



PROJECT NUMBER: 210137
INSTALLATION OF ELECTRIC VEHICLES CHARGING EQUIPMENT
WALMART SUPERCENTER 5137
6101 SOUTH AURORA PARKWAY
AURORA, CO 80016



ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191



4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:
WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SITE INFORMATION		VICINITY MAP		AERIAL MAP		PROJECT DESCRIPTION																																																									
<div>EV SITE ADDRESS: 6101 SOUTH AURORA PARKWAY AURORA, CO 80016</div> <div>PROPERTY OWNER: WALMART</div> <div>EQUIPMENT SUPPLIER: ELECTRIFY AMERICA, LLC. 2003 EDMUND HALLEY DRIVE SUITE 200 RESTON, VIRGINIA 20191</div> <div>POWER COMPANY: XCEL ENERGY SHAUN HUGHES P: 303-571-3169</div> <div>COUNTY: ARAPAHOE COUNTY</div> <div>LATITUDE (NAD83): 39°36'21.05"N</div> <div>LONGITUDE (NAD83): 104°42'23.02"W</div> <div>CONTACT ENGINEER: KIMLEY-HORN AND ASSOCIATES, INC. BRYCE.CHRISTENSEN@KIMLEY-HORN.COM P: 303-228-2339 BRYCE CHRISTENSEN, P.E.</div>						<ul style="list-style-type: none">• INSTALL (1) UTILITY TRANSFORMER• INSTALL (1) SWITCHBOARD ASSEMBLY• INSTALL (4) 150 KW SIGNET DISPENSERS• INSTALL (4) 150 KW SIGNET POWER UNITS																																																									
BENCHMARK & BASIS OF BEARING				DRAWING INDEX																																																											
<div>BENCHMARK: MAG NAIL SET IN ASPHALT PARKING LOT. AS SHOWN ON THE SURVEY. ELEV: 6,021.28 (NAVD88)</div> <div>BASIS OF BEARINGS: COLORADO STATE PLANE COORDINATE SYSTEM CO83-CF</div>				<table><tr><th>SHEET NO.</th><th>SHEET TITLE</th><th>REV NO.</th></tr><tr><td>CS</td><td>COVER SHEET & PROJECT INFORMATION</td><td>2</td></tr><tr><td>GN-1</td><td>GENERAL NOTES</td><td>2</td></tr><tr><td>GN-2</td><td>GENERAL NOTES</td><td>2</td></tr><tr><td>GN-3</td><td>GENERAL NOTES</td><td>2</td></tr><tr><td>C-1</td><td>OVERALL SITE PLAN</td><td>2</td></tr><tr><td>C-2</td><td>DEMOLITION PLAN</td><td>2</td></tr><tr><td>C-3</td><td>ENLARGED SITE PLAN</td><td>3</td></tr><tr><td>C-4</td><td>ENLARGED EQUIPMENT LAYOUT</td><td>3</td></tr><tr><td>C-5</td><td>SITE ELEVATION</td><td>3</td></tr><tr><td>E-1</td><td>UTILITY PLAN</td><td>2</td></tr><tr><td>E-2</td><td>ELECTRICAL PLAN</td><td>2</td></tr><tr><td>E-3</td><td>SINGLE LINE DIAGRAM</td><td>3</td></tr><tr><td>E-4</td><td>ELECTRICAL DETAILS</td><td>2</td></tr><tr><td>E-5</td><td>ELECTRICAL DETAILS</td><td>2</td></tr><tr><td>D-1</td><td>DETAILS</td><td>3</td></tr><tr><td>D-2</td><td>DETAILS</td><td>3</td></tr><tr><td>D-3</td><td>DETAILS</td><td>2</td></tr><tr><td>D-4</td><td>DETAILS</td><td>2</td></tr><tr><td>D-5</td><td>DETAILS</td><td>2</td></tr></table>		SHEET NO.	SHEET TITLE	REV NO.	CS	COVER SHEET & PROJECT INFORMATION	2	GN-1	GENERAL NOTES	2	GN-2	GENERAL NOTES	2	GN-3	GENERAL NOTES	2	C-1	OVERALL SITE PLAN	2	C-2	DEMOLITION PLAN	2	C-3	ENLARGED SITE PLAN	3	C-4	ENLARGED EQUIPMENT LAYOUT	3	C-5	SITE ELEVATION	3	E-1	UTILITY PLAN	2	E-2	ELECTRICAL PLAN	2	E-3	SINGLE LINE DIAGRAM	3	E-4	ELECTRICAL DETAILS	2	E-5	ELECTRICAL DETAILS	2	D-1	DETAILS	3	D-2	DETAILS	3	D-3	DETAILS	2	D-4	DETAILS	2	D-5
SHEET NO.	SHEET TITLE	REV NO.																																																													
CS	COVER SHEET & PROJECT INFORMATION	2																																																													
GN-1	GENERAL NOTES	2																																																													
GN-2	GENERAL NOTES	2																																																													
GN-3	GENERAL NOTES	2																																																													
C-1	OVERALL SITE PLAN	2																																																													
C-2	DEMOLITION PLAN	2																																																													
C-3	ENLARGED SITE PLAN	3																																																													
C-4	ENLARGED EQUIPMENT LAYOUT	3																																																													
C-5	SITE ELEVATION	3																																																													
E-1	UTILITY PLAN	2																																																													
E-2	ELECTRICAL PLAN	2																																																													
E-3	SINGLE LINE DIAGRAM	3																																																													
E-4	ELECTRICAL DETAILS	2																																																													
E-5	ELECTRICAL DETAILS	2																																																													
D-1	DETAILS	3																																																													
D-2	DETAILS	3																																																													
D-3	DETAILS	2																																																													
D-4	DETAILS	2																																																													
D-5	DETAILS	2																																																													
APPLICABLE CODES				<div>Project #: CO210137</div> <div>File: CONSTRUCTION DOCUMENTS</div> <div>Drawn by: GDB</div> <div>Date(s): 10/04/2019</div> <div>11/05/2019 REV #1 CD90 PLANS</div> <div>12/04/2019 REV #2 CD100 PLANS</div>																																																											
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE BUILDING/DWELLING, STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND FIRE/LIFE SAFETY CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LOCAL GOVERNING AUTHORITY CODES.																																																															
ZONING INFORMATION																																																															
<div>PERMITTING JURISDICTION: CITY OF AURORA</div> <div>ZONING CLASS: MU-R: MIXED-USE REGIONAL</div>				<div>FOR REFERENCE ONLY DRAWINGS</div> <div>PROPERTY SURVEY</div> <div>STAGING PLAN</div>																																																											
FLOOD HAZARD AREA NOTE																																																															
THIS SITE IS LOCATED IN FLOOD ZONE "X" PER FEMA FLOOD MAP FIRM 08005C0502L EFFECTIVE DATE 02/17/2017.																																																															
CONTRACTOR NOTE		CALL BEFORE YOU DIG		DO NOT SCALE DRAWINGS		ENGINEER OF RECORD																																																									
CONTRACTOR SHALL COMPLETE INSTALL PER THE SIGNED AND THE SEALED SET OF DRAWINGS. ANY NECESSARY DEVIATIONS FROM THE DRAWINGS MUST BE SUBMITTED THROUGH AN RFI REQUEST PROCESS WITH ENGINEERING FOR AN APPROVAL PRIOR TO CONTRACTOR PROCEEDING WITH A DEVIATION OF THE SIGNED AND SEALED SET OF DRAWINGS.				CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.		BRYCE CHRISTENSEN PE NUMBER: 47935 KIMLEY-HORN AND ASSOCIATES, INC.																																																									

SHEET DESCRIPTION:
COVER SHEET & PROJECT
INFORMATION



Project #: CO210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDB
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

CS

K:\DEN_CIVIL\096867000_ELECTRIFY_AMERICA\CO210137 - WALMART_5137 (AURORA, CO)\CADD\PLANSHEETS\COVERSHEET & GENERAL NOTES.DWG

K:\DEN_CIVIL\09867000_ELECTRIFY_AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\COVERSHEET & GENERAL NOTES.DWG

GENERAL CONSTRUCTION NOTES

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY
GENERAL CONTRACTOR: PENDING OWNER SELECTION
OWNER: ELECTRIFY AMERICA
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS.
 - THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
 - ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
 - ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
 - UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
 - PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
 - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
 - IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
 - THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
 - CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
 - WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEViate FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
 - THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
 - THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
 - THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
 - THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
 - THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
 - THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
 - ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.

GENERAL CONSTRUCTION NOTES CONT.

- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
- NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
- THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES

- THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
- THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. THE CONDITION OF EXISTING ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTAL OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:
 - UL - UNDERWRITERS LABORATORIES
 - NEC - NATIONAL ELECTRICAL CODE
 - NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 - OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
 - SBC - STANDARD BUILDING CODE
 - NFPA - NATIONAL FIRE PROTECTION ASSOCIATION
- DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, BUT CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
- EXISTING SERVICES: THE CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
- THE CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. THE CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING THE EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.

ELECTRICAL NOTES CONT.

- THE CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
- CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER OR ALUMINUM WITH TYPE (THWN-2) INSULATION, 600 VOLT, COLOR CODED UNLESS SPECIFIED DIFFERENTLY ON DRAWINGS.
- ALL (THWN-2) WIRING INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER. CONTRACTOR IS TO PROVIDE ALL ELECTRICAL EQUIPMENT UNLESS OTHERWISE DIRECTED.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
- ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- TRENCHING AND BACKFILL: THE CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO GENERAL SITE WORK NOTES.
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURES CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
- THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES.
- DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
- ALL CONNECTIONS EXCEPT THE EV CHARGE CABLE TERMINATION IN THE CHARGE POST SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NOALOX" BY IDEAL INDUSTRIAL INC., COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED ALUMINUM & COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
- ALL EXTERIOR AND INTERIOR ABOVE GROUND CONDUIT SHALL BE RIGID UNLESS SPECIFIED OTHERWISE. ALL BURIED CONDUITS SHALL BE SCH 40 PVC UNLESS SPECIFIED OTHERWISE.
- RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC, MEETING OR EXCEEDING NEMA TC2 - 1990. THE CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 3 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
- SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- THE CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC".
- WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.
- ALL BOLTS SHALL BE STAINLESS STEEL.
- ALL MATERIALS AND EQUIPMENT SUPPLIED AND INSTALLED BY THE CONTRACTOR SHOULD BE NEW AND UNUSED.



ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191



4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
GENERAL NOTES



Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GGD
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

GN-1

K:\DEN_CIVIL\096867000_ELECTRIFY AMERICA\0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\COVERSHEET & GENERAL NOTES.DWG

GENERAL SITE WORK NOTES

PART 1 - GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1. REFERENCES:

A. COLORADO STATE DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION).

B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).

C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).
2. INSPECTION AND TESTING:

A. GENERAL CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. PERFORM INSPECTIONS BEFORE CONCEALING WORK WITH FOLLOW-ON ACTIVITIES (BACKFILL, CONCRETE POUR, ETC).
3. SITE MAINTENANCE AND PROTECTION:

A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE CONTRACT.

B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.

C. KEEP SITE FREE OF ALL PONDING WATER.

D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.

E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE CONSTRUCTION MANAGER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

G. PROVIDE A MINIMUM 48-HOUR NOTICE TO THE CONSTRUCTION MANAGER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

H. SOD PLANTED IN THE FALL MUST ESTABLISH ITS ROOTS BEFORE THE FIRST WINTER FROST. DETERMINE WHEN THE FIRST FROST USUALLY OCCURS, AND PLANT THE SOD NO LATER THAN ONE MONTH BEFORE THE FIRST FROST. IF THE CONSTRUCTION IS FINISHED LATER THAN ONE MONTH BEFORE THE FIRST FROST, USE STRAW UNTIL SOD CAN BE INSTALLED.

PART 2 - PRODUCTS

1. SUITABLE MATERIAL SUITABLE MATERIAL ARE USED FOR GRADING AND BACKFILL. SUITABLE MATERIALS ARE ON SITE SOILS REMOVED FROM EXCAVATIONS THAT EXCLUDE FROZEN SOIL, ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZE GREATER THAN 3-INCH. SUITABLE SOILS HAVE MOISTURE CONTENTS THAT ALLOW THEM TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS.
2. UNSUITABLE MATERIAL SOILS THAT ARE FROZEN, CONTAIN ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZES GREATER THAN 3-INCH. SOILS THAT ARE TOO WET OR TOO DRY TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS ARE UNSUITABLE.
3. GRANULAR BACKFILL SHALL MEET THE FOLLOWING GRADATION

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
NO. 4 (4.75 MM)	30 TO 60
NO 200 (0.075 MM)	3 TO 15
4. GRANULAR BEDDING WELL-GRADED SAND MEETING THE GRADATION REQUIREMENT OF ASTM C 33 FINE AGGREGATE.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM) A SELF LEVELING AND SELF COMPACTING CEMENTITIOUS MATERIAL COMPOSED OF SAND, COARSE AGGREGATE, CEMENT, FLY ASH, WATER AND ADMIXTURES. CLSM SHALL BE EXCAVATABLE AND SHALL HAVE A DESIGNED UNCONFINED COMPRESSIVE STRENGTH OF BETWEEN 50 TO 100 PSI.
6. BACKFILL PRODUCTS MEETING THE REQUIREMENTS OF SUITABLE MATERIAL, GRANULAR BEDDING, GRANULAR BACKFILL OR CLSM.
7. TOPSOIL SOIL WITH AN ORGANIC CONTENT SUFFICIENT TO ALLOW VEGETATIVE GROWTH.

GENERAL SITE WORK NOTES CONT.

PART 3 - EXECUTION

1. GENERAL:

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.

B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK. CONDUCT UTILITY LOCATE IN ACCORDANCE WITH THE ONE-CALL NOTIFICATION

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.

D. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

E. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS. SUFFICIENT TOPSOIL MAY BE STOCKPILED ON SITE FOR USE DURING FINAL SITE GRADING.

F. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE MATERIAL.

G. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

H. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

I. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

J. DURING EXCAVATION, THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF EXCAVATION.
2. BACKFILL:

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

C. DO NOT PLACE FROZEN MATERIAL IN AS BACKFILL.

D. PLACE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACT TO THE SAME DENSITY AS NATIVE SOIL. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

E. WHENEVER TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE COMPACTION REQUIREMENTS.
3. TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

GENERAL SITE WORK NOTES CONT.

- B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, EXCAVATE THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION, THEN BACKFILL WITH 12" OF GRANULAR BEDDING MATERIAL.
4. TRENCH BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL OR FLOWABLE FILL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH.
5. FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.
6. ASPHALT PAVING ROAD:

A. CONTRACTOR RESPONSIBLE FOR RE-STRIPING AND APPLYING SEALCOATING, UNLESS OTHERWISE NOTED.

B. COLORADO STATE DOT STANDARD SPECIFICATION, CURRENT EDITION.
7. STAGING:

A. WORK / STAGING AREA TO BE CONFIRMED AT PRE-CONSTRUCTION SITE MEETING AND SURROUNDED BY TEMPORARY FENCE (SEE DETAIL BELOW) DURING CONSTRUCTION.

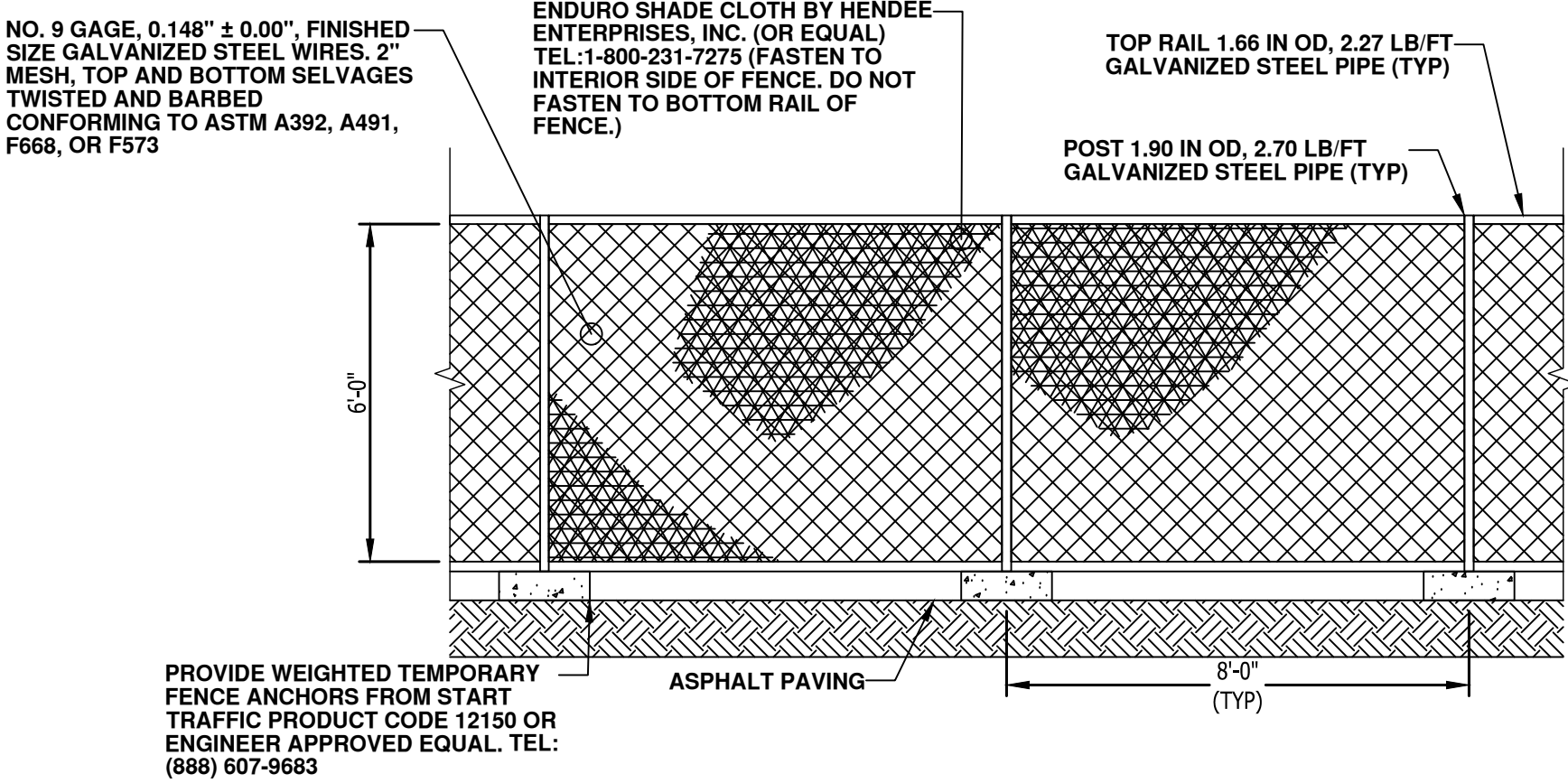
B. POSSIBLE LOCATION FOR TEMPORARY DRIVE AISLE CLOSURE DURING CONSTRUCTION.

C. CONTRACTOR TO PROVIDE TEMPORARY SIGNS TO DIRECT TRAFFIC FLOW.

D. SHORT TERM FENCING TO BE PROVIDED OUTSIDE OF TEMPORARY FENCE FOR ANY OPEN TRENCHES LEFT OVER NIGHT OR UNATTENDED.

E. TEMPORARY FENCE SHALL BE CLOSED AND LOCKED AT ALL TIMES. IF GATE MUST BE OPEN FOR MOVING EQUIPMENT OR MATERIALS, A SPOTTER SHALL BE PROVIDED TO TO PREVENT UNAUTHORIZED ENTRY.

F. NO EQUIPMENT OR MATERIALS SHALL BE STORED OUTSIDE THE TEMPORARY FENCE FOR ANY AMOUNT OF TIME.



TEMPORARY FENCE DETAIL
NO SCALE



**electrify
america**

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
GENERAL NOTES



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GGD

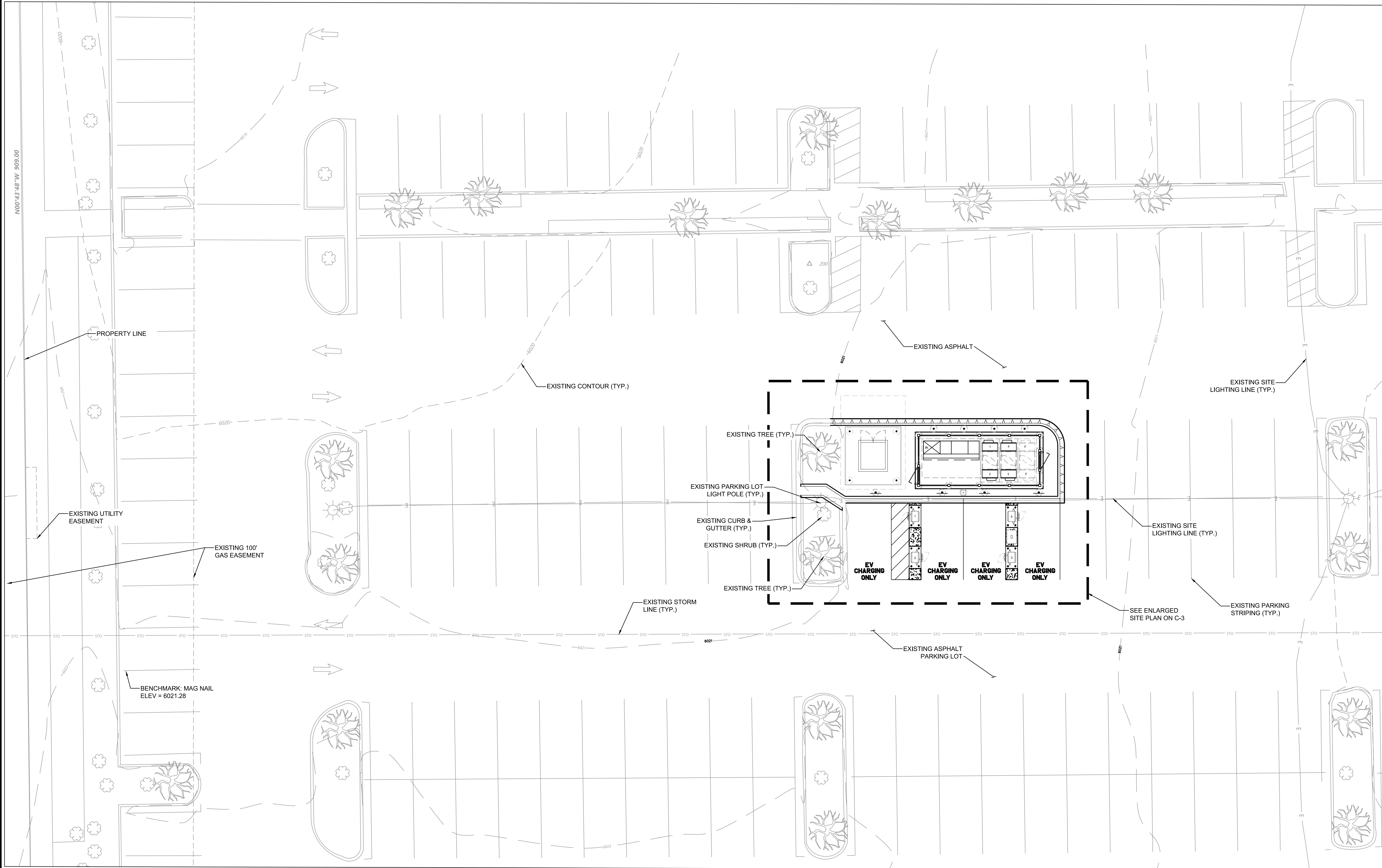
Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

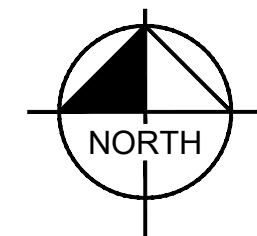
GN-2

K:\DEN_CIVIL\096867000_ELECTRIFY AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\CD50_AURORA.DWG



A
C-1

OVERALL SITE PLAN



GRAPHIC SCALE IN FEET
0 5 10 20



**electrify
america**

ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-286-2300

Job Name:

**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
OVERALL SITE PLAN



Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDB
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

C-1



Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DEMOLITION PLAN



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: G00

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

C-2

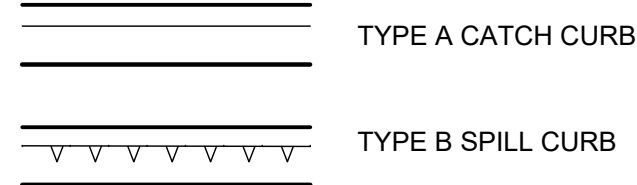
NOTES

1. SOD PLANTED IN THE FALL MUST ESTABLISH ITS ROOTS BEFORE THE FIRST WINTER FROST. DETERMINE WHEN THE FIRST FROST USUALLY OCCURS, AND PLANT THE SOD NO LATER THAN ONE MONTH BEFORE THE FIRST FROST. IF THE CONSTRUCTION IS FINISHED LATER THAN ONE MONTH BEFORE THE FIRST FROST, USE STRAW UNTIL SOD CAN BE INSTALLED.
2. THE CONTRACTOR SHALL RETURN SIDEWALKS, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF THE WORK.

