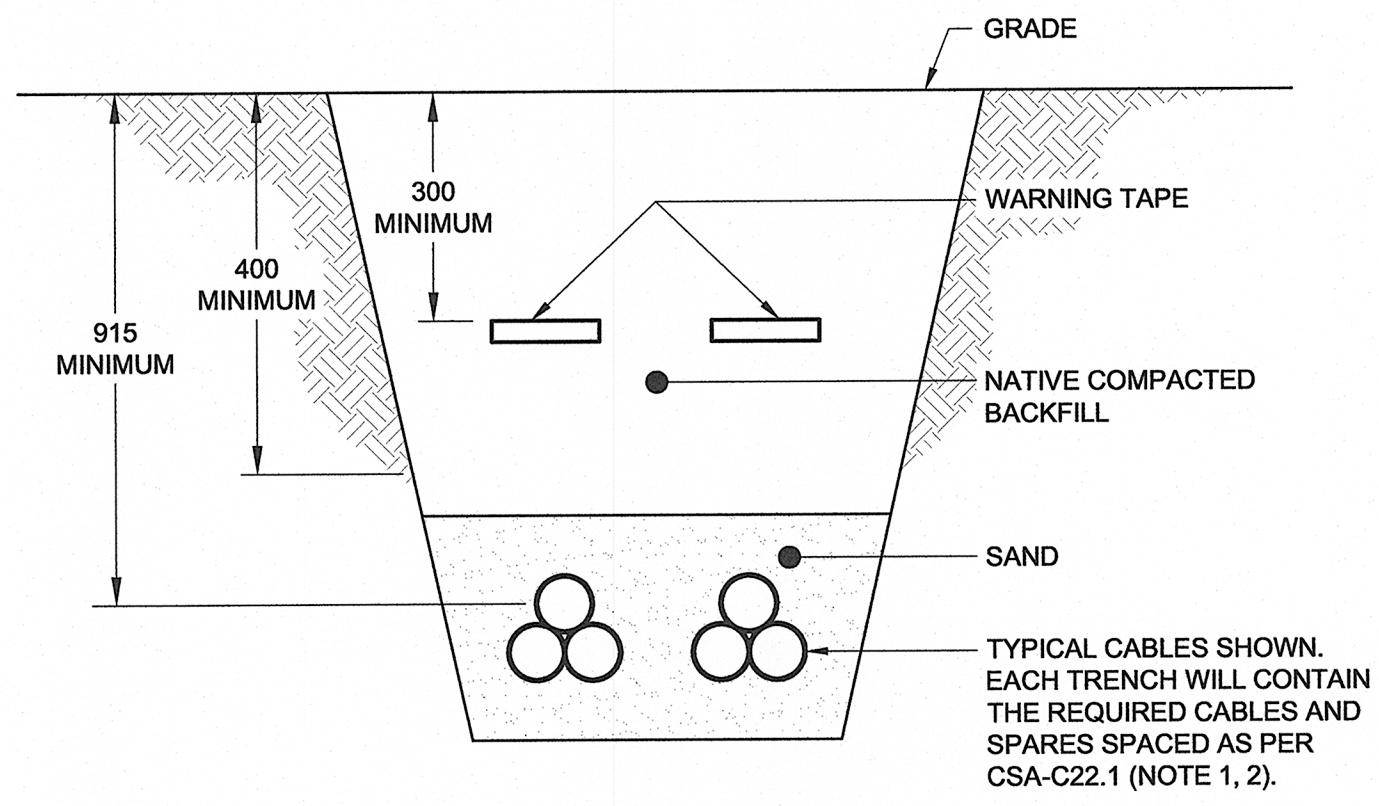


