

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	10 312
2	OHIO		

LAKE COUNTY
LAK-1-2.16

ROAD NAME SIGNS

ALL COUNTY, TOWNSHIP, CITY OR VILLAGE ROAD OR STREET NAME SIGNS THAT WILL BE DISTURBED BY THE CONSTRUCTION SHALL BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR FOR DISPOSAL BY THEIR RESPECTIVE OWNERS. PAYMENT FOR THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION.

FIELD OFFICE:

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE FOR THE EXCLUSIVE USE OF THE STATE EMPLOYEES, IN ACCORDANCE WITH SEC. S-0.01 (B), HAVING A MINIMUM OF 500 SQUARE FEET OF FLOOR SPACE. THE CONTRACTOR SHALL HAVE A TELEPHONE INSTALLED AND MAINTAINED IN THE FIELD OFFICE DURING THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL ALSO INSTALL WIRING AND OUTLETS SUITABLE FOR CONNECTING TO OFFICE EQUIPMENT, AND PROVIDE 110 VOLT ALTERNATING CURRENT DURING THE CONSTRUCTION OF THIS PROJECT.

DESIGN SPEED:

THE GEOMETRICS FOR THIS PROJECT HAVE BEEN PLANNED FOR A DESIGN SPEED OF 70 MILES PER HOUR.

UTILITIES:

THE CONTRACTOR SHALL NOTIFY, AT LEAST 48 HOURS BEFORE BREAKING GROUND, ALL PUBLIC SERVICE CORPORATIONS HAVING WIRE, POLES, PIPE, CONDUITS, MANHOLES OR OTHER STRUCTURES THAT MAY BE AFFECTED BY THIS OPERATION, INCLUDING ALL STRUCTURES WHICH ARE AFFECTED AND NOT SHOWN ON THESE PLANS. ANY AND ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS.

ROUNDING OF CORNERS ON CROSS SECTIONS:

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN IN THESE PLANS.

R/W MONUMENTS, FEDERAL PROJECT MARKERS AND SECTION MARKERS:

EXISTING R/W MONUMENTS, BENCH MARKS, FEDERAL PROJECT MARKERS AND SECTION MARKERS THAT WILL BE DISTURBED BY CONSTRUCTION, SHALL BE PROTECTED BY THE CONTRACTOR AS PER SECTION G-7.09 UNTIL THEY CAN BE WITNESSED, REFERENCED AND RESET BY THE CONSTRUCTION CREW.

ELEVATION DATUM:

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

UNDERGROUND UTILITIES:

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE STATE OF OHIO MAKES NO GUARANTEES AS TO THEIR ACCURACY OR COMPLETENESS.

REMOVAL OF TREES AND STUMPS:

ALL TREES AND STUMPS WITHIN THE LIMITS OF THE LIMITED ACCESS RIGHT-OF-WAY ON THE MAINLINE AND THE WORK LIMITS ON THE CROSS ROADS AND CHANNEL IMPROVEMENT SHALL BE REMOVED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE NUMBER AND SIZE OF TREES AND STUMPS SHOWN BELOW, FOR REMOVAL UNDER THE CONSTRUCTION AS DETAILED ON THESE PLANS, ARE AS NEARLY CORRECT AS AVAILABLE INFORMATION PERMITS. THE STATE OF OHIO WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING CONSTRUCTION. THE LUMP SUM BID FOR ITEM E-9, REMOVAL OF TREES AND STUMPS, SHALL CONSTITUTE FULL PAYMENT FOR THIS ITEM, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE NUMBER AND SIZE OF TREES AND STUMPS ARE ESTIMATED BELOW.

12" TO 18" - 2426	30" TO 36" - 54
18" TO 24" - 979	36" TO 42" - 11
24" TO 30" - 352	42" TO 48" - 4

SELECTED TREES OVER 50' FROM EDGE OF PROPOSED PAVEMENT WHERE EXISTING GROUND IS NOT DISTURBED MAY BE PERMITTED TO REMAIN AT THE ENGINEERS DISCRETION.