PROJECT AREA STALL COUNT	
EXISTING STALL COUNT	10
PROPOSED STALL COUNT	4
WALMART APPROVED STALL COUNT	10

PROPOSED DISPENSER		
DISPENSER NUMBER	150 KW	CABLE TYPE
1	X	CHAdemo/CCS
2	X	CCS
3	X	CCS
4	X	CCS

CURB LEGEND



DECIMAL FEET TO ARCHITECTURAL CONVERSIONS			
DECIMAL (FT)	ARCH. (IN)	DECIMAL (FT)	ARCH. (IN)
0.04'	1/2"	0.5'	6"
0.08'	1"	0.58'	7"
0.1'	1-1/4"	0.6'	7-1/4"
0.17'	2"	0.67'	8"
0.2'	2-1/2"	0.7'	8-1/2"
0.25'	3"	0.75'	9"
0.3'	3-1/2"	0.8'	9-1/2"
0.33'	4"	0.83'	10"
0.4'	4-3/4"	0.9'	10-3/4"
0.42'	5"	0.92'	11"



ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

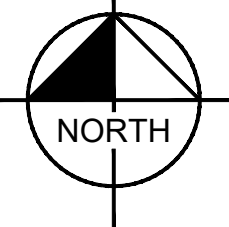
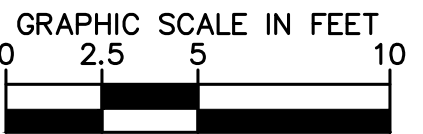
6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
ENLARGED SITE PLAN



Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDB
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

PROJECT TYPE: METRO
EA EQUIPMENT: SIGNET 09/2019
EA BATTERY STG: NOT REQUIRED 08/2019
LOCAL UTILITY: XCEL ENERGY



C-3

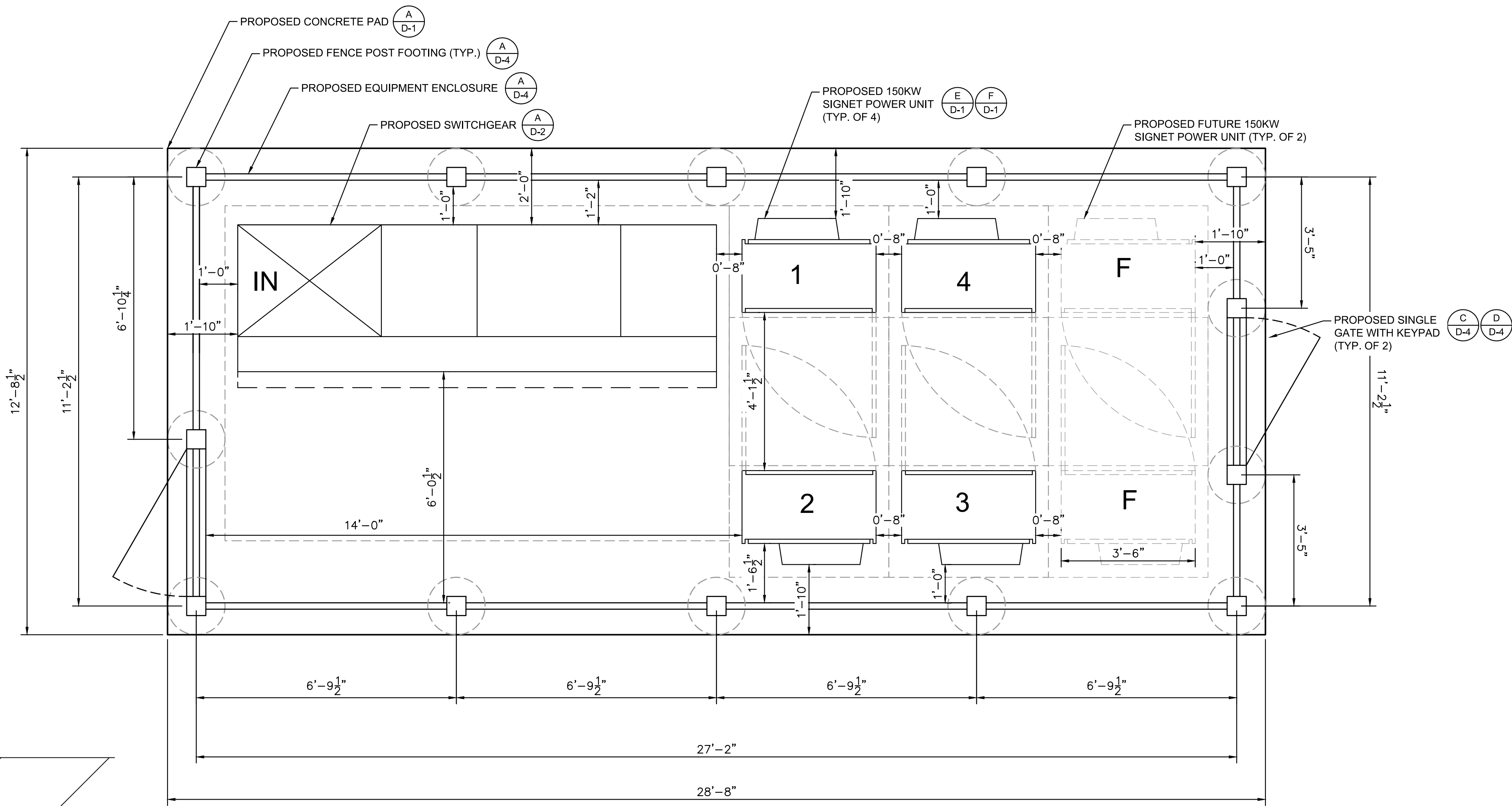
ENLARGED SITE PLAN

A
C-3

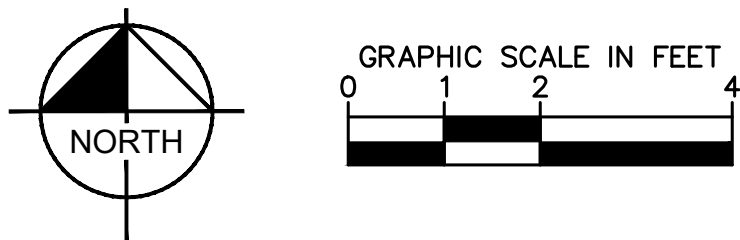
K:\DEN_CIVIL\096867000 ELECTRIFY AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\CD50_AURORA.DWG

NOTES

1. CONTRACTOR TO SLOPE PAD 1-2% TO PROVIDE POSITIVE DRAINAGE.



A
C-4
ENLARGED EQUIPMENT LAYOUT



electrify
america

ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
ENLARGED EQUIPMENT
LAYOUT



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GDB

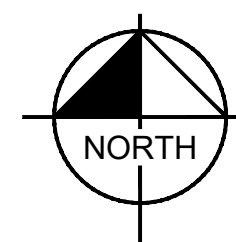
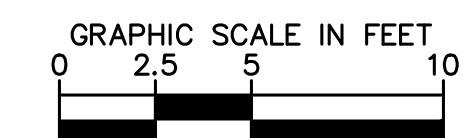
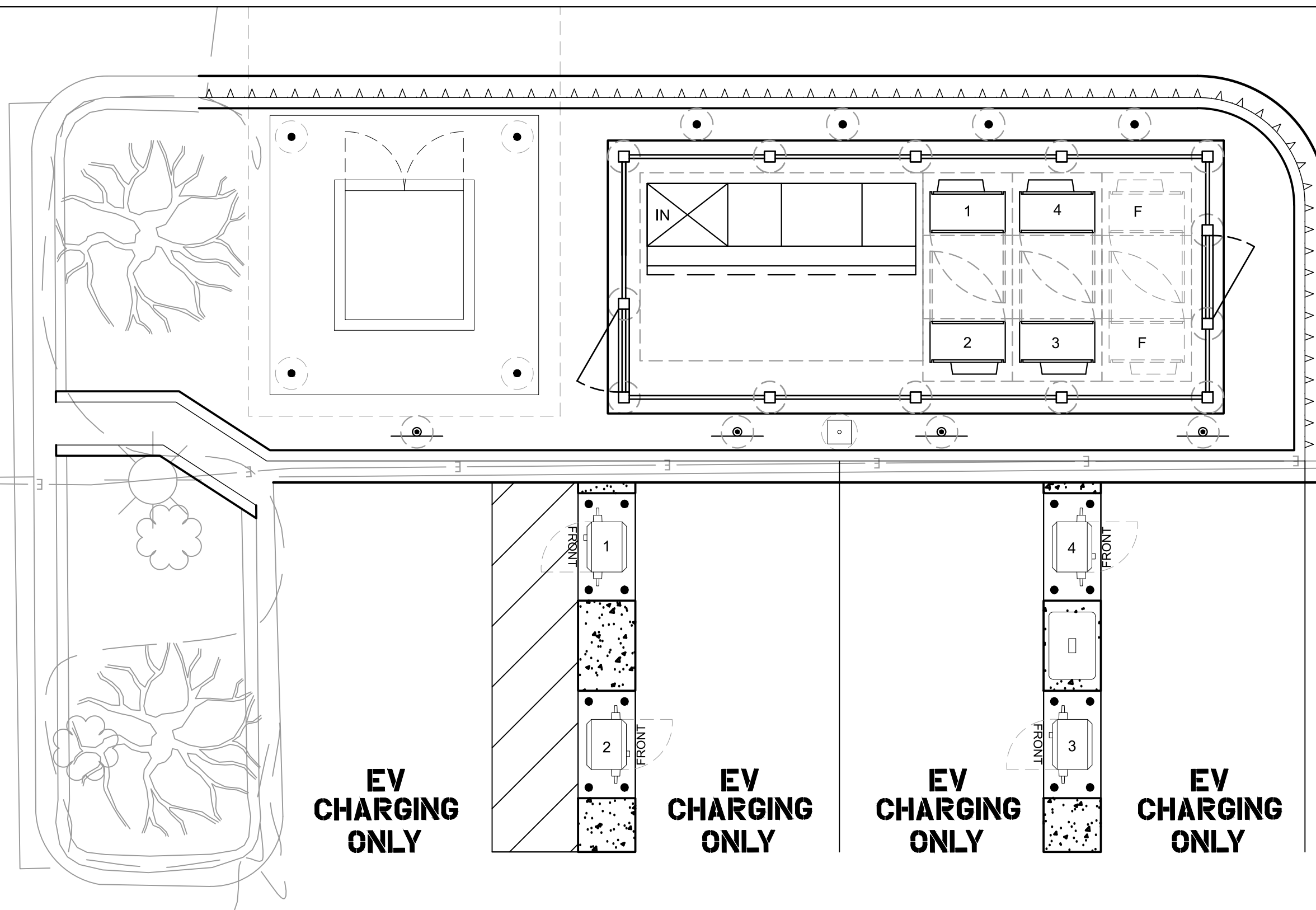
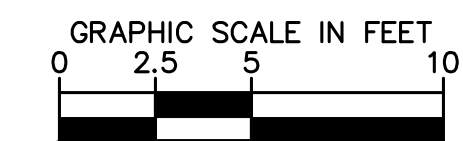
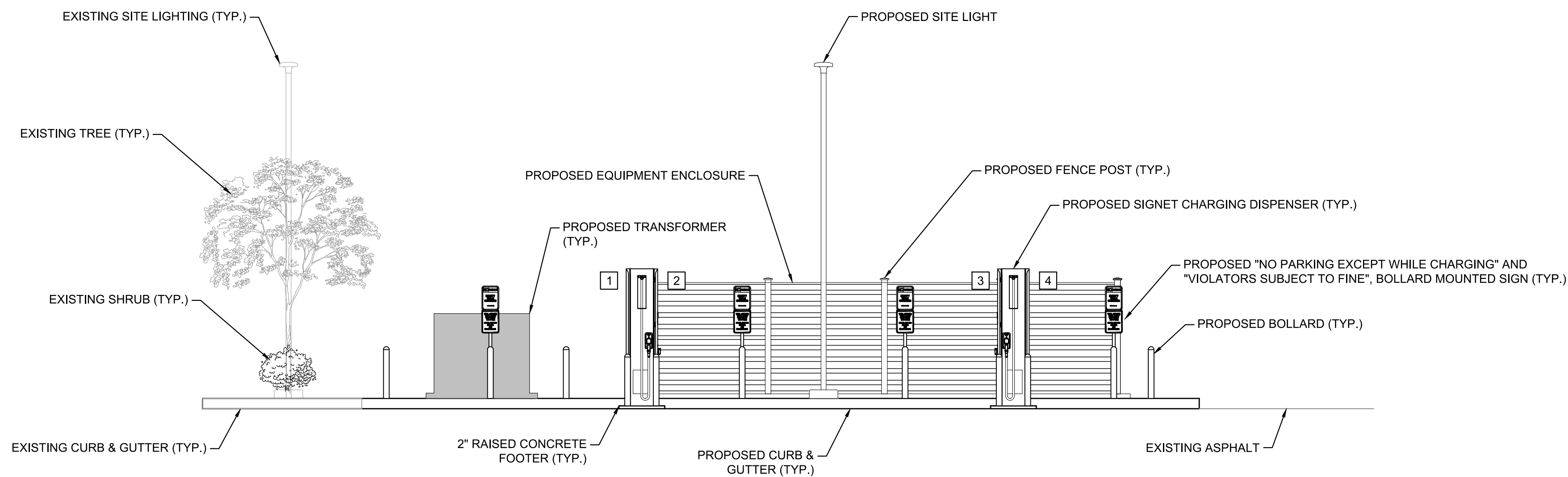
Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

C-4

K:\DEN_CIVIL\096867000_ELECTRIFY_AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\CD50_AURORA.DWG



A
C-5

SITE ELEVATION



ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191



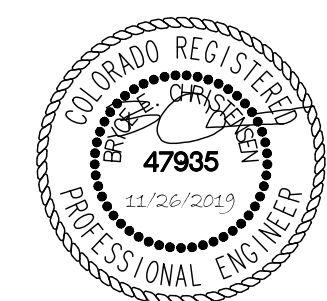
4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
SITE ELEVATIONS



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

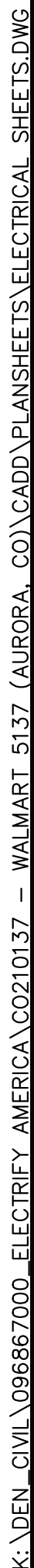
Drawn by: GDB

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

C-5



1. THE UTILITY DESIGN DETAILS SUMMARIZED ON THIS SHEET ARE FOR PROPERTY OWNER REVIEW. THE CONTRACTOR SHALL REFERENCE THE UTILITY DESIGN PACKAGE (UDP), PROVIDED WITH THE ISSUED FOR CONSTRUCTION DRAWINGS FOR BIDDING. THE CONTRACTOR SHALL INSTALL THE UTILITY RELATED SCOPE OF WORK PER UTILITY CONSTRUCTION SPECIFICATION REQUIREMENTS.
2. UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK AND TERMINATION OF SERVICE CONDUCTORS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRE-CONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATIONS.
3. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATION. ADDITIONAL BOLLARD PROTECTION MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY FIELD INSPECTION PERSONNEL.



4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
UTILITY PLAN



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: G00

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

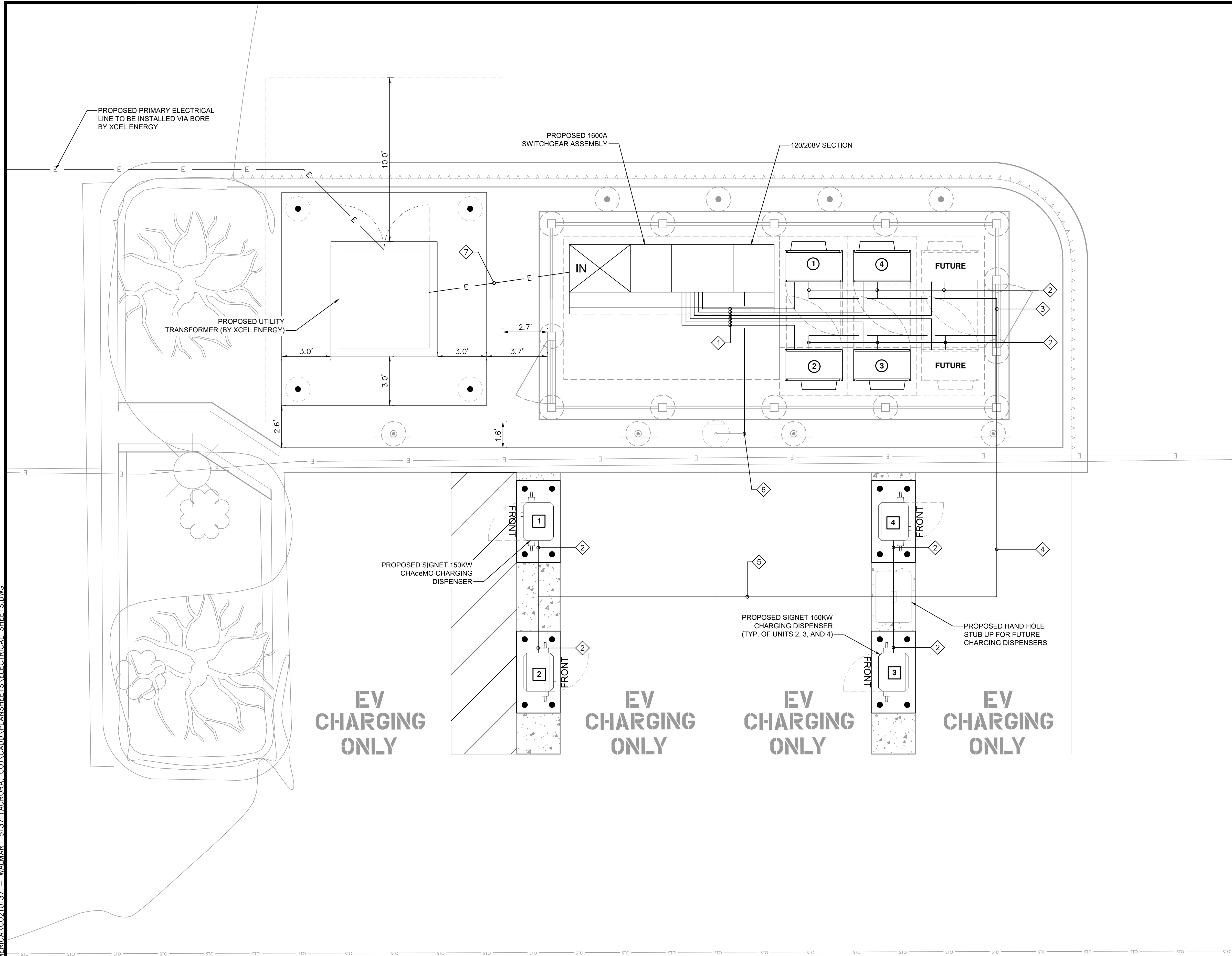
12/04/2019 REV 42 CD100 PLAN

GRAPHIC SCALE IN FEET

0 5 10 20

E-1

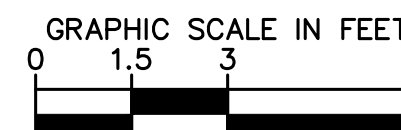
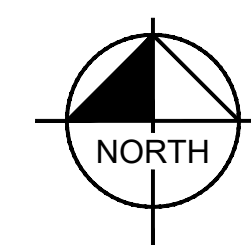
K:\DEN_CIVIL\096867000_ELECTRIFY_AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\ELECTRICAL_SHEETS.DWG



A
E-2

ELECTRICAL PLAN

PENDING UTILITY DESIGN



PROPOSED DISPENSERS

CHARGE POST NUMBER	150KW	350KW	CABLE TYPE
1	X		CHAdMO/CCS
2	X		CCS/CCS
3	X		CCS/CCS
4	X		CCS/CCS

POWER UNIT LENGTHS

POWER UNIT	LINEAR LENGTH SWBD TO POWER UNIT	** ESTIMATED LENGTH (FT)
1	8'	24'
2	10'	26'
3	14'	30'
4	13'	29'
FUTURE	18'+18'	62'
TOTAL ESTIMATED LENGTH		109'
TOTAL LENGTH OF WIRE		436'

TOTAL LENGTH OF AC WIRE = SUM OF ESTIMATED LENGTH x 4 WIRES PER POWER UNIT
TOTAL LENGTH GND WIRE = SUM OF ESTIMATED LENGTHS

DC CHARGING POST LENGTHS

POWER UNITS	DISPENSER	LINEAR LENGTH (FT)	*** ESTIMATED LENGTH (FT)
1	1	60'	82'
2	2	60'	82'
3	3	35'	57'
4	4	35'	57'
FUTURE	FUTURE	30' + 30'	104'

NOTES

(SEE SHEET E-3 FOR WIRE CONFIGURATION)

- ** AC CONDUCTOR: 16 FEET IS ADDED TO HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH
*** DC CONDUCTORS: 22 FEET IS ADDED TO HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH

- CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING PATHS SHALL BE FIELD VERIFIED AND INSTALLED PER JURISDICTIONAL REQUIREMENTS.
- ALL ELECTRICAL WORK AND RELATED ACTIVITIES PERFORMED ONSITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) STANDARDS BEING ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT TIME OF CONSTRUCTION.
- UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER TO ENSURE ACCURACY OF INSTALLATIONS.