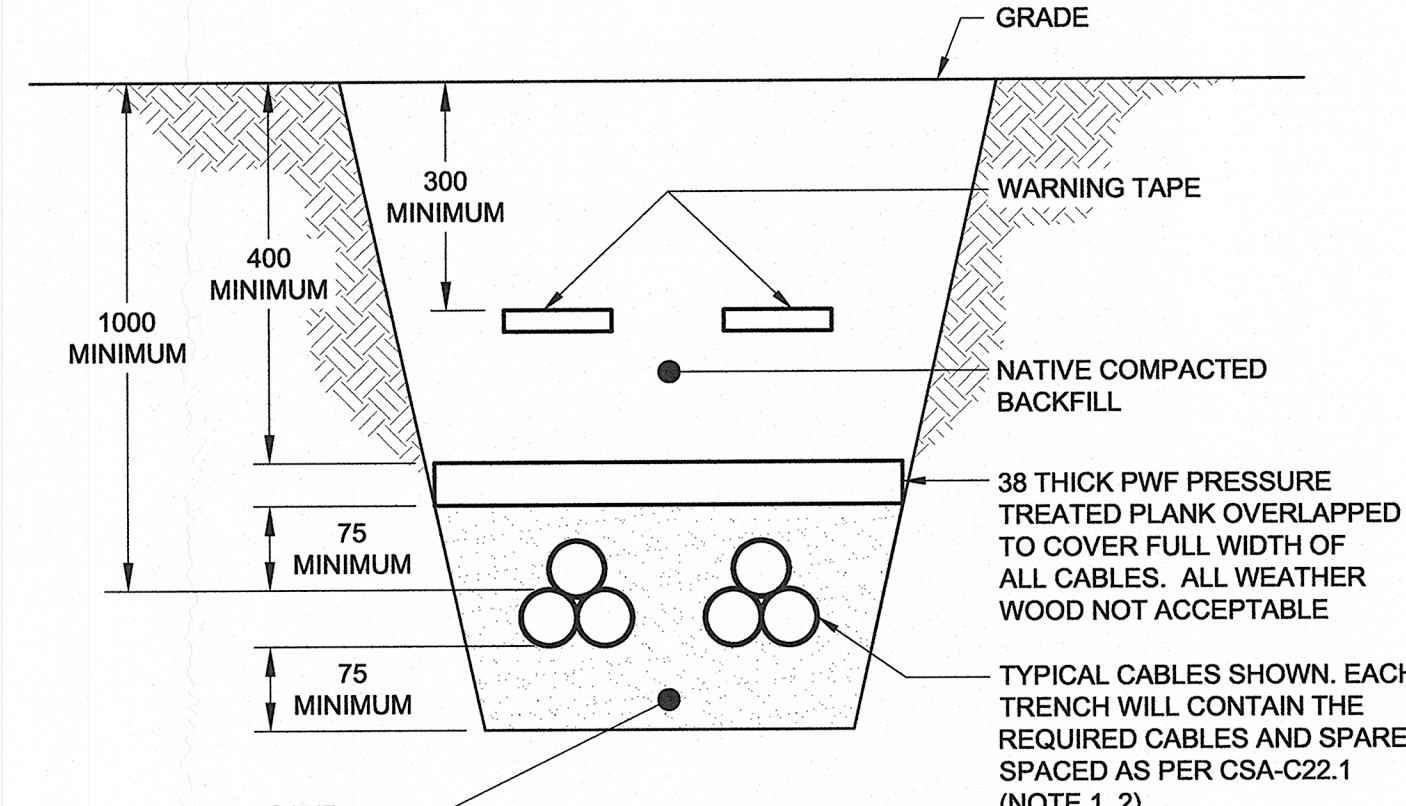
D SIZE 22" x 34" (559mm x 864mm)

