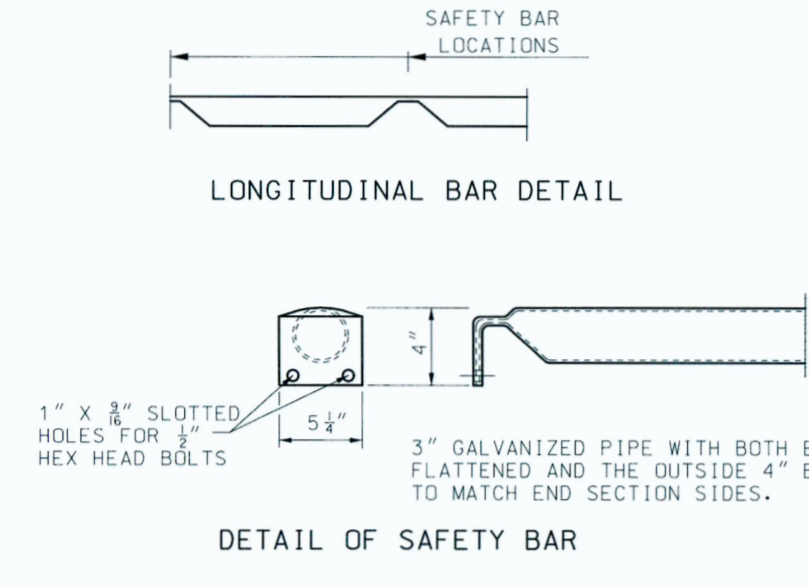


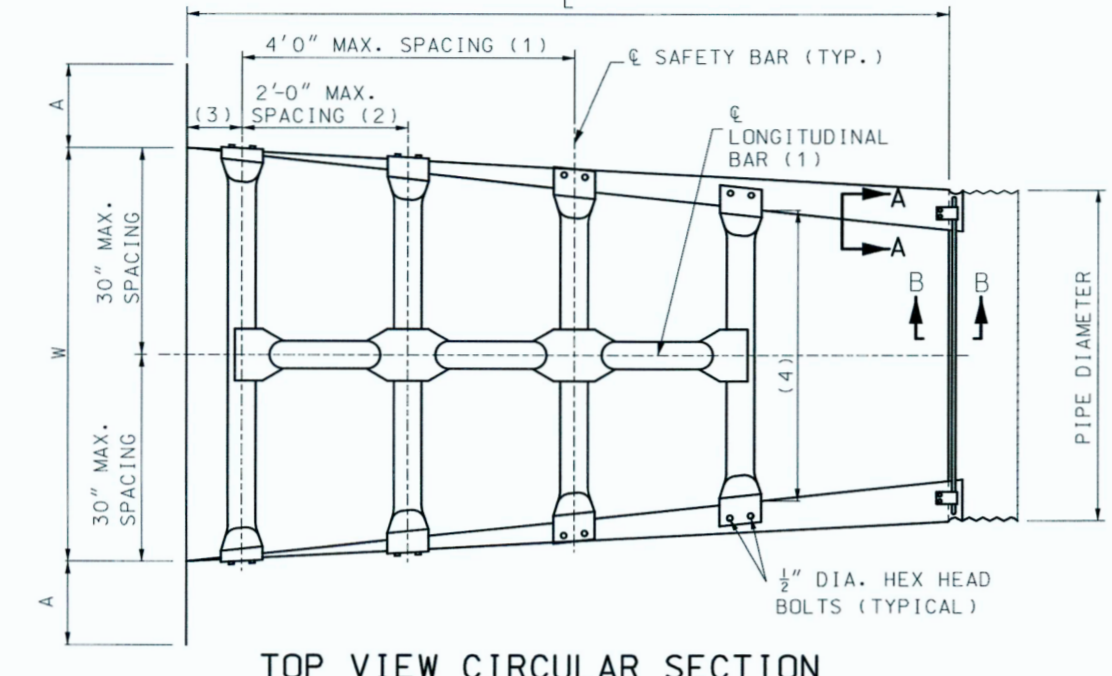
FRONT VIEW CIRCULAR PIPE

SIDE ELEVATION CIRCULAR SECTION

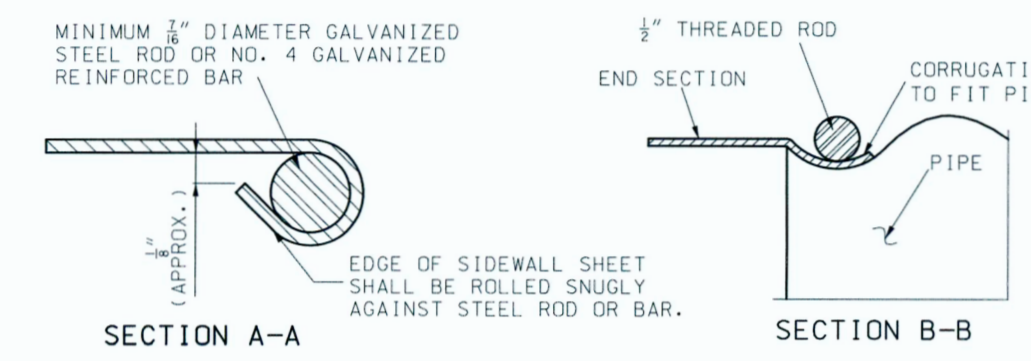


