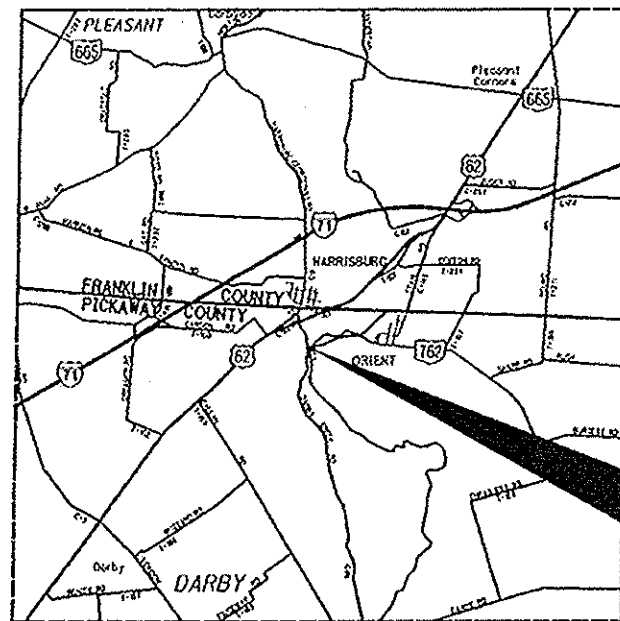


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

PIC-762-0.19

DARBY TOWNSHIP
PICKAWAY COUNTY



LOCATION MAP

LATITUDE: 39°48'08.75"N LONGITUDE: -83°10'12.28"W



PORTION TO BE IMPROVED	—————
INTERSTATE & DIVIDED HIGHWAY	=====
UNDIVIDED STATE & FEDERAL ROUTES	—————
OTHER ROADS	—————

DESIGN DESIGNATION

CURRENT ADT (2013)	2470
DESIGN YEAR ADT (2033)	3000
DESIGN HOURLY VOLUME (2032)	330
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	2.1%
DESIGN SPEED	60 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
RURAL MAJOR COLLECTOR	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

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Cincinnati, Ohio 45242-1818
(616) 513-7911
(616) 513-7912

7000 Dixie Highway
Florence, Kentucky 41042
(606) 859-5253
(606) 859-5254

ENGINEERS SEAL:

SIGNED: _____
DATE: 9-5-14

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2
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GENERAL NOTES	4-5
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SUB-SUMMARY	10
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SIGNING & PAVEMENT MARKING PLAN	14
STRUCTURE FOUNDATION EXPLORATION	

STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4/20/12		
DM-1.1	1/18/13	800	01/15/16
DM-4.3	7/19/13	832	1/17/14
DM-4.4	7/20/12	902	12/31/12
MGS-1.1	7/19/13		
MGS-2.1	7/19/13		
HW-2.2	1/18/13		
MT-96.11	1/14/14		
MT-96.20	7/19/13		
MT-97.10	7/19/13		
MT-101.60	7/19/13		
MT-105.10	7/19/13		
TC-41.20	10/18/13		
TC-41.30	10/18/13		
TC-42.20	10/18/13		
		SPECIAL PROVISIONS	
		NWP #3 4/9/14	
		FLOOD PLAIN PERMIT 04/25/14	

PROJECT DESCRIPTION

REPLACING BRIDGE #PIC-762-0.19 (CORRUGATED METAL PIPE) WITH NEW CONCRETE PIPE. REGRADING THE WEST EMBANKMENT SIDE SLOPE, AND REMOVING & REPLACING GUARDRAIL ON THE EAST SIDE OF THE ROAD IN THE VICINITY OF THE CULVERT.

PROJECT EARTH DISTURBED AREA = .24 ACRES
CONTRACTOR EARTH DISTURBED AREA = .17 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = N/A

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 7.

PLAN CERTIFIED AS TO COMPLETENESS AND QUALITY

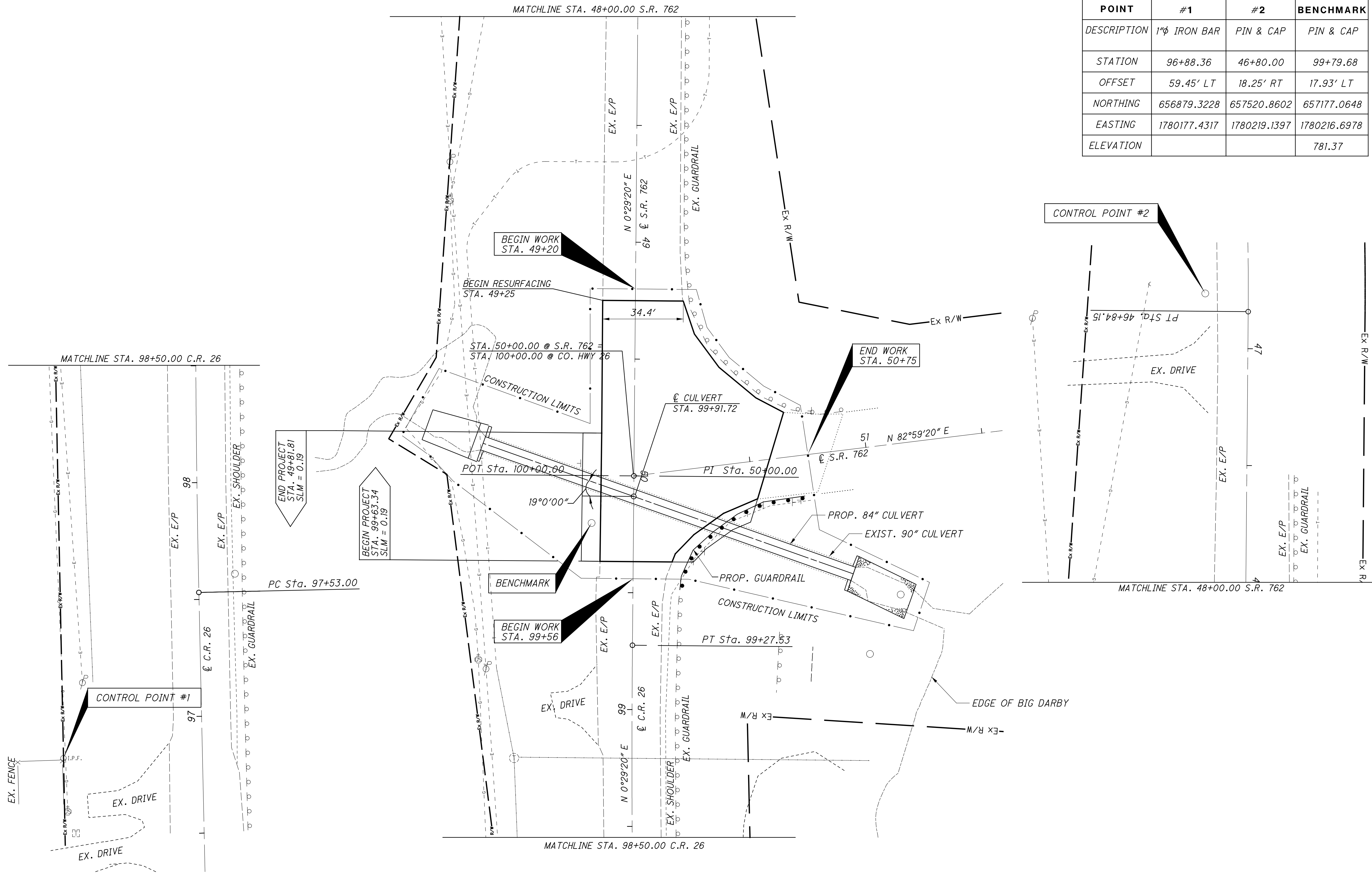
Robert Dreyer, Inc. 12-01-15
SIGNATURE DATE
CT CONSULTANTS, INC. PROJECT MANAGER
FIRM TITLE

APPROVED: _____
DATE 12-3-13 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE 12-16-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

PIC - SR 762-0.19
160124 PID - 92454
Dist 6 3/1/2016
Contract Proposal Available @ www.contracts.dot.state.oh.us/home

FEDERAL PROJECT NO. E130619
PID NO. 92454
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
PIC-762-0.19
1/14



CONTROL POINT DATA			
POINT	#1	#2	BENCHMARK
DESCRIPTION	1"φ IRON BAR	PIN & CAP	PIN & CAP
STATION	96+88.36	46+80.00	99+79.68
OFFSET	59.45' LT	18.25' RT	17.93' LT
NORTHING	656879.3228	657520.8602	657177.0648
EASTING	1780177.4317	1780219.1397	1780216.6978
ELEVATION			781.37

CALCULATED BY: [Signature]

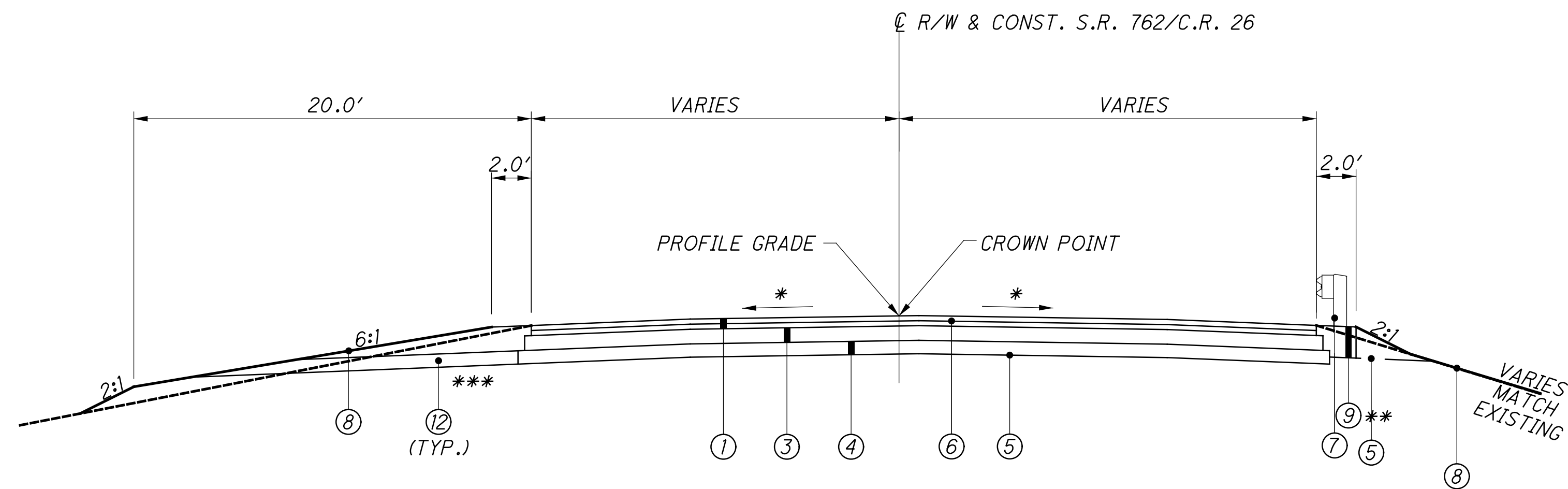
MTW CHECKED: RFD

10' HORIZONTAL SCALE IN FEET

SCHEMATIC PLAN

PIC-762-0.19

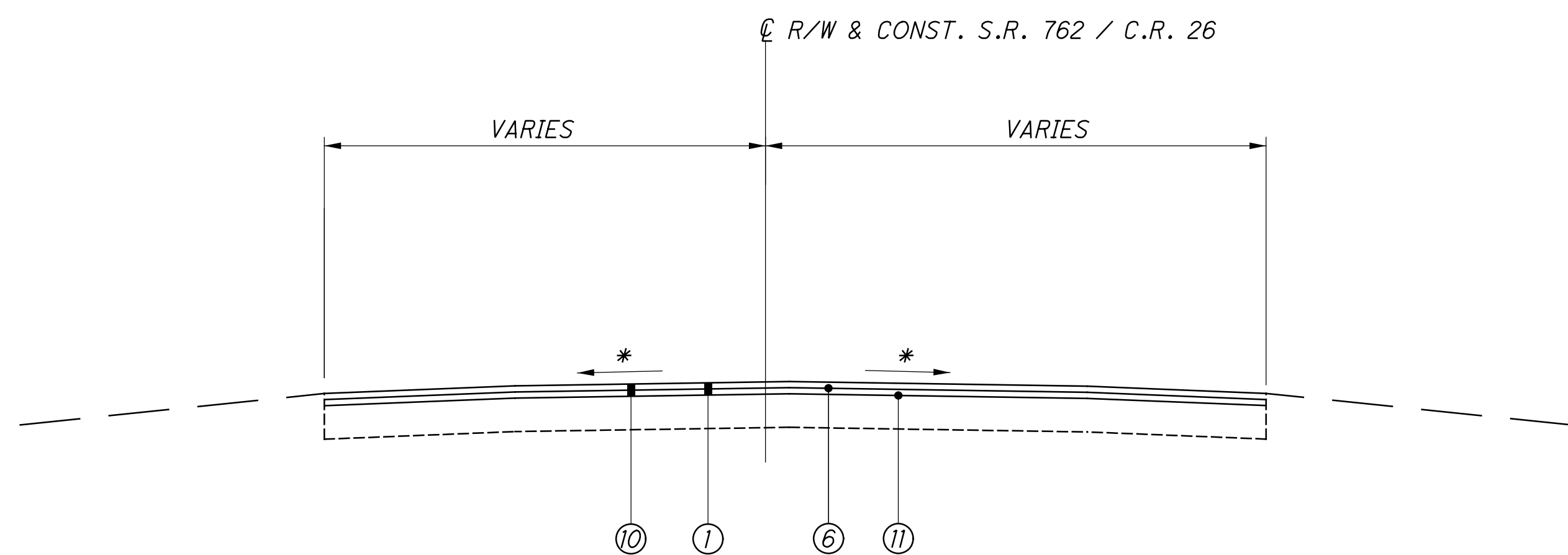
G:\2011\2011210-000_VAP-D06 (9_Culverts)\92454\Culverts\PIC-762-0.19\Roadway\sheets\92454_GY001.dgn 11/30/2015 11:13:00 AM espelage



- *** 0.08 PEF., 0.04 MIN.
- ** USE STABILIZED CRUSHED AGGREGATE IN AREAS WITH GUARDRAIL ONLY
- * MATCH EXISTING CROSS SLOPE

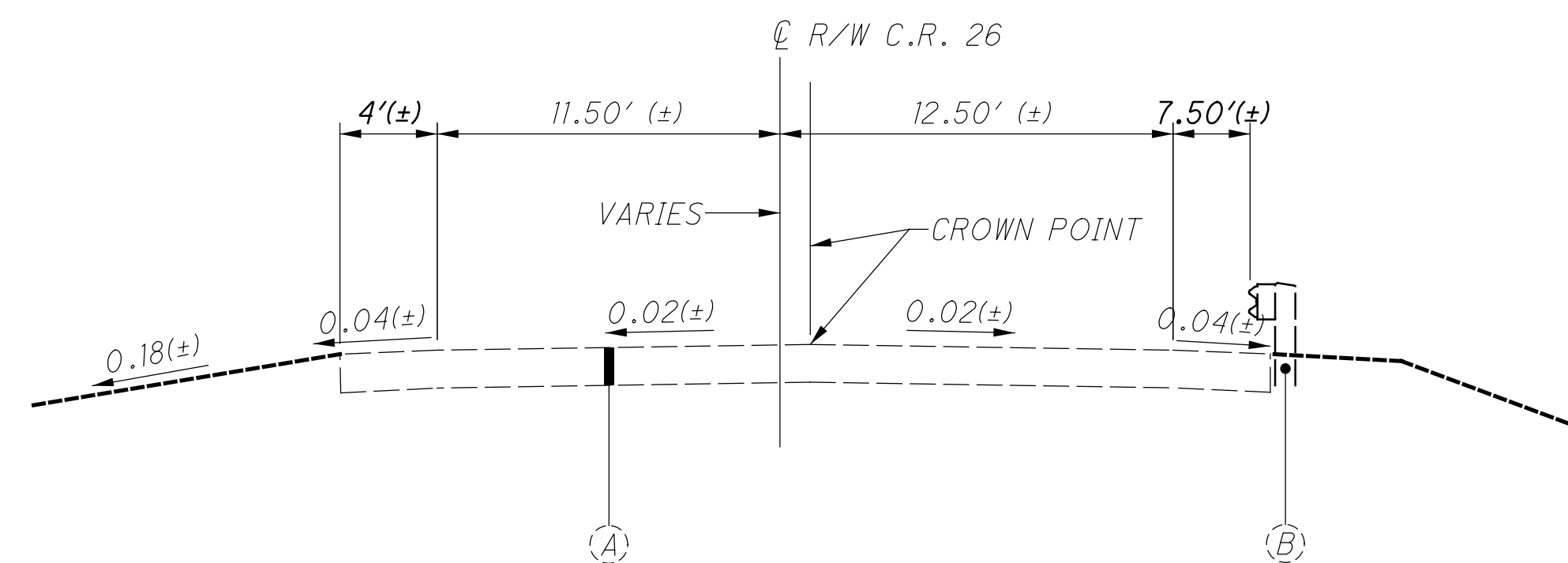
NORMAL SECTION - S.R. 762

FULL DEPTH: STA. 99+63.34 TO STA. 49+86.58 = 50.08 LIN. FT.

