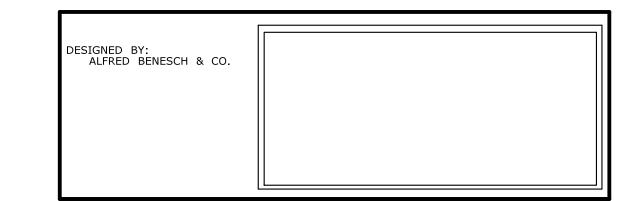
# 04 - STRUCTURE INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
S-01	INDEX OF STUCTURE DRAWINGS		
S-02	GENERAL PLAN AND ELEVATION		
S-03	SECTIONS, QUANTITIES AND NOTES		
S-04	BORING LOGS - 1		
S-05	BORING LOGS - 2		
S-06	BORING LOGS - 3		
S-07	TEST PIT LOGS		
S-08	STAGE CONSTRUCTION - 1		
S-09	STAGE CONSTRUCTION - 2		
S-10	STAGE CONSTRUCTION - 3		
S-11	NORTH ELEVATION AND DETAILS		
S-12	SOUTH ELEVATION AND DETAILS		
S-13	RETAINING WALL PLAN AND DETAILS		
S-14	PRECAST CONCRETE SLAB		
S-15	TURRET REPAIR DETAILS		
S-16	GROUND STABILIZATION PLAN AND DETAILS		
S-17	CONCRETE SIDEWALK		

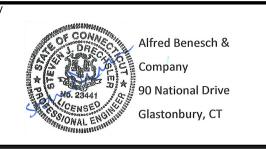


					DES
1	-	-	_	THE INFORMATION, INCLUDING ESTIMATED	
ı	-	-	-	QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED	CHI
-	-	-	_	INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	
-	-	-	_	THE CONDITIONS OF ACTUAL QUANTITIES	
ı	-	-	_	OF WORK WHICH WILL BE REQUIRED.	
-	-	-	_		
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: \$DATE\$	

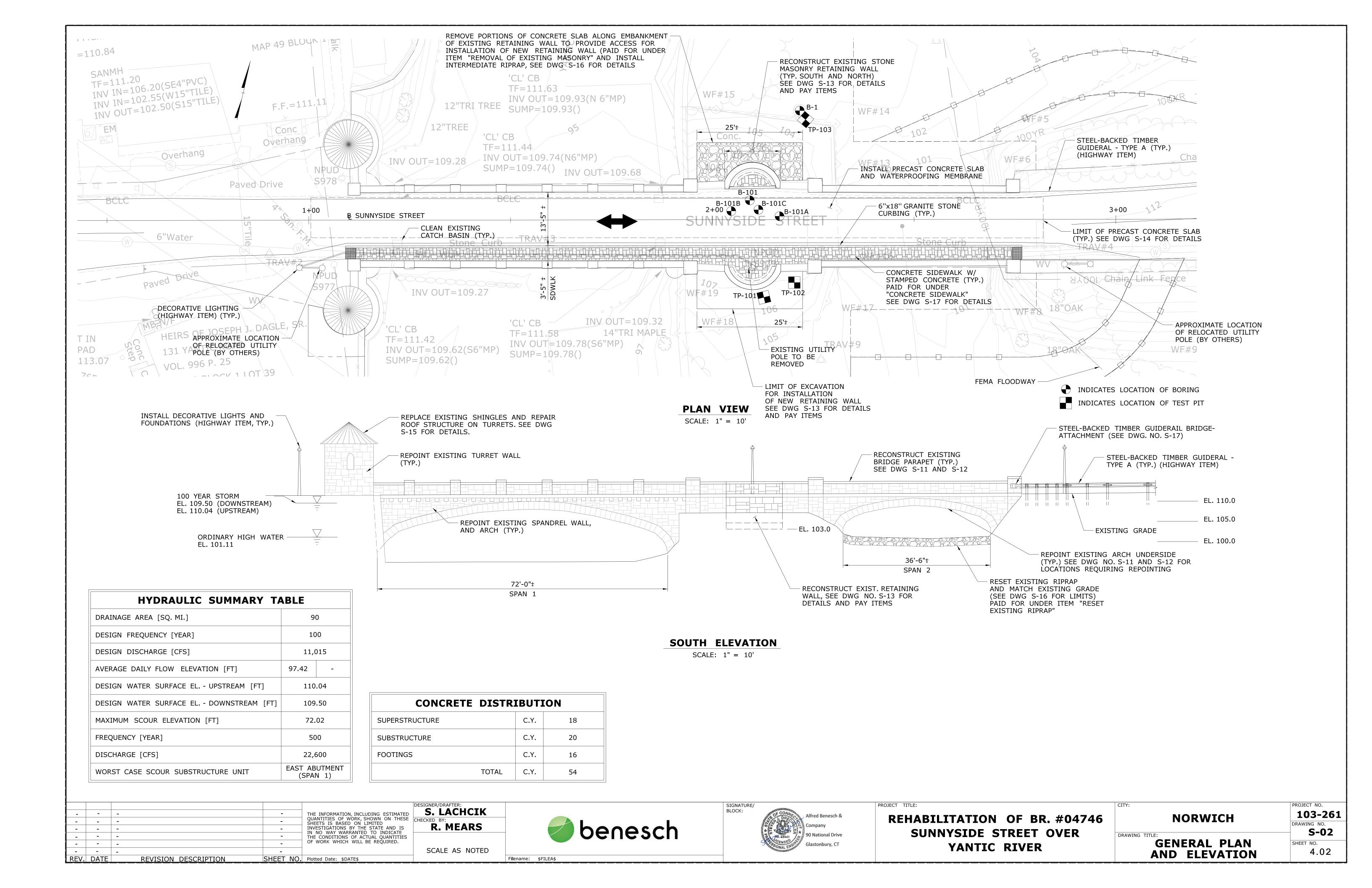
REV. DATE

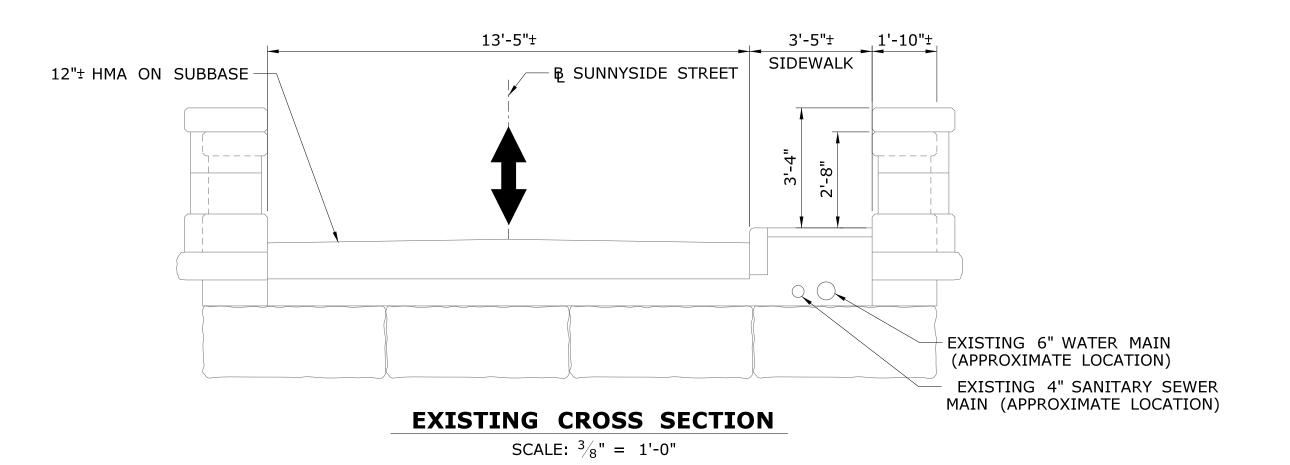


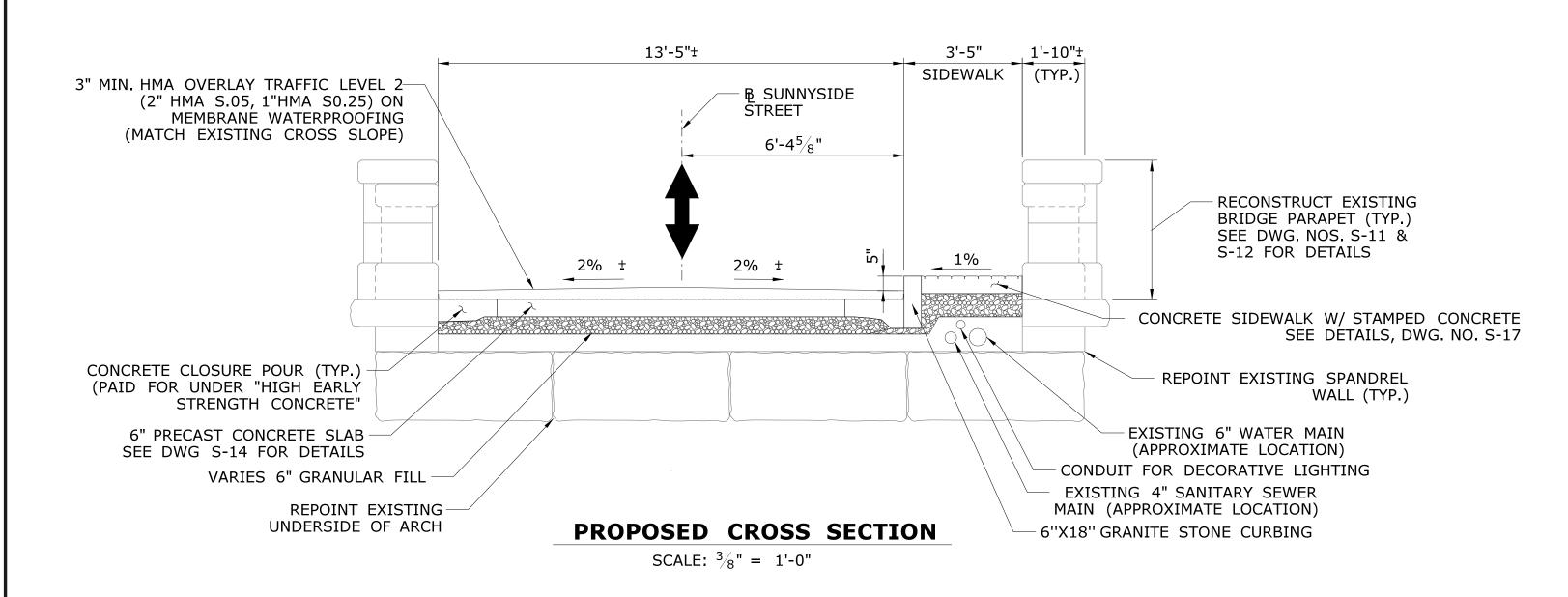




CITY:	PROJECT NO.
NORWICH	103-261
	DRAWING NO.
DRAWING TITLE:	- S-01
INDEX OF	SHEET NO.
STRUCTURE DRAWINGS	4.01







ESTIMATED QUANTITIES		
ITEM	UNIT	QTY.
SLATE SHINGLE ROOF	SY	45
EARTH EXCAVATION	CY	140
CONDITION SURVEY	LS	1
STRUCTURE EXCAVATION - EARTH (COMPLETE)	CY	58
GRANULAR FILL	CY	65
PERVIOUS STRUCTURE BACKFILL	CY	50
HMA S0.5	TON	32
HMA S0.25	TON	16
MATERIAL FOR TACK COAT	GAL	30
SAWING AND SEALING JOINTS	LF	27
RESETTING STONE MASONRY	CF	930
CLASS "A" CONCRETE	CY	36
HIGH EARLY STRENGTH CONCRETE	CY	18
PRECAST CONCRETE SLAB	CY	36
DEFORMED STEEL BARS	LB	2,715
DEFORMED STEEL BARS - EPOXY COATED	LB	1,170
DRILLING HOLES AND GROUTING ANCHOR BOLTS	EA	8
TEMPORARY DECK PLATE	LF	180
MASONRY FACING	SF	450

ESTIMATED QUANTITIES		
ITEM	UNIT	QTY.
REPOINT MORTAR JOINTS	LF	1,850
CLEAN EXISTING CATCH BASIN	EA	4
INTERMEDIATE RIPRAP	CY	10
RESET EXISTING RIPRAP	CY	110
MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)	SY	280
DAMPPROOFING	SY	30
TEMPORARY EARTH RETAINING SYSTEM	SF	825
EARTH RETAINING SYSTEM LEFT IN PLACE	SF	745
NO. 6 CRUSHED STONE	CY	12
GEOTEXTILE	SY	25
GEOTEXTILE (SEPARATION - HIGH SURVIVABILITY)	SY	25
6' 'X 18" GRANITE STONE CURBING	LF	180
CONCRETE SIDEWALK	SF	580
CONSTRUCTION MONITORING - EXISTING BRIDGE	LS	1
REMOVAL OF EXISTING MASONRY	CY	68
PROTECTION AND SUPPORT OF EXISTING UTILITIES	LS	1

#### **GENERAL NOTES:**

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817 (2016), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2018 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2014 7TH EDITION, WITH THE INTERIM SPECIFICATIONS UP TO AND INCLUDING 2015, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003). (NEW ELEMENTS ONLY)

ALLOWABLE DESIGN STRESSES:

CLASS 'A' CONCRETE BASED ON F'c = 3000 PSI

CLASS 'F' CONCRETE BASED ON F'C = 4000 PSI (PRECAST CONCRETE SLAB)

HIGH EARLY STRENGTH CONCRETE BASED ON F'c = 4000 PSI

REINFORCEMENT (ASTM A615 GRADE 60) Fy = 60,000 PSI

THE SPECIFIED CONCRETE STRENGTH USED IN DESIGN, F'c, OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 'SECTION 6.01 CONCRETE FOR STRUCTURES.'

