

GENERAL NOTES

CONT'D FROM SHEET

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

7
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MUS-146-17.25
COUNTY ROAD 604

EROSION CONTROL:

Items 601 and 660 are provided in the plans for erosion control. Rock plus staple nature will not be removed in order to place any of these items. The Engineer shall check and non-perform quantities or adjust locations and quantities for these items where indicated by field conditions during construction.

WATER LINES:

The Contractor's attention is invited to the presence of water lines owned by the East Muskingum Water Authority & City of Zanesville and located on the plan and Profile Sheets. The depths of the lines are estimated to be three to four feet below the existing ground; however, the State does not guarantee this to be the exact location or depth.

The Contractor shall notify the East Muskingum Water Authority & City of Zanesville Water Department at least 48 hours prior to any anticipated conflicts with the water lines and the Contractor shall also exercise extreme care in working in the area to avoid undue damage to the water lines.

This note does not preclude any provisions of the specifications for the Contractor's responsibility with respect to Utilities.

FAIR DRAINS:

All farm drains which are encountered during construction shall be provided with unobstructed outlets under the direction of the Engineer. Existing collectors which are located below the roadway ditch elevations and which cross the roadway shall be replaced within the right-of-way limits by Item 603 conduit Type "E" one commercial size larger than the existing conduit.

Existing collectors and isolated farm drains which are encountered above the elevation of the roadway ditches shall be outletted into the roadway ditch by 603 Type "F" conduit. The optimum outlet elevation shall be, if possible, one foot above the plowline elevation of the ditch. Lateral tile fields which cross the roadway shall be intersected by 603 Type "E" conduit and carried in a longitudinal direction to an adequate outlet or roadway crossing.

The location, type, size, and grade of required replacements shall be determined by the Engineer during construction and payment shall be made on final measurement.

The following estimated quantities have been included in the general summary for the work noted above:

Item 603	6" Conduit Type "B"	100 L.F. Part 1	\$ 100 L.F. Part 2
Item 603	6" Conduit Type "E"	50 L.F. Part 1	\$ 50 L.F. Part 2
Item 603	6" Conduit Type "F"	25 L.F. Part 1	\$ 25 L.F. Part 2
Item 604	Rock Channel protection Type "B" (18" thick)	2 C.Y. Part 1	
	Carried to General Summary Sheet 818A	2 C.Y. Part 2	

Necessary bends or branches shall be included for payment in the pertinent conduit item. None of the above materials shall be ordered by the Contractor until requested by the Engineer.

TREATED SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEM:

Treated sanitary flow may be discharged into the highway drainage system provided the owner has secured the approval of the local health authorities and has acquired from the State Highway Department, the official permit to have the connection made.

In each case where a permit has been issued for a sanitary connection to be made into a highway drainage conduit, it shall be provided with an inspection well in accordance with the detail shown on standard drawing MC-8.

The following estimated quantities have been included in the general summary, for use as directed by the Engineers, in making the above described connections:

Item 603, 6" Conduit, Type "C" 50 Lin. Ft. Part 1

*Item 604, Inspection Wells 1 Each Part 1

Necessary bends or branches shall be included for payment in the pertinent conduit item.

None of the above materials shall be ordered by the contractor until authorized by the Engineer.

*No inspection well is required if effluent is discharged into an open ditch, channel, catch basin or manhole.

TRAFFIC MAINTENANCE:

S.R. 146 (Part 1)

Two way traffic shall be maintained at all times by use of the existing shoulders, surfaced with Item 410 Aggregate and stabilized with Item 610 Calcium Chloride.

It is not intended that temporary roadways be used exclusively for maintaining traffic on this project, but that maximum usage be made of existing and proposed pavements.

The limits and duration of use of temporary roadways shall be held to an absolute minimum, and in all cases shall be subject to the approval of the Engineer.

C.P. 604 (Part 2)

The portion of the project may be closed to through traffic during construction, however, local traffic shall be maintained at all times in accordance with the specifications especially into the Ohio Power Co. sub station located left of station 157+37.

