

# GENERAL NOTES

CALC. BY: <u>TEB</u> DATE: <u>5/98</u> CHKD. BY: <u>EST</u> DATE: <u>5/98</u>	LAKE COUNTY LAK-90/271-1.88/0.00	OHIO FHWA REGION 5 FEDERAL PROJECT	17 185
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## DRAINAGE

### REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STATED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT 603 CONDUIT ITEMS OF THE CONTRACT.

### CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

### AGGREGATE SLOPE PROTECTION REPAIR

THIS ITEM SHALL BE USED TO REPAIR EXISTING SLOPE PROTECTION WHICH HAS BEEN ERODED AS A RESULT OF BRIDGE DRAINAGE.

THIS WORK SHALL INCLUDE THE PLACEMENT OF NON-POROUS EMBANKMENT MATERIAL AND CRUSHED AGGREGATE SLOPE PROTECTION TO MATCH THE SURROUNDING AREA.

ALL COSTS OF FURNISHING AND PLACING THE EMBANKMENT SHALL BE INCLUDED UNDER ITEM 601- CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN.

THE PLANS ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS OUTLINED ABOVE AS DIRECTED BY THE ENGINEER.

ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN

COST PARTICIPATION I \_\_\_\_\_ 4 S.Y.  
 COST PARTICIPATION II \_\_\_\_\_ 16 S.Y.

### ITEM 604 - CATCH BASIN OR MONUMENT BOX ADJUSTED TO GRADE

ALL CASTINGS EXCEPT THOSE OWNED BY PRIVATE UTILITIES SHALL BE ADJUSTED BY THE CONTRACTOR. THE TIME BETWEEN ADJUSTING THE CASTING AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM. THIS WORK SHALL NOT BE PERFORMED UNTIL DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY SHEETS.

ITEM 604 - CATCH BASIN ADJUSTED TO GRADE

COST PARTICIPATION I \_\_\_\_\_ 1 EACH  
 COST PARTICIPATION II \_\_\_\_\_ 1 EACH

### UNDERDRAIN INSTALLATION

NEW SHALLOW UNDERDRAINS, AS PER PLAN, SHALL BE INSTALLED AT THE SAME LOCATIONS AS EXISTING EXCEPT THAT THEY SHALL BE LOCATED AT THE EDGE OF CONCRETE PAVEMENT AS SHOWN ON THE TYPICAL SECTIONS. ASPHALT ABOVE THE UNDERDRAIN SHALL BE REPLACED IN THE SAME THICKNESS AS THE EXISTING WITH ITEM 301. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER LINEAR FOOT OF ITEM 605 - SHALLOW UNDERDRAIN, AS PER PLAN, WHICH SHALL CONSTITUTE FULL COMPENSATION FOR EXCAVATION, BACKFILL, ITEM 301 REPLACEMENT, OUTLET FITTINGS AND CONNECTIONS AND FOR ALL LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM OF WORK.

NEW 6" SHALLOW PIPE UNDERDRAINS, 707.15, SHALL BE INSTALLED WITH THE CONSTRUCTION OF THE NEW SHOULDER & THE NEW LANE & SHOULDER AS SHOWN ON THE TYPICAL SECTIONS. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER LINEAR FOOT OF ITEM 605-6" SHALLOW PIPE UNDERDRAIN, 707.15, AS PER PLAN, WHICH SHALL CONSTITUTE FULL COMPENSATION FOR EXCAVATION AND BACKFILL, FOR FURNISHING MATERIALS INCLUDING MATERIAL FOR OUTLET FITTINGS, FOR ALL LABOR, TOOLS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM OF WORK.

THE ABOVE UNDERDRAINS ARE TO BE OUTLETTED IN THE SAME LOCATIONS AS THE EXISTING UNDERDRAINS. ADDITIONAL OUTLETS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE OUTLETS SHALL BE CONSTRUCTED AT THE SAME LINE AND GRADE AS THE EXISTING OUTLET CONDUITS AND SHALL CONNECT BOTH THE OLD AND NEW UNDERDRAIN SYSTEMS INTO THE OUTLET. THE OUTLET CONDUIT SHALL BE ITEM 603 - 6" CONDUIT, TYPE F, 707.17, NON-PERFORATED, ASTM 3034 SDR 35 OR SUPPLEMENTAL SPECIFICATION 931. FOR DETAILS SEE SHEETS 82 & 83. AT THE PRE-CONSTRUCTION CONFERENCE THE CONTRACTOR SHALL BE FURNISHED FULL SIZE PRINTS SHOWING THE ORIGINAL UNDERDRAIN LOCATIONS AND HIGHLIGHTING THE PROPOSED UNDERDRAIN WORK.

THE ESTIMATED QUANTITIES ARE TABULATED ON SHEETS 47 & 48. IN ADDITION TO THE QUANTITIES LISTED, THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

#### COST PARTICIPATION

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ITEM 603 - 6" CONDUIT, TYPE F, 707.17, NON-PERFORATED ASTM 3034 SDR 35 OR SUPPLEMENTAL SPECIFICATION 931 OR 944 . . . . .	80	320	L.F.
ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN, 707.15, AS PER PLAN. . . . .		1000	L.F.
ITEM 605 - SHALLOW UNDERDRAIN, AS PER PLAN. . . . .	400	1600	L.F.
ITEM SPECIAL - PRECAST REINFORCED CONCRETE OUTLET . . . . .	1	2	EA.

### ITEM 605 - AGGREGATE DRAIN, AS PER PLAN

GRANULAR FILTER MATERIAL FOR THIS ITEM SHALL BE NO. 8 OR NO. 9 SIZE AND LIMITED TO DURABLE NATURAL AGGREGATES OR AIR-COOLED BLAST FURNACE SLAG.

THE FOLLOWING ESTIMATED QUANTITY IS INCLUDED IN THE GENERAL SUMMARY TO BE USED WHERE AND AS DIRECTED BY THE ENGINEER TO DRAIN SUBBASE MATERIAL WHICH HAS BECOME SATURATED.

ITEM 605 - AGGREGATE DRAIN, AS PER PLAN

COST PARTICIPATION I \_\_\_\_\_ 20 L.F.  
 COST PARTICIPATION II \_\_\_\_\_ 80 L.F.

ACAD FILE : GNO5.DWG