

# Madison, Wisconsin

# INDEX OF SHEETS

0.1221.1101	5.1. <u>2.1</u> 1.1.2
SP - 0.00	SKATE PARK-COVER SHEET
SP - 0.10	SKATE PARK-NOTES
C - 0.10	SITE-GENERAL AND GRADING NOTES
C - 1.01	CONSTRUCTION ACCESS AND EXISTING CONDITIONS PL
C - 1.02	CONSTRUCTION ACCESS AND EXISTING CONDITIONS PL
C - 1.03	SITE GRADING AND EROSION CONTROL PLAN
C - 1.04	SITE GRADING AND EROSION CONTROL PLAN
C - 1.05	STORM SEWER PLAN AND PROFILE
C - 1.06	
C - 1.07	
C - 1.08	WATERMAIN PLAN AND PROFILE
E - 000	COVER SHEET- ELECTRICAL
E - 100	SITE PLAN- ELECTRICAL
L - 100	SHET EAN- LEEGTNOAL
SP - 1.0	SKATE PARK-FEATURE PLAN
SP - 1.1	SKATE PARK-FOUNDATION PLAN
SP - 1.2	SKATE PARK-MATERIALS PLAN-CONCRETE
SP - 1.3	SKATE PARK-MATERIALS PLAN- METALS/ COPING
SP - 1.4	SKATE PARK-JOINTING PLAN
SP - 1.5	SKATE PARK-CONCRETE COLOR PLAN
SP - 2.1	SKATE PARK-LAYOUT PLAN
SP - 2.2	SKATE PARK-LAYOUT PLAN-TABLES
SP - 3.1	SKATE PARK-GRADING AND DRAINAGE PLAN
SP - 4.1	SKATE PARK-KEY MAP- SECTIONS/ PROFILES
SP - 4.2	SKATE PARK-SECTIONS/ PROFILES
SP - 4.3	SKATE PARK-SECTIONS/ PROFILES
SP - 4.4	SKATE PARK-SECTIONS/ PROFILES
SP - 4.5	SKATE PARK-SECTIONS/ PROFILES
SP - 4.6	SKATE PARK-SECTIONS/ PROFILES
SP - 4.7	SKATE PARK-SECTIONS/ PROFILES
SP - 4.8	SKATE PARK-SECTIONS/ PROFILES
SP - 4.9	SKATE PARK-SECTIONS/ PROFILES
SP - 4.10	SKATE PARK-SECTIONS/ PROFILES
SP - 5.1	SKATE PARK-CONSTRUCTION DETAILS
SP - 5.2	SKATE PARK-CONSTRUCTION DETAILS
SP - 5.3	SKATE PARK-CONSTRUCTION DETAILS
SP - 5.4	SKATE PARK-CONSTRUCTION DETAILS
SP - 5.5	SKATE PARK-CONSTRUCTION DETAILS
SP - 5.6	SKATE PARK-CONSTRUCTION DETAILS

### GENERAL CONSTRUCTION NOTES

SP - 5.7 SKATE PARK-CONSTRUCTION DETAILS

- 1) ALL CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PLANS AND
- 2) ALL CONSTRUCTION TESTING SHALL BE AT THE DISCRETION OF THE CITY OF MADISON, WI AS TO THE TYPE AND NUMBER.
- 3) ALL EQUIPMENT SHALL HAVE RESIDENTIAL MUFFLER SILENCERS PER OSHA REQUIREMENTS AND MUTCD. 4) ANY DETOURING OF TRAFFIC ONTO CITY STREETS SHALL MEET THE TRAFFIC CONTROL
- REQUIREMENTS OF THE CITY OF MADISON, WI.
- 5) CONTRACTOR SHALL CALL DIGGERS HOTLINE AT (800) 242-8511 AND OWNER AT LEAST ONE (1) WEEK PRIOR TO START OF CONSTRUCTION FOR LOCATING UNDERGROUND UTILITIES. 6) THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON THE BEST INFORMATION, HOWEVER, THE CITY OF MADISON, WI, ENGINEER AND LANDSCAPE
- ARCHITECT ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION SHOWN, OR FOR THE INADVERTENT OMISSION OF ANY SUCH INFORMATION. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES AND OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF THIS PROJECT.

**SUBMITTAL** 

100% 10/13/2014

7) DETOURING OF PEDESTRIANS SHALL BE ACCOMPLISHED WITH ADEQUATE SIGNS AT A SAFE LOCATION.

# **CONSULTANTS**

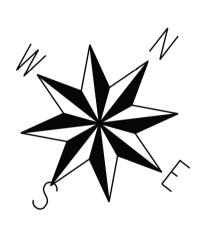
**CIVIL ENGINEER** 

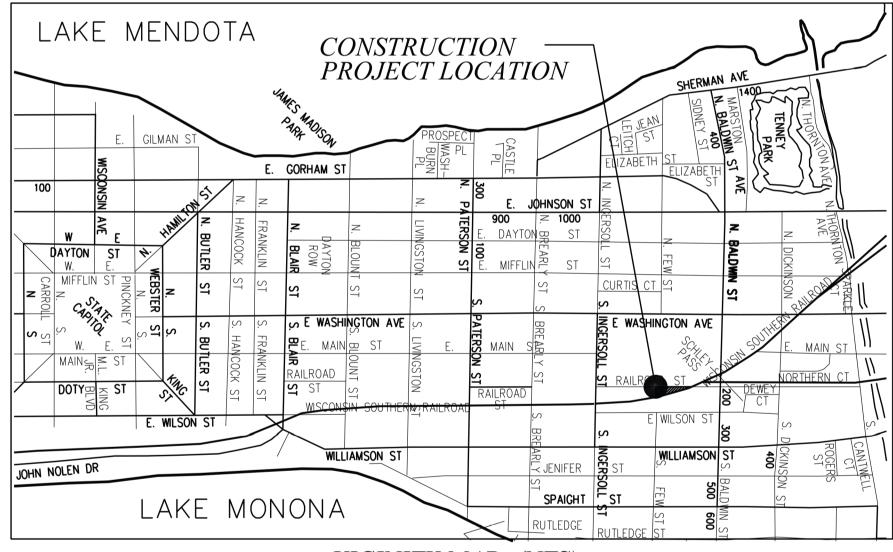
LANDSCAPE ARCHITECT Stantec 226 Causeway Street

MSA Professional Services 2901 International Lane Suite 300 Boston, MA 02114 Madison, WI 53704 [t] 617.523.8103 [t] 608.424.7779 [f] 617.523.4333

# CITY OF MADISON SKATE PARK - CENTRAL PARK

# CITY PROJECT NO. 53W1785 CONTRACT NO. 7408





VICINITY MAP- (NTS)

# SKATE PARK-DESIGN CRITERIA

THESE GENERAL STRUCTURAL NOTES APPLY UNLESS OTHERWISE NOTED.

COMPLY WITH 2006 INTERNATIONAL BUILDING CODE, AS AMENDED BY THE CITY OF MADISON, WI.

SEISMIC USE GROUP SPECTRAL RESPONSE: Sds = 25.2

SITE CLASS "D"

3-SECOND GUST WIND SPEED 90 M.P.H. IMPORTANCE FACTOR I = 1.0 WIND EXPOSURE "C"

# SKATE PARK-STRUCTURAL NOTES

### 1. SPECIAL STRUCTURAL INSPECTION

- 1.1 PROVIDE SPECIAL STRUCTURAL INSPECTION AS REQUIRED BY BUILDING CODES FOR THE FOLLOWING ITEMS:
  - 1.1.1 CONCRETE: DURING THE TAKING OF TEST SPECIMENS & PLACING OF REINFORCED CONCRETE WHERE F'C > 2,500 PSI. EXCEPT SLABS ON GRADE.
  - 1.1.2 BOLTS INSTALLED IN CONCRETE: DURING INSTALLATION OF EMBEDDED BOLTS IN CONCRETE AND DURING INSTALLATION OF EXPANSION BOLTS & EPOXY BOLTS / REBAR INTO EXISTING CONCRETE.
  - 1.1.3 REINFORCING STEEL: DURING PLACING OF REINFORCING STEEL, FOR ALL CONCRETE REQUIRED TO HAVE SPECIAL INSPECTION BY THE CONCRETE SECTION ABOVE AND PLACING REINFORCING STEEL IN EPOXIED HOLES PER ABOVE.
  - 1.1.4 SHOTCRETE: DURING THE TAKING OF TEST SPECIMENS AND PLACING OF ALL SHOTCRETE.
- 1.2 SCHEDULING OF SPECIAL STRUCTURAL INSPECTIONS:
  - 1.2.1 THE CONTRACTOR SHALL ALLOW A MINIMUM OF 24 HOURS NOTIFICATION FOR THE SCHEDULING OF SPECIAL STRUCTURAL INSPECTIONS.

### 2. FOUNDATIONS

2.1 REFER TO SECTIONS AND DETAILS.

### 3. REINFORCING

- 3.1 SECURELY TIE ALL REBAR, INCLUDING DOWELS, IN LOCATION BEFORE PLACING CONCRETE OR GROUT.
- 3.2 WHERE REINFORCING IS SHOWN CONTINUOUS THRU CONSTRUCTION JOINTS, LENTON FORM SAVERS DOWEL BAR SPLICE DEVICES AS MANUFACTURED BY ERICO PRODUCTS, INC. (ICBO #3967) OR EQUIVALENT MAY BE USED. DEVICES SELECTED SHALL DEVELOP AT LEAST 125 PERCENT OF THE TENSION OR COMPRESSION BAR YIELD STRENGTH PER E.S. REPORT

### 4. STRUCTURAL STEEL

- 4.1 ASTM A-36 FOR C, MC, ANGLES, AND PLATES.
- 4.2 ASTM A-53 GRADE B OR A-501 FOR STEEL PIPES
- 4.3 ASTM A-500 GRADE B, FY=46 KSI FOR TS/HSS TUBE STEEL FOR SIZES UP TO 5/8" THICK
- 4.4 ASTM A-307 OR A-36 PLAIN ANCHOR BOLTS.

### 5. STRUCTURAL STEEL & REINFORCEMENT WELDING

- 5.1 ALL CONSTRUCTION AND TESTING PER AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT CERTIFICATES VALIDATED BY AN INDEPENDENT LAB & HAVING CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. THE CONTRACTOR SHALL SUBMIT WELDING CERTIFICATES FOR EACH WELDER PRIOR TO COMMENCING THE WORK.
- 5.2 WELDING RODS TO BE LOW HYDROGEN TYPE, E70 SERIES, PER AWS D1.1 TYPICALLY EXCEPT E-6010 SERIES FOR STEEL SHEET METAL PER AWS D1.3 AND REINFORCING WELDMENTS PER AWS D1.4. USE E80 SERIES WELDING RODS FOR A706 REBAR.
- 5.3 FIELD INDICATED WELDS MAY BE DONE IN SHOP & SHOP INDICATED WELDS MAY BE DONE IN FIELD ONLY IF SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.

### 6. SUPPLEMENTARY NOTES

6.1 THESE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKERS, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, MEANS AND METHODS, BRACING, SHORING, FORMS, SCAFFOLDING, GUYING OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER OR STRUCTURAL OBSERVERS SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

6.2 REINFORCING OR THREADED RODS DRILLED AND EPOXIED INTO EXISTING CONCRETE AS DETAILED ON THE DRAWINGS SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUIVALENT:

- 6.2.1 HILTI RE-500 SD ICC ESR-2322
- 6.2.2 SIMPSON SET-XP ICC ESR-2508
- 6.2.3 POWERS PE1000+ ICC ESR-2583

6.3 INSTALLATION OF EPOXIED DOWELS SHALL FOLLOW THE STRICT RECOMMENDATIONS OF THE MANUFACTURER AND THE APPLICABLE ICBO REPORT AND HAVE A MINIMUM 9 DIAMETERS EMBEDMENT

6.4 INSTALLATION SHALL FOLLOW THE STRICT RECOMMENDATIONS OF THE MANUFACTURER AND THE APPLICABLE ICBO REPORT. CONTRACTOR SHALL HAVE APPROPRIATE ICBO REPORT ON-SITE DURING ALL INSTALLATIONS.

6.5 ANY ENGINEERING DESIGN PROVIDED BY CONTRACTOR OR OTHERS AND SUBMITTED FOR REVIEW SHALL BE BY AN INSURED LICENSED STRUCTURAL ENGINEER WITH CONTINUOUS FIVE YEARS OF EXPERIENCE IN THE TYPE OF DESIGN

# SKATE PARK-GENERAL CONSTRUCTION NOTES

### 1. GENERAL

- 1.1 CONSIDER GENERAL NOTES AS APPLYING TO ALL DRAWINGS.
- 1.2 NOTIFY SKATE PARK DESIGNER OF ANY DISCREPANCIES TO THESE PLANS.
- 1.3 PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND/OR LOCAL BUILDING CODES.
- 1.4 THE SKATE PARK DESIGNER SHALL HAVE NO CONTROL OR CHARGE OF, NOR BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, SAFETY PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- 1.5 PROVIDE SPECIAL INSPECTION AS REQUIRED BY BUILDING CODES FOR THE FOLLOWING ITEMS:
  - 1.5.1 PLACEMENT OF REINFORCING STEEL.
  - 1.5.2 TAKING OF TEST SPECIMENS AND PLACING OF ALL CONCRETE
- 1.5.3 BOLTS IN CONCRETE.
- 1.5.4 TAKING OF TEST SPECIMENS AND PLACING OF ALL SHOTCRETE.
- 1.6 THE CONTRACTOR SHALL WARRANTY ALL OF THEIR WORK DURING CONSTRUCTION AND A MINIMUM OF ONE YEAR AFTER THE PROJECT IS ACCEPTED AS COMPLETE.
- 1.7 THE METRIC EQUIVALENT "[ ]" DIMENSIONS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THEIR ACCURACY.

### 2. CONCRETE WORK

2.1 CONCRETE MIXES SHALL BE DESIGNED BY A TESTING LABORATORY AND APPROVED BY THE SKATE PARK ARCHITECT. MIXES SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS, REGARDLESS OF OTHER MINIMUM REQUIREMENTS SPECIFIED HEREIN OR ON THE DRAWINGS. MIX DESIGNS SHALL BE SUBMITTED TO THE SKATE PARK DESIGNER FOR APPROVAL BEFORE USE. DESIGNS SHALL SHOW PROPORTIONS OF CEMENT, FINE AND COARSE AGGREGATES AND WATER. AND GRADATION OF COMBINED AGGREGATES.

2.2 CEMENT: ASTM C150. CEMENT SHALL BE OF SAME BRAND, TYPE AND SOURCE THROUGHOUT PROJECT. WHERE AGGREGATES ARE POTENTIALLY REACTIVE, USE LOW ALKALI CEMENT.

### 2.3 AGGREGATES SHALL CONFORM TO ASTM C33.

2.4 NO ADMIXTURES WITHOUT APPROVAL. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED. CONCRETE SHALL NOT BE IN CONTACT WITH ALUMINUM.

