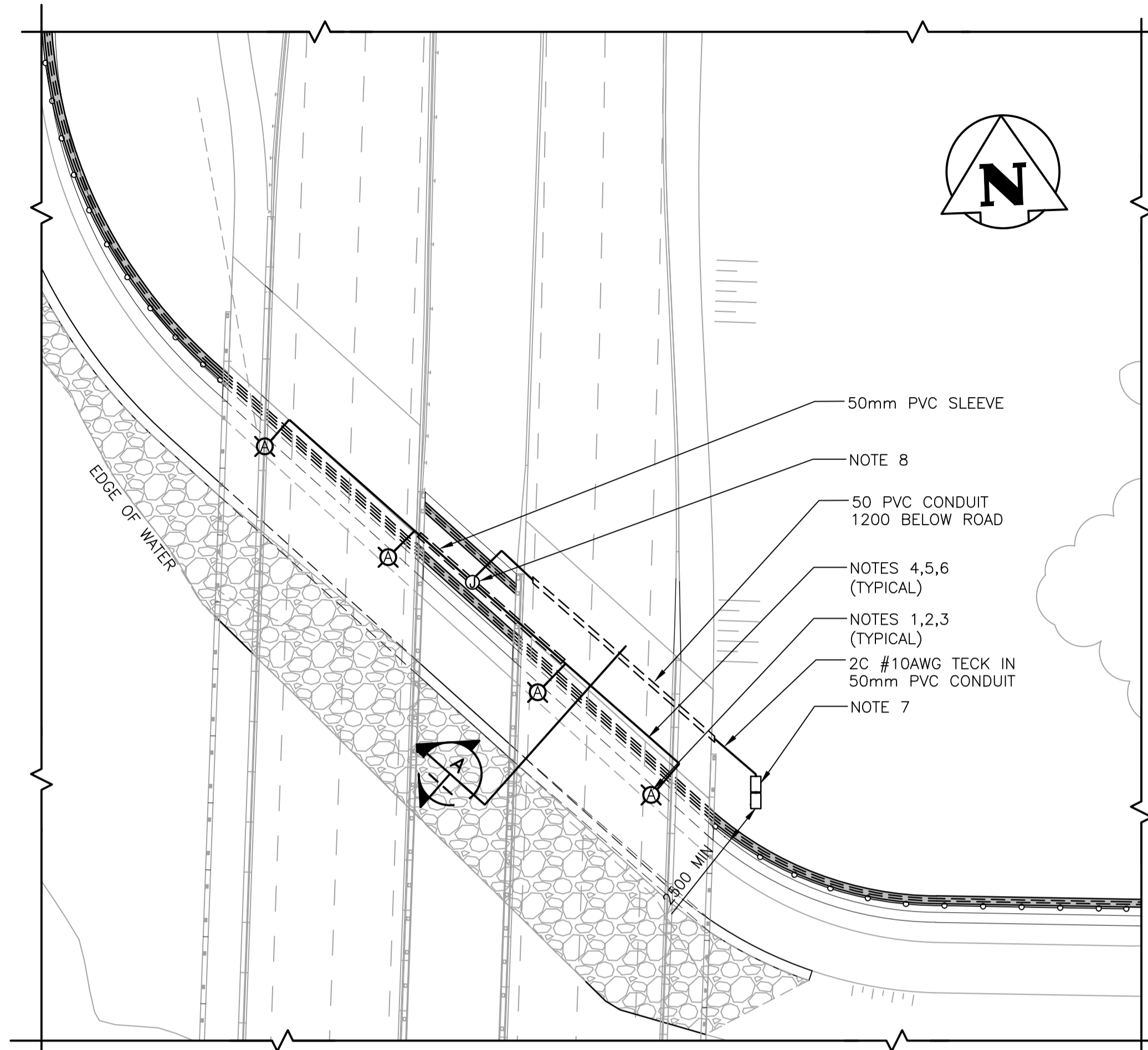
