

**DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242**

ADDENDUM NO. 1 TO PROJECT NO. 45545

**CONSTRUCTION WORK
RELOCATE STATE POLICE EXHIBIT
NEW YORK STATE FAIRGROUNDS
581 STATE FAIR BOULEVARD
SYRACUSE, NY 13209**

February 16, 2017

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

CONSTRUCTION SPECIFICATIONS

1. SECTION 073129 – WOOD SHINGLES: ADD to the Construction Specifications the Section (pages 073129-1 thru 073129-2) that accompanies this Addendum and modify the Table of Contents accordingly.
2. SECTION 076000 – FLASHING AND TRIM: ADD to the Construction Specifications the Section (pages 076000-1 thru 076000-4) that accompanies this Addendum and modify the Table of Contents accordingly.
3. SECTION 082200 – FIBERGLASS DOORS AND FRAMES: ADD to the Construction Specifications the Section (pages 082200-1 thru 082200-5) that accompanies this Addendum and modify the Table of Contents accordingly.
4. SECTION 087100 – FINISH HARDWARE:
 - a. Part 2.04; Add Hardware Group 2:
Group 2: Doors 201A and 201B
 1. Continuous Hinge: 1ea Markar FM300
 2. Mortise Lockset: 1 ea. Best 45H R M 15 VM 630
 3. Cylinder compatible with the provided lockset and the facility's keying system.
 4. Closer: 1 ea. LCN 4211 x 3077EDA x SRI
 5. Threshold: 1 ea. Zero 655A
 6. Weather Seal: 1 set ea. DHSI 105 Cush 'N' Seal
5. SECTION 088400 – PLASTIC GLAZING: ADD to the Construction Specifications the Section (pages 088400-1 thru 088400-2) that accompanies this Addendum and modify the Table of Contents accordingly.

6. SECTION 262416 – PANELBOARDS: ADD to the Construction Specifications the Section (pages 262416-1 thru 262416-4) that accompanies this Addendum and modify the Table of Contents accordingly.

CONSTRUCTION DRAWINGS

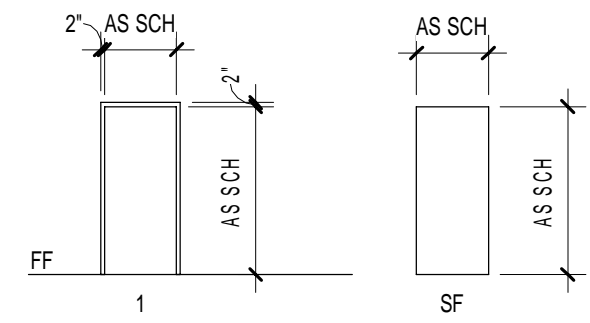
1. REVISED DRAWINGS:
 - a. Drawing C-301 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
 - b. Drawing C-501 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
 - c. Drawing L-201 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
 - d. Drawing L-301 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
 - e. Drawing E-101 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
 - f. Drawing ES-101 noted “2/16/2017 Addendum #1” accompanies this addendum and replaces the same numbered drawing originally issued.
2. DRAWING A-101, LOG CABIN FLOOR PLANS AND DETAILS:
 - a. Add General Note: “At removed mural patch, prime, and paint all surfaces to a level 4 finish. Assume 350 square feet of wall area at outer wall of loft area.”
3. DRAWING A-103, KENNEL PLAN, EXTERIOR ELEVATIONS, AND DETAILS: Add to the Construction Drawings the drawing noted “2/16/17 Addendum #1” that accompanies this Addendum and modify the Cover Sheet accordingly.
4. DRAWING A-203, SCUBA DIVE TANK, DETAIL B - NOTES: Add the following:
 - a. Tank Specification:
 1. 20 foot long by 8 feet deep and 12 feet high dive tank.
 2. Frame to be 304 stainless steel frame tig welded with full penetration required, stainless steel thickness engineered.
 3. Maximum of 3 acrylic windows in the front at least 6 feet wide by 12 feet high and two side windows minimum 6 feet wide by 12 feet high.
 4. Structure to be epoxy coated with FDA primer and FDA top coat. Frame to be sand blasted prior to paint and a surface inspection test and report must be shown on 8 places before painting.
 5. The tank must have a ladder suitable for entry and exit for a diver with all his gear.
 6. The tank must have emergency drains for quick water removal in-case of diver distress.
 7. Tank must have UL rated heaters with a controller.
 8. Tank must use acrylic windows with thickness suitable for 12 feet depth with minimal deflection.
 9. Tank must have a suitable water filtration system to insure no bacteria or foreign material will be in the water. Water must be kept clear during diver show.
 10. Tank must have lifting hooks and must be able to withstand the forces of crane lifting and freight delivery without damaging the seal of the acrylic windows.
 11. Tank must have a complete owners' manual describing operation and winterizing procedures.
 12. A qualified representative must be present during installation and must train a local person on the proper operation.
 13. The manufacturer must supply free phone technical support.

14. The manufacturer must be able to provide a technician for emergency breakdowns within 48 hours.
 15. The manufacturer must supply a scratch removal kit for acrylic.
 16. A modular filtration rack and the tank must be manufactured by a company with a minimum of 15 years of experience, licensed and insured to 1 million dollars.
 17. Minimum of three examples must be provided for similar products. Tank must have a 5 year guarantee on workmanship.
 18. Tank must be delivered and set up by the manufacturer, not a separate vender.
 19. Manufacturer must insure delivery against damage.
 20. Basis of Design Manufacturer: SeaVisions of South Florida Corporation; Gerry Calabrese; 13810 East Palomino Drive Southwest, Ranches, Florida 33330; 954-252-5341; sales@seavisions.com
5. DRAWING ES-102, ELECTRICAL SITE PLAN: Add to the Construction Drawings the drawing noted "2/16/17 Addendum #1" that accompanies this Addendum and modify the Cover Sheet accordingly.

END OF ADDENDUM

Margaret F. Larkin
Executive Director
Design and Construction

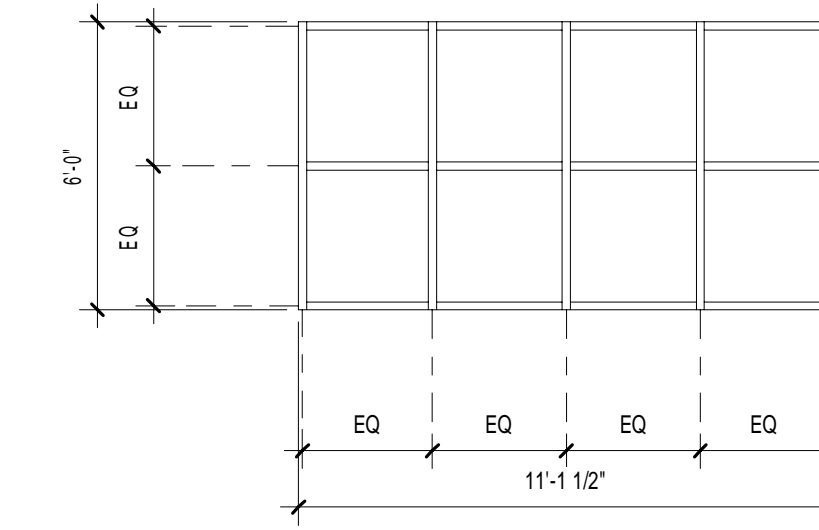
DOOR SCHEDULE												
DOOR NO.	ROOM NO.	TYPE	DOOR				FRAME			HARDWARE SET	FIRE RATING	NOTES
			WIDTH	HEIGHT	MATERIAL	FINISH	TYPE	MATERIAL	FINISH			
201A	201	SF	2'-8"	7'-0"	FRP	-	FRP	-	2			
201B	201	SF	2'-8"	7'-0"	FRP	-	FRP	-	2			



FRAME TYPES: AS SCH, SF
DOOR TYPES: 1, SF
TYPES: SF - SINGLE FLUSH
ABBREVIATIONS: FRP - FIBER-REINFORCED PLASTIC

WINDOW SCHEDULE							
TYPE	ROUGH OPENING		MATERIAL	FINISH	GLAZING		NOTES
	WIDTH	HEIGHT			THICKNESS	TYPE	
W7	11'-1 1/2"	6'-0"	AL	-	-	PLASTIC	

ABBREVIATIONS:
ALUM - ALUMINUM



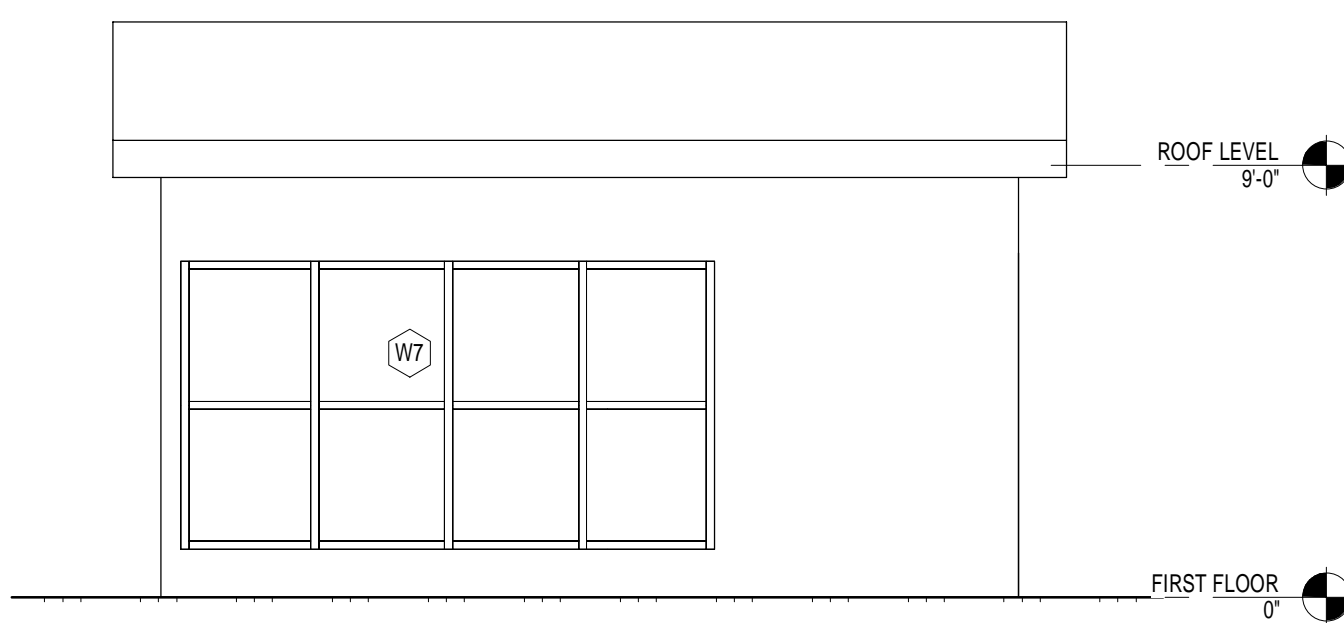
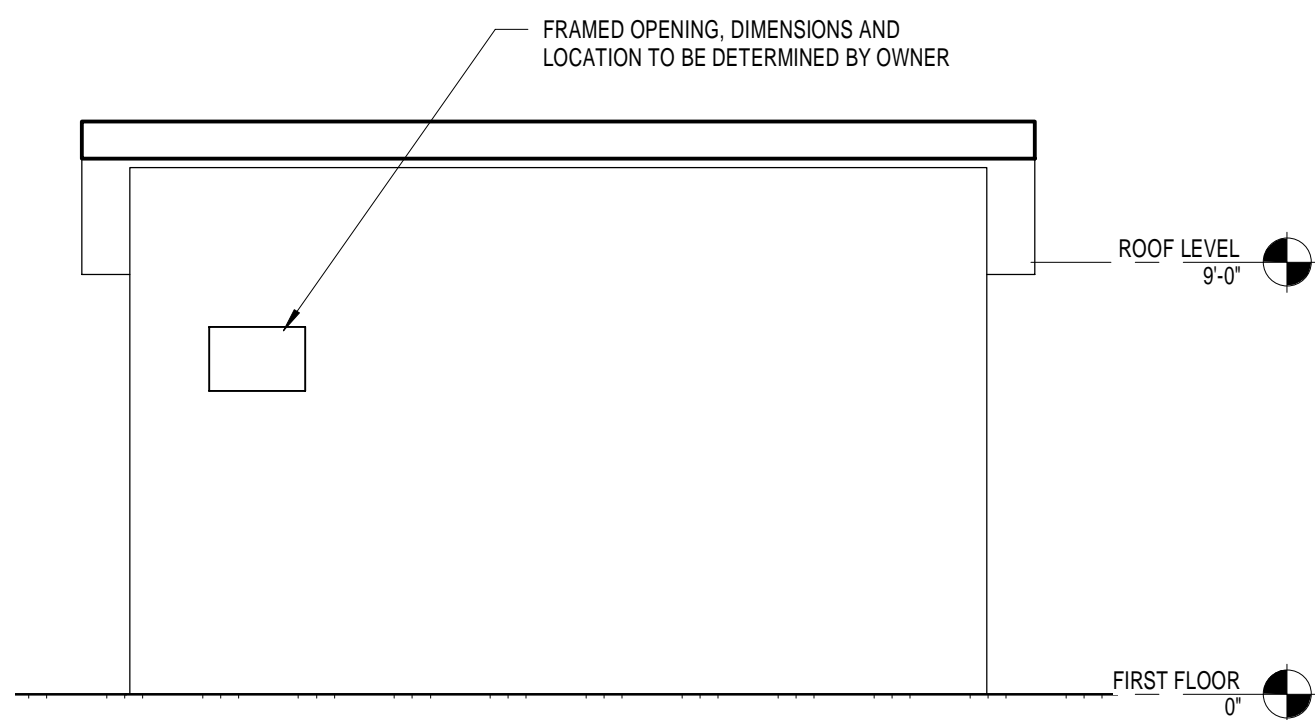
F WINDOW SCHEDULE
A-103 SCALE: 1/8" = 1'-0"

E DOOR SCHEDULE
A-103 SCALE: 1/8" = 1'-0"

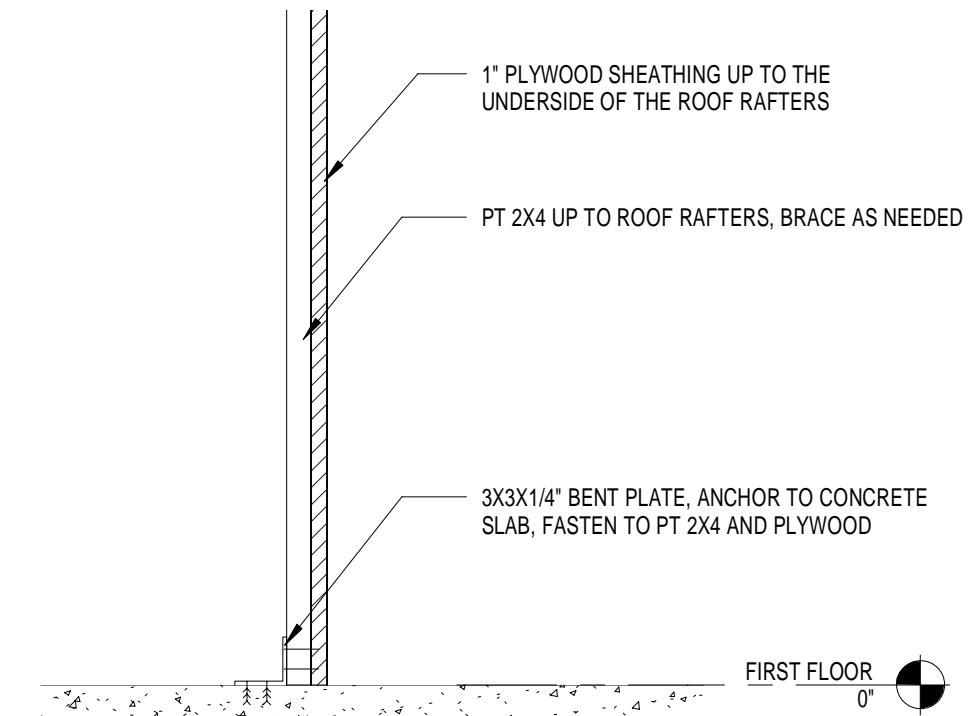


C EAST ELEVATION
A-103 SCALE: 1/4" = 1'-0"

D WEST ELEVATION
A-103 SCALE: 1/4" = 1'-0"

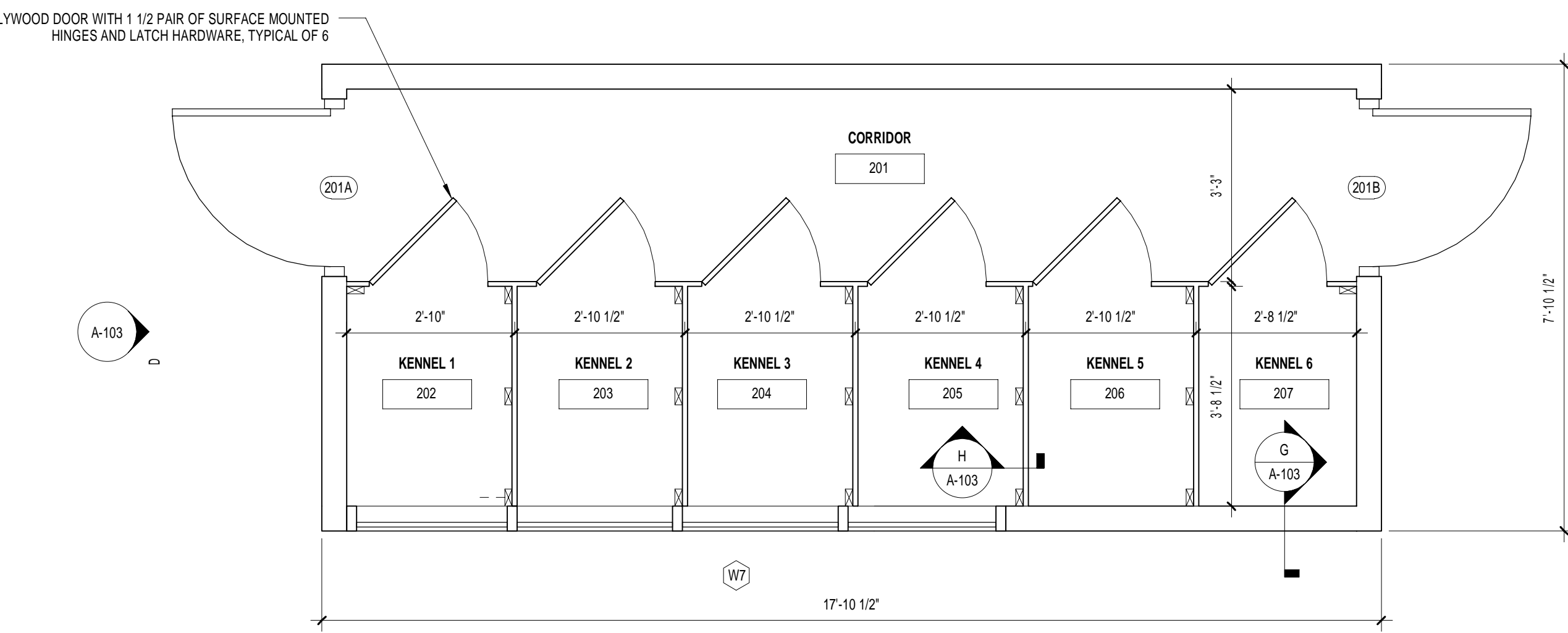


H Detail 2
A-103 SCALE: 1" = 1'-0"

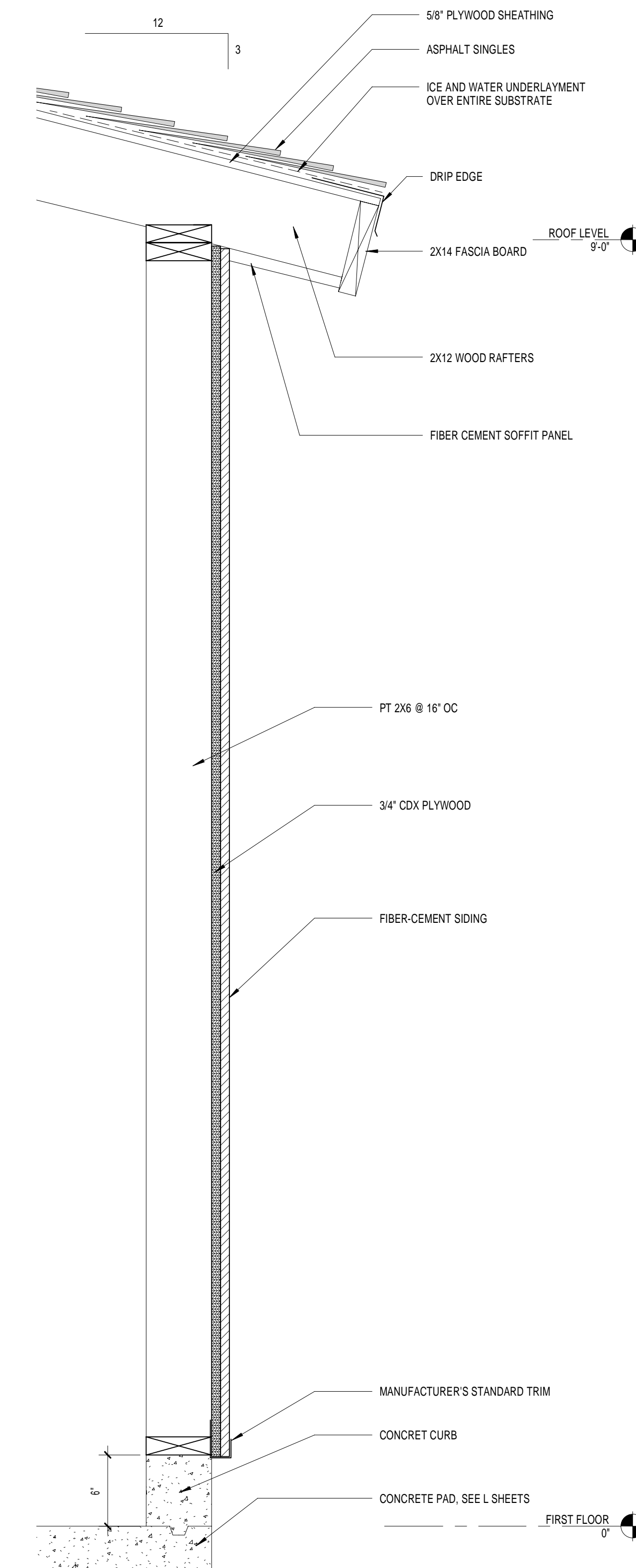


A NORTH ELEVATION
A-103 SCALE: 1/4" = 1'-0"