LONGITUDINAL BAR DETAIL

DETAIL OF SAFETY BAR



TOP VIEW CIRCULAR SECTION

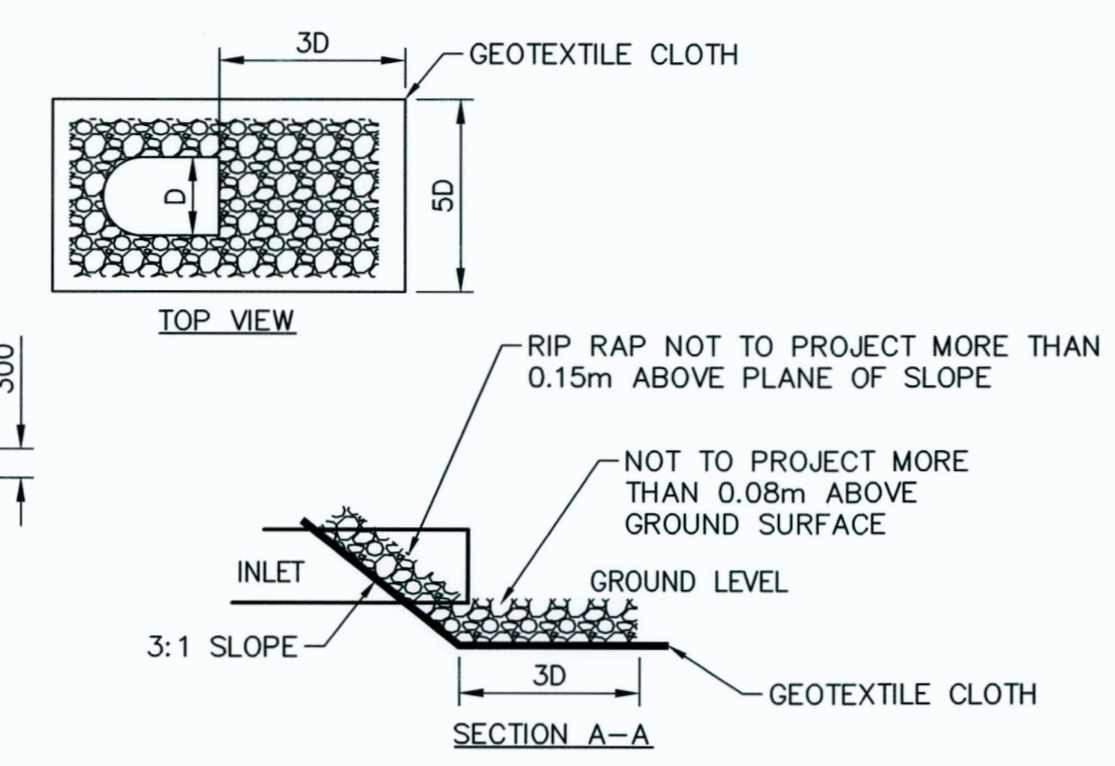


CULVERT END TREATMENT AND SAFETY GRATE DETAIL

SCALE: N.T.S.

