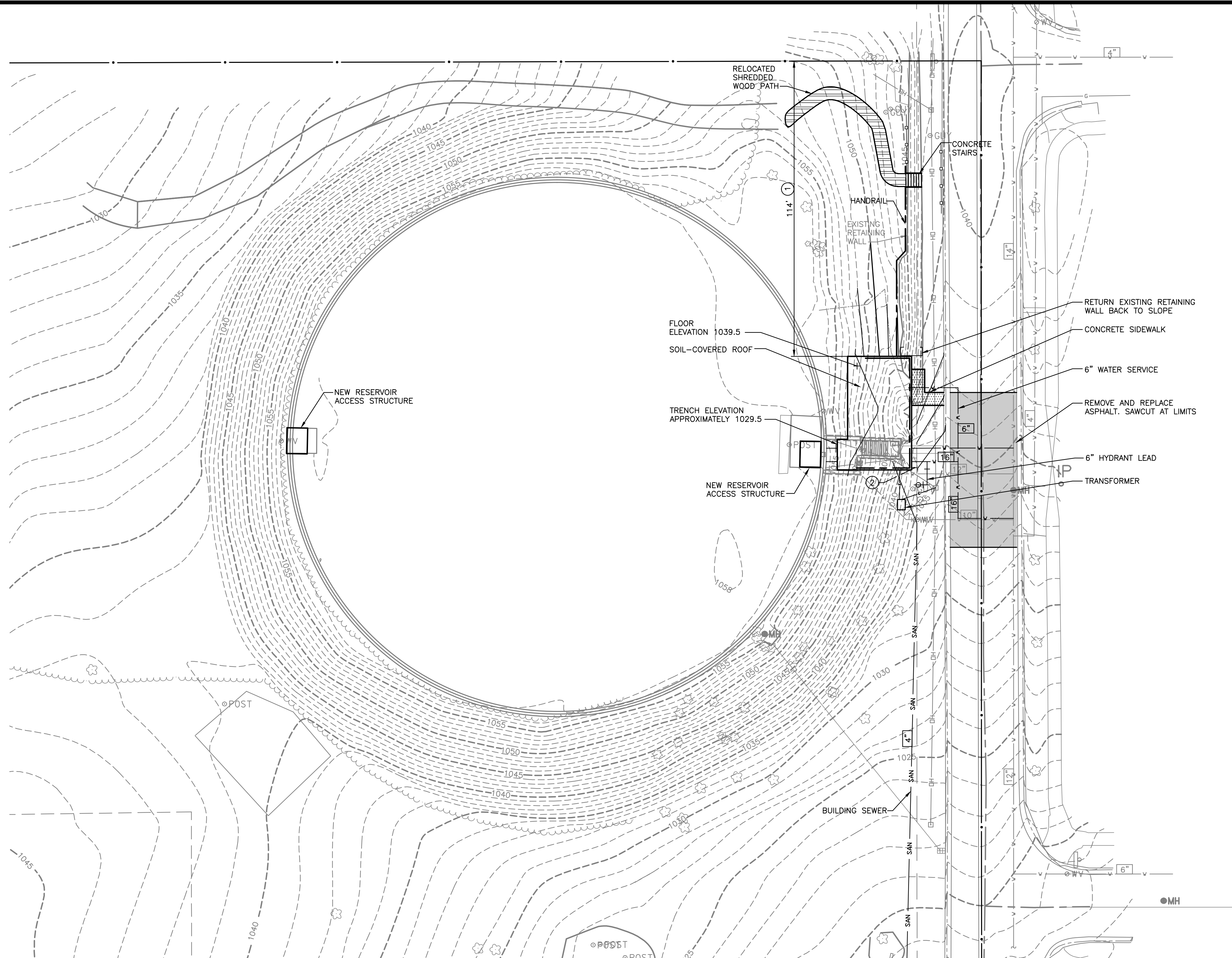


**LOCATION MAP**  
**110 GLENWAY STREET**  
 BOOSTER STATION 106  
 MADISON WATER UTILITY  
 DANE COUNTY, WISCONSIN

**STRAND ASSOCIATES®**

**FIGURE 1**  
**1020.071**





**SITE PLAN**  
 0 5' 10' 20' 40'

- KEY NOTES:**
- ① NORTH SOUTH LOCATION APPROXIMATE. BUILDING WILL BE LOCATED BASED UPON ACTUAL CENTERLINE OF PIPES LEAVING THE EXISTING RESERVOIR.
  - ② 2 FEET FROM BUILDING FACE TO R/W LINE.