B SOUTH ELEVATION
A-103 SCALE: 1/4" = 1'-0"



FIRST FLOOR
SCALE: 1/2" = 1'-0"



G WALL SECTION
A-103 SCALE: 1 1/2" = 1'-0"



C&S Architects, Engineers & Landscape Architect, PLLC.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

CONTRACT: CONSTRUCTION

TITLE: RELOCATE STATE POLICE EXHIBIT

LOCATION: NYS FAIRGROUNDS
581 STATE FAIR BOULEVARD
SYRACUSE, NY 13209

CLIENT: NYS DEPARTMENT OF AGRICULTURE & MARKETS

MARK	DATE	DESCRIPTION
-	2-16-17	ADDENDUM #1
-	1-23-17	BID DOCUMENTS
-	1-18-17	COMMENT REVIEW
-	12-16-16	100% SUBMISSION

PROJECT NUMBER: 45545-C

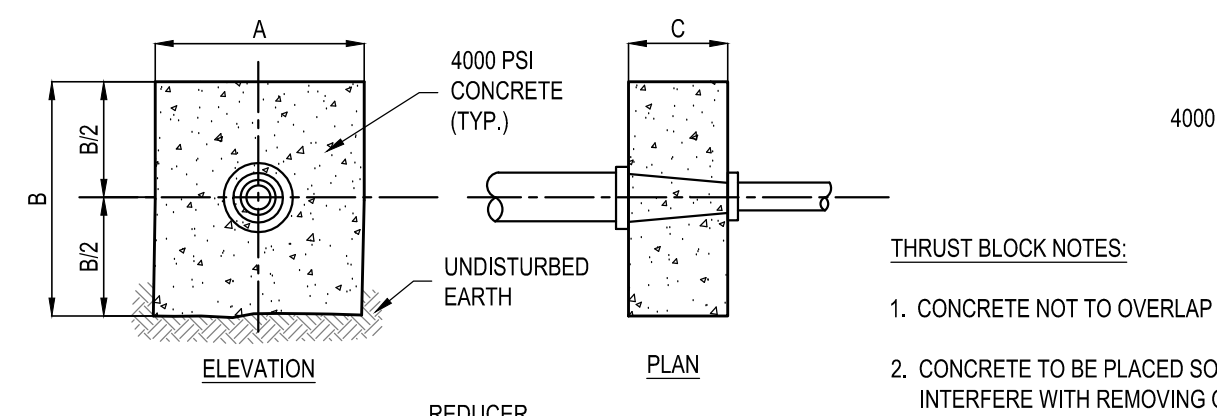
DESIGNED BY: M. W. LAMONTAGNE, AIA
DRAWN BY: L. M. ROYER

FIELD CHECK:
APPROVED: R. S. SLADE, PE RA

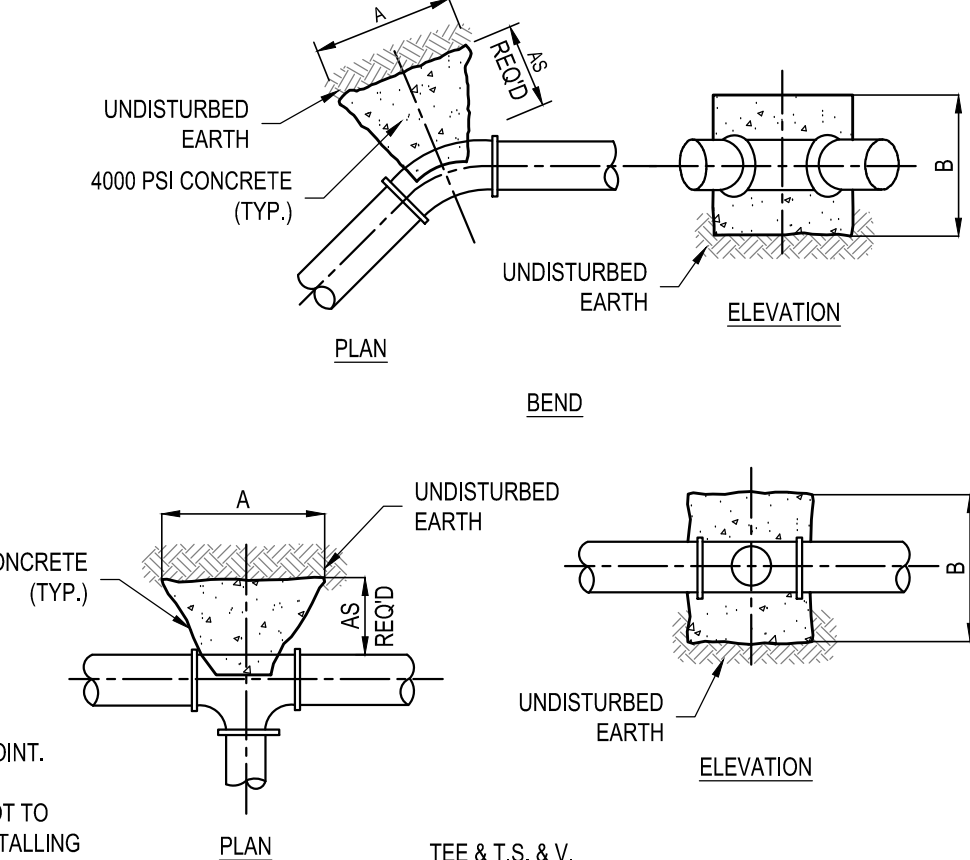
SHEET TITLE: KENNEL PLAN, EXTERIOR ELEVATIONS, AND DETAILS

DRAWING NUMBER: A-103

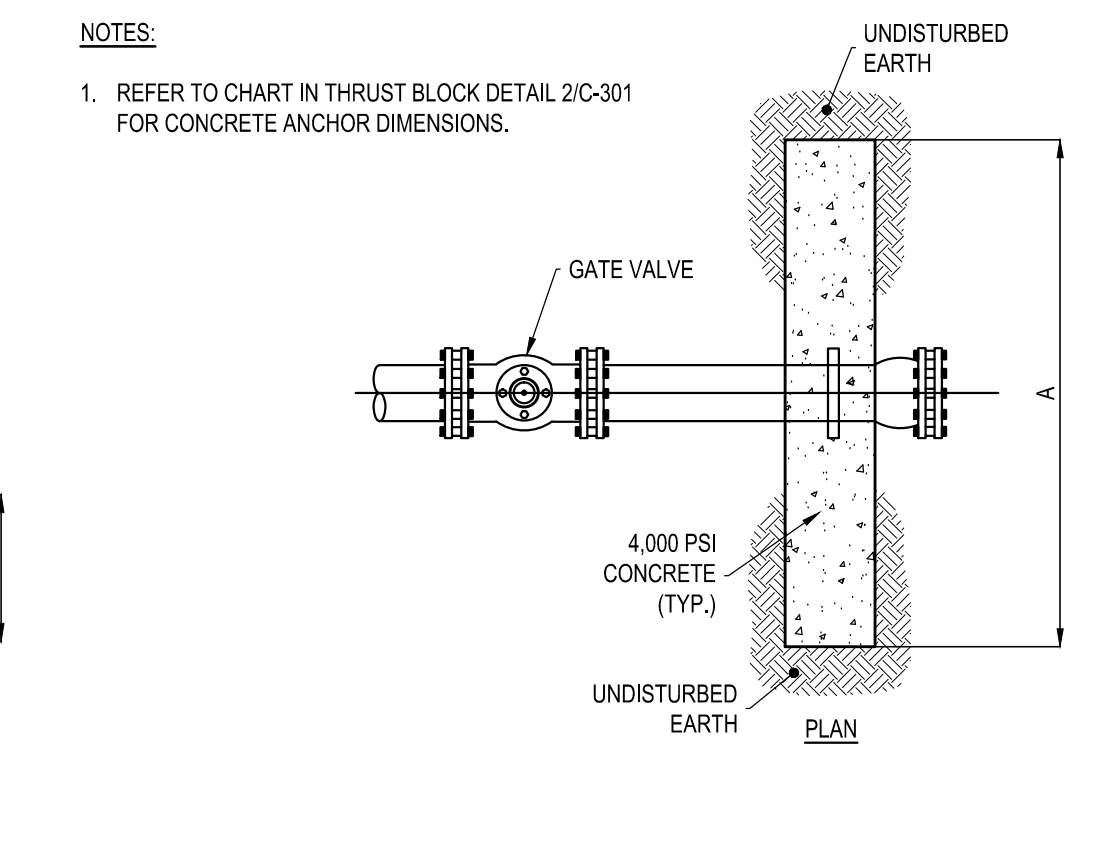
CONCRETE ANCHOR & THRUST BLOCK DIMENSIONS												
SIZE	12"			10"			8"			6"		
DIMENSIONS	A	B	C	A	B	C	A	B	C	A	B	C
BEND 90°	3'-6"	3'-6"	---	2'-11"	2'-11"	---	2'-4"	2'-4"	---	1'-8"	1'-8"	---
BEND 45°	2'-6"	2'-6"	---	2'-2"	2'-2"	---	1'-9"	1'-9"	---	1'-2"	1'-2"	---
BEND 22 1/2°	1'-10"	1'-10"	---	1'-6"	1'-6"	---	1'-3"	1'-3"	---	1'-0"	1'-0"	---
BEND 11 1/4°	1'-4"	1'-4"	---	1'-2"	1'-2"	---	0'-11"	0'-11"	---	1'-0"	1'-0"	---
D.I. ANCHOR	7'-0"	9'-0"	1'-0"	7'-0"	4'-0"	1'-0"	6'-0"	3'-0"	1'-0"	5'-4"	2'-6"	1'-0"
TS&V TEE	3'-0"	3'-0"	---	---	---	---	---	---	---	---	---	---
REDUCER 12"X	---	---	---	2'-6"	2'-6"	---	1'-2"	3'-8"	1'-2"	4'-0"	4'-6"	4'-6"
REDUCER 10"X	---	---	---	2'-6"	2'-6"	---	1'-0"	2'-6"	1'-0"	4'-0"	4'-0"	4'-0"
REDUCER 8"X	---	---	---	---	---	---	---	---	---	2'-0"	2'-0"	0'-11"
REDUCER 6"X	---	---	---	---	---	---	---	---	---	---	1'-8"	1'-8"



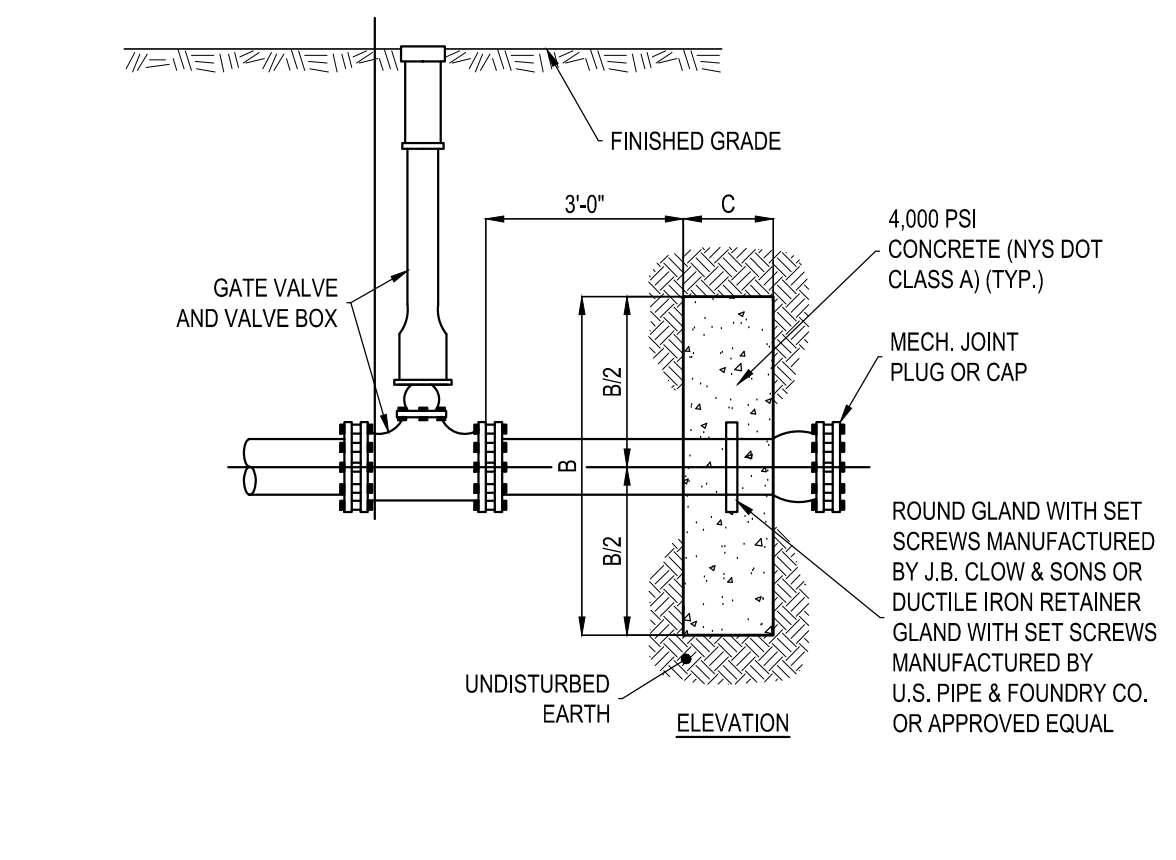
2 TYPICAL THRUST BLOCK DETAIL
SCALE: NOT TO SCALE



