

UTILITIES

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

BUCKEYE CABLEVISION
2700 OREGON RD.
NORTHWOOD, OH 43519
(419) 724-3713

FRONTIER COMMUNICATIONS
300 WEST GYPSY LANE RD. BLDG A
BOWLING GREEN, OH 43402
(419) 354-9452

LEVEL 3 COMMUNICATIONS
1025 ELDORADO BLVD.
BROOMFIELD, CO 80021
(512) 742-1428

TOLEDO EDISON
6099 ANGOLA RD.
HOLLAND, OH 43528
(419) 249-5218

HANCOCK-WOOD ELECTRIC COOPERATIVE, INC.
P.O. BOX 190
NORTH BALITMORE, OH 45872
(419) 257-5015

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.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

CLEARING AND 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 AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET NO. 3 OF THE RIGHT-OF-WAY PLANS.

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, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: VRS ODOT CORS NETWORK, DIFFERENTIAL LEVELING

MONUMENT TYPE: IRON PINS WITH ALUMINUM CAPS SET

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE (NZ 3401)
COMBINED SCALE FACTOR: 1.00000000
ORIGIN OF COORDINATE SYSTEM: NORTHING 0, EASTING 0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

PROPOSED CENTERLINE MONUMENTATION

| C/L RW | STATION | OFFSET | PROPOSED MONUMENTATION | | DESCRIPTION | ITEM 623 |
|----------------------------------|------------|--------|------------------------|-------------|--------------------------------|----------|
| | | | NORTHING | EASTING | | |
| SR 199 | 499+64.64 | CL | 590308.07 | 1691280.365 | RM-1.1 ROUND MONUMENT ASSEMBLY | 1 |
| SR 281 | 1028+12.16 | CL | | | | 1 |
| TOTAL CARRIED TO GENERAL SUMMARY | | | | | | 2 |

ITEM 619: FIELD OFFICE, TYPE B, AS PER PLAN

FURNISH A FUNCTIONAL FIELD OFFICE TYPE B FOR THE DURATION OF THE PROJECT. THE REQUIREMENTS OF C&MS 619 SHALL BE WAIVED EXCEPT FOR A MEANS OF MAINTAINING ROOM TEMPERATURE BETWEEN 68 AND 80 DEGREES. ODOT WILL FURNISH ELECTRICITY AND INTERNET AS WELL AS MAINTAIN THE OFFICE.

THE FIELD OFFICE SHALL BE INSTALLED AT THE ODOT NORTH BALTIMORE OUTPOST LOCATED AT 1218 BUSINESS PARK DR S, NORTH BALTIMORE, OH 45872. NOTIFY THE PROJECT ENGINEER ONE WEEK PRIOR TO DELIVERY OF THE TYPE B TRAILER.

THE FOLLOWING HAS BEEN INCLUDED IN THE GENERAL SUMMARY

619- FIELD OFFICE, TYPE B, AS PER PLAN 5 MONTHS

FARM DRAINS

PROVIDE UNOBSTRUCTED OUTLETS TO ALL FARM DRAINS ENCOUNTERED DURING CONSTRUCTION. REPLACE EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY WITHIN THE (RIGHT OF WAY) (CONSTRUCTION) LIMITS WITH ITEM 611, CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

OUTLET EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES INTO THE ROADWAY.

DITCH USING ITEM 611, TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION IS ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. INTERCEPT LATERAL FIELD TILES WHICH CROSS THE ROADWAY WITH ITEM 611, TYPE E CONDUIT, AND CARRY IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

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

PROVIDE EROSION CONTROL PADS AT THE OUTLET END OF ALL FARM DRAINS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES IS 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 B 20 FT.
- 611 - 6" CONDUIT, TYPE E 20 FT.
- 611 - 6" CONDUIT, TYPE F 20 FT.
- 601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER 5 CU. YD.

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE) (DOUBLE).