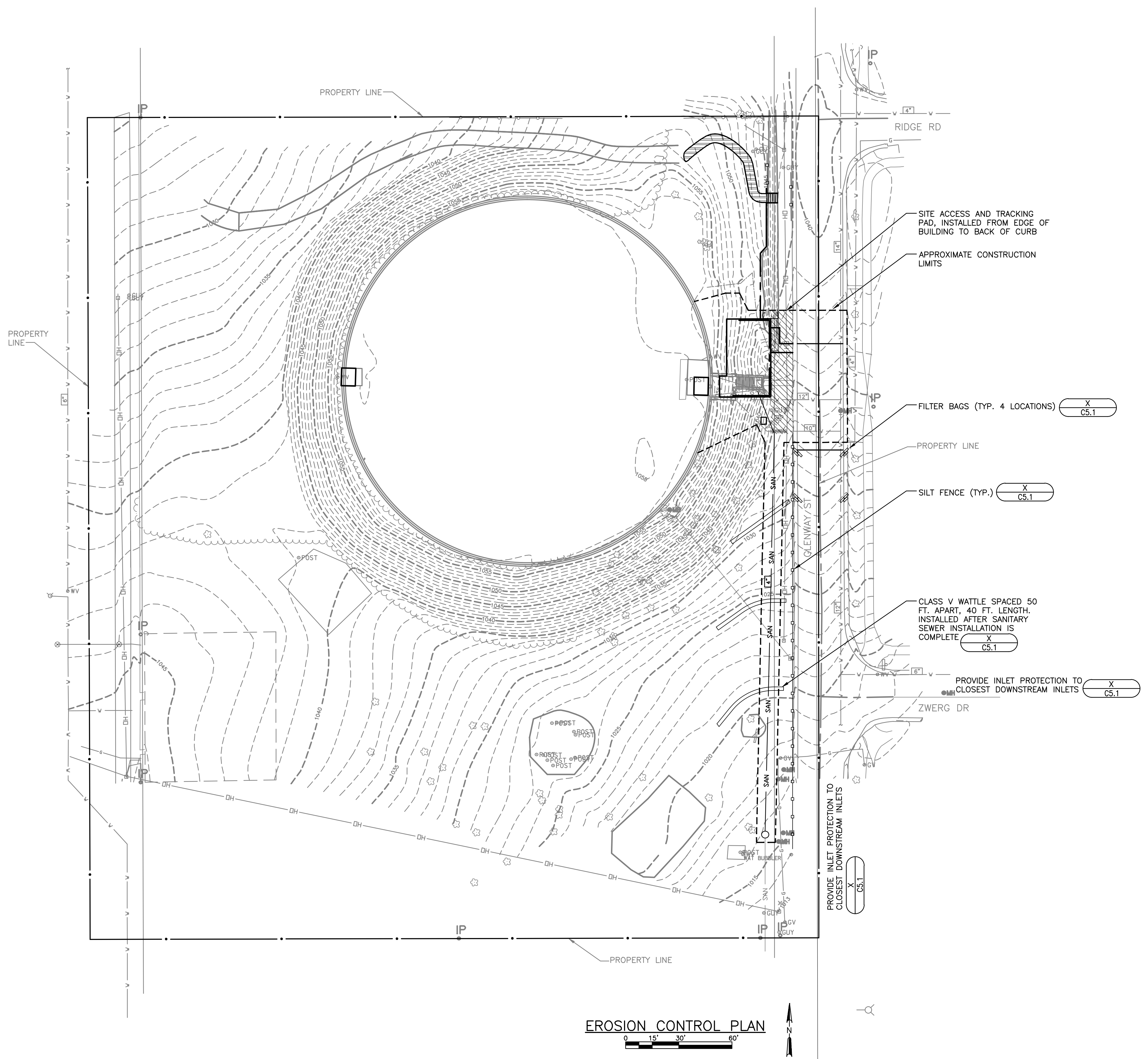
NO.	REVISIONS	DATE:
1	ISSUED FOR CONDITIONAL USE APPLICATION	2/19/13

**SITE PLAN**  
 BOOSTER STATION NO. 106  
 110 GLENWAY STREET  
 MADISON WATER UTILITY  
 MADISON, WISCONSIN

**JOB NO.**  
1020.071  
**PROJECT MGR.**  
ANDY MULLENDORE



**SHEET**  
2



**EROSION CONTROL NOTES:**

1. ANY SOIL STOCKPILED THAT REMAINS FOR MORE THAN 7 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.
2. A MINIMUM OF 4 INCHES OF TOPSOIL MUST BE APPLIED TO ALL AREAS TO BE SEEDDED OR SODDED.
3. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
4. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.
5. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR THE APPLICATION OF STABILIZATION MEASURES MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
6. FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING.
7. ALL TEMPORARY EROSION CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED WITH 70% VEGETATION.
8. WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH OR A TRACKING AGENT MAY NEED TO BE UTILIZED TO PROTECT NEARBY RESIDENCES/WATER RESOURCES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL THE EROSION CONTROL MEASURES IN CONFORMANCE WITH THE WDNR CONSERVATION PRACTICE STANDARDS, LATEST EDITION.
10. THE CONTRACTOR SHALL INSTALL STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITE AS SPECIFIED.
11. FINE SEDIMENT ACCUMULATIONS SHALL BE CLEANED FROM STREETS, PRIVATE DRIVES, OR PARKING AREAS BY MANUAL OR MECHANICAL SWEEPING ON DAILY BASIS AND BEFORE ALL IMMINENT RAINS.
12. EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF RAINFALL OF 0.5 INCH OR MORE.
13. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE DEPOSITS REACH 1/2 THE HEIGHT OF THE SILT FENCE.

**GENERAL NOTES:**

1. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE UNLESS OTHERWISE NOTED.
2. THE EROSION CONTROL MEASURES INDICATED ON THIS DRAWING ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED BY GOVERNING AGENCY.
3. PROTECT EXISTING TREES UNLESS OTHERWISE NOTED.
4. DISTURBED AREAS SHALL BE RESTORED BY SEEDING AS SPECIFIED AND AS SHOWN ON LANDSCAPING PLAN.

**LEGEND:**

- NEW ASPHALT PAVEMENT
- NEW SIDEWALK/CONCRETE PAVEMENT
- STONE TRACKING PAD

NO.	REVISIONS	DATE:
1	ISSUED FOR CONDITIONAL USE APPLICATION	2/19/13

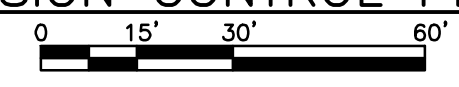
**EROSION CONTROL PLAN**  
 BOOSTER STATION NO. 106  
 110 GLENWAY STREET  
 MADISON WATER UTILITY  
 MADISON, WISCONSIN