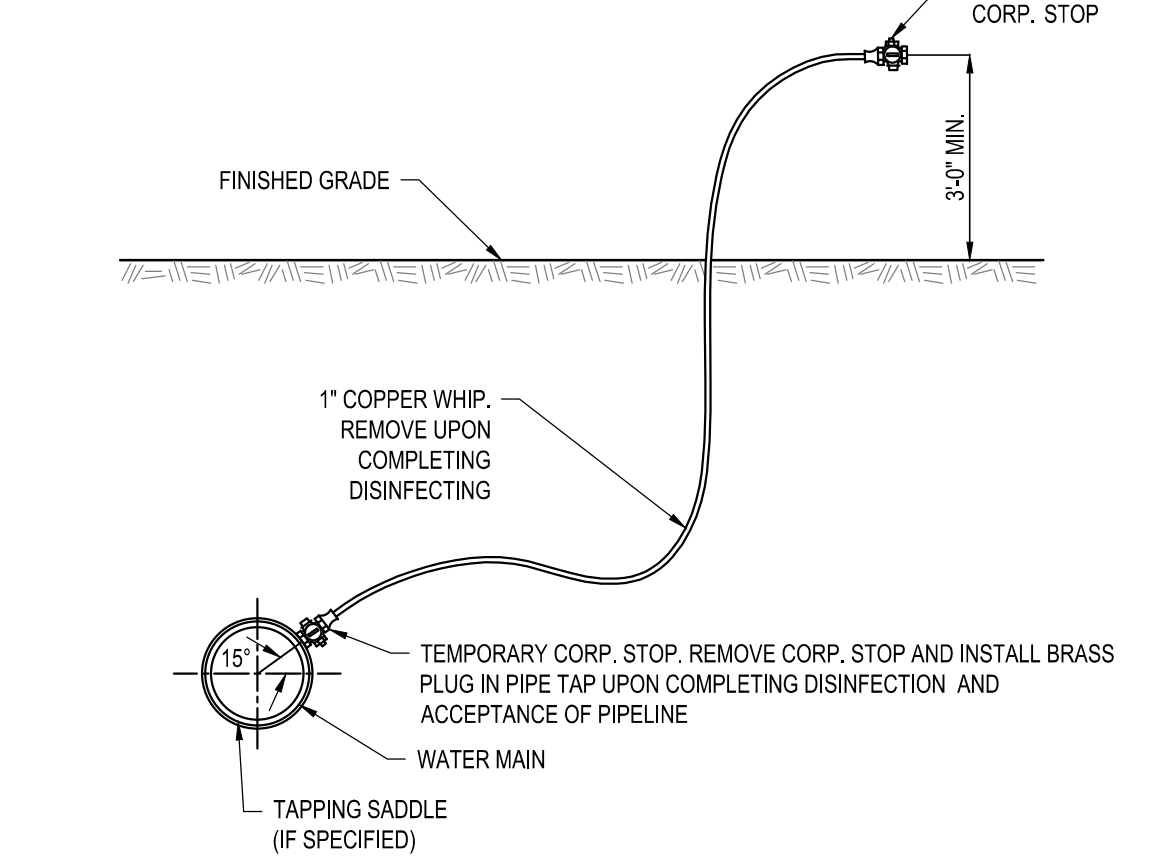
3 DUCTILE IRON PIPE ANCHOR AND PLUG DETAIL
SCALE: NOT TO SCALE



4 SAMPLING AND DISINFECTION TAP DETAIL
SCALE: NOT TO SCALE



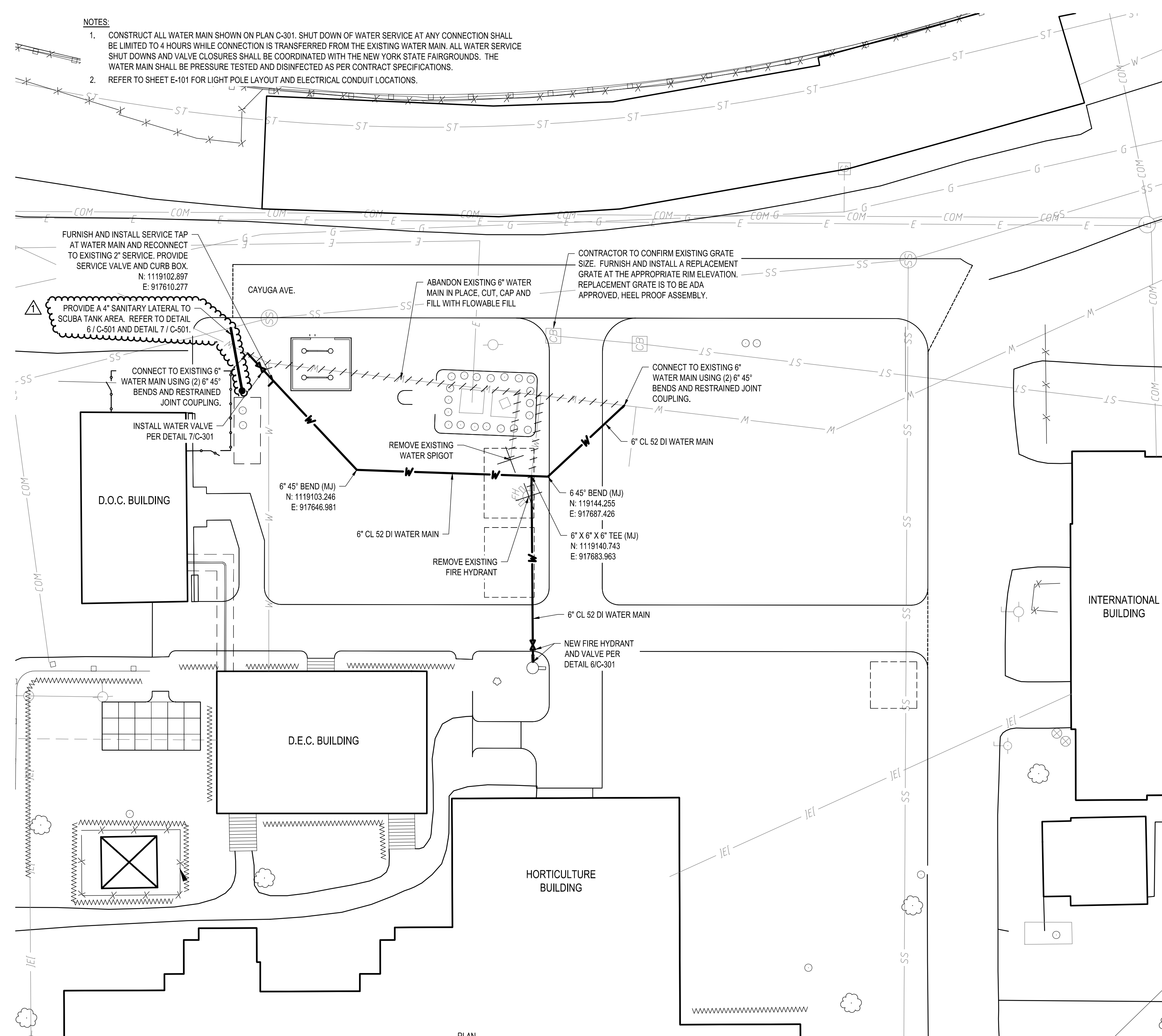
5 TYPICAL WATER MAIN RELOCATION DETAIL
SCALE: NOT TO SCALE



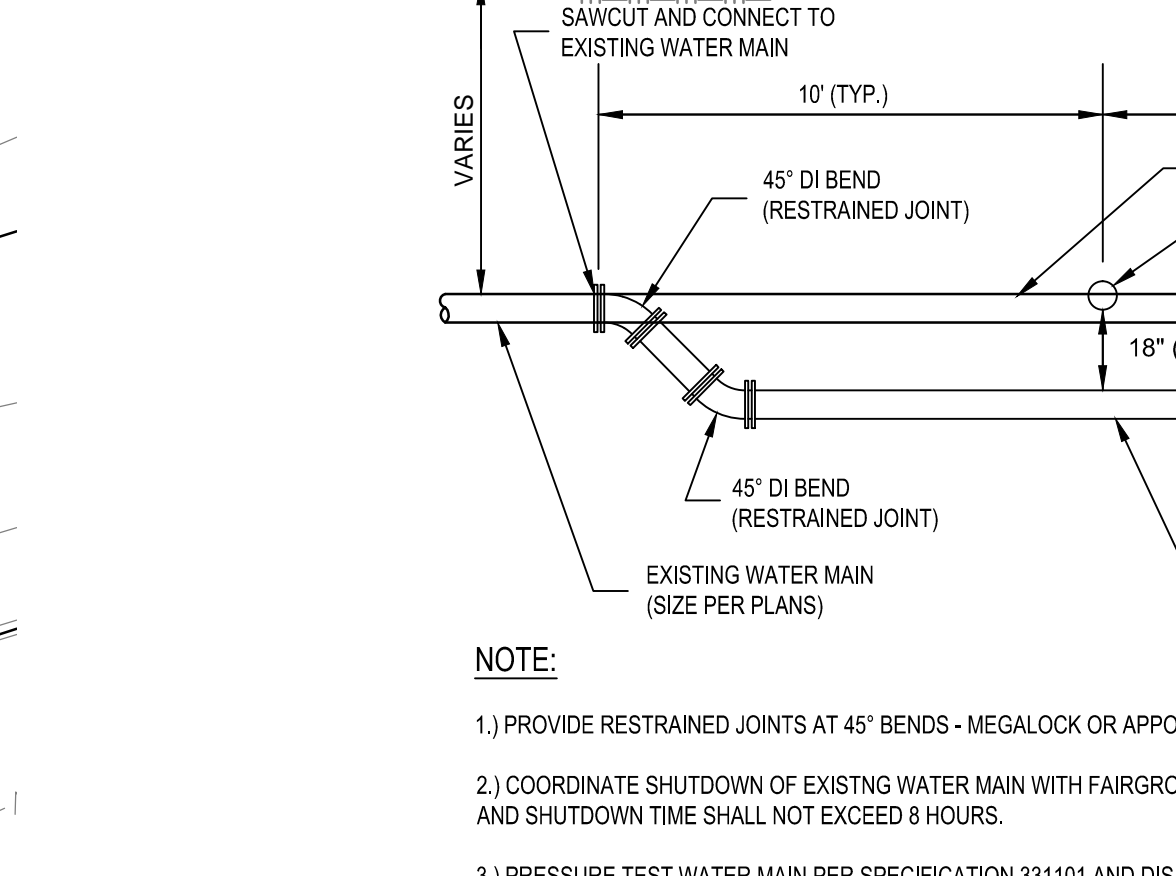
6 FIRE HYDRANT ASSEMBLY DETAIL
SCALE: NOT TO SCALE



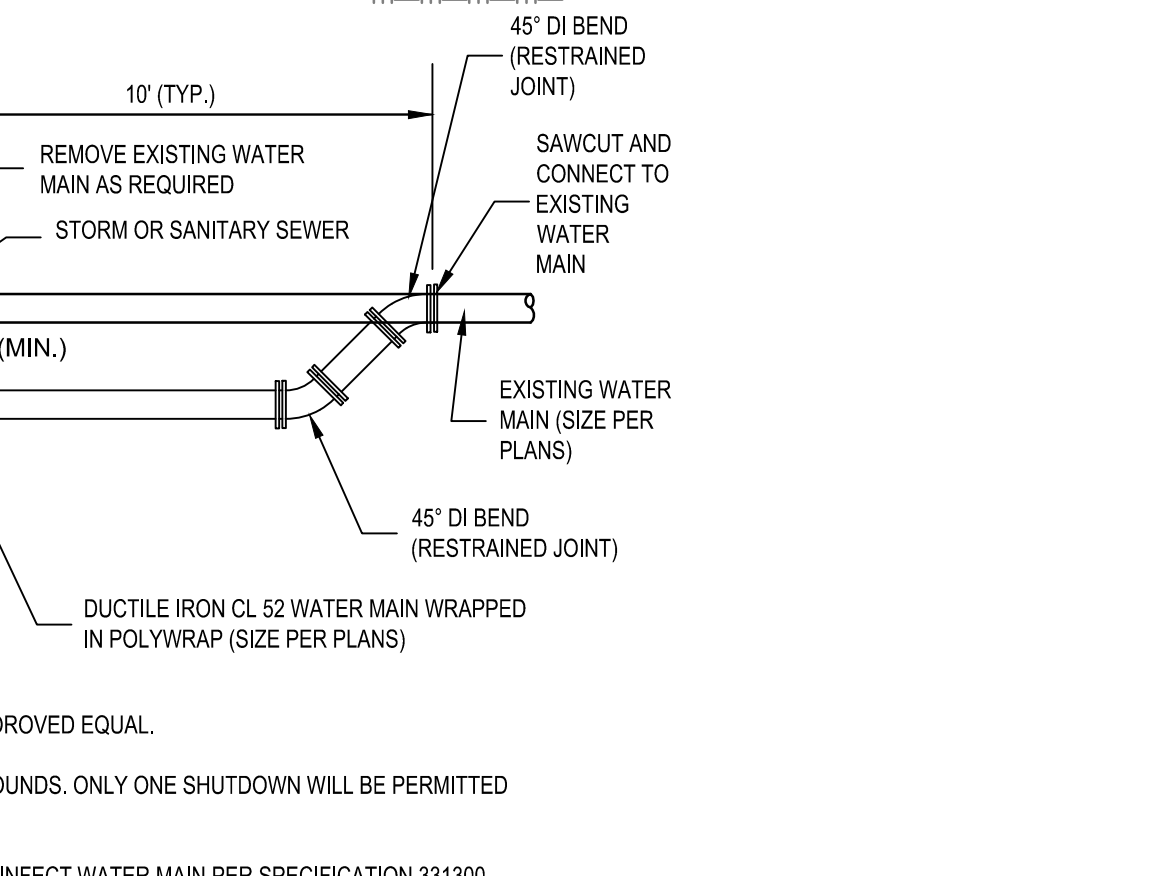
7 TYPICAL GATE VALVE DETAIL
SCALE: NOT TO SCALE



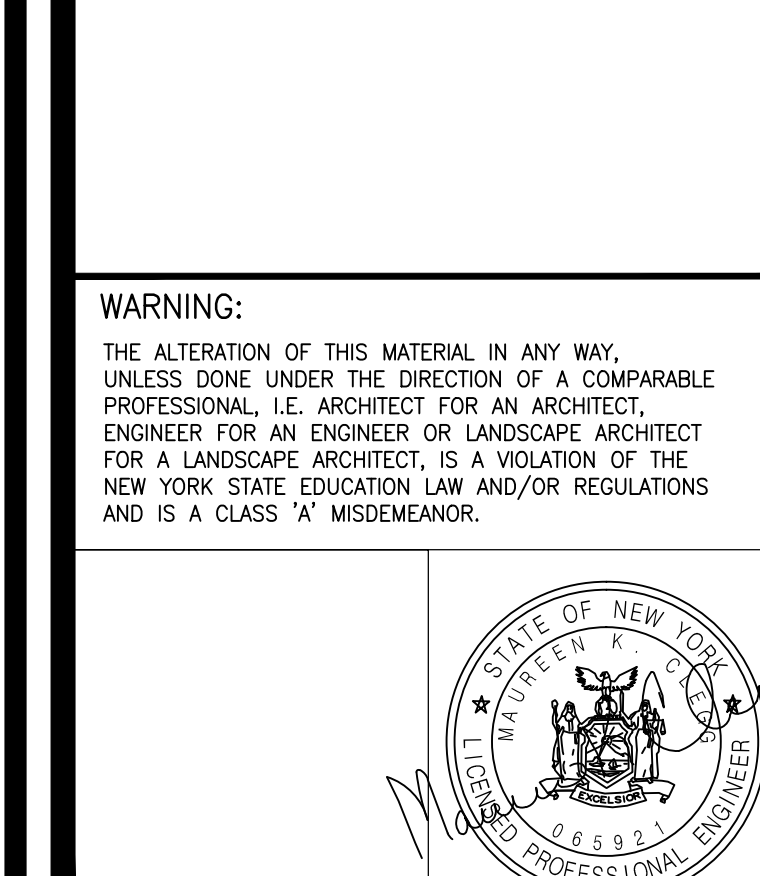
1 UTILITY PLAN
SCALE: 1" = 20'-0"



2 TYPICAL GATE VALVE DETAIL
SCALE: NOT TO SCALE



3 PIPE TRENCH DETAIL
SCALE: NOT TO SCALE



4 PIPE TRENCH DETAIL
SCALE: NOT TO SCALE

NOTES:
1. CONSTRUCT ALL WATER MAIN SHOWN ON PLAN C-301. SHUT DOWN OF WATER SERVICE AT ANY CONNECTION SHALL BE LIMITED TO 4 HOURS WHILE CONNECTION IS TRANSFERRED FROM THE EXISTING WATER MAIN. ALL WATER SERVICE SHUT DOWNS AND VALVE CLOSURES SHALL BE COORDINATED WITH THE NEW YORK STATE FAIRGROUNDS. THE WATER MAIN SHALL BE PRESSURE TESTED AND DISINFECTED AS PER CONTRACT SPECIFICATIONS.
2. REFER TO SHEET E-101 FOR LIGHT POLE LAYOUT AND ELECTRICAL CONDUIT LOCATIONS.

NOTES:
1. PROVIDE RESTRAINED JOINTS AT 45° BENDS - MEGALOCK OR APPROVED EQUAL.
2. COORDINATE SHUTDOWN OF EXISTING WATER MAIN WITH FAIRGROUNDS. ONLY ONE SHUTDOWN WILL BE PERMITTED AND SHUTDOWN TIME SHALL NOT EXCEED 8 HOURS.
3. PRESSURE TEST WATER MAIN PER SPECIFICATION 331101 AND DISINFECT WATER MAIN PER SPECIFICATION 331300.

NOTES:
1. P.V.C. EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR VALVES SHALL BE EXTENDED TO A MAXIMUM OF 30-INCHES BELOW FINISHED GRADE.
3. ADJUST TO MID-RANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.

NOTES:
1. PRIOR TO PERFORMING WATERLINE WORK, THE CONTRACTOR IS TO CONFIRM THE SIZE AND MATERIAL TYPES OF THE EXISTING WATER MAIN AND SERVICE LINES.
2. THIS UTILITY PIPING DETAIL IS FOR THE CONSTRUCTION OF NEW WATER PIPING WITH POLYETHYLENE ENCASEMENT.

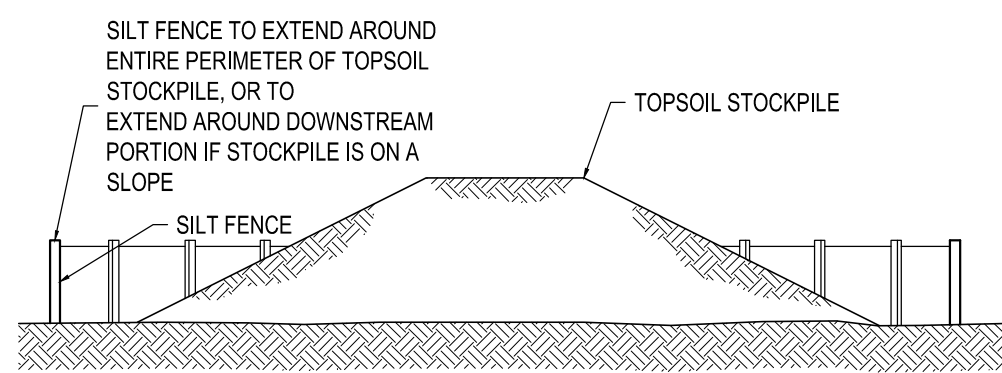
NEW YORK STATE OF OFFICER/ENGINEER
Office of General Services
DESIGN & CONSTRUCTION
CONSULTANT
C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212

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CLIENT: NYS DEPARTMENT OF AGRICULTURE & MARKETS

MARK	DATE	DESCRIPTION
▲	2/16/17	ADDENDUM #1
	1/23/17	BID DOCUMENTS
	1/18/17	COMMENT REVISION
	12/16/2016	100% SUBMISSION
PROJECT NUMBER:	45545-C	
DESIGNED BY:	T.W. LONG	
DRAWN BY:	K. MAGILL-JONES	
FIELD CHECK:	-	
APPROVED:	D.H. WETHEY, P.E.	
SHEET TITLE:	UTILITY PLAN	
DRAWING NUMBER:	C-301	
SHEET	OF	

Feb 15, 2017 12:12pm
F:\Project\190 - NYS065\190610001 - Provide Expo Center & Equestrian Facilities\Design\CADD\Sheet Files\Civil\190610001_C-301.dwg
36x24 PLOT SHEET



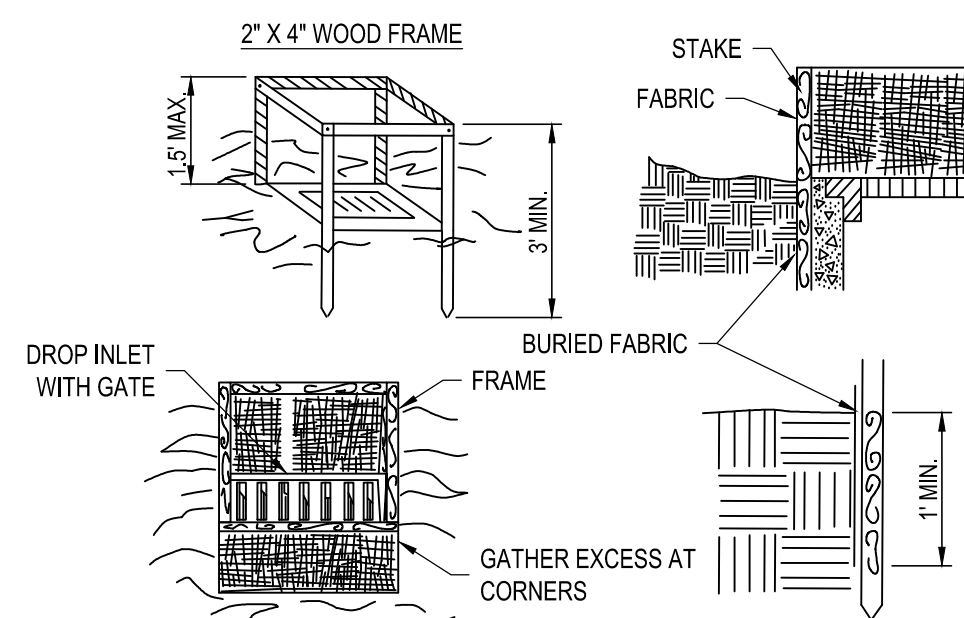
TEMPORARY TOPSOIL STOCKPILE NOTES:

- REFER TO SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
- IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH BURLAP MATTING OR SEEDED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
- INSPECTION OF SILT FENCE SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SEDIMENT TRAPPED BY THE SILT FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
- SILT FENCE SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE ENGINEER.
- TOPSOIL STOCKPILE LOCATION SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE OWNER OR AN AUTHORIZED REPRESENTATIVE.

5
C-501 TEMPORARY TOPSOIL STOCKPILE DETAIL
SCALE: NOT TO SCALE

SILT FENCE INLET PROTECTION NOTES:

- FILTER FABRIC SHALL MEET THE SPECIFICATION REQUIREMENTS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY. MAXIMUM DRAINAGE AREA 1 ACRE.
- COIR ROLL SHALL BE PLACED ALONG THE FRONT OF THE INLET TO THE CATCH BASIN EXTENDING ACROSS THE ENTIRE WIDTH OF THE INLET TO THE CONCRETE GUTTER APRON LIMITS ON BOTH SIDE OF THE CATCH BASIN INLET. COIR ROLL SHALL BE WEIGHTED DOWN AS NEEDED WITH SAND BAGS OR EQUAL.



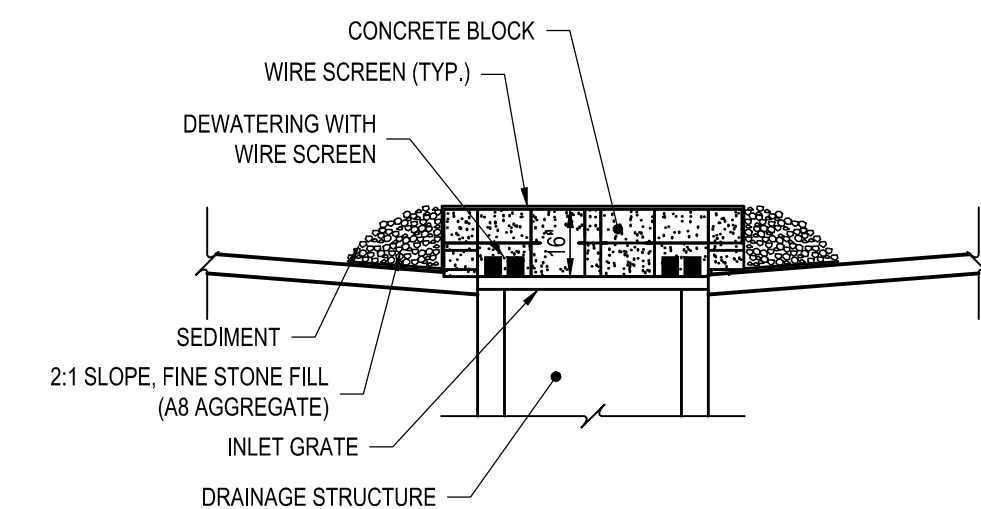
STORM DRAIN INLET PROTECTION DETAIL (GRASS AREA)

4
C-501 TEMPORARY INLET PROTECTION DETAIL (GRASS AREAS)
SCALE: NOT TO SCALE

SOIL AND EROSION CONTROL NOTES:

- ALL SOIL EROSION AND SEDIMENT CONTROL (SESC) MEASURES TO CONFORM TO THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. SELECT APPROPRIATE SESC MEASURES TO BEST CONTROL SOIL. EROSION AND SEDIMENTATION SHOULD SITE CONDITIONS WARRANT. SOIL EROSION WILL INCLUDE SILT FENCE AT GRADING AT TOPSOIL PILES, TEMPORARY SEED AND MULCHING, AND DRAINAGE INLET PROTECTION.
- ALL EROSION CONTROL MEASURES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING CONSTRUCTION.
- SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED AND FULLY FUNCTIONAL PRIOR TO ANY SITE DISTURBANCE. SOIL EROSION AND SEDIMENT CONTROL FACILITIES ARE TO BE MAINTAINED DURING CONSTRUCTION AND REMOVED UPON COMPLETION OF CONSTRUCTION.
- ALL ROADWAYS SHALL BE KEPT CLEAN OF MUD AND DEBRIS. FILL SHALL NOT BE SPILLED ONTO ROADWAY. ALL SPILLED MATERIALS SHALL BE PROMPTLY REMOVED.
- THE AREAS OF CONSTRUCTION SHALL BE LEFT IN STABLE CONDITION AT THE CLOSE OF EACH CONSTRUCTION DAY.
- STORM INLETS SHALL BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION BY USE OF INLET PROTECTION OR OTHER APPROVED MEANS.
- SOIL STOCKPILE AREAS ARE TO BE IMMEDIATELY SURROUNDED WITH SILT FENCING, OR OTHER EROSION CONTROL MEASURES OR AS ORDERED BY THE OWNER'S REPRESENTATIVE.
- CONTRACTOR TO PROVIDE APPROVED DUST CONTROL MEASURES. THE CONTRACTOR SHALL HAVE A WATER TRUCK OR OTHER ACCEPTABLE MEANS OF CONTROLLING DUST AVAILABLE AT ALL TIMES.
- ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AS OUTLINED IN THE APPROVED SWPPP FOR THE PROJECT. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY TO ENSURE FUNCTIONALITY.
- CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS WITHIN 7 DAYS OF INACTIVITY.
- LAND CLEARING AND LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL THE CONTRACTOR CERTIFICATION IN THE SWPPP HAS BEEN SIGNED, AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY THE OWNERS REPRESENTATIVE.
- PRIOR TO FINAL SEEDING AND MULCHING, ALL SOIL IN TURF AREAS SHALL BE DE-COMPACTED AS PER PART 3.01E OF SPECIFICATION SECTION 312.513.