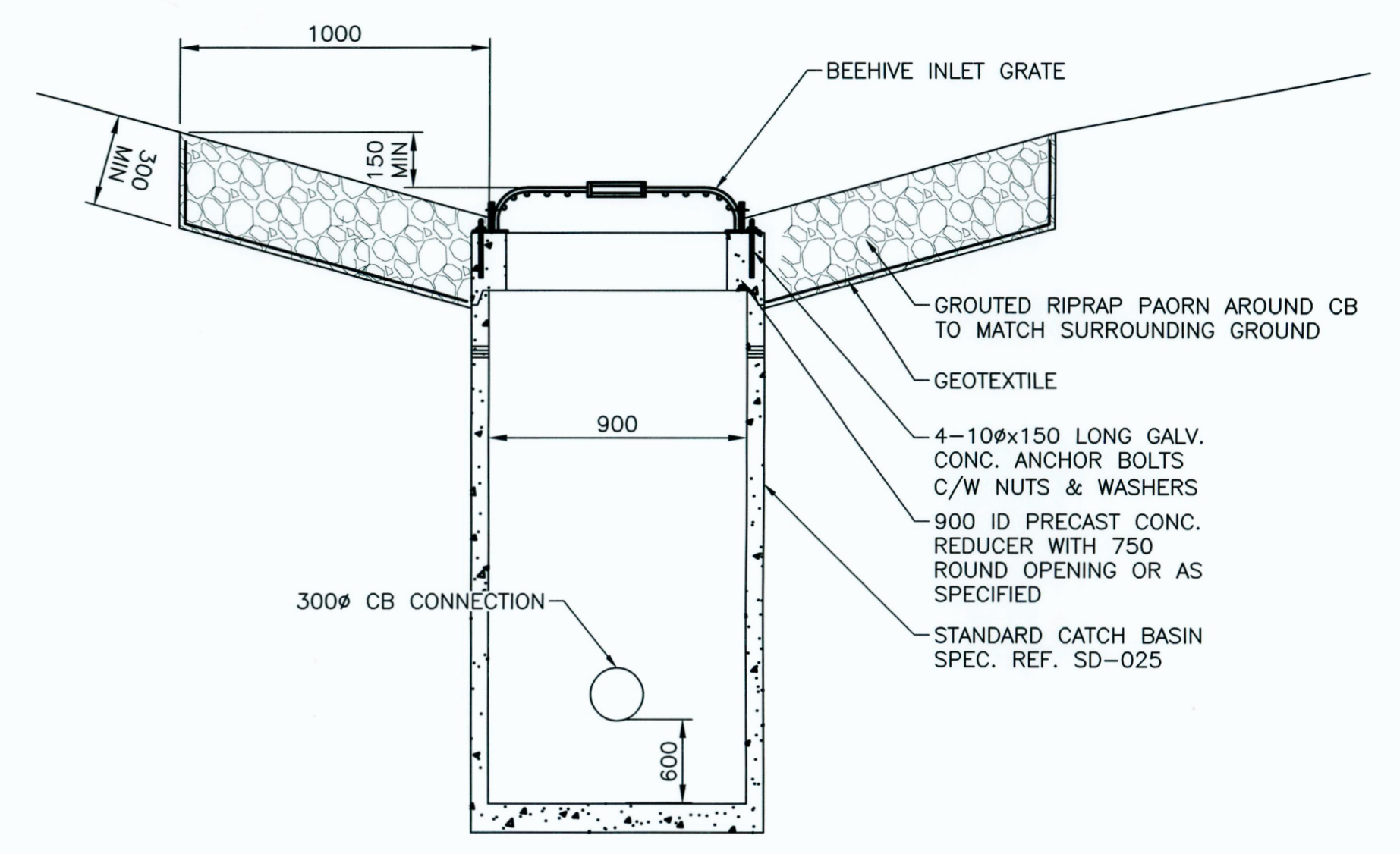
- NOTES:
- DETAIL IS GENERAL, ALTERNATIVE GRATE ARRANGEMENTS WILL BE CONSIDERED. SUBMIT SHOP DRAWINGS TO CONTRACT ADMINISTRATOR FOR REVIEW AND APPROVAL.
 - END SECTIONS INCLUDING ALL BOLTS, NUTS, RODS AND STRAPS SHALL BE GALVANIZED STEEL.

- NOTES:
1. RIP RAP TO BE UNDERLAIN BY GEOTEXTILE FILTER CLOTH THAT IS KEYED INTO NATIVE MATERIAL AT ALL EDGES OF CLOTH
 2. APRON THICKNESS TO BE 0.3 m