KEYNOTES

- (1) 3" C.
- (2) 2-1/2" C., (1) 1-1/2" C., (1) 3/4" C.
- (6) 2-1/2" C., (3) 1-1/2" C., (3) 3/4" C.
- (12) 2-1/2" C., (6) 1-1/2" C., (6) 3/4" C.
- (4) 2-1/2" C., (2) 1-1/2" C., (2) 3/4" C.
- (1) 3/4" C.
- SERVICE ENTRANCE CONDUITS, (6) 4" C. AND (1) 4" C. SPARE



**electrify
america**

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
ELECTRICAL PLAN



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GDB

Date(s): 10/04/2019

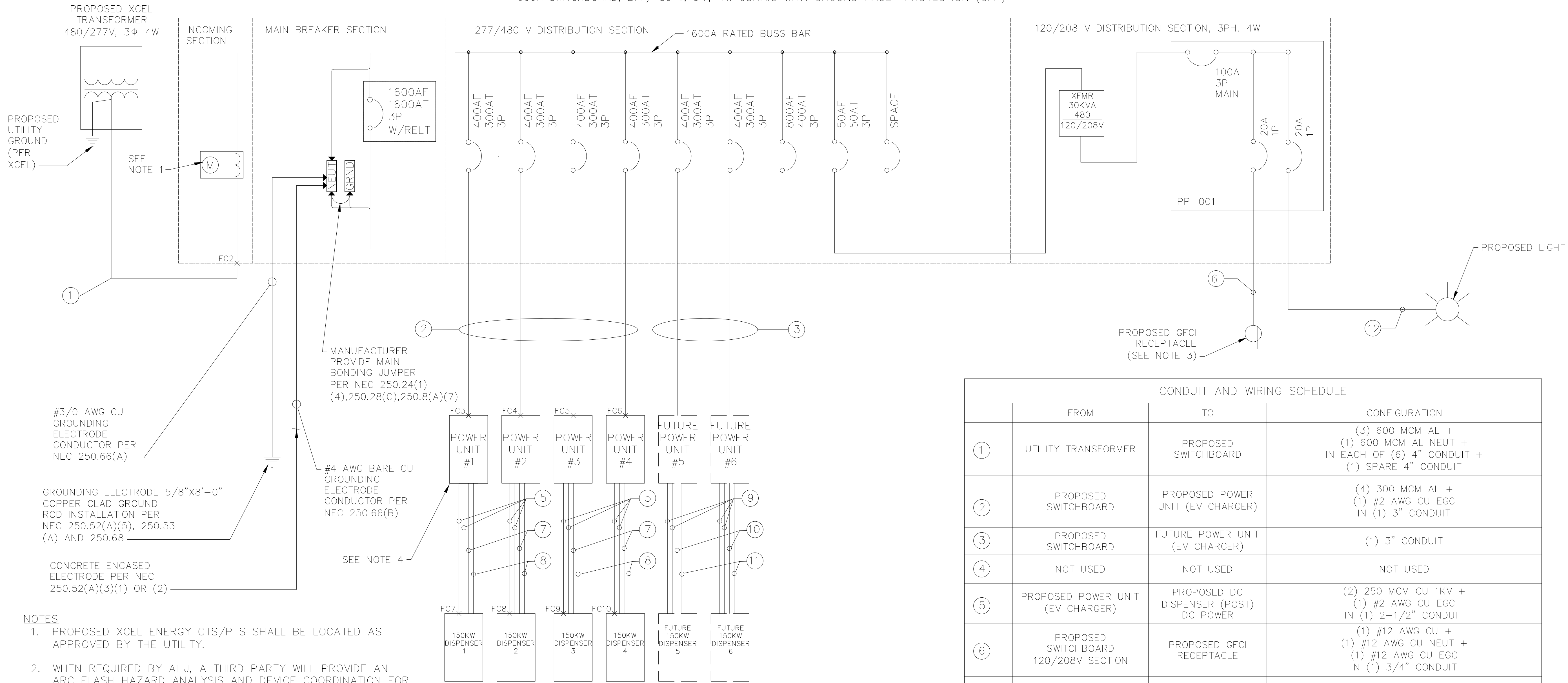
11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

E-2

K:\DEN_CIVIL\096867000_ELECTRIFY_AMERICA\C0210137 - WALMART 5137 (AURORA, CO)\CADD\PLANSHEETS\CD50_AURORA.DWG

1600A SWITCHBOARD, 277/480 V, 3Φ, 4W 65KAIC WITH GROUND FAULT PROTECTION (GFP)



- NOTES
1. PROPOSED XCEL ENERGY CTS/PTS SHALL BE LOCATED AS APPROVED BY THE UTILITY.
 2. WHEN REQUIRED BY AHJ, A THIRD PARTY WILL PROVIDE AN ARC FLASH HAZARD ANALYSIS AND DEVICE COORDINATION FOR THE ELECTRICAL EQUIPMENT INSIDE THE FENCED YARD. ARC FLASH TO BE CONDUCTED BY THIRD PARTY.
 3. PROVIDE WEATHERPROOF "WHILE IN USE" COVER.
 4. ALL PROPOSED AND FUTURE SIGNET POWER UNITS ARE BRACED FOR 65,000 AFC.

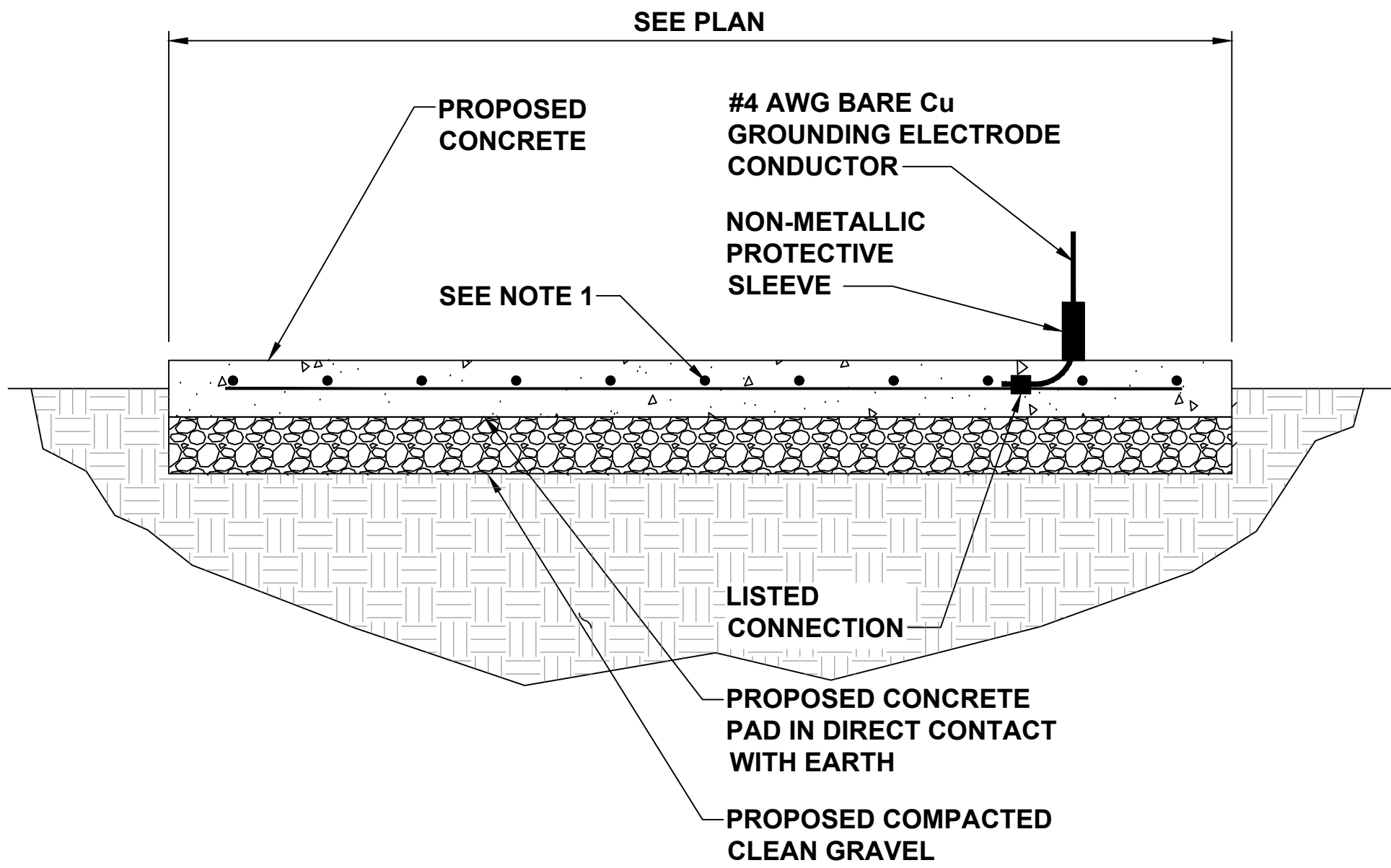
FAULT CURRENT CALCULATIONS															
Point	Point Name	Source* Point	Source Amps	Conduit Type	Conductor Type	Wire Size/Quantity			Distance	Voltage	Phase	"C" Value	"f" Value	"M" Value	Isc
1	UTILITY PUBLISHED DATA	33900	33,900												33,900
2	SES	1	33,900	NM	Aluminum	6	Set of	600 KCML	25	480	3	23451	0.02173	0.978728	33,179
3	PU 1	2	33,179	NM	Copper	1	Set of	300 KCML	30	480	3	20,867	0.17212	0.853152	28,307
4	PU2	2	33,179	NM	Copper	1	Set of	300 KCML	30	480	3	20,867	0.17212	0.853152	28,307
5	PU3	2	33,179	NM	Copper	1	Set of	300 KCML	35	480	3	20,867	0.20081	0.83277	27,630
6	PU 4	2	33,179	NM	Copper	1	Set of	300 KCML	35	480	3	20,867	0.20081	0.83277	27,630
7	Disp 1	3	28,307	NM	Copper	2	Set of	250 KCML	85	920	1	18,593	0.07033	0.934291	26,447
8	Disp 2	4	28,307	NM	Copper	2	Set of	250 KCML	85	920	1	18,593	0.07033	0.934291	26,447
9	Disp 3	5	27,630	NM	Copper	2	Set of	250 KCML	60	920	1	18,593	0.04846	0.953781	26,353
10	Disp 4	6	27,630	NM	Copper	2	Set of	250 KCML	60	920	1	18,593	0.04846	0.953781	26,353

CONDUIT AND WIRING SCHEDULE			
	FROM	TO	CONFIGURATION
①	UTILITY TRANSFORMER	PROPOSED SWITCHBOARD	(3) 600 MCM AL + (1) 600 MCM AL NEUT + IN EACH OF (6) 4" CONDUIT + (1) SPARE 4" CONDUIT
②	PROPOSED SWITCHBOARD	PROPOSED POWER UNIT (EV CHARGER)	(4) 300 MCM AL + (1) #2 AWG CU EGC IN (1) 3" CONDUIT
③	PROPOSED SWITCHBOARD	FUTURE POWER UNIT (EV CHARGER)	(1) 3" CONDUIT
④	NOT USED	NOT USED	NOT USED
⑤	PROPOSED POWER UNIT (EV CHARGER)	PROPOSED DC DISPENSER (POST) DC POWER	(2) 250 MCM CU 1KV + (1) #2 AWG CU EGC IN (1) 2-1/2" CONDUIT
⑥	PROPOSED SWITCHBOARD 120/208V SECTION	PROPOSED GFCI RECEPTACLE	(1) #12 AWG CU + (1) #12 AWG CU NEUT + (1) #12 AWG CU EGC IN (1) 3/4" CONDUIT
⑦	PROPOSED POWER UNIT (EV CHARGER)	PROPOSED DC DISPENSER (POST) AUXILIARY POWER	(1) #12 AWG CU + (1) #12 AWG CU EGC IN (1) 3/4" CONDUIT
⑧	PROPOSED POWER UNIT (EV CHARGER)	PROPOSED DC DISPENSER (POST) COMMUNICATION	(1) MULTIMODE FIBER (ST/ST CONN) + (1) 2 CONDUCTOR #16 AWG(TW/SH PAIR) IN (1) 1-1/2" CONDUIT
⑨	FUTURE POWER UNIT (EV CHARGER)	FUTURE DC DISPENSER (POST) DC POWER	(1) 2-1/2" CONDUIT
⑩	FUTURE POWER UNIT (EV CHARGER)	FUTURE DC DISPENSER (POST) AUXILIARY POWER	(1) 3/4" CONDUIT
⑪	FUTURE POWER UNIT (EV CHARGER)	FUTURE DC DISPENSER (POST) COMMUNICATION	(1) 1-1/2" CONDUIT
⑫	PROPOSED SWITCHBOARD 120/208V SECTION	PROPOSED LIGHT POLE	(2) #10 AWG CU + (1) #10 AWG CU GND IN (1) 3/4" CONDUIT

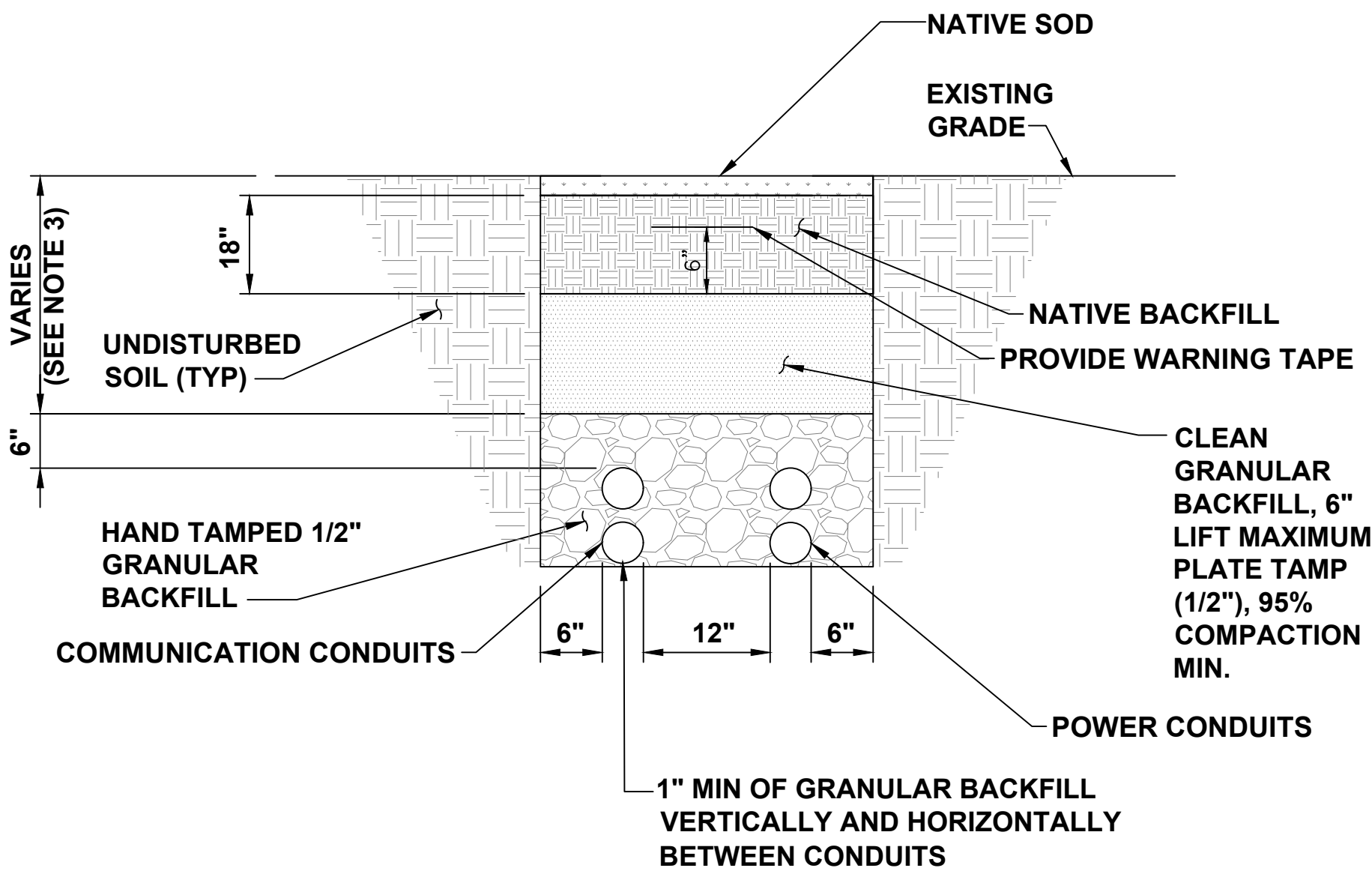
LOAD SUMMARY			
	KVA	QTY	TOTAL KVA
150KW POWER UNIT	150 KVA	4	600
FUTURE 150KW	150 KVA	2	300
25% CONTINUOUS DUTY			225
30 KVA TRANSFORMER			30
TOTAL			1,155
AMPS (480V, 3-PH)			1,390A

NOTE

1. REBAR BONDED TOGETHER WITH STEEL TIE WIRES OR EXOTHERMIC WELDING



A
E-4
CONCRETE ENCASED ELECTRODE DETAIL
N.T.S.

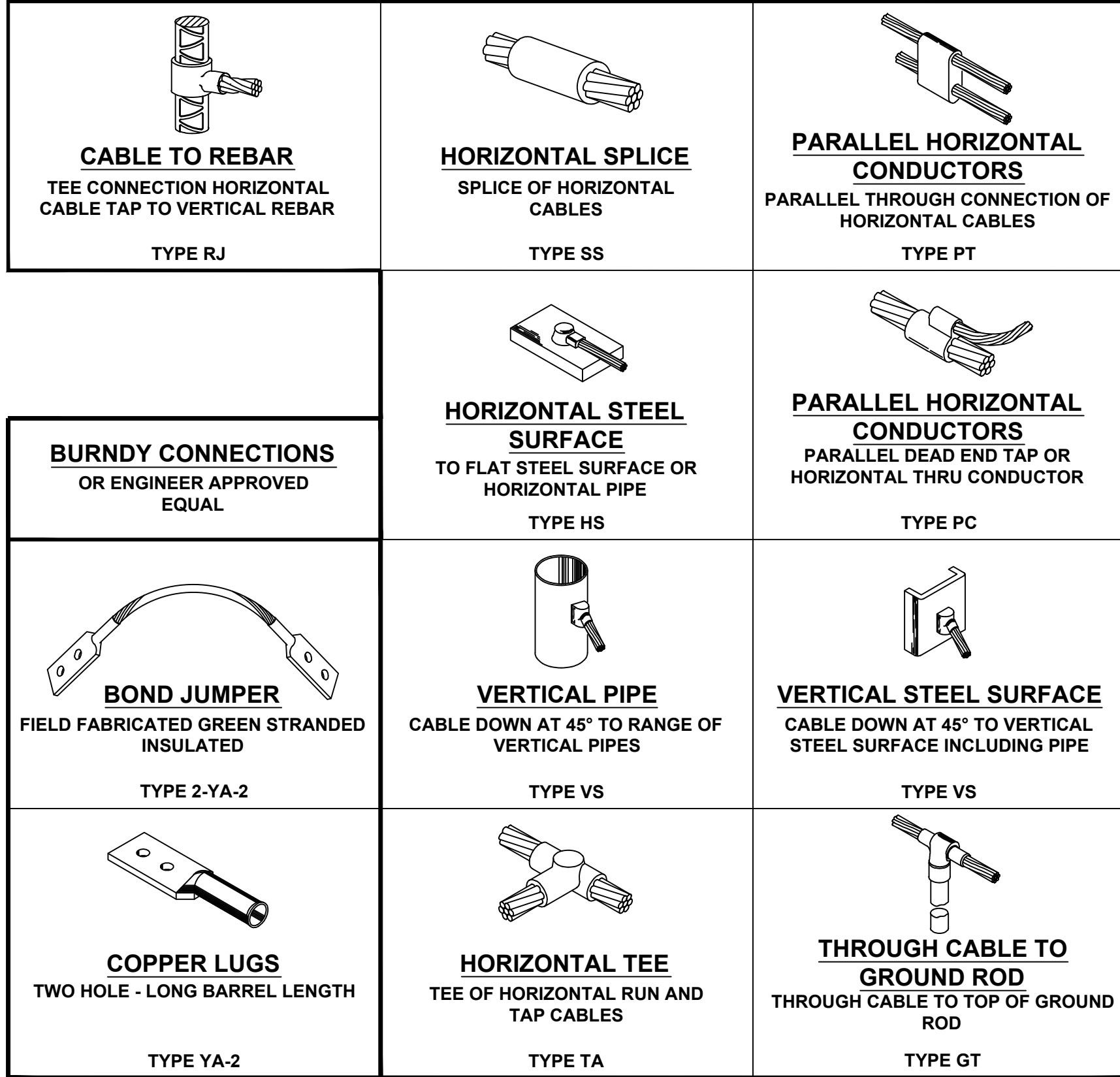


NOTES

1. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO INSURE THE SAFETY OF THE GENERAL PUBLIC.
2. ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
3. TRENCH DEPTHS ARE REQUIRED TO BE 2'-0" MIN. OR 6" BELOW FROST LINE PER LOCAL JURISDICTION REQUIREMENTS.
4. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E-1 & E-2, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.

D
E-4
TYPICAL NON-UTILITY CONDUIT UNDER SOIL TRENCH
N.T.S.

