

CONSTRUCTION SPECIFICATIONS

THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION 2010 CONSTRUCTION AND MATERIALS SPECIFICATIONS AND THE SPECIAL PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS SHALL GOVERN THIS PROJECT.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

Table listing utility providers such as QUEST COMMUNICATIONS, AMERITECH, CITY OF NORTH ROYALTON, CUYAHOGA COUNTY, and COX COMMUNICATIONS, along with their addresses and contact information.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE CHIEF ENGINEER" UNLESS AUTHORIZED BY THE CHIEF ENGINEER.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

AS-BUILT PLANS

THE AS-BUILT PLANS FROM THE ORIGINAL 1953 CONSTRUCTION, 3RD LANE WIDENING, DECK REPLACEMENT AND OTHER MODIFICATIONS, INCLUDING CROSS-SECTIONS, STANDARD DRAWINGS AND TURNPIKE SPECIFIC STANDARD DRAWINGS MAY BE INSPECTED IN THE OHIO TURNPIKE COMMISSION OFFICE LOCATED AT 682 PROSPECT STREET, BEREA, OHIO 44017, TELEPHONE (440) 234-2081.

PROJECT SURVEY

ELEVATIONS SHOWN ON PLAN AND PROFILE SHEETS ARE AT RIGHT EDGE OF THIRD LANE (DIRECTION OF TRAFFIC) AND DERIVED FROM EXISTING THIRD LANE DESIGN PLANS AND DATA COLLECTED IN THE FIELD. CONTRACTOR SHALL CONSTRUCT PROPOSED PAVEMENT TO MATCH EDGE OF EXISTING PAVEMENT AND INSURE DESIGN CROSS SLOPES AND SUPERELEVATIONS RATES ARE MET AS SHOWN ON THE PLANS.

PROJECT BASELINE

THE CONTRACTOR SHALL SURVEY THE CENTERLINE OF TURNPIKE (RE-ESTABLISHED SURVEY BASELINE) AND SHALL ESTABLISH THE PROJECT BASELINE IN THE FIELD AND USE THIS BASELINE FOR CONSTRUCTION LAYOUT. THE LOCATION OF THIS BASELINE SHALL BE AT THE RIGHT EDGE OF THE THIRD LANE BASE PAVEMENT JOINT OF THE EASTBOUND LANES.

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE CHIEF ENGINEER.

SLOPE DRAINS

THE FOLLOWING QUANTITIES, ARE INCLUDED AS CONTINGENCY, TO BE USED AS DIRECTED BY THE CHIEF ENGINEER TO REPLACE ANY DAMAGED, RUSTED, OR NON-FUNCTIONAL SLOPE DRAIN PIPES PER OTC STANDARD DRAWING CB-1. REMOVE AND REPLACE HEADWALLS AND ROCK CHANNEL PROTECTIONS WHERE NEW SLOPE DRAIN PIPES ARE INSTALLED.

Table listing items for slope drains: ITEM 603 - 12" CONDUIT, TYPE F, 707.33, AS PER PLAN (300 FT.); ITEM 603 - 15" CONDUIT, TYPE F, 707.33 (100 FT.); ITEM 603 - 18" CONDUIT, TYPE F, 707.33 (150 FT.); ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C, WITH FABRIC FILTER (20 CU. YD.); ITEM 601 - ROCK CHANNEL PROTECTION, TYPE A, WITH FABRIC FILTER (60 CU. YD.); ITEM 602 - CONCRETE MASONRY (4 CU. YD.).

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.

Table listing items for erosion control: ITEM 207 - TEMPORARY SEEDING AND MULCHING (1377 SQ. YD.); ITEM 659 - COMMERCIAL FERTILIZER (0.3 TON); ITEM 659 - WATER (9 M. GAL.).

ITEM 207 - FILTER FABRIC FENCE

FILTER FABRIC SHALL MEET THE REQUIREMENTS OF ITEM 207.02.

THE BOTTOM OF THE FENCE SHALL BE BURIED 6" BELOW THE GROUND. THE FENCE SHALL BE HIGH ENOUGH TO RETAIN SEDIMENT LADEN WATER AND ADEQUATELY SUPPORTED TO PREVENT COLLAPSE OR BURSTING. THE GROUND ELEVATION OF THE FENCE SHALL BE HELD CONSTANT EXCEPT THAT THE END ELEVATION SHALL BE RAISED TO PREVENT FLOW AROUND THE END OF THE FENCE.

THE FILTER FABRIC SHALL BE MAINTAINED TO BE FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR AND/OR REPLACEMENT OF THE FILTER FABRIC.

THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL REQUIRED SHALL BE PAID FOR UNDER ITEM 207 LIN. FT. FILTER FABRIC FENCE.

ITEM 201 - CLEARING AND GRUBBING

ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THOSE OTHERWISE DESIGNATED BY THE CHIEF ENGINEER. LANDOWNERS SHALL BE ALLOWED TO SALVAGE THE WOOD FROM TREES BEING REMOVED ON THEIR PROPERTY. TREES DESIGNATED AS BEING SALVAGED FOR WOOD, SHALL BE CUT ABOVE THE BASE AND PLACED OUTSIDE OF THE RIGHT-OF-WAY.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE CHIEF ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

ITEM 203 - EXCAVATION

THIS ITEM INCLUDES EXCAVATING THE EXISTING GRANULAR BASE UNDER THE CENTER AND RIGHT EASTBOUND LANES, APPROACH SLABS, FULL DEPTH EXCAVATION OF THE EXISTING EASTBOUND RIGHT SHOULDER AFTER MILLING ASPHALT OVERLAY AND TRENCH EXCAVATION FOR AGGREGATE DRAIN. EXISTING GRANULAR BASE THICKNESS VARIES WITH A MAXIMUM OF 6 INCHES THICK UNDER THE RIGHT AND CENTER LANES.

Table listing excavation quantities: MAINLINE GRANULAR BASE REMOVAL (9,578 CU. YD.); SHOULDER EXCAVATION - WITH AND WITHOUT GUARDRAIL (9,340 CU. YD.); SHOULDER EXCAVATION - WITH BARRIER WALL (3,300 CU. YD.); SHOULDER EXCAVATION - WITH GUARDRAIL AND ASPHALT CURB (542 CU. YD.); APPROACH SLAB GRANULAR BASE REMOVAL (176 CU. YD.); TRENCH FOR AGGREGATE DRAIN (119 CU. YD.); COMPACTED AGG. OR STONE SHOULDER PROTECTION (467 CU. YD.); ITEM 203 EXCAVATION (23,522 CU. YD.).

ITEM 603 - 12" CONDUIT, TYPE F, 707.33, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING A NEW SLOPE DRAIN IN ACCORDANCE WITH OTC STANDARD DRAWING CB-1 AND THE REMOVAL AND DISPOSAL OF EXISTING CONDUIT SHALL BE INCLUDED IN THE COST PER FOOT OF ITEM 603 - 12" CONDUIT, TYPE F, 707.33, AS PER PLAN.

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE 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 WALL THICKNESS OF 0.064 INCHES.

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLE REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.

A MASONRY COLLAR, AS PER STANDARD DRAWING, DM-1.1, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 603.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OTC, REPRESENTATIVES OF THE OTC AND THE CONTRACTOR, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE OTC REPRESENTATIVE.

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

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 CHIEF ENGINEER.

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

ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN

ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH OTC STANDARD DRAWING CBR-3, AND SECTION 622 OF THE SPECIFICATIONS.

IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN SECTION 622.07 OF THE SPECIFICATIONS, THE CONCRETE BARRIER SHALL BE CURED USING THE MATERIAL SPECIFIED IN SP 536A. THE SP 536A MATERIAL APPLICATION SHALL BE AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. THE CONTRACTOR SHALL SUBMIT TECHNICAL DATA FOR THE SP 536A MATERIAL TO THE ENGINEER FOR APPROVAL. THE COST OF CURING THE WALL AND BARRIER SHALL BE INCLUDED IN THE BID PRICE FOR SP 536A, MASONRY COATING. ALL OTHER PROVISIONS OF SECTION 622 OF THE SPECIFICATIONS SHALL APPLY.

THE COST OF THE BARRIER TRANSITION SHALL BE INCIDENTAL TO ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN. THE BARRIER TRANSITION SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING CBR-6. PAYMENT FOR ALL MATERIALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN.

ALL DIMENSIONS SHOWN ON STD. DWG. CBR-3 FOR TYPE D BARRIER SHALL APPLY EXCEPT THAT THE FOOTING DEPTH SHALL BE 11.25 INCHES.

EXISTING UNDERDRAINS

ALL EXISTING UNDERDRAINS ENCOUNTERED IN THE THIRD LANE AND AT THE PAVEMENT SAW CUT LOCATION SHALL NOT BE DISTURBED.

