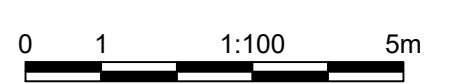
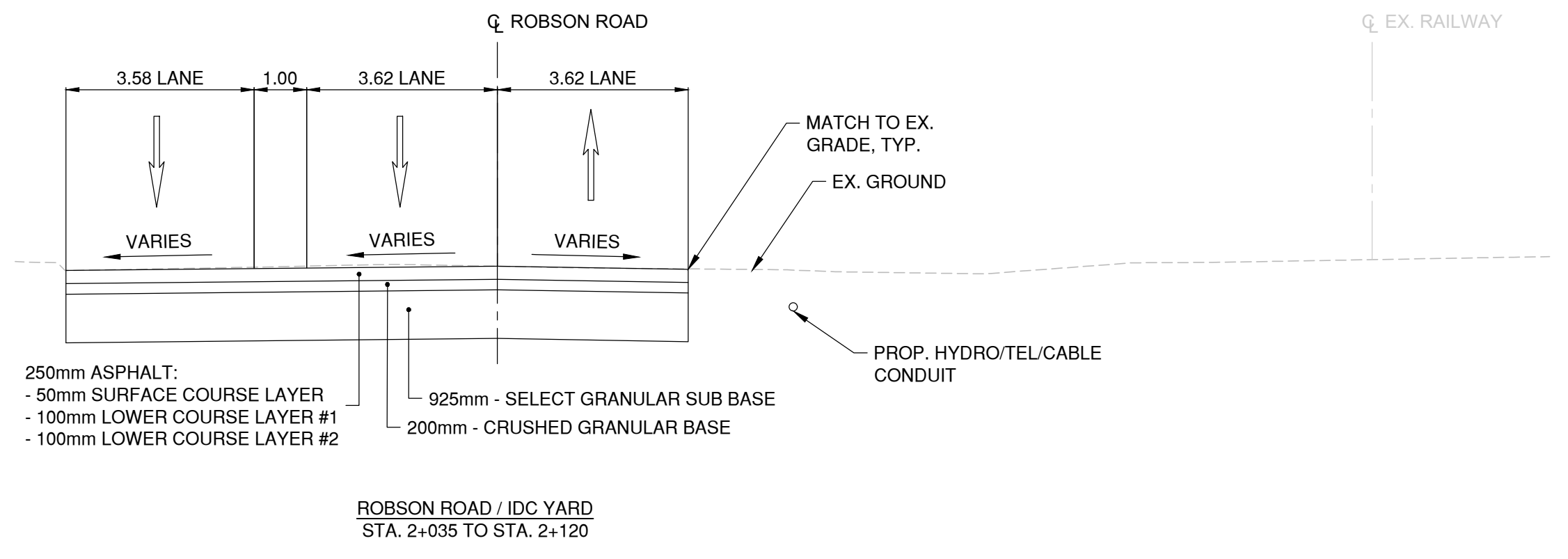
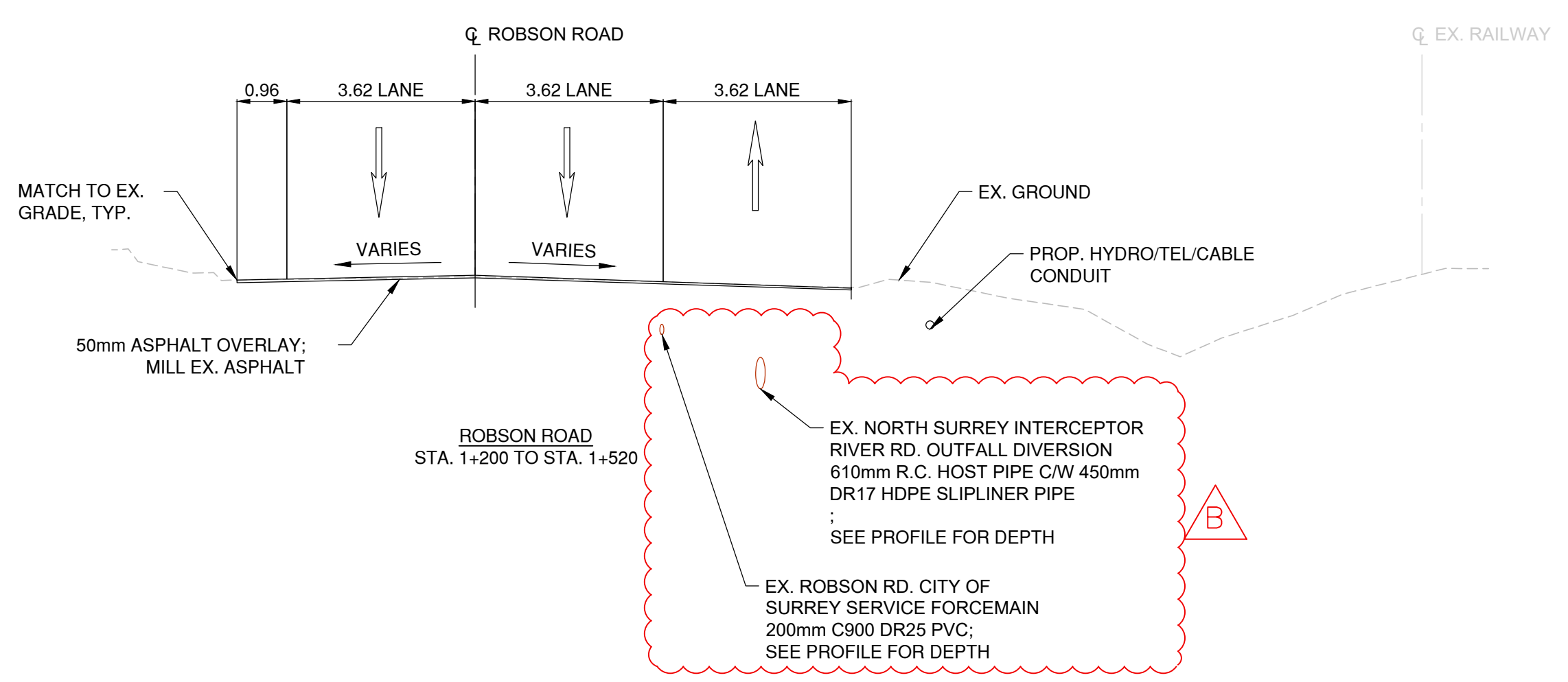
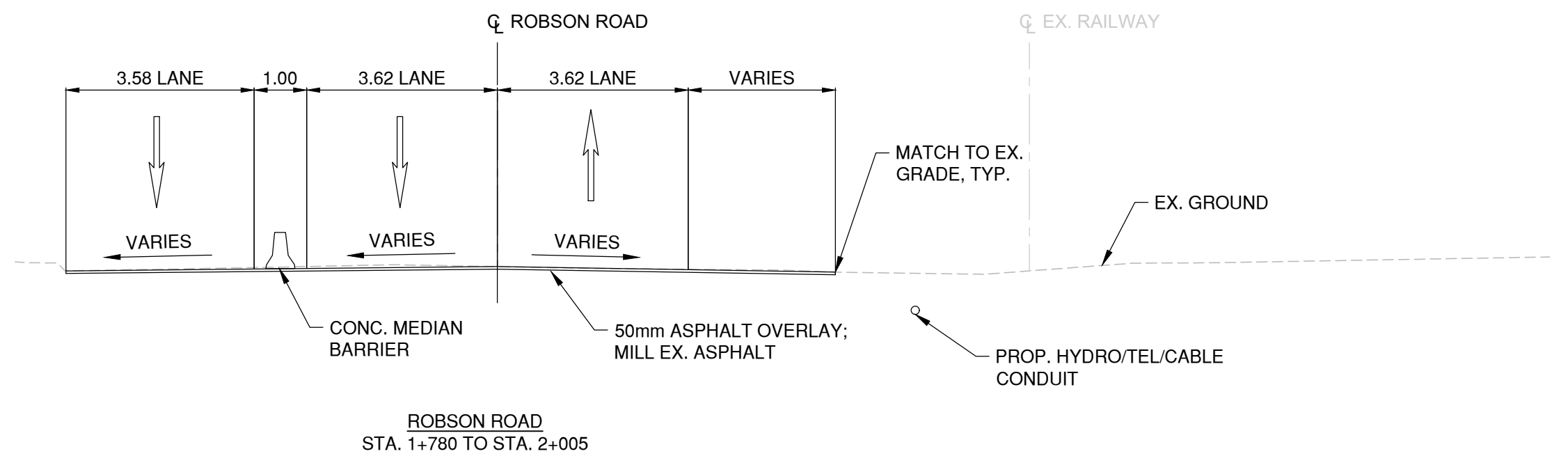
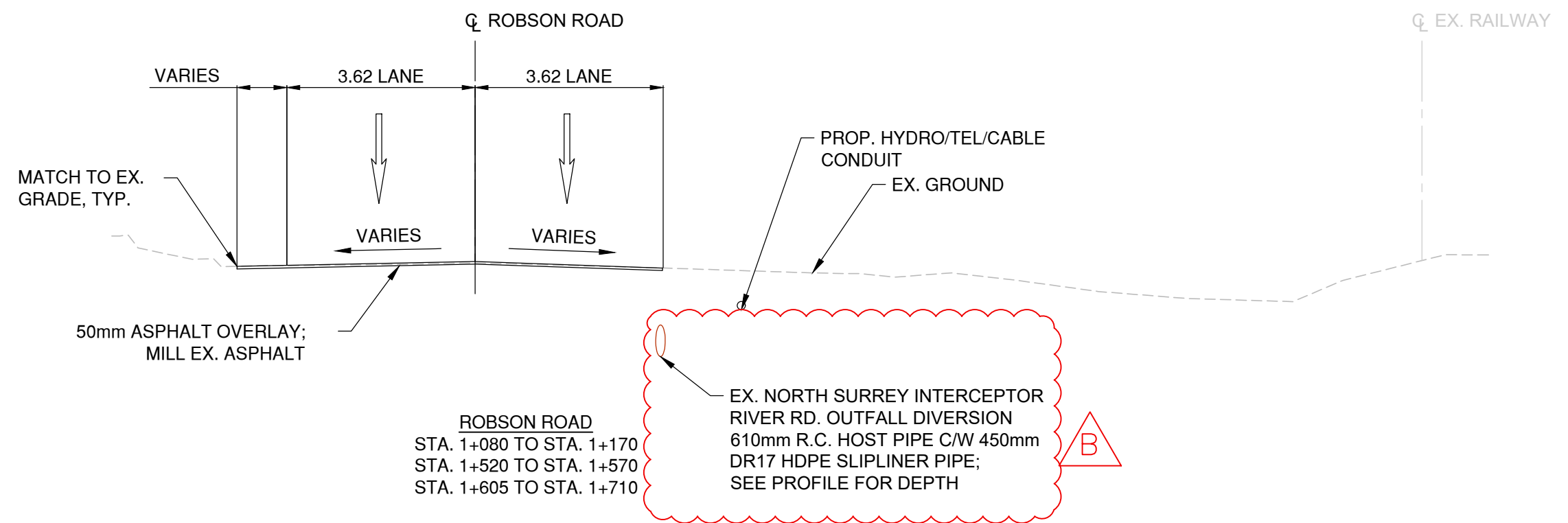
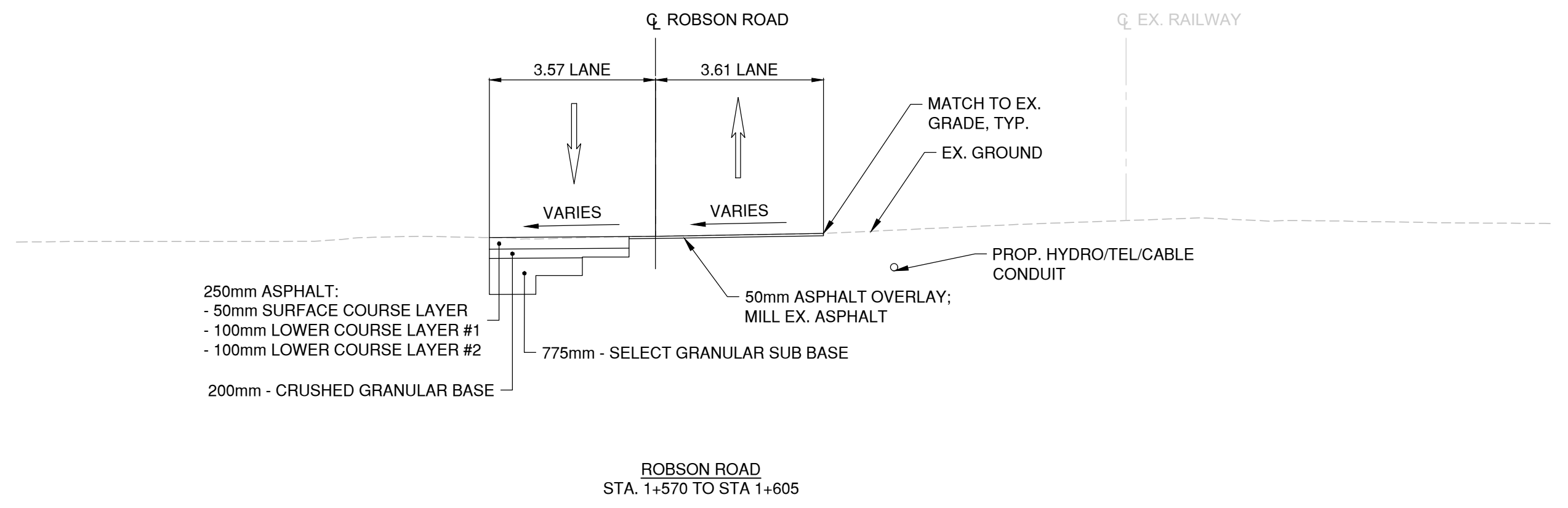
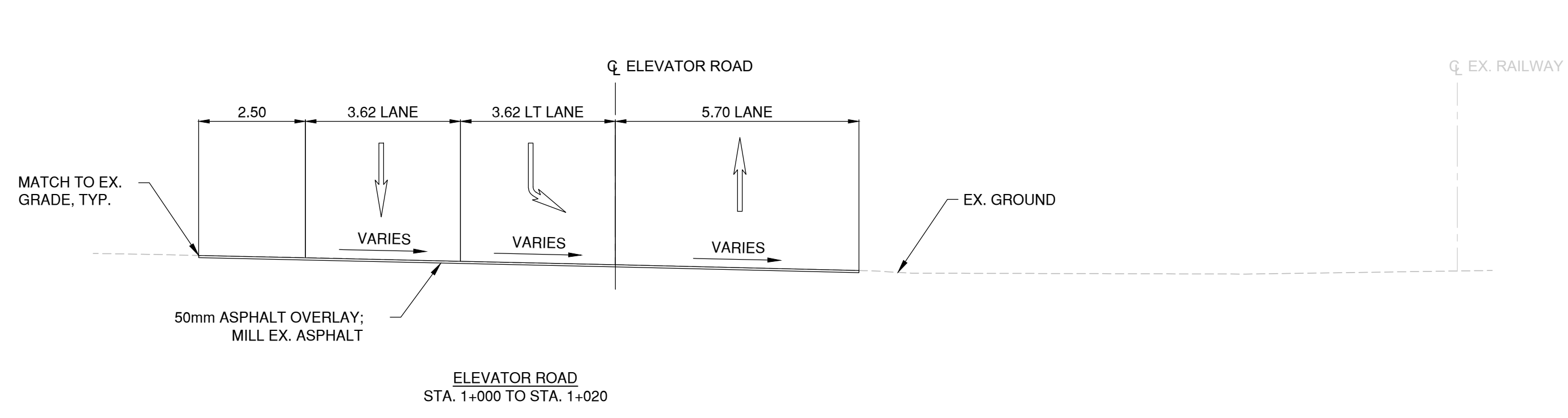


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 April 29, 2021



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B	2021/01/07	ISSUED FOR METRO VANCOUVER	KY	VT
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT



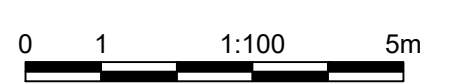
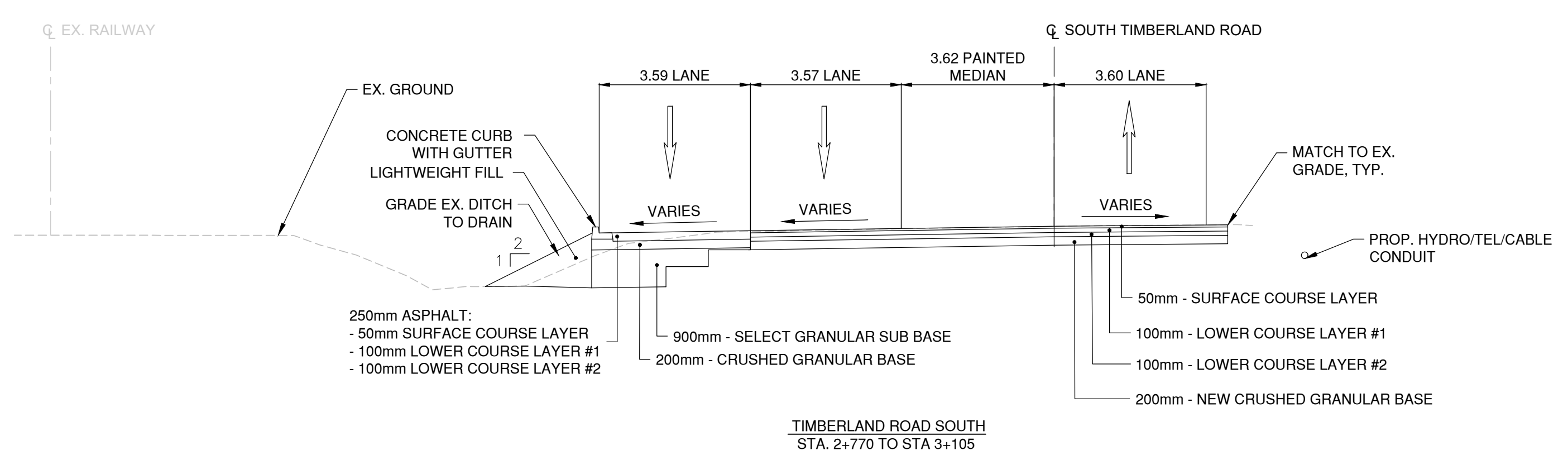
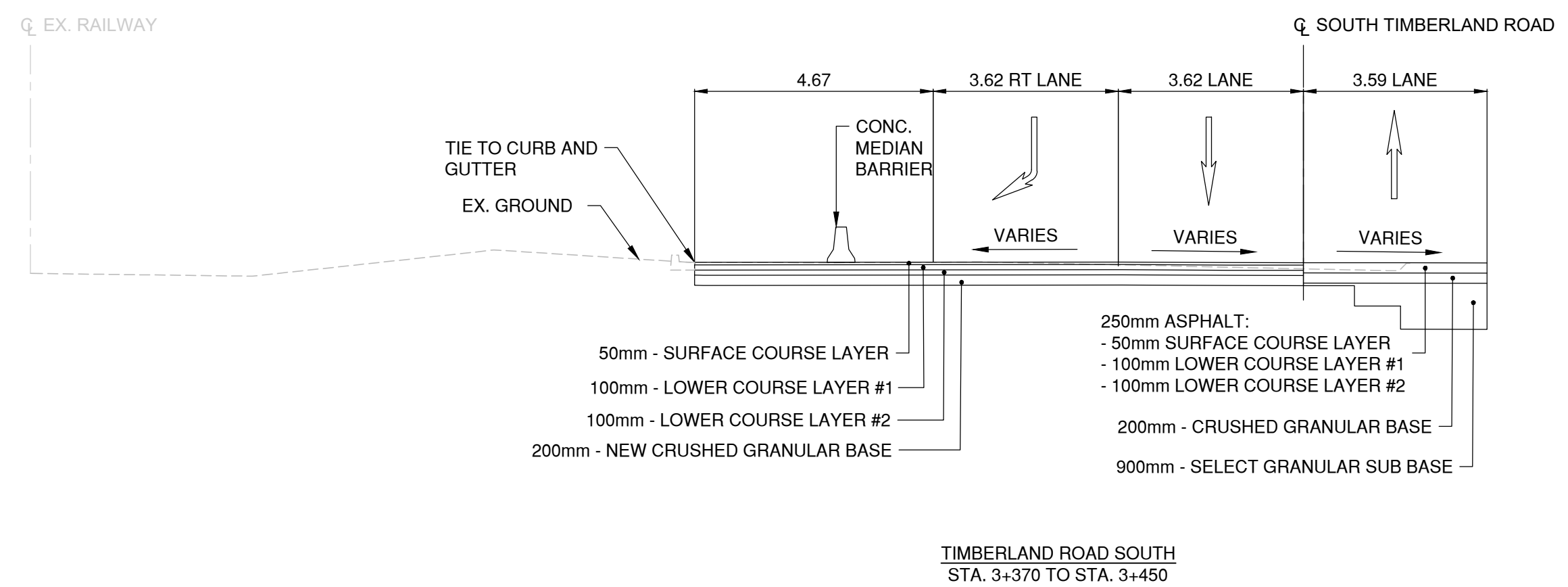
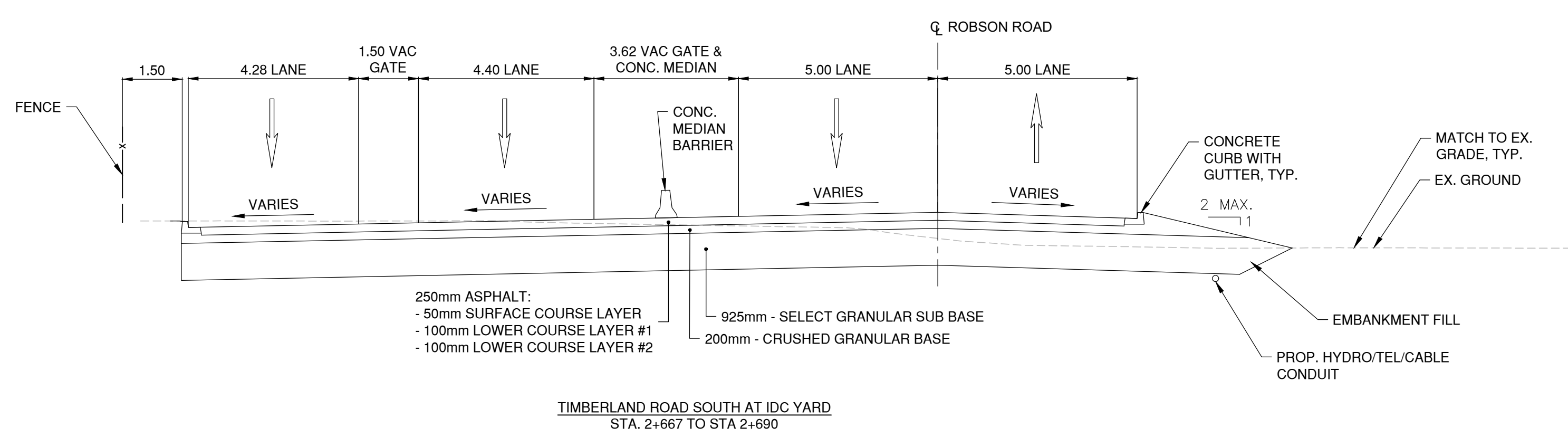
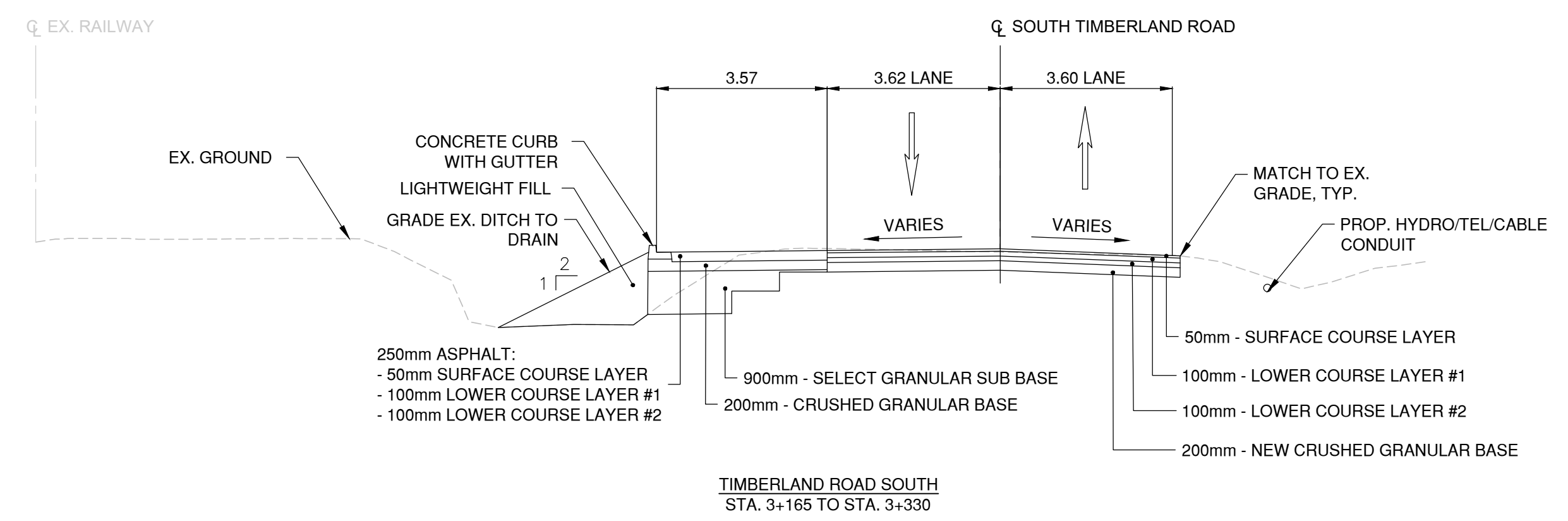
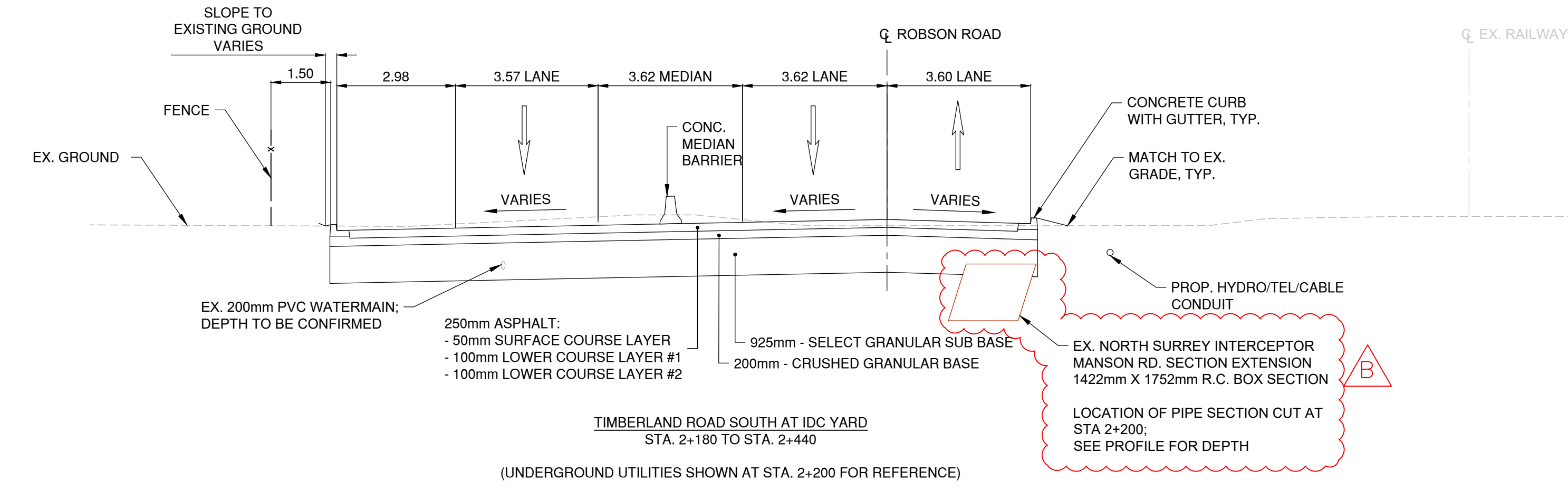
VANCOUVER FRASER PORT AUTHORITY
 ENGINEERING DEPARTMENT

DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/01/07
SCALE	1:100
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
 FSP TRANSPORTATION IMPROVEMENTS
 TYPICAL SECTIONS

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

DATE: 2021/04/29 - 8:55am
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 TITLE BLOCK: DL-TR.dwg



**NOT FOR
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April 29, 2021



No.	Date	REVISION	Dr'n	Ch'd
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VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

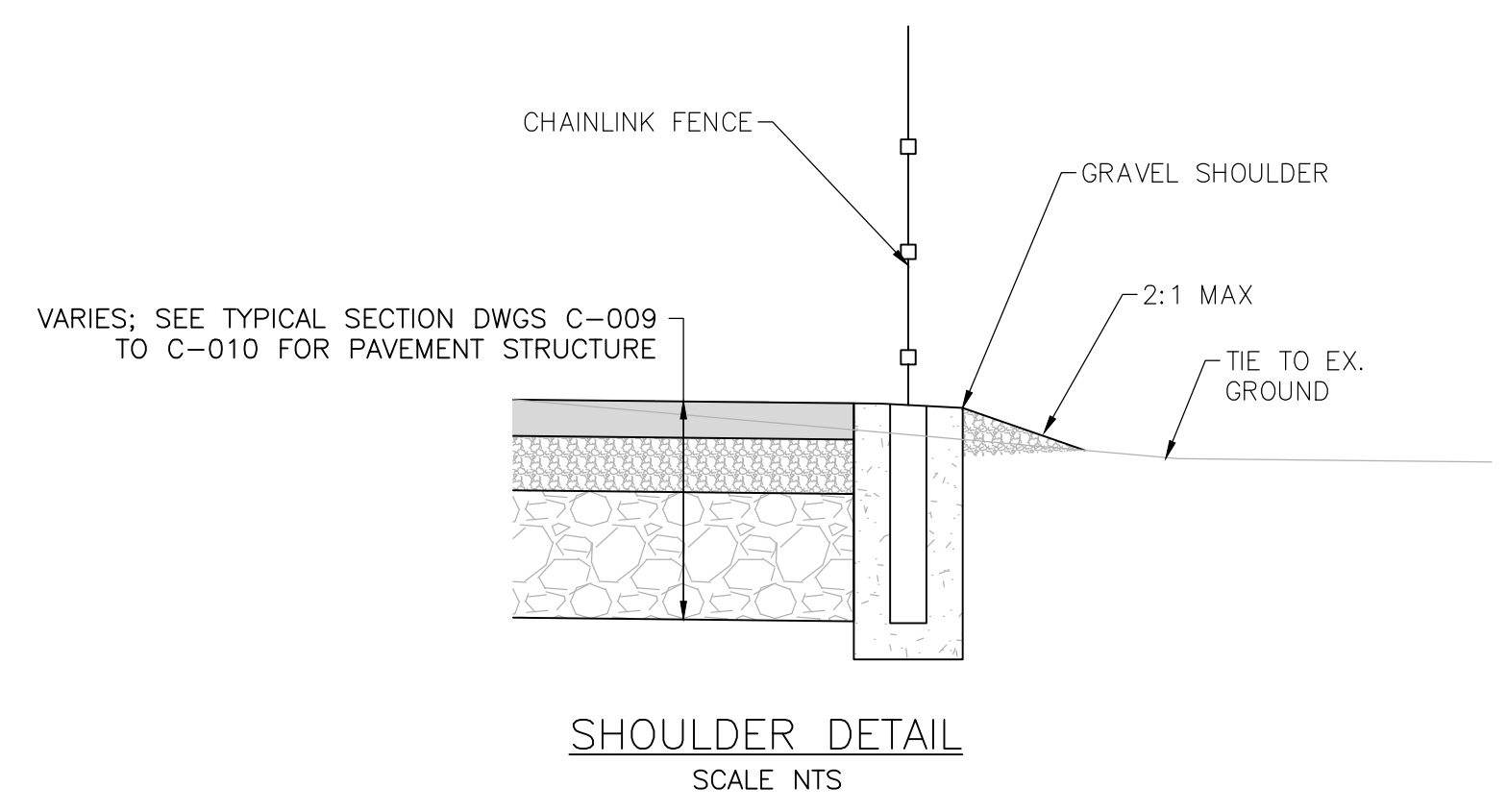
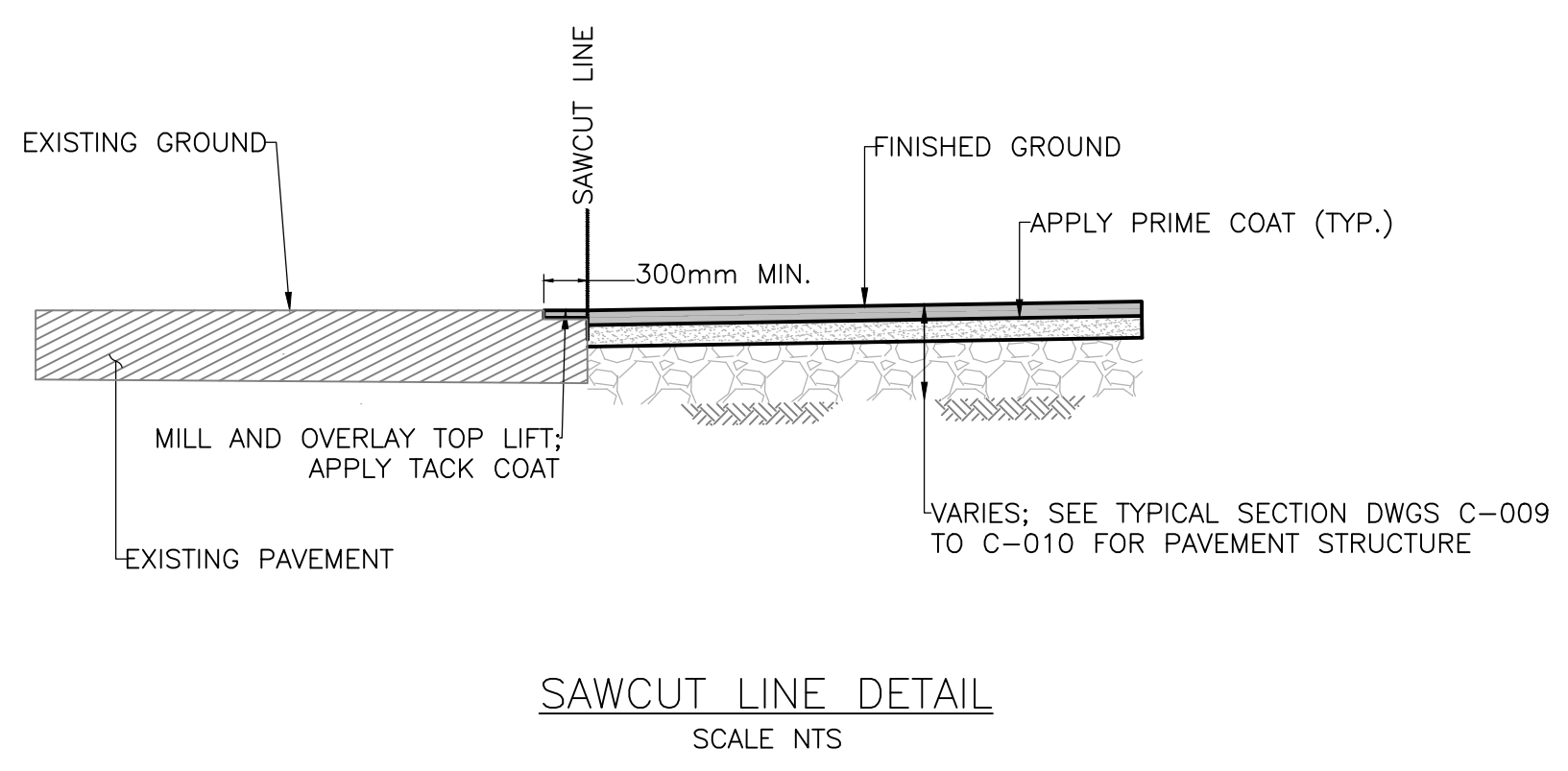
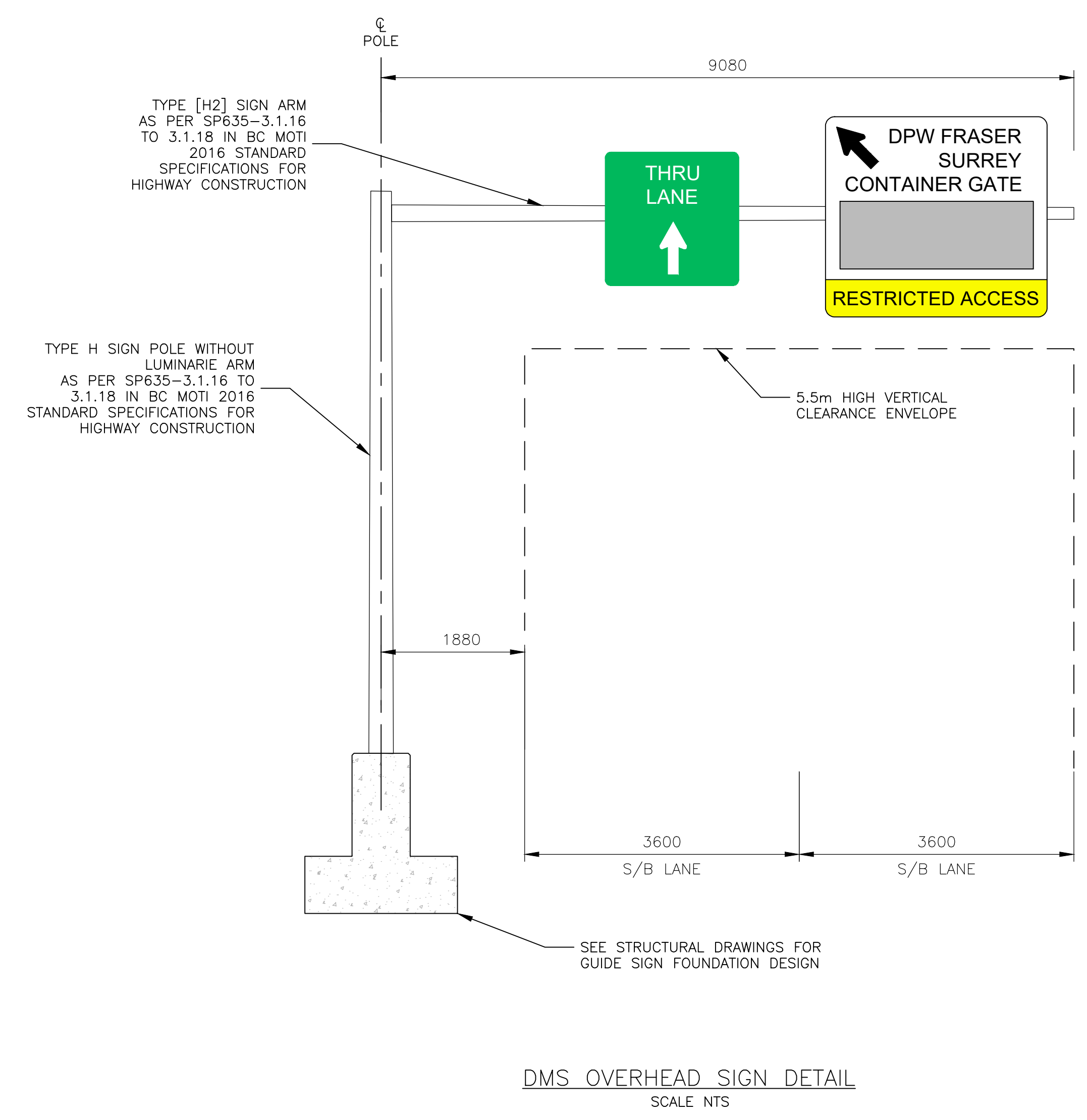
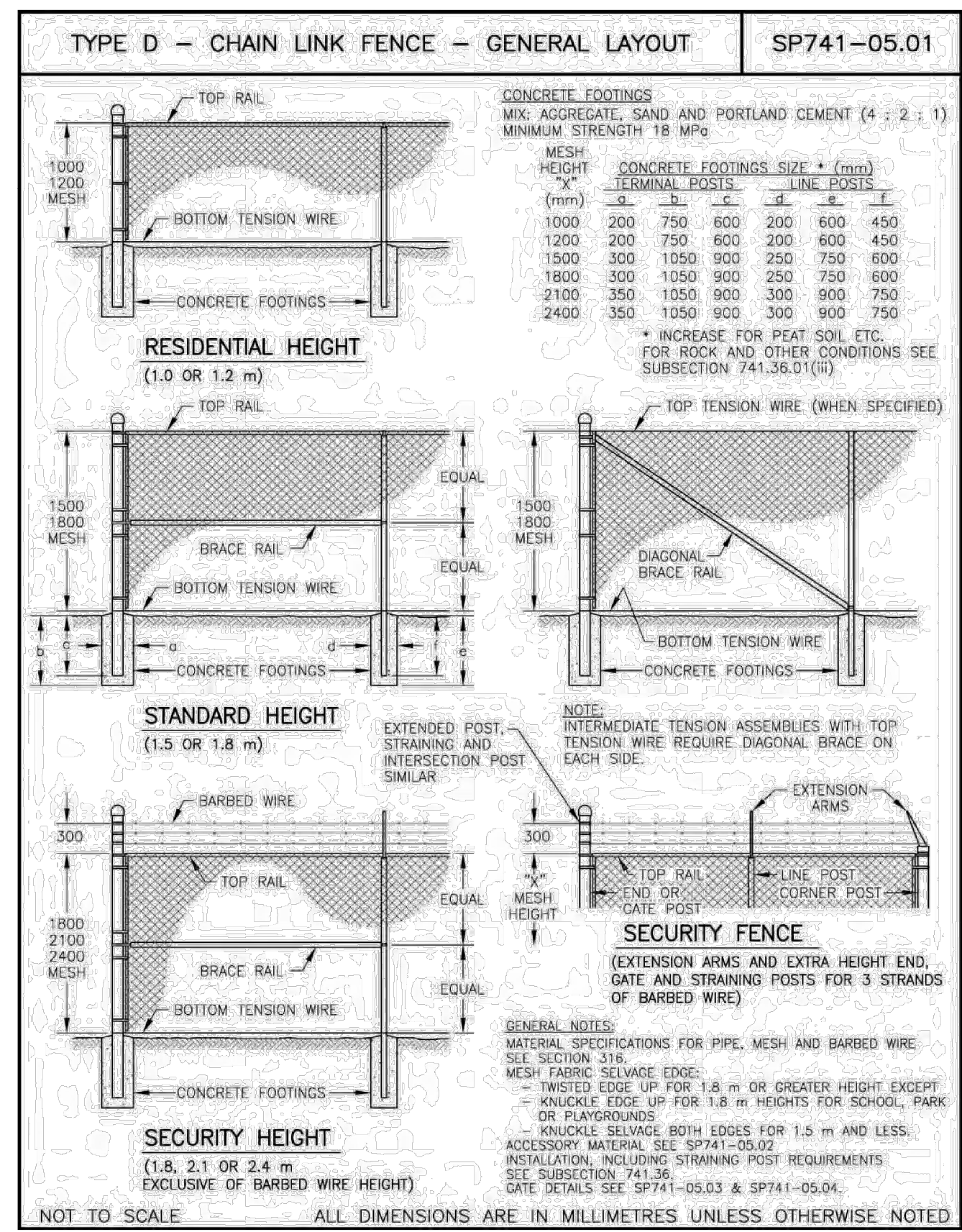
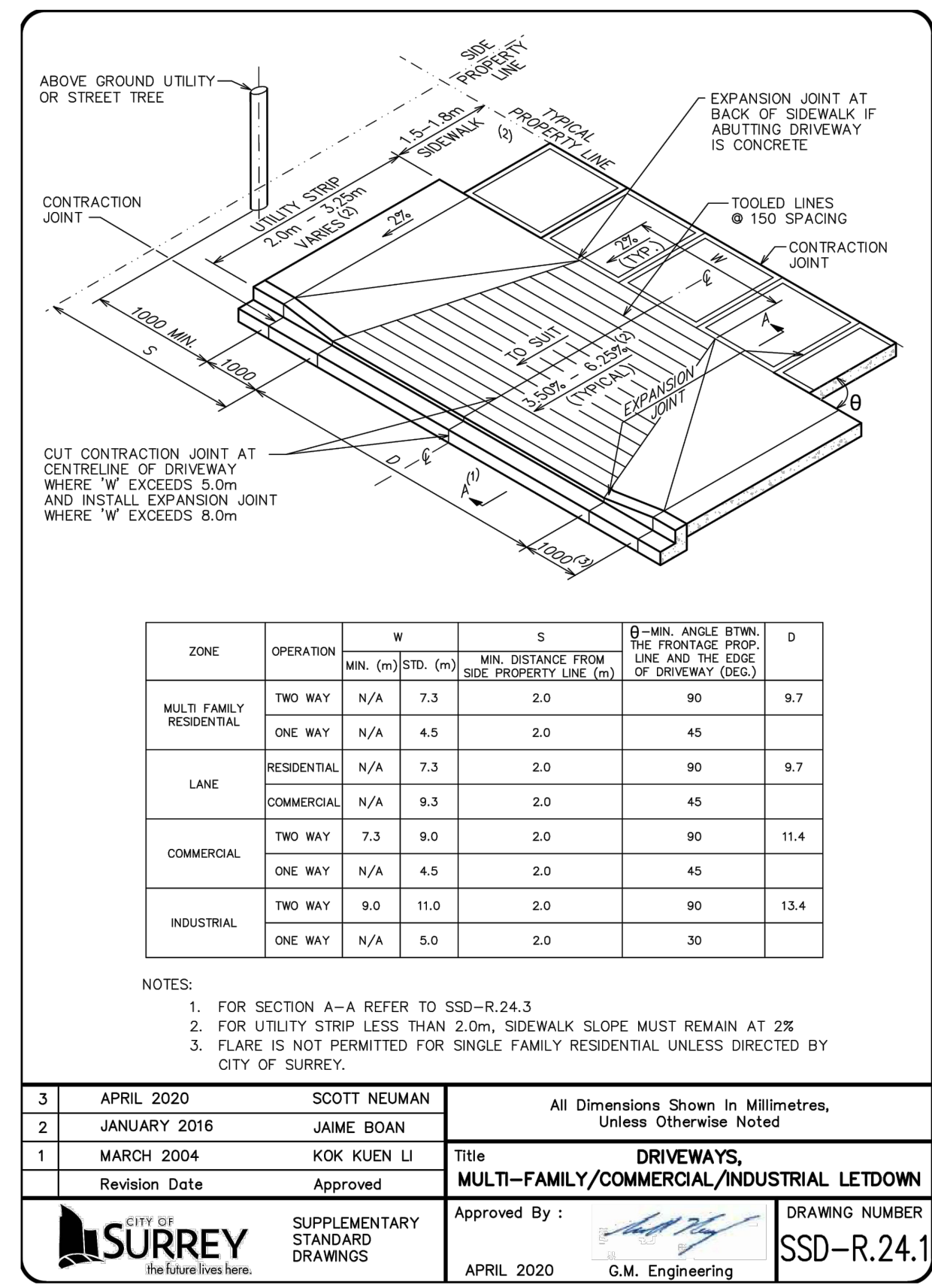
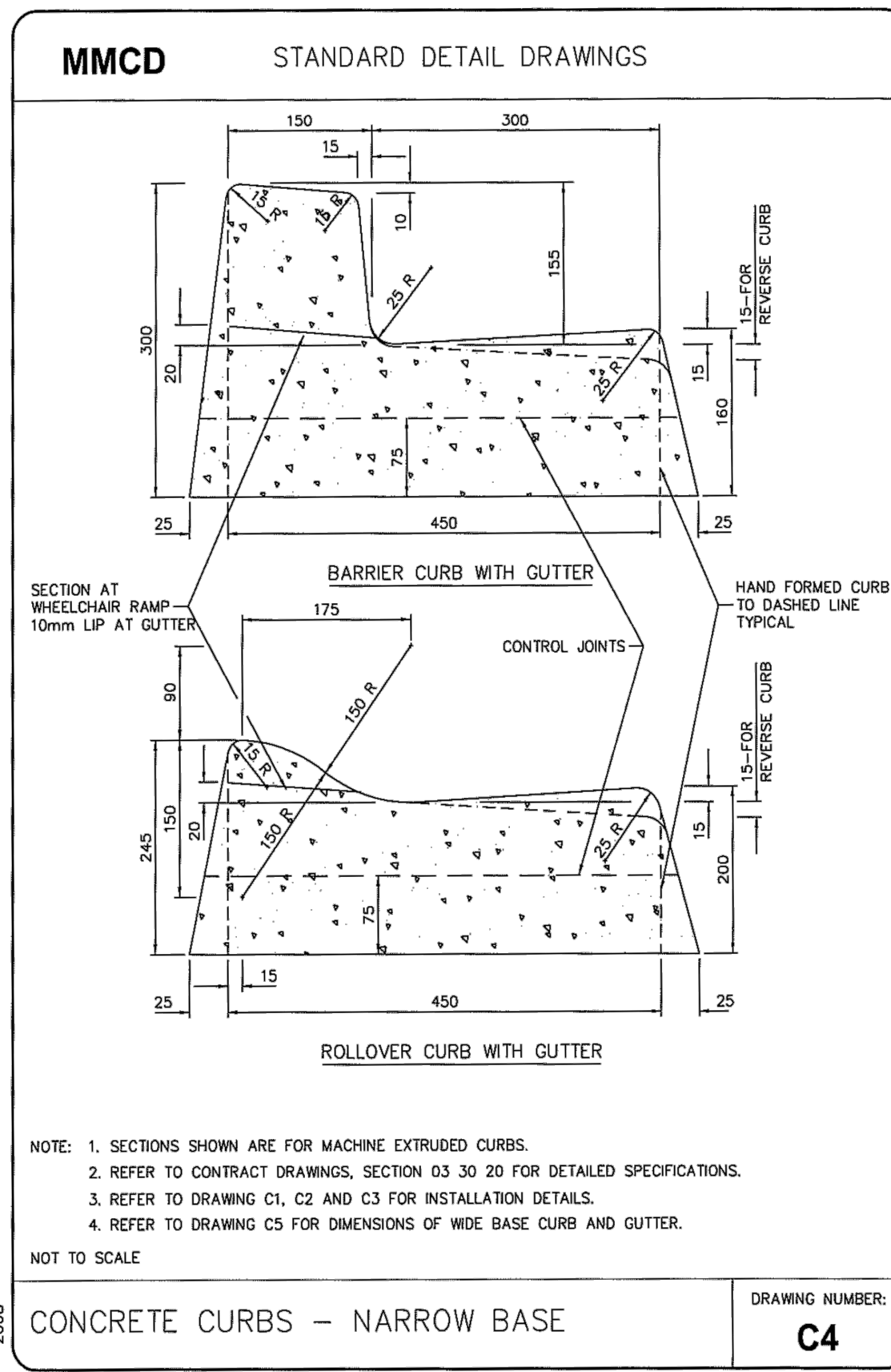
DESIGN BY	K. YANG
DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2021/01/07
SCALE	1:100
PMV SITE	----