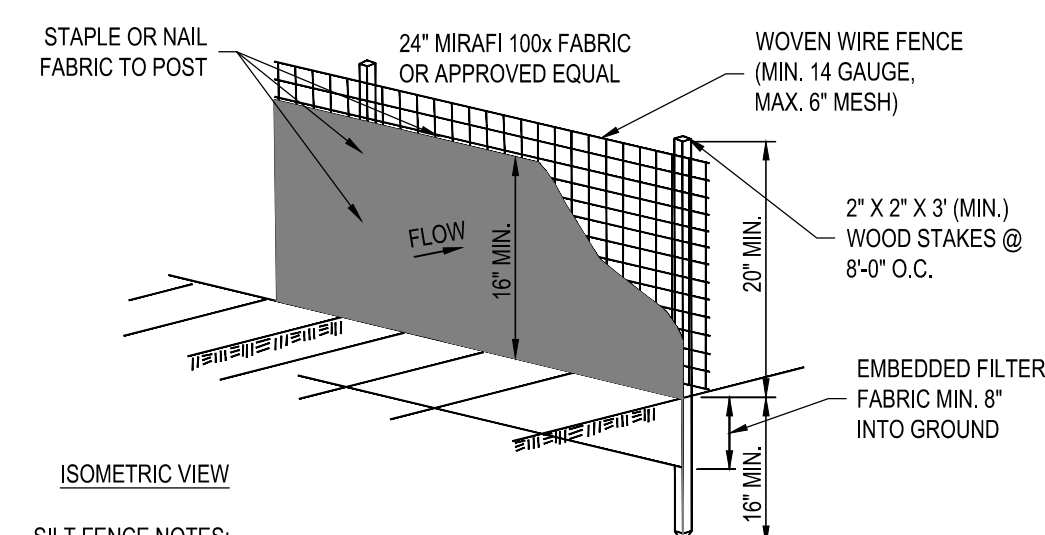
2
C-501 SOIL AND EROSION CONTROL NOTES
SCALE: NOT TO SCALE



STORM DRAIN INLET PROTECTION NOTES:

- SEDIMENT TRAP SHALL BE INSPECTED AND CLEANED IF NEEDED AFTER EVERY RAIN STORM OR AS DIRECTED BY THE ENGINEER.
- WEEPS SHALL BE BULKHEADED BY CONTRACTOR UPON COMPLETION OF PROJECT.
- CONTRACTOR HAS OPTION OF USING NYSDEC APPROVED PREFORMED INLET PROTECTION BLOCKS, AS APPROVED BY THE ENGINEER.

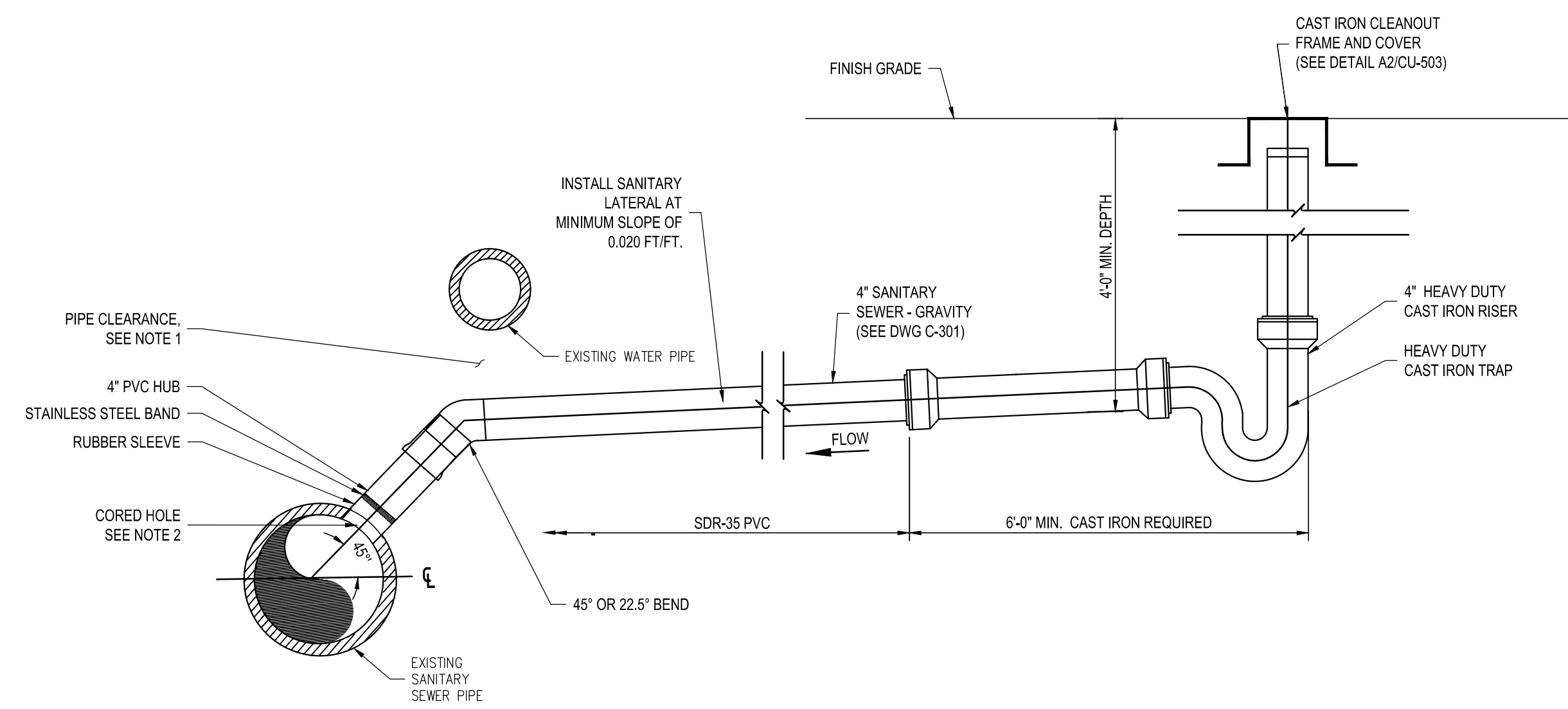
3
C-501 TEMPORARY INLET PROTECTION DETAIL (PAVED AREAS)
SCALE: NOT TO SCALE



SILT FENCE NOTES:

- WOVEN WIRE FENCE SHALL BE SECURELY FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS DIRECTED BY ENGINEER AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
- CONTRACTOR SHALL REMOVE THE SILT FENCE AT THE APPROPRIATE TIME, DRESS THE DISTURBED AREAS, AND DISPOSE OF THE SILT FENCE.

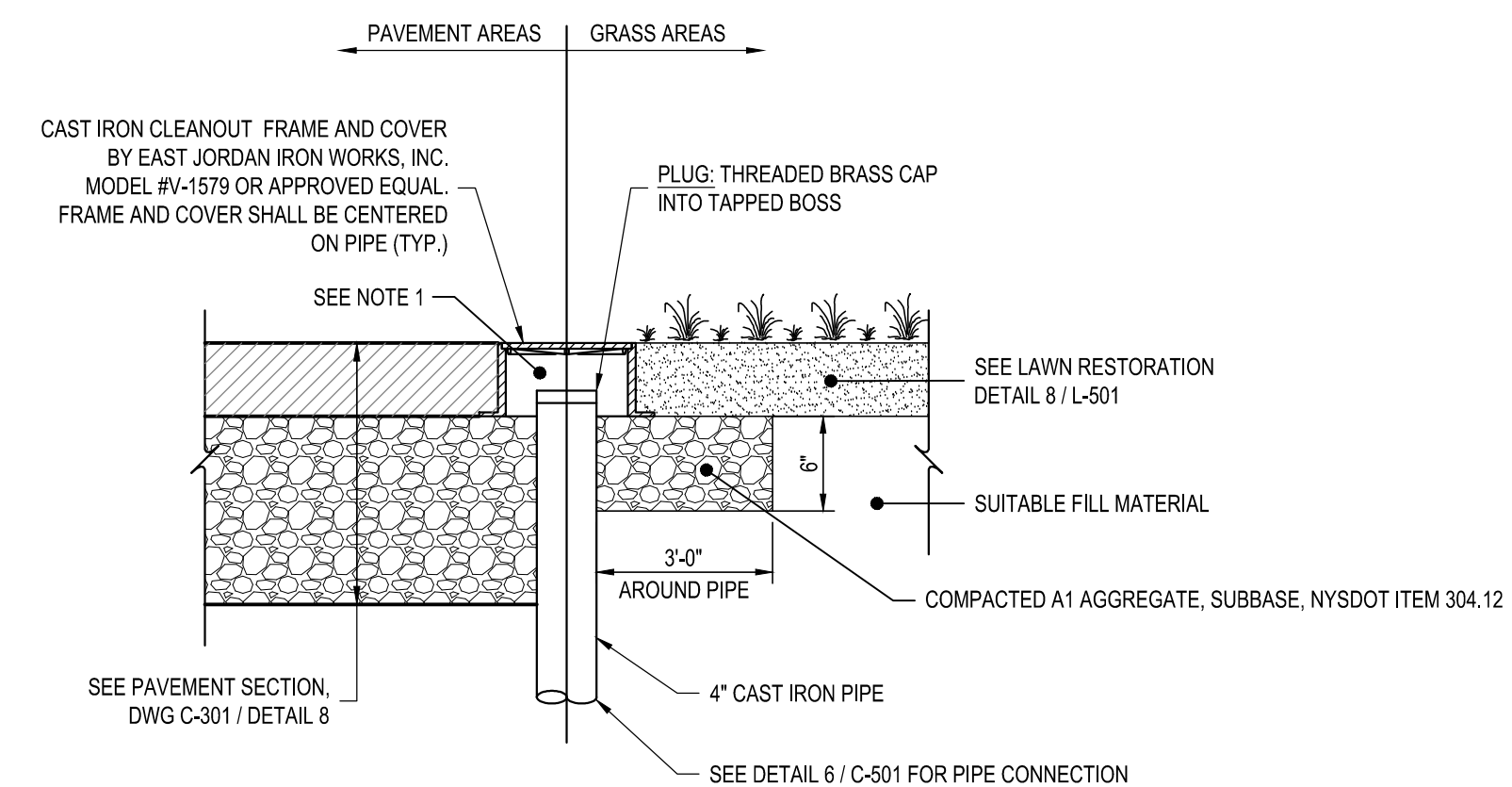
1
C-501 TEMPORARY SILT FENCE DETAIL
SCALE: NOT TO SCALE



SANITARY LATERAL NOTES:

- A MINIMUM CLEARANCE OF 1'-6" (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE) SHALL BE PROVIDED BETWEEN THE SEWER LATERAL AND ANY WATER PIPES.
- THE EXISTING SANITARY SEWER PIPE THAT WILL BE CONNECTED TO IS PRESUMED TO BE A PIPE WITH ASBESTOS CONTAINING MATERIAL (ACM). ALL WORK NECESSARY TO CORE AND CONNECT TO THE ACM PIPE SHALL BE PERFORMED BY A NEW YORK STATE DEPARTMENT OF LABOR (NYS/DOL) LICENSED CONTRACTOR USING NYS/DOL CERTIFIED ASBESTOS HANDLERS. PRIOR TO ANY ACM REMOVAL WORK A PROJECT COORDINATION MEETING SHALL BE HELD WITH THE CONTRACTOR, SUBCONTRACTOR, AND THE DIRECTOR'S REPRESENTATIVE. ALL ACM'S SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH 12 NYCRR 56, OR AN APPROVED VARIANCE FROM THE NYS/DOL. ALL ACM'S SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE REGULATIONS OF FEDERAL, STATE, AND LOCAL AGENCIES.
- ALL SDR-35 PVC PIPE AND FITTINGS SHALL BE SOLID WALL, MEETING THE REQUIREMENTS OF ASTM D3034 AND SDR 35. JOINTS BETWEEN SECTIONS OF PVC SDR-35 PIPE SHALL BE BELL AND SPIGOT WITH ELASTOMERIC GASKET (ASTM D3034) OR SOLVENT WELD (ASTM D2564).
- ALL CAST IRON PIPE AND FITTINGS SHALL BE EXTRA HEAVY DUTY, COATED, MEETING THE REQUIREMENTS OF ASTM C-74 WITH ELASTOMERIC COMPRESSION GASKET (ASTM C-564).
- REFER TO DETAIL 8 / C-301 FOR PIPE TRENCH INSTALLATION DETAILS.

6
C-501 SANITARY LATERAL CONNECTION TO SCUBA TANK DETAIL
SCALE: NOT TO SCALE



NOTE:

- PROVIDE 4" SPACE BETWEEN BOTTOM OF COVER AND TOP OF PIPE.

7
C-501 GROUND TREATMENT AT LATERAL CONNECTION DETAIL
SCALE: NOT TO SCALE



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CONTRACT:

CONSTRUCTION

TITLE:

RELOCATE STATE POLICE EXHIBIT

LOCATION:

NYS FAIRGROUNDS
581 STATE FAIR BLVD.
SYRACUSE, NY 13209

CLIENT:

NYS DEPARTMENT OF AGRICULTURE & MARKETS

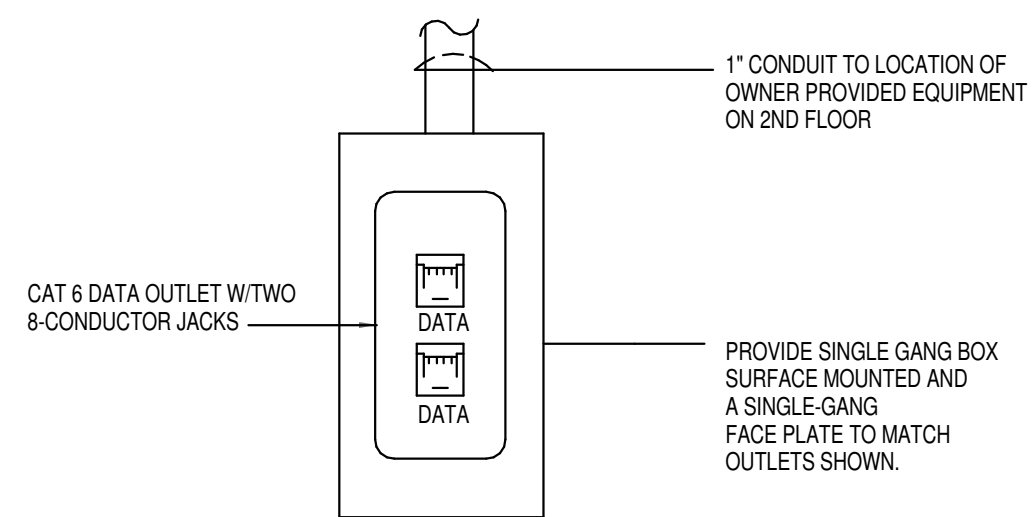
MARK	DATE	DESCRIPTION
▲	2/16/17	ADDENDUM #1
	1/23/17	BID DOCUMENTS
	1/18/17	COMMENT REVIEW
	12/16/2016	100% SUBMISSION
PROJECT NUMBER: 45545-C		
DESIGNED BY: D.H. WETHEY, P.E.		
DRAWN BY: K. MAGILL-JONES		
FIELD CHECK: -		
APPROVED: D.H. WETHEY, P.E.		

SHEET TITLE:

SITE DETAILS

DRAWING NUMBER:

C-501



NOTES:

- A. PROVIDE TWO CAT 6 NETWORK CABLES FROM DATA JACKS TO SECOND FLOOR RACK. PROVIDE TERMINATIONS.

CATV/DATA DETAIL

SCALE: 12" = 1'-0"

PANEL P-1 SCHEDULE

DESCRIPTION	WIRE	CON	CB. AMPS	CIR #	CIR #	CB. AMPS	CON	WIRE	DESCRIPTION
RECEPTACLE	2#12, #12G	1"	20	1	2	15	1"	2#12, #12G	RECEPTACLE
RECEPTACLE	2#12, #12G	1"	20	3	4	15	1"	2#12, #12G	RECEPTACLE
RECEPTACLE	2#12, #12G	1"	20	5	6	20	1"	2#12, #12G	RECEPTACLE
RECEPTACLE	2#12, #12G	1"	20	7	8	20	1"	2#12, #12G	RECEPTACLE
RECEPTACLE	2#12, #12G	1"	20	9	10	20	1"	2#12, #12G	RECEPTACLE
SPARE			20	11	12	20			SPARE
SPARE			20	13	14				SPARE
SPACE			15	16					SPACE
SPACE			17	18					SPACE
SPACE			19	20					SPACE
SPACE			21	22					SPACE
SPACE			23	24					SPACE

FIRST FLOOR POWER PLAN

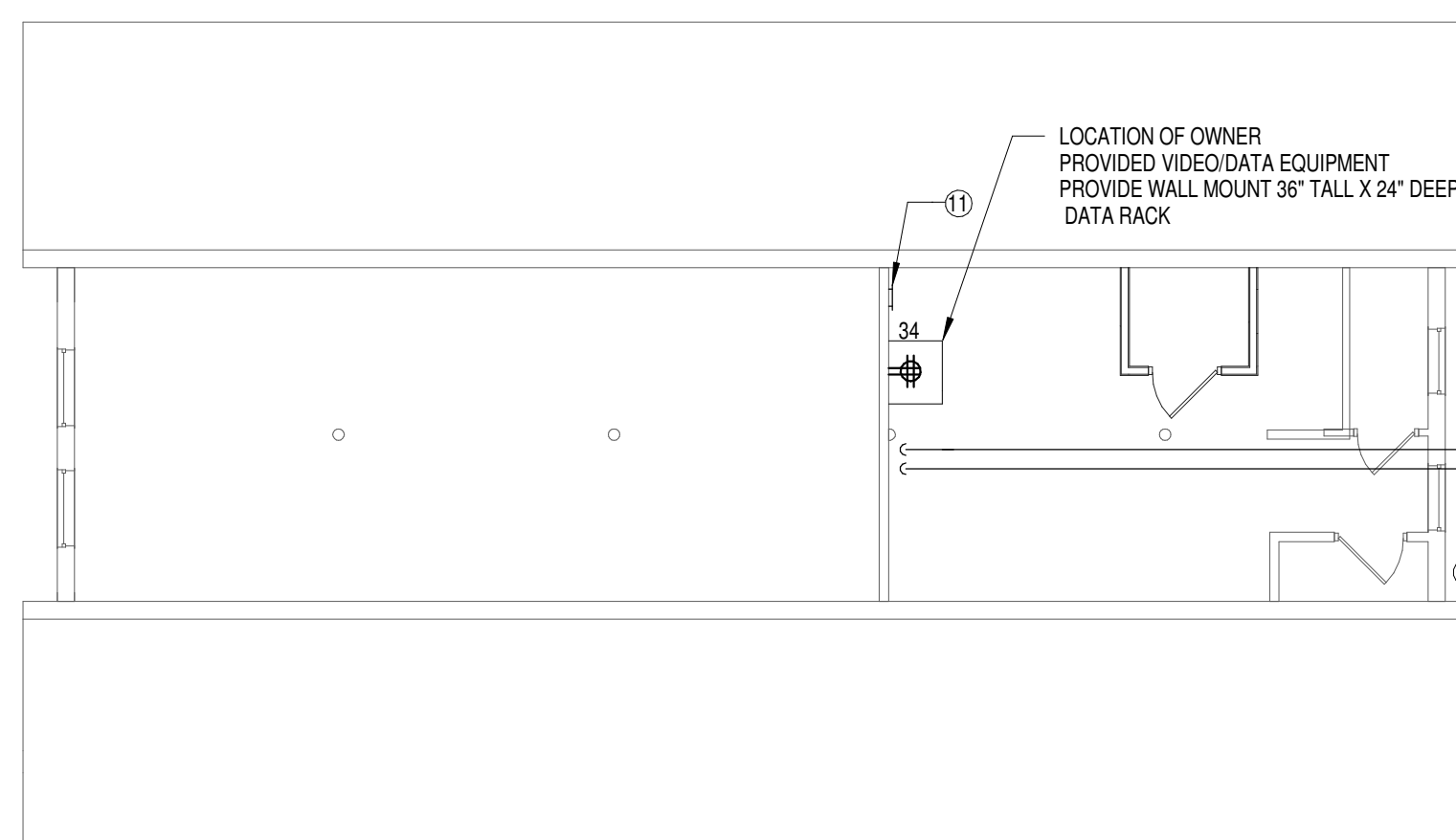
SCALE: 1/8" = 1'-0"

DEC BUILDING LUMINAIRE SCHEDULE							
FIXTURE DESIGNATOR	MANUFACTURER & MODEL NO.	LAMP NO. AND TYPE	VOLTS	WATTS	BALLAST	MOUNTING	REMARKS
A	4' CEILING MOUNTED LED STRIPLIGHT, 3000 LUMENS, 4000K COLOR TEMP. LITHONIA ZL2N SERIES OR APPROVED EQUAL BY EATON OR H.E. WILLIAMS	LED	120	42	LED DRIVER	PENDANT	PENDANT MOUNT 8'-0" AFF
EXIT	THERMOPLASTIC, WHITE, LED EXIT SIGN, MAINTAINENCE FREE BATTERY, INTEGRAL SELF DIAGNOSTICS, BY LITHONIA OR APPROVED EQUAL BY EATON OR H.E. WILLIAMS	LED	120	0.5	LED DRIVER	WALL	MOUNT ABOVE DOOR

