

LEGEND

	FUTURE CONCRETE BASE AND LUMINAIRE POLE (SINGLE)		PEC PHOTO ELECTRIC CELL		RAISED CURB
	LUMINAIRE POLE (SINGLE) 'F' DENOTES FRANGIBLE BASE		RPVC RIGID P.V.C. CONDUIT		PROPERTY LINE
	LUMINAIRE POLE (DOUBLE)		R.C. RIGID STEEL CONDUIT		EDGE OF GRAVEL SHOULDER
	PRIVATE LUMINAIRE (BASE VARIABLE)		F.C. FLEXIBLE CONDUIT (LIQUID TIGHT)		EDGE OF PAVEMENT
	POST TOP MOUNTED LUMINAIRE		OVERHEAD FLASHING BEACON		PAINT LINE
	WALL MOUNTED LUMINAIRE		POST MOUNTED FLASHER		FUTURE ELECTRICAL AND GEOMETRICS
	JUNCTION BOX - No. 10 DENOTES TYPE		BACKGUY		ELECTRICAL EQUIPMENT TO BE REMOVED
	CONCRETE JUNCTION BOX OR VAULT		POWER POLE		PROPOSED UNDERGROUND CONDUIT
			TELEPHONE POLE		EXISTING UNDERGROUND CONDUIT
			POWER/TELEPHONE POLE		FENCE
			SIGNAL HEAD VEHICLE PHASE (T) DENOTES TUNNEL VISOR		CORRUGATED METAL PIPE (CULVERT)
			SIGNAL HEAD PEDESTRIAN PHASE		U/G UTILITY:
			PEDESTRIAN PUSHBUTTON		'G' DENOTES GAS
					'S' DENOTES STORM DRAINS/SEWERS
					'W' DENOTES WATER
					'E' DENOTES ELECTRIC
					'U' DENOTES TELEPHONE
					'SAN' DENOTES SANITARY SEWER
					TEST SWITCH
					BREAKER
					NEUTRAL BAR
					DIAMOND DETECTOR LOOP (WITH LOOP LEADER)
					PRE-FORMED DETECTOR LOOP
					ROUND DETECTOR LOOP
					RECTANGULAR COUNT LOOP
					QUADRUPOLE DETECTOR LOOP

DMD & Associates Ltd.
#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
www.dmdeng.com 604/589-9010
office@dmdeng.com Fax 604/589-9012
DMD PROJECT No. 5555-16-01 of 05

BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
ELECTRICAL ENGINEERING CENTRE

SIGNAL AND LIGHTING MODIFICATION
HIGHWAY 7 AND HIGHWAY 11 / CEDAR VALLEY CONNECTOR AT MISSION

SITE PLAN - NOTES - ELEVATIONS - LEGEND

REV	DATE	REVISIONS	DRAWN
.	JUL18	DRAWING ISSUED	YJ
A	JUN19	RECORD DRAWING	YJ

CAD FILENAME 170231A.dwg

DESIGNED	KGS	DATE	JUN19
QUALITY CONTROL	KGS	DATE	JUN19
QUALITY ASSURANCE	NB	DATE	JUN19
TRAN ELECTRICAL DESIGN REVIEW		DATE	