GREATER VANCOUVER GATEWAY 2030
FSP TRANSPORTATION IMPROVEMENTS
TYPICAL SECTIONS

Ref.No.	REFERENCE
1	WSP PROJECT NO. 20M-00758-00

SIZE	DWG.	C-010	SHEET	REV.
D			10 of 34	B

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Ref.No.	REFERENCE
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 April 29, 2021

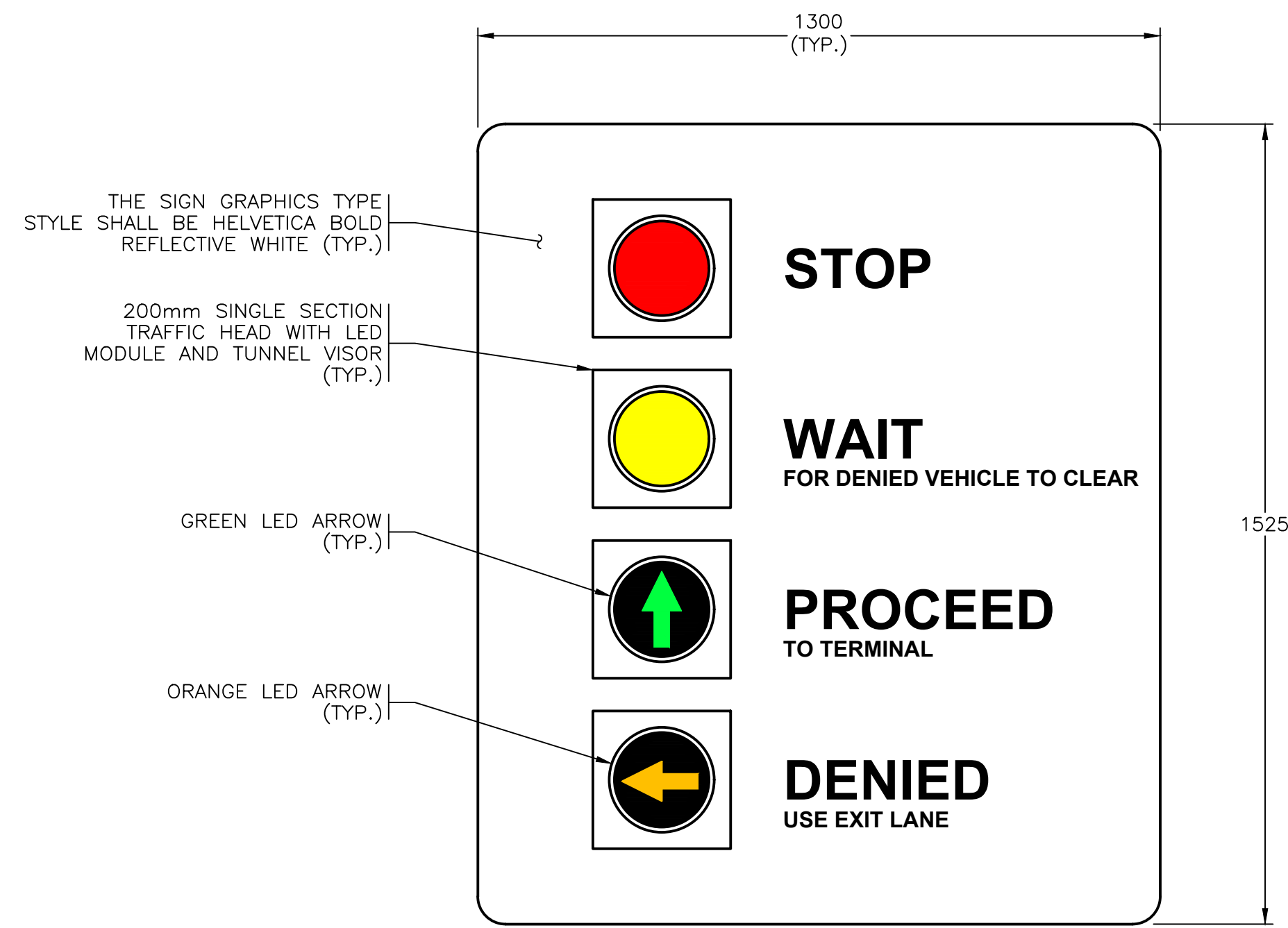


No.	Date	REVISION	Dr'n	Ch'd
A	2020/12/18	ISSUED FOR 30% DESIGN	IL	VT

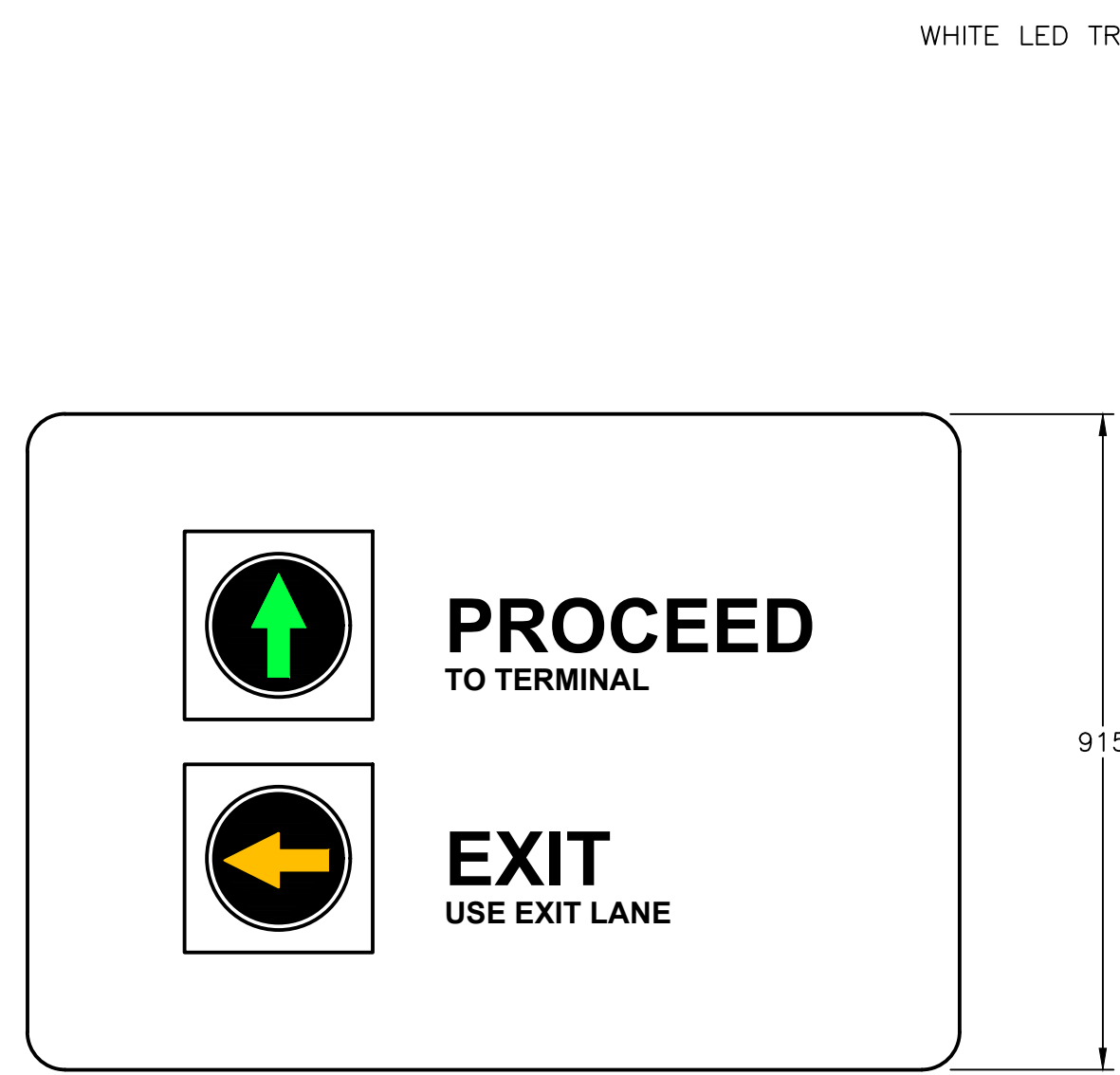


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DRAWN BY	I. LOZADA
APPROVED	V. TJIA
DATE	2020/12/18
SCALE	AS NOTED
PMV SITE	----