ITEM 603 - GROUTING VOIDS AROUND CORRUGATED METAL PIPES. CONTRACTOR SHALL USE A LOW STRENGTH MORTAR BACKFILL IN ACCORDANCE WITH ODOT CMS 613 TO FILL THE VOIDS IN THE PIPE. PAYMENT FOR ALL MATERIALS AND LABOR TO FILL THE VOIDS SHALL BE PAID AT THE UNIT PRICE BID FOR ITEM 603 - GROUTING VOIDS AROUND CORRUGATED METAL PIPES.

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ADDENDUM NO. 3
OHIO TURNPIKE COMMISSION
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION GENERAL NOTES
RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231
DESIGNED: CT CHECKED: SSK DATE: 12/19/2012
DRAWN: CT IN CHARGE: SSK SCALE: N/A
CONTRACT 39-13-02 SHEET 10 OF 165

ITEM 407 - TACK COAT, TRACKLESS TACK, AS PER PLAN

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-IHM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	--	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	--	5
RESIDUE BY DISTILLATION, %	AASHTO T5950	--	--
OIL DISTILLATE, %	AASHTO T59	--	1
SIEVE TEST, %	AASHTO T59	--	0.30
TEST ON RESIDUE:			
PENETRATION, @ 25C	AASHTO T49	--	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	--
SOLUBILITY,%	AASHTO T44	97.5	--
ORIGINAL BINDER DSR@82C			
G*/SIN „,10 RAD/SEC	AASHTO T315	1.00	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC. KEEP FROM FREEZING. SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LAB TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED. IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL. ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD BE A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS. APPLY AT A RATE OF 0.075 GALLONS PER SQUARE YARD TO ALL MILLED SURFACES AND AT A RATE OF 0.06 GALLONS PER SQUARE YARD TO ALL SMOOTH PAVED SURFACES AND BETWEEN COURSES OF ASPHALT. RECOMMENDED APPLICATION TEMPERATURE IS 160F TO 180F. DO NOT EXCEED 180F. DILUTION IS NOT ALLOWED.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT. THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS *10% OF THE SPECIFIED RATE.

METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: ALL REQUIREMENTS OF 407.08 APPLY.

ASPHALT SURFACE COURSE PAVING WITH MATERIAL TRANSFER DEVICE

IN ADDITION TO THE REQUIREMENTS OF SP 400, A MATERIAL TRANSFER DEVICE (MTD) SHALL BE USED FOR ALL SURFACE COURSE MAINLINE AND RAMP PAVING. THE MTD SHALL BE SELF PROPELLED AND NOT ATTACHED TO THE ASPHALT SPREADING AND FINISHING EQUIPMENT. THE MTD SHALL BE CAPABLE OF REMIXING AND TRANSFERRING THE ASPHALT MIXTURE FROM THE MTD TO THE ASPHALT SPREADING AND FINISHING EQUIPMENT. ALL COSTS ASSOCIATED WITH THE USE OF THIS EQUIPMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT SP 404 ITEMS.

ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE A

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING PRESSURE RELIEF JOINT, TYPE A, AT EACH APPROACH TO EACH MAINLINE BRIDGE ACROSS THE NEW PAVEMENT AND OUTSIDE SHOULDER IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET AND OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING BP-2.3 (07-16-04).

PRESSURE RELIEF JOINT LOCATIONS WILL BE FIELD LOCATED BY THE CHIEF ENGINEER APPROXIMATE LOCATIONS FOR EASTBOUND LANES ARE AS FOLLOWS: STA. 639+65 AND STA. 641+41.

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY:

ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE A	175 FT.
ITEM SP605 - 6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP	175 FT.
ITEM 603 - 6" CONDUIT TYPE F, NON-PERFORATED ASTM D3034 (SDR 35) 707.42 OR 707.33	34 FT.

ITEM 601 - PAVED GUTTER, MISC.: GUTTER BROKEN IN PLACE

THIS ITEM INCLUDES BREAKING UP THE PAVED GUTTER CONCRETE IN PLACE TO BE USED AS ROCK CHANNEL PROTECTION. THE CONTRACTOR SHALL REMOVE THE BROKEN CONCRETE FROM THE CHANNEL, EXCAVATE BOTTOM OF THE CHANNEL 2 FEET AND PLACE FABRIC FILTER AT THE EXCAVATED BOTTOM. THE CONTRACTOR SHALL PLACE THE BROKEN CONCRETE IN THE CHANNEL IN CONJUNCTION WITH ROCK CHANNEL PROTECTION PROVIDED IN THE PLANS. THE CHANNEL SHALL BE 16 FEET WIDE WITH 8 FOOT BOTTOM AND 4 FOOT WIDE SIDES AT 4:1 SLOPE OR MATCH EXISTING GROUND. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE CHANNEL.

SLOPE EROSION PROTECTION

FOR INDICATED SLOPE EROSION AREAS, REMOVE TOPSOIL FROM THE EXTENTS OF THE INDICATED AREA AND REMOVE SOIL DOWN TO THE LOWEST EXPOSED DEPTH IN THE EROSION AREA OR 12 INCHES, WHICHEVER IS GREATER. REMOVE ALL ROCKS, GRAVEL, AND COBBLES AND FOREIGN MATERIAL 1 1/2" OR GREATER FROM THE SLOPE EROSION AREA.

SLOPE EROSION PROTECTION CONTINUED

PLACE AND COMPACT BACKFILL TO MATCH THE ADJACENT SLOPE AND PLACE 4 INCHES OF TOPSOIL TO MEET EXISTING SLOPE GRADES AT ALL EXTENTS OF THE INDICATED SLOPE. PLACE ITEM 671 - EROSION CONTROL MAT, TYPE B FROM THE TOP OF THE SLOPE DOWN TO THE LOWEST INDICATED EXTENT OF THE SLOPE EROSION CONTROL AREA. CONTINUE THE EROSION CONTROL MAT LATERALLY FIVE (5) FEET BEYOND THE SIDE EXTENTS OF THE SLOPE EROSION AREA. FOR AREAS ADJACENT TO PROPOSED CONCRETE BARRIER, THE TOP OF SLOPE MAT SHALL START AT THE OUTSIDE FACE OF THE BARRIER. FOR ALL OTHER AREAS, THE TOP OF SLOPE MAT SHALL START AT THE EDGE OF SHOULDER COMPACTED AGGREGATE BEHIND THE GUARDRAIL.

ITEM 203 - EXCAVATION	1500 CU.YD.
ITEM 203 - BORROW	1000 CU.YD.
ITEM 659 - TOPSOIL	380 CU.YD.
ITEM 659 - WATER	10 M. GAL.
ITEM 671 - EROSION CONTROL MAT, TYPE B	4550 SQ.YD.

ITEM 209 - DITCH CLEANOUT

LOCATIONS ARE MARKED ON THE PLANS THAT WILL REQUIRE DITCH CLEANING AND REGRADING OF THE EXISTING DITCH. THE DITCH IN THESE LOCATIONS WILL REGRADED TO PROVIDE POSITIVE DRAINAGE THROUGH THE LIMITS OF THE DITCH CLEANING AREA. THE AREAS WILL BE SEEDED AND MULCHED AFTER THE REGRADING OF THE DITCH IS APPROVED BY THE RESIDENT ENGINEER. DITCH CLEANING IS REQUIRED BUT NOT LIMITED TO THE FOLLOWING LOCATIONS: STA. 613+00 TO STA. 618+00, STA. 638+90 TO STA. 640+15, STA. 681+00 TO STA. 683+85, STA. 704+25 TO STA. 707+25, STA. 708+25 TO STA. 709+50, STA. 736+50 TO STA. 737+50, STA. 738+50 TO STA. 739+50, STA. 781+00 TO STA. 799+00, STA. 851+00 TO STA. 851+90, STA. 853+25 TO STA. 854+15 AND AS DIRECTED BY THE CHIEF ENGINEER. THE COST OF THE LABOR, MATERIALS AND EQUIPMENT TO COMPLETE THIS WORK WILL BE PAID UNDER ITEM 209 - DITCH CLEANOUT. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR DITCH CLEANOUT:

ITEM 209 - DITCH CLEANOUT 3200 FT.

ITEM 202 - SPECIAL PIPE CLEANOUT

LOCATIONS ARE MARKED ON THE PLANS THAT WILL REQUIRE PIPE CLEANING OF THE EXISTING CONDUITS. THE PIPE IN THESE LOCATIONS WILL CLEANED OF ALL DEBRIS LOCATED WITHIN THE PIPE STRUCTURE. PIPE CLEANING IS REQUIRED BUT NOT LIMITED TO 18" PIPE BETWEEN STA. 851+85 TO STA. 853+20., STA. 737+50 TO STA. 738+50, AND AS DIRECTED BY THE RESIDENT ENGINEER. THE COST OF THE LABOR, MATERIALS AND EQUIPMENT TO COMPLETE THIS WORK WILL BE PAID UNDER ITEM 202 - SPECIAL PIPE CLEANOUT. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR CLEANOUT.