CADWELD CONNECTIONS
OR ENGINEER APPROVED EQUAL

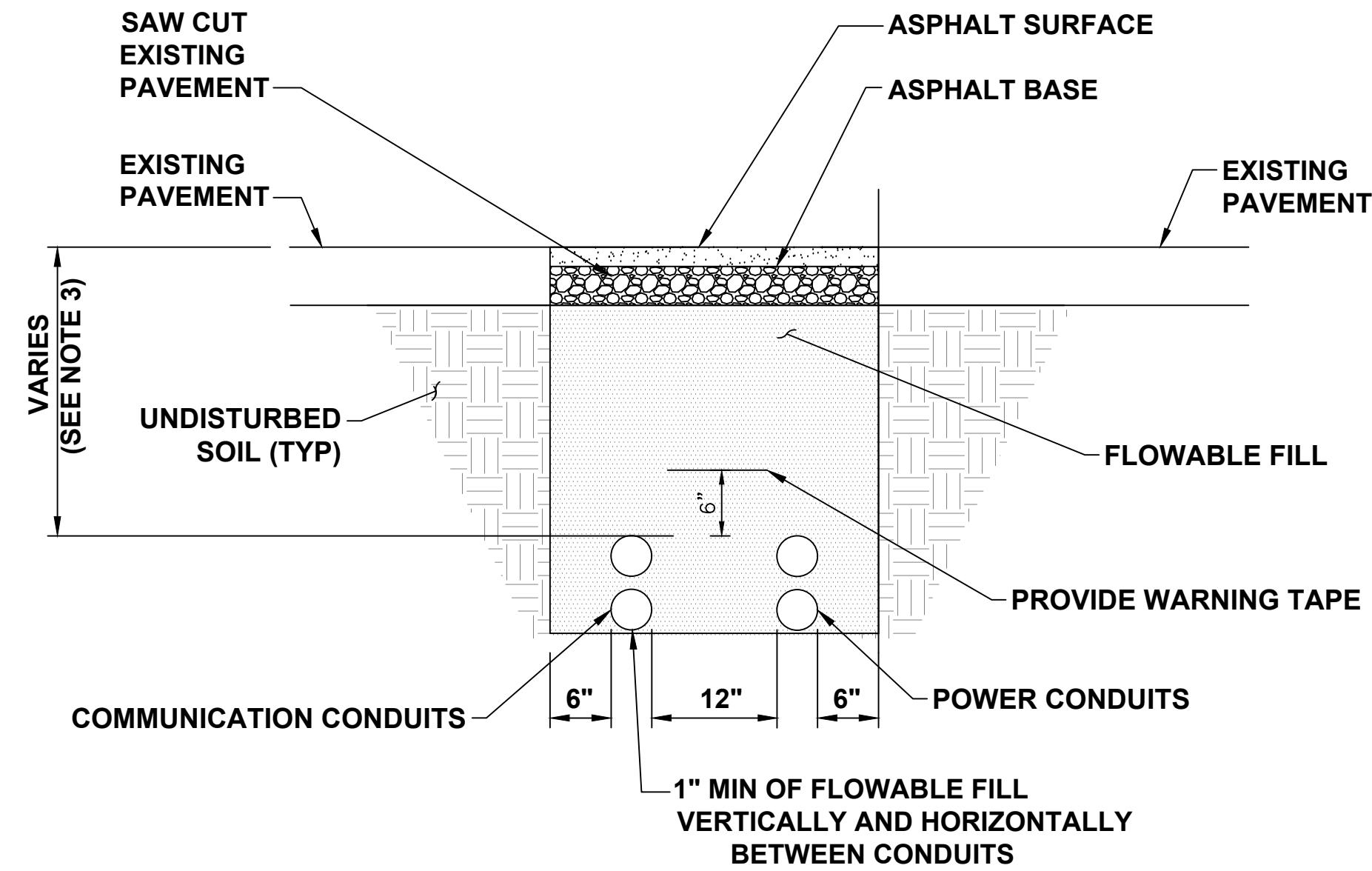


B
E-4
CADWELD CONNECTION DETAIL
N.T.S.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
2. 2014 NEC 250.121 EXCEPTION: A WIRE-TYPE EQUIPMENT GROUNDING CONDUCTOR INSTALLED IN COMPLIANCE WITH 250.6(A) AND THE APPLICABLE REQUIREMENTS FOR BOTH THE EQUIPMENT GROUNDING CONDUCTOR AND THE GROUNDING ELECTRODE CONDUCTOR IN PARTS II, III, AND VI OF THIS ARTICLE SHALL BE PERMITTED TO SERVE AS BOTH AN EQUIPMENT GROUNDING CONDUCTOR AND A GROUNDING ELECTRODE CONDUCTOR.

C
E-4
GROUNDING NOTES
N.T.S.



NOTES

1. ASPHALT SHALL COMPLY WITH STANDARD DOT OR LOCAL JURISDICTION SPEC. FOR HMA SURFACE COURSE.
2. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO INSURE THE SAFETY OF THE GENERAL PUBLIC.
3. TRENCH DEPTHS ARE REQUIRED TO BE 2'-0" MIN. OR 6" BELOW FROST LINE PER LOCAL JURISDICTION REQUIREMENTS.
4. ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
5. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E-1 & E-2, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.

E
E-4
TYPICAL NON-UTILITY CONDUIT UNDER ASPHALT TRENCH
N.T.S.

F
E-4
DETAIL NOT USED
N.T.S.



electrify
america

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
ELECTRICAL DETAILS



Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GDB

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

E-4

ACCESS TO: Front Only	PHASE	3P4W	XCEL ENERGY-COMMND/SDNM/TX
CLASS: 2	AMPERE: 1800A	CODE: XE	
LABEL: U/L SE	BUS MTL: A1 750A/1"	C/T TYPE: Window	
VOLTAGE: 480/277V	PLATE: Tin Plate	P/T TYPE	
STYLE: Bolt-On	RATING: Fully Rated		
BUS BRACING (RMS SYM): 65000A	PER GE DWG 75C143813 PV101.101A		
DEV MIN INT RATING (RMS SYM): 65000A	PER PWR CO SPEC 75C143891 SH 45		

Switchboard / Device Information						
Circuit No.	Device	Amps	Poles	Nameplates	Lugs/Cable Size	Notes
Main	SS	1600	3			12,13,14,16,17,19,20,21,22,24,25
1	SELA	15	2		(1) - #12 - 3/0 AWG CU - Mech. AL	
2	SGLA4	300	3		(2) - 300 - 500 MCM CU - Mech. AL	20
3	SGLA4	300	3		(2) - 300 - 500 MCM CU - Mech. AL	20
4	SGLA4	300	3		(2) - 300 - 500 MCM CU - Mech. AL	20
5	SGLC4	350	3		(2) - 300 - 500 MCM CU - Mech. AL	15,16,18,20,22,23
6	SGLA4	400	3	(SPACE AND BUS)	(2) - 2/0 - 250 MCM CU - Mech. AL	28
7	SGLA4	300	3		(2) - 300 - 500 MCM CU - Mech. AL	20
8	SGLA4	300	3		(2) - 300 - 500 MCM CU - Mech. AL	20
9	SELA	50	3		(1) - #12 - 3/0 AWG CU - Mech. AL	
10	SELA	15	3		(1) - #12 - 3/0 AWG CU - Mech. AL	
LP1	AQ	100	3			10,11
T1	XFMR					9,10,26,27,29,30

NOTES:

- Switchboard furnished with a rainproof TYPE 3R (non-walk-in) enclosure.
- NOTE: See plan view for details. Need additional 1 inch space clearance on top and 1.5 inch clearance on the rear of the swbd.
- Equipment ground bus furnished with lugs.
- Switchboard qualified for Seismic Ratings per publication DET-463 and OSP-0044-10.
- Shipping splits between each section, ship each section separately.
- Switchboard furnished with section space heaters.
- Switchboard furnished with thermostat control for section space heaters.
- Switchboard furnished with lightning arrestor.
- Switchboard furnished with fully rated panel.
- Transformer specified. Refer to BOM for details.
- Switchboard furnished with Factory Interconnecting Cables per the Wire and Cable Schedule drawings.
- Lighting Panel specified. Refer to BOM and Drawings for details.
- Device is 100 percent rated.
- Device furnished with 120V electric operator.
- Device furnished with ETU (LSIGM) programmer.
- Device furnished with MET (LSIGM) programmer.
- Device is furnished with integral ground fault protection.
- Device is furnished with RELT (Reduced Energy Let Through).
- 4 wire GROUND FAULT Load.
- Device furnished with 4 240V AC/125-250 DC auxiliary switches (SPDT).
- Device furnished with padlocking provisions.
- Device furnished with 120V AC Remote Close Solenoid.
- Device furnished with 120V AC undervoltage release.
- Device furnished with 1 Gold-Plated 30VDC auxiliary switches (SPDT).
- Device furnished with 120V AC/25V DC shunt trip.
- Device requires RELT or ZSI feature if Authority having jurisdiction has adopted NEC 2014 code requirements.
- Transformer Primary is provided with factory interconnection cables, see Wire and Cable schedule.
- Transformer Secondary is provided with factory interconnection cables, see Wire and Cable schedule.
- Lugs not furnished with SPACE AND BUS.
- The Primary Transformer is protected by 50 Amp Breaker.

PROJECT NAME: Electrify America Cable 2 RFG CUSTOMER: ELECTRIFY AMERICA, LLC, RESTON	DWG TITLE: Device Information	CREATED BY: Snider, Tom	PRODUCT NAME: Spectra Series Switchboard	DRAWING NO: ITEM NO: MARKS: XCEL ENERGY CO 1600A QUOTE NO: U72-00015645 SHEET: 1 of 5
---	-------------------------------------	----------------------------	--	---

W2 Date:10/15/2019 6:06:12 PM BAB75305-1785-4528-A352-DEE37AADE1C

ACCESS TO: Front Only	PHASE	3P4W	XCEL ENERGY-COMMND/SDNM/TX
CLASS: 2	AMPERE: 1800A	CODE: XE	
LABEL: U/L SE	BUS MTL: A1 750A/1"	C/T TYPE: Window	
VOLTAGE: 480/277V	PLATE: Tin Plate	P/T TYPE	
STYLE: Bolt-On	RATING: Fully Rated		
BUS BRACING (RMS SYM): 65000A	PER GE DWG 75C143813 PV101.101A		
DEV MIN INT RATING (RMS SYM): 65000A	PER PWR CO SPEC 75C143891 SH 45		

Switchboard / Device Information					
NOTES: (continued)					
30. The Secondary Transformer is protected by 100 Amp Breaker					
31. Estimated total factory connected wiring points for the lineup 88.					
32. Estimated shipping weight for the lineup is 2967 lbs.					
33. Miscellaneous Add-Ons:					
1 MOXA MB5105-MB-EIP					
1 MOXA IOLOGIK E1214					
2 RL4 RELAY					
1 MOXA MB3270					
1 SOLA POWER SUPPLY					
34. Due to the presence of Miscellaneous Add-Ons, please review drawings with the factory to ensure accuracy.					
35. Drawing Notes:					
NEMA 3R to have rearward sloping roof					
SGLC feeder breaker to be at end of bus					
No horizontal bus in ISB section					
Transformer to panel to be wired in plant.					
ISB transformer wired to main breaker in panel in factory					
36. As a result of Drawing Notes, this product may require modification to reflect correct footprint, price, cycle or UL certification.					

PROJECT NAME: Electrify America Cable 2 RFG CUSTOMER: ELECTRIFY AMERICA, LLC, RESTON	DWG TITLE: Device Information	CREATED BY: Snider, Tom	PRODUCT NAME: Spectra Series Switchboard	DRAWING NO: ITEM NO: MARKS: XCEL ENERGY CO 1600A QUOTE NO: U72-00015645 SHEET: 2 of 5
---	-------------------------------------	----------------------------	--	---

W2 Date:10/15/2019 6:06:12 PM BAB75305-1785-4528-A352-DEE37AADE1C

ACCESS TO: Front Only	PHASE	3P4W	XCEL ENERGY-COMMND/SDNM/TX
CLASS: 2	AMPERE: 1800A	CODE: XE	
LABEL: U/L SE	BUS MTL: A1 750A/1"	C/T TYPE: Window	
VOLTAGE: 480/277V	PLATE: Tin Plate	P/T TYPE	
STYLE: Bolt-On	RATING: Fully Rated		
BUS BRACING (RMS SYM): 65000A	PER GE DWG 75C143813 PV101.101A		
DEV MIN INT RATING (RMS SYM): 65000A	PER PWR CO SPEC 75C143891 SH 45		

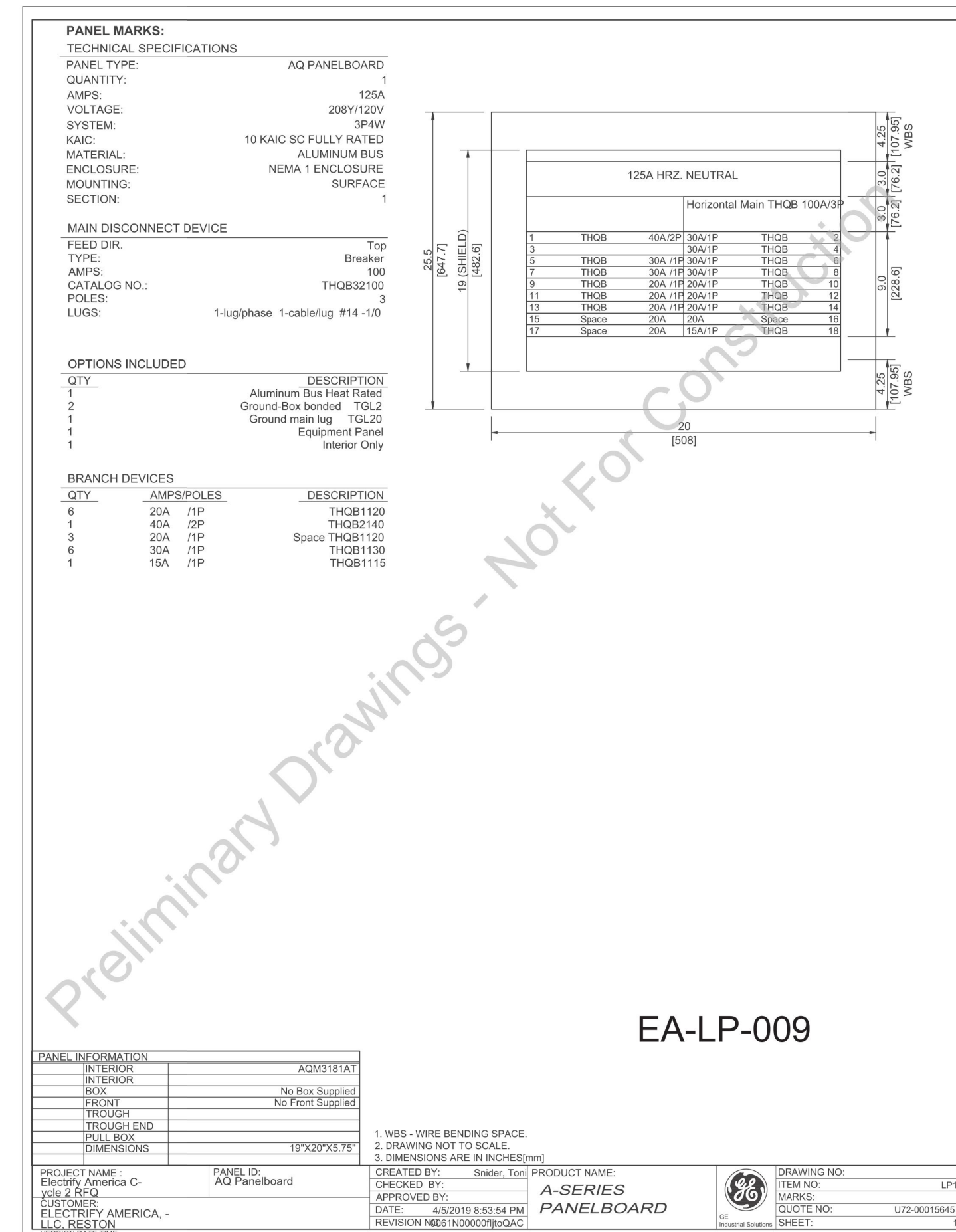
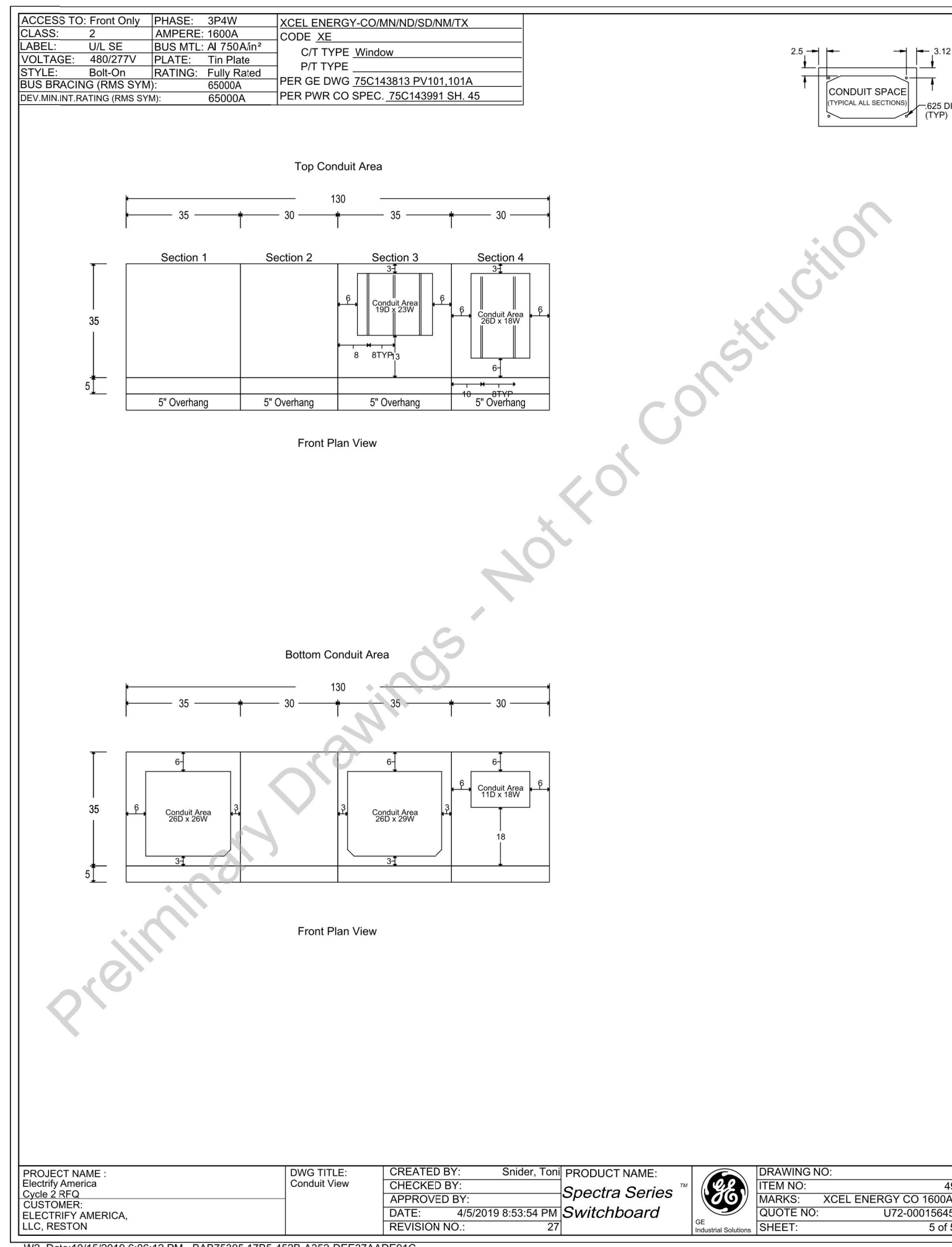
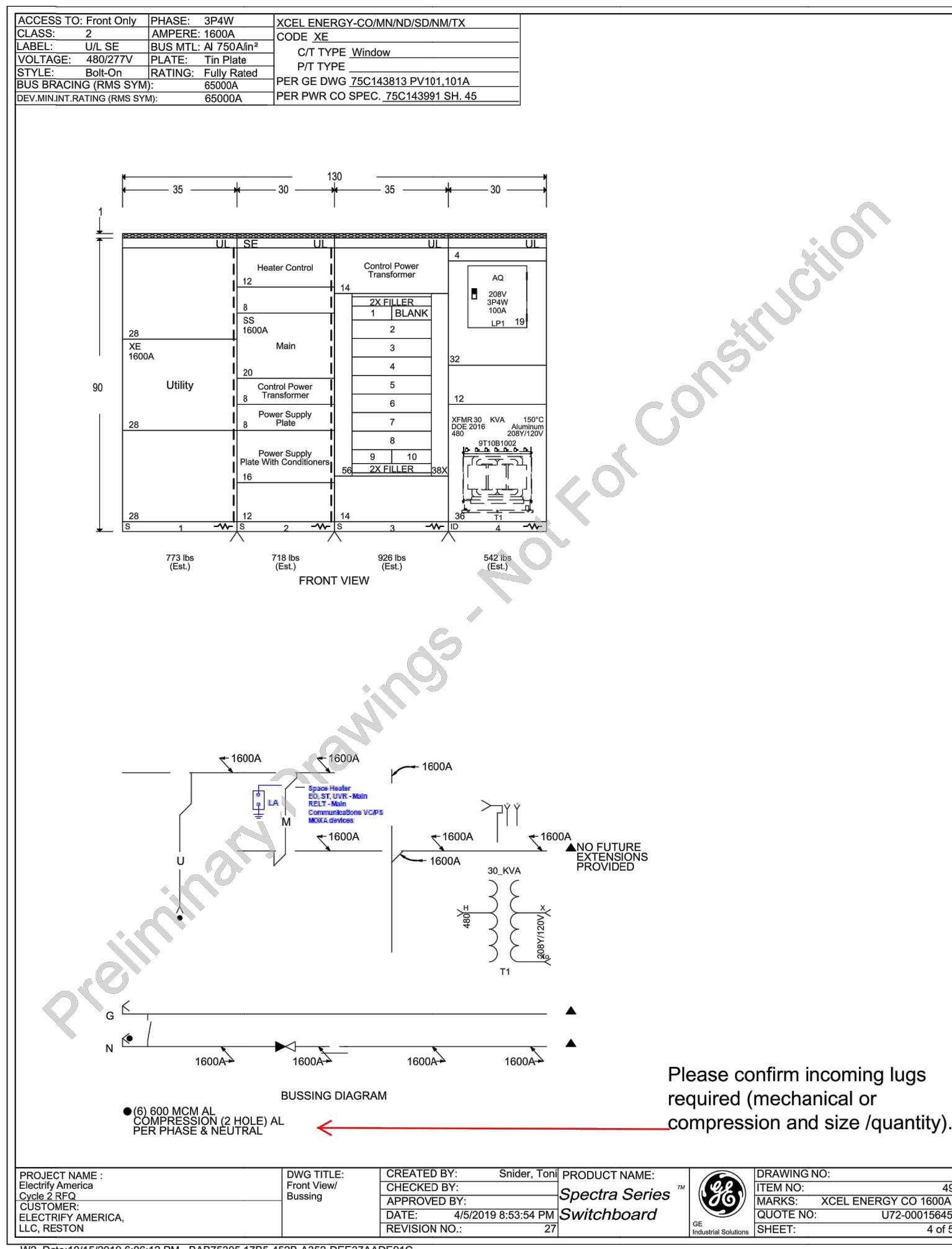
WIRING AND CABLE SCHEDULE																
CABLE SIZE BASED ON 75C COPPER CABLE																
TRANSFORMER CABLE SCHEDULE																
CATALOG NO.	DESIGNATION	2WIRE NAME PLATE	PHASE	KVA	TEMP RISE	MATERIAL	FREQ	PRIMARY SECONDARY	VOLTS	AMPS	PHASE WIRE SIZE	NEUTRAL WIRE SIZE	GROUND BONDING WIRE SIZE	DEVICE ORIGIN (CABLED FROM)	DEVICE DESTINATION (CABLED TO)	
910B1002	T1		3 Phase	30	150	Aluminum	60 Hz	PRIMARY SECONDARY	208Y/120	480	50	1/0	1/0	1/0	1/0	Factory wire to panel

PANEL CABLE SCHEDULE								
DESIGNATION	PANEL NAME PLATE	AMPS	VOLTAGE	INCOMING TYPE	PHASE WIRE SIZE	NEUTRAL WIRE SIZE	GROUND WIRE SIZE	DEVICE ORIGIN (CABLED FROM)
LP1		100 Amps	208	Breaker				T1

No lighting panel branch circuits will have a NEUT, GND or Bonding wire.
Any circuit that has a XFRM device origin will have a NEUT, GND and Bonding Jumper.
All XFRM Bonding Jumper will be sized the same as GND.
Any Main circuit that has 3 phase 4 wire service will have a NEUT and GND.
Neutral Splice required to support Power Panel of the voltage only.

