

GENERAL NOTES

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

LAKE COUNTY
LAK-2-16.49

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE FOR THE EXCLUSIVE USE OF STATE EMPLOYEES, IN ACCORDANCE WITH SEC. 5-0.01(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 60 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, AS SHOWN ON STANDARD DRAWING RI-1, APPLY TO ALL CROSS SECTIONS UNLESS OTHERWISE SHOWN ON THE TYPICAL SECTIONS.

R/W MONUMENTS, FEDERAL PROJECT MARKERS & SECTION MARKERS

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

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.

ELEVATION DATUM

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

SUPERELEVATION

SUPERELEVATED CURVES SHALL BE BUILT WITHOUT CROWN. THE CROWN SHALL BE WORKED OUT OF THE PAVEMENT IN THE PORTION BETWEEN THE BEGINNING OF THE TRANSITION AND THE POINT WHERE THE SUPERELEVATION EQUALS TWICE THE CROWN.

RECORDS

ITEMS SET UP IN THE GENERAL NOTES FOR USE AS DIRECTED BY THE ENGINEER SHALL REQUIRE PROPER RECORDS AND VERIFICATION BEFORE PAYMENT IS APPROVED. THESE ITEMS SHALL NOT BE ORDERED UNTIL SO DIRECTED BY THE ENGINEER.

REPLACEMENTS

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

SPECIAL DITCHES

FOR SPECIAL DITCH GRADES, SEE CROSS SECTIONS AND/OR PLANS.

EXPANSION AND CONTRACTION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN EXPANSION & CONTRACTION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. EXPANSION JOINTS SHALL BE PROVIDED AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL IN ALL CASES BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING T.J.

ITEM T-10, AS PER PLAN

THE WEIGHTS TO BE USED IN CALCULATING THE YARDAGE TO BE PAID FOR UNDER THIS ITEM SHALL, IF A STANDARD SIZE COARSE AGGREGATE IS SPECIFIED, BE THE SAME AS THOSE INDICATED IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR CRUSHER RUN OR BANK RUN MATERIALS.

ITEM I-22 SUBBASE, GRADING "A" OR "B" AS PER PLAN

MATERIAL FOR THIS ITEM SHALL MEET THE REQUIREMENTS OF GRADING "A" OR "B" OF SEC. 1-22.02 EXCEPT THAT FOR EITHER GRADING, NO MORE THAN 10% OF THE MATERIAL SHALL PASS A NO. 200 SIEVE AFTER ALL OPERATIONS OF PLACING AND COMPACTING HAVE BEEN COMPLETED.

SEQUENCE OF PAVING CONSTRUCTION OPERATIONS

UNDERDRAINS SHALL BE INSTALLED AND BACKFILLED TO SUBGRADE ELEVATION, IMMEDIATELY PRIOR TO CONSTRUCTION OF THE SUBBASE, EXCEPT THAT, WHERE SUBSURFACE CONDITIONS ARE SUCH THAT IMPROVEMENT OF AN UNSTABLE SUBGRADE CAN BE ACCOMPLISHED THROUGH THE DRYING ACTION OF DEEP UNDERDRAINS, THE PROJECT ENGINEER MAY AUTHORIZE OR REQUIRE THE CONTRACTOR TO DELAY THE CONSTRUCTION OF THE SUBBASE AS NECESSARY.

THE SUBBASE SHALL THEN BE CONSTRUCTED UNDER THE CONCRETE PAVEMENT AREA AND EXTENDED OUT TO COVER THE POROUS BACKFILL FOR THE UNDERDRAIN.

PAVEMENT SHALL THEN BE CONSTRUCTED.

AFTER THE SUBBASE IN THE SHOULDER AREA IS IN PLACE AND COMPACTED AS SPECIFIED, AND IMMEDIATELY PRIOR TO PLACING THE POROUS BASE COURSE, THE MATERIAL LOCATED ABOVE AND WITHIN THE UNDERDRAIN TRENCH SHALL BE REMOVED TO THE DEPTH NECESSARY TO EXPOSE CLEAN TYPE 3 BACKFILL. THE TRENCH SO EXCAVATED SHALL BE BACKFILLED WITH NEW TYPE 3 BACKFILL MATERIAL.

IF, AFTER TESTING THE SUBBASE MATERIAL FOR COMPOSITION IN THE SHOULDER AREA, IT IS FOUND THAT REMOVAL OF CONTAMINATED MATERIAL FROM THE SURFACE IS NECESSARY, SUCH MATERIAL SHALL BE REPLACED WITH MATERIAL MEETING THE REQUIREMENTS OF "ITEM B-112 POROUS BASE COURSE" AT THE EXPENSE OF THE CONTRACTOR.

