

**PLAN**

SINGLE PCBC SHOWN; MULTIPLE PCBC SIMILAR

**\*\*STONE RIPRAP, CLASS A1 (IF REQUIRED)**

STONE RIPRAP, CLASS A1 SHALL BE USED TO ADDRESS UNSTABLE SOIL CONDITIONS AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

THE WORK SHALL BE PERFORMED PER APPLICABLE PORTIONS OF SECTION 281.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP, CLASS A1.

THE EXCAVATION AND DISPOSAL OF THE UNSUITABLE MATERIAL SHALL NOT BE MEASURED FOR PAYMENT, COST INCLUDED WITH STONE RIPRAP, CLASS A1.

**MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES (MWS)**

SEE SPECIAL PROVISIONS

**GEOCOMPOSITE WALL DRAIN (GWD)**

PER SECTION 591, EXCEPT CONCRETE NAILS NOT USED WHERE MWS & GWD OVERLAP

FILL HEIGHTS <= 3': MWS & GWD REQ.  
 FILL HEIGHTS > 3': MWS & GWD NOT REQ.  
 SEE ABD 19.2.

**POROUS GRANULAR EMBANKMENT (PGE)**

POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER.

THE WORK SHALL BE PERFORMED PER APPLICABLE PORTIONS OF SECTIONS 207 AND 540.

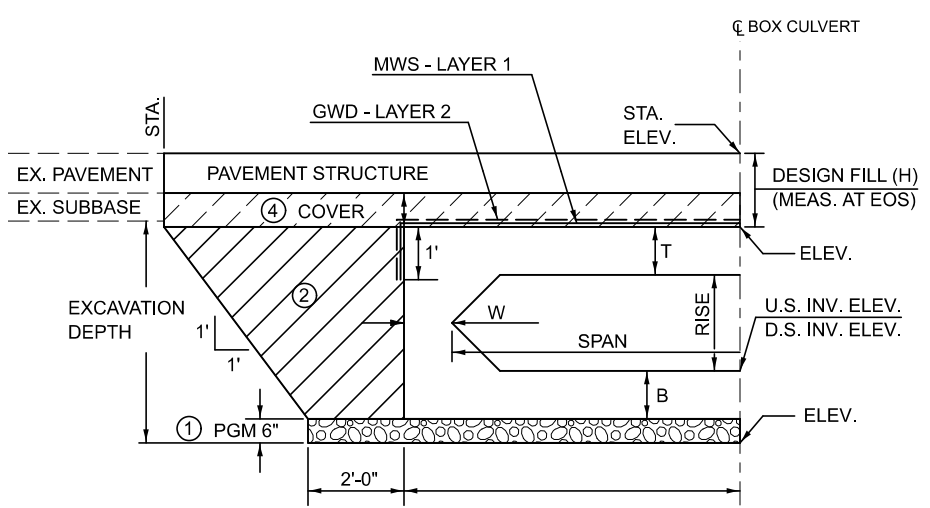
THE COARSE AGGRAGATE QUALITY SHALL BE CLASS D OR BETTER AND THE GRADATION SHALL BE CA-6 OR CA-10.

POROUS GRANULAR EMBANKMENT WILL BE MEASURED FOR PAYMENT IN CU. YDS. IN PLACE AS SHOWN. IF THE CONTACTOR CHOOSES TO EXCAVATE BEYOND THE LIMITS SHOWN. ADDITIONAL QUANTITIES OF POROUS GRANULAR EMBANKMENT WILL BE AT THEIR EXPENSE.