PLOT: 3/30/2017 8:22:00 AM

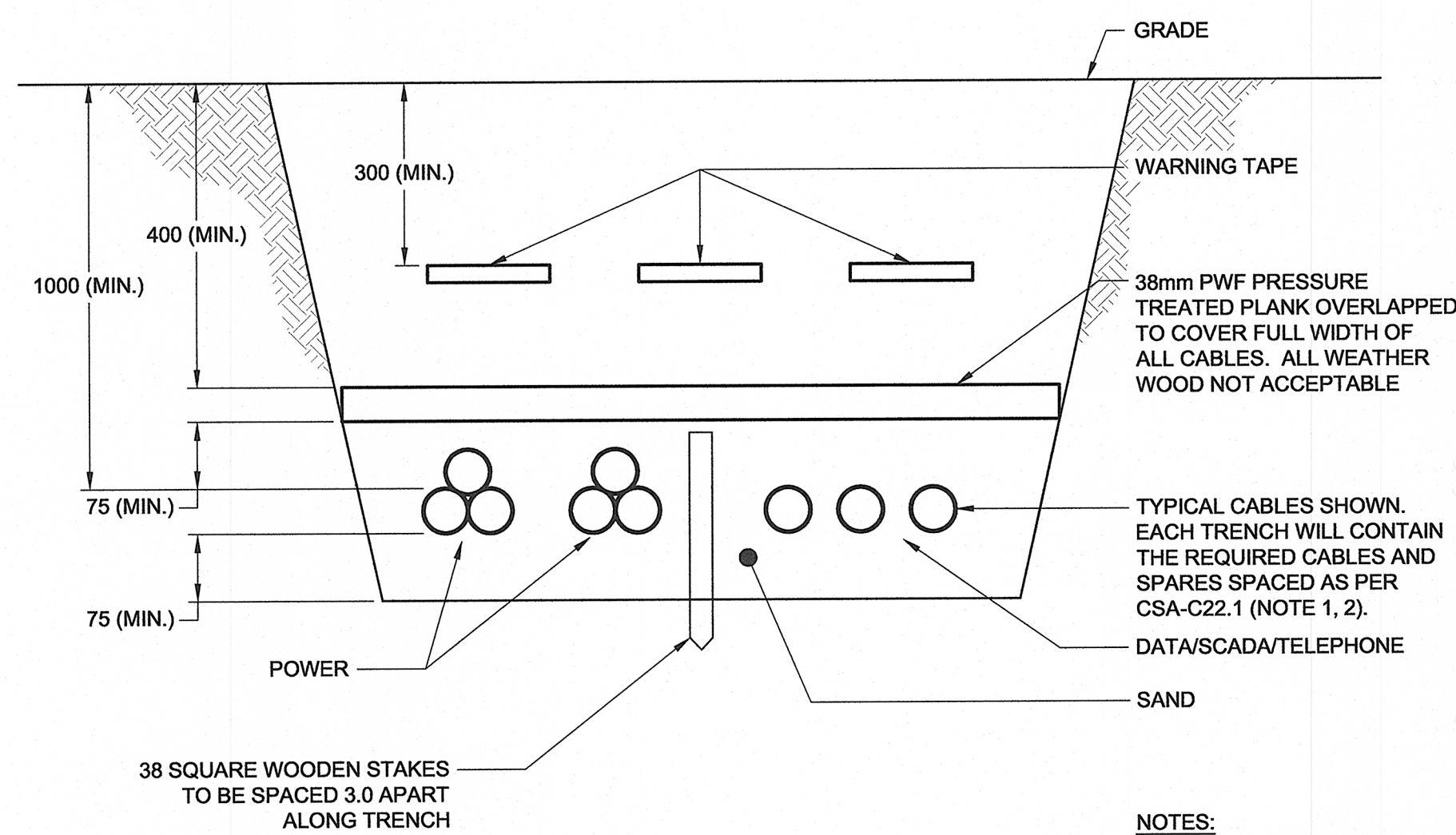
AECOM REVIEW DRAFT CHK. [Signature] AECOM FILE NAME: 60516883-SHT-30-0000-C-4001.dwg Saved By: denoudenw



DIRECT BURIED TRENCH
N.T.S.

