#### TEMPORARY CONSTRUCTION FILL

ANY TEMPORARY CONSTRUCTION ACCESS FILL WITHIN "WATERS OF THE US" ( EG., STREAMS, WETLANDS) SUBJECT TO US ARMY CORPS OF ENGINEERS (USACE) REGULATORY JURISDICTION WILL REQUIRE AUTHORIZATION BY THE USACE PRIOR TO THE PLACEMENT OF TEMPORARY FILL VIA THE WATERWAY PERMITTING PROCESS (404/401). ALL TEMPORARY CONSTRUCTION ACCESS FILLS SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WATERWAY PERMITS (404/401) AND SHOULD NOT EXCEEDTHE QUANTITIES AND/OR SURFACE AREA OF TEMPORARY FILLTHAT HAS BEEN PERMITTED. ADDITIONALLY, SOME TEMPORARY CONSTRUCTION ACCESS FILLS MAY ONLY BE ALLOWED IN SPECIFIC LOCATIONS, PER THE WATERWAY PERMITS(404/401) AND/OR OTHER ENVIRONMENTAL COMMITMENTS, AND SHOULD BE CONSTRUCTED IN ACCORDANCE WITH ANY SUCH LOCATIONAL RESTRICTIONS TO AVOID ENVIRONMENTALLY SENSITIVE AREAS. THE WATERWAY PERMITS ARE ATTACHED TO THE CONSTRUCTION PLANS AS SPECIAL PROVISIONS AND ARE BE AVAILABLE IN THE PROJECT CONSTRUCTION OFFICE.

## ENVIRONMENTAL COMMITMENTS

ENDANGERED SPECIES HABITAT - INDIANA BAT THIS PROJECT IS WITHIN THE RANGE OF THE FEDERALLY ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND MAY IMPACT SUMMER ROOSTING AND BROOD-REARING HABITAT FOR THIS SPECIES. THE SUMMER ROOSTING AND BROOD-REARING HABITAT FOR THE INDIANA BAT CONSISTS OF LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING. PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES. THEREFORE, ANY UNAVOIDABLE CUTTING OF TREES AND/OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES OR CAVITIES SHALL BE PERFORMED ONLY AFTER SEPTEMBER 15 AND BEFORE APRIL 15 WHEN THE SPECIES WOULD NOT BE USING SUCH HABITAT.

# CONSTRUCTION NOISE

CONSTRUCTION ACTIVITIES INVOLVING THE USE OF POWER-OPERATED EQUIPMENT INCLUDING, BUT NOT LIMITED TO. FRONT LOADERS, BACKHOES, DOZERS, TRACTORS, SCRAPERS, GRADERS, PAVERS, ROLLER COMPACTORS, SLIP-FORM EQUIPMENT. PAVEMENT PLANING EQUIPMENT. DUMP TRUCKS. CONCRETE MIXERS. CONCRETE PUMPS. CRANES. COMPRESSORS. GENERATORS. PUMPS. PILE DRIVERS. JACK HAMMERS, ROCK DRILLS, PNEUMATIC TOOLS, SAWS AND VIBRATORS SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL NOISE ORDINANCES.

### MISCELLANEOUS

IF ABANDONED ASBESTOS COVERED PIPELINES ARE DISCOVERED OR DISTURBED DURING CONSTRUCTION THEY WILL BE REMOVED PER CURRENT REGULATIONS.

DUE TO THE PRESENCE OF A CAPPED FLY-ASH PIT. CARE WILL BE TAKEN NOT TO PERFORM ANY EXCAVATION ACTIVITIES WITHIN THE LAKE COUNTY METROPARKS PROPERTY APPROXIMATELY BETWEEN STATIONS 365+00 AND 380+00. NORTH SIDE. CARE WILL BE TAKEN NOT TO BLOCK OR DAMAGE THE LAKE COUNTY METROPARKS SERVICE ROAD EAST OF ERIE STREET. ANY DAMAGE TO THIS ROAD WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

### STREAM AVOIDANCE

UNLESS SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER, NO EXCAVATION, GRADING, OR FILLING OPERATIONS SHALL BE PERFORMED IN ANY WATERWAY WITHIN THE PROJECT LIMITS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS. STREAMS OR OTHER WATERS OF THE UNITED STATES.