LIVE LOAD: HS-20 (FOR NEW ELEMENTS ONLY: RETAINING WALL AND CONCRETE SLAB). THE CONTRACTOR SHALL SUBMIT FOR ENGINEER ANALYSIS AND APPROVAL ANY VEHICLE THAT EXCEEDS THE WEIGHT OF HS-20.

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE A VARIABLE THICKNESS WEDGE COURSE HMA S0.25 TRAFFIC LEVEL 2 ESTABLISHING THE PLANE GRADE AND CROSS SLOPE (1" THICK MIN.). THE SECOND LAYER SHALL BE HMA S0.5 TRAFFIC LEVEL 2 (UNIFORM 2" THICK).

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

TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISIONS "MAINTENANCE AND PROTECTION OF TRAFFIC" AND "PROSECUTION AND PROGRESS".

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY ARE BASED ON ROUGH FIELD MEASUREMENTS OR EXISTING 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 APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT THE LEADING END OF EACH BRIDGE PARAPET ON THE TRAFFIC SIDE. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4" BY 12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ: 04746. THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. THE BRIDGE SIGNS SHALL BE COVERED UNDER THE GENERAL COST OF THE PROJECT.

#### **CONCRETE NOTES:**

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR RETAINING WALL FOOTING AND STEM.

HIGH EARLY STRENGTH CONCRETE: HIGH EARLY STRENGTH CONCRETE SHALL BE USED FOR CONCRETE SLAB CLOSURE POURS.

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

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

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

EPOXY COATED REINFORCING BARS: ALL CONCRETE SLAB REINFORCEMENT SHALL BE EPOXY COATED AND SHALL BE INCLUDED IN THE ITEM "PRECAST CONCRETE SLAB". ALL REINFORCING WITHIN CLOSURE POURS SHALL BE EPOXY COATED AND SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS (EPOXY COATED)". ALL RETAINING WALL REINFORCEMENT SHALL BE BLACK AND SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS".

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

UTILITIES: THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES LOCATED WITHIN THE VICINITY OF THE CONSTRUCTION SITE. ALL WORK RELATED TO UTILITY RELOCATION, TEMPORARY UTILITY RELOCATION AND UTILITY SUPPORTS SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY COMPANIES (SEE SPECIAL PROVISIONS). LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE.

-	-	-	_	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.
-	-	-	-	
REV.	DATE	REVISION DESCRIPTION	SHEET NO	Plotted Date: \$DATE\$



SCALE AS NOTED

Filename: \$FILEA\$





PROJECT TITLE:

## REHABILITATION OF BR. #04746 SUNNYSIDE STREET OVER YANTIC RIVER

4.03

PROJECT NO.

Driller:	N	like Glynn	С	onne	cticu	ıt DOT Boriı	ng Report	Hole No.: B-10	1
Inspect	tor: G	Sarry Jacobsen	Town:		Norw	ich		Stat./Offset:	
Engine	er: F	reeman Cos, LLC	Project	No.:	2017	-0506		Northing: 7654	80.73
Start D	ate: 5	-31-17	Route I	No.:	Sunn	yside Street		Easting: 1171	555.59
Finish I	Date: 5	-31-17	Bridge	No.:	Sunn	yside Street o	ver Yantic River	Surface Elevation: 1	11.7
Project	Descript	ion: Sunnyside Str	eet ove	r Yanti	c Rive	er			
Casing	Size/Typ	oe: 4-1/4 in. HSA	Sample	er Type	/Size:	1-3/8 in.		Core Barrel Type:	
Hamme	er Wt.:	Fall: in.	Hamme	er Wt.:	140	Fall: 30in.			
Ground	dwater Ob	oservations:				I	T		
		SAMPLE	:S		<u> </u>	- p -			<b>£</b>
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ма	terial Description and Notes	Elevation (ft)
0-						Pavement	Asphalt Paveme	nt (12 in.)	
_	S-1	100/3"	3	3		Fill	Black c-f SAND	, ,	-
	<u> </u>	100/0				ГШ			110
_							Refusal on possi	ble rock slab at 1.7 ft	
_							END OF BORIN	G 1.7ft	
_									_
									_
5-									
_									
									<b>—105</b>
_									
_									
_									-
									_
10-									
_									-
									<del>-</del> 100
_									
_									
_									-
15—									
_									
									-95
_									
_									-
									_
20-	I	Sample Type: S =	Split S	poon	C = 0	Core UP=Ur	ndisturbed Piston	V = Vane Shear 1	- Fest
		Proportions Used:	•						Proposition of the Control of the Co
Total P	enetratio							rock slab at 1.7 feet	Sheet
Earth:		Rock: 0ft		. 20.	. 0.111111	atou at Auget P	Corasar on possible	TOOK SIGD OF 1.7 1661	1 of 1
No. of	1.711	No. of							
	mples: 1								SM-001-M REV. 1/02

**BORING B-101** 

## **BORING B-101A**

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: Terminated at Auger Refusal at 17 feet

Connecticut DOT Boring Report

Pavement

Alluvium

Bridge No.: Sunnyside Street over Yantic River | Surface Elevation: 111.7

Norwich

Route No.: Sunnyside Street

Hole No.: B-101A

Northing: 765478.54

Easting: 1171563.65

-110

-105

-100

Sheet 1 of 1

SM-001-M REV. 1/02

Stat./Offset:

Core Barrel Type:

Material Description

and Notes

Brown to gray c-f SAND and c-f GRAVEL, trace

Brown to gray c-f GRAVEL and c-f SAND, little silt. Six-inch thick dark gray layer with little silt.

Brown to gray c-f GRAVEL, some c-f sand, trace silt

S4 (7 to 8 ft): Brown to gray c-f SAND and c-f GRAVEL, trace silt

S4A (8 to 9 ft): Gray to brown f SAND, some silt, with gray layers that include trace roots

Gray to brown f SAND, little silt, trace gravel, 4 to

Gray to brown f SAND, some silt, 4 to 8 inch

Gray c-f GRAVEL and c-f SAND, trace silt.

Augered very hard through cobbles and boulders from 14 to 17 feet.

Asphalt Pavement (12 in.)

8 inch layers

END OF BORING 17ft

6-inch cobble below pavement

Mike Glynn

Town:

Fall: in. Hammer Wt.: 140 Fall: 30in.

Engineer: Freeman Cos, LLC Project No.: 2017-0506

Casing Size/Type: 4-1/4 in. HSA Sampler Type/Size: 1-3/8 in.

SAMPLES

Project Description: Sunnyside Street over Yantic River

Groundwater Observations: @14 after 0 hours

Blows on

Sampler per 6 inches

S-1 23 27 29 29 24 12

S-2 34 29 30 30 24 16

S-3 | 17 28 30 19 | 24 | 18 |

S-4 23 20 17 17 24 18

4 6 11 11 24 18

10 S-5 | 15 12 7 7 | 24 | 18 |

12 100/5"

S-7

Total Penetration in

Earth: 17ft Rock: 0ft

No. of No. of Soil Samples: 7 Core Runs: 0

Inspector: Garry Jacobsen

Start Date: 5-31-17

Finish Date: 5-31-17

Hammer Wt.:

		DESIGNER/DRAFTER:		SIGNATURE/ BLOCK:	PROJECT TITLE:	CITY:	PROJECT NO.
 	THE INFORMATION, INCLUDING ESTIMATE QUANTITIES OF WORK, SHOWN ON THES SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS	S. LACHCIK CHECKED BY:		Alfred Benesch &	REHABILITATION OF BR. #04746	NORWICH	103-2
	SHEETS IS BASED ON LIMITED  - INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	R. MEARS	benesch	Company			DRAWING NO
	IN NO WAY WARRANTED TO INDICATE  THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	5	- Ochesch	90 National Drive	SUNNYSIDE STREET OVER	DRAWING TITLE:	SHEET NO.
	_			Glastonbury, CT	YANTIC RIVER	BORING LOGS - 1	4.0
-  	-	SCALE AS NOTED		ONAL EL MILE			· · · · · · · · · · · · · · · · · ·

Driller:	N	Лike Glynn	С	onne	cticu	ıt DOT Bori	ng Report	Hole No.: B-10	1B	
Inspect		Sarry Jacobsen	Town:		Norw			Stat./Offset:		
Engine		reeman Cos, LLC	Project	:No.:	2017	-0506			77.12	
Start D	ate: 5	5-31-17	Route		Sunn	yside Street		Easting: 1171	551.7	
Finish [	Date: 5	5-31-17	Bridge	No.:	Sunn	yside Street o	ver Yantic River	Surface Elevation:	111.7	
Project	Descrip	tion: Sunnyside Str	eet ove	r Yant	ic Rive	er				
Casing	Size/Ty	pe: 4-1/4 in. HSA	Sample	er Type	/Size:	1-3/8 in.		Core Barrel Type:		
Hamme		Fall: in.	Hamm	er Wt.:	140	Fall: 30in.				
Ground	lwater O	bservations:				1	Ι			
		SAMPLE	S			- pg _				(#)
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 Paveme	nt (12 in.)		
_						Fill				
										-110
5-							Augered modera samples taken; r descriptions	tely hard from 1 to 5 t efer to boring B-101A	feet. No for soil	- - -
_							Augered through 9 feet	cobbles and boulder	s from 5 to	_ 105 _ _
10-						Alluvium	Augured easily fr	rom 9 to 14 feet		_ _ 100
15—							Augered very ha from 14 to 16 fee	rd through cobbles ar et	nd boulders	  -  -  -
_							END OF BORIN	G 16ft		—95 —
20		Sample Type: S = Proportions Used:	Trace :	= 1 - 1	0%,	Little = 10 - 20	)%, Some = 20 -			<u></u>
Total P	enetratio	on in	NO	TES:	Termin	ated at Auger F	Refusal at 16 feet		Shee	
Earth:	16ft	Rock: 0ft							1 of	1
No. of Soil Sa	mples: (	No. of Core Runs: 0							SM-001-M R	EV. 1/02

**BORING B-101B** 

**BORING B-101C** 

Connecticut DOT Boring Report Mike Glynn Hole No.: B-101C Inspector: Garry Jacobsen Town: Norwich Stat./Offset: Engineer: Freeman Cos, LLC Project No.: 2017-0506 Northing: 765478.95 Easting: 1171558.21 Route No.: Sunnyside Street Start Date: 5-31-17 Bridge No.: Sunnyside Street over Yantic River | Surface Elevation: 111.7 Finish Date: 5-31-17 Project Description: Sunnyside Street over Yantic River Sampler Type/Size: Casing Size/Type: Core Barrel Type: Hammer Wt.: Fall: Fall: Hammer Wt.: Groundwater Observations: SAMPLES Material Description Blows on and Notes Sampler per 6 inches Asphalt Pavement (12 in.) **-110** Augered moderately hard from 1 to 6 feet. No samples taken; refer to boring B-101A for soil descriptions Augered very hard through cobbles and boulders from 6 to 7 feet; refusal at 7 feet END OF BORING 7ft -100 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: Terminated at Auger Refusal at 7 feet Sheet 1 of 1 Total Penetration in Earth: 7ft Rock: Oft No. of No. of Soil Samples: 0 Core Runs: 0 SM-001-M REV. 1/02

					DI
_	-	-	-	THE INFORMATION, INCLUDING ESTIMATED	L
-	-	-	-	QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED	CH
-	-	-	-	INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	L
_	1	-	-	THE CONDITIONS OF ACTUAL QUANTITIES	Γ
_	-	-	-	OF WORK WHICH WILL BE REQUIRED.	
_	-	-	-		ı