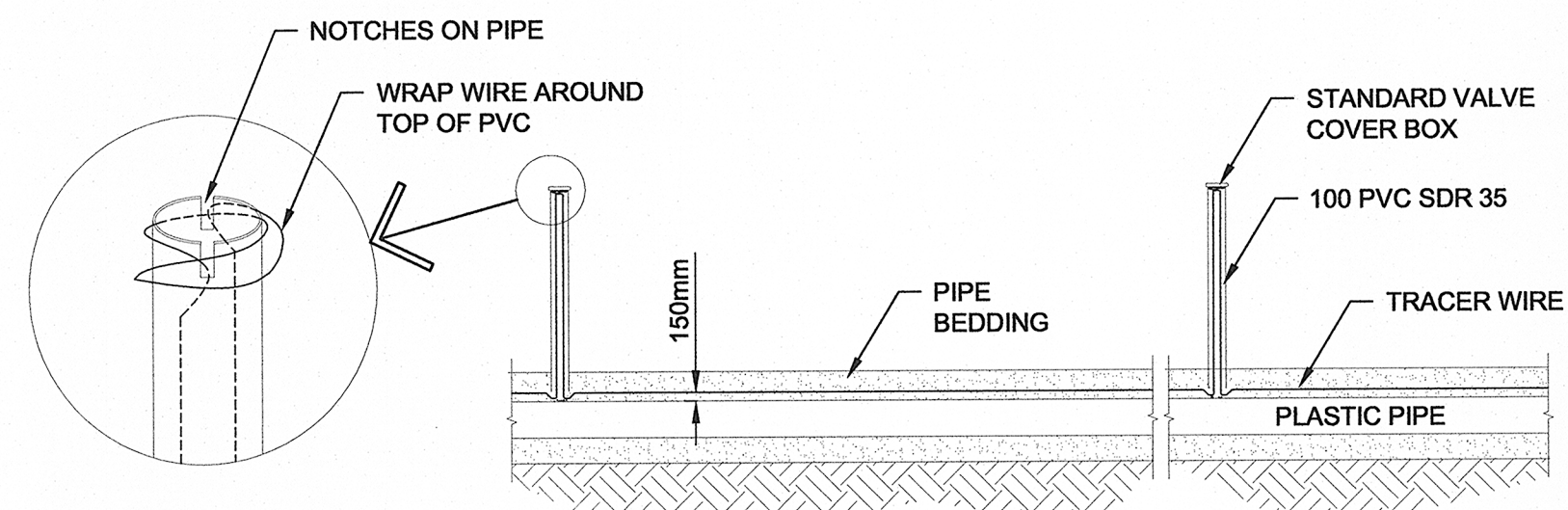


DIRECT BURIED TRENCH W/ MECHANICAL PROTECTION
N.T.S.

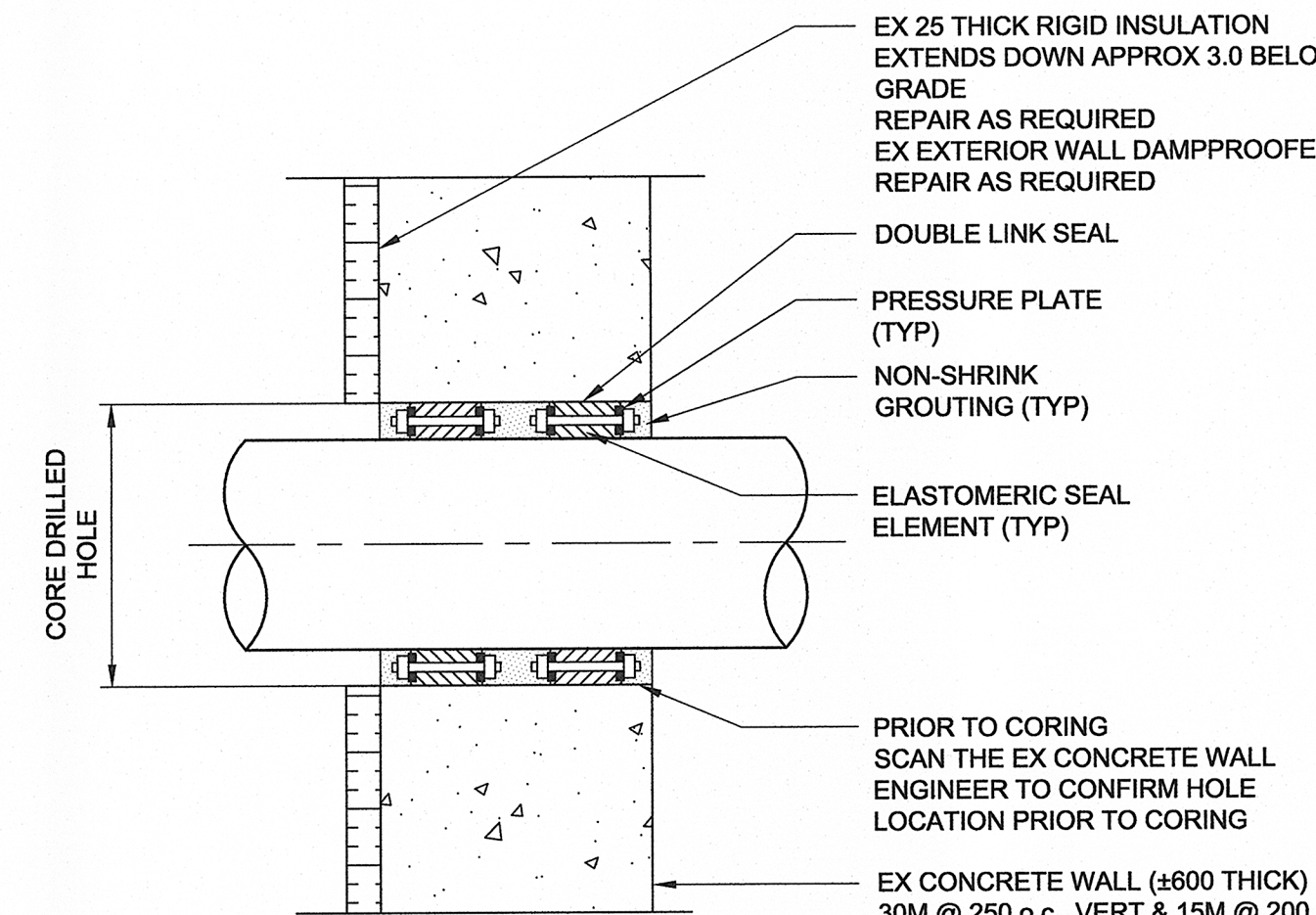


COMMON TRENCH DETAIL
N.T.S.

