

# GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		7 306

LAKE COUNTY  
LAK-1-10.38

## ITEMS L-10 SODDING, I-10 RIP RAP & I-14 PAVED GUTTER

THESE ITEMS ARE PROVIDED ON THE PLANS FOR EROSION CONTROL. THE ENGINEER SHALL CHECK AND MAKE ADJUSTMENTS IN LOCATION AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

## L-9 COMMERCIAL FERTILIZER

ALL AREAS TO BE SEEDED UNDER ITEM L-9 OR SODDED UNDER ITEM L-10 SHALL HAVE COMMERCIAL FERTILIZER 12-12-12, APPLIED AT THE RATE OF TWENTY (20) POUNDS PER 1,000 SQUARE FEET.

## SEEDING AND PROTECTING

QUANTITIES FOR SEEDING ITEM L-9 ARE CALCULATED FOR ALL SOIL AREAS BETWEEN RIGHT-OF-WAY FENCE LINES. SEED SHALL BE SOWN AT THE RATE OF 3 POUNDS PER 1,000 SQUARE FEET EXCEPT AS OTHERWISE NOTED IN THE PLANS. SEEDING FORMULA FOR ALL SEEDED AREAS, EXCEPT PARK AREAS, SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

65% KENTUCKY 31 FESCUE  
25% KENTUCKY BLUEGRASS  
5% REDTOP  
5% ALSIKE CLOVER.

QUANTITIES FOR LOCAL ROAD SEEDING INCLUDES ALL SOIL AREA BETWEEN THE WORK LIMITS.

## CENTERLINE REFERENCE MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED OF CLASS "C" CONCRETE CAST-IN-PLACE IN A CIRCULAR HOLE, EIGHT INCHES IN DIAMETER AND FORTY-FOUR INCHES IN DEPTH. TOP OF CONCRETE SHALL BE FINISHED TWO INCHES BELOW GROUND LEVEL AND THE UPPER SIX INCHES PORTION OF THE CONCRETE SHALL BE FORMED. A 1/4" NAIL SHALL BE EMBEDDED IN THE WET CONCRETE AS DIRECTED BY THE ENGINEER TO MARK THE CENTERLINE AND STATION. MONUMENTS SHALL NOT BE PLACED UNTIL SEEDING IS COMPLETED.

## EXISTING WATER WELLS

DUG WELLS ENCOUNTERED WITHIN THE WORK LIMITS SHALL BE FILLED WITH ROCK OR GRANULAR MATERIAL. DRILLED WELL CASING SHALL BE REMOVED TO AN ELEVATION APPROXIMATELY THREE FEET BELOW FINISHED GRADE AND COVERED WITH A PRE-CAST CONCRETE SLAB OR A LARGE ROCK. PRIOR TO CONSTRUCTION OF EMBANKMENT, THE CONTRACTOR SHALL REMOVE ANY MASONRY SURROUNDING A WELL WITHIN THREE FEET OF FINISHED GRADE. PUMPS AND OTHER APPURTENANCES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM. THE COST OF FILLING OR CAPPING OF WELLS SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD FOR ROADWAY EXCAVATION, ITEM E-1

## SODDING

SOD DEPTH "d" AS NOTED ON THE PLANS IS THE VERTICAL DISTANCE FROM THE DITCH BOTTOM TO THE POINT ON THE DITCH SLOPES TO WHICH SODDING IS PLACED. SOD WIDTH "w" AS NOTED ON THE PLANS IS THE WIDTH OF SOD REQUIRED PER LINEAL FOOT. ALL AREAS TO BE SODDED SHALL BE LOOSENEED TO A DEPTH NOT LESS THAN TWO INCHES JUST PRIOR TO LAYING SOD. COST SHALL BE INCLUDED FOR PAYMENT IN THE PRICE BID PER SQUARE YARD OF SODDING. A QUANTITY OF 1,200 SQUARE YARDS OF ITEM L-10 SODDING HAS BEEN PROVIDED IN THE GENERAL SUMMARY TO BE USED FOR EROSION CONTROL WHERE AND AS DIRECTED BY THE ENGINEER.

## PLACING SOD IN DITCHES

All sod placed in ditches shall be laid with the long edges of the strips perpendicular to the flow line of the ditch. Successive strips shall be neatly matched and all joints staggered or broken. The sod shall be staked securely with stakes placed on maximum two ft. centers in rows not more than two feet apart. Stakes in adjacent rows shall be staggered. The stakes shall be wood from 1/2" x 3/4" x 12" to 1" x 1" x 24", as required to hold the sod and shall be driven flush with the top of the sod.

## REMOVALS

ALL ITEMS MARKED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM. WHERE PIPE IS MARKED FOR REMOVAL WITH HEADWALLS AND/OR CATCH BASINS INVOLVED, THE COST OF SUCH REMOVAL SHALL BE INCLUDED IN THE PRICE BID PER LINEAL FOOT FOR ITEM E-12 PIPE REMOVAL.