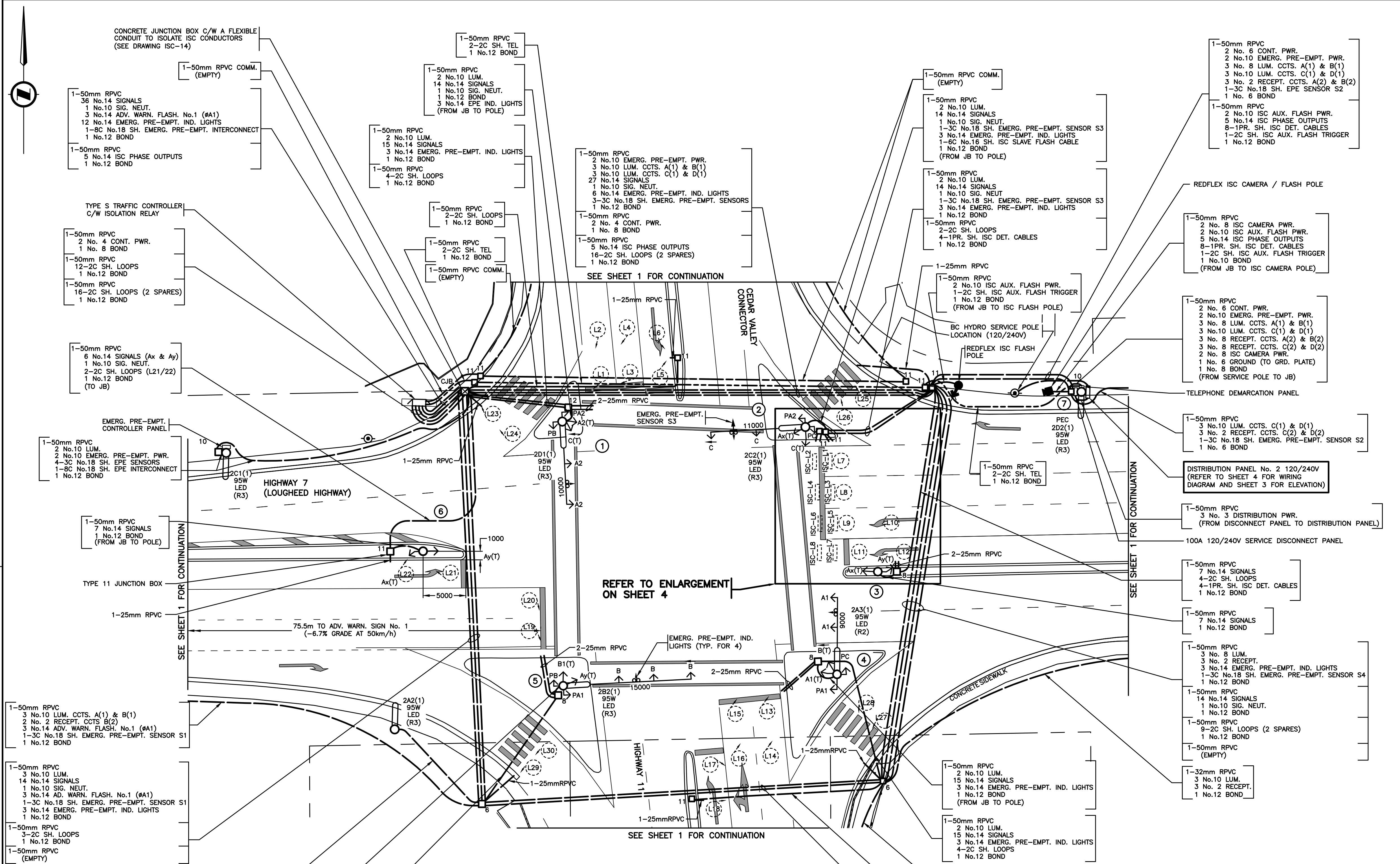
ELECTRICAL ENGINEER OF RECORD (FOR CURRENT REVISION)
DATE

SHEET NUMBER SHEET 1 OF 4

HWY DIST REG DRAWING NUMBER 1 1 TE-17023-1

SEAL

CANCEL PRINTS BEARING PREVIOUS LETTER



CONDUCTOR COLOUR CODE		
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
A1	RED YELLOW GREEN	RED YELLOW BLUE
A2	RED YELLOW GREEN	RED YELLOW (RED T.T.) BLUE
Ax	RED YELLOW GREEN ARROW	RED (BLUE T.T.) YELLOW BLUE (WHITE T.T.)
Ay	RED YELLOW GREEN ARROW	RED (BLUE T.T.) YELLOW (RED T.T.) BLUE (WHITE T.T.)
B	RED YELLOW GREEN GREEN ARROW	RED BROWN BLUE BLUE (WHITE T.T.)
C	RED YELLOW GREEN GREEN ARROW	RED ORANGE BLUE BLUE (WHITE T.T.)
PA1	DON'T WALK WALK PUSH BUTTON	YELLOW BLUE PURPLE/PURPLE (YELLOW T.T.)
PA2	DON'T WALK WALK PUSH BUTTON	YELLOW (RED T.T.) BLUE PURPLE/PURPLE (RED T.T.)
PB	DON'T WALK WALK PUSH BUTTON	BROWN BLUE PURPLE/PURPLE (BROWN T.T.)
PC	DON'T WALK WALK PUSH BUTTON	ORANGE BLUE PURPLE/PURPLE (ORANGE T.T.)
CONTROLLER POWER		BLACK
LUMINAIRE CCTS. A&C		RED
LUMINAIRE CCTS. B&D		BLACK
RECEPTACLE CCTS. A&C		RED
RECEPTACLE CCTS. B&D		BLACK
ISLAND FLASHER		ORANGE
NEUTRAL		WHITE
GROUND/BOND		GREEN
ADVANCE WARNING FLASHER No. 1		YELLOW BROWN

NOTE: T.T. DENOTES TAPE TRACER.

EMERGENCY PRE-EMPTION CONDUCTOR LABELLING				
ITEM	LABEL	COLOUR	CONDUCTOR TYPE	
EMERG. PRE-EMPT. ENCLOSURE PWR.	N/A	BLACK/WHITE	RW90	
EMERG. PRE-EMPT. SENSOR #A1	S1	N/A	BELDEN 8770	
EMERG. PRE-EMPT. SENSOR #A2	S2	N/A	BELDEN 8770	
EMERG. PRE-EMPT. SENSOR #B	S3	N/A	BELDEN 8770	
EMERG. PRE-EMPT. SENSOR #C	S4	N/A	BELDEN 8770	
WHITE EMERG. INDICATION LIGHT #A1	PE-A1-WH	RED	RW90	
BLUE EMERG. INDICATION LIGHT #A1	PE-A1-BL	RED (WHITE T.T.)	RW90	
WHITE EMERG. INDICATION LIGHT #A2	PE-A2-WH	RED	RW90	
BLUE EMERG. INDICATION LIGHT #A2	PE-A2-BL	RED (WHITE T.T.)	RW90	
WHITE EMERG. INDICATION LIGHT #B	PE-B-WH	RED	RW90	
BLUE EMERG. INDICATION LIGHT #B	PE-B-BL	RED (WHITE T.T.)	RW90	
WHITE EMERG. INDICATION LIGHT #C	PE-C-WH	RED	RW90	
BLUE EMERG. INDICATION LIGHT #C	PE-C-BL	RED (WHITE T.T.)	RW90	
EMERG. PRE-EMPT. INTERTIE #A1	PE-A1-INT	N/A		
EMERG. PRE-EMPT. INTERTIE #A2	PE-A2-INT	N/A		
EMERG. PRE-EMPT. INTERTIE #B	PE-B-INT	N/A	BELDEN 9388	
EMERG. PRE-EMPT. INTERTIE #C	PE-C-INT	N/A		

NOTE: T.T. DENOTES TAPE TRACER.
REFER TO SP635-2.5.7 FOR NOTES ON CONDUCTOR LABELLING.

POSTED SPEED LIMIT NB 60 km/h ON HIGHWAY 11
 POSTED SPEED LIMIT SB 50 km/h ON CEDAR VALLEY CONNECTOR
 POSTED SPEED LIMIT EB 50 km/h ON HIGHWAY 7
 POSTED SPEED LIMIT WB 50 km/h ON HIGHWAY 7

ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT WHERE NOTED

SEE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" FOR APPLICABLE STANDARD DRAWINGS

ILLUMINANCE DESIGN CRITERIA		
ITEM	DESIGN REQUIREMENTS	DESIGN ACHIEVED
STREET NAME(S)	HIGHWAY 7 @ HIGHWAY 11	
PEDESTRIAN CONFLICT AREA	LOW	
ROAD CLASSIFICATION	MAJOR/MAJOR	
ILLUMINATION LEVEL (AVG.)	18.0 LUX	20.0 LUX
UNIFORMITY RATIO (AVG:MIN)	3.0:1	2.8:1

REFER TO SHEET 1 FOR NOTES

FOR MINISTRY USE ONLY
 THIS DRAWING SUPERSEDES
 DRAWING TE-90064-8

DMD & Associates Ltd.
 #12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
 www.dmdeng.com 604/589-9010
 office@dmdeng.com Fax 604/589-9012
 DMD PROJECT NO. 5555-16-02 of 05

BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
 ELECTRICAL ENGINEERING CENTRE

REV	DATE	REVISIONS	DRAWN
-	JUL18	DRAWING ISSUED	YJ
A	JUN19	RECORD DRAWING	YJ

CAD FILENAME: 170232A.dwg

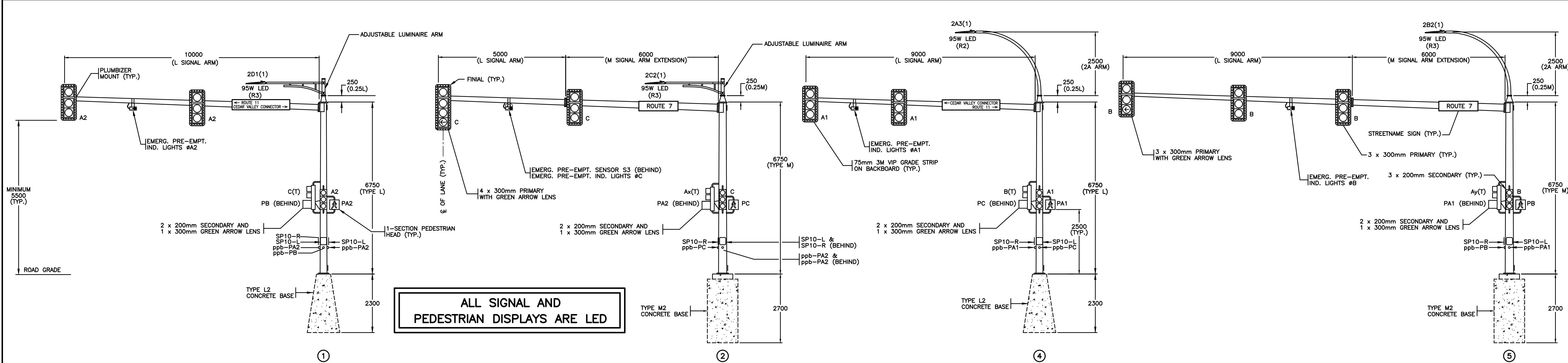
SIGNAL AND LIGHTING MODIFICATION
 HIGHWAY 7 AND HIGHWAY 11 / CEDAR VALLEY CONNECTOR
 AT MISSION