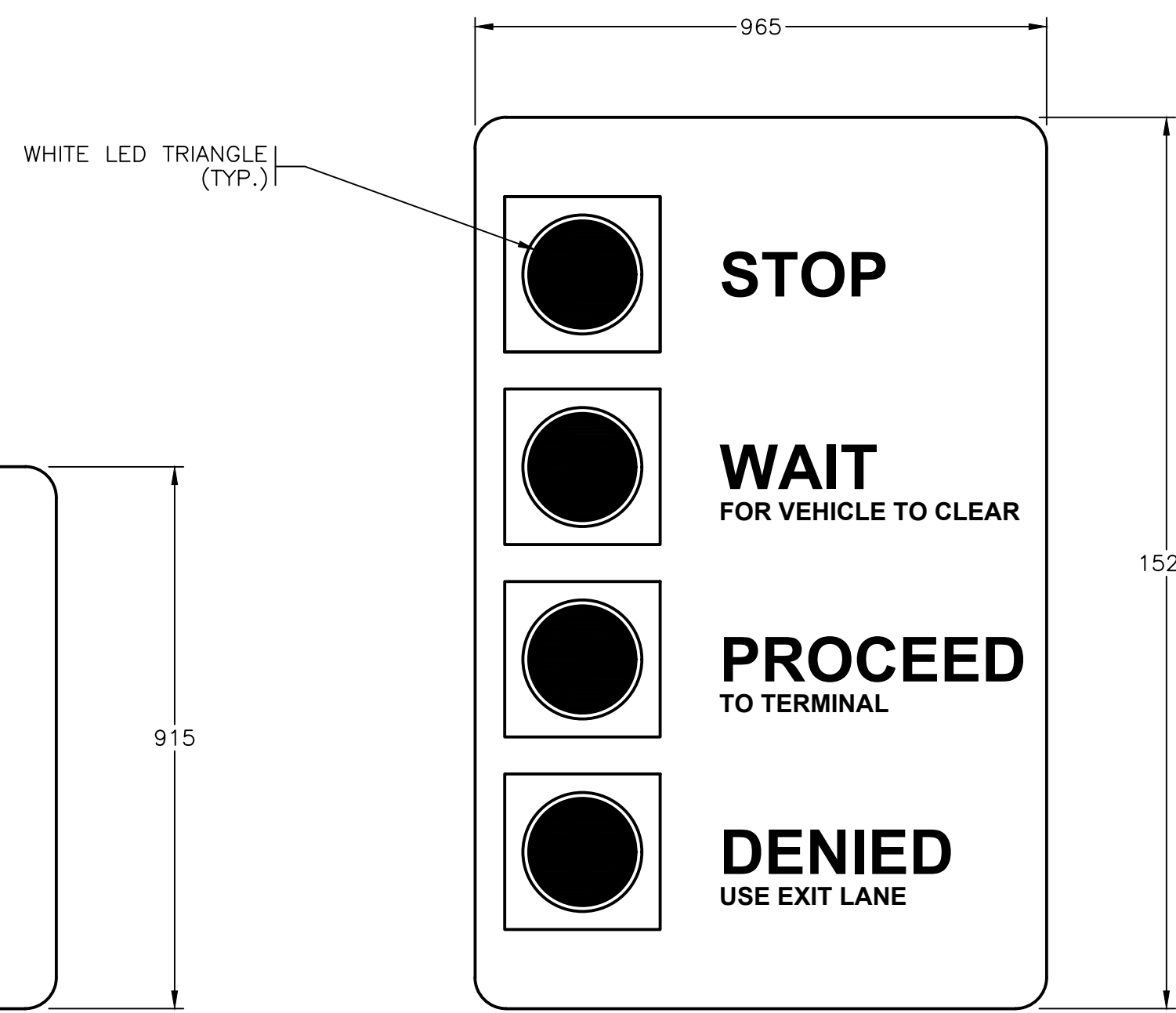
GREATER VANCOUVER GATEWAY 2030 FSPL TRANSPORTATION IMPROVEMENTS CIVIL DETAILS	
SIZE	DWG. C-011
SHEET	11 of 34
REV.	A



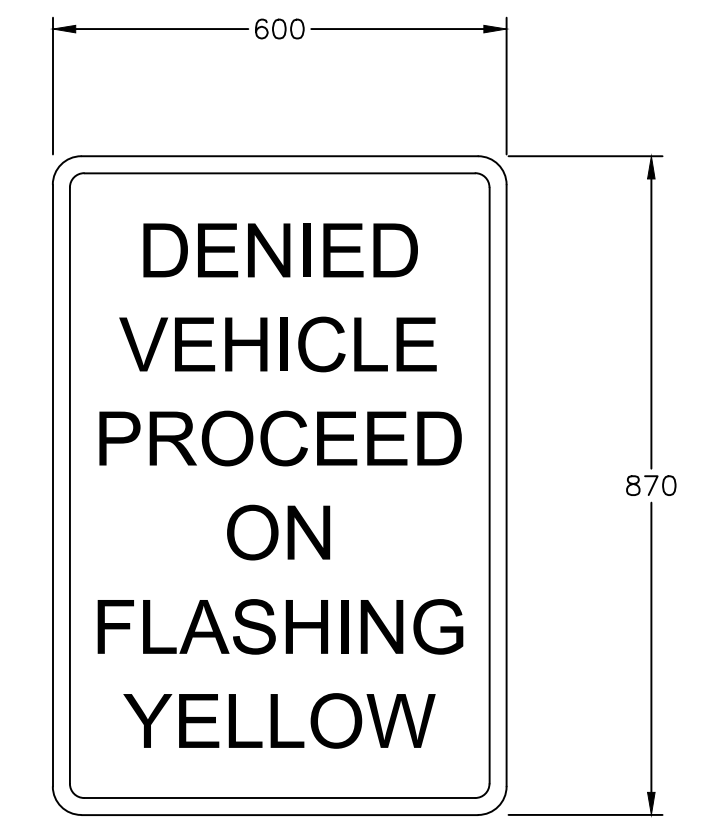
DETAIL 1 FSPL SECONDARY GATE SIGNAGE
1:10 (260)



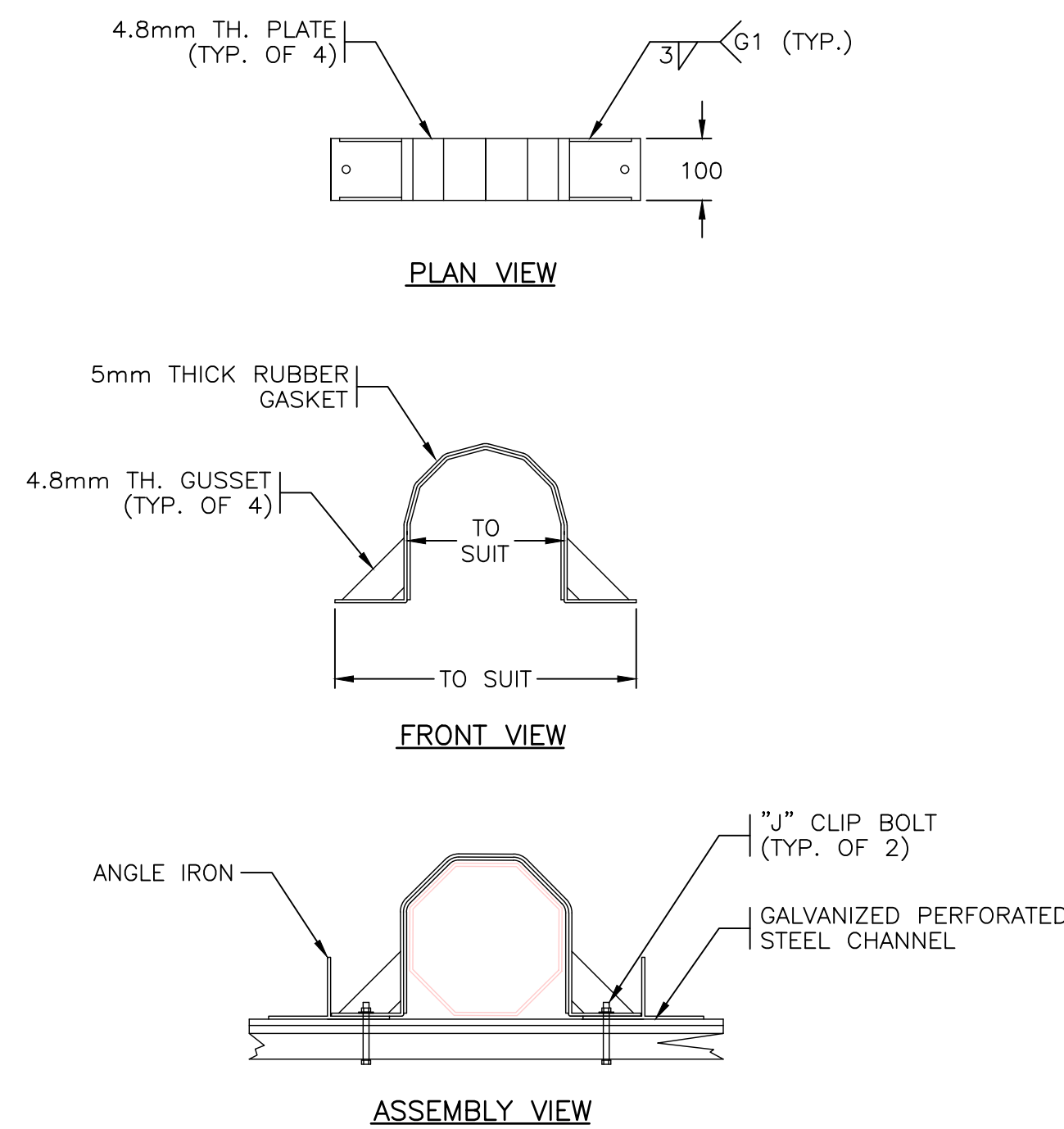
DETAIL 2 FSPL CONFIRMATION SIGNAGE
1:10 (226)



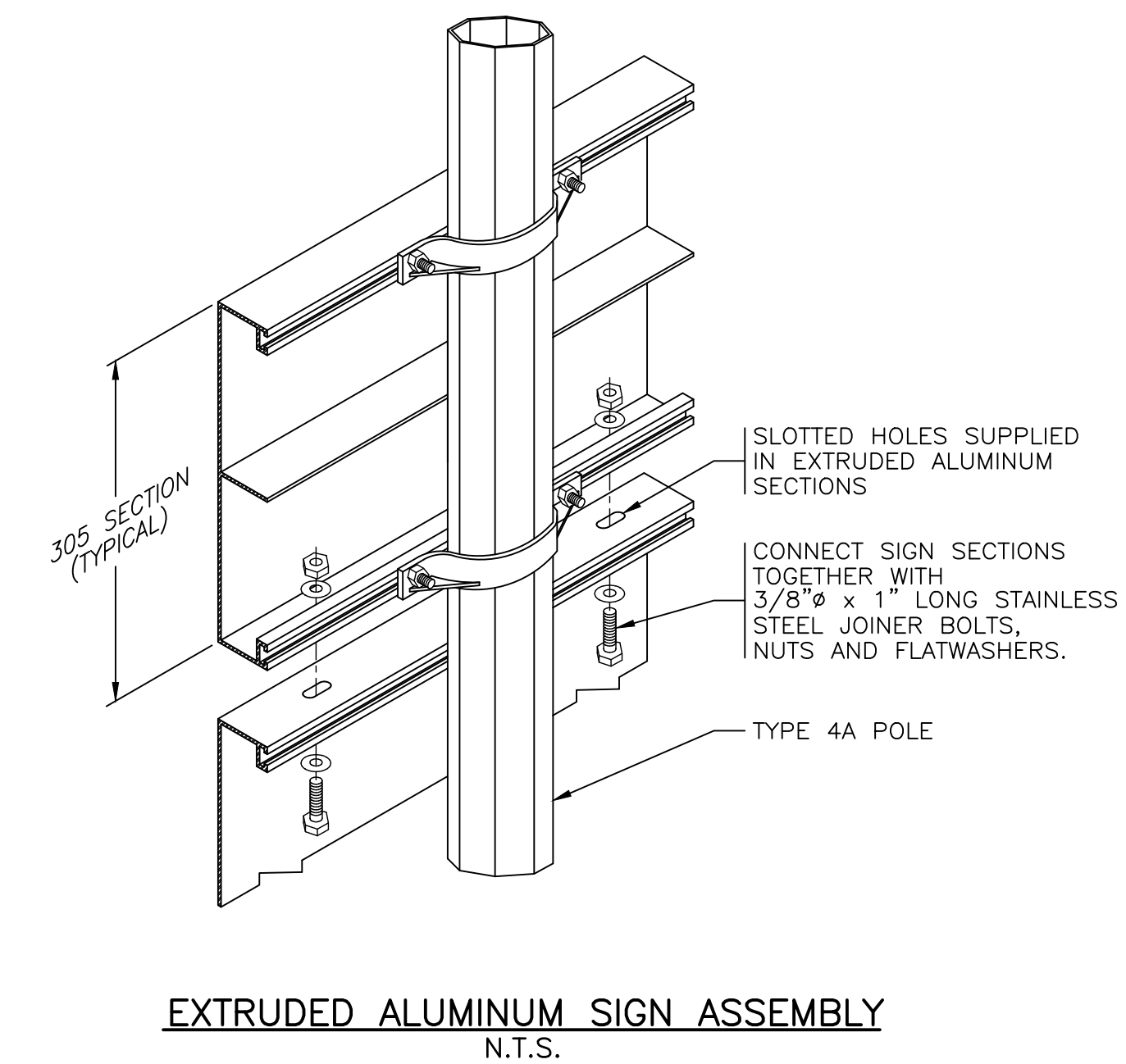
DETAIL 3 FSPL INBOUND SIGNAGE
1:10 (262, 263)



DETAIL 4 CUSTOM SIGN
1:10 (226)



STOP/WAIT/PROCEED/TURN AROUND SIGN MOUNTING BRACKET ELEVATION
1:10



EXTRUDED ALUMINUM SIGN ASSEMBLY
N.T.S.

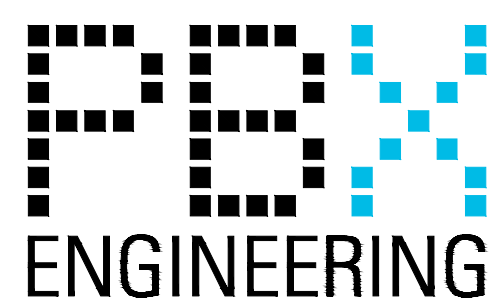
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0 1:10 500mm

DATE: 2020/12/15 - 7:48am
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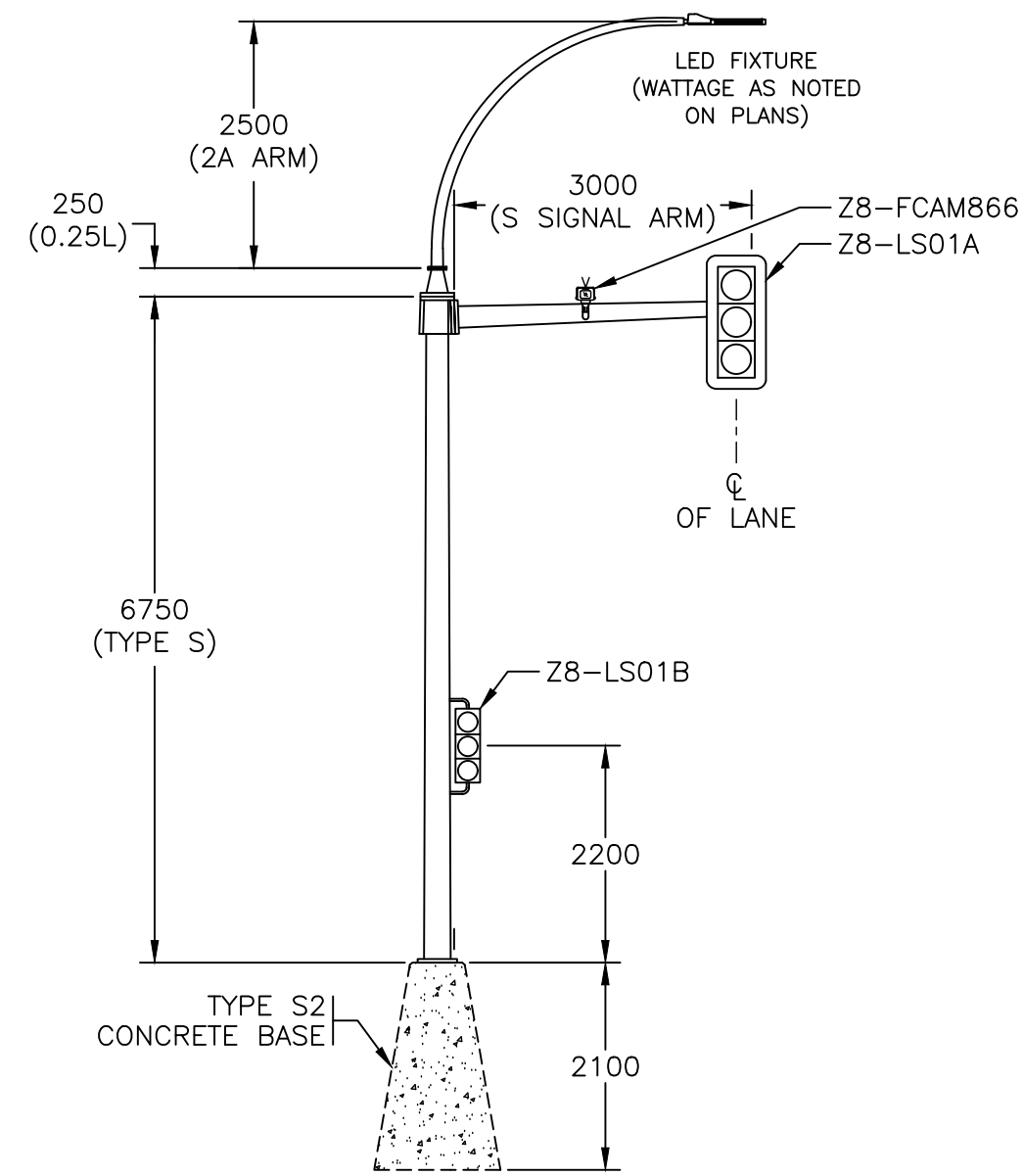
No.	Date	REVISION	Dr'n	Ch'd
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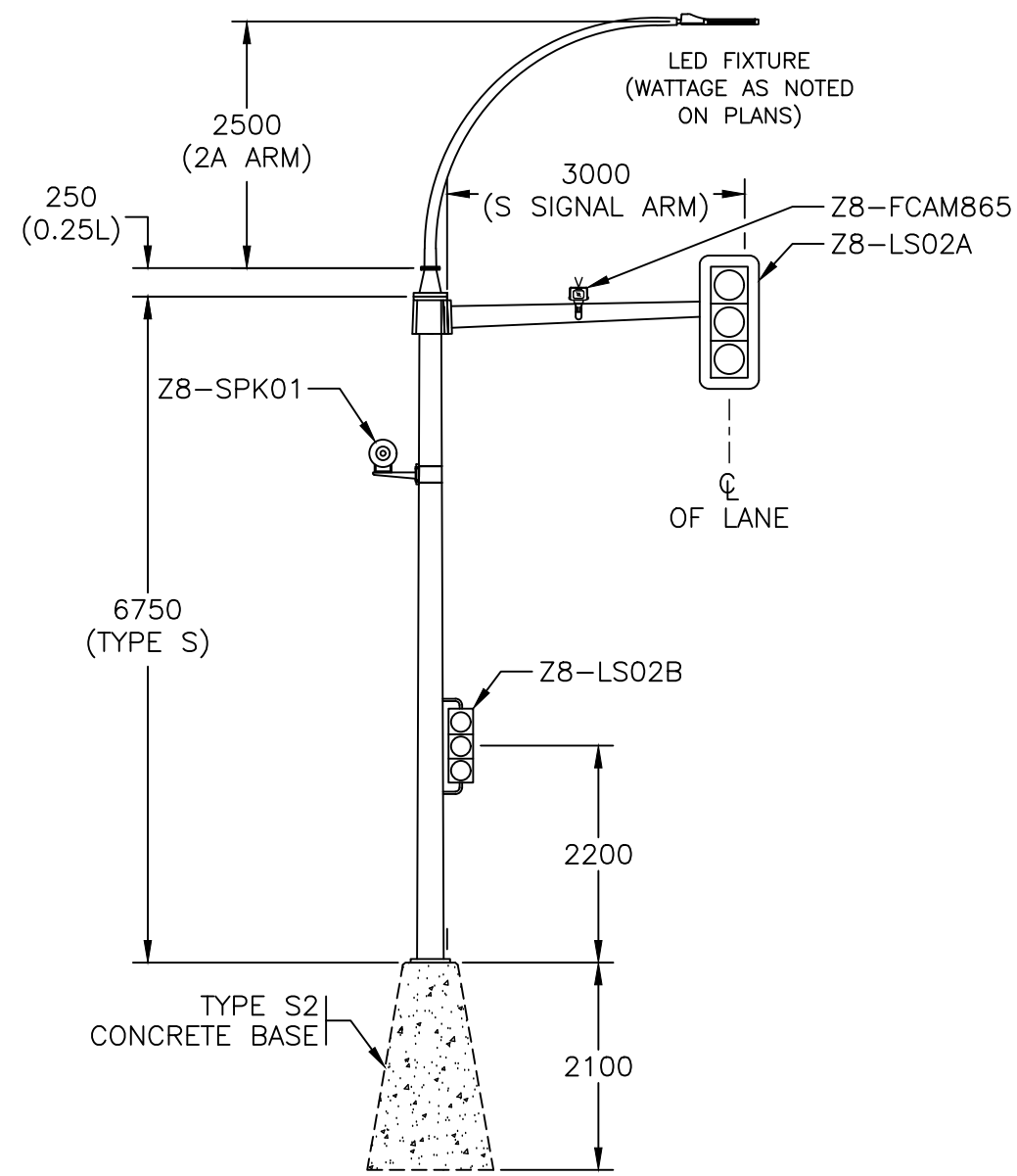
VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

