

**ITEM 511 - CONCRETE, MISC.: 1000 PSI**

PROVIDE A CONCRETE MIX DESIGN WITH A MINIMUM COMPRESSIVE STRENGTH OF 1000 PSI AT 28 DAYS. THE CONCRETE MIX DESIGN SHALL CONFORM TO CMS 499 CONCRETE - GENERAL WITH THE FOLLOWING EXCEPTIONS:

THE CONCRETE MIX SHALL HAVE MINIMUM CEMENT CONTENT OF 10% BY WEIGHT.

MAX SLUMP OF 4 INCHES TO PREVENT INFILTRATION OF CONCRETE INTO EMBANKMENT AS PER PLAN.

THE AGGREGATE REQUIREMENTS SHALL BE WELL GRADED PER CMS TABLE 499.03-1.

PROVIDE AASHTO ACCREDITED LABORATORY UNCONFINED COMPRESSIVE STRENGTH RESULTS AT 28 DAYS FOR THE MIX DESIGN TO THE ENGINEER TWO WEEKS BEFORE PLACEMENT.

ALL EQUIPMENT, LABOR AND MATERIALS REQUIRED TO PERFORM THIS WORK SHALL BE INCLUDED FOR PAYMENT FOR ITEM 511 - CONCRETE MISC.: 1000 PSI.