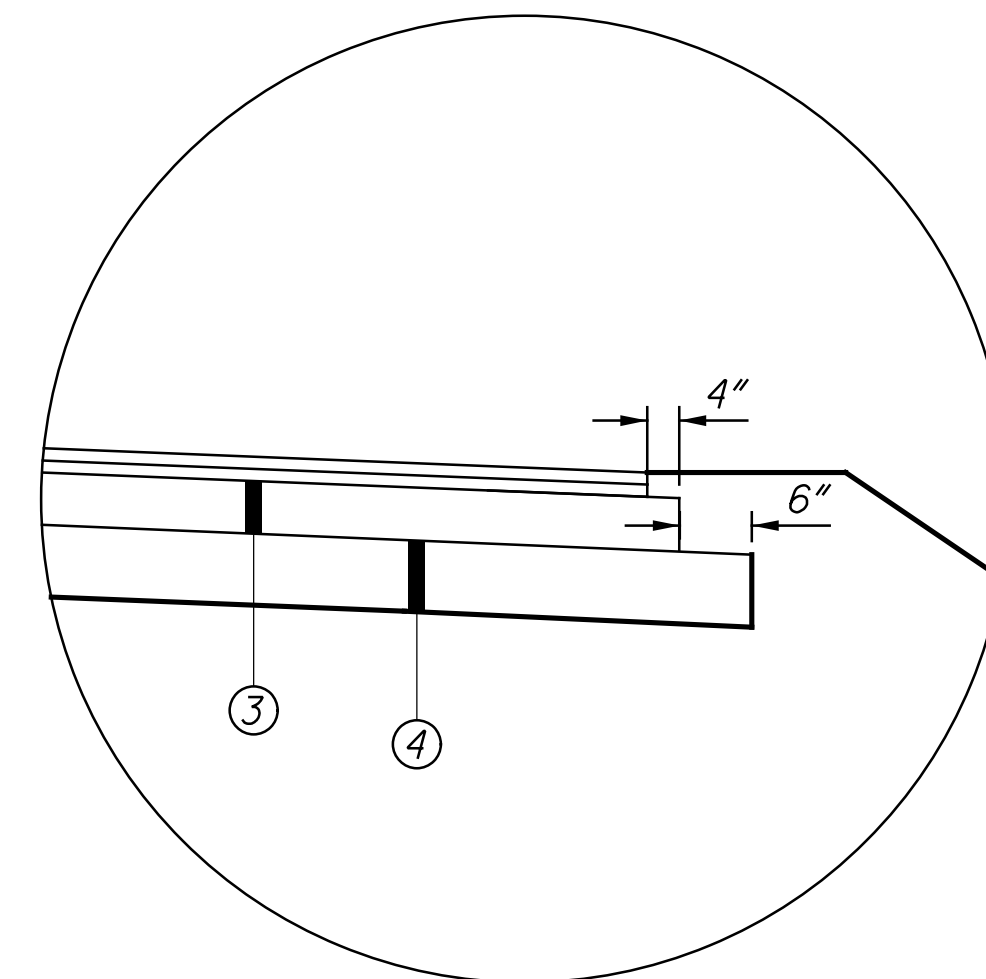


RESURFACING SECTION

STA. 49+86.58 TO STA. 49+25 = 61.58 FT.



EXISTING SECTION - C.R. 26



EDGE COURSE DESIGN (TYP)

LEGEND:

- ① ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (2 EQUAL LIFTS)
- ③ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ ITEM 204 - SUBGRADE COMPACTION
- ⑥ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL/S.Y.)
- ⑦ ITEM 606 - TYPE MGS GUARDRAIL
- ⑧ ITEM 659 - SEEDING & MULCHING
- ⑨ ITEM 411 - 12" STABILIZED CRUSHED AGGREGATE (2 - 6" LIFTS)
- ⑩ ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE
- ⑪ ITEM 407 - TACK COAT (0.10 GAL/SY)
- ⑫ ITEM 605 - AGGREGATE DRAINS, SEE SHEET 4 FOR LOCATIONS
- Ⓐ EXISTING ASPHALT PAVEMENT (6.5" (±) THICK)
- Ⓑ EXISTING GUARDRAIL

DESIGN AGENCY
CDS ASSOCIATES, INC.
11200 E. Southwestern Blvd., Suite 200
Columbus, OH 43240-1188
614.881.1700
www.cds-engineers.com

CALCULATED
AUB
CHECKED
JRE

TYPICAL SECTION

PIC-762-0.19

3
14

UTILITIES

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

BIDDERS ARE ADVISED THAT THE FOLLOWING UTILITY FACILITIES WILL NOT BE CLEARED FROM THE CONSTRUCTION AREA AT THE TIME OF AWARD OF THE CONTRACT. THESE UTILITY FACILITIES SHALL REMAIN IN PLACE WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT.

TELEPHONE/CABLE AT&T GARY VAN ALMSICK 111 N 4 th ST RM. 802 COLUMBUS, OH 43215 614.223.7276 gv2758@att.com	ELECTRIC AEP Transmission BARBARA DUNLAP 700 MORRISON RD GAHANNA, OH 43230 614.552.1893 bldunlap@aep.com	GAS COLUMBIA GAS CARY MACLAUGHLIN 842 PIATT AVE CHILLICOTHE, OH 45601 740.772.9131 cmaclaughlin@nisource.com
TIME WARNER CABLE RAY MAURER 3760 INTERCHANGE DRIVE COLUMBUS, OHIO 43216-2553 614.481.5262 ray.maurer@tWCable.com	AEP Paul Paxton 850 Tech Center Drive Gahanna, OH 43230 614.883.6831 ptpaxton@aep.com	

THE COLUMBIA GAS LINE IS VERY CLOSE IN PROXIMITY TO THE EXISTING CULVERT. THE CONTRACTOR SHOULD REMOVE THE EXISTING SLAB IN A WAY TO ENSURE THE GAS LINE IS NOT DAMAGED. IF THERE IS AN EXISTING CUTOFF WALL, THE ENTIRE SLAB INCLUDING THE SECTION ABOVE THE CUTOFF WALL SHOULD BE REMOVED. DOWELS SHOULD BE GROUTED INTO THE TOP OF THE EXISTING CUTOFF WALL AS SHOWN IN THE DRAWINGS AND THE SLAB SHOULD BE REPLACED AS SHOWN IN "RIPRAP CUTOFF WALL" DETAIL ON THIS SHEET. IF A CUTOFF WALL DOES NOT EXIST, THEN A TRENCH SHOULD BE HAND DUG AND THE CUTOFF WALL SHOULD BE INSTALLED WITH THE SLAB PER ODOT SCD DM 1.1. PLEASE REFER TO THE PLAN SHEETS FOR THE DETAILS.

DIRECTLY ABOVE THE EXISTING CULVERT THERE IS AN AERIAL POLE LINE WHICH CONTAINS AEP TRANSMISSION, AEP DISTRIBUTION, AND TIME WARNER CABLE FROM TOP TO BOTTOM. THIS AERIAL POLE LINE WILL REMAIN IN PLACE AND NOT BE TAKEN OUT OF SERVICE OR SHIELDED DURING THE REMOVAL/INSTALLATION OF THE CULVERT. THE ODOT CONTRACTOR WILL NEED TO COMPLETE THIS CULVERT REPLACEMENT WITH THESE LINES IN PLACE. CLEARANCES ARE AS FOLLOWS:

AEP:
DISTRIBUTION PRIMARY NEURAL - 43.5' DIRECTLY ABOVE CULVERT
PRIMARY 3-PHASE - (ON THE CROSS ARM) - 55.0' DIRECTLY ABOVE CULVERT - 13.2 KV

****IT IS THE RESPONSIBILITY OF THE ODOT CONTRACTOR TO MAINTAIN ALL OSHA CLEARANCES/REQUIREMENTS WITH THE LINES REMAINING IN PLACE**

TIME WARNER CABLE:
33.5' DIRECTLY ABOVE CULVERT

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN PROXIMITY TO THE EXISTING UTILITY FACILITIES.

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.

SURVEY PARAMETERS

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 2009

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(CORS)
ELLIPSOID: WGS 1984
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE SOUTH
COMBINED SCALE FACTOR: 1.00

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

STREAM CHANNEL EXCAVATION

STREAM CHANNEL EXCAVATION WITHIN "WATERS OF THE U.S." IS SUBJECT TO U.S. ARMY CORPS OF ENGINEERS (USACE) REGULATORY JURISDICTION AND WILL REQUIRE AUTHORIZATION BY THE USACE VIA THE WATERWAY PERMITTING PROCESS (404/401). IN ACCORDANCE WITH THE APPLICABLE WATERWAY PERMITS (404/401) STREAM CHANNEL EXCAVATION CAN NOT EXCEED THE QUANTITIES AND/OR SURFACE AREA THAT HAS BEEN PERMITTED. THE WATERWAY PERMITS ARE ATTACHED TO THE CONSTRUCTION PLANS AS SPECIAL PROVISIONS AND WILL BE AVAILABLE IN THE PROJECT CONSTRUCTION OFFICE.

TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS SUCH AS FOUNDATION, PIER, OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

ITEM 201 - CLEARING & GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING & GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM BID FOR ITEM 201, CLEARING & GRUBBING

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SEEDING AND MULCHING	244 SQ YD (CADD AREA)
659, COMMERCIAL FERTILIZER	0.04 TON
659, WATER	1.3 M GAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE RIGHT OF WAY LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

611, 6" CONDUIT, TYPE E	25 FT
611, 6" CONDUIT, TYPE F	25 FT
601, ROCK CHANNEL PROTECTION TYPE C WITH FILTER	10 CU YD

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 605. AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE CONSTRUCTED AT THE FOLLOWING LOCATIONS:

- STA. 99+70 LT.
- STA. 50+40 RT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK: 50 FT.

ITEM 661. DECIDUOUS TREE, 1-1/2" CALIPER

THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED, AS DIRECTED BY THE ENGINEER, FOR REPLACEMENT OF EXISTING TREES TO BE REMOVED.

ITEM 661, RED MAPLE (ACER RUBRUM), 1-1/2" CALIPER	6 EACH
ITEM 661, RIVER BIRCH (BETULA NIGRA), 1-1/2" CALIPER	7 EACH

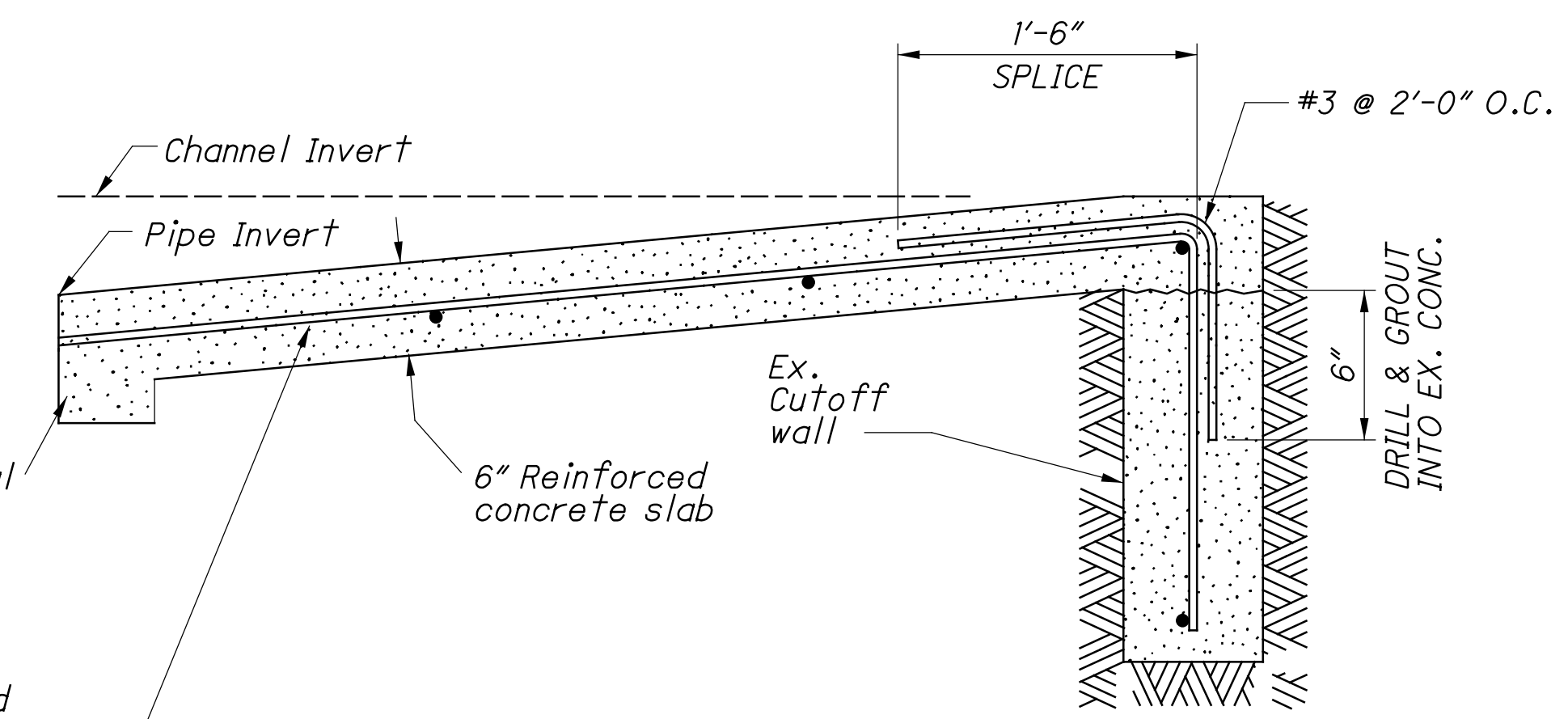
DESIGN AGENCY
CDS ASSOCIATES, INC.
 1120 East Main Street
 Columbus, OH 43260-1818
 614.297.1700
 www.cdsassoc.com

CALCULATED
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 JWC

GENERAL NOTES

PIC-762-0.19

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Pay Item for cutoff wall includes any additional concrete required to support cutoff wall.

As per CMS 601.04.D, reinforce the slab approximately midway between the top and bottom of the slab, with steel bars or fabricated reinforcement equivalent to #3 round bars, at 24" o.c. in two directions, or wire fabric according to SCD BP-1.1.

RIPRAP CUTOFF WALL

ENVIRONMENTAL NOTES

EROSION CONTROL/RIPARIAN ZONE PROTECTION / TREE REPLACEMENT

1. REMOVAL OF MATERIAL: ANY COMPONENTS OF THE EXISTING STRUCTURES NOT INCORPORATED INTO THE REPLACEMENT STRUCTURES SHALL BE COMPLETELY REMOVED. EVERY EFFORT SHALL BE MADE TO KEEP DEMOLITION MATERIAL AND OTHER DEBRIS OUT OF THE RIVER DURING REMOVAL. ALL DEBRIS, EXCESS FILL MATERIAL AND MATERIAL EXCAVATED FROM THE DITCH BOTTOM SHALL BE DISPOSED OF AT AN APPROVED UPLAND SITE (ABOVE 100-YEAR FLOOD ELEVATIONS). DISPOSAL IN WETLANDS, FLOODPLAINS OR WITHIN 1,000 FEET OF THE RIVER SHALL NOT BE PERMITTED.

2. DEWATERING: IF DEWATERING BECOMES NECESSARY TO FACILITATE CONSTRUCTION, ALL WASTEWATER SHALL BE PUMPED ONTO A VEGETATED AREA A SUFFICIENT DISTANCE FROM THE TRIBUTARY TO ALLOW FOR COMPLETE INFILTRATION. NO WASTEWATER OF ANY KIND SHALL BE DISCHARGED DIRECTLY INTO THE DITCH OR THE MAINSTEM OF THE RIVER.

3. ROCK PAD/DISSIPATION STRUCTURE SHALL BE THE MINIMAL SIZE REQUIRED TO PROTECT THE INTEGRITY OF THE IMMEDIATE PIPE OUTLET.

4. THE REMOVAL OF WOODY VEGETATION SHALL BE ONLY THAT WHICH IS NECESSARY TO ESTABLISH THE ROCK PAD FOOTPRINT. THE IMPACTED CORRIDOR SHALL BE REPLANTED AND RETURNED WITH SUFFICIENT DENSITY OF NATIVE SHRUBS, TREES THAT WILL PROVIDE AN EFFECTIVE VISUAL SCREEN AS VIEWED FROM THE RIVER DURING SUMMER GROWTH. SPECIES SELECTION SHALL BE DONE IN CONSULTATION WITH OHIO DEPARTMENT OF NATURAL RESOURCES (DNR) SCENIC RIVERS PROGRAM.