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DRAWN BY	PBX
APPROVED	J. VASQUEZ
DATE	2020-12-15
SCALE	SHOWN
PMW SITE	

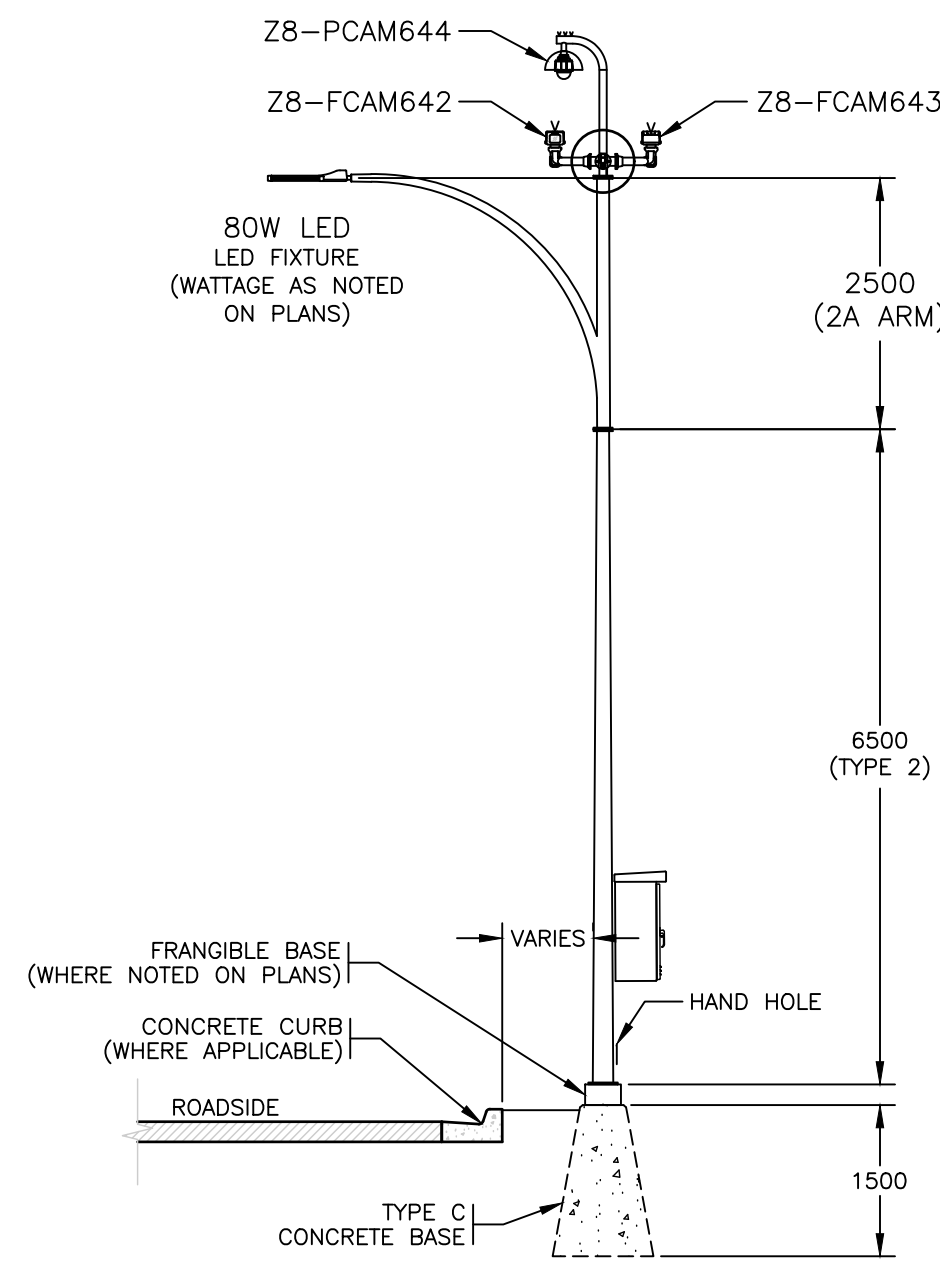
GREATER VANCOUVER GATEWAY 2030 OPTIONS STUDY	
FSPL TRANSPORTATION IMPROVEMENTS	
ZONE 8 - ELEVATIONS AND DETAILS FSPL SIGNAL POLES	
SIZE	DWG.
FSPL-E-0225	
SHEET	REV.
-	A



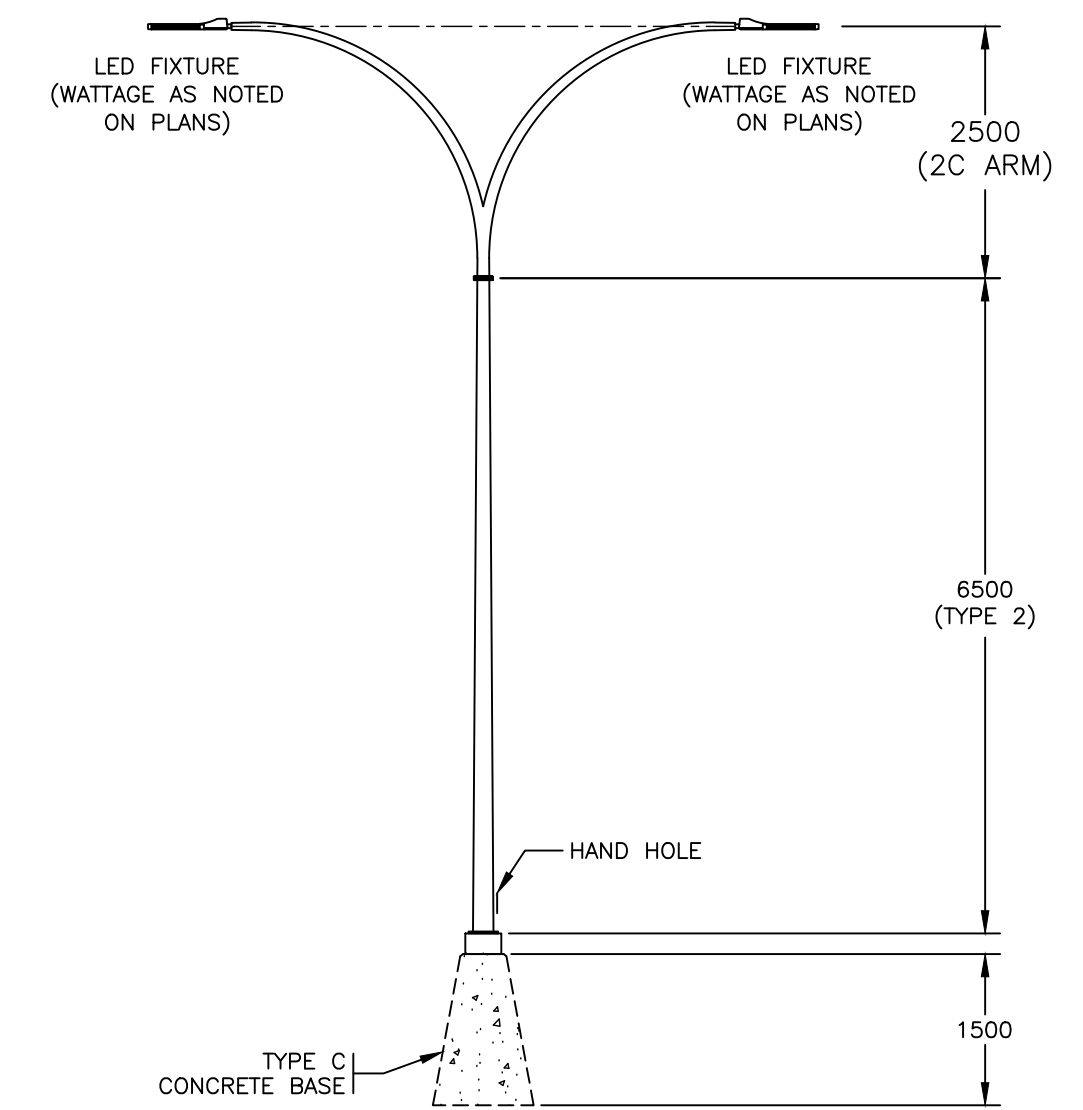
ELEVATION (A) SIGNAL POLE
1:75 (200) LANE 1



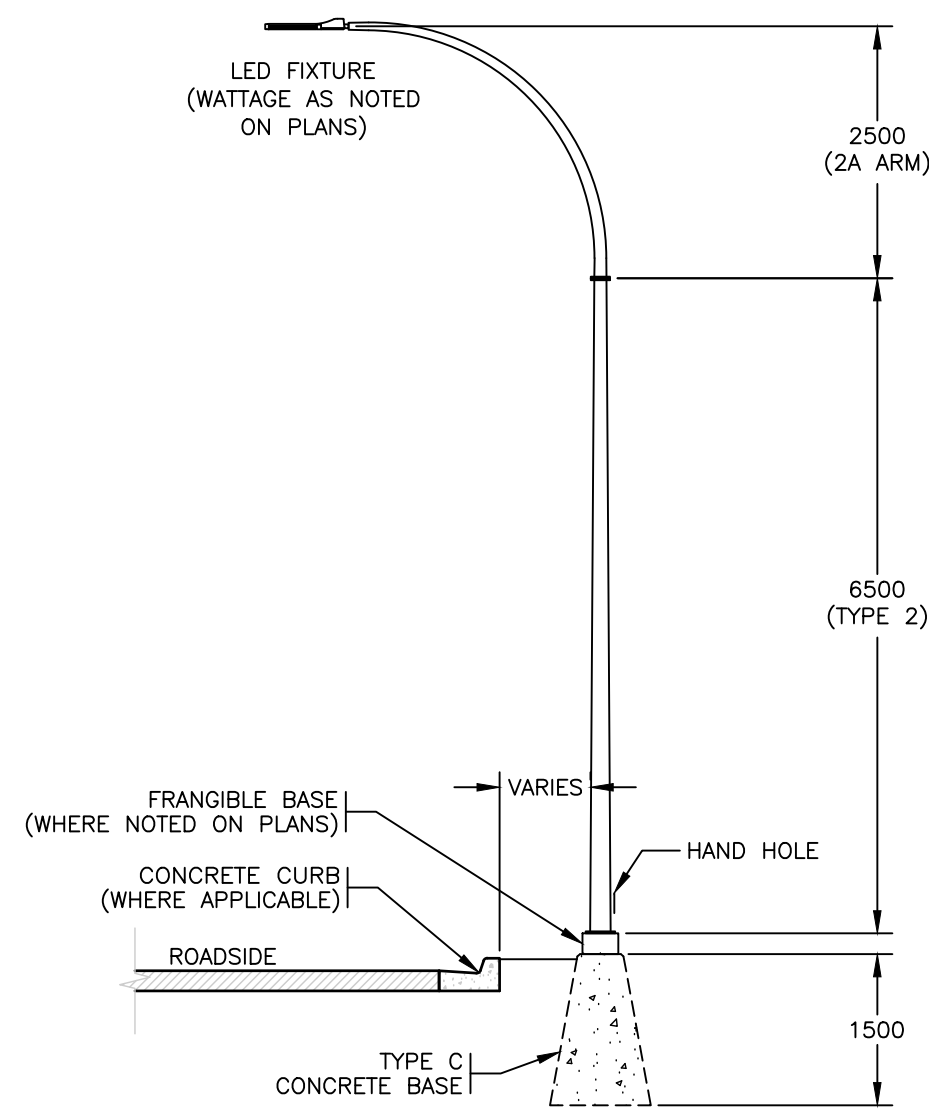
ELEVATION (B) SIGNAL POLE
1:75 (200) LANE 2



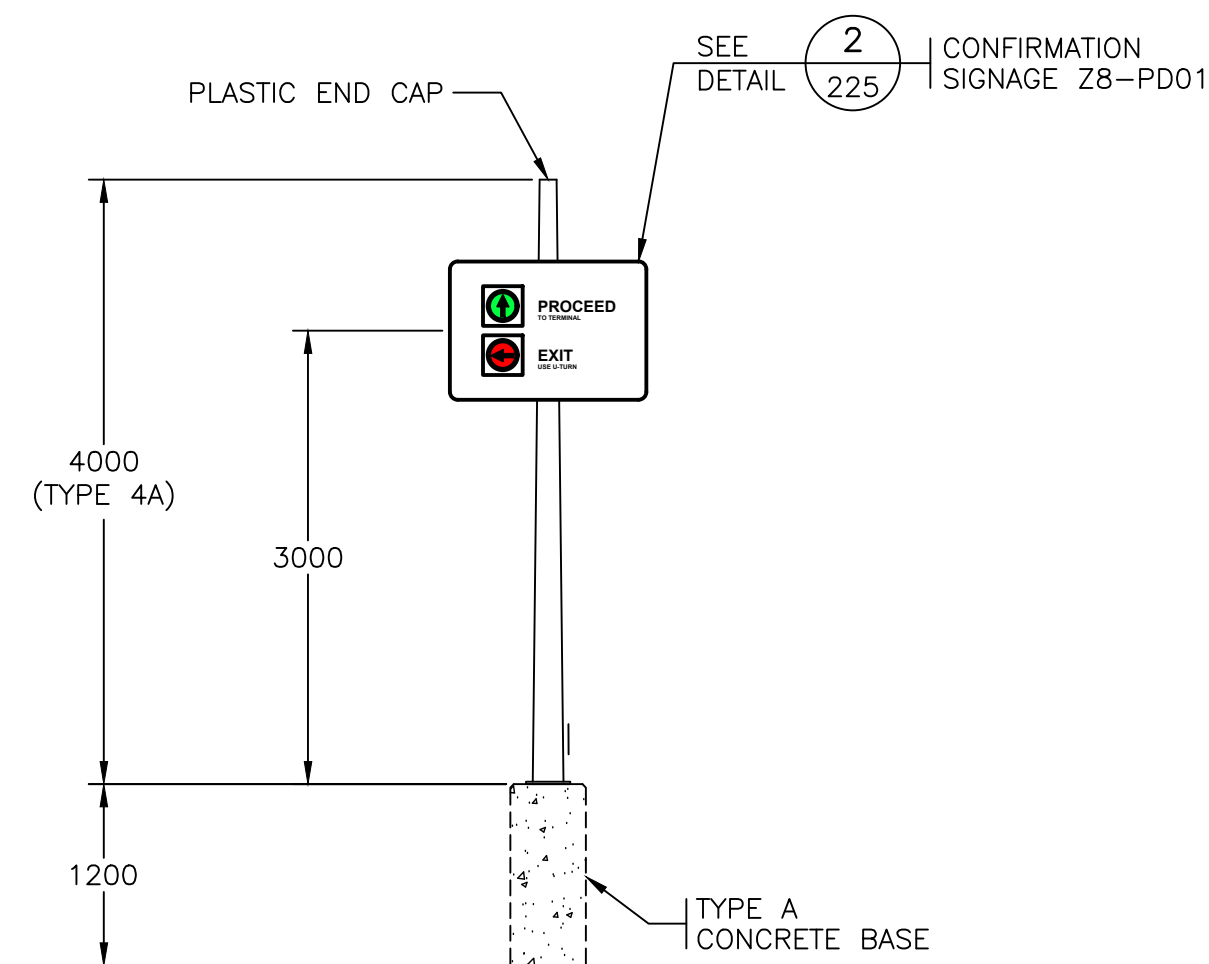
ELEVATION (C) 9.0m LUMINAIRE POLE
1:75 (100, 101, 102, 103) C/W CABINET AND CAMERAS



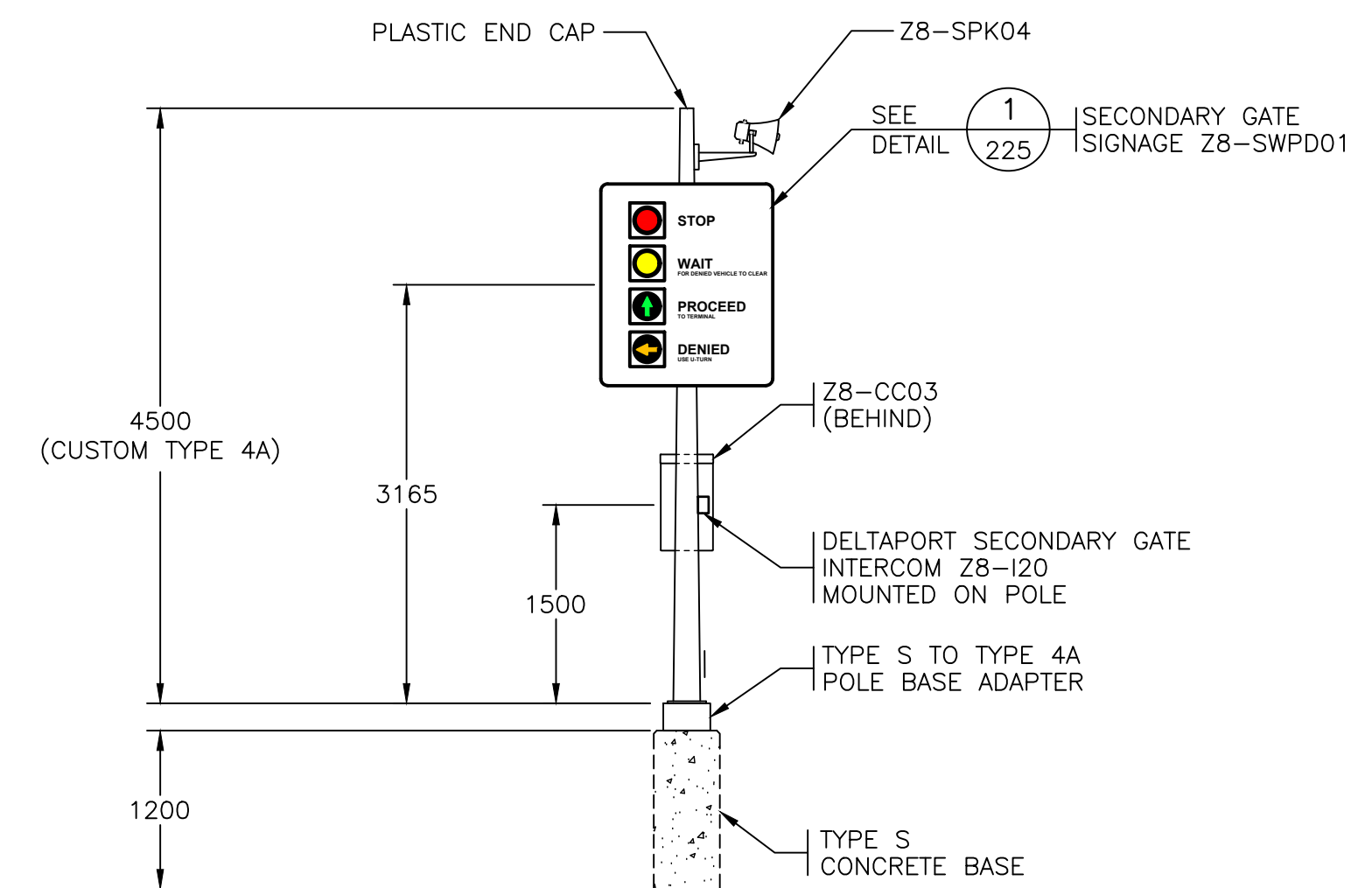
ELEVATION (D) DOUBLE DAVIT 9.0 LUMINAIRE POLE
1:75 (-)



