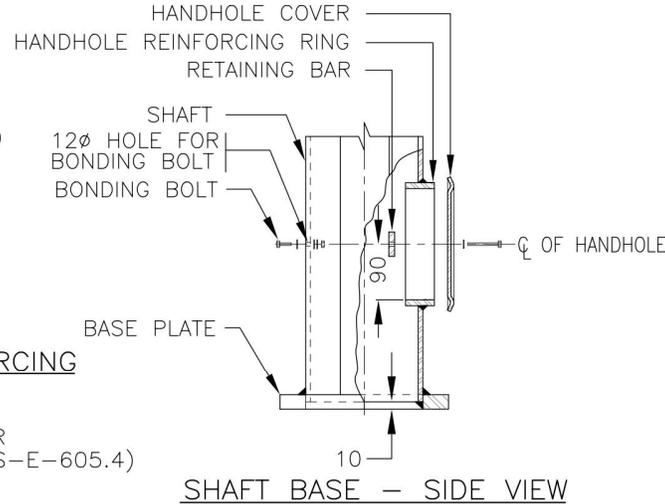
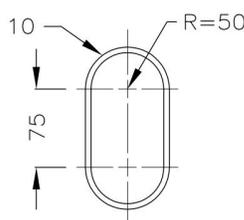
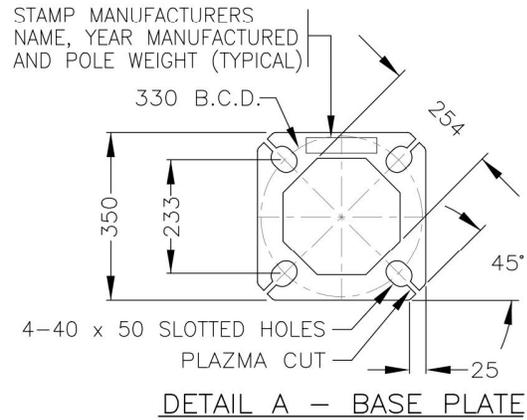


MAXIMUM POLE LOADING	
DEAD LOADS	WEIGHT OF POLE + LUMINAIRE MAX 26 kg MASS +15% ALLOWANCE FOR FUTURE
LIVE LOADS	1.2 kN TENSION O/H CABLE AT LUMINAIRE OR 1.5 m ² SIGNAGE AT 3.0 m ABOVE GRADE
WIND LOADS	500 Pa WITH 2.5 WIND GUST FACTOR (160 km/h WIND GUSTS)