PROJECT NAME: Electrify America Cable 2 RFG CUSTOMER: ELECTRIFY AMERICA, LLC, RESTON	DWG TITLE: Device Information	CREATED BY: Snider, Tom	PRODUCT NAME: Spectra Series Switchboard	DRAWING NO: ITEM NO: MARKS: XCEL ENERGY CO 1600A QUOTE NO: U72-00015645 SHEET: 3 of 5
---	-------------------------------------	----------------------------	--	---

W2 Date:10/15/2019 6:06:12 PM BAB75305-1785-4528-A352-DEE37AADE1C



ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
ELECTRICAL DETAILS

Project #: C0210137

File: CONSTRUCTION DOCUMENTS

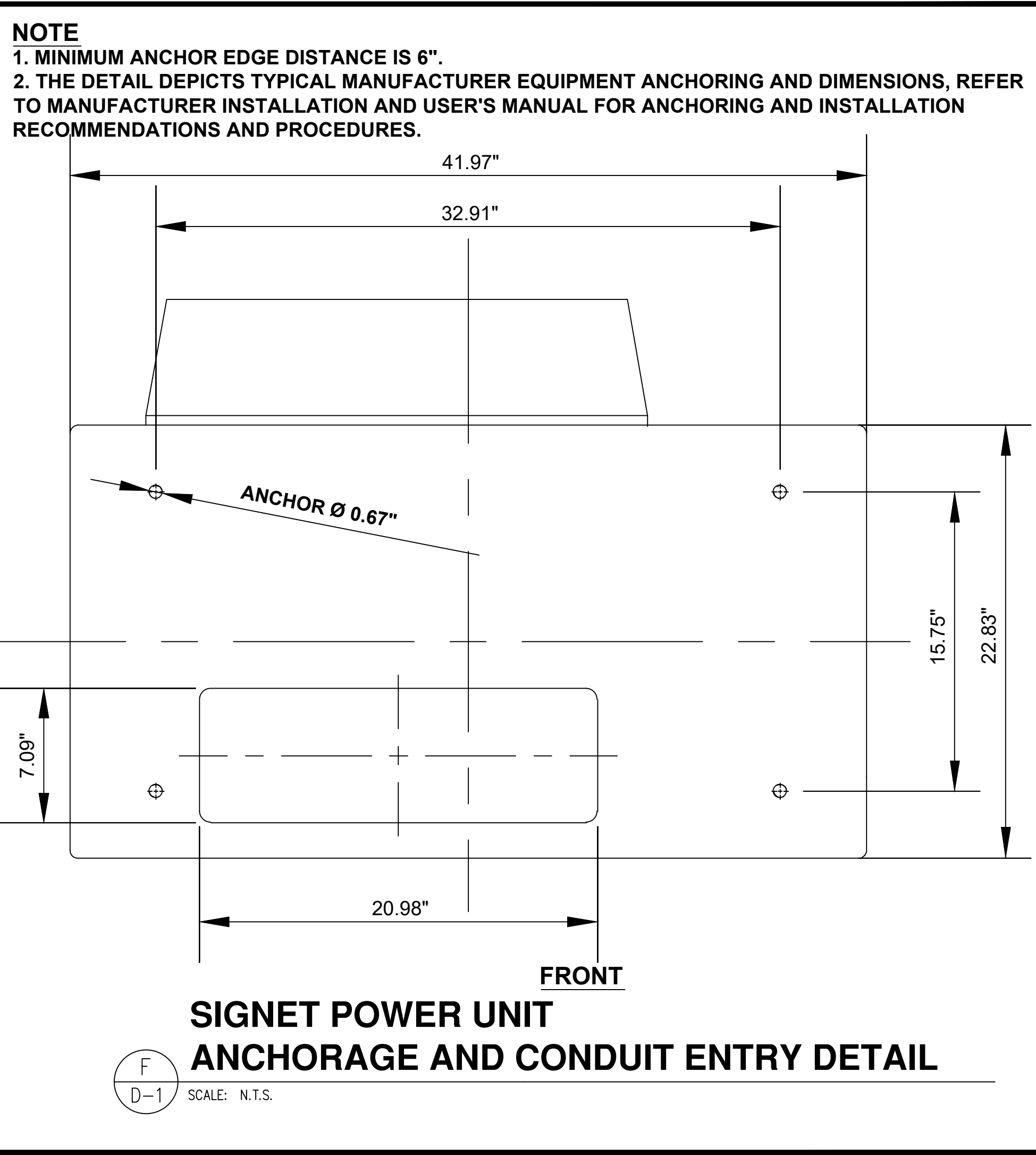
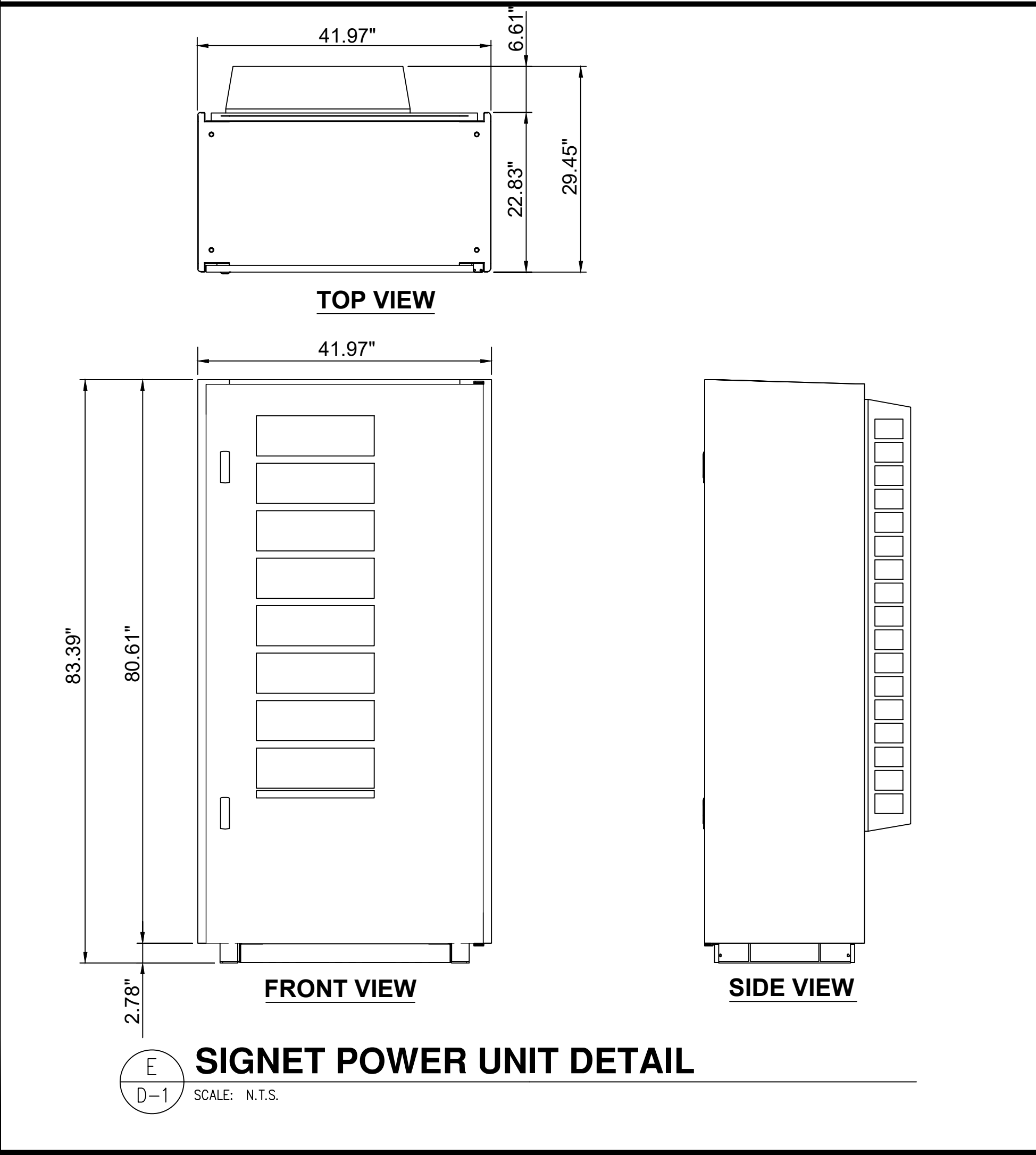
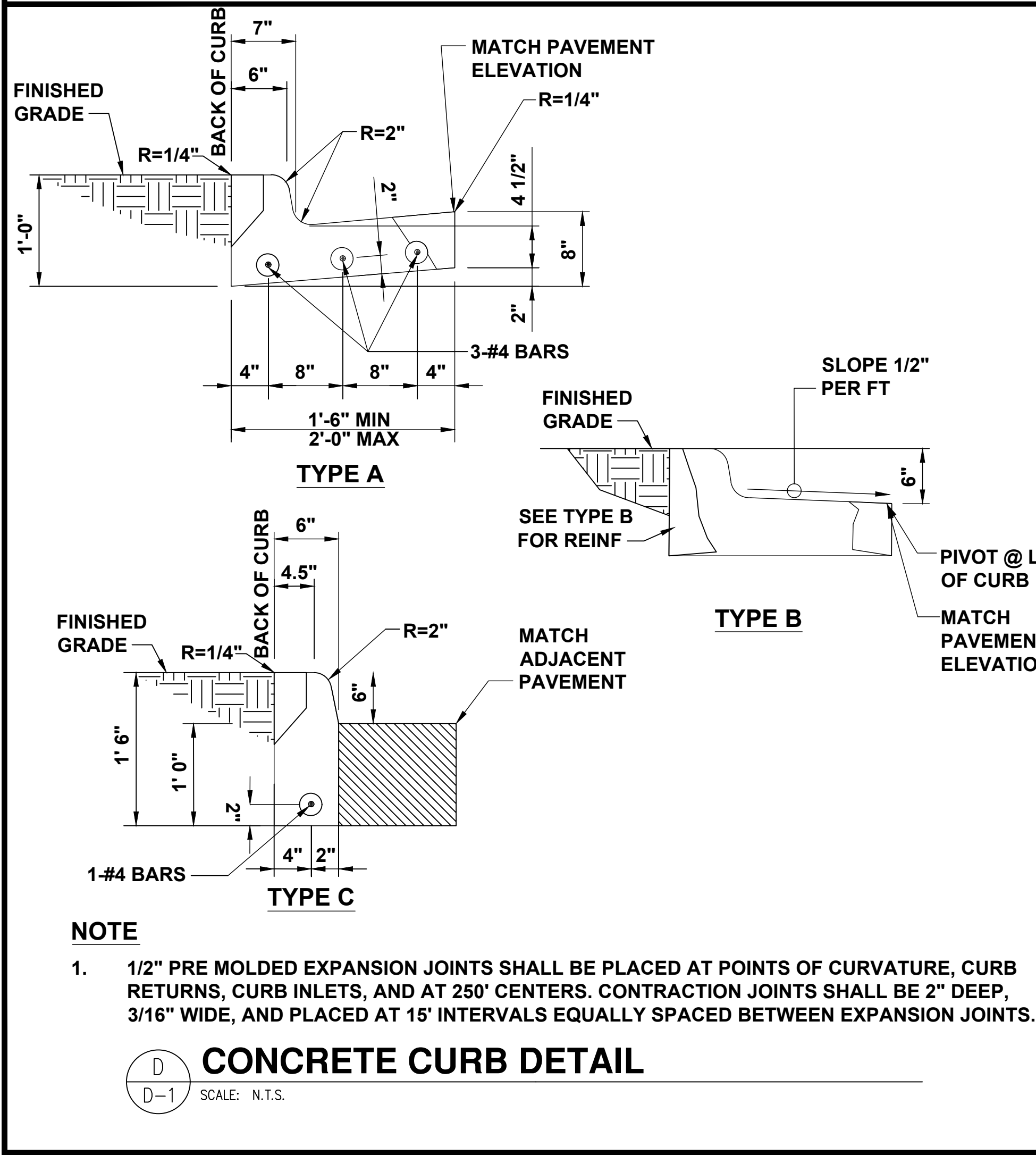
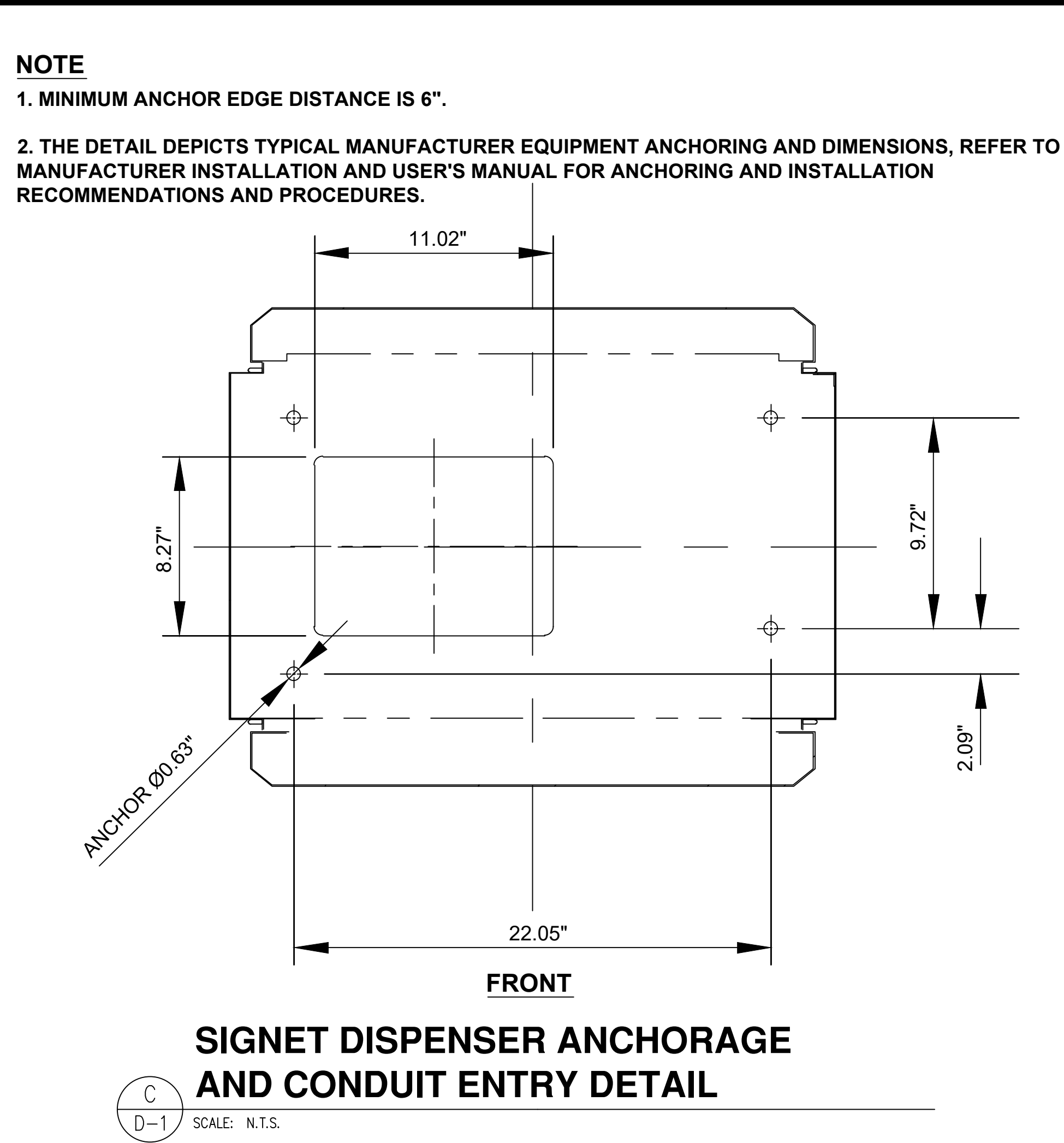
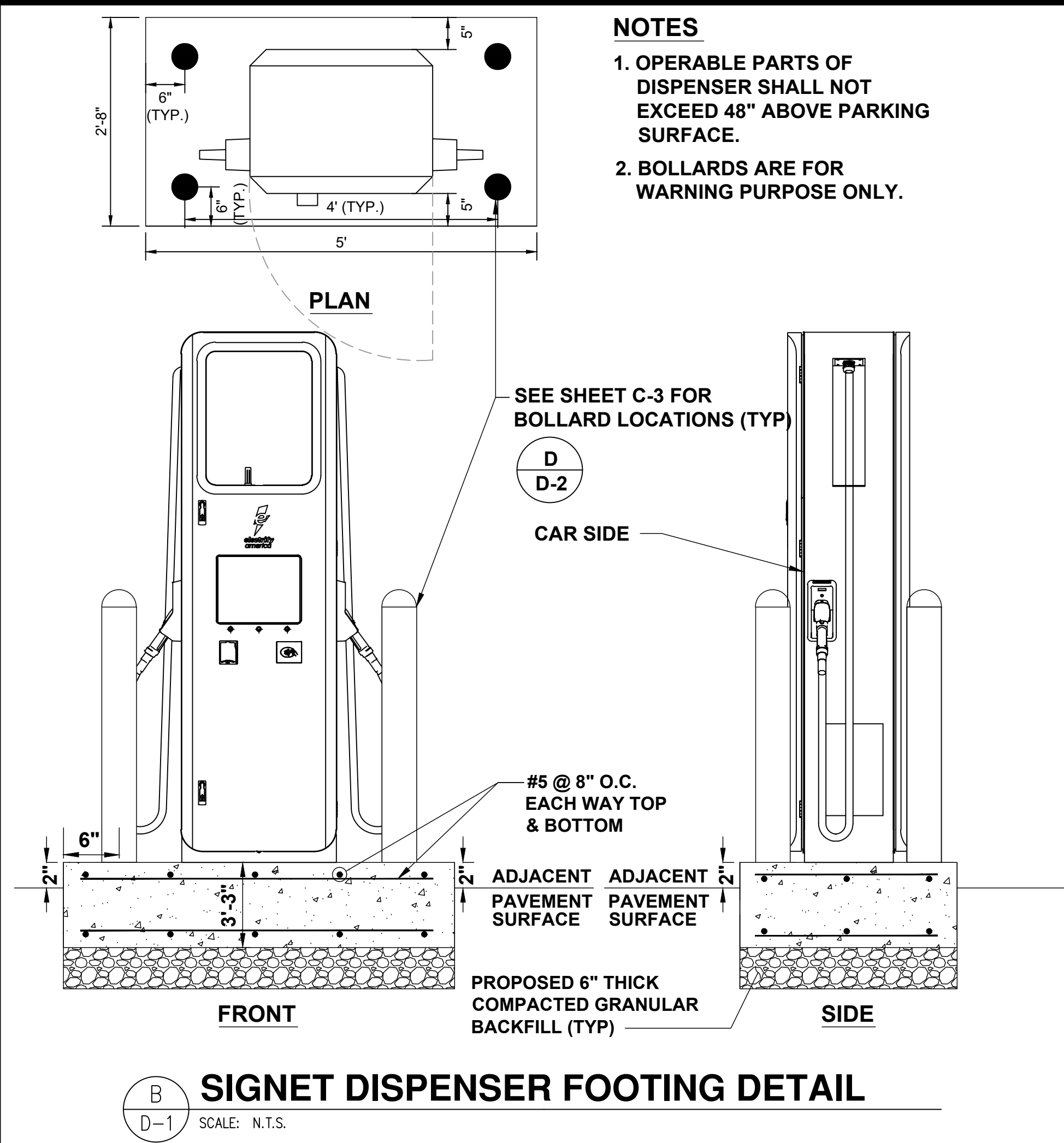
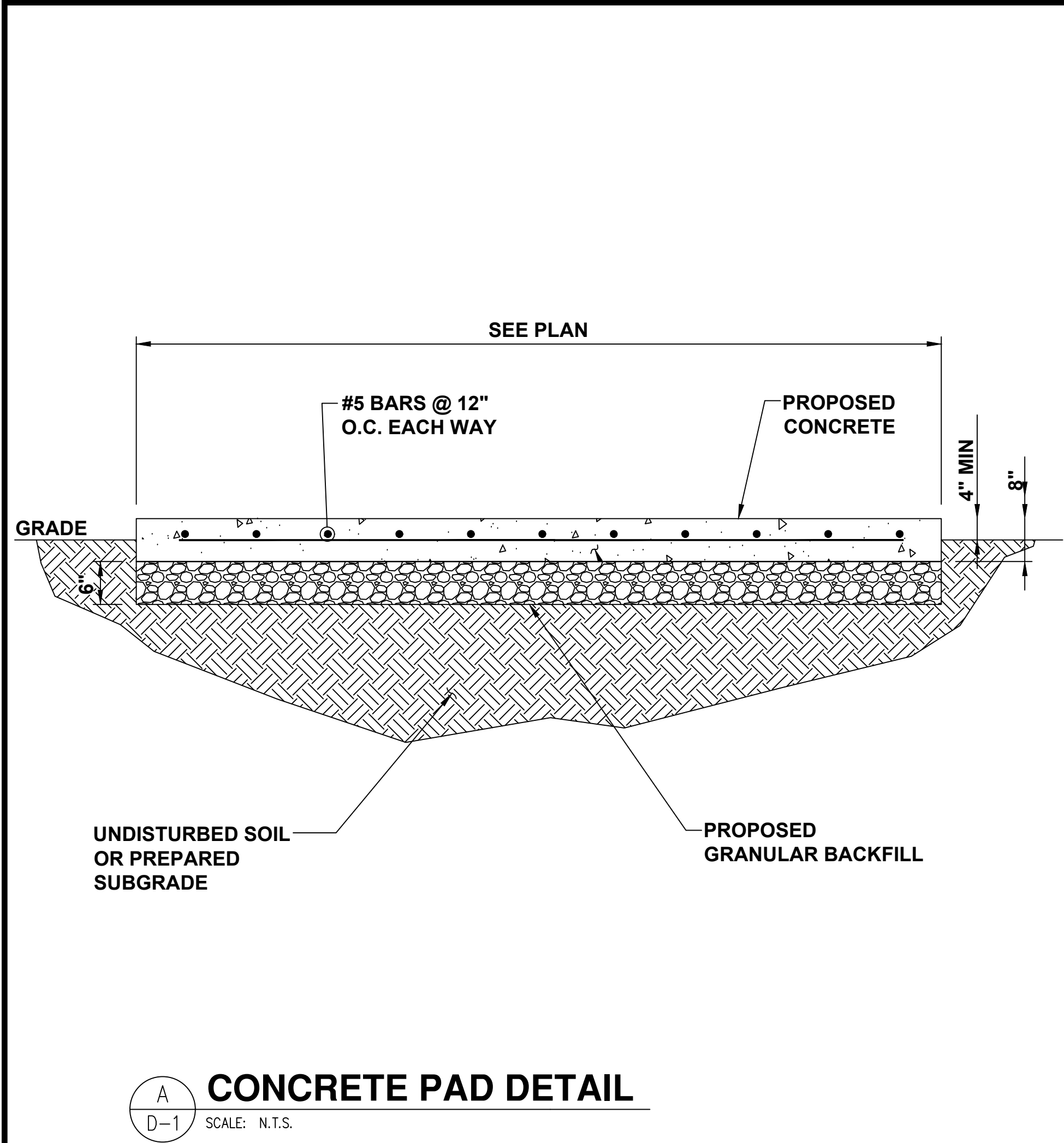
Drawn by: GGD

