

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):

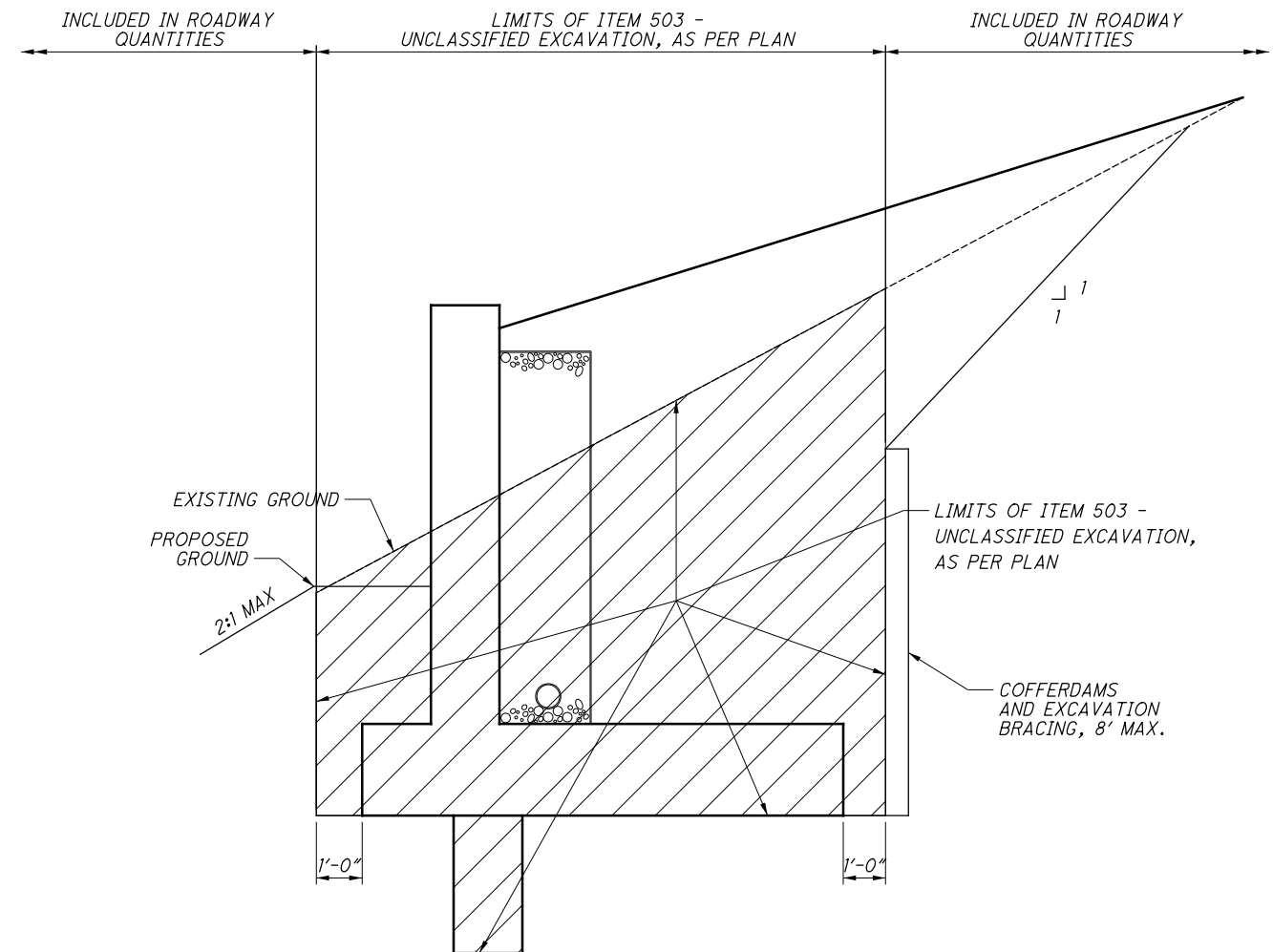
SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE CONCRETE FACING OF THE RETAINING WALL INCLUDING THE TOP, BACKSIDE OF WALL DOWN TO THE GUTTER OR TOE OF BARRIER, AND THE FRONT VERTICAL SIDE OF THE CONCRETE FROM TOP TO BOTTOM. THE FINISH COAT COLOR FOR THE RETAINING 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

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

ESTIMATED QUANTITIES				
ITEM	ITEM EXT.	PARTICIPATION 02/NHS/PV	UNIT	DESCRIPTION
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING
503	21101	47	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN
509	10000	35280	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

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RESOURCE INTERNATIONAL, INC.
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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