Filename: 140_MOT Overview.dgn Division: Username: Date:3/3/2020

Westbrook

Falmouth

Portland

Scarborough

South Portland

Cape Elizabeth

I 95 Exit 42
I 95 Exit 44
I 95 Exit 45
I 95 Exit 46
I 95 Exit 47
I 95 Exit 48
I 95 Exit 52
I 95 Exit 53
I 295 Exit 1
I 295 Exit 2
I 295 Exit 3
I 295 Exit 4
I 295 Exit 5
I 295 Exit 6
I 295 Exit 7
I 295 Exit 8
I 295 Exit 9
I 295 Exit 10
I 295 Exit 11

See I 95 Exit 44 Plan
See I 95 Exit 52 Plans
Falmouth Spur
See Detour Plan 2
3 Miles
See Route 1 SB Closure Plans
I 295 Over Veranda Street Bridge
See Detour Plan 1

PCMS #1
PCMS #2
PCMS #3
PCMS #4
PCMS #5
PCMS #6
PCMS #7
PCMS #8
PCMS #9
PCMS #10
PCMS #11

95 22 114 25 26 100 302 9 1 1A 295 88 703 701 207 77

DETOUR PLAN

0.5 0 0.5 1
Scale of Miles

PCMS MESSAGES

	ALL PCMS (1 WEEK PRIOR TO CLOSURE)	PCMS #1	PCMS #2 & #3	PCMS #4 Through # 11
SCREEN 1	I 295 OVER VERANDA ST	VERANDA ST. BRIDGE CLOSED	VERANDA ST. BRIDGE CLOSED	I 295 OVER VERANDA ST
SCREEN 2	BRIDGE CLOSURE	POINTS NORTH OF I 295 EXIT 8	VEHICLES MUST EXIT AHEAD	BRIDGE CLOSED
SCREEN 3	XX/XX TO XX/XX	USE I 95 EXIT 52		SEEK ALTERNATE ROUTE

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	EDD	2\20
CHECKED-REVIEWED	RWH	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

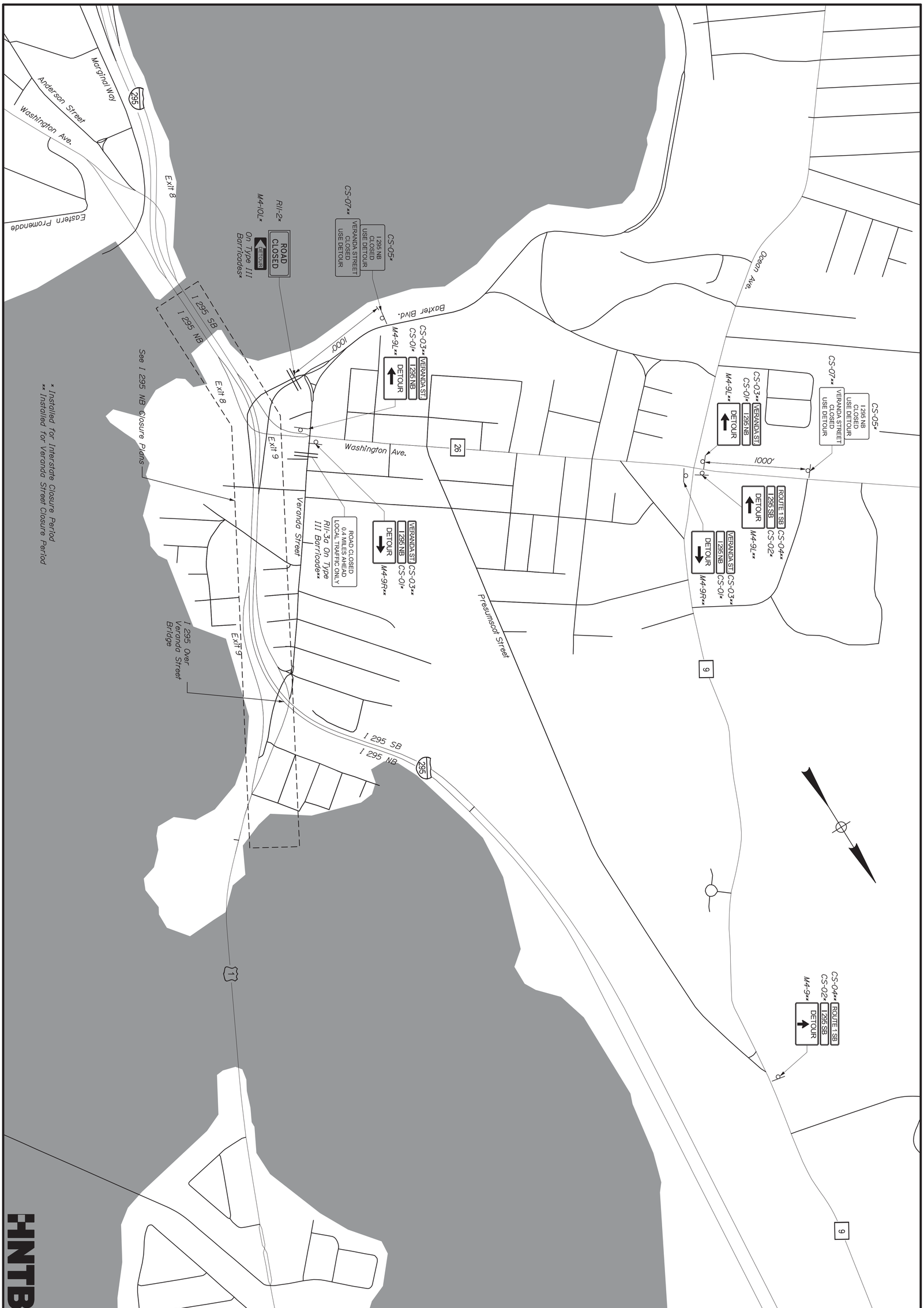
MAINTENANCE OF TRAFFIC OVERVIEW

SHEET NUMBER

140

OF 220

Filename: 141_Detour Plan_1.dgn Division: Username: Date:3/3/2020



HNTB

SHEET NUMBER 141 OF 220

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC DETOUR PLAN 1

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	EDD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

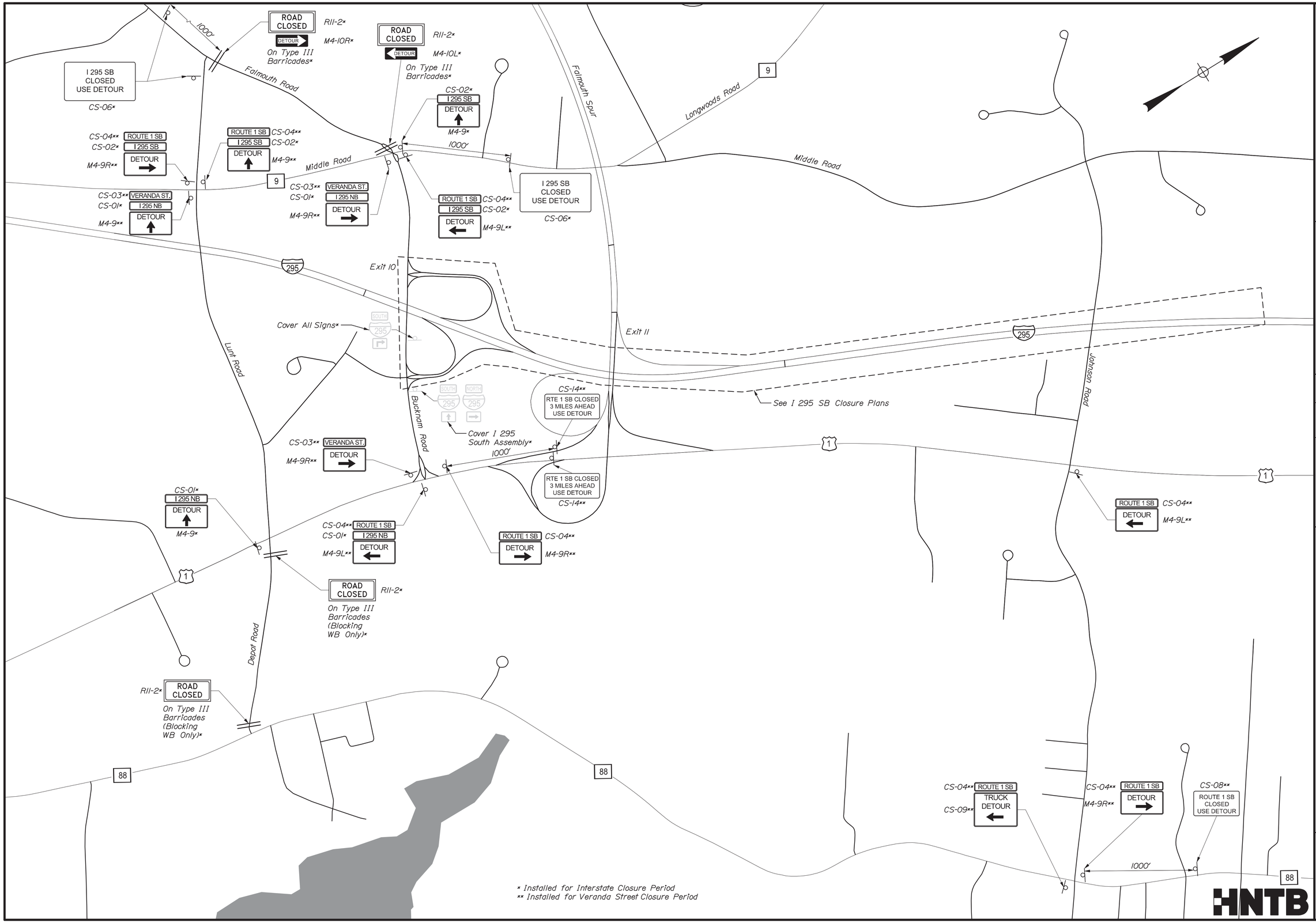
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