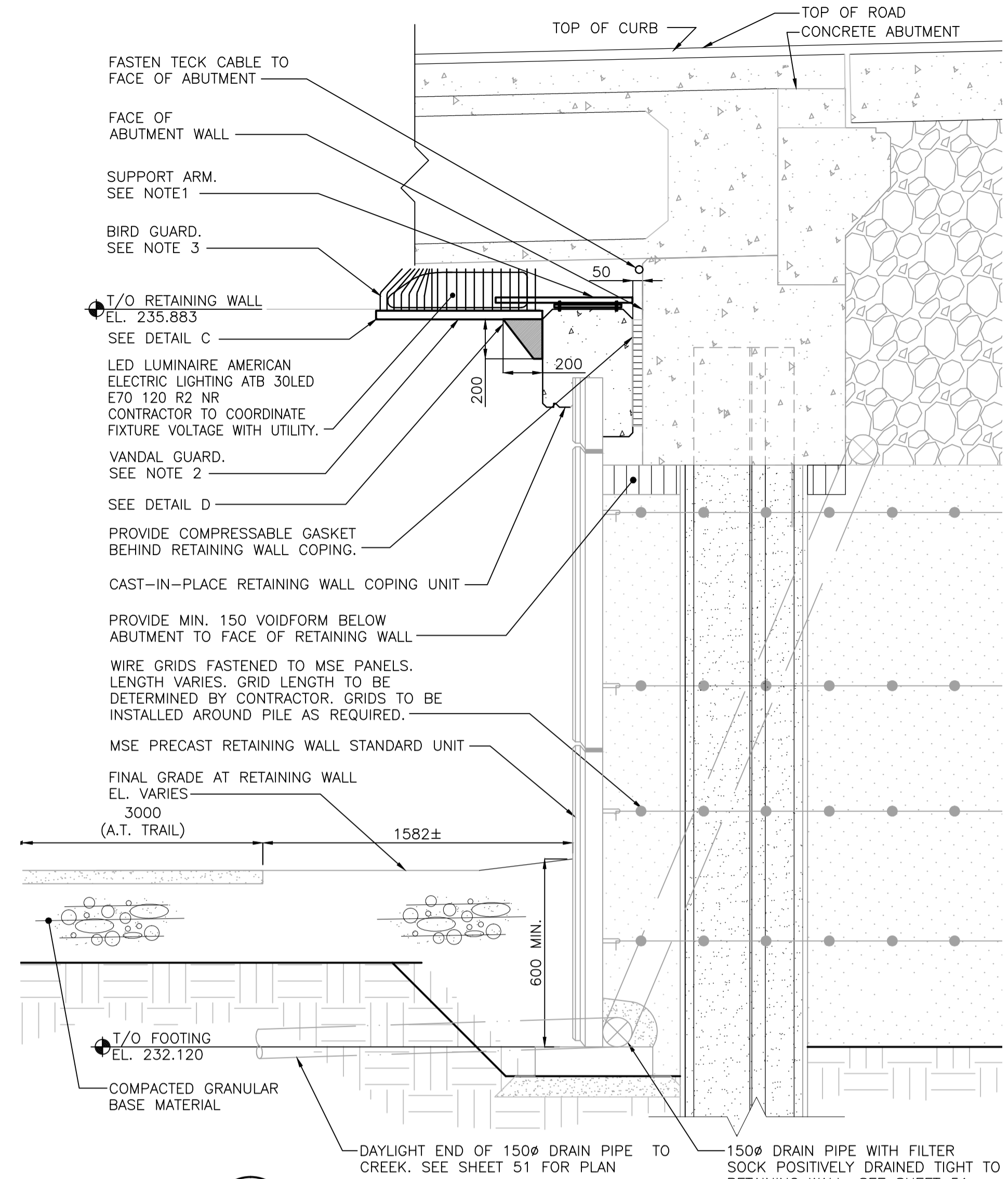