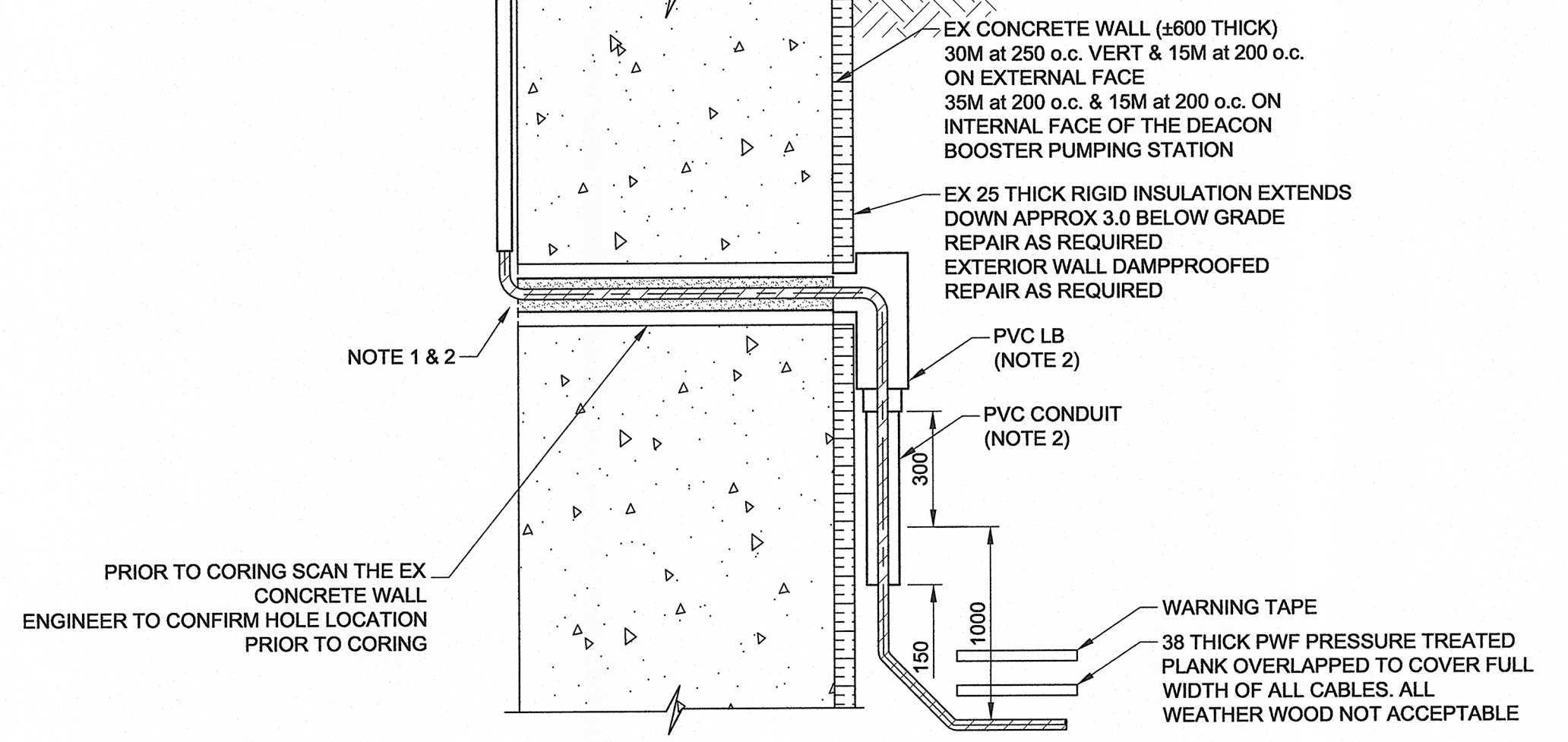
SOURCE	SOURCE DESCRIPTION	CABLE TAG	DESTINATION	DESTINATION DESCRIPTION	CABLE TYPE	LENGTH (NOTE 2)
DEACON BOOSTER PUMPING STATION	400A, 3P 100% Rated Breaker	[DBPS]-[C-Y300-A, C-Y300-B]	DP-V700	DISTRIBUTION PANEL	ARMORED POWER CABLE (ACWU90) 1000V, 2x3C 1000 Konril, Direct Buried	226.0
CHEMICAL FEED BUILDING	Chemical Feed Building Communication Rack	[CFB]-[MB]-[CN-Y301]	Maintenance Building Communication Rack	NETWORK SWITCH	ARMORED FIBER OPTIC CABLE. Fiber optic cables shall be indoor/outdoor direct burial rated loose tube, rodent protected and constructed with 24 strand 50/125/250µm multi-mode glass fibres, spiral interlocked armour, and outer polyethylene jacket. Maximum attenuation shall be 3.5/1.0 dB/km. Minimum modal bandwidth shall be 220 MHz*km.	169.0 (+ additional coiled lengths)