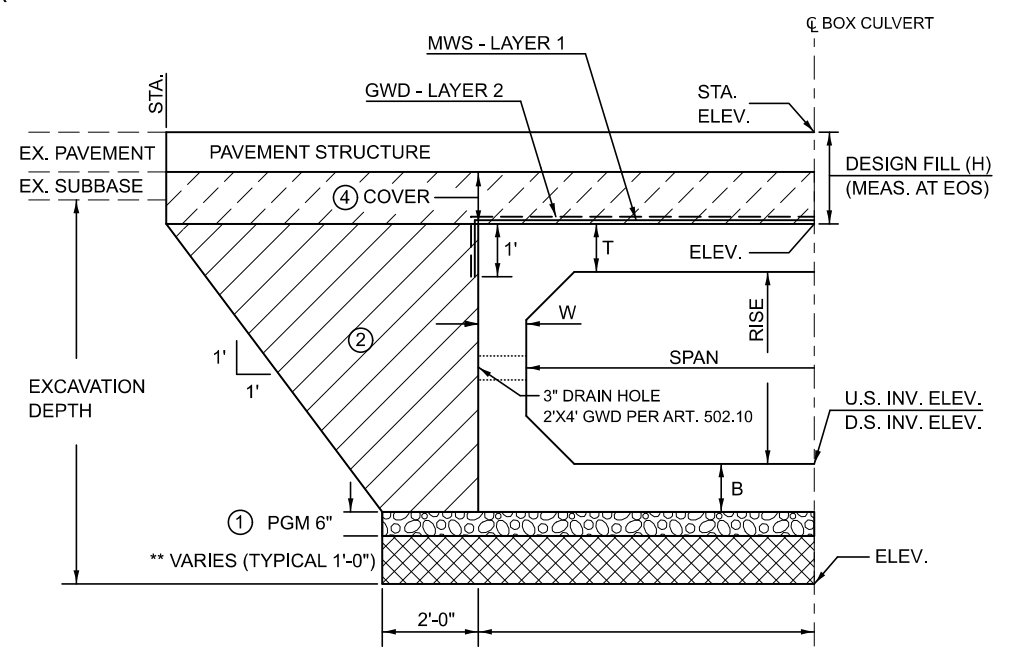
THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT AND END SECTIONS SHALL NOT BE MEASURED FOR PAYMENT. COST INCLUDED WITH PRECAST CONCRETE BOX CULVERTS.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
POROUS GRANULAR EMBANKMENT	CU YD	X
STONE RIPRAP, CLASS A1	TON	X
MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	X
GEOCOMPOSITE WALL DRAIN	SQ YD	X



HALF SECTION SHOWN; (EXCAVATION DEPTH <= 5'-0")



HALF SECTION SHOWN; SEE EXCAVATION DEPTHS TABLE

EXCAVATION DEPTHS	* SLOPES
5'-0" < EXCAVATION DEPTH <= 8'-0"	3/4' : 1'
8'-0" < EXCAVATION DEPTH <= 12'-0"	1' : 1'
12'-0" < EXCAVATION DEPTH <= 20'-0"	1' : 1'

MUST BE SLOPED FROM EXCAVATION BOTTOM OR SPECIAL DESIGN BY S.E. SEE ARTICLE 522.07 FOR TEMPORARY SOIL RETENTION SYSTEM

\*SLOPED EXCAVATION IN TYPE A SOIL SHOWN PER APPENDIX B OF OSHA CFR LABOR 29 PART 1926 SUBPART P - EXCAVATIONS.

OPTIONAL CONFIGURATIONS MAY BE CONSTRUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS CONTAINED IN THE CODE OF FEDERAL REGULATIONS LABOR 29 PART 1926 SUBPART P - EXCAVATIONS.

SEE ARTICLE 107.28 FOR CONTACTOR SAFETY RESPONSIBILITY.

① POROUS GRANULAR MATERIAL (PGM) (CA-7) (Cost included with PCBC per Article 540.06)	② POROUS GRANULAR EMBANKMENT (PGE) SEE ABD 21.1.
STONE RIPRAP, CLASS A1	④ MIN. 6" COVER UNDER FLEXIBLE PAVEMENT. FILL HEIGHTS <= 3' PGE REQ. FILL HEIGHTS > 3' PGE NOT REQ. NO COVER REQUIRED UNDER RIGID PAVEMENT. WHEN RIGID PAVEMENT PLACED ON TOP OF PCBC THE MWS AND GWD ARE NOT REQ. SEE ABD 21.1.

REVISED PER ALL BRIDGE DESIGNERS MEMORANDUMS (ABD) 19.2 AND 21.1

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 20700220**

USER NAME = Eric.Thomas	DESIGNED - TJB	REVISED - TJB
PLOT SCALE = 0.16666633' / in.	DRAWN - TJB	REVISED - TJB
PLOT DATE = 12/7/2022	CHECKED -	REVISED -
	DATE - 10/17/2016	REVISED - 6/1/2022

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**POROUS GRANULAR EMBANKMENT  
S.N. - ; CULVERT NO.**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

MODEL: SHT\_PLAN FILE NAME: C:\Bentley\CONNECT101\Organizer\ChivilDOT\_Standards\Civil\DOT\_Sheets.cad