

DRAINAGE

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, 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, NOTIFY THE ENGINEER 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, NOTIFY THE ENGINEER 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 IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

ITEM 611 - INLET, NO. 2, AS PER PLAN

THIS ITEM SHALL CONSIST OF CONSTRUCTING THE INLET, NO. 2 PER THE ODOT ARCHIVED STANDARD CONSTRUCTION DRAWING I-8 DATED 4/23/59 AS SHOWN ON SHEET P.472 .

ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO PERFORM THE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 611 - INLET, NO. 2, AS PER PLAN.

ITEM 611 - CONDUIT BORED OR JACKED

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION IS PERMITTED WITHIN 50 FEET OF THE EDGE OF PAVEMENT. PROVIDE A STEEL CASING PIPE CONFORMING TO 748.06. JOINTS WITH A CIRCUMFERENCIAL FULLY PENETRATING B-U4b WELD THAT IS PERFORMED BY A CERTIFIED WELDER FOR WELDING CODE AMERICAN WELDING SOCIETY (AWS) D1. 1 OR MACHINED INTERLOCKING JOINTS ARE PERMITTED. THE INSTALLED CASING PIPE IS THE STORM WATER CONVEYANCE CARRIER UNLESS OTHERWISE SPECIFIED IN THE PLANS. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT, 27" DIAMETER

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 27 INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT, 27" DIAMETER

PIPE CONNECTIONS TO METAL STRUCTURES

PROVIDE CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. FURNISH A STUB MEETING THE REQUIREMENTS OF 707 WITH A MINIMUM LENGTH OF 2 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 ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THOROUGHLY CLEAN AND REGALVANIZE OR OTHERWISE SUITABLY REPAIR THE FIELD WELDED JOINT, IF USED. MEET WELDING REQUIREMENTS OF 513.21.

PROVIDE A MASONRY COLLAR PER STANDARD CONSTRUCTION DRAWING DM-1.1, TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS USED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, IS INCLUDED IN THE CONTRACT PRICE FOR ITEM 611.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

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

605, 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 50 FT

CULVERT (CFN 1984167) REHABILITATION STA. 8+63.53 (RAMP F) SHEET P.471

THE OUTLET OF THIS CULVERT IS BURIED AND HAS BEEN REFLECTED IN THE PLANS PER THE ORIGINAL CONSTRUCTION DRAWINGS. FINDING AND EXPOSING THE OUTLET SHALL BE INCIDENTAL TO THE FOLLOWING WORK ITEMS. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED TO PERFORM REPAIRS AS DIRECTED BY THE ENGINEER:

611, 27" CONDUIT, TYPE C
 611, MANHOLE, NO. 3
 899, 27" DIAMETER CURED-IN-PLACE-PIPE LINER
 602, CONCRETE MASONRY

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING

THE FOLLOWING ITEM HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR DEWATERING DURING CURED-IN-PLACE PIPE LINER INSTALLATIONS:

503 - COFFERDAMS AND EXCAVATION BRACING LS

PAVEMENT

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 206 - CEMENT STABILIZED SUBGRADE

THE CEMENT STABILIZED SUBGRADE IS REQUIRED AS PART OF THE STRUCTURAL DESIGN OF THE PAVEMENT. ANY CHANGES TO THE STABILIZATION MAY REQUIRE ADDITIONAL PAVEMENT THICKNESS. CONTACT THE OFFICE OF PAVEMENT ENGINEERING PRIOR TO ANY NON- PERFORMANCE OR CHANGES TO THE CEMENT STABILIZED SUBGRADE.

EROSION CONTROL

SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST 2 EACH
 659, TOPSOIL 10,481 CU. YD.
 659, SEEDING AND MULCHING 94,418 SQ. YD.
 659, REPAIR SEEDING AND MULCHING 4,721 SQ. YD.
 659, INTER-SEEDING 4,721 SQ. YD.
 659, COMMERCIAL FERTILIZER 21.24 TON
 659, LIME 19.51 ACRES
 659, WATER 523 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.