SHEET NO. Plotted Date: \$DATE\$

REVISION DESCRIPTION

REV. DATE

S. LACHCIK CHECKED BY:

R. MEARS

SCALE AS NOTED





REHABILITATION OF BR. #04746 SUNNYSIDE STREET OVER YANTIC RIVER

ITY:	NOR	WICH	
RAWING	TITLE:		
	<b>BORING</b>	LOGS - 2	

103-261

S-05

4.05

Filename: \$FILEA\$

		E WELTI	ASSOC.,	INC.	IENT			PROJECT N SUNNYS	SIDESTR	EET BRID RIVER		ER YAN
2	BOX 39	7 JRY, CONN	06033					LOCATION	ļ	1 11 V Lui 1		
							ELL ASSOCIATES	SURFACE ELE	<u>N</u>	ORWICH,	СТ	
		AUGER	CASING	SAMPLER	CORE	BAR.	OFFSET	SURPACE ELE	<b>V</b> .	HOLE	NO.	B-1
TYPE		HSA		SS	_		LINE & STA,	GROUND W	ATER OBSER	IVATIONS	START	8/22/12
SIZE LI		3.75"		1.375"		······································	N. COORDINATE	AT 8.0 FT.	AFTER (	) HOURS	DATE	U/LL/ 12
	ER WT.		· · · · · · · · · · · · · · · · · · ·	140lbs			E. COORDINATE	AT FT.	AFTER	HOURS	FINISH DATE	8/22/12
HAMM	ER FALL	CIN	IDI E	30"	<del>                                     </del>					34	Ditta	
DEPTH	NO.	SAM BLOWS/6'		РТН	A		STRATU	M DESCRIPTION + REMARK				E1
0							PSOIL					0.5
		<del></del>				GF	REY/BR.FINE-MED.SAND,	SOME SILT, TF	ACE RO	OTS - FIL	L	
		<del>, , , , , , , , , , , , , , , , , , , </del>				;						
<u>,22</u>												
5-	1	1-2-2	5.00	-6,50'								
			***************************************									
					1-1-1-1-1	GF	REY/BR.FINE-CRS.SAND, O	BRAVEL AND C	OBBLES			7.5
						:						0
10 –						GF	REY/BR.FINE-CRS.SAND, S	SOME GRAVEL	, LITTLE	SILT	1	9.0
10	2	8-14-25	10.00'-	-11.50'		:						
						:						
15 –		*				:						
,0	3	10-18-20	15.00'-	16.50'								х.
						:						
20 –												
	4	6-6-12	20.00'-	21.50'								
						:						
25 –	5	5-15-26	25.00'-	26 50'	-							
	<u> </u>	J-1J-ZU	23.80 =	20.50	-							
												MARKAL LALLE
6												
30 –	6	9-12-15	30.00'-	31,50'								
4												
25												
35 <u>l</u>				L	<u></u>	1		DRILLER; J.E	REWER	·	······································	
		A:RECOVE		MBE 3	IOTHE -	The second	201 A ANI III ANA 222	INSPECTOR:	>1 < = VQ = 1 \			
SAMPI	E TYPE:	D=DRY A=.	AUGER C=C	ORE U=UND	ISTURBED	PISTO	ON S=SPLIT SPOON			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************	

11-22-23 40.00'-41.50' 11-15-25 50.00'-51.50' 10 28-60 60.00'-61.00' BOTTOM OF BORING @ 61.0' (AUGER REFUSAL) DRILLER: J.BREWER LEGEND: COL. A:RECOVERY " INSPECTOR: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50% SHEET 2 OF 2 HOLE NO. B-1

PURCELL ASSOCIATES

STRATUM DESCRIPTION

+ REMARKS

ROJECT NAME SUNNYSIDE STREET BRIDGE OVER YANTIC

RIVER

NORWICH, CT

**BORING B1-1 BORING B1-CONT.** 

_	-	-	-	THE INFORMATION, INCLUDING ESTIMATED
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-	-	-	-	IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES
_	-	-	_	OF WORK WHICH WILL BE REQUIRED.
_	_	_	_	

SHEET NO. Plotted Date: \$DATE\$

REVISION DESCRIPTION

REV. DATE

S. LACHCIK R. MEARS

SCALE AS NOTED





CLARENCE WELTI ASSOC., INC.

SAMPLE

18-20-21 35.00'-36.50'

GLASTONBURY, CONN 06033

DEPTH NO. BLOWS/6" DEPTH

P.O. BOX 397

NORWICH	PROJECT NO. 103-261
ING TITLE:	DRAWING NO. S-06
<b>BORING LOGS - 3</b>	SHEET NO. 4.06

	EASTING:	1,171,564.34 <b>STATION</b> : OFFSET:	
IORIZONTAL DATUM: /ERTICAL DATUM:		STATION CENTERLINE:  ESTIMATED GROUND SURFACE ELEV. (FT): 114.	
est Pit Information ATE START / END: _6/1 ONTRACTOR: _Seaboa QUIPMENT: _Track Mou	1/2017 - 6/1/2017 ard Drilling, Inc. unted Excavator		
OTAL DEPTH (FT): 11. OGGED BY (Person): 14. ATER LEVEL DEPTHS (FENERAL NOTES: 15.	G. Jacobsen		
S, = Pocket	oionization Detector t Penetrometer Strength t Torvane Shear Strength ane Shear Strength	NA, NM = Not Applicable, Not Measured	
SAMPLE	EINFORMATION	Sample	
Elev. Depth (ft) Sample No.	Depth Test (ft) Data	Sample Description & Classification	H <sub>2</sub> 0 Depth Remarks
    110 5		(0'- 7.2') BLOCK WALL, Exposed Wall (from top of railing).	
   05 10		Ground surface at 7.2 ft.  (7.2'- 7.7') BLOCK WALL, Buried Wall. Topsoil adjacent to  (7.7'- 9.2') Cobbles/Boulders below wall & 0.4 ft outside; Gralittle gravel adjacent (Fill).  (9.2'- 11.2') Gray silty f SAND, little gravel (Fill).	
-		End of Boring at 11.2 feet	
100 — 15			
95—20			
Stratification lines represent approundary between soil types, trai	nsitions may be	ED BY (Consultant): Freeman Companies, LLC	Freeman Companies, LLC
gradual. Water level readings ha at times and under conditions sta Fluctuations of groundwater may other factors than those present measurements were made.	ated. Coccur due to	ECT NAME: Sunnyside Street over Yantic River ETATE: Norwich, CT ECT NUMBER: 2017-0506	Hartford, CT 06102 (860) 251-9550 www.freemancos.com

Explo	oration	Location						TE	ST PIT
NORT	THING:	765,463.3	33 <b>EAS</b>	TING:	1,17	1,570.88 STATION: OFFSET: _		TD	102
VERT	ICAL D	ATUM:				STATION CENTERLINE: ESTIMATED GROUND SURFACE ELEV. (FT):	114.9		-102
LOCA	ATION:					- ,		PAG	E 1 of 1
		ormation					•		
		END: 6/1/							
		I (FT): 9.5							
LOGG	ED BY (	Person): G	. Jacobsen						
	RAL NO		,. <u>u.y</u>						
ABBRI	EVIATION	S <sub>v</sub> = Pocket	onization Dete Penetrometer : Forvane Shear ne Shear Strei	Strength Strength	NA, NI	M = Not Applicable, Not Measured			
		SAMPLE	INFORMA	TION	LOG				
Elev. (ft)	Depth (ft)	Sample De		est esta	GRAPHIC L	Sample Description & Classification		H₂0 Depth	Remarks
						(0'- 7.4') BLOCK WALL, Exposed Wall (from top of ra	ailing).		
-	_				A 4				
-	<u> </u>			:	P &				
_					P & S				
	_				5 A				
-	_			3	A 4				
110 —	_ 5			:	р Б. 9 Д 2				
_				[0] [0]	9 A				
					4 A				
_	_			•	9.4	(7.4) 7.5) DLOOK WALL Duried Wells 7.44- 7.54			
-	_				$\Delta$	(7.4'- 7.5') BLOCK WALL, Buried Wall: 7.4 to 7.5 ft. Cobbles/Boulders Below Wall: Dark brown loamy f S	AND, little c-f gravel		
-	<u> </u> <del> </del> -					adjacent. (8.2'- 9') Cobbles/Boulders below wall to 9.0 ft; Gray	j siltv f SAND. little		
105 —	10				XXX.	gravel adjacent (Fill).  FILL, Gray silty f SAND, little gravel (Fill).			
100	10					End of Boring at 9.5 feet			
-	_								
-	_								
_	_								
100 —	15								
-	_								
_	_								
_									
-	+								
95 —	20								
)( <del>-</del>	<u>1.0</u> 9								
		represent appro		LOGG	ED B	Y (Consultant): Freeman Companies, LLC	Fre	eeman	Companies, LLC
gradual. at times	. Water level and under	el readings have r conditions state	e been made ed.	PROJE	ECT N	IAME: Sunnyside Street over Yantic River	FREEMAN 36	John S artford,	Street CT 06102
other fa		oundwater may o those present at ore made				E: Norwich, CT	LAND SOVELEPHINE, INGUINAMING EXHIPS CONSTRUCTION MAYNERS (86	60) 251	-9550 mancos.com

NOR HORI VER	THING: IZONTA TICAL [	L DATU DATUM:	503.3 M:			_ STATIO	_ STATION ON CENTER ATED GROU	LINE: JND SURFAC	OFFSET: _			TF	P-103 GE 1 of 1
Test DATE CONT EQUIR	PIT INF	ormatic / END: R: Sea Track I	On 6/1/2017 - board Drilli Mounted E	6/1/2017 ng, Inc.									
12		l (FT): Person):	19.8 G. Jaco	S									
WATE		L DEPTH											
	VICTOR DE LA COMP	S: PID = P Q, = Po S, = Po		ometer Strength Shear Strength		NM = Not Appl	licable, Not Meas	ured					
		SAME	PLE INFO	RMATION	LOG								
Elev. (ft)	Depth (ft)	Sample No.	Depth (ft)	Test Data	GRAPHIC I			Desc	imple ription & sification			H <sub>2</sub> 0 Depth	Remarks
110 —	- 5 10				?.	(7.5'- 11.5	(') Concrete a	t ground surfa	MASS				
100 —	- - - -									TEST PIT			
95 —	— 20 -						ring at 19.8 fe	et		No.			
boundary gradual. at times a Fluctuation other fact	y between Water leve and under ons of grou	el readings conditions : undwater m nose presei	ransitions ma have been m	nade PROJ	ECT I	NAME: St E: Norwic	unnyside Str	man Compa eet over Yar		FREEMA	36 Ha (86	John rtford, (0) 25	Companies, LLC Street CT 06102 1-9550