### 2.5 CONCRETE MIX DESIGN - CAST-IN-PLACE

2.5.1 PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED BELOW. INCREASE CEMENT CONTENT OVER THAT SHOWN. IF REQUIRED TO OBTAIN THE COMPRESSIVE STRENGTH:

MIN. 28-DAY	MIN. CEMENT	MAX.	MAX.	MAX. AIR
COMPRESSIVE	CONTENT	SLUMP	AGGREGATE	ENTRAINING
STRENGTH (PSI)	(POUNDS)	(INCHES)	SIZE (INCHES)	(PERCENT)
4000	480	4"	1"	

- 2.6.1 ACI STANDARD 506, LATEST EDITION, "SPECIFICATION FOR MATERIALS, PROPORTIONING AND APPLICATION OF SHOTCRETE" AND ACI 506.2, LATEST EDITION, "RECOMMENDED PRACTICES FOR SHOTCRETE" SHALL BE FOLLOWED.
- 2.6.2 MIX DESIGNS FOR SHOTCRETE CONTAINING FLY ASH SHALL BE BY AN INDEPENDENT TESTING LABORATORY. ONLY ASTM C618 CLASS F FLY ASH SHALL BE USED. THE AMOUNT OF FLY ASH USED SHALL NOT EXCEED 20 PERCENT BY WEIGHT OF THE COMBINED WEIGHT OF FLY ASH PLUS CEMENT.
- 2.6.3 PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED BELOW. INCREASE CEMENT CONTENT OVER THAT SHOWN, IF REQUIRED TO OBTAIN THE COMPRESSIVE STRENGTH:

MIN. 28-DAY	MIN. CEMENT	MAX.	MAX.	MAX. AIR
COMPRESSIVE	CONTENT	SLUMP	AGGREGATE	ENTRAINING
STRENGTH (PSI)	(POUNDS)	(INCHES)	SIZE (INCHES)	(PERCENT)
4000	600	2"	3/8"	3-5%

- 2.6.4 SURFACE PREPARATION: EXPOSED EXISTING CONCRETE SHALL BE SANDBLASTED CLEAN. SURFACES SHALL BE FOLLOWED BY WETTING AND DAMP DRYING JUST PRIOR TO SHOTCRETE APPLICATION.
- 2.6.5 ANY REBOUND OR ACCUMULATED LOOSE AGGREGATE SHALL BE REMOVED FROM THE SURFACES TO BE COVERED PRIOR TO PLACING THE INITIAL OR ANY SUCCEEDING LAYERS OF SHOTCRETE. REBOUND SHALL NOT BE REUSED AS AGGREGATE.
- 2.6.6 JOINTS IN WALL POURS ARE PERMISSIBLE. AT JOINTS, SHOTCRETE SHALL BE SLOPED TO A THIN EDGE. BEFORE PLACING ADDITIONAL MATERIAL, ALL SURFACES SHALL BE THOROUGHLY CLEANED AND WETTED AND ALL REINFORCING STEEL SHALL BE BRUSHED FREE OF LATENT SHOTCRETE MATERIAL.
- 2.6.7 ANY IN-PLACE SHOTCRETE MATERIAL WHICH EXHIBITS SAGS OR SLOUGHS, SEGREGATION, HONEYCOMBING, SAND POCKETS OR OTHER OBVIOUS DEFECTS SHALL BE REMOVED AND REPLACED.
- 2.6.8 TESTING AND INSPECTION OF IN-PLACE SHOTCRETE SHALL BE IN ACCORDANCE WITH 2003 IBC.
- 2.7 CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCHING AND SHALL NOT EXCEED A TEMPERATURE OF 90°F UNLESS PRE-APPROVED BY THE SKATE PARK DESIGNER.
- 2.8 CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED PER THE CODE BY AN INDEPENDENT TESTING LABORATORY FOR STRUCTURAL POURS OVER 50 CUBIC YARDS OF CONCRETE. HISTORICAL DATA SHALL BE SUBMITTED AND APPROVED PRIOR TO THE POUR IF NO TEST SAMPLES ARE TAKEN FOR POURS LESS THAN 50 CUBIC YARDS.
- 2.9 DURING THE CURING PERIOD, CONCRETE SHALL BE MAINTAINED AT A TEMPERATURE ABOVE 40°F AND IN MOIST CONDITION. FOR INITIAL CURING, CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR 24 HOURS AFTER PLACEMENT IS COMPLETE. FINAL CURING SHALL CONTINUE FOR SEVEN DAYS AFTER PLACEMENT AND SHALL CONSIST OF APPLICATION OF CURING COMPOUND PER ASTM C309. APPLY AT A RATE SUFFICIENT TO RETAIN MOISTURE, BUT NOT LESS THAN 1 GALLON [4.551] PER 200 SQUARE FEET. COVER CONCRETE WITH POLYETHYLENE PLASTIC TO MAINTAIN TEMPERATURE IF NECESSARY. LAP SEAMS IN THE PLASTIC 6" AND TAPE, WEIGHT DOWN THE PLASTIC AS NEEDED.
- 2.10 THE CONTRACTOR SHALL FIX ALL CRACKS AND DISPLACEMENTS LARGER THAN 1/16".

DATE: 10-13-2014

CENTRAL PARK - SKATE PARK PROJECT NO. 53W1785

SHEET NO. SP-0.10

SKATE PARK- NOTES

CENTRAL PARK-SKATE PARK CITY OF MADISON

> 226 Causeway Street Boston, MA 02114 Fax. 617.523.4333 www.stantec.com



MISCONS

MICHAEL R.

2.11 ALL CONCRETE WHICH DURING THE LIFE OF THE STRUCTURE WILL BE SUBJECTED TO FREEZING TEMPERATURES WHILE WET, SHALL HAVE A WATER CEMENT RATIO NOT EXCEEDING 0.53 BY WEIGHT AND SHALL CONTAIN ENTRAINED AIR AS PER ACI 301. SUCH CONCRETE SHALL INCLUDE EXTERIOR SLABS, PERIMETER FOUNDATIONS, EXTERIOR CURBS AND GUTTERS, ETC.

2.12 CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF IBC SECTION

2.13 USE INTERMEDIATE GRADE ASTM A615, GRADE 60 FOR ALL REINFORCING. USE ASTM A706, GRADE 60 FOR ALL REINFORCING THAT IS TO BE WELDED. USE A108, GRADE 60, FOR ALL WELDED ANCHORS REFER TO AWS SPEC FOR WELDING WITHOUT PREHEAT. WELDING OF REINFORCING BARS TO BE IN ACCORDANCE WITH ALL BUILDING CODES.



- 3" AT SURFACES POURED AGAINST EARTH 2" AT FORMED SURFACES EXPOSED TO EARTH OR WEATHER
- 1-1/2" AT OTHER SURFACES, EXCEPT WHERE SHOWN OTHERWISE.
- 2.15 SECURE REINFORCING, ANCHOR BOLTS, INSERTS, ETC. RIGIDLY IN PLACE PRIOR TO POURING CONCRETE.

2.16 SUPPORT HORIZONTAL REINFORCING ON GALVANIZED CHAIRS OR OTHER APPROVED METHOD (MORTAR BLOCKS ARE UNACCEPTABLE) OF SUPPORT FOR FOOTINGS AND SLABS ON GRADE.

2.17 REMOVE FORMS AT FOLLOWING MINIMUM TIMES AFTER POURING: AT SLAB EDGES - 24 HOURS; AT WALLS LESS THAN 4'-0'

2.18 MAKE HOOKS ACI 318-99 STANDARD HOOKS UNLESS OTHERWISE NOTED. PROVIDE 135 DEGREE MINIMUM TURN, PLUS 4" EXTENSION AT FREE ENDS OF COLUMN PILASTER TIES.

2.19 MAKE LAPS CONTACT SPLICES, DEVELOPMENT LENGTHS, HOOK EMBEDMENT PER ACI 318-99, UNLESS OTHERWISE NOTED. STAGGER LAP SPLICES WHERE POSSIBLE

2.20 ALL REBAR SHALL BE COLD BENT

2.21 WHERE REINFORCING IS SHOWN CONTINUOUS THRU CONSTRUCTION JOINTS, LENTON FORM SAVERS DOWEL BAR SPLICE DEVICES AS MANUFACTURED BY ERICO PRODUCTS, INC. (ICBO #3967) OR EQUIVALENT MAY BE USED. SIZES AND TYPES SHALL BE SELECTED TO DEVELOP THE FULL TENSION STRENGTH OF THE BAR PER ICBO RESEARCH REPORT

2.22 MINIMUM CLEARANCE BETWEEN PARALLEL REINFORCEMENT BARS SHALL BE 2-1/2". LAP SPLICES IN REINFORCING BARS SHALL BE BY THE NON-CONTRACT LAP SPLICE METHOD WITH AT LEAST 2" CLEARANCE BETWEEN BARS.

2.23 AGGREGATE BASE COURSE TO BE 4" OF COMPACTED 1" CRUSHED LIMESTONE AND SUBGRADE TO BE 95% COMPACTED NATIVE SOIL AND/OR ENGINEERED FILL. IF THESE GUIDELINES CONFLICT WITH THE GEO-TECHNICAL REPORT, THE CONTRACTOR TO FOLLOW THE MORE STRINGENT OF THE TWO GUIDELINES.

- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FILLING OR CUTTING AS NECESSARY TO ENSURE THAT ALL PORTIONS OF THE SITE DRAIN.
- 3. THE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES AND SITE CONDITIONS BY FIELD INSPECTION BEFORE SUBMITTING A
- 4. ALL OBJECTIONABLE MATERIALS DISCOVERED IN THE SOIL DURING THE GRADING PROCESS SHALL BE REMOVED FROM THE
- 5. ANY DAMAGE TO THE EXISTING STREET PAVING, CURBS OR OTHER EXISTING ELEMENTS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHOOTING ALL SPOT ELEVATIONS NECESSARY TO CONSTRUCT THE
- 7. CONTRACTOR SHALL DETERMINE THE AMOUNT OF CUT AN FILL NECESSARY TO COMPLETE THE EARTHWORK AS SHOWN ON
- THESE PLANS AND INCLUDE A FEE FOR COMPLETION OF THE EARTHWORK IN THE BASE BID.

  8. SOIL SHALL NOT CONTAIN ROCKS 6" OR LARGER IN ANY DIMENSION. THE FINISH GRADE (TOP 6" OF DEPTH) SHALL NOT
- CONTAIN ANY ROCKS LARGER THAN ONE-HALF (1/2") IN DIAMETER.
- 9. HORIZONTAL CONTROL POINTS ARE FOR POSITIONING POINTS AND DIMENSION CLARIFICATION ONLY.
- 10. ALL COORDINATES SHOWN ARE LOCATED AT THE CONSTRUCTION JOINT FOR THE BOTTOM OF THE CONCRETE SKATE PARK AND AT THE RIM FOR TOP OF PARK. ALL OTHER COORDINATES ARE ASSUMED EDGE OF FEATURE.
- 11. TREES SHALL NOT BE REMOVED WITHOUT THE SPECIFIC CONSENT OF THE OWNER'S PROJECT REPRESENTATIVE. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING TREES REMOVED WITHOUT RECEIVING PROPER APPROVAL.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF TREE'S, SHRUBS AND OTHER PLAN MATERIAL WITHIN THE LIMITS OF THE WORK TO REMAIN. ANY PLANTING MATERIAL DAMAGED TO AND FROM PROJECT SITE PATH WILL BE AT THE EXPENSE OF CONTRACTOR WITH "AS-EQUAL" MATERIAL APPROVED BY CITY.
- 13. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING AND PAYING ALL PERMITS AND INSPECTIONS FROM ALL JURISDICTIONAL AGENCIES AND CORPORATIONS. THE CONTRACTOR WILL BE REQUIRED TO PAY ALL PERMIT FEE'S FOR THE CITY UNLESS OTHERWISE NOTED.
- 14. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO ORIGINAL CONDITION OR BETTER.
  RESTORED AREAS INCLUDE, BUT ARE NOT LIMITED TO TRENCH BACKFILL, SIDE SLOPES, FENCES, DRAIN PIPES, DRAINAGE
  DITCHES, DRIVEWAYS, LANDSCAPING, EXISTING GRADE ELEVATIONS.
- DITCHES, DRIVEWAYS, LANDSCAPING, EXISTING GRADE ELEVATIONS.

  15. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PLACEMENT OF ALL IRRIGATION SLEEVES UNDER CONCRETE PAVING AS INDICATED ON THE PLANS. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR
- REGARDING PLACEMENT OF INDICATED SLEEVES AND/ OR ADDITIONAL SLEEVES.
- 16. ADEQUATE MEASURES SHALL BE TAKEN TO PREVENT EROSION. IN THE EVENT THAT SIGNIFICANT EROSION OCCURS AS A RESULT OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE THE ERODED AREA TO ORIGINAL CONDITION.
- 17. DISCREPANCIES IF ANY, SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT/ SKATE PARK ARCHITECT BEFORE WORK COMMENCES.
- 18. ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES (FEDERAL, STATE, LOCAL, AND HEALTH DEPARTMENTS), EXCEPT WHERE REQUIREMENTS OF CONTRACT DOCUMENTS ARE MOST STRINGENT.
- 19. NO DESIGN MODIFICATIONS SHALL BE MADE WITHOUT THE OWNER'S AND/ OR LANDSCAPE ARCHITECT/ SKATE PARK ARCHITECT'S APPROVAL.

# SITE- GRADING & DRAINAGE NOTES

- 1. FINAL HEIGHT AND SHAPE OF EXCAVATION TO BE VERIFIED BY LANDSCAPE ARCHITECT/ SKATE PARK DESIGNER IN THE FIELD.
- 2. ALL SPOT ELEVATIONS ARE FOR TOP OF FINISH WORK UNLESS OTHERWISE NOTED.
- 3. MINIMUM SLOPE FOR ALL CONCRETE FINISH WORK SHALL BE 1%. WATER MUST DRAIN TOWARDS DIRECTION OF FLOW
- ARROWS AND FOLLOW OVERALL DESIGN INTENT.
- 4. All AREAS DISTURBED BY GRADING OPERATIONS TO BE FINE GRADED.
- 5. VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK.
  6. REFER TO SECTIONS AND PROFILES ON SHEETS: SP-4.1 THROUGH SP-5.7 FOR HEIGHT, RADII AND PROFILES.
- 7. ALL FINE GRADING OF EARTHWORK SHALL BE INSPECTED WITH TEMPLATES CUT TO THE SPECIFIED RADII/ ANGLE. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL TEMPLATES/ SCREEDS TO BE USED FOR EARTHWORK TOLERANCES FOR APPROVAL BY LANDSCAPE ARCHITECT/ SKATE PARK DESIGNER.
- 8. CONTRACTOR TO PROTECT ALL EXCAVATIONS FROM SOIL EROSION AND WATER SATURATION AT ALL TIMES USING APPROPRIATE CONSTRUCTION METHODS. AND LOSS OF SOIL PROFILE DURING CONSTRUCTION SHALL BE REPLACED WITH APPROPRIATE SOIL COMPOSITION AND COMPACTION METHODS TO MATCH LOSS SOIL.

## SITE- SURVEY NOTES

- 1. LOCATE ALL SURVEY MARKS INCLUDING BENCH MARKS AND PROPERTY LINES IN ORDER THAT THE EXACT LINES OF CONSTRUCTION LIMITS AND GRADES MAY BE DETERMINED. BRING ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY BEFORE PROCEEDING WITH WORK.
- 2. VERIFY ENTIRE LAYOUT PRIOR TO START OF CONSTRUCTION WITH PROJECT OWNER'S REPRESENTATIVES AND LANDSCAPE ARCHITECT/ SKATE PARK ARCHITECT.
- 3. LOCATE AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK AND PROTECT ALL PERMANENT REFERENCE POINTS DURING ENTIRE CONSTRUCTION. REPLACE PROJECT CONTROL POINTS WHICH MAY BE LOST OR DESTROYED DURING CONSTRUCTION.

# SITE- EXISTING CONDITIONS & DEMOLITION NOTES

- 1. ALL MATERIAL "TO REMAIN" SHALL BE PROTECTED DURING CONSTRUCTION.
- 2. ALL MATERIALS "TO BE REMOVED" SHALL BE TAKEN FROM THE SITE AND DISPOSED OF PROPERLY.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE JOB SITE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT COULD AFFECT THE INSTALLATION OF ANY WORK SET FORTH IN THESE PLANS PRIOR TO SUBMITTING A BID.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ANY UTILITIES THAT MAY BE NEEDED OR AVOIDED IN THE DEMOLITION PHASE IN ADVANCE OF ANY CONSTRUCTION. THE CITY AND STANTEC DOES NOT GUARANTEE ANY LOCATIONS REFERENCED.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SOILS AND COMPACTION TESTING DURING THE COURSE OF CONSTRUCTION TILL FINAL ACCEPTANCE.
- 6. THE CONTRACTOR SHALL CONTACT ALL UTILITY ENTITIES AND OWNER FOR EXISTING LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- 7. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION PER CITY REQUIREMENTS.

CONTRACTOR. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE CITY.

8. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY PRIOR TO CONSTRUCTION.
9. EXISTING LANDSCAPE AND/ OR IRRIGATION SYSTEM DISTURBED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY THE

CENTRAL PARK - SKATE PARK PROJECT NO. 53W1785 SHEET NO. C-0.10

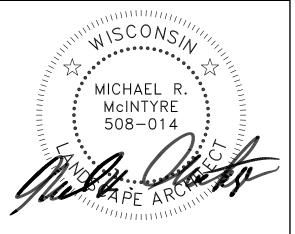
SITE - GENERAL AND GRADING NOTES

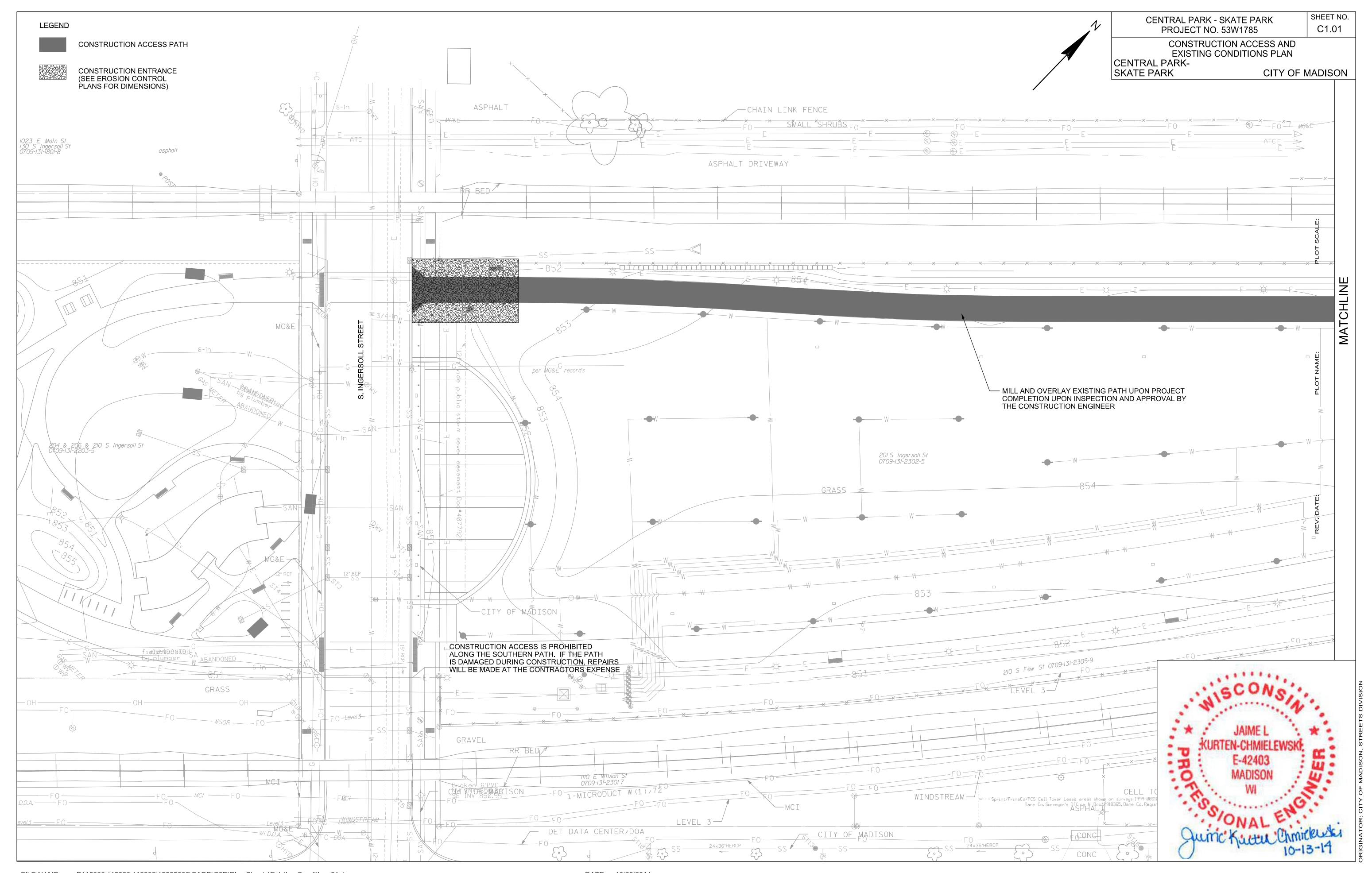
CENTRAL PARK-SKATE PARK

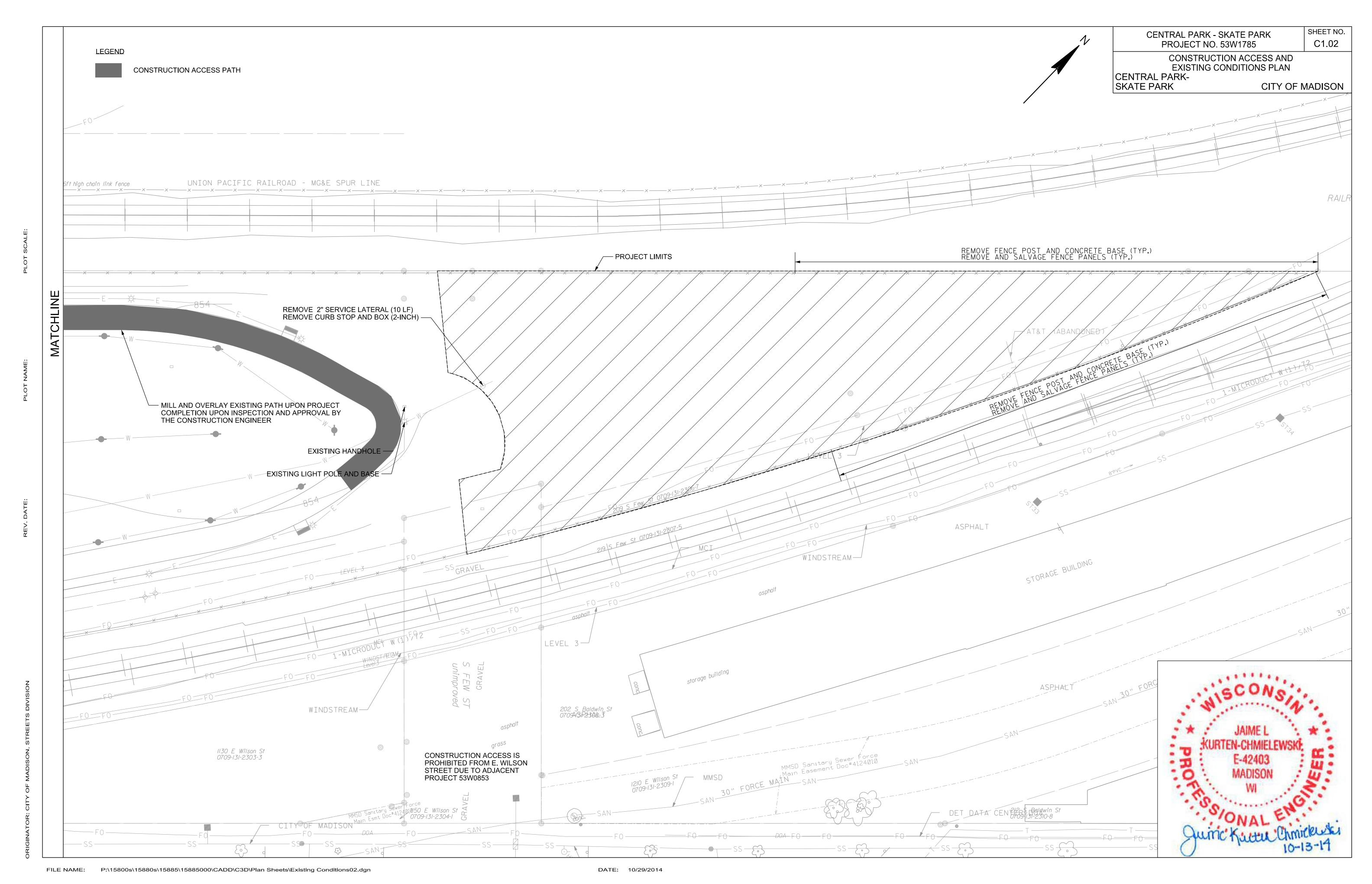
CITY OF MADISON

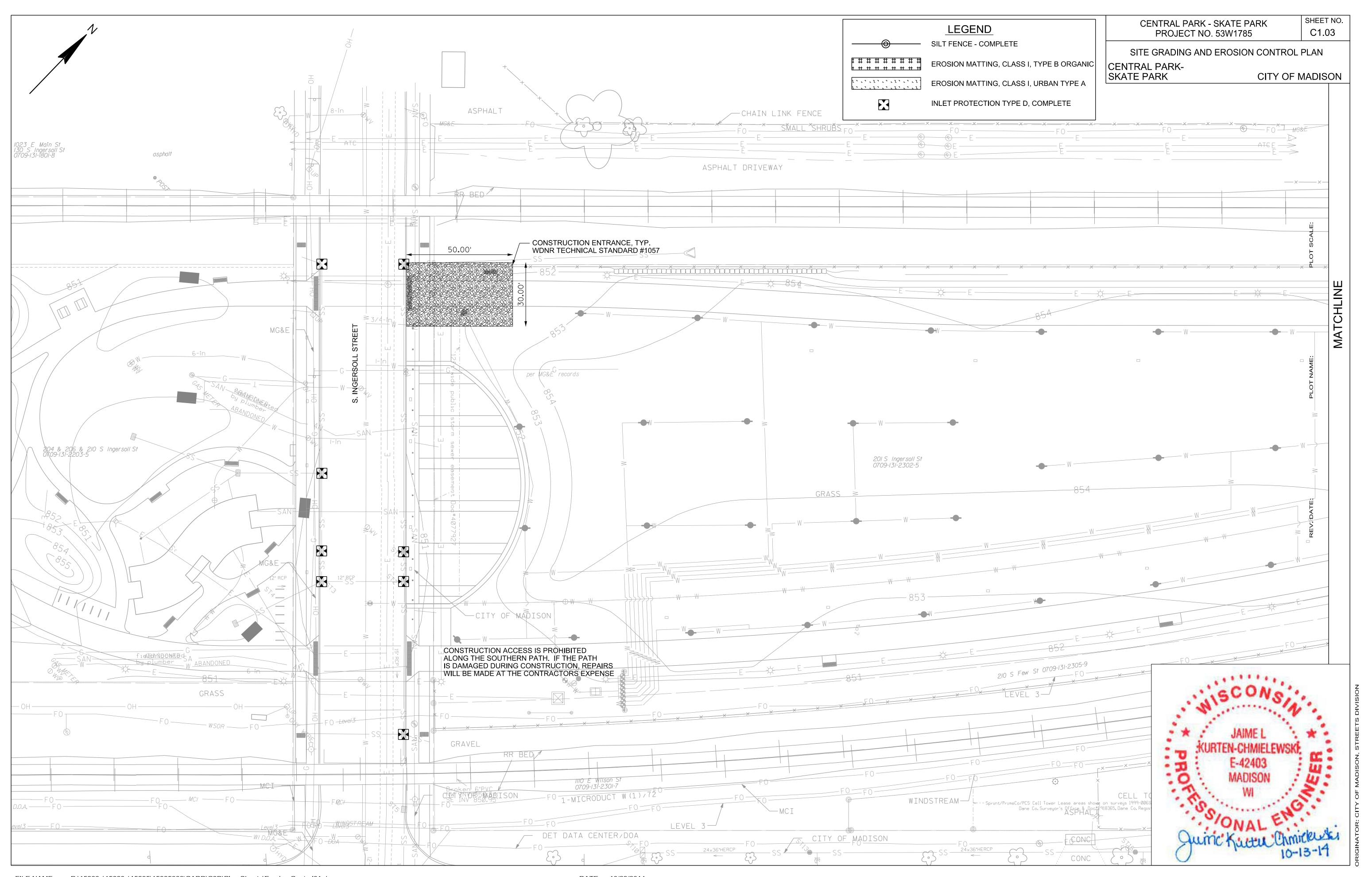
226 Causeway Street
Boston, MA 02114
Tel. 617.523.8103
Fax. 617.523.4333
www.stantec.com

