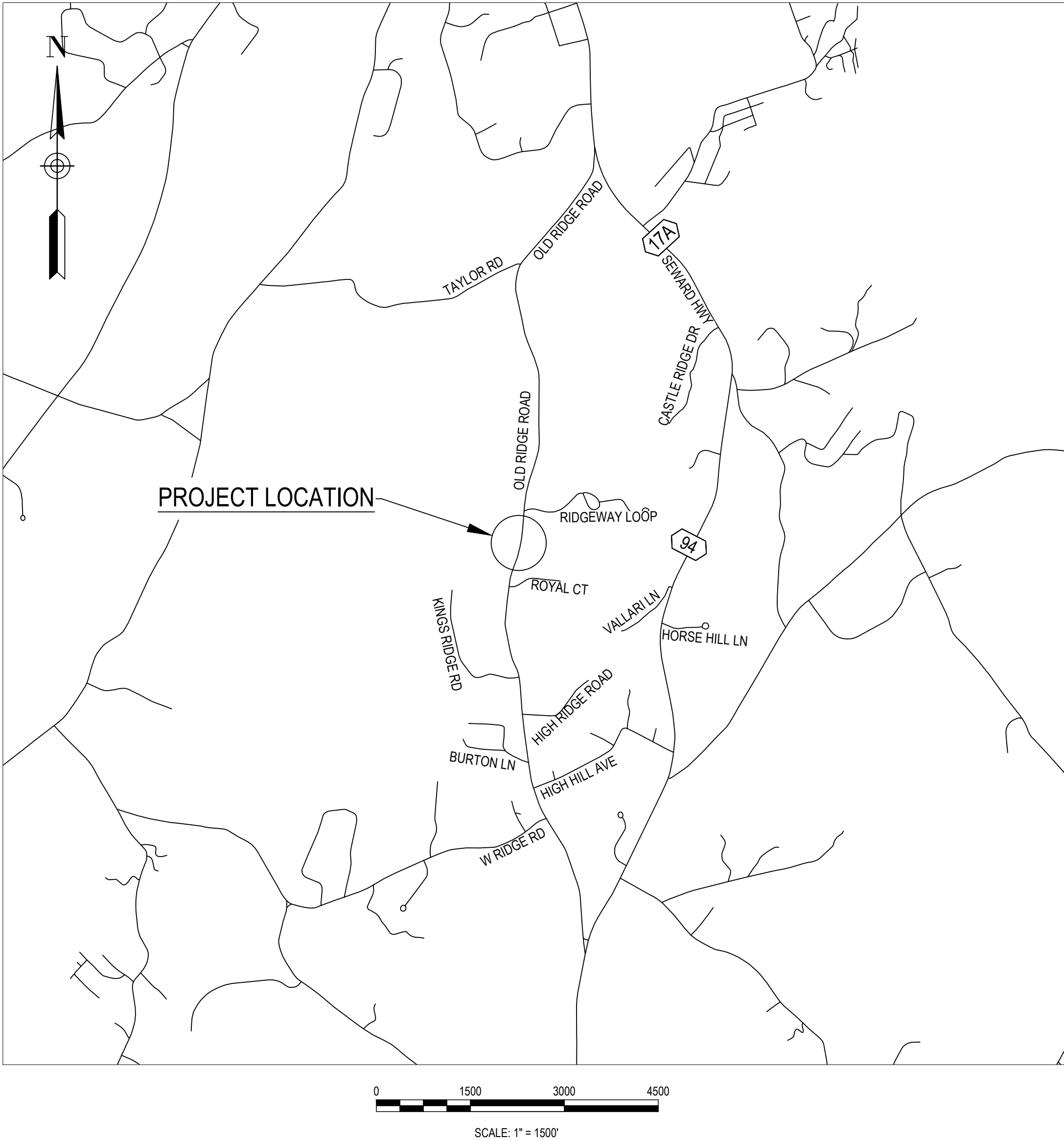


DEPARTMENT OF PUBLIC WORKS
TOWN OF WARWICK
ORANGE COUNTY, NEW YORK



Contract Drawings For

Old Ridge Road

Removal and Replacement of Existing Retaining Wall

Project No.
10400319

Town of Warwick, NY
February 2025

INDEX OF DRAWINGS

GENERAL	
01G-1.01	TITLE SHEET
01G-1.02	GENERAL NOTES, ABBREVIATIONS AND ESTIMATE OF QUANTITIES
01G-1.03	SURVEY PLAN
01B-1.01	SOIL BORING LOGS
01C-1.01	TYPICAL SECTIONS
01C-1.02	RETAINING WALL
01C-1.03	GUIDE RAIL PLAN - 1
01C-1.04	GUIDE RAIL PLAN - 2
01C-1.05	PAVEMENT LAYOUT PLAN - 1
01C-1.06	PAVEMENT LAYOUT PLAN - 2
01C-1.07	CONSTRUCTION DETAILS
01C-1.08	TEMPORARY TRAFFIC CONTROL PLAN - 1
01C-1.09	TEMPORARY TRAFFIC CONTROL PLAN - 2

RECOMMENDED BY:

BENJAMIN D. ASTORINO
TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS COMMISSIONER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DRAWINGS PREPARED BY:

JESSE R. JAECKEL, P.E.
HDR
N.Y.S. P.E. NO. 092769

GENERAL NOTES:

1. DESIGN SPECIFICATIONS: NEW YORK STATE DEPARTMENT OF TRANSPORTATION HIGHWAY DESIGN MANUAL, WITH ALL REVISIONS AS OF NOVEMBER 2022, AND NEW YORK PRESTRESSED CONCRETE CONSTRUCTION MANUAL 4TH EDITION, MARCH 2023.
2. CONSTRUCTION AND MATERIALS SPECIFICATIONS: STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION, ENGINEERING DIVISION, STATEDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, DATED JANUARY 1, 2025 AND ANY ASSOCIATED ADDENDUMS.
3. ALL EQUIPMENT SHALL BE INSTALLED PLUMB AND LEVEL UNLESS OTHERWISE NOTED ON THE PLANS
4. LIVE LOAD: HS25
5. ALL SHOP DRAWINGS SUBMITTED FOR THIS PROJECT SHALL BE IN US CUSTOMARY.
6. THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR VARIOUS ITEMS IN THE CONTRACT, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
7. THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE TOWN, WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE TOWN, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE TOWN ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
8. NO PAYMENT WILL BE MADE FOR WORK CALLED FOR BY NOTES, ON THE PLANS, OR IN THE SPECIFICATIONS UNLESS PAYMENT IS SPECIFICALLY INDICATED BY AN ITEM NUMBER, THE COST OF WORK FOR WHICH NO PAYMENT IS INDICATED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.
9. ALL WORK ZONE TRAFFIC CONTROL, INCLUDING MAINTENANCE AND PROTECTION OF TRAFFIC PROCEDURES AND ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL COMPLY WITH NEW YORK STATE MANUAL OF TRAFFIC CONTROL DEVICES OR AS MODIFIED BY THE ENGINEER TO SUIT FIELD CONDITIONS.
10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN, IMPLEMENTATION, AND MAINTENANCE OF ALL SUPPORT OF EXCAVATION AND DEWATERING SYSTEMS REQUIRED FOR THE PROJECT.
11. CONTRACTOR SHALL PERFORM HIS OPERATIONS TO MINIMIZE AREAS OF DISTURBANCE. ALL DISTURBED AREAS SHALL BE FULLY RESTORED TO THE ORIGINAL CONDITION. FOR RETAINING WALL WORK, COST OF TOP SOIL, PERMANENT SEEDING, ETC. SHALL BE INCLUDED IN THE VARIOUS PAYMENT ITEMS.
12. THE CONTRACTOR SHALL PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REQUIREMENTS.
13. THE PROJECT IS ANTICIPATED TO BE AUTHORIZED UNDER NYSDEC ARTICLE 15 AND USACE PERMIT, NATIONWIDE PERMIT #3 (MAINTENANCE). COPIES OF THE PERMITS SHALL BE POSTED AT THE PROJECT SITE. THE WORK SHOULD BE COMPLETED FOLLOWING THE GENERAL, REGIONAL AND ANY PROJECT-SPECIFIC CONDITIONS IN THE PERMITS. THE ENGINEER SHALL BE NOTIFIED WHEN ANY PERMIT CONDITIONS CANNOT BE MET.
14. EROSION CONTROL MEASURES NOT LISTED FOR PAYMENT UNDER THE SPECIFIC ITEMS UNDER THIS CONTRACT SHALL BE INCLUDED UNDER THE VARIOUS PAY ITEMS WITHIN THIS CONTRACT.
15. IF THE CONTRACTOR EXPOSES TRANSITE PIPE, JOINT CAULKING, OR SIMILAR ITEMS DURING DEMOLITION WHICH MAY CONTAIN HAZARDOUS MATERIALS, THE MATERIALS SHALL BE TESTED IN ACCORDANCE WITH APPLICABLE REGULATIONS AND ADVISE THE ENGINEER ACCORDINGLY.
16. WORK OCCURING AFTER SUNSET AND BEFORE SUNRISE SHALL BE CONSIDERED NIGHT TIME OPERATIONS. A NIGHT TIME LIGHTING PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK.