TEST PIT TP-101 TEST PIT TP-102 TEST PIT TP-103

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: \$DATE\$

REVISION DESCRIPTION

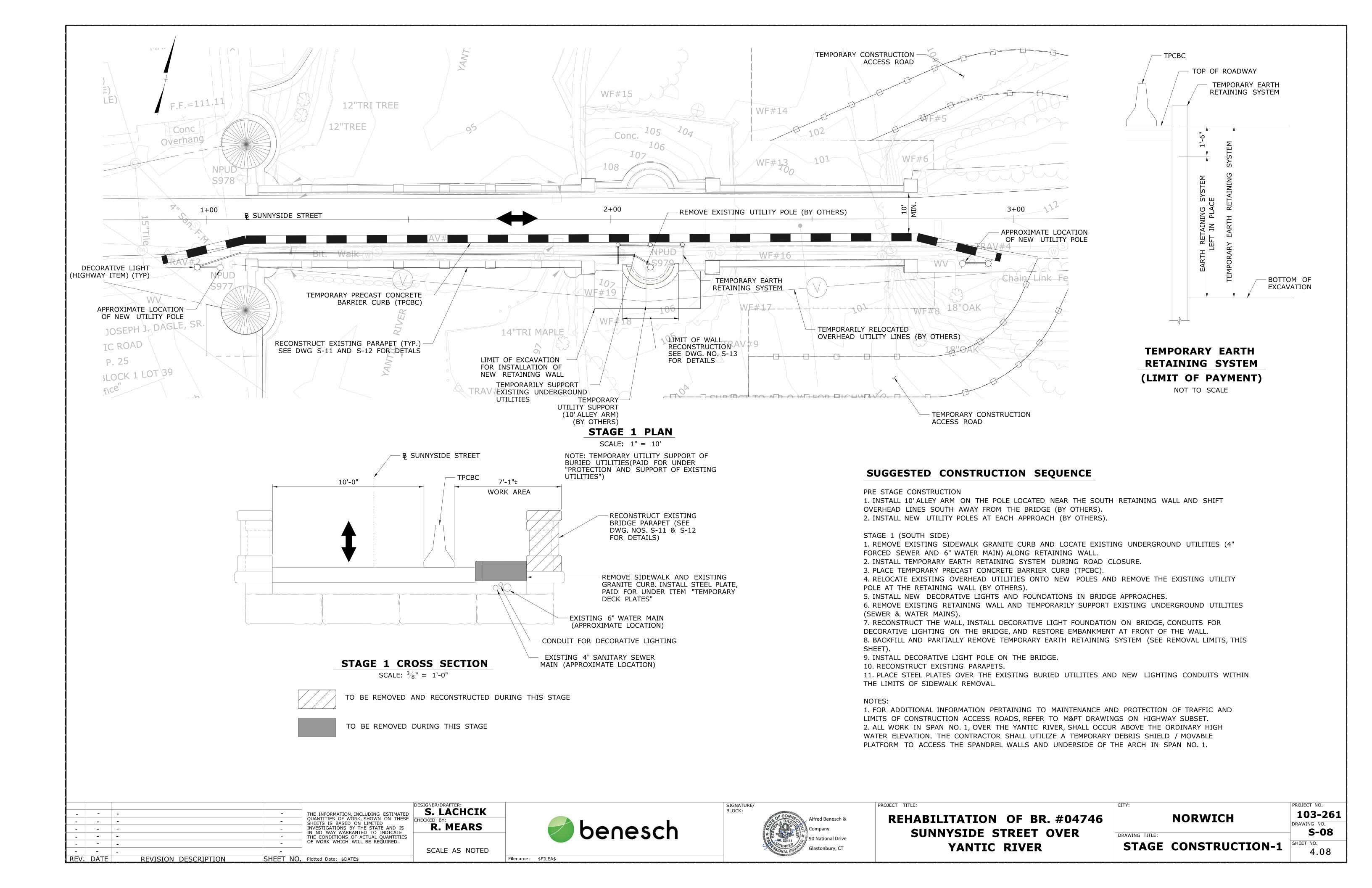
S. LACHCIK R. MEARS

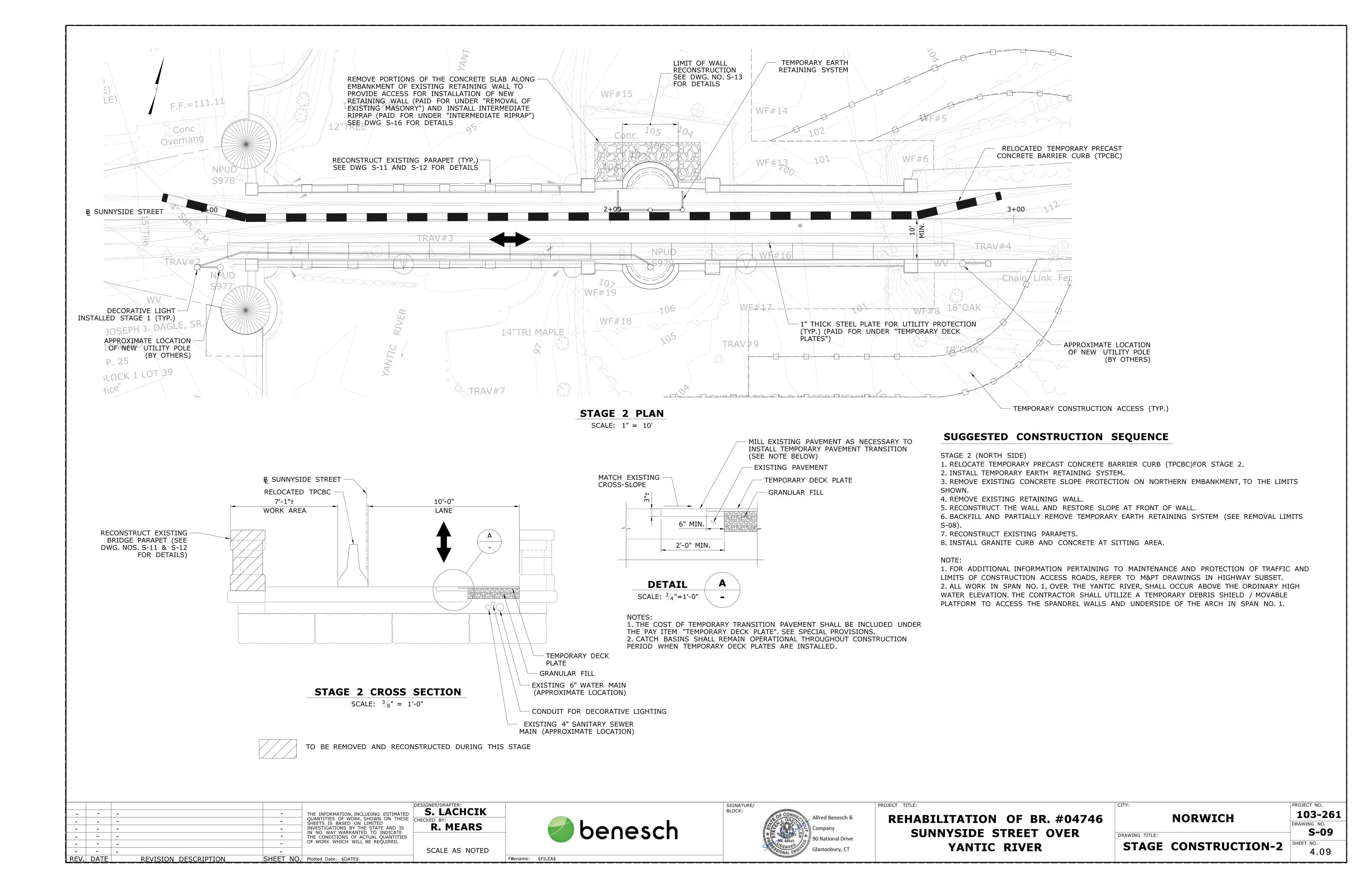
SCALE AS NOTED

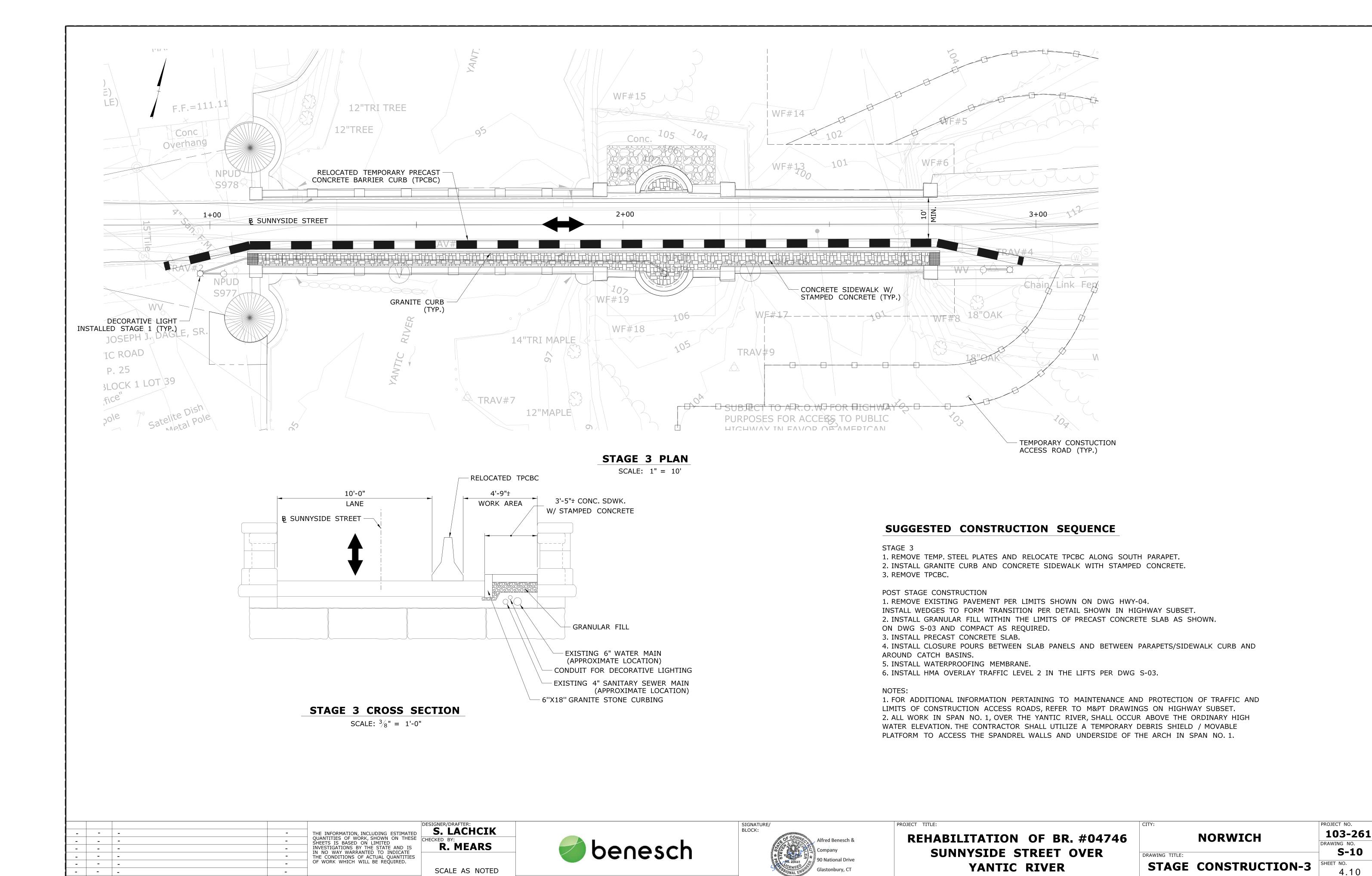




γ:	PROJECT NO.
NORWICH	103-261
	DRAWING NO.
WING TITLE:	<b>├ S-07  </b>
TEST PIT LOGS	SHEET NO.
IESI PII LOGS	4.07





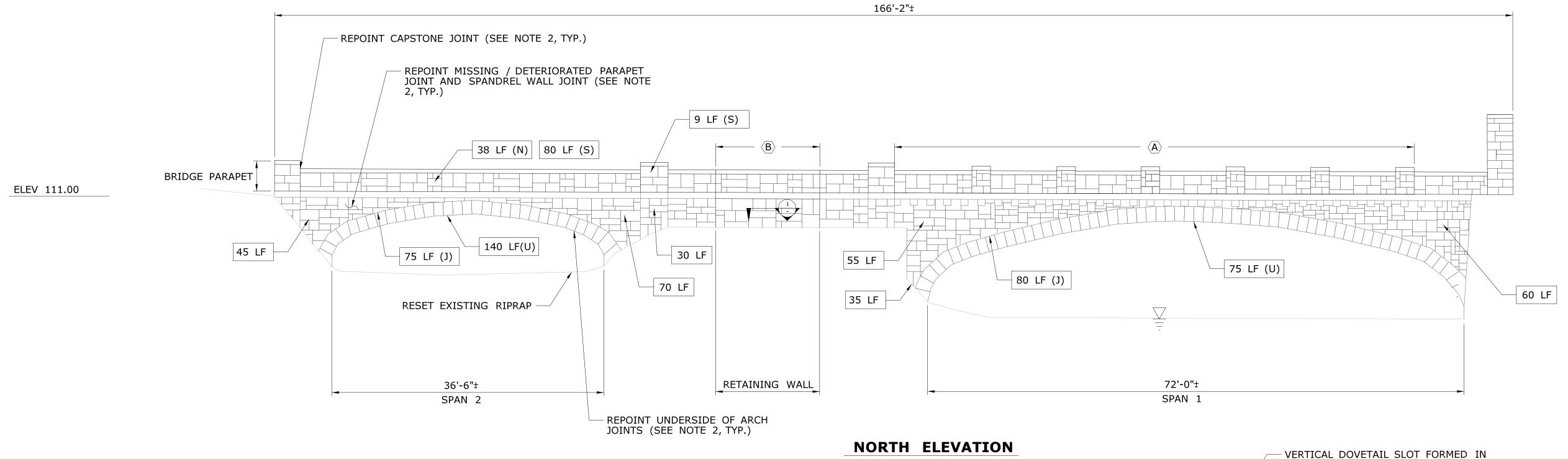


Filename: \$FILEA\$

REV. DATE

REVISION DESCRIPTION

SHEET NO. Plotted Date: \$DATE\$



#### LEGEND

- RECONSTRUCT PARAPET SECTION, PAID FOR UNDER "RESETTING STONE MASONRY"
- REMOVAL OF RETAINING WALL IS PAID FOR UNDER "REMOVAL OF EXISTING MASONRY".

  EXCAVATION FOR REMOVAL OF THE RETAINING WALL IS PAID FOR UNDER

  "STRUCTURE EXCAVATION EARTH (COMPLETE)".

  THE CONCRETE FOR RECONSTRUCTION OF THE RETAINING WALL IS PAID FOR UNDER

  "CLASS A CONCRETE" AND THE REINFORCING IS PAID FOR UNDER "DEFORMED STEEL BARS".