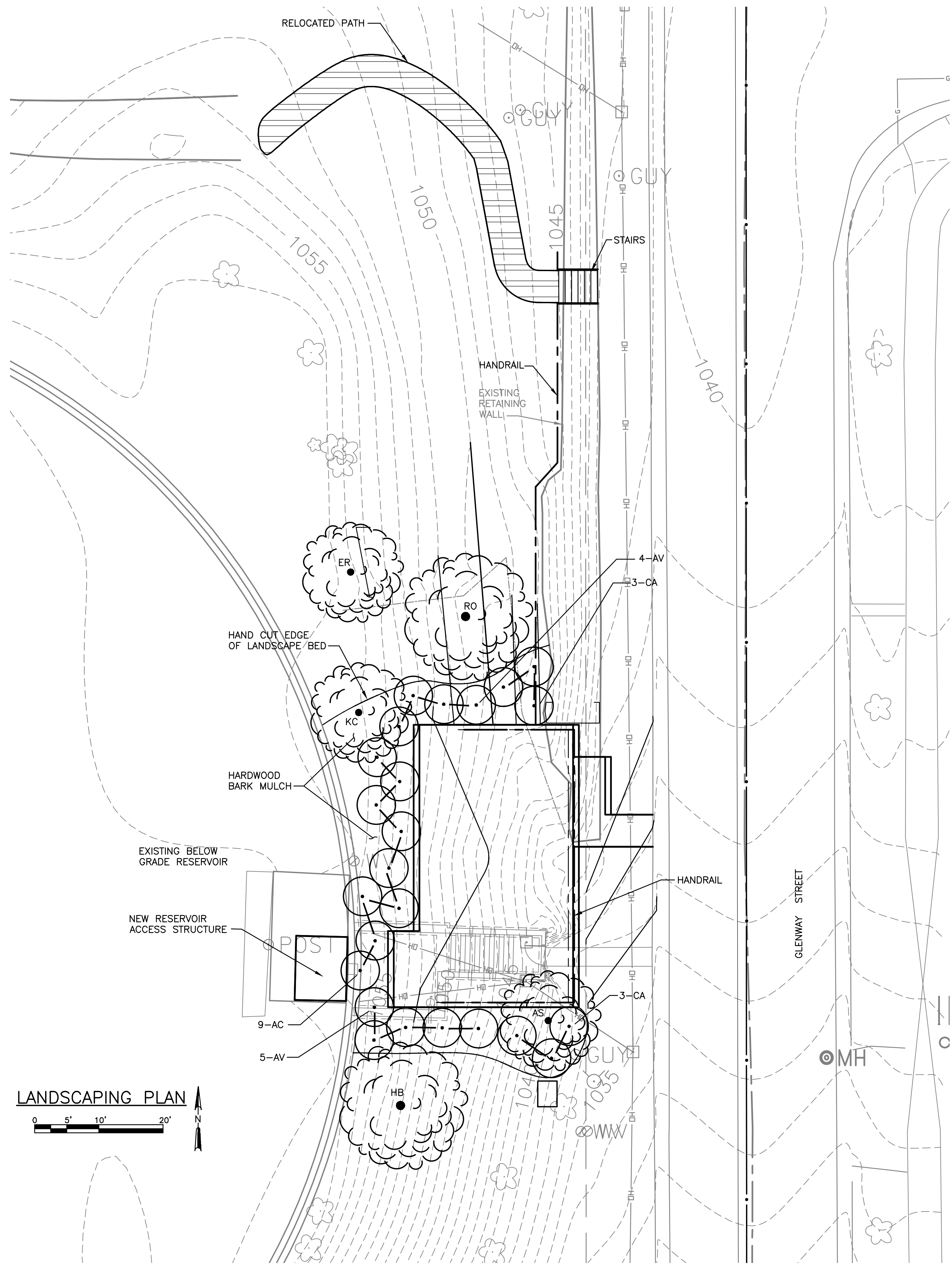
**JOB NO.**  
1020.071  
**PROJECT MGR.**  
ANDY MULLENDORE



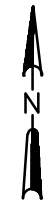
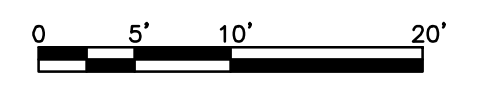
**SHEET**  
3

**EROSION CONTROL PLAN**





**LANDSCAPING PLAN**



**ARROWWOOD VIBURNAM 5-6' HEIGHT**



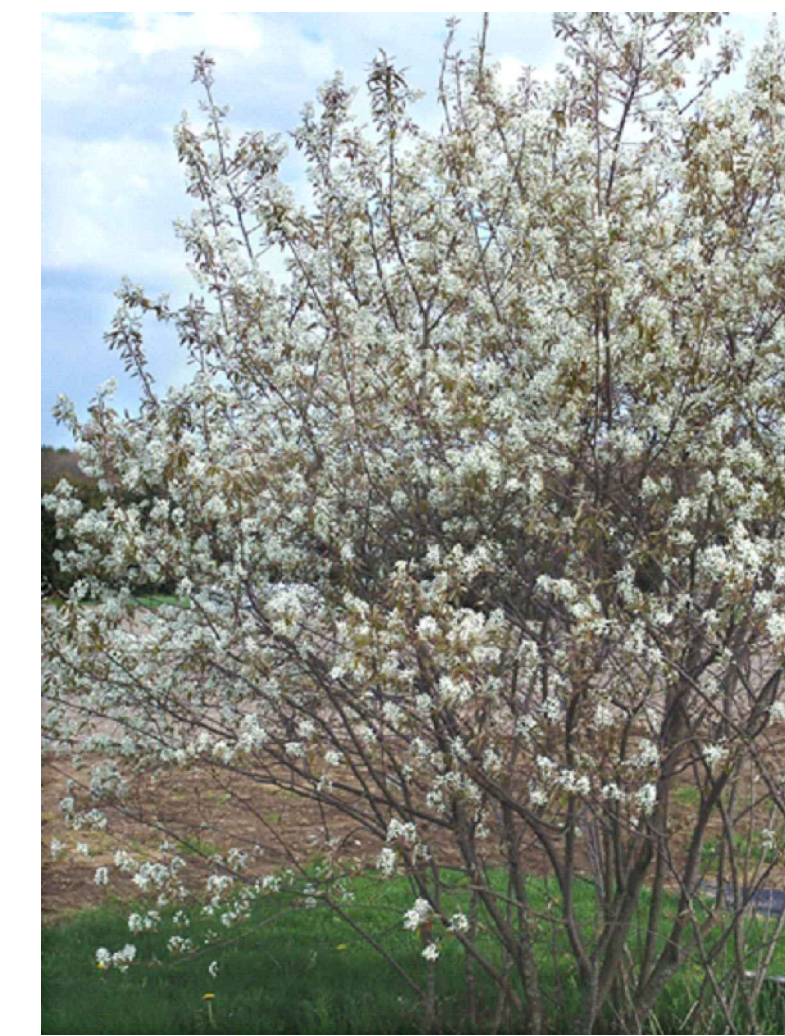
**COMPACT AMERICAN CRANBERRY BUSH VIBURNUM 6-8'**



