

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHING THE EXISTING RIGHT OF WAY OR EASEMENTS.

CONVERSION OF METRIC STANDARD DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02-2 OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.08 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON ORIGINAL CONSTRUCTION DATUM.

WORK LIMITS

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

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, ANY SUCH DEVICE SHALL NOT BE OPERATED AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

TEMPORARY STREAM CROSSING FORDS

WHERE STREAM CROSSING FORDS ARE REQUIRED FOR EQUIPMENT CROSSING, THE CROSSING SHALL CONSIST OF CLEAN NON-TOXIC GRANULAR OR ROCK MATERIAL, PROPERLY MAINTAINED TO PREVENT EROSION, WITH PROVISIONS FOR CONVEYANCE OF ANTICIPATED HIGH FLOWS, AND SHALL NOT IMPEDE THE MOVEMENT OF AQUATIC LIFE. ROCK OR GRANULAR MATERIAL SHALL BE ROCK AS PER 203.02 OR DUMP ROCK FILL TYPE A, B, C OR D AS PER 601.08, EXCEPT ALL MATERIALS SHALL BE RETAINED ON THE 12.5 mm SIEVE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH PART 330, APPENDIX A, SPECIFIC CATEGORIES OF DISCHARGES- NATIONALLY PERMITTED, PARAGRAPH (A14), MINOR ROAD CROSSING FILLS - THE FEDERAL REGISTER -CORPS OF ENGINEERS FINAL REGULATIONS, CURRENT EDITION.

INSTREAM WORK

INSTREAM WORK WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN NON-ERODIBLE MATERIAL WILL BE USED FOR FORDS OR COFFERDAMS. THIS TEMPORARY PLACED MATERIAL WILL BE REMOVED AND THE STREAM BOTTOM RESTORED TO NEAR NATURAL CONDITIONS WHEN THE WORK IS COMPLETED.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL 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 203 - EMBANKMENT, AS PER PLAN

THE FOLLOWING CONTINGENCY ITEMS SHALL BE USED TO FILL THE SINKHOLES THAT HAVE DEVELOPED NEAR THE EXISTING HEADWALLS AND MANHOLES AT THE LOCATIONS SHOWN ON SHEETS 6-7. THE TOP 3" OF EMBANKMENT SHALL BE A LOOSE FRIABLE, LOAMY SOIL CAPABLE OF SUPPORTING VEGETATION.

ITEM 203-EMBANKMENT, AS PER PLAN 100 C.Y.

ITEM 603 - 72" CONDUIT, TYPE A, FIELD PAVING OF EXISTING PIPE, AS PER PLAN

THIS ITEM SHALL INCLUDE THE FIELD PAVING OF THE EXISTING 72" DIAMETER, CORRUGATED STRUCTURAL PLATE CULVERT. THE BOTTOM 1/3 OF THE PIPE'S CIRCUMFERENCE SHALL BE PAVED AS SHOWN ON SHEET 7.

THE METHOD OF WORK SHALL BE AS FOLLOWS:

1. DEWATER CULVERT
2. CLEAN DEBRIS FROM CULVERT
3. INSPECT THE INVERT OF THE EXISTING CULVERT TO DETERMINE IF

ADDITIONAL REPAIRS ARE NECESSARY BEYOND THE FIELD PAVING.

4. PERFORM ADDITIONAL REPAIRS IF NECESSARY (SEE ITEM 603 - CONDUIT, MISC.:STRUCTURAL PLATE)
5. INSTALL GALVANIZED WIRE MESH PER ITEM 603
 - A. THIS ITEM SHALL INCLUDE ALL SURFACE PREPARATION NECESSARY TO SECURELY ATTACH THE MESH TO THE EXISTING CONDUIT.
6. PLACE CONCRETE PER ITEM 603
7. AFTER PLACEMENT AND PROPER CURING OF THE CONCRETE, THE AREA APPROXIMATELY SIX(6) INCHES ABOVE EACH SIDE OF THE PAVING SHALL BE COMPLETELY COATED WITH A BITUMINOUS MATERIAL MEETING THE REQUIREMENTS OF AASHTO M243. THERE SHALL BE A ONE(1) INCH OVERLAP OF THE BITUMINOUS MATERIAL ONTO THE CONCRETE. THE APPLICATION METHOD SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THIS WORK COMMENCING. THIS AREA SHALL BE CLEAN TO ENSURE A GOOD BOND BETWEEN THE BITUMINOUS MATERIAL AND THE EXISTING CONDUIT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THE ABOVE NOTED WORK:

ITEM 603 - 72" CONDUIT, TYPE A, FIELD PAVING OF EXISTING PIPE, AS PER PLAN 1362 L.F.