  THE STONE VENEER FACING FOR THE RETAINING WALL IS PAID FOR UNDER

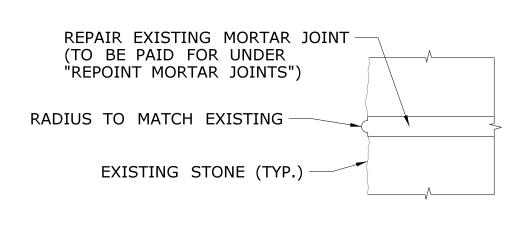
  "MASONRY FACING".
  - U UNDERSIDE OF BRIDGE
  - J SPANDREL ARCH JOINT
  - L.F. LENGTH OF "REPOINTED MASONRY"

REVISION DESCRIPTION

#### NOTES:

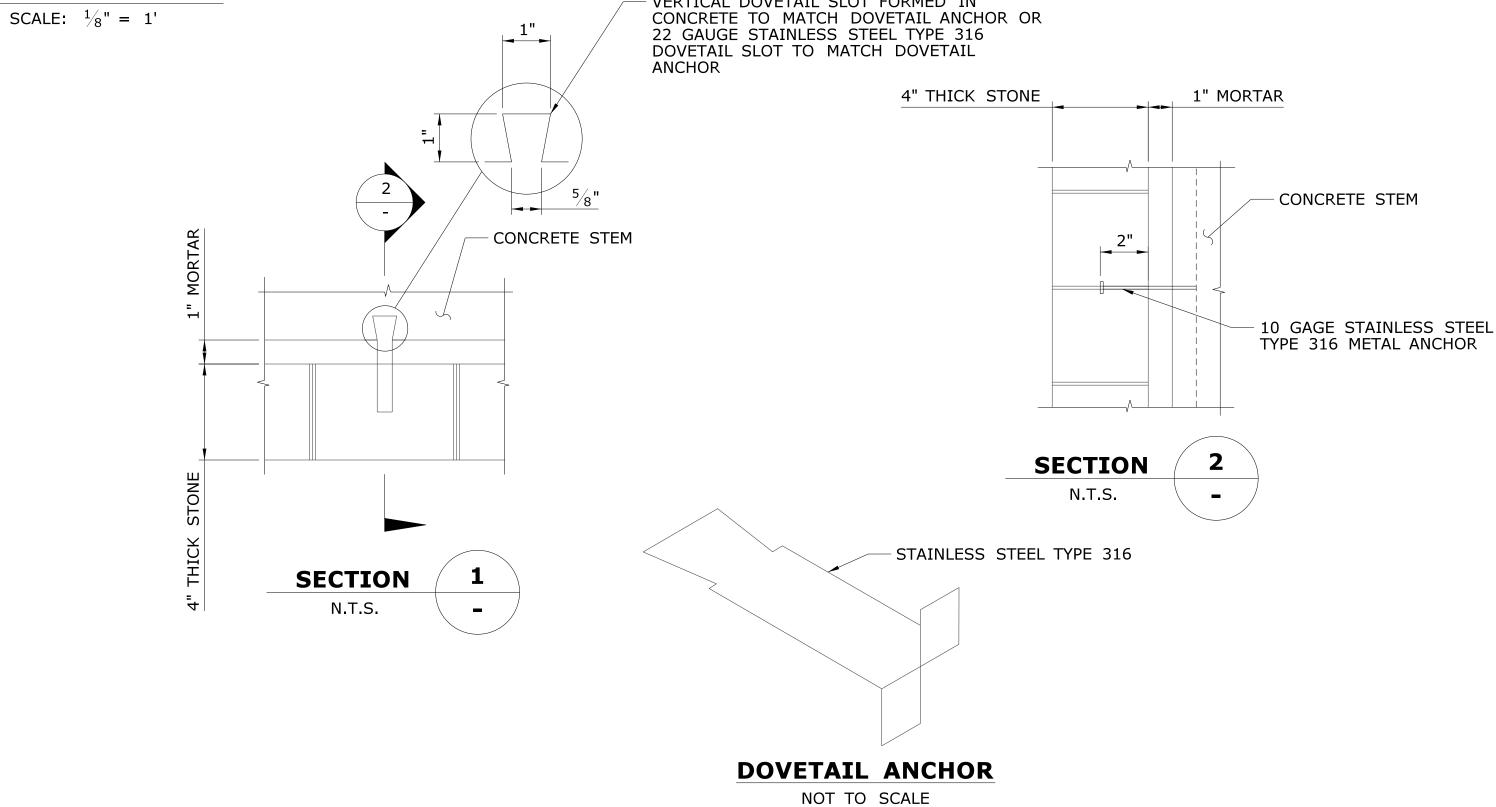
REV. DATE

- 1. FOR TYPICAL JOINT REPAIR DETAILS, SEE "BEADED MORTAR JOINT DETAIL" THIS SHEET.
- 2. REPOINT CAPSTONE JOINT, REPOINT MISSING/DETERIORATED SPANDREL WALL JOINTS, AND REPOINT UNDERSIDE OF ARCH JOINTS PAID FOR UNDER "REPOINT MORTAR JOINTS."
- 3. ALL WORK IN SPAN NO. 1, OVER THE YANTIC RIVER, SHALL OCCUR ABOVE THE ORDINARY HIGH WATER ELEVATION. THE CONTRACTOR SHALL UTILIZE A TEMPORARY MOVABLE DEBRIS SHIELD / PLATFORM TO ACCESS THE SPANDREL WALLS AND UNDERSIDE OF THE ARCH.
- 4. SEE SPECIAL PROVISION FOR DEFINITION OF PAY LIMITS FOR "RESETTING STONE MASONRY".



BEADED MORTAR JOINT DETAIL

NOT TO SCALE



## TYPICAL MASONRY FACING ANCHORAGE DETAILS NOT TO SCALE

NOTE: THE COST OF THE DOVETAIL ANCHOR SHALL BE INCLUDED IN THE UNIT PRICE FOR "MASONRY FACING".

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: \$DATE\$

DESIGNER/DRAFTER:
S. LACHCIK
CHECKED BY:
R. MEARS

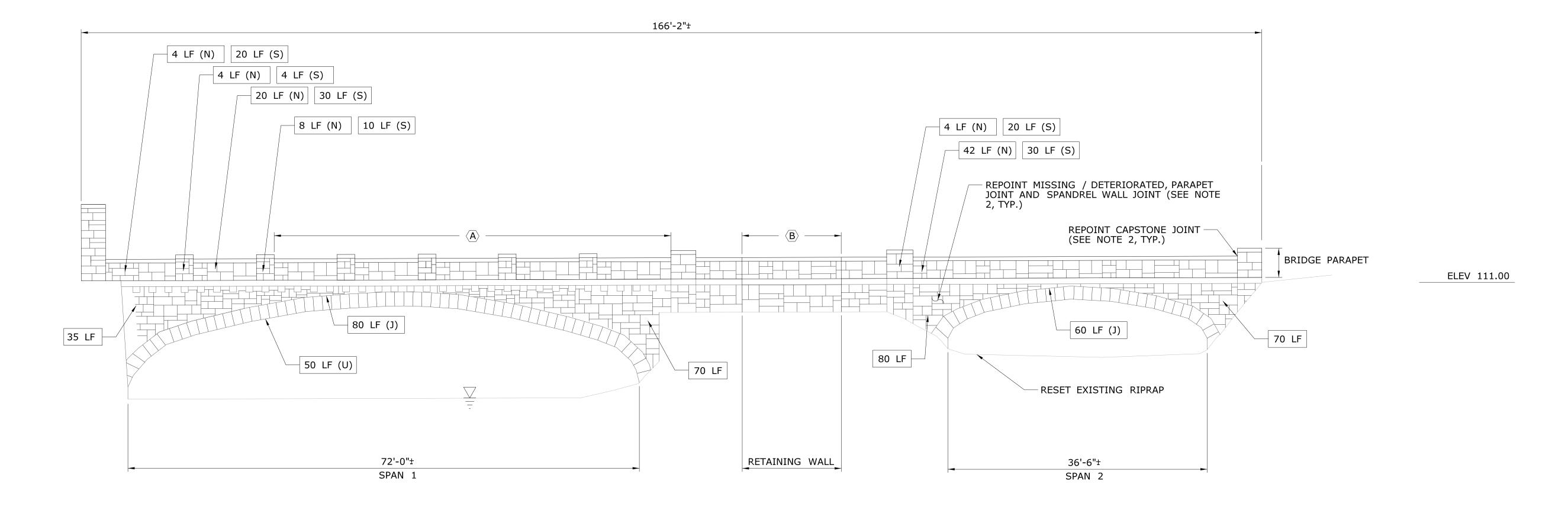
SCALE AS NOTED

Filename: \$FILEA\$





NORWICH	PROJECT NO.  103-261  DRAWING NO.
NORTH ELEVATION AND DETAILS	S-11 SHEET NO. 4.11



#### **SOUTH ELEVATION**

 $\frac{1}{8}$  = 1'

## LEGEND

- (A) RECONSTRUCT PARAPET SECTION, PAID FOR UNDER "RESETTING STONE MASONRY"
- REMOVAL OF RETAINING WALL IS PAID FOR UNDER "REMOVAL OF EXISTING MASONRY".

  EXCAVATION FOR REMOVAL OF THE RETAINING WALL IS PAID FOR UNDER
  "STRUCTURE EXCAVATION EARTH (COMPLETE)".

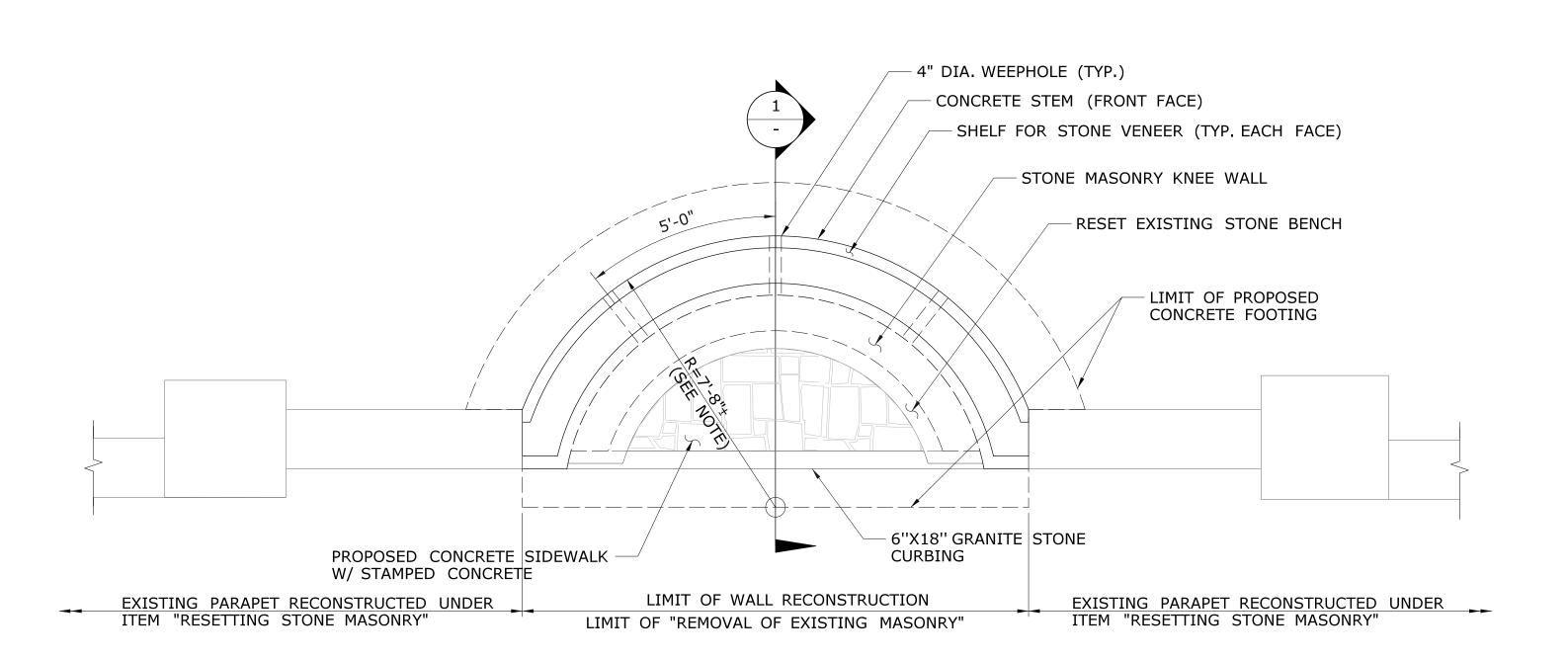
  THE CONCRETE FOR RECONSTRUCTION OF THE RETAINING WALL IS PAID FOR UNDER
  "CLASS A CONCRETE" AND THE REINFORCING IS PAID FOR UNDER "DEFORMED STEEL BARS".