ITEM 202 - SPECIAL PIPE CLEANOUT 235 FT.

ITEM SPECIAL - CULVERT CLEANOUT, TWIN 6' X 12' BOX

THIS ITEM OF WORK SHALL CONSIST OF REMOVING ALL SEDIMENTS, DEBRIS, AND OTHER FOREIGN MATERIALS FROM INSIDE AND OUTSIDE OF THE EXISTING TWIN 6' (H) BY 12' (W) BOX CULVERTS AND REESTABLISH THE CHANNEL FLOW LINE 40 FEET ON EITHER SIDE OF THIS CULVERT. THE REMOVAL OPERATION SHALL NOT BE DESTRUCTIVE TO THE INTEGRITY OF THE CULVERT. THE CONTRACTOR SHALL SUBMIT A CLEANOUT PROCEDURE TO THE CHIEF ENGINEER FOR APPROVAL PRIOR TO PERFORMING THE WORK. THE CONTRACTOR SHALL REESTABLISH THE CHANNEL FLOW LINE WITHIN THE LIMITS OF WORK. ALL REMOVAL MATERIALS SHALL BE REMOVED OFF-SITE IN ACCORDANCE WITH ITEM SP 105. ANY DEWATERING WORK REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED UNDER THIS PAY ITEM. PAYMENT FOR CULVERT AND CHANNEL CLEANOUT WILL BE PAID AT THE LUMP SUM PRICE BID FOR ITEM SPECIAL - CULVERT CLEANOUT, TWIN 6' BY 12' BOX.

CEMENT STABILIZATION AT CULVERTS AND APPROACH SLAB AREAS

BRIDGE APPROACH SLABS

EXCAVATE 16 INCHES OF THE EXPOSED SOIL SUBGRADE FROM THE EDGE OF THE BRIDGE FACE TO 20 FEET BEYOND THE BRIDGE FACE AND SPREAD THE EXCAVATED SOIL IN THE AREA TO BE CHEMICALLY STABILIZED. PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING THE SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION FROM THE BRIDGE FACE TO 20 FEET BEYOND THE BRIDGE FACE AND COMPACT ACCORDING TO THE PROJECT SPECIFICATIONS.

BOX CULVERTS WHERE DEPTH OF COVER IS GREATER THAN 4 FEET:

CHEMICALLY STABILIZE ACCORDING TO PROJECT DOCUMENTS

BOX CULVERTS WHERE DEPTH OF COVER IS BETWEEN 2-4 FEET:

EXCAVATE 12 INCHES OF THE EXPOSED SOIL SUBGRADE FROM 20 FEET BEYOND BOTH ENDS OF THE BOX CULVERT AND THE SPREAD THE EXCAVATED SOIL IN THE AREA TO BE CHEMICALLY STABILIZED. PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING THE SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION FROM 20 FEET BEYOND BOTH ENDS OF THE BOX CULVERT AND COMPACT ACCORDING TO THE PROJECT SPECIFICATIONS.

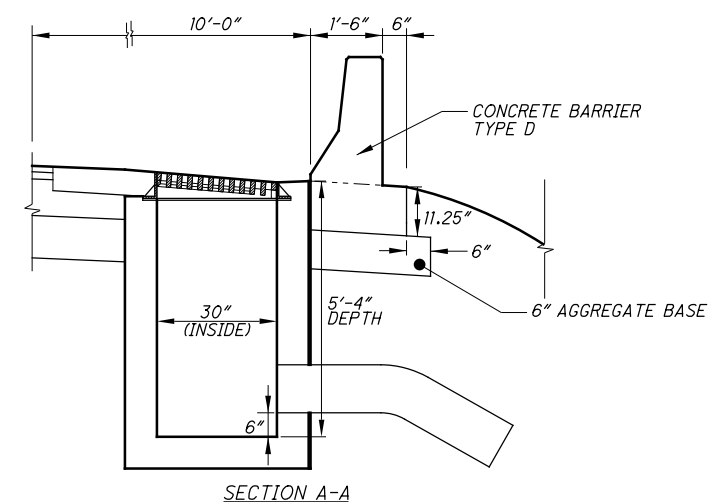
BOX CULVERTS WHERE DEPTH OF COVER IS LESS THAN 2 FEET:

EXCAVATE 16 INCHES OF THE EXPOSED SOIL SUBGRADE FROM THE EDGE OF THE BOX CULVERT TO 20 FEET BEYOND THE END OF THE BOX CULVERT AND SPREAD THE EXCAVATED SOIL IN AN AREA TO BE CHEMICALLY STABILIZED. PERFORM CHEMICAL STABILIZATION ON THE EXCAVATED SOIL USING SAME REQUIREMENTS AS THE ADJACENT SUBGRADE. AFTER CHEMICALLY STABILIZING THE EXCAVATED SOIL, PLACE THE EXCAVATED SOIL BACK IN THE EXCAVATION FROM THE EDGE OF THE BOX CULVERT TO 20 FEET BEYOND THE BOX CULVERT AND COMPACT ACCORDING TO PROJECT SPECIFICATIONS.

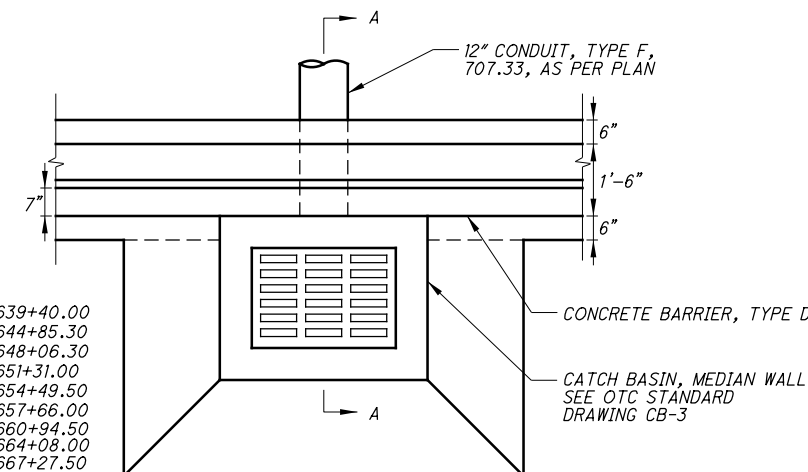
COMPACT THE EXISTING SUBGRADE MATERIAL OVER THE BOX CULVERT USING A NON-VIBRATORY ROLLER AND TEST FOR PERCENT COMPACTION ACCORDING TO THE PROJECT SPECIFICATIONS. DO NOT PROOF ROLL. IF THE COMPACTED SOIL DOES NOT MEET THE SPECIFICATION REQUIREMENTS FOR DENSITY, THE ENGINEER WILL DELINEATE THE AREA TO BE UNDERCUT AND BACKFILL WITH ITEM SP304 MATERIAL.

FOR ALL SCENARIOS LISTED ABOVE IN AREAS INACCESSIBLE TO THE SPECIFIED COMPACTION EQUIPMENT, THE CONTRACTOR SHALL ENSURE THAT THE SPECIFIED COMPACTION IS OBTAINED USING OTHER SUITABLE EQUIPMENT.

PAYMENT FOR EXCAVATION AND EMBANKMENT REQUIRED TO COMPLETE THE STABILIZATION IN THE AREAS SHALL BE INCLUDED IN AND INCIDENTAL TO ITEM 206 - CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP, AS PER PLAN AND ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN.