EXISTING PANEL LC1 SCHEDULE

DESCRIPTION	WIRE	CON	CB. AMPS	CIR #	CIR #	CB. AMPS	CON	WIRE	DESCRIPTION
WALL RECEPTACLES*			20	1	2	15			RECEPTACLES OUTSIDE BTHRM WALL*
FLOOR RECEPTACLES*			20	3	4	15			FLOR. LIGHTS (REARM)*
WALL RECEPTACLES*			20	5	6	15			MOTION DETECTOR LIGHTS*
WALL RECEPTACLES*			15	7	8	20			EXIT LIGHTS*
WALL RECEPTACLES*			15	9	10	20			TRACK LIGHTS FRONT*
UPSTAIRS BATHROOM*			20	11	12	20			DOWNSTAIRS BATHROOM*
HEATER*			70	13	14	15			TRACK LIGHTS REAR*
				15	16	20			ENTRANCE LIGHTS + OUTSIDE RECP.*
WATER HEATER*			30	17	18	15			LIGHT HERE*
				19	20	15			HEATING SYSTEM*
RAPPEL TOWER QUADRUPLX	3#8, #8G	1"	20	21	22	20			TOWER RECEPTACLE*
RAPPEL TOWER QUADRUPLX	3#8, #8G	1"	20	23	24	20			TOWER RECEPTACLE*
BOILER*			15	25	26	20			BLANK*
WALL RECEPTACLES*			15	27	28	20			NEW TRACK LIGHTS W, SW*
FLOOR RECEPTACLES*			20	29	30	20			NEW TRACK LIGHTS NE, SE, E*
FLOOR LIGHTS*			20	31	32	20			NEW TRACK LIGHTS NORTH + CENTER*
BLANK*			20	33	34	20	1/2"	2 #12, #12G	RECEPTACLES
BLANK*			20	35	36	20	1/2"	2 #12, #12G	RECEPTACLES
2 CENTRAL QUAD RECEPTACLES AND CLOSET RECEPTACLE	2 #12, #12G	1/2"	20	37	38	20	1"	2#8, #8G	SITE LIGHTING
LIGHTS	2 #12, #12G	1/2"	20	39	40	20	1"	2#8, #8G	SITE LIGHTING
2 CENTRAL QUAD RECEPTACLES	2 #12, #12G	1/2"	20	41	42	20	1/2"	2 #12, #12G	PROJECTION SCREEN RECEPTACLE

* = EXISTING LOAD/CIRCUIT BREAKER



SECOND FLOOR

SCALE: 1/8" = 1'-0"

ELECTRICAL SYMBOL LIST

- 1: DUPLEX RECEPTACLE, MOUNT 18" AFF UNLESS OTHERWISE NOTED. NUMBER INDICATES BRANCH CIRCUIT
- 1: QUAD RECEPTACLE, MOUNT 18" AFF UNLESS OTHERWISE NOTED. NUMBER INDICATES BRANCH CIRCUIT
- EXIT SIGN
- 1: LIGHT SWITCH, LOWERCASE LETTER DENOTES SWITCHING
- 1: SINGLE POLE DIMMER SWITCH
- 1: DATA OUTLET, 2 CAT 6 CABLES
- 1: CAMERA DATA OUTLET, 1 CAT 6 CABLE
- 1: SURFACE MOUNTED PANELBOARD
- 1: 4' LED LIGHT FIXTURE, UPPERCASE LETTER DENOTES TYPE, LOWERCASE LETTER DENOTES SWITCHING, NUMBER DENOTES CIRCUIT GROUPING
- 1: TRACK LIGHTING
- 1: NEW WORK
- 1: EXISTING WORK
- 1: REMOVALS (HATCHED)
- 1: KEYS NOTE
- 1: TELEVISION OUTLET, RECESSED BOX WITH DATA AND HDMI CABLE, MOUNT BEHIND TV
- 1: WP WEATHERPROOF
- 1: GFI GROUND FAULT INTERRUPTER
- 1: DUCTBANK SECTION

GENERAL NOTES:

- A. TRACE AND FIELD VERIFY SOURCE FOR ALL CIRCUIT REMOVALS AND CIRCUIT MODIFICATIONS. MAINTAIN CONTINUITY OF CIRCUIT TO EQUIPMENT THAT REMAINS.
- B. WHERE CIRCUITS HAVE BEEN ADDED, REMOVED, OR MODIFIED, PROVIDE UPDATED, TYPEWRITTEN PANELBOARD DIRECTORIES.
- C. UNLESS OTHERWISE NOTED, CIRCUIT RECEPTACLES AND LIGHT FIXTURES SHOWN ON THIS DRAWING TO 20A-1P CIRCUIT BREAKERS IN EXISTING PANEL LC1, USING 2#12, #12G, 1/2" C, CIRCUIT GROUPINGS AS INDICATED. PROVIDE CIRCUIT BREAKERS IN EXISTING PANEL, TYPE AND AIC RATING TO MATCH EXISTING.
- D. CIRCUIT EMERGENCY BATTERY PACKS TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT.

KEYED NOTES:

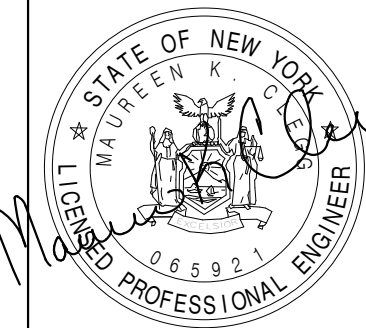
- 1. DISCONNECT AND REMOVE RECEPTACLE. REMOVE CONDUIT AND WIRE BACK TO RECEPTACLE IN SOUTHWEST CORNER OF BUILDING.
- 2. DISCONNECT AND REMOVE RECEPTACLE. CONDUIT AND WIRING SHALL REMAIN FOR RE-USE. EXTEND/REROUTE CONDUIT AND WIRING TO REPLACEMENT RECEPTACLE LOCATION AND RECONNECT. COORDINATE EXACT LOCATION PRIOR TO ROUGH IN.
- 3. DISCONNECT AND REMOVE SECTION OF TRACK LIGHTING. PROVIDE MANUFACTURERS RECOMMENDED END CAP ON REMAINING SECTION OF TRACKLIGHTING.
- 4. TYPICAL - PROVIDE CATV/DATA OUTLET ADJACENT TO EXISTING RECEPTACLE. COORDINATE EXACT MOUNTING LOCATION WITH EXISTING CONDITIONS. REFER TO CATV/DATA OUTLET DETAIL FOR REQUIREMENTS.
- 5. PROVIDE QUADRUPLX RECEPTACLE MOUNTED ON SIDE OF WOOD BEAM.
- 6. PROVIDE 2" CONDUIT WITH CAT6 NETWORK CABLE FROM SECOND FLOOR TO DOCS BUILDING. PROVIDE MINIMUM 10' SPARE CABLE AT EACH END. PROVIDE 8 CONDUCTOR TERMINATION AT EACH END. COORDINATE EXACT CONDUIT ROUTING WITH OWNER PRIOR TO COMMENCEMENT OF WORK. FOR BIDDING PURPOSES, ASSUME 100' OF CONDUIT AND CABLE.
- 7. PROVIDE 2" CONDUIT WITH RG6 COAXIAL CABLE FROM SECOND FLOOR TO DOCS BUILDING. PROVIDE MINIMUM 10' SPARE CABLE AT EACH END. PROVIDE TERMINATIONS AT EACH END. COORDINATE EXACT CONDUIT ROUTING WITH OWNER PRIOR TO COMMENCEMENT OF WORK. FOR BIDDING PURPOSES, ASSUME 100' OF CONDUIT AND CABLE.
- 8. PROVIDE 12"x12"x4" LOCKABLE JUNCTION BOX WITH TWO (2) 1" CONDUITS TO LOCATION OF OWNER PROVIDED CATV/DATA EQUIPMENT ON SECOND FLOOR.
- 9. PROVIDE RECESSED BOX BEHIND TV FOR DATA AND HDMI CABLE. PROVIDE BOX MOUNTED ABOVE COUNTER FOR HDMI CABLE FROM THE RECESSED BOX. ROUTE DATA AND HDMI CABLE TO VIDEO DATA EQUIPMENT LOCATION ON SECOND FLOOR. PROVIDE CAT6 CABLE AND HDMI CABLE AND TERMINATIONS.
- 10. CIRCUIT EXIT SIGN TO EXISTING EXIT SIGN CIRCUIT. EXTEND/REROUTE EXISTING CONDUIT AND WIRE AS REQUIRED.
- 11. PROVIDE GROUND BAR PER GROUND BAR DETAIL. BOND DATA RACK TO GROUND BAR USING #8 BARE COPPER WIRE.
- 12. PROVIDE A WEATHERPROOF GFI, DUPLEX RECEPTACLE MOUNTED TO FRONT OF BUILDING FOR DISPLAY. COORDINATE EXACT RECEPTACLE MOUNTING LOCATION WITH FINAL DISPLAY MOUNTING LOCATION.
- 13. PROVIDE BOX WITH WEATHERPROOF WHILE IN USE COVER FOR DATA AND HDMI CABLE. MOUNT BOX TO BUILDING ROOF, FOR ROOF MOUNTED DISPLAY. COORDINATE EXACT MOUNTING LOCATION WITH FINAL DISPLAY MOUNTING LOCATION. ROUTE DATA AND HDMI CABLE TO VIDEO DATA EQUIPMENT LOCATION ON SECOND FLOOR. PROVIDE CAT6 AND HDMI CABLE AND TERMINATIONS.
- 14. PROVIDE A WEATHERPROOF GFI, DUPLEX RECEPTACLE MOUNTED TO SIDE OF BUILDING.



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CONSTRUCTION

TITLE: **RELOCATE STATE POLICE EXHIBIT**

LOCATION: **NYS FAIRGROUNDS
581 STATE FAIR
BOULEVARD
SYRACUSE, NY 13209**

CLIENT: **NYS DEPARTMENT OF AGRICULTURE
& MARKETS**

MARK	DATE	DESCRIPTION
△	2-16-17	ADDENDUM #1
-	1-23-17	BID DOCUMENTS
-	1-18-17	COMMENT REVIEW
-	12-16-16	100% SUBMISSION

PROJECT NUMBER: **45545-C**

DESIGNED BY: **J. J. KING**

DRAWN BY: **J. T. TYO**

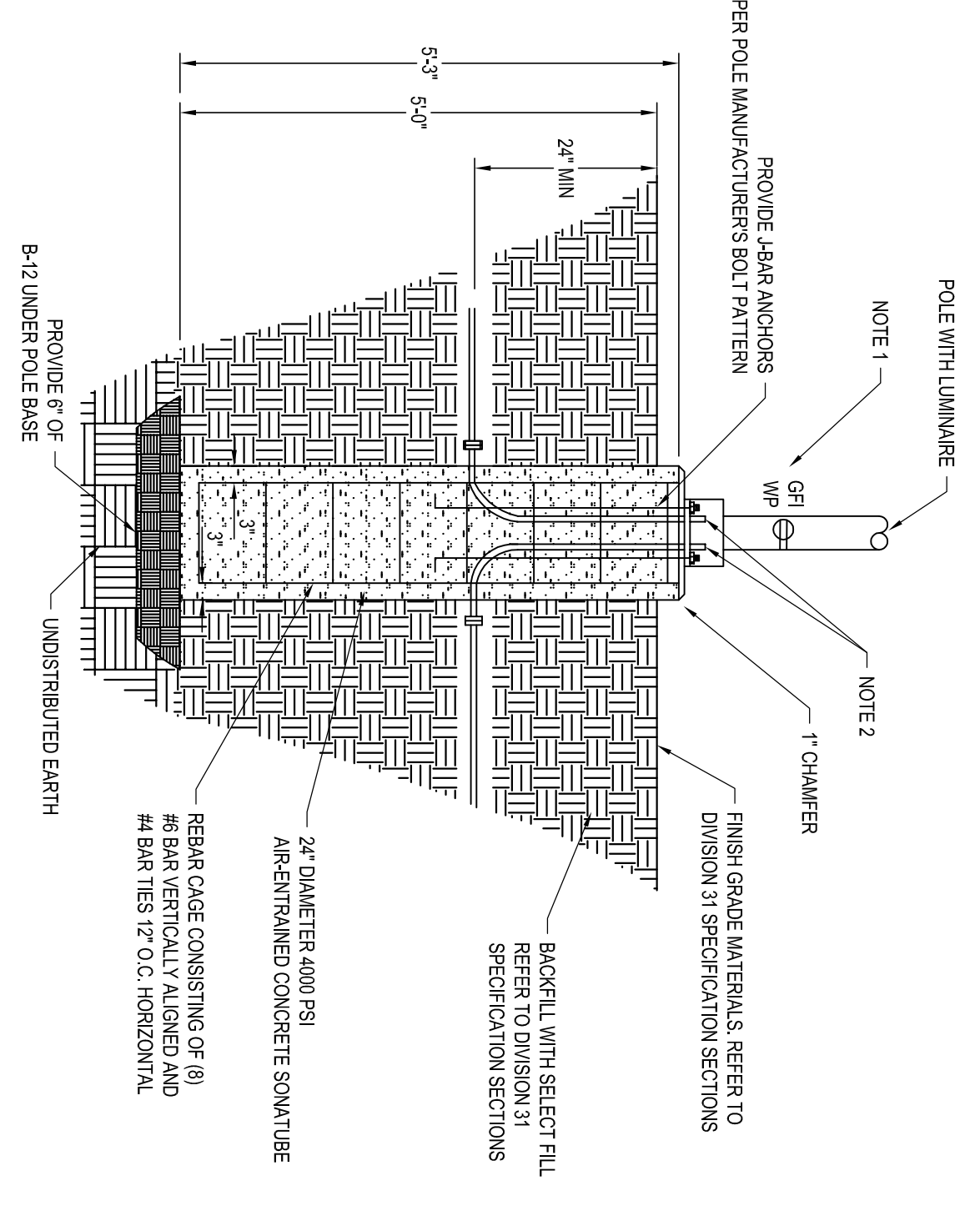
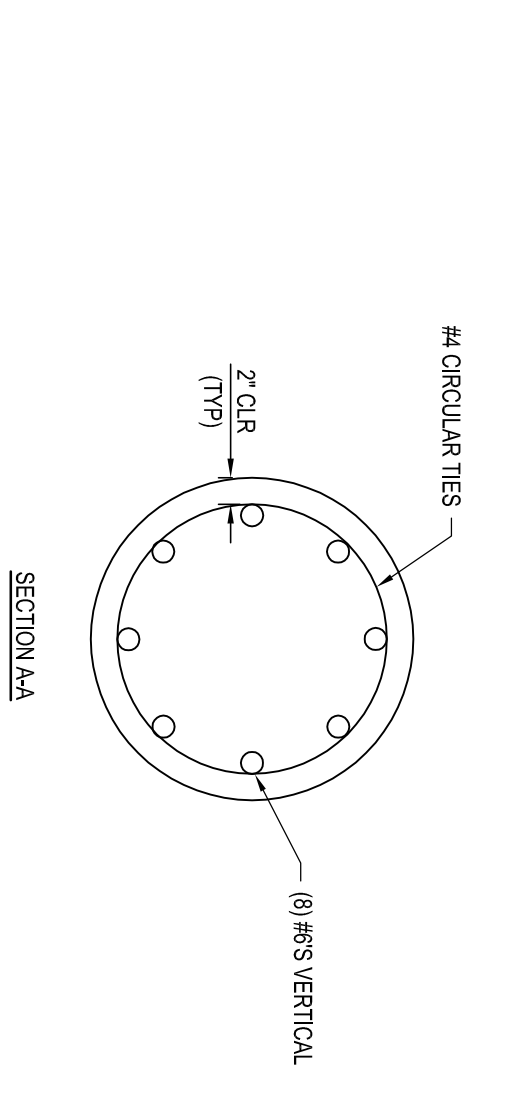
APPROVED: **D. J. OBRIST, PE**

SHEET TITLE:

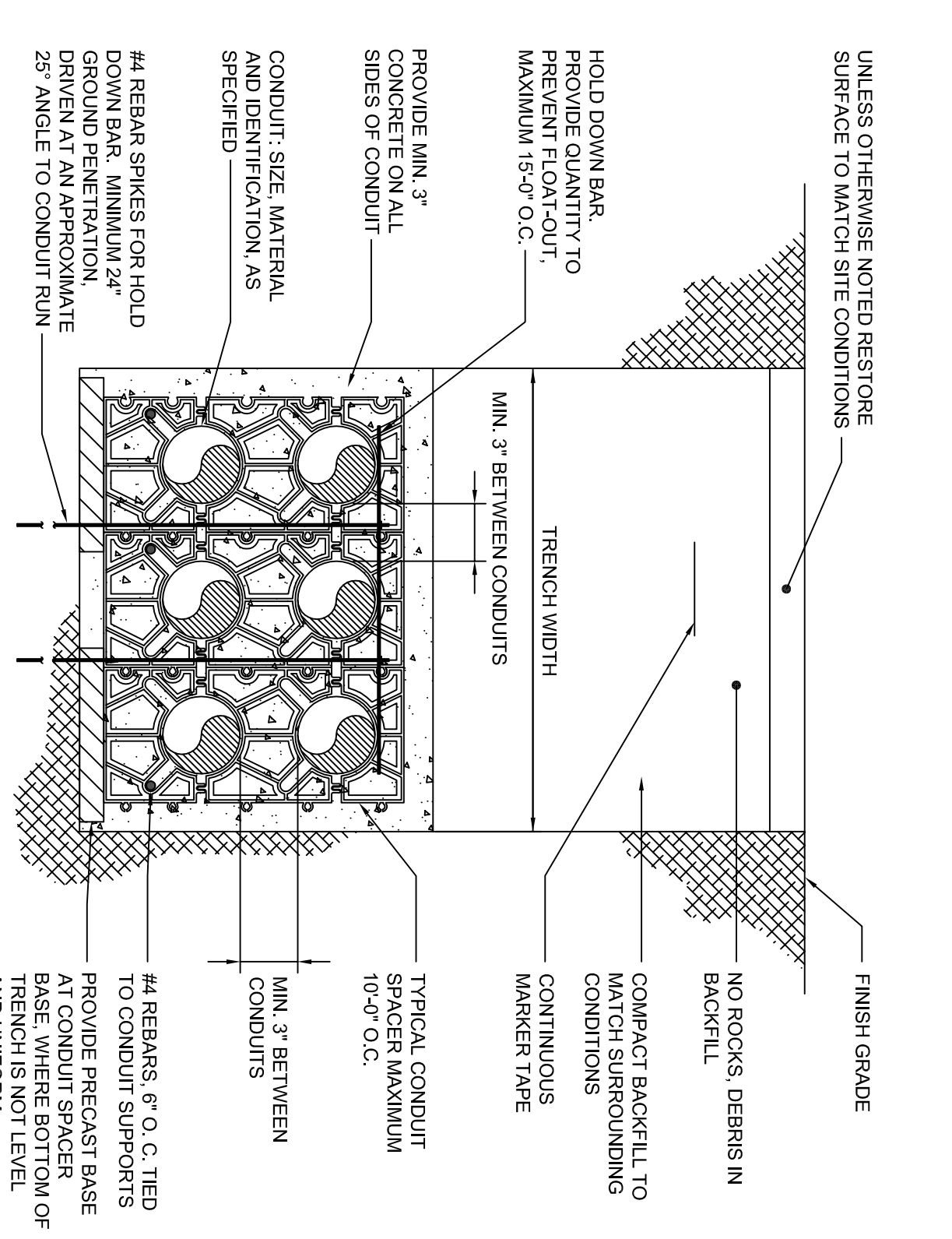
LOG CABIN FIRST FLOOR ELECTRICAL PLAN

DRAWING NUMBER: **E-101**

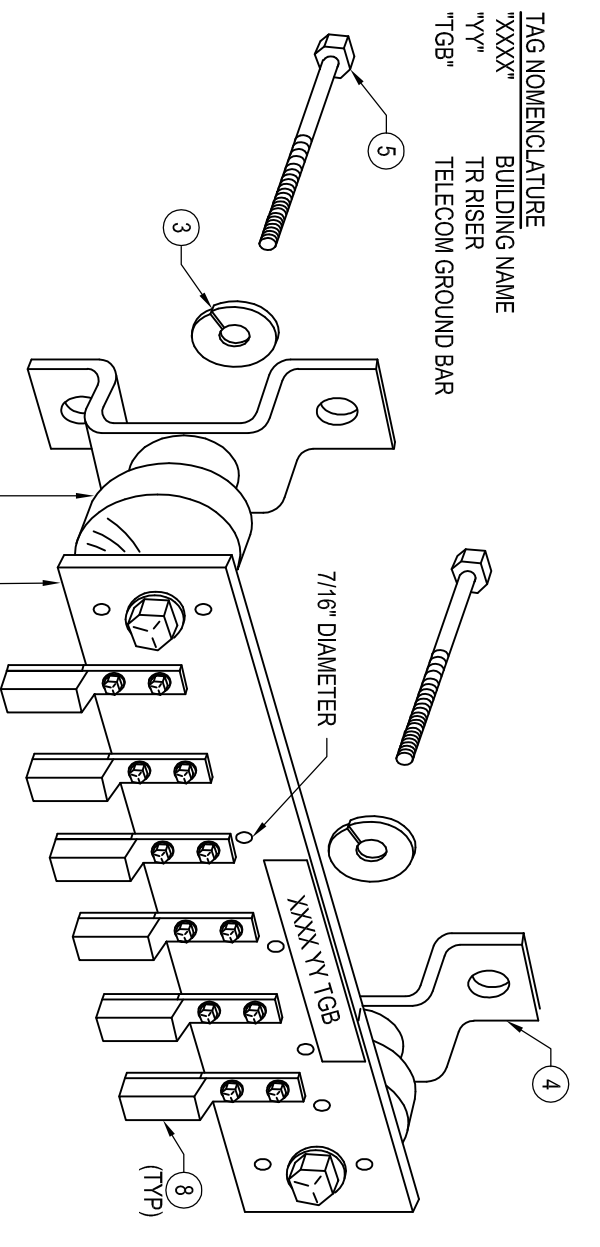
FIGURE DESIGNATOR	MANUFACTURER & MODEL NO.	LAMP NO. AND TYPE	VOLTS WATTS	BALLAST	MOUNTING	REMARKS
A	AGORN POLE MOUNTED LED AREA LIGHT, 5000 LUMENS, 4000K COLOR TEMP, TYPE II DISTRIBUTION, POST TOP MOUNT, SUN VALLEY LIGHTING LAS SERIES OR APPROVED EQUAL, BY LITHOMAN OR EATON. PROVIDE 1/2" ALUMINUM 4" ROUND FLUTED, STRAIGHT POLE.	LED	120 67	LED	POST TOP	BLACK FINISH, PROVIDE INTEGRAL PHOTOCELL, PROVIDE GF1 WEATHERPROOF DUPLEX RECEPTACLE IN POLE BASE