POROUS BASE COURSE SHALL THEN BE CONSTRUCTED AND CONSTRUCTION OF THE WATERPROOFED AGGREGATE COURSE SHALL FOLLOW IMMEDIATELY.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE PERTINENT ITEMS AFFECTED.

AGGREGATE BASE COURSE

THE COMPLETED AGGREGATE BASE COURSE B-19 MAY BE USED FOR MAINTAINING LOCAL TRAFFIC ON THIS PROJECT. ANY DAMAGE DONE TO THE BASE, SUBBASE OR SUBGRADE BY LOCAL TRAFFIC SHALL BE REPAIRED BY RESHAPING, RECOMPACTING AND BY ADDITION OF EXTRA B-19 MATERIAL AT NO ADDITIONAL COST TO THE STATE.

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.

CONTRACTOR'S MAINTENANCE RESPONSIBILITY

ON THIS PROJECT, THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF THE EXISTING PAVEMENT PER ITEM I-3 SHALL BE LIMITED TO THOSE PORTIONS OF THE EXISTING PAVEMENT LYING WITHIN THE PROPOSED WORK LIMITS.

ESTIMATED QUANTITIES

SPECIFIC LOCATIONS AND USAGE OF ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED "AS DIRECTED BY THE ENGINEER" SHALL BE MADE AS A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

EROSION CONTROL

ITEMS I-10, I-14, L-10 AND L-120 ARE PROVIDED IN THESE PLANS FOR EROSION CONTROL. ROCK OF A STABLE 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.

EROSION CONTROL AT BRIDGES

SODDED CHANNELS SHALL BE PROVIDED AT ENDS OF BRIDGES WHERE REQUIRED BY THE PLANS. COST OF ALL WORK NECESSARY TO COMPLETE THE ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR "ITEM L-10, SODDING FOR SPECIAL BERM AND SLOPE PROTECTION", AS PER PLAN. PLACEMENT SHALL BE MADE IN ACCORDANCE WITH THE METHOD SHOWN ON SHEET 225.

EROSION CONTROL AT HEADWALLS

AN 18" WIDE STRIP OF SOD SHALL BE PLACED ALONG THE BACK AND BOTH ENDS OF EACH STANDARD HEADWALL OR ENDWALL TO PREVENT EROSION. THE QUANTITY OF SODDING REQUIRED TO PREVENT EROSION AT THE HEADWALLS OR ENDWALLS IS INCLUDED IN THE CULVERT ESTIMATED QUANTITIES. FOR DETAIL OF SODDING SEE SHEET 223.

REMOVAL OF TREES AND STUMPS

ALL TREES AND STUMPS LYING WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM E-9, REMOVAL OF TREES AND STUMPS, EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

SIZES	NO. OF TREES	NO. OF STUMPS
12" - 18"	1,035	5
18" - 24"	271	1
24" - 30"	108	2
30" - 36"	66	1
36" - 42"	46	0
48" - 54"	13	0
54" - 60"	5	1

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM E-9, REMOVAL OF TREES AND STUMPS.

UNSUITABLE MATERIAL

SOILS INVESTIGATION INDICATES THAT THE MOISTURE CONTENT OF THE MATERIAL IN THE CUT AREAS BETWEEN STA. 782[±] AND STA. 833[±] WILL BE GREATER THAN OPTIMUM PLUS 8%. AN ESTIMATED 277,203 CY. WILL BE UNSUITABLE FOR EMBANKMENT UNDER SEC. E-106 (g). ALL OF THE UNSUITABLE MATERIAL AS INDICATED ON THE PLANS UNDER THE EMBANKMENT IN THE VICINITY OF STA. 865[±] AND UNDER MANTLE ROAD AT STA. 32[±] SHALL BE WASTED. BOTH OF THESE CONDITIONS ARE CONSIDERED IN THE EARTHWORK ANALYSIS ON SHEET 18.

FOUNDATION TREATMENT

SHALLOW AT SURFACE PEATS AND ORGANIC MATERIALS ARE NOTED BETWEEN APPROXIMATE STATIONS 862+00 AND 867+00 ON S.R. 2 AND ALSO BETWEEN STATIONS 32+00 AND 33+00 ON MANTLE ROAD. THE EMBANKMENT FOUNDATIONS BETWEEN THESE STATIONS SHOULD BE EXCAVATED TO A DEPTH OF 3 FEET ON S.R. 2 AND TO A MAXIMUM OF 5 FEET AT STATION 32+50 ON MANTLE ROAD, OR AS DIRECTED BY THE ENGINEER, AND THE EXCAVATED UNSUITABLE MATERIAL REPLACED WITH SUITABLE EMBANKMENT MATERIAL. THE MATERIAL THUS REMOVED SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE BID FOR ITEM E-1 ROADWAY EXCAVATION AND DISPOSED OF IN ACCORDANCE WITH SEC. E-1.06(a).