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

E-5



ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191



4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:
**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DETAILS

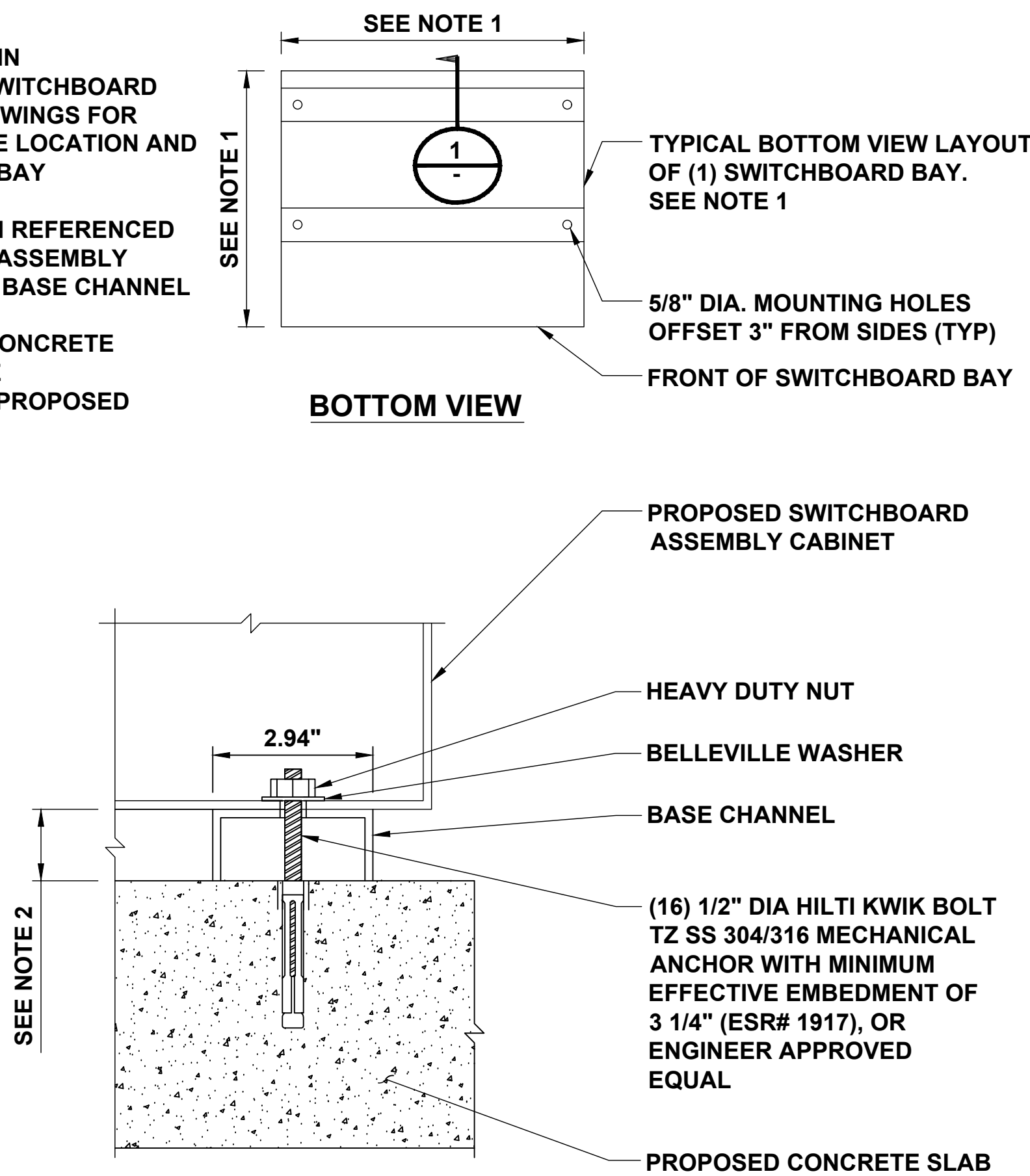


Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDD
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

D-1

NOTES

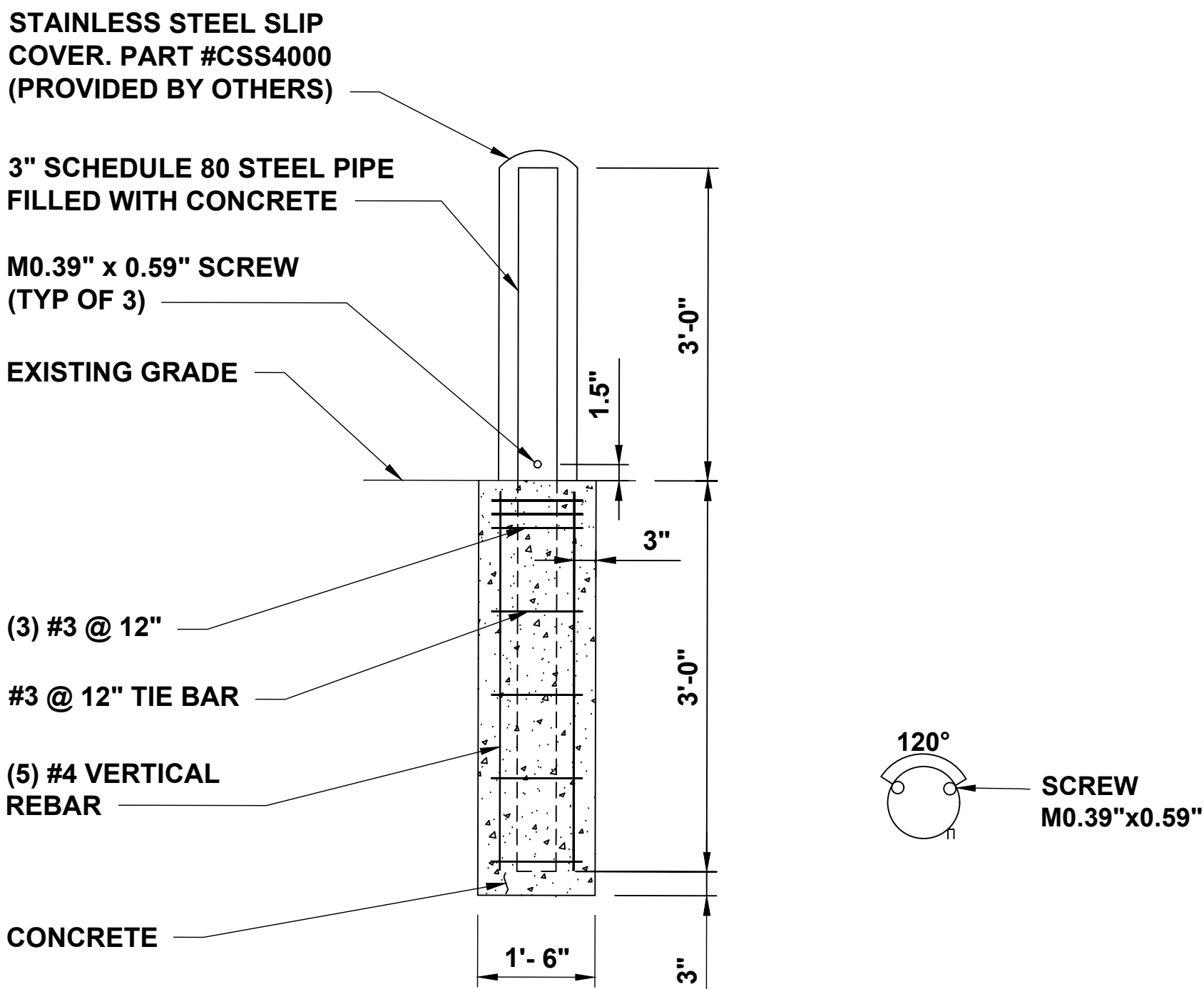
1. SEE FLOOR PLAN IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR MOUNTING HOLE LOCATION AND SWITCHBOARD BAY DIMENSIONS.
2. SEE ELEVATION IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR BASE CHANNEL DIMENSION.
3. MINIMUM 10 1/2" CONCRETE EDGE DISTANCE REQUIRED FOR PROPOSED ANCHORAGE.



A SWITCHBOARD MOUNTING DETAIL
D-2 SCALE: N.T.S.

NOTES

1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. BOLLARD DETAIL FOR BOLLARDS AROUND ELECTRIFY AMERICA EQUIPMENT.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.

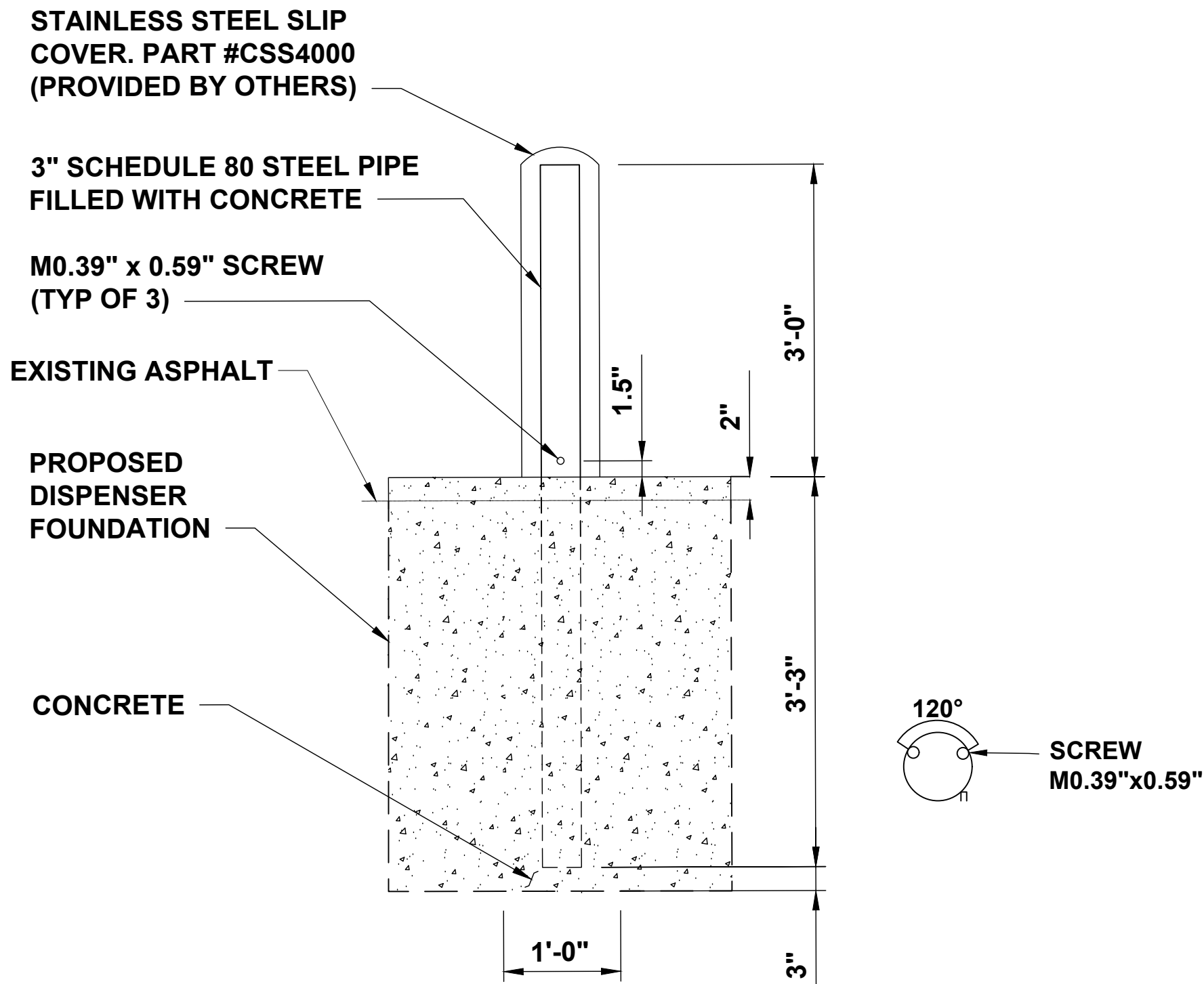


B WARNING BOLLARD DETAIL
D-2 SCALE: N.T.S.

C NOT USED
D-2 SCALE: N.T.S.

NOTES

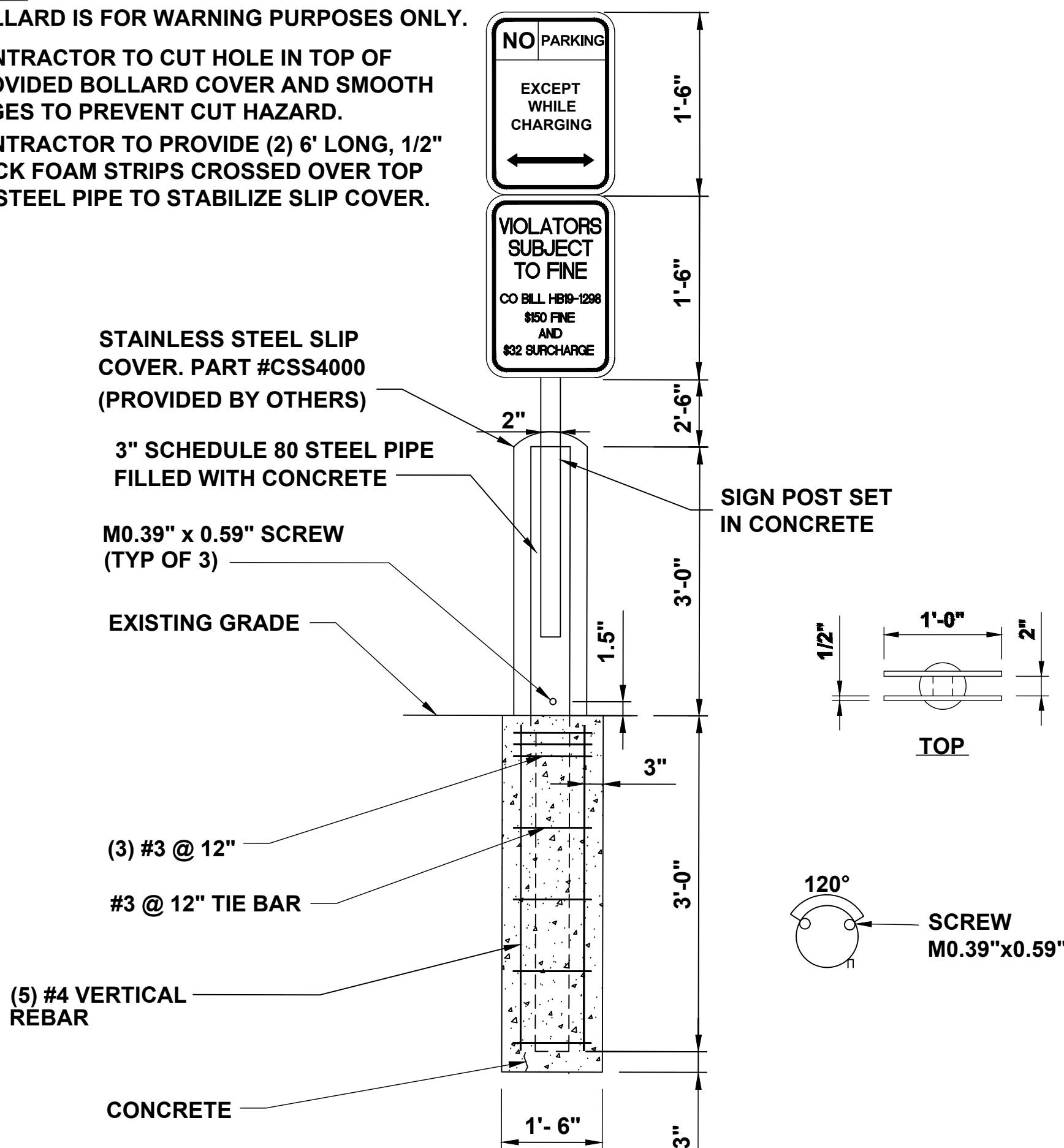
1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. BOLLARD DETAIL FOR BOLLARDS AROUND ELECTRIFY AMERICA EQUIPMENT.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.



D DISPENSER WARNING BOLLARD DETAIL
D-2 SCALE: N.T.S.

NOTES

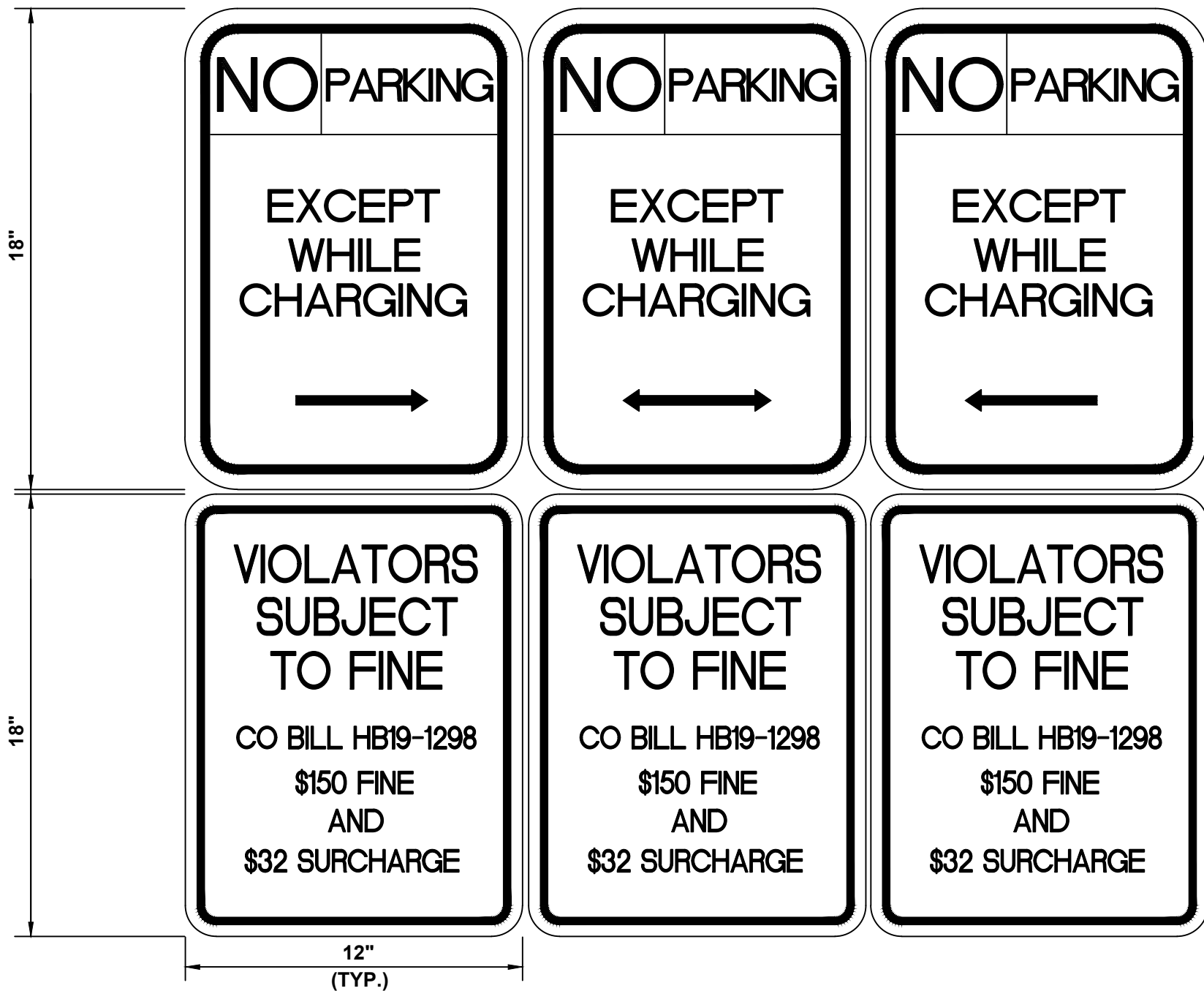
1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. CONTRACTOR TO CUT HOLE IN TOP OF PROVIDED BOLLARD COVER AND SMOOTH EDGES TO PREVENT CUT HAZARD.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.



E WARNING BOLLARD WITH SIGN DETAIL
D-2 SCALE: N.T.S.

NOTES

1. BOTTOM OF LOWEST SIGN SHALL BE INSTALLED 66" ABOVE GRADE.



F NO PARKING SIGN
D-2 SCALE: N.T.S.