5. APPROPRIATE SEDIMENT/STORMWATER CONTROLS MUST BE INSTALLED IN ACCORDANCE WITH A SEDIMENT AND EROSION CONTROL PLAN PRIOR TO GRADING OR OTHER LAND DISTURBING ACTIVITIES. THE USE OF HAY OR STRAW BALES IN LIEU OF ROCK CHECK DAMS AND SILT FENCE IS PROHIBITED.

6. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED DAILY AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. ACCUMULATED SEDIMENT SHALL BE CLEANED OUT OF EROSION CONTROL DEVICES, AND WORN-OUT OR DETERIORATED MATERIALS SHOULD BE REPLACED ON A REGULAR BASIS.

7. SEDIMENT AND EROSION CONTROL: A SEDIMENT AND EROSION CONTROL PLAN SHALL BE DEVELOPED FOR THE SITE AND IMPLEMENTED BEFORE EARTHWORK COMMENCES. PARTICULAR ATTENTION SHALL BE GIVEN TO THE TRIBUTARY, WHICH DRAINS DIRECTLY INTO DARBY STATE SCENIC RIVER. PROPERLY INSTALLED (FRAMED AND ENTRENCHED) SEDIMENT FENCE SHALL BE UTILIZED AROUND THE WORK SITE PERIMETER. APPROPRIATELY DESIGNED ROCK CHECK DAMS OR OTHER EROSION CONTROLS SHALL BE UTILIZED IN THE TRIBUTARY. ALL CONTROLS SHALL BE PROPERLY MAINTAINED UNTIL FINAL SITE STABILIZATION IS ACHIEVED. ALL SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED UPON STABILIZATION OF THE PROJECT AREA WITH VEGETATION. STRAW BALES SHALL NOT BE PERMITTED AS A FORM OF EROSION CONTROL. ALL DENUDED AREAS SHALL BE PERMANENTLY SEEDED AND MULCHED, OR FIBER MAT, OR SODDED IMMEDIATELY UPON COMPLETION OF EARTHWORK OR TEMPORARILY SEEDED AND MULCHED (OR FIBER MAT) WITHIN SEVEN DAYS IF THE AREA IS TO REMAIN IDLE FOR MORE THAN 30 DAYS.

8. RIPRAP AND FILL MATERIAL: NO RIP-RAP OF ANY KIND SHALL BE USED FOR THE PROJECT. ALL FILL MATERIAL USED FOR COFFERDAMS (IF NECESSARY) AND ROCK CHANNEL PROTECTION SHALL BE WASHED TO REMOVE FINE PARTICULATE MATTER. ROCK IS TO BE KEYED INTO PLACE TO STOP WATER FROM REMOVING THE REPLACED CHANNEL PROTECTION.

9. DISTURBANCES TO THE RIPARIAN ZONE SHALL BE LIMITED TO THE ACCESS POINTS AND CONSTRUCTION LIMITS. PROVISIONS MUST BE IN PLACE TO PROTECT REMAINING VEGETATION/TREES FROM DAMAGE BY CONSTRUCTION EQUIPMENT. THESE PROVISIONS MUST LIMIT THE REMOVAL OF RIPARIAN VEGETATION AND INCLUDE MEASURES TO AVOID EQUIPMENT DAMAGE TO REMAINING TREES (TRUNKS, BRANCHES, AND/OR ROOTS) LOCATED IN THE WORK AREA. SEVERELY DAMAGED TREES MAY REMAIN ONSITE TO SERVE AS NESTING CAVITIES, HOLD SOIL, AND PREVENT EROSION.

10. DISTURBED/EXPOSED AREAS IN THE RIPARIAN CORRIDOR (SLOPE AND BANKS) SHALL BE PROPERLY STABILIZED (SEEDED, MULCHED, OR OTHERWISE) IMMEDIATELY AFTER GRADING TO PREVENT EROSION AND ESTABLISHMENT OF INVASIVE PLANT SPECIES. APPROPRIATE TREE AND SHRUB SPECIES MUST BE PLANTED TO REPLACE TREE AND SHRUBS REMOVED ALONG THE RIVERBANKS.

11. EXCEPT IN THE IMMEDIATE PROJECT FOOTPRINT OR WHEN NECESSARY TO PROVIDED STRUCTURAL STABILITY, BULLDOZERS MAY NOT BE USED TO KNOCK TREES/STUMPS/ROOT WADS OUT OF THE GROUND. TREES NOT IN THE IMMEDIATE AREA AROUND THE ABUTMENT LOCATED WITHIN THE CONSTRUCTION WORK LIMITS MUST BE CUT FLUSH TO THE GROUND.

12. ALL TREES REMOVED, OR OTHERWISE SEVERELY DAMAGED DURING THE CONSTRUCTION, FROM THE RIVERBANK/RIPARIAN CORRIDOR (INCLUDING ORDINARY HIGH WATER MARK TO THE BANK TOP AND 25 FEET BEYOND) MUST BE REPLACED, AT THE LOCATION THEY WERE REMOVED, AS FOLLOWS:

- A. TREES LESS THAN 12 INCHES DIAMETER OF BREST HEIGHT (DBH) WILL BE REPLACED WITH BARE ROOT TREE SEEDLINGS AT A 1:1 RATIO.
- B. TREES BETWEEN 12 AND 20 INCHES DBH WILL BE REPLACED WITH BARE ROOT TREE SEEDLINGS AT A 2: 1 RATIO.
- C. TREES GREATER THAN 20 INCHES DBH WILL BE REPLACED AT A 1: 1 RATIO WITH TREE SAPLINGS THAT ARC AT LEAST 2 INCHES DBH AND 12 FEET IN HEIGHT.
- D. NATIVE SHRUBS SHOULD ALSO BE PLANTED RANDOMLY THROUGHOUT THE DISTURBED AREA.

13. PLANTED TREE SEEDLINGS/SAPLINGS SHALL BE CULTIVATED AND MONITORED FOR TWO YEARS TO ENSURE SUCCESS. PLANTED STOCK SHOWING SIGNS OF MORTALITY SHALL BE PROMPTLY REPLACED. ONLY LOCAL, NATIVE TREES/SHRUBS/GRASSES, NATURALLY OCCURRING WITHIN THE RIVER'S RIPARIAN ZONE AREA SHALL BE PLANTED. PLANT SELECTION (SPECIES AND SIZE) SHOULD REFLECT THE NATURAL MIXTURE/DIVERSITY OF THE IMMEDIATE AREA, FLOOD FREQUENCY, AND BROWSE PRESSURES. WATERING AND PROVISIONS FOR THE REPLACEMENT OF TREES/SHRUBS IN THE EVENT OF MORTALITY SHOULD BE ADDRESSED. USE OF FERTILIZERS AND HERBICIDES IN THE RIPARIAN CORRIDOR SHOULD BE AVOIDED.

IDLE EQUIPMENT, PETROCHEMICALS, AND TOXIC/HAZARDOUS MATERIALS:

IDLE EQUIPMENT, PETROCHEMICALS, AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE STORED IN THE FLOODPLAIN OR NEAR ANY DRAINAGE WAYS, DITCHES OR STREAMS THAT COULD CONVEY SUCH MATERIALS TO THE DARBY SCENIC RIVER. PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE DISCHARGED INTO THE MAINSTREAM OF THE DARBY STATE SCENIC RIVER, ITS FLOODPLAIN, OR ANY DRAINAGE WAYS, DITCHES, OR STREAMS. REFUELING OF EQUIPMENT SHALL NOT OCCUR IN THE FLOODPLAIN OR NEAR ANY DRAINAGE WAYS, DITCHES, OR STREAMS. A SPILL CONTAINMENT AND CLEANUP PLAN SHALL BE GENERATED PRIOR TO THE START OF THE PROJECT.

CLEARING AND GRUBBING

CLEARING OF ANY TREES 3" DBH (DEPTH BREST HIGH) OR LARGER SHALL OCCUR BEFORE APRIL 1 AND AFTER SEPTEMBER 30. ENSURE THAT ALL STUMPS ARE LEFT IN PLACE, AND NO GRUBBING ON THE SITE OCCURS UNTIL THE ACTUAL PROJECT START DATE. ALL FELLED TRUNKS, LIMBS, AND OTHER WOODY DEBRIS SHOULD BE IMMEDIATELY REMOVED FROM THE SITE AFTER CUTTING TO PREVENT THIS DEBRIS FROM POTENTIALLY WASHING DOWNSTREAM DURING A HIGH FLOW EVENT.

SCENIC RIVER PLAN NOTES

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO THE BIG DARBY CREEK. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL BE REMOVED IMMEDIATELY FROM WITHIN 1,000 FEET OF THE BIG DARBY CREEK AND DISPOSED OF AT AN APPROPRIATE FACILITY ABOVE THE FEMA 100-YEAR FLOOD EVALUATION AND NOT WITHIN 1,000 FEET OF THE BIG DARBY CREEK.

NO WASTEWATER OF ANY KIND SHALL BE DIRECTLY DISCHARGED TO THE BIG DARBY CREEK OR ANY WATERCOURSE DRAINING DIRECTLY INTO THE BIG DARBY CREEK. IDLE EQUIPMENT, FUELS, LUBRICANTS OR STORAGE FOR AND/OR STORAGE OF POTENTIALLY TOXIC OR HAZARDOUS MATERIALS SHALL BE KEPT ABOVE THE FEMA 100 YEAR FLOOD PLAIN AND NOT WITHIN 1,000 FEET OF THE BIG DARBY CREEK.

"THE PROJECT IS LOCATED WITHIN THE ORDC PICKAWAY CORRECTIONAL INSTITUTION PWSID#6501712 SOURCE WATER AREA PROTECTION. IN ORDER TO MINIMIZE THE POTENTIAL FOR A RELEASE IN THIS SENSITIVE AREA, PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL NOT BE PERFORMED WITHIN THE PROJECT LIMITS. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO THE DRINKING WATER SOURCE AREA SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTACT THE LOCAL HAZARDOUS MATERIALS RESPONSE TEAM FOR CLEAN-UP OF THE SPILL."

NO INSTREAM WORK IS PERMITTED BETWEEN OCTOBER 31 AND JULY 31 OF ANY GIVEN YEAR.

ALL MOTORIZED EQUIPMENT OPERATIONS MUST BE CONDUCTED FROM BANK AND/OR WORK PADS. NO MACHINERY (TRUCKS, CRANES, BACKHOES, EXCAVATORS) MAY WORK OR OTHERWISE OPERATE FROM WITHIN THE RIVERBED.

WHERE CONFLICTS ARISE BETWEEN STATE AND FEDERAL REQUIRMENTS, THE MORE PROTECTIVE (RESTRICTIVE) MEASURE SHALL APPLY.

ALL FUELING OPERATIONS, LUBRICATING, HYDRAULIC TOPPING OFF, FUEL TANK PURGING AND EQUIPMENT MAINTENANCE/REPAIRS SHALL BE PERFORMED AT AN UPLAND SITE OUTSIDE OF THE 100 YEAR FLOODPLAIN. THESE ACTIVITIES SHALL TAKE PLACE ON AN APPROVED PAD WITH SPILL CONTROL/COLLECTION DEVICES IN PLACE.

NO MIXES, CEMENTS, FLUIDS, OR OTHER CONSTRUCTION WASTEWATER MAY BE DISCHARGED INTO THE RIVER. SPOIL PILES MUST BE COVERED OR OTHERWISE MANAGED TO REDUCE SEDIMENTATION.

THE OHIO EPA, CENTRAL OFFICE, DIVISION OF SURFACE WATER, AND THE OHIO DNR SCENIC RIVERS PROGRAM STAFF MUST BE NOTIFIED PRIOR TO COMMENCING CONSTRUCTION.

THE NPS WILL BE PROMPTLY NOTIFIED OF ACCIDENTS AND/OR FAILURES OF PROJECT FEATURES INTENDED TO PROTECT THE FREE-FLOWING CONDITION OR BIOLOGICAL RESOURCES.

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DESIGN AGENCY
CDS ASSOCIATES, INC.
11075
Columbus, OH 43240
614.891.1700
www.cds-engineer.com

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RFD
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JWC

GENERAL NOTES

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOs) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOs SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- FOR LANE CLOSURES: DURING INTIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOs SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORKS ZONES.

A UNIFORM LEO WITH AN OFFICIAL PATROL CAR SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

LEOs SHOULD NOT FORGO THEIR TRAFFIC CONTROLL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOs WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOs AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOs. THE ENGINEER SHALL HAVE FINAL CONTROL OF THE LEOs' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING THE ADDRESS AND TELEPHONE NUMBER.

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECIEVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF THE SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHOULD NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 40 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614. MAINTAINING TRAFFIC

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES PER STANDARD CONSTRUCTION DRAWING MT-101.60 AT THE LOCATIONS SHOWN ON SHEET 7. THE CONTRACTOR SHALL PROVIDE ODOT A 14 DAY NOTICE PRIOR TO THE ROAD CLOSURE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

SINGLE LANE CLOSURES ARE ALLOWED DURING WORKING HOURS FOR THE PURPOSE OF INSTALLING TEMPORARY PAVEMENT. DURING NON-WORKING HOURS, ALL LANES ARE TO BE OPEN.

PHASING

- PHASE I - CONSTRUCT DETOUR ROUTE, TEMPORARY SIGNAL AND PCB. DETOUR WILL BE LIMITED TO 21 CONSECUTIVE CALENDAR DAYS.
- PHASE II - CONSTRUCT 84" CONDUIT AND FULL DEPTH PAVEMENT WHILE TRAFFIC IS DETOURED OFF C.R. 26 AND TEMPORARY SIGNAL OPERATES ALONG S.R. 762.
- PHASE III- CONSTRUCT RESURFACING, STRIPING, AND ALL REMAINING ITEMS.
- PHASE IV - OPEN ROADWAY TO TRAFFIC.

ITEM 614. MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS, W20-H13, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THERE SHALL BE ONE SIGN PER DIRECTION OF TRAFFIC AND THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS. THE PHONE NUMBER AT THE BOTTOM OF THE SIGN SHALL BE THE DISTRICT 6 PUBLIC INFORMATION CONSTRUCTION LINE (740)833-8268.

NOTIFICATION OF CONSTRUCTION INITIATION

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT D06.PIO@DOT.STATE.OH.US, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT D06.MOT@DOT.STATE.OH.US AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614)728-4099 OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

ITEM 614. MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTIONS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 21 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 6. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT \$1500 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

TRUCK MOUNTED ATTENUATOR (TMA)

WHEN WORKING IN A CLOSED LANE OR SHOULDER ON A MULTILANE HIGHWAY WITHOUT POSITIVE PROTECTION, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED TO PROTECT EACH WORK AREA IN ACCORDANCE WITH STANDARD DRAWINGS MT-95.30, MT-95.31, MT-95.32 OR OMUTCD TYPICAL APPLICATION TA-4 OR TA-6. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLASHING ARROW PANEL AT THE BEGINNING OF THE MERGE TAPER. THE TMA SHALL MEET NCHRP 350 TEST LEVEL 3 CRITERIA FOR STANDARD AND OPTIONAL TESTS AT 100 KM/H (62 MPH) FOR DESIGN IMPACTS. THE COST FOR PROVIDING THE TMA SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE REPLACEMENT AND IS TO INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614-MAINTAINING TRAFFIC.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIMEFRAMES SET FORTH IN THE TABLE BELOW. THE NOTIFICATION SHALL BE RECIEVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHOULD LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	NOTIFICATION TIME FRAME TABLE	
	DURATION OF CLOSURE	NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE
RAMP AND ROAD CLOSURES	>= 2 WEEKS	14 BUSINESS DAYS PRIOR TO CLOSURE
	> 12 HOURS AND < 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES/RESTRICTIONS	>= 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE

ANY UNFORSEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

PUBLIC OUTREACH AND NOTIFICATION (ROAD CLOSURE)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE VIA EMAIL AT d06.pio@dot.state.oh.us TO COORDINATE EFFORTS TO NOTIFY ALL LOCAL COUNTY, STATE AND FEDERAL EMERGENCY SERVICES, SCHOOL DISTRICTS AND ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING CLOSURE. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO CLOSING THE ROAD. IF, SUBSEQUENT TO THE ADVANCE NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN (7) DAY NOTIFICATION WILL BE REQUIRED. THE ROAD CANNOT BE CLOSED UNLESS PRIOR NOTIFICATION HAS BEEN ACCOMPLISHED. THE SAME PARTIES SHALL BE NOTIFIED WHEN THE CLOSURE HAS CONCLUDED AND THE ROAD IS BACK OPEN TO TRAFFIC. ALL NOTIFICATIONS SHALL BE MADE UTILIZING THE TEMPLATE PROVIDED BY THE DISTRICT 6 PUBLIC INFORMATION OFFICE.