  THE STONE VENEER FACING FOR THE RETAINING WALL IS PAID FOR UNDER
  "MASONRY FACING".
  - U UNDERSIDE OF BRIDGE
- J SPANDREL ARCH JOINT
- L.F. LENGTH OF "REPOINTED MASONRY"

#### NOTES:

- 1. FOR TYPICAL JOINT REPAIR AND DOVETAIL ANCHOR DETAILS, SEE DWG. NO. S-11.
- REPOINT CAPSTONE JOINT, REPOINT MISSING/DETERIORATED SPANDREL WALL JOINTS, AND REPOINT UNDERSIDE OF ARCH JOINTS PAID FOR UNDER "REPOINT MORTAR JOINTS."
- 3. ALL WORK IN SPAN NO. 1, OVER THE YANTIC RIVER, SHALL OCCUR ABOVE THE ORDINARY HIGH WATER ELEVATION. THE CONTRACTOR SHALL UTILIZE A TEMPORARY MOVABLE DEBRIS SHIELD / PLATFORM TO ACCESS THE SPANDREL WALLS AND UNDERSIDE OF THE ARCH IN SPAN NO. 1.
- 4. SEE SPECIAL PROVISION FOR DEFINITION OF PAY LIMITS FOR "RESETTING STONE MASONRY".

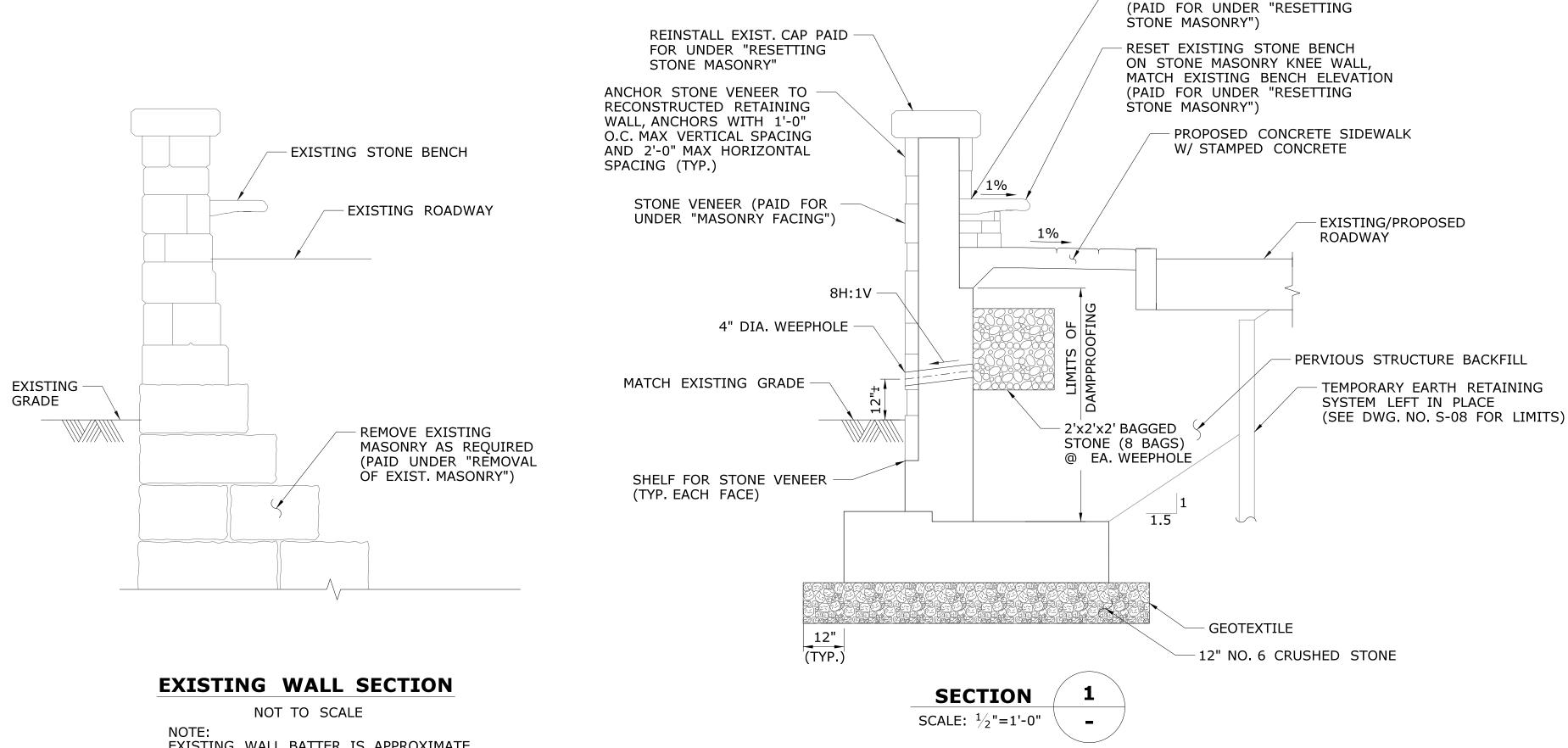
	DESIGNER/DRAFTER:		SIGNATURE/	PROJECT TITLE:	CITY:	PROJECT NO.
THE INFORMATION, INCLUDING ESTIMATED	S. LACHCIK		BLOCK:	DELIABELITATION OF DD #04746	NODWICH	103-261
QUANTITIES OF WORK, SHOWN ON THESE CONTROL SHEETS IS BASED ON LIMITED	CHECKED BY:		Alfred Benesch &	REHABILITATION OF BR. #04746	NORWICH	DRAWING NO.
INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	R. MEARS	hanasch	Company	SUNNYSIDE STREET OVER		S-12
THE CONDITIONS OF ACTUAL QUANTITIES		OCITE SCIT	The Contact of the Co	SUMMISIDE SIKEEL OVEK	DRAWING TITLE:	3 12
OF WORK WHICH WILL BE REQUIRED.		The second states and the second states are seco	Mo. 23441 90 National Drive	YANTIC RIVER	SOUTH ELEVATION	SHEET NO.
	SCALE AS NOTED		Glastonbury, CT	IANIC KIVEK	AND DETAILS	4.12
EV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: \$DATE\$		Filename: \$FILEA\$	Salatano marie		AND DETATES	

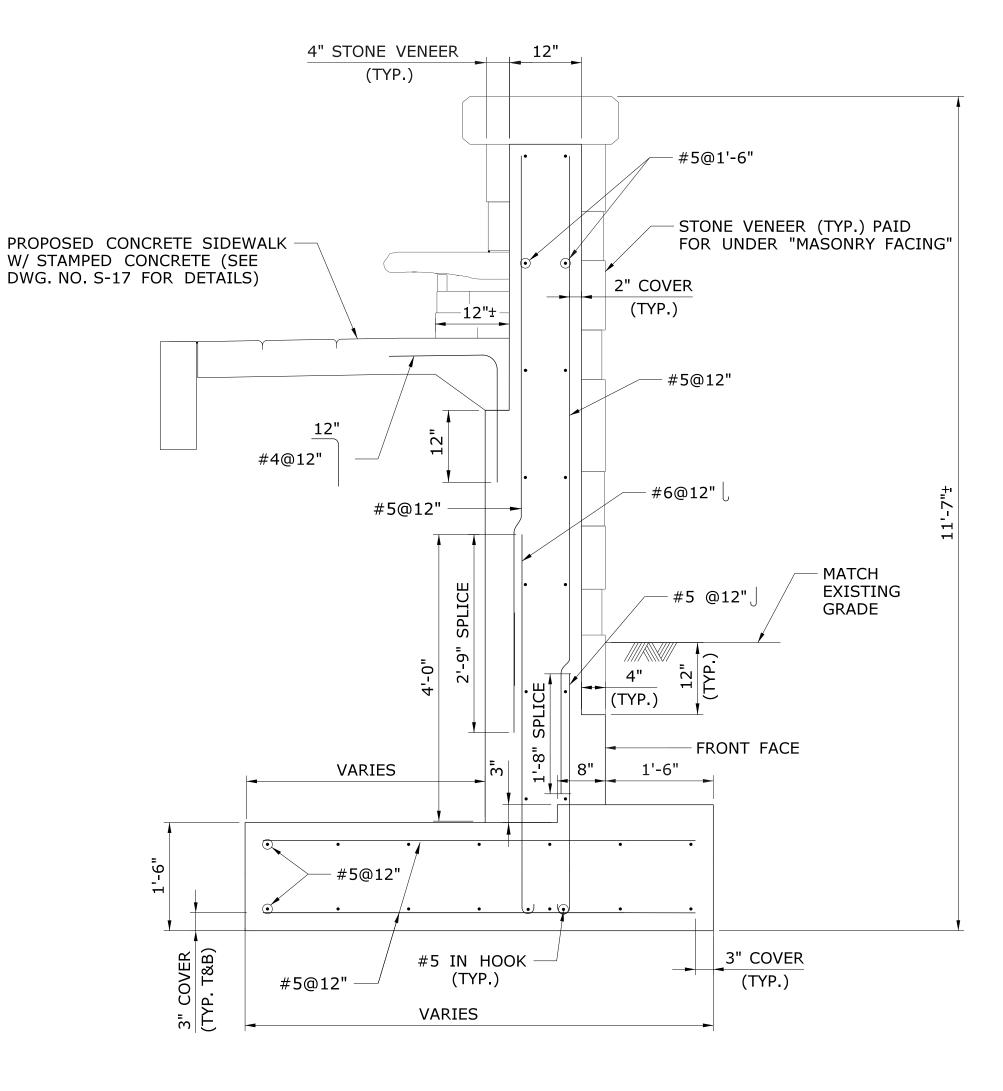


## TYPICAL RETAINING WALL PLAN

SCALE:  $\frac{3}{8}$ "=1'-0"

MATCH EXISTING WALL CURVATURE AS MEASURED AT THE BASE OF WALL





#### PROPOSED RETAINING WALL SECTION

SCALE:  $\frac{3}{4}$ "=1'-0"

NOTE: CERTAIN DETAILS NOT SHOWN FOR CLARITY SEE SECTION 1 FOR WALL INFORMATION NOT SHOWN

REMOVAL OF RETAINING WALL IS PAID FOR UNDER "REMOVAL OF EXISTING MASONRY". EXCAVATION FOR REMOVAL OF THE RETAINING WALL IS PAID FOR UNDER "STRUCTURE EXCAVATION - EARTH (COMPLETE)". THE CONCRETE FOR RECONSTRUCTION OF THE RETAINING WALL IS PAID FOR UNDER "CLASS A CONCRETE" AND THE REINFORCING IS PAID FOR UNDER "DEFORMED STEEL BARS". THE STONE VENEER FACING FOR THE RETAINING WALL IS PAID FOR UNDER "MASONRY FACING".

EXISTING WALL BATTER IS APPROXIMATE, EXISTING PLANS WERE NOT AVAILABLE.

