Contract Routing Form

ROUTING: Routine printed on: 08/15/2013

==========

Contract between: Madison Commercial Landscapes
and Dept. or Division: Engineering Division
Name/Phone Number:

Project: 2013 Park Playground Improvements

Contract No.: 7130 File No.: 30995
Enactment No.: RES-13-00627 Enactment Date: 08/09/2013
Dollar Amount: 99,846.60

(Please DATE before routing)

| Signatures Required | Date Received | Date Signed |
|---|---|---|
| City Clerk | 8/15/13 | 8/15/13 |
| Director of Civil Rights | 8-15-13 | 8/21/13 mw. |
| Risk Manager | 8-22-13 | 8/22/13 RN |
| Finance Director | 8-23-13 | 8-22-13 pw |
| City Attorney 1254 | 8-23-13 | 8-26-13 |
| Mayor | 8-26-13 | |
| | | |

Please return signed Contracts to the City Clerk's Office
Room 103, City-County Building for filing.

Original + 2 Copies

Pot 81637130

08/15/2013 12:13:47 enjls - Sarah Lerner, 261-4281

**Dis Rights:** OK / N/A / Problem - Hold
**Prev Wage:** AA / Agency / No
**Contract Value:** See above
**AA Plan:** Exempt.
**Amendment / Addendum #** ____
**Type:** POS / Dvlp / Sbdv / Gov't / Grant / PW / Goal / Loan / Agrmt

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| | | | |
|---|---|---|---|
| File #: | 30995 Version: 1 | Name: | Awarding Public Works Contract No. 7130, 2013 Park Playground Improvements. |
| Type: | Resolution | Status: | Passed |
| File created: | 7/17/2013 | In control: | BOARD OF PUBLIC WORKS |
| On agenda: | 8/6/2013 | Final action: | 8/6/2013 |
| Enactment date: | 8/9/2013 | Enactment #: | RES-13-00627 |
| Title: | Awarding Public Works Contract No. 7130, 2013 Park Playground Improvements. | | |
| Sponsors: | BOARD OF PUBLIC WORKS | | |
| Attachments: | 1. Cont 7130.pdf | | |

History (3) Text

3 records Group Export

| Date | Ver. | Action By | Action | Result | Action Details | Watch |
|---|---|---|---|---|---|---|
| 8/6/2013 | 1 | COMMON COUNCIL | Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25 | Pass | Action details | Not available |
| 7/24/2013 | 1 | BOARD OF PUBLIC WORKS | RECOMMEND TO COUNCIL TO ADOPT UNDER SUSPENSION OF RULES 2.04, 2.05, 2.24, & 2.25 - REPORT OF OFFICER | Pass | Action details | Not available |
| 7/17/2013 | 1 | Engineering Division | Refer | | Action details | Not available |

| PROJECT | CONTRACTOR | AMOUNT OF BID |
|---|---|---|
| CONTRACT NO. 7130<br>2013 PARK PLAYGROUND IMPROVEMENTS | | |
| | MADISON COMMERCIAL LANDSCAPES | $99,846.60 |
| Acct. No. CL60-58201-810402-00-0000000-60391N00 | $21,640.00 | |
| Contingency 12%± | 2,597.00 | |
| Sub-Total | $24,237.00 | |
| Acct. No. CL60-58201-810769-00-0000000-60277N00 | $26,877.00 | |
| Contingency 12%± | 3,225.00 | |
| Sub-Total | $30,102.00 | |
| Acct. No.CL60-58201-810402-00-0000000-60002N00 | $20,700.00 | |
| Contingency 12%± | 2,484.00 | |
| Sub-Total | $23,184.00 | |
| Acct. No. CL60-58201-810402-00-0000000-60336N00 | $30,629.60 | |
| Contingency 12%± | 3,675.40 | |
| Sub-Total | $34,305.00 | |
| GRAND TOTAL | $111,828.00 | |

**Wisconsin Office of the Commissioner of Insurance**
**Licensed Producer Search***

Wednesday, August 14, 2013

WIANECKI, PATRICIA K
REESEVILLE WI

Year of Birth: 1966
Status: Active
License Number: 2339271
NPN**: 6512852
Effective Date: 02-23-1995
Expiration Date: 01-31-2015
License Type: Resident Intermediary Indv
CE Compliance: 01-31-2015

**Lines of Authority**

| Line of Authority | Residency | Effective Date | Status |
|---|---|---|---|
| Casualty | Resident | 03-09-1995 | Active |
| Property | Resident | 03-09-1995 | Active |
| Accident & Health | Resident | 02-23-1995 | Active |
| Life | Resident | 02-23-1995 | Active |

**Appointments and Terminations**

| Company Name | Qualification Type/Status | Effective Date | Termination Date | Termination Reason |
|---|---|---|---|---|
| 21st Century National Insurance Company | CAS/Inactive | 03-28-2006 | 08-02-2010 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 03-28-2006 | 08-02-2010 | Vol. Surrender per Agent Rqst |
| ACUITY, A Mutual Insurance Company | AH/Inactive | 10-15-1999 | 04-16-2002 | Canceled |
| | CAS/Active | 10-15-1999 | | |
| | PROP/Active | 10-15-1999 | | |
| Allstate Vehicle and Property Insurance Company | CAS/Inactive | 07-01-2002 | 07-24-2008 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 07-01-2002 | 07-24-2008 | Vol. Surrender per Agent Rqst |
| American Casualty Company of Reading, Pennsylvania | AH/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| Artisan and Truckers Casualty Company | CAS/Active | 01-15-2008 | | |
| | PROP/Active | 01-15-2008 | | |
| Auto-Owners Insurance Company | CAS/Active | 04-11-2008 | | |
| | PROP/Active | 04-11-2008 | | |

| | | | | |
|---|---|---|---|---|
| Auto-Owners Life Insurance Company | AH/Active | 04-11-2008 | | |
| | LI/Active | 04-11-2008 | | |
| Bristol West Insurance Company | CAS/Active | 09-11-2009 | | |
| | PROP/Active | 09-11-2009 | | |
| Capitol Indemnity Corporation | AH/Inactive | 10-01-1997 | 10-23-2006 | Canceled |
| | CAS/Inactive | 10-01-1997 | 10-23-2006 | Canceled |
| | PROP/Inactive | 10-01-1997 | 10-23-2006 | Canceled |
| Continental Casualty Company | AH/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| Economy Premier Assurance Company | CAS/Inactive | 07-23-2002 | 07-09-2013 | Canceled |
| | PROP/Inactive | 07-23-2002 | 07-09-2013 | Canceled |
| Foremost Insurance Company Grand Rapids, Michigan | CAS/Active | 11-05-2001 | | |
| | PROP/Active | 11-05-2001 | | |
| General Casualty Company of Wisconsin | AH/Inactive | 06-02-2000 | 12-03-2008 | Canceled |
| | CAS/Active | 06-02-2000 | | |
| | PROP/Active | 06-02-2000 | | |
| Guaranty National Insurance Company | CAS/Inactive | 10-30-2002 | 02-13-2006 | Inadequate Production |
| | PROP/Inactive | 10-30-2002 | 02-13-2006 | Inadequate Production |
| Homesite Insurance Company | CAS/Inactive | 09-02-2008 | 12-30-2010 | Canceled |
| | PROP/Inactive | 09-02-2008 | 12-30-2010 | Canceled |
| Metropolitan Casualty Insurance Company | CAS/Inactive | 07-23-2002 | 12-07-2012 | Canceled |
| | PROP/Inactive | 07-23-2002 | 12-07-2012 | Canceled |
| Metropolitan General Insurance Company | CAS/Inactive | 07-23-2002 | 12-07-2012 | Canceled |
| | PROP/Inactive | 07-23-2002 | 12-07-2012 | Canceled |
| Metropolitan Property and Casualty Insurance Company | CAS/Inactive | 07-23-2002 | 07-09-2013 | Canceled |
| | PROP/Inactive | 07-23-2002 | 07-09-2013 | Canceled |
| Middleton Insurance Company | CAS/Inactive | 01-27-2003 | 06-26-2007 | Canceled |
| | PROP/Inactive | 01-27-2003 | 06-26-2007 | Canceled |
| National Fire Insurance Company of Hartford | AH/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 02-23-1999 | 03-30-2001 | Vol. Surrender per |

| | | | | |
|---|---|---|---|---|
| | | | | Agent Rqst |
| Northbrook Indemnity Company | CAS/Inactive | 07-01-2002 | 06-18-2003 | Inadequate Production |
| | PROP/Inactive | 07-01-2002 | 06-18-2003 | Inadequate Production |
| Old Republic Insurance Company | AH/Inactive | 10-08-1997 | 01-21-2000 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 10-08-1997 | 01-21-2000 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 10-08-1997 | 01-21-2000 | Vol. Surrender per Agent Rqst |
| Old Republic Surety Company | CAS/Inactive | 10-08-1997 | 01-12-2000 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 10-08-1997 | 01-12-2000 | Vol. Surrender per Agent Rqst |
| Owners Insurance Company | CAS/Active | 04-11-2008 | | |
| | PROP/Active | 04-11-2008 | | |
| Pacific Star Insurance Company | AH/Inactive | 10-15-1999 | 01-26-2001 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 10-15-1999 | 01-26-2001 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 10-15-1999 | 01-26-2001 | Vol. Surrender per Agent Rqst |
| Progressive Casualty Insurance Company | CAS/Inactive | 06-02-2008 | 01-06-2009 | Vol. Surrender per Agent Rqst |
| | PROP/Inactive | 06-02-2008 | 01-06-2009 | Vol. Surrender per Agent Rqst |
| Progressive Classic Insurance Company | CAS/Active | 04-27-2004 | | |
| | PROP/Active | 04-27-2004 | | |
| Progressive Northern Insurance Company | CAS/Active | 12-19-2002 | | |
| | PROP/Active | 12-19-2002 | | |
| Regent Insurance Company | AH/Inactive | 06-02-2000 | 12-03-2008 | Canceled |
| | CAS/Active | 06-02-2000 | | |
| | PROP/Active | 06-02-2000 | | |
| RLI Insurance Company | AH/Inactive | 10-06-1997 | 11-30-1999 | Vol. Surrender per Agent Rqst |
| | CAS/Active | 01-03-2006 | | |
| | CAS/Inactive | 10-06-1997 | 11-30-1999 | Vol. Surrender per Agent Rqst |
| | PROP/Active | 01-03-2006 | | |
| | PROP/Inactive | 10-06-1997 | 11-30-1999 | Vol. Surrender per Agent Rqst |
| SECURA INSURANCE, A | AH/Inactive | 08-27-1999 | 07-16-2003 | Canceled |
| | CAS/Inactive | 08-27-1999 | 07-16-2003 | Canceled |

| | | | | |
|---|---|---|---|---|
| Mutual Company | PROP/Inactive | 08-27-1999 | 07-16-2003 | Canceled |
| SECURA Supreme Insurance Company | AH/Inactive | 09-30-1999 | 07-16-2003 | Canceled |
| | CAS/Inactive | 09-30-1999 | 07-16-2003 | Canceled |
| | PROP/Inactive | 09-30-1999 | 07-16-2003 | Canceled |
| Sentry Insurance a Mutual Company | CAS/Active | 09-15-2012 | | |
| | PROP/Active | 09-15-2012 | | |
| Viking Insurance Company of Wisconsin | CAS/Active | 11-01-2007 | | |
| | CAS/Inactive | 10-30-2002 | 02-13-2006 | Inadequate Production |
| | PROP/Active | 11-01-2007 | | |
| | PROP/Inactive | 10-30-2002 | 02-13-2006 | Inadequate Production |
| Western Surety Company | CAS/Active | 02-18-2004 | | |
| | CAS/Inactive | 09-26-2000 | 09-12-2001 | Vol. Surrender per Agent Rqst |
| | CAS/Inactive | 10-09-1997 | 06-06-2000 | Vol. Surrender per Agent Rqst |
| Wisconsin Mutual Insurance Company | CAS/Active | 03-14-2008 | | |
| | PROP/Active | 03-14-2008 | | |

* Photocopies of this report provided to an insurer should be confirmed on-line for accuracy.

** NPN = National Producer Number assigned by the National Insurance Producer Registry to assist with nonresident licensing in the future.

$99,846.60
FILE

BID OF MADISON COMMERICAL LANDSCAPES

**2013**

**PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS**

**FOR**

**2013 PARK PLAYGROUND IMPROVEMENTS**

**CONTRACT NO. 7130**

**IN**

**MADISON, DANE COUNTY, WISCONSIN**

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON **AUGUST 6, 2013**

CITY ENGINEERING DIVISION
1600EMIL STREET MADISON,
WISCONSIN 53713

www.cityofmadison.com/business/pw

https://bidexpress.com/login

# SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

## REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION
## CITY OF MADISON, WISCONSIN

### A BEST VALUE CONTRACTING MUNICIPALITY

| | |
|---|---|
| PROJECT NAME: | 2013 PARK PLAYGROUND IMPROVEMENTS |
| CONTRACT NO.: | 7130 |
| SBE GOAL | 10% |
| BID BOND | 5% |
| PRE BID MEETING (1:00 P.M.) | 7/5/2013 |
| PREQUALIFICATION APPLICATION DUE (1:00 P.M) | 7/5/2013 |
| BID SUBMISSION (1:00 P.M.) | 7/12/2013 |
| BID OPEN (1:30 P.M.) | 7/12/2013 |
| PUBLISHED IN WSJ | 6/28 & 7/5 |

PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

Plans and Specifications are also available at 1600 Emil St., Madison, WI, 53713; (608) 267-1197.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2013 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory

personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a)l. of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

The Bidder shall execute the Disclosure of Ownership form. REFER TO SECTION F.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

PREVAILING WAGE RATES

Prevailing Wage Rates may be required and are attached in Section J of the contract. See Special Provisions to determine applicability.

## Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an ☒

### Building Demolition

101 ☐ Asbestos Removal
120 ☐ House Mover
110 ☐ Building Demolition

### Street, Utility and Site Construction

201 ☒ Asphalt Paving
205 ☐ Blasting
210 ☐ Boring/Pipe Jacking
215 ☐ Concrete Paving
220 ☐ Con. Sidewalk/Curb & Gutter/Misc. Flat Work
221 ☐ Concrete Bases and Other Concrete Work
225 ☐ Dredging
230 ☐ Fencing
235 ☐ Fiber Optic Cable/Conduit Installation
240 ☒ Grading and Earthwork
241 ☐ Horizontal Saw Cutting of Sidewalk
242 ☐ Infrared Seamless Patching
245 ☐ Landscaping, Maintenance
250 ☐ Landscaping, Site and Street
251 ☐ Parking Ramp Maintenance
255 ☐ Pavement Sealcoating and Crack Sealing
260 ☐ Petroleum Above/Below Ground Storank Tank Removal/Install
265 ☐ Retaining Walls, Precast Modular Units
270 ☐ Retaining Walls, Reinforced Concrete
275 ☐ Sanitary, Storm Sewer and Water Main Construction
280 ☐ Sewer Lateral Drain Cleaning/Internal TV Insp.
285 ☐ Sewer Lining
290 ☐ Sewer Pipe Bursting
295 ☐ Soil Borings
300 ☐ Soil Nailing
305 ☐ Storm & Sanitary Sewer Laterals & Water Svc.
310 ☐ Street Construction
315 ☐ Street Lighting
318 ☐ Tennis Court Resurfacing
320 ☐ Traffic Signals
325 ☐ Traffic Signing & Marking
332 ☐ Tree pruning/removal
333 ☐ Tree, pesticide treatment of
335 ☐ Trucking
340 ☐ Utility Transmission Lines including Natural Gas, Electrical & Communications
399 ☒ Other Playground Installer

### Bridge Construction

501 ☐ Bridge Construction and/or Repair

### Building Construction

401 ☐ Floor Covering (including carpet, ceramic tile installation, rubber, VCT
402 ☐ Building Automation Systems
403 ☐ Concrete
404 ☐ Doors and Windows
405 ☐ Electrical - Power, Lighting & Communications
410 ☐ Elevator - Lifts
412 ☐ Fire Suppression
413 ☐ Furnishings - Furniture and Window Treatments
415 ☐ General Building Construction, Equal or Less than $250,000
420 ☐ General Building Construction, $250,000 to $1,500,000
425 ☐ General Building Construction, Over $1,500,000
428 ☐ Glass and/or Glazing
429 ☐ Hazardous Material Removal
430 ☐ Heating, Ventilating and Air Conditioning (HVAC)
433 ☐ Insulation - Thermal
435 ☐ Masonry/Tuck pointing
437 ☐ Metals
440 ☐ Painting and Wallcovering
445 ☐ Plumbing
450 ☐ Pump Repair
455 ☐ Pump Systems
460 ☐ Roofing and Moisture Protection
461 ☐ Solar Photovoltaic/Hot Water Systems
465 ☐ Soil/Groundwater Remediation
466 ☐ Warning Sirens
470 ☐ Water Supply Elevated Tanks
475 ☐ Water Supply Wells
480 ☐ Wood, Plastics & Composites - Structural & Architectural
499 ☐ Other_____

### State of Wisconsin Certifications

1 ☐ Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
2 ☐ Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
3 ☐ Class 7 Blaster - Blasting Operations and Activities for structures greater than 15 ' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
4 ☐ Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
5 ☐ Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
6 ☐ Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
7 ☐ Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
8 ☐ Other_____
9 ☐ Other_____

# Please refer to the Bid Express Website at https://bidexpress.com look up contract number and go to Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

# SECTION C: SMALL BUSINESS ENTERPRISE

## Instructions to Bidders
## City of Madison
## SBE Program Information

### 2 Small Business Enterprise (SBE) Program Information

#### 2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

## 2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

## 2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/dcr/aaTBDir.cfm.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/dcr/aaTBDir.cfm. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

## 2.4 Small Business Enterprise Compliance Report

### 2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

2.4.1.1 Attendance at the pre-bid meeting.

2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.

2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.

2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.

2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.

2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.

2.4.1.7 Providing SBEs with specific information regarding the work to be performed.

2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.

2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.

2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.

### 2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid: This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below

shall be deemed non-responsible and the bidder ineligible for award of this contract.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.1.1 **Cover Page,** Page C-6; and
2.4.2.1.2 **Summary Sheet,** C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.2.1 **Cover Page,** Page C-6;
2.4.2.2.2 **Summary Sheet,** C-7; and
2.4.2.2.3 **SBE Contact Report,** C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

## 2.5 Appeal Procedure

A bidder which does not achieve the established goal and is deemed non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may, within 72 hours of receiving such notification, appeal that decision to a special appeals committee composed of three (3) members of the Affirmative Action Commission, three (3) members of the Board of Public Works and a seventh member appointed by the Mayor. All appeals must be made in writing to the City Engineer and received within 72 hours of City of Madison's notice. Postmark not applicable.

## 2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

## 2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.

B. A business that has averaged no more than $4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of $1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

### Small Business Enterprise Compliance Report

**This information may be submitted electronically through Bid Express or submitted with bid in sealed envelope.**

### Cover Sheet

Prime Bidder Information

Company:_____

Address:_____

Telephone Number:_____ Fax Number:_____

Contact Person/Title:_____

Prime Bidder Certification

I, _____, _____ of
Name Title

_____ certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

_____ _____
Witness' Signature Bidder's Signature

_____
Date

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

### Small Business Enterprise Compliance Report

### Summary Sheet

SBE Subcontractors Who Are NOT Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|---|---|---|
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |

**Subtotal SBE who are NOT suppliers:** _____ %

SBE Subcontractors Who Are Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|---|---|---|
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |

**Subtotal Contractors who are suppliers:** _____ % x 0.6 = _____ % (discounted to 60%)

**Total Percentage of SBE Utilization:** _____%.

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

### Small Business Enterprise Compliance Report

### SBE Contact Report

Submit separate copy of this form for each SBE which you are not able to utilize towards meeting the SBE goal for this project. Attach separate sheets if necessary.

SBE Information

Company:_____

Address:_____

Telephone Number:_____

Contact Person/Title:_____

1. Outline below all efforts to solicit a bid from the above SBE. Include date, means of contact, who from your company made this contact and the result.

   _____

   _____

   _____

2. Describe the information provided to the aforementioned SBE regarding the scope of work for which he/she was to provide a bid.

   _____

   _____

   _____

   Is this the same scope of work on which the subcontractor you intend to utilize based his/her bid?

   ☐ Yes ☐ No

3. Did this SBE submit a bid? ☐ Yes ☐ No

4. Is the General Contractor pre-qualified to self-perform this category of work?

   ☐ Yes ☐ No

5. If you responded "Yes" to Question 3, please check the items below which apply and provide the requested detail. If you responded "No" to Question 3, please skip ahead to item 6 below.

☐ The SBE listed above is unavailable for work on this project for the following reasons. Provide specific detail for this conclusion.

_____

_____

☐ The SBE listed above is unqualified for work on this project. Provide specific details for this conclusion.

_____

_____

☐ The SBE listed above provided a price that was unreasonable (i.e. more than 5% above the lowest bidder). Provide specific detail for this conclusion including the SBE's price and the price of the subcontractor you intend to utilize.

_____

_____

☐ A contract with the SBE listed above may constitute a breach of the bidder's collective bargaining agreements. Provide specific detail for this conclusion including, but not limited to, correspondence from the SBE indicating it will not sign a project labor agreement and/or correspondence from the applicable trade union indicating a project labor agreement will not be allowed at the time of project bidding.

_____

_____

☐ Other; please specify reason(s) other than listed above which made it impossible for you to utilize this SBE on this project.

_____

_____

6. Describe any other good faith efforts:

_____

_____

# SECTION D: SPECIAL PROVISIONS

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

**SECTION 102.10: MINIMUM RATE OF WAGE SCALE**

For this project, payment of prevailing wages (white sheet) is not required if either: a single trade accounts for 85% or more of the total labor costs of the project and the bid is less than $48,000; or no single trade accounts for 85% or more of the total labor costs of the project and the bid is less than $100,000. For bids not meeting either of these conditions, prevailing wages shall be required.

If required, the wages and benefits paid on the contract shall not be less than those specified in the Prevailing Wage Determination included with these contract documents for the following types of work:

- ☒ Building and Heavy Construction
- ☐ Sewer, Water, and Tunnel Construction
- ☐ Local Street and Miscellaneous Paving Operations
- ☐ Residential and Agricultural Construction

All bidders are notified that all labor employed on City contracts must be paid in accordance with the minimum rate of wage scale included in the Contract Documents.

For the information of the employees working on the project, a copy of the wage scale included in the contract documents and the provisions of Section 66.0903(8) of the Wisconsin Statutes shall be kept posted by the employer and in at least one conspicuous and easily accessible place at the site of the project.

The Contractor shall keep weekly payroll records setting forth the name, address, telephone number, classification, wage rate and fringe benefit package of each employee who worked on such City project and all other projects the employee worked in the same period, and the Contractor must keep records of the individual time each employee worked on the project and for each day of the project. Records shall include employee demographics or contractor can submit a one-time report of all employee demographics that can be matched up with weekly payrolls. Reports shall only include last four social security digits. Such records shall also set forth the total number of hours of overtime credited to each such employee for each day and week and the amount of overtime pay received in that week. Such records shall, in addition, set forth the full weekly wages earned by each such employee and the actual hourly wage paid to that employee. The Contractor shall submit payroll records to the Engineer every week for those periods when work is being done on the project. Said submittal shall be within twenty-one (21) calendar days of the end of the Contractor's weekly pay period.

The Contractor shall ensure that employees shall be paid unconditionally and shall receive the full amounts accrued at the time of payment, computed at rates not less than those stated in the City of Madison "Minimum Rate of Wage Scale" and that each employee's rate shall be determined by the work that is done within the trade or occupation classification which should be properly assigned to such employee. Questions regarding an employee's classification or rate of pay within that classification, shall be resolved by the practice that predominates in the industry and on which the trade or occupation rate/classification is based. Therefore, rate of pay, classification and work jurisdiction disputes shall be

resolved by relying upon practices established by collective bargaining agreements and guidelines used in such determinations by appropriate recognized trade unions operating within the City of Madison.

The Contractor shall agree that the normal rate of wage paid to the Contractor's employees on other projects shall not be reduced or otherwise diminished as a result of the requirement to pay no less than the minimum rate of wage scale on a City project. Mulcting of employees on City projects by contractors, such as by kickbacks or other such devices, is prohibited.

These contract provisions shall apply to all work performed on the contract by the Contractor with its own organization and with assistance of laborers under its immediate superintendency and to all work performed by piecework or by subcontract. No laborer, worker, or mechanic shall be employed directly upon the site of the work except on a wage basis, but this shall not be construed to prohibit the rental of equipment from individuals.

In the event of a refusal by the Contractor to submit payroll records as required by the contract, the City of Madison shall have the option to cancel this contract and request the Surety to perform or to re-let the balance of the work for bids, and in that event, to charge the Contractor for any loss which the City may incur thereby.

**SECTION 102.12: BEST VALUE CONTRACTING**

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than $53,000 for a single trade contract; or equal to or greater than $257,500 for a multi-trade contract pursuant to MGO 33.07(7).

**SECTION 105.1: AUTHORITY OF THE ENGINEER**

The Engineer shall resolve all questions which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, interpretation of the plans and Specifications, acceptable fulfillment of the contract, compensation, and disputes and mutual rights between Contractors under the Specifications. The Engineer shall determine the amount and quantity of work performed and materials furnished.

All decisions of the Engineer shall, when so requested, be rendered in writing. They shall be final and conclusive in all matters unless within ten (10) days after such decision the Contractor applies in writing to the Board of Public Works for a review of such decision.

Any change proposed by a Contractor in SBE subcontractors, vendors or suppliers from those SBEs indicated on the SBE Compliance Report must be approved by the Engineer and the City's Manager of the Affirmative Action Division (hereafter, AAD). When requested, such decision shall be rendered in writing. Such decisions shall be final and conclusive in all matters unless within ten (10) days after such decision the Contractor or the affected SBE applies in writing to the Board of Public Works for a review of such decision.

In the event the Engineer and the AAD disagree over the proper decision to be made regarding an SBE, the Mayor shall appoint a third person to resolve the disagreement, within 30 days of appointment. The decision thus rendered may be reviewed by the Board of Public Works upon request of the Contractor or the affected SBE as set forth in Sections 105.1 and 105.2 of the City's standard specifications.

**SECTION 105.12: COOPERATION BY CONTRACTOR**

Several utilities exist on site. The Contractor shall perform a One Call through Digger's Hotline for each site at least three days prior to beginning construction.

The Contractor shall secure materials at the end of each work day to deter any potential vandalism and theft.

A pre-construction meeting will be required prior to the start of construction.

The Contractor warrants that its services are performed, within the limits prescribed by the City, with the usual thoroughness and competence of the consulting profession; in accordance with the standard for professional services at the time those services are rendered. The Contractor shall be responsible for the accuracy of the work performed under this Agreement, and shall promptly make necessary revisions or corrections resulting from their negligent acts, errors or omissions without additional compensation. The Contractor shall be responsible for any damages incurred as a result of their errors, omissions, or negligent acts and for any losses or costs to repair or remedy construction.

The Contractor shall take care when accessing the site not to damage the existing utilities, concrete curb, sidewalk or asphalt pavement. Any damage shall be repaired per City of Madison Standard Specifications for Public Works Construction by the Contractor and considered incidental this contract.

Contractor to note – the Parks Division will be reconstructing the Worthington Park existing basketball courts at a new location in the park at approximately the same timetable as this contract. The successful bidder for this contract will be required to work with the basketball court contractor if site coordination issues arise. At the letting of this contract the exact timing of the court reconstruction had not been established. The excavation cut and gravel base quantities listed in the proposal page may be affected by the existing court removal. The exact effect on the path construction will be known at the time of the pre-construction meeting.

**SECTION 105.9: SURVEYS, POINTS, AND INSTRUCTION**

The City of Madison will be responsible for setting all lines and/or grades required to complete the work for the 2013 Park Playground Improvements. Any questions regarding the layout and staking of this project should be directed to Dan Rodman at the Parks Division at 266-6674.

**SECTION 107.7 MAINTENANCE OF TRAFFIC**

**Nakoma Park**

All traffic control shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall submit an acceptable, complete Traffic Control Plan, including all necessary phases and any required sidewalk or bike route closures, to the office of the City Traffic Engineer, at 215 Martin Luther King, Jr. Blvd, Suite 100, Madison, WI 53703, a minimum of five (5) working days, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

The Contractor will be responsible for installing and maintaining traffic control in accordance with the Traffic Control Plan and as directed by the City Traffic Engineer. The Contractor shall install and maintain modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

The Contractor shall provide ADA/Handicap Accessible pedestrian access at all intersections within the construction area at all times. Sidewalks shall be maintained on at least one side of the street at all times unless otherwise required.

The Contractor may remove parking within the project limits as indicated on the Traffic Control Plan. The Contractor shall be responsible for posting and maintaining NO PARKING signs in accordance with City of Madison Police Department's "Guidelines for Temporary No Parking Restrictions for Construction or Special Events".

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contact Yang Tao, Traffic Engineering Division, 266-4815, with any questions concerning these traffic control specifications.

**Reservoir Park**

Construction of the Reservoir Park playground will be happening concurrently with construction of the Booster Pump Station at Reservoir Park. Both construction projects are allowed to close Glenway Street between Ridge Road and Zwerg Drive. Both projects must share this space for construction staging.

All signing and barricading shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

Contractor shall submit an acceptable traffic control plan to the Traffic Engineer Division 5 days prior to the preconstruction meeting.

Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Contractor shall supply all necessary mounting hardware and supports for signing. This shall also include covering and uncovering any conflicting signs during the project. Contractor shall display all signing so as to be easily viewed by all users. Contractor shall mount traffic control on posts or existing poles or drive posts whenever possible. Existing poles may be used with approval of Construction Engineer. Contractor shall inspect traffic control daily to insure all traffic control remains in place during the project.

The traffic control plan may need to be altered as conditions change in the field or as unexpected conditions occur. This shall include relocating existing traffic control or providing additional traffic control. This should be considered incidental to providing traffic control for the project.

The Contractor shall supply temporary stop signs at any location where a permanent stop sign needs to be removed or is no longer affective.

Maintain Access to all properties along Owen Parkway at all times.

Contractor may close Glenway Street between Ridge Road and Zwerg Drive. Contractor shall occupy not occupy any other portions of the Street Right of Way at any time. All sidewalks shall remain open and clean for the duration of the project

Contractor shall install temporary no parking signs on Glenway between Ridge Road and Zwerg Drive. Signs shall be installed and verified by police department in accordance with the Madison Police Departments Guidelines for temporary no parking restrictions for construction or special events. Contact John Villareal (267-8756) of the Madison Parking utility at least 2 business days prior to needing the temporary signs.

The Contractor shall not remove traffic signs. For removal or replacement of traffic and parking signs, contact the City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767, 8:00 a.m. to 4:00 p.m., a minimum of 2 working days in advance of when any existing signs need to be removed. This service is provided free of charge. If the contractor removes the signs, the contractor will be billed for the reinstallation of, and any damage to, the signing equipment. The contractor shall notify The City of Madison Traffic Engineering Field Operations, 1120 Sayle Street, 266-4767 upon completion of final landscaping to have permanent signs reinstalled. The contractor shall expect a minimum of seven working days to have permanent signs reinstalled. The contractor shall leave in place all necessary traffic control until given notice by the construction engineer that permanent signing is in place and temporary traffic control may be removed.

**Reynolds Park**

All traffic control shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall submit an acceptable, complete Traffic Control Plan, including all necessary phases and any required sidewalk or bike route closures, to the office of the City Traffic Engineer, at 215 Martin Luther King, Jr. Blvd, Suite 100, Madison, WI 53703, a minimum of five (5) working days, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

The Contractor will be responsible for installing and maintaining traffic control in accordance with the Traffic Control Plan and as directed by the City Traffic Engineer. The Contractor shall install and maintain modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

The contractor shall coordinate traffic control with E Dayton St construction project, in the event that the two projects overlap in time frame.

The Contractor shall provide ADA/Handicap Accessible pedestrian access at all intersections within the construction area at all times. Sidewalks shall be maintained on at least one side of the street at all times unless otherwise required.

The Contractor may remove parking within the project limits as indicated on the Traffic Control Plan. The Contractor shall be responsible for posting and maintaining NO PARKING signs in accordance with City of Madison Police Department's "Guidelines for Temporary No Parking Restrictions for Construction or Special Events".

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contact Yang Tao, Traffic Engineering Division, 266-4815, with any questions concerning these traffic control specifications.

**Worthington Park**

All traffic control shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall submit an acceptable, complete Traffic Control Plan, including all necessary phases and any required sidewalk or bike route closures, to the office of the City Traffic Engineer, at 215 Martin Luther King, Jr. Blvd, Suite 100, Madison, WI 53703, a minimum of five (5) working days, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

The Contractor will be responsible for installing and maintaining traffic control in accordance with the Traffic Control Plan and as directed by the City Traffic Engineer. The Contractor shall install and maintain modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

The Contractor shall provide ADA/Handicap Accessible pedestrian access at all intersections within the construction area at all times. Sidewalks shall be maintained on at least one side of the street at all times unless otherwise required.

The Contractor may remove parking within the project limits as indicated on the Traffic Control Plan. The Contractor shall be responsible for posting and maintaining NO PARKING signs in accordance with City of Madison Police Department's "Guidelines for Temporary No Parking Restrictions for Construction or Special Events".

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contact Yang Tao, Traffic Engineering Division, 266-4815, with any questions concerning these traffic control specifications.

**SECTION 107.13 TREE PROTECTION SPECIFICATIONS**

The Contractor is advised to review Article 107.13 of the Standard Specifications for tree protection. Note that Articles 107.13(a) Underground Utility Excavation & Installation and 107.13(c) Sidewalk Excavation and Installation are not applicable to this project except as noted below.

The intent of these designs is to minimize the damage to those trees that remain following construction. Trees that must be protected are designated on the plans.

107.13(e) Terrace Restoration

It is recognized that grading operations and root cutting of some trees will need to occur within 5 feet of trees in order to complete the work, and care must be taken in these areas. For trees marked as "tree protection - no root cut" grading, excavation, filling, stone placement and other construction operations near these trees shall be done under the supervision of a City of Madison Forestry Representative. The following sequence to construct in areas adjacent to "no root cut" trees shall be as follows:

1. Trees marked on the plan as "NRC" or "no root cut" shall not be disturbed until inspection by City Forester.
2. The Contractor shall place a yellow ribbon around the tree marked NRC to highlight these trees for the equipment operator.
3. The ribbon shall remain until the area is fine graded and seeded or sodded. Roots shall be cut cleanly by using a saw, ax, lopping shears, chain saw, stump grinder, or other means which will produce a clean cut. Exposed roots shall be covered as soon as excavation and installation are complete. All roots over one (1) inch in diameter that are damaged shall be cleanly cut immediately back of the damaged section on the same day of the excavation. The Contractor

shall not rip or pull roots out towards the trunk of a tree while excavating with a backhoe. The use of a backhoe to cut roots is NOT acceptable.

All provisions of Articles 107.13(d), 107.13(f) Bark Abrasions and Limb Damage, 107.13(g) Soil Compaction, 107.13(h) Contractor/Foreperson Acknowledgement, and 107.13(i) Cost Recovery and Liquidated Damages are applicable to this contract.

1. Protection of these trees shall be paid under Bid Item 10803 –Tree Protection/No Root Cut.

**SECTION 107.14 WEAPONS PROHIBITION**

Contractor shall prohibit, and shall require its subcontractors to prohibit, its employees from carrying weapons, including concealed weapons, in the course of performance of work under this Contract, other than while at the Contractor's or subcontractor's own business premises. This requirement shall apply to vehicles used at any City work site and vehicles used to perform any work under this Contract, except vehicles that are an employee's "own motor vehicle" pursuant to Wis. Stat. sec. 175.60(15m).

**SECTION 108.2: PERMITS**

The following permits will be applied for by the City of Madison:

1. City of Madison Erosion Control Permit

The Contractor shall meet the conditions of all permits and must keep a copy of each individual permit on site at all times throughout construction.

The Contractor shall meet the conditions of the permits including properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Construction Engineer or his designees. This work will be paid for under the appropriate bid items, or if appropriate items are not included in the contract, they shall be paid for as Extra Work.

The City's obtaining these permits is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction.

**SECTION 109.2: PROSECUTION OF THE WORK**

Construction work must begin within seven (7) calendar days after the date appearing on the mailed notice to do so that was sent to the Contractor. Construction work shall be carried on at a rate so as to secure full completion within the contract times outlined in Section 109.7, the rate of progress and the time of completion being essential conditions of this Agreement.

The fixed, agreed upon, liquidated damages for failure to complete all work within the contract, unless otherwise specified in this section, shall be calculated in accordance with Article 109 of the Standard Specifications. The Contractor shall limit workdays from 7:00 am to 7:00 pm, unless approved by the Engineer in writing.

**SECTION 109.7: TIME OF COMPLETION**

Work cannot start on this contract until after the "Start to Work" letter has been received. Work on the 2013 Park Playground Improvements will start on or around 9/06/13 and must be completed by 11/15/2013.

## BID ITEM 10701 – TRAFFIC CONTROL

### DESCRIPTION

Work under this item shall be bid per Section 107.7 MAINTENANCE OF TRAFFIC per this contract. This bid item is required for the following projects sites:

- Nakoma Park
- Reynolds Park
- Reservoir Park
- Worthington Park

### METHOD OF MEASUREMENT

Traffic control shall be measured lump sum for each individual site.

### BASIS OF PAYMENT

Traffic control shall be paid at the total completion of project as determined by the Project Manager. This item will not be paid full if at any time the Contractor fails to properly erect, maintain and coordinate traffic control per Section 107.7 MAINTENANCE OF TRAFFIC.

## BID ITEM 10803 – TREE PROTECTION/NO ROOT CUT

### DESCRIPTION

Work under this item is intended to cover work required to protect trees per Section 107.13 of the latest edition of the City of Madison Standard Specifications for Public Works Construction and as marked on the plans.

Pruning of existing trees is prohibited.

The following quantities of root cutting are required at each site:

- Nakoma Park – 80 linear feet
- Reservoir Park – 90 linear feet
- Reynolds Park – 15 linear feet
- Worthington Park – 30 linear feet

### METHOD OF MEASUREMENT

Tree Protection/No Root Cut shall be measured per linear feet; each tree shall have a maximum of 15 linear feet of root cut per tree.

### BASIS OF PAYMENT

Tree Protection/No Root Cut shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, and incidentals required to complete the work as set forth in the description.

## BID ITEM 10911 - MOBILIZATION

### DESCRIPTION

Work under this item shall include all costs associated with mobilization of the Contractor to each park playground location. There are four park playground locations in this contract at the following addresses:

Nakoma Park
3801 Cherokee Drive
Madison, WI 53711

Reservoir Park
126 Glenway Street
Madison, WI 53705

Reynolds Park
810 East Mifflin Street
Madison, WI 53703

Worthington Park
3102 Worthington Avenue
Madison, WI 53714

Parking of equipment, storage of materials, and staging shall be allowed within project limits per Section 107.7 MAINTENANCE OF TRAFFIC and as shown on plans.

The Contractor may only enter the construction site through an area bordered by construction fencing as shown on the plans. **THE CONTRACTOR MAY NOT DRIVE OR STORE EQUIPMENT ON ANY PORTION OF THE PARK OUTSIDE THE CONSTRUCTION LIMITS UNLESS INDICATED OTHERWISE ON PLANS OR DIRECTED IN THE FIELD.**

All materials purchased (play equipment and border timbers) by the City of Madison will be **ordered for delivery to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

The Contractor is responsible for restoration of any damage to the site due to construction access.

### METHOD OF MEASUREMENT

Mobilization shall be paid as a lump sum for mobilization related to each project site.

### BASIS OF PAYMENT

Mobilization shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, tools, equipment, labor, and incidentals required to complete the work as set forth in the description.

## BID ITEM 20101 – EXCAVATION CUT

### DESCRIPTION

The excavation quantities for this contract have been calculated by subtracting digital terrain models of the existing and proposed surfaces and sub surfaces within the different material areas. Cut (in place quantities) and fill have been estimated from these models. Cut and fill quantities have been determined based on an estimated existing playground surface depth of 14". This surface will have been removed from the project at the time of construction of this contract. No shrinkage factor has been applied to fill quantities to estimate net volume. The Contractor is responsible to review attached earthwork

calculations. Three-dimensional Microstation (.dgn) files containing the digital terrain models used for the earthwork calculations are available.

The proposal quantity was computed by Microstation InRoads surface data volume computations and the assumptions listed above. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, excavation of fourteen (14) inches of existing playground surfacing, placement of six (6) inches of proposed topsoil, and placement of either twelve (12) or nine (9) inches of playground surfacing (depending on the surfacing type).

Excavation Cut shall consist of the loosening, loading, hauling and disposal of all materials of every description encountered in the performance of the work other than specific materials which have been classified and bid upon. Excavation cut required for installation of boulder retaining wall and incidental leveling pad shall be paid separately under BID ITEM 90005 – BOULDER RETAINING WALL.

Excess excavated material deemed unusable shall be disposed of at a suitable location determined by the Contractor at no additional cost to the City of Madison.

Suitable materials (to be determined by the Engineer) may be reused as fill within the project limits. Placement of these fill materials shall be considered incidental to this bid item and shall not be compensated separately.

- For Nakoma Park it is estimated that there will be 30.1 cubic yards of excavation cut, including 12.4 cubic yards of topsoil cut and 17.7 cubic yards of subsoil cut. Of this, 17.7 subsoil cut shall be reused as subsoil fill. An additional 63.1 cubic yards of subsoil fill is needed and shall be paid separately under BID ITEM 20201 – FILL. 12.4 cubic yards of topsoil cut shall be used as topsoil placement, and an additional 28.3 cubic yards of topsoil is needed from offsite to meet the placement requirements. Topsoil placement is excluded in this bid item and paid separately under BID ITEM 20221 - TOPSOIL.

- For Reservoir Park it is estimated that there will be 113 cubic yards of excavation cut, including 59 cubic yards of topsoil cut and 54 cubic yards of subsoil cut. Of this, all subsoil cut shall be reused as subsoil fill. An additional 88 cubic yards of subsoil fill is needed and shall be paid separately under BID ITEM 20201 – FILL. 52 cubic yards of topsoil cut shall be used as topsoil placement, resulting in 7 cubic yards of topsoil that will have to be disposed offsite. Topsoil placement is excluded in this bid item and paid separately under BID ITEM 20221 - TOPSOIL.

- For Reynolds Park it is estimated that there will be 45 cubic yards of excavation cut, including 42 cubic yards of topsoil cut and 3 cubic yards of subsoil cut. Of this, all subsoil cut shall be reused as subsoil fill. An additional 124 cubic yards of subsoil fill is needed and shall be paid separately under BID ITEM 20201 – FILL. 34 cubic yards of topsoil cut shall be used as topsoil placement, resulting in 8 cubic yards of topsoil that will have to be disposed offsite. Topsoil placement is excluded in this bid item and paid separately under BID ITEM 20221-TOPSOIL.

- For Worthington Park it is estimated that there will be 77.4 cubic yards of excavation cut, including 44.6 cubic yards of topsoil cut and 32.8 cubic yards of subsoil cut. Of this, 32.8 subsoil cut shall be reused as subsoil fill. An additional 133.6 cubic yards of subsoil fill is needed and shall be paid separately under BID ITEM 20201 – FILL. 44.6 cubic yards of topsoil cut shall be used as topsoil placement, an additional 18.5 cubic yards of topsoil is needed from offsite to meet the placement requirements. Topsoil placement is excluded in this bid item and paid separately under BID ITEM 20221 - TOPSOIL.

All double handling and subsoil placement is included in this bid item.

Contractor to note all excavated areas shall be filled at the end of each work day. No excavated areas shall be "open" during non work hours.

## METHOD OF MEASUREMENT

Excavation Cut within the limits shown on the plans will be paid for based on the "proposal quantity" as shown in the Contract without measurement thereof.

If the Engineer determines that substantial changes are required to excavation limits, additional undercut or excavation directed by the Engineer additional excavation shall be measured in the field by cubic yards in place, and paid for as Excavation Cut.

## BASIS OF PAYMENT

Excavation Cut shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM 20130 - UNDER DRAIN, 4 INCH, WRAPPED

This work shall include all labor, equipment, materials, and incidentals required to install and connect four-inch perforated pipe under drain, wrapped, including open graded base course and geotextile fabric, as shown on the plans or as directed by the Engineer. Drain pipe shall pitch at a minimum 0.5% slope in a bed of ¾" **washed** stone to cover and envelope the pipe a minimum of 3" around. Drain pipe shall be located to intersect a main run that will daylight to a low spot noted on the plan and confirmed in the field. The pipe end shall include a secured mitered drain grate (Drain-Tech # 0499MDB or approved equal) and be directed to an area determined on-site that will carry water from the playground. See the City of Madison Standard Specification for Public Works Construction, Standard Detail Drawing 4.05 for additional information. Installation of the secured mitered drain grate, stone, Geotextile fabric, perforated pipe and excavation cut is incidental to this bid item.

When installing the under drain system the Contractor shall maintain a 24" minimum clearance from playground equipment footings.

The following quantities of under drain are required at each site:

- Nakoma Park – 317 linear feet
- Reservoir Park – 348.5 linear feet
- Reynolds Park – 0 linear feet
- Worthington Park – 271 linear feet

## METHOD OF MEASUREMENT

Under Drain, 4 Inch Wrapped shall be measured by the plan linear foot as listed on the proposal page.

## BASIS OF PAYMENT

Under Drain, 4 Inch Wrapped shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

## BID ITEM 20140 – GEOTEXTILE FABRIC TYPE SAS NON WOVEN

## DESCRIPTION

Work under this bid item shall include all necessary work, labor and incidentals required to install Type SAS Non Woven Geotextile Fabric between the proposed subgrade/under drain and the playground surfacing (installed by others).

Geotextile fabric shall have a minimum 4 oz/sy fabric strength.

Overlap and staple pattern shall be in general accordance with the manufacturer's recommendations, or as modified or approved in the field to accommodate the underlying play equipment or as specified in plans. The Contractor shall provide to the City the Manufacturer's recommended staple pattern.

The following quantities of Geotextile Fabric Type SAS Non Woven are required at each site:

- Nakoma Park – 610 square yards, not including run out in anchor trenches or overlap.
- Reservoir Park – 380 square yards, not including run out in anchor trenches or overlap.
- Reynolds Park – 383 square yards, not including run out in anchor trenches or overlap.
- Worthington Park – 380 square yards, not including run out in anchor trenches or overlap.

**METHOD OF MEASUREMENT**

Geotextile Fabric Type SAS Non Woven shall be measured by the plan square yard listed in the proposal page, not including run out in anchor trenches or overlap.

**BASIS OF PAYMENT**

Geotextile Fabric Type SAS Non Woven shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

**BID ITEM 20217 – CLEAR STONE**

**DESCRIPTION**

This item shall include the quantity of clear stone required for the construction entrance per BID ITEM 21010 and does not include stone for construction of the under drain. Stone required for construction of the under drain shall be incidental to BID ITEM 20130 – UNDERDRAIN, 4 INCH, WRAPPED.

**METHOD OF MEASUREMENT**

Clear Stone shall be measured in cubic yards.

**BASIS OF PAYMENT**

Clear Stone shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

**BID ITEM 20201 - FILL BORROW**

**DESCRIPTION**

This item shall include all necessary work, labor and incidentals required to obtain and distribute fill to meet proposed subgrades. Fill shall comply with material described in the latest edition of the City of Madison Standard Specifications for Public Works Construction Article 202.

- For Nakoma Park it is estimate that 63.1 cubic yards of fill will need to be imported.
- For Reservoir Park it is estimate that 88 cubic yards of fill will need to be imported.
- For Reynolds Park it is estimate that 124 cubic yards of fill will need to be imported.
- For Worthington Park it is estimate that 133.6 cubic yards of fill will need to be imported.

Double handling, stockpiling and placing fill is included in this bid item.

## METHOD OF MEASUREMENT

Fill shall be measured in cubic yards.

The proposal quantity was computed by Microstation InRoads surface data volume. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, excavation of fourteen (14) inches of existing playground surfacing, placement of six (6) inches of proposed topsoil, and placement of either twelve (12) or nine (9) inches of playground surfacing (depending on the surfacing type).

## BASIS OF PAYMENT

Fill shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM 20221 - TOPSOIL

## DESCRIPTION

This item shall include all necessary work, labor and incidentals required to distribute and dispose of topsoil to meet proposed grades. Topsoil shall comply with material described in the City of Madison Standard Specifications for Public Works Construction Article 202.

- For Nakoma Park it is estimated that there will be roughly 12.4 cubic yards made available through Excavation Cut, of which 12.4 will be reused onsite and an additional 28.3 cubic yards of topsoil is needed from offsite to meet the placement requirements. Stripped topsoil can be stockpiled on site at the location shown on the plans.

- For Reservoir Park it is estimated that there will be roughly 59 cubic yards of topsoil made available through Excavation Cut, of which 52 will be reused onsite and 7 will have to be disposed. Stripped topsoil can be stockpiled on site at the location shown on the plans

- For Reynolds Park it is estimated that there will be roughly 42 cubic yards made available through Excavation Cut, of which 34 will be reused onsite and 8 will have to be disposed. Stripped topsoil can be stockpiled on site at the location shown on the plans.

- For Worthington Park it is estimated that there will be roughly 44.6 cubic yards made available through Excavation Cut, of which 44.6 will be reused onsite and an additional 18.5 cubic yards of topsoil is needed from offsite to meet the placement requirements. Stripped topsoil can be stockpiled on site at the location shown on the plans.

Excess material shall be disposed offsite at a location to be determined and provided by the Contractor at no extra cost to the City. Double handling, stockpiling and placing topsoil is included in this bid item.

**Contractor to note - the City of Madison Parks Division is to be called to inspect and approve the finish grade prior to seeding.**

## METHOD OF MEASUREMENT

Topsoil shall be measured in cubic yards.

The proposal quantity was computed by Microstation InRoads surface data volume computations and the assumptions listed above. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, fourteen (14) inches of existing playground surfacing, and placement of six (6) inches of proposed topsoil.

## BASIS OF PAYMENT

Topsoil shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM 20322 - REMOVE CONCRETE CURB & GUTTER

This item shall include all necessary work, labor and incidentals required to remove and disposed of concrete curb and gutter as indicated on the plans as indicated in the latest edition of the City of Madison Standard Specifications for Public Works Construction.

The Contractor shall take care in removing existing curb and gutter not to damage or remove the existing asphalt pavement. New curb and gutter shall be hand placed and poured directly against the existing pavement. Any damage to the existing asphalt pavement shall be replaced per City of Madison patching standards by the Contractor and considered incidental to work.

## METHOD OF MEASUREMENT

Remove Concrete Curb & Gutter shall be measured per plan linear foot quantity as listed on the proposal page.

## BASIS OF PAYMENT

Remove Concrete Curb & Gutter shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

## BID ITEM 20701 – TERRACE SEEDING

## DESCRIPTION

This work shall consist of preparing seed beds, furnishing and sowing the required seed, furnishing and applying the required stabilizers, fertilizer, and mulching material in terrace and existing lawn damaged by construction activities, all in accordance with the City of Madison Standard Specifications for Public Works Construction Article 207. Seed mixture shall be either in whole, or a mixture of the City of Madison sun terrace mix and shade terrace mix applied appropriately based on shady and sunny areas of the construction site.

Since construction is limited to within the construction fence, no additional compensation will be given for seeding quantities beyond what is specified in this contract.

**Contractor to note - the City of Madison Parks Division is to be called to inspect and approve the finish grade prior to seeding and mulching or sodding.**

The following quantities of terrace seeding are required at each site:

- Nakoma Park – 238 square yards
- Reservoir Park – 310 square yards
- Reynolds Park – 310 square yards
- Worthington Park – 432 square yards
-

## METHOD OF MEASUREMENT

Terrace Seeding shall be measured by the square yard as listed on the proposal page.

## BASIS OF PAYMENT

Terrace Seeding shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM–21024 SILT SOCK (12 INCH) - COMPLETE

## DESCRIPTION

Work under this item shall include all work, materials, labor, and incidentals required to install, maintain and remove silt sock at locations shown on the plans and around any subsoil/topsoil staging piles and to install, maintain and remove additional undistributed silt sock as a precautionary measure to address emergency erosion control. It is probable that the additional linear feet of undistributed silt sock will be reduced or eliminated from the proposal quantities.

The following quantities of silt sock are required at each site:

- Nakoma Park – 250 linear feet of silt sock shown on the plans and xxx linear feet around any subsoil/topsoil staging piles, and as a precautionary measure to address emergency erosion control.
- Reservoir Park – 300 linear feet of silt sock shown on the plans and 100 linear feet around any subsoil/topsoil staging piles, and as a precautionary measure to address emergency erosion control.
- Reynolds Park – 300 linear feet of silt sock shown on the plans and 100 linear feet around any subsoil/topsoil staging piles, and as a precautionary measure to address emergency erosion control.
- Worthington Park – 400 linear feet of silt sock shown on the plans and xxx linear feet around any subsoil/topsoil staging piles, and as a precautionary measure to address emergency erosion control.

## METHOD OF MEASUREMENT

Silt Sock (12 inch) – Complete, shall be measured by linear foot for the completed work as described above.

## BASIS OF PAYMENT

Silt Sock (12 inch) – Complete, shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

## BID ITEM 21061 - EROSION MATTING, CLASS I URBAN TYPE A

Work under this bid item shall include installation Erosion Matting, Class I Urban Type A on all seeded slopes steeper than 5:1.

Work under this bid item shall be as set forth in the latest edition of the City of Madison Standard Specifications for Public Works Contracts, except the Contractor shall note that special care with anchorage devices shall be required so as to not injure users of the park. Anchorage devices for the mat are required to be a product identified on the Wisconsin Department of Transportation Erosion Control Product Acceptability List (PAL) under the category of "Anchoring Devices for Class I, Urban Erosion Mat.

Anchorage devices shall be completely biodegradable, and photobiodegradable or metal anchorage devices or will not be allowed. Materials deemed to present a hazard from splintering or spearing will not be approved, including solid wood devices.

Photobiodegradable matting is not allowed.

Erosion Matting, Class I Urban Type A installed correctly with correct anchorage, staple pattern, and overlap shall be paid at the contract price. To verify the staple pattern, the Contractor shall provide to the City a Manufacturer's recommended staple pattern for the type of matting installed.

Trimming of the Erosion Matting, Class I Urban Type A required to accommodate existing tree locations shall be considered incidental to this bid item.

The following quantities of erosion matting are required at each site:

- Nakoma Park – 263 square yards
- Reservoir Park – 193 square yards
- Reynolds Park – 310 square yards
- Worthington Park – 130 square yards

**METHOD OF MEASUREMENT**

Erosion Matting, Class I Urban Type A shall be measured by the square yard quantity.

**BASIS OF PAYMENT**

Erosion Matting, Class I Urban Type A shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Seeding shall be paid separately. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

**BID ITEM 40102 – CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2**

**DESCRIPTION**

Work under this bid item shall include provision and installation of 6" of Crushed Aggregate Base Course Gradation No. 2 for asphalt path construction as shown in the City of Madison Standard Detail Drawing 4.08 Typical Section Bike Path. The Contractor shall note that the dimensions and slopes shown on Detail 4.08 are typical details, and do not reflect the exact dimensions and slopes of the proposed path construction in this contract. The Contractor should refer to the plans in this contract document for exact grading and dimensions.

**All aggregate base course shall extend .5' beyond the proposed pavement edge and shall HAVE 3" of topsoil and terrace seed over the extended gravel base to be paid for under BID ITEM 20221 – TOPSOIL and 20701 – TERRACE SEEDING for all paved path, except for where the path extends into the playground.**

The following quantities of crushed aggregate base course are required at each site.

- Nakoma Park – 0 tons
- Reservoir Park – 21 tons
- Reynolds Park – 12 tons
- Worthington Park – 49.1 tons

**The Contractor shall contact Dan Rodman at 266-6674 to proof subgrade elevations prior to paving.**

## METHOD OF MEASUREMENT

Crushed Aggregate Base Course Gradation No. 2 shall be measured by the ton as listed on the proposal page.

## BASIS OF PAYMENT

Crushed Aggregate Base Course Gradation No. 2 shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM 40201 – 3" DEPTH HMA PAVEMENT TYPE E-0.3

## DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide and install 3" Depth HMA Pavement Type E-0.3 in accordance with these plans and specifications and the latest edition of the City of Madison Standard Specifications for Public Works Construction.

The following quantities of 3" depth HMA pavement Type E-0.3 are required at each site.

- Nakoma Park – 0 tons
- Reservoir Park – 8.7 tons
- Reynolds Park – 4.5 tons
- Worthington Park – 28.3 tons

## METHOD OF MEASUREMENT

3" Depth HMA Pavement Type E-0.3 shall be measured by the ton as listed on the proposal page.

## BASIS OF PAYMENT

3" Depth HMA Pavement Type E-0.0 shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

## BID ITEM 90000 CONSTRUCTION FENCING (PLASTIC)

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fence from the project site as shown on the plans.

Construction fencing shall be installed to discourage access to the construction area by the general public during the course of the project. Fencing will be maintained throughout and adjusted or removed at the request of the Engineer.

This fence shall be highly visible (orange), constructed of a plastic web, and able to withstand the expected amount of use it will receive on a construction site. Minor relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or minor relocation of the fencing as needed to perform the work. Fencing shall be left in place until construction operations are complete.

Construction fencing shall be International Orange color, high-density polyethylene mesh conforming to the following:

- Mesh opening: 1 inch minimum to 3 inch maximum
- Height: 4 feet
- Ultimate tensile strength: Avg 3000lb per 4' width (ASTM D638)

The following quantities of construction fencing are required at each site:

- Nakoma Park – 1435 linear feet
- Reynolds Park – 375 linear feet
- Reservoir Park – 500 linear feet
- Worthington Park – 830 linear feet

**METHOD OF MEASUREMENT**

Construction Fence (plastic) shall be measured by the Linear Foot.

**BASIS OF PAYMENT**

Construction Fence (plastic) shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Unless there is a substantial change, no payment shall be given for changes in quantities listed in proposal. For purposes of this item, "substantial" shall mean changes over 10% of the estimated quantity.

**BID ITEM 90001 BORDER TIMBERS FOR PLAYGROUND EDGING**

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to install playground border timbers (Tuff Timbers) at each project site as shown on the plans.

**Border timbers will be purchased by the City of Madison and ordered for delivery from the vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the Playground Construction Inspector following installation. Actual layout of Tuff Timbers will comply with the dimensions shown in the plans and be confirmed in the field by the Playground Construction Inspector. The Tuff Timbers shall be installed at the correct elevations as specified on the plans. The Contractor shall field confirm timber placement does not encroach upon the play equipment fall zones as shown in the attached plans.

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, 209-7012 throughout installation to verify that playground equipment is installed at the correct elevation with respect to the proposed playground surfacing.

The following quantities of border timbers are required at each site:

- Nakoma Park – 62 timbers
- Reservoir Park – 77 timbers
- Reynolds Park – 72 timbers
- Worthington Park – 58 timbers

**METHOD OF MEASUREMENT**

Border Timbers for Playground Edging shall be measured by each individual timber for the quantity listed in the proposal page.

**BASIS OF PAYMENT**

Border Timbers for Playground Edging shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

**BID ITEM 90002 PARK BENCH INSTALLATION**

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to install three KayPark (Part # 6FBARP) flat bench, in ground mounted at Nakoma Park at the locations specified on the plans. All handling and installation shall be according to manufacturer's specifications. The complete installation specifications will be included in the shipment of equipment from the vendor.

**METHOD OF MEASUREMENT**

Park Bench Installation shall be measured per each individual installed bench.

**BASIS OF PAYMENT**

Park Bench Installation shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

**BID ITEM 90003 RELOCATE EXISTING BENCHES**

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to remove, store and reinstall the existing park benches at the locations shown on the attached plans.

**METHOD OF MEASUREMENT**

Relocate Existing Benches shall be measured per each individual relocated bench.

**BASIS OF PAYMENT**

Relocate Existing Benches shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

**BID ITEM 90004 BOULDERS FOR SEATING**

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide and install limestone boulders for seating at the locations shown on plans. Boulder shall have a maximum height of 30". The maximum heights can be achieved by burying boulders. Boulders top surface shall be relatively flat.

The exact dimension and quantity of boulders is subject to change depending on field availability.
The Contractor shall bring the boulders to the site for approval by the Engineer prior to installation.

**METHOD OF MEASUREMENT**

Boulders for Seating shall be measured by each individual boulder.

**BASIS OF PAYMENT**

Boulders for Seating shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

## BID ITEM 90005 BOULDER RETAINING WALL

The work under this item shall consist of all work, materials, labor and incidentals necessary for the Contactor to provide and install a boulder retaining wall in accordance with the lines, dimension, and elevations shown on the plans.

Excavation cut for installation of the boulder retaining wall is incidental to this bid item.

### MATERIALS

Materials furnished under this contract shall conform to the following requirements.

**Leveling Pad and Footings**: The wall leveling pad shall consist of a dense-graded crushed aggregate conforming to Article 4.01(b) Gradation No. 3, minimum 6 inches deep following compaction. The wall leveling pad shall be at least 4 inches wider than the proposed stone base. The bottom of the bottom row of stones shall have a reasonably flat face solidly bearing on the leveling pad.

Labor, materials and incidentals necessary for the construction of the leveling pad are incidental to this bid item.

Boulders shall be rounded, natural glacial stones of minimum dimensions not less than 12 inches and maximum dimensions not exceeding 30 inches. Materials shall be clean, sound stone free of fines. No crushed rock, broken concrete or other manufactured materials will be accepted.

Geotextile Fabric Type HR shall be installed behind the wall and under the leveling pad to separate fill and topsoil from boulder and base course material. Geotextile Fabric Type HR shall meet manufacturer's recommendations for this application and shall conform to requirements for Geotextile Fabric Type HR as provided in section 645.2.7 of the State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, (Current Edition). Labor, materials and incidentalis necessary for the installation of Geotextile Fabric Type HR are incidental to this bid item.

### CONSTRUCTION METHODS

**Excavation for the wall shall be done with extreme care in the vicinity of trees to be protected. Roots greater than 1 inch in diameter shall be exposed by hand excavation and shall be cut under the supervision of a Forestry representative. The excavation shall be as nearly vertical as possible based on the soil conditions, in order to disturb as little as possible behind the wall.**

The leveling pad shall be compacted with lightweight manually operated compaction equipment to provide a firm base without unnecessarily compacting underlying soils.

The stone units shall be individually placed to the approximate lines and elevations shown on the plans.

Backfill shall be placed in maximum 1 foot lifts. Compaction of Wall Backfill shall be accomplished by at least three passes of lightweight manually operated compaction equipment acceptable to the engineer. Backfilling operations shall be conducted in such a manner as to prevent damage or misalignment of the wall facing units. No tracked or wheeled equipment may operate on the backfill.

The top of the leveling pad shall be level and shall be stepped as necessary to provide the required minimum embedment of the stone. This minimum embedment may be modified by the Engineer if necessary to protect trees.

The base of the wall boulders (top of leveling pad) shall be a minimum of 6 inches below the proposed finished grade at the face of wall. Fill within 1 foot of back of wall shall be granular material conforming to requirements for Fill. Top six (6) inches of backfill shall be topsoil which shall be graded to the extent possible flush with the top of wall.

Boulders encountered during the cut/fill part of this project can be used as a part of this item. The Contractor will not be paid extra for hauling any boulders off site.

**MEASUREMENT**

Boulder Retaining Wall will be measured in place by the plan quantity linear foot of boulder wall as listed in the proposal page.

**PAYMENT**

Boulder Retaining Wall shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description above.

**BID ITEM 90006 PLAYGROUND EQUIPMENT INSTALLATION**

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

**METHOD OF MEASUREMENT**

Playground Equipment Installation shall be measured by lump sum per each park playground site for the completed work as described above.

**BASIS OF PAYMENT**

Playground Equipment Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

# MANUFACTURERS' PLAYGROUND INSTALLATION SPECIFICATIONS

# NAKOMA PARK PLAYGROUND INSTALLATION SPECIFICATIONS

Installation Specifications

NAKOMA PARK

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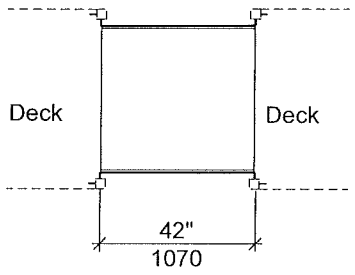
ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

14550700

## PLAN VIEW/ FOOTING LAYOUT

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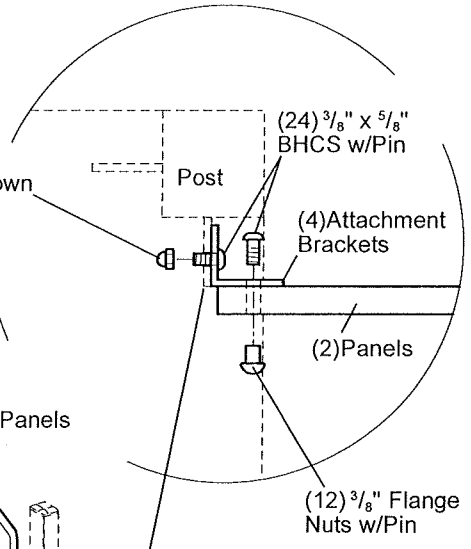
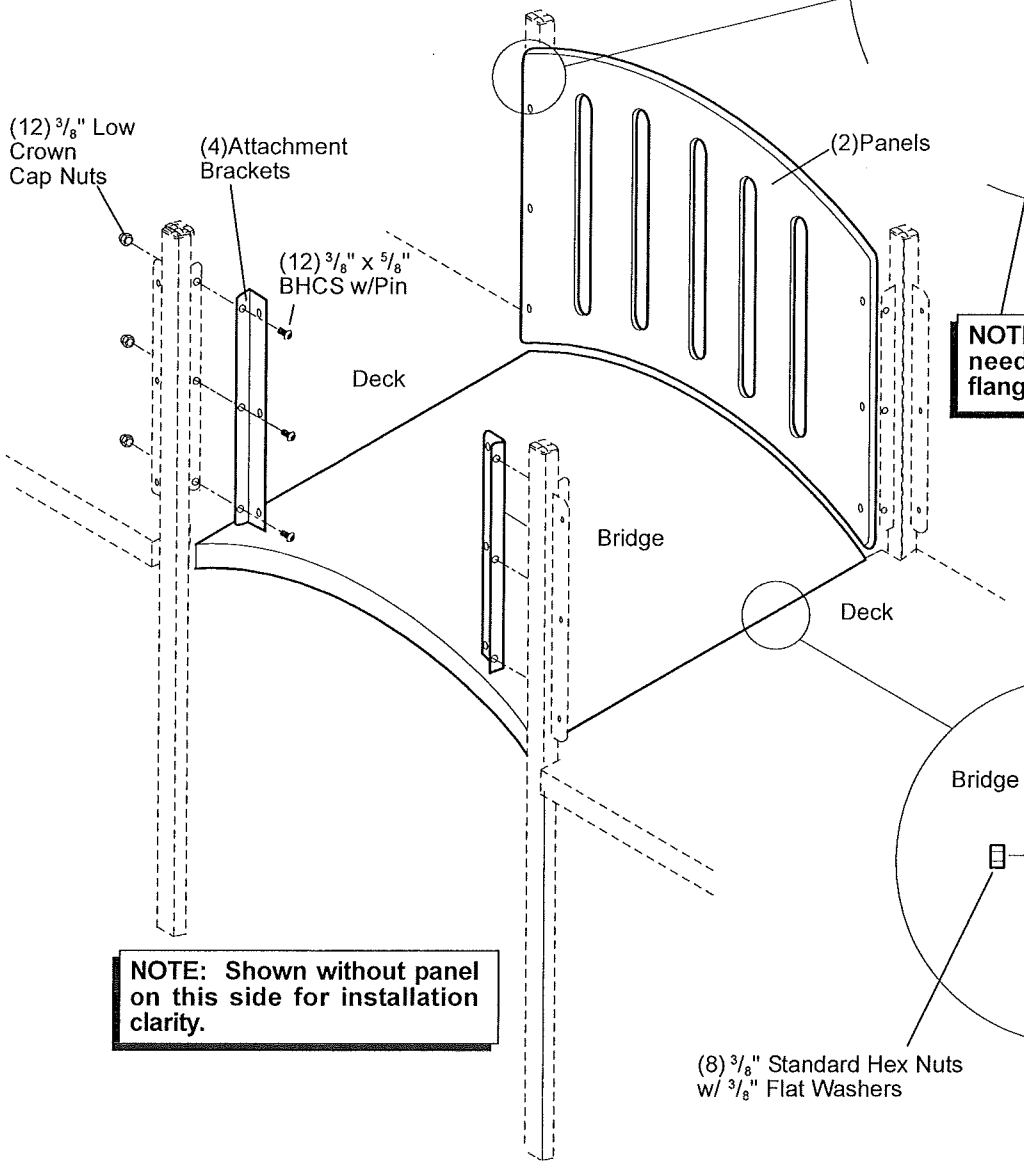
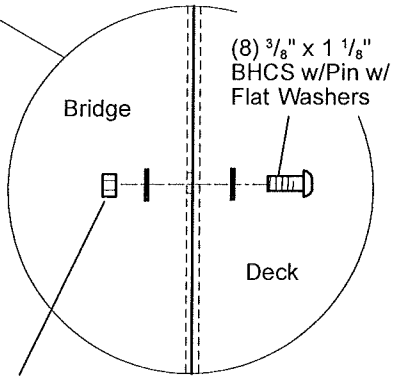



**NOTE: Attachment Brackets need to be flush with post flanges.**




**NOTE: Shown without panel on this side for installation clarity.**

## DETAIL




(8) 3/8" Standard Hex Nuts w/ 3/8" Flat Washers

PlayShaper®

# 111348 Arch Bridge, 42"

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# PlayShaper® 111348 Arch Bridge, 42"

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 111796-00 | Attachment Bracket, Specify Color | 4 |
| 134945-00 | Arch Bridge Deck, Specify Color | 1 |
| 145506-00 | Arch Bridge Panel, Specify Color | 2 |
| **107031-00** | **Hardware Package** | 1 |
| 100195-00 | 3/8" x 5/8" BHCS w/Pin, SST | 24 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 8 |
| 100349-00 | 3/8" Low Crown Cap Nut, SST | 12 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 12 |
| 100362-00 | 3/8" Flat Washer, SST | 16 |

## Specifications

**Bridge Deck:** Fabricated from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff™, color specified.

**Panels:** Permalene® panel measures 41" wide x 34 15/16" high, color specified.

**Attachment Brkt:** Fabricated from 1/8" x 1 1/4" x 2" 6061-T6 aluminum angle. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 man hour

**Weight:** 130 lbs.

## Installation Instructions

1) With mainstructures in position, attach arch bridge to face of decks using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washers and 3/8" standard hex nuts with 3/8" flat washers. See Detail.
2) Attach brackets to post flanges in position shown using 3/8" x 5/8" BHCS w/pin and 3/8" low crown cap nuts.
3) Attach panels to brackets in position shown using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.
4) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53933 Document #17030000 replaces #14550700. Changed height of Panel to 34 15/16".

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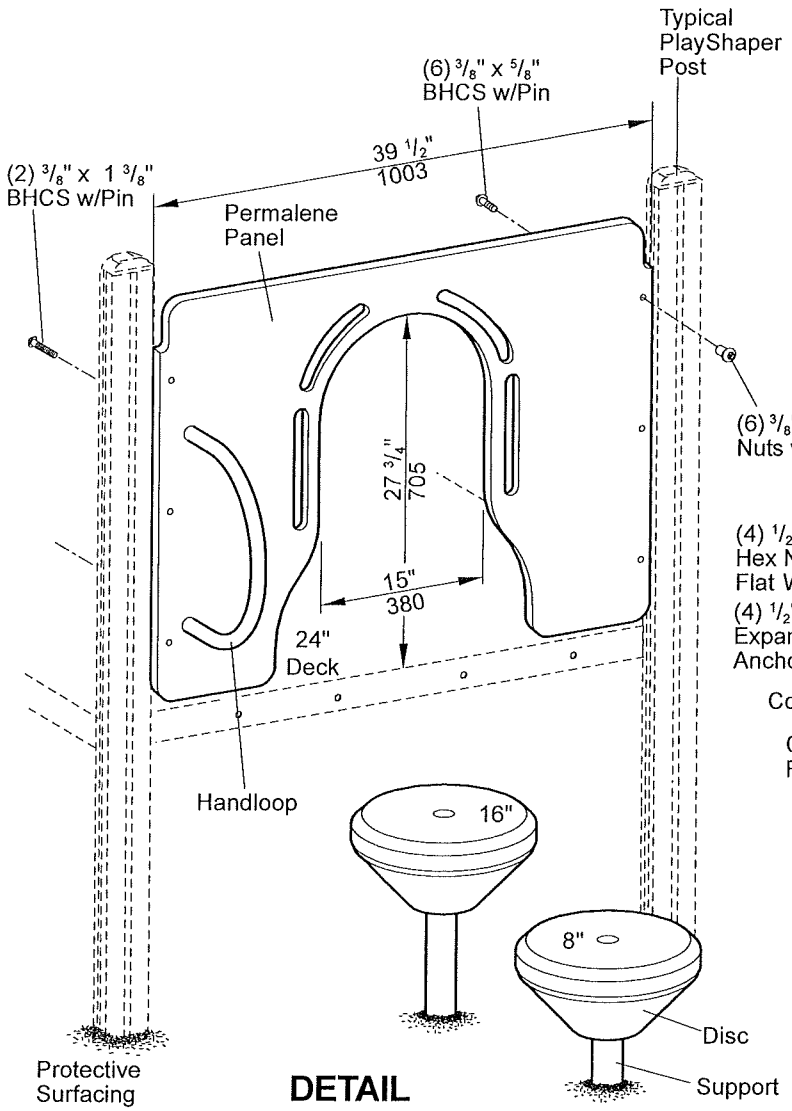
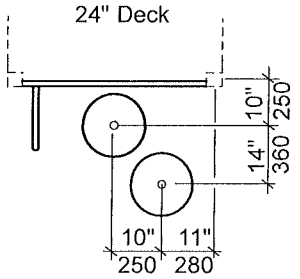
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

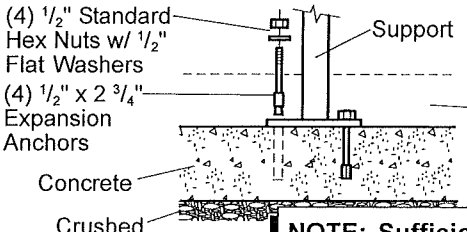
15437600

## PLAN VIEW/FOOTING LAYOUT



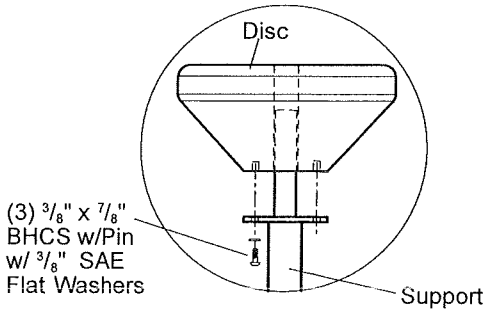




## DETAIL
### SURFACE MOUNT

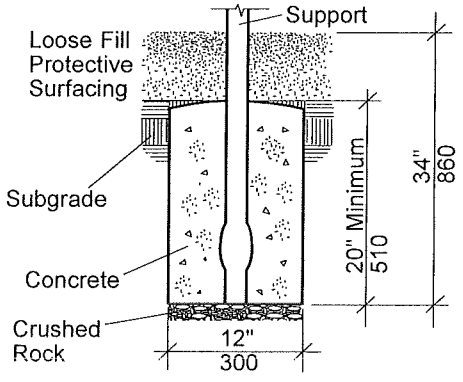



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

## DETAIL
### DISC ATTACHMENT




## DETAIL
### DIRECT BURY




# PlayShaper® 135346 Pod Climber®, 24"

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# PlayShaper® 135346 Pod Climber®, 24"

Landscape Structures®

J:\SPECS\184\18499000.P65

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 126956-00 | Disc, Specify Color | 2 |
| 145467-00 | Permalene Panel, Specify Color | 1 |
| 135553-00 | Handloop, Specify Color | 1 |
| 120603-00 | Support 8" (SM), Specify Color | 1 |
| 120599-00 | Support 8" (DB), Specify Color | 1 |
| 120600-00 | Support 16" (DB), Specify Color | 1 |
| 120604-00 | Support 16" (SM), Specify Color | 1 |
| **106480-00** | **Panel Hardware Package** | 1 |
| 100195-00 | 3/8" x 5/8" BHCS w/Pin, SST | 6 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| **184986-00** | **Disc Climber Hardware Package** | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 6 |
| **135605-00** | **Handloop Hardware Package** | 1 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 2 |
| **121348-00** | **4 Hole (SM) Hardware Package** | 2 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 8 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 8 |
| 100363-00 | 1/2" Flat Washer, SST | 8 |

**DB = Direct Bury**
**SM=Surface Mount**

## Specifications

**Disc:** Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, color specified.

**Permalene Panel:** Solid color Permalene®, color specified.

**Handloop:** Weldment comprised of 1.125" O.D. 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff™, color specified.

**Support:** Weldment comprised of 1.900" O.D. RS-20 (.090" - .100"), 1.315" O.D. RS-20 (.080" - .090") and 3/16" x 5" diameter plate. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **SM** - Approx. 1 man hour
**DB** - Approx. 1 1/2 man hour

**Concrete Req.:** Approx. 3 cu. ft.

**Weight:** 51 lbs. **(DB)**
43 lbs. **(SM)**

**Fall Height:** 24" (0,61 m) Deck Height

## Installation Instructions

1) **(Direct Bury)** Dig footing spaced as shown. See your Plan View/ Footing Layout.

2) Attach disc to support using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers, as shown.

3) **(Direct Bury)** Position support in footing hole and pour concrete footing. With support post plumb, prop support to hold in position. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.

   **(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in anchor plate. Remove support with disc. Drill 1/2" x 3" deep holes on marks into concrete using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten anchor plate to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

4) Attach panel to post flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. Using a 7/16" drill bit, drill out 1/8" pilot holes in each handhold panel to attach handloop & handrail.

5) Attach handloop to handhold panel using 3/8" x 1 3/8" BHCS w/pin.

6) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54544 Document #18499000 replaces #15437600. Replaced hardware package.

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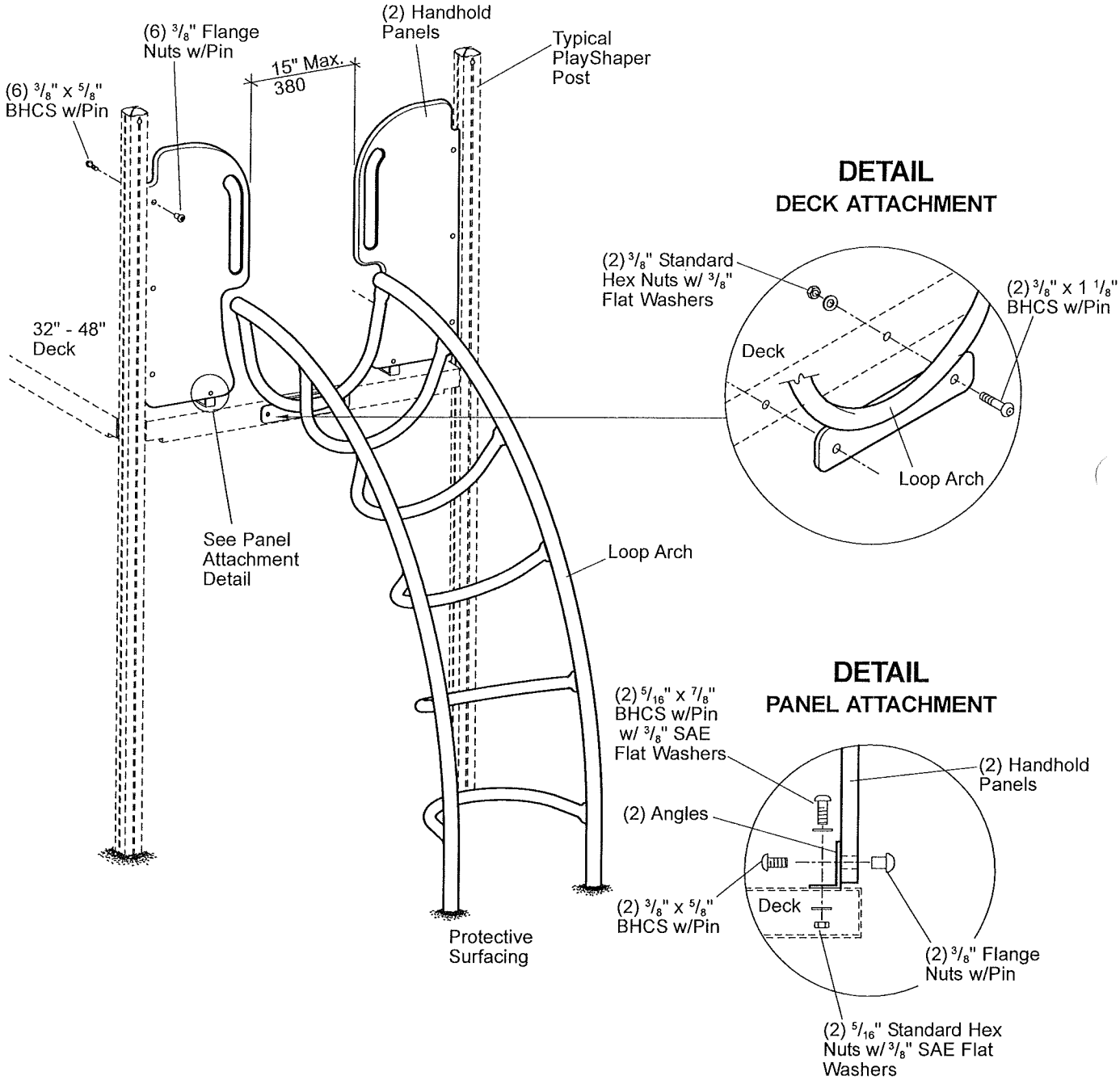
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

15662200




**Off 32" Deck (DB) Only**
**Off 40" Deck (Shown)**
**Off 48" Deck**

PlayShaper®

# 139262 Loop Arches



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# PlayShaper® 139262 Loop Arches

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 145500-00 | Handhold Panel, Specify Color | 2 |
| 111595-00 | 32", 40" & 48" Loop Arch (DB), Specify Color | 1 |
| 111598-00 | 40" Loop Arch (SM), Specify Color | 1 |
| 111599-00 | 48" Loop Arch (SM), Specify Color | 1 |
| **139293-00** | **Loop Arch Hardware Package** | 1 |
| 100195-00 | 3/8" x 5/8" BHCS w/Pin, SST | 8 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 2 |
| 100326-00 | 5/16" Standard Hex Nut, SST | 2 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 2 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 8 |
| 100362-00 | 3/8" Flat Washer, SST | 2 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 4 |
| 106187-00 | Angle, SST | 2 |
| 132626-00 | 5/16" x 7/8" BHCS w/Pin, SST | 2 |
| **121348-00** | **4-Hole (SM) Hardware Package** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 4 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |

**DB=Direct Bury**
**SM=Surface Mount**

## Specifications

**Loop Arch:** Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing, 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and 1/4" flat steel. Finish: ProShield®, color specified.

**Handhold Panel:** Solid color Permalene® panel measures 13 1/16" wide x 30" high with 3/4" x 1 1/8" handholds, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **SM** - Approx. 1 1/2 man hours
**DB** - Approx. 2 1/2 man hours

**Concrete Req.:** Approx. 2.6 cu. ft.

**Weight:** 81 lbs.

**Fall Height:** Deck Height

## Installation Instructions

1) (Direct Bury) Dig footing holes spaced as shown.

2) Attach loop arch to deck using 3/8" x 1 1/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" flat washers.

3) Attach handhold panels to post flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.

4) Attach angle to handhold panels using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.

5) Using the hole in the angle as a guide, drill through the deck using a 3/8" drill bit. Attach angles to deck using 5/16" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 5/16" standard hex nuts with 3/8" SAE flat washers.

6) **(Direct Bury)** With loop arch in final position, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

   **(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in anchor plate and remove loop arch. Drill 1/2" x 3" deep holes on marks into concrete using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition loop arch and reattach to the face of the deck following step 2. Fasten anchor plates to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

7) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53017 Document #15662200 replaces #15046000. Removed Play It Safe Label for hardware package.

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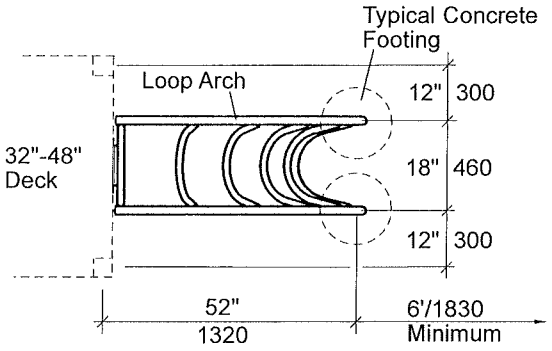
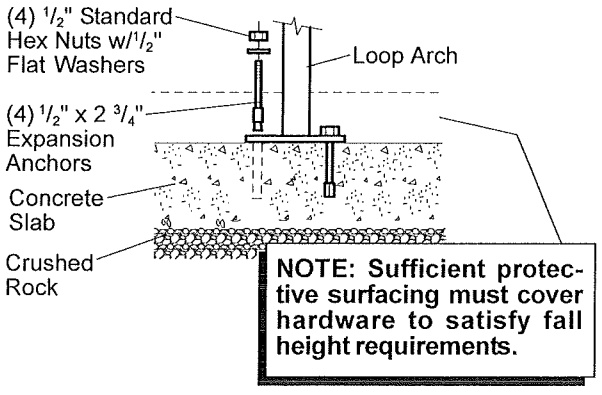
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

139263a0

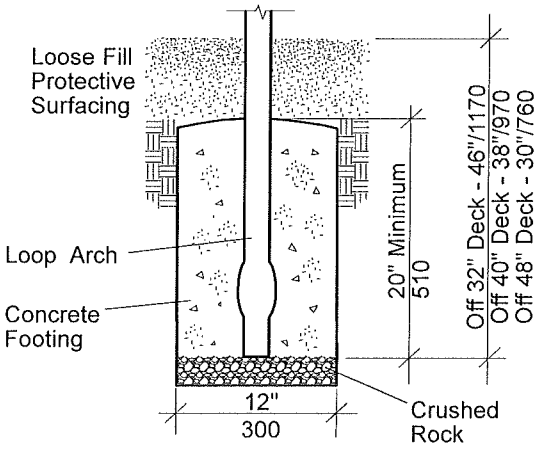
## PLAN VIEW/DB FOOTING LAYOUT




## DETAIL
### SURFACE MOUNT




## DETAIL
### DIRECT BURY







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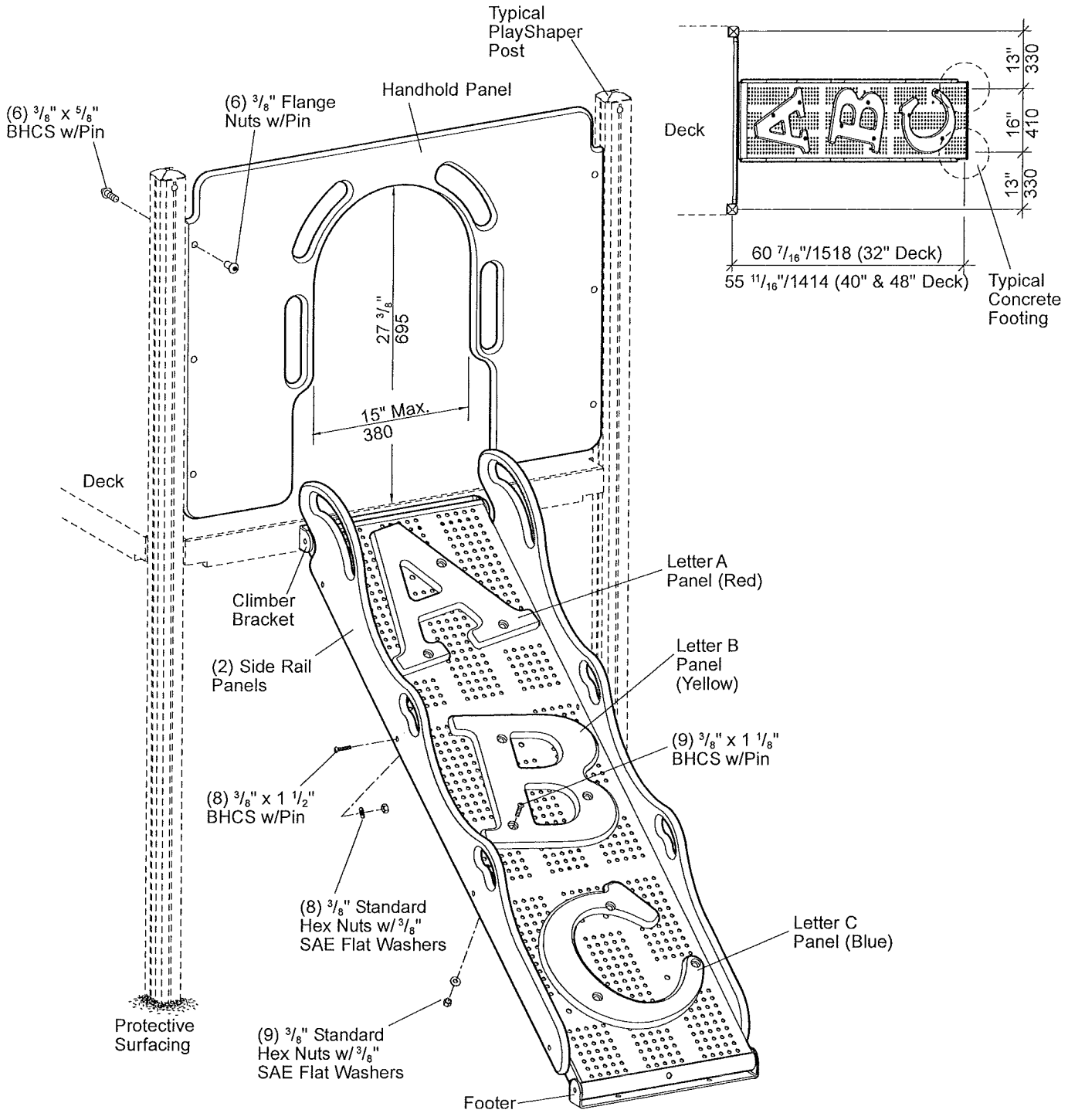
ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

15243400

# PLAN VIEW/DB FOOTING LAYOUT




PlayShaper®

# 152432 ABC Climber



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# PlayShaper® 152432 ABC Climber

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 152391-00 | Climber Plank, Specify Color | 1 |
| 145467-00 | Handhold Panel, Specify Color | 1 |
| 122122-00 | Climber Bracket, Specify Color | 1 |
| 122131-00 | Footer (DB), Specify Color | 1 |
| 122646-00 | Footer (SM) 32" & 40", Specify Color | 1 |
| 137805-00 | Footer (SM) 48", Specify Color | 1 |
| 152446-00 | Letter A Panel, Red | 1 |
| 152447-00 | Letter B Panel, Yellow | 1 |
| 152448-00 | Letter C Panel, Blue | 1 |
| 152449-00 | Side Rail Panel, Specify Color | 2 |
| **173163-00** | **ABC Climber Hardware Package** | 1 |
| 100195-00 | 3/8" x 5/8" BHCS w/Pin, SST | 6 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 2 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 13 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 23 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 27 |
| 100171-00 | 3/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| **111392-00** | **2 Hole (SM) 32" & 40" Hardware Package** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 2 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 2 |
| 100363-00 | 1/2" Flat Washer, SST | 2 |
| **111394-00** | **4 Hole (SM) 48" Hardware Package** | 1 |
| 100263-00 | 3/8" x 2 3/4" Expansion Anchor | 4 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |

**DB=Direct Bury**
**SM=Surface Mount**

## Specifications

**Climber Plank:** Flange formed from 11 GA (.120") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16"diameter holes. Finish: TenderTuff™, color specified.

**Climber Bracket:** Fabricated from formed 3/16" x 2" HRPO steel sheet. Finish: ProShield®, color specified.

**Footer:** Weldment comprised of 1.660" O.D. RS-20 (.085"-.095") galvanized steel tubing and 3/16" x 2" HRPO steel sheet. Finish: ProShield, color specified.

**Panels:** Solid color Permalene®, color specified.

**Fasteners:** Primary fasteners are socketed and pinned tamperproof in design, either stainless steel (SST) or carbon steel plated with zinc/nickel and iridescent chromate finish.

**Installation Time:** **SM** - Approx. 2 man hours
**DB** - Approx. 2 1/2 man hours

**Concrete Req.:** Approx. 2 cu. ft.

**Area Req.:** 6' (1830 mm) minimum use zone at exit

**Weight:** **SM** - 120 lbs. (32" & 40" Deck Height)
**SM** - 124 lbs. (48" Deck Height)
**DB** - 128 lbs.

**Fall Height:** Deck Height

## Installation Instructions

1) Dig footing holes spaced as shown.

2) Attach handhold panel to post flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.

3) Attach letter panels A, B and C to the climber plank using 3/8" x 1 1/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.

4) Attach side rail panels to the climber plank using 3/8" x 1 1/2" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.

5) Attach climber plank to climber bracket and footer using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Plank Attachment Detail.

6) Attach climber bracket to the face of the deck using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Plank Attachment Detail.

7) **(Direct Bury)** With ABC climber in final position, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure. **NOTE:** *When installing a ABC climber off of a 48" deck, the ABC climber will have to be blocked in position prior to pouring concrete footing.*

   **(Surface Mount 32" & 40")** Mark anchor bolt locations on concrete slab through holes in footer and remove ABC climber from climber bracket. Drill 1/2" x 3" deep holes on marks into concrete using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition ABC climber and reattach to the climber bracket. Fasten footer to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

   **(Surface Mount 48")** Mark anchor bolt locations on concrete slab through holes in footer and remove ABC climber from climber bracket. Drill 3/8" x 3" deep holes on marks into concrete using hammer drill and 3/8" masonry bit. Tap expansion anchors into drilled holes. Reposition ABC climber and reattach to the climber bracket. Fasten footer to expansion anchors using 3/8" standard hex nuts with 3/8" flat washers.

8) Install protective surfacing before users are allowed to play on the structure.



ECO #54088 Document #17317500 replaces #15243400. Replaced hardware package.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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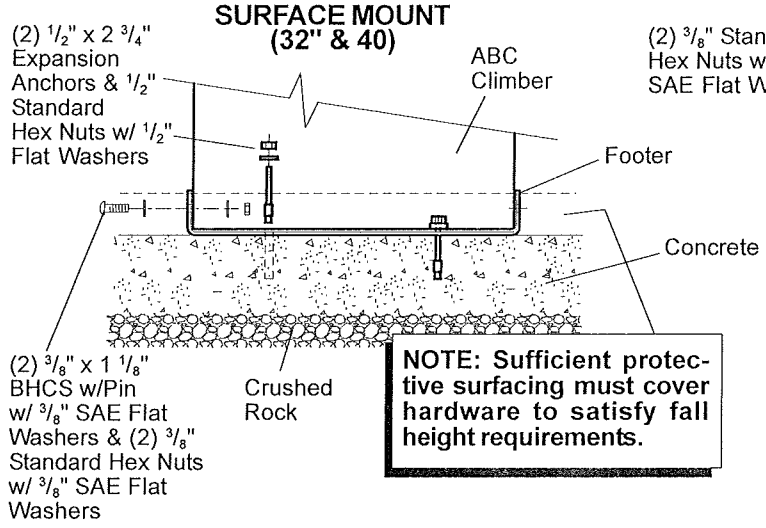
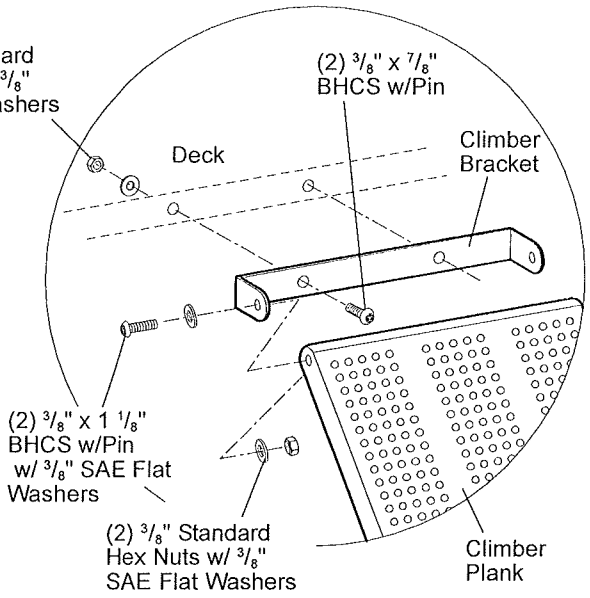
## DETAIL
### SURFACE MOUNT (32" & 40")

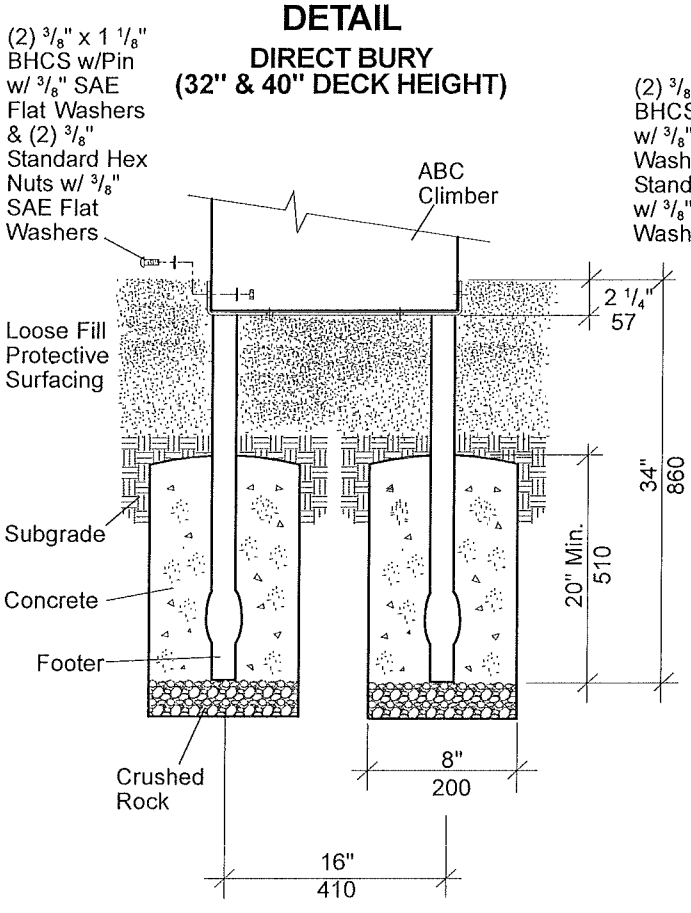



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

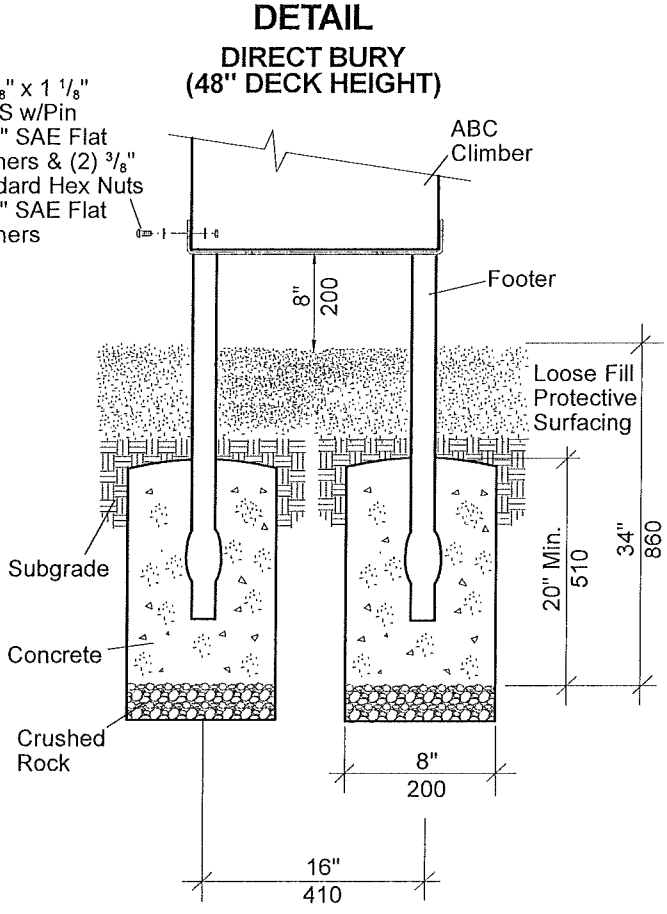
## DETAIL
### PLANK ATTACHMENT




## DETAIL
### DIRECT BURY (32" & 40" DECK HEIGHT)




## DETAIL
### DIRECT BURY (48" DECK HEIGHT)




PlayShaper®

# 152432 ABC Climber



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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Document #17317500

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ISO 14001 CERTIFIED

ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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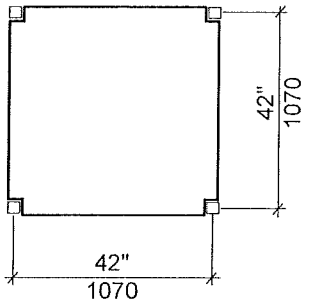
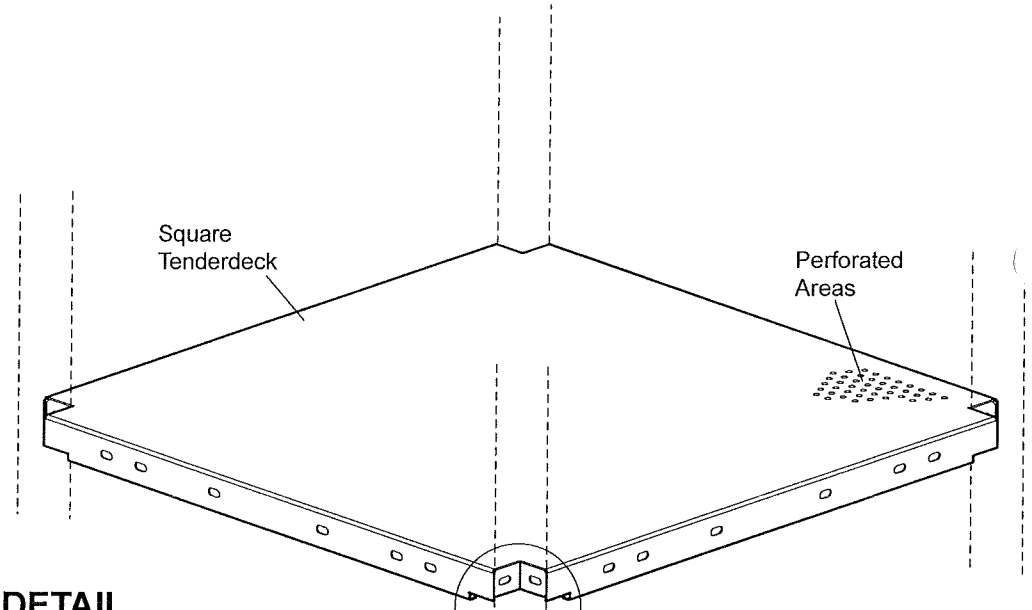
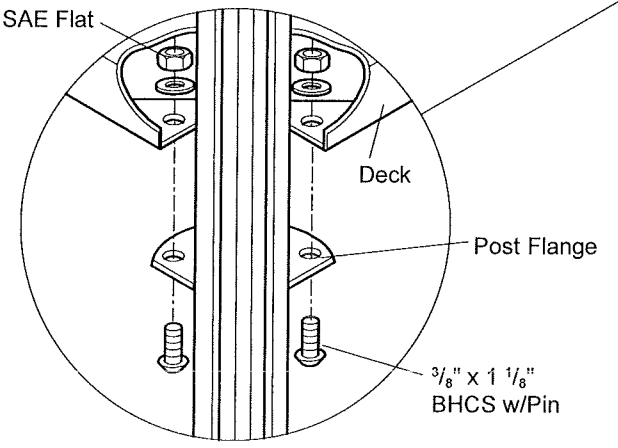
## PLAN VIEW
### FOOTING LAYOUT




## DETAIL
### DECK ATTACHMENT




PlayShaper®

# 111237 Tenderdeck

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# PlayShaper® 111237 Tenderdeck

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 153298-00 | Tenderdeck, Specify Color | 1 |
| **106695-00** | **Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST | 8 |
| 100327-00 | $^3/_8$" Standard Hex Nut, SST | 8 |
| 100365-00 | $^3/_8$" SAE Flat Washer, SST | 8 |

## Specifications

**Square Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with $^5/_{16}$" diameter holes. Deck face has (6) slotted holes for face mounting components. The finished size measures 2 $^5/_8$" x 44 $^3/_8$" x 44 $^3/_8$". Finish: TenderTuff™, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx: $^3/_4$ man hour
**Weight:** 102 lbs.

## Installation Instructions

1) Orient posts correctly according to labeled post letters and set in proper footing holes.
2) Position deck on post flanges and attach using $^3/_8$" x 1 $^1/_8$" BHCS w/pin and $^3/_8$" standard hex nuts with $^3/_8$" SAE flat washers. See Deck Attachment Detail.
3) Level deck and plumb posts.
4) Install other panels/ components according to their respective installation sheets.
5) Pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
6) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco#52809 Document #15330400 replaces #14611000. Added slots to deck.

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ISO 9001 Certified

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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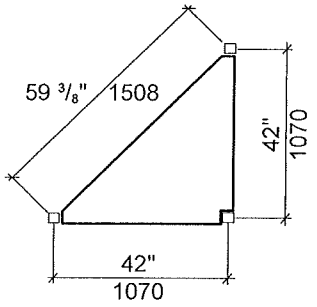
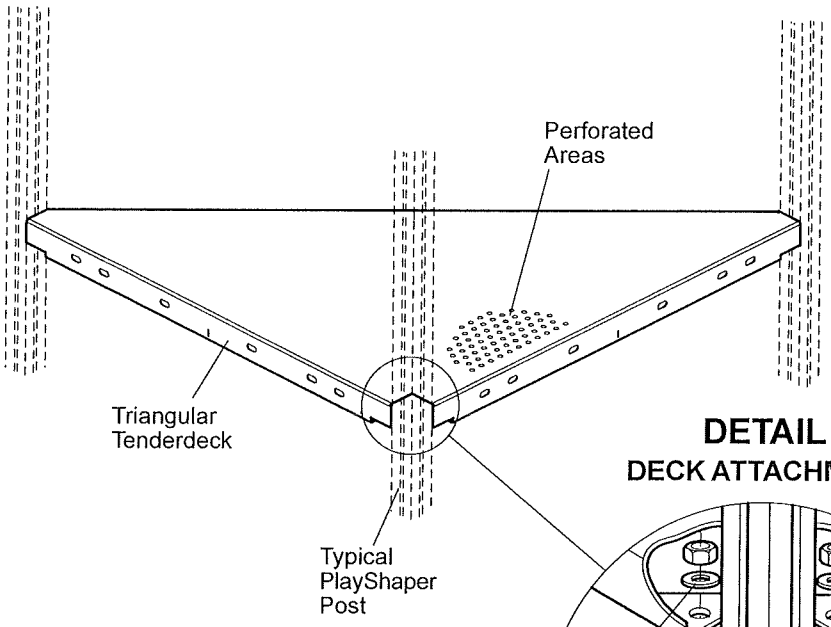
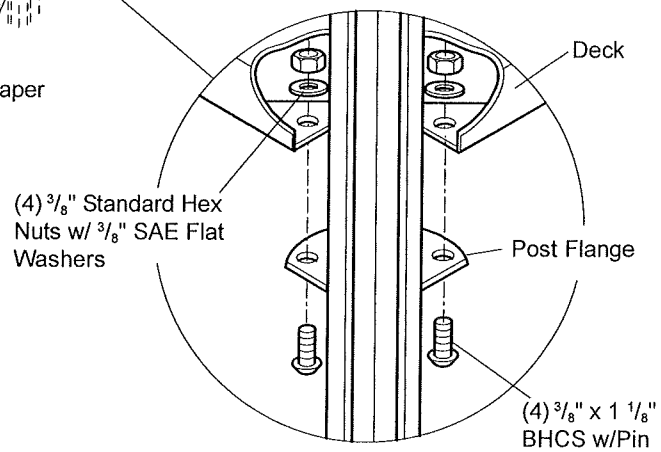
## PLAN VIEW
### FOOTING LAYOUT




## DETAIL
### DECK ATTACHMENT

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# 117495 Tenderdeck, Triangular

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# PlayShaper® 117495 Tenderdeck, Triangular

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 153299-00 | Tri-Deck, Specify Color | 1 |
| **117406-00** | **Tri-Deck Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST | 4 |
| 100327-00 | $^3/_8$" Standard Hex Nut, SST | 4 |
| 100365-00 | $^3/_8$" SAE Flat Washer, SST | 4 |

## Specifications

**Triangular Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1010. Standing surface is perforated with $^5/_{16}$" diameter holes. Deck face has (6) slotted holes for face mounting components. The finished size of two of the three sides measures 2 $^5/_8$" x 39 $^1/_4$" on the face of the deck and the other side measures 2 $^5/_8$" x 55 $^1/_2$". Finish: TenderTuff™, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. $^1/_2$ man hour

**Weight:** 60 lbs.

## Installation Instructions

1) Orient posts correctly according to labeled post letters and set in proper footing holes.

2) Position deck on post flanges and attach using $^3/_8$" x 1 $^1/_8$" BHCS w/pin and $^3/_8$" standard hex nuts with $^3/_8$" SAE flat washers. See Deck Attachment Detail.

3) Plumb posts and level deck. After components and enclosures are in place, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.

4) Install protective surfacing before users are allowed to play on the structure.



Eco#52801 Document #15330500 replaces #14611100. Added slots to Tri-Deck.

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ISO 14001 CERTIFIED

ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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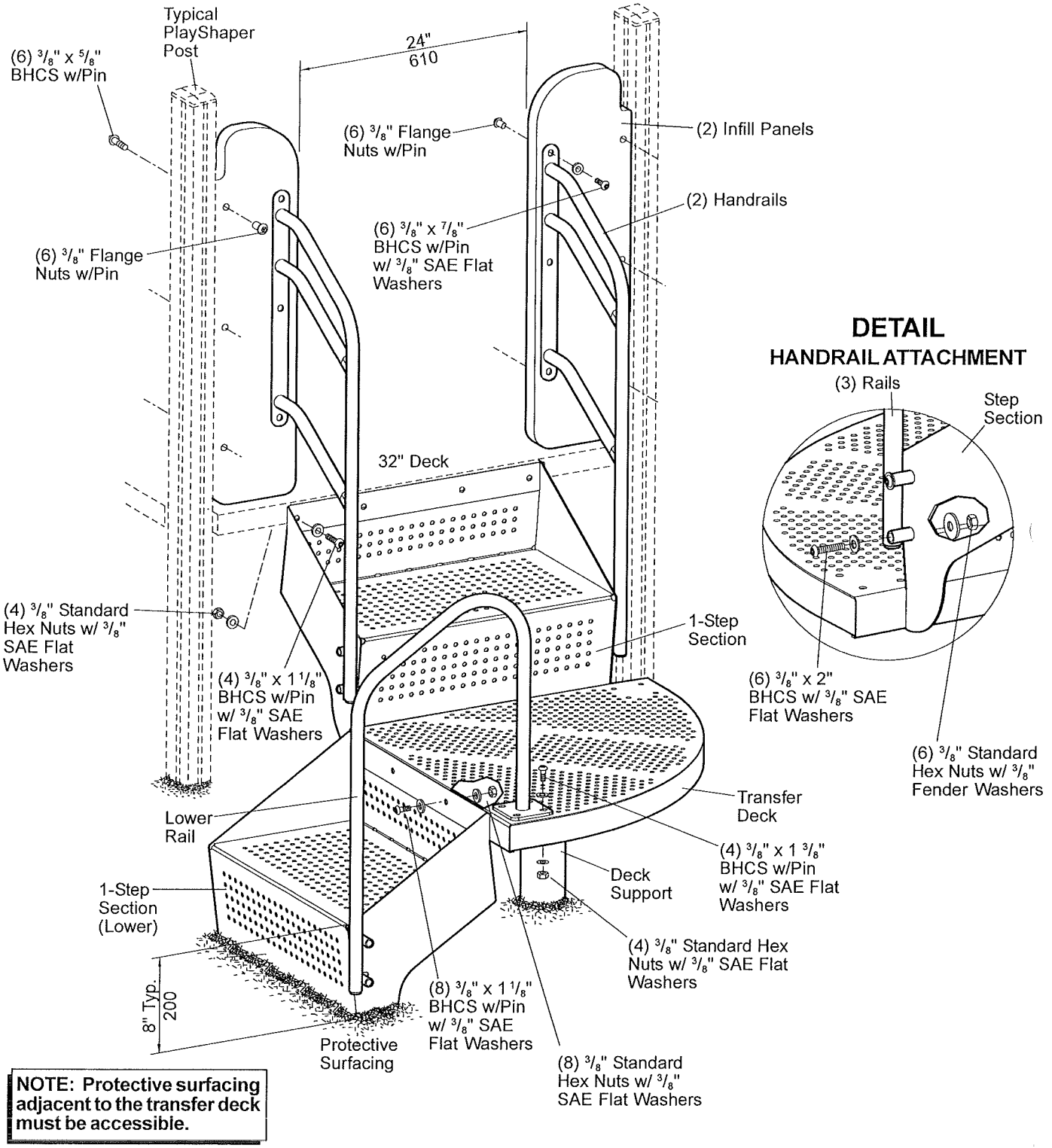


## DETAIL
### HANDRAIL ATTACHMENT




**NOTE: Protective surfacing adjacent to the transfer deck must be accessible.**

# PlayShaper® 153020 Transfer Module, 32", w/Handrails

Sheet 1 of 2

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Document #18138300

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# PlayShaper® 153020 Transfer Module, 32", w/Handrails

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 144696-00 | 1-Step Section, Specify Color | 2 |
| 153398-00 | Transfer Deck, Specify Color | 1 |
| 175516-00 | 1-Step Handrail, Specify Color | 2 |
| 152641-00 | Lower Rail, Specify Color | 1 |
| 181371-00 | Deck Support (DB), Specify Color | 1 |
| 181373-00 | Deck Support (SM), Specify Color | 1 |
| 181374-00 | Step Support (DB), Specify Color | 1 |
| 181376-00 | Step Support (SM), Specify Color | 1 |
| 175530-00 | Infill Panel, Specify Color | 2 |
| **177123-00** | **Transfer Module Hardware Package** | 1 |
| 100173-00 | 3/8" x 2" BHCS, SST | 6 |
| 100195-00 | 3/8" x 5/8" BHCS w/Pin, SST | 6 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 12 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 12 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 28 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 12 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 50 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 4 |
| 100378-00 | 3/8" Fender Washer, SST | 6 |
| **111393-00** | **4-Hole (SM) Hardware Package** | 1 |
| 100263-00 | 3/8" x 2 3/4" Expansion Anchors | 4 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 4 |
| 100365-00 | 3/8" SAE Flat Washers, SST | 4 |
| **121256-00** | **2-Hole (SM) Hardware Package** | 1 |
| 100263-00 | 3/8" x 2 3/4" Expansion Anchors | 2 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 2 |
| 100365-00 | 3/8" SAE Flat Washers, SST | 2 |

**DB=Direct Bury**
**SM=Surface Mount**

## Specifications

**Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measure 29" per (2) sides. Finish: TenderTuff™, color specified.

**Railings:** Weldment comprised of formed 1 1/8" O.D. x 11 GA (.120") steel tubing, 3/16" thick HR flat steel, 3/16" thick HRPO steel plate and 3/4" O.D. x 11 GA. (.120") stainless steel tubing. Finish: TenderTuff, color specified.

**Step Sections:** Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

**Deck Support:** Weldment comprised of 3 1/2" O.D. RS20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long rod. Finish: ProShield®, color specified.

**Step Support:** Weldment comprised of 1.660 O.D. RS20 (.080"-.095") and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.

**Panel:** Solid color Permalene®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **SM** - Approx. 3 man hours
**DB** - Approx. 4 man hours

**Concrete Req.:** Approx. 3.4 cu. ft.

**Weight:** **SM** - 179 lbs.
**DB** - 194 lbs.

**Fall Height:** Deck Height

## Installation Instructions

1) **(Direct Bury)** Dig footings as shown. Refer to your Plan View/Footing Layout.

2) Attach the deck support to the transfer deck using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers. **NOTE:** *Make sure 3/8" rod on support is under support strap on deck as shown.* Refer to the Deck Support Attachment Detail.

3) Attach the 1-step section to the transfer deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.

4) Attach the 1-step section to the mainstructure deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.

5) Attach the step support to the 1-step section (lower) using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts. Refer to the Step Support Attachment Detail.

6) Attach the 1-step section (lower) to the transfer deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.

7) Attach infill panels to the posts using 3/8" x 5/8" BHCS w/pin with 3/8" flange nuts w/pin.

8) Attach the handrails to the steps using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.

9) Attach handrails to the infill panels using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.

10) Attach the lower rail to the transfer deck using 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.

11) Attach the lower rail to the 1-step section (lower) using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.

12) **(Direct Bury)** With transfer deck and steps level and supports plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.

**(Surface Mount)** Mark holes for expansion anchors on concrete slab through support plates. Detach the module from the mainstructure and slide module aside, drill 3/8" x 3" deep holes on marks using hammer drill and 3/8" masonry bit. Reposition module over drilled holes and tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers. Reattach module to structure.

13) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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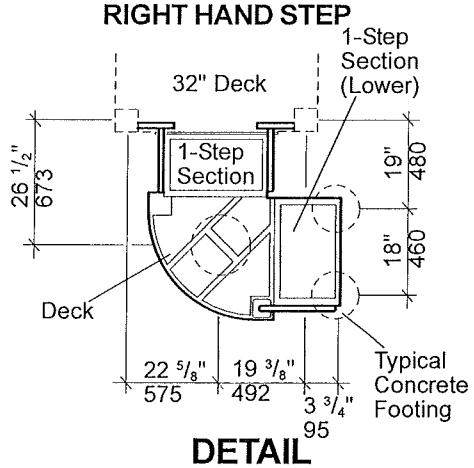
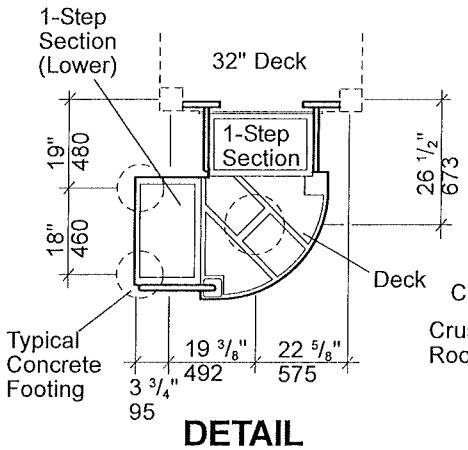
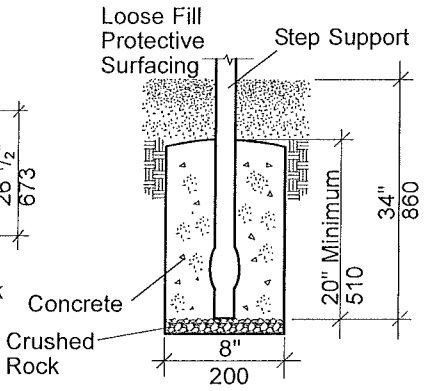
## PLAN VIEW FOOTING LAYOUT
### RIGHT HAND STEP



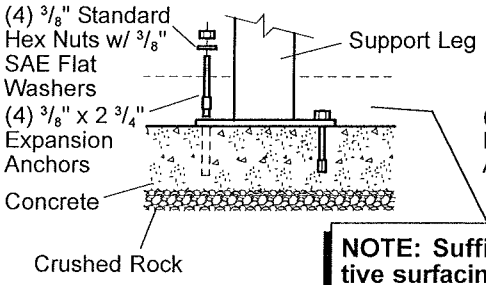

## PLAN VIEW FOOTING LAYOUT
### LEFT HAND STEP



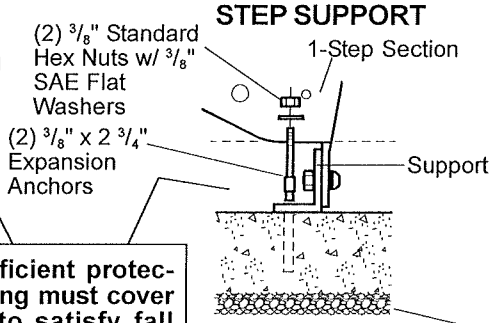

## DETAIL
### STEP SUPPORT BURY




## DETAIL
### SURFACE MOUNT DECK SUPPORT

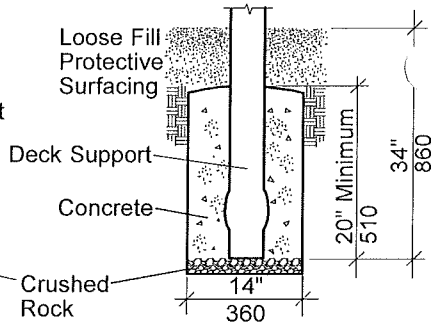



## DETAIL
### SURFACE MOUNT STEP SUPPORT

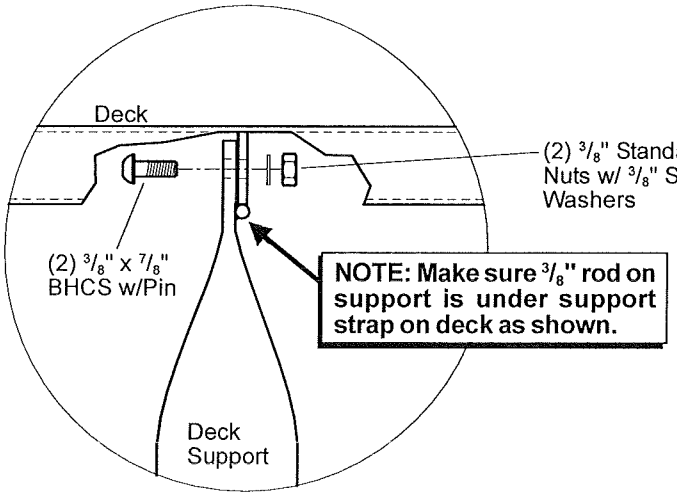



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

## DETAIL
### DECK SUPPORT BURY

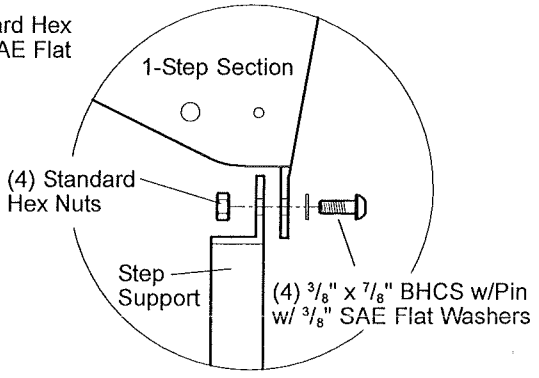



## DETAIL
### DECK SUPPORT ATTACHMENT




**NOTE: Make sure 3/8" rod on support is under support strap on deck as shown.**

## DETAIL
### STEP SUPPORT ATTACHMENT




# PlayShaper® 153020 Transfer Module, 32", w/Handrails



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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Document #18138300

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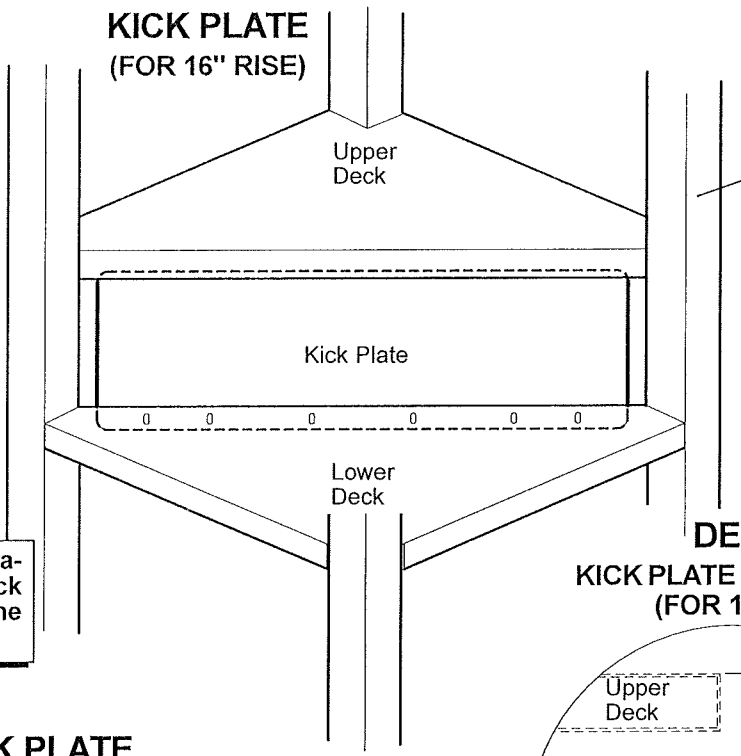
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

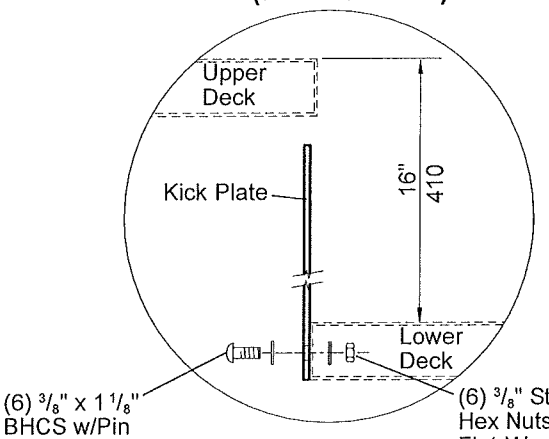
13091300

## KICK PLATE (FOR 16" RISE)

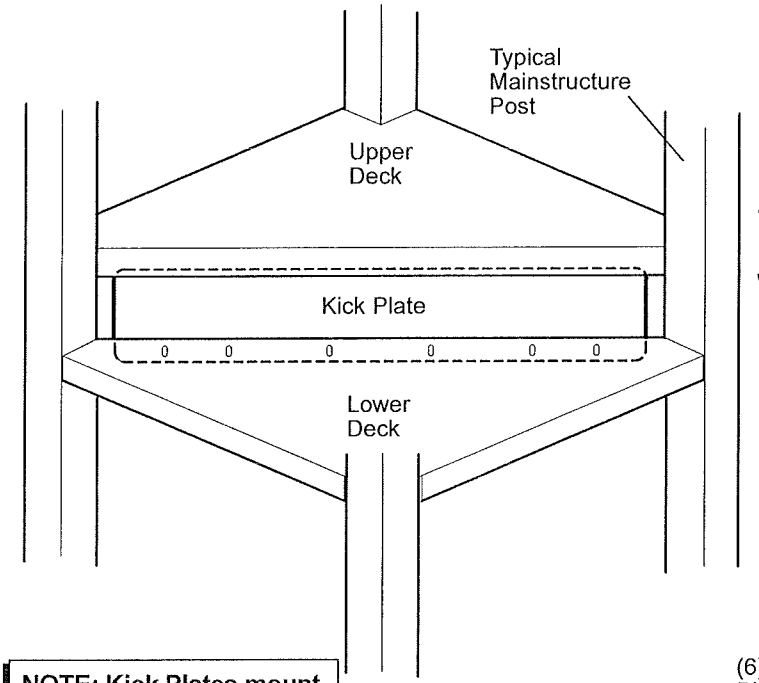



**NOTE: Tri-Deck configuration may require the kick plate to be mounted to the upper deck.**

## DETAIL
### KICK PLATE ATTACHMENT (FOR 16" RISE)

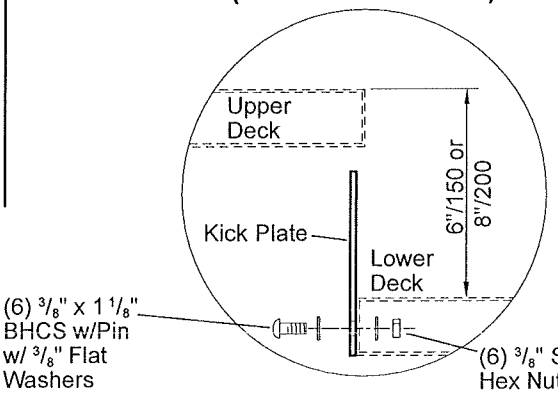



## KICK PLATE (FOR 6" OR 8" RISE)




**NOTE: Kick Plates mount to face of *lower* deck.**

## DETAIL
### KICK PLATE ATTACHMENT (FOR 6" OR 8" RISE)




# PlayShaper® 179362 Kick Plates, 90° Tri-Decks, 6", 8" & 16"

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# PlayShaper® 179362 Kick Plates, 90° Tri-Decks, 6", 8" & 16"

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 121820-00 | Kick Plate (For 6" or 8" Rise), Specify Color | 1 |
| 121822-00 | Kick Plate (For 16" Rise), Specify Color | 1 |
| **156059-00** | **Kick Plate Tenderdeck Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 6 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 6 |
| 100362-00 | 3/8" Flat Washer, SST | 12 |

## Specifications

**Kick Plate:** Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff™, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/4 man hour

**Weight:** Kick Plate (For 6" or 8" Rise) 13 lbs.
Kick Plate (For 16" Rise) 33 lbs.

## Installation Instructions

1) Locate kick plates as labeled on your plan drawing.
2) Attach kick plate using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washers and 3/8" standard hex nuts with 3/8" flat washers, as shown. **NOTE:** *Kick plates mount to face of lower deck.*
3) Install protective surfacing before users are allowed to play on the structure.

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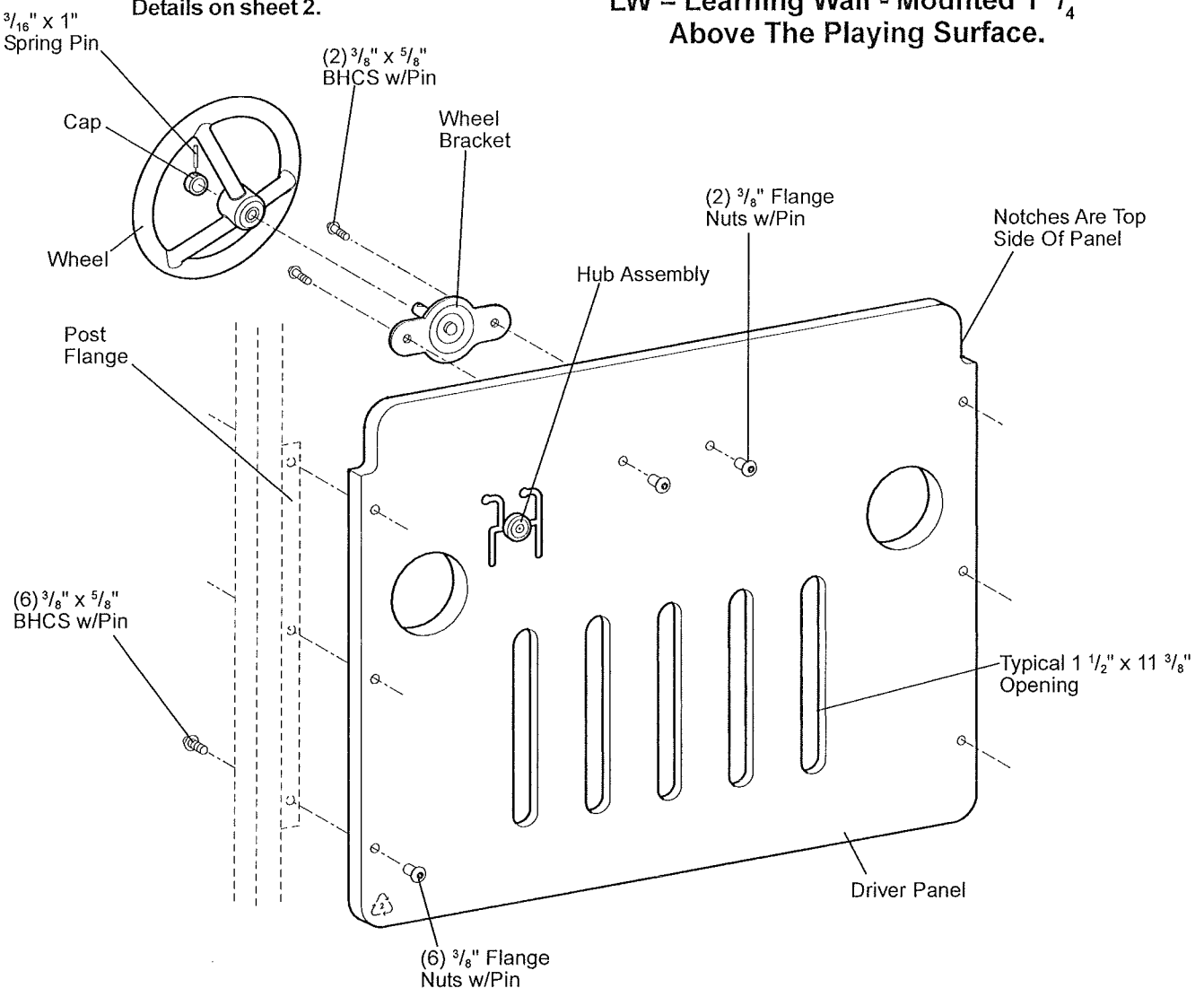
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

14023900

Refer to Wheel Assembly Details on sheet 2.

**PS = Playshaper**
**LW = Learning Wall - Mounted 1 3/4" Above The Playing Surface.**




**NOTE: Steering Wheel Infill Panel available. Refer to the Wheel Spec Sheet.**

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# 111288/184858 Driver Panel



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# PlayShaper® 111288/184858 Driver Panel

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 140235-00 | Driver Panel, Specify Color | 1 |
| 108432-00 | Wheel, Specify Color | 1 |
| 127242-00 | Steering Wheel Bracket, Specify Color | 1 |
| **106480-00** | **Attachment Hardware Package** | 1 |
| 100195-00 | $^3/_8$" x $^5/_8$" BHCS w/Pin, SST | 6 |
| 100353-00 | $^3/_8$" Flange Nut w/Pin, SST | 6 |
| **148626-00** | **Driver Panel Hardware Package** | 1 |
| 100195-00 | $^3/_8$" x $^5/_8$" BHCS w/Pin, SST | 2 |
| 100353-00 | $^3/_8$" Flange Nut w/Pin, SST | 2 |
| 118452-00 | $^3/_{16}$" x 1" Spring Pin, SST | 1 |
| 148623-00 | Cap, White | 1 |

## Specifications

**Permalene® Panel:** Two color panel measures 39 $^1/_2$" wide x 30" high, color specified.

**Wheel:** 12" diameter cast A356 aluminum alloy. Finish: TenderTuff®, color specified.

**Wheel Bracket:** Weldment comprised of formed $^3/_{16}$" plate and $^5/_8$" O.D. stainless steel shaft. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. $^1/_2$ man hour
**Weight:** 30 lbs.

## Installation Instructions

1) Attach wheel bracket to panel using $^3/_8$" x $^5/_8$" BHCS w/pin and $^3/_8$" flange nuts w/pin. Slide wheel and cap onto wheel bracket shaft and tap $^3/_{16}$" x 1" spring pin through cap and shaft. **NOTE:** *To assist in the alignment of the cap to the wheel bracket shaft, tap spring pin through cap approximately $^1/_{16}$". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin though cap and shaft until flush.*

2) Attach panel to post flanges using $^3/_8$" x $^5/_8$" BHCS w/pin with $^3/_8$" flange nuts w/pin.

3) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53666 Document #16542800 replaces #14863300. Changed panel height to 30".
Eco #54656 Added new model number.

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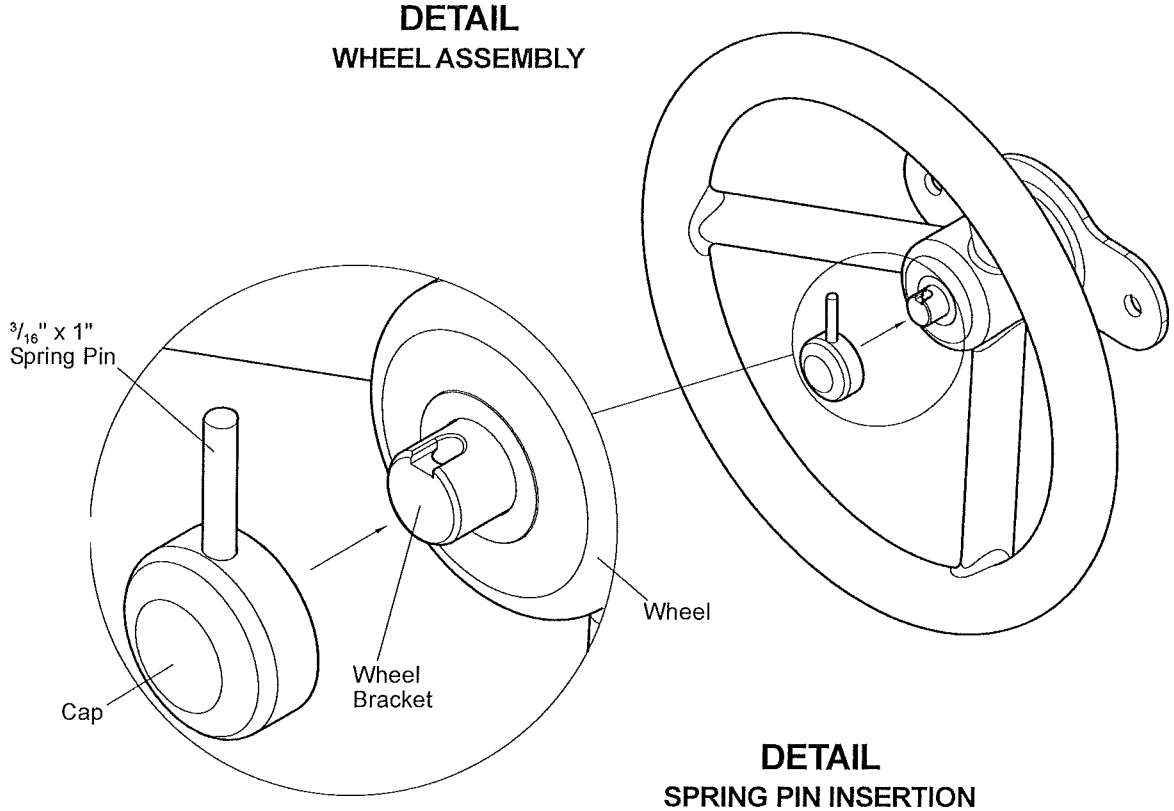
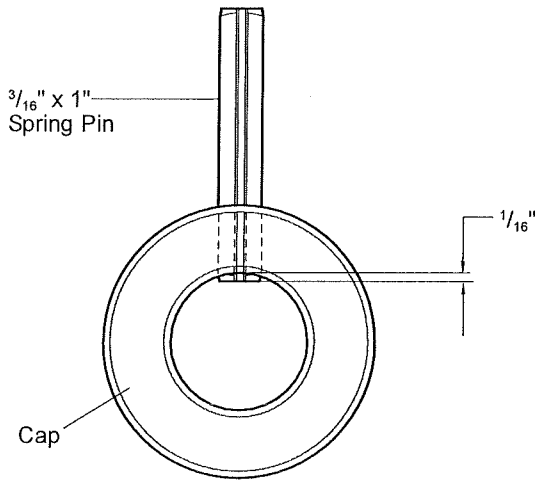
## DETAIL
### WHEEL ASSEMBLY




## DETAIL
### SPRING PIN INSERTION
### (CAP BACK VIEW)




**NOTE: To assist in the alignment of the cap to the wheel bracket shaft, tap spring pin through cap approximately 1/16". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin though cap and shaft until flush.**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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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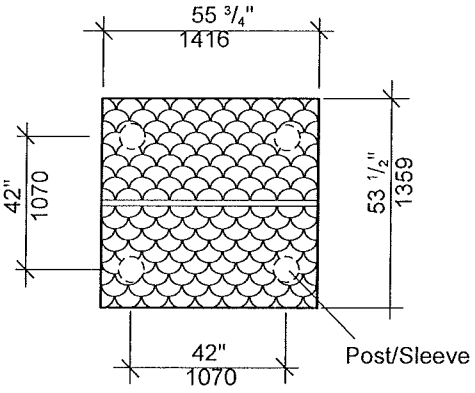
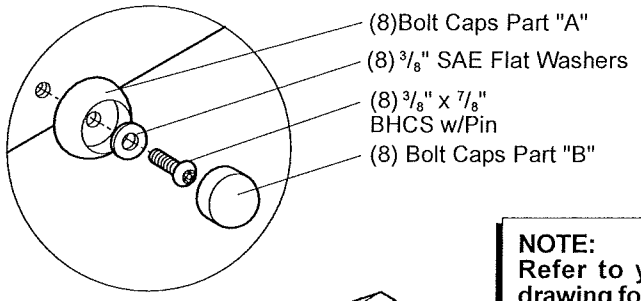
18160500

## PLAN VIEW

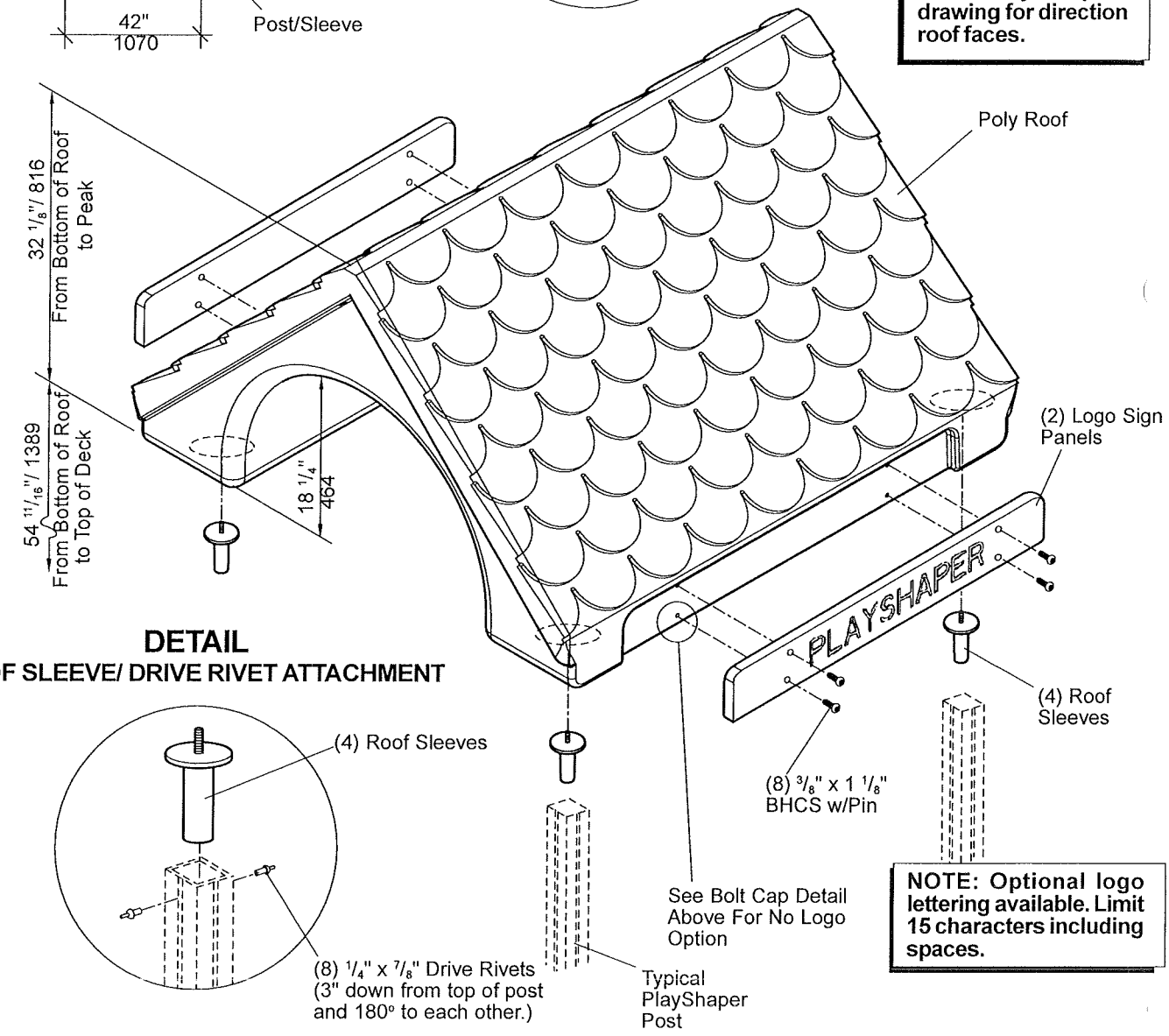



## DETAIL

### BOLT CAP ASSEMBLY (FOR NO LOGO PANEL OPTION)




**NOTE: Refer to your plan drawing for direction roof faces.**




**NOTE: Optional logo lettering available. Limit 15 characters including spaces.**

## DETAIL

### ROOF SLEEVE/ DRIVE RIVET ATTACHMENT




PlayShaper®

# 179225 Square Poly Roof

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# PlayShaper® 179225 Square Poly Roof

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 127765-00 | Poly Roof, Specify Color | 1 |
| 127801-00 | Roof Logo, Specify Color | 2 |
| 118175-00 | Roof Sleeve, Specify Color | 4 |
| **128190-00** | **Roof Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 8 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 8 |
| 100613-00 | 1/4" x 7/8" Drive Rivet, AL | 8 |
| 108184-01 | Bolt Cap Part A | 8 |
| 108185-01 | Bolt Cap Part B | 8 |
| **128189-00** | **Roof/Logo Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 |
| 100613-00 | 1/4" x 7/8" Drive Rivet, AL | 8 |

## Specifications

**Poly Roof:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Roof Logo:** Two color Permalene® logo measures 41" wide x 5 1/8" high, color specified.

**Roof Sleeve:** Cast from 319 almag. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 2 man hours
**Weight:** w/Logo - 112 lbs.
w/o Logo - 99 lbs.

## Installation Instructions

1) Turn roof sleeves onto roof. Refer to the Roof Sleeve/Drive Rivet Attachment Detail.

2) **(With Roof Logo)** Attach roof logo to roof using 3/8" x 1 1/8" BHCS w/pin, as shown.

   **(Without Roof Logo)** Attach bolt cap assembly to roof using bolt cap part "A", 3/8" SAE flat washer and fasten with 3/8" x 7/8" BHCS w/pin. Snap bolt cap part "B" onto bolt cap part "A". Refer to the Bolt Cap Assembly Detail.

3) With two people minimum, lift roof into position in the proper direction and insert roof sleeves into posts.

4) Drill 1/4" holes through roof sleeves using the predrilled 1/4" holes in posts as a guide. Insert 1/4" x 7/8" drive rivets into drilled holes and tap pin in until flush with rivet head. Refer to the Roof Sleeve/Drive Rivet Attachment Detail.

5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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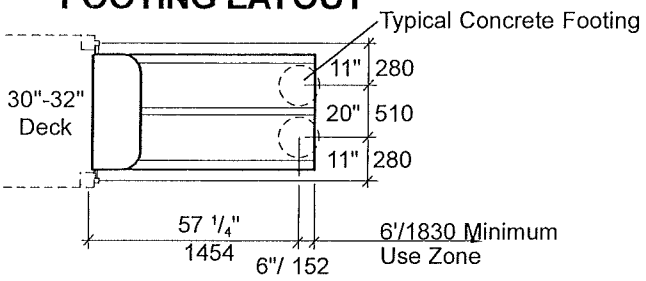
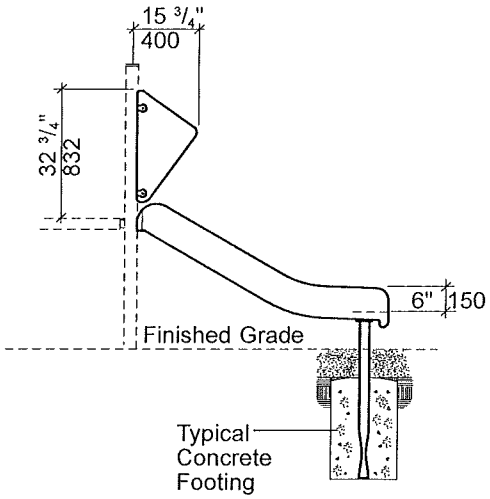
**SAFETY NOTE**

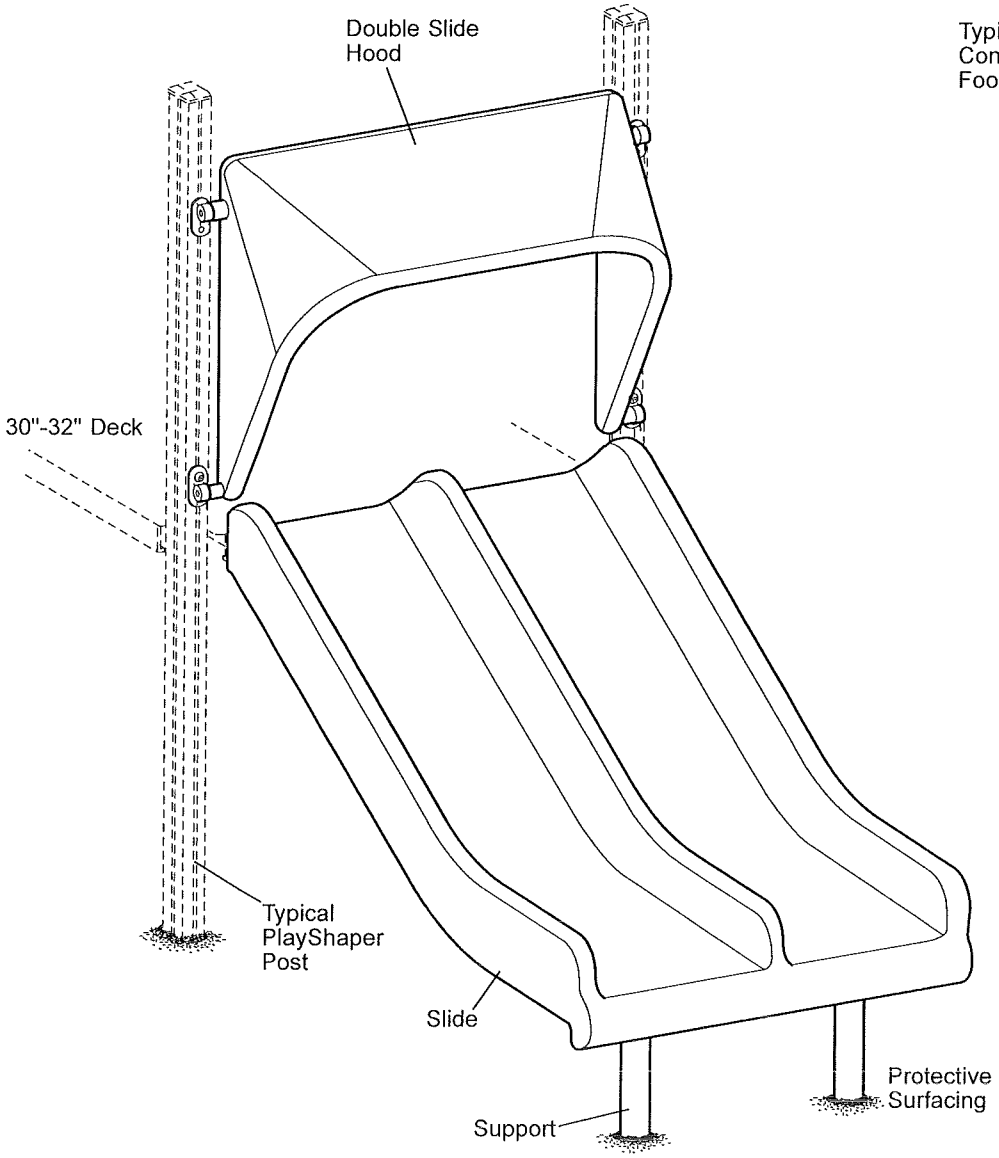
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

13216100

## PLAN VIEW/ FOOTING LAYOUT




# PlayShaper® 132155 Double Poly Slide, 30"-32"



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# PlayShaper® 132155 Double Poly Slide, 30"-32"

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 127449-00 | 32" Double Poly Slide, Specify Color | 1 |
| 126957-00 | Hood, Specify Color | 1 |
| 100583-00 | 40 7/16" Rail, Aluminum, Specify Color | 1 |
| 132443-00 | Rail Spacer, Specify Color | 2 |
| 113468-00 | Spacer Tube, Specify Color | 2 |
| 113895-00 | Offset Bolt Bracket, Specify Color | 4 |
| 150941-00 | Support (DB), Specify Color | 2 |
| 151007-00 | Support (SM), Specify Color | 2 |
| **132154-00** | **Slide Hood Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100200-00 | 3/8" x 3 1/2" BHCS w/Pin, SST | 2 |
| 100203-00 | 5/8" x 2 1/4" BHCS w/Pin, SST | 2 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 6 |
| 166868-00 | 3/4" O.D. x .390" Spacer, Aluminum | 4 |
| **111508-00** | **Slide Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 8 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST | 4 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 4 |
| 111442-00 | Rubber Bushing | 4 |
| **121348-00** | **4-Hole SM Hardware Package** | 2 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 8 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 8 |
| 100363-00 | 1/2" Flat Washer, SST | 8 |

**=Direct Bury**
**M=Surface Mount**

## Specifications

**Slide:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Hood:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Rail Spacer:** Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield®, color specified.

**Spacer Tube:** Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

**Rail:** Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.

**Exit Support:** Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.

**Offset Bolt Bracket:** Cast from 356-T6 aluminum alloy. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **SM** - Approx. 1 1/2 man hours
**DB** - Approx. 2 man hours
**Concrete Req.:** Approx. 2.6 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone at exit
**Weight:** **SM** - 106 lbs.
**DB** - 114 lbs.
**Fall Height:** 32" Deck (0,81 m)

Specifications are subject to change without notice.

## Installation Instructions

1) **(Direct Bury)** Dig footings spaced as shown.

2) Attach offset bolt brackets to posts using 3/4" O.D. x .390" spacers and 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers. Refer to Detail.

3) Place 40 7/16" rail in hood and attach rail and rail spacers to offset bolt brackets using 5/8" x 2 1/4" BHCS w/pin.

4) Attach bottom of hood to offset bolt brackets using spacer tubes and 3/8" x 3 1/2" BHCS w/pin with 3/8" SAE flat washers.

5) Attach supports to slide using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, 3/8" SAE flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Attachment Detail. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten.*

6) Attach slide to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers. Refer to the Deck Connection Detail.

7) **(Direct Bury)** With supports plumb pour concrete footings.

**(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in the support plates and remove the slide. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 6. Fasten supports to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

8) Install protective surfacing before users are allowed to play on the structure.

Eco #53834 Document #16755800 replaces #16108700. Added 3/4" O.D. x .390" spacers to hardware package.

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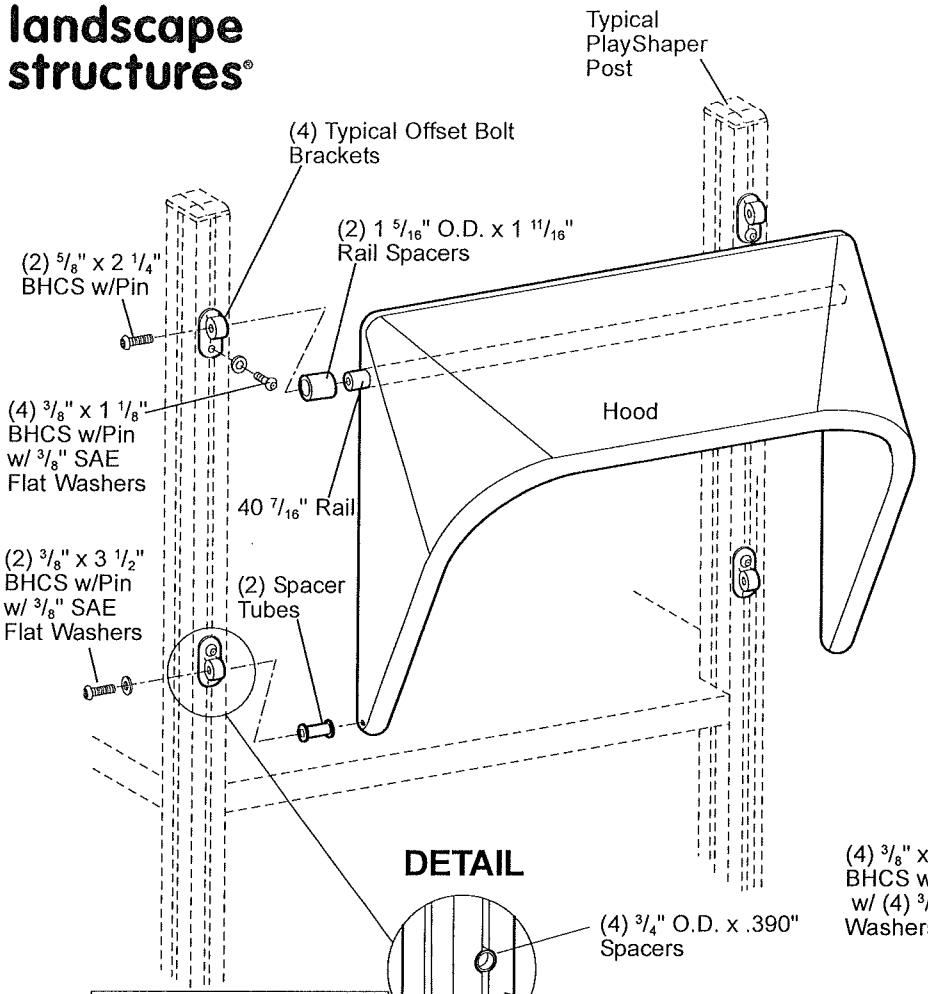
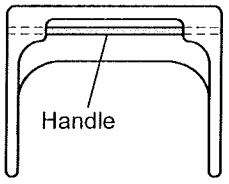
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

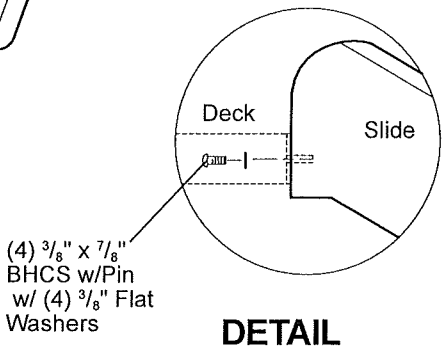
1675



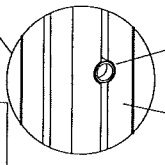

## HOOD - HANDLE DETAIL




## DETAIL
### SLIDE/DECK CONNECTION

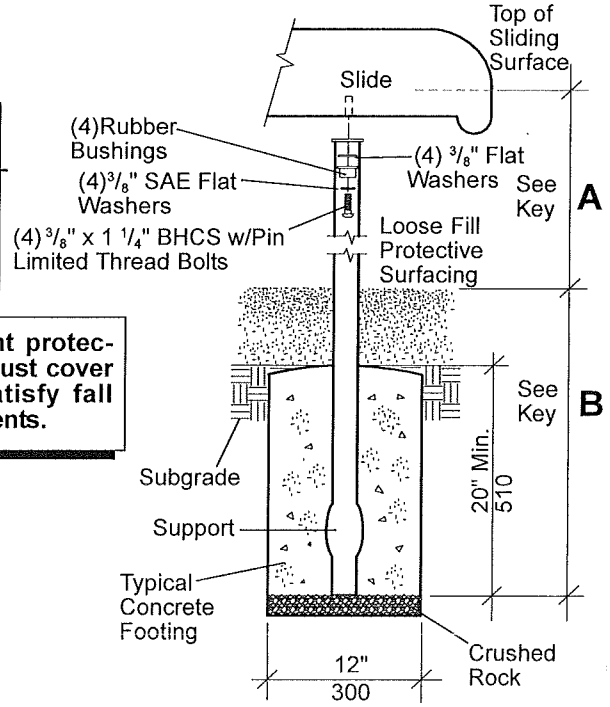



## DETAIL



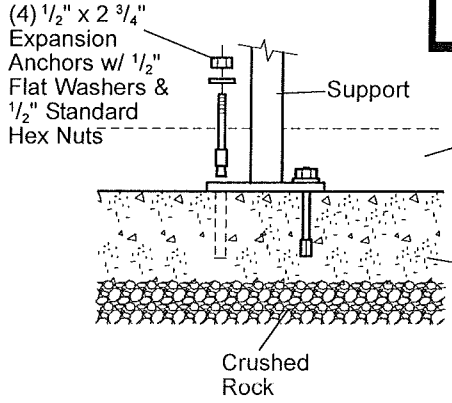

**NOTE: Insert spacers into posts before attaching offset bolt brackets.**

## DETAIL
### DIRECT BURY




| KEY: Deck Hgts | Dimension |
|---|---|
| 30" | A = 5"/130 |
| 32" | A = 7"/180 |
| 30" | B = 38"/970 |
| 32" | B = 36"/910 |

## DETAIL
### SURFACE MOUNT




**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

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# 132155 Double Poly Slide, 30"-32"



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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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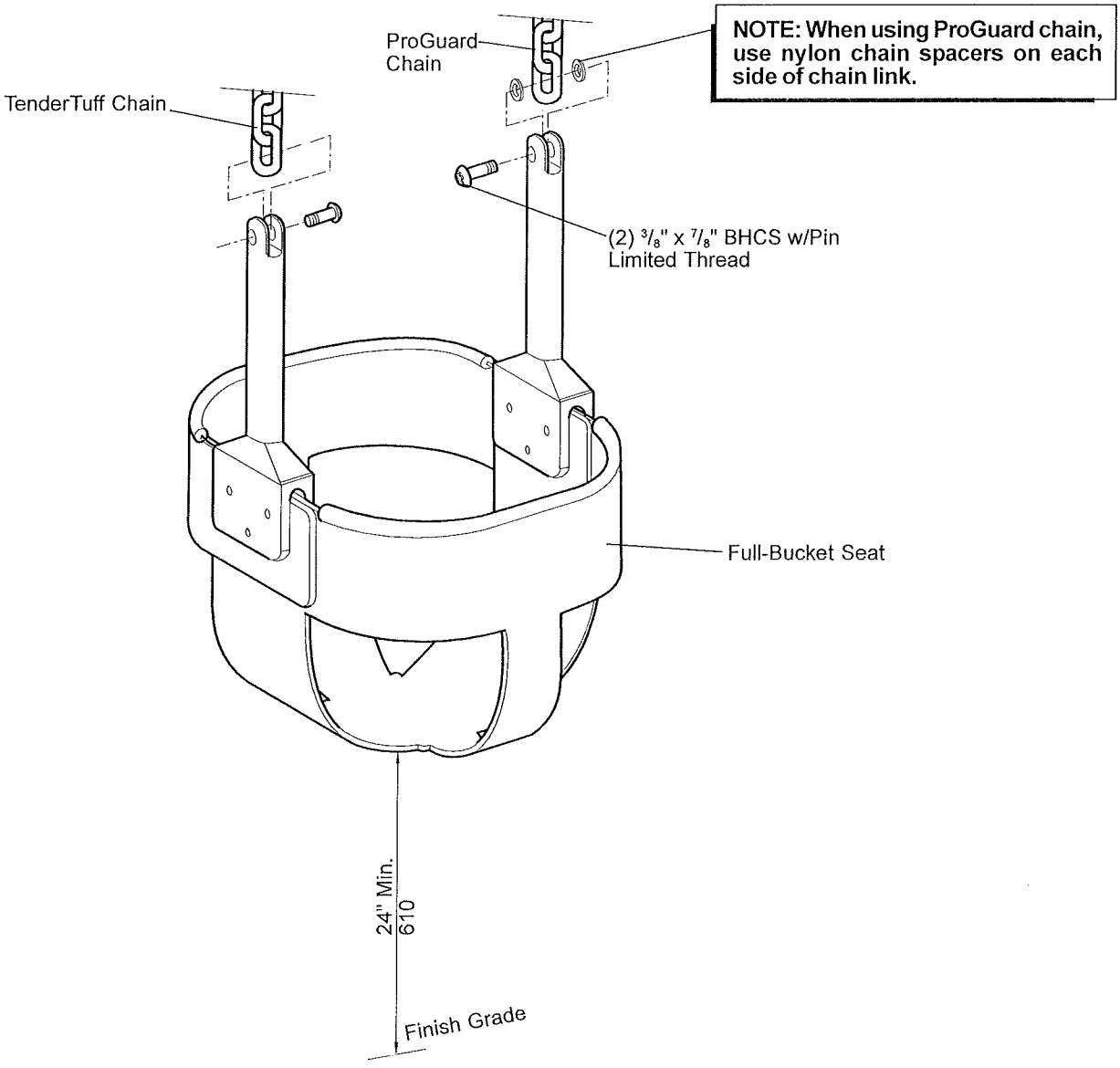
**NOTE: Face bolt heads inward as shown.**

**NOTE: When using ProGuard chain, use nylon chain spacers on each side of chain link.**




Swings

# 176038 Full-Bucket Seat, w/Chains



601 7TH STREET SOUTH DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Swings 176038 Full-Bucket Seat, w/Chains

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| | **8 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 160110-00 | 52 9/16" Chain, TenderTuff, Specify Color | 2 |
| 174882-00 | 52 9/16" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **10 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152051-00 | 76 7/16" Chain, TenderTuff, Specify Color | 2 |
| 174883-00 | 76 7/16" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **7 Ft. High Beam (Tot)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152053-00 | 37 1/2" Chain, TenderTuff, Specify Color | 2 |
| 175247-00 | 37 1/2" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **75" High Beam (Toddler)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152016-00 | 29 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174881-00 | 29 7/8" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |

## Specifications

**Full-Bucket Seat:** Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) 1/4" x 1 5/16" long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 1/2" wide.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:**
14 lbs. (8 FT. Beam w/TenderTuff Chain)
14 lbs. (8 FT. Beam w/ProGuard Chain)
17 lbs. (10 FT. Beam w/TenderTuff Chain)
16 lbs. (10 FT. Beam w/ProGuard Chain)
12 lbs. (7 FT. Beam w/TenderTuff Chain)
12 lbs. (7 FT. Beam w/ProGuard Chain)
11 lbs. (75" Beam w/TenderTuff Chain)
11 lbs. (75" Beam w/ProGuard Chain)

## Installation Instructions

**Swing Hangers with Double Clevis**

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

**Anti-wrap Swing Hangers**

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.



Eco #54752 Document #18985400 replaces #17746000. Replaced full-bucket swing seat.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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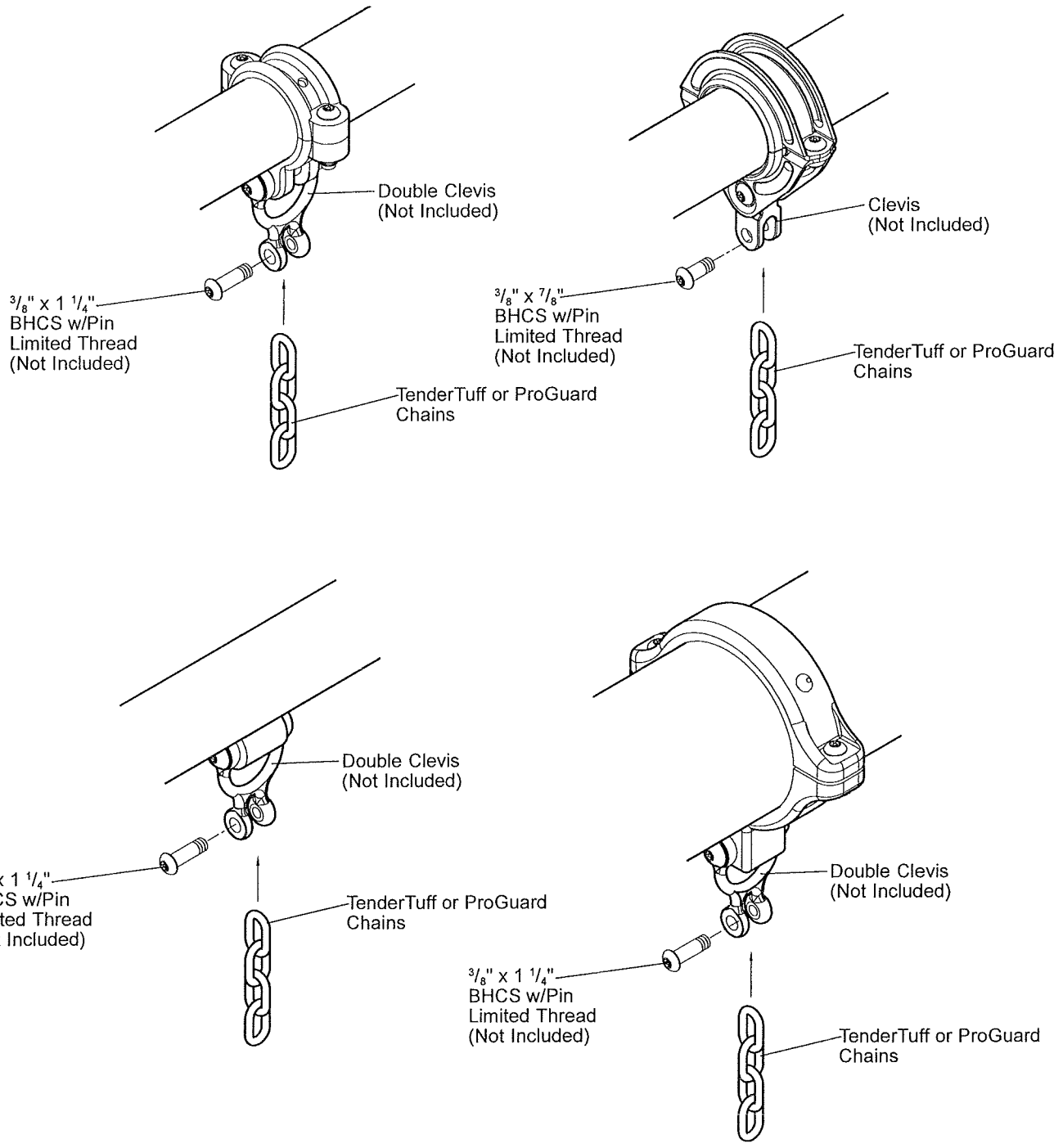
## SWING HANGER OPTIONS







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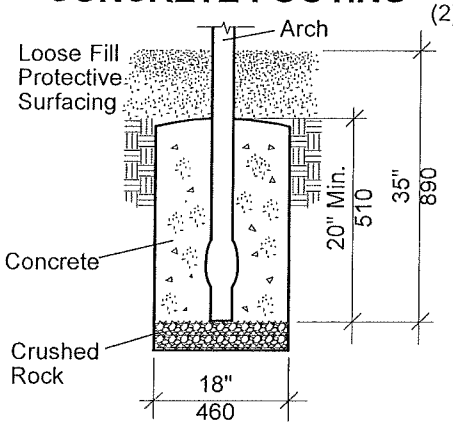
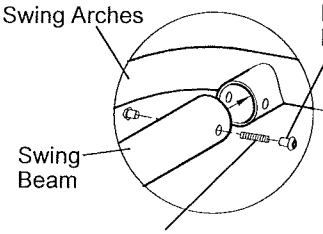
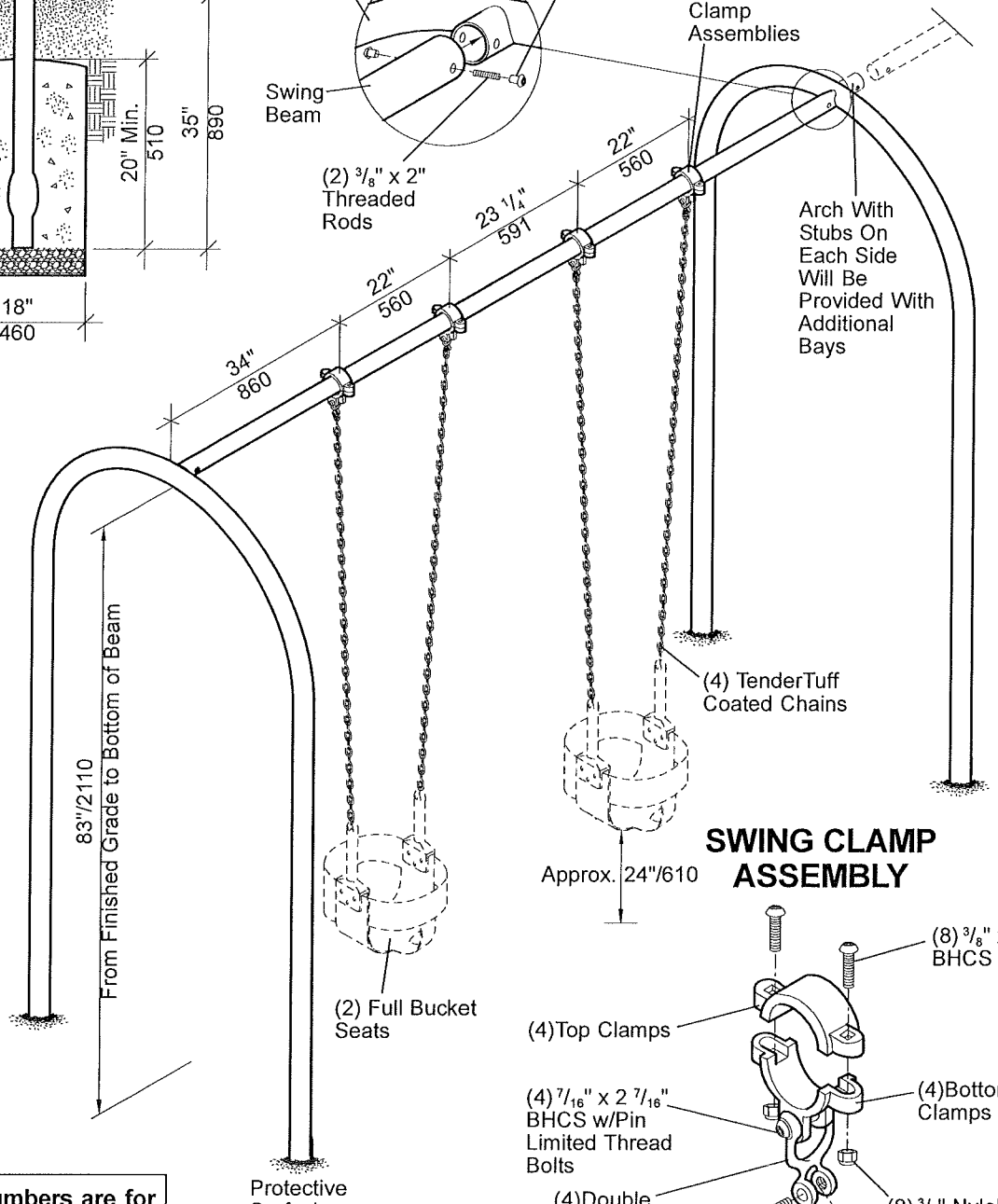
## CONCRETE FOOTING

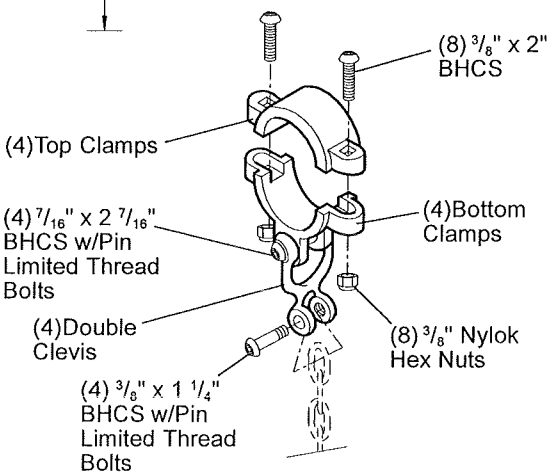



## DETAIL




## SWING CLAMP ASSEMBLY




**NOTE: Model numbers are for swing frames only, order swing seats with chains separately.**

**Model #177341 Additional Bay**

# Swings 177340/177341 Arch Swing Frame, 2" Beam



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Document #18267700

# Swings 177340/177341 Arch Swing Frame, 2" Beam

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## Parts List

| Part# | Description | Qty. 2 Pl | Add. Bay |
|---|---|---|---|
| 111624-00 | Arches, Specify Color | 2 | - |
| 146159-00 | Beam, Specify Color | 1 | 1 |
| 111623-00 | Arch, For Additional Bay, Specify Color | - | 1 |
| 105192-00 | Hanger Top Clamp | 4 | 4 |
| 107391-00 | 2 3/8" Bottom Swing Clamp w/Dbl. Clevis | 4 | 4 |
| **173515-00** | **2 3/8" Beam Swing Hanger Hardware Pkg.** | 4 | 4 |
| 100173-00 | 3/8" x 2" BHCS, SST | 8 | 8 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST | 4 | 4 |
| 136931-00 | 3/8" Nylok Hex Nut, SST | 8 | 8 |
| **182661-00** | **Swing Beam Attachment Hardware Package** | 1 | 1 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 4 | 4 |
| 116942-00 | 3/8" x 2" Threaded Rod, SST | 2 | 2 |
| 115176-00 | ASTM HD Surface Warning Label | 1 | 1 |
| 156844-00 | Play Safe Label, 2-3 YRS. | 1 | 1 |
| 182212-00 | Entanglement Warning Label | 1 | 1 |
| 182213-00 | Hot Surface Warning Label | 1 | 1 |

## Specifications

**Arches:** Fabricated from formed 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing. Finish: ProShield®, color specified.

**Swing Beam:** Fabricated from 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing. Finish: ProShield, color specified.

**Swing Hanger:** Made from galvanized malleable iron hanger with oil impregnated bearings.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 8 man hours
**Additional Bay** - Approx. 4 man hours

**Concrete Req.:** Approx. 12 cu. ft.
**Additional Bay** - 6 cu. ft.

**Actual Size:** 45" x 139" x 86" high (1,1 m x 3,5 m x 2,2 m)
**Additional Bay** - 45" x 139" x 86" high (1,1 m x 3,5 m x 2,2 m)

**Area Req.:** 23'-7" x 20' (7,2 m x 6,1 m)
**Additional Bay** - 11'-4" x 20' (3,45 m x 6,1 m)

**Weight:** 196 lbs.
**Additional Bay** - 123 lbs.

**Fall Height:** 84" (2,13 m)

## Installation Instructions

1) Dig footings to proper depth and spacing as shown.
2) Set swing arches in footing holes with stubs facing inward. Attach the swing beam to the stubs using 3/8" x 2" threaded rods and 3/8" flange nuts w/pin. Refer to the Detail.
3) Level beam at proper height and plumb arch frames. Pour concrete footings and let cure for 72 hours before proceeding.
4) Attach swing clamps to beam per Detail and spaced as shown.
5) **NOTE:** *Refer to specific swing seat installation document for attaching chains and seats.*
6) Apply labels to arch.
7) Install protective surfacing before users are allowed to play on the swing.

Specifications are subject to change without notice.

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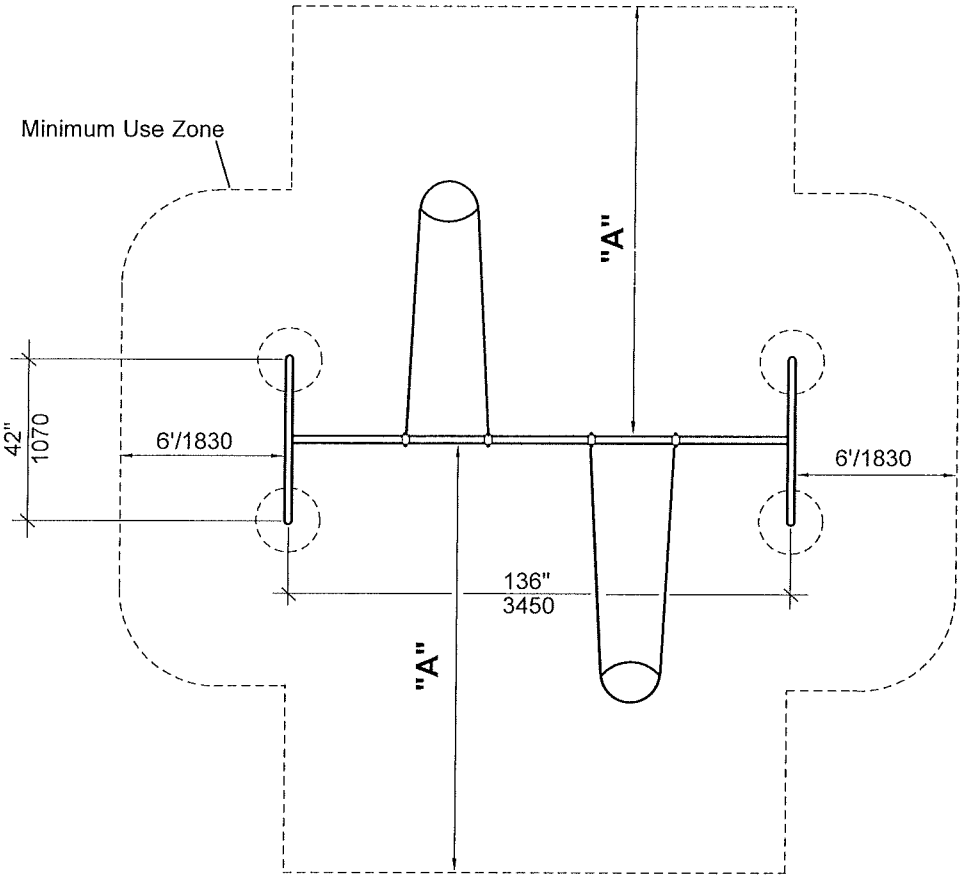
## PLAN VIEW/FOOTING LAYOUT




| KEY | |
|---|---|
| Seat Type | Dimension "A" |
| Belt | N/A |
| Flat | N/A |
| Full Bucket | 10'-0" (3,05 m) |
| Half Bucket | 14'-0" (4,27 m) |
| Molded Bucket | N/A |
| Molded Bucket/Harness | N/A |
| Infant Full Bucket | 10'-0" (3,05 m) |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# Installation Specifications

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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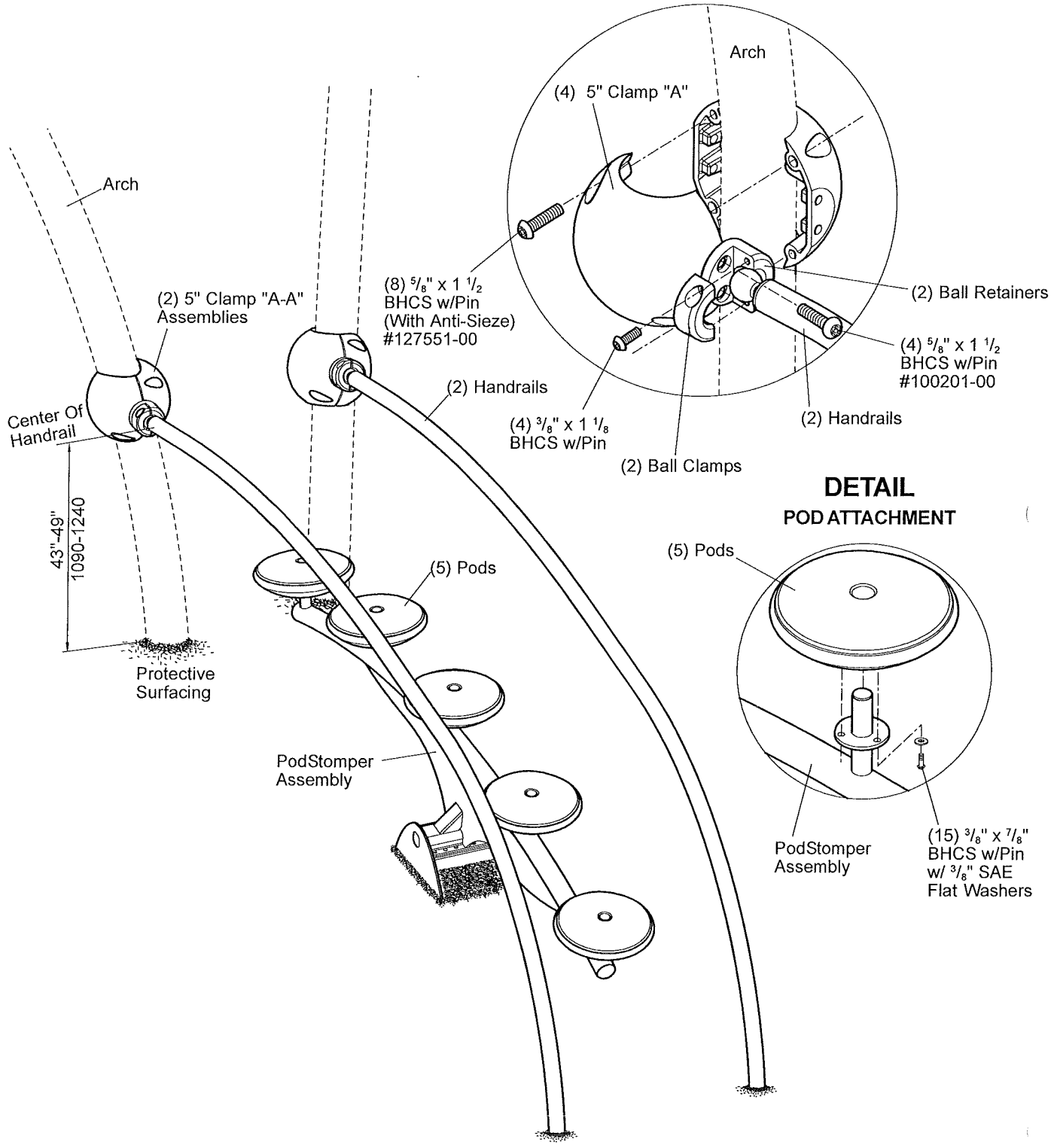
# DETAIL

## HANDRAIL ATTACHMENT




# DETAIL

## POD ATTACHMENT

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# 156464 PodStomper® Bridge



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# Evos® 156464 PodStomper® Bridge

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 148881-00 | Seesaw Leg (DB), Specify Color | 1 |
| 154460-00 | Pod, Specify Color | 5 |
| 156247-00 | Handrails, Specify Color | 2 |
| 166271-00 | 5" Clamp "A", Specify Color | 4 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 160949-00 | PodStomper Assembly, Specify Color | 1 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| **156974-00** | **PodStomper Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 15 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100216-00 | 1/2" x 1 1/4" Hex Cap Screw, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 8 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 15 |
| 129692-00 | 1/2" Standard Hex Nut, SST/Patch | 4 |

## Specifications

**PodStomper Assy.:** Weldment comprised of 1.315" O.D. RS20 (.080"-.090" Wall) galvanized steel tubing, 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tubing, 1/8" HRPO steel sheet, 1/4" HRPO steel sheet, and 3/8" HRPO steel sheet. Finish: ProShield®, color specified.