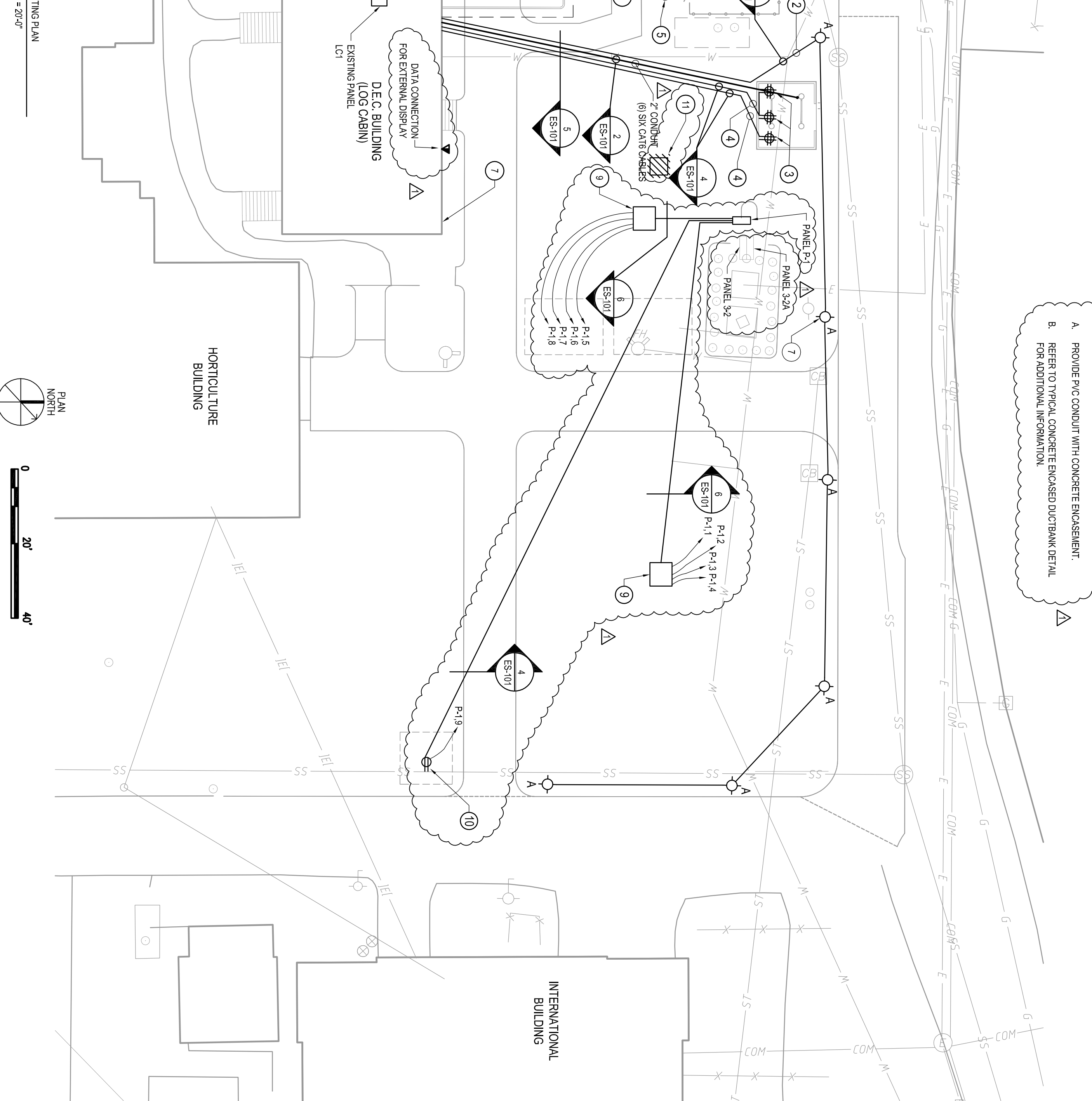
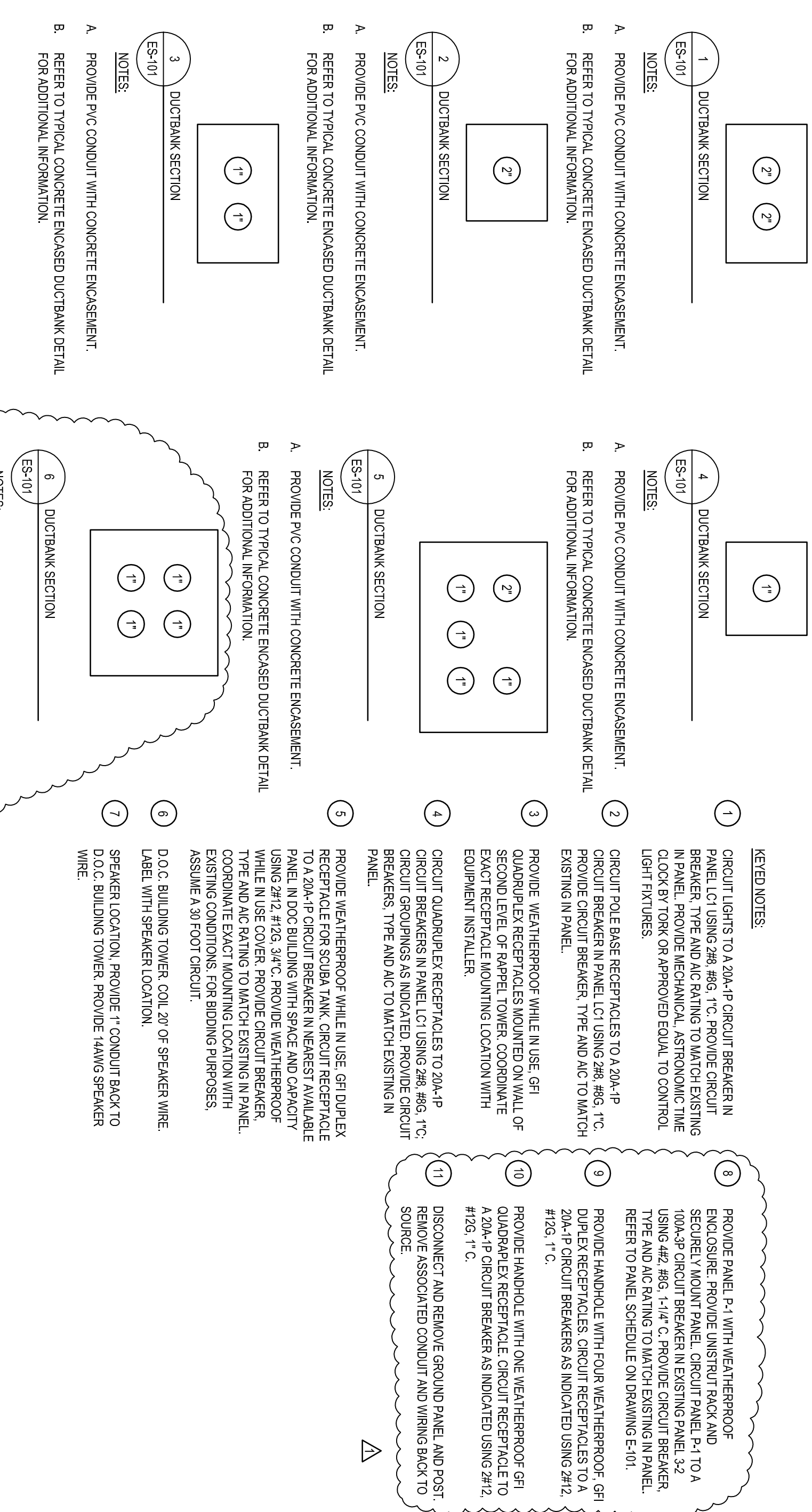
- NOTES**
- PROVIDE RECEPTACLE FLUSH WITH POLE WITH WEATHERPROOF WHILE IN USE COVER. REFER TO DRAWINGS FOR POLES DESIGNATED WITH RECEPTACLES. CONNECT TO 120V CIRCUIT INDICATED ON PLAN.
 - PROVIDE FOR ALL POLE BASES CONDUITS STRIPPED UP WITHIN POLE BASE PLATE FOR POWER (2 CONDUITS) AND POLE BASE GROUND (1 CONDUIT).
 - PROVIDE ADDITIONAL COMMUNICATION CONDUITS INTO POLE BASE WHERE REQUIRED. REFER TO DRAWINGS FOR CONDUIT SIZE AND QUANTITY.
 - MINIMUM SPACING SPACING APPLIES TO CONDUITS ARRANGED HORIZONTALLY AND VERTICALLY.



- GENERAL NOTES**
- REFER TO DUCTBANK SECTION AND FLOOR PLANS FOR ACTUAL QUANTITY AND SIZE OF CONDUITS REQUIRED.
 - ENCASED MATERIAL MEETING SPECIFICATIONS MAY BE USED FOR BACKFILL IN TRENCHES. IN THE EVENT ENCASED MATERIAL DOES NOT MEET SPECIFICATIONS, PROVIDE GRANULAR BACKFILL AS SPECIFIED FOR BACKFILL. REMOVE UNSUITABLE MATERIAL FROM SITE.
 - UNLESS OTHERWISE NOTED, TOP OF CONDUIT SHALL BE 30\"/>



- INSULATED CORNER GROUND BAR, 1/4\"/>
- INSULATORS, NEWTON INSTRUMENT COMPANY CATEGORY NUMBER 306-H OR EQUAL. HOLE CENTERS TO MATCH NEMA LUG CONFIGURATION.
- INSULATORS, NEWTON INSTRUMENT COMPANY CATEGORY NUMBER 3015-3 OR EQUAL.
- 5/8\"/>
- 5/8\"/>
- 5/8\"/>
- LONG BARREL COMPRESSION LUG, PROVIDE A MINIMUM OF 6 LUGS PER T99. DRILL AND TAP AS REQUIRED.



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 Syracuse, New York 13212

CLIENT:
 NYS DEPARTMENT OF AGRICULTURE & MARKETS

LOCATION:
 NYS FAIRGROUNDS
 581 STATE FAIR BLDG.
 SYRACUSE, NY 13209

CONTRACT:
 CONSTRUCTION

TITLE:
 RELOCATE STATE POLICE EXHIBIT

MARK:
 45545-C

DESIGNED BY:
 -

DRAWN BY:
 -

FIELD CHECK:
 -

APPROVED:
 -

ADJUDICUM #1
 2/16/17

BD DOCUMENTS
 1/23/17

COMMENT REVIEW
 1/18/17

100% SUBMISSION
 12/16/2016

PROJECT NUMBER:
 45545-C

SHEET TITLE:
 SITE LIGHTING PLAN

DRAWING NUMBER:
 ES-101

SHEET _____ **OF** _____

PANEL SCHEDULE										
PANEL: 3-2 (EXR)		VOLTS: 208/120		PHASE: 3		WIRE: 4				
MAIN RATING: 800 AMPS		MCB: 800 AMPS		MIN AIC RATING: 18 KAIC		AMPS RMS SYM.				
MOUNTING: SURFACE		OTHER: IN ENCL., TOP FEED		LOCATION: ADJACENT TO XFMR 3-2						
CKT. NO.	LOAD DESCRIPTION	LOAD	WIRE SIZE	TRIP	PHASE A B C	TRIP	WIRE SIZE	LOAD	LOAD DESCRIPTION	CKT. NO.
1	GROUND PANEL 20	18000	500	200/3	↑	200/3	500	18000	GROUND PANEL 21	2
3		18000	-	-	↑	-	-	18000		4
5		18000	-	-	↑	-	-	18000		6
7	GROUND PANEL 22	18000	400	200/3	↑	200/3	400	18000	GROUND PANEL 23	8
9		18000	2 SETS	-	↑	2 SETS	-	18000		10
11		18000	-	-	↑	-	-	18000		12
13	GROUND PANEL 24	18000	500	200/3	↑	200/3	500	18000	GROUND PANEL 25	14
15		18000	2 SETS	-	↑	2 SETS	-	18000		16
17		18000	-	-	↑	-	-	18000		18
19	LC-843	-	-	200/3	↑	200/3	-	-	LC-841	20
21		-	-	-	↑	-	-	-		22
23		-	-	-	↑	-	-	-		24
25	REST AND EAT	-	-	60/3	↑	-	-	-	SPACE	26
27		-	-	-	↑	-	-	-	SPACE	28
29		-	-	-	↑	-	-	-	SPACE	30
31	SPACE	-	-	-	↑	-	-	-	SPACE	32
33	SPACE	-	-	-	↑	-	-	-	SPACE	34
35	SPACE	-	-	-	↑	-	-	-	SPACE	36
37	SPACE	-	-	-	↑	20/3	#B	-	TVSS	38
39	SPACE	-	-	-	↑	-	-	-		40
41	SPACE	-	-	-	↑	-	-	-		42

PANEL SCHEDULE										
PANEL: 3-2A		VOLTS: 208/120		PHASE: 3		WIRE: 4				
MAIN RATING: 800 AMPS		MCB: 800 AMPS		MIN AIC RATING: 18 KAIC		AMPS RMS SYM.				
MOUNTING: SURFACE		OTHER: IN ENCL., BTM FEED		LOCATION: ADJACENT TO XFMR 3-2						
CKT. NO.	LOAD DESCRIPTION	LOAD	WIRE SIZE	TRIP	PHASE A B C	TRIP	WIRE SIZE	LOAD	LOAD DESCRIPTION	CKT. NO.
1	SPARE	-	-	200/3	↑	200/3	-	-	SPARE	2
3		-	-	-	↑	-	-	-		4
5		-	-	-	↑	-	-	-		6
7	SPARE	-	-	200/3	↑	200/3	-	-	SPARE	8
9		-	-	-	↑	-	-	-		10
11		-	-	-	↑	-	-	-		12
13	SPARE	-	-	200/3	↑	200/3	-	-	SPARE	14
15		-	-	-	↑	-	-	-		16
17		-	-	-	↑	-	-	-		18
19	SPARE	-	-	200/3	↑	200/3	-	-	SPARE	20
21		-	-	-	↑	-	-	-		22
23		-	-	-	↑	-	-	-		24
25	SPARE	-	-	100/2	↑	100/2	-	-	SPARE	26
27		-	-	-	↑	-	-	-		28
29	SPARE	-	-	100/2	↑	100/2	-	-	SPARE	30
31		-	-	-	↑	-	-	-		32
33	SPARE	-	-	20/1	↑	20/1	-	-	SPARE	34
35	SPARE	-	-	20/1	↑	20/1	-	-	SPARE	36
37		-	-	-	↑	20/3	#B	-	SFD	38
39		-	-	-	↑	-	-	-		40
41		-	-	-	↑	-	-	-		42

NOTE: MAXIMUM PANELBOARD BOX SIZE 73.50" X 36" X 10.4" BASIS OF DESIGN EATON PRL4.

PANEL NOTES:

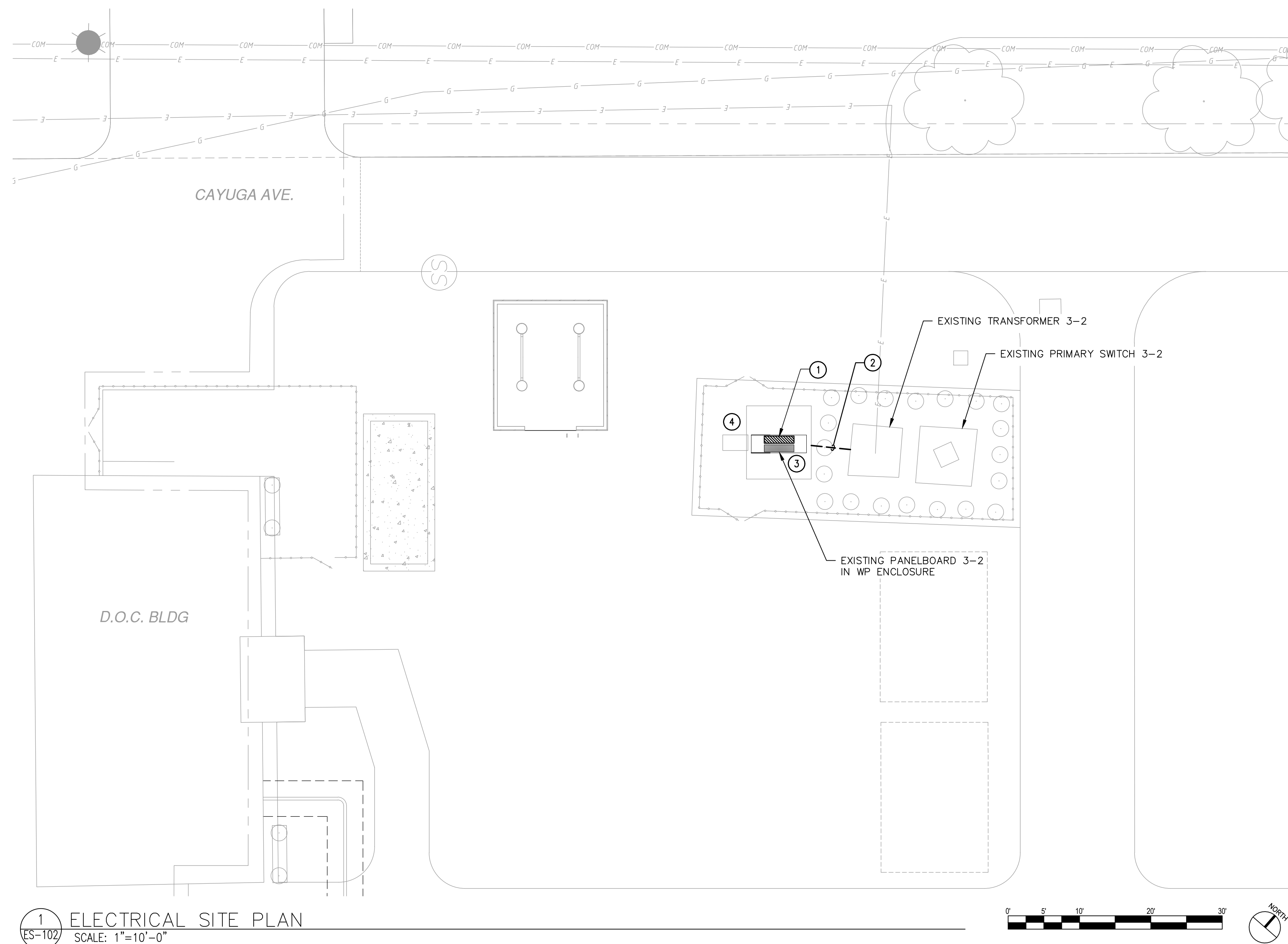
1. PROVIDE TYPED PANEL SCHEDULE FOR EACH PANEL.
2. FOR EACH FEEDER LIST THE SITE NUMBERS CONNECTED TO THAT FEEDER.

GENERAL NOTES:

1. RESERVED.

KEYED NOTES:

1. PROVIDE 800 AMP PANELBOARD "3-2A" PER PANEL SCHEDULE THIS SHEET. INSTALL PANELBOARD IN EXISTING WP ENCLOSURE ON MIDWAY SIDE. EXISTING PANELBOARD 3-2 IS INSTALLED IN ENCLOSURE ON THE D.E.C. SIDE.
2. PROVIDE 2-4" CONDUIT FROM EXISTING TRANSFORMER SECONDARY COMPARTMENT TO PANELBOARD ENCLOSURE TO SERVE PANELBOARD 3-2A. PROVIDE 4-600 KCMIL, 3/0 GROUND IN EACH CONDUIT. EXCAVATE AS REQUIRED AROUND TRANSFORMER PAD AND PROVIDE CONDUIT OR PROVIDE RGS LB FITTINGS FROM SECONDARY COMPARTMENT.
3. PROVIDE LOUVER AND FILTER FOR EXISTING ENCLOSURE. LOUVER (15.31" H X 9.5" W X 0.43" D, BY SAGINAW CONTROL & ENGINEERING #SCE-AVK812 AND FILTER #SCE-FLT812). PROVIDE ONE LOUVER/FILTER ASSEMBLY PER DOOR, AND ONE LOUVER/FILTER ASSEMBLY ON SIDE WALL.
4. EXISTING WIREWAY WITH FEEDERS TO GROUND PANELS. RELOCATE AS DIRECTED 4-200 AMP FEEDERS FROM PANELBOARD 3-2 TO PANELBOARD 3-2A. UPDATE PANEL SCHEDULE OF PANELBOARD 3-2.