## ESTIMATED QUANTITIES

Specific location and usage of estimated quantities set up on this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project.

## EXCAVATION FOR STRUCTURES

AN ITEM E-2 EXCAVATION FOR STRUCTURES HAS BEEN INCLUDED IN THE COMPUTATION SHEET TO PROVIDE FOR ALL HEADWALL EXCAVATION UNDER ITEM I-2 STORM SEWERS.

## EXPANSION JOINTS

Although specific locations of certain expansion joints have been detailed on this plan, no waiver of the specifications is intended and expansion joints shall be provided at all major structures as required by Standard Construction Drawing T.J.

## REPLACEMENTS

THE CONTRACTOR SHALL REPLACE AT HIS OWN EXPENSE ANY ITEM NOT SPECIFICALLY LISTED FOR REMOVAL THAT IS DAMAGED OR DESTROYED BY HIS OPERATIONS.

## TEMPORARY DRAINAGE

TEMPORARY DRAINAGE WILL BE REQUIRED FOR THE PIPE UNDERDRAINS DURING CONSTRUCTION OF THIS SECTION, PAYMENT FOR WHICH IS INCLUDED IN THE PRICE BID PER LINEAL FOOT FOR ITEM I-4 UNDERDRAIN.

## MANHOLE CASTING

MANHOLE CASTINGS LOCATED IN SLOPES SHALL BE SET SO THAT THE COVER WILL CONFORM WITH THE PLANE OF THE SLOPED SURFACE, EXCEPT AS OTHERWISE SHOWN ON THE PLANS.

## GRATE ELEVATIONS

THE FLOW LINE OF GRATE ELEVATIONS SHOWN FOR I-8 #4 CATCH BASIN AND I-8 #5 CATCH BASIN IS THE LOWEST POINT ON THE GRATE.

## PIPE UNDERDRAINS

THE LOCATION OF THE TRANSVERSE PIPE UNDERDRAINS LOCATED AT THE POINTS CUT TO FILL AND FILL TO CUT MAY BE REVISED SLIGHTLY DURING CONSTRUCTION TO ASSURE THAT THE UNDERDRAINS WILL BE PLACED IN CUT.

## PIPE SPECIALS

I-5 PIPE SPECIALS HAVE BEEN COMPUTED ON THE BASIS OF 4' - 0". EXCEPT PIPE UNDERDRAINS WHERE 12" HAS BEEN OMITTED FOR EACH.

## EXISTING DRAINAGE

IT IS ANTICIPATED THAT SOME EXISTING DRAINS OTHER THAN THOSE CARRYING DOMESTIC WASTE WILL BE INTERCEPTED AND SEVERED BY THE PROPOSED ROADWAY AND CHANNEL EXCAVATION. IN ANY SUCH CASE A SECTION OF THE PIPE SO SEVERED WILL BE REMOVED TO MAKE WAY FOR THE NECESSARY EXCAVATION. IF THE REMAINING PIPE FLOWS AWAY FROM THE EXCAVATION AND THE PLANS DO NOT INDICATE THAT IT IS TO BE USED AS AN OUTLET, IT SHALL BE BLOCKED AT ITS UPPER END IN ACCORDANCE WITH THE PROVISIONS OF ITEM 204. PAYMENT FOR PLUGGING IS INCLUDED IN THE UNIT PRICE BID FOR ITEM E-1 ROADWAY EXCAVATION. IF THE PIPE FLOWS TOWARD THE DITCH EXCAVATION, THE TILE SHALL BE PRESERVED AND A PROPER OUTLET PROVIDED.

THE FOLLOWING QUANTITIES HAVE BEEN SET UP IN THE GENERAL SUMMARY TO BE USED FOR THE ABOVE PURPOSE AS DIRECTED BY THE ENGINEER.

I-3	6"	ROADWAY DRAINAGE	400	LIN. FT.
I-3	8"	"	400	LIN. FT.
I-3	8"	PIPE OUTLETS FOR ROADWAY DRAINAGE	100	LIN. FT. - SEC. M 6.4 (c)
I-3	10"	"	50	LIN. FT. "
I-3	12"	"	50	LIN. FT. "
I-2	8"	CLASS A STORM SEWERS UNDER PAV. OR APPROACHES	1200	LIN. FT. - SEC. M 6.5 (b) OR M 6.8 (b)
I-2	12"	"	600	LIN. FT. "

THE AMOUNT AND LOCATION OF SUCH MATERIAL SHALL BE RECORDED AS USED AND SHALL BE SUBMITTED WITH THE FINAL ESTIMATE.

## EROSION CONTROL AT HEADWALLS

AN 18" WIDE STRIP OF SOD SHALL BE PLACED ALONG THE BACK AND BOTH ENDS OF EACH STANDARD HEADWALL TYPE A, B AND C TO PREVENT EROSION. THE QUANTITY OF SODDING REQUIRED TO PREVENT EROSION AT THE HEADWALLS IS INCLUDED IN EACH OF THE CULVERT ESTIMATED QUANTITIES SUMMARIES.