**(Base Assembly)** Weldment comprised of 1/4" sheet HRPO steel and 2" SQ. HR steel bar. Finish: ProShield, color specified.

**(Torsion Half Clamp)** Fabricated from 1/4" sheet HRPO steel. Finish: ProShield, color specified.

**(Rod)** 1.000" O.D. Polyurethane.

**(Bolt Covers)** ABS Polymer Thermoplastic, Tan in color.

**(Bushings)** Plastic (UHMW), Black in color.

**5" Clamp:** Cast from 535 almag. Finish: ProShield, color specified.

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield, color specified.

**Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Handrails:** Weldment comprised of 1.900" O.D. RS20 (.090"-.100" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield, color specified.

**Seesaw Leg:** Weldment comprised of 5.000" O.D. x 11 Ga. (.120" Wall) galvanized steel tube, 1/4" sheet HRPO steel and 3/16" sheet HRPO steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 3 man hours
**Concrete Req.:** Approx. 7.5 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 235 lbs.
**Fall Height:** 25" (640 mm)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach 5" clamps to arches, using 5/8" x 1 1/2" BHCS w/pin (with anti-sieze). Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Refer to the Handrail Attachment Detail.

3) Fasten handrails to ball retainers at height shown, using ball clamps and 3/8" x 1 1/8" BHCS w/pin. Handrails should be parallel. Refer to the Handrail Attachment Detail. **NOTE:** *5" Clamps may need to be adjusted to connect handrails and position properly. Retighten 5" clamp fasteners when handrails are in proper position.*

4) Attach pods to PodStomper assembly, using 3/8" x 7/8" BHCS w/pin and 3/8" SAE Flat washers. Refer to the Pod Attachment Detail.

5) Attach PodStomper assembly to seesaw leg, using 1/2" x 1 1/4" hex cap screws with 1/2" flat washers and 1/2" standard hex nuts with 1/2" flat washers. Refer to the Direct Bury Detail.

6) Place PodStomper assembly with seesaw leg in footing hole. With handrails and leg plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure. **NOTE:** *PodStomper assembly should be parallel with handrails.*

7) Install protective surfacing 2" - 4" above bottom of PodStomper assembly before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53850 Document 16814900 replaces 16126100. Changed 5" clamp part number.

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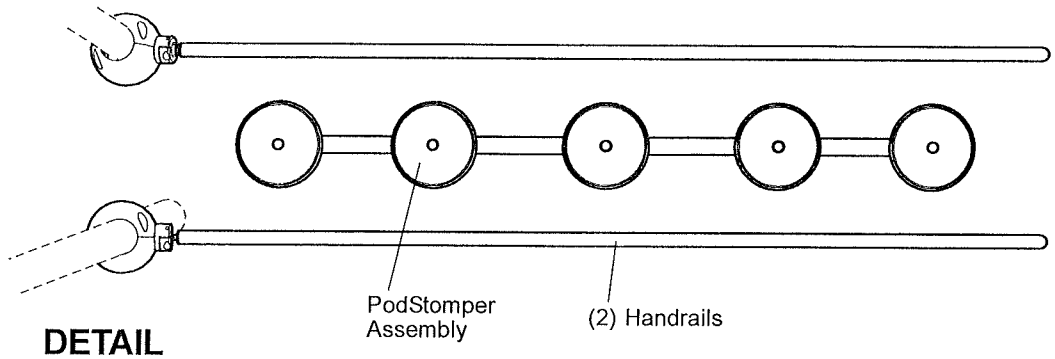
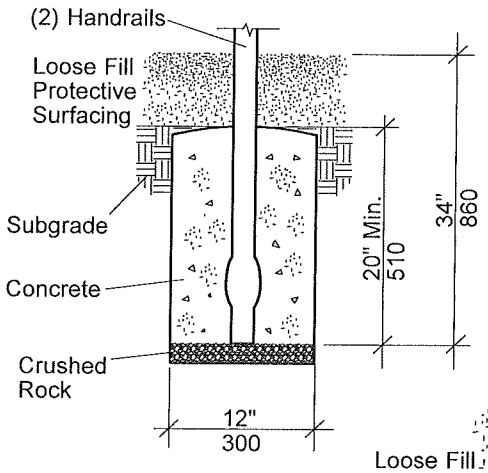
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

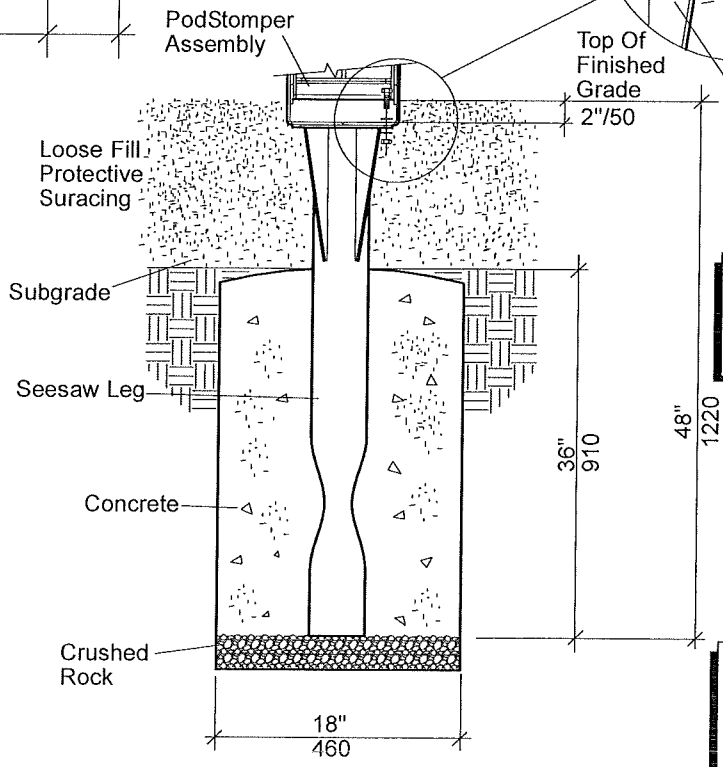
## PLAN VIEW

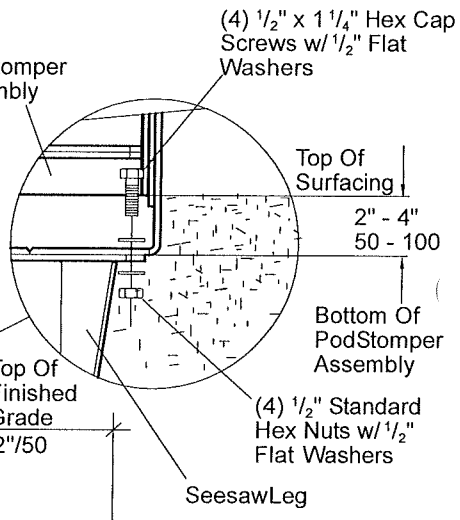



## DETAIL
### HANDRAIL ATTACHMENT




## DETAIL
### DIRECT BURY




**NOTE: Surfacing must be maintained between 2"-4" above the bottom of the base.**

**NOTE:**
**In loose sandy soil conditions, a larger footing may be necessary.**

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# 156464 PodStomper® Bridge



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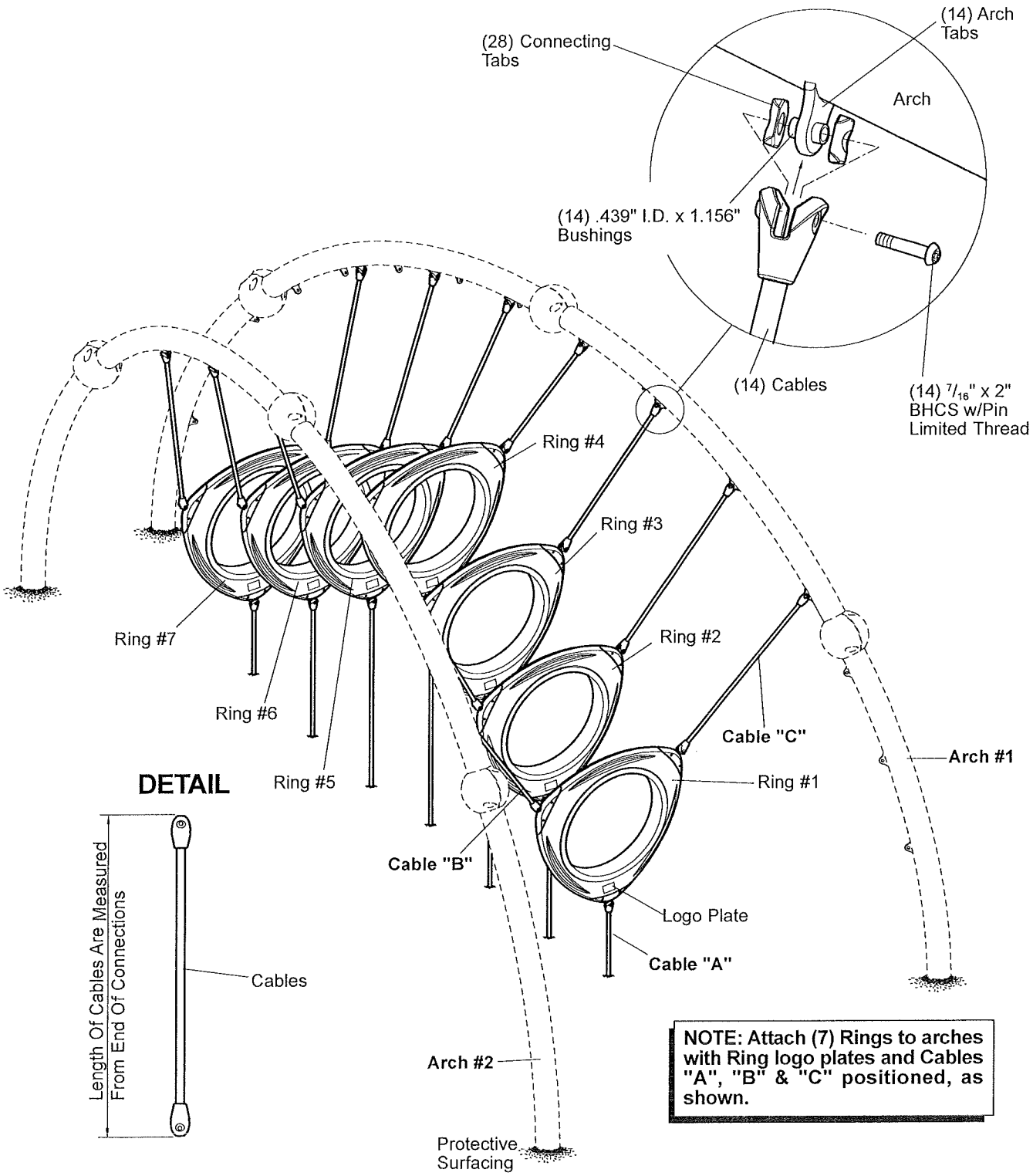
## DETAIL
CABLE ATTACHMENT




## DETAIL




**NOTE: Attach (7) Rings to arches with Ring logo plates and Cables "A", "B" & "C" positioned, as shown.**

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# 156448 O-Zone® Climber



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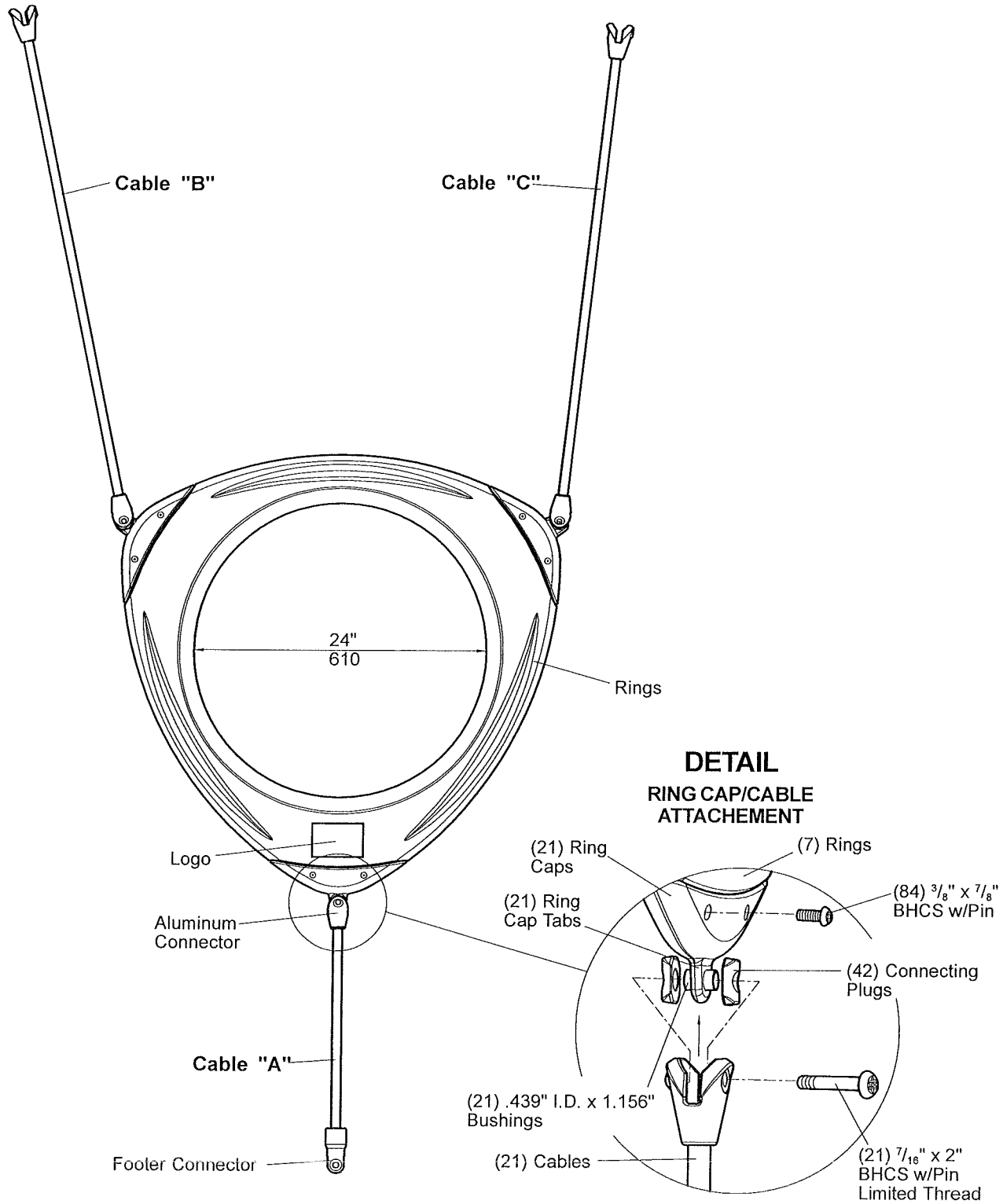


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# 156448 O-Zone® Climber

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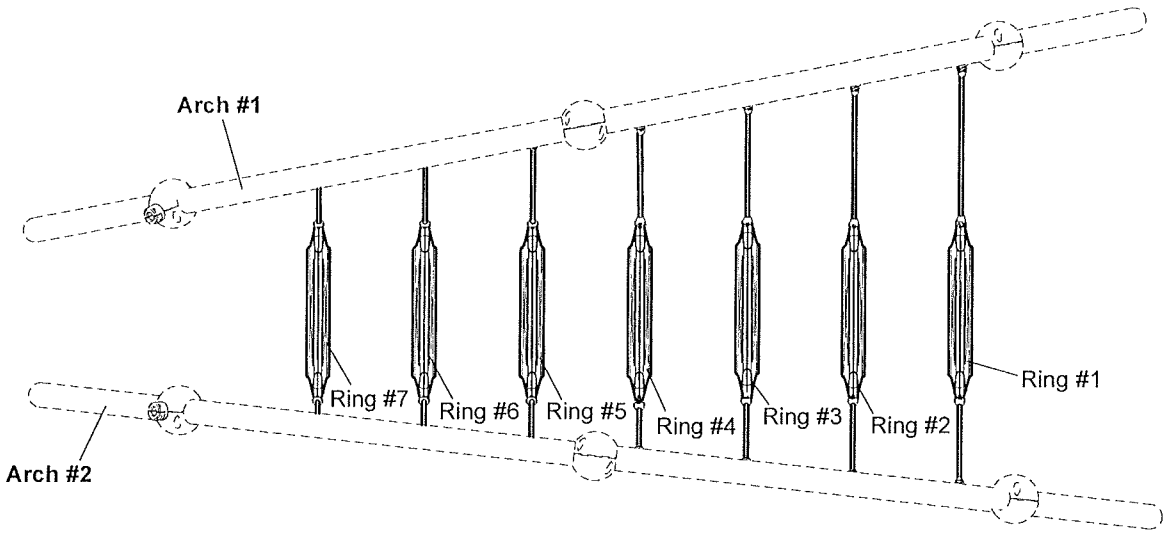
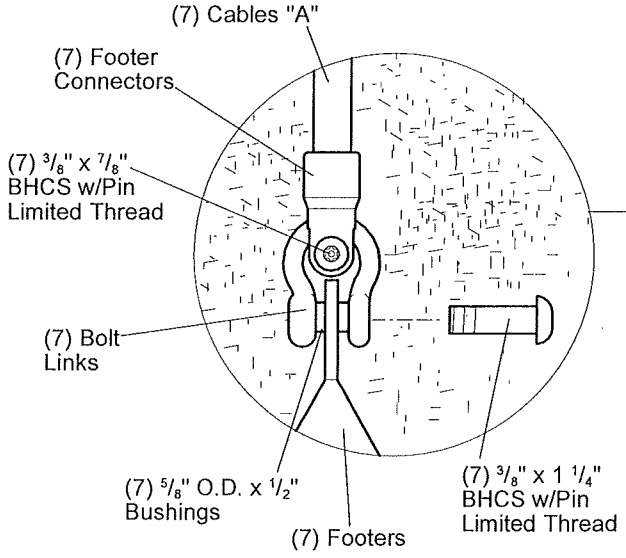
161704b

## PLAN VIEW

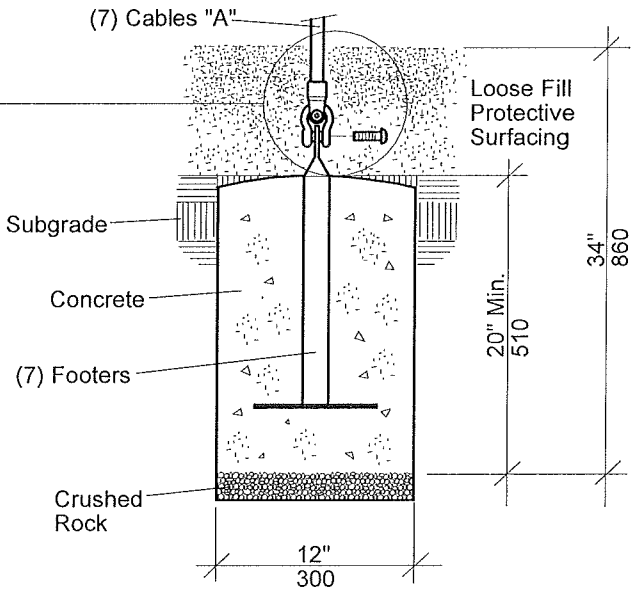



## DETAIL




## DETAIL

### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cable.**

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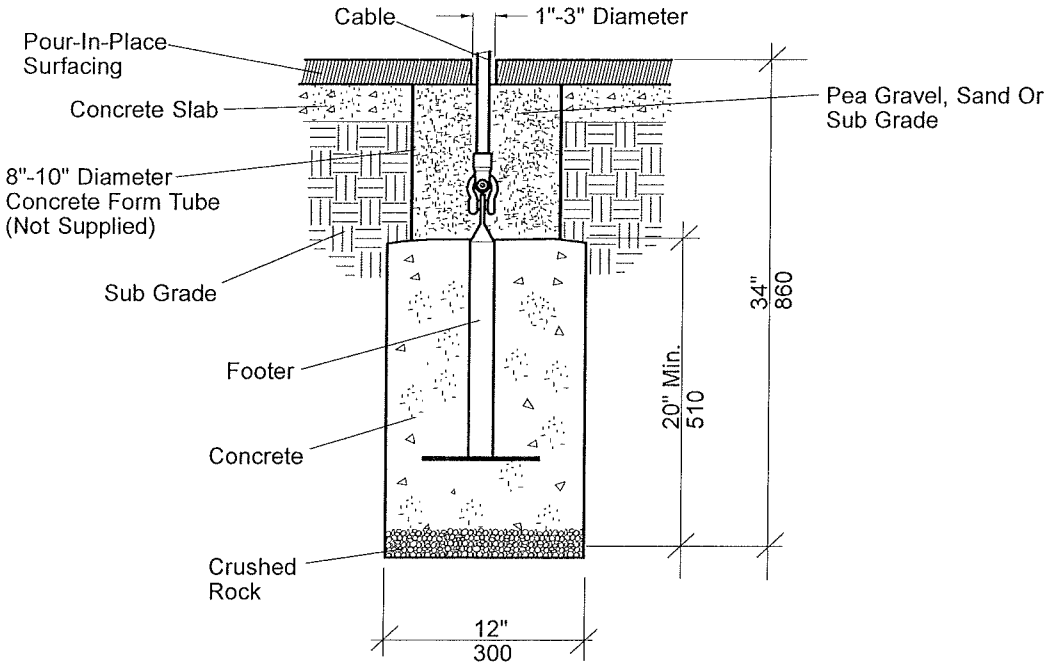
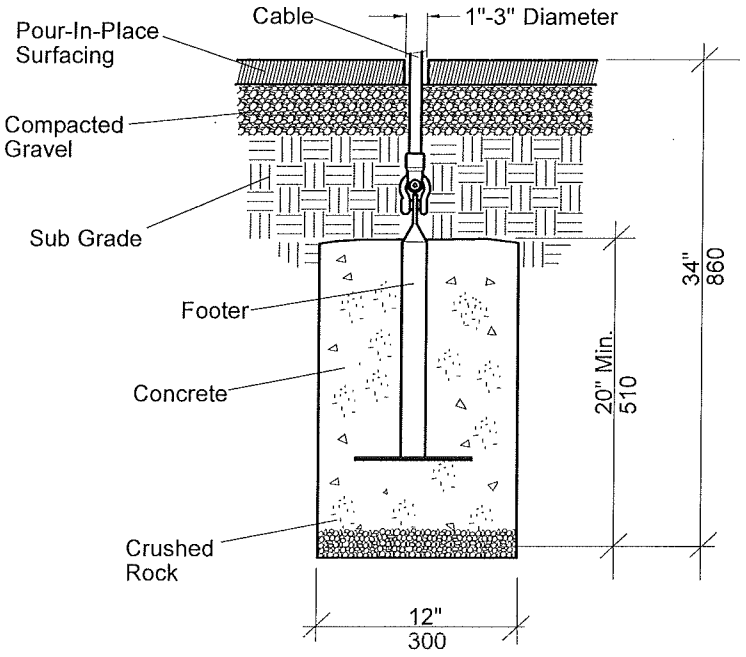
161704c

## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING ( COMPACTED GRAVEL)







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# Evos® 156448 O-Zone® Climber

J:\INSTSPEC\SPECS\189\18930400.P65

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 154458-00 | O-Zone Ring, Specify Color | 7 |
| 176231-00 | O-Zone Cable 1A & 7A, 20" | 2 |
| 176232-00 | O-Zone Cable 1B, 36 5/8" | 1 |
| 176233-00 | O-Zone Cable 1C, 2C & 7C, 44 5/8" | 3 |
| 176234-00 | O-Zone Cable 2A & 6A, 29" | 2 |
| 176235-00 | O-Zone Cable 2B & 5C, 38 7/8" | 2 |
| 176236-00 | O-Zone Cable 3A & 5A, 41" | 2 |
| 176237-00 | O-Zone Cable 3B, 34 1/4" | 1 |
| 176238-00 | O-Zone Cable 3C, 39 5/8" | 1 |
| 176239-00 | O-Zone Cable 4A, 53" | 1 |
| 176240-00 | O-Zone Cable 4B, 24 3/4" | 1 |
| 176241-00 | O-Zone Cable 4C, 30 5/16" | 1 |
| 176243-00 | O-Zone Cable 5B, 35 3/4" | 1 |
| 176244-00 | O-Zone Cable 6B, 43 1/2" | 1 |
| 176245-00 | O-Zone Cable 6C, 45 5/8" | 1 |
| 176246-00 | O-Zone Cable 7B, 42 7/8" | 1 |
| 164367-00 | Footer, Specify Color | 7 |
| 164009-00 | O-Zone Ring Cap, Specify Color | 21 |
| **162128-00** | **O-Zone Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 84 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 7 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 35 |
| 138915-00 | Bolt Link, SST | 7 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 35 |
| 156962-00 | 5/8" O.D. x 1/2" Bushing, SST | 7 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 7 |
| 162729-00 | Connecting Plug | 70 |

## Specifications

**Ring:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Cable A:** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connector)** 6061-T6 aluminum. Finish: ProShield®, black in color. **(Footing Connector)** Fabricated from 1.250" O.D. 6061-T6 aluminum.

**Cable B & C:** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connector)** 6061-T6 aluminum. Finish: ProShield, black in color.

**Ring Caps:** Fabricated from sand-cast alloy 356. Finish: ProShield, color specified.

**Footer:** Weldment comprised of 1.660" O.D. RS20 (.085" - .095" Wall) galvanized steel tubing and 3/16" HRPO sheet steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 5 man hours
**Concrete Req.:** Approx. 9 cu. ft.
**Area Req.:** 6' (1830 mm) minimum use zone
**Weight:** 186 lbs.
**Fall Height:** 88" (2240 mm)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach ring caps to rings, using 3/8" x 7/8" BHCS w/pin. Refer to the Ring Cap/Cable Attachment Detail.

3) Attach Cable "A" with footing connector to ring cap tab located below logo, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolt. Attach cables "B" & "C" to remaining ring cap tabs as shown, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Ring Cap/Cable Attachment Detail. **NOTE:** *Cables are tagged 1A, 1B, 1C, 2A, 2B, 2C etc. Cable "A" is attached below logo, as shown.*

4) Starting at the wide end of the arches, attach ring #1 to arch tabs using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolt. **NOTE:** *Make sure Cables "B" & "C" are attached to the correct arches. Cable "B" attaches to arch #2, Cable "C" attaches to arch #1.*

5) Attach bolt links to footer connectors, using 3/8" x 7/8" BHCS w/pin limited thread bolts.

6) Attach footers to footer connectors, using 5/8" O.D. x 1/2" bushings, and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Refer to Footer Attachment Details.

7) Pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure. **NOTE:** *Cables attached to footers should be taut and plumb.*

   **(Direct Bury With Pour-In Place Surfacing)** Cut 7 lengths of concrete form tubes (not supplied) long enough to set on top of concrete footings and be level with top of concrete slab. Concrete form tubes should be 8"-10" in diameter. Disconnect cables from bolt links. Place concrete form tubes over cables and footers. Connect cables to bolt links. Fill concrete form tubes with pea gravel, sand or sub grade. Pour concrete slab. After concrete slab has cured, pour surfacing. **NOTE:** *When pouring surfacing leave a 1"-3" diameter opening around cables. Refer to the DirectBury Pour-In-Place Surfacing Detail.*

8) Install protective surfacing before users are allowed to play on the structure.



Specifications are subject to change without notice.

ECO #54735 Document 18930400 replaces 17962700. Changed the way length of cables are measured.

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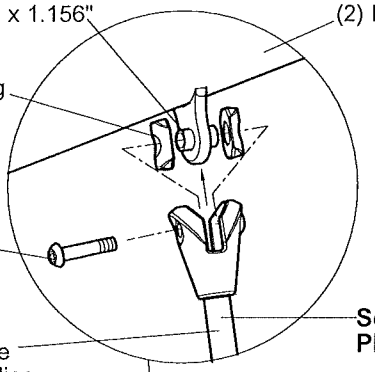
**SAFETY NOTE**

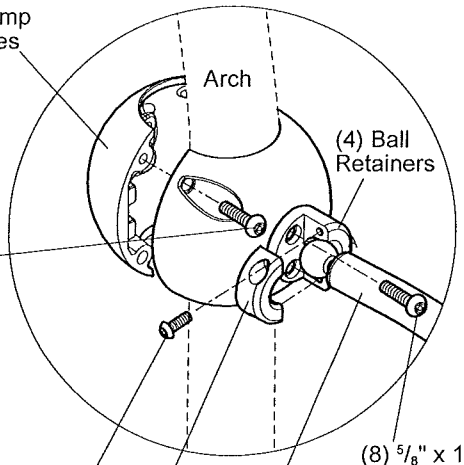
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

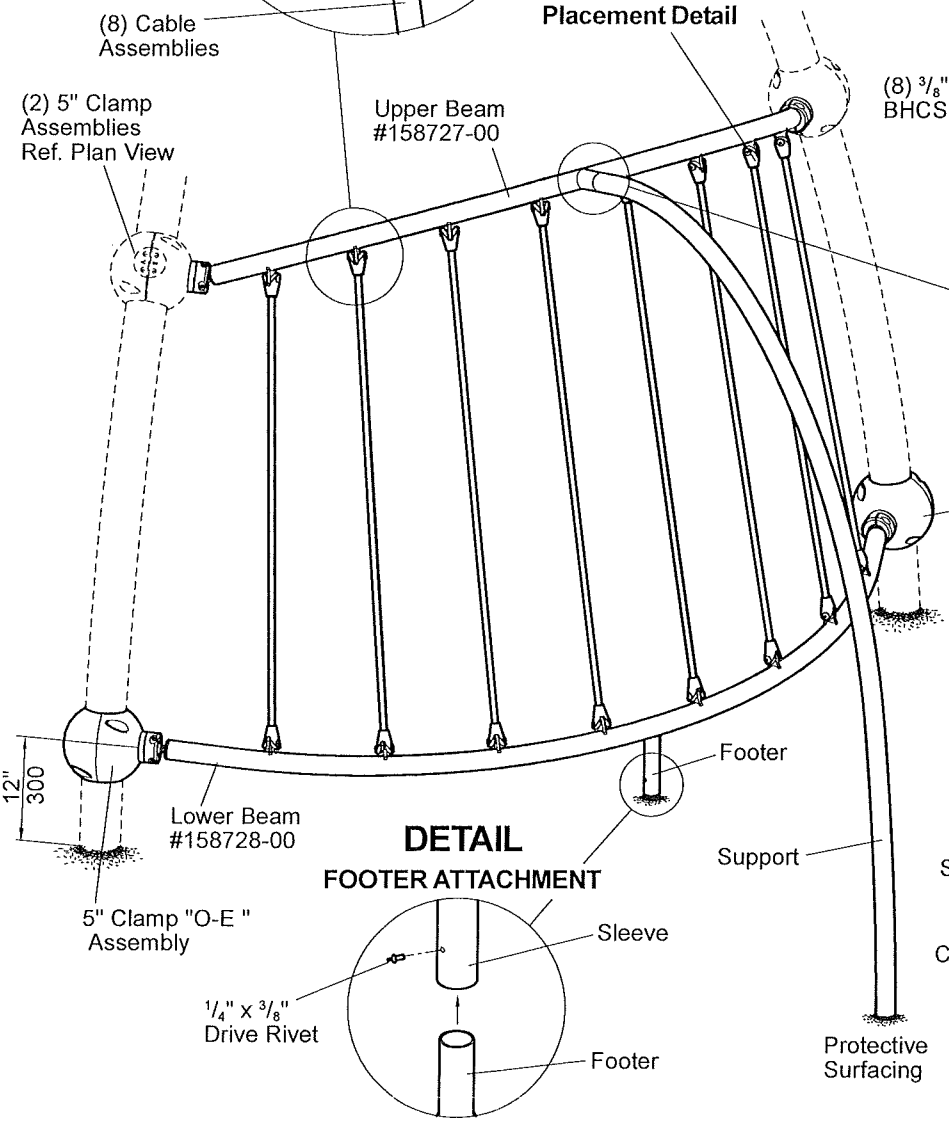
16815700

## DETAIL
### ROPE ATTACHMENT

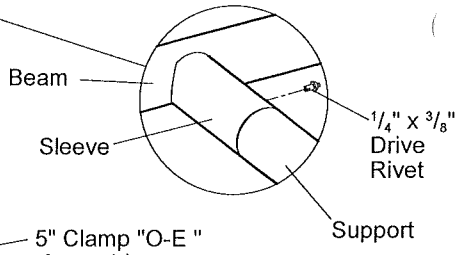



## DETAIL
### BEAM ATTACHMENT



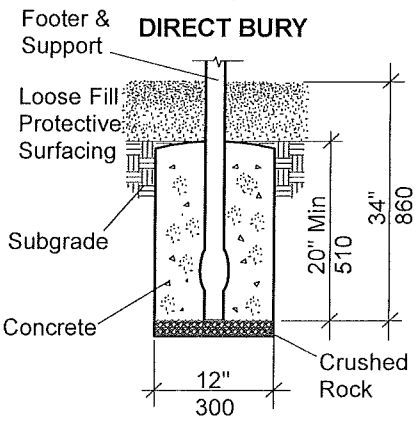

## DETAIL
### SUPPORT ATTACHMENT




## DETAIL
### FOOTER ATTACHMENT




## DETAIL
### DIRECT BURY

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# 160252 BalanceWinder™

Sheet 1 of 2

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Document #17715900

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# Evos® 160252 BalanceWinder™

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| 156213-00 | Footer, Specify Color | 1 |
| 166276-00 | 5" Round Clamp "O", Specify Color | 2 |
| 156699-00 | Ball Clamp, Specify Color | 4 |
| 156700-00 | Ball Retainer, Specify Color | 4 |
| 166275-00 | 5" Round Clamp "E", Specify Color | 2 |
| 158727-00 | Upper Beam, Specify Color | 1 |
| 158728-00 | Lower Beam, Specify Color | 1 |
| 176409-00 | Cable Assembly #1, Black | 1 |
| 176410-00 | Cable Assembly #2, Black | 1 |
| 176411-00 | Cable Assembly #3, Black | 1 |
| 176412-00 | Cable Assembly #4, Black | 1 |
| 176412-00 | Cable Assembly #5, Black | 1 |
| 176413-00 | Cable Assembly #6, Black | 1 |
| 176414-00 | Cable Assembly #7, Black | 1 |
| 176415-00 | Cable Assembly #8, Black | 1 |
| 158887-00 | Support, Specify Color | 1 |
| **166828-00** | **BalanceWinder Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 2 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 16 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 16 |
| 162729-00 | Connecting Plug | 32 |

## Specifications

**5" Round Clamp:** Cast from 356-T6 aluminum. Finish: ProShield®, color specified.

**Ball Clamp/ Ball Retainer:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**Cable:** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connector)** 6061-T6 aluminum.

**Upper Beam:** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 3/8" thick HRPO steel plate, and 1 7/8" steel ball. Finish: ProShield, color specified.

**Lower Beam:** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 1.900" O.D. RS20 (.090"-.100" wall) galvanized steel tubing, 3/8" thick HRPO steel plate, and 1 7/8" steel ball. Finish: ProShield, color specified.

**Support:** Fabricated from 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing. Finish: ProShield, color specified.

**Footer:** Fabricated from 1.900" O.D. RS20 (.090"-.100" wall) galvanized steel tubing. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 2 3/4 man hours
**Concrete Req.:** Approx. 2.5 cu. ft.
**Min. Use Zone:** 6' (1830 mm) minimum use zone
**Weight:** 160 lbs.
**Fall Height:** 14 3/4" (374 mm)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Insert footer into lower beam sleeve. Drill through hole in sleeve and into footer with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Footer Attachment Detail.

3) Attach (2) 5" clamps to arches at height shown, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Do not final tighten fasteners at this time, 5" round clamps will need to be adjusted to attach rope railings.

4) Attach ball retainers to 5" clamps, using 5/8" x 1 1/2" BHCS w/pin. Place support and footer in footing holes. Attach upper and lower beams to ball retainers using ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Beam Attachment Detail.

5) Insert support into upper beam sleeve. Drill through hole in sleeve and into support with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Support Attachment Detail.

6) Attach cables to upper and lower net beam tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Move lower beam and 5" clamps down until cables are taut. With cables taut and beams in proper position, tighten 5" clamp fasteners. Refer to the Cable Attachment and Cable Placement Details.

7) With footer and support plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

8) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54247 Document 17715700 replaces 16815700. Changed cable assembly part numbers.

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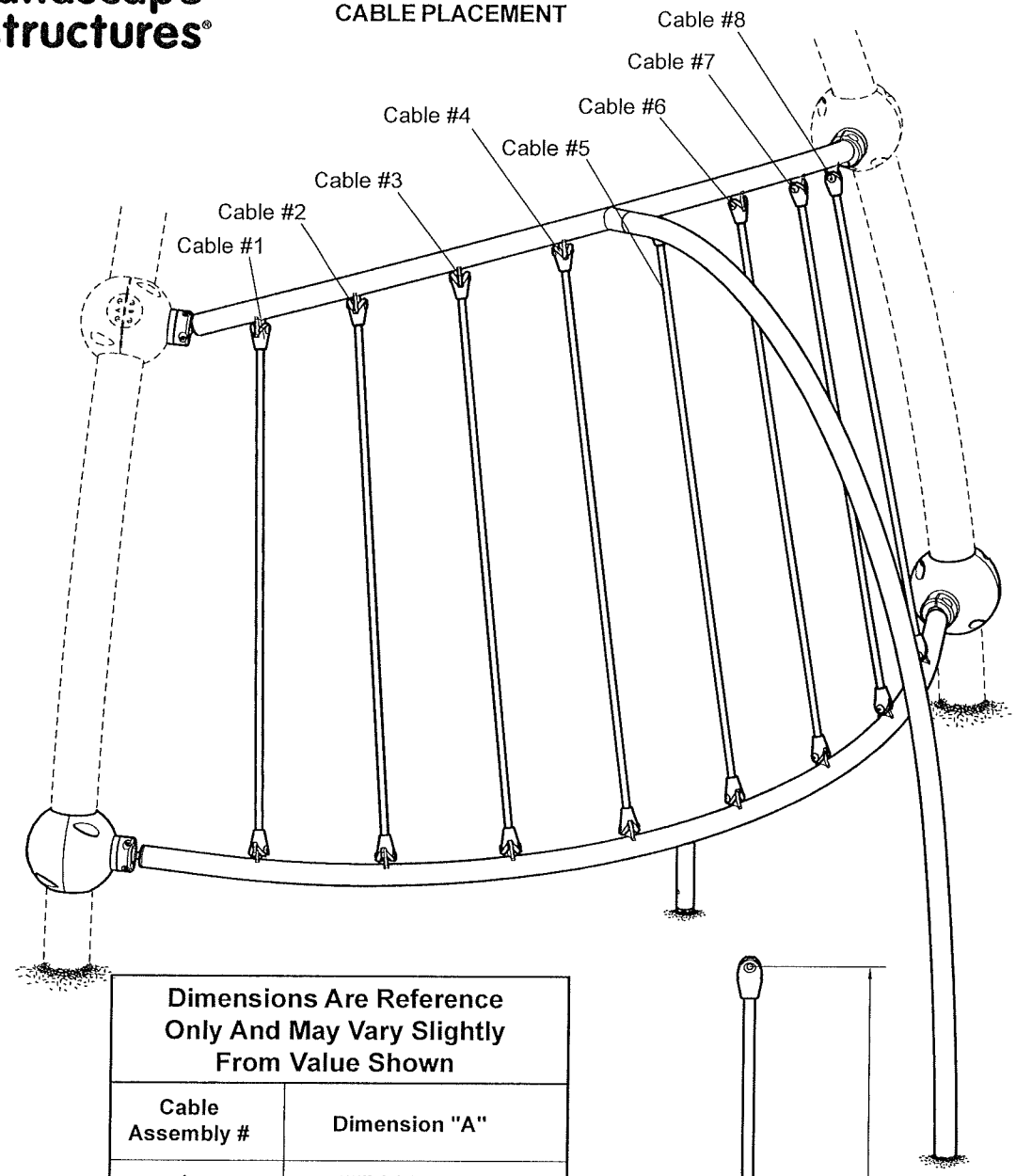
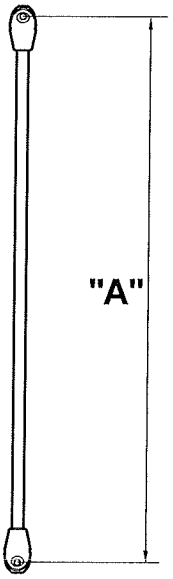
# DETAIL

## CABLE PLACEMENT




| Dimensions Are Reference Only And May Vary Slightly From Value Shown | |
|---|---|
| **Cable Assembly #** | **Dimension "A"** |
| 1 | 55" / 1400 |
| 2 | 58 1/2" / 1485 |
| 3 | 61 1/16" / 1550 |
| 4 | 62 3/8" / 1584 |
| 5 | 62 3/8" / 1584 |
| 6 | 60 7/8" / 1546 |
| 7 | 57 3/4" / 1447 |
| 8 | 53 3/8" / 1355 |

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# 160252 BalanceWinder™



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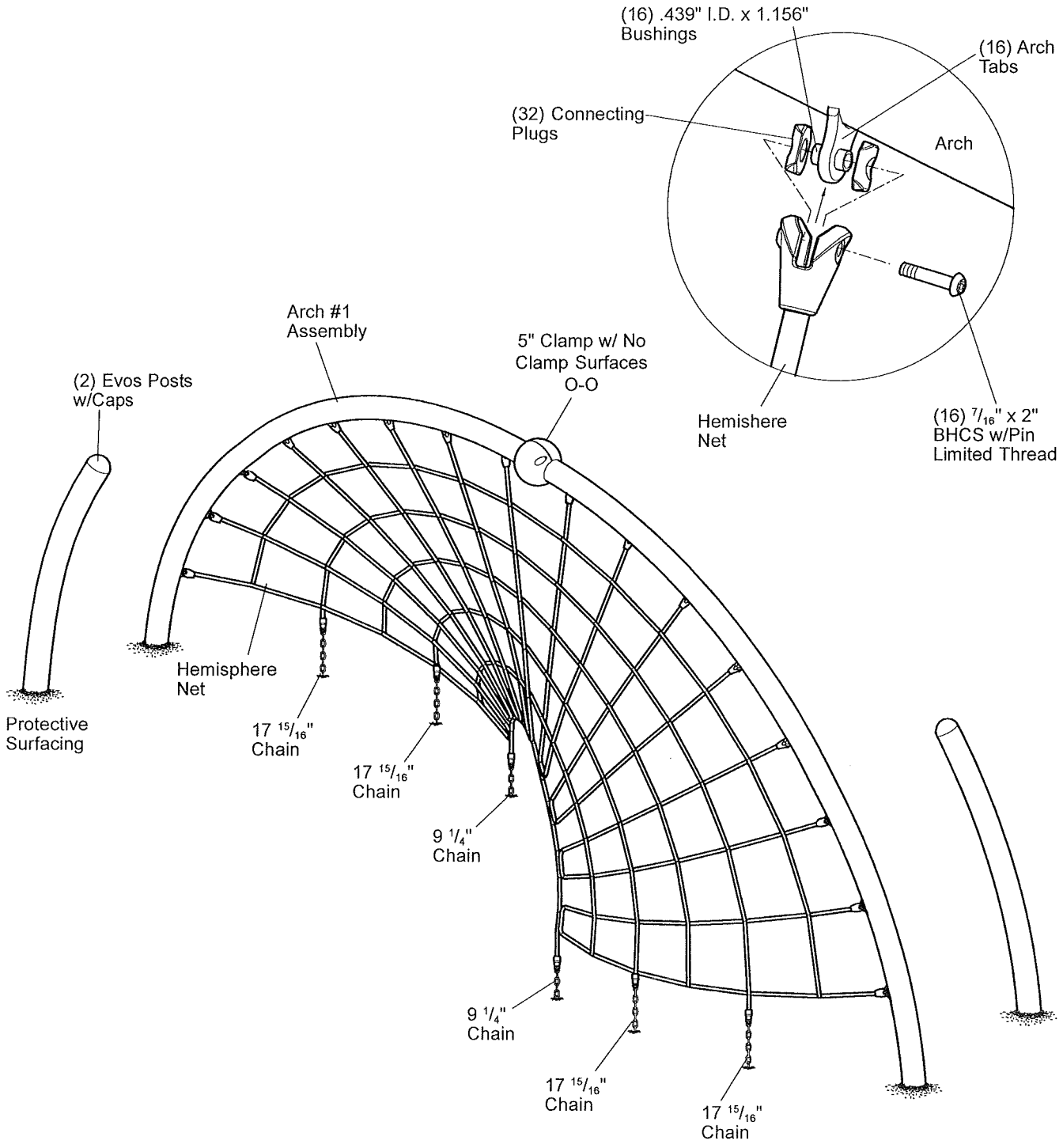
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

19082000

# DETAIL

## HEMISPHERE NET ATTACHMENT




**Evos®** **171626 Single Arch, w/2 Attachment Points** Sheet 1 of 4

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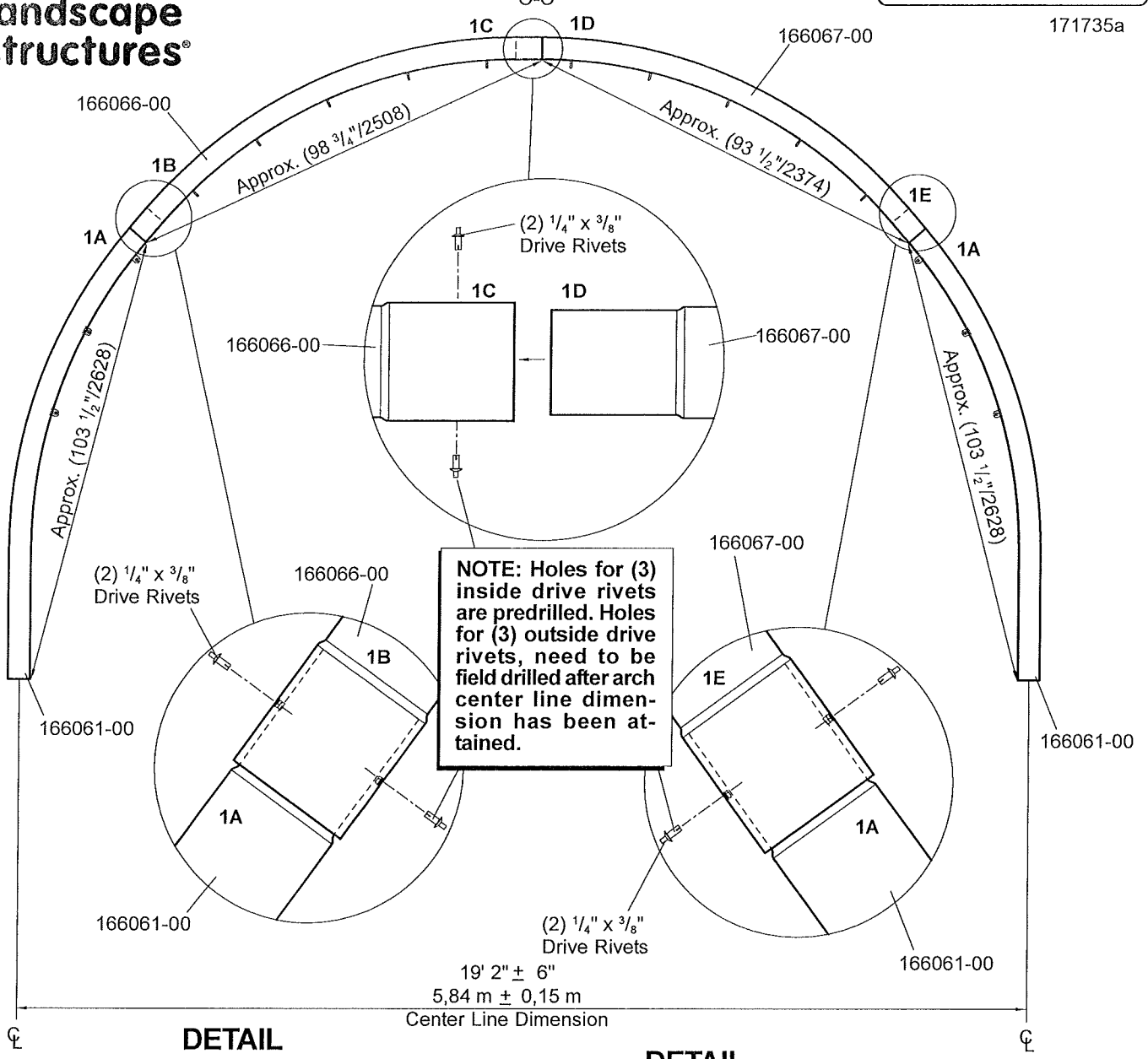
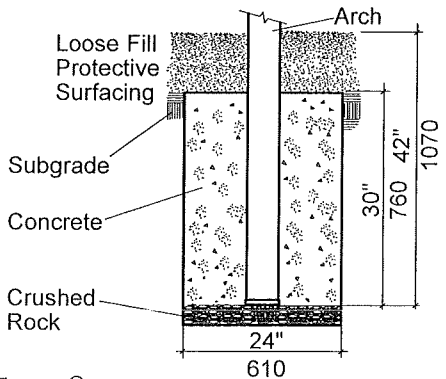
# ARCH #1 ASSEMBLY

**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

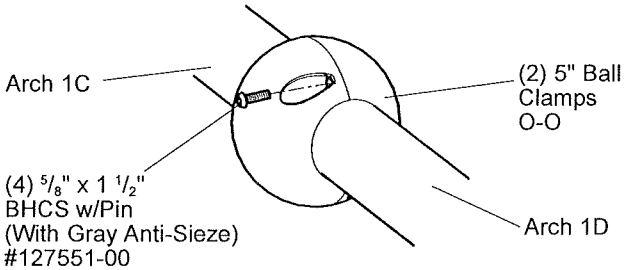
171735a




## DETAIL
### DIRECT BURY




## DETAIL
### 5" CLAMP O-O ATTACHMENT

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# Arch Assembly

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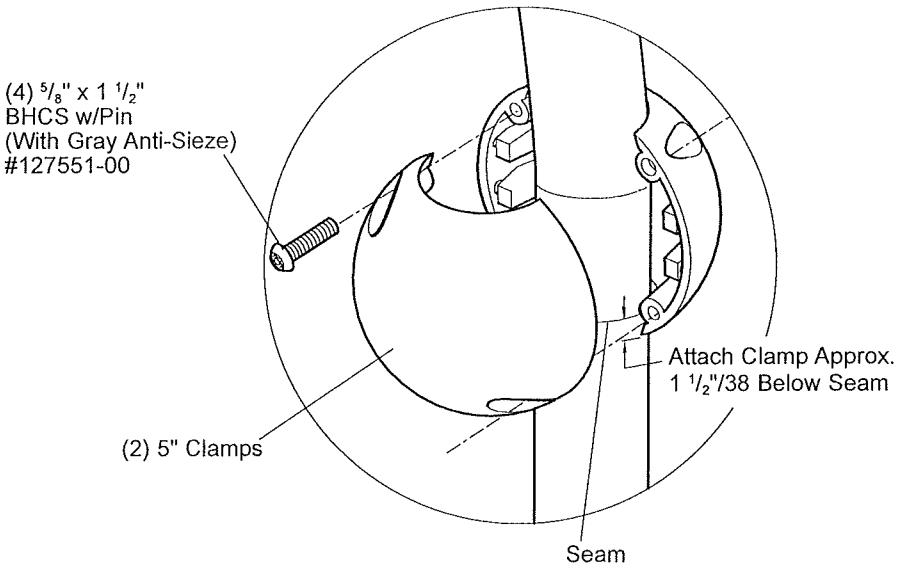
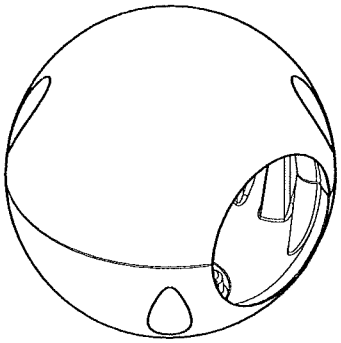
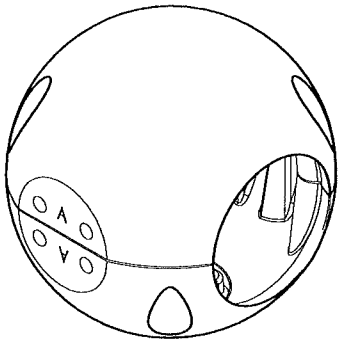
## DETAIL
### 5" CLAMP ATTACHMENT

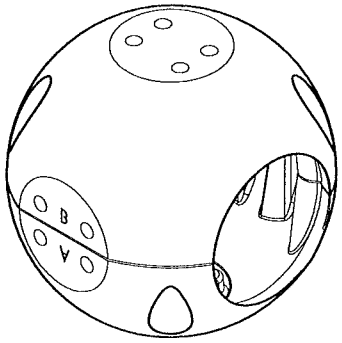


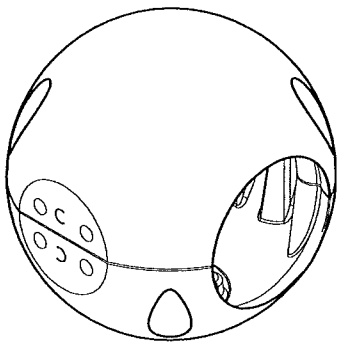
5" Clamp w/ No
Clamp Surfaces
O-O



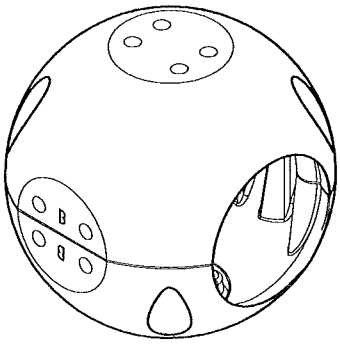

5" Clamp w/ 1
Clamp Surface
A-A



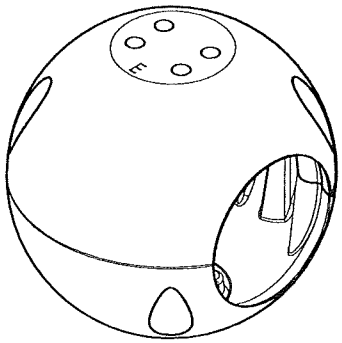

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



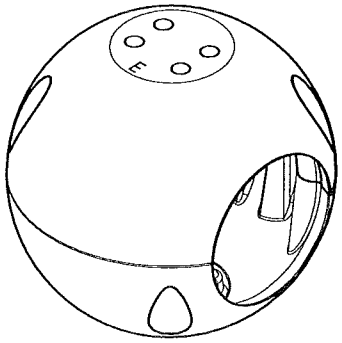

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E



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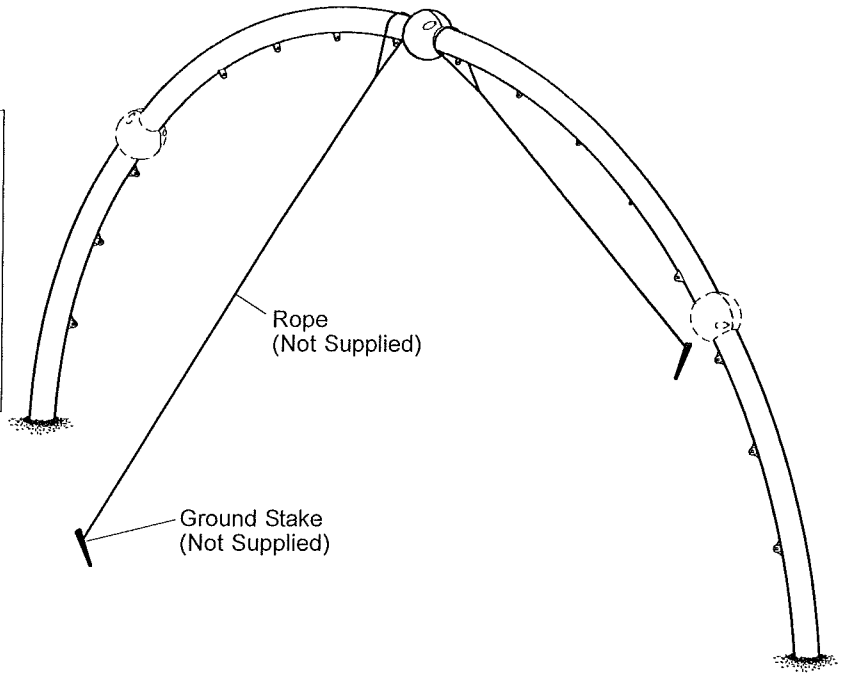
SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

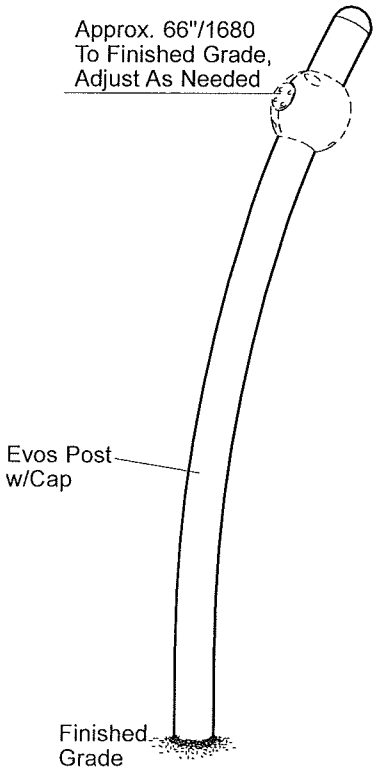
171735b

## DETAIL
ROPE/GROUND STAKES

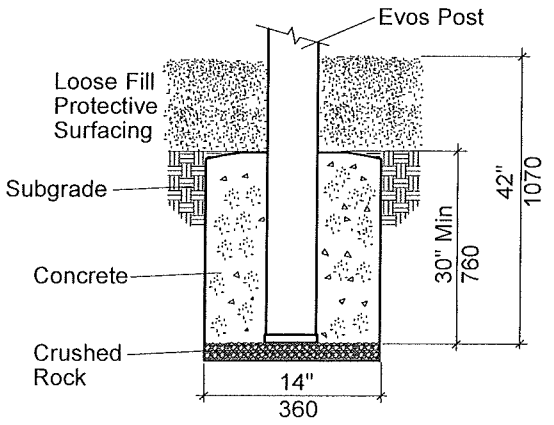
NOTE: *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*




## DETAIL
EVOS POST




## DETAIL
DIRECT BURY




**IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.**

# Evos® 171626 Single Arch, w/2 Attachment Points

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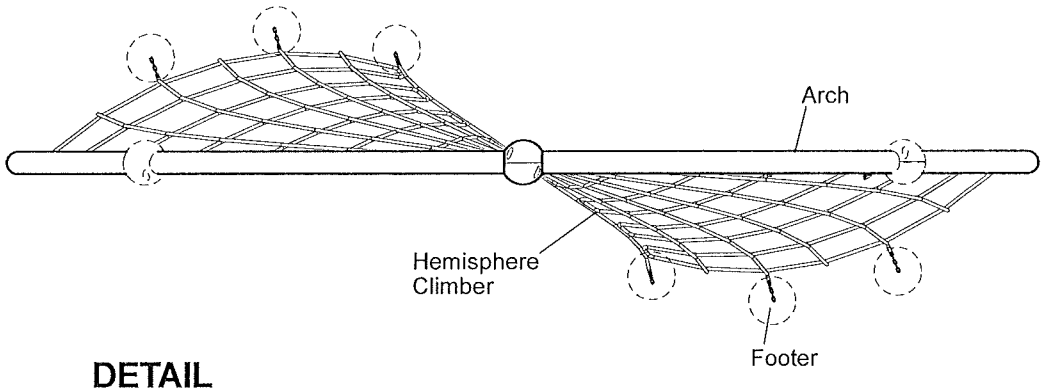
**SAFETY NOTE**

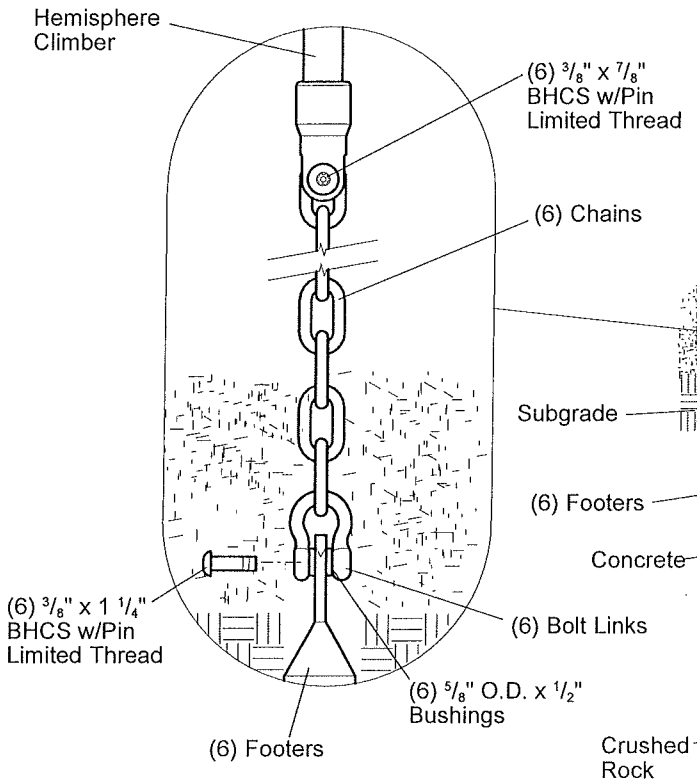
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

190820a

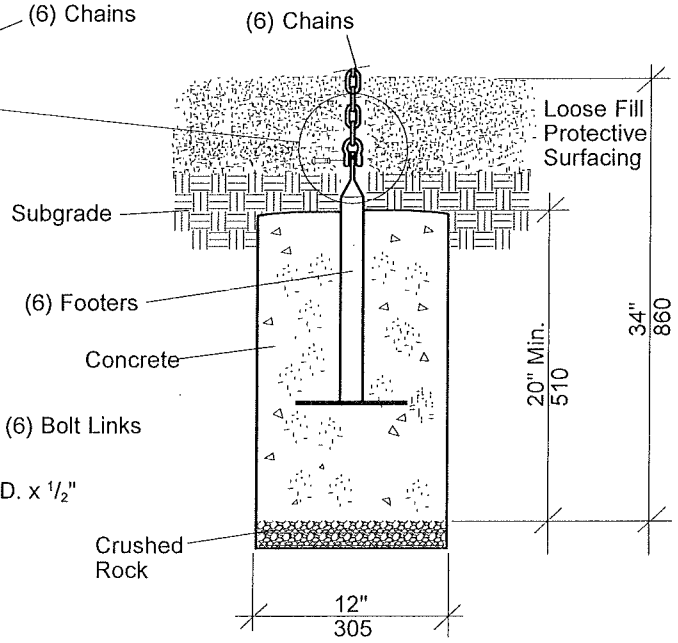
## PLAN VIEW




## DETAIL




## DETAIL
### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cord.**



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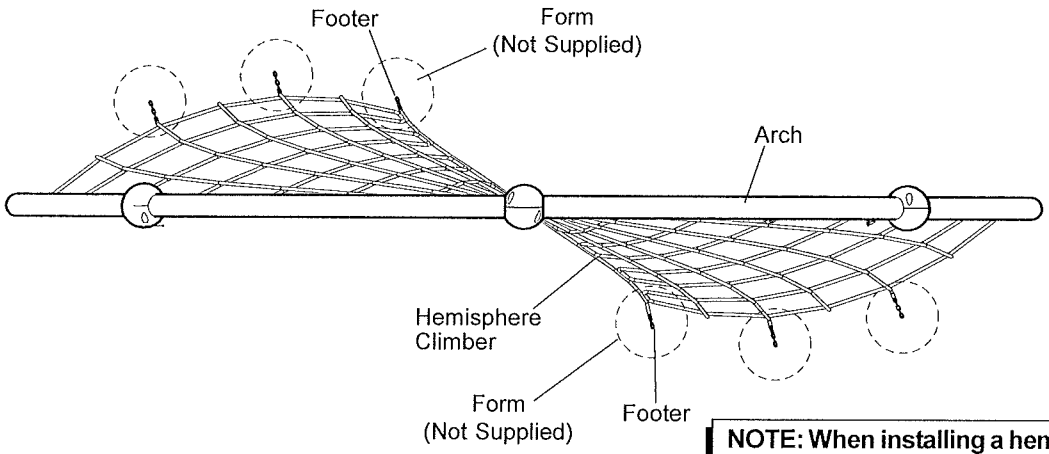
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

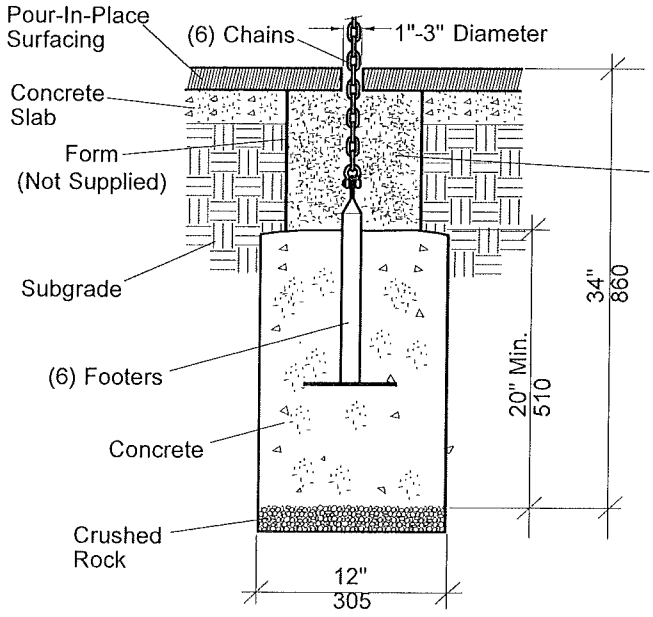
190742c

## PLAN VIEW

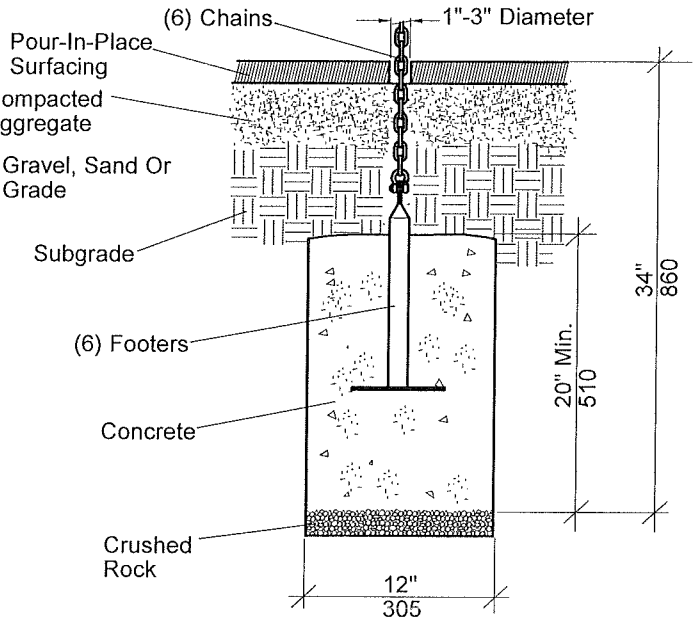



**NOTE: When installing a hemisphere climber over a concrete slab with pour-in-place surfacing, a form needs to be placed around the footers, to prevent concrete from covering the bolt links and fasteners.**

## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING (COMPACTED AGGREGATE)




# Evos® Detail Plan For Pour In Place Surfacing

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# Evos® 171626 Single Arch, w/2 Attachment Points

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 6 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 164367-00 | Footer, Specify Color | 6 |
| 171806-00 | Evos Post w/Cap, Specify Color | 2 |
| 190610-00 | Net Assembly, Black | 1 |
| 166061-00 | Arch 1A With Net Tabs, Specify Color | 2 |
| 166066-00 | Arch 1B/1C Without Ring Tabs, Specify Color | 1 |
| 166067-00 | Arch 1D/1E Without Tabs, Specify Color | 1 |
| 166276-00 | 5" Clamp O, Specify Color | 2 |
| 136721-00 | 9 1/4" Long Chain | 2 |
| 190780-00 | 17 15/16" Long Chain | 4 |
| **190829-00** | **Hemisphere Climber Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 6 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 6 |
| 138915-00 | Bolt Link, SST | 6 |
| 156962-00 | 5/8" O.D. x 1/2" Long Bushing, SST | 6 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 16 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 16 |
| 162729-00 | Connecting Plug | 32 |

## Specifications

**Net Assembly:** **(Net)** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Swage)** 3/4" schedule 40 6061-T6 aluminum pipe. **(S-Hooks)** Fabricated from 5/16" diameter 316-TI stainless steel. **(Cable Connectors)** Cast from 356-T6 aluminum. Finish: ProShield®, black in color. **(Footing Connector)** Fabricated from 1 5/16" O.D. 6061-T6 aluminum.

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Post:** Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield, color specified.

**Chain:** Steel 1/4" straight link chain, 3,150 lb. working load limit. Finish: Peer Gold.

**Footer:** Weldment comprised of 1.660" O.D. RS20 (.085" - .095") galvanized steel tubing, and 7 GA. (.179") HRPO sheet steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 6 man hours
**Concrete Req.:** Approx. 28.914 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 590 lbs.
**Fall Height:** 87" (2,21 m)

## Installation Instructions

1) **(Direct Bury) Refer to Site Plan for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

6) Place the fully assembled arch in footings holes. **NOTE:** *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*

7) Attach hemisphere net to arch tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Hemisphere Net Attachment Detail.

8) Attach chains to hemisphere climber, using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.

9) Attach footers to chains, using bolt links, 5/8" O.D. x 1/2" long bushings and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Place footers in footing holes. Refer to the Footer Attachment Details. **NOTE:** *If footers are not fully suspended, a trench will need to be dug the full length of the footers. Refer to the Plan View.*

10) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.

11) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

12) Install protective surfacing before users are allowed to play on the structure.



Specifications are subject to change without notice.

Eco #54776 Document #19082000 replaces #17701000. Replaced net.

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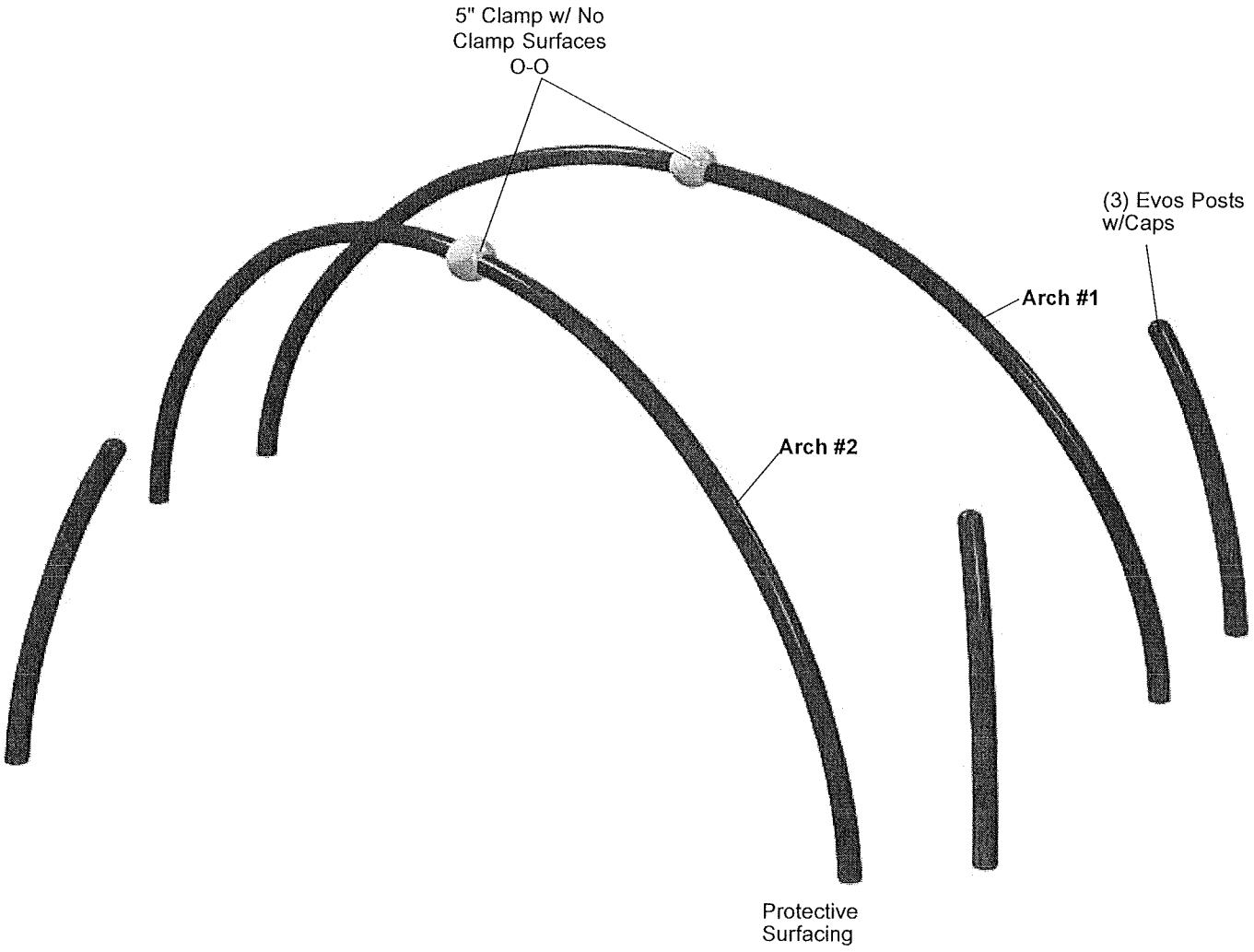
ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

179188




# Evos® 179188 2-Arch, w/3-5 Attachment Points



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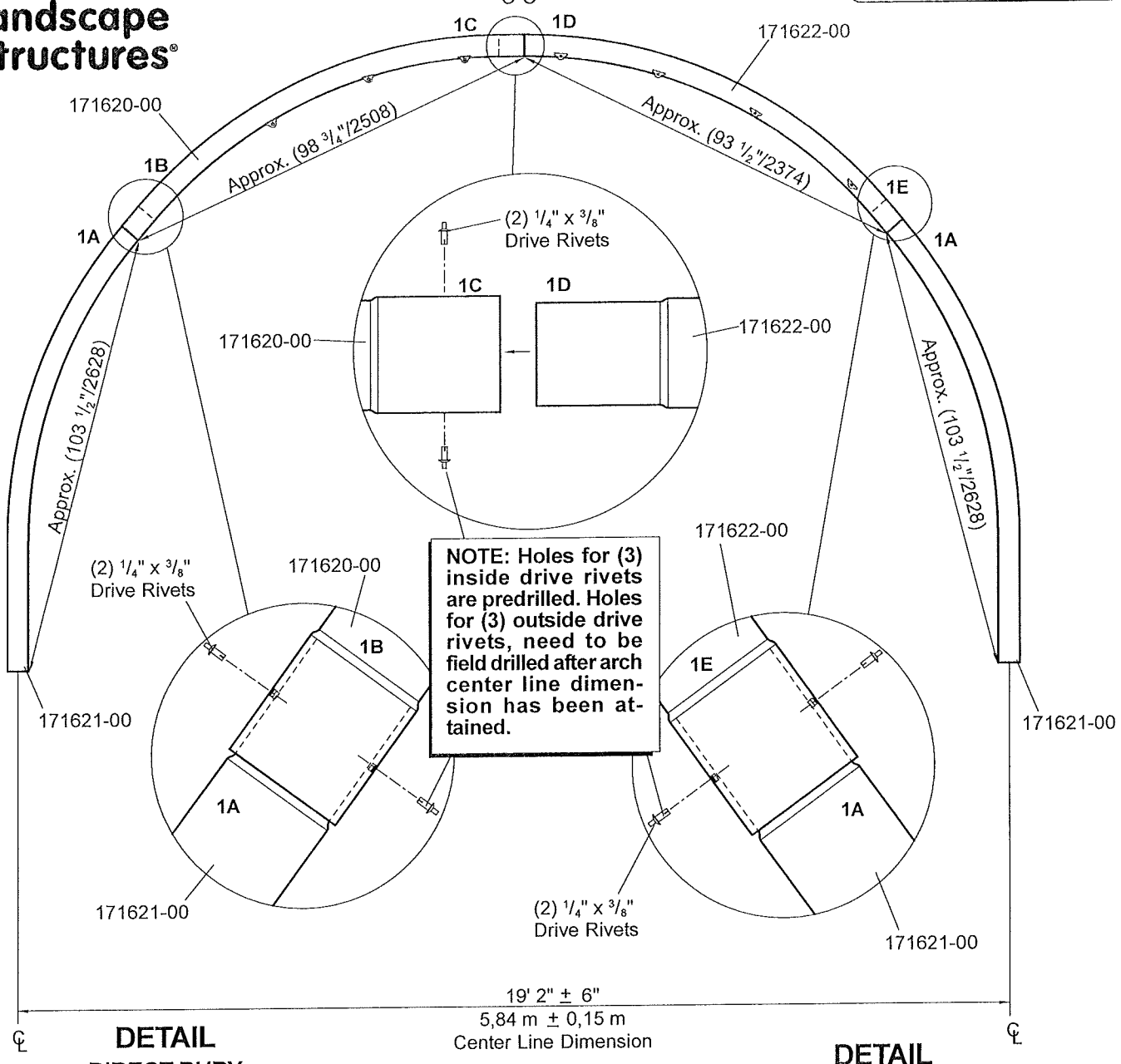
# ARCH #1 ASSEMBLY

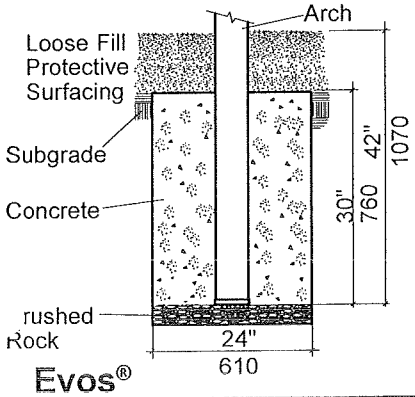
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

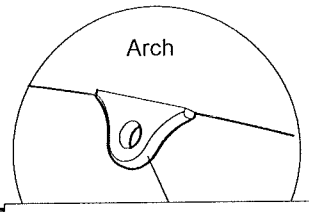



**NOTE: Holes for (3) inside drive rivets are predrilled. Holes for (3) outside drive rivets, need to be field drilled after arch center line dimension has been attained.**

## DETAIL
### DIRECT BURY




## DETAIL




**NOTE: Assemble structure with tabs on arches #1 & #2 angled towards each other.**

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# Arch #1

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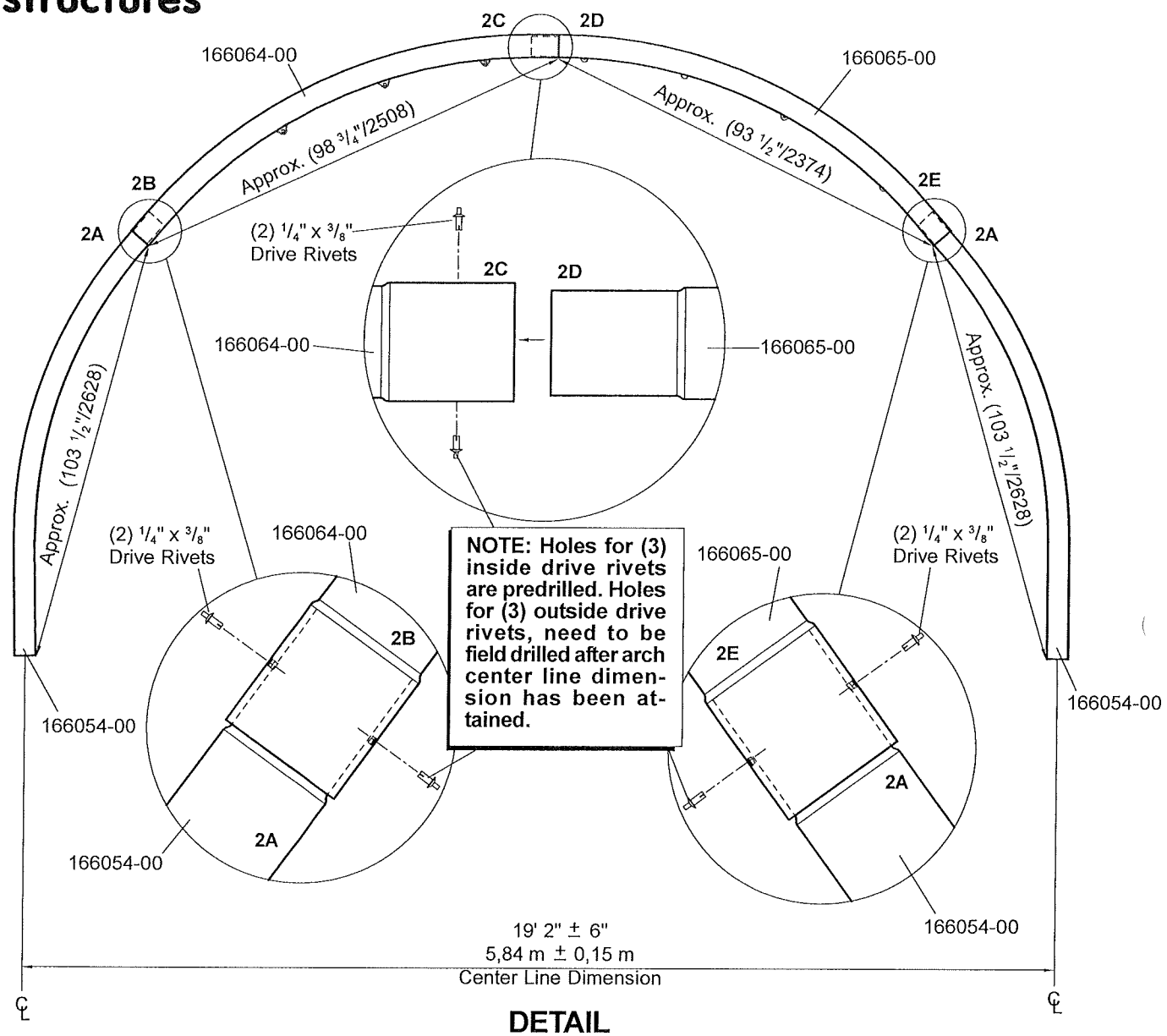
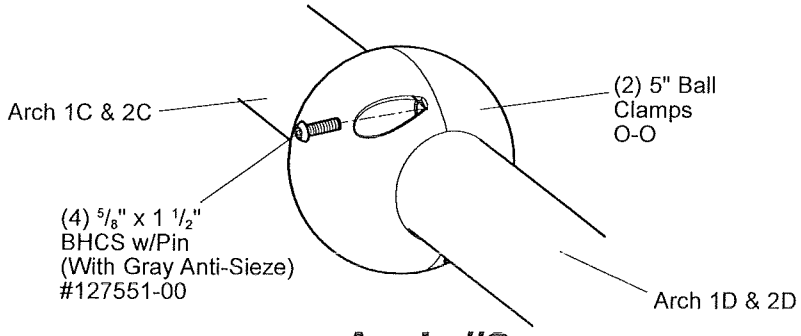
# ARCH #2 ASSEMBLY




## DETAIL

### 5" CLAMP O-O ATTACHMENT







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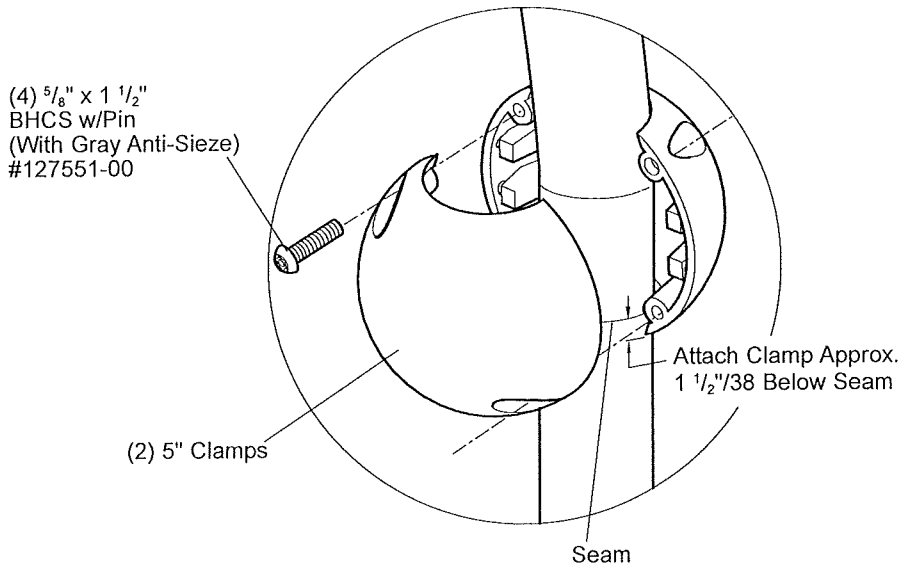
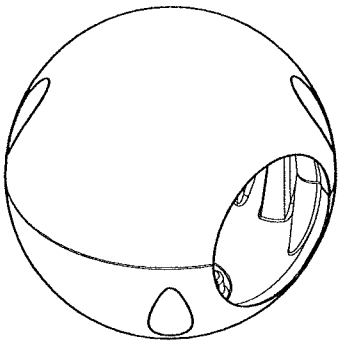
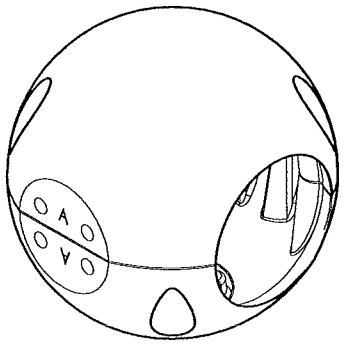
## DETAIL
### 5" CLAMP ATTACHMENT

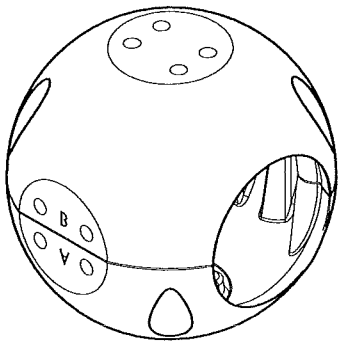


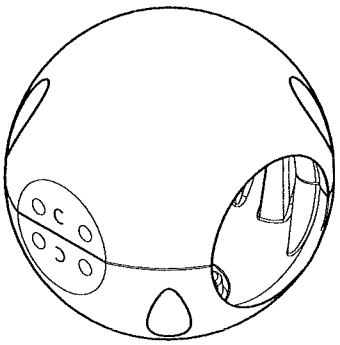
5" Clamp w/ No
Clamp Surfaces
O-O



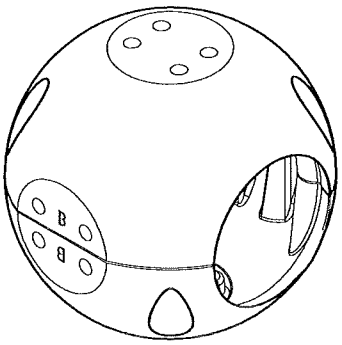

5" Clamp w/ 1
Clamp Surface
A-A



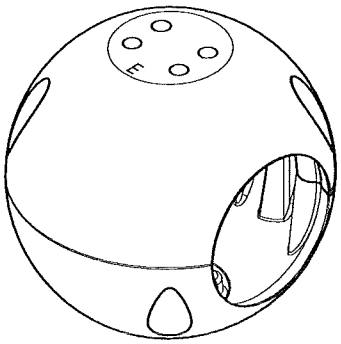

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



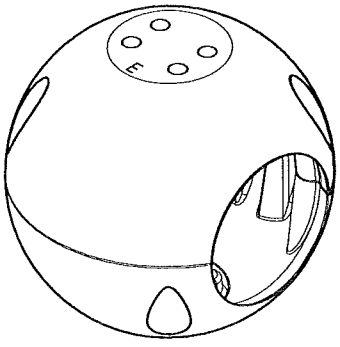

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E

# 5" Clamps



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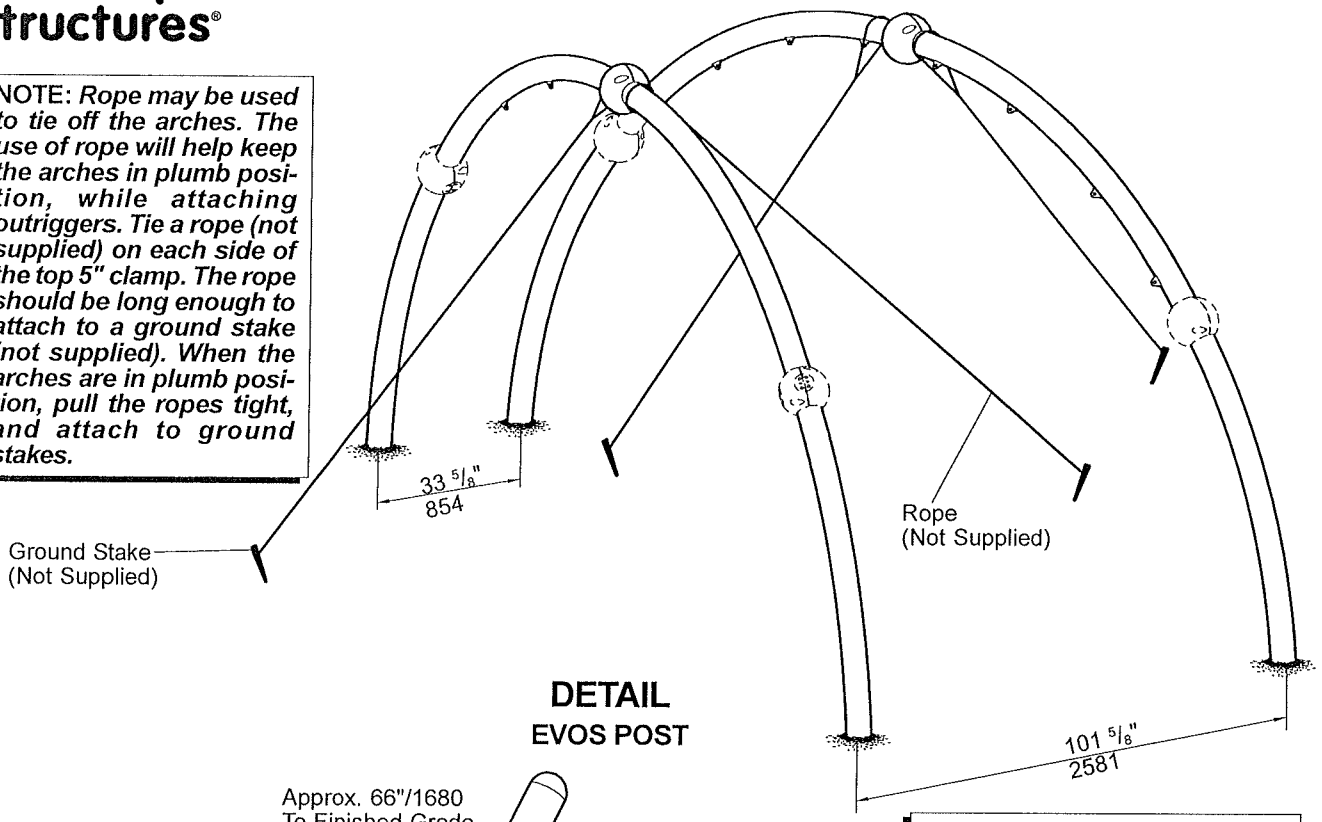
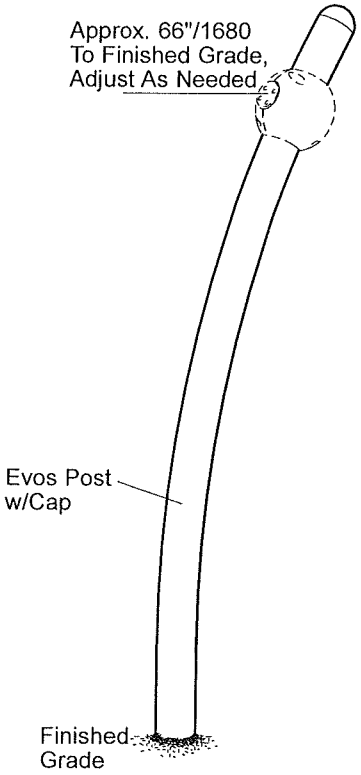
## DETAIL
### ROPE/GROUND STAKES

NOTE: *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*

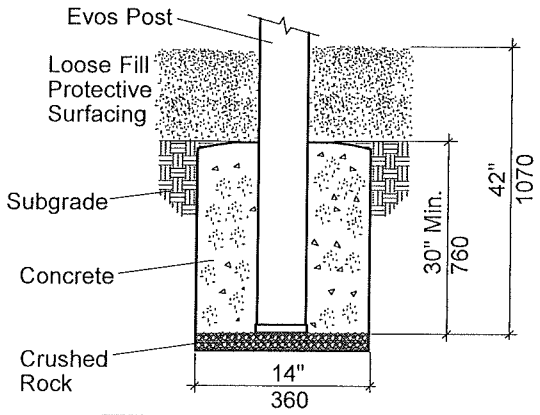



**NOTE: Make sure tabs on arches #1 & #2 are angled towards each other.**

## DETAIL
### EVOS POST




## DETAIL
### DIRECT BURY




**IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.**



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# Evos® 179188 2-Arch, w/3-5 Attachment Points

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 12 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| 166054-00 | Arch 2A, Specify Color | 2 |
| 166064-00 | Arch 2B/2C With Tabs, Specify Color | 1 |
| 166065-00 | Arch 2D/2E With Tabs, Specify Color | 1 |
| 166276-00 | 5" Clamp O, Specify Color | 4 |
| 171620-00 | Arch 1B/1C w/o Hemisphere Tabs, Specify Color | 1 |
| 171621-00 | Arch 1A w/o Hemisphere Tabs, Specify Color | 2 |
| 171622-00 | Arch 1D/1E w/o Hemisphere Tabs, Specify Color | 1 |
| 171806-00 | Evos Post w/Cap ASM, Specify Color | 3 |

## Specifications

**Post:** Fabricated from 5.000" (127 mm) O.D. x 11 GA. (.120") (3,05 mm) wall galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield®, color specified.

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**5" Arch:** Steel arch is manufactured from 5" (127 mm) O.D. galvanized tubing with a wall thickness of .120" (3,05 mm). Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 4 1/4 man hours
**Concrete Req.:** Approx. 18.71 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 815 lbs.

## Installation Instructions

1) **(Direct Bury) Refer to Site Plan for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

6) Place the fully assembled arches in footing holes. Refer to the Site Plan for proper location of arches. **NOTE:** *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*

7) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.

8) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

9) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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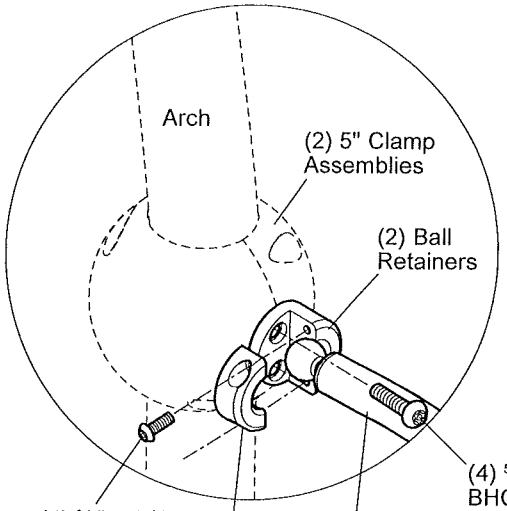
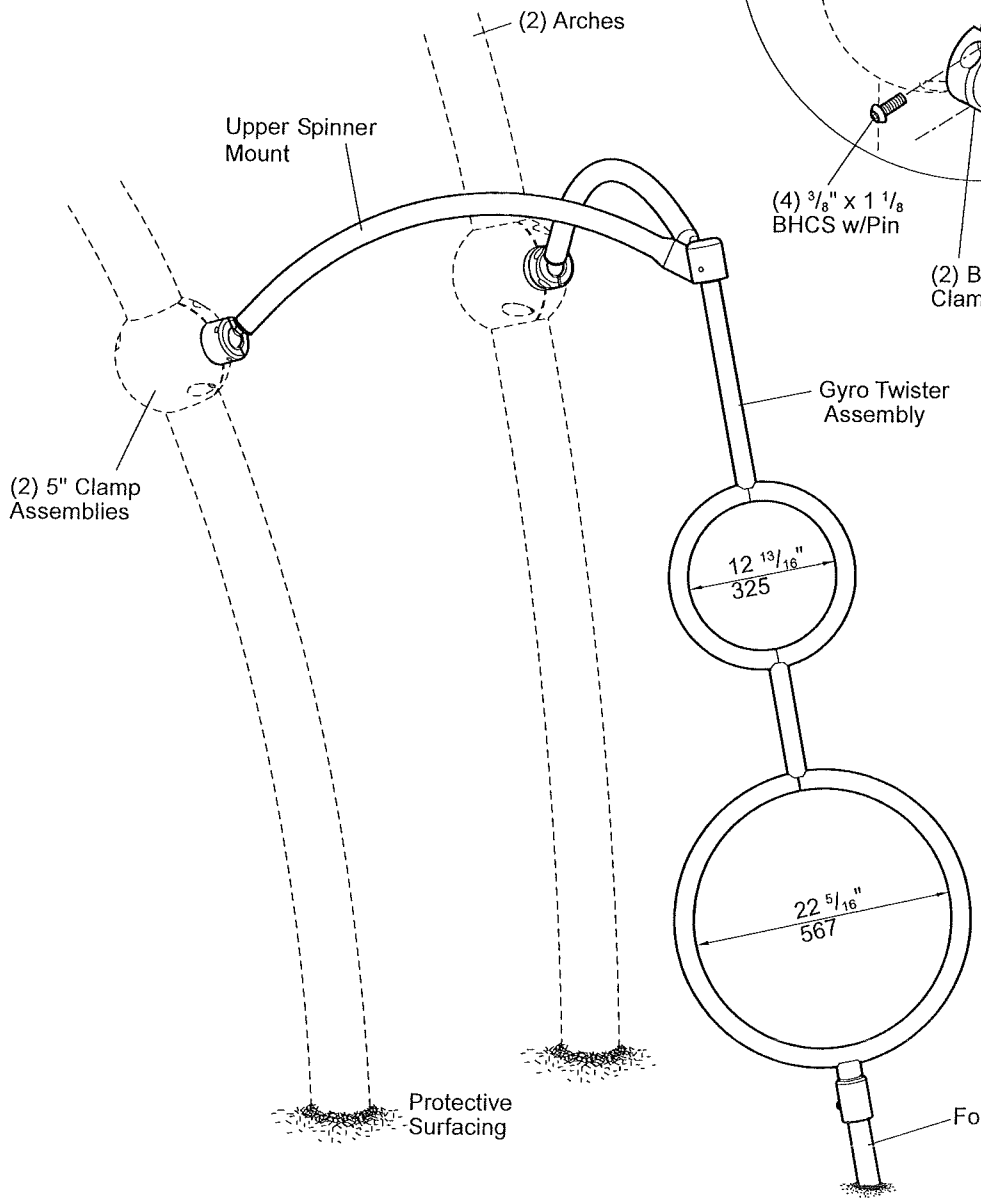
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

# DETAIL

## UPPER SPINNER MOUNT ATTACHMENT




Evos®

# 156459 Gyro Twister® Spinner



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# Evos® 156459 Gyro Twister® Spinner

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 158711-00 | Upper Spinner Mount, Specify Color | 1 |
| 171114-00 | Gyro Twister Assembly, Specify Color | 1 |
| 157092-00 | Footer, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| **159381-00** | **Evos Spinners Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST | 4 |
| 100201-00 | $^5/_8$" x 1 $^1/_2$" BHCS w/Pin, SST | 4 |
| 131849-00 | $^5/_{16}$" x $^1/_2$" BHCS w/Pin, SST | 4 |
| 158710-00 | Bushing | 4 |

## Specifications

**Upper Spinner Mount:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 2.750" O.D. 1018 steel, and 1 $^7/_8$" steel ball. Finish: ProShield®, color specified.

**Gyro Twister Assy.:** Weldment comprised of 1.900" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 1.660" O.D. RS40 (.111"-.121" Wall) galvanized steel tube, $^3/_{16}$" HRPO steel plate and 1 $^7/_8$" steel ball. Finish: ProShield, color specified.

**Bushing:** Oil-filled UHMW PE.

**Footer:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 12 Ga. (.105") HR flat steel and 1 $^7/_8$" steel ball. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 $^1/_2$ man hours
**Concrete Req.:** Approx. 3 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 83 lbs.
**Fall Height:** 50" (1,27 m)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Place a bushing on each side of the footer's 1 $^7/_8$" ball, as shown. Insert footer with bushings into Gyro Twister assembly. Align holes in bushings with holes in housing. When holes are aligned, insert $^5/_{16}$" x $^1/_2$" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

3) Place a bushing on each side of the Gyro Twister assembly's 1 $^7/_8$" ball, as shown. Insert Gyro Twister assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert $^5/_{16}$" x $^1/_2$" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

4) Attach ball retainers to 5" clamps using $^5/_8$" x 1 $^1/_2$" BHCS w/pin. Attach upper spinner mount to ball retainers using ball clamps and $^3/_8$" x 1 $^1/_8$" BHCS w/pin. Refer to the Upper Spinner Mount Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect the Gyro Twister Assembly and position properly. Check to make sure 5" clamps are at the same height, if not adjust 5" clamps.*

5) Place a level on the footer gusset, when gusset is plumb pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. **NOTE:** *Gyro Twister assembly will have to be propped in position, until concrete has cured.*

6) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54010 Document 17138000 replaces 15976600. Replaced Gyro Twister Assembly.

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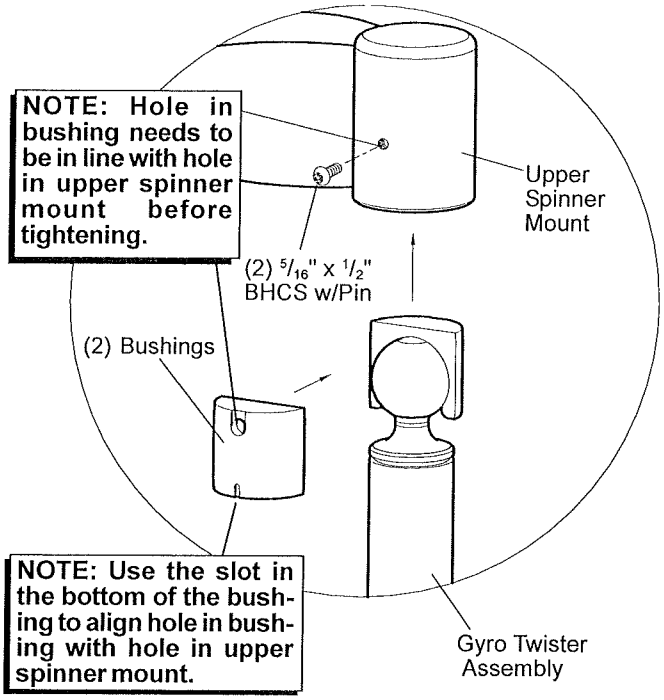
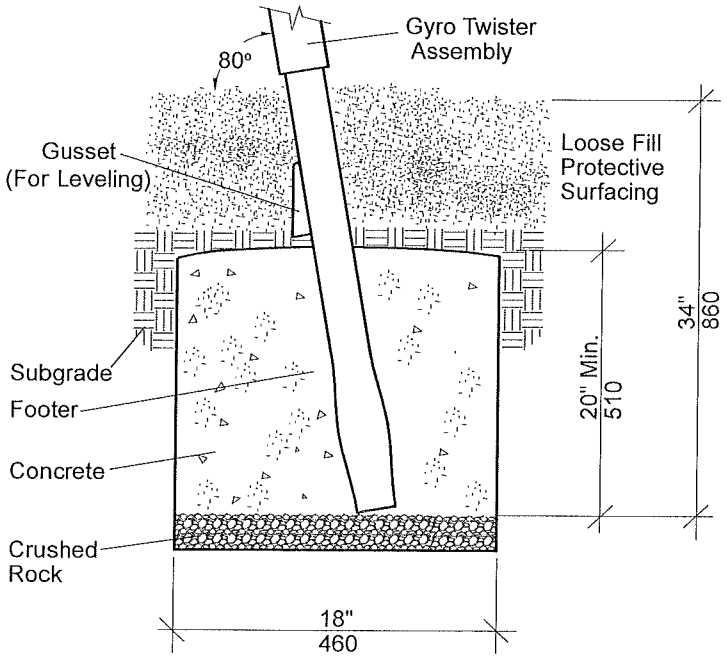
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

## DETAIL
### GYRO TWISTER ASSEMBLY




## DETAIL
### FOOTER ATTACHMENT




Evos®

# 156459 Gyro Twister® Spinner



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Document #17138000

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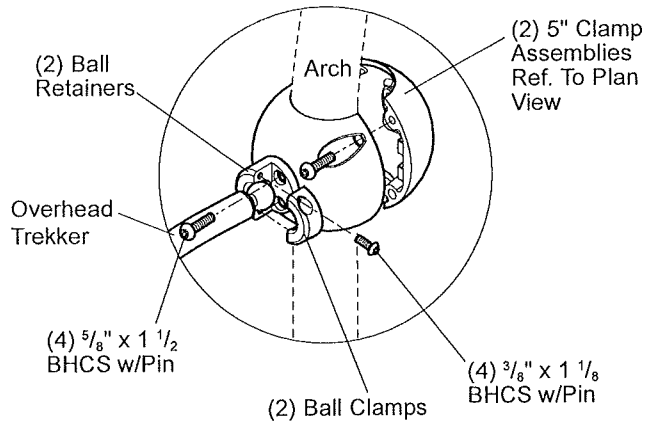
**SAFETY NOTE**

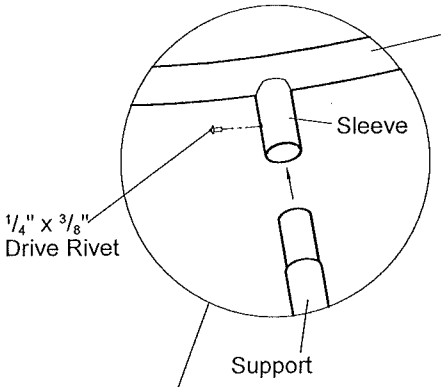
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

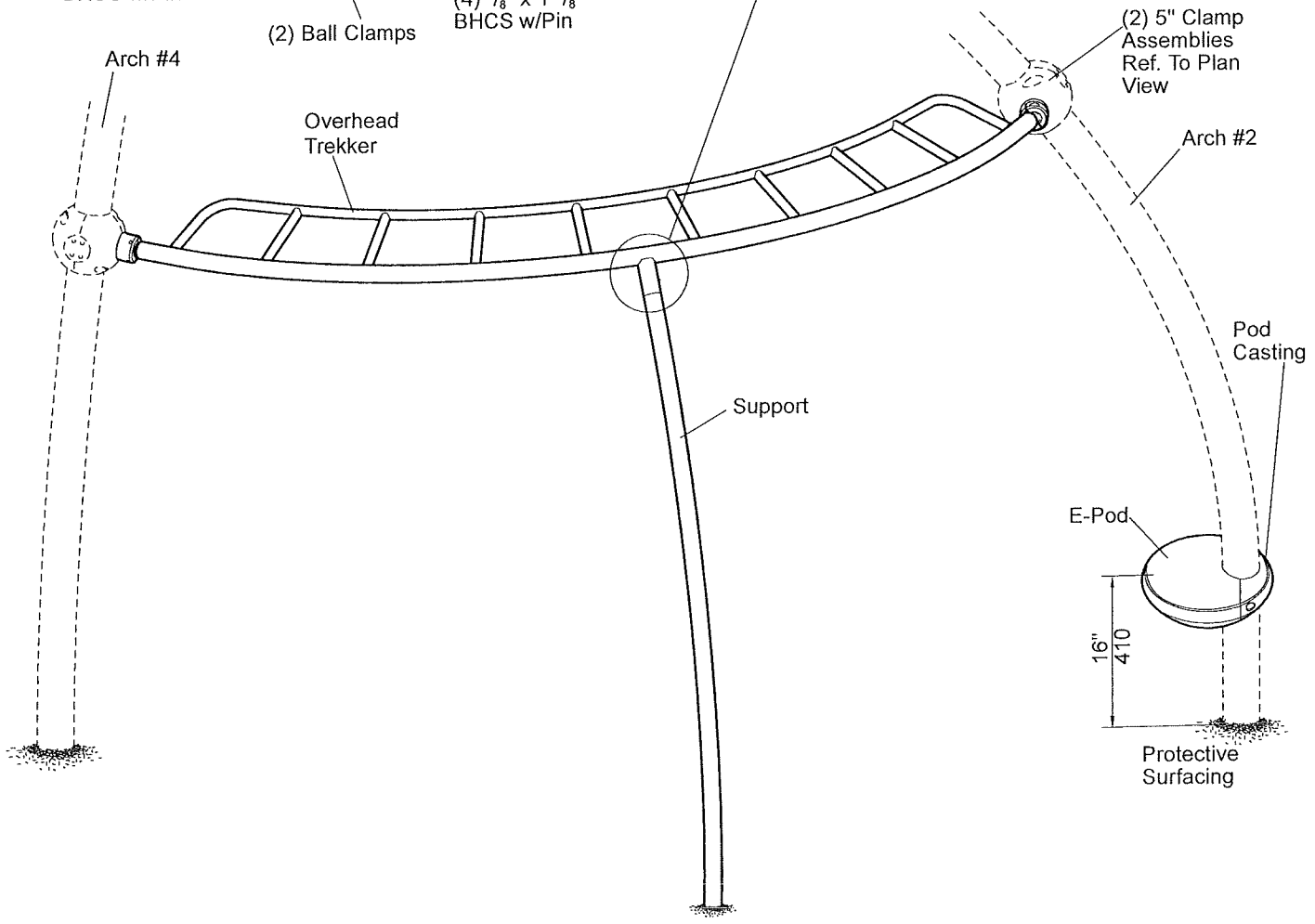
16041200

## DETAIL
### BALL CLAMP ATTACHMENT




## DETAIL
### SUPPORT ATTACHMENT




Evos®

# 160254 Overhead Trekker™

Sheet 1 of 2

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# Evos® 160254 Overhead Trekker™

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 154461-00 | E-Pod, Specify Color | 1 |
| 156203-00 | Pod Climb Across Support, Specify Color | 1 |
| 156806-00 | Pod Casting, Specify Color | 1 |
| 160135-00 | Overhead Trekker, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| **156968-00** | **Pod Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 1 |
| **160409-00** | **Evos Overhead Events Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 1 |

## Specifications

**Overhead Trekker:** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 1.315" O.D. RS20 (.080"-.090" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield®, color specified.

**E-Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Pod Casting:** Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

**Support:** Fabricated from 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 1/4 man hours
**Concrete Req.:** Approx. 1.31 cu. ft.
**Area Req.:** 6'/2060 mm minimum use zone
**Weight:** 122 lbs.
**Fall Height:** 81"/2010 mm

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Fasten Overhead Trekker to ball retainers using, ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Ball Clamp Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect and position Overhead Trekker properly. Check to make sure Overhead Trekker is level, if not adjust 5" clamps. Retighten 5" clamp fasteners when Overhead Trekker is in proper position.*

3) Slide support into Overhead Trekker sleeve. Drill through hole in sleeve and into support with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Direct Bury Detail.

4) Attach e-pod and pod casting to arch as shown, using 3/8" x 1 1/8" BHCS w/pin. Refer to the E-Pod Attachment Detail.

5) Drill through hole in pod casting and into arch with a 1/4" or "F" (only) drill bit. Insert 1/4" x 5/8" rivet in hole and hammer rivet pin in until it is flush with head.

6) With support plumb, pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.

7) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

ECO #54569 Remove Play Safe Label from hardware package.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*.)

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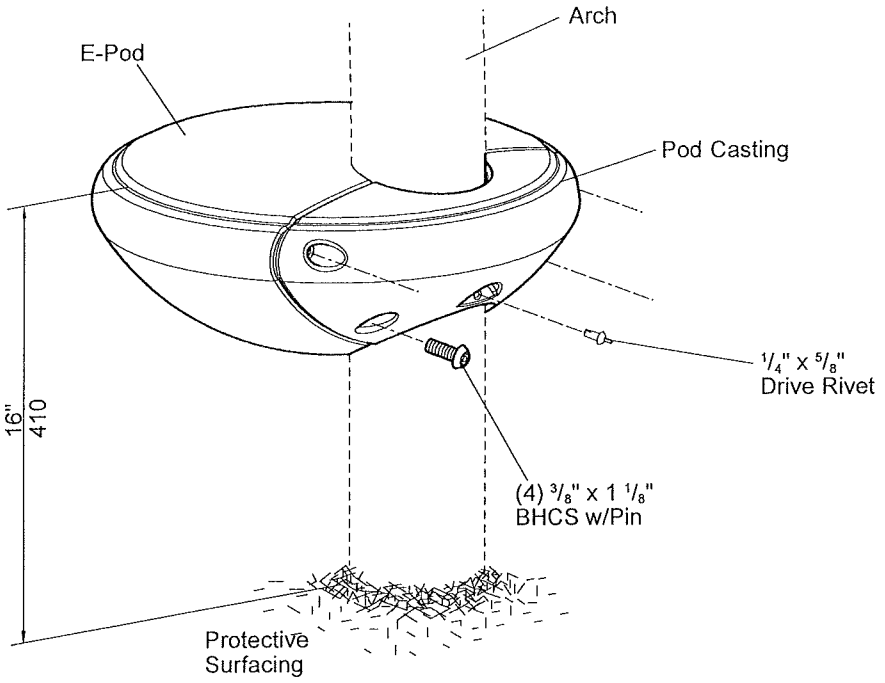
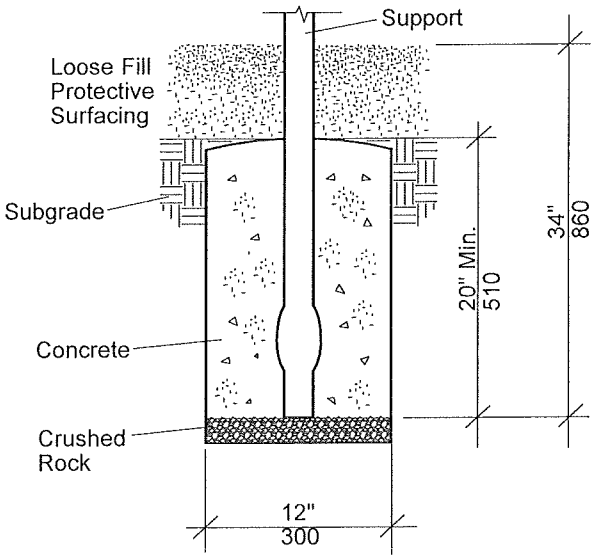
## DETAIL

### E-POD ATTACHMENT




## DETAIL

### DIRECT BURY




Evos®

# 160254 Overhead Trekker™



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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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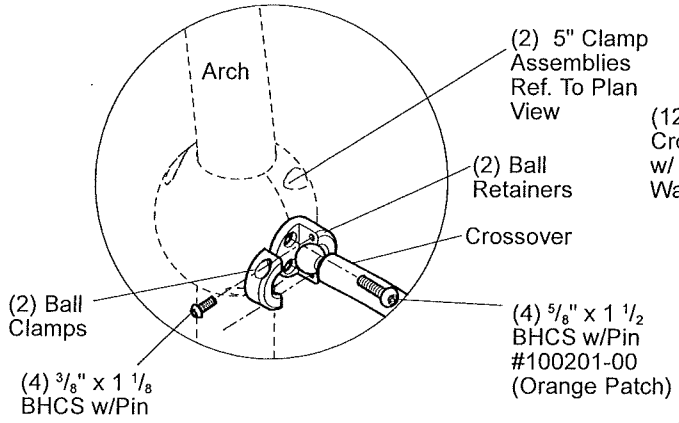
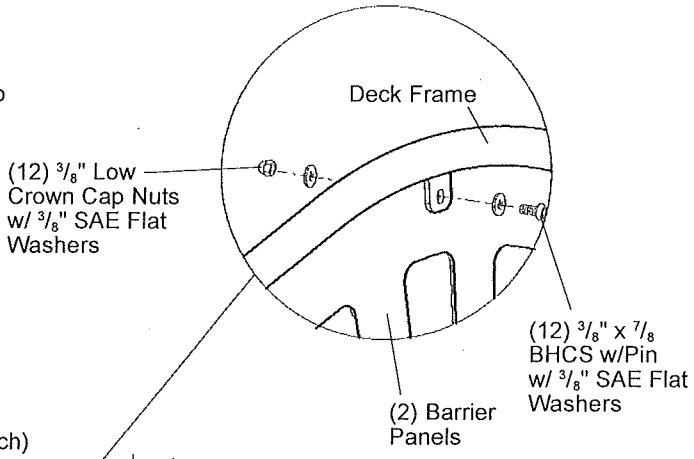
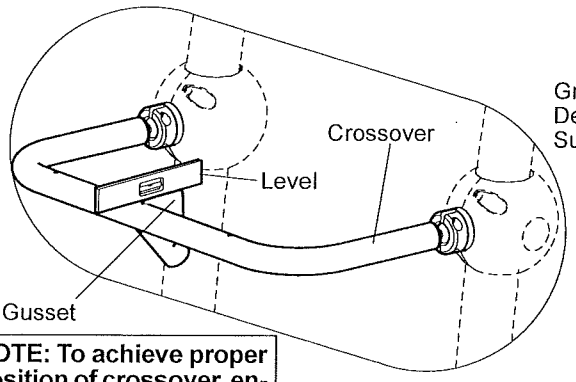
## DETAIL
### CROSSOVER ATTACHMENT



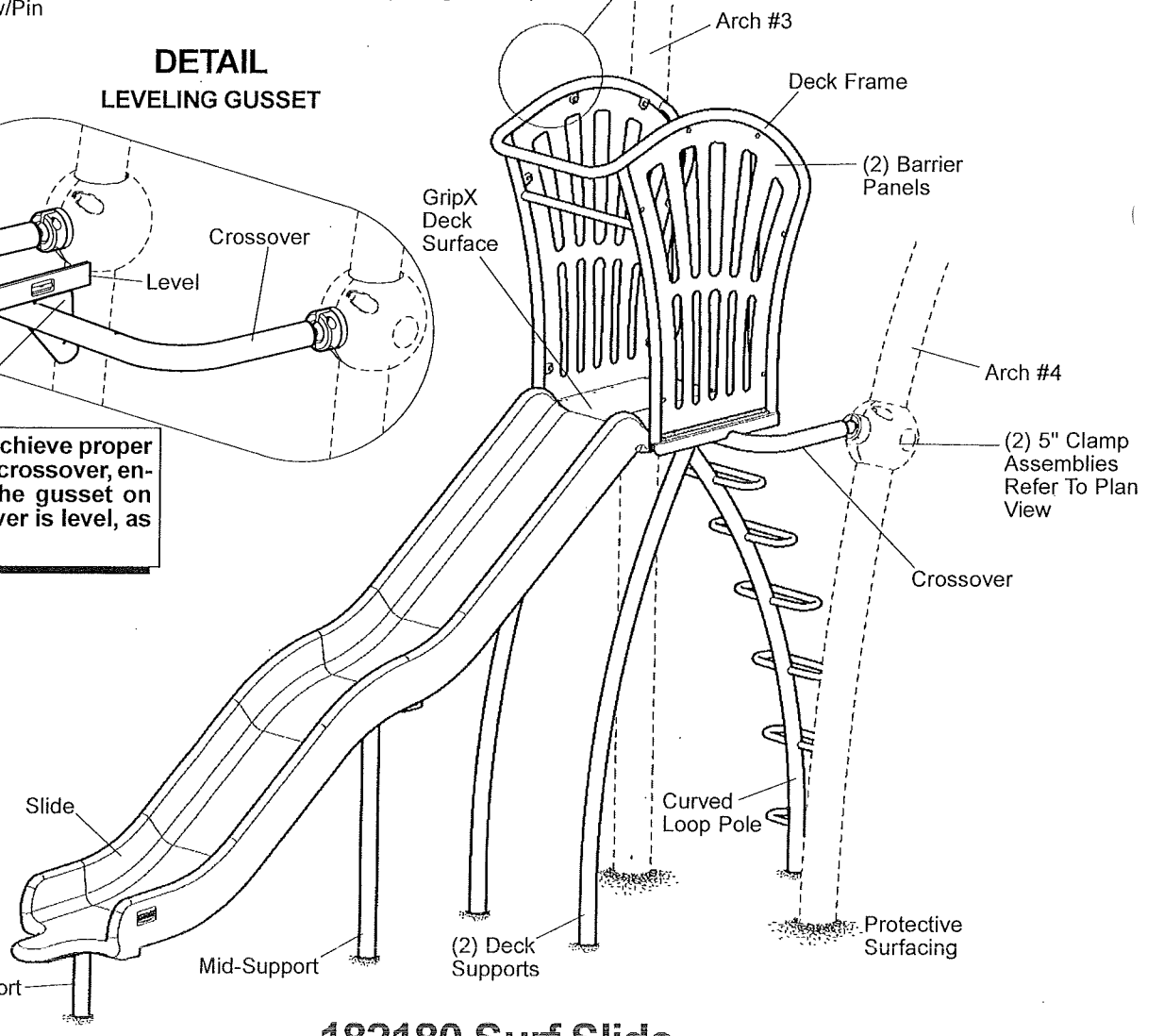

## DETAIL
### BARRIER PANEL ATTACHMENT




## DETAIL
### LEVELING GUSSET




**NOTE: To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown.**




Evos®

# 182180 Surf Slide



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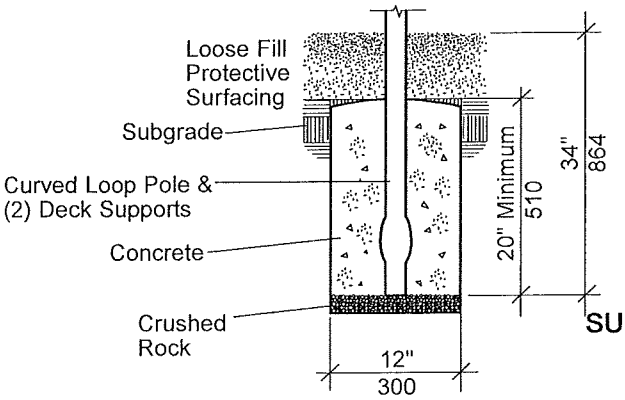
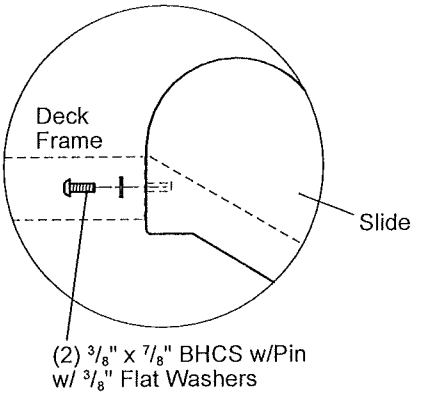
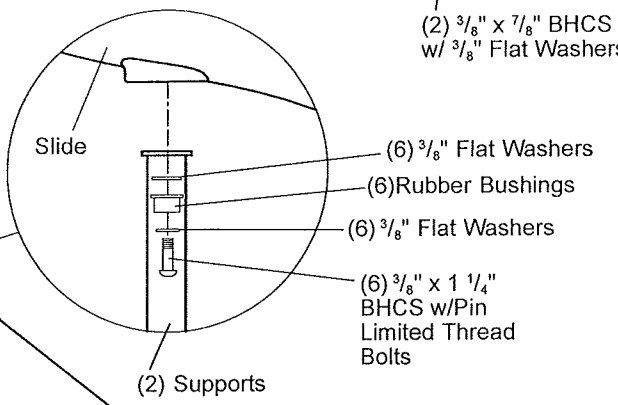
## DETAIL
DIRECT BURY

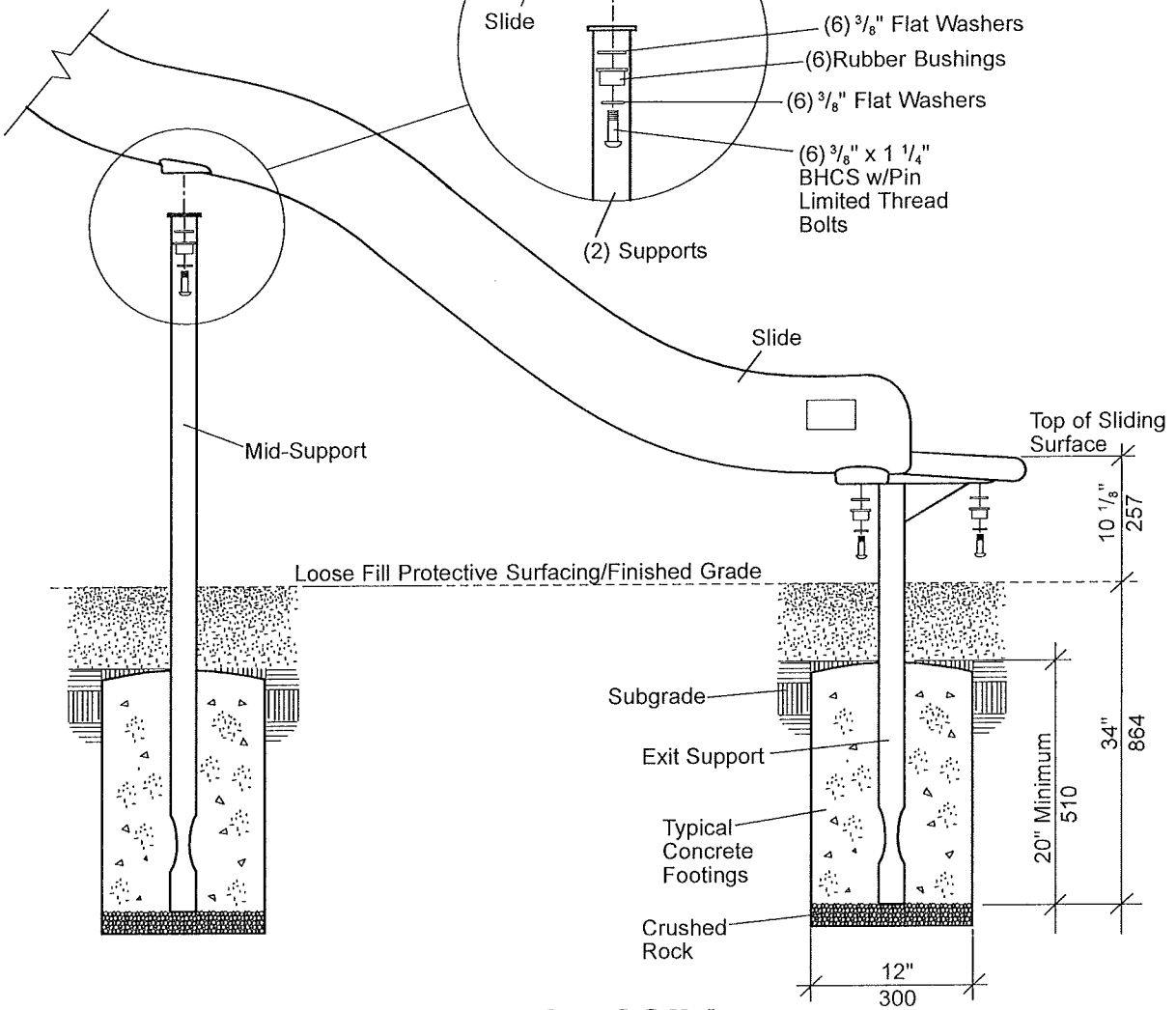



## DETAIL
SLIDE ATTACHMENT




## DETAIL
SUPPORT ATTACHMENT

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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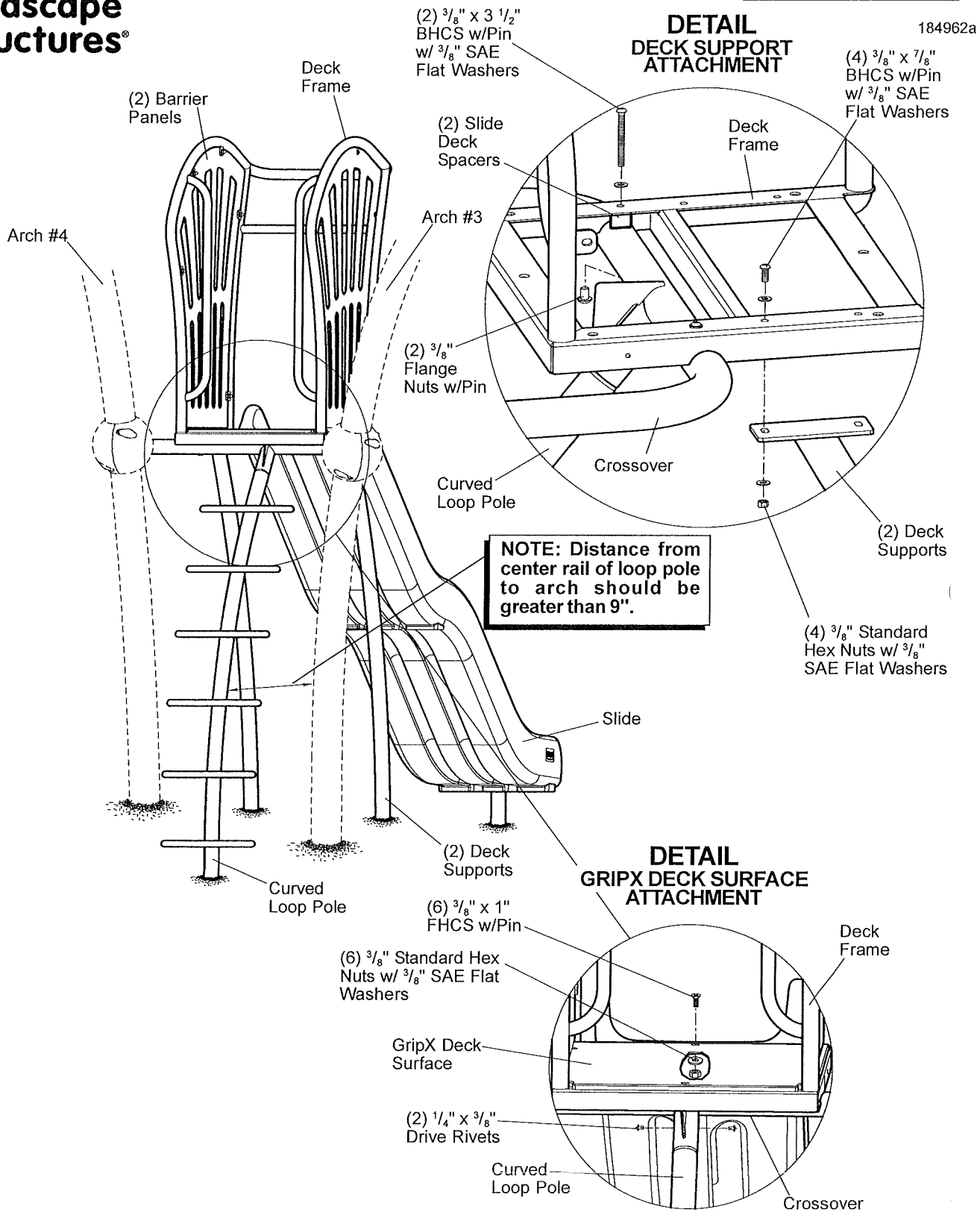


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# Evos® 182180 Surf Slide

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 130612-00 | Single Wave Poly Slide, 64"-72"Dk.,Specify Color | 1 |
| 182643-00 | Curved Loop Pole, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 180674-00 | GripX Deck Surface, Black | 1 |
| 180675-00 | Deck Frame, Specify Color | 1 |
| 180839-00 | Crossover, Specify Color | 1 |
| 180983-00 | Deck Support, Specify Color | 2 |
| 181014-00 | Barrier Panels, Specify Color | 2 |
| 182188-00 | Mid Support, 64"-72" Deck, DB, Specify Color | 1 |
| 182189-00 | Exit Support, 56"-72" Deck, DB, Specify Color | 1 |
| 182194-00 | Slide Deck Spacer, Specify Color | 2 |
| **131672-00** | **Slide Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST | 6 |
| 111442-00 | Rubber Bushing | 6 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 2 |
| 100362-00 | 3/8" Flat Washer, SST | 14 |
| **182187-00** | **Slide Platform Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 16 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100200-00 | 3/8" x 3 1/2" BHCS w/Pin, SST | 2 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 10 |
| 100349-00 | 3/8" Low Crown Cap Nut, SST | 12 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 2 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 40 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 2 |
| 137091-00 | 3/8" x 1" FHCS w/Pin, SST | 6 |

**DB = Direct Bury**

## Specifications

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield®, color specified.

**Curved Loop Pole:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing, and 1.029" (26,14 mm) O.D. RS20 (.070"-.080") (1,78 mm-2,03 mm) wall galvanized steel tubing. Finish: ProShield, color specified.

**Slide Deck Spacer:** Fabricated from 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,28 mm) wall galvanized steel tubing. Finish: ProShield®, color specified.

**Deck Frame:** Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,15 mm-2,41 mm) wall galvanized steel tubing, and 1/8" (3,17 mm) HRPO steel plate. Finish: ProShield, color specified.

**Slide:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Barrier Panel:** Fabricated from 7GA. (.179") (4,54 mm) thick HRPO steel sheet. Finish: ProShield, color specified.

**GripX Deck Surface:** .530" (13,46 mm) Thick Permalene®, black in color.

**Crossover:** Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,56 mm) wall galvanized steel tubing, 3/16" (4,74 mm) HRPO steel sheet and 1 7/8" (47,63 mm) steel ball. Finish: ProShield, color specified.

**Mid-Support:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,66 mm) wall galvanized steel tubing and 1/4" (6,35 mm) x 3" (76 mm) HR flat steel. Finish: ProShield, color specified.

**Exit & Deck Supports:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 3 1/2 man hours
**Concrete Req.:** Approx. 6.55 cu. ft.
**Area Req.:** 6' (1830 mm) minimum use zone
**Weight:** 374 lbs.
**Fall Height:** 72" (1830 mm)

Specifications are subject to change without notice.

Eco #54543 Document 18496200 replaces 18463400. Changed curved loop pole part number.

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## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach ball retainers to 5" round clamps, using $^5/_8$" x 1 $^1/_2$" BHCS w/pin. Attach crossover to ball retainers using ball clamps and $^3/_8$" x 1 $^1/_8$" BHCS w/pin. 5" Round clamps may need to be turned, or moved up or down to connect crossover and position slide properly. Refer to the Crossover Attachment Detail. **NOTE: To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Refer to Leveling Gusset Detail.**

3) Insert end of curved loop pole into crossover tube. **NOTE:** *Distance from center rail of loop pole to arch should be greater than 9".*

4) Place deck frame onto crossover. Line up holes in bottom of crossover with holes in deck spacers and deck frame, attach using $^3/_8$" x 3 $^1/_2$" BHCS w/pin, $^3/_8$" SAE flat washers and $^3/_8$" flange nuts w/pin. Refer to Detail.

5) Attach deck supports to deck frame, using $^3/_8$" x $^7/_8$" BHCS w/pin with $^3/_8$" SAE flat washers and $^3/_8$" standard hex nuts with $^3/_8$" SAE flat washers. Refer to Detail.

6) Place GripX deck surface onto deck frame. Fasten GripX deck surface to deck frame, using $^3/_8$" x 1" FHCS w/pin and $^3/_8$" standard hex nuts with $^3/_8$" SAE flat washers. Refer to the GripX Deck Surface Attachment Detail.

7) Attach barrier panels to deck frame, using $^3/_8$" x $^7/_8$" BHCS w/pin with $^3/_8$" SAE flat washers and $^3/_8$" low crown cap nuts with $^3/_8$" SAE flat washers. Refer to Barrier Panel Attachment Detail.

8) Attach supports to slide using $^3/_8$" x 1 $^1/_4$" BHCS w/pin limited thread bolts, $^3/_8$" flat washers and rubber bushings. Refer to Support Attachment Detail. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only. Do not overtighten!*

9) Attach slide to the face of the deck frame, using $^3/_8$" x $^7/_8$" BHCS w/ pin and $^3/_8$" flat washers. Refer to the Slide Attachment Detail.

10) With deck surface and curved loop pole steps level, drill through holes in crossover tube into curved loop pole with a $^1/_4$" or "F" (only) drill bit. Insert $^1/_4$" x $^3/_8$" rivets into holes and hammer rivet pins in until it is flush with head. Refer to Detail.

11) With deck surface and curved loop pole steps level and supports plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

12) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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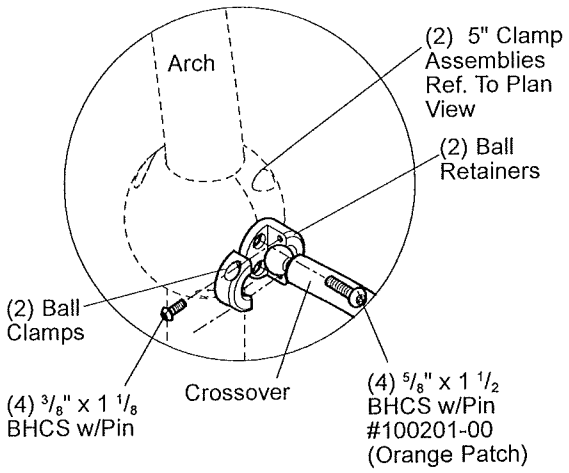
**SAFETY NOTE**

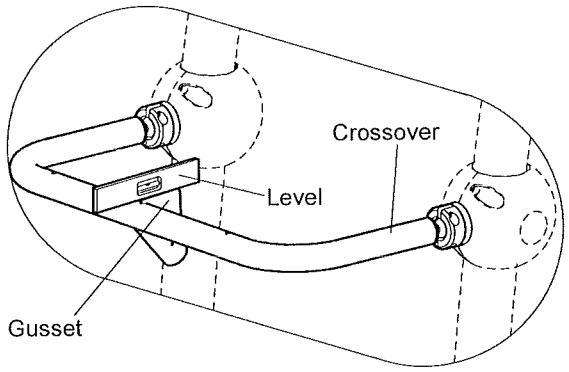
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

18317200

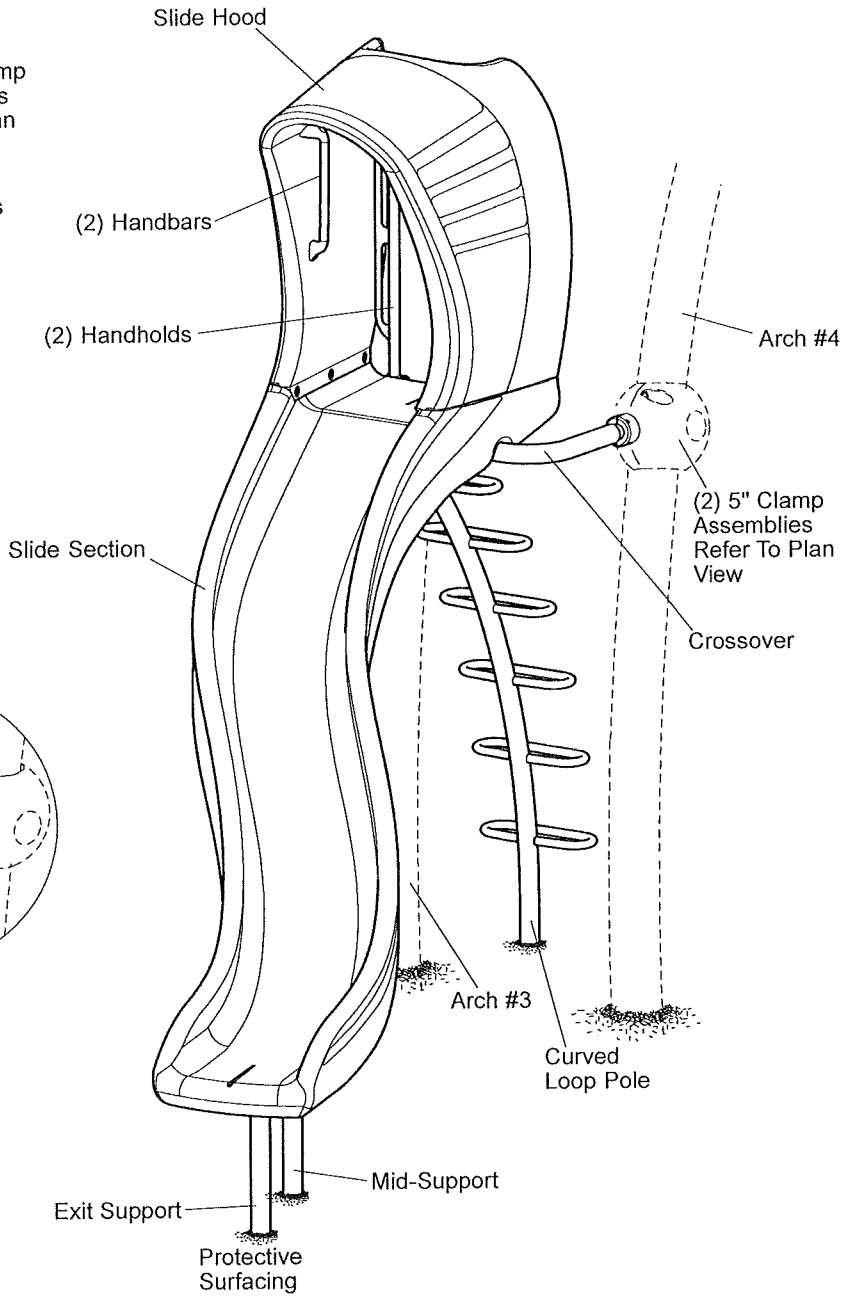
## DETAIL
### CROSSOVER ATTACHMENT




## DETAIL
### LEVELING GUSSET




**NOTE: To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Check prior to pouring concrete.**

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# 182865 Rush™ Slide



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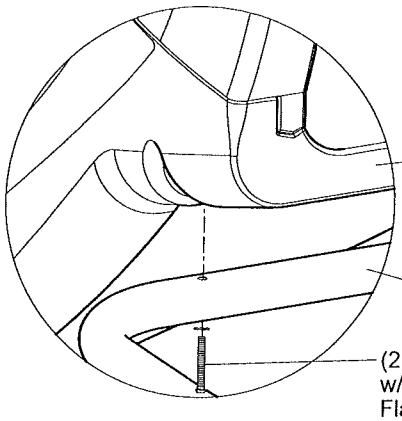
## DETAIL
SLIDE TO CROSSOVER ATTACHMENT




**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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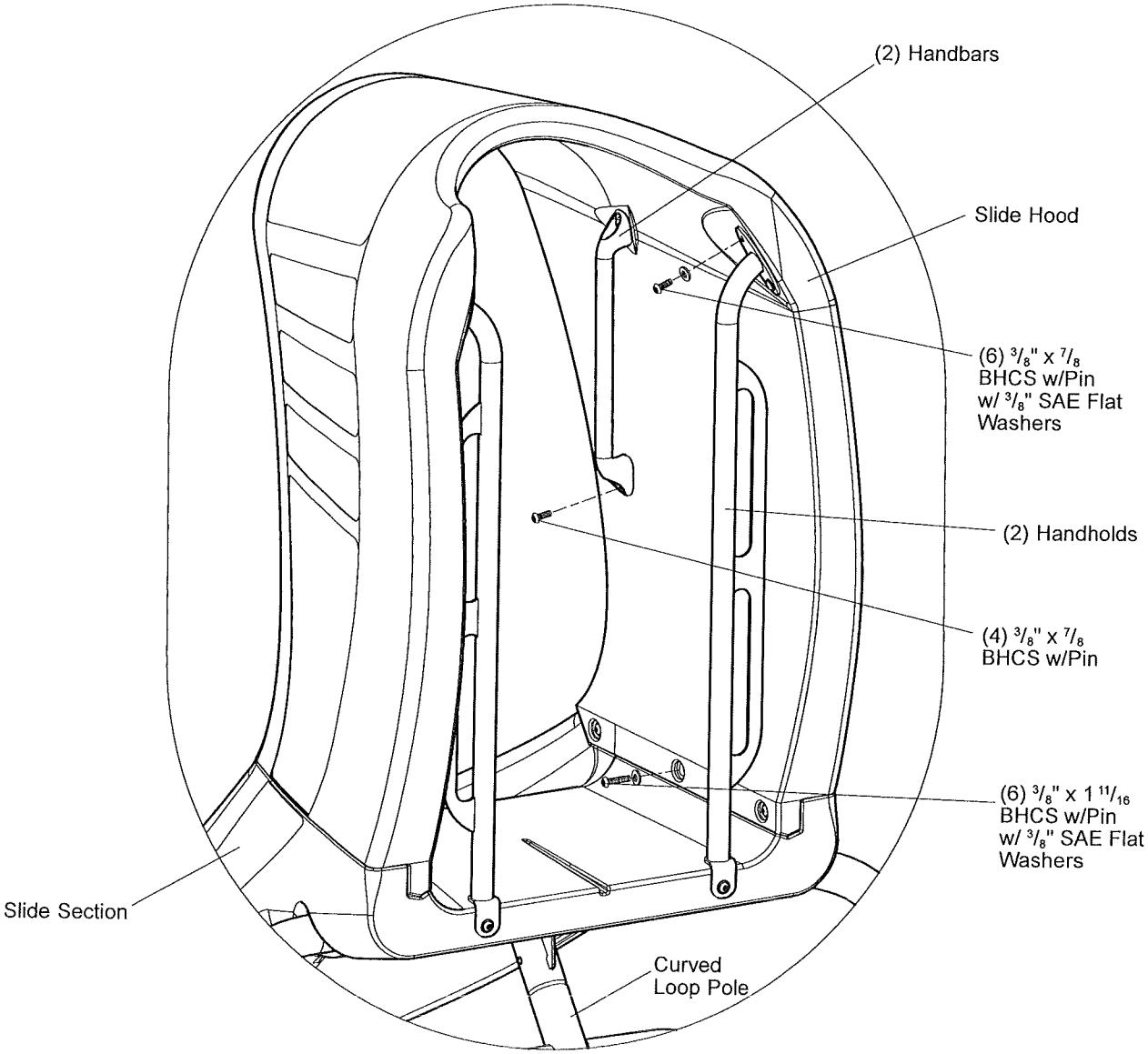
## DETAIL
SLIDE HOOD ASSEMBLY

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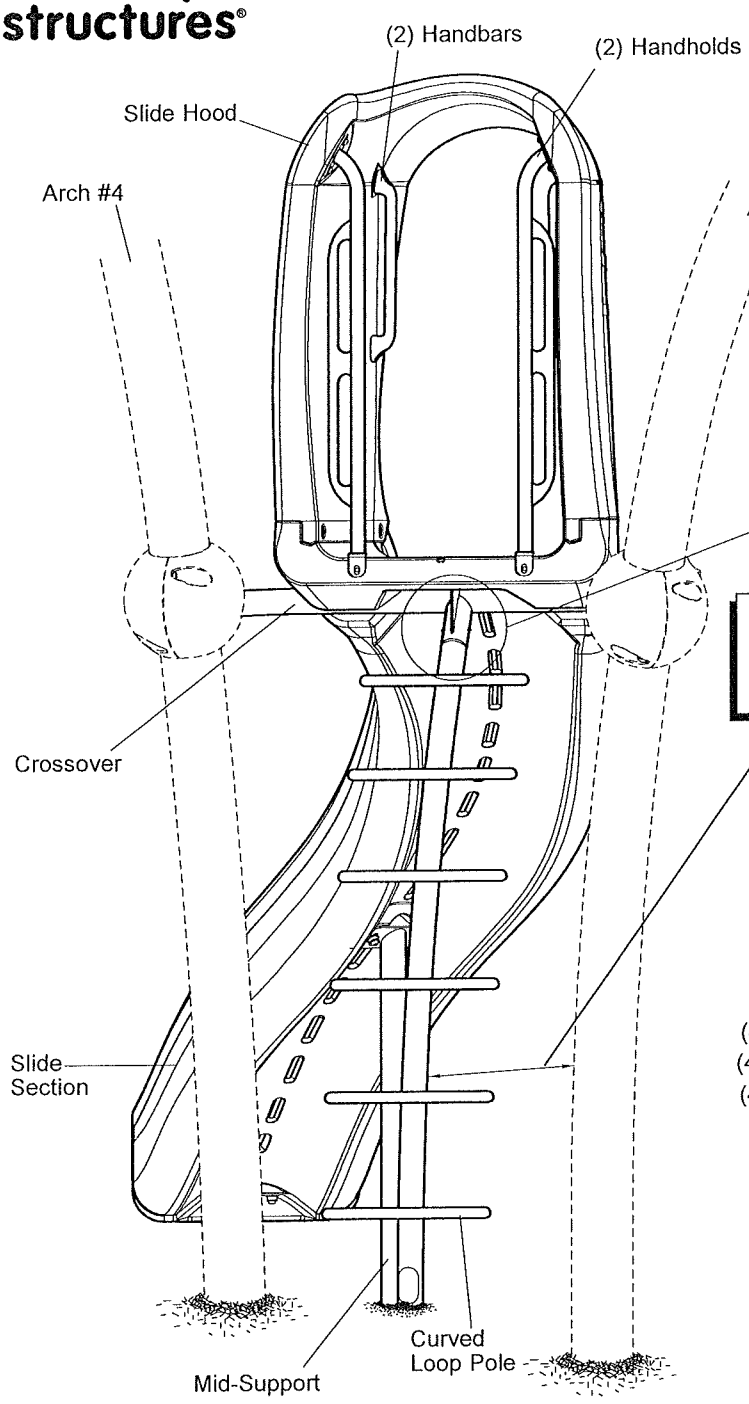
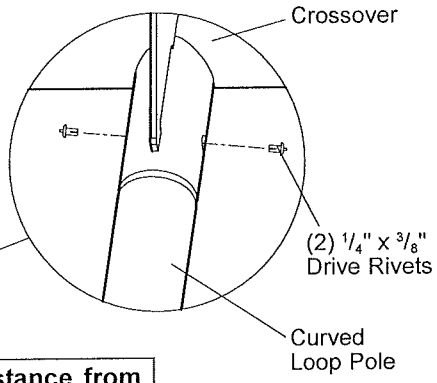
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

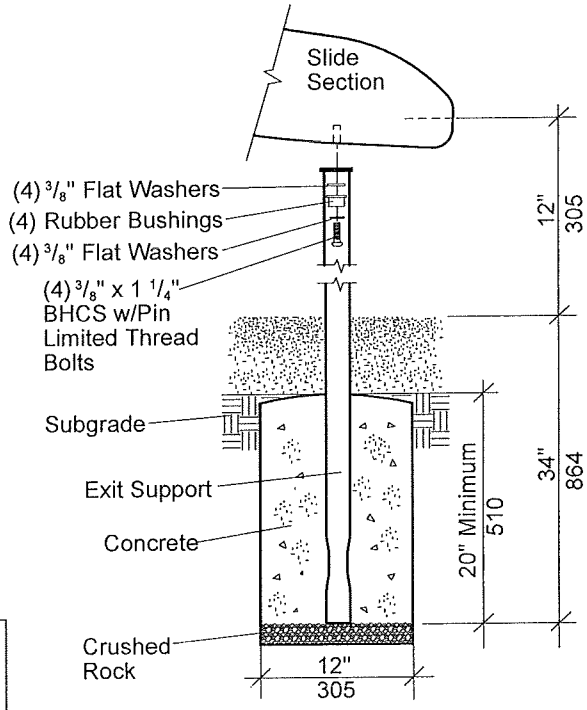



## DETAIL
### LOOP POLE ATTACHMENT




**NOTE: Distance from center rail of loop pole to arch should be greater than 9".**

## DETAIL
### EXIT SUPPORT & MID-SUPPORT DIRECT BURY




**NOTE: Curved loop pole requires the same size footing hole as the slide supports.**

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Document #18317200

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# Evos® 182865 Rush™ Slide

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 164372-00 | Handbar, Specify Color | 2 |
| 180839-00 | Crossover, Specify Color | 1 |
| 182604-00 | Slide Section, Specify Color | 1 |
| 182605-00 | Slide Hood, Specify Color | 1 |
| 182641-00 | Handhold (RH), Specify Color | 1 |
| 182642-00 | Handhold (LH), Specify Color | 1 |
| 182644-00 | Mid Support, DB, Specify Color | 1 |
| 182645-00 | Exit Support, DB, Specify Color | 1 |
| 182643-00 | Curved Loop Pole, Specify Color | 1 |
| **183185-00** | **Evos Rush Slide Hardware Package** | 1 |
| 100176-00 | 3/8" x 3" BHCS w/Pin, SST | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 10 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 8 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 14 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 2 |
| 111442-00 | Rubber Bushing | 4 |
| 123224-00 | 3/8" x 1 11/16" BHCS w/Pin, SST | 6 |

**DB = Direct Bury**

## Specifications

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield®, color specified.

**Curved Loop Pole:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing, and 1.029" (26,14 mm) O.D. RS20 (.070"-.080") (1,78 mm-2,03 mm) wall galvanized steel tubing. Finish: ProShield, color specified.

**Slide Section:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Hood:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Crossover:** Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,56 mm) wall galvanized steel tubing, 3/16" (4,74 mm) HRPO steel sheet and 1 7/8" (47,63 mm) steel ball. Finish: ProShield, color specified.

**Supports:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,66 mm) wall galvanized steel tubing and 7 GA. (4,54 mm) HRPO steel sheet. Finish: ProShield, color specified.

**Handbar:** Fabricated from A356-T6 aluminum. Finish: ProShield, color specified.

**Handhold:** Weldment comprised of 1.315" (33,4 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,28 mm) wall galvanized steel tubing and 7 GA. (4,54 mm) HRPO steel sheet. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Specifications are subject to change without notice.

**Installation Time:** Approx. 2 3/4 man hours
**Concrete Req.:** Approx. 3.93 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 264 lbs.
**Fall Height:** 72" (1,83 m)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach ball retainers to 5" round clamps, using 5/8" x 1 1/2" BHCS w/pin. Attach crossover to ball retainers using ball clamps and 3/8" x 1 1/8" BHCS w/pin. 5" Round clamps may need to be turned, or moved up or down to connect crossover. Refer to the Crossover Attachment Detail. **NOTE:** *To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Check prior to pouring concrete. Refer to Leveling Gusset Detail.*

3) Insert end of curved loop pole into crossover tube. **NOTE:** *Distance from center rail of loop pole to arch should be greater than 9".*

4) Attach supports to poly slide section, using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, 3/8" flat washers and rubber bushings. Refer to Exit Support & Mid-Support Attachment Detail. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only. Do not overtighten!*

5) Place poly slide section onto crossover. Line up holes in bottom of crossover with holes in poly slide section, attach using 3/8" x 3" BHCS w/pin and 3/8" SAE flat washers. Refer to Slide to Crossover Attachment Detail.

6) Attach slide hood to poly slide section, using 3/8" x 1 11/16" BHCS w/ pin and 3/8" SAE flat washers. Refer to Slide Hood Assembly.

7) Attach handbars to slide hood, using 3/8" x 7/8" BHCS w/pin. Refer to Slide Hood Assembly.

8) Attach handholds to slide hood and slide section, using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers. Refer to Slide Hood Assembly.

9) With crossover gusset and curved loop pole steps level, drill through holes in crossover tube into curved loop pole with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivets into holes and hammer rivet pins in until it is flush with head. Refer to Detail. **NOTE:** *To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Refer to Leveling Gusset Detail.*

10) With supports plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

11) Install protective surfacing before users are allowed to play on the structure.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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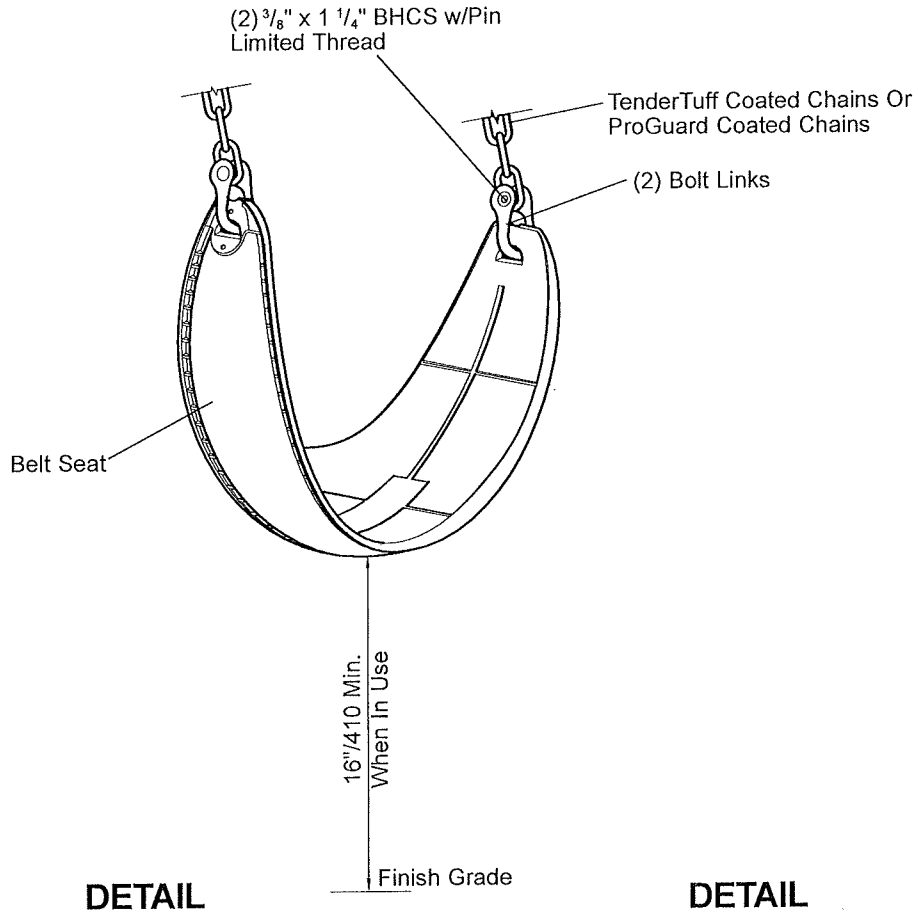
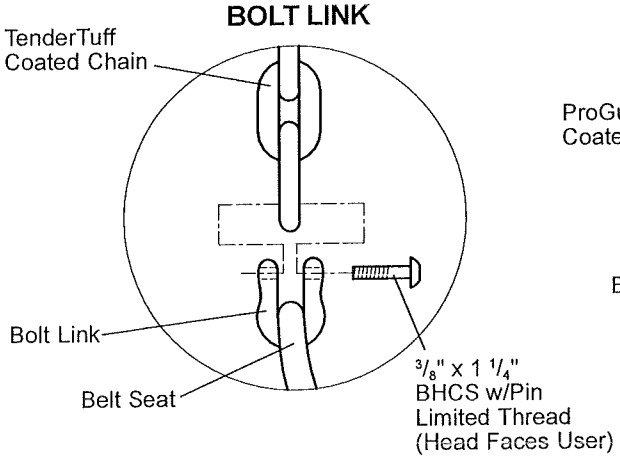
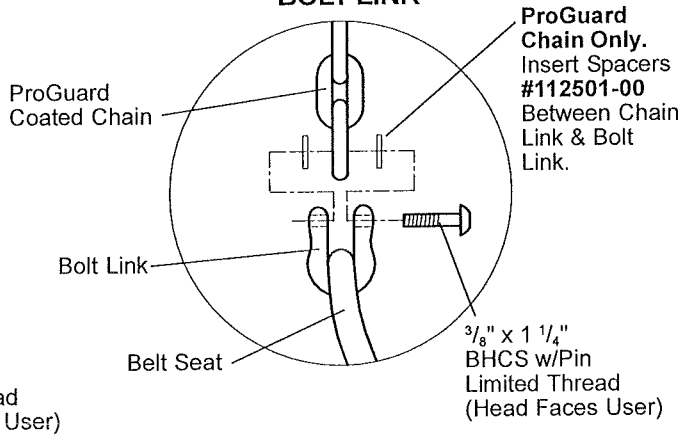



**DETAIL**
**BOLT LINK**




**DETAIL**
**BOLT LINK**




Swings

# 174018 Belt Seat



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# Swings 174018 Belt Seat

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## Parts List

| Part # | Description | Qty. |
|---|---|---|
| | **8 Ft. High Beam** | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152050-00 | 67 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174404-00 | 67 7/8" Chain, ProGuard | 2 |
| **132672-00** | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| **132635-00** | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| | **10 Ft. High Beam** | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152052-00 | 90 11/16" Chain, TenderTuff, Specify Color | 2 |
| 174884-00 | 90 11/16" Chain, ProGuard | 2 |
| **132672-00** | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| **132635-00** | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |

## Specifications

**Chain Spacer:** Made from white nylon measuring .080" x .785" O.D.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Belt Seats:** Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.

**Bolt Link:** Stainless Steel.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:** 8 lbs. (8 Ft. Beam w/ProGuard Chains)
9 lbs. (8 Ft. Beam w/TenderTuff Chains)
10 lbs. (10 Ft. Beam w/ProGuard Chains)
11 lbs. (10 Ft. Beam w/TenderTuff Chains)

## Installation

**Swing Hangers With Double Clevis**

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

**Anti-wrap Swing Hangers**

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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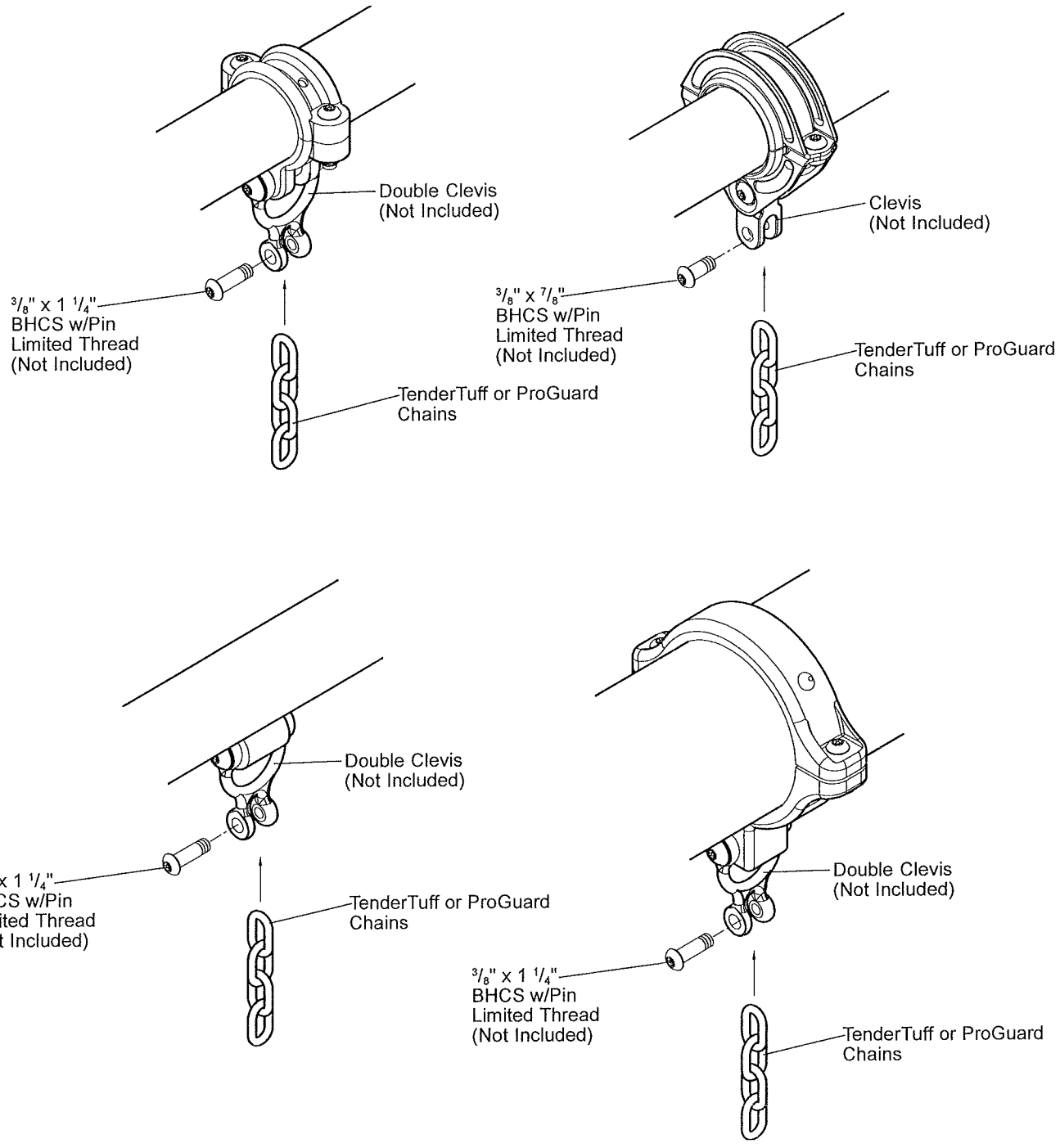
# SWING HANGER OPTIONS







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**SAFETY NOTE**

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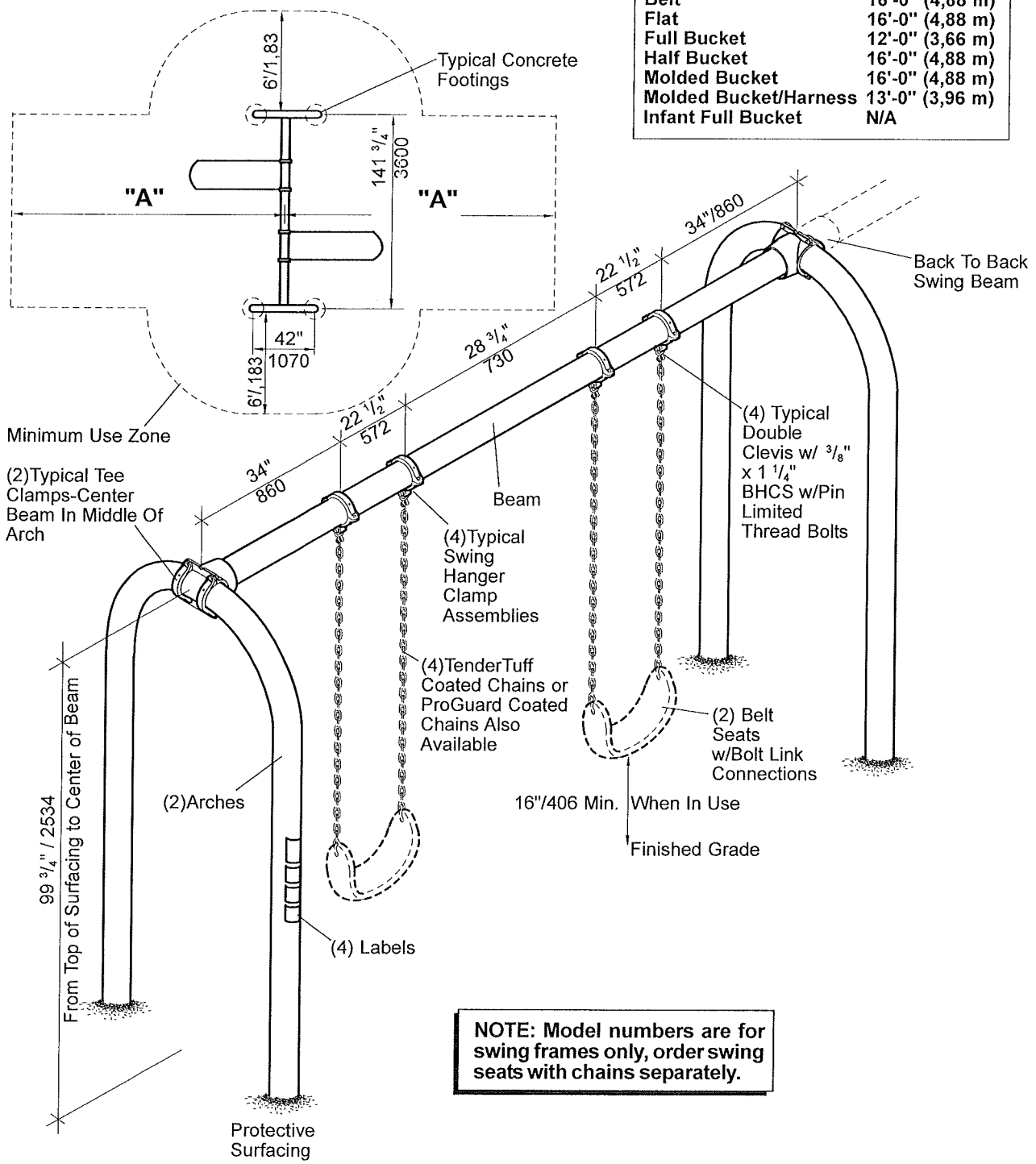
18448000

## PLAN VIEW/FOOTING LAYOUT

| KEY<br>Seat Type | Dimension "A" |
|---|---|
| Belt | 16'-0" (4,88 m) |
| Flat | 16'-0" (4,88 m) |
| Full Bucket | 12'-0" (3,66 m) |
| Half Bucket | 16'-0" (4,88 m) |
| Molded Bucket | 16'-0" (4,88 m) |
| Molded Bucket/Harness | 13'-0" (3,96 m) |
| Infant Full Bucket | N/A |




**NOTE: Model numbers are for swing frames only, order swing seats with chains separately.**

**Model #177331 Additional Bay**

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# Swings 177330/177331 Arch Belt Swing Frame

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## Parts List

| Part# | Description | Qty. 2 Pl | Add. Bay |
|---|---|---|---|
| 126749-00 | Swing Arch, Specify Color | 2 | 1 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 8 | 6 |
| 105327-01 | 5" Half Clamp, Specify Color | 8 | 4* |
| 146160-00 | 141 3/4" Swing Beam, Specify Color | 1 | 1 |
| **121291-00** | **Swing Hanger Clamp Assy. Specify Color** | 4 | 4 |
| 121289-00 | Swing Hanger Clamp, Specify Color | 4 | 4 |
| 127068-00 | 7/16" x 2 7/16" BHCS w/Pin Ltd. Thread, SST | 4 | 4 |
| 138917-00 | Swing Hanger Double Clevis | 4 | 4 |
| 100667-00 | Oilite Bushing | 4 | 4 |
| **184227-00** | **Arch Swing 5" O.D. Beam Hardware Pkg.** | 1 | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 | 8 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 8 | 8 |
| 100292-00 | 3/8" x 1 1/4"BHCS w/Pin Ltd. Thread, SST | 4 | 4 |
| 100351-00 | 3/8" Tee Nut, SST | 16 | 16 |
| 156846-00 | Play Safe Label, 2-12 Yrs. | 1 | 1 |
| 128296-00 | 3/8" Hex Jam Nut, SST | 8 | 8 |
| 182213-00 | Hot Surface Warning Label | 2 | 1 |
| 182212-00 | Entanglement Warning Label | 2 | 1 |
| 115176-00 | Hard Surface Warning Label | 2 | 1 |

*** = 5" Half Clamps From 2 PL. End Of Beam Need To Be Used.**

## Specifications

**Arch Posts:** See PlayBooster® (PB) General Specifications.

**Swing Beam:** Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" W. Finish: ProShield®, color specified.

**Hanger Clamp Assembly:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 8 man hours
Additional Bay 4 man hours

**Concrete Req.:** Approx. 7.5 cu. ft.
Additional Bay 3.75 cu. ft.

**Area Req.:** 24'-2 3/4" x 32' (7,39 m x 9,75 m)
Additional Bay 11'-9 3/4" x 32' (3,60 m x 9,75 m)

**Weight:** 204 lbs.
Additional Bay 124 lbs.

**Fall Height:** 96" (2,43 m)

## Installation Instructions

1) Dig footings, spaced as shown. Refer to the Concrete Footing Detail.
2) Set arches in footing holes and attach swing beam to center of arches using 5" half clamps with 3/8" x 1 3/8" BHCS w/pin and 3/8" tee nuts with 3/8" jam nuts. Refer to the Tee Clamp Position Detail. Center of beam should be 99 3/4" above finished grade. When installing back to back swing beams refer to the Back To Back Tee Clamps Detail.
3) Level beam and plumb arches and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
4) Locate, mark and attach swing hanger clamps to beam in locations shown. Refer to the Typical Swing Hanger Clamp Spec Sheet.
5) **NOTE:** *Refer to specific swing seat installation document for attaching chains and seats.*
6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Back To Back Tee Clamps Detail.
7) Apply Play Safe and Warning Labels, as shown.
8) Install protective surfacing before users are allowed to play on the swing.



Eco #54545 Document #18448000 replaces #17744600. Added warning labels to hardware package.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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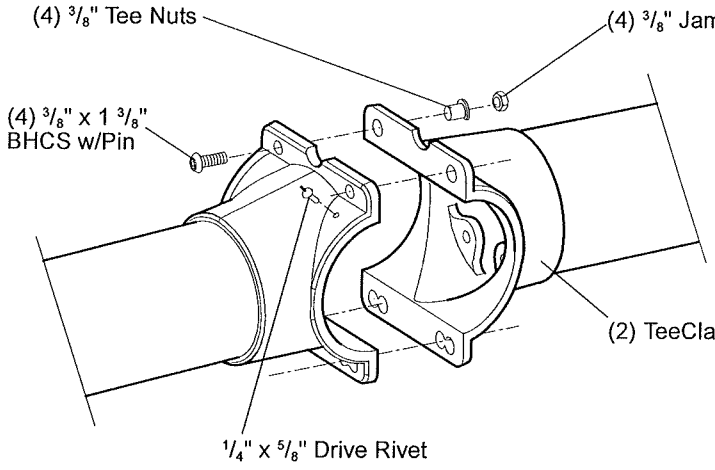
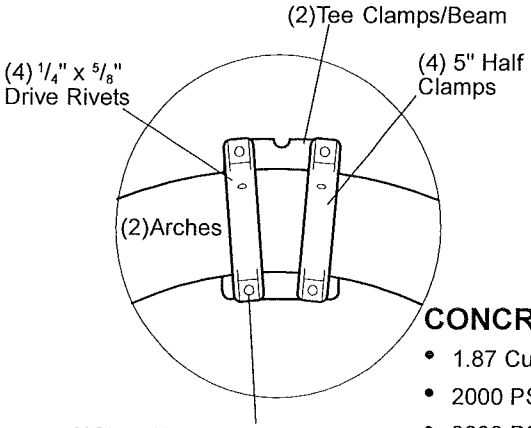
## DETAIL
### BACK TO BACK TEE CLAMPS



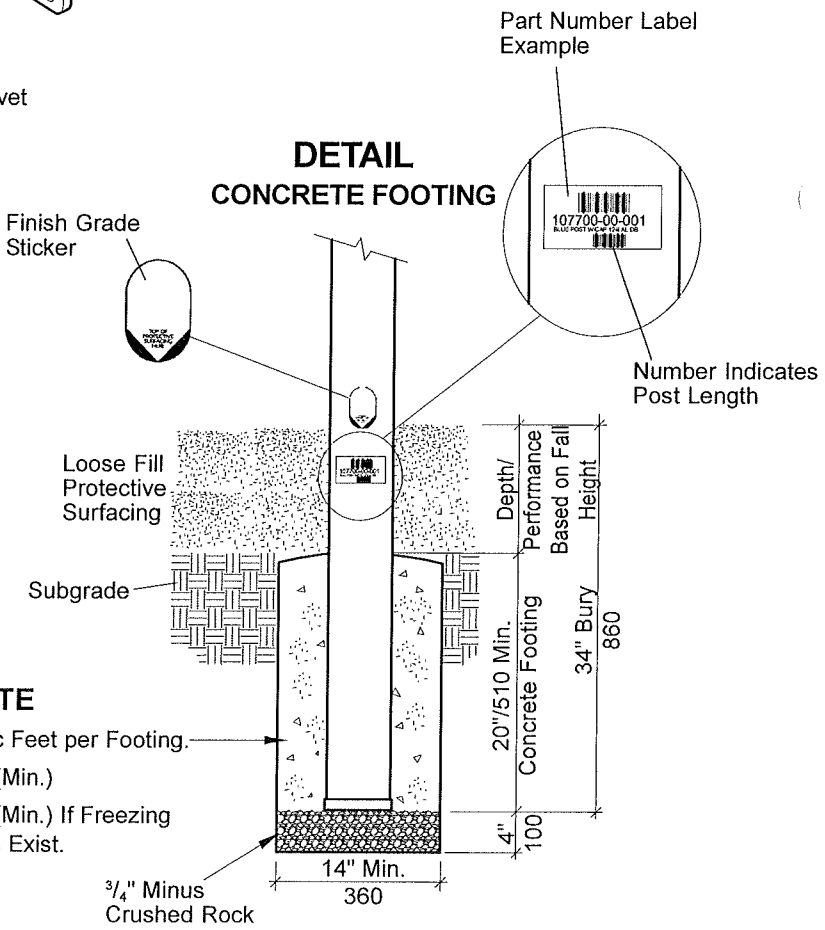

**NOTE: Drill 1/4" hole through tee and arch for 1/4" x 5/8" drive rivet when installing back to back tee clamps.**

## DETAIL
### TEE CLAMP POSITION




**NOTE:** Use Inside Holes For (4) 3/8" x 1 3/8" BHCS w/Pin & 3/8" Tee Nuts w/ 3/8" Jam Nuts

## DETAIL
### CONCRETE FOOTING




### CONCRETE

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.