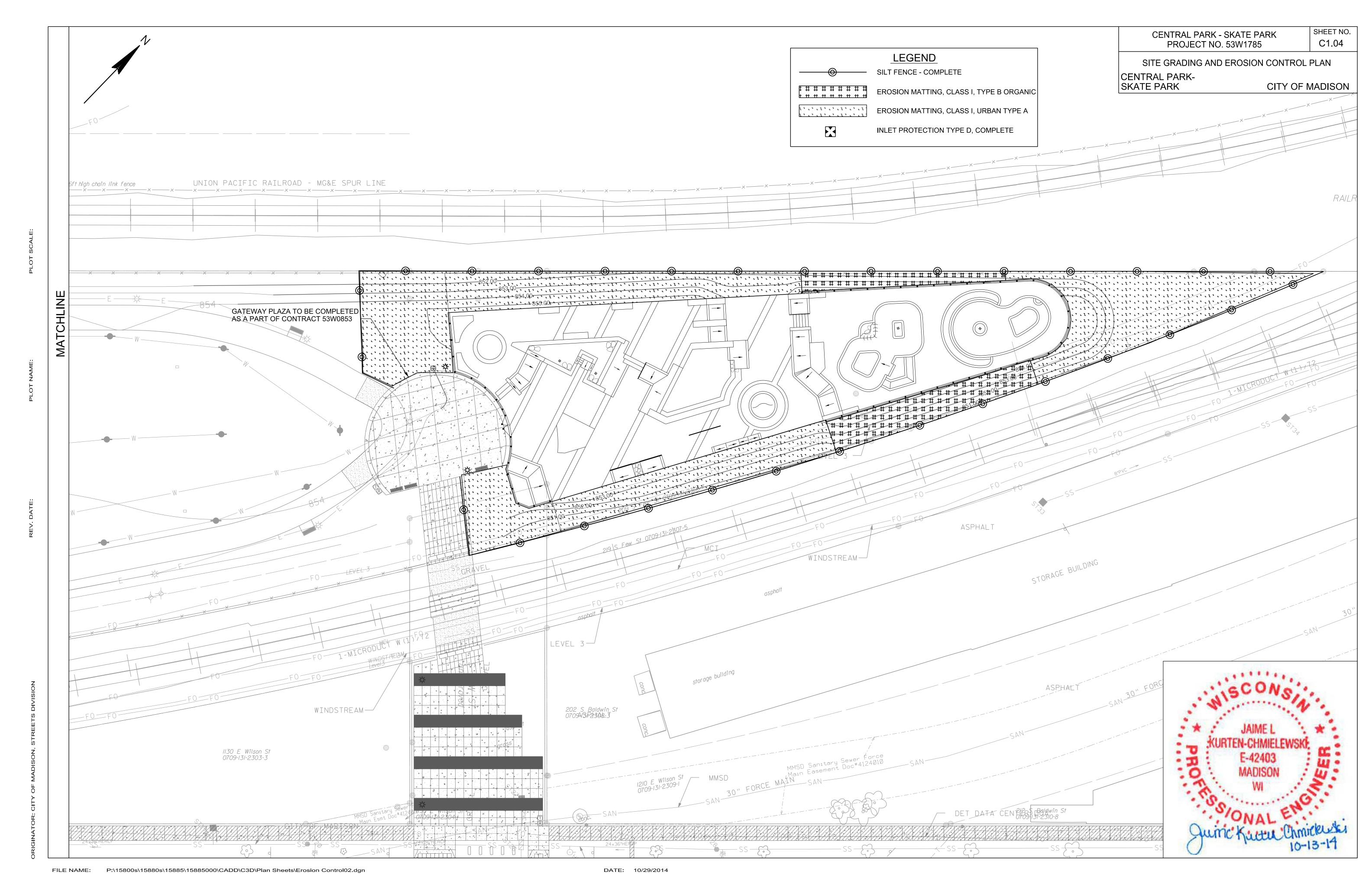


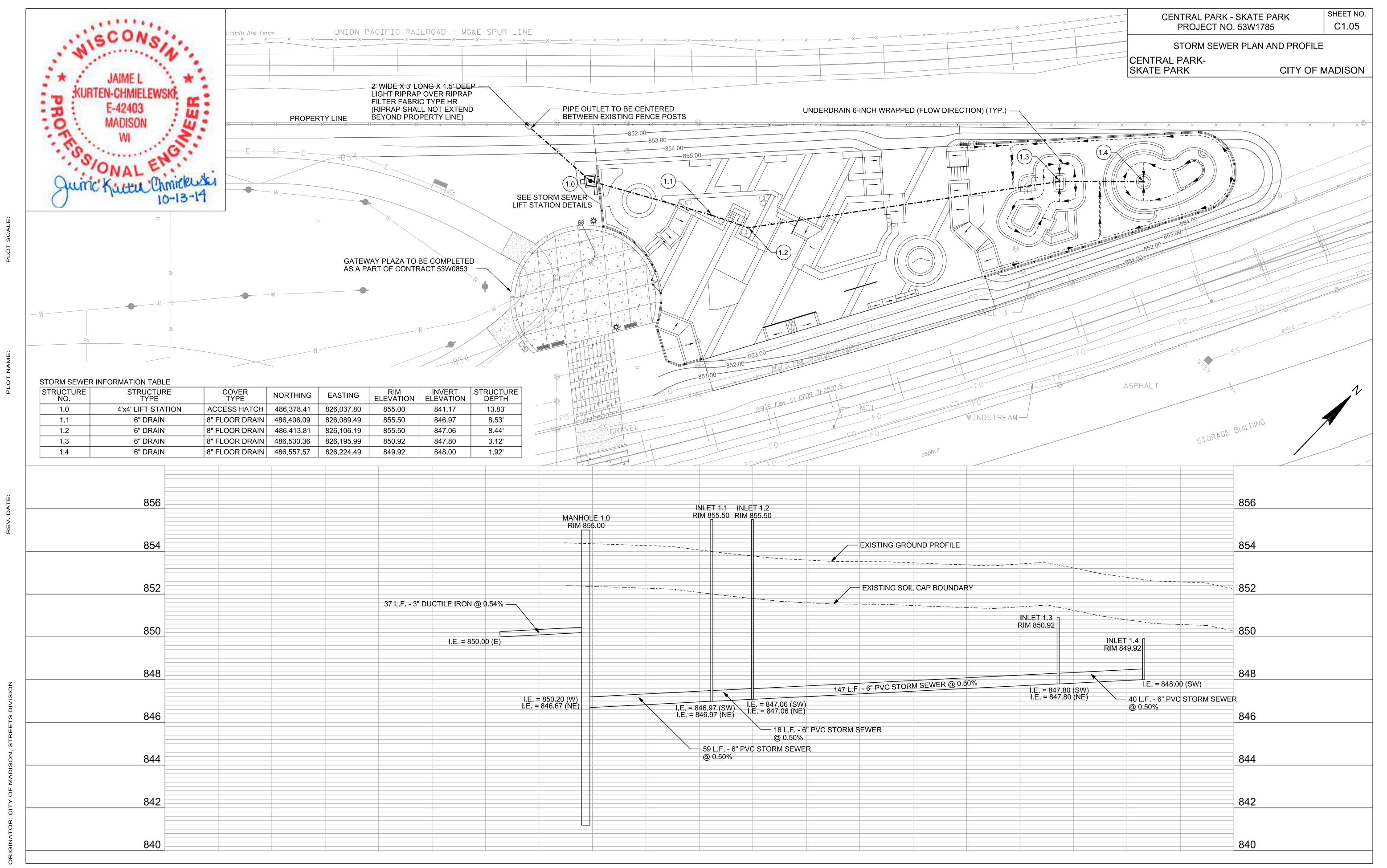




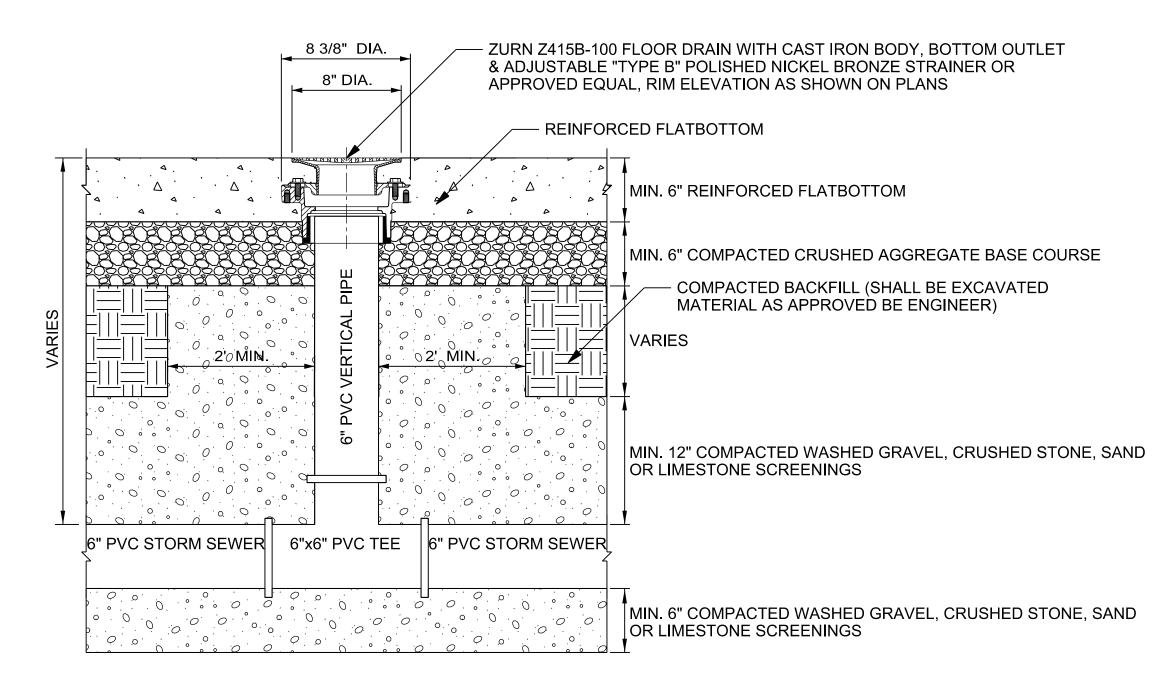








# **PLAN VIEW**



# PROFILE VIEW

# 6-INCH DRAIN DETAIL

CENTRAL PARK - SKATE PARK PROJECT NO. 53W1785

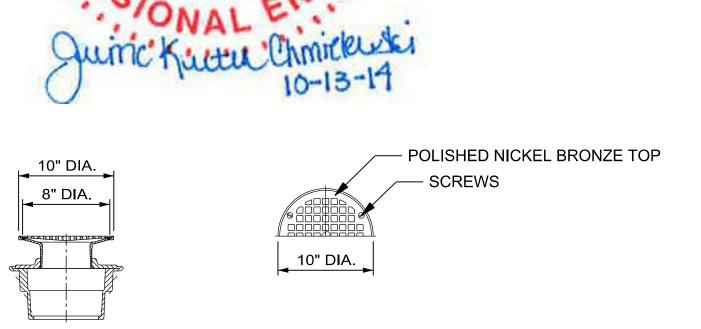
G3W1785 C1.06

STORM SEWER DETAILS

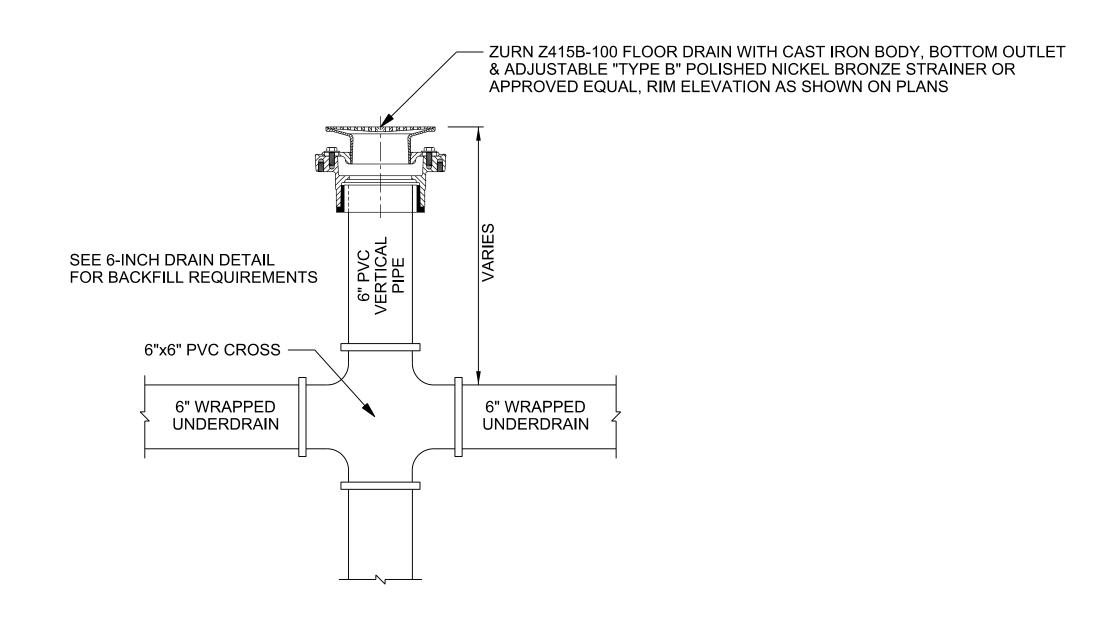
CENTRAL PARK-SKATE PARK

CITY OF MADISON

SHEET NO.



10" ROUND STRAINER DETAIL
SCALE: NONE



UNDERDRAIN CONNECTION TO 6-INCH CATCH BASIN DETAIL
SCALE: NONE



STORM SEWER DETAILS

APPROVED MANUFACTURER

CENTRAL PARK-SKATE PARK

**DESCRIPTION** 

CITY OF MADISON

SHEET NO.

C1.07

LOCKABLE ALUMINUM ACCESS HATCH WITH PROTECTIVE GRATING SIZED PER MANUFACTURER RECOMMENDATIONS - 90° FLANGED BENDS (2 REQUIRED) FOR PUMP REMOVAL (NOT LESS THAN 24"x30" NOMINAL SIZE) STAINLESS STEEL SCREEN REDI-FLANGE ADAPTER - 2'x2'x6" CONCRETE PAD 3" D.I. -CONCRETE BLOCKING

# VENT DETAIL

— 4'x4' STORM SAS

INFLUENT PIPEINVERT ELEV. = 846.67

# GENERAL SUMP PUMP SYSTEM CONTROL PANEL EQUIPMENT SCHEDULE

ITEM NO.

ITEM NO.	DESCRIPTION	APPROVED MANUFACTURER
1	Main Circuit Breaker  A thermal magnetic device sized to accommodate the amperage draw of the pumps and all options to protect against high fault current. Shutting off the main circuit breaker cuts all power to the panel.	PENTAIR HYDROMATIC OR APPROVED EQUAL
2	Swing Dead Front Panel  This added safety option is constructed in four sizes corresponding to standard Hydromatic Panel sizes. Throughthe-door main disconnect switch to lock the dead front closed when the switch is in the "on" position is provided.	PENTAIR HYDROMATIC OR APPROVED EQUAL
3	Lightning Suppressor  Metal oxide within the casing of this compact device conducts transient high voltage surges of 500 volts or more to ground, aiding in longer motor life.	PENTAIR HYDROMATIC OR APPROVED EQUAL
4	Elapsed Time Meters  One meter for each pump records in hours the cumulative amount of time each pump has run in simplex or duplex panels. A single meter for recording the time both pumps have run simultaneously is available for duplex panels only. Either type of meter is non-resetable, maximum 9999.9 hours.	PENTAIR HYDROMATIC OR APPROVED EQUAL
5	Pump Failure  If contactor fails to pull in within a preset delay period after pump is called for, a relay is energized to signal an operative motor starter. Relay contacts are used as input to a telemetry device and/or to an alarm indicator board.	PENTAIR HYDROMATIC OR APPROVED EQUAL

6	High Water Telemetry and High Water Alarm  An additional float located above the highest pump-on float signals a relay to energize when a high water condition exists. Relay contacts are used for input to telemetry only, input to an alarm indicator board only, or both options may be specified together. Intrinsically safe circuit extensions are available.	PENTAIR HYDROMATIC OR APPROVED EQUAL
7	Seal Failure  Relay energizes a red light on the side of the control panel when foreign liquid passes through the lower seal area of the pump, indicating the pump seal has failed – valuable protection for motors in double sealed Hydromatic pumps. Contacts of the relay are used as input to a telemetry device and/or to an alarm indicator board.	PENTAIR HYDROMATIC OR APPROVED EQUAL
8	Pump Run  Each time a contactor is energized, a relay is activated, enabling remote monitoring of motor starter operation. The relay can be used as input to a telemetry device.	PENTAIR HYDROMATIC OR APPROVED EQUAL
9	Convenience Outlet  Duplex receptacle with ground fault interrupter, circuit breaker, and transformer (if required, mounted separately). A transformer is not required when 120 volts is available to the panel, but would be required for 230V or 460V three-phase panels. The convenience outlet may be used for purposes of repair and maintenance.	PENTAIR HYDROMATIC OR APPROVED EQUAL
10	Cellular Alarm Monitor and Web Based Photo System	OMNISITE VIPER OR APPROVED EQUAL

# STORM SEWER LIFT STATION PLAN VIEW SCALE: NONE

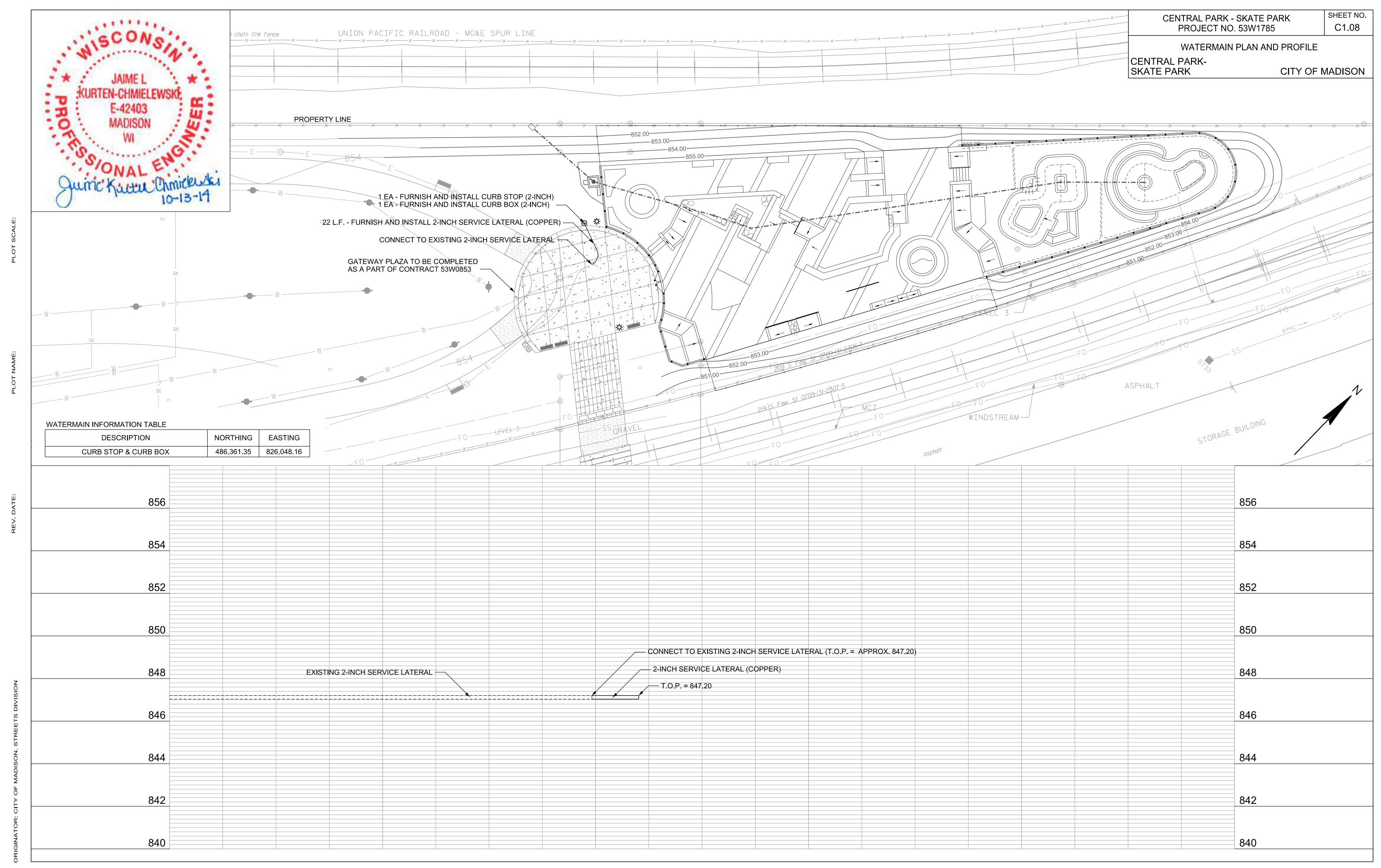
TO VENT -

- PROVIDE STAINLESS STEEL HOOKS FOR EACH PUMP CHAIN, POWER WIRES, TRANSDUCER CABLE, FLOAT CABLE, AND TRANSDUCER/FLOAT WIRES. - INSTALL FLOAT AND POWER CABLES AS REQUIRED ON THE ELECTRICAL PLAN, SEPERATE CONDUITS - MTM GUIDE RAIL SYSTEM - STAINLESS STEEL CHAIN 3" DUCTILE IRON — 850.20 2 COURSES OF GASKET MATERIAL REQ'D (TYP.) FOR WATER TIGHT SEAL. INV. ELEV. & HWA 846.67 ON 845.67 PUMPS OFF 843.67 - ANCHOR FOR FLOATS 1:1 TYP. 841.17 – 12" MIN. NO. 2 WASHED STONE

STORM SEWER LIFT STATION SECTION VIEW

P:\15800s\15880s\15885\15885000\CADD\C3D\Plan Sheets\Lift Station Detail.dgn

SCALE: NONE



LUMINAIRE SCHEDULE					
(MTG) MOUNTING:	(Type) LAMP TECHNOLOGY:	(L/L) LENS/LOUVER:			
RE - RECESSED	FL - FLUORESCENT	A125" ACRYLIC			
SP - SUSPENDED	CF - COMPACT FLUORESCENT	B- BLACK BAFFLE			
CL - CEILING SURFACE	HL - HALOGEN	C- CLEAR ALZAK			
WL - WALL	IN - INCANDESCENT	D- PARABOLIC			
UC - UNDER CABINET	LED - LIGHT EMITTING DIODE	F- FRESNEL			
CV - COVE	HS - HIGH PRESSURE SODIUM	G- TEMPERED GLASS			
PL - POLE	MH - METAL HALIDE	H- WALL WASHER			
FR- FLANGED RECESSED	SMH - SUPER METAL HALIDE	P- POLY CARBONATE			
O - OTHER ( SEE DESCRIPTION)	PSMH - PULSE START METAL HALIDE	K- KSH12 .125" ACRYLIC			
DOOR:	CMH - CERAMIC METAL HALIDE	K19- KSH19 .156" ACRYLIC			
FA - FLAT ALUMINUM	O - OTHER (SEE DESCRIPTION)	L- LOW IRIDESCENT SPECULAR ALUM			
FS - FLAT STEEL	XL - EXTENDED LIFE	N- NONE			
RA - REGRESSED ALUMINUM	XLP - EXTENDED LIFE & OUTPUT	R- HIGH IMPACT DR ACRYLIC			
RS - REGRESSED STEEL		O- OTHER (SEE DESCRIPTION)			
	(TYPE) BALLAST:	(TYPE) BALLAST:			
FINISH:	DIM07- LINE DIMMING BALLAST	EB- ELECTRONIC BALLAST			
PAF - PAINT AFTER FABRICATION	DIM10- 0-10V DIMMING BALLAST	EM- EMERGENCY BATTERY/BALLAST			
CSA - FINISH SELECTION BY ARCHITECT	HL- HIGH / LOW LEVEL BALLAST	DALI- DIGITAL DIMMING BALLAST			
	ML- MULTI-LEVEL SWITCHING	MV- MULTI-VOLTAGE ELECTRONIC 120V-277V			
	HP- HIGH PERFORMANCE / LBF	#BF- BALLAST FACTOR			

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN.