ITEM 614 - DETOUR SIGNING

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01. DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 614 - DETOUR SIGNING = LUMP SUM

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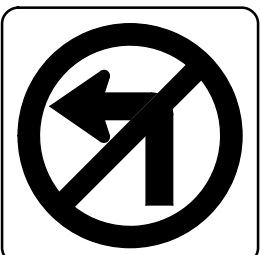
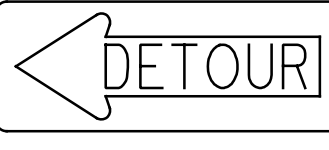
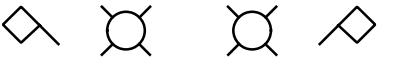




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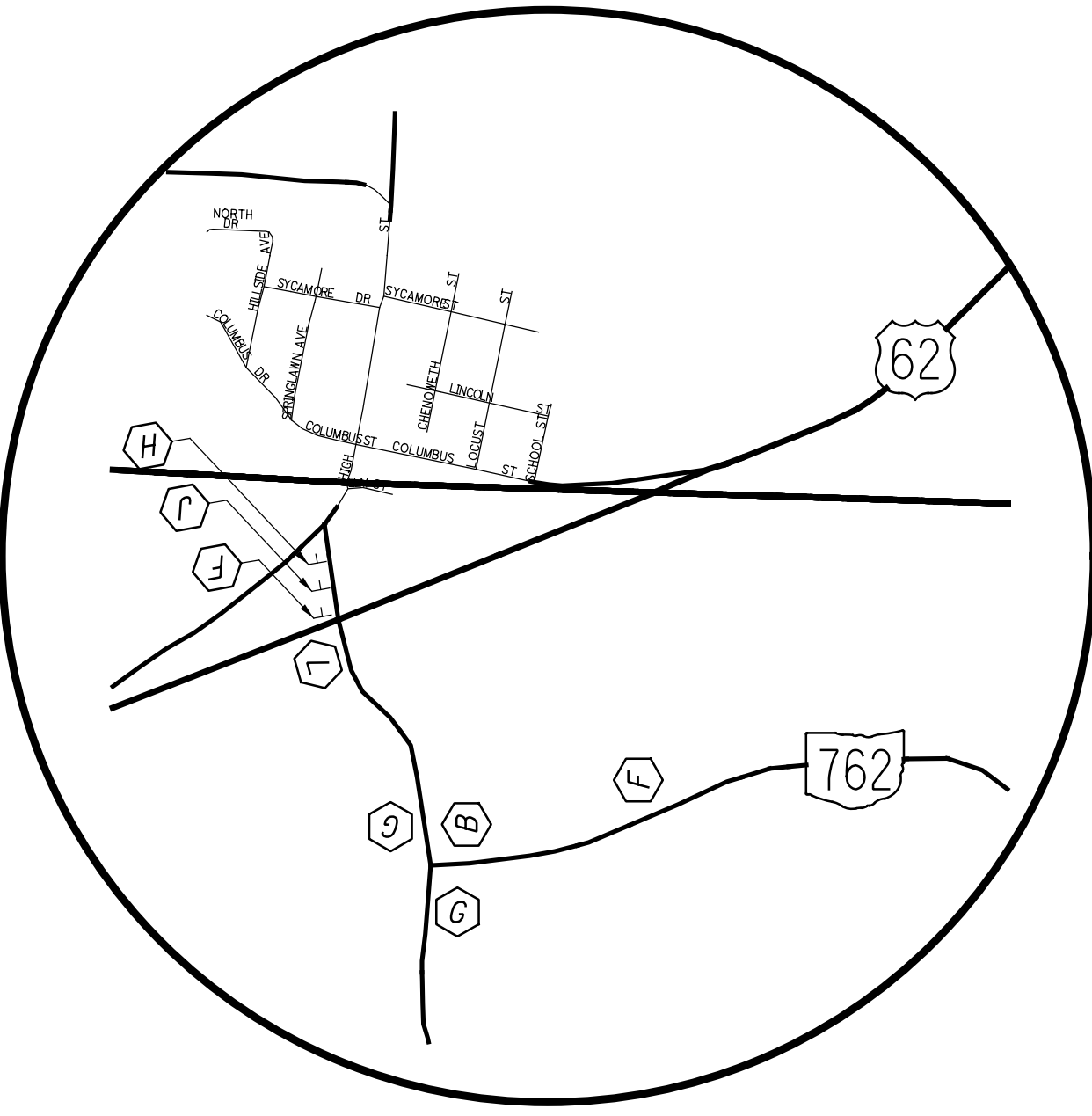
MAINTENANCE OF TRAFFIC GENERAL NOTES

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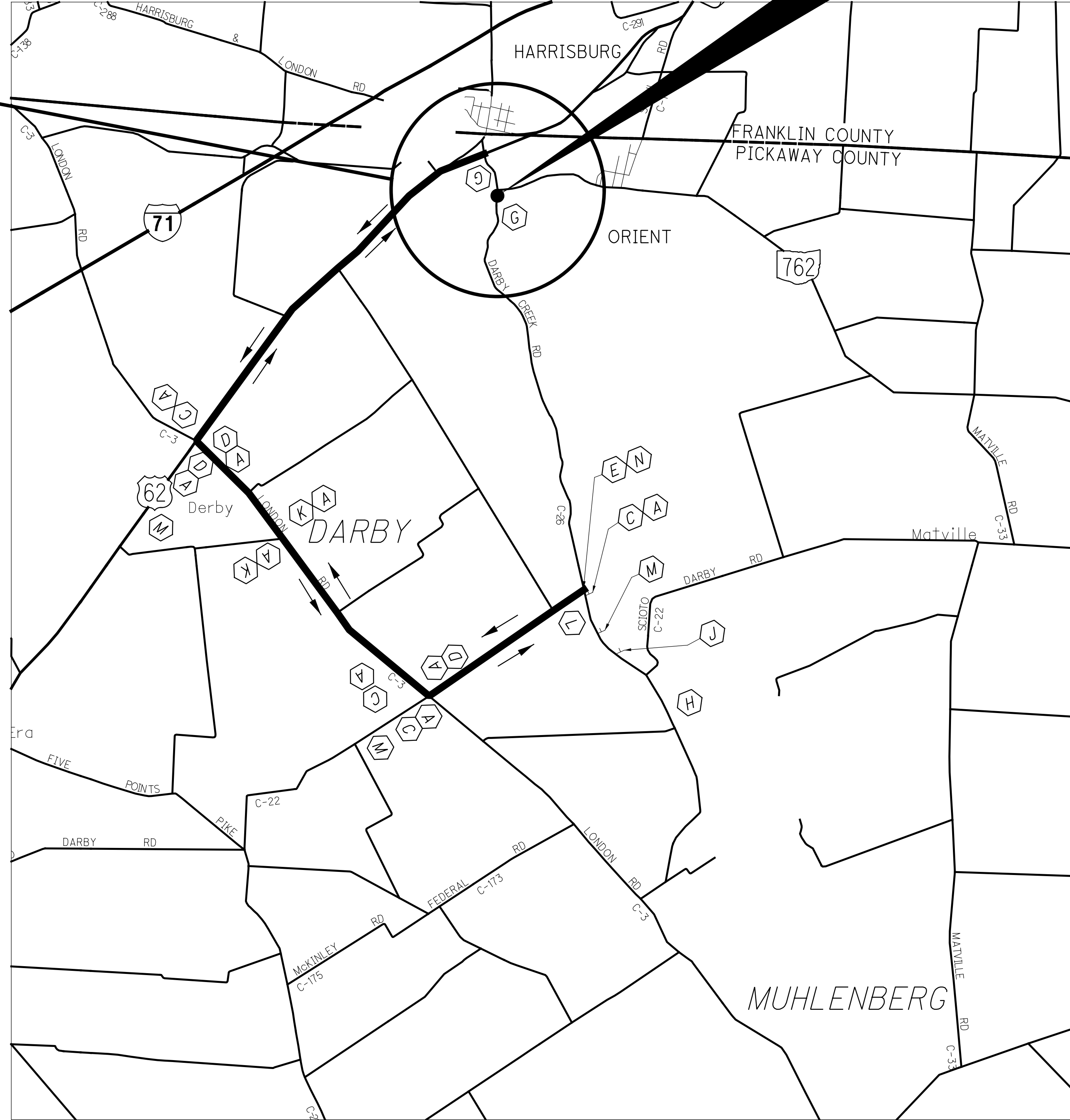
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SIGN LEGEND

<p>A</p> <p>Darby Creek Rd D1-H5-30</p>	<p>B</p>  <p>R3-2-30</p>
<p>C</p> <p>DETOUR ←</p> <p>M4-9L-30</p>	<p>D</p> <p>DETOUR →</p> <p>M4-9R-30</p>
<p>E</p> <p>ROAD CLOSED 3 MILES AHEAD DARBY CREEK ROAD LOCAL TRAFFIC ONLY</p> <p>R11-3A-60</p>  <p>OR-48 ON A TYPE III BARRICADE</p>	<p>F</p>  <p>DARBY CREEK RD. CLOSED SOUTH OF MAIN ST. FOLLOW DETOUR</p> <p>SPECIAL 60" x 48" BLACK ON ORANGE</p>  <p>OR-48 ON A TYPE III BARRICADE</p>
<p>G</p> <p>ROAD CLOSED PER MT-101.60</p>	<p>H</p>  <p>ROAD WORK AHEAD</p> <p>W20-1-48</p>
<p>J</p>  <p>ROAD CLOSED AHEAD</p> <p>W-20-3-48</p>	<p>K</p> <p>DETOUR ↑</p> <p>M4-9C-30</p>
<p>L</p> <p>END DETOUR</p> <p>M4-8A</p>	<p>M</p>  <p>DARBY CREEK RD. CLOSED AT MAIN ST. FOLLOW DETOUR</p> <p>SPECIAL 60" x 48" BLACK ON ORANGE</p>

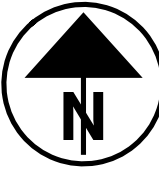


DETAIL

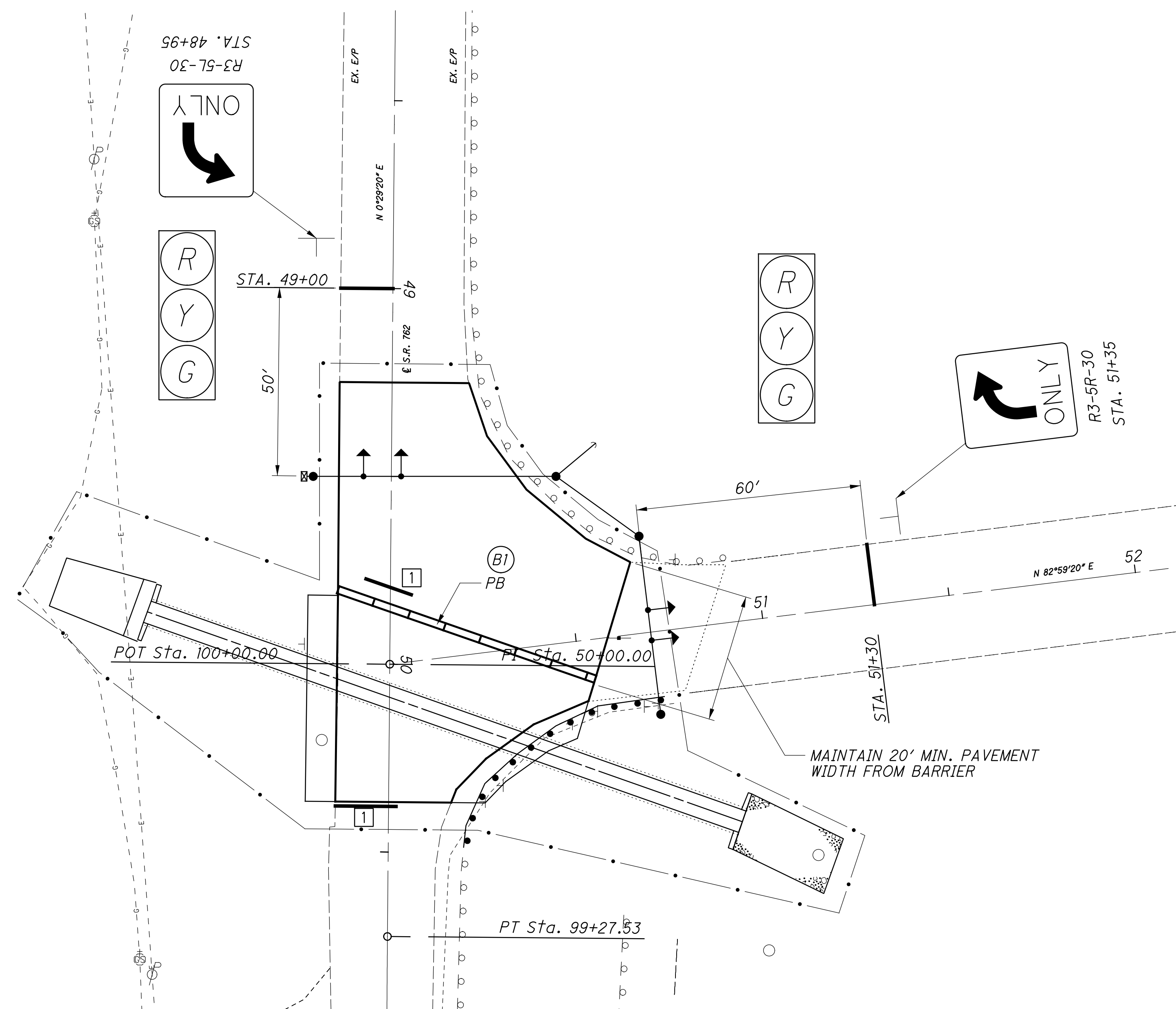


DETOUR MAP

LEGEND
 DETOUR ROUTE



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φ1G	φ1Y	φ2G	φ2Y	φ3G	φ3Y	φ4G	φ4Y
16S	4S	25S	4S	16S	4S	25S	4S

1 SIGNAGE AND BARRICADE PER MT-101.60

FOR DETAILS REGARDING TEMPORARY SIGNALIZED CLOSING ONE LANE OF 2-LANE HIGHWAY, REFER TO MT-96.20. FOR SIGNAGE AND PAVEMENT MARKING DETAILS, REFER TO MT-96.11. THIS ITEM SHALL INCLUDE, BUT NOT LIMITED TO, TEMPORARY SIGNAL EQUIPMENT, COVERING OF EXISTING SIGNS, TEMPORARY PAVEMENT MARKINGS, SIGNING, ETC. AND ALL ADDITIONAL MATERIAL AND LABOR TO COMPLETE THIS WORK. THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK: ITEM 614, SPECIAL-WORK ZONE TRAFFIC SIGNAL.