**EASTERN REDBUD**



**HACKBERRY - HEIGHT 55'**



**ALLEGHENY SERVICEBERRY**



**KENTUCKY COFFEE TREE**



**AMERICAN CRANBERRY BUSH VIBURNUM 8-12'**



**RED OAK**

PLANT CODE	COMMON NAME	SCIENTIFIC NAME	AVG. MATURE HEIGHT	MATURE SPREAD	ROOT ZONE	MIN. BALL OR POT		FORM	MIN. HOLE SIZE		FERT. PACK	MULCH
						MIN. CONT. SIZE	MIN. CONT. DEPTH		MIN. HOLE DIA.	MIN. HOLE DEPTH		
<b>DECIDUOUS TREES</b>												
HB	Common Hackberry	Celtis occidentalis	55'	1.5' Cal.	B&B	20"	14"	Tree	36"	14"	3	44"
KC	Kentucky Coffee Tree	Gymnocladus dioica	65'	1.5' Cal.	B&B	20"	14"	Tree	36"	14"	3	44"
RO	Red Oak	Quercus rubra	70'	1.5' Cal.	B&B	20"	14"	Tree	36"	14"	3	44"
ER	Eastern Redbud	Cercis canadensis	30'	2" Cal.	B&B	24"	16"	Tree	40"	16"	4	48"
AS	Allegheny Serviceberry	Amelanchier laevis	15-25'	1.5' Cal.	B&B	20"	15"	Clump	32"	16"	3	Bed
<b>DECIDUOUS SHRUBS</b>												
AC	American Cranberry bush Viburnum	Viburnum trilobum	8-12'	4' HT	B&B	16"	12"	...	28"	16"	2	Bed
CA	Compact American Cranberry bush Viburnum	Viburnum trilobum 'Compactum'	6-8'	3' HT	B&B	20"	14"	...	32"	14"	2	36"
AV	Arrowwood Viburnum	Viburnum trilobum dentatum	5'	3' HT	B&B	12"	9"	...	28"	9"	1	Bed

NO.	REVISIONS	DATE:
1	ISSUED FOR CONDITIONAL USE APPLICATION	2/19/13

**LANDSCAPING PLAN**  
**BOOSTER STATION NO. 106**  
**110 GLENWAY STREET**  
**MADISON WATER UTILITY**  
**MADISON, WISCONSIN**

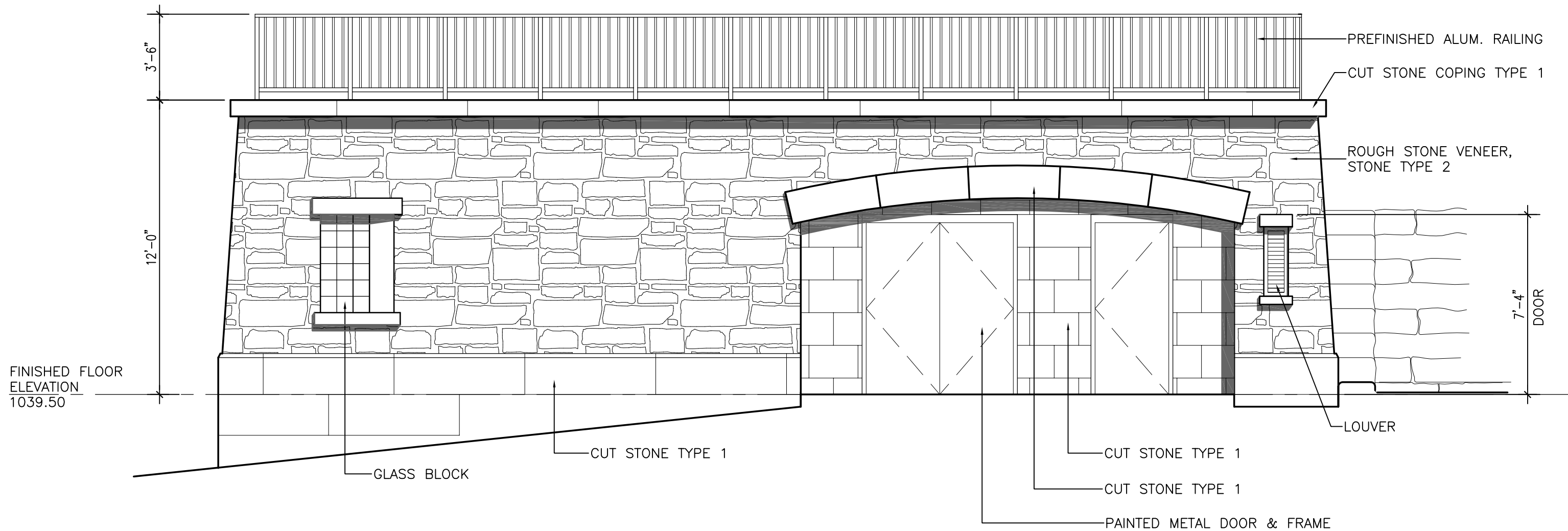
**JOB NO.**  
**1020.071**  
**PROJECT MGR.**  
**ANDY MULLENDORE**



**SHEET**  
**4**



1



STONE LEGEND:

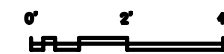
TYPE 1: EDEN CUT STONE

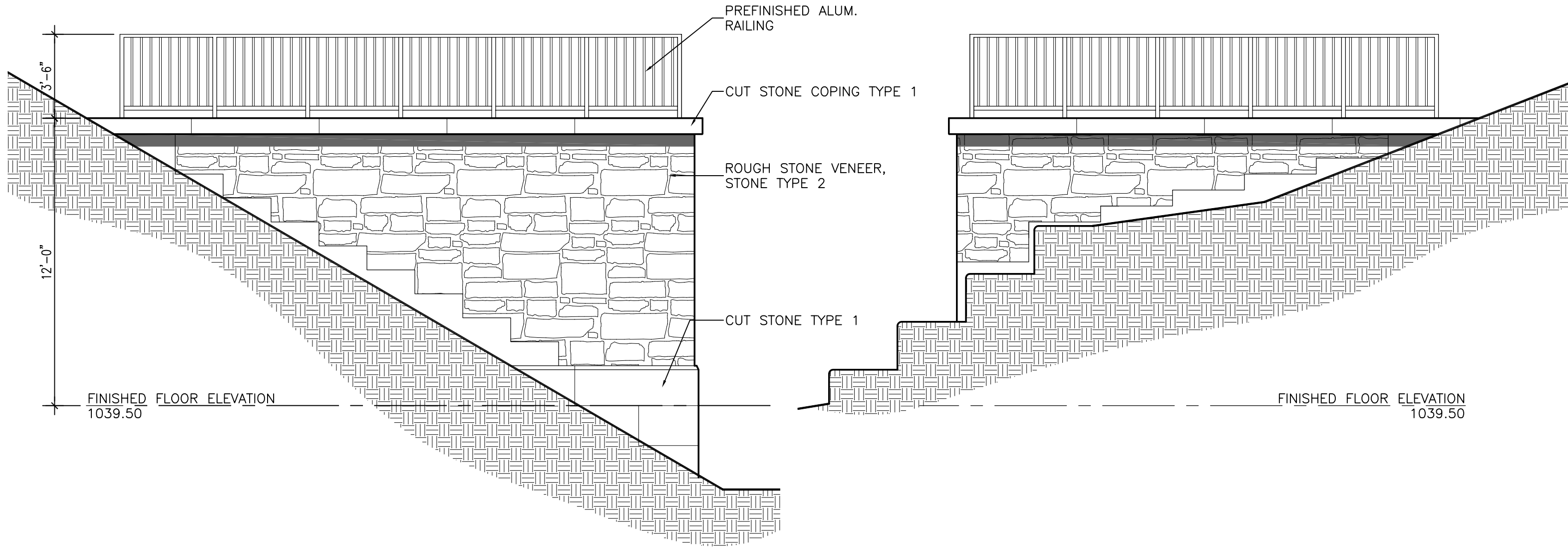


TYPE 2: EDEN STONE, CHILTON  
WEATHER EDGE TUMBLED, NO REDS

EAST ELEVATION

1/4" = 1'-0"



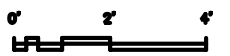


SOUTH ELEVATION

1/4" = 1'-0"

NORTH ELEVATION

1/4" = 1'-0"







Existing



Proposed



Existing Context

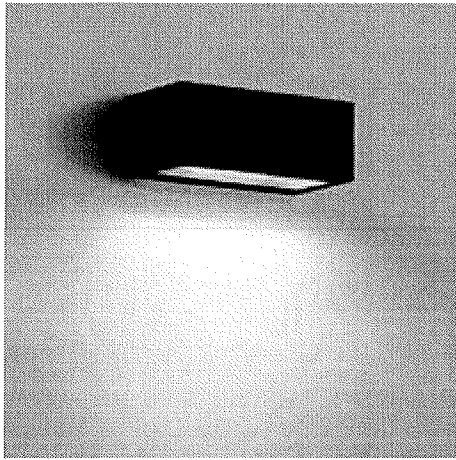


# LUMINAIRE SPECIFICATION



PROJECT : Madison Booster 106 DATE : \_\_\_\_\_  
 LOCATION : Madison, WI  
 QUANTITY : \_\_\_\_\_ NOTE : Building Mounted Light

IP65 : Suitable for Wet Locations



## U31611

### Gino 4 rectangular wall down light

#### Product Type

Wall mounted luminaires with upward and downward light distributions. Ideally suited to illuminate the wall and surfaces in front of wall and for light accents on vertical surfaces using power LED's. The luminaires are a high quality power LED source with low energy consumption and long service life 60,000 – 80,000 Hrs.

Low copper content die-cast aluminium frame and body. Stainless steel screws. Durable silicone rubber gasket and impact resistant frosted toughened glass diffuser. Single cable entry. The luminaire is treated with a chemical phosphate protection before powder coating, ensuring high corrosion resistance. Integral driver suitable for 120v.

#### Physical Data

Length: 8.1"  
 Height: 3.2"  
 Weight: 4.4 lbs

#### Lamp

10w White LED 500 Lm

(For More Lamp options please Consult the Catalogue, Website or Contact The Ligman Lighting Factory)

#### Voltage (Please Specify)

120V  
 277V  
 Other \_\_\_\_\_

#### Color (Please Specify)

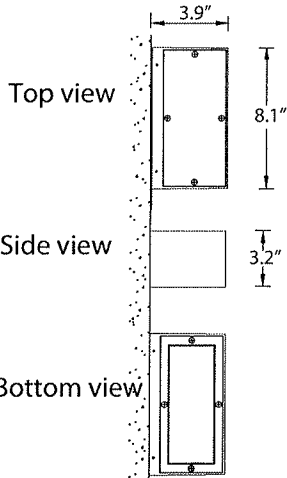
01-Black - RAL 9011       02- Dark Grey - RAL 7043  
 03-White - RAL 9003       04- Metallic Silver - RAL 9006  
 05-Matt Silver - RAL 9006       07- Custom - RAL \_\_\_\_\_  
 06-Bronze -RAL 6014

#### Note

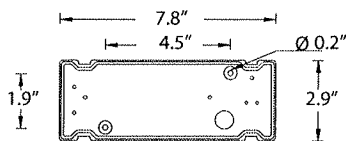
- Mounts over a horizontally installed single gang junction box  
 - Integral Electronic control gear.

#### Option (Please Specify)

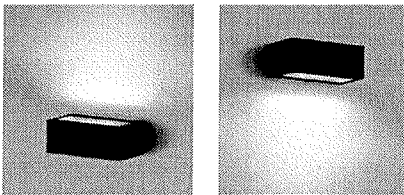
F - Lightly Frosted Lens



NOTE : Complies with Dark Sky Requirements when mounted in a downward light configuration.



Mounting detail



For mounting in upward or downward lighting positions



Head Office:  
 3302 NW 211th Terrace  
 Hillsboro,  
 Oregon  
 97125  
 USA

Tel: 503-645-0500  
 Fax: 503-645-8100  
 Email: info@ligmanlightingusa.com  
 Website: www.ligmanlightingusa.com

Ligman Lighting USA reserves the right to change specifications without prior notice.