L-6 ROADSIDE CLEAN-UP-ESTIMATED AREAS AS FOLLOWS.					
LEFT	SOUTHBOUND LANE	UNITS	RIGHT	NORTHBOUND LANE	UNITS
STA. 114 + 00	TO STA. 117 + 00	12	STA. 114 + 00	TO STA. 115 + 00	6
117 + 00	119 + 00	4	118 + 00	120 + 00	8
130 + 00	133 + 00	6	120 + 00	126 + 00	84-Inside
137 + 50	140 + 00	15	120 + 00	122 + 00	12 Ramp
155 + 00	155 + 00	2	122 + 00	123 + 00	4
155 + 50	156 + 00	5	123 + 00	127 + 00	8
156 + 00	157 + 00	10	130 + 50	131 + 50	10
157 + 00	158 + 00	8	131 + 50	132 + 00	4
158 + 00	160 + 00	12	132 + 00	135 + 00	18
160 + 00	161 + 00	4	139 + 50	142 + 00	20
161 + 00	163 + 00	12	142 + 00	143 + 00	6
163 + 00	165 + 00	8	142 + 00	144 + 00	2
165 + 00	168 + 00	6	143 + 00	144 + 00	2
173 + 00	175 + 00	8	156 + 00	160 + 50	18
176 + 50	181 + 00	27	162 + 00	165 + 50	14
181 + 00	187 + 00	12	170 + 00	174 + 00	8
189 + 00	190 + 50	6	174 + 00	174 + 50	4
190 + 50	193 + 00	15	174 + 50	176 + 00	3
193 + 00	195 + 50	20	176 + 00	182 + 00	24
195 + 50	196 + 50	4	182 + 00	183 + 00	2
196 + 50	197 + 50	6	191 + 00	192 + 00	4
197 + 50	198 + 50	6	192 + 00	193 + 00	8
198 + 50	199 + 50	6			
					SUB-TOTAL: 489

MEDIAN AREA		UNITS	S.R. No. 91	LT. CL STA. 16 + 00 - STA. 20 + 00	8
STA. 154 + 50	STA. 156 + 50	8	RT. CL STA. 15 + 00 - STA. 21 + 00	12	
				TOTAL:	517

LOCATION AND SIZE OF PIPES:

THE LOCATION, TYPE, DEPTH AND SIZE OF ALL EXISTING PIPES ARE SHOWN AS NEAR EXACT AS THE AVAILABLE INFORMATION WILL PERMIT. THE STATE WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING CONSTRUCTION.

PIPE FOR SUBGRADE DRAINAGE:

10 LIN. FT. OF 8" CORRUGATED METAL PIPE, SEC. M-6.4 (a), SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR, IN MANHOLES, CATCH BASINS AND INLETS FOR EACH SUBGRADE DRAIN, WHERE, AND AS DIRECTED BY THE ENGINEER. PAYMENT FOR EACH SHALL BE MADE AT THE PRICE BID PER LINEAL FOOT OF PIPE OUTLETS FOR UNDERDRAINS.

PIPE:

WHEN BELL AND SPIGOT PIPE IS USED, ANY NECESSARY PIPE CUT-OFFS WILL BE MADE AT THE SPIGOT END OF THE LENGTH OF PIPE ADJACENT TO THE END LENGTH. WHEN TONGUE AND GROOVE PIPE IS USED THE LENGTH OF PIPE NEXT TO THE END LENGTH SHALL BE CUT AND BUTT JOINT FORMED WITH A COLLAR 12" LARGER THAN THE OUTSIDE DIAMETER AND 12" IN LENGTH. THE COST OF THE JOINT AND COLLAR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT PIPE ITEM. COLLAR TO BE

CONSTRUCTED OF CLASS "E" CONCRETE.

REMOVAL OF EXISTING HOUSE DRAINS:

THE REMOVAL OF ALL EXISTING HOUSE CONNECTIONS, WHICH INCLUDES SANITARY, YARD, ROOF, BASEMENT OR OTHER SIMILAR PIPE DRAINS WITHIN THE ROADWAY CONSTRUCTION LIMITS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION UNLESS OTHERWISE ITEMIZED FOR PAYMENT IN THESE PLANS.

STONE UNDERDRAIN NO. 2:

NO. 2 STONE UNDERDRAIN HAS BEEN ESTIMATED FOR CROSS ROAD DRAINAGE STAGGERED AT 50 FEET INTERVALS ON EACH SIDE WHERE I-4 DRAINAGE IS NOT PROVIDED. THEY SHALL BE PLACED NOT OVER 50 FEET APART. THIS QUANTITY IS TO BE USED IN ITS ENTIRETY.

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES:

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO THE PROPOSED CORRUGATED METAL STRUCTURES SHALL BE BY MEANS OF A SHOP FABRICATED (OR FIELD WELDED) STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF SECTION M-6.4 AND HAVE A MINIMUM LENGTH OF TWO FEET AND A MINIMUM GAGE OF 1/4". LOCATION AND ELEVATION OF THE STUB ARE 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, SECTION M-9.9, AND TWO COATS OF GRAPHITE PAINT, SECTION M-9.11. WELDING SHALL BE CLASS "B"). PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM S-28 STRUCTURES.