SITE PLAN ENLARGEMENT - COLOUR CODE

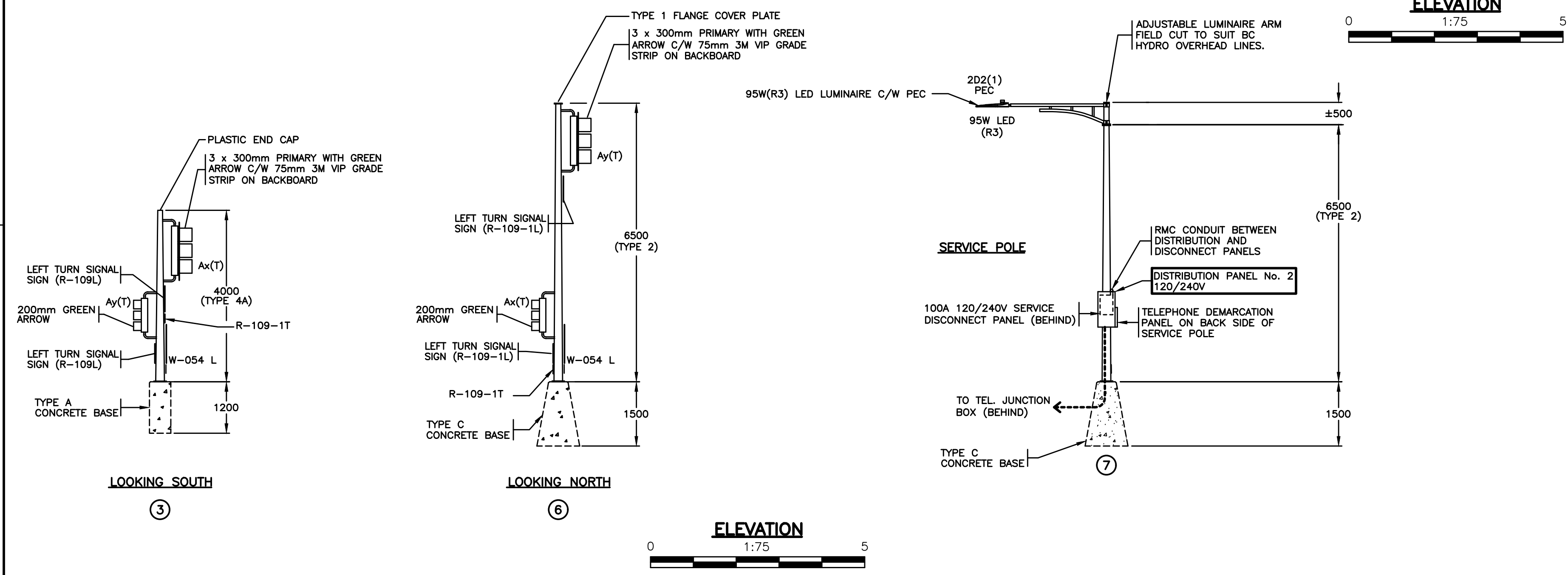
DESIGNED: KGS DATE: JUN19
 QUALITY CONTROL: KGS DATE: JUN19
 QUALITY ASSURANCE: NB DATE: JUN19
 TRAN ELECTRICAL DESIGN REVIEW: DATE: _____

ELECTRICAL ENGINEER OF RECORD (FOR CURRENT REVISION)
 SHEET NUMBER: SHEET 2 OF 4
 HWY DIST: 1 REG: 1 DRAWING NUMBER: TE-17023-2

H-2086 CANCEL PRINTS BEARING PREVIOUS LETTER



ALL SIGNAL AND PEDESTRIAN DISPLAYS ARE LED



DETECTOR LOOP TABLE						
LOOP No.	LOOP			INDUCTANCE		PHASE
	SIZE	TURNS	LOOP LEAD	TOTAL		
L 1	1.8m ϕ	4	95	11	106	B
L 2	1.8m ϕ	4	95	11	106	B
L 3	1.8m ϕ	4	95	11	106	B
L 4	1.8m ϕ	4	95	11	106	B
L 5	1.8m ϕ	4	95	24	119	B
L 6	1.8m ϕ	4	95	24	119	B
L 7	1.8m ϕ	4	95	47	142	A2
L 8	1.8m ϕ	4	95	47	142	A2
L 9	1.8m ϕ	5	140	52	192	Ay
L 10	1.8m ϕ	5	140	52	192	Ay
L 11	1.8m ϕ	5	140	52	192	Ay
L 12	1.8m ϕ	5	140	52	192	Ay
L 13	1.8m ϕ	6	195	73	268	C
L 14	1.8m ϕ	6	195	73	268	C
L 15	1.8m ϕ	6	195	73	268	C
L 16	1.8m ϕ	6	195	73	268	C
L 17	1.8m ϕ	6	195	89	284	C
L 18	1.8m ϕ	6	195	89	284	C
L 19	1.8m ϕ	5	140	48	188	A1
L 20	1.8m ϕ	5	140	48	188	A1
L 21	1.8m ϕ	4	95	22	117	Ax
L 22	1.8m ϕ	4	95	22	117	Ax
L 23	1.8m ϕ	4	95			
L 24	1.8m ϕ	4	95	4	194	COUNT
L 25	1.8m ϕ	4	95			
L 26	1.8m ϕ	4	95	36	226	COUNT
L 27	1.8m ϕ	4	95			
L 28	1.8m ϕ	4	95	64	254	COUNT
L 29	1.8m ϕ	4	95			
L 30	1.8m ϕ	4	95	33	223	COUNT