DRAWING NOTES:

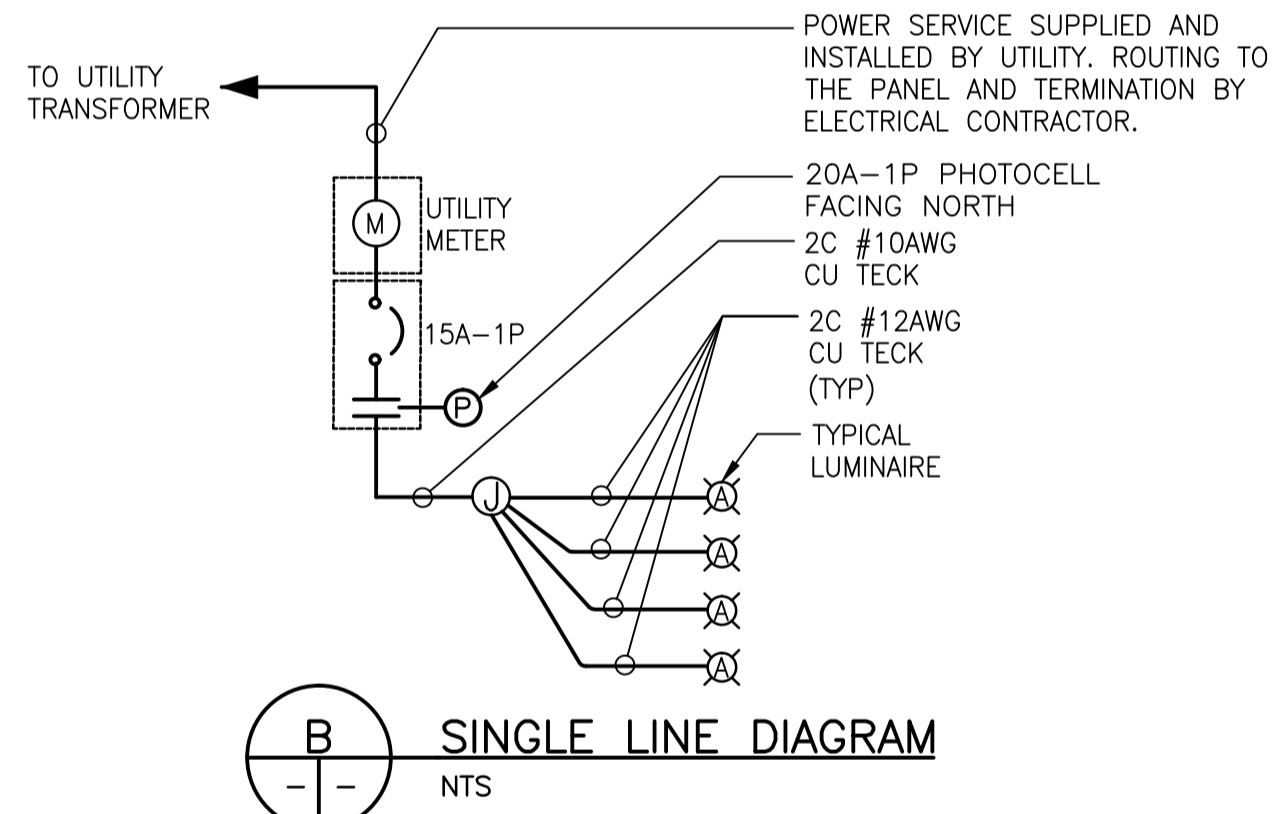
- SUPPLY AND INSTALL STAINLESS STEEL 50 DIAMETER SUPPORT ARM FOR EACH LIGHTING FIXTURE. SUPPORT ARM TO BE WELDED TO A 200x200x6.35 STAINLESS STEEL PLATE. PLATE TO BE FASTENED TO THE TOP OF THE RETAINING WALL WITH FOUR 9.5 DIAMETER 80 STAINLESS STEEL EMBEDMENT BOLTS. USE HILTI HIT-ICE 150 ADHESIVE ANCHORS AT MOUNTING POINTS.
- SUPPLY AND INSTALL VANDAL-PROOF SHIELD IMMEDIATELY BELOW THE LIGHT FIXTURE. SHIELD TO CONSIST OF A 850x500x6.35 CLEAR LEXAN SHEET FASTENED WITH 14 TAMPER-PROOF SCREWS TO A FRAME CONSTRUCTED OF WELDED 44x44x6.4 STAINLESS STEEL ANGLE. LEXAN SHEET TO BE FASTENED BELOW THE FRAME. FRAME TO BE SUPPORTED OFF THE WALL BY 200 LONG 44x44x6.4 ANGLES WELDED TO 200x200x6.4 STAINLESS STEEL GUSSET PLATE. BOLT ANGLES TO THE CAST-IN-PLACE WALL WITH FOUR 9.5 DIAMETER, 130 EMBEDMENT STAINLESS STEEL BOLTS. USE HILTI HIT-ICE 150 ADHESIVE ANCHORS AT MOUNTING POINTS. ENSURE THAT THE LIGHT FIXTURE IS SERVICEABLE WITH LEXAN REMOVED AND THE FRAME IN PLACE. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION. SEE DETAIL E ON THIS DRAWING.
- INSTALL STAINLESS STEEL WIRE BIRD GUARD AROUND THE FIXTURE. BIRD GUARD WIRES TO BEND AROUND THE FIXTURE TO PREVENT BIRDS FROM LANDING ON TOP.