SHEET NO. Plotted Date: \$DATE\$

DESIGNER/DRAFTER: S. LACHCIK

SCALE AS NOTED

Filename: \$FILEA\$

benesch

NOTE: SEE "PROPOSED RETAINING WALL SECTION" FOR WALL DIMENSIONS AND REINFORCING DETAILS

Alfred Benesch & Company 90 National Drive

REHABILITATION OF BR. #04746 SUNNYSIDE STREET OVER YANTIC RIVER

PROJECT TITLE:

CITY:	PROJECT NO.
NORWICH	103-26
NORWICH	DRAWING NO.
DRAWING TITLE:	<b>S-13</b>
RETAINING WALL PLAN AND DETAILS	SHEET NO. 4.13

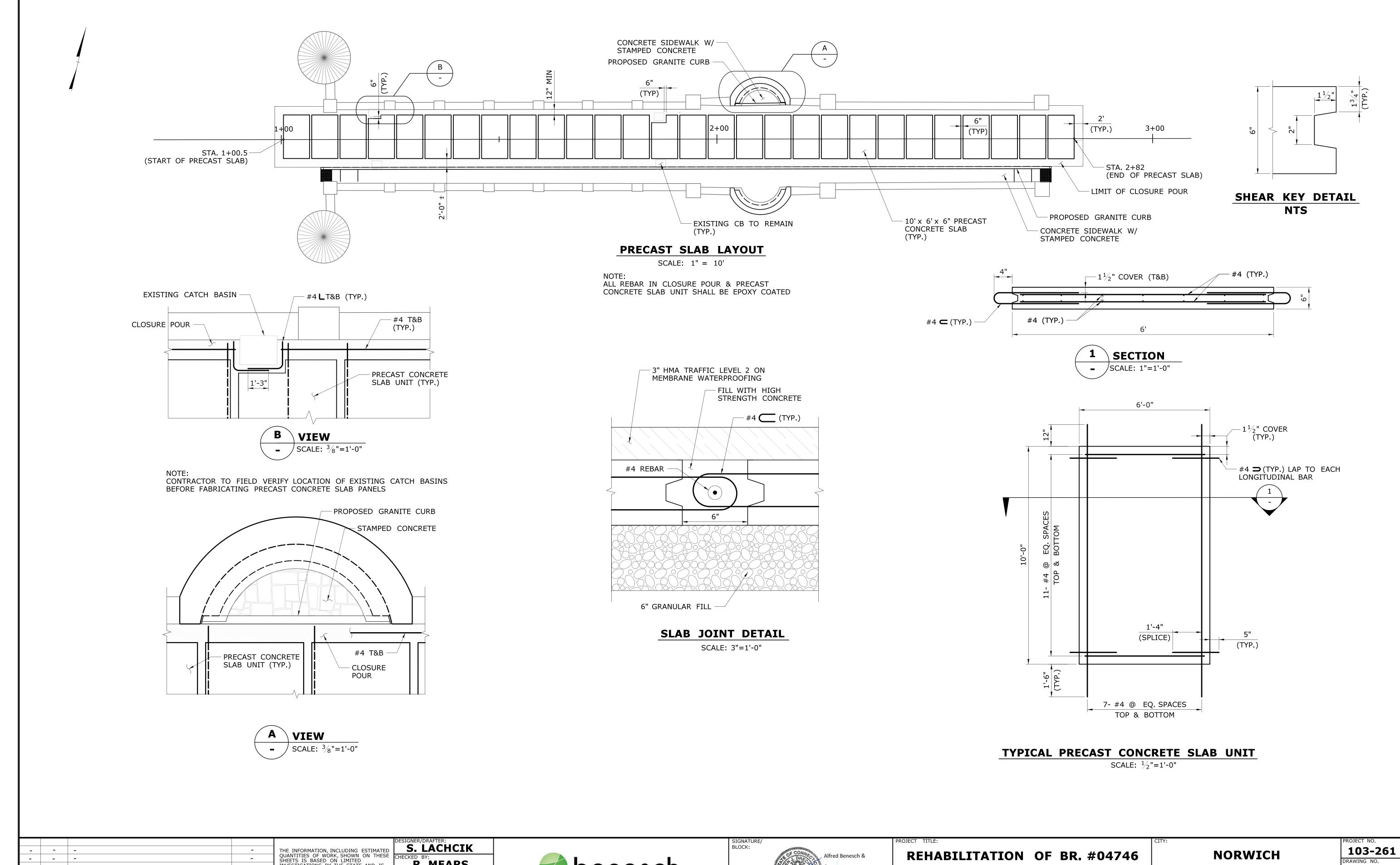
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED. - - -- | - | -\_ | \_ \_ \_ - - -

REVISION DESCRIPTION

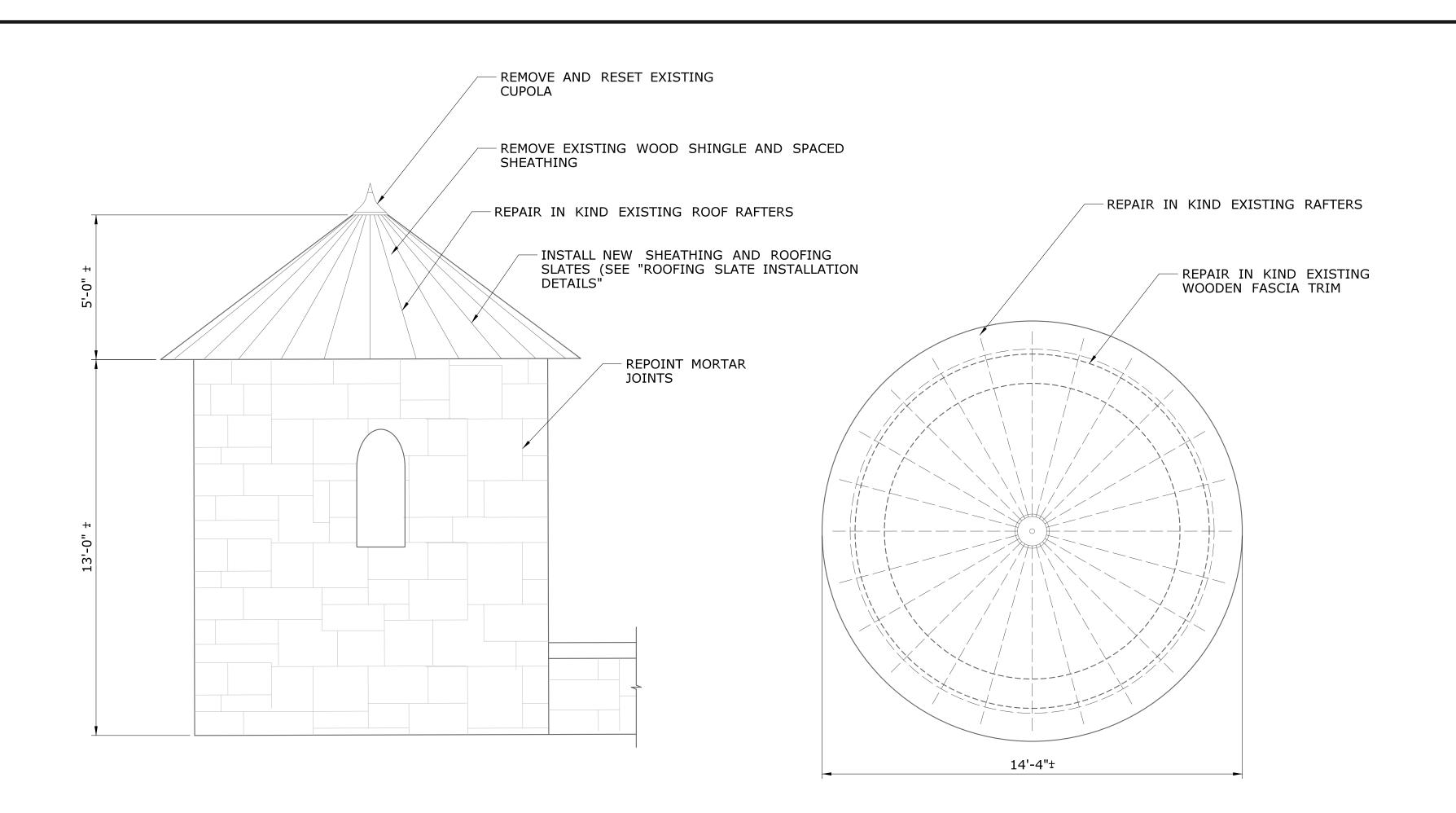
REV. DATE

R. MEARS

MORTAR JOINT



	-	THE INFORMATION, INCLUDING ESTIMATED OUANTITIES OF WORK, SHOWN ON THESE	S. LACHCIK		BLOCK:  Alfred Benesch &	REHABILITATION OF BR. #04746	NORWICH	103-261
	- -	SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE	R. MEARS	benesch	Company	SUNNYSIDE STREET OVER		DRAWING NO.  S-14
	- -	THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	SCALE AS NOTED	- OCHCOCH	90 National Drive	YANTIC RIVER	PRECAST CONCRETE SLAI	CHEET NO
REV. DATE	REVISION DESCRIPTION SHEET N	O. Plotted Date: \$DATE\$	SCALE AS NOTED	Filename: \$FILEA\$	ONAL ENGINE			4.14



**TURRET ELEVATION** 

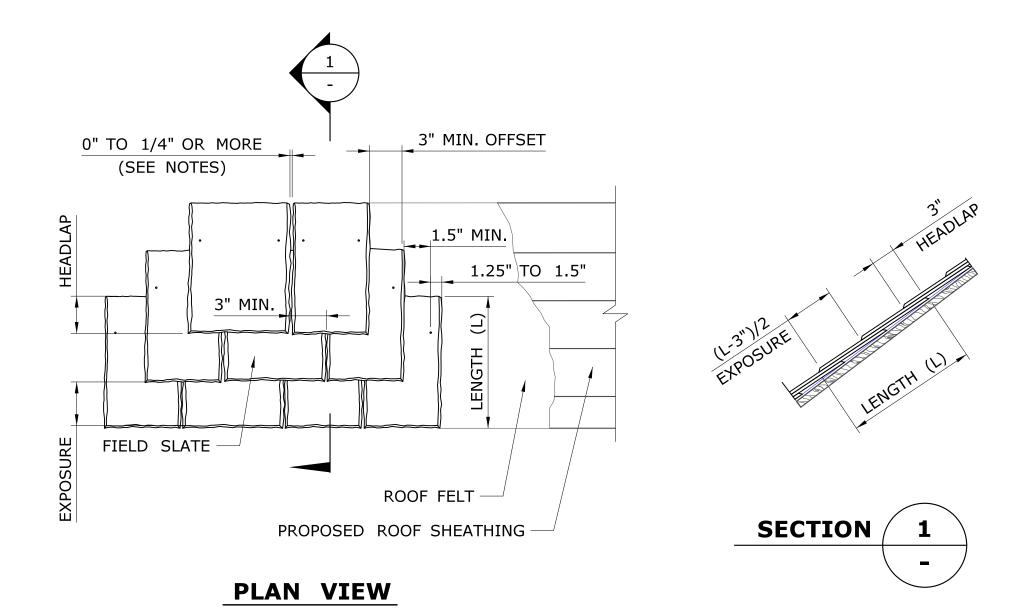
SCALE:  $\frac{3}{8}$ " = 1'

TURRET ROOF PLAN

SCALE:  $\frac{3}{8}$ " = 1'

1. ALL REPAIRS AND REMOVAL OF DETERIORATED ELEMENTS TO THE TURRET ROOF ARE PAID FOR UNDER "SLATE SHINGLE ROOF".

SHEET NO. Plotted Date: \$DATE\$



ROOFING SLATE INSTALLATION DETAILS

SCALE: 1" = 1'