BRIDGE NO.5933 WIN 021745.00 HIGHWAY PLANS



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

HIGHWAY PLANS

	BY	DATE
D. EATON		
PROJ. MANAGER	CDH	2.'20
DESIGN-DETAILED	EDD	2.'20
CHECKED-REVIEWED	RWH	
DESIGN2-DETAILED2	LZD	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC DETOUR PLAN 2

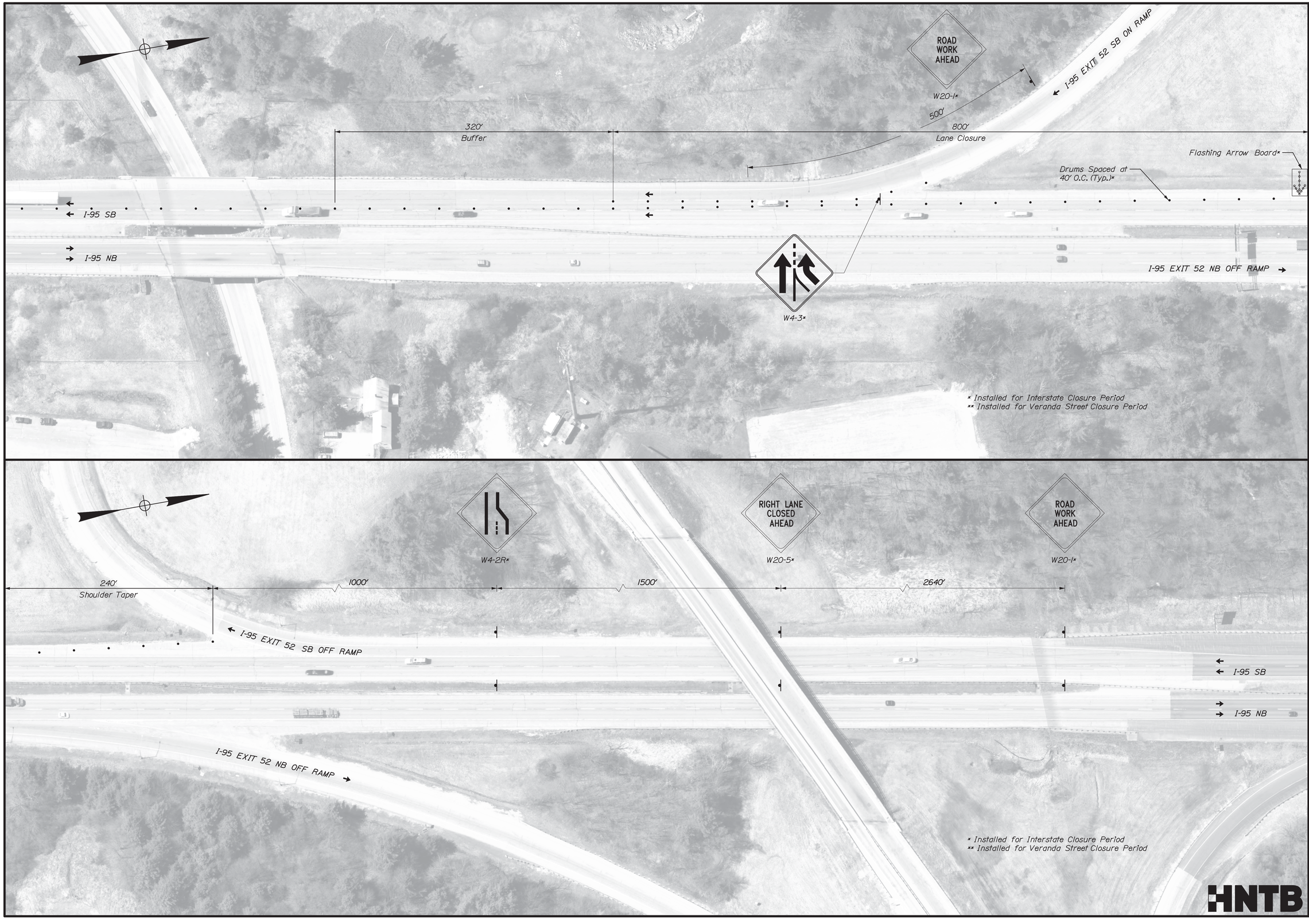
SHEET NUMBER

142

OF 220

HNTB

Filename: 142_Detour Plan_2.dgn Division: Username: Date:3/3/2020



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	EDD	COH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC I-95 EXIT 52

SHEET NUMBER

143

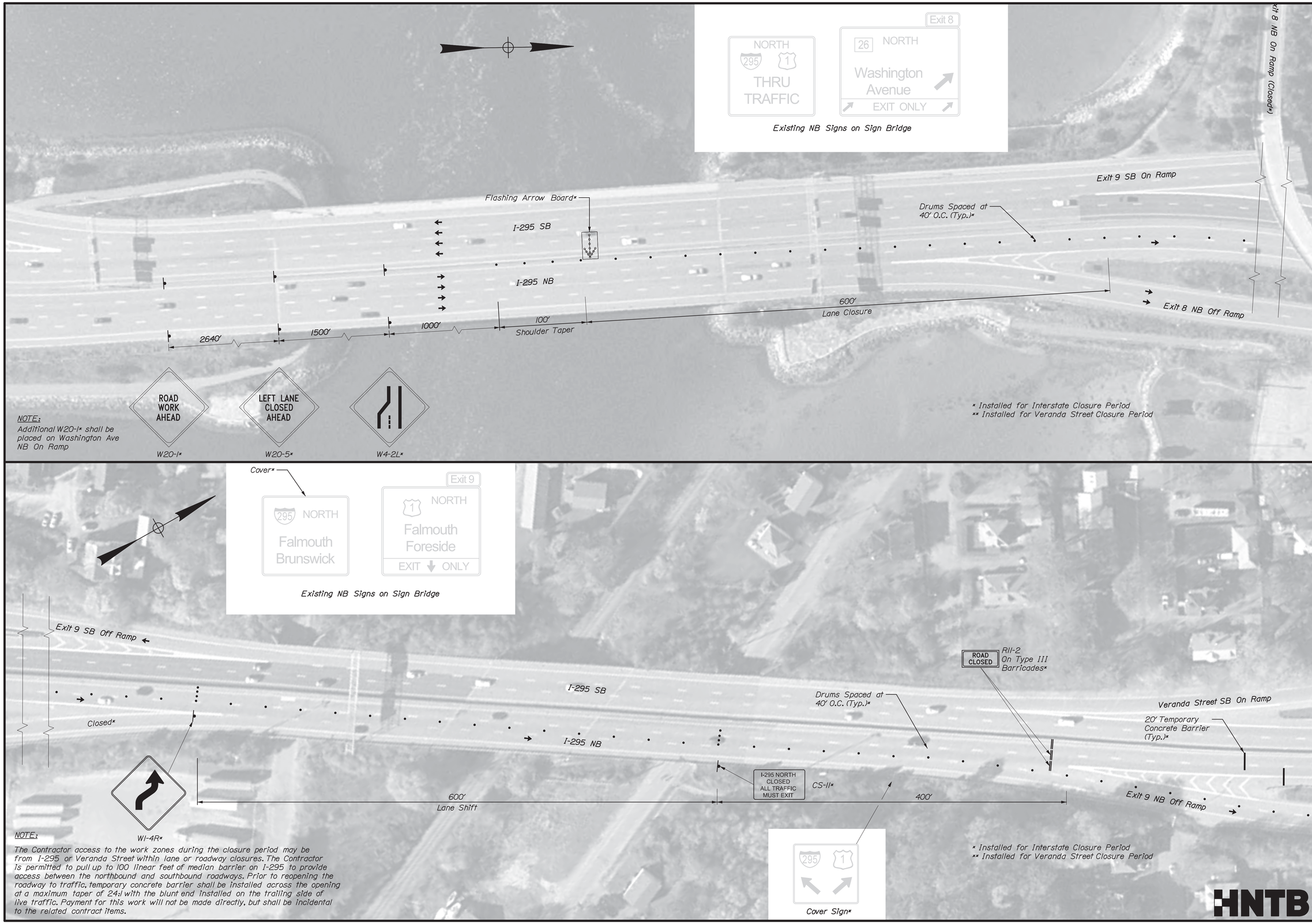
OF 220

Username:

Division:

Filename: 143_95Exit 52.dgn

Date:3/3/2020



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	EDD	2\20
CHECKED-REVIEWED	RWH	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC
I-295 NB CLOSURE 1

SHEET NUMBER

144

OF 220

Username:

Division:

Date:3/3/2020

Filename: 144_295NBClosure.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN **021745.00**

BRIDGE NO.5933 — BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	EDD	BY	DATE
CHECKED-REVIEWED	RWH	CDH	2\20
DESIGN2-DETAILED2		LZD	2\20
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC I-295 NB CLOSURE 2

SHEET NUMBER

145

OF 220

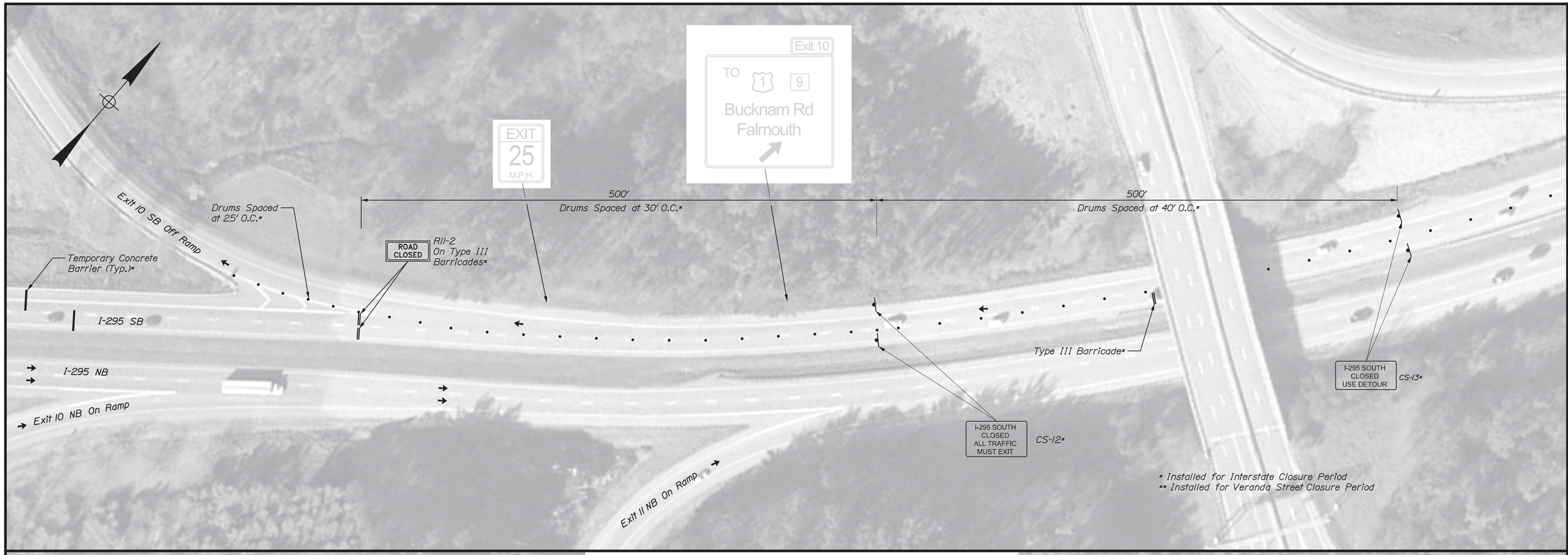
HNTB

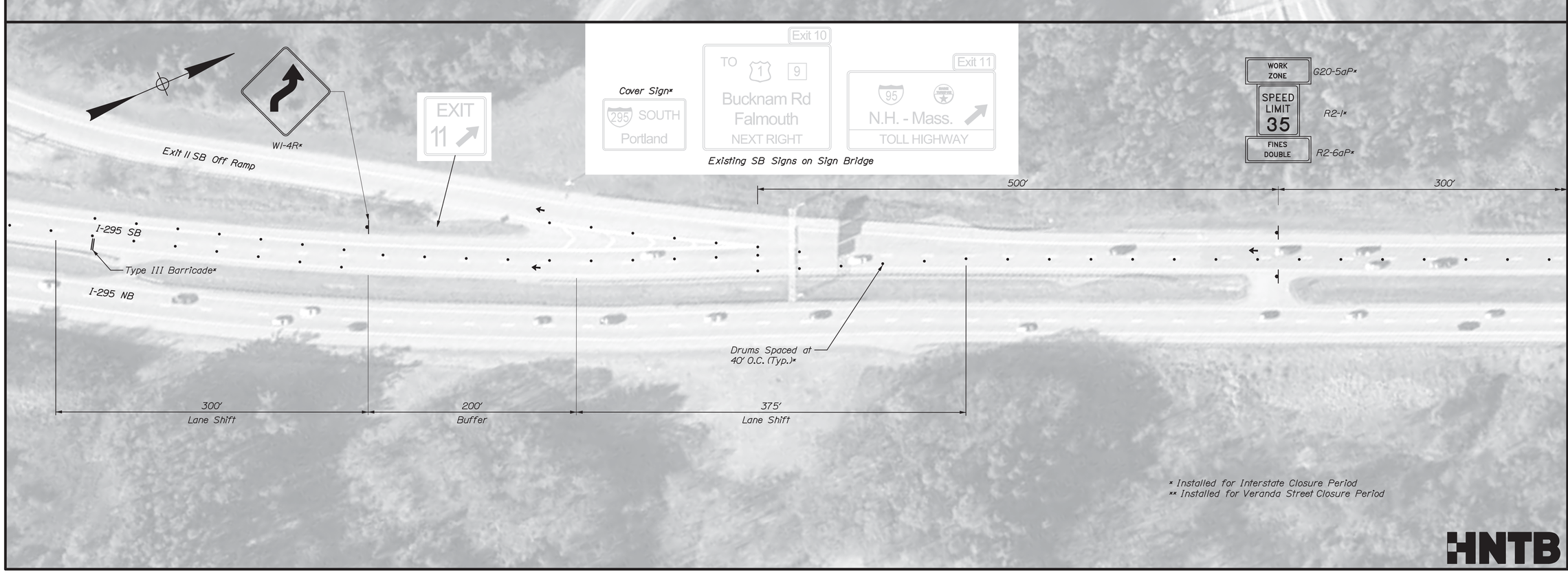
Username:

Division:

Date:3/3/2020

Filename: 145_295NBClosure2.dgn





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
D. EATON		
DESIGN-DETAILED	EDD	2\20
CHECKED-REVIEWED	RWH	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		
PROJ. MANAGER	CDH	

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC
I-295 SB CLOSURE 1

SHEET NUMBER

146

OF 220

HNTB

Date:3/3/2020

Username:

Division:

Filename: 146_295SBClosure1.dgn

Username:

Division:

Date:3/3/2020

Filename: 147_295SBClosure2.dgn

SPEED LIMIT 35

W3-5*

Exit 11

95

Points South
N.H. - MASS.