- TECK CABLE TO EACH LIGHTING FIXTURE TO RUN ON TOP OF THE RETAINING WALL, AT LEAST 200 FROM THE EDGE. CABLE TO BE CLIPPED TO THE TOP OF THE RETAINING WALL WITH TWO-HOLE STAINLESS STEEL STRAPS EVERY 1500mm.
- PROVIDE AT LEAST 100 OF CABLE SLACK AT THE TRANSITION TO THE RETAINING WALL TO ALLOW FOR FUTURE WALL MOVEMENT WITH RESPECT TO THE ABUTMENT.
- ROUTE TECK CABLE TO AVOID INSTALLATION IN COMPACTED GRANULAR BASE MATERIAL. COORDINATE WITH OTHER TRADES AS REQUIRED. ADJUST BURIAL DEPTH ACCORDINGLY.
- PROVIDE CSA 4 RATED STAINLESS STEEL LOCKABLE VANDAL-PROOF METERING CABINET AND A CSA 4 RATED STAINLESS STEEL ENCLOSURE COMPLETE WITH ONE 15A-1P BREAKER AND ONE PHOTOCELL-CONTROLLED 20A LIGHTING CONTACTOR. COORDINATE EXACT LOCATION TO ENSURE INSTALLATION OF ENCLOSURE SUPPORT CHANNELS IN COMPACT GRANULAR FILL MATERIAL. ENSURE A MINIMUM CLEARANCE OF 2500mm FROM RETAINING WALL. PROVIDE PVC SLEEVES FOR INCOMING AND OUTGOING SERVICES. PROVIDE TAMPER-PROOF SCREWS ON THE BREAKER ENCLOSURE. COORDINATE LOCATION OF THE INCOMING POWER SERVICE WITH UTILITY. PROVIDE CABLE AND TRENCHING AS REQUIRED. PAY UTILITY CONTRIBUTION CHARGES.
- PROVIDE CSA 4 RATED STAINLESS STEEL 150x150x50 ENCLOSURE MOUNTED ON ABUTMENT WALL FOR SPLICING CIRCUITS TO INDIVIDUAL LIGHTING FIXTURES.
- COORDINATE EXACT MOUNTING LOCATION, MOUNTING PATTERN AND FASTENER CLEARANCES FROM EDGES OF PRE-CAST BLOCK WITH PRECAST BLOCK SUPPLIER.