REFER TO SPECIFICATION SECTIONS LIGHTING 26 51 00 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

ALL LAMPS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.

			DIMENSIONS				LAMPS BALLAST			LAST			
ITEM	DESCRIPTION	L	w	Н	DIA	MTG	TYPE	QTY	MODEL	VOLTS	TYPE	L/L	APPROVED MANUFACTURER
S1	SITE SPORTS LIGHTING POLE TOP LUMINAIRE, 4 FIXTURES MOUNTED TO CROSSARM, 50' STEEL POLE. BLACK POWDERCOAT FINISH ON POLE AND ARM.					PL @ 50'	МН	4	1000W MZ	208	0.9BF	0	MUSCO LIGHT STRUCTURE GREEN
S2	SITE SPORTS LIGHTING POLE TOP LUMINAIRE, 3 FIXTURES MOUNTED TO CROSSARM, 50' STEEL POLE. BLACK POWDERCOAT FINISH ON POLE AND ARM.					PL @ 50'	МН	3	1000W MZ	208	0.9BF	0	MUSCO LIGHT STRUCTURE GREEN
S3	SITE SPORTS LIGHTING POLE TOP LUMINAIRE, 2 FIXTURES MOUNTED TO CROSSARM, 50' STEEL POLE. BLACK POWDERCOAT FINISH ON POLE AND ARM.					PL @ 50'	МН	2	1000W MZ	208	0.9BF	0	MUSCO LIGHT STRUCTURE GREEN

### GENERAL ELECTRICAL EQUIPMENT SCHEDULE

THE SYMBOLS AND THE EQUIPMENT SCHEDULE ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM.

CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.

ITEM NO.	SYMBOL	DESCRIPTION	APPROVED MANUFACTURERS
1	E E	ELECTRICAL CONNECTION TO EQUIPMENT AND MOTORS, SIZE PER N.E.C. COORDINATE REQUIREMENTS WITH CONTRACTOR FURNISHING EQUIPMENT OR MOTOR. REFER TO SPECIFICATIONS AND GENERAL INSTALLATION NOTES FOR TERMINATIONS TO MOTORS.	REFER TO SPECIFICATIONS
2	HH-#	HANDHOLE, COMPOSITE POLYMER CONCRETE BODY AND COVER. STAINLESS STEEL HARDWARE. BOLTED NON-SKID COVER RATED FOR 10,000 LB. DESIGN LOAD OCCASIONAL NON-DELIBERATE VEHICULAR TRAFFIC. STACK UNITS TO ACHIEVE DEPTH SHOWN ON PLANS. UNITS IN LANDSCAPED AREAS SHALL BE GREEN IN COLOR. 11"W, 18"L, 18"D OR DIMENSIONS AS NEEDED.	HUBBELL/QUAZITE PG BB18 PG HAOO CARSON INDUSTRIES H SERIES ARMORCAST HIGHLINE PRODUCTS SYNERTECH
3	LCP	LIGHTING CONTROL PANEL, CUSTOM NEMA 3R OR 4X ENCLOSURE WITH LOAD CENTER, LIGHTING CONTRACTOR, PHOTO CELL, AND TIME CLOCK. REFER TO SITE LIGHTING CONTROL DIAGRAM ON THIS SHEET.	SEE DETAIL 1 ON THIS SHEET

# **GENERAL ELECTRICAL NOTES:**

1. "1/E100" INDICATES DETAIL NUMBER/SHEET NUMBER.

2. ##-### INDICATES ELECTRICAL EQUIPMENT DEFINED IN ELECTRICAL SCHEDULES. REFER TO DRAWINGS CONTAINING ELECTRICAL SCHEDULES. PERMANENT NAMEPLATE SHALL MATCH FINAL EQUIPMENT NOMENCLATURE, NOT ELECTRICAL EQUIPMENT TAG NAME, REFER TO SPECIFICATIONS.

INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL IT IS SHOWN WITH.

ALL ELECTRICAL CONDUCTORS SHALL BE COPPER.

-INDICATES NUMBER OF WIRES IN CONDUIT.

**NEUTRAL WRE** PHASE WIRE

**ABBREVIATION KEY:** ELECTRICAL CONTRACTOR

E.C. T.C. TELECOMMUNICATIONS CONTRACTOR MECHANICAL CONTRACTOR GENERAL CONTRACTOR

MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE

- NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE) (DARK LONG DASHED LINE)

NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)

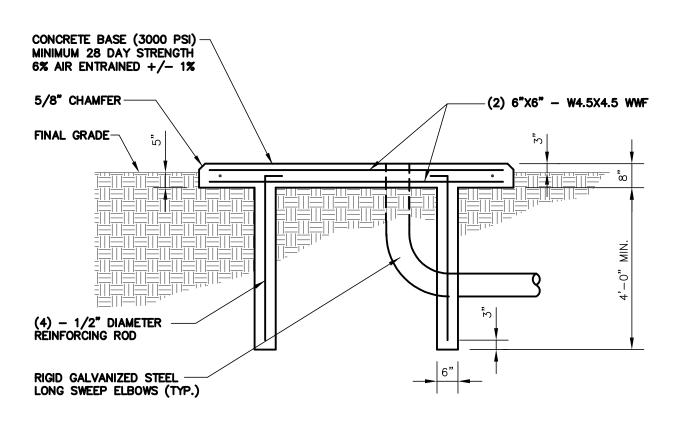
# **ELECTRICAL INSTALLATION NOTES:**

- CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH PHASE.
- 2. A #12 GREEN INSULATED GROUND CONDUCTOR SHALL BE INSTALLED WITH CIRCUIT CONDUCTORS
- CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND IN FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
- 4. CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS WITH PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION THIS CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS OR CONNECTION LOCATIONS TO ACCOMMODATE EQUIPMENT.
- ELECTRICAL EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF OPERATION OF AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL, ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE
- USE LIQUIDTIGHT CONDUIT AND FITTINGS WHERE SUBJECT TO MOISTURE. ROUTE GROUND WIRE FROM CIRCUIT GROUND TO MOTOR GROUND THROUGH FLEXIBLE CONDUIT. FLEXIBLE CONDUIT SHALL NOT EXCEED 6' IN LENGTH.

6. ALL FINAL ELECTRICAL CONNECTIONS TO MOTORS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.

- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
- 8. ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER. PRIOR TO DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB.
- 9. CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF ELECTRICAL WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. CONTRACTOR SHALL REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.

WIDTH OF PANELS + 12"





1. VERIFY FINAL REQUIREMENTS WITH LIGHTING PANEL AND SUMP PUMP PANEL PRIOR TO INSTALLATION.

CENTRAL PARK - SKATE PARK PROJECT NO. 53W1785

COVER SHEET - ELECTRICAL

CENTRAL PARK-SKATE PARK

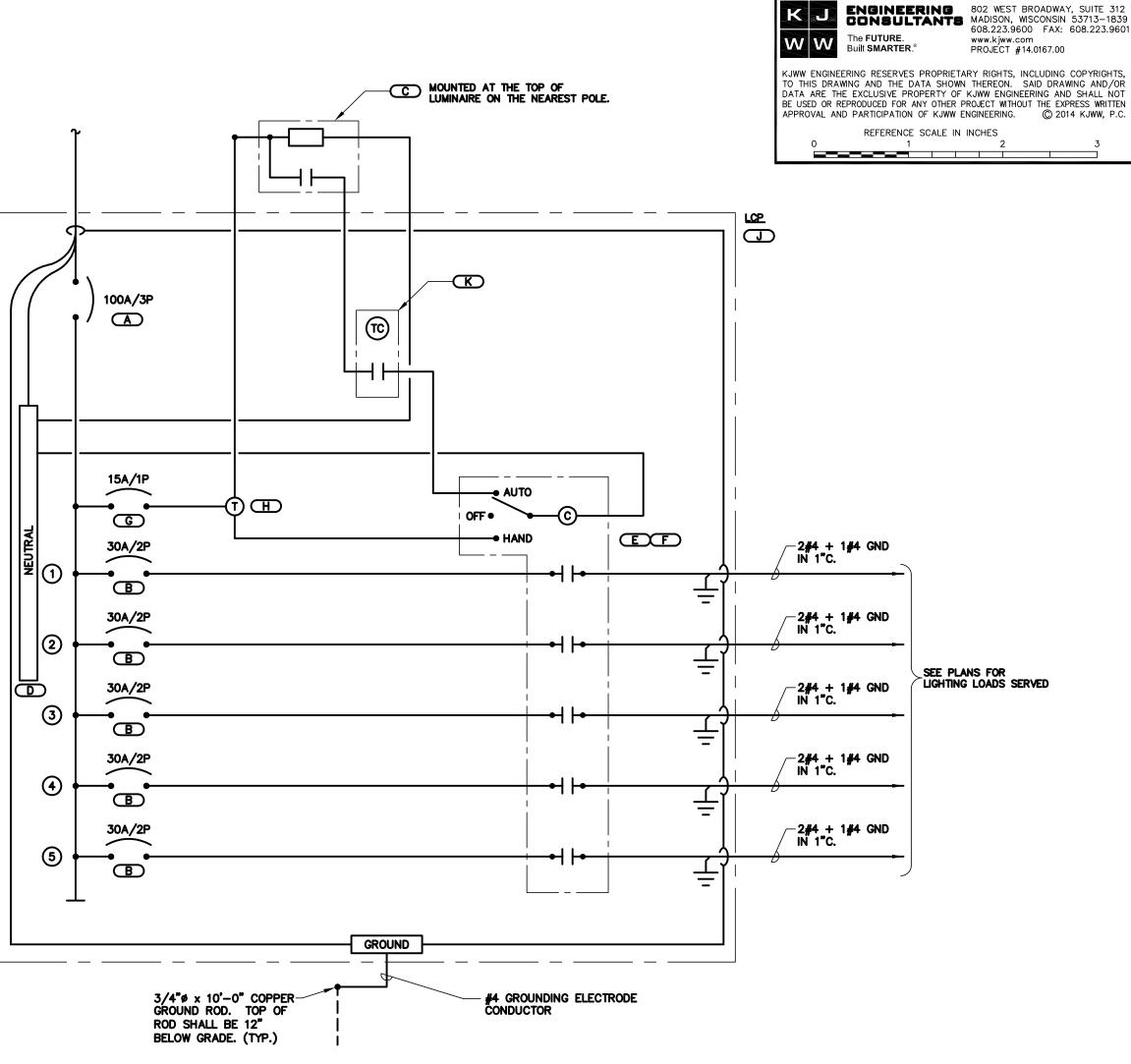
CITY OF MADISON

141 Portland St. Boston, MA 02114 Tel. 617.523.8103 Fax. 617.523.4333 www.stantec.com



SHEET NO.

E000



# SITE LIGHTING CONTROL DIAGRAM

100A MAIN BREAKER 240V/3P CUTLER-HAMMER #QC3100 30A BRANCH BREAKER 240V/2P CUTLER-HAMMER #QC2030 VERIFY BREAKER AND FEEDER SIZE WITH LIGHTING MANUFACTURER