TOLL HIGHWAY

WORK ZONE G20-5aP*

SPEED LIMIT 50 R2-1*

FINES DOUBLE R2-6aP*

300'

500'

800'
Lane Closure

120'
Shoulder Taper

See Advanced Signing Below

Drums Spaced at 40' O.C. (Typ.)*

I-295 SB

Flashing Arrow Board*

I-295 NB

W4-2L*

SPEED LIMIT 50

W3-5*

LEFT LANE CLOSED AHEAD

W20-5*

ROAD WORK AHEAD

W20-1*

1000'

800'

800'

2640'

Shoulder Taper

I-295 SB

Existing VMS North of Johnson Road

* Installed for Interstate Closure Period
** Installed for Veranda Street Closure Period

CS-02* I 295 SB DETOUR

M4-9R*

Exit 10 SB Off Ramp

Exit 10 SB On Ramp

Drums Spaced at 10' O.C.*

On Type III Barricades*

R11-2* ROAD CLOSED

M4-10L* DETOUR

I 295 SB DETOUR CS-02*

M4-9*

I-295 SB CLOSED USE DETOUR CS-06*

Bucknam Road

I-295 SB

I-295 NB

Exit 10 NB Off Ramp

Exit 10 NB On Ramp

* Installed for Interstate Closure Period
** Installed for Veranda Street Closure Period

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
D. EATON		
PROJ. MANAGER	EDD	CDH 2\20
DESIGN-DETAILED	EDD	CDH 2\20
CHECKED-REVIEWED	RWH	LZD
DESIGN2-DETAILED2	EDD	
DESIGN3-DETAILED3	EDD	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC
I-295 SB CLOSURE 2

SHEET NUMBER

147

OF 220



* Installed for Interstate Closure Period
** Installed for Veranda Street Closure Period

HNTB

SHEET NUMBER 148 OF 220

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC
ROUTE 1 SB CLOSURE

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	EDD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

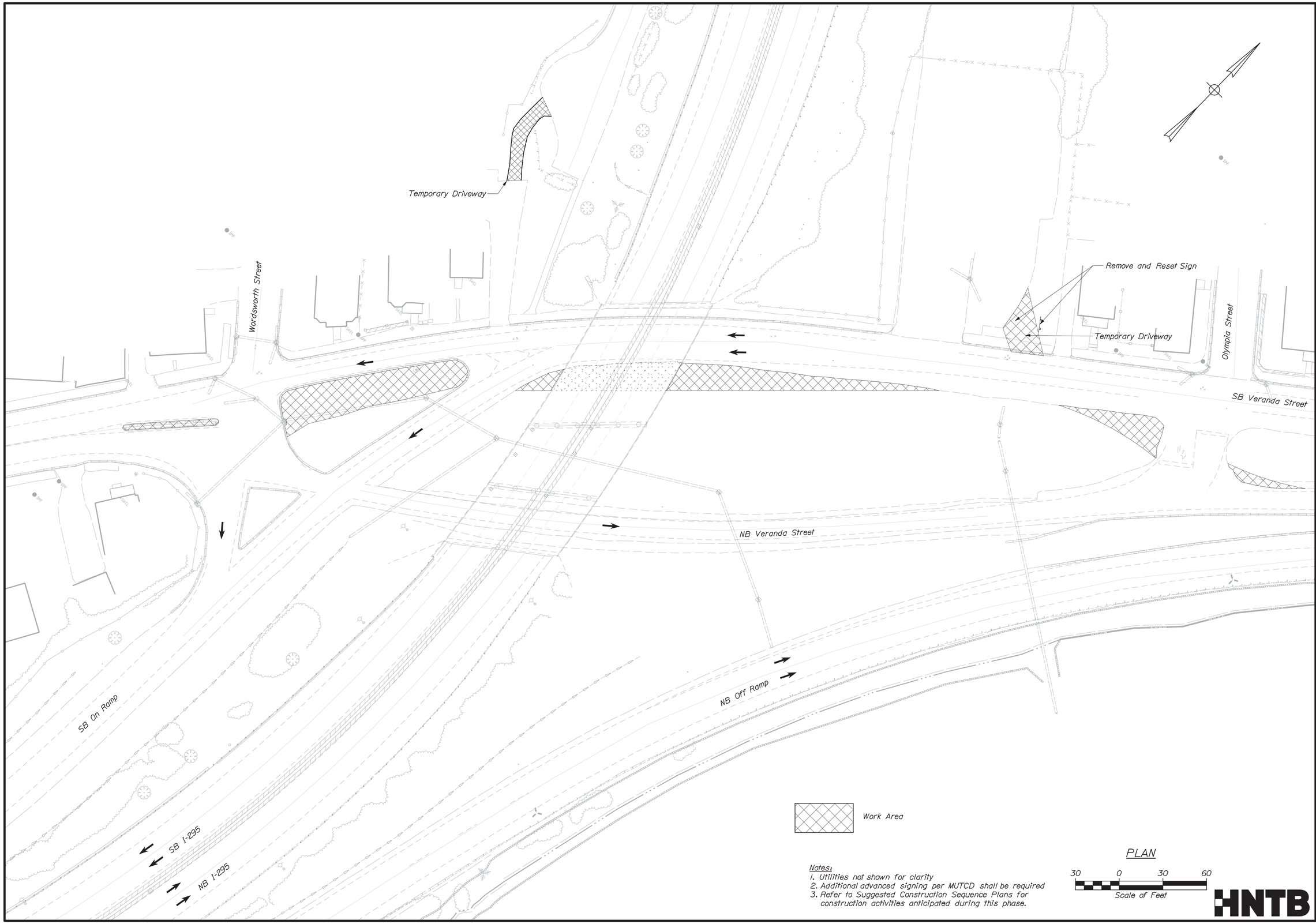
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

BRIDGE NO.5933 **WIN 021745.00** BRIDGE PLANS

Filename: 149_MOT_PhaseIA.dgn Division: Username: Date:3/3/2020



Notes:
1. Utilities not shown for clarity
2. Additional advanced signing per MUTCD shall be required
3. Refer to Suggested Construction Sequence Plans for construction activities anticipated during this phase.

PLAN

30 0 30 60

Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	EJD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC VERANDA ST PHASE 1A

SHEET NUMBER

149

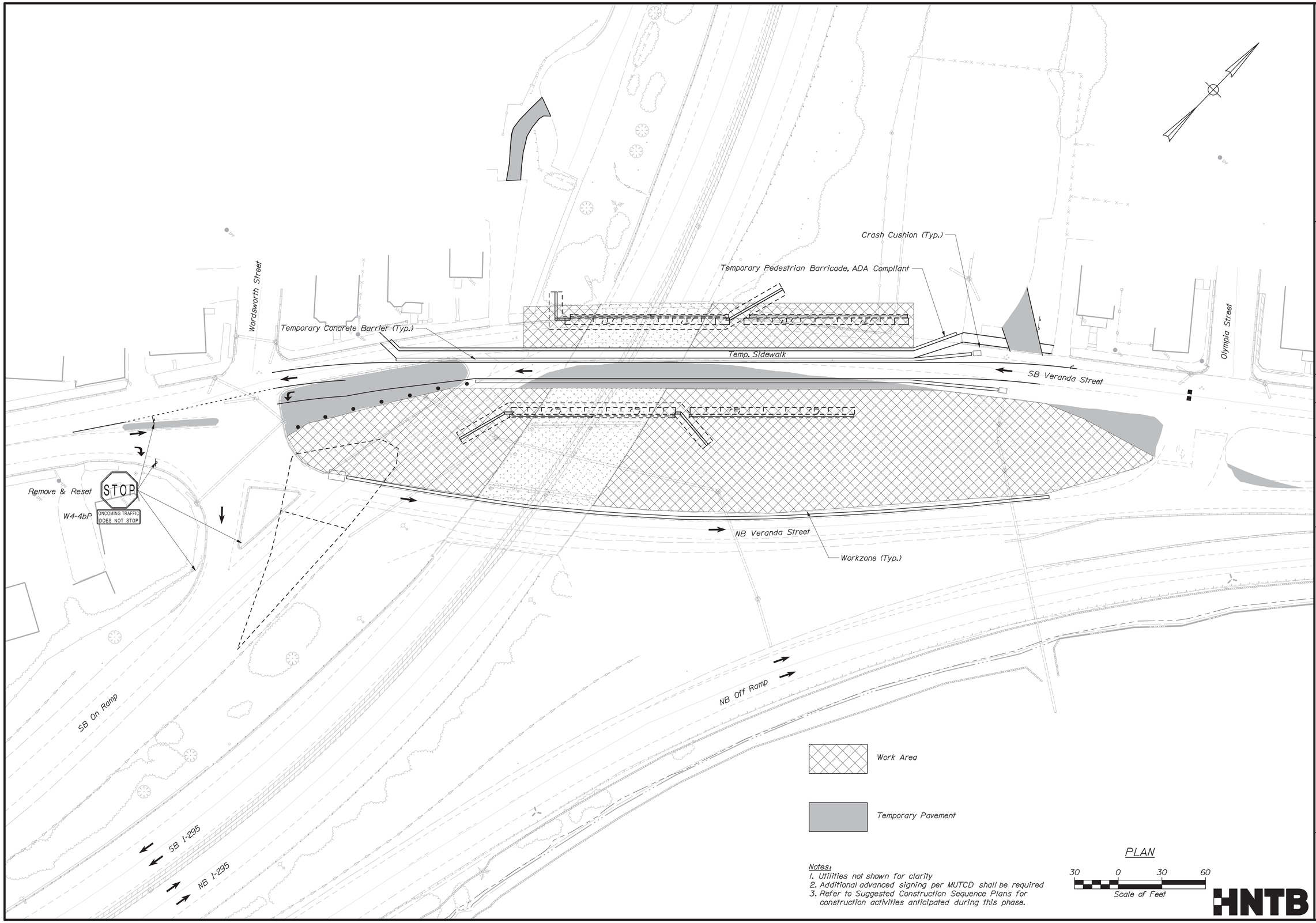
OF 220

Date:3/3/2020

Username:

Division:

Filename: 150_MOT_PhaseIB.dgn



Notes:

1. Utilities not shown for clarity
2. Additional advanced signing per MUTCD shall be required
3. Refer to Suggested Construction Sequence Plans for construction activities anticipated during this phase.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	D. EATON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	EDD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC VERANDA ST PHASE 1B

SHEET NUMBER

150

OF 220

Filename: 151_MOT_Phase2.dgn Division: Username: Date:3/3/2020

ROAD CLOSED
RII-2
On Type III
Barricades

Wordsworth Street

Temporary Concrete
Barrier (Typ.)

Crash Cushion (Typ.)

Temporary Falsework for
Bridge Superstructure

Temporary Pedestrian Barricade,
ADA Compliant

WI-6

Olympia Street

Temp. Sidewalk

SB Veranda Street

NB Veranda Street

R = 200'

STOP
ONCOMING TRAFFIC
DOES NOT STOP

Workzone (Typ.)

SB On Ramp

NB Off Ramp

SB I-295

NB I-295

Work Area

Temporary Pavement

Notes:
1. Utilities not shown for clarity
2. Additional advanced signing per MUTCD shall be required
3. Refer to Suggested Construction Sequence Plans for construction activities anticipated during this phase.
4. Limits of temporary pavement and roadway may be adjusted.

PLAN
30 0 30 60
Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN
021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	EDD		
CHECKED-REVIEWED	RWH		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1	EDD	CDH	2\20
REVISIONS 2	RWH	LZD	2\20
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MAINTENANCE OF TRAFFIC
VERANDA ST PHASE 2

SHEET NUMBER
151
OF 220

DETOUR SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	AREA IN SQUARE FEET	NOTES
CS-01	30"	12"	I 295 NB	4"C			11	ORANGE	BLACK	2.5 (27.5)	
CS-02	30"	12"	I 295 SB	4"C			8	ORANGE	BLACK	2.5 (20)	
CS-03	30"	12"	VERANDA ST	4"C			7	ORANGE	BLACK	2.5 (17.5)	
CS-04	30"	12"	ROUTE 1 SB	4"C			11	ORANGE	BLACK	2.5 (27.5)	
CS-05	36"	30"	I 295 NB CLOSED USE DETOUR	4"C 4"C 4"C	4" 4"		2	ORANGE	BLACK	7.5 (15)	
CS-06	36"	30"	I 295 SB CLOSED USE DETOUR	4"C 4"C 4"C	4" 4"		6	ORANGE	BLACK	7.5 (45)	
CS-07	48"	30"	VERANDA STREET CLOSED USE DETOUR	4"C 4"C 4"C	4" 4"		2	ORANGE	BLACK	10 (20)	
CS-08	36"	30"	ROUTE 1 SB CLOSED USE DETOUR	4"C 4"C 4"C	4" 4"		1	ORANGE	BLACK	7.5	
CS-09	30"	36"	TRUCK DETOUR ←	4"C 4"C	3"	4.5"X18"	1	ORANGE	BLACK	7.5	
CS-10	30"	36"	TRUCK DETOUR ↑	4"C 4"C	3"	4.5"X12"	1	ORANGE	BLACK	7.5	
CS-11	66"	60"	I-295 NORTH CLOSED ALL TRAFFIC MUST EXIT	8"D 8"D 8"D 8"D	6" 6" 6"		1	ORANGE	BLACK	27.5	
CS-12	66"	60"	I-295 SOUTH CLOSED ALL TRAFFIC MUST EXIT	8"D 8"D 8"D 8"D	6" 6" 6"		2	ORANGE	BLACK	27.5 (55)	
CS-13	66"	42"	I-295 SOUTH CLOSED USE DETOUR	8"D 8"D 8"D	6" 6"		2	ORANGE	BLACK	19.25 (38.5)	
CS-14	54"	30"	RTE 1 SB CLOSED 3 MILES AHEAD USE DETOUR	4"D 4"D 4"D	3" 3"		2	ORANGE	BLACK	11.25 (22.5)	
G20-5aP	48"	24"	WORK ZONE	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			4	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"		8 (32)	
M4-9	30"	24"	DETOUR ↑	↓	↓	↓	9	↓	↓	5 (45)	

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	AREA IN SQUARE FEET	NOTES
M4-9L	30"	24"	DETOUR ←	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			7	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"		5 (35)	
M4-9R	30"	24"	DETOUR →				8			5 (40)	
M4-10L	48"	18"	DETOUR ←				5			6 (30)	
M4-10R	48"	18"	DETOUR →				2			6 (12)	
R2-1 (35) (50)	48"	60"	SPEED LIMIT XX				2 2			20 (40) 20 (40)	
R2-6aP	48"	36"	FINES DOUBLE				4			12 (48)	
R3-1	24"	24"					1			4	
R11-2	48"	30"	ROAD CLOSED				17			10 (170)	
R11-3a (0.4) (1.7)	60"	30"	ROAD CLOSED _.- MILES AHEAD LOCAL TRAFFIC ONLY				1 2			12.5 12.5 (25)	
R11-4	60"	30"	ROAD CLOSED TO THRU TRAFFIC				2			12.5 (25)	
W1-4R	48"	48"					2			16 (32)	
W1-6	48"	24"					1			8	
W3-5 (35) (50)	48" 48"	48" 48"	SPEED LIMIT XX				2 2			16 (32) 16 (32)	
W4-2R	48"	48"					2			16 (48)	
W4-2L	48"	48"					4			16 (64)	
W4-3	48"	48"		↓	↓	↓	1	↓	↓	16	

NOTE:
1. Sign summary includes detour signs only.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	DATE	BY
DESIGN-DETAILED	2\20	CDH
CHECKED-REVIEWED	2\20	LZD
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PROJ. MANAGER: D. EATON
DESIGNED-DETAILED: EDD

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

DETOUR SIGN SUMMARY

SHEET NUMBER
152
OF 220

Filename: 152_Detour_Sign_Summary.dgn Division: Username: Date:3/3/2020

DETOUR SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	AREA IN SQUARE FEET	NOTES
W4-4bP	24"	12"	ONCOMING TRAFFIC DOES NOT STOP	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			1	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"		16	
W20-1	48"	48"	ROAD WORK AHEAD				7			16 (112)	
W20-3 (500) (1000)	48" 48"	48" 48"	ROAD CLOSED XX FT				2 2			16 (32) 16 (32)	
W20-5 (LEFT) (RIGHT)	48" 48"	48" 48"	LANE CLOSED AHEAD				4 2			16 (64) 16 (32)	

NOTE:
1. Sign summary includes detour signs only.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN
021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	EDD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

DETOUR SIGN SUMMARY 2

SHEET NUMBER

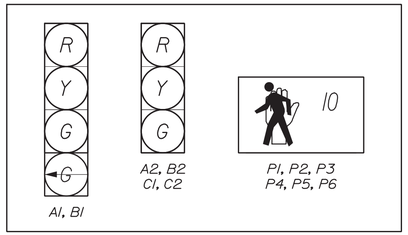
153

OF 220

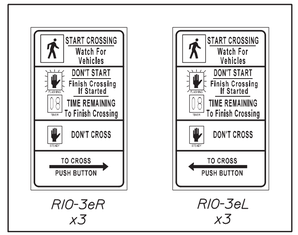
Filename: 153_Detour_Sign_Summary2.dgn Division: Username: Date:3/3/2020