REMOVAL NOTES:

1. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THOSE ITEMS.
2. PRIOR TO SUBMITTING HIS BID THE CONTRACTOR SHALL SURVEY THE PROJECT SITE TO ESTIMATE THE REQUIRED AMOUNT OF TREE REMOVAL WITHIN THE TOWN OF WARWICK AND THE VILLAGE OF WARWICK RIGHT-OF-WAY NECESSARY TO COMPLETE THE WORK.
3. ALL TREES, SHRUBS AND BRUSH REQUIRED TO BE REMOVED TO COMPLETE ITEMS UNDER THIS CONTRACT SHALL BE INCLUDED IN CONTRACTOR BID AND WILL BE PAID FOR UNDER ITEM 201.06. ALL REMOVALS SHALL BE APPROVED BY THE ENGINEER IN ADVANCE. EVERY EFFORT WILL BE MADE TO RETAIN ANY TREE EXHIBITING CHARACTERISTICS THAT COULD PROVIDE ROOSTING HABITAT TO THE INDIANA BAT OR NORTHERN LONG-EARNED BAT. IN ACCORDANCE WITH USF&WS, TREES EXHIBITING ANY OF THESE CHARACTERISTICS CAN NOT BE REMOVED BETWEEN APRIL 1ST AND OCTOBER 1ST UNLESS FURTHER STUDY HAS BEEN CONDUCTED AND DOCUMENTED.
4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF SUBSECTION 202-3.01 GENERAL AND SAFETY REQUIREMENTS. A REMOVAL PLAN SHALL BE SUBMITTED TO THE ENGINEER FIFTEEN (15) DAYS PRIOR TO BEGINNING DEMOLITION. THE REQUIREMENT THAT IT BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IS WAIVED.
5. THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS, SHORING OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE APPROPRIATE ITEMS OF THE CONTRACT.

UTILITY NOTES:

1. THE ACCURACY INDICATED FOR THE LOCATIONS OF OVERHEAD AND UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE DEFINED AS FOLLOWS:

A. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS UNDER SECTIONS 660 THROUGH 680 OF THE STANDARD SPECIFICATIONS. NOR DOES IT RELIEVE THE UTILITY OWNERS OF THEIR OBLIGATION TO ACCURATELY LOCATE THEIR FACILITIES.

B. ALL KNOWN PUBLIC AND PRIVATE UTILITY LINES WITHIN OR ADJACENT TO THE SITE OF THE WORK AND SHOWN IN THEIR EXISTING APPROXIMATE LOCATIONS ON THE CONTRACT PLANS. THE CONTRACTOR IS CAUTIONED THAT THESE LOCATIONS ARE NOT GUARANTEED NOR IS THERE A GUARANTEE THAT ALL SUCH LINES IN EXISTENCE HAVE BEEN SHOWN ON THE PLANS.

C. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS AND TAKE THE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION.

D. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AS TO PREVENT DAMAGE TO SUCH FACILITIES. HE SHALL MAKE SUCH EXPLORATIONS AS MAY BE NECESSARY TO DETERMINE THE DIMENSIONS AND LOCATIONS OF LINES THAT MAY BE SUBJECT TO DAMAGE. NOTIFICATION TO THE VARIOUS OWNERS OF FACILITIES SHALL BE IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE 753, CURRENT EDITION.

E. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE EXACT LOCATION OF UTILITY LINES AND SHALL PROTECT AND SUPPORT IN A SUITABLE MANNER AT HIS OWN EXPENSE ALL UNDERGROUND UTILITIES ENCOUNTERED IN HIS EXCAVATING AND TRENCHING OPERATIONS. THE CONTRACTOR SHALL MAKE GOOD ANY DAMAGE TO THOSE UTILITIES CAUSED BY HIS OPERATIONS. IF THE NATURE OF THE DAMAGE IS SUCH AS TO ENDANGER THE SATISFACTORY OPERATIONS OF THE UTILITIES AND THE NECESSARY REPAIRS ARE NOT IMMEDIATELY MADE BY THE CONTRACTOR, THE WORK MAY BE DONE BY THE RESPECTIVE OWNING COMPANIES AND THE COST THEREOF CHARGED AGAINST THE CONTRACTOR.

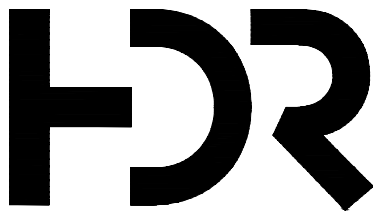
F. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH ALL THE KNOWN PUBLIC AND PRIVATE UTILITY COMPANIES OCCUPYING THE WORK SITE. THE CONTRACTOR SHALL AT THIS MEETING INFORM THE UTILITY COMPANIES OF HIS SCHEDULE OF OPERATIONS AND SO COORDINATE HIS WORK WITH THESE COMPANIES.

ABBREVIATIONS:

GENERAL		GENERAL	
B	BASELINE	PROP	PROPOSE
BW	BOTTOM OF WALL	R&D	REMOVE AND DISPOSE
C	CENTERLINE	R&R	REMOVE AND RESET
INV	INVERT	RET	RETAIN
LF	LINEAR FEET	SPA	SPACE
MAX	MAXIMUM	STA	STATION
MIN	MINIMUM	TYP	TYPICAL
OFF	OFFSET	TW	TOP OF WALL

ESTIMATE OF QUANTITIES:

ESTIMATE OF QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
201.06	CLEARING AND GRUBBING	LS	1
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	510
209.10	SEED AND MULCH - TEMPORARY	SY	410
209.1901	ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE A, INTERMEDIATE	SY	410
304.12	SUBBASE COURSE, TYPE 2 (12" DEPTH)	CY	260
404.0683	6.3 F3 TOP COURSE ASPHALT, 80 SERIES COMPACTION (1 1/4" DEPTH)	TON	55
404.1279	12.5 F9 BINDER COURSE ASPHALT, 70 SERIES COMPACTION (2 1/2" DEPTH)	TON	105
404.3779	37.5 F9 BASE COURSE ASPHALT, 70 SERIES COMPACTION (4" DEPTH)	TON	165
407.0102	DILUTED TACK COACT	GAL	830
554.41	FILL TYPE RETAINING WALL (GREATER THAN 6FT. - 12 FT.)	SF	1049
606.10	BOX BEAM GUIDE RAILING	LF	350
606.100002	BOX BEAM GUIDE RAILING (SHOP BENT)	LF	10
606.120201	BOX BEAM GUIDE RAILING , END ASSEMBLY, TYPE IIA	EA	2
606.71	REMOVE AND DISPOSE OF CORRUGATED BEAM GUIDE RAILING	LF	335
608.020102	3" VEGETATION CONTROL STRIP	TON	25
610.1402	4" TOPSOIL ROADSIDE	CY	35
610.1601	TURF ESTABLISHMENT - ROADSIDE	SY	280
614.060103	TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS CUT TO BELOW GRADE	EA	4
614.060203	TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS CUT TO BELOW GRADE	EA	5
614.060303	TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS CUT TO BELOW GRADE	EA	4
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1
619.1301	TEMPORARY TRAFFIC SIGNALS	ELOC	1
619.1712	TEMPORARY POSITIVE BARRIER - CATEGORY 2 (PINNING PERMITTED)	LF	1400
619.1719	WARNING LIGHTS ON TEMPORARY POSITIVE BARRIERS	EA	35
619.24	NIGHTTIME OPERATIONS (ENTIRE PROJECT)	LS	1
623.03	CRUSHED STONE (BY WEIGHT) (3/4" LEVELING PAD)	CY	4
623.03	CRUSHED STONE (BY WEIGHT) (12" MIN DRAINSTONE)	CY	128
625.01	SURVEY OPERATIONS	LS	1
627.5014001	CUTTING PAVEMENT	LF	45
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	4
637.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	
645.13080010	REINSTALL SIGN PANELS ASSEMBLIES	SF	2
645.81	TYPE A SIGN POSTS	EA	1
697.03	FIELD CHANGE PAYMENT	DC	
698.04	ASPHALT PRICE ADJUSTMENT	DC	
698.05	FUEL PRICE ADJUSTMENT	DC	
698.06	STEEL/IRON PRICE ADJUSTMENT	DC	
699.040001	MOBILIZATION	LS	1