ITEM SPECIAL - SAND BLANKET

A 1-FOOT SAND BLANKET SHALL BE PROVIDED BENEATH THE APPROACH EMBANKMENTS, AS SHOWN ON THE PLANS AT THE STRUCTURE CARRYING RELOC. S.R. 2 OVER BACON ROAD, EXTENDING FROM THE SPILL-THROUGH SLOPE TO A POINT 200 FEET BACK OF THE ABUTMENTS. SEE PROPOSAL NOTE FOR MEASUREMENTS AND PAYMENT.

GUARD RAIL ADJACENT TO BRIDGE

ONE (1) ADDITIONAL GUARD RAIL POST SHALL BE PROVIDED IN THE CENTER OF EACH PANEL OF GUARD RAIL ADJACENT TO A BRIDGE, PAYMENT FOR WHICH SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM I-15 GUARD RAIL.

GUARD RAIL FLARES

WHERE PROPOSED GUARD RAIL FLARES ARE CONSTRUCTED OF RAIL ELEMENTS WHICH HAVE NOT BEEN FABRICATED EXACTLY TO FIT THE CURVATURE SHOWN ON THE PLANS, THE TWO END POSTS OF EACH FLARED SECTION SHALL BE ENCASED IN A MINIMUM 4-INCH THICKNESS OF CLASS "E" CONCRETE FOR THE FULL DEPTH OF THE POST BELOW THE GROUND LINE. PAYMENT FOR ENCASEMENT, IF REQUIRED, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE GUARD RAIL.

GUARD RAIL POST ANCHORS

AT LOCATIONS WHERE PIER FOOTINGS INTERFERE WITH THE INSTALLATION OF FULL LENGTH GUARD RAIL POSTS, SHORT POSTS SHALL BE PROVIDED WHICH WILL BE ANCHORED IN ACCORDANCE WITH THE DETAIL SHOWN ON STANDARD DRAWING NO. 1-15, NO. 6. COST OF PROVIDING AND INSTALLING NECESSARY ANCHORS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR GUARD RAIL.

ITEM I-9; NO. 1 STONE UNDERDRAINS

AT THOSE LOCATIONS WHERE ITEM I-9, FOR-SPRING DRAINS ARE CALLED FOR, THE PRICE BID FOR THE UNDERDRAINS SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTING THE DRAIN AS SHOWN ON SHEET 223 INCLUDING ALL MATERIALS, LABOR, EXCAVATION AND DISCARDING ALL SURPLUS MATERIALS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER, TO DRAIN SPRINGS THAT MAY BE ENCOUNTERED:

ITEM I-9 NO. 1 STONE UNDERDRAINS, AS PER PLAN	= 12 LIN. FT.
ITEM I-1 6" PIPE, CLASS I-3, SEC. M 6.4(h)	= 200 LIN. FT.
ITEM I-1 8" PIPE, CLASS F-4, SEC. M 6.4(c)	= 40 LIN. FT.

ITEM S.S. CE-101.04 COMPACTION USING HEAVY PNEUMATIC-TIRED ROLLER

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE, AS DIRECTED BY THE ENGINEER, IN PROOF ROLLING OF ALL SUBGRADE ON THE MAINLINE AND RAMPS. IN AREAS WHERE ROCK OR SHALE IS ENCOUNTERED IN SUBGRADE AND IN AREAS WHERE SUBBASE HAS BEEN THICKENED TO REPLACE FROST SUSCEPTIBLE SILTS, PROOF ROLLING WILL NOT BE REQUIRED. IN LIEU OF THE REQUIREMENTS OF CE-101.04, A MINIMUM OF ONE COVERAGE WILL BE REQUIRED TO CHECK THE SUBGRADE. MOISTURE CONTENT OF THE TOP 12" OF SUBGRADE SHALL NOT EXCEED OPTIMUM AT THE TIME OF PROOF ROLLING. TIRE PRESSURE AND TOTAL LOAD SHALL BE VARIED AS DIRECTED BY THE ENGINEER WITHIN THE LIMITS PROVIDED IN SUPPLEMENTAL SPECIFICATION CE-101.04.