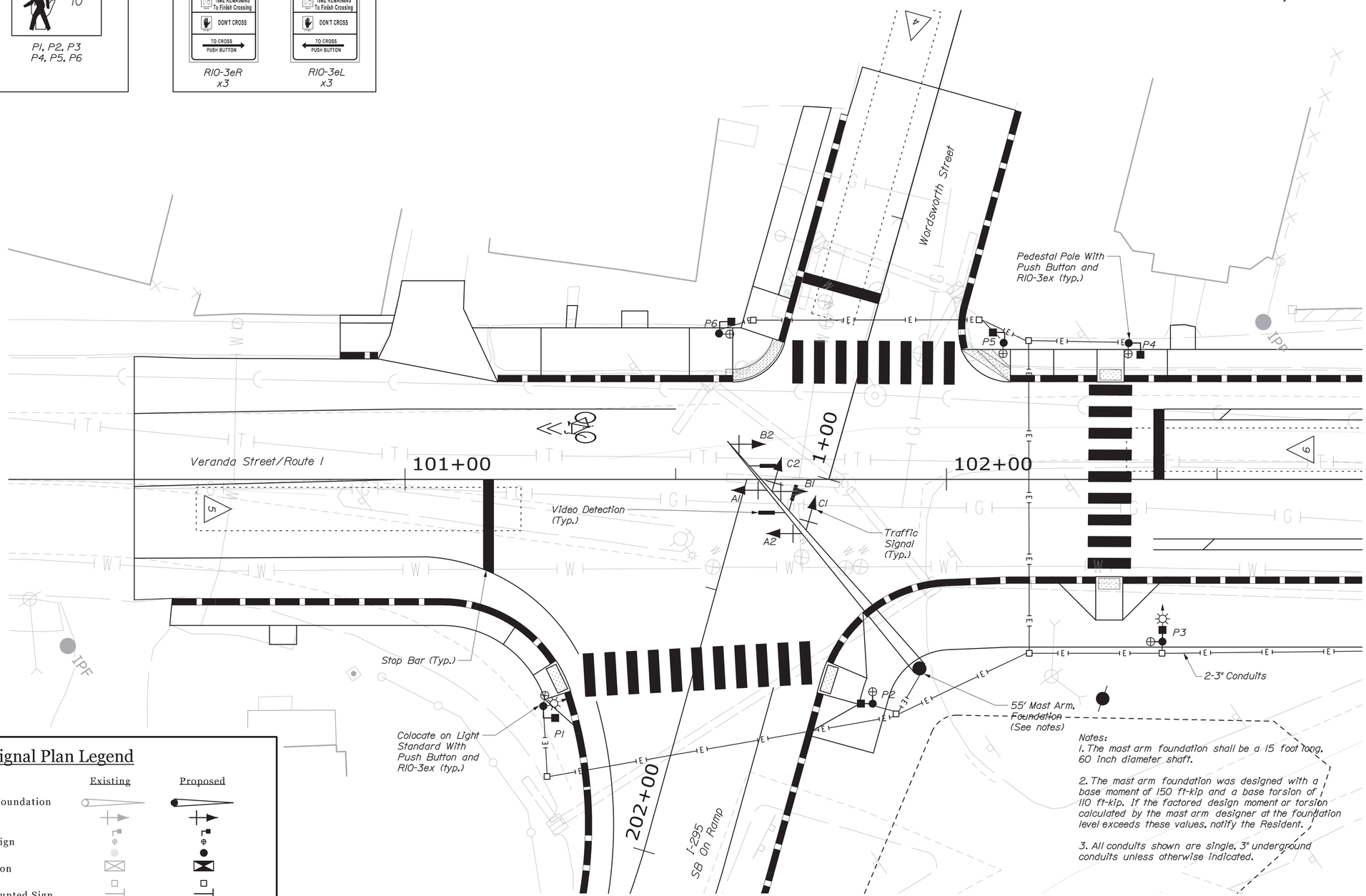
Filename: 154_Signal_SB_On_Ramp.dgn Username: Division: Date:4/24/2020

Proposed Signals



Proposed Signs





Notes:
1. The mast arm foundation shall be a 15 foot long, 60 inch diameter shaft.

2. The mast arm foundation was designed with a base moment of 150 ft-kip and a base torsion of 110 ft-kip. If the factored design moment or torsion calculated by the mast arm designer at the foundation level exceeds these values, notify the Resident.

3. All conduits shown are single, 3" underground conduits unless otherwise indicated.

Signal Plan Legend

	Existing	Proposed
Mast Arm & Steel Pole On Foundation		
Signal Head		
Pedestrian Signal Head		
Pedestrian Push Button & Sign		
Pedestal Pole & Foundation		
Control Cabinet & Foundation		
Junction Box		
Mast Arm Or Span Wire Mounted Sign		
Detector Zone		
Video Detector		
3" Underground Conduit	E I	E I
Interconnect	C I	C I
Video Dectector	#	#

PLAN

10 0 10 20
Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	RBM	2\20
CHECKED-REVIEWED	ARG	2\20
DESIGN2-DETAILED2	WAD	
DESIGN3-DETAILED3	DSS	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

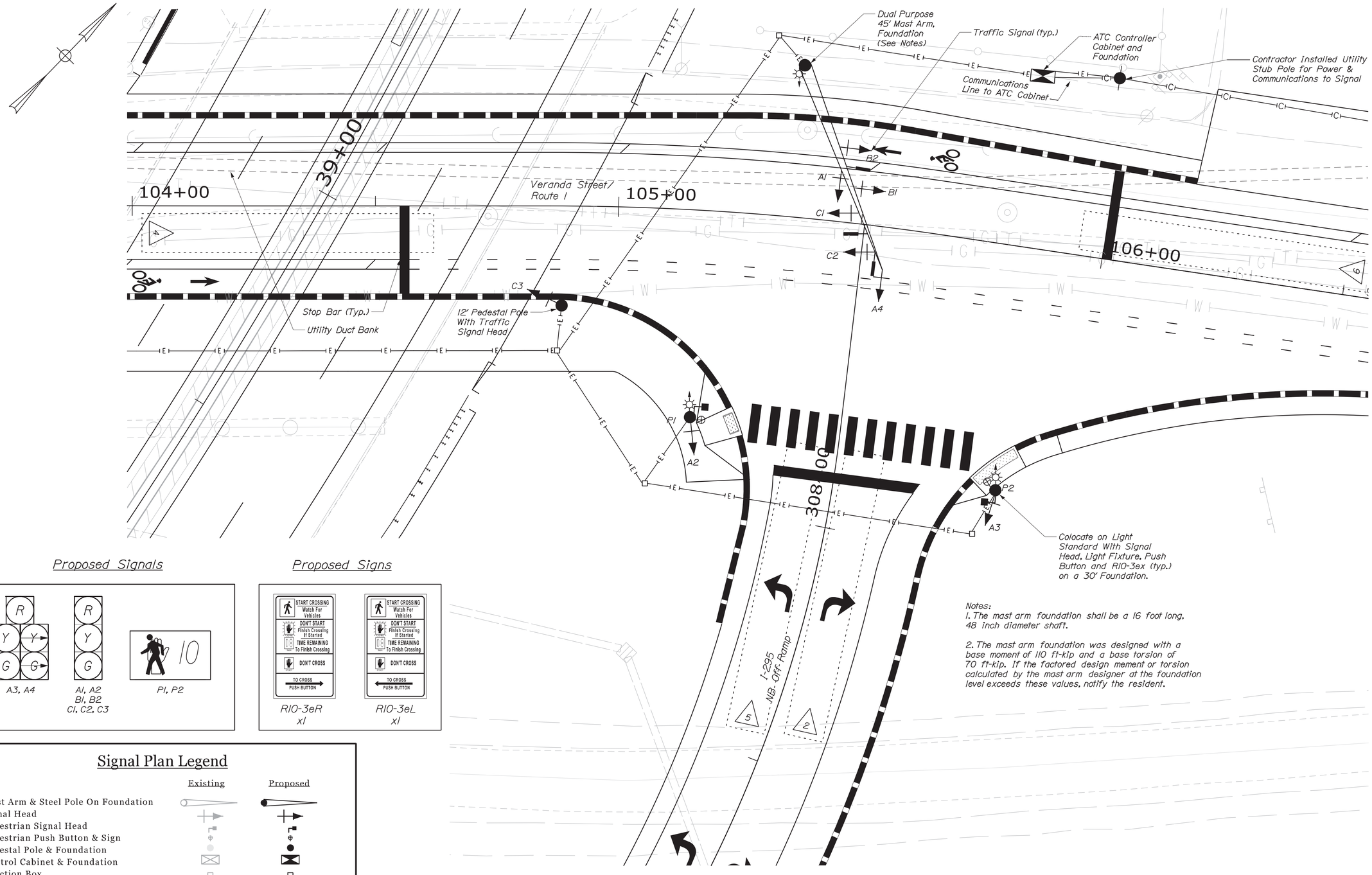
DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

SB ON RAMP SIGNAL PLANS

SHEET NUMBER
154
OF 220

Username:
Division:
Date:4/24/2020
Filename: 155_Signal_NB_Off_Ramp.dgn



Notes:
1. The mast arm foundation shall be a 16 foot long, 48 inch diameter shaft.