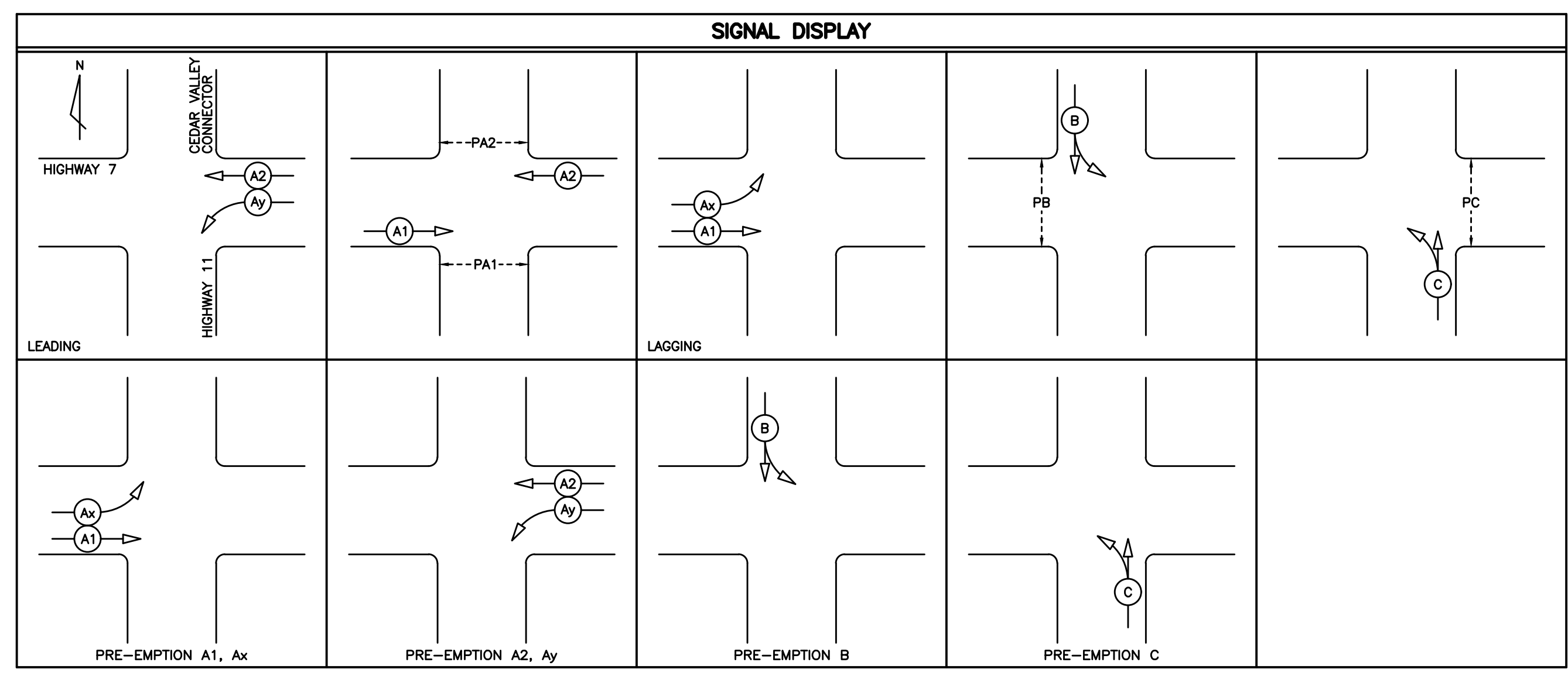
FOR MINISTRY USE ONLY
THIS DRAWING SUPERSEDES
DRAWING TE-90064-9

REFER TO SHEET 1 FOR NOTES

(T) - INDICATES TUNNEL VISOR

ALL DIMENSIONS ARE IN MILLIMETERS
EXCEPT WHERE NOTED

SEE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION"
FOR APPLICABLE STANDARD DRAWINGS



DMD & Associates Ltd.
#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
www.dmdeng.com 604/589-9010
office@dmdeng.com Fax 604/589-9012
DMD PROJECT No. 5555-16-03 of 05

BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
ELECTRICAL ENGINEERING CENTRE

CAD FILENAME 170233A.dwg

REV	DATE	REVISIONS	DRAWN
.	JUL18	DRAWING ISSUED	YJ
A	JUN19	RECORD DRAWING	YJ

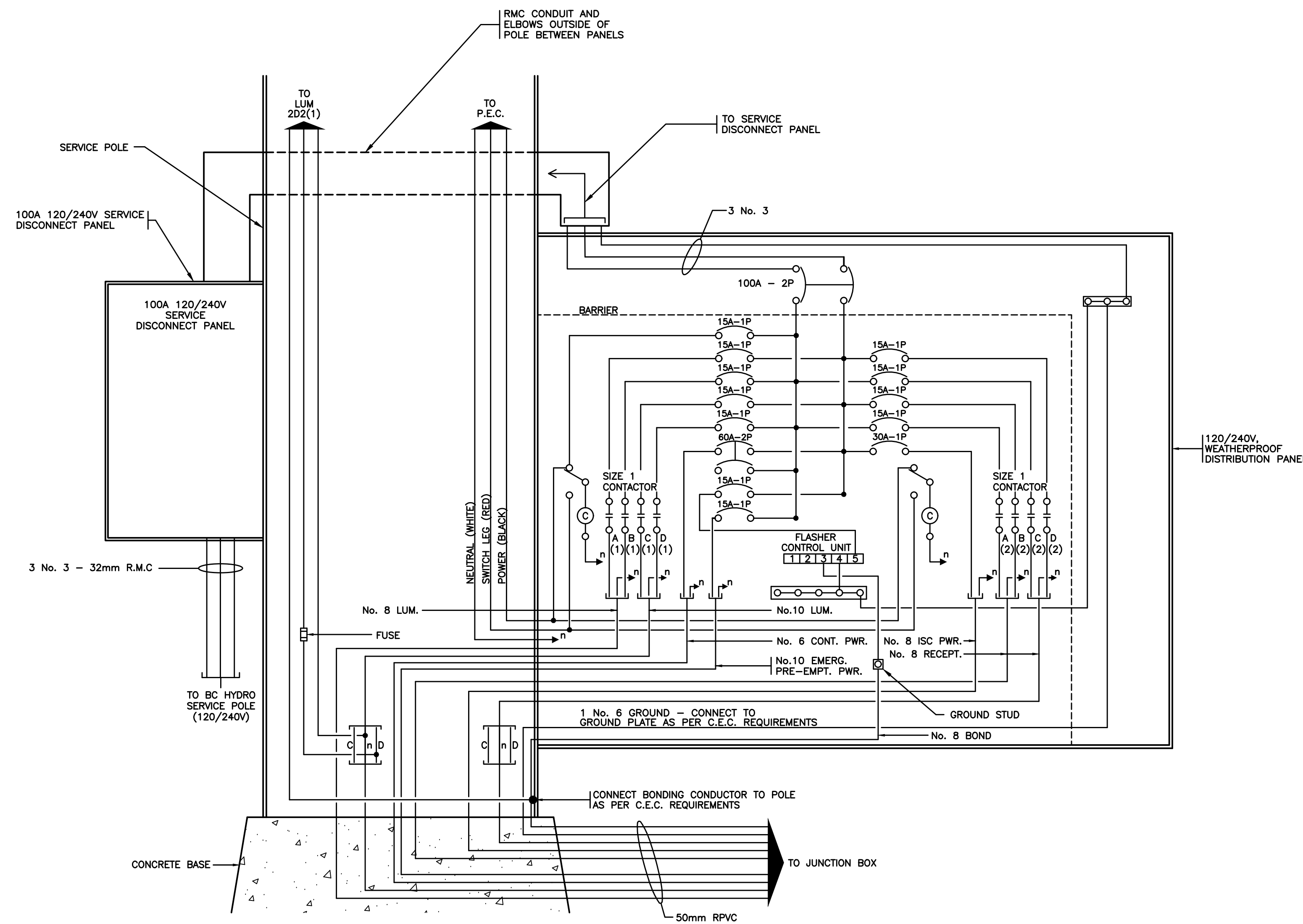
SIGNAL AND LIGHTING MODIFICATION
HIGHWAY 7 AND HIGHWAY 11 / CEDAR VALLEY CONNECTOR
AT MISSION