TRACER WIRE DETAIL
N.T.S.



PIPE PENETRATION DETAIL
N.T.S.



BUILDING ENTRY
N.T.S.

- DRAWING NOTES:**
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MANITOBA TELECOM SERVICES TO PROVIDE A FULLY FUNCTIONAL TELECOM SERVICE WITH CABLE ROUTINGS SHOWN ON THIS DRAWING.
 - CABLE LENGTHS SHOWN ARE ESTIMATED. THE ELECTRICAL CONTRACTOR SHALL CONFIRM LENGTHS INCLUDING EXTRA TO BE COILED, PRIOR TO ORDERING MATERIAL.
 - CABLE & CONDUIT SHALL BE INSTALLED COMPLETE WITH STAMPED CONCRETE MARKING BLOCKS AT GRADE.



BID OPPORTUNITY NO. 259-2017

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

150 WM	150 WM	150 WM	150 WM	150 WM	150 WM	150 WM	150 WM	150 WM	150 WM
	WATERMAIN		CURB STOP		WATERMAIN		LAND DRAINAGE SEWER		WASTE WATER SEWER
	HYDRANT		REDUCER		HYDRANT		300 LDS		250 WWS
	VALVE		COUPLING		VALVE		MANHOLE		CATCH BASIN
	LAND DRAINAGE SEWER		HYDRO		LAND DRAINAGE SEWER		CURB INLET		CULVERT
	WASTE WATER SEWER		MTS		WASTE WATER SEWER		PIPE ABANDONMENTS		SURVEY BAR
	MANHOLE		GAS		PIPE ABANDONMENTS		EXISTING		LEGEND - PLAN
	CATCH BASIN		TESTHOLE		EXISTING		LEGEND - PROFILE		NEW
	CURB INLET		LAMP STANDARD		EXISTING		LEGEND - PROFILE		NEW
	CULVERT		TREE		EXISTING		LEGEND - PROFILE		NEW
	PIPE ABANDONMENTS				EXISTING				
	SURVEY BAR				EXISTING				
	EXISTING				EXISTING				
	LEGEND - PLAN				EXISTING				
	LEGEND - PROFILE				EXISTING				
	NEW				EXISTING				
	LEGEND - PLAN				EXISTING				
	LEGEND - PROFILE				EXISTING				
	NEW				EXISTING				
	LEGEND - PLAN				EXISTING				
	LEGEND - PROFILE				EXISTING				
	NEW				EXISTING				

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES DATE COMMITTEE

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.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR CONSTRUCTION	17/03/2017	KLC

DESIGNED BY	CHECKED BY	DRAWN BY	APPROVED BY	HOR. SCALE	VERT. SCALE	RELEASED FOR CONSTRUCTION DATE
GSK	[Signature]	WJD	[Signature]	1:500	-	April 13/2017

APECM
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: April 13/17

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
REGISTERED PROFESSIONAL ELECTRICAL ENGINEER
A.D. BRAUN
Member
24453
April 13/2017

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

CIVIL MAINTENANCE/ AQUEDUCT STORAGE BUILDING INSTALLATION OF ELECTRICAL AND COMMUNICATION UTILITIES AND SEWER AND WATER SERVICING

MISCELLANEOUS DETAILS

SHEET 8 OF 8
CITY DRAWING NUMBER 1-0601H-D0003-001
REV 0