

PROPOSED WORK:

THE PROPOSED WORK CONSISTS OF BUILDING CAST-IN-PLACE REINFORCED CONCRETE RETAINING WALLS IN THE FOLLOWING LOCATIONS:

RIC-30-9.26 WALL 10B, CAST-IN-PLACE RETAINING WALL LOCATED ALONG RAMP X, BEGINNING AT STA. 238+00.00, 20' LT., ENDING AT STA. 240+00.00, 20' LT.

REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATION:

NONE

REFERENCE SHALL BE MADE TO SUPPLEMENT:

NONE

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2010, AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN PARAMETERS:

RETAINED SOIL FRICTION ANGLE = 30°
RETAINED SOIL UNIT WEIGHT = 120 PCF

ALLOWABLE COEFFICIENT OF FRICTION = 0.5

DESIGN DATA:

SUBSTRUCTURE CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI

SUPERSTRUCTURE CONCRETE CLASS QC2 COMPRESSIVE STRENGTH 4500 PSI

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI

FOUNDATION BEARING PRESSURE:

RETAINING WALL FOOTINGS, AS DESIGNED, PRODUCE THE FOLLOWING BEARING PRESSURES:

| WALL 10B | FOUNDATION BEARING RESISTANCE (KSF) | | |
|------------------------------|-------------------------------------|----------------------------|-----------------------------|
| | MAX SERVICE LOAD PRESSURE | MAX STRENGTH LOAD PRESSURE | FACTORED BEARING RESISTANCE |
| STA. 1+00.00 TO STA. 1+50.64 | 1.7 | 2.5 | 6.1 |
| STA. 1+50.64 TO STA. 2+59.23 | 2.4 | 3.6 | 6.1 |
| STA. 2+59.23 TO STA. 3+13.59 | 1.9 | 2.9 | 6.1 |

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

ALL EXCAVATION REQUIRED TO CONSTRUCT THE PROPOSED EMBANKMENT BETWEEN THE VERTICAL LIMITS OF THE UNCLASSIFIED EXCAVATION FOR THE RETAINING WALL SHALL BE INCLUDED WITH ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN FOR PAYMENT. UNCLASSIFIED EXCAVATION WILL BE MEASURED PER CMS 503.09.

BACKFILL BETWEEN THE VERTICAL LIMITS OF THE UNCLASSIFIED EXCAVATION FROM THE BOTTOM OF FOOTING ELEVATION SHALL BE INCLUDED WITH ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN, FOR PAYMENT.

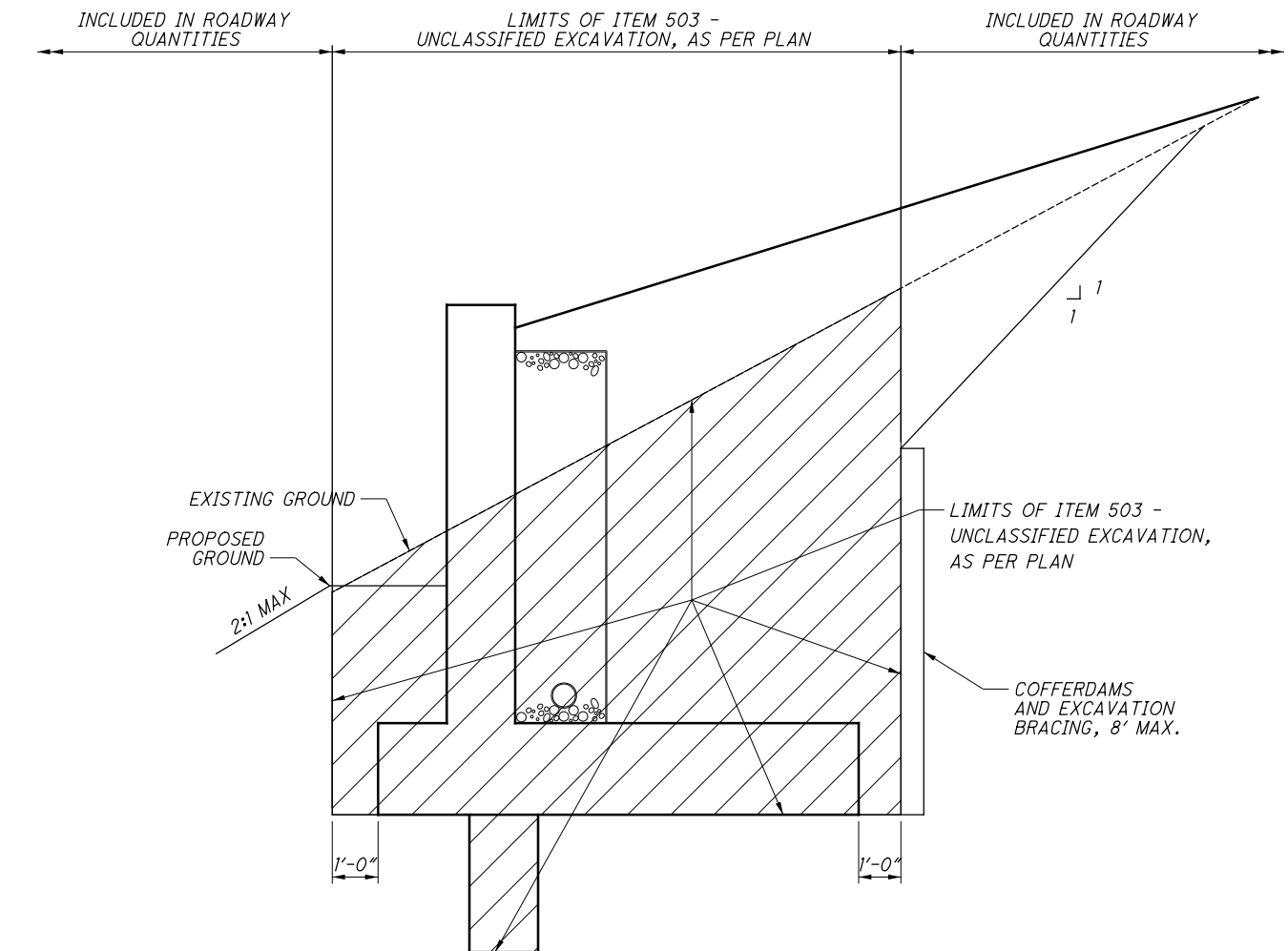
ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE FACING OF THE RETAINING WALL INCLUDING THE TOP, BACKSIDE OF WALL DOWN TO THE GUTTER OR TOE OF BARRIER, AND THE FRONT VERTICAL SIDE OF THE CONCRETE FROM TOP TO BOTTOM. THE FINISH COAT COLOR FOR THE RETAINING WALL SHALL BE LIGHT NEUTRAL MEETING FEDERAL COLOR STANDARD NO. 595B-17778.