SIGNAL DISPLAY - ELEVATIONS - DETECTOR LOOP TABLE

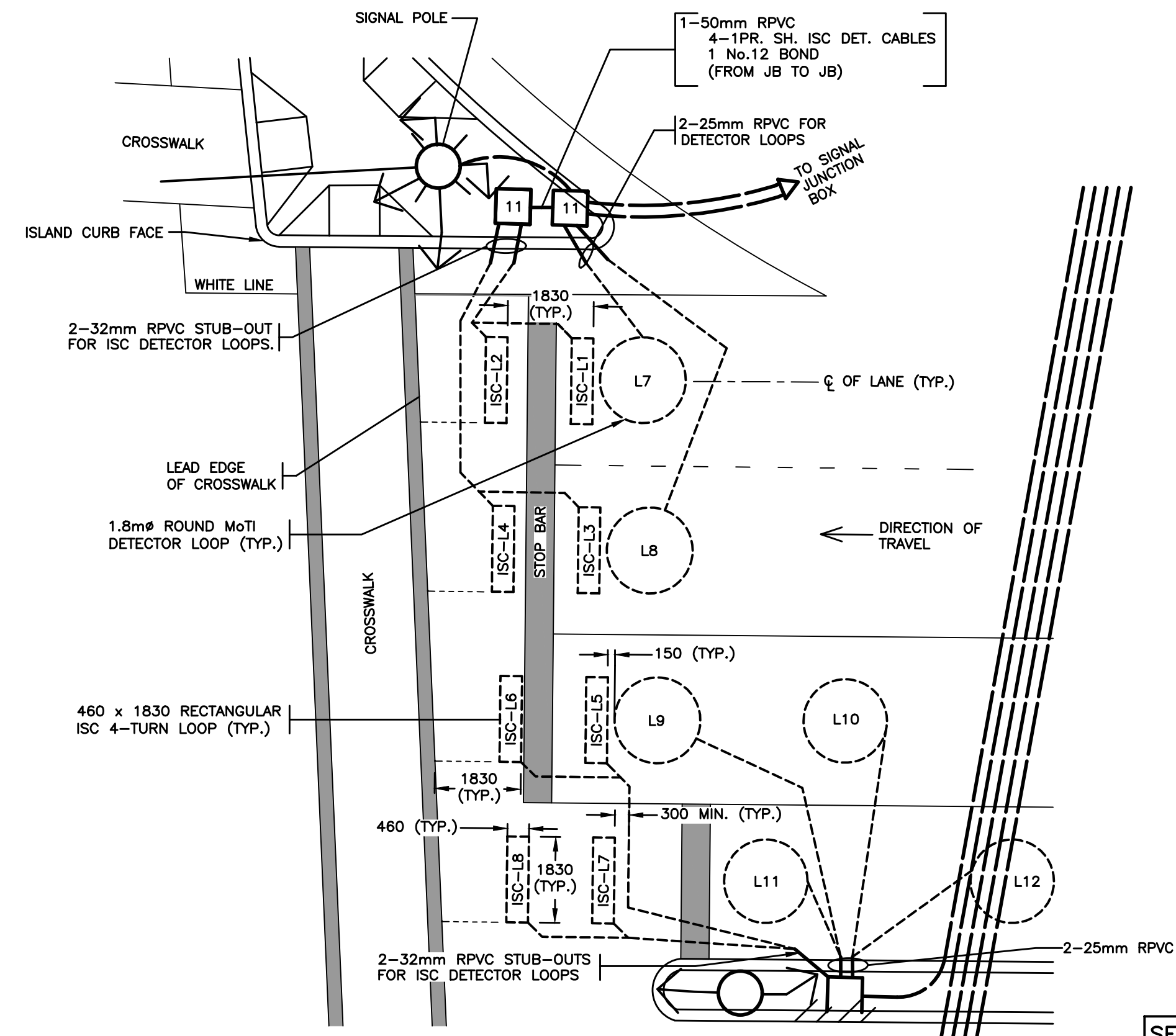
DESIGNED	KGS	DATE	JUN19
QUALITY CONTROL	KGS	DATE	JUN19
QUALITY ASSURANCE	NB	DATE	JUN19
TRAN ELECTRICAL DESIGN REVIEW		DATE	