## SHALE SLOPES

AGRICULTURAL LIMING MATERIAL SHALL BE APPLIED TO SHALE SLOPES AT THE RATE OF 10 TONS PER ACRE.

## ROCK SUBGRADE

The Contractor shall be paid for the thickness of I-22 material shown on the typical sections in rock excavation areas. Any pockets in the rock below the plan subgrade elevation under pavement shall drain either longitudinally or laterally and all irregularities in the rock below this elevation shall be filled with I-22 material at no additional cost to the State.

## I-22 SUBBASE GRADING

I-22 SUBBASE GRADING A & B AS PER PLAN. MATERIAL FOR THIS ITEM SHALL MEET THE REQUIREMENTS FOR I-22 GRADING A OR B, EXCEPT THAT FOR BOTH GRADINGS THE PERCENT PASSING NO. 200 SIEVE SHALL NOT EXCEED TEN.

## MAINTAINING LOCAL TRAFFIC

AGGREGATE AND CHLORIDE REQUIRED FOR MAINTENANCE OF LOCAL TRAFFIC, IN ACCORDANCE WITH THE PROVISIONS OF SECTION G-4.05 OF THE SPECIFICATIONS, IS PROVIDED IN THE SUMMARY OF QUANTITIES IN THE FOLLOWING AMOUNTS:

150	CU.YD. TRAFFIC COMPACTED SURFACE COURSE, ITEM T-10
3	TONS CALCIUM CHLORIDE ITEM M-10.

REQUIREMENTS FOR HARDNESS AND SOUNDNESS WILL BE WAIVED FOR AGGREGATE USED FOR MAINTAINING LOCAL TRAFFIC.

## EMBANKMENT

IN ADDITION TO THE REQUIREMENTS OF SEC. E-1.08 (f) THE MOISTURE CONTENT OF ALL EMBANKMENT MATERIALS THAT DISPLAY PRONOUNCED ELASTICITY OR DEFORMATION UNDER THE ACTION OF CONSTRUCTION EQUIPMENT SHALL NOT EXCEED OPTIMUM AT THE TIME OF COMPACTION.

## CONSTRUCTION LAYOUT STAKES

See note in proposal describing work to be done in this lump sum pay item.

## SIGHT DISTANCE

BASIS FOR MEASURING SIGHT DISTANCE SHALL BE 4.0 FEET FOR HEIGHT OF EYE AND ZERO FEET FOR HEIGHT OF OBJECT. THE MINIMUM STOPPING SIGHT DISTANCE ON THIS PROJECT IS 600 FEET.

## REMOVAL OF BUILDINGS

WHERE THE PLAN SHOWS A STRUCTURE TO BE REMOVED UNDER ITEM S-24, THE ENTIRE BUILDING WITHIN AND WITHOUT THE RIGHT-OF-WAY SHALL BE REMOVED TO GROUND LEVEL.

## LINE DATA CALCULATION FOR APPROACHES

### LENGTH OF WORK ON APPROACHES

KING MEMORIAL ROAD STA. 23 + 00 TO STA. 39 + 00 DEDUCT FOR EQUATION	1.78
NET LENGTH OF WORK	1,598.22 LIN. FT.
MORLEY ROAD STA. 22 + 00 TO STA. 39 + 00 NET LENGTH OF WORK	1,700.00 LIN. FT.
S.R. 1 BEGIN WORK ON APPROACH STA. 192 + 50 TO BEGIN PROJECT STA. 193 + 50	100.00 LIN. FT.
HERMITAGE ROAD STA. 24 + 50 TO STA. 39 + 00 NET LENGTH OF WORK	1,450.00 LIN. FT.
	4,848.22 LIN. FT.

## TRAFFIC

King Memorial Road, Morley Road and Hermitage Road may be closed to traffic when necessitated by construction operations, except that the period of closure of any individual road shall not exceed eight calendar months. Also, the work shall be so arranged that Kellogg Road will remain open to two-way traffic at all times that Morley and Hermitage Roads are closed. At all other times two-way traffic shall be maintained on these roads by using the existing pavements or the proposed pavements and structures. Local traffic shall be maintained at all times in accordance with the provisions of Sec. G-4.05 and it shall be understood to include maintaining access to adjacent properties affected by any of the construction operations. Materials are provided by note elsewhere on this sheet for maintaining local traffic.

SEE SHEET NO. 254 FOR ROADSIDE REST GENERAL NOTES.

## ROAD MIX QUANTITIES

The quantity of bituminous material estimated for the Bituminous Road Mix Surface Course has been calculated on the line sheets for use with stone or gravel aggregate. If the Contractor elects to use slag aggregate, bituminous material for the road mix shall be applied at the rate of 1.1 gallon per square yard which will require an additional quantity of approximately 2,420 gallons. This additional quantity has been carried to the General Summary and is reflected in the grand total. Payment will be made on final measurement.