## GENERAL

## SCOPE OF WORK

THE WORK WITHIN THE LIMITS OF THIS IMPROVEMENT INCLUDES RAISING THE EXISTING PROFILE GRADE OF S.R. 2 OVER S.R. 615, AND REPLACING THE EXISTING FOUR-SPAN REINFORCED CONCRETE SLAB BRIDGES WITH TWO-SPAN CONTINUOUS STEEL BEAM BRIDGES HAVING REINFORCED CONCRETE DECKS. ALSO INCLUDED ARE REPLACEMENT OF THE APPROACH SLABS AND THE CENTER PIERS, AND VARIOUS ROADWAY ITEMS AS SHOWN ON THE PLANS OR STIPULATED IN THE NOTES.

# ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. 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.

# ROUNDING

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

# UTILITIES

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THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

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

AMERITECH
13630 LORAIN ROAD
CLEVELAND, DHIO 44111
ATTN: LAURA FRANK
PHONE: (216) 476-6141

CLEVELAND ELECTRIC ILLUMINATING CO. 55 PUBLIC SQUARE, P.O. BOX 5000 CLEVELAND, OHIO 44101 ATTN: TIM J. DENZLER

OHIO WATER SERVICE COMPANY
LAKE ERIE WEST DISTRICT
8644 STATION STREET
P.O. BOX 539
MENTOR, OHIO 44061
ATTN: ERIK SPEAKER
PHONE: (216) 255-3421

PHONE: (216) 479-3452

CONTINENTAL CABLEVISION
7820 DIVISION DRIVE
MENTOR, OHIO 44060
ATTN: JAMES F. GERHARD, JR.
PHONE: (216) 974-3401

CITY OF MENTOR
8500 CIVIC CENTER BOULEVARD
MENTOR, OHIO 44060-2499
ATTN: JOHN W. KONRAD, CITY ENGINEER
PHONE: (216) 255-1100

EAST OHIO GAS COMPANY 1201 EAST 55TH STREET CLEVELAND, OHIO 44103 ATTN: MAMIE REED PHONE: (216) 736-6803

# GENERAL NOTES

### ROADWAY

#### CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES AND/OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THIS PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 802 - BARRIER REFLECTORS

THE FOLLOWING ARE ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 802 35 EACH-BARRIER REFLECTOR, TYPE A

ITEM 802 8 EACH-BARRIER REFLECTOR, TYPE B

#### 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 RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

### ITEM 606 - ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING AN ET-2000, OPTION  $^{\prime}B^{\prime}$  GUARDRAIL END TERMINAL AS MANUFACTURED BY SYRO STEEL COMPANY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 216-545-4373).

THE LENGTH OF THE ET-2000 SYSTEM IS CONSIDERED TO BE 50, INCLUSIVE OF TWO 25' LONG RAIL ELEMENTS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND AT THE LOCATIONS SHOWN IN THE PLANS.

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

## PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER PER 203.04(G), LINEAR GRADING AS MAY BE NECESSARY, AND PAVING UNDER THE GUARDRAIL USING 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (UNDER GUARDRAIL), AS PER PLAN.

ITEM 203 LINEAR GRADING SHALL CONSIST OF NECESSARY EARTHWORK, PLACING GRANULAR MATERIAL, AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS, UNSUITABLE SOIL, RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 203.05.

ANY REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 203.02 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE TREFLAN E. C., SPIKE OR AN APPROVED EQUAL AND SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

ONLY PROPERLY LICENSED PERSONNEL SHALL APPLY HERBICIDES AS REQUIRED BY THE OHIO REVISED® CODE.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:

1) SET GUARDRAIL POSTS

2) PLACE ITEM 448

METHOD B: 1) PLACE ITEM 448

2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE

3) SET GUARDRAIL POSTS

4) PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE A BITUMINOUS CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (UNDER GUARDRAIL), AS PER PLAN.

### NATIONAL GEODETIC MONUMENT

NATIONAL GEODETIC MONUMENT NO. N-323 IS CURRENTLY LOCATED ON THE FOURTH BRIDGE PIER IN FROM THE SOUTHERN END OF THE EXISTING LINE OF BRIDGE PIERS RUNNING ALONG THE CENTER LINE OF S.R. 615. JUST BEFORE THIS BRIDGE PIER IS DESTROYED, THE CONTRACTOR SHALL CAREFULLY REMOVE THE MONUMENT CAP AND DELIVER IT TO MR. BOB KOSIE OF THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 SURVEYING DEPARTMENT. ODOT WILL SUPPLY AND SET A NEW NATIONAL GEODETIC MONUMENT ONCE THE NEW BRIDGE IS CONSTRUCTED.

THE CONTRACTOR'S WORK IN REMOVING THE CAP AND DELIVERING IT TO ODOT SHALL BE INCLUDED FOR PAYMENT IN ITEMS OF WORK INVOLVING THE DEMOLITION OF THE EXISTING BRIDGE PIERS.

#### ITEM SPECIAL - GABION, WITH ADDITIONAL COATING

## I. DESCRIPTION

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING THE GABIONS AND THE FILL MATERIAL AND ANY EXCAVATION OR OTHER WORK NECESSARY TO INSTALL THE GABIONS (BASKETS) AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

## II. MATERIAL

## A. BASKET

## 1. DIMENSION

WIRE MESH BASKETS SHALL BE SUPPLIED AS SPECIFIED ON THE PLANS. THE HORIZONTAL LENGTH SHALL NOT BE LESS THAN 72 INCHES. THE GABION WIDTH SHALL BE MULTIPLES (2, 3 OR 4) OF THE HORIZONTAL WIDTH. THE HORIZONTAL WIDTH SHALL NOT BE LESS THAN 36 INCHES. DIMENSIONS ARE SUBJECT TO A TOLERANCE LIMIT OF +/- 3%.

## 2. WIRE BASKET

THE WIRE SHALL BE STEEL WELDED WIRE OR TWISTED WIRE MESH, FABRICATED IN SUCH A MANNER THAT THE SIDES, ENDS, LIDS AND DIAPHRAGMS CAN BE ASSEMBLED AT THE CONSTRUCTION SITE INTO RECTANGULAR UNITS.

THE WIRE MESH SHALL HAVE A MINIMUM SIZE OF U.S. STEEL WIRE GAGE NO. 11. THE TENSILE STRENGTH OF THE WIRE SHALL BE IN THE RANGE OF 60,000 TO 85,000 PSI. THE MESH OPENINGS SHALL BE 4 1/2" MAXIMUM AND THE AREA OF ANY MESH OPENING SHALL NOT EXCEED 10 SQ. INCHES.

THE WELDED WIRE MESH SHALL BE FORMED IN A UNIFORM SQUARE PATTERN WITH A RESISTANCE WELD AT EACH CONNECTION. THE MESH SHALL CONFORM TO AASHTO M55 EXCEPT THAT THE WELD SHEAR STRENGTH SHALL BE 600 POUNDS FOR 11 GAGE WIRE. THE SPIRAL BINDERS FOR JOINING WELDED WIRE MESH PANELS SHALL BE FORMED FROM COATED WIRE CONFORMING TO ASSHTO M 32 OF THE SAME GAGE AS THE WIRE MESH.