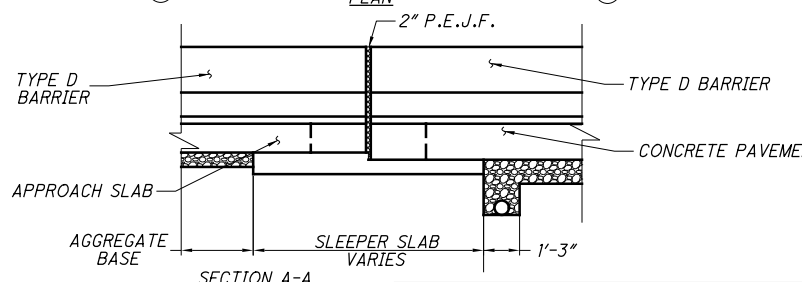
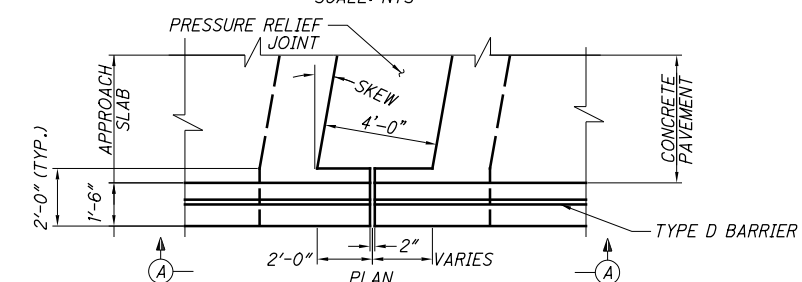
SECTION A-A



- DR-4 STA. 639+40.00
- DR-6 STA. 644+85.30
- DR-7 STA. 648+06.30
- DR-8 STA. 651+31.00
- DR-9 STA. 654+49.50
- DR-10 STA. 657+66.00
- DR-12 STA. 660+94.50
- DR-13 STA. 664+08.00
- DR-14 STA. 667+27.50
- DR-15 STA. 682+30.00
- DR-18 STA. 691+00.00

MODIFIED TYPE D BARRIER DETAIL AT CATCH BASIN

SCALE: NTS



SECTION A-A


PRESSURE RELIEF JOINT

ADDENDUM NO. 3			
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION GENERAL NOTES			
RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231			
DESIGNED: CT	CHECKED: SSK	DATE: 12/19/2012	
DRAWN: CT	IN CHARGE: SSK	SCALE: N/A	
CONTRACT 39-13-02			SHEET 12 OF 165

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SHEET NUMBER																		ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.	
10	11	12	14	15	16	19	66	67	68	69	70	71	102A	103	111	112	129						
																					DRAINAGE (CONT.)		
								1353											603	1653	FT	12" CONDUIT, TYPE F-707.33, AS PER PLAN	10
																			603	100	FT	15" CONDUIT, TYPE F-707.33	
								16											603	16	FT	18" CONDUIT, TYPE C	
																			603	150	FT	18" CONDUIT, TYPE F-707.33	
								212											603	212	FT	30" CONDUIT, TYPE C	
								15											603	15	FT	36" CONDUIT, TYPE A	
								186											603	186	FT	FIELD PAVING OF EXISTING PIPE	
								2											SP 604	2	EACH	CATCH BASIN, NO. CB-1	11
								12											SP 604	12	EACH	CATCH BASIN, MEDIAN WALL	11
								15											SP 604	15	EACH	SPECIAL - 12" PRECAST CONCRETE END SECTION	
								3											SP 604	3	EACH	SPECIAL - 18" PRECAST CONCRETE END SECTION	
								2											SP 604	2	EACH	SPECIAL - 30" PRECAST CONCRETE END SECTION	
		3200																	209	3200	FT	DITCH CLEANOUT	
								2.4											613	2.4	CU YD	LOW STRENGTH MORTAR BACKFILL	
											6434								605	6434	FT	AGGREGATE DRAIN, AS PER PLAN	11
		175							49023										SP605	49198	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP	
									32										SPECIAL	32	EACH	PRECAST REINFORCED CONCRETE OUTLET	11
		LUMP																	SPECIAL	LUMP	LUMP	CULVERT CLEANOUT, TWIN 6'X12' BOX	12
																					PAVEMENT		
	63365																		206	63365	SQ YD	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP, AS PER PLAN	11
	33875																		206	33875	SQ YD	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	11
	3019																		206	3019	TON	CEMENT	
	1.3																		206	1.3	M GAL	WATER FOR CURING	
	32																		206	32	HOUR	TEST ROLLING	
	300																		251	300	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	11
											25061								252	25061	FT	FULL DEPTH PAVEMENT SAWING	
	300																		255	300	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	11
	200																		255	200	FT	FULL DEPTH PAVEMENT SAWING	
											26082								SP302	26114	CU YD	BITUMINOUS AGGREGATE BASE, PG64-22	
																			SP304	11281	CU YD	AGGREGATE BASE	
																			SP304	7745	CU YD	AGGREGATE BASE (SHOULDER)	
																			SP402	1314	CU YD	ASPHALT CONC. BASE COURSE, OR RECYCLED ASPHALT CONC. BASE COURSE, PG64-22	
																			SP402	3335	CU YD	ASPHALT CONC. BASE COURSE, OR RECYCLED ASPHALT CONC. BASE COURSE, PG70-22 (FR)	
																			SP404	1288	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG64-22	
																			SP404	2858	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 (FR)	
																			SP404A	29074	FT	JOINT SEALER	
																			407	5738	GALLON	TACK COAT, TRACKLESS TACK, AS PER PLAN	12
																			407	7462	GALLON	TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE, AS PER PLAN	12
																			452	1002	SQ YD	NON-REINFORCED CONCRETE PAVEMENT (T=15")	
																			617	4974	SQ YD	SHOULDER PREPARATION	
																			617	415	CU YD	COMPACTED AGGREGATE	
																			617	27	M GAL	WATER	
																			SP627	282	CU YD	STONE SHOULDER PROTECTION	
																			SPECIAL	6792	SQ YD	ASPHALT PAVEMENT REINFORCEMENT	11
		175																	SPECIAL	175	FT	PRESSURE RELIEF JOINT, TYPE A	12
																			SPECIAL	15.14	MILE	SONIC NAP ALERT PATTERN (SNAP)	SPEC.
		24836																	SPECIAL	26916	FT	SAW CUT JOINT	11
																						ALTERNATE BID	
																			SP304	7745	CU YD	RECYCLED AGGREGATE BASE, AS PER PLAN (SHOULDER)	11
																			SPECIAL	10000	CU YD	CRUSHED MATERIAL STOCKPILE	11
FOR BRIDGE MAINTANENCE GENERAL SUMMARY SEE SHEET 129																							

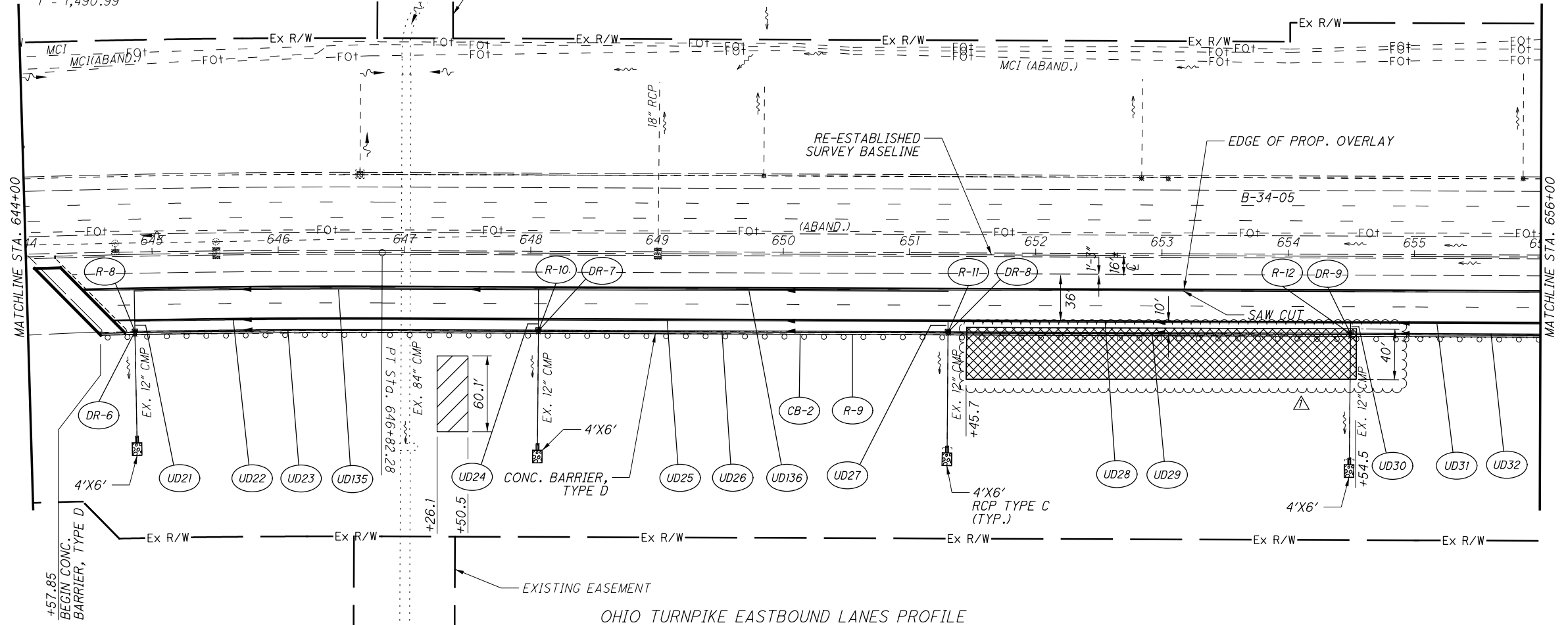
ADDENDUM NO. 3	CT	1/22
ADDENDUM NO. 1	CT	1/15
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION GENERAL SUMMARY		
 RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 42321		
DESIGNED: NLC	CHECKED: SSK	DATE: 12/19/2012
DRAWN: NLC	IN CHARGE: SSK	SCALE: N/A
CONTRACT 39-13-02		SHEET 64 OF 165