120V PHOTOCELL CONTROLLER

**GB101 NEUTRAL BUS** 

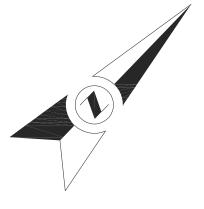
CONTACTOR 50A MSD MILBANK SOCKET AP2300

15A BRANCH BREAKER 120V/1P CUTLER-HAMMER #QC1015

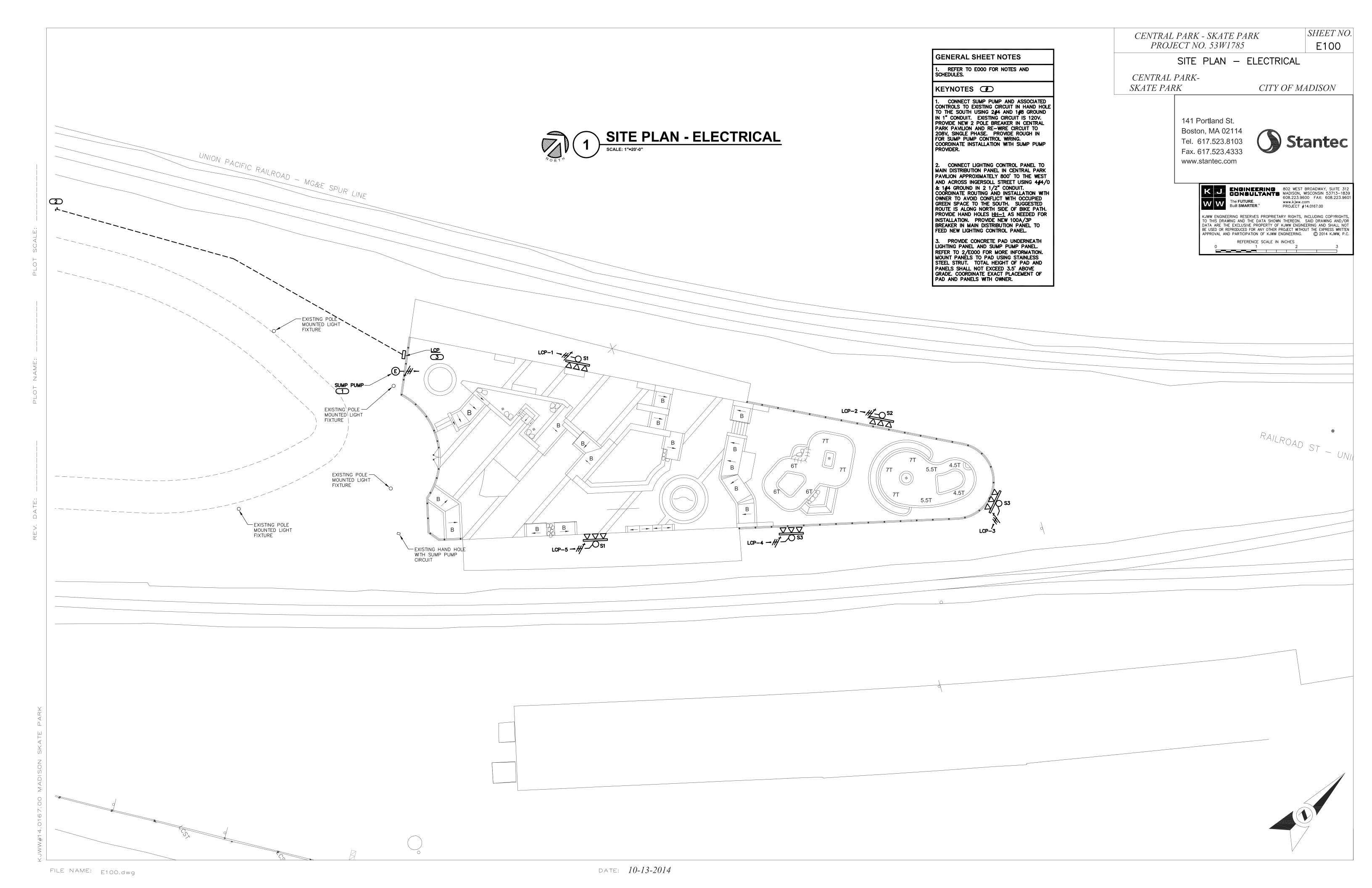
USD NDN3 TERMINAL BLOCK

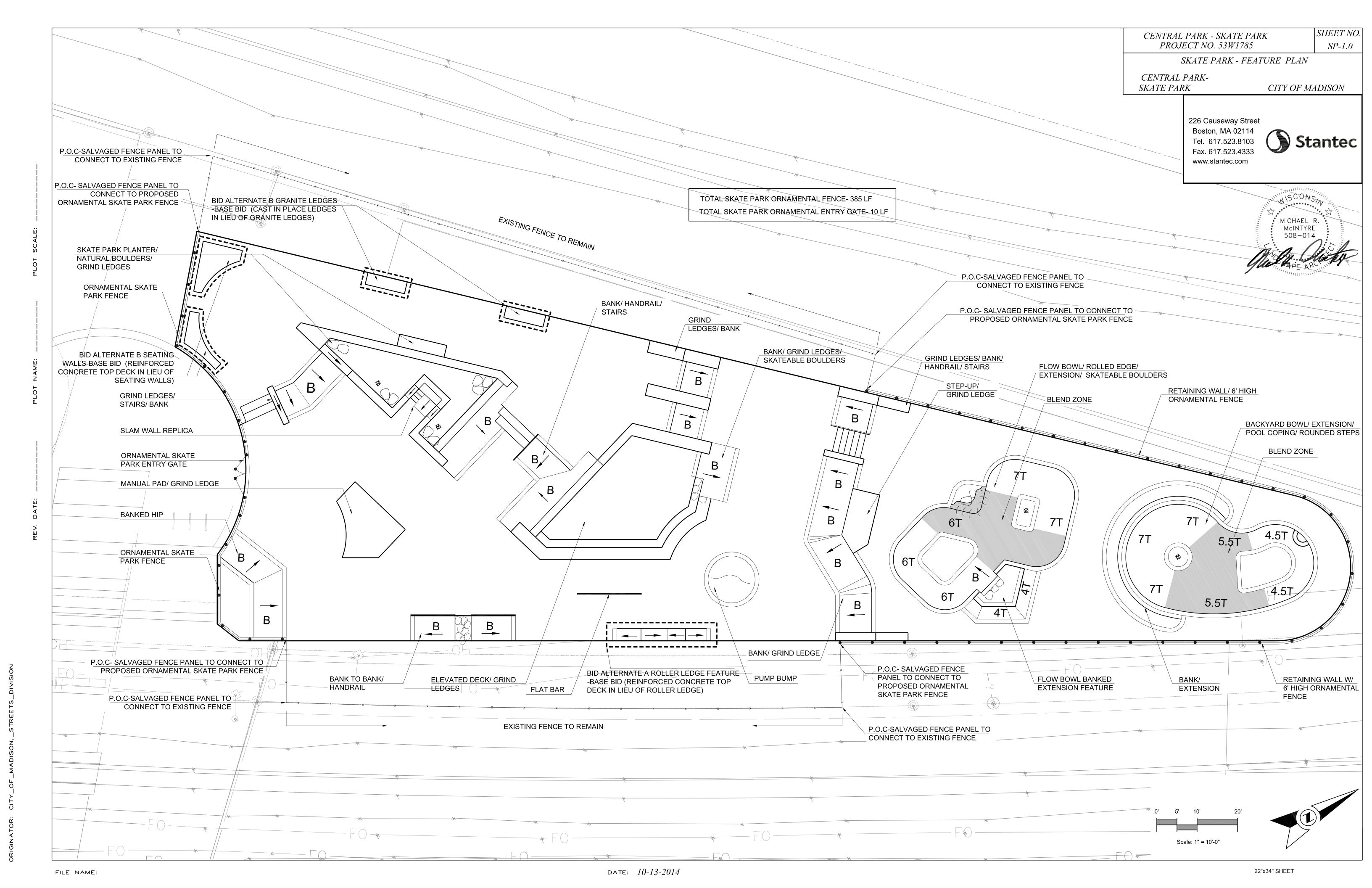
HOFFMAN ENCLOSURE, NEMA 3R OR 4X, STAINLESS STEEL, SIZED PER EQUIPMENT

7 DAY ELECTRONIC PROGRAMMABLE TIME SWITCH PARAGON



DATE: 10-13-2014 FILE NAME: E000.dwg





SHEET NO.

CENTRAL PARK - SKATE PARK

FILE NAME:

SHEET NO. SP-1.3

PROJECT NO. 53W1785 SKATE PARK - MATERIALS PLAN - METALS/ COPING

CENTRAL PARK-CITY OF MADISON

> 226 Causeway Street Boston, MA 02114 Tel. 617.523.8103 Fax. 617.523.4333 www.stantec.com

POOL COPING/ TILE (COLOR TBD)

6' ORNAMENTAL SKATE PARK FENCE

(SPECIALTY CONTRACTOR)





22"x34" SHEET

0' 5' 10' 20'

FILE NAME:

DATE: 10-13-2014

SP-1.5





Scale: 1" = 10'-0"

	Line Table					
Line #	Length	Direction	START POINT (N, E)	END POINT (N, E)		
L2	29.12	S49° 46' 46"E	486385.56, 826034.62	486366.75, 826056.86		
L3	279.70	N43° 00' 38"E	486385.56, 826034.62	486590.08, 826225.42		
L4	17.20	S60° 31' 16"E	486350.54, 826106.83	486342.08, 826121.80		
L5	6.75	N67° 26' 16"E	486342.08, 826121.80	486344.67, 826128.03		
L6	11.78	S29° 28' 44"W	486354.92, 826133.83	486344.67, 826128.03		
L7	245.52	N29° 28' 44"E	486354.92, 826133.83	486568.65, 826254.65		
L11	8.00	S4° 49' 30"W	486381.42, 826078.50	486373.44, 826077.82		
L12	8.22	S4° 49' 30"W	486381.08, 826082.48	486372.89, 826081.79		
L13	1.97	S4° 49' 30"W	486372.89, 826081.79	486370.93, 826081.63		
L14	10.00	S85° 10' 30"E	486381.54, 826077.00	486380.70, 826086.97		
L15	1.50	S4° 49' 30"W	486383.04, 826077.13	486381.54, 826077.00		
L16	10.00	S85° 10' 30"E	486383.04, 826077.13	486382.20, 826087.09		
L17	1.50	S4° 49' 30"W	486382.20, 826087.09	486380.70, 826086.97		
L18	6.41	S4° 49' 30"W	486388.71, 826086.14	486382.32, 826085.60		
L19	11.65	N16° 59' 20"W	486388.71, 826086.14	486399.85, 826082.74		
L20	7.13	N83° 55' 05"E	486387.95, 826079.05	486388.71, 826086.14		
L21	10.30	N16° 59' 20"W	486387.95, 826079.05	486397.80, 826076.04		
L22	5.06	S4° 49' 30"W	486387.95, 826079.05	486382.91, 826078.62		
L27	32.46	S73° 00' 40"W	486404.69, 826098.58	486395.20, 826067.53		
L28	1.71	S16° 59' 20"E	486396.84, 826067.03	486395.20, 826067.53		
L29	51.18	N43° 00' 40"E	486396.84, 826067.03	486434.27, 826101.94		
L30	42.68	N43° 00' 40"E	486401.30, 826073.93	486432.51, 826103.04		
L31	1.96	N16° 59' 20"W	486399.42, 826074.50	486401.30, 826073.93		
L32	2.00	N16° 59' 20"W	486397.51, 826075.08	486399.42, 826074.50		
L33	23.07	S73° 00' 40"W	486406.16, 826096.56	486399.42, 826074.50		
L34	32.46	S73° 00' 40"W	486404.69, 826098.58	486395.20, 826067.53		
L35	2.00	N16° 59' 20"W	486400.29, 826084.17	486402.20, 826083.59		
L36	3.00	N46° 59' 20"W	486414.74, 826083.73	486416.79, 826081.53		
L37	12.00	N43° 00' 40"E	486416.79, 826081.53	486425.56, 826089.72		
L38	3.00	N46° 59' 20"W	486423.51, 826091.91	486425.56, 826089.72		
L39	11.50	N16° 59' 20"W	486406.16, 826096.56	486417.16, 826093.20		
L40	9.00	S73° 00' 40"W	486419.79, 826101.81	486417.16, 826093.20		
L41	11.50	N16° 59' 20"W	486408.79, 826105.17	486419.79, 826101.81		
L42	10.00	N16° 59' 20"W	486406.44, 826104.32	486416.01, 826101.40		
L43	4.00	S73° 00' 40"W	486412.18, 826102.56	486411.01, 826098.74		

Line Table

L115 | 3.00 | N46° 59' 20"W | 486441.23, 826090.66 | 486443.27, 826088.46

L116 | 10.00 | N43° 00' 40"E | 486441.23, 826090.66 | 486448.54, 826097.48

L117 | 3.00 | N46° 59' 20"W | 486448.54, 826097.48 | 486450.58, 826095.29

L118 | 16.00 | S29° 28' 44"W | 486437.33, 826167.02 | 486423.40, 826159.14

L119 | 6.50 | N60° 31' 16"W | 486403.51, 826161.29 | 486406.70, 826155.64

L120 | 26.00 | S29° 28' 44"W | 486407.45, 826156.34 | 486384.82, 826143.55

L121 | 10.00 | N29° 28' 44"E | 486398.00, 826150.71 | 486406.70, 826155.64

L122 | 6.50 | N60° 31' 16"W | 486394.80, 826156.37 | 486398.00, 826150.71

L123 | 6.50 | N60° 31' 16"W | 486391.32, 826154.40 | 486394.52, 826148.75

L124 | 6.50 | N60° 31' 16"W | 486382.61, 826149.48 | 486385.81, 826143.82

L125 | 10.00 | N29° 28' 44"E | 486385.81, 826143.82 | 486394.52, 826148.75

L126 | 9.00 | N29° 28' 44"E | 486377.11, 826122.73 | 486384.94, 826127.16

L127 | 9.64 | N16° 59' 20"W | 486384.94, 826127.16 | 486394.17, 826124.34

L128 | 17.17 | \$73° 00' 40"W | 486394.17, 826124.34 | 486389.15, 826107.93

L129 | 6.70 | N16° 59' 20"W | 486382.75, 826109.88 | 486389.15, 826107.93

L130 | 2.00 | N16° 59' 20"W | 486409.80, 826115.29 | 486411.71, 826114.71

L131 | 14.81 | N67° 26' 16"E | 486357.06, 826104.27 | 486362.74, 826117.95

L132 | 16.91 | S60° 31' 16"E | 486362.74, 826117.95 | 486354.42, 826132.67

L133 | 7.79 | N3° 27' 30"E | 486354.97, 826117.48 | 486362.74, 826117.95

L134 | 13.42 | S60° 31' 16"E | 486354.97, 826117.48 | 486348.36, 826129.16

L135 | 10.48 | N67° 26' 16"E | 486350.95, 826107.80 | 486354.97, 826117.48 |

L136 | 22.28 | N29° 28' 44"E | 486427.70, 826171.52 | 486447.09, 826182.49

L137 | 3.00 | N60° 31' 16"W | 486426.22, 826174.13 | 486427.70, 826171.52

L138 | 3.00 | N60° 31' 16"W | 486445.61, 826185.10 | 486447.09, 826182.49

L139 | 2.50 | S46° 59' 20"E | 486505.44, 826146.46 | 486503.74, 826148.29

L140 | 18.00 | N43° 00' 38"E | 486503.74, 826148.29 | 486516.90, 826160.57

L141 | 2.50 | S46° 59' 20"E | 486512.75, 826153.28 | 486511.05, 826155.11

L142 | 2.50 | S46° 59' 20"E | 486518.60, 826158.74 | 486516.90, 826160.57 L143 | 7.26 | S46° 59' 20"E | 486510.32, 826154.43 | 486505.36, 826159.74

L144 | 7.26 | S46° 59' 20"E | 486504.47, 826148.97 | 486499.51, 826154.28

L145 | 8.00 | S43° 00' 40"W | 486505.36, 826159.74 | 486499.51, 826154.28 L146 | 10.00 | N43° 00° 40"E | 486498.61, 826153.78 | 486505.92, 826160.60

L147 | 6.40 | N46° 59' 20"W | 486500.99, 826164.42 | 486505.36, 826159.74

L148 | 6.40 | N46° 59' 20"W | 486495.80, 826159.58 | 486500.17, 826154.89

L149 | 10.00 | S43° 00' 40"W | 486501.73, 826165.10 | 486494.41, 826158.28

START POINT (N, E)

END POINT (N, E)

L180 | 5.58 | S73° 00' 40"W | 486502.51, 826200.62 | 486500.88, 826195.29 |

L181 | 6.00 | N16° 59' 20"W | 486502.65, 826191.96 | 486508.38, 826190.21

L182 | 6.52 | N43° 00' 40"E | 486509.85, 826190.55 | 486514.62, 826195.00 |

L183 | 6.00 | S16° 59' 20"E | 486516.32, 826206.56 | 486510.58, 826208.31

L184 | 4.02 | S16° 59' 20"E | 486519.72, 826203.95 | 486515.88, 826205.12

Line # | Length | Direction

	Line Table					
Line #	Length	Direction	START POINT (N, E)	END POINT (N, E)		
L44	1.50	S73° 00' 40"W	486413.10, 826103.85	486412.66, 826102.42		
L45	1.50	N73° 00' 40"E	486416.01, 826101.40	486416.44, 826102.83		
L46	4.00	S73° 00' 40"W	486416.01, 826101.40	486414.84, 826097.57		
L47	4.00	N16° 59' 20"W	486411.01, 826098.74	486414.84, 826097.57		
L49	2.00	S73° 00' 40"W	486414.84, 826097.57	486414.25, 826095.66		
L50	6.00	S73° 00' 40"W	486417.92, 826100.81	486416.17, 826095.07		
L51	2.00	N16° 59' 20"W	486414.25, 826095.66	486416.17, 826095.07		
L52	1.50	S73° 00' 40"W	486414.25, 826095.66	486413.81, 826094.22		
L53	1.50	S73° 00' 40"W	486410.91, 826096.68	486410.47, 826095.24		
L54	2.00	S73° 00' 40"W	486411.97, 826098.45	486411.38, 826096.53		
L55	11.48	S73° 00' 40"W	486409.80, 826115.29	486406.44, 826104.32		
L56	4.09	S73° 00' 40"W	486410.99, 826119.20	486409.80, 826115.29		
L57	17.23	N16° 59' 20"W	486410.99, 826119.20	486427.47, 826114.17		
L58	23.30	N16° 59' 20"W	486410.81, 826111.76	486433.09, 826104.95		
L59	23.30	N16° 59' 20"W	486410.22, 826109.85	486432.51, 826103.04		
L60	3.70	N73° 00' 40"E	486434.27, 826101.94	486435.35, 826105.48		
L61	1.92	N73° 00' 40"E	486435.35, 826105.48	486435.91, 826107.32		
L62	6.07	N16° 59' 20"W	486430.10, 826109.09	486435.91, 826107.32		
L63	2.00	N16° 59' 20"W	486433.43, 826106.06	486435.35, 826105.48		
L64	2.00	N73° 00' 40"E	486432.51, 826103.04	486433.09, 826104.95		
L65	10.16	N73° 00' 40"E	486426.77, 826111.87	486429.74, 826121.59		
L66	11.84	N73° 00' 40"E	486430.10, 826109.09	486433.56, 826120.42		
L67	9.00	S16° 59' 20"E	486434.47, 826119.96	486425.86, 826122.59		
L68	6.73	N16° 59' 20"W	486427.12, 826122.39	486433.56, 826120.42		
L69	7.76	S73° 00' 40"W	486429.39, 826129.81	486427.12, 826122.39		
L70	7.88	N14° 15' 28"E	486429.39, 826129.81	486437.03, 826131.75		
L71	11.84	N73° 00' 40"E	486433.56, 826120.42	486437.03, 826131.75		
L72	5.44	N16° 59' 20"W	486437.98, 826131.45	486443.18, 826129.86		
L73	3.08	N73° 00' 40"E	486443.18, 826129.86	486444.08, 826132.81		
L74	2.00	N73° 00' 40"E	486444.08, 826132.81	486444.67, 826134.73		
L75	24.42	N16° 59' 20"W	486420.73, 826139.95	486444.08, 826132.81		
L76	9.11	S73° 00' 40"W	486422.41, 826145.46	486419.75, 826136.76		
L77	3.25	N16° 59' 20"W	486416.64, 826137.71	486419.75, 826136.76		
L78	14.50	N16° 59' 20"W	486415.52, 826134.04	486429.39, 826129.81		
L79	3.83	S73° 00' 40"W	486416.64, 826137.71	486415.52, 826134.04		

