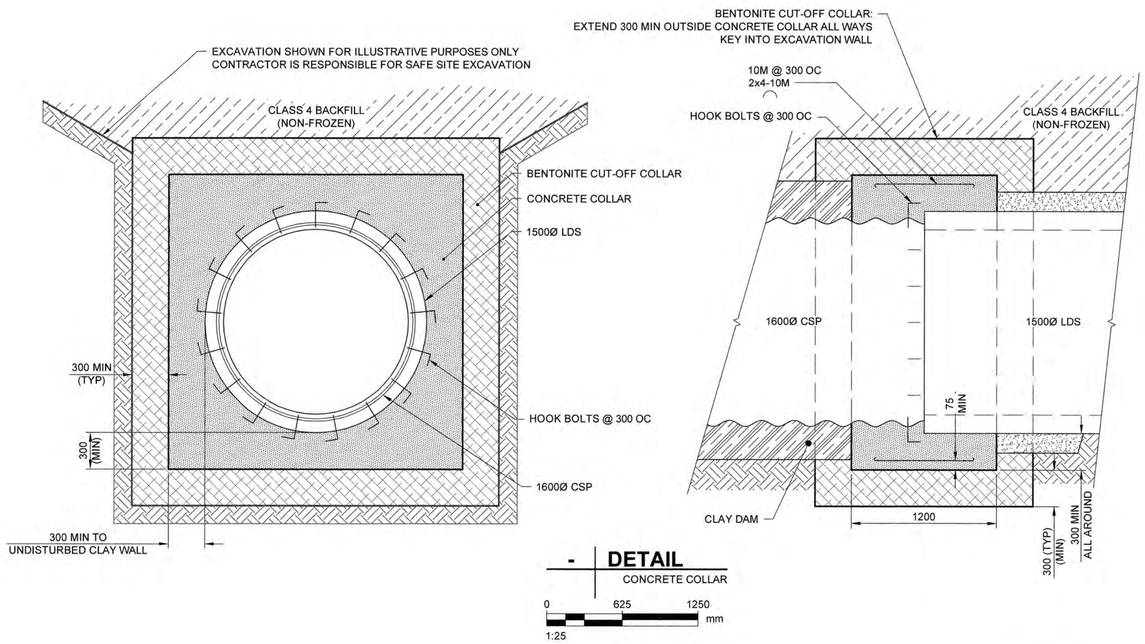
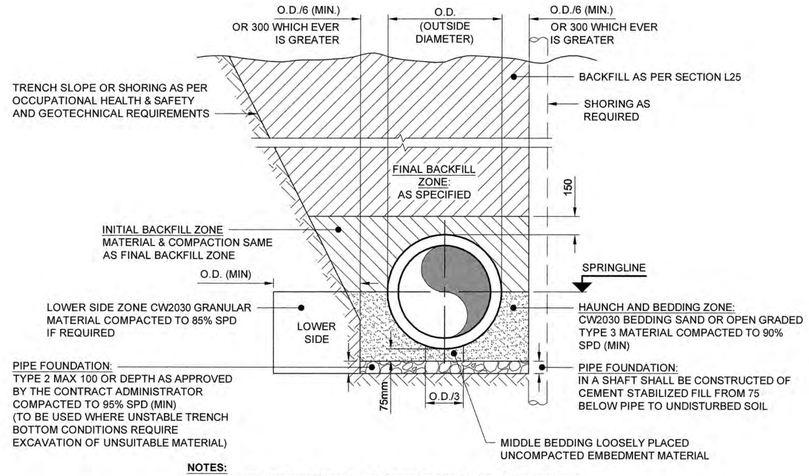


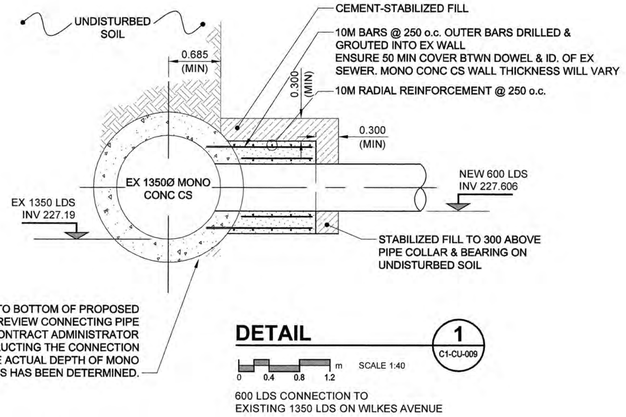
- DETAIL
CONCRETE COLLAR

0 625 1250 mm
1:25



NOTES:
1. ANY OPEN GRADED GRANULAR MATERIALS SHALL BE WRAPPED WITH A NON-WOVE GEOTEXTILE, SEAMS SHALL BE OVERLAPPED 300 (MIN).

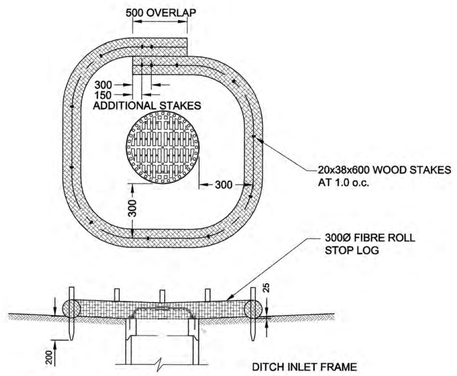
DETAIL - RIGID PIPE INSTALLATION
N.T.S.
TYPE 2 SIDD
(REINFORCED CONCRETE PIPE)



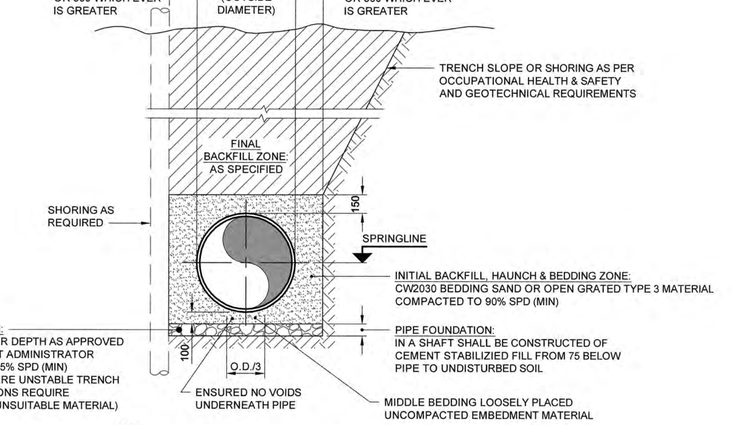
DETAIL 1
C1-CU-009

0 0.4 0.8 1.2 m SCALE 1:40

600 LDS CONNECTION TO
EXISTING 1350 LDS ON WILKES AVENUE

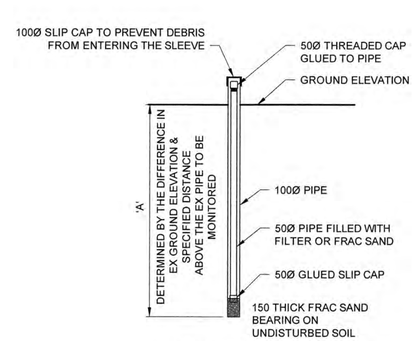


TEMPORARY SEDIMENT CONTROL DETAIL
N.T.S.



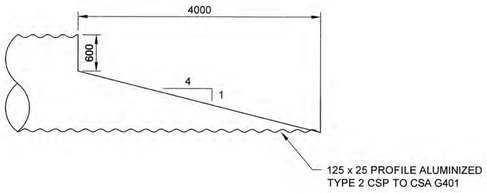
NOTE:
ANY OPEN GRADED GRANULAR MATERIALS SHALL BE WRAPPED WITH A NON-WOVE GEOTEXTILE, SEAMS SHALL BE OVERLAPPED 300 (MIN).

DETAIL - FLEXIBLE PIPE INSTALLATION
N.T.S.
TRENCH OR SHAFT
(PVC & CSP PIPE)



- DETAIL
SUB-SURFACE SETTLEMENT MONITOR

0 625 1250 mm
1:25



- DETAIL
1600Ø CSP BEVELED END SECTION

0 1250 2500

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

APEGM
Certificate of Authorization
UMA Engineering Ltd. (MB)
No. 256 Date: Oct 19, 2016

UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES DATE

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.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	16/10/17	WJd

AECOM

DESIGNED BY	MPG	CHECKED BY	
DRAWN BY	KLC	APPROVED BY	
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERTICAL	AS NOTED		
DATE	DATE	DATE	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
M.P.A. GAUDREAU
Member 32167
Oct 19, 2016
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NUMBER
60321148

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

WAVERLEY STREET UNDERPASS AT CN MILE 3.89 RIVERS SUB
CONTRACT 1: PRELIMINARY UNDERGROUND WORKS AND SECURITY FENCING

CIVIL UTILITIES MISC DETAILS 1

CITY DRAWING NUMBER
U239-2016-C1-CU-007

SHEET 9 OF 9

CONSULTANT DRAWING NUMBER
C1-CU-007

P:\60321148\900--Work\9100--DD CAD\200--SHEETS\Municipal\163353--C1--CON--CU--Details--001.dwg