SINGLE DAVIT

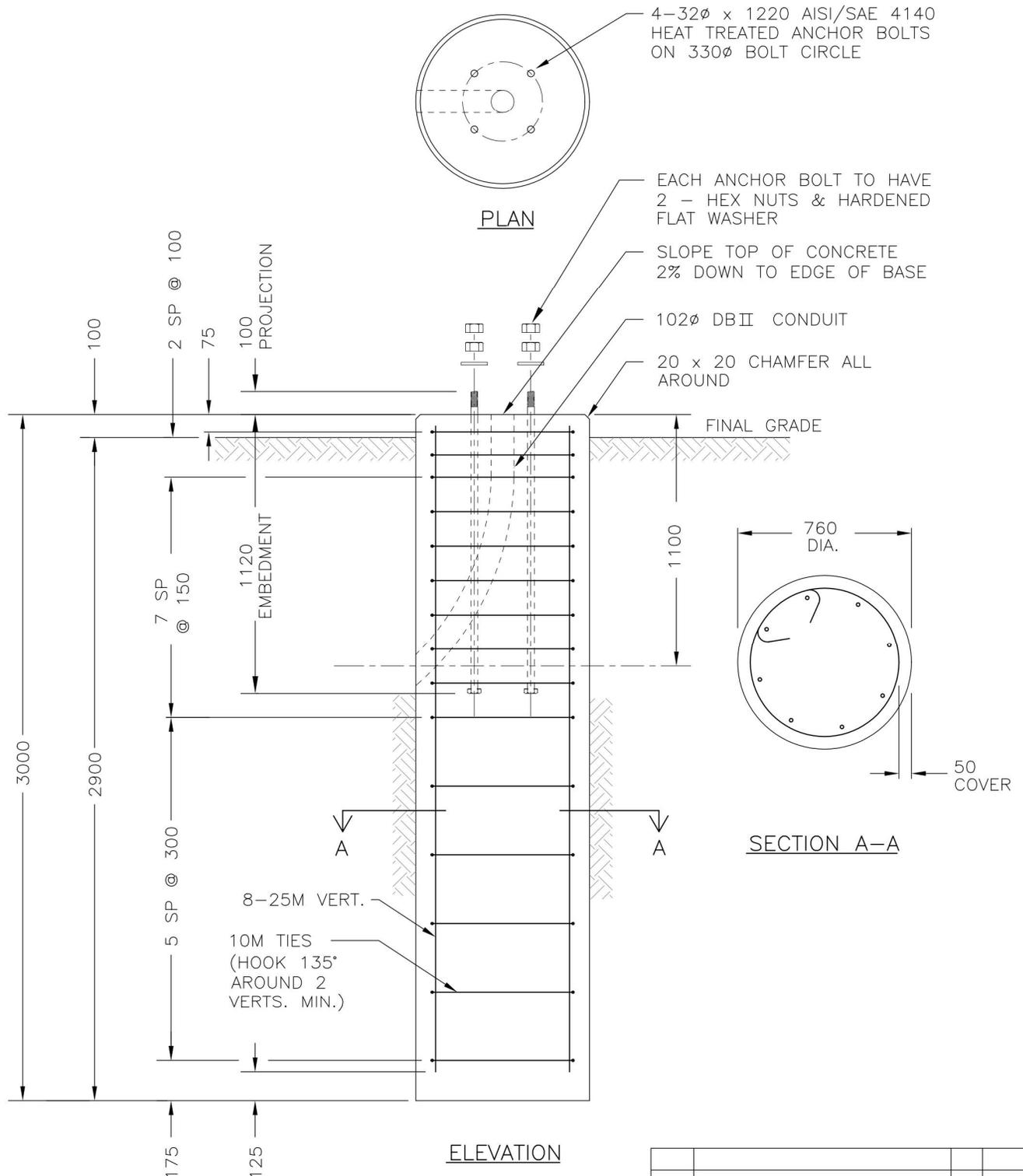


DETAIL A - BASE PLATE

DIMENSIONS ARE MILLIMETRES UNLESS OTHERWISE NOTED



No.	DESCRIPTION	BY	DATE
		DRAWING TCS-E-605.1	
		Date: MAR 2003	
ROADWAY LIGHTING SINGLE DAVIT POLES 13.0 m AND 15.0 m			
Prepared By: DVH	Checked By: PMS	Scale: N.T.S.	SECTION E6

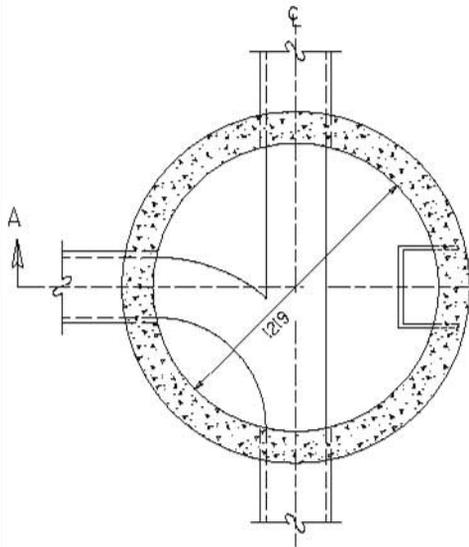


No.	DESCRIPTION	BY	DATE
-----	-------------	----	------

	DRAWING TCS-E-601.1
	Date: MAR 2003

ROADWAY LIGHTING
CAST-IN-PLACE CONCRETE BASE
FOR UP TO 15 m DOUBLE DAVIT

Prepared By: GY	Checked By: DE	Scale: N.T.S.	SECTION E6
-----------------	----------------	---------------	-------------------