PLUGGING PIPE ENDS:

THE UPSTREAM ENDS OF PIPE LINES OR TILE LINES INTERCEPTED BY EARTHWORK OPERATIONS SHALL BE EFFECTIVELY PLUGGED AND COVERED. BROKEN PIECES AND PORTIONS OF PIPE OR TILE SHALL BE REMOVED UNTIL A WHOLE LENGTH IS ENCOUNTERED, WHICH SHALL BE PLUGGED WITH CONCRETE, FLAT STONE OR BRICK LAID IN MORTAR, OR PRECAST CLAY OR CONCRETE STOPPER. PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION.

GUARD RAIL REMOVAL:

THE REMOVAL OF ANY GUARD RAIL OR GUARD RAIL POSTS LYING WITHIN THE LIMITS OF ROADWAY EXCAVATION OR EMBANKMENT (AND NOT SPECIFICALLY PAID FOR UNDER A SEPARATE ITEM) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION. ALL RESULTING MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM AT NO EXTRA COST TO THE STATE, EXCEPT THAT THE STEEL RAIL ON ALL EXISTING STEEL BEAM TYPE OR STEEL CABLE ON STEEL CABLE TYPE GUARD RAILS SHALL BE STORED ON THE RIGHT-OF-WAY FOR DISPOSAL BY THE OWNER.

HEAVY EQUIPMENT:

THE CONTRACTOR SHALL EXERCISE CARE IN THE USE OF HEAVY EQUIPMENT OVER FINISHED WORK AND WILL BE REQUIRED TO REMOVE AND REPLACE ANY COMPLETED WORK DESTROYED THEREBY. CULVERTS SHALL BE BACKFILLED TO A HEIGHT OF FOUR FEET BEFORE LOADED EARTH-MOVING EQUIPMENT IS PERMITTED TO CROSS THE TRENCH. HEAVY EQUIPMENT SHALL NOT BE OPERATED OVER ANY COMPLETED LAYER OF EMBANKMENT, COMPACTED SUB-GRADE OR SUB-BASE IF SUCH OPERATION TENDS TO DESTROY THE SOIL STRUCTURE OR PIPE UNDERDRAINS; HOWEVER, IF SUCH OPERATION CANNOT BE AVOIDED, THE CONTRACTOR WILL BE REQUIRED TO REDUCE THE SIZE OF LOADS TO AN EXTENT THAT DAMAGE DOES NOT OCCUR. ALL OF ABOVE MENTIONED OPERATIONS TO BE AT NO ADDITIONAL COST TO THE STATE. SUBGRADE COMPACTION FOR DRIVES AND MAIL BOX TURNOUTS:

THE SUBGRADE UNDER B-19 MATERIAL USED ON DRIVES AND MAIL BOX TURNOUTS SHALL BE COMPACTED FOR A DEPTH OF SIX INCHES (6") TO THE DENSITY REQUIREMENTS OF TABLE 111 IN ITEM E-1. PAYMENT FOR SUBGRADE COMPACTION, AS SPECIFIED ABOVE, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION.

EXCAVATION FOR ITEM B-19:

EXCAVATION FOR B-19 MATERIAL USED ON SIDE ROAD APPROACHES, MAIL BOX TURNOUTS AND DRIVES HAS BEEN INCLUDED IN EARTHWORK QUANTITIES WHEN SAME IS IN "CUT" WHERE SIDE APPROACHES, MAIL BOX TURNOUTS, AND DRIVES ARE IN "FILL", EXCAVATION FOR B-19 MATERIAL SHALL BE MADE BY THE CONTRACTOR AT HIS OWN EXPENSE IF HE BUILDS THE EMBANKMENT UP TO FINISH GRADE BEFORE PLACING THE B-19 MATERIAL.

SUPERELEVATION:

FOR DETAILS OF SUPERELEVATION SEE TABLES, SHEET 30.

FLARING GUARD RAIL AT BRIDGES:

GUARD RAIL ON CROSS ROADS SHALL BE FLARED TO MEET THE BRIDGE RAILING IN SUCH A MANNER THAT THE CHANGE IN ALIGNMENT OF THE GUARD RAIL SHALL NOT EXCEED 1:20.

SPECIAL DITCHES:

FOR SPECIAL DITCH GRADES, SEE CROSS SECTIONS.

DRAINAGE OF SUBBASE MATERIAL:

WHERE THE SUBBASE MATERIAL IS DRAINED BY I-9 STONE UNDERDRAINS OR BY EXTENSIONS THROUGH THE SHOULDERS TO THE FILL SLOPE OR THE DITCH LINE, THE CONTRACTOR SHALL FINISH, SEED AND MULCH THE SLOPES SO AS NOT TO IMPEDE DRAINAGE OF THE SUBBASE MATERIAL. THE ACTUAL AREA OF THE OUTCROP OF THE SUBBASE MATERIAL OR I-9 UNDERDRAIN SHALL NOT BE SEEDED.