ELEVATION (E) 9.0m LUMINAIRE POLE
1:75 (100, 101, 102, 103, 200, 201)



ELEVATION (F) PROCEED / DENIED SIGN
1:50 (150)

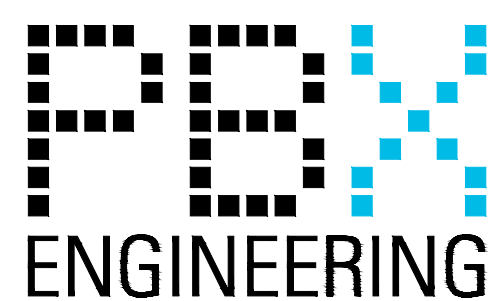


ELEVATION (G) STOP / WAIT / PROCEED / DENIED SIGN
1:50 (260) SECONDARY GATE



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APPROVED: J. VASQUEZ
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SCALE: SHOWN
PMV SITE:

GREATER VANCOUVER GATEWAY 2030
OPTIONS STUDY
FSPL TRANSPORTATION IMPROVEMENTS
ZONE 8 - ELEVATIONS AND DETAILS FSPL SIGNAL POLES
FSPL-E-0226

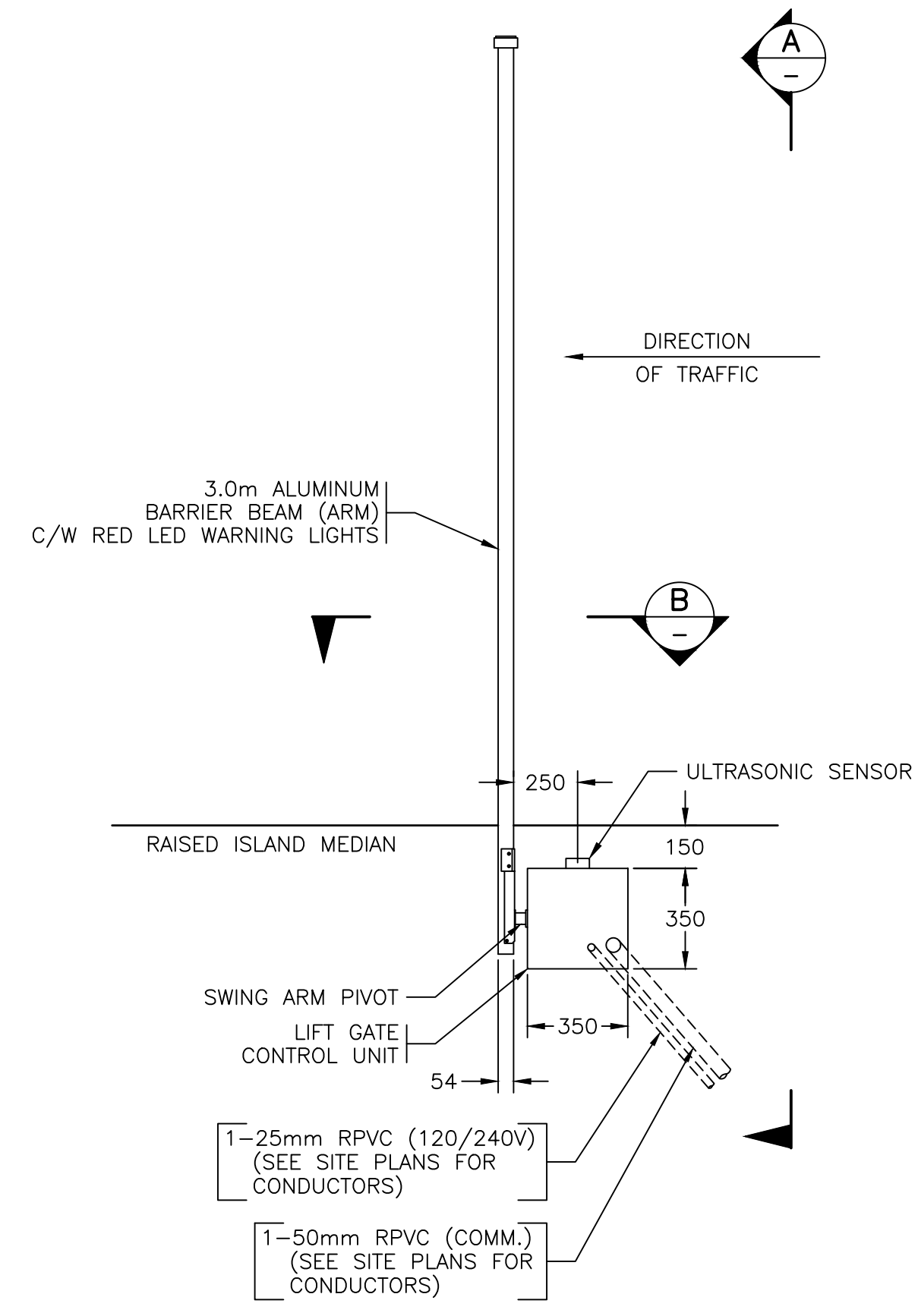
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Ref.No.	REFERENCE

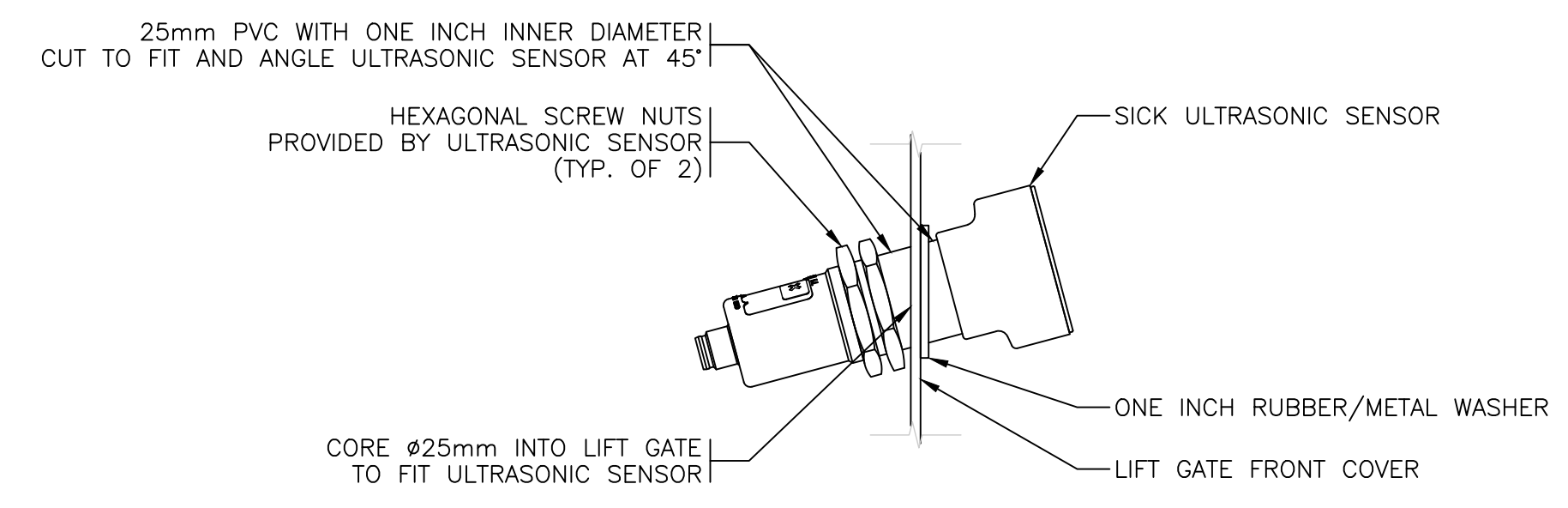
No.	Date	REVISION	Dr'n	Ch'd
A	DEC15/20	ISSUED FOR CLIENT REVIEW	BC	JV

VANCOUVER FRASER PORT AUTHORITY
ENGINEERING DEPARTMENT

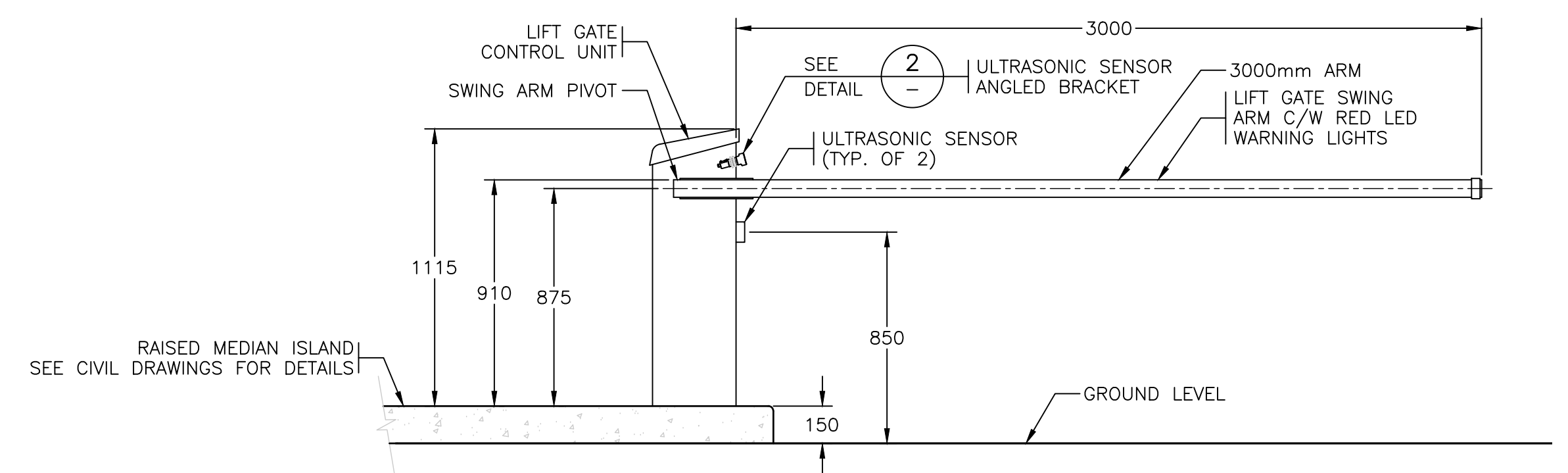
SHEET - REV. A



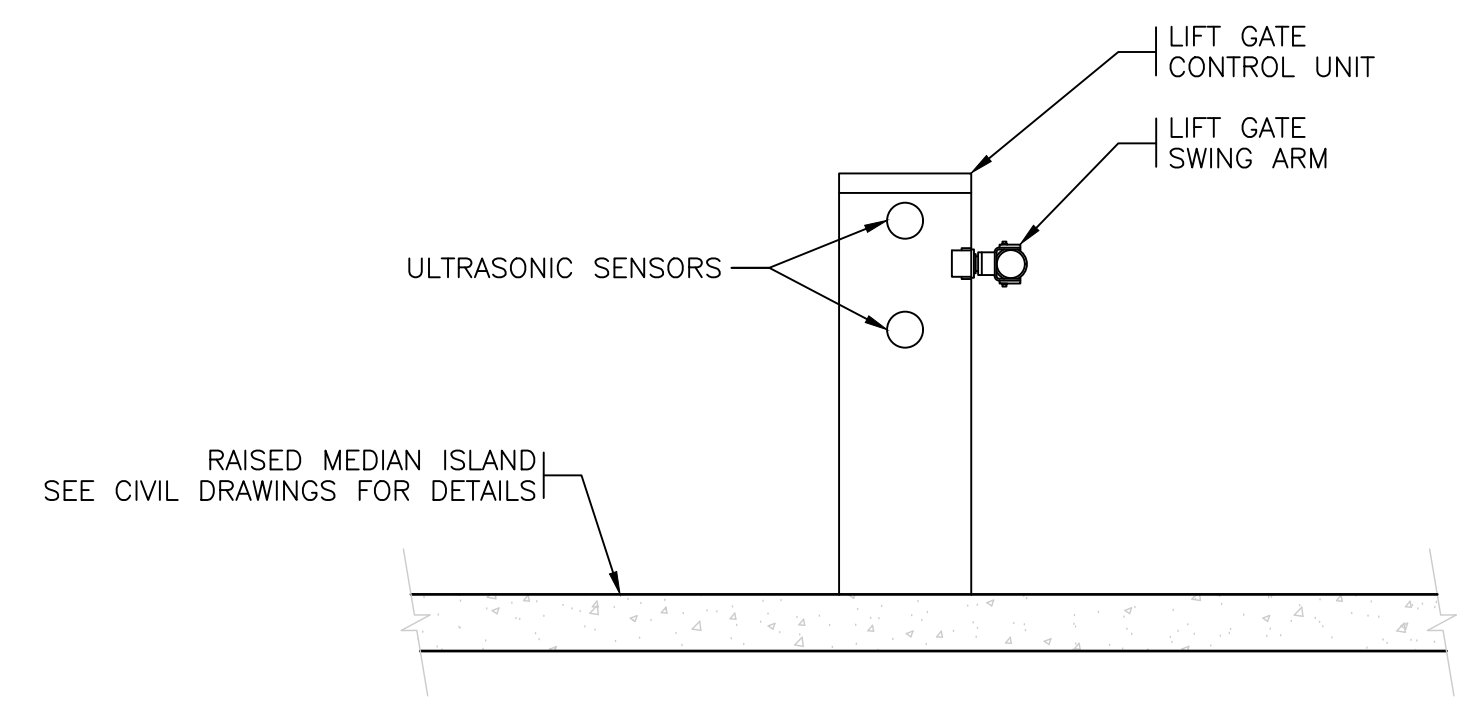
DETAIL 1 1 Z8 - LIFT GATE TYPICAL LAYOUT 1:20



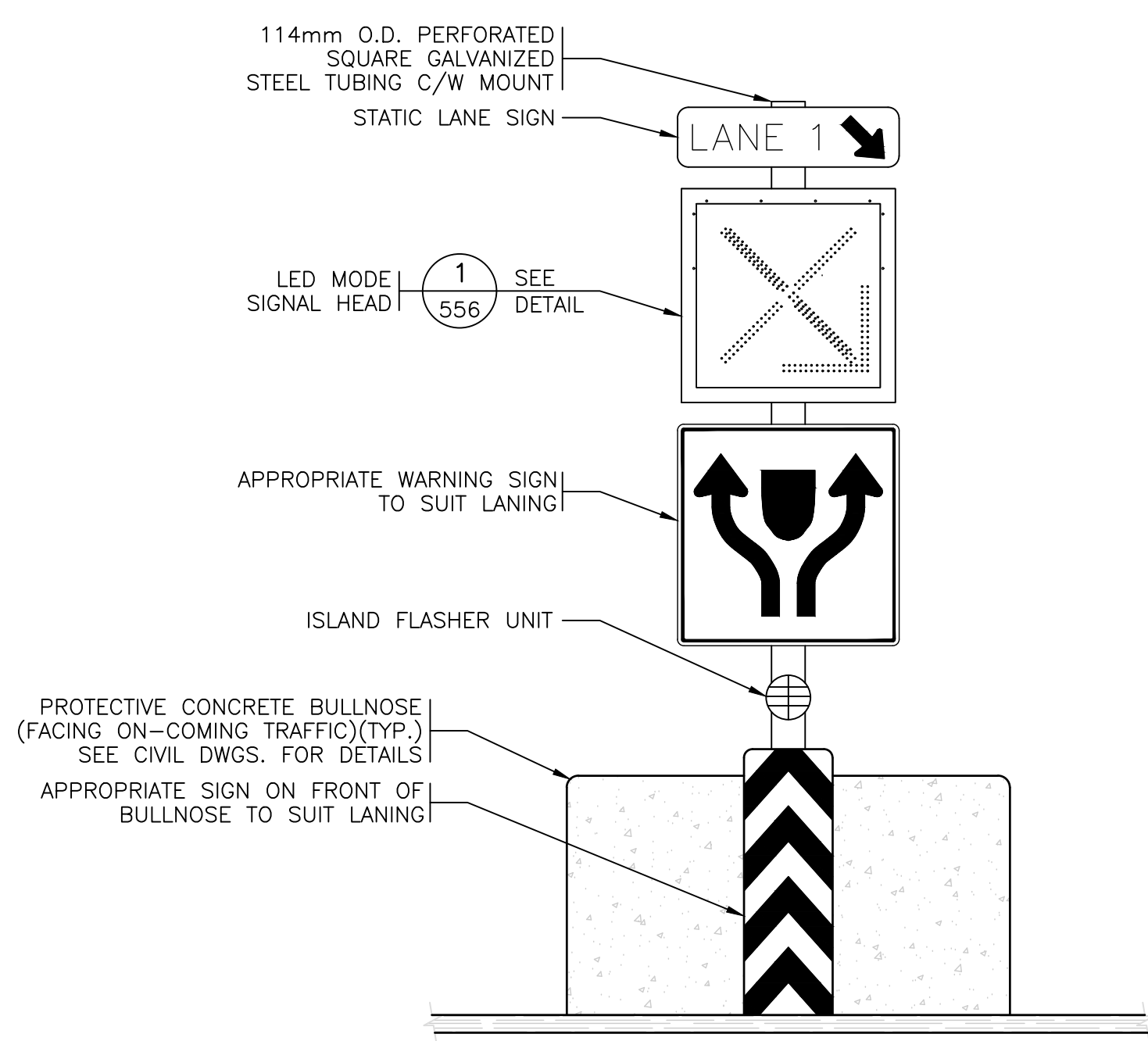
DETAIL 2 2 ULTRASONIC SENSOR ANGLED BRACKET 1:2



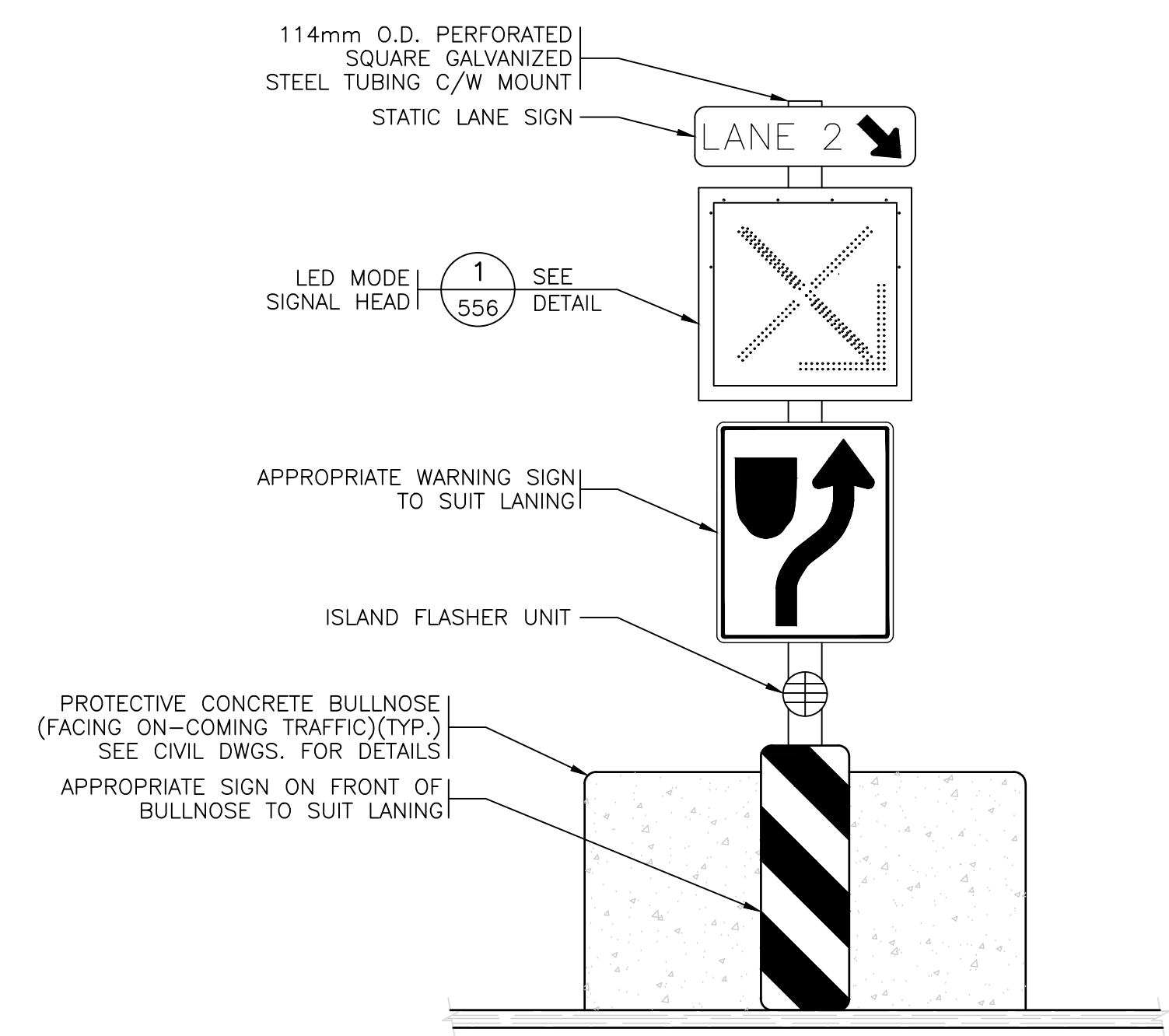
SECTION A Z8 - LIFT GATE CONFIGURATION 1:20