SEEDING AND MULCHING QUANTITY IS CARRIED TO GENERAL SUMMARY FROM SHEETS P.90 & P.91

WATER QUALITY

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670. SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

TREE REMOVAL

THE CONTRACTOR SHALL NOT REMOVE ANY TREES UNDER THE PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30, THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERAL LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31, THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE

ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOUT THE GROUND SURFACE, WITH A MINIMUM HEIGHT OF 13 FEET.

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1

PRIOR TO THE FIRST PHASE OF CONSTRUCTION, TEMPORARY TRAFFIC CONTROL ITEMS MUST BE IN PLACE. TEMPORARY GUARDRAIL SHALL BE INSTALLED IN AREAS WHERE PROTECTION IS NECESSARY AT BRIDGE ABUTMENTS AND ANY OTHER HAZARDS FOR THE WESTBOUND DIRECTION AS PER MT-95.82. THE WESTBOUND OUTSIDE SHOULDER SHALL BE PLANED AND RESURFACED. THE TEMPORARY PAVEMENT FOR THE RAMP CROSSOVERS AND MAINLINE WIDENING SHALL ALSO BE INSTALLED.

PRE-PHASE 1/PHASE 1 (HAS-22-1749L BRIDGE REPAIR)

THE CONTRACTOR HAS THE OPTION TO PERFORM THE BEAM REPAIR WORK DURING A COMBINATION OF PRE-PHASE 1 AND PHASE 1. IF WORK IS PERFORMED DURING PRE-PHASE 1, THE WESTBOUND US-22 OUTSIDE SHOULDER IS TO REMAIN CLOSED AS IS CURRENTLY. IN BRIDGE REPAIR WORK IS PERFORMED DURING PHASE 1, IT MUST BE PERFORMED CONCURRENTLY WITH THE RAMP E CLOSURE. RAMP E MAY ALSO BE CLOSED DURING PRE-PHASE 1. THE COMBINED (PRE-PHASE 1/PHASE 1) ALLOWABLE CLOSURE OF RAMP E IS 30 DAYS MAX. AN ADDITIONAL 90 DAY CLOSURE IS ALSO ALLOWABLE DURING PHASE 2. MAINTENANCE OF TRAFFIC CONTROL ON STATE ROUTE 9 DURING THE BRIDGE REPAIR SHALL BE A TWO-WAY ONE LANE SIGNALIZED CLOSURE AS PER MT-96.11. DETAILS FOR THIS WORK CAN BE FOUND ON SHEETS P.22 & P.45.

PHASE 1

DURING THE FIRST PHASE OF CONSTRUCTION, TRAFFIC IN BOTH DIRECTIONS OF US-22 WILL BE REDUCED TO A SINGLE 12' LANE IN EACH DIRECTION. PORTABLE BARRIER WILL BE USED TO DIVIDE THE OPPOSING DIRECTIONS THROUGHOUT MOST OF THE PROJECT LIMITS. THE EXCEPTION BEING AT THE SOUTH END OF THE PROJECT TO ALLOW ALL TURNING MOVEMENTS TO AND FROM INDUSTRIAL PARK ROAD.

THE SINGLE WESTBOUND LANE IS TO BE SHIFTED ONTO THE OUTSIDE SHOULDER. A TWO FOOT SHY DISTANCE FROM THE EDGE OF SHOULDER SHALL BE MAINTAINED THROUGHOUT THE WORK AREA. THE SINGLE EASTBOUND LANE SHALL BE SHIFTED TO THE EXISTING WESTBOUND PAVEMENT. PORTABLE BARRIER SHALL BE INSTALLED ON THE OUTSIDE SHOULDER OF EASTBOUND TRAFFIC.