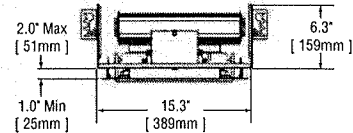
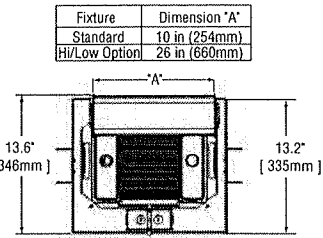
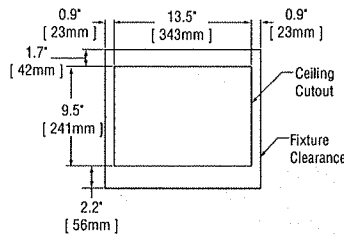
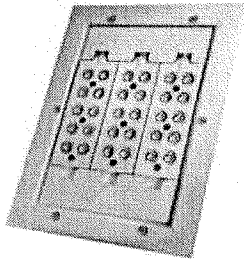
# Soffit Mounted Fixture

**SFT-227-5S-RM-03**

**BetaLED® Recessed Soffit Luminaire – IC Rated**

Rev. Date: 2/13/12

BetaLED Catalog #: SFT - 227 - 5S - RM - 03 - D - - - - -



Fixture	Dimension "A"
Standard	10 in (254mm)
Hi/Low Option	26 in (660mm)

Notes:

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
SFT	227	5S <sup>1</sup>	RM <sup>2</sup>	03	D	<input checked="" type="checkbox"/> UL Universal 120-277V <input type="checkbox"/> UH Universal 347-480V <input type="checkbox"/> 12 120V <input type="checkbox"/> 20 208V <input type="checkbox"/> 24 240V <input type="checkbox"/> 27 277V <input type="checkbox"/> 34 347V <input type="checkbox"/> 48 480V	<input checked="" type="checkbox"/> WH White (Standard) <input type="checkbox"/> SV Silver <input checked="" type="checkbox"/> BK Black <input type="checkbox"/> BZ Bronze <input type="checkbox"/> PB Platinum Bronze	225 525mA (Standard) 350 350mA	<input checked="" type="checkbox"/> 40K 4000K Color Temperature <sup>3</sup> <input type="checkbox"/> F Fuse <sup>4,5</sup>  For remodel option, see <u>remodel spec sheet</u>

**Footnotes**

1. IESNA Type V Short distribution
2. Recessed soffit mount for new construction
3. Color temperature per fixture; 5700K standard; minimum 70 CRI
4. Must specify voltage other than UL, UH, or 34
5. When code dictates fusing use time delay fuse

LED PERFORMANCE SPECS																	
# of LEDs	Initial Delivered Lumens – Type V Short @ 5700K	B U G Rating**			Initial Delivered Lumens – Type V Short @ 4000K	B U G Rating**			System Watts 120-480V	Total Current @ 120V	Total Current @ 208V	Total Current @ 240V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L <sub>70</sub> Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor* @ 15° C (59° F)
		B	U	G		B	U	G									
350mA Fixture Operating at 25° C (77° F)																	
30	3,307 (03)	2	0	1	3,048 (03)	2	0	1	36	0.30	0.19	0.17	0.17	0.12	0.10	> 150,000	90%
525mA (Standard) Fixture Operating at 25° C (77° F)																	
30	4,629 (03)	2	0	1	4,267 (03)	2	0	1	52	0.44	0.26	0.24	0.21	0.13	0.13	128,000	88%

\* For recommended lumen maintenance factor data see [TD-13](#). \*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit [www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf](http://www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf).



**General Description**

High performance energy efficient LED down light, designed for use in drop ceilings or new construction applications with 16" (406mm) to 24" (610mm) on center building construction. Heavy gauge steel recessed mounting frame features 1-1/2" (38mm) deep aperture throat to accommodate most standard ceiling thicknesses, and a universal mounting brackets that accept 1/2" (13mm) EMT conduit, C-channel mounting bars or flat bar hangers with 5" (127mm) vertical adjustment from either above or below the ceiling. An oversized junction box is listed for eight #12 AWG feed through wires.

Luminaire sides are rugged cast aluminum with high performance extruded aluminum heat sink specifically designed for high power LED. It is factory assembled to the trim plate and wired to the driver.

Driver compartment is constructed of anodized extruded aluminum with stainless steel end panels for exceptional thermal performance. Driver is factory wired to the LED modules and features a quick connect power harness.

Five year limited warranty on luminaire.

**Electrical**

Modular design accommodates varied lighting output from high power, white, 5700K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4000K (+/- 300K per full fixture) also available. 120-277V 50/60 Hz, Class 1 LED drivers are standard. 347-480VHz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

Luminaire is Type IC in accordance with Article 410 of the NEC and UL 1598. It is suitable for direct contact with insulation.

Luminaire is listed for eight #12 AWG, 90C rated through branch circuit wires.

Meets FCC Title 47 CFR Part 18, Non-Consumer EMI and RFI emission levels.

**Testing & Compliance**

UL listed in the U.S. and Canada for wet locations under covered ceilings. Consult factory for CE certified product. RoHS compliant. International Dark-Sky Association approved.



**Finish**

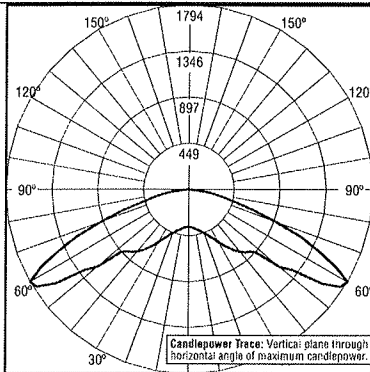
Exclusive Colorfast DeltaGuard® finish on all cast aluminum components features an E-Coat epoxy primer with an ultra-durable white powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, silver and platinum bronze powder topcoats are also available. Clear anodized finish on extruded aluminum heat sink. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

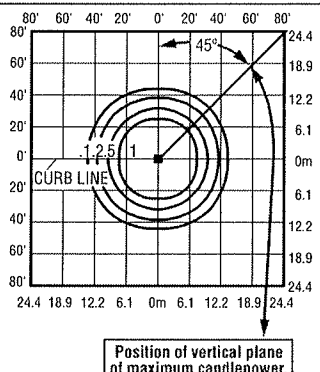
**Patents**

U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit [www.uspto.gov](http://www.uspto.gov).