ITEM 603 - CONDUIT, MISC.: STRUCTURAL PLATE

THE FOLLOWING ITEM HAS BEEN INCLUDED TO REPAIR THE INVERT OF THE EXISTING 72" CONDUIT IF THE PROPOSED WIDTH OF THE FIELD PAVING WILL NOT FILL AND COVER THE EXISTING PERFORATION IN THE EXISTING CULVERT. THIS ITEM SHALL INCLUDE THE SELECTION, PREPARATION, AND INSTALLATION OF THE NEW STRUCTURAL PLATES.

SELECTION

THE CONTRACTOR SHALL PROVIDE STRUCTURAL PLATES WHICH MEET THE

REQUIREMENTS OF 707.03. THE MINIMUM GAGE STEEL PROVIDED SHALL BE 0.138 INCHES. THE CONTRACTOR SHALL PROVIDE STRUCTURAL PLATES THAT WILL NEATLY FIT WITHIN THE CORRUGATION PATTERN OF THE EXISTING CONDUIT. THE PROPOSED PLATE SHALL BUTT CLOSELY AGAINST THE EXISTING CULVERT SO THAT AN ACCEPTABLE WELD CAN BE COMPLETED TO ATTACH THE NEW PLATE TO THE EXISTING CULVERT.

PREPARATION & INSTALLATION

THE CONTRACTOR SHALL PREPARE THE EXISTING CULVERT AS NECESSARY TO ACCEPT THE NEW STRUCTURAL PLATES AND WELDS. ALL VOIDS UNDER THE NEW PLATES SHALL BE FILLED WITH ITEM 613 - LOW STRENGTH MORTAR BACKFILL, TYPE 1. THE NEW PLATES AND OLD PLATES SHALL BE WELDED WITH A CONTINUOUS WELD ALONG THE PERIMETER OF THE NEW PLATE.

ALL FIELD WELDED JOINTS SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 513.21.

THE CONTRACTOR IS NOTIFIED THAT THE EXISTING BOLT PATTERN MAY CONFLICT WITH THE INSTALLATION OF THE NEW PLATES. THE CONTRACTOR MAY HAVE TO CUT HOLES IN THE NEW PLATES SO THAT THE NEW PLATES FIT SNUGLY AGAINST THE EXISTING CONDUIT. THE EXISTING BOLTS MAY **NOT** BE REMOVED BY THE CONTRACTOR. ANY GAPS WHICH ARE CREATED AT THESE BOLT HOLE LOCATIONS SHALL BE COMPLETELY SEALED WITH AN ACCEPTABLE CAULK. THESE AREAS SHALL THEN BE SEALED AGAIN WITH THE BITUMINOUS MATERIAL WHICH MEETS THE REQUIREMENTS OF AASHTO M243.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER:

ITEM 603-CONDUIT, MISC.: STRUCTURAL PLATE 50 S.Y.
ITEM 613-LOW STRENGTH MORTAR BACKFILL, TYPE 1 9 C.Y.

ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

THIS ITEM SHALL BE USED TO RECONSTRUCT MANHOLES TO GRADE AT THE LOCATIONS SHOWN ON SHEET 2. THE RECONSTRUCTION SHALL CONSIST OF REMOVAL OF EXISTING WALLS DOWN TO AN ELEVATION EQUAL TO THE TOP OF THE EXISTING 72" CONDUIT AND RECONSTRUCTION TO THE NEW GRADE. THE FINAL ELEVATIONS OF THE TOP OF THE MANHOLE COVERS AS SHOWN IN THE PLANS ARE ESTIMATED FROM THE ORIGINAL CONSTRUCTION PLANS AND MAY HAVE TO BE ADJUSTED IN THE FIELD BY THE ENGINEER.

THIS ITEM SHALL INCLUDE ANY CONDUIT NECESSARY TO NEATLY TIE INTO THE EXISTING SEWERS. THE CONDUIT SHALL MEET THE REQUIREMENTS OF ITEM 603 AND SHALL MATCH THE EXISTING MATERIAL TYPE.

ALL COSTS INCLUDING EQUIPMENT, LABOR, AND MATERIALS TO PERFORM THE WORK ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN.

ITEM 604-MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2 EACH