ACCESS TO ALL RAMPS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION WHEN A PARTICULAR RAMP IS NOT UNDER CONSTRUCTION. DETOUR PLANS HAVE BEEN PROVIDED TO SHOW THE APPROPRIATE ROUTE FOR EACH RAMP CLOSURE. WHEN NOT UNDER CONSTRUCTION, RAMP ACCESS SHALL BE MAINTAINED WITH TEMPORARY PAVEMENT THROUGH THE EXISTING MEDIAN TO CONNECT TO THE EASTBOUND ON AND OFF RAMPS. ONLY ONE RAMP IS ALLOWED TO BE CLOSED AT A TIME (EXCEPT FOR RAMPS G & H). NO OTHER CONCURRENT CLOSURES ARE ALLOWED. THE FOLLOWING RAMPS ARE TO BE RECONSTRUCTED DURING PHASE 1 WITH THE LISTED MAXIMUM ALLOWABLE CLOSURE LENGTHS:

- US-22 EAST OFF-RAMP TO US-250 WEST (RAMP C) - 14 DAYS
US-250 EAST ON-RAMP TO US-22 EAST (RAMP D) - 14 DAYS
US-22 EAST OFF-RAMP TO SR-9/ US-250 EAST (RAMP G) - 90 DAYS
SR-9/ US-250 ON-RAMP TO US-22 EAST (RAMP H) - 90 DAYS

IN ADDITION, THERE ARE AT GRADE INTERSECTIONS WITHIN THE PROJECT LIMITS THAT ARE AFFECTED. THE FOLLOWING INTERSECTIONS SHALL BE MODIFIED AS NOTED BELOW:

US-22 & NORTH MAIN STREET

ACCESS TO AND FROM NORTH MAIN STREET SOUTH OF US-22 SHALL BE CLOSED THROUGHOUT PHASE 1 FOR WESTBOUND US-22 TRAFFIC. TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET P.43 . RIGHT TURNS (SEE SHEET P.43) TO AND FROM MARKWEST DRIVE NORTH OF US-22 ARE ALLOWED DURING PHASE 1. RIGHT TURNS TO AND FROM NORTH MAIN STREET AND US-22 EASTBOUND ARE PERMITTED THROUGHOUT PHASE 1. WHEN THE CONTRACTOR IS WORKING IN THE INTERSECTION AREA, THE CONSTRUCTION SHALL TAKE PLACE UNDER TRAFFIC.

US-22 & INDUSTRIAL PARK ROAD

ACCESS TO AND FROM INDUSTRIAL PARK ROAD SHALL BE MAINTAINED THROUGHOUT MAINLINE US-22 CONSTRUCTION. WHEN CONSTRUCTION IN THE VICINITY OF THE INTERSECTION IS TAKING PLACE, THE AREA SHALL BE CONSTRUCTED UNDER TRAFFIC.

PHASE 1A

PHASE 1A IS A SUBPHASE THAT WILL BUILD A CENTER PORTION OF PAVEMENT FROM ROUGHLY STA. 800+60 TO STA. 809+75. WESTBOUND TRAFFIC SHALL REMAIN IN THE SAME LOCATION AS THE LANE WAS IN PHASE 1. EASTBOUND TRAFFIC WILL BE SHIFTED ONTO FINISHED PAVEMENT THAT WAS PLACED IN PHASE 1. BOTH DIRECTIONS OF TRAFFIC WILL OPEN UP TO TWO LANES EAST OF THE PHASE 1A WORK ZONE. THE LOCATION OF THE LANES IN THIS AREA SHALL MATCH THE EXISTING (PRE-PROJECT) PAVEMENT MARKINGS.

POST PHASE 1A/ PRE-WINTER PHASE

PERMANENT TRAFFIC CONTROL ELEMENTS SHALL BE IN PLACE PRIOR TO OPENING THE FACILITIES TO TRAFFIC. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FROM PHASE 1A. INSTALL THE SURFACE COURSE PAVEMENT ON THE MAINLINE IN THE EASTBOUND DIRECTION UTILIZING LANE CLOSURES AS PER MT-97.10. INSTALL TEMPORARY PAVEMENT MARKINGS IN FINAL CONFIGURATION. ALL POST PHASE 1A/PRE-WINTER PHASE WORK SHALL BE COMPLETED BY NOVEMBER 30, 2026. DISINCENTIVES WILL BE APPLIED PER TABLE BELOW.