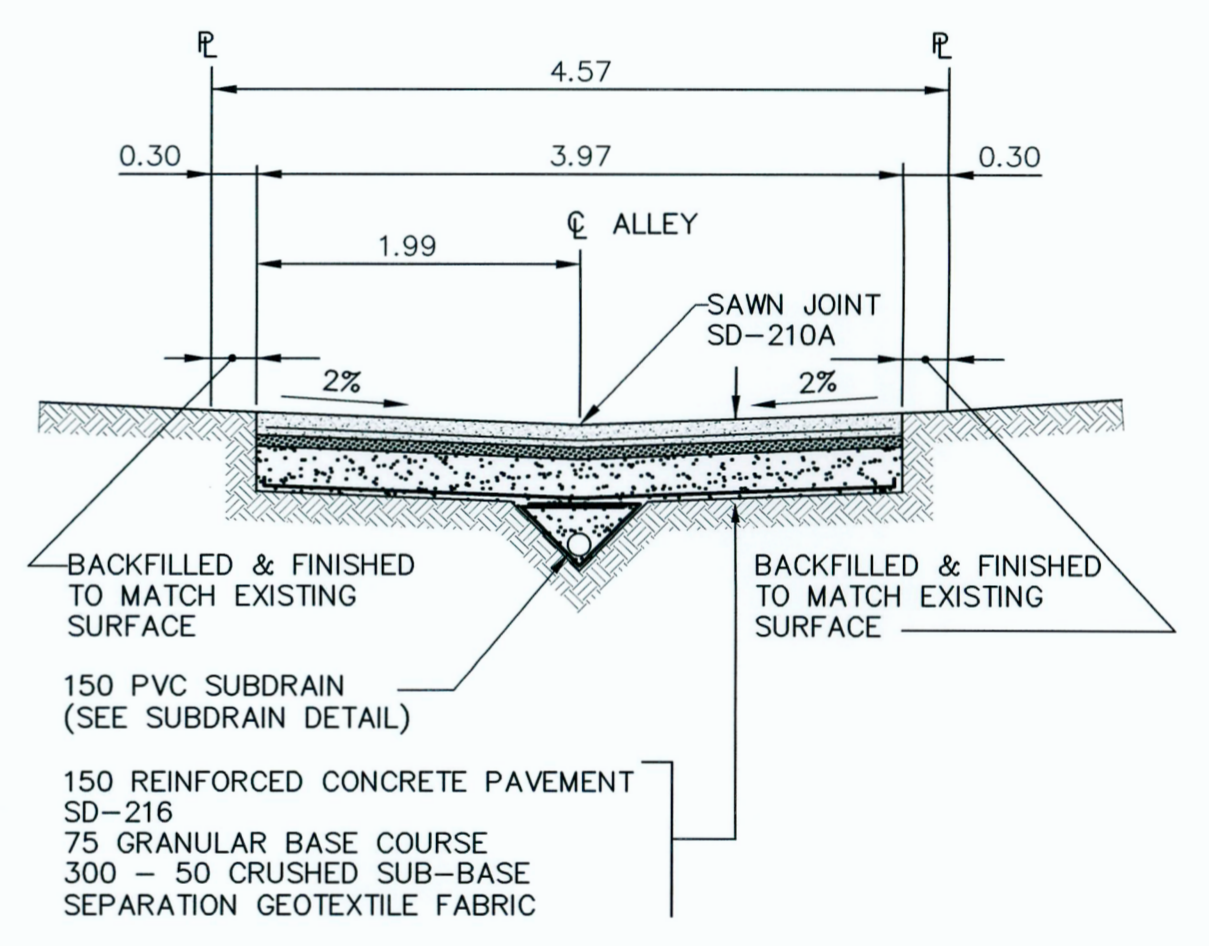
CULVERT INLET DETAIL

SCALE: N.T.S.