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	601					602	603	603			SP 604	SP 604	SP 604	SP 604	SP 604	613	REMARKS		
					PATCHING CONCRETE STRUCTURE	ROCK CHANNEL PROTECTION, TYPE A, WITH FABRIC FILTER	ROCK CHANNEL PROTECTION, TYPE B, WITH FABRIC FILTER	ROCK CHANNEL PROTECTION, TYPE C, WITH FABRIC FILTER	PAVED GUTTER, MISC.: GUTTER BROKEN IN PLACE	CONCRETE MASONRY	SPECIAL - GROUTING VOIDS AROUND CORRUGATED METAL PIPES	12" CONDUIT, TYPE F 707.33, AS PER PLAN	18" CONDUIT, TYPE C	30" CONDUIT, TYPE C	36" CONDUIT, TYPE A	FIELD PAVING OF EXISTING PIPE	CATCH BASIN, NO. CB-1	SPECIAL - 12" PRECAST CONCRETE END SECTION	SPECIAL - 18" PRECAST CONCRETE END SECTION	SPECIAL - 30" PRECAST CONCRETE END SECTION		CATCH BASIN, MEDIAN WALL	LOW STRENGTH MORTAR BACKFILL
					SQ FT	CU YD	CU YD	CU YD	FT	CU YD	CU YD	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	CU YD		
DR-1	80	606+00.00		LT.	46																	3 SPALLED AREAS ON THE WINGWALL	
DR-1A	81	612+28.00	613+21.00	RT.			39		90														
DR-2	82	625+00.00		RT.				1.33				36			1	1						NEW CONST. PER OTC CB-1	
DR-2A	82	627+25.02		RT.				1.33				21			1	1							
DR-3	82	631+28.50		RT.				1.33				46			1	1						CONNECT INTO EXISTING PIPE	
DR-4	83	639+40.00		RT.				1.33				50				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-5	83	640+15.00		RT.				1.78															
DR-6	84	644+85.30		RT.				1.33				82				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-7	84	648+06.30		RT.				1.33				91				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-8	84	651+31.00		RT.				1.33				91				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-9	84	654+49.50		RT.				1.33				97				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-10	85	657+66.00		RT.				1.33				102				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-11	85	658+90.00		RT.	74	18.00																2 SPALLED AREAS ON THE WINGWALL	
DR-12	85	660+94.50		RT.				1.33				101				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-13	85	664+08.00		RT.				1.33				113				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-14	85	667+27.50		RT.				1.33				113				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-14A	86	673+25.00		RT.				1.33				130				1				1		REPLACE PER OTC CB-1 AND CB-MW	
DR-15	87	682+30.00		RT.				1.33				140				1				1		NEW CONST. PER OTC CB-1/CB-MW	
DR-16	87	683+85.00		RT.																	2.40	PLACE LSM UNDER FOOTING	
DR-17	87	685+08.00	690+43.00	LT.			155		535.00														
DR-17A	87-88	690+71.00	695+90.00	LT.			150		569.00														
DR-18	87	691+00.00		RT.				1.33				140				1				1		NEW CONST. PER OTC CB-1/CB-MW	
DR-18A	88	700+00.00	702+00.00	RT.			42						200				2						
DR-19	88	696+00.00		RT.	34		△	2.78														2 SPALLED AREAS ON THE WINGWALL	
DR-20	91	737+85.00		RT.				1.33														CONNECT INTO EXISTING PIPE	
DR-21	93	752+50.00		RT.								8							1			CONNECT INTO EXISTING PIPE	
DR-22	93	762+30.00		RT.						0.18		4							1			CONNECT INTO EXISTING PIPE	
DR-23	96	792+40.00		RT./LT.										15	186							REPLACE 15' OF PIPE ON THE WB SIDE	
DR-24	98	821+00.00		RT.	7																	2 SPALLED AREAS ON THE WINGWALL	
DR-25	99	825+00.00		RT.	26																	2 SPALLED AREAS ON THE WINGWALL	
DR-26	101	850+35.00		LT.									2									HOLE AT TOP AND BOTTOM OF PIPE	
DR-27	101	854+10.00		RT.						0.33		4							1			15" HEADWALL	
DR-28	102	860+15.00		LT.						0.6			12									30" HEADWALL	
DR-29	102	860+40.00		RT.			13.60																
DR-30	102	867+00.00		RT.				1.78															
TOTALS CARRIED TO GENERAL SUMMARY					187	18.00	399.60	27.62	1194	1.11	2	1353	16	212	15	186	2	15	3	2	12	2.40	

ADDENDUM NO. 3	CT	1/22
NO. REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION DRAINAGE SUB-SUMMARY		
 RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43221		
DESIGNED: NLC	CHECKED: SSK	DATE: 12/19/2012
DRAWN: NLC	IN CHARGE: SSK	SCALE: N/A
CONTRACT 39-13-02		SHEET 66 OF 165

CURVE DATA
 P.I. = Sta. 632+20.68 L = 2,952.60'
 D = 19° 41' 02" (RT) E = 128.37'
 Dc = 0° 40' 00" C = 2,938.10'
 R = 8,594.37' C.B. = S 60° 24' 08" E
 T = 1,490.99'

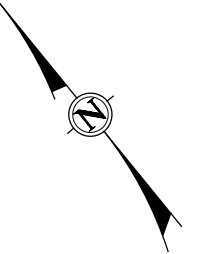
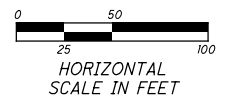
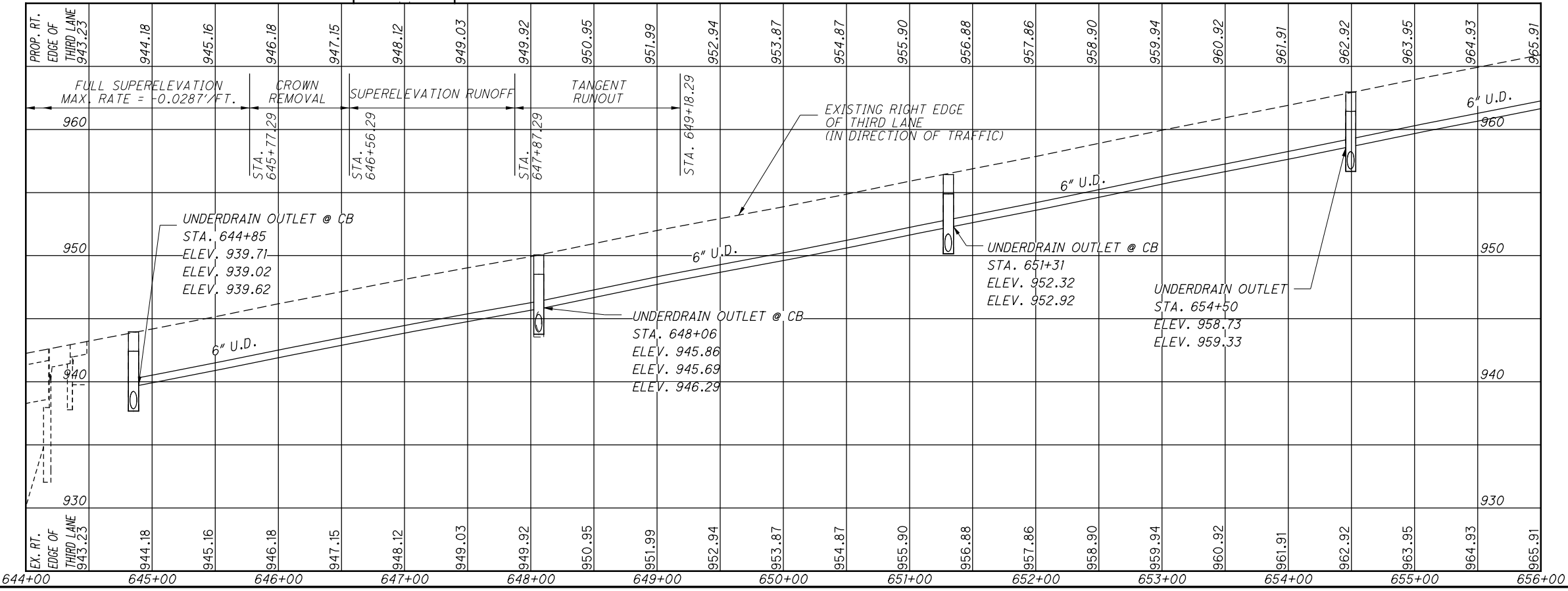


EROSION IMPROVEMENT AREA
SEE GENERAL NOTES SHEET 12.