L65	10.16	N73° 00' 40"E	486426.77, 826111.87	486429.74, 826121.59
L66	11.84	N73° 00' 40"E	486430.10, 826109.09	486433.56, 826120.42
L67	9.00	S16° 59' 20"E	486434.47, 826119.96	486425.86, 826122.59
L68	6.73	N16* 59' 20"W	486427.12, 826122.39	486433.56, 826120.42
L69	7.76	S73° 00' 40"W	486429.39, 826129.81	486427.12, 826122.39
L70	7.88	N14° 15' 28"E	486429.39, 826129.81	486437.03, 826131.75
L71	11.84	N73° 00' 40"E	486433.56, 826120.42	486437.03, 826131.75
L72	5.44	N16° 59' 20"W	486437.98, 826131.45	486443.18, 826129.86
L73	3.08	N73° 00' 40"E	486443.18, 826129.86	486444.08, 826132.81
L74	2.00	N73° 00' 40"E	486444.08, 826132.81	486444.67, 826134.73
L75	24.42	N16° 59' 20"W	486420.73, 826139.95	486444.08, 826132.81
L76	9.11	S73° 00' 40"W	486422.41, 826145.46	486419.75, 826136.76
L77	3.25	N16° 59' 20"W	486416.64, 826137.71	486419.75, 826136.76
L78	14.50	N16° 59' 20"W	486415.52, 826134.04	486429.39, 826129.81
L79	3.83	S73° 00' 40"W	486416.64, 826137.71	486415.52, 826134.04
Line #	Length	Direction	Line Table START POINT (N, E)	END POINT (N, E)
Line #	_	Direction	· · · · · · · · · · · · · · · · · · ·	
L150	1.50	N46° 59' 20"W	486493.39, 826159.38	486494.41, 826158.28
L151	10.00	S43° 00' 40"W	486500.70, 826166.20	486493.39, 826159.38
L152	1.50	N46° 59' 20"W	486500.70, 826166.20	486501.73, 826165.10
L153	18.06	S46' 59' 20"E	486499.97, 826165.52	486487.65, 826178.72
L154	6.86	S43° 00' 40"W	486500.73, 826174.77	486495.71, 826170.09
L155	12.61	S46° 59' 20"E	486500.73, 826174.77	486492.13, 826183.99
L156	4.29	N1° 59' 20"W	486487.84, 826184.14	486492.13, 826183.99
L157	12.00	N88° 00' 40"E	486487.65, 826178.72	486488.07, 826190.71
L158	9.83	S60° 31' 16"E	486487.04, 826194.92	486482.20, 826203.48
L159	9.27	S60° 31' 16"E	486479.80, 826191.48	486475.24, 826199.55
L160	13.92	N88° 00' 40"E	486479.57, 826176.51	486480.06, 826190.42
L161	20.54	S46* 59' 20"E	486494.12, 826160.06	486480.11, 826175.08
L162	18.00	N29° 28' 44"E	486474.37, 826199.05	486490.04, 826207.91
L163	2.00	S60° 31' 16"E	486474.37, 826199.05	486473.38, 826200.79
L164	2.00	S60° 31' 16"E	486490.04, 826207.91	486489.05, 826209.65
L165	2.00	S60° 31' 16"E	486483.07, 826203.97	486482.09, 826205.72
L166	8.00	N43° 00' 40"E	486535.58, 826184.56	486541.43, 826190.01
L167	11.00	S47° 30' 02"E	486541.77, 826199.91	486534.34, 826208.02
L168	6.56	S47° 30' 02"E	486534.27, 826195.93	486529.84, 826200.76
L169	3.58	N43° 00' 40"E	486531.60, 826192.08	486534.21, 826194.52
L170	6.56	N47° 03' 53"W	486525.72, 826196.93	486530.18, 826192.13
L171	3.63	S43° 00' 40"W	486528.42, 826200.82	486525.77, 826198.35
L172	6.72	N47° 03' 53"W	486521.11, 826189.82	486525.68, 826184.90
L173	5.39	N43° 00' 40"E	486514.34, 826186.25	486518.28, 826189.92
L174	3.25	N40° 11' 42"W	486515.02, 826185.52	486517.50, 826183.42
L175	2.86	N38° 12' 17"E	486521.65, 826183.58	486523.90, 826185.35
L176	8.00	N16° 59' 20"W	486499.87, 826187.01	486507.52, 826184.67
L177	8.00	S73° 00' 40"W	486497.56, 826203.40	486495.22, 826195.75
L178	4.02	S16° 59' 20"E	486510.14, 826206.88	486506.30, 826208.05
L179	7.96	S16° 59' 20"E	486513.45, 826200.06	486505.83, 826202.39

	I	Τ	Line Table	
Line #	Length	Direction	START POINT (N, E)	END POINT (N, E)
L80	24.42	N16° 59' 20"W	486421.31, 826141.86	486444.67, 826134.
L81	10.25	N16° 59' 20"W	486444.67, 826134.73	486454.47, 826131.
L82	12.56	N16° 59' 20"W	486444.08, 826132.81	486456.09, 826129.
L83	20.28	N43° 00' 40"E	486456.09, 826129.15	486470.92, 826142.
L84	19.70	N43° 00' 40"E	486454.47, 826131.73	486468.88, 826145.
L85	10.04	S73° 00' 40"W	486419.58, 826147.31	486416.64, 826137.
L86	32.21	N29° 28' 44"E	486419.58, 826147.31	486447.61, 826163.
L87	5.50	N46° 59' 20"W	486460.14, 826159.01	486463.89, 826154.
L88	4.09	N46° 59' 20"W	486458.91, 826155.92	486461.70, 826152.
L89	4.29	N46° 59' 20"W	486461.70, 826152.94	486464.62, 826149.
L90	7.50	N46° 59' 20"W	486458.04, 826153.92	486463.16, 826148.
L91	26.56	N29° 28' 44"E	486424.09, 826144.12	486447.21, 826157.
L92	28.60	N29° 28' 44"E	486422.41, 826145.46	486447.31, 826159.
L93	2.97	S73° 00' 40"W	486424.09, 826144.12	486423.23, 826141.
L94	6.00	N43° 00' 40"E	486461.70, 826152.94	486466.09, 826157.
L95	13.57	S46° 59' 20"E	486475.35, 826147.10	486466.09, 826157.
L96	2.00	N43° 00' 40"E	486463.16, 826148.44	486464.62, 826149.
L97	6.29	S46° 59' 20"E	486467.45, 826143.84	486463.16, 826148.
L98	3.00	N46° 59' 20"W	486468.88, 826145.17	486470.92, 826142.
L99	6.05	N43° 00' 40"E	486470.92, 826142.98	486475.35, 826147.
L100	7.50	S46° 59' 20"E	486468.15, 826130.13	486463.03, 826135
L101	7.50	S46° 59' 20"E	486473.27, 826134.91	486468.15, 826140
L102	3.00	S46° 59' 20"E	486476.04, 826133.40	486474.00, 826135
L103	16.00	N43° 00' 40"E	486462.30, 826124.68	486474.00, 826135
L104	3.00	S46° 59' 20"E	486464.34, 826122.48	486462.30, 826124
L105	16.00	N43° 00' 40"E	486464.34, 826122.48	486476.04, 826133
L106	7.50	S46° 59' 20"E	486475.31, 826122.46	486470.19, 826127.
L107	7.50	S46° 59' 20"E	486480.43, 826127.23	486475.31, 826132.
L108	3.00	S46° 59' 20"E	486483.21, 826125.72	486481.16, 826127.
L109	18.00	N43° 00' 40"E	486468.00, 826115.63	486481.16, 826127.
L110	3.00	S46° 59' 20"E	486476.63, 826119.58	486474.58, 826121.
L111	3.00	S46° 59' 20"E	486470.04, 826113.44	486468.00, 826115.
L112	10.00	N43° 00' 40"E	486415.41, 826066.57	486422.72, 826073
L113	3.00	N46° 59' 20"W	486415.41, 826066.57	486417.45, 826064.
L114	3.00	N46° 59' 20"W	486422.72, 826073.39	486424.77, 826071.

			Line Table	
Line #	Length	Direction	START POINT (N, E)	END POINT (N, E)
L185	6.47	S43° 00' 40"W	486524.45, 826208.36	486519.72, 826203.9
L186	3.12	S14° 56' 02"E	486508.30, 826208.48	486505.28, 826209.2
L187	2.23	S16° 59' 20"E	486510.43, 826207.83	486508.30, 826208.4
L188	2.50	N73° 00' 40"E	486510.14, 826206.88	486510.87, 826209.2
L189	2.50	N73° 00' 40"E	486515.88, 826205.12	486516.61, 826207.5
L190	3.44	S16° 59' 20"E	486519.46, 826205.07	486516.17, 826206.0
L191	4.77	N43° 00' 40"E	486519.46, 826205.07	486522.95, 826208.3
L192	9.65	N46° 59' 20"W	486516.36, 826215.39	486522.95, 826208.
L193	3.12	N43° 00' 40"E	486522.95, 826208.33	486525.23, 826210.
L194	12.11	N46° 59' 20"W	486516.97, 826219.31	486525.23, 826210.4
L195	3.97	N81° 14' 42"E	486516.36, 826215.39	486516.97, 826219
L196	11.97	N29° 28' 44"E	486506.54, 826213.42	486516.97, 826219
L197	8.27	N29° 28' 44"E	486509.16, 826211.32	486516.36, 826215
L198	3.36	S38° 45' 18"E	486509.16, 826211.32	486506.54, 826213.
L199	4.32	N73° 00' 40"E	486505.28, 826209.29	486506.54, 826213.
L200	2.96	N73° 00' 40"E	486508.30, 826208.48	486509.16, 826211
L201	0.88	N50° 13' 32"W	486550.69, 826238.26	486551.25, 826237.5
L202	0.78	S11° 31' 09"E	486572.27, 826222.25	486571.51, 826222.4
L203	7.38	S63° 38' 28"E	486569.95, 826231.73	486566.67, 826238
L205	6.00	S16° 59' 20"E	486516.61, 826207.51	486510.87, 826209.3
L206	2.67	S46° 59' 20"E	486393.04, 826044.34	486391.22, 826046.3
L207	10.00	N43° 00' 40"E	486385.73, 826037.52	486393.04, 826044
L208	12.69	N49° 46' 46"W	486377.53, 826047.21	486385.73, 826037.5
L209	1.97	S40° 13' 14"W	486379.04, 826048.49	486377.53, 826047.2
L210	2.35	S40° 13' 14"W	486376.09, 826052.54	486374.30, 826051.0
L211	2.02	N16° 59' 20"W	486372.70, 826066.70	486374.63, 826066.
L212	8.00	S49° 46' 46"E	486374.30, 826051.03	486369.13, 826057.

	CURVE TABLE						
CURVE	DELTA	ARC LEN	RADIUS	BEARING	CHORD LEN	START NORTHING, EASTING END NORTHING, EASTING	
C5	166*28'06"	53.02	18.25	N53°45'19"W	36.25	N: 486568.654, E: 826254.650 N: 486590.084, E: 826225.41	
C7	6*12'23"	4.01	37.00	N82°04'19"W	4.01	N: 486372.892, E: 826081.792 N: 486373.445, E: 826077.82	
C9	97°15'23"	59.41	35.00	N72°01'42"W	52.53	N: 486350.541, E: 826106.828 N: 486366.749, E: 826056.86	
C10	48*41'54"	13.60	16.00	S18*19'43"E	13.19	N: 486460.138, E: 826159.008 N: 486447.614, E: 826163.15	
C11	31°14'54"	11.45	21.00	S16°45'42"E	11.31	N: 486458.043, E: 826153.924 N: 486447.212, E: 826157.18	
C12	37*18'17"	12.37	19.00	S17*17'27"E	12.15	N: 486458.911, E: 826155.925 N: 486447.307, E: 826159.53	
C13	359*55'44"	36.50	5.81	S61°19'29"W	0.01	N: 486453.364, E: 826177.711 N: 486453.361, E: 826177.70	
C14	52*00'48"	14.52	16.00	N66'19'08"W	14.03	N: 486377.110, E: 826122.733 N: 486382.746, E: 826109.88	
C15	10°48'47"	6.76	35.83	N29°15'23"W	6.75	N: 486351.129, E: 826107.480 N: 486357.021, E: 826104.18	
C16	31°28'03"	4.39	8.00	N76°15'18"W	4.34	N: 486487.039, E: 826194.925 N: 486488.070, E: 826190.710	
C17	31°28'03"	1.10	2.00	N76°15'18"W	1.08	N: 486479.798, E: 826191.478 N: 486480.055, E: 826190.42	
C18	45°00'00"	1.57	2.00	S69°29'20"E	1.53	N: 486480.109, E: 826175.081 N: 486479.572, E: 826176.51	
C19	90°00'00"	11.00	7.00	S1°59'20"E	9.90	N: 486535.578, E: 826184.556 N: 486525.685, E: 826184.90	
C20	90°00'00"	11.00	7.00	S88°00'40"W	9.90	N: 486541.772, E: 826199.907 N: 486541.428, E: 826190.01	
C21	90°00'00"	11.00	7.00	N1*59'20"W	9.90	N: 486524.448, E: 826208.359 N: 486534.342, E: 826208.010	
C22	89*29'18"	1.56	1.00	S87°45'19"W	1.41	N: 486534.267, E: 826195.930 N: 486534.212, E: 826194.52	
C23	90°04'34"	1.57	1.00	S2*01'36"E	1.42	N: 486531.596, E: 826192.083 N: 486530.182, E: 826192.13.	
C24	89*55'26"	1.57	1.00	N87°58'24"E	1.41	N: 486525.716, E: 826196.934 N: 486525.766, E: 826198.34	
C25	90°30'42"	1.58	1.00	N2*14'41"W	1.42	N: 486528.417, E: 826200.820 N: 486529.837, E: 826200.76	
C26	90°04'34"	3.14	2.00	N2°01'36"W	2.83	N: 486518.277, E: 826189.922 N: 486521.105, E: 826189.82	
C27	66*12'40"	3.47	3.00	S7°05'22"E	3.28	N: 486520.754, E: 826183.017 N: 486517.502, E: 826183.42	
C28	60°00'00"	7.33	7.00	S13°00'40"W	7.00	N: 486514.339, E: 826186.249 N: 486507.518, E: 826184.67	
C29	90°00'00"	11.00	7.00	S61°59'20"E	9.90	N: 486499.869, E: 826187.010 N: 486495.220, E: 826195.75	
C30	90°00'00"	11.00	7.00	N28°00'40"E	9.90	N: 486497.557, E: 826203.401 N: 486506.297, E: 826208.05	
C31	90°00'00"	4.18	2.66	N28°00'40"E	3.76	N: 486502.511, E: 826200.622 N: 486505.832, E: 826202.38	
C32	90°00'00"	4.18	2.66	S61°59'20"E	3.76	N: 486502.648, E: 826191.964 N: 486500.881, E: 826195.28	
C33	60°00'00"	1.57	1.50	S13°00'40"W	1.50	N: 486509.845, E: 826190.549 N: 486508.384, E: 826190.21	
C34	120°00'00"	6.28	3.00	N76°59'20"W	5.20	N: 486513.446, E: 826200.062 N: 486514.616, E: 826195.000	
C35	213'20'42"	66.39	17.83	S36°11'23"E	34.16	N: 486574.374, E: 826218.534 N: 486546.804, E: 826238.70	
C36	97*59'53"	4.84	2.83	N60°31'05"W	4.27	N: 486572.272, E: 826222.253 N: 486574.374, E: 826218.53	
C37	87°21'48"	4.32	2.83	N6°32'38"W	3.91	N: 486546.804, E: 826238.705 N: 486550.687, E: 826238.25	
C38	5*21'24"	4.67	50.00	N41°30'15"E	4.67	N: 486547.114, E: 826235.248 N: 486550.614, E: 826238.34	
C39	217°07'35"	56.84	15.00	S27°15'16"E	28.44	N: 486572.396, E: 826222.224 N: 486547.114, E: 826235.24	
C40	214'00'18"	48.56	13.00	S28'48'54"E	24.86	N: 486570.293, E: 826221.830 N: 486548.508, E: 826233.81	
			t	i e	1		