Table with 4 columns: DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED, DUE DATE, TIME UNIT, DISINCENTIVE \$ PER DAY PER LANE. Row 1: 2 LANES OF US-22 IN EACH DIRECTION, 11/30/2026, EACH DAY PER LANE, \$1,650

PRE-PHASE 2

PRIOR TO THE SECOND PHASE OF CONSTRUCTION, TEMPORARY TRAFFIC CONTROL ITEMS MUST BE IN PLACE. TEMPORARY GUARDRAIL SHALL BE INSTALLED IN AREAS WHERE PROTECTION IS NECESSARY AT BRIDGE ABUTMENTS AND ANY OTHER HAZARDS FOR THE EASTBOUND DIRECTION AS PER MT-95.82. THE TEMPORARY CROSSOVERS FOR THE RAMPS SHALL ALSO BE INSTALLED. THE MAINLINE CROSSOVERS USED DURING PHASE 1 SHALL CONTINUE TO BE IN PLACE IN THE SAME LOCATIONS.

PHASE 2

DURING THE SECOND PHASE OF CONSTRUCTION, TRAFFIC IN BOTH DIRECTIONS OF US-22 WILL BE REDUCED TO A SINGLE 12' LANE IN EACH DIRECTION. PORTABLE BARRIER WILL BE USED TO DIVIDE THE OPPOSING DIRECTIONS THROUGHOUT MOST OF THE PROJECT LIMITS. THE EXCEPTION BEING AT THE SOUTH END OF THE PROJECT TO ALLOW ALL TURNING MOVEMENTS TO AND FROM INDUSTRIAL PARK ROAD.

THE SINGLE EASTBOUND LANE IS TO BE SHIFTED ONTO THE OUTSIDE SHOULDER. A TWO FOOT SHY DISTANCE FROM THE EDGE OF SHOULDER SHALL BE MAINTAINED THROUGHOUT THE WORK AREA. THE SINGLE WESTBOUND LANE SHALL BE SHIFTED TO THE NEWLY COMPLETED EASTBOUND PAVEMENT. PORTABLE BARRIER SHALL BE INSTALLED ON THE OUTSIDE SHOULDER OF EASTBOUND TRAFFIC.

ALL PROPOSED ROADWAY ITEMS SHALL BE CONSTRUCTED AND INSTALLED FOR THE WESTBOUND ROADWAY. THIS INCLUDES THE SURFACE COURSE OF PAVEMENT AND THE FINAL PAVEMENT MARKINGS.

ACCESS TO ALL RAMPS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION WHEN A PARTICULAR RAMP IS NOT UNDER CONSTRUCTION. DETOUR PLANS HAVE BEEN PROVIDED TO SHOW THE APPROPRIATE ROUTE FOR EACH RAMP CLOSURE. WHEN NOT UNDER CONSTRUCTION, RAMP ACCESS SHALL BE MAINTAINED WITH TEMPORARY PAVEMENT THROUGH THE EXISTING MEDIAN TO CONNECT TO THE WESTBOUND ON AND OFF RAMPS. ONLY ONE RAMP IS ALLOWED TO BE CLOSED AT A TIME. NO CONCURRENT CLOSURES ARE ALLOWED. THE FOLLOWING RAMPS ARE TO BE RECONSTRUCTED DURING PHASE 2 WITH THE LISTED MAXIMUM ALLOWABLE CLOSURE LENGTHS:

- US-22 WEST OFF-RAMP TO US-250 WEST (RAMP A) - 14 DAYS
US-250 EAST ON-RAMP TO US-22 WEST (RAMP B) - 14 DAYS
US-22 WEST OFF-RAMP TO SR-9 (RAMP E) - 90 DAYS
SR-9/ US-250 ON-RAMP TO US-22 WEST (RAMP F) - 14 DAYS