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**SAFETY NOTE**

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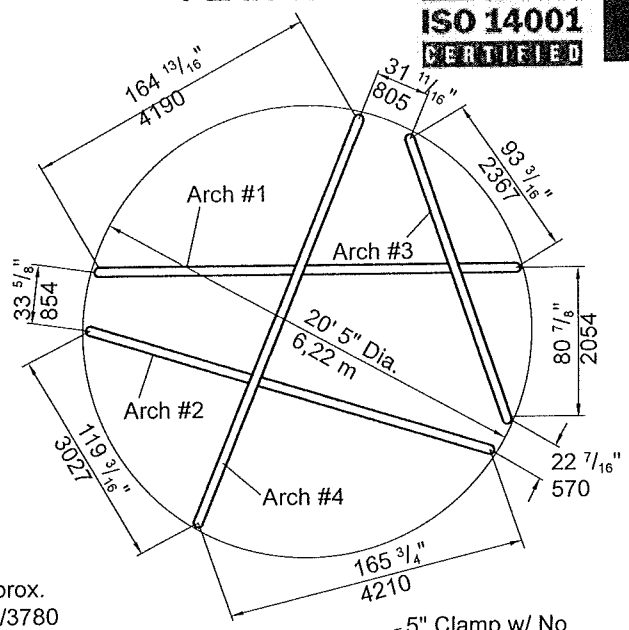
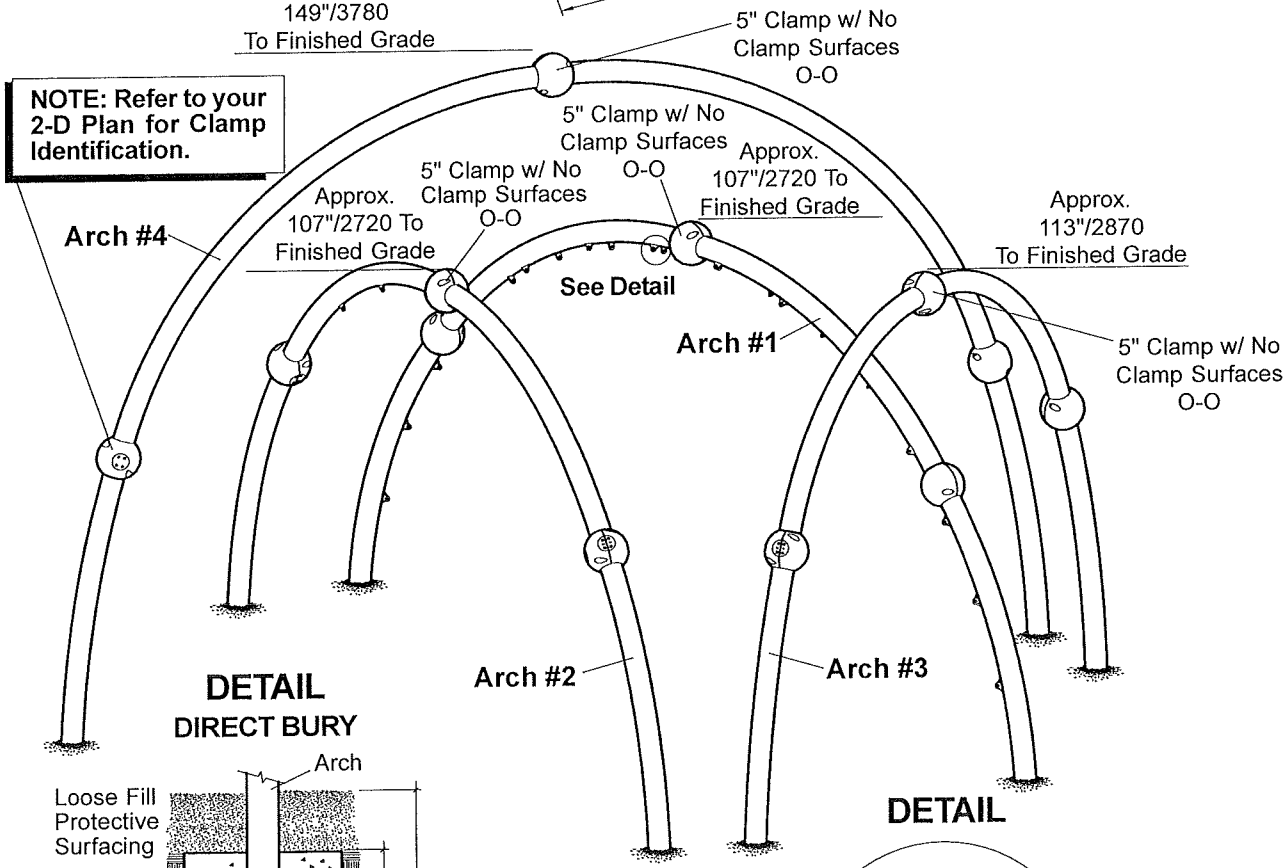
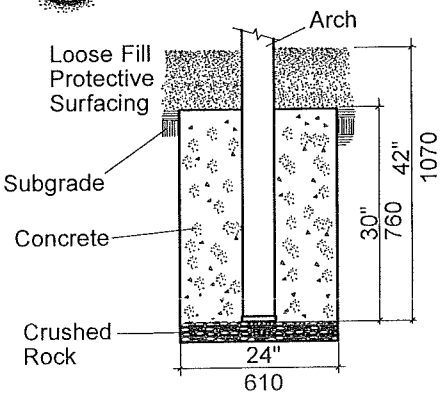
## PLAN VIEW



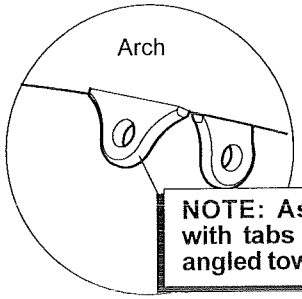

**NOTE: Refer to your 2-D Plan for Clamp Identification.**




## DETAIL
### DIRECT BURY




## DETAIL




**NOTE: Assemble structure with tabs on arches #1 & #2 angled towards each other.**

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# Arches



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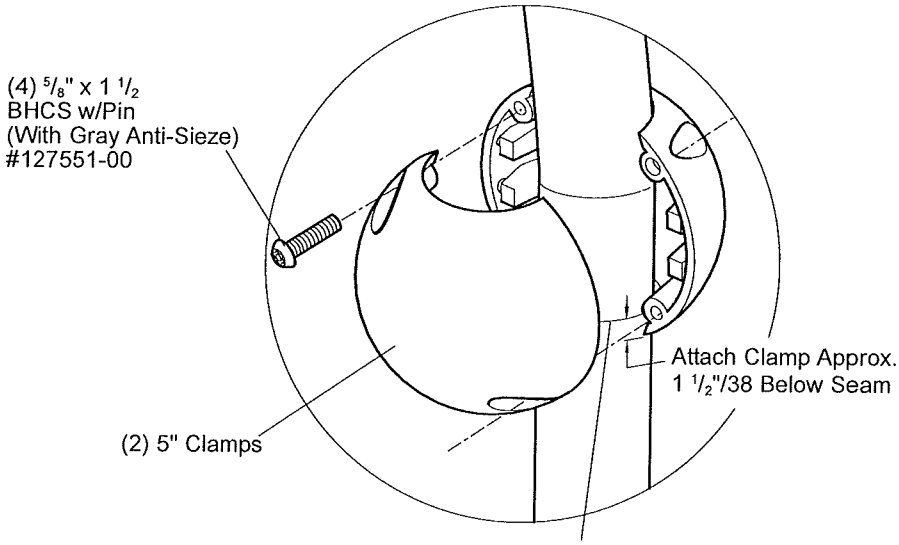
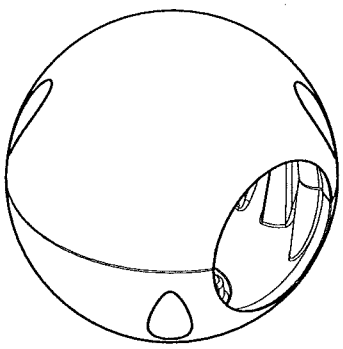
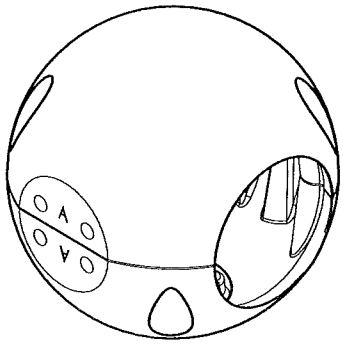
## DETAIL
### 5" CLAMP ATTACHMENT

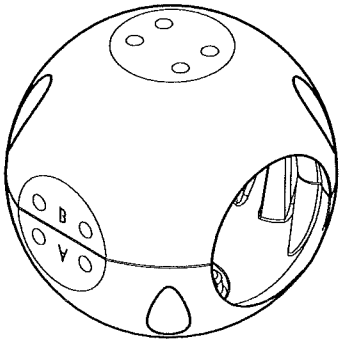


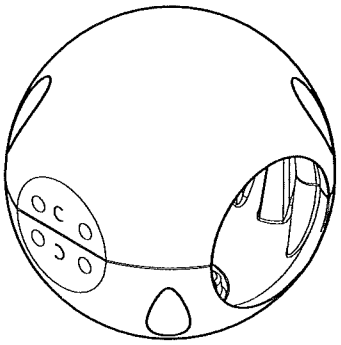
5" Clamp w/ No
Clamp Surfaces
O-O



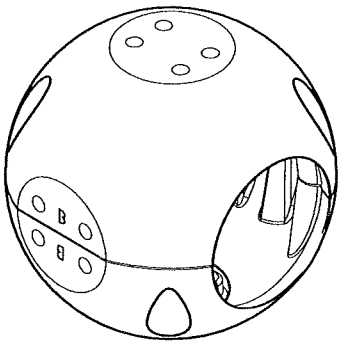

5" Clamp w/ 1
Clamp Surface
A-A



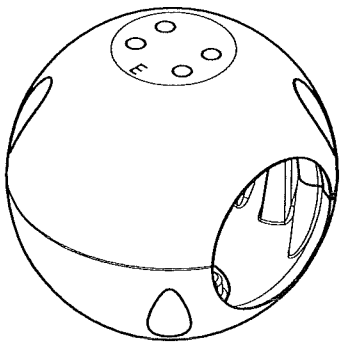

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



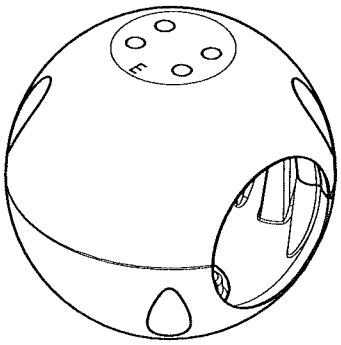

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E

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# 5" Clamps

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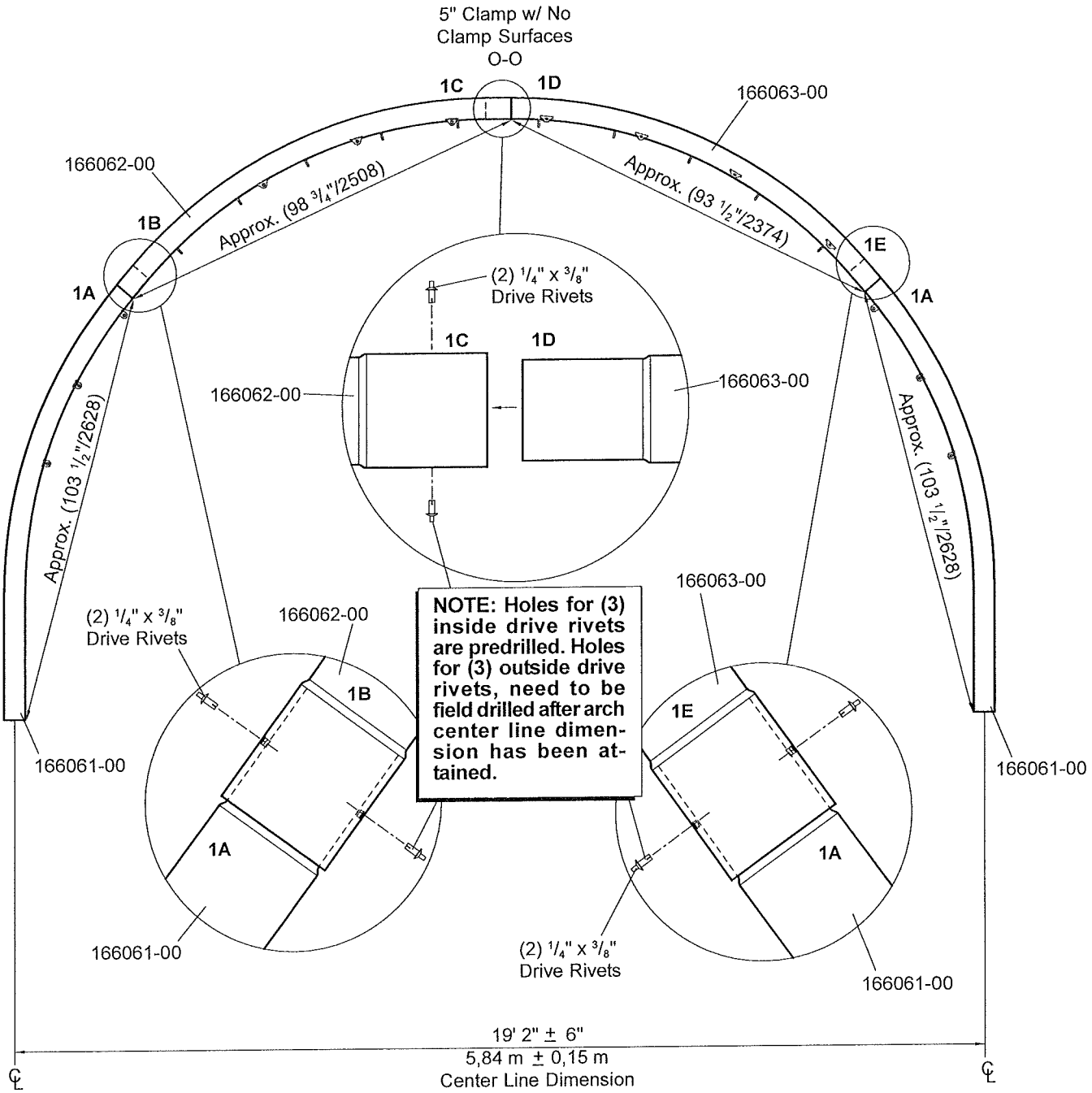
# ARCH #1 ASSEMBLY







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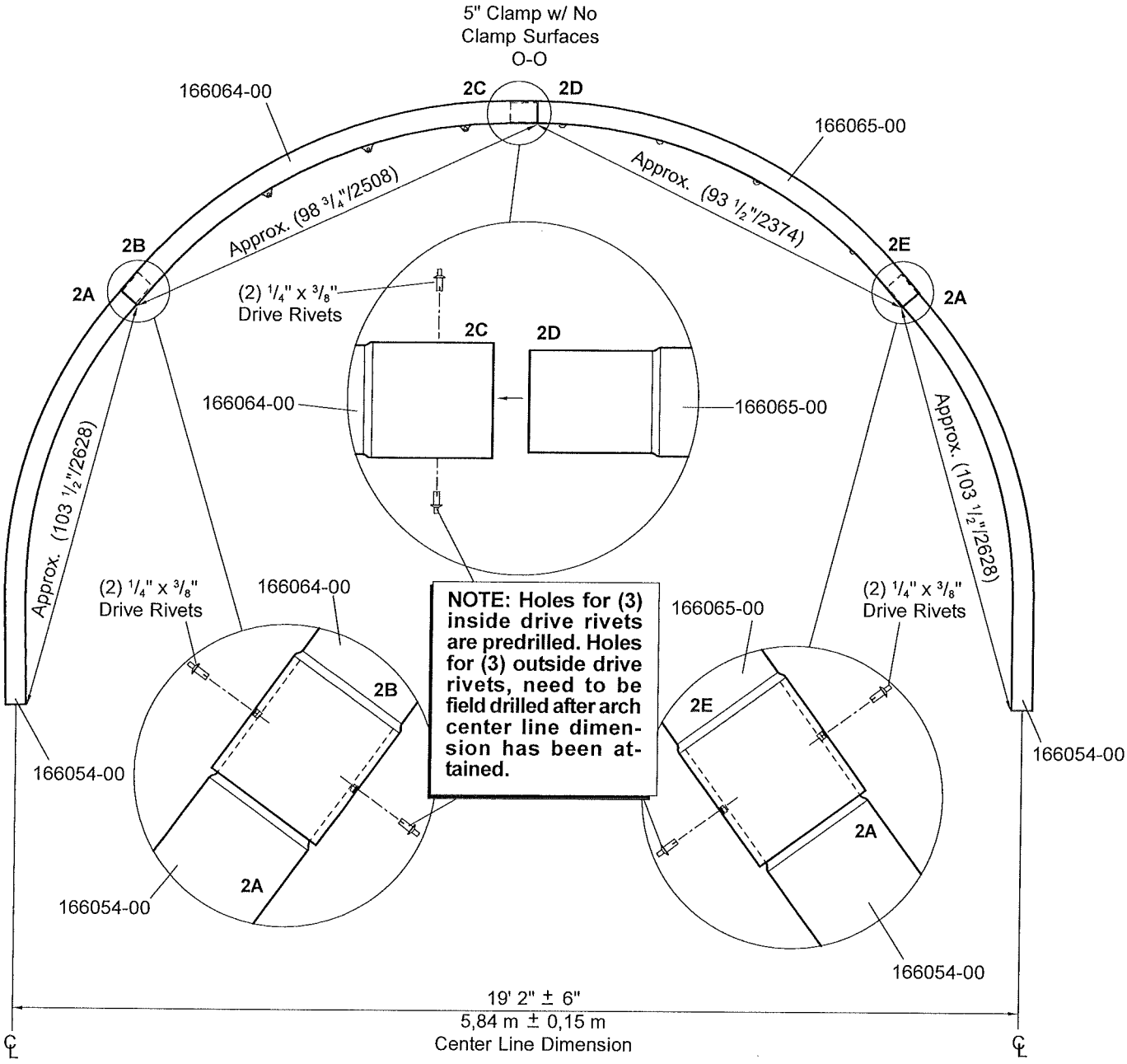
# ARCH #2 ASSEMBLY

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# Arch #2

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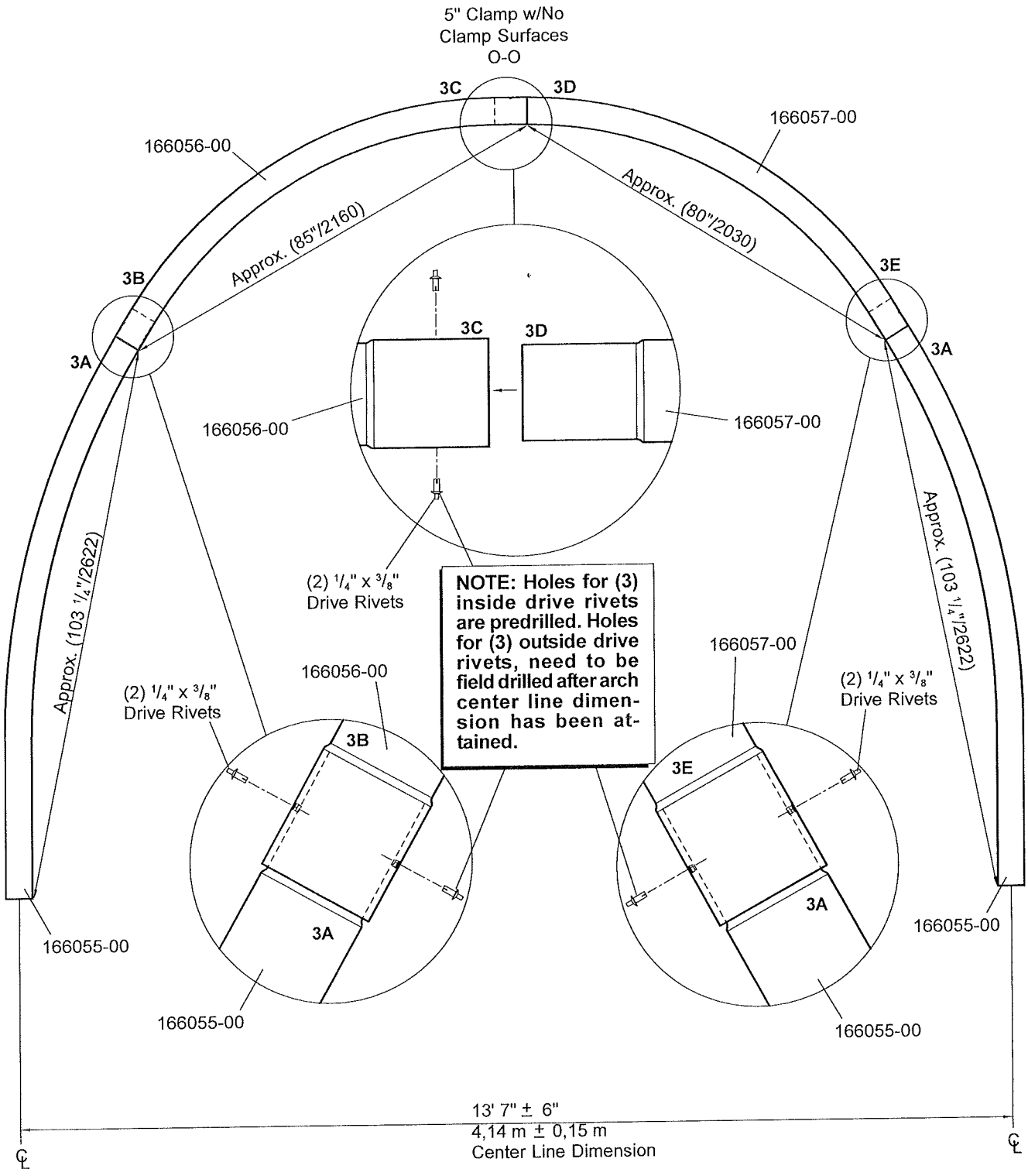
# ARCH #3 ASSEMBLY







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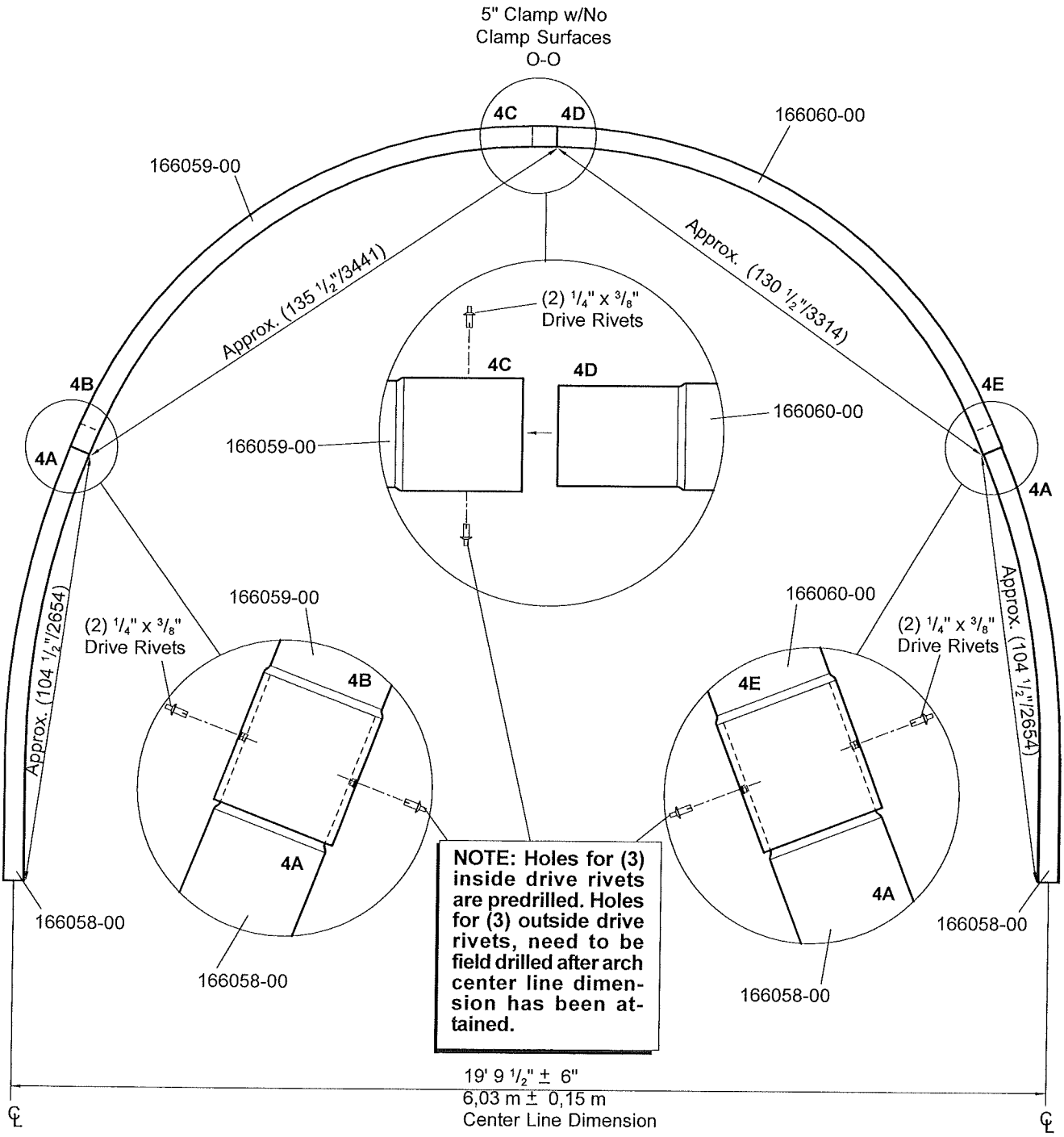
# ARCH #4 ASSEMBLY



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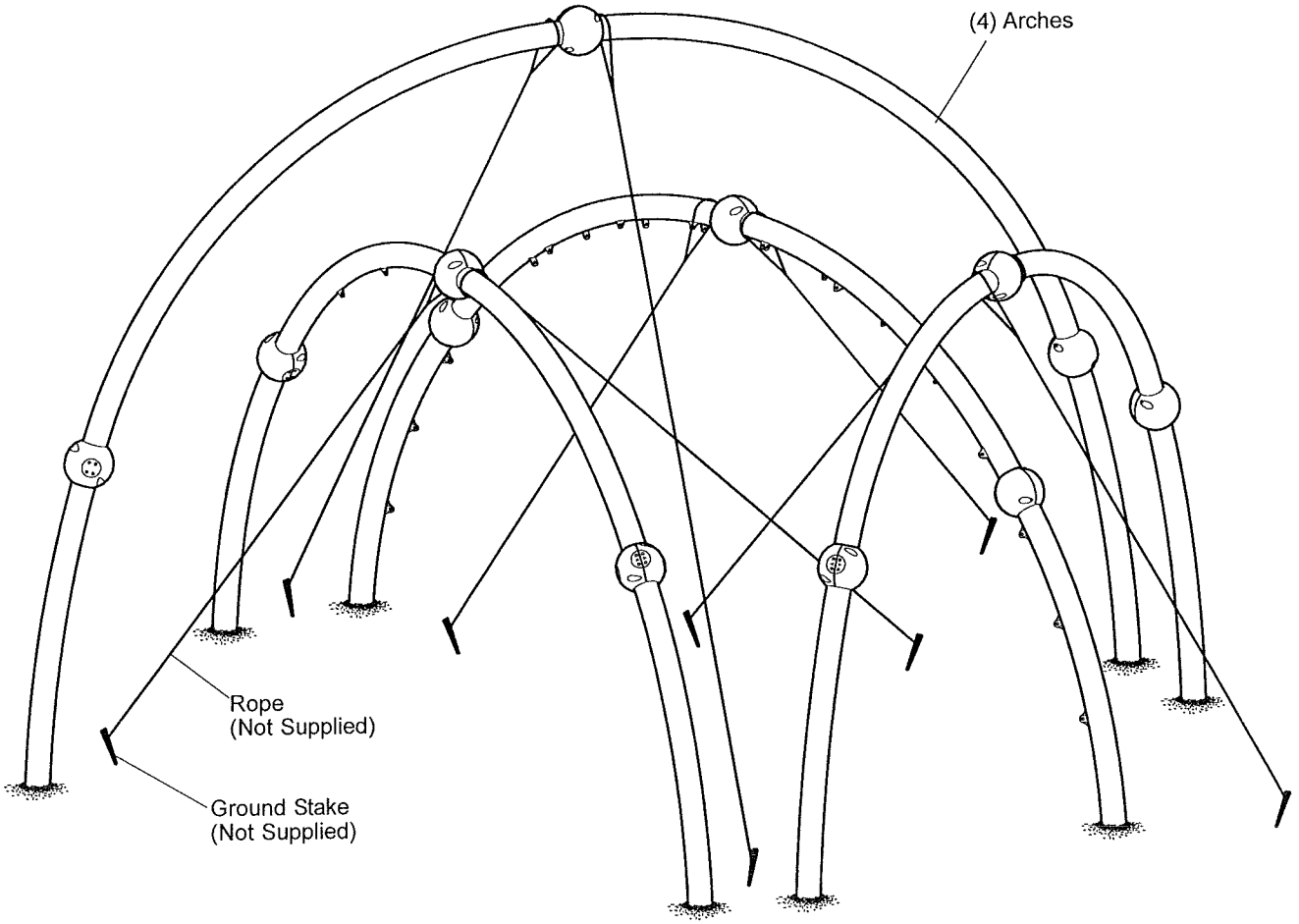
# DETAIL

## ROPE/GROUND STAKES




NOTE: *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*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# Evos® Arches

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 166061-00 | Arch 1 A With Net Tabs, Specify Color | * |
| 166054-00 | Arch 2 A, Specify Color | * |
| 166062-00 | Arch 1B/1C With Tabs, Specify Color | * |
| 166063-00 | Arch 1D/1E With Tabs, Specify Color | * |
| 166064-00 | Arch 2B/2C With Tabs, Specify Color | * |
| 166065-00 | Arch 2D/2E With Tabs, Specify Color | * |
| 166055-00 | Arch 3A, Specify Color | * |
| 166056-00 | Arch 3B/3C, Specify Color | * |
| 166057-00 | Arch 3D/3E, Specify Color | * |
| 166058-00 | Arch 4A, Specify Color | * |
| 166059-00 | Arch 4B/4C, Specify Color | * |
| 166060-00 | Arch 4D/4E, Specify Color | * |
| 166271-00 | 5" Clamp A, Specify Color | * |
| 166272-00 | 5" Clamp B, Specify Color | * |
| 166273-00 | 5" Clamp C, Specify Color | * |
| 166275-00 | 5" Clamp E, Specify Color | * |
| 166276-00 | 5" Clamp O, Specify Color | * |
| 100611-00 | $^1/_4$" x $^3/_8$" Drive Rivet, AL/SST | * |
| 127551-00 | $^5/_8$" x 1 $^1/_2$" BHCS w/Pin, SST | * |

*** = Quantity Determined By Your Order**

## Specifications

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield®, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 4 People minimum approx. 6 man hours
**Concrete Req.:** Approx. 2.25 cu. yds.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 98 lbs.
**Fall Height:** 75"

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) An Evos structure consists of (2-4) arch assemblies, numbered #1 through #4. Each arch assembly consists of (4) arches with part numbers to ensure the arch is assembled correctly.

3) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

4) Line up (3) holes on inside of arches. Insert $^1/_4$" x $^3/_8$" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with $^1/_4$" of "F" (only) drill bit. Insert $^1/_4$" x $^3/_8$" drive rivets into holes and hammer rivet pins in until it is flush with head.

6) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using $^5/_8$" x 1 $^1/_2$" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

7) Place the fully assembled arches in footing holes. Refer to the Site Plan for proper location of arches. **NOTE:** *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes. Refer to sheet 4.*

Specifications are subject to change without notice.

Eco #53850 Document 16814600 replaces 16620200. Changed 5" clamp part numbers.
6/16/10 Changed arch descriptions.

# RESERVOIR PARK PLAYGROUND INSTALLATION SPECIFICATIONS

# Installation Specifications

RESERVOIR PARK

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487, SECTION 9.*)

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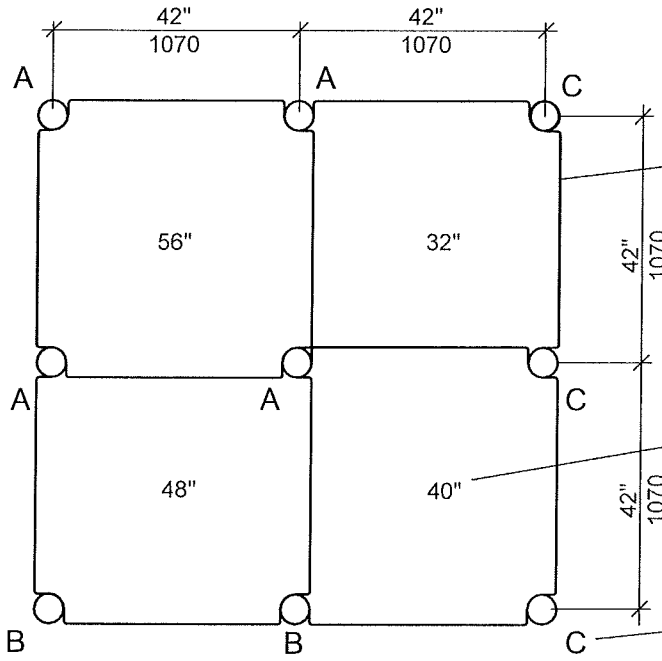
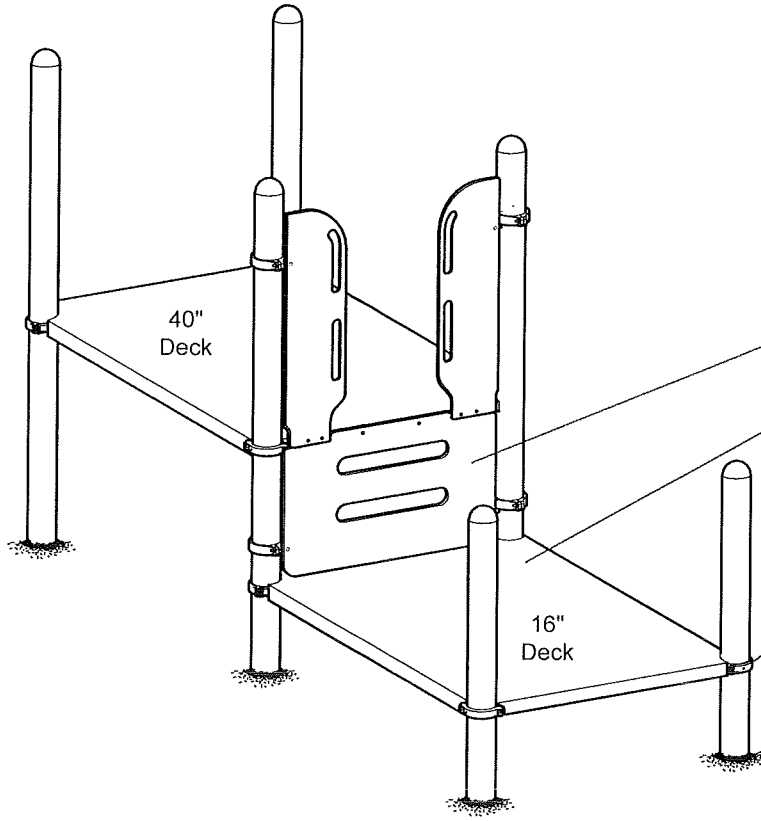



Enclosures or components are required on any decks higher than 28" as indicated on your plan drawing.

Dimension indicates center to center spacing of concrete footings.

Number indicates height of deck above finished grade.

Letter indicates post length as indicated on your plan drawing.




**Enclosures/ Components** - Refer to your plan drawing for locations and their respective spec sheets for installation.

**Vertical Ladders** - Refer to your plan drawing for locations and the Vertical Ladder spec sheet for installation.

**Decks** - Refer to your plan drawing for heights and orientation. Refer to the appropriate deck spec sheet for installation.

**Deck Hanger Clamp Assembly** - Refer to the appropriate Deck Assembly spec sheet for installation."

**Concrete Footings** - Refer to the Typical Concrete Footing spec sheet for installation.

**Kick Plates** - Refer to your plan drawing for locations and the Kick Plate spec sheet for installation.

# PlayBooster General Post/Tenderdeck Information



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# PlayBooster General Post/Tenderdeck Information

## Installation Instructions

**Before Starting, Read the General Construction Guidelines, Installation Hints, All Typical Detail Sheets and Specific Installation Instructions for Each Component Labeled on Your Plan.**

1) Dig footing holes spaced as shown on the plan and spec sheets. Refer to the Typical Concrete Footing Spec Sheet.

2) Note the post lengths as shown on the plan and set in their appropriate footing holes. The post length is indicated on the finished grade sticker on each post.

3) Mark the appropriate posts for the deck heights you are installing and attach decks to posts at marked height. Refer to the appropriate deck spec sheet for installation.

4) After all the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Spec Sheet.

5) Continue installing enclosures and components and pour concrete footings as you progress, making sure everything is plumb and level.

6) When installation is complete, install Drive Rivets in all clamps per the Typical Offset Hanger Clamp Spec Sheet.

7) Install protective surfacing under and around all equipment before users are allowed to play on the structure.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*)

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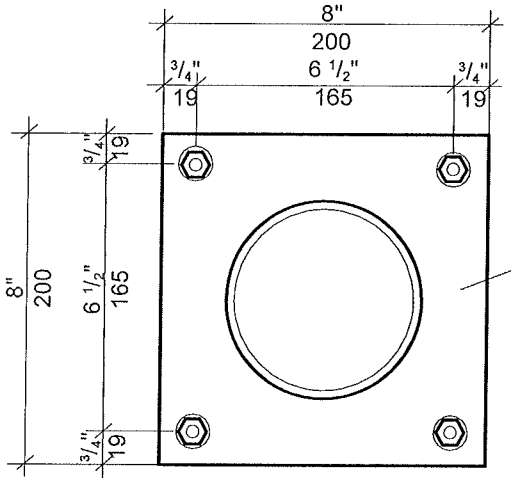
12194700

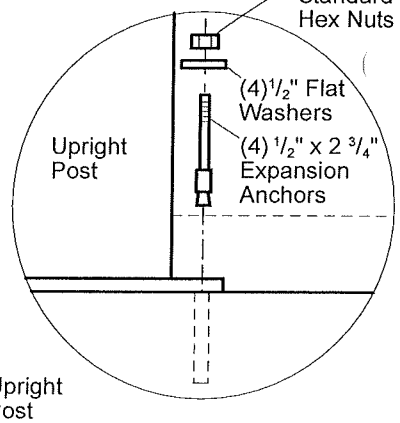
**NOTE:**
**Surface mounting will not work in all applications. Consult Landscape Structures Inc. for your particular requirements.**



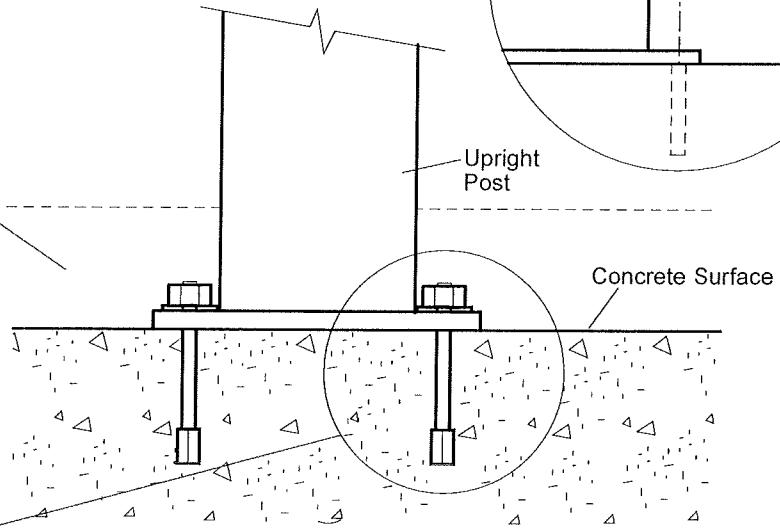

## CONCRETE SLAB SPECS

- Base under slab to be 4" - 6" of sand over a stable subgrade.
- Depth of concrete slab to be 4" - 6" with a wire mesh support.
- Minimum of 7 days curing time full cure after 30 days.
- Surface of concrete to be trowled smooth and acid etched.
- Concrete: 3000 PSI (Min)
  30 Days 3500 PSI
  3/4 Minus Crushed Rock

**DETAIL**




**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**




**NOTE:**
**Drill 3" deep hole using hammer drill and 1/2"masonry bit. Tap anchors into concrete and secure with 1/2" standard hex nuts and 1/2" flat washers.**



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1-30-97 Document #12194700 replaces #10971000. Updated notes.

Document #12194700

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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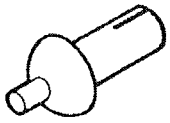
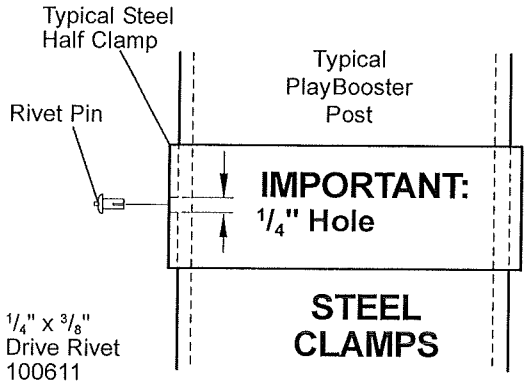
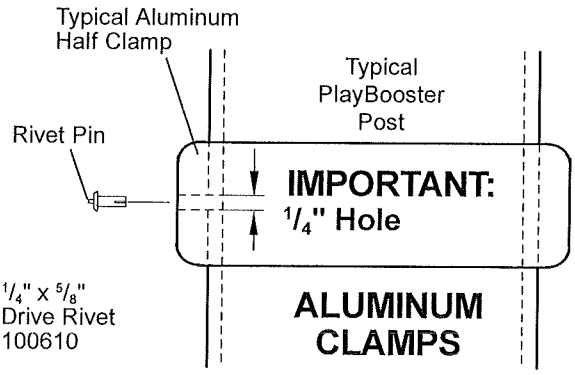


# General Rules For Use Of Drive Rivets

- Rivets are used as "Insurance" to keep clamps from sliding down the posts. In many cases this "Insurance" is achieved in other ways; i.e. Panels that attach to the deck face.
- Refer to the Spec Sheet Parts List and follow Installation Instructions for each component.
- Decks and Overhead Events always need rivets.
- Any component fastened to the Deck does not need rivets.

  Benefits of not installing unnecessary rivets: saves time, it makes clamp adjustments as well as the removal of clamps for replacement or adding phases much easier, and you will have fewer damaged clamps or posts due to poor installation techniques.




**INSTRUCTIONS:**

**NOTE:** Use Only Bit Size "F" or 1/4" Drill Bit.

After Play Component Assembly is Complete, Drill Hole into Post Through Half Clamp, Insert Rivet in Hole, and Hammer Rivet Pin in Until it is Flush with Head.



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11-22-99 Document #12984700 replaces #10972900. Added general rules for use of drive rivets.

Document #12984700

11-22-99
109729a

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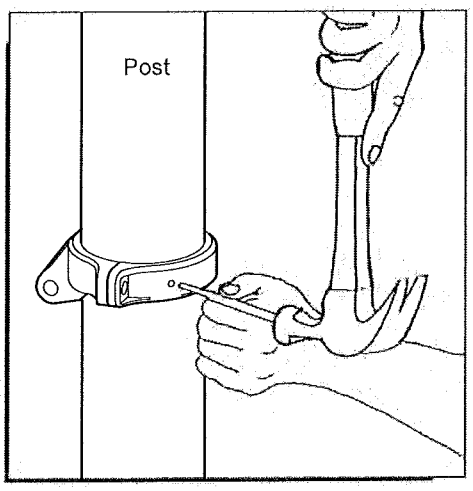
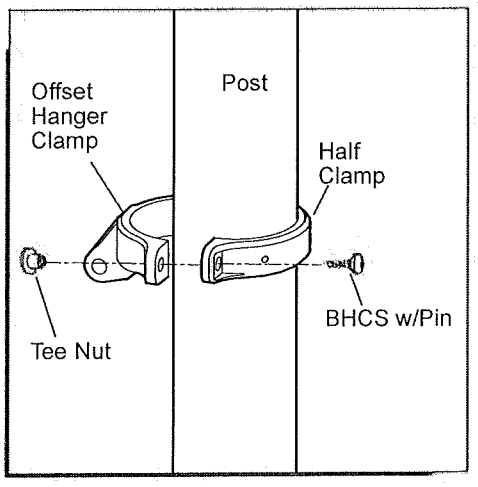
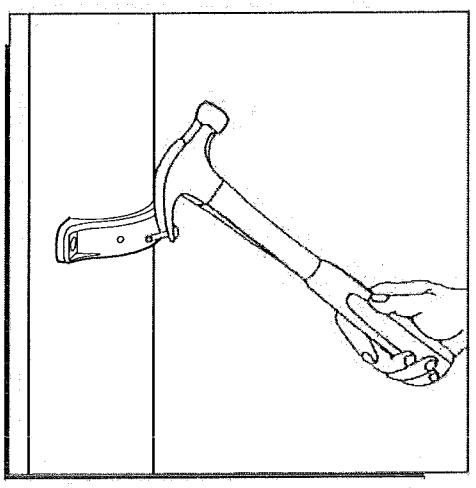



1) **Drive Center Pin of Rivet Straight into Post Using $^1/_8$" Diameter Punch and Hammer.**




2) **Unbolt BHCS w/Pin and Tee Nuts from Clamp Using Tamperproof Hex Wrench. Remove Offset Hanger Clamp. Lightly Tap on Half Clamp with Hammer Until Head of Drive Rivet Pulls Away From Half Clamp.**



3) **Pull Out Drive Rivet Using Claw End of Hammer.**

**Tools Needed:**

- Claw Hammer
- $^1/_8$" Diameter Steel Punch
- Tamperproof Hex Wrench

# Drive Rivet Removal

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

1-1-01

# PlayBooster Installation

1) Before starting installation, study your *PlayBooster* plan drawing and all installation instructions carefully for location of posts, deck heights, components and safety enclosures. Make sure slides are oriented away from the afternoon sun and that the structure is visible (easily supervised) and accessible.

2) Clear an area large enough for your *PlayBooster* and at least the required minimum use zone around it, as shown on your plan drawing. The subsurface must be well drained. If the soil does not drain naturally it must be tiled or sloped at $^1/_8$" to $^1/_4$" per foot to a storm sewer or a "French Drain". If your *PlayBooster* is over 30' in length it is recommended to install more than one "French Drain" or similar system to allow drainage from the center of the play area and decrease the overall slope. If this is not possible, the structure may need to be "stepped" to take up the grade change.

3) Overhead Obstructions: Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example, tree limbs) shall be at least 84 in. (2130 mm) above each designated play surface or 84 in. (2130 mm) above the pivot point of swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes, such as the National Electical Safety Code.

4) Locate all mainstructure post footing holes according to the dimensions shown on your *PlayBooster* plan. This can be accomplished by laying a deck on the ground and measuring from it; by laying out a base line string grid or using a builders transit. This step is very important and worth taking extra time to be precise. Location of component footings such as slide supports can be done at a later time.

5) Refer to the Typical Concrete Footing installation sheet. Dig holes to the proper width and depth as shown. (Only dig enough holes for one day's construction. Do not leave holes open over night.) Pour crushed rock in each hole ***level with each other*** and at least 4" deep as shown. This can be easily accomplished either with a builders transit or by laying out hole locations with a string grid, leveling the grid, and measuring down from the grid for each footing. Tamp the crushed rock down until compacted and at proper level. This step is important to ensure all posts will be at the proper height relative to each other, and it greatly simplifies installation. If the soils are loose or unstable, larger diameter holes may be necessary. Check with a local engineer if in doubt.

6) Start with the lowest deck and work your way to the highest deck following instructions on the installation sheets for typical post/deck assembly. Install barriers and roofs as located on the plan for stability.

7) After the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Detail.

8) During construction, the site and all the material on it must be secured when unattended to prevent children from playing on them. Do not leave decks with unprotected openings when unattended-use temporary barricades if necessary.

9) Install all other play components per the installation instructions. After all components and enclosures are properly attached, pour the remaining concrete footings per the Typical Concrete Footing Detail.

10) Install protective surfacing material.

11) Attach play hardware such as 'D' rings and swing seats last, ***after*** protective surfacing is in place and footings have cured at least 3 days.

12) Carefully and thoroughly inspect the entire *PlayBooster* to be sure all fastening hardware is tight. According to ASTM F1487, section 6.2 sharp points, edges and protrusions; any exposed bolt ends should not protrude beyond the face of the nut more than two (2) threads. This condition is not planned, but may exist in some applications because materials and finishes will vary. To remedy this situation, add a second nut or washer(s), extras have been added to the spare parts kit. See illustrations on reverse side of this sheet. Children should not be allowed on the structure until this inspection is complete.

13) Before children are allowed on the structure, the site must be cleaned and free of all construction debris and packaging material. Do not burn on the site.



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## Tools Required

Tools required for installation are an auger, or other equipment for digging 14" diameter footing holes; shovels, rubber mallet, drill (with $^1/_4$", $^7/_{16}$", $^9/_{16}$", $^{11}/_{16}$" and $^3/_8$" drill bits), tape measure, hex keys or allen wrenches, level, $^3/_8$" socket set, hammer, open end wrench set, screw driver, for surface mount a hammer drill, $^3/_8$" and $^1/_2$" masonry bits and transit or string line to aid in layout. Some washable felt tip pens are also useful for marking clamp locations.

## Materials Required

All *PlayBooster* materials are supplied except concrete for footings, protective surfacing material, and curbing or edging material. With the exception of the special wrenches required (for the pinned hex fasteners) no other tools are supplied.

## Recycling

Many of our packaging materials can be recycled, please take the time to separate and deliver them to a recycler. Thank You.

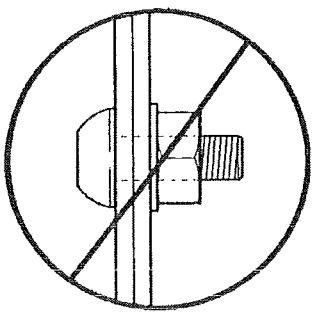
## Installation Times

Installation times, as noted on the back of the installation sheets, are ***approximate*** and will vary depending on soil conditions, installer's equipment and ability. Times indicated ***do not*** include unloading or unpacking equipment. The man hours given are for one person installing (unless otherwise noted). Cut time in half for two people.

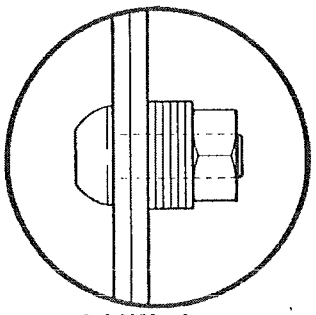
## Technical Services

If you have any questions or concerns about the installation of your structure, call our Technical Services Department at: ***1-800-328-0035*** (7:30 - 5:30p.m. CST/M-F).

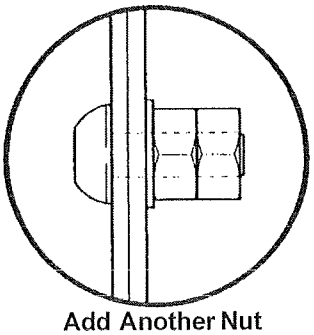
## Illustrations For Note 10, (Reverse Side Of This Sheet)



More Than Two (2) Threads Exposed



Add Washers



Add Another Nut (Align Flat Area)



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1-1-01 Document #13412800 Replaces #12809900. Udated Installations Instructions.

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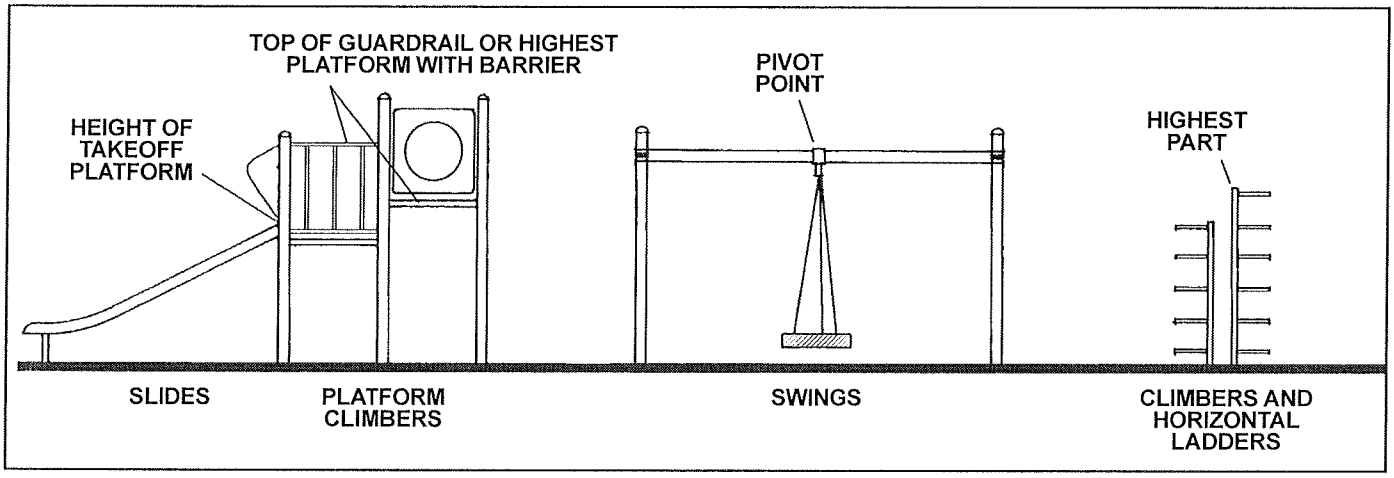
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)




1.) Determine the highest accessible part - by definition.

2.) Determine the type of surfacing material desired:
- *Unitary* - Bound rubber type materials for the accessible areas.
- *Loose-fill* - Sand, wood chips, etc. for non-accessible areas.

3.) Select a material that has a Critical Height value of at least the height of the highest accessible part.
- According to the CPSC, Critical Height is defined as the maximum height from which the instrumented metal headform, upon impact, yields both a peak deceleration of no more than 200 G's and a HIC value of no more than 1,000 when tested in accordance with the procedure described in the ASTM Test Method F1292.
- Request independent laboratory test results showing the critical height of each product per the above procedures for commercially available products. The CPSC has tested some common loose-fill materials that are commonly not tested as a protective surfacing. (See back page.)

4.) Cover the designated use zone with the desired materials. If a different type of material is used for the accessible route of travel, make sure the surfaces are maintained flush.

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Document #13412800

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

## Critical Heights (in Feet)

| | Uncompressed Depth | | | Compressed Depth * |
|---|---|---|---|---|
| **Material** | **6"** | **9"** | **12"** | **9"** |
| * Wood Mulch | 7' | 10' | 11' | **10'** |
| * Double Shredded Bark Mulch | 6' | 10' | 11' | **7'** |
| * Uniform Wood Chips | 6' | 7' | 12' | **6'** |
| * Fine Sand | 5' | 5' | 9' | **5'** |
| * Coarse Sand | 5' | 5' | 6' | **4'** |
| * Fine Gravel | 6' | 7' | 10' | **6'** |
| * Medium Gravel | 5' | 5' | 6' | **5'** |

**NA = Not Available**

* **NOTE:** Compressed depths most accurately depict conditions on a playground.
* An approximation of the maximum fall height from which a life-threatening head injury would not be expected to occur, based on tests in which a headform yielded both a peak deceleration of less than 200 G's and a HIC of less than 1000 upon impact.

* Handbook for *Public Playground Safety*, published by the U.S. Consumer Products Safety Commission, Section 10, Table 2, page 21.



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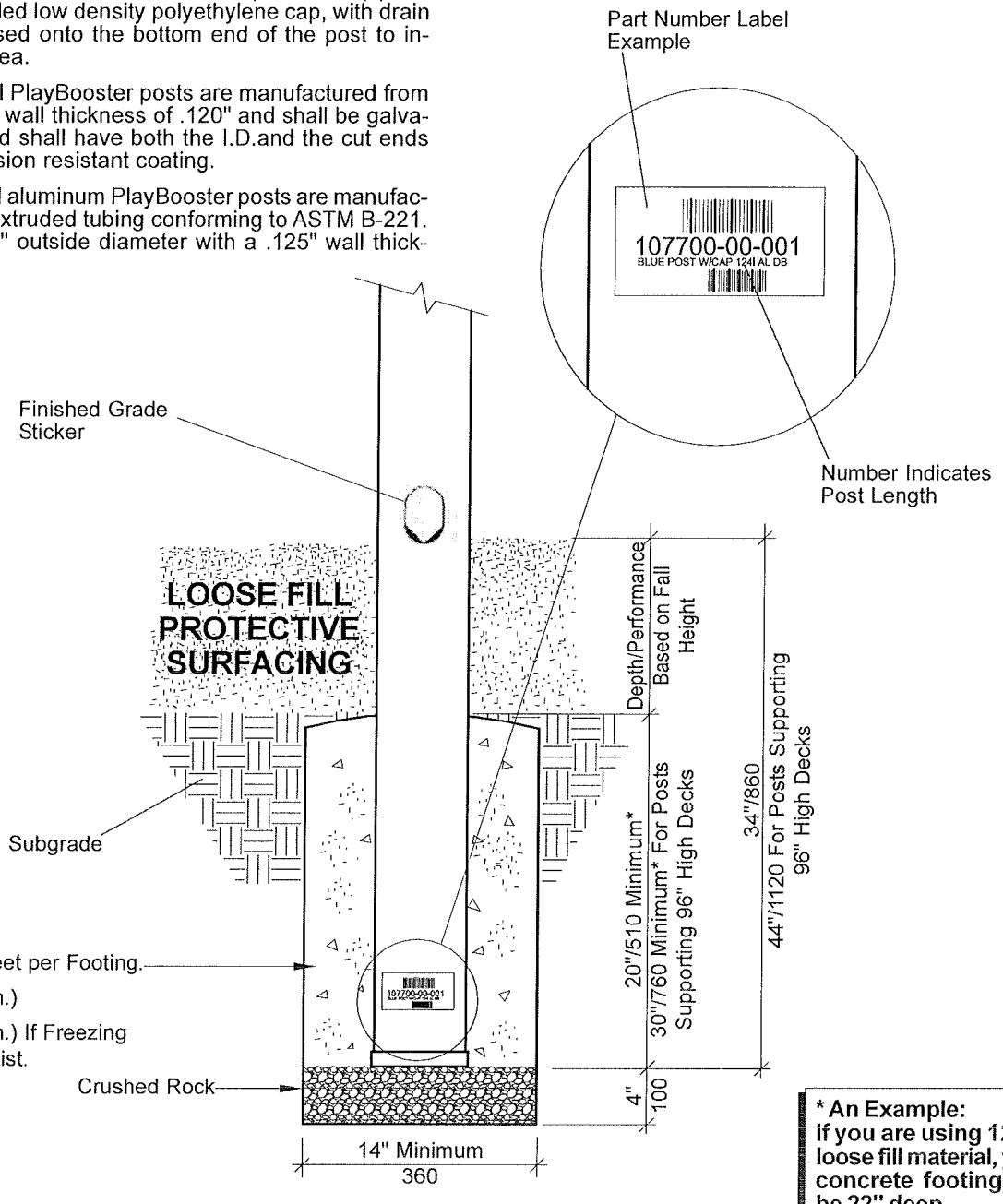
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*)

13871600

**Post Specifications:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D.and the cut ends sprayed with a corrosion resistant coating.

**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.




## CONCRETE

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.

*** An Example:**
**If you are using 12" of loose fill material, your concrete footing wi be 22" deep.**

# PlayBooster® Concrete Footings, 5" Posts



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Eco #51014 Document #13871600 replaces #13433700. Removed Post Length Sticker.

Document #13871600

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# Shipment Receiving and Inspection Troubleshooting Tips

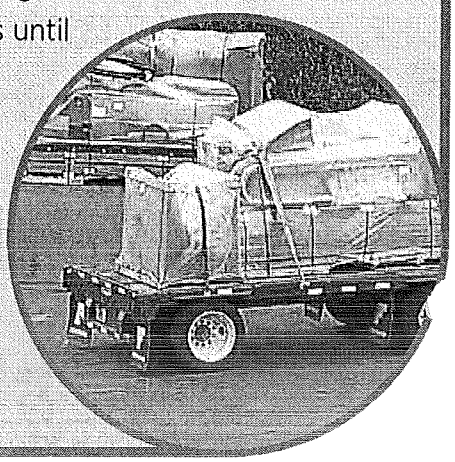
**Thank you for selecting Landscape Structures for your park and playground equipment. Landscape Structures takes great pride in assuring that your shipment was effectively packaged and complete. Smaller parts may be individually packaged or nested with larger parts. Here is a checklist to follow when unloading and unpacking your shipment.**

## *At Time Of Delivery (before the driver leaves)*

- The quantity of shipping units should be compared to the shipping unit quantities shown on the bill of lading. If they do not match, note the discrepancy on the driver's copy of the bill of lading before signing (see reverse side for an example of a bill of lading).
- Inspect each piece of equipment for signs of damage (i.e. torn packaging, punctures, etc.). Freight damage notations should be listed on the bill of lading and communicated to the driver with as much detail as possible in order to avoid controversy at a later date should a claim be necessary.
- Make sure all shipping units you receive are actually addressed to you as trucks may carry multiple shipments.

## *Post Delivery Inspection*

- Each piece of equipment should be checked off against your packing list and placed in a secure area until you're ready to begin installation. If for some reason you are missing equipment, please contact your Landscape Structures sales representative (see reverse side for an example of a packing list).
- When inspecting, please try to minimize the amount of tearing of the packaging and do not dispose of packaging materials/labels until installation is complete. The information on the packaging labels may be needed in the event that the manufacturer needs to be contacted.
- If concealed damage is found, please contact your Landscape Structures sales representative within 15 days from the time of delivery to protect your rights as the consignee.



This is where your Playstructure was manufactured

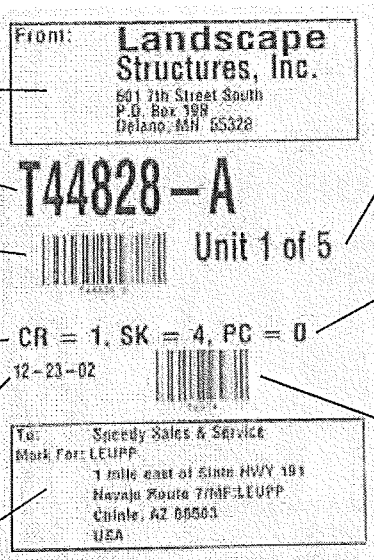
Your Sales Order number

A barcode representing your Sales Order Number

This tells you what shipping unit this label is for. In this case there is one crate.

This is the date your Order was prepared for shipping.

This box will have the name and address of where this shipment was delivered.




Total number of units in your shipment. In this case there are a total of 5 crates, skids and/or pieces. This is the 1st of those units.

This line tells you the exact number of each type of container in your shipment. CR stands for Crates or Cartons, SK stands for Skids or Pallets and PC stands for Pieces. This shipment has 1 crate, 4 skids and no pieces.

This is a unique identifier for this container. With this number we are able to determine when it was prepared for shipping, who prepared it and at what time it was prepared.

*Ship Unit Codes:
S=Skid
P=Piece
C=Crate

The Shipping Label above will be on all of the Skids, Pieces and Crates shipped to you*.

## BACK-ORDER

If you see a label like this on the Shiplist, it means that we have not sent everything. The products(s) we did not include will be indicated on the Shiplist with the word "Backordered" next to it. Your Sales Representative will be able to give you more information.

## Sample Master Packing List

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**Master Packing List - T00000**

Page 1

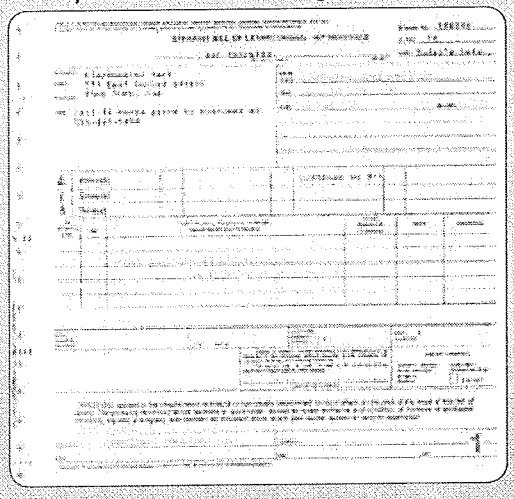
Cust. PO: 1868

| Customer Information | Installation Location Information |
|---|---|
| PlayBooster Park<br>111 East Locust Street<br>Your Town, USA | PlayBooster Park<br>111 East Locust Street<br>Your Town, USA |

Units prepared for shipping by asmith at 07:47 on 01/27/2005

| Ship Qty | Part Number | Description | Container ID |
|---|---|---|---|
| 1 | 139573-00-000 | HDW WIGGLE LADR 400F PB | T74622-B-P1 |
| 1 | 139738-00-023 | HORIZ LADR 84 PB STR | T74622-B-S1 |
| 1 | 139819-00-000 | HDW BLOCK CLMR ARCH PB | T74622-B-P1 |
| 1 | 139892-00-000 | HDW LOOP LADDER TO PB | T74622-B-P2 |
| 1 | 140432-00-023 | VERT LADR END SPRT PB | T74622-B-S1 |
| 2 | 140664-00-044 | INFILL PNL XFER MOD PB/PV | T74622-B-S2 |
| 4 | 141765-00-000 | CBH 7/16 F30 X 20-7/81 | T74622-B-P1 |
| 1 | 142386-00-002 | 3-BLOCK BLE CLMR BRN | T74622-B-S3 |
| 2 | 142386-00-044 | 3-BLOCK BLE CLMR TAN | T74622-B-S2 |
| 2 | 142387-00-044 | LRG BLOCK CLMR DB TAN | T74622-B-S2 |
| 1 | 142389-00-044 | GUSSET BLOCK CLMR PNT TAN | T74622-B-C1 |
| 1 | 144579-00-044 | STORE PANEL SET PB/PV | T74622-B-S2 |
| 4 | 145666-00-002 | SQ DECK PB | T74622-B-S3 |
| 3 | 145668-00-002 | TRI DK PB 90 DEG PVC | T74622-B-S3 |
| 2 | 145661-00-002 | SQ DECK EXT PB | T74622-B-S3 |
| 1 | 145662-00-002 | SQ DECK CORNER PB | T74622-B-S3 |
| 4 | 146007-00-000 | BIT 5/16 6-LOBE T-45 TAMP | T74622-B-P1 |
| 4 | 148017-00-000 | KEY 5/161 6-LOBE T-45 | T74622-B-P1 |
| 2 | 148368-00-000 | HDW TALK TUBE COVER | T74622-B-P1 |
| 2 | 148344-00-023 | TALK TUBE STD @ GRD PNT | T74622-B-S1 |
| 1 | 148628-00-000 | HDW STEERING WHL BARRIER | T74622-B-P2 |
| 1 | T74622-B-99 | Installation Instructions | T74622-B-C1 |

## Sample Bill of Lading



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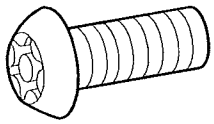
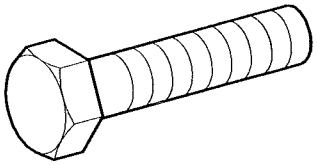
# Common Parts & Fasteners

## Button Head Cap Screws BHCS w/Pin



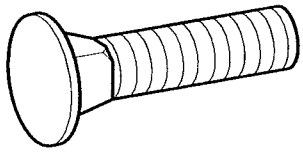
| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 137277-00 | 1/4" x 3/8" | (6,4 x 9,5) | SST-PAT | 10 | 1.4 |
| 131849-00 | 5/16" x 1/2" | (7,9 x 12,7) | SST-PAT | 10 | 1.4 |
| 132626-00 | 5/16" x 7/8" | (7,9 x 22,2) | SST-PAT | 10 | 1.4 |
| 100195-00 | 3/8" x 5/8" | (9,5 x 15,9) | SST-PAT | 15 | 2 |
| 100196-00 | 3/8" x 7/8" | (9,5 x 22,2) | SST-PAT | 15 | 2 |
| 100198-00 | 3/8" x 1 1/8" | (9,5 x 28,6) | SST-PAT | 15 | 2 |
| 113027-00 | 3/8" x 1 3/8" | (9,5 x 34,9) | SST-PAT | 15 | 2 |
| 100171-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 123224-00 | 3/8" x 1 11/16" | (9,5 x 42,9) | SST-PAT | 15 | 2 |
| 100173-00 | 3/8" x 2" | (9,5 x 50,8) | SST-PAT | 15 | 2 |
| 100199-00 | 3/8" x 2 1/4" | (9,5 x 57,2) | SST-PAT | 15 | 2 |
| 100174-00 | 3/8" x 2 1/2" | (9,5 x 63,5) | SST-PAT | 15 | 2 |
| 100175-00 | 3/8" x 2 3/4" | (9,5 x 69,9) | SST-PAT | 15 | 2 |
| 100176-00 | 3/8" x 3" | (9,5 x 76,2) | SST-PAT | 15 | 2 |
| 100168-00 | 3/8" x 3 1/4" | (9,5 x 82,6) | SST-PAT | 15 | 2 |
| 100200-00 | 3/8" x 3 1/2" | (9,5 x 88,9) | SST-PAT | 15 | 2 |
| 124460-00 | 3/8" x 3 3/4" | (9,5 x 95,2) | SST-PAT | 15 | 2 |
| 100201-00 | 5/8" x 1 1/2" | (15,9 x 38,1) | SST-PAT | 50 | 7 |
| 127551-00 | 5/8" x 1 1/2" | (15,9 x 38,1) | SST-ANTI-SIEZE | 50 | 7 |
| 100203-00 | 5/8" x 2 1/4" | (15,9 x 57,2) | SST-PAT | 50 | 7 |

## Hex Cap Screws



| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 100206-00 | 3/8" x 1" | (9,5 x 25,4) | SST-PAT | 15 | 2 |
| 100208-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 100209-00 | 3/8" x 1 3/4" | (9,5 x 44,4) | SST-PAT | 15 | 2 |
| 135682-00 | 3/8" x 3 1/8" | (9,5 x 79,3) | SST-PAT | 15 | 2 |
| 135683-00 | 3/8" x 4 5/8" | (9,5 x 117,5) | SST | 15 | 2 |
| 100214-00 | 3/8" x 5" | (9,5 x 127) | SST-PAT | 15 | 2 |
| 121499-00 | 7/16" x 1 3/4" | (11,1 x 114,3) | SST-PAT | 15 | 2 |
| 100216-00 | 1/2" x 1 1/4" | (12,7 x 31,7) | SST | 15 | 2 |
| 131862-00 | 1/2" x 2 1/4" | (12,7 x 57,1) | SST-PAT | 20 | 2.8 |

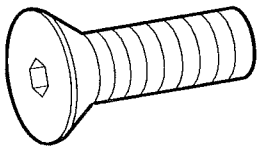
## Carriage Bolts



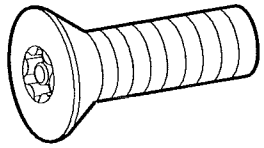
| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 100135-00 | 5/16" x 1 1/4" | (7,9 x 31,8) | SST-PAT | 5 | 0.7 |
| 100147-00 | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 15 | 2 |
| 116017-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 100148-00 | 3/8" x 1 3/4" | (9,5 x 44,5) | SST-PAT | 15 | 2 |

## Flat Head Cap Screws (FHCS)

No Pin*



With Pin



| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 148686-00 | 3/8" x 3/4" | (9,5 x 19,05) | SST-PAT | 13 | 1.8 |
| 100252-00* | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 13 | 1.8 |
| 151421-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 13 | 1.8 |
| 148765-00 | 3/8" x 3 1/2" | (9,5 x 88,9) | SST-PAT | 13 | 1.8 |
| 130824-00* | 1/2" x 2 1/4" | (12,5 x 57,2) | SST | 20 | 2.8 |

**NOTE: These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.**



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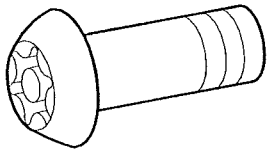
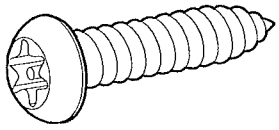
## BHCS w/Pin Limited Thread Bolts



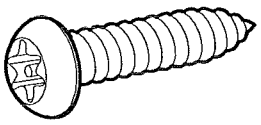
| Part # | Sizes Inches | mm | Mat'l or Grade | Recommended Torque Ft./lbs | Kgm |
|---|---|---|---|---|---|
| 100290-00 | 3/8" x 7/8" | (9,5 x 22,2) | SST-PAT | 21 | 3 |
| 100292-00 | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 21 | 3 |
| 157704-00 | 7/16" x 2" | (11,11x 51) | SST-PAT | 40 | 5.5 |
| 127068-00 | 7/16" x 2 7/16" | (11,11x61,91) | SST-PAT | 40 | 5.5 |

## Lag Screws



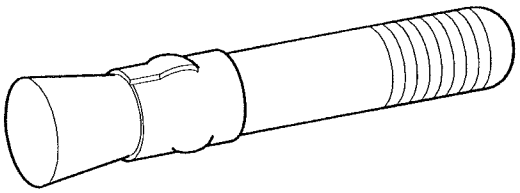
| Part # | Sizes Inches | mm | Mat'l or Grade | Head Type |
|---|---|---|---|---|
| 100127-00 | 5/16" x 1 1/4" | (7,9 x 31,8) | SST | Hex Head |
| 168198-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST | Button Head (Shown) |
| 139039-00 | 3/8" x 2" | (9,5 x 50,8) | SST | Button Head (Shown) |

## Screw, Type AB Thread BHCS w/Pin



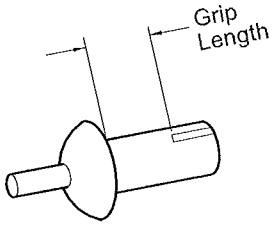
| Part # | Size | Mat'l or Grade |
|---|---|---|
| 3671-00 | #14 x 1/2" | SST |
| 127872-00 | #14 x 3/4" | SST |
| 136232-00 | #14 x 1" | SST |
| 129672-00 | #14 x 1 1/4" | SST |

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



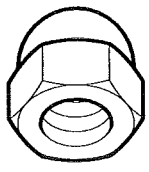
| Part # | Sizes Inches | mm | Mat'l or Grade | Recommended Torque Ft./lbs | Kgm |
|---|---|---|---|---|---|
| 100263-00 | 3/8" x 2 3/4" | (9,5 x 69,9) | Alloy Steel | 15 | 2 |
| 100266-00 | 1/2" x 2 3/4" | (12,7 x 69,9) | Alloy Steel | 20 | 2.8 |

## Drive Rivets




| Part # | Sizes Inches | mm | Mat'l |
|---|---|---|---|
| 100609-00 | 1/4" x 3/16" | (6,4 x 4,8) | Alum Rivet/Alum Pin |
| 100611-00 | 1/4" x 3/8" | (6,4 x 9,5) | Alum Rivet/SST Pin |
| 113300-00 | 1/4" x 1/2" | (6,4 x 12,7) | Alum Rivet/Alum Pin |
| 100610-00 | 1/4" x 5/8" | (6,4 x 15,9) | Alum Rivet/SST Pin |
| 139152-00 | 1/4" x 3/4" | (6,4 x 19,05) | Alum Rivet/Alum Pin |
| 100613-00 | 1/4" x 7/8" | (6,4 x 22,2) | Alum Rivet/Alum Pin |
| 118158-00 | 1/4" x 1" | (6,4 x 25,4) | Alum Rivet/Alum Pin |

## Low Crown Cap Nut



| Part # | Size Inches | Mat'l |
|---|---|---|
| 100349-00 | 3/8" -16 UNC | SST |

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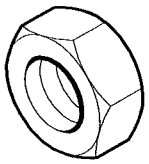
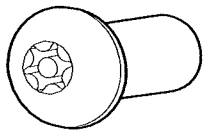
## Standard Hex Nuts



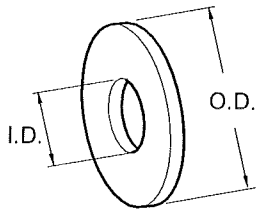
| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100326-00 | 5/16-18 UNC | SST |
| 100321-00 | 3/8-16 UNC | SST-Pat |
| 100327-00 | 3/8-16 UNC | SST |
| 128296-00 | 3/8-16 UNC (Jam Nut) | SST |
| 100328-00 | 7/16-14 UNC | SST |
| 145021-00 | 7/16-14 UNC (Jam Nut) | SST |
| 100322-00 | 1/2-13 UNC | SST |
| 129692-00 | 1/2-13 UNC | SST-Pat |
| 129693-00 | 1/2-13 UNC (Jam Nut) | SST |
| 100323-00 | 5/8-11 UNC | SST |

## Flange Nut w/Pin



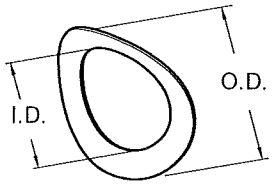
| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100353-00 | 3/8-16 UNC | SST |

## Flat Washers



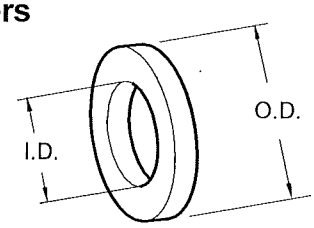

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 122039-00 | 1/4" | (6,3) | SST | 0.312 | .734 |
| 100362-00 | 3/8" | (9,5) | SST | 0.406 | 1.002 |
| 112793-00 | 7/16" | (11,1) | SST | 0.505 | 1.262 |
| 100363-00 | 1/2" | (12,7) | SST | 0.536 | 1.262 |
| 100366-00 | 5/8" | (15,9) | SST | 0.688 | 1.750 |
| 123737-00 | 1 1/8" | (28,6) | SST | 1.140 | 1.750 |

## Curved Spring Washer



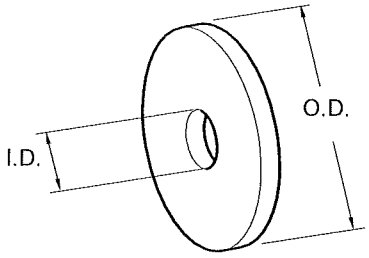

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 100380-00 | 1/2" | (12,7) | SST | 0.531 | 0.795 |

## SAE Flat Washers



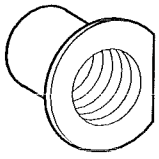

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D |
|---|---|---|---|---|---|
| 100364-00 | 1/4" | (6,35) | SST | 0.281 | 0.625 |
| 100365-00 | 3/8" | (9,5) | SST | 0.411 | 0.816 |
| 113550-00 | 1/2" | (12,7) | SST | 0.531 | 1.062 |
| 129500-00 | 5/8" | (15,9) | SST | 0.686 | 1.342 |

## Fender Washers




| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 100378-00 | 3/8" x 1 1/2" | (9,53 x 38,1) | SST | 0.406 | 1.500 |
| 100379-00 | 1/2" x 2" | (12,7 x 50,8) | SST | 0.531 | 2.000 |

## Tee Nut (PlayBooster Clamps)



| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100351-00 | 3/8-16 UNC | SST |

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## Set Screw

| Part # | Sizes Inches | Sizes mm | Mat'l or Grade |
|---|---|---|---|
| 100298-00 | 3/8" x 7/16" | (9,5 x 11,1) | SST |

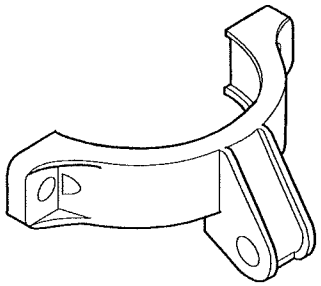
## Bolt Link

| Part # | Mat'l or Grade |
|---|---|
| 138915-00 | SST |

## Double Clevis

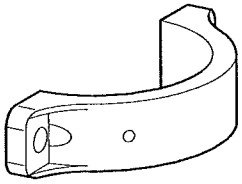
| Part # | Mat'l or Grade |
|---|---|
| 3917-00 | SST |

## Offset Hanger Clamp (PlayBooster)



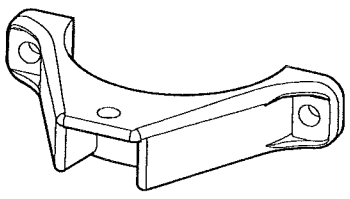
| Part # | Mat'l |
|---|---|
| 113729-00 | Cast Aluminum |

## Half Clamp (PlayBooster)



| Part # | Mat'l |
|---|---|
| 105327-01 | Cast Aluminum |

## Deck Hanger Clamp (PlayBooster)



| Part # | Mat'l |
|---|---|
| 106022-00 | Cast Aluminum |

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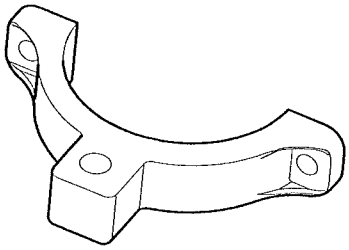
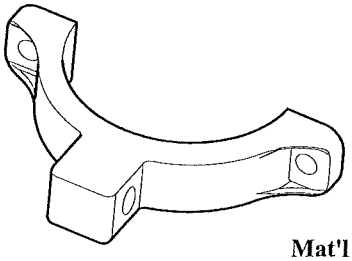
## Swing Hanger Clamp



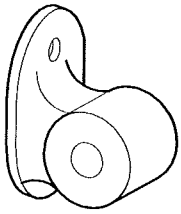
| Part # | Mat'l |
|---|---|
| 121289-00 | Cast Aluminum |

## Ring/Rail Hanger Clamp (PlayBooster)



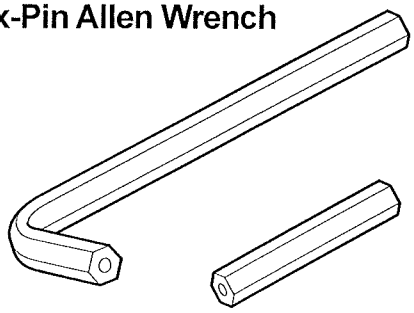
| Part # | Mat'l |
|---|---|
| 105330-00 | Cast Aluminum |

## Offset Bolt Bracket (PlayShaper)



| Part # | Mat'l |
|---|---|
| 113895-00 | Cast Aluminum |

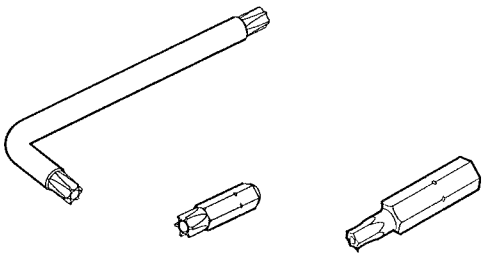
## Hex-Pin Allen Wrench



### Hex-Pin Driver

| Part # | Description |
|---|---|
| 100685-00 | Hex-Pin Allen Wrench |
| 100686-00 | Hex-Pin Driver (Used With A $^{5}/_{16}$" Socket) |

## 6-Lobe Wrench



### 6-Lobe Driver

### Torx-Pin Driver

| Part # | Description |
|---|---|
| 146017-00 | 6-Lobe Wrench (T-45) |
| 146007-00 | 6-Lobe Driver (T-45) (Used With A $^{5}/_{16}$" Socket) |
| 127463-00 | Torx-Pin Driver (T-27) (Used With A $^{1}/_{4}$" Socket) |



Eco #53704 Document #16338900 replaces #15436400. Udated Fasteners.

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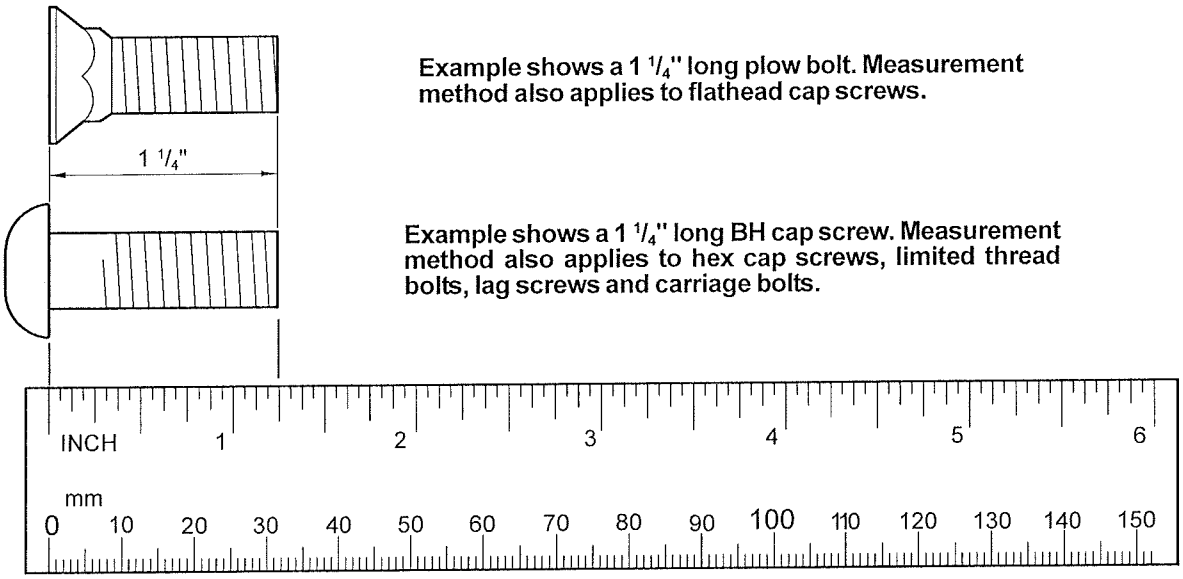
# HOW TO DETERMINE BOLT LENGTHS




Example shows a 1 1/4" long plow bolt. Measurement method also applies to flathead cap screws.

Example shows a 1 1/4" long BH cap screw. Measurement method also applies to hex cap screws, limited thread bolts, lag screws and carriage bolts.

Rule: Measurements should be based on the part of the screw that penetrates the surface.

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ISO 9001:20[illegible] Certi[illegible]

# Warning

**Your playground may include equipment containing moving parts. Moving parts are more vulnerable to wear, mis-use and abuse than other non-moving parts. It is critical these parts be inspected and maintained according to our recommendations.**

**As the owner, it is your responsibility to perform preventative maintenance and record your findings. Failure to do so may create a hazard and cause serious injury or death.**

601 7TH STREET SOUTH, P.O. BOX 198 DELANO, MINNESOTA 55328-0198 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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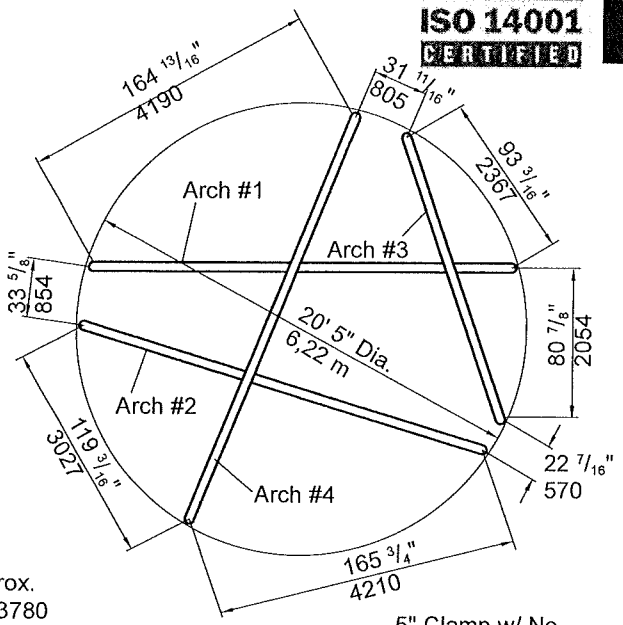
ISO 9001 Certified

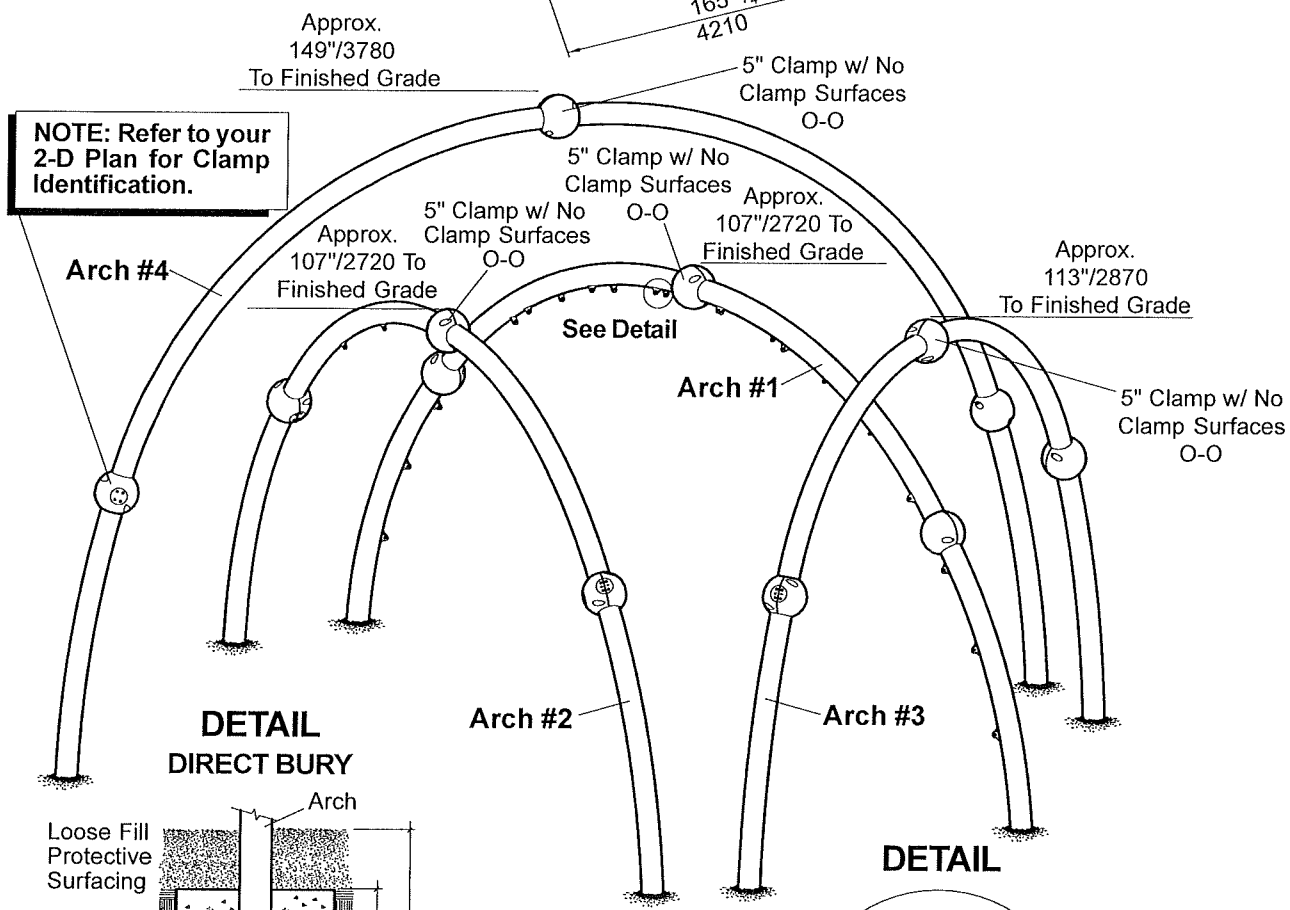
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

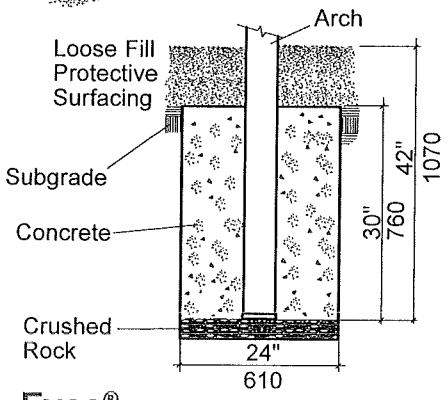
## PLAN VIEW



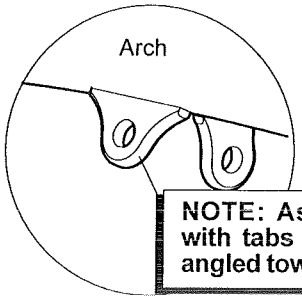

**NOTE: Refer to your 2-D Plan for Clamp Identification.**




## DETAIL
### DIRECT BURY




## DETAIL




**NOTE: Assemble structure with tabs on arches #1 & #2 angled towards each other.**

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# Arches



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Document #16814600

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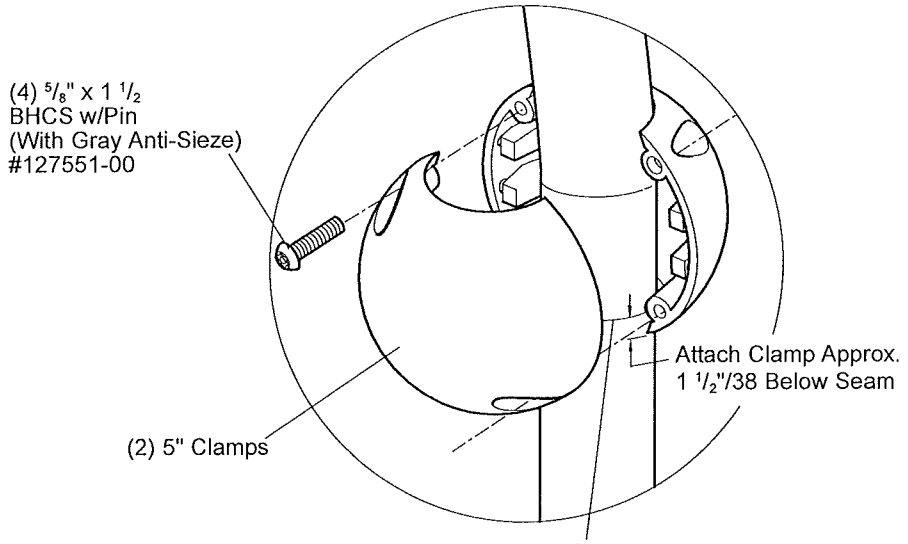
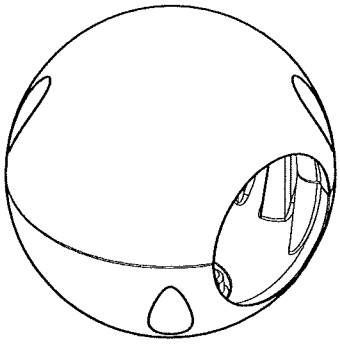
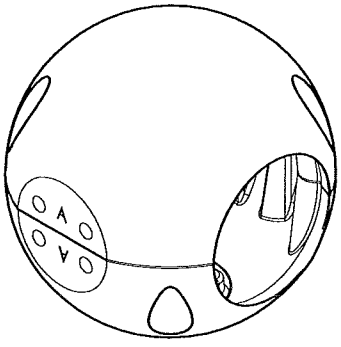
## DETAIL
### 5" CLAMP ATTACHMENT

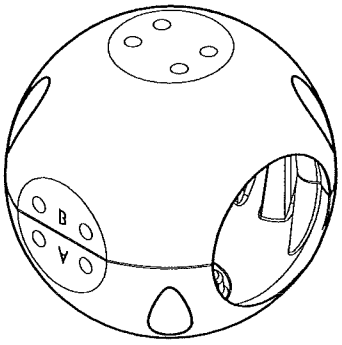


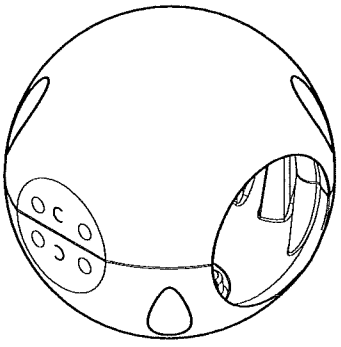
5" Clamp w/ No
Clamp Surfaces
O-O



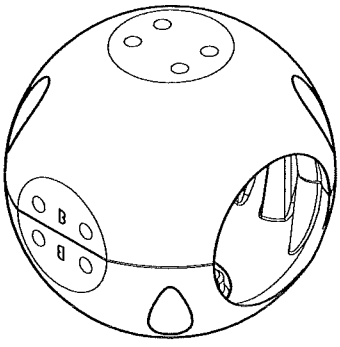

5" Clamp w/ 1
Clamp Surface
A-A



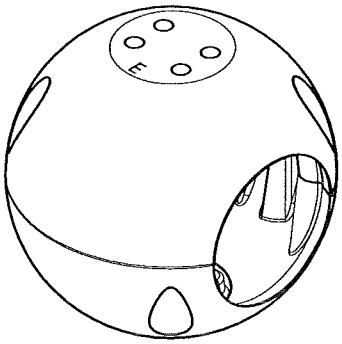

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



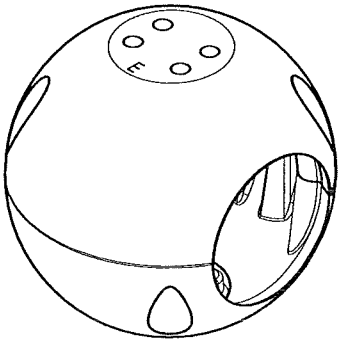

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E

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# 5" Clamps

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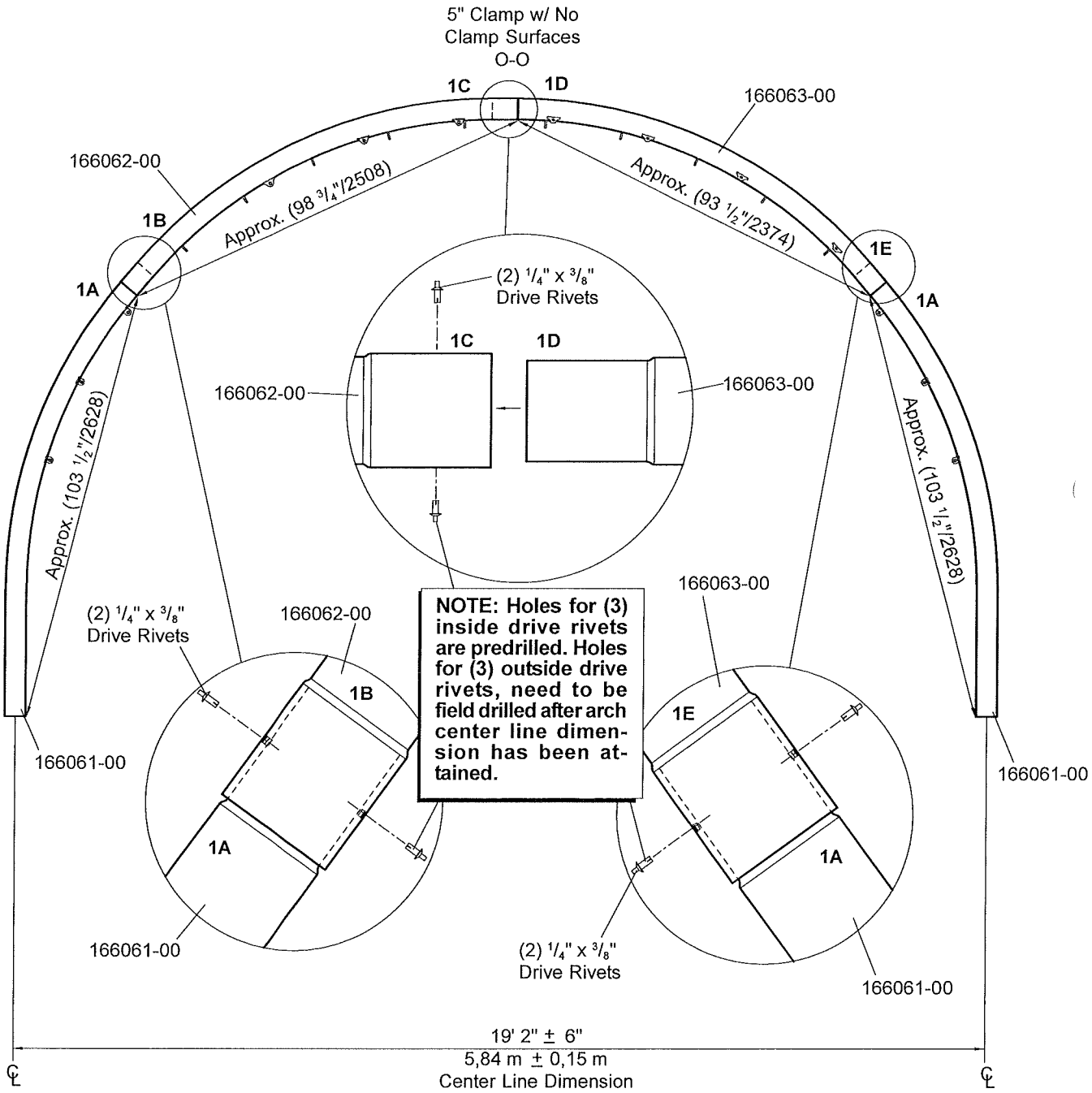
# ARCH #1 ASSEMBLY







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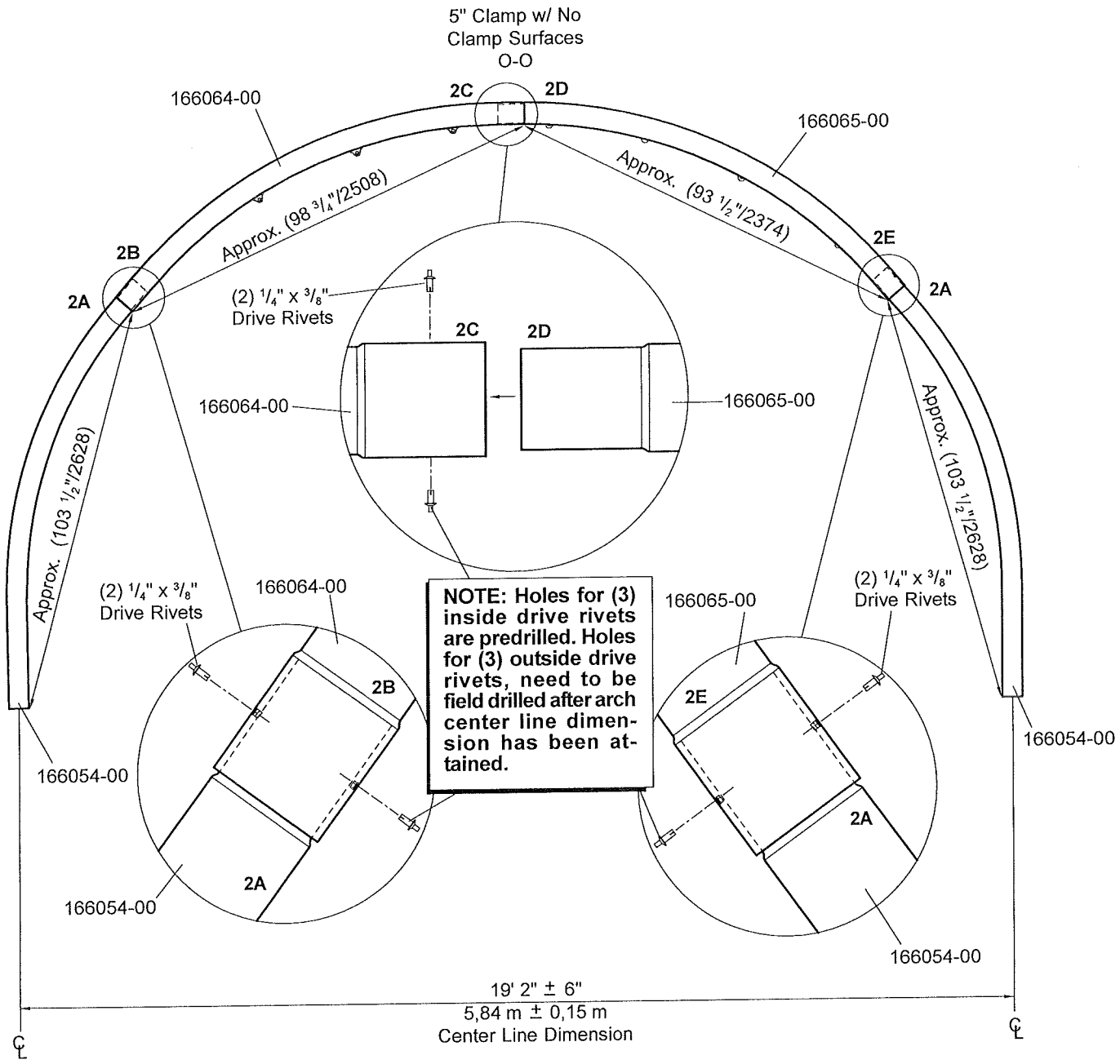
# ARCH #2 ASSEMBLY







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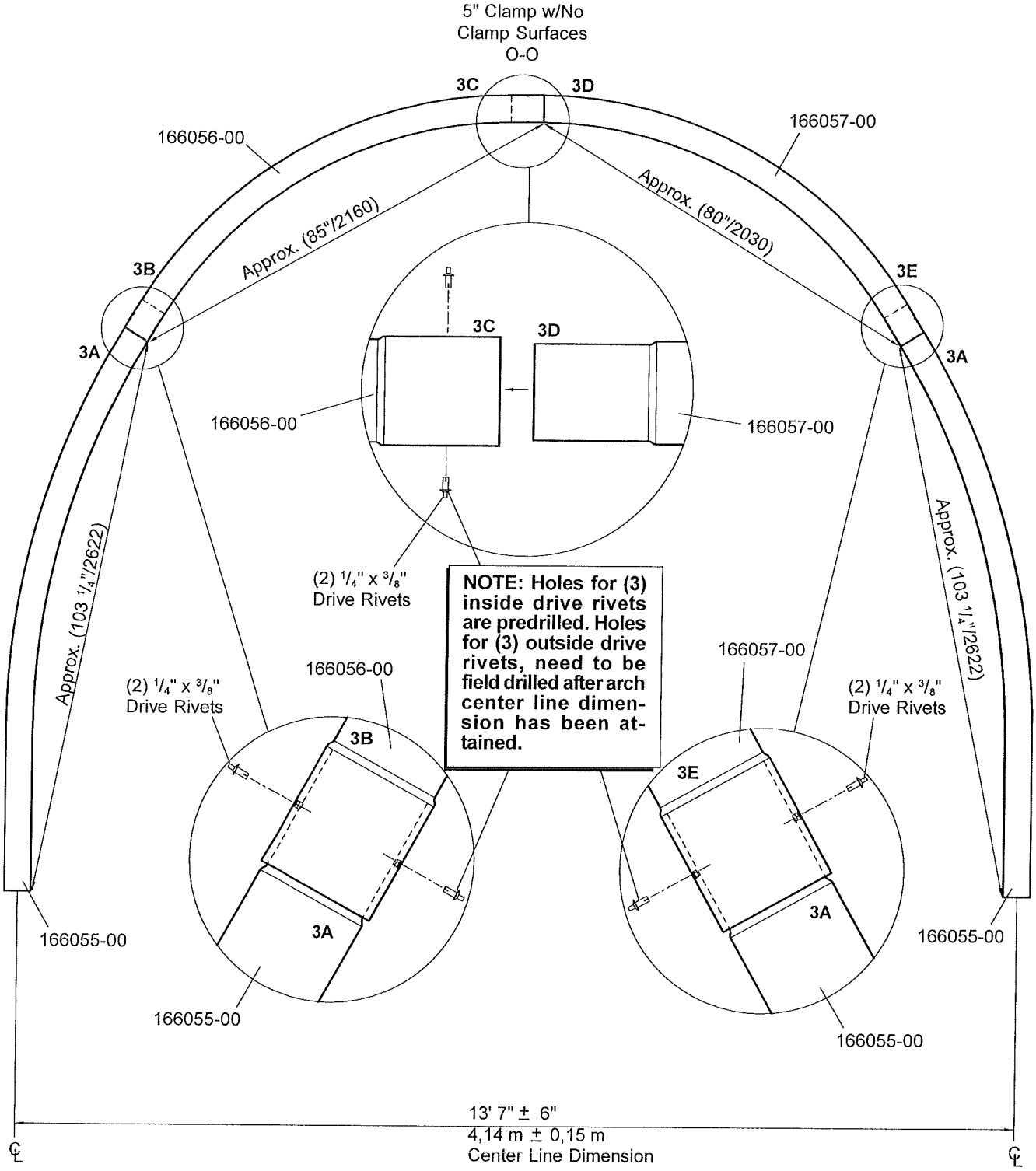
# ARCH #3 ASSEMBLY







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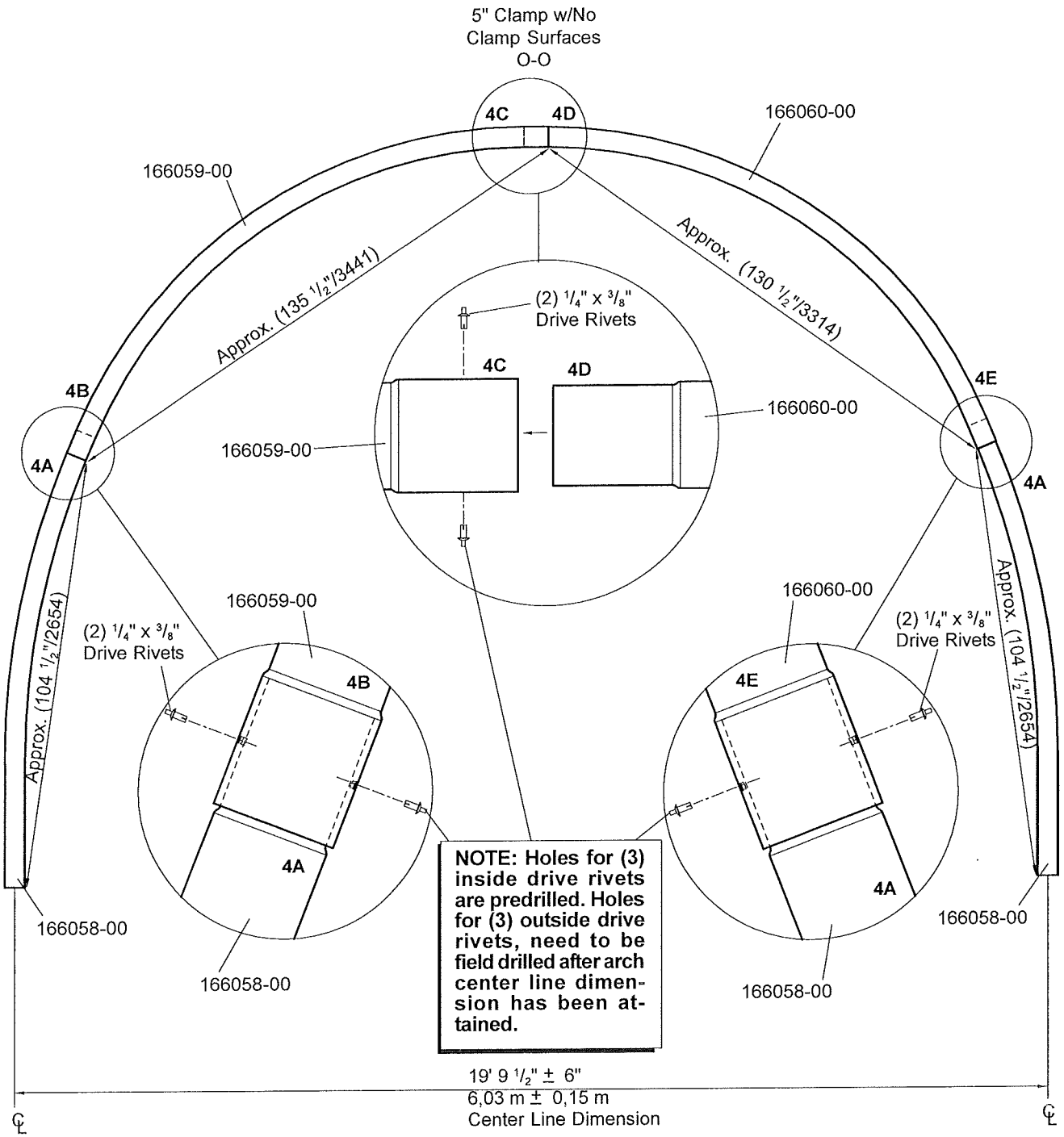
# ARCH #4 ASSEMBLY

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## Arch #4

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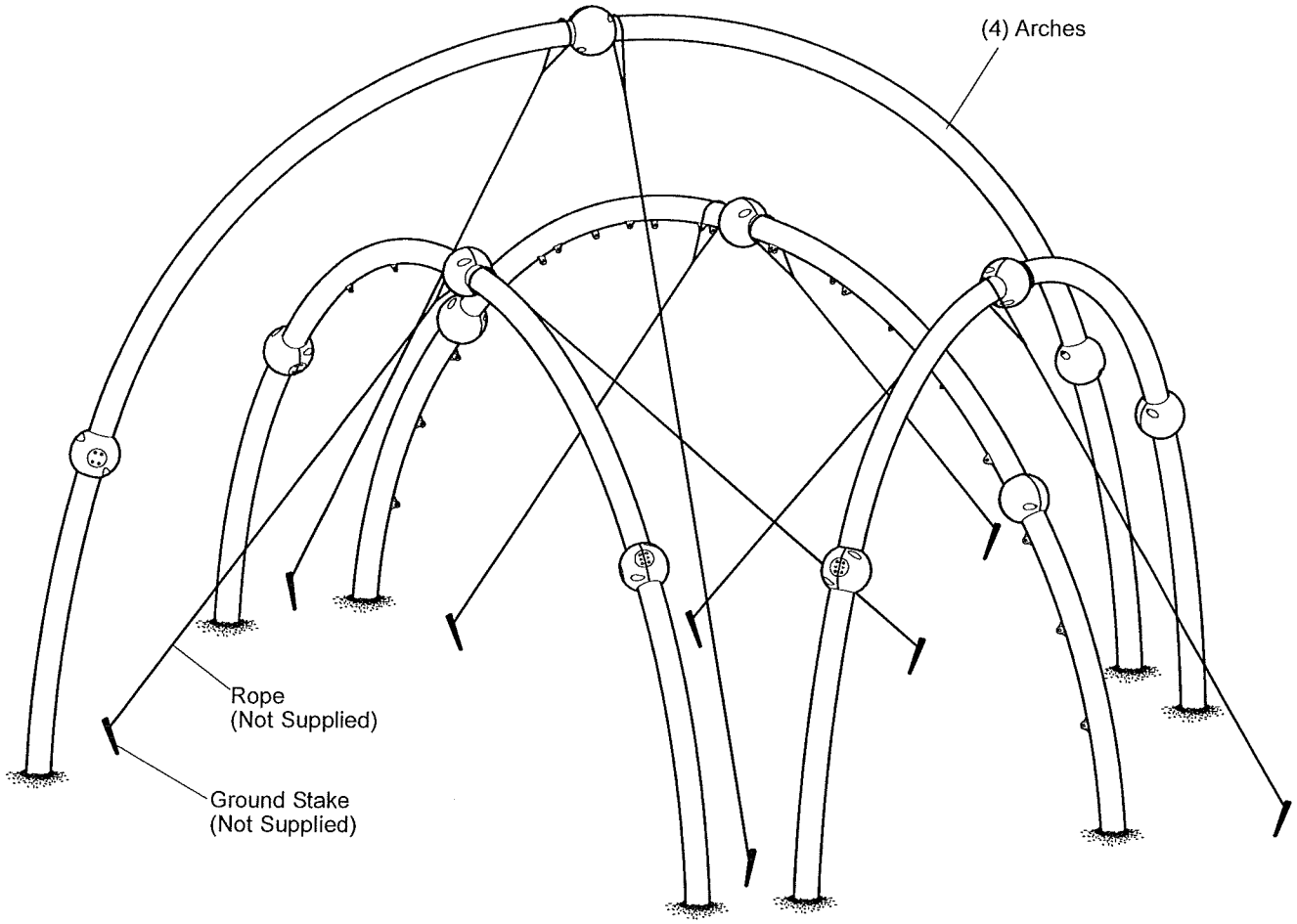
# DETAIL

## ROPE/GROUND STAKES




NOTE: *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*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# Evos® Arches

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 166061-00 | Arch 1 A With Net Tabs, Specify Color | * |
| 166054-00 | Arch 2 A, Specify Color | * |
| 166062-00 | Arch 1B/1C With Tabs, Specify Color | * |
| 166063-00 | Arch 1D/1E With Tabs, Specify Color | * |
| 166064-00 | Arch 2B/2C With Tabs, Specify Color | * |
| 166065-00 | Arch 2D/2E With Tabs, Specify Color | * |
| 166055-00 | Arch 3A, Specify Color | * |
| 166056-00 | Arch 3B/3C, Specify Color | * |
| 166057-00 | Arch 3D/3E, Specify Color | * |
| 166058-00 | Arch 4A, Specify Color | * |
| 166059-00 | Arch 4B/4C, Specify Color | * |
| 166060-00 | Arch 4D/4E, Specify Color | * |
| 166271-00 | 5" Clamp A, Specify Color | * |
| 166272-00 | 5" Clamp B, Specify Color | * |
| 166273-00 | 5" Clamp C, Specify Color | * |
| 166275-00 | 5" Clamp E, Specify Color | * |
| 166276-00 | 5" Clamp O, Specify Color | * |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | * |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | * |

*** = Quantity Determined By Your Order**

## Specifications

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield®, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 4 People minimum approx. 6 man hours
**Concrete Req.:** Approx. 2.25 cu. yds.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 98 lbs.
**Fall Height:** 75"

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) An Evos structure consists of (2-4) arch assemblies, numbered #1 through #4. Each arch assembly consists of (4) arches with part numbers to ensure the arch is assembled correctly.

3) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

4) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

6) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

7) Place the fully assembled arches in footing holes. Refer to the Site Plan for proper location of arches. **NOTE:** *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes. Refer to sheet 4.*

Specifications are subject to change without notice.

Eco #53850 Document 16814600 replaces 16620200. Changed 5" clamp part numbers.
6/16/10 Changed arch descriptions.

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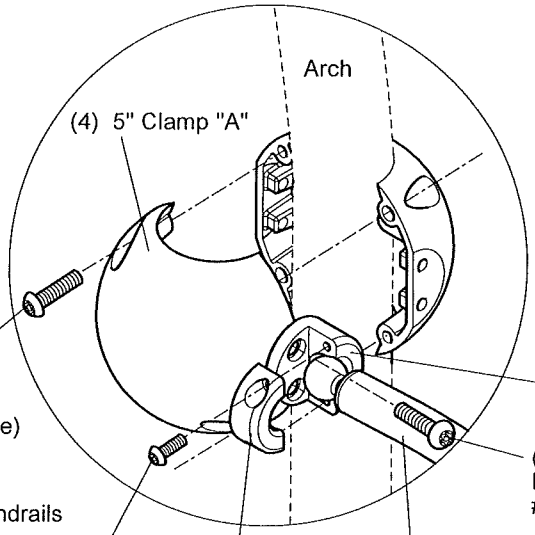
**SAFETY NOTE**

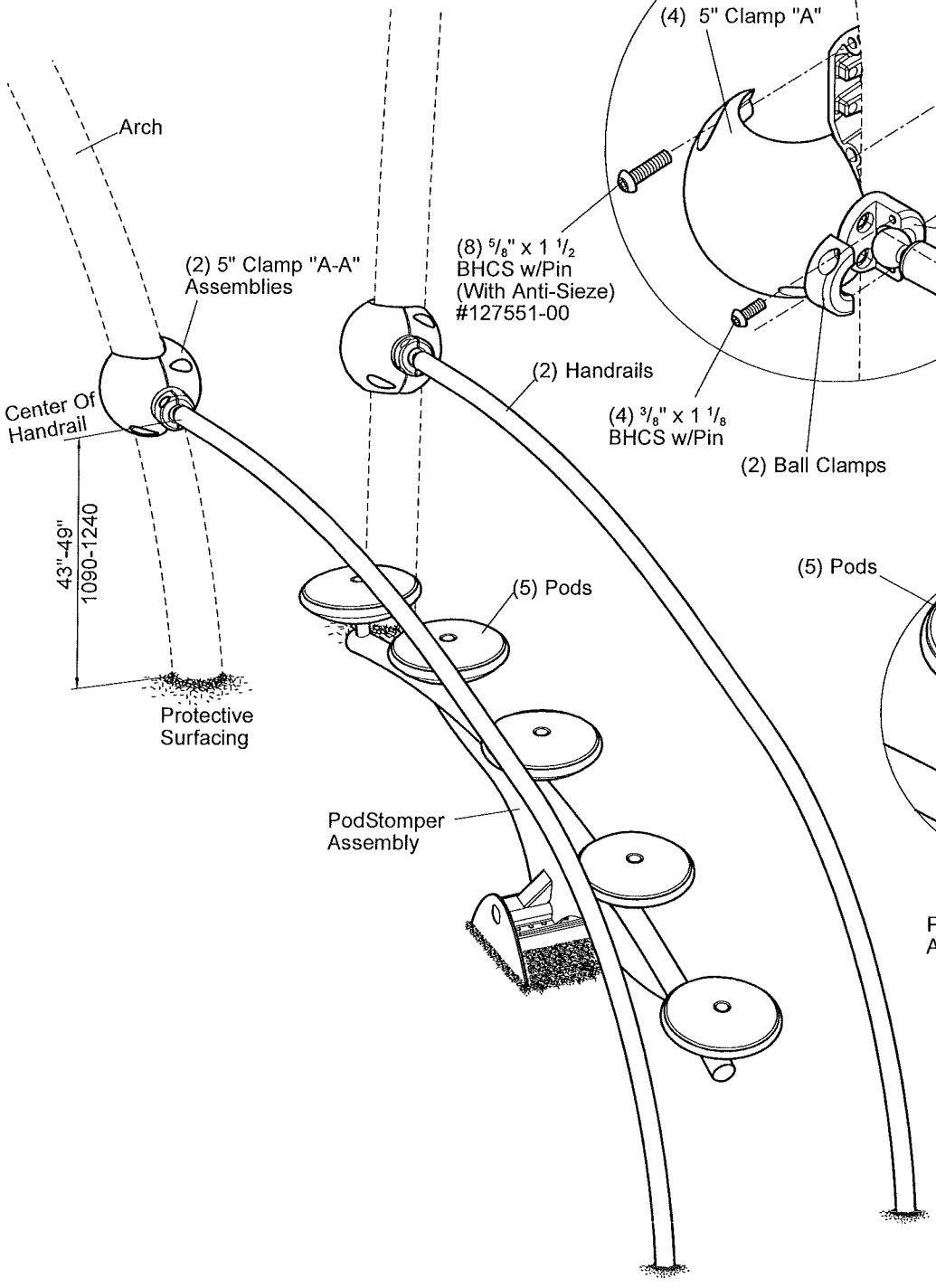
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

16126100

# DETAIL

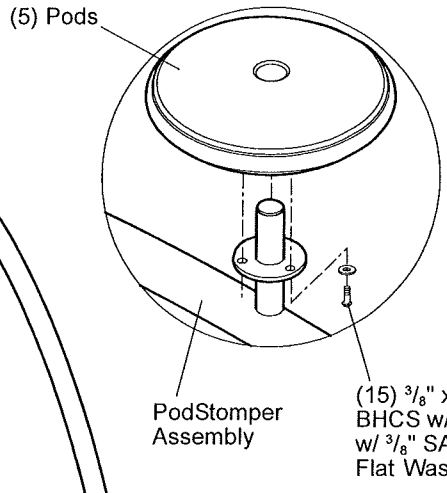
## HANDRAIL ATTACHMENT




# DETAIL

## POD ATTACHMENT




Evos®

# 156464 PodStomper® Bridge



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# Evos® 156464 PodStomper® Bridge

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 148881-00 | Seesaw Leg (DB), Specify Color | 1 |
| 154460-00 | Pod, Specify Color | 5 |
| 156247-00 | Handrails, Specify Color | 2 |
| 166271-00 | 5" Clamp "A", Specify Color | 4 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 160949-00 | PodStomper Assembly, Specify Color | 1 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| **156974-00** | **PodStomper Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 15 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100216-00 | 1/2" x 1 1/4" Hex Cap Screw, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 8 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 15 |
| 129692-00 | 1/2" Standard Hex Nut, SST/Patch | 4 |

## Specifications

**PodStomper Assy.:** Weldment comprised of 1.315" O.D. RS20 (.080"-.090" Wall) galvanized steel tubing, 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tubing, 1/8" HRPO steel sheet, 1/4" HRPO steel sheet, and 3/8" HRPO steel sheet. Finish: ProShield®, color specified.

**(Base Assembly)** Weldment comprised of 1/4" sheet HRPO steel and 2" SQ. HR steel bar. Finish: ProShield, color specified.

**(Torsion Half Clamp)** Fabricated from 1/4" sheet HRPO steel. Finish: ProShield, color specified.

**(Rod)** 1.000" O.D. Polyurethane.

**(Bolt Covers)** ABS Polymer Thermoplastic, Tan in color.

**(Bushings)** Plastic (UHMW), Black in color.

**5" Clamp:** Cast from 535 almag. Finish: ProShield, color specified.

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield, color specified.

**Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Handrails:** Weldment comprised of 1.900" O.D. RS20 (.090"-.100" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield, color specified.

**Seesaw Leg:** Weldment comprised of 5.000" O.D. x 11 Ga. (.120" Wall) galvanized steel tube, 1/4" sheet HRPO steel and 3/16" sheet HRPO steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 3 man hours
**Concrete Req.:** Approx. 7.5 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 235 lbs.
**Fall Height:** 25" (640 mm)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach 5" clamps to arches, using 5/8" x 1 1/2" BHCS w/pin (with anti-sieze). Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Refer to the Handrail Attachment Detail.

3) Fasten handrails to ball retainers at height shown, using ball clamps and 3/8" x 1 1/8" BHCS w/pin. Handrails should be parallel. Refer to the Handrail Attachment Detail. **NOTE:** *5" Clamps may need to be adjusted to connect handrails and position properly. Retighten 5" clamp fasteners when handrails are in proper position.*

4) Attach pods to PodStomper assembly, using 3/8" x 7/8" BHCS w/pin and 3/8" SAE Flat washers. Refer to the Pod Attachment Detail.

5) Attach PodStomper assembly to seesaw leg, using 1/2" x 1 1/4" hex cap screws with 1/2" flat washers and 1/2" standard hex nuts with 1/2" flat washers. Refer to the Direct Bury Detail.

6) Place PodStomper assembly with seesaw leg in footing hole. With handrails and leg plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure. **NOTE:** *PodStomper assembly should be parallel with handrails.*

7) Install protective surfacing 2" - 4" above bottom of PodStomper assembly before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53850 Document 16814900 replaces 16126100. Changed 5" clamp part number.

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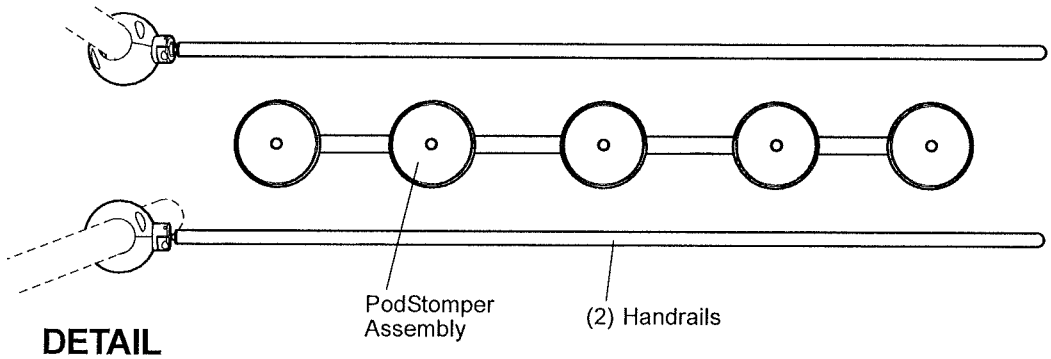
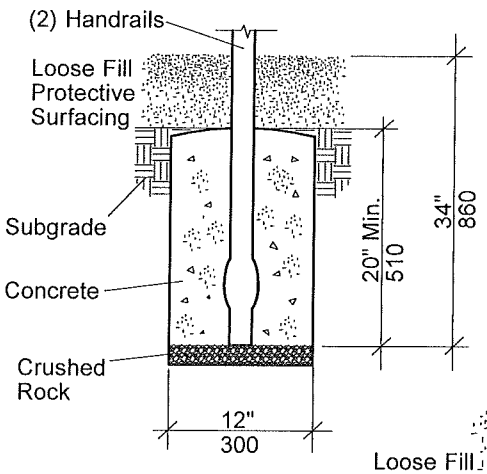
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

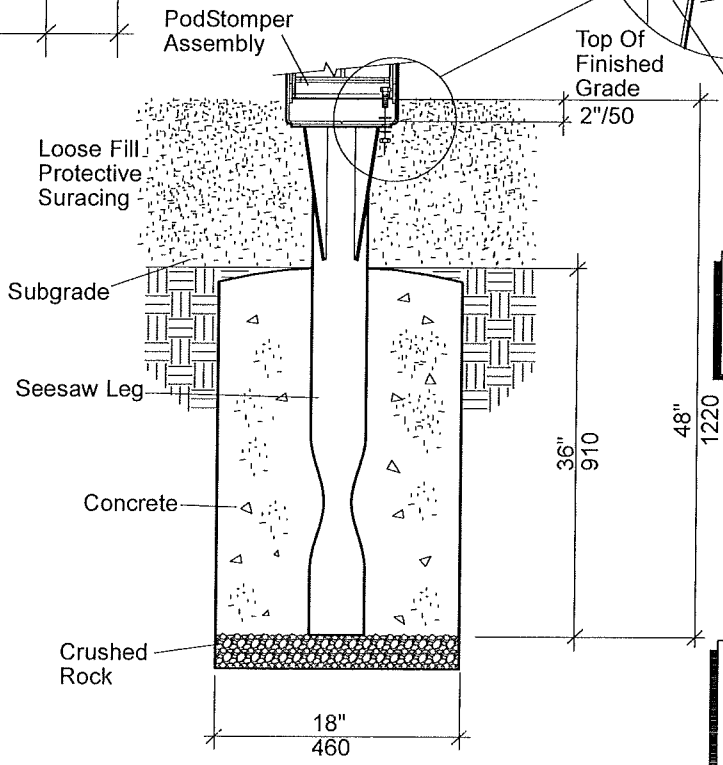
## PLAN VIEW

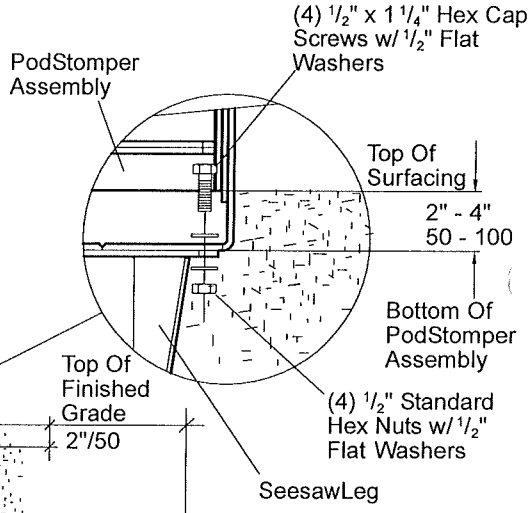



## DETAIL
### HANDRAIL ATTACHMENT




## DETAIL
### DIRECT BURY




**NOTE: Surfacing must be maintained between 2"-4" above the bottom of the base.**

**NOTE:**
**In loose sandy soil conditions, a larger footing may be necessary.**

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# 156464 PodStomper® Bridge



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Document #16814900

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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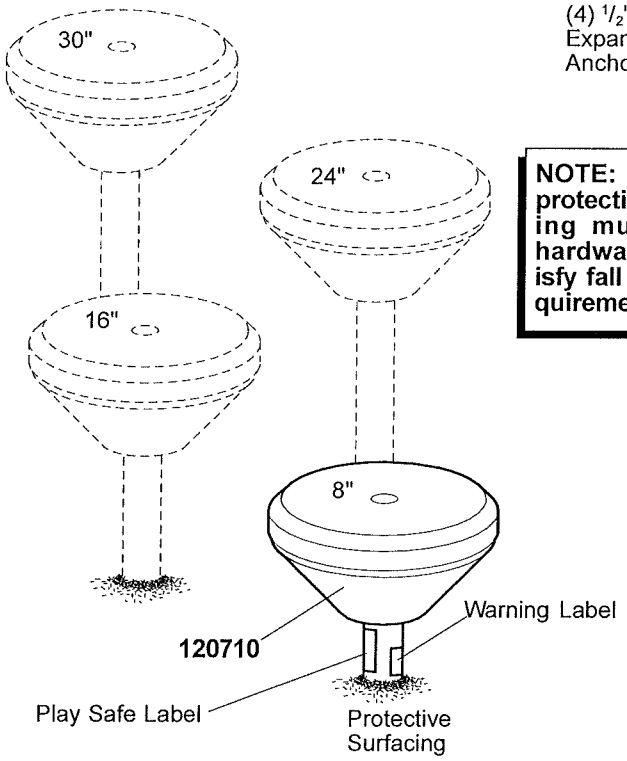
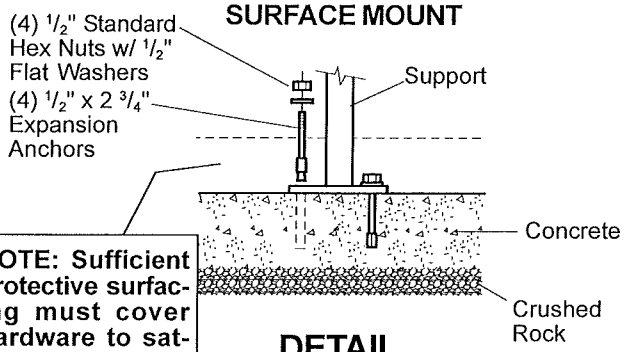
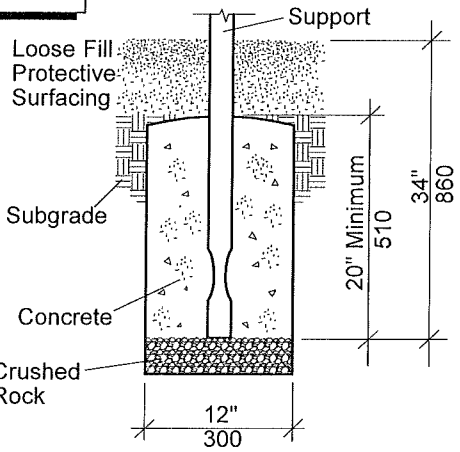



## DETAIL
### SURFACE MOUNT

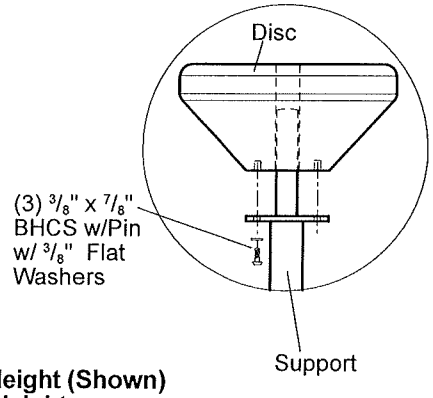



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

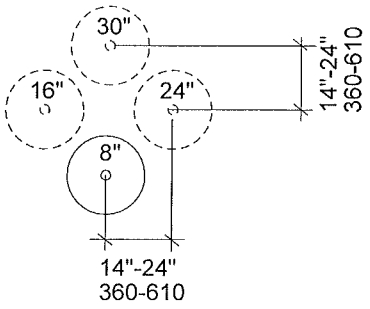
## DETAIL
### DIRECT BURY




## DETAIL
### DISC ATTACHMENT




## PLAN VIEW/FOOTING LAYOUT
**(Layout Varies - See Your Plan)**




**120710 8" Height (Shown)**
**158997 10" Height**
**120711 16" Height**
**158998 20" Height**
**120712 24" Height**
**120713 30" Height**

Climbers

# Pod Climbers

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 126956-00 | Disc, Specify Color | * |
| 169340-00 | Support 8" (SM), Specify Color | * |
| 169339-00 | Support 8" (DB), Specify Color | * |
| 169342-00 | Support 10" (SM), Specify Color | * |
| 169341-00 | Support 10" (DB), Specify Color | * |
| 169344-00 | Support 16" (SM), Specify Color | * |
| 169343-00 | Support 16" (DB), Specify Color | * |
| 156625-00 | Support 20" (SM), Specify Color | * |
| 156627-00 | Support 20" (DB), Specify Color | * |
| 120605-00 | Support 24" (SM), Specify Color | * |
| 120601-00 | Support 24" (DB), Specify Color | * |
| 153987-00 | Support 30" (SM), Specify Color | * |
| 153988-00 | Support 30" (DB), Specify Color | * |
| **183871-00** | **Disc Climber Hardware Package** | 1 |
| 100196-00 | $^3/_8$" x $^7/_8$" BHCS w/Pin, SST | 3 |
| 100365-00 | $^3/_8$" Flat Washer, SST | 3 |
| 156847-00 | Play Safe Label, 5-12 Yrs. | 1 |
| 183064-00 | Warning Label | 1 |
| **121348-00** | **4 Hole (SM) Hardware Package** | 1 |
| 100266-00 | $^1/_2$" x 2 $^3/_4$" Expansion Anchor | 4 |
| 100322-00 | $^1/_2$" Standard Hex Nut, SST | 4 |
| 100363-00 | $^1/_2$" Flat Washer, SST | 4 |

**DB = Direct Bury**
**SM = Surface Mount**
*** = Quantity Determined By Your Order**

## Specifications

**Disc:** Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, color specified.

**Support:** Weldment comprised of 1.900" O.D. RS20 (.090" - .100" Wall), 1.315" O.D. RS20 (.080" - 090" Wall) and $^3/_{16}$" x 5" diameter plate. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **SM** - Approx. $^1/_2$ man hour each
**DB** - Approx. $^3/_4$ man hour each

**Concrete Req.:** Approx. 1.31 cu. ft. each

**Weight:**
8" - 12 lbs.
10" - 13 lbs.
16" - 14 lbs.
20" - 15 lbs.
24" - 15 lbs.
30" - 16 lbs.

## Installation Instructions

1) **(Direct Bury)** Dig footing as shown. See your Plan View/Footing Layout.

2) Attach disc to support using $^3/_8$" x $^7/_8$" BHCS w/pin with $^3/_8$" flat washers, as shown.

3) **(Direct Bury)** Position support in footing hole and pour concrete footing. With support post plumb, prop support to hold in position.

   **(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in support plate. Remove disc climber. Drill 3" deep holes on marks into concrete slab using hammer drill and $^1/_2$" masonry bit. Tap expansion anchors into holes and secure disc climber using $^1/_2$" standard hex nuts with $^1/_2$" flat washers.

4) Apply labels as shown.

5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54517 Document #18381300 replaces #16934500. Added warning label to hardware package.

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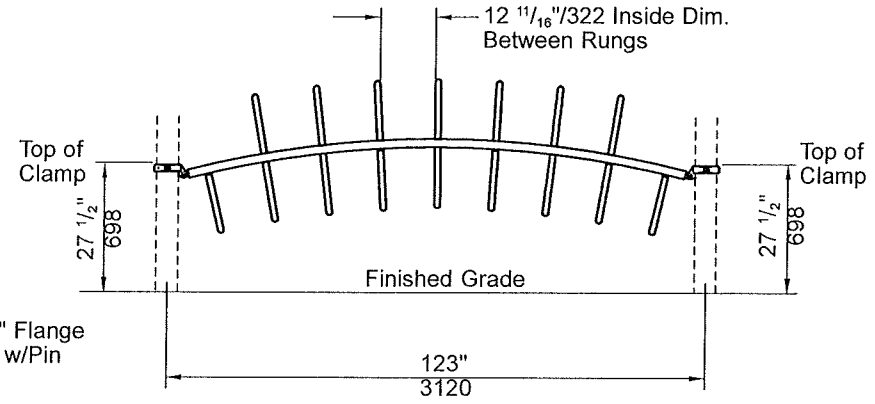
**SAFETY NOTE**

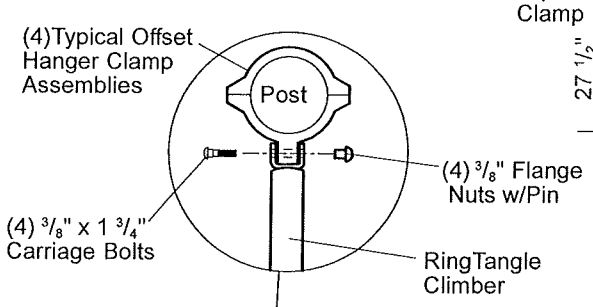
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

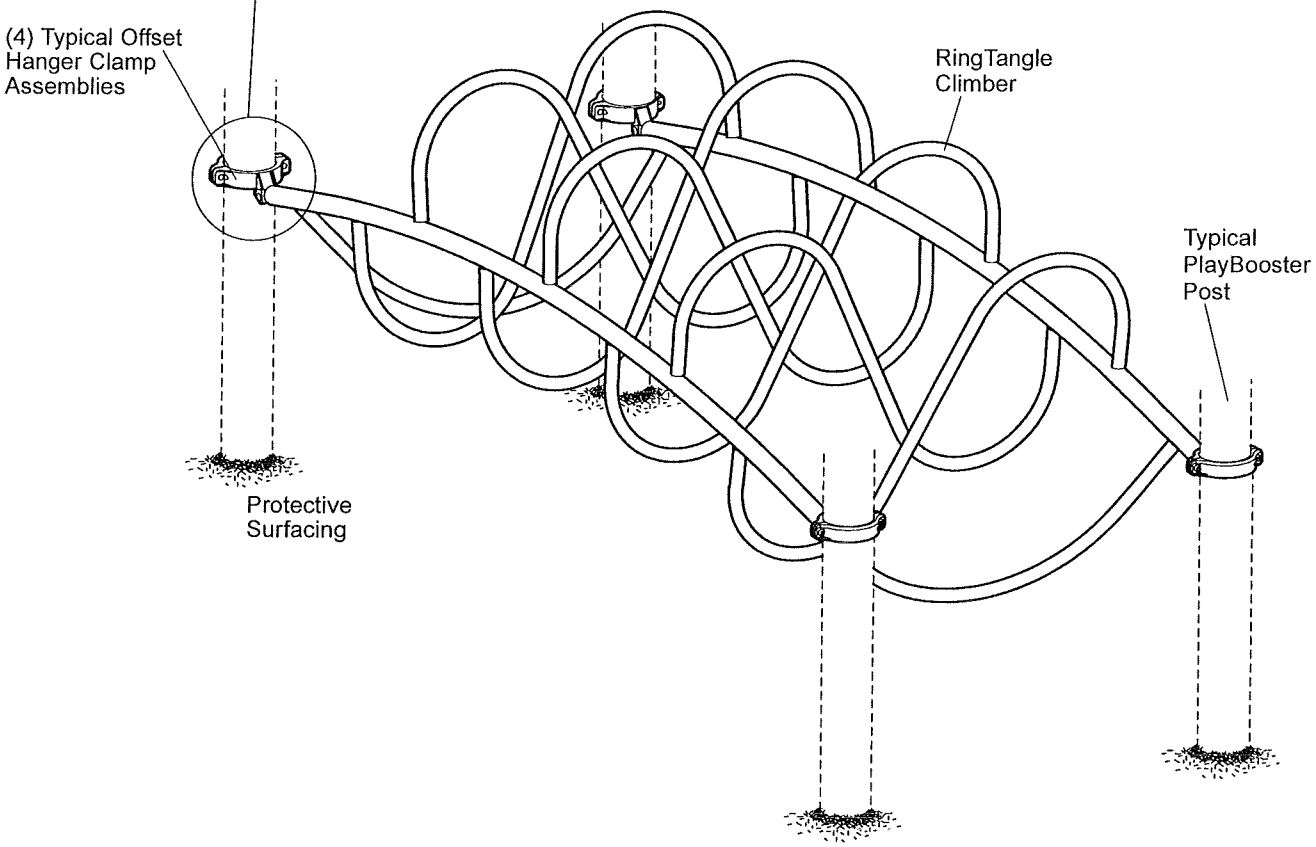
18558700

## ELEVATION




## DETAIL




# PlayBooster® 185583 RingTangle® Climber, Ground Level

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# PlayBooster® 185583 RingTangle® Climber, Ground Level

## Parts List

| Part # | Description | Qty. |
|---|---|---|
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 4 |
| 105327-01 | 5" Half Clamp, Specify Color | 4 |
| 113729-00 | 5" Offset Hanger Clamp, Specify Color | 4 |
| 163333-00 | RingTangle Climber, Specify Color | 1 |
| **185586-00** | **RingTangle Ground Level Hardware Package** | 1 |
| 100148-00 | 3/8" x 1 3/4" Carriage Bolt, SST | 4 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 |
| 100351-00 | 3/8" Tee Nut, SST | 8 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 4 |

## Specifications

**RingTangle® Climber:** Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120" - .130") (3,04 mm - 3,30 mm) wall galvanized steel tubing, 1.315" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm - 2,28 mm) wall galvanized steel tubing and 3/16" (4,74 mm) HRPO flat steel. Finish: ProShield®, color specified.

**Clamps:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 3/4 man hour
**Min. Use Zone:** 6' (1,82 m)
**Weight:** 114 lbs.
**Fall Height:** 20" (508 mm)

## Installation Instructions

1) Attach offset hanger clamps to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
2) Attach RingTangle Climber to offset hanger clamp assemblies, using 3/8" x 1 3/4" carriage bolts and 3/8" flange nuts w/pin. Refer to Detail.
3) Install 1/4" x 5/8" drive rivets in 5" half clamps. Refer to the Offset Hanger Clamp Spec Sheet.
4) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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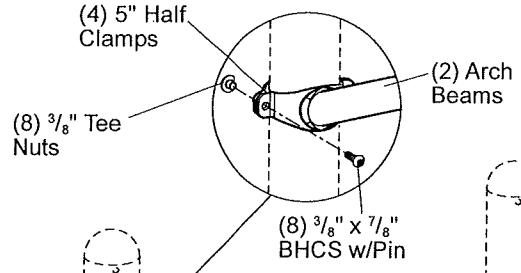
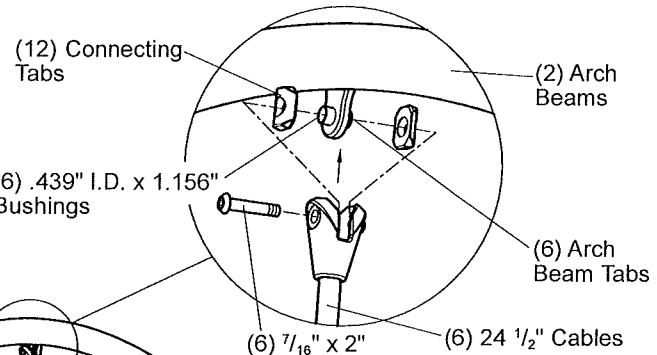
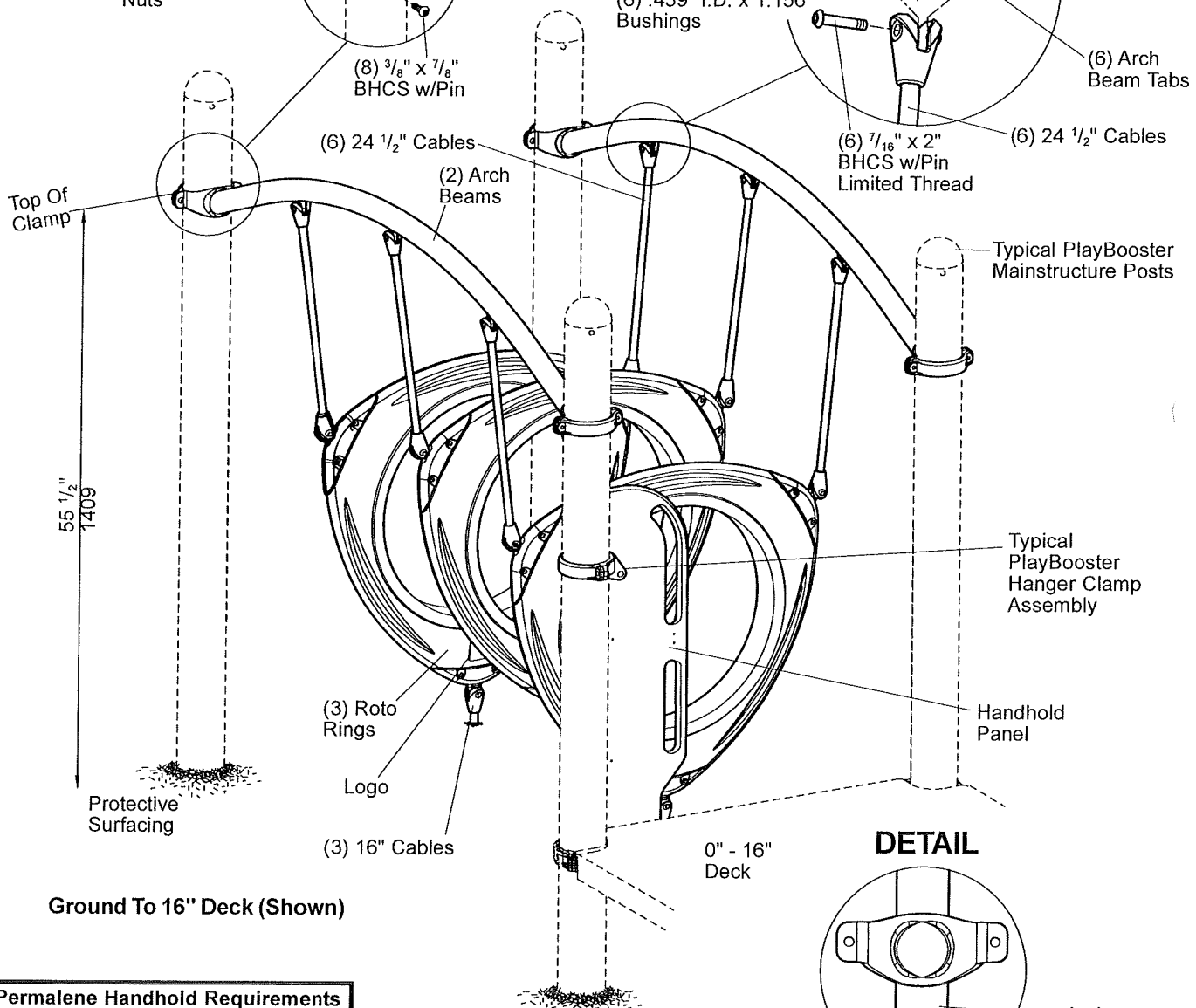
## DETAIL
### ARCH BEAM ATTACHMENT



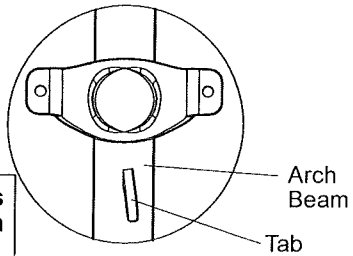

## DETAIL
### CABLE ATTACHMENT




**Ground To 16" Deck (Shown)**

## DETAIL




| Permalene Handhold Requirements | |
|---|---|
| Ground | 16" Deck |
| No Handholds | 1 Handhold |

**NOTE: Attach arch beams to posts with tabs angled towards each other.**

# PlayBooster® 184605 O-Zone® Climber, w/ Permalene® Handholds



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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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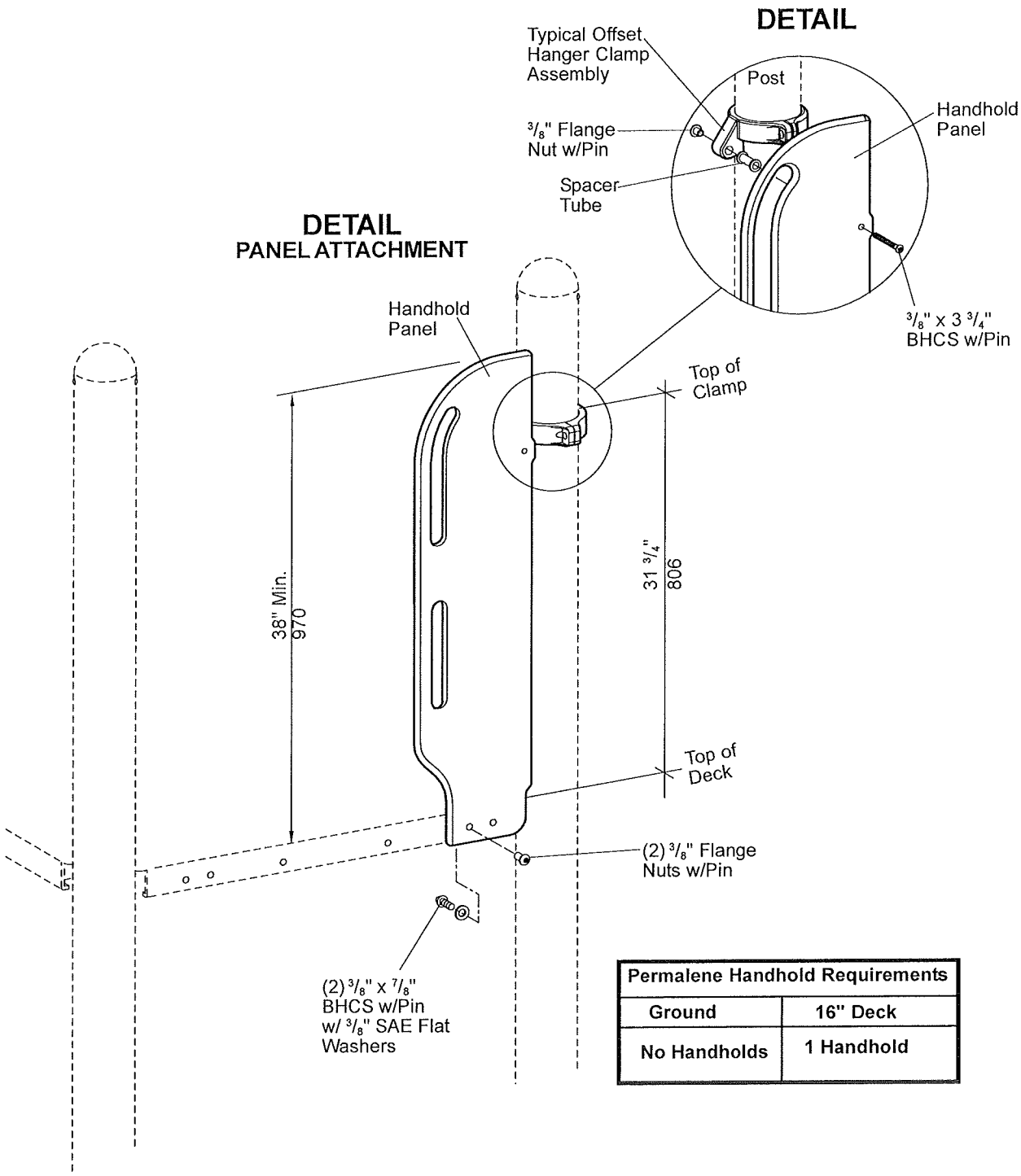


| Permalene Handhold Requirements | |
|---|---|
| Ground | 16" Deck |
| No Handholds | 1 Handhold |

# PlayBooster® 184605 O-Zone® Climber, w/ Permalene® Handholds

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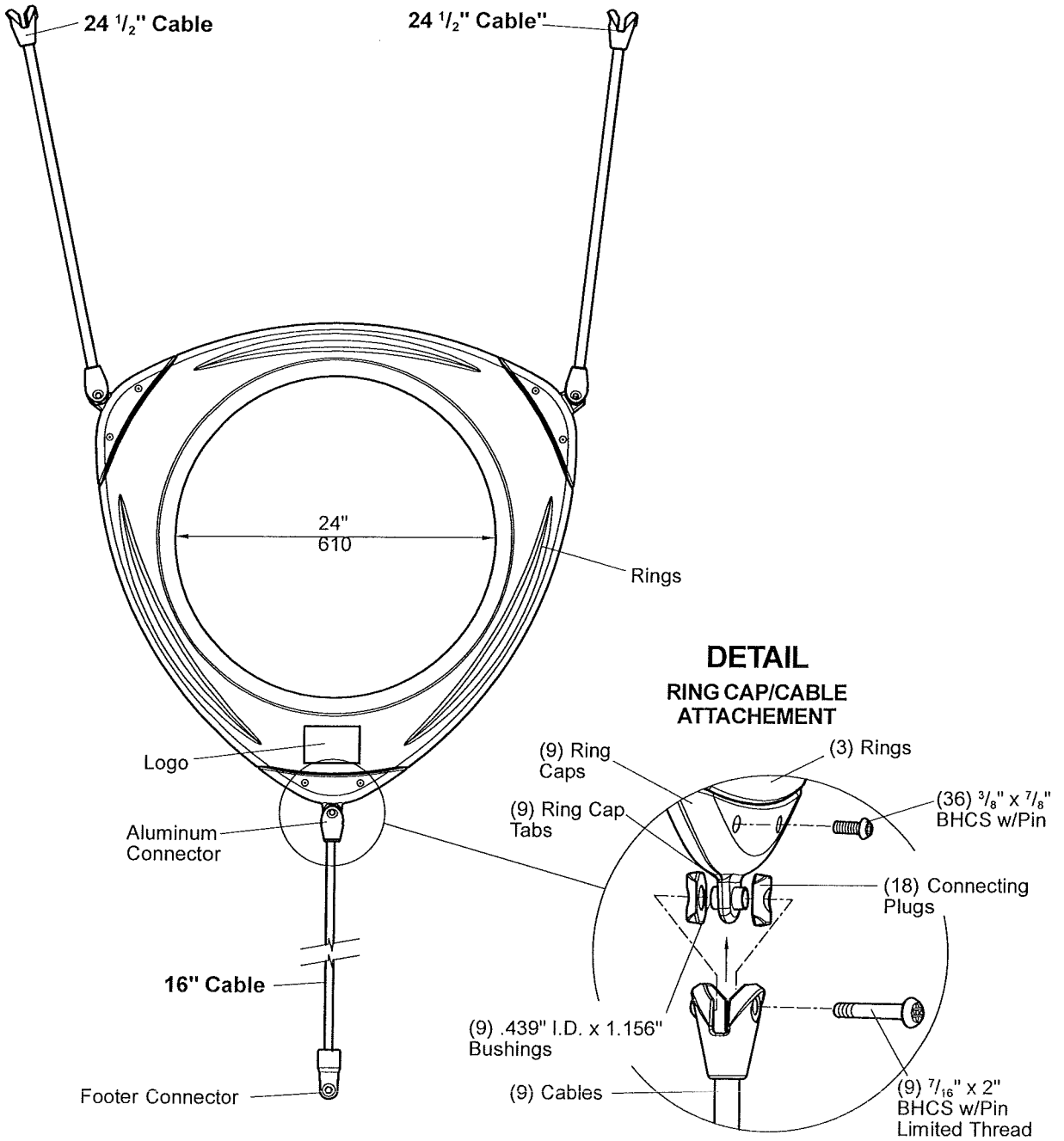


# PlayBooster® 184605 O-Zone® Climber, w/ Permalene® Handholds



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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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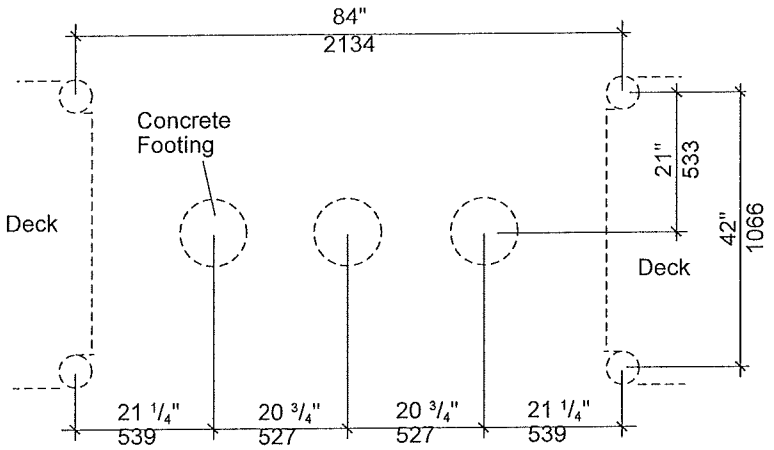
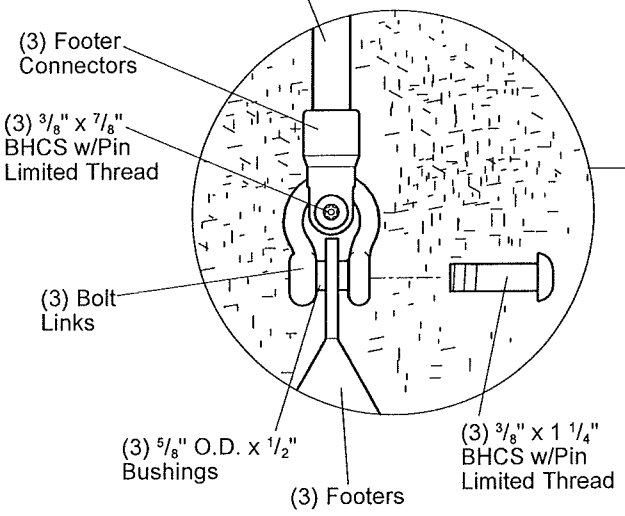
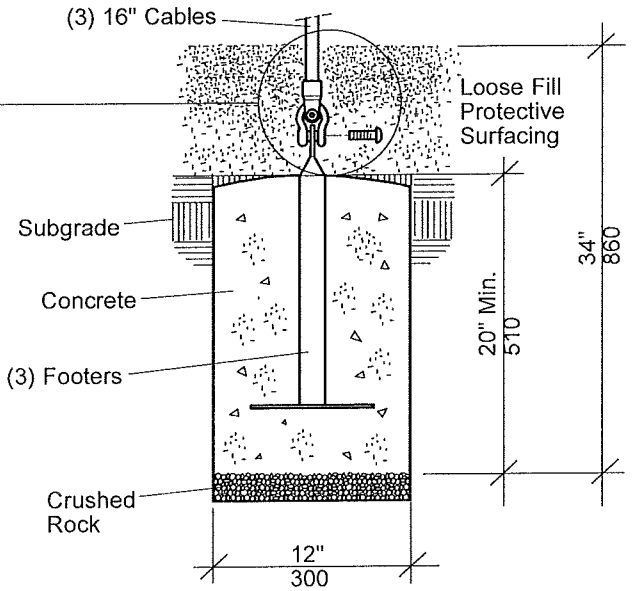
# PLAN VIEW/FOOTING LAYOUT




## DETAIL




## DETAIL
### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cable.**

PlayBooster® **184605 O-Zone® Climber, w/ Permalene® Handholds**

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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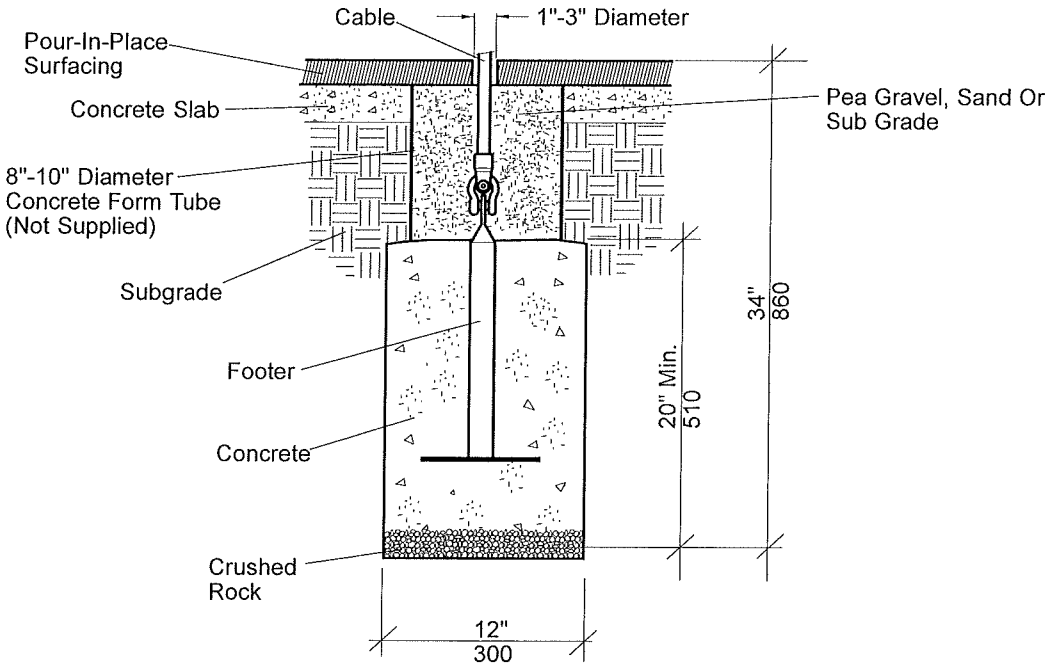
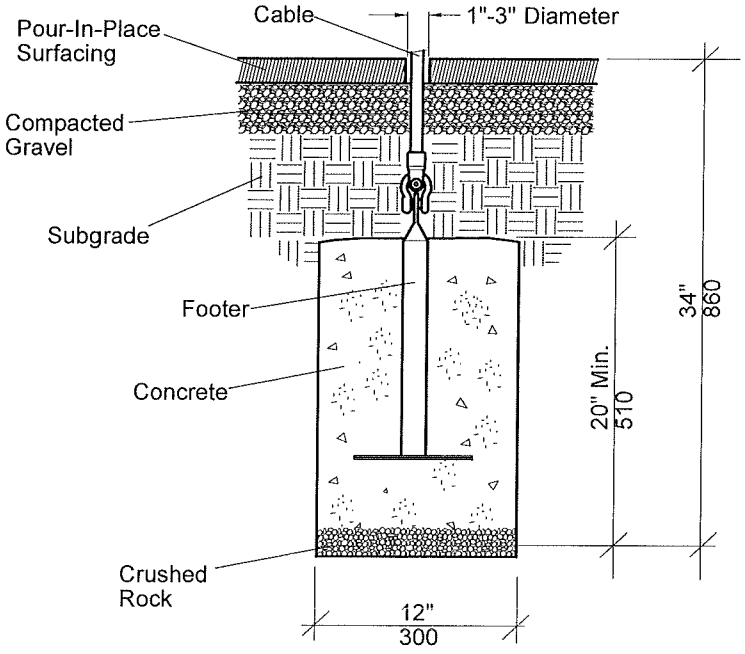
## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING ( COMPACTED GRAVEL)





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# PlayBooster® 184605 O-Zone® Climber, w/ Permalene® Handholds

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| | **Ground To Ground** | |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL./SST | 4 |
| 105327-01 | 5" Half Clamp, Specify Color | 4 |
| 154458-00 | O-Zone Ring, Specify Color | 3 |
| 164009-00 | O-Zone Ring Cap, Specify Color | 9 |
| 164367-00 | Footer, Specify Color | 3 |
| 183027-00 | O-Zone Cable, 24 1/2" Long | 6 |
| 183771-00 | O-Zone Cable, 16" Long | 3 |
| 183029-00 | Arch Beam, Specify Color | 2 |
| **184645-00** | **PlayBooster O-Zone Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 44 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 3 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 3 |
| 100351-00 | 3/8" Tee Nut, Specify Color | 8 |
| 138915-00 | Bolt Link, SST | 3 |
| 156962-00 | 5/8" O.D. x 1/2" Bushing, SST | 3 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 15 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 15 |
| 162729-00 | Connecting Plug | 30 |
| | **Ground To 16" Deck** | |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL./SST | 5 |
| 105327-01 | 5" Half Clamp, Specify Color | 5 |
| 113468-00 | 7/8" O.D. x 1 11/16" Spacer Tube, AL. | 1 |
| 3729-00 | 5" Offset Rail Hanger Clamp, Specify Color | 1 |
| 9563-00 | Handhold Panel, Specify Color | 1 |
| 154458-00 | O-Zone Ring, Specify Color | 3 |
| 164009-00 | O-Zone Ring Cap, Specify Color | 9 |
| 164367-00 | Footer, Specify Color | 3 |
| 183027-00 | O-Zone Cable, 24 1/2" Long | 6 |
| 183771-00 | O-Zone Cable, 16" Long | 3 |
| 183029-00 | Arch Beam, Specify Color | 2 |
| **124900-00** | **Deck Mount Panel Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 4 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100351-00 | 3/8" Tee Nut, SST | 4 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 4 |
| 124460-00 | 3/8" x 3 3/4" BHCS w/Pin, SST | 2 |
| **139861-00** | **Handhold Panel Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 2 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 2 |
| 100351-00 | 3/8" Tee Nut, SST | 2 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 3 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 2 |
| 124460-00 | 3/8" x 3 3/4" BHCS w/Pin, SST | 1 |
| **184645-00** | **PlayBooster O-Zone Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 44 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 3 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 3 |
| 100351-00 | 3/8" Tee Nut, Specify Color | 8 |
| 138915-00 | Bolt Link, SST | 3 |
| 156962-00 | 5/8" O.D. x 1/2" Bushing, SST | 3 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 15 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 15 |
| 162729-00 | Connecting Plug | 30 |

| | | |
|---|---|---|
| | **16" Deck To 16" Deck** | |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL./SST | 6 |
| 105327-01 | 5" Half Clamp, Specify Color | 6 |
| 113468-00 | 7/8" O.D. x 1 11/16" Spacer Tube, AL. | 2 |
| 113729-00 | 5" Offset Rail Hanger Clamp, Specify Color | 2 |
| 139563-00 | Handhold Panel, Specify Color | 2 |
| 154458-00 | O-Zone Ring, Specify Color | 3 |
| 164009-00 | O-Zone Ring Cap, Specify Color | 9 |
| 164367-00 | Footer, Specify Color | 3 |
| 183027-00 | O-Zone Cable, 24 1/2" Long | 6 |
| 183771-00 | O-Zone Cable, 16" Long | 3 |
| 183029-00 | Arch Beam, Specify Color | 2 |
| **139861-00** | **Handhold Panel Hardware Package** | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 4 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100351-00 | 3/8" Tee Nut, SST | 4 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 4 |
| 124460-00 | 3/8" x 3 3/4" BHCS w/Pin, SST | 2 |
| **184645-00** | **PlayBooster O-Zone Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 44 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 3 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 3 |
| 100351-00 | 3/8" Tee Nut, Specify Color | 8 |
| 138915-00 | Bolt Link, SST | 3 |
| 156962-00 | 5/8" O.D. x 1/2" Bushing, SST | 3 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 15 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 15 |
| 162729-00 | Connecting Plug | 30 |

Specifications are subject to change without notice.

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# PlayBooster® 184605 O-Zone® Climber, w/ Permalene® Handholds

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## Specifications

**Ring:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Arch Beam:** Weldment comprised of 2.375" (60,32 mm) O.D. RS20 (.095" - .105") (2,41 mm-2,66 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO flat steel and 3/8" (9,52 mm) HRPO flat steel. Finish: ProShield®, color specified.

**Upper Cable:** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connector)** 6061-T6 aluminum. Finish: ProShield, black in color.

**Lower Cable:** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connector)** 6061-T6 aluminum. Finish: ProShield, black in color. **(Footing Connector)** Fabricated from 1.250" (31,75 mm) O.D. 6061-T6 aluminum.

**Ring Caps:** Fabricated from sand-cast alloy 356. Finish: ProShield, color specified.

**Footer:** Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085" - .095") ( 2,15 mm-2,41 mm) wall galvanized steel tubing and 3/16" (4,74 mm) HRPO sheet steel. Finish: ProShield, color specified.

**Spacer Tube:** Made from 6061-T6 aluminum 7/8" (22,22 mm) O.D. x 1 11/16" (42,84 mm). Finish: ProShield, color specified.

**Handhold Panel:** Solid color Permalene®, color specified.

**Clamp:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 4 man hours
**Concrete Req.:** Approx. 3.93 cu. ft.
**Area Req.:** 6' (1,82 m) minimum use zone
**Weight:** Ground to Ground 121 lbs.
Ground to 16" Dk. 133 lbs.
16" Dk. to 16" Dk. 145 lbs.
**Fall Height:** 40" (1016 mm)

## Installation Instructions

1) **(Direct Bury) Refer to the Plan View/Footing Layout.**

2) **(16" Deck Heights)** Attach handhold panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Refer to the Panel Attachment Details.

   Attach offset hanger clamps to post at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.

   Attach handhold panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS w/Pin, spacer tubes and 3/8" flange nuts w/pin. See Handhold Panel Attachment Detail. **NOTE:** *One handhold panel is required for the 16" deck heights.*

3) Mark posts for the appropriate height of the beam you are installing.

4) Attach arch beams to posts, using 5" half clamps with 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts. Refer to the Arch Beam Attachment Detail.

5) Attach ring caps to rings, using 3/8" x 7/8" BHCS w/pin. Refer to the Ring Cap/Cable Attachment Detail.

6) Attach lower cable with footing connector to ring cap tab located below logo, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolt. Attach upper cables to remaining ring cap tabs as shown, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to Ring Cap/Cable Attachment Detail.

7) Attach roto rings to arch beam tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolt.

8) Attach bolt links to footer connectors, using 3/8" x 7/8" BHCS w/pin limited thread bolts.

9) Attach footers to footer connectors, using 5/8" O.D. x 1/2" bushings, and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Refer to Footer Attachment Details.

10) Pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure. Refer to Footer Attachment Details. **NOTE:** *Cables attached to footers should be taut and plumb.*

    **(Direct Bury With Pour-In Place Surfacing)** Cut 3 lengths of concrete form tubes (not supplied) long enough to set on top of concrete footings and be level with top of concrete slab. Concrete form tubes should be 8"-10" in diameter. Disconnect cables from bolt links. Place concrete form tubes over cables and footers. Connect cables to bolt links. Fill concrete form tubes with pea gravel, sand or subgrade. Pour concrete slab. After concrete slab has cured, pour surfacing. **NOTE:** *When pouring surfacing leave a 1"-3" diameter opening around cables. Refer to the Direct Bury Pour-In-Place Surfacing Detail.*

11) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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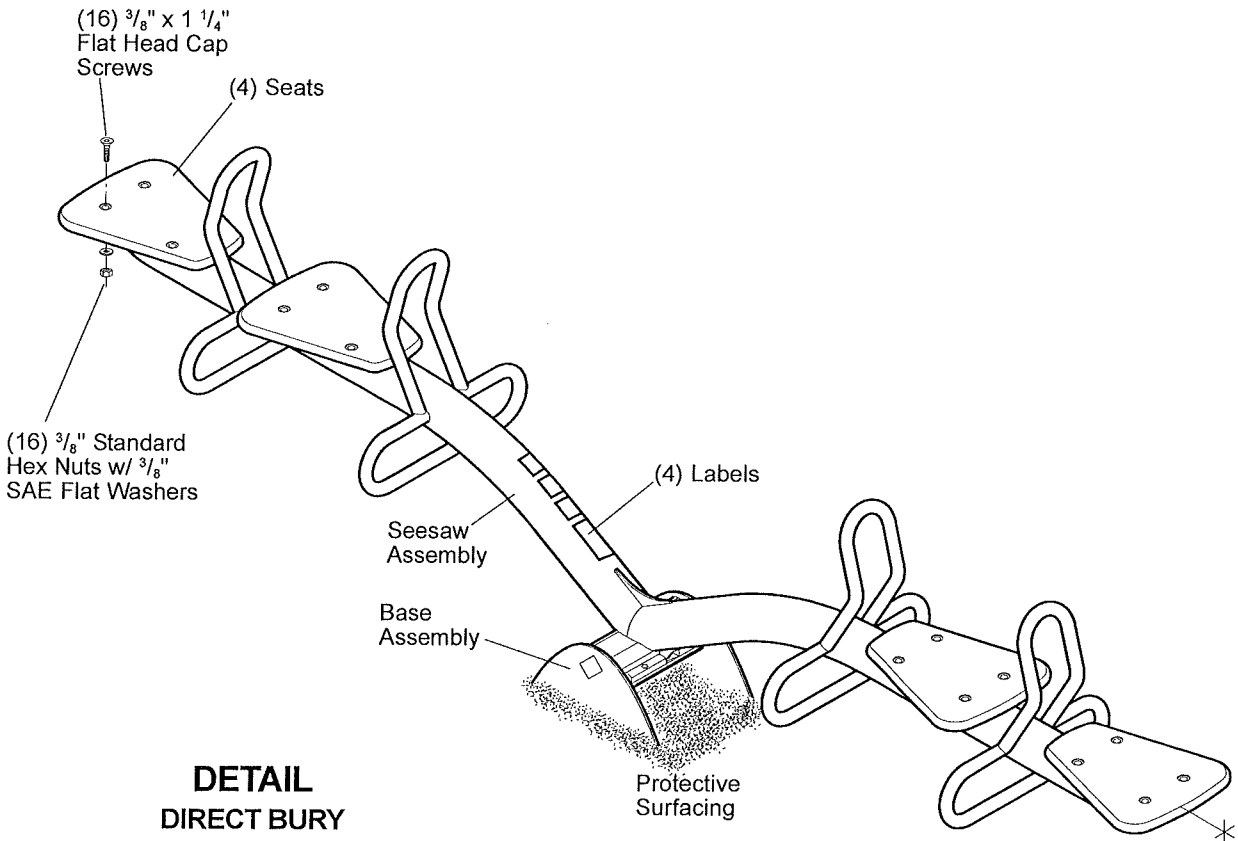
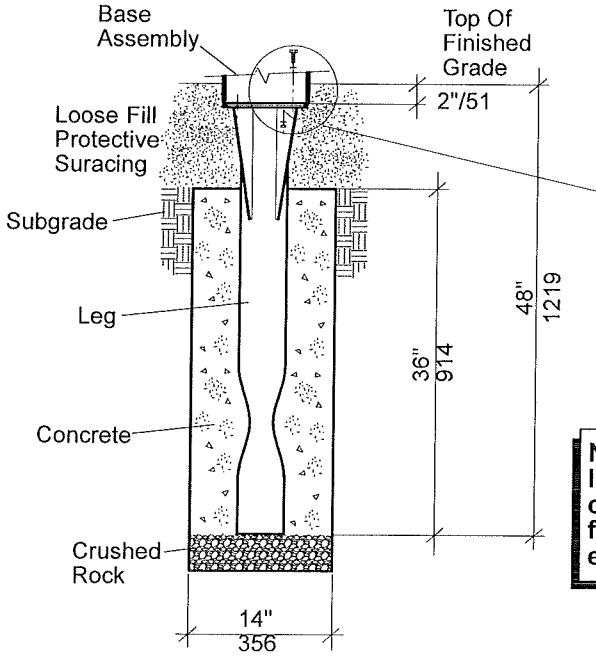
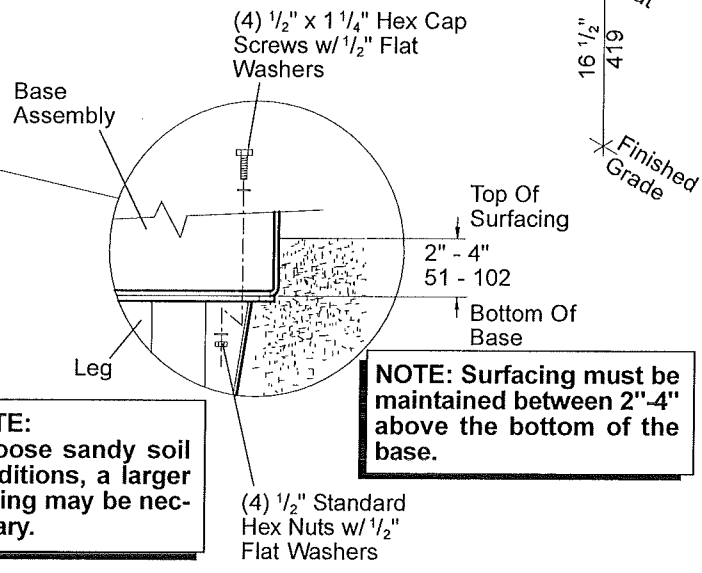



## DETAIL
### DIRECT BURY




**NOTE:**
**In loose sandy soil conditions, a larger footing may be necessary.**

**NOTE: Surfacing must be maintained between 2"-4" above the bottom of the base.**

**Kids In Motion** **148637 Seesaw, 4-Seat** Sheet 1 of 2

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Document #18577900

# Kids In Motion 148637 Seesaw, 4-Seat

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 148881-00 | Leg (DB), Specify Color | 1 |
| 160199-00 | Seat, Tan/Black | 4 |
| 146007-00 | 5/16" 6-Lobe T-45 Bit | 1 |
| 146017-00 | 5/16" 6-Lobe T-45 Key | 1 |
| **149309-00** | **Seesaw 4-Place Assembly, Specify Color** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 8 |
| 100351-00 | 3/8" T-Nut, SST | 12 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 4 |
| 128296-00 | 3/8" Hex Jam Nut, SST | 12 |
| 146453-00 | Seesaw 4-Place Weldment, Specify Color | 1 |
| 156257-00 | Base Assembly, Specify Color | 1 |
| 149173-00 | Torsion Half Clamp, Specify Color | 1 |
| 185471-00 | 9/16" O.D. Spacer, Aluminum | 4 |
| 156370-00 | Bolt Cover, Tan | 4 |
| 149272-00 | 3/8" D-Cut Flat Washer, SST | 8 |
| 181001-00 | 1.125" O.D. x 5 7/8" Long Polyurethane Rod | 4 |
| 154164-00 | Bushing | 4 |
| **184513-00** | **4-Seat Seesaw Hardware Package** | 1 |
| 100252-00 | 3/8" x 1 1/4" Flat Head Cap Screw, SST | 16 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 16 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 16 |
| 156846-00 | Play Safe Label, 2-12 Years | 1 |
| 182213-00 | Hot Surface Warning Label | 1 |
| 182212-00 | Entanglement Warning Label | 1 |
| 15176-00 | Hard Surface Warning Label | 1 |
| 1765-00 | **Seesaw Leg Hardware Package (DB)** | 1 |
| 100216-00 | 1/2" x 1 1/4" Hex Cap Screw, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 8 |
| 129692-00 | 1/2" Standard Hex Nut, SST/Patch | 4 |
| **120202-00** | **Spring Animal Hardware Package (SM)** | 1 |
| 100262-00 | 1/2" x 6" L-Anchors | 4 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |

**DB = Direct Bury**
**SM = Surface Mount**

## Specifications

**Seesaw Assembly:** **(Seesaw)** Weldment comprised of 3.500" O.D. RS20 (.125" wall) galvanized steel tube, 1.029" O.D. RS20 (.070"-.080" wall) galvanized steel tube, 1/8" HRPO flat steel, 12 Ga. (.105") sheet HRPO steel and 1/4" sheet HRPO steel. Finish: ProShield®, color specified.

**(Base Assembly)** Weldment comprised of 1/4" sheet HRPO steel and 2" square steel bar. Finish: ProShield, color specified.

**(Torsion Half Clamp)** Fabricated from 1/4" sheet HRPO steel. Finish: ProShield, color specified.

**(Polyurethane Rod)** 1.125" O.D.

**(Bolt Covers)** ABS Polymer Thermoplastic, Tan in color.

**(Bushings)** Plastic (UHMW), Black in color.

**Leg:** Weldment comprised of 5.000" O.D. x 11 Ga. (.120") galvanized steel tube, 1/4" sheet HRPO steel and 3/16" sheet HRPO steel. Finish: ProShield, color specified.

**Seat:** Permalene®, Tan/Black in color.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **DB** - Approx. 2 man hours
**SM** - Approx. 2 man hours

**Concrete Req.:** **DB** - Approx. 3 cu. ft.
**SM** - Approx. 1.5 cu. ft. (existing concrete slab)

**Weight:** **DB** - 167 lbs.
**SM** - 125 lbs.

**Area Required:** 12' 11" x 21' 7" (3,94 m x 6,58 m)

**Fall Height:** 29" (700 mm)

## Installation Instructions

1) **(Direct Bury)** Dig footing to depth as shown. Refer to the Direct Bury Detail.
2) Attach seats to to seesaw assembly using 3/8" x 1 1/4" flat head cap screws and 3/8" standard hex nuts with 3/8" SAE flat washers.
3) Lay Seesaw on its side and attach leg using 1/2" x 1 1/4" hex cap screws with 1/2" flat washers and 1/2" standard hex nuts with 1/2" flat washers.
4) Lift Seesaw upright and place leg in footing hole. With Stand-up Seesaw plumb pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.
5) Apply Play Safe and Warning Labels, as shown.
6) Install protective surfacing 2" - 4" above bottom of base assembly before users are allowed to play on the component.