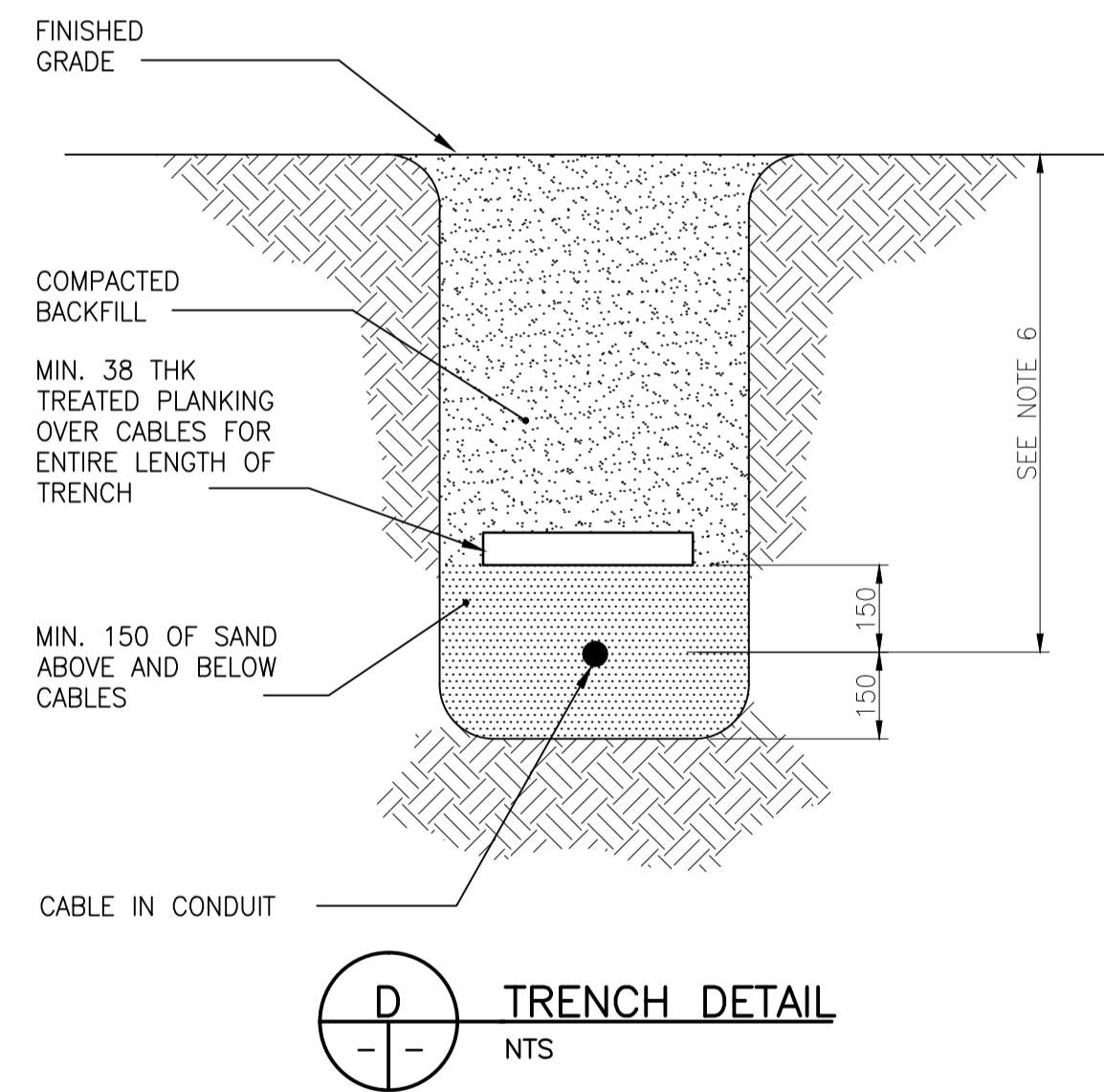
RETAINING WALL LAYOUT - NORTH EMBANKMENT
1:250



