

GENERAL

UTILITIES
(G102A)

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

CITY CITY OF ASHLAND 206 CLAREMONT AVENUE ASHLAND, OH 44805 419.289.8331	GAS NORTHEAST OHIO NATURAL GAS 9081 STATE ROUTE 250 STRASBURG, OH 44680 330.878.5589
ELECTRIC OHIO EDISON 2508 WEST PERKINS AVENUE SANDUSKY, OH 44870 419.627.6881	GAS DIVERSIFIED GAS & OIL PLC 1800 CORPORATE DRIVE BIRMINGHAM, AL 35242 205.408.0909
COMMUNICATION EVERSTREAM SOLUTIONS 800 W ST CLAIR, 2ND FLOOR CLEVELAND, OH 44113 216.581.7972	ELECTRIC FIRELANDS ELECTRIC 1 ENERGY PLACE NEW LONDON, OH 44851 419.929.1571
COMMUNICATION FRONTIER COM 83 TOWNSEND AVENUE NORWALK, OH 44857 419.744.3613	GAS KINDER MORGAN 605 WESTLAKE DRIVE ASHLAND, OH 44805 714.560.4967
GAS MFC DRILLING COMPANY 46281 U.S. HIGHWAY 36 COSHOCOTON, OH 43812 740.622.5600	CABLE MASSILLON CABLE TELEVISION P.O. BOX 917 WOOSTER, OH 44691 330.345.5110
TRAFFIC ODOT DISTRICT THREE 906 CLARK AVENUE ASHLAND, OH 44805 419.207.2868	

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

WORK LIMITS
(G106)

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.

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

PRECONSTRUCTION MEETING

THE PRECONSTRUCTION MEETING SHALL BE HELD WITHIN 45 CONSECUTIVE CALENDAR DAYS AFTER AWARD OF THE CONTRACT.

STRUCTURE REPAIR

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND OTHER REPAIRS. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT THREE OFFICE IN ASHLAND:

PLAN NAME	DATE
ASD-71-0416_(SFN_0302465)_ORIGINAL_1958	1958
ASD-71-0637_(SFN_0302643)_ORIGINAL_1958	1958
ASD-71-0756_(SFN_0302708)_ORIGINAL_1958	1958
ASD-71-1111_(SFN_0303097)_ORIGINAL_1957	1957
ASD-71-1190_(SFN_0303127)_ORIGINAL_1957	1957
WAY-71-0368_(SFN_8503125)_ORIGINAL_1957	1957
WAY-71-0368_(SFN_8503125)_ORIGINAL_1957	1957

STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

SUPPLEMENTAL SPECIFICATION: 844.05A

ITEM 519 – PATCHING CONCRETE STRUCTURES

REPLACE UNSOUND CONCRETE IN ALL AREAS OUTLINED FOR EACH PIER STRUCTURE. EPOXY-URETHANE SEAL EACH PATCH AND 6” BEYOND THE EDGE OF THE PATCH, EXCEPT FOR REPAIRS WHERE THE ENTIRE COLUMN IS CALLED OUT FOR EPOXY-URETHANE SEALING.

THIS ITEM IS TO BE USED IN CONJUNCTURE WITH ITEM 844 - GALVANIC ANODE PROTECTION WHERE APPLICABLE.

ITEM 844 – GALVANIC ANODE PROTECTION (BDM 702.17-1)

REPAIR CONCRETE SHALL BE HYDRAULIC CEMENT-BASED MATERIAL WITH AN ELECTRICAL RESISTIVITY LESS THAN 50,000 OHM-CM ACCORDING TO ASTM C 1760. DO NOT USE NON- CONDUCTIVE REPAIR MATERIALS SUCH AS MAGNESIUM AMMONIUM PHOSPHATE CONCRETE AND EPOXY MORTARS OR BONDING AGENTS. CONCRETE MIXES CONTAINING HIGH LEVELS OF SUPPLEMENTARY CEMENTITIOUS MATERIALS SUCH AS SILICA FUME, GROUND GRANULATED BLAST FURNACE SLAG, LATEX, FLY ASH OR METAKAOLIN MAY NOT MEET THE RESISTIVITY REQUIREMENT.

THE GALVANIC ANODE SIZE AND SPACING IS BASED ON ACHIEVING A CURRENT DENSITY FOR THE EXTREMELY HIGH CORROSION RISK CATEGORY WITH A 10 YEAR INSTALLATION. SUPPLY ANODES WITH A MINIMUM CORE OF 100 GRAMS OF ZINC.

THIS ITEM IS TO BE USED IN CONJUNCTURE WITH ITEM 519 – PATCHING CONCRETE STRUCTURES WHERE APPLICABLE.