1) **(Surface Mount )** Cut a rectangular hole in existing concrete to size as shown. After existing concrete has been removed, dig down deep enough to allow for compacted crushed rock and 8" of concrete. Refer to the Surface Mount and Concrete Base Details. **NOTE:** *When pouring new concrete slab, Seesaw base assembly with L-anchors requires a depth of 8" minimum directly under base.*
2) Lay seesaw on its side. Using the base assembly as a pattern, make a plywood template for L-anchor placement and fasten L-anchors to template. Allow 3/4" - 7/8" of thread to protrude from template.
3) Pour concrete in footing hole and lay template on surface of concrete. Push L-anchors into concrete and level plywood template. Allow concrete to cure for 72 hours before removing template. Refer to the Plywood Template Detail.
4) Attach seats to to seesaw assembly using 3/8" x 1 1/4" flat head cap screws and 3/8" standard hex nuts with 3/8" SAE flat washers.
5) Lift Seesaw assembly upright and place over L-anchors. Fasten Seesaw assembly to L-anchors using 1/2" standard hex nuts with 1/2" flat washers.
6) Apply Play Safe and Warning Labels, as shown.
7) Install protective surfacing 2" - 4" above bottom of base assembly before users are allowed to play on the component.

Specifications are subject to change without notice.

Eco #54591 Document #18577900 replaces #18452100. Changed 9/16 O.D. spacer to aluminum.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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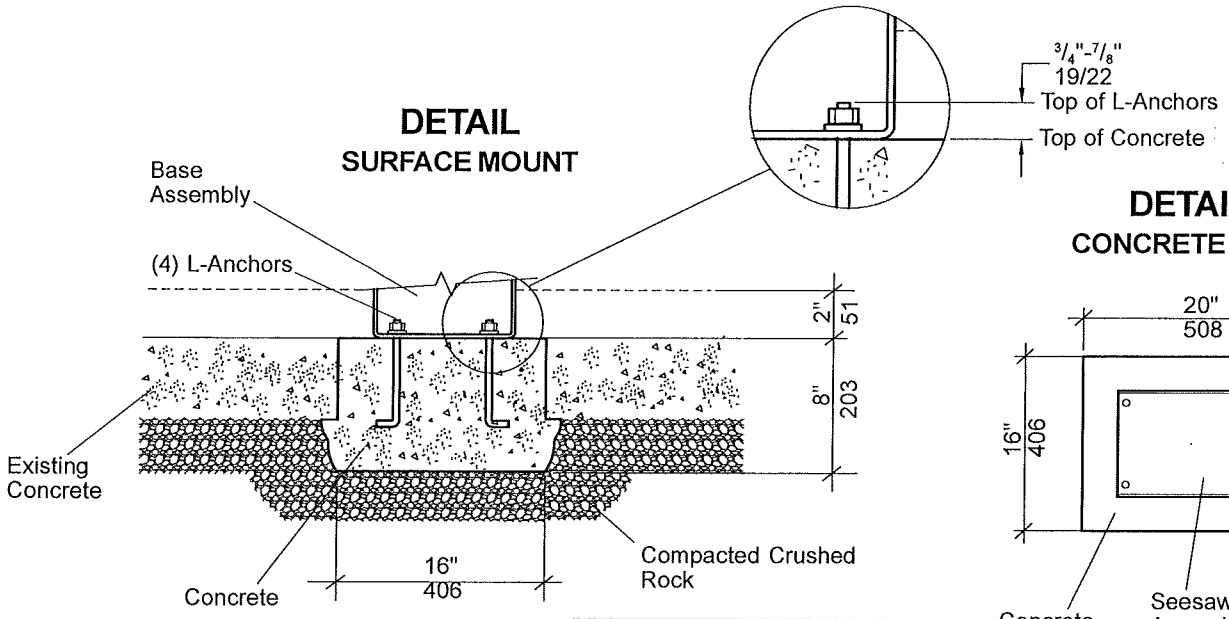
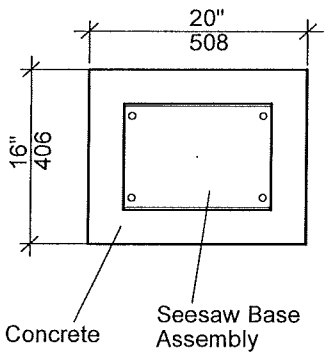
## DETAIL
### SURFACE MOUNT

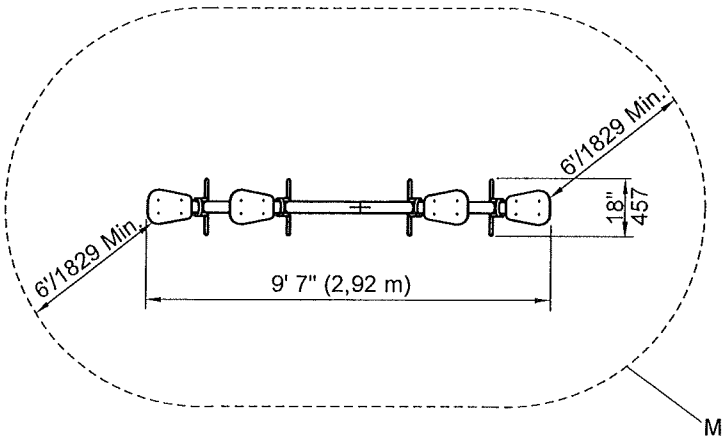



## DETAIL
### CONCRETE BASE

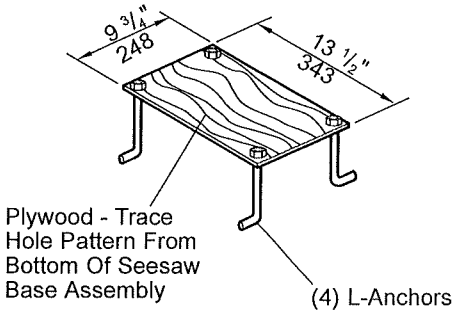



**NOTE: When pouring new concrete slab, Seesaw base assembly with L-anchors requires a depth of 8" minimum directly under base.**

## PLAN VIEW




## DETAIL
### PLYWOOD TEMPLATE



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ISO 14001 CERTIFIED

ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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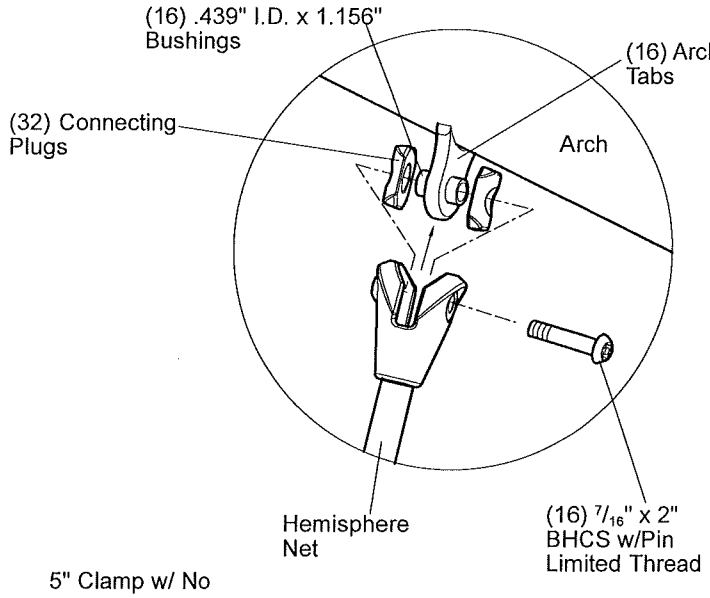
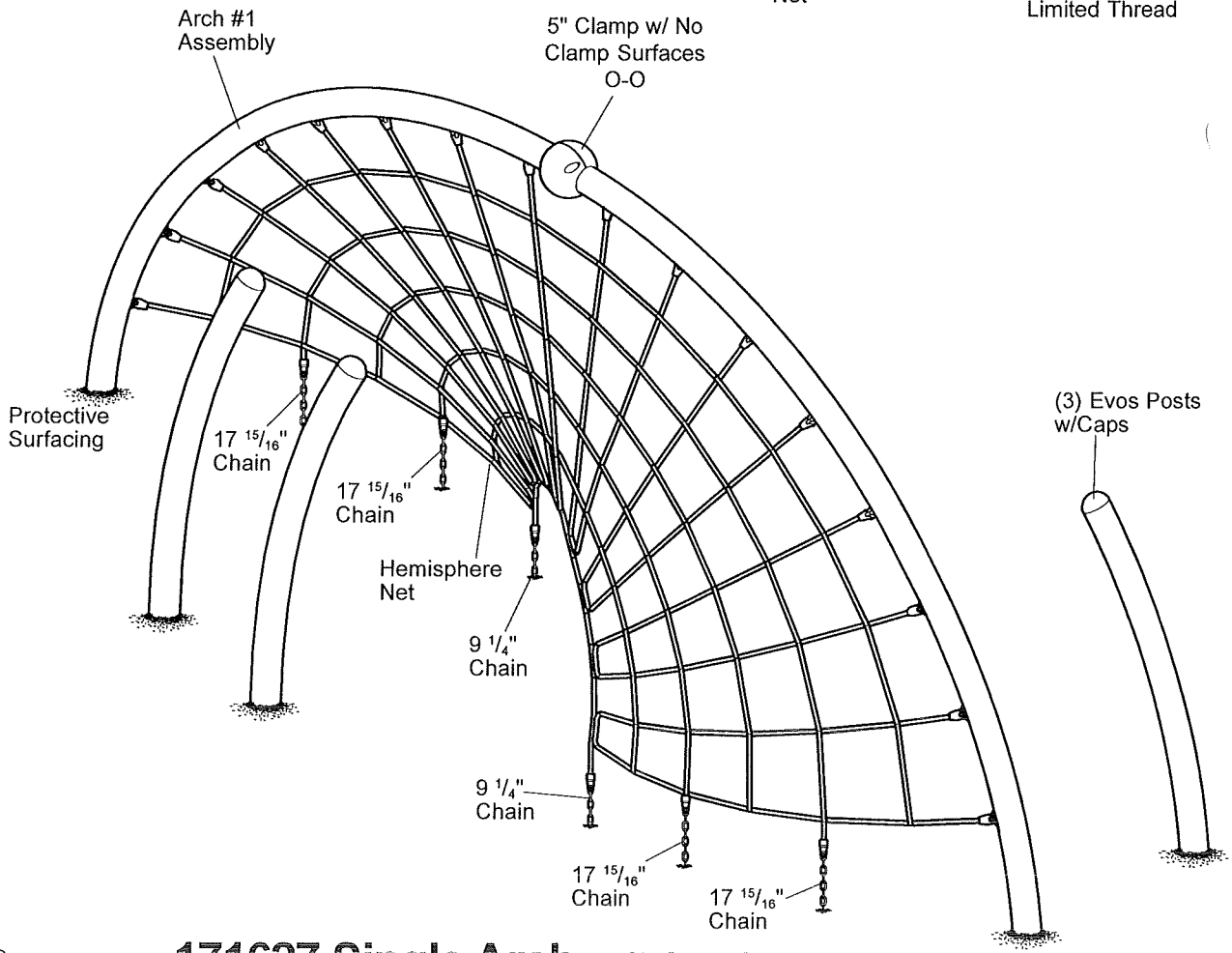
# DETAIL

## HEMISPHERE NET ATTACHMENT

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# 171627 Single Arch, w/3 Attachment Points



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# ARCH #1 ASSEMBLY

**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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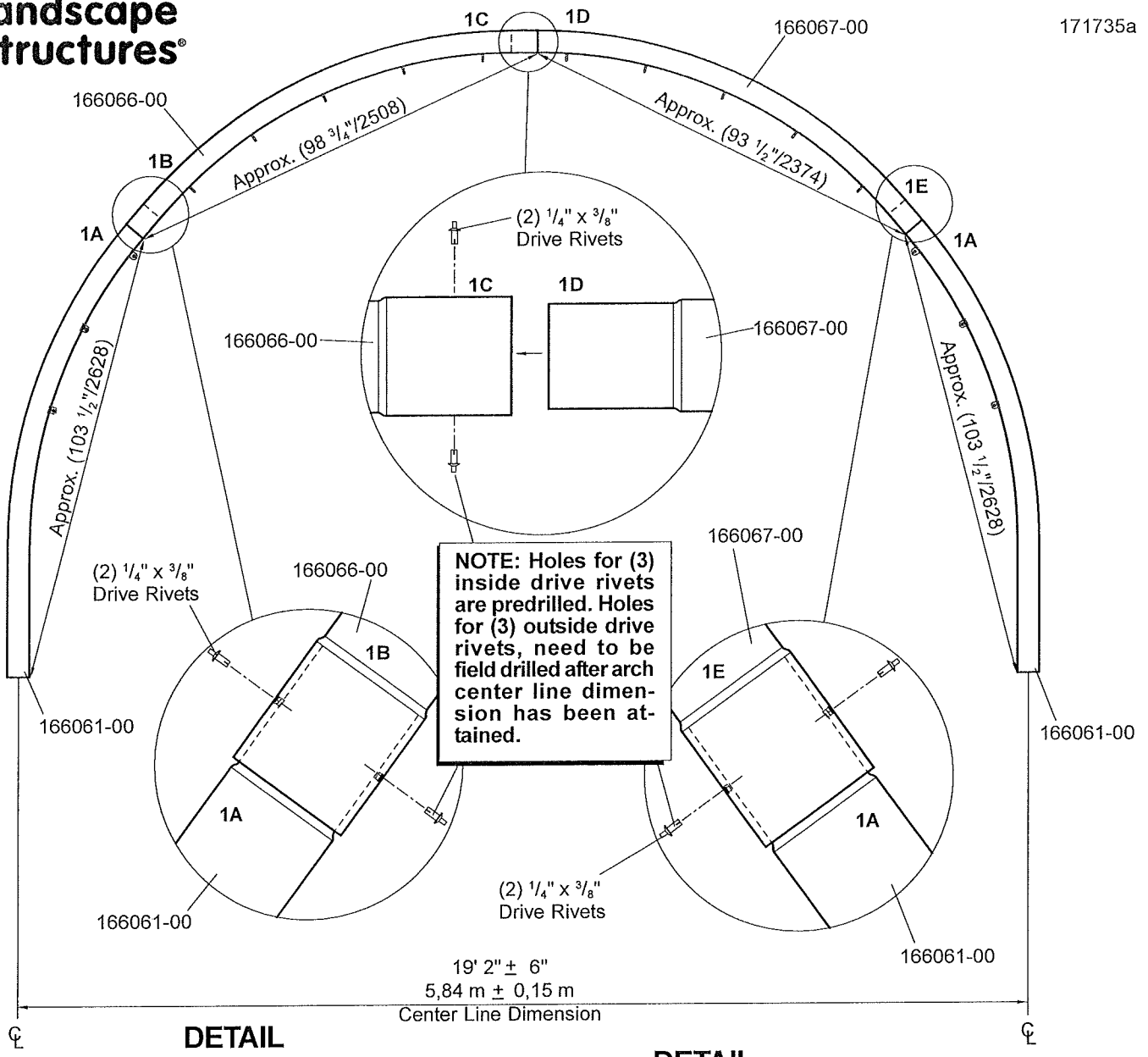
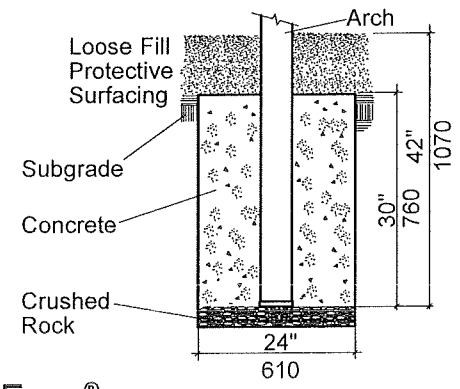
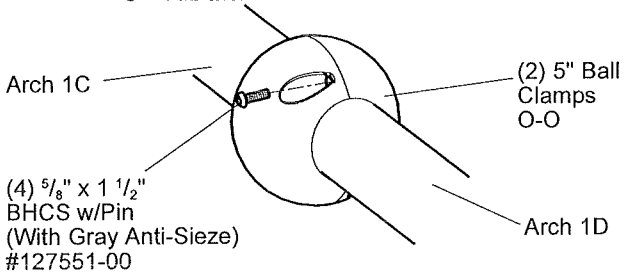



## DETAIL
### DIRECT BURY




## DETAIL
### 5" CLAMP O-O ATTACHMENT




# Arch Assembly

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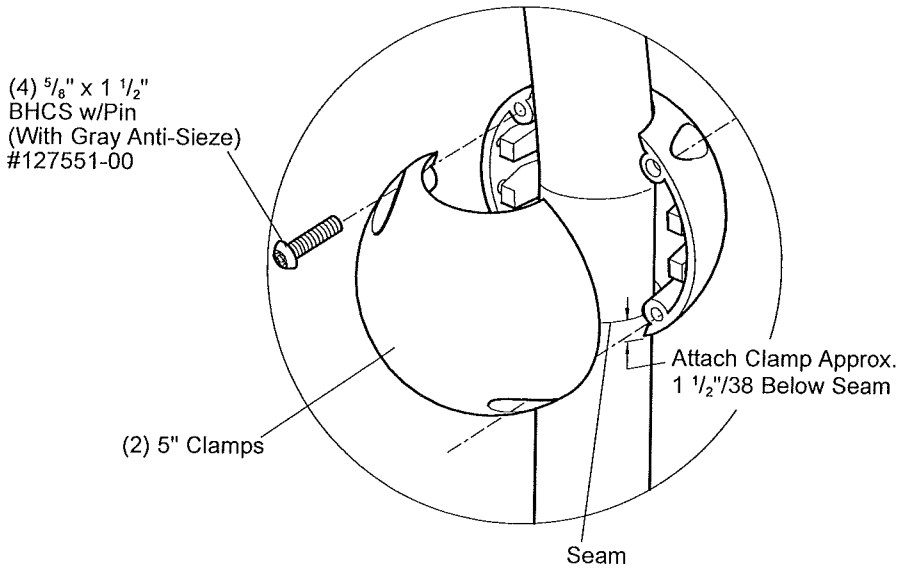
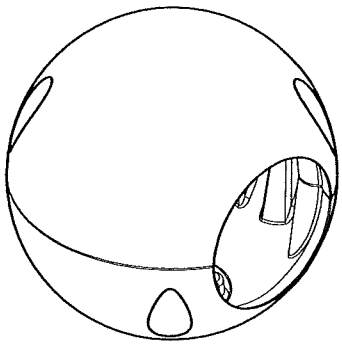
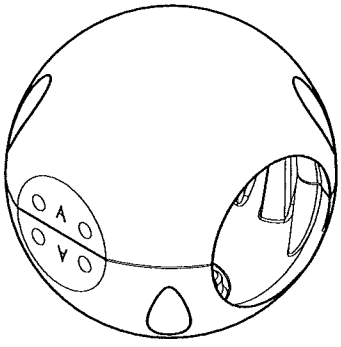
## DETAIL
### 5" CLAMP ATTACHMENT

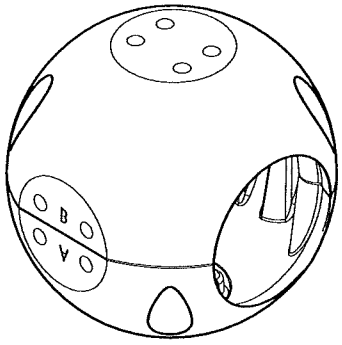


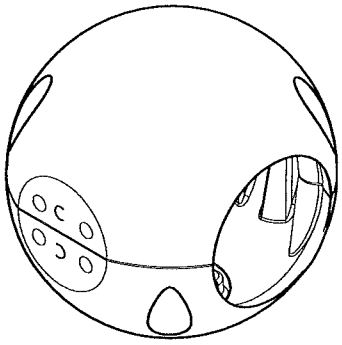
5" Clamp w/ No
Clamp Surfaces
O-O



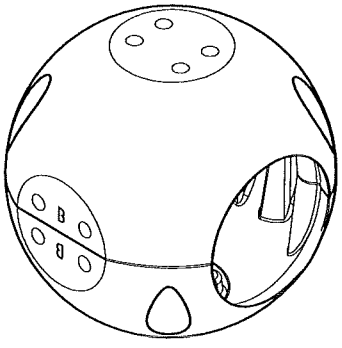

5" Clamp w/ 1
Clamp Surface
A-A



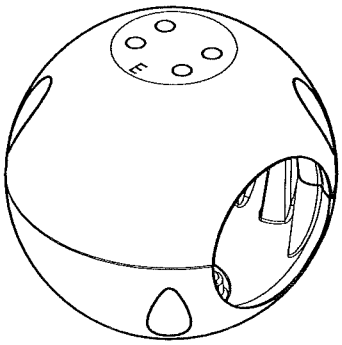

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



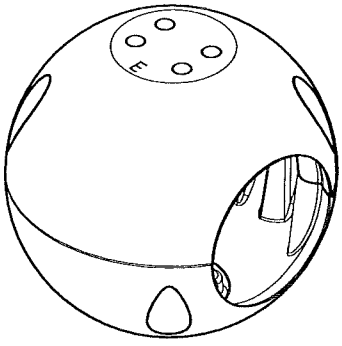

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E



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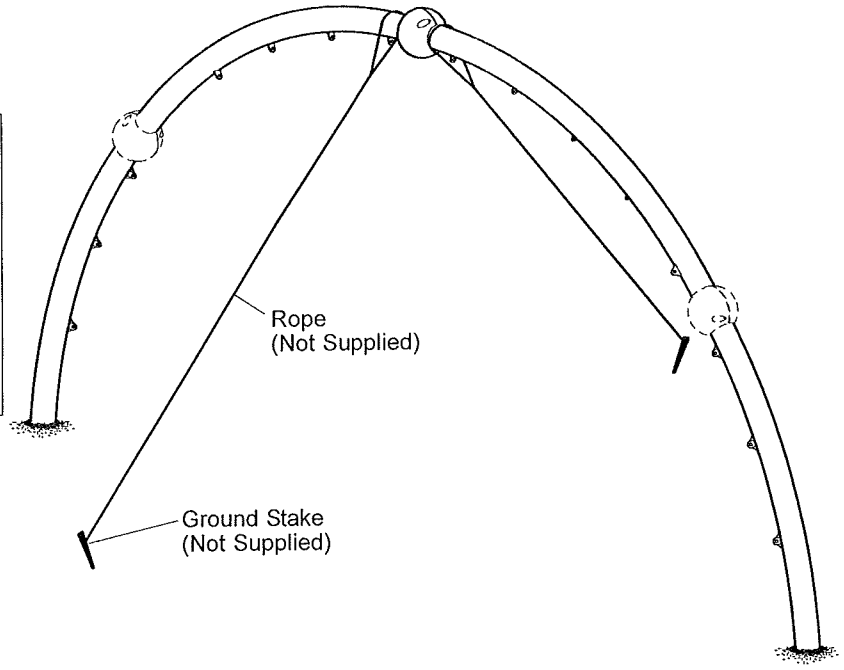
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

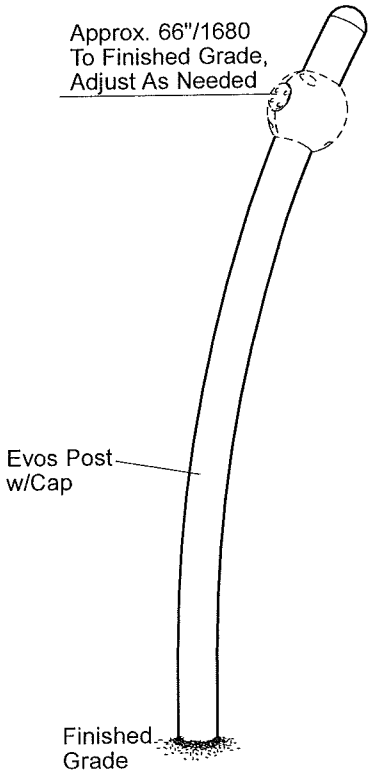
171735b

## DETAIL
### ROPE/GROUND STAKES

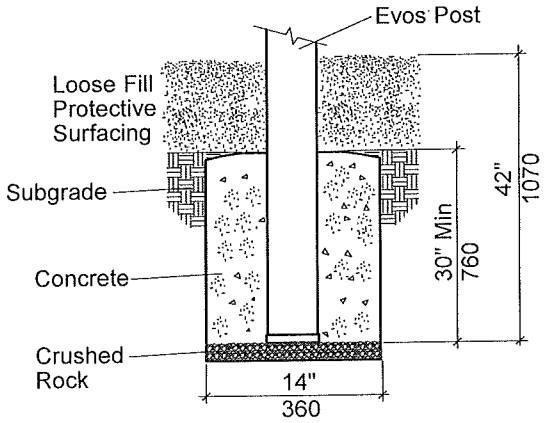
NOTE: *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*




## DETAIL
### EVOS POST




## DETAIL
### DIRECT BURY




**IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.**

# Evos® 171627 Single Arch, w/3 Attachment Points

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**SAFETY NOTE**
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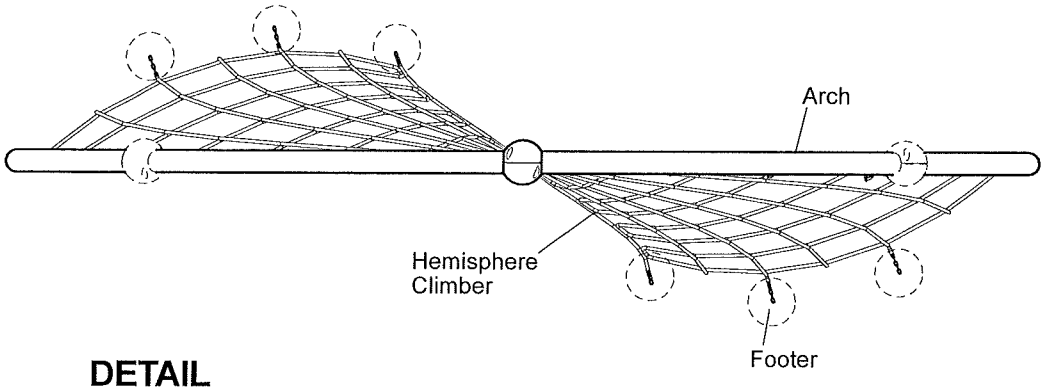
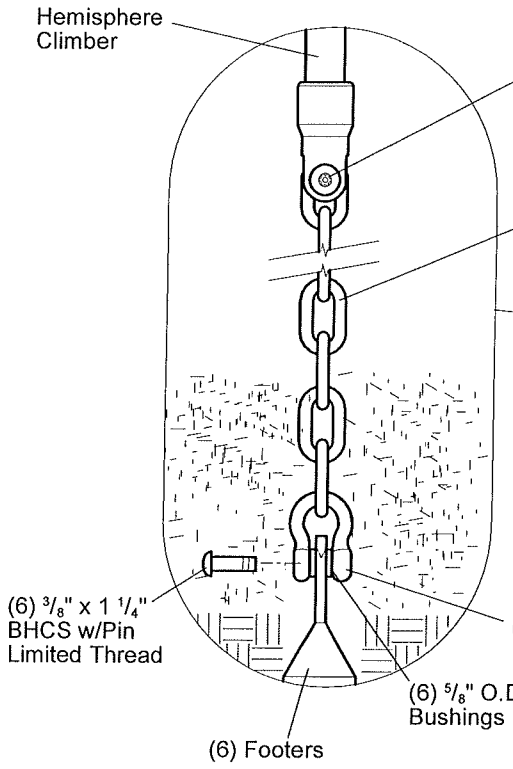
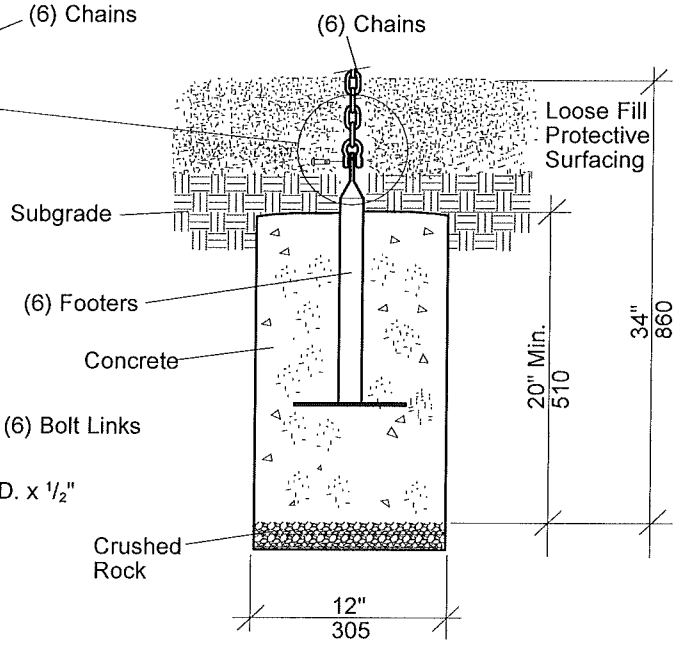
## PLAN VIEW




## DETAIL




## DETAIL
### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cord.**



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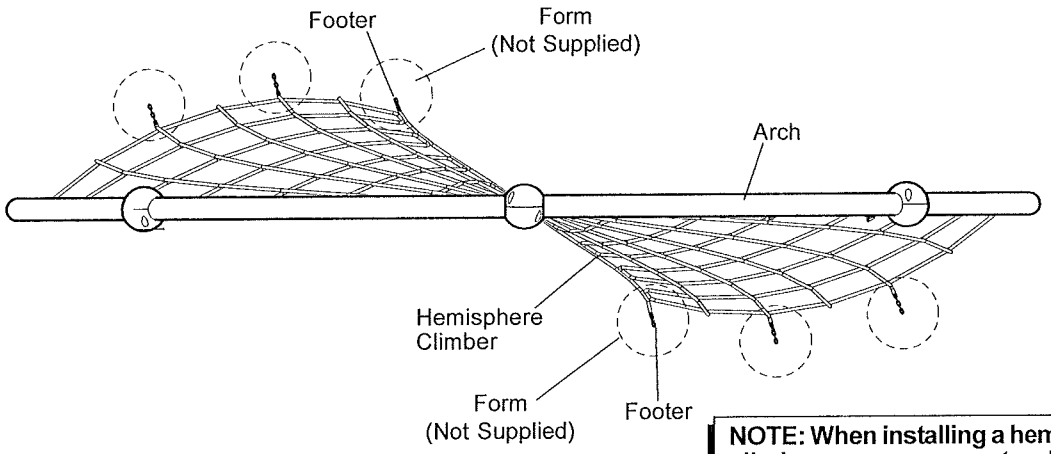
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

190742c

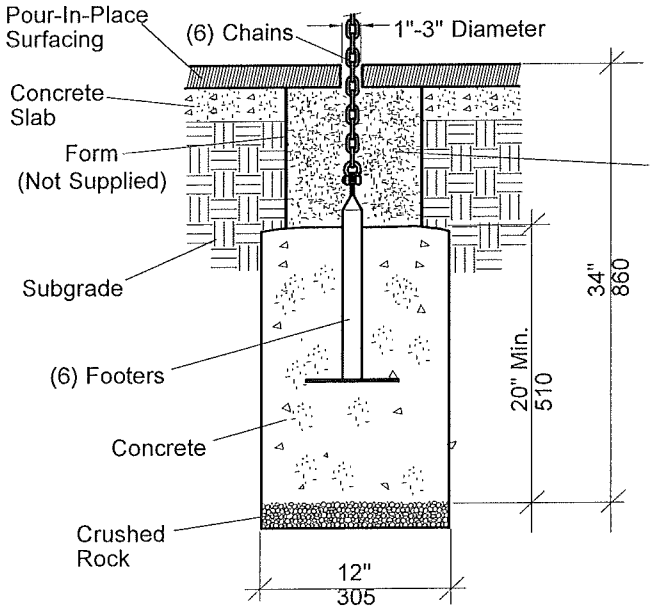
## PLAN VIEW




**NOTE: When installing a hemisphere climber over a concrete slab with pour-in-place surfacing, a form needs to be placed around the footers, to prevent concrete from covering the bolt links and fasteners.**

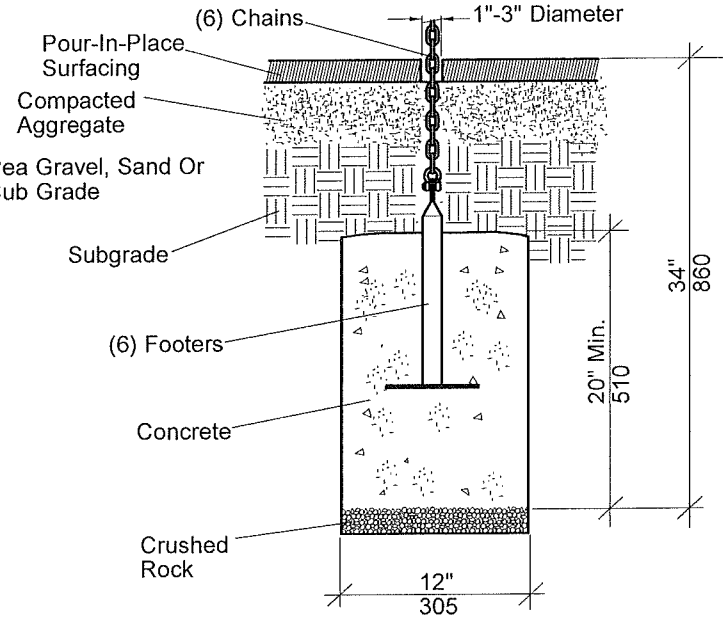
## DETAIL

### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL

### DIRECT BURY WITH POUR-IN-PLACE SURFACING (COMPACTED AGGREGATE)

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# Detail Plan For Pour In Place Surfacing

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J:\SPECS\190\19082100.P65

# Evos® 171627 Single Arch, w/3 Attachment Points

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 6 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 164367-00 | Footer, Specify Color | 6 |
| 171806-00 | Evos Post w/Cap, Specify Color | 3 |
| 190610-00 | Net Assembly, Black | 1 |
| 166061-00 | Arch 1A With Net Tabs, Specify Color | 2 |
| 166066-00 | Arch 1B/1C Without Ring Tabs, Specify Color | 1 |
| 166067-00 | Arch 1D/1E Without Tabs, Specify Color | 1 |
| 166276-00 | 5" Clamp O, Specify Color | 2 |
| 136721-00 | 9 1/4" Long Chain | 2 |
| 190780-00 | 17 15/16" Long Chain | 4 |
| **190829-00** | **Hemisphere Climber Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 6 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 6 |
| 138915-00 | Bolt Link, SST | 6 |
| 156962-00 | 5/8" O.D. x 1/2" Long Bushing, SST | 6 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 16 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 16 |
| 162729-00 | Connecting Plug | 32 |

## Specifications

**Net Assembly:** **(Net)** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Swage)** 3/4" schedule 40 6061-T6 aluminum pipe. **(S-Hooks)** Fabricated from 5/16" diameter 316-TI stainless steel. **(Cable Connectors)** Cast from 356-T6 aluminum. Finish: ProShield®, black in color. **(Footing Connector)** Fabricated from 1 5/16" O.D. 6061-T6 aluminum.

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Post:** Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield, color specified.

**Chain:** Steel 1/4" straight link chain, 3,150 lb. working load limit. Finish: Peer Gold.

**Footer:** Weldment comprised of 1.660" O.D. RS20 (.085" - .095") galvanized steel tubing, and 7 GA. (.179") HRPO sheet steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 6 3/4 man hours
**Concrete Req.:** Approx. 31.58 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 670 lbs.
**Fall Height:** 87" (2,21 m)

## Installation Instructions

1) **(Direct Bury) Refer to Plan View for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

6) Place the fully assembled arch in footings holes. **NOTE:** *Rope n be used to tie off the arch. The use of rope will help keep the arch .. plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*

7) Attach hemisphere net to arch tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Hemisphere Net Attachment Detail.

8) Attach chains to hemisphere climber, using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.

9) Attach footers to chains, using bolt links, 5/8" O.D. x 1/2" long bushings and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Place footers in footing holes. Refer to the Footer Attachment Details. **NOTE:** *If footers are not fully suspended, a trench will need to be dug the full length of the footers. Refer to the Plan View.*

10) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.

11) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

12) Install protective surfacing before users are allowed to play on the structure.



Specifications are subject to change without notice.

Eco #54776 Document #19082100 replaces #17701100. Replaced net.

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**SAFETY NOTE**

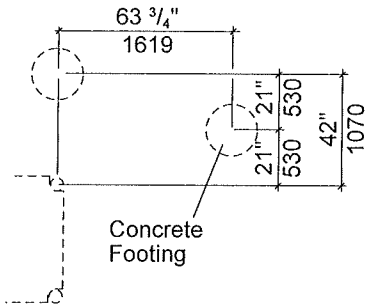
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

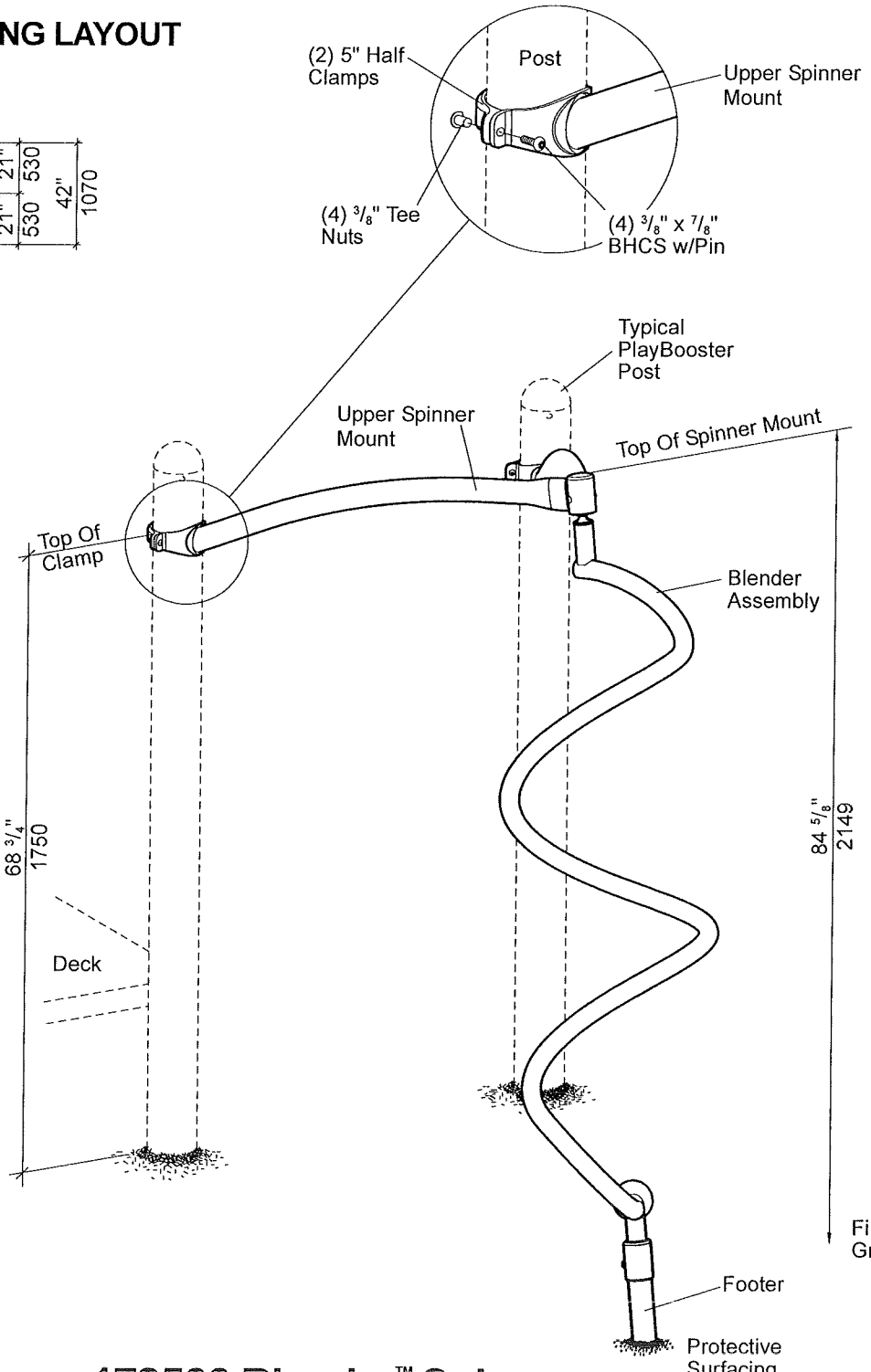
17257000

# DETAIL

## UPPER SPINNER MOUNT ATTACHMENT

## PLAN VIEW/FOOTING LAYOUT




PlayBooster®

# 172566 Blender™ Spinner



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# PlayBooster® 172566 Blender™ Spinner

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 2 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 155614-00 | Blender Assembly, Specify Color | 1 |
| 157092-00 | Footer, (DB), Specify Color | * |
| 160514-00 | Spinner Post, (SM), Specify Color | * |
| 186027-00 | Spinner UHMW Bushing | 4 |
| 159979-00 | Upper Spinner Mount, Specify Color | 1 |
| **160502-00** | **Spinner Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 4 |
| 100351-00 | 3/8" Tee Nuts, SST | 4 |
| 131849-00 | 5/16" x 1/2" BHCS w/Pin, SST | 4 |
| **121348-00** | **4-Hole (SM) Hardware Package** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 4 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |

**DB = Direct Bury**
**SM = Surface Mount**
*** = Determined By Your Order**

## Specifications

**Upper Spinner Mount:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 2.750" O.D. 1018 steel, and 1/4" HRPO flat steel. Finish: ProShield®, color specified.

**Blender Assy.:** Weldment comprised of 1.900" O.D. RS20 (.090"-.100" wall) galvanized steel tube, 10 Ga. (.135") HRPO steel, 2.750" O.D. 1018 steel and 1 7/8" steel ball. Finish: ProShield, color specified.

**Bushing:** Oil-filled UHMW PE.

**Footer:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 12 Ga. (.105") HR flat steel and 1 7/8" steel ball. Finish: ProShield, color specified.

**Clamp:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** **(DB)** Approx. 2 man hours
**(SM)** Approx. 1 1/2 man hours
**Concrete Req.:** **(DB)** Approx. 2.94 cu. ft.
**Min. Use Zone:** 6' (1,83 m) minimum use zone
**Weight:** **(DB)** 83 lbs.
**(SM)** 80 lbs.
**Fall Height:** 75" (1,27 m)

## Installation Instructions

1) **(Direct Bury)** Dig footings as shown. Refer to the Plan View Footing Layout and Footer Attachment Detail.

2) Attach upper spinner mount to posts at height shown, using 5" half clamps, 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts. Refer to the Upper Spinner Mount Attachment Detail.

3) Place a bushing on each side of the footer post's 1 7/8" ball, as shown. Insert footer post with bushings into Blender assembly. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Blender Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

4) Place a bushing on each side of the Blender assemblies 1 7/8" ball, as shown. Insert Blender assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Blender Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

5) **(Direct Bury)** Place a level on the footer gusset, when gusset is plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. **NOTE:** *Blender assembly will have to be propped in position, until concrete has cured.*

   **(Surface Mount)** Drill 1/2" x 3" deep holes through spinner post plate using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten spinner post to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

6) Install 1/4" x 5/8" drive rivets in 5" half clamps. Drill through hole in half clamps and into 5" post with a 1/4" or "F" (only) drill bit, insert rivet in hole and hammer rivet pin in until it is flush with head.

7) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54663 Document #18757400 replaces #17257000. Replaced spinner bushing.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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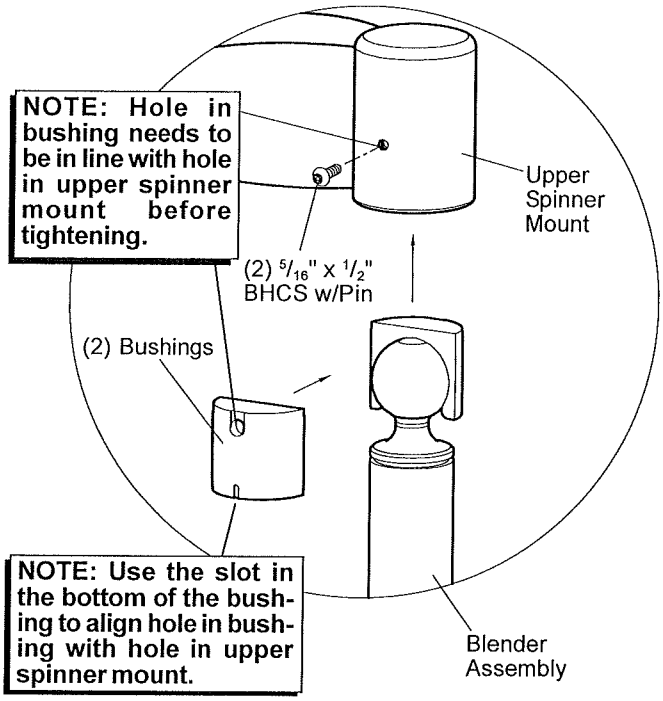
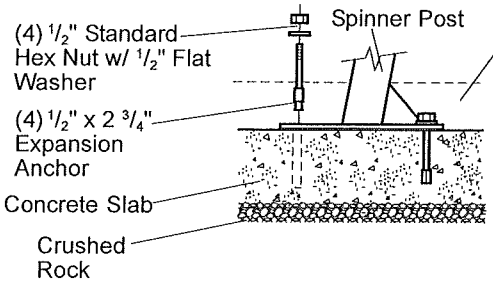
## DETAIL
### BLENDER ASSEMBLY

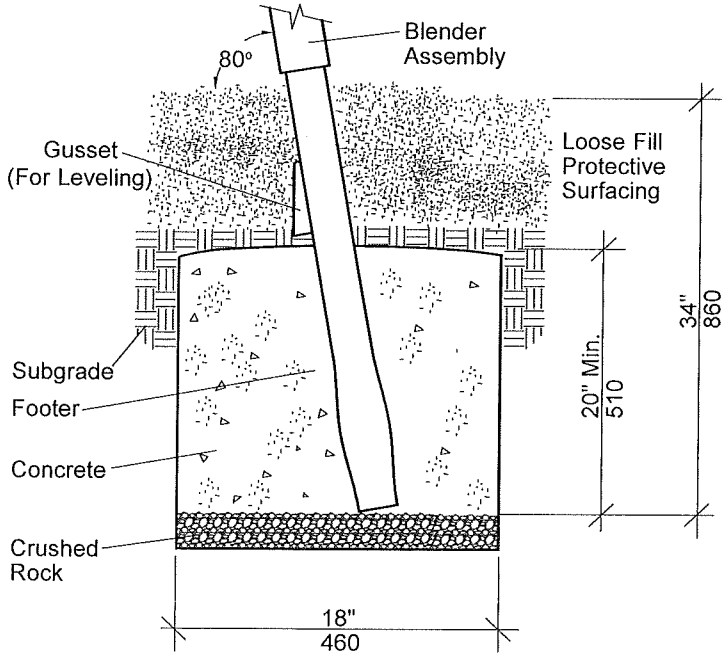



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

## DETAIL
### SURFACE MOUNT




## DETAIL
### FOOTER ATTACHMENT




# PlayBooster® 172566 Blender™ Spinner



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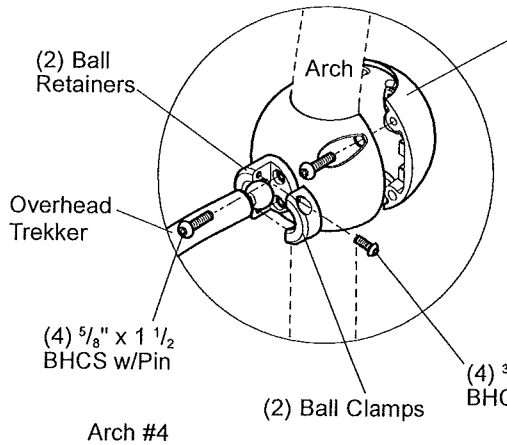
**SAFETY NOTE**

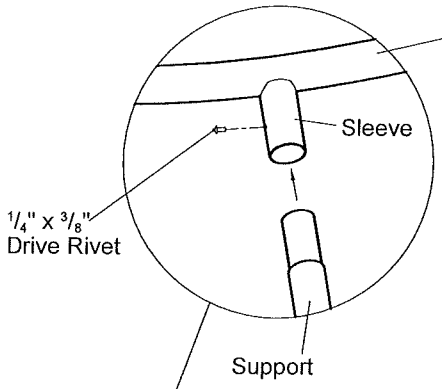
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

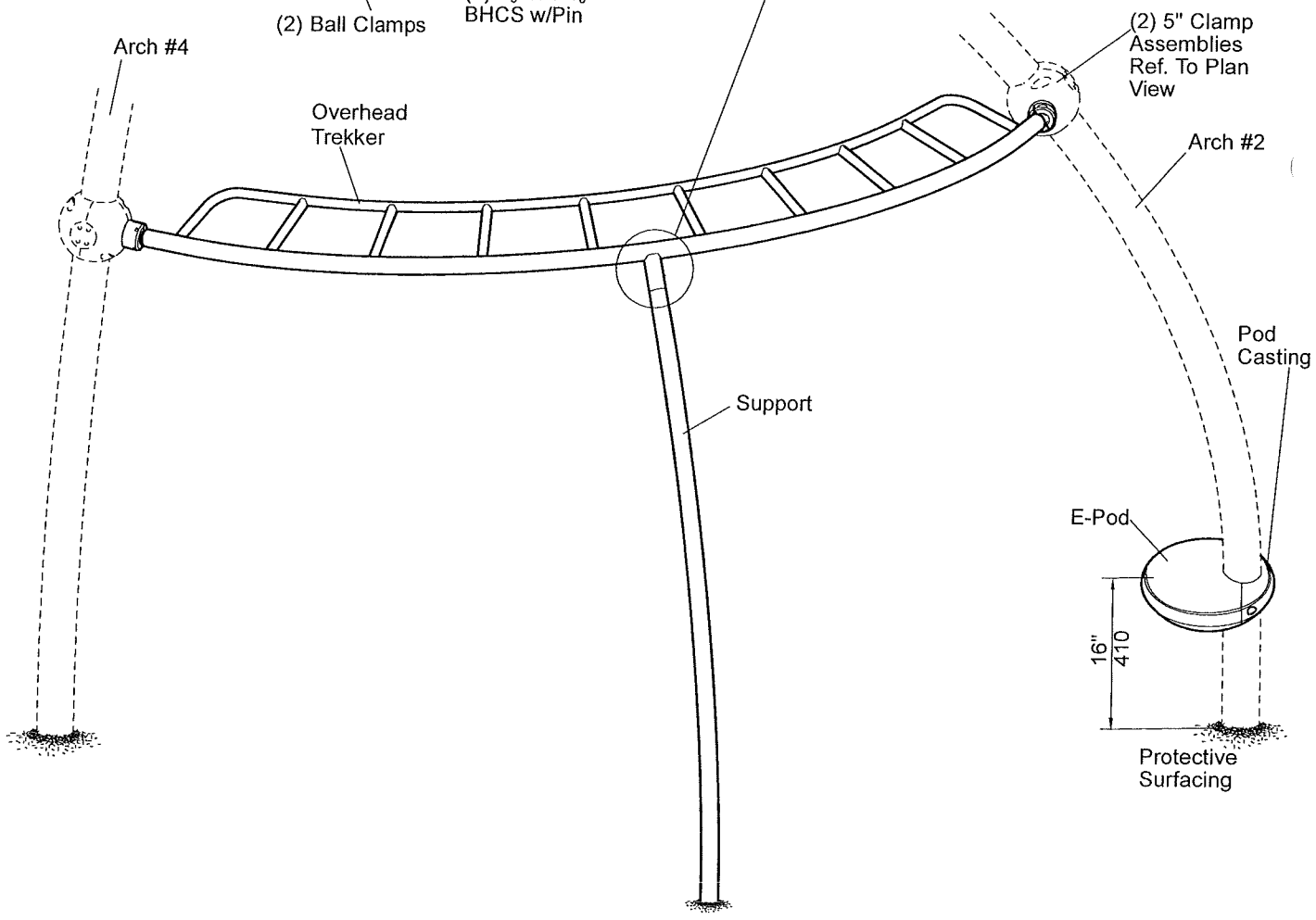
16041200

## DETAIL
### BALL CLAMP ATTACHMENT




## DETAIL
### SUPPORT ATTACHMENT




Evos®

# 160254 Overhead Trekker™

Sheet 1 of 2

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# Evos® 160254 Overhead Trekker™

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 154461-00 | E-Pod, Specify Color | 1 |
| 156203-00 | Pod Climb Across Support, Specify Color | 1 |
| 156806-00 | Pod Casting, Specify Color | 1 |
| 160135-00 | Overhead Trekker, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| **156968-00** | **Pod Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 1 |
| **160409-00** | **Evos Overhead Events Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 1 |

## Specifications

**Overhead Trekker:** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 1.315" O.D. RS20 (.080"-.090" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield®, color specified.

**E-Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Pod Casting:** Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

**Support:** Fabricated from 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 1/4 man hours
**Concrete Req.:** Approx. 1.31 cu. ft.
**Area Req.:** 6'/2060 mm minimum use zone
**Weight:** 122 lbs.
**Fall Height:** 81"/2010 mm

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Fasten Overhead Trekker to ball retainers using, ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Ball Clamp Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect and position Overhead Trekker properly. Check to make sure Overhead Trekker is level, if not adjust 5" clamps. Retighten 5" clamp fasteners when Overhead Trekker is in proper position.*

3) Slide support into Overhead Trekker sleeve. Drill through hole in sleeve and into support with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Direct Bury Detail.

4) Attach e-pod and pod casting to arch as shown, using 3/8" x 1 1/8" BHCS w/pin. Refer to the E-Pod Attachment Detail.

5) Drill through hole in pod casting and into arch with a 1/4" or "F" (only) drill bit. Insert 1/4" x 5/8" rivet in hole and hammer rivet pin in until it is flush with head.

6) With support plumb, pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.

7) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

ECO #54569 Remove Play Safe Label from hardware package.

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**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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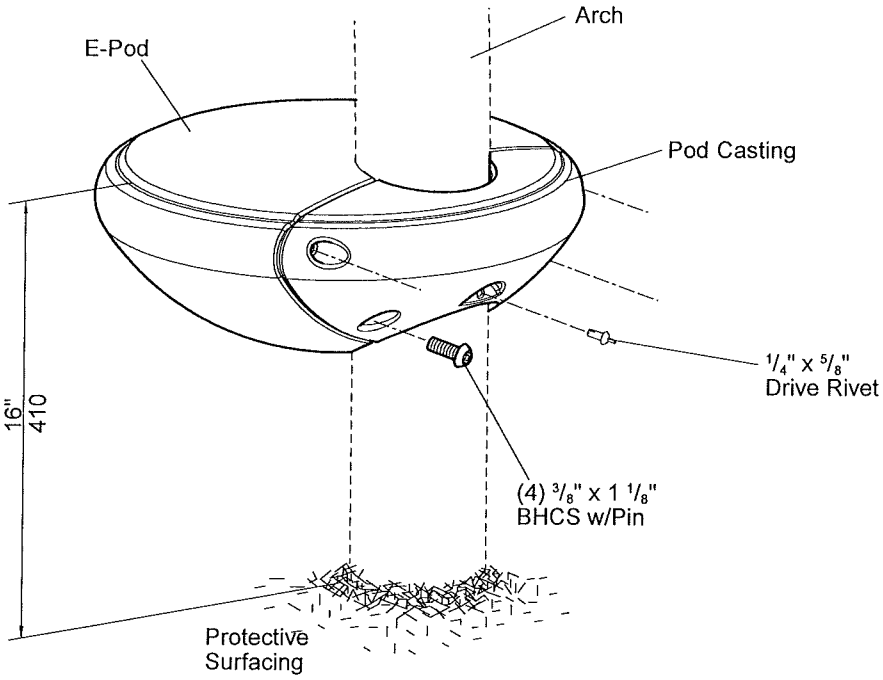
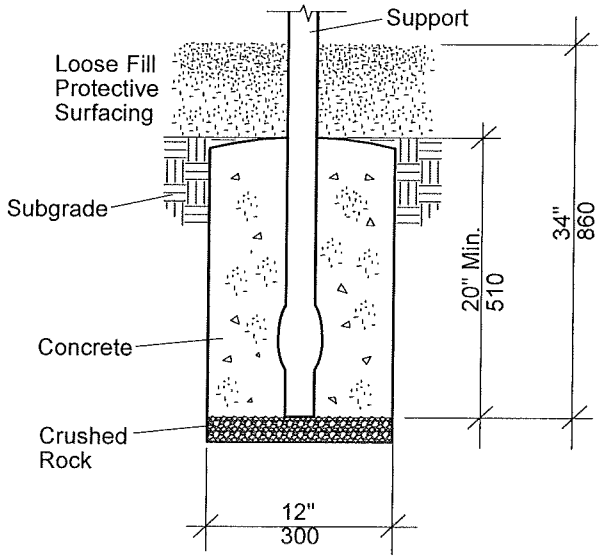
# DETAIL
## E-POD ATTACHMENT




# DETAIL
## DIRECT BURY




Evos®

# 160254 Overhead Trekker™



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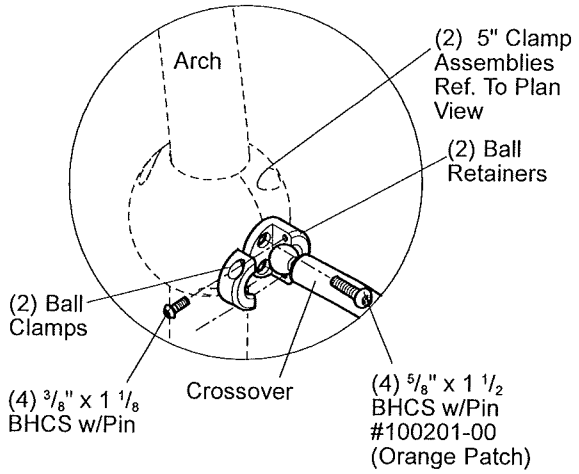
**SAFETY NOTE**

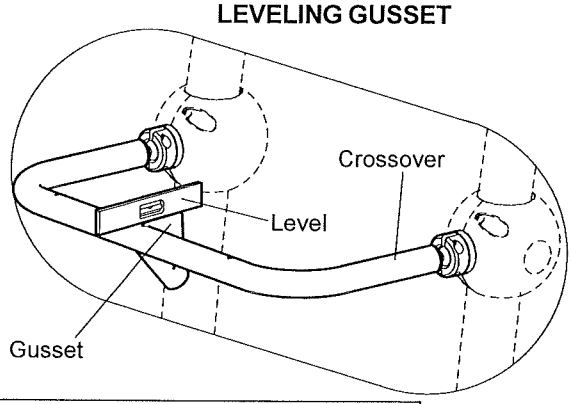
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

18317200

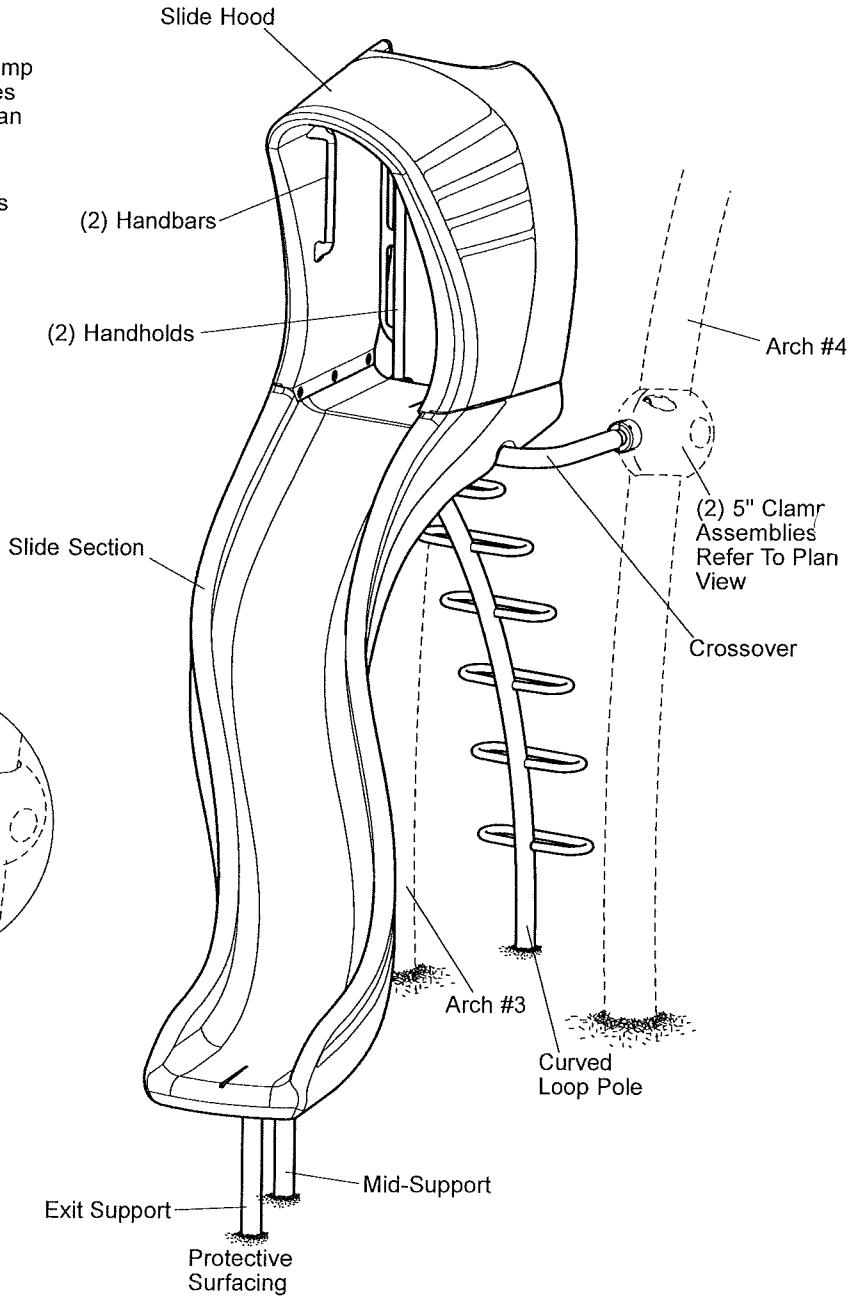
## DETAIL
### CROSSOVER ATTACHMENT




## DETAIL
### LEVELING GUSSET




**NOTE: To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Check prior to pouring concrete.**




Evos®

# 182865 Rush™ Slide



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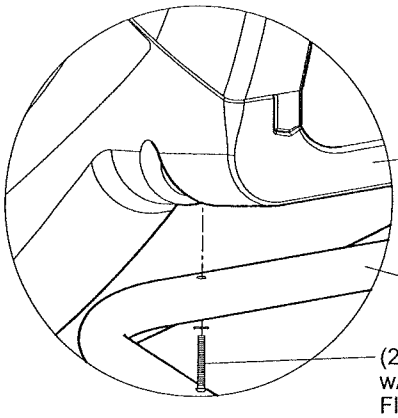
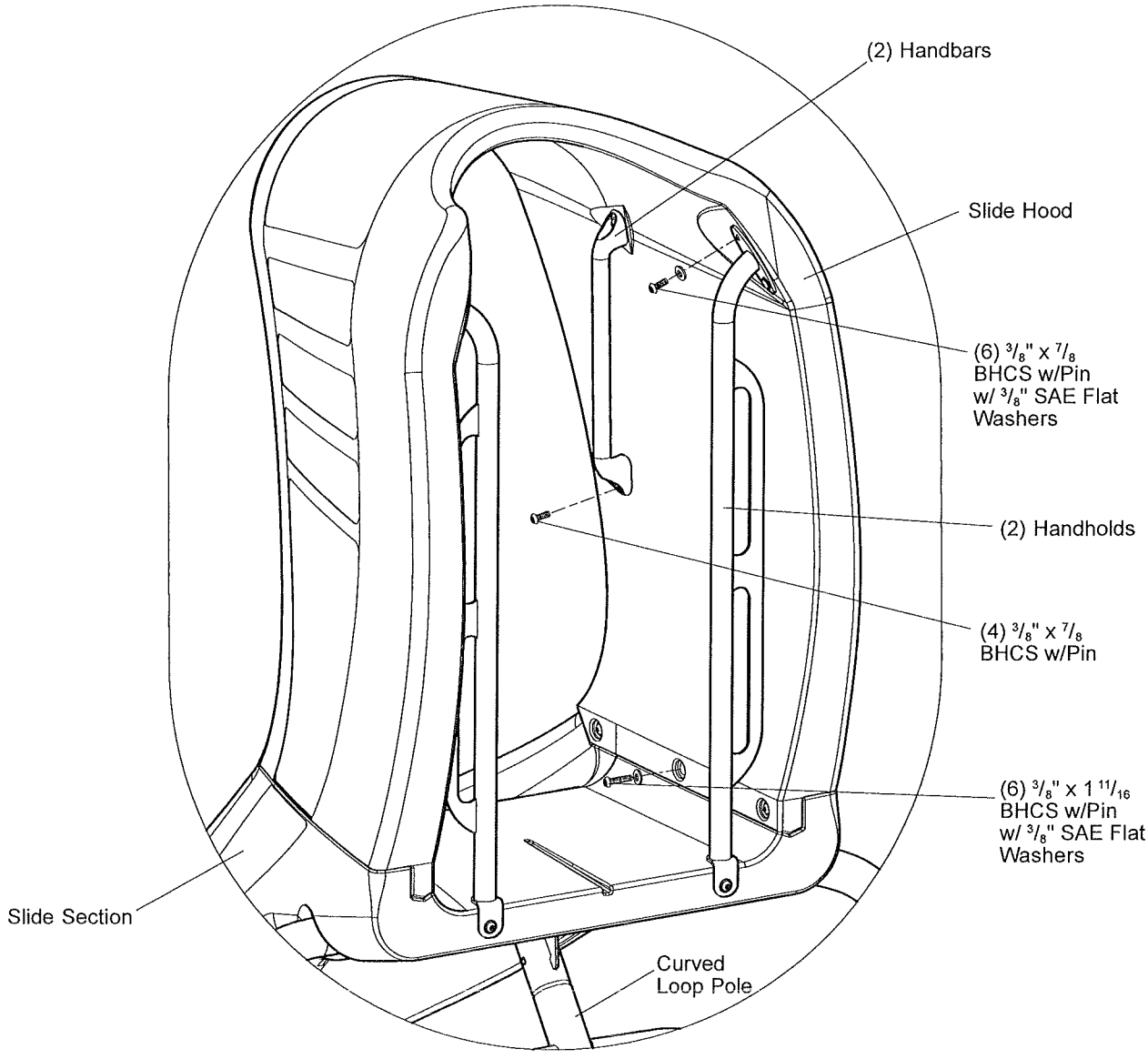
## DETAIL
SLIDE TO CROSSOVER ATTACHMENT




**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

183172a

## DETAIL
SLIDE HOOD ASSEMBLY




# 182865 Rush™ Slide

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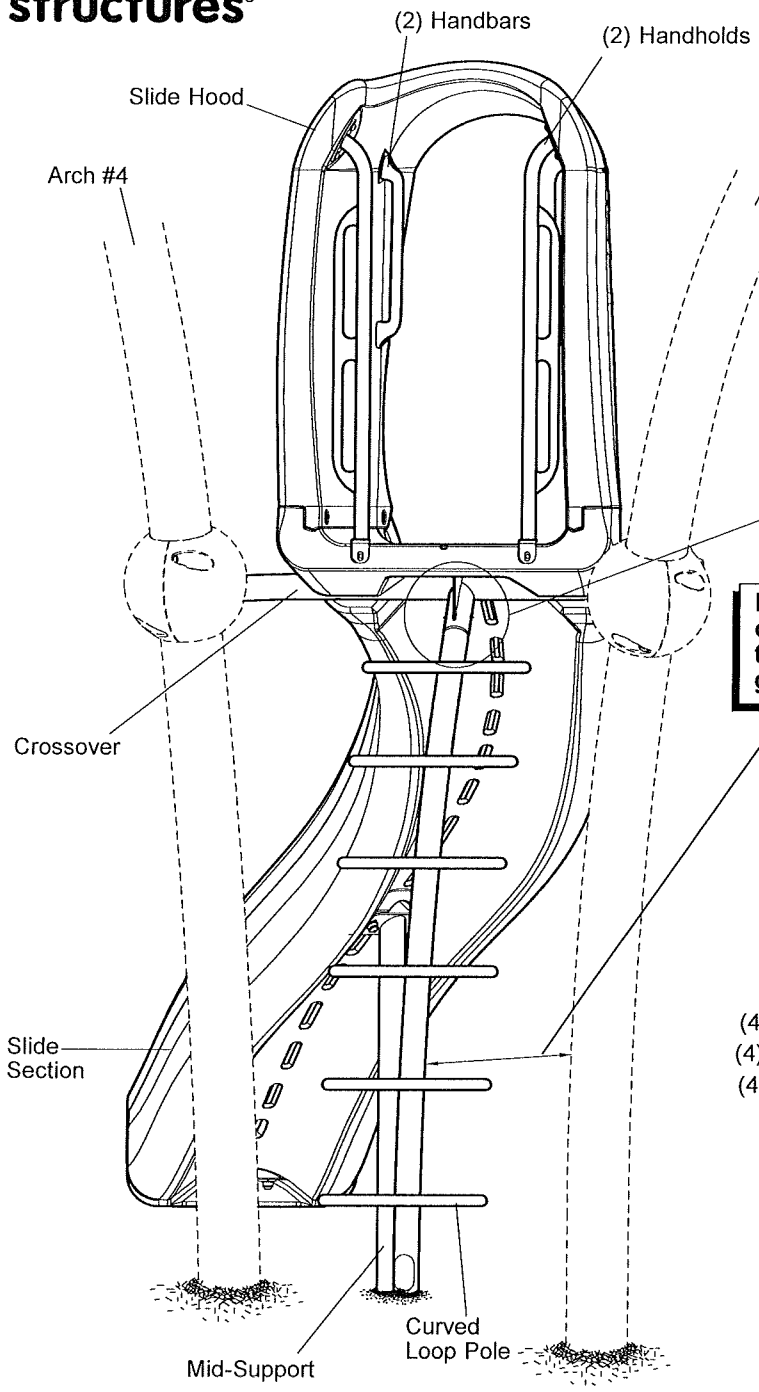
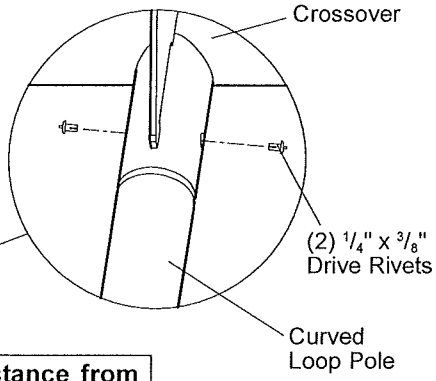
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

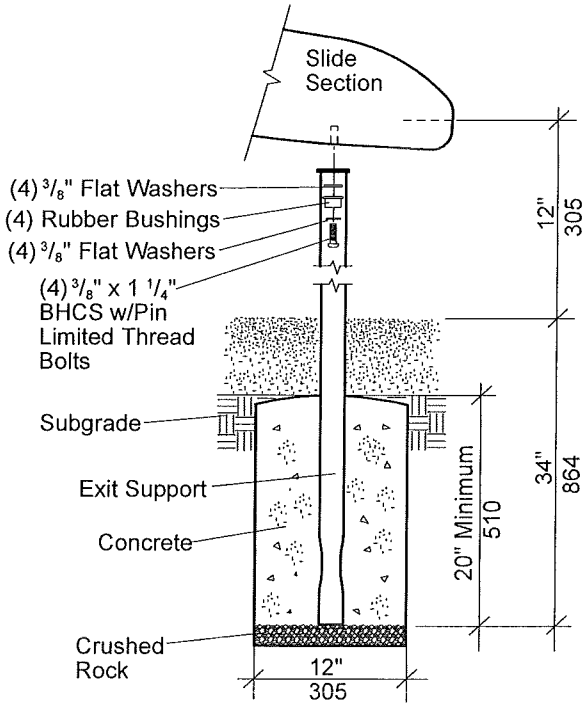



## DETAIL
### LOOP POLE ATTACHMENT




**NOTE: Distance from center rail of loop pole to arch should be greater than 9".**

## DETAIL
### EXIT SUPPORT & MID-SUPPORT DIRECT BURY




**NOTE: Curved loop pole requires the same size footing hole as the slide supports.**

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# Evos® 182865 Rush™ Slide

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 164372-00 | Handbar, Specify Color | 2 |
| 180839-00 | Crossover, Specify Color | 1 |
| 182604-00 | Slide Section, Specify Color | 1 |
| 182605-00 | Slide Hood, Specify Color | 1 |
| 182641-00 | Handhold (RH), Specify Color | 1 |
| 182642-00 | Handhold (LH), Specify Color | 1 |
| 182644-00 | Mid Support, DB, Specify Color | 1 |
| 182645-00 | Exit Support, DB, Specify Color | 1 |
| 182643-00 | Curved Loop Pole, Specify Color | 1 |
| **183185-00** | **Evos Rush Slide Hardware Package** | 1 |
| 100176-00 | 3/8" x 3" BHCS w/Pin, SST | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 10 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 8 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 14 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 2 |
| 111442-00 | Rubber Bushing | 4 |
| 123224-00 | 3/8" x 1 11/16" BHCS w/Pin, SST | 6 |

DB = Direct Bury

## Specifications

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield®, color specified.

**Curved Loop Pole:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing, and 1.029" (26,14 mm) O.D. RS20 (.070"-.080") (1,78 mm-2,03 mm) wall galvanized steel tubing. Finish: ProShield, color specified.

**Slide Section:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Hood:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Crossover:** Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,56 mm) wall galvanized steel tubing, 3/16" (4,74 mm) HRPO steel sheet and 1 7/8" (47,63 mm) steel ball. Finish: ProShield, color specified.

**Supports:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,66 mm) wall galvanized steel tubing and 7 GA. (4,54 mm) HRPO steel sheet. Finish: ProShield, color specified.

**Handbar:** Fabricated from A356-T6 aluminum. Finish: ProShield, color specified.

**Handhold:** Weldment comprised of 1.315" (33,4 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,28 mm) wall galvanized steel tubing and 7 GA. (4,54 mm) HRPO steel sheet. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Specifications are subject to change without notice.

**Installation Time:** Approx. 2 3/4 man hours
**Concrete Req.:** Approx. 3.93 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 264 lbs.
**Fall Height:** 72" (1,83 m)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach ball retainers to 5" round clamps, using 5/8" x 1 1/2" BHCS w/pin. Attach crossover to ball retainers using ball clamps and 3/8" x 1 1/8" BHCS w/pin. 5" Round clamps may need to be turned, or moved up or down to connect crossover. Refer to the Crossover Attachment Detail. **NOTE:** *To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Check prior to pouring concrete. Refer to Leveling Gusset Detail.*

3) Insert end of curved loop pole into crossover tube. **NOTE:** *Distance from center rail of loop pole to arch should be greater than 9".*

4) Attach supports to poly slide section, using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, 3/8" flat washers and rubber bushings. Refer to Exit Support & Mid-Support Attachment Detail. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only. Do not overtighten!*

5) Place poly slide section onto crossover. Line up holes in bottom of crossover with holes in poly slide section, attach using 3/8" x 3" BHCS w/pin and 3/8" SAE flat washers. Refer to Slide to Crossover Attachment Detail.

6) Attach slide hood to poly slide section, using 3/8" x 1 11/16" BHCS w/pin and 3/8" SAE flat washers. Refer to Slide Hood Assembly.

7) Attach handbars to slide hood, using 3/8" x 7/8" BHCS w/pin. Refer to Slide Hood Assembly.

8) Attach handholds to slide hood and slide section, using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers. Refer to Slide Hood Assembly.

9) With crossover gusset and curved loop pole steps level, drill through holes in crossover tube into curved loop pole with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivets into holes and hammer rivet pins in until it is flush with head. Refer to Detail. **NOTE:** *To achieve proper position of crossover, ensure that the gusset on the crossover is level, as shown. Refer to Leveling Gusset Detail.*

10) With supports plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

11) Install protective surfacing before users are allowed to play on the structure.

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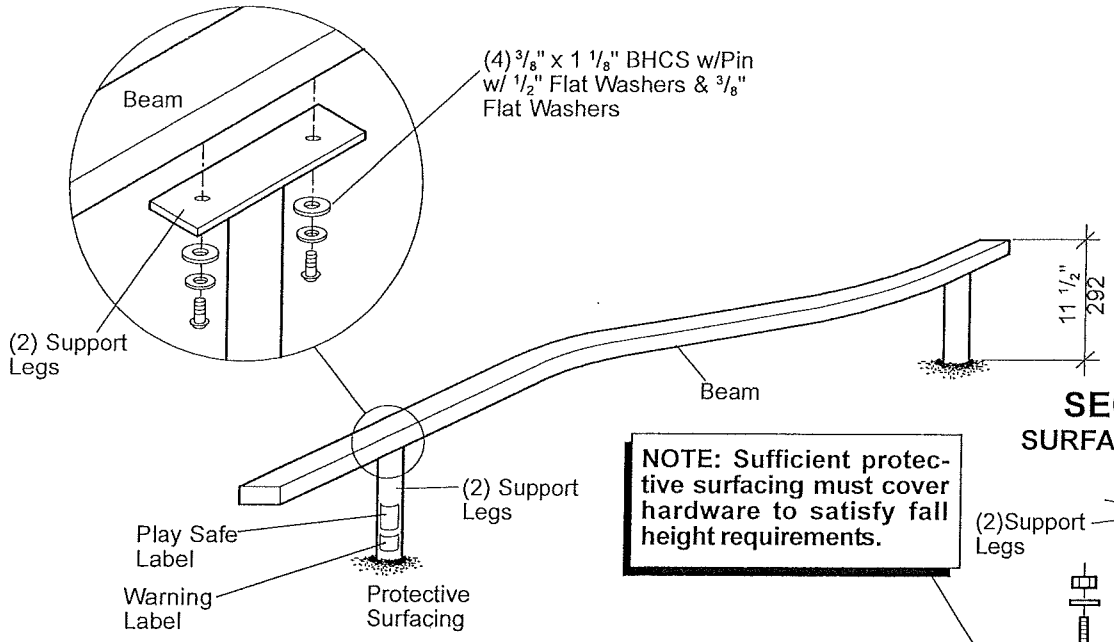
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

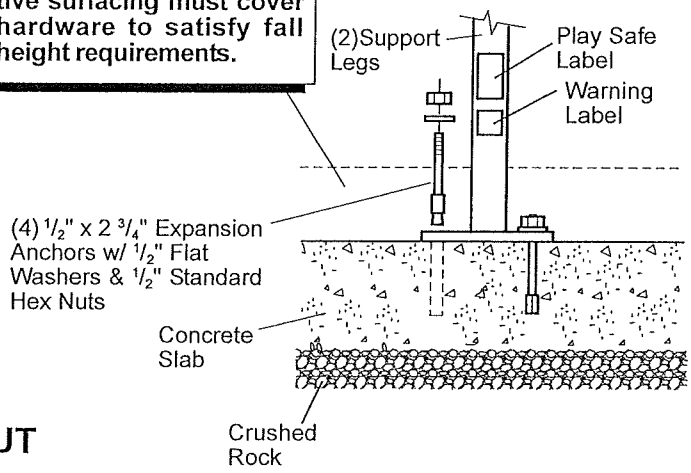
15444700

## DETAIL

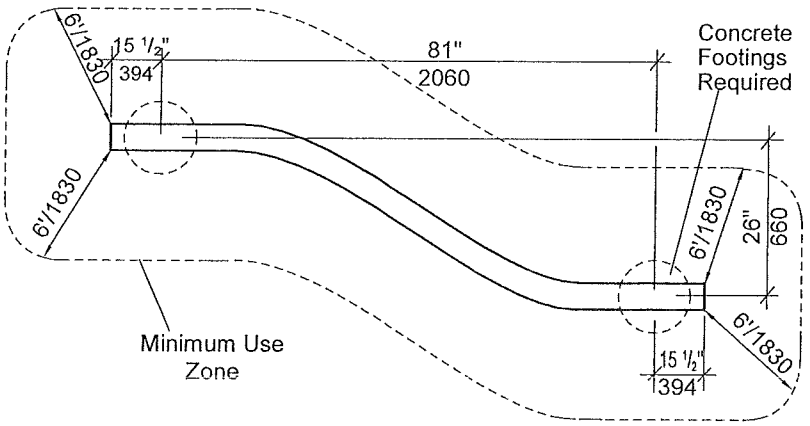



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

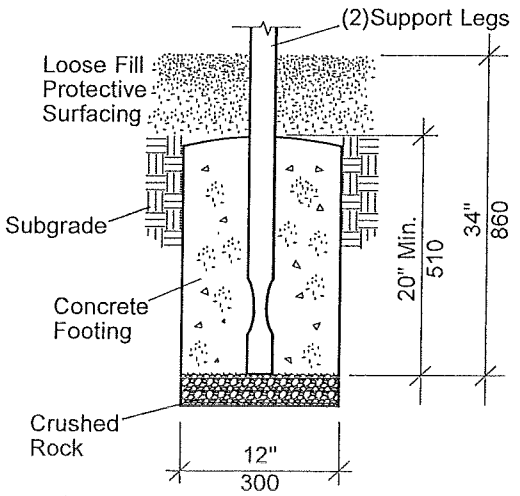
## SECTION
### SURFACE MOUNT




## PLAN VIEW/ FOOTING LAYOUT




## SECTION
### CONCRETE FOOTING




# Sports & Fitness 100041 Curved Balance Beam

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Sports & Fitness 100041 Curved Balance Beam

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## Parts List

| Part# | Description | Qty |
|---|---|---|
| 147727-00 | Curved Balance Beam, Specify Color | 1 |
| 113443-00 | (DB) Support Leg, Specify Color | 2 |
| 114954-00 | (SM) Support Leg, Specify Color | 2 |
| **183898-00** | **Curved Balance Beam Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |
| 156846-00 | Play Safe Label, 2-12 Yrs. | 1 |
| 183064-00 | Warning Label | 1 |
| **121348-00** | **4-Hole (SM) Hardware Package** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchors | 4 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |

**DB = Direct Bury**
**SM = Surface Mount**

## Specifications

**Beam:** Weldment comprised of 1 1/2" x 3" 11 GA (.120") rectangular steel tubing. Finish: TenderTuff®, color specified.

**Support Leg:** Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/8" x 2 1/2" mounting plate. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Actual Size:** 11 1/2" high x 3" wide x 9'-4" long.

**Installation Time:** Approx. 1 1/4 man hour
**Concrete Req:** DB - Approx. 3 cu. ft.
**Area Req:** 6' minimum use zone
**Weight:** DB - 60 lbs.
SM - 58 lbs.

## Installation Instructions

**Direct Bury**

1) Dig footings spaced as shown.
2) Using 3/8" x 1 1/8" BHCS w/pin, 1/2" flat washers and 3/8" flat washers, fasten support legs to balance beam.
3) Place balance beam in holes, block up, plumb and level.
4) Pour concrete footings and let concrete cure for a minimum of 72 hours before users are allowed to play on the structure.
5) Install protective surfacing before users are allowed to play on the structure.
6) Apply labels as shown.

**Surface Mount**

1) Using 3/8" x 1 1/8" BHCS w/pin, 1/2" flat washers and 3/8" flat washers, fasten support legs to balance beam.
2) Place balance beam in position and drill through holes in support legs 3" deep into concrete slab using 1/2" masonry bit.
3) Tap 1/2" x 2 3/4" expansion anchors through support leg holes and into concrete. Secure with 1/2" flat washers and 1/2" standard hex nuts screwed down tight.
4) Install protective surfacing before users are allowed to play on the structure.
5) Apply labels as shown.

Specifications are subject to change without notice.

Eco #54517 Document #18385000 replaces #15793600. Added warning label to hardware package.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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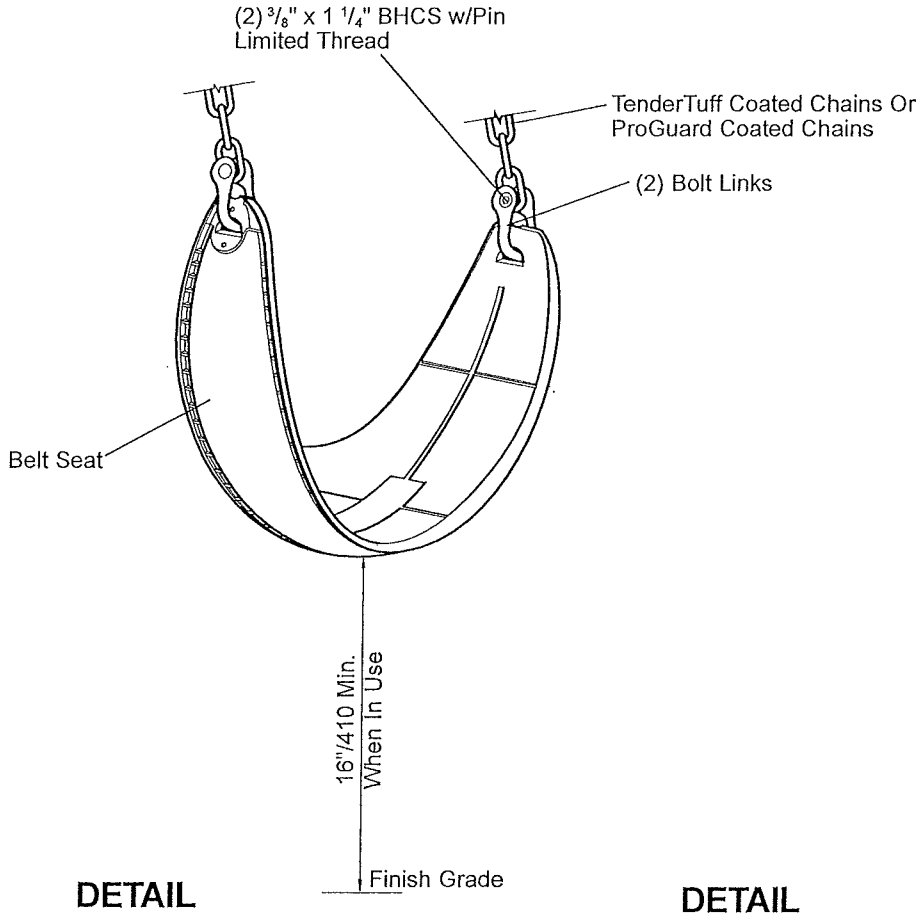
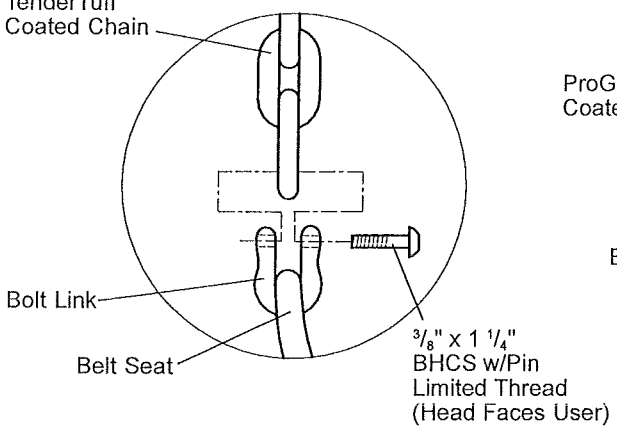
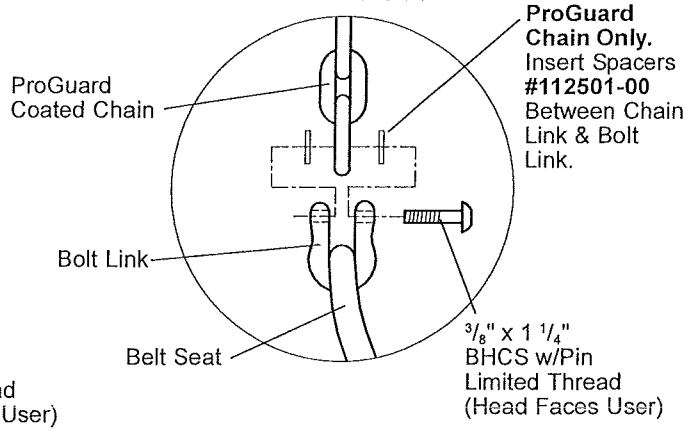



**DETAIL**
**BOLT LINK**




**DETAIL**
**BOLT LINK**




Swings

# 174018 Belt Seat



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Swings 174018 Belt Seat

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## Parts List

| Part # | Description | Qty. |
|---|---|---|
| | 8 Ft. High Beam | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152050-00 | 67 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174404-00 | 67 7/8" Chain, ProGuard | 2 |
| 132672-00 | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| 132635-00 | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| | 10 Ft. High Beam | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152052-00 | 90 11/16" Chain, TenderTuff, Specify Color | 2 |
| 174884-00 | 90 11/16" Chain, ProGuard | 2 |
| 132672-00 | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| 132635-00 | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |

## Specifications

**Chain Spacer:** Made from white nylon measuring .080" x .785" O.D.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Belt Seats:** Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.

**Bolt Link:** Stainless Steel.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:**
8 lbs. (8 Ft. Beam w/ProGuard Chains)
9 lbs. (8 Ft. Beam w/TenderTuff Chains)
10 lbs. (10 Ft. Beam w/ProGuard Chains)
11 lbs. (10 Ft. Beam w/TenderTuff Chains)

## Installation

Swing Hangers With Double Clevis

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

Anti-wrap Swing Hangers

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

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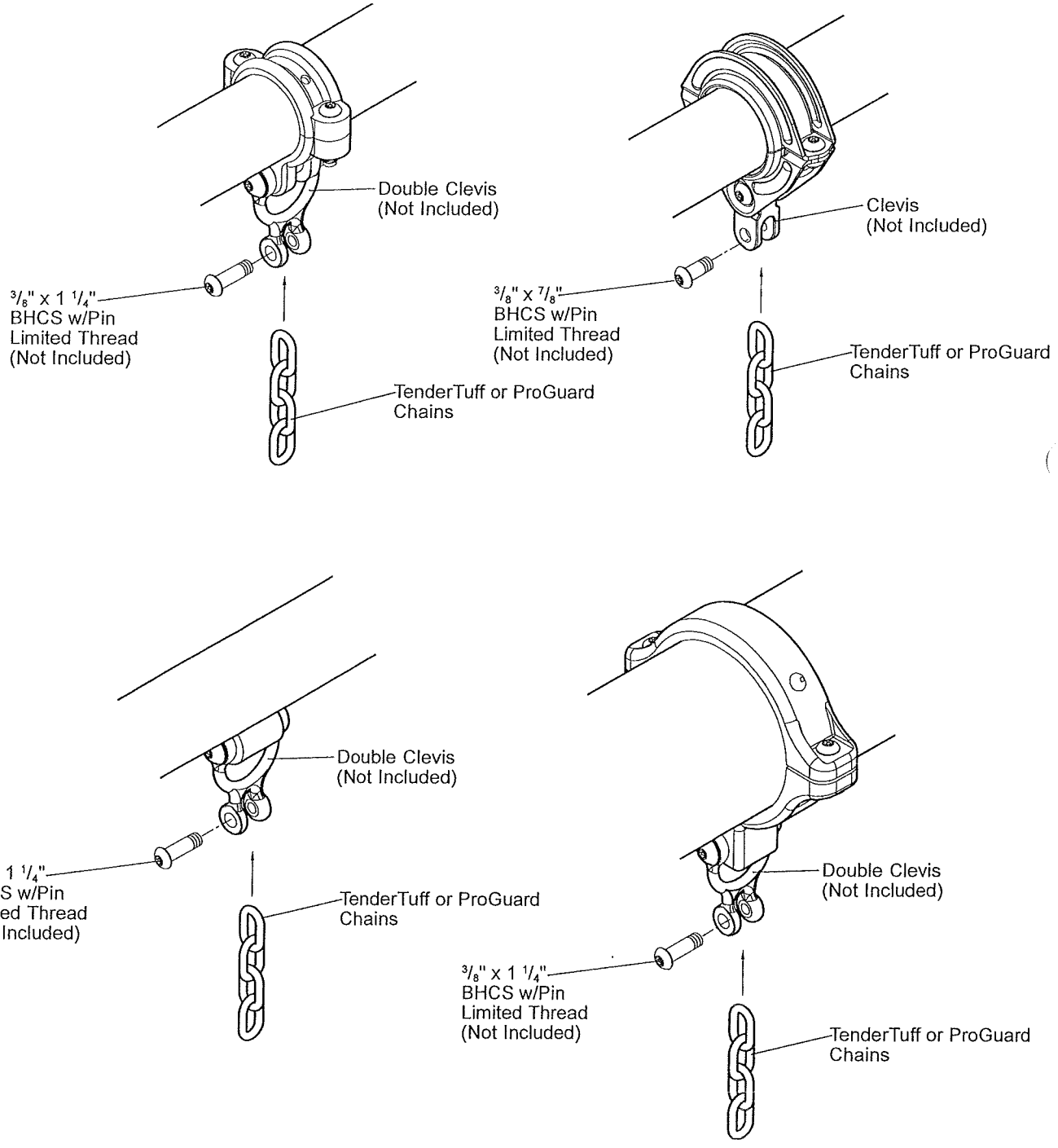
# SWING HANGER OPTIONS







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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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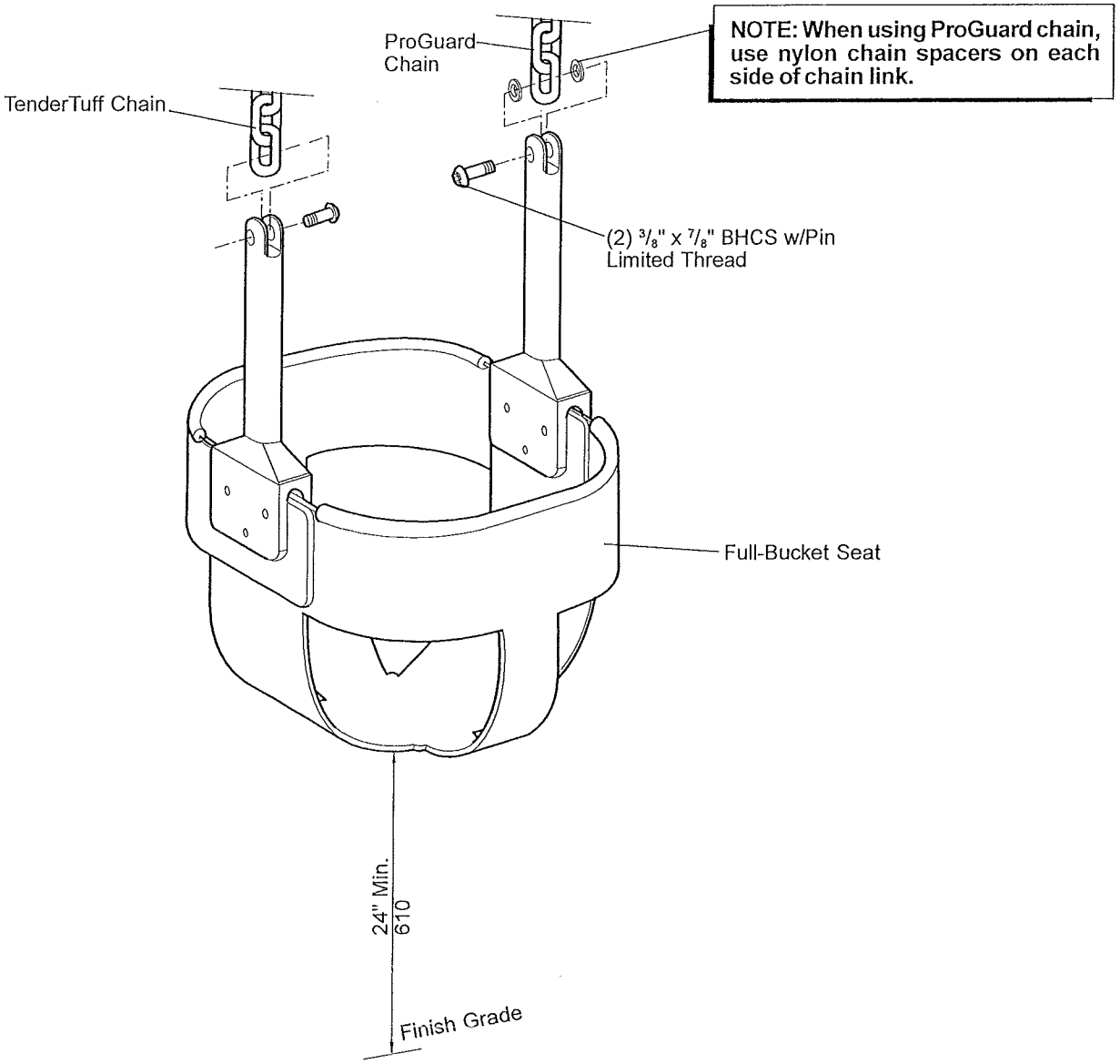
**NOTE: Face bolt heads inward as shown.**

**NOTE: When using ProGuard chain, use nylon chain spacers on each side of chain link.**




Swings

# 176038 Full-Bucket Seat, w/Chains



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Swings 176038 Full-Bucket Seat, w/Chains

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| | **8 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 160110-00 | 52 9/16" Chain, TenderTuff, Specify Color | 2 |
| 174882-00 | 52 9/16" Chain, ProGuard | 2 |
| 138414-00 | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **10 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152051-00 | 76 7/16" Chain, TenderTuff, Specify Color | 2 |
| 174883-00 | 76 7/16" Chain, ProGuard | 2 |
| 138414-00 | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **7 Ft. High Beam (Tot)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152053-00 | 37 1/2" Chain, TenderTuff, Specify Color | 2 |
| 175247-00 | 37 1/2" Chain, ProGuard | 2 |
| 138414-00 | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **75" High Beam (Toddler)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152016-00 | 29 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174881-00 | 29 7/8" Chain, ProGuard | 2 |
| 138414-00 | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |

## Specifications

**Full-Bucket Seat:** Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) 1/4" x 1 5/16" long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 1/2" wide.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:**
14 lbs. (8 FT. Beam w/TenderTuff Chain)
14 lbs. (8 FT. Beam w/ProGuard Chain)
17 lbs. (10 FT. Beam w/TenderTuff Chain)
16 lbs. (10 FT. Beam w/ProGuard Chain)
12 lbs. (7 FT. Beam w/TenderTuff Chain)
12 lbs. (7 FT. Beam w/ProGuard Chain)
11 lbs. (75" Beam w/TenderTuff Chain)
11 lbs. (75" Beam w/ProGuard Chain)

## Installation Instructions

**Swing Hangers with Double Clevis**

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

**Anti-wrap Swing Hangers**

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.



Eco #54752 Document #18985400 replaces #17746000. Replaced full-bucket swing seat.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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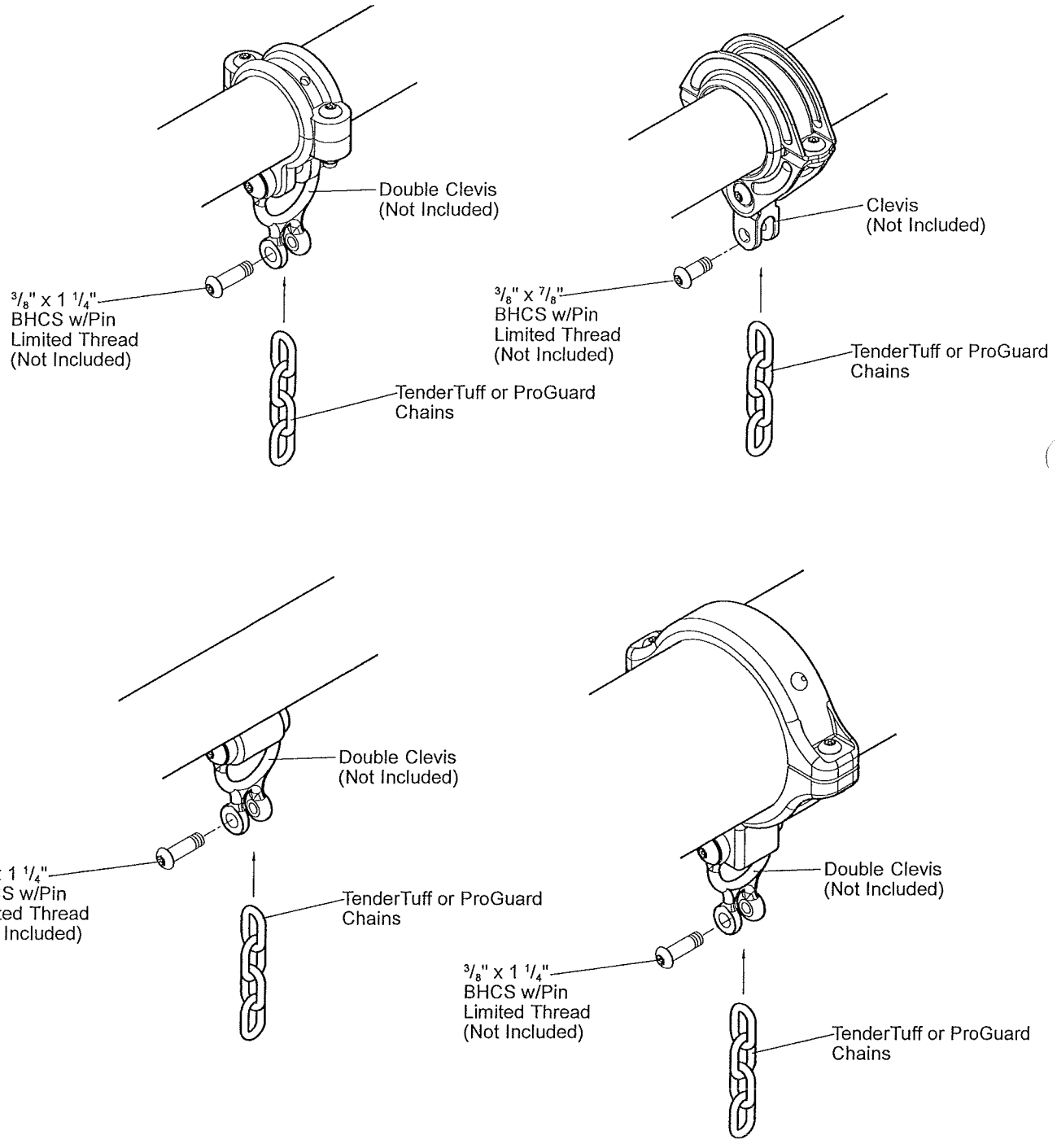
## SWING HANGER OPTIONS




Swings

# 176038 Full-Bucket Seat, w/Chains



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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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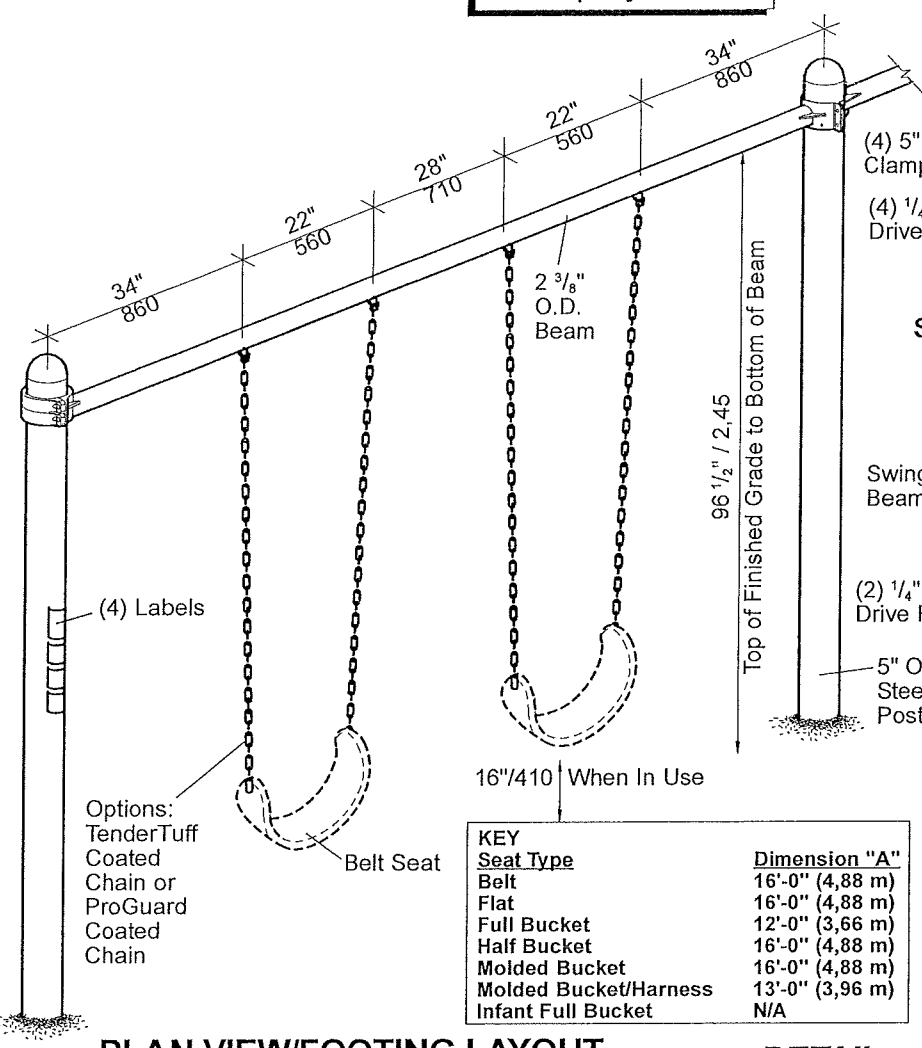
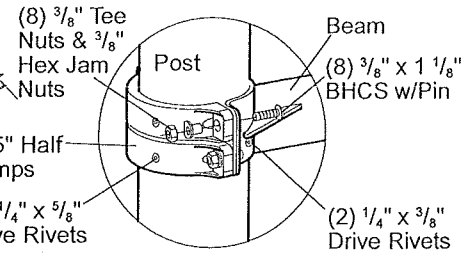
**NOTE: Tighten all BHCS w/Pin equally.**

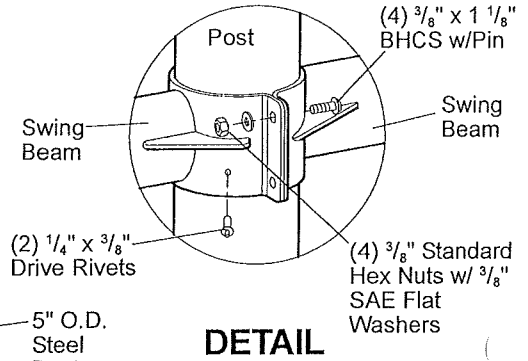



| KEY | |
|---|---|
| **Seat Type** | **Dimension "A"** |
| Belt | 16'-0" (4,88 m) |
| Flat | 16'-0" (4,88 m) |
| Full Bucket | 12'-0" (3,66 m) |
| Half Bucket | 16'-0" (4,88 m) |
| Molded Bucket | 16'-0" (4,88 m) |
| Molded Bucket/Harness | 13'-0" (3,96 m) |
| Infant Full Bucket | N/A |

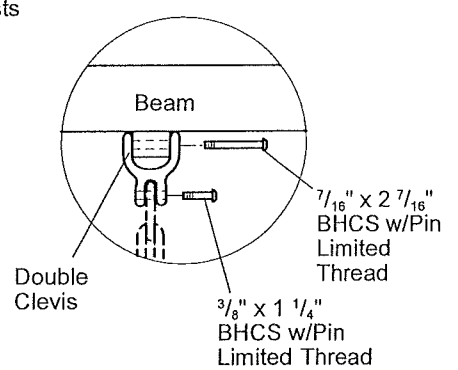
## DETAIL
### END POST ATTACHMENT



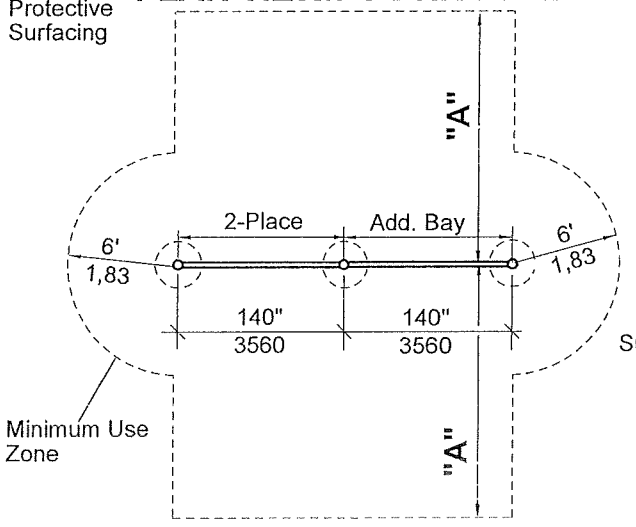

## DETAIL
### BACK-TO-BACK SWING BEAM ATTACHMENT



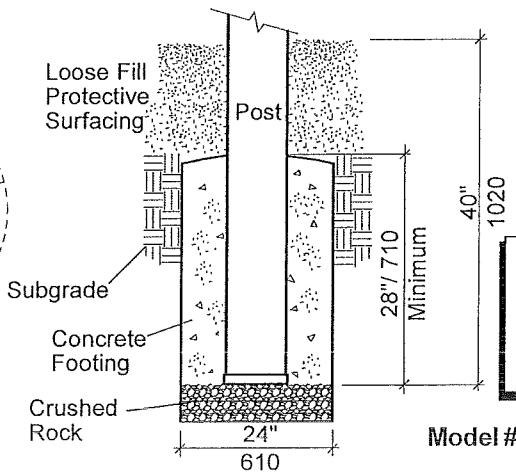

## DETAIL




## PLAN VIEW/FOOTING LAYOUT




## DETAIL
### CONCRETE FOOTING




**NOTE: Model numbers are for swing frames only, order swing seats with chains separately.**

**Model #177333 Additional Bay**

Swings **177332/177333 Single Post Swing Frame**

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# Swings 177332/177333 Single Post Swing Frame

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## Parts List

| Part# | Description | Qty 2 Pl | Qty Add. Bay |
|---|---|---|---|
| 177498-00 | Swing Beam, Specify Color | 1 | 1 |
| 107532-00 | 140" Steel Post Assy., Specify Color | 2 | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 4 | * |
| **132634-00** | **Double Clevis Hardware Package** | 2 | 2 |
| 127068-00 | 7/16" x 2 7/16"BHCS w/Pin Litd.Thread, SST | 4 | 4 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Litd. Thread, SST | 4 | 4 |
| 138917-00 | Double Clevis, SST | 4 | 4 |
| **184516-00** | **2-Place Hardware Package** | 1 | - |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 | - |
| 100351-00 | 3/8" Tee Nut, SST | 8 | - |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 4 | - |
| 128296-00 | 3/8" Hex Jam Nut, SST | 8 | - |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 2 | - |
| 156846-00 | Play Safe Label, 2-12 Yrs. | 1 | - |
| 182213-00 | Hot Surface Warning Label | 1 | - |
| 182212-00 | Entanglement Warning Label | 1 | - |
| 115176-00 | Hard Surface Warning Label | 1 | - |
| **184429-00** | **Additional 2 Place Hardware Package** | - | 1 |
| 100198-00 | 3/8" x1 1/8" BHCS w/Pin, SST | - | 4 |
| 100327-00 | 3/8" Standard Hex Nut, SST | - | 4 |
| .00611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | - | 2 |
| 100365-00 | 3/8" SAE Flat Washer, SST | - | 4 |
| 156846-00 | Play Safe Label, 2-12 Yrs. | - | 1 |
| 182213-00 | Hot Surface Warning Label | - | 1 |
| 182212-00 | Entanglement Warning Label | - | 1 |
| 115176-00 | Hard Surface Warning Label | - | 1 |

*** = 5" Half Clamps From 2 PL. Need To Be Used.**

## Specifications

**Post:** See PlayBooster® (PB) General Specifications.

**Beam:** Weldment comprised of 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing, 3" wide zinc-plated steel clamps and 1 1/4" housings w/bronze bushings. Finish: ProShield®, color specified.

**Half Clamp:** Cast aluminum. Finish: ProShield,, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:**
**2-Place** - Approx. 6 man hours
**Additional Bay** - Approx. 3 man hours

**Concrete Req.:**
**2-Place** - Approx. 14 cu. ft.
**Additional Bay** - Approx. 7 cu. ft.

**Area Req:**
**2-Place** - 24'-1" x 24' (7,3 m x 7,31 m) Full bucket seats.
**2-Place** - 24'-1" x 32' (7,3 m x 9,75 m) For all other seats.
**Additional Bay** - 11'-8" x 24' (3,56 m x 7,31 m) Full bucket seats.
**Additional Bay** - 11'-8" x 32' (3,56 m x 9,75 m) For all other seats.

**Weight:**
**2-Place** - 213 lbs.
**Additional Bay** - 129 lbs.

## Installation Instructions

1) Dig footings spaced as shown. Refer to Concrete Footing Detail.
2) Set posts in footing holes and attach swing beam using 5" half clamps with 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Note Detail on front of sheet. Bottom of beam should be 96 1/2" above finished grade. **NOTE:** *Tighten all BHCS w/pin equally.*
3) Fasten 3/8" hex jam nuts to 3/8" x 1 1/8" BHCS w/pin.
4) If installing additional bay swings use 3/8" x 1 1/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers, this hardware will be used to connect swing beam to swing beam. Refer to Back to Back Swing Beam Attachment Detail.
5) Level beam and plumb posts and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
6) Attach double clevis to beam using 7/16" x 2 7/16" BHCS w/pin limited thread.
7) **NOTE:** *Refer to specific swing seat installation document for attaching chains and seats.*
8) **IMPORTANT:** *Drill Through hole in 5" half clamps and steel half clamps on beams and into 5" post with a 1/4" or "F" (only) drill bit, tap 1/4 " x 5/8" drive rivets through aluminum clamps and 1/4 " x 3/8" drive rivets through steel clamps and into post. This will ensure that the clamp assembly cannot slide down the post.*
9) Apply Play Safe and Warning Labels, as shown.
10) Install protective surfacing before users are allowed to play on the swing.

Specifications are subject to change without notice.

Eco #54545 Document #18448100 replaces #17744700. Added warning labels to hardware package.

# REYNOLDS PARK PLAYGROUND INSTALLATION SPECIFICATIONS

Installation Specifications

REYNOLDS PARK

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487, SECTION 9.*)

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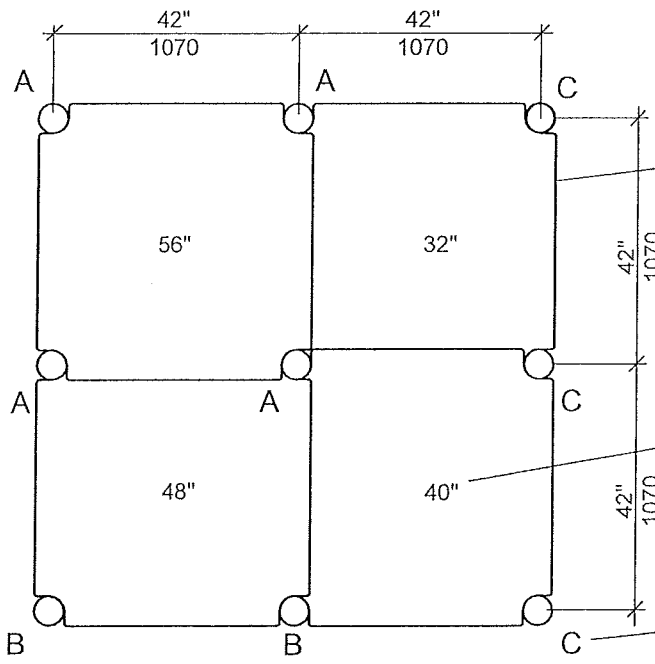
6-1-95

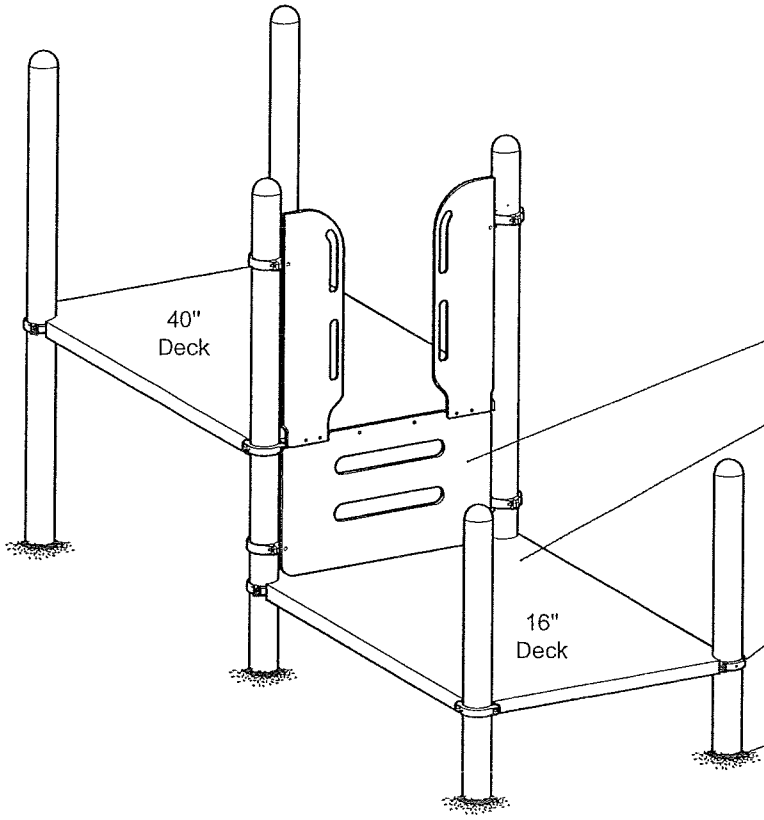



Enclosures or components are required on any decks higher than 28" as indicated on your plan drawing.

Dimension indicates center to center spacing of concrete footings.

Number indicates height of deck above finished grade.

Letter indicates post length as indicated on your plan drawing.




**Enclosures/ Components** - Refer to your plan drawing for locations and their respective spec sheets for installation.

**Vertical Ladders** - Refer to your plan drawing for locations and the Vertical Ladder spec sheet for installation.

**Decks** - Refer to your plan drawing for heights and orientation. Refer to the appropriate deck spec sheet for installation.

**Deck Hanger Clamp Assembly** - Refer to the appropriate Deck Assembly spec sheet for installation."

**Concrete Footings** - Refer to the Typical Concrete Footing spec sheet for installation.

**Kick Plates** - Refer to your plan drawing for locations and the Kick Plate spec sheet for installation.

# PlayBooster General Post/Tenderdeck Information



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J:\SPECS\109\10972201.P65

# PlayBooster General Post/Tenderdeck Information

## Installation Instructions

**Before Starting, Read the General Construction Guidelines, Installation Hints, All Typical Detail Sheets and Specific Installation Instructions for Each Component Labeled on Your Plan.**

1) Dig footing holes spaced as shown on the plan and spec sheets. Refer to the Typical Concrete Footing Spec Sheet.

2) Note the post lengths as shown on the plan and set in their appropriate footing holes. The post length is indicated on the finished grade sticker on each post.

3) Mark the appropriate posts for the deck heights you are installing and attach decks to posts at marked height. Refer to the appropriate deck spec sheet for installation.

4) After all the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Spec Sheet.

5) Continue installing enclosures and components and pour concrete footings as you progress, making sure everything is plumb and level.

6) When installation is complete, install Drive Rivets in all clamps per the Typical Offset Hanger Clamp Spec Sheet.

7) Install protective surfacing under and around all equipment before users are allowed to play on the structure.

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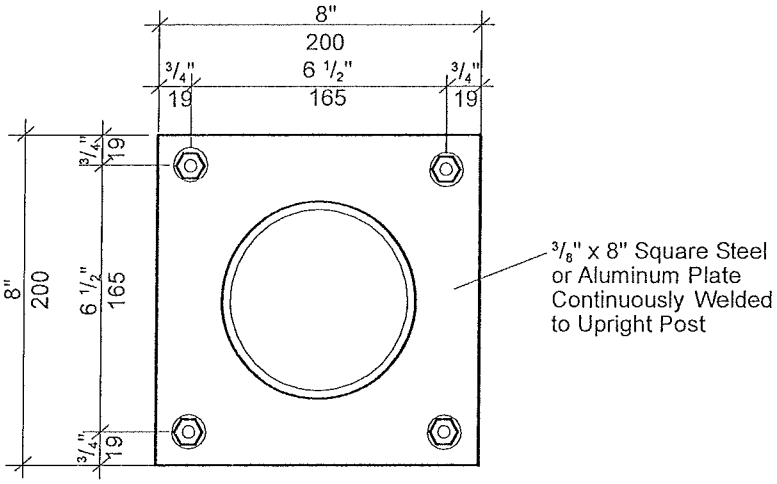
ISO 9001 Certified

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*)

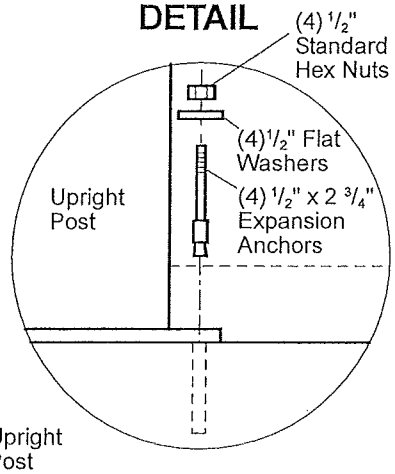
3-29-01
12194700

NOTE:
Surface mounting will not work in all applications. Consult Landscape Structures Inc. for your particular requirements.

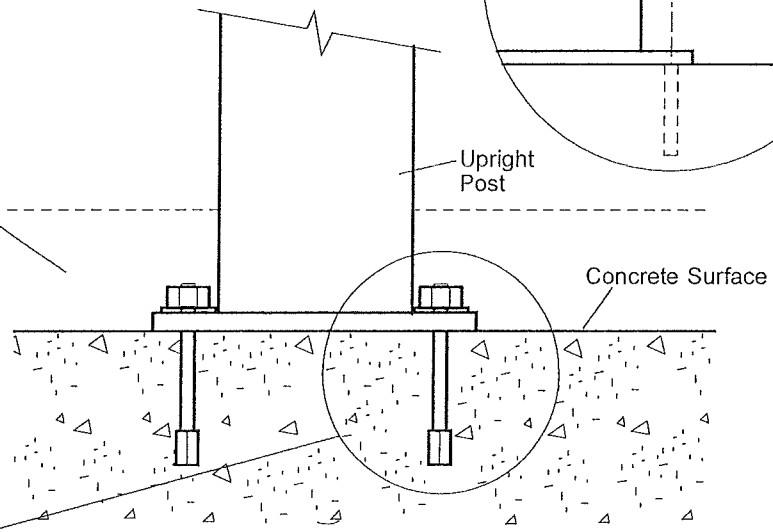



## CONCRETE SLAB SPECS

- Base under slab to be 4" - 6" of sand over a stable subgrade.
- Depth of concrete slab to be 4" - 6" with a wire mesh support.
- Minimum of 7 days curing time full cure after 30 days.
- Surface of concrete to be trowled smooth and acid etched.
- Concrete: 3000 PSI (Min)
  30 Days 3500 PSI
  3/4 Minus Crushed Rock




NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.




NOTE:
Drill 3" deep hole using hammer drill and 1/2"masonry bit. Tap anchors into concrete and secure with 1/2" standard hex nuts and 1/2" flat washers.



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SAFETY NOTE

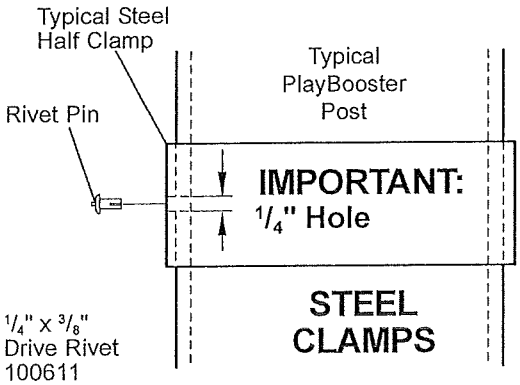
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

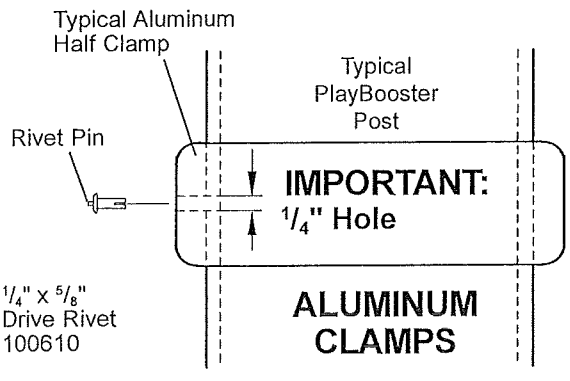
11-22-99
129847a0
129847b0

# General Rules For Use Of Drive Rivets

- Rivets are used as "Insurance" to keep clamps from sliding down the posts. In many cases this "Insurance" is achieved in other ways; i.e. Panels that attach to the deck face.
- Refer to the Spec Sheet Parts List and follow Installation Instructions for each component.
- Decks and Overhead Events always need rivets.
- Any component fastened to the Deck does not need rivets.

  Benefits of not installing unnecessary rivets: saves time, it makes clamp adjustments as well as the removal of clamps for replacement or adding phases much easier, and you will have fewer damaged clamps or posts due to poor installation techniques.




**INSTRUCTIONS:**

**NOTE:** Use Only Bit Size "F" or 1/4" Drill Bit.

After Play Component Assembly is Complete, Drill Hole into Post Through Half Clamp, Insert Rivet in Hole, and Hammer Rivet Pin in Until it is Flush with Head.



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11-22-99 Document #12984700 replaces #10972900. Added general rules for use of drive rivets. Document #12984700

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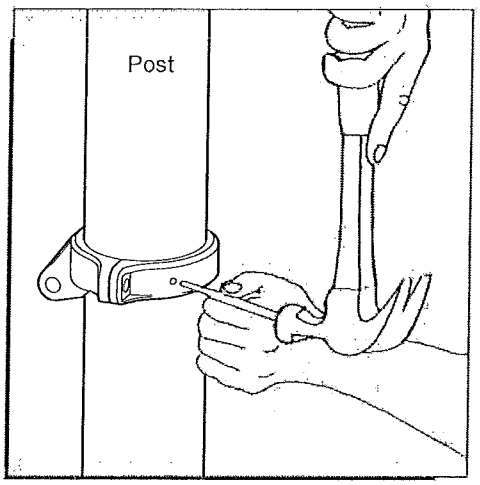
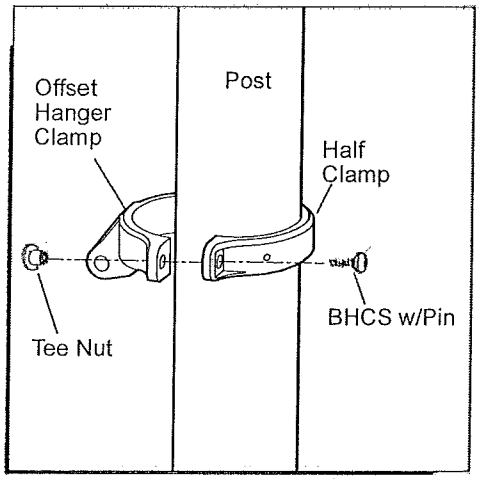
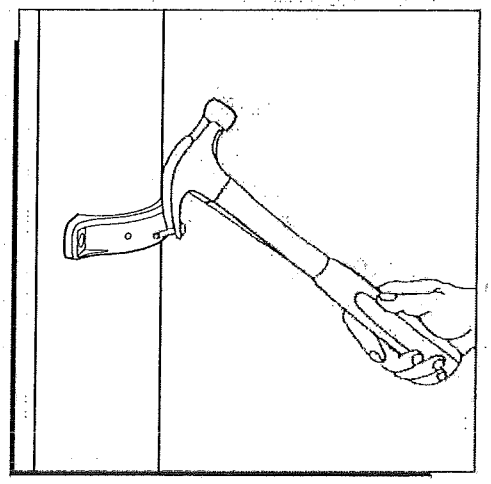
11-22-99
109729a




1) Drive Center Pin of Rivet Straight into Post Using $^1/_8$" Diameter Punch and Hammer.




2) Unbolt BHCS w/Pin and Tee Nuts from Clamp Using Tamperproof Hex Wrench. Remove Offset Hanger Clamp. Lightly Tap on Half Clamp with Hammer Until Head of Drive Rivet Pulls Away From Half Clamp.



3) Pull Out Drive Rivet Using Claw End of Hammer.

**Tools Needed:**
- Claw Hammer
- $^1/_8$" Diameter Steel Punch
- Tamperproof Hex Wrench

# Drive Rivet Removal

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

1-1-01

# PlayBooster Installation

1) Before starting installation, study your *PlayBooster* plan drawing and all installation instructions carefully for location of posts, deck heights, components and safety enclosures. Make sure slides are oriented away from the afternoon sun and that the structure is visible (easily supervised) and accessible.

2) Clear an area large enough for your *PlayBooster* and at least the required minimum use zone around it, as shown on your plan drawing. The subsurface must be well drained. If the soil does not drain naturally it must be tiled or sloped at $^1/_8$" to $^1/_4$" per foot to a storm sewer or a "French Drain". If your *PlayBooster* is over 30' in length it is recommended to install more than one "French Drain" or similar system to allow drainage from the center of the play area and decrease the overall slope. If this is not possible, the structure may need to be "stepped" to take up the grade change.

3) Overhead Obstructions: Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example, tree limbs) shall be at least 84 in. (2130 mm) above each designated play surface or 84 in. (2130 mm) above the pivot point of swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes, such as the National Electical Safety Code.

4) Locate all mainstructure post footing holes according to the dimensions shown on your *PlayBooster* plan. This can be accomplished by laying a deck on the ground and measuring from it; by laying out a base line string grid or using a builders transit. This step is very important and worth taking extra time to be precise. Location of component footings such as slide supports can be done at a later time.

5) Refer to the Typical Concrete Footing installation sheet. Dig holes to the proper width and depth as shown. (Only dig enough holes for one day's construction. Do not leave holes open over night.) Pour crushed rock in each hole ***level with each other*** and at least 4" deep as shown. This can be easily accomplished either with a builders transit or by laying out hole locations with a string grid, leveling the grid, and measuring down from the grid for each footing. Tamp the crushed rock down until compacted and at proper level. This step is important to ensure all posts will be at the proper height relative to each other, and it greatly simplifies installation. If the soils are loose or unstable, larger diameter holes may be necessary. Check with a local engineer if in doubt.

6) Start with the lowest deck and work your way to the highest deck following instructions on the installation sheets for typical post/deck assembly. Install barriers and roofs as located on the plan for stability.

7) After the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Detail.

8) During construction, the site and all the material on it must be secured when unattended to prevent children from playing on them. Do not leave decks with unprotected openings when unattended-use temporary barricades if necessary.

9) Install all other play components per the installation instructions. After all components and enclosures are properly attached, pour the remaining concrete footings per the Typical Concrete Footing Detail.

10) Install protective surfacing material.

11) Attach play hardware such as 'D' rings and swing seats last, ***after*** protective surfacing is in place and footings have cured at least 3 days.

12) Carefully and thoroughly inspect the entire *PlayBooster* to be sure all fastening hardware is tight. According to ASTM F1487, section 6.2 sharp points, edges and protrusions; any exposed bolt ends should not protrude beyond the face of the nut more than two (2) threads. This condition is not planned, but may exist in some applications because materials and finishes will vary. To remedy this situation, add a second nut or washer(s), extras have been added to the spare parts kit. See illustrations on reverse side of this sheet. Children should not be allowed on the structure until this inspection is complete.

13) Before children are allowed on the structure, the site must be cleaned and free of all construction debris and packaging material. Do not burn on the site.



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## Tools Required

Tools required for installation are an auger, or other equipment for digging 14" diameter footing holes; shovels, rubber mallet, drill (with $^1/_4$", $^7/_{16}$", $^9/_{16}$", $^{11}/_{16}$" and $^3/_8$" drill bits), tape measure, hex keys or allen wrenches, level, $^3/_8$" socket set, hammer, open end wrench set, screw driver, for surface mount a hammer drill, $^3/_8$" and $^1/_2$" masonry bits and transit or string line to aid in layout. Some washable felt tip pens are also useful for marking clamp locations.

## Materials Required

All *PlayBooster* materials are supplied except concrete for footings, protective surfacing material, and curbing or edging material. With the exception of the special wrenches required (for the pinned hex fasteners) no other tools are supplied.

## Recycling

Many of our packaging materials can be recycled, please take the time to separate and deliver them to a recycler. Thank You.

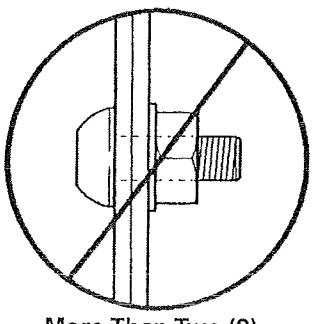
## Installation Times

Installation times, as noted on the back of the installation sheets, are ***approximate*** and will vary depending on soil conditions, installer's equipment and ability. Times indicated ***do not*** include unloading or unpacking equipment. The man hours given are for one person installing (unless otherwise noted). Cut time in half for two people.

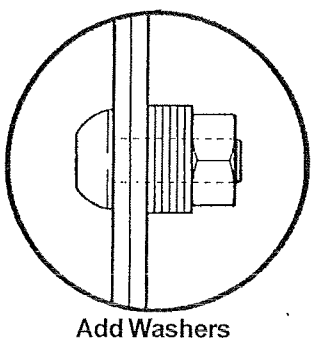
## Technical Services

If you have any questions or concerns about the installation of your structure, call our Technical Services Department at: ***1-800-328-0035*** (7:30 - 5:30p.m. CST/M-F).

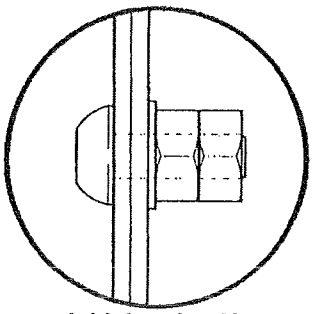
## Illustrations For Note 10, (Reverse Side Of This Sheet)



More Than Two (2) Threads Exposed



Add Washers



Add Another Nut (Align Flat Area)



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1-1-01 Document #13412800 Replaces #12809900, Udated Installations Instructions.

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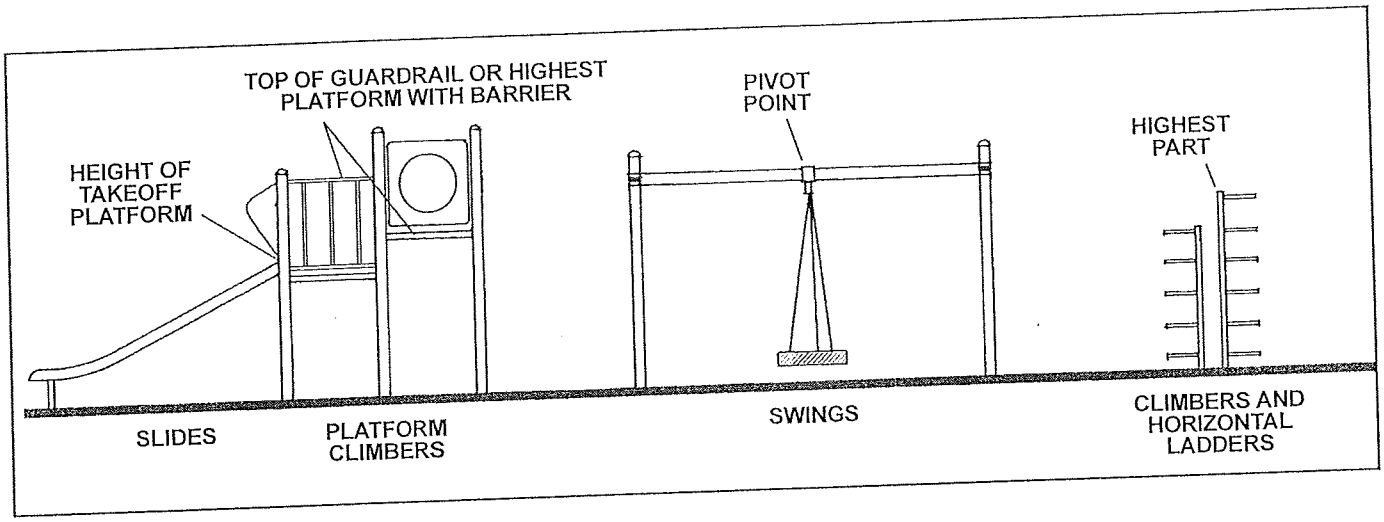
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*.)




1.) Determine the highest accessible part - by definition.

2.) Determine the type of surfacing material desired:
- *Unitary* - Bound rubber type materials for the accessible areas.
- *Loose-fill* - Sand, wood chips, etc. for non-accessible areas.

3.) Select a material that has a Critical Height value of at least the height of the highest accessible part.
- According to the CPSC, Critical Height is defined as the maximum height from which the instrumented metal headform, upon impact, yields both a peak deceleration of no more than 200 G's and a HIC value of no more than 1,000 when tested in accordance with the procedure described in the ASTM Test Method F1292.
- Request independent laboratory test results showing the critical height of each product per the above procedures for commercially available products. The CPSC has tested some common loose-fill materials that are commonly not tested as a protective surfacing. (See back page.)

4.) Cover the designated use zone with the desired materials. If a different type of material is used for the accessible route of travel, make sure the surfaces are maintained flush.



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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

## Critical Heights (in Feet)

| | Uncompressed Depth | | | Compressed Depth * |
|---|---|---|---|---|
| **Material** | **6"** | **9"** | **12"** | **9"** |
| * Wood Mulch | 7' | 10' | 11' | **10'** |
| * Double Shredded Bark Mulch | 6' | 10' | 11' | **7'** |
| * Uniform Wood Chips | 6' | 7' | 12' | **6'** |
| * Fine Sand | 5' | 5' | 9' | **5'** |
| * Coarse Sand | 5' | 5' | 6' | **4'** |
| * Fine Gravel | 6' | 7' | 10' | **6'** |
| * Medium Gravel | 5' | 5' | 6' | **5'** |

**NA = Not Available**

* **NOTE:** Compressed depths most accurately depict conditions on a playground.

* An approximation of the maximum fall height from which a life-threatening head injury would not be expected to occur, based on tests in which a headform yielded both a peak deceleration of less than 200 G's and a HIC of less than 1000 upon impact.

* Handbook for *Public Playground Safety*, published by the U.S. Consumer Products Safety Commission, Section 10, Table 2, page 21.



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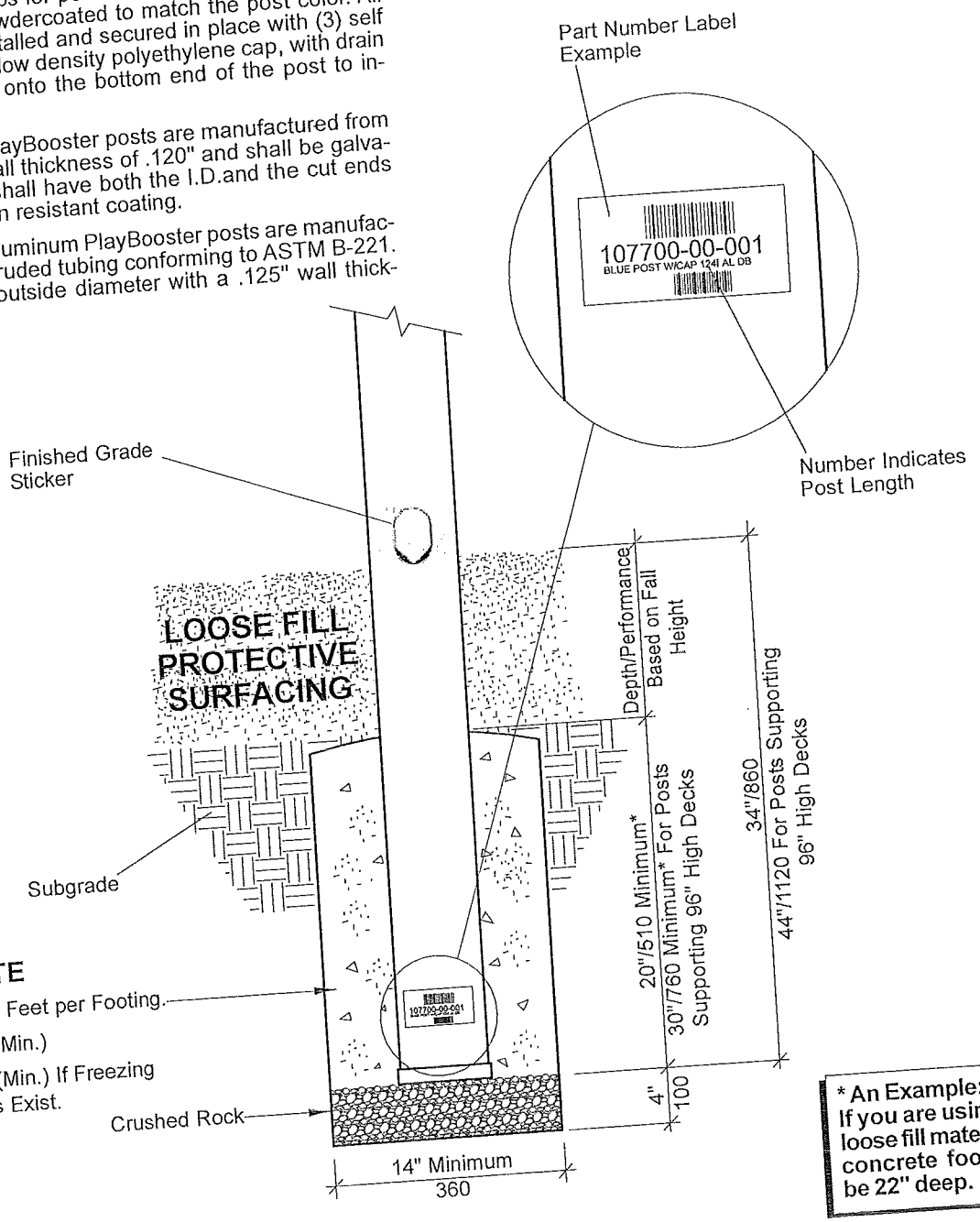
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*)

13871600

**Post Specifications:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D.and the cut ends sprayed with a corrosion resistant coating.

**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.




*** An Example:**
**If you are using 12" of loose fill material, your concrete footing will be 22" deep.**

# Concrete Footings, 5" Posts



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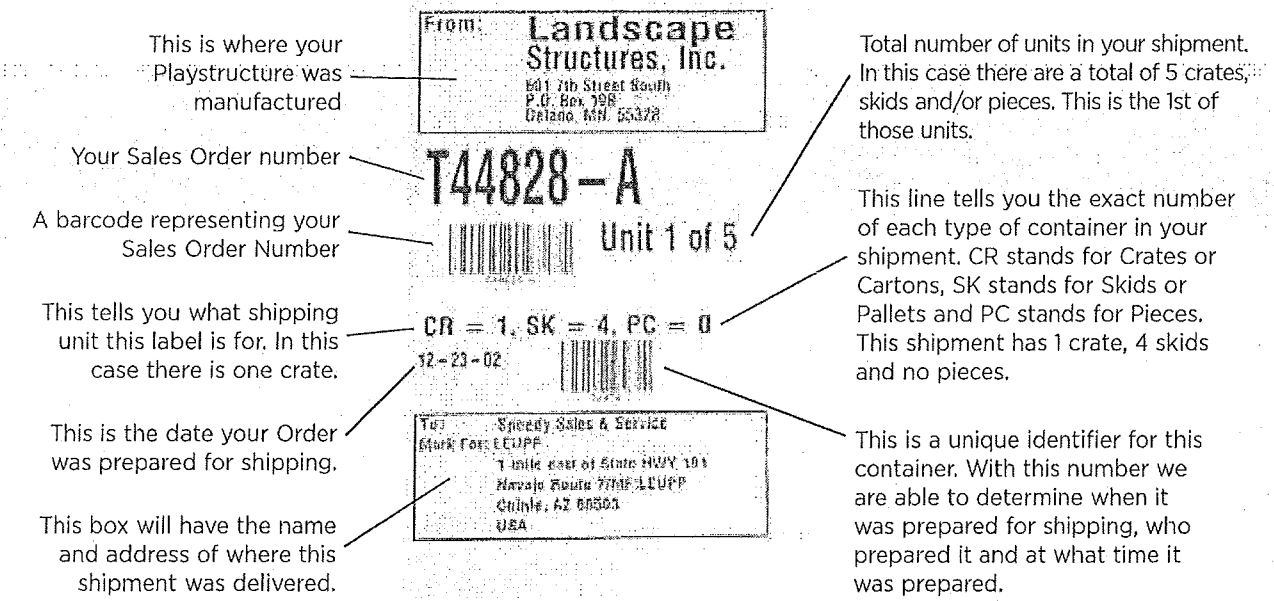
Eco #51014 Document #13871600 replaces #13433700. Removed Post Length Sticker.
Document #13871600




*Ship Unit Codes:
S=Skid
P=Piece
C=Crate

The Shipping Label above will be on all of the Skids, Pieces and Crates shipped to you*.

## Sample Master Packing List

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**Master Packing List - T00000**

Page 1

Cust. PO: 1868

**Customer Information**

PlayBooster Park
111 East Locust Street
Your Town, USA

**Installation Location Information**

PlayBooster Park
111 East Locust Street
Your Town, USA

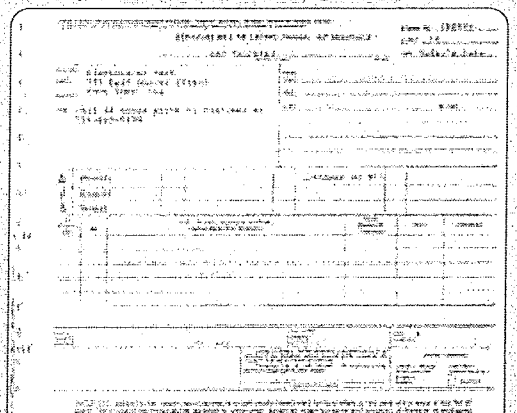
Units prepared for shipping by nsmith at 07:47 on 01/27/2005

| Ship Qty | Part Number | Description | Container ID |
|---|---|---|---|
| 1 | 139573-00-000 | RDM WIGGLE LADR 4DEK PB | T74622-S-01 |
| 1 | 139734-00-000 | MONIX LADR 84 PB STR | T74622-S-S1 |
| 1 | 139619-00-000 | RDM BLOCK CLMB 2DEK PB | T74622-S-01 |
| 1 | 139892-00-000 | RDM LOOP LADDER TC PB | T74622-S-02 |
| 1 | 140412-00-000 | VERT LADR END SPRT DB | T74622-S-S3 |
| 2 | 140664-00-000 | INFILL PNL SPER MOD PB/PV | T74622-S-S2 |
| 4 | 141765-00-000 | CBN 3/16 FSC X 29-7/81 | T74622-S-01 |
| 1 | 142326-00-000 | 2-BLOCK BLK CLMB BRN | T74622-S-S3 |
| 2 | 142346-00-000 | 2-BLOCK BLK CLMB TAN | T74622-S-S2 |
| 2 | 142347-00-000 | LDR BLOCK CLMB DB TAN | T74622-S-S1 |
| 1 | 142389-00-000 | GUSSET BLOCK CLMB PNT TAN | T74622-S-03 |
| 1 | 144579-00-000 | STORE PANEL SET PB/PV | T74622-S-S2 |
| 4 | 145658-00-000 | SQ DECK PB | T74622-S-S3 |
| 3 | 145659-00-000 | TRI DK PB 90 DEG EXT | T74622-S-S3 |
| 2 | 145661-00-000 | SQ DECK EXT PB | T74622-S-S3 |
| 1 | 145662-00-000 | SQ DECK CORNER PB | T74622-S-S3 |
| 4 | 146007-00-000 | BIT 5/16 6-LOBE T-45 TAMP | T74622-S-P3 |
| 4 | 146017-00-000 | NUT 5/16 A/LOCK T-45 | T74622-S-P3 |

## BACK-ORDER

If you see a label like this on the Shiplist, it means that we have not sent everything. The products(s) we did not include will be indicated on the Shiplist with the word "Backordered" next to it. Your Sales Representative will be able to give you more information.

## Sample Bill of Lading



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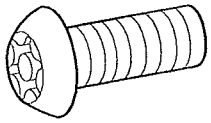
ISO 14001 CERTIFIED

ISO 9001 Certified

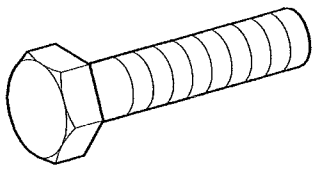
# Common Parts & Fasteners

## Button Head Cap Screws BHCS w/Pin



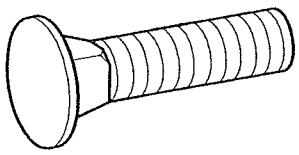
| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 137277-00 | 1/4" x 3/8" | (6,4 x 9,5) | SST-PAT | 10 | 1.4 |
| 131849-00 | 5/16" x 1/2" | (7,9 x 12,7) | SST-PAT | 10 | 1.4 |
| 132626-00 | 5/16" x 7/8" | (7,9 x 22,2) | SST-PAT | 10 | 1.4 |
| 100195-00 | 3/8" x 5/8" | (9,5 x 15,9) | SST-PAT | 15 | 2 |
| 100196-00 | 3/8" x 7/8" | (9,5 x 22,2) | SST-PAT | 15 | 2 |
| 100198-00 | 3/8" x 1 1/8" | (9,5 x 28,6) | SST-PAT | 15 | 2 |
| 113027-00 | 3/8" x 1 3/8" | (9,5 x 34,9) | SST-PAT | 15 | 2 |
| 100171-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 123224-00 | 3/8" x 1 11/16" | (9,5 x 42,9) | SST-PAT | 15 | 2 |
| 100173-00 | 3/8" x 2" | (9,5 x 50,8) | SST-PAT | 15 | 2 |
| 100199-00 | 3/8" x 2 1/4" | (9,5 x 57,2) | SST-PAT | 15 | 2 |
| 100174-00 | 3/8" x 2 1/2" | (9,5 x 63,5) | SST-PAT | 15 | 2 |
| 100175-00 | 3/8" x 2 3/4" | (9,5 x 69,9) | SST-PAT | 15 | 2 |
| 100176-00 | 3/8" x 3" | (9,5 x 76,2) | SST-PAT | 15 | 2 |
| 100168-00 | 3/8" x 3 1/4" | (9,5 x 82,6) | SST-PAT | 15 | 2 |
| 100200-00 | 3/8" x 3 1/2" | (9,5 x 88,9) | SST-PAT | 15 | 2 |
| 124460-00 | 3/8" x 3 3/4" | (9,5 x 95,2) | SST-PAT | 15 | 2 |
| 100201-00 | 5/8" x 1 1/2" | (15,9 x 38,1) | SST-PAT | 50 | 7 |
| 127551-00 | 5/8" x 1 1/2" | (15,9 x 38,1) | SST-ANTI-SIEZE | 50 | 7 |
| 100203-00 | 5/8" x 2 1/4" | (15,9 x 57,2) | SST-PAT | 50 | 7 |

## Hex Cap Screws



| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 100206-00 | 3/8" x 1" | (9,5 x 25,4) | SST-PAT | 15 | 2 |
| 100208-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 100209-00 | 3/8" x 1 3/4" | (9,5 x 44,4) | SST-PAT | 15 | 2 |
| 135682-00 | 3/8" x 3 1/8" | (9,5 x 79,3) | SST-PAT | 15 | 2 |
| 135683-00 | 3/8" x 4 5/8" | (9,5 x 117,5) | SST | 15 | 2 |
| 100214-00 | 3/8" x 5" | (9,5 x 127) | SST-PAT | 15 | 2 |
| 121499-00 | 7/16" x 1 3/4" | (11,1 x 114,3) | SST-PAT | 15 | 2 |
| 100216-00 | 1/2" x 1 1/4" | (12,7 x 31,7) | SST | 15 | 2 |
| 131862-00 | 1/2" x 2 1/4" | (12,7 x 57,1) | SST-PAT | 20 | 2.8 |

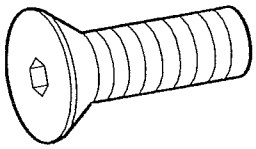
## Carriage Bolts



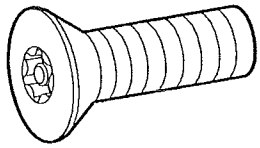
| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 100135-00 | 5/16" x 1 1/4" | (7,9 x 31,8) | SST-PAT | 5 | 0.7 |
| 100147-00 | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 15 | 2 |
| 116017-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 15 | 2 |
| 100148-00 | 3/8" x 1 3/4" | (9,5 x 44,5) | SST-PAT | 15 | 2 |

## Flat Head Cap Screws (FHCS)

No Pin*



With Pin



| Part # | Sizes Inches | Sizes mm | Mat'l or Grade | Recommended Torque Ft./lbs | Recommended Torque Kgm |
|---|---|---|---|---|---|
| 148686-00 | 3/8" x 3/4" | (9,5 x 19,05) | SST-PAT | 13 | 1.8 |
| 100252-00* | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 13 | 1.8 |
| 151421-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST-PAT | 13 | 1.8 |
| 148765-00 | 3/8" x 3 1/2" | (9,5 x 88,9) | SST-PAT | 13 | 1.8 |
| 130824-00* | 1/2" x 2 1/4" | (12,5 x 57,2) | SST | 20 | 2.8 |

NOTE: These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.



601 7TH STREET SOUTH DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSEINST (1-888-573-4678) FAX (763) 972-3185

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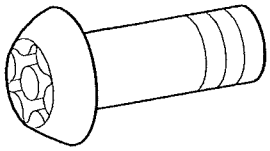
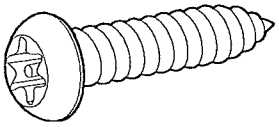
## BHCS w/Pin Limited Thread Bolts



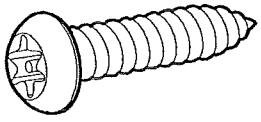
| Part # | Sizes Inches | mm | Mat'l or Grade | Recommended Torque Ft./lbs | Kgm |
|---|---|---|---|---|---|
| 100290-00 | 3/8" x 7/8" | (9,5 x 22,2) | SST-PAT | 21 | 3 |
| 100292-00 | 3/8" x 1 1/4" | (9,5 x 31,8) | SST-PAT | 21 | 3 |
| 157704-00 | 7/16" x 2" | (11,11x 51) | SST-PAT | 40 | 5.5 |
| 127068-00 | 7/16" x 2 7/16" | (11,11x61,91) | SST-PAT | 40 | 5.5 |

## Lag Screws



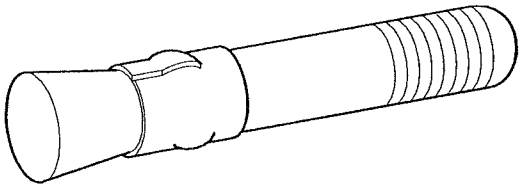
| Part # | Sizes Inches | mm | Mat'l or Grade | Head Type |
|---|---|---|---|---|
| 100127-00 | 5/16" x 1 1/4" | (7,9 x 31,8) | SST | Hex Head |
| 168198-00 | 3/8" x 1 1/2" | (9,5 x 38,1) | SST | Button Head (Shown) |
| 139039-00 | 3/8" x 2" | (9,5 x 50,8) | SST | Button Head (Shown) |

## Screw, Type AB Thread BHCS w/Pin



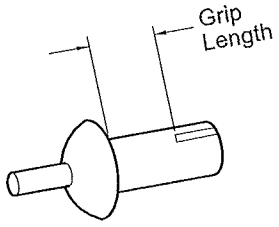
| Part # | Size | Mat'l or Grade |
|---|---|---|
| 129671-00 | #14 x 1/2" | SST |
| 127872-00 | #14 x 3/4" | SST |
| 136232-00 | #14 x 1" | SST |
| 129672-00 | #14 x 1 1/4" | SST |

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



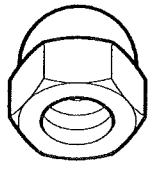
| Part # | Sizes Inches | mm | Mat'l or Grade | Recommended Torque Ft./lbs | Kgm |
|---|---|---|---|---|---|
| 100263-00 | 3/8" x 2 3/4" | (9,5 x 69,9) | Alloy Steel | 15 | 2 |
| 100266-00 | 1/2" x 2 3/4" | (12,7 x 69,9) | Alloy Steel | 20 | 2.8 |

## Drive Rivets




| Part # | Sizes Inches | mm | Mat'l |
|---|---|---|---|
| 100609-00 | 1/4" x 3/16" | (6,4 x 4,8) | Alum Rivet/Alum Pin |
| 100611-00 | 1/4" x 3/8" | (6,4 x 9,5) | Alum Rivet/SST Pin |
| 113300-00 | 1/4" x 1/2" | (6,4 x 12,7) | Alum Rivet/Alum Pin |
| 100610-00 | 1/4" x 5/8" | (6,4 x 15,9) | Alum Rivet/SST Pin |
| 139152-00 | 1/4" x 3/4" | (6,4 x 19,05) | Alum Rivet/Alum Pin |
| 100613-00 | 1/4" x 7/8" | (6,4 x 22,2) | Alum Rivet/Alum Pin |
| 118158-00 | 1/4" x 1" | (6,4 x 25,4) | Alum Rivet/Alum Pin |

## Low Crown Cap Nut



| Part # | Size Inches | Mat'l |
|---|---|---|
| 100349-00 | 3/8" -16 UNC | SST |

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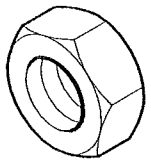
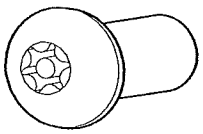
## Standard Hex Nuts



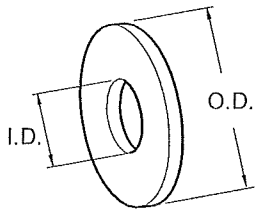
| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100326-00 | 5/16-18 UNC | SST |
| 100321-00 | 3/8-16 UNC | SST-Pat |
| 100327-00 | 3/8-16 UNC | SST |
| 128296-00 | 3/8-16 UNC (Jam Nut) | SST |
| 100328-00 | 7/16-14 UNC | SST |
| 145021-00 | 7/16-14 UNC (Jam Nut) | SST |
| 100322-00 | 1/2-13 UNC | SST |
| 129692-00 | 1/2-13 UNC | SST-Pat |
| 129693-00 | 1/2-13 UNC (Jam Nut) | SST |
| 100323-00 | 5/8-11 UNC | SST |

## Flange Nut w/Pin



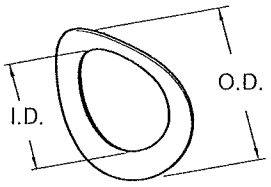
| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100353-00 | 3/8-16 UNC | SST |

## Flat Washers



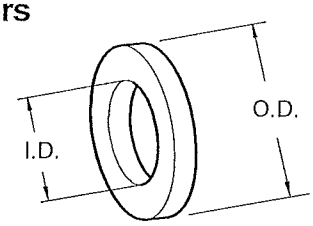

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 122039-00 | 1/4" | (6,3) | SST | 0.312 | .734 |
| 100362-00 | 3/8" | (9,5) | SST | 0.406 | 1.002 |
| 112793-00 | 7/16" | (11,1) | SST | 0.505 | 1.262 |
| 100363-00 | 1/2" | (12,7) | SST | 0.536 | 1.262 |
| 100366-00 | 5/8" | (15,9) | SST | 0.688 | 1.750 |
| 123737-00 | 1 1/8" | (28,6) | SST | 1.140 | 1.750 |

## Curved Spring Washer



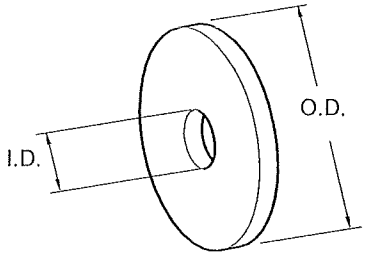

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 100380-00 | 1/2" | (12,7) | SST | 0.531 | 0.795 |

## SAE Flat Washers



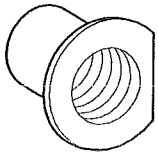

| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 100364-00 | 1/4" | (6,35) | SST | 0.281 | 0.625 |
| 100365-00 | 3/8" | (9,5) | SST | 0.411 | 0.816 |
| 113550-00 | 1/2" | (12,7) | SST | 0.531 | 1.062 |
| 129500-00 | 5/8" | (15,9) | SST | 0.686 | 1.342 |

## Fender Washers




| Part # | Sizes Inches | mm | Mat'l or Grade | I.D. | O.D. |
|---|---|---|---|---|---|
| 100378-00 | 3/8" x 1 1/2" | (9,53 x 38,1) | SST | 0.406 | 1.500 |
| 100379-00 | 1/2" x 2" | (12,7 x 50,8) | SST | 0.531 | 2.000 |

## Tee Nut (PlayBooster Clamps)



| Part # | Sizes Inches | Mat'l or Grade |
|---|---|---|
| 100351-00 | 3/8-16 UNC | SST |

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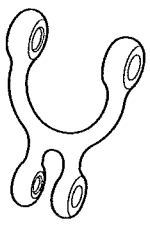
## Set Screw

| Part # | Sizes Inches | mm | Mat'l or Grade |
|---|---|---|---|
| 100298-00 | 3/8" x 7/16" | (9,5 x 11,1) | SST |

## Bolt Link

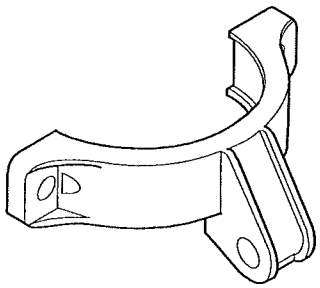
| Part # | Mat'l or Grade |
|---|---|
| 138915-00 | SST |

## Double Clevis



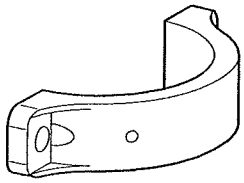
| Part # | Mat'l or Grade |
|---|---|
| 138917-00 | SST |

## Offset Hanger Clamp (PlayBooster)



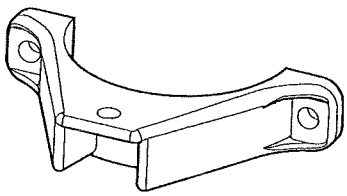
| Part # | Mat'l |
|---|---|
| 113729-00 | Cast Aluminum |

## Half Clamp (PlayBooster)



| Part # | Mat'l |
|---|---|
| 105327-01 | Cast Aluminum |

## Deck Hanger Clamp (PlayBooster)



| Part # | Mat'l |
|---|---|
| 106022-00 | Cast Aluminum |

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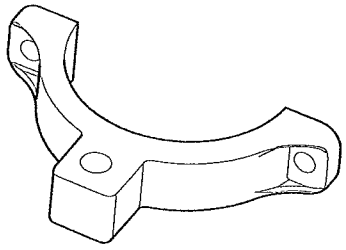
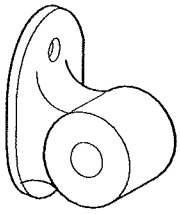
## Swing Hanger Clamp



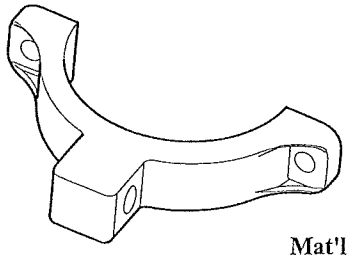
| Part # | Mat'l |
|---|---|
| 121289-00 | Cast Aluminum |

## Offset Bolt Bracket (PlayShaper)



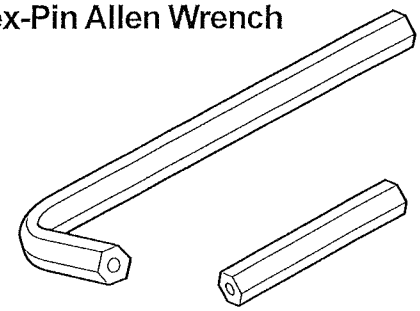
| Part # | Mat'l |
|---|---|
| 113895-00 | Cast Aluminum |

## Ring/Rail Hanger Clamp (PlayBooster)



| Part # | Mat'l |
|---|---|
| 105330-00 | Cast Aluminum |

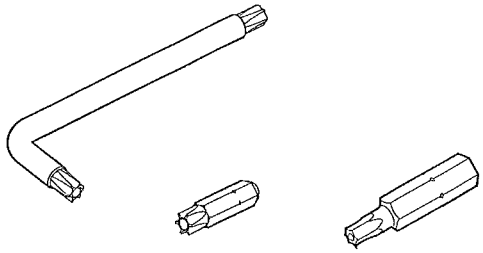
## Hex-Pin Allen Wrench



Hex-Pin Driver

| Part # | Description |
|---|---|
| 100685-00 | Hex-Pin Allen Wrench |
| 100686-00 | Hex-Pin Driver (Used With A $^{5}/_{16}$" Socket) |

## 6-Lobe Wrench



6-Lobe Driver

Torx-Pin Driver

| Part # | Description |
|---|---|
| 146017-00 | 6-Lobe Wrench (T-45) |
| 146007-00 | 6-Lobe Driver (T-45) (Used With A $^{5}/_{16}$" Socket) |
| 127463-00 | Torx-Pin Driver (T-27) (Used With A $^{1}/_{4}$" Socket) |



Eco #53704 Document #16338900 replaces #15436400. Udated Fasteners.

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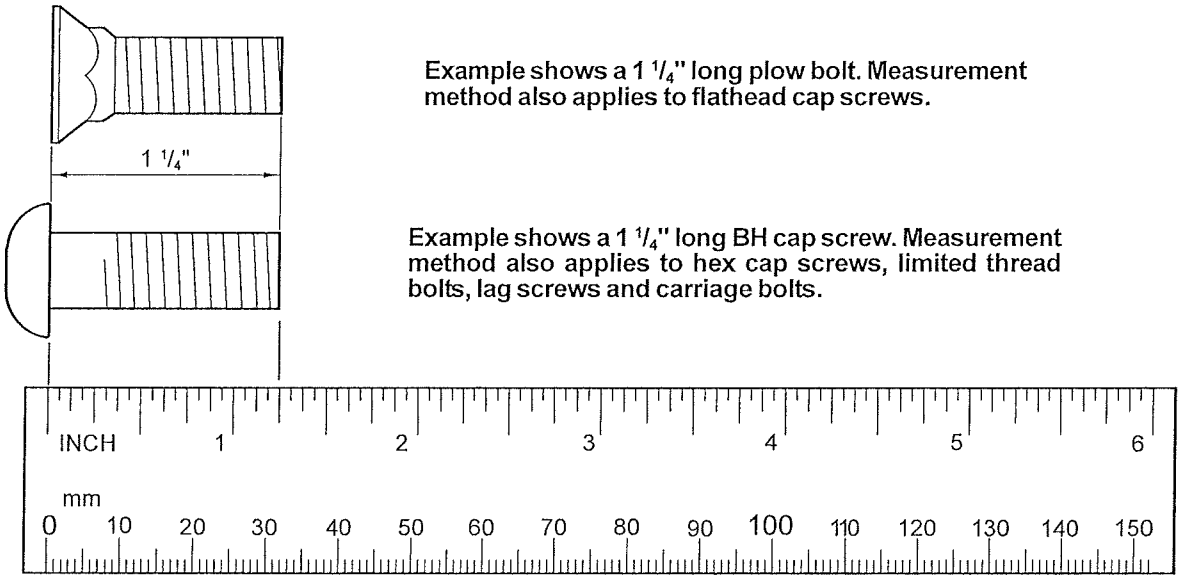
# HOW TO DETERMINE BOLT LENGTHS




Example shows a 1 1/4" long plow bolt. Measurement method also applies to flathead cap screws.

Example shows a 1 1/4" long BH cap screw. Measurement method also applies to hex cap screws, limited thread bolts, lag screws and carriage bolts.

Rule: Measurements should be based on the part of the screw that penetrates the surface.

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# Warning

**Your playground may include equipment containing moving parts. Moving parts are more vulnerable to wear, mis-use and abuse than other non-moving parts. It is critical these parts be inspected and maintained according to our recommendations.**

**As the owner, it is your responsibility to perform preventative maintenance and record your findings. Failure to do so may create a hazard and cause serious injury or death.**

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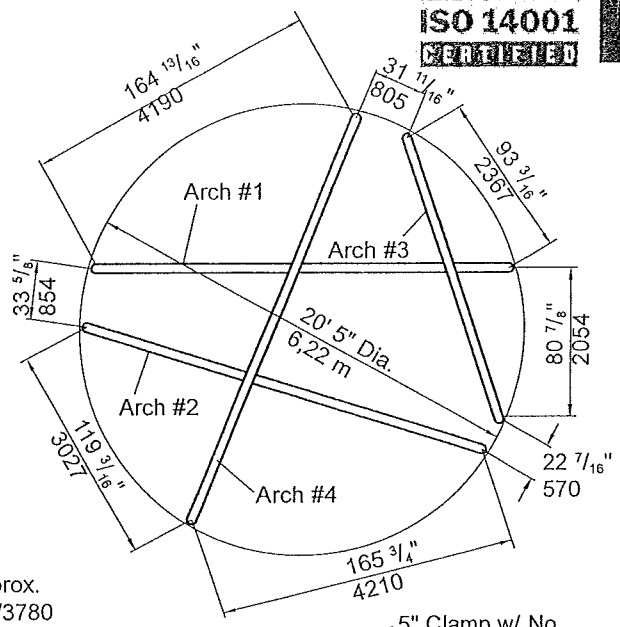
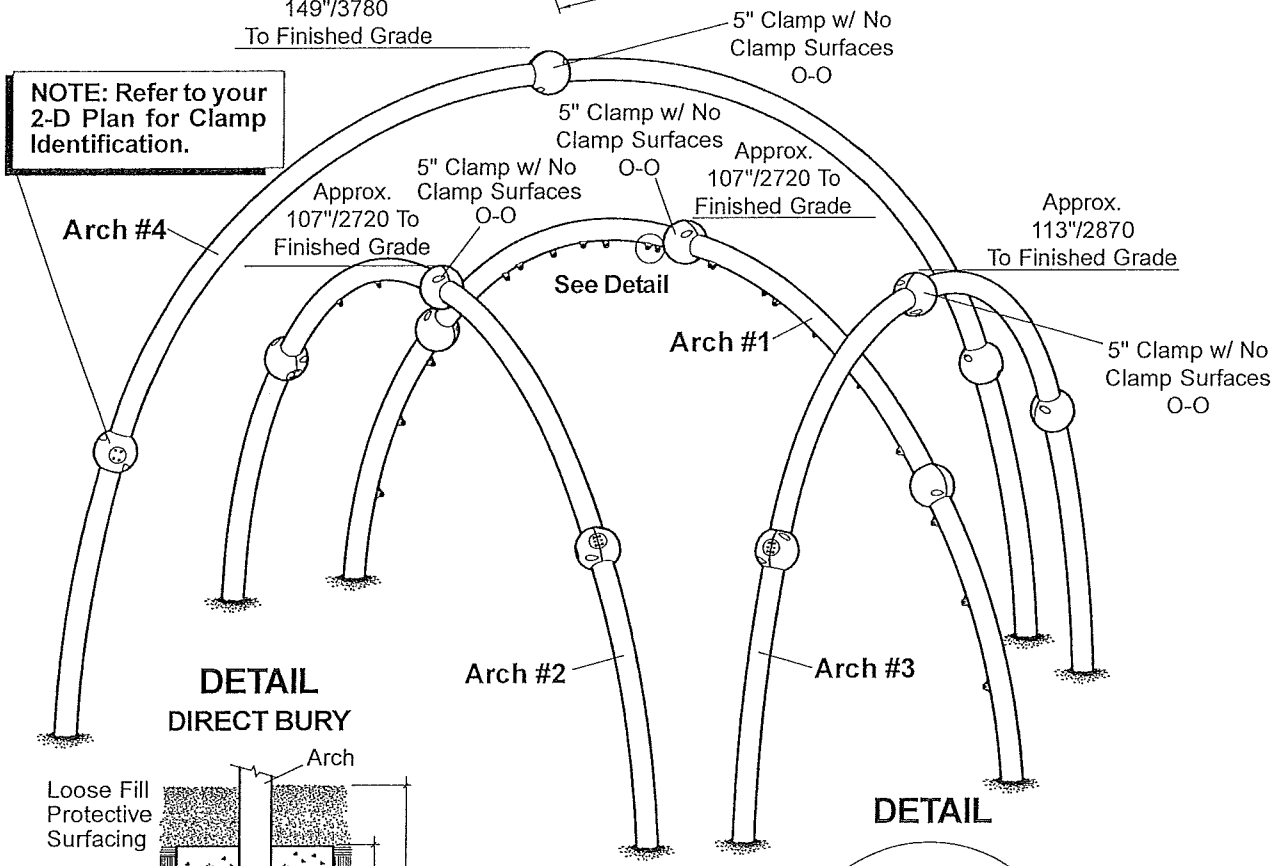
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

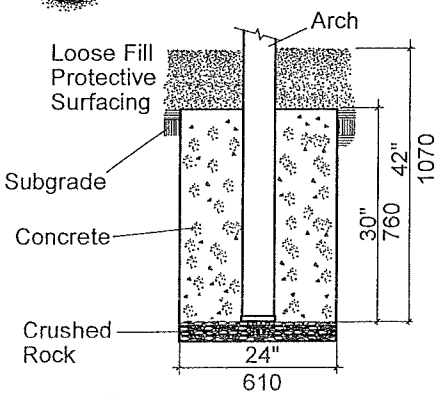
## PLAN VIEW



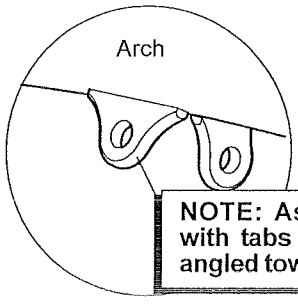




**NOTE: Refer to your 2-D Plan for Clamp Identification.**

## DETAIL
### DIRECT BURY




## DETAIL




**NOTE: Assemble structure with tabs on arches #1 & #2 angled towards each other.**

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# Arches



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Document #16814600

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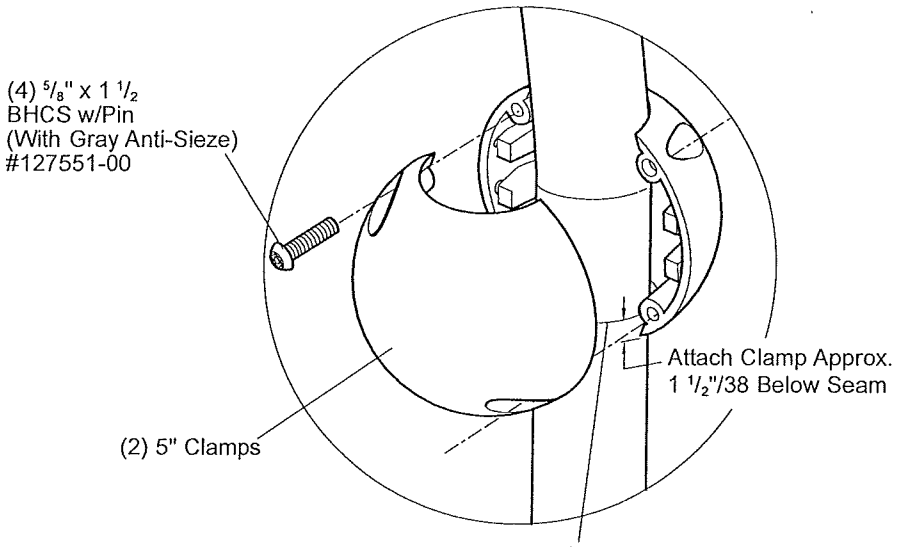
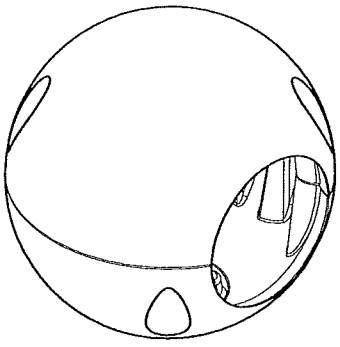
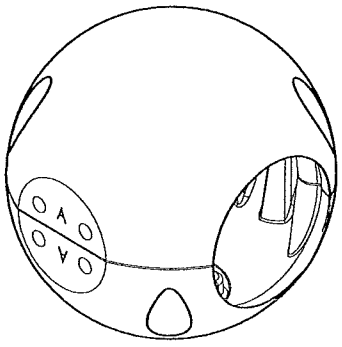
## DETAIL
### 5" CLAMP ATTACHMENT

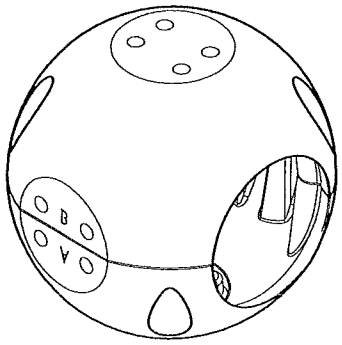


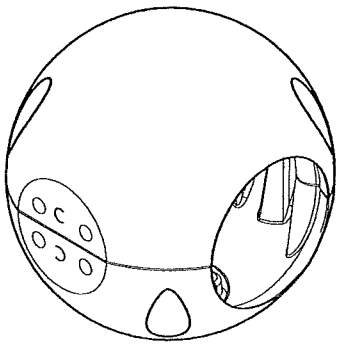
5" Clamp w/ No
Clamp Surfaces
O-O



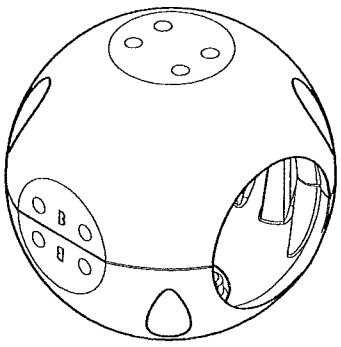

5" Clamp w/ 1
Clamp Surface
A-A



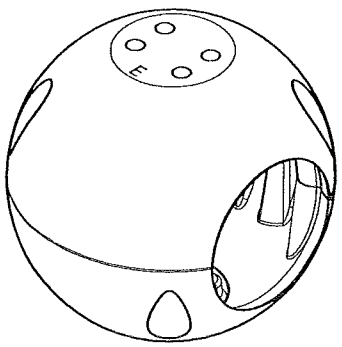

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



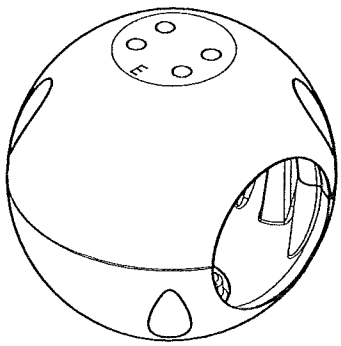

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E

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# 5" Clamps

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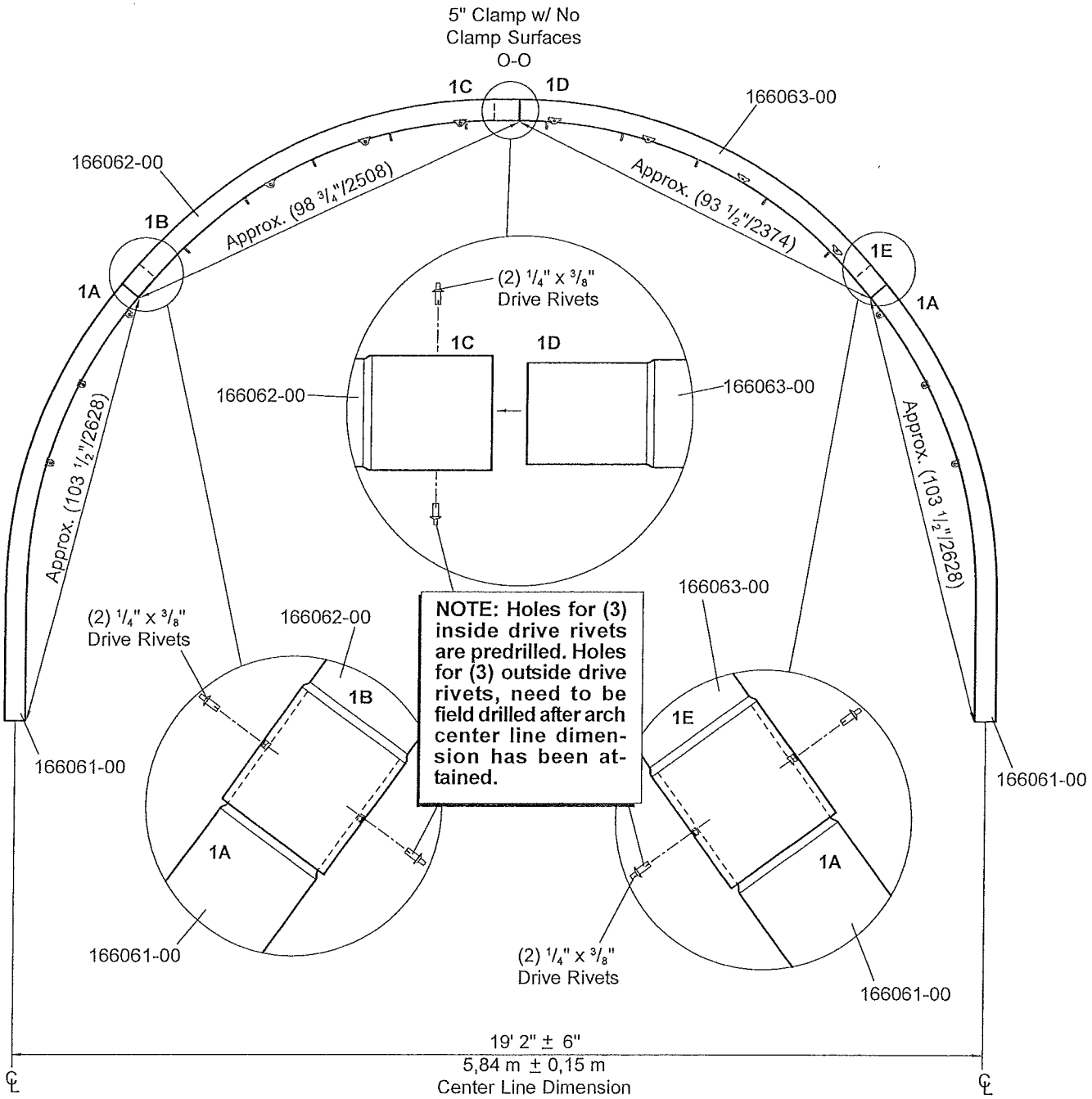
# ARCH #1 ASSEMBLY







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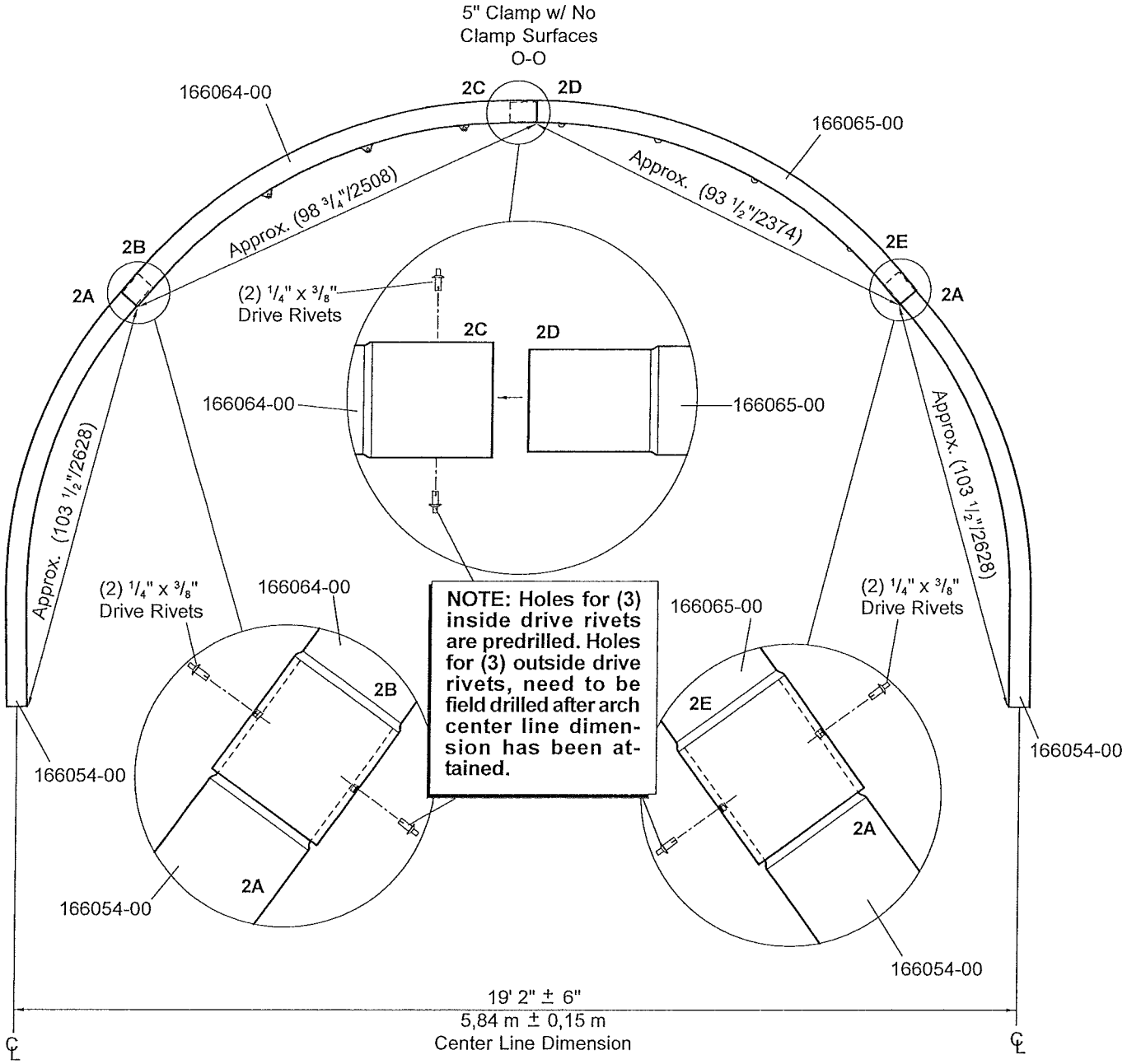
# ARCH #2 ASSEMBLY

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# Arch #2

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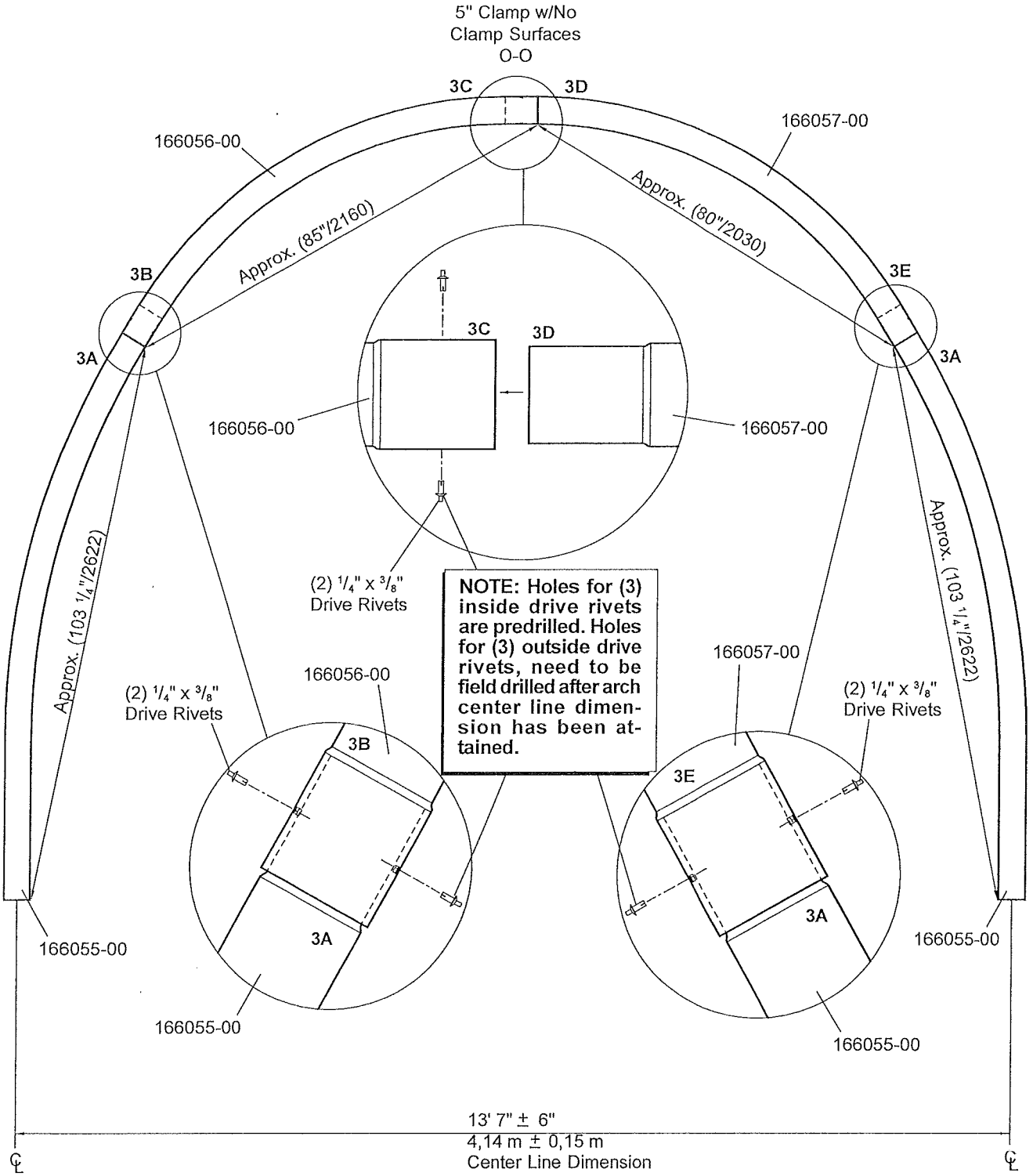
# ARCH #3 ASSEMBLY







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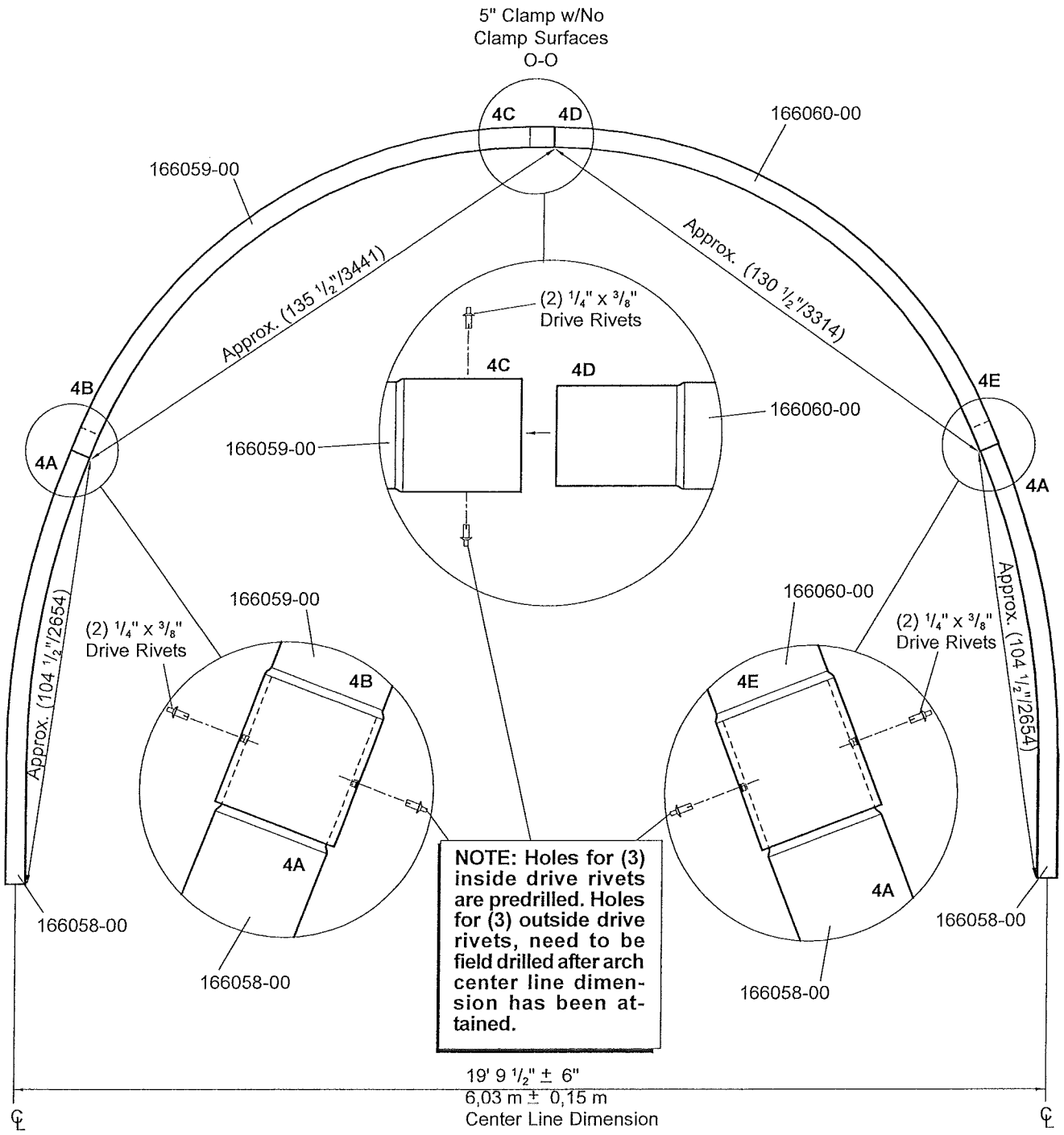
# ARCH #4 ASSEMBLY

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## Arch #4

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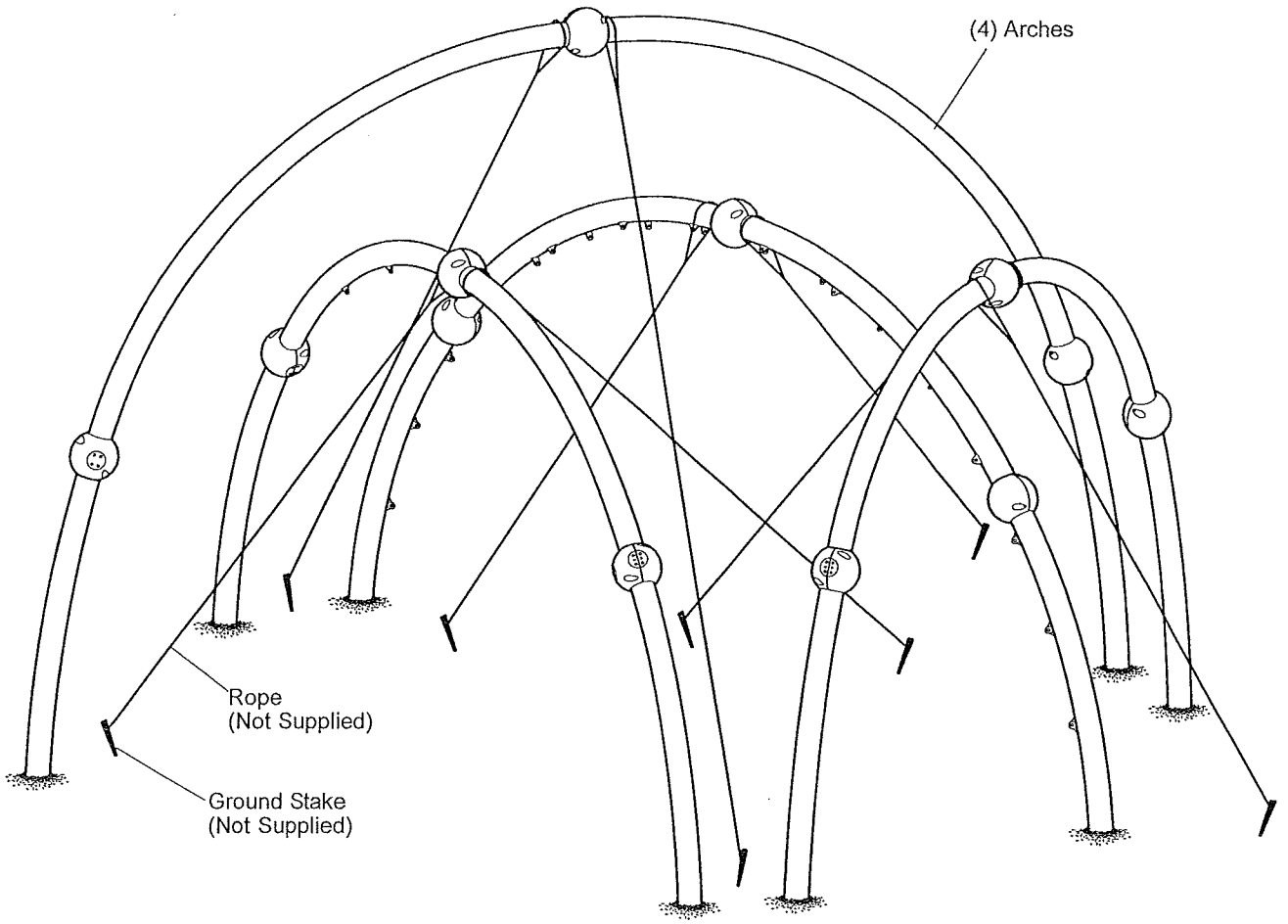
# DETAIL

## ROPE/GROUND STAKES




NOTE: *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*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# Evos® Arches

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 166061-00 | Arch 1 A With Net Tabs, Specify Color | * |
| 166054-00 | Arch 2 A, Specify Color | * |
| 166062-00 | Arch 1B/1C With Tabs, Specify Color | * |
| 166063-00 | Arch 1D/1E With Tabs, Specify Color | * |
| 166064-00 | Arch 2B/2C With Tabs, Specify Color | * |
| 166065-00 | Arch 2D/2E With Tabs, Specify Color | * |
| 166055-00 | Arch 3A, Specify Color | * |
| 166056-00 | Arch 3B/3C, Specify Color | * |
| 166057-00 | Arch 3D/3E, Specify Color | * |
| 166058-00 | Arch 4A, Specify Color | * |
| 166059-00 | Arch 4B/4C, Specify Color | * |
| 166060-00 | Arch 4D/4E, Specify Color | * |
| 166271-00 | 5" Clamp A, Specify Color | * |
| 166272-00 | 5" Clamp B, Specify Color | * |
| 166273-00 | 5" Clamp C, Specify Color | * |
| 166275-00 | 5" Clamp E, Specify Color | * |
| 166276-00 | 5" Clamp O, Specify Color | * |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | * |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | * |

* = Quantity Determined By Your Order

## Specifications

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield®, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 4 People minimum approx. 6 man hours
**Concrete Req.:** Approx. 2.25 cu. yds.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 98 lbs.
**Fall Height:** 75"

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) An Evos structure consists of (2-4) arch assemblies, numbered #1 through #4. Each arch assembly consists of (4) arches with part numbers to ensure the arch is assembled correctly.

3) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

4) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

6) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

7) Place the fully assembled arches in footing holes. Refer to the Site Plan for proper location of arches. **NOTE:** *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes. Refer to sheet 4.*

Specifications are subject to change without notice.

Eco #53850 Document 16814600 replaces 16620200. Changed 5" clamp part numbers.
6/16/10 Changed arch descriptions.

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487, SECTION 9.*)

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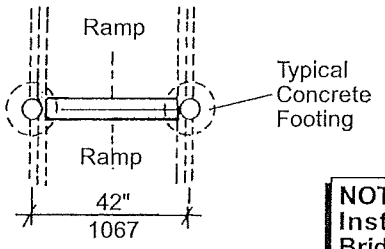
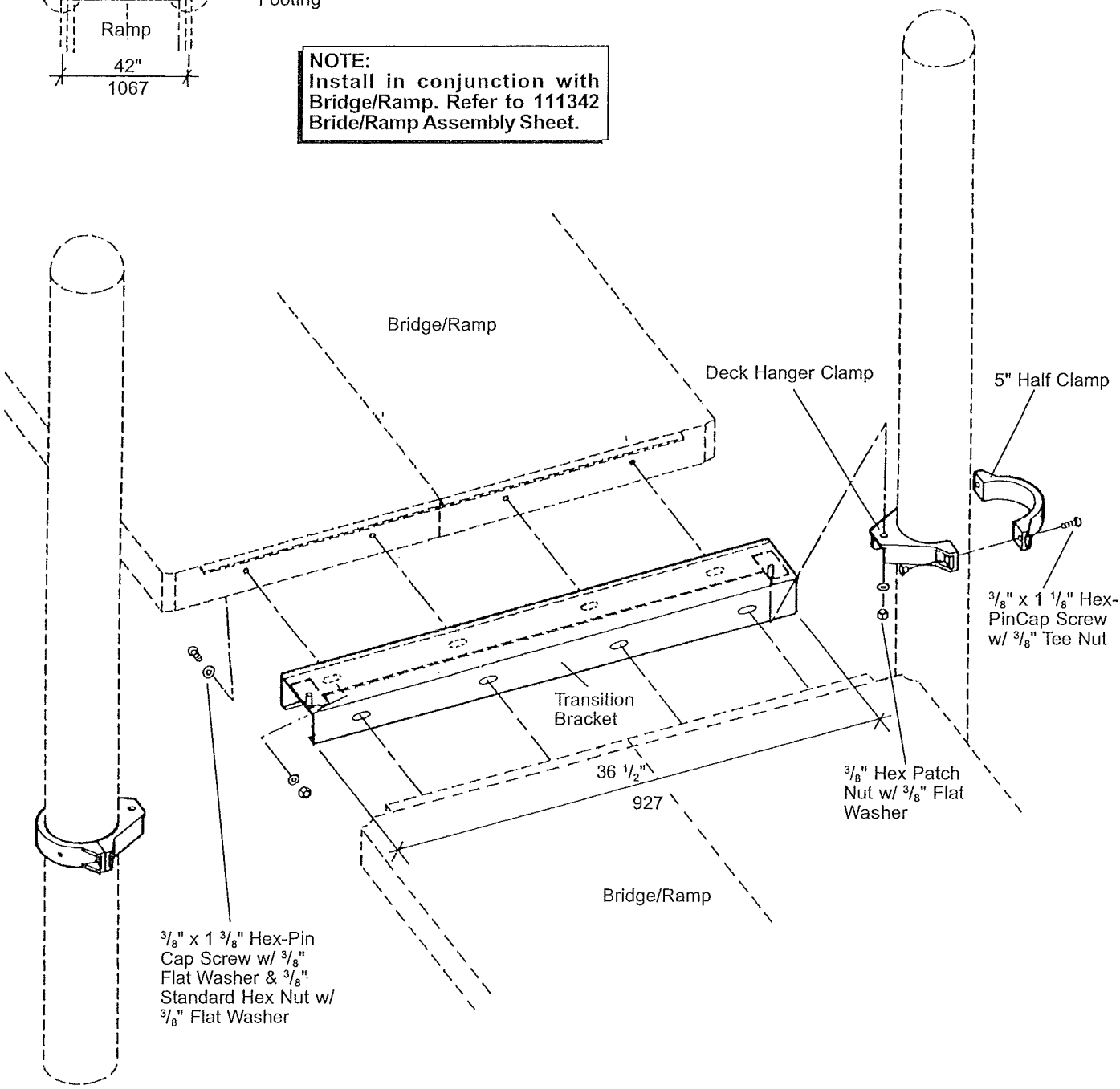
12-5-94




**NOTE:**
**Install in conjunction with Bridge/Ramp. Refer to 111342 Bride/Ramp Assembly Sheet.**




PlayBooster **111345 Bridge/Ramp Transition Bracket**



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# PlayBooster 111345 Bridge/Ramp Transition Bracket

## Parts List

| Part# | Description | Qty |
|---|---|---|
| 108623-00 | Bridge/ Ramp Transition Bracket, Specify Color | 1 |
| 105327-01 | 5" Aluminum Half Clamp, Specify Color | 2 |
| 106022-00 | Deck Hanger Clamp, Specify Color | 2 |
| **106676-00** | **Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" Hex-Pin Cap Screw, SST | 4 |
| 100321-00 | $^3/_8$" Hex Patch Nut, SST | 2 |
| 100351-00 | $^3/_8$" Tee Nut | 4 |
| 100362-00 | $^3/_8$" Flat Washer, SST | 2 |
| 100610-00 | $^1/_4$" x $^5/_8$" Drive Rivet, SST | 2 |

## Specifications

**Transition Bracket:** Fabricated and formed from 11-gauge HRPO low carbon sheet steel. TenderTuff coated brown.

**Clamps:** Cast from 369.1 aluminum alloy with a baked-on polyester powdercoating, color specified.

**Hardware:** Primary fasteners are socketed and pinned tamper-proof in design, either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel (SST).

**Installation Time:** Approx. $^1/_2$ man hour

**Weight:** 22 lbs.

## Installation Instructions

1) Install transition bracket in conjunction with ramp. Refer to the 111342 Bridge Ramp Assembly sheet.
2) Attach deck hanger clamp on post using $^3/_8$" x 1 $^1/_8$" hex-pin cap screws w/ $^3/_8$" tee nuts. Position transition w/ studs through holes in clamps and fasten w/ $^3/_8$" flat washer and $^3/_8$" patch nut.
3) Position ramp on deck and transition bracket. Attach ramp to deck and transition bracket. Refer to 111342 Bridge Ramp Assembly sheet.
4) Final tighten hardware. Install drive rivets in half clamps. Refer to the Typical Rail Hanger Clamp Assembly sheet.
5) Install protective surfacing.

Specifications are subject to change without notice.

12-5-94 Revision-01 Replaced 3/8" x 1 1/8" Hex-Pin Cap Screws With 3/8" x 1 3/8" Hex-Pin Cap Screws (Bridge Ramp Hardware Package). Updated Half Clamp (11-30-94).

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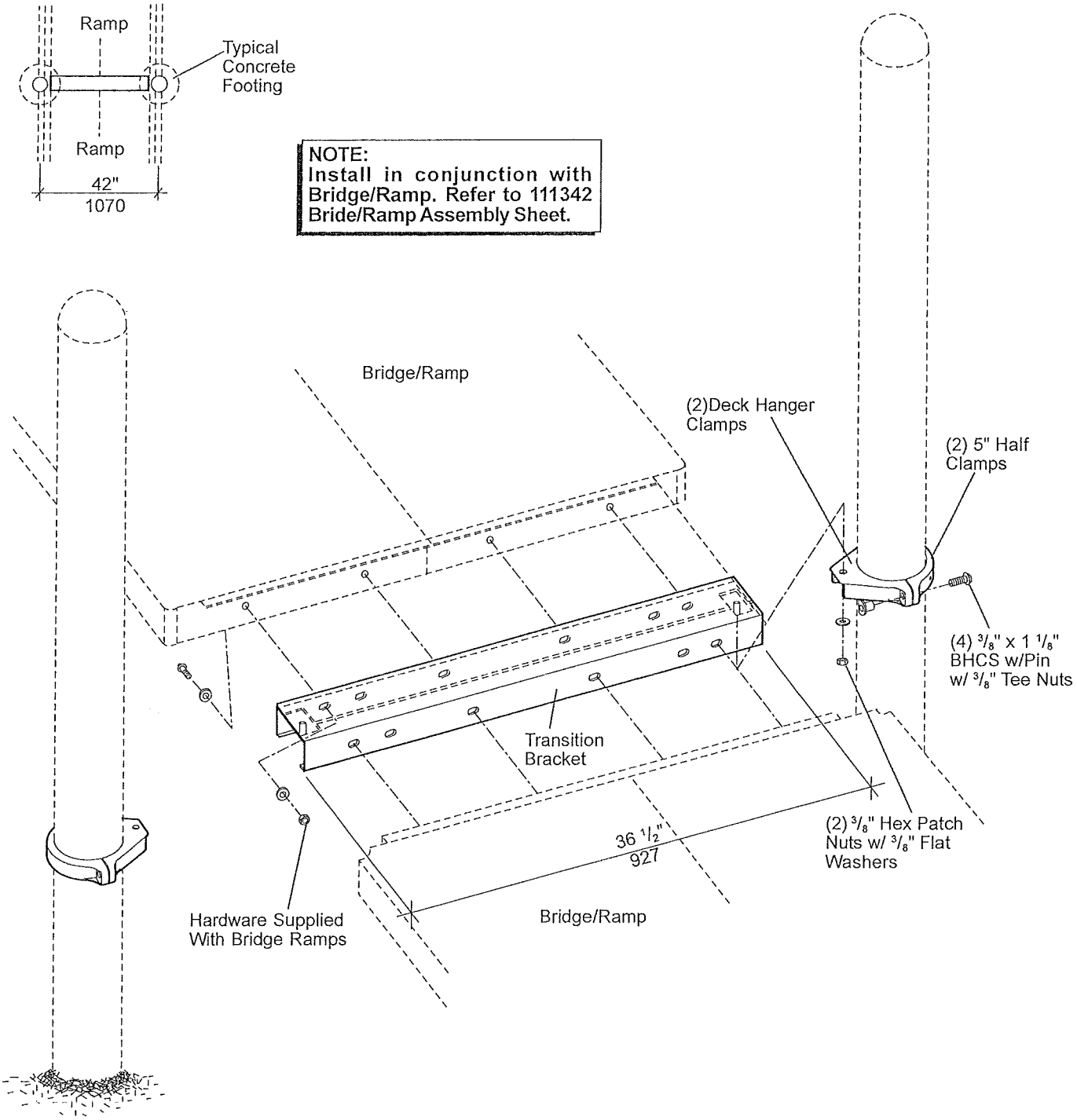
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

12-12-96
12104300




**NOTE:**
**Install in conjunction with Bridge/Ramp. Refer to 111342 Bride/Ramp Assembly Sheet.**




PlayBooster®

# 111345 Transition Bracket



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# PlayBooster® 111345 Transition Bracket

## Parts List

| Part# | Description | Qty |
|---|---|---|
| 108623-00 | Bridge/ Ramp Transition Bracket, Specify Color | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 106022-00 | Deck Hanger Clamp, Specify Color | 2 |
| **106676-00** | **Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100321-00 | 3/8" Hex Patch Nut, SST | 2 |
| 100351-00 | 3/8" Tee Nut, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 2 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 2 |

## Specifications

**Transition Bracket:** Fabricated and formed from 11 GA (.120") HRPO low carbon sheet steel. Finish: TenderTuff, brown in color.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Deck Hanger Clamp Assembly:** Cast aluminum. Finish: Powdercoat, color specified.

**Installation Time:** Approx. 1/2 man hour

**Weight:** 22 lbs.

## Installation Instructions

1) Install transition bracket in conjunction with ramp. Refer to the 111342 Bridge Ramp Spec Sheet.
2) Attach deck hanger clamp on post using 5" half clamp with 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Position transition with studs through holes in clamps and fasten with 3/8" flat washer and 3/8" patch nut.
3) Position ramp on deck and transition bracket. Attach ramp to deck and transition bracket. Refer to 111342 Bridge Ramp Spec Sheet.
4) Final tighten hardware. Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

12-12-96 Document #121043-00 replaces 110021-01. Added hardware supplied with bridge ramp note.

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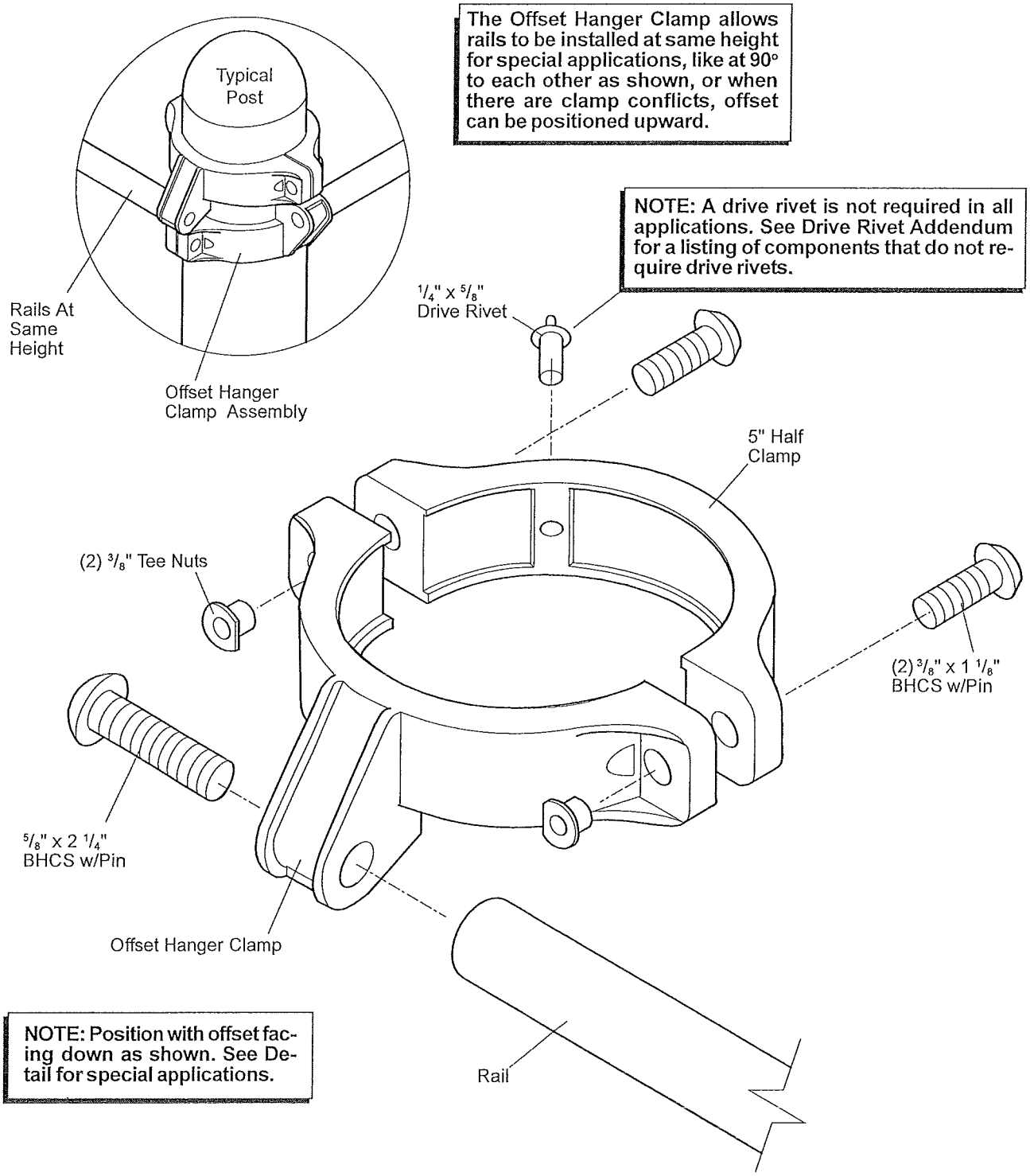
SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

10-3-97
12382100

# DETAIL
## ASSEMBLED CLAMP

The Offset Hanger Clamp allows rails to be installed at same height for special applications, like at 90° to each other as shown, or when there are clamp conflicts, offset can be positioned upward.

NOTE: A drive rivet is not required in all applications. See Drive Rivet Addendum for a listing of components that do not require drive rivets.




NOTE: Position with offset facing down as shown. See Detail for special applications.

# PlayBooster® 114261 Offset Hanger Clamp Assembly



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# PlayBooster®114261 Offset Hanger Clamp Assembly

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## Parts List

| Part# | Description | Qty |
|---|---|---|
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 2 |
| 100351-00 | 3/8" Tee Nut, SST | 2 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 1 |
| 113729-00 | Offset Hanger Clamp, Specify Color | 1 |
| 100203-00 | 5/8" x 2 1/4" BHCS w/Pin, SST | 1 |

## Specifications

**Clamp:** Cast aluminum. Finish: Powdercoat, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/4 man hour

**Weight:** 3 lbs.

## Installation Instructions

1) Locate and mark position of clamp on 5" post.

2) Position clamp in proper direction and assemble with 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts as shown and lightly tighten. Position rail against clamp and screw in 5/8" x 2 1/4" BHCS w/pin until rail bottoms out on clamp. Final tighten all fasteners.

3) **IMPORTANT:** *Drill through hole in 5" half clamp and into 5" post with a 1/4" or "F" (only) drill bit, insert rivet in hole and hammer rivet pin in until it is flush with head.*

Specifications are subject to change without notice.

10-3-97 Document #123821-00 replaces #114666-00. Added Drive Rivet NOTE:

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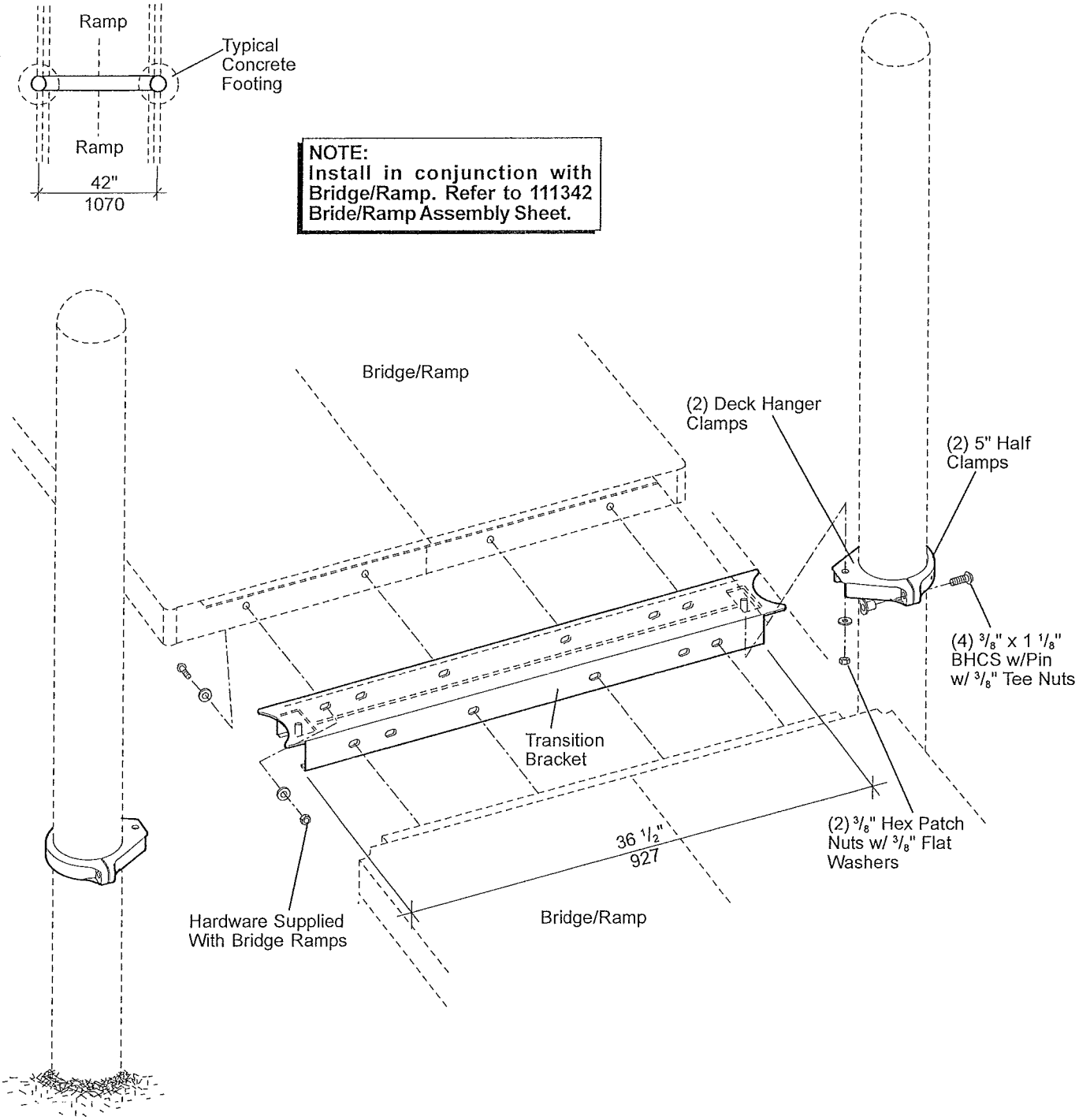
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

18427300




**NOTE:**
**Install in conjunction with Bridge/Ramp. Refer to 111342 Bride/Ramp Assembly Sheet.**




# 111345 Transition Bracket

PlayBooster®

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# PlayBooster® 111345 Transition Bracket

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## Parts List

| Part# | Description | Qty |
|---|---|---|
| 184259-00 | Bridge/ Ramp Transition Bracket, Specify Color | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 106022-00 | Deck Hanger Clamp, Specify Color | 2 |
| **106676-00** | **Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST | 4 |
| 100321-00 | $^3/_8$" Hex Patch Nut, SST | 2 |
| 100351-00 | $^3/_8$" Tee Nut, SST | 4 |
| 100362-00 | $^3/_8$" Flat Washer, SST | 2 |
| 100610-00 | $^1/_4$" x $^5/_8$" Drive Rivet, AL/SST | 2 |

## Specifications

**Transition Bracket:** Fabricated and formed from 11 GA (.120") HRPO low carbon sheet steel. Finish: TenderTuff®, brown in color.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Deck Hanger Clamp Assembly:** Cast aluminum. Finish: Powdercoat, color specified.

**Installation Time:** Approx. $^1/_2$ man hour

**Weight:** 22 lbs.

## Installation Instructions

1) Install transition bracket in conjunction with ramp. Refer to the 111342 Bridge Ramp Spec Sheet.
2) Attach deck hanger clamp on post using 5" half clamp with $^3/_8$" x 1 $^1/_8$" BHCS w/pin and $^3/_8$" tee nuts. Position transition with studs through holes in clamps and fasten with $^3/_8$" flat washer and $^3/_8$" patch nut.
3) Position ramp on deck and transition bracket. Attach ramp to deck and transition bracket. Refer to 111342 Bridge Ramp Spec Sheet.
4) Final tighten hardware. Install $^1/_4$" x $^5/_8$" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54519 Document 18427300 replaces 12104300. Replaced transition bracket.

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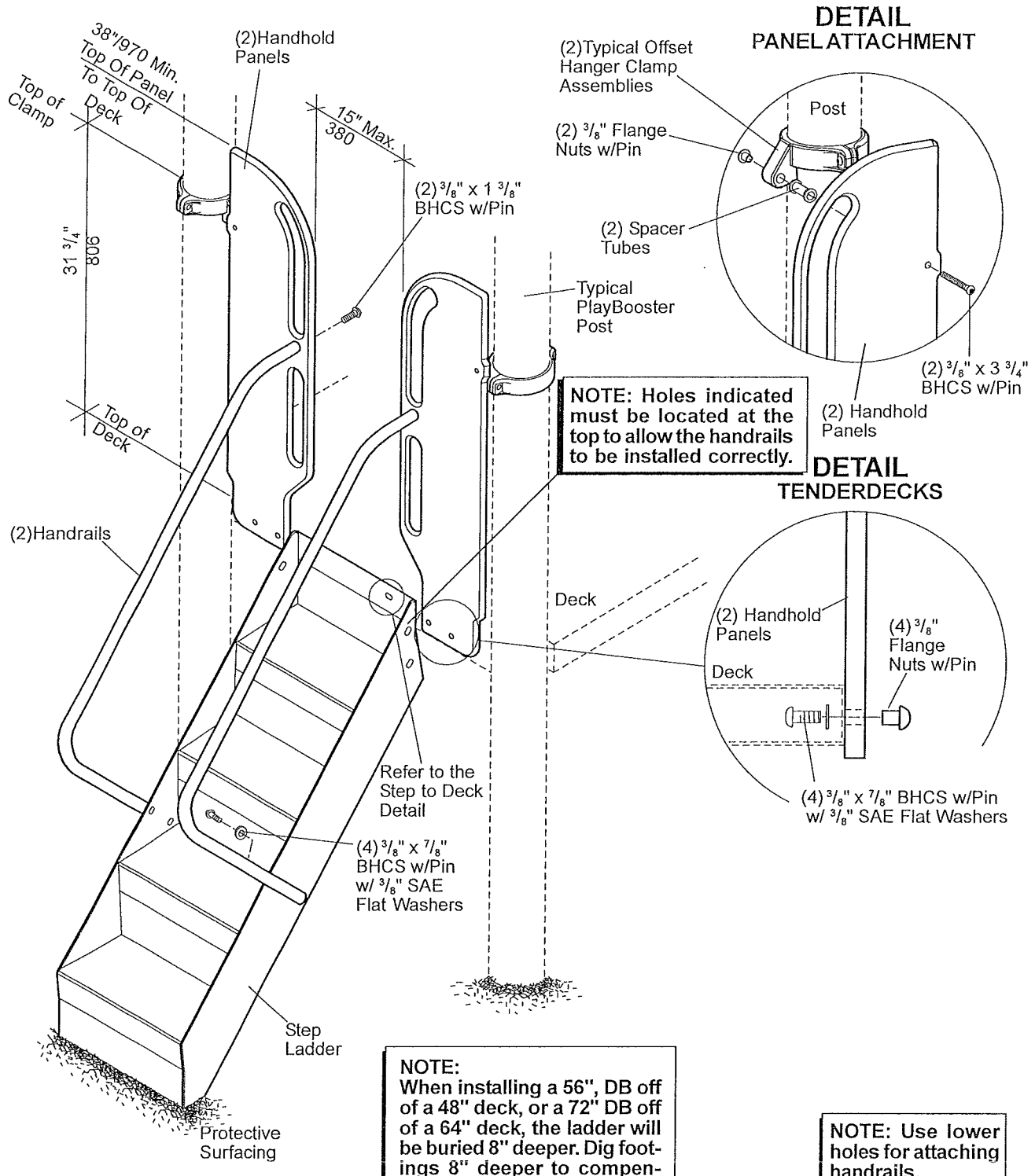
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

18157800




**Off 40" Deck (Shown)**

NOTE:
When installing a 56", DB off of a 48" deck, or a 72" DB off of a 64" deck, the ladder will be buried 8" deeper. Dig footings 8" deeper to compensate.

NOTE: Use lower holes for attaching handrails.

# PlayBooster® 116246 Step Ladders, 32"-72" Decks



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# PlayBooster® 116246 Step Ladders, 32"-72" Decks

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 108534-00 | 32" Step Ladder, Specify Color | 1 |
| 108563-00 | 40" Step Ladder, Specify Color | 1 |
| 108575-00 | 56" Step Ladder, Specify Color | 1 |
| 108540-00 | 72" Step Ladder, Specify Color | 1 |
| 126005-00 | Handrail 32" Deck RH, Specify Color | 1 |
| 126002-00 | Handrail 32" Deck LH, Specify Color | 1 |
| 125999-00 | Handrail 40" Deck RH, Specify Color | 1 |
| 125996-00 | Handrail 40" Deck LH, Specify Color | 1 |
| 125989-00 | Handrail 56" Deck RH, Specify Color | 1 |
| 125988-00 | Handrail 56" Deck LH, Specify Color | 1 |
| 125983-00 | Handrail 72" Deck RH, Specify Color | 1 |
| 125110-00 | Handrail 72" Deck LH, Specify Color | 1 |
| 139563-00 | Handhold Panel, Specify Color | 2 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 113729-00 | Offset Hanger Clamp, Specify Color | 2 |
| 113468-00 | Spacer Tube, Specify Color | 2 |
| 180688-00 | Support (DB), Specify Color | 1 |
| 180690-00 | Support (SM), 72" Step Ladr. Only, Specify Color | 1 |
| **123723-00** | **Clamp Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100351-00 | 3/8" Tee Nut, SST | 4 |
| **139608-00** | **32" - 56"Step Ladder Hdw. Pkg. (Tenderdeck)** | 1 |
| 124460-00 | 3/8" x 3 3/4" BHCS w/Pin, SST | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 12 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 4 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 14 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 2 |
| **139609-00** | **72" Step Ladder Hardware Pkg. (Tenderdeck)** | 1 |
| 124460-00 | 3/8" x 3 3/4" BHCS w/Pin, SST | 2 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 16 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 4 |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | 6 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 18 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 2 |
| **121256-00** | **2 Hole (SM) Hardware Package** | 1 |
| 100263-00 | 3/8" x 2 3/4" Expansion Anchor | 2 |
| 100327-00 | 3/8" Standard Hex Nut, SST | 2 |
| 100365-00 | 3/8" SAE Flat Washer, SST | 2 |

**DB = Direct Bury**
**SM = Surface Mount**
**RH = Right Hand**
**LH = Left Hand**

## Specifications

**Ladder:** Fabricated and formed from 14 GA (.075") HRPO sheet steel with 5/16" perforated holes for steps and welded 12 GA (.105") HRPO sheet steel for sides. Finish: TenderTuff™, color specified.

**Handhold Panel:** Solid color Permalene®, color specified.

**Handrail:** Formed from 1.125" O.D. 11 GA (.120") galvanized steel tubing. Finish: TenderTuff, color specified.

**Footer:** Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 2" zinc plated steel strap. Finish: ProShield®, color specified.

**Spacer Tube:** Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

**Offset Hanger Clamp Assembly:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** SM - Approx. 1 1/4 man hours
DB - Approx. 2 man hours

**Concrete Req.:** Approx. 1.4 cu. ft.

**Weight:**
32" Step Ladder (SM) - 90 lbs.
32" Step Ladder (DB) - 100 lbs.
40" Step Ladder (SM) - 106 lbs.
40" Step Ladder (DB) - 116 lbs.
56" Step Ladder (SM) - 142 lbs.
56" Step Ladder (DB) - 152 lbs.
72" Step Ladder (SM) - 185 lbs.
72" Step Ladder (DB) - 195 lbs.

**Fall Height:** Deck Height

## Installation Instructions

1) **(Direct Bury)** Dig footing holes spaced as shown. Attach support to step ladder using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.

   **(Surface Mount 72" Step Ladder Only)** Attach support to step ladder using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.

2) Attach offset hanger clamp assemblies to posts at height shown. Using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.

3) Attach handhold panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.

4) Attach step ladder to deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown.

5) Attach handhold panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin, as shown.

6) Attach handrails to sides of step ladder using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers.

7) Using a 7/16" drill bit, drill out the lower 1/8" pilot hole in each handhold panel for attaching handrails.

8) Attach handrails to handhold panels using 3/8" x 1 3/8" BHCS w/pin, as shown.

9) **(Direct Bury)** With step ladder plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.

   **(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in base of step ladder. Remove step ladder and drill 3/8" x 3" deep holes on marks into concrete using 3/8" masonry bit and hammer drill. Tap expansion anchors into drilled holes. Reposition step ladder and reattach to face of deck following step #4. Fasten base of step to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers.

10) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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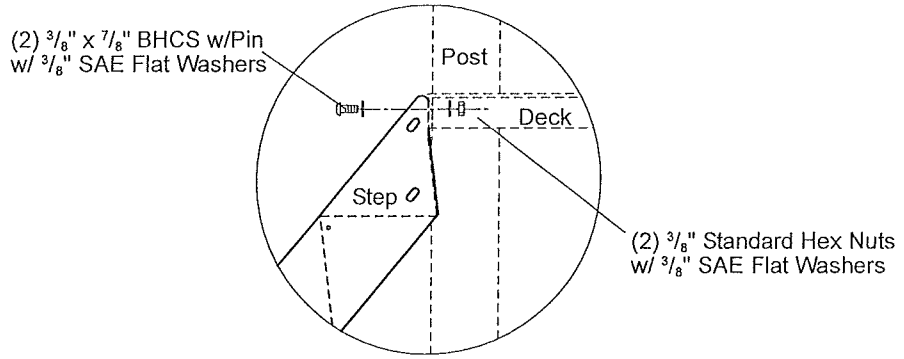
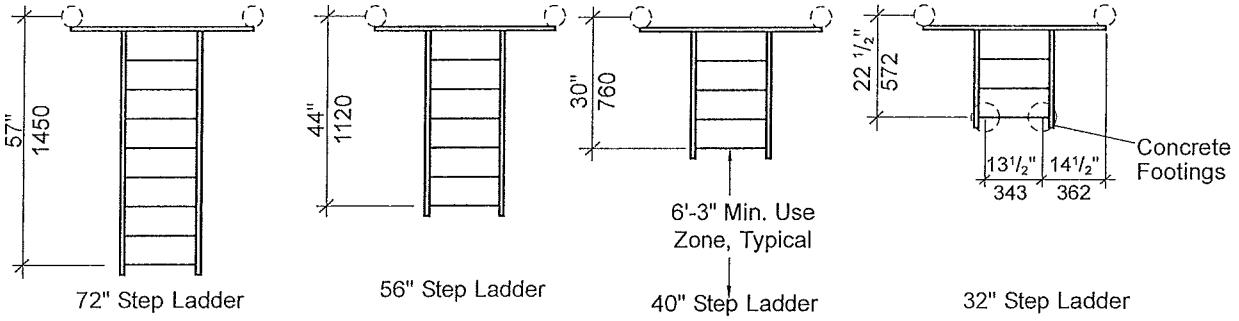
## DETAIL
### STEP TO DECK

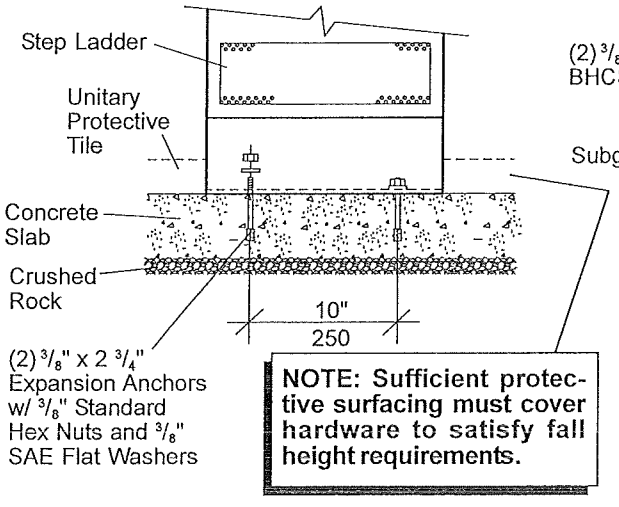



## PLAN VIEW/FOOTING LAYOUTS



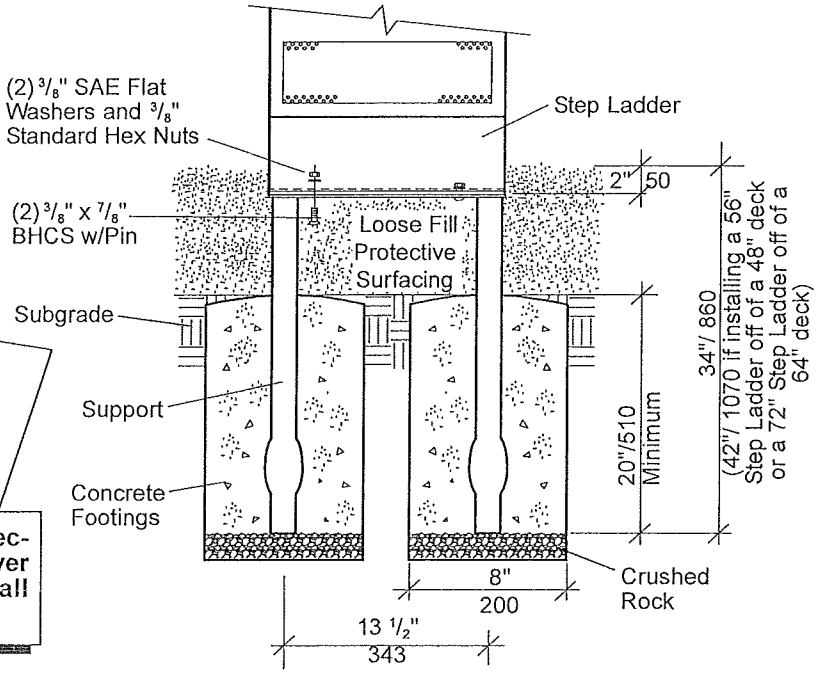

**NOTE:**
**Dimensions Are From Center Of Post To Center Of Footer**

## DETAIL
### SURFACE MOUNT




**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

## DETAIL
### DIRECT BURY







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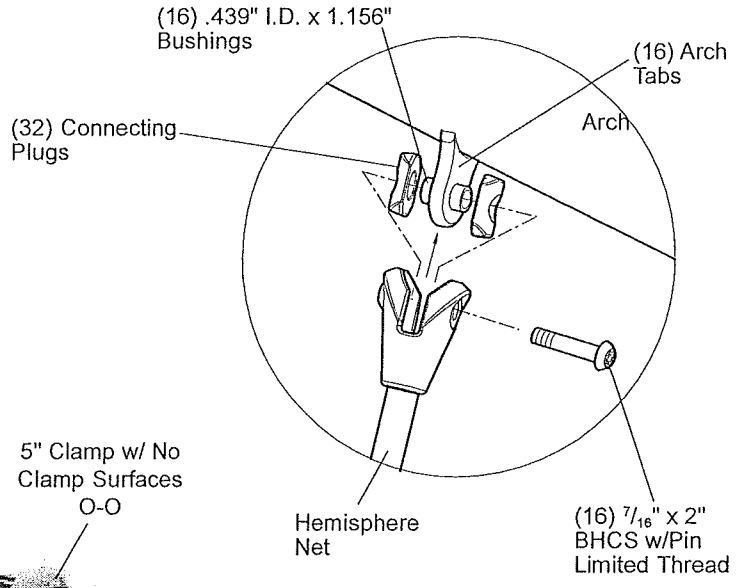
SAFETY NOTE

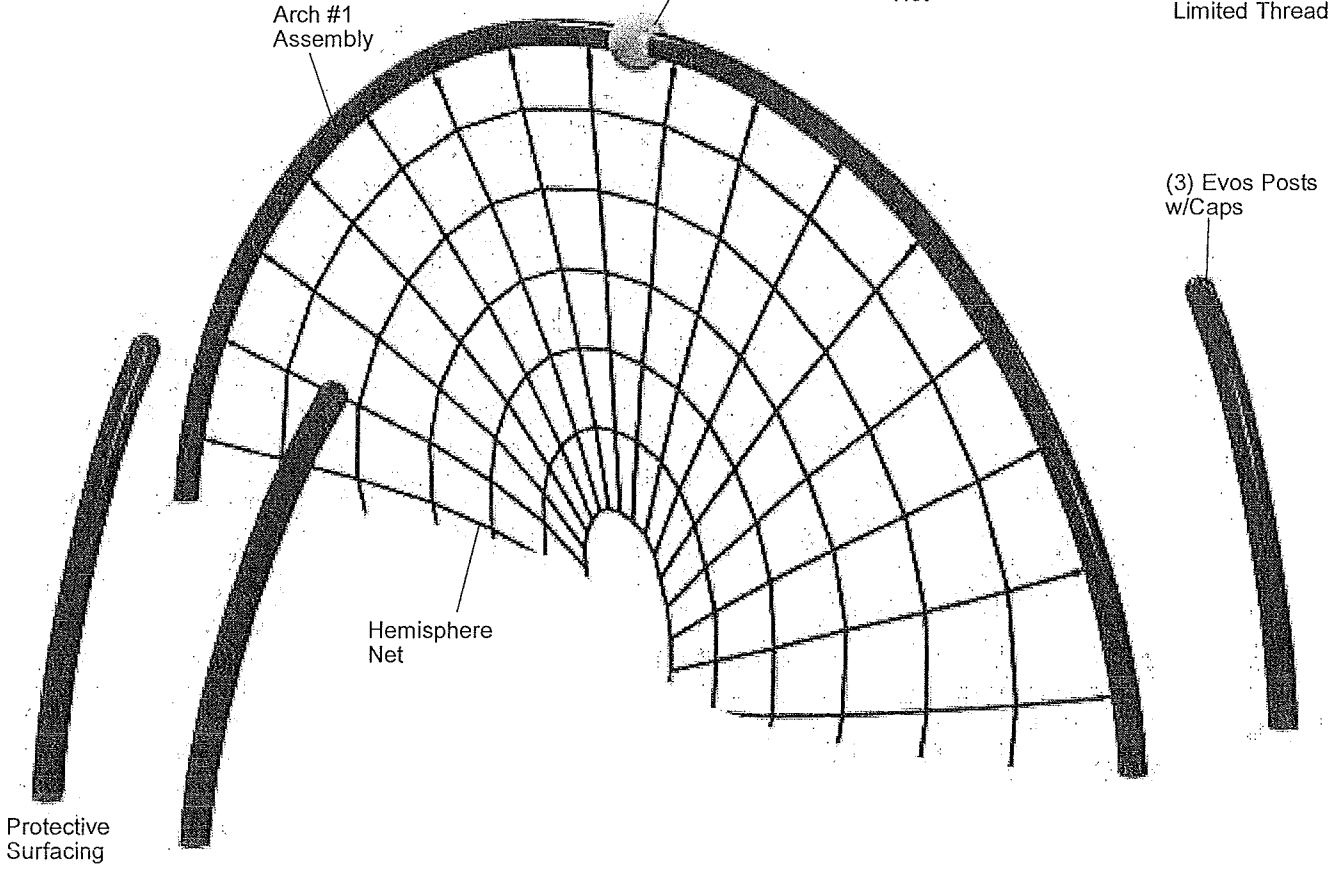
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

16496500

# DETAIL

## HEMISPHERE NET ATTACHMENT

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# 171627 Single Arch, w/3 Attachment Points



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# ARCH #1 ASSEMBLY

SAFETY NOTE
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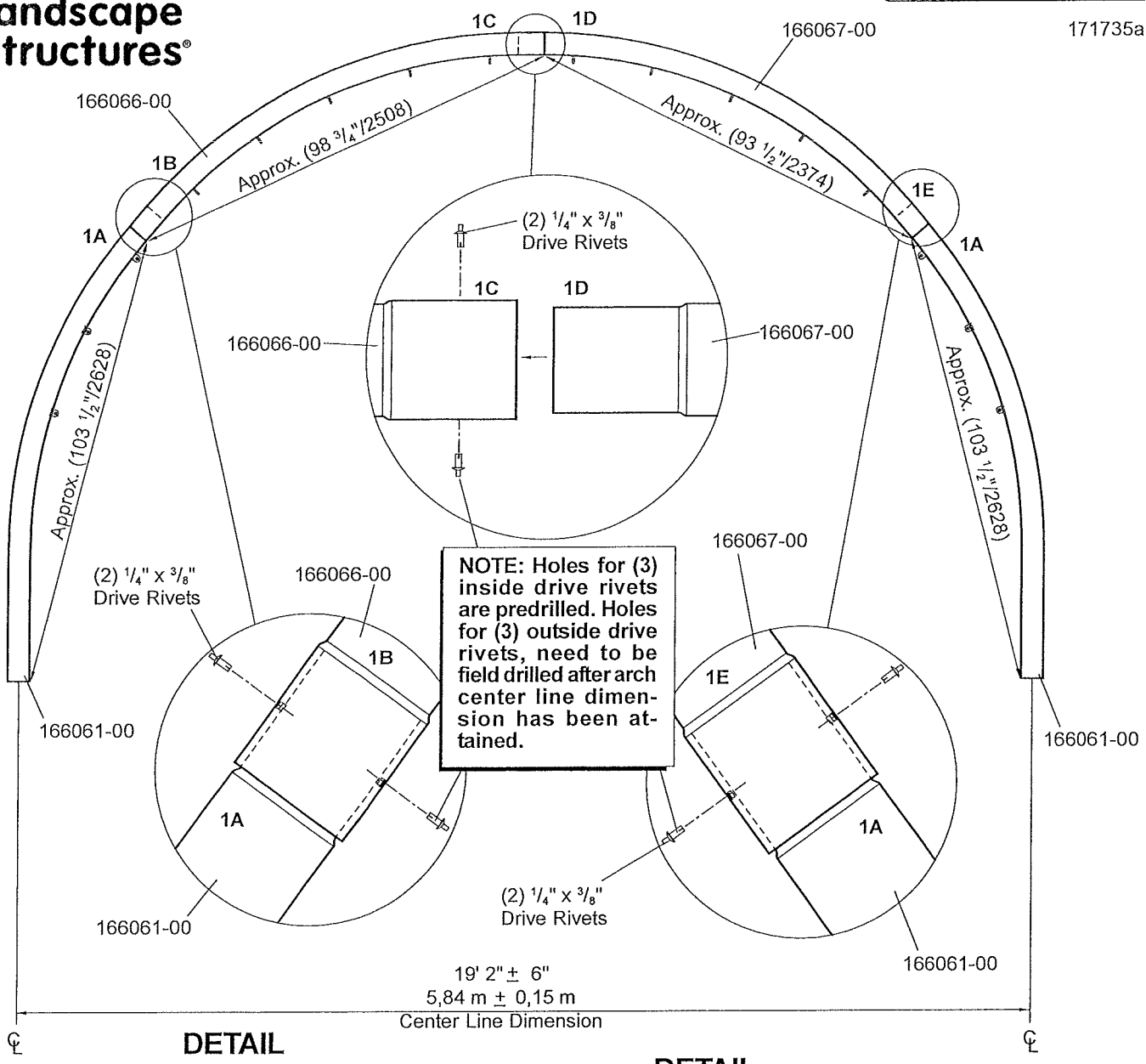
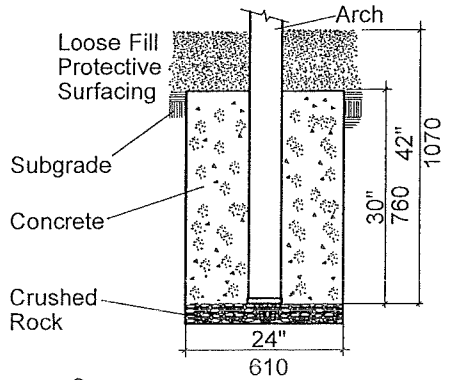
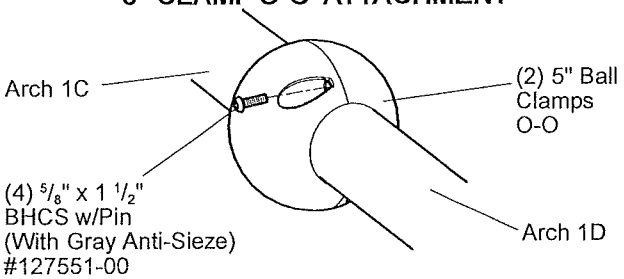



## DETAIL
### DIRECT BURY




## DETAIL
### 5" CLAMP O-O ATTACHMENT




# Arch Assembly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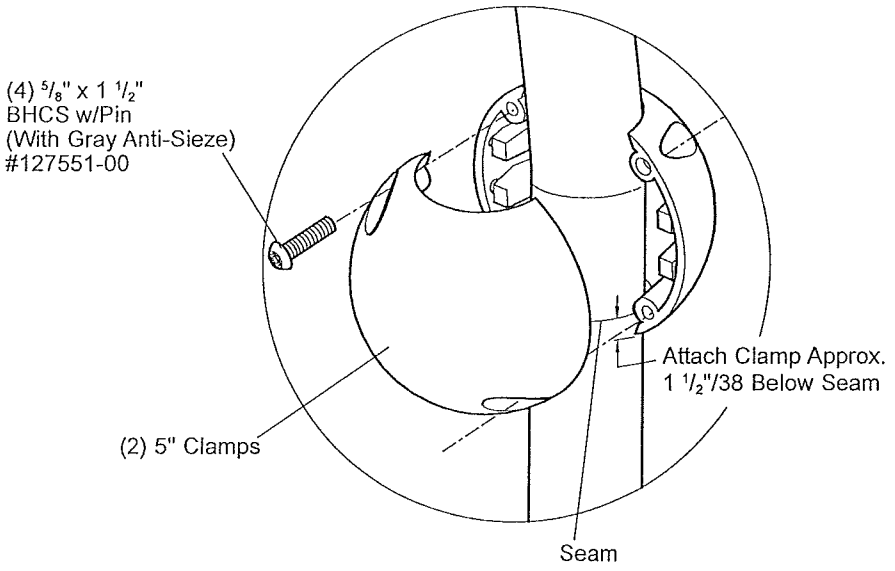
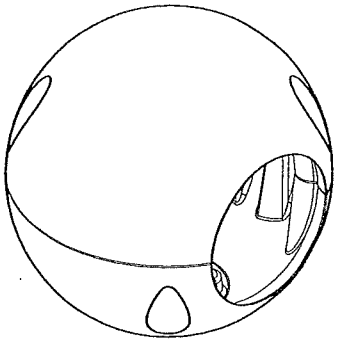
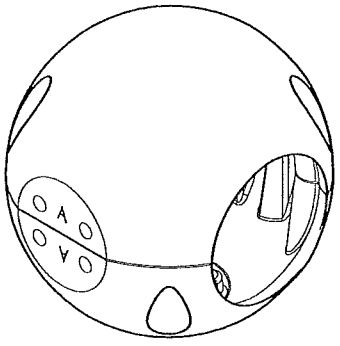
## DETAIL
5" CLAMP ATTACHMENT

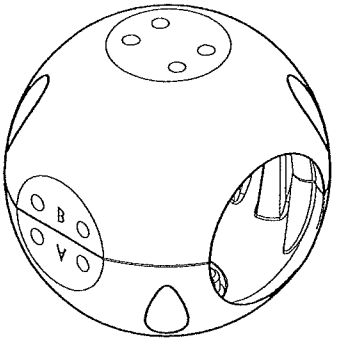


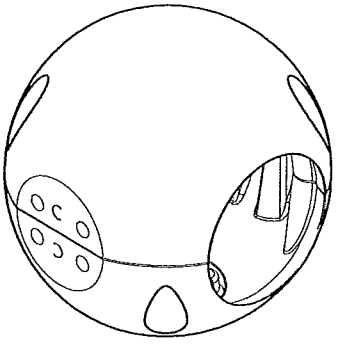
5" Clamp w/ No
Clamp Surfaces
O-O



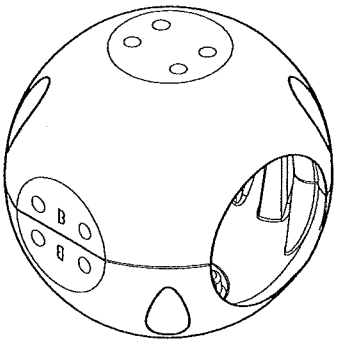

5" Clamp w/ 1
Clamp Surface
A-A



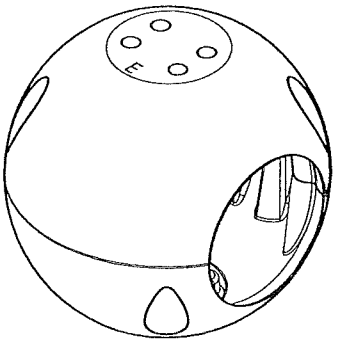

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



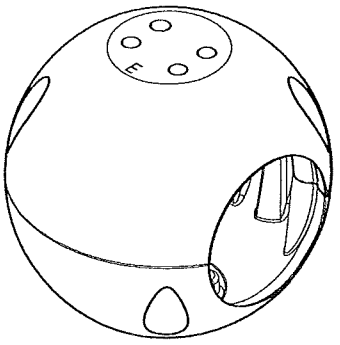

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E



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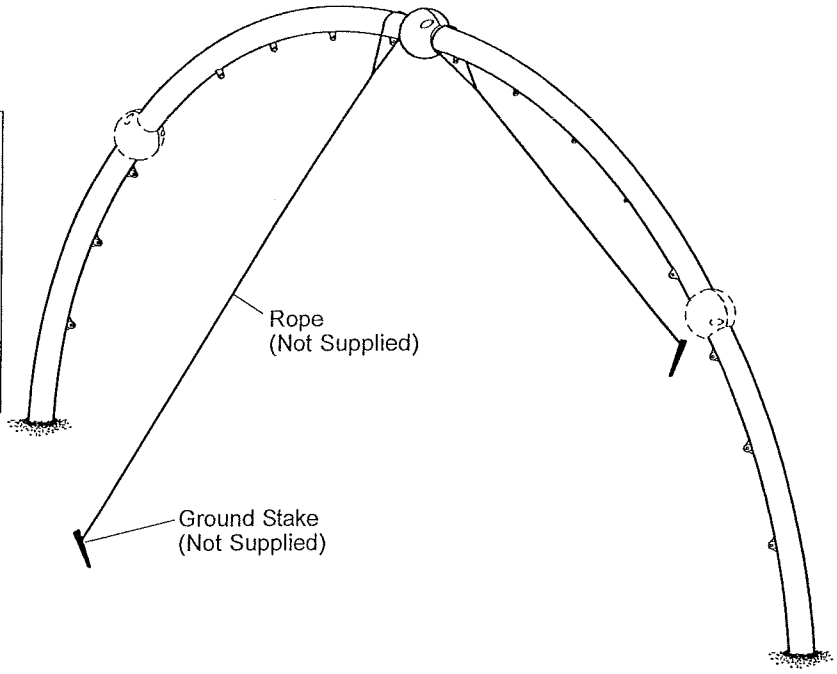
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

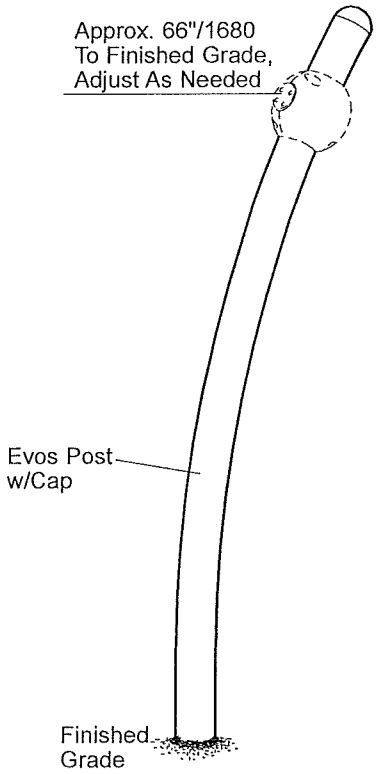
171735b

## DETAIL
ROPE/GROUND STAKES

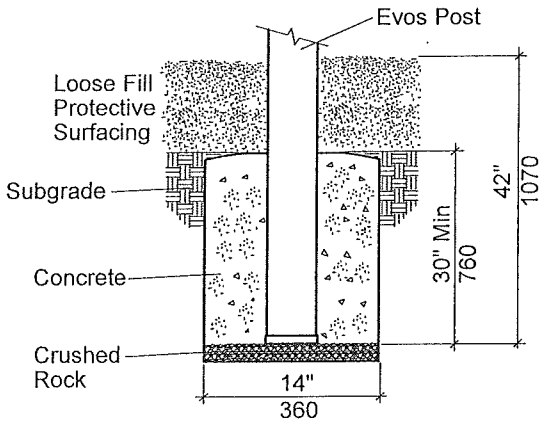
NOTE: *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*




## DETAIL
EVOS POST




## DETAIL
DIRECT BURY




**IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.**

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# 171627 Single Arch, w/3 Attachment Points

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**SAFETY NOTE**

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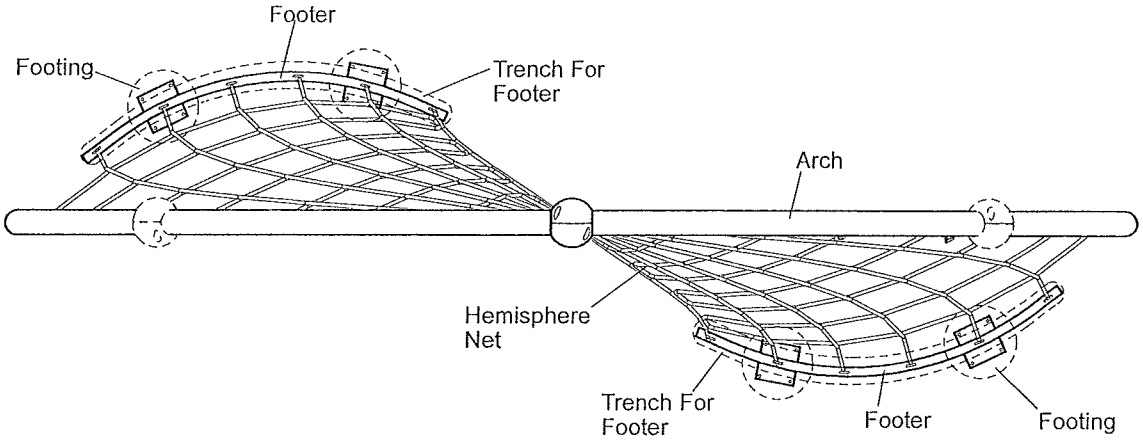
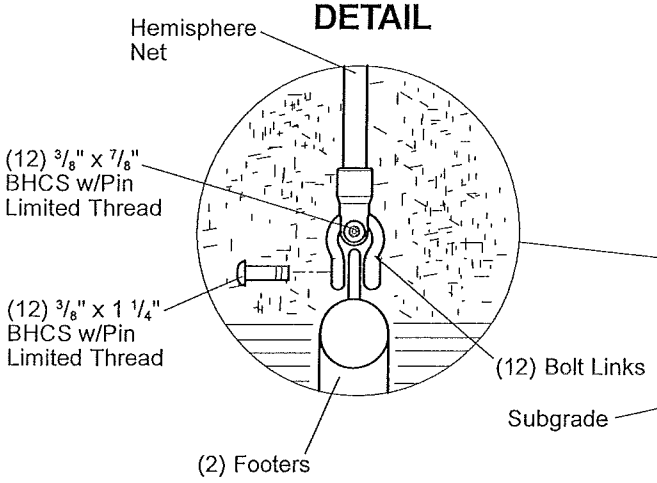
## PLAN VIEW

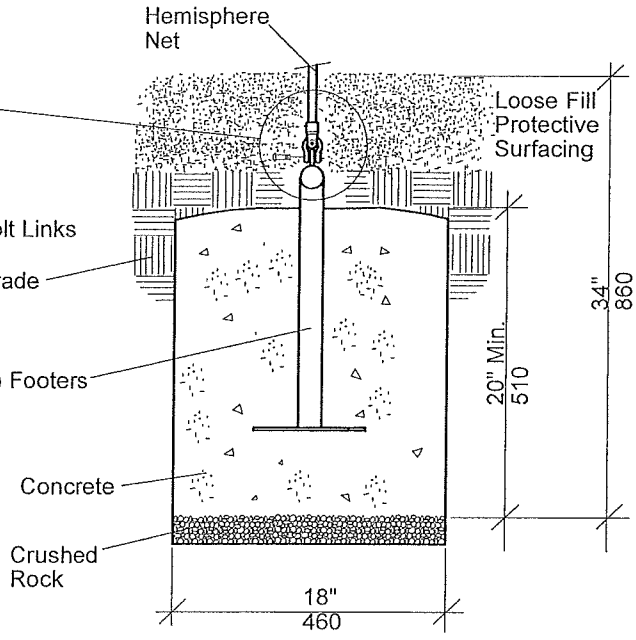



## DETAIL




## DETAIL

### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the rope.**

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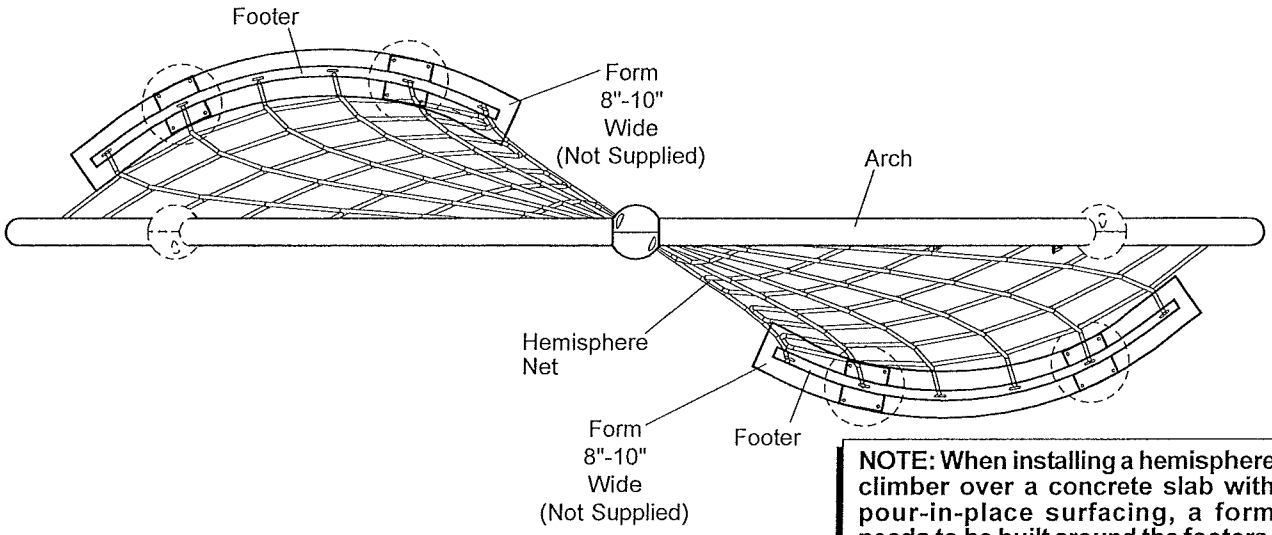
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

171735y

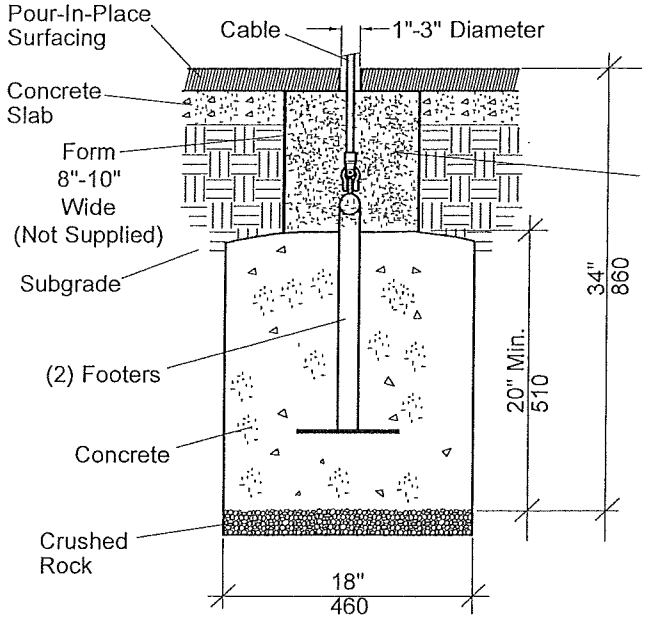
## PLAN VIEW




**NOTE: When installing a hemisphere climber over a concrete slab with pour-in-place surfacing, a form needs to be built around the footers, to prevent concrete from covering the bolt links and fasteners.**

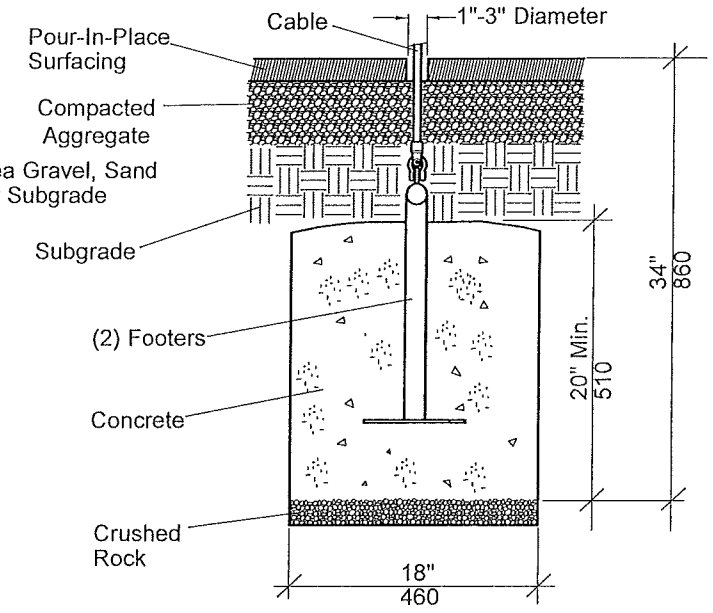
## DETAIL

### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL

### DIRECT BURY WITH POUR-IN-PLACE SURFACING (COMPACTED AGGREGATE)

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# Detail Plan For Pour In Place Surfacing

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J:\SPECS\177\17701100.P65

# Evos® 171627 Single Arch, w/3 Attachment Points

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 6 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 155634-00 | Footer, Specify Color | 2 |
| 171806-00 | Evos Post w/Cap, Specify Color | 3 |
| 176274-00 | Net Assembly, Black | 1 |
| 166061-00 | Arch 1A With Net Tabs, Specify Color | 2 |
| 166066-00 | Arch 1B/1C Without Ring Tabs, Specify Color | 1 |
| 166067-00 | Arch 1D/1E Without Tabs, Specify Color | 1 |
| 166276-00 | 5" Clamp O, Specify Color | 2 |
| **162247-00** | **Hemisphere Climber Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 12 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 12 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 16 |
| 138915-00 | Bolt Link, SST | 12 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 16 |
| 162729-00 | Connecting Plug | 32 |

## Specifications

**Net Assembly:** (Net) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Swage) 3/4" schedule 40 6061-T6 aluminum pipe. (S-Hooks) Fabricated from 5/16" diameter 316-TI stainless steel. (Cable Connectors) Cast from 356-T6 aluminum. Finish: ProShield®, black in color. (Footing Connector) Fabricated from 1 5/16" O.D. 6061-T6 aluminum.

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Post:** Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield, color specified.

**Footer:** Weldment comprised of 1.900" O.D. RS20 (.090" - .100" wall) galvanized steel tubing, 1/4" HRPO flat sheet steel and 3/8" diameter stainless steel rod. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 7 1/4 man hours
**Concrete Req.:** Approx. 34.95 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 670 lbs.
**Fall Height:** 87" (2,21 m)

## Installation Instructions

1) **(Direct Bury) Refer to Plan View for footing locations.**

   **IMPORTANT!** Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

6) Place the fully assembled arch in footings holes. **NOTE:** *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*

7) Attach hemisphere net to arch tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Hemisphere Net Attachment Detail.

8) Attach footers to hemisphere net, using bolt links, 3/8" x 1 1/4" BHCS w/pin limited thread bolts and 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown. Place footers in footing holes. Refer to the Footer Attachment Details. **NOTE:** *If footers are not fully suspended, a trench will need to be dug the full length of the footers. Refer to the Plan View.*

9) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.

10) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

11) Install protective surfacing before users are allowed to play on the structure.



Specifications are subject to change without notice.

Eco #54233 Document 17701100 replaces 17173600 Changed net assembly part number.

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ISO 14001 CERTIFIED

ISO 9001 Certified

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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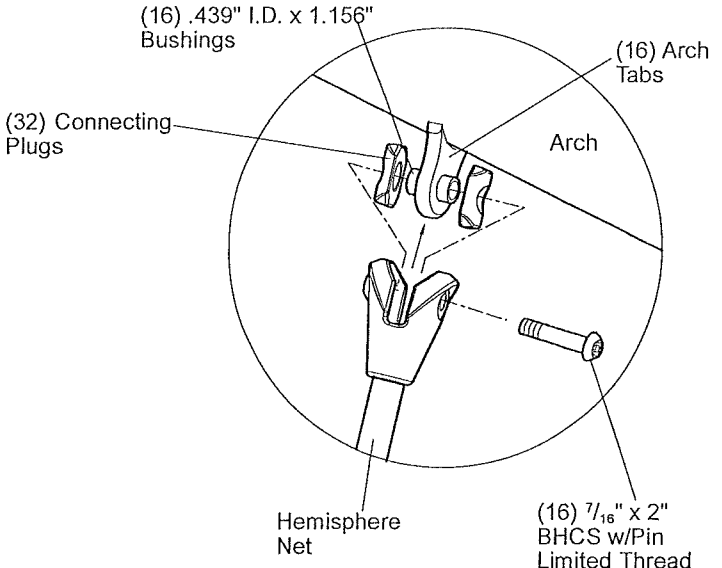
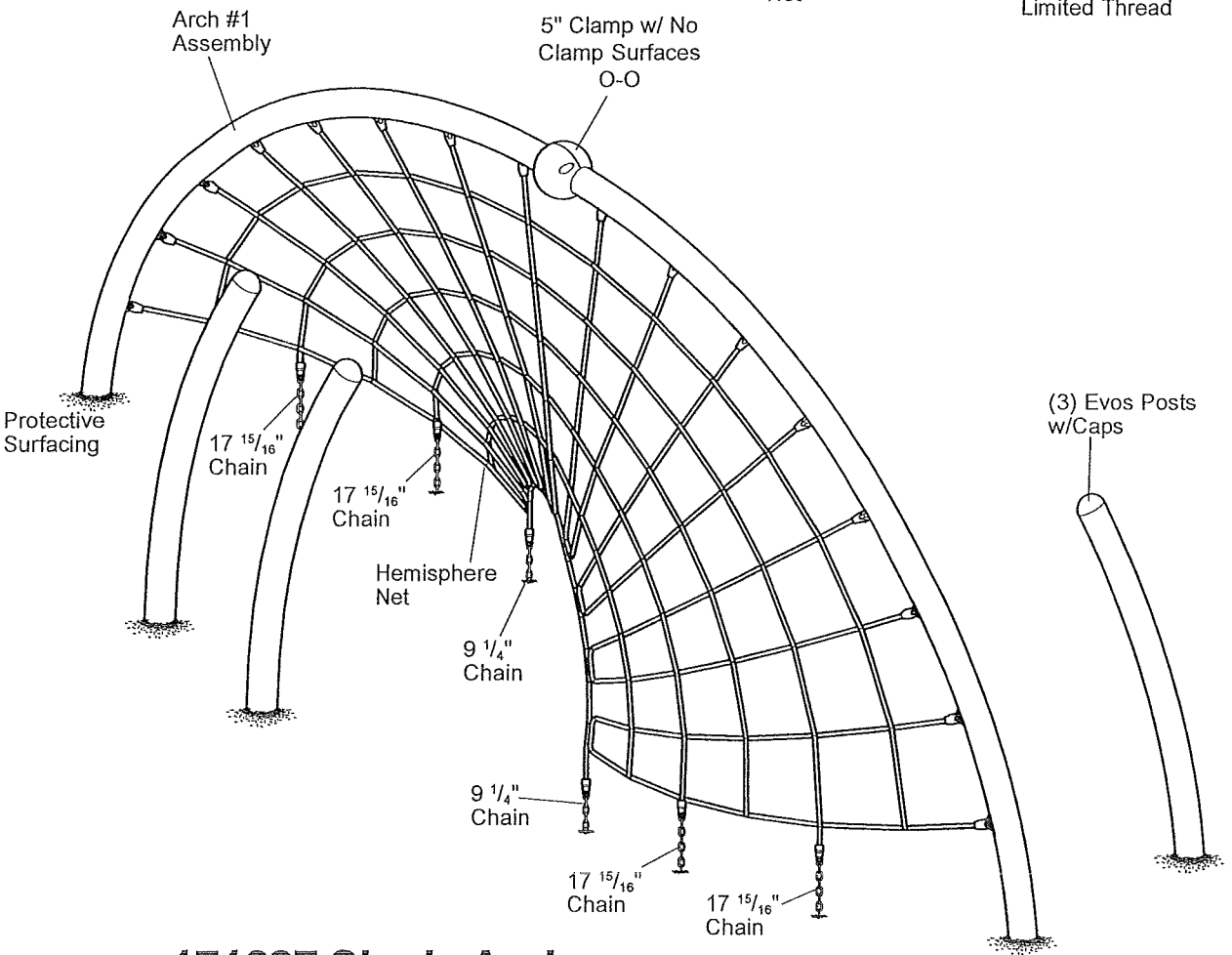
# DETAIL

## HEMISPHERE NET ATTACHMENT

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# 171627 Single Arch, w/3 Attachment Points



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# ARCH #1 ASSEMBLY

SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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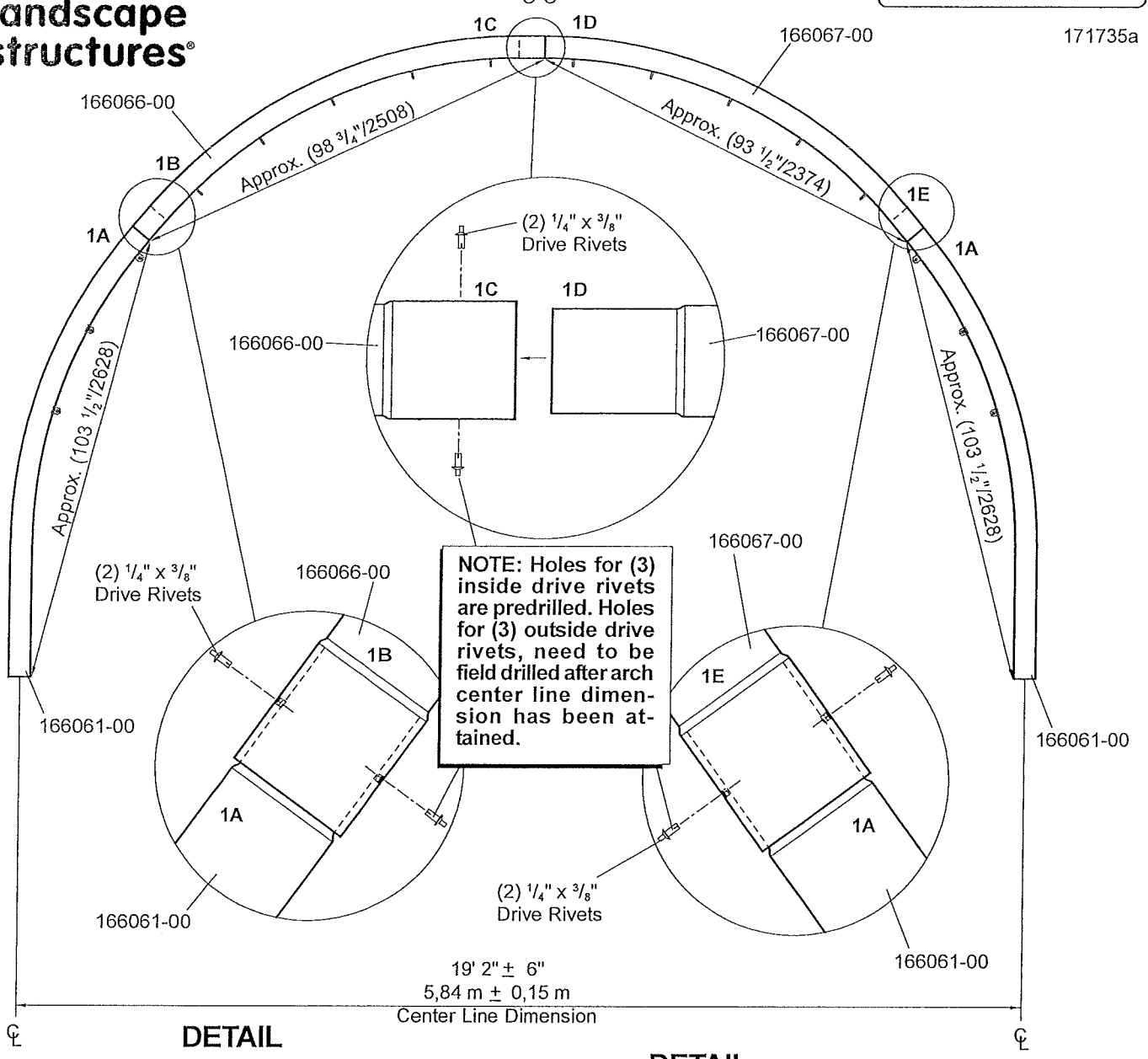
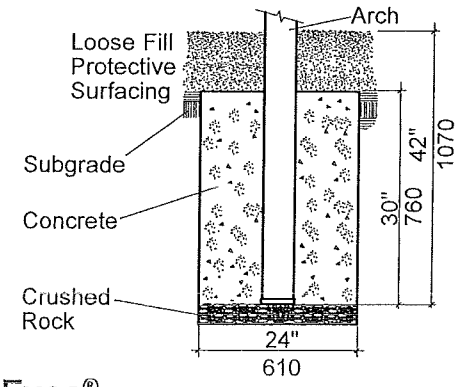
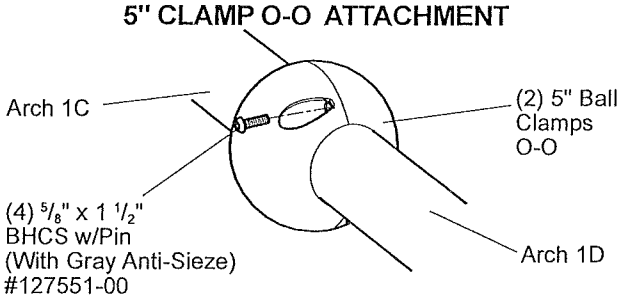



## DETAIL
### DIRECT BURY




## DETAIL
### 5" CLAMP O-O ATTACHMENT

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# Arch Assembly

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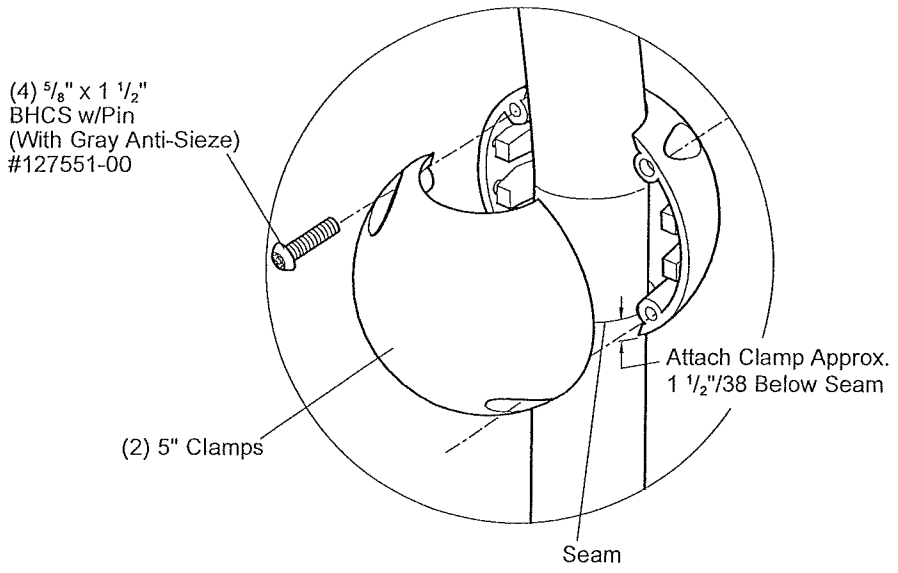
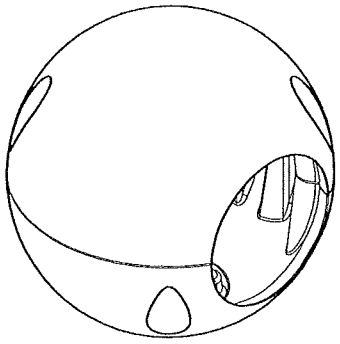
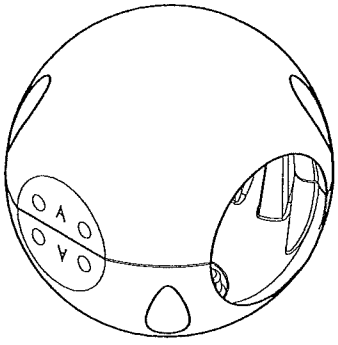
## DETAIL
### 5" CLAMP ATTACHMENT

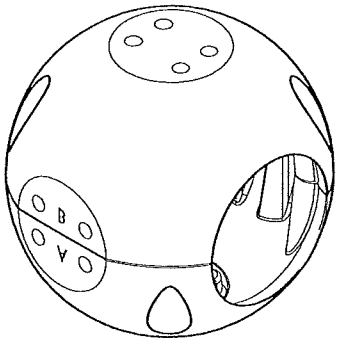


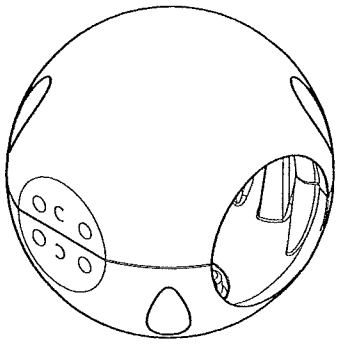
5" Clamp w/ No
Clamp Surfaces
O-O



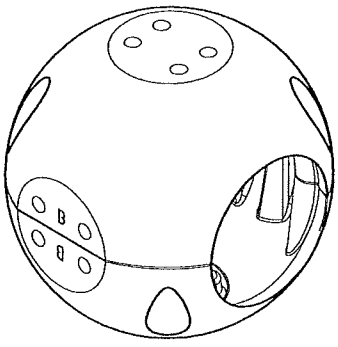

5" Clamp w/ 1
Clamp Surface
A-A



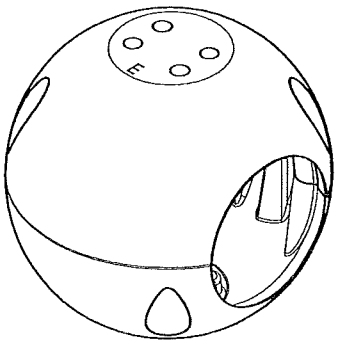

5" Clamp w/ 2 Clamp
Surfaces @ 90°
A-B



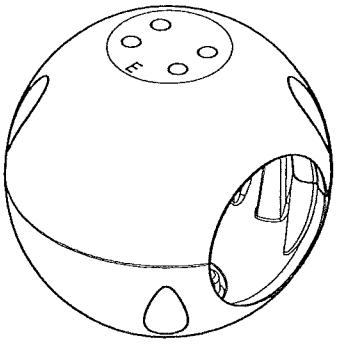

5" Clamp w/ 2 Clamp
Surfaces @ 180°
C-C




5" Clamp
w/ 3 Clamp Surfaces
B-B




5" Clamp
w/ 1 Clamp Surface
O-E




5" Clamp w/ 2 Clamp
Surfaces @ 180°
E-E



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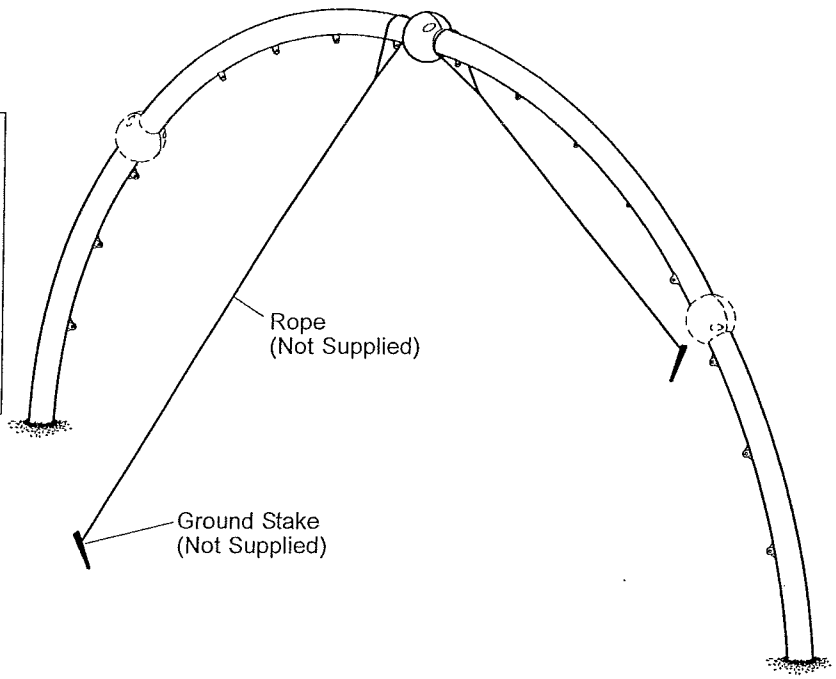
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

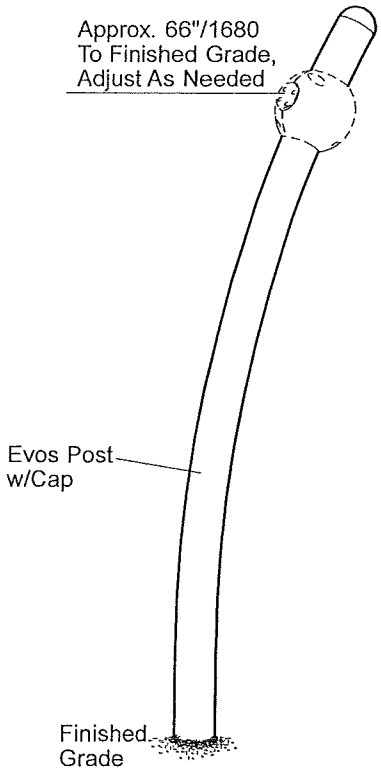
171735b

## DETAIL
ROPE/GROUND STAKES

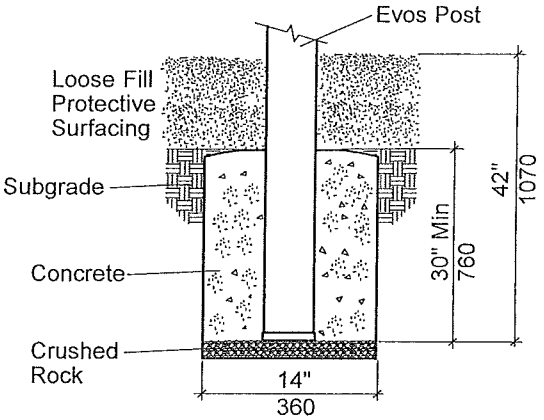
NOTE: *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*




## DETAIL
EVOS POST




## DETAIL
DIRECT BURY




**IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.**

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# 171627 Single Arch, w/3 Attachment Points

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SAFETY NOTE

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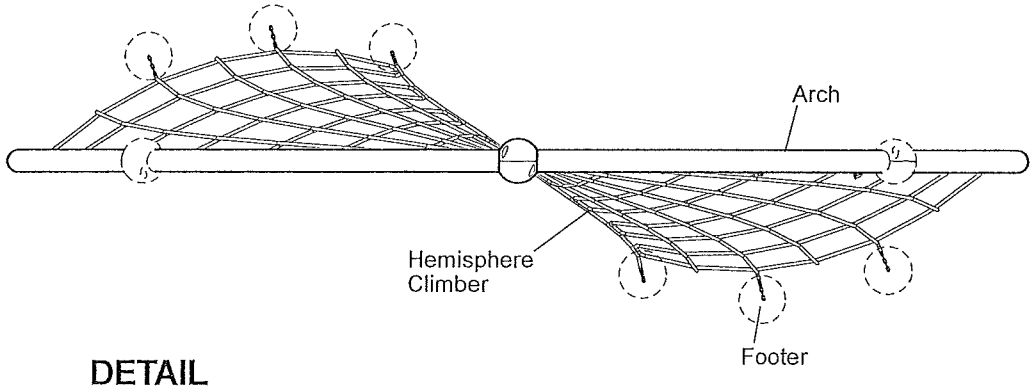
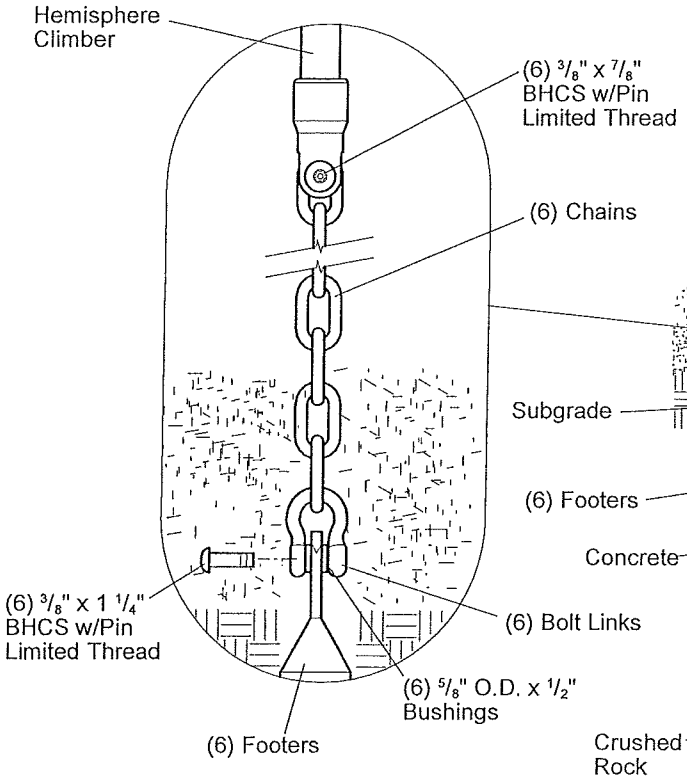
## PLAN VIEW

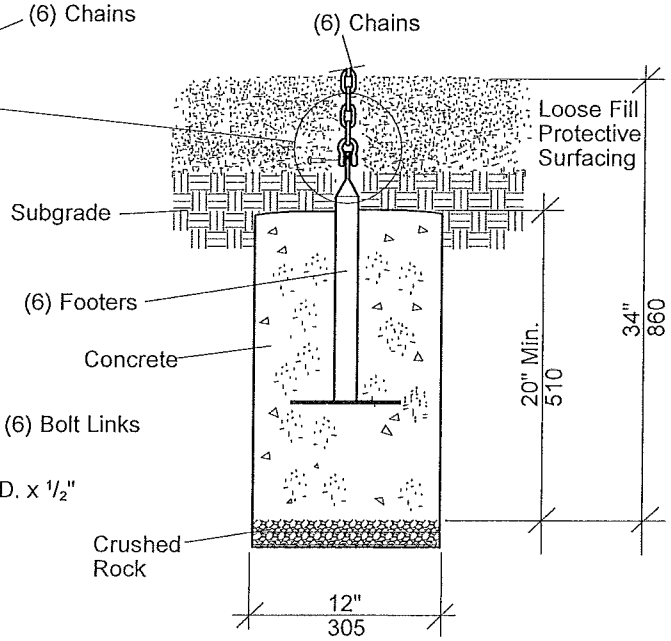



## DETAIL




## DETAIL

### FOOTER ATTACHMENT




**NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cord.**

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**SAFETY NOTE**

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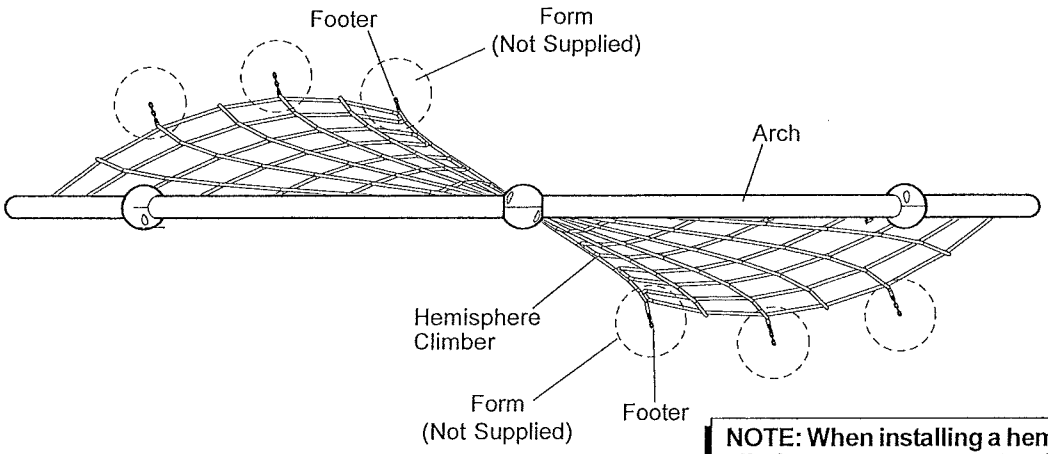
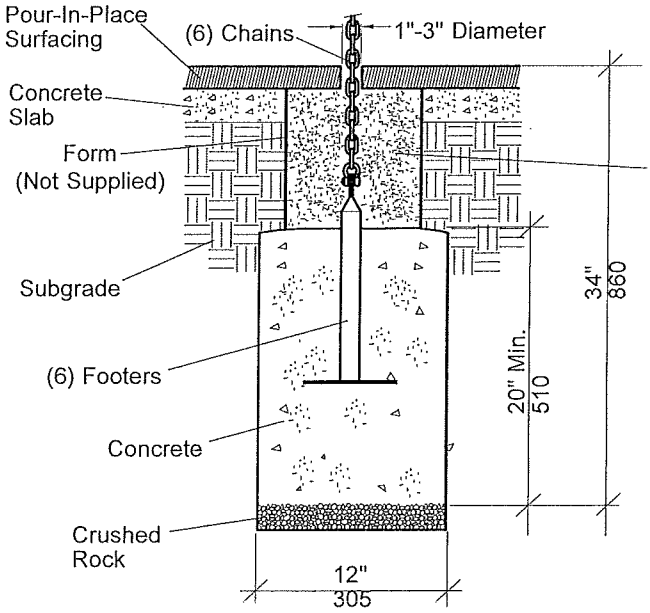
## PLAN VIEW

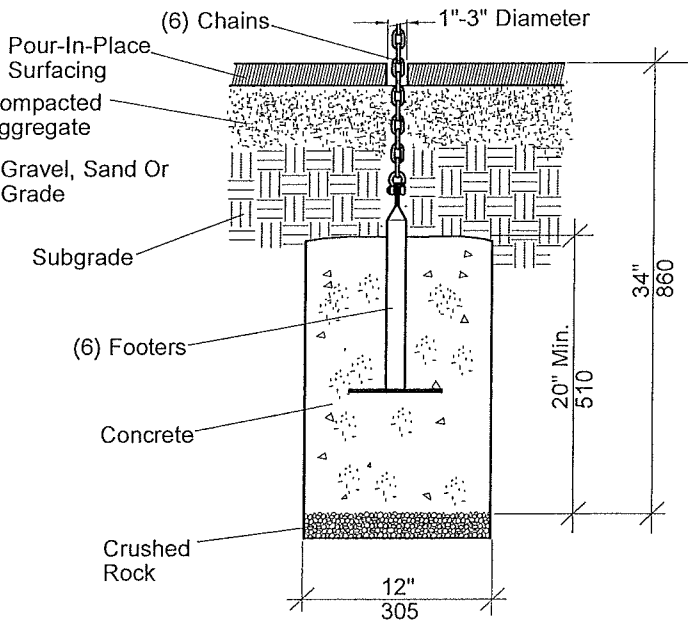



**NOTE: When installing a hemisphere climber over a concrete slab with pour-in-place surfacing, a form needs to be placed around the footers, to prevent concrete from covering the bolt links and fasteners.**

## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING




## DETAIL
### DIRECT BURY WITH POUR-IN-PLACE SURFACING (COMPACTED AGGREGATE)

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# Detail Plan For Pour In Place Surfacing

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# Evos® 171627 Single Arch, w/3 Attachment Points

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 6 |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 164367-00 | Footer, Specify Color | 6 |
| 171806-00 | Evos Post w/Cap, Specify Color | 3 |
| 190610-00 | Net Assembly, Black | 1 |
| 166061-00 | Arch 1A With Net Tabs, Specify Color | 2 |
| 166066-00 | Arch 1B/1C Without Ring Tabs, Specify Color | 1 |
| 166067-00 | Arch 1D/1E Without Tabs, Specify Color | 1 |
| 166276-00 | 5" Clamp O, Specify Color | 2 |
| 136721-00 | 9 1/4" Long Chain | 2 |
| 190780-00 | 17 15/16" Long Chain | 4 |
| **190829-00** | **Hemisphere Climber Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 6 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST | 6 |
| 138915-00 | Bolt Link, SST | 6 |
| 156962-00 | 5/8" O.D. x 1/2" Long Bushing, SST | 6 |
| 157224-00 | .439" I.D. x 1.156" Bushing, SST | 16 |
| 157704-00 | 7/16" x 2" BHCS w/Pin Limited Thread, SST | 16 |
| 162729-00 | Connecting Plug | 32 |

## Specifications

**Net Assembly:** **(Net)** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Swage)** 3/4" schedule 40 6061-T6 aluminum pipe. **(S-Hooks)** Fabricated from 5/16" diameter 316-TI stainless steel. **(Cable Connectors)** Cast from 356-T6 aluminum. Finish: ProShield®, black in color. **(Footing Connector)** Fabricated from 1 5/16" O.D. 6061-T6 aluminum.

**5" Clamps:** Cast from 356-T6 aluminum. Finish: ProShield, color specified.

**5" Arch:** Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

**Post:** Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield, color specified.

**Chain:** Steel 1/4" straight link chain, 3,150 lb. working load limit. Finish: Peer Gold.

**Footer:** Weldment comprised of 1.660" O.D. RS20 (.085" - .095") galvanized steel tubing, and 7 GA. (.179") HRPO sheet steel. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 6 3/4 man hours
**Concrete Req.:** Approx. 31.58 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 670 lbs.
**Fall Height:** 87" (2,21 m)

## Installation Instructions

1) **(Direct Bury) Refer to Plan View for footing locations.**

   IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches. **NOTE:** *Lay arches on cardboard to prevent arches from being scratched during assembly.*

3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.

5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** *Refer to your 2-D Plan for clamp identification.* The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** *The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.*

6) Place the fully assembled arch in footings holes. **NOTE:** *Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.*

7) Attach hemisphere net to arch tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Hemisphere Net Attachment Detail.

8) Attach chains to hemisphere climber, using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.

9) Attach footers to chains, using bolt links, 5/8" O.D. x 1/2" long bushings and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Place footers in footing holes. Refer to the Footer Attachment Details. **NOTE:** *If footers are not fully suspended, a trench will need to be dug the full length of the footers. Refer to the Plan View.*

10) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.

11) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

12) Install protective surfacing before users are allowed to play on the structure.



Specifications are subject to change without notice.

Eco #54776 Document #19082100 replaces #17701100. Replaced net.

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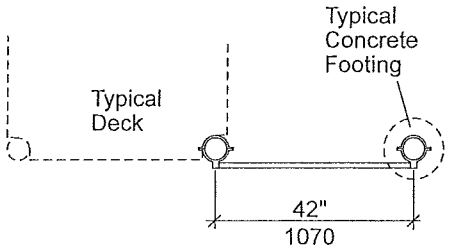
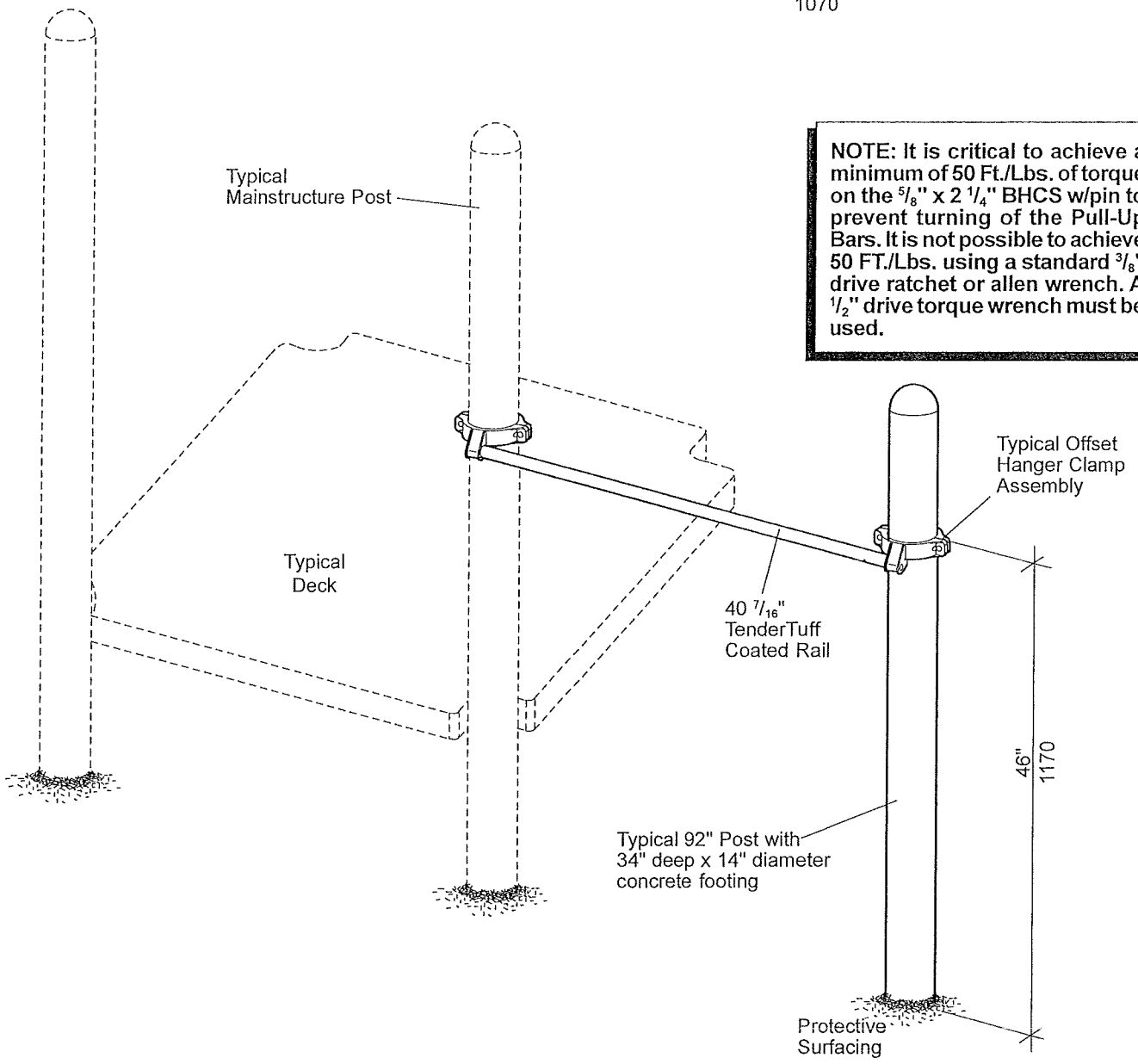
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

10996000




**NOTE: It is critical to achieve a minimum of 50 Ft./Lbs. of torque on the $^{5}/_{8}$" x 2 $^{1}/_{4}$" BHCS w/pin to prevent turning of the Pull-Up Bars. It is not possible to achieve 50 FT./Lbs. using a standard $^{3}/_{8}$" drive ratchet or allen wrench. A $^{1}/_{2}$" drive torque wrench must be used.**

PlayBooster®

# 111357 Turning Bar

601 7TH STREET SOUTH DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSINST (1-888-574-4678) FAX (763) 972-3185

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# PlayBooster® 111357 Turning Bar

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 107681-00 | 92" Aluminum Post, Specify Color | 1 |
| 108569-00 | 40 $^{7}/_{16}$" TenderTuff Rail, Specify Color | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 113729-00 | Offset Hanger Clamp, Specify Color | 2 |
| 100610-00 | $^{1}/_{4}$" x $^{5}/_{8}$" Drive Rivet, SST | 2 |
| 100351-00 | $^{3}/_{8}$" Tee Nut, SST | 4 |
| 100198-00 | $^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS w/Pin, SST | 4 |
| 100203-00 | $^{5}/_{8}$" x 2 $^{1}/_{4}$" BHCS w/Pin, SST | 2 |

## Specifications

**Rail:** Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel $^{5}/_{8}$" threaded inserts. Finish: TenderTuff™, color specified.

**Post:** See PlayBooster® (PB) General Specifications.

**Offset Hanger Clamp Assembly:** Cast aluminum. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 $^{1}/_{2}$ man hours
**Concrete Req.:** Approx. 1.6 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 35 lbs.

## Installation Instructions

1) Dig footing hole spaced as shown. Refer to the Typical Concrete Footing Detail sheet.

2) Set 92" post in footing hole and attach 40 $^{7}/_{16}$" rail assembly to post at height shown using offset hanger clamp. Refer to the Typical Offset Hanger Clamp Assembly Spec sheet. **NOTE:** *It is critical to achieve a minimum of 50 Ft./Lbs. of torque on the $^{5}/_{8}$" x 2 $^{1}/_{4}$" BHCS w/pin to prevent turning of the Pull-Up Bars. It is not possible to achieve 50 FT./Lbs. using a standard $^{3}/_{8}$" drive ratchet or allen wrench. A $^{1}/_{2}$" drive torque wrench must be used.*

3) Temporarily brace post in plumb position and level rail. Pour concrete footing.

4) Install drive rivets in all clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet.

5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #52364 Document #14657400 replaces #10996000. Added 50 Ft./Lbs. of torque note.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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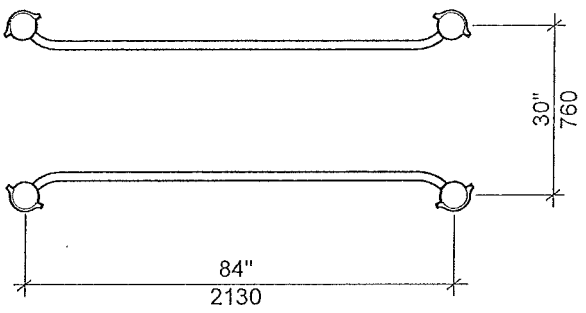
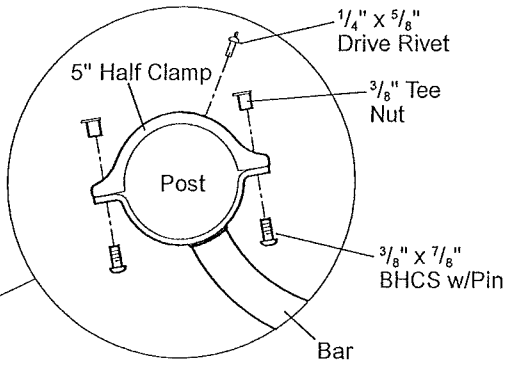
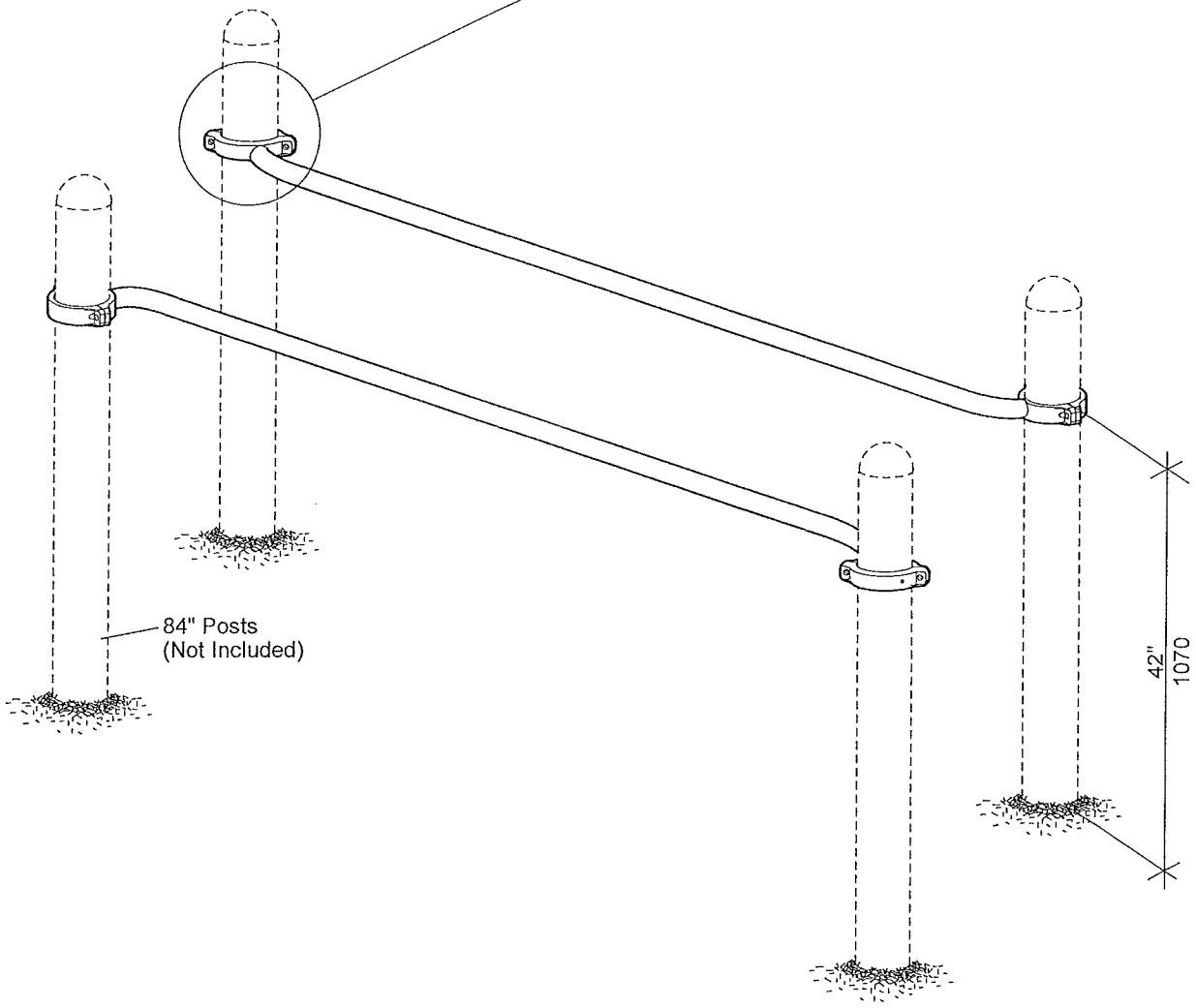



## CLAMP DETAIL




PlayBooster®

# 111361 Parallel Bars

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# PlayBooster® 111361 Parallel Bars

## Parts List

| Part# | Description | Qty |
|---|---|---|
| 103063-00 | Parallel Bar, Specify Color | 2 |
| 105327-01 | 5" Half Clamp, Specify Color | 4 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin | 8 |
| 100351-00 | 3/8" Tee Nut, SST | 8 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, SST | 4 |

## Specifications

**Parallel Bar:** Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing beam and 1/4" x 1 3/4" steel half clamps. Finish: ProShield®, color specified.

**Half Clamp:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 man hour
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 32 lbs.

## Installation Instructions

1) Attach parallel bars to posts at height shown, using 5" half clamps with 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts.
2) Install 1/4" x 5/8" drive rivets in all half clamps. Refer to the Typical Rail Hanger Clamp Assembly Detail sheet.
3) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487, SECTION 9.*)

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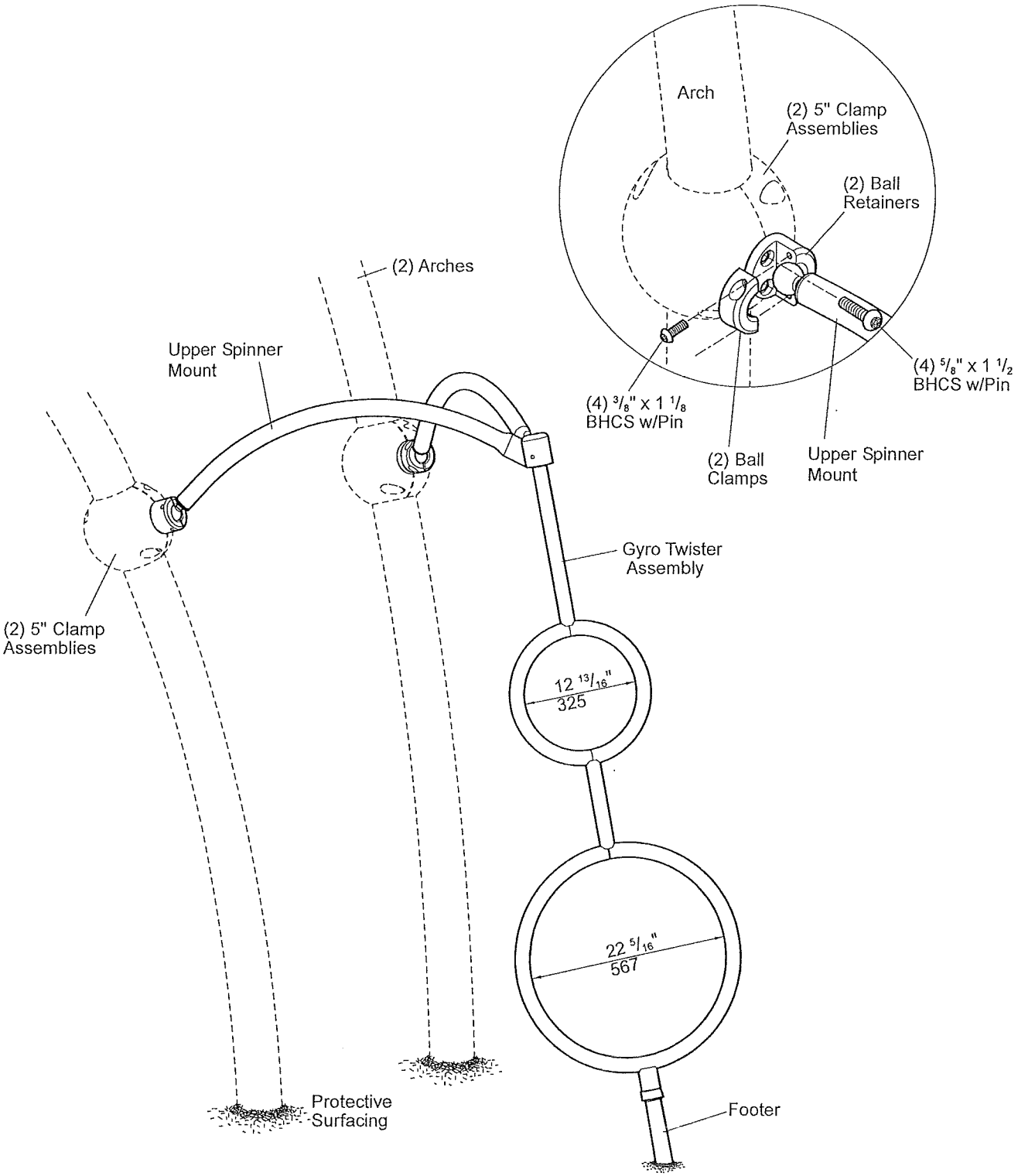
# DETAIL

## UPPER SPINNER MOUNT ATTACHMENT




Evos™

# 156459 Gyro Twister™



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# Evos™ 156459 Gyro Twister™

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 158711-00 | Upper Spinner Mount, Specify Color | 1 |
| 157091-00 | Gyro Twister Assembly, Specify Color | 1 |
| 157092-00 | Footer, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 159381-00 | **Evos Spinners Hardware Package** | 1 |
| 100198-00 | $^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST | 4 |
| 100201-00 | $^5/_8$" x 1 $^1/_2$" BHCS w/Pin, SST | 4 |
| 131849-00 | $^5/_{16}$" x $^1/_2$" BHCS w/Pin, SST | 4 |
| 158710-00 | Bushing | 4 |

## Specifications

**Upper Spinner Mount:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 2.750" O.D. 1018 steel, and 1 $^7/_8$" steel ball. Finish: Powdercoat, color specified.

**Gyro Twister Assy.:** Weldment comprised of 1.900" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 1.660" O.D. RS40 (.111"-.121" Wall) galvanized steel tube, 2.750" O.D. 1018 steel and 1 $^7/_8$" steel ball. Finish: Powdercoat, color specified.

**Bushing:** Oil-filled UHMW PE.

**Footer:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 12 Ga. (.105") HR flat steel and 1 $^7/_8$" steel ball. Finish: Powdercoat, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 $^1/_2$ man hours
**Concrete Req.:** Approx. 3 cu. ft.
**Area Req.:** 6' minimum use zone
**Weight:** 83 lbs.
**Fall Height:** 50"

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Place a bushing on each side of the footer's 1 $^7/_8$" ball, as shown. Insert footer with bushings into Gyro Twister assembly. Align holes in bushings with holes in housing. When holes are aligned, insert $^5/_{16}$" x $^1/_2$" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

3) Place a bushing on each side of the Gyro Twister assembly's 1 $^7/_8$" ball, as shown. Insert Gyro Twister assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert $^5/_{16}$" x $^1/_2$" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

4) Attach ball retainers to 5" clamps using $^5/_8$" x 1 $^1/_2$" BHCS w/pin. Attach upper spinner mount to ball retainers using ball clamps and $^3/_8$" x 1 $^1/_8$" BHCS w/pin. Refer to the Upper Spinner Mount Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect the Gyro Twister Assembly and position properly. Check to make sure 5" clamps are at the same height, if not adjust 5" clamps.*

5) Place a level on the footer gusset, when gusset is plumb pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. **NOTE:** *Gyro Twister assembly will have to be propped in position, until concrete has cured.*

6) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53259 Document 15976600 replaces 15747000. Replaced upper mount.

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SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487, SECTION 9.*)

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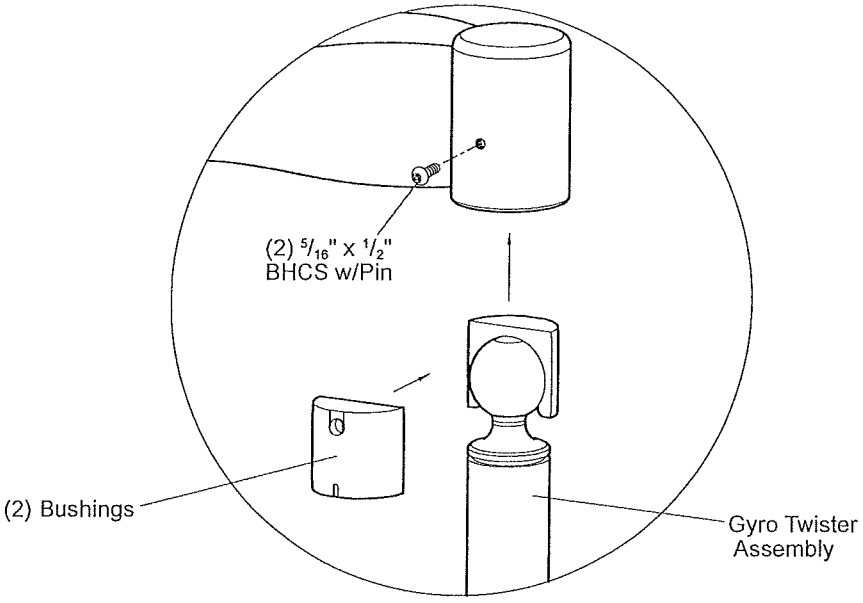
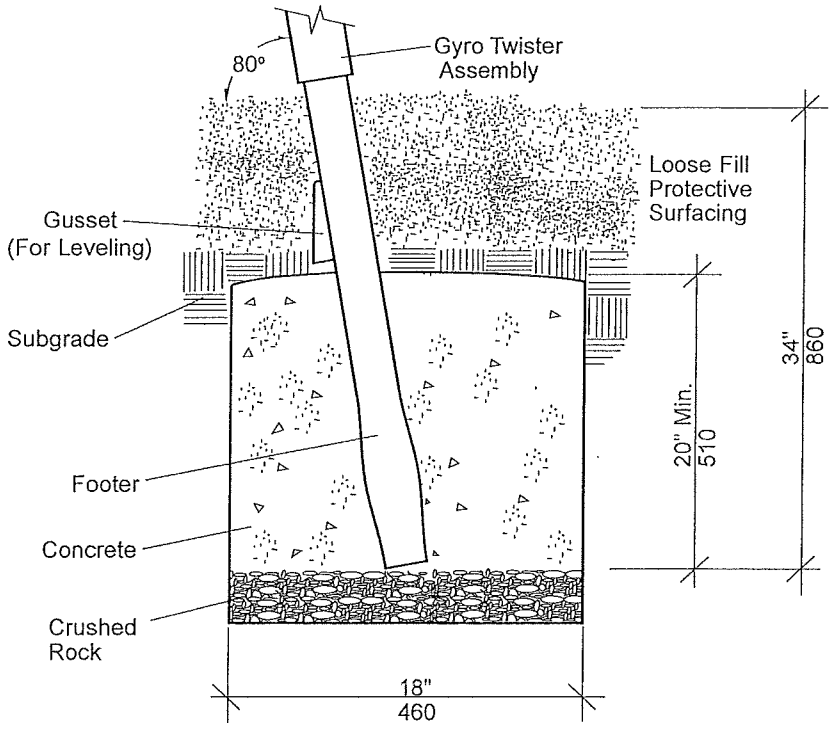
## DETAIL
GYRO TWISTER ASSEMBLY




## DETAIL
FOOTER ATTACHMENT




Evos™

# 156459 Gyro Twister™



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Document #15976600

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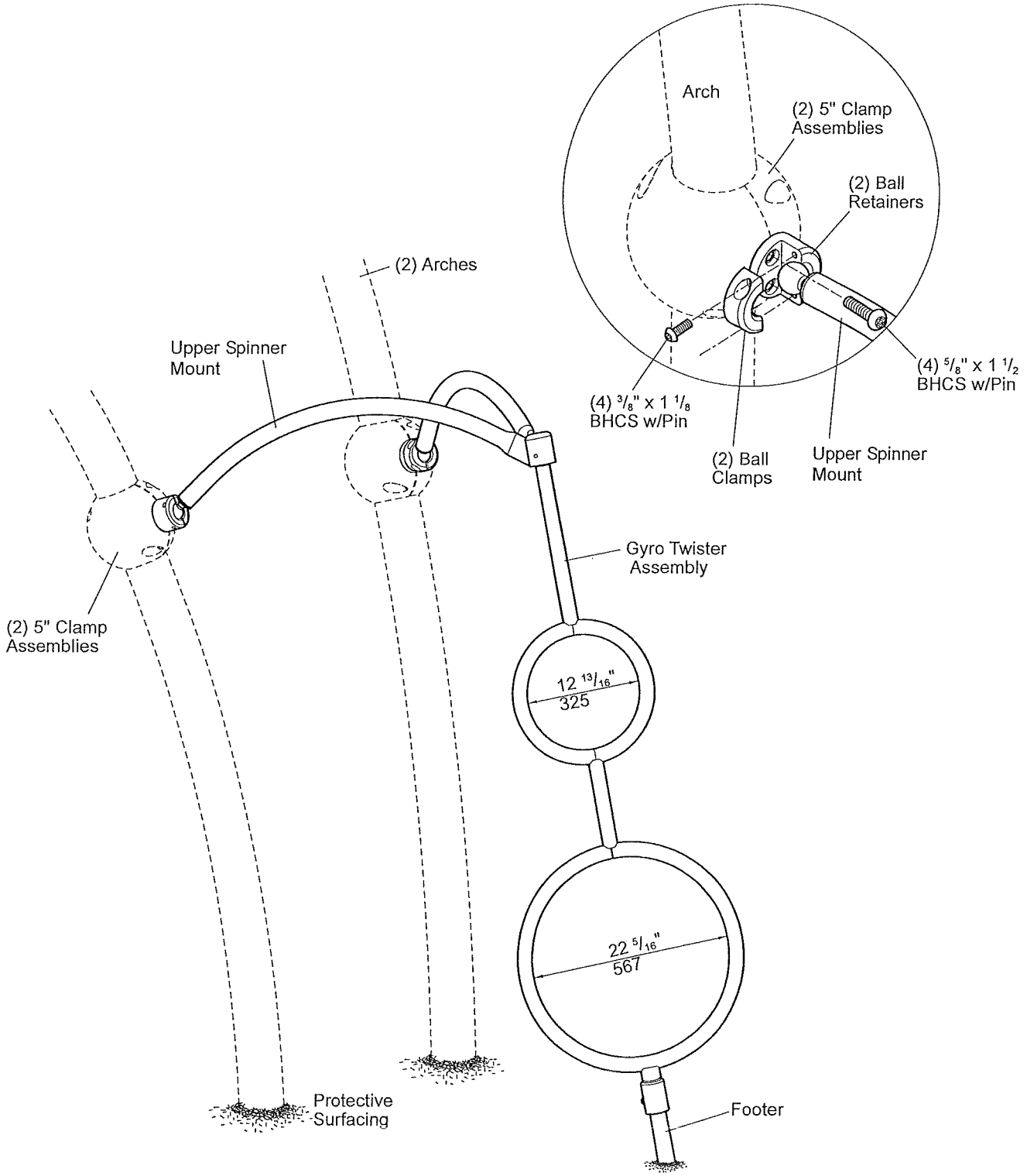
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

# DETAIL

## UPPER SPINNER MOUNT ATTACHMENT




Evos®

# 156459 Gyro Twister® Spinner



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Document #17138000

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# Evos® 156459 Gyro Twister® Spinner

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 158711-00 | Upper Spinner Mount, Specify Color | 1 |
| 171114-00 | Gyro Twister Assembly, Specify Color | 1 |
| 157092-00 | Footer, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| **159381-00** | **Evos Spinners Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 131849-00 | 5/16" x 1/2" BHCS w/Pin, SST | 4 |
| 158710-00 | Bushing | 4 |

## Specifications

**Upper Spinner Mount:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 2.750" O.D. 1018 steel, and 1 7/8" steel ball. Finish: ProShield®, color specified.

**Gyro Twister Assy.:** Weldment comprised of 1.900" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 1.660" O.D. RS40 (.111"-.121" Wall) galvanized steel tube, 3/16" HRPO steel plate and 1 7/8" steel ball. Finish: ProShield, color specified.

**Bushing:** Oil-filled UHMW PE.

**Footer:** Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 12 Ga. (.105") HR flat steel and 1 7/8" steel ball. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 1/2 man hours
**Concrete Req.:** Approx. 3 cu. ft.
**Area Req.:** 6' (1,83 m) minimum use zone
**Weight:** 83 lbs.
**Fall Height:** 50" (1,27 m)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Place a bushing on each side of the footer's 1 7/8" ball, as shown. Insert footer with bushings into Gyro Twister assembly. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

3) Place a bushing on each side of the Gyro Twister assembly's 1 7/8" ball, as shown. Insert Gyro Twister assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** *Use the slot in the bottom of the bushing to align holes.*

4) Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Attach upper spinner mount to ball retainers using ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Upper Spinner Mount Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect the Gyro Twister Assembly and position properly. Check to make sure 5" clamps are at the same height, if not adjust 5" clamps.*

5) Place a level on the footer gusset, when gusset is plumb pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. **NOTE:** *Gyro Twister assembly will have to be propped in position, until concrete has cured.*

6) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54010 Document 17138000 replaces 15976600. Replaced Gyro Twister Assembly.

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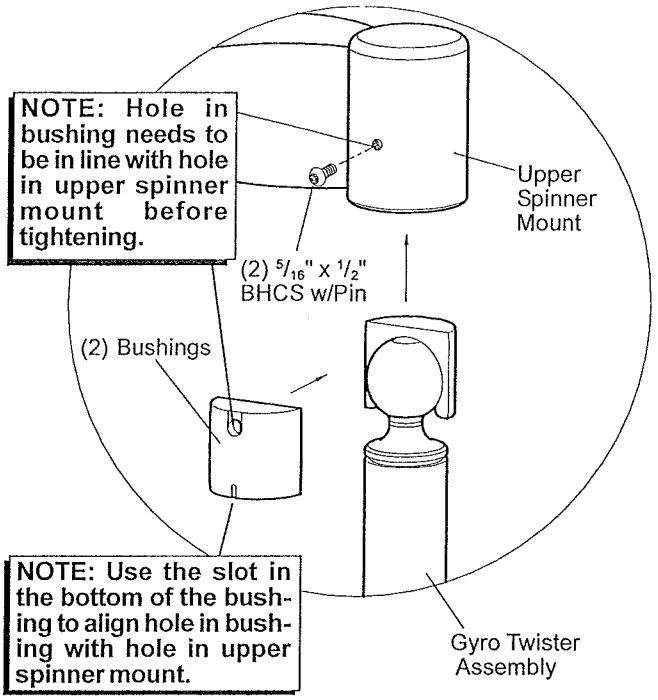
SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

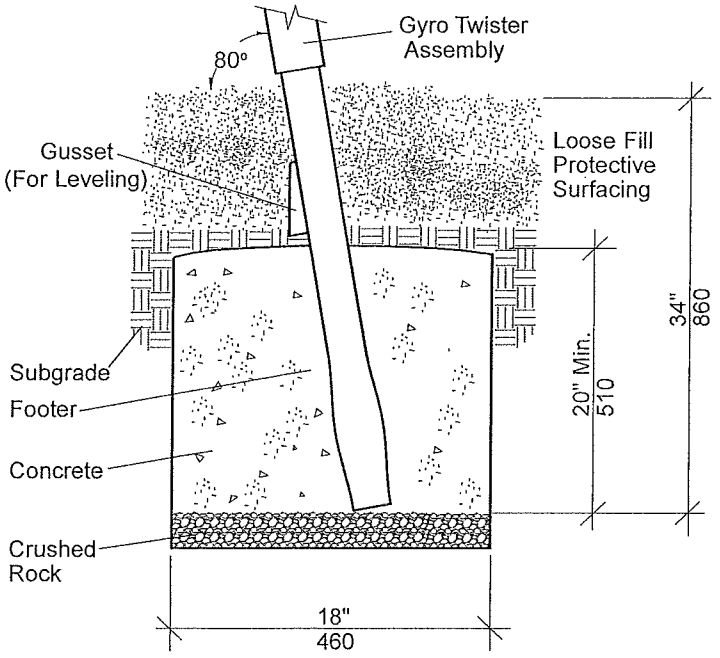
## DETAIL

GYRO TWISTER ASSEMBLY




## DETAIL

FOOTER ATTACHMENT

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# 156459 Gyro Twister® Spinner



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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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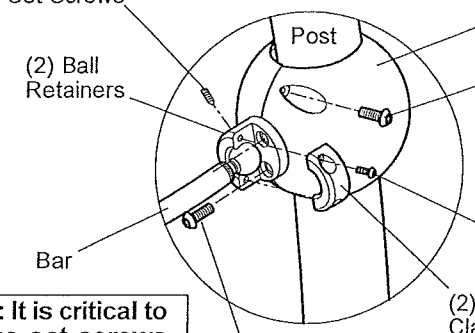
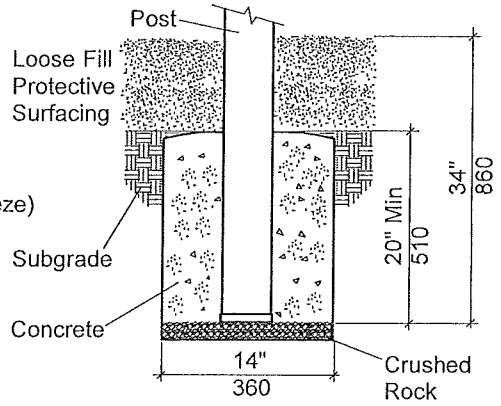
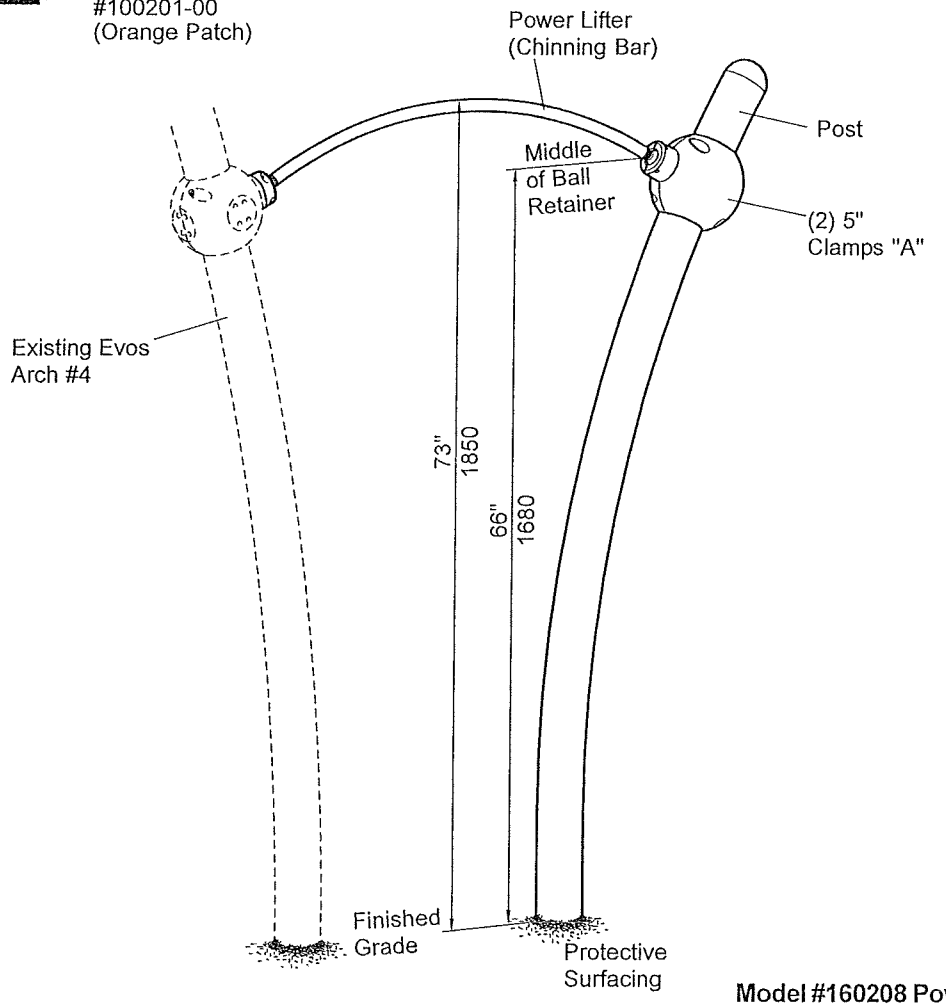
## DETAIL
### BAR ATTACHMENT




**NOTE: It is critical to engage set screws securely against the bar.**

## DETAIL
### DIRECT BURY




**Model #160208 Power Lifter**

# Evos® 160208/160210 Power Lifter™



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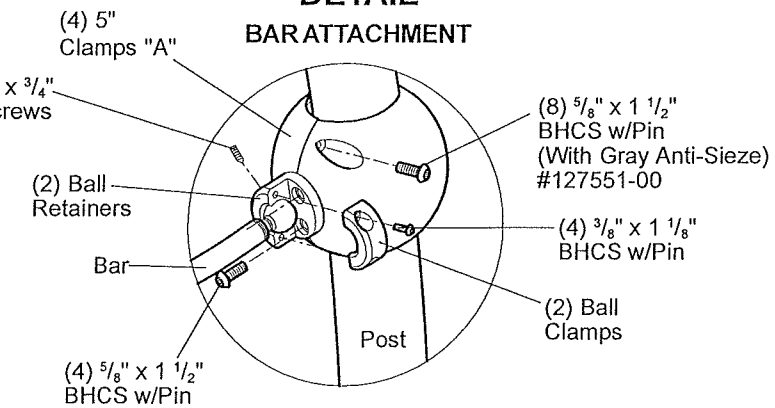
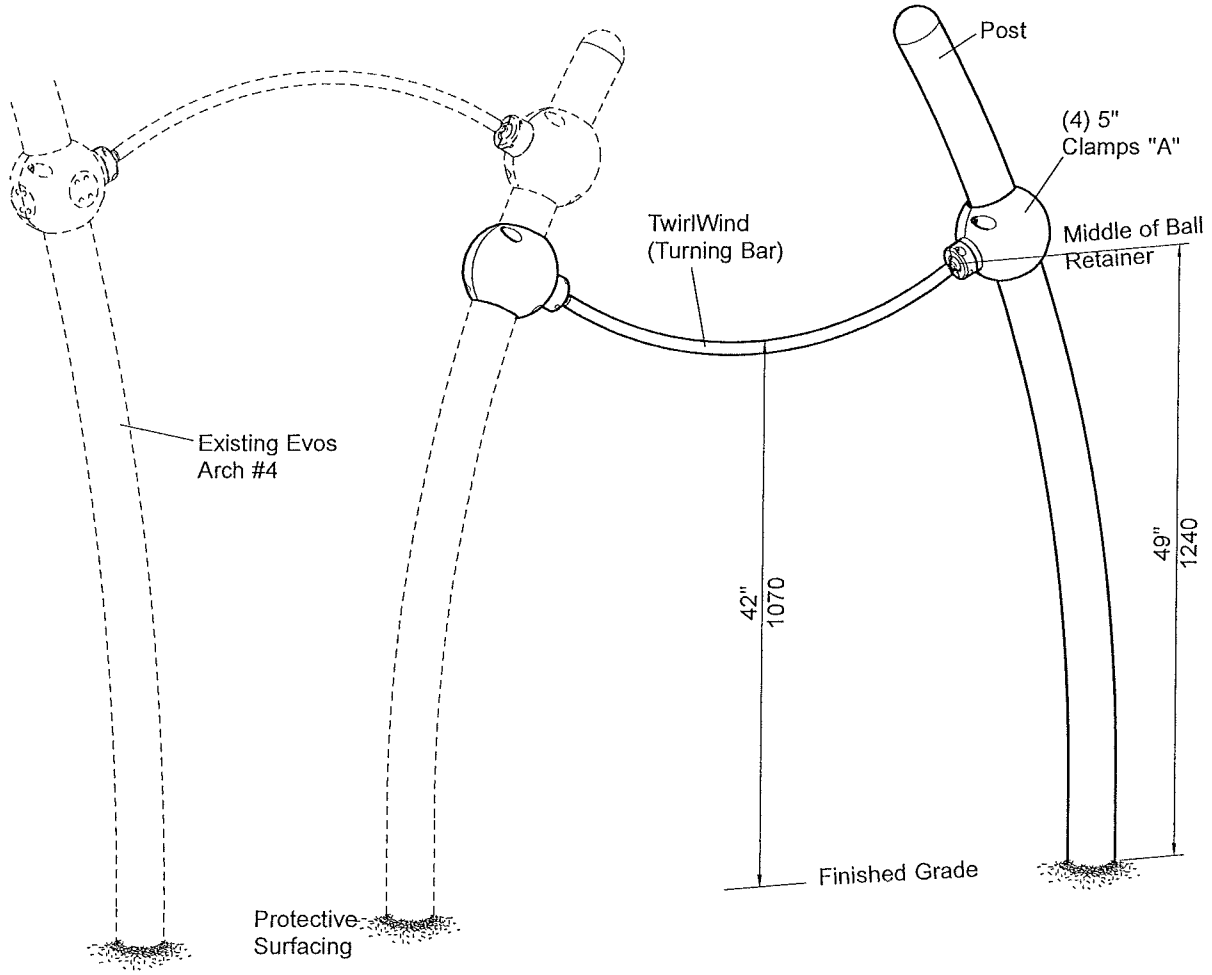
## DETAIL
### BAR ATTACHMENT




**NOTE: It is critical to engage set screws securely against the bar.**




**Model #160210 TwirlWind™**

Evos®

# 160208/160210 Power Lifter™

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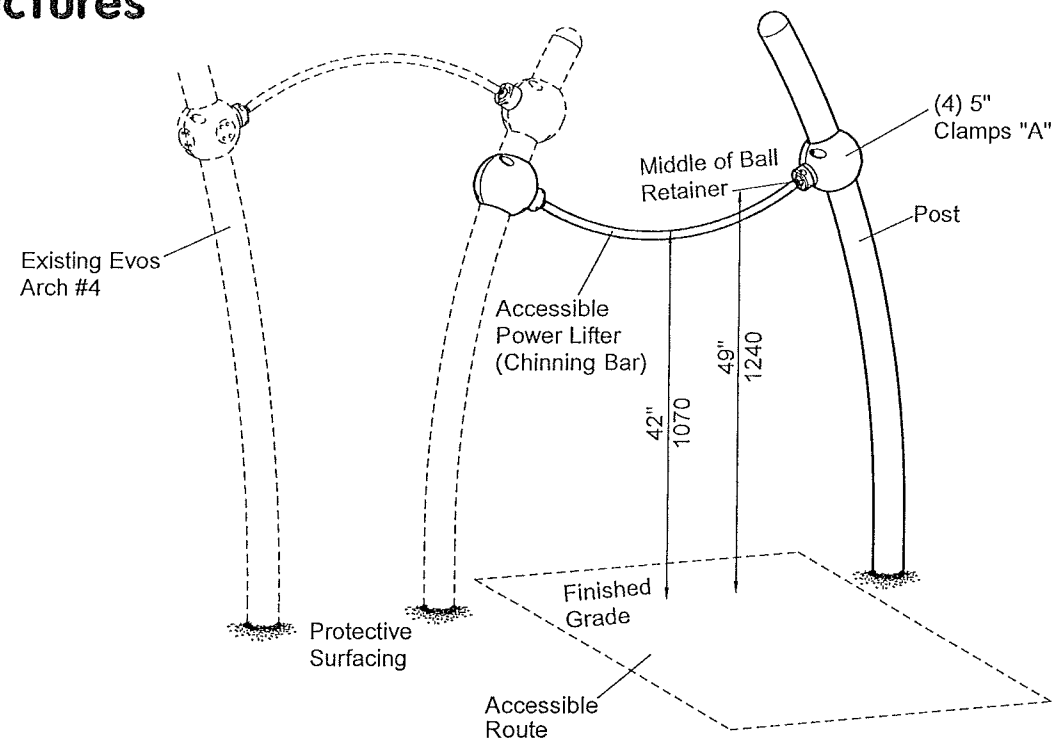
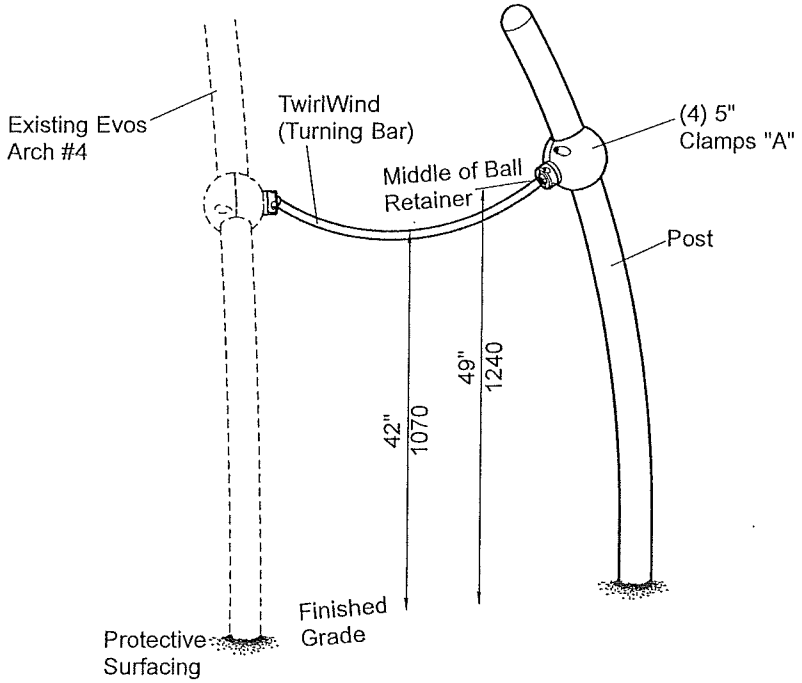



**Model #160209 Accessible Power Lifter**




**TwirlWind Attached Approximately 90° Off Of Evos Arch #4**



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# Evos® 160208/160210 Power Lifter™

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| | **#160208 Power Lifter™** | |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 166271-00 | 5" Round Clamp "A", Specify Color | 2 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 169690-00 | Ball Retainer, Specify Color | 2 |
| 159051-00 | Chinning Bar, Specify Color | 1 |
| 159445-00 | Post, Specify Color | 1 |
| **169795-00** | **Power Lifter Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 156847-00 | Play Safe Label, 5-12 Years | 1 |
| 169691-00 | 3/8" x 3/4" Set Screw, ZP | 4 |
| | **#160209 Accessible Power Lifter™** | |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| 166271-00 | 5" Round Clamp "A", Specify Color | 4 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 159051-00 | Chinning Bar, Specify Color | 1 |
| 159445-00 | Post, Specify Color | 1 |
| **160310-00** | **Power Lifter Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 156847-00 | Play Safe Label, 5-12 Years | 1 |
| | **#160210 TwirlWind™ Turning Bar** | |
| 127551-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 8 |
| 166271-00 | 5" Round Clamp "A", Specify Color | 4 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| 159051-00 | Chinning Bar, Specify Color | 1 |
| 159445-00 | Post, Specify Color | 1 |
| **160310-00** | **Power Lifter Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 156847-00 | Play Safe Label, 5-12 Years | 1 |

## Specifications

**5" Round Clamp:** Cast from 535 almag. Finish: ProShield®, color specified.

**Post:** Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube. Finish: ProShield, color specified.

**Ball Clamp/ Ball Retainer:** Cast from 535 almag. Finish: ProShield, color specified.

**Chinning Bar:** Fabricated from 1.315" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 man hour (Power Lifter)
Approx. 1 man hour (Twirlwind)
**Concrete Req.:** Approx. 1.75 cu. ft.
**Min. Use Zone:** 6' (1,83 m) minimum use zone
**Weight:** 97 lbs. (Power Lifter)
109 lbs. (Twirlwind) & (Accessible Power Lifter)
**Fall Height:** 73" (1,85 m) (Power Lifter)
49" (1,24 m) (Twirlwind)

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing locations.**

2) Attach 5" clamps to posts at height shown, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Do not final tighten fasteners at this time, 5" round clamps will need to be adjusted to attach Power Lifter/ TwirlWind™.

3) Attach ball retainers to 5" clamps, using 5/8" x 1 1/2" BHCS w/pin. Attach Power Lifter/TwirlWind to ball retainers using ball clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" x 3/4" set screws. With Power Lifter/ TwirlWind at proper height, final tighten 5" clamp fasteners. Refer to the Chinning Bar Attachment Detail.

4) With posts plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

5) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #53908 Document 16979400 replaces 16815100. Replaced ball retainers and add set screws.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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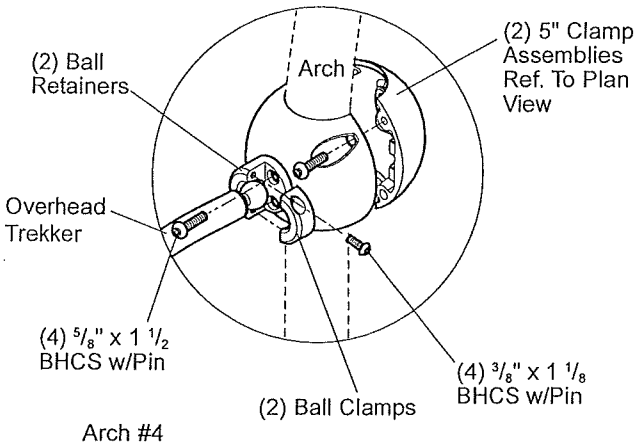
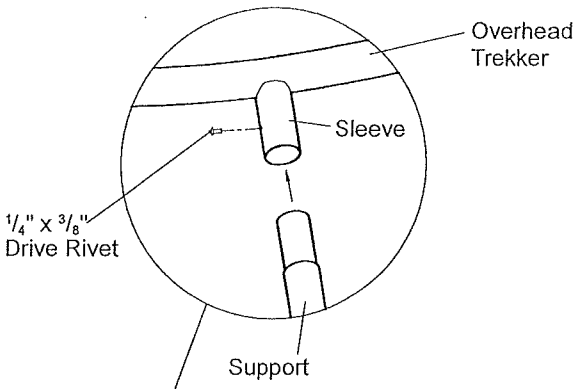
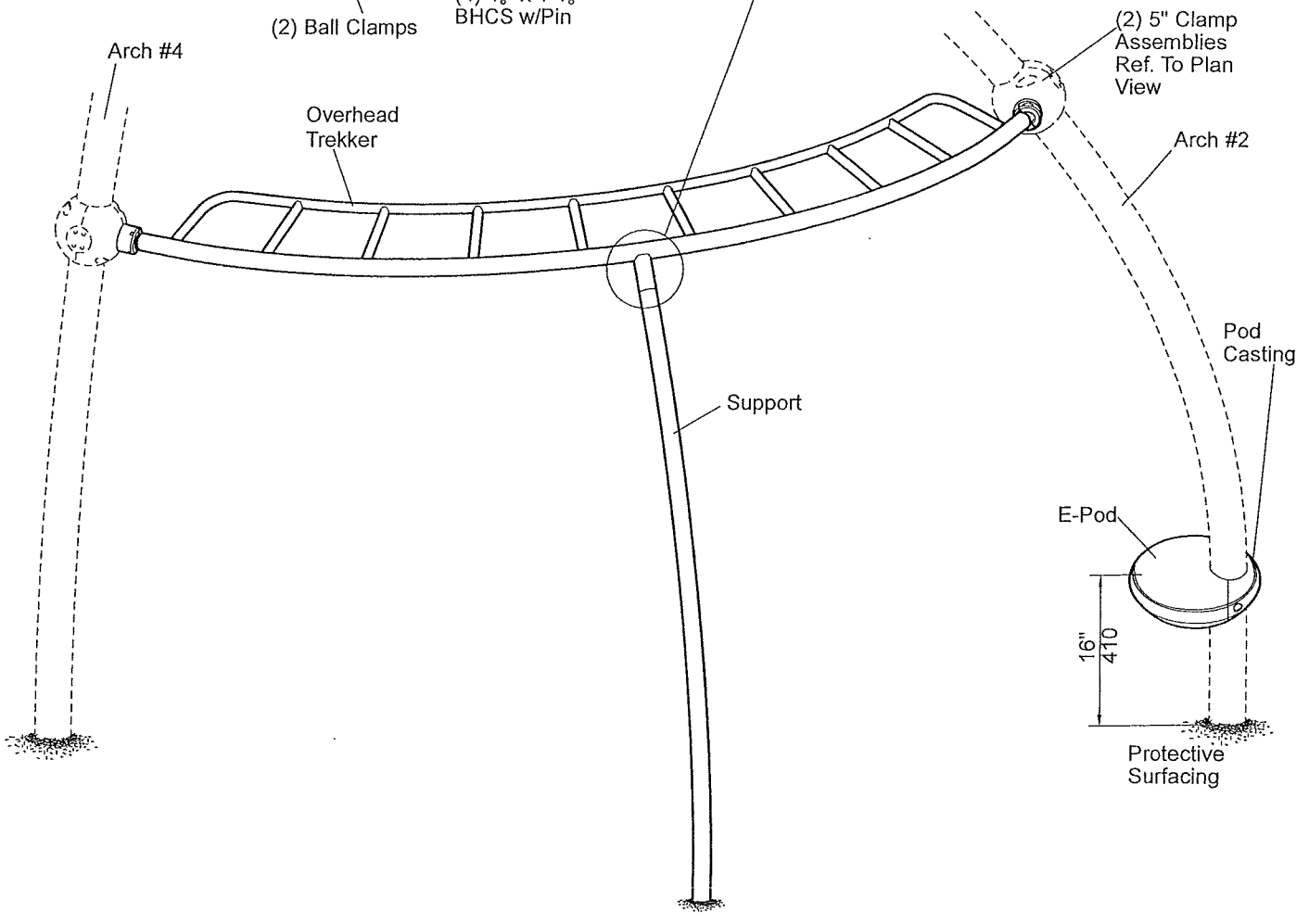
## DETAIL
### BALL CLAMP ATTACHMENT




## DETAIL
### SUPPORT ATTACHMENT




Evos®

# 160254 Overhead Trekker™

Sheet 1 of 2

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# Evos® 160254 Overhead Trekker™

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 154461-00 | E-Pod, Specify Color | 1 |
| 156203-00 | Pod Climb Across Support, Specify Color | 1 |
| 156806-00 | Pod Casting, Specify Color | 1 |
| 160135-00 | Overhead Trekker, Specify Color | 1 |
| 156699-00 | Ball Clamp, Specify Color | 2 |
| 156700-00 | Ball Retainer, Specify Color | 2 |
| **156968-00** | **Pod Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 1 |
| **160409-00** | **Evos Overhead Events Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100201-00 | 5/8" x 1 1/2" BHCS w/Pin, SST | 4 |
| 100611-00 | 1/4" x 3/8" Drive Rivet, AL/SST | 1 |

## Specifications

**Overhead Trekker:** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing, 1.315" O.D. RS20 (.080"-.090" Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield®, color specified.

**E-Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Pod Casting:** Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

**Support:** Fabricated from 2.375" O.D. RS20 (.095"-.105" Wall) galvanized steel tubing. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 1/4 man hours
**Concrete Req.:** Approx. 1.31 cu. ft.
**Area Req.:** 6'/2060 mm minimum use zone
**Weight:** 122 lbs.
**Fall Height:** 81"/2010 mm

## Installation Instructions

1) **(Direct Bury) Refer to the Site Plan for footing location.**

2) Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Fasten Overhead Trekker to ball retainers using, ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Ball Clamp Attachment Detail. **NOTE:** *5" Clamps may need to be turned, or moved up or down to connect and position Overhead Trekker properly. Check to make sure Overhead Trekker is level, if not adjust 5" clamps. Retighten 5" clamp fasteners when Overhead Trekker is in proper position.*

3) Slide support into Overhead Trekker sleeve. Drill through hole in sleeve and into support with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Direct Bury Detail.

4) Attach e-pod and pod casting to arch as shown, using 3/8" x 1 1/8" BHCS w/pin. Refer to the E-Pod Attachment Detail.

5) Drill through hole in pod casting and into arch with a 1/4" or "F" (only) drill bit. Insert 1/4" x 5/8" rivet in hole and hammer rivet pin in until it is flush with head.

6) With support plumb, pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.

7) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

ECO #54569 Remove Play Safe Label from hardware package.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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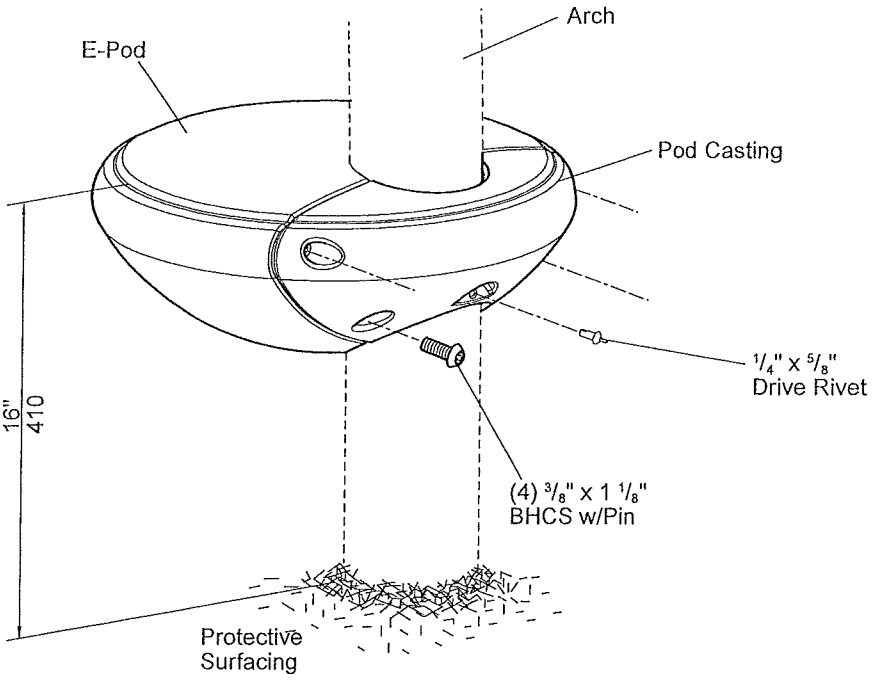
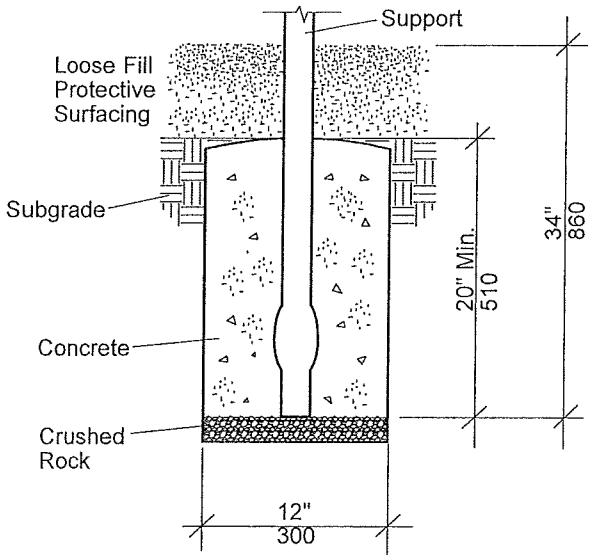
## DETAIL
### E-POD ATTACHMENT




## DETAIL
### DIRECT BURY

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# 160254 Overhead Trekker™



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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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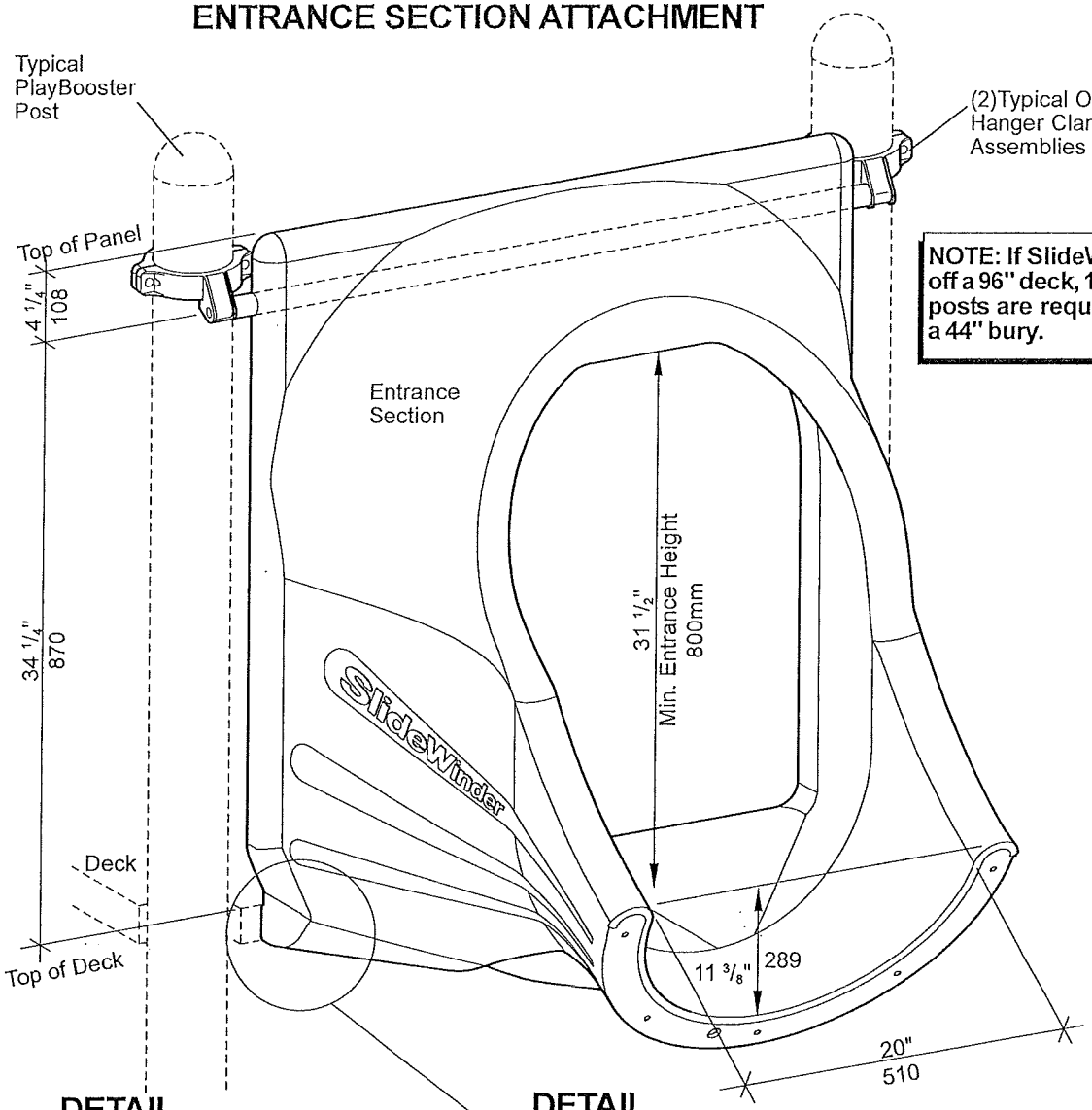
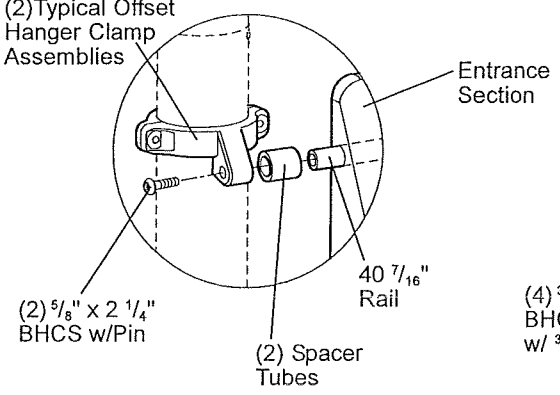
# ENTRANCE SECTION ATTACHMENT

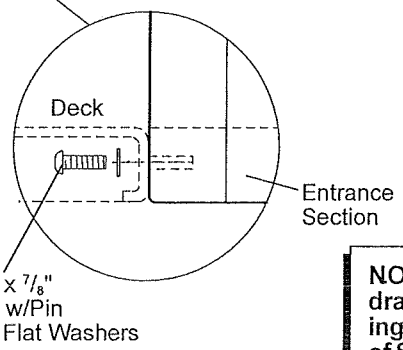



**NOTE: If SlideWinder is off a 96" deck, 182" steel posts are required with a 44" bury.**

## DETAIL




## DETAIL




**NOTE: Refer to your plan drawing for location of footings and layout and direction of SlideWinder sections.**

PlayBooster®

# 124863 SlideWinder2, 32"-96"



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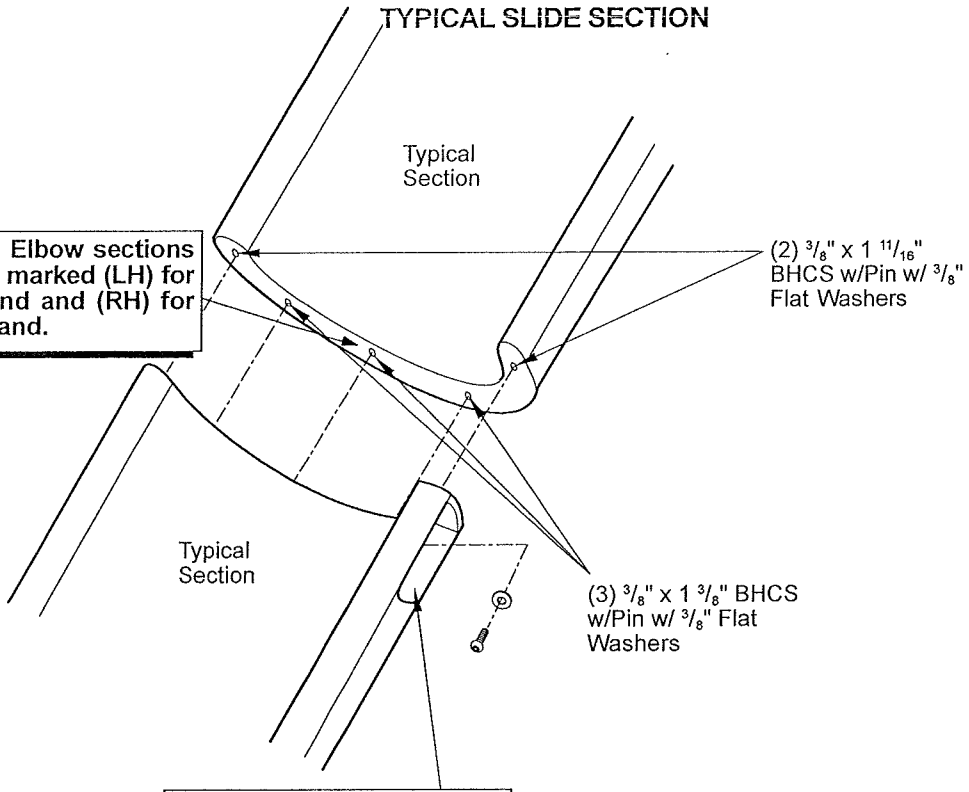
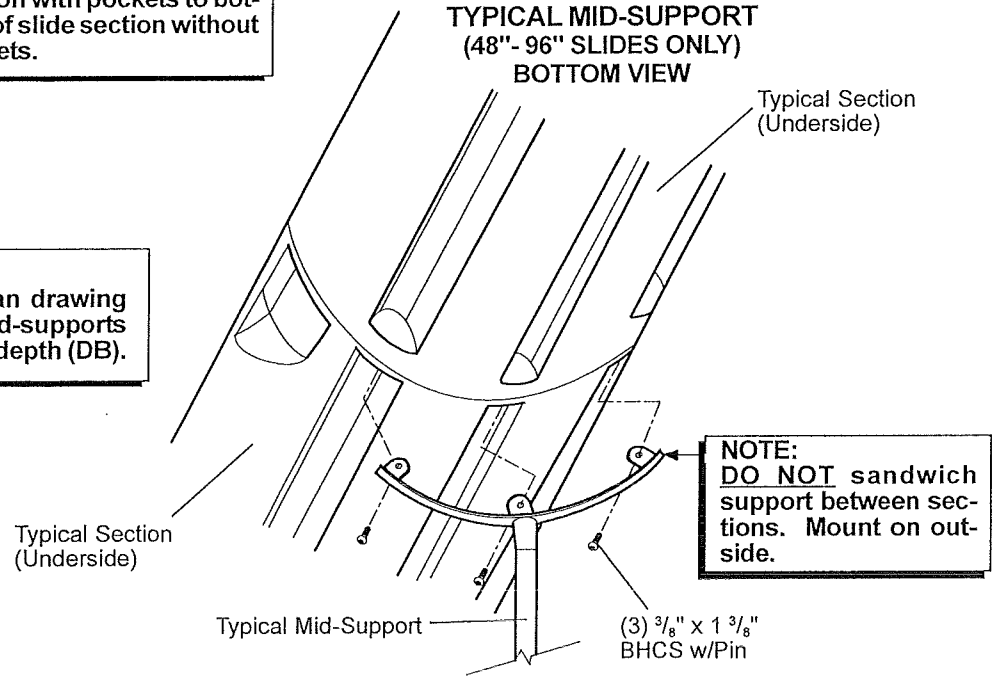
## DETAIL
### TYPICAL SLIDE SECTION




NOTE: Elbow sections will be marked (LH) for left hand and (RH) for right hand.

NOTE: Fasten top of slide section with pockets to bottom of slide section without pockets.

## DETAIL
### TYPICAL MID-SUPPORT
### (48"- 96" SLIDES ONLY)
### BOTTOM VIEW




NOTE:
Refer to your plan drawing for location of mid-supports and their footing depth (DB).

NOTE:
DO NOT sandwich support between sections. Mount on outside.