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER LAURA BARCA

PROJECT NUMBER	10400319



TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

GENERAL NOTES, ABBREVIATIONS
AND ESTIMATE OF QUANTITIES
OLD RIDGE ROAD

SHEET
01G-1.02

N. OR F.
CATHERINE C RUFRANO LIVING TRUST
LIBER 13639 PAGE 620
TM 18-1-16.2

N. OR F.
RAND
LIBER 2288 PAGE 563
LOT No. 5 FILED MAP No. 2295
TM 18-1-3.16



RIDGEWAY LOOP

N. OR F.
REILLY
LIBER 11630 PAGE 1851
TM 18-1-16.1

N. OR F.
ZABAWA
LIBER 13423 PAGE 1013
LOT No. 6 FILED MAP No. 2295
TM 18-1-3.15

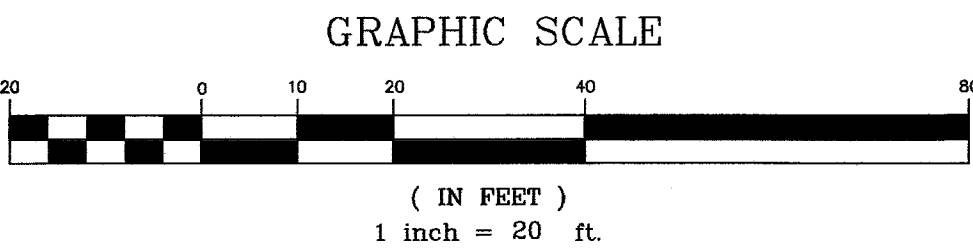
N. OR F.
COLLINS & MOLINA
LIBER 11945 PAGE 1627
TM 18-1-14

N. OR F.
ZABAWA
LIBER 13423 PAGE 1017
LOT No. 7 FILED MAP No. 2295
TM 18-1-3.14

N. OR F.
RACHEL D DURLAND
IRREVOCABLE TRUST
LIBER 14390 PAGE 413
TM 18-1-13

MAP NOTES

1. PROPERTY LINES SHOWN HEREON ARE BASED ON DEEDS OF RECORD AND MONUMENTATION FOUND IN THE FIELD.
2. UNDERGROUND UTILITY LOCATIONS ARE BASED ON FIELD MARKINGS BY OTHERS. ALL UTILITY LOCATIONS SHALL BE VERIFIED. UTILITY LINE DEPTHS SHALL BE VERIFIED PRIOR TO ANY CONSTRUCTION COMMENCING.
3. HORIZONTAL DATUM: NEW YORK STATE PLANE.
4. VERTICAL DATUM: NAVD 1988
5. WE DO HEREBY CERTIFY THAT THIS MAP IS THE RESULT OF AN ACTUAL FIELD SURVEY COMPLETED ON OCTOBER 4, 2023

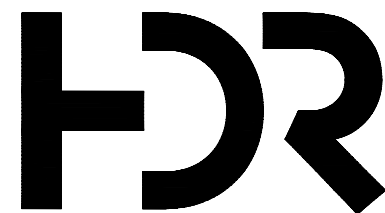


COPIES OF THIS SURVEY NOT BEARING THE EMBOSSED SEAL OF THE LAND SURVEYOR SHALL NOT BE VALID. GUARANTEES OF CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS. UNAUTHORIZED ALTERATION OF THIS DOCUMENT, IN ANY WAY, CONSTITUTES A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209, SUB-DIVISION 2.

JOHN A. MCGLOIN, N.Y. LIC. #49689
PROFESSIONAL LAND SURVEYOR
32 COLONIAL AVENUE
WARWICK, NEW YORK 10990

ROBERT H. SCHMICK N.Y. LIC. #50573
PROFESSIONAL LAND SURVEYOR
5 OVERLOOK DR.
WARWICK, NEW YORK 10990

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER LAURA BARCA

PROJECT NUMBER	10400319



TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

SOIL BORING LOGS
OLD RIDGE ROAD

SHEET
01B-1.01

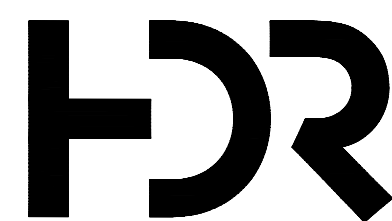
				PROJECT No. 12020.05				BORING No. B-1						
				PROJECT: Town of Warwick Culvert Replacement										
				LOCATION: Old Ridge Road, Warwick, NY										
CLIENT: Town of Warwick				GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Connor McCleary						
CONTRACTOR: Craig Geotechnical Drilling Co., Inc.					DRILLER: George Zachman									
METHOD OF ADVANCING BORING		DIA.	DEPTH		SURFACE ELEVATION: 748.0									
POWER AUGER:			TO	MON. WELL ☐ YES ☒ NO		DATUM: See Remarks								
ROT. DRILL:		3 7/8"	0	TO	SCREEN DEPTH: --- TO ---	DATE START: 5/17/23								
CASING:		4"	0	TO	8'	WEATHER: Clear		TEMP: 60° F		DATE FINISH: 5/17/23				
DIAMOND CORE:		2"	13	TO	23'	DEPTH TO ROCK: 8.5'								
CME 75 Truck Mounted Drill Rig with Automatic Hammer				*CHANGES IN STRATA ARE INFERRED										
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLE NUMBER	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT.)					ELEVATION (FT.)
				RECOV.					1 2 3 4 5					
				LENGTH (IN.)	ROD (%)				PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT %					
									STANDARD PENETRATION (BLOWS/FT.)					
1	35	11	S-1	8		M	SM							
2		23												
3	7	4	S-2	0		M								
4		4												
5	10	5	S-3	11		M	SM							743.0
6		5												
7	21	12	S-4	2		M	SM							
8	50+	50/5	S-5	1		M	SM							
9														
10														738.0
11														
12														
13														
14	6													
15	10													733.0
16	5		C-1	57/60	13									
17	7													
18	5													
19	5													
20	5													728.0
21	5		C-2	60/60	15									
22	7													
23	14													
24														
25														723.0

REMARKS: Surface elevation was estimated to the nearest foot by interpolating between contour lines shown on a topographic survey drawing of the site provided by HDR.

				PROJECT No. 12020.05				BORING No. B-2						
				PROJECT: Town of Warwick Culvert Replacement										
				LOCATION: Old Ridge Road, Warwick, NY										
CLIENT: Town of Warwick				GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Connor McCleary						
CONTRACTOR: Craig Geotechnical Drilling Co., Inc.					DRILLER: George Zachman									
METHOD OF ADVANCING BORING		DIA.	DEPTH		SURFACE ELEVATION: 757.0									
POWER AUGER:			TO	MON. WELL ☐ YES ☒ NO		DATUM: See Remarks								
ROT. DRILL:		3 7/8"	0	TO	13'	SCREEN DEPTH: --- TO ---		DATE START: 5/17/23						
CASING:		4"	0	TO	10'	WEATHER: Clear		TEMP: 60° F		DATE FINISH: 5/17/23				
DIAMOND CORE:		2"	13	TO	23'	DEPTH TO ROCK: 10.5'								
CME 75 Truck Mounted Drill Rig with Automatic Hammer				*CHANGES IN STRATA ARE INFERRED										
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLE NUMBER	SAMPLES		UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT.)					ELEVATION (FT.)
				RECOV.					1 2 3 4 5					
				LENGTH (IN.)	ROD (%)				PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT %					
									STANDARD PENETRATION (BLOWS/FT.)					
1		16	S-1	7		M	SM							
2	40	24												
3	7	4	S-2	5		M	SM							
4		4												
5	10	3	S-3	5		M	SM							752.0
6		4												
7	16	7	S-4	0										
8		10												
9	13	8	S-5	8		M	SM							
10	50+	9	S-6	5		M	SM							747.0
11		50/0												
12														
13														
14	6													
15	5													
16	6		C-1	53/60	40									742.0
17	7													
18	4													
19	5													
20	5													737.0
21	5		C-2	59/60	65									
22	6													
23	3													
24														
25														732.0

REMARKS: Surface elevation was estimated to the nearest foot by interpolating between contour lines shown on a topographic survey drawing of the site provided by HDR.