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TEMPORARY SIGNAL PLAN

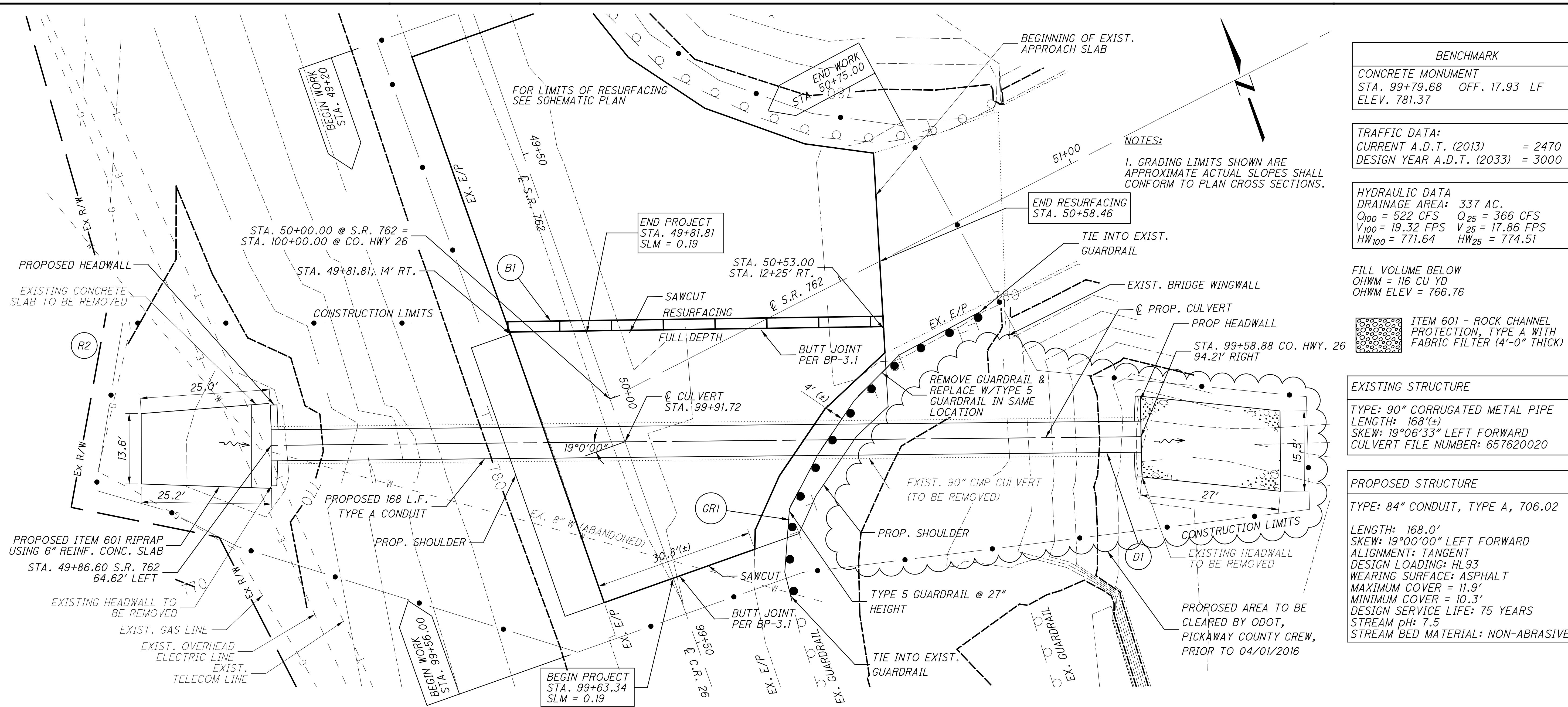
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REF. NO.	SHEET NO.	STATION TO STATION		SIDE	202	202	202	503	601	601	602	611	606	622	626	630		630		630	630	630	642	642	642	
					HEADWALL REMOVED	CONCRETE SLOPE PROTECTION REMOVED	GUARDRAIL REMOVED	COFFERDAMS AND EXCAVATION BRACING	RIPRAP USING 6" REINFORCED CONCRETE SLAB	ROCK CHANNEL PROTECTION TYPE A, WITH FABRIC FILTER	CONCRETE MASONRY	84" CONDUIT, TYPE A, 706.02	GUARDRAIL, TYPE 5	PORTABLE BARRIER, 32", BRIDGE MOUNTED	BARRIER REFLECTOR	GROUND MOUNTED SUPPORT, POST		STREET NAME SIGN, POST		REMOVAL OF GROUND MOUNTED SIGN AND RE-ERECTION	SIGN POST REFLECTOR	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	SIGN, FLAT SHEET	STOP LINE	EDGE LINE, 4"	CENTER LINE
					EACH	SQ YD	FT	LUMP	SQ YD	CU YD	CU YD	FT	FT	FT	EACH	NO. 2	NO. 3	NO. 2	NO. 3	EACH	EACH	EACH	SQ FT	FT	MILE	MILE
R1	11	50+15	50+70	RT			70																			
GR1	11	50+15	50+70	RT									70		4											
D1	11	99+91		LT / RT	2			LUMP	38	62	8.1	168														
R2	11	99+91		LT		38																				
B1	11	49+86.58	50+55	LT / RT										92	4											
CL1	14	99+63	49+25	CL																				0.1		
CL2	14	49+25	99+63	CL																				0.1		
EL1	14	49+25	99+63	RT																				0.1		
EL2	14	50+20	50+60	RT																				0.1		
EL3	14	49+25	50+60	LT																				0.1		
SL1	14	50+35		LT																						
SL2	14	50+00	50+24	RT																						
S1	14	50+35		LT												5	10			1	1					
S2	14	50+30		LT														5	10	2						
S3	14	50+10		LT												5	10			1						
S4	14	50+05 (W8-13-36)		LT												5	10					1	9			
TOTALS CARRIED TO GENERAL SUMMARY					2	38	70	LUMP	38	62	8.1	168	70	92	8	15	30	5	10	4	1	1	9	54	0.3	0.2

SUBSUMMARY	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">CALCULATED</td> <td style="width: 50%; text-align: center;">AJB</td> </tr> <tr> <td style="width: 50%; text-align: center;">CHECKED</td> <td style="width: 50%; text-align: center;">JRE</td> </tr> </table>	CALCULATED	AJB	CHECKED	JRE
CALCULATED	AJB				
CHECKED	JRE				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">10</td> <td style="width: 50%; text-align: center;">14</td> </tr> </table>	10	14	PIC - 762 - 0.19		
10	14				

G:\2011\201110-000 VAR-D06 (9 Culverts)\92454\Culverts\PIC-762-0.19\Roadway\sheet\92454-BP001.dgn 11/30/2015 11:13:07 AM espelage



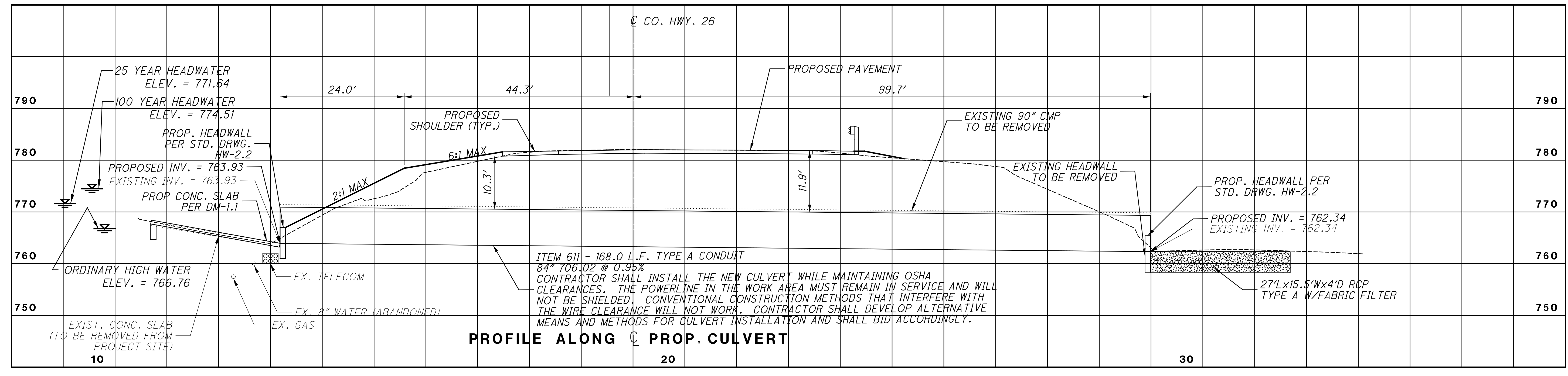
BENCHMARK	
CONCRETE MONUMENT	
STA. 99+79.68	OFF. 17.93 LF
ELEV. 781.37	

TRAFFIC DATA:	
CURRENT A.D.T. (2013)	= 2470
DESIGN YEAR A.D.T. (2033)	= 3000

HYDRAULIC DATA	
DRAINAGE AREA:	337 AC.
Q ₁₀₀ = 522 CFS	Q ₂₅ = 366 CFS
V ₁₀₀ = 19.32 FPS	V ₂₅ = 17.86 FPS
HW ₁₀₀ = 771.64	HW ₂₅ = 774.51

FILL VOLUME BELOW	
OHWM	= 116 CU YD
OHWM ELEV	= 766.76

	ITEM 601 - ROCK CHANNEL PROTECTION, TYPE A WITH FABRIC FILTER (4'-0" THICK)
--	---



DESIGN AGENCY: **CDS ASSOCIATES, INC.**
 11000 Woodloch Forest Dr., Columbus, OH 43240
 (614) 251-1700
 www.cdsassoc.com

DATE: -
 REVIEWED: -
 DRAWN: MTW
 CHECKED: RFD

CULVERT FILE NUMBER: 657620022

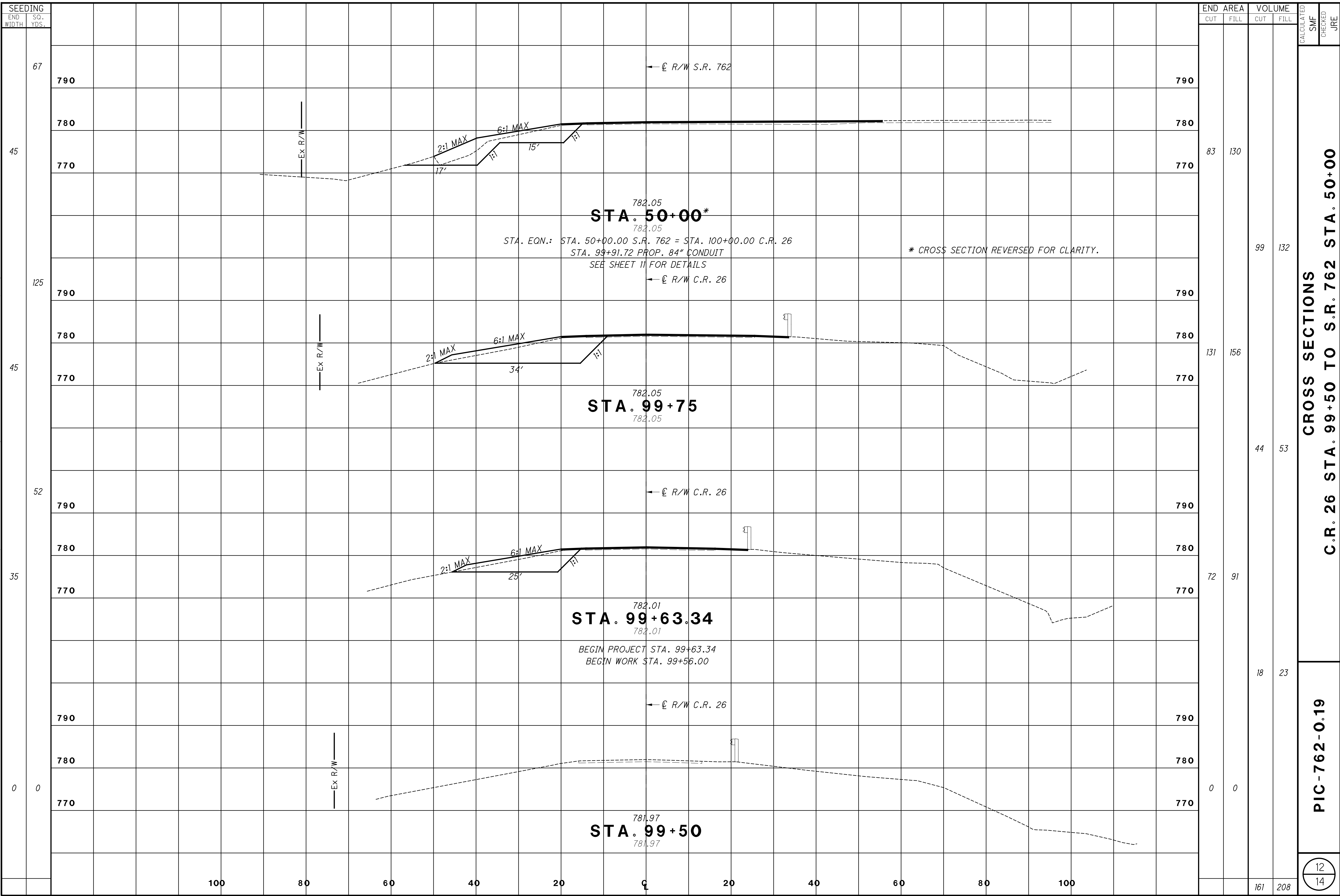
PICKAWAY COUNTY
 STA. - 49+77.85
 STA. - 49+81.81

SITE PLAN
 PIC-762-0.19
 STATE ROUTE 762 OVER CREEK

PIC-762-0.19
 PID No. 92454

1/1
 11/14

G:\2011\2011210-000 VAR-D06 (9 Culverts)\92454\Culverts\PIC-762-0.19\roadway\sheets\92454_XS001.dgn 11/30/2015 11:13:08 AM espelage

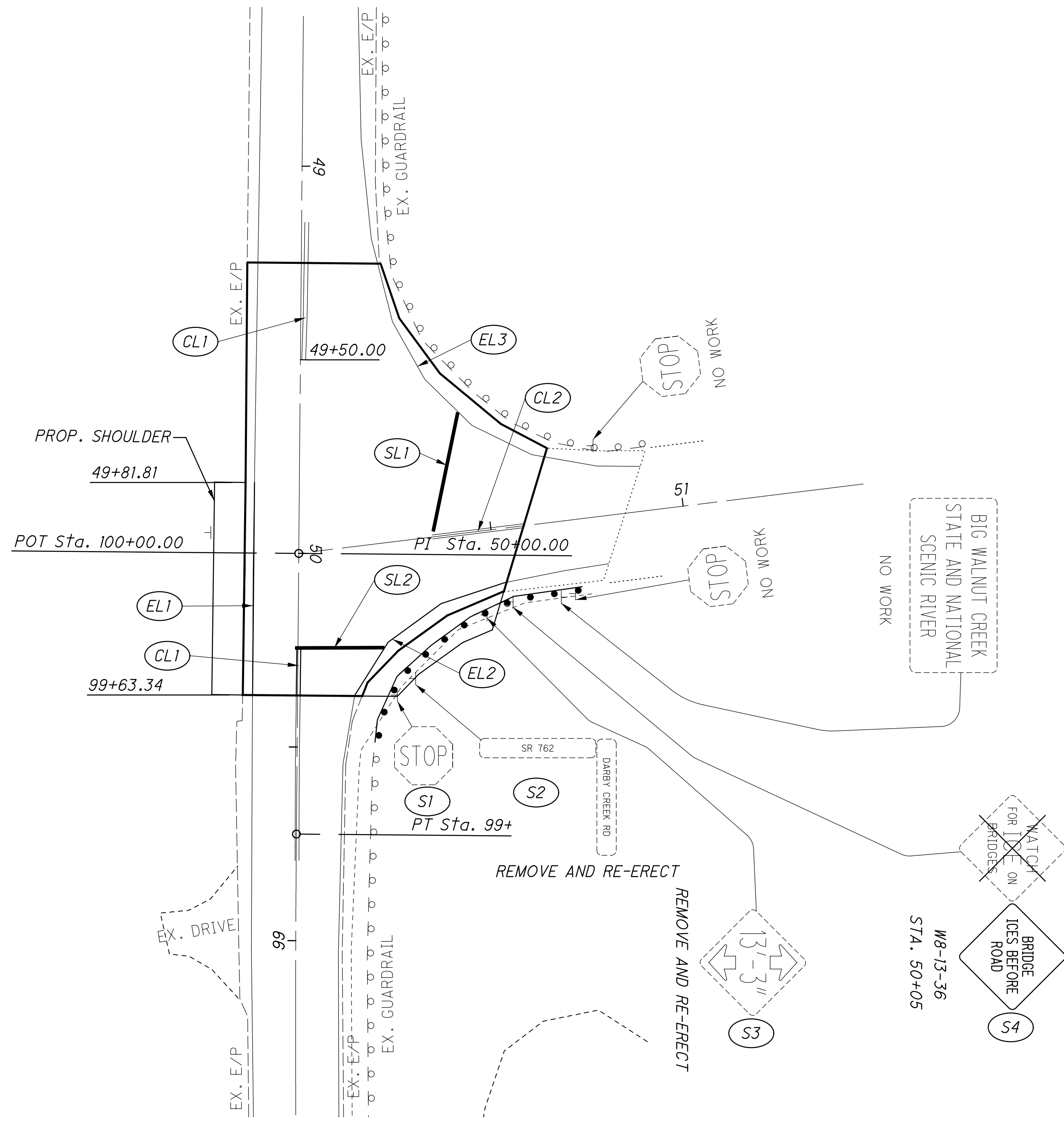


END AREA	VOLUME	CALCULATED	CHECKED		
				CUT	FILL
83	130				
131	156				
72	91				
0	0				
161	208				

CROSS SECTIONS
C.R. 26 STA. 99+50 TO S.R. 762 STA. 50+00

PIC-762-0.19

12
14



LEGEND

- (EL) - 642, EDGE LINE, 4"
- (CL) - 642, CENTER LINE
- (SL) - 642, STOP LINE

CALCULATED	SMF
	CHECKED
	JRE

0 20 40
HORIZONTAL SCALE IN FEET

SIGNING & PAVEMENT MARKING PLAN

PROJECT DESCRIPTION

THE EXISTING 90-INCH CMP CULVERT STRUCTURE (PIC-762-0019) IS TO BE REPLACED BY A 72-INCH DIAMETER CONCRETE OR 84-INCH CMP CULVERT. THE NEW ALIGNMENT WILL BE THE SAME AS THE EXISTING STRUCTURE. THE STRUCTURE IS LOCATED ON STATE ROUTE 762 (S.R. 762) AT THE INTERSECTION OF COUNTY HIGHWAY 26 IN PICKAWAY COUNTY, OHIO. IT IS UNDERSTOOD THAT THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF S.R. 762 AND C.R. 26 WILL BE GENERALLY MAINTAINED WITH MINIMAL APPROACH WORK.