IN ADDITION, THERE IS AN AT GRADE INTERSECTION WITHIN THE PROJECT LIMITS THAT IS AFFECTED. THE FOLLOWING INTERSECTION SHALL BE MODIFIED AS NOTED BELOW:

US-22 & MARKWEST DRIVE

ACCESS TO AND FROM MARKWEST DRIVE NORTH OF US-22 SHALL BE CLOSED THROUGHOUT PHASE 2 TO EASTBOUND TRAFFIC. TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET P.44 . RIGHT TURNS SEE SHEET P.44 TO AND FROM NORTH MAIN STREET SOUTH OF US-22 ARE ALLOWED DURING PHASE 2. RIGHT TURNS TO AND FROM MARKWEST DRIVE AND US-22 WESTBOUND ARE PERMITTED THROUGHOUT PHASE 2. WHEN THE CONTRACTOR IS WORKING IN THE INTERSECTION AREA, THE CONSTRUCTION SHALL TAKE PLACE UNDER TRAFFIC.

POST PHASE 2

PERMANENT TRAFFIC CONTROL ELEMENTS SHALL BE IN PLACE PRIOR TO OPENING THE FACILITIES TO TRAFFIC. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FROM PHASE 2. INSTALL THE SURFACE COURSE PAVEMENT ON THE MAINLINE IN THE WESTBOUND DIRECTION UTILIZING LANE CLOSURES AS PER MT-97.10. INSTALL FINAL PAVEMENT MARKINGS UTILIZING LANE CLOSURES.

DESIGN AGENCY



DESIGNER

EJT

REVIEWER

TJR 11-10-25

PROJECT ID

113440

SHEET TOTAL

P.19 736

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEM 614.

ALL ON AND OFF RAMPS SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND TEMPORARY PAVEMENT EXCEPT FOR THE ALLOWABLE CLOSURES LISTED IN THE SEQUENCE OF CONSTRUCTION ON SHEET P.19

NO WORK SHALL BE PERFORMED AND ALL EXISTING RAMPS SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S	THANKSGIVING
MEMORIAL DAY	CHRISTMAS
FOURTH OF JULY	LABOR DAY
GENERAL/REGULAR ELECTION DAY (NOV)	

THE PERIOD OF TIME THAT THE RAMPS ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRI THRU 6:00AM MON
MONDAY	12:00N FRI THRU 6:00AM TUES
TUESDAY	12:00N MON THRU 6:00AM WED
TUESDAY (GEN./REG. ELECTION)	5:00AM TUES THRU 12:00AM WED
WEDNESDAY	12:00N TUES THRU 6:00AM THURS
THURSDAY	12:00N WED THRU 6:00AM FRI
THURSDAY (THANKSGIVING)	6:00AM WED THRU 6:00AM MON
FRIDAY	12:00N THURS THRU 6:00AM MON
SATURDAY	12:00N FRI THRU 6:00AM MON

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

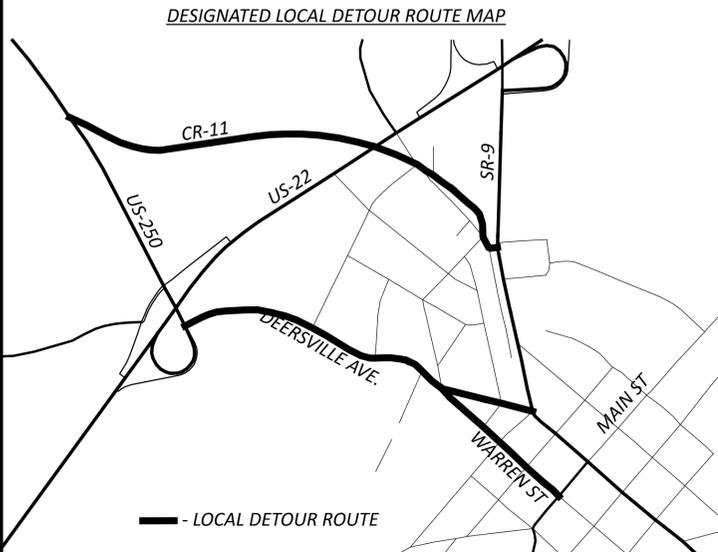
SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTORS SHALL BE ASSESSED A DISINCENTIVE OF \$2,500 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LENGTH AND DURATION OF RAMP CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. RAMP CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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 THIS PLAN.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.



DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 100 M. GAL.

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY.

EXCAVATION FOR MAINTAINING TRAFFIC 3467 CU. YD.

EMBANKMENT FOR MAINTAINING TRAFFIC 329 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

THE ABOVE WORK, INCLUDING LABOR, EQUIPMENT, AND MATERIALS SHALL BE PAID FOR UNDER THE LUMP SUM BID FOR ITEM 615 ROADS FOR MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON THIS SHEET. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 50 CY

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&S 614 OR C&MS 621 AS SPECIFIED HEREIN.

- RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

- RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOWING SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM NOV. 1ST TO APR. 1ST

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY THE ENGINEER.

RAISED PAVEMENT MARKER QUANTITIES CAN BE FOUND IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY.

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEMS FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB OR PERMANENT BARRIER (INCLUDING BRIDGE PARAPETS) CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS IF DELINEATION APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE ESTIMATED QUANTITIES RELATED TO THIS ITEM CAN BE FOUND IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY AND CARRIED TO THE GENERAL SUMMARY.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

THE ESTIMATED QUANTITIES RELATED TO THIS ITEM CAN BE FOUND IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY AND CARRIED TO THE GENERAL SUMMARY.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEMS.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

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 OAT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

HAS-022-15.11 PAVEMENT RECONSTRUCTION

MODEL: Sheet_SurvFl_PAPER SIZE: 34x22 (in.) DATE: 3/6/2026 TIME: 2:09:29 PM USER: TBuniak
 p:\arcadis-us-pw\entley.com\arcadis-us-01\Documents\01_Active Projects\30181931400_CAD\401-Engineering_Arcadis\Roadway\Sheets\13440_G0001.dgn