SLOPE FAILURE AREA,
SEE SHEET 102A FOR DETAILS
AND QUANTITIES

NOTE: FOR BARRIER DETAIL AT CATCH BASIN
SEE MODIFIED TYPE D BARRIER DETAIL
SHEET 12.

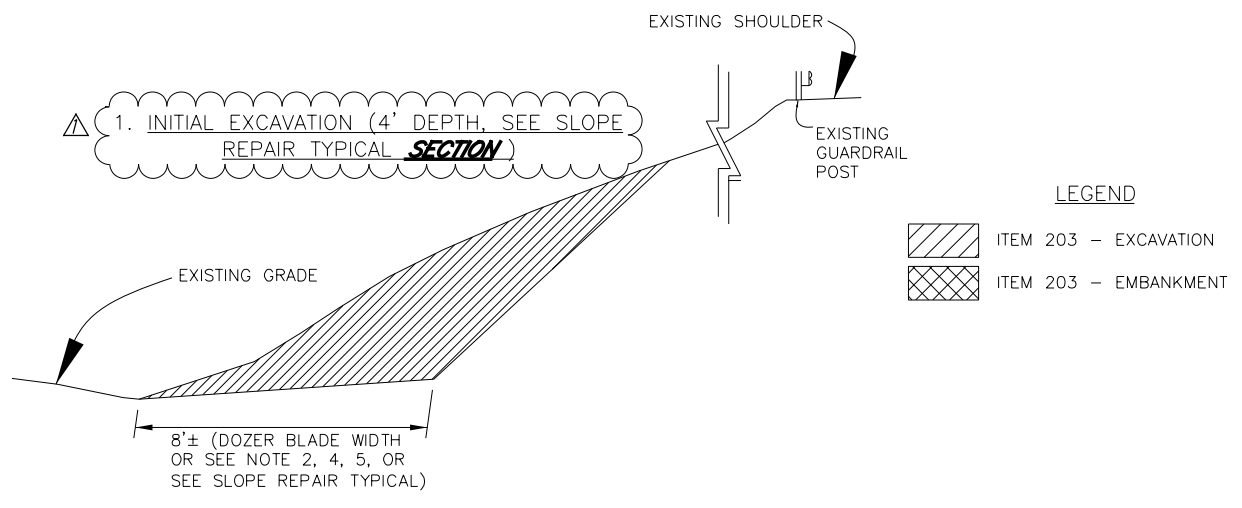
OHIO TURNPIKE EASTBOUND LANES PROFILE



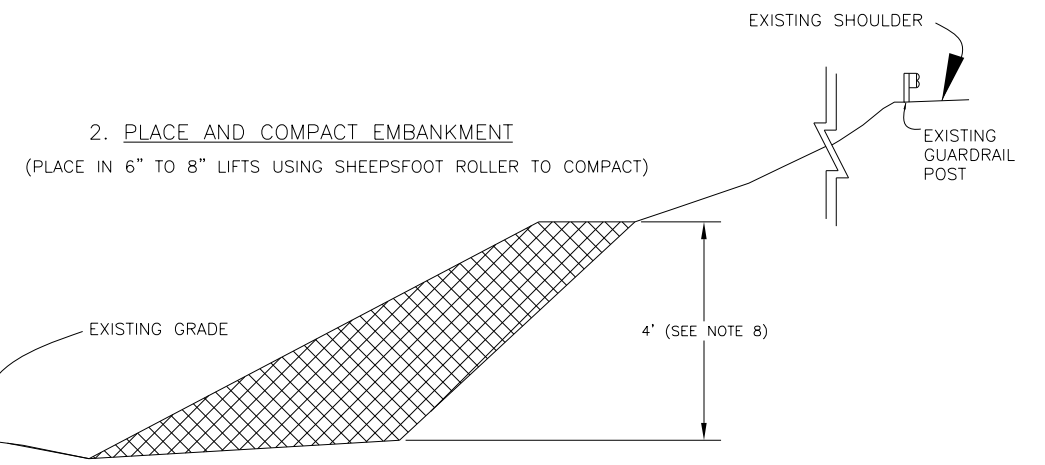
ADDENDUM NO. 3		CT	1/22
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION PLAN & PROFILE - 644+00 TO 656+00			
RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231			
DESIGNED: CT	CHECKED: SSK	DATE: 12/19/2012	
DRAWN: CT	IN CHARGE: SSK	SCALE: 1" = 50'	
CONTRACT 39-13-02 SHEET 84 OF 165			

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TYPICAL SEQUENCE OF BENCH CONSTRUCTION