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# 124863 SlideWinder2 Details

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SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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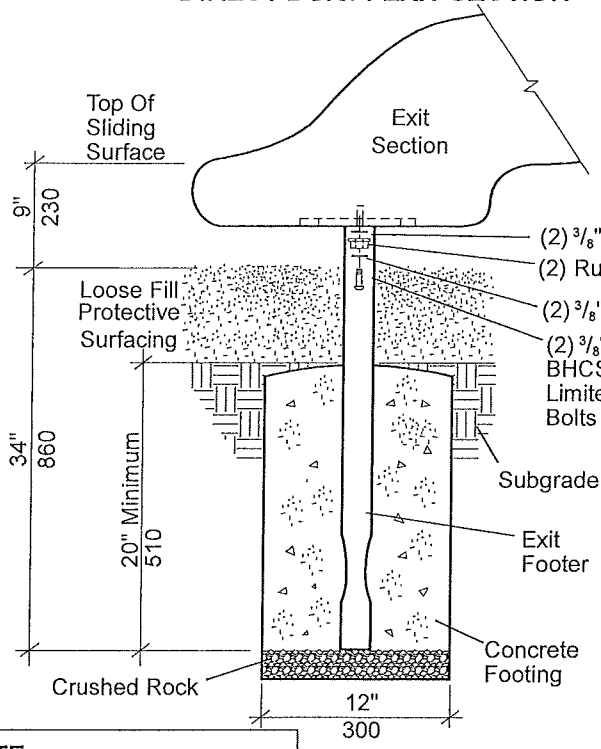
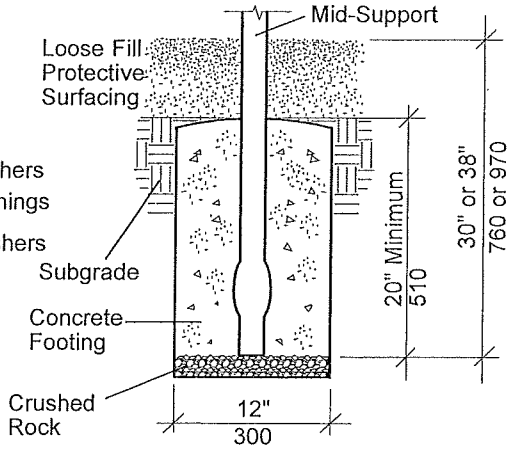
## DETAIL
### DIRECT BURY / EXIT SECTION

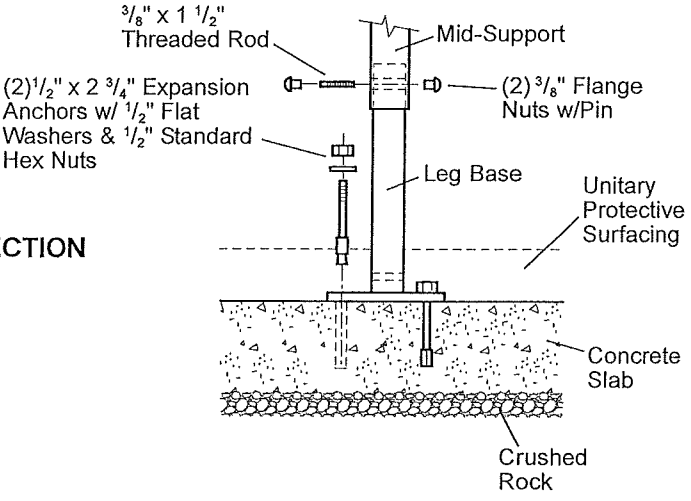



## DETAIL
### DIRECT BURY / MID-SUPPORTS




**NOTE:**
**Attach bolts in the center of the footer slots to allow for expansion and contraction. Snug bolts down only, do not overtighten!**

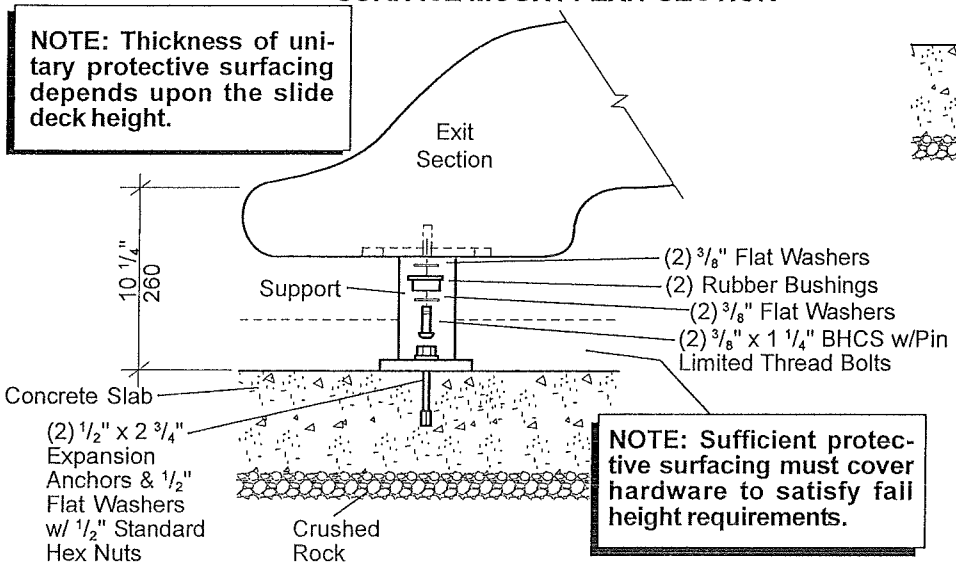
## DETAIL
### SURFACE MOUNT / MID-SUPPORTS




**NOTE:**
**Exit Heights may vary if the protective surfacing is not level. Do not put pressure/tension on the entrance section when adjusting the exit height.**

## DETAIL
### SURFACE MOUNT / EXIT SECTION

**NOTE: Thickness of unitary protective surfacing depends upon the slide deck height.**




**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

# PlayBooster® 124863 SlideWinder2 Details



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Document #17787300

# PlayBooster® 124863 SlideWinder2, 32"-96"

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 124867-00 | Right Elbow Section, Specify Color | * |
| 124868-00 | Left Elbow Section, Specify Color | * |
| 125655-00 | Straight Section (15 1/4" Long), Specify Color | * |
| 124864-00 | Straight Section (30 1/2" Long), Specify Color | * |
| 100583-00 | 40 7/16" Rail, Specify Color | 1 |
| 105327-01 | 5" Half Clamp, Specify Color | 2 |
| 113729-00 | Offset Hanger Clamp, Specify Color | 2 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 2 |
| 125562-00 | Support Base (SM), Specify Color | * |
| 128434-00 | 66" Mid-Support (DB), Specify Color | * |
| 128077-00 | 82" Mid-Support (DB), Specify Color | * |
| 128078-00 | 106" Mid-Support (DB), Specify Color | * |
| 128079-00 | 20 3/4" Mid-Support (SM), Specify Color | * |
| 128080-00 | 29" Mid-Support (SM), Specify Color | * |
| 128081-00 | 37 1/8" Mid-Support (SM), Specify Color | * |
| 128082-00 | 45 1/4" Mid-Support (SM), Specify Color | * |
| 128261-00 | Exit Footer (DB), Specify Color | 1 |
| 128262-00 | Exit Footer (SM), Specify Color | 1 |
| 124876-00 | Entrance Section, Specify Color | 1 |
| 124877-00 | Exit Section, Specify Color | 1 |
| 132443-00 | Spacer Tube, Specify Color | 2 |
| **121371-00** | **Entrance/Deck Mounting Hardware Package** | 1 |
| 100196-00 | 3/8" x 7/8" BHCS w/Pin, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |
| **154942-00** | **SlideWinder Section Hardware Package** | * |
| 100362-00 | 3/8" Flat Washer, SST | * |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | * |
| 123224-00 | 3/8" x 1 11/16" BHCS w/Pin, SST | * |
| **124342-00** | **Rail Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100203-00 | 5/8" x 2 1/4" BHCS w/Pin, SST | 2 |
| 100351-00 | 3/8" Tee Nut, SST | 4 |
| **125670-00** | **Mid-Support Hardware Package (SM)** | * |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | * |
| 100322-00 | 1/2" Standard Hex Nut, SST | * |
| 100353-00 | 3/8" Flange Nut w/Pin, SST | * |
| 100363-00 | 1/2" Flat Washer, SST | * |
| 115813-00 | 3/8" x 1 1/2" Threaded Rod, SST | * |
| **128373-00** | **Exit Support Hardware Package (DB)** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST | 2 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |
| 111442-00 | Rubber Bushing | 2 |
| **128343-00** | **Exit Support Hardware Package (SM)** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchor | 2 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST | 2 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 2 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 2 |
| 111442-00 | Rubber Bushing | 2 |

**DB = Direct Bury**
**SM = Surface Mount**
*** = Quantity Varies Per Deck Height**

## Specifications

**Slide Sections:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**Rail:** 1 1/8" O.D. 6005-T5 aluminum extrusion with 5/16" walls. Finish: ProShield®, color specified.

**Mid-Support:** Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/16" x 1 1/4" zinc plated steel strap. Finish: ProShield, color specified.

**Support Base (SM):** Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" x 8" mounting plate. Finish: ProShield, color specified.

**Spacer Tube:** Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.

**Exit Footer:** Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" x 7 1/2" mounting plate. Finish: ProShield, color specified.

**Offset Hanger Clamp Assy.:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:**
32" - 48" Approx. 3 man hours
56" - 72" Approx. 4 man hours
96" Approx. 5 man hours

**Concrete Req.:**
30" Depth - Approx. 1.3 cu. ft.
34" Depth - Approx. 1.5 cu. ft.
38" Depth - Approx. 1.8 cu. ft.

**Weight:**
32" - 134 lbs.
40" - 146 lbs.
48" - 172 lbs.
56" - 184 lbs.
64" - 197 lbs.
72" - 247 lbs.
96" - 265 lbs.

**Fall Height:** Deck Height

## Installation Instructions

1) Refer to your plan drawing for location of footings and direction of SlideWinder sections.

2) **(Direct Bury)** Dig footing holes spaced as shown, depending upon slide. Refer to the Direct Bury Exit Section and Direct Bury Mid-Support Details.

3) Place 40 7/16" rail in entrance section, place spacer tubes over each end of the 40 7/16" rail, attach offset hanger clamps using 5/8" x 2 1/4" BHCS w/Pin.

4) Fasten SlideWinder sections together loosely starting in the middle and working your way to the outside of each section, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers on the 3 inside holes and 3/8" x 1 11/16" BHCS w/pin with 3/8" flat washers on the 2 outside holes. When all bolts are started, pull the tops flush with each other and tighten. The left elbow section reads (LH) and the right elbow section reads (RH). Attach entrance and exit section last. Refer to the Typical Slide Section Detail.

5) **(Direct Bury)** If required attach mid-supports, refer to your plan drawing for locations. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.

**(Surface Mount)** If required attach mid-supports, refer to your plan drawing for locations. Assemble mid-supports by placing support base inside mid-support and attach using 3/8" x 1 1/2" threaded rod and 3/8" flange nuts w/pin. Refer to the Surface Mount/Mid-Support Detail. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.

6) Attach exit footer to base of slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten. See Direct Bury/Exit Section Detail.*

7) With SlideWinder fully assembled, attach entrance section to the face of the deck using 3/8" x 7/8" BHCS w/Pin and 3/8" flat washers.

8) Attach offset hanger clamps to posts using 5" half clamps, 3/8" x 1 1/8" BHCS w/Pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.

9) **(Direct Bury)** With supports plumb pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

**(Surface Mount)** Mark anchor bolt locations on concrete slab through holes in anchor plates. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap 1/2" x 2 3/4" expansion anchors into drilled holes and fasten using 1/2" standard hex nuts with 1/2" flat washers.

10) Install protective surfacing before users are allowed to play on the structure.

Specifications are subject to change without notice.

Eco #54291 Document #17787300 replaces #15494700. Added spacer tubes to Parts List.

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *CPSC Guidelines*, Section 10: Surfacing.)

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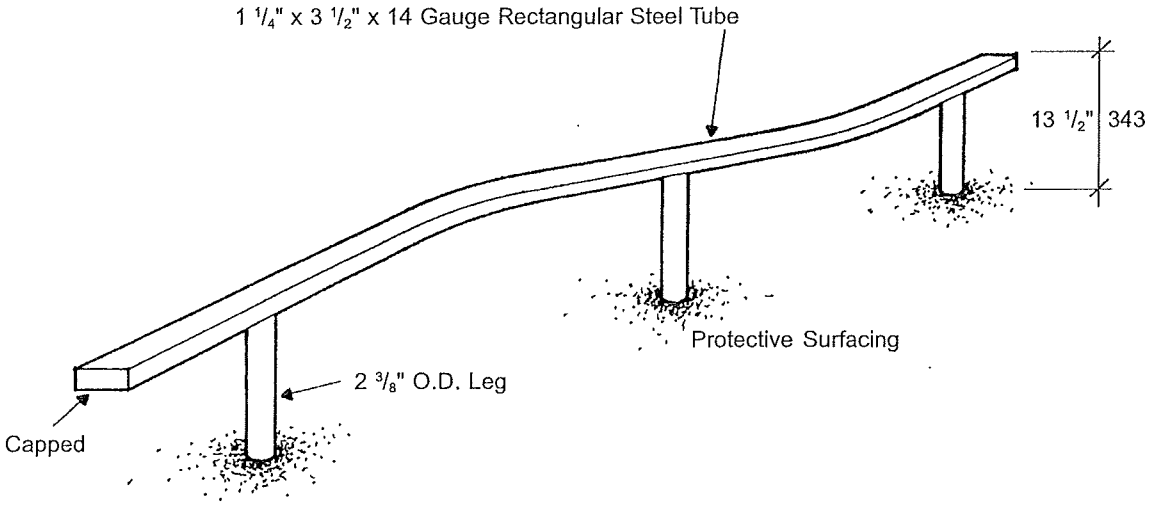
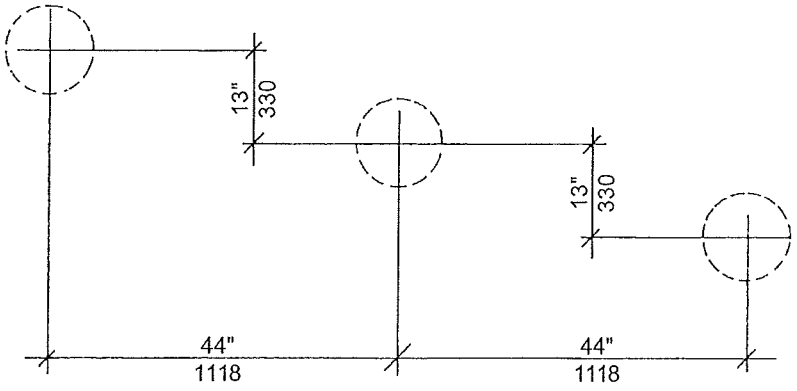
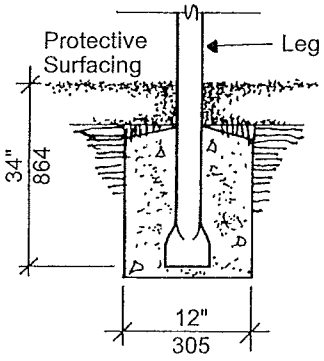



## PLAN
### CONCRETE FOOTINGS




## SECTION
### CONCRETE FOOTING







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LANDSCAPE STRUCTURES INC
(DISK 3) H:11068200.PM5

# Ind. Playthings 100041 Curved Balance Beam

## Parts List

| Part# | Description | Qty |
|---|---|---|
| 108581-00 | Curved Balance Beam Assembly, Specify Color | 1 |

## Specifications

**Beam:** Manufactured from 1 1/4" x 3 1/2" x 14-gauge rectangular steel tube.

**Legs:** Manufactured from 2 3/8" RS-20 galvanized O.D. steel tubing.

**Finish:** TenderTuff-coated, color specified.

**Actual Size:** 13 1/2" high x 3 1/2" wide x 9'-4" long
**Installation Time:** Approx. 1 hour
**Concrete Req.:** Approx. 2 1/2 cu. ft.
**Area Req.:** 6' minimum use zone
**Weight:** 50 lbs.

## Installation Instructions

1) Dig footings spaced as shown. (Hole size may have to be increased to meet local conditions.)
2) Place balance beam in holes, block up plumb and level.
3) Pour concrete footings and let set for 24 hours before proceeding.
4) Install protective surfacing.

Specifications are subject to change without notice.

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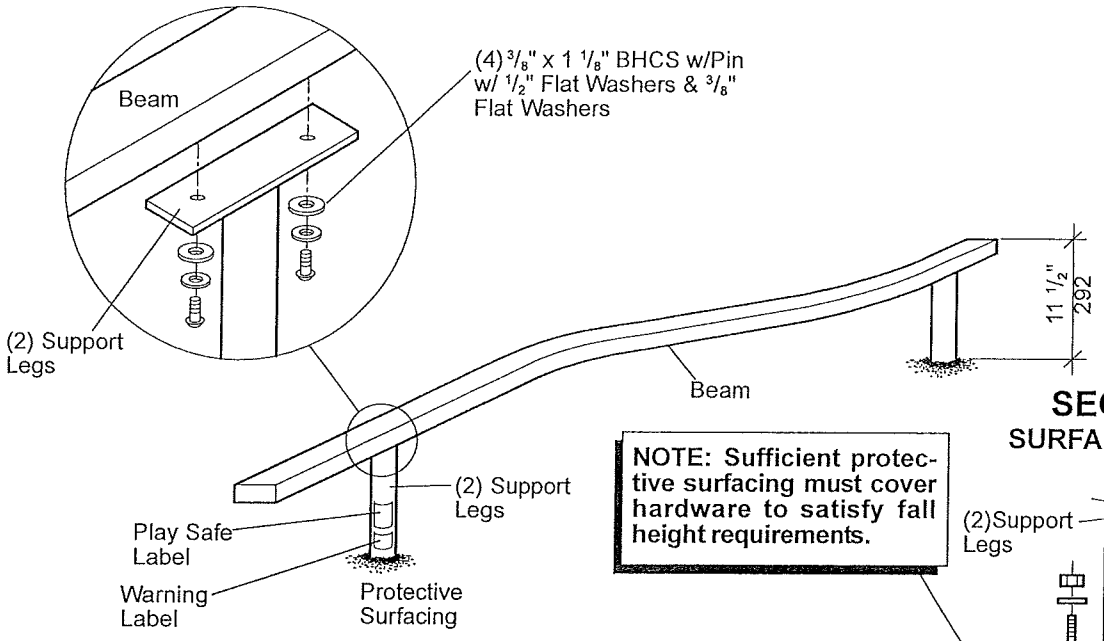
**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

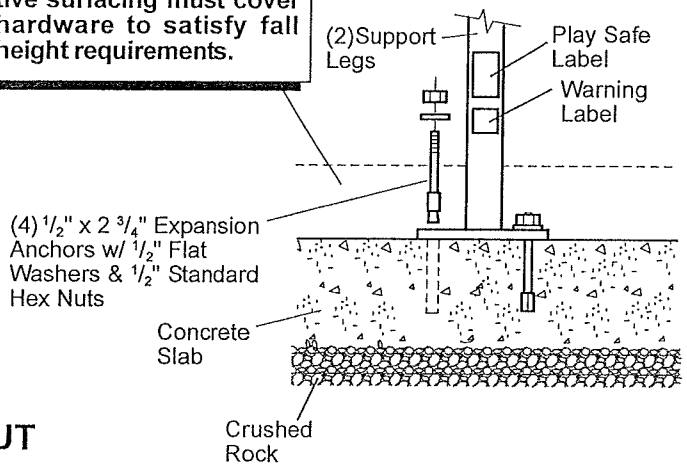
15444700

## DETAIL

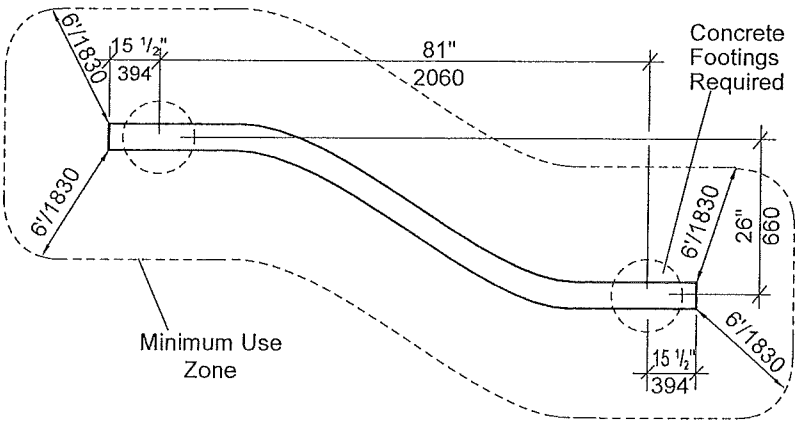



**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

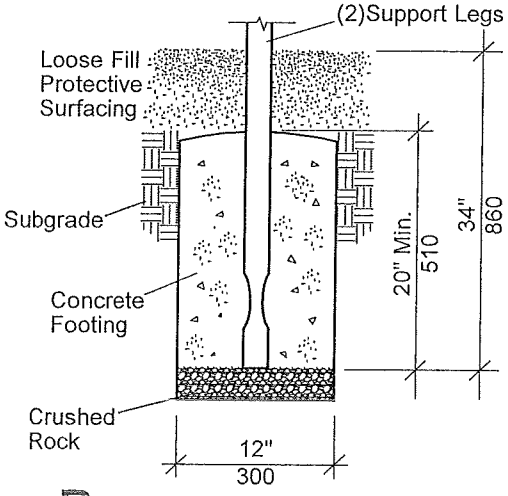
## SECTION
### SURFACE MOUNT




## PLAN VIEW/ FOOTING LAYOUT




## SECTION
### CONCRETE FOOTING




Sports & Fitness

# 100041 Curved Balance Beam

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Sports & Fitness 100041 Curved Balance Beam

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## Parts List

| Part# | Description | Qty |
|---|---|---|
| 147727-00 | Curved Balance Beam, Specify Color | 1 |
| 113443-00 | (DB) Support Leg, Specify Color | 2 |
| 114954-00 | (SM) Support Leg, Specify Color | 2 |
| **183898-00** | **Curved Balance Beam Hardware Package** | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 4 |
| 100362-00 | 3/8" Flat Washer, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |
| 156846-00 | Play Safe Label, 2-12 Yrs. | 1 |
| 183064-00 | Warning Label | 1 |
| **121348-00** | **4-Hole (SM) Hardware Package** | 1 |
| 100266-00 | 1/2" x 2 3/4" Expansion Anchors | 4 |
| 100322-00 | 1/2" Standard Hex Nut, SST | 4 |
| 100363-00 | 1/2" Flat Washer, SST | 4 |

**DB = Direct Bury**
**SM = Surface Mount**

## Specifications

**Beam:** Weldment comprised of 1 1/2" x 3" 11 GA (.120") rectangular steel tubing. Finish: TenderTuff®, color specified.

**Support Leg:** Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/8" x 2 1/2" mounting plate. Finish: ProShield®, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Actual Size:** 11 1/2" high x 3" wide x 9'-4" long.

**Installation Time:** Approx. 1 1/4 man hour
**Concrete Req:** **DB** - Approx. 3 cu. ft.
**Area Req:** 6' minimum use zone
**Weight:** **DB** - 60 lbs.
**SM** - 58 lbs.

## Installation Instructions

**Direct Bury**

1) Dig footings spaced as shown.
2) Using 3/8" x 1 1/8" BHCS w/pin, 1/2" flat washers and 3/8" flat washers, fasten support legs to balance beam.
3) Place balance beam in holes, block up, plumb and level.
4) Pour concrete footings and let concrete cure for a minimum of 72 hours before users are allowed to play on the structure.
5) Install protective surfacing before users are allowed to play on the structure.
6) Apply labels as shown.

**Surface Mount**

1) Using 3/8" x 1 1/8" BHCS w/pin, 1/2" flat washers and 3/8" flat washers, fasten support legs to balance beam.
2) Place balance beam in position and drill through holes in support legs 3" deep into concrete slab using 1/2" masonry bit.
3) Tap 1/2" x 2 3/4" expansion anchors through support leg holes and into concrete. Secure with 1/2" flat washers and 1/2" standard hex nuts screwed down tight.
4) Install protective surfacing before users are allowed to play on the structure.
5) Apply labels as shown.

Specifications are subject to change without notice.

Eco #54517 Document #18385000 replaces #15793600. Added warning label to hardware package.

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**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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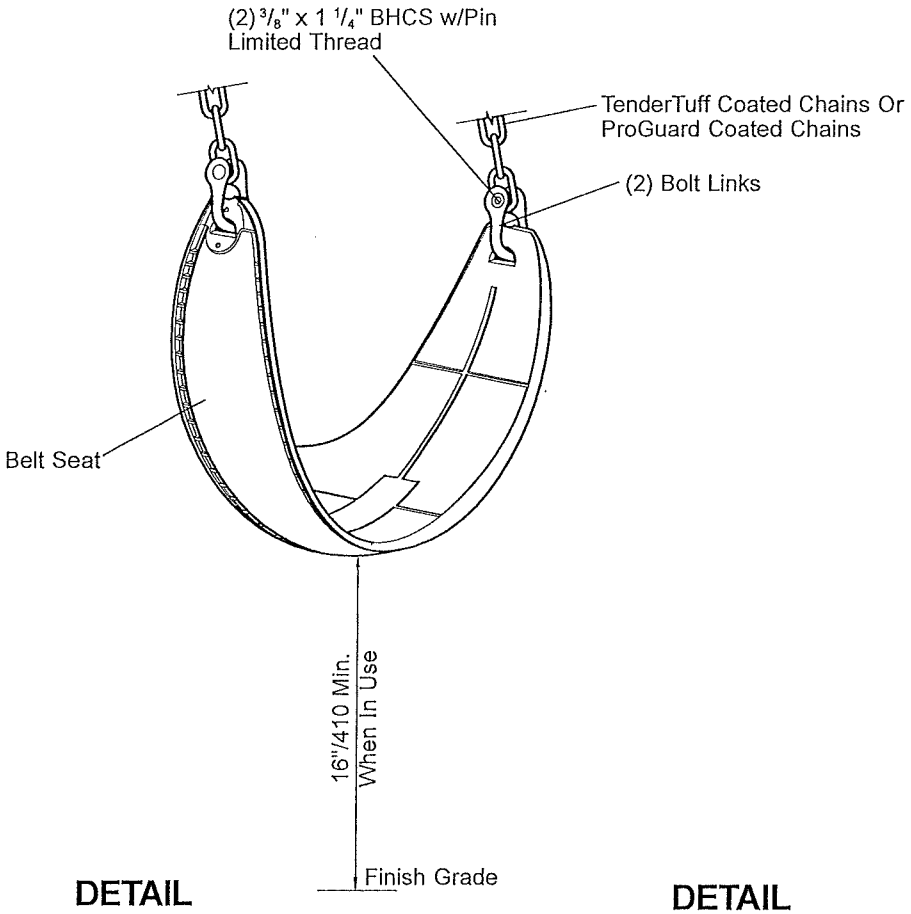
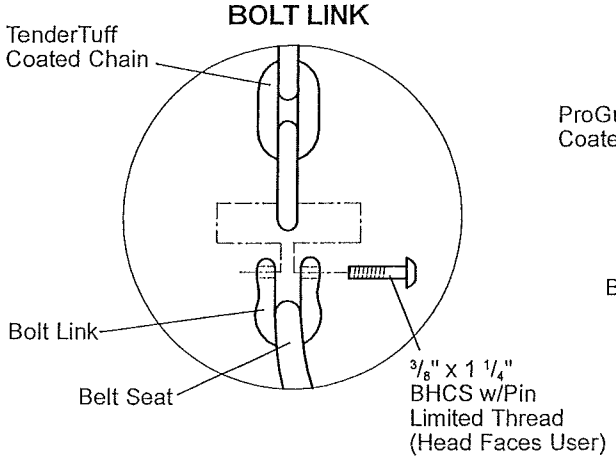
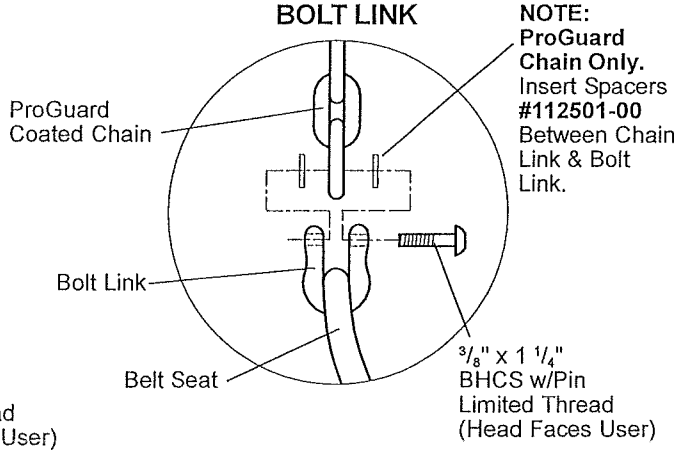



**DETAIL**
**BOLT LINK**




**DETAIL**
**BOLT LINK**




Swings

# 174018 Belt Seat



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSINST (1-888-574-4678) FAX (763) 972-3185

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# Swings 174018 Belt Seat

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## Parts List

| Part # | Description | Qty. |
|---|---|---|
| | **8 Ft. High Beam** | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152050-00 | 67 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174404-00 | 67 7/8" Chain, ProGuard | 2 |
| **132672-00** | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| **132635-00** | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| | **10 Ft. High Beam** | |
| 128842-00 | Belt Swing Seat, Black | 1 |
| 152052-00 | 90 11/16" Chain, TenderTuff, Specify Color | 2 |
| 174884-00 | 90 11/16" Chain, ProGuard | 2 |
| **132672-00** | **Bolt Link w/Bolt & Spacers** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |
| 112501-00 | Chain Spacer | 4 |
| **132635-00** | **Bolt Link w/Bolt Hardware Package** | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST | 2 |
| 138915-00 | Bolt Link, SST | 2 |

## Specifications

**Chain Spacer:** Made from white nylon measuring .080" x .785" O.D.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Belt Seats:** Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.

**Bolt Link:** Stainless Steel.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:** 8 lbs. (8 Ft. Beam w/ProGuard Chains)
9 lbs. (8 Ft. Beam w/TenderTuff Chains)
10 lbs. (10 Ft. Beam w/ProGuard Chains)
11 lbs. (10 Ft. Beam w/TenderTuff Chains)

## Installation

**Swing Hangers With Double Clevis**

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

**Anti-wrap Swing Hangers**

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread, as shown.
2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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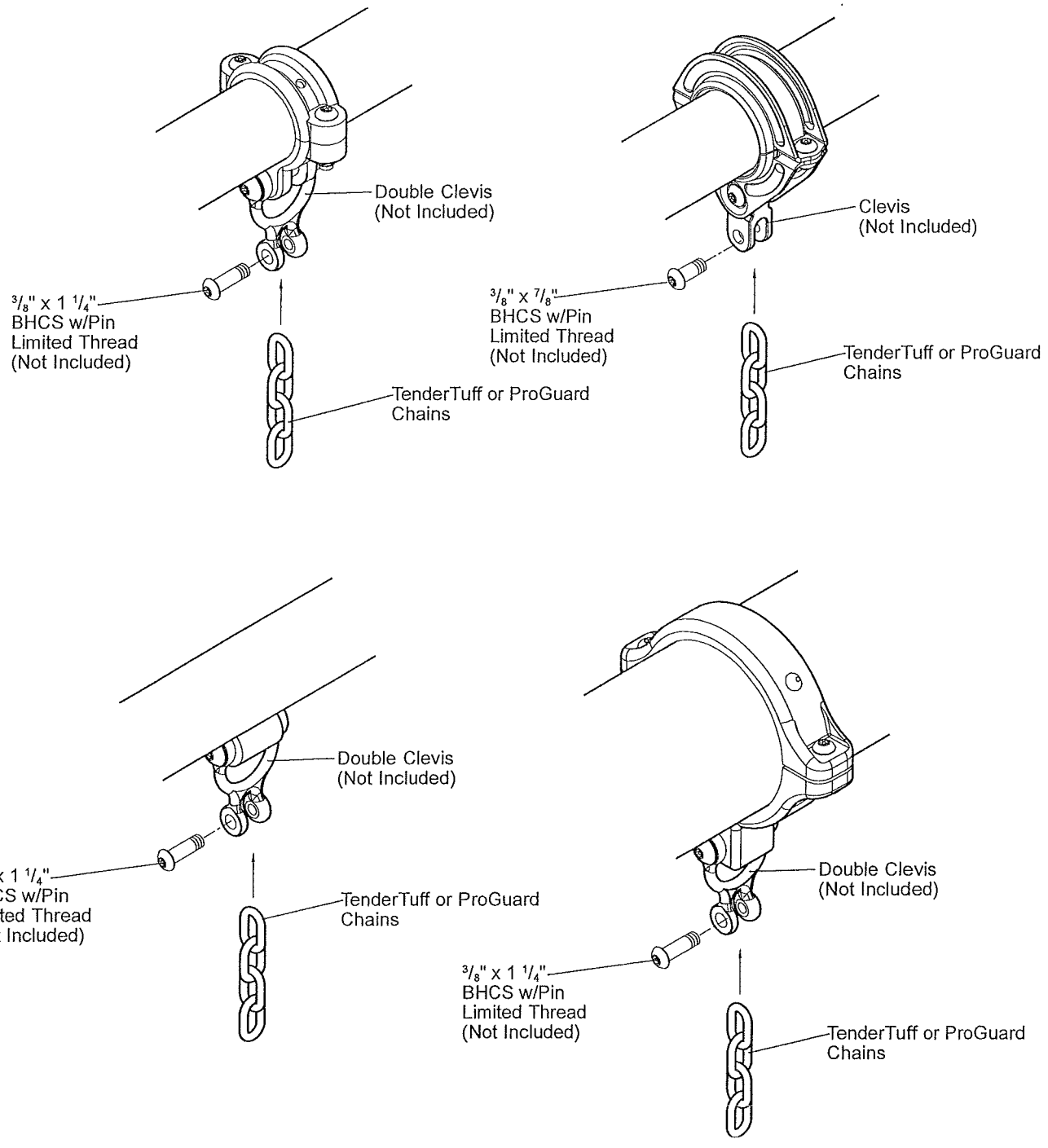
# SWING HANGER OPTIONS




Swings

# 174018 Belt Seat



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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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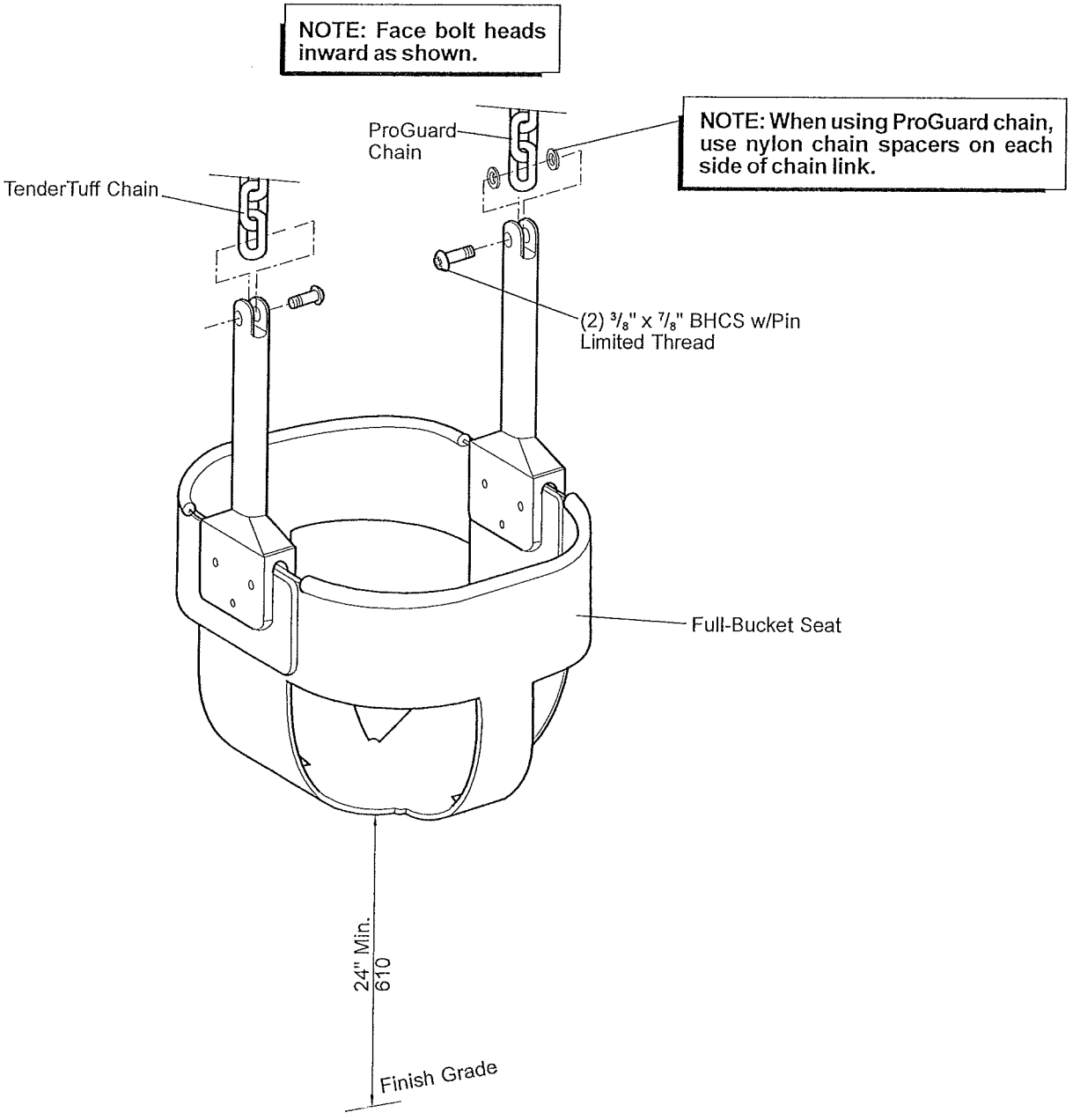


Swings

# 176038 Full-Bucket Seat, w/Chains



601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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# Swings 176038 Full-Bucket Seat, w/Chains

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## Parts List

| Part# | Description | Qty. |
|---|---|---|
| | **8 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 160110-00 | 52 9/16" Chain, TenderTuff, Specify Color | 2 |
| 174882-00 | 52 9/16" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **10 Ft. High Beam** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152051-00 | 76 7/16" Chain, TenderTuff, Specify Color | 2 |
| 174883-00 | 76 7/16" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **7 Ft. High Beam (Tot)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152053-00 | 37 1/2" Chain, TenderTuff, Specify Color | 2 |
| 175247-00 | 37 1/2" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | **75" High Beam (Toddler)** | |
| 186276-00 | Full-Bucket Swing Seat, Black | 1 |
| 152016-00 | 29 7/8" Chain, TenderTuff, Specify Color | 2 |
| 174881-00 | 29 7/8" Chain, ProGuard | 2 |
| **138414-00** | **Bucket Seat Hardware Package** | 1 |
| 100290-00 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501-00 | Chain Spacer (For ProGuard Chains Only) | 4 |

## Specifications

**Full-Bucket Seat:** Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) 1/4" x 1 5/16" long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 1/2" wide.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** 1/4 man hour per seat

**Weight:**
14 lbs. (8 FT. Beam w/TenderTuff Chain)
14 lbs. (8 FT. Beam w/ProGuard Chain)
17 lbs. (10 FT. Beam w/TenderTuff Chain)
16 lbs. (10 FT. Beam w/ProGuard Chain)
12 lbs. (7 FT. Beam w/TenderTuff Chain)
12 lbs. (7 FT. Beam w/ProGuard Chain)
11 lbs. (75" Beam w/TenderTuff Chain)
11 lbs. (75" Beam w/ProGuard Chain)

## Installation Instructions

**Swing Hangers with Double Clevis**

1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.

**Anti-wrap Swing Hangers**

1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
3) Install protective surfacing before users are allowed to play on the structure.



Eco #54752 Document #18985400 replaces #17746000. Replaced full-bucket swing seat.

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SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

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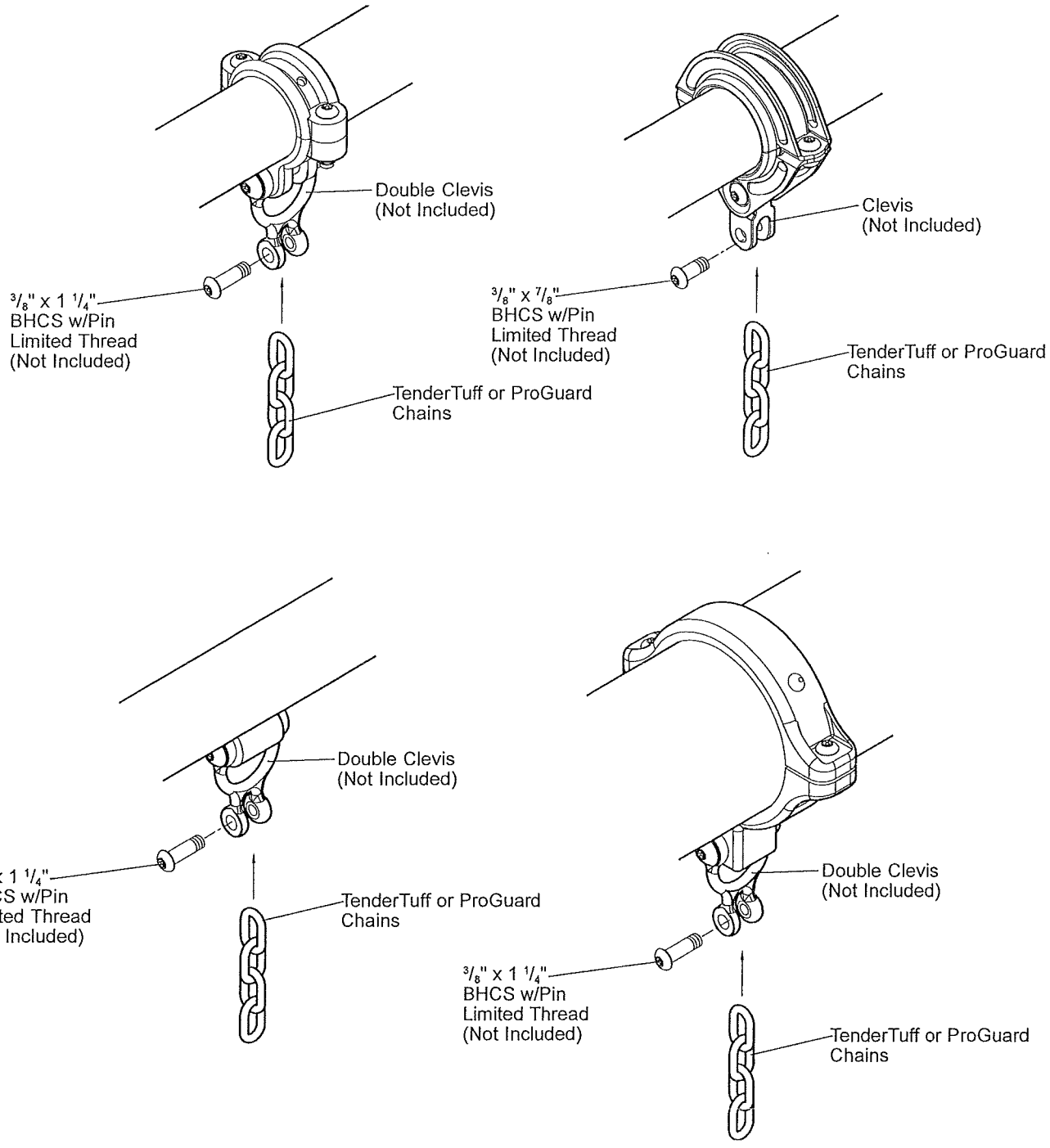
## SWING HANGER OPTIONS



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SAFETY NOTE

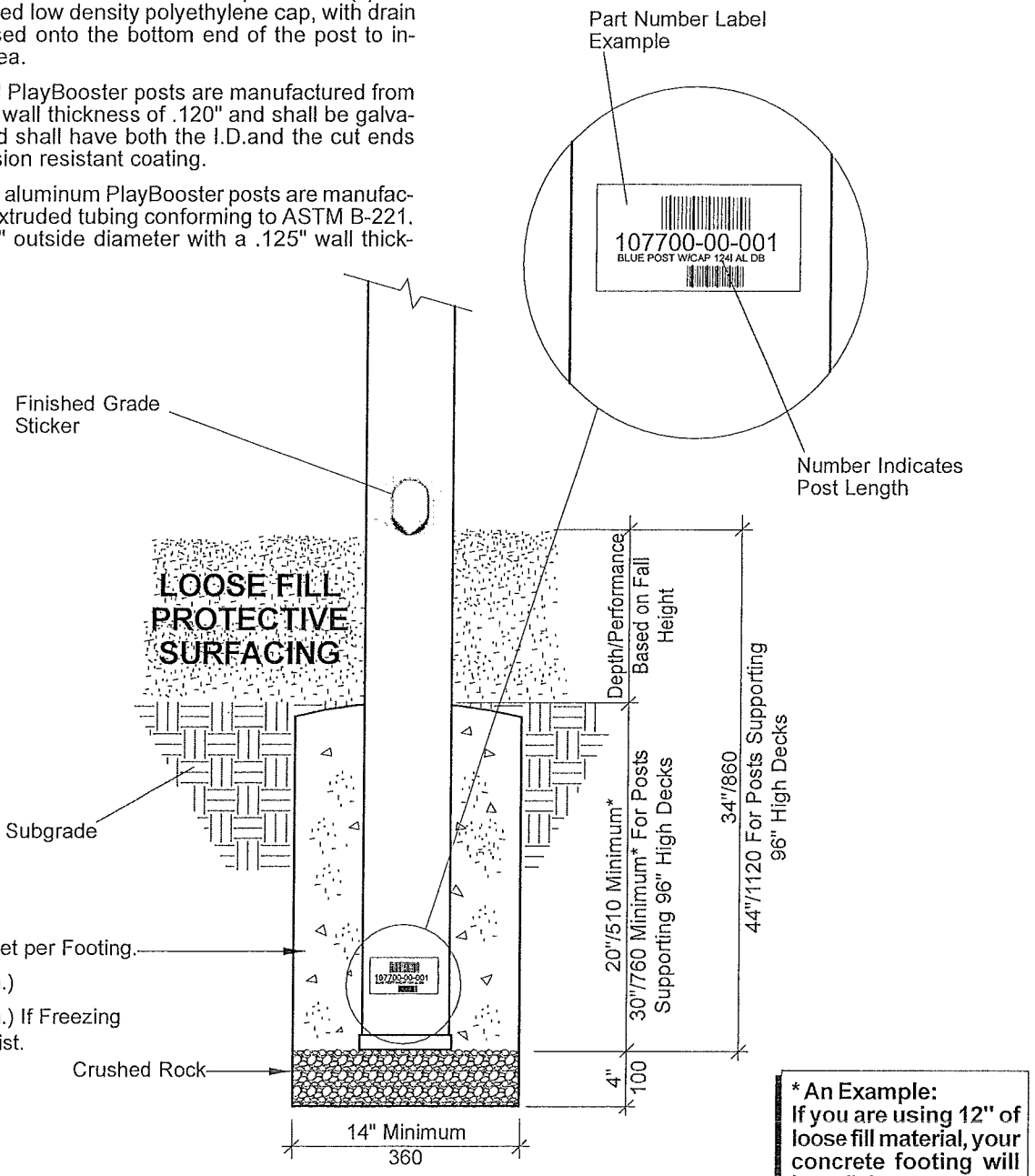
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487*)

13871600

**Post Specifications:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D.and the cut ends sprayed with a corrosion resistant coating.

**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.




## CONCRETE

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.

*** An Example:**
**If you are using 12" of loose fill material, your concrete footing will be 22" deep.**

PlayBooster®

# Concrete Footings, 5" Posts



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Eco #51014 Document #13871600 replaces #13433700. Removed Post Length Sticker.

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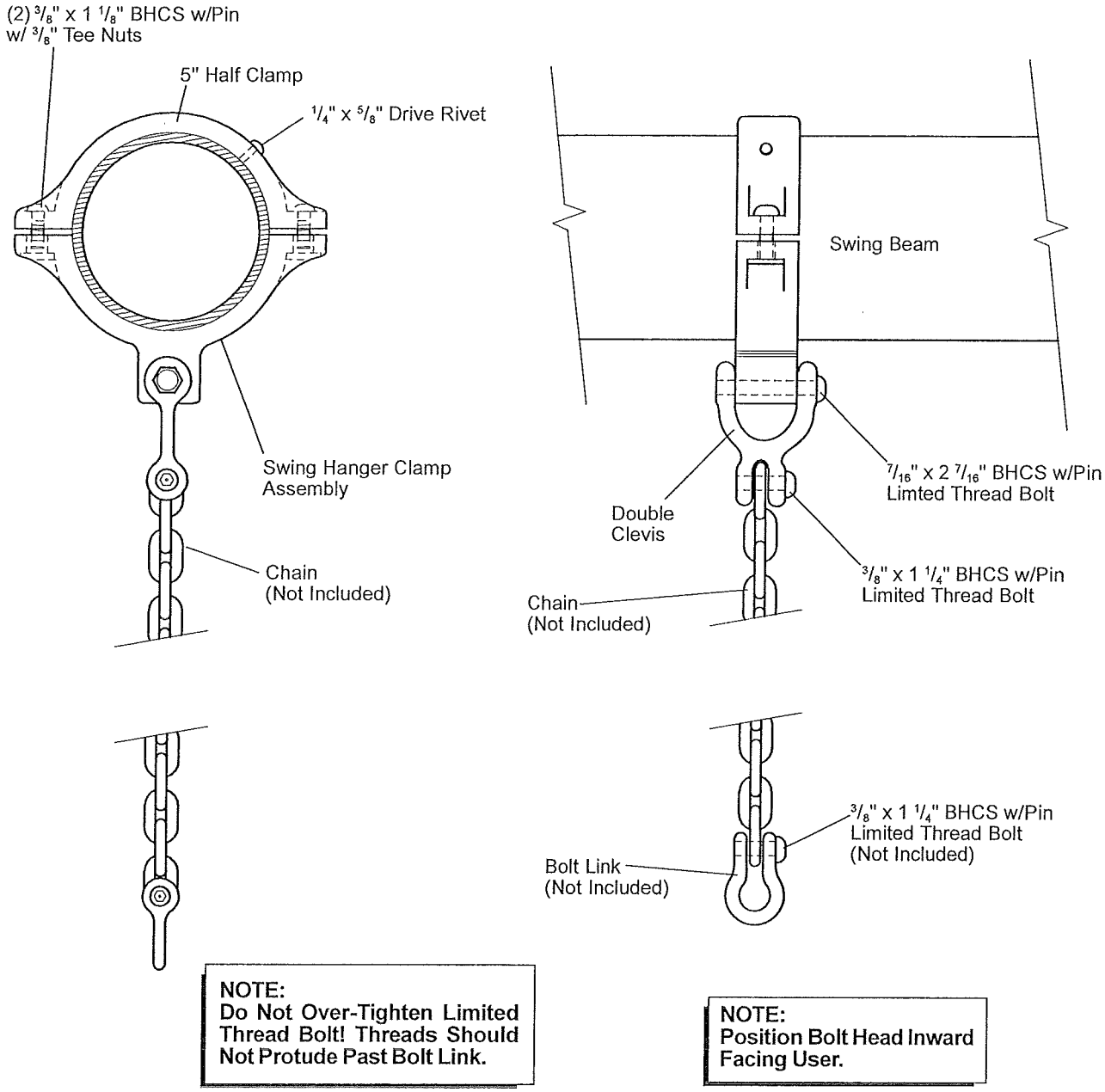
ISO 9001 Certified

**SAFETY NOTE**

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

13616300




**NOTE:**
**Do Not Over-Tighten Limited Thread Bolt! Threads Should Not Protude Past Bolt Link.**

**NOTE:**
**Position Bolt Head Inward Facing User.**

Swings

# 111418 Swing Hanger, Belt Swing

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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J:\SPECS\183\18379700.P65

# Swings 111418 Swing Hanger, Belt Swing

## Parts List

| Part# | Description | Qty. |
|---|---|---|
| 105327-01 | 5" Half Clamp, Specify Color | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 2 |
| 100351-00 | 3/8" Tee Nut, SST | 2 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 1 |
| 100292-00 | 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST | 1 |
| **121291-00** | **Swing Hanger Clamp Assy. Specify Color** | 1 |
| 121289-00 | Swing Hanger Clamp, Specify Color | 1 |
| 127068-00 | 7/16" x 2 7/16" BHCS w/Pin Ltd. Thread Bolt, SST | 1 |
| 138917-00 | Swing Hanger Double Clevis SST | 1 |
| 100667-00 | Oilite Bushing | 1 |

## Specifications

**Hanger Clamp Assembly:** Cast aluminum. Finish: ProShield®, color specified.

**Double Clevis:** Stainless Steel.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/2 man hour

**Weight:** 6 lbs.

## Installation Instructions

1) Locate and mark location of clamp on beam.

2) Attach 5" half clamp and swing hanger clamp to beam using 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. *Tighten evenly.*

3) ***IMPORTANT:*** *Drill through holes in 5" half clamps and into 5" pipe with a 1/4" or "F" (only) drill bit, tap 1/4" x 5/8" drive rivets through 5" half clamps and into pipe, to ensure that clamps remain secure.*

4) Attach swing chain to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts.

5) Attach swing seat to chains using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread bolts. **NOTE:** *Do not over-tighten limited thread bolt. Threads should not protrude past bolt link. Position bolt head inward facing user.*

Specifications are subject to change without notice.

ECO #54506 Document #18379700 replaces #13616300. Changed Double Clevis material to Stainless Steel.

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ISO 14001 CERTIFIED

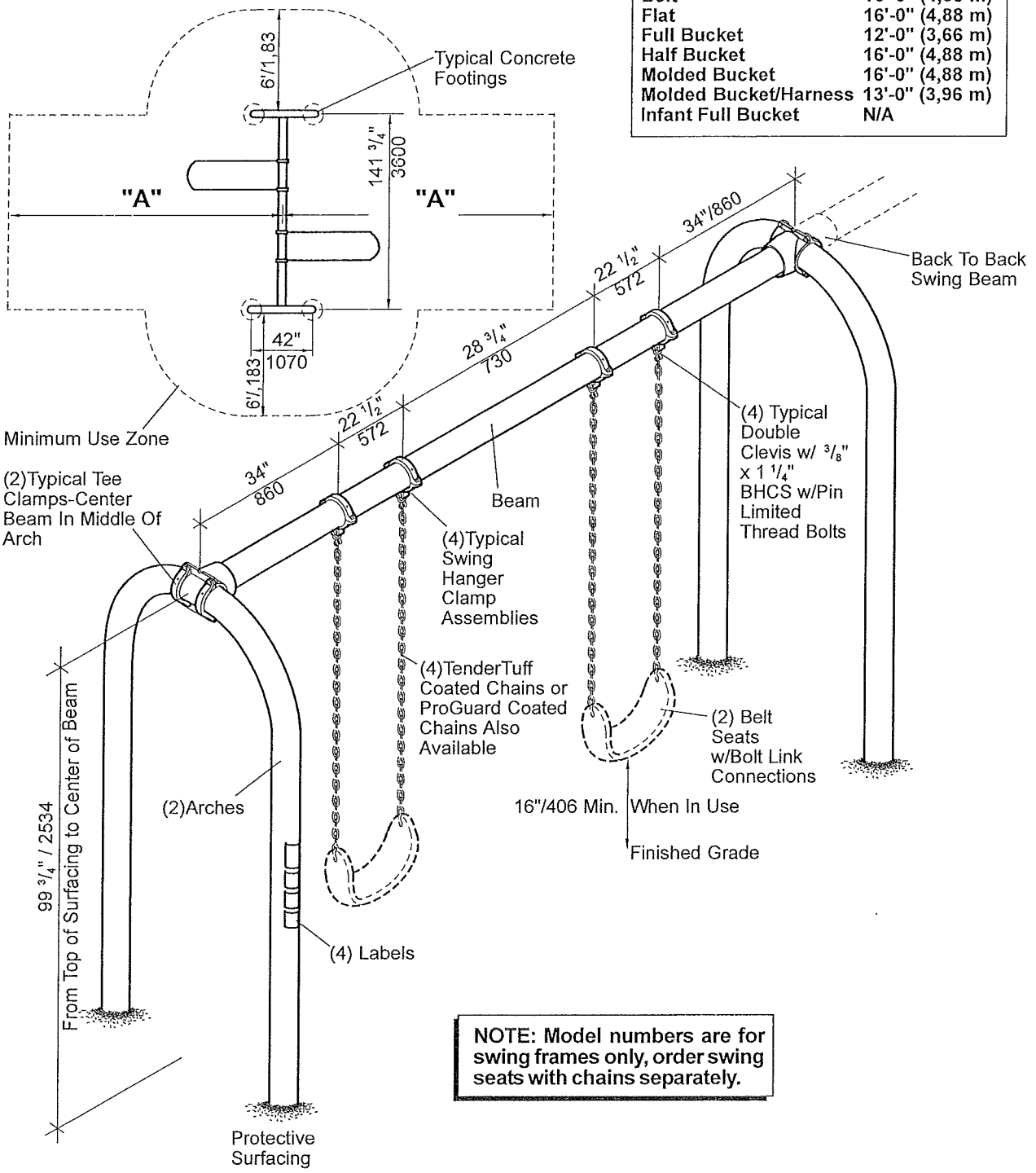
ISO 9001 Certified

**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

18448000

# PLAN VIEW/FOOTING LAYOUT

| KEY<br>Seat Type | Dimension "A" |
|---|---|
| Belt | 16'-0" (4,88 m) |
| Flat | 16'-0" (4,88 m) |
| Full Bucket | 12'-0" (3,66 m) |
| Half Bucket | 16'-0" (4,88 m) |
| Molded Bucket | 16'-0" (4,88 m) |
| Molded Bucket/Harness | 13'-0" (3,96 m) |
| Infant Full Bucket | N/A |




**NOTE: Model numbers are for swing frames only, order swing seats with chains separately.**

**Model #177331 Additional Bay**

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# Swings 177330/177331 Arch Belt Swing Frame

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## Parts List

| Part# | Description | Qty. 2 Pl | Add. Bay |
|---|---|---|---|
| 126749-00 | Swing Arch, Specify Color | 2 | 1 |
| 100610-00 | 1/4" x 5/8" Drive Rivet, AL/SST | 8 | 6 |
| 105327-01 | 5" Half Clamp, Specify Color | 8 | 4* |
| 146160-00 | 141 3/4" Swing Beam, Specify Color | 1 | 1 |
| **121291-00** | **Swing Hanger Clamp Assy. Specify Color** | 4 | 4 |
| 121289-00 | Swing Hanger Clamp, Specify Color | 4 | 4 |
| 127068-00 | 7/16" x 2 7/16" BHCS w/Pin Ltd. Thread, SST | 4 | 4 |
| 138917-00 | Swing Hanger Double Clevis | 4 | 4 |
| 100667-00 | Oilite Bushing | 4 | 4 |
| **184227-00** | **Arch Swing 5" O.D. Beam Hardware Pkg.** | 1 | 1 |
| 100198-00 | 3/8" x 1 1/8" BHCS w/Pin, SST | 8 | 8 |
| 113027-00 | 3/8" x 1 3/8" BHCS w/Pin, SST | 8 | 8 |
| 100292-00 | 3/8" x 1 1/4"BHCS w/Pin Ltd. Thread, SST | 4 | 4 |
| 100351-00 | 3/8" Tee Nut, SST | 16 | 16 |
| 156846-00 | Play Safe Label, 2-12 Yrs. | 1 | 1 |
| 128296-00 | 3/8" Hex Jam Nut, SST | 8 | 8 |
| 182213-00 | Hot Surface Warning Label | 2 | 1 |
| 182212-00 | Entanglement Warning Label | 2 | 1 |
| 115176-00 | Hard Surface Warning Label | 2 | 1 |

*** = 5" Half Clamps From 2 PL. End Of Beam Need To Be Used.**

## Specifications

**Arch Posts:** See PlayBooster® (PB) General Specifications.

**Swing Beam:** Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" W. Finish: ProShield®, color specified.

**Hanger Clamp Assembly:** Cast aluminum. Finish: ProShield, color specified.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 8 man hours
Additional Bay 4 man hours

**Concrete Req.:** Approx. 7.5 cu. ft.
Additional Bay 3.75 cu. ft.

**Area Req.:** 24'-2 3/4" x 32' (7,39 m x 9,75 m)
Additional Bay 11'-9 3/4" x 32' (3,60 m x 9,75 m)

**Weight:** 204 lbs.
Additional Bay 124 lbs.

**Fall Height:** 96" (2,43 m)

## Installation Instructions

1) Dig footings, spaced as shown. Refer to the Concrete Footing Detail.
2) Set arches in footing holes and attach swing beam to center of arches using 5" half clamps with 3/8" x 1 3/8" BHCS w/pin and 3/8" tee nuts with 3/8" jam nuts. Refer to the Tee Clamp Position Detail. Center of beam should be 99 3/4" above finished grade. When installing back to back swing beams refer to the Back To Back Tee Clamps Detail.
3) Level beam and plumb arches and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
4) Locate, mark and attach swing hanger clamps to beam in locations shown. Refer to the Typical Swing Hanger Clamp Spec Sheet.
5) **NOTE:** *Refer to specific swing seat installation document for attaching chains and seats.*
6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Back To Back Tee Clamps Detail.
7) Apply Play Safe and Warning Labels, as shown.
8) Install protective surfacing before users are allowed to play on the swing.



Eco #54545 Document #18448000 replaces #17744600. Added warning labels to hardware package.

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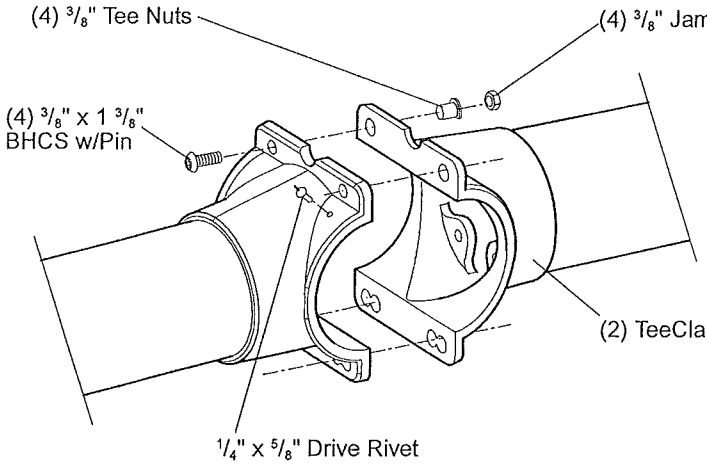
**SAFETY NOTE**
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. *ASTM F1487.*)

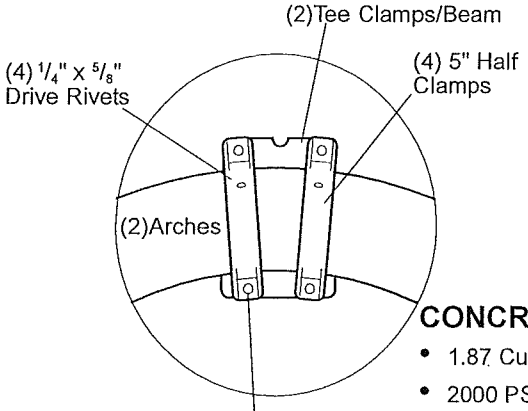
167729a

## DETAIL
### BACK TO BACK TEE CLAMPS



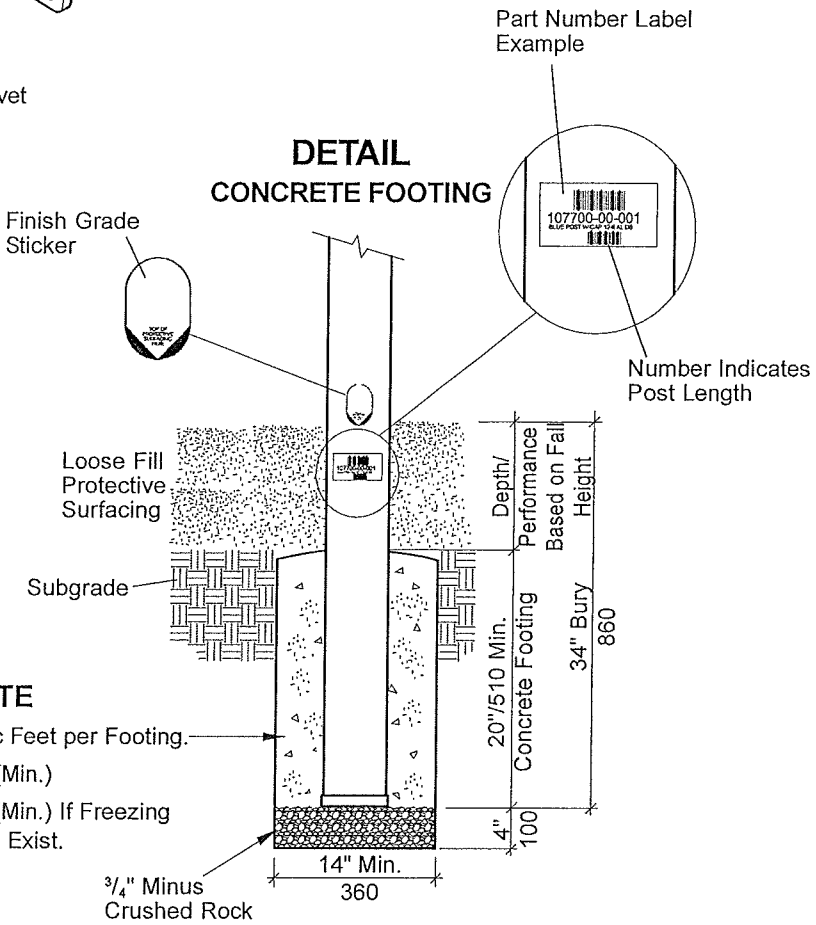

**NOTE: Drill 1/4" hole through tee and arch for 1/4" x 5/8" drive rivet when installing back to back tee clamps.**

## DETAIL
### TEE CLAMP POSITION




**NOTE:** Use Inside Holes For (4) 3/8" x 1 3/8" BHCS w/Pin & 3/8" Tee Nuts w/ 3/8" Jam Nuts

## DETAIL
### CONCRETE FOOTING




**CONCRETE**

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.



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# WORTHINGTON PARK PLAYGROUND INSTALLATION SPECIFICATIONS

PowerScape®

A PLAYCORE COMPANY GameTime®

Enriching Childhood Through Play.

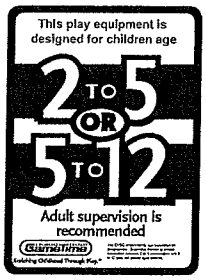
1-800-235-2440

ISSUED/REVISED: 3/21/13

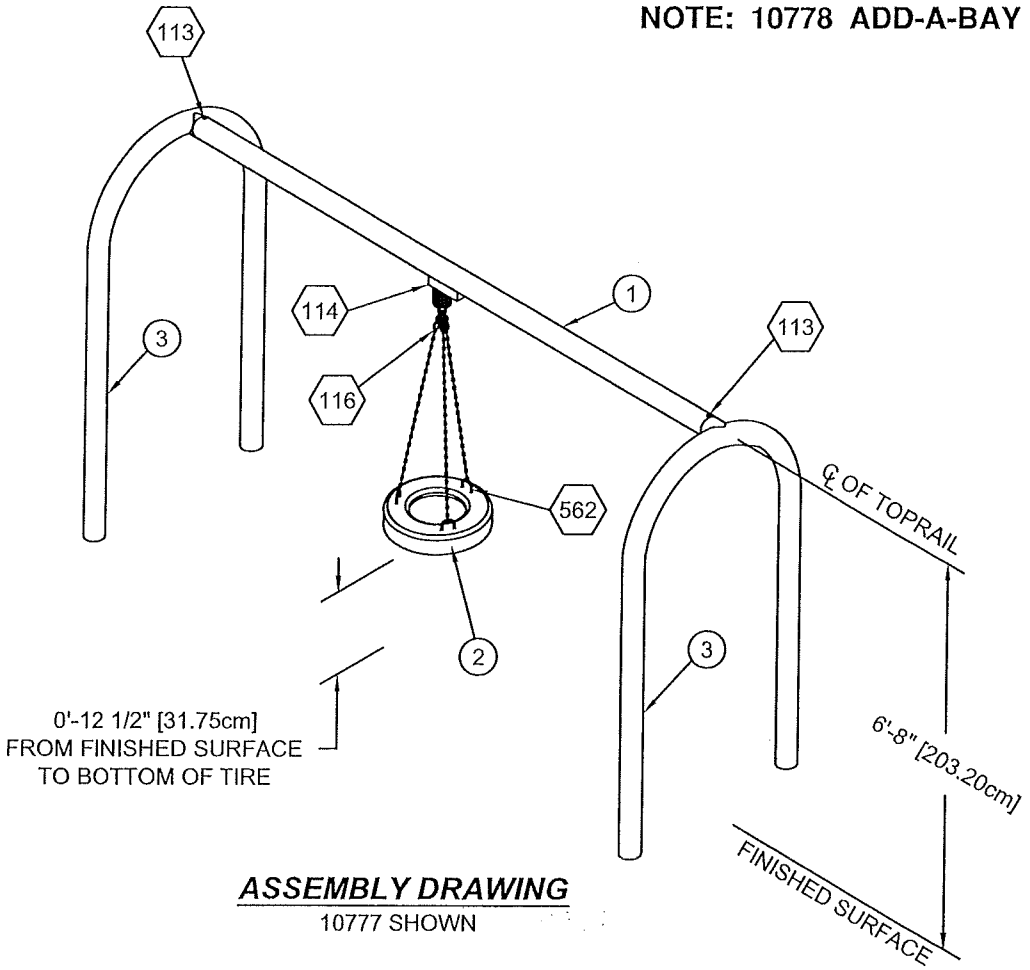
# 10777 TIRE SWING

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE




NOTE: 10778 ADD-A-BAY




***ASSEMBLY DRAWING***

10777 SHOWN

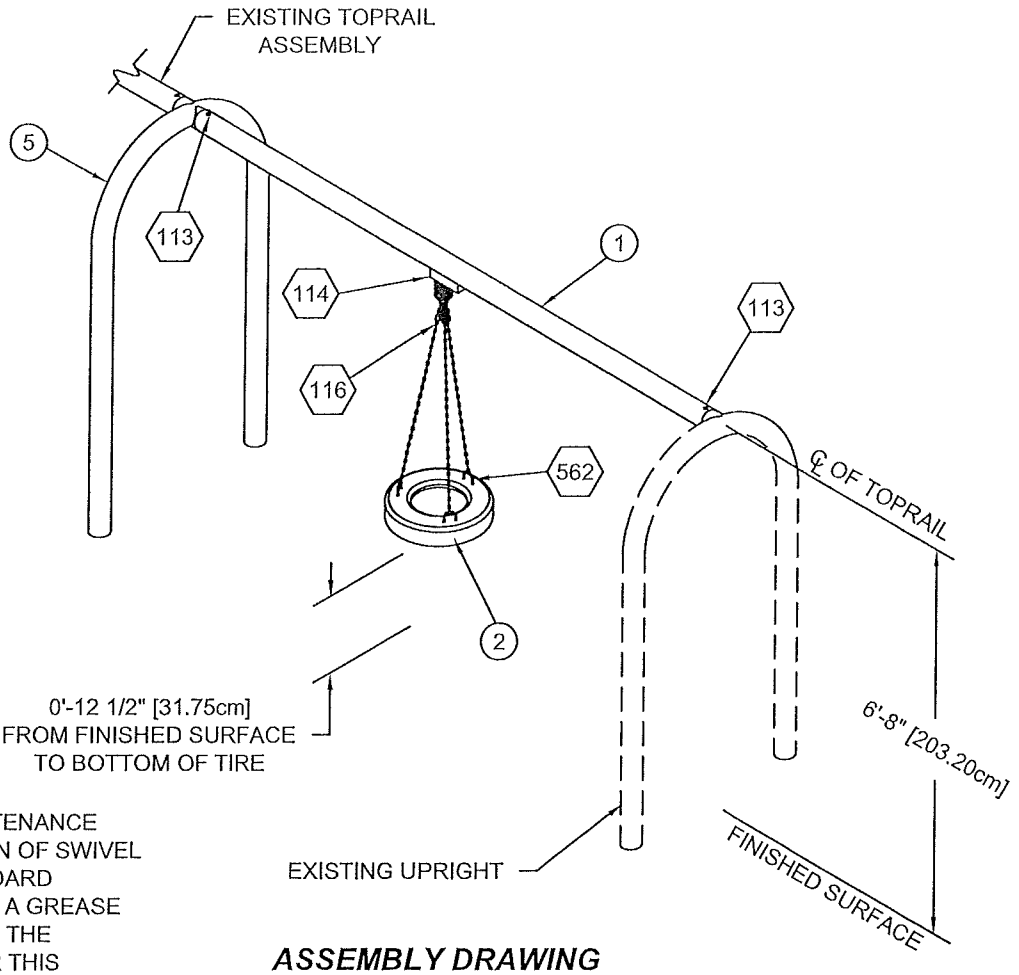
NOTE: REGULAR MAINTENANCE REQUIRES LUBRICATION OF SWIVEL ASSEMBLY WITH STANDARD AUTOMOTIVE GREASE. A GREASE FITTING IS INCLUDED IN THE SWIVEL ASSEMBLY FOR THIS PURPOSE. IN AREAS OF HIGH USE, LUBRICATION INTERVALS SHOULD BE INCREASED ACCORDINGLY.

## *INSTALLATION INSTRUCTIONS*

***STEP 1:*** Before assembling this equipment, read the enclosed *Installer Instructions* in the installation booklet; follow all the instructions during installation.

***STEP 2:*** Assemble parts as shown in the *Assembly Drawing.* Refer to the assembly details for the specific hardware required in each connection.

***STEP 3:*** Loctite (supplied by others) should be used on all threaded hardware.




NOTE: REGULAR MAINTENANCE REQUIRES LUBRICATION OF SWIVEL ASSEMBLY WITH STANDARD AUTOMOTIVE GREASE. A GREASE FITTING IS INCLUDED IN THE SWIVEL ASSEMBLY FOR THIS PURPOSE. IN AREAS OF HIGH USE, LUBRICATION INTERVALS SHOULD BE INCREASED ACCORDINGLY.

## *ASSEMBLY DRAWING*

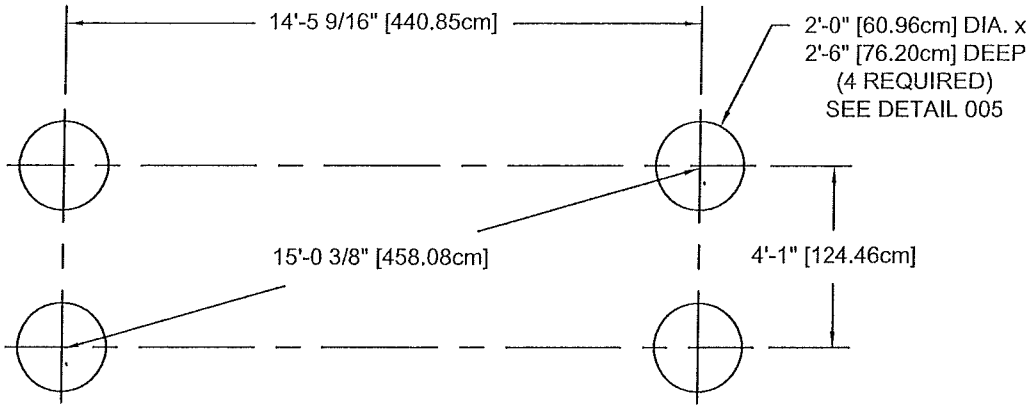
10778 SHOWN

## *PARTS LIST*

| *REF. NO.* | *DESCRIPTION* | *NO. REQ'D* | | *PART NUMBER* |
|---|---|---|---|---|
| | | *10777* | *10778* | |
| 1 | Toprail Ass'y. | 1 | 1 | 140364 |
| 2 | Plastic Tire | 1 | 1 | 300196 |
| 3 | Arch Uprights | 2 | 0 | 140434 |
| 4 | Tire Ring Frame | 1 | 1 | 304005 |
| 5 | Add-A-Bay Arch Upright | 0 | 1 | 140492 |
| | Hardware Complete | 1 | 1 | 156872 |
| | Chain (44-1/8" Lg.) | 3 | 3 | 176318* |
| | "U" Bolt | 3 | 3 | 803441* |
| | 3/8" 'S' Hook | 3 | 3 | 1* |
| | 3/8" Lockwasher | 3 | 3 | 817334* |
| | Bracket | 3 | 3 | 303833* |
| | 3/8" Lock-Nut | 6 | 6 | 804353* |
| | Swing Swivel | 1 | 1 | 159194* |
| | 1/2" x 1-1/4" B.H.C.S. w/ Patch | 2 | 2 | 811062* |
| | 1/2" Lockwasher | 4 | 4 | 817342* |
| | 1/2" Hex Nut | 4 | 4 | 804055* |
| | 1/2" x 5-1/2" B.H.C.S. | 2 | 2 | 811071* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

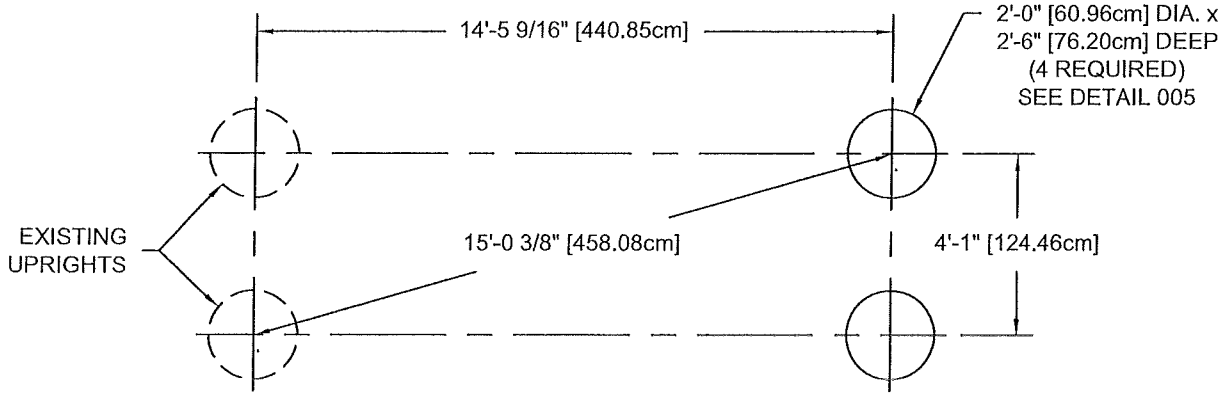



10777

NOTE: HOLE DEPTHS INDICATED ON ALL GROUND PLANS ARE MEASURED FROM THE FINISHED SURFACE. SEE DETAIL 005. ALL FOOTING DIMENSIONS ARE BASED ON LEVEL FINISHED SURFACE.

## *GROUND PLANS*

CONCRETE REQUIRED:
(PER GROUND HOLE)
.17 CUBIC YARDS
[.13 CUBIC METERS]

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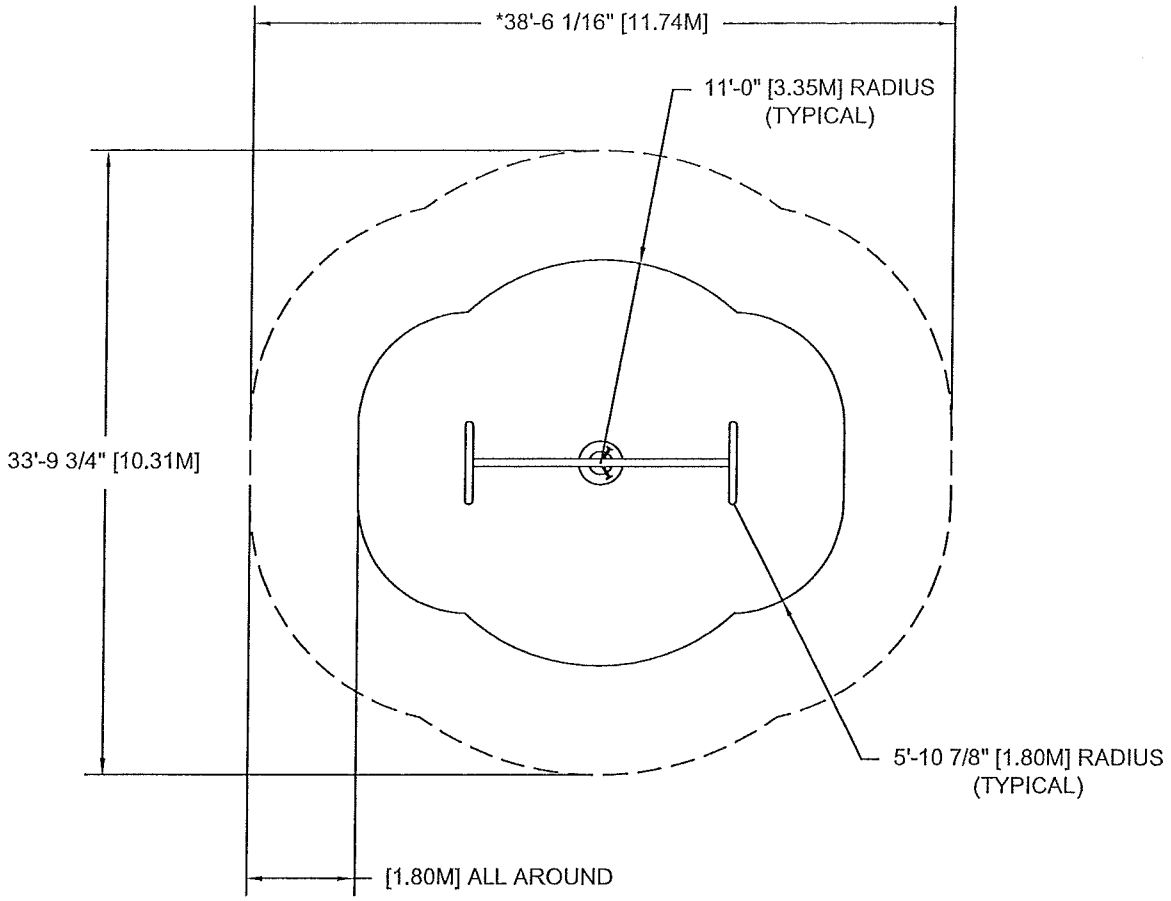



10777

## *TOP VIEWS*

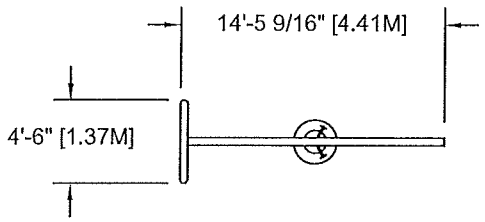
NOTE:

1.) OWNER/OPERATOR SHALL INSTALL AND MAINTAIN PROTECTIVE SURFACING WITHIN THE USE ZONE (U.S.) OR PROTECTIVE SURFACING ZONE (CANADA) OF ALL PLAY EQUIPMENT TO COMPLY WITH ASTM F-1292 AND ASTM F-1487 (U.S.) or CAN/CSA-Z-614 (CANADA).

2.) SOLID OUTSIDE BORDER REPRESENTS MINIMUM REQUIRED ASTM USE ZONE AND CSA PROTECTIVE SURFACING ZONE FOR SWING FRAME SHOWN.

3.) DASHED LINES REPRESENT CSA NO-ENCROACHMENT ZONE (CANADA ONLY).

4.) **EACH ADDITIONAL CONNECTED SWING FRAME BAY INCREASES THE USE ZONE SURFACING DIMENSIONS BY 14'-5 9/16" [4.41M]. (NOT AVAILABLE IN CANADA).*



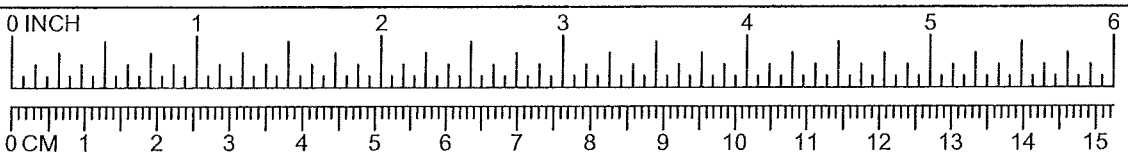

10778

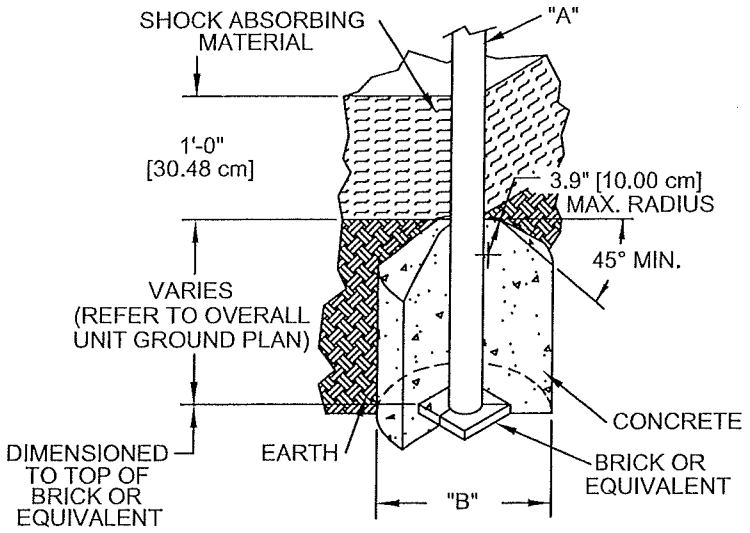
# DETAILS -for-
# 10777 & 10778

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*



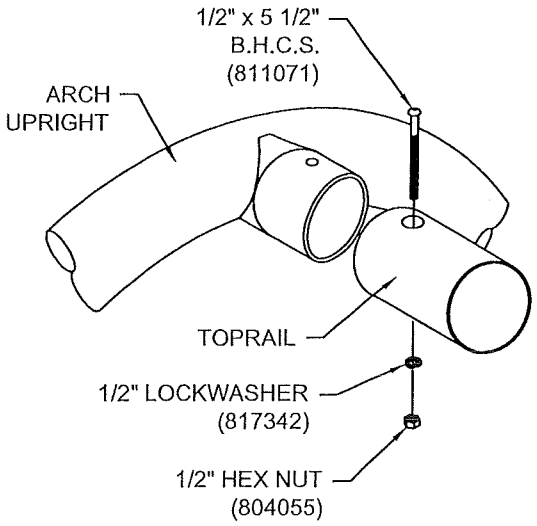




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 1/16" [2.70 cm] | 1'-2" [35.56 cm] |
| 1 5/16" [3.33 cm] | 1'-2" [35.56 cm] |
| 1 5/8" [4.13 cm] | 1'-2" [35.56 cm] |
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 2 3/8" [6.03 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| 5" [12.70 cm] | 1'-6" [45.72cm] |
| TRACK RIDE & SWINGS | |
| 5" [12.70 cm] | 2'-0" [60.96 cm] |
| TREE SCAPE | |
| 5" [12.70 cm] | 4'-0" [121.92 cm] |

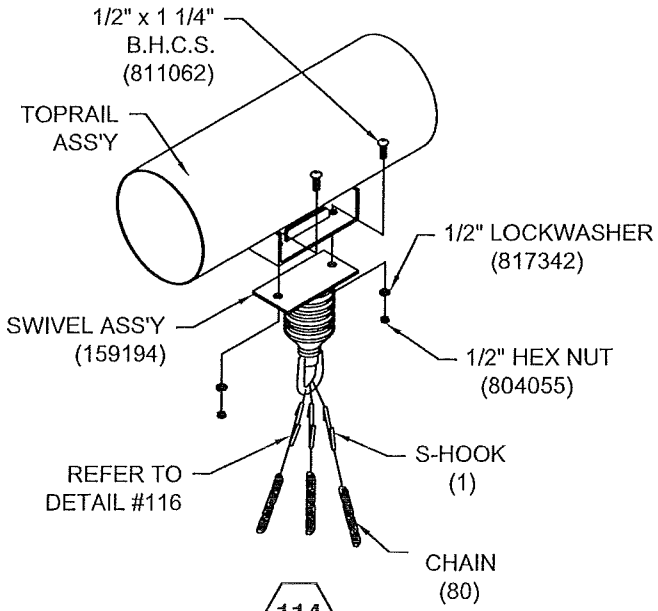
NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

005

SHOCK ABSORBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.




113



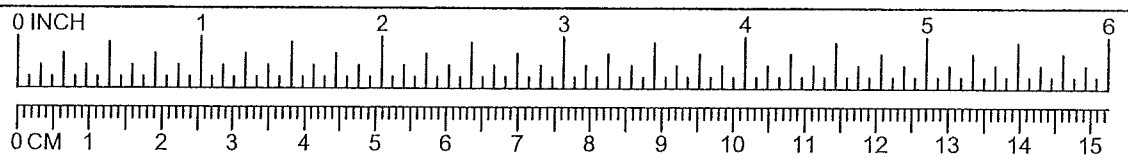

114

# DETAILS -for-
# 10777 & 10778

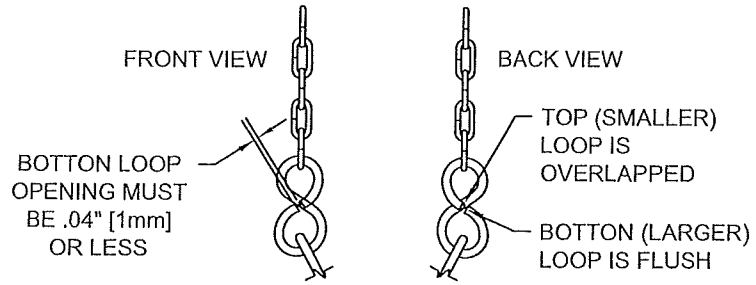
*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

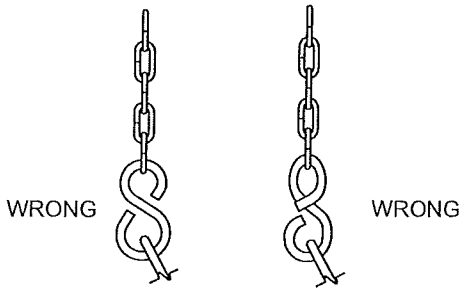
*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*



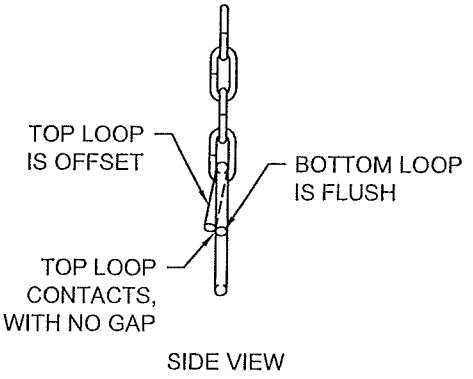

PROPERLY CLOSED "S" HOOK

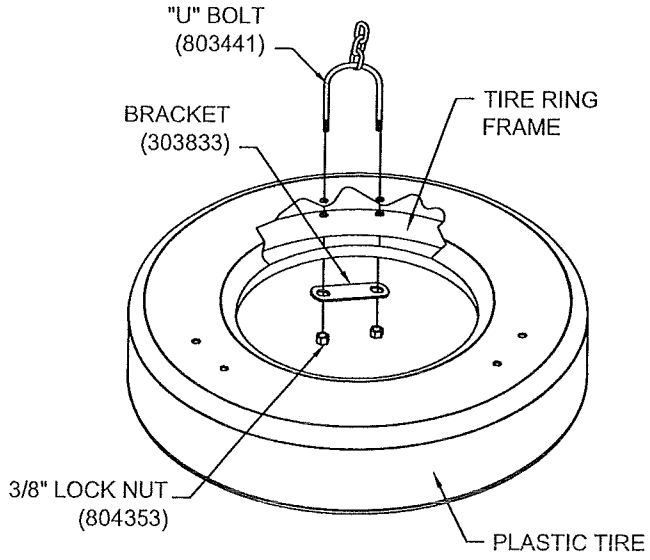



NOTE:
REPLACE ALL WORN "S" HOOKS. "S" HOOKS MUST BE COMPLETELY CLOSED. FAILURE TO CLOSE "S" HOOKS PROPERLY MAY RESULT IN SERIOUS INJURY TO THE USER.




116




NOTE: DO NOT OVERTIGHTEN LOCK NUTS ON U-BOLTS. LESS THAN TWO THREADS SHOULD BE EXPOSED AFTER TIGHTENING.

562

PRIME TIME

A PLAYCORE COMPANY GameTime

Enriching Childhood Through Play.

1-800-235-2440

ISSUED/REVISED: 8/17/12

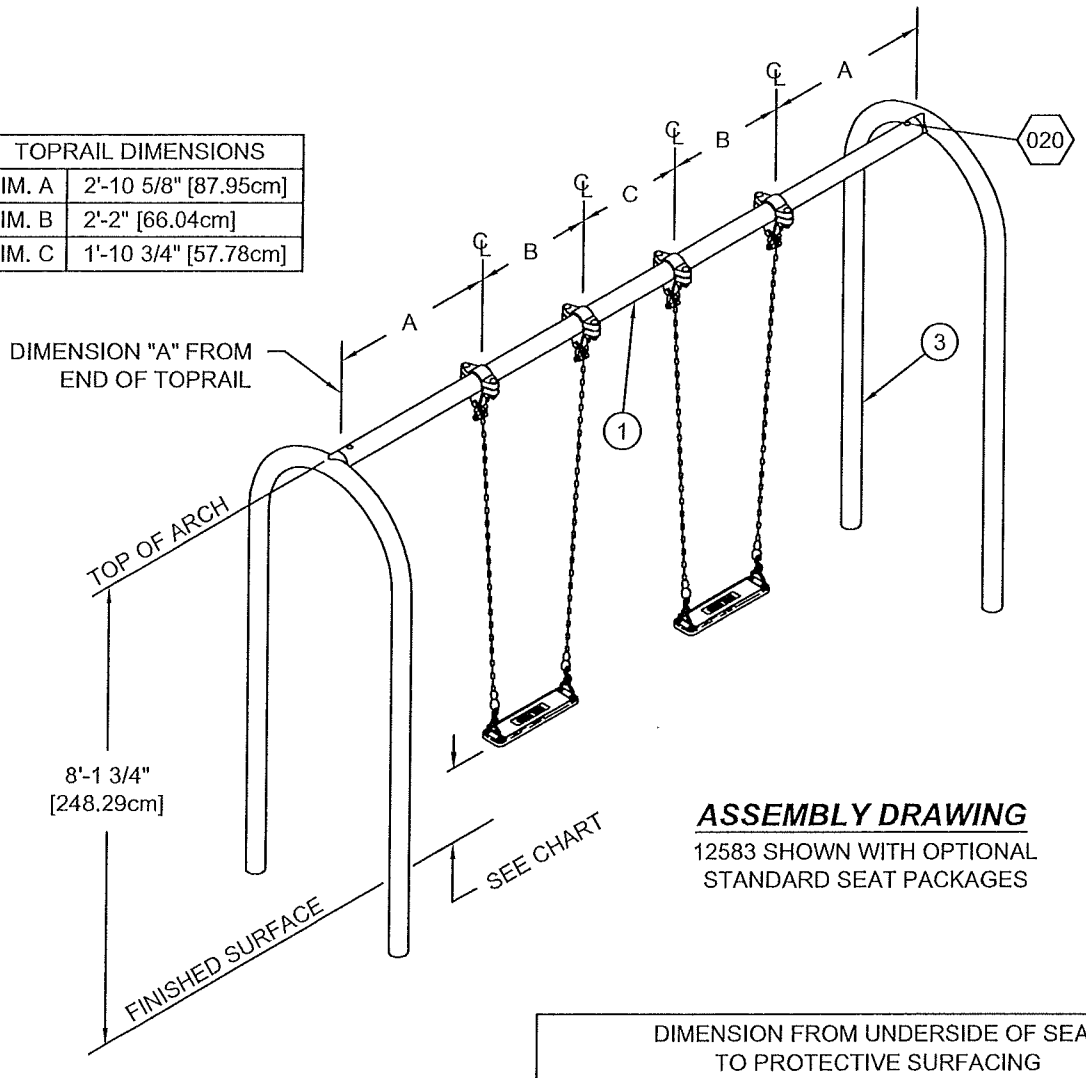
# 12583 ARCH SWING

= INSTALLATION DETAIL

= PARTS LIST REFERENCE

**NOTE: 12583 FREESTANDING**
**12584 ADD-A-BAY**

| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 2'-10 5/8" [87.95cm] |
| DIM. B | 2'-2" [66.04cm] |
| DIM. C | 1'-10 3/4" [57.78cm] |



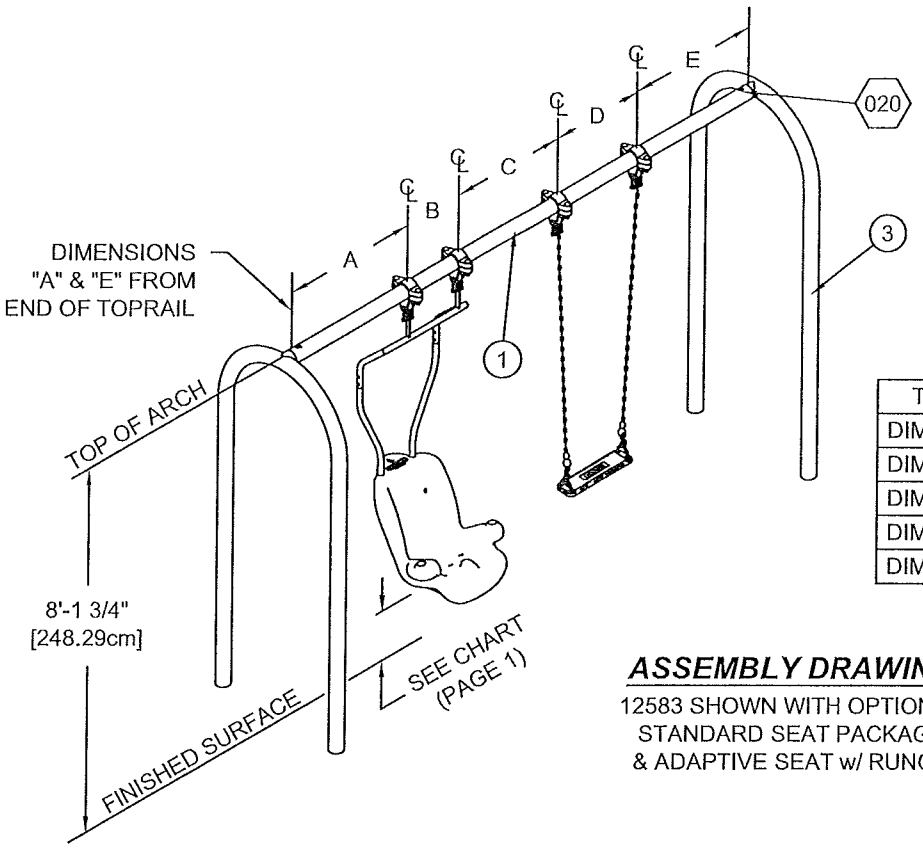

***ASSEMBLY DRAWING***

12583 SHOWN WITH OPTIONAL STANDARD SEAT PACKAGES

| DIMENSION FROM UNDERSIDE OF SEAT TO PROTECTIVE SURFACING | | |
|---|---|---|
| STANDARD | MIN. | MAX. |
| *CANADIAN | 1'-2" [35.56cm] | 1'-6" [45.72cm] |
| ASTM | 1'-0" [30.48cm] | N/A |
| DIN | 1'-3 3/4"[40.00cm] | N/A |
| CPSC | N/A | N/A |

* UNDER LOADED CONDITION BASED ON WEIGHT OF 165lb. [75kg.]

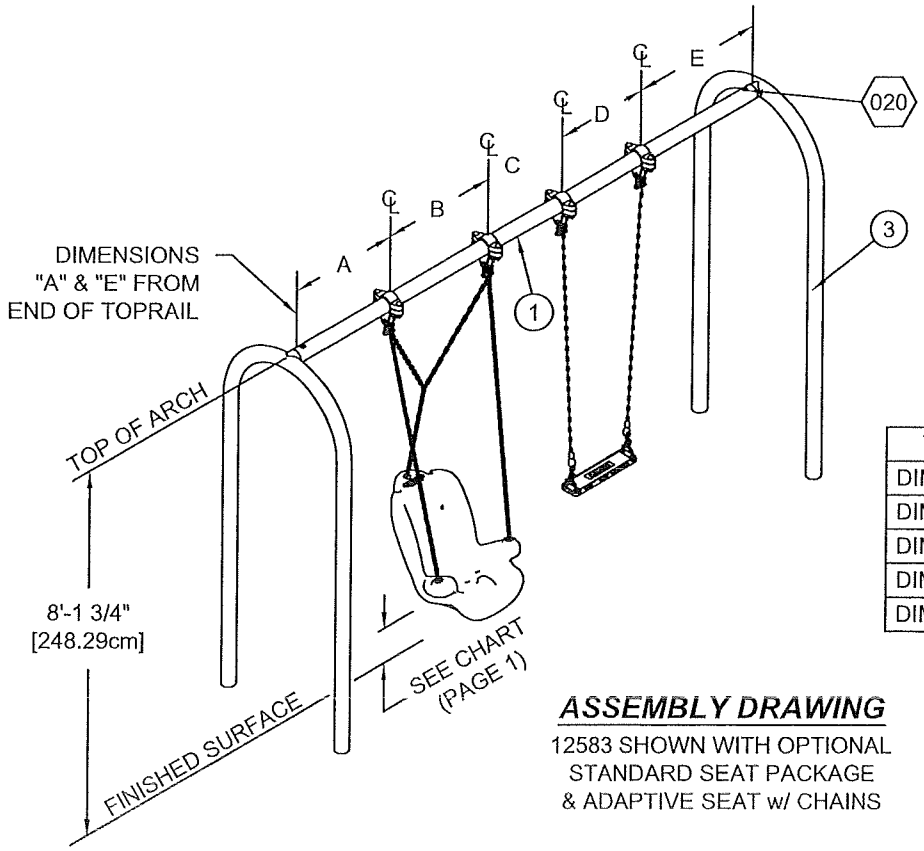
NOTE: SWING SEAT PACKAGES SHOWN ON ASSEMBLY DRAWINGS NOT INCLUDED. SHOWN FOR ILLUSTRATION ONLY.




| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 3'-1" [93.98cm] |
| DIM. B | 1'-4" [40.64cm] |
| DIM. C | 2'-6 3/8" [77.15cm] |
| DIM. D | 2'-2" [66.04cm] |
| DIM. E | 2'-10 5/8" [87.95cm] |

***ASSEMBLY DRAWING***

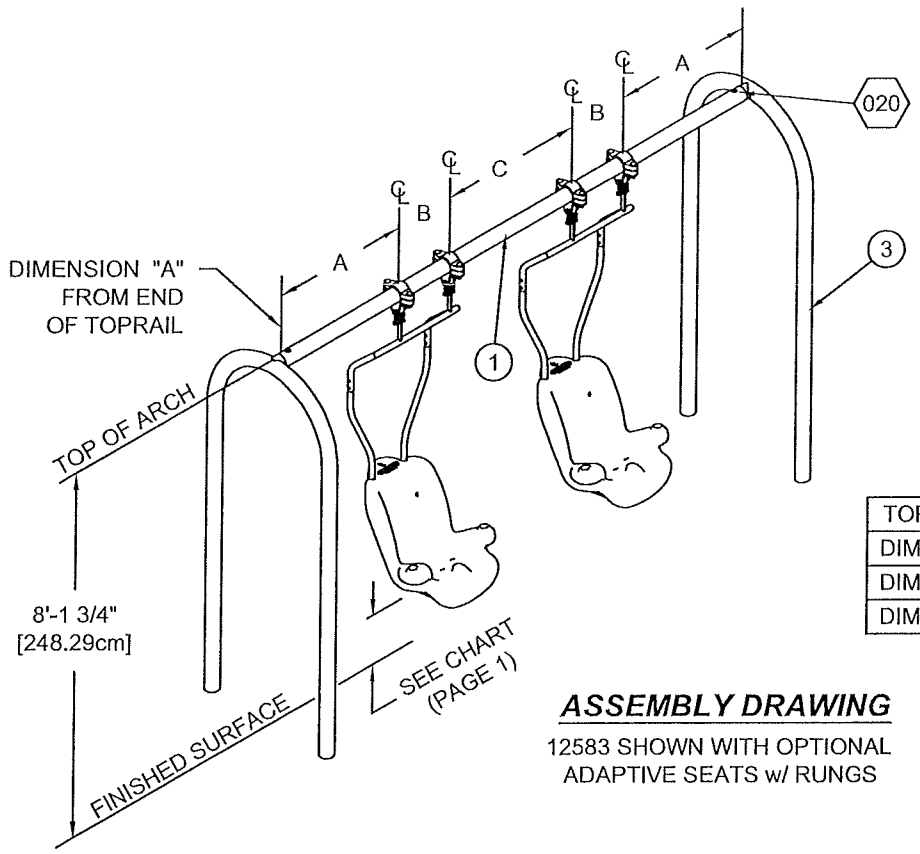
12583 SHOWN WITH OPTIONAL
STANDARD SEAT PACKAGE
& ADAPTIVE SEAT w/ RUNGS




| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 2'-5" [73.66cm] |
| DIM. B | 2'-8" [81.28cm] |
| DIM. C | 1'-10 3/8" [56.83cm] |
| DIM. D | 2'-2" [66.04cm] |
| DIM. E | 2'-10 5/8" [87.95cm] |

***ASSEMBLY DRAWING***

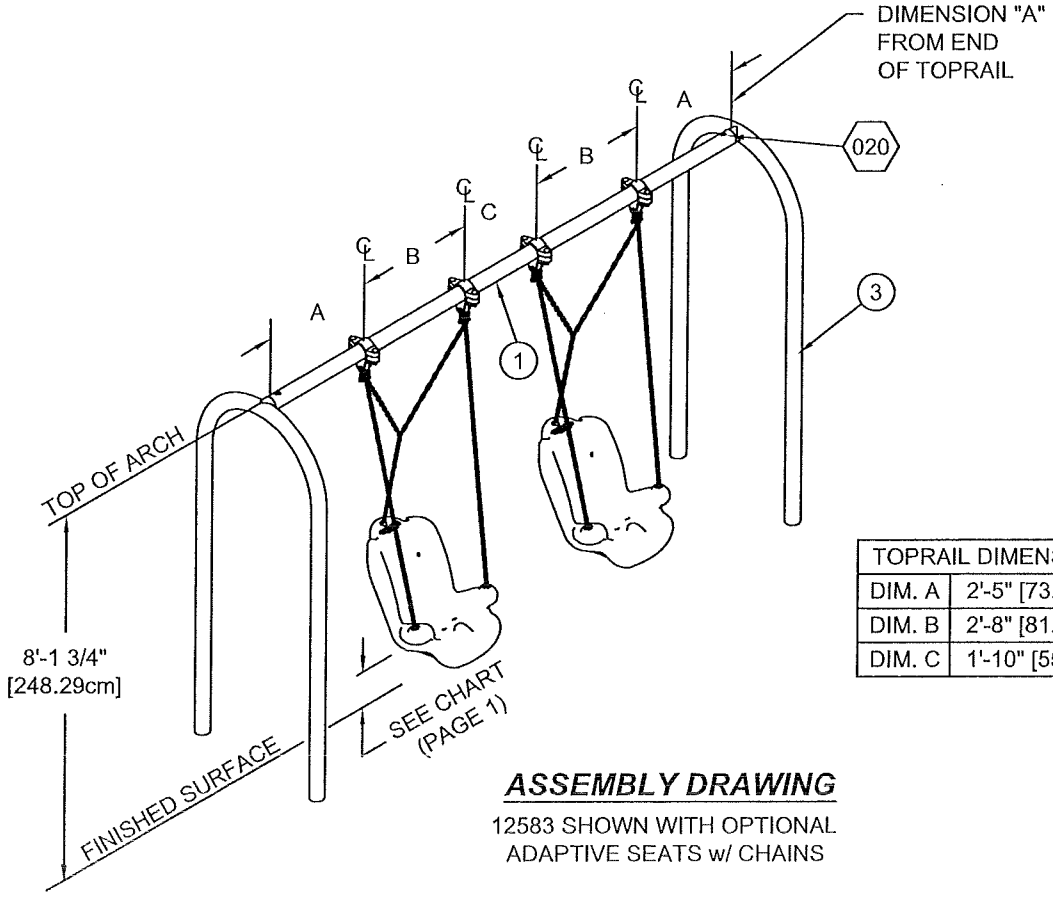
12583 SHOWN WITH OPTIONAL
STANDARD SEAT PACKAGE
& ADAPTIVE SEAT w/ CHAINS




| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 3'-1" [93.98cm] |
| DIM. B | 1'-4" [40.64cm] |
| DIM. C | 3'-2" [96.52cm] |

***ASSEMBLY DRAWING***

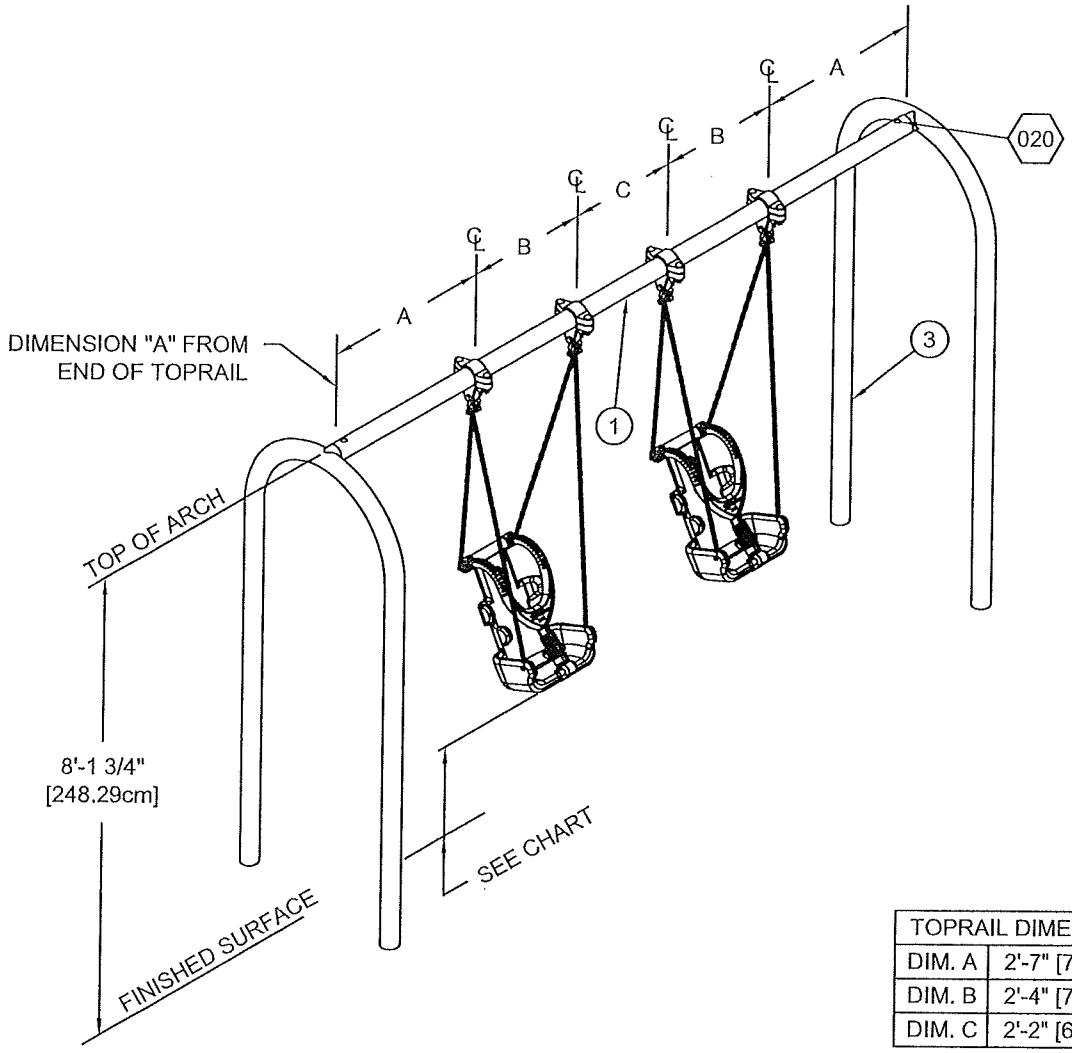
12583 SHOWN WITH OPTIONAL
ADAPTIVE SEATS w/ RUNGS




| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 2'-5" [73.66cm] |
| DIM. B | 2'-8" [81.28cm] |
| DIM. C | 1'-10" [55.88cm] |

***ASSEMBLY DRAWING***

12583 SHOWN WITH OPTIONAL
ADAPTIVE SEATS w/ CHAINS

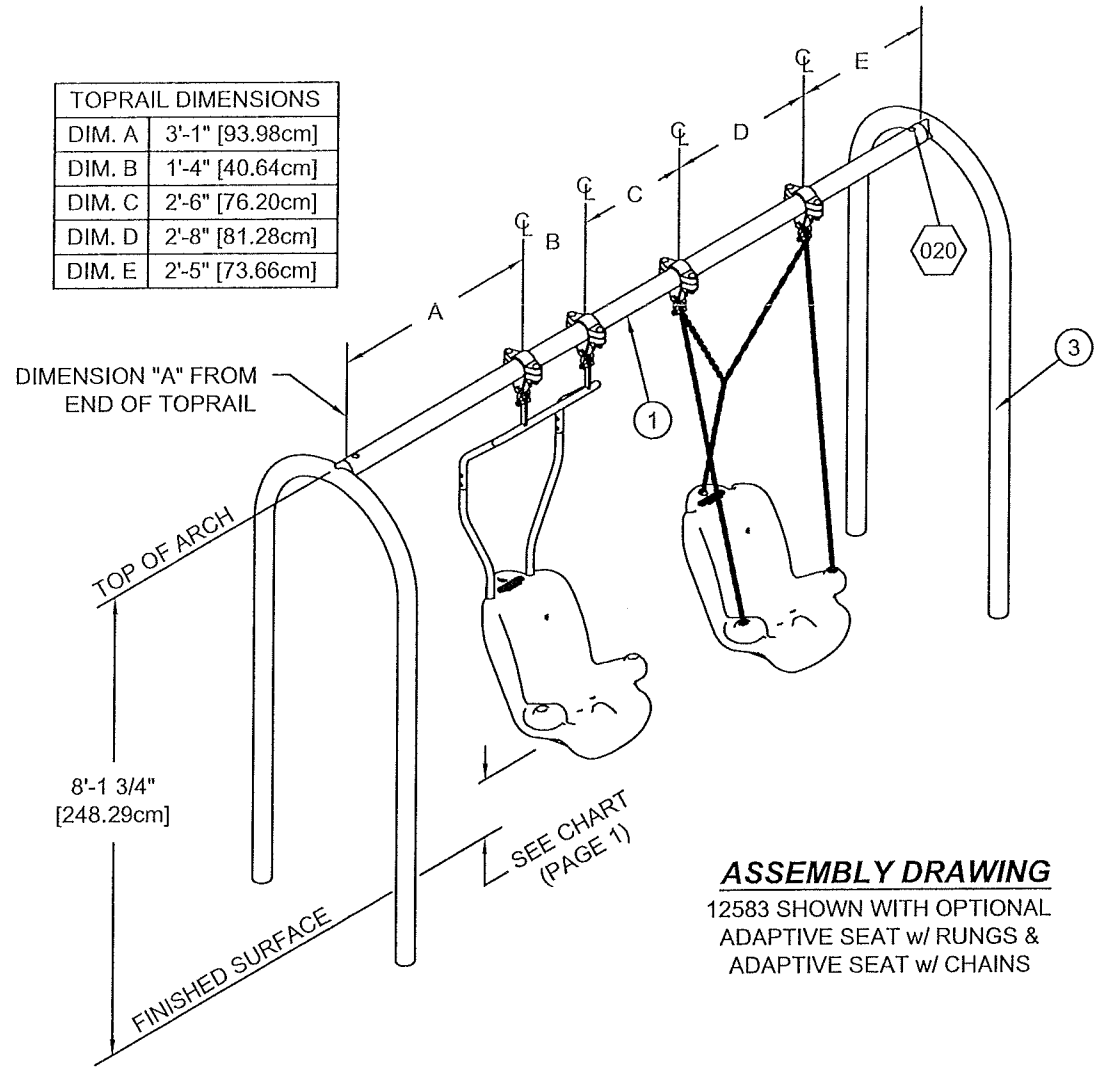



| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 2'-7" [78.74cm] |
| DIM. B | 2'-4" [71.12cm] |
| DIM. C | 2'-2" [66.04cm] |

## *ASSEMBLY DRAWING*

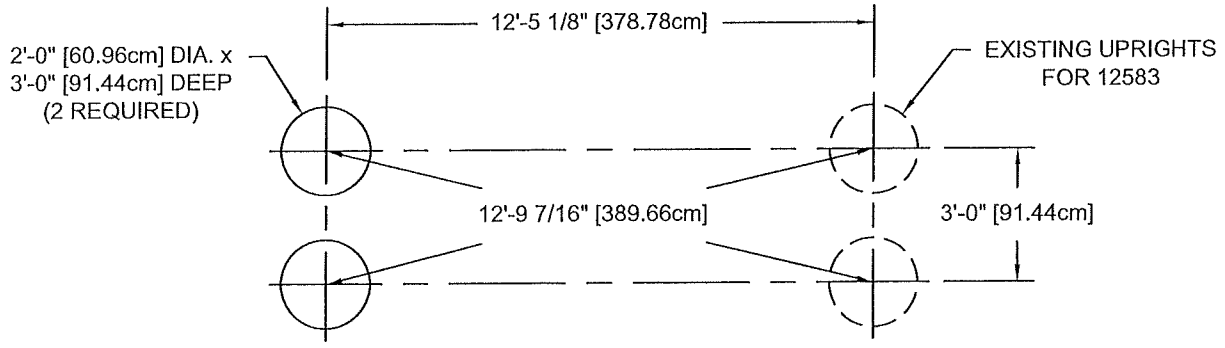
12583 SHOWN WITH OPTIONAL
ZERO-G CHAIRS

| TOPRAIL DIMENSIONS | |
|---|---|
| DIM. A | 3'-1" [93.98cm] |
| DIM. B | 1'-4" [40.64cm] |
| DIM. C | 2'-6" [76.20cm] |
| DIM. D | 2'-8" [81.28cm] |
| DIM. E | 2'-5" [73.66cm] |




***ASSEMBLY DRAWING***

12583 SHOWN WITH OPTIONAL ADAPTIVE SEAT w/ RUNGS & ADAPTIVE SEAT w/ CHAINS

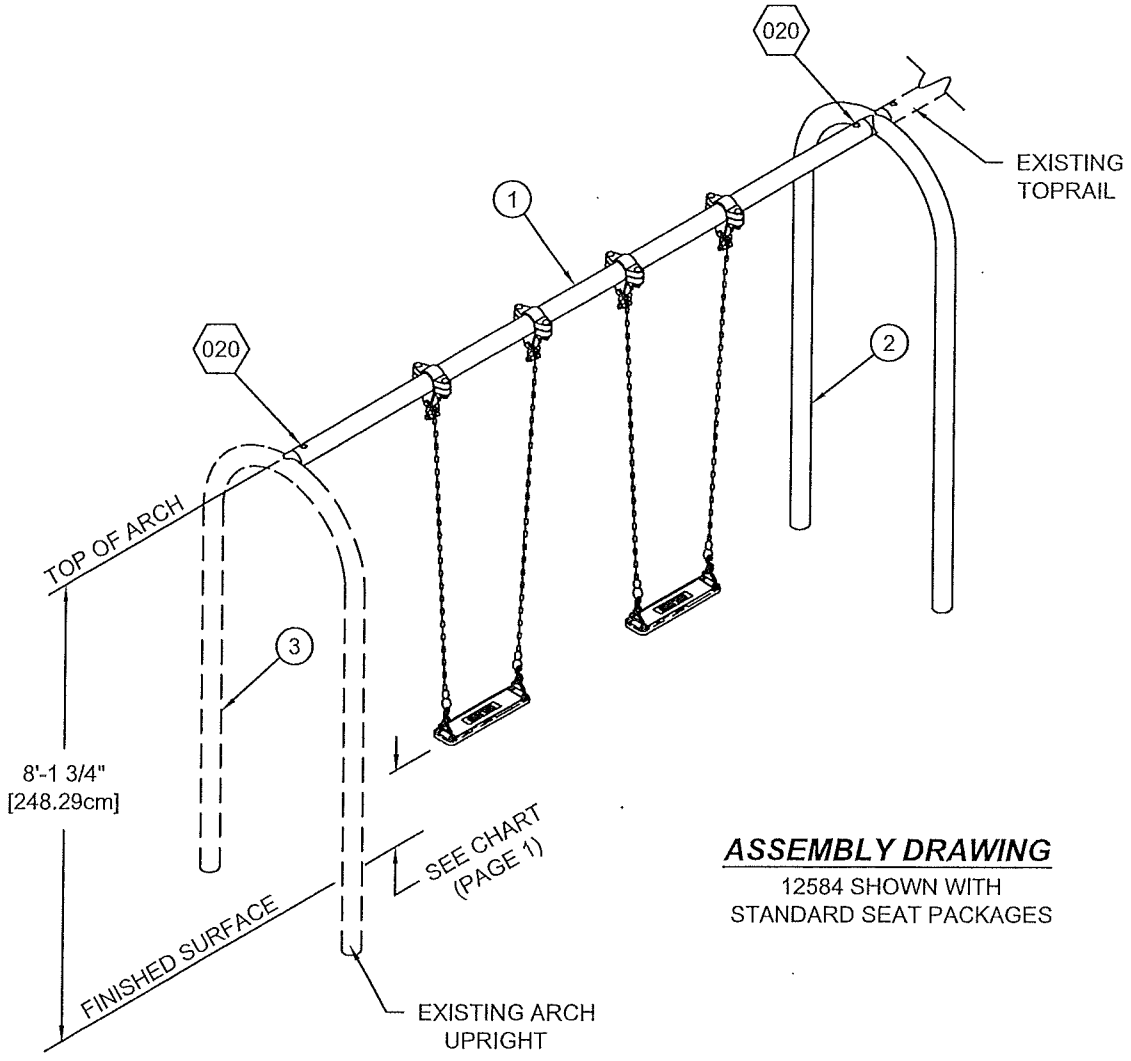



***GROUND PLAN***

NOTE: Hole depths indicated on all ground plans are measurd from the finished surface. See Detail 005. All footing dimensions are based on level finished surface.

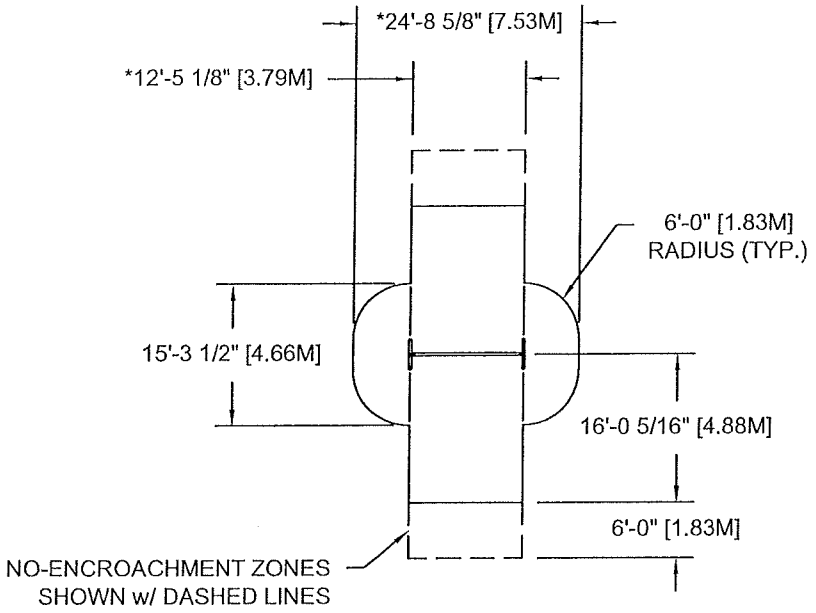
Concrete Required - 12583:
.92 Cubic Yards
[.70 Cubic Meters]

Concrete Required - 12583/12584:
1.38 Cubic Yards
[1.06 Cubic Meters]



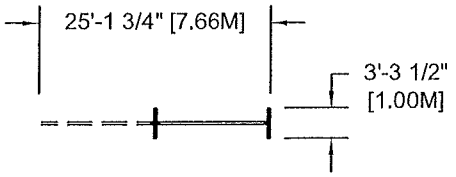

***ASSEMBLY DRAWING***

12584 SHOWN WITH
STANDARD SEAT PACKAGES

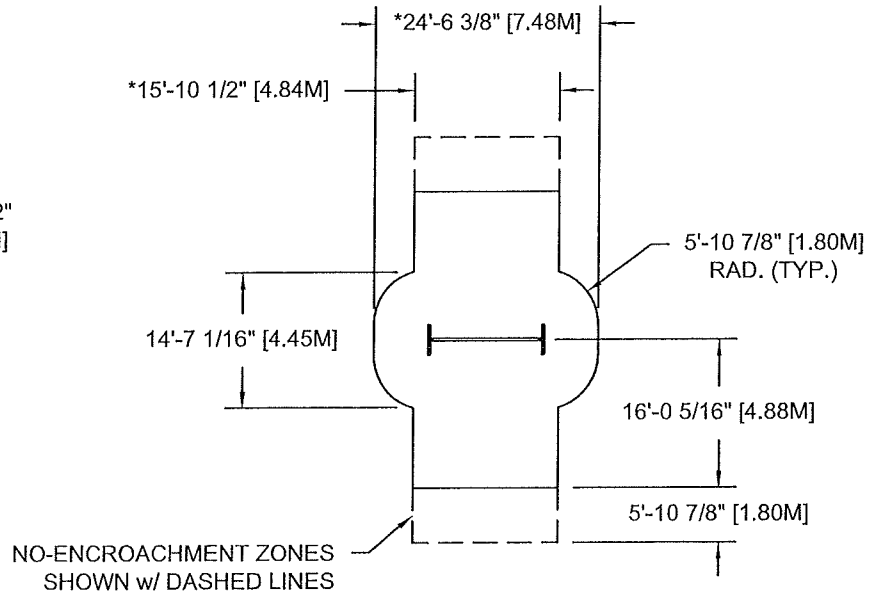



12583

## *TOP VIEWS*




12584




12583 (CSA ONLY)

NOTE:
1. OWNER/OPERATOR SHALL INSTALL AND MAINTAIN PROTECTIVE SURFACING WITHIN THE USE ZONE (U.S.) OR PROTECTIVE SURFACING ZONE (CANADA) OF ALL PLAY EQUIPMENT TO COMPLY WITH ASTM F-1292 AND ASTM F-1487 (U.S.) or CAN/CSA-Z-614 (CANADA).
2. SOLID OUTSIDE BORDER REPRESENTS MINIMUM REQUIRED ASTM USE ZONE AND CSA PROTECTIVE SURFACING ZONE FOR SWING FRAME SHOWN.
3. DASHED LINES REPRESENT CSA *NO ENCROACHMENT* ZONE (CANADA ONLY).
4. *EACH ADDITIONAL CONNECTED SWING FRAME BAY INCREASES THE USE ZONE SURFACING, AND *NO ENCROACHMENT* ZONE DIMENSIONS BY 12'-5 1/8" [3.79M].

## *SPECIFICATIONS*

***TOPRAIL AND ARCH:*** Shall be fabricated of 3-1/2" O.D. (11 Gauge) galvanized steel tubing. Arch includes a welded 3-1/8" O.D. galvanized steel sleeve to which the toprail is fastened.

***FINISH:*** Shall be an electrostatically applied custom formula of TGIC polyester powder with baked finish. Specify color desired.

***HARDWARE:*** All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

***SPECIFICATIONS:*** GAMETIME® has a policy of continuous improvement and reserves the right to change specifications without notice.

## STOP IMPORTANT PRODUCT INFORMATION AND SAFETY WARNINGS STOP

☐ All equipment should be installed on a soft, resilient, energy-absorbing ground surface. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT. A fall on a hard surface can result in serious injury to the equipment user.

☐ ALWAYS FOLLOW INSTALLATION INSTRUCTIONS WHEN ERECTING EQUIPMENT.

☐ Worn surfaces around equipment should be restored. Concrete footings should never be exposed. Surface depth should comply with installation instructions.

☐ Equipment should be placed to eliminate conflicting traffic patterns.

☐ All protruding nuts and bolts should be covered; sharp edges on pipes should be capped or removed. Check for bent, broken or severely worn pipe and replace.

☐ Test overall stability and rigidity of all play equipment. Check for proper assembly, installation and ground anchoring.

☐ Check for and repair damage caused by wear or vandalism, a major factor in injury-causing situations.

☐ GAMETIME® PROVIDES ITS CUSTOMERS WITH COMPLETE INSTALLATION SHEETS AND INSTALLATION INSTRUCTIONS. THE INSTALLATION SHEET CONTAINS THE LISTING OF EVERY PART USED IN A PIECE OF EQUIPMENT AND SHOULD BE KEPT IN THE CUSTOMER'S FILES FOR ACCURATE REFERENCE WHEN REPLACEMENT PARTS ARE NEEDED.

☐ Never add components not intended for use with this product.

☐ Regular maintenance is necessary on this and all park and recreational equipment to ensure the safety of the user.

☐ Proper maintenance of GAMETIME® equipment requires regular tightening of all bolts, nuts, and set screws.

☐ All equipment should be free of rust and repainted whenever necessary to deter rusting.

☐ Regular checking of all parts, castings, etc., should be made. If a part is broken or worn it should be replaced immediately.

☐ Replace all worn S-Hooks. S-Hooks must be completely closed. To close S-Hooks properly, use GAMETIME® S-Hook Pliers. Failure to close S-Hooks properly can result in serious injury to the user. Never reuse S-Hooks.

☐ Test for free movement of swing hanger and other moving attached parts.

☐ Check for worn chains and replace them.

☐ Replace worn or damaged seats.

☐ A soft, resilient surface should be placed under all swings, extending at least six feet beyond the farthest arc of the swing seat, both front and back. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT.

## *INSTALLATION INSTRUCTIONS*

***NOTE: THIS INSTALLATION BOOKLET SHOULD BE KEPT IN CUSTOMER'S FILE FOR FUTURE REFERENCE.***

***NOTE:*** Do not overtighten bolts. To overtighten may cause buckling or dimpling of some parts.

***NOTE:*** Read installation instructions thoroughly before starting assembly. Pour concrete only after final assembly is complete. Bracing material may be required during assembly.

***NOTE:*** Do not tighten any nuts, bolts, rods, etc. until the unit is completely assembled.

***NOTE:*** Due to extremes in weather and soil conditions, hole sizes may have to be increased to meet local conditions.

***NOTE:*** It is important to check the hole location in the upright and on the drawings while assembling this unit.

***STEP 1:*** Dig holes according to the Ground Plan (see Detail 005 also). Place a brick or equivalent at the bottom of the hole to provide a solid foundation. Allow for this in hole depth (see Detail 005).

***STEP 2:*** Insert toprail onto socket on the arch and secure with 1/2" x 4" hex head bolt, 1/2" flatwasher, 1/2" lockwasher and 1/2" hex nut (see Detail 020).

***STEP 3:*** Set frame in holes, making sure that legs rest on foundation bricks. Check to ensure swing is level.

***STEP 4:*** Fill holes with concrete per Detail 005. Plumb and brace assembly. Allow a minimum of 48 hours for concrete to harden before continuing.

***NOTE:*** Loctite (supplied by others) should be used on all threaded hardware.

***STEP 5:*** Place swing hangers on toprail using Assembly Drawing for spacing. Hang seats per Installation Sheet for swing seats.

***STEP 6:*** After assembly is complete, place manufacturer's I.D. label in a visible location.

## *PARTS LIST*

| *REF. NO.* | *DESCRIPTION* | *NO. REQ'D* | | *PART NUMBER* |
|---|---|---|---|---|
| | | *12583* | *12584* | |
| 1 | 3-1/2" O.D. Toprail | 1 | 1 | 168622 |
| 2 | Multi-Bay Arch Upright Ass'y | 0 | 1 | 152805 |
| 3 | Arch End Upright Ass'y | 2 | 0 | 152803 |
| | Hardware Complete | 1 | 1 | 152821 |
| | 1/2" x 4" Hex Bolt | 2 | 2 | 801215* |
| | 1/2" Lockwasher | 2 | 2 | 817342* |
| | 1/2" Hex Nut | 2 | 2 | 804055* |
| | 1/2" Flatwasher | 2 | 2 | 817412* |
| | Manufacturer I.D. Label | 1 | 1 | 159151* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

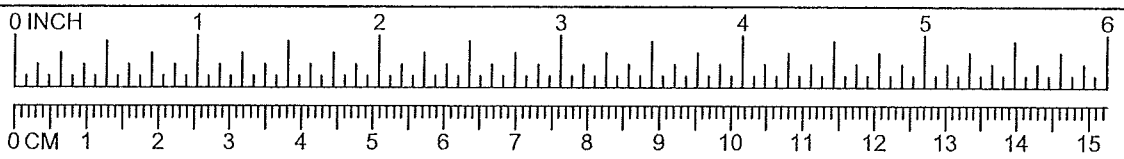
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

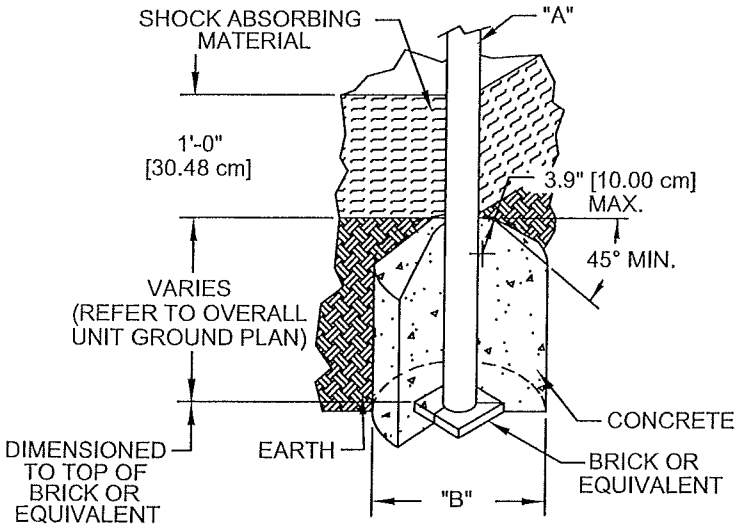
# DETAILS -for-
# 12583 & 12584

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*



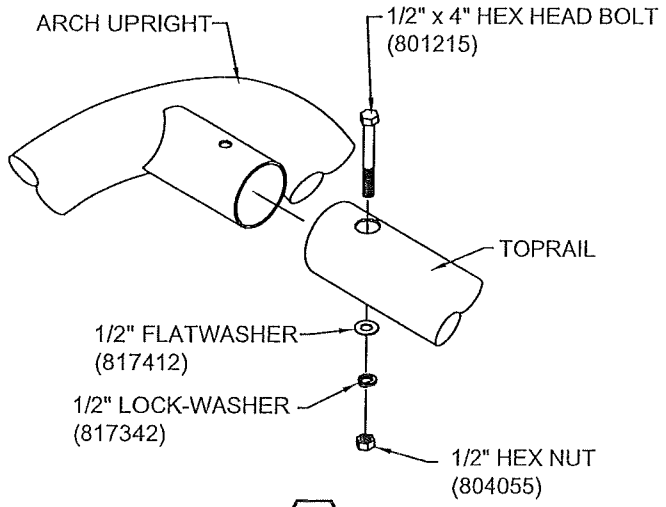

| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 1/16" [2.70 cm] | 1'-2" [35.56 cm] |
| 1 5/16" [3.33 cm] | 1'-2" [35.56 cm] |
| 1 5/8" [4.13 cm] | 1'-2" [35.56 cm] |
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 2 3/8" [6.03 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| ARCH SWING | |
| 3 1/2" [8.89 cm] | 2'-0" [60.96 cm] |

NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1 ONLY
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

005

SHOCK ABSORBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.

NOTE: PEEN FLATWASHERS AFTER INSTALLATION TO MATCH RADIUS OF TOPRAIL.




020

Xscape

GameTime
A PLAYCORE Company

1-800-235-2440

ISSUED/REVISED: 8/23/11

# 26057
# 2 WAY X-POD STEP

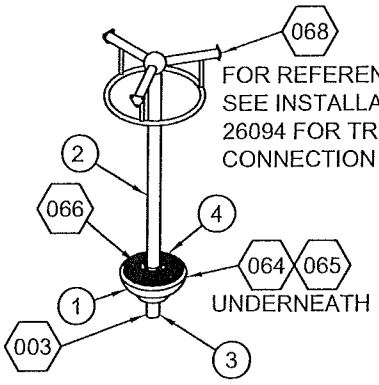
⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

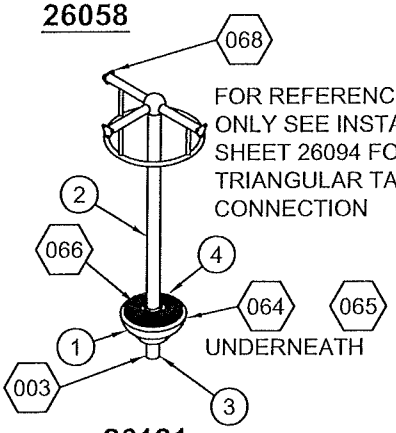
| | |
|---|---|
| 3 WAY | 26058 |
| 4 WAY | 26059 |
| 90° 3 WAY | 26121 |
| 90° 2 WAY | 26143 |

## *INSTRUCTIONS*

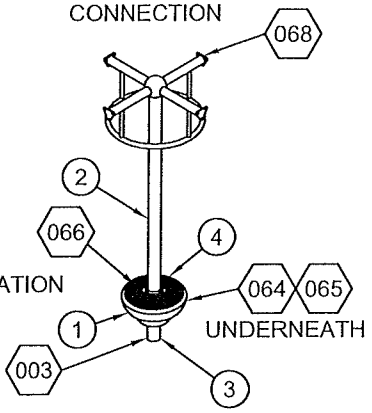
1. Before assembling this equipment, read the enclosed *INSTALLER INSTRUCTIONS*in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the *ASSEMBLY DRAWING*. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.



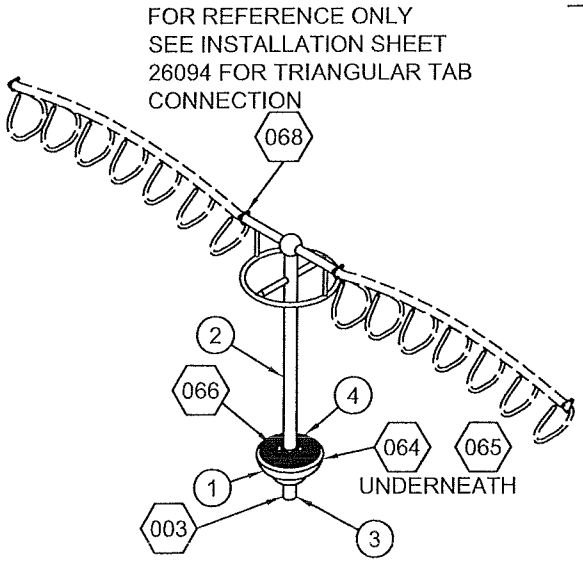

**26058**



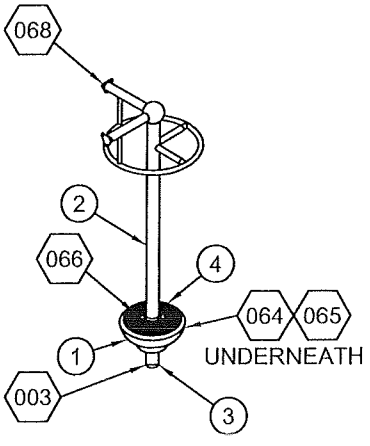

**26121**




**26059**

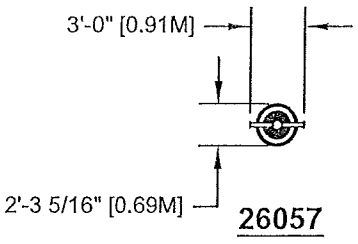



**26057**

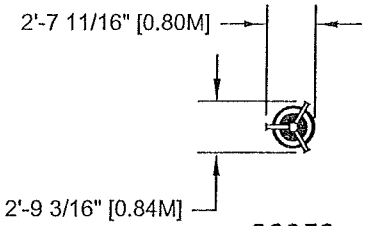



**26143**

## *ASSEMBLY DRAWINGS*




**26057**

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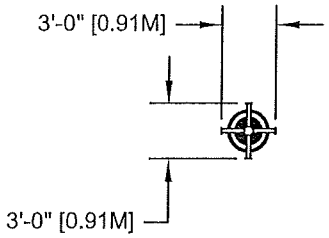


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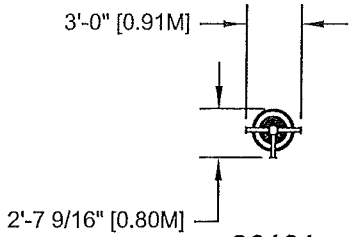


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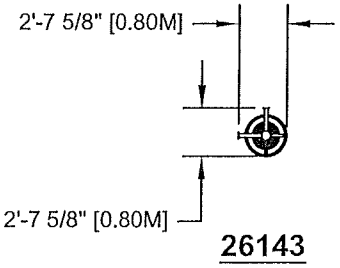
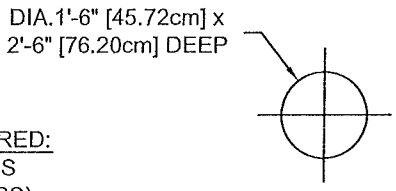



**26143**

***TOP VIEWS***




CONCRETE REQUIRED:
.10 CUBIC YARDS
(.08 CUBIC METERS)

## *GROUND PLAN*

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *NUMBER REQUIRED* | | | | | *PART NUMBER* |
|---|---|---|---|---|---|---|---|
| | | *26057* | *26058* | *26059* | *26121* | *26143* | |
| 1 | X-Pod Step | 1 | 1 | 1 | 1 | 1 | 178658 |
| 2 | 2 Way X-Pod Step Weld Ass'y | 1 | 0 | 0 | 0 | 0 | 178643 |
| 2 | 3 Way X-Pod Step Weld Ass'y | 0 | 1 | 0 | 0 | 0 | 178654 |
| 2 | 90° 3 Way X-Pod Step Weld Ass'y | 0 | 0 | 0 | 1 | 0 | 200210 |
| 2 | 4 Way X-Pod Step Weld Ass'y | 0 | 0 | 1 | 0 | 0 | 178656 |
| 2 | 90° 2 Way X-Pod Step Weld Ass'y | 0 | 0 | 0 | 0 | 1 | 202221 |
| 3 | Ground Socket Weld Ass'y | 1 | 1 | 1 | 1 | 1 | 178650 |
| 4 | X-Pod Step Surface | 1 | 1 | 1 | 1 | 1 | 201055 |
| | ***Hardware Complete*** | 1 | 1 | 1 | 1 | 1 | 178677 |
| | 3/8" x 1" P.B.H.C.S. | 2 | 2 | 2 | 2 | 2 | 812050* |
| | 3/8" x 2" P.B.H.C.S. | 5 | 5 | 5 | 5 | 5 | 812055* |
| | 3/8" x 3 3/4" Hex Head Bolt | 2 | 2 | 2 | 2 | 2 | 801014* |
| | 3/8" Lockwasher | 9 | 9 | 9 | 9 | 9 | 817334* |
| | 3/8" Flatwasher | 7 | 7 | 7 | 7 | 7 | 817410* |
| | 3/8" Hex Nut | 2 | 2 | 2 | 2 | 2 | 804053* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

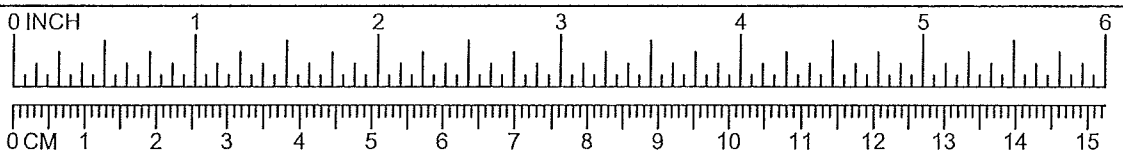
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

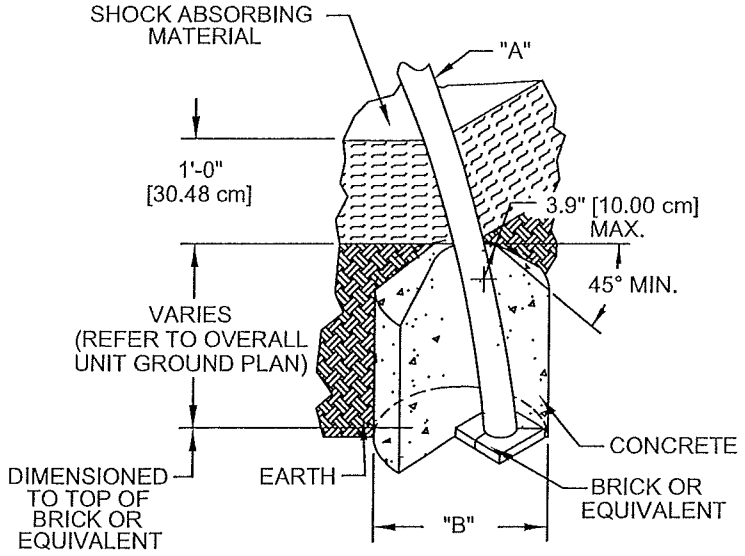
# DETAILS -for-
# 26057, 26058, 26059 AND 26143

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*



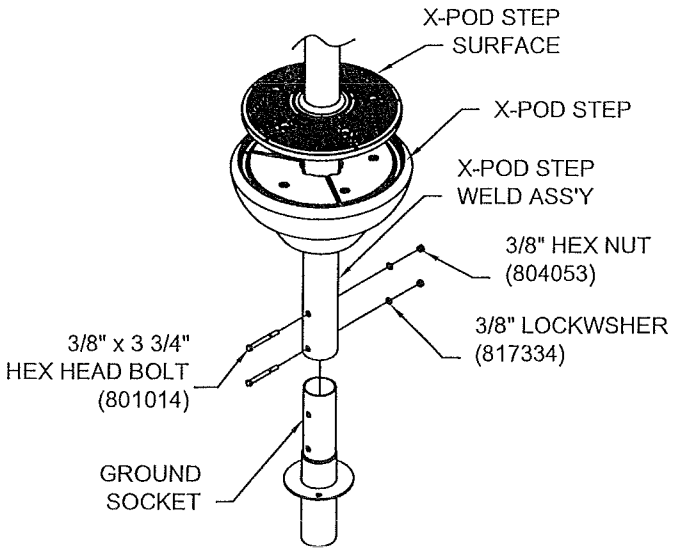




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| SWINGS | |
| 3 1/2" [8.89 cm] | 2'-0" [60.96 cm] |

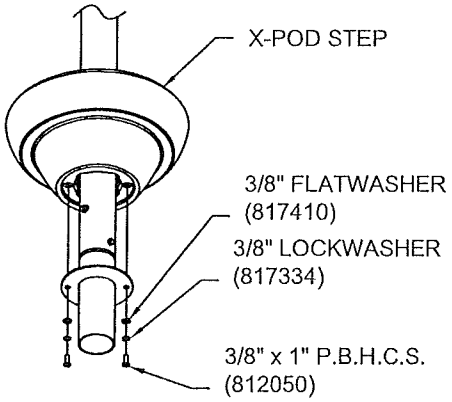
NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

003

SHOCK ABSOBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.




064



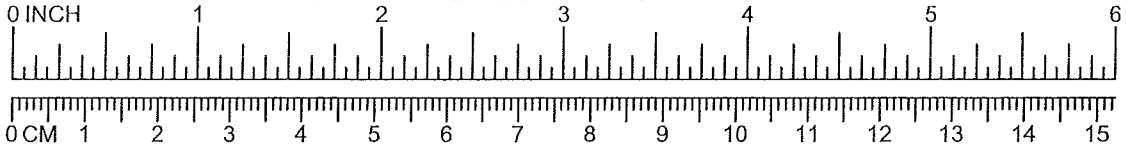

065

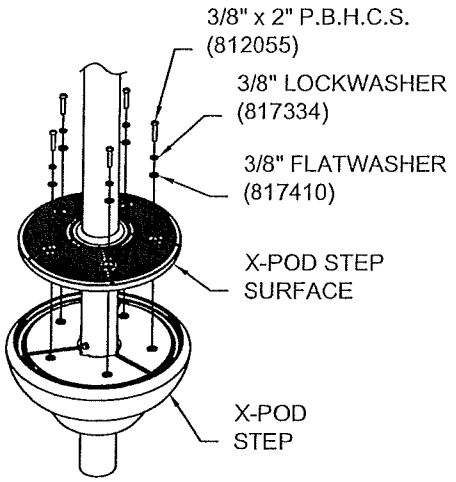
# DETAILS -for-
# 26057, 26058, 26059 AND 26143

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

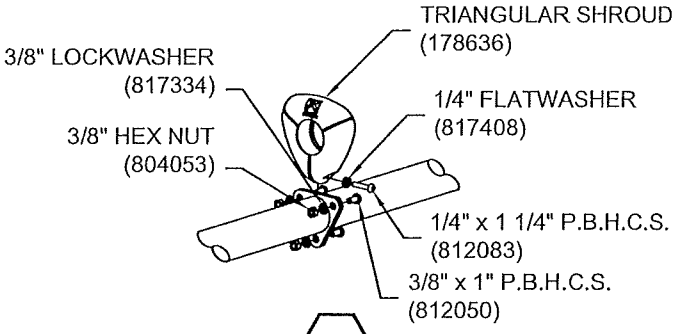
*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*




066

STRETCH TRIANGULAR SHROUD OVER TRIANGLE TABS BEFORE INSTALLING 1/4" x 1 1/4" B.H.C.S.




068

NOTE: SEE INSTALLATION SHEET 26094 FOR RUBBER SHROUD CONNECTION DETAIL. HARDWARE FOR THIS CONNECTION IS LOCATED IN HARDWARE COMPLETE #178755

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ISSUED/REVISED: 12/04/09

# 26086

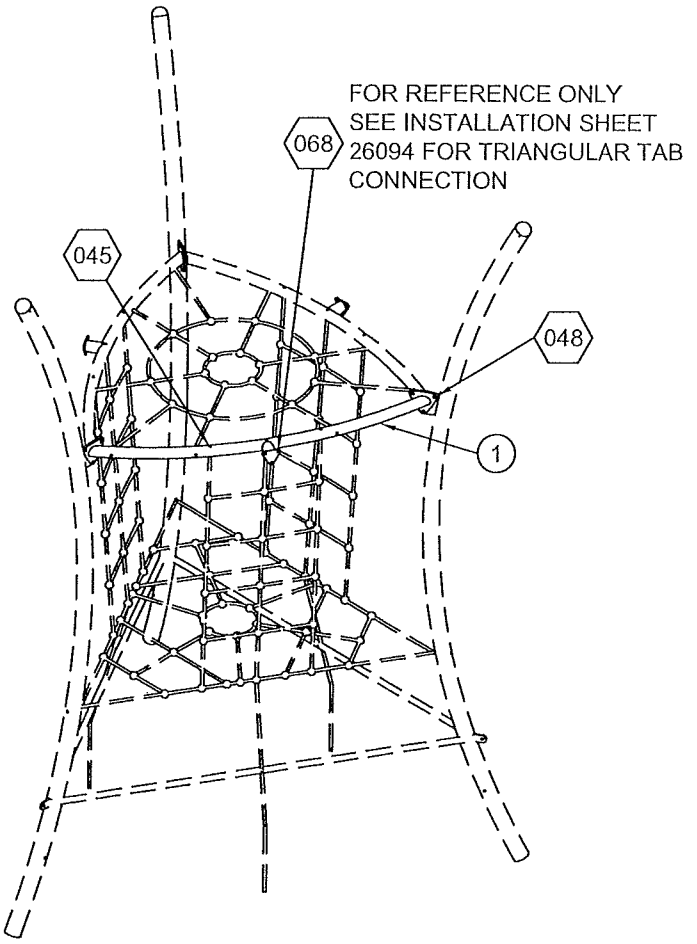
# HELIOCENTRIX SUPPORT RUNGS WITH TAB

⬡ = INSTALLATION DETAIL

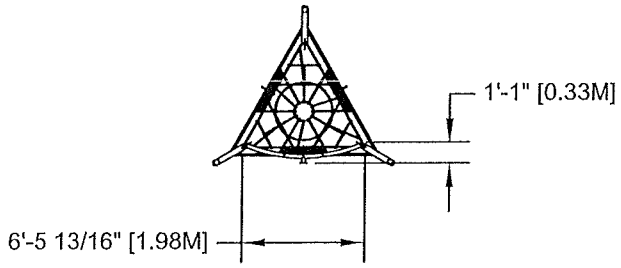
◯ = PARTS LIST REFERENCE

## *INSTRUCTIONS*

1. Before assembling this equipment, read the enclosed *INSTALLER INSTRUCTIONS* in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the *ASSEMBLY DRAWING*. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.




## *ASSEMBLY DRAWING*




***TOP VIEW***
***26086***

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *26086* | *PART NUMBER* |
|---|---|---|---|
| 1 | Heliocentrix Support Rung w/ Tab | 1 | 178709 |
| | ***Hardware Complete*** | 1 | 178260 |
| | 3/8" x 3/4" P.B.H.C.S. | 3 | 812052* |
| | 3/8" Lockwasher | 9 | 817334* |
| | 3/8" Flatwasher | 6 | 817410* |
| | 3/8" Barrel Nut | 3 | 804804* |
| | 3/8" x 2 1/2" P.B.H.C.S. | 6 | 812057* |
| | 1/2" Flatwasher | 3 | 817412* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

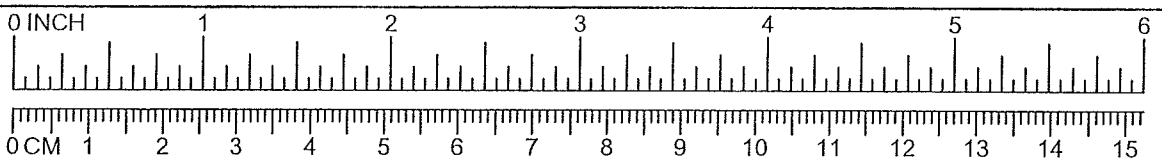
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

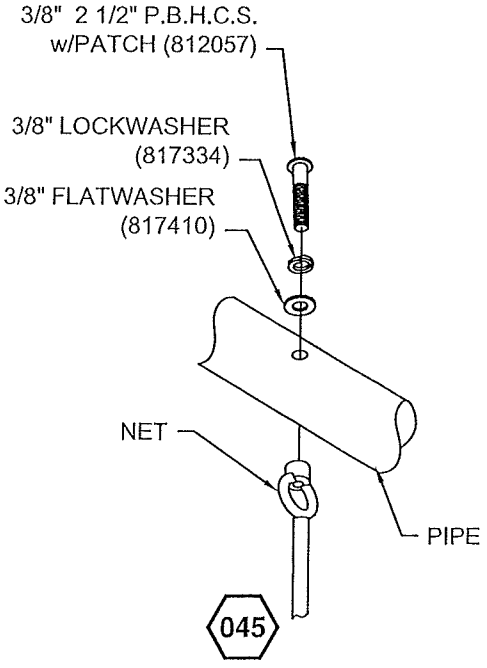
# DETAILS -for-
# 26086

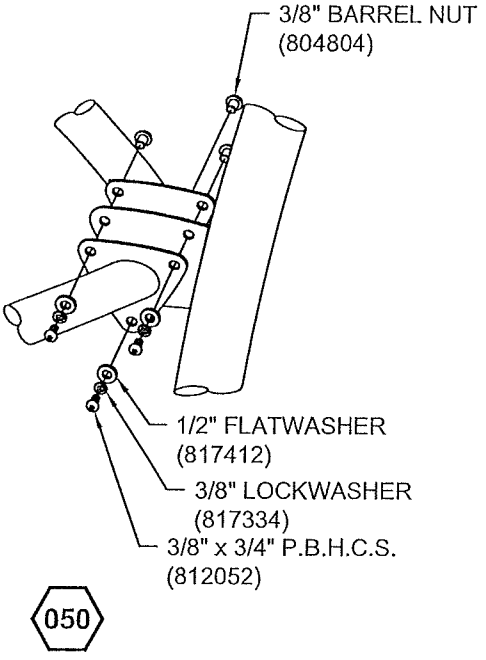
*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

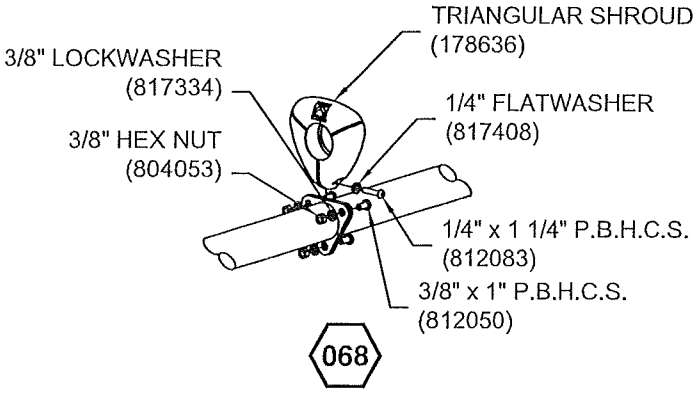
*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




STRETCH TRIANGULAR SHROUD OVER TRIANGLE TABS BEFORE INSTALLING 1/4" x 1 1/4" B.H.C.S.




NOTE: SEE INSTALLATION SHEET 26094 FOR RUBBER SHROUD CONNECTION DETAIL. HARDWARE FOR THIS CONNECTION IS LOCATED IN HARDWARE COMPLETE #178755

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ISSUED/REVISED: 11/7/08

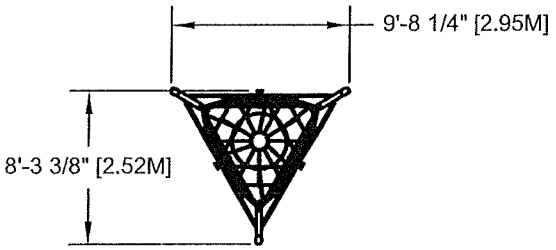
# 26087
# HELIOCENTRIX

⬡ = INSTALLATION DETAIL

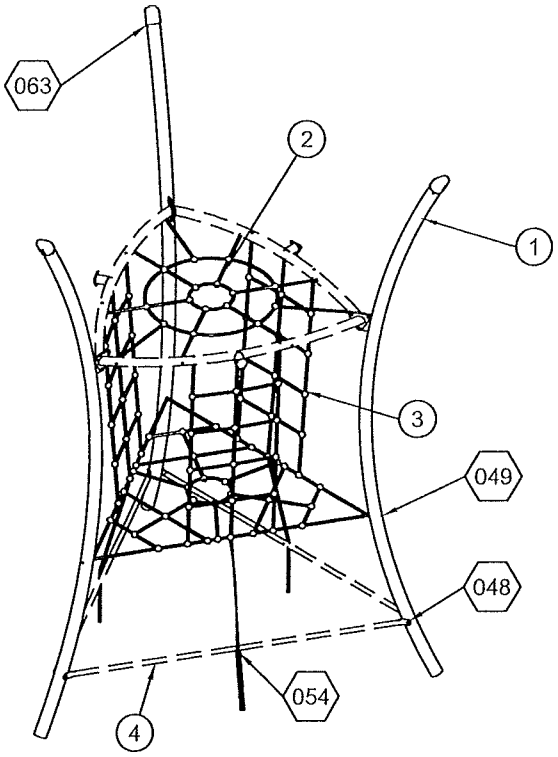
◯ = PARTS LIST REFERENCE

## *INSTRUCTIONS*

1. Before assembling this equipment, read the enclosed *INSTALLER INSTRUCTIONS* in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the *ASSEMBLY DRAWING*. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.




## *TOP VIEW*



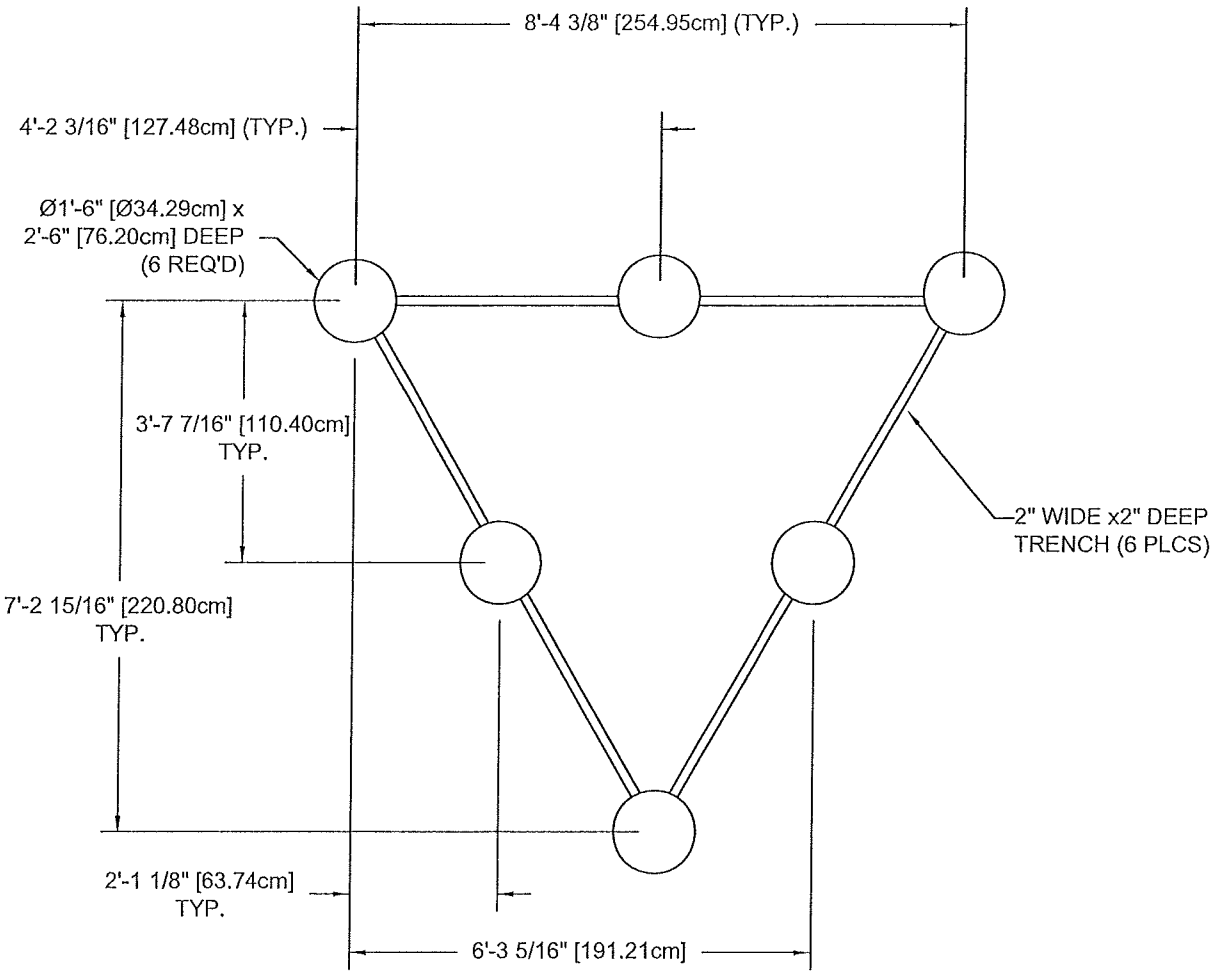

## *ASSEMBLY DRAWING*

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *No. REQ'D* | *PART NUMBER* |
|---|---|---|---|
| 1 | Heliocentrix Upright | 3 | 178720 |
| 2 | Top Net | 1 | 178241 |
| 3 | Bottom Net | 1 | 178242 |
| 4 | Bottom Spacer Bar | 3 | 178221 |
| | ***Hardware Complete*** | 1 | 178730 |
| | 3/8" x 4" B.H.S.C.S. | 3 | 811076* |
| | 3/8" Lockwasher | 3 | 817334* |
| | 3/8" Flatwasher | 9 | 817410* |
| | 3/8" x 4 1/2" P.B.H.S.C.S. w/ Patch | 3 | 812077* |
| | 3/8" Hex Nut | 3 | 804200* |
| | 1/4" Hex Nut | 3 | 804351* |
| | 1/4" x 2 1/2" Hex Head Bolt | 3 | 800808* |
| | Post Topper | 3 | 178676* |
| | 3/8" x 1/2" P.B.H.C.S. w/Patch | 6 | 812049* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***




**NOTE:** HOLE DEPTHS INDICATED ON ALL GROUND PLANS ARE MEASURED FROM THE FINISHED SURFACE. SEE DETAIL 003. ALL FOOTING DIMENSIONS ARE BASED ON LEVEL FINISHED SURFACE.

## ***GROUND PLAN***

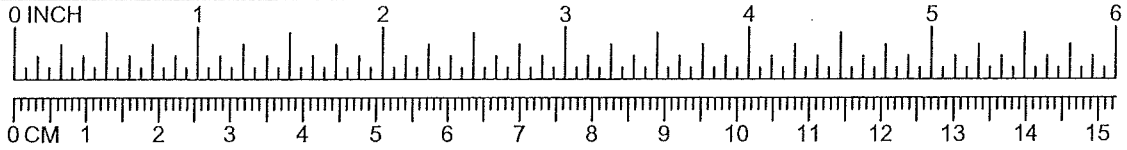
CONCRETE REQUIRED
.72 CUBIC YARDS
[.54 CUBIC METERS]

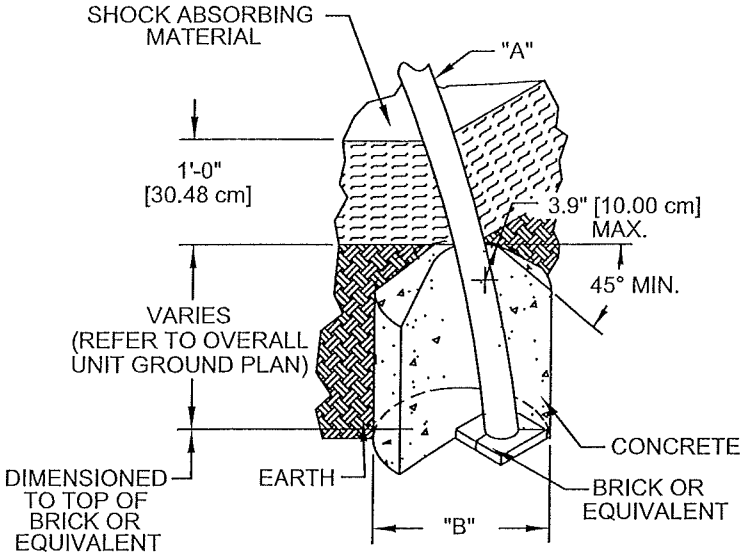
# DETAILS -for-
# 26087

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*



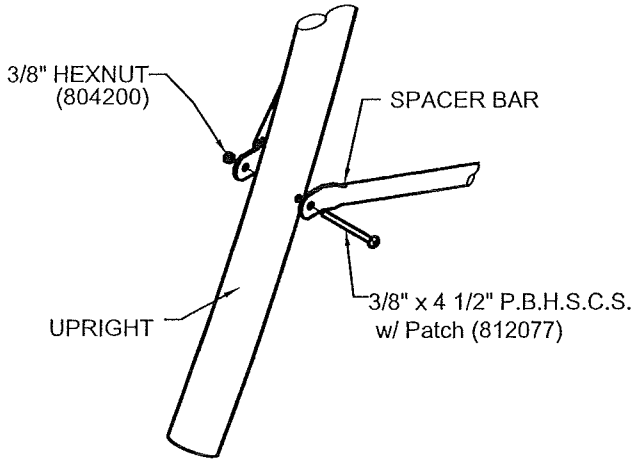




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| SWINGS | |
| 3 1/2" [8.89 cm] | 2'-0" [60.96 cm] |

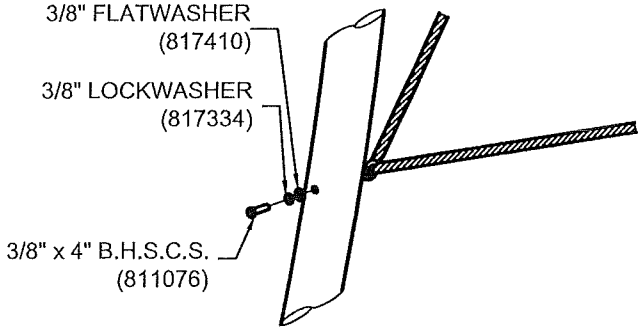
NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

003

SHOCK ABSOBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.




048



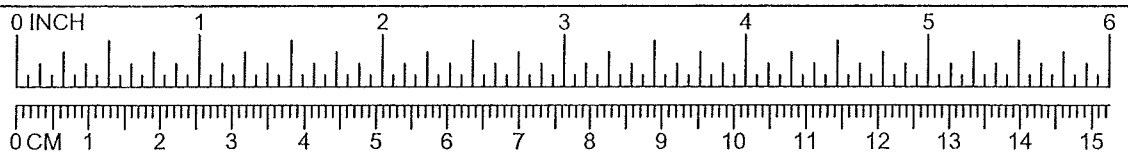

049

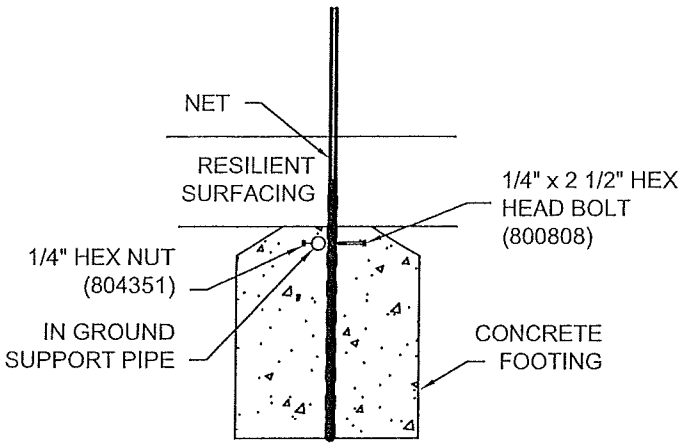
# DETAILS -for-
# 26087

*Important*

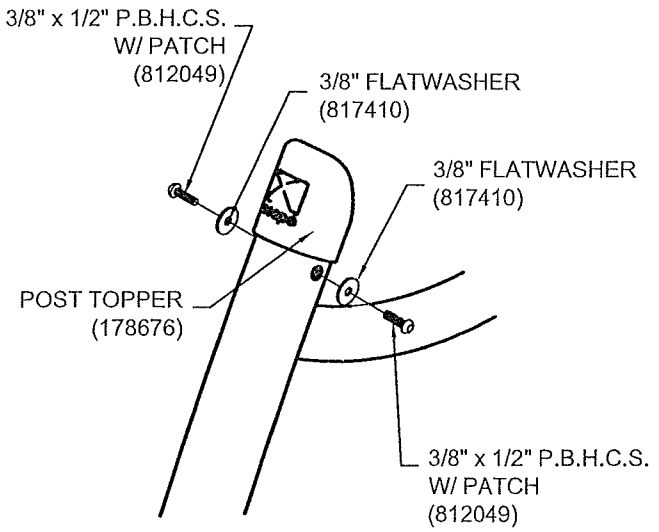
*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




054




063

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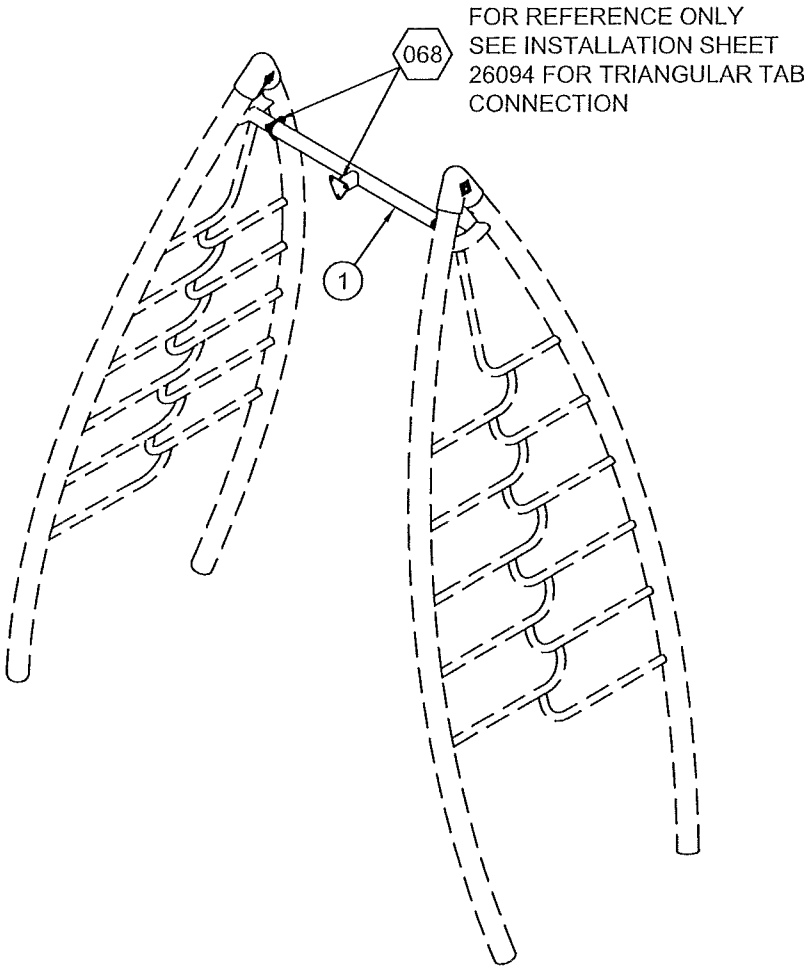
ISSUED/REVISED: 9/27/12

# 26091
# CROSS BEAM CONNECTOR

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

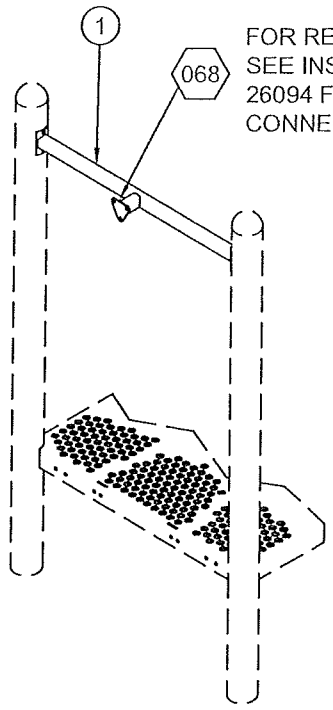
| | |
|---|---|
| SINGLE LINK CROSS BEAM | 26091 |
| DOUBLE LINK CROSS BEAM | 26090 |
| PS PLUS SINGLE LINK CROSS BEAM | 26092 |
| 45 1/2" PT SINGLE LINK CROSS BEAM | 26093 |
| 36" PT SINGLE LINK CROSS BEAM | 26155 |




***ASSEMBLY DRAWING***

**26091 SHOWN**

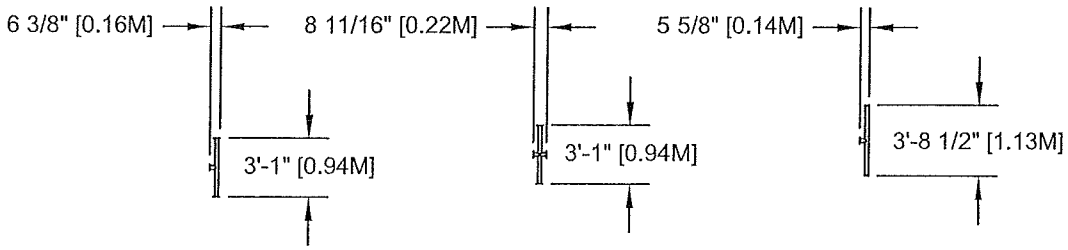
**26090 SIMILAR**



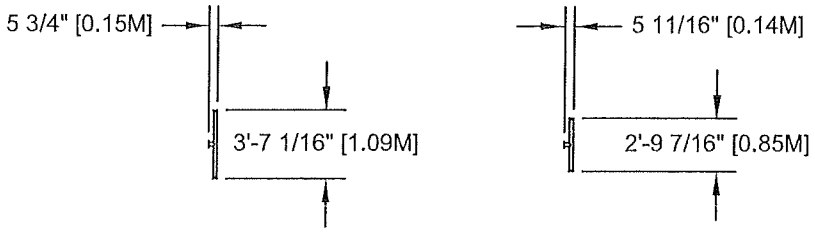

***ASSEMBLY DRAWING***

**26092 SHOWN**

**26093 & 26155 SIMILAR**




**26091** **26090** **26092**




**26093** **26155**

***TOP VIEWS***

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *No. REQ'D* | | | | | *PART NUMBER* |
|---|---|---|---|---|---|---|---|
| | | *26091* | *26090* | *26092* | *26093* | *26155* | |
| 1 | Single Link Cross Beam | 1 | 0 | 0 | 0 | 0 | 178827 |
| 1 | Double Link Cross Beam | 0 | 1 | 0 | 0 | 0 | 178569 |
| 1 | PS Plus Single Link Cross Beam | 0 | 0 | 1 | 0 | 0 | 178829 |
| 1 | 45 1/2" PrimeTime Single Link Cross Beam | 0 | 0 | 0 | 1 | 0 | 178831 |
| 1 | 36" PrimeTime Single Link Cross Beam | 0 | 0 | 0 | 0 | 1 | 202925 |
| | ***Hardware Complete*** | 0 | 0 | 1 | 1 | 1 | 178832 |
| | 3/8" X 1" P.B.H.C.S. w/Patch | 0 | 0 | 4 | 4 | 4 | 812050* |
| | 3/8" Lockwasher | 0 | 0 | 4 | 4 | 4 | 817334* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

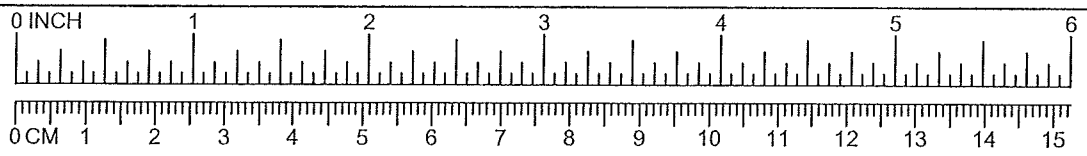
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

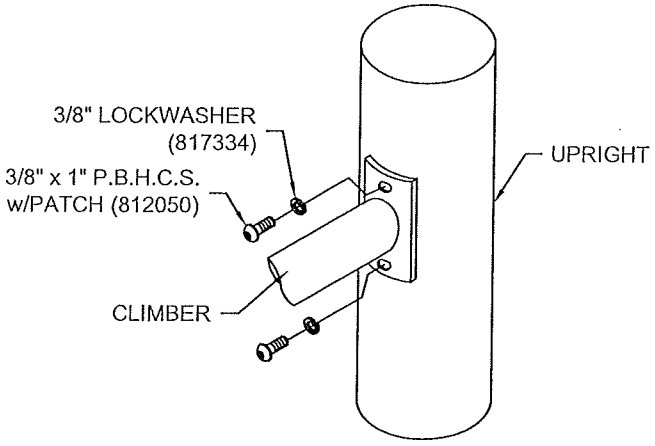
# DETAILS -for-
# 26091, 26090, 26092 26093 AND 26155

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

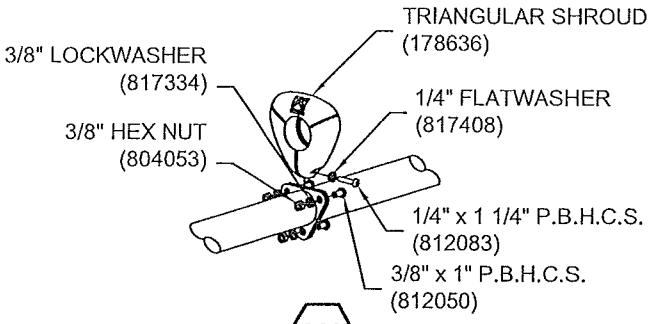
*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




029

STRETCH TRIANGULAR SHROUD OVER TRIANGLE TABS BEFORE INSTALLING 1/4" x 1 1/4" B.H.C.S.




068

NOTE: SEE INSTALLATION SHEET 26094 FOR RUBBER SHROUD CONNECTION DETAIL. HARDWARE FOR THIS CONNECTION IS LOCATED IN HARDWARE COMPLETE #178755

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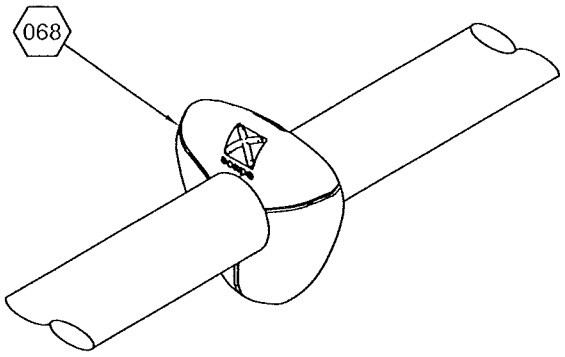
ISSUED/REVISED: 2/4/09

# 26094

# TRIANGULAR SHROUD

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE




## INSTRUCTIONS

1. Before assembling this equipment, read the enclosed *INSTALLER INSTRUCTIONS* in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the *ASSEMBLY DRAWING*. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.

## ASSEMBLY DRAWING

## PARTS LIST

| REF NO. | DESCRIPTION | No. REQ'D | PART NUMBER |
|---|---|---|---|
| | ***Hardware Complete*** | 1 | 178755 |
| | Triangular Shroud | 1 | 178636* |
| | 3/8" x 1" P.B.H.C.S. | 3 | 812050* |
| | 3/8" Lockwasher | 3 | 817334* |
| | 3/8" Hex Nut | 3 | 804053* |
| | 1/4" x 1 1/4" P.B.H.C.S. | 1 | 812083 |
| | 1/4" Flatwasher | 1 | 817408* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

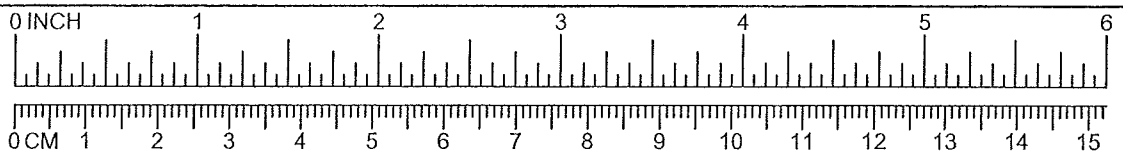
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

# DETAILS -for-
# 26094

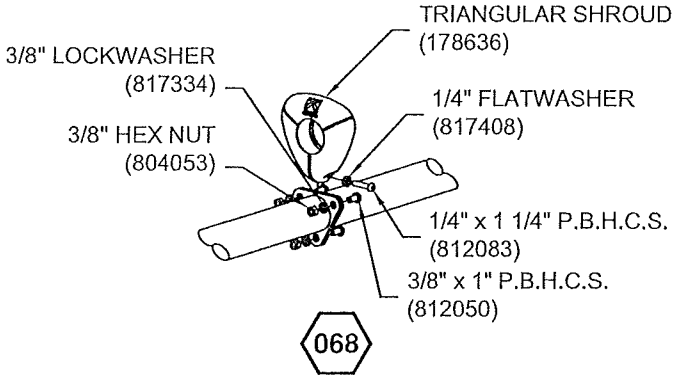
*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




STRETCH TRIANGULAR SHROUD OVER TRIANGLE TABS BEFORE INSTALLING 1/4" x 1 1/4" B.H.C.S.