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.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSCHONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DESIGN AGENCY



DESIGNER
JLE

REVIEWER
XXX MM-DD-YY

PROJECT ID
113719

SHEET TOTAL
9 75

| SHEET NUM. | | | | | | | | | | | | PART. | ITEM | ITEM | GRAND | UNIT | DESCRIPTION | SEE SHEET NO. |
|-------------------------------|-----|----|-------|-------|----|----|----|-----|-------|----|--|-----------|------|-------|-------|------|--|---------------|
| 9 | 11 | 12 | 15 | 16 | 17 | 18 | 54 | 55 | 65 | 66 | | 01/SAE/21 | ITEM | EXT | TOTAL | | | |
| | | | 1,490 | | | | | | | | | 1,490 | 452 | 19200 | 1,490 | SY | NON-REINFORCED CONCRETE PAVEMENT, MISC., 8" | 10 |
| | | | | 856 | | | | | | | | 856 | 609 | 12000 | 856 | FT | COMBINATION CURB AND GUTTER, TYPE 2 | |
| | | | | 260 | | | | | | | | 260 | 609 | 26000 | 260 | FT | CURB, TYPE 6 | |
| | | | | 865 | | | | | | | | 865 | 609 | 31001 | 865 | FT | COMBINATION CURB AND GUTTER, TYPE 9, AS PER PLAN, EXTERIOR | 10 |
| | | | | 2,035 | | | | | | | | 2,035 | 609 | 31001 | 2,035 | FT | COMBINATION CURB AND GUTTER, TYPE 9, AS PER PLAN, INTERIOR | 10 |
| | | | 34 | | | | | | | | | 34 | 617 | 10100 | 34 | CY | COMPACTED AGGREGATE | |
| | 200 | | | | | | | | | | | 200 | 617 | 10100 | 200 | CY | COMPACTED AGGREGATE, TYPE A | |
| LIGHTING | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 22 | | | 22 | 625 | 00450 | 22 | EACH | CONNECTION, FUSED PULL APART | |
| | | | | | | | | | 11 | | | 11 | 625 | 00460 | 11 | EACH | CONNECTION, UNFUSED PULL APART | |
| | | | | | | | | | 24 | | | 24 | 625 | 00480 | 24 | EACH | CONNECTION, UNFUSED PERMANENT | |
| | | | | | | | | | 11 | | | 11 | 625 | 10503 | 11 | EACH | LIGHT POLE (INSTALLATION ONLY), AS PER PLAN | 66 |
| | | | | | | | | | 11 | | | 11 | 625 | 14000 | 11 | EACH | LIGHT POLE FOUNDATION, 24" X 6' DEEP | |
| | | | | | | | | | 537 | | | 537 | 625 | 23200 | 537 | FT | NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE | |
| | | | | | | | | | 1,342 | | | 1,342 | 625 | 23400 | 1,342 | FT | NO. 10 AWG POLE AND BRACKET CABLE | |
| | | | | | | | | | 1,411 | | | 1,411 | 625 | 24320 | 1,411 | FT | 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES | |
| | | | | | | | | | 149 | | | 149 | 625 | 25500 | 149 | FT | CONDUIT, 3", 725.04 | |
| | | | | | | | | | 11 | | | 11 | 625 | 26253 | 11 | EACH | LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN | 66 |
| | | | | | | | | | 1,420 | | | 1,420 | 625 | 29002 | 1,420 | FT | TRENCH, 24" DEEP | |
| | | | | | | | | | 6 | | | 6 | 625 | 30700 | 6 | EACH | PULL BOX, 725.08, 18" | |
| | | | | | | | | | 12 | | | 12 | 625 | 32000 | 12 | EACH | GROUND ROD | |
| | | | | | | | | | 1 | | | 1 | 625 | 34001 | 1 | EACH | POWER SERVICE, AS PER PLAN | 66 |