- LEGEND**
- ITEM 203 - EXCAVATION
 - ITEM 203 - EMBANKMENT



3. REPEAT UNTIL MATCHED EXISTING ROADWAY SUBGRADE.

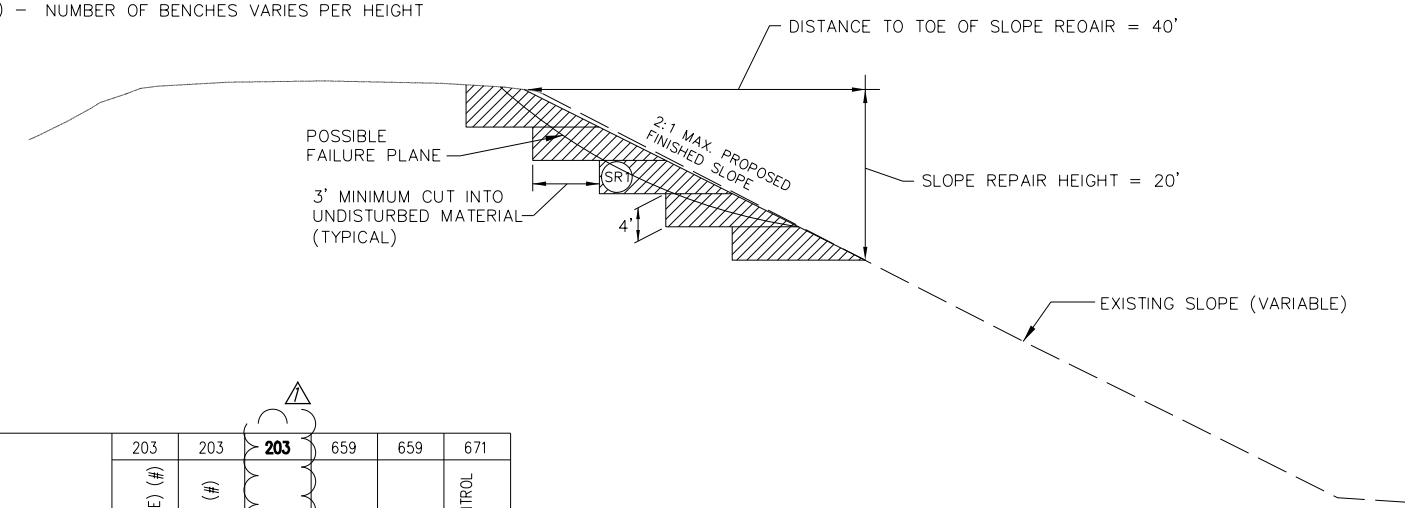
NOTES

- (1) - THE GENERAL AREA OF SLOPE FAILURE REPAIR IS ON THE EASTBOUND SIDE, SOUTH EMBANKMENT BETWEEN STA. 651+50 AND 654+50.
- (2) - THE FAILURE PLANE SHOWN AND THE LIMITS OF CORRECTIVE WORK ARE ESTIMATED. THE ACTUAL FAILURE PLANE SHALL BE DETERMINED BY CAREFUL TRENCHING NORMAL TO THE EMBANKMENT PRIOR TO ANY EXCAVATION AND/OR REMOVAL OF THE FAILED EMBANKMENT MATERIAL. THE PRESENCE OF, AND LOCATION OF, THE FAILURE PLANE SHALL BE VERIFIED BY THE ENGINEER AND TESTING LAB.
- (3) - THE WORK SHALL CONSIST OF REMOVING AND REUSING EXISTING SLOPE MATERIAL WITH THE INCLUSION OF **NEW ITEM 203 EMBANKMENT FILL WHERE NECESSARY TO BALANCE THE SITE**. THE EXISTING SLOPE SHALL BE BENCHED AS SHOWN ON THE PLANS AND EMBANKMENT MATERIAL FURNISHED, PLACED AND COMPACTED IN ACCORDANCE WITH ITEM 203.
- (4) - BENCHING AND LIMITS OF CORRECTIVE WORK SHOWN ON THE PLANS SHALL BE MODIFIED, IF NECESSARY, IN ACCORDANCE WITH THE FIELD CONDITIONS TO ENSURE THAT THE FAILURE PLANE IS LOCATED AND MATERIAL IS REMOVED AND REPLACED TO THE DIMENSIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- (5) - BENCHES SHALL BE CUT INTO SOFT OR LOOSE MATERIAL AND EXTEND A MINIMUM OF 3 FEET BEYOND THE FAILURE PLANE INTO FIRM AND STABLE MATERIAL.
- (6) - THE TOP 6 INCHES OF EMBANKMENT REMAINING AFTER REMOVAL TO THE SPECIFIED DEPTH SHALL BE COMPACTED TO A MINIMUM DENSITY OF 98% (AASHTO T-99) PRIOR TO PLACING NEW EMBANKMENT MATERIAL.
- (7) - THE SURFACE OF BENCHED AREAS SHALL BE SLOPED TO DRAIN DURING INCLEMENT WEATHER TO PREVENT SATURATION OF THE CONSTRUCTED BENCHES.
- (8) - PLACEMENT AND COMPACTION OF EMBANKMENT SHALL BE DONE IN NO MORE THAN 8" LIFTS.
- (9) - THE SLOPE REPAIR SEQUENCE OF CONSTRUCTION SHOWN ON THIS SHEET CORRESPONDS TO THE SLOPE REPAIR TYPICAL ON THIS SHEET. THE REPAIR SEQUENCE IN OTHER AREAS SHALL BE CONSTRUCTED IN SIMILAR SEQUENTIAL ORDER BEGINNING WITH INITIAL FILL.
- (10) - ALL EMBANKMENT MATERIAL **PLACED** UNDER ITEM 203 - EMBANKMENT **INCLUDING NEW AND REUSED MATERIAL**, SHALL BE TESTED BY THE COMMISSION TO INSURE THAT THE MATERIAL HAS AN EFFECTIVE FRICTION ANGLE OF 28 DEGREES OR GREATER. **AN ESTIMATED QUANTITY FOR ITEM 203 - BORROW HAS BEEN PROVIDED ON THIS SHEET TO BE USED FOR THE NEW MATERIAL NEEDED TO COMPLETE THE EMBANKMENT CONSTRUCTION.**
- (11) - ALTHOUGH A TYPICAL CROSS SECTION IS PROVIDED INDICATING PROPOSED BENCHING OF THE EMBANKMENT FOUNDATION THROUGHOUT THE PROJECT, NO WAIVER OF SPECIFICATION IS INTENDED. ALL OTHER SLOPE EMBANKMENT AREAS SHALL BE BENCHED AS SET FORTH IN THE ITEM 203. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER ITEM 203.

SLOPE REPAIR TYPICAL SECTION

NOTES

- (1) - NUMBER OF BENCHES VARIES PER HEIGHT



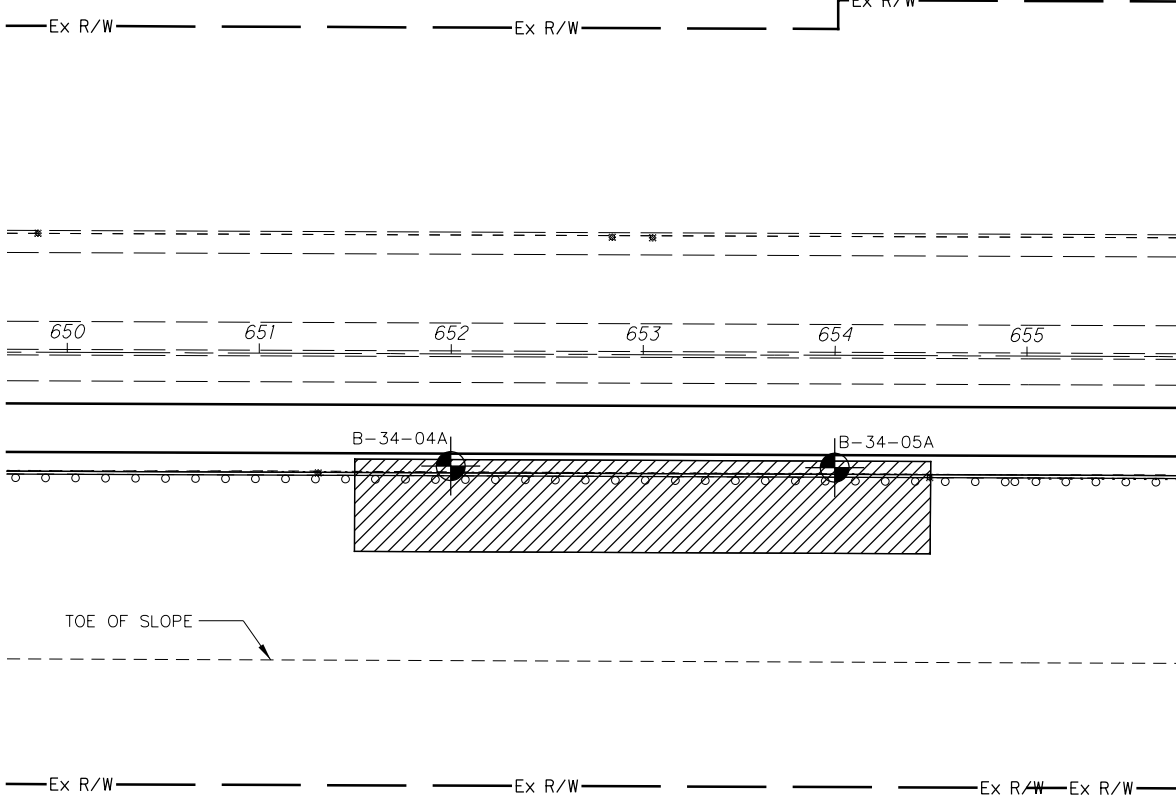
- LEGEND**
- APPROXIMATE SLOPE REPAIR LOCATION

REF #	APPROX. LOCATION	203	203	203	659	659	671
		EXCAVATION (APPROXIMATE) (#)	EMBANKMENT (#)	BORROW	TOP SOIL	WATER	EROSION CONTROL MAT. TYPE B
		C.Y.	C.Y.	C.Y.	C.Y.	M. GAL.	S.Y.
SR1	651+50-654+50	2,767	2,767	200	200	6	2575
	* SUBTOTAL	2,767	2,767	200	200	6	2575

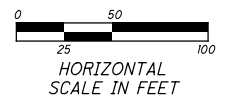
* CARRIED TO GENERAL SUMMARY SHEET

(#) - THE ESTIMATED QUANTITIES FOR EXCAVATION AND EMBANKMENT ARE APPROXIMATE AND BASED ON A SET REMOVAL AREA OF 12' X 4' X 300' FOR 5 BENCHES. THE ACTUAL EXCAVATION AND EMBANKMENT QUANTITIES SHALL BE VERIFIED BY FIELD SURVEY. THE CONTRACTOR SHALL FIELD SURVEY THE SLOPE REPAIR AREA PRIOR TO, DURING, AND AFTER EXCAVATION AND EMBANKMENT OPERATIONS. THE SURVEY SHALL GENERATE CROSS SECTIONS AT 100 FOOT INTERVALS. AVERAGE END AREAS WILL BE USED TO DETERMINE THE ACTUAL AMOUNT OF MATERIAL REMOVED AND REPLACED. THE COST OF SURVEYING, GENERATING CROSS SECTIONS AND QUANTITIES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION WILL BE GRANTED.