ITEM 202 – PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (BDM 603.1-3)

REMOVE ALL CONCRETE AND REINFORCEMENT COMPRISING THE EXISTING PIER ENCASEMENT DOWN TO THE ORIGINAL PIER, AS WELL AS ANY UNSOUND CONCRETE IN THE ORIGINAL PIER. PRESERVE ALL REINFORCEMENT IN THE ORIGINAL PIER.

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS. DO NOT BEGIN WORK UNTIL THE ENGINEER ACCEPTS THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING CONCRETE REINFORCEMENT TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

SOUND THE CONCRETE TO DETERMINE THE LIMITS OF THE CONCRETE TO BE REMOVED AND COMPARE THESE LIMITS TO THE AREAS SHOWN IN THE PLANS. IF NEW AREAS ARE DISCOVERED OR IF THE DIMENSIONS OF THE PLAN AREAS INCREASE BY MORE THAN 25% IN ANY DIRECTION, DOCUMENT THE AREAS AND NOTIFY THE ENGINEER FOR EVALUATION TWO WEEKS PRIOR TO REMOVAL. THE ENGINEER WILL DETERMINE IF PATCHING IN DISCRETE SECTIONS/STAGES IS NEEDED OR IF THE INSTALLATION OF TEMPORARY FALSEWORK IS REQUIRED.

ITEM 511 – CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN (BDM C405.10)

PREPARE ALL COLUMN SURFACES TO BE ENCASED PER C&MS 519. INSTALL ANCHORS (EPOXY OR EXPANSION) AS NEEDED TO SUPPORT AND POSITION WELDED WIRE FABRIC REINFORCEMENT WITH A MINIMUM OF 3.0” COVER. ENCASE THE COLUMN FROM 1’ BELOW THE GROUNDLINE TO THE HEIGHT INDICATED ON THE CORRESPONDING DETAIL WITH A MINIMUM THICKNESS OF 6” OF CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4.0 KSI, REINFORCED WITH W4 X W4, 6” X 6” WELDED WIRE FABRIC. ENSURE EXPOSED TOP OF ENCASING CONCRETE IS SLOPED TO DRAIN WATER. SEAL ALL NEW CONCRETE WITH EPOXY-URETHANE TO THE SATISFACTION OF THE AS PER PLAN NOTE FOR ITEM 512 – SEALING OF CONCRETE SURFACES (EPOXY URETHANE).

THE AFOREMENTIONED WELDED WIRE FABRIC REINFORCEMENT SHALL BE PAID FOR SEPARATELY UNDER ITEM 509 – EPOXY COATED STEEL REINFORCEMENT.

THIS ITEM SHALL INCLUDE THE EXCAVATION, AND REPLACEMENT EMBANKMENT ITEMS PERTINENT TO ACCOMPLISHING THE ABOVE WORK.

ITEM 509 – EPOXY COATED STEEL REINFORCEMENT (SUPPLEMENTAL SPEC. 844)

REINFORCE ALL CONCRETE ENCASEMENTS ADDED USING ITEM 511 – CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN, USING A WELDED WIRE FABRIC REINFORCEMENT: W4 X W4, 6” X 6”. ENSURE THE FABRIC IS PLACED IN A FASHION THAT THERE SHALL BE 3.0” OF COVER.

INCIDENTALS

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL EXISTING AND NEW BRIDGES THAT CROSS ANOTHER ROADWAY OR RAILROAD WITHIN THE PROJECT LIMITS. AT A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT THE EDGE OF SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. FOR BRIDGES OVER RAILROADS, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT BOTH RAILS AND 6 FEET OFF EITHER SIDE OF THE CENTERLINE OF EACH TRACK BELOW. IN ADDITION, THE CONTRACTOR WILL DETERMINE THE “HIGHWAY MAXIMUM USABLE VERTICAL CLEARANCE” (SNBI ID B.H.12) AND “HIGHWAY MINIMUM VERTICAL CLEARANCE” (SNBI ID B.H.13). THE SURVEYOR SHALL PRODUCE A SKETCH OF THE BRIDGE ELEVATION SHOWING THE LOCATION OF THESE MEASUREMENTS IN RELATION TO THE OVERHEAD BRIDGE OR FEATURE, AND THE ROADWAY AND SHOULDERS BELOW. THE SKETCH SHALL IDENTIFY WHICH BRIDGE BEAM LINE OR OTHER APPURTENANCE DETERMINED THE MEASUREMENTS.