SHEET NUMBER 3 OF 4
DRAWING NUMBER TE-17023-3

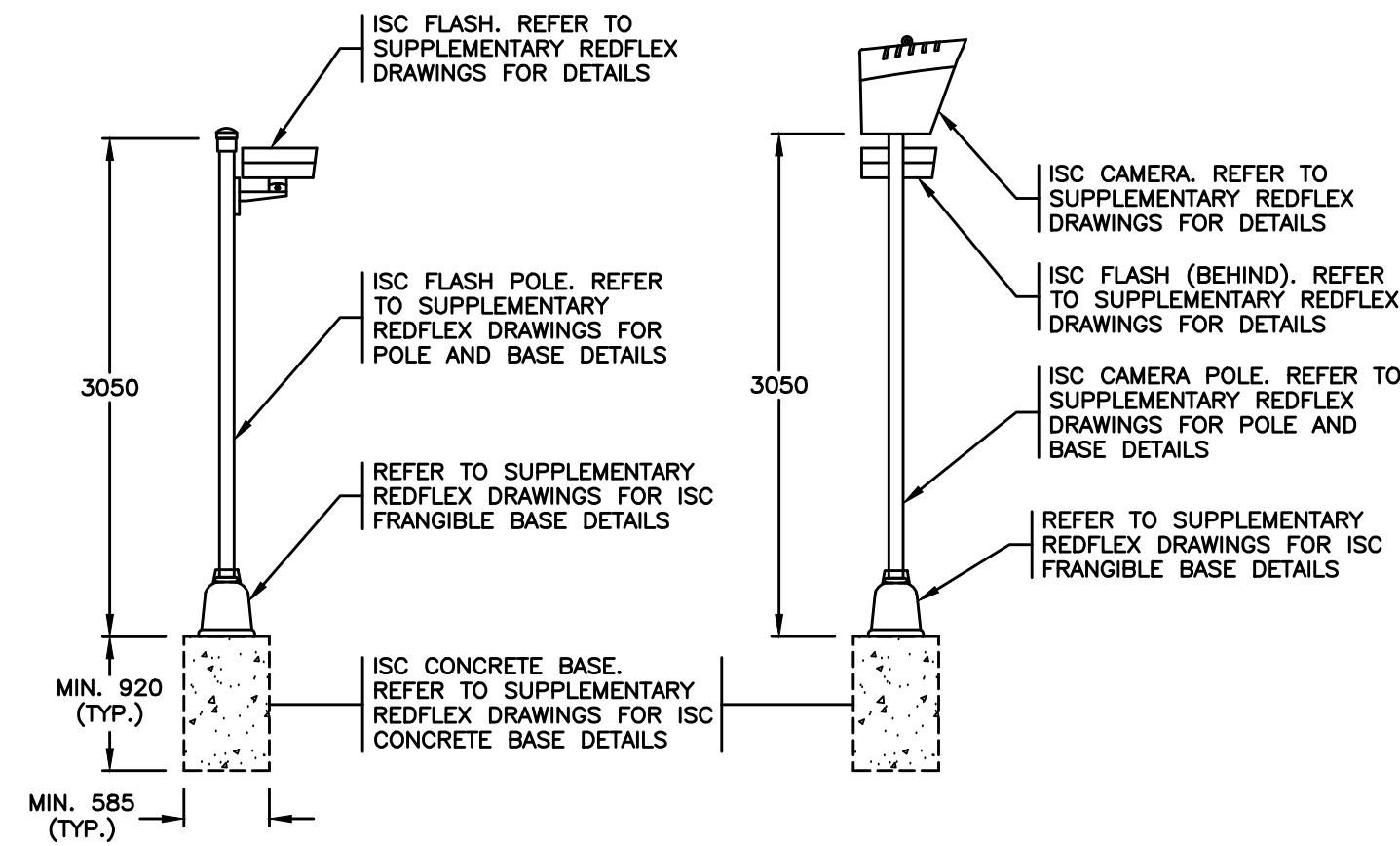
H-308 CANCEL PRINTS BEARING PREVIOUS LETTER



WIRING DIAGRAM - DISTRIBUTION PANEL No. 2
N.T.S.

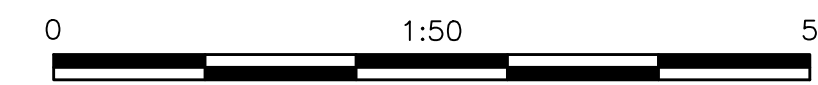


ISC LOOP LAYOUT ENLARGEMENT DETAIL
1:100



ISC FLASH POLE **ISC CAMERA / FLASH POLE**

ISC POLE ELEVATIONS



DMD & Associates Ltd.
#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
www.dmdeng.com 604/589-9010
office@dmdeng.com Fax 604/589-9012
DMD PROJECT No. 5555-16-04 of 05

BRITISH COLUMBIA **MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**
ELECTRICAL ENGINEERING CENTRE

CAD FILENAME: 170234A.dwg

REV	DATE	REVISIONS	DRAWN
.	JUL18	DRAWING ISSUED	YJ
A	JUN19	RECORD DRAWING	YJ

ELECTRICAL ENGINEER OF RECORD (FOR CURRENT REVISION)
DATE

SHEET NUMBER: SHEET 4 OF 4

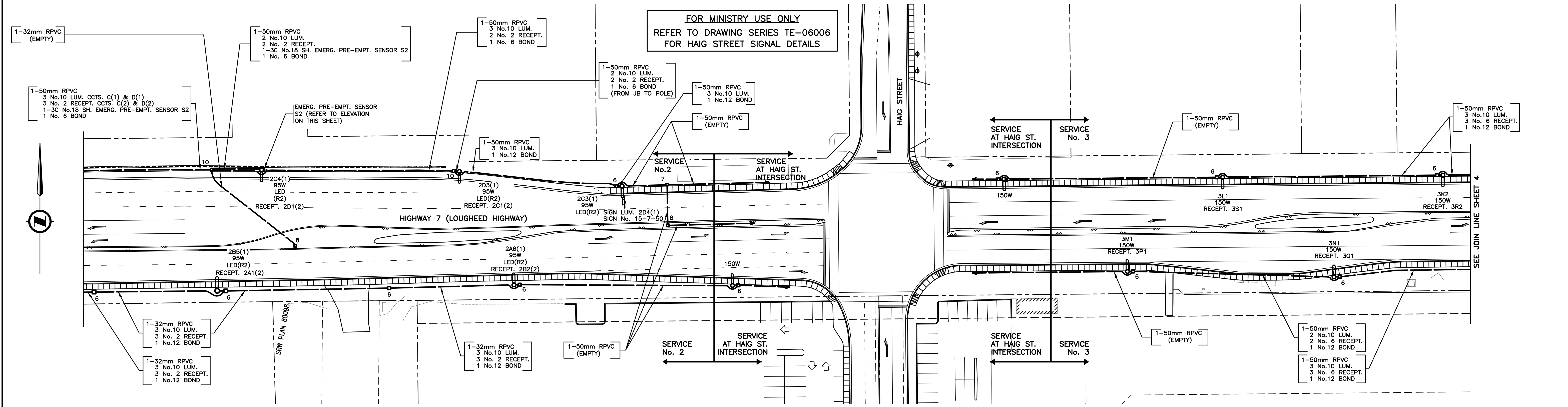
SIGNAL AND LIGHTING MODIFICATION
HIGHWAY 7 AND HIGHWAY 11 / CEDAR VALLEY CONNECTOR
AT MISSION

SITE PLAN ENLARGEMENT - ELEVATIONS - WIRING DIAGRAM

DESIGNED	KGS	DATE	JUN19
QUALITY CONTROL	KGS	DATE	JUN19
QUALITY ASSURANCE	NB	DATE	JUN19
TRAN ELECTRICAL DESIGN REVIEW		DATE	