SLOPE REPAIR PLAN



- LEGEND**
- APPROXIMATE SLOPE REPAIR LOCATION



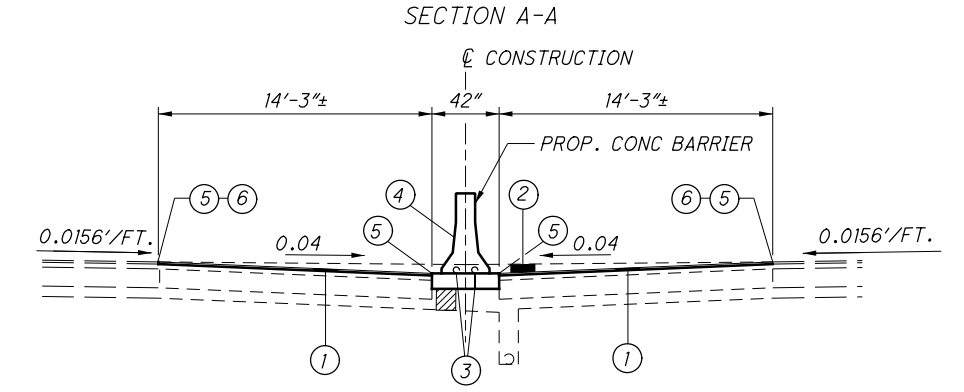
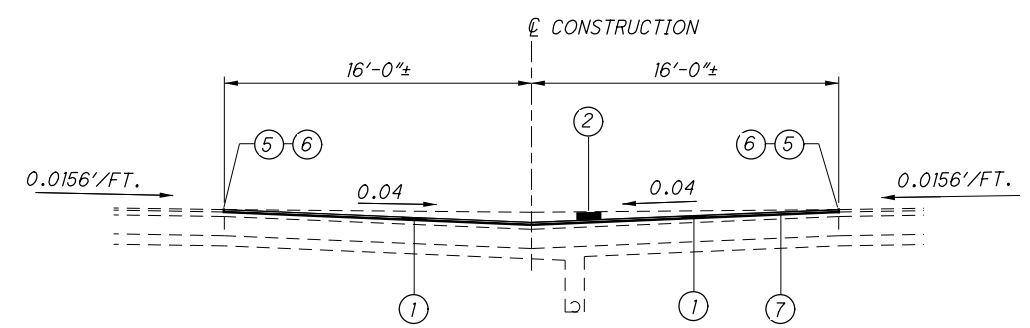
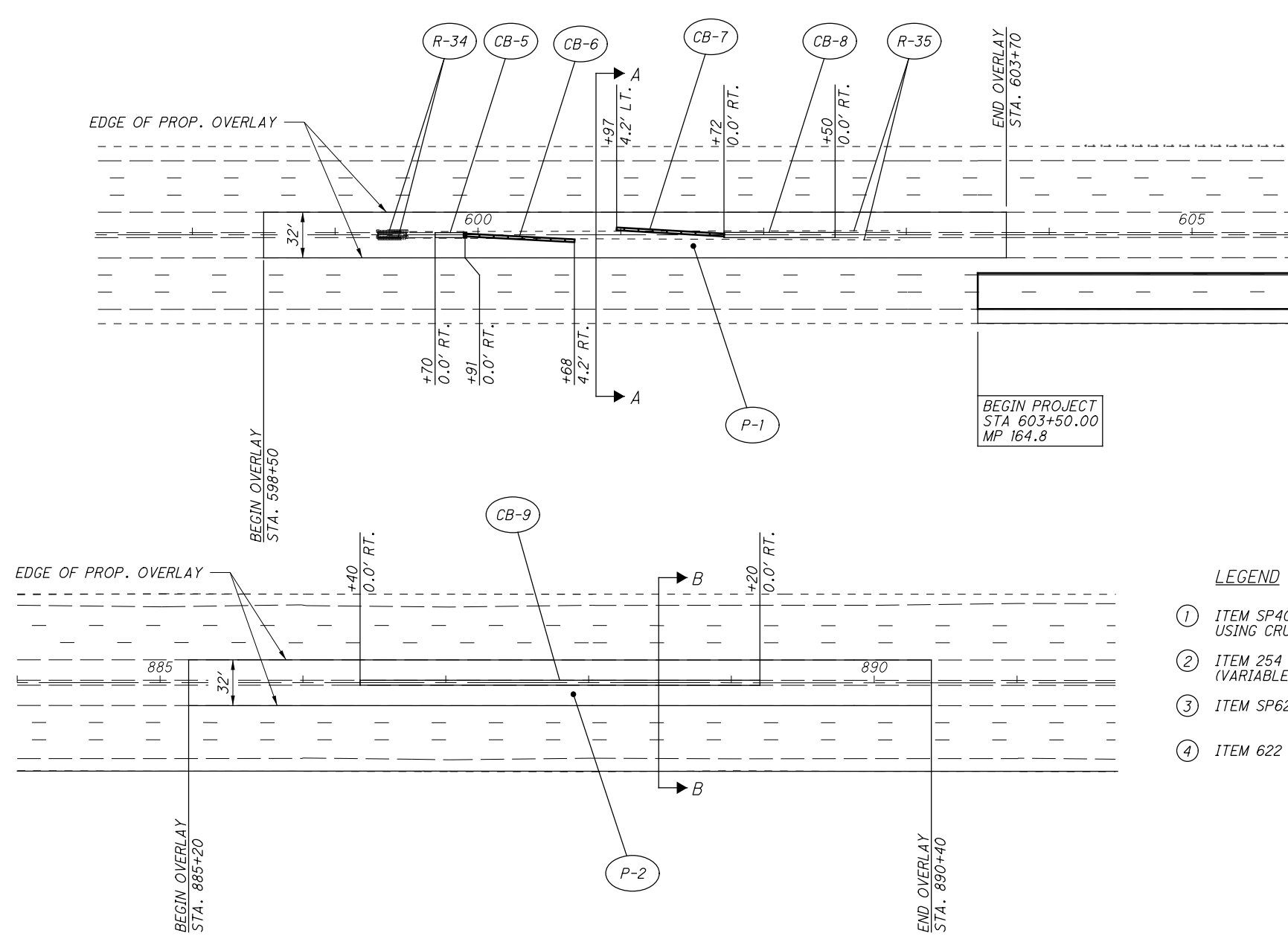
NOTES

- (1) THE CONTRACTOR SHALL SCALP THE EXISTING SLOPE, WHICH SHALL INCLUDE THE REMOVAL OF THE TOPSOIL, IN ACCORDANCE WITH 201 AND DISPOSE OF THE MATERIAL IN ACCORDANCE WITH SP 105. SCALPING OPERATIONS SHALL BE CONSIDERED INCIDENTAL TO ITEM 203 EXCAVATION.

ADDENDUM NO. 3		RRM	1/22
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE EASTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION SLOPE REPAIR PLAN - 651+50 TO 654+50			
RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43231			
DESIGNED: BRT	CHECKED: JPS	DATE: 12/19/2012	
DRAWN: RRM	IN CHARGE: SSK	SCALE: 1" = 50'	
CONTRACT 39-13-02 SHEET 102A OF 165			

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LEGEND

- ① ITEM SP404 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22
- ② ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH)
- ③ ITEM SP625 - CONDUIT, MULTI CELL INNERDUCT
- ④ ITEM 622 - CONCRETE BARRIER, TYPE B-50, AS PER PLAN
- ⑤ ITEM SP404A - JOINT SEALER (APPLIED TO VERTICAL FACE)
- ⑥ ITEM SPECIAL - SAWCUT JOINT
- ⑦ ITEM SP407 - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE, APPLIED @ 0.075 GAL/S.Y.

OVERLAY AREA:

STA. 598+50 TO STA. 603+70 = 15454 S.F.
 STA. 885+20 TO STA. 890+40 = 14820 S.F.

ITEM 407 - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

(15454 /9) X 0.075 = 129 GAL
 (14820 /9) X 0.075 = 123 GAL

ITEM 254 - PAVEMENT PLANING ASPHALT SURFACE CONCRETE (VARIABLE DEPTH)
 15454 /9 = 1717 S.Y., 14820 /9 = 1647 S.Y.

ITEM SP404 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE PG 64-22

[15454 X (1.5/12)]/27 = 72 C.Y.
 [(14820 X (1.5/12)]/27 = 69 C.Y.

NOTE:

THE CONTRACTOR SHALL RECONSTRUCT THE MAINTENANCE OF TRAFFIC CROSSOVER IN ACCORDANCE WITH OTC STANDARD DRAWING XOY-3.

ITEM 622 - PORTABLE CONCRETE BARRIER, 32", AS PR PLAN
 PORTABLE CONCRETE BARRIER SHALL BE NEW.

REF NO.	STATION		SIDE	ESTIMATED QUANTITIES													
				202	254	SP302	SP304	SP404	SP404A	407	622	622	SP 625	626	SPECIAL		
	FROM	TO		EACH	FT.	SQ.YD.	CU.YD.	CU.YD.	CU.YD.	FT.	GAL.	FT.	FT.	FT.	FT.	EACH	FT.
R-34	599+30		LT./RT.	2													
R-35	599+30	603+00	LT./RT.		700		32	70									
CB-5	599+70	599+91	℄														
CB-6	599+91	600+68	℄														
CB-7	600+97	601+72	RT.														
CB-8	601+72	602+50	LT.														
CB-9	886+40	889+20	℄														
P-1	598+50	603+70															
P-2	885+20	890+40	LT./RT.														
TOTALS CARRIED TO GENERAL SUMMARY				2	700	3364	32	70	141	4160	252	379	152	379	379	5	2080

ADDENDUM NO. 3		CT	1/22
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
MAINTENANCE OF TRAFFIC CROSSOVER RESTORATION DETAILS AND QUANTITIES			
RESOURCE INTERNATIONAL, INC. 6350 PRESIDENTIAL GATEWAY COLUMBUS, OH 43221			
DESIGNED: SSK	CHECKED: SSK	DATE: 12/19/2012	
DRAWN: CFR	IN CHARGE: SSK	SCALE: 1" = 50'	
CONTRACT 39-13-02		SHEET 103 OF 165	