THE “HIGHWAY MAXIMUM USABLE VERTICAL CLEARANCE” SHALL BE REPORTED AS THE MINIMUM VERTICAL CLEARANCE FOR THE HIGHWAY FEATURE, MEASURED OVER THE 10-FOOT-WIDE ENVELOPE OF THE TRAVELED PART OF THE HIGHWAY, THAT PROVIDES FOR THE MAXIMUM USABLE CLEARANCE ENVELOPE, ROUNDED DOWN TO THE NEAREST TENTH OF A FOOT. MEASURE THE VERTICAL CLEARANCE PLUMB FROM THE DECK OR HIGHWAY SURFACE TO THE LOWEST BRIDGE MEMBER RESTRICTION, APPURTENANCE (SIGNS, UTILITIES, ETC.) ATTACHED TO THE BRIDGE, OR OTHER STRUCTURE. THE DATA MAY NOT REPRESENT THE ABSOLUTE MINIMUM CLEARANCE OVER THE HIGHWAY FEATURE. THE TRAVELED PART OF THE HIGHWAY FEATURE DOES NOT INCLUDE SHOULDERS. CLEARANCES GREATER THAN 30 FEET MAY BE ESTIMATED.

THE “HIGHWAY MINIMUM VERTICAL CLEARANCE” SHALL BE REPORTED AS THE MINIMUM VERTICAL CLEARANCE MEASURED OVER THE HIGHWAY FEATURE, ROUNDED DOWN TO THE NEAREST TENTH OF A FOOT. MEASURE THE VERTICAL CLEARANCE PLUMB FROM THE DECK OR HIGHWAY SURFACE (INCLUDING PAVED OR STABILIZED SHOULDERS) TO THE LOWEST BRIDGE MEMBER RESTRICTION, APPURTENANCE (SIGNS, UTILITIES, ETC.) ATTACHED TO THE BRIDGE, OR OTHER STRUCTURE. SEVERAL MEASUREMENTS MAY NEED TO BE MADE TO DETERMINE THE MINIMUM VERTICAL CLEARANCE. HOWEVER, ONLY THE MINIMUM MEASUREMENT IS REPORTED. SHOULDERS MUST BE CONTIGUOUS WITH THE TRAVELED WAY AND MUST BE STRUCTURALLY ADEQUATE FOR ALL WEATHER AND TRAFFIC CONDITIONS CONSISTENT WITH THE FACILITY CARRIED. UNSTABILIZED GRASS OR DIRT, WITH NO BASE COURSE, FLUSH WITH AND BESIDE THE TRAFFIC LANE IS NOT TO BE CONSIDERED A SHOULDER FOR THIS ITEM. REFER TO AGENCY POLICY FOR WHEN AND WHERE STABILIZED SHOULDERS ARE USED. WHEN IT IS NOT READILY KNOWN IF STABILIZED CONSTRUCTION DETAILS WERE USED, THE PRESENCE OF RUTTING, HEAVING, WATER RETENTION, OR OTHER DISTRESS MAY BE USED AS INDICATORS THAT THE SHOULDER IS NOT STABILIZED. CLEARANCES GREATER THAN 30 FEET MAY BE ESTIMATED.

ADDITIONAL DETAILS, DESCRIPTIONS AND EXAMPLES OF THE “HIGHWAY MAXIMUM USABLE VERTICAL CLEARANCE” AND “HIGHWAY MINIMUM VERTICAL CLEARANCE” CAN BE FOUND IN THE “SPECIFICATIONS FOR THE NATIONAL BRIDGE INVENTORY” (SNBI) PUBLISHED BY FEDERAL HIGHWAY ADMINISTRATION.

THE ODOT DISTRICT 3 VERTICAL CLEARANCE SURVEY FORM SHALL BE USED, WHERE APPLICABLE, TO DOCUMENT THE MEASUREMENTS. WHERE THE ODOT DISTRICT 3 VERTICAL CLEARANCE SURVEY FORM IS NOT APPLICABLE, THE MEASUREMENTS SHALL BE DOCUMENTED ON A CONTRACTOR-DEVELOPED FORM THAT CLOSELY RESEMBLES THE ODOT DISTRICT 3 VERTICAL CLEARANCE SURVEY FORM AND ACCURATELY DEPICTS THE BRIDGE AND THE LANE AND SHOULDER AND/OR TRACK CONFIGURATION OF THE ROADWAY AND/OR RAILROAD THAT PASSES BELOW THE BRIDGE. THE COMPLETED FORM SHALL BEAR THE SEAL AND SIGNATURE OF THE OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

THE ODOT DISTRICT 3 VERTICAL CLEARANCE SURVEY FORM CAN BE DOWNLOADED FROM THE FOLLOWING FTP SITE:

HTTPS://FTP.DOT.STATE.OH.US/PUB/CONTRACTS/ATTACH/ASD/WAY-112294