**XSCAPE**

A PLAYCORE COMPANY GameTime

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1-800-235-2440

ISSUED/REVISED: 12/07/09

# 26105

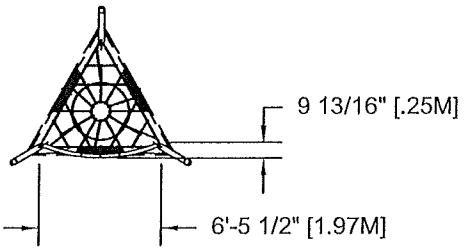
# SUPPORT RUNG FOR HELIOCENTRIX

⬡ = INSTALLATION DETAIL

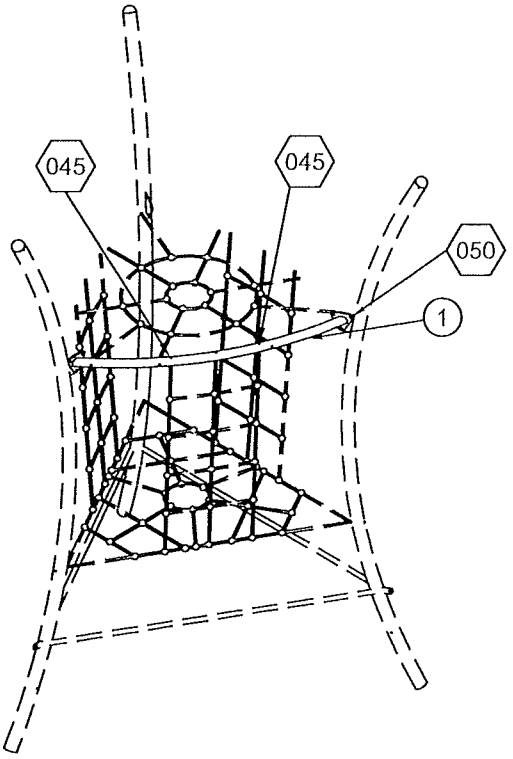
◯ = PARTS LIST REFERENCE

## *INSTRUCTIONS*

1. Before assembling this equipment, read the enclosed *INSTALLER INSTRUCTIONS* in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the *ASSEMBLY DRAWING*. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.




*TOP VIEW*




*ASSEMBLY VIEW*

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *NO. REQ'D* | *PART NUMBER* |
|---|---|---|---|
| 1 | Heliocentrix Top Bar | 1 | 178257 |
| | ***Hardware Complete*** | 1 | 178260 |
| | 3/8" x 3/4" P.B.H.C.S. | 3 | 812052* |
| | 3/8" Lockwasher | 9 | 817334* |
| | 3/8" Flatwasher | 6 | 817410* |
| | 3/8" Barrel Nut | 3 | 804804* |
| | 3/8" x 2 1/2" P.B.H.C.S. | 6 | 812057* |
| | 1/2" Flatwasher | 3 | 817412* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

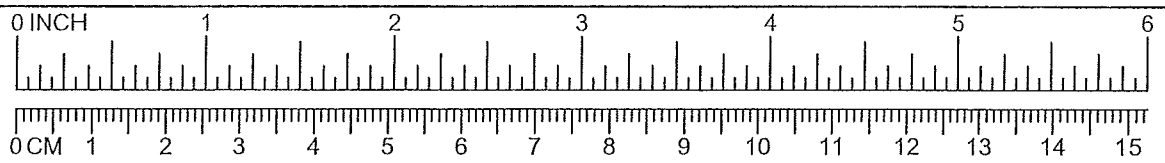
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

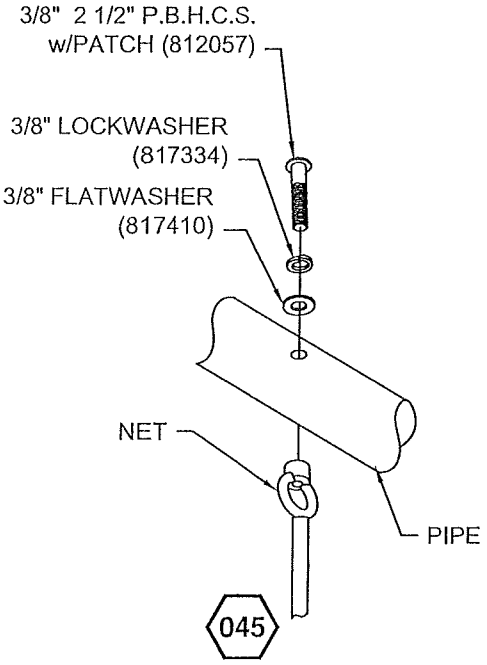
# DETAILS -for-
# 26105

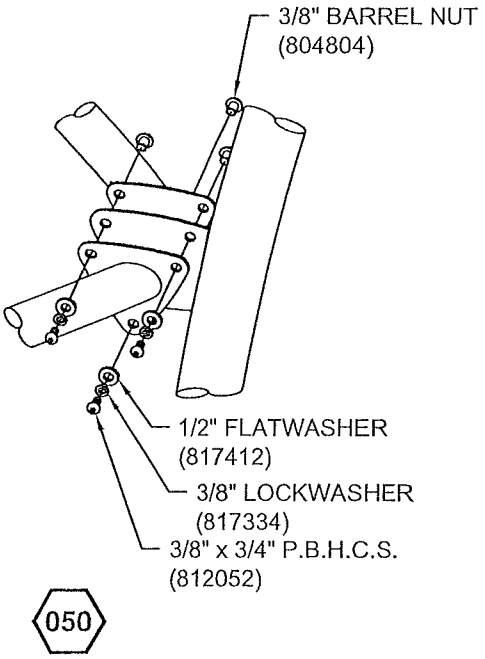
*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*



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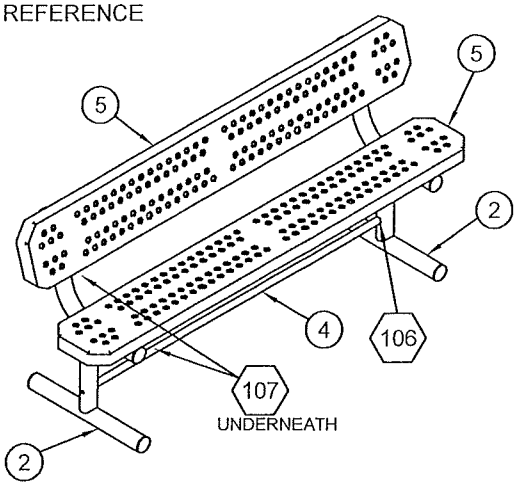
# 28008
# PARK BENCH

ISSUED/REVISED: 06/17/04

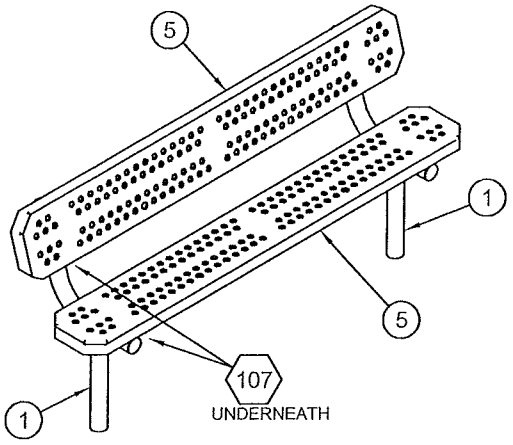
⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

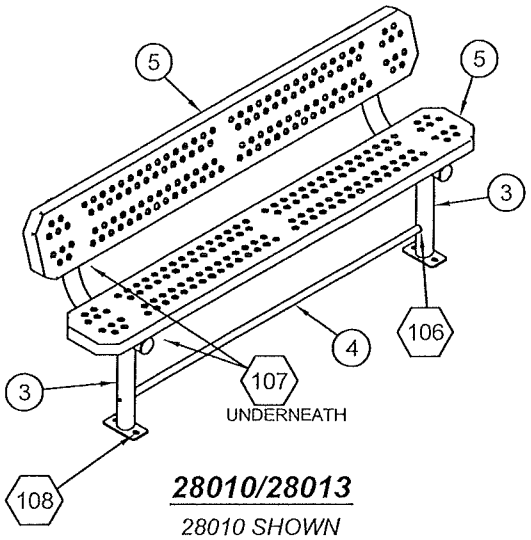
| | |
|---|---|
| 28008 | 6' PORTABLE |
| 28009 | 6' IN-GROUND |
| 28010 | 6' SURFACE MOUNT |
| 28011 | 8' PORTABLE |
| 28012 | 8' IN-GROUND |
| 28013 | 8' SURFACE MOUNT |




***28008/28011***
*28008 SHOWN*

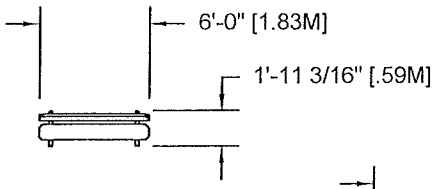



***28009/28012***
*28009 SHOWN*

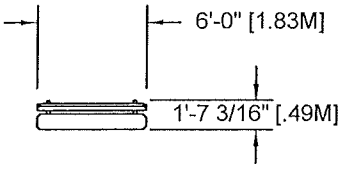



***28010/28013***
*28010 SHOWN*

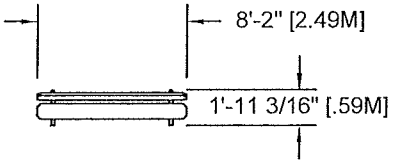
***TOP VIEWS***



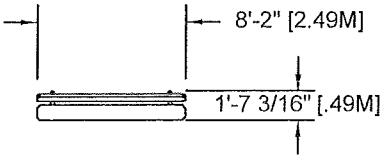

*28008*



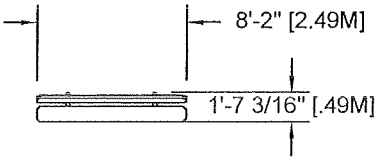

*28009/28010*




*28011*




*28013*




*28012*

## *SPECIFICATIONS*

*FRAME:* The frames shall be fabricated of 2-3/8" O.D. galvanized pipe.

*SEAT AND BACK:* The seat shall be punched steel with a plastisol coating.

*HARDWARE:* All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

*SPECIFICATIONS:* GAMETIME® has a policy of continuous improvement and reserves the right to discontinue or change specifications without notice.

## STOP IMPORTANT PRODUCT INFORMATION AND SAFETY WARNINGS STOP

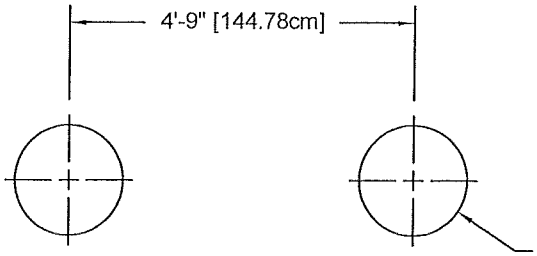
☐ ALWAYS FOLLOW INSTALLATION INSTRUCTIONS WHEN ERECTING EQUIPMENT.

☐ GAMETIME® PROVIDES ITS CUSTOMERS WITH COMPLETE SPECIFICATION SHEETS AND INSTALLATION INSTRUCTIONS. THE SPECIFICATION SHEET CONTAINS THE LISTING OF EVERY PART USED IN A PIECE OF EQUIPMENT AND SHOULD BE KEPT IN THE CUSTOMER'S FILES FOR ACCURATE REFERENCE WHEN REPLACEMENT PARTS ARE NEEDED.

☐ Regular maintenance is necessary on this and all park and recreational equipment to ensure the safety of the user.

☐ Proper maintenance of GAMETIME® equipment requires regular tightening of all bolts, nuts, and set screws.

☐ Regular checking of all parts, castings, etc., should be made. If a part is broken or worn it should be replaced immediately.




Concrete Required:
(28009/28012)
.22 Cubic Yards
[.17 Cubic Meters]

1'-6" [45.72cm] DIA. x
2'-0" [60.96cm] DEEP
(2 REQUIRED)

***GROUND PLAN***

*28009/28012*

NOTE: Hole depths indicated on all ground plans are measurd from the finished surface. See Detail 109. All footing dimensions are based on level finished surface.

## *INSTALLATION INSTRUCTIONS*

*NOTE: THIS SPECIFICATION BOOKLET SHOULD BE KEPT IN CUSTOMERS FILE FOR FUTURE REFERENCE.*

*NOTE:* Do not over tighten bolts. To over tighten may cause buckling or dimpling of some parts.

*NOTE:* Read installation instructions thoroughly before starting assembly. Pour concrete only after final assembly is complete. Bracing material may be required during assembly.

*NOTE:* Do not tighten any nuts, bolts, rods, etc. until the unit is completely assembled.

*NOTE:* Place a brick or equivalent at the bottom of ground holes (where shown), to provide a solid foundation. Allow for this in hole depth.

*STEP 1:* Position the leg assemblies the correct distance apart.

*STEP 2:* Bolt the plastisol seat to leg assemblies, using Detail 107.

*STEP 3:* Bolt Horizontal Leg Brace to Leg Assembly using Detail 106. NOTE: Not required on in-ground model.

*STEP 4:* Make sure the frames are square. Tighten all nuts. Loctite (supplied by others) should be used on all threaded hardware.

*IN-GROUND*

*STEP 5:* Locate position of holes for legs using the assembled bench as a template.

*STEP 6:* Dig holes and place a brick or equivalent in the bottom of each to provide a solid foundation for the bench legs. See Detail 109.

*NOTE:* Due to extremes in weather and soil conditions, hole sizes may have to be increased to meet local conditions.

*STEP 7:* Pour concrete to within 0'-4" [10.16 cm] of finished surface and fill the remainder with surfacing, and/or backfill. Allow concrete 48 hours minimum, to harden before using the park bench.

*SURFACE MOUNT*

*STEP 8:* Place assembled bench in desired location on a concrete slab or flooring. Mark the location of the holes using the mounting plates as templates. Move bench and drill 1/2" diameter holes 2" deep into concrete or flooring as marked. Reposition bench over holes and mount to the concrete as shown in Detail 108.

## *PARTS LIST*

| *REF. NO.* | *DESCRIPTION* | *NUMBER REQUIRED* | | | | | | *PART NUMBER* |
|---|---|---|---|---|---|---|---|---|
| | | *28008* | *28009* | *28010* | *28011* | *28012* | *28013* | |
| 1 | Leg Ass'y, In-Ground | 0 | 2 | 0 | 0 | 2 | 0 | 152099 |
| 2 | Leg Ass'y, Portable | 2 | 0 | 0 | 2 | 0 | 0 | 157851 |
| 3 | Leg Ass'y, Surface Mount | 0 | 0 | 2 | 0 | 0 | 2 | 157704 |
| 4 | Horizontal Support | 1 | 0 | 1 | 0 | 0 | 0 | 157796 |
| 4 | Horizontal Support | 0 | 0 | 0 | 1 | 0 | 1 | 169450 |
| 5 | 6' Punched Bench, Coated | 2 | 2 | 2 | 0 | 0 | 0 | 160893 |
| 5 | 8' Punched Bench, Coated | 0 | 0 | 0 | 2 | 2 | 2 | 160505 |
| | Hardware Complete | 0 | 1 | 0 | 0 | 1 | 0 | 157867 |
| | Hardware Complete | 1 | 0 | 0 | 1 | 0 | 0 | 157868 |
| | Hardware Complete | 0 | 0 | 1 | 0 | 0 | 1 | 157869 |
| | 1/2" x 2-3/4" Wedge Anchor | 0 | 0 | 4 | 0 | 0 | 4 | 800074* |
| | 3/8" x 1-1/4" Hex Head Bolt | 8 | 8 | 8 | 8 | 8 | 8 | 801004* |
| | 3/8" x 2-3/4" Hex Head Bolt | 2 | 0 | 2 | 2 | 0 | 2 | 801010* |
| | 1/2" Lockwasher | 0 | 0 | 4 | 0 | 0 | 4 | 817342* |
| | 3/8" Flatwasher | 16 | 16 | 16 | 16 | 16 | 16 | 817410* |
| | 3/8" Lockwasher | 10 | 10 | 10 | 10 | 10 | 10 | 817334* |
| | 3/8" Hex Nut | 8 | 8 | 8 | 8 | 8 | 8 | 804053* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

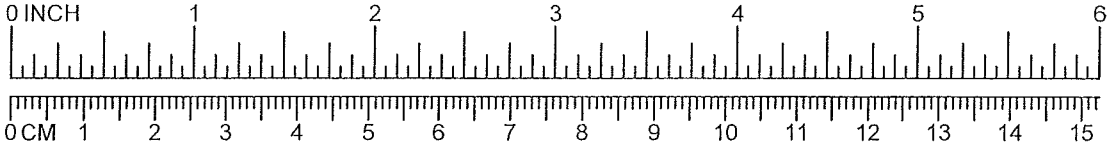
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

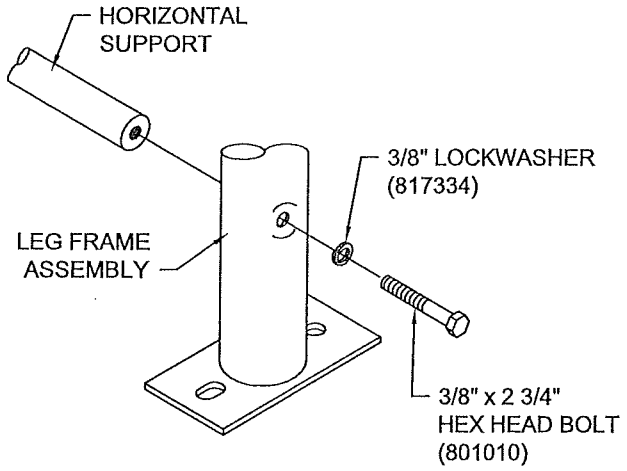
# DETAILS -for-
# 28008 thru 28013

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*

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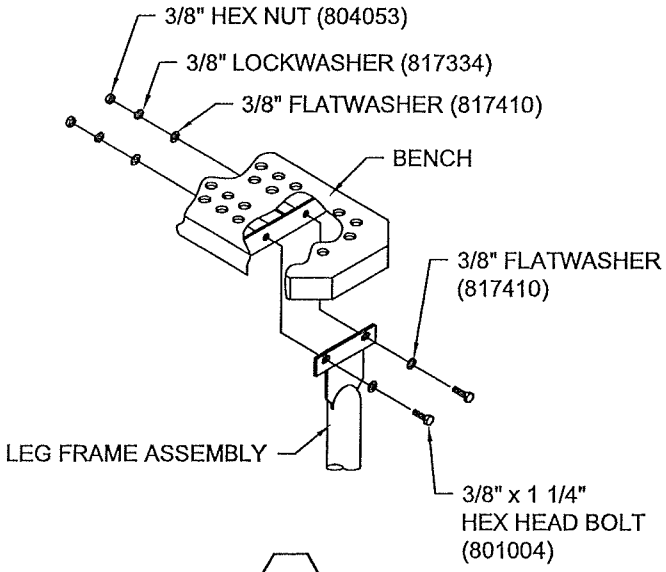


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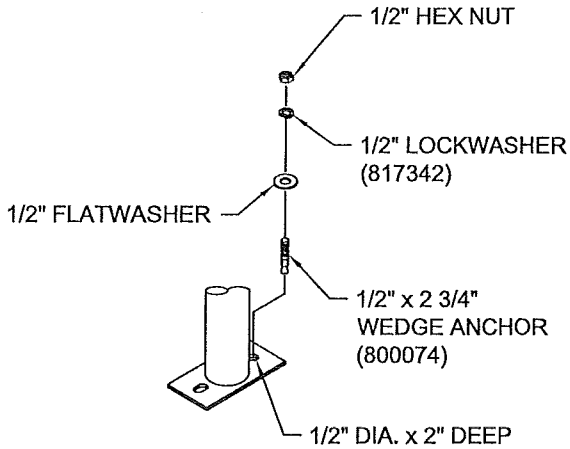


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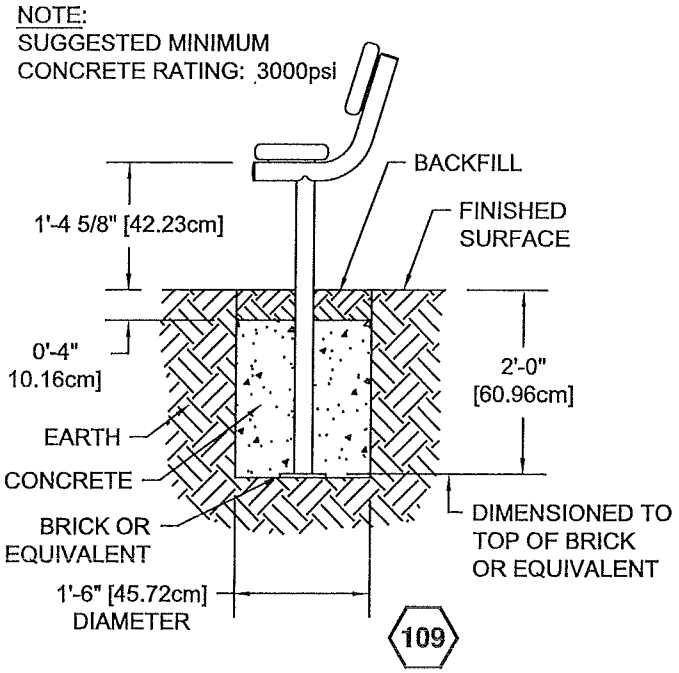



109

NEW POWERSCAPE PLUS

A PLAYCORE COMPANY GameTime

Enriching Childhood Through Play.

1-800-235-2440

ISSUED/REVISED: 3/24/10

# 80000
# DECKS

⬡ = INSTALLATION DETAIL

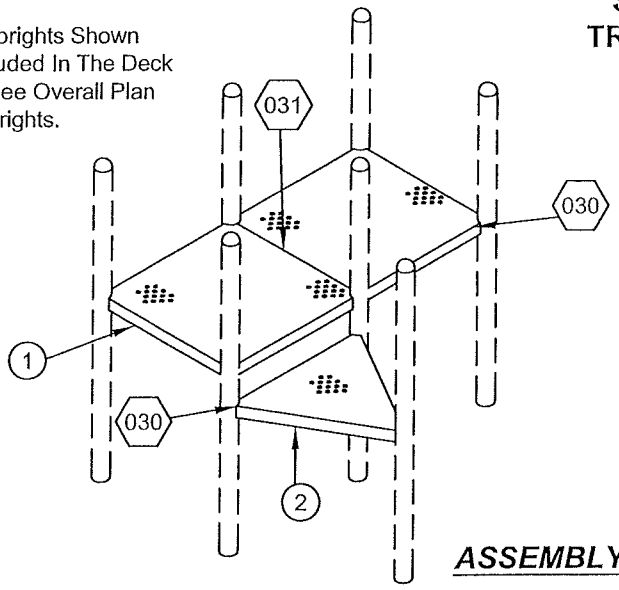
◯ = PARTS LIST REFERENCE

Note: The Uprights Shown Are Not Included In The Deck Packages. See Overall Plan View For Uprights.

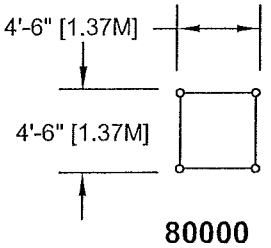
SQUARE 80000
TRIANGLE 80001

## *INSTALLATION INSTRUCTIONS*

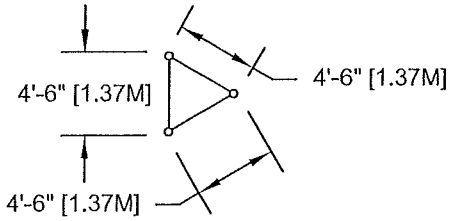
1.Before assembling this equipment, read the enclosed *Installer Instructions* in the installation booklet; follow all the instructions during assembly.
2. Dig ground holes per Ground Plan. See system topview for quantity.
3. Attach deck to uprights using (1) Detail 030 per upright.
4. Loctite (supplied by others) should be used on all threaded hardware.
5. When decks are at the same height as shown in Assembly Drawing, fasten together using (2) Detail 031.
***NOTE:*** Remove vinyl from the two inside holes, with 1/2" bit.




***ASSEMBLY DRAWING***




***TOP VIEWS***




**80000** **80001**

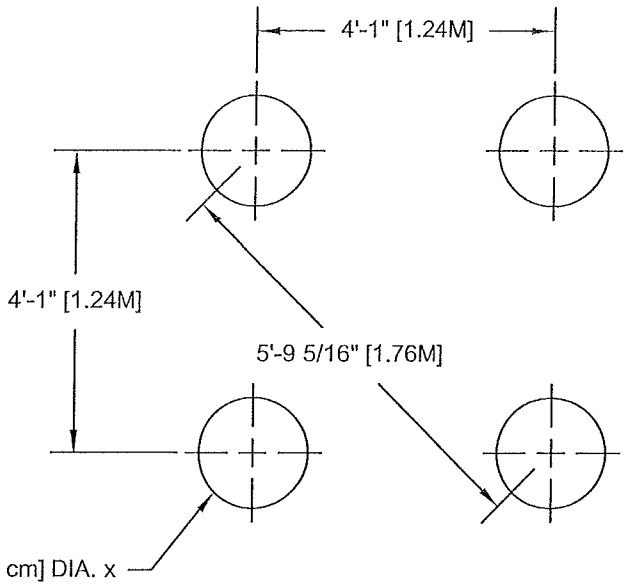
## *PARTS LIST*

| REF NO. | DESCRIPTION | 80000 | 80001 | PART NUMBER |
|---|---|---|---|---|
| 1 | Punched Deck, Square | 1 | 0 | 163307 |
| 2 | Punched Deck, Triangle | 0 | 1 | 163317 |
| | *Hardware Complete* | 1 | 0 | 161254 |
| | *Hardware Complete* | 0 | 1 | 161255 |
| | 3/8" x 3/4" P.B.H.C.S. w/Patch | 2 | 2 | 812052* |
| | 3/8" x 1 1/2" P.B.H.C.S. | 8 | 6 | 810053* |
| | 3/8" Tee-Nut | 2 | 2 | 804556* |
| | 3/8" Lockwasher | 10 | 8 | 817334* |
| | 3/8" Flatwasher (1 1/4" O.D.) | 10 | 8 | 817424* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

PlayCore Moving play forward.

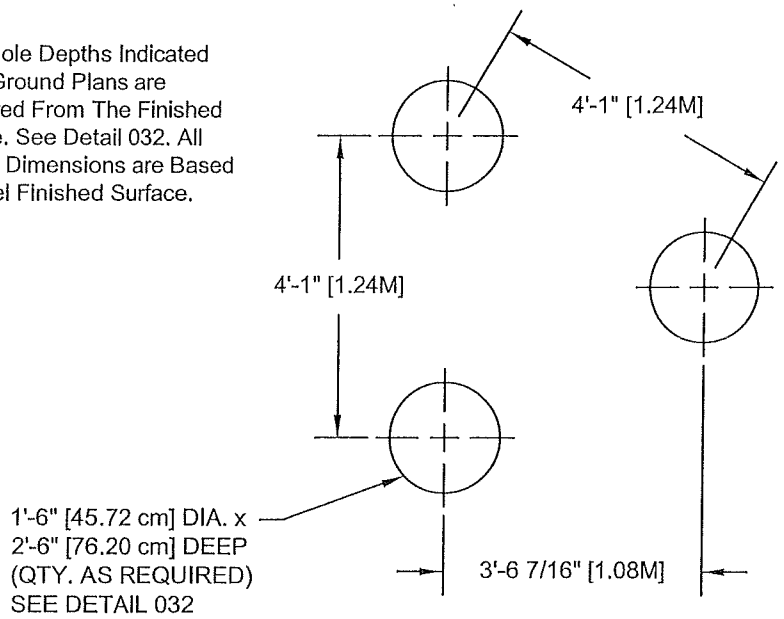
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***




**80000**

Concrete Required
.10 Cubic Yards [.07 cm]
Per Upright Ground Hole

Note: Hole Depths Indicated on All Ground Plans are Measured From The Finished Surface. See Detail 032. All Footing Dimensions are Based on Level Finished Surface.




**80001**

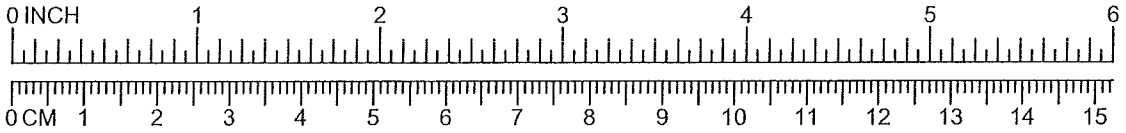
## *GROUND PLANS*

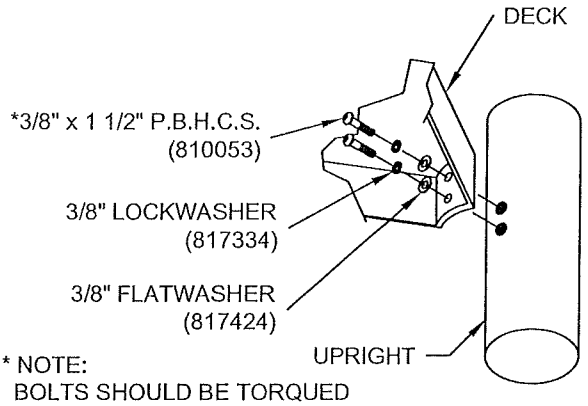
# DETAILS -for- 80000 & 80001

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

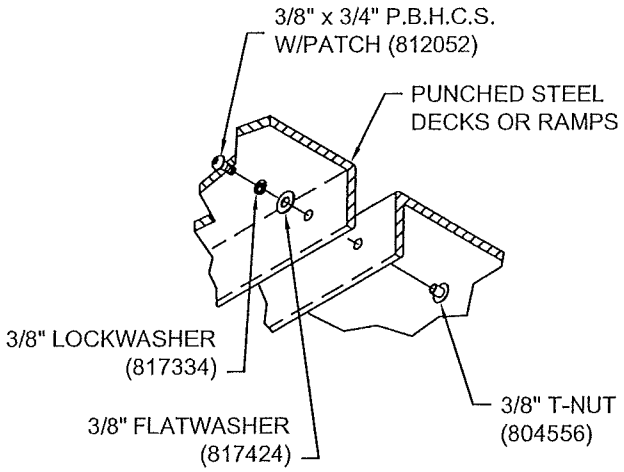
*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*



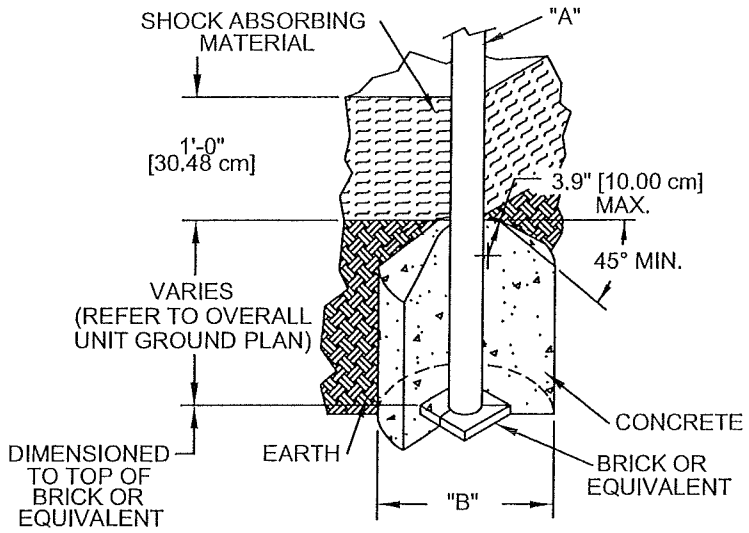

* NOTE:
BOLTS SHOULD BE TORQUED FROM 20-25 FT. LBS. FOR PROPER INSTALLATION.

* NOTE:
AFTER ASSEMBLY IS COMPLETED, PEEN FLATWASHERS TO MATCH RADIUS OF UPRIGHT.




031

030




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 1/16" [2.70 cm] | 1'-2" [35.56 cm] |
| 1 5/16" [3.33 cm] | 1'-2" [35.56 cm] |
| 1 5/8" [4.13 cm] | 1'-2" [35.56 cm] |
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 2 3/8" [6.03 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| 5" [12.70 cm] | 1'-6" [45.72cm] |
| TRACK RIDE & SWINGS | |
| 5" [12.70 cm] | 2'-0" [60.96 cm] |
| TREE SCAPE | |
| 5" [12.70 cm] | 4'-0" [121.92 cm] |

NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1 ONLY
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

032

SHOCK ABSORBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.

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ISSUED/REVISED: 9/4/08

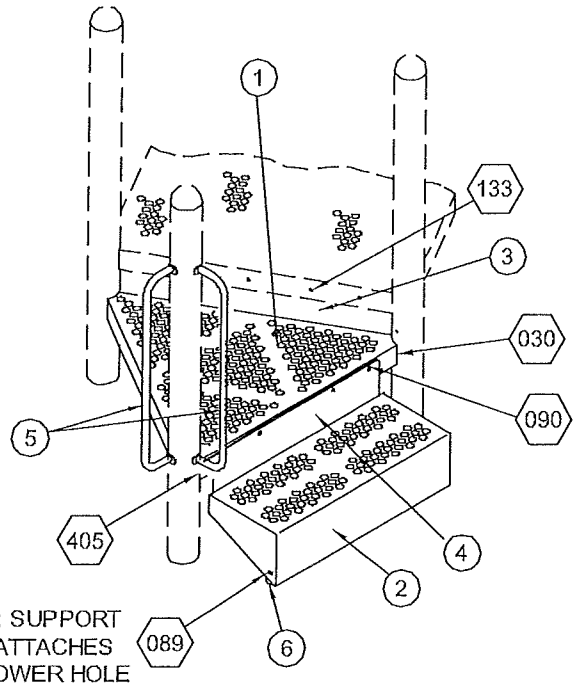
# 80688
# TRANSFER PLATFORM

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

## *INSTALLATION INSTRUCTIONS*

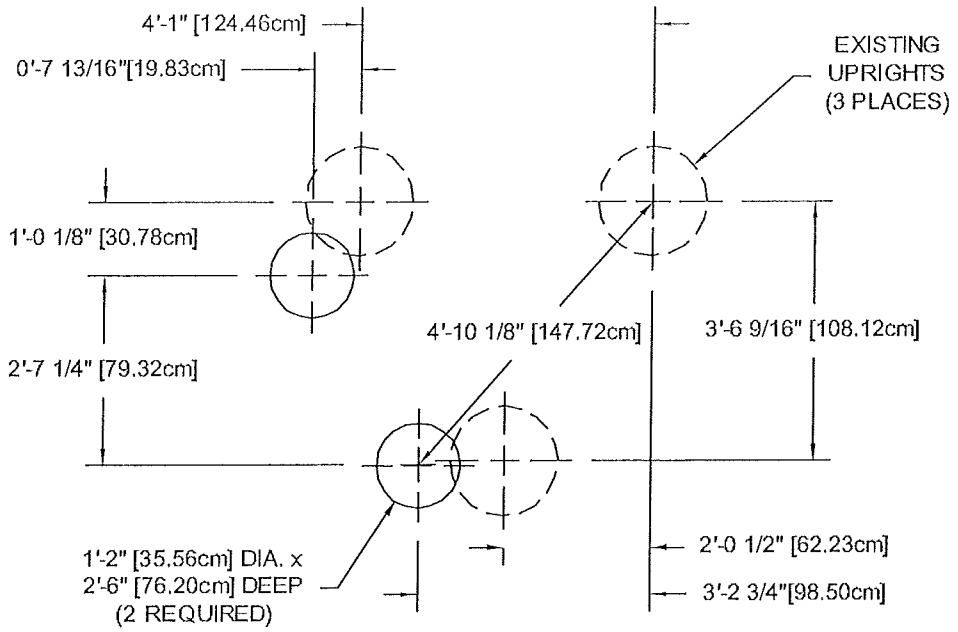
1. Before assembling this equipment, read the enclosed INSTALLER INSTRUCTIONS in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the ASSEMBLY DRAWING. Refer to the assembly details for the specific hardware required in each connection.
3. Loctite (supplied by others) should be used on all threaded hardware.



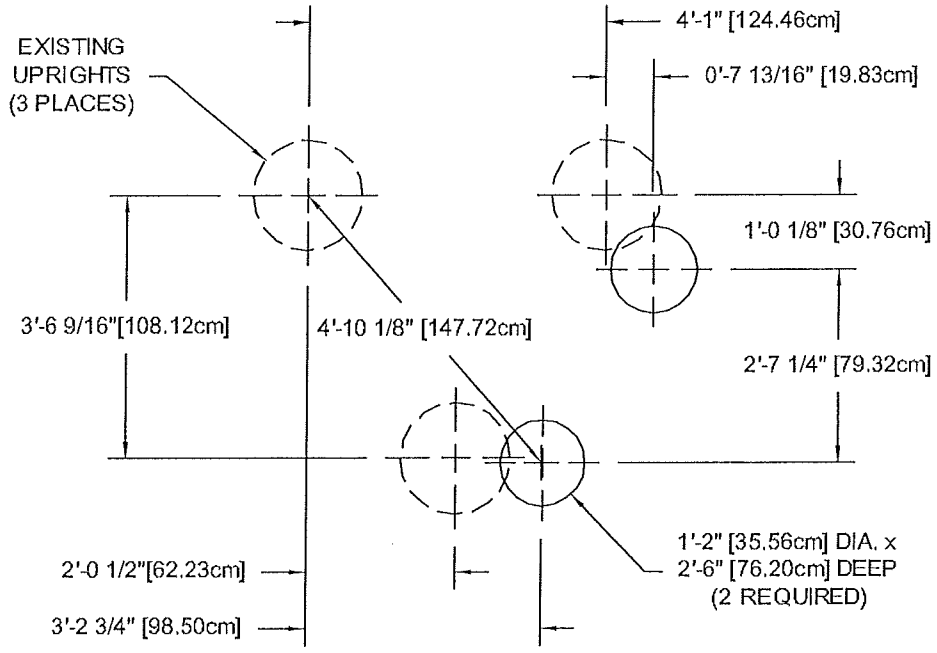

NOTE: SUPPORT PIPE ATTACHES TO LOWER HOLE ON PLATFORM.

80661
RIGHT ORIENTATION SHOWN

## *ASSEMBLY DRAWING*




LEFT ORIENTATION SHOWN

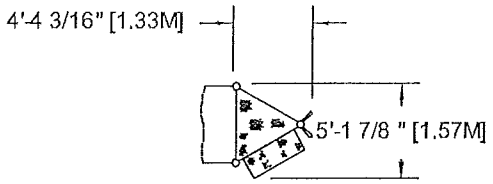



RIGHT ORIENTATION SHOWN

NOTE: HOLE DEPTHS INDICATED ON ALL GROUND PLANS ARE MEASURED FROM THE FINISHED SURFACE. SEE DETAIL 032. ALL FOOTING DIMENSIONS ARE BASED ON LEVEL FINISHED SURFACE.

Concrete Required:
.12 Cubic Yards
[.09 Cubic Meters]

## *GROUND PLANS*




*TOP VIEW*

## *PARTS LIST*

| REF NO. | DESCRIPTION | NO. REQ'D. | PART NUMBER |
|---|---|---|---|
| 1 | Triangle Deck | 1 | 163317 |
| 2 | 8" Modular Platform | 1 | 158921 |
| 3 | Kick Plate | 1 | 153544 |
| 4 | Kick Plate | 1 | 153545 |
| 5 | Handhold | 2 | 177207 |
| 6 | Modular Platform Support Pipe | 2 | 168470 |
| | *Hardware Complete* | 1 | 177018 |
| | 3/8" Flatwasher | 8 | 817410* |
| | 3/8" Lockwasher | 32 | 817334* |
| | 3/8" x 1 1/4" P.B.H.C.S. w/Patch | 8 | 812051* |
| | 3/8" x 1" P.B.H.C.S. w/Patch | 8 | 812050* |
| | 3/8" Flatwasher | 10 | 817424* |
| | 3/8" T-Nut | 10 | 804556* |
| | 3/8" x 2" P.B.H.C.S. w/Patch | 2 | 812055* |
| | 3/8" Hex Nut | 8 | 804053* |
| | 3/8" x 1 1/2" P.B.H.C.S. | 6 | 810053* |
| | 3/8" x 3/4" P.B.H.C.S. | 8 | 812052* |
| | 1/2" Flatwasher | 8 | 817412* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

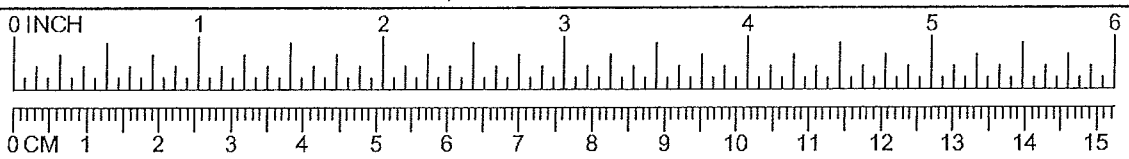
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

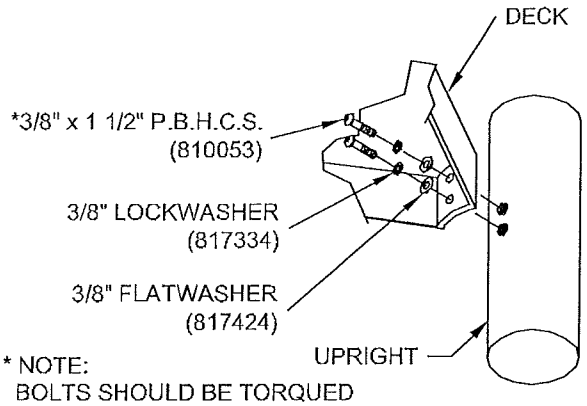
# DETAILS -for-
# 80688

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*

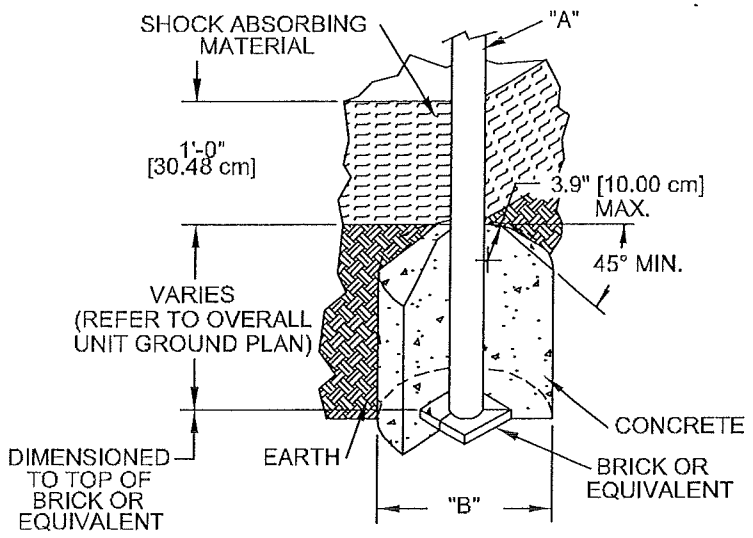



* NOTE:
BOLTS SHOULD BE TORQUED FROM 20-25 FT. LBS. FOR PROPER INSTALLATION.

* NOTE:
AFTER ASSEMBLY IS COMPLETED, PEEN FLATWASHERS TO MATCH RADIUS OF UPRIGHT.

030




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 1/16" [2.70 cm] | 1'-2" [35.56 cm] |
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| TREE SCAPE | |
| 5" [12.70 cm] | 4'-0" [121.92 cm] |

NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1 ONLY
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

032

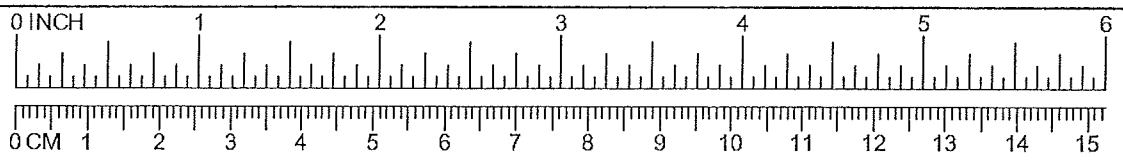
SHOCK ABSORBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.

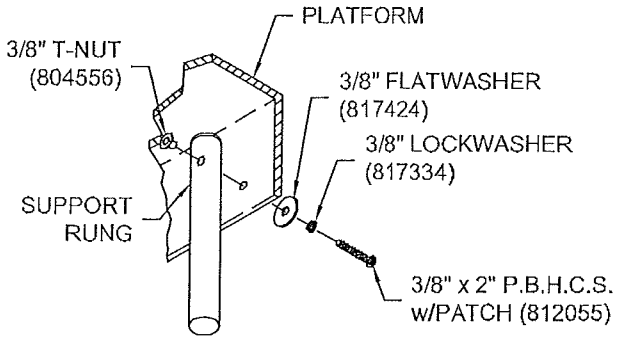
# DETAILS -for-
# 80688

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*

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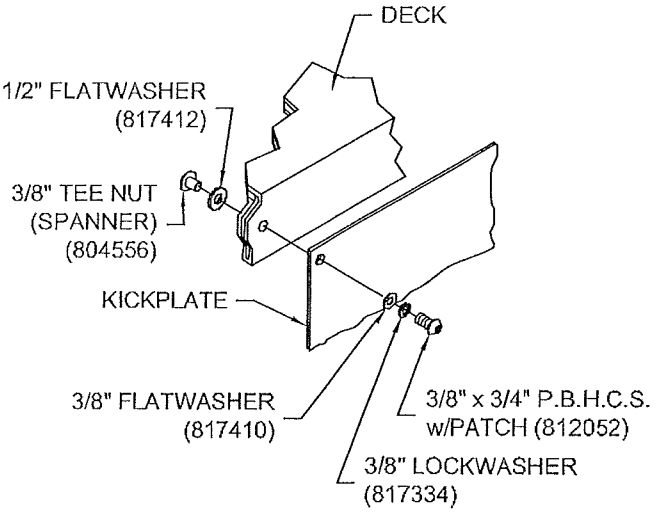


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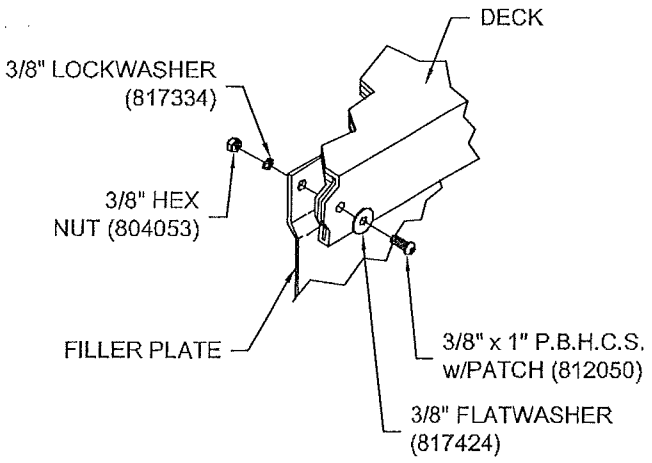


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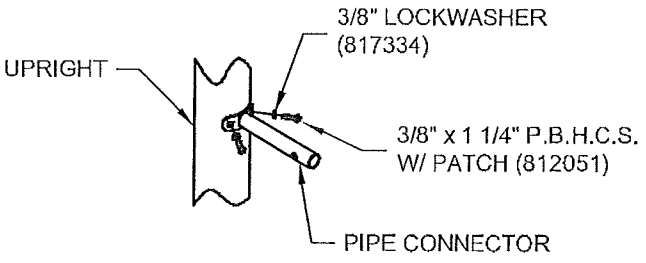


405

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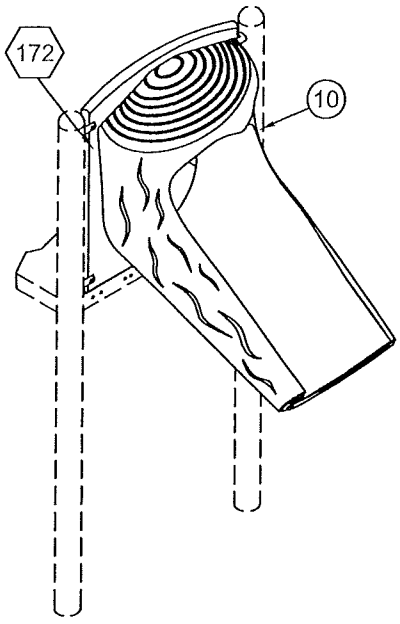
ISSUED/REVISED: 09/23/12

# 81274
# WILDER SLIDE

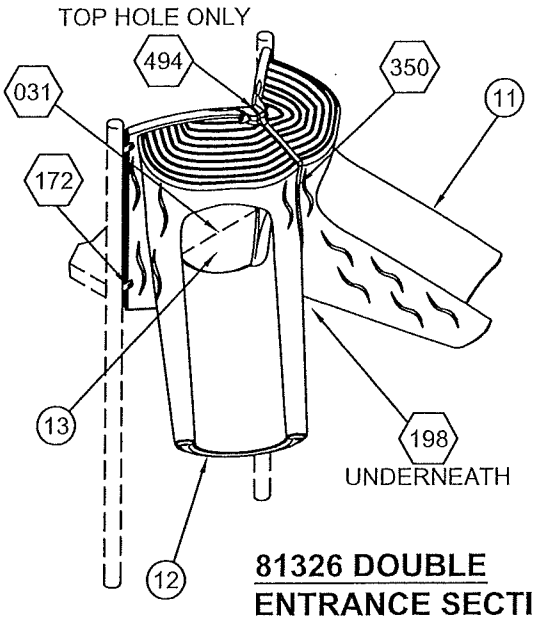
⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

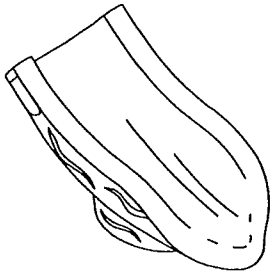
| | |
|---|---|
| EXIT SECTION | 81274 |
| STRAIGHT SECTION | 81275 |
| LEFT CURVE | 81276 |
| RIGHT CURVE | 81277 |
| 3' SLIDE SUPPORT | 81278 |
| 4' SLIDE SUPPORT | 81279 |
| 1' EXIT SECTION | 81323 |
| SPIRAL SECTION | 81324 |
| ENTRANCE SECTION | 81325 |
| DOUBLE ENTRANCE SECTION | 81326 |
| OUTRIGGER | 81330 |



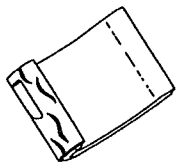

81325 ENTRANCE SECTION
*ASSEMBLY DRAWING*



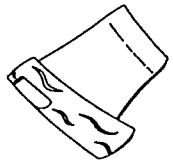

81326 DOUBLE ENTRANCE SECTION
*ASSEMBLY DRAWING*



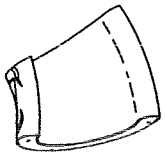
81274 EXIT SECTION



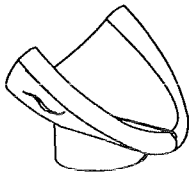
81275 STRAIGHT SECTION



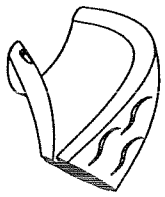
81276 LEFT CURVE



81277 RIGHT CURVE



81323 1' EXIT SECTION



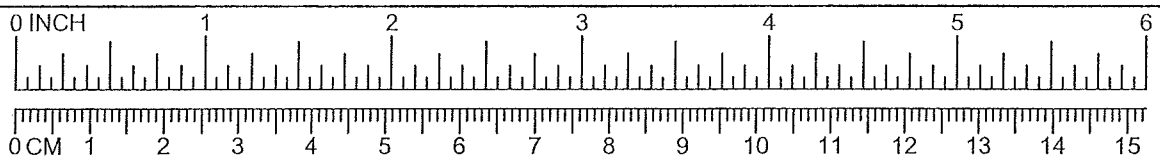
81324 SPIRAL SECTION

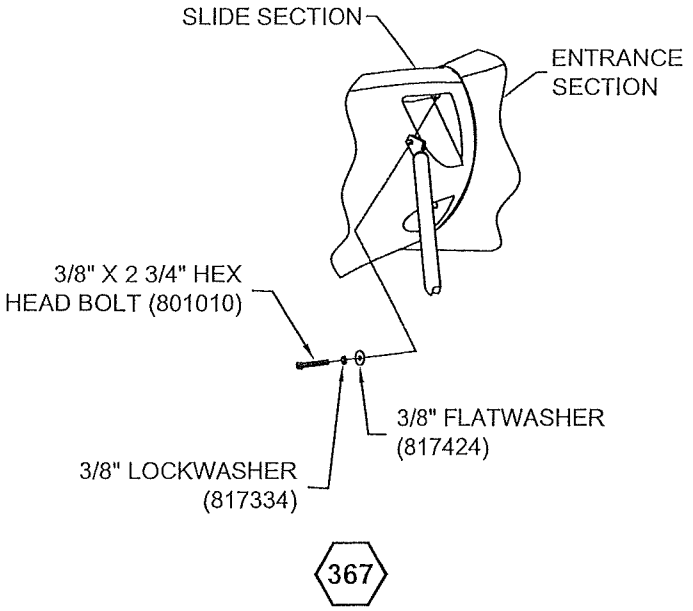
# DETAILS -for-
# 81274-81279 & 81323-81326 & 81330

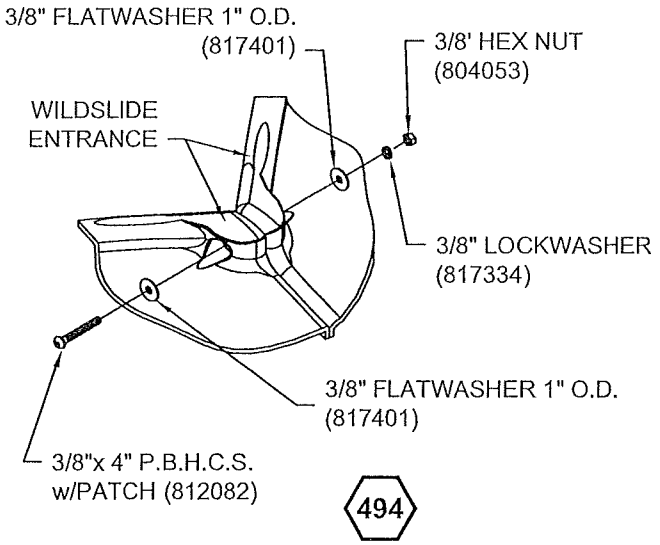
*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*



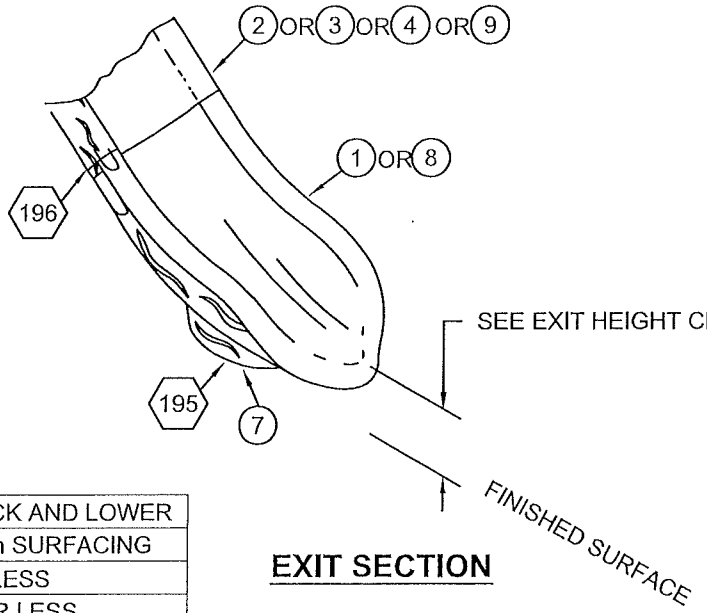



**81279 4'**
**SLIDE SUPPORT**

**81278 3'**
**SLIDE SUPPORT**

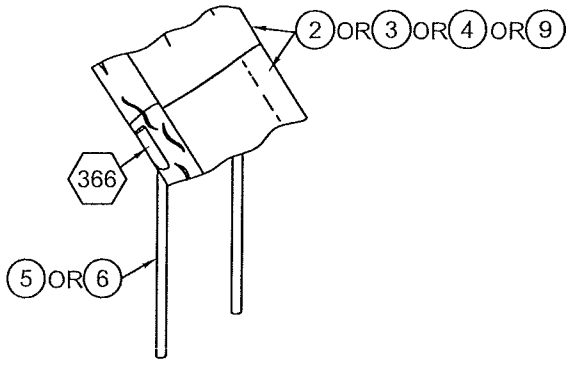
**81330**
**OUTRIGGER**




**EXIT SECTION**

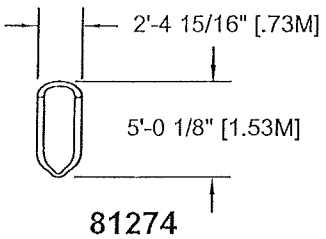
| EXIT HEIGHT CHART -for- 4' DECK AND LOWER | |
|---|---|
| STANDARD | EXIT HEIGHT from SURFACING |
| ASTM | 11" OR LESS |
| CSA | 275mm OR LESS |
| EN | 200mm OR LESS |

| EXIT HEIGHT CHART -for- 4' 6" DECK AND HIGHER | |
|---|---|
| STANDARD | EXIT HEIGHT from SURFACING |
| ASTM | 7" TO 15" |
| CSA | 175mm TO 380mm |
| EN | 350mm OR LESS |

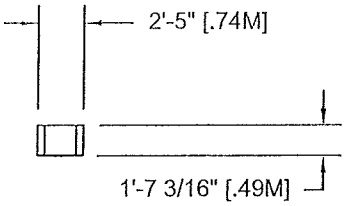



**SLIDE SECTIONS**
**w/SUPPORTS**

***ASSEMBLY DRAWINGS***




**81274**

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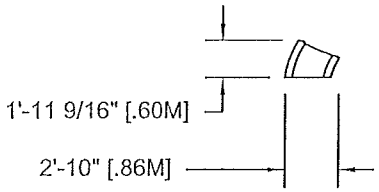
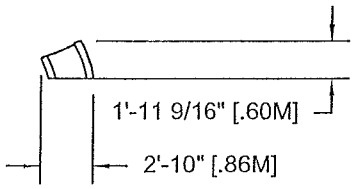



**81276**

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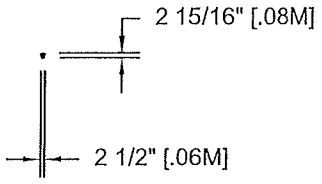
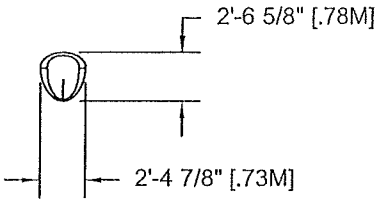



**81278, 81279 & 81330**

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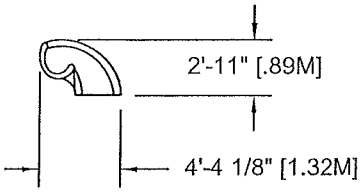


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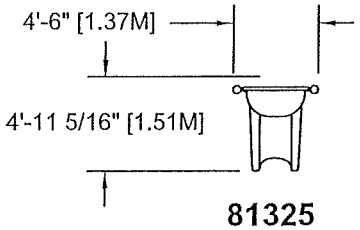


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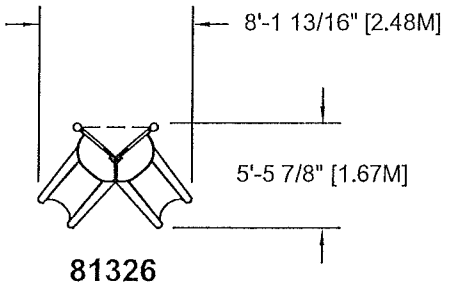
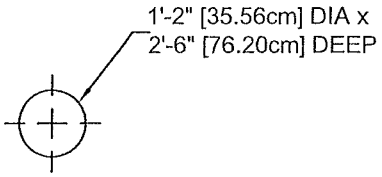



**81326**

## *TOP VIEWS*

NOTE: HOLE DEPTHS INDICATED ON ALL GROUND PLANS ARE MEASURED FROM THE FINISHED SURFACE. SEE DETAIL 005 & 006. ALL FOOTING DIMENSIONS ARE BASED ON A LEVEL FINISHED SURFACE.




## *GROUND PLAN*

CONCRETE REQUIRED
.06 CUBIC YARDS
[.05 CUBIC METERS]

PER GROUND HOLE
(DETERMINED BY CONFIGURATION)

NOTE:
NUMBER OF GROUND HOLES REQUIRED WILL BE DETERMINED BY SLIDE CONFIGURATION.

## *INSTALLATION INSTRUCTIONS*

1. Before assembling this equipment, read the enclosed *INSTRUCTIONS INSTALLER* in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown *ASSEMBLY DRAWING.* Refer to the assembly details for the specific hardware required in each connection.
3. Assemble slide on the ground, then Install on the play system.
4. Bolt each section together using the hardware shown in Detail-196. Hand tighten the 4 bolts that join each section.
5. Once all sections are bolted together, hand tight, Install the slide to the play system. For 81326 Double Entrance, use the 5" hex bolt to clamp the pieces together. On detail 350, after all connections are made replace 5" hex head bolt with 3 1/4" button head bolt.
6. Starting at the top section, tighten the bolts with a wrench. Tighten the top 2 bolts first, then the bottom 2 bolts second, as shown, See Figure #1.
7. It is important that each seam between slide sections are as tight as possible. Be sure that the seams are flush or higher on the upper piece. See Figure #2.
8. After tightening all the pieces, if seam adjustment is necessary, slightly loosen the bolt in the area to be adjusted, using dead blow hammer on one side and a 2x4 backer on the other, hit the slide with the hammer to adjust, See Figure #3.
9. After the slide is adjusted and the bolts are tight, locate the slide support , loosen the 2 bottom bolts and slip the slide support behind the bolt and washers and re-tighten, See Detail-366.
10. If installing an 81326 with three spiral sections, an 81330 outrigger is required. See outrigger assembly for details.

Note: When using the spiral sections in a configuration that comes near the uprights, the distance from the inside bedway and the upright shall be a min. of 21".

Note: 81276 and 81277 curve sections can <u>not</u> be together in a slide without a 81275 straight section between them.

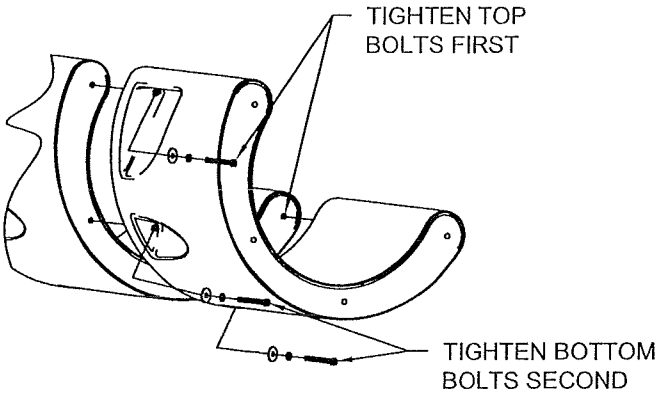



**FIGURE #1**

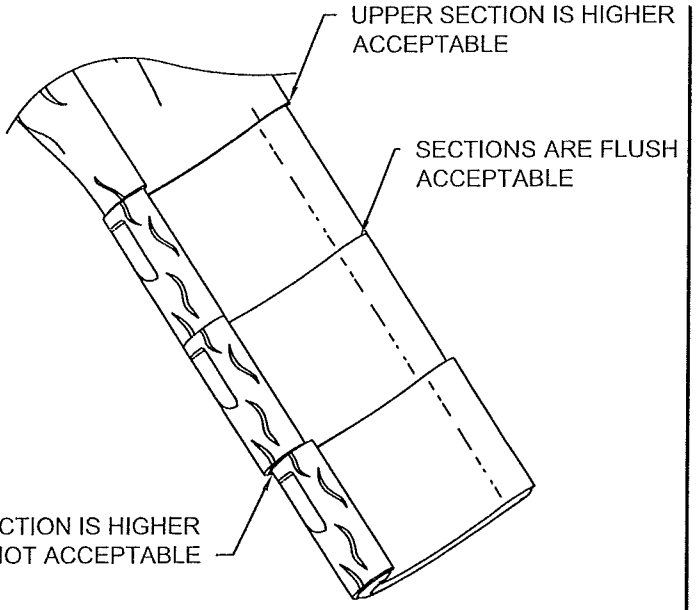



**FIGURE #2**

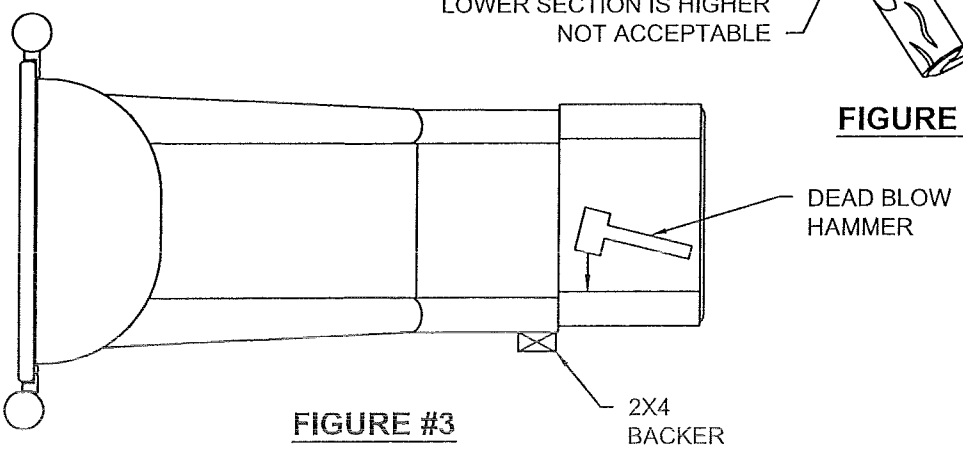
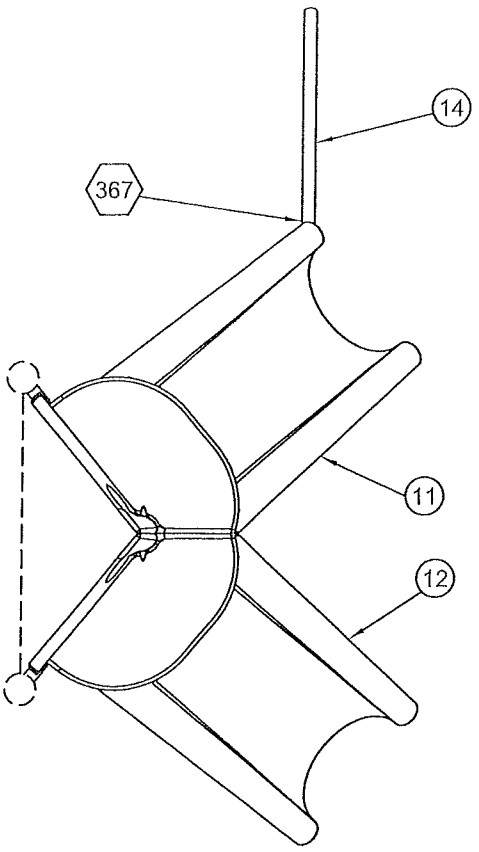
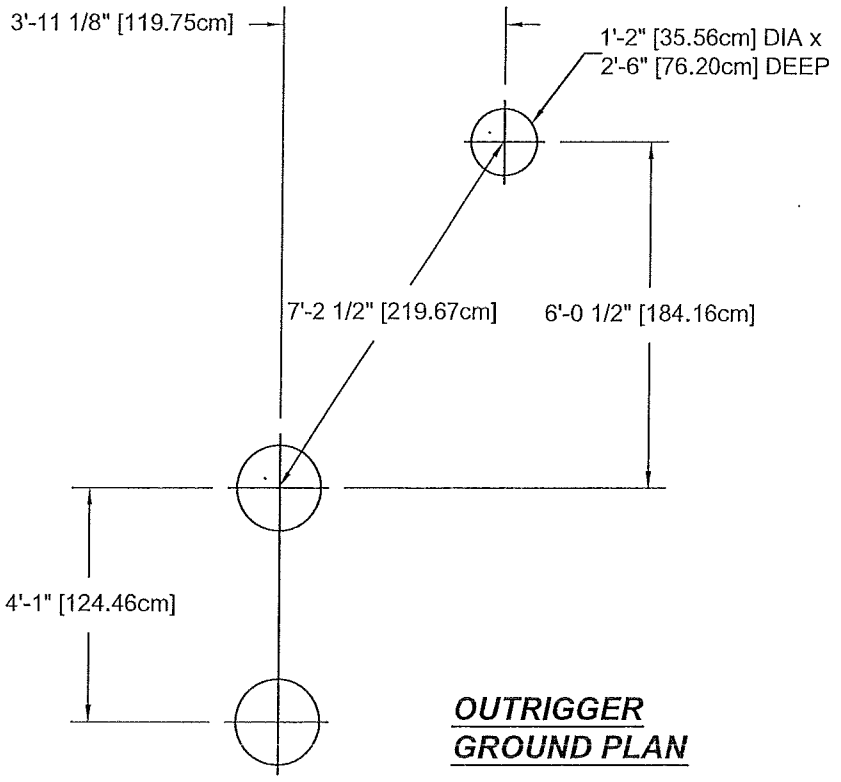



**FIGURE #3**




***OUTRIGGER ASSEMBLY***




***OUTRIGGER GROUND PLAN***

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *NUMBER REQUIRED* | | | | | | | *PART NUMBER* |
|---|---|---|---|---|---|---|---|---|---|
| | | *81274* | *81275* | *81276* | *81277* | *81278* | *81279* | *81323* | |
| 1 | Exit Section | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 161937 |
| 2 | Straight Section | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 161938 |
| 3 | Left Curve | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 161939 |
| 4 | Right Curve | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 161940 |
| 5 | 3' Slide Support | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 168652 |
| 6 | 4' Slide Support | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 168654 |
| 7 | Footbuck | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 200033 |
| 8 | Exit Section 1 ft | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 168136 |
| 9 | Spiral Section | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168149 |
| 10 | Entrance Section | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168290 |
| 11 | Double Entrance Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168450 |
| 12 | Double Entrance Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168547 |
| 13 | Filler Deck | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168548 |
| 14 | Outrigger | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168937 |
| | Panel Attachment Powerlock | 0 | 0 | 0 | 0 | 0 | 0 | 0 | *63519 |
| | *Hardware Complete* | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 165720 |
| | *Hardware Complete* | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 165721 |
| | *Hardware Complete* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168521 |
| | *Hardware Complete* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168536 |
| | *Hardware Complete* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168537 |
| | 3/8" Lockwasher | 6 | 4 | 4 | 4 | 0 | 0 | 6 | 817334* |
| | 3/8" x 2 1/4" P.B.H.C.S. w/Patch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 812056* |
| | 3/8" x 1 3/4" Hex Head Bolt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 801006* |
| | 3/8" Flatwasher (1" O.D.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 817401* |
| | 3/8" Flatwasher | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 817410* |
| | 3/8" Flatwasher (1 1/4" O.D.) | 4 | 4 | 4 | 4 | 0 | 0 | 4 | 817424* |
| | 3/8" Tee Nut | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 804556* |
| | 3/8" x 3/4" P.B.H.C.S. w/Patch | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 812052* |
| | 3/8" x 2 3/4" Hex Head Bolt | 4 | 4 | 4 | 4 | 0 | 0 | 4 | 801010* |
| | Bolt Guard | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 156079* |
| | 3/8" x 3 1/4" P.B.H.C.S. w/Patch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 812060* |
| | 3/8" Hex Nut | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 804053* |
| | 3/8" x 5" Hex Bolt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 801019* |

***PARTS LIST CONT'D ON NEXT PAGE***
***(FINAL #'S 81324 & 81325)***

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

## *PARTS LIST*

| *REF NO.* | *DESCRIPTION* | *NUMBER REQUIRED* | | | | *PART NUMBER* |
|---|---|---|---|---|---|---|
| | | *81324* | *81325* | *81326* | *81330* | |
| 1 | Exit Section | 0 | 0 | 0 | 0 | 161937 |
| 2 | Straight Section | 0 | 0 | 0 | 0 | 161938 |
| 3 | Left Curve | 0 | 0 | 0 | 0 | 161939 |
| 4 | Right Curve | 0 | 0 | 0 | 0 | 161940 |
| 5 | 3' Slide Support | 0 | 0 | 0 | 0 | 168652 |
| 6 | 4' Slide Support | 0 | 0 | 0 | 0 | 168654 |
| 7 | Footbuck | 0 | 0 | 0 | 0 | 200033 |
| 8 | Exit Section 1 ft | 0 | 0 | 0 | 0 | 168136 |
| 9 | Spiral Section | 1 | 0 | 0 | 0 | 168149 |
| 10 | Entrance Section | 0 | 1 | 0 | 0 | 168290 |
| 11 | Double Entrance Left | 0 | 0 | 1 | 0 | 168450 |
| 12 | Double Entrance Right | 0 | 0 | 1 | 0 | 168547 |
| 13 | Filler Deck | 0 | 0 | 1 | 0 | 168548 |
| 14 | Outrigger | 0 | 0 | 0 | 1 | 168937 |
| | Panel Attachment Powerlock | 0 | 4 | 4 | 0 | *63519* |
| | *Hardware Complete* | 0 | 0 | 0 | 0 | 165720 |
| | *Hardware Complete* | 0 | 0 | 0 | 0 | 165721 |
| | *Hardware Complete* | 1 | 0 | 0 | 0 | 168521 |
| | *Hardware Complete* | 0 | 1 | 0 | 0 | 168536 |
| | *Hardware Complete* | 0 | 0 | 1 | 0 | 168537 |
| | 3/8" Lockwasher | 4 | 8 | 22 | 0 | 817334* |
| | 3/8" x 2 1/4" P.B.H.C.S. w/Patch | 0 | 4 | 4 | 0 | 812056* |
| | 3/8" x 1 3/4" Hex Head Bolt | 0 | 4 | 4 | 0 | 801006* |
| | 3/8" Flatwasher (1" O.D.) | 1 | 0 | 4 | 0 | 817401* |
| | 3/8" Flatwasher | 0 | 4 | 4 | 0 | 817410* |
| | 3/8" Flatwasher (1 1/4" O.D.) | 3 | 0 | 14 | 0 | 817424* |
| | 3/8" Tee Nut | 0 | 4 | 8 | 0 | 804556* |
| | 3/8" x 3/4" P.B.H.C.S. w/Patch | 0 | 0 | 4 | 0 | 812052* |
| | 3/8" x 2 3/4" Hex Head Bolt | 4 | 0 | 0 | 0 | 801010* |
| | Bolt Guard | 1 | 0 | 0 | 0 | 156079* |
| | 3/8" x 3 1/4" P.B.H.C.S. w/Patch | 0 | 0 | 3 | 0 | 812060* |
| | 3/8" x 4" P.B.H.C.S. w/Patch | 0 | 0 | 1 | 0 | 812082* |
| | 3/8" x 3 1/2" P.B.H.C.S. w/Patch | 0 | 0 | 2 | 0 | 812075* |
| | 3/8" x 3 3/4" P.B.H.C.S. w/Patch | 0 | 0 | 2 | 0 | 812076* |
| | 3/8" Hex Nut | 0 | 0 | 4 | 0 | 804053* |
| | 3/8" x 5" Hex Bolt | 0 | 0 | 1 | 0 | 801019* |
| | 3/8" x 1 1/4" P.B.H.C.S. | 0 | 0 | 6 | 0 | 812051* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

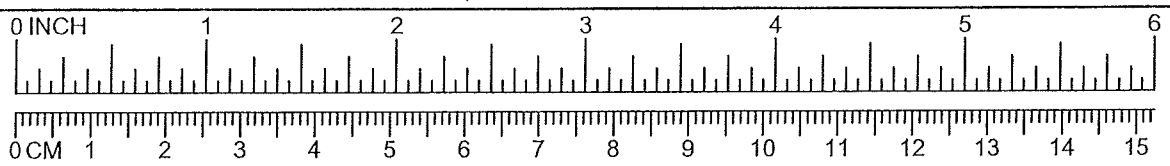
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

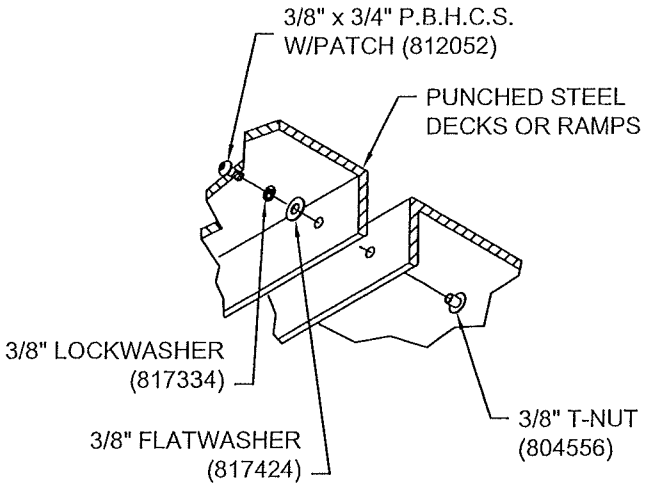
# DETAILS -for-
# 81274-81279 & 81323-81326 & 81330

*Important*

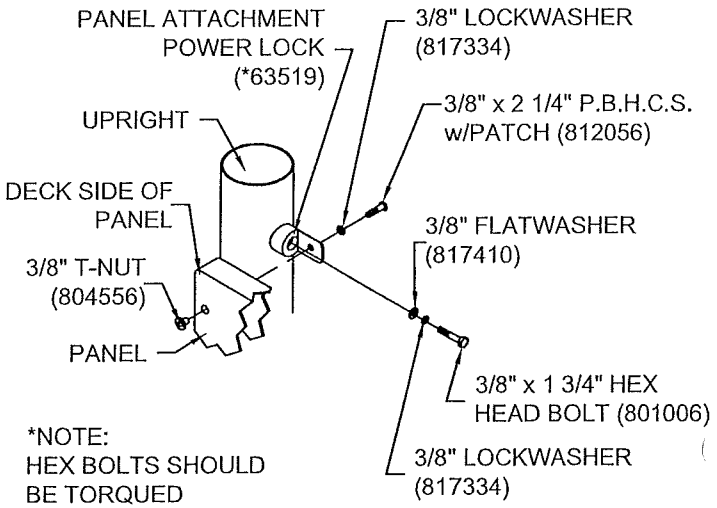
*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




031




*NOTE:
HEX BOLTS SHOULD BE TORQUED FROM 20-25 FT. LBS. FOR PROPER INSTALLATION.

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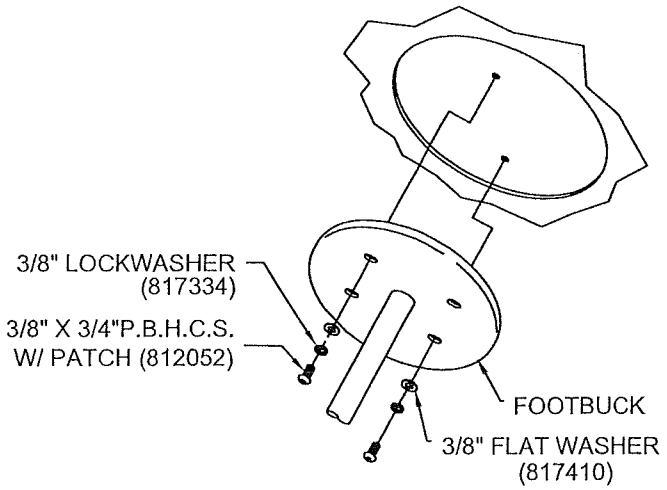
( * = T,W,G, or K )

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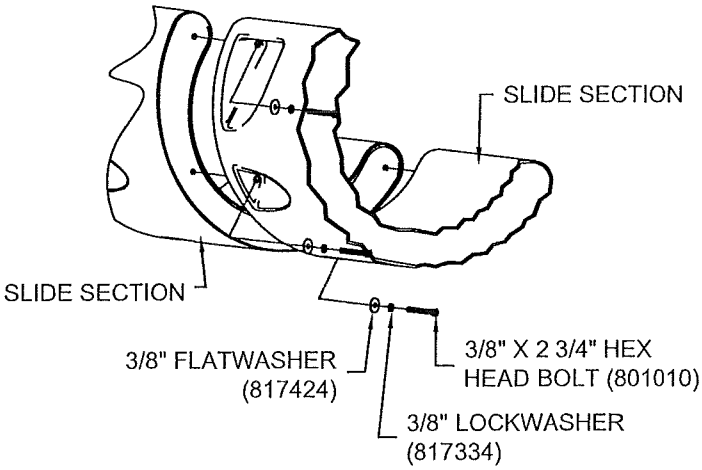


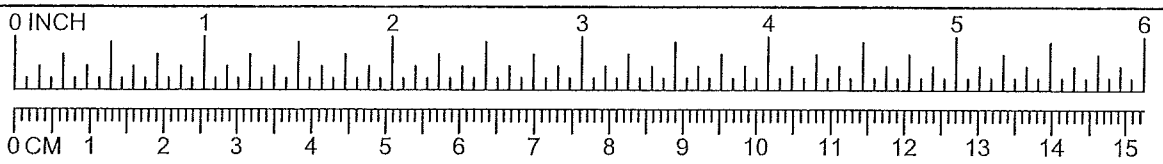

196

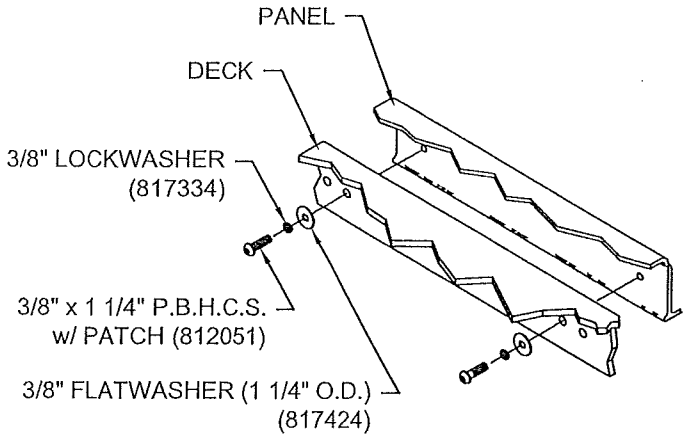
# DETAILS -for-
# 81274-81279 & 81323-81326 & 81330

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*

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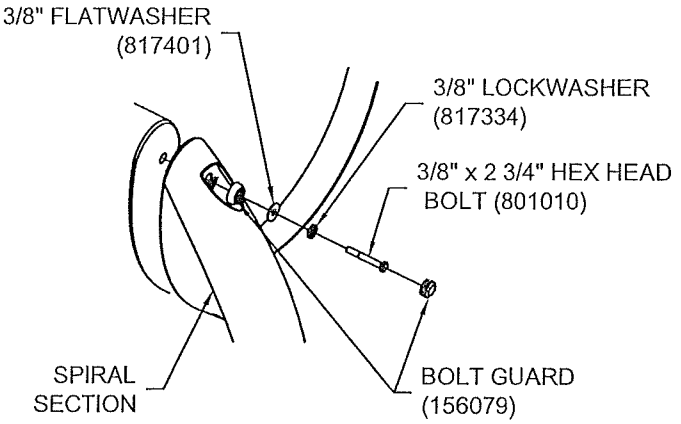


FOR 81324 SPIRAL SECTION ONLY

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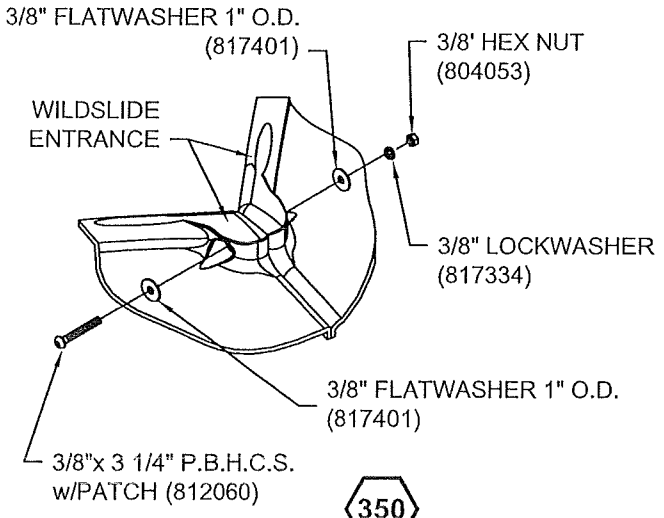


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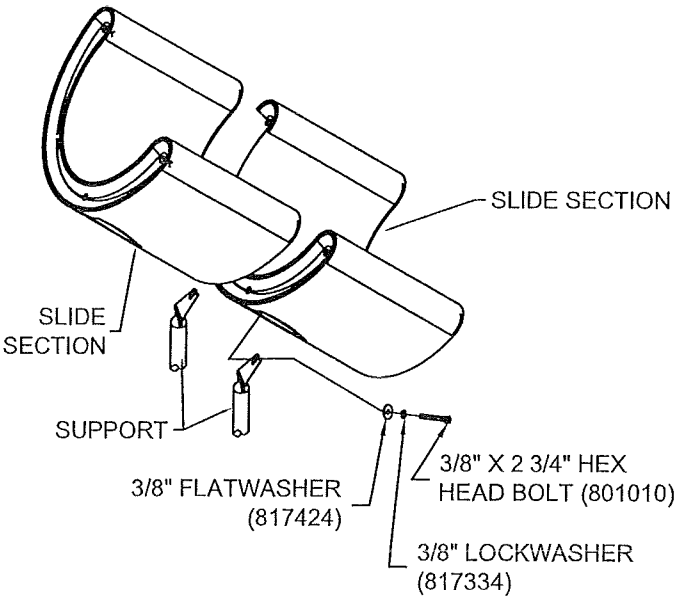


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DUE TO VARYING THICKNESS OF WILDSLIDE ENTRANCE EXTRA HARDWARE IS SUPPLIED. CHOOSE LENGTH THAT DOES NOT CAUSE PROTRUSION.

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ISSUED/REVISED: 9/12/12

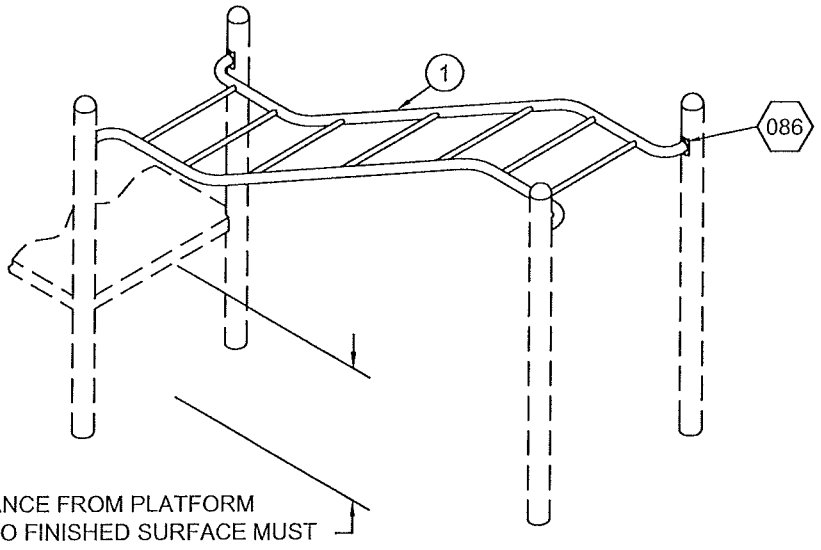
# 81468

# "S" HORIZONTAL LADDER

⬡ = INSTALLATION DETAIL

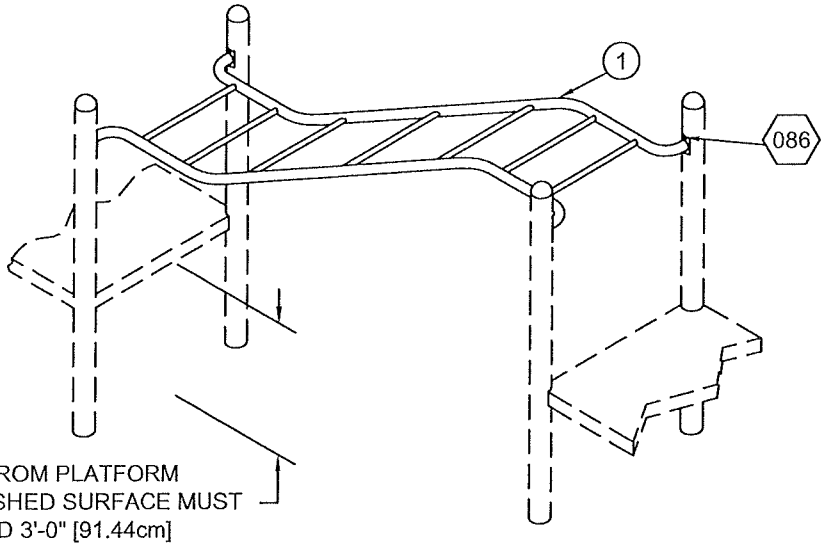
◯ = PARTS LIST REFERENCE

This play equipment is designed for CHILDREN 5 TO 12 YEARS OLD Adult supervision is recommended




DISTANCE FROM PLATFORM SURFACE TO FINISHED SURFACE MUST NOT EXCEED 3'-0" [91.44cm]

**ATTACHMENTS**




DISTANCE FROM PLATFORM SURFACE TO FINISHED SURFACE MUST NOT EXCEED 3'-0" [91.44cm]

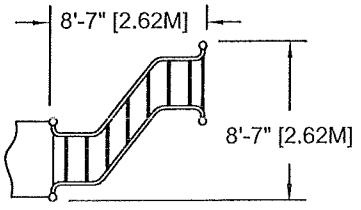
**LINKS**

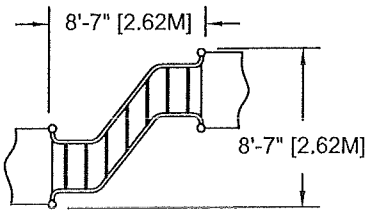
## *INSTALLATION INSTRUCTIONS*

Note: Assemble parts as shown in the *Assembly Drawing*. Refer to the assembly details for the specific hardware required in each connection.

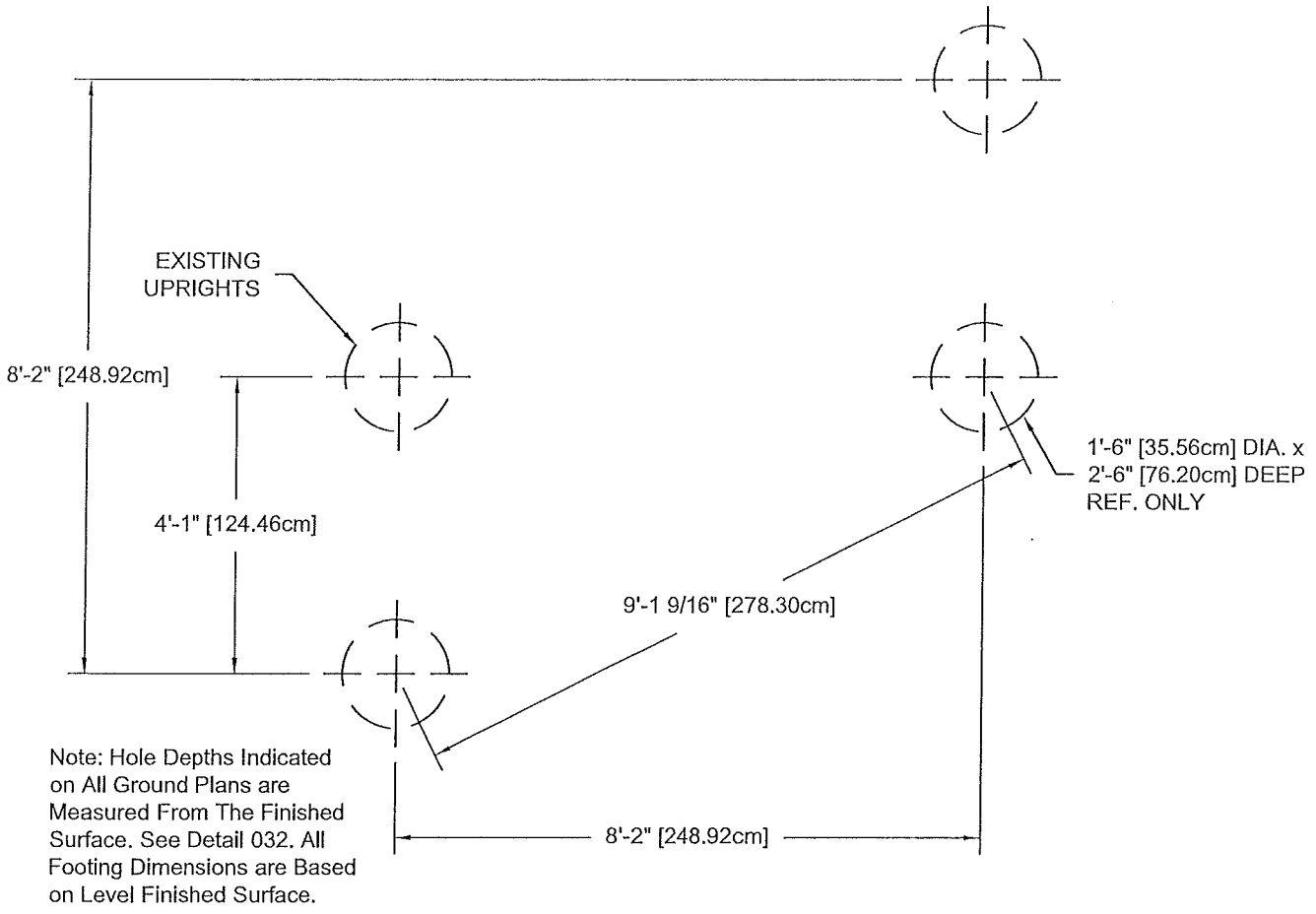
1.Before assembling this equipment, read the enclosed *Installer Instructions* in the installation booklet; follow all the instructions during assembly.

## *ASSEMBLY DRAWINGS*




## *TOP VIEWS*




Note: Hole Depths Indicated on All Ground Plans are Measured From The Finished Surface. See Detail 032. All Footing Dimensions are Based on Level Finished Surface.

## *GROUND PLAN*

## *PARTS LIST*

| REF NO. | DESCRIPTION | PART NUMBER | |
|---|---|---|---|
| | | 81468 | |
| 1 | "S" Horizontal Ladder | 1 | 160787 |
| | *Hardware Complete* | 1 | 164706 |
| | 3/8" x 1" P.B.H.C.S. w/Patch | 8 | 812050* |
| | 3/8" Lockwasher | 8 | 817334* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

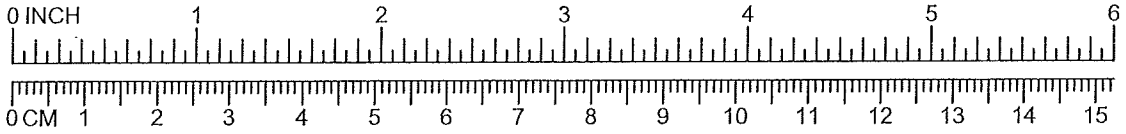
***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

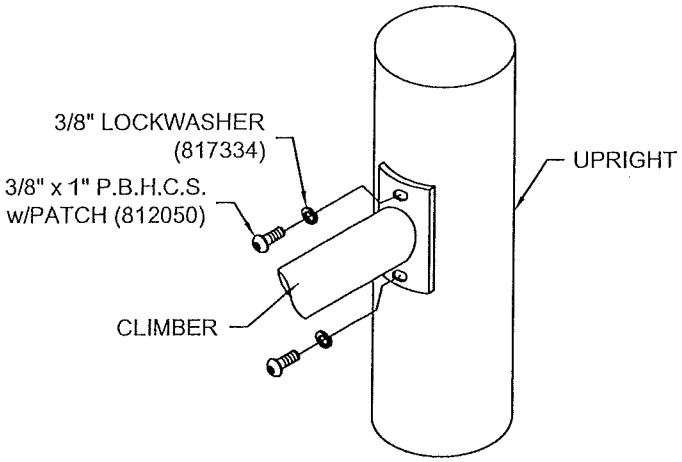
# DETAILS -for-
# 81468

*Important*

*To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.*

*Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.*




086

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ISSUED/REVISED: 09/23/12

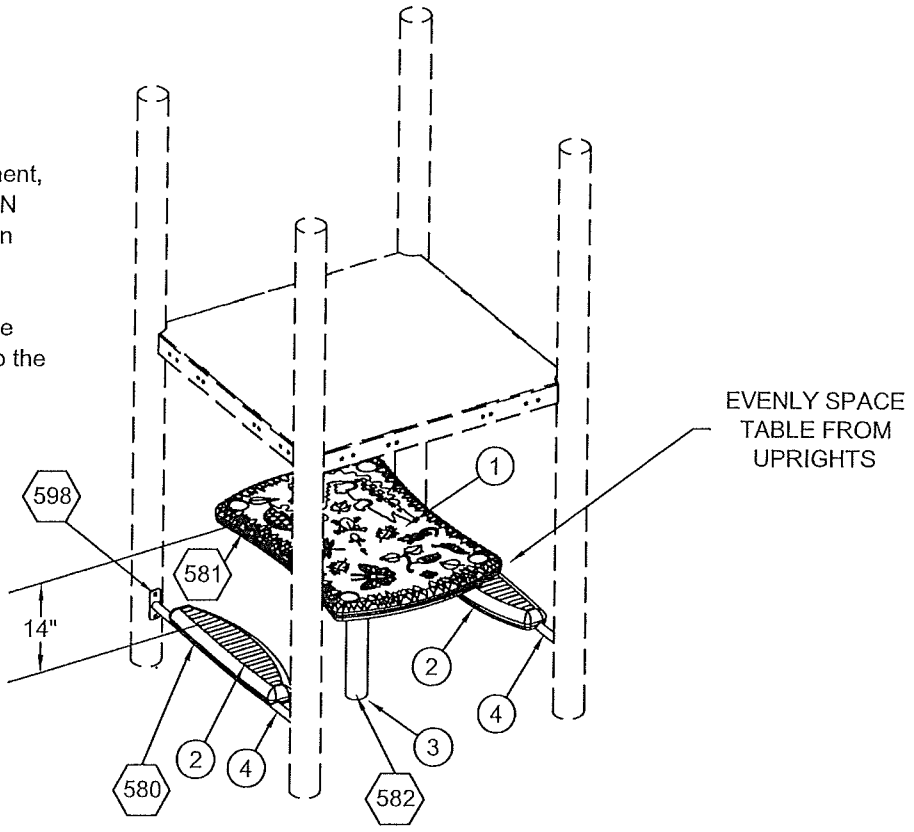
# 81668
# NATURE DISCOVERY TABLE

⬡ = INSTALLATION DETAIL

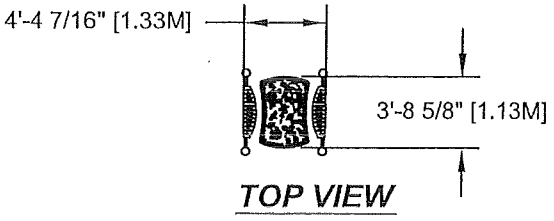
◯ = PARTS LIST REFERENCE

## *INSTALLATION INSTRUCTIONS*

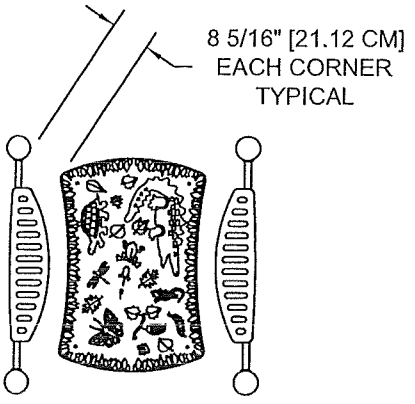
1. Before assembling this equipment, read the enclosed INSTALLATION INSTRUCTIONS in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the ASSEMBLY DRAWING. Refer to the assembly details for the specific hardware required in each connection.




***ASSEMBLY DRAWING***




***TOP VIEW***




***INSTALLATION GUIDE***

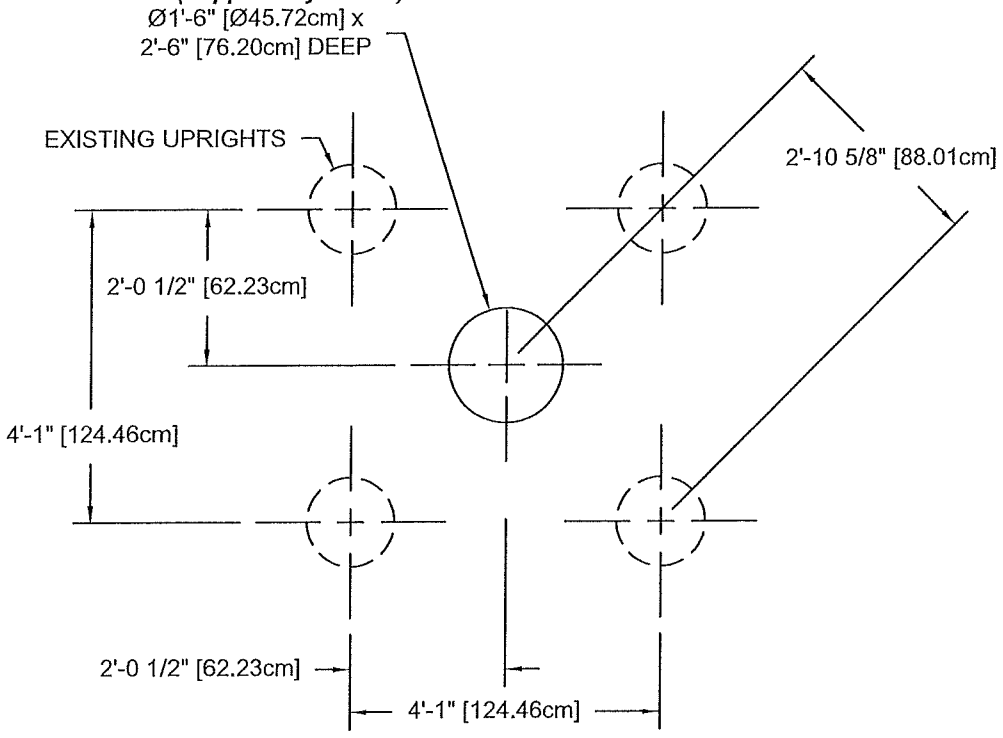
## *PARTS LIST*

| REF NO. | DESCRIPTION | NO. REQ'D. | PART NUMBER |
|---|---|---|---|
| 1 | Nature Discovery Table Top | 1 | 179944 |
| 2 | Nature Discovery Table Seat | 2 | 179945 |
| 3 | Nature Discovery Table Frame Weld Ass'y | 1 | 200012 |
| 4 | Seat Frame Weld Ass'y | 2 | 200041 |
| | *Hardware Complete* | 1 | 200048 |
| | 3/8" x 1" P.B.H.C.S. w/Patch | 4 | 812050* |
| | 3/8" x 1 1/4" P.B.H.C.S. w/Patch | 8 | 812051* |
| | 3/8" x 1 3/4" P.B.H.C.S. w/Patch | 4 | 812054* |
| | 3/8" x 2" P.B.H.C.S. w/Patch | 4 | 812055* |
| | 3/8" Lockwasher | 20 | 817334* |
| | 3/8" Flatwasher | 16 | 817410* |
| | 3/8" Flatwasher 1 1/4" O.D. | 4 | 817424* |
| | 1/2" Anchor Rod | 1 | 135038* |

***Unless Otherwise Specified, All Units of Measure are Each***
**** Included in Hardware***

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

***Note: Loctite (supplied by others) should be used on all threaded hardware.***




## ***GROUND PLAN***

NOTE: HOLE DEPTHS INDICATED ON ALL GROUND PLANS ARE MEASURED FROM THE FINISHED SURFACE. SEE DETAIL FS-003. ALL FOOTING DIMENSIONS ARE BASED ON LEVEL FINISHED SURFACE.

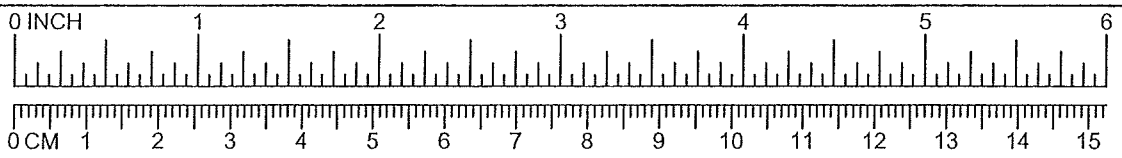
CONCRETE REQUIRED
.17 CUBIC YARDS
.13 CUBIC METERS

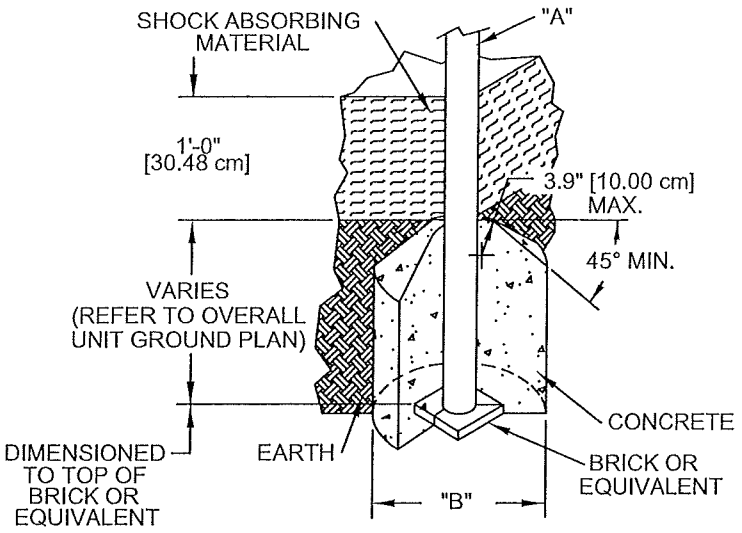
# DETAILS -for-
# 81668

*IMPORTANT*

*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*



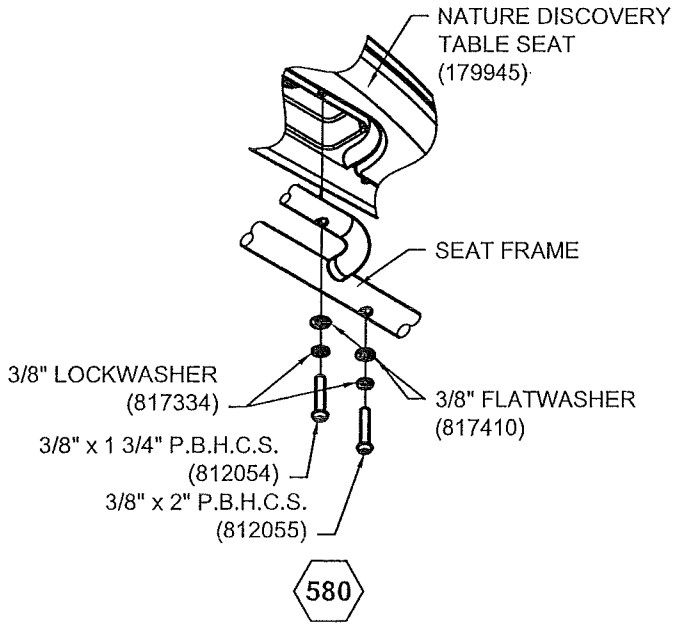




| DIA. "A" (PIPE SIZE) | DIA. "B" (FOOTING SIZE) |
|---|---|
| 1 1/16" [2.70 cm] | 1'-2" [35.56 cm] |
| 1 5/16" [3.33 cm] | 1'-2" [35.56 cm] |
| 1 5/8" [4.13 cm] | 1'-2" [35.56 cm] |
| 1 7/8" [4.83 cm] | 1'-2" [35.56 cm] |
| 2 3/8" [6.03 cm] | 1'-2" [35.56 cm] |
| 3 1/2" [8.89 cm] | 1'-6" [45.72 cm] |
| 5" [12.70 cm] | 1'-6" [45.72cm] |
| TRACK RIDE & SWINGS | |
| 5" [12.70 cm] | 2'-0" [60.96 cm] |
| TREE SCAPE | |
| 5" [12.70 cm] | 4'-0" [121.92 cm] |

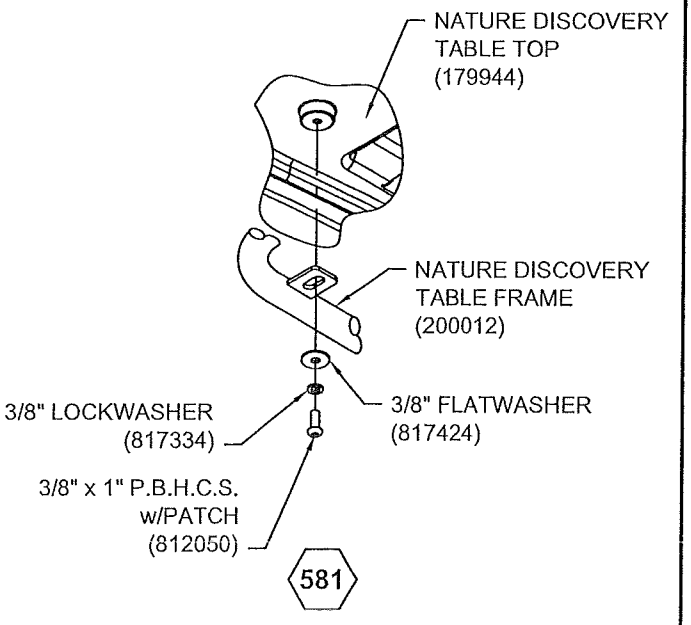
NOTES:
-SLOPED FOOTING IS A REQUIREMENT OF EUROPEAN STANDARD EN1176-1 ONLY
-SUGGESTED MINIMUM CONCRETE RATING: 3000 PSI

032

SHOCK ABSORBING PROPERTIES OF SURFACING MATERIALS VARY. IF YOU DETERMINE THAT LESS THAN 1'-0" [30.48cm] OF SURFACING IS REQUIRED, MAKE UP THE DIFFERENCE IN ELEVATION WITH EARTH, BEFORE APPLYING SURFACING.




580



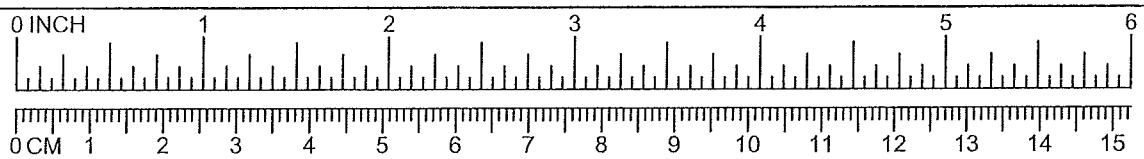

581

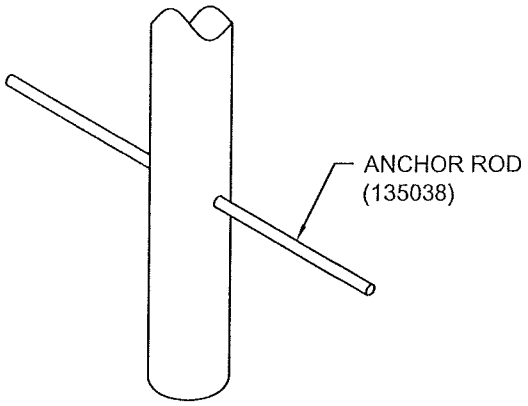
# DETAILS -for-
# 81668

*IMPORTANT*

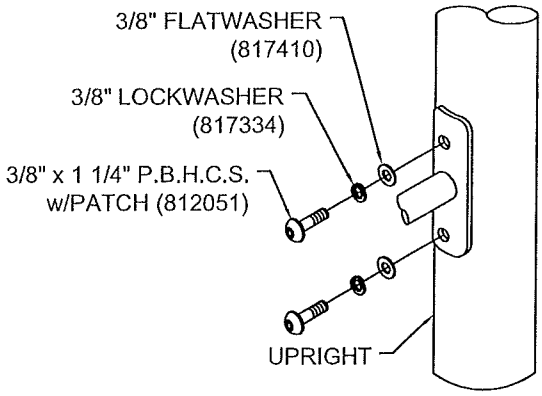
*TO REDUCE THE RISK OF CLOTHING ENTANGLEMENT IN COMPLIANCE WITH ASTM F1487, ANY BOLT END PROTRUDING MORE THAN TWO FULL THREADS BEYOND THE FACE OF THE NUT SHALL BE CUT-OFF FLUSH, FILED SMOOTH AND TREATED TO PREVENT CORROSION.*

*NOTE: AFTER ASSEMBLY IS COMPLETE, PEEN TEE-NUTS AND FLATWASHERS TO MATCH RADIUS OF PIPE.*




582




598

A PLAYCORE COMPANY GameTime

Enriching Childhood Through Play.

1-800-235-2440

# 8691
# SEAT

ISSUED/REVISED: 08/17/12

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

BELT SEAT 8691

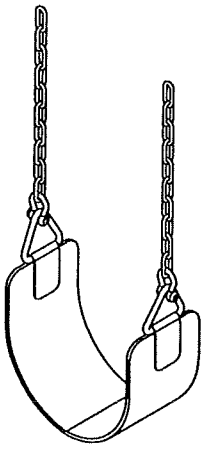
FULLY ENCLOSED SEAT 8693

8695, 8696, 8908, 8909, 8910, 8911, 8914, 8918, CC8695, CC8696, CC8908, CC8909, CC8910, CC8911, CC8914, CC8918, SS8914, SS8695, SS8696, SS8918, SS8908, SS8910, SS8909, SS8911

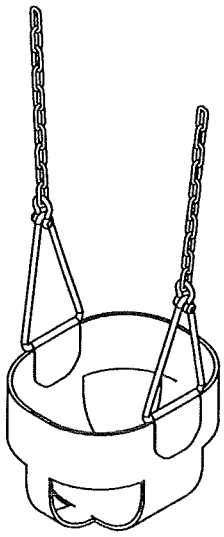
SEAT PACKAGES

8695, CC8695, 8696, CC8696, 8914, CC8914, SS8914, SS8695, SS8696

8908, CC8908, 8909, CC8909, 8910, CC8910, 8911, CC8911, 8918, CC8918, 8915, SS8918, SS8908, SS8910, SS8909, SS8911



*8691*



*8693*

## *SPECIFICATIONS*

*Rights are reserved to disontinue or change specifications without notice.

*Fully Enclosed Seats shall be fabricated with .025" thick stainless steel inserts covered by a dark green colored EPDM rubber.

*Commercial Belt Seat - an extra piece of fluted rubber at the front and back of seat gives it a cushion bumper.

*NOTE: Weights are based on average comparisons of each part.

## IMPORTANT PRODUCT INFORMATION AND SAFETY WARNINGS

☐ All equipment should be installed on a soft, resilient, energy-absorbing ground surface. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT. A fall on a hard surface can result in serious injury to the equipment user.

☐ ALWAYS FOLLOW INSTALLATION INSTRUCTIONS WHEN ERECTING EQUIPMENT.

☐ Worn surfaces around equipment should be restored. Concrete footings should never be exposed. Surface depth should comply with installation instructions.

☐ Equipment should be placed to eliminate conflicting traffic patterns.

☐ All protruding nuts and bolts should be covered; sharp edges on pipes should be capped or removed. Check for bent, broken or severely worn pipe and replace.

☐ Test overall stability and rigidity of all play equipment. Check for proper assembly, installation and ground anchoring.

☐ Check for and repair damage caused by wear or vandalism, a major factor in injury-causing situations.

☐ GAMETIME® PROVIDES ITS CUSTOMERS WITH COMPLETE SPECIFICATION SHEETS AND INSTALLATION INSTRUCTIONS. THE SPECIFICATION SHEET CONTAINS THE LISTING OF EVERY PART USED IN A PIECE OF EQUIPMENT AND SHOULD BE KEPT IN THE CUSTOMER'S FILES FOR ACCURATE REFERENCE WHEN REPLACEMENT PARTS ARE NEEDED.

☐ Never add components not intended for use with this product.

☐ Regular maintenance is necessary on this and all park and recreational equipment to ensure the safety of the user.

☐ Proper maintenance of GAMETIME® equipment requires regular tightening of all bolts, nuts, and set screws.

## PARTS LIST -for- SEATS

| DESCRIPTION | NO. REQD | | PART NO. |
|---|---|---|---|
| | *8693* | *8691* | |
| *Belt Seat* | *0* | *1* | *153738* |
| *Enclosed Tot Seat* | *1* | *0* | *153746* |
| *Hardware Complete* | *1* | *1* | *167359* |
| *Swing Clevis* | *2* | *2* | *166683** |
| *1/2" Pin-In Hex Bit (5/16")* | *1* | *1* | *812644** |

## PARTS LIST -for- SEAT PACKAGES

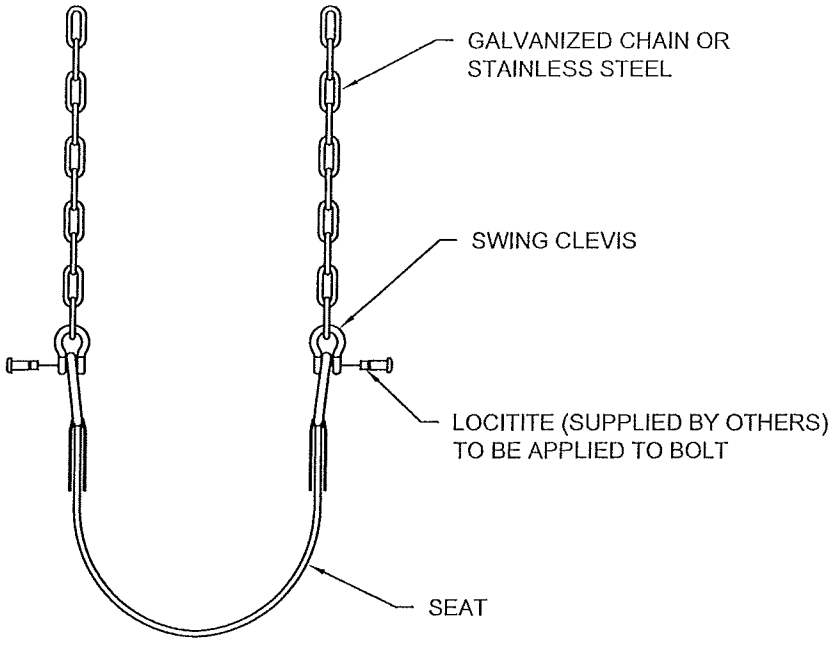
| DESCRIPTION | NO. REQUIRED | | | | | | PART NO. |
|---|---|---|---|---|---|---|---|
| | *8914* | *8695* | *8696* | *CC8914* | *CC8695* | *CC8696* | |
| *Enclosed Tot Seat* | *1* | *1* | *1* | *1* | *1* | *1* | *8693* |
| *Swing Hanger (2-3/8" O.D.)* | *0* | *2* | *0* | *0* | *2* | *0* | *1461* |
| *Swing Hanger (3-1/2" O.D.)* | *0* | *0* | *2* | *0* | *0* | *2* | *1462* |
| *Swing Hanger (5" O.D.)* | *2* | *0* | *0* | *2* | *0* | *0* | *1487* |
| *Chain* | *2* | *2* | *2* | *0* | *0* | *0* | *131904* |
| *Coated Chain* | *0* | *0* | *0* | *2* | *2* | *2* | *141140* |

***Unless otherwise specified, all units of measure are each.***
****Included in Hardware Complete.***
***NOTE: "CC" prefix before package number indicates seat with coated chain.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

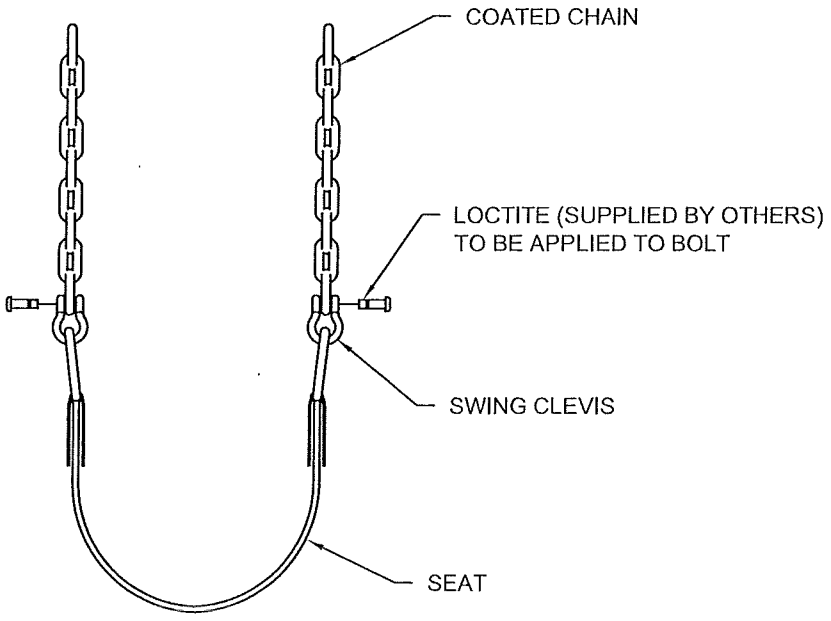
## PARTS LIST -for- SEAT PACKAGES

| DESCRIPTION | NO. REQUIRED | | | | | | | | PART NO. |
|---|---|---|---|---|---|---|---|---|---|
| | 8691 | 8918 | CC8918 | 8908 | 8910 | 8909 | 8911 | | |
| Belt Seat | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 8691 |
| Swing Hanger (2-3/8" O.D.) | 0 | 0 | 0 | 2 | 0 | 2 | 0 | | 1461 |
| Swing Hanger (3-1/2" O.D.) | 0 | 0 | 0 | 0 | 2 | 0 | 2 | | 1462 |
| Swing Hanger (5" O.D.) | 0 | 2 | 2 | 0 | 0 | 0 | 0 | | 1487 |
| Chain | 0 | 2 | 0 | 0 | 0 | 0 | 0 | | 103052 |
| Coated Chain | 0 | 0 | 2 | 0 | 0 | 0 | 0 | | 153864 |
| Chain | 0 | 0 | 0 | 2 | 2 | 0 | 0 | | 166892 |
| Chain | 0 | 0 | 0 | 0 | 0 | 2 | 2 | | 153867 |
| Swing Clevis | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 166683* |
| 1/2" Pin-In Hex Bit (5/16") | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 812644* |
| | | | | CC8908 | CC8910 | CC8909 | CC8911 | | |
| Belt Seat | | | | 1 | 1 | 1 | 1 | | 8691 |
| Swing Hanger (2-3/8" O.D.) | | | | 2 | 0 | 2 | 0 | | 1461 |
| Swing Hanger (3-1/2" O.D.) | | | | 0 | 2 | 0 | 2 | | 1462 |
| Coated Chain | | | | 2 | 2 | 0 | 0 | | 153869 |
| Coated Chain | | | | 0 | 0 | 2 | 2 | | 153868 |
| | SS8914 | SS8695 | SS8696 | SS8918 | SS8908 | SS8910 | SS8909 | SS8911 | |
| Enclosed Tot Seat | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 8693 |
| Belt Seat | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 8691 |
| Swing Hanger (2-3/8" O.D.) | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1461* |
| Swing Hanger (3-1/2" O.D.) | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 1462* |
| Swing Hanger (5" O.D.) | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1487* |
| Stainless Steel Chain | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 177993* |
| Stainless Steel Chain | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 177994* |
| Stainless Steel Chain | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 177991* |
| Stainless Steel Chain | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 177990* |

***Unless otherwise specified, all units of measure are each.***
****Included in Hardware Complete.***
***NOTE: "CC" prefix before package number indicates seat with coated chain.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***




***SEAT ASSEMBLY***
***(WITH GALVANIZED CHAIN OR STAINLESS STEEL)***




***SEAT ASSEMBLY***
***(WITH COATED CHAIN)***

# 1461
# SWING HANGER

ISSUED/REVISED: 08/17/12

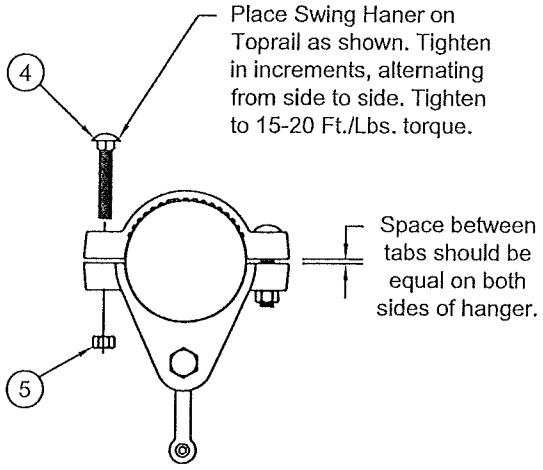
⬡ = INSTALLATION DETAIL

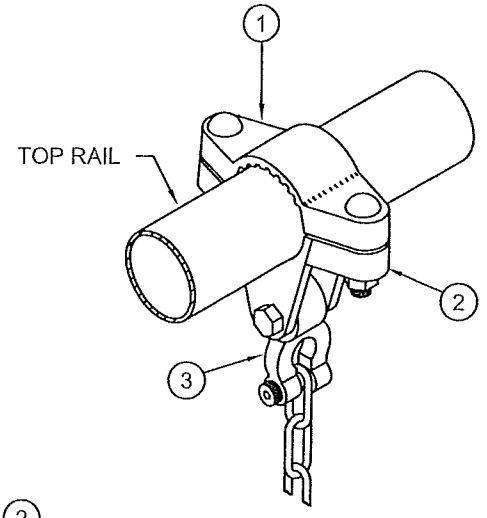
◯ = PARTS LIST REFERENCE

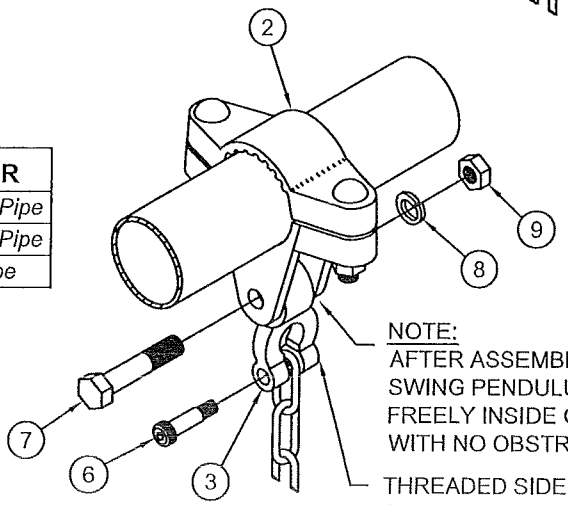
**GALVANIZED 1461**
**GALVANIZED 1462**
**PAINTED 1463**
**PAINTED 1485**
**PAINTED 1486**
**GALVANIZED 1487**

## *SPECIFICATIONS*

**MATERIAL:** All swing hanger castings shall be cast of malleable iron.
**HARDWARE:** All Carriage bolts, lockwashers, hex nuts, and shoulder bolts shall be zinc plated with a clear chromate coating.
**FINISH:** All top and bottom clevis parts shall be galvanized or powder coated. The swing pendulum shall be galvanized only.
**CONSTRUCTION:** The swing hanger shall consist of a top clevis, bottom clevis, and swing pendulum. The top clevis shall have a non-slip-serrated surface. The pendulum shall incorporate a factory installed bronze bushing. The pendulum shall be attached to the bottom clevis with 1/2" x 2-1/2" hex bolt, 1/2" lockwasher, and 1/2" hex nut. The top and bottom clevis shall be attached with 3/8" carriage bolt and 3/8" lock nut.
**SPECIFICATIONS: GAMETIME** has a policy of continuous improvement and reserves the right to discontinue or change specifications without notice.




NOTE:
AFTER ASSEMBLY IS COMPLETE, SWING PENDULUM SHOULD PIVOT FREELY INSIDE OF BOTTOM CLEVIS WITH NO OBSTRUCTION.

THREADED SIDE OF PENDULUM

| PAINTED | GALVANIZED | PIPE DIAMETER |
|---|---|---|
| *1485* | *1461* | *2-3/8" [6.03cm] O.D. Pipe* |
| *1486* | *1462* | *3-1/2" [8.89cm] O.D. Pipe* |
| *1463* | *1487* | *5" [12.70cm] O.D. Pipe* |

## PARTS LIST

| Ref. NO. | DESCRIPTION | NO. REQUIRED | | | | | | PART NO. |
|---|---|---|---|---|---|---|---|---|
| | | 1461 | 1462 | 1463 | 1485 | 1486 | 1487 | |
| 1 | Top Clevis | 1 | 0 | 0 | 0 | 0 | 0 | 157000 |
| 1 | Top Clevis | 1 | 1 | 0 | 0 | 0 | 0 | 157002 |
| 1 | Top Clevis | 0 | 0 | 1 | 0 | 0 | 0 | 157382 |
| 1 | Top Clevis | 0 | 0 | 0 | 1 | 0 | 0 | 158223 |
| 1 | Top Clevis | 0 | 0 | 0 | 0 | 1 | 0 | 158221 |
| 1 | Top Clevis | 0 | 0 | 0 | 0 | 0 | 1 | 157005 |
| 2 | Bottom Clevis | 1 | 0 | 0 | 0 | 0 | 0 | 157011 |
| 2 | Bottom Clevis | 0 | 1 | 0 | 0 | 0 | 0 | 157012 |
| 2 | Bottom Clevis | 0 | 0 | 1 | 0 | 0 | 0 | 157383 |
| 2 | Bottom Clevis | 0 | 0 | 0 | 1 | 0 | 0 | 158233 |
| 2 | Bottom Clevis | 0 | 0 | 0 | 0 | 1 | 0 | 158230 |
| 2 | Bottom Clevis | 0 | 0 | 0 | 0 | 0 | 1 | 157013 |
| 3 | Swing Pendulum | 1 | 1 | 1 | 1 | 1 | 1 | 157010 |
| 4 | 3/8" x 2" Carriage Bolt | 2 | 2 | 0 | 2 | 2 | 0 | 800256 |
| 4 | 3/8" x 1-3/4" Carriage Bolt | 0 | 0 | 2 | 0 | 0 | 2 | 800290 |
| 5 | 3/8" Lock Nut | 2 | 2 | 2 | 2 | 2 | 2 | 804353 |
| 6 | 3/8" x 1" Shoulder Bolt | 1 | 1 | 1 | 1 | 1 | 1 | 811226 |
| 7 | 1/2" x 2-1/2" Hex Bolt | 1 | 1 | 1 | 1 | 1 | 1 | 801200 |
| 8 | 1/2" Lockwasher | 1 | 1 | 1 | 1 | 1 | 1 | 817342 |
| 9 | 1/2" Hex Nut | 1 | 1 | 1 | 1 | 1 | 1 | 804055 |

***Unless otherwise specified, all units of measure are each.***
***Note: Loctite (supplied by others) should be used on all threaded hardware.***

PowerScape®

GameTime®

A PLAYCORE Company

1-800-235-2440

ISSUED/REVISED: 03/01/13

# 90020

# TRANSFER SYSTEM WITH BARRIER

⬡ = INSTALLATION DETAIL

◯ = PARTS LIST REFERENCE

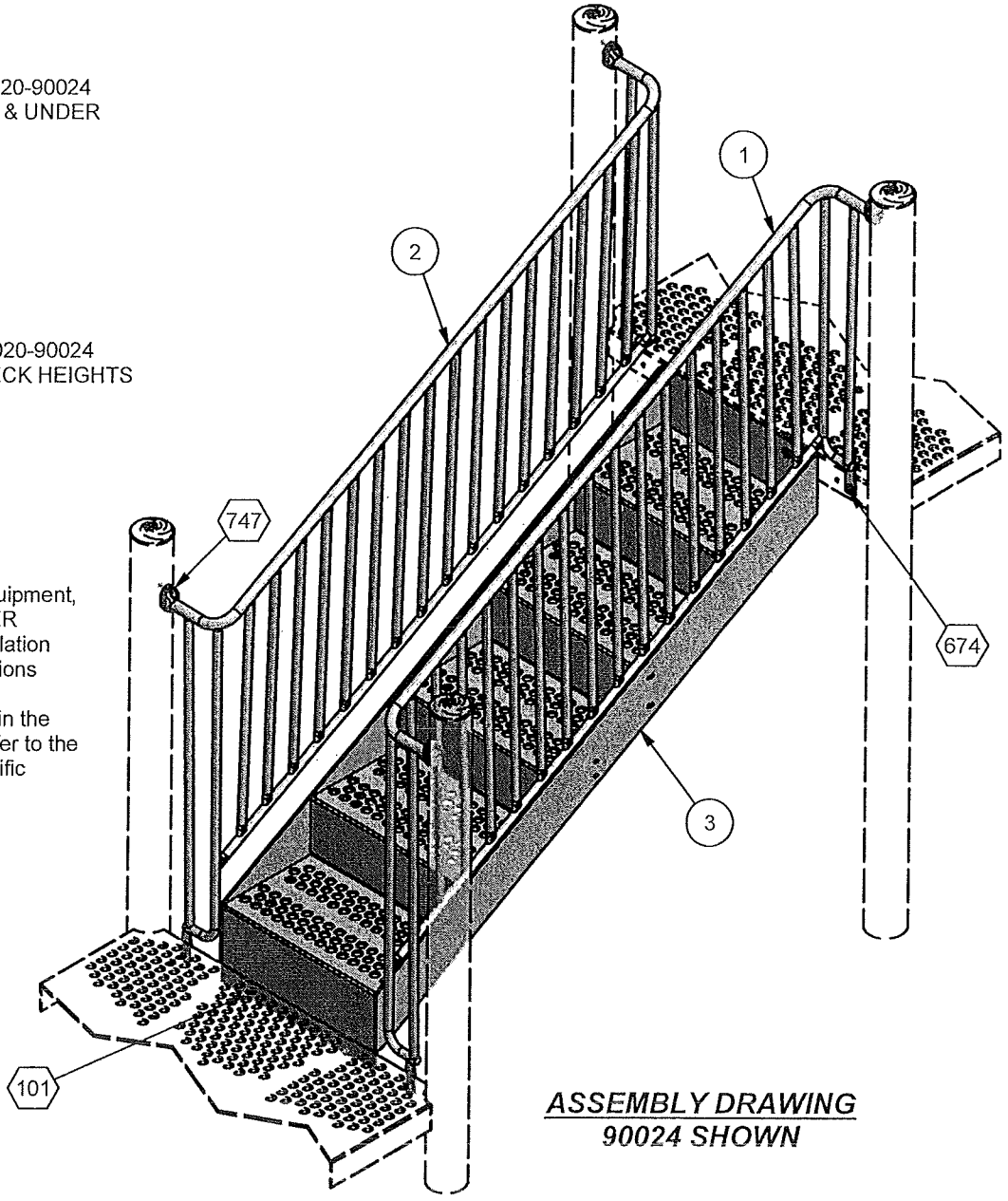
| | |
|---|---|
| 1'-0" RISE | 90020 |
| 2'-0" RISE | 90021 |
| 2'-6' RISE | 90022 |
| 3'-0" RISE | 90023 |
| 4'-0" RISE | 90024 |

90020-90024
5'-0" & UNDER

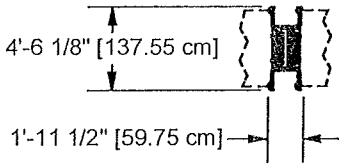
90020-90024
ALL DECK HEIGHTS

## INSTALLATION INSTRUCTIONS

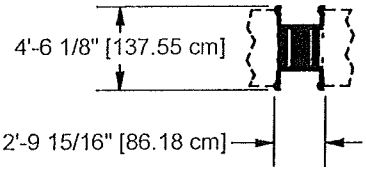
1. Before assembling this equipment, read the enclosed INSTALLER INSTRUCTIONS in the installation booklet; follow all the instructions during installation.
2. Assemble parts as shown in the ASSEMBLY DRAWING. Refer to the assembly details for the specific hardware required in each connection.




*ASSEMBLY DRAWING*
*90024 SHOWN*




**90020**

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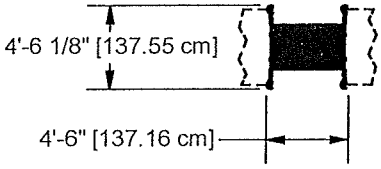
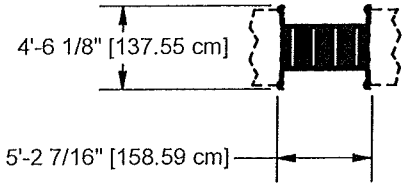



**90022**

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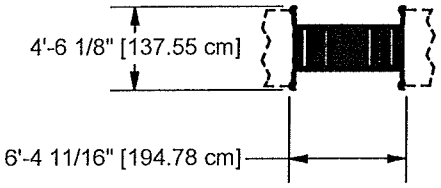
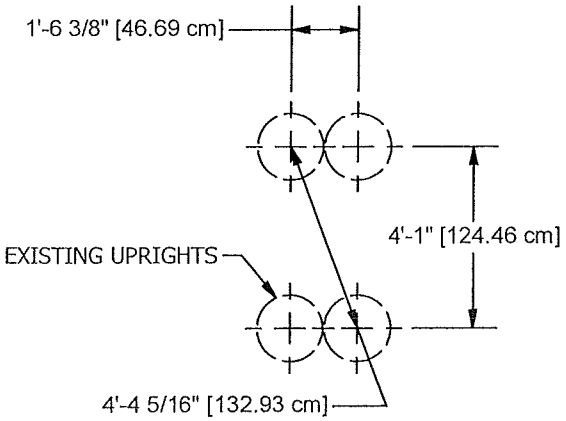
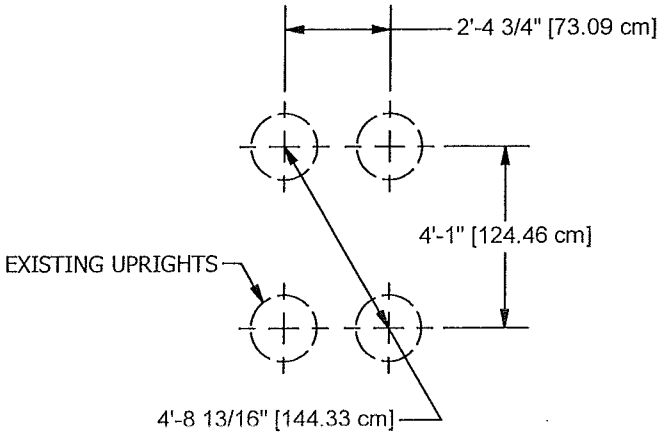



**90024**

## *TOP VIEWS*

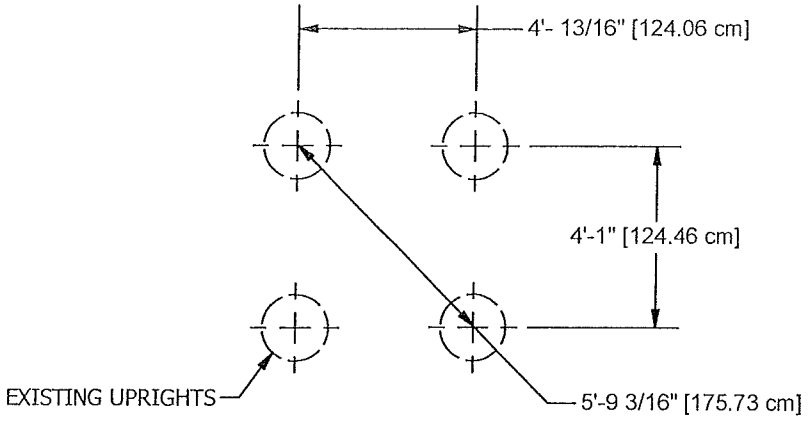



**90020**

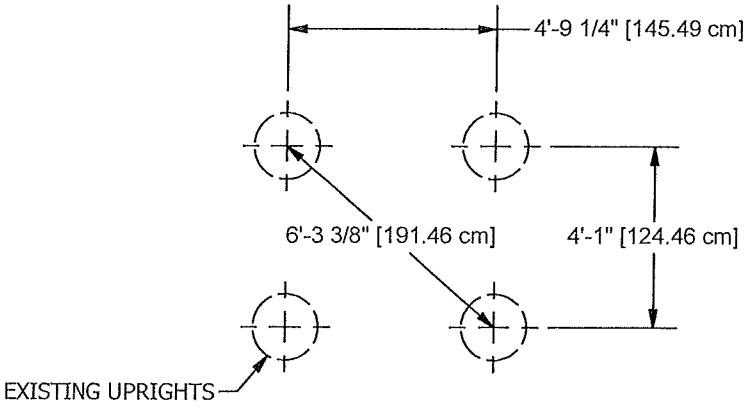



**90021**

## *GROUND PLANS*




**90022**

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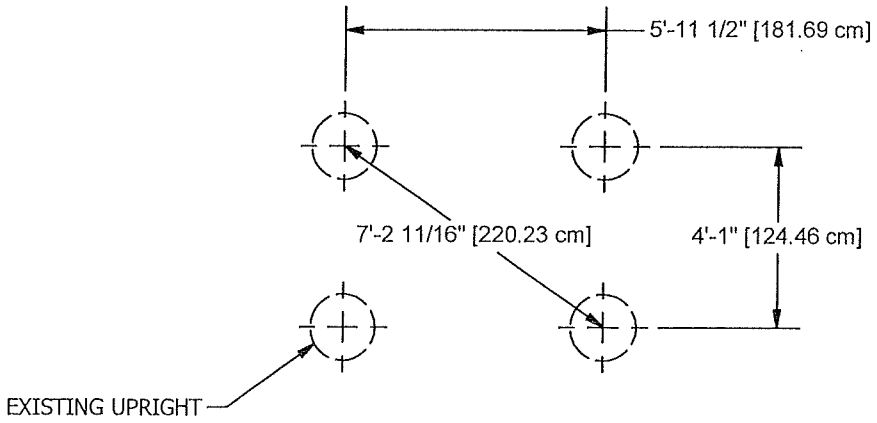



**90024**

## *GROUND PLANS*

| Parts List | | | | | | | |
|---|---|---|---|---|---|---|---|
| REF. | DESCRIPTION | 90020 | 90021 | 90022 | 90023 | 90024 | PART NUMBER |
| 1 | RIGHT BARRIER WELD ASSEMBLY | 1 | 0 | 0 | 0 | 0 | 203370 |
| 1 | RIGHT BARRIER WELD ASSEMBLY | 0 | 1 | 0 | 0 | 0 | 203384 |
| 1 | RIGHT BARRIER WELD ASSEMBLY | 0 | 0 | 1 | 0 | 0 | 203397 |
| 1 | RIGHT BARRIER WELD ASSEMBLY | 0 | 0 | 0 | 1 | 0 | 203417 |
| 1 | RIGHT BARRIER WELD ASSEMBLY | 0 | 0 | 0 | 0 | 1 | 203431 |
| 2 | LEFT BARRIER WELD ASSEMBLY | 1 | 0 | 0 | 0 | 0 | 203379 |
| 2 | LEFT BARRIER WELD ASSEMBLY | 0 | 1 | 0 | 0 | 0 | 203392 |
| 2 | LEFT BARRIER WELD ASSEMBLY | 0 | 0 | 1 | 0 | 0 | 203411 |
| 2 | LEFT BARRIER WELD ASSEMBLY | 0 | 0 | 0 | 1 | 0 | 203425 |
| 2 | LEFT BARRIER WELD ASSEMBLY | 0 | 0 | 0 | 0 | 1 | 203435 |
| 3 | 1' COATED STEPLINK | 1 | 0 | 0 | 0 | 0 | 161235 |
| 3 | 2' STEP ASSEMBLY | 0 | 1 | 0 | 0 | 0 | 160670 |
| 3 | 2'-6' STEP ASSEMBLY | 0 | 0 | 1 | 0 | 0 | 167494 |
| 3 | 3' STEP ASSEMBLY | 0 | 0 | 0 | 1 | 0 | 161371 |
| 3 | 4' STEP ASSEMBLY | 0 | 0 | 0 | 0 | 1 | 160667 |
| | TRU-LOC | 4 | 4 | 4 | 4 | 4 | A03650 |
| | ***HARDWARE COMPLETE*** | 1 | 1 | 1 | 1 | 1 | 203545 |
| | 3/8" x 3/4" P.B.H.C.S. w/PATCH | 8 | 8 | 8 | 8 | 8 | 812052* |
| | 3/8" x 2" P.B.H.C.S. w/PATCH | 4 | 4 | 4 | 4 | 4 | 812055* |
| | 3/8" FLAT WASHER (1 1/4" O.D.) | 8 | 8 | 8 | 8 | 8 | 817424* |
| | 3/8" LOCKWASHER | 12 | 12 | 12 | 12 | 12 | 817334* |
| | 3/8" T-NUT | 8 | 8 | 8 | 8 | 8 | 804556* |
| | ALUM. PIN | 4 | 4 | 4 | 4 | 4 | 203568* |

*Unless Otherwise Specified, All Units of Measure are Each*
** Included in Hardware*

***Warning: During Installation, Hardware And Small Parts Are Choking Hazards For Young Children. Store Unused Parts Appropriately Until Assembly Is Completed. Once Assembly Is Completed, Remove Any Unused Parts From The Play Environment And Dispose/Save Them In A Secure Location.***

***Note: Peen Tee-Nuts and Flatwashers to match radius of pipe after assembly is complete.***

***Note: Loctite (supplied by others) should be used on any non-patch hardware.***

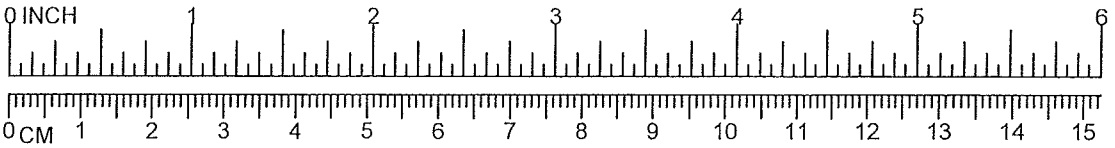
# DETAILS -for-
# 90020, 90021, 90022, 90023, 90024

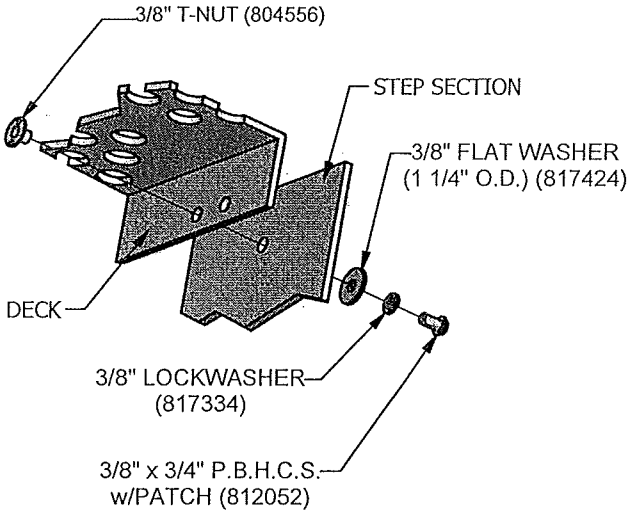
*Important*

To Reduce the Risk of Clothing Entanglement in Compliance with ASTM F1487, Any Bolt End Protruding More Than Two Full Threads Beyond the Face of the Nut Shall Be Cut-Off Flush, Filed Smooth and Treated to Prevent Corrosion.

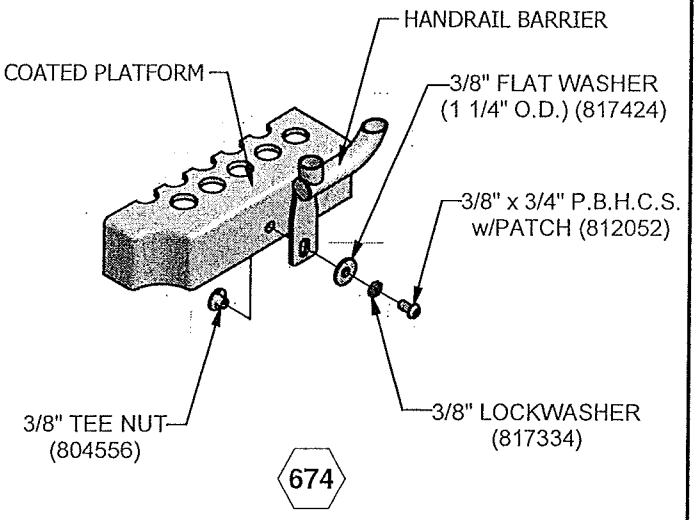
Note: Loctite (Supplied by Others) Should be Used on All Threaded Hardware.

Note: After Assembly is Complete, Peen Tee-Nuts and Flatwashers to Match Radius of Pipe.

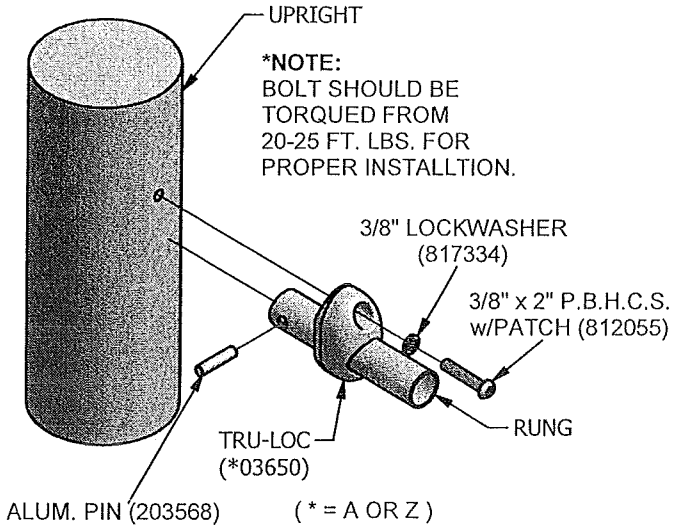



101




674




747

SHEET SCHEDULE


1.1 NAKOMA PARK - PROJECT LOCATION AND SITE ACCESS
1.2 NAKOMA PARK - DEMOLITION AND PROTECTION PLAN
1.3 NAKOMA PARK - SITE PLAN
1.4 NAKOMA PARK - GRADING, DRAINAGE & EROSION CONTROL PLAN
1.5 NAKOMA PARK - DESIGN COMPUTATIONS

2.1 RESERVOIR PARK - PROJECT LOCATION AND SITE ACCESS
2.2 RESERVOIR PARK - DEMOLITION AND PROTECTION PLAN
2.3 RESERVOIR PARK - SITE PLAN
2.4 RESERVOIR PARK - GRADING, DRAINAGE AND EROSION CONTROL PLAN
2.5 RESERVOIR PARK - DESIGN COMPUTATIONS

3.1 REYNOLDS PARK - PROJECT LOCATION AND SITE ACCESS
3.2 REYNOLDS PARK - DEMOLITION AND PROTECTION PLAN
3.3 REYNOLDS PARK - SITE PLAN
3.4 REYNOLDS PARK - GRADING AND EROSION CONTROL PLAN
3.5 REYNOLDS PARK - DESIGN COMPUTATIONS


SHEET SCHEDULE (CONTINUED)


4.1 WORTHINGTON PARK - PROJECT LOCATION AND SITE ACCESS
4.2 WORTHINGTON PARK - DEMOLITION AND PROTECTION PLAN - PLAYGROUND
4.3 WORTHINGTON PARK - DEMOLITION AND PROTECTION PLAN - PATH
4.4 WORTHINGTON PARK - SITE PLAN - PLAYGROUND
4.5 WORTHINGTON PARK - SITE PLAN - PATH
4.6 WORTHINGTON PARK - GRADING, DRAINAGE & EROSION CONTROL PLAN - PLAYGROUND
4.7 WORTHINGTON PARK - GRADING, DRAINAGE &EROSION CONTROL PLAN - PATH
4.8 WORTHINGTON PARK - DESIGN COMPUTATIONS

5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN
5.2 ASPHALT EDGE AT PLAYGROUND


# 2013 PARK PLAYGROUND IMPROVEMENTS

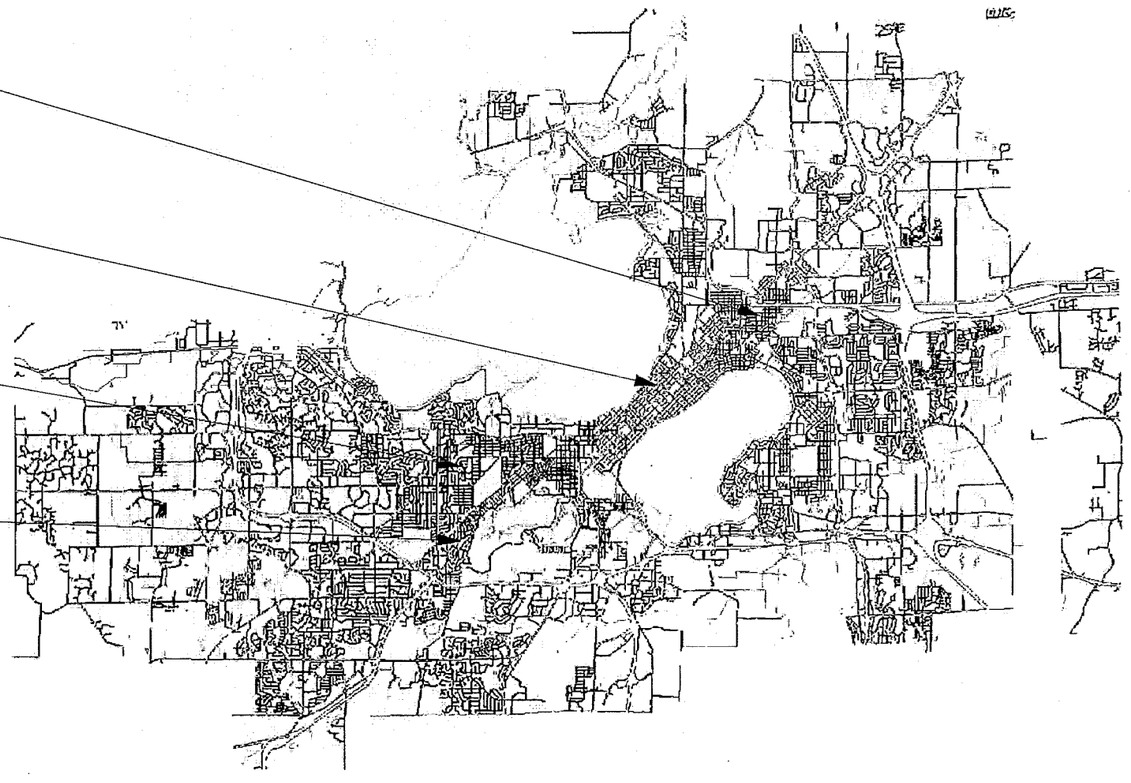
# CONTRACT 7130

WORTHINGTON PARK
3102 WORTHINGTON AVENUE
MADISON, WI 53714

REYNOLDS PARK
810 EAST MIFFLIN STREET
MADISON, WI 53703

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705

NAKOMA PARK
3801 CHEROKEE DRIVE
MADISON, WI 53711

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*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*


play MADISON PARKS

N

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimenstons of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: SCL/MS* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:

SHEET NUMBER:

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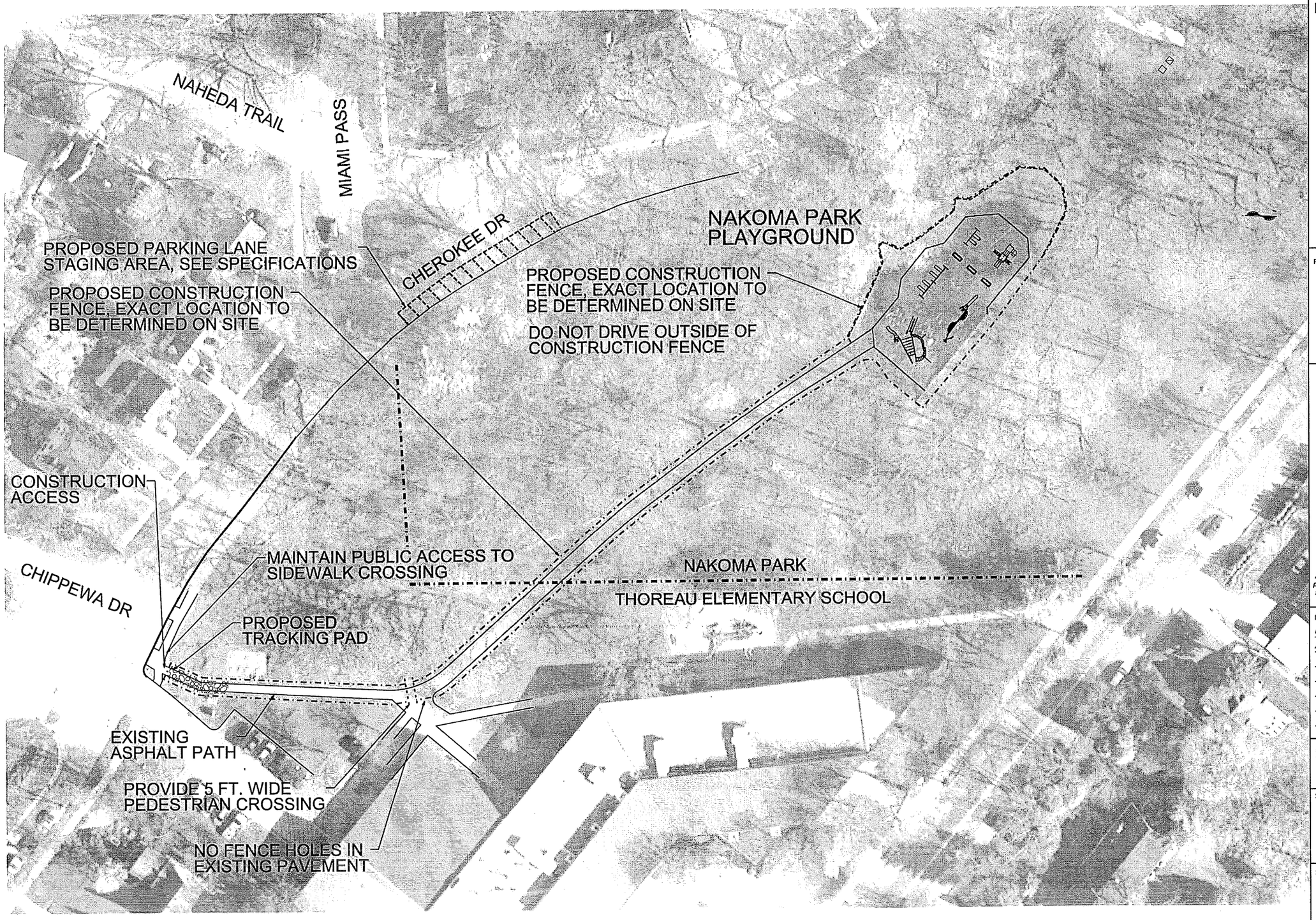


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*Madison, WI 53701-2987*

*play* MADISON PARKS

Graphical Scale
0 60 ft

N

PROJECT:

*NAKOMA PARK PLAYGROUND*

*NAKOMA PARK*
*3801 CHEROKEE DR.*
*MADISON, WI*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by:* | *xx-xx-xxxx* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*PROJECT LOCATION AND SITE ACCESS*

SHEET NUMBER:
*1.1*

*M:\Maps\parks\Nakoma\playground 2013\NakomaPlayground2013.dgn*

CONSTRUCTION FENCE
DO NOT DRIVE OUTSIDE
OF CONSTRUCTION FENCE

PROPOSED SILT SOCK

REMOVE EXISTING SOD AND TOPSOIL

ALL EXISTING PLAY EQUIPMENT
TO BE REMOVED BY CITY OF MADISON

EXISTING PLAYGROUND SURFACING TO
BE REMOVED BY CITY OF MADISON TO
14" BELOW THE EXISTING PLAYGROUND
SURFACE ELEVATION

TEMPORARY
EXCAVATION
STORAGE

EXISTING RETAINING WALL REMAINS

KEY

TREE PROTECTION TYP.
NO ROOT CUT


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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:

NAKOMA PARK
PLAYGROUND

NAKOMA PARK
3801 CHEROKEE DR.
MADISON, WI


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: | xx-xx-xxxx |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DEMOLITION AND
PROTECTION PLAN

SHEET NUMBER:
1.2

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PROPOSED 2-5 CLIMBING STRUCTURE, SEE ATTACHED SPECIFICATIONS

PROPOSED 2-5 SWINGS, SEE SPECIFICATIONS

PROPOSED ENGINEERED WOOD FIBER PLAY SURFACE, 12" DEPTH (BY OTHERS)

PROPOSED SWINGS,SEE SPECIFICATIONS

PROPOSED 5-12 CLIMBING STRUCTURE, SEE SPECIFICATIONS

PROPOSED 5-12 CLIMBING STRUCTURE, SEE SPECIFICATIONS

PROPOSED BORDER TIMBERS (SUPPLIED BY THE CITY OF MADISON, INSTALLED BY THE CONTRACTOR)

TOPSOIL AND SEED IN ALL DISTURBED AREAS

EXISTING ASPHALT PATH

TOPSOIL AND SEED IN ALL DISTURBED AREAS

PROPOSED BENCHES (3), SEE SPECIFICATIONS

PROPOSED EQUIPMENT SAFETY ZONES

EXISTING RETAINING WALL

CONSTRUCTION FENCE

DO NOT DRIVE OUTSIDE OF CONSTRUCTION FENCE

ALIGN BORDER TIMBERS WITH EXISTING ASPHALT PATH

TOP OF BANK

BOTTOM OF BANK

20' 0" +/-

24' 0"+/-

36' 7 3/4"

12' 0" +/-

6' 0"

48' 0"

4' 0" +/-

7' 5 1/2"

25' 0" +/-

5" Black Cherry

12" Type?

18" White

16" White/

11" Boxelder

16" Boxelder

12" STUMP

8" Type?

22" Hickory

6" Maple

13" Type?

Chinese Elm?

8" Black Cherry

8" Boxelder

30" White/Burr Oak

6" Boxelder

30" White/Burr Oak

30" White/Burr Oak

30" White/Burr Oak

17" White/Burr Oak

28" White/Burr Oak

18" White/Burr Oak

24" White/Burr Oa

9" Red/Black Oak

26" Type?

21" White/Burr Oak

30" White/Burr Oak

18" White/Burr Oak

22" White/Burr Oak

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*play* **MADISON PARKS**

Graphical Scale
0 20 ft

N

PROJECT:

*NAKOMA PARK PLAYGROUND*

*NAKOMA PARK*
*3801 CHEROKEE DR.*
*MADISON, WI*

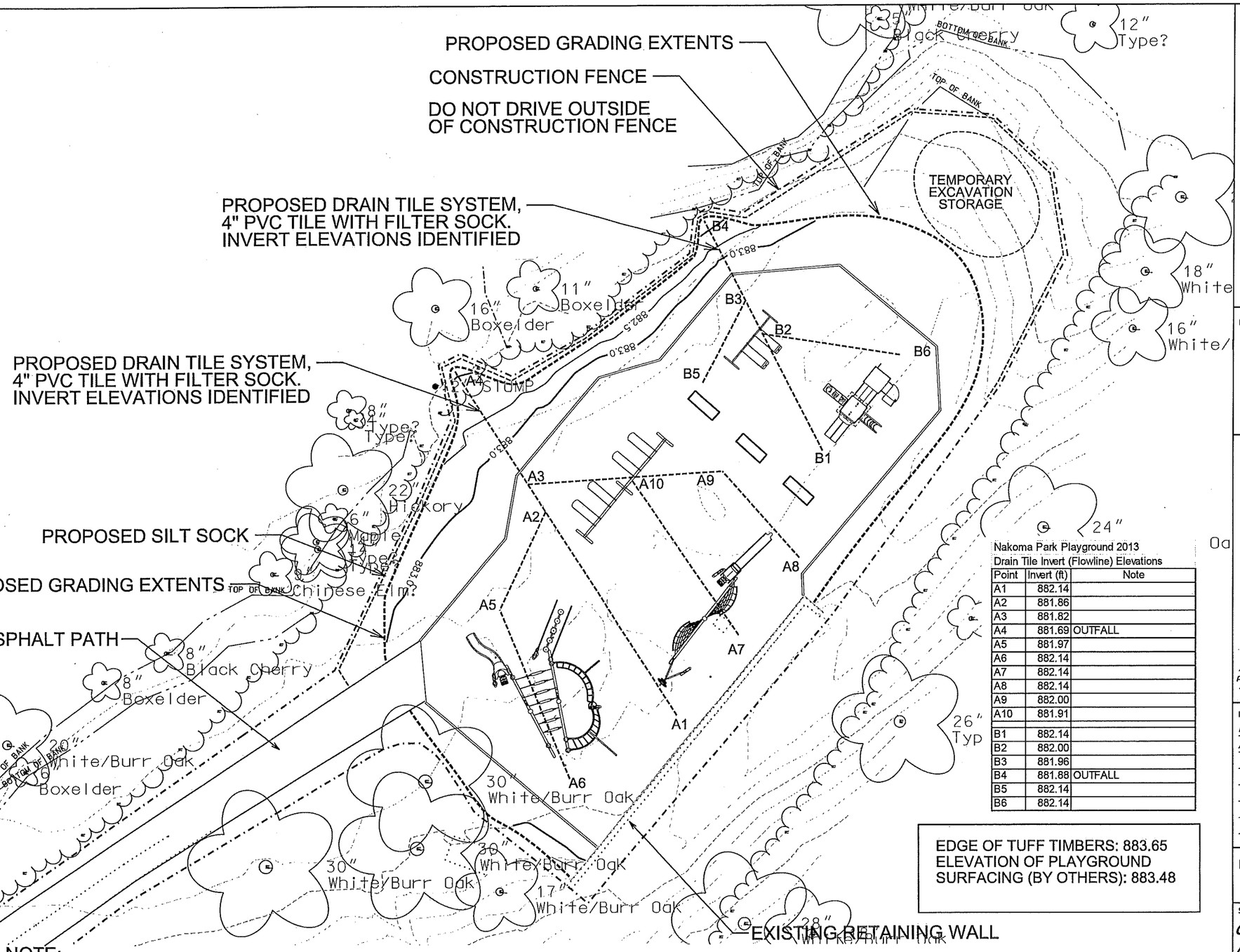
*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by:* | *xx-xx-xxxx* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN*

SHEET NUMBER:
**1.3**




Nakoma Park Playground 2013
Drain Tile Invert (Flowline) Elevations

| Point | Invert (ft) | Note |
|---|---|---|
| A1 | 882.14 | |
| A2 | 881.86 | |
| A3 | 881.82 | |
| A4 | 881.69 | OUTFALL |
| A5 | 881.97 | |
| A6 | 882.14 | |
| A7 | 882.14 | |
| A8 | 882.14 | |
| A9 | 882.00 | |
| A10 | 881.91 | |
| | | |
| B1 | 882.14 | |
| B2 | 882.00 | |
| B3 | 881.96 | |
| B4 | 881.88 | OUTFALL |
| B5 | 882.14 | |
| B6 | 882.14 | |

EDGE OF TUFF TIMBERS: 883.65
ELEVATION OF PLAYGROUND SURFACING (BY OTHERS): 883.48

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.0 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
NAKOMA PARK PLAYGROUND

NAKOMA PARK
3801 CHEROKEE DR.
MADISON, WI


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| ITEM | DATE |
|---|---|
| Drawn by: | xx-xx-xxxx |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
1.4

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**Nakoma Park Playground Improvements**
City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

**Notes:**

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

**Area ID# groups**

| | | |
|---|---|---|
| CO | Tuf to Concrete | CO |
| GR | Turf to Gravel | GR |
| AS | Asphalt | AS |
| PP | Playground to Playground | PP |
| PT | Playground to Turf | PT |
| TP | Turf to Playground | TP |
| TT | Turf to Turf | TT |
| TB | Turf to Border Timbers | TB |
| PB | Playground to Border Timb | PB |
| WA | Wall | WA |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PP | | Play Material Excavate | Excavate 14" of playground surfacing | | | 5321 | 1.17 | 6210 | 230.0 | 0% | 230.0 |
| PP | | Subsoil Place | Place subsoil to within 12" of proposed grade | Ex-14inches | Pro1-12inches | | varies | -896 | -33.2 | 0% | -33.2 |
| PP | | Subsoil Excavate | Excavate subsoil to within 12" of proposed grade | Ex-14inches | Pro1-12inches | | varies | 278 | 10.3 | 0% | 10.3 |
| PP | | Play Material Place | Place 12" of shredded wood surfacing | | | 5321 | -1.00 | -5321 | -197.1 | 0% | -197.1 |
| PT | | Play Material Excavate | Excavate 14" of playground surfacing | | | 1409.1 | 1.17 | 1644 | 60.9 | 0% | 60.9 |
| PT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-14inches | Pro2-6inches | | varies | -1119 | -41.5 | 0% | -41.5 |
| PT | | Topsoil Place | Place 6" topsoil | | | 1409.1 | -0.50 | -705 | -26.1 | 0% | -26.1 |
| TP | | Topsoil Excavate | Excavate 4" of topsoil | | | 147.8 | 0.33 | 49 | 1.8 | 0% | 1.8 |
| TP | | Subsoil Excavate | Excavate subsoil to within 12" of proposed grades | Ex-4inches | Pro1-12inches | | varies | 75 | 2.8 | 0% | 2.8 |
| TP | | Subsoil Place | Place subsoil to within 12" of proposed grade | Ex-4inches | Pro2-9inches | | varies | -3 | -0.1 | 0% | -0.1 |
| TP | | Play Material Place | Place 12" of shredded wood surfacing | | | 147.8 | -1.00 | -148 | -5.5 | 0% | -5.5 |
| TT | | Topsoil Excavate | Remove 4" of topsoil | | | 790 | 0.33 | 261 | 9.7 | 0% | 9.7 |
| TT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | | varies | -135 | -5.0 | 0% | -5.0 |
| TT | | Subsoil Excavate | Excavate subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | | varies | 85 | 3.1 | 0% | 3.1 |
| TT | | Topsoil Place | Place 6" of topsoil | | | 790 | -0.50 | -395 | -14.6 | 0% | -14.6 |
| TB | | Topsoil Excavate | Excavate 4" of topsoil | | | 79.5 | 0.33 | 26 | 1.0 | 0% | 1.0 |
| TB | | Subsoil Excavate | Excavate subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | | varies | 41 | 1.5 | 0% | 1.5 |
| TB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | | varies | 1 | 0.1 | 0% | 0.1 |
| TB | | Place Border | Place Border | | | 79.5 | -1.00 | -80 | -2.9 | 0% | -2.9 |
| PB | | Play Material Excavate | Excavate 14" of playground surfacing | | | | 1.17 | 76 | 2.8 | 0% | 2.8 |
| PB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-14inches | Pro2-1foot | | varies | -29 | -1.1 | 0% | -1.1 |

**Nakoma Park Playground**
City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

Summary of stone (gravel) and soil quantities in the Bid Table.
Dervied from more detailed spreadsheet available from Parks Div

**Preliminary Computation Summary**
Positive volumes are cuts (material available), negative volumes are fills (material needed)

| Row Labels | Sum of Factored (Uncom-pacted) Volume (cu yd) |
|---|---|
| Play Material Excavate | 293.7 |
| Play Material Place | -202.5 |
| Subsoil Excavate | 17.7 |
| Subsoil Place | -80.8 |
| Topsoil Excavate | 12.4 |
| Topsoil Place | -40.7 |
| **Grand Total** | **-3.1** |

**Reorganized into Bid Table Items:**

| | |
|---|---|
| Bid Item #20101 Excavation Cut | Subsoil Excavate + Topsoil Excavate |
| Bid Item #20201 Fill | Subsoil Place + Subsoil Excavate |
| Bid Item #20221 Topsoil | = Topsoil Place |
| Bid Item #40201 | = Asphalt |
| Bid Item #40102 | = Gravel Place |
| Play material Exavate | By others, not included in this contract. |
| Play material Place | By others, not included in this contract. |


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PROJECT:
*NAKOMA PARK PLAYGROUND*

*NAKOMA PARK*
*3801 CHEROKEE DR.*
*MADISON, WI*


*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*


| ITEM | DATE |
|---|---|
| *Drawn by:* | *xx-xx-xxxx* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*DESIGN COMPUTATIONS*

SHEET NUMBER:
*1.5*

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NOTE:
1. NO CONSTRUCTION ACCESS FROM LARKIN STREET.

CONSTRUCTION STAGING AREA (SHARED WITH CONTRACTOR FOR BOOSTER STATION RECONSTRUCTION). TOPSOIL AND SUBSOIL STOCKPILING MAY NOT OCCUR IN THIS AREA.

BOOSTER PUMP STATION

LARKIN STREET

RESERVOIR PARK

PROJECT LOCATION

EXISTING BASKETBALL COURT

SUBSOIL AND TOPSOIL STAGING CAN ONLY BE WITHIN THE PROPOSED PLAYGROUND SITE. NO SUBSOIL OR TOPSOIL STAGING CAN OCCUR OUTSIDE THESE LIMITS.

RIDGE ROAD

CONSTRUCTION ENTRANCE

GLENWAY STREET

ZWERG DRIVE

PRIVATE PROPERTY


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play MADISON PARKS

Graphical Scale
0 50 ft

N

PROJECT:

2013 PARK PLAYGROUND IMPROVEMENTS

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
PROJECT LOCATION AND SITE ACCESS

SHEET NUMBER:
2.1

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NOTE:
1.) ALL EXISTING EQUIPMENT & PLAYGROUND SURFACING TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.