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER LAURA BARCA

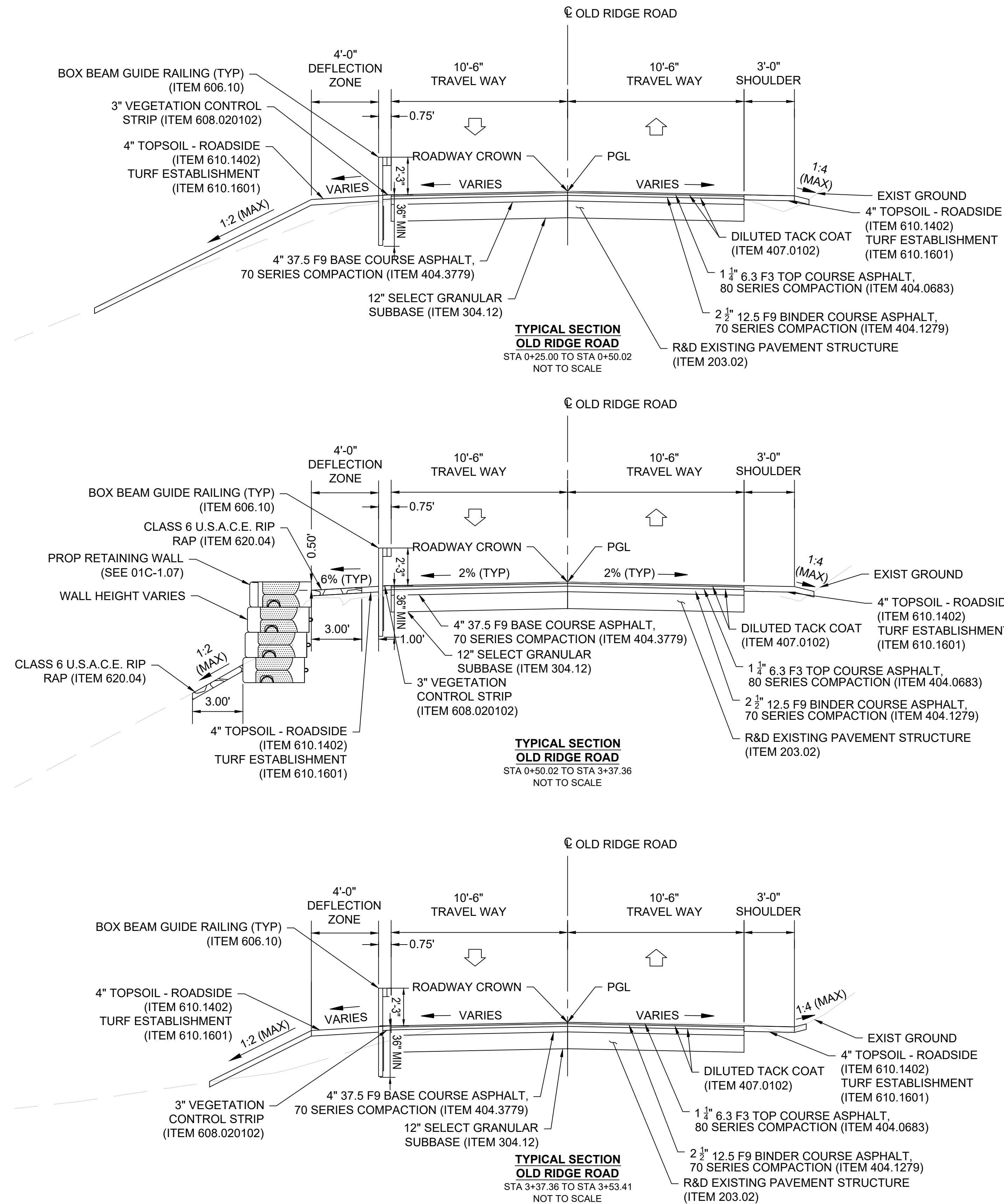
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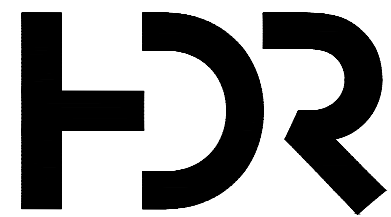
TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

TYPICAL SECTIONS
OLD RIDGE ROAD

SHEET
01C-1.01



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ISSUE	DATE	DESCRIPTION
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PROJECT MANAGER LAURA BARCA

PROJECT NUMBER	10400319
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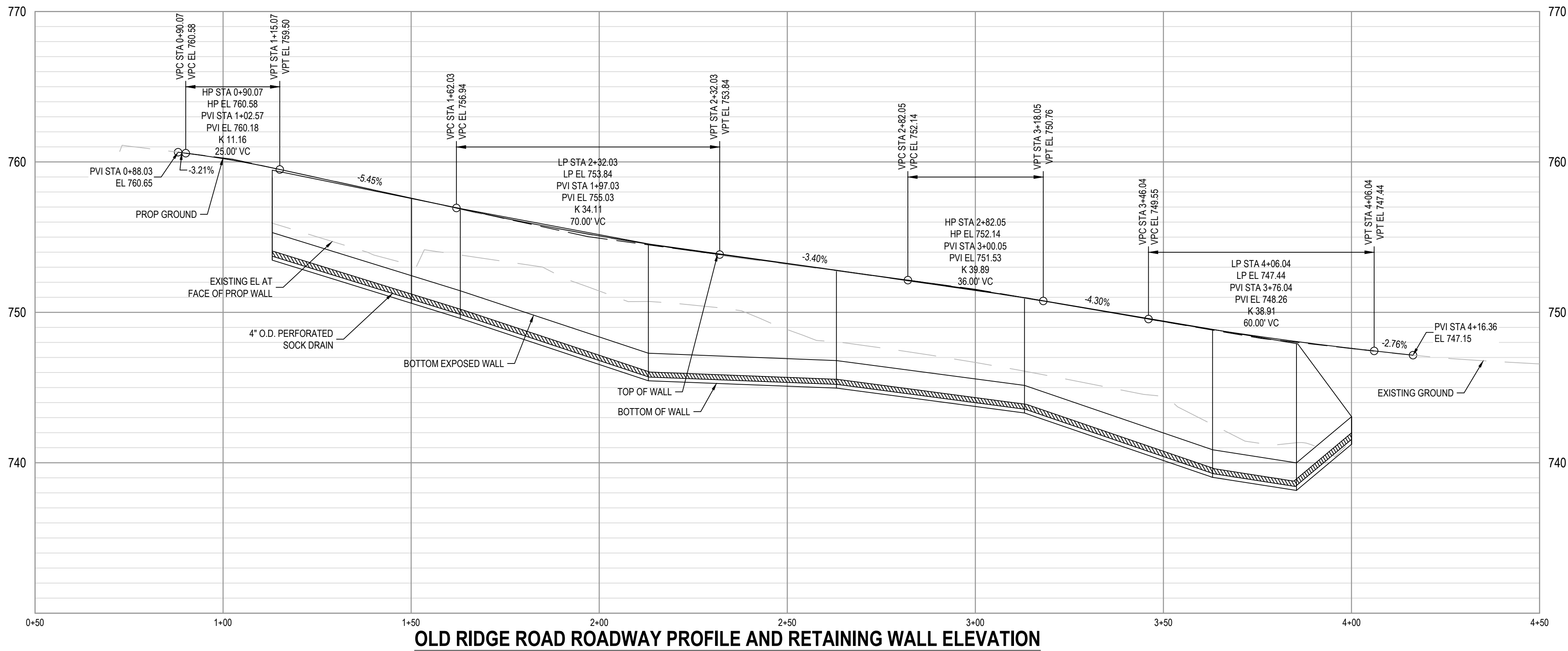
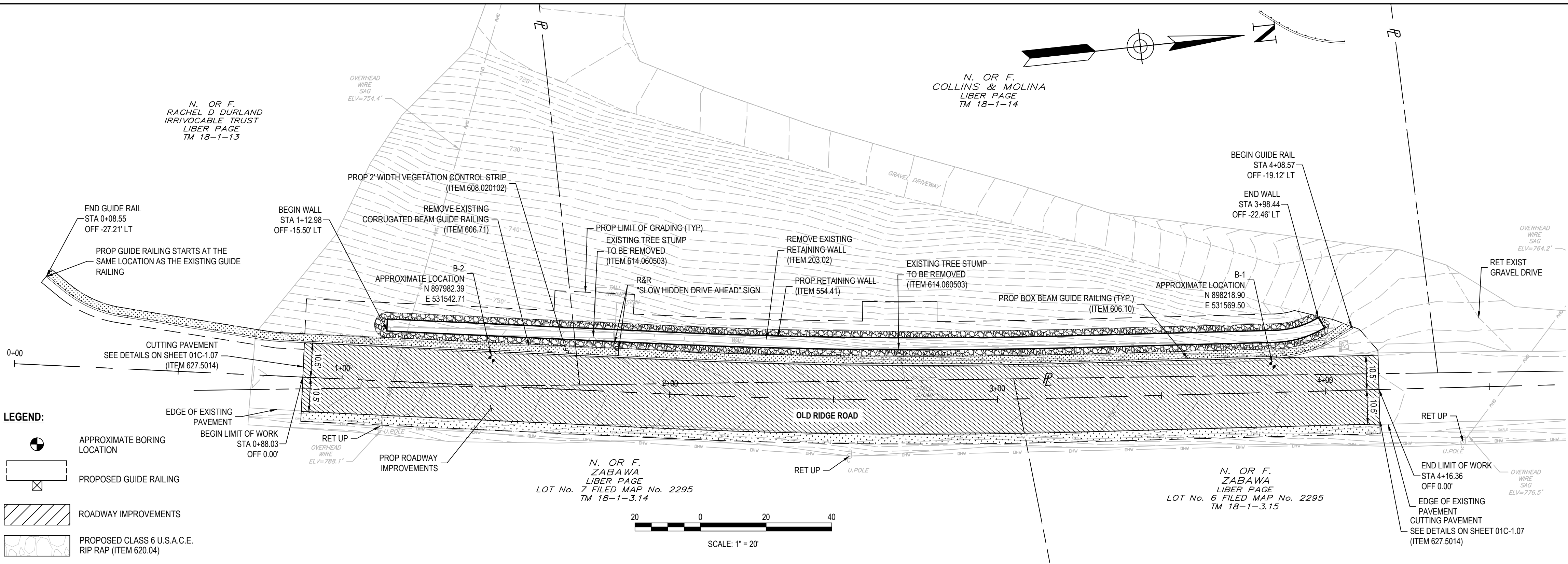
TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