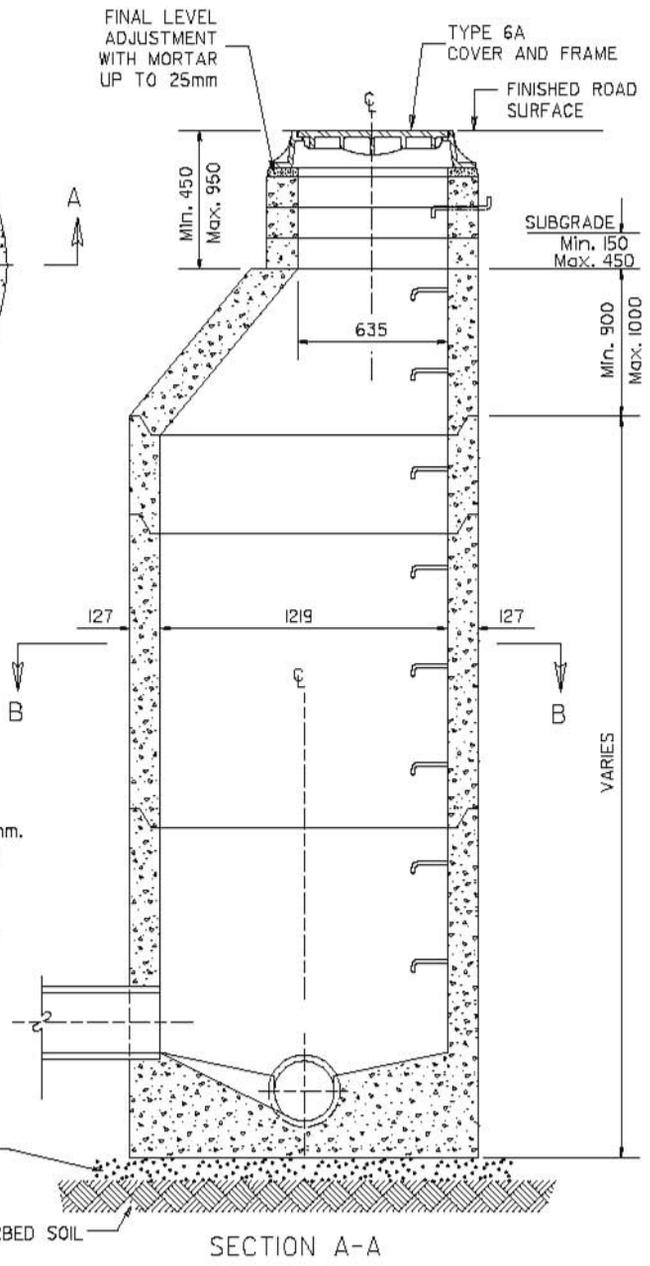


SECTION B-B

FINAL LEVEL ADJUSTMENT WITH MORTAR UP TO 25mm

TYPE 6A COVER AND FRAME

FINISHED ROAD SURFACE



SECTION A-A

NOTES:

1. THIS STANDARD APPLIES TO MANHOLES ON PIPING OF MAXIMUM DIAMETER 600mm AND MINIMUM DEFLECTION ANGLE OF 120°.
2. 1500mm MANHOLE SHALL BE USED ON PIPING DIAMETER 750mm, 900mm AND 1050mm. FOR PIPES DIAMETER 1200mm AND LARGER, MANHOLE TEE RISERS SHALL BE USED.
3. PREBENCHED MANHOLE BASE UNITS WITH INTEGRAL GASKETS SHALL BE USED.
4. THE SEWER PIPING IS AN EXAMPLE ONLY. REFER TO PROJECT DRAWINGS FOR LAYOUT AND ELEVATIONS.