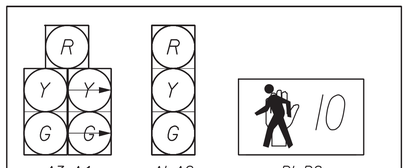
2. The mast arm foundation was designed with a base moment of 110 ft-kip and a base torsion of 70 ft-kip. If the factored design mement or torsion calculated by the mast arm designer at the foundation level exceeds these values, notify the resident.

PLAN

10 0 10 20

Scale of Feet

Proposed Signals



Proposed Signs

Signal Plan Legend

	Existing	Proposed
Mast Arm & Steel Pole On Foundation		
Signal Head		
Pedestrian Signal Head		
Pedestrian Push Button & Sign		
Pedestal Pole & Foundation		
Control Cabinet & Foundation		
Junction Box		
Mast Arm Or Span Wire Mounted Sign		
Detector Zone		
Video Detector		
3" Underground Conduit	E I	E I
Interconnect	C I	C I
Video Dectector	#	#

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	RBM	WAD	2\20
CHECKED-REVIEWED	ARG	DSS	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

NB OFF RAMP SIGNAL PLAN

SHEET NUMBER

155

OF 220

HNTB

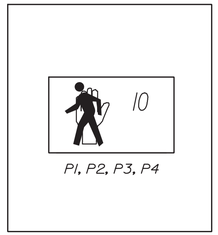
Username:

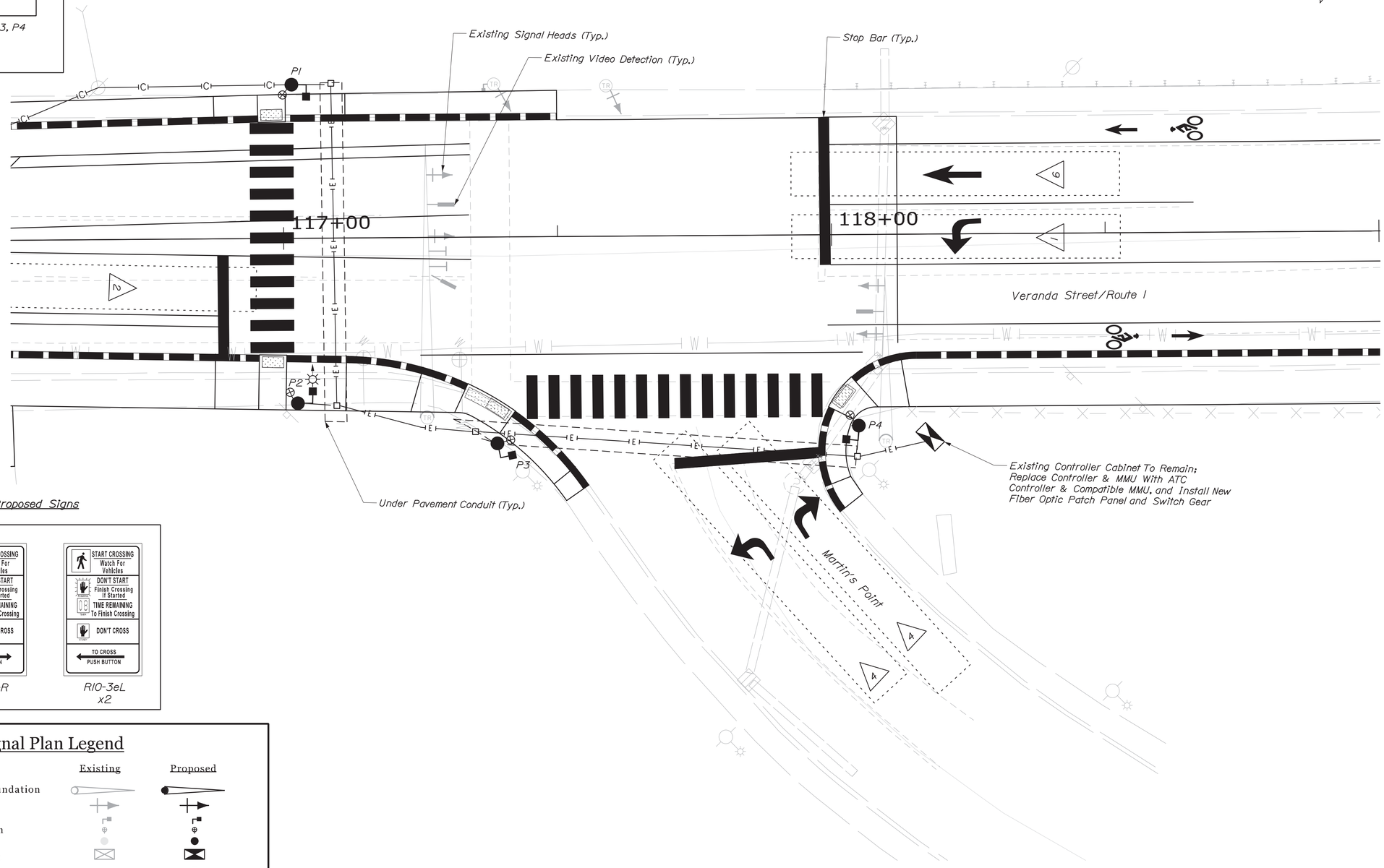
Date:3/3/2020

Division:

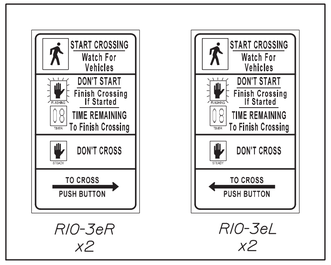
Filename: 156_Signal_Martins Point.dgn

Proposed Signals





Proposed Signs



Signal Plan Legend

	Existing	Proposed
Mast Arm & Steel Pole On Foundation		
Signal Head		
Pedestrian Signal Head		
Pedestrian Push Button & Sign		
Pedestal Pole & Foundation		
Control Cabinet & Foundation		
Junction Box		
Mast Arm Or Span Wire Mounted Sign		
Detector Zone		
Video Detector		
3" Underground Conduit	E I	E I
Interconnect	C I	C I
Video Dectector	#	#

PLAN

10 0 10 20

Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	RBM	WAD	2\20
CHECKED-REVIEWED	ARG	DSS	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

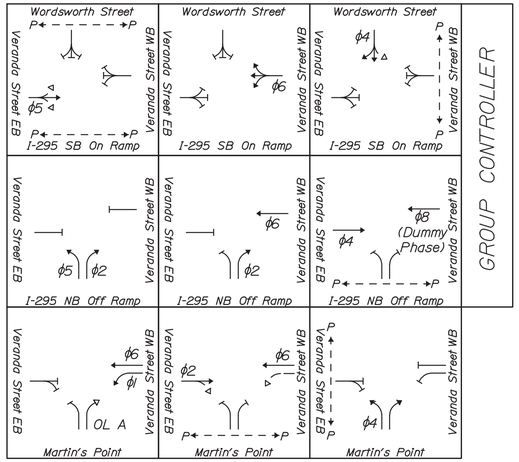
MARTIN'S POINT SIGNAL PLAN

SHEET NUMBER

156

OF 220

SIGNAL PHASING SEQUENCE



* Pedestrian pre-emption will force Veranda Street EBL to a permissive movement.