**Photometrics**



Candlepower trace of 6000K, 30 LED recessed soffit luminaire with IESNA Type V Short distribution. Luminaire with 11,822 initial delivered lumens operating at 525mA. Configured from PKG-304-5S-\*\*-06-D-UL-700. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 6000K, 30 LED recessed soffit luminaire with IESNA Type V Short optic mounted at 15' (4.6m) A.F.G. Luminaire with 4,629 initial delivered lumens operating at 525mA. Initial FC at grade.

**Field-Installed Accessories**

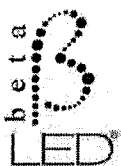
Mounting C Channel - 30" (762mm) Long  
 XA-MC30

Mounting C Channel - 14" (356mm) Long  
 XA-MC14

Mounting C Channel - 22" (559mm) Long  
 XA-MC22

Mounting Brackets (Kit contains 4)  
 XA-MB4

**Remote Motion Sensor Kit**  
Used to control a single or series of fixtures as On/Off controller or Hi/Low controller with HL option (rated for up to 800 watts @ 120V or 1200 watts @ 277V)  
 XA-OMS108-UWL  
Up to 8' (2.4m) mounting height  
 XA-OMS120-UWL  
Up to 20' (6.1m) mounting height  
 XA-OMS140-UWL  
Up to 40' (12.2m) mounting height

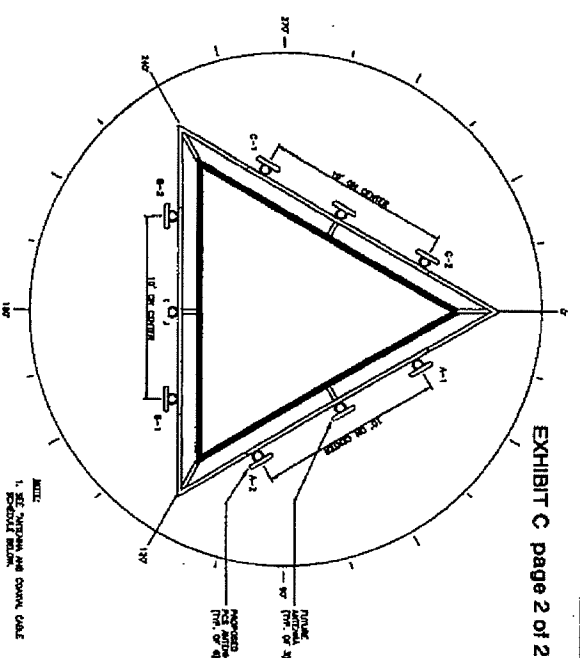




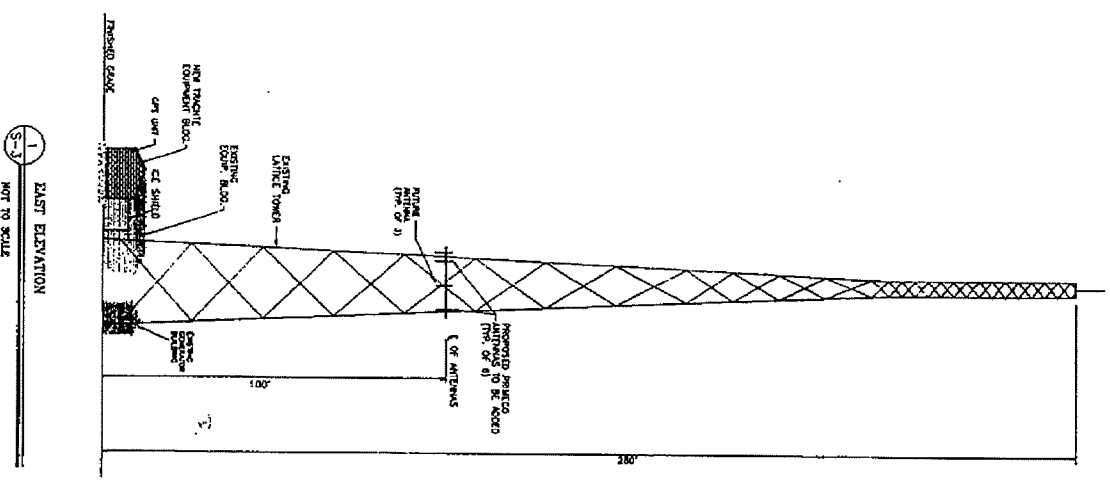




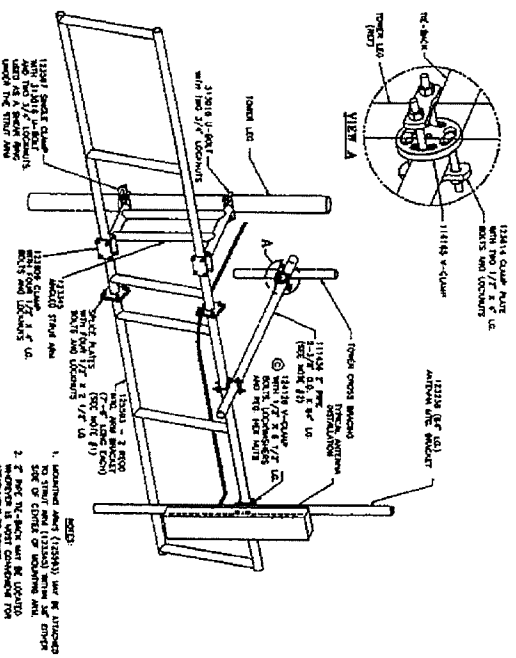




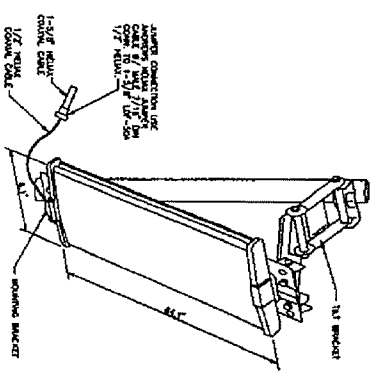
2 ANTENNA LOCATION/ORIENTATION PLAN  
NOT TO SCALE



1 EAST ELEVATION  
NOT TO SCALE



3 DOWN TILT DIRECTIONAL SECTOR MOUNT  
PART NO. 801595  
NOT TO SCALE



4 SOCOLA PANEL ANTENNA  
NOT TO SCALE

**ANTENNA AND COAXIAL CABLE SCHEDULE**

ANTENNA UNIT	SECTION	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION
A-1	1	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
A-2	1	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
A-3	1	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
B-1	2	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
B-2	2	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
B-3	2	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
C-1	3	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
C-2	3	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION
C-3	3	SOLA #171-1000000	DOWN-TILT	ANTENNA	SECTION	SECTION	SECTION	SECTION	SECTION

NOTE: REFER TO CONSTRUCTION CONDITIONS TO VERIFY DIMENSIONS AND LOCATION OF ANTENNA WITH PROJECTOR OF DIMENSIONS.