#### IN-STREAM WORK

ALL MATERIALS REMOVED FROM THE DITCHES, STREAMS OR WETLANDS MUST BE IMMEDIATELY REMOVED TO AN UPLAND SITE AND STABILIZED (I.E., SEEDED) TO PREVENT REDISTRIBUTION INTO ANY WATERS OF THE UNITED STATES. IMMEDIATE REMOVAL IS DEFINED BY THE UNITED STATES ARMY CORPS OF ENGINEERS AS DEPOSITING THE REMOVED

MATERIALS DIRECTLY INTO A TRUCK AND REMOVING THE MATERIAL FROM THE SITE: PLACEMENT OF REMOVED OF MATERIALS INTO A WETLAND OR ON THE BANKS A STREAM. EVEN TEMPORARILY, IS CONSIDERED A FILL AND REQUIRES A PERMIT ACTION. ANY AREAS DISTURBED BY EQUIPMENT ACTIVITIES MUST BE SEEDED TO PREVENT EROSION OF SEDIMENTS INTO WATERS OF THE UNITED STATES.

IN-STREAM WORK WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN NON-ERODIBLE MATERIAL WILL BE USED FOR STREAM CROSSINGS, COFFERDAMS OR OTHER EQUIPMENT ACCESS PADS. THIS TEMPORARILY PLACED MATERIAL WILL BE REMOVED AND STREAM BOTTOMS RESTORED TO NEAR NATURAL CONDITIONS WHEN THE WORK IS COMPLETED.

#### WETLANDS

DISTURBED WETLANDS WILL BE ABATED PER CURRENT LAW OR REGULATION.

#### BEST MANAGEMENT PRACTICES

SOIL EROSION AND SEDIMENTATION CONTROL WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL.

#### IN-STREAM BLASTING

NO IN-STREAM BLASTING WILL BE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION OF THE CHIEF OF THE DIVISION OF WILDLIFE, OHIO DEPARTMENT OF NATURAL RESOURCES, IN ACCORDANCE WITH SECTION 1533.58 OF THE OHIO REVISED CODE.

MECHANICAL EQUIPMENT OPERATION AT STREAM CHANNELS THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED HEREIN OR DIRECTED BY THE ENGINEER SHALL BE IN PLACE PRIOR TO ANY EXCAVATION. GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THESE CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

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

### **DRAINAGE**

### ITEM 604 - MANHOLE NO. 3, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF A SLAB TOP MANHOLE AT THE LOCATION SHOWN IN THE PLANS USING THE DETAILS SHOWN ON STANDARD CONSTRUCTION DRAW-ING MH-1.2. ALL REQUIREMENTS OF ITEM 604 STILL APPLY.

#### ITEM 604 - INLET NO. 3, SINGLE SLOPE BARRIER, TYPE BI, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF AN INLET NO. 3. SINGLE SLOPE BARRIER. TYPE BI AS PER STANDARD CONSTRUCTION DRAWING I-2.1 WITH THE FOLLOWING EXCEPTIONS:

- 1) THE MINIMUM ALLOWABLE DEPTH OF THE INLET WILL BE 27" (2.25')
- 2) THE ACCESS STEPS WILL NOT BE REQUIRED.

## REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE. REPRESENTATIVES OF THE STATE AND THE CONTRACTOR. ALONG WITH LOCAL REPRESENTATIVES. SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE. ALL NEW CONDUITS. INLETS. CATCH BASINS. AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

### PRECAST WINGWALLS, HEADWALLS AND FOOTERS

AT THE OPTION OF THE CONTRACTOR, A PRECAST WINGWALL, HEADWALL, OR FOOTER MAY BE FURNISHED PER ITEM 602.03 PRECAST STRUCTURES. THE PRECAST OPTION FURNISHED WILL MEET THE CAST-IN-PLACE STRUCTURAL DESIGN LOADINGS, DESIGN HEIGHT, AND DESIGN LENGTH DIMENSIONS.

FULL COMPENSATION FOR THE PRECAST WINGWALL. HEADWALL, OR FOOTER IS THE NUMBER OF CUBIC YARDS OF ITEM 511 OR SUPPLEMENTAL SPECIFICATION 898, AND POUNDS OF ITEM 509 FOR THE CORRESPONDING CAST-IN-PLACE STRUCTURE.

## CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

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

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

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

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

### PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF 707 AND HAVE A MINIMUM LENGTH OF 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.

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

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

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED. SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 603 OR 522.

## UNRECORDED UNTREATED NON-STORMWATER DRAINAGE

FURNISH NO CONTINUANCE FOR ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE SUCH AS UNTREATED SEPTIC. UNTREATED WASTEWATER, UNTREATED CURTAIN/GRADIENT DRAINS, AND UNTREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. PLUG ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE WITH CLASS C CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM.

## ITEM 603 - CONDUIT BORED OR JACKED

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN 30 FEET TO THE EDGE OF PAVEMENT ALONG SR2 AND 20 FEET AT ALL OTHER LOCATIONS. PROVIDE A 0.50 INCH UNGALVANIZED CASING PIPE CONFORMING TO 748.06 THAT HAS JOINTS WITH A CIRCUMFERENTIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. 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.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

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