RETAINING WALL
OLD RIDGE ROAD

SHEET
01C-1.02

LEGEND:

- APPROXIMATE BORING LOCATION
- PROPOSED GUIDE RAILING
- ROADWAY IMPROVEMENTS
- PROPOSED CLASS 6 U.S.A.C.E. RIP RAP (ITEM 620.04)



NOTES:

GENERAL NOTES

- ALL DISTURBED AND EXPOSED AREAS SHALL BE TEMPORARILY STABILIZED FOR THE DURATION OF THE PROJECT OR UNTIL FINAL STABILIZATION IS PROVIDED.

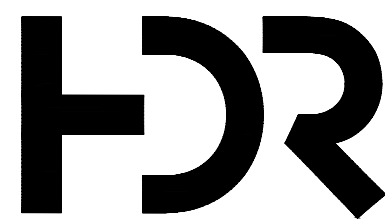
PAVEMENT MARKING NOTES

- SUBSEQUENT TO FINAL PAVEMENT, A NEW DOUBLE SOLID 4" YELLOW LINE SHALL BE INSTALLED FROM BEGIN LIMIT OF WORK TO END LIMIT OF WORK; THE NEW LINE STRIPING SHALL BE CONTIGUOUS WITH THE EXISTING LINE STRIPING ALONG OLD RIDGE ROAD.

TREE REMOVAL NOTES

- ALL TREES, GENERAL SHRUBS, AND BRUSH REQUIRED TO BE REMOVED TO COMPLETE ITEMS UNDER THIS CONTRACT SHALL BE INCLUDED IN THE CONTRACTOR'S BID AND WILL BE PAID FOR UNDER ITEM 201.06. ADDITIONALLY, THE REMOVAL OF OTHER SPECIFIED TREES WILL BE ACCOUNTED FOR UNDER A DISTINCT ITEM NUMBER.
- THE ENGINEER SHALL APPROVE OF ANY CASE WHERE THE RETAINING WALL CAN BE INSTALLED AND THE ABOVE TREES CAN BE PROPERLY AND SAFELY RETAINED THE ENGINEER SHALL APPROVE OF ANY TREE STUMPS TO REMAIN FOR BANK STABILIZATION WHERE THEY DO NOT INTERFERE WITH RETAINING WALL WORK.
- THE TREE REMOVAL VALUES IN NOTES ABOVE IS AN ESTIMATE; ADDITIONAL TREE REMOVAL MAY BE REQUIRED TO INSTALL THE NECESSARY STREAM RESTORATION. ANY ADDITIONAL TREE REMOVAL UP TO 6 TREES, WILL BE PROVIDED AT NO ADDITIONAL COST.
- EVERY EFFORT WILL BE MADE TO RETAIN ANY TREE EXHIBITING CHARACTERISTICS THAT COULD PROVIDE ROOSTING HABITAT TO THE INDIANA BAT OR NORTHERN LONG-EARED BAT. IN ACCORDANCE WITH USF&WS, TREES EXHIBITING ANY OF THESE CHARACTERISTICS CAN NOT BE REMOVED BETWEEN APRIL 1ST AND OCTOBER 1ST UNLESS FURTHER STUDY HAS BEEN CONDUCTED AND DOCUMENTED.

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER LAURA BARCA

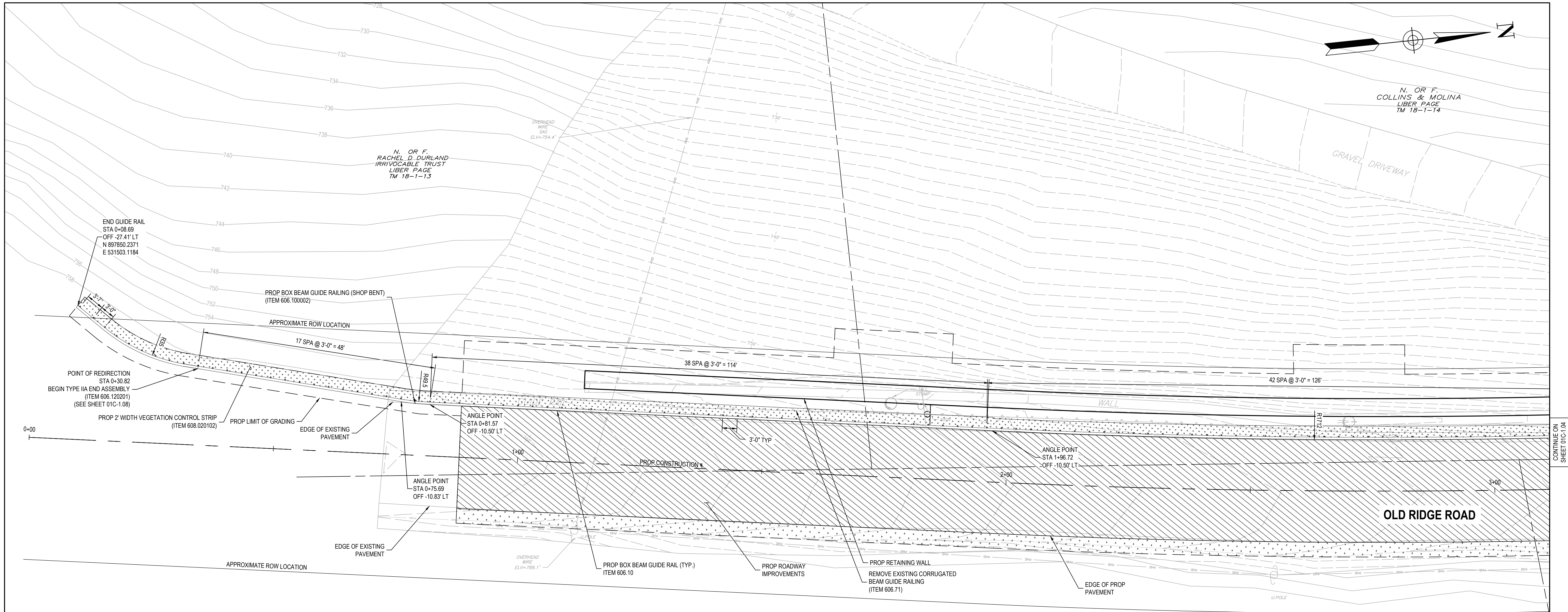
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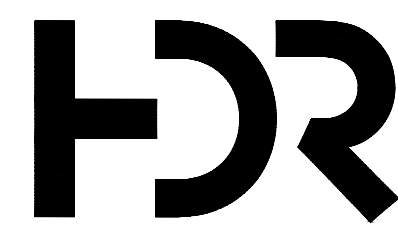
TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