ABBREVIATIONS:

- BOT. - BOTTOM
- C.J. - CONSTRUCTION JOINT
- C/C - CENTER TO CENTER
- CLR. - CLEAR
- CONST. - CONSTRUCTION
- E.F. - EACH FACE
- EL. - ELEVATION
- EQ. - EQUAL
- EX. - EXISTING
- F.F. - FAR FACE
- GFRP - GLASS FIBER REINFORCED POLYMER STIFFENING REINFORCEMENT
- INC. - INCREMENT
- LT. - LEFT
- MAX. - MAXIMUM
- MIN. - MINIMUM
- NPCPP - NON-PERFORATED CORRUGATED PLASTIC PIPE
- N.F. - NEAR FACE
- PCPP - PERFORATED CORRUGATED PLASTIC PIPE
- PEJF - PREFORMED EXPANSION JOINT FILLER
- PROP. - PROPOSED
- RT. - RIGHT
- SER. - SERIES
- SPA. - SPACING
- STA. - STATION
- ST. - STRAIGHT
- T&B - TOP AND BOTTOM
- TYP. - TYPICAL

| ESTIMATED QUANTITIES | | | | |
|----------------------|-----------|-------------------------|------|---|
| ITEM | ITEM EXT. | PARTICIPATION 02/NHS/PV | UNIT | DESCRIPTION |
| 503 | 1100 | 47 | UM | COFFERDAMS AND EXCAVATION BRACING |
| 503 | 21101 | 47 | CY | UNCLASSIFIED EXCAVATION, AS PER PLAN |
| 509 | 10000 | 30280 | LB | EPOXY COATED REINFORCING STEEL |
| 511 | 34448 | 33 | CY | CLASS QC2 CONCRETE BRIDGE DECK (PARAPET) |
| 511 | 46012 | 111 | CY | CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING |
| 511 | 46510 | 214 | CY | CLASS QC1 CONCRETE, FOOTING |
| 512 | 10100 | 349 | SY | SEALING OF CONCRETE SURFACES (EPOXY URETHANE) |
| 512 | 33000 | 21 | SY | TYPE 2 WATERPROOFING |
| 516 | 13600 | 36 | SF | 1" PREFORMED EXPANSION JOINT FILLER |
| 518 | 21200 | 115 | CY | POROUS BACKFILL WITH GEOTEXTILE FABRIC |
| 518 | 40000 | 162 | FT | 6" PERFORATED CORRUGATED PLASTIC PIPE |
| 518 | 40010 | 40 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS |



UNCLASSIFIED EXCAVATION, AS PER PLAN, PAYMENT LIMITS

CALCULATED BY: JGM DATE: 11/2019
CHECKED BY: NCK DATE: 11/2019

RESOURCE INTERNATIONAL INC.
6550 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231
(614) 823-4949

DATE 9/2019
REVIEWED SSK
DRAWN JGM
DESIGNED JGM
CHECKED NCK

GENERAL NOTES
CAST-IN-PLACE WALL 10B

RIC-30-9.26
PID No. 93455

2 / 6

974
1669

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