ANTENNA AND COAXIAL CABLE SCHEDULE

SECTION	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION	SECTION
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**PRIMECO**  
 700 WEST VIRGINIA ST.  
 OFFICE: 414-364-1300  
 FAX: 414-364-1322



PROJECT NO. 14-1352A  
 DRAWN BY: TJB  
 CHECKED BY:

APPROVALS

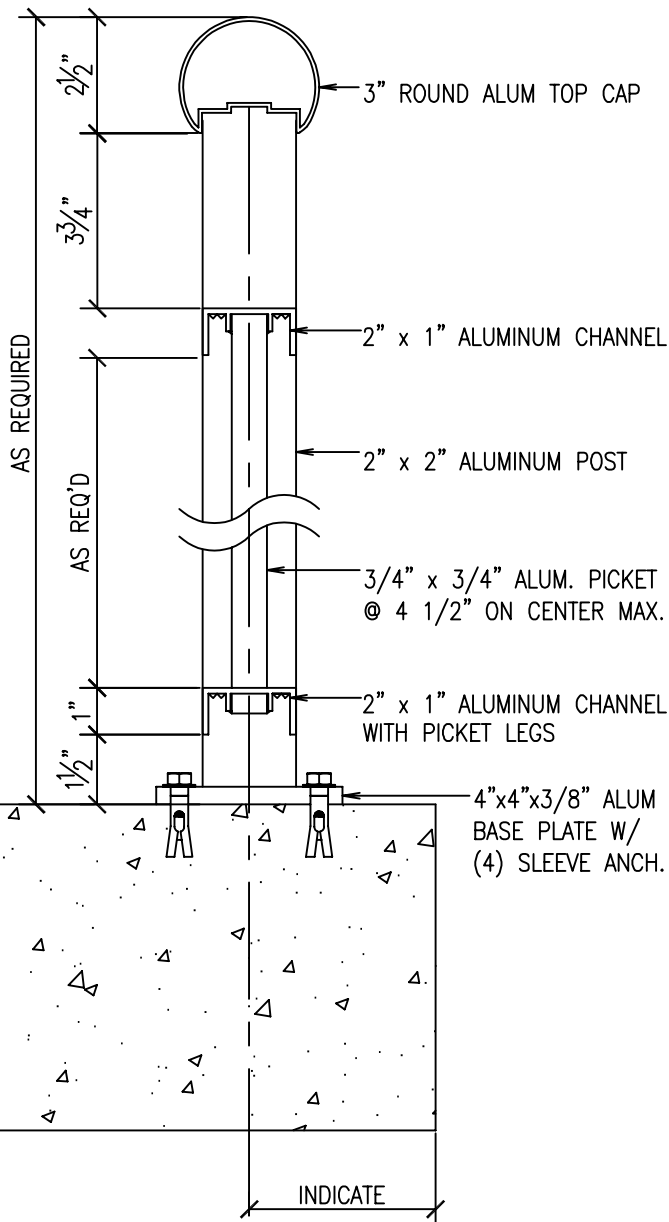
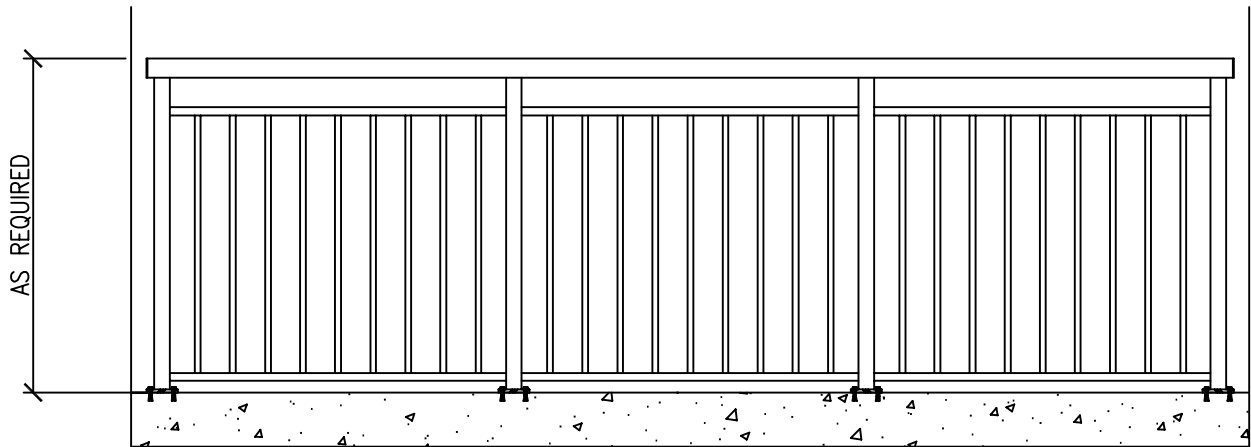
DATE: APR 11, 2002

14-1302A  
 LARKIN

135 LARKIN STREET  
 CITY OF WASHINGTON  
 DADE COUNTY  
 WISCONSIN

SHEET TITLE  
 ANTENNA LOCATION PLAN  
 TOWER ELEVATION

SPRD NUMBER  
 S-3



RAIL CATEGORY:  
STANDARD PICKET RAIL

RAIL SHOWN:  
3-LINE, BASE PLATED,  
3" ROUND TOP CAP

Architectural Railings & Grilles, Inc.

8041 Arrowridge Blvd., Suite G

Charlotte, NC 28273

Phone 704-365-5152

Fax 704-373-2995

www.aluminum-rails.com