HISTORICAL RECORDS

FIVE HISTORIC BORINGS WERE AVAILABLE AS PART OF THE PIC-762-0033 BRIDGE PROJECT PERFORMED IN 1984-1985 AND LOCATED JUST NORTHEAST OF THE CULVERT. THE FIVE HISTORIC BORINGS WERE DRILLED FOR THE BRIDGE STRUCTURE OVER BIG DARBY CREEK. THE HISTORIC BORINGS WERE NOT DRILLED IN ACCORDANCE WITH CURRENT ODOT SPECIFICATIONS; THEREFORE, TWO ADDITIONAL BORINGS WERE PERFORMED FOR THIS CURRENT INVESTIGATION. ONE HISTORIC BORING, BORING A-1 (DESIGNATED A-001-0-85) IS PRESENTED ON THE SHEETS INCLUDED AS PART OF THIS STRUCTURE FOUNDATION EXPLORATION.

GEOLOGY

THE SITE IS LOCATED WITHIN THE DARBY PLAIN OF THE SOUTHERN OHIO LOAMY TILL PLAIN PHYSIOGRAPHIC REGION OF THE OHIO. SOIL OVERBURDEN IN THE AREA TYPICALLY CONSIST OF ALLUVIUM AND WISCONSINAN-AGED GROUND MORAINIC GLACIAL TILL (QUATERNARY GEOLOGY OF OHIO, OHIO DIVISION OF NATURAL RESOURCES, GEOLOGICAL SURVEY). GEOLOGIC BEDROCK MAPPING (BEDROCK GEOLOGY OF THE HARRISBURG QUADRANGLE, ODNR, GEOLOGICAL SURVEY) INDICATES THAT THE UPPERMOST BEDROCK IN THE AREA GENERALLY CONSISTS OF SALINA DOLOMITE AT DEPTHS THAT VARY WIDELY IN THE AREA. THE ODNR "OHIO KARST AREAS" MAP DOES NOT INDICATE THE PRESENCE OF POTENTIAL KARST FEATURES IN THE AREA OF THIS SITE. ODNR INDICATES THAT UNDERGROUND MINES ARE NOT IN THIS AREA OF PICKAWAY COUNTY.

RECONNAISSANCE

S&ME PERFORMED A RECONNAISSANCE OF THE SITE ON JULY 16, 2011. THE LAND USAGE AROUND THE SITE IS AGRICULTURAL AND RURAL RESIDENTIAL. THE AREA AT THE PIC-762-0019 STRUCTURE WAS GENTLY UNDULATING WITH SLOUGHING OBSERVED ON THE WEST (INLET) SIDE OF THE EXISTING EMBANKMENT WHERE LOSS OF MATERIAL WAS OBSERVED INTO A HOLE IN THE TOP OF THE EXISTING CULVERT PIPE. THE CREEK HAD A VERY LOW LEVEL OF FLOWING WATER PRESENT AT THE TIME OF THE SITE VISIT. EXISTING PAVEMENT CONTAINED NO SIGNIFICANT DISTRESS.

SUBSURFACE EXPLORATION

ON JUNE 26 AND JULY 6, 2012, TWO (2) BORINGS (BORINGS B-001-0-12 AND B-002-0-12) WERE PERFORMED TO INVESTIGATE THE EXISTING SOIL AND BEDROCK FOR THE PROPOSED IMPROVEMENTS. THE BORINGS WERE EXTENDED TO DEPTHS OF 29.5 AND 20.3 FEET, RESPECTIVELY. THE BORING LOCATIONS WERE SELECTED AND FIELD LOCATED BY S&ME. THE ELEVATIONS OF THE BORINGS WERE ESTIMATED BY S&ME BASED ON THE ELEVATION SHOWN ON THE PROFILE DRAWINGS PROVIDED BY CDS. THE BORINGS WERE DRILLED WITH AN ATV-MOUNTED DRILL RIG USING A 3-1/4 INCH I.D. HOLLOW-STEM AUGER. AT REGULAR INTERVALS, THE DRILL RODS WERE LOWERED INTO THE HOLE AND DISTURBED, BUT REPRESENTATIVE, SOIL SAMPLES WERE OBTAINED BY DRIVING A 2-INCH O.D. SPLIT-BARREL SAMPLER INTO THE SOIL WITH BLOWS FROM A 140-POUND HAMMER FREELY FALLING 30 INCHES (ASTM D 1586-STANDARD PENETRATION TEST). SPT SAMPLES WERE OBTAINED AT 2.5-FOOT INTERVALS TO A DEPTH OF 20 FEET OR UNTIL BEDROCK WAS ENCOUNTERED AND CONTINUOUS SAMPLING WAS PERFORMED FOR SCOUR (JUST BELOW THE CREEK BED). AN ADDITIONAL SAMPLE WAS OBTAINED AT ONE BORING AT A DEPTH OF 23.5 FEET. CORING OF BEDROCK WAS PERFORMED USING AN NQ CORE BARREL WITH WATER AS THE CIRCULATING FLUID. ALL DISTURBED SOIL SAMPLES WERE EXAMINED IN THE FIELD AND REPRESENTATIVE PORTIONS WERE PRESERVED IN AIRTIGHT GLASS JARS. ROCK CORE WAS PRESERVED IN COMPARTMENTED BOXES. THE RECOVERED SOIL AND ROCK SAMPLES WERE THEN TRANSPORTED TO THE SOILS LABORATORY OF S&ME FOR FURTHER EXAMINATION AND TESTING. UPON COMPLETION, WATER LEVELS WERE MEASURED AND THE BORINGS WERE BACKFILLED IN ACCORDANCE WITH ODOT REQUIREMENTS.

IN ACCORDANCE WITH ODOT SPECIFICATIONS, THE HAMMER SYSTEM ON THE DRILLING RIGS WAS CALIBRATED ON MARCH 21, 2011, IN ACCORDANCE WITH ASTM D4633 TO DETERMINE THE DRILL ROD ENERGY RATIO (81.0 %).

EXPLORATION FINDINGS

BORING B-001-0-12 (B-001) WAS DRILLED THROUGH THE EXISTING EMBANKMENT, SOUTH OF THE CULVERT. THE BORING ENCOUNTERED 5 INCHES OF TOPSOIL. FILL WAS ENCOUNTERED THAT CONSISTED OF MEDIUM-DENSE GRAVEL WITH SAND (A-1-b) AND HARD SANDY SILT (A-4a) TO A DEPTH OF 15.5 FEET. THE NATURAL SOILS, BELOW THE FILL, CONSISTED OF MEDIUM-DENSE GRAVEL WITH SAND (A-1-b) TO A DEPTH OF 16.9 FEET, STIFF TO VERY-STIFF SILTY CLAY (A-6b) TO 19.4 FEET, AND STIFF TO VERY-STIFF SANDY SILT (A-4a) TO A DEPTH OF 24.0 FEET. DOLOMITE BEDROCK WAS ENCOUNTERED AT 24.0 FEET, AND THE BORING WAS TERMINATED AFTER CORING TO A DEPTH OF 29.5 FEET. THE DOLOMITE WAS STRONG TO VERY STRONG AND MODERATELY WEATHERED.

BORING B-002-0-12 (B-002) WAS DRILLED THROUGH THE EXISTING PAVEMENT, NORTH OF THE CULVERT, IN THE SOUTHBOUND LANE OF STATE ROUTE 762. THE BORING ENCOUNTERED 6.5 INCHES OF ASPHALT OVER 7 INCHES OF GRANULAR BASE. FILL WAS ENCOUNTERED TO A DEPTH OF 12.4 FEET CONSISTING OF VERY-STIFF TO HARD SANDY SILT (A-4a) AND STIFF TO VERY-STIFF SILTY CLAY (A-6b). THE NATURAL SOILS, BELOW THE FILL, CONSISTED OF STIFF SILTY CLAY (A-6b) TO A DEPTH OF 15.0 FEET. DOLOMITE BEDROCK WAS ENCOUNTERED AT 15.0 FEET, AND THE BORING WAS TERMINATED AFTER CORING TO A DEPTH OF 20.3 FEET. THE DOLOMITE WAS STRONG AND SLIGHTLY WEATHERED.

DURING DRILLING, WATER WAS NOT OBSERVED IN EITHER BORING B-001 OR B-002. IMMEDIATELY AFTER DRILLING, THE DEPTH OF WATER IN BORING B-001 WAS 13.2 FEET. THE WATER LEVEL INCLUDED WATER USED DURING CORING OF ROCK. BORING B-002 WAS "DRY" UPON COMPLETION, THAT IS TO SAY A SIGNIFICANT AMOUNT OF WATER HAD NOT ACCUMULATED IN THE BOTTOM OF THE BOREHOLE PRIOR TO BACKFILLING.

LEGEND

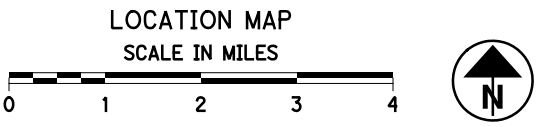
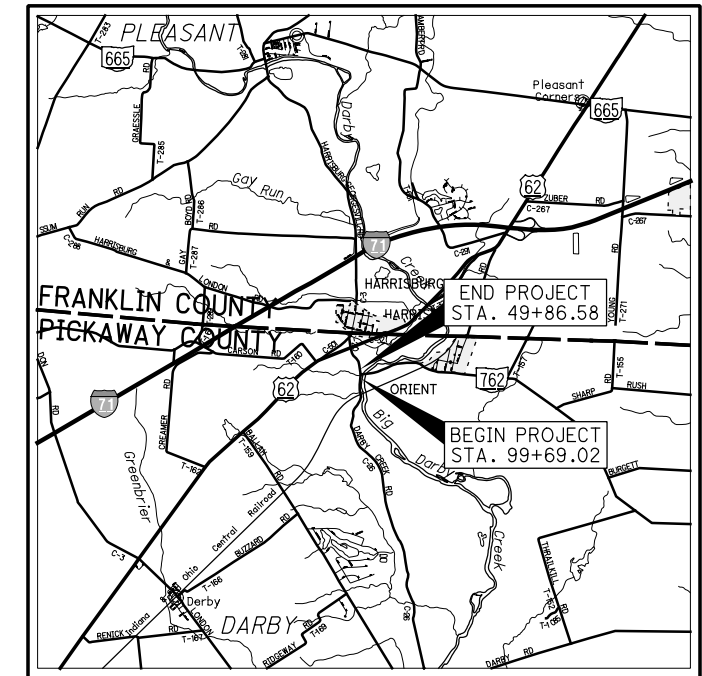
DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL
GRAVEL WITH SAND	A-1-b	- 8
SANDY SILT	A-4a	1 5
SILTY CLAY	A-6b	1 5
TOTAL	TOTAL	2 18
DOLOMITE	VISUAL	
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL	
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL	
BORING LOCATION - PLAN VIEW		
HISTORIC BORING LOCATION - PLAN VIEW		
DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.		
<i>WC</i>		INDICATES WATER CONTENT IN PERCENT.
<i>N₆₀</i>		INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.
<i>W</i>		INDICATES FREE WATER ELEVATION.
<i>W</i> (with inverted triangle)		INDICATES STATIC WATER ELEVATION.
		INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.
		INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.
*		INDICATES A SAMPLE TAKEN WITHIN 3 FT OF PROPOSED GRADE.
<i>NP</i>		INDICATES A NON-PLASTIC SAMPLE.
<i>SS</i>		INDICATES A SPLIT SPOON SAMPLE, STANDARD PENETRATION TEST.
<i>ST</i>		INDICATES A SHELBY TUBE SAMPLE.
<i>TR</i>		INDICATES TOP OF BEDROCK.
HISTORIC BORING DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL
GRAVEL	A-1-a	- 2
TOTAL	TOTAL	- 2

SPECIFICATIONS

THIS SUBSURFACE INVESTIGATION WAS GENERALLY PERFORMED IN ACCORDANCE WITH THE JANUARY 2012 UPDATE OF THE ODOT "SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS" (SGE).

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL EXPLORATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1600 WEST BROAD STREET, OR THE OFFICE OF STRUCTURAL ENGINEERING AT 1980 WEST BROAD STREET.



BORING NO.	SAMPLE NO.	SAMPLE ELEVATION	D ₅₀ (mm)	D ₉₅ (mm)
B-001-0-12	SS-3	774.0 - 772.5	0.4708	31.268
	SS-4	772.5 - 771.0	2.5767	22.8653
	SS-5B	770.7 - 769.5	0.1818	22.5494
	SS-6	769.5 - 768.0	0.8158	21.7514
B-002-0-12	SS-5A	770.0 - 769.6	0.1418	14.3857
	SS-5B	769.6 - 768.5	0.0507	21.12
	SS-6	768.5 - 768.0	0.5456	15.8138

- RECON. - JCH (7/16/11)
- DRILLING - S&ME (6/26/12), (7/6/12)
- DRAWN - EDV (9/17/12)
- REVIEWED - DAF (9/19/12)

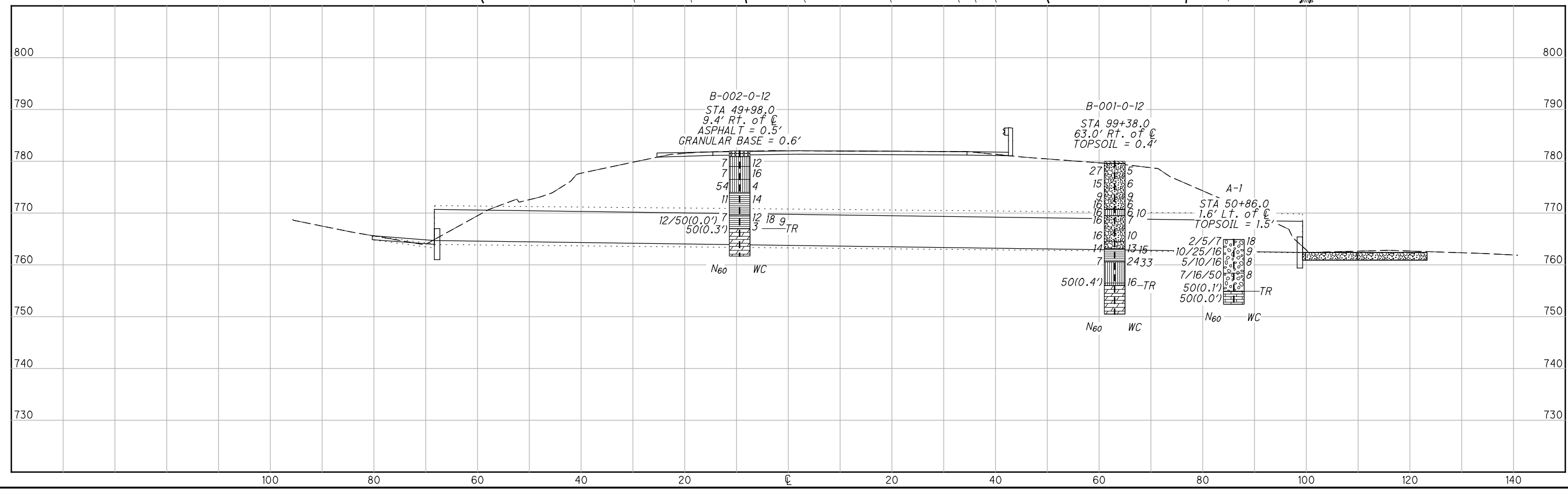
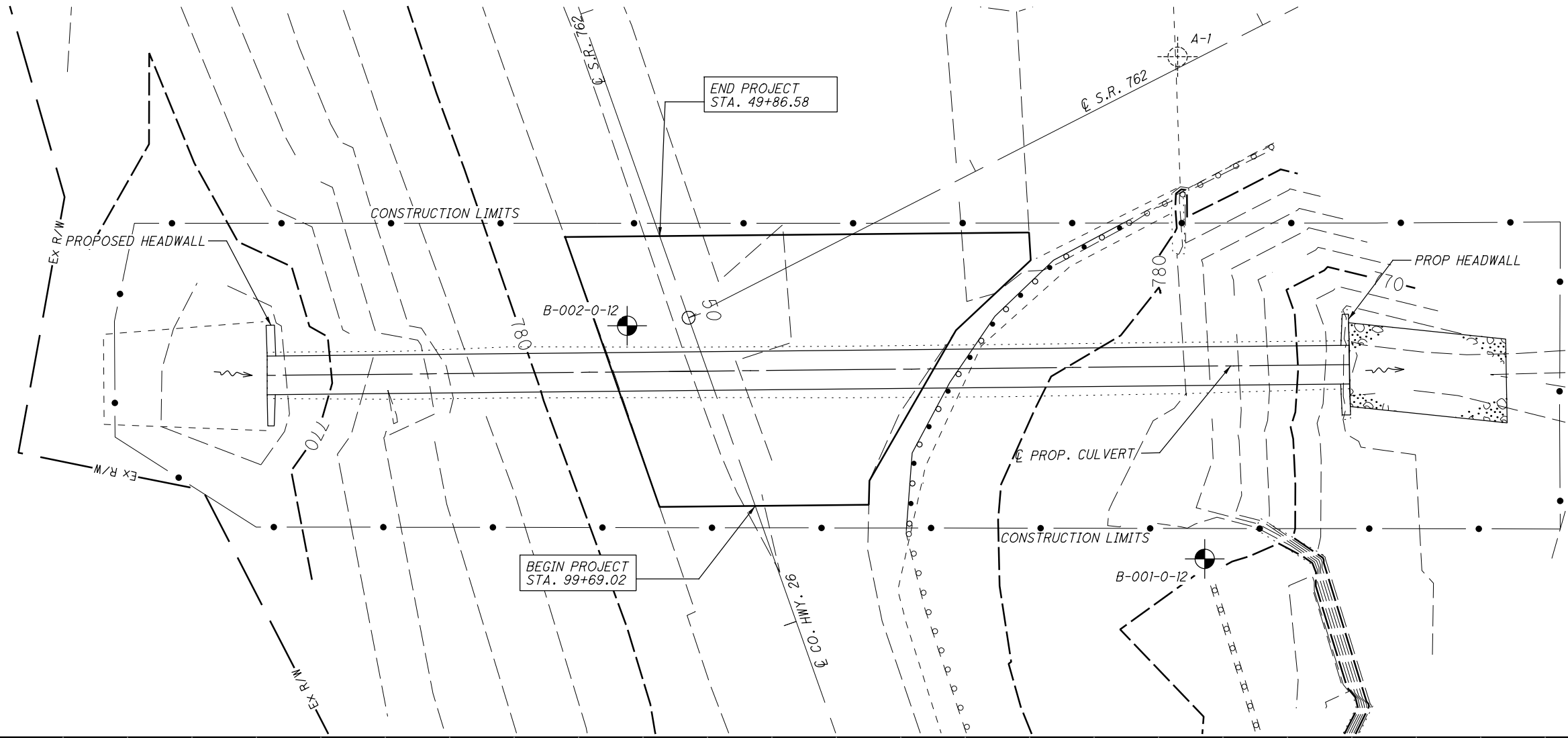