**electrify
america**

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

**WALMART
SUPERCENTER
5137**

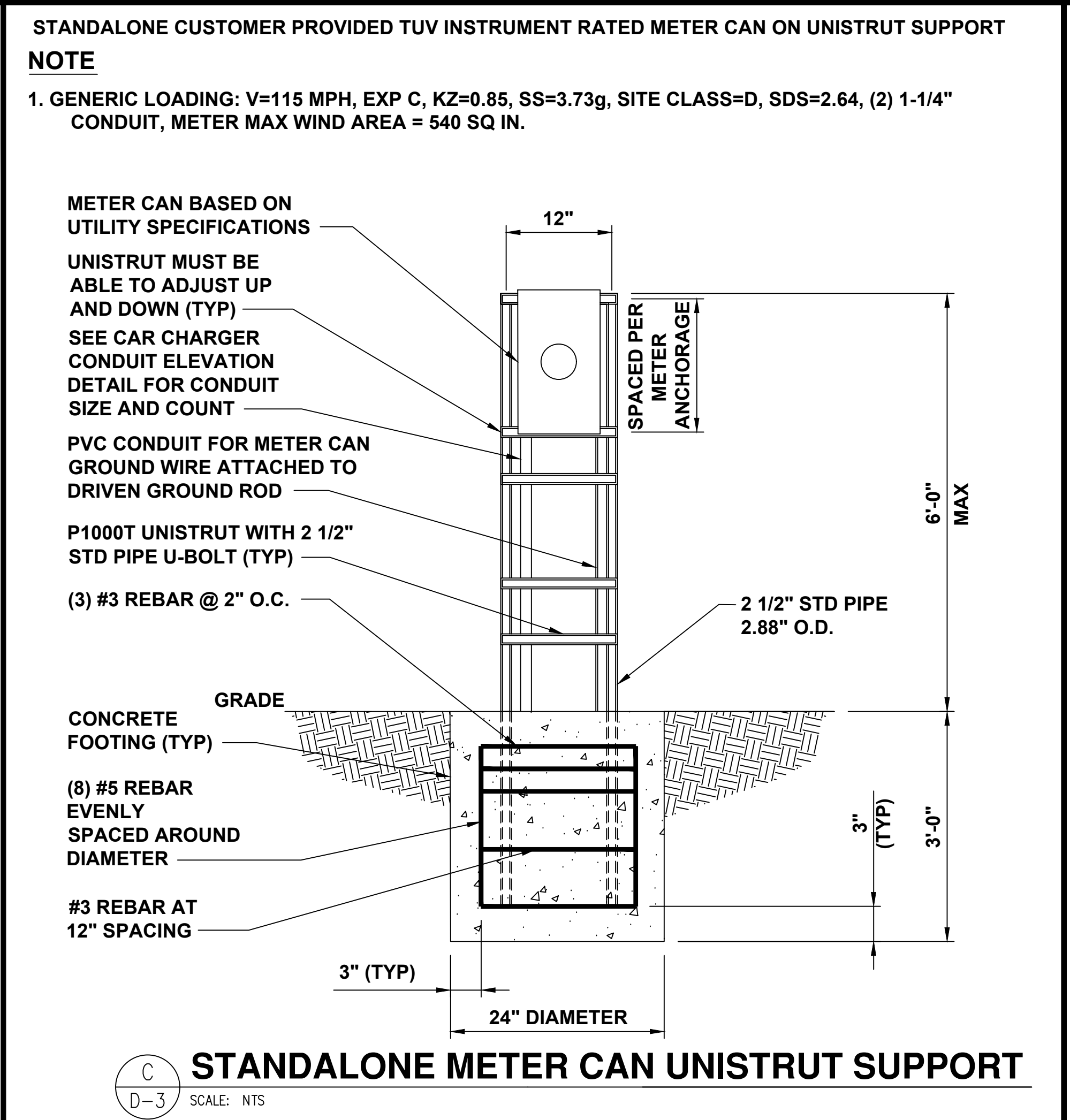
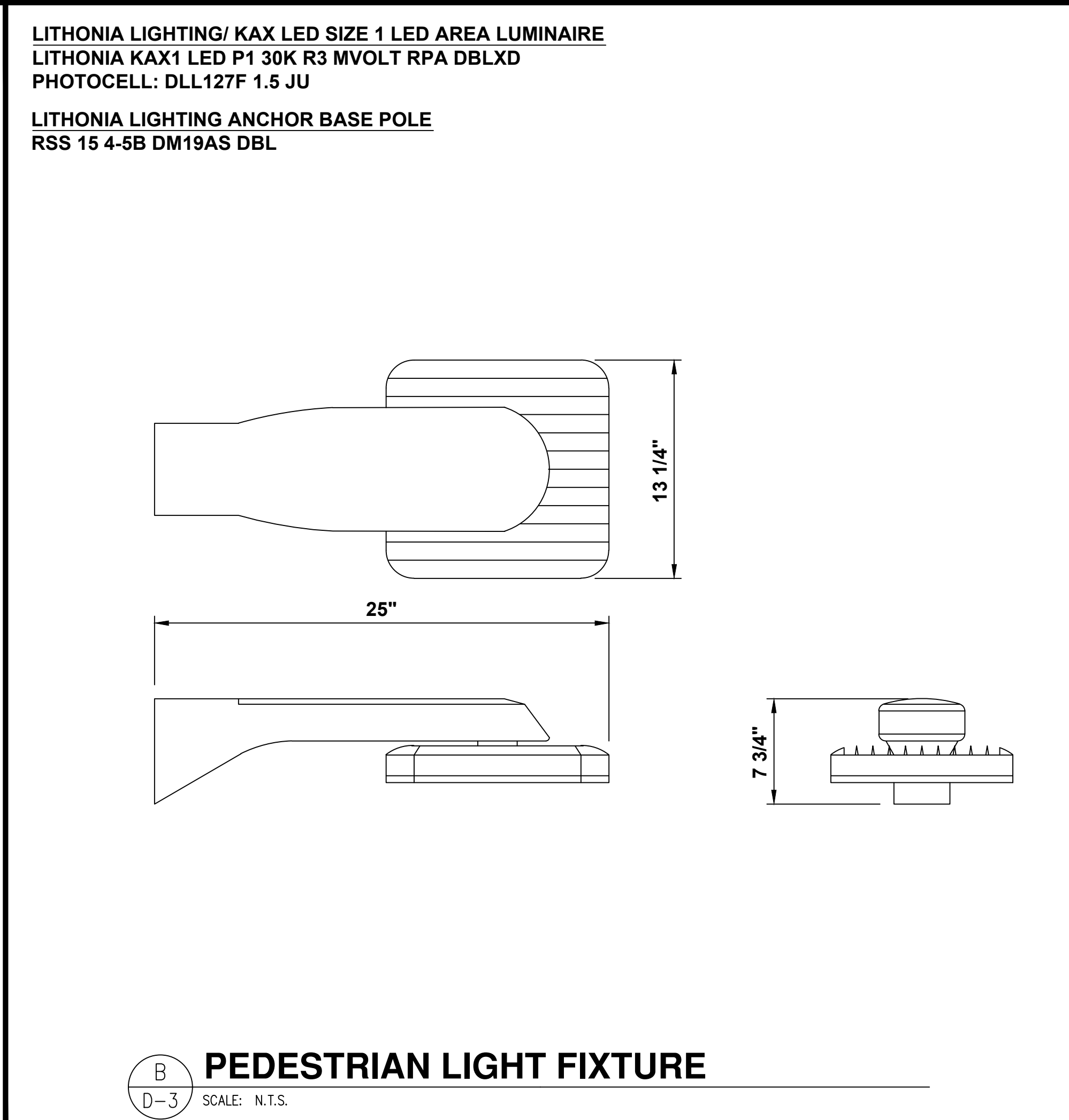
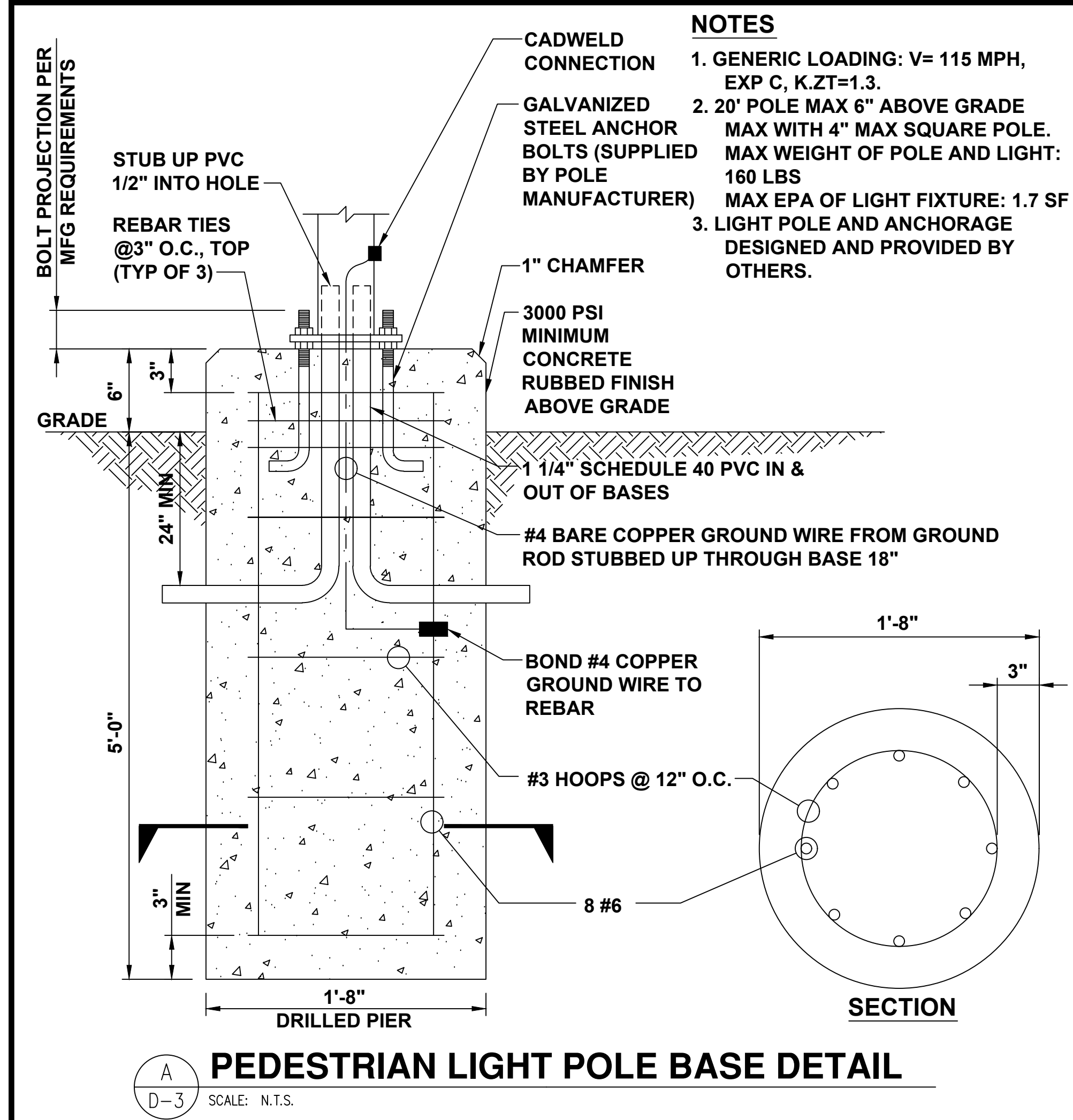
6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DETAILS



Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDD
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

D-2



electrify america

ELECTRIFY AMERICA, LLC.
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART SUPERCENTER 5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DETAILS

PROFESSIONAL ENGINEER

Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GGD

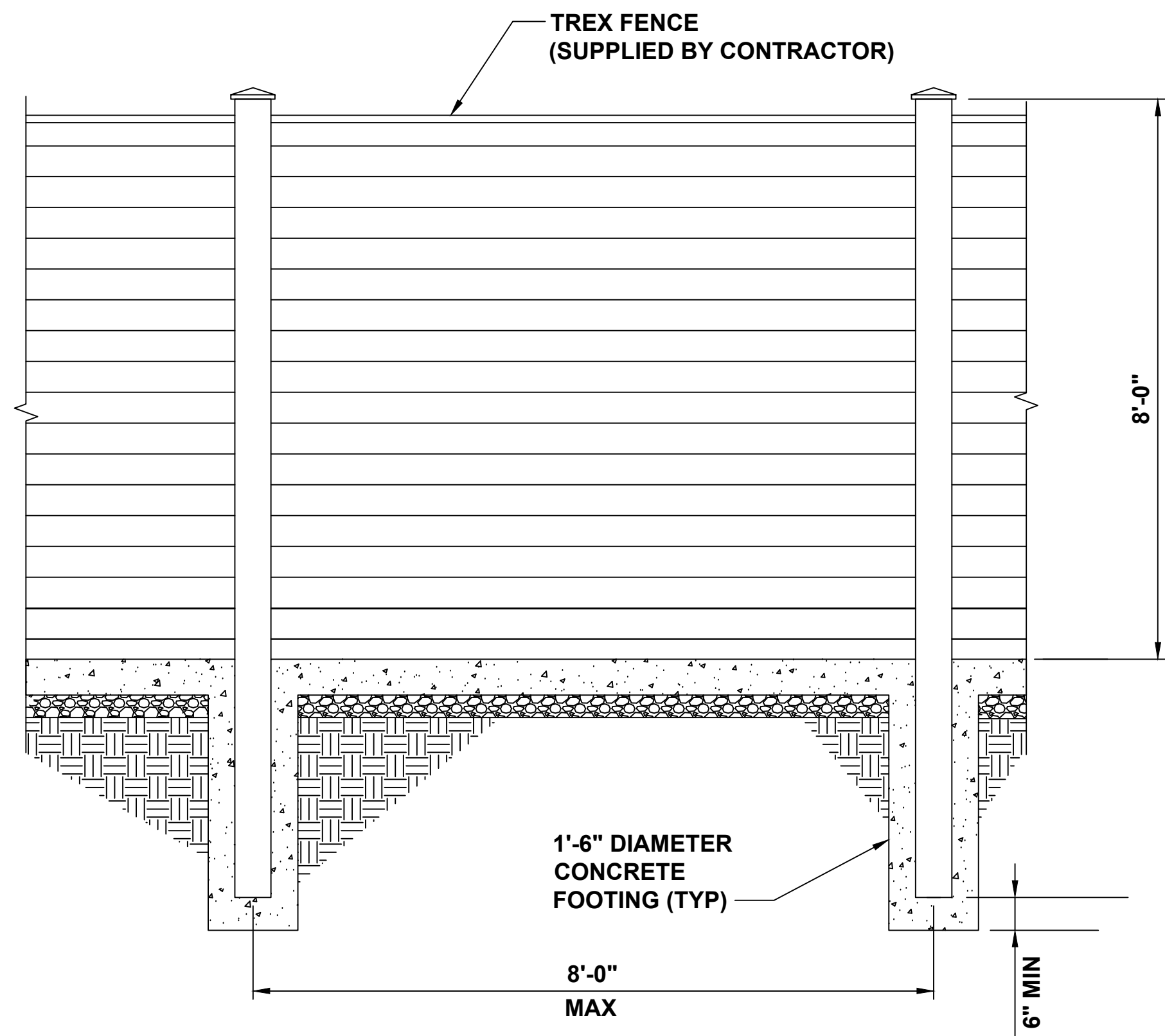
Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

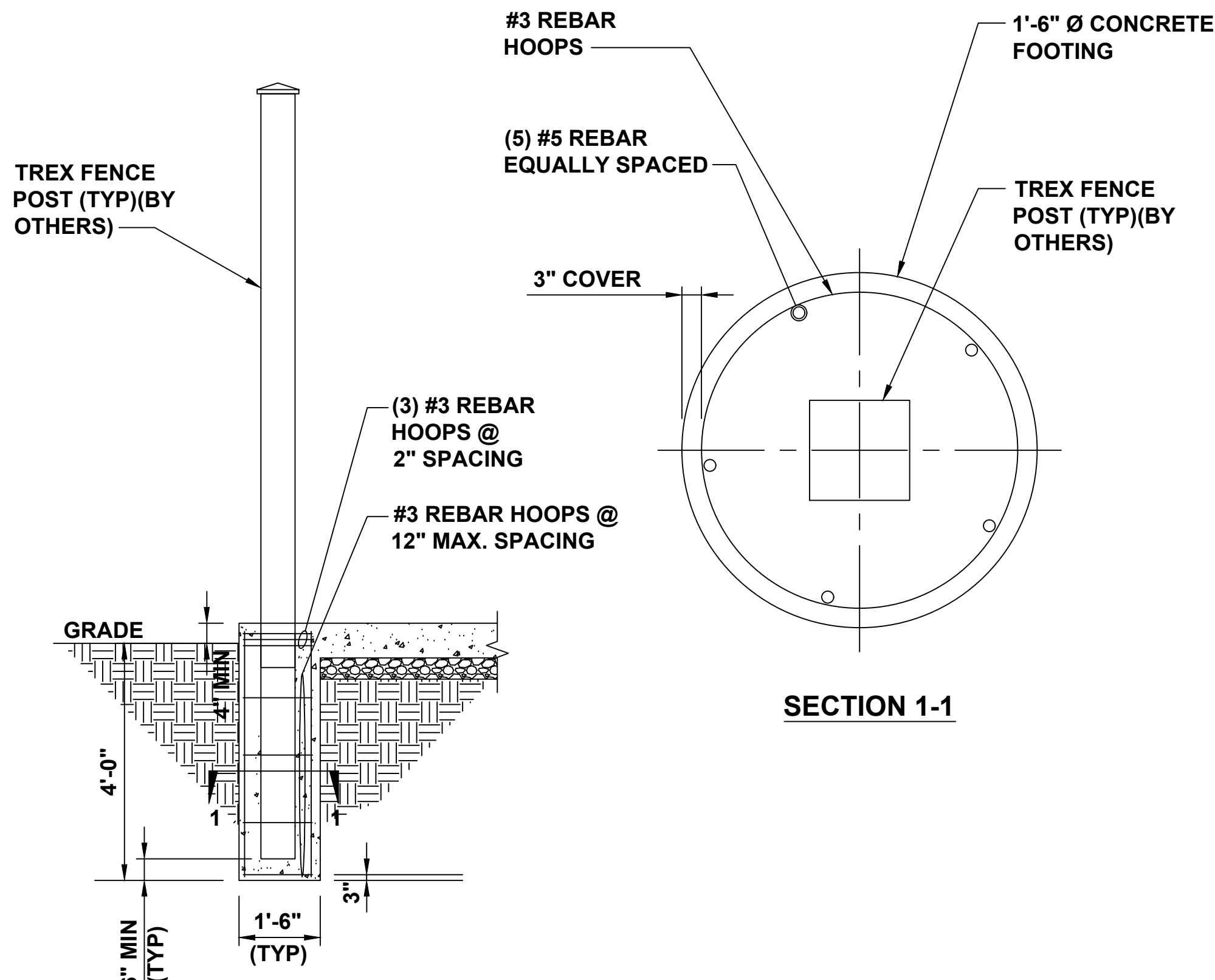
D-3

NOTES:
1. COLOR: WINCHESTER GREY



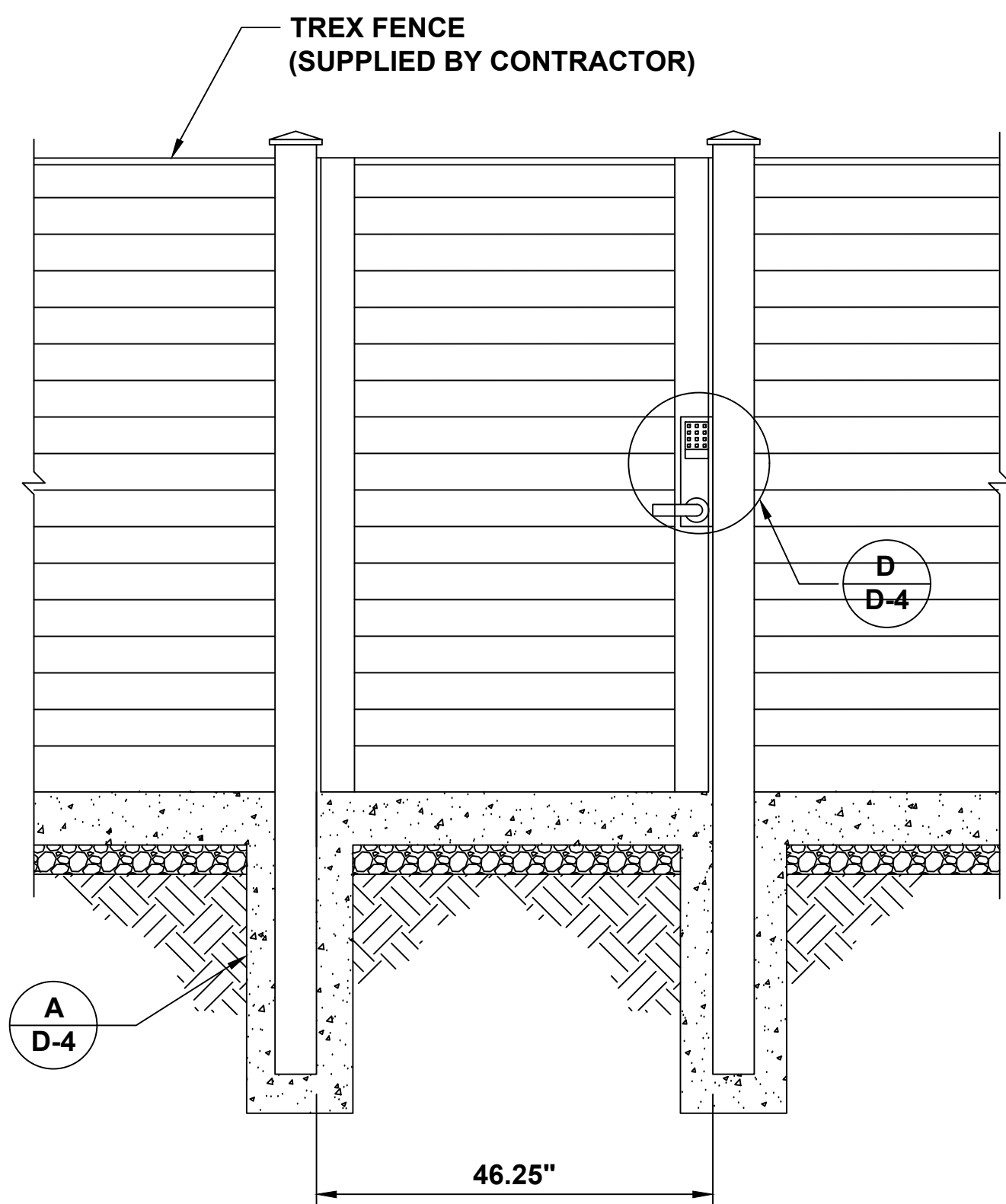
TREX FENCE ELEVATION

A
D-4
TYPICAL TREX FENCE DETAIL
SCALE: N.T.S.