1 ELECTRICAL SITE PLAN
SCALE: 1"=10'-0"



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Syracuse, New York 13212



WARNING:

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CONTRACT: CONSTRUCTION

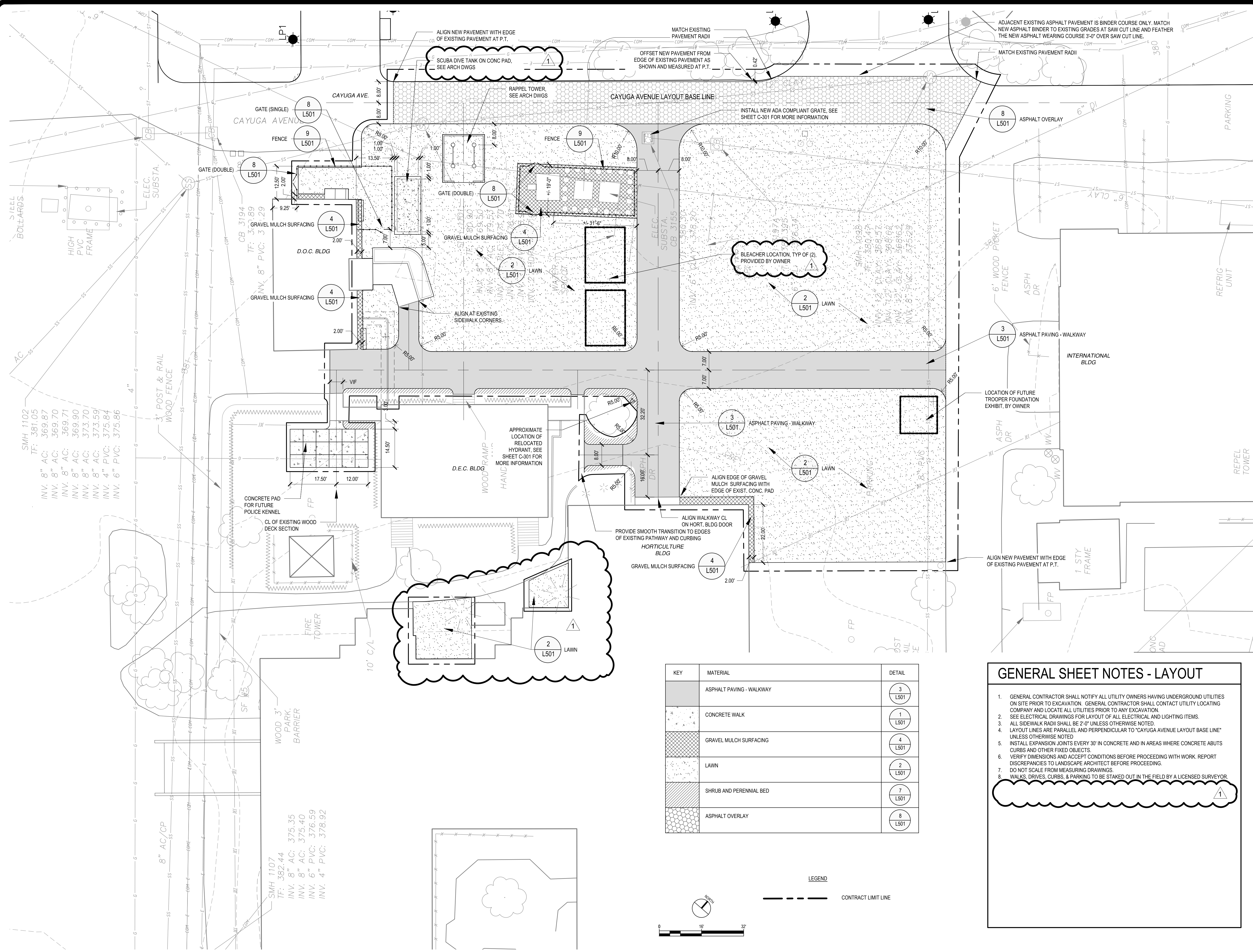
TITLE: RELOCATE STATE POLICE EXHIBIT

LOCATION: NYS FAIRGROUNDS
581 STATE FAIR BOULEVARD
SYRACUSE, NY 13209

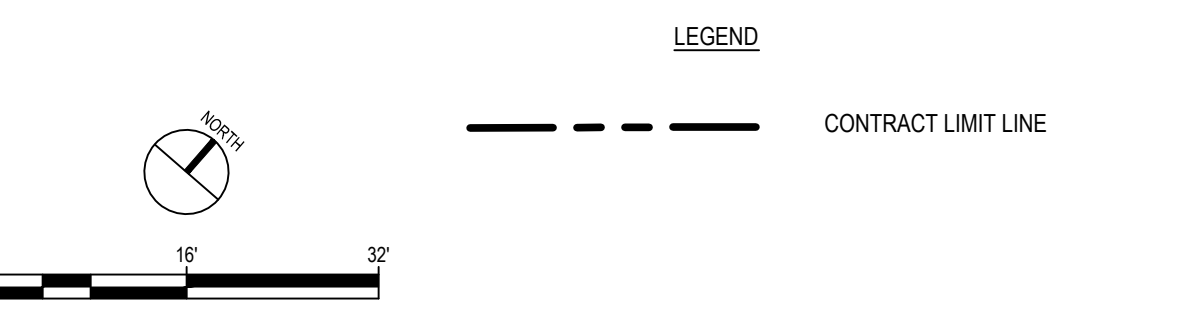
CLIENT: NYS DEPARTMENT OF AGRICULTURE & MARKETS

MARK	DATE	DESCRIPTION
	02/16/17	ADDENDUM 1
	01/23/17	BID DOCUMENTS
	01/18/17	COMMENT REVIEW
	12/16/2016	100% SUBMISSION
PROJECT NUMBER:	45545 - C	
DESIGNED BY:	MOM	
DRAWN BY:	JRT	
FIELD CHECK:		
APPROVED:		
SHEET TITLE:	ELECTRICAL SITE PLAN	
DRAWING NUMBER:	ES-102	

Feb. 15, 2017 - 4:11pm
 T:\PROJECTS\NY State Fair - State Police Exhibit\ACAD\L201 Layout Plan.dwg
 36.24 PLOT SHEET



KEY	MATERIAL	DETAIL
[Pattern]	ASPHALT PAVING - WALKWAY	3 L501
[Pattern]	CONCRETE WALK	1 L501
[Pattern]	GRAVEL MULCH SURFACING	4 L501
[Pattern]	LAWN	2 L501
[Pattern]	SHRUB AND PERENNIAL BED	7 L501
[Pattern]	ASPHALT OVERLAY	8 L501



GENERAL SHEET NOTES - LAYOUT

- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS HAVING UNDERGROUND UTILITIES ON SITE PRIOR TO EXCAVATION. GENERAL CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATION.
- SEE ELECTRICAL DRAWINGS FOR LAYOUT OF ALL ELECTRICAL AND LIGHTING ITEMS.
- ALL SIDEWALK RADII SHALL BE 2'-0" UNLESS OTHERWISE NOTED.
- LAYOUT LINES ARE PARALLEL AND PERPENDICULAR TO "CAYUGA AVENUE LAYOUT BASE LINE" UNLESS OTHERWISE NOTED
- INSTALL EXPANSION JOINTS EVERY 30' IN CONCRETE AND IN AREAS WHERE CONCRETE ABUTS CURBS AND OTHER FIXED OBJECTS.
- VERIFY DIMENSIONS AND ACCEPT CONDITIONS BEFORE PROCEEDING WITH WORK. REPORT DISCREPANCIES TO LANDSCAPE ARCHITECT BEFORE PROCEEDING.
- DO NOT SCALE FROM MEASURING DRAWINGS.
- WALKS, DRIVES, CURBS, & PARKING TO BE STAKED OUT IN THE FIELD BY A LICENSED SURVEYOR.

Office of General Services
 DESIGN & CONSTRUCTION

CONSULTANT

C&S COMPANIES

C&S Engineers, Inc.
 499 Col. Eileen Collins Blvd.
 Syracuse, New York 13212

TMA LANDSCAPE ARCHITECTS

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CONTRACT: CONSTRUCTION

TITLE: RELOCATE STATE POLICE EXHIBIT

LOCATION: NYS FAIRGROUNDS
 581 STATE FAIR BLVD.
 SYRACUSE, NY 13209

CLIENT: NYS DEPARTMENT OF AGRICULTURE & MARKETS

MARK	DATE	DESCRIPTION
△	02/16/2017	ADDENDUM 1
	02/01/2017	BID DOCUMENTS
	01/18/2017	COMMENT REVIEW
	12/16/2016	100% SUBMISSION

PROJECT NUMBER: **45545-C**

DESIGNED BY: MDC/JBP

DRAWN BY: JBP/BRD

FIELD CHECK:

APPROVED:

SHEET TITLE: **MATERIALS & LAYOUT PLAN**

DRAWING NUMBER: **L-201**

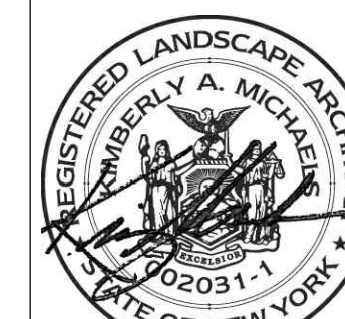
SHEET OF



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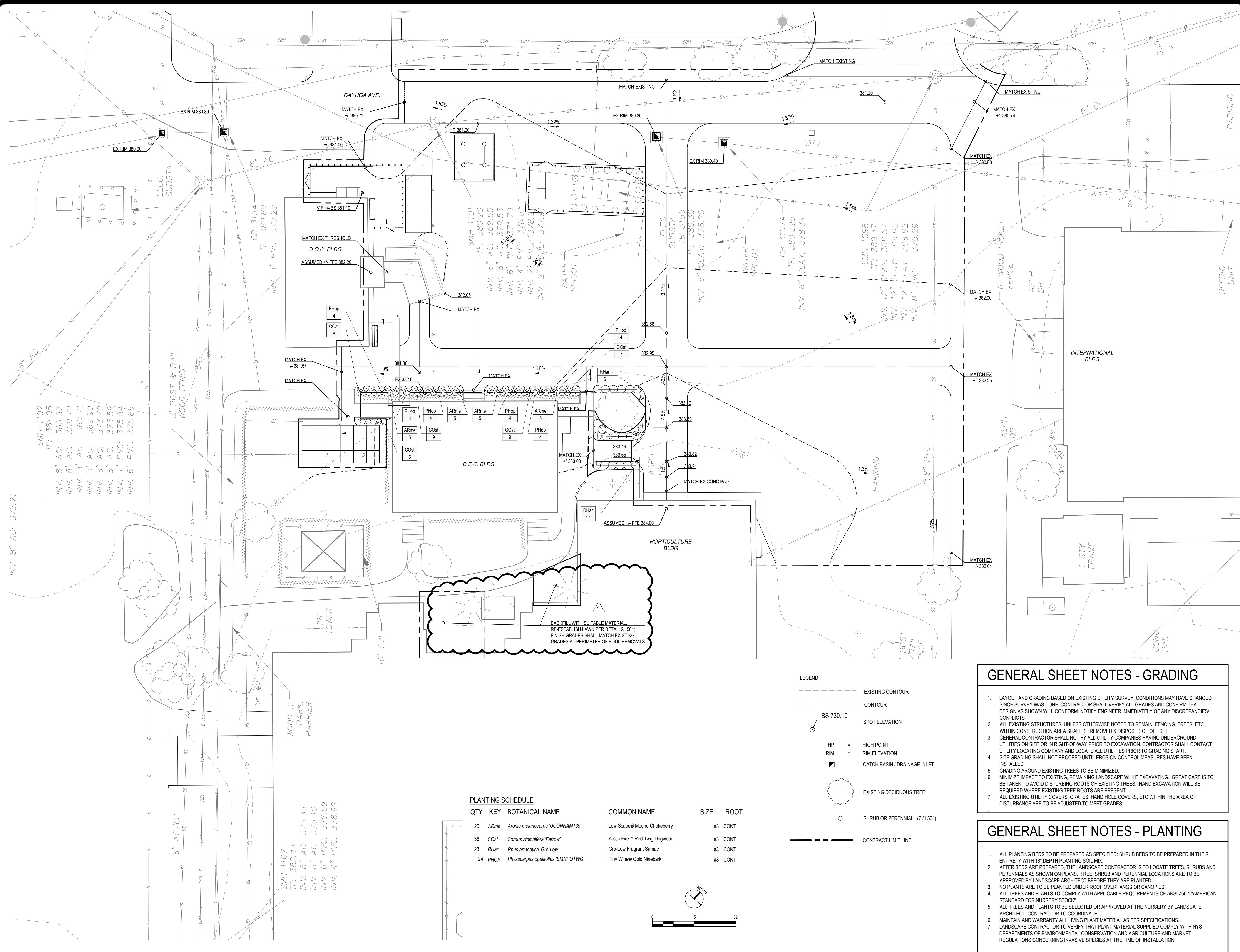
MARK	DATE	DESCRIPTION
△	02/16/2017	ADDENDUM 1
	02/01/2017	BID DOCUMENTS
	01/18/2017	COMMENT REVIEW
	12/16/2016	100% SUBMISSION

PROJECT NUMBER: 45545-C
DESIGNED BY: MDC/JBP
DRAWN BY: JBP/BRD

FIELD CHECK:
APPROVED:

SHEET TITLE: **GRADING & PLANTING PLAN**

DRAWING NUMBER: **L-301**



GENERAL SHEET NOTES - GRADING

- LAYOUT AND GRADING BASED ON EXISTING UTILITY SURVEY. CONDITIONS MAY HAVE CHANGED SINCE SURVEY WAS DONE. CONTRACTOR SHALL VERIFY ALL GRADES AND CONFIRM THAT DESIGN AS SHOWN WILL CONFORM. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES/CONFLICTS.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE.
- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- GRADING AROUND EXISTING TREES TO BE MINIMIZED.
- MINIMIZE IMPACT TO EXISTING, REMAINING LANDSCAPE WHILE EXCAVATING. GREAT CARE IS TO BE TAKEN TO AVOID DISTURBING ROOTS OF EXISTING TREES. HAND EXCAVATION WILL BE REQUIRED WHERE EXISTING TREE ROOTS ARE PRESENT.
- ALL EXISTING UTILITY COVERS, GRATES, HAND HOLE COVERS, ETC WITHIN THE AREA OF DISTURBANCE ARE TO BE ADJUSTED TO MEET GRADES.

GENERAL SHEET NOTES - PLANTING

- ALL PLANTING BEDS TO BE PREPARED AS SPECIFIED. SHRUB BEDS TO BE PREPARED IN THEIR ENTIRETY WITH 18" DEPTH PLANTING SOIL MIX.
- AFTER BEDS ARE PREPARED, THE LANDSCAPE CONTRACTOR IS TO LOCATE TREES, SHRUBS AND PERENNIALS AS SHOWN ON PLANS. TREE, SHRUB AND PERENNIAL LOCATIONS ARE TO BE APPROVED BY LANDSCAPE ARCHITECT BEFORE THEY ARE PLANTED.
- NO PLANTS ARE TO BE PLANTED UNDER ROOF OVERHANGS OR CANOPIES.
- ALL TREES AND PLANTS TO COMPLY WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 'AMERICAN STANDARD FOR NURSERY STOCK'.
- ALL TREES AND PLANTS TO BE SELECTED OR APPROVED AT THE NURSERY BY LANDSCAPE ARCHITECT. CONTRACTOR TO COORDINATE.
- MAINTAIN AND WARRANTY ALL LIVING PLANT MATERIAL AS PER SPECIFICATIONS.
- LANDSCAPE CONTRACTOR TO VERIFY THAT PLANT MATERIAL SUPPLIED COMPLY WITH NYS DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND AGRICULTURE AND MARKET REGULATIONS CONCERNING INVASIVE SPECIES AT THE TIME OF INSTALLATION.

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36.24 PLOT SHEET

SECTION 073129

WOOD SHINGLES

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Wood Nailers and Blocking: Section 061000.

1.02 REFERENCES

- A. ASTM: American Society for Testing and Materials.
- B. UL: Underwriters Laboratories.

1.03 SUBMITTALS

- A. Submittals Package: Submit the product data, samples, and quality control submittals specified below at the same time as a package.
- B. Product Data: Catalog sheets, specifications, and installation instructions for each material specified, except for nails.
- C. Samples:
 - 1. Shingles: One bundle each type specified.
 - 2. Nails: 3, each type.

1.04 QUALITY ASSURANCE

- A. Applicator's Qualifications: The crew chief or foreman and at least one other member of the roofing crew shall have previously installed at least 12 wood shake or shingle roof systems and shall be thoroughly familiar with all aspects of the installation.
- B. Fire Hazard Classification: The shingles shall have an Underwriters Laboratories Class B External Fire Resistance Rating.
 - 1. All shingle bundles shall bear the UL fire resistance label.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the site in the manufacturer's labeled unopened containers.
- B. Store materials in a dry, well ventilated place protected from the weather.

1.06 PROJECT CONDITIONS

- A. Do not install underlayment or shingles on wet surfaces.

- B. Do not perform the Work of this Section unless the Director's Representative is present or unless he directs that the Work be performed during his absence.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Shingles: UL Classified, Standard Grade, Tulip Poplar Bark Shingles
 1. Manufacturer: Bark House, 534 Oak Avenue, Spruce Pine, N.C. 28777, (828) 765-9010
 2. Random widths (six inch minimum to 48" maximum) x 1/2 inch.

PART 3 EXECUTION

3.01 PREPARATION

- A. Do not proceed with application of shingles until all surfaces are dry, free of all debris and protruding nails, and properly supported for shingle nailing and application.

3.02 WALL INSTALLATION

- A. Installing Shingles – Refer to manufacturer's written instructions:
 1. Install one ply of felt underlayment over the entire surface to be shingled. Lay edges a minimum of 2 inches and ends a minimum of 6 inches.
 2. Start shingles with a starter course so that the first course at the bottom of the wall is doubled.
 3. Butt shingles together so joints are closed.
 4. Stagger joints in courses so that no joints in any three adjacent courses are in alignment.
 5. Shingle Weather Exposure:
 - a. 16 inch shingles: 7-1/2 inch exposure.
 6. Inside and Outside Corners:
 - a. Miter cut the shingles so they can be installed with an alternate overlap between courses.
 7. Nailing Shingles:
 - a. Secure each shingle with two nails. Place each nail not more than 3/4 inch from the side of the shingle and not more than 2 inches above the butt line of the next course.
 - b. Drive nails flush without driving the nailheads into the shingles or crushing the wood.

3.04 CLEANING

- A. Clean debris from roofs, gutters, downspouts, and drainage systems. Test drainage system for proper operation.

END OF SECTION

SECTION 076000

FLASHING AND TRIM

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Wood Nailers and Blocking: Section 061053.
- B. Asphalt Shingles: Section 073113.

1.03 REFERENCES

- A. SMACNA: Sheet Metal and Air Conditioning Contractors' National Association, 4201 Lafayette Center Dr., Chantilly, VA 20151-1209, (703) 803-2980, www.smacna.org.
- B. ASTM: ASTM International, 100 Barr Harbor Dr., PO Box C700, West Conshohocken, PA, 19428-2959, (610) 832-9500, www.astm.org.

1.04 SYSTEM DESCRIPTION

- A. Metal flashings, trim, and related accessories that form terminations and waterproof connections.

1.05 SUBMITTALS

- A. Product Data: Catalog sheets, specifications, installation instructions for each item specified except for shop or job formed items, solder, flux, and bituminous paint.
- B. Samples:
 - 1. Materials for Flashings: One 6 inch sq piece, for each type material specified.
 - 2. Anchors: Six, each type required.
 - 3. Cap Flashings: Full section, 6 inches long.
 - 4. Gravel Stop: Full section, 6 inches long.
 - 5. Coping: Full section, 12 inches long.

1.06 QUALITY ASSURANCE

- A. Except as otherwise shown or specified, comply with applicable recommendations, details, and standards of CDA, and SMACNA.
- B. Manufacturer's Recommendations: For factory fabricated items, follow the manufacturer's recommendations and installation instructions unless specifically shown or specified otherwise.

1.07 PROJECT CONDITIONS

- A. Do not execute the Work of this Section unless the Director's Representative is present, or unless he directs that the Work be performed during his absence.
- B. Make the roof and all uncompleted flashings watertight at the end of each work day.

PART 2 PRODUCTS

2.01 MATERIALS FOR FLASHING FABRICATION

- A. Stainless Steel Sheet: Dead soft fully annealed stainless steel sheet, ASTM A 666, Type 302/304, 2D dull finish.
- B. Prefinished Aluminum Sheet: ASTM B 209, 3003-H14 alloy.
 - 1. Finish: Fluorocarbon coating (polyvinylidene Fluoride PVDF). Reverse side primed. Shipped with strippable protective tape.
 - 2. Color: As selected by the Director's Representative from manufacturer's standard colors.

2.02 FASTENERS

- A. Nails: "Stronghold" type large flat head roofing nail.
 - 1. For Stainless Steel: Stainless steel.
 - 2. For Aluminum: Hard aluminum alloy or stainless steel.
- B. Screws, Bolts, and Other Fastening Accessories:
 - 1. For Stainless Steel: Stainless steel.
 - 2. For Aluminum: Hard aluminum alloy or stainless steel.
- C. Anchors: Provide one of the following types:
 - 1. Hammer driven anchors, consisting of a stainless steel drive pin and a plastic or corrosion resistant metal expansion shield inserted thru a stainless steel disc with an EPDM sealing washer.
 - 2. Self-tapping, corrosion resistant, concrete and masonry screw inserted thru a stainless steel disc with an EPDM sealing washer.