**CULVERT B:**

**CONCRETE CRADLE**

@ CULVERT B STA. 37+80 TO STA. 38+61 (18" UNDER CULVERT)  
(18.7 SF (AREA BY CAD) \* 81 FT)/27 = 56.1 CY

@ CULVERT B STA. 38+61 TO STA. 38+79 (12" AVG. UNDER CULVERT)  
(14.7 SF (AREA BY CAD) \* 18 FT)/27 = 9.8 CY

@ CULVERT B STA. 38+79 TO STA. 40+04 (6" UNDER CULVERT)  
(10.7 SF (AREA BY CAD) \* 125 FT)/27 = 49.5 CY

@ CULVERT B STA. 40+04 TO STA. 41+01 (12" AVG. UNDER CULVERT)  
(14.7 SF (AREA BY CAD) \* 97 FT)/27 = 52.8 CY

@ CULVERT B STA. 41+01 TO STA. 43+31 (18" UNDER CULVERT)  
(18.7 SF (AREA BY CAD) \* 230 FT)/27 = 159.3 CY

**CONCRETE BACKFILL**

(29.11 SF (AREA BY CAD) \* 551 FT)/27 = 594.1 CY

CULVERT B TOTAL: 921.6 \* 1.10 (FOR INFILTRATION) = 1,014 CY  
**1,014 CY CARRIED TO SHEET 18**

**CULVERT C:**

**CONCRETE CRADLE**

@ CULVERT C STA. 46+19.25 TO STA. 47+16 (18" UNDER CULVERT)  
(18.7 SF (AREA BY CAD) \* 96.75 FT)/27 = 67.0 CY

@ CULVERT C STA. 47+16 TO STA. 47+27 (12" AVG. UNDER CULVERT)  
(14.7 SF (AREA BY CAD) \* 11 FT)/27 = 6.0 CY

@ CULVERT C STA. 47+27 TO STA. 51+57 (6" UNDER CULVERT)  
(10.7 SF (AREA BY CAD) \* 430 FT)/27 = 170.4 CY

@ CULVERT C STA. 51+57 TO STA. 51+62 (12" AVG. UNDER CULVERT)  
(14.7 SF (AREA BY CAD) \* 5 FT)/27 = 2.7 CY

@ CULVERT C STA. 51+62 TO STA. 53+48.5 (18" UNDER CULVERT)  
(18.7 SF (AREA BY CAD) \* 186.5 FT)/27 = 129.2 CY

**CONCRETE BACKFILL**

(29.11 SF (AREA BY CAD) \* 729.25 FT)/27 = 786.2 CY

CULVERT C TOTAL: 1161.5 \* 1.10 (FOR INFILTRATION) = 1,278 CY  
**1,278 CY CARRIED TO SHEET 18**

**ITEM 503 - ROCK EXCAVATION**

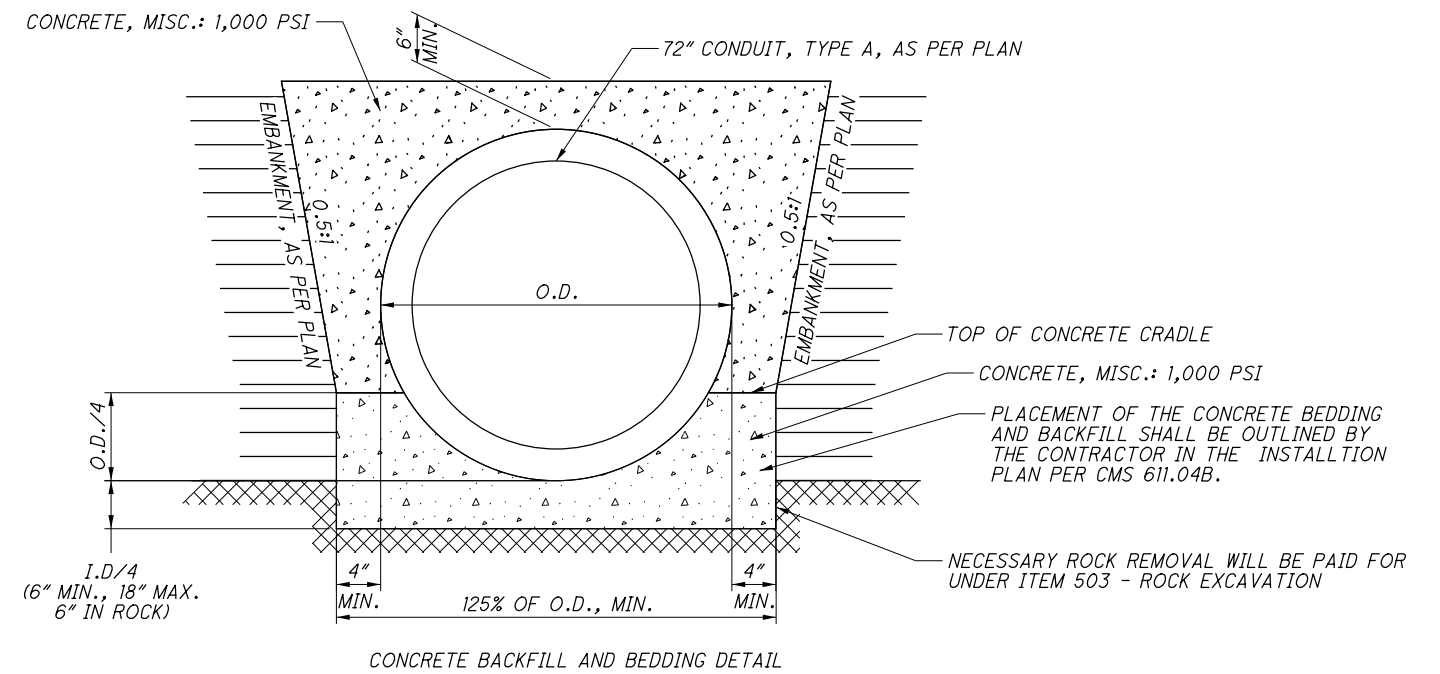
REMOVE ROCK TO A DEPTH OF 6" BELOW THE OUTSIDE WALL OF PROPOSED CULVERTS B AND C, AS DETAILED ON THIS SHEET.

**CULVERT B:**

(125' L \* 8' W \* 2' AVG. DEPTH)/27 = 74 CY  
**74 CY CARRIED TO SHEET 18**

**CULVERT C:**

(430' L \* 8' W \* 7.65' AVG. DEPTH)/27 = 975 CY  
**975 CY CARRIED TO SHEET 18**



**INCENTIVE / DISINCENTIVE TABLE**

DESCRIPTION OR LOCATION OF CRITICAL WORK	COMPLETION DATE	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD	INCENTIVE \$ PER TIME PERIOD	MAXIMUM INCENTIVE
SR 537 AND WEST TIE IN TO CLEARFORK ROAD OPEN TO UNRESTRICTED TRAFFIC.	NOV. 1, 2022	DAY	\$5,000.00	\$10,000.00	\$200,000.00

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CALCULATED  
ARM  
CHECKED  
DTH

**GENERAL NOTES**

**MOE-537-3.40**