| | | | | | | | | | 1 | | | 1 | 625 | 34450 | 1 | EACH | CONTROL CENTER CABINET, COMPLETE | |
| | | | | | | | | | 1,420 | | | 1,420 | 625 | 36010 | 1,420 | FT | UNDERGROUND WARNING/MARKING TAPE | |
| | | | | | | | | | 1 | LS | | 1 | 625 | 39000 | 1 | LS | TEMPORARY LIGHTING | |
| | | | | | | | | | 1 | | | 1 | 632 | 70200 | 1 | EACH | CONDUIT RISER, 1" DIAMETER | |
| TRAFFIC CONTROL | | | | | | | | | | | | | | | | | | |
| | | | | | | | 4 | | | | | 4 | 620 | 70000 | 4 | EACH | DELINEATOR, MISC.:HIGH INTENSITY RETRO-REFLECTIVE ISLAND BULLNOSE MARKER | 56 |
| | | | | | | | | 30 | | | | 30 | 621 | 00100 | 30 | EACH | RPM (TWO-WAY, YELLOW/YELLOW) | |
| | | | | | | | | 40 | | | | 40 | 621 | 54000 | 40 | EACH | RAISED PAVEMENT MARKER REMOVED | |
| | | | | | | | | 611 | | | | 611 | 630 | 03101 | 611 | FT | GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN | 56 |
| | | | | | | | | 20 | | | | 20 | 630 | 08601 | 20 | EACH | SIGN POST REFLECTOR, AS PER PLAN | 56 |
| | | | | | | | | 286 | | | | 286 | 630 | 80100 | 286 | SF | SIGN, FLAT SHEET | |
| | | | | | | | | 71 | | | | 71 | 630 | 84900 | 71 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL | |
| | | | | | | | | 32 | | | | 32 | 630 | 86002 | 32 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | |
| | | | | | | | | 4 | | | | 4 | 630 | 86292 | 4 | EACH | REMOVAL OF GROUND MOUNTED WOODEN BOX BEAM SUPPORT AND DISPOSAL | |
| | | | | | | | | 2 | | | | 2 | 630 | 97700 | 2 | EACH | SIGNING, MISC.: SALVAGE OF EXISTING FLASHING LED SIGNS | 56 |
| | | | | | | | | | 1 | | | 1 | 644 | 00104 | 1 | MILE | EDGE LINE, 6", WHITE | |
| | | | | | | | | | 1 | | | 1 | 644 | 00104 | 1 | MILE | EDGE LINE, 6", YELLOW | |
| | | | | | | | | | 1 | | | 1 | 644 | 00300 | 1 | MILE | CENTER LINE, DOUBLE YELLOW | |
| | | | | | | | | | 96 | | | 96 | 644 | 00700 | 96 | FT | TRANSVERSE/DIAGONAL LINE, YELLOW | |
| | | | | | | | | | 4 | | | 4 | 644 | 01300 | 4 | EACH | LANE ARROW | |
| | | | | | | | | | 396 | | | 396 | 644 | 01510 | 396 | FT | DOTTED LINE, 6", WHITE | |
| | | | | | | | | | 143 | | | 143 | 644 | 20800 | 143 | FT | YIELD LINE | |
| MAINTENANCE OF TRAFFIC | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 80 | | | 80 | 614 | 11110 | 80 | HOUR | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| INCIDENTALS | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | LS | | | LS | 614 | 11000 | LS | | MAINTAINING TRAFFIC | |
| | | | | | | | | | LS | | | LS | 623 | 10000 | LS | | CONSTRUCTION LAYOUT STAKES AND SURVEYING | |
| | | | | | | | | | LS | | | LS | 624 | 10000 | LS | | MOBILIZATION | |
| 5 | | | | | | | | | | | | 5 | 619 | 16011 | 5 | MNTH | FIELD OFFICE, TYPE B, AS PER PLAN | 9 |

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
JLE

REVIEWER
XXX MM-DD-YY

PROJECT ID
113719

SHEET TOTAL
14 75