DRAWN EDV
CHECKED DAF

**STRUCTURE FOUNDATION EXPLORATION
CO. HWY. 26 OVER CREEK**

PIC-762-00.19



PROJECT: PIC-762-0019		DRILLING FIRM / OPERATOR: S&M / P. TUTTLE		STATION / OFFSET: 99+38.63 RT		EXPLORATION ID: B-001-0-12	
TYPE: CULVERT REPLACEMENT		HAMMER: CME AUTOMATIC		ALIGNMENT: C.R. 26 CENTERLINE		PAGE: 1 OF 1	
PID: 92454 BR ID: PIC-762-0019		CALIBRATION DATE: 3/21/11		ELEVATION: 780.0 (MSL) EOB: 29.5 ft.		PAGE: 1 OF 1	
START: 7/6/12 END: 7/6/12		ENERGY RATIO (%): 81		LAT / LONG: 39.80230058 N, 83.16986505 W		PAGE: 1 OF 1	
MATERIAL DESCRIPTION AND NOTES		S&M / D. GODWIN		GRADATION (%)		BOOTH CLASS (GD)	
		SPT / NQ		GR CS FS SI CL LL PL PI		MC	
ELEV.		DEPTHS		HP		REC	
780.0		1		SS-1		44	
779.6		2		SS-2		72	
		3					
		4					
		5					
		6		33 18 24 16 9		9	
		7					
		8		52 13 15 13 7		6	
770.7		9		SS-5A		6	
		10		SS-5B		10	
769.5		11		SS-6		7	
		12					
		13					
		14					
764.5		15					
763.1		16		SS-8A		13	
		17		SS-8B		15	
		18					
760.6		19		SS-9A		24	
		20		SS-9B		33	
		21					
		22					
		23					
756.5		24		SS-10		16	
756.0		25					
		26					
		27					
750.5		28					
		29					

NOTES: GROUNDWATER WAS NOT ENCOUNTERED. ENCOUNTERED MANY COBBLES FROM 3.0' TO 16.0'. ENCOUNTERED AUGER REFUSAL AT 24.5'.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS

PROJECT: PIC-762-0019		DRILLING FIRM / OPERATOR: S&M / M. WOLF		STATION / OFFSET: 49+98, 9.4 RT		EXPLORATION ID: B-002-0-12	
TYPE: CULVERT REPLACEMENT		HAMMER: CME AUTOMATIC		ALIGNMENT: S.R. 762 CENTERLINE		PAGE: 1 OF 1	
PID: 92454 BR ID: PIC-762-0019		CALIBRATION DATE: 3/21/11		ELEVATION: 782.0 (MSL) EOB: 20.3 ft.		PAGE: 1 OF 1	
START: 6/26/12 END: 6/26/12		ENERGY RATIO (%): 81		LAT / LONG: 39.80249630 N, 83.17009637 W		PAGE: 1 OF 1	
MATERIAL DESCRIPTION AND NOTES		S&M / D. GODWIN		GRADATION (%)		BOOTH CLASS (GD)	
		SPT / NQ		GR CS FS SI CL LL PL PI		MC	
ELEV.		DEPTHS		HP		REC	
782.0		1		SS-1		39	
781.5		2		SS-2		33	
780.9		3					
		4					
779.0		5					
		6					
		7		33 17 13 24 28 36 20		14	
		8					
776.5		9		SS-4		9	
		10					
		11					
		12					
769.6		13		SS-5A		12	
		14		SS-5B		18	
		15		SS-6		9	
767.0		16		SS-7		3	
		17					
		18					
761.7		19					
		20					

NOTES: GROUNDWATER WAS NOT ENCOUNTERED. ENCOUNTERED COBBLES AT 10.0' AND 14.0'. ENCOUNTERED AUGER REFUSAL AT 15.0'.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 25 LB. BENTONITE GROUT; POURED 94 LB. CEMENT; POURED 30 GAL. WATER.



PIC-762-00.19

STRUCTURE FOUNDATION EXPLORATION
LOG OF BORING B-001-0-12 & B-002-0-12

DRAWN
TJM
CHECKED
RSW

SPECIAL PROVISIONS

WATERWAY PERMITS CONDITIONS

C-R-S: PIC-762-0.19

PID: 92454

Date: 04/09/2014

1. Waterway Permit Time Restrictions:

Complete all work in streams depicted in the plans, Special Provisions, and/or working drawings by March 18, 2017.

For work on streams the Department will consider the Contractor's submission of an extension to the waterway permit end date based on project constraints. In order to be considered, the Contractor must submit a justification to the Engineer at least two months prior to the waterway permit end date.

The Engineer will submit the request for a time extension to ODOT-Office of Environmental Services-Waterway Permits Unit (614-466-7100) for consideration and coordination with the USACE and/or Ohio EPA.

2. Deviations from Permitted Construction Activities:

No deviation from the requirements for work in streams depicted in the plans, Special Provisions, and/or working drawings may be made unless a modification has been submitted to ODOT and approved by the appropriate agencies (i.e., USACE, Ohio EPA, USCG, ODNR, and USFWS).

For emergency situations resulting in unanticipated impacts to streams or wetlands, provide notification (verbal or written) to the Engineer as soon as possible following discovery of the situation. Written notification to the Engineer and notification to the ODOT- Office of Environmental Services-Waterway Permits Unit must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT-Office of Environmental Services-Waterway Permits Unit (614-466-7100) for consideration and coordination with the appropriate agencies. Notification must be made at least two months prior to planned, non-permitted activities. Consideration of the requested deviation is at the discretion of the Director and must be coordinated with the appropriate regulatory agencies.

3. In-Stream Work Restrictions:

Work in the following sensitive streams is further restricted as follows:

Stream Name /Description	Location	Work restriction dates (No In-stream work permitted)
UNT to Big Darby Creek	STA 99+58.88	10/31 to 7/31

In-stream work has been defined as the placement and/or removal of fill materials (temporary or permanent) below ordinary high water of a stream. Examples of "fill" include (but are not limited to) bridge piers, abutments, culverts, rock channel protection, scour protection, and temporary work pads.

Fills (such as temporary work pads) placed within a stream identified in the above table outside of the work restriction dates can continue to be worked from during the work restriction dates, but cannot be expanded, removed, or otherwise modified (below ordinary high water) until once again outside of the work restriction dates.

The Engineer will submit the request for a time extension to ODOT-Office of Environmental Services-Waterway Permits Unit (614-466-7100) for consideration and coordination with the USACE and/or Ohio EPA.

4. Materials:

Materials utilized in or adjacent to streams on this project for temporary or permanent fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded.

Cadmium, chromium, arsenate (CCA), creosote, and other pressure treated lumber shall not be used in structures that are placed in streams.

5. Cultural Resources:

If archeological sites or human remains are discovered, cease all work in the immediate area and notify the Engineer who will immediately contact the Office of Environmental Services-Cultural Resource Section (614-466-7100) and the Ohio Historic Preservation Office.

In the event of human remains are discovered the Engineer shall also contact the Pickaway County Sheriff's Office at (740) 474-2176.

6. Water Resource Demarcation:

All streams, wetlands, lakes, and ponds indicated on the plans shall be demarcated in the field as per SS 832 prior to site disturbance. The fence shall remain in place and be maintained throughout the construction process. Following the completion of the project, the fence and posts shall be removed.

7. Spill containment:

Provide and Maintain an Oil Spill Kit with a minimum capacity of 65 gallons. The Spill Kit shall contain:

- 6 - 3 in. X 8 ft. Oil only socks
- 4 - 18 in. X 18 in. Oil only pillows
- 2 - 5 in. X 10ft. Booms
- 50 - 16in. X 20 in. Oil only pads
- 10- Disposable Bags
- 1- 65 Gallon drum with lid
- 25 pounds of Granular Oil Absorbent

The Oil Spill Kit shall be located within 150 feet of any equipment working in a stream or wetland. The oil Spill Kit shall be maintained for the life of the contract. Any materials utilized during the project will be replaced within 48 hours.

All costs associated with furnishing and maintaining the above referenced spill containment kit is incidental to work.

8. Blasting:

State law requires notification to the Ohio Department of Natural Resources should blasting be required within or near stream channels (See ORC 1533.58 & CMS 107.09).

Notify Engineer, in writing, for submission to ODOT Office of Environmental Services-Waterway Permits Unit (614-466-7100) for coordination with the Ohio Department of Natural Resources.

9. Waterway Permits:

USACE Section 404 NWP # 3 (Maintenance) is authorized for PIC-762-0.19, PID 92454 (USACE ID# 2014-00303-SCR). A copy of the NWP shall be kept at the work site at all times and made available to all contractors and subcontractors. The permit is effective starting: 04-09-2014. The permit expires: 03-18-2017.

10. Bridge Inspection:

Prior to the removal of bridge structures, the underside must be carefully examined for the presence of birds and bats. Should any birds or bats be found roosting on the underside of the bridge, the Contractor is required to notify the Engineer for coordination with ODOT-Office of Environmental Services (614-466-7100).

11. Project Inspection:

Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work or regulate the Work through State and Federal law. Comments from the representatives of these agencies shall be directed to the Engineer. Please forward a copy to ODOT Office of Environmental Services. Waterway Permits Unit (614-466-7100).

12. Temporary Access Fills (Stream and River Crossings and Fills):Special Provisions Notes:Definitions:Hydraulic Opening

The cross sectional area allowing an unimpeded discharge equal to twice the highest monthly flow without producing a rise in the backwater above the Ordinary High Water Mark (OHWM)*.

Standard Temporary Discharge

The hydraulic opening providing a capacity for a discharge equal to twice the *highest monthly flow* without producing a rise in the backwater above the OHWM shall be known as the Standard Temporary Discharge. The U.S. Geologic Service publication "Techniques for estimating Selected Streamflow Characteristics of Rural Unregulated Streams in Ohio" provides equations that estimate monthly flow for Ohio Waterways These flows are also available in a web application by USGS StreamStats, (<http://water.usgs.gov/osw/streamstat/ohi.html>).

Average Monthly Flow

The average monthly flow represents the estimated "normal" flow.

Temporary Access Fills (TAFs)

In Streams and Rivers may include, but are not limited to, causeways, cofferdams (as described by other items of work), access pads, temporary bridges, etc. The Contractor will make every attempt minimize disturbance to water bodies, stream banks, stream beds, and approach sections during the construction, maintenance, and removal of the TAFs. Forging of streams and rivers is prohibited. Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis. *TAFs shall be designed and constructed so that the hydraulic opening provides capacity for a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the Ordinary High Water Mark (OHWM)*.*

Requirements

21 calendar days prior to the initiation of any in-stream work, provide the Engineer with working drawings that include:

- Plan view drawing (200 scale or less) showing the location of all jurisdictional temporary fill proposed for use on the project
- Scaled Cross section and profile drawing showing the OHWM and the proposed compliant hydraulic opening.
- A description of the installation and staging of all temporary jurisdictional fill over the life of the contract.
- A description of the removal of all jurisdictional temporary fill and restoration of the channel and all areas impacted by the jurisdictional temporary fill.
- A schedule outlining the timing of the placement and removal of all TAF.
- Have an Ohio Registered Engineer prepare, sign, seal and date the working drawings. Have a second Ohio Registered Engineer check, sign, seal and date the working drawings. The preparer and checker are two different Engineers. Include the following statement on the working drawings:
"These working drawings were prepared in compliance with the terms of the Regional General Permit and all contract documents."
- Include supporting hydraulic calculations developed by the engineer(s) who sealed the working drawings.
- Do not begin in-stream work until the Engineer has accepted the working drawings.

If the OHWM is not shown on the plans, the Department will establish the OHWM based on the definition of OHWM (as defined in SS 832) or the peak discharge from the 2 year event, using the method described in the most current version of the Department's Location and Design Manual Volume II.

If the Contractor proposes a TAF which does not provide for the Standard Temporary Discharge (discharge equal to twice the highest monthly flow without producing a rise in the backwater), the Contractor is required to coordinate the request for the contractor's proposed TAF with the Engineer and the ODOT Office of Environmental Services (OES). The Department makes no guarantee to grant the request. The contractor's proposed TAF request will be coordinated by OES with the U.S. Army Corps of Engineers and the Ohio Environmental Protection Agency, as appropriate.

In addition to the requirements described in SS 832, supply the Engineer/OES with the following:

1. A plan and Profile showing the temporary access fill(s) with the OHWM.
2. Cross section showing the hydraulic opening and the anticipated discharge flow.
3. A restoration plan for the area affected by the temporary access fill(s).
4. A schedule outlining the timing of the placement and removal of the temporary access fill(s)

The time frame allowed for the coordination of the contractor's proposed TAF will be a minimum of 60 days. Installation of any jurisdictional fill without a 404 Permit authorized by the USACE is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

Temporary Access Fills Construction and Payment

Begin planning and installing causeways and access fills as early in construction as possible to avoid conflicts with 404/401 permits or other environmental commitments that have been included in the construction plans.

Temporary Access Fills (TAFs) in Streams and Rivers may include, but are not limited to, causeways, cofferdams, access pads, temporary bridges, etc. Make every attempt minimize disturbance to water bodies, stream banks, stream beds, and approach sections during the construction, maintenance, and

removal of the TAFs. Make every attempt to minimize disturbance to water bodies during construction, maintenance and removal of the causeway and access fills. Construct the causeway and access fills as narrow as practical. Install in-stream conduits parallel to the stream banks. Make the causeway and access fills in shallow areas rather than deep pools where possible. Minimize clearing, grubbing, and excavation of stream banks, bed, and approach sections. Construct the causeway and access fills as to not erode stream banks or allow sediment deposits in the channel.

Prior to the initiation of any in-stream work, establish a monument upstream of proposed temporary crossing or temporary construction access fill to visually monitor the water elevation in the waterway where the fill is permitted. Maintain the monument throughout the project. Provide a visual mark on the monument that identifies the elevation 1 foot above the OHWM. If the OHWM is not shown on the plans, the Department will establish the OHWM based on the definition of OHWM (SS 832.02) or the peak discharge from the 2 year event, using the method described in the most current version of the Department's Location and Design Manual Volume II.

Ensure that the monument can be read from the bank of the waterway. Have this elevation set and certified by an Ohio Registered Surveyor.

Temporary access fills placed by the contractor above the OHWM are not subject to the 404/401 permit constraints. All costs associated with furnishing and maintaining the above referenced monument is incidental to the work.

Should the water elevation of the waterway, exceed the elevation 1 foot above OHWM, the Department will compensate the Contractor for repair of any resulting damage to the permitted temporary access fill up to the elevation of 1 foot above the OHWM, except as noted. Follow the requirements in Item 502 for Structures for Maintaining Traffic and in Item 503 for Cofferdams and any modifications to these items as shown in the plans. The Department will not pay for repair and maintenance of temporary access structures that are related to the construction access fill.

Should the water elevation of the waterway exceed the elevation shown on the monument, the Department will recognize this event as an excusable, non-compensable delay in accordance with Section 108.06 of the Construction & Materials Specifications.