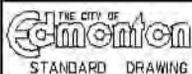
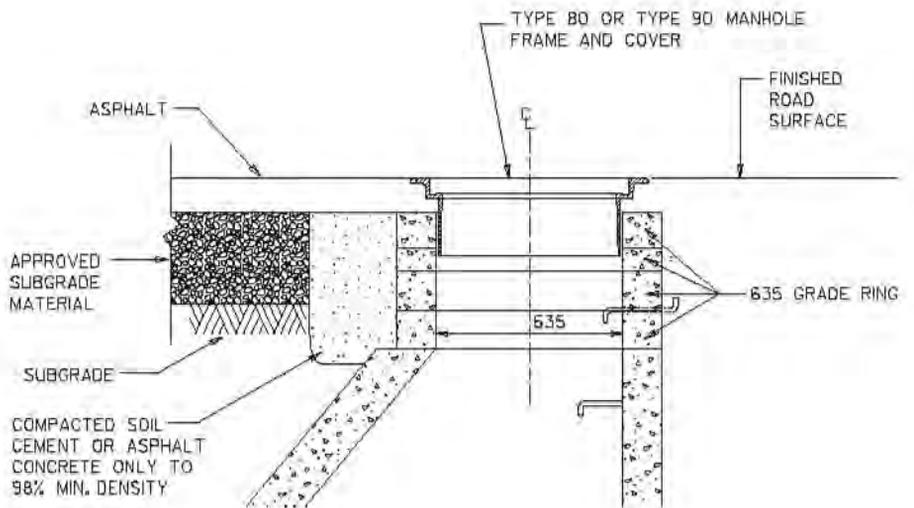
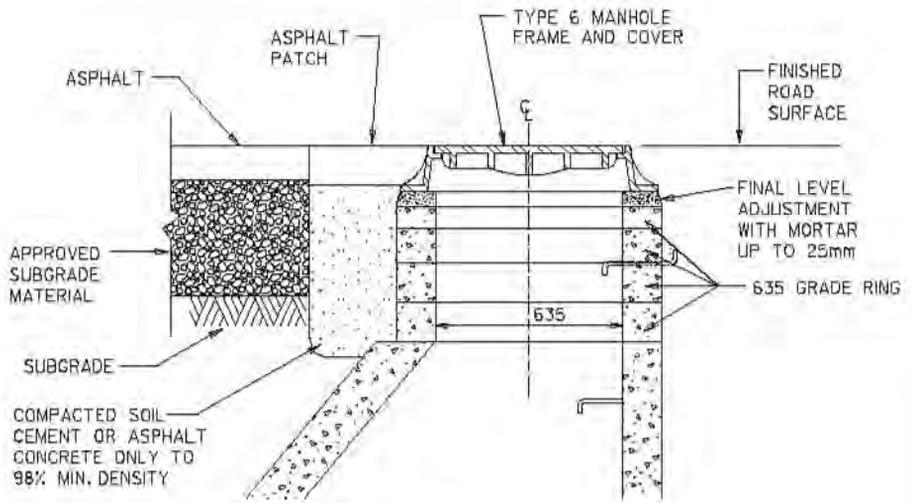


STANDARD 1200 MANHOLE FOR PIPING UP TO 600mm DIAMETER WITH TYPE 6A COVER AND FRAME

Date Approved 98-11-16	Drawn By J.L.
Scale NTS	Checked By MJB

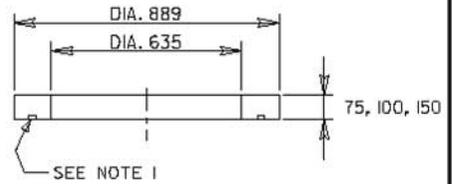
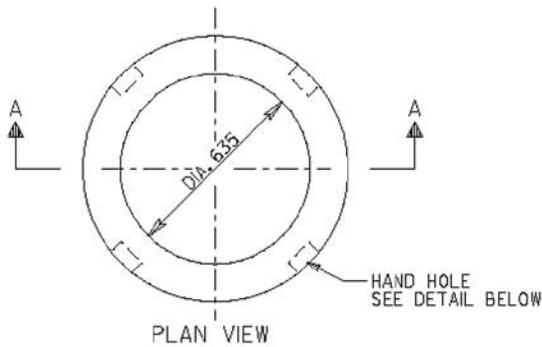
Approved
[Signature]