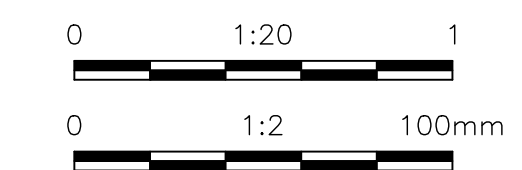
SECTION B 1:20



ELEVATION A ISLAND FLASHER 1:20



ELEVATION B ISLAND FLASHER 1:20

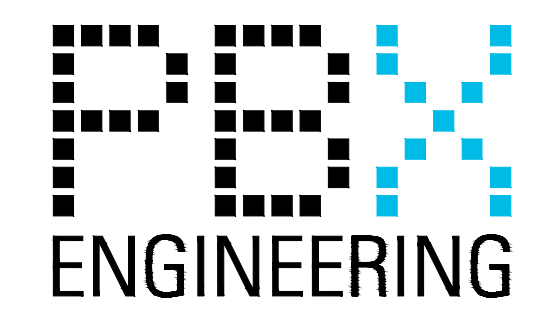


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Ref.No.	REFERENCE

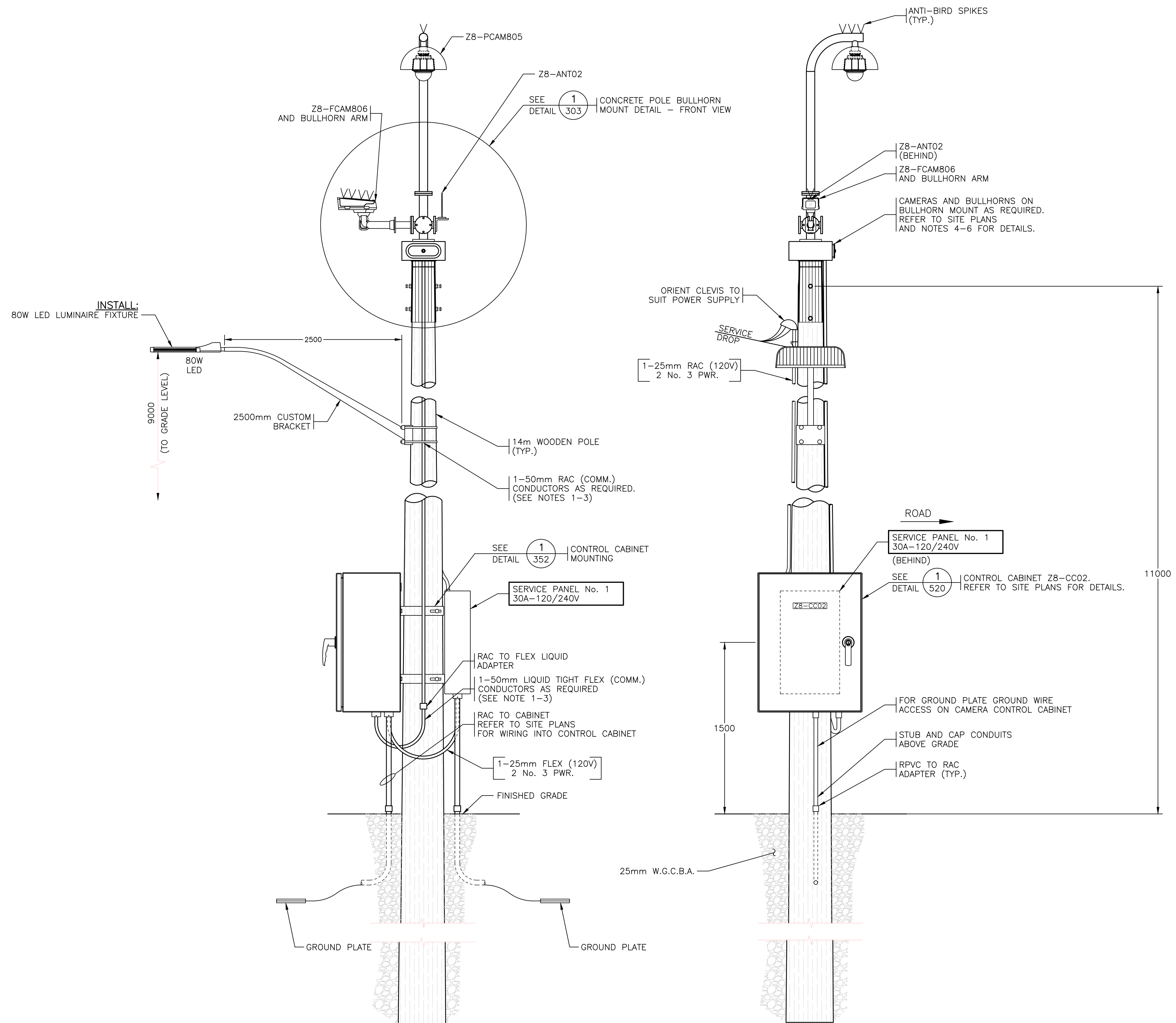


No.	Date	REVISION	Dr'n	Ch'd
A	DEC15/20	ISSUED FOR CLIENT REVIEW	BC	JV



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DATE	2020-12-15
SCALE	SHOWN
PMW SITE	

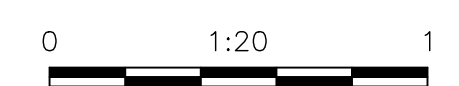
GREATER VANCOUVER GATEWAY 2030 OPTIONS STUDY		SHEET -	REV. A
FSPL TRANSPORTATION IMPROVEMENTS ZONE 8 - DETAILS - LIFT GATE LAYOUT			
SIZE	DWG.	FSPL-E-0462	



NOTES:

1. PTZ CAMERA CONDUCTORS (TYP.)
1-CAT5E LAN Z8-PCAM805
2. FIXED CAMERA CONDUCTORS (TYP.)
1-CAT5E LAN Z8-FCAM806
3. ANTENNA CONDUCTORS (TYP.)
1-ANTENNA CABLE Z8-ANT02
4. REFER TO SITE PLANS FOR NUMBER OF CAMERAS, BULLHORNS, AND CAMERA CONDUCTOR REQUIREMENTS.

ELEVATION (A) WOODEN CAMERA POLE
1:20 (100) W/ CONTROL CABINET Z8-CC01
* NOT ALL INFORMATION SHOWN FOR CLARITY

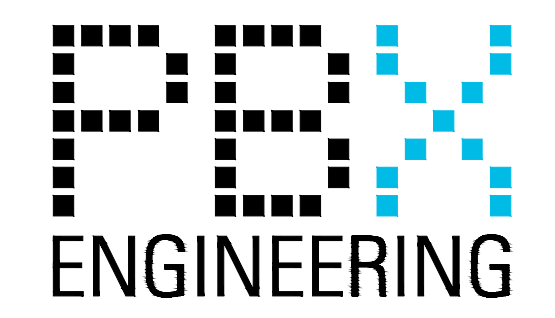


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Ref.No.	REFERENCE



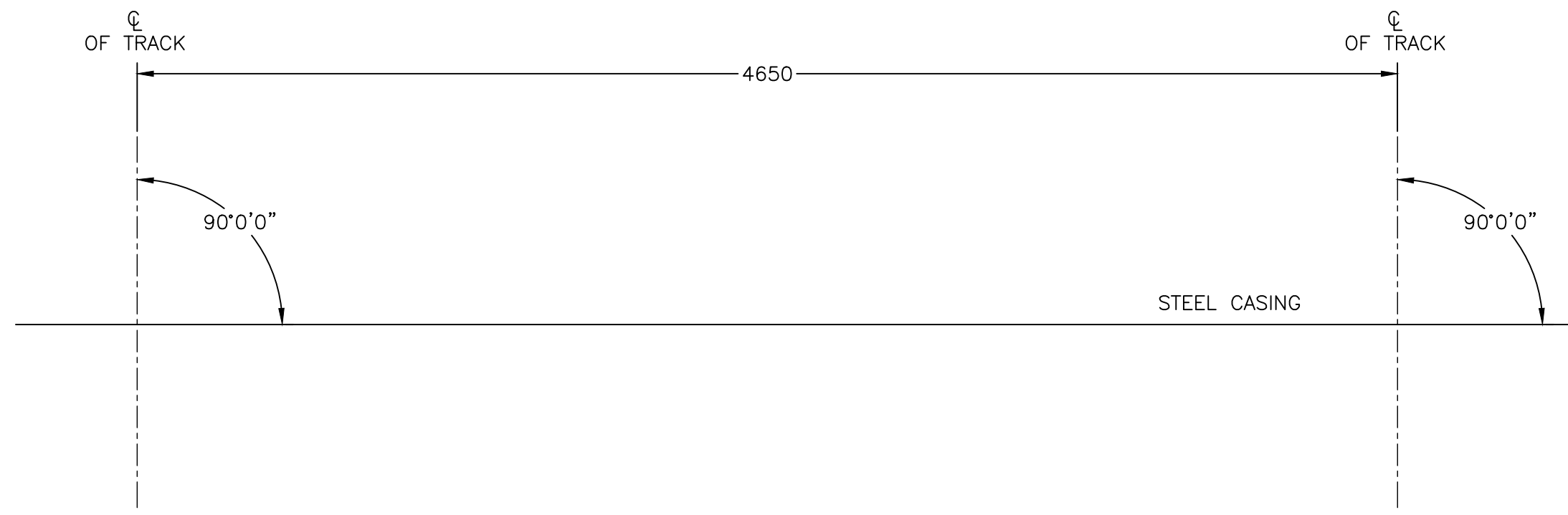
No.	Date	REVISION	Dr'n	Ch'd
A	DEC15/20	ISSUED FOR CLIENT REVIEW	BC	JV



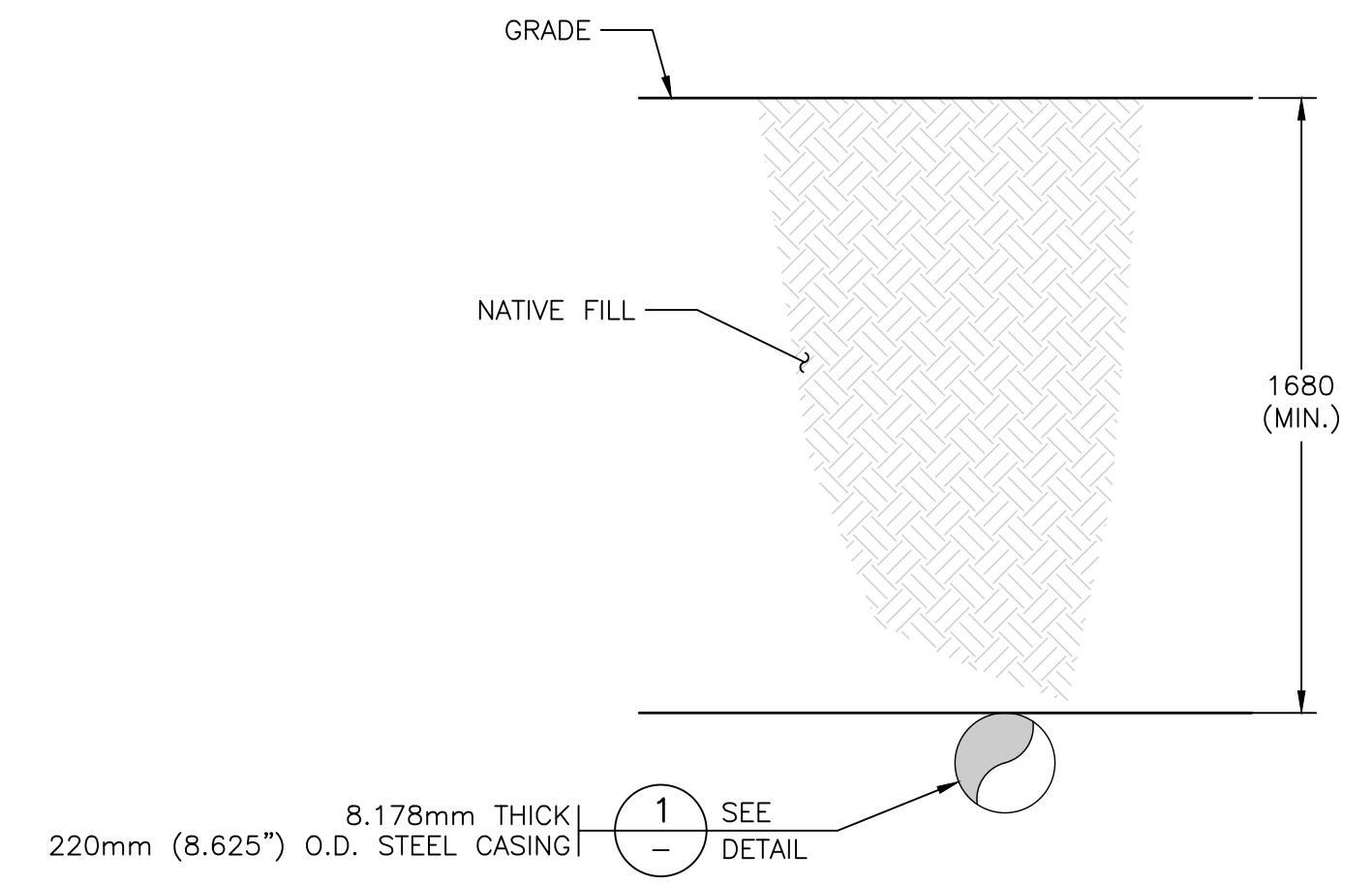
DESIGN BY	E. MICKA
DRAWN BY	PBX
APPROVED	J. VASQUEZ
DATE	2020-12-15
SCALE	SHOWN
PMW SITE	

GREATER VANCOUVER GATEWAY 2030 OPTIONS STUDY		SHEET 24 of 57	REV. A
FSPL TRANSPORTATION IMPROVEMENTS ELEVATION - SERVICE POLE AND CABINET			
SIZE	DWG.	FSPL-E-0507	

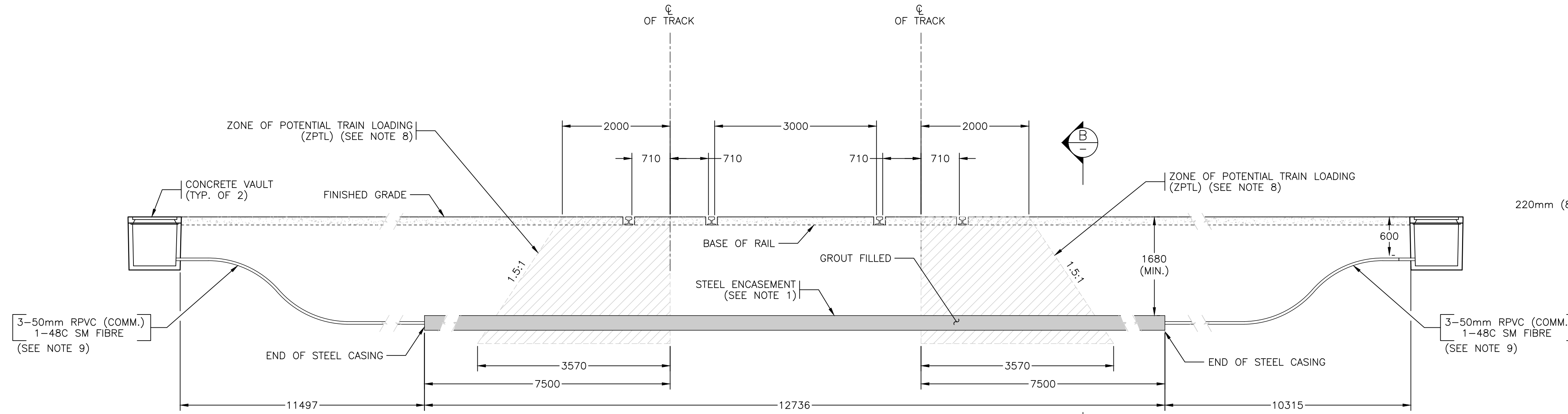
CROSSING SPECIFICATIONS	
CARRIER PIPE #1	I.D. = 50mm W.T. = 5.156mm (MINIMUM) SPEC. = RIGID PVC, SCHEDULE 40
CARRIER PIPE #2	I.D. = 50mm W.T. = 5.156mm (MINIMUM) SPEC. = RIGID PVC, SCHEDULE 40
CARRIER PIPE #3	I.D. = 50mm W.T. = 5.156mm (MINIMUM) SPEC. = RIGID PVC, SCHEDULE 40
CONVEYING #1	1-48C SM FIBRE
CONVEYING #2	(EMPTY)
CONVEYING #3	(EMPTY)
JOINT TYPE	FUSION WELD
ENDS SEALED	VOLCLAY GRANULAR BENTONITE GROUT (20% SOLIDS)
CASING PIPE	O.D. = 220mm W.T. = 8.178mm
SPEC	STEEL, SCHEDULE 40
MIN. YIELD STRENGTH	241 MPa
EXTERNAL COATING	YES
CATHODIC PROTECTION	NO
INSTALLATION METHOD	DIRECTIONAL BORING (SEE NOTE 1)