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REVISION DESCRIPTION

REV. DATE

S. LACHCIK R. MEARS

SCALE AS NOTED

Filename: \$FILEA\$



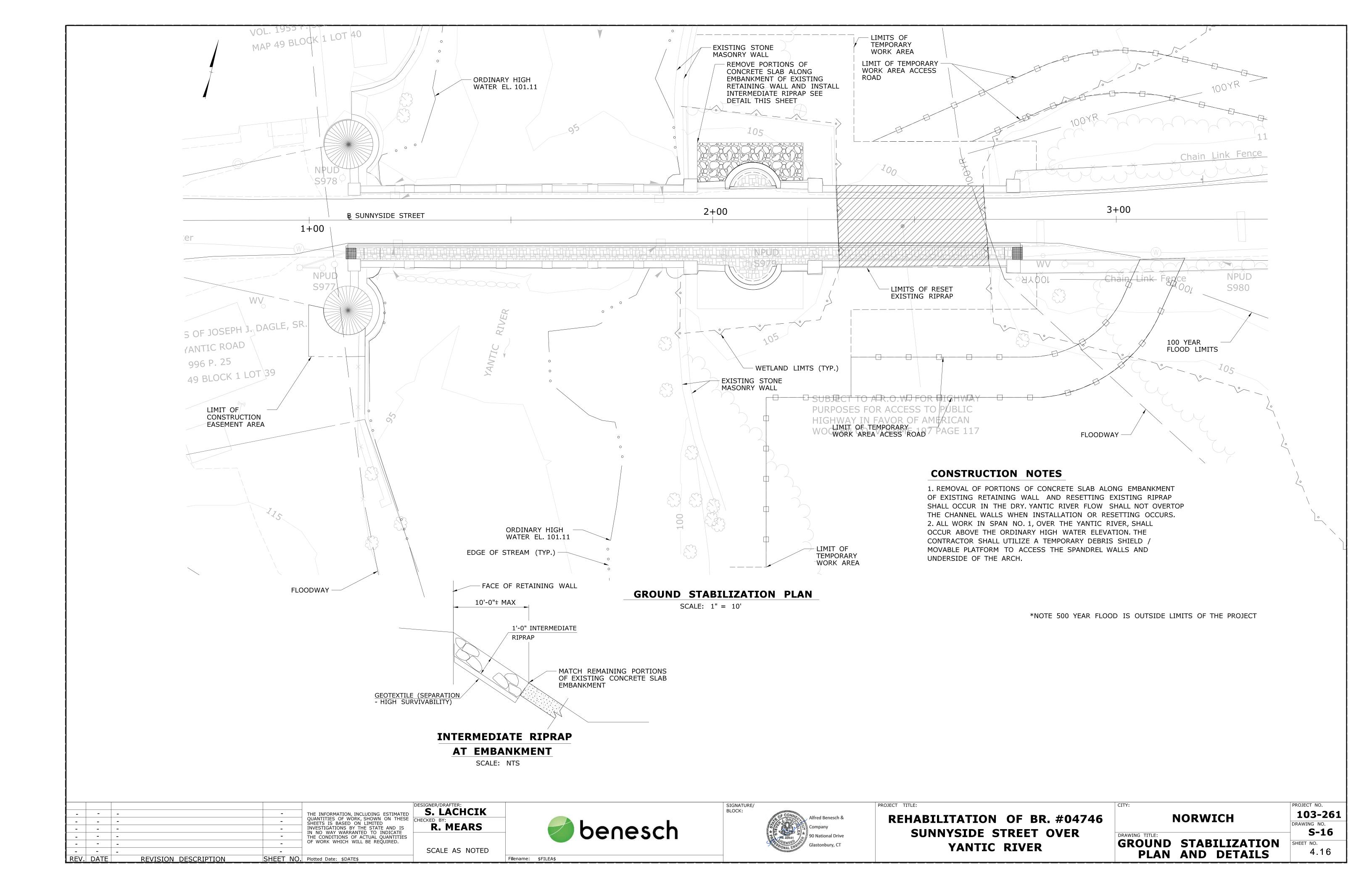


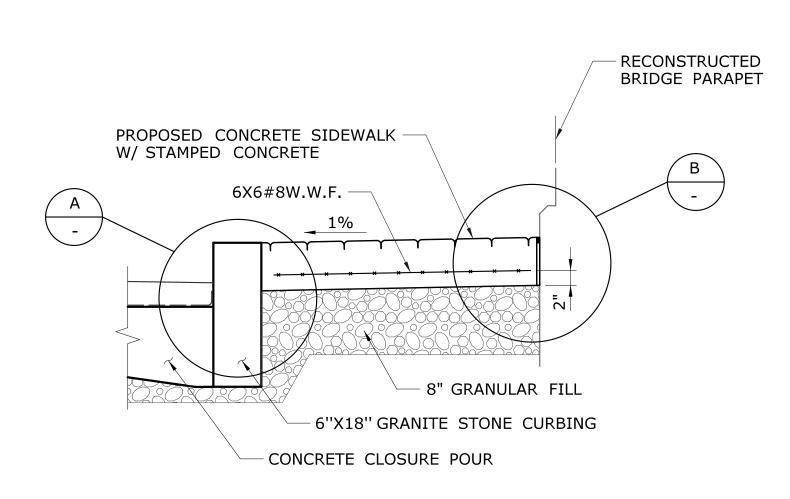
REHABILITATION OF BR. #04746 SUNNYSIDE STREET OVER YANTIC RIVER

5	CITY:	NORWIC	Н
	DRAWING TITLE:		
	TURRET	REPAIR	DE

S-15 ETAILS 4.15

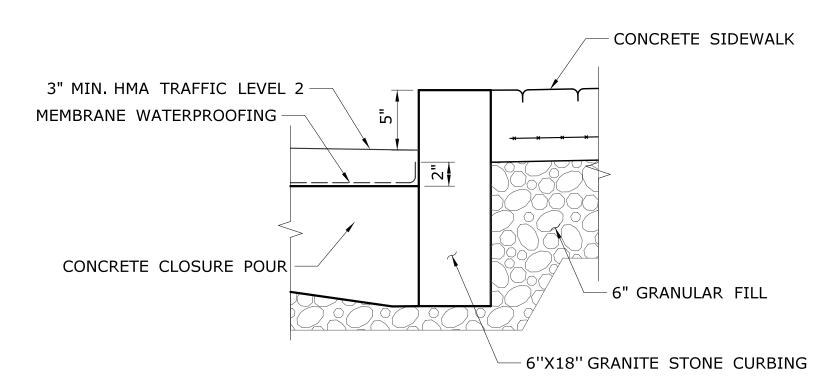
103-261



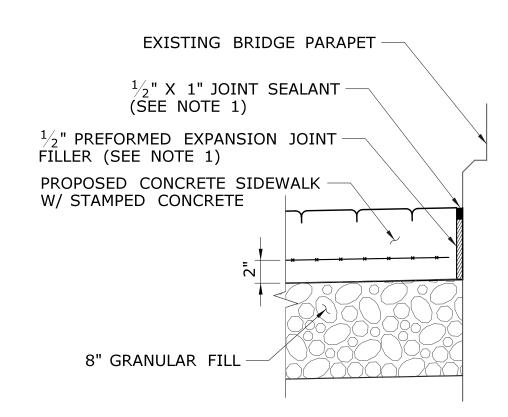


## **CONCRETE SIDEWALK**

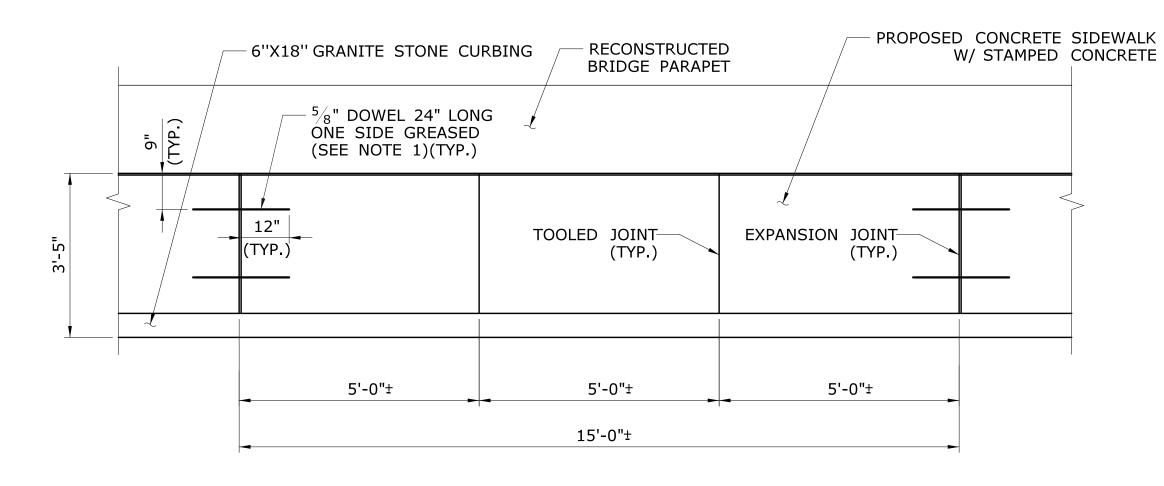
SCALE: 1"=1'-0"





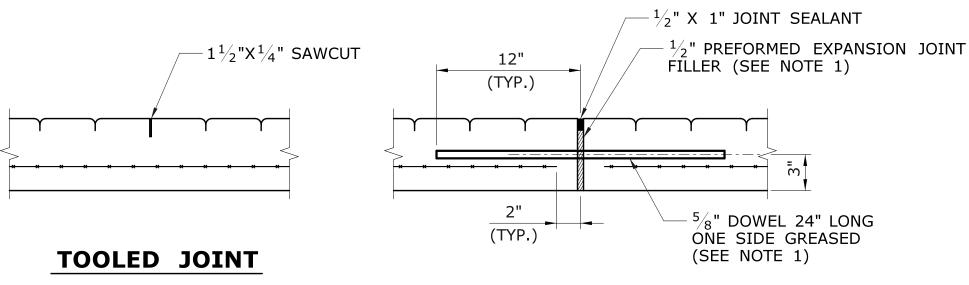






## CONCRETE SIDEWALK TRANSVERSE JOINT LAYOUT

SCALE:  $\frac{1}{2}$ "=1'-0"



#### **EXPANSION JOINT**

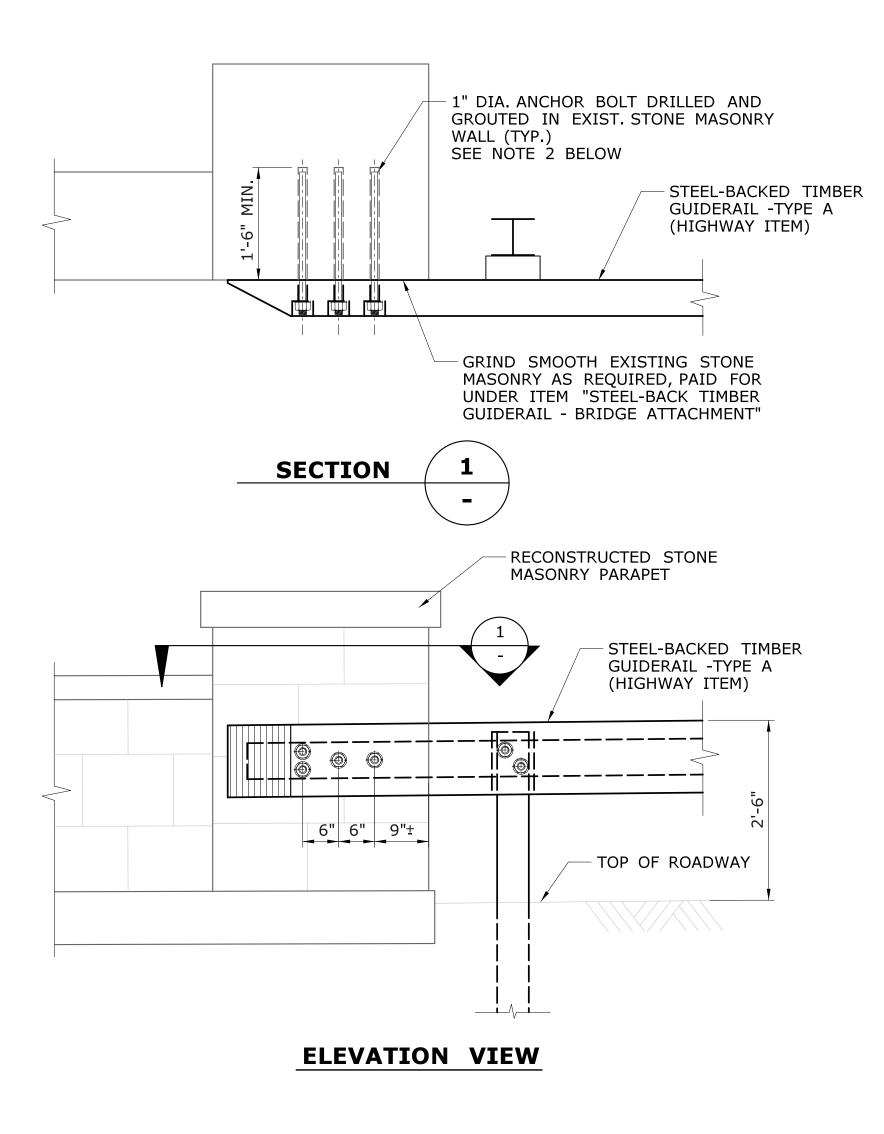
CONCRETE SIDEWALK NOTES:

1.  $^{1}\!/_{2}$ " PREFORMED EXPANSION JOINT FILLER,  $^{1}\!/_{2}$ " X 1" JOINT SEALANT,  $^{5}\!/_{8}$ " DOWEL AND ALL COST ASSOCIATED SHALL BE PAID FOR UNDER "CONCRETE SIDEWALK".

2. IF REQUIRED, REINFORCING WIRE MESH SHALL BE LAPPED 8" MIN. AND TIED TOGETHER WITH WIRE SPACED NOT OVER 24" ON CENTER.

3. EXPANSION MATERIAL SHALL MEET ASTM SPECIFICATION D-1752-04 TYPE II.

4. STAMPED CONCRETE INCLUDED UNDER THE ITEM "CONCRETE SIDEWALK".



## STEEL-BACKED TIMBER GUIDERAIL ATTACHMENT DETAILS

N.T.S.

GUIDERAIL ATTACHMENT NOTES:

1. FOR ADDITIONAL DETAILS REFER TO DWG NOS. HWY 11-13.

2. DRILLING AND GROUTING FOR 1" DIA. ANCHOR SHALL BE PAID FOR UNDER "DRILLING HOLES AND GROUTING ANCHOR BOLTS".

-	-	-	1	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.
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SHEET NO. Plotted Date: \$DATE\$

REVISION DESCRIPTION

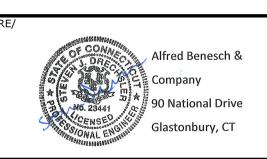
REV. DATE

DESIGNER/DRAFTER:
S. LACHCIK
CHECKED BY:
R. MEARS

SCALE AS NOTED

Filename: \$FILEA\$





REHABILITATION OF BR. #04746
SUNNYSIDE STREET OVER
YANTIC RIVER

NORWICH	
DRAWING TITLE:	
CONCRETE SIDEV	VAL

103-261

S-17

4.17