Revision # 0	Drawing # 7013
-----------------	-------------------

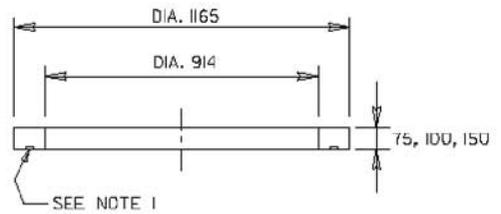
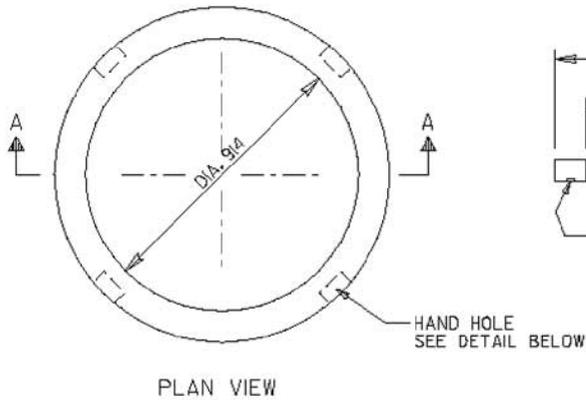


NECK SECTION DETAILS FOR STANDARD 1200 MANHOLE

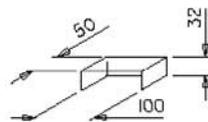
Date Approved: 03-02-26	Drawn By: J.L., D.L.	Approved 	Revision # 1	Drawing # 7014
Scale: NTS	Checked By: MJB	-----		



635 GRADE RING

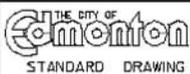


900 GRADE RING



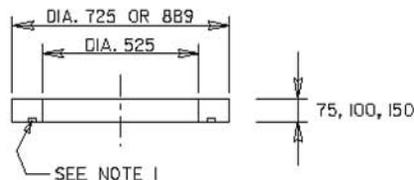
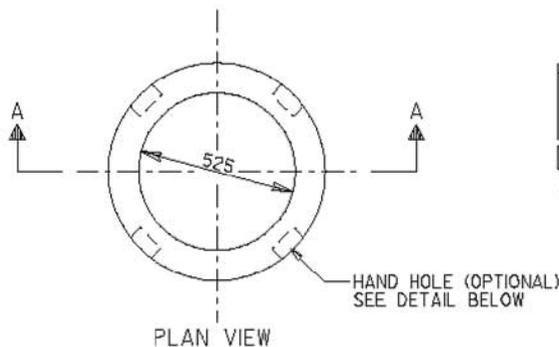
NOTES:

1. A CONCENTRIC GROOVE (SUITABLE FOR SEALANT) LOCATED AT MID CROSS SECTION



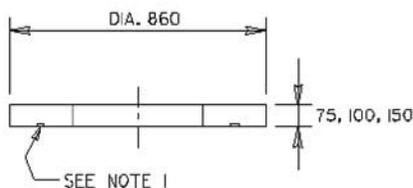
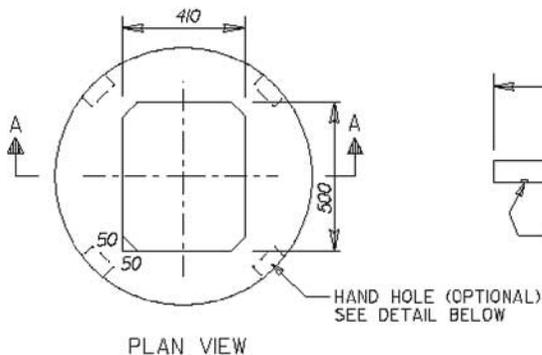
GRADE RINGS

Date Approved: 03-02-26	Drawn By: J.L.	Approved 	Revision * 1	Drawing * 7030
Scale: NTS	Checked By: MJB	-----		