2.03 MISCELLANEOUS MATERIALS

- A. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.
- B. Type 2 Sealant: One-part acrylic polymer sealant; Pecora AVW-920, PTI 738, or Tremco Mono.

2.04 FABRICATION

- A. Where practicable, form and fabricate sheet metal Work in the factory or shop. Produce bends and profiles accurately to the indicated shapes. Where not indicated or specified, follow the applicable requirements of the reference standards listed in PART 1.
- B. Base Flashing:
 - 1. Prefinished Aluminum: .032 inch.
- C. Extruded Aluminum Gravel Stop: Complete system including gravel stop, extruded aluminum joint cover plates, concealed .025 inch aluminum joint flashing, fasteners, corners, and intersections and all other accessory components. Type F gravel stop by Architectural Products Company, 1290 Aviation Blvd., Suite 200, P.O. Box 630, Hebron, KY, (800) 837-1001, www.archprod.com.
 - 1. Face Height: Closest manufacturer's standard dimension to face height shown on drawings.
 - 2. Finish: Color Anodized.
 - 3. Color: Dark Bronze
- D. Shop Formed Coping:
 - 1. Prefinished Aluminum: .040 inch.
- E. Eave and Rake Flashing:
 - 1. Prefinished Aluminum: .032 inch.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Coordinate the Work of this Section with other Work for the correct sequencing of items that make up the entire system of weatherproofing or waterproofing.

3.02 PREPARATION

- A. Do not install the Work of this Section unless all necessary nailers, blocking and other supporting components have been provided.
- B. Do not install the Work of this Section unless all substrates are clean and dry.

3.03 INSTALLATION

- A. Isolation: Separate dissimilar metals from each other with bituminous paint.
- B. Installing Cap Flashing:
 - 1. Form and install the cap to provide a spring tight fit against the base flashing. Lap all end joints and base flashing a minimum of 3 inches. Extend the cap continuously around corners or provide lock seams.

1. Surface Mounted Cap Flashing:
 - a. Form the top portion of the cap flashing which comes in contact with the wall surface with a one-inch wide bearing surface. Form a 45 degree x 1/4 inch wide stiffener and caulking flange along the top edge.
 - b. Apply Type 2 sealant on the back side of the bearing surface.
 - c. Secure the cap flashing to the wall with fasteners spaced one foot oc thru the bearing surface.
 - d. Apply Type 2 sealant along the caulking flange.

- C. Installing Base Flashing:
 1. Form the base flashing into lengths not exceeding 8 ft long.
 2. Extend the vertical portion of the base flashing a min of 3 inches up behind the cap flashing.
 3. Extend the horizontal portion of the base flashing onto the roof surface a min of 4 inches and terminate in a 1/2 inch folded edge.
 4. Lap ends a min of 6 inches. Apply type 3 sealant between the mating surfaces of each length of flashing.
 5. Secure the flashing to the roof surfaces with 2 inch wide cleats (same material) hooked over the folded edge and nailed to the roof deck. Install cleats 8 inches oc.

- D. Installing Formed Metal Gravel Stops:
 1. Form the gravel stop into lengths not exceeding 8'-0". Allow 1/4 inch between sections for expansion.
 2. Install a continuous edge strip secured 8 inches oc.
 3. Install a 12 inch wide concealed splice plate at all joints. Form the splice plate to the exact shape of the gravel stop. Center the splice plate beneath the joints of the gravel stop and secure to the roof deck.
 4. Extend the horizontal portion of the gravel stop onto the roof surface a minimum of 4 inches and terminate in a 1/2 inch folded edge. Secure with nails spaced 3 inches oc staggered. Hook the drip edge of the gravel stop over a continuous metal edge strip.

- E. Installing Factory Fabricated Formed Metal Coping:
 1. Install in accordance with the manufacturer's written instructions unless shown or specified otherwise.

- F. Installing Eave and Rake Flashing:
 1. Install in lengths not to exceed 10'0". Lap ends a minimum of 3 inches.
 2. At eaves install the flashing under the 15 lb felt. At rakes install the flashing over the 15 lb felt.
 3. Secure the flashing to the roof deck with nails spaced 8 inches oc.

- G. Door and Window Flashing:
 1. Install the flashing in one continuous length from side to side.

END OF SECTION

SECTION 082200

FIBERGLASS DOORS AND FRAMES

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Finish Hardware: Section 087100.

1.02 SUBMITTALS

- A. Submit shop drawings and product.
- B. Indicate frame configuration, anchor types and spacing, location of cutouts for hardware, reinforcement and finish.
- C. Indicate door elevations and internal reinforcement.
- D. Submit manufacturer's product literature, fabrication descriptions and installation instructions.

1.03 DELIVERY, STORAGE AND PROTECTION

- A. Deliver, handle and store doors and frames at the job site in such a manner as to prevent damage. Only remove cartons upon arrival of doors at job site if cartons are wet or damaged. Doors shall be stored out of weather and/or extreme temperatures. The doors shall be stored in a vertical position on blocking, clear of the floor and with blocking between the doors to permit air circulation between the doors. All damaged or otherwise unsuitable doors and frames, when so ascertained, shall be immediately removed from the job site.

1.04 QUALITY ASSURANCE

- A. General: Provide fiberglass reinforced door and frame units made of components of standard construction furnished by one manufacturer as coordinated assemblies.
- B. Manufacturer: Company specializing in the manufacture of fiberglass doors and frames with a minimum of five years documented experience.
- C. Construction: Verify that FRP doors and frames are manufactured utilizing pultruded fiberglass components for flexibility, durability, superior strength and chemical resistance. Press-molded doors and frames will not be accepted.
- D. Resins: Resins shall comply with USDA and FDA standards for incidental food contact.
- E. Flame Spread Rating: Flame retardant structural shapes meet the minimum flame spread rating less than or equal to 25 when tested according to ASTM E84.

- F. Fire-rated doors and frames to conform to NFPA 252 (2008), CAN4 S104 (1985), UL10C (2001), and UL9 (2005).
- G. Impact Strength: FRP doors and panels 10.32 foot-pounds per inch of notch, ASTM D-256.
- H. Tensile Strength:
 - a. FRP doors and panels 12,000 psi, ASTM D-638.
 - b. FRP frames 30,000 psi, ASTM D-638.
- I. Flexural Strength: FRP doors, panels, and frames 25,000 psi, ASTM D-790.
- J. Compressive Strength:
 - a. FRP doors and panels 18,000 psi, ASTM D-695.
 - b. FRP frames 30,000 psi, ASTM D-695.
- K. Water Absorption: FRP doors, panels, and frames .27 %, ASTM D-570.
- L. Hardware Reinforcements: FRP doors and frames fabricated with a minimum screw holding strength of 1,000 lbs. Tested with a #12 x 1-1/4" hinge screw.
- M. Paint Adhesion: Coating for FRP doors, panels, and frames to conform to AAMA 624-07 for color uniformity, film adhesion, specular gloss, direct impact, abrasion resistance, and chemical resistance.
- N. Warranty: Warranty fiberglass doors and frames for life of the initial installation against failure due to corrosion. Additionally, warranty fiberglass doors and frames for a period of 10 years against failure due to materials and workmanship, from date of substantial completion.

PART 2 PRODUCTS

2.01 DOORS

Provide doors complying with requirements indicated below:

- A. Internal Construction
 - 1. Doors to have full height heavy duty vertical fiberglass stiffeners 6 inches on center.
 - 2. Core: polystyrene foam.
 - 3. Stiles and Rails: Stiles and rails shall be pultruded fiberglass tubes. No metal or wood lumber reinforcements will be allowed. (Bevel Lock Stile 1/8" in 2").
 - 4. Composite door faces shall be urethane-fused to the stiles and rails and ground smooth for a completely sealed unit.
- B. Hardware Preparations
 - 1. Reinforcement Blocking:
 - a. Lockset - solid polymer blocking.
 - b. Surface mounted hardware - solid polymer blocking.
 - c. Thru-bolted hardware - solid polymer blocking.

2. Mortise Hardware:
 - a. Full mortise hinges - solid polymer blocking.
 3. All doors shall be mortised and reinforced to allow application of hinges and locks, in accordance with hardware schedule and manufacturer's templates. The hinges shall be attached by using stainless steel wood screws. Pilot holes shall be in strict accordance to manufacturer's recommendations.
- C. Door Accessories
1. Fasteners: Provide stainless steel fasteners as required.

2.02 FABRICATION

- A. General: Fabricate fiberglass door and frame units to be rigid, neat in appearance, and free from defects including warp and buckle.
- B. Core Construction: Manufacturer's standard core construction that complies with the following:
 1. Doors to have full height vertical fiberglass stiffeners, 6 inches on center. Voids to be filled with expanded polystyrene foam.
 2. Hollow/honeycomb core or aluminum components will not be accepted.
- C. Stiles and Rails: Fabricate doors utilizing heavy duty pultruded fiberglass tubular members.
- D. Door Faces: Laminated composite faces shall be urethane fused to the stile and rail assembly, including the vertical stiffeners and core material, utilizing a two-part 100 percent reactive urethane adhesive, and then cured under pressure until completely bonded.
- E. Clearances: Not more than 1/8 inch (3.2 mm) at jambs and heads. Not more than 3/4 inch (19 mm) at bottom, with standard being 5/8 inch (15.9 mm) at bottom.
- F. Door Edges: Lock stile to be factory beveled 1/8" in 2" for rub-free operation. Square lock-edge will not be accepted.
- G. Tolerances: Maximum diagonal distortion - 1/16 inch (1.6 mm) measured with straight edge, corner-to-corner.
- H. Hardware Reinforcement: Fabricate all hardware reinforcements utilizing premium high density polyethylene (HDPE) and fiberglass blocking. Any form of wood or metal reinforcements will not be accepted.
- I. Exposed Fasteners: Unless otherwise indicated, provide stainless steel, countersunk flat or oval heads for exposed screws and bolts.
- J. Hardware Preparations: Prepare doors and frames to receive mortised and concealed hardware according to final door hardware schedule and templates provided by hardware supplier. Doors and frames must be factory pre-drilled for all mortised hardware preps. Pilot and through-bolt holes for all surface mounted hardware to be drilled at the project site during installation.

2.03 FINISHES

- A. Furnish fiberglass doors and frames factory pre-finished.
 1. Finish: Manufacturers standard chemical resistant waterborne acrylic enamel topcoat. Sheen: Satin
 2. Color: To be selected from manufacturer's full range.

- B. Door Faces: Face skins shall be smooth. Due to the unit's extra-long life expectancy, minor repairs on facings must be easily blended in the event of damage. Slightly textured gelcoat facings will not be accepted.

PART 3 EXECUTION

3.01 INSPECTION

- A. Installer shall examine the substrate and conditions under which fiberglass reinforced plastic work is to be installed and notify the Director's Representative in writing of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 INSTALLATION

- A. General: Install FRP doors, frames and accessories in accordance with final shop drawings, and as herein specified. Installation to be in accordance with FRP manufacturer's written instructions.
- B. Frame Installation:
 - 1. Coordinate placement of frames with construction of enclosing walls. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. Frame must not be drilled for brace supports as finish may be damaged.
 - 2. In masonry construction, locate three (3) wall anchors per jamb at hinge and strike levels. A continuous bead of silicone sealant is to be applied between the head and jamb at the miter joint.
 - 3. Install pressure button in bed of silicone and install in anchor bolt locations on frame stop per manufacturer's instructions.
- C. Door Installation:
 - 1. Fit FRP doors accurately in frames, within clearances specified.

3.03 ADJUSTING

- A. At substantial completion, adjust all operable components to ensure proper installation and that they function smooth and freely.

3.04 CLEANING

- A. Remove dirt and excess sealant from exposed surfaces. Follow the manufacturer's recommended cleaning techniques and procedures for cleaning all surfaces. Use only cleaning products that will not scratch or damage the surfaces, and are recommended by the manufacturer.
- B. Remove debris from project site.

3.05 WARRANTY

- A. To include ten (10) years free from defects in materials and workmanship from date of shipment, and lifetime from degradation or failure due to corrosion from date of shipment, provided that the structural integrity of the doors and frames have not been violated or compromised. (No unauthorized cuts, bores, or other structural alterations affecting the core of the door, or the structure of the frame.)

END OF SECTION

SECTION 088400

PLASTIC GLAZING

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Glass and Glazing: Section 088100.

1.02 SUBMITTALS

- A. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 013300 does not apply to this Section.
- B. Product Data: Catalog sheets, specifications, and installation instructions for plastic glazing. Include tables indicating the following information for sash size required:
 - 1. Sheet thickness.
 - 2. Minimum edge engagement.
 - 3. Minimum rabbet depth.
 - 4. Minimum rabbet width.
 - 5. Minimum sealer tape thickness.
 - 6. Expansion allowances.
- C. Samples:
 - 1. Acrylic Sheet: 12 by 12 inch pieces.
- D. Contract Closeout Submittal:
 - 1. Maintenance Data: Deliver two copies, covering the installed products, to the Director’s Representative.

1.03 QUALITY ASSURANCE

- A. Regulatory Requirements: Unless otherwise specified, comply with the following:
 - 1. American National Standards Institute Standard ANSI Z 97.1.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store plastic sheets with protective masking intact.
- B. Deliver and store glazing materials in original, unopened containers bearing manufacturer’s labels.
- C. Handle plastic sheets with care. Avoid scratching or marring surfaces.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Acrylic Sheet: Lucite "L" by DuPont Company, Specialty Products Division, Wilmington, DE 19898, (800) 441-9494 or Plexiglas MC by AtoHaas North America Inc., 100 Independence Mall West, Philadelphia, PA 19106, (215) 785-8290.
 - 1. Thickness: Manufacturer's recommended thickness for sash size, unless otherwise shown.
 - 2. Color: Clear.

- B. Glazing Materials: Manufacturer's standard or recommended materials, unless specific materials are indicated on the Drawings.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install plastic glazing in accordance with the manufacturer's printed instructions, except as otherwise shown.

3.02 CLEANING

- A. Remove surplus glazing materials. Remove protective masking and clean the plastic glazing in accordance with the manufacturer's printed instructions.

END OF SECTION

SECTION 262416

PANELBOARDS

PART 1 GENERAL

1.01 REFERENCES

- A. The latest edition of: NEMA PB-1, UL-50, UL-67, ANSI C37.81.

1.02 SUBMITTALS

- A. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 013300 does not apply to this Section.
- B. Submittal Packages: Submit the shop drawings, product data, and the quality control submittals specified below at the same time as a package.
- C. Shop Drawings; include the following for each panelboard:
 - 1. Cabinet and gutter size.
 - 2. Voltage and current rating.
 - 3. Panelboard short circuit rating: Fully rated equipment is required.
 - 4. Circuit breaker enumeration (frame, ATE, poles, I.C.).
 - a. Indicate circuit breakers are suitable for the panelboards’ fully rated equipment rating. Series rated combinations will not be considered.
 - 5. When indicated on the drawings, a coordinated selective scheme between the main circuit breaker and branch/feeder circuit breakers so that under fault conditions the branch/feeder circuit breaker clears the fault while the main circuit breaker remains closed.
 - 6. Submit time current characteristic curves for each overcurrent protective device contained within each panelboard on a single log-log graph.
 - 7. Cable terminal sizes
 - 8. Power and Energy Meter.
 - 9. Locks.
 - 10. Accessories.
- D. Product Data:
 - 1. Catalog sheets, specifications and installation instructions.
 - 2. Bill of materials.
- E. Quality Control Submittals:
 - 1. List of Completed Installations: If brand names other than those specified are proposed for use, furnish the name, address, and telephone number of at least 5 comparable installations that can prove the proposed products have operated satisfactorily for one year.
 - 2. Company Field Advisor Data: Include:
 - a. Name, business address and telephone number of Company Field Advisor secured for the required services.

- b. Certified statement from the Company listing the qualifications of the Company Field Advisor.
 - c. Services and each product for which authorization is given by the Company listed specifically for this project.
- F. Contract Closeout Submittals:
- 1. System acceptance test report.
 - 2. Certificate: Affidavit, signed by the Company Field Advisor and notarized, certifying that the system meets the contract requirements and is operating properly.
 - 3. Operation and Maintenance Data: Deliver 2 copies, covering the installed products, to the Director's Representative.

PART 2 PRODUCTS

2.01 PANELBOARDS

- A. The listing of specific manufacturers does not imply acceptance of their products that do not meet the specified ratings, features and functions. Manufacturers listed are not relieved from meeting these specifications in their entirety.
- B. As produced by Cutler-Hammer/Eaton Corp. with LT Trim (Eaton EZ Trim shall not be considered), General Electric Co., Siemens or Square D Co., having:
 - 1. Flush or surface type cabinets as indicated on the drawings.
 - 2. Increased gutter space for gutter taps, sub-feed wiring, through-feed wiring, oversize lugs.
 - 3. **SUITABLE FOR USE AS SERVICE EQUIPMENT** where used as service equipment.
 - 4. Door and one piece trim. Door fastened to trim with butt or piano hinges. Trim fastened to cabinet with devices having provision for trim adjustment.
 - 5. Yale No. 511S locks with brass cylinder rosette, blind fastened from inside of door. 2 No. 47 keys with each lock (Exception: Not more than 7 keys, total).
 - 6. Solid copper bus bars. Ampere rating of bus bars not less than frame size of main circuit breaker.
 - 7. Ratings as indicated on the drawings.
 - 8. Full capacity copper neutral bus where neutrals are required..
 - 9. Copper equipment grounding bus.
 - 10. Sections designated "space" or "provision for future breaker" equipped to accept future circuit breakers.
 - 11. Provisions for padlocking circuit breaker handle in OFF position where indicated.
 - 12. Directory.
 - 13. Short circuit rating not less than indicated on panelboard schedule. Furnish fully rated equipment (the short circuit rating of the panelboard is equal to the lowest interrupting rating of any device installed in the panelboard).
 - 14. Thermal magnetic, molded case, bolt-on circuit breakers:

- a. Mounting: Individually mounted main circuit breaker (when MCB is required), and group mounted branch/feeder circuit breakers to accommodate the circuit breaker style and panelboard construction.
- b. Components: See panelboard schedule for specific components required for each circuit breaker. In addition to the specific components, equip each circuit breaker with additional components as required to achieve a coordinated selective scheme between the main circuit breaker and the branch/feeder circuit breakers.

2.02 SURGE PROTECTIVE DEVICES

- A. General: Where indicated on the drawings, the panelboards shall be provided with factory installed directly to bus, internal modular Surge Protective Device (SPD) equipment having:
 1. ANSI/UL 1449 3rd Edition compliant – Listed Category C, Type 2 with protected modes for 208/120 volt, 3 phase, 4 wire Wye configured system: L-G, L-N, L-L and N-G.
 2. Rating (ANSI / IEEE C62.41 location Category C): The minimum surge current capacity the device is capable of withstanding shall be 250 kA per phase, 125 kA per mode minimum.

2.03 NAMEPLATES

- A. General: Precision engrave letters and numbers with uniform margins, character size minimum 3/16 inch high.
 1. Phenolic: Two color laminated engravers stock, 1/16 inch minimum thickness, machine engraved to expose inner core color (white).
 2. Aluminum: Standard aluminum alloy plate stock, minimum .032 inches thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.
 3. Materials for Outdoor Applications: As recommended by nameplate manufacturer to suit environmental conditions.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install panelboards in accordance with NEMA Publication No. PB1.1 “General Instructions for Proper Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less”.
- B. Flush Cabinets: Set flush cabinets so that edges will be flush with the finished wall line. Where space will not permit flush type cabinets to be set entirely in the wall, set cabinet as nearly flush as possible, and cover the protruding sides with the trim extending over the exposed sides of the cabinet and back to the finished wall line.
- C. Directory: Indicate on typewritten directory the equipment controlled by each

circuit breaker, and size of feeder servicing panelboard. For power panelboards also include ATE rating and feeder size for each breaker.

D. Remove the neutral to ground main/system bonding jumper unless the panelboard is used for a service entrance or if the panel is fed by a separately derived system. Turn the bonding jumper over to the Director's Representative.

E. Identification:

1. Use nameplates, or stencil on front of each panelboard with white paint, "LP-1, PP-1, etc." in 1/2 inch lettering corresponding to panelboard designations on the drawings, and electrical parameters (phase, wire, voltage).

2. Install a nameplate on each panelboard that explains the means of identifying each ungrounded system conductor by phase and system.

Examples of nameplate statements:

a. Identification of 120/240 Volt Circuit Conductors:

2 wire circuit - white*, black.

3 wire circuit - white*, black, red.

4 wire circuit - white*, black, red, blue.

*White is used only as neutral. Where neutral is not required, black, red, or black, red, blue is used for phase to phase circuits.

b. Identification of 277/480 Volt Circuit Conductors:

2 wire circuit - natural gray**, brown.

3 wire circuit - natural gray**, brown, yellow.

4 wire circuit - natural gray**, brown, yellow, orange.

**Natural gray is used only as neutral. Where neutral is not required, brown, yellow, or brown, yellow, orange is used for phase to phase circuits.

3. Provide laminated identification plate on the outer cover of the RV panel indicated site number, numeral height 1/2" minimum. Provide laminated identification plate within RV panel indicating voltage, source panel, and source circuit breaker according to laminated identification detail in the drawings.

END OF SECTION