PART WIDTH CONSTRUCTION:

BECAUSE OF THE NECESSITY OF BUILDING CERTAIN CROSS ROADS UNDER TRAFFIC AND CONSTRUCTING THE PAVEMENT, PART AT A TIME, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT ON CENTERLINE IN THE BASE AND SUBBASE COURSES.

THIS SHALL BE ACCOMPLISHED BY HAVING THE BASE AND SUBBASE COURSES PLACED WITH THE FIRST PORTION OF THE PAVEMENT BUILT AT LEAST EIGHTEEN INCHES (18") BEYOND THE CENTERLINE AND BY SURFACING NO CLOSER THAN EIGHTEEN (18) INCHES TO THE EDGE OF THE ABOVE COURSES. WHEN THE SECOND PORTION OF THE PAVEMENT IS BUILT, AT LEAST TWELVE INCHES (12") OF THESE PROJECTING COURSES SHALL BE BROKEN DOWN AND THOROUGHLY KEED IN WITH THE NEWLY PLACED CORRESPONDING COURSES IN THE SECOND PORTION OF THE PAVEMENT. PAYMENT FOR THIS OPERATION SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT PAVEMENT ITEMS.

EXISTING FLEXIBLE PAVEMENT:

WITHIN THE LIMITS OF CONSTRUCTION WHERE THE EXISTING FLEXIBLE PAVEMENT WILL HAVE LESS THAN SIX (6) INCHES OF FILL PLACED UPON IT, THE PAVEMENT SHALL BE THOROUGHLY SCARIFIED FOR ITS FULL DEPTH, MIXED WITH SUFFICIENT SOIL AND PROPERLY RECOMPACTED TO INSURE THE ELIMINATION OF ANY PLANE OF SEPARATION BETWEEN IT AND THE EMBANKMENT PLACED THEREON. OUTSIDE THE LIMITS OF CONSTRUCTION THE EXISTING FLEXIBLE PAVEMENT SHALL BE THOROUGHLY SCARIFIED, MIXED WITH SUFFICIENT SOIL AND SHAPED TO FIT THE SURROUNDING TERRAIN IN SUCH A MANNER AS TO INSURE THE GROWTH OF SEED PLANTED THEREON. PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION.

NON-RIGID PAVEMENT REMOVAL:

COST OF REMOVING NON-RIGID PAVEMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ROADWAY EXCAVATION.

GUARD RAIL POST ANCHORS:

AT LOCATIONS WHERE PIER FOOTINGS INTERFERE WITH INSTALLATION OF FULL LENGTH GUARD RAIL POSTS, SHORT POSTS SHALL BE PROVIDED AND SHALL BE ANCHORED IN ACCORDANCE WITH THE DETAIL SHOWN ON SHEET 253. COST OF PROVIDING AND INSTALLING NECESSARY ANCHORS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAL FOOT OF GUARD RAIL.

GUARD RAIL PARAPET ANCHOR:

COST OF PROVIDING AND INSTALLING ANCHOR FOR CONNECTING DEEP STEEL BEAM GUARD RAIL TO BRIDGE PARAPET IS INCLUDED IN THE BRIDGE QUANTITIES FOR PAYMENT. CONTRACTOR SHALL PROVIDE ONE ADDITIONAL GUARD RAIL POST IN THE CENTER OF THE FIRST PANEL OF DEEP STEEL BEAM GUARD RAIL WHERE ANCHORED TO THE PARAPET, COST OF WHICH SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAL FOOT OF GUARD RAIL.

ITEMS L-10 SODDING, I-10 RIP RAP AND 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.

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 AT A DEPTH OF TWO INCHES BELOW GROUND LEVEL AND THE UPPER SIX INCH PORTION OF THE CONCRETE SHALL BE FORMED. A 16 D NAIL SHALL BE EMBEDDED IN THE WET CONCRETE AS DIRECTED BY THE ENGINEER TO MARK CENTERLINE AND STATION.

REPLACEMENT:

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

CHANNEL EXCAVATION:

WHERE CHANNEL EXCAVATION IS CARRIED THROUGH A PROPOSED PIPE STRUCTURE SITE, ADDITIONAL EXCAVATION REQUIRED TO OBTAIN A STABLE FOUNDATION FOR THE STRUCTURE SHALL BE MEASURED AND PAID FOR AS ITEM E-3, CHANNEL EXCAVATION.

MICHAEL BAKER JR., CONSULTING ENGINEERS ROCHESTER, PENNSYLVANIA					
STATE OF OHIO DEPARTMENT OF HIGHWAYS STATE HIGHWAY NO. 1 C-43 GENERAL NOTES					
Designed	Drawn	Traced	Checked	Reviewed Date	Revised
	V.T.	B.N.	B.P.		