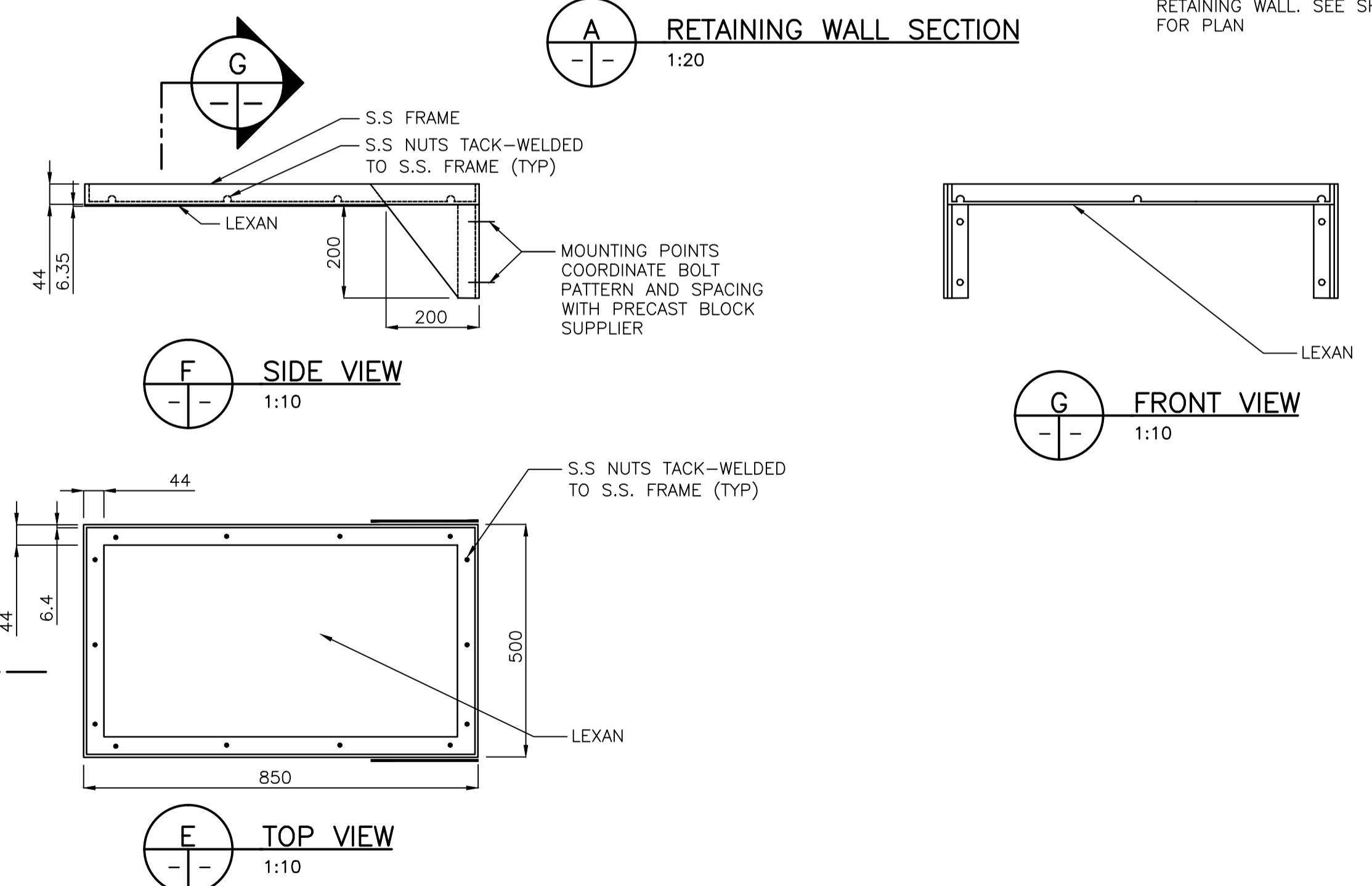
RETAINING WALL SECTION
1:20



SINGLE LINE DIAGRAM
NTS



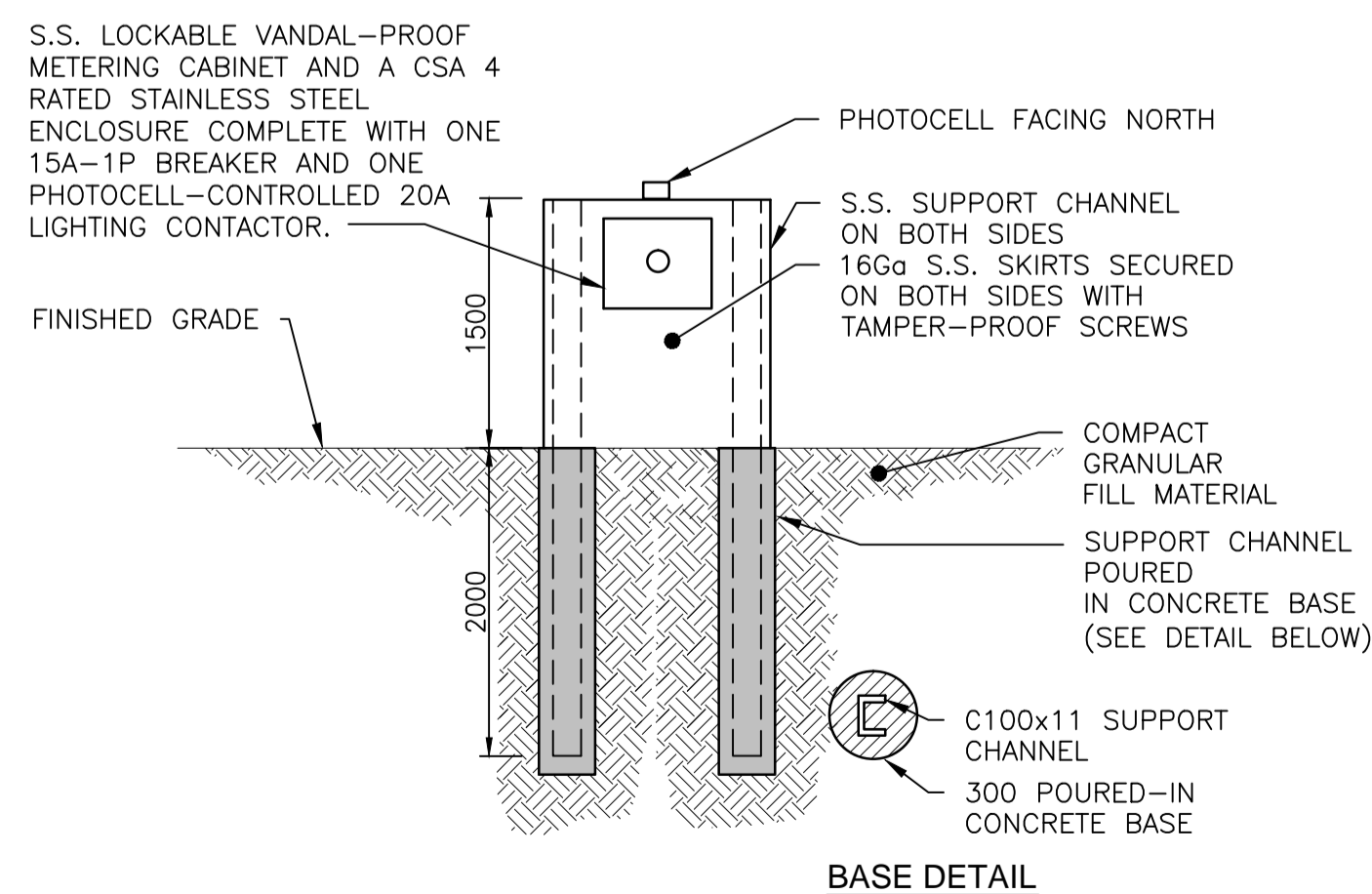
TRENCH DETAIL
NTS



SIDE VIEW
1:10

FRONT VIEW
1:10

TOP VIEW
1:10



LIGHTING DISTRIBUTION - MOUNTING DETAIL
NTS

APEGM
Certificate of Authorization
Stantec Consulting Ltd.
No. 1301 Date: 2011-12-13

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.
SUPV. U/G STRUCTURES COMMITTEE	DATE	
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.		
01	REVISED FOR ADDENDUM No.1	12.01.18 K.S.A.
0	ISSUED FOR TENDER	11.12.15 K.S.A.
NO.	REVISIONS	DATE BY

Stantec Consulting Ltd.		ENGINEER'S SEAL
905 Waverley Street, Winnipeg, Manitoba Tel 204-489-5900 Fax 204-453-9012		
DESIGNED BY: AA	CHECKED BY: LK	
DRAWN BY: TS	APPROVED BY:	
HOR. SCALE: AS SHOWN	RELEASED FOR CONSTRUCTION:	
VERTICAL:	DATE: DEC. 15, 2011	
	DATE:	

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION		CONSULTANT DRAWING NO.
STURGEON ROAD BRIDGE REPLACEMENT PORTAGE AVENUE TO HALLONQUIST DRIVE ELECTRICAL LAYOUT		E-101
SHEET 62	OF 82	
CAD FILE DRAWING NUMBER 31590e-101-767.dwg		
CITY DRAWING NUMBER B120-12-062		

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 Date: 2012 Jun 18 4:48pm Login: Friesen, Vince