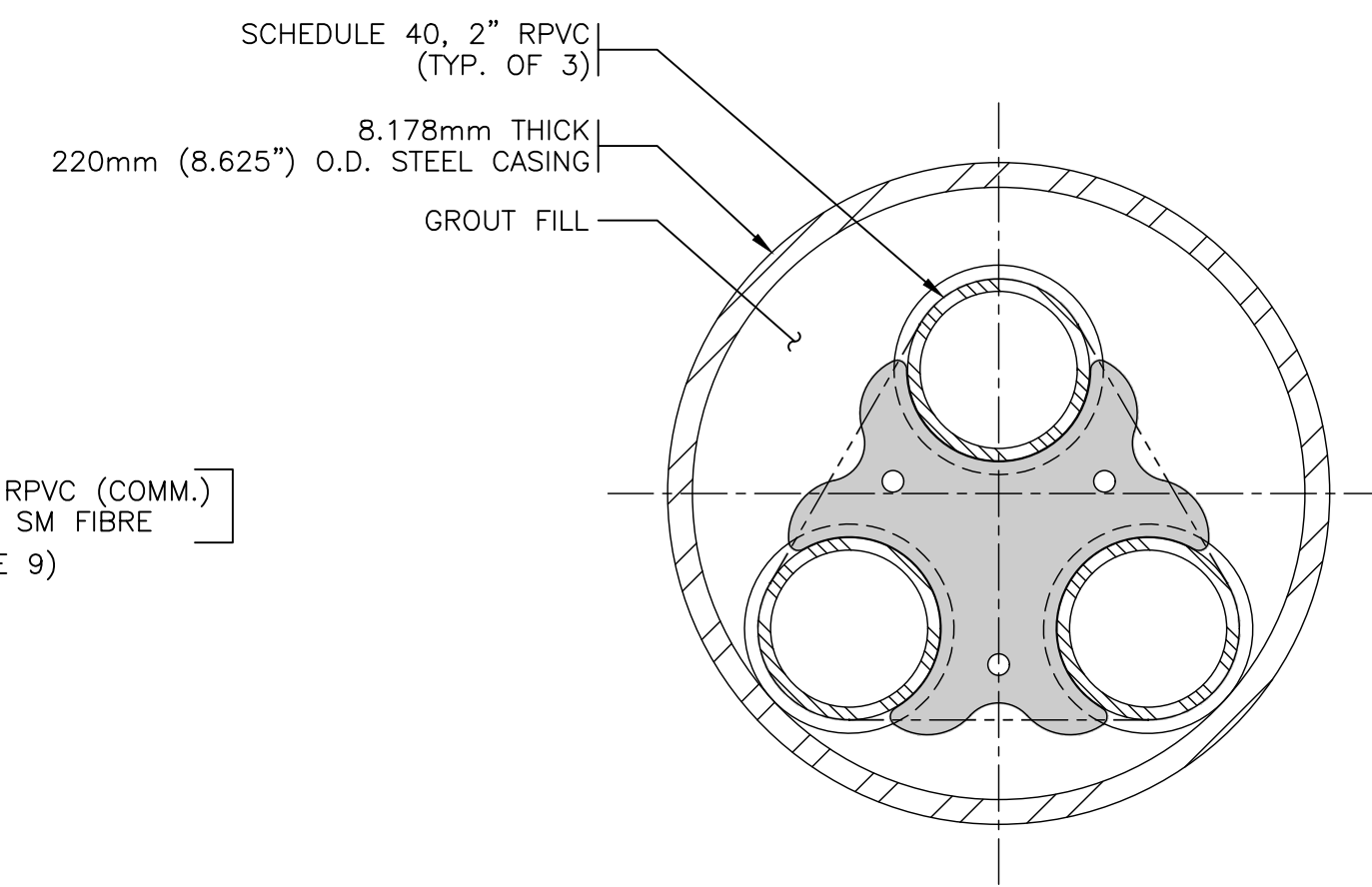
PLAN 1 STEEL ENCASED CROSSING
1:20



SECTION B UNDERGROUND DUCT
1:20



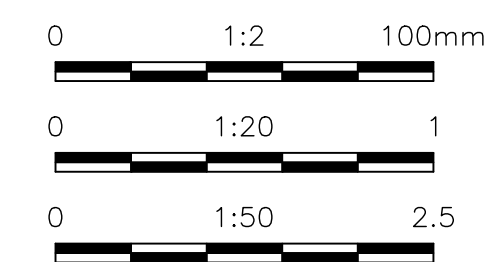
DETAIL 1 DIRECTIONAL DRILL UNDERGROUND CROSSING
1:50



DETAIL 1 220mm (8.625") STEEL CASING
1:2

NOTES:

- STEEL CASE PIPE TO BE INSTALLED BY DIRECTIONAL BORING.
- CONSTRUCTION, MAINTENANCE AND OPERATION OF THE LINE SHALL BE IN ACCORDANCE WITH TRANSPORT CANADA GENERAL ORDERS E-11 AND E-12 AND CANADIAN STANDARDS ASSOCIATION STANDARDS CAN/CSA - C22.1 No. 1-10 AND CAN3 - C22.3 No. 7-10 AS APPLICABLE.
- RAILROAD TRACKS LOCATED @ GPS COORDINATES 49°10'41.79"N, 122°54'45.56"W.
- CROSSING TO BE DESIGNED, CONSTRUCTED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH CANADIAN TRANSPORTATION COMMISSION GENERAL ORDER E11 AND TRANSPORT CANADA STANDARD (TCE-10) STANDARDS RESPECTING PIPELINE CROSSINGS UNDER RAILWAYS.
- NO GROUND DISTURBANCE WITHIN RAIL RIGHT OF WAY.
- METHOD OF CONSTRUCTION FOR STEEL CASING IS JACKING ONLY - NO AUGER.
- WARNING MARKERS SHALL BE INSTALLED AT THE PROPERTY LINE.
- PIT EXCAVATION WORK SHALL BE OUTSIDE ZONE OF POTENTIAL TRAIN LOADING (ZPTL).
- POWER CONDUITS TO BE ROUTED INTO RESPECTIVE JUNCTION BOXES.

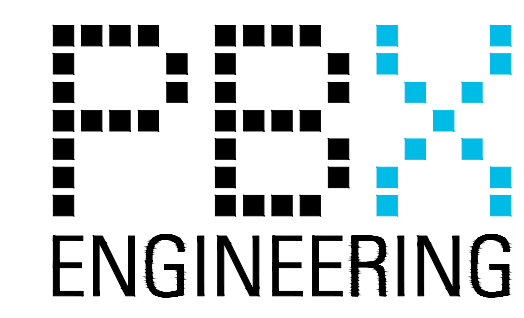


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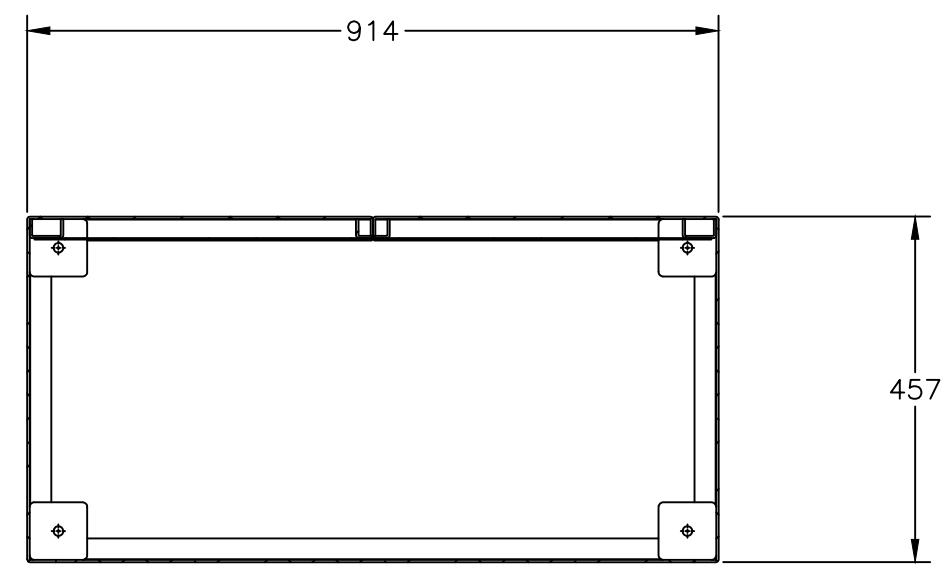


DESIGN BY	E. MICKA
DRAWN BY	PBX
APPROVED	J. VASQUEZ
DATE	2020-12-15
SCALE	SHOWN
PMW SITE	

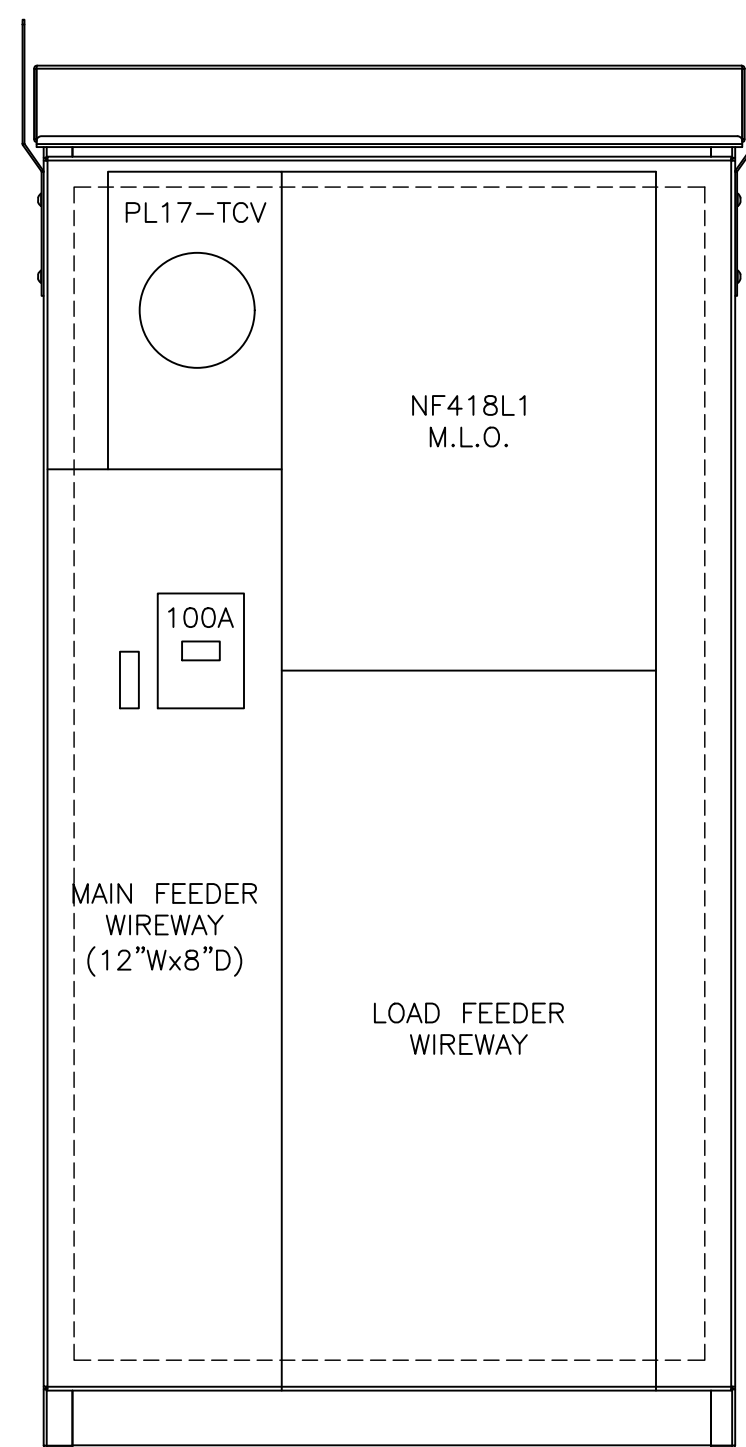
GREATER VANCOUVER GATEWAY 2030 OPTIONS STUDY	
FSPL TRANSPORTATION IMPROVEMENTS	
DETAILS - DIRECTIONAL DRILL INSTALLATION UNDER RAILROAD TRACKS	
SIZE	DWG.
D	FSPL-E-0561
SHEET	REV.
-	A

No.	Date	REVISION	Dr'n	Ch'd
A	DEC15/20	ISSUED FOR CLIENT REVIEW	BC	JV

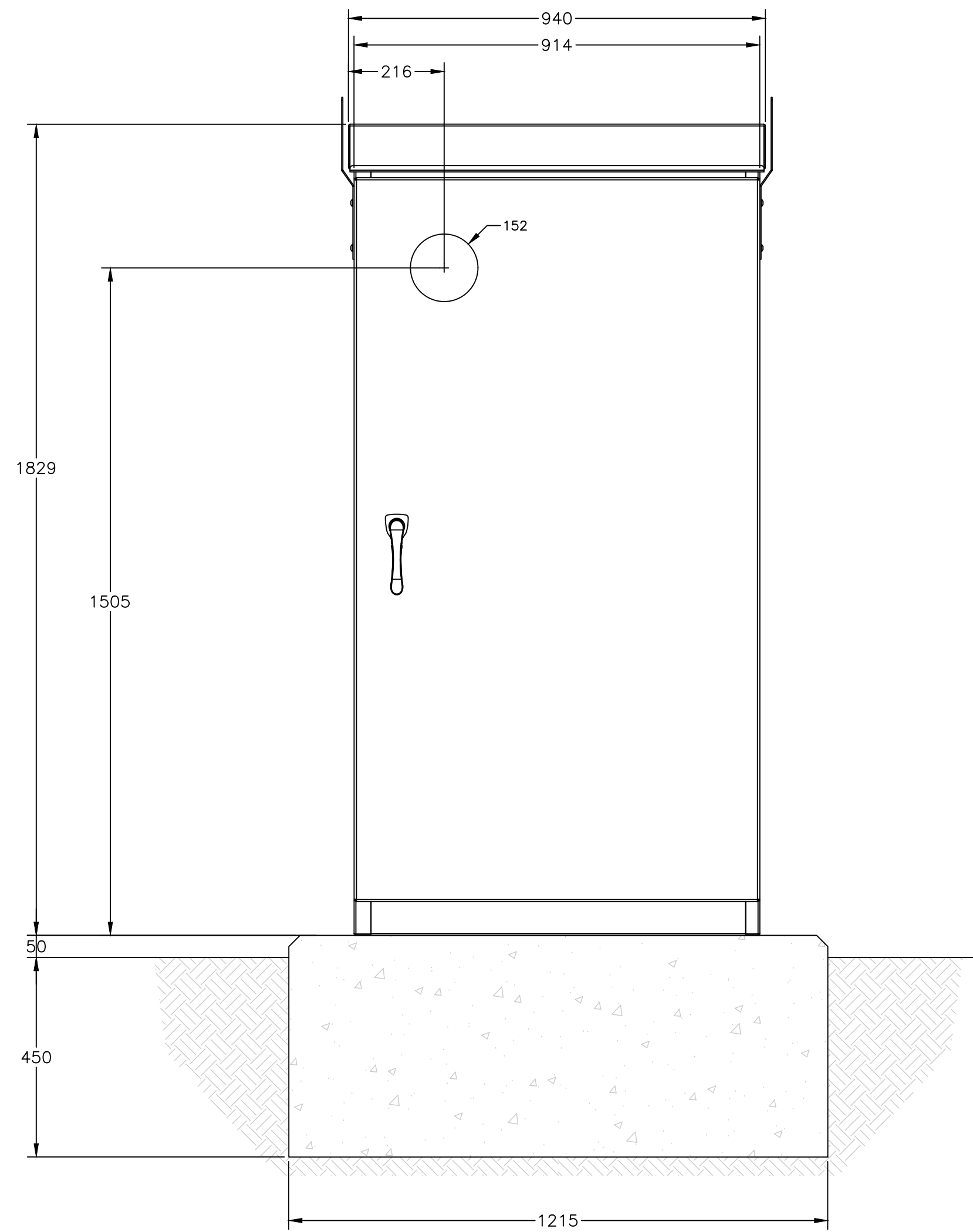
DATE: 2020/12/15 - 7:49am
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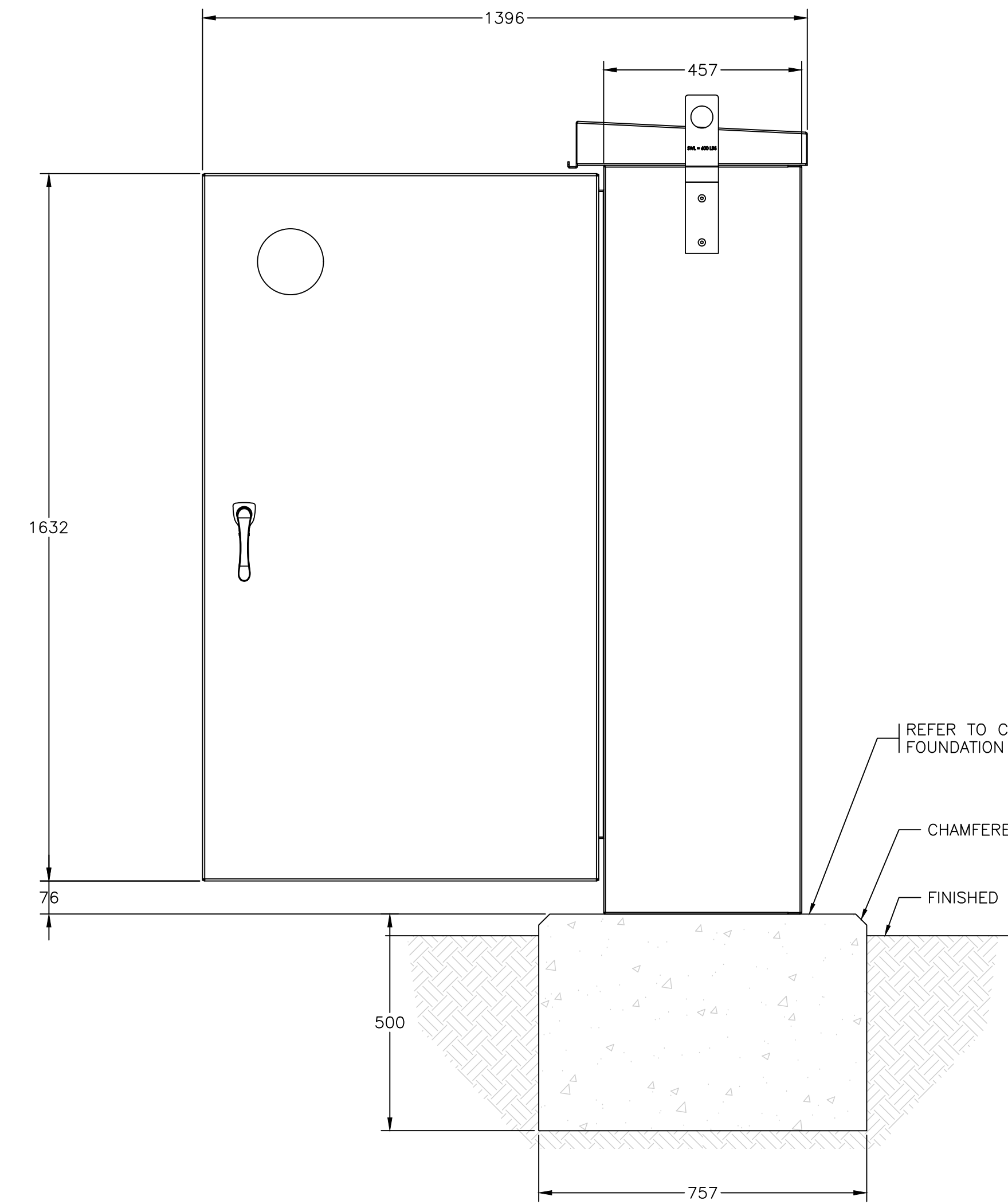
TOP VIEW



FRONT VIEW
 (DOOR NOT SHOWN FOR CLARITY)



FRONT VIEW



SIDE VIEW

REFER TO CIVIL DRAWING FOR FOUNDATION DETAILS
 CHAMFERED EDGES
 FINISHED GRADE

METERING KIOSK NOTES:

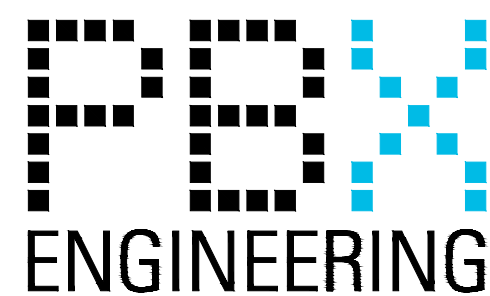
1. CONDUIT NOT SHOWN FOR CLARITY.
2. STANDARD OF ACCEPTANCE FOR METERING KIOSK: VALID MANUFACTURING BCH-600-1-240, OR APPROVED ALTERNATE.
3. POWDER COAT KIOSK TO MATCH SURROUNDING LANDSCAPING. COORDINATE COLOR WITH LANDSCAPE ARCHITECT.

DETAIL 1 METERING KIOSK
 1:10

0 1:10 500mm

**ISSUED FOR CLIENT REVIEW
 NOT FOR CONSTRUCTION**

ALL EQUIPMENT IS PROPOSED
 UNLESS NOTED OTHERWISE



DESIGN BY	E. MICKA
DRAWN BY	PBX
APPROVED	J. VASQUEZ
DATE	2020-12-15
SCALE	SHOWN
PMW SITE	

GREATER VANCOUVER GATEWAY 2030
 OPTIONS STUDY
 FSPL TRANSPORTATION IMPROVEMENTS
 DETAIL - METERING KIOSK

Ref.No.	REFERENCE
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No.	Date	REVISION	Dr'n	Ch'd
A	DEC15/20	ISSUED FOR CLIENT REVIEW	BC	JV

VANCOUVER FRASER PORT AUTHORITY
 ENGINEERING DEPARTMENT

SIZE	D	DWG.		SHEET	-	REV.	A
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FSPL-E-0800