Included in the General Summary are the following quantities for Maintaining Traffic and Dust Control:

ITEM	QUANTITIES	S.R. 146 (PART 1)	C.P. 604 (PART 2)
614	Maintaining Traffic	Lump	Lump
616	Calcium Chloride	5 Tons	2 Tons
616	Water	5 M.Gal's.	2 M.Gal's.
410	Traffic compacted surface Type A or B	125 Cu.yds.	50 Cu.yds.
410	Traffic compacted surface Type C	125 Cu.yds.	50 Cu.yds.

Quantities carried to sheets 818-A

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES:

Connections of proposed longitudinal drainage to the exist-ing corrugated metal structure shall be by means of a shop fabricated (or field welded) stub on the structure. The stub shall meet the requirements of 707 and have a minimum length of two feet and a minimum grade of 14.

Location and elevation of the stubs to be considered approximate and may be adjusted by the Engineer to avoid cutting through joints in the structure.

The field welded joint, if used, shall be painted on the inside and outside with two coats of red lead paint, 708.06 and two coats of graphite paint, 708.13. Welding shall meet the requirements of 513.23.

Payment for cutting into the structure and providing the connection described shall be included in the unit price bid for Item 603.

TEMPORARY WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL:

The following estimated quantities are to be used as directed by the Engineer for temporary control measures. For details see the note in the proposal.

Special, Temporary Seeding and Mulching
Part 1 S.R. 146 ~ 6,700 S.Y.
Part 2 C.P. 604 ~ 20,400 S.Y.

Special, Commercial Fertilizer (12-12-12)
Part 1 S.R. 146 ~ 0.30 Ton
Part 2 C.P. 604 ~ 1.00 Ton

Special, Water

Part 1 S.R. 146 ~ 3 M.Gal.

Part 2 C.P. 604 ~ 10 M.Gal.

Special, Temporary Slope Drains

Part 2 C.P. 604 ~ 1300 Lin. Ft.

Special, Temporary Benches, Dikes, Dams & Sediment Basins

Part 2 C.P. 604 ~ 70 C.Y.

Quantities carried to sheets 818-A

MUS-146 (PART 1)

Sta. 31+39 to Sta. 37+59	= 601 Lin.Ft. x 36' = 21,636.00 Sq.Ft.
Sta. 37+33 to Sta. 39+89	= 280 Lin.Ft. x 30' = 8,400.00 Sq.Ft.
Sta. 39+89 to Sta. 41+00	= 411 Lin.Ft. x 24' = 9,864.00 Sq.Ft.
Sta. 42+00 to Sta. 44+50	= 50 Lin.Ft. x 22' = 1,100.00 Sq.Ft.
Total	40,110.00 Sq.Ft. / 3 = 13,703.33 Sq.yds.
	13,703.33 Sq.yds. x 1 Hr./3000 Sq.yds. = 2 Hr.

4256.67 Sq.yds. x 1 Hr./3000 Sq.yds. = 2 Hr.

Sta. 132+10 to Sta. 162+777 - 3.31 Lin.Ft. = 5250.39 Lin.Ft. x 24' = 126,009.60 Sq.Ft.

Turn Lane & Road = 6055.06 Sq.Ft.

Total = 132,054.665 Sq.Ft. / 3 = 44,018.88 Sq.yds.

3407.16 Sq.yds. x 1 Hr./3000 Sq.yds. = 1.1 Hr.

Quantities carried to sheet 818-A

CALCULATIONS

659 COMMERCIAL FERTILIZER (12-12-12)		
Part 1 S.R. 146 (659) 13,388 x 9 x 20 / (1000 x 2000) = 1.204		USE 1.20 Tons
Part 2 C.P. 604 (659) + 3000 = 41,015 x 9 x 20 / (1000 x 2000) = 3.69		USE 3.69 Tons
659 AGRICULTURAL LIMING		
Part 1 S.R. 146 (659) 13,388 x 9 x 100 / (1000 x 2000) = 0.024		USE 0.02 Tons
Part 2 C.P. 604 (659) + 3000 = 41,015 x 9 x 100 / (1000 x 2000) = 18.156		USE 18.15 Tons

CALCULATED BY D.M. DATE 6-12-70
CHECKED BY J.A. DATE 10-27-70

GENERAL NOTES & CALCULATIONS