GUIDE RAIL PLAN - 1
OLD RIDGE ROAD

SHEET
01C-1.03



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PROJECT MANAGER LAURA BARCA

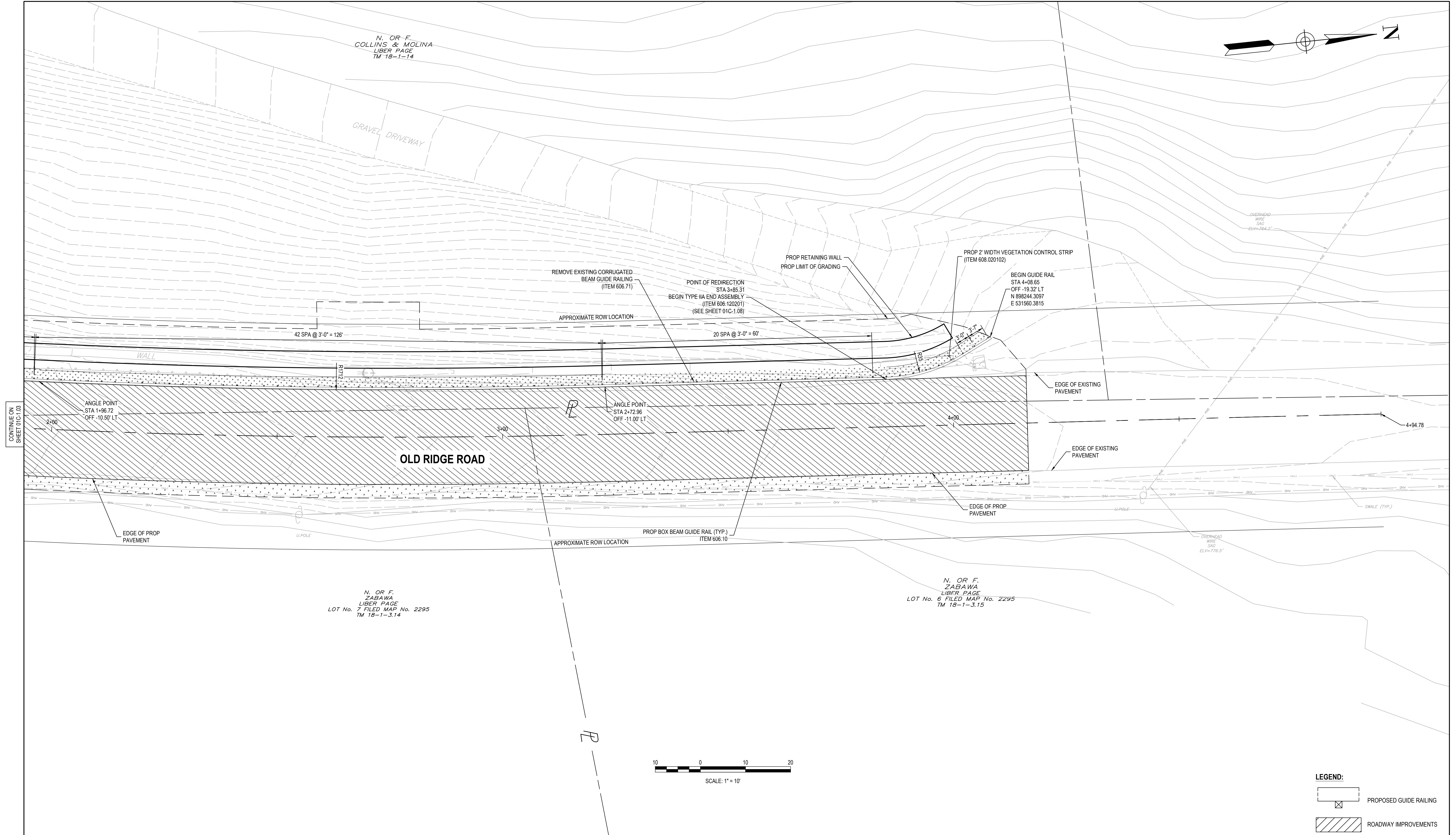
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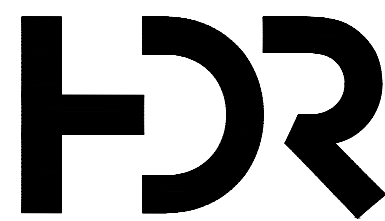
TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

GUIDE RAIL PLAN - 2
OLD RIDGE ROAD

SHEET
01C-1.04



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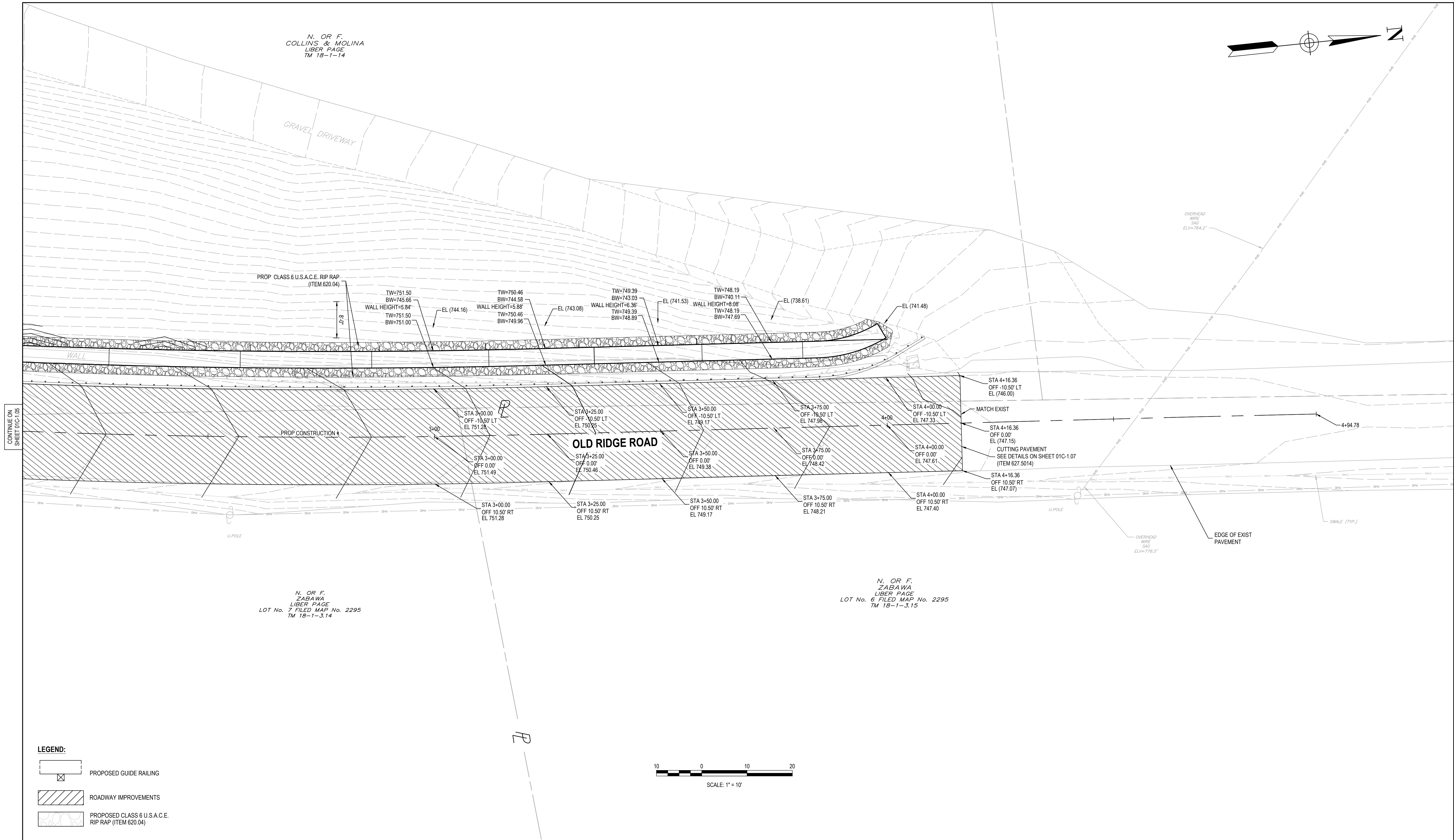
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TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS

PAVEMENT LAYOUT PLAN - 2
OLD RIDGE ROAD

SHEET
01C-1.06





1. WALL UNITS CAN BE STONE STRONG (SHOWN) OR EQUIVALENT.
2. WALL UNITS MUST HAVE UNIT WEIGHT GREATER THAN OR EQUAL TO 250 PSF AND HAVE A UNIT WIDTH OF 44", HEIGHT OF 18", AND LENGTH OF 4'.
3. SEE SHEET 01C-1.02 FOR CIVIL PROFILE. ADJUST NUMBER OF BLOCKS AS REQUIRED TO MEET MINIMUM HEIGHT OF RETAINED SOIL. MAINTAIN 16" MINIMUM BURP DEPTH AT FACE OF WALL.



1. ASPHALT OVERLAY SPLICES SHALL BE USED AT: ENDS OF ASPHALT OVERLAY HIGHWAY SECTIONS, MAJOR INTERSECTIONS, AND OTHER LOCATIONS INDICATED IN THE PLANS.

2. THE TRANSITION LENGTH IN FEET SHALL NOT BE LESS THAN THE VALUE OBTAINED BY MULTIPLYING THE EFFECTIVE OVERLAY THICKNESS IN INCHES (DIFFERENCE BETWEEN THE EXISTING AND THE OVERLAID ELEVATIONS) BY THE K VALUE FROM THE TABLE FOR THE POSTED SPEED OF THE HIGHWAY. THE MINIMUM TRANSITION LENGTH IS 30'.

EXAMPLE: IF THE POSTED SPEED IS 55 MPH,
EFFECTIVE OVERLAY THICKNESS = 2"
THEN THE MINIMUM TRANSITION LENGTH
= 2 INCHES x 30 FT/IN = 60 FEET

K VALUE TABLE FT/IN							
POSTED SPEED MPH	30	35	40	45	50	55	60
K	16.67	19.17	21.67	24.17	27.50	30.00	32.50

3. ALL SURFACES OF THE ASPHALT OVERLAY SPLICE TRANSITION AREA SHALL BE CLEANED AND TACK-COATED PRIOR TO ASPHALT PLACEMENT. THE COST OF MILLING REBATES AND TACK COAT IN THE ASPHALT OVERLAY SPLICE TRANSITION AREA SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS. COST OF LEAVING A NEAT EDGE SHALL BE INCLUDED IN THE MILLING ITEM.

4. SAW CUTS SHALL BE MADE SO THAT SURFACE RUNOFF IS DIRECTED TO THE EDGE OF PAVEMENT.

5. IN THE TRANSITION AREA, PAVEMENT COURSES OTHER THAN THE TOP COURSE SHALL BE FEATHERED OUT USING TOP COURSE OR OTHER APPROPRIATE MATERIAL. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE ITEM.

6. SEE STANDARD SHEET 402-01 IN BOOK 1 OF 4 OF THE NEW YORK STANDARD SHEETS DATED MAY 01, 2024.

PROJECT MANAGER LAURA BARCA

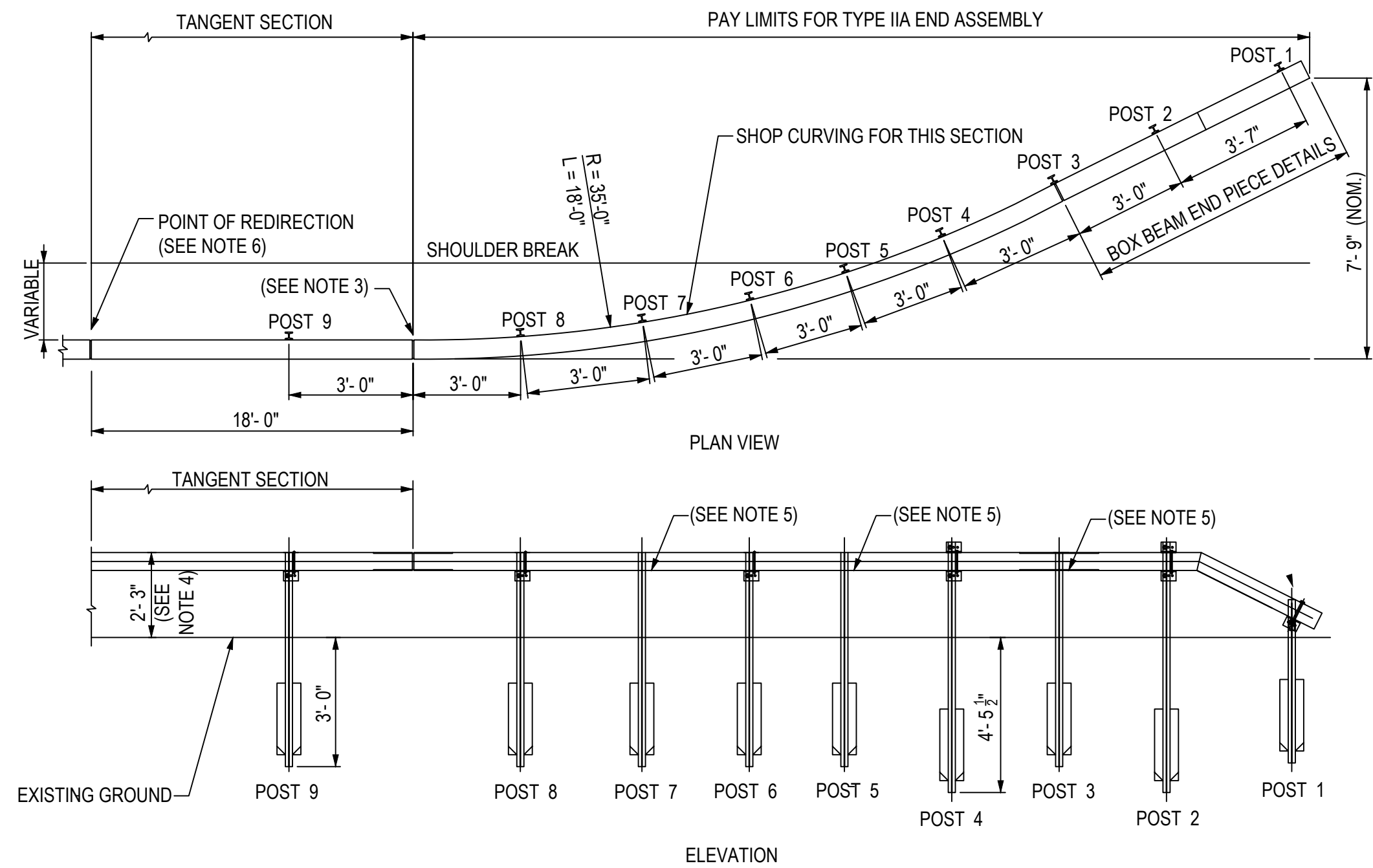
PROJECT NUMBER	10400319



CONSTRUCTION DETAILS

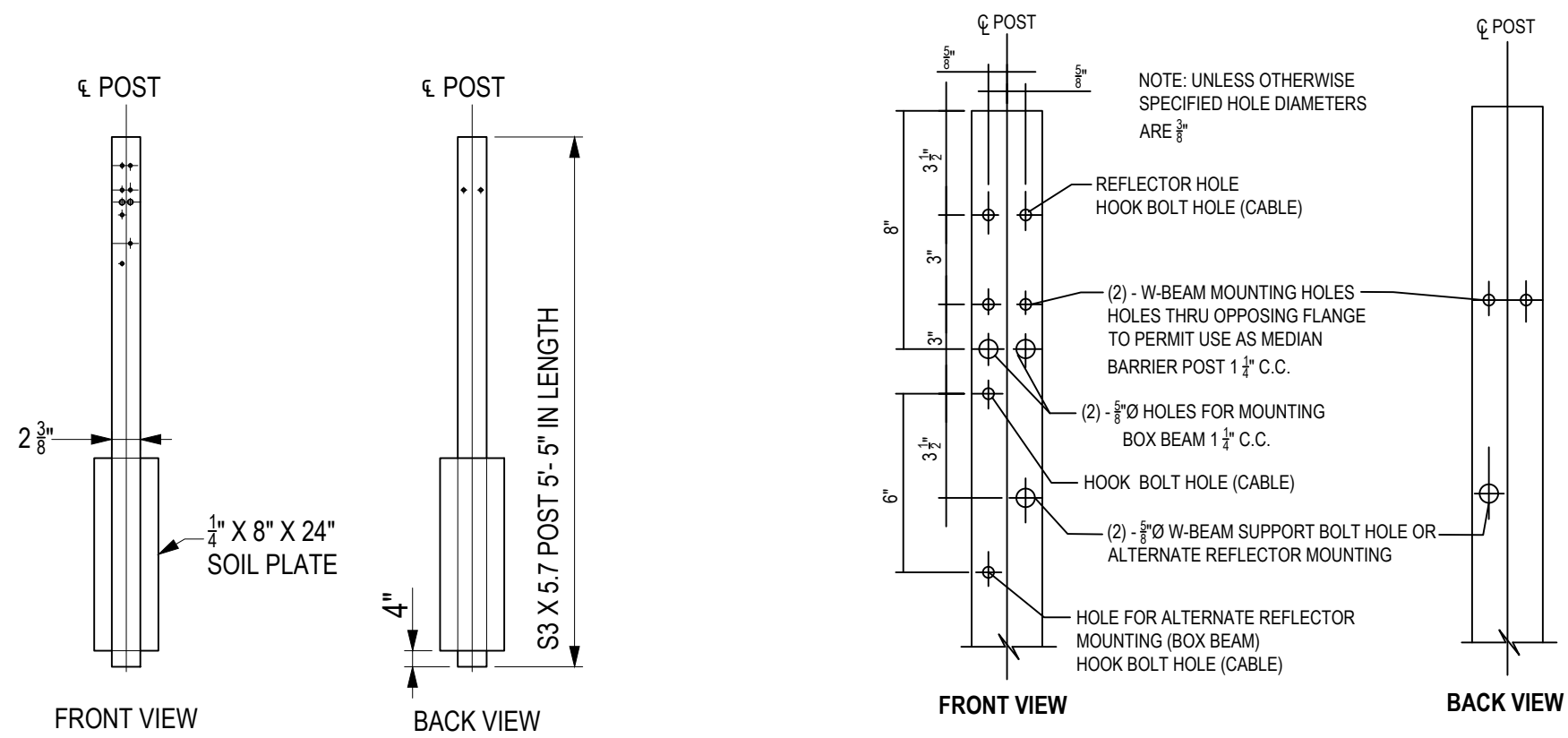
OLD RIDGE ROAD

SHEET
01C-1.08



END ASSEMBLY TYPE IIA
NOT TO SCALE

1. POSTS 2, AND 4 SHALL BE EXTRA LONG POSTS. POSTS 3, 5, 6, 7, 8, AND 9 SHALL BE STANDARD LENGTH.
2. POSTS 2 AND 4 SHALL BE FASTENED TO THE RAIL USING DETAIL "A".
3. FOR SIDE SLOPES 1:5 OR FLATTER, THE 18" OF CURVED BOX BEAM MAY BE PROVIDED IN A CURVED PORTION OF A 24' OR 36" PIECE. OTHERWISE, AN 18" SECTION IS TO BE SPLICED AT THE POINT OF TANGENCY.
4. THE DRAWING INDICATES THE TERMINAL INSTALLED ON LEVEL GROUND. WHEN INSTALLED OVER A SLOPE OR DITCH, THE TERMINAL END SHOULD BE PUSHED DOWN WITH THE EQUIVALENT OF APPROXIMATELY 100 LBS EFFORT TO DEPRESS THE TERMINAL DOWN.
5. POSTS 3, 5, AND 7 SHALL NOT BE CONNECTED TO BOX BEAM GUIDE RAIL. HOWEVER, FOR RUNS LESS THAN 130' IN LENGTH, ALL BACKUP POSTS SHALL BE FASTENED TO THE RAIL.
6. FOR DESIGN SPEEDS UNDER 50 MPH THE POINT OF REDIRECTION WILL BE AT THE POINT OF TANGENCY.
7. SEE STANDARD SHEET 606-04 IN BOOK 2 OF 4 OF THE NEW YORK STANDARD SHEETS DATED MAY 01, 2024.



UNIVERSAL POST
NOT TO SCALE

1. SEE STANDARD SHEET 606-04 IN BOOK 2 OF 4 OF THE NEW YORK STANDARD SHEETS DATED MAY 01, 2024

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.

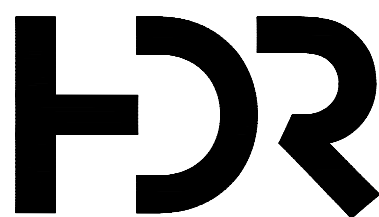
*PRECONSTRUCTION POSTED SPEED LIMIT

PRECONSTRUCTION POSTED SPED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.)/ # OF SKIP LINES	TAPER LENGTH: (FT.)/ # OF SKIP LINES/ # OF CHANNELIZING DEVICES			SHOULDER TAPER LENGTH: (FT.)/ # OF SKIP LINES/ # OF CHANNELIZING DEVICES						
		LATERAL SHIFT OF TRAFFIC FLOW PATH (FT.)			FOR SHOULDER WIDTH						
		10	11	12	≤ 4 FT.	5 - 7 FT.	8 FT.	9 FT.	10 FT.	11 FT.	12 FT.
25	155 / 4	120/3/4	120/3/4	120/3/4	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2
30	200 / 5	160/4/5	160/4/5	200/5/6	40/1/2	40/1/2	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3
35	250 / 6	200/5/6	240/6/7	240/6/7	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3	80/2/3	80/2/3
40	305 / 8	280/7/8	320/8/9	320/8/9	40/1/2	80/2/3	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4
45	360 / 9	440/11/12	520/13/14	560/14/15	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4	120/3/4	160/4/5
50	425 / 11	520/13/14	560/14/15	600/15/16	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	160/4/5	160/4/5
55	495 / 13	560/14/15	600/15/16	680/17/18	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	200/5/6	200/5/6

WORK ZONE PROVISIONS	MAXIMUM DEVICE SPACING (CENTER TO CENTER)	MUTCD COMPLIANT CHANNELIZING DEVICE								
LONG-TERM' STATIONARY WORK ZONES INVOLVE WORK THAT OCCUPIES A LOCATION FOR MORE THAN 3 CONSECUTIVE DAYS		DRUMS	STANDARD CONES	TALL CONES	EXTRA TALL CONES	TEMPORARY TUBULAR MARKINGS	INTERIM TUBULAR MARKINGS	VERTICAL PANELS	OVERSIZED VERTICAL PANELS	TYPE III BARRICADES
SHOULDER/MERGING/ SHIFTING TAPERS	20 FT.	X							X	
	40 FT.	X							X	
TRANSVERSE DEVICE WITHIN CLOSED TRAFFIC LANE AND/OR SHOULDER	800 FT.	X		X	X			X	X	0
REMOVAL OF EXISTING GUIDE RAIL	80 FT.	X		X	X	X		X	X	0
	40 FT.									
NOTES: X= ALLOWED, BLANK = NOT ALLOWED, 0 = OPTIONAL										
1. - A TYPE 1 OBJECT MARKER MAY BE USED IN LIEU OF CHANNELIZING DEVICE.										
2. - CHANNELIZING DEVICES SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT.										

TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT			
	30 MPH	40 MPH	50 MPH	55 MPH
TEMPORARY CONCRETE BARRIER	8:1	11:1	14:1	16:1
BOX BEAM OR HEAVY POST CORRUGATED BEAM	7:1	9:1	11:1	12:1

SIGN	NON-HIGHWAY	FREEWAY
G20-2	36x18	48x24
NYR9-11	24x24	48x84
R10-6L / R10-6R**	24x36	24x36
W1-6L / W1-6R	48x24	60x30
W3-3	36x36	48x48
W13-1P	24x24	30x30
W20-1	36x36	48x48
W20-4	36x36	48x48
WARNING FLAG	18x18	18x18
*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST. **SIGNS NOT FOR FREEWAY USE.		



			PROJECT MANAGER		LAURA BARCA	
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER		10400319	



**TOWN OF WARWICK
DEPARTMENT OF PUBLIC WORKS**

TEMPORARY TRAFFIC CONTROL PLAN - 2 OLD RIDGE ROAD