HWY DIST: 1 REG: 1 DRAWING NUMBER: TE-17023-4

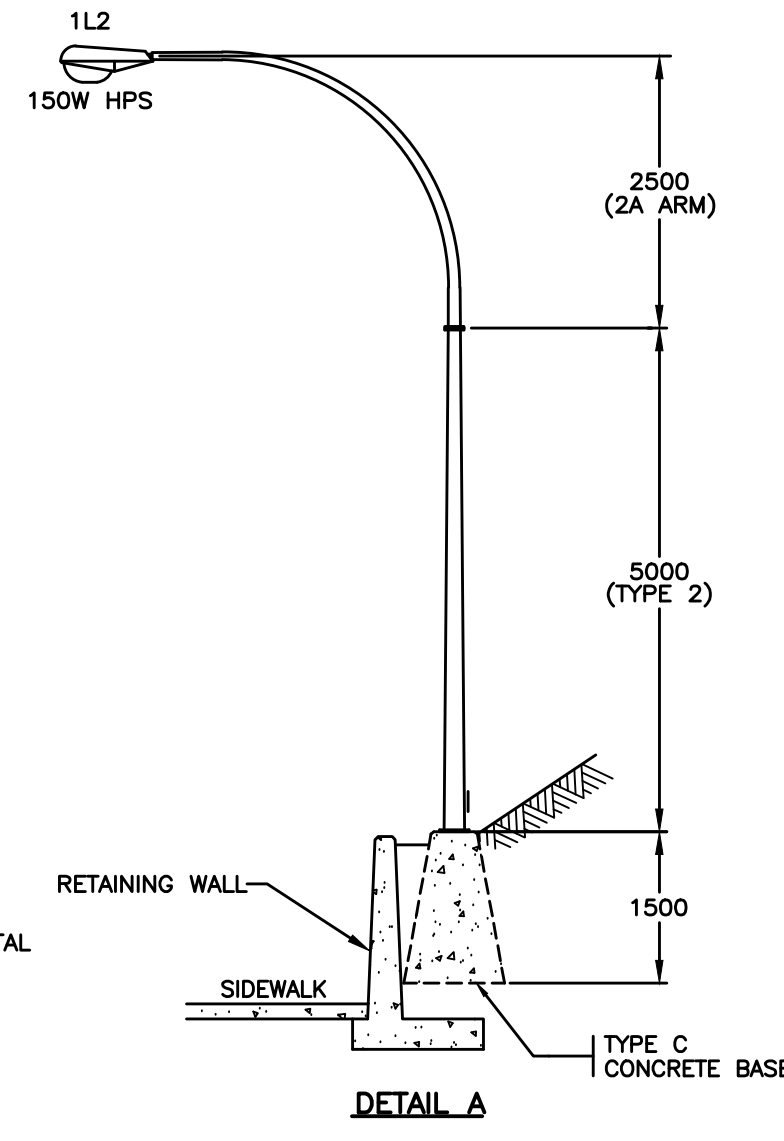
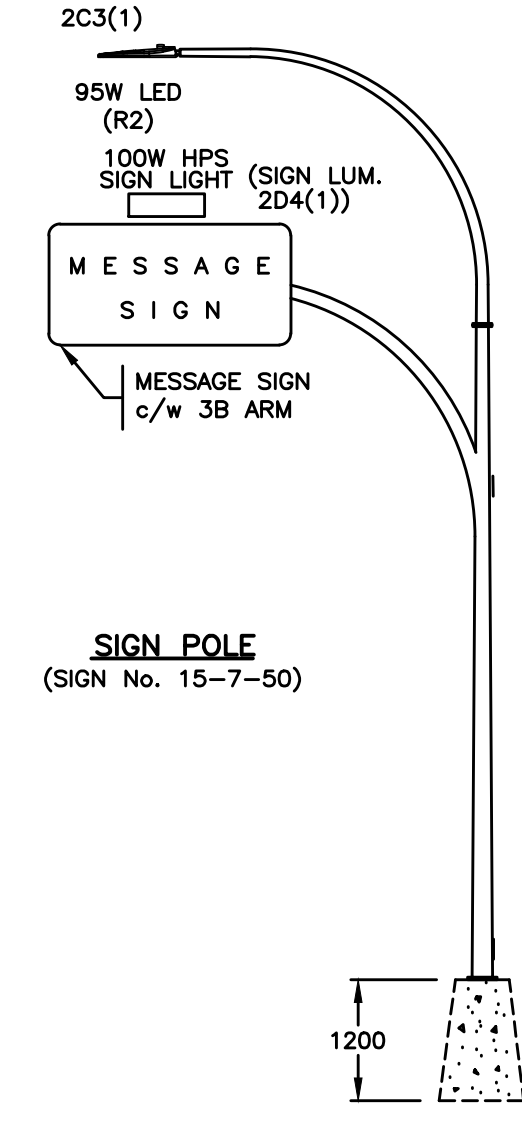
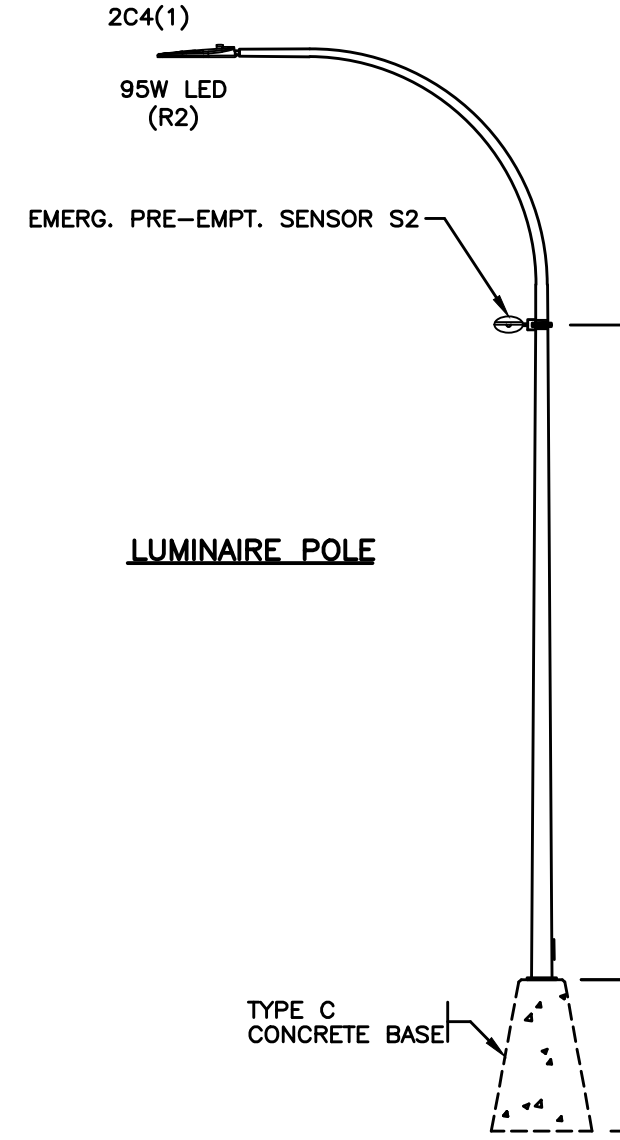
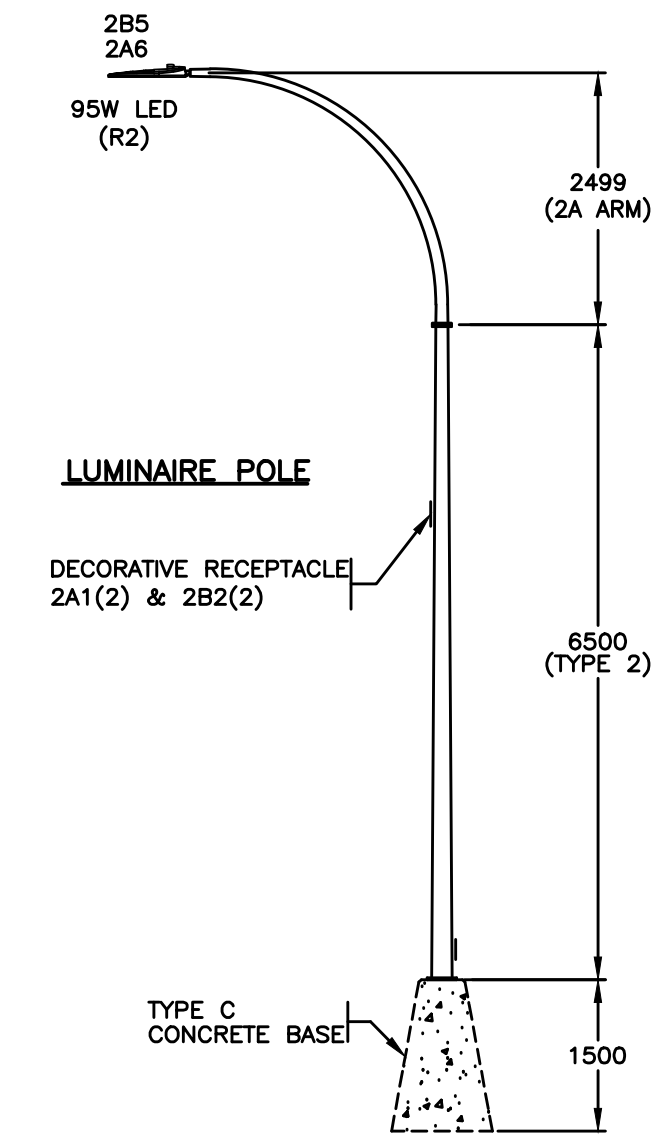
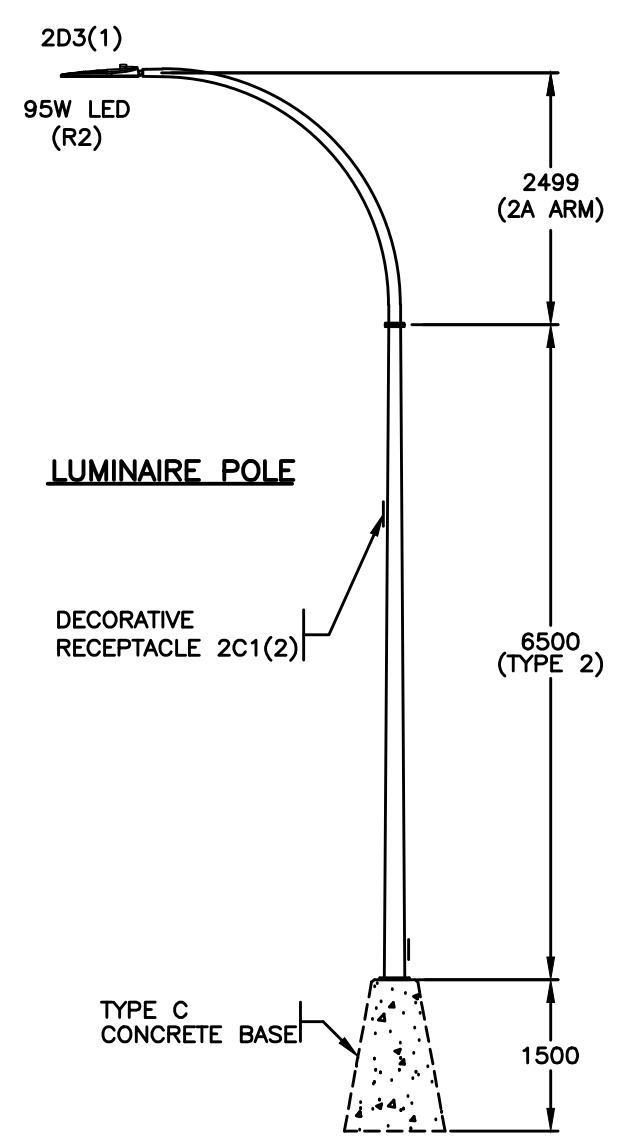
CANCEL PRINTS BEARING PREVIOUS LETTER