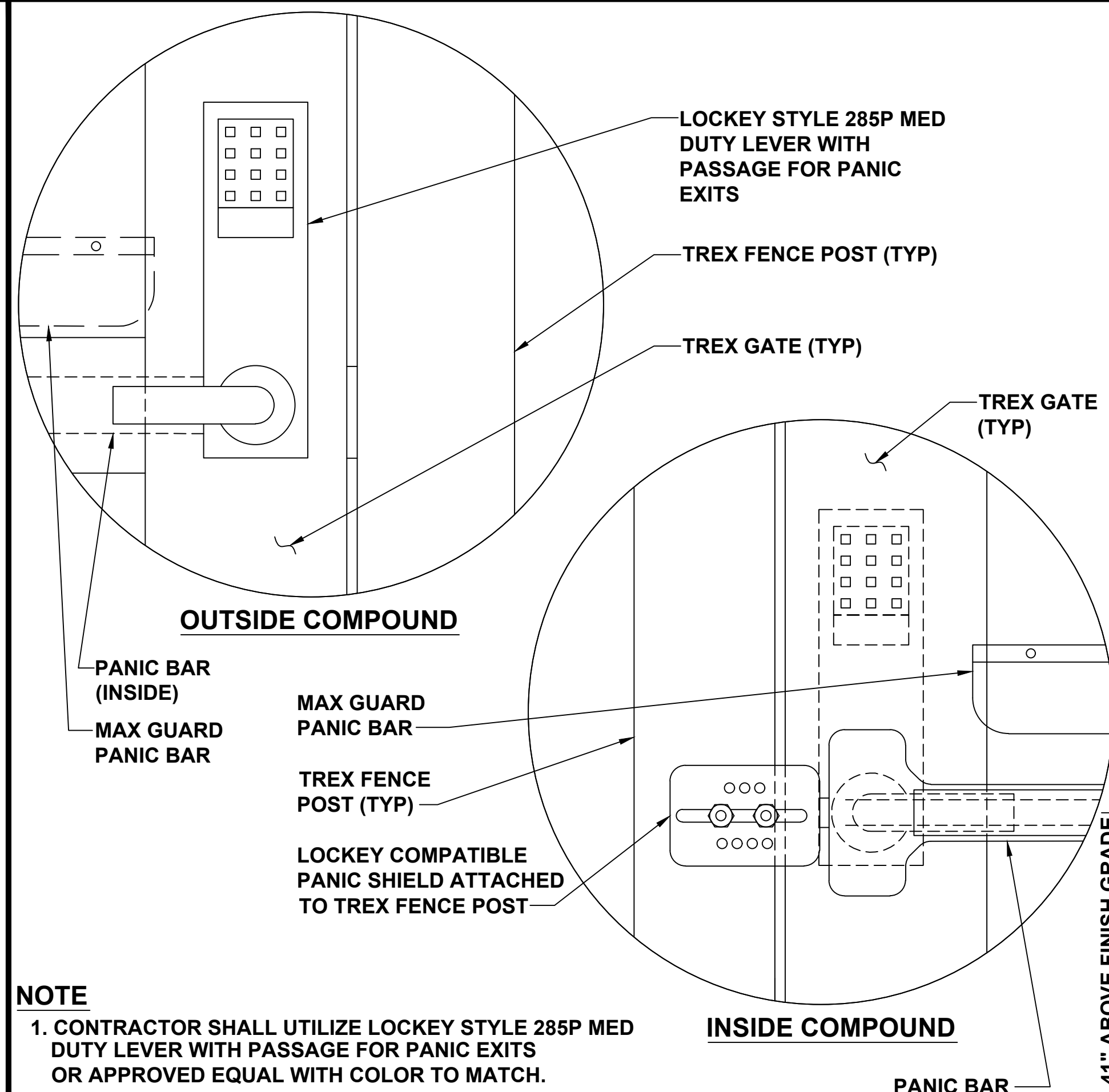


TYPICAL TREX FENCE ELEVATION

B
D-4
NOT USED
SCALE: N.T.S.



C
D-4
SINGLE GATE DETAIL
SCALE: N.T.S.



NOTE
1. CONTRACTOR SHALL UTILIZE LOCKEY STYLE 285P MED DUTY LEVER WITH PASSAGE FOR PANIC EXITS OR APPROVED EQUAL WITH COLOR TO MATCH. PURCHASE ACCESSORIES AS NECESSARY.

D
D-4
LOCK DETAIL WITH KEYPAD
SCALE: N.T.S.

E
D-4
NOT USED
SCALE: N.T.S.



electrify
america

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

WALMART
SUPERCENTER
5137

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DETAILS



Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDB
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

D-4

NOTES

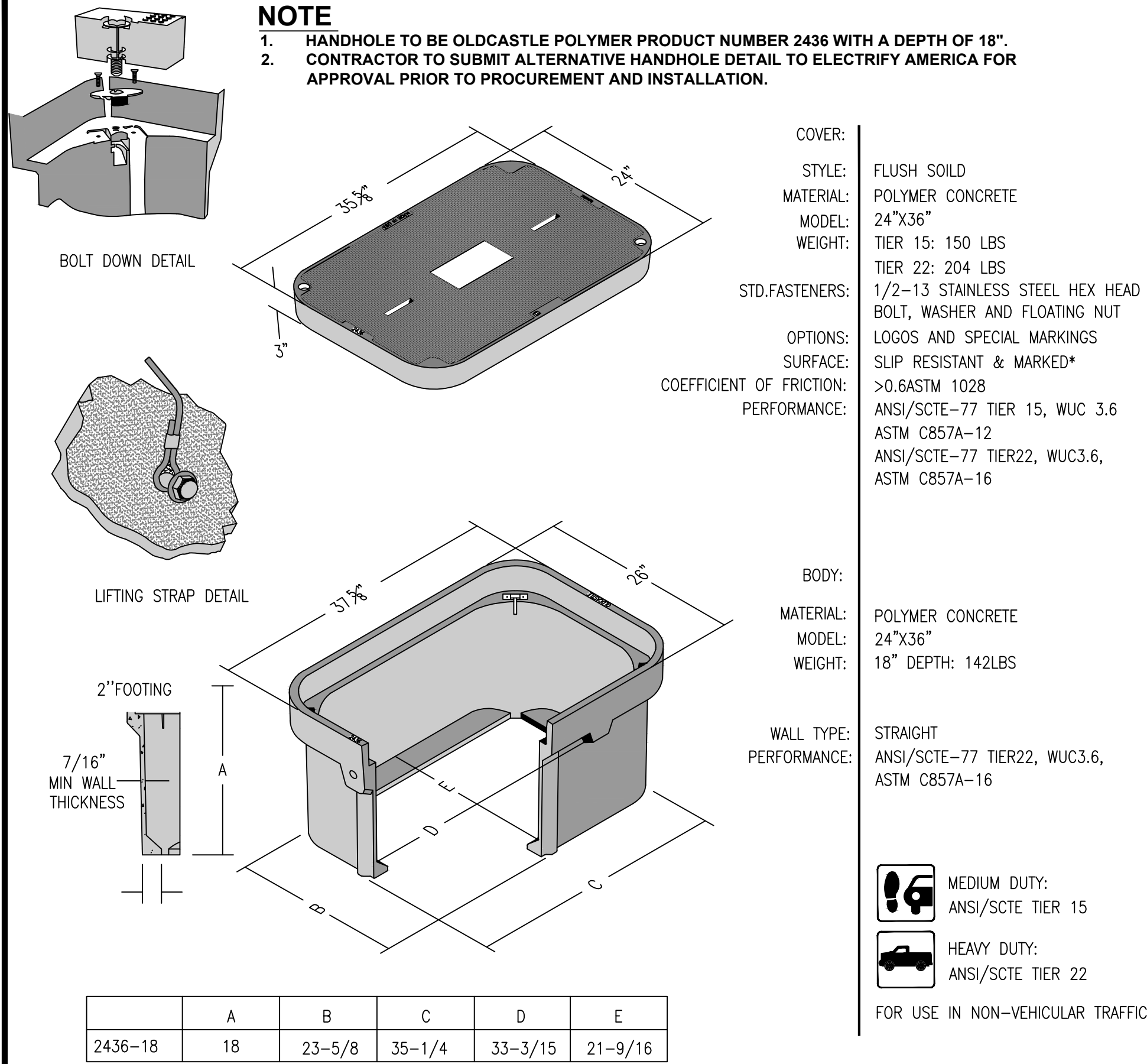
1. BOTTOM OF STENCIL TO BE PLACED AT THE LEADING EDGE OF THE PROPOSED PARKING STALL
2. STENCIL TO FIT WITHIN DIMENSIONS SHOWN
3. PAVEMENT MARKING TO BE PAINTED WHITE



A EV PAVEMENT MARKING DETAIL
SCALE: N.T.S.

NOTE

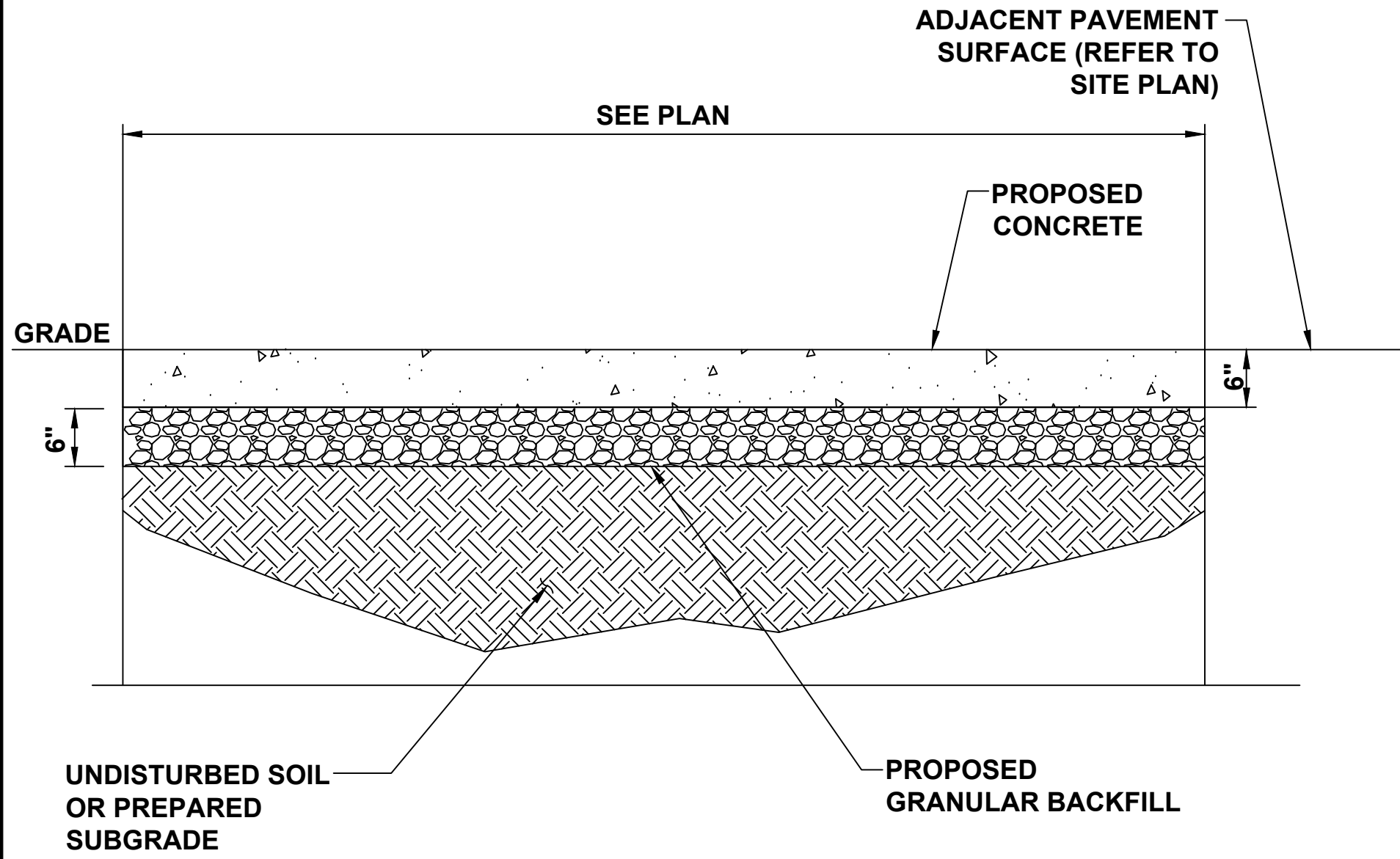
1. HANDHOLE TO BE OLDCASTLE POLYMER PRODUCT NUMBER 2436 WITH A DEPTH OF 18".
2. CONTRACTOR TO SUBMIT ALTERNATIVE HANDHOLE DETAIL TO ELECTRIFY AMERICA FOR APPROVAL PRIOR TO PROCUREMENT AND INSTALLATION.



B HANDHOLE DETAIL OR APPROVED EQUIVALENT
SCALE: N.T.S.

NOTE

1. REFER TO REINFORCED CONCRETE NOTE FOR CONCRETE REQUIREMENTS



C PARKING LOT CONCRETE DETAIL
SCALE: N.T.S.

D NOT USED
SCALE: N.T.S.

E NOT USED
SCALE: N.T.S.

F NOT USED
SCALE: N.T.S.



ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191



4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

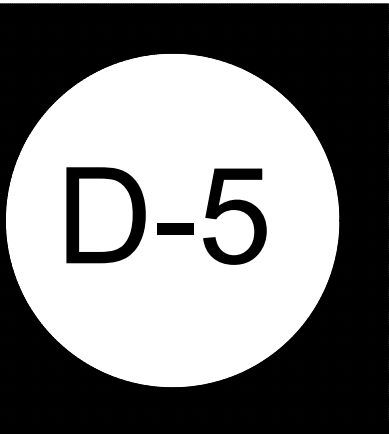
Job Name:
**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:
DETAILS




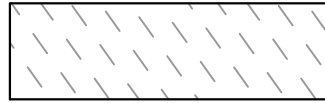
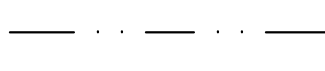
Project #: C0210137
File: CONSTRUCTION DOCUMENTS
Drawn by: GDB
Date(s): 10/04/2019
11/05/2019 REV #1 CD90 PLANS
12/04/2019 REV #2 CD100 PLANS

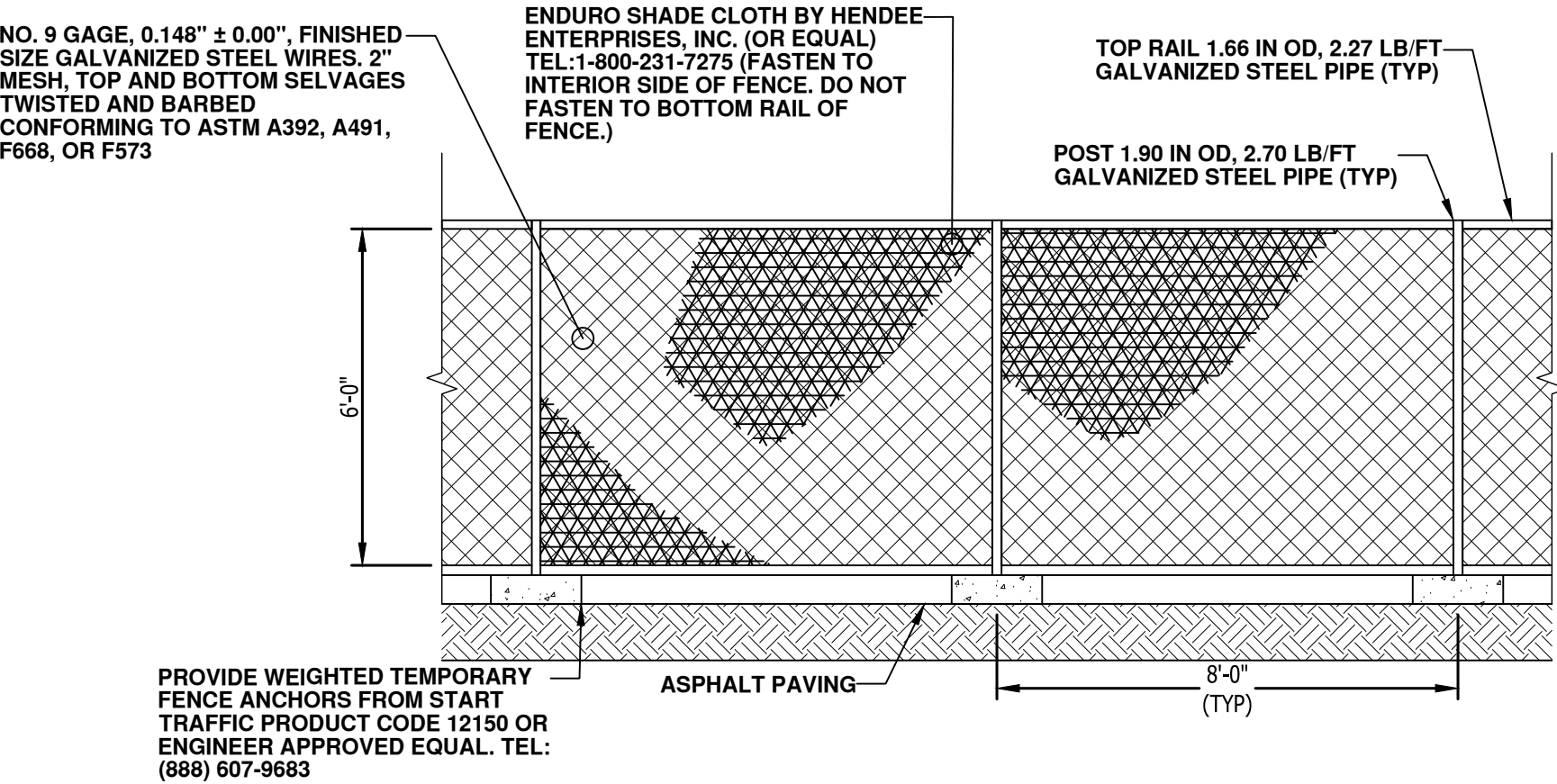
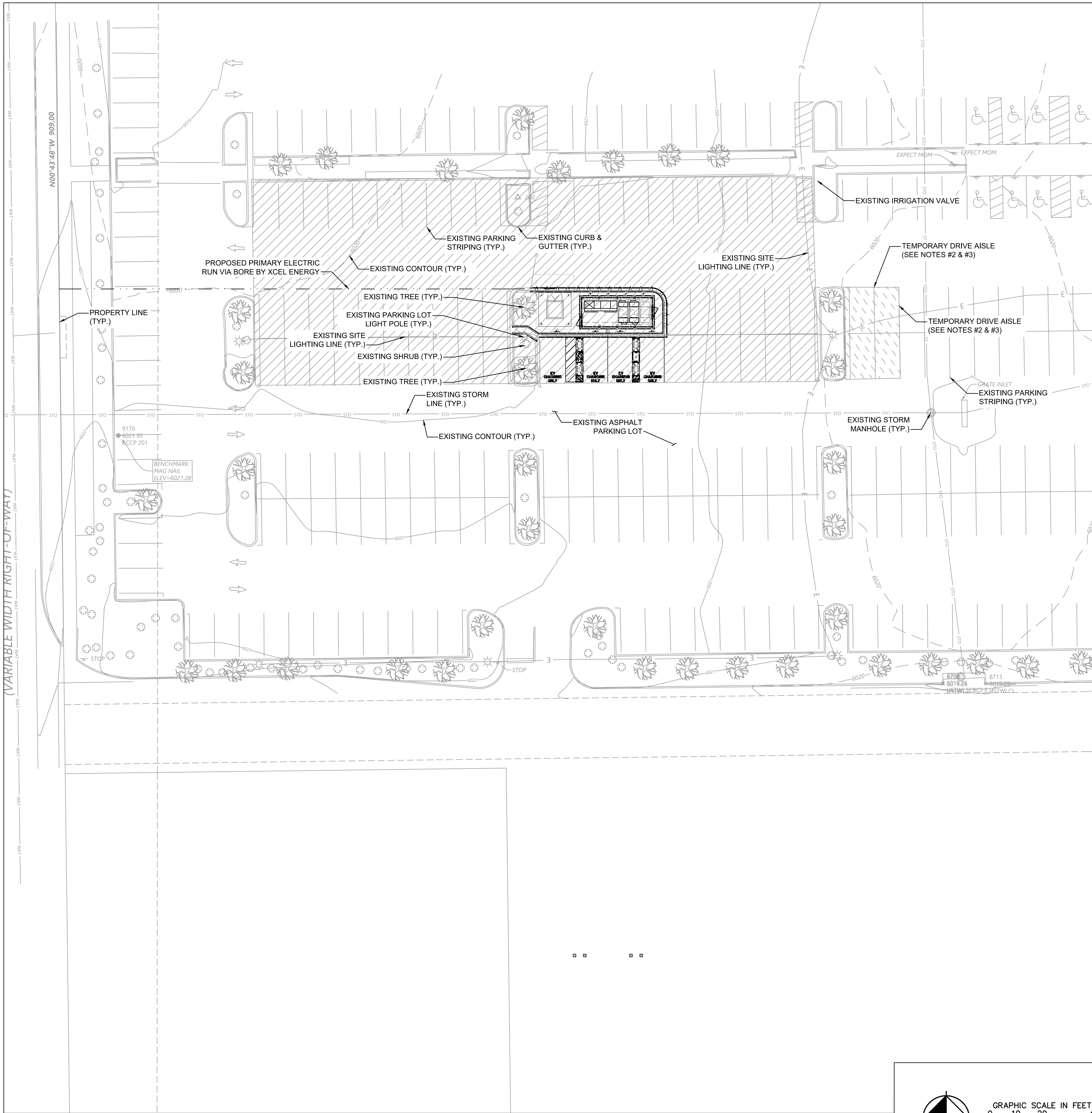


NOTES

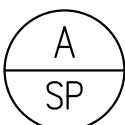
1. WORK / STAGING AREA TO BE CONFIRMED AT PRE-CONSTRUCTION SITE MEETING AND SURROUNDED BY TEMPORARY FENCE DURING CONSTRUCTION.
2. POSSIBLE LOCATION FOR TEMPORARY DRIVE AISLE CLOSURE DURING CONSTRUCTION.
3. CONTRACTOR TO PROVIDE TEMPORARY SIGNS TO DIRECT TRAFFIC FLOW.
4. SHORT TERM FENCING TO BE PROVIDED OUTSIDE OF TEMPORARY FENCE FOR ANY OPEN TRENCHES LEFT OVER NIGHT OR UNATTENDED
5. THE CONTRACTOR SHALL RETURN SIDEWALKS, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF THE WORK.

LEGEND

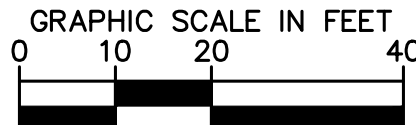
-  WORKING/STAGING AREA
-  TEMPORARY DRIVE AISLE
-  UTILITY LINE TO BE BORED (OUTSIDE OF WORKING/STAGING AREA)



TEMPORARY FENCE DETAIL
NO SCALE



STAGING PLAN



**electrify
america**

ELECTRIFY AMERICA, LLC,
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

Kimley»Horn

4582 S. ULSTER STREET
SUITE 1500
DENVER, CO 80237
303-288-2300

Job Name:

**WALMART
SUPERCENTER
5137**

6101 SOUTH AURORA PARKWAY
AURORA, CO 80016

SHEET DESCRIPTION:

STAGING PLAN

Project #: C0210137

File: CONSTRUCTION DOCUMENTS

Drawn by: GDD

Date(s): 10/04/2019

11/05/2019 REV #1 CD90 PLANS

12/04/2019 REV #2 CD100 PLANS

SP