	CURVE TABLE							
CURVE	DELTA	ARC LEN	RADIUS	BEARING	CHORD LEN	START NORTHING, EASTING	END NORTHING, EASTING	
C42	185°10'14"	30.70	9.50	N86°23'17"W	18.98	N: 486576.780, E: 826247.111	N: 486577.976, E: 826228.168	
C43	37*59'07"	31.82	48.00	N25'11'24"E	31.24	N: 486548.508, E: 826233.814	N: 486576.780, E: 826247.111	
C44	92°48'39"	2.43	1.50	S17°14'08"E	2.17	N: 486572.026, E: 826231.084	N: 486569.951, E: 826231.728	
C45	28'08'35"	6.14	12.50	N15°05'54"E	6.08	N: 486572.026, E: 826231.084	N: 486577.895, E: 826232.668	
C46	185'10'14"	16.16	5.00	N86'23'17"W	9.99	N: 486577.266, E: 826242.638	N: 486577.895, E: 826232.668	
C47	13*11'36"	10.02	43.50	N12*47'38"E	9.99	N: 486567.519, E: 826240.424	N: 486577.266, E: 826242.638	
C48	96*58'07"	2.54	1.50	N67*52'29"E	2.25	N: 486566.673, E: 826238.343	N: 486567.519, E: 826240.424	
C49	359'40'56"	21.72	3.46	N4°43'35"W	0.02	N: 486557.274, E: 826221.044	N: 486557.293, E: 826221.042	
C50	164*52'42"	7.19	2.50	N75°18'05"E	4.96	N: 486586.047, E: 826232.943	N: 486587.305, E: 826237.737	
C51	170*56'38"	4.48	1.50	N75°18'05"E	2.99	N: 486586.500, E: 826233.840	N: 486587.259, E: 826236.733	
C52	49°22'04"	12.77	14.82	S10°12'28"E	12.38	N: 486391.219, E: 826046.291	N: 486379.037, E: 826048.485	
C53	58°20'04"	14.25	14.00	S83°49'57"E	13.65	N: 486376.093, E: 826052.544	N: 486374.627, E: 826066.111	
C54	15*51'18"	10.24	37.00	S69°33'59"W	10.21	N: 486372.698, E: 826066.701	N: 486369.135, E: 826057.137	

N: 486570.290, E: 826221.816 N: 486577.976, E: 826228.168

10.76 | 8.00 | N39°34'32"E | 9.97

# NOTE:

COORDINATE VALUES SHOWN ARE INTENDED FOR HORIZONTAL POSITIONING AND DIMENSION CLARIFICATION ONLY. ALL POINTS SET IN THE FIELD FROM THESE VALUES SHALL FIRST BE CHECKED BY THE CONTRACTOR TO ENSURE THAT THE LOCATION IS CONSISTENT WITH THE DIMENSIONS AND GRAPHIC LOCATIONS SHOWN ON THE APPROVED CONSTRUCTION PLANS. IN THE CASE OF A DISCREPANCY WITH ANY COORDINATE VALUE SHOWN, THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE CITY PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY THAT MAY BE AFFECTED.

ALL COORDINATES SHOWN AT THE BOTTOM OF ALL BANKS/ TRANSITIONS ARE LOCATED AT THE POINT OF TANGENCY NOT AT THE KEY JOINT. THESE COORDINATES VALUES MUST BE OFFSET 1'-0" AWAY FROM THE BANK/ TRANSITION TO DETERMINE THE LOCATION OF THE KEY JOINT.

BECAUSE OF THE SCALE OF THIS DRAWING AND PROXIMITY OF FEATURES TO EACH OTHER, THE LOCATION OF SOME OR THE POINTS MAY BE OBSCURED. REFER TO THE LAYOUT DATA FOR THE ACTUAL LOCATIONS FOR ALL POINTS.

\* CONTRACTOR RESPONSIBLE FOR SURVEY WORK

CENTRAL PARK - SKATE PARK PROJECT NO. 53W1785

SHEET NO. *SP-2.2* 

SKATE PARK - LAYOUT TABLES

CENTRAL PARK-SKATE PARK

CITY OF MADISON

226 Causeway Street Boston, MA 02114 Tel. 617.523.8103 Fax. 617.523.4333 www.stantec.com





SHEET NO. CENTRAL PARK - SKATE PARK **GRADING & DRAINAGE SHEET NOTE MASTER** PROJECT NO. 53W1785 SP-3.1 **NOTES:** 1. FINAL HEIGHT AND SHAPE OF EXCAVATION TO BE VERIFIED BY SKATE PARK ARCHITECT IN THE FIELD. SKATE PARK - GRADING & DRAINAGE PLAN 2. ALL SPOT ELEVATIONS ARE FOR TOP OF FINISH WORK UNLESS OTHERWISE NOTED. CONTRACTOR TO VERIFY FEATURE ELEVATIONS WITH SECTIONS. IF A DISCREPANCY 3. MINIMUM SLOPE FOR ALL CONCRETE FINISH WORK SHALL BE 1%. WATER MUST DRAIN TOWARDS CENTRAL PARK-OCCURS, CONTRACTOR SHALL CONTACT SKATE PARK DESIGNER IMMEDIATELY. DIRECTION OF FLOW ARROWS AND FOLLOW OVERALL DESIGN INTENT. SKATE PARK CITY OF MADISON 4. All AREAS DISTURBED BY GRADING OPERATIONS TO BE FINE GRADED. REFER TO CIVIL PLANS FOR FINISH GRADE ELEVATIONS BEYOND SKATE PARK. 5. VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK. REFER TO SECTIONS FOR HEIGHTS OF SKATE PARK FEATURES 6. REFER TO SECTIONS AND PROFILES FOR HEIGHT, RADII AND PROFILES. 226 Causeway Street 7. ALL FINE GRADING OF EARTHWORK SHALL BE INSPECTED WITH TEMPLATES CUT TO THE SPECIFIED Boston, MA 02114 RADII/ ANGLE. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL TEMPLATES/ SCREEDS TO BE USED FOR EARTHWORK TOLERANCES FOR APPROVAL BY SKATE PARK ARCHITECT. Tel. 617.523.8103 Fax. 617.523.4333 8. CONTRACTOR TO PROTECT ALL EXCAVATIONS FROM SOIL EROSION AND WATER SATURATION AT ALL TIMES USING APPROPRIATE CONSTRUCTION METHODS. AND LOSS OF SOIL PROFILE DURING www.stantec.com CONSTRUCTION SHALL BE REPLACED WITH APPROPRIATE SOIL COMPOSITION AND COMPACTION METHODS TO MATCH LOSS SOIL. 9. THE DRAINS IN THE SKATE PARK HAVE PERFORATIONS IN THE PORTION BELOW THE CONCRETE DECK **GRADING LEGEND** TO AVOID ANY HYDRO-STATIC LIFT POTENTIAL **SURVEY NOTES** SYMBOL DESCRIPTION 1. LOCATE ALL SURVEY MARKS INCLUDING BENCH MARKS AND PROPERTY LINES IN ORDER THAT THE EXACT LINES OF CONSTRUCTION LIMITS AND GRADES MAY BE DETERMINED. BRING ANY DRAIN INLET  $\Phi$ DISCREPANCIES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY BEFORE PROCEEDING WITH WORK. 852.00 2. VERIFY ENTIRE LAYOUT PRIOR TO START OF CONSTRUCTION WITH PROJECT OWNER'S DIRECTION OF FLOW REPRESENTATIVES AND SKATE PARK ARCHITECT. 853.00 LOCATE AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK AND PROTECT ALL PERMANENT REFERENCE POINTS DURING ENTIRE CONSTRUCTION. REPLACE PROJECT CONTROL F.L. FLOWLINE POINTS WHICH MAY BE LOST OR DESTROYED DURING CONSTRUCTION. <sup>-854</sup>.00-4. CONTRACTOR SHALL VERIFY FINISH GRADE ELEVATIONS AS SHOWN ON CIVIL ENGINEER'S PLANS AND RIM ELEVATION R.E. BRING ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE IMMEDIATELY BEFORE PROCEEDING <sup>-855.0</sup>Ø-855.40 FG FINISH GRADE HP HIGH POINT FG 856.50 855.40 855.20 B.G. - BREAK IN GRADE RE 855.50 HP 856.67 F.L. - FLOWLINE OF SWALE 855.4Ô FG 856.50 855.60 🖈 **BLEND ZONE** 855.55 **TOW** TOP OF RETAINING WALL ELEVATION BASED ON A +000.00 ELEVATION AT 855.55/ ADJACENT SITE GRADE. 855.40 853.95 854.05 854.10 T RADIUS OF WALL. REFER TO SECTION FG 855.70 SHEETS FOR PROFILE VIEW. TOW 857,00 855.65<sup>^</sup> 855.75 854.20× 854.05× BANK-EMBANKMENT WALL WITH SLOPE 856.90 853.90 AND RADII AT BASE. REFER TO SECTION 854.15 SHEETS FOR PROFILE VIEW. 857.00 × 854.35 857.00<sup>^</sup> RE 855.50 TOW 857.00 853.70 7T RE 850.92 859.10 854.2Ô 857.10 854.00× ×854.25 7T ×857.10 857.00× 7T × 853.90 &C/ 854.20° BG 4.5T 5.5T 854.25 853.00 × 854.00 852.00 854.1Õ <sup>854.10</sup> 854.05 857.10 RE 849.92 × 858.60 TOW 857,00 857.10 5.5T 853.90 857.10 857.00 854.00 857.00 857.10 853.90 854.00 856.90 853.80 857.00× TOW 857.00 854.00 TOW 857.00 853.00 852.00 -853.00#851<sub>.00</sub> **--852.00**-851.00 MICHAEL R. McINTYRE 508-014 219 S Few St  $0 \times 09 - 131 - 2307 - 5$ 

FILE NAME:

SHEET NO. SP-4.1

SKATE PARK - KEY MAP-SECTIONS/ PROFILES

CENTRAL PARK-SKATE PARK

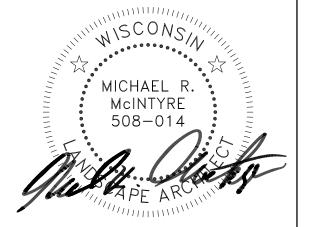
CITY OF MADISON

### SECTION GENERAL NOTES:

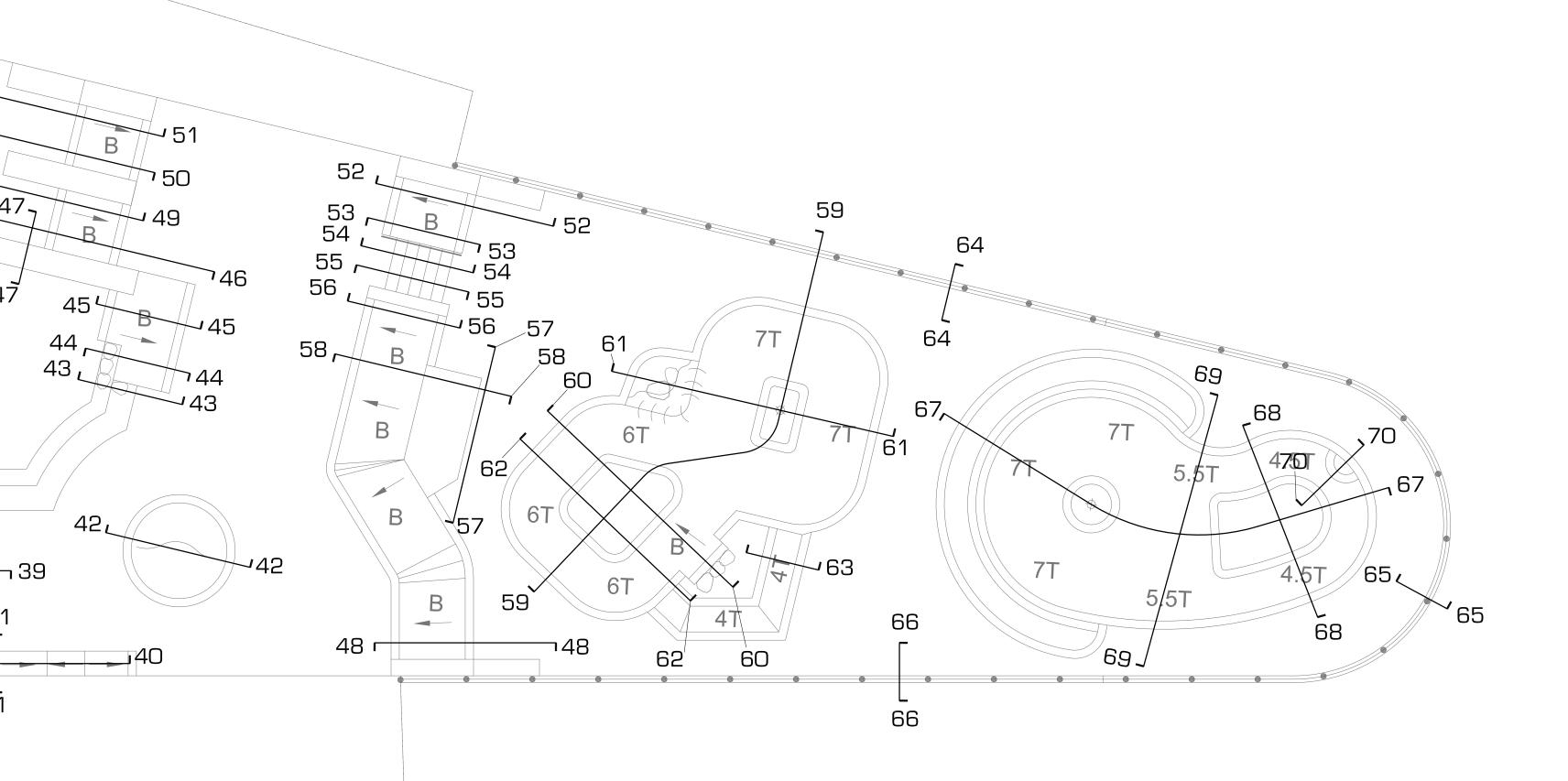
- ALL SECTION DIMENSIONS ARE TOP OF CONCRETE FINISH GRADE UNLESS OTHERWISE NOTED.
- 2. DO NOT INCLUDE METAL FABRICATION OFFSET TO OVERALL DIMENSIONS SHOWN IN SECTIONS AND PROFILES.
- 3. REFER TO SKATEPARK LAYOUT PLAN SHEETS: SP-2.1/ SP-2.2 FOR ACTUAL HORIZONTAL LOCATIONS.
- 4. FINAL GRADE EARTHWORK AND FORMWORK TO BE REVIEWED AND APPROVED BY STANTEC. STANTEC RESERVES THE RIGHT TO MAKE FIELD ADJUSTMENTS AS NECESSARY TO FULFILL THE DESIGN INTENT.
- 5. ALL DIMENSIONS AT BOTTOM OF BOWLS, EMBANKMENTS, AND TRANSITIONS ARE LOCATED AT THE COLD JOINT.
- 6. DUE TO THE UNIQUE AND SCULPTURAL ASPECTS OF THE SKATEPARK THE LOCATION OF THE DIMENSIONS IN THE SECTIONS NEED TO BE CROSS REFERENCED BY THE SKATEPARK LAYOUT PLAN SHEETS: SP-2.1/ SP-2.2.
- 7. CONTRACTOR SHALL HAVE EXTENSIVE KNOWLEDGE AND EXPERIENCE OF SKATEPARK CONSTRUCTION AND/ OR FREEFORM PRECISION CONCRETE FORMING, APPLICATION AND FINISHING TO PROPERLY INTERPRET SECTIONS/ PROFILES.
- 8. METAL FABRICATION REFER TO MATERIALS PLAN METALS AND DETAILS SHEETS FOR TYPE AND LOCATION.

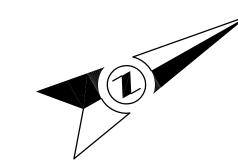
226 Causeway Street Boston, MA 02114 Tel. 617.523.8103 Fax. 617.523.4333 www.stantec.com











- KEY MAP-(REFER TO SP-4.2 - SP-4.10 FOR SECTIONS/ PROFILES)

36 🗸

35 ┌

0" 6' 12' SCALE 3/32" = 1'-0"

FILE NAME:

