

CONNECTICUT DEPARTMENT OF TRANSPORTATION



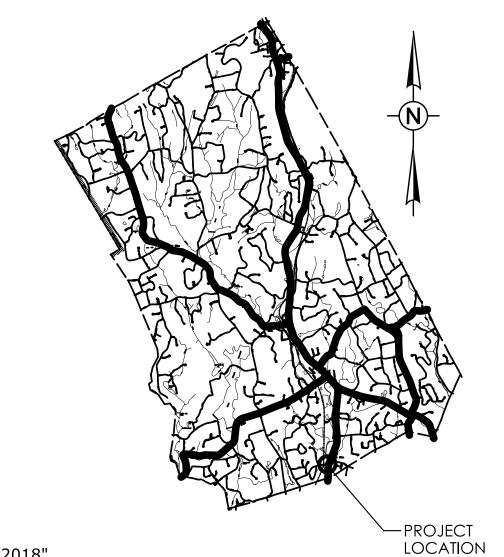
Plans For

REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER

> Town of WILTON

MAINTENANCE RESPONSIBILITY LENGTH ROAD 370 FEET ARROWHEAD RD. TOWN

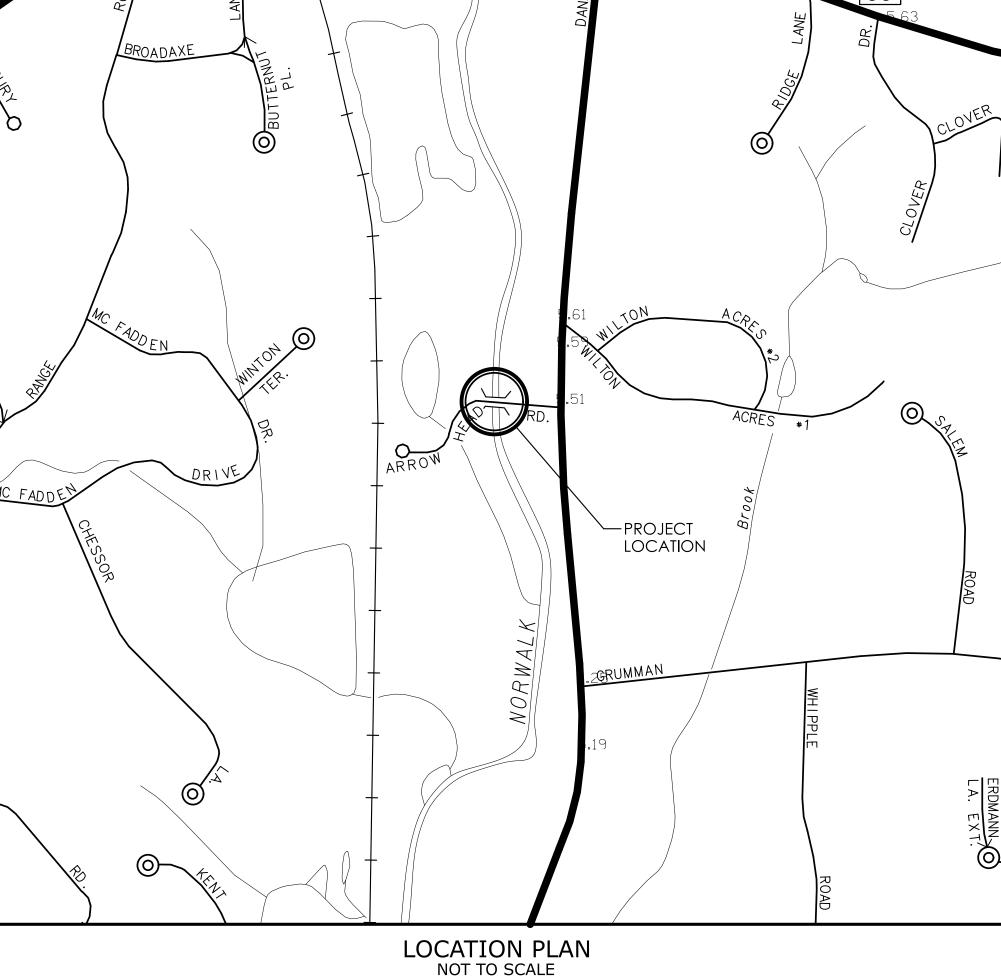
MAINTENANCE **RESPONSIBILITY** PROJECT # F.A.P. # 6161(007) 0161-0143



TOWN OF WILTON

NOT TO SCALE

DESIGNED BY: MACDONALD 175 Capital Blvd Rocky Hill, CT 06067



Jeffrey J. Long 2022.09.30 16:54:23-04'00'

FDP SUBMISSION SEPTEMBER 28, 2022

MASSAC	HUSETTS
DISTRICT 4	DISTRICT 1 DISTRICT 2
SALISBURY CANAAN NORFOLK CANAAN NORFOLK CANAAN NORFOLK GRANBY BARKMAMSTED SIMSBURY SHARON CORNWALL TORRINGTON AVON	SUPPIELD SOMES STAFFORD HIDON GRANEY WINDSOR GRANEY WINDSOR LUNGTON ASPROAD ENTITION WINDSOR SOUTH WINDSOR CLINGTON WINDSOR CLINGTON WINDSOR COLUMBIA COVENTRY MANSFELD CHANLIN ANIMITON GRANEY WINDSOR COLUMBIA COVENTRY MANSFELD CHANLIN SPACE LISBON WEST COLUMBIA COVENTRY COLUMBIA COVENTRY MANSFELD CHANLIN SPACE LISBON WINDSOR HARVETON BOLTON GRISWOLD VOLUNTONN GRISWOLD VOLUNTONN MIDDLE NOT HARVETON COLOMESTER NORWICH BOLTON FRANKLIN SPACE LISBON PORTLAND PRESTOR GRISWOLD VOLUNTONN MIDDLE NOT HARVETON GRISWOLD VOLUNTONN BOLTON FRANKLIN SPACE LISBON DUBRHAM INDOLE NOT HARVETON COLOMESTER NORWICH BOLTON FRANKLIN SPACE LISBON DUBRHAM INDOLE NOT GRISWOLD VOLUNTONN GRISWOLD VOLUNTONN BOLTON GRISWOLD VOLUNTONN GRISWOLD VOLUNTO
PROJECT LOCATION	
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GENERAL NOTES:

- 1. CONSTRUCTION SPECIFICATIONS: Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, dated 2020; Supplemental Specifications, dated January 2022; and Special Provisions 2. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE
- SYSTEM N.A.D. 1983 (2011)
- 3. VERTICAL DATUM BASED ON NAVD 1988
 4. Surveyed By: CONNECTICUT D.O.T. DISTRICT 3

DISCLAIMER:

IT IS THE RESPONSIBILITY OF EACH BIDDER AND ALL OTHER INTERESTED PARTIES TO OBTAIN ALL BIDDING RELATED INFORMATION AND DOCUMENTS FROM OFFICIAL SOURCES WITHIN THE DEPARTMENT.

LIST OF SUBSETS

PERSONS AND/OR ENTITIES WHICH REPRODUCE AND/OR MAKE SUCH INFORMATION AVAILABLE BY ANY MEANS ARE NOT AUTHORIZED BY THE DEPARTMENT TO DO SO AND MAY BE LIABLE FOR CLAIMS RESULTING FROM THE DISSEMINATION OF UNOFFICIAL, INCOMPLETE AND/OR INACCURATE INFORMATION.

	*THE INITIAL SUBSE NOT INCLUDE ADDI	T SHEET COUNT DOES ENDUM AND CHANGE ORDERS	HIGHWAY CLASSIFICATION:
SUBSET NO.	SUBSET TITLE	*SUBSET SHEET COUNT	DESIGN SPEED: ADT (2020):
#01	GENERAL	3	DESIGN STANDARD:
#02	REVISIONS	1	AASHTO "A POLICY ON GE
#03	HIGHWAY	17	CONNECTICUT DEPARTME WITH CURRENT REV
#04	TRAFFIC	8	AASHTO "LRFD BRIDGE D
#05	STRUCTURE	21	CONNECTICUT DEPARTME WITH 2019 INTERIM
#06	LANDSCAPE	2	WITH 2019 IN ENG
#07	FIO - UTILITY RELOCATION	6	LIST OF DF
	HIGHWAY STANDARD SHEETS	12	SUBSET 01 -
	TRAFFIC STANDARD SHEETS	14	300321 01
			DRAWING TITLE
			TITLE SHEET
			DETAILED ESTIMATE SHEET - 01
			DETAILED ESTIMATE SHEET - 02

HIGHWAY CLASSIFICATION: SPEED:

LOCAL URBAN STREET 30 MPH 83 VEH/DAY

LIST OF DRAWINGS

SUBSET 01 - GENERAL

SHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 2018" NNECTICUT DEPARTMENT OF TRANSPORTATION "HIGHWAY DESIGN MANUAL, 2003" WITH CURRENT REVISIONS

SHTO "LRFD BRIDGE DESIGN SPECIFICATIONS, AASHTO 9TH EDITION 2020"
DINNECTICUT DEPARTMENT OF TRANSPORATION "BRIDGE DESIGN MANUAL, 2003" WITH 2019 INTERIM REVISIONS

G-01

G-02

G-03

STANDARD CONVENTIONS Rustic Fence Hedge Row XXXXXXXX Tree Line DRAWING NO Shrub 🌞 Evergreen Tree 💢 Deciduous Tree € Retaining Wall B.C.L.C. Granite Curb Street Line Guide Rail Conc. Sidewalk

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED. Digitally signed by Jeffrey J. Long Date: 2022.09.30 16:37:09-04'00' SUBMITTED BY: DESIGNER APPROVED BY: TOWN

Plans For REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER

> Town of WILTON

STATE PROJECT NO. 0161-0143 DRAWING NO G-01 SHEET NO. 01.01

		HIGHW	AY ITEN	15	,	,													_		_			,	,	,						,	,	,	,		, -	,		,	,	,	,	,	
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UNIT	1 	C. S EARTH EX	O REUSE OF EXISTING CHANNEL BOTTOM MATERIAL		S FORMATION OF	. C.Y		SEDIMENT SYSTEM A BASIN	O PROCESSED AGGREGATE BASE	C PR(SAWING AND SEALING IN JOINTS IN BITUMINOUS CONCRETE PAVEMENT	S.Y.	<u>Б</u> НМА S0.5	<u>Б</u> НМА S0.375		MATERIAL FOR TACK P COAT	FINE MILLING OF S. BITUMINOUS CONCRETE (0"-4")	\vdash	RESET FRAME AND P GRATE FOR CATCH BASIN	.4.1 12" R.C.	TA CLEAN EXISTING OF CATCH BASIN		EA. L		STEEL-BACKED TIN	SECTIC STEEL- GUIDE	L.F.	S BITUMINOU 	H SWEEPING FO 'S CONTROL	G CALCIUM CHL	WATEN OONTER	O OFFICE, SMALL	S. RETAINING WALL CASHITATION AND	S. L	S. l	F.	ABOVE GROUND WATER STORAGE TANK								
BRIDGE 05501	L.S.	289	1	1 1	50 1822	2 45	710	4	127	68	234	321	86	111	31	91	85	2	2	322	3	L.S.	12 8	0 100	0 4	4	88	24	190	1	128	12 L	S. I	S. L	S. 7	740	1								
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ITEM	STRUCTURE EXCAVATION - EARTH (EXCLUDING	AND DEWATERING) COFFERDAM AND	HANDLING WATER	GRANULAR FILL PERVIOUS STRUCTURE	BACKFILL SAWING AND SEALING JOINTS IN BITUMINOUS	NRA SRA	REMOVAL OF SUPERSTRUCTURE	SSED DE	PRESTRESSED DECK UNITS (4'-0" X 1'-6")	ASPHALTIC PLUG EXPANSION JOINT SYSTEM	Preformed Joint Seal	ELASTOMERIC BEARING PADS	ULTRA HIGH PERFORMANCE CONCRETE	ABUTMENT AND WALL CONCRETE	PARAPET CONCRETE	APPROACH SLAB CONCRETE	1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	1" CLOSED CELL ELASTOMER	Deformed Steel Bars - Galvanized	METALLIZING STRUCTURAL STEEL (SITE NO. 1)	NRY FA	FURNISHING STEEL PILES	PRE-AUGERING OF PILES	SPLICING STEEL FILES	POINT REINFORCEMENT	FOR SIEEL PILES DYNAMIC PILE DRIVING ANALYSIS (P.D.A.) TEST	INTERMEDIATE RIPRAP	MEMBRANE WATERPROOFING (COLD LIQUID	ÉLASTOMERIC)	<u>کے</u> ا	TORING	AND	GEOTEXTILE PENETRATING SEALER	PROTECTIVE COMPOUND 3 TUBE CURB	BRIDGE	REBUILD STONE WALL	REMOVAL OF EXISTINC MASONRY	SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE	SHEETING)						
UNIT	C.Y.	. L.F		C.Y. C	Y. L.F.	L.S.	. L.S.	L.F.	L.F.	C.F.	L.F.	C.I.	C.Y.	C.Y.	L.F.	C.Y.	S.F.	C.I.	LB	L.S.	S.F.	LB	L.F. L	F. EA	. EA.	. EA.	C.Y.	S.Y.		S.Y.	L.S.	S.F. S	S.Y. :	S.Y. L	F.	L.F.	C.Y.	S.F.							-
BRIDGE 05501	241	24	0 1	19 1	34 92	L.S.	. L.S.	101	253	34	102	9144	3	65	136	34	121	15840	16623	L.S.	327 13	32240	400 14	50 20	20	3	29	238		60	L.S. 1	040	79	69 1	16	100	47	2							
																																													
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MOTT MACDONALD

Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067.

SIGNATURE/ BLOCK:

SCALE AS NOTED

M 175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067

TOWN OF WILTON

PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON DRAWING TITLE: DETAILED ESTIMATE SHEET - 01

G-02 SHEET NO. 01.02

CHECKED BY: Y.A.

		TRAFFIC	CITEMS		,		,	,			,		,		,	,	,	,		,				,	,	,	,	,	,	,	,	,	,	
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UNIT	ب TEMPORARY TRAFFIC ت BARRIER	TEMPORARY TRAFFIC BARRIER (PINNED) RELOCATED TEMPORARY TRAFFIC	BARRIER RELOCATED TEMPORARY TRAFFI	TRAFFIC PERSON H (UNIFORMED FLAGGER) MAINTENANCE AND	PROTECTION OF TRAFFIC BARRICADE WARNING LIGHTS	A - HIGH INTENSITY TRAFFIC DRUM	CONSTRUCTION BARRICADE III		TEMPORARY S SIGNALIZATION (SITE NO.1)	TYPE DE-7D P DELINEATOR	SIGN FACE-SHEET S ALUMINUM (TYPE IX THETROREFLECTIVE SHEETING)	TEMPORARY PLASTIC	TEMPORARY PLASTIC TEMPORARY PLASTIC T PAVEMENT MARKING TAPE - 4" WHITE	TEMPORARY PLASTIC FINEMENT MARKING TAPE - 12" WHITE	CONSTRUCTION SIGNS	TEMPC BARRE	TEMPC BARRE	TEMPC BARREI	TEMPORARY SAND P BARREL (2100 LB.) RELOCATION OF	BARREL (400 LB.) RELOCATION OF TEMPORARY SAND	BARREL (700 LB.) RELOCATION OF TEMPORARY SAND BARREL (1400 LB.)	RELOCATION OF TEMPORARY SAND BARREL (2100 LB.)												
BRIDGE 05501	280	80 54	0 80	112	L.S. 72	20 20	4	12	L.S.	14	1	210	2060	65	85	4	4	16	8	1 4	16	8												
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ITEM NUMBER	00 A4 00 00 00 00 00 00 00 00 00 00 00 00 00		\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\						V (2)/																									
ITEM	S FURNISHING AND PLACING TOPSOIL	WOOD CHIP MULCH GLETHRA ALNIFOLIA	HT.B.B. THUJA PLICATA, WESTERN ARBORVITAE,	MAPLE 2"-2 1/2" CAL.B.B. RHODODENDRON	YISCOSUM, SWAMP AZALEA 24"-36" HT. B.B.	. S CONSERVATION	WETLAND GRASS ESTABLISHMENT	CONTROL AND K. REMOVAL OF INVASIVE	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \																									
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NASSIGNED TOTAL		802 27	7 33	11	12 19	+	4 69			+				+ +			-	+		+														

SCALE AS NOTED

Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067. SIGNATURE/ BLOCK:

MOTT MACDONALD

M 175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067





PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON DRAWING TITLE: DETAILED ESTIMATE SHEET - 02

DRAWING NO.

G-03 SHEET NO. 01.03

CHECKED BY: M.D.G.

DESIGNER/DRAFTER: D.T.K.

REV. No.	SHEET No.	DATE mm/dd/yy	NEW REV.	DESCRIPTION BY	REV. No. SHEET No.	DATE mm/dd/yy	NEW REV.	DESCRIPTION BY	REV. No. DATE Mmm/dd/yy ≥ 2	DESCRIPTION BY	Υ
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				DESIGNER/DRAFTER:				DESIGNED BY: MOTT MACDONALD 175 Capital Blvd 4th Floor Rocky Hill, CT 06	M M Jeffrey J. Long 2022.09.30 16:57:27-04'00'	TOWN: PROJECT NO.	
				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	STATE O	F CONN	ECTICUT	Mott MacDonald 175 Capital Blvd		DRAWING NO.	

DEPARTMENT OF TRANSPORTATION

Filename: ...\New_Revision_Sheet.dgn

Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067.

SHEET NO. **02.01**

DRAWING TITLE:

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEET NO. Plotted Date: 10/7/2011

REVISION DESCRIPTION

REV. DATE

		03 - HIGHWAY INDEX OF DRAWINGS		
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE	
HWY-01	HIGHWAY INDEX OF DRAWINGS			
HWY-02	TYPICAL SECTIONS - 01			
HWY-03	TYPICAL SECTIONS - 02			
HWY-04	ROADWAY PLAN			
HWY-05	ALIGNMENT AND LAYOUT PLAN			
HWY-06	ARROWHEAD ROAD PROFILE			
HWY-07	DRAINAGE AND GRADING PLAN			
HWY-08	ARROWHEAD ROAD CROSS SECTIONS - 01			
HWY-09	ARROWHEAD ROAD CROSS SECTIONS - 02			
HWY-10	ARROWHEAD ROAD CROSS SECTIONS - 03			
HWY-11	TEMPORARY ROADWAY PLAN			
HWY-12	TEMPORARY ROADWAY PROFILE			
HWY-13	TEMPORARY ALIGNMENT AND LAYOUT PLAN			
HWY-14	STEEL-BACKED TIMBER GUIDERAIL TYPE A LEADING ATTACHMENT AND SYSTEMS 2.	AND 3		
HWY-15	STEEL-BACKED TIMBER GUIDERAIL TYPE A HARDWARE DETAILS			
HWY-16	STEEL-BACKED TIMBER GUIDERAIL - TERMINAL SECTION			
HWY-17	ENDWALL DETAILS			

DESIGNED BY:
MOTT

MOTT M MACDONALD I 175 Capital Blvd 4th Floor Rocky Hill, CT 06067 No. 28869

Jeffrey J. Long 2022.09.30 16:56:39-04'00'

> FDP SUBMISSION SEPTEMBER 28, 2022

V. DATE

CHECKED BY: M.D.G.

DESIGNER/DRAFTER: D.T.K.

SIGNATURE/ BLOCK:

Mott MacDonald
175 Capital Blvd
4th Floor
Rocky Hill, CT 006067. MOTT MACDONALD

175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067



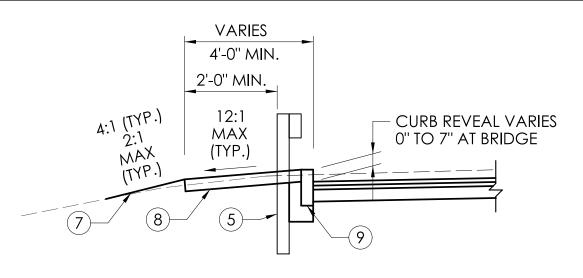
TOWN
OF
WILTON

PROJECT NUMBER: 0161-0143

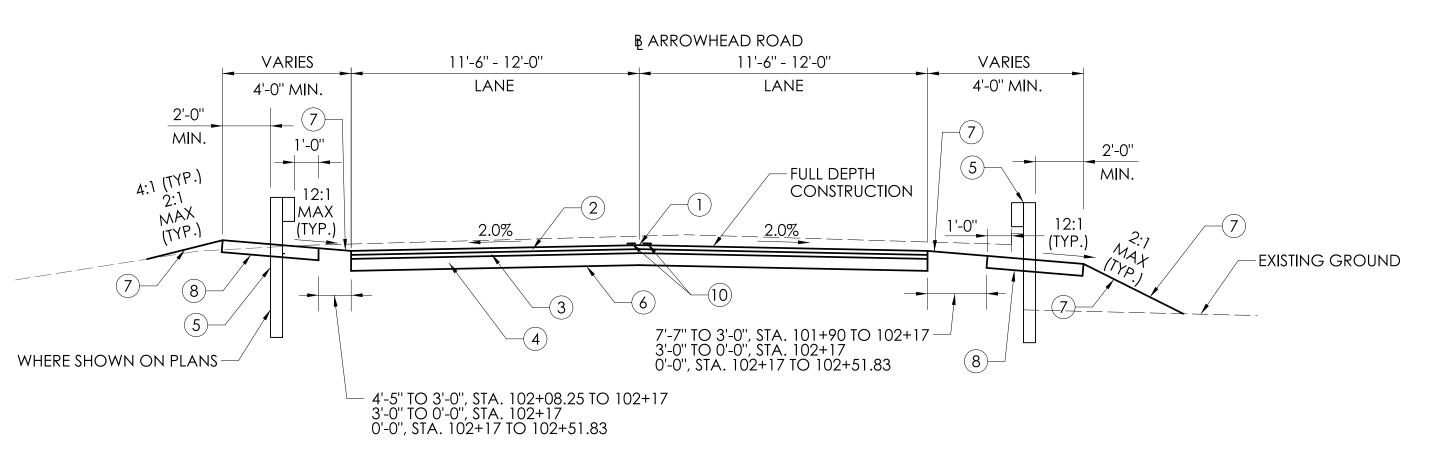
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON

DRAWING TITLE: HIGHWAY INDEX OF DRAWINGS

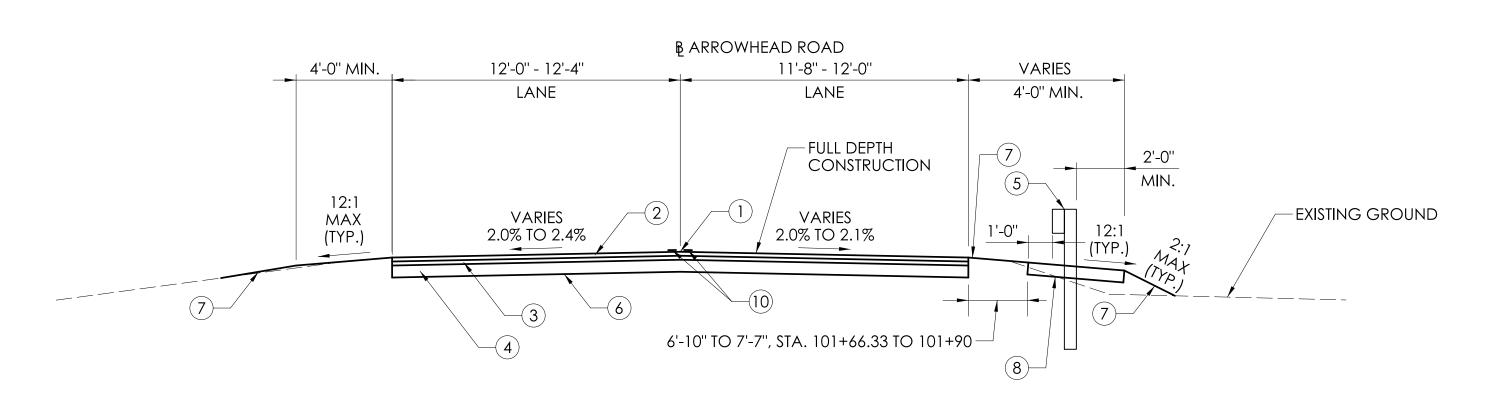
DRAWING NO.
HWY-01
SHEET NO.
03.01



PROPOSED ROADWAY SECTION WITH GRANITE STONE TRANSITION CURB AT BRIDGE STA 102+40.33 TO 102+60.33 LEFT AND RIGHT STA 103+28.33 TO 103+48.33 LEFT AND RIGHT



PROPOSED ROADWAY SECTION STA 101+90 TO STA 102+51.83



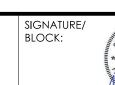
PROPOSED ROADWAY SECTION
STA 101+50 TO STA 101+90
CROSS SLOPE VARIES/TAPER TO MATCH EXISTING

CROSS SLOPE VARIES/TAPER TO MATCH EXISTING

DATE REVISION DESCRIPTION

DESIGNER/DRAFTER: C.A.B.

NOT TO SCALE



Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067.











PROJECT NUMBER: 0161-0143

PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON

DRAWING TITLE: TYPICAL SECTIONS - 01

FDP SUBMISSION SEPTEMBER 28, 2022

LEGEND:

1) POINT OF APPLICATION OF GRADE

2" HMA S0.375 (TRAFFIC LEVEL 2)

(4) 6" PROCESSED AGGREGATE BASE

(5) STEEL-BACKED TIMBER GUIDERAIL

6" PROCESSED AGGREGATE

7 4" FURNISHING AND PLACING TOPSOIL, TURF ESTABLISHMENT

GRANITE STONE TRANSITION CURBING

(6) FORMATION OF SUBGRADE

4" YELLOW EPOXY RESIN PAVEMENT MARKINGS

3 2" HMA S0.5 (TRAFFIC LEVEL 2)

HWY-02
SHEET NO.
03.02

LASTED SAVED BY: LOR33993 FILE NAME: C:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract - Towns.cel PLOTTED DATE: 9/29/2022

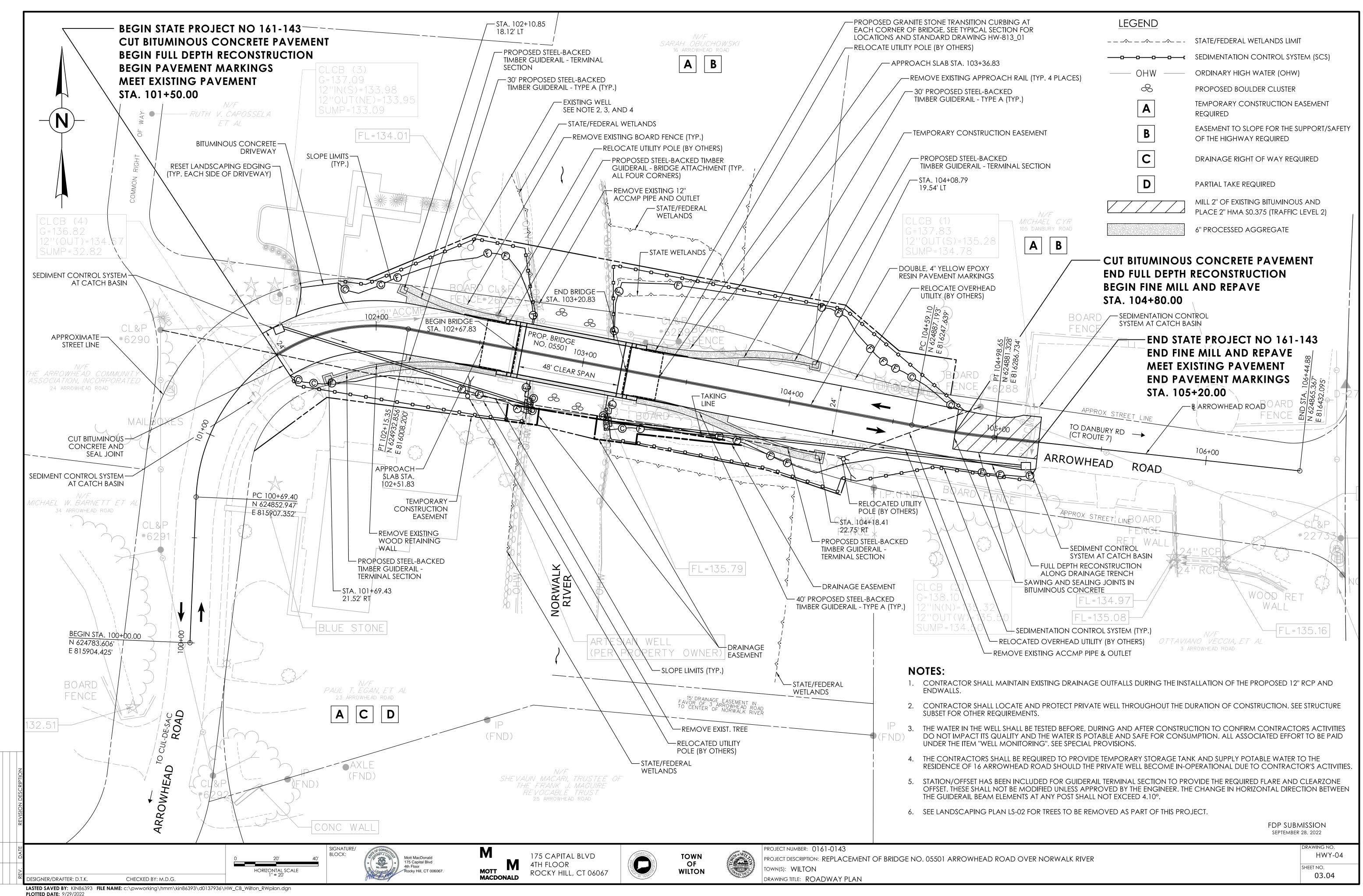
CHECKED BY: M.D.G.

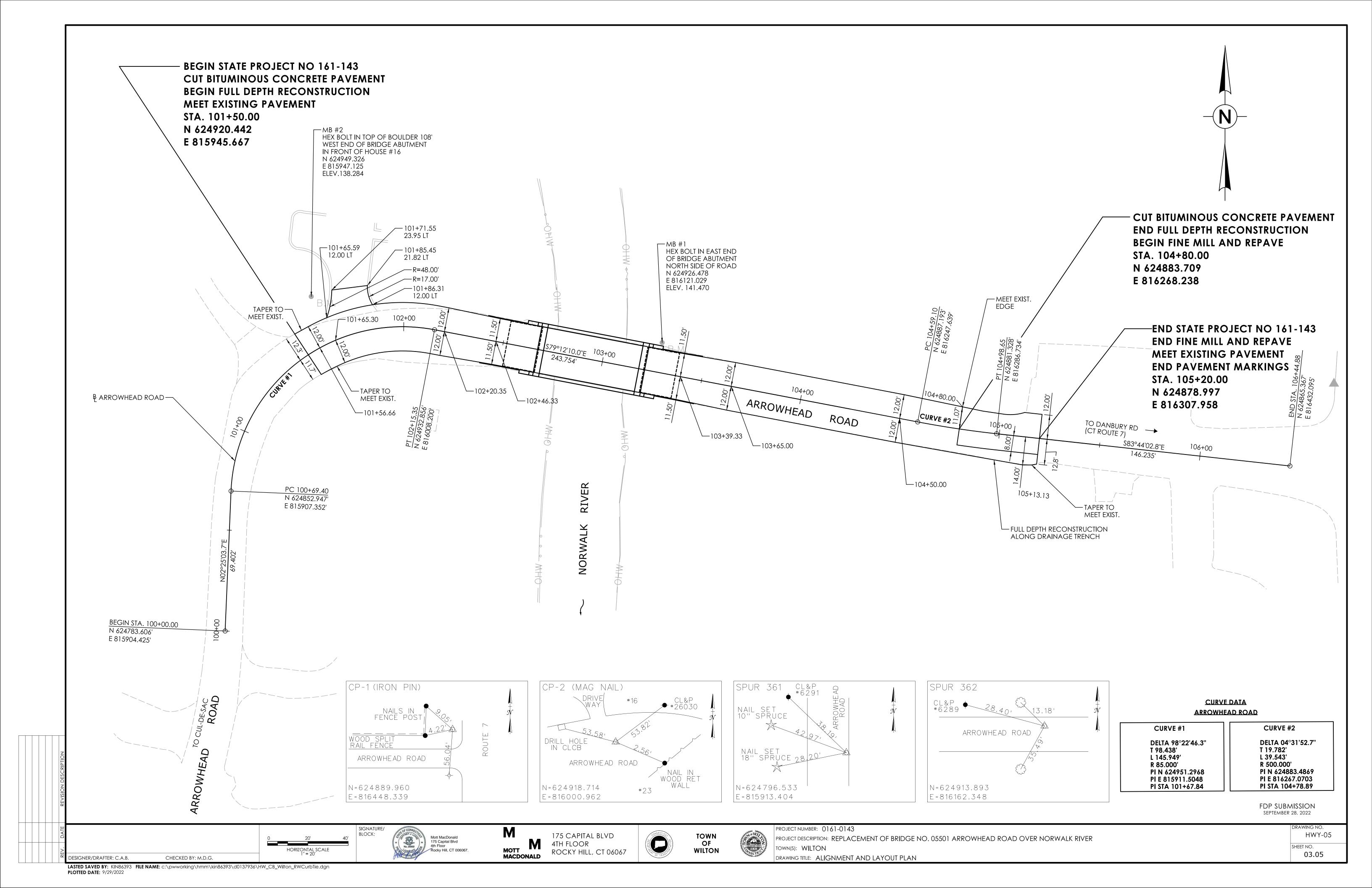
₽ TEMPORARY ROAD 1'-0" MIN. 6'-0'' 6'-0'' LEGEND: (TYP.) 2'-0" MIN. 1) POINT OF APPLICATION OF GRADE 0'-0" TO 9'-2" - TEMPORARY TRAFFIC BARRIER (TYP.) - EXISTING GROUND 2" HMA S0.375 (TRAFFIC LEVEL 2) (TYP.) (3) 2" HMA S0.5 (TRAFFIC LEVEL 2) 1.0% MIN. 4) 6" PROCESSED AGGREGATE BASE (5) STEEL-BACKED TIMBER GUIDERAIL - SHIM AS REQUIRED (VARIABLE DEPTH) (6) FORMATION OF SUBGRADE - EXISTING EDGE OF PAVEMENT 7 4" FURNISHING AND PLACING TOPSOIL, TURF ESTABLISHMENT **TEMPORARY ROADWAY SECTION** 6" PROCESSED AGGREGATE STA 202+69.41 TO STA 202+82 GRANITE STONE TRANSITION CURBING (10) 4" YELLOW EPOXY RESIN PAVEMENT MARKINGS BE TEMPORARY ROAD (1) 3" TEMPORARY PAVEMENT HMA \$0.5 (TRAFFIC LEVEL 2) 6'-0'' (12) 8" SUBBASE MIN. 13) BORROW 2'-0" MIN. TEMPORARY TRAFFIC BARRIER (TYP.) (TYP.) 1.0% MIN. EXISTING GROUND-12:1 TEMPORARY ROADWAY SECTION STA 200+45 TO STA 201+02.85 STA 201+92.85 TO 202+69.41 B ARROWHEAD ROAD 11'-1" - 12'-0" 12'-0" - 14'-0" LANE LANE 8'-0'' 4'-1" - 5'-10" MATCH EXISTING — EDGE (TYP.) MATCH EXIST. (2) MATCH EXIST. __EXISTING GROUND 1.5% TO 2.0% 2.0% TO 2.5% 12:1 — 2" FINE MILL AND REPAVE PROPOSED ROADWAY SECTION STA 104+80 TO STA 105+20 B ARROWHEAD ROAD **VARIES** 11'-1" - 12'-0" 11'-6" - 12'-0" **VARIES** 4'-0" MIN. LANE LANE 4'-0" MIN. 2'-0'' -EXISTING GROUND PROPOSED ROADWAY SECTION STA 103+36.83 TO STA 104+80 SIGNATURE/ BLOCK: 175 CAPITAL BLVD TOWN OF WILTON CHAPTE 102 Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067. PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER NOT TO SCALE 4TH FLOOR MOTT MACDONALD ROCKY HILL, CT 06067 DRAWING TITLE: TYPICAL SECTIONS - 02 DESIGNER/DRAFTER: C.A.B. CHECKED BY: M.D.G. LASTED SAVED BY: KIN86393 FILE NAME: c:\pwworking\hmm\kin86393\d0137936\HW_XX_CB_Wilton_RWTypXsec_02.dgn PLOTTED DATE: 9/29/2022

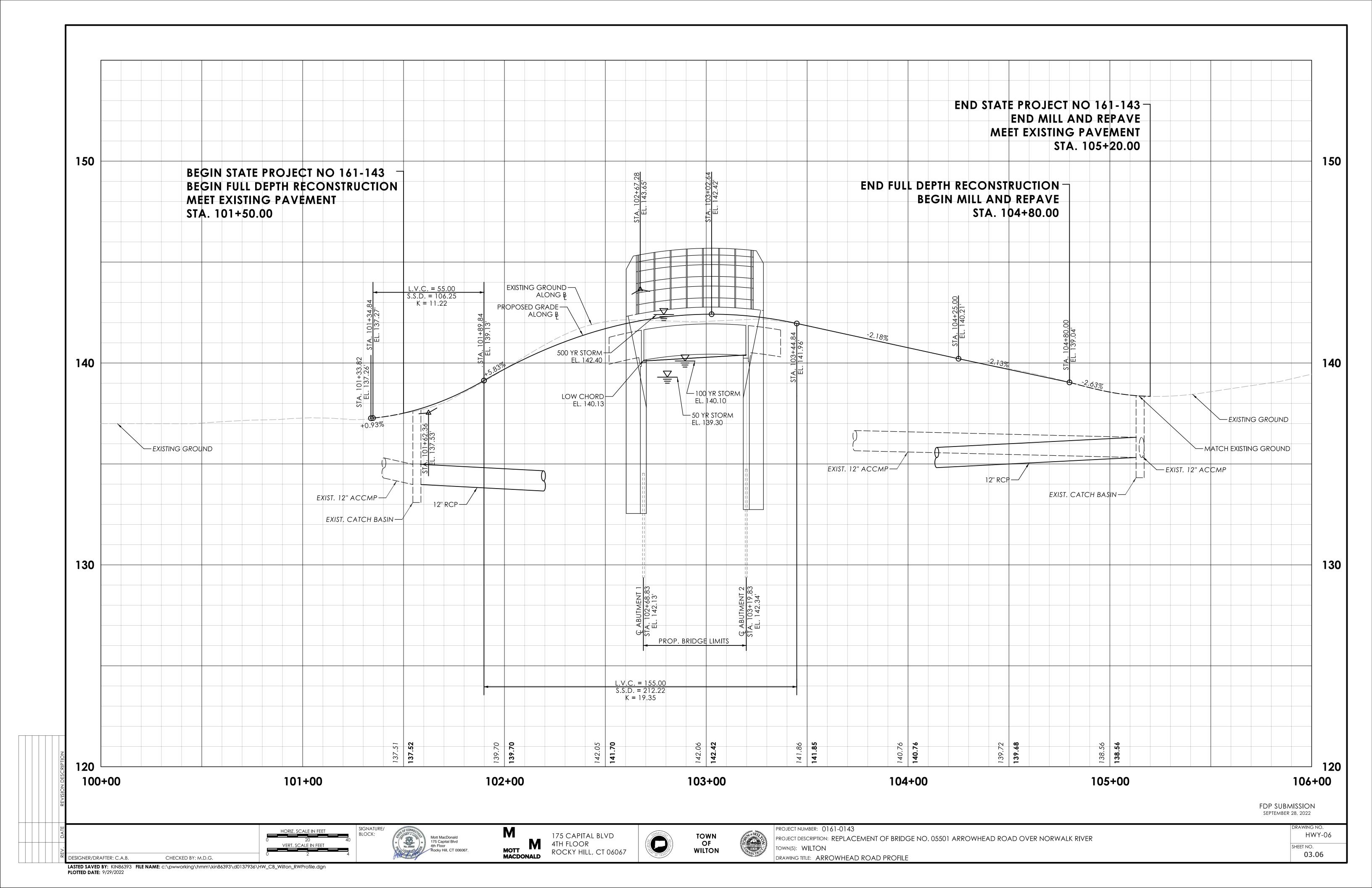
FDP SUBMISSION SEPTEMBER 28, 2022

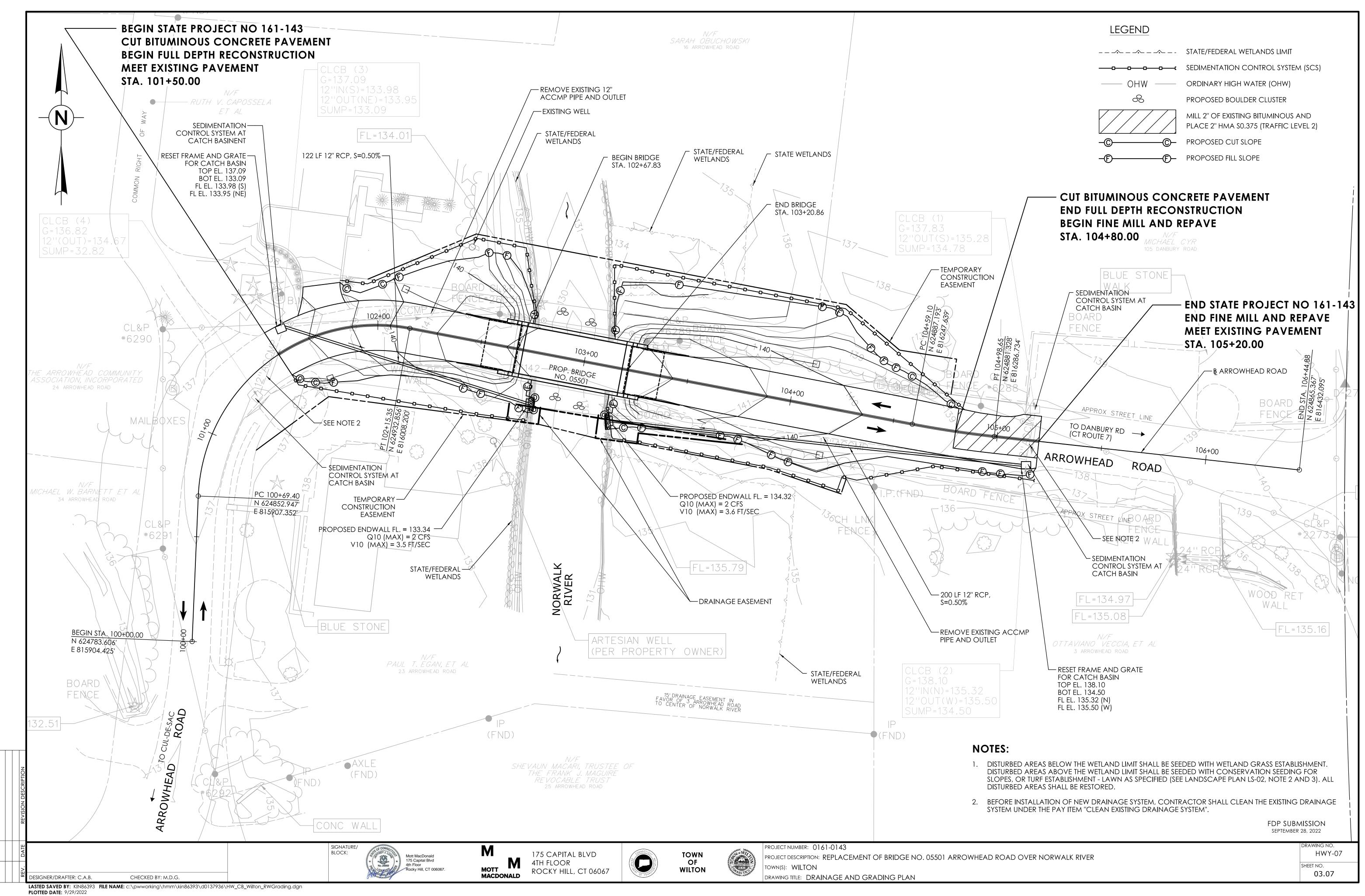
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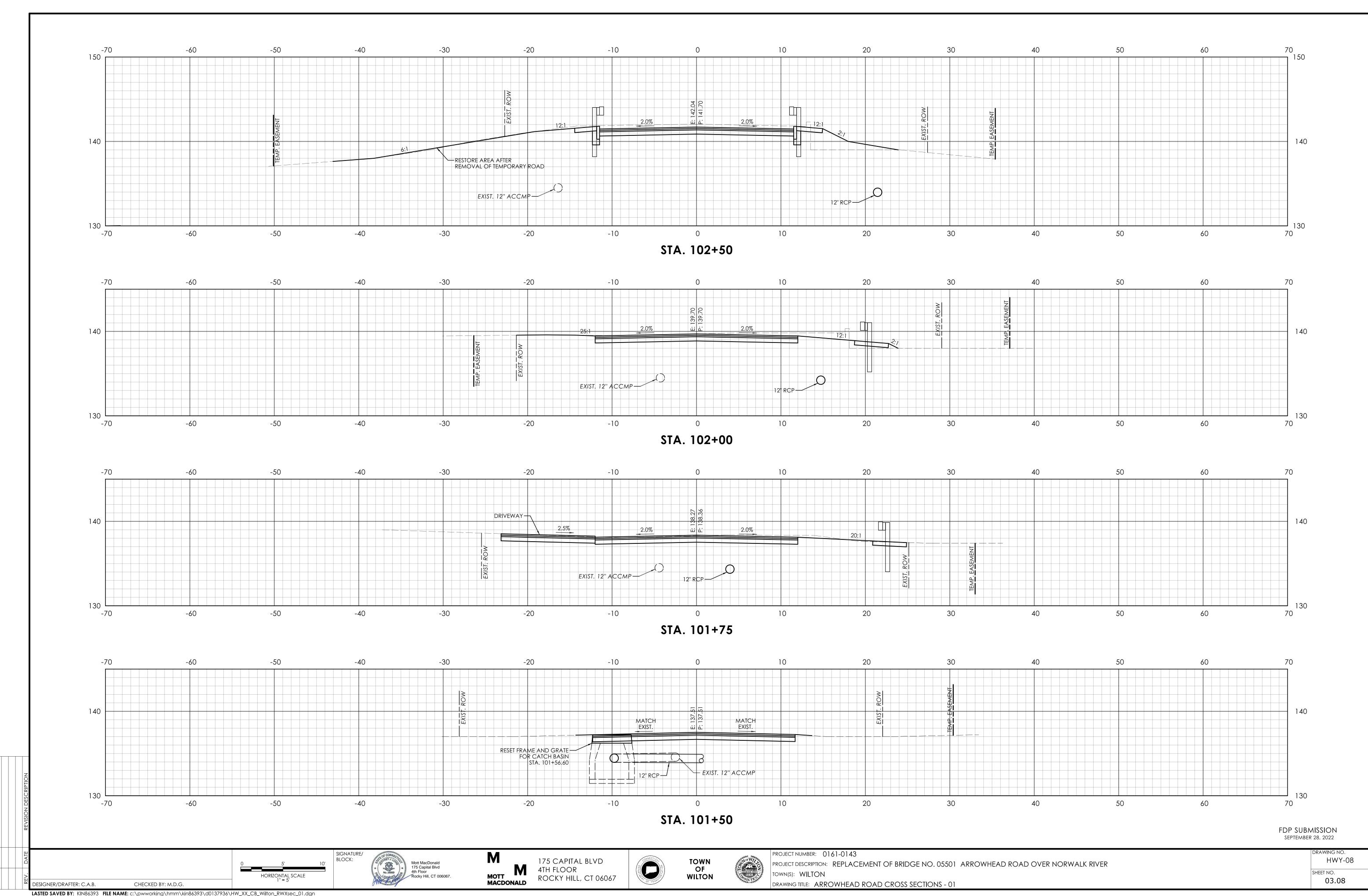
03.03

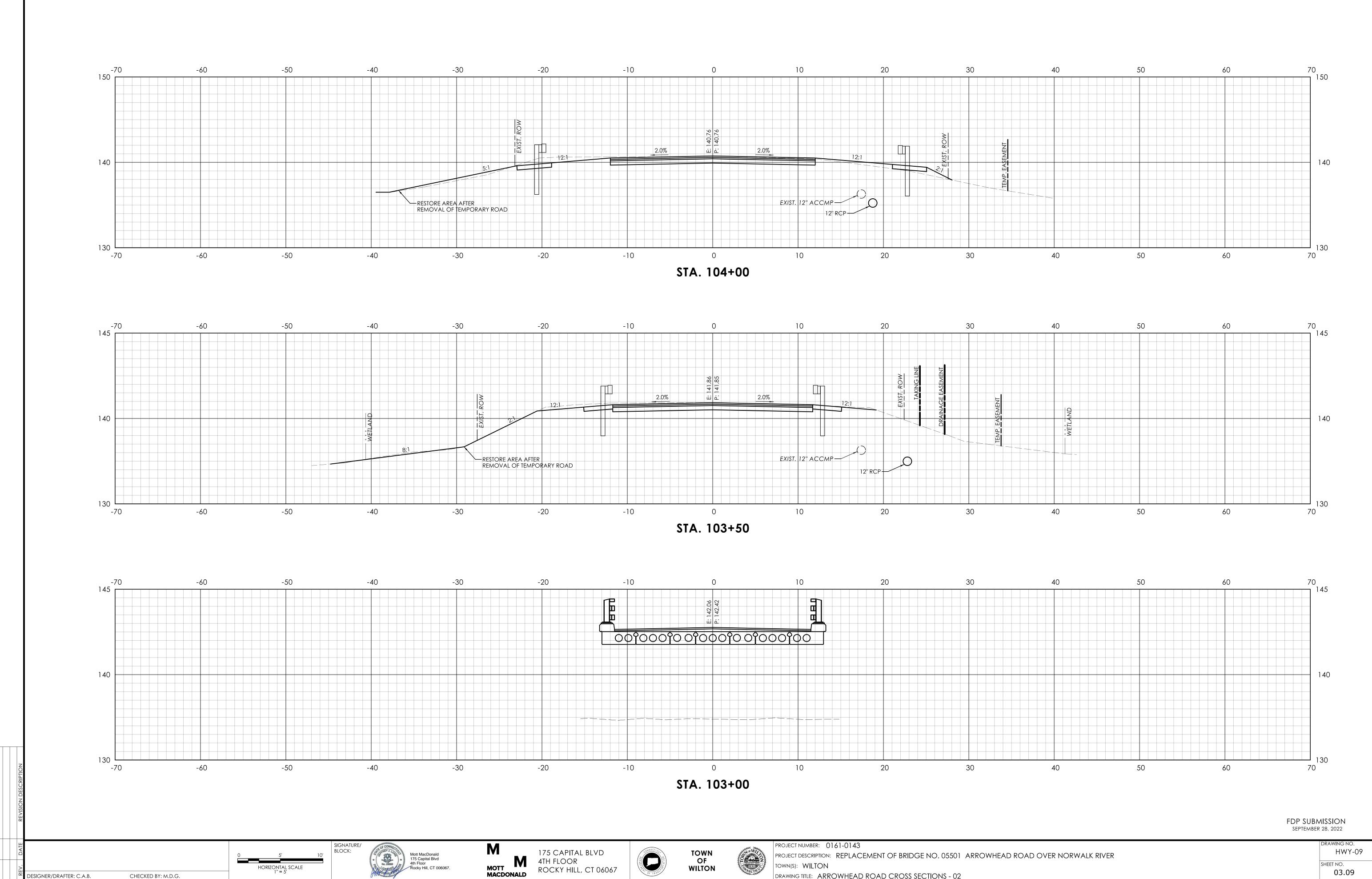










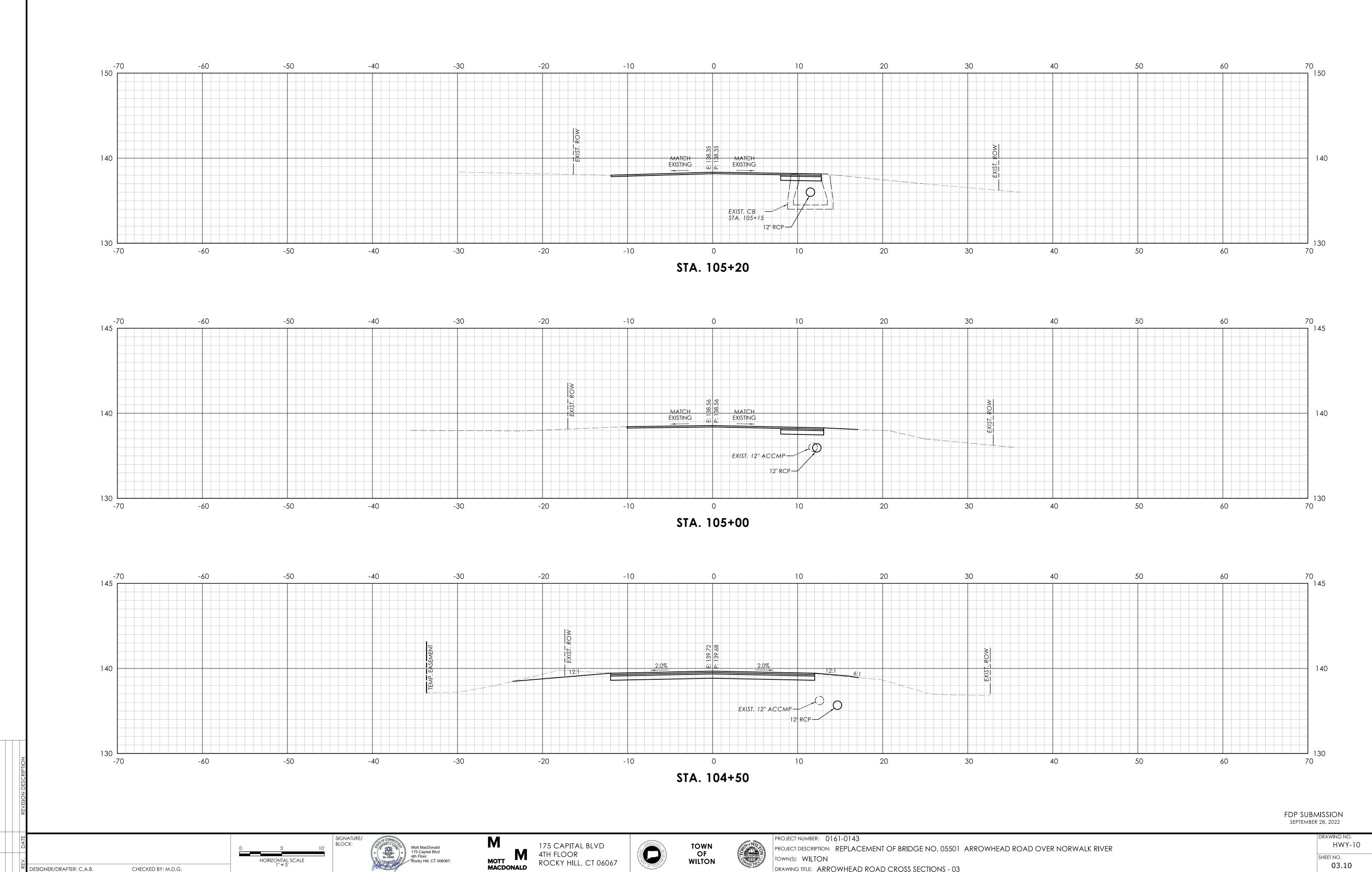


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MOTT MACDONALD

DRAWING TITLE: ARROWHEAD ROAD CROSS SECTIONS - 02

03.09

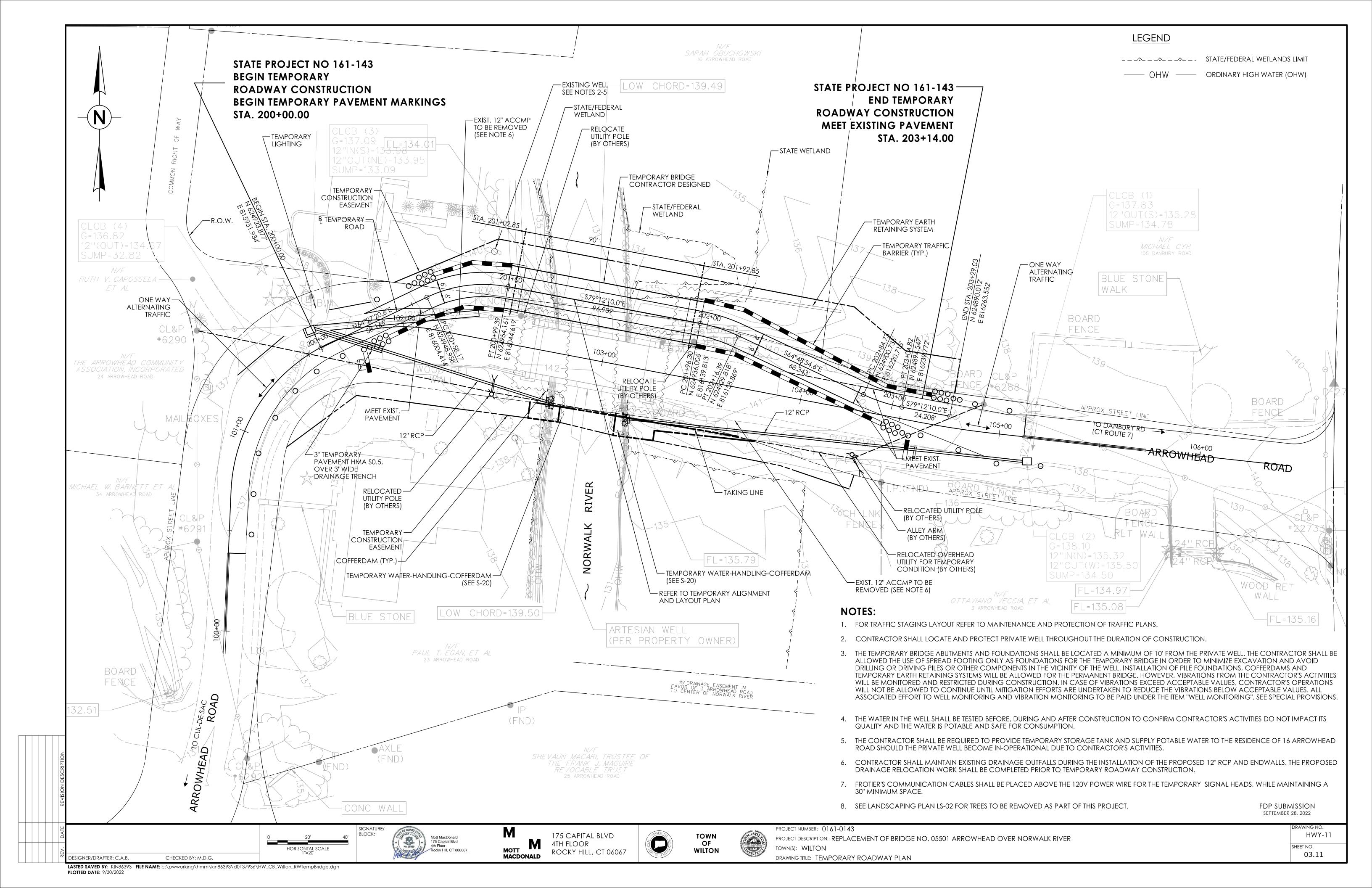


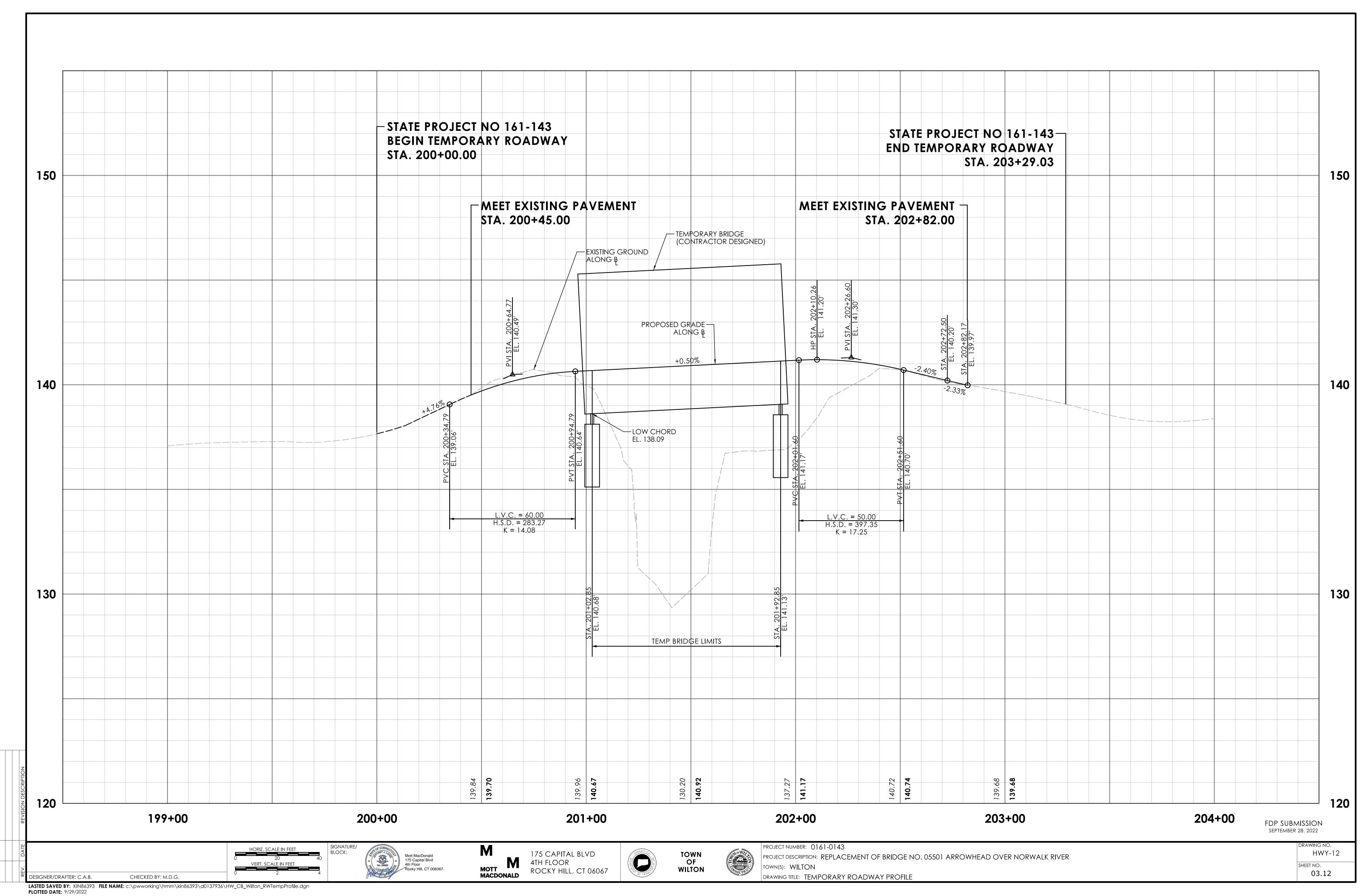
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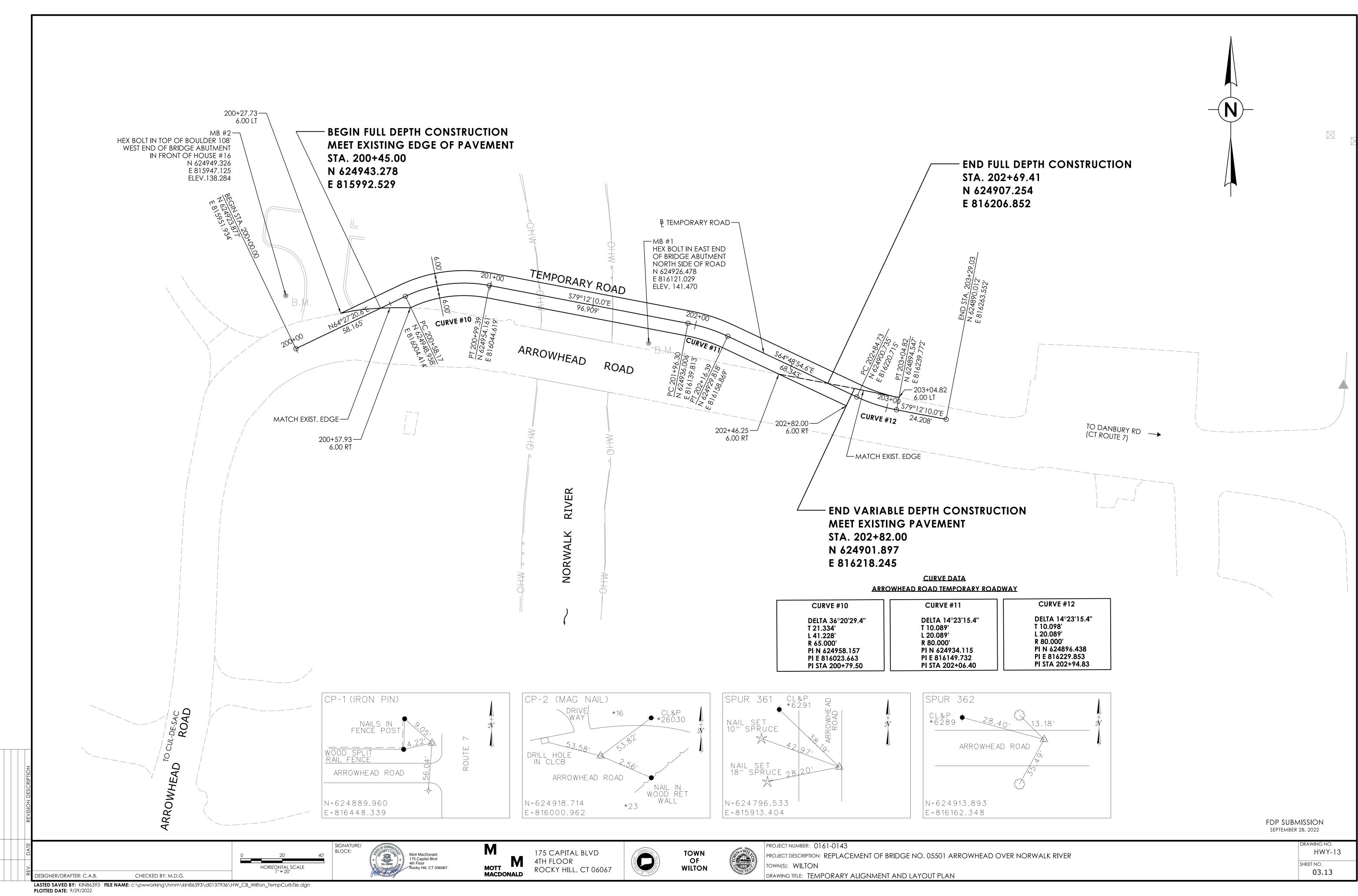
MOTT MACDONALD

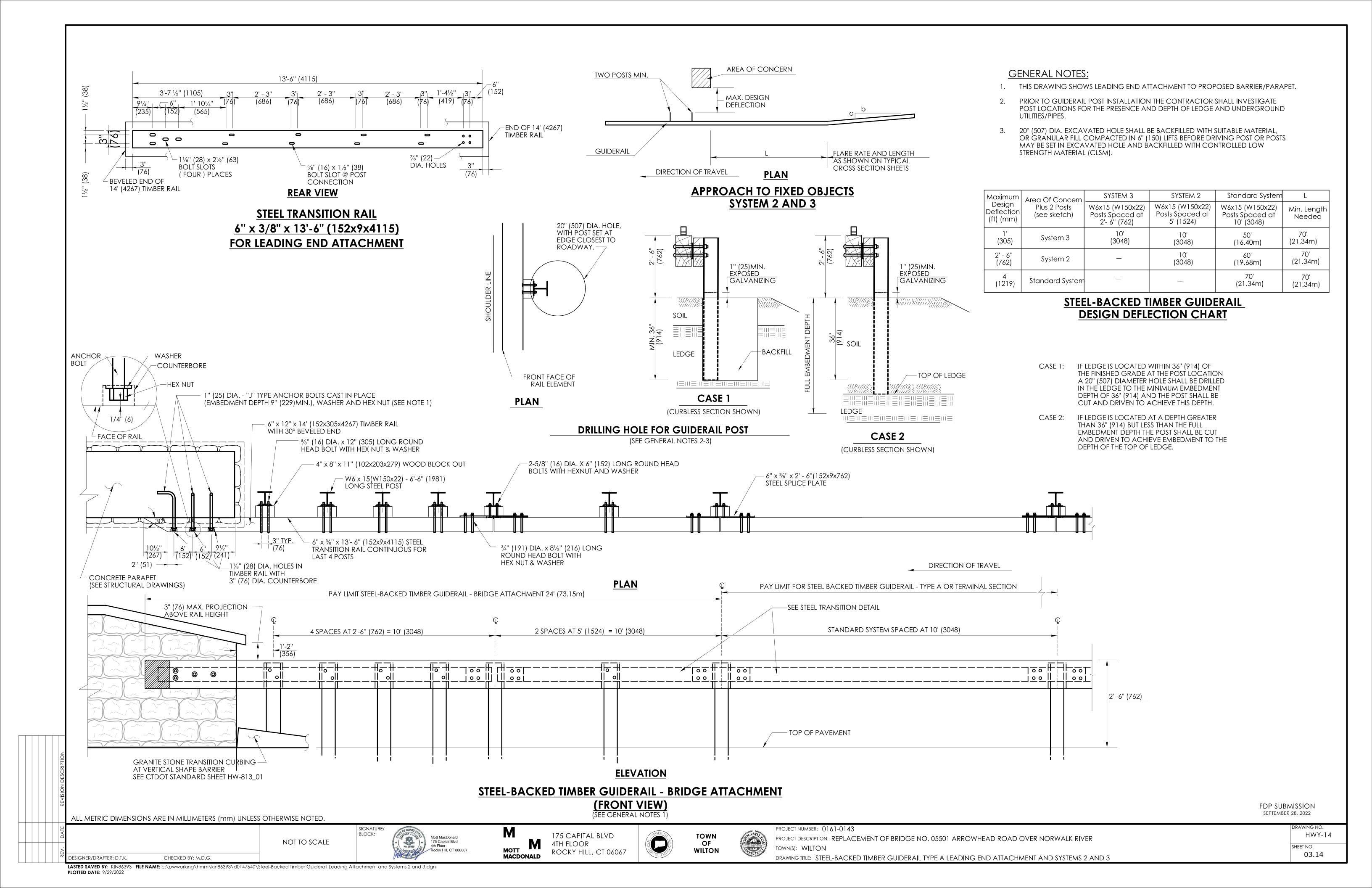


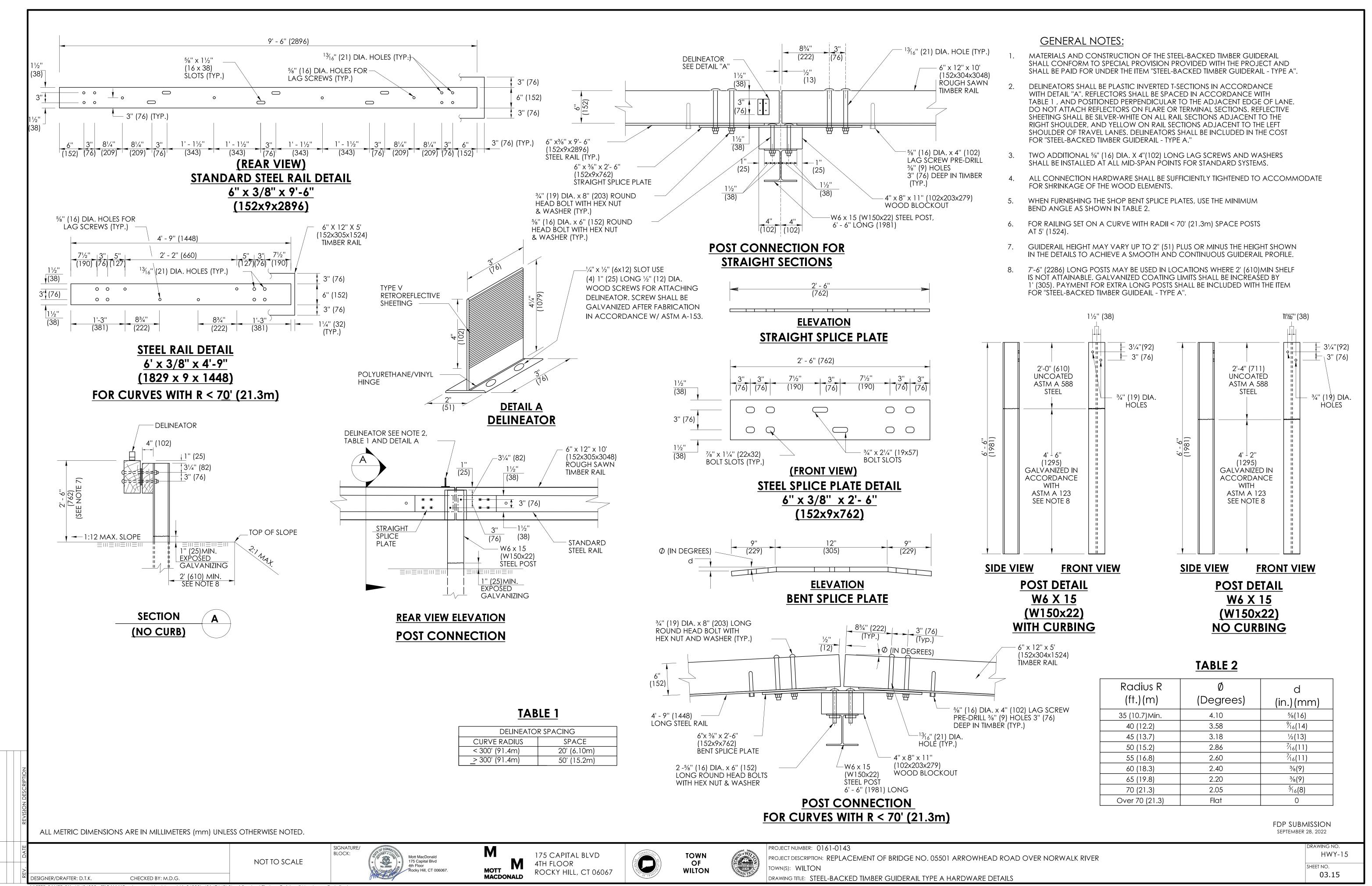




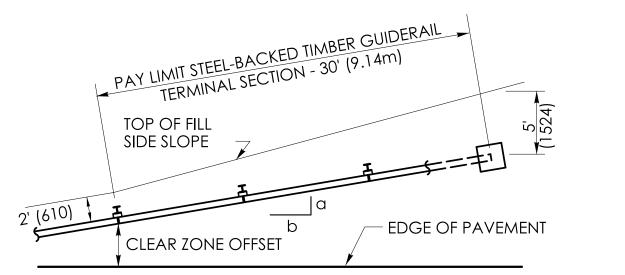


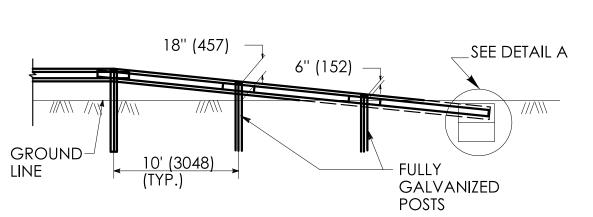






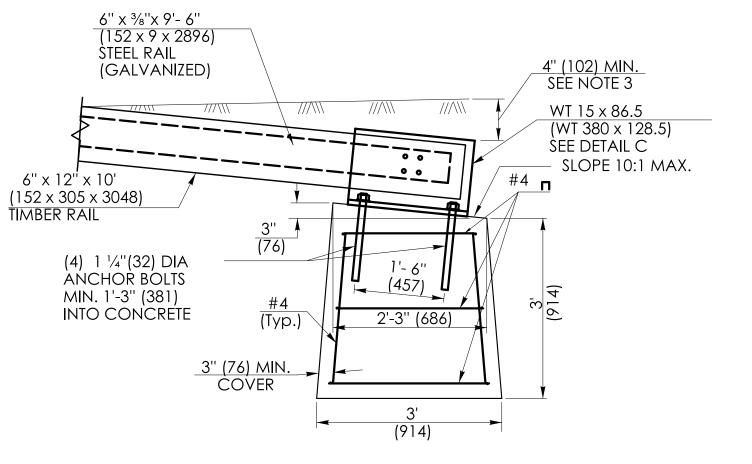
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ELEVATION PLAN STEEL-BACKED TIMBER GUIDERAIL TERMINAL SECTION (BURIED END ANCHORAGE TYPE I)

NOTE: SEE PLAN SHEETS FOR FLARE RATE a:b.



GENERAL NOTES:

1. MATERIALS AND CONSTRUCTION OF THE STEEL-BACKED TIMBER GUIDERAIL

END ANCHORS SHALL CONFORM TO THE SPECIAL PROVISIONS PROVIDED WITH THE PROJECT AND BE PAID UNDER THE ITEM FOR "STEEL-BACKED TIMBER

GUIDERAIL - TERMINAL SECTION". ALL HARDWARE IN CONTACT WITH THE GROUND SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIAL PROVISION.

2. FOR THE END ANCHOR TYPE I, BURY THE GUIDERAIL ANCHOR AND ELEMENT

TO OBTAIN A MINIMUM COVER OF 4" (102). SEE DETAIL A.

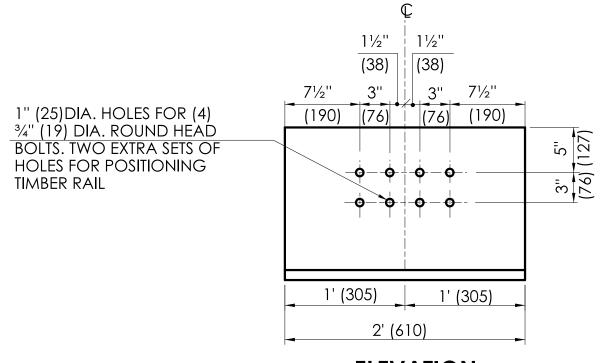
BETWEEN FILL AND CUT AS DIRECTED BY THE ENGINEER.

3. BEGIN THE FLARE AT THE NEAREST POST TO A TRANSITION POINT

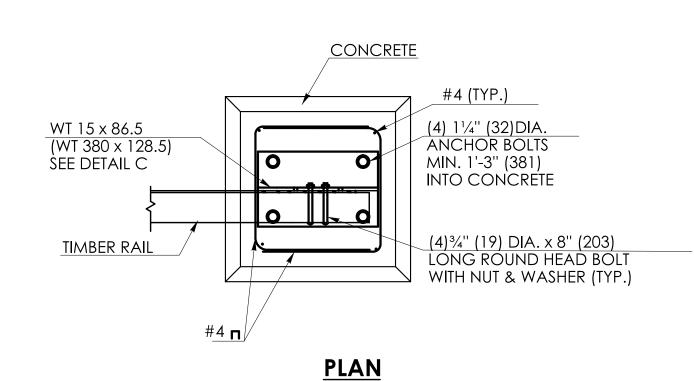
LENGTH AND RATE REQUIRED AS DIRECTED BY THE ENGINEER.

4. THE GUIDERAIL FLARE SHOWN ON THE PLAN SHEETS IS THE MINIMUM

ELEVATION DETAIL A



ELEVATION DETAIL C WT 15 x 86.5 (GALVANIZED) (WT 380 X 128.5)



DETAIL D PLAN VIEW FOR TYPE I ANCHOR

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED.

FDP SUBMISSION SEPTEMBER 28, 2022

NOT TO SCALE

DESIGNER/DRAFTER: D.T.K.

SIGNATURE/ BLOCK:



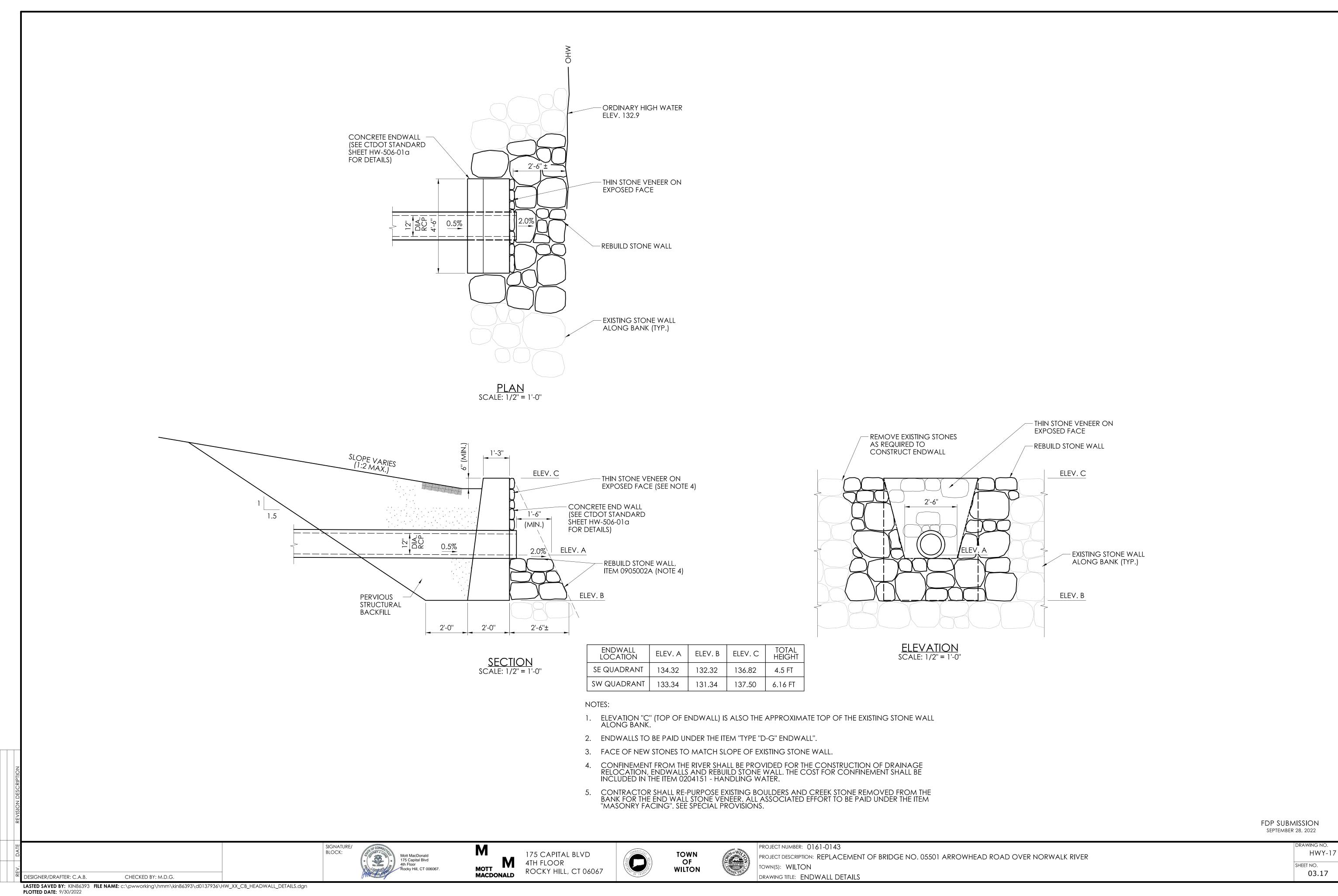












04 - TRAFFIC INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
TR-01	TRAFFIC INDEX OF DRAWINGS		
MPT-01	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 1		
MPT-02	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 2		
MPT-03	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 3		
TCS-01	TEMPORARY TRAFFIC SIGNAL CONTROL PLAN - STAGE 1		
TCS-02	TEMPORARY TRAFFIC SIGNAL CONTROL PLAN - STAGE 2		
TCS-03	TEMPORARY TRAFFIC SIGNAL CONTROL PLAN - STAGE 3		
TR-GS_01	SIGN FACE SHEET ALUMINUM (X) R-SERIES TYPICAL SIGN DETAILS		





FDP SUBMISSION SEPTEMBER 28, 2022

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VN ENGINEE

Traffic • Infrastructure

No. 23842

VN ENGINEE

Traffic • Infrastructure

No. 23842

VN ENGINEE

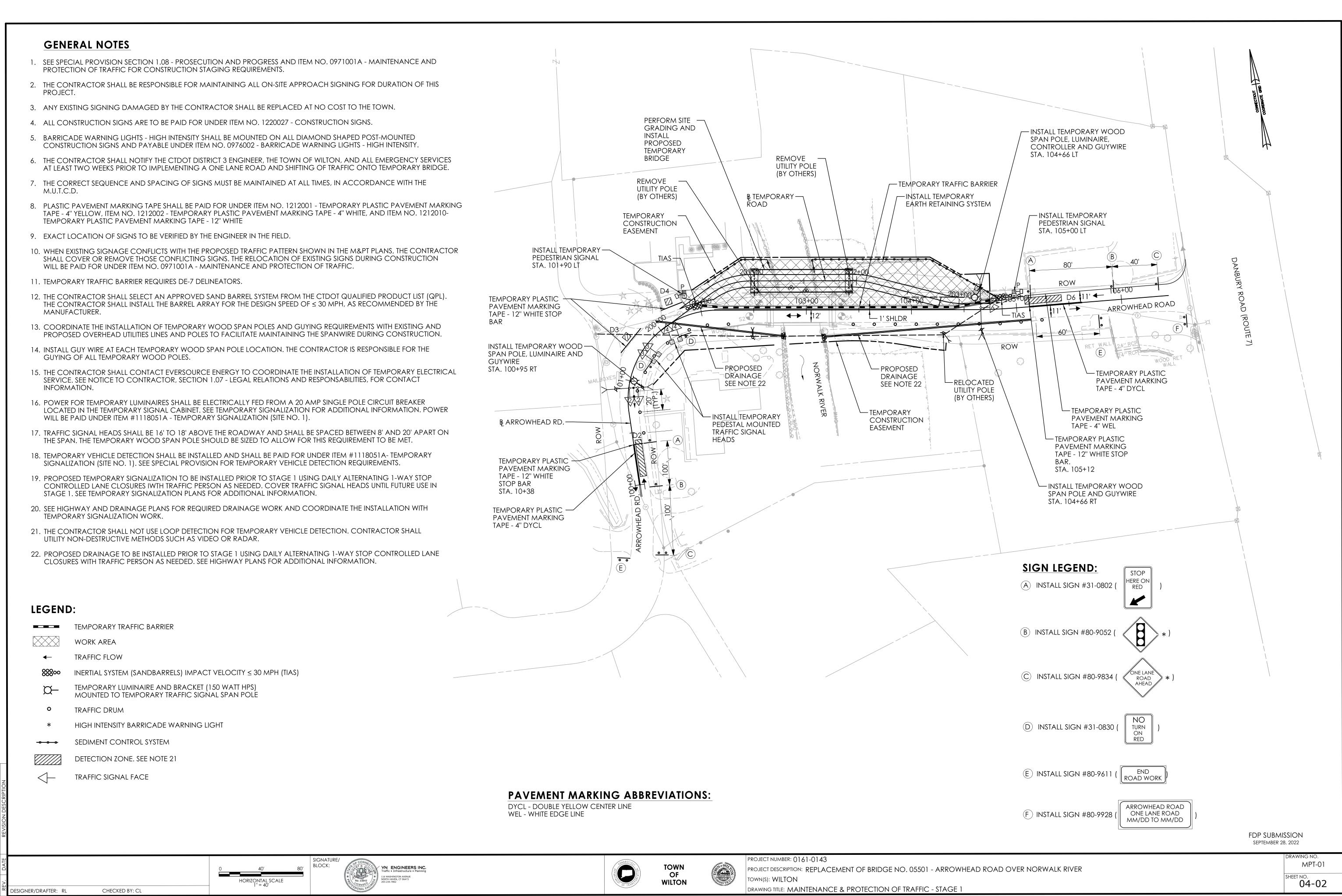
Traffic • Infrastructure

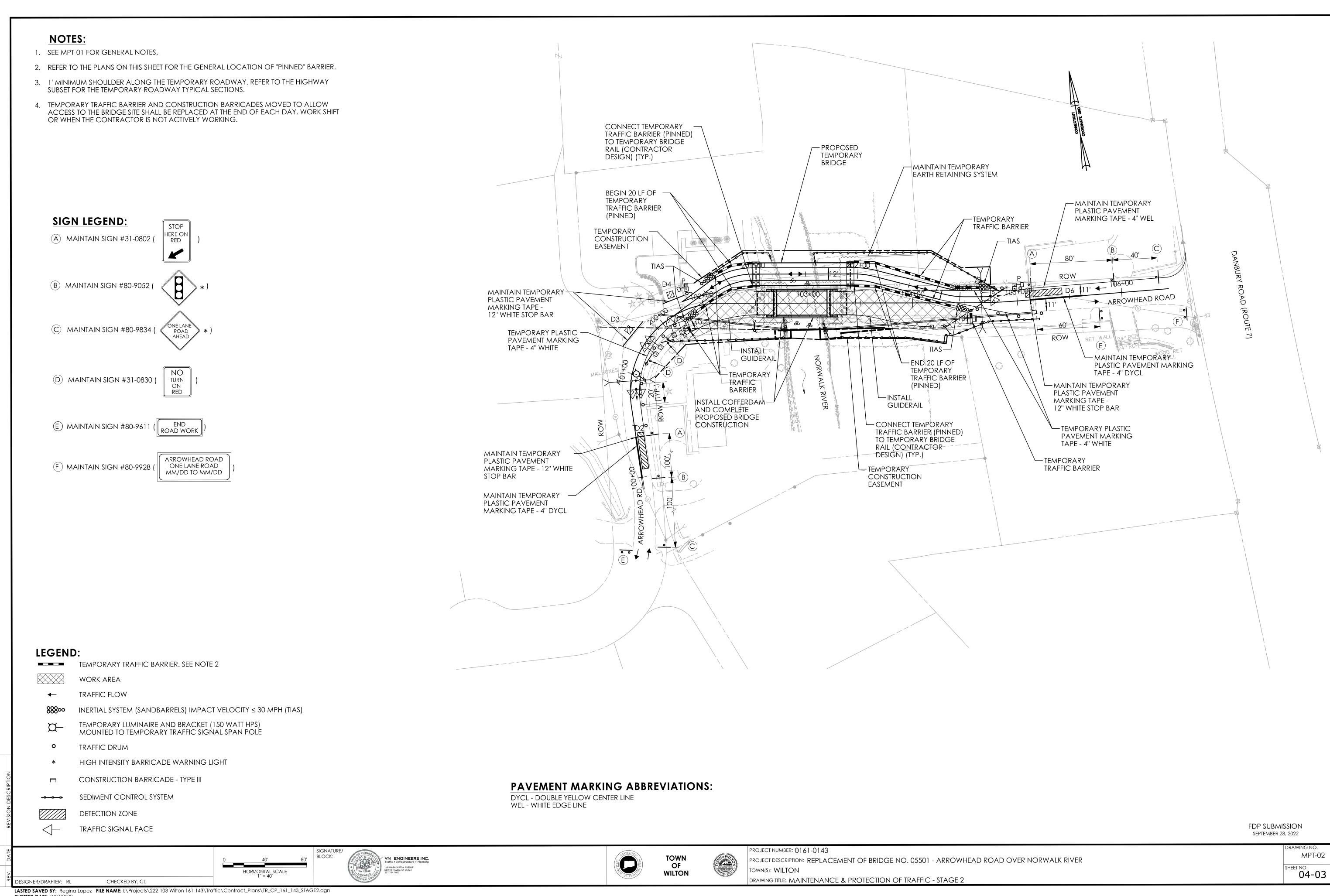
203.234.7862



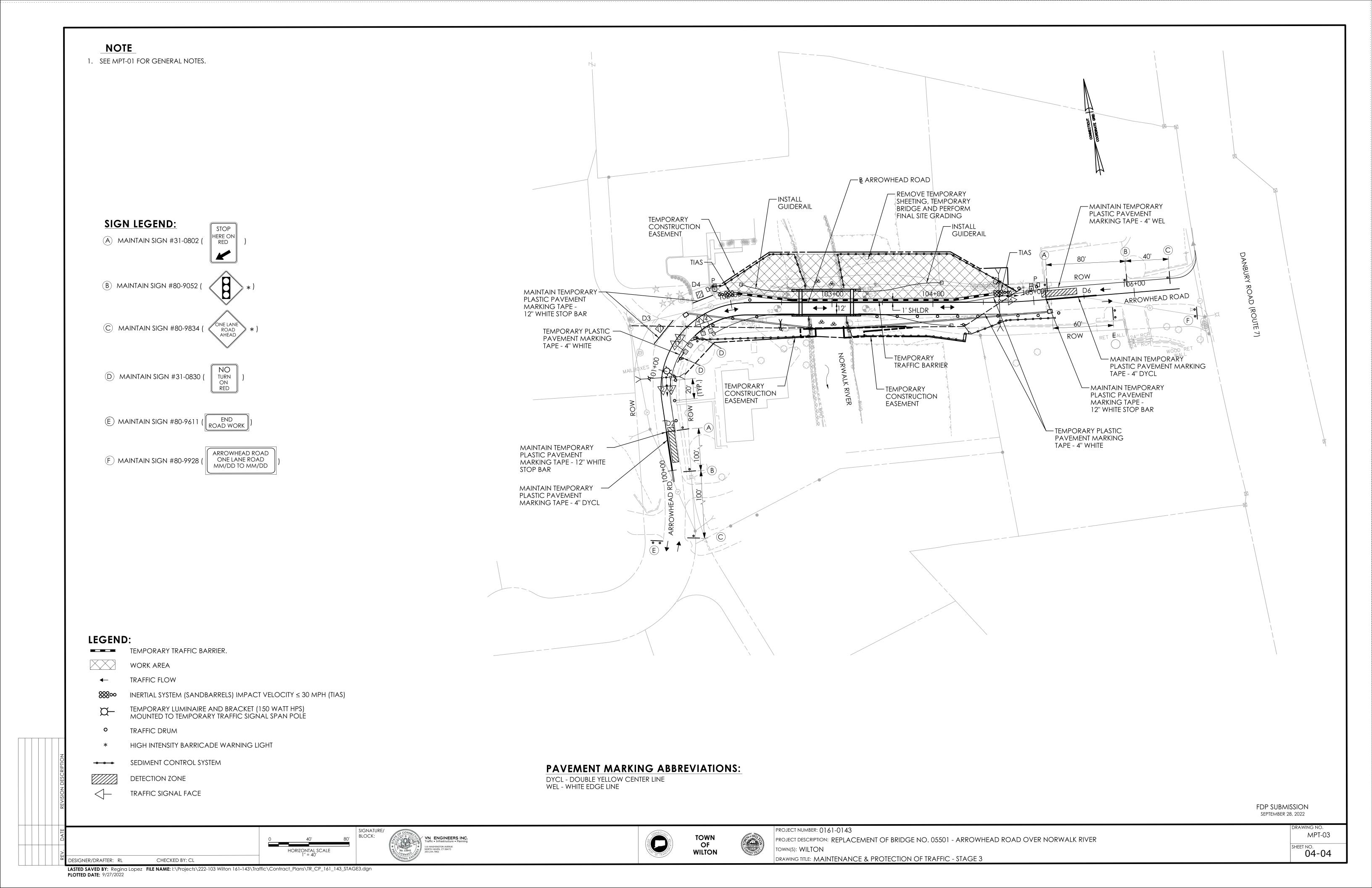
TOWN OF WILTON

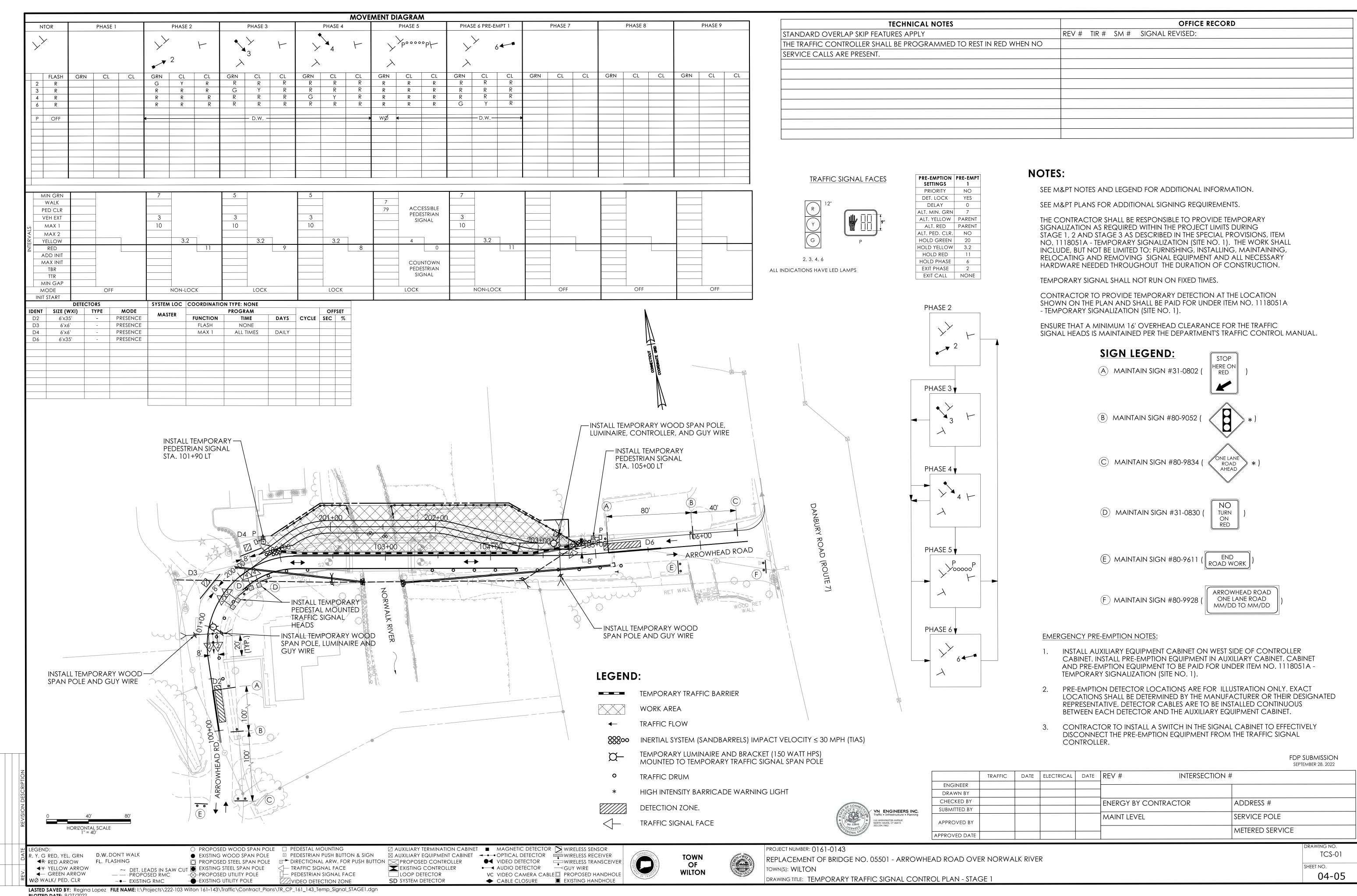




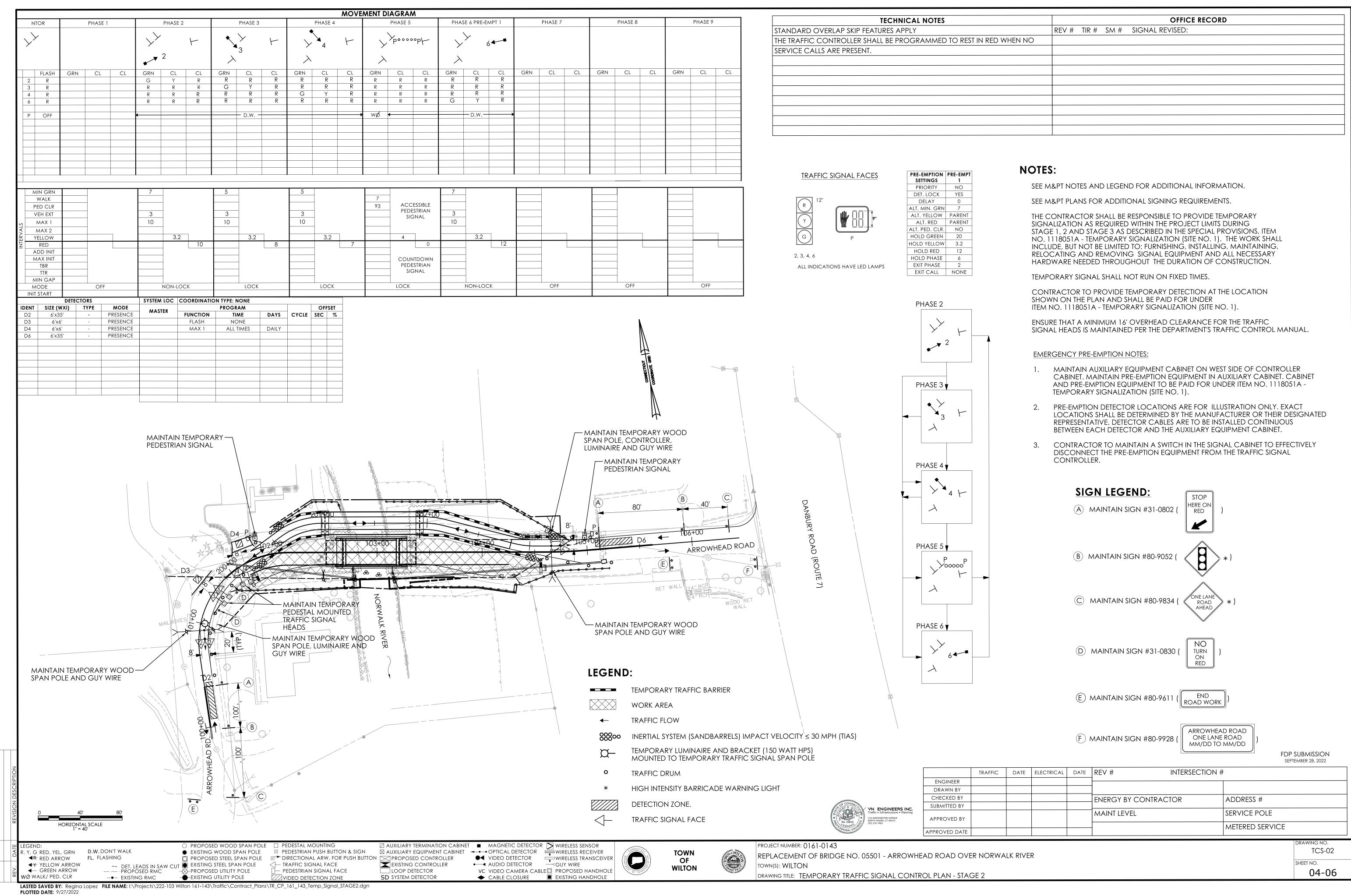


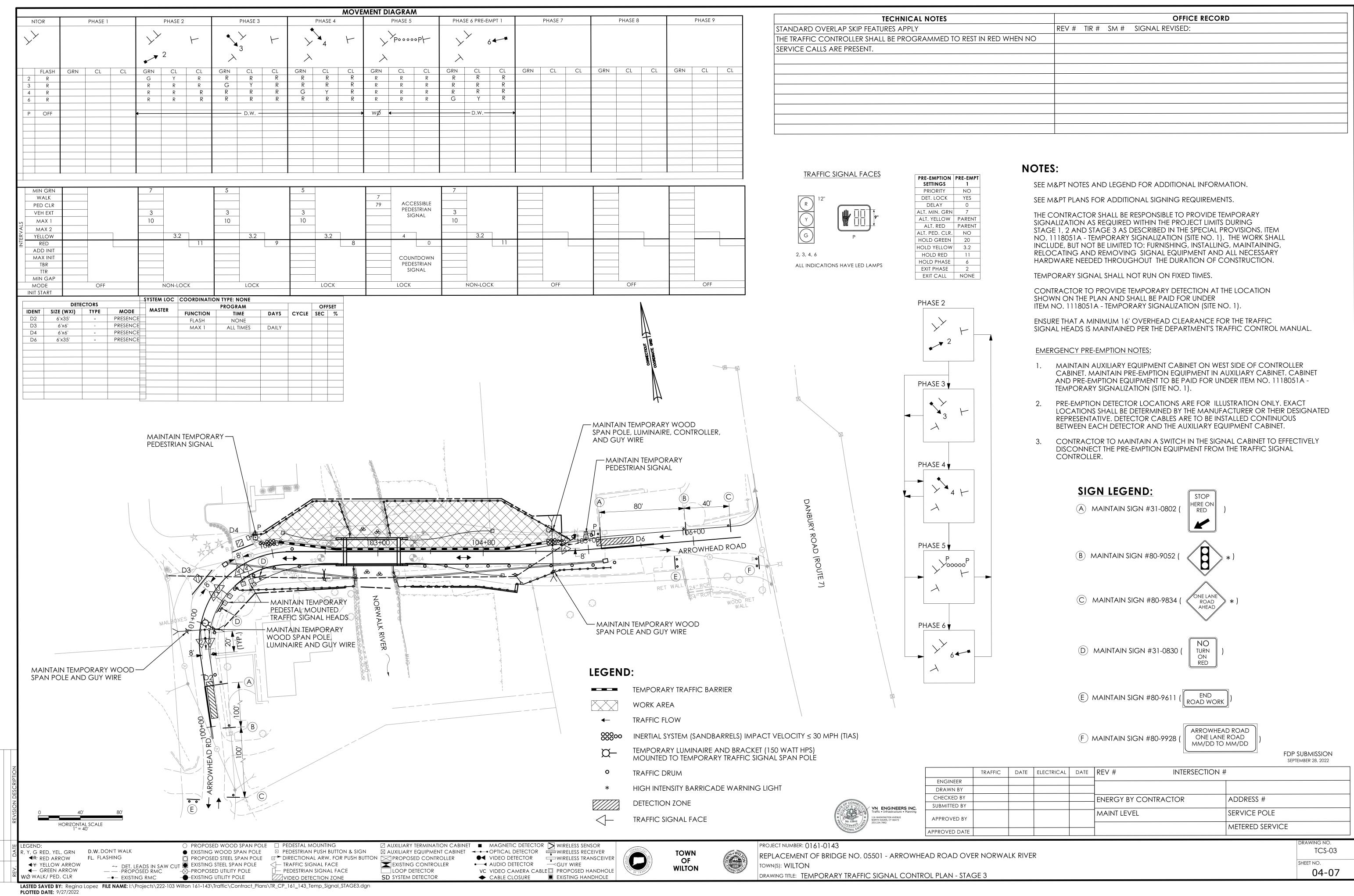
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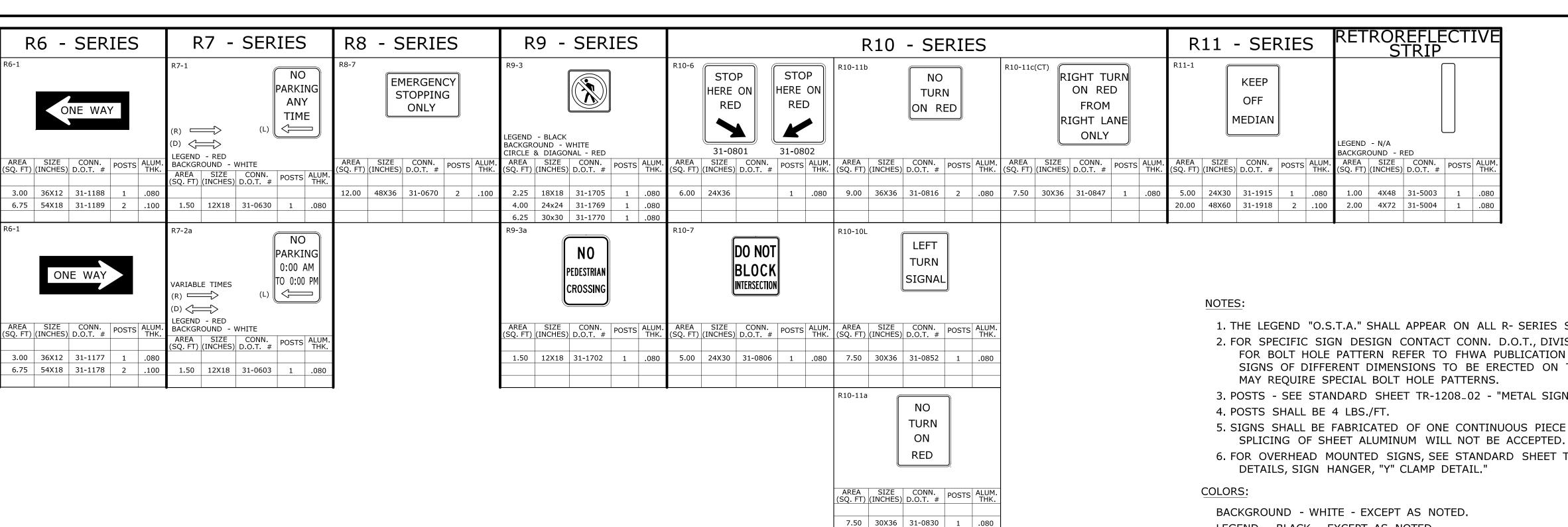




PLOTTED DATE: 9/27/2022







- 1. THE LEGEND "O.S.T.A." SHALL APPEAR ON ALL R- SERIES SIGNS EXCEPT WHEN SUFFIXED WITH THE LETTER "Z".
- 2. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS".
 - SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
- 3. POSTS SEE STANDARD SHEET TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
- 5. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM.
- 6. FOR OVERHEAD MOUNTED SIGNS, SEE STANDARD SHEET TR-1114_01 "BONDING AND UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAIL."

BACKGROUND - WHITE - EXCEPT AS NOTED.

LEGEND - BLACK - EXCEPT AS NOTED.

ALL SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

SIGNATURE/ BLOCK:



12.00 36X48 31-0819 2 .100





PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 - ARROWHEAD ROAD OVER NORWALK RIVER DRAWING TITLE: SIGN FACE SHEET ALUMINUM (X) R-SERIES TYPICAL SIGN DETAILS

TR-GS_01

04-08

DESIGNER/DRAFTER: R.L. CHECKED BY: R.G. LASTED SAVED BY: Regina Lopez FILE NAME: I:\Projects\222-103 Wilton 161-143\Traffic\Contract_Plans\TR_CP_161_143_CTDOT_TRAFFIC_GS.dgn PLOTTED DATE: 9/27/2022

N.T.S.

FDP SUBMISSION SEPTEMBER 28, 2022

		05 - STRUCTURE	
		INDEX OF DRAWINGS	
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
S-01	STRUCTURE INDEX OF DRAWINGS	S-15	TEMPORARY BRIDGE LAYOUT
S-02	GENERAL PLAN AND ELEVATION	S-16	3-TUBE CURB MOUNTED BRIDGE RAIL DETAILS - 1
S-03	STRUCTURAL GENERAL NOTES	S-17	3-TUBE CURB MOUNTED BRIDGE RAIL DETAILS - 2
S-04	BORING LOGS - 1	S-18	3-TUBE CURB MOUNTED BRIDGE RAIL DETAILS - 3
S-05	BORING LOGS - 2	S-19	WATER HANDLING AND CONSTRUCTION STAGING PLAN
S-06	PILE LAYOUT PLAN	S-20	WATER HANDLING AND CONSTRUCTION NOTES AND DETAILS
S-07	ABUTMENT NO. 1 AND WINGWALLS 1A & 1B	S-21	CONSTRUCTION DETAILS
S-08	ABUTMENT NO. 2 AND WINGWALLS 2A & 2B		
S-09	SUBSTRUCTURE REINFORCING		
S-10	FRAMING PLAN		
S-11	PRESTRESSED CONCRETE DETAILS - 1		
S-12	PRESTRESSED CONCRETE DETAILS - 2		
S-13	PRESTRESSED CONCRETE DETAILS - 3		
S-14	APPROACH SLAB DETAILS		

DESIGNED BY:

MOTT M MACDONALD

175 Capital Blvd 4th Floor Rocky Hill, CT 06067

Jeffrey J. Long 2022.09.30 16:55:46-04'00'

FDP SUBMISSION SEPTEMBER 28, 2022

SIGNATURE/ BLOCK:

Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067.

MOTT MACDONALD

M 175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067

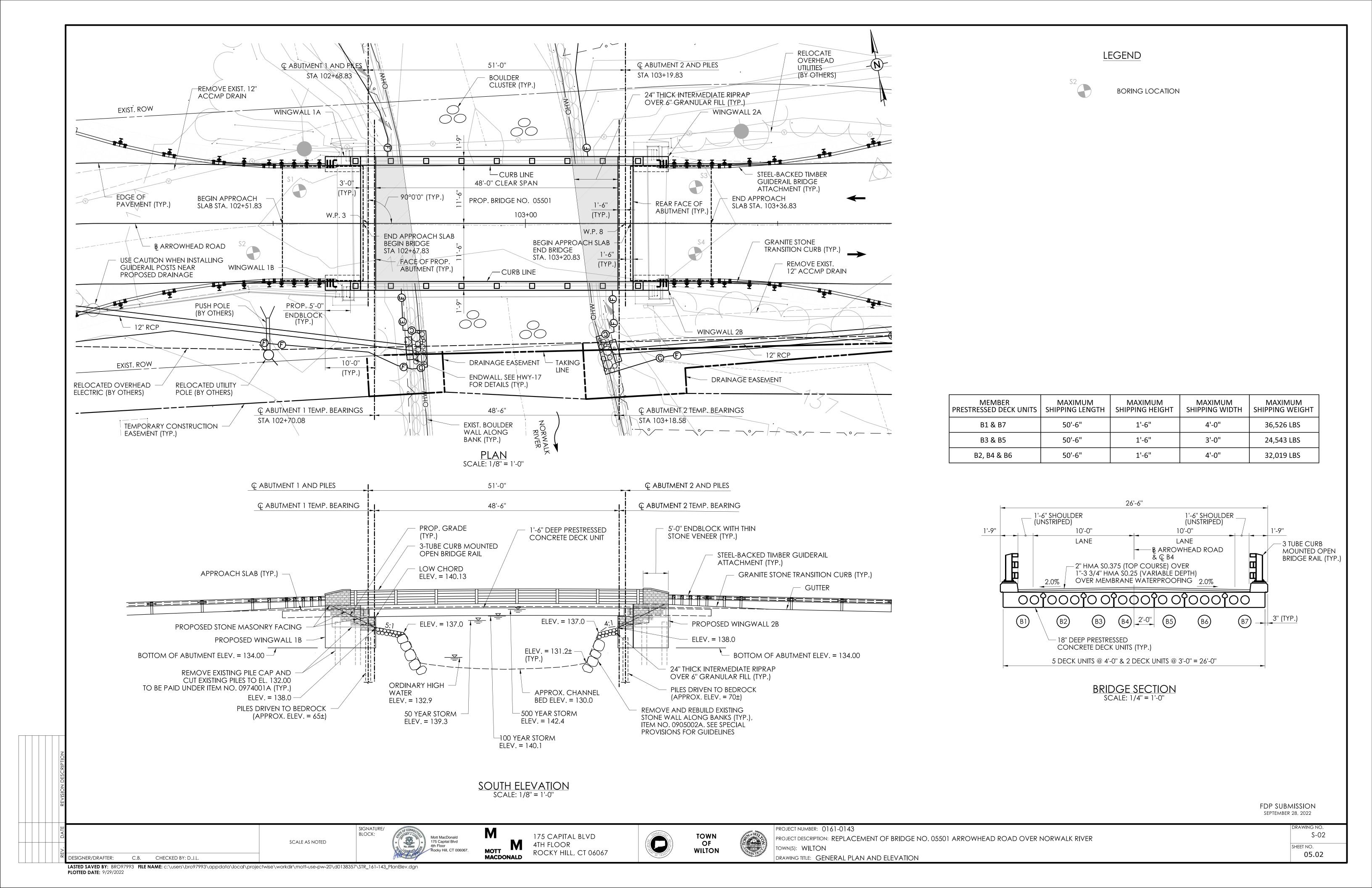




PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER DRAWING TITLE: STRUCTURE INDEX OF DRAWINGS

S-01 SHEET NO.

05.01



GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818 (2020), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2022, AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATION (AASHTO 9TH EDITION, 2020) AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003 WITH INTERIM REVISIONS UP TO AND INCLUDING 12/19)

MATERIAL STRENGTHS:	
CLASS PCC03340 (CAST-IN-PLACE CONCRETE)	F'C = 3,000 PSI
CLASS PCC04462 (CAST-IN PLACE CONCRETE)	F'C = 4,000 PSI
CLASS PRC10062 (PRECAST CONCRETE)	F'C = 10,000 PSI

THE CONCRETE STRENGTH, F'C, USED IN DESIGN OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.03 - PORTLAND CEMENT CONCRETE.

REINFORCEMENT ASTM A615 GRADE 60...... FY = 60,000 PSI

LIVE LOAD: HL93, LEGAL AND PERMIT VEHICLES

FUTURE PAVING ALLOWANCE: NONE.

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE HMA S0.25 (1" - 3 3/4" VARIABLE DEPTH). THE SECOND SHALL BE HMA S0.375 (2" THICK).

FOUNDATION PRESSURE AND PILE LOADS: THE VARIOUS GROUP LOADINGS NOTED ON THE SUBSTRUCTURE PLAN SHEETS REFER TO THE GROUP LOADS AS GIVEN IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

DIMENSIONS: WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR REVIEW, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

CONCRETE NOTES:

THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
ABUTMENT AND WALL CONCRETE	ABUTMENT AND WINGWALL STEMS, CLOSURE POURS	PCC03340
DADADET CONCRETE	ENDBLOCK	PCC04462
PARAPET CONCRETE	BRIDGE CURB	PCC04462
APPROACH SLAB CONCRETE	APPROACH SLAB	PCC04462

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT IN CAST IN PLACE CONCRETE SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED."

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER IS PAID FOR AS "1" PREFORMED JOINT FILLER FOR BRIDGES."

CLOSED CELL ELASTOMER: FURNISHING AND INSTALLING CLOSED CELL ELASTOMER SHALL BE INCLUDED IN THE ITEM "1" CLOSED CELL ELASTOMER."

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT THE LEADING END OF EACH BRIDGE ENDBLOCK. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4" X 12" WITH 3" WHITE REFLECTIVE BLOCK NUMBERS ON GREEN RETROREFLECTIVE SHEETING. EACH SIGN SHALL READ 05501. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE SIGNS SHALL BE COVERED UNDER THE ITEM "SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)". THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

BRIDGE AESTHETIC NOTES: ALL EXPOSED CONCRETE SURFACES OF ABUTMENTS (NOT INCLUDING FRONT FACE OF THE ABUTMENTS), WINGWALLS AND ENDBLOCKS (VERTICAL FACES) SHALL BE PROVIDED WITH A STONE MASONRY FACING. THE STONE MASONRY SHALL BE "THIN STONE VENEER" AND THE STONE PATTERN SHALL BE "NEW ENGLAND FIELDSTONE MOSAIC" PATTERN FROM CONNECTICUT STONE PRODUCTS, OR APPROVED EQUAL.

THE BRIDGE RAILS, POSTS AND HARDWARE SHALL BE METALLIZED. THE COLOR OF THE TOP COAT MATERIAL ON THE STEEL SHALL CONFORM TO FEDERAL STANDARD NO. 17038 (BLACK).

			REVISION DESCRIPTION	
			DATE	
			REV.	DESIGNER/DRAFTER:

SIGNATURE/ BLOCK:



Mott MacDonald 175 Capital Blvd

Rocky Hill, CT 006067.

M 175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067





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SEAL NECTICS

PROJECT NUMBER: 0161-0143
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER
TOWN(S): WILTON
DRAWING TITLE: STRUCTURAL GENERAL NOTES

FDP SUBMISSION
101 300//1331014
SEPTEMBER 28, 2022

S-03
SHEET NO.
05.03

INSPECTION OF FIELD WELDS									
METHODS	UNIT	QUANTITY							
ULTRASONIC	INCH	0							
MAGNETIC PARTICLE	FEET	0							

SUPERSTRUCTURE	C.Y.	45
SUBSTRUCTURE	C.Y.	65
FOOTING	C.Y.	0
TOTAL	C.Y.	110

HYDRAULIC	SUMMARY DATA				
DRAINAGE AREA [mi²]	29				
DESIGN FREQUENCY [YEAR]	10	00			
DESIGN DISHCARGE [cfs]	4,850				
AVERAGE DAILY FLOW [cfs]	55				
	UPSTREAM	DOWNSTREAM			
DESIGN WATER SURFACE ELEVATION [feet]	140.1	139.6			
MINIMUM SCOUR FREQUENCY (YEARS)	*,	50			
MAXIMUM SCOUR ELEVATION [feet] 1	12	2.0			
WORST SCOUR SUBSTRUCTURE UNIT	ABUTMEN	NT 2 (EAST)			

NOTE: ALL HYDRAULIC DATA PROVIDED BY CHA CONSULTING, INC. *50-YEAR STORM IS THE INCIPIENT OVERTOPPING FLOW, WHICH RESULTS IN GREATER SCOUR THAN THE TYPICAL 200-YEAR DESIGN AND 500-YEAR CHECK STORMS FOR SCOUR EVALUATION.

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUAL FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING FOR COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENT OR DETAIL	STRUCTURE SHEET REFERENCE	
NONE		

DESIGNER/DRAFTER: C.B. CHECKED BY: D.J.L.

LASTED SAVED BY: BRO97993 FILE NAME: c:\users\bro97993\appdata\local\projectwise\workdir\mott-use-pw-20\d0138357\STR_161-143_Notes.dgn
PLOTTED DATE: 9/27/2022

A. MacKernon Connecticut DOT Boring Report Format Hole No.: S-1

HOLE NO. S-1 (2 OF 4)

HOLE NO. S-1 (3 OF 4)

A. MacKernon Connecticut DOT Boring Report Format Hole No.: S-1

HOLE NO. S-1 (4 OF 4)

nspect	or:	G. Jaco	obser	1		Town:		Wiltor	n	Stat./Offset:	102+56/8.6 ft L			
ngine	er:	Nathan	Whe	etten		Project	No.:	161-1	43		Northing:	624931.74		
Start D	ate:	7-20-20)			Route N	lo.:	Arrow	head Road		Easting:	816048.56		
inish [Date:	7-21-20)			Bridge No.: 05501 Surface Elevation: 142								
roject	Descrip	otion: F	Recor	struc	tion	of Arrov	Arrowhead Road over Norwalk River							
asing	Size/Ty	pe: 4-ir	n. Cas	sing		Sample	r Type/	/Size: '	1-3/8 inch ID		Core Barrel Type: NX			
łamme	er Wt.: 🤅	300lb	Fall:	30in.		Hamme	ammer Wt.: 140lb Fall: 30in.							
rounc	lwater C	Observat	ions:	11	0 hrs	3								
	CAMDI EC													
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches			Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes		Elevation (ft)			
0-									Pavement	Asphalt Pavemen	t 4"			
-	S-1	12	25	17	11	24	8		\Structure / Misc. Fill	Gray c-f SAND, so	ome c-f gravel	, little silt	- 140	
- 5-	S-2	13	12	24	13	24	10			Gray-brown c-f S/	Gray-brown c-f SAND, some c-f gravel, little			
_	S-3	11	20	15	10	24	10			Brown c-f SAND,	some m-f gra	some m-f gravel, trace silt		
=	S-4	13	11	11	14	24	6			Brown c-f SAND,	little m-f grave	l, trace silt	−135	
10-	S-5	15	15	15	15	24	14		Gravelly Sand	Brown c-f SAND a	and m-f gravel	, trace silt		
_													- -130	
-														
15—		_											-	

Brown c-f GRAVEL, little c-f sand, some silt

Brown c-f SAND, little c-f gravel, trace silt

Driller:	A. MacKernon	Connecticut De	OT Boring F	Hole No.:	S-1		
Inspector:	G. Jacobsen	Town: Wilto	n		Stat./Offset:	102+56/8.6 ft L	
Engineer:	Nathan Whetten	Project No.: 161-	143		Northing:	624931.74	
Start Date:	7-20-20	Route No.: Arrov	vhead Road		Easting:	816048.56	
Finish Date:	7-21-20	Bridge No.: 0550	1		Surface Eleva	ation: 142	
Project Desc	ription: Reconstruction	of Arrowhead Road	d over Norwalk	River			
Casing Size/	Type: 4-in. Casing	Sampler Type/Size:	1-3/8 inch ID		Core Barrel T	ype: NX	
Hammer Wt.:	: 300lb Fall: 30in.	Hammer Wt.: 140lb	Fall: 30in.				
Groundwater	Observations: 11 0 hr	s					
	SAMPLE	S	_				

sing	Size/Typ	e: 4-in	. Cas	sing	:	Samplei	Туре/	Size: '	1-3/8 inch ID	Core Barrel Type: NX				
amm	er Wt.: 30	00lb	Fall:	30in.	. 1	Hamme	r Wt.:	140lb	Fall: 30in.					
ound	dwater Ob	servat	ions:	11	0 hrs									
SAMPLES SAMPLES Blows on City City Sampler Sampler										£				
Depth (ft)	Sample Type/No.	ŗ	San			Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ма	aterial Description and Notes	Elevation (ft)		
25- - - -	S-8	18	18	20	17	24	6		Gravelly Sand (con't)	Brown c-f GRAVE	EL, little c-f sand, trace silt	- - -115		
- 30 – - -	S-9	13	15	12	12	24	8			Brown c-f GRAVE	EL, little c-f SAND, trace silt	_ _ _ _110		
- 35-												_		

30-	S-9	13	15	12	12	24	8	Bro	own c-f GRAVEL, little c-f SAND, trace silt	_ _ _ _ _ 110
- 35- -	S-10	13	16	19	30	24	5	Bro	own c-f GRAVEL, little c-f sand, trace silt	_ _ _ _ _105
 40	S-11	12	15	26	11	24	1	Bro	own c-f GRAVEL, trace silt	_ _ _ _ _100
- 45-	S-12	17	12	14	17	24	3	Bro	own c-f SAND and c-f GRAVEL, trace silt	_ _ _ _

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

NOTES: Driller notes cobbles from 1 to 9 ft, 25 to 35 ft, 40 ft, and 55 to Total Penetration in | Company of the content of the cont

		. IVIACI								•	11016 140	<u> </u>	
Inspect	or: G	i. Jaco	bser	1	Т	own:		Wilto	n		Stat./Offset:	102+56/8.6 ft	L
Engine		athan		etten	F	Project I	No.:	161-1	143		Northing:	624931.74	
Start D	ate: 7	-20-20)		F	Route N	o.:	Arrow	head Road		Easting:	816048.56	
inish [-21-20				Bridge N		0550			Surface Eleva	ation: 142	
roject	Descripti	struc	tion of	f Arrov									
Casing	Size/Typ	e: 4-in	. Cas	sing	S	Sampler	Type/	Size:	1-3/8 inch ID		Core Barrel T	ype: NX	
	er Wt.: 30			30in.		Hamme	r Wt.:	140lb	Fall: 30in.				
rounc	dwater Ob	servati							I	T			
		ı		SAMF	PLES	1			7 2				§
Depth (ft)	Blows on Sampler per 6 inches					Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ма	aterial Descrip and Notes		: i
50-									Gravelly				-
_	S-13	8	8	7	4	24	5		Sand (con't)	Brown c-f SAND	and c-f GRAV	EL, trace silt	- -90
_													-
55— -	S-14	39	40	31	19	24	10			Brown c-m GRA\	√EL and c-f SA	AND, trace silt	
_													-8
60-	0.45	20	40	24	20	24	_						
-	S-15	30	18	31	36	24	7			Brown c-f GRAVI	EL, little c-f sar	nd, trace silt	-80
- 65-									Glacial Till				-
_	S-16	31	46	50/5"		17	14			Gray-brown c-f S	AND and c-f G	BRAVEL, little silt	- -75
70													-
70— —	S-17	49	38	50	39	24	10			Gray-brown c-m	GRAVEL, som	ne c-f sand, some	-70
-									Weathered Bedrock				-
75—										disturbed Piston Some = 20 -			
Γotal P	enetration									om 1 to 9 ft, 25 to 35		55 to S	Sheet
Earth:	75ft	Rock	o. of			60 ft Rolle	er bit th	ırough	probable weath	ered rock from 73 tock core, broken ca	to 76 ft.	3	of 4
3oil Sa	mples: 17	7 C	ore R	uns: 1	1	barre	el to clo	og eas	ily	•		SM-001-	M REV.

Driller:	A	. MacKernon	Con	nectic	ut D	OT Boring F	Report Format	Hole No.:	S-1	
Inspect		. Jacobsen	Town:		Wilto		-	Stat./Offset:	102+56/8.6	ft L
Engine	er: N	athan Whetten	Projec	t No.:	161-1	143		Northing:	624931.74	
Start Da	ate: 7-	-20-20	Route	No.:	Arrov	vhead Road		Easting:	816048.56	
Finish [Date: 7-	-21-20	Bridge	No.:	0550	1		Surface Eleva	ation: 142	
Project	Descripti	on: Reconstruction	of Arro	whead	Road	d over Norwalk	River			
Casing	Size/Type	e: 4-in. Casing	Sampl	er Type	/Size:	1-3/8 inch ID		Core Barrel T	ype: NX	
Hamme	er Wt.: 30	00lb Fall: 30in.	Hamm	er Wt.:	140lb	Fall: 30in.				
Ground	water Ob	servations: 11 0 h								
		SAMPLE	S			۾ ا				€
(£)	<u> </u>	Blows on	<u> </u>	(in.)		Generalized Strata Description	Ma	aterial Descrip	otion	2
ţ	e Pig	Sampler	. <u>=</u>	. <u></u>	% D	ata scrij		and Notes		į.
Depth (ft)	Sample Type/No.	per 6 inches	Pen. (in.)	Rec.	RQD	Stra				Flevation (ff)
 75_	971			┿	⊨					
_						Bedrock	GNEISS, gray, fir fractured, slightly			
	C-1		36	30	14		joints 1-6" spacing	g, shallow dipp	ing, tight, plana	
_							slightly weathered joints steeply dipp			ary 55
_							C-1 coring times:			/
_										-
80—							END OF BORING	3 /8ft		-
_										-
_										-60
_										
85—										
_										
_										-55
-										-
_										_
90-										
										Γ.
_										-50
-										-
-										-
95—										-
_										_
_										-45
_										-
100—		Comple Type: C	- Colit	Snoon	C = 1	Coro IID - III	adiaturbad Diatan	\/ = \/ana Cl	hoor Toot	
		Sample Type: S Proportions Used:		•						
Total D	enetration	<u> </u>					om 1 to 9 ft. 25 to 35			Sheet
			60	ft.			,	, ,) IU	4 of 4
Earth: No. of	<i>i</i> OIL	Rock: 3ft No. of					nered rock from 73 t ock core, broken ca		ore	
	mples: 17			rel to cl			con oore, pronen oa	oning oddoca oc		1-M REV. 1/

HOLE NO. S-2 (1 OF 4)

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in

Earth: 75ft Rock: 3ft

No. of No. of
Soil Samples: 17 Core Runs: 1

NOTES: Driller notes cobbles from 1 to 9 ft, 25 to 35 ft, 40 ft, and 55 to 60 ft.
Roller bit through probable weathered rock from 73 to 76 ft.
Required 3 attempts to recover rock core, broken casing caused core barrel to clog easily

Driller: A. MacKernon Connecticut DOT Boring Report Format Hole No.: S-2 Inspector: G. Jacobsen Town: Wilton Stat./Offset: 102+56/10.8 ft R Northing: 624921.35 Engineer: Nathan Whetten Project No.: 161-143 Route No.: Arrowhead Road Easting: 816037.26

S-7 10 11 11 14 24 7

lamme	Size/Typ er Wt.: 3 dwater Ob	00lb	Fall:	30in.	H	lamme			1-3/8 inch ID Fall: 30in.		Core Barrel Type: NX	
Depth (ft)	Sample Type/No.	SAMPLES Blows on Sampler per 6 inches		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	terial Description and Notes	Elevation (ft)		
0— - - -	S-1	13	23	22	18	24	8		Pavement Structure Misc. Fill		t 4" nd c-f GRAVEL, little silt nd c-f GRAVEL, little silt	_ 140
5— - -	S-3	8	10	11	12	24	10				nd c-f GRAVEL, little silt	_ _ _ _ 135
10— -	S-4	20	33	44		18	14		Gravelly Sand	Brown c-f SAND	and c-f GRAVEL, trace silt	_ _ _ _ _ 130
15— - -	S-5	30	24	26	28	24	10			Brown c-f SAND	and c-f GRAVEL, trace silt	_ _ _ 125
20-	S-6	18	15	12	13	24	10			Brown c-f SAND,	some c-f gravel, trace silt	_ _ _ _ _ 120
- 25-											V = Vane Shear Test 35%, And = 35 - 50%	
	enetratio	Propo n in Rock	ortior	ns Us		race =	ES: E	0%, Oriller n	Little = 10 - 20 lotes cobbles 4 to 71 ft, hole stay	%, Some = 20 - to 5 ft, 7 to 9 ft yed open from 71 to	35%, And = 35 - 50%	Sheet of 4

HOLE NO. S-2 (2 OF 4)

Driller:	A. MacKernon	Connection	cut DC	T Boring F	Report Format	Hole No.:	S-2
Inspector:	G. Jacobsen	Town:	Wiltor	1		Stat./Offset:	102+56/10.8 ft R
Engineer:	Nathan Whetten	Project No.:	161-1	43		Northing:	624921.35
Start Date:	7-22-20	Route No.:	Arrow	head Road		Easting:	816037.26
Finish Date:	7-23-20	Bridge No.:	05501			Surface Eleva	ation: 141.9
Project Desc	ription: Reconstruction	of Arrowhea	d Road	over Norwalk	River		
Casing Size/	Type: 4-in. Casing	Sampler Type	e/Size: 1	-3/8 inch ID		Core Barrel T	ype: NX
Hammer Wt.:	: 300lb Fall: 30in.	Hammer Wt.	140lb	Fall: 30in.			
Groundwater	Observations: 11 0 h	rs					
	SAMPLE	S					
				zed			

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalize Strata Descriptior	Material Description and Notes	Elevation (
25- - -	- S-7	20 15 21 18	24	4		Gravelly Sand (con't)	Brown c-f SAND and c-f GRAVEL, trace silt	- 115 -
30-	S-8	13 29 23 12	24	6			Brown c-f SAND and c-f GRAVEL, trace silt	_ _ 110
35-	S-9	19 18 19 12	24	1			Brown c-f SAND and c-f GRAVEL, trace silt	- - - -105
40-	S-10	13 19 25 50/4"	22	4			Brown c-f SAND and c-f GRAVEL, trace silt	- - - -100
45— - - -	S-11	15 14 15 12	24	8			Brown c-f SAND and c-f GRAVEL, trace silt	- - - -95
50-								

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test

Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

HOLE NO. S-2 (3 OF 4)

						<u> </u>	IOL	L 14	O. 3-2 (3	1014)			
Driller:	Д	. Mack	(ernc	on	С	onne	ectic	ut DC	OT Boring R	eport Format	Hole No.:	S-2	
Inspecto		3. Jaco			Т	own:		Wiltor	<u> </u>		Stat./Offset:	102+56/1	0.8 ft R
Enginee	r: N	lathan	Whe	tten	Р	roject l	No.:	161-1	43		Northing:	624921.3	5
Start Da	te: 7	-22-20			R	oute N	o.:	Arrow	head Road		Easting:	816037.2	6
Finish D	ate: 7	-23-20			В	ridge N	lo.:	05501	<u> </u>		Surface Eleva	ation: 141.9	
Project [Descript	ion: R	econ	struc	tion of	Arrow	head	Road	over Norwalk	River			
Casing S	Size/Typ	e: 4-in.	. Cas	sing	S	ampler	Type/	Size: 1	I-3/8 inch ID		Core Barrel T	ype: NX	
Hammei	r Wt.: 3	00lb	Fall:	30in.	Н	lammer	Wt.:	140lb	Fall: 30in.				
Groundy	water Ol	oservatio			0 hrs								
-				SAMF	PLES				۾ ر				⊋
Depth (ft)	Sample Type/No.	p	San	vs on npler inche		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	terial Descrip and Notes	otion	Elevation (ft)
	თ ⊢	į į				Δ.	œ	œ	000				
50	S-12	22	24	28	27	24	8		Gravelly Sand (con't)	Brown c-f SAND a	and c-f GRAVI	EL, trace silt	- -90
55—	S-13	30	22	15	18	24	8			D. COAND	1 (ODA)/		-
-	3-13		22	15	10	24	0			Brown c-f SAND a	and C-f GRAVI	EL, trace siit	—85 —
60													-
_	S-14	12	10	15	16	24	2			Brown c-f SAND a	and c-f GRAVI	EL, trace silt	- 80
65		_											-
- - -	S-15	27	27	27	27	24	6		Glacial Till	Brown c-f SAND a	and c-f GRAVI	EL, trace silt	
70	S-16	50/1"				1	1		Weathered	Brown c-f SAND a	and c-f GRAVI	EL, little silt	- - -
- - -									Bedrock				-70 - -
75													
		Propo				race =	1 - 10	0%, l	_ittle = 10 - 20	disturbed Piston %, Some = 20 - 3			
Total Pe	netratio	n in							otes cobbles 4 to	o 5 ft, 7 to 9 ft red open from 71 to	75 ft		Sheet 3 of 4
Earth: 7	5ft	Rock:		t		Rolle				probable weathere		1 to 75	5 51 7
No. of Soil San	nples: 1		o. of ore Ru	uns: 2	2	ft.						SM	-001-M REV. 1/02

HOLE NO. S-2 (4 OF 4)

SM-001-M REV. 1/02

Driller:	A. MacKernon	Connecticut DOT Boring Report Format	Hole No.:	S-2
Inspector:	G. Jacobsen	Town: Wilton	Stat./Offset:	102+56/10.8 ft R
Engineer:	Nathan Whetten	Project No.: 161-143	Northing:	624921.35
Start Date:	7-22-20	Route No.: Arrowhead Road	Easting:	816037.26
Finish Date:	7-23-20	Bridge No.: 05501	Surface Eleva	ation: 141.9
Project Desc	ription: Reconstruction	of Arrowhead Road over Norwalk River		
Casing Size/	Type: 4-in. Casing	Sampler Type/Size: 1-3/8 inch ID	Core Barrel T	Гуре: NX
Hammer Wt.:	: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater	Observations: 11 0 hi	rs		

Ground	water Ob	servations: 11 0 hrs						
		SAMPLES				75		⊕
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
75—						Bedrock		-
- - - 80-	C-1		60	54	30		GNEISS, gray, fine grained, laminated, highly fractured, slightly weathered, strong. Primary joints horizontal, moderately weathered, several high angle joints. C-1 coring times: 9, 9, 9, 9, 9 per ft.	- -65 - -
-	C-2		42	41	48		GNEISS, gray, fine grained, laminated, moderately fractured, slightly weathered, strong. Primary joints horizontal, tight, slightly weathered. Several high angle joints and healed cracks C-2 coring times: 10, 10, 10 per ft.	- -60 -
85 <i>-</i>							END OF BORING 83.5ft	_
-								
_								-55
-								
-								
90-								_
-								_
-								-50
-								-
-								-
95—								-
-								-
_								-45
-								
				1				⊢

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test

Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

NOTES: Driller notes cobbles 4 to 5 ft, 7 to 9 ft
Drove 4" casing to 71 ft, hole stayed open from 71 to 75 ft.
Roller bit hard and steady through probable weathered rock from 71 to 75 ft.

Earth: 75ft Rock: 8.5ft

No. of No. of
Soil Samples: 16 Core Runs: 2

FDP SUBMISSION SEPTEMBER 28, 2022

S-04

05.04

SHEET NO.

Sheet 4 of 4

SM-001-M REV. 1/02

NOTE: SEE S-02 FOR BORING LOCATION

BLOCK:



MACDONALD

Earth: 75ft Rock: 8.5ft
No. of No. of

Soil Samples: 16 Core Runs: 2

175 CAPITAL BLVD M 4TH FLOOR ROCKY HILL, CT 06067

NOTES: Driller notes cobbles 4 to 5 ft, 7 to 9 ft
Drove 4" casing to 71 ft, hole stayed open from 71 to 75 ft.
Roller bit hard and steady through probable weathered rock from 71 to 75



Sheet 2 of 4





SM-001-M REV. 1/02

C.B. CHECKED BY: D.J.L.

Driller:	R. Posa	Connecticut DO	OT Boring R	eport Format	Hole No.:	S-3
Inspector:	G. Jacobsen	Town: Wiltor	า		Stat./Offset:	103+32/9.2 ft L
Engineer:	Nathan Whetten	Project No.: 161-1	43		Northing:	624917.73
Start Date:	7-20-20	Route No.: Arrow	head Road		Easting:	816125.91
Finish Date:	7-21-20	Bridge No.: 0550	1		Surface Eleva	ation: 142.1
Project Desc	ription: Reconstruction	of Arrowhead Road	over Norwalk	River		
Casing Size/	Гуре: 4-in. Casing	Sampler Type/Size: 1	1-3/8 inch ID		Core Barrel T	ype: NX
Hammer Wt.	: 300lb Fall: 30in.	Hammer Wt.: 140lb	Fall: 30in.			
Groundwater	Observations: 10 0 hr	'S				
	SAMDI E	9				

Hamme	er Wt.: 30	00lb	Fall:	30in.	H	amme	r Wt.:	140lb	Fall: 30in.		
Ground	lwater Ob	servatio	ns:	10 () hrs						
				SAMF	LES				_		
Depth (ft)	Sample Type/No.		Sam	vs on npler inche	s	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
0-									Pavement	Asphalt Pavement 4"	-
_	S-1	32	44	37	29	24	14		Structure / Misc. Fill	Gray c-f SAND, and c-f GRAVEL, little silt	- 140
_	S-2	22	37	50/1"		13	10			Gray c-f SAND, and c-f GRAVEL, little silt	_
_											_
5—											
_	S-3	17	21	24	30	24	16			Gray to brown c-f SAND, some c-f gravel, little silt	-
_	S-4	50/3"				3	3			Gray to brown c-f SAND, and c-f GRAVEL, little silt	-13
_									Sand	_	-
10-	S-5	5	6	28	32	24	14		Gravelly Sand	S5 top 12 in: Gray f SAND, some silt S5 bottom 2 in: Brown c-f SAND, and c-f GRAVEL, trace silt	-
_	S-6	22	15	17	33	24	10			Brown c-f SAND and c-f GRAVEL, trace silt	-13
- - 15-										-	- - -
_	S-7	39	40	20	8	24	10			Top 6 in.: Brown c-f SAND and c-f GRAVEL, trace silt; Bottom 4 in.: SILT, some f sand	-

- S-8 20 13 11 19 24 12

Top 6 in.: Brown c-f SAND and c-f GRAVEL, trace silt; Bottom 4 in.: SILT, some f sand

Brown c-f SAND and c-f GRAVEL, little silt

Sheet 1 of 4

HOLE NO.	८ _२	12 OF 1	1
HOLL NO.	J-J	12 OI 4	1

Oriller:		R. Posa	3		(onne	ectic	ut DC	וע Boring R	eport Format	Hole No.:	S-3	
nspect	tor:	G. Jaco	bser	1	Т	own:		Wiltor	1		Stat./Offset:	103+32/9.2 ft L	
Engine	er:	Nathan	Whe	etten	F	Project	No.:	161-1	43		Northing:	624917.73	
Start D	ate:	7-20-20)		F	Route N	lo.:	Arrow	head Road		Easting:	816125.91	
Finish [Date:	7-21-20)		E	Bridge N	No.:	05501			Surface Eleva	ation: 142.1	
Project	Descrip	tion: R	econ	struc	tion o	f Arrov	vhead	Road	over Norwalk	River			
Casing	Size/Ty	pe: 4-in	. Cas	sing	5	Sample	r Type	/Size: 1	I-3/8 inch ID		Core Barrel T	ype: NX	
	er Wt.: 🤇			30in.	. F	Iamme	r Wt.:	140lb	Fall: 30in.				
Ground	dwater C	bservat	ions:	10	0 hrs								
			;	SAME	PLES				-				<u> </u>
æ							·		Generalized Strata Description	D.4	Annial Danasis	_#:	Elevation (ft)
Depth (ft)	Blows on Sampler per 6 inches					(in.)	Rec. (in.)	%	əral a xripi	IVIa	terial Descrip and Notes	Duon	atio
ebt	am ype	r		inche		Pen.	ec.	RQD	ene trat esc		ana motoc		le Ki
	ΩÉ	'				۵	2	<u>~</u>	O S O				Ш
25-						1.0			Gravelly				-
-	S-9	18	51	66		18	8		Sand (con't)	Brown c-f SAND	and c-f GRAV	EL, trace silt	-
_									(John)				-115
_													L
-													
30-		7											
-	S-10	20	23	28	21	24	8			Brown c-f SAND	and c-f GRAV	EL, trace silt	-
-		-											-110
_													L
35-		7										(004)/51	-
-	S-11	13	17	18	21	24	8			Top 4 in: Brown o silt; Bottom 4 in: E		c-f GRAVEL, trace	-
-		-											-105
_													
_													
													Г
40 —													_
-	S-12	15	16	9	9	24	8			Brown c-f SAND,	little m-f grave	l, some silt	-
-		-											-100
_	1												L
_													
45													
45-		1											
-	S-13	15	29	30	18	24	6			Brown c-f SAND	and c-f GRAV	EL, trace silt	
-		\dashv											-95
_	-												L
_	_												L
E0													Γ
50 —		Sam	ple T	vpe.	S = 5	Split S	poon	C = C	Core UP=Ur	ndisturbed Piston	V = Vane SI	hear Test	_
										%, Some = 20 -			
Fate! D	lanatur.	•	OI LIUI	13 03	ou. I								_4
	enetration		4							m 3.5 to 5 ft, 7 to 8 ve 4" casing. Rolle		She nd 2 of	
Earth:	72ft	Rock		7ft		steady 68 to 70 ft. Drove 4 inch casng to 68 ft. Roller bit to 72 ft Core barrel damaged during C-2, core damaged, recovery and RQD							
No. of			o. of	uns: 3	_				ged during C-2, me water during		overy and RQ	D SM-001-M F	

HOLE NO. S-3 (3 OF 4)

Driller:		R. Pos	а			Conn	ectic	ut DO	OT Boring R	eport Format	Hole No.:	S-3	
Inspect	tor:	G. Jaco	bser	า		Town:		Wilto	n		Stat./Offset:	103+32/9.2 ft L	
Engine	er:	Nathan	Whe	etten		Project	No.:	161-1	43		Northing:	624917.73	
Start D	ate:	7-20-20)			Route I	No.:	Arrow	head Road		Easting:	816125.91	
Finish I	Date:	7-21-20)			Bridge	No.:	0550 ⁻	1		Surface Eleva	ation: 142.1	
Project	Descri	otion: F	Recor	nstruc	tion o	of Arro	whead	Road	l over Norwalk	River			
Casing	Size/Ty	/pe: 4-ir	ı. Cas	sing		Sample	r Type	Size:	1-3/8 inch ID		Core Barrel T	ype: NX	
Hamm	er Wt.:	300lb	Fall:	30in.		Hamme	er Wt.:	140lb	Fall: 30in.				
Ground	dwater (Observat	ions:	10	0 hrs	;							
				SAMF	PLES	;			-				1
Depth (ft)	Sample Type/No.		Sar	ws on npler inche		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	aterial Descrip and Notes	otion	Flevation (ft)
	ν̈́Ε	` '				۵	~	<u> </u>	000				ш
50- -	S-14	13	17	14	9	24	6		Gravelly Sand (con't)	Brown c-f SAND	and c-f GRAVI	EL, trace silt	
-													-
55— - -	S-15	6	9	16	16	24	4			Brown c-f SAND	and c-f GRAVI	EL, trace silt	- - -85
- 60-													_
-	S-16	14	23	39	21	24	10			Brown c-f SAND	and c-f GRAVI	EL, trace silt	- -80
- 65-									Glacial Till				_
-	S-17	18	42	50/5"	•	17	13			Brown c-f SAND	and c-f GRAVI	EL, little silt	- - -75
-	-								Weathered Bedrock				_

Bedrock

GNEISS, gray, fine grained, laminated, highly fractured, slightly weathered, strong. Primary joints 1-8" spacing, shallow dipping, tight, planar, slightly weathered, parallel to foliation. Secondary joints steeply dipping 12-24" spacing, open, Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50% Total Penetration in

Earth: 72ft Rock: 10.7ft

No. of No. of
Soil Samples: 17 Core Runs: 3

NOTES: Driller notes cobbles from 3.5 to 5 ft, 7 to 8 ft
Used Solid auger to 9 ft, then drove 4" casing. Roller-bitted hard and steady 68 to 70 ft. Drove 4 inch casng to 68 ft. Roller bit to 72 ft
Core barrel damaged during C-2, core damaged, recovery and RQD reduced. Lost some water during coring.

HOLE NO. S-3 (4 OF 4)

Driller:	F	R. Posa	Connecticut	DC	T Boring R	eport Format	Hole No.:	S-3	
Inspect	or: (G. Jacobsen	Town: W	/ilton	1		Stat./Offset:	103+32/9.2 ft L	
Engine	er: N	Nathan Whetten	Project No.: 16	61-14	43		Northing:	624917.73	
Start Da	ate: 7	7-20-20	Route No.: A	rrowl	head Road		Easting:	816125.91	
Finish [Date: 7	7-21-20	Bridge No.: 0	5501			Surface Eleva	tion: 142.1	
Project	Descrip	tion: Reconstruction	of Arrowhead R	load	over Norwalk	River			
Casing	Size/Typ	pe: 4-in. Casing	Sampler Type/Si	ze: 1	-3/8 inch ID		Core Barrel T	ype: NX	
Hamme	er Wt.: 3	00lb Fall: 30in.	Hammer Wt.: 14	10lb	Fall: 30in.				
Ground	water O	bservations: 10 0 hr	S						
		SAMPLE	S		70				(ft)
æ			~ ~		izec	Ma	tarial Dagarin	.tion	n (f

| Robert | R Material Description

weathered
C-1 coring times: 5, 6, 6 min per ft.
GNEISS, gray, fine grained, laminated, moderately fractured, slightly weathered, strong. Primary joints 1-8" spacing, shallow dipping, tight, planar, slightly weathered, parallel to foliation. Secondary joints steeply dipping 12-24" spacing, open, weathered.
C-2 coring times: 6, 6, 6 min per ft.
GNEISS, gray, fine grained, laminated, moderately fractured, slightly weathered, strong. Primary joints 3-8" spacing, shallow dipping, tight, planar, slightly weathered, parallel to foliation. Secondary joints steeply dipping 12-24" spacing, open, weathered.
C-3 coring times: 6, 6, 6, 6, 6 min per ft. END OF BORING 82.7ft Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test

Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50% Total Penetration in

Earth: 72ft Rock: 10.7ft

No. of No. of
Soil Samples: 17 Core Runs: 3

NOTES: Driller notes cobbles from 3.5 to 5 ft, 7 to 8 ft
Used Solid auger to 9 ft, then drove 4" casing. Roller-bitted hard and steady 68 to 70 ft. Drove 4 inch casng to 68 ft. Roller bit to 72 ft
Core barrel damaged during C-2, core damaged, recovery and RQD reduced. Lost some water during coring.

HOLE NO. S-4 (1 OF 4)

Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test

Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%

Total Penetration in

Earth: 72ft Rock: 10.7ft

No. of No. of
Soil Samples: 17 Core Runs: 3

NOTES: Driller notes cobbles from 3.5 to 5 ft, 7 to 8 ft
Used Solid auger to 9 ft, then drove 4" casing. Roller-bitted hard and steady 68 to 70 ft. Drove 4 inch casng to 68 ft. Roller bit to 72 ft
Core barrel damaged during C-2, core damaged, recovery and RQD reduced. Lost some water during coring.

										1			
Driller:	F	R. Posa	а		C	onne	ectic	ut DO	OT Boring R	eport Format	Hole No.:	S-4	
Inspect	or: (3. Jaco	bser	1	T	own:		Wilton	า		Stat./Offset:	103+30/9.4	4 ft R
Engine	er: N	Nathan	Whe	etten	Р	roject l	No.:	161-1	43		Northing:	624904.82	2
Start D	ate: 7	7-22-20)		R	oute N	lo.:	Arrow	head Road		Easting:	816123.28	3
Finish [Date: 7	7-23-20)		В	ridge N	lo.:	0550	1		Surface Eleva	tion: 142	
Project	Descrip	tion: R	Recon	struc	ction of	Arrov	vhead	Road	over Norwalk	River			
Casing	Size/Typ	e: 4-in	ı. Cas	sing	s	amplei	г Туре	/Size: '	1-3/8 inch ID		Core Barrel T	ype: NX	
	er Wt.: 3			30in	. Н	amme	r Wt.:	140lb	Fall: 30in.				
Ground	lwater O	bservat	ions:	10	0 hrs								
			;	SAM	PLES				- o				æ
Depth (ft)	Sample Type/No.			vs or		Pen. (in.)	Rec. (in.)	%	Generalized Strata Description	Ma	terial Descrip	otion	Elevation (ft)
 t d	mb/pe/	, r	San 5 per	npler		Ę.	ပ္က	RQD %	ene rata escr		and Notes		eva
🛎	8 L	1	Jei U	IIICIII	53	<u>~</u>	&	×	ರಿಭರ				🛅
0-									Pavement	Asphalt Pavemen	t 4"		
-	0.4	40	20	0.4	20	0.4			Structure				-
_	S-1	10	36	31	33	24	3		Misc. Fill	Gray c-f SAND ar	nd c-f GRAVEL	., trace silt	-140
_													
	S-2	27	21	31	33	24	4			Gray c-f SAND ar	nd c-f GRAVEL	., trace silt	
		-											Γ
5-		1,,	24		E0/4"	40							
_	S-3	11	21	50	50/1"	19	3			Dark gray c-f SAN	ID and c-f GRA	AVEL, trace s	silt
-													−135
-													-
_	S-4	14	13	4	5	24	14		0	8 to 9 ft: Brown c-	f SAND, some	c-f gravel, tra	ace _
10-									Sand	silt 9 to 9.2 ft: Dark g	rav c-f SAND 1	trace silt	
	S-5	6	48	40	40	24	6		Gravelly Sand	_			
	3-5	0	40	40	40	24	0		Jana	Brown c-f SAND	and c-f GRAVE	EL, trace silt	Γ
-													-130
_													-
-													-
15-													-
_	S-6	18	26	33	38	24	4			Brown c-f SAND,	some c-f grave	el trace silt	_
_										,	g	,	—125
													23
-	1												
20-		1											
-	S-7	16	8	9	15	24	5			Brown c-f GRAVE	EL and c-f SAN	ID, trace silt	
-		-											-120
_													
_													L
25													
25—		Sam	ple T	vpe.	S = 5	Split S	poon	C = 0	Core UP=Ur	disturbed Piston	V = Vane Sh	near Test	
				٠.						%, Some = 20 - 3			
Total P	enetratio				-					drilling resistance a		1	Sheet
Earth:		Rock	. 6ft			At 6	5 ft roll	er-bitte	d through proba	able cobbles, probat	ole glacial till	_	1 of 4
No. of	OOIL		o. of						and steady from and steady to 7:	n 68 to 70 ft., Drove 2 ft.	4" casing to 69	9 ft.	
	mples: 1		ore R	uns:	1					·		SM-	001-M REV. 1/02

HOLE NO. S-4 (2 OF 4)

iller:	R. Posa				Conn				eport Format		S-4		
spector:	G. Jaco				Town:		Wilto			Stat./Offset:)/9.4 ft R	
ngineer:	Nathan		etten		Project		161-1			Northing:	624904		
tart Date:	7-22-20				Route N			vhead Road		Easting:	816123		
inish Date:	7-23-20				Bridge N		0550		D:	Surface Eleva	ation: 142	2	
•	•			т				l over Norwalk	River	I			
asing Size/T								1-3/8 inch ID		Core Barrel T	ype: NX		
ammer Wt.:			30in.		Hamme	r Wt.:	140lb	Fall: 30in.					
roundwater	Observat		SAMF										
Sample	i i	Blov San	vs on npler inche		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ма	iterial Descrip and Notes	otion		Elevation (ft)
25								Gravelly					_
- S-8	5	14	26	26	24	4		Sand (con't)	Brown c-f SAND,	some c-f grav	el, trace s	ilt	- 115
-													_
30													_
- S-9	19	16	21	21	24	2			Brown c-f GRAVE	EL, trace c-f sa	nd, trace	silt	_
+													—110
=													_
_													_
35													_
- S-10) 13	17	21	21	24	3			Brown c-f SAND	and c-f GRAV	El trace	silt	_
									B10111110110711110		,	Oiit	—105
													_
]													_
40													_
- S-1	20	28	15	15	24	1			Brown c-f GRAVE	EL, trace silt			_
+													—100
+													_
4													_
45													_
S-12	2 8	8	7	8	24	5			Brown c-f GRAVE	EL, little c-f san	d, trace s	ilt	_
										, 2 . 3411	,		- 95
50—		•							ndisturbed Piston %, Some = 20 -				_
otal Penetra	ion in								drilling resistance a			Shee	
arth: 68ft	Rock	6ft							able cobbles, probal n 68 to 70 ft., Drove		9 ft.	2 of	4
o. of	N	o. of						and steady to 7					

HOLE NO. S-4 (3 OF 4)

Oriller:	F	R. Posa	l			onne	ectic	ut DO	OT Boring R	eport Format	Hole No.:	S-4	
nspect		G. Jaco				own:		Wilton			Stat./Offset:	103+30/9.4 ft I	₹
Engine	er: N	Nathan	Whe	tten	F	roject l	No.:	161-1	43		Northing:	624904.82	
Start D	ate: 7	7-22-20			F	oute N	lo.:	Arrow	head Road		Easting:	816123.28	
inish [Date: 7	7-23-20			E	ridge N	10.:	0550	1		Surface Eleva	ation: 142	
⊃roject	Descrip	tion: R	econ	struc	ction of	Arrov	/head	Road	over Norwalk	River			
Casing	Size/Typ	e: 4-in	. Cas	ing	S	amplei	Type/	Size: ´	1-3/8 inch ID		Core Barrel T	ype: NX	
Hamme	er Wt.: 3	00lb	Fall:	30in	. F	lamme	r Wt.:	140lb	Fall: 30in.				
Ground	dwater O	bservati	ons:	10	0 hrs								
			(SAM	PLES				, ₀ _				£
Depth (ft)	Sample Type/No.	р	Blow Sam er 6	pler		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	iterial Descrip and Notes	otion	Flevation (ft)
50— - - -	S-13	11	10	10	11	24	5		Gravelly Sand (con't)	Brown c-f GRAVI	EL, little c-f san	d, trace silt	- -90
55— - - -	S-14	36	30	30	50/5"	23	4			S14 top 2in: Brov trace silt S14 bottom 2 in: little silt			- - - -85
60-	S-15	50/5"				5	2			Brown gravelly c-	f SAND, some	c-f gravel, trace s	ilt
65— -	S-16	50/2"				2	0		Glacial Till	No recovery: Pro GRAVEL, little silt for this project)			- - - - -75
70—									Weathered Bedrock				- - -
- - -	C-1	_				24	20	0	Bedrock	GNEISS, gray, fir fractured, slightyly open horizontal a horizontal C-1 coring times:	weathered, st nd vertical fract	rong. Numerous tures. Foliation	
75—		Propo	•	, ,		race =	1 - 1	0%, I	Little = 10 - 20	ndisturbed Piston %, Some = 20 -	35%, And =	35 - 50%	<u> </u>
Γotal P	enetratio	n in								drilling resistance a			neet
Earth: No. of	orth: 68ft Rock: 6ft					At 65 ft roller-bitted through probable cobbles, probable glacial till Roller-bitted hard and steady from 68 to 70 ft., Drove 4" casing to 69 ft Roller bitted hard and steady to 72 ft.							of 4

HOLE NO. S-4 (4 OF 4)

Rou Brid struction of A ing Sam 30in. Han 10 0 hrs SAMPLES	ute No. dge No Arrowh mpler T mmer V	o.: / b.: (nead Type/S	05501 Road Size: 1	43 /head Road 1 Lover Norwalk R 1-3/8 inch ID Fall: 30in.		Stat./Offset: Northing: Easting: Surface Eleva Core Barrel T terial Descrip and Notes	ype: NX	Elavation (#)
Roud Brid Brid Struction of A Sam 30in. Han 10 0 hrs SAMPLES	ute No. dge No Arrowh mpler T mmer V	D.: (D.: (D.: (D.: (D.: (D.: (D.: (D.: (Arrow 05501 Road Size: 1 140lb	head Road 1 over Norwalk R 1-3/8 inch ID Fall: 30in. pagratian Oescription O	Ma	Easting: Surface Eleva Core Barrel T terial Descrip and Notes	816123.28 ation: 142 ype: NX	Elevation (#)
Brid struction of A ing Sam 30in. Han 10 0 hrs 6AMPLES	dge No Arrowh mpler T mmer V	nead Type/S Wt.: 1	05501 Road Size: 1 140lb	over Norwalk R 1-3/8 inch ID Fall: 30in. Description Percentage	Ma	Surface Eleva Core Barrel T terial Descrip and Notes	ype: NX	Flavation (#)
struction of Aling Sam 30in. Han 10 0 hrs SAMPLES	mpler T mmer V	Type/S Wt.: 1	Road Size: 1 140lb	over Norwalk R 1-3/8 inch ID Fall: 30in. Strata Description Oestimate Oesti	Ma	Core Barrel T terial Descrip and Notes	ype: NX	Flavotion (#)
ing Sam 30in. Han 10 0 hrs SAMPLES	mpler T mmer V	Type/S Wt.: 1	Size: 1 140lb	1-3/8 inch ID Fall: 30in. Strata Description	Ma	terial Descrip and Notes		Flavotion (#)
30in. Han 10 0 hrs SAMPLES	mmer V	Wt.: 1	140lb %	Generalized Strata Description Oescription		terial Descrip and Notes		Elovation (#)
30in. Han 10 0 hrs SAMPLES	mmer V	Wt.: 1	140lb %	Generalized Strata Description Oescription		terial Descrip and Notes		
10 0 hrs SAMPLES	(in.)	(in.)	%	Generalized Strata Description		and Notes	otion	
SAMPLES	Pen. (in.)	Rec. (in.)	RQD %			and Notes	otion	Elevation (#)
	Pen. (in.)	Rec. (in.)	RQD %			and Notes	otion	
pler	Pen. (Rec. (RQD		END OF BORING			
					END OF BORING	6 74ft		Ŧ
								—65
								_ 60
								-
								- -55
								_
								-50
								-
								- -45
								-
s osea: Trad								
1	Roller-	-bitted	hard	and steady from 6	68 to 70 ft., Drove	ole glacial till 4" casing to 6	9 ft. 4 of	4
٠	s Used: Tra	s Used: Trace = NOTE At 65 Roller	s Used: Trace = 1 - 10 NOTES: D At 65 ft rolle Roller-bittec Roller bittec	s Used: Trace = 1 - 10%, NOTES: Driller in At 65 ft roller-bitted hard	s Used: Trace = 1 - 10%, Little = 10 - 20% NOTES: Driller notes increase in c At 65 ft roller-bitted through probate Roller-bitted hard and steady from Roller bitted hard and steady to 72	s Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 3 NOTES: Driller notes increase in drilling resistance at At 65 ft roller-bitted through probable cobbles, probable Roller-bitted hard and steady from 68 to 70 ft., Drove Roller bitted hard and steady to 72 ft.	s Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = NOTES: Driller notes increase in drilling resistance at 54 ft. At 65 ft roller-bitted through probable cobbles, probable glacial till Roller-bitted hard and steady from 68 to 70 ft., Drove 4" casing to 6 Roller bitted hard and steady to 72 ft.	At 65 ft roller-bitted through probable cobbles, probable glacial till 4 of Roller-bitted hard and steady from 68 to 70 ft., Drove 4" casing to 69 ft. Roller bitted hard and steady to 72 ft.

NOTE: SEE S-02 FOR BORING LOCATION

FDP SUBMISSION SEPTEMBER 28, 2022

SIGNATURE/ BLOCK:



MOTT MACDONALD

175 CAPITAL BLVD M 4TH FLOOR ROCKY HILL, CT 06067



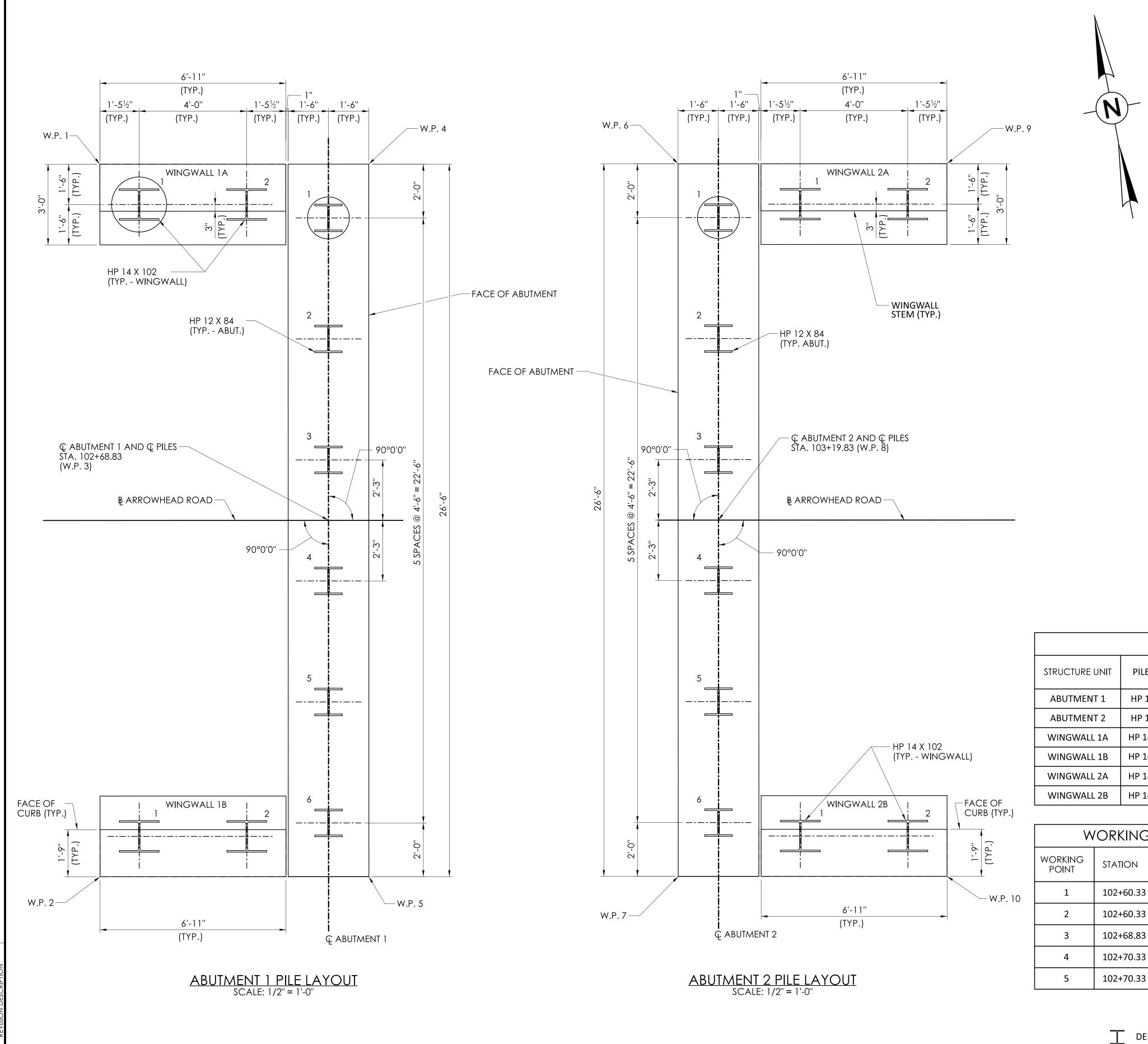




PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON DRAWING TITLE: BORING LOGS - 2

S-05

DESIGNER/DRAFTER: C.B CHECKED BY: D.J.L.



NOTES:

- PRIOR TO DRIVING THE PILES, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL THE METHOD AND SEQUENCE OF PILE DRIVING.
- PILE POINT REINFORCEMENT AND SPLICES SHALL BE PREFABRICATED. THE CONTRACTOR SHALL SUBMIT PILE POINT REINFORCEMENT AND SPLICE DETAILS TO THE ENGINEER FOR REVIEW AND
- THE ESTIMATED PILE LENGTHS ARE TO BE USED AS THE PILE ORDER LENGTH.
- H-PILES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50.
- 5. PILES SHALL BE DRIVEN TO APPROXIMATELY ELEVATION 65 AT ABUTMENT 1 AND WINGWALL 1 AND APPROXIMATELY ELEVATION 70 AT ABUTMENT 2 AND WINGWALL 2. THE REFUSAL CRITERIA SHALL BE CONFIRMED BY DYNAMIC TESTING. CONTRACTOR MAY EMPLOY PRE-AUGERING TO REMOVE OBSTRUCTIONS AND FACILITATE PILE DRIVING IN THE FILL AND NATURAL SOILS, WHERE REQUIRED TO AVOID EXCESSIVE STRESSES IN PILES. AN ALLOWANCE OF 400 LF OF PRE-AUGERING PILES HAS BEEN INCLUDED IN THE CONTRACT.
- SOIL DEPOSITS AT THE SITE ARE GLACIALLY-DERIVED AND KNOWN TO CONTAIN COBBLES AND/OR BOULDERS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF PILES ENCOUNTER REFUSAL AT ELEVATIONS HIGHER THAN ELEVATIONS SPECIFIED HEREIN.
- DYNAMIC TESTING SHALL BE CARRIED OUT ON THE FIRST PILE DRIVEN AT EACH ABUTMENT AND ON THE FIRST WINGWALL PILE DRIVEN (TOTAL OF THREE PILES) TO ENSURE THAT STRESSES IN PILES DO NOT EXCEED 45 KSI AT THE PRESCRIBED REFUSAL CRITERIA AND TO CONFIRM THE PILE CAPACITY OF 280 KIPS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF STRESSES IN PILES REACH 45 KSI BEFORE REFUSAL CRITERION IS MET.

PILE LAYOUT												
COMPONENT	PILE NO.	STA.	OFFSET	COMPONENT	PILE NO.	STA.	OFFSET					
	1	102+68.83	11.25 LT	\\/\\\C\\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	102+61.79	11.75 LT					
	2	102+68.83	6.75 LT	WINGWALL 1A	2	102+65.79	11.75 LT					
ABUTMENT 1	3	102+68.83	2.25 LT									
ABOTIVIENTI	4	102+68.83	2.25 RT									
	5	102+68.83	6.75 RT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	102+61.79	11.75 RT					
	6	102+68.83	11.25RT	WINGWALL 1B	2	102+65.79	11.75 RT					

	1	103+19.83	11.25 LT	NAMINICNAMALI 2A	1	103+22.87	11.75 LT
	2	103+19.83	6.75 LT	WINGWALL 2A	2	103+26.87	11.75 LT
ABUTMENT 2	3	103+19.83	2.25 LT				
ABOTIVIENT 2	4	103+19.83	2.25 RT				
	5	103+19.83	6.75 RT	MANING MANING OR	1	103+22.87	11.75 RT
	6	103+19.83	11.25 RT	WINGWALL 2B	2	103+26.87	11.75 RT

				PILE SCH	EDULE		
STRUCTURE UNIT	PILE SIZE	NUMBER OF PILES	ESTIMATED PILE LENGTH	TEST PILE LENGTH	ULTIMATE PILE CAPACITY	MAXIMUM FACTORED DESIGN PILE LOAD (KIPS) (STRENGTH I)	MAXIMUM UNFACTORED DESIGN PILE LOAD (KIPS) (SERVICE I)
ABUTMENT 1	HP 12X84	6	75	75	195 KIPS	122	83
ABUTMENT 2	HP 12X84	6	70	70	195 KIPS	122	83
WINGWALL 1A	HP 14X102	2	75	75	255 KIPS	34	7
WINGWALL 1B	HP 14X102	2	75	-	255 KIPS	34	7
WINGWALL 2A	HP 14X102	2	70	-	255 KIPS	34	7
WINGWALL 2B	HP 14X102	2	70	-	255 KIPS	34	7

V	VORKING	POINT LA	YOUT
WORKING POINT	STATION	OFFSET (FT)	COORDINATES
1	102+60.33	13.25 LT	N 624937.45 E 816054.87
2	102+60.33	13.25 RT	N 624911.41 E 816049.90
3	102+68.83	0	N 624922.84 E 816060.74
4	102+70.33	13.25 LT	N 624935.57 E 816064.69
5	102+70.33	13.25 RT	N 624909.54 E 816059.73

W	WORKING POINT LAYOUT											
WORKING POINT	STATION	OFFSET (FT)	COORDINATES									
6	103+18.33	13.25 LT	N 624926.58 E 816111.84									
7	103+18.33	13.25 RT	N 624900.55 E 816106.88									
8	103+19.83	0	N 624924.71 E 816110.83									
9	103+28.33	13.25 LT	N 624924.71 E 816121.67									
10	103+28.33	13.25 RT	N 624898.68 E 816116.70									

LEGEND:



DENOTES VERTICAL PILE

DENOTES TEST PILE

FDP SUBMISSION SEPTEMBER 28, 2022

C.B. CHECKED BY: D.J.L. LASTED SAVED BY: LOR33993 FILE NAME: C:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract - Towns.cel PLOTTED DATE: 9/28/2022

Mott MacDonald 175 Capital Blvd 4th Floor Rocky Hill, CT 006067.

SIGNATURE/ BLOCK:

SCALE: 1/2" = 1'-0"

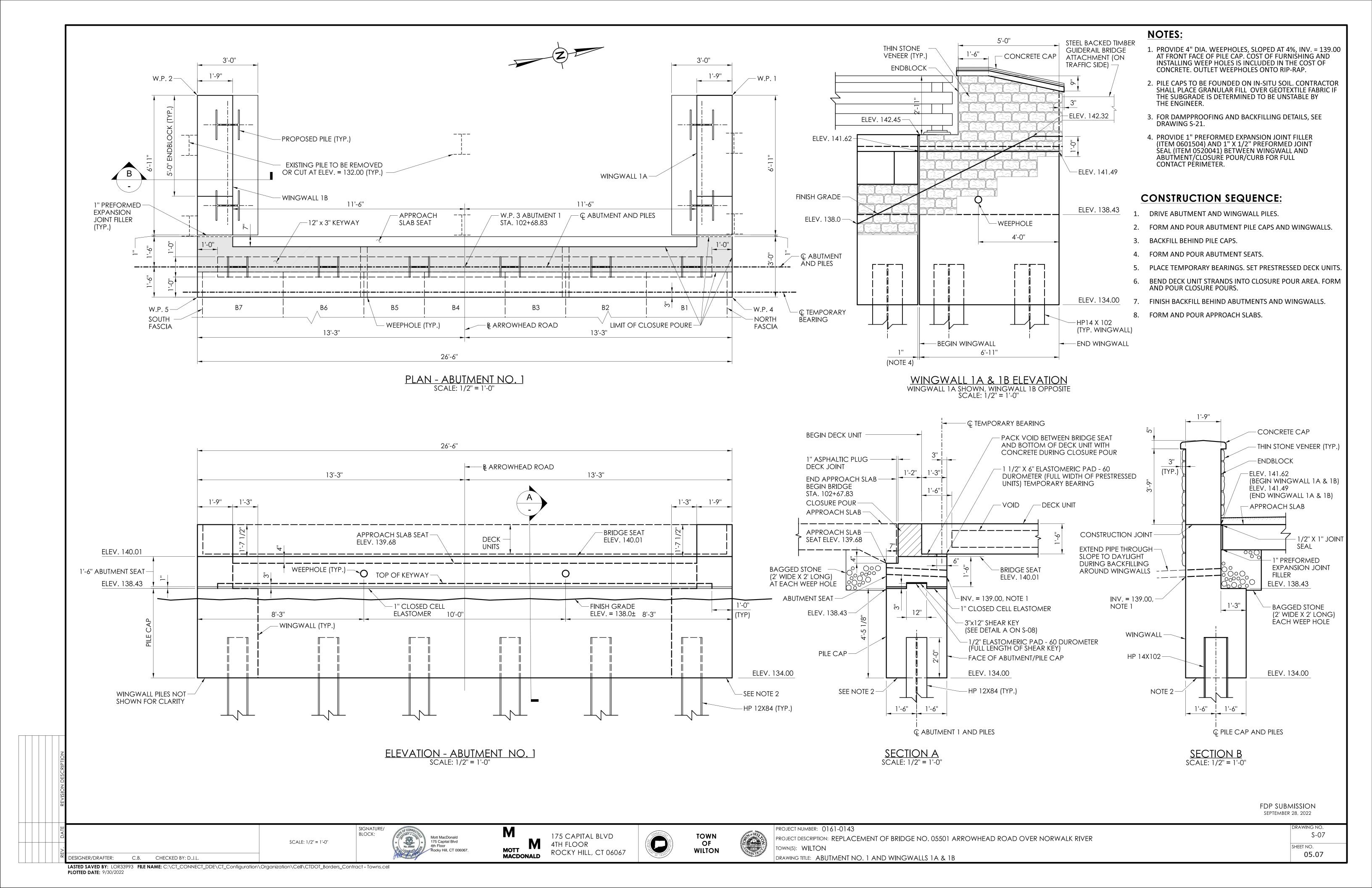
175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067

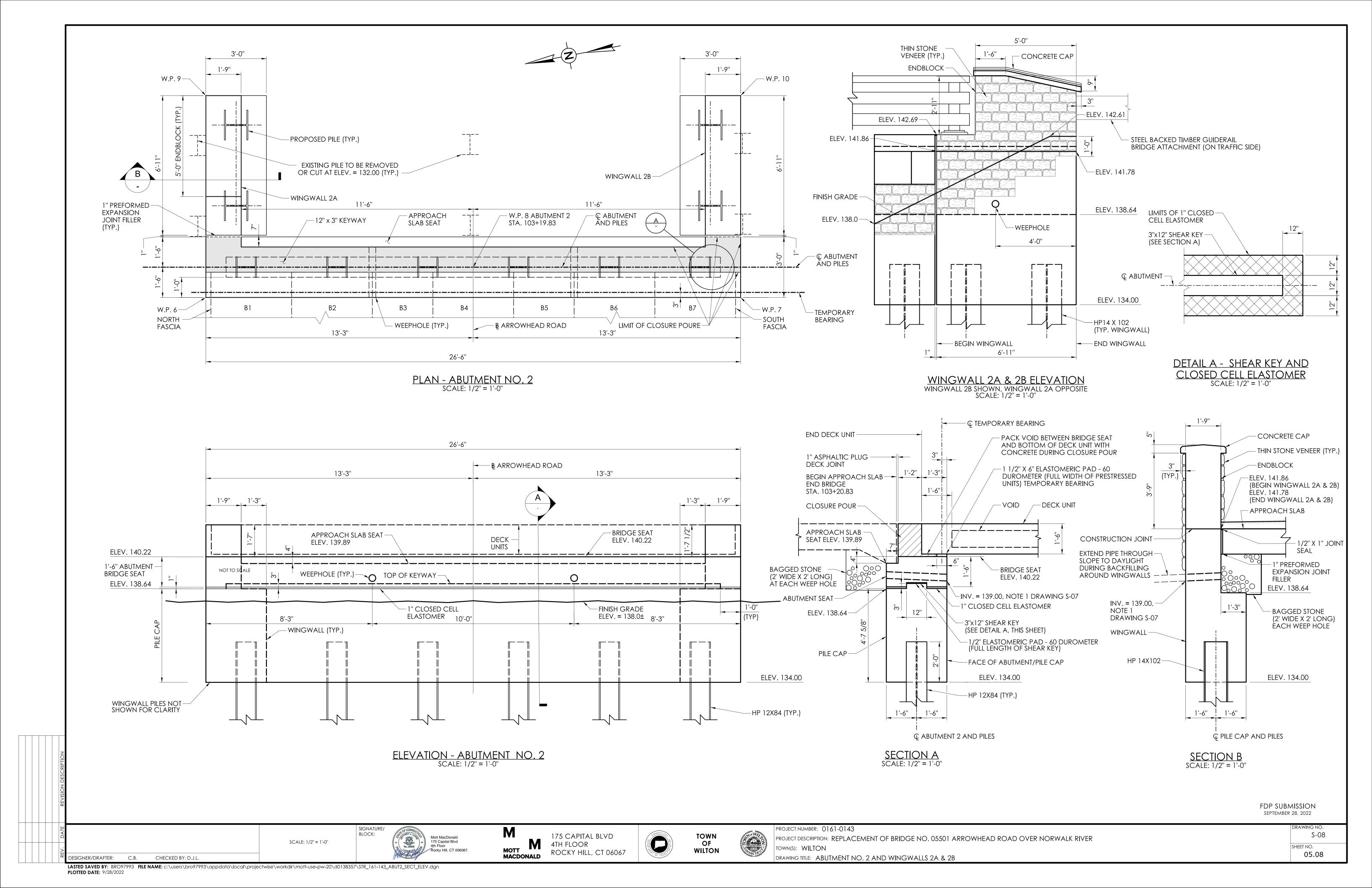


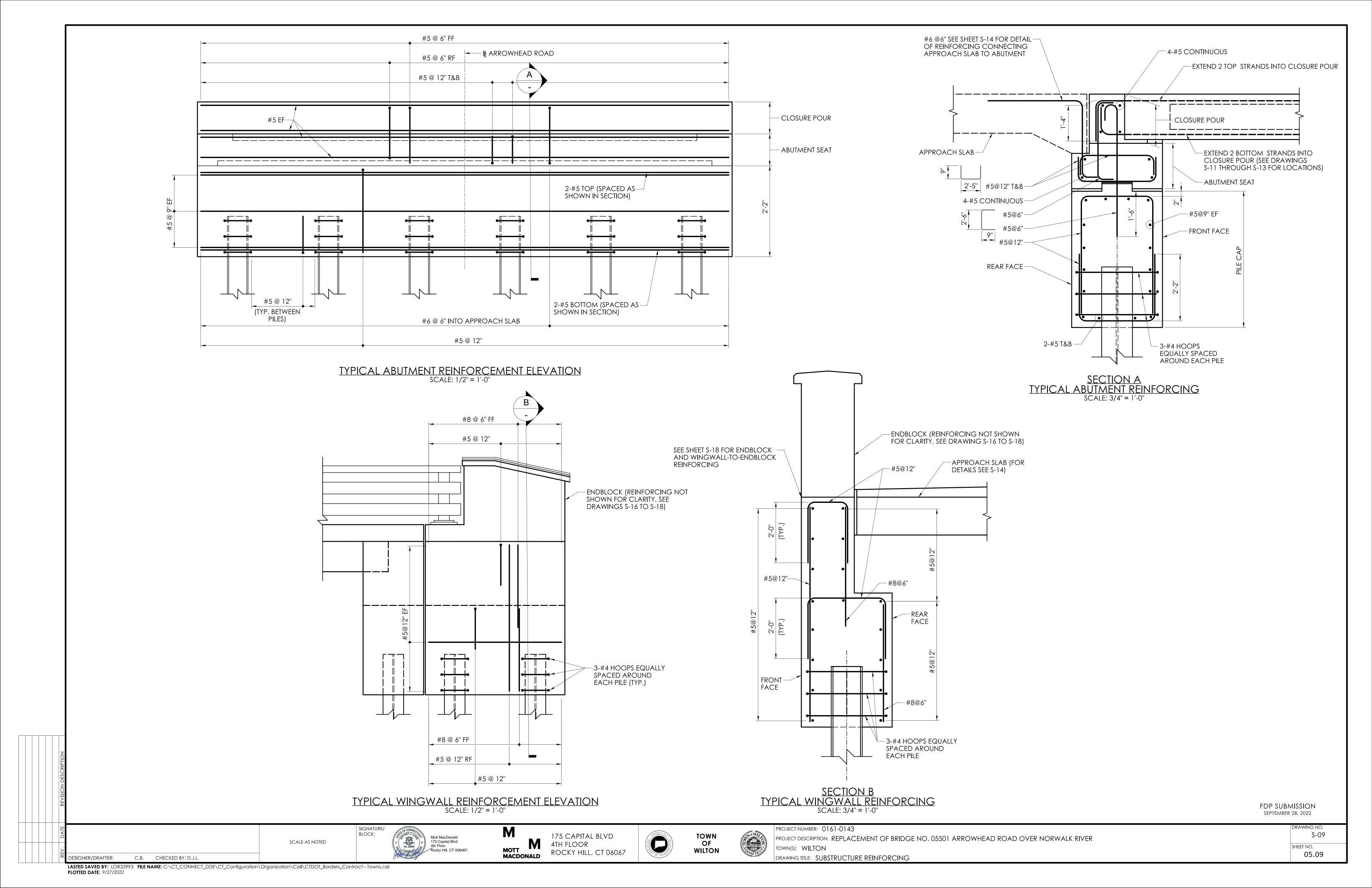


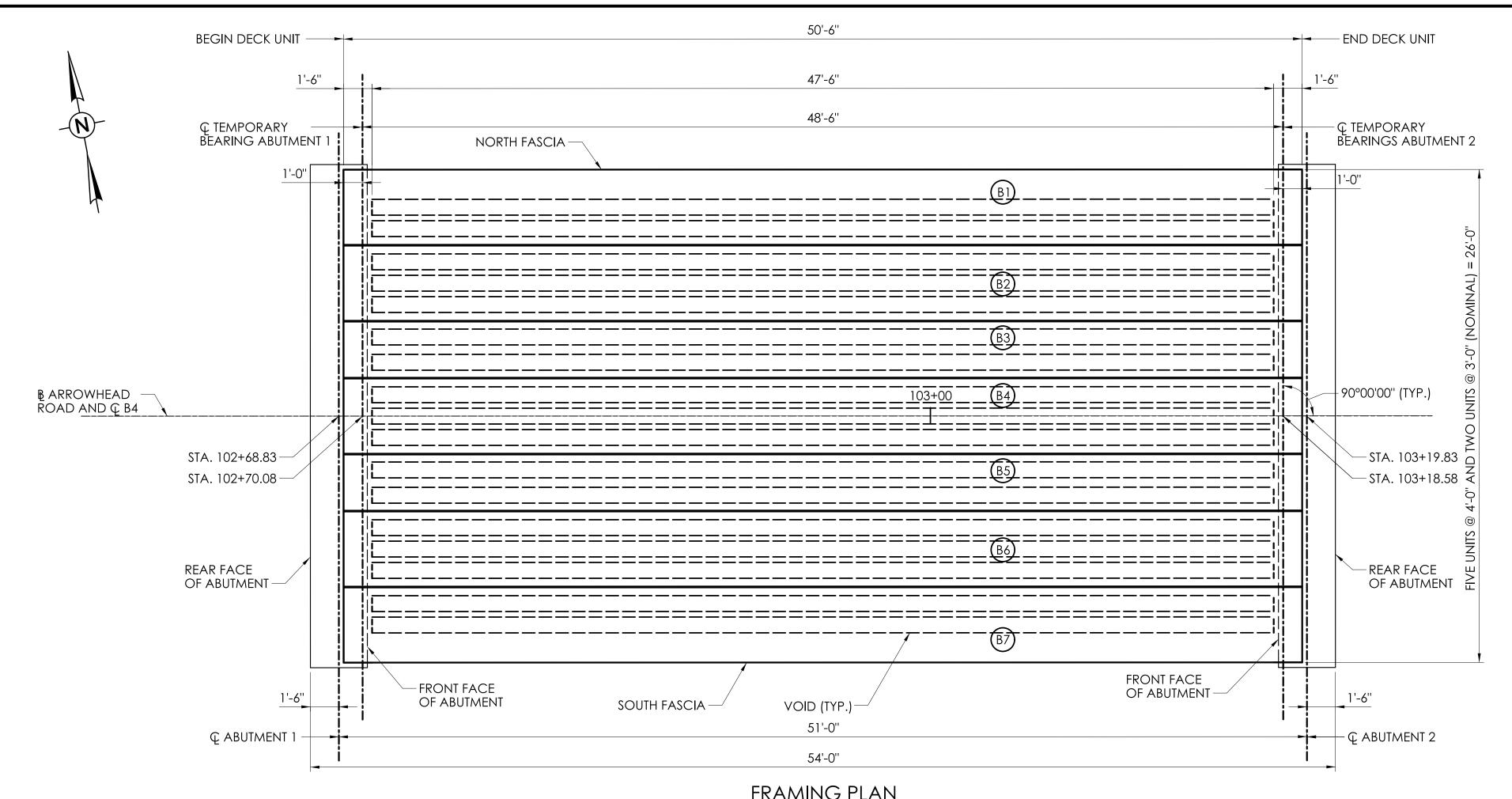


S-06

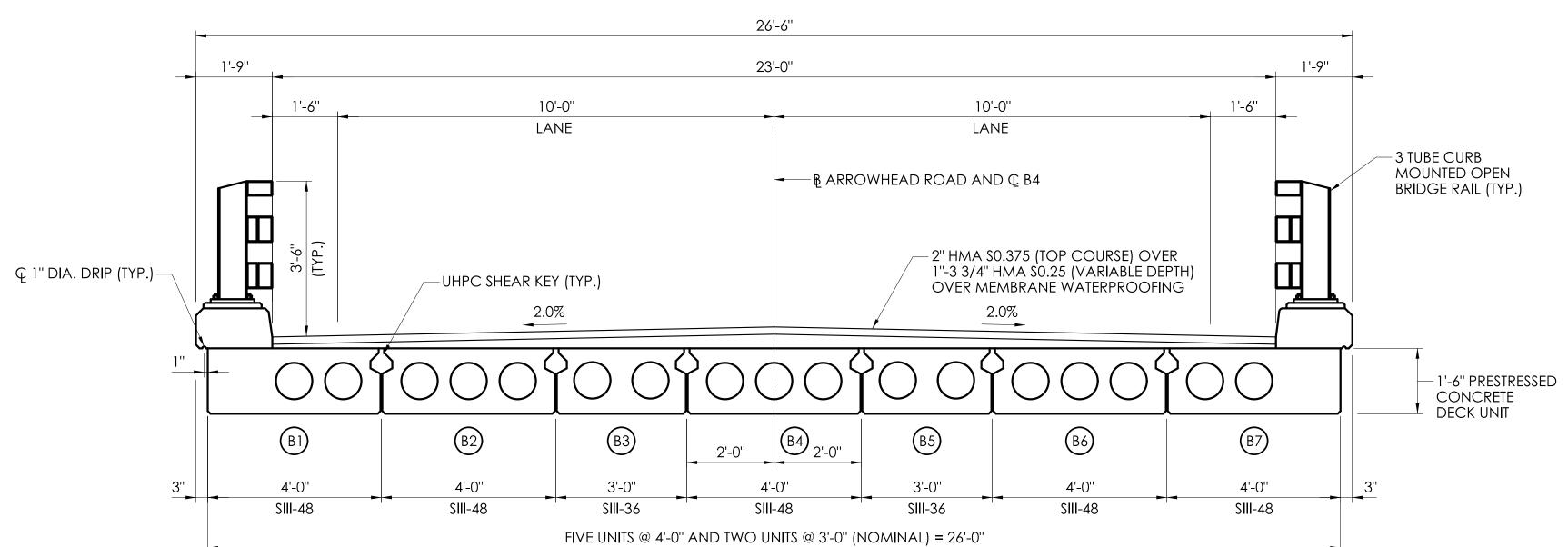












STRAND TABLE						
			CENTER OF GRAVITY OF STRANDS			
BEAM		NO. STRANDS	STA. 102+70.80 TO STA. 102+73.80	STA. 102+73.80 TO STA. 103+15.58	STA. 103+15.58 TO STA. 103+18.58	
B1 & B7	SIII-48	22	3.889	3.545	3.889	
B2, B4 AND B6	SIII-48	22	4.333	3.909	4.333	
B3 AMD B5	SIII-36	18	4.375	4.111	4.375	

BRIDGE SECTION SCALE: 1/2'' = 1'-0''

* THE CENTER OF GRAVITY OF STRANDS IS MEASURED FROM THE BOTTOM OF THE BEAM AND IS BASED ON THE GROSS NON-COMPOSITE SECTION

Mott MacDonald 175 Capital Blvd

Rocky Hill, CT 006067.

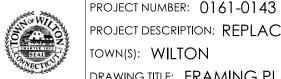
MACDONALD







OF



PRESTRESSED DECK UNIT NOTES:

- 1. PRESTRESSED DECK UNITS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: F'c = 10 KSI
- 2. PRESTRESSED STRANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS. 0.6" DIAMETER, UNCOATED, 7 WIRE, LOW RELAXATION STRANDS CONFORMING TO THE REQUIREMENTS OF AASHTO M203, GRADE 270: ULTIMATE STRENGTH (f's) = 270,000 PSI

JACKING TENSION (FJ) = 31,000 LBS. PER STRAND

- 3. PRESTRESSED STRANDS SHALL BE PLACED 2" MINIMUM ON CENTER AND SHALL HAVE A MINIMUM COVER OF 2".
- ENDS OF THE DECK UNITS SHALL BE VERTICAL AFTER APPLICATION OF FULL DEAD LOAD.
- 5. THE DRILLING OF HOLES IN PRESTRESSED DECK UNITS, OR THE USE OF POWDER ACTUATED TOOLS ON PRESTRESSED DECK UNITS WILL NOT BE PERMITTED.
- NO ADDITIONAL DEAD LOADS OR LIVE LOADS SHALL BE APPLIED TO THE PRESTRESSED DECK UNITS UNTIL UHPC KEYWAYS ARE FULLY FILLED AND UHPC IN THE LONGITUDINAL SHEAR KEYS HAVE REACHED A SEVEN-DAY COMPRESSIVE STRENGTH OF 14 KSI.
- THE DECK UNITS SHALL BE PLACED AT THE NOMINAL SPACING SHOWN ON THE PLANS WITH A 1/2" WIDE GAP BETWEEN THE BOTTOM OF THE UNITS. THE WIDTH OF THIS GAP CAN VARY DUE TO SWEEP OF THE BEAMS.
- MILD REINFORCING STEEL SHALL BE GALVANIZED ASTM A615 GRADE 60.
- 9. SHEAR KEY SHALL BE OMITTED ON OUTSIDE FACE OF FASCIA BEAMS
- 10. THE CONTRACTOR SHALL MANUFACTURE AND CONSTRUCT DECK UNITS IN ACCORDANCE WITH SPECIAL PROVISIONS FOR "PRESTRESSED DECK UNITS".
- 11. ALL INSERTS OR HOLES CAST INTO THE DECK UNITS FOR THE PURPOSE OF HANDLING AND SETTING THE UNITS SHALL BE SEALED WITH GROUT TO A SMOOTH FINISH UPON COMPLETION OF THE WORK.
- 12. THE COST OF FURNISHING INSERTS SHALL BE INCLUDED IN THE ITEMS 0514223A AND 0514203A PRESTRESSED DECK UNITS.
- 13. LIFTING HOOKS SHALL BE PLACED IN LINE WITH THE CENTER LINE OF THE TEMPORARY BEARINGS AND SHALL BE INSTALLED PER THE FABRICATOR'S STANDARD DETAILS. THE FABRICATOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE LIFTING DEVICES WHICH SHALL BE ADEQUATE FOR THE SAFETY FACTORS REQUIRED BY THE ERECTION PROCEDURE.

FINISHED GRADE ELEVATIONS (TOP OF PAVEMENT)

	SPAN (L = 48'-6")										
BEAM NO.	© BEARING ABUTMENT 1	0.1L	0.2L	0.3	0.4L	0.5L	0.6L	0.7L	0.8L	0.9L	© BEARING ABUTMENT 2
B1	141.92	142.00	142.06	142.11	142.15	142.18	142.20	142.20	142.19	142.17	142.13
B2	142.00	142.08	142.14	142.19	142.23	142.26	142.28	142.28	142.27	142.25	142.21
В3	142.07	142.15	142.21	142.26	142.30	142.33	142.35	142.35	142.34	142.32	142.28
B4	142.14	142.22	142.28	142.33	142.37	142.40	142.42	142.42	142.41	142.39	142.35
B5	142.07	142.15	142.21	142.26	142.30	142.33	142.35	142.35	142.34	142.32	142.28
В6	142.00	142.08	142.14	142.19	142.23	142.26	142.28	142.28	142.27	142.25	142.21
В7	141.92	142.00	142.06	142.11	142.15	142.18	142.20	142.20	142.19	142.17	142.13

CAMBER NOTES:

AT TRANSFER: CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS THE DEFLECTION DUE TO BEAM WEIGHT.

AT ERECTION: CAMBER (DUE TO PRESTRESS FORCE AT TRANSFER MINUS DEFLECTION DUE TO BEAM WEIGHT) THAT IS PRESENT AT APPROXIMATELY 30-60 DAYS AFTER TRANSFER.

FINAL: LONG-TERM CAMBER THAT IS PRESENT AFTER ALL DEAD LOADS ARE APPLIED TO THE STRUCTURE AND AFTER LONG TERM CREEP AND RELAXATION HAVE TAKEN PLACE.

POSITIVE VALUES IN THE CAMBER TABLE INDICATE UPWARD CAMBER.

BEAM NO.	ESTIMATED CAMBER AT MIDSPAN (INCHES)					
BLAIVI NO.	AT TRANSFER	AT ERECTION	FINAL			
B1 & B7	0.99	1.33	0.99			
B2, B4 & B6	0.99	1.35	1.04			
B3 & B5	1.03	1.43	1.15			

BEAM NO.	DEAD LOAD DEFLECTIONS AT MIDSPAN (INCHES)					
	SELF	PDL	SDL			
B1 & B7	1.67	0.81	0.41			
B2, B4 & B6	1.51	0.78	0.40			
B3 & B5	1.56	0.77	0.40			

BEAM DEAD LOAD DEFLECTION TABLE NOTES:

"SELF" IS THE DEFLECTION DUE TO THE GIRDER SELF-WEIGHT AT 30 DAYS.

"PDL" IS PRE-COMPOSITE DEAD LOAD DEFLECTION DUE TO THE WEIGHT OF THE CURB.

"SDL" IS THE DEFLECTION DUE TO THE SUPERIMPOSED DEAD LOAD (RAILING LOADS AND ASPHALT OVERLAY)

ALL DEFLECTIONS ARE IN INCHES AND ARE COMPUTED AT THE MIDSPAN OF THE GIRDER.

POSITIVE DEFLECTION VALUES INDICATE DOWNWARD DEFLECTION.

FDP SUBMISSION

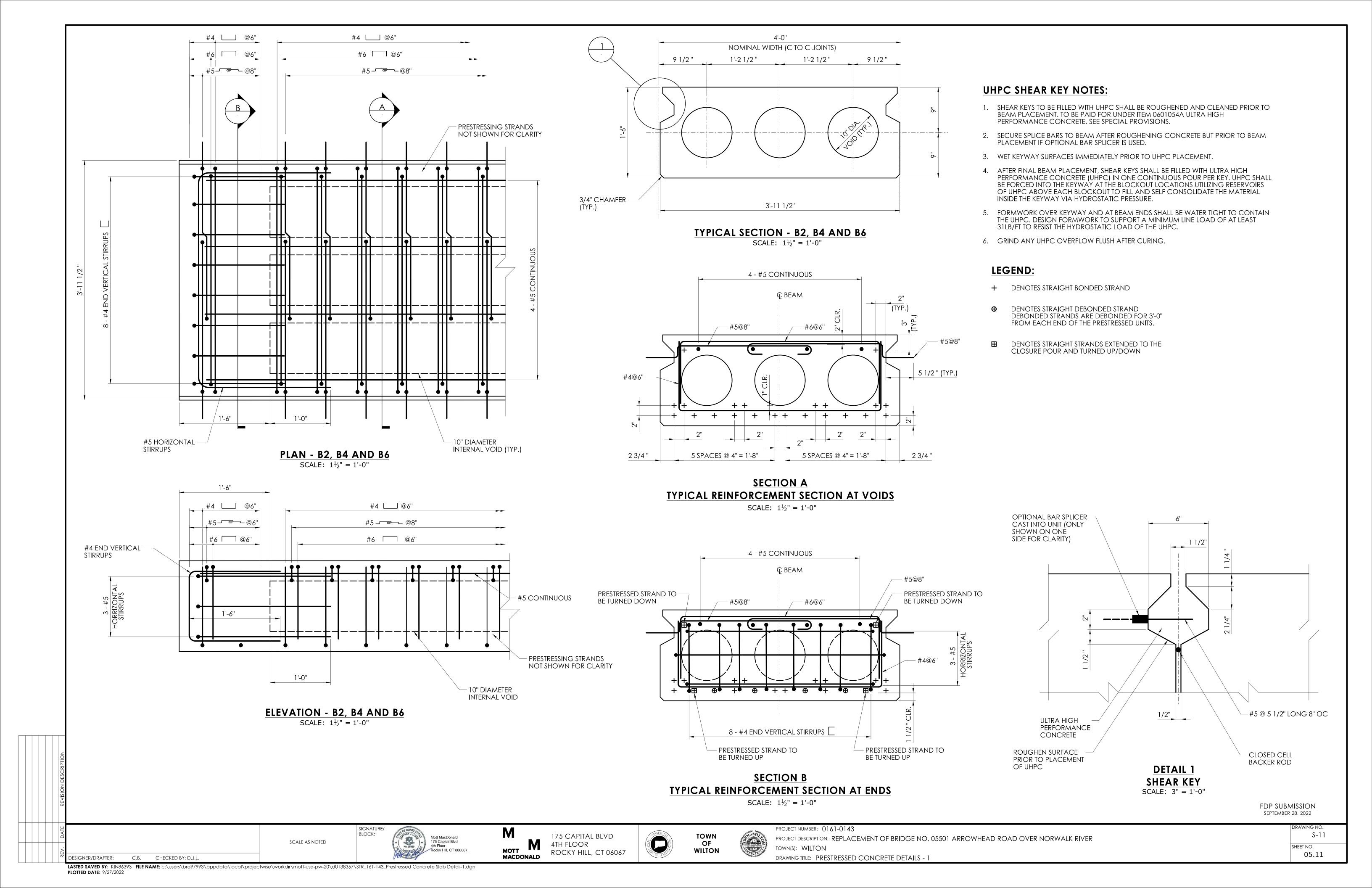
SEPTEMBER 28, 2022

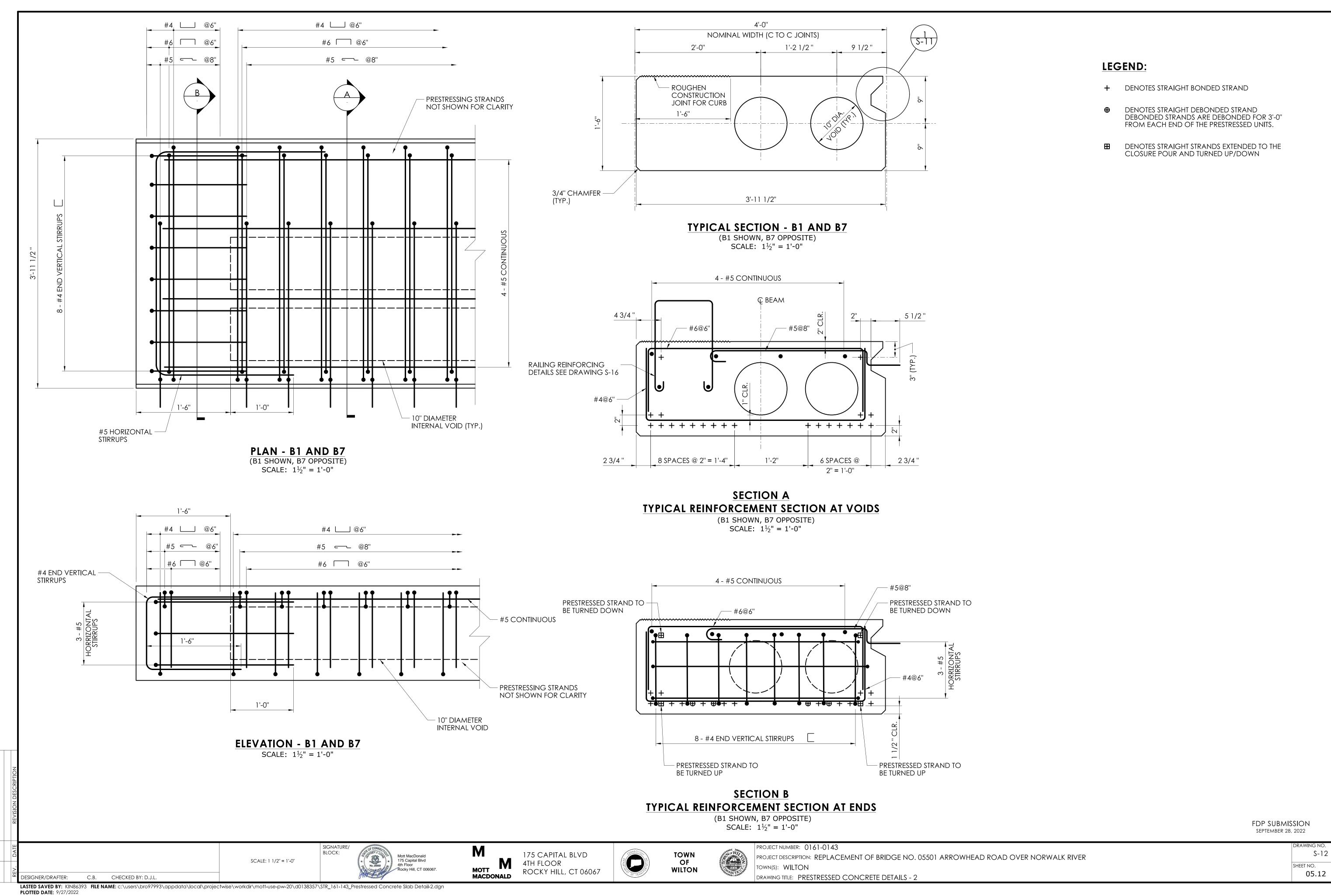
S-10 SHEET NO.

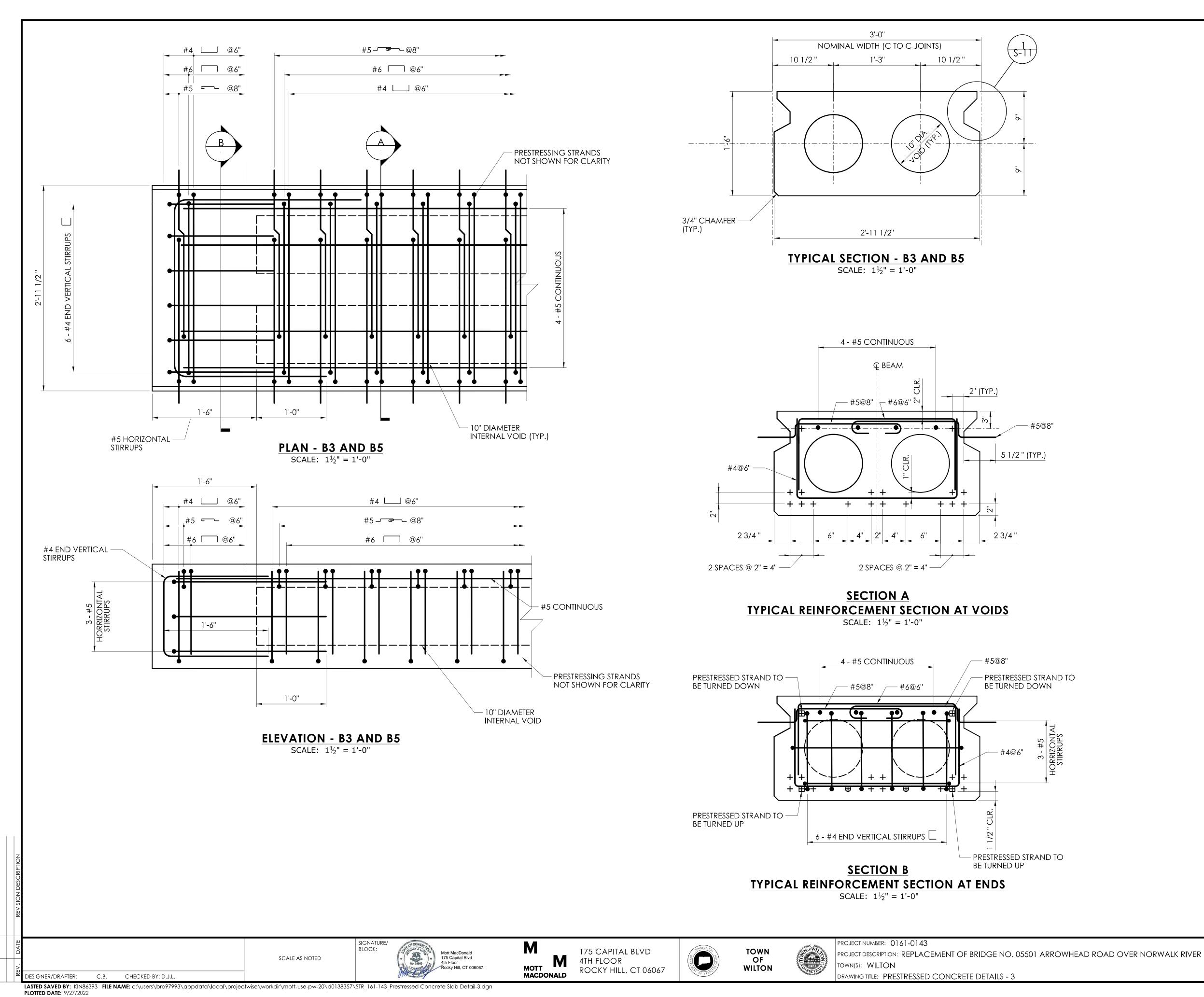
05.10

PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON DRAWING TITLE: FRAMING PLAN

DESIGNER/DRAFTER: C.B. CHECKED BY: D.J.L.







LEGEND:

+ DENOTES STRAIGHT BONDED STRAND

DENOTES STRAIGHT DEBONDED STRAND DEBONDED STRANDS ARE DEBONDED FOR 3'-0" FROM EACH END OF THE PRESTRESSED UNITS.

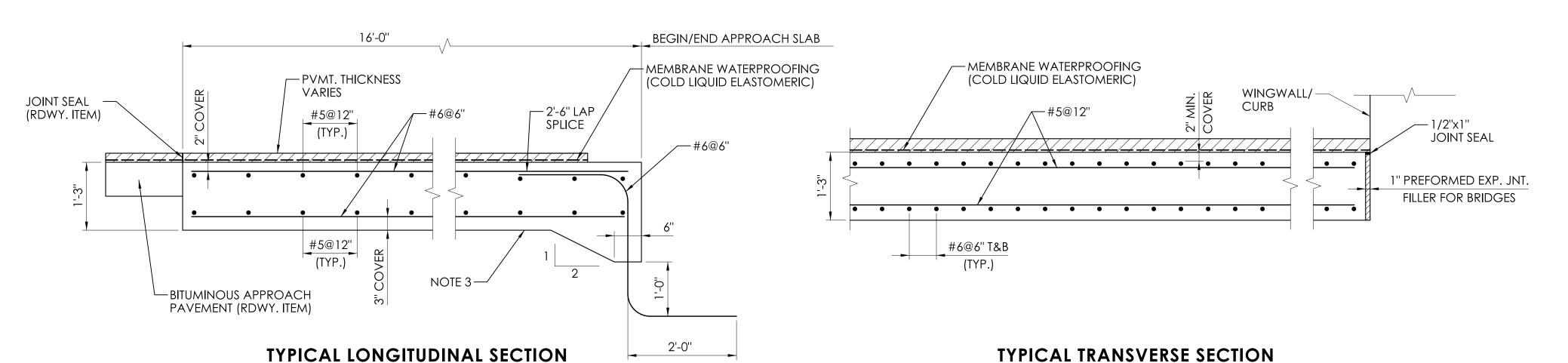
DENOTES STRAIGHT STRANDS EXTENDED TO THE CLOSURE POUR AND TURNED UP/DOWN

FDP SUBMISSION SEPTEMBER 28, 2022

S-13

05.13

SHEET NO.

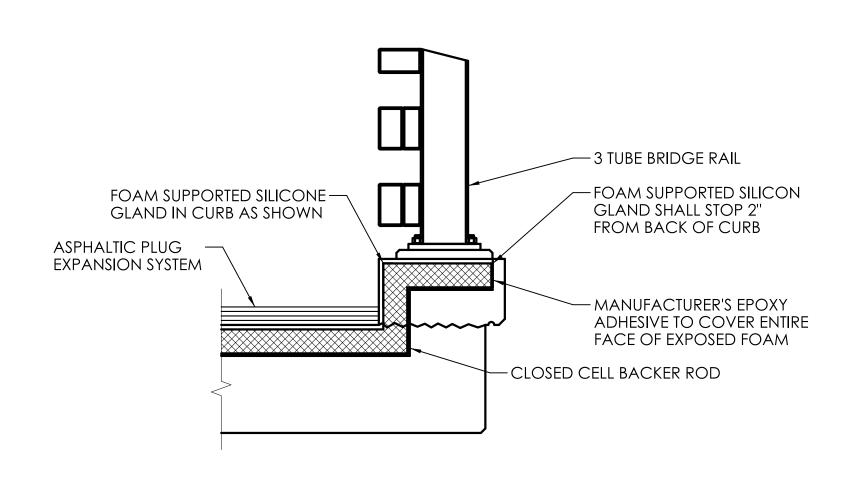


APPROACH SLAB NOTES

- 1. ALL REINFORCING STEEL IN APPROACH SLABS TO BE INCLUDED IN THE ITEM FOR "DEFORMED STEEL BARS-GALVANIZED"
- 2. SEE DRAWING S-21 FOR PAVEMENT DETAILS AT APPROACH SLAB.

APPROACH SLAB DETAILS

SCALE: 3/4" = 1'-0"



ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT CURB

SCALE: 3/4'' = 1'-0''

NOTES:

- 1. THE CLOSED CELL BACKER ROD SHALL BE PLACED A MINIMUM OF 2" FROM THE OUTSIDE FACE OF CURB. INCLUDE IN ITEM FOR ASPHALTIC PLUG EXPANSION JOINT SYSTEM.
- 2. THE NON-SAGGING SILICONE SEALANT SHALL BE PLACED ON THE BACKER ROD $\frac{1}{2}$ " THICK. AT THE GUTTER, THE SILICONE SEALANT SHALL BE PLACED FLUSH WITH THE OUTSIDE FACE OF THE CONCRETE.
- 3. PRIOR TO INSTALLING THE SILICONE SEALANT, CLEAN JOINT SIDES BY SANDBLASTING. DUST SHALL BE REMOVED BY THE METHOD APPROVED BY THE ENGINEER. THE WORK SHALL BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM". (SEE SPECIAL PROVISIONS)

SCALE AS NOTED

SUGGESTED SEQUENCE OF WORK

- INSTALL TEMPORARY BACKER ROD FLUSH WITH THE CLOSURE POUR AND APPROACH SLAB OR BACKWALL.
- INSTALL MEMBRANE WATERPROOFING TO THE TOP OF CLOSURE POUR AND APPROACH SLAB WITHIN THE LIMITS SHOWN.
- PLACE BITUMINOUS CONCRETE OVERLAY AS INDICATED ON THE PLANS.
- STEP 4: SAW-CUT PAVEMENT FULL DEPTH AT 10" EACH SIDE OF CENTERLINE OF JOINT, AND REMOVE ALL PAVEMENT MATERIAL BETWEEN SAW-CUTS. TO BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM".
- INSTALL PROPOSED ASPHALTIC PLUG EXPANSION JOINT SYSTEM WITH FOAM SUPPORTED SILICONE GLAND AND BRIDGING PLATE. LOCATING PINS SHALL NOT BE USED TO SECURE THE BRIDGING PLATE.

SEE NOTE 10" & 10INT -BINDER WITH AGGREGATE SAWCUT PRIOR TO REMOVAL — OF BITUMINOUS CONCRETE BITUMINOUS CONCRETE OVERLAY (TYP.) OVERLAY ON MEMBRANE WATERPROOFING BITUMINOUS CONCRETE OVERLAY ON MEMBRANE WATERPROOFING (THICKNESS VARIES) - BRIDGING PLATE 8" X 1/4" MIN. -CLOSURE POUR APPROACH SLAB--PRESTRESSED CONCRETE DECK UNIT FOAM SUPPORTED-AT 68° F SILICONE GLAND 1" (TYP.) ~— ABUTMENT

ASPHALTIC PLUG EXPANSION JOINT SYSTEM

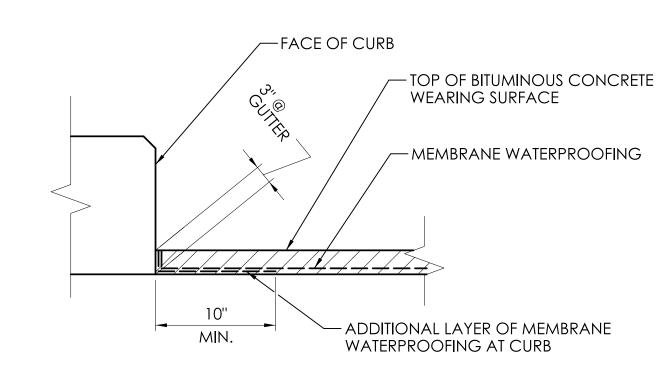
SCALE: 3/4" = 1'-0"

NOTE: REMOVE NEW BITUMINOUS CONCRETE OVERLAY AND MEMBRANE WATERPROOFING. REPLACE WITH ASPHALTIC PLUG EXPANSION SYSTEM. TO BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM. "SEE SPECIAL PROVISION).

EXPECTED THERMAL MOVEMENT BETWEEN $\frac{1}{6}$ " AND $\frac{1}{4}$ ".

ASPHALTIC PLUG EXPANSION JOINT SYSTEM NOTES:

- 1. A BRIDGING PLATE SHALL BE USED TO SPAN THE GAP BETWEEN JOINT BETWEEN A DECK END CLOSURE POUR AND A CONCRETE APPROACH SLAB.
- DISCONTINUE THE INSTALLATION OF THE BRIDGING PLATE WHERE THE APPROACH SLAB IS DISCONTINUED (TYPICALLY IN THE ROADWAY SHOULDERS). SEE "ASPHALTIC PLUG EXPANSION JOINT SYSTEM" SPECIAL PROVISION.
- NEW STEEL BRIDGING PLATES SHALL BE A MINIMUM OF $\frac{1}{4}$ " THICK BY 8" WIDE. FOR JOINT OPENINGS WHICH EXCEED 3", A %" THICK BY 12" WIDE PLATE WILL BE REQUIRED
- NO BRIDGING PLATE SHALL BE USED AT THE FOLLOWING LOCATIONS: A. JOINT BETWEEN A DECK END CLOSURE POUR AND A CONCRETE APPROACH PAVEMENT
 - WHERE A BRIDGE DECK END CLOSURE POUR MEETS A BITUMINOUS APPROACH PAVEMENT
- TEMPORARY CLOSED CELL BACKER ROD DIAMETER SHALL BE DETERMINED AFTER MEASURING THE JOINT OPENING, THE ROD SHALL BE 25% LARGER THAN THE JOINT OPENING.



TREATMENT OF MEMBRANE WATERPROOFING AT GUTTER

ASPHALTIC PLUG EXPANSION JOINT SYSTEM NOTES (CONT.):

- INSTALLATION OF MEMBRANE WITHIN THE LIMITS SHOWN TO BE PAID UNDER THE ITEM, "MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMER)".
- 7. THE FURNISHING AND PLACING OF HMA TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "HMA \$0.375".
- SAW-CUTTING AND REMOVAL OF PAVEMENT FOR JOINT INSTALLATION TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM".
- 9. INSTALLATION OF FOAM SUPPORTED SILICONE GLAND TO BE PAID UNDER THE ITEM "PREFORMED JOINT SEAL".
- ASPHALTIC PLUG EXPANSION JOINT SYSTEMS MAY BE INSTALLED ONLY WITHIN THE TEMPERATURE RANGE SPECIFIED IN THE SPECIAL PROVISION "ASPHALTIC PLUG EXPANSION JOINT SYSTEM". REFERENCE THE RANGE OF THERMAL MOVEMENT FOR THE SELECTED JOINT PRODUCT IN THE TABLE FOR "INSTALLATION RESTRICTIONS" IN THE SPECIAL PROVISION.

BITUMINOUS CONCRETE PLACEMENT AT ASPHALTIC PLUG JOINTS (APJ):

- THE REQUIREMENTS OF SPECIAL PROVISION SECTION 4.06 SHALL BE MET EXCEPT IN LIEU OF DENSITY TESTING, THE METHODS DESCRIBED BELOW SHALL BE FOLLOWED TO ASSURE PROPER COMPACTION.
- TOP LIFT MUST BE UNIFORM THICKNESS; INTERMEDIATE LIFTS CAN BE PLACED AT $1\frac{1}{4}$ " TO $2\frac{1}{2}$ " COMPACTED
- REQUIREMENTS FOR PROPER COMPACTION:
 - MINIMUM 265° F DELIVERY TEMPERATURE OF MATERIAL. PLACE AND SPREAD MATERIAL BEFORE IT COOLS TO 260° F. MATERIAL BELOW TEMPERATURE REQUIREMENT WILL BE REJECTED.
 - COMPACT NON-SURFACE LIFTS WITH VIBRATORY PLATE COMPACTOR MEETING THE FOLLOWING REQUIREMENTS:
 - DESIGNED TO COMPACT ASPHALT
 - EQUIPPED WITH A WATER TANK
 - CENTRIFUGAL FORCE 3200 LBS TO 6000 LBS
 - WEIGHS MINIMUM 160 LBS (WITHOUT WATER) MINIMUM 4400 VIBRATIONS PER MINUTE
 - COMPACT TOP LIFT WITH 3 1/2 TO 4 1/2 TON DOUBLE DRUM ROLLER, DESIGNED TO COMPACT BITUMINOUS CONCRETE.
 - PROVIDE NUMBER OF PASSES BASED ON LIFT THICKNESS AS FOLLOWS:

LIFT THICKNESS (INCHES) NUMBER OF PASSES 1¼ TO 1½ 1½ TO 2 2 TO $2\frac{1}{2}$

- ADDITIONAL COMPACTING EQUIPMENT MAY BE REQUIRED TO COMPLETE LIFT COMPACTION BEFORE MATERIAL COOLS TO 180° F.
- AT CORNERS OR OTHER AREAS INACCESSIBLE TO PLATE TAMPER, HAND TAMP 20 TIMES MINIMUM BEFORE MATERIAL COOLS TO 180° F.
- 4. ALTERNATE EQUIPMENT MAY BE REQUESTED AS A SUPPLEMENT TO CONTRACTOR'S QC PLAN. THE EQUIPMENT AND PROCEDURES MUST BE APPROVED BY THE ENGINEER PRIOR TO USE.
- IF THESE METHODS ARE NOT PERFORMED TO THE SATISFACTION OF THE ENGINEER, DENSITY VERIFICATION MAY BE REQUIRED WHEREIN THE CONTRACTOR SHALL PROVIDE DENSITY TESTING WITH A QC NUCLEAR DENSITY GAUGE OR COLLECT CORE SAMPLES AS SPECIFIED IN SECTION 4.06.

FDP SUBMISSION SEPTEMBER 28, 2022

CHECKED BY: D.J.L.

DESIGNER/DRAFTER:

C.B.











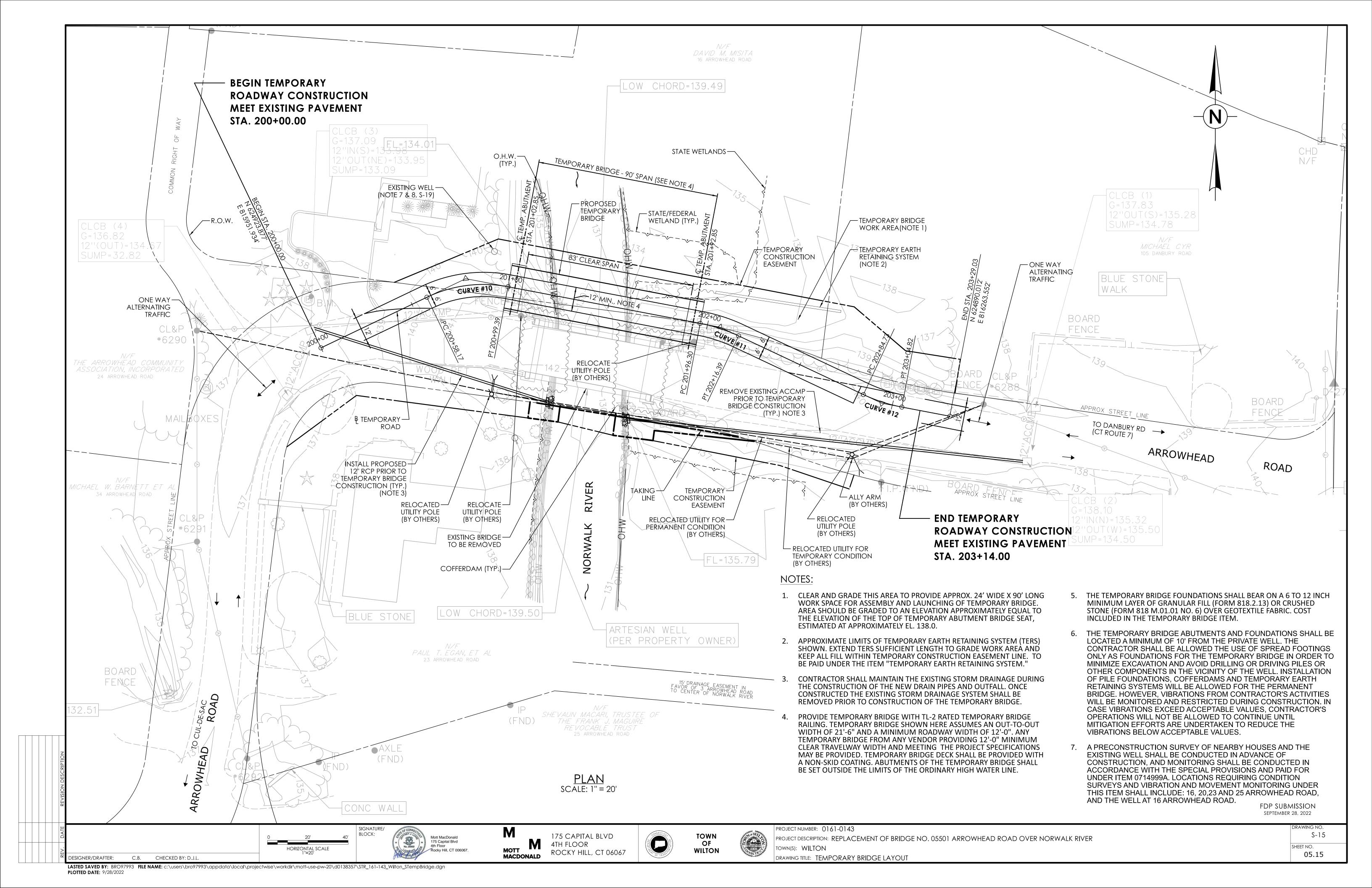


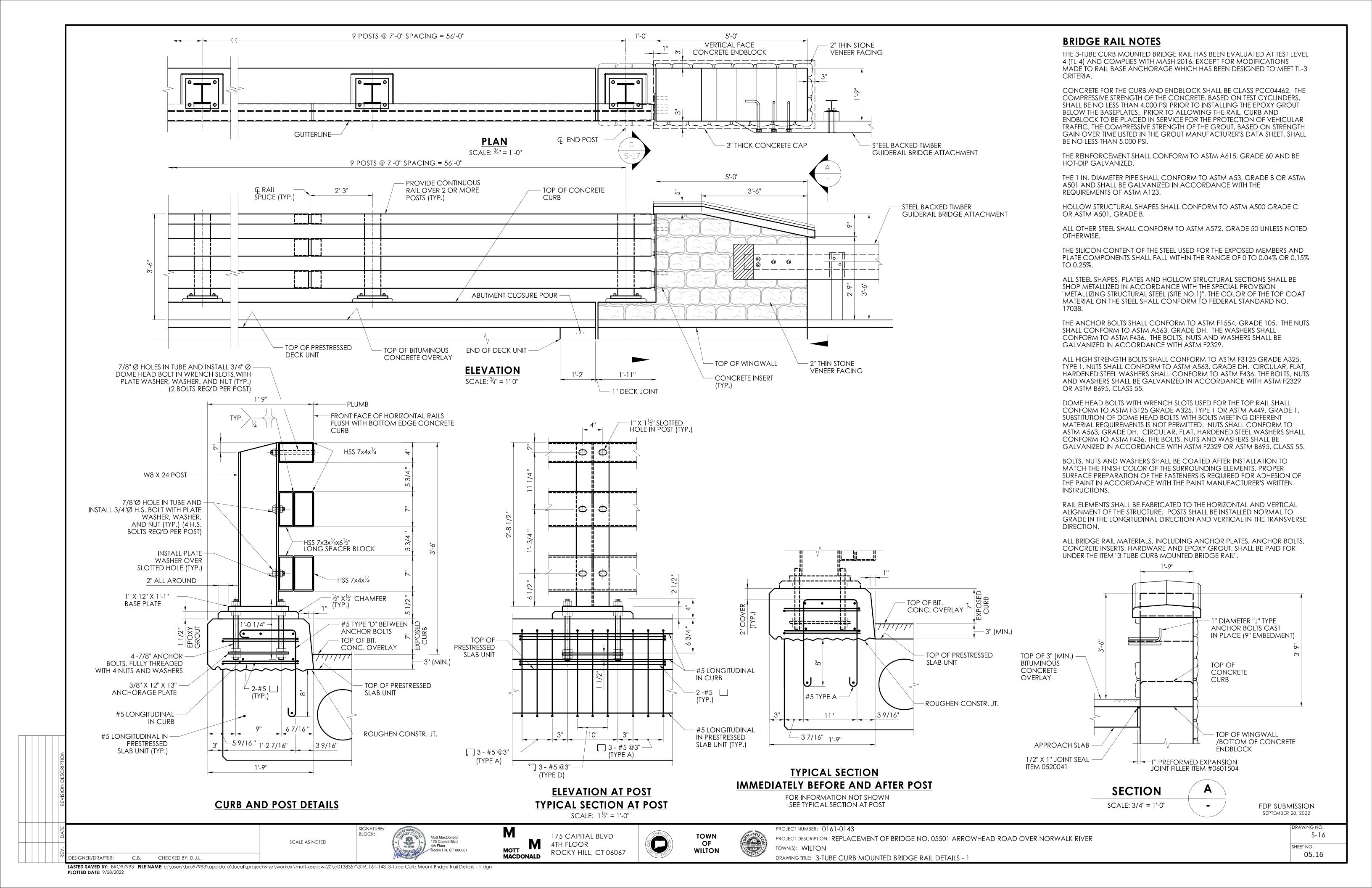


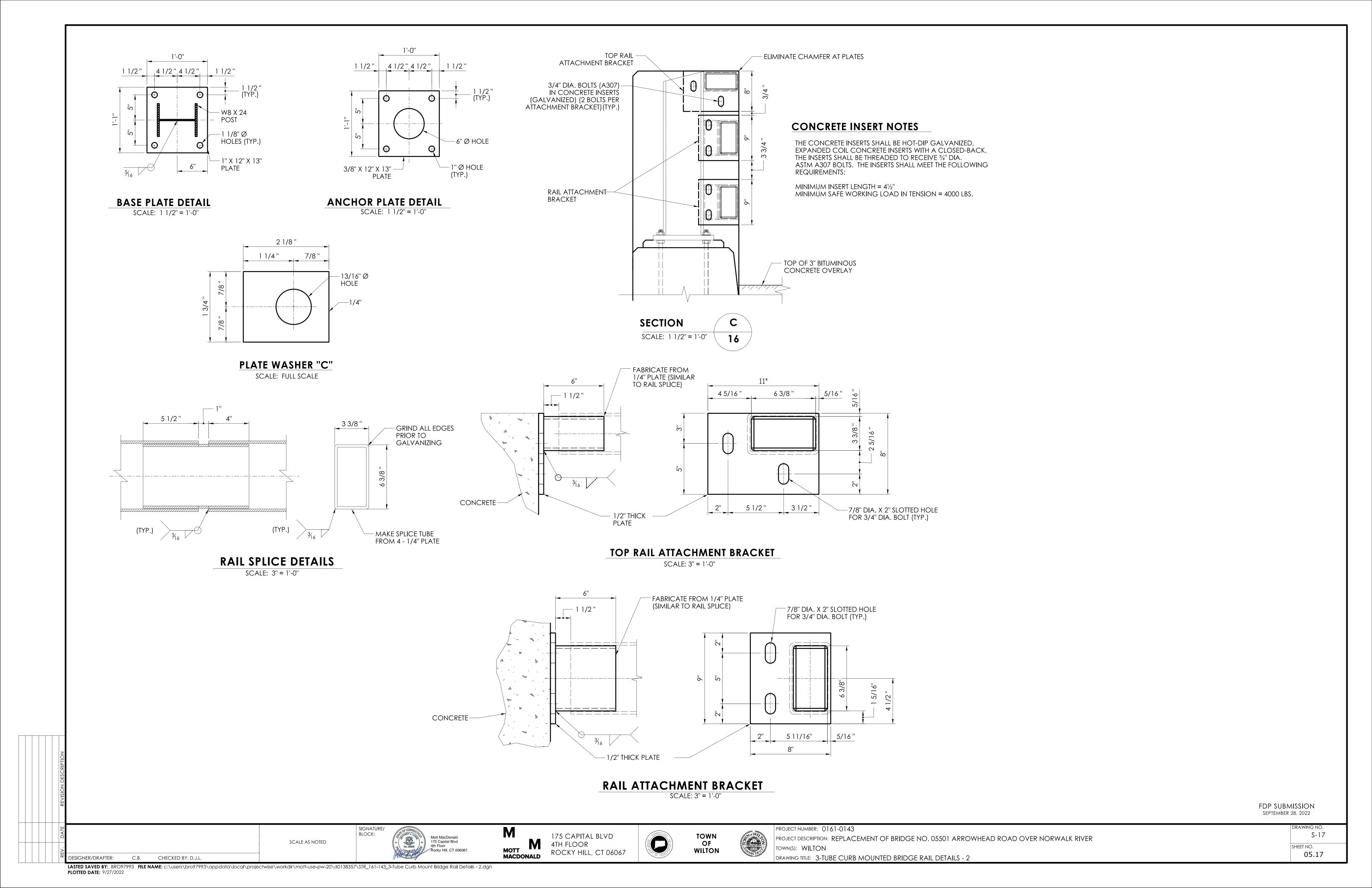
PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON DRAWING TITLE: APPROACH SLAB DETAILS

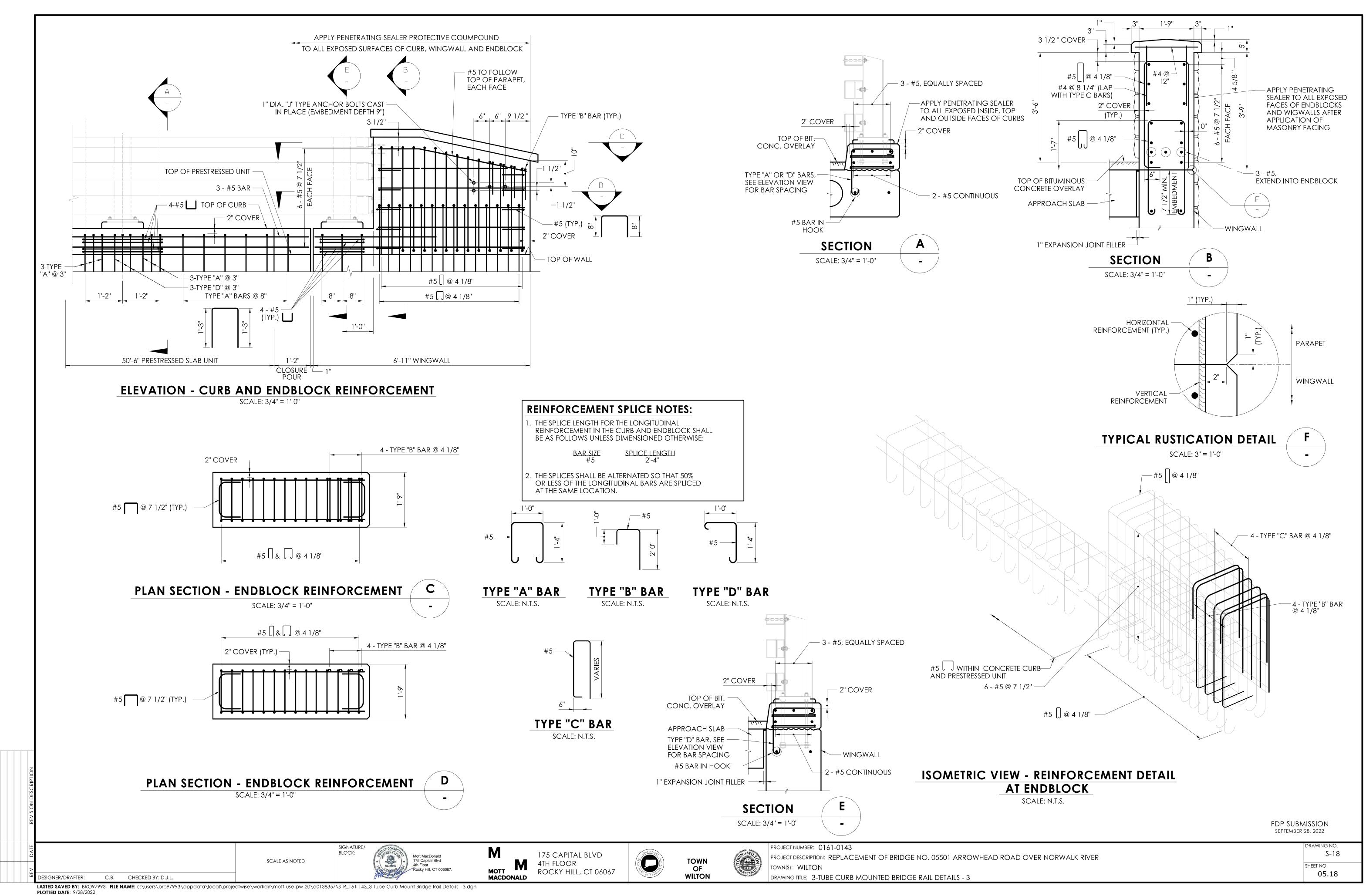
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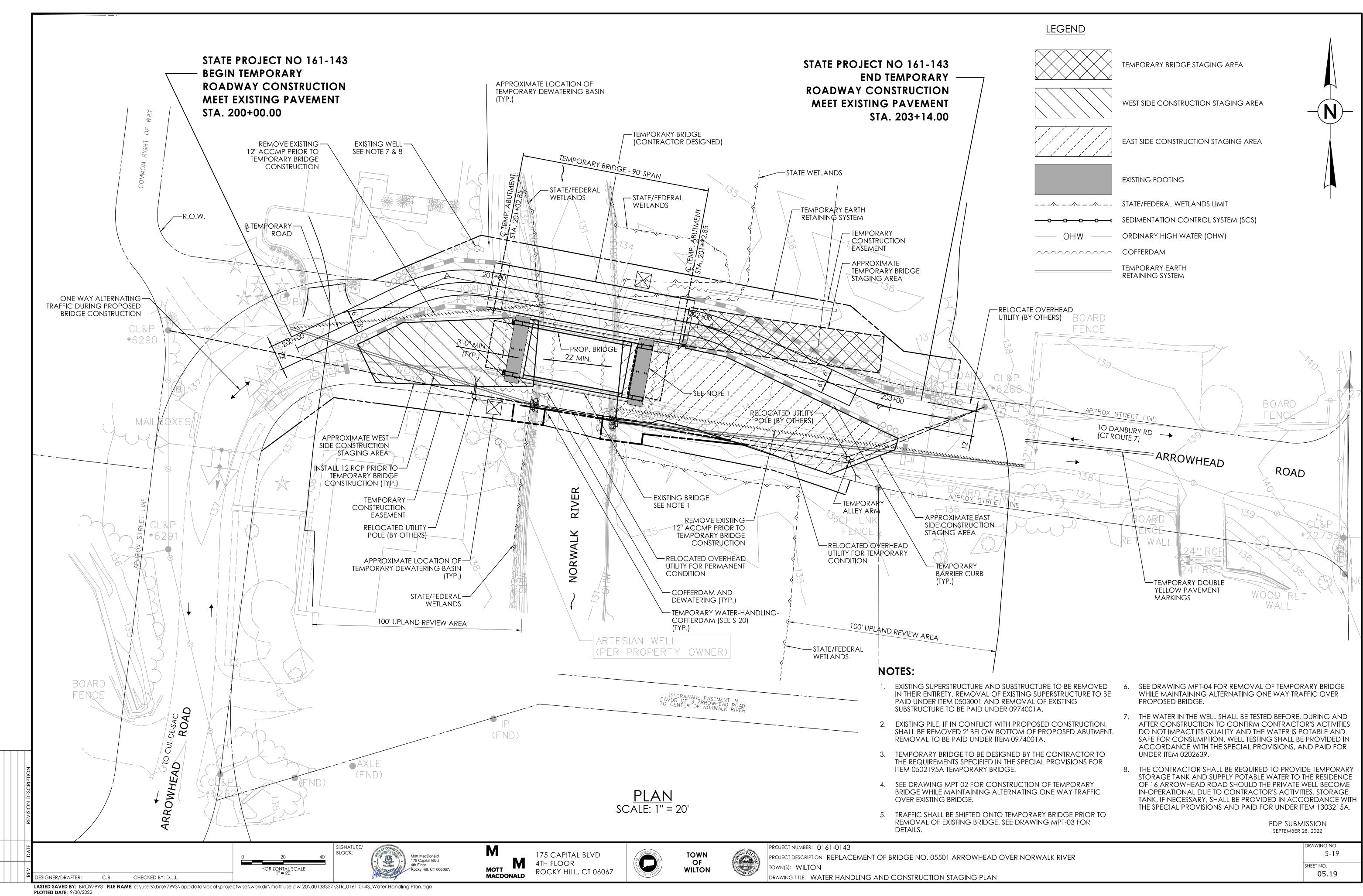
S-14











WATER HANDLING NOTES:

- 1. COFFERDAMS SHALL CONSIST OF ANY APPROVED SYSTEM THAT THE CONTRACTOR DESIGNS AND ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND EXCAVATION, AND SHALL CONFORM TO PERMITS. COFFERDAMS ARE PAID FOR UNDER THE "COFFERDAM AND DEWATERING" ITEM #0204111.
- 2. BEFORE INITIATING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL THAT DEFINES THE METHODS AND MATERIALS FOR CONTROLLING WATER, STRUCTURE EXCAVATION, AND PROTECTING THE STREAM DURING CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE "COFFERDAM AND DEWATERING" ITEM.
- 3. EQUIPMENT SHALL NOT BE PERMITTED IN THE RIVER WHEN COFFERDAM AND DEWATERING SYSTEM IS NOT IN PLACE WITHOUT APPROVAL FROM THE ENGINEER.
- 4. THE INSTALLATION AND REMOVAL OF COFFERDAM AND DEWATERING SYSTEM CAN OCCUR AT ANY TIME OF THE YEAR. WORK BEHIND COFFERDAM CAN OCCUR AT ANY TIME OF THE YEAR.
- 5. COFFERDAM AND TERS SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND AND FLOODPLAIN IMPACT SHEETS OF THE PERMIT PLANS.
- 6. A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS. THE LOCATION OF THE DEWATERING BASIN IS APPROXIMATE. THE EXACT POSITION MAY VARY BASED ON THE PUMPING DESIGN SUBMISSION APPROVED BY THE ENGINEER.
- 7. PRESENCE OF OBSTRUCTIONS IN THE FILL AND NATURAL SOILS, AND THE PRESENCE OF FINE-GRAINED GRANULAR SOILS THAT ARE SUSCEPTIBLE TO DISTURBANCE IN THE PRESENCE OF WATER, SHALL BE CONSIDERED BY THE CONTRACTOR IN DESIGNING AND PROVIDING THE COFFERDAM AND DEWATERING SYSTEM. THE CONTRACTOR SHALL REVIEW THE BORING LOGS ON DRAWINGS S-04, S-05 AND IN THE FINAL GEOTECHNICAL ENGINEERING REPORT.
- 8. COFFERDAM AND DEWATERING SYSTEM SHALL BE REMOVED IN ITS ENTIRETY AT THE END OF CONSTRUCTION.
- 9. TEMPORARY-WATER HANDLING-COFFERDAMS SHALL CONSIST OF PLASTIC LINER, SANDBAGS OR ANY OTHER APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS AROUND THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND EXCAVATION, AND SHALL CONFORM TO PERMITS. TEMPORARY-WATER-HANDLING-COFFERDAMS ARE PAID FOR UNDER "HANDLING WATER". THIS DETAIL APPLIES TO THE CONSTRUCTION OF DRAINAGE PIPE RELOCATIONS, ENDWALLS AND REBULT STONE WALLS AT THE SOUTHWEST AND SOUTHEAST QUADRANTS OF THE BRIDGE. A 22' (MIN.) CHANNEL OPENING SHALL BE MAINTAINED; INSTALL TEMPORARY-WATER-HANDLING-COFFERDAM ON ONE SIDE OF THE RIVER AT A TIME IF THE CONFIGURATION OF THE SYSTEM DOES NOT ALLOW FOR THE MINIMUM CHANNEL OPENING TO BE MAINTAINED IF INSTALLED SIMULTANEOUSLY ON BOTH SIDES OF THE RIVER.

TIME-OF-YEAR RESTRICTIONS

ANY "UNCONFINED" INSTREAM WORK WITHIN THE RIVER SHALL BE RESTRICTED TO THE PERIOD FROM JULY 1 TO SEPTEMBER 30, INCLUSIVE.

SUGGESTED SEQUENCE OF CONSTRUCTION:

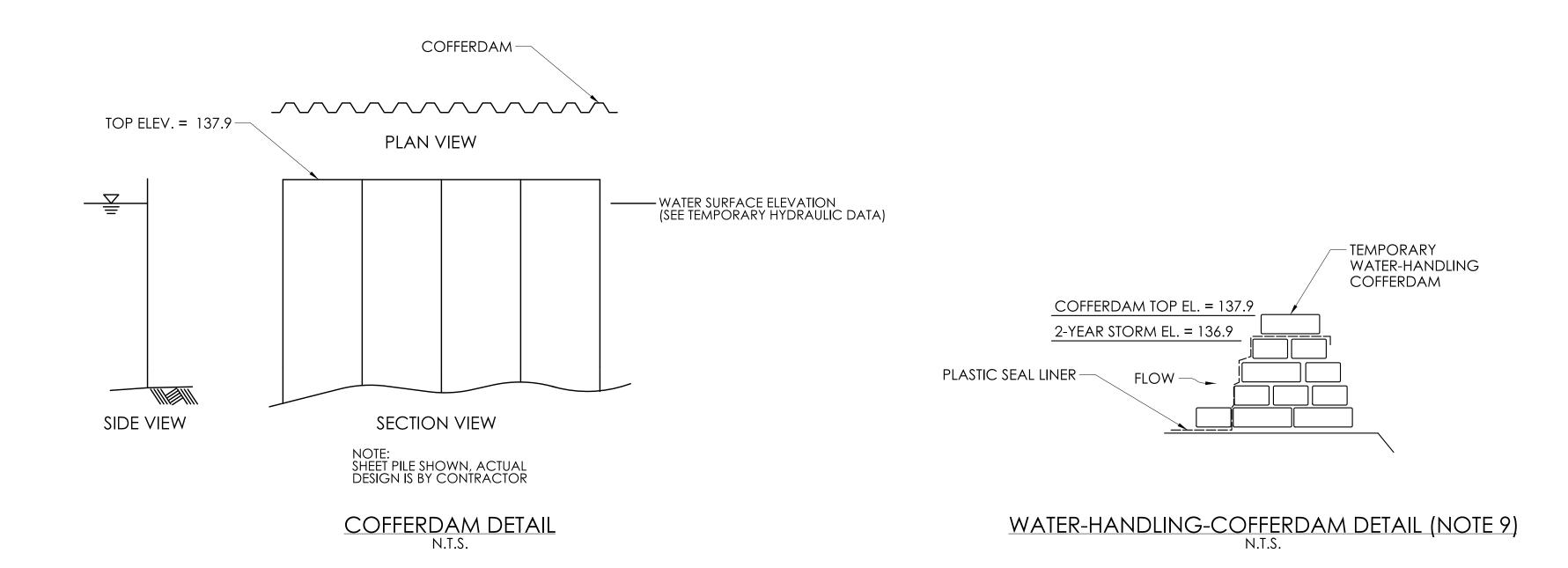
- 1. CLEAR AND GRUB THE WORK AREA AND INSTALL SEDIMENTATION CONTROL SYSTEM (SCS).
- 2. INSTALL TERS.
- 3. CONSTRUCT TEMPORARY ROADWAY AND STAGING AREAS.
- 4. CONSTRUCT TEMPORARY BRIDGE. DIVERT TRAFFIC ONTO TEMPORARY BRIDGE.
- 5. INSTALL DEBRIS SHIELD ABOVE ELEVATION 138.0 MIN. AND DEMOLISH EXISTING BRIDGE SUPERSTRUCTURE.
- 6. INSTALL COFFERDAMS.
- 7. DEMOLISH EXISTING SUBSTRUCTURES AND EXCAVATE FOR PROPOSED SUBSTRUCTURES.
 CUT OFF EXISTING PILES 2 FEET BELOW BOTTOM OF PROPOSED ABUTMENTS OR WINGWALLS
 (ELEV. 132.0 MIN.) REMOVE PORTIONS OF EXISTING STONE WALLS AS NEEDED.
- 8. DRIVE PILES AND CONSTRUCT NEW SUBSTRUCTURES AND BACKFILL.
- 9. REMOVE COFFERDAMS.
- 10. COMPLETE CONSTRUCTION OF PROPOSED BRIDGE.

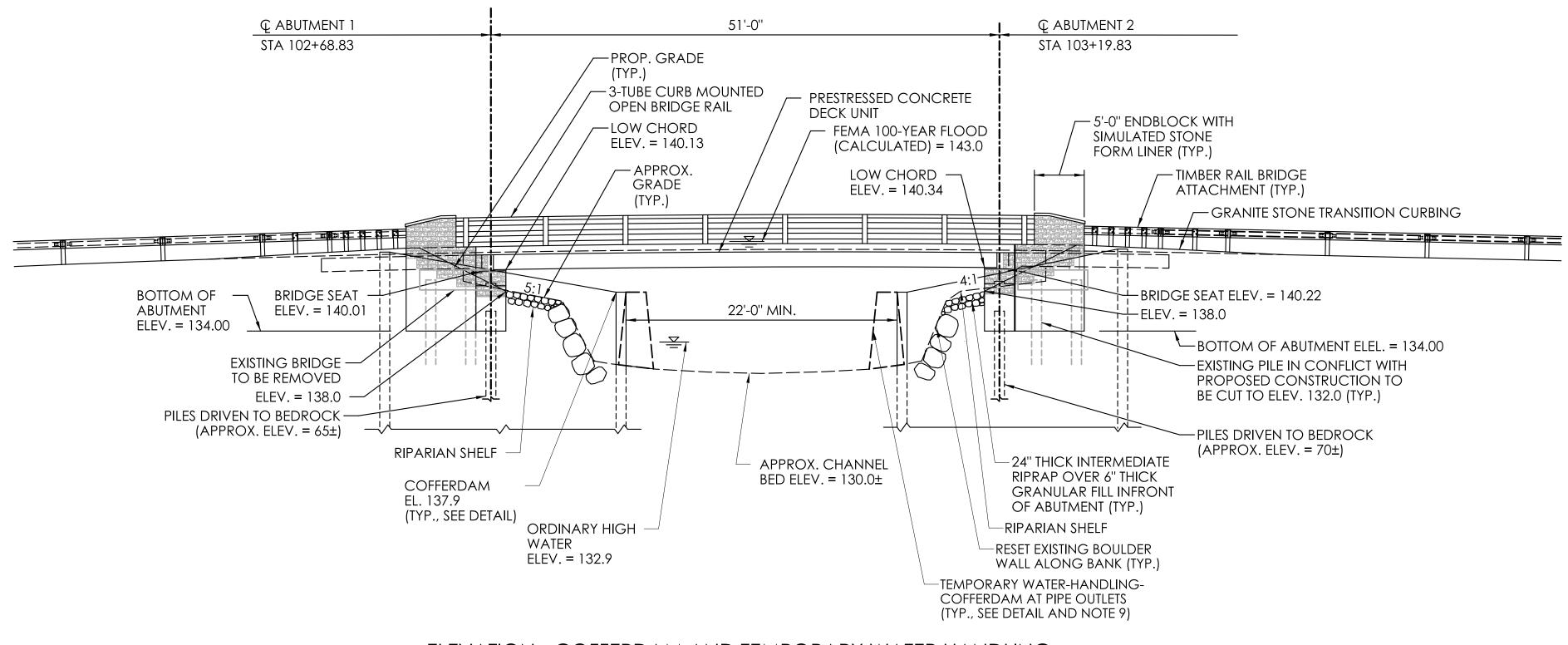
CHECKED BY: D.L

- 11. DIVERT TRAFFIC ONTO THE PROPOSED BRIDGE AND REMOVE TEMPORARY BRIDGE.
- 12. REMOVE TREES.
- 13. COMPLETE SITE RESTORATION.

TEMPORARY HYDRAULIC DATA					
AVERAGE DAILY FLOW (ADF) [CFS]	55				
AVERAGE SPRING FLOW (AFS) [CFS]	101				
2-YEAR FREQUENCY DISCHARGE [CFS]	1,050				
TEMPORARY DESIGN DISCHARGE [CFS]	1,050				
TEMPORARY DESIGN FREQUENCY	2-YEAR				
TEMPORARY WATER SURFACE ELEVATION [FEET]	UPSTREAM	DOWNSTREAM			
TEIVIT ORAKT WATER SURFACE ELEVATION [FEET]	136.9	135.7			

NOTE: ALL TEMPORARY HYDRAULIC DATA PROVIDED BY CHA COMPANIES, INC.





FDP SUBMISSION SEPTEMBER 28, 2022

SCALE AS NOTED



M MOTT MACDONALD

175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067





PROJECT NUMBER: 0161-0143

PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON

DRAWING TITLE: WATER HANDLING AND CONSTRUCTION NOTES AND DETAILS

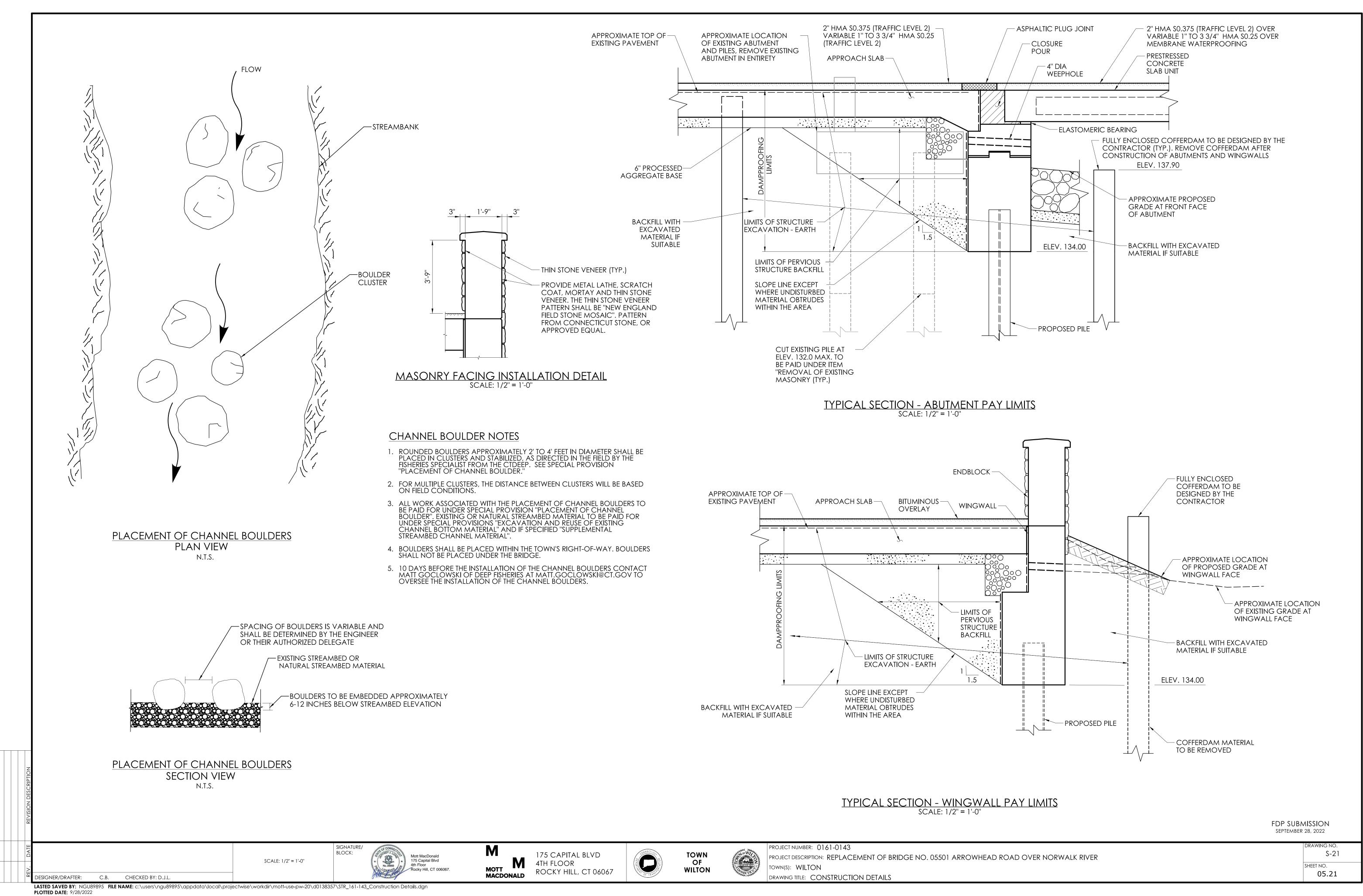
DRAWING NO.

SHEET NO.

05.20

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PLOTTED DATE: 9/30/2022

DESIGNER/DRAFTER: D.T.K.

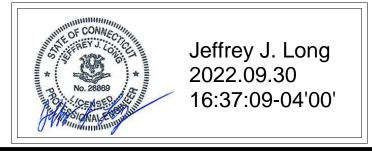


06 - LANDSCAPE INDEX OF DRAWINGS					
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE		
LS-01	LANDSCAPE INDEX OF DRAWINGS				
LS-02	RESTORATION PLANTING PLAN				

DESIGNED BY:

MOTT M
MACDONALD M

175 Capital Blvd
4th Floor
Rocky Hill, CT 06067



FDP SUBMISSION SEPTEMBER 28, 2022

, DATE

CHECKED BY: M.D.G.

DESIGNER/DRAFTER: D.T.K.

SIGNATURE/ BLOCK:

Mott MacDonald
175 Capital Blvd
4th Floor
Rocky Hill, CT 006067. MOTT MACDONALD

M 175 CAPITAL BLVD 4TH FLOOR ROCKY HILL, CT 06067



TOWN OF WILTON

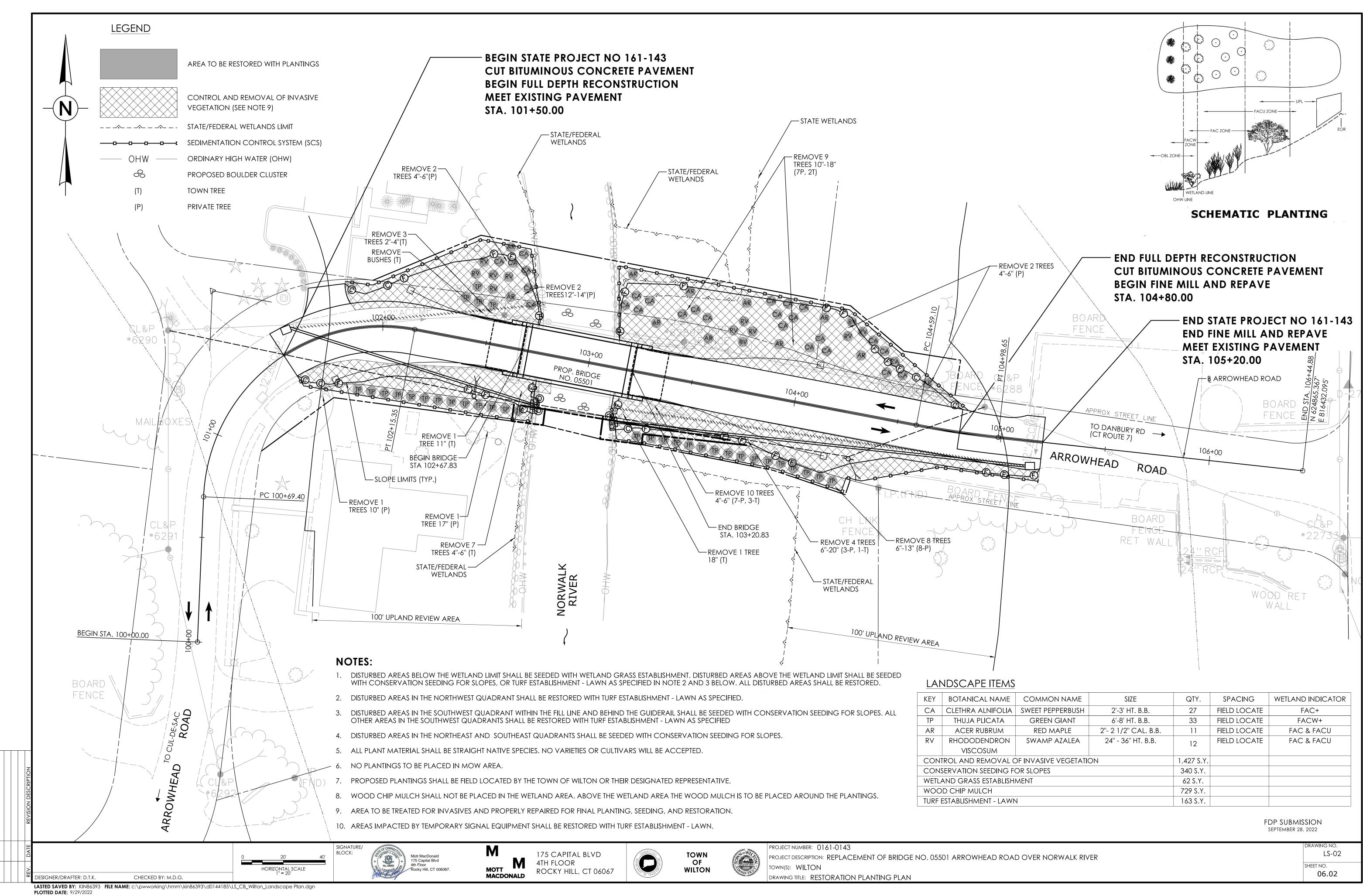


PROJECT NUMBER: 0161-0143

PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER TOWN(S): WILTON

DRAWING TITLE: LANDSCAPE INDEX OF DRAWINGS

LS-01 SHEET NO. 06.01



07 - FOR INFORMATION ONLY INDEX OF DRAWINGS						
DRAWING NUMBER	ABER DRAWING TITLE DRAWING NUMBER DRAWING TITLE					
FIO-01	FOR INFORMATION ONLY INDEX OF DRAWINGS					
FIO-02	ROADWAY PLAN					
FIO-03	MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 1					
FIO-04	MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 2					
FIO-05	MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 3					
FIO-06	TEMPORARY TRAFFIC SIGNAL CONTROL PLAN - STAGE 1					

SIGNATURE/ BLOCK:

MOTT MACDONALD

175 CAPITAL BLVD

4TH FLOOR
ROCKY HILL, CT 06067





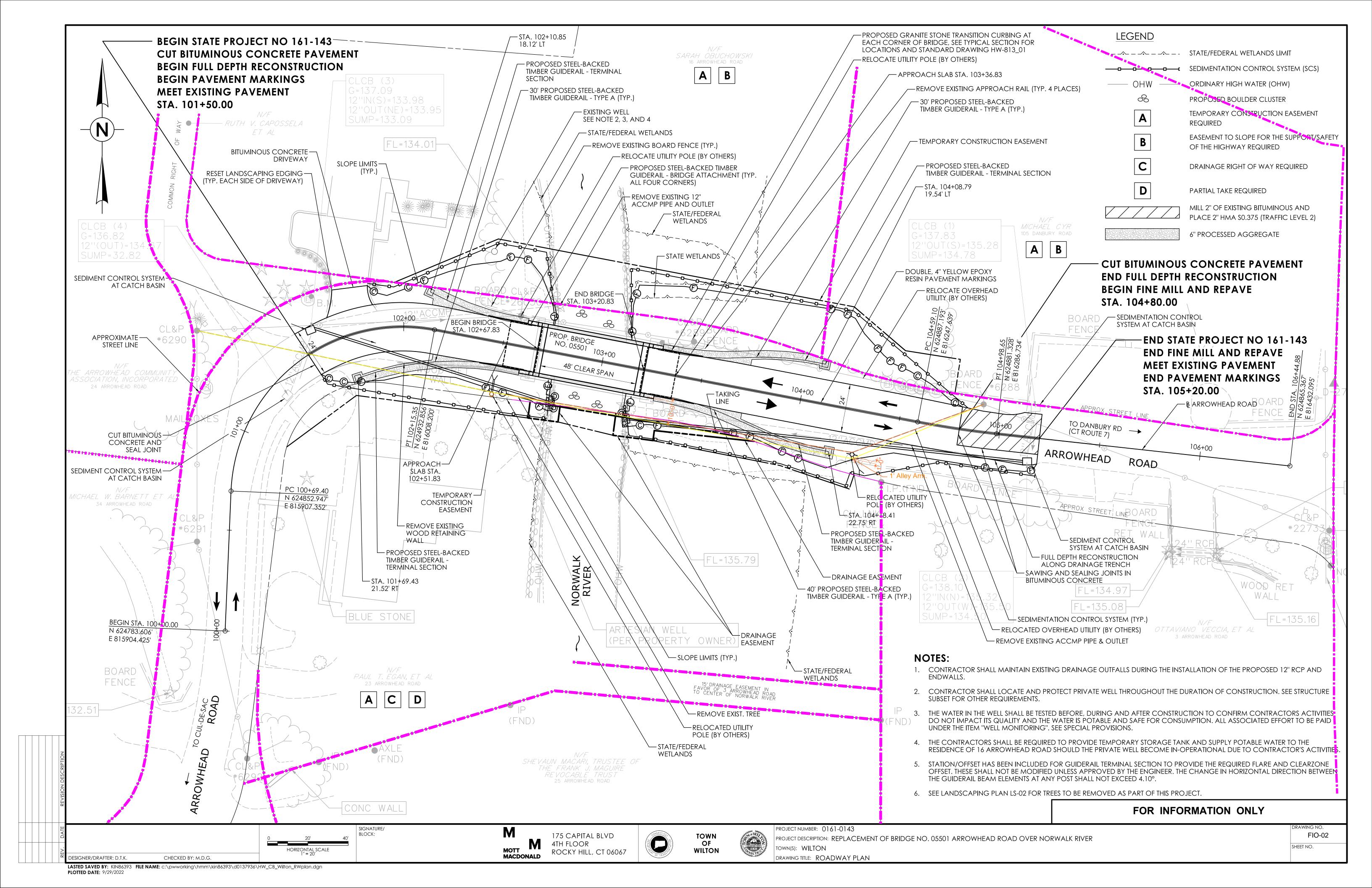
PROJECT NUMBER: 0161-0143 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 ARROWHEAD ROAD OVER NORWALK RIVER DRAWING TITLE: FOR INFORMATION ONLY INDEX OF DRAWINGS

FOR INFORMATION ONLY

FIO-01

CHECKED BY: M.D.G.

[™] DESIGNER/DRAFTER: D.T.K.

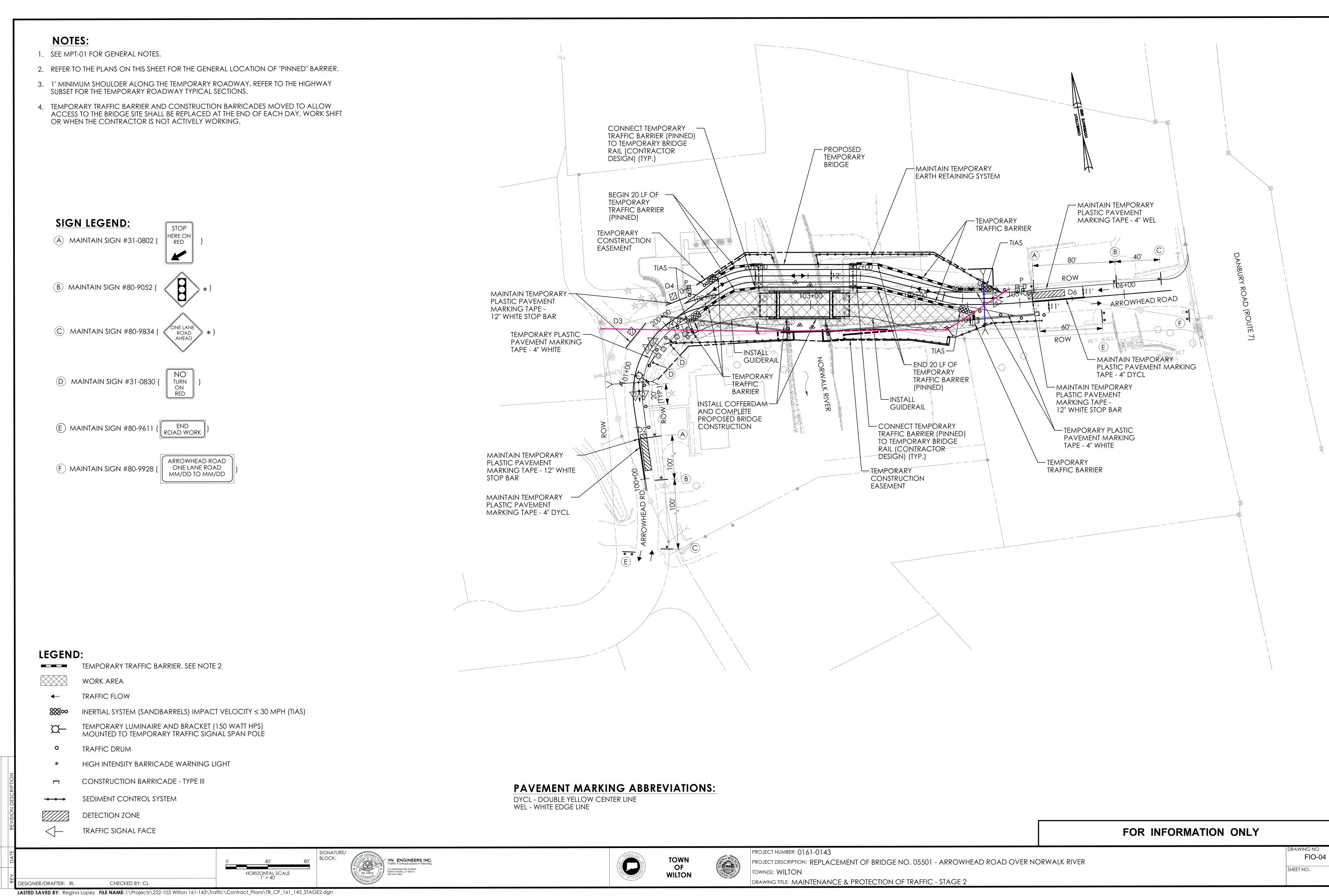


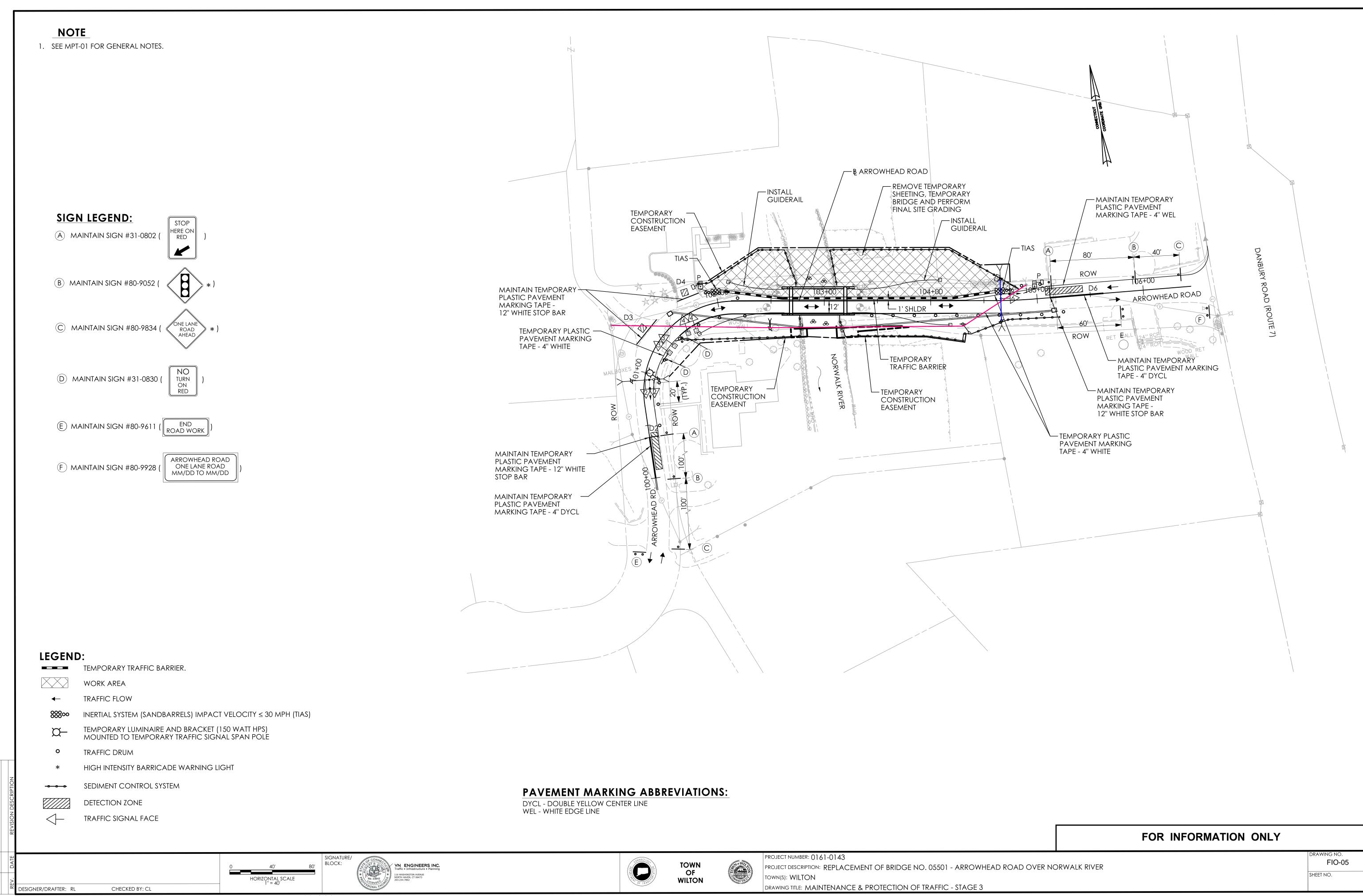
GENERAL NOTES SEE SPECIAL PROVISION SECTION 1.08 - PROSECUTION AND PROGRESS AND ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC FOR CONSTRUCTION STAGING REQUIREMENTS. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ON-SITE APPROACH SIGNING FOR DURATION OF THIS PROJECT. 3. ANY EXISTING SIGNING DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT NO COST TO THE TOWN. PERFORM SITE 4. ALL CONSTRUCTION SIGNS ARE TO BE PAID FOR UNDER ITEM NO. 1220027 - CONSTRUCTION SIGNS. GRADING AND - INSTALL TEMPORARY WOOD INSTALL 5. BARRICADE WARNING LIGHTS - HIGH INTENSITY SHALL BE MOUNTED ON ALL DIAMOND SHAPED POST-MOUNTED SPAN POLE, LUMINAIRE, PROPOSED CONSTRUCTION SIGNS AND PAYABLE UNDER ITEM NO. 0976002 - BARRICADE WARNING LIGHTS - HIGH INTENSITY. CONTROLLER AND GUYWIRE **TEMPORARY** STA. 104+66 LT BRIDGE REMOVE 6. THE CONTRACTOR SHALL NOTIFY THE CTDOT DISTRICT 3 ENGINEER, THE TOWN OF WILTON, AND ALL EMERGENCY SERVICES UTILITY POLE AT LEAST TWO WEEKS PRIOR TO IMPLEMENTING A ONE LANE ROAD AND SHIFTING OF TRAFFIC ONTO TEMPORARY BRIDGE. (BY OTHERS) REMOVE 7. THE CORRECT SEQUENCE AND SPACING OF SIGNS MUST BE MAINTAINED AT ALL TIMES, IN ACCORDANCE WITH THE — TEMPORARY TRAFFIC BARRIER UTILITY POLE M.U.T.C.D. (BY OTHERS) **B** TEMPORARY -—INSTALL TEMPORARY ROAD EARTH RETAINING SYSTEM 8. PLASTIC PAVEMENT MARKING TAPE SHALL BE PAID FOR UNDER ITEM NO. 1212001 - TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 4" YELLOW, ITEM NO. 1212002 - TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 4" WHITE, AND ITEM NO. 1212010-TEMPORARY --- INSTALL TEMPORARY TEMPORARY PLASTIC PAVEMENT MARKING TAPE - 12" WHITE CONSTRUCTION PEDESTRIAN SIGNAL EASEMENT STA. 105+00 LT 9. EXACT LOCATION OF SIGNS TO BE VERIFIED BY THE ENGINEER IN THE FIELD. INSTALL TEMPORARY— 10. WHEN EXISTING SIGNAGE CONFLICTS WITH THE PROPOSED TRAFFIC PATTERN SHOWN IN THE M&PT PLANS, THE CONTRACTOR PEDESTRIAN SIGNAL SHALL COVER OR REMOVE THOSE CONFLICTING SIGNS. THE RELOCATION OF EXISTING SIGNS DURING CONSTRUCTION TIAS 0 0 0 0 0 0 0 0 0 0 0 0 0 STA. 101+90 LT WILL BE PAID FOR UNDER ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC. 11. TEMPORARY TRAFFIC BARRIER REQUIRES DE-7 DELINEATORS. D6 11' ◆ 12. THE CONTRACTOR SHALL SELECT AN APPROVED SAND BARREL SYSTEM FROM THE CTDOT QUALIFIED PRODUCT LIST (QPL) TEMPORARY PLASTIC ARROWHEAD ROAD THE CONTRACTOR SHALL INSTALL THE BARREL ARRAY FOR THE DESIGN SPEED OF ≤ 30 MPH, AS RECOMMENDED BY THE PAVEMENT MARKING MANUFACTURER. TAPE - 12" WHITE STOP **←→** ' 12' ^t— 1' SHLDR BAR13. COORDINATE THE INSTALLATION OF TEMPORARY WOOD SPAN POLES AND GUYING REQUIREMENTS WITH EXISTING AND PROPOSED OVERHEAD UTILITIES LINES AND POLES TO FACILITATE MAINTAINING THE SPANWIRE DURING CONSTRUCTION. INSTALL TEMPORARY WOOD -14. INSTALL GUY WIRE AT EACH TEMPORARY WOOD SPAN POLE LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR THE SPAN POLE, LUMINAIRE AND GUYING OF ALL TEMPORARY WOOD POLES. GUYWIRE PROPOSED STA. 100+95 RT - PROPOSED 15. THE CONTRACTOR SHALL CONTACT EVERSOURCE ENERGY TO COORDINATE THE INSTALLATION OF TEMPORARY ELECTRICAL — TEMPORARY PLASTIC DRAINAGE DRAINAGE SERVICE. SEE NOTICE TO CONTRACTOR, SECTION 1.07 - LEGAL RELATIONS AND RESPONSABILITIES, FOR CONTACT PAVEMENT MARKING SEE NOTE 22 └─RELФCATED SEE NOTE 22 INFORMATION. TAPE - 4" DYCL UTILITY POLE (BY OTHERS) 16. POWER FOR TEMPORARY LUMINAIRES SHALL BE ELECTRICALLY FED FROM A 20 AMP SINGLE POLE CIRCUIT BREAKER LOCATED IN THE TEMPORARY SIGNAL CABINET. SEE TEMPORARY SIGNALIZATION FOR ADDITIONAL INFORMATION. POWER — TEMPORARY PLASTIC -TEMPORARY - INSTALL TEMPORARY WILL BE PAID UNDER ITEM #1118051A - TEMPORARY SIGNALIZATION (SITE NO. 1). PAVEMENT MARKING CONSTRUCTION B ARROWHEAD RD.-PEDESTAL MOUNTED TAPE - 4" WEL EASEMENT TRAFFIC SIGNAL 17. TRAFFIC SIGNAL HEADS SHALL BE 16' TO 18' ABOVE THE ROADWAY AND SHALL BE SPACED BETWEEN 8' AND 20' APART ON - TEMPORARY PLASTIC THE SPAN. THE TEMPORARY WOOD SPAN POLE SHOULD BE SIZED TO ALLOW FOR THIS REQUIREMENT TO BE MET. PAVEMENT MARKING TAPE - 12" WHITE STOP 18. TEMPORARY VEHICLE DETECTION SHALL BE INSTALLED AND SHALL BE PAID FOR UNDER ITEM #1118051A- TEMPORARY TEMPORARY PLASTIC BAR. SIGNALIZATION (SITE NO. 1). SEE SPECIAL PROVISION FOR TEMPORARY VEHICLE DETECTION REQUIREMENTS. PAVEMENT MARKING STA. 105+12 TAPE - 12" WHITE 19. PROPOSED TEMPORARY SIGNALIZATION TO BE INSTALLED PRIOR TO STAGE 1 USING DAILY ALTERNATING 1-WAY STOP STOP BAR CONTROLLED LANE CLOSURES IWTH TRAFFIC PERSON AS NEEDED. COVER TRAFFIC SIGNAL HEADS UNTIL FUTURE USE IN - INSTALL TEMPORARY WOOD STA. 10+38 STAGE 1. SEE TEMPORARY SIGNALIZATION PLANS FOR ADDITIONAL INFORMATION. SPAN POLE AND GUYWIRE STA. 104+66 RT 20. SEE HIGHWAY AND DRAINAGE PLANS FOR REQUIRED DRAINAGE WORK AND COORDINATE THE INSTALLATION WITH TEMPORARY PLASTIC TEMPORARY SIGNALIZATION WORK. PAVEMENT MARKING TAPE - 4" DYCL 21. THE CONTRACTOR SHALL NOT USE LOOP DETECTION FOR TEMPORARY VEHICLE DETECTION. CONTRACTOR SHALL UTILITY NON-DESTRUCTIVE METHODS SUCH AS VIDEO OR RADAR. 22. PROPOSED DRAINAGE TO BE INSTALLED PRIOR TO STAGE 1 USING DAILY ALTERNATING 1-WAY STOP CONTROLLED LANE SIGN LEGEND: 00 CLOSURES WITH TRAFFIC PERSON AS NEEDED. SEE HIGHWAY PLANS FOR ADDITIONAL INFORMATION. HERE ON RED (A) INSTALL SIGN #31-0802 (LEGEND: (B) INSTALL SIGN #80-9052 (TEMPORARY TRAFFIC BARRIER **WORK AREA** TRAFFIC FLOW (C) INSTALL SIGN #80-9834 (INERTIAL SYSTEM (SANDBARRELS) IMPACT VELOCITY ≤ 30 MPH (TIAS) TEMPORARY LUMINAIRE AND BRACKET (150 WATT HPS) MOUNTED TO TEMPORARY TRAFFIC SIGNAL SPAN POLE TRAFFIC DRUM (D) INSTALL SIGN #31-0830 (TURN HIGH INTENSITY BARRICADE WARNING LIGHT SEDIMENT CONTROL SYSTEM DETECTION ZONE. SEE NOTE 21 E INSTALL SIGN #80-9611 (ROAD WORK TRAFFIC SIGNAL FACE PAVEMENT MARKING ABBREVIATIONS: ARROWHEAD ROAD DYCL - DOUBLE YELLOW CENTER LINE ONE LANE ROAD (F) INSTALL SIGN #80-9928 (MM/DD TO MM/DD WEL - WHITE EDGE LINE FOR INFORMATION ONLY PROJECT NUMBER: 0161-0143 FIO-03 **TOWN** CHATTER 1992 VN ENGINEERS INC. Traffic • Infrastructure • Planning PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05501 - ARROWHEAD ROAD OVER NORWALK RIVER OF SHEET NO. HORIZONTAL SCALE 1" = 40' **WILTON**

DRAWING TITLE: MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 1

CHECKED BY: CL

DESIGNER/DRAFTER: RL





LASTED SAVED BY: Regina Lopez FILE NAME: I:\Projects\222-103 Wilton 161-143\Traffic\Contract_Plans\TR_CP_161_143_STAGE3.dgn