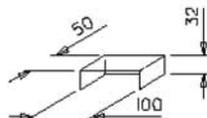
525 RING/TOP

FOR USE WITH TYPE 2A FRAME AND GRATING



K-7 RING/TOP

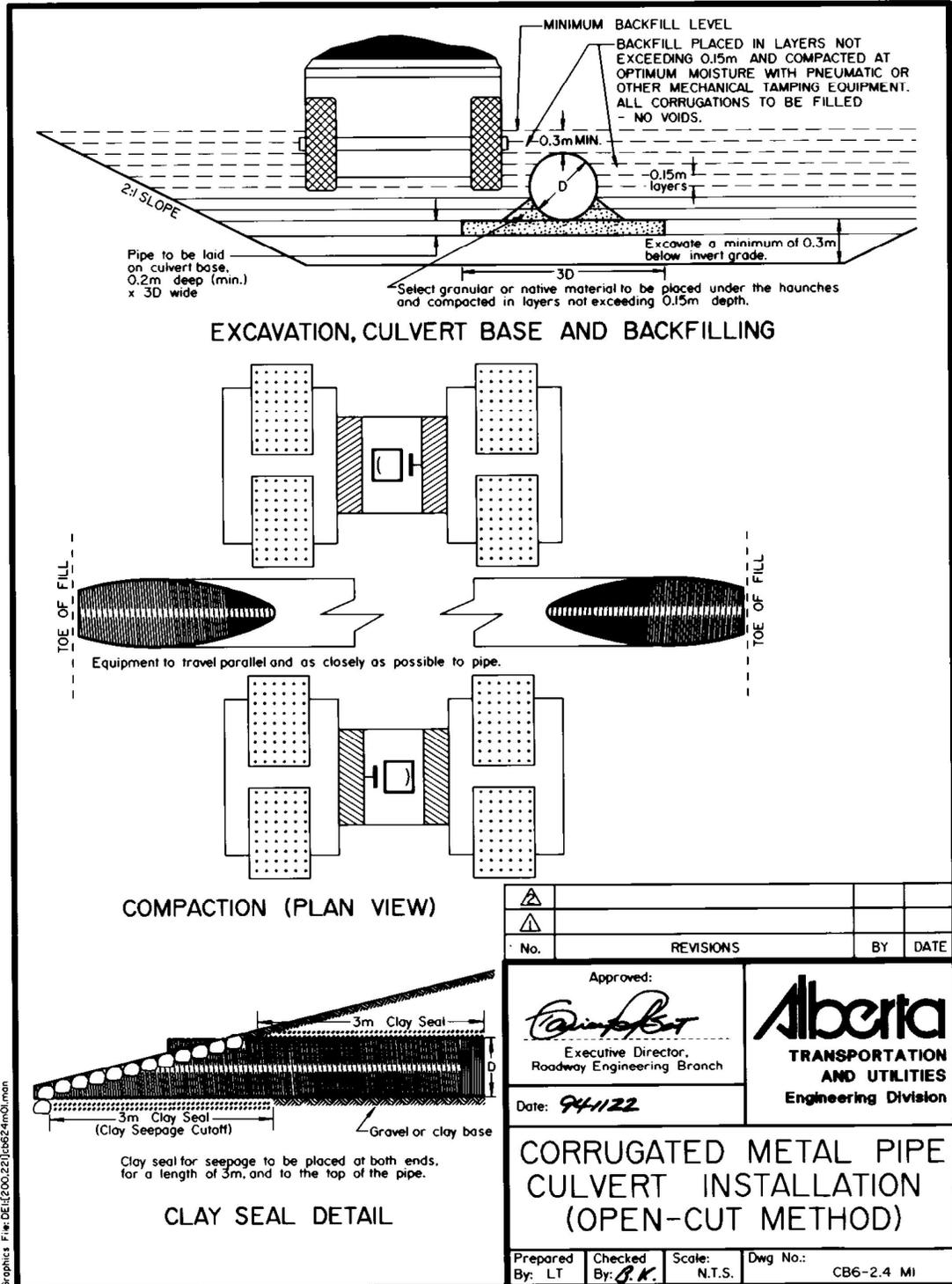
FOR USE WITH TYPE K-7 OR F-51 WITHOUT SIDE INLET FRAMES AND GRATINGS

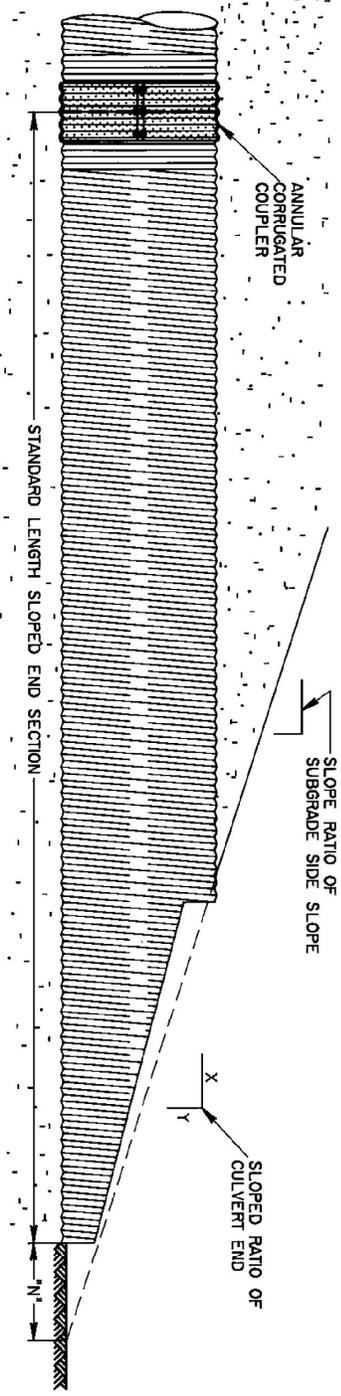


HAND HOLE DETAIL

NOTES:

1. A CONCENTRIC GROOVE (SUITABLE FOR SEALANT) LOCATED AT MID CROSS SECTION OR 50mm FROM THE EDGE





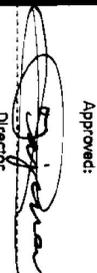
SELECTION OF SLOPE RATIO FOR SLOPED END SECTION:

A 4 : 1 SLOPED END SECTION SHALL BE USED IN CONJUNCTION WITH ALL SUBGRADE SIDE SLOPES WITH THE EXCEPTION OF 1:200mm DIA. AND LARGER WHERE APPLICABLE.

C.S.P. DIAMETER - D mm	SLOPE RATIO OF END X:Y	"N" - "M"				INVERT LENGTH OF SLOPED END SEC. METRE
		WITH 3:1 SUBGRADE SLOPE RATIO	WITH 4:1 SUBGRADE SLOPE RATIO	WITH 5:1 SUBGRADE SLOPE RATIO	WITH 6:1 SUBGRADE SLOPE RATIO	
400	4 : 1	0.3	0.5	0.8	1.2	6.0
500	4 : 1	0.3	0.6	0.9	1.5	6.0