FOR MINISTRY USE ONLY
FOR CONTINUATION OF STREET LIGHTING SEE TE-17023-1

FOR MINISTRY USE ONLY
REFER TO DRAWING SERIES TE-06006
FOR HAIG STREET SIGNAL DETAILS

SITE PLAN
0 1:500 25



ELEVATIONS
0 1:75 5

REFER TO SHEET 1 FOR NOTES
POSTED SPEED LIMIT 50 km/h
DO NOT USE THIS DRAWING FOR PAVEMENT MARKINGS
ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT WHERE NOTED

SEE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" FOR APPLICABLE STANDARD DRAWINGS

DMD & Associates Ltd.
#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
www.dmdeng.com 604/589-9010
office@dmdeng.com Fax 604/589-9012
DMD PROJECT No. 5555-16-05 of 05

BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
ELECTRICAL ENGINEERING CENTRE

SIGNAL AND LIGHTING MODIFICATION
HIGHWAY 7 AND HIGHWAY 11 / CEDAR VALLEY CONNECTOR
AT MISSION

REV	DATE	REVISIONS	DRAWN
C	JUN/05	EMERG. PRE-EMPTION EQUIPMENT ADDED TO WIRING DIAGRAM AND LUMINAIRE POLE 2A2(1)	JDM
D	JUL/06	CONDUCTOR AND LUMINAIRE POLES REVISED DUE TO SIGNALIZATION OF HAIG ST - REFER TO DRAWING SERIES TE-06006 FOR SIGNAL DETAILS	JDM
E	JAN/08	RECORD DRAWING	EC
F	JUL/11	EQUIPMENT NORTH SIDE OF HIGHWAY 7 REVISED TO SUIT NEW GEOMETRICS	JDM
G	JUN/12	RECORD DRAWING	BK
H	JUL/18	REPLACE LIGHTING WITH LED LUMINAIRE ON SERVICE 2	YJ
I	JUN/19	RECORD DRAWING	YJ

SITE PLAN - ELEVATIONS			
DESIGNED	KGS	DATE	JUN/19
QUALITY CONTROL	KGS	DATE	JUN/19
QUALITY ASSURANCE	NB	DATE	JUN/19
TRAN ELECTRICAL DESIGN REVIEW		DATE	
SHEET NUMBER	SHEET 3 OF 11		
HWY DIST	REG	DRAWING NUMBER	TE-90064-3

CANCEL PRINTS BEARING PREVIOUS LETTER