PROTECT STORM OVERFLOW STRUCTURE

PLACE CONSTRUCTION FENCE AT GRADING EXTENTS PRIOR TO CONSTRUCTION

PROTECT EX. TREE (NO ROOT CUT)

EXISTING EXCAVATED PLAYGROUND SURFACING (RESTORED BY OTHERS)

REMOVE & RELOCATE EXISTING BENCH TO LOCATION SHOWN ON SHEET 2.3

EXISTING EXCAVATED PLAYGROUND SURFACING

REMOVE EXISTING SOD & TOPSOIL

NOTE:
PROTECT ALL EXISTING UTILITIES

REMOVE CONCRETE CURB AND GUTTER

PROTECT EXISTING TREE (NO ROOT CUT)

CONTROL POINT
DRILL HOLE N RIM OF 4 MGE MHS
N=479357.69
E=806563.75
ELEV=1017.30

PROTECT EXISTING CONCRETE PAD AND DRINKING FOUNTAIN

PROTECT EXISTING TREE (NO ROOT CUT)


City of Madison
Department of Public Works
*PARKS DIVISION*
*City-County Building, Suite 104*
*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*


play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*RESERVOIR PARK*
*126 GLENWAY STREET*
*MADISON, WI 53705*


*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*


| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*DEMOLITION AND PROTECTION PLAN*

SHEET NUMBER:
2.2

*M:\Maps\parks\Reservoir\Playground\Reservoir_Playground_2013_2D_Pro-3.dgn*

PROPOSED 3" DEPTH ASPHALT PATH. EXTEND GRAVEL BASE .5 FEET BEYOND EDGE OF ASHPALT, TOP WITH TOPSOIL, SEED AND MULCH

SEE DETAIL 5.2 PAVEMENT AT PLAYGROUND EDGE

TAPER ASPHALT WITHIN HATCHED AREA TO ENSURE ASPHALT ELEVATION IS AT 1020.34

PROPOSED TUFF TIMBERS (SUPPLIED BY CITY OF MADISON, INSTALLED BY CONTRACTOR)

RELOCATED BENCH

PROPOSED CONCRETE PEDESTRIAN CURB RAMP WITH DETECTABLE WARNING FIELDS

CONTROL POINT
DRILL HOLE N RIM OF 4 MGE MHS
N=479357.69
E=806563.75
ELEV=1017.30

PROPOSED SHREDDED RUBBER MULCH (INSTALLED BY OTHERS)

PROPOSED BOULDER RETAINING WALL

28' 24' 8' 20' 32' 8' 28' 8' 16' 12' 40' 48' 36' 0.5' 1.5' 1.5' 8'


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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
2.3

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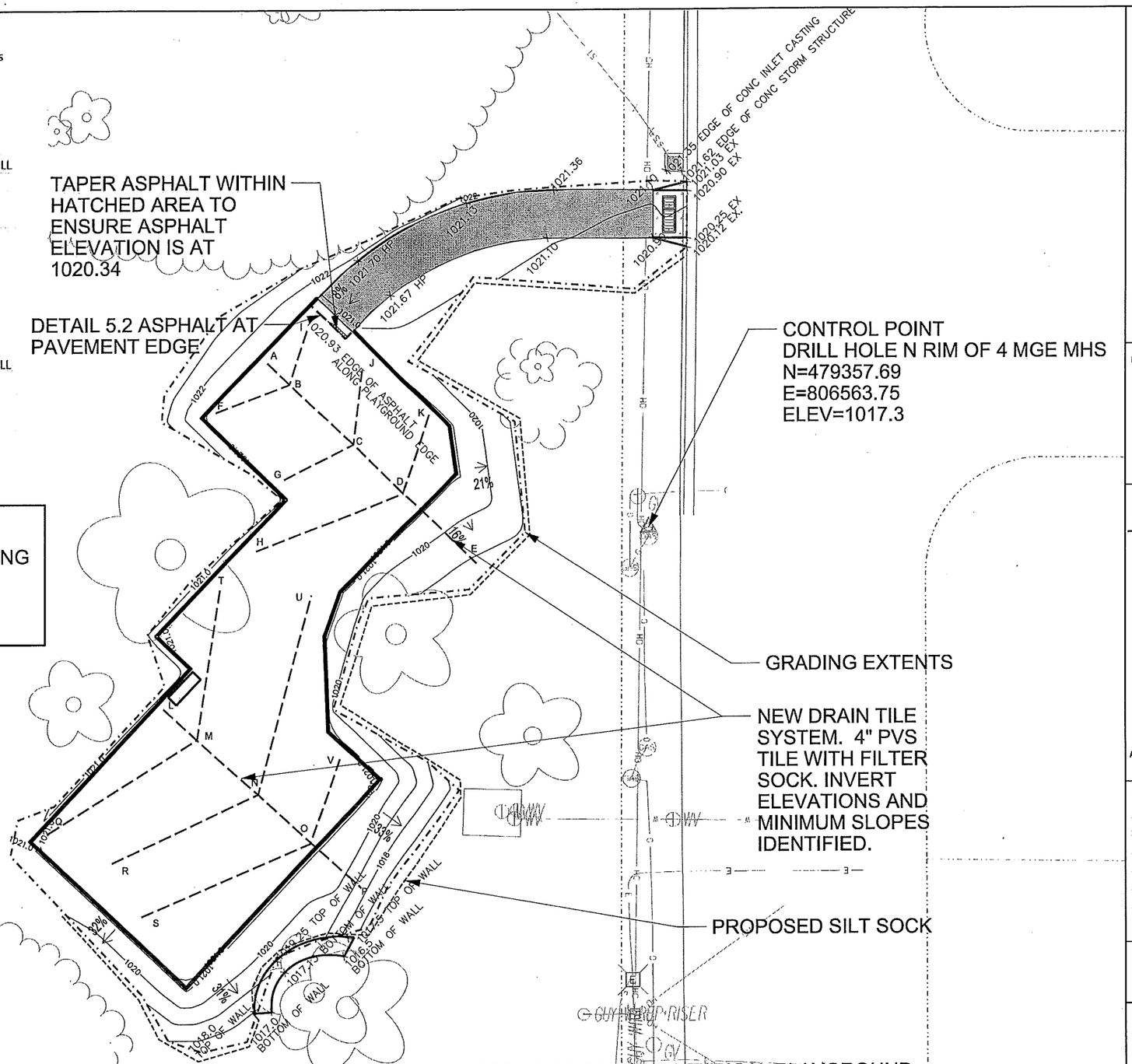
**Drain Tile Lengths & Slopes**
**from intersection to intersection**

| From | To | Length (ft) | Slope (%) |
|---|---|---|---|
| A | B | 5.18 | -1.35 |
| B | C | 14.82 | -0.74 |
| C | D | 11.87 | -1.02 |
| D | E | 17.31 | -0.7 |
| F | B | 13.32 | -0.53 |
| B | I | 9.73 | 0.72 |
| G | C | 13.02 | -0.54 |
| C | J | 12.69 | 0.5 |
| H | D | 26.7 | -0.5 |
| D | K | 14.14 | 0.5 |
| L | M | 7.81 | -1.92 |
| M | N | 13.85 | -0.94 |
| N | O | 11.76 | -0.71 |
| O | P | 11.76 | -0.71 |
| Q | M | 30.24 | -0.5 |
| M | T | 25.59 | 0.59 |
| R | N | 27.6 | -0.5 |
| N | U | 34.8 | 0.5 |
| S | O | 31.38 | -0.5 |
| O | V | 15.17 | 0.5 |

**Reservoir Park Playground**
**Drain Tile Invert (Flowline) Elevations**

| Point | Invert (ft) | Note |
|---|---|---|
| A | 1019.26 | |
| B | 1019.19 | |
| C | 1019.08 | |
| D | 1018.96 | |
| E | 1018.84 | OUTFALL |
| F | 1019.26 | |
| G | 1019.15 | |
| H | 1019.09 | |
| I | 1019.26 | |
| J | 1019.14 | |
| K | 1019.03 | |
| L | 1019.26 | |
| M | 1019.11 | |
| N | 1018.98 | |
| O | 1018.9 | |
| P | 1018.84 | OUTFALL |
| Q | 1019.26 | |
| R | 1019.12 | |
| S | 1019.06 | |
| T | 1019.26 | |
| U | 1019.15 | |
| V | 1018.98 | |

EDGE OF TUFF TIMBERS: 1021.10
ELEVATION OF FINISHED PLAYGROUND SURFACING (BY OTHERS): 1020.93
SUBGRADE DEPTH: 1020.34




NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.0 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) MAT ALL SLOPES GREATER THAN 5:1 WITH EROSION CONTROL MATTING, CLASS I URBAN TYPE A.
3.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
4.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
2.4

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**Reservoir Park Playground Improvements**
City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

Notes:

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Area ID# groups

| | | |
|---|---|---|
| CO | Turf to Concrete | CO |
| GR | Turf to Gravel | GR |
| AS | Asphalt | AS |
| PP | Playground to Playground | PP |
| PT | Playground to Turf | PT |
| TP | Turf to Playground | TP |
| TT | Turf to Turf | TT |
| TB | Turf to Border Timbers | TB |
| PB | Playground to Border Timb | PB |
| WA | Wall | WA |

| Grp | ID# | Material | Item | From Surface Model | To Surface Model | area (sq ft) | depth (ft) | Unfactored volume (cu ft) | Unfactored volume (cu yd) | Expansion Factor (%) | Factored (Uncompacted) Volume (cu yd) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CO | | Topsoil Excavate | Remove top 4" of topsoil | | | 50 | 0.34 | 17 | 0.6 | 0% | 0.6 |
| CO | | Subsoil Excavate | Remove subsoil to within 13" of proposed grade | Ex-13inches | Pro2-13inches | 50 | varies | 6.5 | 0.2 | 0% | 0.2 |
| CO | | Subsoil Fill | Place subsoil to within 13" of proposed grade | Ex-13inches | Pro2-13inches | 50 | varies | 0.2 | 0.0 | 0% | 0.0 |
| CO | | Gravel Place | Place 6" of compacted crushed aggregate base course | | | 50 | -0.50 | -25 | -0.9 | 0% | -0.9 |
| CO | | Concrete Place | Place 7" of concrete sidewalk | | | 50 | -0.58 | -29.15 | -1.1 | 0% | -1.1 |
| GR | | Topsoil Excavate | Remove top 4" of topsoil | | | 87 | 0.34 | 29.58 | 1.1 | 0% | 1.1 |
| GR | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro2-9inches | 87 | varies | 55.7 | 2.1 | 0% | 2.1 |
| GR | | Gravel Place | Place 6" depth of gravel | | | 87 | -0.50 | -43.5 | -1.6 | 0% | -1.6 |
| GR | | Topsoil Place | Place 3" of topsoil over gravel base | | | 87 | -0.25 | -21.75 | -0.8 | 0% | -0.8 |
| AS | | Topsoil Excavate | Remove top 4" of topsoil | | | 466 | 0.34 | 158.44 | 5.9 | 0% | 5.9 |
| AS | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro2-9inches | 466 | varies | 344.8 | 12.8 | 0% | 12.8 |
| AS | | Gravel Place | Place 6" depth of gravel | | | 466 | -0.50 | -233 | -8.6 | 0% | -8.6 |
| AS | | Asphalt Place | Place 3" depth of asphalt for bike path construction | | | 466 | -0.25 | -116.5 | -4.3 | 0% | -4.3 |
| PP | | Play Material Excavate | Excavate 14" of playground surfacing | | | 1527 | 1.17 | 1782 | 66.0 | 0% | 66.0 |
| PP | | Subsoil Place | Place subsoil to within 9" of proposed grade | Ex-14inches | Pro2-9inches | 1527 | varies | -1713 | -63.4 | 0% | -63.4 |
| PP | | Play Material Place | Place 9" of rubber surfacing | | | 1527 | -0.75 | -1145 | -42.4 | 0% | -42.4 |
| PT | | Play Material Excavate | Excavate 14" of playground surfacing | | | 321 | 1.17 | 375 | 13.9 | 0% | 13.9 |
| PT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-14inches | Pro2-6inches | 321 | varies | -134 | -5.0 | 0% | -5.0 |
| PT | | Topsoil Place | Place 6" topsoil | | | 321 | -0.50 | -161 | -5.9 | 0% | -5.9 |
| TP | | Topsoil Excavate | Excavate 4" of topsoil | | | 1819 | 0.33 | 600 | 22.2 | 0% | 22.2 |
| TP | | Subsoil Excavate | Excavate subsoil to within 9" of proposed grades | Ex-4inches | Pro2-9inches | 1819 | varies | 633 | 23.4 | 0% | 23.4 |
| TP | | Subsoil Place | Place subsoil to within 9" of proposed grade | Ex-4inches | Pro2-9inches | 1819 | varies | -638 | -23.6 | 0% | -23.6 |
| TP | | Play Material Place | Place 9" of rubber surfacing | | | 1819 | -0.75 | -1364 | -50.5 | 0% | -50.5 |
| TT | | Topsoil Excavate | Remove 4" of topsoil | | | 2427 | 0.33 | 801 | 29.7 | 0% | 29.7 |
| TT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 2427 | varies | -1352 | -50.1 | 0% | -50.1 |
| TT | | Subsoil Excavate | Excavate subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 2427 | varies | 428 | 15.9 | 0% | 15.9 |
| TT | | Topsoil Place | Place 6" of topsoil | | | 2427 | -0.50 | -1214 | -44.9 | 0% | -44.9 |
| TB | | Topsoil Excavate | Excavate 4" of topsoil | | | 92 | 0.33 | 30 | 1.1 | 0% | 1.1 |
| TB | | Subsoil Excavate | Excavate subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | 92 | varies | 42 | 1.6 | 0% | 1.6 |
| TB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | 92 | varies | -41 | -1.5 | 0% | -1.5 |
| TB | | Place Border | Place Border | | | 92 | -1.00 | -92 | -3.4 | 0% | -3.4 |
| PB | | Play Material Excavate | Excavate 14" of playground surfacing | | | 11 | 1.17 | 13 | 0.5 | 0% | 0.5 |
| PB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-14inches | Pro2-1foot | 11 | varies | -6 | -0.2 | 0% | -0.2 |
| PB | | Place Border | Place Border | | | 11 | -1.00 | -11 | -0.4 | 0% | -0.4 |
| WA | | Topsoil Excavate | Excavate 4" of topsoil | | | 70 | 0.33 | 23 | 0.9 | 0% | 0.9 |
| WA | | Subsoil Excavate | Excavate Material for Wall | | | 70 | 1.00 | 70 | 2.6 | 0% | 2.6 |
| WA | | Wall Place | Place Wall | | | 70 | -1.00 | -70 | -2.6 | 0% | -2.6 |

## Reservoir Park Playground

City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

Summary of stone (gravel) and soil quantities in the Bid Table.
Dervied from more detailed spreadsheet available from Parks Div

**Preliminary Computation Summary**
Positive volumes are cuts (material available), negative volumes are fills (material

| Row Labels | Sum of Factored (Uncom-pacted) Volume (cu yd) |
|---|---|
| Gravel Place | -11 |
| Subsoil Excavate | 54 |
| Subsoil Place | -142 |
| Topsoil Excavate | 59 |
| Topsoil Place | -52 |
| Play Material Excavate | 80 |
| Play Material Place | -93 |
| Subsoil Fill | 0 |
| Concrete Place | -1 |
| Asphalt Place | -4 |
| **Grand Total** | **-110** |

**Reorganized into Bid Table Items:**

| | |
|---|---|
| Bid Item #20101 Excavation Cut | Subsoil Excavate + Topsoil Excavate |
| Bid Item #20201 Fill | Subsoil Place + Subsoil Excavate |
| Bid Item #20221 Topsoil | = Topsoil Place |
| Bid Item #40201 | = Asphalt |
| Bid Item #40102 | = Gravel Place |
| Play material Exavate | By others, not included in this contract. |
| Play material Place | By others, not included in this contract. |


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*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*


*play* MADISON PARKS

Graphical Scale
0 20 ft
N

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*RESERVOIR PARK*
*126 GLENWAY STREET*
*MADISON, WI 53705*


*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*


| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN*

SHEET NUMBER:
*2.5*

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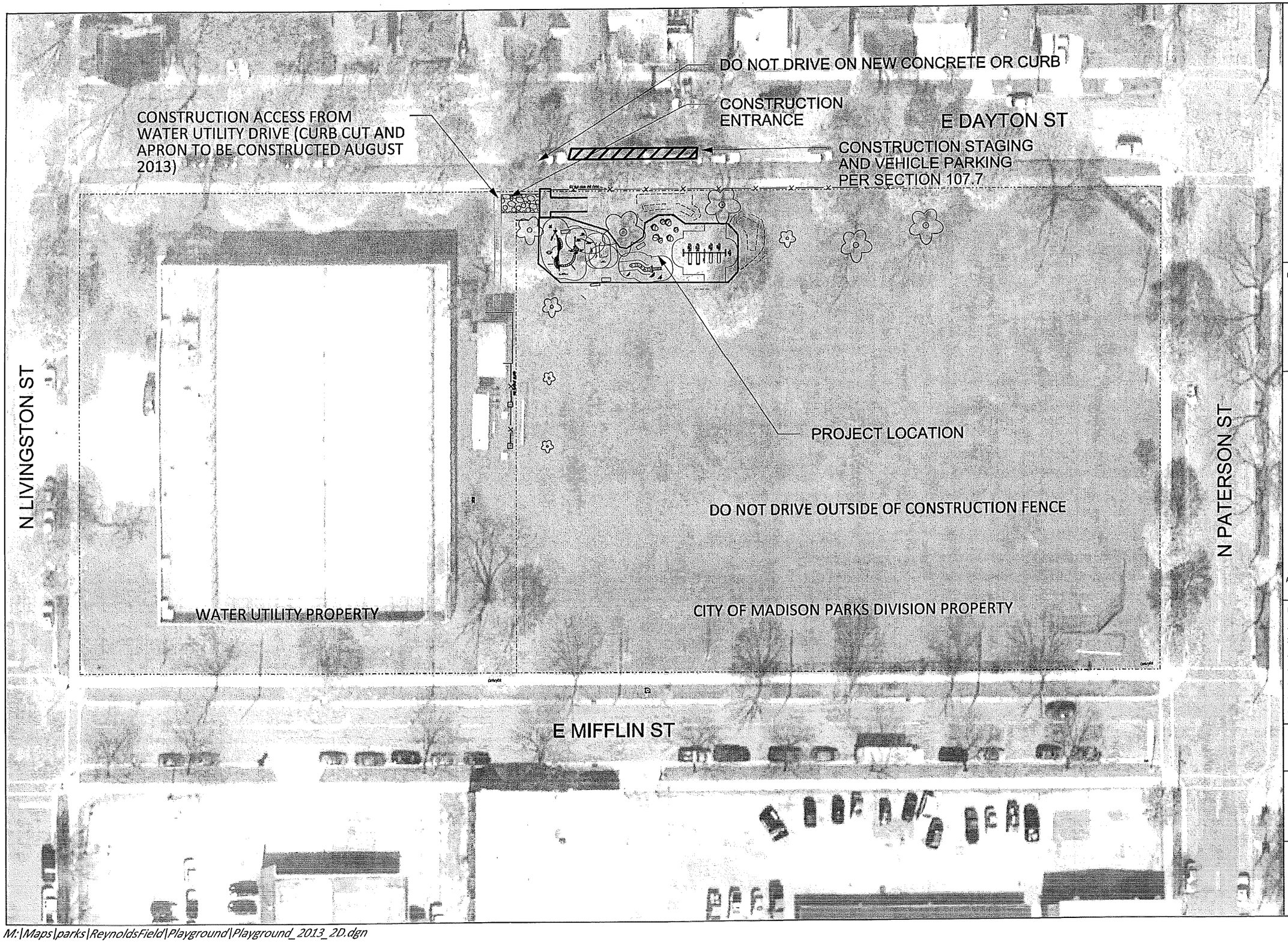


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*PO Box 2987*
*Madison, WI 53701-2987*

play MADISON PARKS

Graphical Scale
0 50 ft

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*REYNOLDS PARK*
*810 E MIFFLIN ST*
*MADISON, WI 53703*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*PROJECT LOCATION AND SITE ACCESS*

SHEET NUMBER:
*3.1*

PROTECT EXISTING TREE (NO ROOT CUT)

PROTECT EXISTING DRINKING FOUNTAIN & CONCRETE PAD

CONTROL POINT, N BOLT FNTN BASE
N=485884.5100
E=823304.5000
ELEV = 850.7300

PROTECT EXISTING TREE (NO ROOT CUT)

PROTECT EXISTING FENCE

PROTECT EXISTING TREE (NO ROOT CUT)

6ft high chain link fence

drinking fountain

TOPSOIL/SUBSOIL STAGING LOCATION

bench

ped. gravel

playset

Swivel digger (2.5" reach)

ped. gravel

tot swings

TOPSOIL/SUBSOIL STAGING LOCATION

PROPOSED SILT SOCK

PROPOSED SILT SOCK

EXISTING EXCAVATED PLAYGROUND SURFACING

PLACE CONSTRUCTION FENCE AT GRADING EXTENTS PRIOR TO START OF CONSTRUCTION

DISTURBED LIMITS/CONSTRUCTION FENCE

REMOVE EXISTING BENCH AND RELOCATE AS SHOWN ON SHEET L-4 AND PER BID ITEM 90001 RELOCATE EXISTING BENCHES

NOTE: ALL EXISTING EQUIPMENT AND PLAYGROUND SURFACING TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION OF THIS CONTRACT.


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play MADISON PARKS

Graphical Scale
0 10ft

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

REYNOLDS PARK
810 E MIFFLIN ST
MADISON, WI 53703


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| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DEMOLITION PLAN AND PROTECTION PLAN

SHEET NUMBER:
3.2

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END OF EXISTING CHAIN LINK FENCE

6' EXISTING DRINKING FOUNTAIN & CONCRETE PAD

6ft high chain link fence

CONTROL POINT, N BOLT FNTN BASE
N=485884.5100
E=823304.5000
ELEV = 850.7300

(7) PROPOSED BOULDERS FOR SEATING

EXISTING CONCRETE SIDEWALK

drinking fountain

8'

7.8'

24'

12'

11'

8'

8'

8'

8'

8'

8'

24'

25'

16'

20'

4'

8'

92'

ENGINEERED WOOD FIBER PLAYGROUND SURFACING (INSTALLED BY OTHERS)

RELOCATED BENCH

RELOCATED BENCH

PROPOSED PLAYGROUND BORDER TIMBERS (SUPPLIED BY THE CITY OF MADISON, INSTALLED BY CONTRACTOR).

PROPOSED 3" DEPTH ASPHALT PATH. EXTEND GRAVEL BASE 0.5 FEET BEYOND EDGE OF ASPHALT.

DETAIL 5.2 ASPHALT EDGE AT PLAYGROUND

156459 GYRO TWISTER

100041 CURVED BALANCE BEAM

160208 POWERLIFTER

156180 THE BLENDER

111361 PARALLEL BARS

111357 TURNING BAR

171627 EVO'S 1 ARCH W/3 ATTACH POINTS

HEMISPHERE

160254 OVERHEAD TREKKER

SITE LOCATION NON-MAY NOT ATTACH A COMPONENT LATER WITHOUT EXTENSIVE REWORK OF THE NON-ARCHES

172038 FULL BUCKET SEAT W/PROGUARD CHAINS 6' BEAM HEIGHT

172038 FULL BUCKET SEAT W/PROGUARD CHAINS 6' BEAM HEIGHT

174018 BELT SEAT W/PROGUARD CHAINS 8' BEAM HEIGHT

174018 BELT SEAT W/PROGUARD CHAINS 8' BEAM HEIGHT

172331 5' ARCH SWING

172330 5' ARCH SWING

City of Madison
Department of Public Works
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*play* MADISON PARKS

Graphical Scale
0 10ft

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*REYNOLDS PARK*
*810 E MIFFLIN ST*
*MADISON, WI 53703*

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| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *XX-XX-XXXX* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN*

SHEET NUMBER:
3.3

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CONSTRUCTION ENTRANCE

CONTROL POINT, N BOLT FNTN BASE
N=485884.5100
E=823304.5000
ELEV = 850.7300

EXISTING FENCE

PROPOSED SILT SOCK

CONCRETE SIDEWALK

12" SHREDDED ENGINEERED FIBER WOOD MULCH (BY OTHERS)

TAPER ASPHALT WITHIN HATCHED AREA TO ENSURE ASPHALT EL. IS AT 850.33, SEE DETAIL 5.2

PROPOSED SILT SOCK

GRADING EXTENTS

EDGE OF PLAYGROUND BORDER TIMBERS: 851.50
ELEVATION OF FINISHED PLAYGROUND SURFACING (BY OTHERS) : 851.33
PLAYGROUND SUBGRADE ELEVATION: 850.33

ASPHALT AT PLAYGROUND ELEVATION: 851.33, SEE DETAIL 5.2

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.0 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.


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play MADISON PARKS

Graphical Scale
0 10ft

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

REYNOLDS PARK
810 E MIFFLIN ST
MADISON, WI 53703


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| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN

SHEET NUMBER:
3.4

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## Reynolds Park Playground Improvements

City of Madison, WI Public Works Contract #7130
Date Revised: 6/12/2013

**Notes:**

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

**Area ID# groups**

| | | |
|---|---|---|
| GR | Turf to Gravel | GR |
| AS | Asphalt | AS |
| PP | Playground to Playground | PP |
| PT | Playground to Turf | PT |
| TP | Turf to Playground | TP |
| TT | Turf to Turf | TT |
| TB | Turf to Border Timbers | TB |
| PB | Playground to Border Timt | PB |

| *Grp* | *ID#* | *Material* | *Item* | *From Surface Model* | *To Surface Model* | *area (sq ft)* | *depth (ft)* | *Unfac-tored volume (cu ft)* | *Unfac-tored volume (cu yd)* | *Expan-sion Factor (%)* | *Factored (Uncom-pacted) Volume (cu yd)* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GR | | Topsoil Excavate | Remove top 4" of topsoil | | | 343 | 0.34 | 116.62 | 4.3 | 0% | 4.3 |
| GR | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro-9inches | 343 | varies | 54.1 | 2.0 | 0% | 2.0 |
| GR | | Subsoil Place | Place subsoil to within 9" of proposed grade | Ex-4inches | Pro-9inches | 343 | varies | -15.4 | -0.6 | 0% | -0.6 |
| GR | | Gravel Place | Place 6" depth of gravel | | | 343 | -0.50 | -171.5 | -6.4 | 0% | -6.4 |
| GR | | Topsoil Place | Place 3" topsoil over gravel | | | 81 | -0.25 | -20.25 | -0.8 | 0% | -0.8 |
| AS | | Asphalt | Place 3" depth of asphalt for bike path construction | | | 248 | -0.25 | -62 | -2.3 | 0% | -2.3 |
| PP | | Play Material Excavate | Remove 14" of playground surfacing | | | 1822 | 1.17 | 2126 | 78.7 | 0% | 78.7 |
| PP | | Subsoil Place | Place subsoil to within 1 foot of proposed grade | Ex-14inches | Pro-1foot | 1822 | varies | -1733 | -64.2 | 0% | -64.2 |
| PP | | Play Material Place | Place 1' of woodchips | | | 1822 | -1.00 | -1822 | -67.5 | 0% | -67.5 |
| PT | | Play Material Excavate | Excavate14" of playground surfacing | | | 150 | 1.17 | 175 | 6.5 | 0% | 6.5 |
| PT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-14inches | Pro-6inches | 150 | varies | -157 | -5.8 | 0% | -5.8 |
| PT | | Topsoil Place | Place 6" topsoil | | | 150 | -0.50 | -75 | -2.8 | 0% | -2.8 |
| TP | | Topsoil Excavate | Excavate 4" of topsoil | | | 1446 | 0.33 | 477 | 17.7 | 0% | 17.7 |
| TP | | Subsoil Excavate | Excavate subsoil to within 12" of proposed grade | Ex-4inches | Pro-1foot | 1446 | varies | 5 | 0.2 | 0% | 0.2 |
| TP | | Subsoil Place | Place subsoil to within 14" of proposed grade | Ex-4inches | Pro-14inches | 1446 | varies | -212 | -7.9 | 0% | -7.9 |
| TP | | Play Material Place | Place 1' of woodchips | | | 1446 | -1.00 | -1446 | -53.6 | 0% | -53.6 |
| TT | | Topsoil Excavate | Remove 4" of topsoil | | | 1625 | 0.33 | 536 | 19.9 | 0% | 19.9 |
| TT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 1625 | varies | -1301 | -48.2 | 0% | -48.2 |
| TT | | Subsoil Excavate | Excavate subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 1625 | varies | 14 | 0.5 | 0% | 0.5 |
| TT | | Topsoil Place | Place 6" of topsoil | | | 1625 | -0.50 | -813 | -30.1 | 0% | -30.1 |
| TB | | Topsoil Excavate | Excavate 4" of topsoil | | | 75 | 0.33 | 25 | 0.9 | 0% | 0.9 |
| TB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-4inches | Pro-1' | 75 | varies | -14 | -0.5 | 0% | -0.5 |
| TB | | Place Border | Place Border | | | 75 | -1.00 | -75 | -2.8 | 0% | -2.8 |
| PB | | Play Material Excavate | Excavate 14" of playground surfacing | | | 19 | 1.17 | 22 | 0.8 | 0% | 0.8 |
| PB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-14inches | Pro-1' | 19 | varies | -17 | -0.6 | 0% | -0.6 |
| PB | | Place Border | Place Border | | | 19 | -1.00 | -19 | -0.7 | 0% | -0.7 |

## Reynolds Park Playground

City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

Summary of stone (gravel) and soil quantities in the Bid Table.
Dervied from more detailed spreadsheet available from Parks Div

**Preliminary Computation Summary**
Positive volumes are cuts (material available), negative volumes are fills (material

| Row Labels | Sum of Factored (Uncom-pacted) Volume (cu yd) |
|---|---|
| Gravel Place | -6 |
| Subsoil Excavate | 3 |
| Subsoil Place | -127 |
| Topsoil Excavate | 42 |
| Topsoil Place | -34 |
| Asphalt | -2 |
| Play Material Excavate | 85 |
| Play Material Place | -121 |
| **Grand Total** | **-160** |

**Reorganized into Bid Table Items:**

| | |
|---|---|
| Bid Item #20101 Excavation Cut | Subsoil Excavate + Topsoil Excavate |
| Bid Item #20201 Fill | Subsoil Place + Subsoil Excavate |
| Bid Item #20221 Topsoil | = Topsoil Place |
| Bid Item #40201 | = Asphalt |
| Bid Item #40102 | = Gravel Place |
| Play material Exavate | By others, not included in this contract. |
| Play material Place | By others, not included in this contract. |


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*PO Box 2987*
*Madison, WI 53701-2987*


*play* MADISON PARKS

Graphical Scale
0 10ft

PROJECT:
*2013 PARK PLAYGROUND IMPROVEMENTS*

*REYNOLDS PARK*
*810 E MIFFLIN ST*
*MADISON, WI 53703*


*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*


| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *xx-xx-xxxx06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:

SHEET TITLE:
*DESIGN COMPUTATIONS*

SHEET NUMBER:
*3.5*

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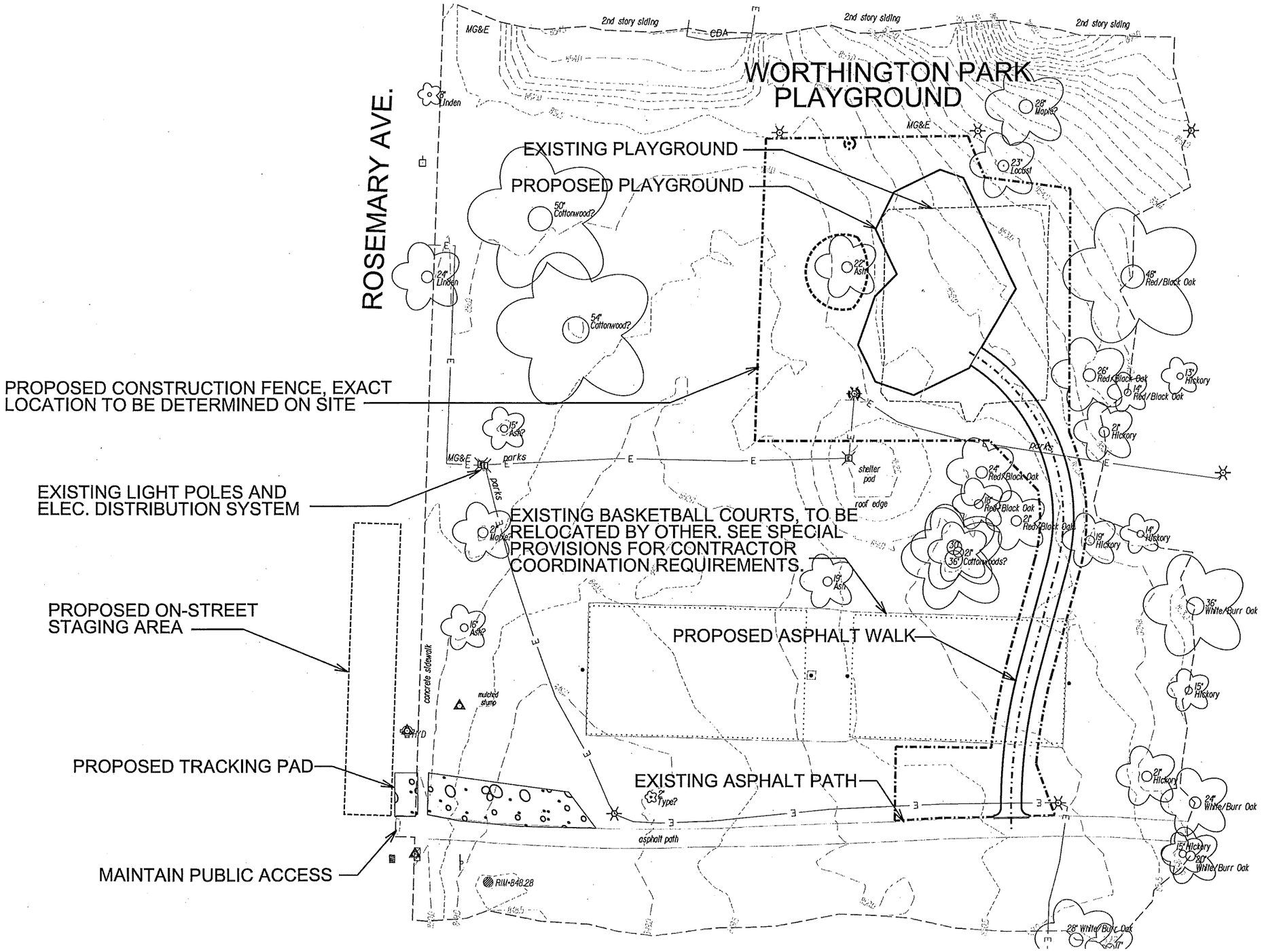



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*play* MADISON PARKS

Graphical Scale
0 40 ft

N

PROJECT:
*WORTHINGTON PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
*PROJECT LOCATION AND SITE ACCESS*

SHEET NUMBER:
4.1

*M:\Maps\parks\Worthington\Playground\Worthington_Playground2013.dgn*

PROPOSED SILT SOCK

CONSTRUCTION FENCE (PLASTIC)

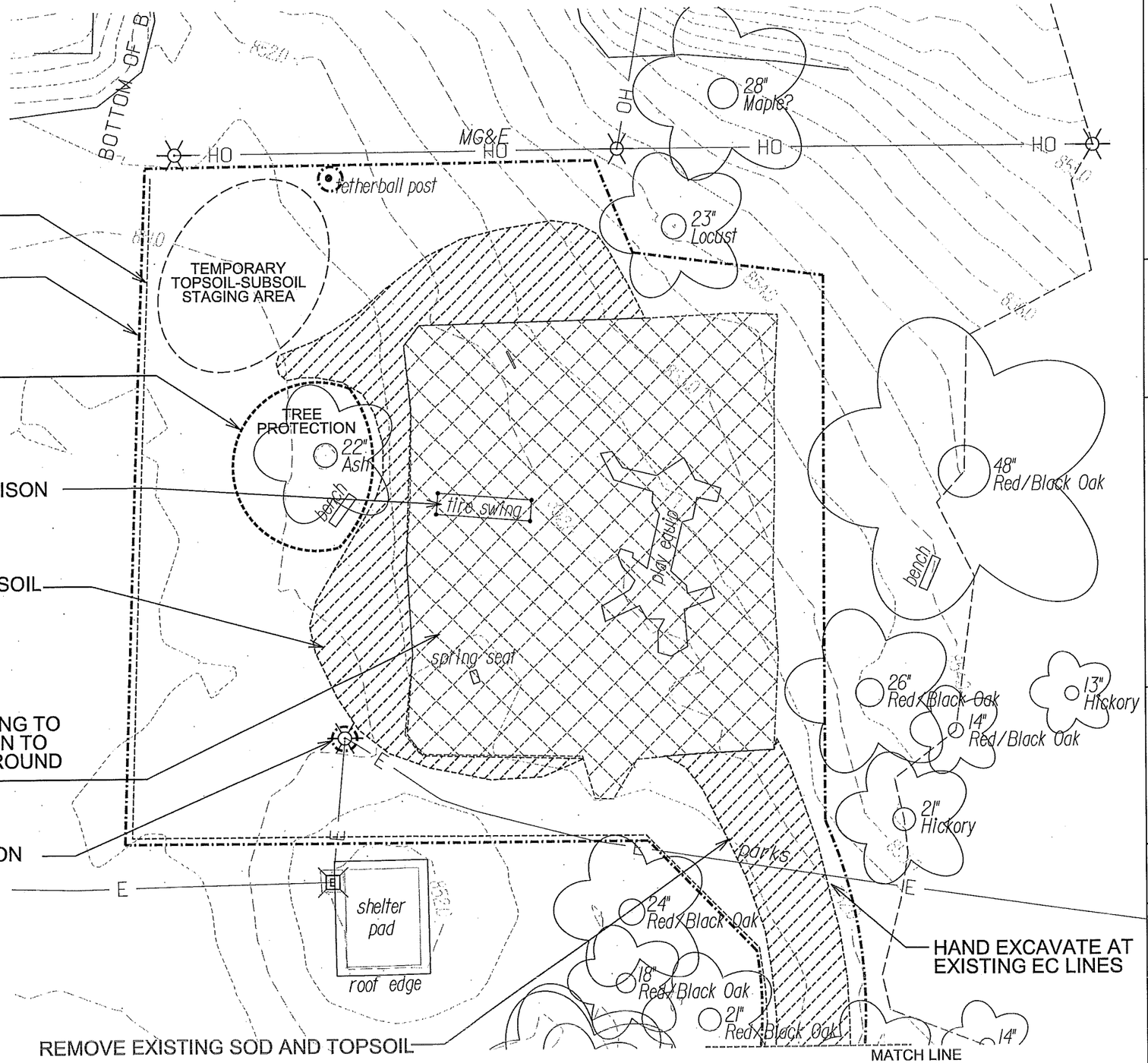
TREE PROTECTION (NO ROOT CUT) TYP.

ALL EXISTING PLAY EQUIPMENT TO BE REMOVED BY CITY OF MADISON

REMOVE EXISTING SOD AND TOPSOIL

EXISTING PLAYGROUND SURFACING TO BE REMOVED BY CITY OF MADISON TO 12" BELOW THE EXISTING PLAYGROUND SURFACE ELEVATION

EXISTING LIGHT POLE PROTECTION





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*play* **MADISON PARKS**

Graphical Scale
0 20 ft

N

PROJECT:
*WORTHINGTON PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: MRS* | *06-21-13* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*DEMOLITION AND PROTECTION PLAN*

SHEET NUMBER:
*4.2*

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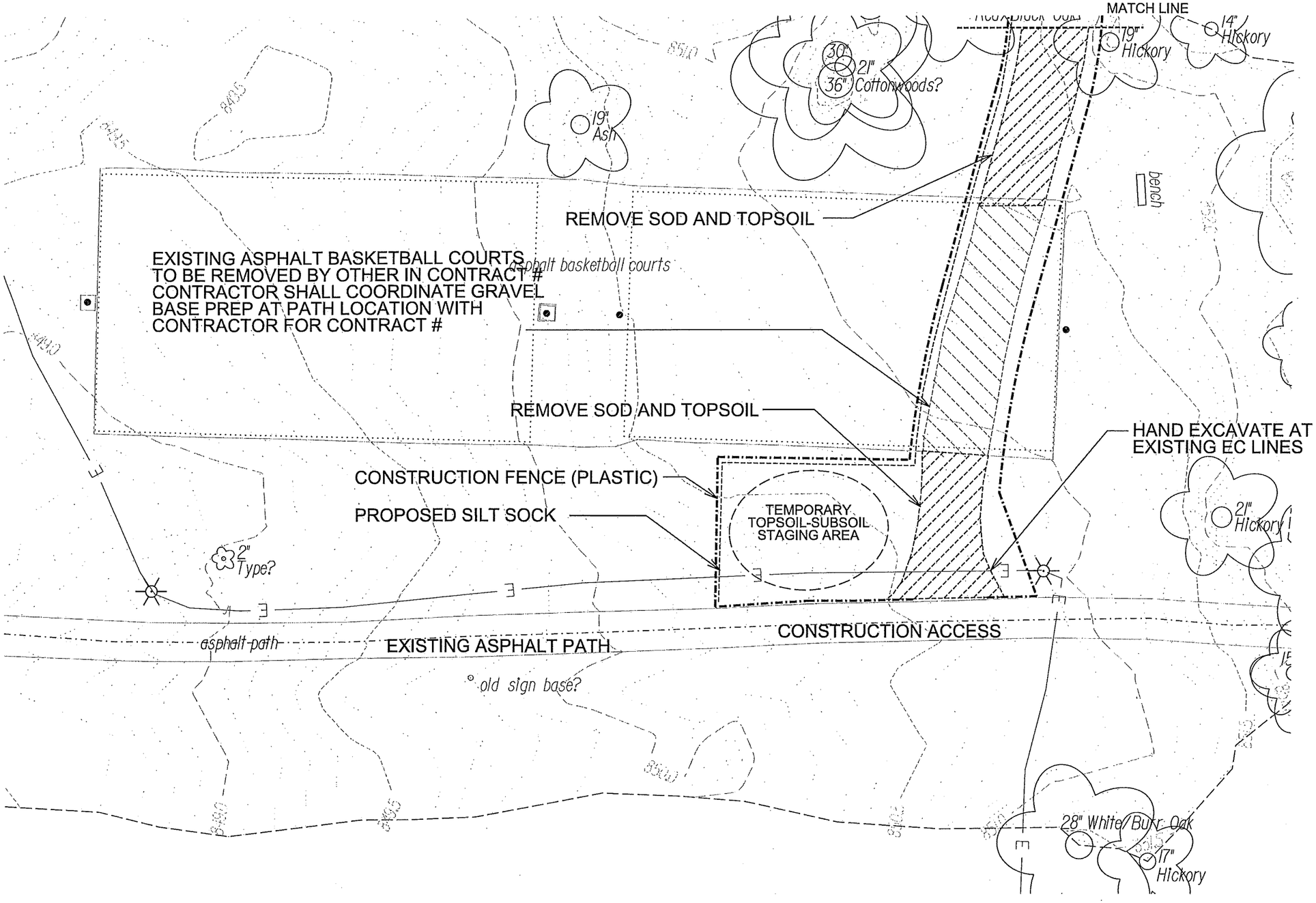


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Madison, WI 53701-2987

play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS

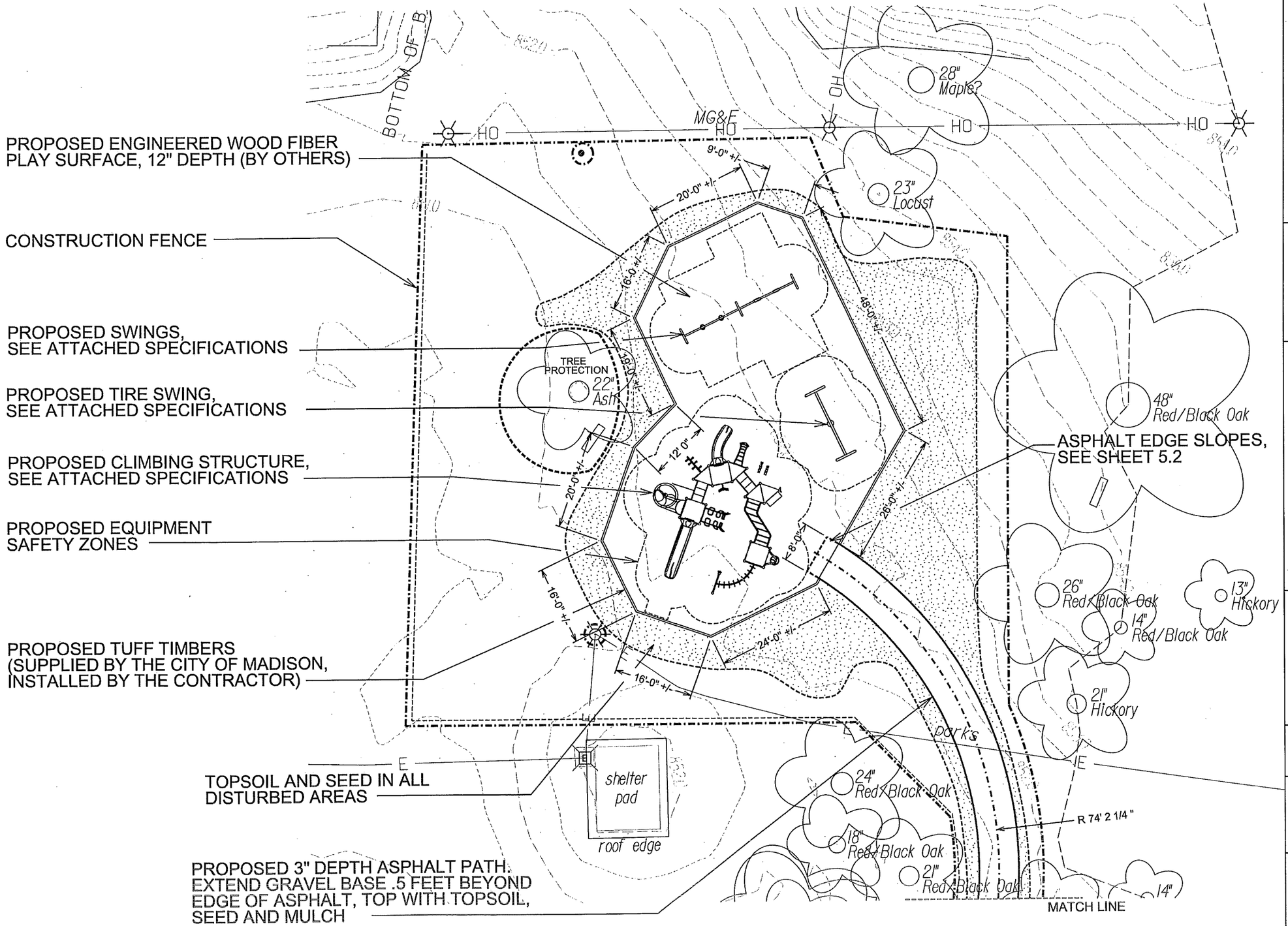
Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DEMOLITION AND PROTECTION PLAN-PATH

SHEET NUMBER:
4.3

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*PARKS DIVISION*

*City-County Building, Suite 104*
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*Madison, WI 53701-2987*

*play* MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
*WORTHINGTON PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

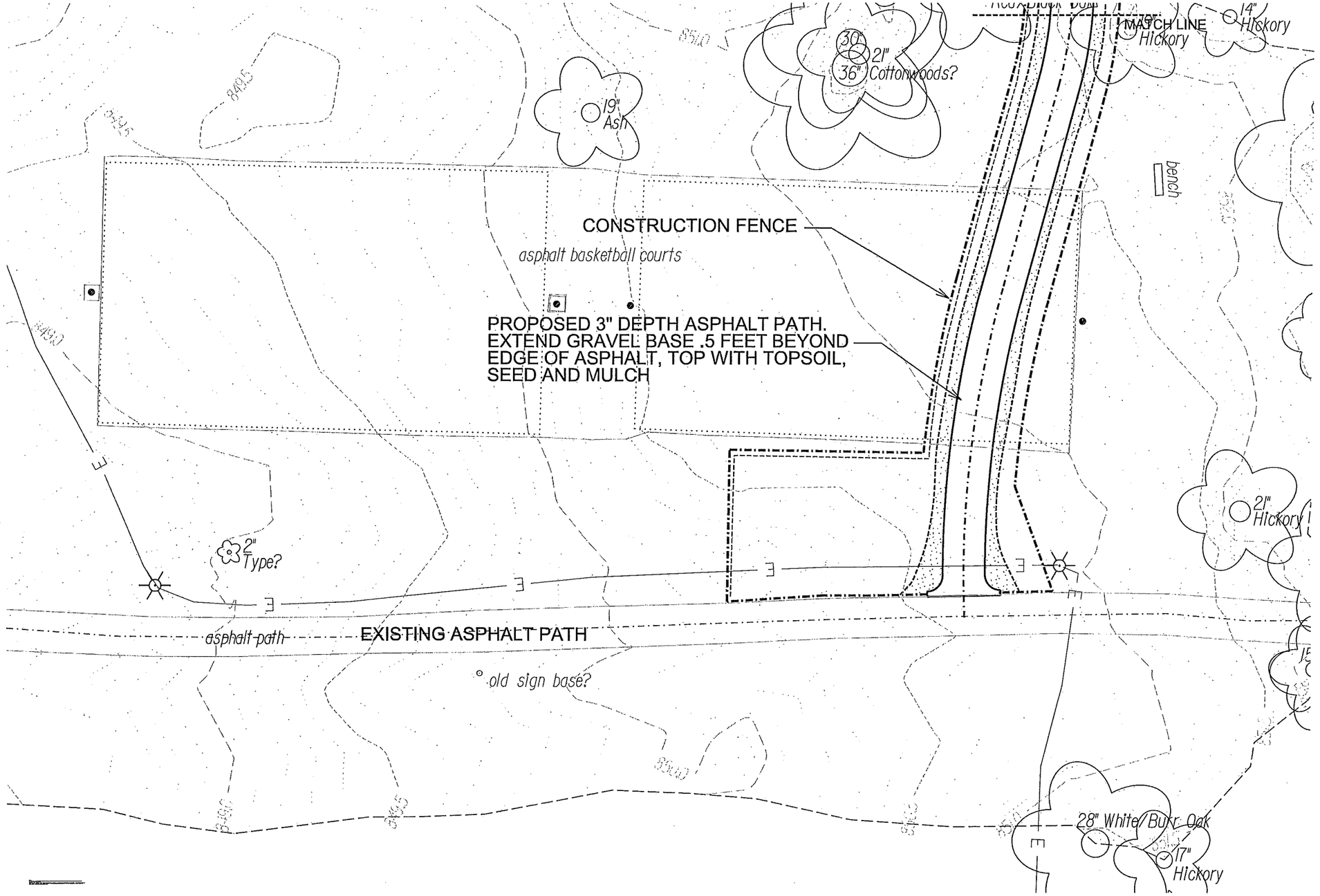
| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN- PLAYGROUND*

SHEET NUMBER:
**4.4**

*M:\Maps\parks\Worthington\Playground\Worthington_Playground2013.dgn*

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*play* **MADISON PARKS**

Graphical Scale
0 20 ft

N

PROJECT:
*WORTHINGTON PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: MRS* | *06-21-13* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN- PATH*

SHEET NUMBER:
*4.5*

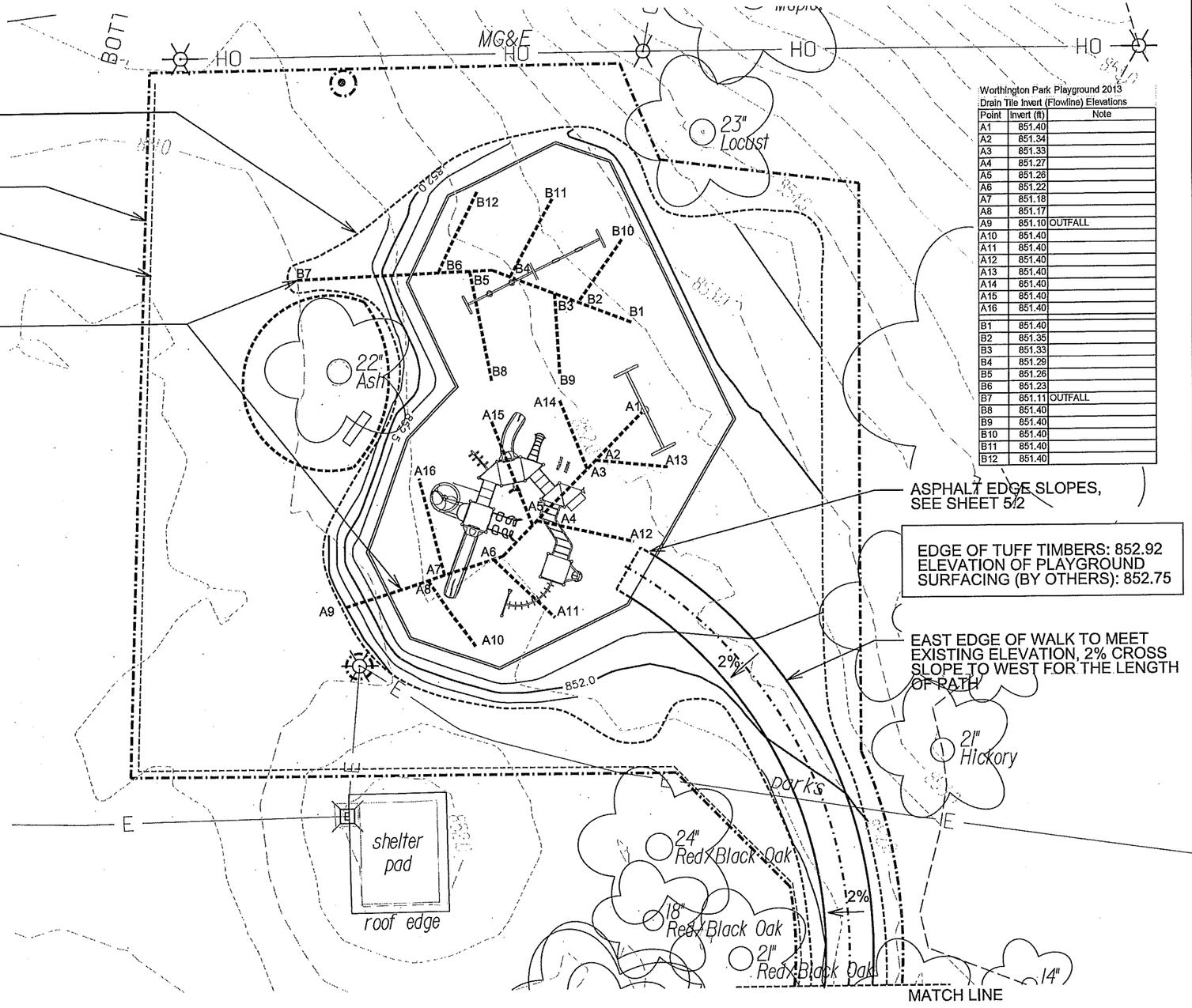
*M:\Maps\parks\Worthington\Playground\Worthington_Playground2013.dgn*

PROPOSED GRADING EXTENTS

CONSTRUCTION FENCE (PLASTIC)

PROPOSES SILT SOCK

PROPOSED DRAIN TILE SYSTEM, 4" PVC TILE WITH FILTER SOCK. INVERT ELEVATIONS IDENTIFIED




Worthington Park Playground 2013
Drain Tile Invert (Flowline) Elevations

| Point | Invert (ft) | Note |
|---|---|---|
| A1 | 851.40 | |
| A2 | 851.34 | |
| A3 | 851.33 | |
| A4 | 851.27 | |
| A5 | 851.26 | |
| A6 | 851.22 | |
| A7 | 851.18 | |
| A8 | 851.17 | |
| A9 | 851.10 | OUTFALL |
| A10 | 851.40 | |
| A11 | 851.40 | |
| A12 | 851.40 | |
| A13 | 851.40 | |
| A14 | 851.40 | |
| A15 | 851.40 | |
| A16 | 851.40 | |
| | | |
| B1 | 851.40 | |
| B2 | 851.35 | |
| B3 | 851.33 | |
| B4 | 851.29 | |
| B5 | 851.26 | |
| B6 | 851.23 | |
| B7 | 851.11 | OUTFALL |
| B8 | 851.40 | |
| B9 | 851.40 | |
| B10 | 851.40 | |
| B11 | 851.40 | |
| B12 | 851.40 | |

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.0 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.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PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
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play MADISON PARKS

Graphical Scale
0 20 ft
N

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN- PLAYGROUND

SHEET NUMBER:
4.6

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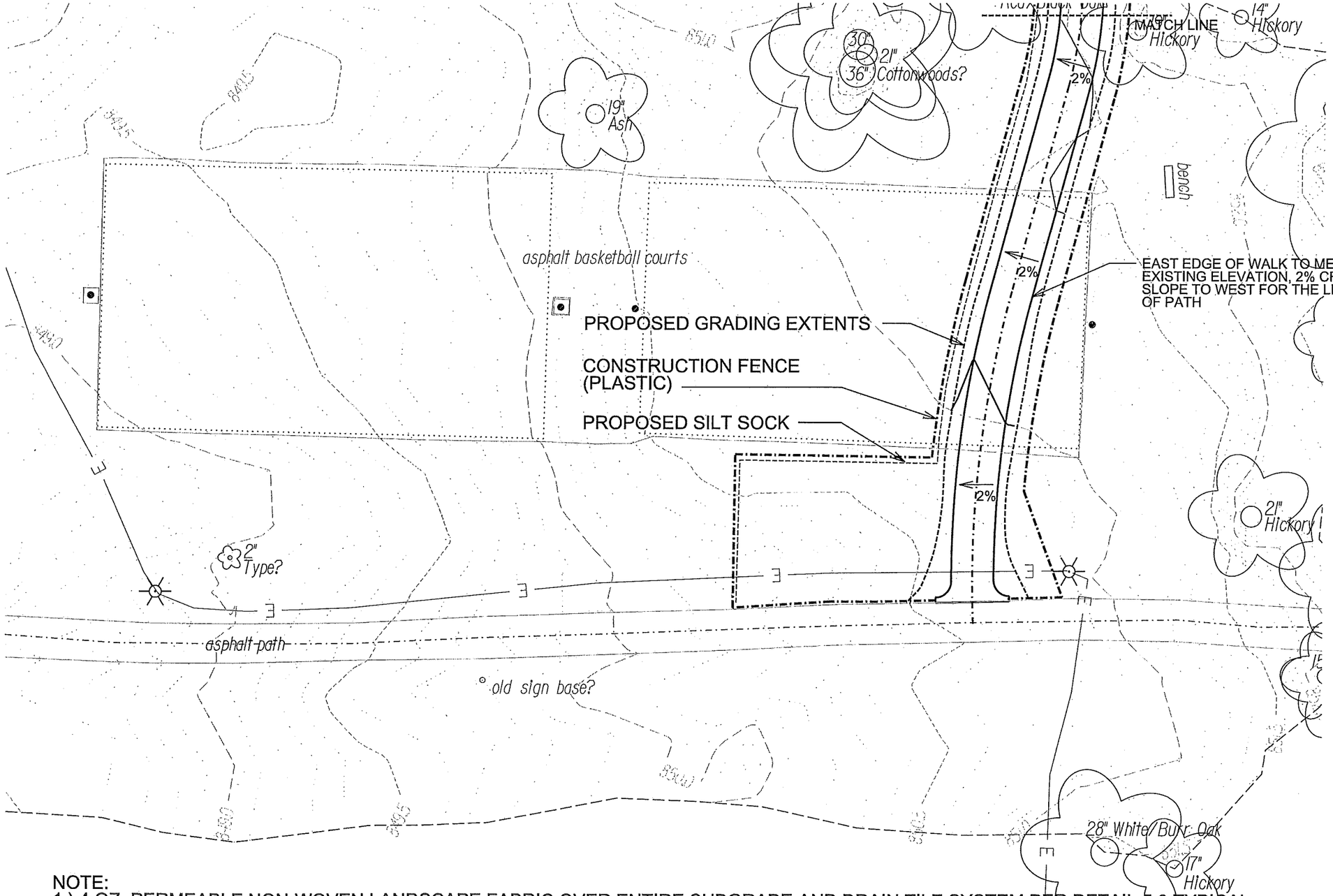


NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.0 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.


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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS


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| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN- PATH

SHEET NUMBER:
4.7

M:\Maps\parks\Worthington\Playground\Worthington_Playground2013.dgn

| Grp | ID# | Material | Item | From Surface Model | To Surface Model | area (sq ft) | depth (ft) | Unfac-tored volume (cu ft) | Unfac-tored volume (cu yd) | Expan-sion Factor (%) | Factored (Uncom-pacted) Volume (cu yd) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AS | | Topsoil Excavate | Remove top 4" of topsoil | | | 1347 | 0.34 | 457.98 | 17.0 | 0% | 17.0 |
| AS | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro1-9inches | | varies | 549.34 | 20.3 | 0% | 20.3 |
| AS | | Play Material Excavate | Excavate 12" of playground surfacing | | | -211 | -1.00 | 211 | 7.8 | 0% | 7.8 |
| AS | | Gravel Place | Place 6" depth of gravel | | | 1558 | -0.50 | -779 | -28.9 | 0% | -28.9 |
| AS | | Subsoil Place | Place subsoil for Asphalt Path | Ex-12inches | Pro1-9inches | | varies | -180.9 | -6.7 | 0% | -6.7 |
| AS | | Asphalt Place | Place 3" depth of asphalt for bike path construction | | | 1416.4 | -0.25 | -354.1 | -13.1 | 0% | -13.1 |
| PP | | Play Material Excavate | Excavate 12" of playground surfacing | | | -2848 | -1.00 | 2848 | 105.5 | 0% | 105.5 |
| PP | | Subsoil Place | Place subsoil to within 12" of proposed grade | Ex-12inches | Pro1-12inches | | varies | -2156 | -79.9 | 0% | -79.9 |
| PP | | Subsoil Excavate | Excavate subsoil to within 12" of proposed grade | Ex-12nches | Pro1-12inches | | varies | 8 | 0.3 | 0% | 0.3 |
| PP | | Play Material Place | Place 12" of shredded wood surfacing | | | 2848 | -1.00 | -2848 | -105.5 | 0% | -105.5 |
| PT | | Play Material Excavate | Excavate 12" of playground surfacing | | | 1784 | 1.00 | 1784 | 66.1 | 0% | 66.1 |
| PT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-12inches | Pro2-6inches | | varies | -1532 | -56.7 | 0% | -56.7 |
| PT | | Topsoil Place | Place 6" topsoil | | | 1784 | -0.50 | -892 | -33.0 | 0% | -33.0 |
| TP | | Topsoil Excavate | Excavate 4" of topsoil | | | 600.54 | 0.33 | 198 | 7.3 | 0% | 7.3 |
| TP | | Subsoil Excavate | Excavate subsoil to within 12" of proposed grades | Ex-4inches | Pro1-12inches | | varies | 168 | 6.2 | 0% | 6.2 |
| TP | | Subsoil Place | Place subsoil to within 12" of proposed grade | Ex-4inches | Pro2-9inches | | varies | -175 | -6.5 | 0% | -6.5 |
| TP | | Play Material Place | Place 12" of shredded wood surfacing | | | 600.5 | -1.00 | -601 | -22.2 | 0% | -22.2 |
| TT | | Topsoil Excavate | Remove 4" of topsoil | | | 1621.7 | 0.33 | 535 | 19.8 | 0% | 19.8 |
| TT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | | varies | -406 | -15.0 | 0% | -15.0 |
| TT | | Subsoil Excavate | Excavate subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | | varies | 153 | 5.7 | 0% | 5.7 |
| TT | | Topsoil Place | Place 6" of topsoil | | | 1621.7 | -0.50 | -811 | -30.0 | 0% | -30.0 |
| TB | | Topsoil Excavate | Excavate 4" of topsoil | | | 36.7 | 0.33 | 12 | 0.4 | 0% | 0.4 |
| TB | | Subsoil Excavate | Excavate subsoil to within 1' of proposed grade | Ex-4inches | Pro1-1foot | | varies | 8 | 0.3 | 0% | 0.3 |
| TB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | | varies | -17 | -0.6 | 0% | -0.6 |
| TB | | Place Border | Place Border | | | 36.7 | -1.00 | -37 | -1.4 | 0% | -1.4 |
| PB | | Play Material Excavate | Excavate 12" of playground surfacing | | | 36.3 | 1.00 | 36 | 1.3 | 0% | 1.3 |
| PB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-12inches | Pro2-1foot | | varies | -26 | -1.0 | 0% | -1.0 |
| PB | | Place Border | Place Border | | | 36.3 | -1.00 | -26 | -1.0 | 0% | -1.0 |

## Worthington Park Playground

City of Madison, WI Public Works Contract #7130
Date Revised: 6/25/2013

Summary of stone (gravel) and soil quantities in the Bid Table.
Dervied from more detailed spreadsheet available from Parks Div

**Preliminary Computation Summary**
Positive volumes are cuts (material available), negative volumes are fills (material needed)

| Row Labels | Sum of Factored (Uncom-pacted) Volume (cu yd) |
|---|---|
| Asphalt Place | -13.1 |
| Gravel Place | -28.9 |
| Play Material Excavate | 180.7 |
| Play Material Place | -127.7 |
| Subsoil Excavate | 32.8 |
| Subsoil Place | -166.4 |
| Topsoil Excavate | 44.6 |
| Topsoil Place | -63.1 |
| **Grand Total** | **-143.4** |

**Reorganized into Bid Table Items:**

| | |
|---|---|
| Bid Item #20101 Excavation Cut | Subsoil Excavate + Topsoil Excavate |
| Bid Item #20201 Fill | Subsoil Place + Subsoil Excavate |
| Bid Item #20221 Topsoil | = Topsoil Place |
| Bid Item #40201 | = Asphalt |
| Bid Item #40102 | = Gravel Place |
| Play material Exavate | By others, not included in this contract. |
| Play material Place | By others, not included in this contract. |


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PARKS DIVISION
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play MADISON PARKS

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Approved by: | xx-xx-xxxx |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DESIGN COMPUTATIONS

SHEET NUMBER:
4.8

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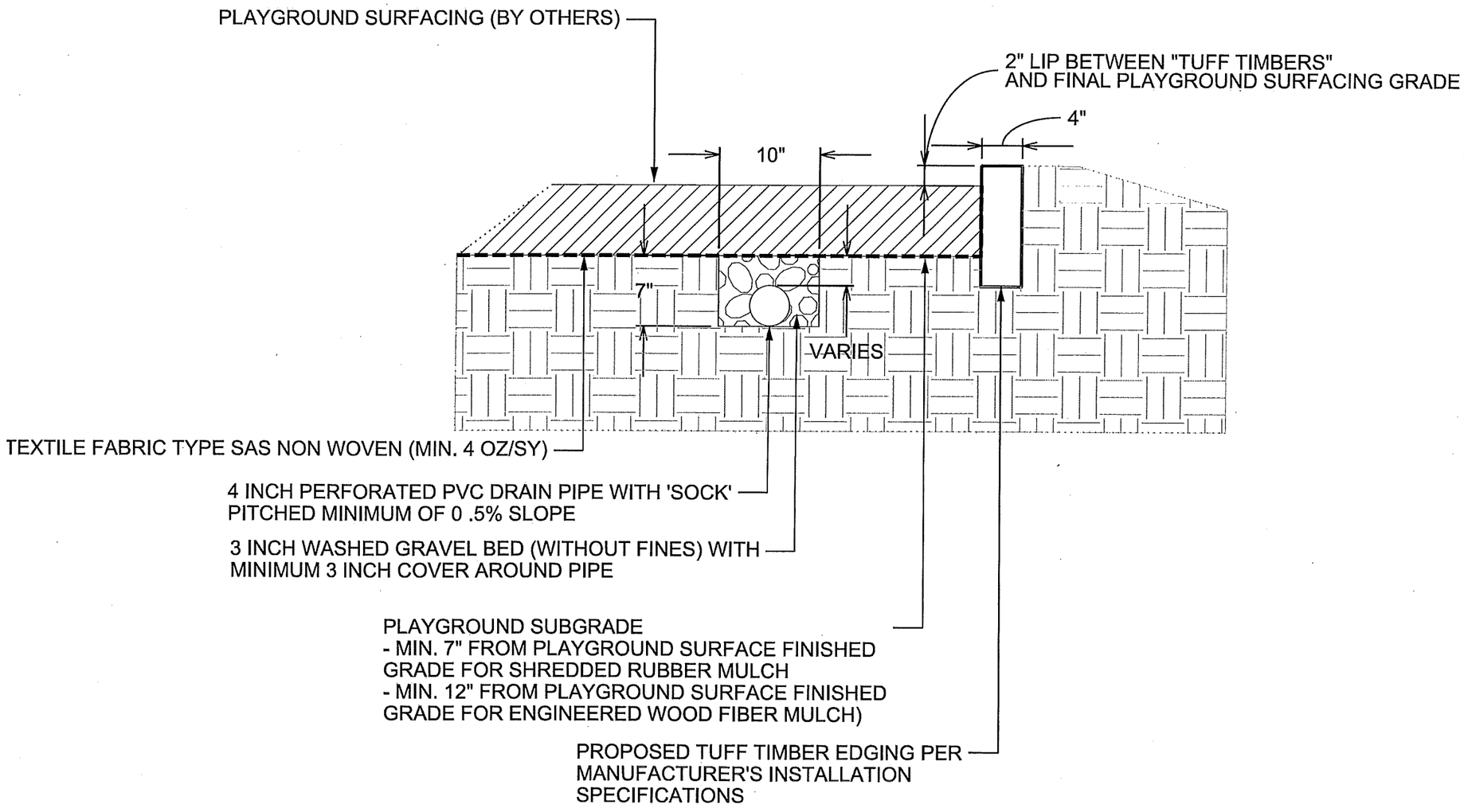


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*PARKS DIVISION*
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*play*
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PARKS

PROJECT:
*2013 PARK PLAYGROUND IMPROVEMENTS*

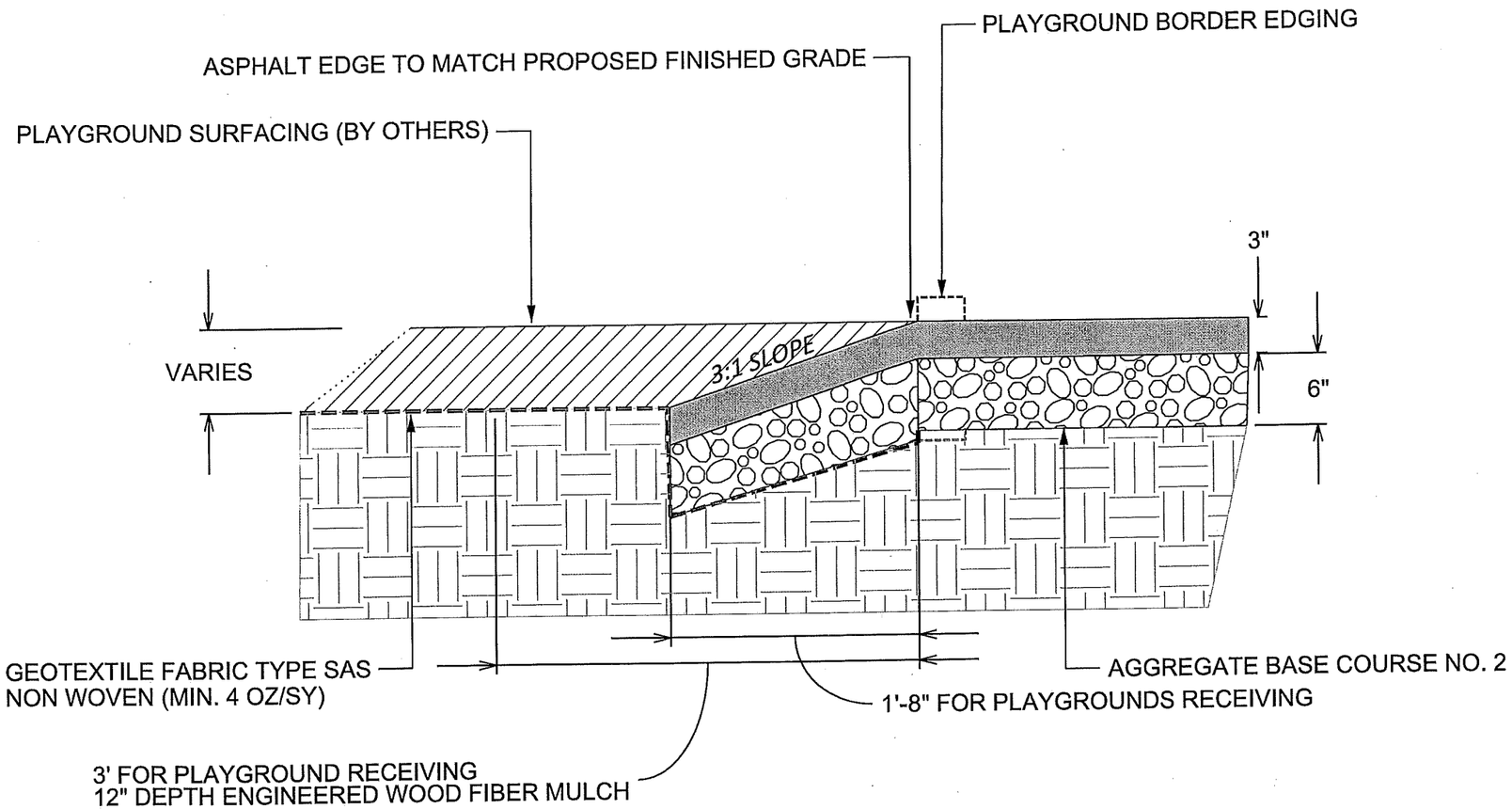
*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN*

SHEET NUMBER:
*5.1*




City of Madison
Department of Public Works
*PARKS DIVISION*
*City-County Building, Suite 104*
*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*
play MADISON PARKS

PROJECT:
*2013 PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Approved by:* | *xx-xx-xxxx* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*ASPHALT EDGE AT PLAYGROUND*

SHEET NUMBER:
5.2

Department of Public Works
**City Engineering Division**

Robert F. Phillips, P.E.
**City Engineer**

City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
FAX 608 264 9275
www.cityofmadison.com

**608 266 4751**

**Assistant City Engineer**
Michael R. Dailey, P.E.

**Principal Engineers**
Christina M. Bachmann, P.E.
John S. Fahrney, P.E.
Gregory T. Fries, P.E.
Christopher J. Petykowski, P.E.

**Facilities & Sustainability**
Jeanne E. Hoffman, Manager

**Operations Supervisor**
Kathleen M. Cryan

**Mapping Section Manager**
Eric T. Pederson

**Financial Officer**
Steven B. Danner-Rivers

**Hydrogeologist**
Brynn Bemis

July 10, 2013

# NOTICE OF ADDENDUM
# ADDENDUM NO. 1
# 2013 PARK PLAYGROUND IMPROVEMENTS
# CONTRACT NO. 7130

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

## PLANS

- Replace **COVER SHEET** of the **PLANS** with revised **COVER SHEET** dated July 9, 2013.
- Replace **Sheet 1.3** of the **PLANS** with revised **Sheet 1.3** dated July 9, 2013 and discard old sheet. The sheet is updated to include playground equipment name designations for **BID ITEMS 90007-90011.**
- **Replace Sheet 1.4**
- **Replace Sheet 2.2**
- **Replace Sheet 2.4**
- **Replace Sheet 2.5**
- **Replace Sheet 3.2**
- **Replace Sheet 3.4**
- **Replace Sheet 4.3**
- **Replace Sheet 4.6**
- **Replace Sheet 4.7**
- **Replace Sheet 5.2**
- **Add Sheet 5.3**

## PROPOSAL

- Adjust Quantity of BID ITEM 20101 - EXCAVATION CUT from 265.5 cy to 267.5 cy
- Adjust Quantity of BID ITEM 20201 - FILL BORROW from 408.7 cy to 414.7 cy
- Adjust Quantity of BID ITEM 90006 - PLAYGROUND EQUIPMENT INSTALLATION from 4.0 to 3.0 units
- Add BID ITEM 90007 - NAKOMA PARK OZONE CLIMBING STRUCTURE INSTALLATION - 1 lump sum
- Add BID ITEM 90008 - NAKOMA PARK HEMISPHERE CLIMBING STRUCTURE INSTALLATION - 1 lump sum
- Add BID ITEM 90009 - NAKOMA PARK 2-5 CLIMBING STRUCTURE INSTALLATION – 1 lump sum
- Add BID ITEM 90010 - NAKOMA PARK 5-12 SWINGS INSTALLATION – 1 lump sum

- Add BID ITEM 90011 - NAKOMA PARK 2-5 SWINGS INSTALLATION – 1 lump sum

SPECIAL PROVISIONS

- Add the following paragraph on page D-1 of **Section D: Special Provisions**:

  Article 103 – AWARD AND EXECUTION OF THE CONTRACT

  Prior to award of this contract by the Board of Public Works on July 24, 2013, the Contractor must provide proof of previous experience installing playgrounds. The Contractor must provide references for installation of a minimum of 5 playgrounds. If the Contractor is hiring a sub contractor for the playground installation component of this project, the Contractor must provide proof of the sub contractor's experience installing a minimum of 5 playgrounds.

  If the Contractor does not provide proof of experience 5 days prior to award at the Board of Public Works on 7/24/2013 this contract will be awarded to the next lowest bidder that meets this requirement.

- Revise page D-4 of **Section D: SPECIAL PROVISIONS** as follows: Under **SECTION 107.7 MAINTENANCE OF TRAFFIC, Reservoir Park,**

  **DELETE:** Traffic Control shall be measured as a lump sum. Payment for the Traffic Control is full compensation for constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing non permanent traffic signs, drums, barricades, and similar control devices, including arrow boards, for providing, placing, and maintaining work zone. Maintaining shall include replacing damaged or stolen traffic control devices. Contractor shall supply all necessary mounting hardware and supports for signing. This shall also include covering and uncovering any conflicting signs during the project. Contractor shall display all signing so as to be easily viewed by all users. Contractor shall mount traffic control on posts or existing poles or drive posts whenever possible. Existing poles may be used with approval of Construction Engineer. Contractor shall inspect traffic control daily to insure all traffic control remains in place during the project."

- Revise page D-4 of **Section D: SPECIAL PROVISIONS** as follows: Under **SECTION 107.7 Maintenance of Traffic, Reservoir Park**

  **ADD:** The Contractor shall coordinate traffic control with the Booster Station construction project, in the event that the two projects overlap in time frame.

- Revise page D-4 of **Section D: SPECIAL PROVISIONS** as follows: Under **SECTION 107.7 Maintenance of Traffic, Reservoir Park**

  Revise second to last paragraph to read, "Contractor SHALL NOT OCCUPY any other portions of the Street Right of Way at any time."

- Revise page D-8 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 10701 – TRAFFIC CONTROL, BASIS OF PAYMENT** replace "Project Manager" with "Engineer."

- Revise page D-9 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 20101 – EXCAVATION CUT, DESCRIPTION** replace "playground surface depth of 14" with "playground surface depth of 14" for Reynolds, Reindahl, and Nakoma Parks, and a depth of 12" for Worthington Park."

- Revise page D-10 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 20101 – EXCAVATION CUT, DESCRIPTION** replace "excavation of fourteen (14) inches of existing playground surfacing" with "excavation of fourteen (14) inches playground surfacing for Reynolds, Reindahl, and Nakoma Parks, and excavation of twelve (12) inches playground surfacing for Worthington Park."

- Revise page D-10 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 20101 – EXCAVATION CUT, DESCRIPTION** replace "or nine (9) inches of playground surfacing" with "or eight (8) inches of playground surfacing."

- Revise page D-15 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 21024 – SILT SOCK (12 INCH) - COMPLETE, DESCRIPTION, Nakoma Park,** replace "xxx linear feet" with "100 linear feet."

- Revise page D-15 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 21024 – SILT SOCK (12 INCH) - COMPLETE, DESCRIPTION, Worthington Park,** replace "xxx linear feet" with "100 linear feet."

- Revise page D-19 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 90002 – PARK BENCH INSTALLATION,** add "**Park benches will be purchased by the City of Madison and ordered for delivery from the vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**"

- Revise page D-21 of **Section D: SPECIAL PROVISIONS** as follows: Under **BID ITEM 90006 – PLAYGROUND EQUIPMENT INSTALLATION,** replace the **METHOD OF MEASUREMENT** with the following text:

  **METHOD OF MEASUREMENT**

  Playground Equipment Installation shall be measured by lump sum per each park playground site for the following parks:

  Worthington Park
  Reservoir Park
  Reindahl Park

  See bid items 90007-90011 for the Nakoma Park playground equipment installation.

- **ADD BID ITEM 90007 NAKOMA PARK OZONE CLIMBING STRUCTURE INSTALLATION**

BID ITEM 90007 NAKOMA PARK OZONE CLIMBING STRUCTURE INSTALLATION

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

**METHOD OF MEASUREMENT**

Nakoma Park Ozone Climbing Structure Installation shall be measured by lump sum for the installation of the following features:

179188 Evos Arch (2)
156448 Ozone Climber
160252 Balance Winder
160254 Overhead Trekker
156464 Podstomper
182865 Rush Slide

**BASIS OF PAYMENT**

Nakoma Park Ozone Climbing Structure Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

- **ADD BID ITEM 90008 NAKOMA PARK HEMISPHERE CLIMBING STRUCTURE INSTALLATION**

BID ITEM 90008 NAKOMA PARK HEMISPHERE CLIMBING STRUCTURE INSTALLATION

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

**METHOD OF MEASUREMENT**

Nakoma Park Hemisphere Climbing Structure Installation shall be measured by lump sum for the installation of the following features:

171626 Evos Arch w/ Hemisphere Climber
182180 Surf Slide
156459 Gyro Twister

**BASIS OF PAYMENT**

Nakoma Park Hemisphere Climbing Structure Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

- **ADD BID ITEM 90009 NAKOMA PARK 2-5 CLIMBING STRUCTURE INSTALLATION**

BID ITEM 90009 NAKOMA PARK 2-5 CLIMBING STRUCTURE INSTALLATION

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

**METHOD OF MEASUREMENT**

Nakoma Park 2-5 Climbing Structure Installation shall be measured by lump sum for the installation of the following features:

152432 ABC Climber
179225 Square Poly Roof
132155 Double Poly Slide
139262 Loop Arch
153020 Curved Transfer Module
135346 Pod Climber w/ Handles
111288 Driver Panel
111348 Arch Bridge

**BASIS OF PAYMENT**

Nakoma Park 2-5 Climbing Structure Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

- **ADD BID ITEM 90010 NAKOMA PARK 5-12 SWINGS INSTALLATION**

BID ITEM 90010 NAKOMA PARK 5-12 SWINGS INSTALLATION

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

**METHOD OF MEASUREMENT**

Nakoma Park 5-12 Swings Installation shall be measured by lump sum for the installation of the following features:

177330 5" Arch Swing
177351 Arch Swing Additional Bay
174018 Belt Seat (4)

BASIS OF PAYMENT

Nakoma Park 5-12 Swings Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

- **ADD BID ITEM 90011 NAKOMA PARK 2-5 SWINGS INSTALLATION**

BID ITEM 90011 NAKOMA PARK 2-5 SWINGS INSTALLATION

**All play equipment will be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor will provide equipment and labor for off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.**

All installation of equipment shall adhere and conform to the installation specifications as provided by the manufacturer, and will be further inspected by the City of Madison Playground Construction Inspector following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Installation specifications are provided within this contract book. Actual layout of play system and components to be installed will comply with that shown in the plans and be confirmed in the field by the City of Madison Playground Construction Inspector and City of Madison Parks Surveyor. **The playground shall be installed at the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the playground surfacing finished elevations as indicated on the plans.**

The Contractor shall contact Kevin Boehm, Playground Construction Inspector at 267-8805 prior to installation to coordinate exact date for playground installation.

The Contractor shall contact Dan Rodman, Parks Surveyor at 209-7012 throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

METHOD OF MEASUREMENT

Nakoma Park 2-5 Swings Installation shall be measured by lump sum for installation of the following features:
177340 Arch Swings
176038 Full Bucket Seat (2)

BASIS OF PAYMENT

Nakoma Park 2-5 Swings Installation shall be paid at the contract unit price for work described above and shall include all work, materials, labor and incidentals.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on Bid Express at https://www.bidexpress.com.

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

Kevin Briski, Parks Superintendent

SHEET SCHEDULE


1.1 NAKOMA PARK - PROJECT LOCATION AND SITE ACCESS
1.2 NAKOMA PARK - DEMOLITION AND PROTECTION PLAN
1.3 NAKOMA PARK - SITE PLAN
1.4 NAKOMA PARK - GRADING, DRAINAGE & EROSION CONTROL PLAN
1.5 NAKOMA PARK - DESIGN COMPUTATIONS

2.1 RESERVOIR PARK - PROJECT LOCATION AND SITE ACCESS
2.2 RESERVOIR PARK - DEMOLITION AND PROTECTION PLAN
2.3 RESERVOIR PARK - SITE PLAN
2.4 RESERVOIR PARK - GRADING, DRAINAGE AND EROSION CONTROL PLAN
2.5 RESERVOIR PARK - DESIGN COMPUTATIONS

3.1 REYNOLDS PARK - PROJECT LOCATION AND SITE ACCESS
3.2 REYNOLDS PARK - DEMOLITION AND PROTECTION PLAN
3.3 REYNOLDS PARK - SITE PLAN
3.4 REYNOLDS PARK - GRADING AND EROSION CONTROL PLAN
3.5 REYNOLDS PARK - DESIGN COMPUTATIONS


SHEET SCHEDULE (CONTINUED)


4.1 WORTHINGTON PARK - PROJECT LOCATION AND SITE ACCESS
4.2 WORTHINGTON PARK - DEMOLITION AND PROTECTION PLAN - PLAYGROUND
4.3 WORTHINGTON PARK - DEMOLITION AND PROTECTION PLAN - PATH
4.4 WORTHINGTON PARK - SITE PLAN - PLAYGROUND
4.5 WORTHINGTON PARK - SITE PLAN - PATH
4.6 WORTHINGTON PARK - GRADING, DRAINAGE & EROSION CONTROL PLAN - PLAYGROUND
4.7 WORTHINGTON PARK - GRADING, DRAINAGE &EROSION CONTROL PLAN - PATH
4.8 WORTHINGTON PARK - DESIGN COMPUTATIONS

5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN
5.2 ASPHALT EDGE AT PLAYGROUND
5.3 BOULDER RETAINING WALL DETAIL


# 2013 PARK PLAYGROUND IMPROVEMENTS

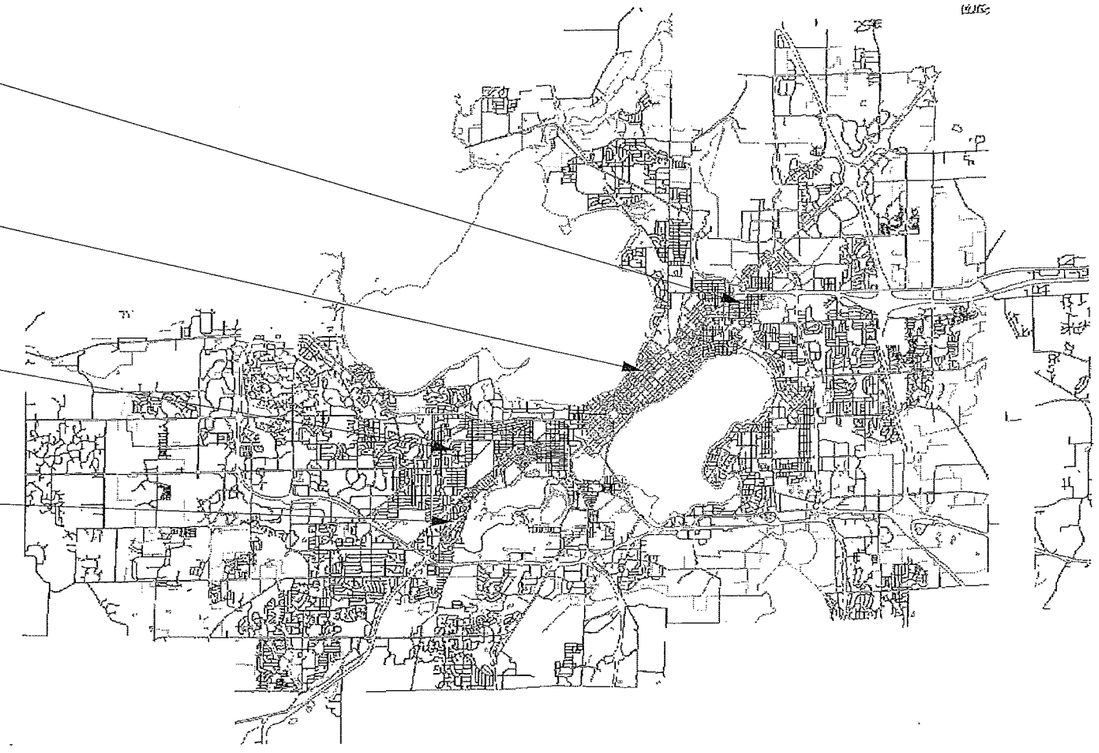
# CONTRACT 7130

WORTHINGTON PARK
3102 WORTHINGTON AVENUE
MADISON, WI 53714

REYNOLDS PARK
810 EAST MIFFLIN STREET
MADISON, WI 53703

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705

NAKOMA PARK
3801 CHEROKEE DRIVE
MADISON, WI 53711




City of Madison
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*PARKS DIVISION*
*City-County Building, Suite 104*
*210 Martin Luther King, Jr. Blvd.*
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*Madison, WI 53701-2987*


*play* MADISON PARKS

N

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

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| ITEM | DATE |
|---|---|
| *Drawn by: SCL/MS* | *06-27-2013* |
| *Revised by: SCL/MS* | *07-09-2013* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:

SHEET NUMBER:

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PROPOSED 2-5 CLIMBING STRUCTURE, SEE ATTACHED SPECIFICATIONS

PROPOSED 2-5 SWINGS, SEE SPECIFICATIONS

PROPOSED ENGINEERED WOOD FIBER PLAY SURFACE, 12" DEPTH (BY OTHERS)

PROPOSED 5-12 SWINGS,SEE SPECIFICATIONS

PROPOSED HEMISPHERE CLIMBING STRUCTURE, SEE SPECIFICATIONS

PROPOSED OZONE CLIMBING STRUCTURE, SEE SPECIFICATIONS

PROPOSED BORDER TIMBERS (SUPPLIED BY THE CITY OF MADISON, INSTALLED BY THE CONTRACTOR)

TOPSOIL AND SEED IN ALL DISTURBED AREAS

EXISTING ASPHALT PATH

TOPSOIL AND SEED IN ALL DISTURBED AREAS

PROPOSED BENCHES (3), SEE SPECIFICATIONS

PROPOSED EQUIPMENT SAFETY ZONES

EXISTING RETAINING WALL

CONSTRUCTION FENCE

DO NOT DRIVE OUTSIDE OF CONSTRUCTION FENCE

ALIGN BORDER TIMBERS WITH EXISTING ASPHALT PATH

35" Black Cherry
12" Type?
11" Boxelder
16" Boxelder
18" White
16" White/
12" STUMP
8" Type?
24" Type?
22" Hickory
6" Maple
12" Type?
Type
Chinese Elm?
24" White/Burr Oa
9" Red/Black Oak
8" Black Cherry
8" Boxelder
20" White/Burr Oak
6" Boxelder
26" Type?
30" White/Burr Oak
30" White/Burr Oak
30" White/Burr Oak
17" White/Burr Oak
28" White/Burr Oak
18" White/Burr Oak
30" White/Burr Oak
18" White/Burr Oak
22" White/Burr Oak
21" White/Burr Oak

20'0" +/-
21'0" +/-
24'0" +/-
36'7 3/4"
12'0" +/-
24'0" +/-
12'0" +/-
6'0"
6'0"
6'0"
12'0" +/-
25'0" +/-
T.S. 12"
+0.4'+/-

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City of Madison
Department of Public Works
*PARKS DIVISION*
*City-County Building, Suite 104*
*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*

*play* MADISON PARKS

Graphical Scale
0 20 ft
N

PROJECT:
*NAKOMA PARK PLAYGROUND*

*NAKOMA PARK*
*3801 CHEROKEE DR.*
*MADISON, WI*

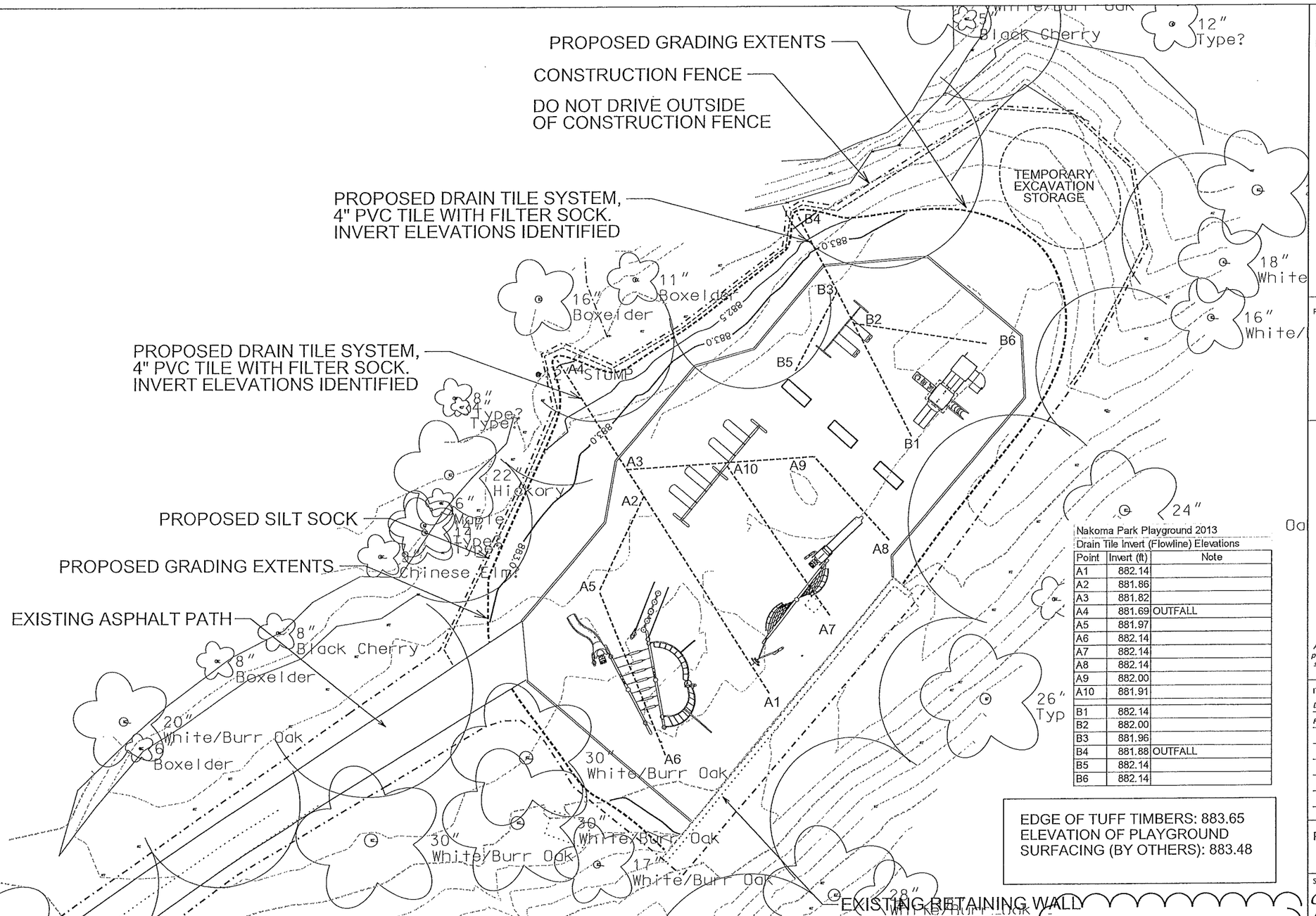
*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| Drawn by: MS | 07-03-13 |
| Revised by: MRS | 07-09-13 |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN*

SHEET NUMBER:
*1.3*




Nakoma Park Playground 2013
Drain Tile Invert (Flowline) Elevations

| Point | Invert (ft) | Note |
|---|---|---|
| A1 | 882.14 | |
| A2 | 881.86 | |
| A3 | 881.82 | |
| A4 | 881.69 | OUTFALL |
| A5 | 881.97 | |
| A6 | 882.14 | |
| A7 | 882.14 | |
| A8 | 882.14 | |
| A9 | 882.00 | |
| A10 | 881.91 | |
| | | |
| B1 | 882.14 | |
| B2 | 882.00 | |
| B3 | 881.96 | |
| B4 | 881.88 | OUTFALL |
| B5 | 882.14 | |
| B6 | 882.14 | |

EDGE OF TUFF TIMBERS: 883.65
ELEVATION OF PLAYGROUND SURFACING (BY OTHERS): 883.48

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.


City of Madison
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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:

NAKOMA PARK PLAYGROUND

NAKOMA PARK
3801 CHEROKEE DR.
MADISON, WI


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: MS | 07-03-13 |
| Revised by: MRS | 07-09-13 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
1.4

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NOTE:
1.) ALL EXISTING EQUIPMENT & PLAYGROUND SURFACING TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.

PROTECT STORM OVERFLOW STRUCTURE

PLACE CONSTRUCTION FENCE AT GRADING EXTENTS PRIOR TO CONSTRUCTION

PROTECT EX. TREE (NO ROOT CUT)

EXISTING EXCAVATED PLAYGROUND SURFACING (RESTORED BY OTHERS)

REMOVE & RELOCATE EXISTING BENCH TO LOCATION SHOWN ON SHEET 2.3

EXISTING PLAYGROUND SURFACING TO BE REMOVED BY CITY OF MADISON TO 14" BELOW THE EXISTING PLAYGROUND SURFACE ELEVATION

REMOVE EXISTING SOD & TOPSOIL

NOTE:
PROTECT ALL EXISTING UTILITIES

REMOVE CONCRETE CURB AND GUTTER

PROTECT EXISTING TREE (NO ROOT CUT)

CONTROL POINT
DRILL HOLE N RIM OF 4 MGE MHS
N=479357.69
E=806563.75
ELEV=1017.30

PROTECT EXISTING CONCRETE PAD AND DRINKING FOUNTAIN

PROTECT EXISTING TREE (NO ROOT CUT)


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PARKS DIVISION
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PO Box 2987
Madison, WI 53701-2987


play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Revised by: SCL/MS | 07-09-2013 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DEMOLITION AND PROTECTION PLAN

SHEET NUMBER:
2.2

M:\Maps\parks\Reservoir\Old\Reservoir_Playground_2013_2D_Pro-3_2013_07_09.dgn

**Drain Tile Lengths & Slopes**
from intersection to intersection

| From | To | Length (ft) | Slope (%) |
|---|---|---|---|
| A | B | 5.18 | -1.5 |
| B | C | 14.82 | -1.5 |
| C | D | 11.87 | -1.5 |
| D | E | 17.31 | -1.5 |
| F | B | 13.32 | -0.6 |
| B | I | 9.73 | 0.82 |
| G | C | 13.02 | -0.54 |
| C | J | 12.69 | 0.47 |
| H | D | 26.7 | -0.91 |
| D | K | 14.14 | 1.5 |
| L | M | 7.81 | -1.96 |
| M | N | 13.85 | -1.25 |
| N | O | 11.76 | -1.5 |
| O | P | 11.76 | -1.67 |
| Q | M | 30.24 | -0.5 |
| M | T | 25.59 | 0.59 |
| R | N | 27.6 | -0.5 |
| N | U | 34.8 | 0.5 |
| S | O | 31.38 | -0.5 |
| O | V | 15.17 | 0.5 |

**Reservoir Park Playground**
Drain Tile Invert (Flowline) Elevations

| Point | Invert (ft) | Note |
|---|---|---|
| A | 1019.67 | |
| B | 1019.59 | |
| C | 1019.37 | |
| D | 1019.19 | |
| E | 1018.95 | OUTFALL |
| F | 1019.67 | |
| G | 1019.44 | |
| H | 1019.43 | |
| I | 1019.67 | |
| J | 1019.43 | |
| K | 1019.4 | |
| L | 1019.67 | |
| M | 1019.52 | |
| N | 1019.35 | |
| O | 1019.17 | |
| P | 1018.99 | OUTFALL |
| Q | 1019.67 | |
| R | 1019.49 | |
| S | 1019.33 | |
| T | 1019.67 | |
| U | 1019.52 | |
| V | 1019.25 | |

EDGE OF TUFF TIMBERS: 1021.10
ELEVATION OF FINISHED PLAYGROUND SURFACING (BY OTHERS): 1020.93
SUBGRADE DEPTH: 1020.25

PROPOSED PATH SHALL MEET USDOJ 2010 ADA STANDARDS FOR ACCESSIBLE ROUTES AND RAMPS. SLOPE GUIDELINES DOES NOT APPLY TO CURB RAMP.

TAPER ASPHALT WITHIN HATCHED AREA TO ENSURE ASPHALT ELEVATION IS AT 1020.34

DETAIL 5.2 ASPHALT AT PAVEMENT EDGE

CONTROL POINT
DRILL HOLE N RIM OF 4 MGE MHS
N=479357.69
E=806563.75
ELEV=1017.3

GRADING EXTENTS

NEW DRAIN TILE SYSTEM. 4" PVC TILE WITH FILTER SOCK. INVERT ELEVATIONS AND MINIMUM SLOPES IDENTIFIED.

PROPOSED SILT SOCK

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) MAT ALL SLOPES GREATER THAN 5:1 WITH EROSION CONTROL MATTING, CLASS I URBAN TYPE A.
3.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
4.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.


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play MADISON PARKS

Graphical Scale
0 20 ft

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

RESERVOIR PARK
126 GLENWAY STREET
MADISON, WI 53705


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Revised by: SCL/MS | 07-09-2013 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING, DRAINAGE & EROSION CONTROL PLAN

SHEET NUMBER:
2.4

M:\Maps\parks\Reservoir\Old\Reservoir_Playground_2013_2D_Pro-3_2013_07_09.dgn

**Reservoir Park Playground Improvements**
City of Madison, WI Public Works Contract #7130
Date Revised: 7/9/2013

Notes:

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Area ID# groups

| | | |
|---|---|---|
| CO | Turf to Concrete | CO |
| GR | Turf to Gravel | GR |
| AS | Asphalt | AS |
| PP | Playground to Playground | PP |
| PT | Playground to Turf | PT |
| TP | Turf to Playground | TP |
| TT | Turf to Turf | TT |
| TB | Turf to Border Timbers | TB |
| PB | Playground to Border Timb | PB |
| WA | Wall | WA |

| Grp | ID# | Material | Item | From Surface Model | To Surface Model | area (sq ft) | depth (ft) | Unfac-tored volume (cu ft) | Unfac-tored volume (cu yd) | Expan-sion Factor (%) | Factored (Uncom-pacted) Volume (cu yd) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CO | | Topsoil Excavate | Remove top 4" of topsoil | | | 50 | 0.34 | 17 | 0.6 | 0% | 0.6 |
| CO | | Subsoil Excavate | Remove subsoil to within 13" of proposed grade | Ex-13inches | Pro3-13inches | 50 | varies | 6.6 | 0.2 | 0% | 0.2 |
| CO | | Subsoil Place | Place subsoil to within 13" of proposed grade | Ex-13inches | Pro3-13inches | 50 | varies | 0.2 | 0.0 | 0% | 0.0 |
| CO | | Gravel Place | Place 6" of compacted crushed aggregate base course | | | 50 | -0.50 | -25 | -0.9 | 0% | -0.9 |
| CO | | Concrete Place | Place 7" of concrete sidewalk | | | 50 | -0.58 | -29.15 | -1.1 | 0% | -1.1 |
| GR | | Topsoil Excavate | Remove top 4" of topsoil | | | 87 | 0.34 | 29.58 | 1.1 | 0% | 1.1 |
| GR | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro3-9inches | 87 | varies | 67.3 | 2.5 | 0% | 2.5 |
| GR | | Gravel Place | Place 6" depth of gravel | | | 87 | -0.50 | -43.5 | -1.5 | 0% | -1.6 |
| GR | | Topsoil Place | Place 3" of topsoil over gravel base | | | 87 | -0.25 | -21.75 | -0.8 | 0% | -0.8 |
| AS | | Topsoil Excavate | Remove top 4" of topsoil | | | 466 | 0.34 | 158.44 | 5.9 | 0% | 5.9 |
| AS | | Subsoil Excavate | Remove subsoil to within 9" of proposed grade | Ex-4inches | Pro3-9inches | 466 | varies | 433.9 | 16.1 | 0% | 16.1 |
| AS | | Gravel Place | Place 6" depth of gravel | | | 466 | -0.50 | -233 | -8.6 | 0% | -8.6 |
| AS | | Asphalt Place | Place 3" depth of asphalt for bike path construction | | | 466 | -0.25 | -116.5 | -4.3 | 0% | -4.3 |
| PP | | Play Material Excavate | Excavate 14" of playground surfacing | | | 1527 | 1.17 | 1782 | 66.0 | 0% | 66.0 |
| PP | | Subsoil Place | Place subsoil to within 8" of proposed grade | Ex-14inches | Pro3-8inches | 1527 | varies | -1835 | -68.0 | 0% | -68.0 |
| PP | | Play Material Place | Place 8" of rubber surfacing | | | 1527 | -0.67 | -1023 | -37.9 | 0% | -37.9 |
| PT | | Play Material Excavate | Excavate 14" of playground surfacing | | | 321 | 1.17 | 375 | 13.9 | 0% | 13.9 |
| PT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-14inches | Pro3-6inches | 321 | varies | -134 | -5.0 | 0% | -5.0 |
| PT | | Topsoil Place | Place 6" topsoil | | | 321 | -0.50 | -161 | -5.9 | 0% | -5.9 |
| TP | | Topsoil Excavate | Excavate 4" of topsoil | | | 1819 | 0.33 | 600 | 22.2 | 0% | 22.2 |
| TP | | Subsoil Excavate | Excavate subsoil to within 8" of proposed grades | Ex-4inches | Pro3-8inches | 1819 | varies | 576 | 21.3 | 0% | 21.3 |
| TP | | Subsoil Place | Place subsoil to within 6" of proposed grade | Ex-4inches | Pro3-8inches | 1819 | varies | -725 | -26.9 | 0% | -26.9 |
| TP | | Play Material Place | Place 8" of rubber surfacing | | | 1819 | -0.67 | -1219 | -45.1 | 0% | -45.1 |
| TT | | Topsoil Excavate | Remove 4" of topsoil | | | 2427 | 0.33 | 801 | 29.7 | 0% | 29.7 |
| TT | | Subsoil Place | Place subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 2427 | varies | -1352 | -50.1 | 0% | -50.1 |
| TT | | Subsoil Excavate | Excavate subsoil to within 6" of pro grade | Ex-4inches | Pro-6inches | 2427 | varies | 428 | 15.9 | 0% | 15.9 |
| TT | | Topsoil Place | Place 6" of topsoil | | | 2427 | -0.50 | -1214 | -44.9 | 0% | -44.9 |
| TB | | Topsoil Excavate | Excavate 4" of topsoil | | | 92 | 0.33 | 30 | 1.1 | 0% | 1.1 |
| TB | | Subsoil Excavate | Excavate subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | 92 | varies | 42 | 1.6 | 0% | 1.6 |
| TB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-4inches | Pro2-1foot | 92 | varies | -41 | -1.5 | 0% | -1.5 |
| TB | | Place Border | Place Border | | | 92 | -1.00 | -92 | -3.4 | 0% | -3.4 |
| PB | | Play Material Excavate | Excavate 14" of playground surfacing | | | 11 | 1.17 | 13 | 0.5 | 0% | 0.5 |
| PB | | Subsoil Place | Place subsoil to within 1' of proposed grade | Ex-14inches | Pro2-1foot | 11 | varies | -6 | -0.2 | 0% | -0.2 |
| PB | | Place Border | Place Border | | | 11 | -1.00 | -11 | -0.4 | 0% | -0.4 |
| WA | | Topsoil Excavate | Excavate 4" of topsoil | | | 70 | 0.33 | 23 | 0.9 | 0% | 0.9 |
| WA | | Subsoil Excavate | Excavate Material for Wall | | | 70 | 1.00 | 70 | 2.6 | 0% | 2.6 |
| WA | | Wall Place | Place Wall | | | 70 | -1.00 | -70 | -2.6 | 0% | -2.6 |

## Reservoir Park Playground

City of Madison, WI Public Works Contract #7130
Date Revised: 7/9/2013

Summary of stone (gravel) and soil quantities in the Bid Table.
Derived from more detailed spreadsheet available from Parks Div

### Preliminary Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material

| Row Labels | Sum of Factored (Uncom-pacted) Volume (cu yd) |
|---|---|
| Gravel Place | -11 |
| Subsoil Excavate | 56 |
| Subsoil Place | -150 |
| Topsoil Excavate | 59 |
| Topsoil Place | -52 |
| Play Material Excavate | 80 |
| Play Material Place | -83 |
| Concrete Place | -1 |
| Asphalt Place | -4 |
| **Grand Total** | **-106** |

### Reorganized into Bid Table Items:

| | |
|---|---|
| Bid Item #20101 Excavation Cut | Subsoil Excavate + Topsoil Excavate |
| Bid Item #20201 Fill | Subsoil Place + Subsoil Excavate |
| Bid Item #20221 Topsoil | = Topsoil Place |
| Bid Item #40201 | = Asphalt |
| Bid Item #40102 | = Gravel Place |
| Play material Exavate | By others, not included in this contract. |
| Play material Place | By others, not included in this contract. |


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*play* MADISON PARKS

Graphical Scale
0 20 ft
N

PROJECT:

*2013 PARK PLAYGROUND IMPROVEMENTS*

*RESERVOIR PARK*
*126 GLENWAY STREET*
*MADISON, WI 53705*


*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*


| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Revised by: SCL/MS* | *07-09-2013* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*SITE PLAN*

SHEET NUMBER:
*2.5*

*M:\Maps\parks\Reservoir\Playground\Reservoir_Playground_2013_2D_Pro-3.dgn*

PROTECT EXISTING TREE (NO ROOT CUT)

PROTECT EXISTING DRINKING FOUNTAIN & CONCRETE PAD

CONTROL POINT, N BOLT FNTN BASE
N=485884.5100
E=823304.5000
ELEV = 850.7300

PROTECT EXISTING TREE (NO ROOT CUT)

PROTECT EXISTING FENCE

PROTECT EXISTING TREE (NO ROOT CUT)

6ft high chain link fence

TOPSOIL/SUBSOIL STAGING LOCATION

TOPSOIL/SUBSOIL STAGING LOCATION

PROPOSED SILT SOCK

PROPOSED SILT SOCK

EXISTING PLAYGROUND SURFACING TO BE REMOVED BY CITY OF MADISON TO 14" BELOW THE EXISTING PLAYGROUND SURFACE ELEVATION.

REMOVE EXISTING BENCH AND RELOCATE AS SHOWN ON SHEET L-4 AND PER BID ITEM 90001 RELOCATE EXISTING BENCHES

PLACE CONSTRUCTION FENCE AT GRADING EXTENTS PRIOR TO START OF CONSTRUCTION

DISTURBED LIMITS/CONSTRUCTION FENCE

NOTE: ALL EXISTING EQUIPMENT AND PLAYGROUND SURFACING TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION OF THIS CONTRACT.

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play MADISON PARKS

Graphical Scale
0 10ft

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

REYNOLDS PARK
810 E MIFFLIN ST
MADISON, WI 53703


Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.


| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Revised by: SCL/MS | 07-09-2013 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
DEMOLITION PLAN AND PROTECTION PLAN

SHEET NUMBER:
3.2

CONSTRUCTION ENTRANCE

PROPOSED PATH SHALL MEET USDOG 2010 ADA STANDARDS FOR ACCESSIBLE ROUTES.

CONTROL POINT, N BOLT FNTN BASE
N=485884.5100
E=823304.5000
ELEV = 850.7300

EXISTING FENCE

PROPOSED SILT SOCK

CONCRETE SIDEWALK

12" SHREDDED ENGINEERED FIBER WOOD MULCH (BY OTHERS)

TAPER ASPHALT WITHIN HATCHED AREA TO ENSURE ASPHALT EL. IS AT 850.33, SEE DETAIL 5.2

PROPOSED SILT SOCK

GRADING EXTENTS

EDGE OF PLAYGROUND BORDER TIMBERS: 851.50
ELEVATION OF FINISHED PLAYGROUND SURFACING (BY OTHERS) : 851.33
PLAYGROUND SUBGRADE ELEVATION: 850.33

ASPHALT AT PLAYGROUND ELEVATION: 851.33, SEE DETAIL 5.2

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.

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play MADISON PARKS

Graphical Scale
0 10ft

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

REYNOLDS PARK
810 E MIFFLIN ST
MADISON, WI 53703


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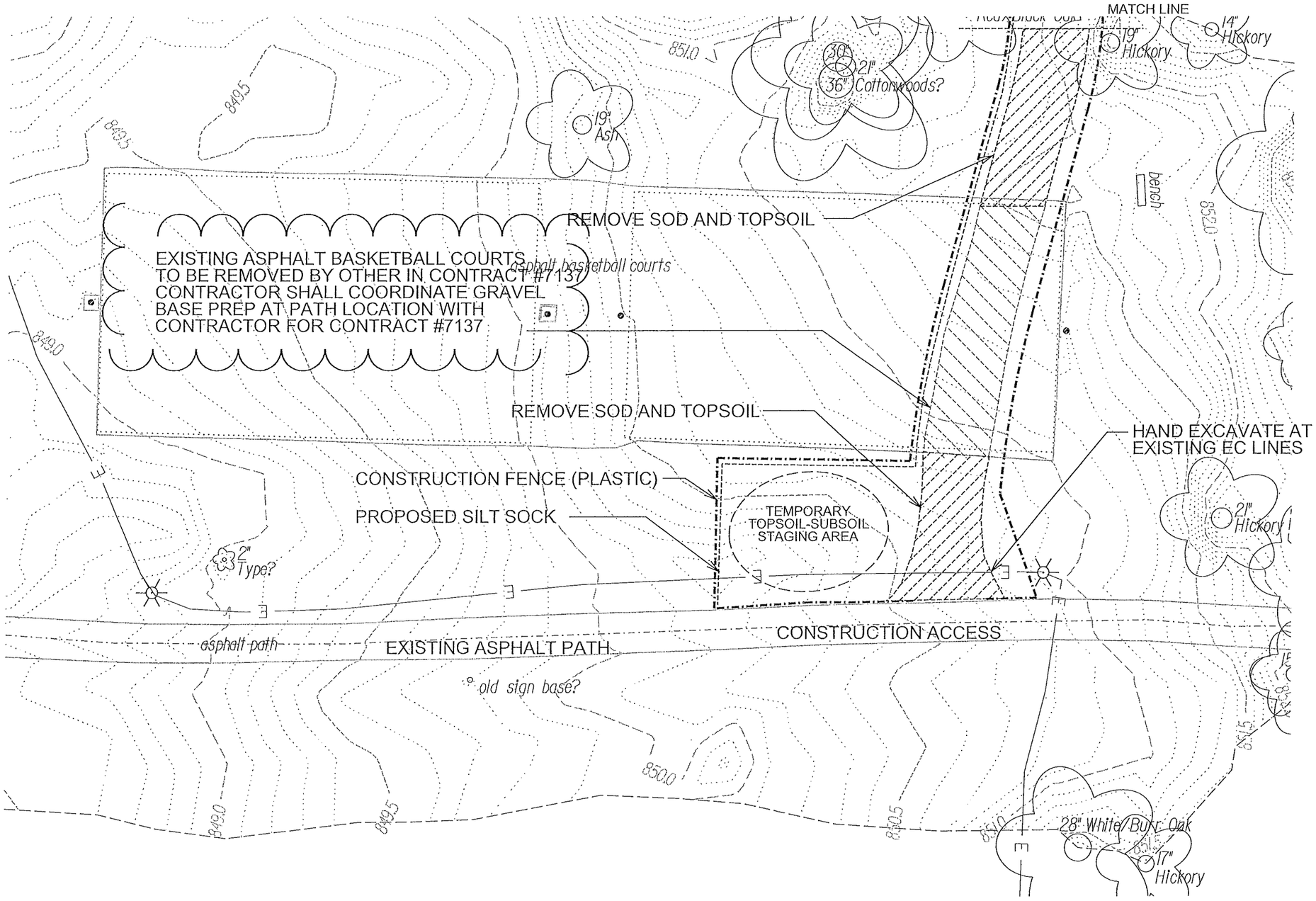
| ITEM | DATE |
|---|---|
| Drawn by: SCL | 06-27-2013 |
| Revised by: SCL/MS | 07-09-2013 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN

SHEET NUMBER:
3.4

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*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*

*play*
**MADISON PARKS**

Graphical Scale
0 20 ft
N

PROJECT:
*WORTHINGTON PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: MRS* | *06-21-13* |
| *Revised by: MRS* | *07-09-13* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*DEMOLITION AND PROTECTION PLAN- PATH*

SHEET NUMBER:
*4.3*

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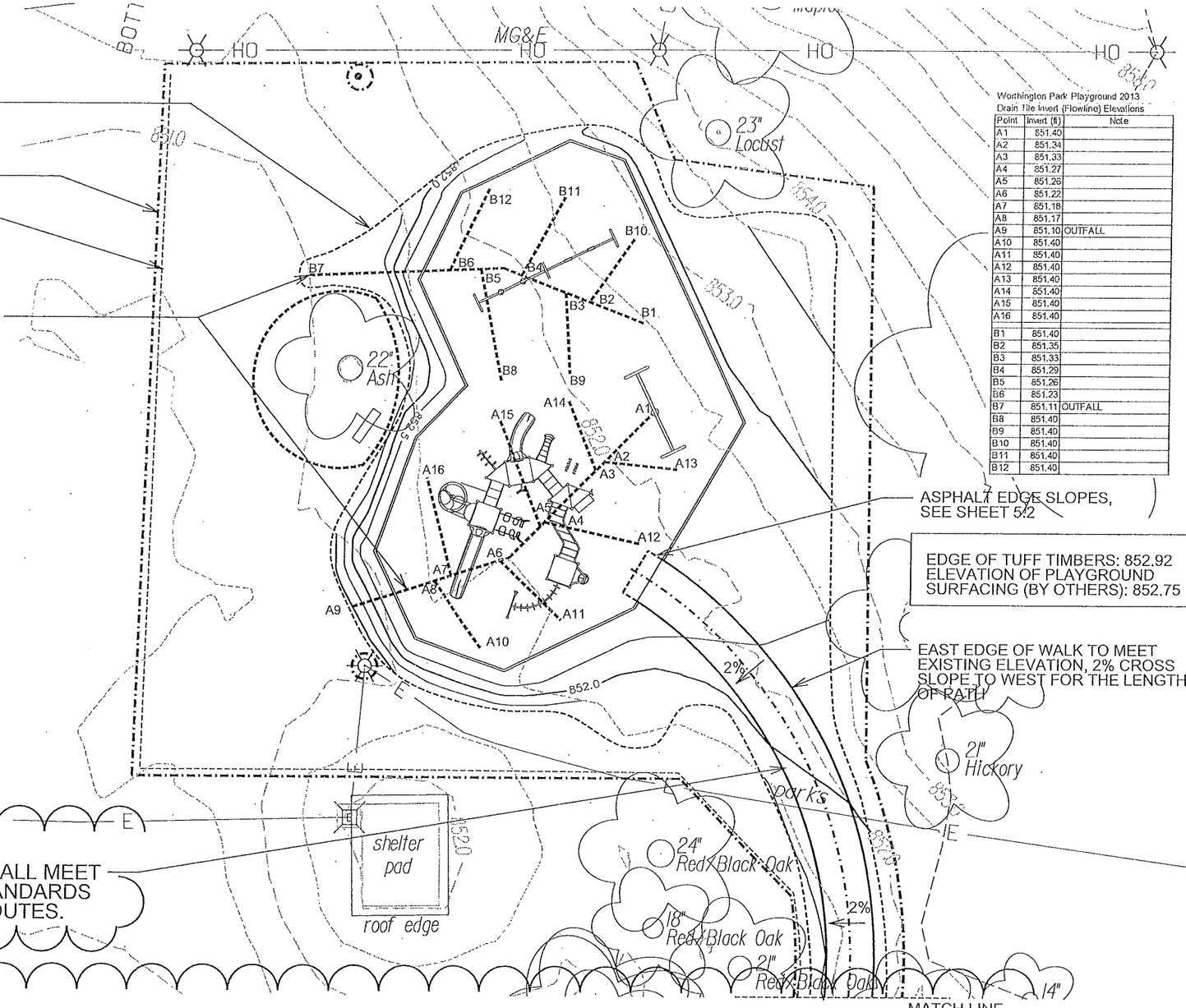
PROPOSED GRADING EXTENTS

CONSTRUCTION FENCE (PLASTIC)

PROPOSES SILT SOCK

PROPOSED DRAIN TILE SYSTEM, 4" PVC TILE WITH FILTER SOCK. INVERT ELEVATIONS IDENTIFIED




| Worthington Park Playground 2013 Drain Tile Invert (Flowline) Elevations | | |
|---|---|---|
| Point | Invert (ft) | Note |
| A1 | 851.40 | |
| A2 | 851.34 | |
| A3 | 851.33 | |
| A4 | 851.27 | |
| A5 | 851.26 | |
| A6 | 851.22 | |
| A7 | 851.18 | |
| A8 | 851.17 | |
| A9 | 851.10 | OUTFALL |
| A10 | 851.40 | |
| A11 | 851.40 | |
| A12 | 851.40 | |
| A13 | 851.40 | |
| A14 | 851.40 | |
| A15 | 851.40 | |
| A16 | 851.40 | |
| B1 | 851.40 | |
| B2 | 851.35 | |
| B3 | 851.33 | |
| B4 | 851.29 | |
| B5 | 851.26 | |
| B6 | 851.23 | |
| B7 | 851.11 | OUTFALL |
| B8 | 851.40 | |
| B9 | 851.40 | |
| B10 | 851.40 | |
| B11 | 851.40 | |
| B12 | 851.40 | |

ASPHALT EDGE SLOPES, SEE SHEET 5.2

EDGE OF TUFF TIMBERS: 852.92
ELEVATION OF PLAYGROUND SURFACING (BY OTHERS): 852.75

EAST EDGE OF WALK TO MEET EXISTING ELEVATION, 2% CROSS SLOPE TO WEST FOR THE LENGTH OF PATH

PROPOSED PATH SHALL MEET USDOJ 2010 ADA STANDARDS FOR ACCESSIBLE ROUTES.

MATCH LINE

NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS


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| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Revised by: MRS | 07-09-13 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN- PLAYGROUND

SHEET NUMBER:
4.6

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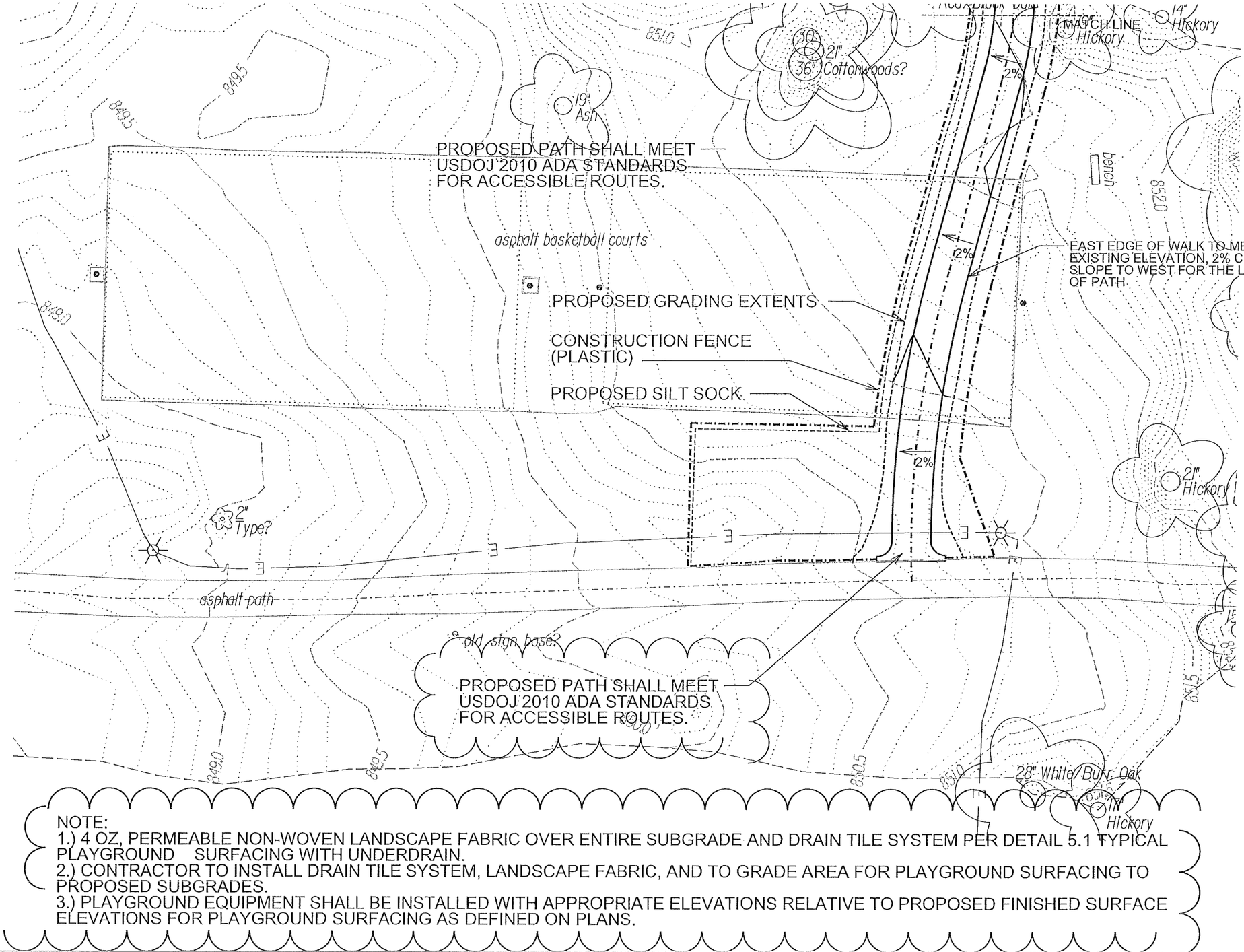


NOTE:
1.) 4 OZ, PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE SUBGRADE AND DRAIN TILE SYSTEM PER DETAIL 5.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN.
2.) CONTRACTOR TO INSTALL DRAIN TILE SYSTEM, LANDSCAPE FABRIC, AND TO GRADE AREA FOR PLAYGROUND SURFACING TO PROPOSED SUBGRADES.
3.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED ON PLANS.

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play MADISON PARKS

Graphical Scale
0 20 ft

N

PROJECT:
WORTHINGTON PARK PLAYGROUND IMPROVEMENTS


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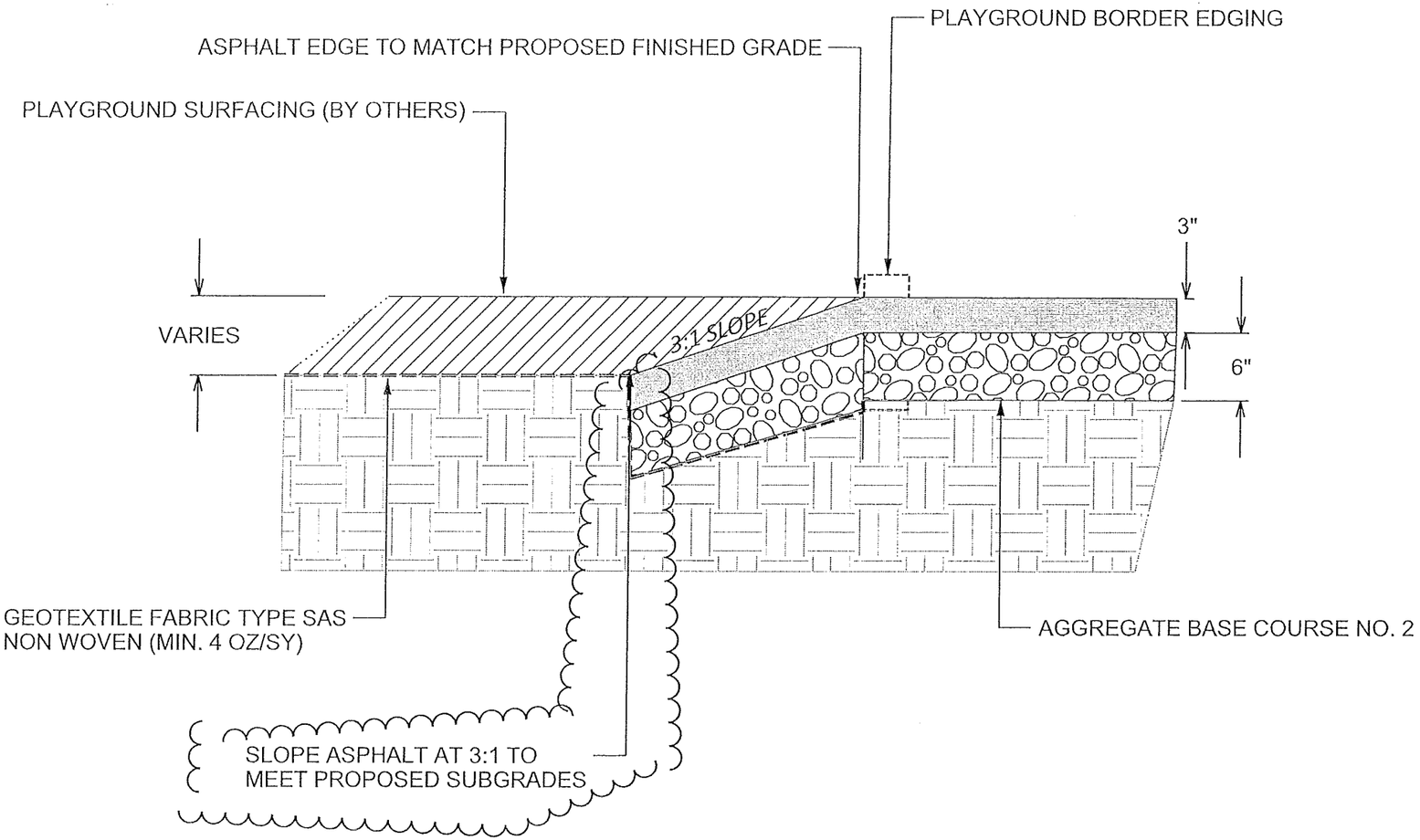
| ITEM | DATE |
|---|---|
| Drawn by: MRS | 06-21-13 |
| Revised by: MRS | 07-09-13 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
GRADING AND EROSION CONTROL PLAN- PATH

SHEET NUMBER:
4.7




City of Madison
Department of Public Works
*PARKS DIVISION*
*City-County Building, Suite 104*
*210 Martin Luther King, Jr. Blvd.*
*PO Box 2987*
*Madison, WI 53701-2987*
*play* MADISON PARKS

PROJECT:
*2013 PARK PLAYGROUND IMPROVEMENTS*

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

| ITEM | DATE |
|---|---|
| *Drawn by: SCL* | *06-27-2013* |
| *Revised by: SCL/MS* | *07-09-2013* |

PUBLIC WORKS PROJECT #:
*7130*

SHEET TITLE:
*ASPHALT EDGE AT PLAYGROUND*

SHEET NUMBER:
*5.2*

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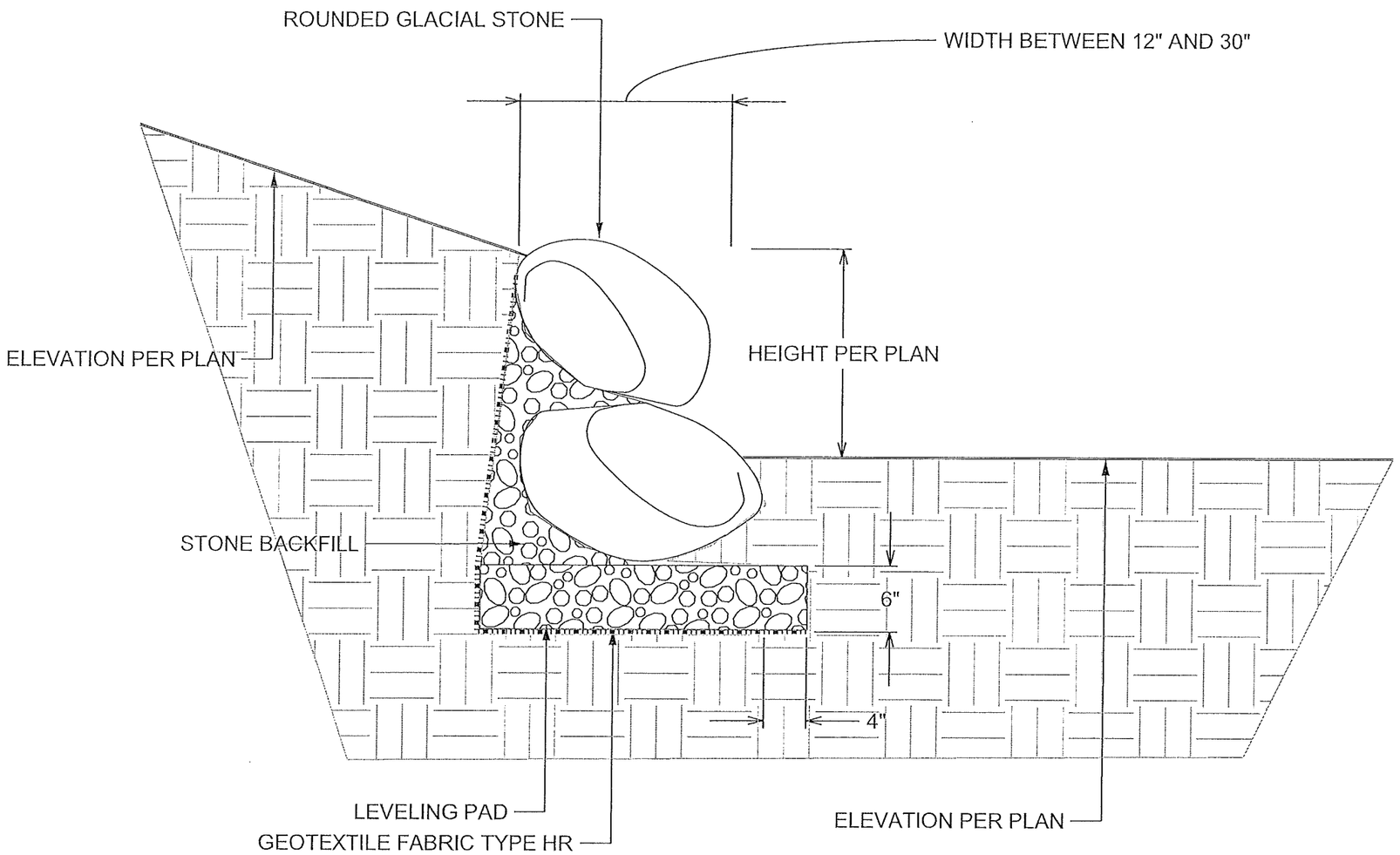


NOT TO SCALE

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
PO Box 2987
Madison, WI 53701-2987

play MADISON PARKS

PROJECT:
2013 PARK PLAYGROUND IMPROVEMENTS

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

| ITEM | DATE |
|---|---|
| Drawn by: SCL | 07-09-2013 |

PUBLIC WORKS PROJECT #:
7130

SHEET TITLE:
BOULDER RETAINING WALL DETAIL

SHEET NUMBER:
5.3

F:\Parcot\Planning\Capital Projects\Playgrounds\2013 Capital Projects\CoverSheet.dgn

REVISED

## SECTION E: BIDDERS ACKNOWLEDGEMENT

## CONTRACT TITLE 2013 PARK PLAYGROUND IMPROVEMENTS

## CONTRACT NO. 7130

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2013 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda to the Contract Nos. ____ through ____ issued thereto, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. *(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).*
5. I hereby certify that all statements herein are made on behalf of Madison Commercial Landscapes (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wisconsin a partnership consisting of _____; an individual trading as _____; of the City of Madison State of Wisconsin; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

Mustafa John Ansari
SIGNATURE

Owner
TITLE, IF ANY

Sworn and subscribed to before me this 10th day of July, 2013

(Notary Public or other officer authorized to administer oaths)
My Commission Expires 11-15-2015

NOTARY PUBLIC ILDA MEZEZI STATE OF WISCONSIN

Bidders shall not add any conditions or qualifying statements to this Proposal.

## SECTION F: DISCLOSURE OF OWNERSHIP & BEST VALUE CONTRACTING

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

State of Wisconsin
Department of Workforce Development
Equal Rights Division
Labor Standards Bureau

# Disclosure of Ownership

**Notice required under Section 15.04(1)(m), Wisconsin Statutes.** The statutory authority for the use of this form is prescribed in Sections 66.0903(12)(d) and 103.49(7)(d), Wisconsin Statutes. The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes. Personal information you provide may be used for secondary purposes.

(1) On the date a contractor submits a bid to or completes negotiations with a state agency or local governmental unit, on a project subject to Section 66.0903 or 103.49, Wisconsin Statutes, the contractor shall disclose to such state agency or local governmental unit the name of any "other construction business", which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.

(2) The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities. It also means any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 103.49(2) and 103.50(2), Wisconsin Statutes.

(3) This form must ONLY be filed, with the state agency or local governmental unit that will be awarding the contract, if **both (A) and (B) are met.**

(A) The contractor, or a shareholder, officer or partner of the contractor:
(1) Owns at least a 25% interest in the "other construction business", indicated below, on the date the contractor submits a bid or completes negotiations.
(2) Or has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years.

(B) The Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" has failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay, for hours worked in excess of the prevailing hours of labor, to any employee at any time within the preceding three (3) years.

**Other Construction Business**

**Not Applicable** ☒

| | | | |
|---|---|---|---|
| Name of Business | | | |
| Street Address or P O Box | City | State | Zip Code |
| Name of Business | | | |
| Street Address or P O Box | City | State | Zip Code |
| Name of Business | | | |
| Street Address or P O Box | City | State | Zip Code |

**I hereby state under penalty of perjury that the information, contained in this document, is true and accurate according to my knowledge and belief.**

Print the Name of Authorized Officer: Michael John Arnold

Signature of Authorized Officer: Michael John Arnold — Date Signed: 7-16-13

Name of Corporation, Partnership or Sole Proprietorship: Madison Commercial Landscapes

| Street Address or P O Box | City | State | Zip Code |
|---|---|---|---|
| 1871 Hwy MM | Oregon | Wis. | 53575 |

**If you have any questions call (608) 266-0028**

ERD-7777-E (R. 09/2003)

# 2013 PARK PLAYGROUND IMPROVEMENTS
# CONTRACT NO. 7130

## Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

| LANDSCAPER |
|---|
| |

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

☒ Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.

☐ No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.

☐ Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.

☐ First-time Contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.

☐ Contractor has been in business less than one year.

☐ Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

☒ The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

**LIST APPRENTICABLE TRADES** (check all that apply to your work to be performed on this contract)

- ☐ BRICKLAYER
- ☐ CARPENTER
- ☐ CEMENT MASON / CONCRETE FINISHER
- ☐ CEMENT MASON (HEAVY HIGHWAY)
- ☐ CONSTRUCTION CRAFT LABORER
- ☐ DATA COMMUNICATION INSTALLER
- ☐ ELECTRICIAN
- ☐ ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE
- ☐ GLAZIER
- ☐ HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- ☐ INSULATION WORKER (HEAT & FROST)
- ☐ IRON WORKER
- ☐ IRON WORKER (ASSEMBLER, METAL BLDGS)
- ☐ PAINTER & DECORATOR
- ☐ PLASTERER
- ☐ PLUMBER
- ☐ RESIDENTIAL ELECTRICIAN
- ☐ ROOFER & WATER PROOFER
- ☐ SHEET METAL WORKER
- ☐ SPRINKLER FITTER
- ☐ STEAMFITTER
- ☐ STEAMFITTER (REFRIGERATION)
- ☐ STEAMFITTER (SERVICE)
- ☐ TAPER & FINISHER
- ☐ TELECOMMUNICATIONS (VOICE, DATA & VIDEO) INSTALLER-TECHNICIAN
- ☐ TILE SETTER

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

### Small Business Enterprise Compliance Report

**This information may be submitted electronically through Bid Express or submitted with bid in sealed envelope.**

### Cover Sheet

Prime Bidder Information

Company: Madison Commercial Landscapes

Address: 1871 Hwy MM Oregon WI 53575

Telephone Number: 608-835-7700 Fax Number: 608-835-7987

Contact Person/Title: Nate Amble project Manager

Prime Bidder Certification

I, Nate Amble (Name), project manager (Title) of

Madison Commercial Landscapes (Company) certify that the information

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

Witness' Signature

Bidder's Signature

7/11/13 Bradley Franklin

Date

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

### Small Business Enterprise Compliance Report

### Summary Sheet

SBE Subcontractors Who Are NOT Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|---|---|---|
| | | % |
| Madison Commercial Landscapes<br>1871 hwy MM<br>Oregon, WI 53575<br>608-835-7700 | Landscaper | 100% |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| | | % |
| **Subtotal SBE who are NOT suppliers:** | | 100% |

SBE Subcontractors Who Are Suppliers

| Name(s) of SBEs Utilized | Type of Work | % of Total Bid Amount |
|---|---|---|
| | | % |
| N/A | | % |
| | | % |
| | | % |
| | | % |
| | | % |

**Subtotal Contractors who are suppliers:** _____ % x 0.6 = _____ % (discounted to 60%)

**Total Percentage of SBE Utilization:** 100% %.

2013 PARK PLAYGROUND IMPROVEMENTS
CONTRACT NO. 7130
PROPOSAL PAGE

Madison Commercial Landscapes
1871 hwy MM
Oregon, WI 53575
608-835-7700

| Item Code | Description | Quantity | Units | Unit Price | TOTAL |
|---|---|---|---|---|---|
| 10701 | TRAFFIC CONTROL | 4 | LS | $ 925.00 | $ 3,700.00 |
| 10803 | TREE PROTECTION/NO ROOT CUT | 215 | LF | $ 10.00 | $ 2,150.00 |
| 10911 | MOBILIZATION | 4 | LS | $ 4,750.00 | $ 19,000.00 |
| 20101 | EXCAVATION CUT | 267.5 | CY | $ 15.50 | $ 4,146.25 |
| 20130 | UNDERDRAIN, 4 INCH, WRAPPED | 936.5 | LF | $ 5.50 | $ 5,150.75 |
| 20140 | GEOTEXTILE FABRIC TYPE SAS NON WOVEN | 1,753.00 | SY | $ 2.45 | $ 4,294.85 |
| 20201 | FILL BORROW | 414.7 | CY | $ 5.00 | $ 2,073.50 |
| 20217 | CLEAR STONE | 19.8 | CY | $ 12.00 | $ 237.60 |
| 20221 | TOPSOIL | 86 | CY | $ 25.00 | $ 2,150.00 |
| 20322 | REMOVE CONCRETE CURB & GUTTER | 11 | LF | $ 10.00 | $ 110.00 |
| 20701 | TERRACE SEEDING | 1,290.00 | SY | $ 1.48 | $ 1,909.20 |
| 21010 | CONSTRUCTION ENTRACE | 4 | EA | $ 150.00 | $ 600.00 |
| 21024 | SILT SOCK (12 INCH) - COMPLETE | 1,350.00 | LF | $ 7.15 | $ 9,652.50 |
| 21061 | EROSION MATTING, CLASS I URBAN TYPE A | 896 | SY | $ 1.25 | $ 1,120.00 |
| 30201 | TYPE A CONCRETE CURB AND GUTTER | 11 | LF | $ 20.00 | $ 220.00 |
| 30302 | 7 INCH CONCRETE SIDEWALK AND DRIVE | 50 | SF | $ 12.00 | $ 600.00 |
| 30340 | CURB RAMP DETECTABLE WARING FIELDS | 12 | SF | $ 45.00 | $ 540.00 |
| | CRUSHED AGGREGATE BASE COURSE GRADATION | | | | |
| 40102 | NO. 2 | 82.1 | TON | $ 12.00 | $ 985.20 |
| 40201 | 3" DEPTH HMA PAVEMENT TYPE E-0.3 | 42.5 | TON | $ 349.00 | $ 14,832.50 |
| 40321 | UNDERCUT | 20 | SY | $ 10.00 | $ 200.00 |
| 90000 | CONSTRUCTION FENCE (PLASTIC) | 875 | LF | $ 1.75 | $ 1,531.25 |
| | BORDER TIMBER PLAYGROUND EDGING | | | | |
| 90001 | INSTALLATION | 269 | EA | $ 9.00 | $ 2,421.00 |
| 90002 | PARK BENCH INSTALLATION | 3 | EA | $ 100.00 | $ 300.00 |
| 90003 | RELOCATE EXISTING BENCHES | 3 | EA | $ 150.00 | $ 450.00 |
| 90004 | BOULDERS FOR SEATING | 7 | EA | $ 60.00 | $ 420.00 |
| 90005 | BOULDER RETAINING WALL | 24 | LF | $ 23.00 | $ 552.00 |
| 90006 | PLAYGROUND EQUIPMENT INSTALLATION | 3 | LS | $ 5,000.00 | $ 15,000.00 |
| | NAKOMA PARK OZONE CLIMBING STRUCTURE | | | | |
| 90007 | INSTALLATION | 1 | LS | $ 1,500.00 | $ 1,500.00 |
| | NAKOMA PARK HEMISPHERE CLIMBING STRUCTURE | | | | |
| 90008 | INSTALLATION | 1 | LS | $ 1,500.00 | $ 1,500.00 |
| | NAKOMA PARK 2-5 CLIMBING STRUCTURE | | | | |
| 90009 | INSTALLATION | 1 | LS | $ 1,000.00 | $ 1,000.00 |
| 90010 | NAKOMA PARK 5-12 SWINGS INSTALLATION | 1 | LS | $ 750.00 | $ 750.00 |
| 90011 | NAKOMA PARK 2-5 SWINGS INSTALLATION | 1 | LS | $ 750.00 | $ 750.00 |
| | | | | **TOTAL** | **$99,846.60** |

✓ AMB

Bond No. 61740483

## SECTION G: BID BOND

KNOW ALL MEN BY THESE PRESENT, THAT Michael J Amble dba Madison Commercial Landscapes (a corporation of the State of _____) (individual), (partnership), hereinafter referred to as the "Principal") and WESTERN SURETY COMPANY a corporation of the State of South Dakota (hereinafter referred to as the "Surety") and licensed to do business in the State of Wisconsin, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

**2013 PARK PLAYGROUND IMPROVEMENTS**
**CONTRACT NO. 7130**

1. If said bid is rejected by the Obligee, then this obligation shall be void.

2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

   If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

   The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the Obligee may accept such bid, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

Seal

Michael J Amble dba Madison Commercial Landscapes — 7-10-13
Principal — Date

By: Michael John Amble

WESTERN SURETY COMPANY
Name of Surety

By: Patricia K Wianecki — July 12, 2013
PATRICIA K WIANECKI, Attorney-in-Fact — Date

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under License No. 2339271 for the year 2013, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has not been revoked.

7/10/13
Date

Patricia K Wianecki
Krueu Nusen Insurance
Agent

P. O. BOX 620067
Address

MIDDLETON, WI 53562-0067
City, State and Zip Code

608-831-3168
Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees may be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

**ACKNOWLEDGMENT OF SURETY**
**(Attorney-in-Fact)**

STATE OF Wisconsin }
COUNTY OF Dane } ss

Bond No. 61740483

On this 10th day of July, 2013, before me, a notary public in and for said County, personally appeared PATRICIA K WIANECKI to me personally known and being by me duly sworn, did say, that he is the Attorney-in-Fact of WESTERN SURETY COMPANY, a corporation of Sioux Falls, South Dakota, created, organized and existing under and by virtue of the laws of the State of South Dakota, that the said instrument was executed on behalf of the said corporation by authority of its Board of Directors and that the said PATRICIA K WIANECKI acknowledges said instrument to be the free act and deed of said corporation and that he has authority to sign said instrument without affixing the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal at Middleton, Wisconsin, the day and year last above written.

My commission expires 9-13, 2015

Cheryl A Theis
Notary Public

CHERYL A THEIS NOTARY PUBLIC STATE OF WISCONSIN

Form 106-4-2000

# Western Surety Company

## POWER OF ATTORNEY - CERTIFIED COPY

Bond No. 61740483

Know All Men By These Presents, that WESTERN SURETY COMPANY, a corporation duly organized and existing under the laws of the State of South Dakota, and having its principal office in Sioux Falls, South Dakota (the "Company"), does by these presents make, constitute and appoint PATRICIA K WIANECKI

its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred, to execute, acknowledge and deliver for and on its behalf as Surety, bonds for:

Principal: Michael J Amble dba Madison Commercial Landscapes

Obligee: City of Madison

Amount: $500,000.00

and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the Senior Vice President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said attorney(s)-in-fact may do within the above stated limitations. Said appointment is made under and by authority of the following bylaw of Western Surety Company which remains in full force and effect.

"Section 7. All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

All authority hereby conferred shall expire and terminate, without notice, unless used before midnight of October 10, 2013, but until such time shall be irrevocable and in full force and effect.

In Witness Whereof, Western Surety Company has caused these presents to be signed by its Vice President, Paul T. Bruflat, and its corporate seal to be affixed this 12th day of July, 2013.

WESTERN SURETY COMPANY

Paul T. Bruflat

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA }
COUNTY OF MINNEHAHA } ss

On this 12th day of July, in the year 2013, before me, a notary public, personally appeared Paul T. Bruflat, who being to me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of WESTERN SURETY COMPANY and acknowledged said instrument to be the voluntary act and deed of said corporation.

S. PETRIK
NOTARY PUBLIC
SOUTH DAKOTA

S. Petrik

Notary Public - South Dakota

My Commission Expires August 11, 2016

I the undersigned officer of Western Surety Company, a stock corporation of the State of South Dakota, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable, and furthermore, that Section 7 of the bylaws of the Company as set forth in the Power of Attorney is now in force.

In testimony whereof, I have hereunto set my hand and seal of Western Surety Company this 12th day of July, 2013.

WESTERN SURETY COMPANY

Paul T. Bruflat

Paul T. Bruflat, Vice President

Form F5306-8-2012

## SECTION H: AGREEMENT

THIS AGREEMENT made this 7 day of AUGUST in the year Two Thousand and Thirteen between MADISON COMMERCIAL LANDSCAPES hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted AUGUST 6, 2013, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies; transportation, and labor necessary to the prosecution and completion of the work or improvements:

**2013 PARK PLAYGROUND IMPROVEMENTS**
**CONTRACT NO. 7130**

2. **Completion Date/Contract Time.** Construction work must begin within seven *!;1)* calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.

3. **Contract Price,** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of NINETY-NINE THOUSAND EIGHT HUNDRED FORTY-SIX DOLLARS AND SIXTY CENTS ($99,846.60) being the amount bid by such Contractor and which was awarded to him/her as provided bylaw.

4. **Wage Rates for Employees of Public Works Contractors**

**General and Authorization.** The Contractor shall compensate its employees at the prevailing wage rate in accordance with section 66.0903, Wis. Slats., DWD 290 of the Wisconsin Administrative Code and as hereinafter provided.

"Public Works" shall include building or work involving the erection, construction, remodeling, repairing or demolition of buildings, parking lots, highways, streets, bridges, sidewalks, street lighting, traffic signals, sanitary sewers, water mains and appurtenances, storm sewers, and the grading and landscaping of public lands.

"Building or work" includes construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work, except for the delivery of mineral aggregate such as sand, gravel, bituminous asphaltic concrete or stone which is incorporated into the work under contract with the City by depositing the material directly in final place from transporting vehicle.

"Erection, construction, remodeling, repairing" means all types of work done on a particular building or Work at the site thereof in the construction or development of the project, including without limitation, erecting, construction, remodeling, repairing, altering, painting, and decorating, the transporting of materials and supplies to or from the building or work done by the employees of the Contractor, Subcontractor, or Agent thereof, and the manufacturing or furnishing of materials, articles, supplies or equipment on the site of the building or work, by persons employed by the Contractor, Subcontractor, or Agent thereof.

"Employees working on the project" means laborers, workers, and mechanics employed directly upon the site of work.

"Laborers, Workers, and Mechanics" include pre-apprentices, helpers, trainees, learners and properly registered and indentured apprentices but exclude clerical, supervisory, and other personnel not performing manual labor.

**Establishment of Wage Rates.** The Department of Public Works shall periodically obtain a current schedule of prevailing wage rates from DWD. The schedule shall be used to establish the City of Madison Prevailing Wage Rate Schedule for Public Works Construction (prevailing wage rate). The Department of Public Works may include known increases to the prevailing wage rate which can be documented and are to occur on a future specific date. The prevailing wage rate shall be included in public works contracts subsequently negotiated or solicited by the City. Except for known increases contained within the schedule, the prevailing wage rate shall not change during the contract. The approved wage rate is attached hereto.

**Workforce Profile.** The Contractor shall, at the time of signature of the contract, notify the City Engineer in writing of the names and classifications of all the employees of the Contractor, Subcontractors, and Agents proposed for the work. In the alternative, the Contractor shall submit in writing the classifications of all the employees of the Contractor, Subcontractors and Agents and the total number of hours estimated in each classification for the work. This workforce profile(s) shall be reviewed by the City Engineer who may, within ten (10) days, object to the workforce profile(s) as not being reflective of that which would be required for the work. The Contractor may request that the workforce profile, or a portion of the workforce profile, be submitted after the signature of the contract but at least ten (10) days prior to the work commencing. Any costs or time loss resulting from modifications to the workforce profile as a result of the City Engineer's objections shall be the responsibility of the Contractor.

**Payrolls and Records.** The Contractor shall keep weekly payroll records setting forth the name, address, telephone number, classification, wage rate and fringe benefit package of all the employees who work on the contract, including the employees of the Contractor's subcontractors and agents. Such weekly payroll records must include the required information for all City contracts and all other contracts on which the employee worked during the week in which the employee worked on the contract. The Contractor shall also keep records of the individual time each employee worked on the project and for each day of the project. Such records shall also set forth the total number of hours of overtime credited to each such employee for each day and week and the amount of overtime pay received in that week. The records shall set forth the full weekly wages earned by each employee and the actual hourly wage paid to the employee.

The Contractor shall submit the weekly payroll records, including the records of the Contractor's subcontractors and agents, to the City Engineer for every week that work is being done on the contract. The submittal shall be within twenty-one (21) calendar days of the end of the Contractor's weekly pay period.

Employees shall receive the full amounts accrued at the time of the payment, computed at rates not less than those stated in the prevailing wage rate and each employee's rate shall be determined by the work that is done within the trade or occupation classification which should be properly assigned to the employee.

An employee's classification shall not be changed to a classification of a lesser rate during the contract. If, during the term of the contract, an employee works in a higher pay classification than the one which was previously properly assigned to the employee, then that employee shall be considered to be in the higher pay classification for the balance of the contract, receive the appropriate higher rate of pay, and she/he shall not receive a lesser rate during the balance of the contract. For purposes of clarification, it is noted that there is a distinct difference between working in a different classification with higher pay and doing work within a classification that has

varying rates of pay which are determined by the type of work that is done within the classification. For example, the classification "Operating Engineer" provides for different rates of pay for various classes of work and the Employer shall compensate an employee classified as an "Operating Engineer" based on the highest class of work that is done in one day. Therefore, an "Operating Engineer's" rate may vary on a day to day basis depending on the type of work that is done, but it will never be less than the base rate of an "Operating Engineer". Also, as a matter of clarification, it is recognized that an employee may work in a higher paying classification merely by chance and without prior intention, calculation or design. If such is the case and the performance of the work is truly incidental and the occurrence is infrequent, inconsequential and does not serve to undermine the single classification principle herein, then it may not be required that the employee be considered to be in the higher pay classification and receive the higher rate of pay for the duration of the contract. However, the Contractor is not precluded or prevented from paying the higher rate for the limited time that an employee performs work that is outside of the employee's proper classification.

Questions regarding an employee's classification, rate of pay or rate of pay within a classification, shall be resolved by reference to the established practice that predominates in the industry and on which the trade or occupation rate/classification is based. Rate of pay and classification disputes shall be resolved by relying upon practices established by collective bargaining agreements and guidelines used in such determination by appropriate recognized trade unions operating within the City of Madison.

The Contractor, its Subcontractors and Agents shall submit to interrogation regarding compliance with the provisions of this ordinance.

Mulcting of the employees by the Contractor, Subcontractor, and Agents on Public Works contracts, such as by kickbacks or other devices, is prohibited. The normal rate of wage of the employees of the Contractor, Subcontractor, and Agents shall not be reduced or otherwise diminished as a result of payment of the prevailing wage rate on a public works contract.

**Hourly contributions.** Hourly contributions shall be determined in accordance with the prevailing wage rate and with DWD. 290.01(10), Wis. Admin. Code.

**Apprentices and Subjourney persons.** Apprentices and sub journeypersons performing work on the project shall be compensated in accordance with the prevailing wage rate and with DWD 290.02, and 290.025, respectively, Wis. Admin. Code.

**Straight Time Wages.** The Contractor may pay straight time wages as determined by the prevailing wage rate and DWD 290.04, Wis. Admin. Code.

**Overtime Wages.** The Contractor shall pay overtime wages as required by the prevailing wage rate and DWD 290.05, Wis. Admin. Code.

**Posting of Wage Rates and Hours.** A clearly legible copy of the prevailing wage rate, together with the provisions of Sec. 66.0903(10)(a) and (11)(a), Wis. Stats., shall be kept posted in at least one conspicuous and easily accessible place at the project site by the Contractor and such notice shall remain posted during the full time any laborers, workers or mechanics are employed on the contract.

**Evidence of Compliance by Contractor.** Upon completion of the contract, the Contractor shall file with the Department of Public Works an affidavit stating:

a. That the Contractor has complied fully with the provisions and requirements of Sec. 66.0903(3), Wis. Stats., and Chapter DWD 290, Wis. Admin. Code; the Contractor has received evidence of compliance from each of the agents and subcontractors; and the names and addresses of all of the subcontractors and agents who worked on the contract.

b. That full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records will be kept and the name, address and telephone number of the person who will be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

**Evidence of Compliance by Agent and Subcontractor.** Each agent and subcontractor shall file with the Contractor, upon completion of their portion of the work on the contract an affidavit stating that all the provisions of Sec. 66.0903(3), Wis. Stats., have been fully complied with and that full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records shall be kept and the name, address and telephone number of the person who shall be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

**Failure to Comply with the Prevailing Wage Rate.** If the Contractor fails to comply with the prevailing wage rate, she/he shall be in default on the contract.

5. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement
Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex or national original and that the

employer shall provide harassment free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Director of Affirmative Action.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.

2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.

3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or five thousand dollars ($5,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract.

## 2013 PARK PLAYGROUND IMPROVEMENTS
## CONTRACT NO. 7130

IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused these presents to be sealed with its corporate seal and to be subscribed by its Mayor and City Clerk the day and year first above written.

Countersigned:

MADISON COMMERCIAL LANDSCAPES
Company Name

Witness 8/14/13 Date

President 8-14-13 Date

Witness 8/14/13 Date

Secretary 8-14-13 Date

CITY OF MADISON, WISCONSIN

Provisions have been made to pay the liability that will accrue under this contract

Finance Director

Approved as to form:

City Attorney

Signed this 26th day of August, 2013

Witness

Witness

Mayor 8-26-13 Date

City Clerk for 8/15/13 Date

BOND #71443200

## SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we MICHAEL J AMBLE DBA MADISON COMMERCIAL LANDSCAPES as principal, and WESTERN SURETY COMPANY Company of CHICAGO IL as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of $99,846.60 ($_____) Dollars, lawful money of the United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully perform all of the terms of the Contract entered into between him/herself and the City of Madison for the construction of:

**2013 PARK PLAYGROUND IMPROVEMENTS**
**CONTRACT NO. 7130**

in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the prosecution of said work, and save the City harmless from all claims for damages because of negligence in the prosecution of said work, and shall save harmless the said City from all claims for compensation (under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is to be void, otherwise of full force, virtue and effect.

Signed and sealed this 7th day of AUGUST 2013

Countersigned:

Witness

Secretary

MICHAEL J AMBLE DBA
MADISON COMMERCIAL LANDSCAPES
Company Name (Principal)

President

Seal

WESTERN SURETY COMPANY
CORPORATE SEAL
SOUTH DAKOTA

Approved as to form:

City Attorney

WESTERN SURETY COMPANY
Surety

☐ Salary Employee ☐ Commission

By Patricia K Wianecki
Attorney-in-Fact

PATRICIA K WIANECKI

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under License No. 2339271 for the year 2013, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

8/7/13
Date

Patricia K Wianecki
Agent Signature

# Western Surety Company

## POWER OF ATTORNEY - CERTIFIED COPY

Bond No. 71443200

Know All Men By These Presents, that WESTERN SURETY COMPANY, a corporation duly organized and existing under the laws of the State of South Dakota, and having its principal office in Sioux Falls, South Dakota (the "Company"), does by these presents make, constitute and appoint PATRICIA K WIANECKI

its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred, to execute, acknowledge and deliver for and on its behalf as Surety, bonds for:

Principal: Michael J. Amble dba Madison Commercial Landscapes

Obligee: City of Madison

Amount: $500,000.00

and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the Senior Vice President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said attorney(s)-in-fact may do within the above stated limitations. Said appointment is made under and by authority of the following bylaw of Western Surety Company which remains in full force and effect.

"Section 7. All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

All authority hereby conferred shall expire and terminate, without notice, unless used before midnight of February 15, 2014, but until such time shall be irrevocable and in full force and effect.

In Witness Whereof, Western Surety Company has caused these presents to be signed by its Vice President, Paul T. Bruflat, and its corporate seal to be affixed this 31st day of July, 2013.

WESTERN SURETY COMPANY

Paul T. Bruflat

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA }
COUNTY OF MINNEHAHA } ss

On this 31st day of July, in the year 2013, before me, a notary public, personally appeared Paul T. Bruflat, who being to me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of WESTERN SURETY COMPANY and acknowledged said instrument to be the voluntary act and deed of said corporation.

S. PETRIK
NOTARY PUBLIC
SOUTH DAKOTA

S. Petrik

Notary Public - South Dakota

My Commission Expires August 11, 2016

I the undersigned officer of Western Surety Company, a stock corporation of the State of South Dakota, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable, and furthermore, that Section 7 of the bylaws of the Company as set forth in the Power of Attorney is now in force.

In testimony whereof, I have hereunto set my hand and seal of Western Surety Company this 31st day of July, 2013.

WESTERN SURETY COMPANY

Paul T. Bruflat

Paul T. Bruflat, Vice President

Form F5306-8-2012

**ACKNOWLEDGMENT OF SURETY**
**(Attorney-in-Fact)**

STATE OF Wisconsin
COUNTY OF Dane } ss

Bond No. 71443200

On this 31st day of July, 2013, before me, a notary public in and for said County, personally appeared PATRICIA K WIANECKI to me personally known and being by me duly sworn, did say, that he is the Attorney-in-Fact of WESTERN SURETY COMPANY, a corporation of Sioux Falls, South Dakota, created, organized and existing under and by virtue of the laws of the State of South Dakota, that the said instrument was executed on behalf of the said corporation by authority of its Board of Directors and that the said PATRICIA K WIANECKI acknowledges said instrument to be the free act and deed of said corporation and that he has authority to sign said instrument without affixing the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal at Middleton, Wisconsin, the day and year last above written.

My commission expires 9-13, 2015

Cheryl A Theis
Notary Public

Form 106-4-2000

CHERYL A THEIS NOTARY PUBLIC STATE OF WISCONSIN

# SECTION J: PREVAILING WAGE RATES

PREVAILING WAGE RATE DETERMINATION
Issued by the State of Wisconsin
Department of Workforce Development
Pursuant to s. 66.0903, Wis. Stats.
Issued On: 01/10/2013
Amended On: 02/18/2013

| | |
|---|---|
| **DETERMINATION NUMBER:** | 201300080 |
| **EXPIRATION DATE:** | Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2013. If NOT, You MUST Reapply. |
| **PROJECT NAME:** | ALL PUBLIC WORKS PROJECTS UNDER SEC 66.0903, STATS - CITY OF MADISON |
| **PROJECT LOCATION:** | MADISON CITY, DANE COUNTY, WI |
| **CONTRACTING AGENCY:** | CITY OF MADISON-ENGINEERING |

| | |
|---|---|
| **CLASSIFICATION:** | Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm. |
| **OVERTIME:** | Time and one-half must be paid for all hours worked:<br>- over 10 hours per day on prevailing wage projects<br>- over 40 hours per calendar week<br>- Saturday and Sunday<br>- on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25;<br>- The day before if January 1, July 4 or December 25 falls on a Saturday;<br>- The day following if January 1, July 4 or December 25 falls on a Sunday.<br>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.<br><br>A DOT Premium (discussed below) may supersede this time and one-half requirement. |
| **FUTURE INCREASE:** | When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation. |
| **PREMIUM PAY:** | If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whevenever such pay is applicable. |
| **DOT PREMIUM:** | This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination. |
| **APPRENTICES:** | Pay apprentices a percentage of the applicable journeyperson's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture. |
| **SUBJOURNEY:** | Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project. |

his document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project** . A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

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**The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.**

**s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR"** for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

**s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.**

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

**s. 66.0903 (11) LIABILITY AND PENALTIES.**

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

## BUILDING OR HEAVY CONSTRUCTION

**Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.**

### SKILLED TRADES

**Fringe Benefits Must Be Paid On All Hours Worked**

| CODE | TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 101 | Acoustic Ceiling Tile Installer | 30.16 | 15.31 | 45.47 |
| 102 | Boilermaker | 31.09 | 24.52 | 55.61 |
| 103 | Bricklayer, Blocklayer or Stonemason<br>Future Increase(s):<br>Add $ .80 on 6/1/2013<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.01 | 17.35 | 49.36 |
| 104 | Cabinet Installer | 30.16 | 15.31 | 45.47 |
| 105 | Carpenter | 30.16 | 15.31 | 45.47 |
| 106 | Carpet Layer or Soft Floor Coverer | 30.16 | 15.31 | 45.47 |
| 107 | Cement Finisher | 31.48 | 13.19 | 44.67 |
| 108 | Drywall Taper or Finisher | 25.10 | 14.78 | 39.88 |
| 109 | Electrician<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.94 | 18.80 | 51.74 |
| 110 | Elevator Constructor | 44.94 | 23.84 | 68.78 |
| 111 | Fence Erector | 22.50 | 3.98 | 26.48 |
| 112 | Fire Sprinkler Fitter | 36.07 | 18.60 | 54.67 |
| 113 | Glazier | 37.13 | 12.32 | 49.45 |
| 114 | Heat or Frost Insulator | 33.93 | 23.26 | 57.19 |
| 115 | Insulator (Batt or Blown) | 27.47 | 19.16 | 46.63 |
| 116 | Ironworker | 30.90 | 19.11 | 50.01 |
| 117 | Lather | 30.16 | 15.31 | 45.47 |
| 118 | Line Constructor (Electrical) | 37.05 | 16.94 | 53.99 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 119 | Marble Finisher | 20.00 | 0.00 | 20.00 |
| 120 | Marble Mason | 32.01 | 16.85 | 48.86 |
| 121 | Metal Building Erector | 18.05 | 8.08 | 26.13 |
| 122 | Millwright | 31.76 | 15.36 | 47.12 |
| 123 | Overhead Door Installer | 13.50 | 0.00 | 13.50 |
| 124 | Painter | 24.80 | 14.78 | 39.58 |
| 125 | Pavement Marking Operator | 30.00 | 0.00 | 30.00 |
| 126 | Piledriver | 30.66 | 15.31 | 45.97 |
| 127 | Pipeline Fuser or Welder (Gas or Utility) | 30.18 | 19.29 | 49.47 |
| 129 | Plasterer | 30.03 | 16.36 | 46.39 |
| 130 | Plumber | 36.17 | 15.37 | 51.54 |
| 132 | Refrigeration Mechanic | 42.45 | 16.71 | 59.16 |
| 133 | Roofer or Waterproofer | 30.40 | 2.23 | 32.63 |
| 34 | Sheet Metal Worker | 34.23 | 20.19 | 54.42 |
| 135 | Steamfitter | 41.20 | 16.28 | 57.48 |
| 137 | Teledata Technician or Installer<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 21.89 | 11.85 | 33.74 |
| 138 | Temperature Control Installer | 41.20 | 16.21 | 57.41 |
| 139 | Terrazzo Finisher<br>Future Increase(s):<br>Add $ .80 on 6/1/2013 | 26.57 | 16.50 | 43.07 |
| 140 | Terrazzo Mechanic | 29.51 | 17.63 | 47.14 |
| 141 | Tile Finisher<br>Future Increase(s):<br>Add $ .80/hr on 6/1/2013. | 23.77 | 16.50 | 40.27 |
| 142 | Tile Setter<br>Future Increase(s):<br>Add $ .80/hr on 6/1/2013. | 29.71 | 16.50 | 46.21 |
| 143 | Tuckpointer, Caulker or Cleaner<br>Future Increase(s):<br>Add $ .80 on 6/1/2013<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.01 | 17.35 | 49.36 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 144 | Underwater Diver (Except on Great Lakes) | 34.16 | 15.31 | 49.47 |
| 146 | Well Driller or Pump Installer<br>Future Increase(s):<br>Add $.20/hr on 06/01/2013. | 25.32 | 15.45 | 40.77 |
| 147 | Siding Installer | 37.20 | 17.01 | 54.21 |
| 150 | Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY | 28.24 | 15.10 | 43.34 |
| 151 | Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY | 29.64 | 14.64 | 44.28 |
| 152 | Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 25.94 | 13.57 | 39.51 |
| 153 | Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 24.08 | 12.96 | 37.04 |
| 154 | Groundman - ELECTRICAL LINE CONSTRUCTION ONLY | 24.00 | 11.57 | 35.57 |

## TRUCK DRIVERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 201 | Single Axle or Two Axle | 31.89 | 17.98 | 49.87 |
| 203 | Three or More Axle | 18.00 | 11.45 | 29.45 |
| 204 | Articulated, Euclid, Dumptor, Off Road Material Hauler<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 205 | Pavement Marking Vehicle | 20.85 | 11.02 | 31.87 |
| 207 | Truck Mechanic | 18.00 | 11.45 | 29.45 |

## LABORERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 301 | General Laborer<br>Future Increase(s):<br>Add $.75/hr. on 06/03/2013<br>Premium Increase(s):<br>Add $1.00/hr for certified welder; Add $.25/hr for mason tender | 24.19 | 13.90 | 38.09 |
| 302 | Asbestos Abatement Worker | 18.00 | 0.00 | 18.00 |
| 303 | Landscaper | 15.00 | 3.90 | 18.90 |
| 310 | Gas or Utility Pipeline Laborer (Other Than Sewer and Water) | 20.94 | 12.65 | 33.59 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 311 | Fiber Optic Laborer (Outside, Other Than Concrete Encased)<br>Premium Increase(s):<br>DOT PREMIUMS: Pay two times the hourly basic rate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 18.31 | 12.67 | 30.98 |
| 314 | Railroad Track Laborer | 23.41 | 6.91 | 30.32 |
| 315 | Final Construction Clean-Up Worker | 24.69 | 12.90 | 37.59 |

## HEAVY EQUIPMENT OPERATORS
## SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 501 | Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfgr's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 502 | Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 503 | Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 30.32 | 18.46 | 48.78 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 504 | Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer. | 37.45 | 19.45 | 56.90 |
| 505 | Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator.<br>Future Increase(s):<br>Add $2.19/hr on 01/01/2013; Add $2.00/hr on 01/01/2014.<br>Premium Increase(s):<br>Add $.50/hr for Friction Crane, Lattice Boom or Crane Certification (CCO). | 38.80 | 20.17 | 58.97 |
| 506 | Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.<br>Future Increase(s):<br>Add $2.08/hr on 01/01/2013; Add $2.00/hr on 01/01/2014. | 34.50 | 20.04 | 54.54 |
| 507 | Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.<br>Future Increase(s):<br>Add $1.88/hr on 01/01/2013; Add $2.00/hr on 01/01/2014. | 28.70 | 19.86 | 48.56 |

## HEAVY EQUIPMENT OPERATORS
## EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 508 | Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013.<br>Premium Increase(s):<br>Add $.50/hr for >200 Ton / Add $1/hr at 300 Ton / Add $1.50 at 400 Ton / Add $2/hr at 500 Ton & Over. | 35.12 | 18.46 | 53.58 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 509 | Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013.<br>Premium Increase(s):<br>Add $.25/hr for all >45 Ton lifting capacity cranes. | 34.12 | 18.46 | 52.58 |
| 510 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type). | 32.42 | 17.97 | 50.39 |
| 511 | Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 512 | Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 30.32 | 18.46 | 48.78 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 513 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 29.69 | 18.46 | 48.15 |
| 514 | Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment).<br>Future Increase(s):<br>Add $2/hr on 1/1/2013. | 34.89 | 20.59 | 55.48 |
| 515 | Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment).<br>Future Increase(s):<br>Add $1.60/hr on 06/01/2013; Add $1.60/hr on 06/01/2014; Add $1.65/hr on 06/01/2015. | 31.32 | 17.95 | 49.27 |
| 516 | Fiber Optic Cable Equipment<br>Future Increase(s):<br>Add $1.75/hr on 02/01/2013; Add $1.75/hr on 02/01/2014 | 26.69 | 16.65 | 43.34 |

## SEWER, WATER OR TUNNEL CONSTRUCTION

**ıcludes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).**

### SKILLED TRADES

| CODE | TRADE OR OCCUPATION<br>Fringe Benefits Must Be Paid On All Hours Worked | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 103 | Bricklayer, Blocklayer or Stonemason<br>Future Increase(s):<br>Add $1.45/hr on 6/01/2013<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 35.80 | 16.87 | 52.67 |
| 105 | Carpenter<br>Future Increase(s):<br>Add $.75/hr on 6/3/2013. Add $1.25/hr on 6/2/2014.<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.93 | 19.81 | 52.74 |
| 107 | Cement Finisher<br>Future Increase(s):<br>Add $1.87 on 6/1/13; Add $1.87 on 6/1/14; Add $1.87 on 6/1/15; Add $1.75 on 6/1/16.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise. | 32.09 | 16.13 | 48.22 |
| 109 | Electrician<br>Future Increase(s):<br>Add $1.60/hr on 6/1/2013.<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.20 | 21.71 | 53.91 |
| 111 | Fence Erector | 22.50 | 3.98 | 26.48 |
| 116 | Ironworker | 30.90 | 19.11 | 50.01 |
| 118 | Line Constructor (Electrical) | 37.05 | 16.94 | 53.99 |
| 125 | Pavement Marking Operator | 28.10 | 15.00 | 43.10 |
| 26 | Piledriver | 30.66 | 15.31 | 45.97 |
| 130 | Plumber | 36.97 | 17.66 | 54.63 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 135 | Steamfitter | 41.20 | 16.28 | 57.48 |
| 137 | Teledata Technician or Installer | 21.26 | 11.75 | 33.01 |
| 143 | Tuckpointer, Caulker or Cleaner | 32.01 | 16.85 | 48.86 |
| 144 | Underwater Diver (Except on Great Lakes) | 37.45 | 19.45 | 56.90 |
| 146 | Well Driller or Pump Installer | 21.00 | 2.23 | 23.23 |
| 150 | Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY | 28.24 | 15.10 | 43.34 |
| 151 | Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY | 29.64 | 14.64 | 44.28 |
| 152 | Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 25.94 | 13.57 | 39.51 |
| 153 | Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 24.08 | 12.96 | 37.04 |
| 154 | Groundman - ELECTRICAL LINE CONSTRUCTION ONLY | 21.75 | 11.90 | 33.65 |

## TRUCK DRIVERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 201 | Single Axle or Two Axle | 25.87 | 13.00 | 38.87 |
| 203 | Three or More Axle | 17.54 | 13.85 | 31.39 |
| 204 | Articulated, Euclid, Dumptor, Off Road Material Hauler | 31.89 | 17.98 | 49.87 |
| 205 | Pavement Marking Vehicle | 20.85 | 11.02 | 31.87 |
| 207 | Truck Mechanic | 17.00 | 0.00 | 17.00 |

## LABORERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 301 | General Laborer<br>Future Increase(s):<br>Add $.80/hr. on 06/03/2013<br>Premium Increase(s):<br>Add $.20 for blaster, bracer, manhole builder, caulker, bottomman and power tool; Add $.55 for pipelayer; Add $1.00 for tunnel work 0-15 lbs. compressed air; Add $2.00 for over 15-30 lbs. compressed air; Add $3.00 for over 30 lbs. compressed air. | 25.53 | 13.89 | 39.42 |
| 303 | Landscaper | 26.92 | 12.51 | 39.43 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 304 | Flagperson or Traffic Control Person | 17.33 | 15.53 | 32.86 |
| 311 | Fiber Optic Laborer (Outside, Other Than Concrete Encased) | 17.81 | 12.22 | 30.03 |
| 314 | Railroad Track Laborer | 23.41 | 6.91 | 30.32 |

## HEAVY EQUIPMENT OPERATORS SEWER, WATER OR TUNNEL WORK

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 521 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013.<br>Premium Increase(s):<br>Add $.50/hr for >200 Ton / Add $1/hr at 300 Ton / Add $1.50 at 400 Ton / Add $2/hr at 500 Ton & Over. | 35.12 | 18.46 | 53.58 |
| 522 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader & Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.92 | 18.46 | 51.38 |
| 523 | Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 524 | Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. | 31.89 | 18.11 | 50.00 |
| 525 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 29.69 | 18.46 | 48.15 |
| 526 | Boiler (Temporary Heat); Forklift; Greaser; Oiler. | 30.44 | 19.10 | 49.54 |
| 527 | Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer. | 37.45 | 19.45 | 56.90 |
| 528 | Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder. | 37.45 | 19.45 | 56.90 |
| 529 | Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery. | 27.75 | 19.15 | 46.90 |
| 530 | Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY. | 27.75 | 19.15 | 46.90 |

## AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION

**ıcludes all airport projects (excluding buildings) and all projects awarded by the Wisconsin Department of Transportation (excluding buildings).**

### SKILLED TRADES

**Fringe Benefits Must Be Paid On All Hours Worked**

| CODE | TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 103 | Bricklayer, Blocklayer or Stonemason | 35.58 | 19.20 | 54.78 |
| 105 | Carpenter | 30.16 | 15.31 | 45.47 |
| 107 | Cement Finisher<br>Future Increase(s):<br>Add $1.87 on 6/1/13; Add $1.87 on 6/1/14; Add $1.87 on 6/1/15; Add $1.75 on 6/1/16.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise. | 32.09 | 16.13 | 48.22 |
| 109 | Electrician<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.94 | 18.80 | 51.74 |
| 111 | Fence Erector | 28.00 | 4.50 | 32.50 |
| 116 | Ironworker | 30.90 | 19.11 | 50.01 |
| 118 | Line Constructor (Electrical) | 31.29 | 15.34 | 46.63 |
| 124 | Painter | 26.65 | 13.10 | 39.75 |
| 125 | Pavement Marking Operator | 29.22 | 16.71 | 45.93 |
| 126 | Piledriver | 30.66 | 15.31 | 45.97 |
| 133 | Roofer or Waterproofer | 30.40 | 2.23 | 32.63 |
| 137 | Teledata Technician or Installer | 21.26 | 11.75 | 33.01 |
| 143 | Tuckpointer, Caulker or Cleaner | 32.01 | 16.85 | 48.86 |
| 144 | Underwater Diver (Except on Great Lakes) | 37.45 | 19.45 | 56.90 |
| 150 | Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY | 29.64 | 17.00 | 46.64 |
| 151 | Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY | 35.50 | 15.09 | 50.59 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 152 | Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 25.94 | 13.57 | 39.51 |
| 153 | Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 24.08 | 12.96 | 37.04 |
| 154 | Groundman - ELECTRICAL LINE CONSTRUCTION ONLY | 21.75 | 11.90 | 33.65 |

## TRUCK DRIVERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 201 | Single Axle or Two Axle | 33.22 | 18.90 | 52.12 |
| 203 | Three or More Axle<br>Future Increase(s):<br>Add $1.85/hr on 6/1/2013.<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 23.31 | 17.13 | 40.44 |
| 204 | Articulated, Euclid, Dumptor, Off Road Material Hauler<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 27.77 | 19.90 | 47.67 |
| 205 | Pavement Marking Vehicle | 23.84 | 14.94 | 38.78 |
| 206 | Shadow or Pilot Vehicle | 33.22 | 18.90 | 52.12 |
| 207 | Truck Mechanic | 22.50 | 16.19 | 38.69 |

## LABORERS

| CODE | TRADE OR OCCUPATION<br>**Fringe Benefits Must Be Paid On All Hours Worked** | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 301 | General Laborer<br>Future Increase(s):<br>Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014.<br>Premium Increase(s):<br>Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period). | 28.35 | 13.90 | 42.25 |
| )2 | Asbestos Abatement Worker | 18.00 | 0.00 | 18.00 |
| 303 | Landscaper<br>Future Increase(s):<br>Add $1.70/hr on 6/1/13; Add $1.60/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period). | 28.35 | 13.90 | 42.25 |
| 304 | Flagperson or Traffic Control Person<br>Future Increase(s):<br>Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise. | 24.70 | 13.90 | 38.60 |
| 11 | Fiber Optic Laborer (Outside, Other Than Concrete Encased) | 17.81 | 12.22 | 30.03 |
| 314 | Railroad Track Laborer | 23.41 | 6.91 | 30.32 |

## HEAVY EQUIPMENT OPERATORS
## AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 531 | Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 35.22 | 19.90 | 55.12 |
| 532 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 34.72 | 19.90 | 54.62 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 533 | Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 34.22 | 19.90 | 54.12 |
| 534 | Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s): | 33.96 | 19.90 | 53.86 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| | DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | | | |
| 535 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 33.67 | 19.90 | 53.57 |
| 536 | Fiber Optic Cable Equipment. | 25.74 | 15.85 | 41.59 |
| 537 | Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer. | 37.45 | 19.45 | 56.90 |
| 538 | Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder. | 37.45 | 19.45 | 56.90 |
| 539 | Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery. | 27.75 | 19.15 | 46.90 |
| 540 | Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY. | 27.75 | 19.15 | 46.90 |

## LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION

**ıcludes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).**

### SKILLED TRADES

**Fringe Benefits Must Be Paid On All Hours Worked**

| CODE | TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY $ | HOURLY FRINGE BENEFITS $ | TOTAL $ |
|---|---|---|---|---|
| 103 | Bricklayer, Blocklayer or Stonemason | 33.00 | 15.00 | 48.00 |
| 105 | Carpenter | 30.16 | 15.31 | 45.47 |
| 107 | Cement Finisher | 31.48 | 15.68 | 47.16 |
| 109 | Electrician<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 32.94 | 18.80 | 51.74 |
| 111 | Fence Erector | 22.50 | 3.98 | 26.48 |
| 116 | Ironworker | 30.90 | 19.11 | 50.01 |
| 18 | Line Constructor (Electrical) | 37.05 | 16.94 | 53.99 |
| 124 | Painter | 24.80 | 14.78 | 39.58 |
| 125 | Pavement Marking Operator | 28.10 | 15.00 | 43.10 |
| 126 | Piledriver | 30.66 | 15.31 | 45.97 |
| 133 | Roofer or Waterproofer | 30.40 | 2.23 | 32.63 |
| 137 | Teledata Technician or Installer | 21.26 | 11.75 | 33.01 |
| 143 | Tuckpointer, Caulker or Cleaner | 32.01 | 16.85 | 48.86 |
| 144 | Underwater Diver (Except on Great Lakes) | 37.45 | 19.45 | 56.90 |
| 150 | Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY | 29.64 | 14.55 | 44.19 |
| 151 | Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY<br>Premium Increase(s):<br>DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. | 30.60 | 14.64 | 45.24 |
| 152 | Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 25.94 | 13.57 | 39.51 |
| 153 | Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY | 24.08 | 12.96 | 37.04 |
| 54 | Groundman - ELECTRICAL LINE CONSTRUCTION ONLY | 21.75 | 11.90 | 33.65 |

## TRUCK DRIVERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 201 | Single Axle or Two Axle | 25.87 | 13.00 | 38.87 |
| 203 | Three or More Axle | 17.00 | 0.00 | 17.00 |
| 204 | Articulated, Euclid, Dumptor, Off Road Material Hauler<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 205 | Pavement Marking Vehicle | 20.85 | 11.02 | 31.87 |
| 206 | Shadow or Pilot Vehicle | 25.87 | 13.00 | 38.87 |
| 207 | Truck Mechanic | 17.00 | 0.00 | 17.00 |

## LABORERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 301 | General Laborer | 27.20 | 13.37 | 40.57 |
| 303 | Landscaper | 18.25 | 1.11 | 19.36 |
| 304 | Flagperson or Traffic Control Person | 17.33 | 15.53 | 32.86 |
| 311 | Fiber Optic Laborer (Outside, Other Than Concrete Encased) | 17.81 | 12.22 | 30.03 |
| 314 | Railroad Track Laborer | 23.41 | 6.91 | 30.32 |

## HEAVY EQUIPMENT OPERATORS
## CONCRETE PAVEMENT OR BRIDGE WORK

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 541 | Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 35.22 | 19.90 | 55.12 |
| 542 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 34.72 | 19.90 | 54.62 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 543 | Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 34.22 | 19.90 | 54.12 |
| 544 | Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.<br>Premium Increase(s):<br>DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm. | 33.96 | 19.90 | 53.86 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 545 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. | 29.82 | 17.98 | 47.80 |
| 546 | Fiber Optic Cable Equipment. | 25.74 | 15.85 | 41.59 |
| 547 | Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer. | 37.45 | 19.45 | 56.90 |
| 548 | Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder. | 37.45 | 19.45 | 56.90 |
| 549 | Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery. | 27.75 | 19.15 | 46.90 |
| 50 | Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY. | 27.75 | 19.15 | 46.90 |

## HEAVY EQUIPMENT OPERATORS
## ASPHALT PAVEMENT OR OTHER WORK

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 551 | Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. | 34.62 | 17.98 | 52.60 |
| 552 | Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.92 | 18.46 | 51.38 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 553 | Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb & Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.<br>Future Increase(s):<br>Add $1/hr on 6/2/2013. | 32.39 | 18.46 | 50.85 |
| 554 | Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. | 33.67 | 19.55 | 53.22 |
| 555 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.<br>Future Increase(s):<br>Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. | 33.67 | 19.55 | 53.22 |
| 556 | Fiber Optic Cable Equipment. | 25.74 | 15.85 | 41.59 |

## RESIDENTIAL OR AGRICULTURAL CONSTRUCTION

.cludes single family houses or apartment buildings of no more than four (4) stories in height and all buildings, structures or facilities that are primarily used for agricultural or farming purposes, excluding commercial buildings. For classification purposes, the exterior height of a residential building, in terms of stories, is the primary consideration. All incidental items such as site work, driveways, parking lots, private sidewalks, private septic systems or sewer and water laterals connected to a public system and swimming pools are included within this definition. Residential buildings of five (5) stories and above are NOT included within this definition.

### SKILLED TRADES

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 101 | Acoustic Ceiling Tile Installer | 19.50 | 11.10 | 30.60 |
| 102 | Boilermaker | 31.09 | 24.52 | 55.61 |
| 103 | Bricklayer, Blocklayer or Stonemason | 23.00 | 0.00 | 23.00 |
| 104 | Cabinet Installer | 16.25 | 3.22 | 19.47 |
| 105 | Carpenter | 30.16 | 1.36 | 31.52 |
| 106 | Carpet Layer or Soft Floor Coverer | 23.95 | 6.48 | 30.43 |
| 107 | Cement Finisher | 22.46 | 2.71 | 25.17 |
| 108 | Drywall Taper or Finisher | 15.50 | 0.00 | 15.50 |
| 109 | Electrician | 17.00 | 13.64 | 30.64 |
| 110 | Elevator Constructor | 44.94 | 23.84 | 68.78 |
| 111 | Fence Erector | 18.52 | 5.93 | 24.45 |
| 112 | Fire Sprinkler Fitter | 36.07 | 18.60 | 54.67 |
| 113 | Glazier | 37.13 | 12.32 | 49.45 |
| 114 | Heat or Frost Insulator | 35.00 | 0.00 | 35.00 |
| 115 | Insulator (Batt or Blown) | 18.50 | 13.98 | 32.48 |
| 116 | Ironworker | 30.90 | 19.11 | 50.01 |
| 117 | Lather | 30.16 | 1.36 | 31.52 |
| 119 | Marble Finisher | 16.50 | 2.38 | 18.88 |
| 120 | Marble Mason | 23.00 | 0.00 | 23.00 |
| 121 | Metal Building Erector | 16.52 | 1.82 | 18.34 |
| 123 | Overhead Door Installer | 17.00 | 0.00 | 17.00 |
| 124 | Painter | 23.00 | 11.27 | 34.27 |
| 125 | Pavement Marking Operator | 28.10 | 15.00 | 43.10 |

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 129 | Plasterer | 20.00 | 0.00 | 20.00 |
| 130 | Plumber | 38.90 | 0.00 | 38.90 |
| 132 | Refrigeration Mechanic | 33.00 | 1.79 | 34.79 |
| 133 | Roofer or Waterproofer | 17.50 | 3.73 | 21.23 |
| 134 | Sheet Metal Worker | 21.03 | 3.40 | 24.43 |
| 135 | Steamfitter | 41.20 | 16.28 | 57.48 |
| 137 | Teledata Technician or Installer | 19.23 | 1.46 | 20.69 |
| 138 | Temperature Control Installer | 21.00 | 0.00 | 21.00 |
| 139 | Terrazzo Finisher | 26.57 | 16.00 | 42.57 |
| 140 | Terrazzo Mechanic | 30.01 | 17.13 | 47.14 |
| 141 | Tile Finisher | 20.60 | 4.88 | 25.48 |
| 142 | Tile Setter | 19.00 | 0.00 | 19.00 |
| 143 | Tuckpointer, Caulker or Cleaner | 32.50 | 2.84 | 35.34 |
| 146 | Well Driller or Pump Installer | 19.00 | 7.30 | 26.30 |
| 147 | Siding Installer | 19.07 | 0.00 | 19.07 |

## TRUCK DRIVERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 201 | Single Axle or Two Axle | 28.05 | 4.18 | 32.23 |
| 203 | Three or More Axle | 20.00 | 4.37 | 24.37 |
| 205 | Pavement Marking Vehicle | 20.85 | 11.02 | 31.87 |
| 207 | Truck Mechanic | 19.00 | 1.85 | 20.85 |

## LABORERS

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 301 | General Laborer | 19.80 | 7.22 | 27.02 |
| 302 | Asbestos Abatement Worker | 18.00 | 6.24 | 24.24 |
| 303 | Landscaper | 13.15 | 6.51 | 19.66 |

| ODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 311 | Fiber Optic Laborer (Outside, Other Than Concrete Encased) | 17.81 | 12.22 | 30.03 |
| 315 | Final Construction Clean-Up Worker | 15.00 | 0.00 | 15.00 |

## HEAVY EQUIPMENT OPERATORS RESIDENTIAL OR AGRICULTURAL CONSTRUCTION

| CODE | Fringe Benefits Must Be Paid On All Hours Worked<br>TRADE OR OCCUPATION | HOURLY BASIC RATE OF PAY<br>$ | HOURLY FRINGE BENEFITS<br>$ | TOTAL<br>$ |
|---|---|---|---|---|
| 557 | Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type); Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & DIstributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Crane, Shovel, Dragline, Clamshells; Forestry Equipment, TImbco, Tree Shear, Tub Grinder, Processor; Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type); WInches & A-Frames. | 31.89 | 18.20 | 50.09 |
| 558 | Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Backfiller; Belting, Burlap, Texturing Machine; Boiler (Temporary Heat); Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & LIght Equipment); Concrete Finishing Machine (Road Type); Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Jeep Digger; Lift Slab Machine; Mulcher; Oiler; Post Hole Digger or Driver; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Roller (Rubber Tire, 5 Tons or Under); Screed (Milling Machine); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Stump Chipper; Telehandler; Vibratory Hammer or Extractor, Power Pack. | 28.70 | 4.91 | 33.61 |

********** END OF RATES **********