Construct the causeway and fills, not including cofferdams and temporary bridges, to a water elevation at least 1 foot (0.3 m) above the OHWM. If more than one-third the width of the stream is filled, then use culvert pipes to allow the movement of aquatic life. Ensure that any ponding of water behind the causeway and access fills will not damage property or threaten human health and safety.

The following minimum requirements apply to TAFs where culverts are used.

- A. Furnish culverts on the existing stream bottom.
- B. Avoid a drop in water elevation at the downstream end of the culvert.
- C. Furnish a sufficient number of culverts in addition to stream openings¹ to providing a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the OHWM.
- D. Furnish culverts with a minimum diameter of 18 inches (0.5 m)...

For all fill and surface material placed in the channel, around the culverts, or on the surface of the causeway and access fills furnish clean, non-erodible, nontoxic dumped rock fill, Type B, C, or D, as specified in C&MS 703.19.B. Extend rock fill up the slope from original stream bank for 50 feet (10 m) to catch and remove erodible material from equipment.

When the work requiring the TAFs is complete all portions of the TAF (including all rock and culverts) will be removed in its entirety. The material will not be disposed in other waters of the US or isolated wetland. The stream bottom affected by the causeway and access fills will be restored to its pre-construction elevations. The TAF will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

Unless specific Temporary Access Fill compensation is included in the plans, all environmental protection and control associated with the 404/401 permit activities, including but not limited to Temporary Access Fills, are incidental to the work within the boundaries of the 404/401 permit or as otherwise identified in the 404/401 permit application.

13. Excavation Activities:

Excavated material will be placed at the upland site and disposed of in such a manner that sediment and runoff to streams is controlled and minimized. If any changes to the proposed work are deemed necessary, you must notify and coordinate with the Office of Environmental Services-Waterway Permits Unit (614-466-7100).

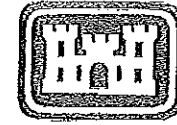
14. Construction Completion Certification:

Upon Completion of the work, notify the Engineer. The US Army Corps of Engineers Construction Completion Certification must be completed and signed by the Engineer then forwarded to the:

U.S. Corps of Engineers
DSCC
Building 10, Section 10
3990 East Broad Street
Columbus, Ohio 43218

Forward a copy of the certification to ODOT Office of Environmental Services. Waterway Permits Unit. A copy of the certification form is attached.

Ver: 2-Special Provisions for Waterway Permits February 15, 2012



US Army Corps of Engineers
Huntington District

Permit Number: 2014-00303-SCR

Name of Permittee: Ohio Department of Transportation

Date of Issuance: April 9, 2014

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers - Huntington District
Building 10/ Section 10
PO Box 3990
Columbus, OH 43218-3990

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

SPECIAL PROVISIONS

Floodplain Permit

CO-RT-SEC:
PIC-762-0.19

PID:
92454

DATE: 04/25/14



William R Toole
Chief Building Official
Flood Plain Administrator
Geoffrey A. Davis Residential Building Official, Inspector

Pickaway County Building Department

124 West Franklin Street
Circleville, Ohio 43113
740-477-8282 Fax 740-477-8265
www.pickaway.org

also serving...
Circleville
Commercial Point
New Holland
Orient
Tarlton
Williamsport

April 25, 2014

Ms. Laura Wright
ODOT District 6
400 East Williams Street
Delaware, Ohio 43015

Attached is your approved flood hazard permit #21400002 for replacement of an existing 90" corrugated steel culvert pipe with an 84" concrete culvert pipe over an unnamed tributary to Big Darby Creek on State Route 762 between Orient, Ohio and Harrisburg, Ohio in a flood zone A.

Expiration date is at completion of this project as long as work commences by January 1, 2016 and is continuous to completion

Feel free to call me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read "W. Toole".

William R Toole
Flood Plain Administrator



Pickaway County Building Department
 124 West Franklin Street
 Circleville, Ohio 43113
 Phone: 740-477-8282 Fax 740-477-8265
 www.pickaway.org

BUILDING PLAN APPROVAL

Permit Number: 2014000185
 Issued: 04/28/2014 Jurisdiction: ORIENT
 Permit Type: FLOOD MANAGEMENT

Name of Project: ODOT CULVERT REPLACEMENT - FLOOD PLAIN
 0 SR 762
 ORIENT, OH 43146

Permit Fee: \$50.00
 Use Group: FL

In pursuance of the filing of the required application and plans and specifications by

Contractor: _____ Owner: _____

Permission is hereby granted for:
 REPLACE 90" CORRUGATED STEEL PIPE W/84" CONCRETE PIPE. WORK IS ON SR 762 BETWEEN VILLAGES OF ORIENT & HARRISBURG IN DARBY TWP, PICKAWAY COUNTY, OHIO PERMIT IS VALID FOR DURATION OF THIS PROJECT AS LONG AS WORK COMMENCES BY JANUARY 1, 2016

No premises shall be occupied until a certificate of use and occupancy or a written conditional occupancy approval by the building official has been issued.

See attached for addendum (conditions to this permit), minimum required inspections, inspection instructions, and for validity and legality of this permit.

The issuance of this permit is for the work specified in the application filed. Therefore, any unauthorized change or alteration from the aforesaid application or plans will render this permit null and void. All corrections or alterations noted in any addendums issued by this department shall be made a part of the approved plans and shall be performed and incorporated into the work.

Demolition permits are void after 60 days

CHIEF BUILDING OFFICIAL

MUST POST ON JOB SITE IN A VISIBLE LOCATION



Pickaway County Building Department
 104 East Franklin Street
 Circleville, Ohio 43113
 740-477-8282 Fax 740-477-8265

FLOOD PLAIN PLAN APPROVAL

Permit Number: 21400002
 Issued: 04/25/14 Jurisdiction: DARBY TWP
 Permit Type: FLOOD HAZARD MANAGEMENT

Name of Project: ODOT CULVERT PIPE REPLACEMENT

Permit Fee: \$50.00
 Use Group: FLOOD HAZARD

In pursuance of the filing of the required application and plans and specifications by

Contractor: _____ Owner: ODOT
 TBD District 6
 400 East Williams Street
 Delaware, Ohio 43015

Permission is hereby granted to:
 REPLACE 90" CORRUGATED STEEL PIPE WITH 84" CONCRETE PIPE. WORK IS ON STATE ROUTE 762 BETWEEN VILLAGES OF ORIENT AND HARRISBURG IN DARBY TOWNSHIP, PICKAWAY COUNTY, OHIO PERMIT IS VALID FOR DURATION OF THIS PROJECT AS LONG AS WORK COMMENCES BY JANUARY 1, 2016.

Final inspections to be scheduled with flood plain administrator upon restoration of work area at completion of work.

See attached for addendum (conditions to this permit), minimum required inspections, inspection instructions, and for validity and legality of this permit.

The issuance of this permit is for the work specified in the application filed. Therefore any unauthorized change or alteration from the aforesaid application or plans will render this permit null and void. All corrections or alterations noted in any addendums issued by this department shall be made a part of the approved plans and shall be performed and incorporated into the work.

CHIEF BUILDING OFFICIAL

MUST POST ON JOB SITE IN A VISIBLE LOCATION

PIC-762 Flood Evaluation Statement

A flood evaluation was performed for the PIC-762-0.19 culvert. The existing culvert is a 90" CMP with an inlet invert elevation of 763.93 and a 100 year storm inlet water surface elevation of 776.32. The existing upstream flooded area is 1.17 acres. An existing driveway pipe north of the project location has an invert elevation of 772.46 and is inundated with the 100 year storm.

Our hydraulic analysis of the proposed 84" concrete pipe, which has an inlet invert elevation of 763.93, produces a 100 year storm inlet water surface elevation of 774.51 and decreases the upstream flooded area to 0.55 acres from the 1.17 acres flooded by the existing 90" CMP. No additional structures will be inundated by these flood elevations. See attached aerial photo that shows no additional structures in the flooded area.

SPECIAL FLOOD HAZARD AREA DEVELOPMENT PERMIT APPLICATION

Application is hereby made for a DEVELOPMENT PERMIT as required by the Flood Damage Prevention Resolution adopted by the Pickaway County Commissioners on September 20, 1999, for development in an identified flood hazard area. All activities shall be completed in accordance with the requirements of said Resolution. The development to be performed is described below and in attachments hereto. The applicant understands and agrees that:

- this permit is issued on the conditions and facts described;
- any permit may be repealed if conditions or facts change;
- permit void if the activity has not begun within 180 days of the issuance date;
- the permit will remain valid for one year from date of issuance.

Owner's Name: Ohio Department of Transportation Builder: Low Bid Contractor
 Address: 406 E. William St. Delaware, OH 43015 Address: TBD
 Phone: 740-833-8228 Phone: _____

NOTE: In addition to completion of this form the applicant agrees to submit any additional information required by the administrator in order to determine that the proposed development is compliant with the local and federal flood prevention criteria of the National Flood Insurance Program. Additional Information may include but is not limited to: site specific plans to scale showing the nature, location, dimensions and elevations of the area and structure(s) in question.

DESCRIPTION OF WORK

1. Location of proposed development site-address: PIC-762-0.19
 Legal description: Replacement of Existing Structure, reconstruct pavement & guardrail
2. Kind of development proposed:

<table border="0"> <tr><td><u>New Building</u></td><td>_____</td></tr> <tr><td>residential</td><td>_____</td></tr> <tr><td>nonresidential</td><td>_____</td></tr> <tr><td>installation</td><td>_____</td></tr> <tr><td>manufactured home</td><td>_____</td></tr> </table>	<u>New Building</u>	_____	residential	_____	nonresidential	_____	installation	_____	manufactured home	_____	<table border="0"> <tr><td><u>Existing Structure</u></td><td>_____</td></tr> <tr><td>alteration</td><td>_____</td></tr> <tr><td>addition</td><td>_____</td></tr> <tr><td>accessory</td><td>_____</td></tr> <tr><td>materials storage</td><td>_____</td></tr> </table>	<u>Existing Structure</u>	_____	alteration	_____	addition	_____	accessory	_____	materials storage	_____	<table border="0"> <tr><td><u>Site Work</u></td><td>_____</td></tr> <tr><td>filling/grading</td><td>_____</td></tr> <tr><td>mining/dredging</td><td>_____</td></tr> <tr><td>watercourse alteration</td><td>_____</td></tr> <tr><td>other*</td><td><u>X</u></td></tr> </table>	<u>Site Work</u>	_____	filling/grading	_____	mining/dredging	_____	watercourse alteration	_____	other*	<u>X</u>
<u>New Building</u>	_____																															
residential	_____																															
nonresidential	_____																															
installation	_____																															
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mining/dredging	_____																															
watercourse alteration	_____																															
other*	<u>X</u>																															

*Describe activity: Replacement of existing 90" Corrugated metal pipe with an 84" concrete pipe with reconstructed guardrail & pavement.

3. Is the proposed construction an alteration, addition or improvement to an existing structure?
 Cost of proposed construction \$ 300,000.00 What is the estimated market value of the existing structure \$ N/A

NOTE: An existing structure must comply with the flood protection standards if it is substantially improved (an improvement equal to or greater than 50% of the market value of the structure). FEMA maintains that the "substantial improvements" definition applies to existing structures only and that once a structure meets the definition of "new construction" any further improvements to that structure must meet "new construction" requirements. For flood plain management purposes "new construction" means structures for which "start of construction" began on or after the effective date of the initial Flood Insurance Rate Map issued by FEMA for the community.

4. Does proposed development involve a subdivision or other development containing at least 50 lots or 5 acres (whichever is less) Yes _____ No X?

NOTE: If yes, base flood elevation data is required from applicant if it has not been provided by FEMA.

I AGREE THAT ALL STATEMENTS IN AND ATTACHMENTS TO THIS APPLICATION ARE A TRUE DESCRIPTION OF THE EXISTING PROPERTY AND THE PROPOSED DEVELOPMENT ACTIVITY. I UNDERSTAND THE DEVELOPMENT REQUIREMENTS FOR SPECIAL FLOOD HAZARD AREA ACTIVITIES PER THE APPROPRIATE RESOLUTION AND AGREE TO ABIDE THERETO. I UNDERSTAND IT IS MY RESPONSIBILITY TO OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS.

Applicant's Signature: James L Wright Date 04.03.14

ADMINISTRATIVE

5. Base flood elevation (100-year) at proposed site ~~772.0~~ 774.51 AFTER CONSULT feet m.s.l.
 Data source FEMA
 Map effective date 2009
 Community-Panel No. 39129C00255

6. Is the proposed development located in:
 an identified floodway
 a flood hazard area where base flood elevations exist with no identified floodway
 an area within the floodplain fringe
 an approximate flood hazard area (Zone A).

NOTE: Floodway development must demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice, that no increase in base flood elevation will result during occurrence of the base flood discharge. If base flood elevations exist with no floodway delineation, hydrologic and hydraulic analysis is required to demonstrate not more than one foot increase at any point to the water surface elevation of the base flood.

7. Encroachments - proposed action will not obstruct flood waters.
 Proposed site grade elevations of fill or topographic alteration to be at _____ m.s.l.

Does the structure contain:

N/A basement
N/A enclosed area other than basement below lowest floor?

8a. Does proposed development meet NFIP and local General Standards at Section 5.1 of the regulations?

- Section 5.1-1 Anchoring
 Section 5.1-2 Construction Materials and Methods
 Section 5.1-3 Utilities
 Section 5.1-4 Subdivision Proposals
 Section 5.1-5 No Base Flood Elevation Data

8b. Does proposed development meet NFIP and local Specific Standards at Section 5.2 of the regulations?

- N/A Section 5.2-1 Residential Construction
 Proposed lowest floor elevation (including basement) to be at _____ m.s.l.
N/A Section 5.2-2 Nonresidential Construction
 Proposed lowest floor elevation to be at _____ m.s.l.
N/A Section 5.2-3 Accessory Structures
N/A Section 5.2-4 Manufactured Homes and Recreational Vehicles
N/A Section 5.2-5 Enclosures Below Lowest Floor
N/A Section 5.2-6 Subdivisions and Large Developments

9. For structures located in approximate A zones (no BFE available) the structure's lowest floor is N/A feet above the highest grade adjacent to the structure.

10. The certified as-built elevation of the structure's lowest floor is N/A feet above msl. *

11. The certified as-built floodproofed elevation of the structure is N/A feet above msl. *

* Certification by registered engineer or land surveyor documenting these elevations is necessary if elevations are provided by applicant.

12. The proposed development is in compliance with applicable floodplain standards.
 PERMIT ISSUED ON 4/25/14 PERMIT NUMBER 21400002

13. The proposed development is not in compliance with applicable floodplain standards.
 PERMIT DENIED ON _____
 Reason: _____

14. The proposed development is exempt from the floodplain standards per Section _____ of the Flood Damage Prevention Resolution.

Administrator's Signature: [Signature] Date: 4/25/14



CULVERT ANALYSIS

PID : 92454 Date : 12/02/2013 Project : 2011210 Location : PIC-762-0.19 Designer : AJB
 Description : Existing Culvert
 HEADWATER CONTROL CODES:
 INLET - Inlet Control
 OUTLET - Outlet Control
 INLET Invert Elevation (ft.) : 763.93 Outlet Invert Elevation (ft.) : 762.34
 Use HW : 0
 Pipe Number : 1
 Pipe Quantity : 1
 Culvert Type : Circular Corrugated
 Corrugation Type : Corrugated Metal Pipe (3 x 1 in. corrugations)
 Pipe Size : 90 in.
 Design Manning 'n' : (default)
 Entrance Type : Half Headwall
 Pipe Length (ft.) : 168.00
 Culvert Slope (ft./ft.) : 0.0095
 Loss Coef. Ke : 0.9000

FLOW	HEAD LOSS	HWI	HWO	FLOW TYPE	VELOCITY	DN	DC	MANNING N	HEADWATER CONTROL	BURIED DEPTH	TAILWATER ELEVATION
(cfs.)	(ft.)	(ft.)	(ft.)		(fps.)	(ft.)	(ft.)			(ft.)	(ft.)
386.00	5.37	771.94	772.66	1 - A	11.84	6.08	4.95	0.0263	OUTLET*	0.00	762.34
522.00	7.28	775.56	776.32	2 - F	13.99	7.50	5.90	0.0263	OUTLET**	0.00	762.34

Pickaway County Building Department
124 West Franklin Street
Circleville, Ohio 43113
Phone: 740-477-8282
Fax: 740-477-8265
www.pickaway.org

Building Receipt

Receipt Number: 2014000396

Date: 04/28/2014

Application Number: 2140000368

Permit Number: 2014000185

Jurisdiction: ORIENT

Address: 0 SR 762
ORIENT, OH 43146

FLOOD MANAGEMENT

FLOOD MANAGEMENT

Fee Description

FLOOD MANAGEMEN	50.00
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Total Fees Due: \$50.00

Total Paid: \$50.00

Total Due: \$0.00