600	4 : 1	0.3	0.6	1.0	1.6	6.0
700	4 : 1	0.3	0.8	1.2	2.0	6.0
800	4 : 1	0.4	0.9	1.4	2.3	6.0
900	4 : 1	0.5	1.0	1.6	2.5	6.0
1000	4 : 1	0.5	1.2	1.8	2.8	6.0
1200	3 : 1	0.9	1.7	2.4	3.7	6.0
	4 : 1	0.6	1.4	2.2	3.5	6.0
	3 : 1	1.0	1.9	2.8	4.3	6.0
1400	4 : 1	0.6	1.6	2.5	3.9	6.0

DETERMINING INSTALLATION LENGTH

THE LENGTH OF PIPE CULVERT TO BE INSTALLED SHALL BE DETERMINED AS FOLLOWS:
 1) ESTABLISH THE THEORETICAL LENGTH BASED ON SLOPE STAKE REQUIREMENTS.
 2) ADJUST THE THEORETICAL LENGTH BY APPLYING THE END CORRECTION "N" AS DETERMINED FROM THE TABLE TO EACH END OF THE CULVERT.
 3) INSTALLATION LENGTH SHALL BE THE LENGTH DETERMINED IN "2" ABOVE, ROUNDED OFF TO THE NEAREST METRE.

Approved:  Director, Design Engineering Branch			
Date: FEBRUARY 27, 1992			
SLOPED END INSTALLATIONS FOR CORRUGATED STEEL PIPE			
Prepared By: B.R.	Checked By: J.R.	Scale: N.T.S.	Dwg No.: CB6-2.4M7
REVISIONS		BY	DATE
No.			