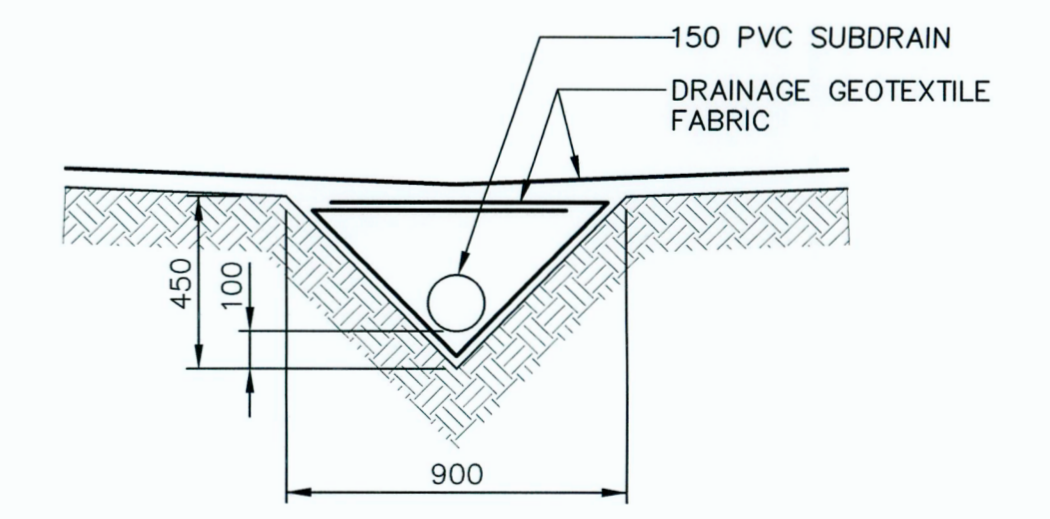
BEEHIVE INLET GRATE AND RIPRAP DETAIL

SCALE: N.T.S.



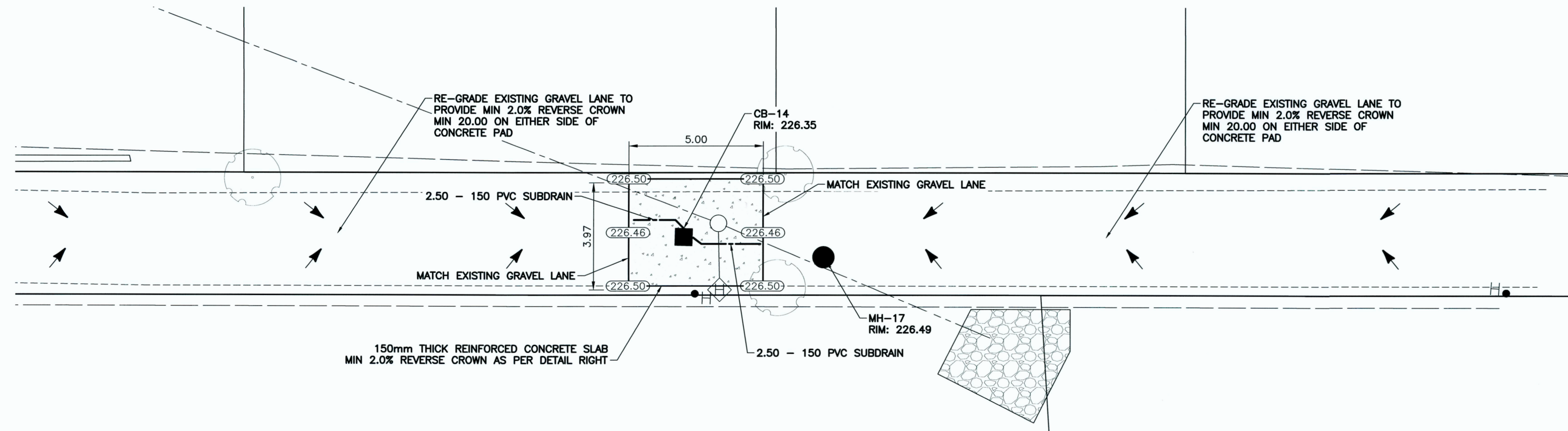
BACK LANE CROSS SECTION

SCALE: N.T.S.



SUBDRAIN DETAIL

SCALE: N.T.S.



IRVING PLACE BACK LANE DETAIL

SCALE: 1:100

FOR INDEX PAGE SEE DWG LD-12121

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

ISSUED FOR TENDER
NOT TO BE USED FOR CONSTRUCTION

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
KGS Group
No. 245

LOCATION APPROVED
UNDERGROUND STRUCTURES

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.

B.M. ELEV.	NO.	ISSUED FOR TENDER	2023 05 10	DATE	BY
	A	ISSUED FOR TENDER	2023 05 10		
	NO.	REVISIONS	DATE	BY	

KGS GROUP

DESIGNED BY GH
DRAWN BY GH
SCALE: HORIZONTAL AS NOTED
VERTICAL NA
DATE 2023 05 10
PLOT DATE: 2023 05 10

CHECKED BY TLF
APPROVED BY RBO
RELEASED FOR CONSTRUCTION
DATE

ENGINEER'S SEAL
PROVINCE OF MANITOBA
P.E.G.T.
HEINRICHS
Member
38162
REGISTERED PROFESSIONAL ENGINEER
CONSULTANT DRAWING NUMBER
22-0107-024_C13

THE CITY OF WINNIPEG
Winnipeg
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION
McLEOD CREEK DRAINAGE IMPROVEMENTS
MISCELLANEOUS DETAILS
SHEET 14 OF 16
CITY DRAWING NUMBER
LD-12133