SHEET NUM.														PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.			
P.17	P.18	P.88	P.91	P.92	P.94	P.100	P.101	P.467	P.468	P.469	P.470	P.471	Office Calc	01/NHS	EXT	TOTAL							
LS					1				1					LS	201	11000	LS				ROADWAY		
														2	202	20010	2	EACH			CLEARING AND GRUBBING		
		176											180,780	180,780	202	23000	180,780	SY			HEADWALL REMOVED		
					266									176	202	30700	176	FT			PAVEMENT REMOVED		
														266	202	35100	266	FT			CONCRETE BARRIER REMOVED		
																					PIPE REMOVED, 24" DIAMETER AND UNDER		
					12									12	202	35200	12	FT			PIPE REMOVED, OVER 24" DIAMETER		
		22,322												22,322	202	38000	22,322	FT			GUARDRAIL REMOVED		
		412												412	202	38300	412	FT			GUARDRAIL REMOVED, BARRIER DESIGN		
		48												48	202	42206	48	EACH			ANCHOR ASSEMBLY REMOVED		
		26												26	202	47000	26	EACH			BRIDGE TERMINAL ASSEMBLY REMOVED		
		4												4	202	47800	4	EACH			IMPACT ATTENUATOR REMOVED		
					19				1					20	202	58100	20	EACH			CATCH BASIN REMOVED		
					6									6	202	58200	6	EACH			INLET REMOVED		
										328				328	SPECIAL	20270000	328	FT			FILL AND PLUG EXISTING CONDUIT, 27" DIAMETER	P.18	
			16,235	3,546						11	10	60		19,862	203	10000	19,862	CY			EXCAVATION		
			2,335	424	3				60	2				2,824	203	20000	2,824	CY			EMBANKMENT		
600														600	204	13000	600	CY			EXCAVATION OF SUBGRADE		
600														600	204	30010	600	CY			GRANULAR MATERIAL, TYPE B		
														7	204	45000	7	TON			PROOF ROLLING		
														5,870	206	10500	5,870	TON			CEMENT		
														194,627	206	11000	194,627	SY			CURING COAT		
														194,627	206	15020	194,627	SY			CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		
		20,400												20,400	606	15050	20,400	FT			GUARDRAIL, TYPE MGS		
		425												425	606	15150	425	FT			GUARDRAIL, TYPE MGS HALF POST SPACING		
		325												325	606	15550	325	FT			GUARDRAIL, BARRIER DESIGN, TYPE MGS		
														23	606	26150	23	EACH			ANCHOR ASSEMBLY, MGS TYPE E	P.17	
														20	606	26550	20	EACH			ANCHOR ASSEMBLY, MGS TYPE T		
														11	606	35002	11	EACH			MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
														6	606	35102	6	EACH			MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		
														4	606	60012	4	EACH			IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	P.17	
														72	622	10160	72	FT			CONCRETE BARRIER, SINGLE SLOPE, TYPE D		
														135	622	24001	135	FT			CONCRETE BARRIER, TYPE D, AS PER PLAN	P.464	
														2	622	25000	2	EACH			CONCRETE BARRIER END SECTION, TYPE D		
														2	622	25050	2	EACH			CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		
																							EROSION CONTROL
												3		3	601	11000	3	SY			RIPRAP, TYPE D		
						118								118	601	21050	118	SY			TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
					2						4			4	601	32104	4	CY			ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC		
								5	5	2				16	601	32204	16	CY			ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC		
	2													2	659	00100	2	EACH			SOIL ANALYSIS TEST		
	10,481						3,564							14,045	659	00300	14,045	CY			TOPSOIL		
			80,067	14,351										94,418	659	10000	94,418	SY			SEEDING AND MULCHING		
		4,721												4,721	659	14000	4,721	SY			REPAIR SEEDING AND MULCHING		
		4,721												4,721	659	15000	4,721	SY			INTER-SEEDING		
		21.24												21.24	659	20000	21.24	TON			COMMERCIAL FERTILIZER		
		19.51												19.51	659	31000	19.51	ACRE			LIME		
		523												523	659	35000	523	MGAL			WATER		
														32,077	670	00500	32,077	SY			SLOPE EROSION PROTECTION		
					1,340									1,340	670	00700	1,340	SY			DITCH EROSION PROTECTION		
						LS								LS	832	15000	LS					STORM WATER POLLUTION PREVENTION PLAN	
						LS								LS	832	15002	LS					STORM WATER POLLUTION PREVENTION INSPECTIONS	
						LS								LS	832	15010	LS					STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
						350,000								350,000	832	30000	350,000	EACH				EROSION CONTROL	
														LS	503	11100	LS					DRAINAGE	
					0.5					0.8	1.1			3.4	602	20000	3.4	CY				COFFERDAMS AND EXCAVATION BRACING	
						36,992								36,992	605	11110	36,992	FT				6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
	50					740								790	605	13410	790	FT				6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
						4,661								4,661	605	13500	4,661	FT				6" ROCK CUT UNDERDRAINS	
						77,513								77,513	605	14020	77,513	FT				6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
						764								764	611	00510	764	FT				6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	

GENERAL SUMMARY

DESIGN AGENCY
ARCADIS
 222 SOUTH MAIN STREET SUITE 200
 ARCADIS, MISSOURI 64480
 (314) 434-1985
 www.arcadis.com

DESIGNER
 TB

REVIEWER
 SMG 11-10-25

PROJECT ID
 113440

SHEET TOTAL
 P.84 736