I-295 NB & SB RAMPS AND VERANDA STREET SIGNAL TIMING

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PHASE 9
MINIMUM GREEN	-	5.0	-	5.0	5.0	5.0	-	5.0	-
VEHICLE EXTENSION		3.0		3.0	3.0	3.0		3.0	
MAXIMUM 1		76.0		22.0	23.0	47.0		22.0	
MAXIMUM 2		66.0		18.0	18.0	42.0		18.0	
MAXIMUM 3		60.0		18.0	18.0	36.0		18.0	
YELLOW		4.0		4.0	4.0	4.0		4.0	
ALL RED		2.0		2.0	2.0	2.0		2.0	
RECALL MODE		Min		None	None	Min		None	
WALK				7	7				
PED CLEAR				11	15				

Max 1 - AM Weekdays 7 AM to 9 AM
Max 2 - PM Weekdays 4 PM to 7 PM
Max 3 - Free All other

MARTIN'S POINT & VERANDA STREET SIGNAL TIMING

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PHASE 9
MINIMUM GREEN	5.0	5.0	-	5.0	-	5.0	-	-	-
VEHICLE EXTENSION	3.0	3.0		3.0		3.0			
MAXIMUM 1	5.0	70.0		17.0		81.0			
MAXIMUM 2	5.0	51.0		22.0		62.0			
MAXIMUM 3	5.0	45.0		23.0		57.0			
YELLOW	4.0	4.0		4.0		4.0			
ALL RED	2.0	2.0		2.0		2.0			
RECALL MODE	None	Min.		None		Min.			
WALK		7		7					
PED CLEAR		15		12					

Max 1 - AM Weekdays 7 AM to 9 AM
Max 2 - PM Weekdays 4 PM to 7 PM
Max 3 - Free All other

EQUIPMENT AND WORK ITEMS

	Wordworth and Veranda Street/Route 1/SB on Ramp	Veranda Street/ Route 1 and I-295 NB off Ramp	Martins Point and Veranda Street/ Route 1
FURNISH/INSTALL NEW ATC CONTROLLER CABINET W/FOUNDATION AND ALL ANCILLARY EQUIPMENT AND WIRING. (GROUP CONTROLLER)	1/2	1/2	-
FURNISH/INSTALL NEW ATC CONTROLLER AND MMU.	-	-	1
FURNISH/INSTALL 3-SECTION 12-INCH SIGNAL HEADS W/LED MODULES, TUNNEL VISORS AND REFLECTORIZED ALUMINUM LOUVERED BACKPLATES MOUNTED ON MAST ARMS OR PEDESTAL POLES W/NEW MOUNTING HARDWARE.	4	7	-
FURNISH/INSTALL 4-SECTION 12-INCH SIGNAL HEADS W/LED MODULES, TUNNEL VISORS AND REFLECTORIZED ALUMINUM LOUVERED BACKPLATES MOUNTED ON MAST ARMS OR PEDESTAL POLES W/NEW MOUNTING HARDWARE.	2	-	-
FURNISH/INSTALL 5-SECTION 12-INCH SIGNAL HEADS W/LED MODULES, TUNNEL VISORS AND REFLECTORIZED ALUMINUM LOUVERED BACKPLATES MOUNTED ON MAST ARMS OR PEDESTAL POLES W/NEW MOUNTING HARDWARE.	-	2	-
FURNISH/INSTALL PEDESTRIAN SIGNAL HEADS W/LED MODULES, TUNNEL VISORS AND REFLECTORIZED ALUMINUM LOUVERED BACKPLATES MOUNTED ON MAST ARMS OR PEDESTAL POLES W/NEW MOUNTING HARDWARE.	6	2	4
FURNISH/INSTALL PEDESTRIAN PUSH BUTTONS.	6	2	4
FURNISH/INSTALL NEW SIGNAL HEAD CABLE WIRING. WILL BE CONTINUOUS WIRING FROM CABINET TO MAST ARMS.	1/2	1/2	1
FURNISH/INSTALL UTILITY STUB POLE WITH POWER AND COMMUNICATIONS SERVICES AS SHOWN ON THE PLANS.	-	1	-
FURNISH/INSTALL VIDEO DETECTION SYSTEM.	1/2	1/2	-
FURNISH/INSTALL NON-METALLIC CONDUIT. (ITEM 626.22)	530 LF	530 LF	-
FURNISH/INSTALL NON-METALLIC UNDER PAVEMENT CONDUIT. (ITEM 626.251)	-	-	150 LF
FURNISH/INSTALL DUAL PURPOSE POLE W/55 FOOT MAST ARM, 12 FOOT LUMINAIRE ARM AND FOUNDATION.	1	-	-
FURNISH/INSTALL POLE WITH 45 FOOT MAST ARM, 12 FOOT LUMINAIRE ARM AND FOUNDATION.	-	1	-
FURNISH/INSTALL PEDESTAL POLES WITH FOUNDATIONS.	4	1	3
FURNISH/INSTALL INTERCONNECT WIRE BETWEEN: 12-STRAND FIBER OPTIC CABLE. (2000 LF)	1/4	1/4	1/2
FURNISH/INSTALL FIBER OPTIC PATCH PANEL AND SWITCH GEAR	1/2	1/2	1

COORDINATION CYCLE/SPLIT/OFFSET SCHEDULE

	Wordsworth and Veranda St/ Rte 1/I-295 SB on Ramp /I-295 NB off		Martins Point and Veranda St/ Rte 1		
	PLAN 1	PLAN 2	PLAN 1	PLAN 2	
CYCLE LENGTH	110	96	110	96	COORDINATION MODE SET TO FIXED FORCE-OFF
OFFSET	0	0	92	19	
COORDINATED PHASE	2	2	6	6	
SPLIT TIME ϕ1	--	--	11	11	
SPLIT TIME ϕ2	82	72	76	57	
SPLIT TIME ϕ3	--	--	--	--	
SPLIT TIME ϕ4	28	24	23	28	
SPLIT TIME ϕ5	29	24	--	--	
SPLIT TIME ϕ6	53	48	87	68	
SPLIT TIME ϕ7	--	--	--	--	
SPLIT TIME ϕ8	28	24	--	--	

1. Coordination reference offsets to end of green
2. Coordination applies to weekday
   Plan 1 AM Peak: 7-9am
   Plan 2 PM Peak: 4-7pm

SIGNAL NOTES

1. Conduits installed on Utility Company owned poles will be installed by the respective utility. The conduit will be provided by the contractor.
2. The location of all signal equipment and related items shall be in conformity with 'Americans With Disabilities Act' (ADA) accessibility standards. Use of sidewalks and pedestrian ramps shall not be obstructed.
3. Traffic controller cabinet shall be MaineDOT 32/48 ATC Cabinet. The cabinet shall have an extension base and be mounted on a concrete pad foundation with a Trafficware Commander ATC Controller.
4. All new signal sections shall have led lenses 12 inches in diameter with 5" retroreflective back plates.
5. All splices will be made in the cabinets meeting MaineDOT specifications.
6. The bottom of the housing of new mast arm mounted signal faces shall be at least 17 feet but not more than 19 feet above the pavement grade at the center of the roadway.
7. For pole mounted signal heads, the bottom of the housing shall be mounted at least 8 feet but not more than 19 feet above the sidewalk, or above pavment grade at the high point of the road.
8. Two copies of as-built plans, signal timing, log book and controller manuals shall be left in the controller cabinet. In a sealed water proof bag with memory stick.
9. The Contractor is responsible for finding exact locations of utilities prior to construction. The contractor shall contact dig-safe and appropriate authorities prior to any subsurface activities.
10. Traffic signal work shall be completed in a manner and order that will cause the minimum disruption to traffic.
11. The Resident, MaineDOT, and City of Portland shall have the right and authority to determine the acceptability of work and materials in progress or completed and shall have the right to reject any work or materials which do not conform, in its sole opinion, to the plans or specifications.
12. The Contractor shall provide the resident and the City of Portland with a schedule of work for constructing the traffic improvements.
13. The Contractor shall prepare a material schedule. All schedules shall be verified in the field by the Resident prior to ordering materials or performing work.
14. The Contractor shall be responsible for submitting red-line as-built drawings of the final work to the Resident. Those drawings shall be a clean set of plans showing all changes, modifications, and elevations to the bid plans.
15. All underground conduit shall be PVC Schedule 80 conduit when placed under pavement and Schedule 40 beyond pavement limits.
16. The Contractor shall meet all utility requirements for the new service connection.
17. All pedestal poles shall be one-piece.
18. Contractor shall povide and install all junction boxes, all junction boxes shall be paid under item 626.11.
19. The Contractor shall refer to the special provisions for City of Portland specific signal requirements.
20. All pole bases, pull boxes, and other controller conduits shall be sealed to prevent access by rodents and other small animals.
21. All old signal equipment will be returned to the City of Portland.

DETECTOR SCHEDULE

DETECTOR			
	PLAN ID	STREET	DIRECTION
Wordsworth and Veranda St/Rte 1/ I-295 SB on Ramp	4	Wordsworth Street SB	SB LTR
	5	Veranda Street EB	EB LTR
	6	Veranda Street WB	WB LTR
Veranda St/ Rte 1 and I-295 NB off Ramp	2	I-295 NB off Ramp	NB R
	4	Veranda Street EB	EB T
	5	I-295 NB off Ramp	NB L
	6 (DP)	Veranda Street WB	WB T
Martins Point and Veranda St/Rte 1	1	Veranda Street WB	WB L
	2	Veranda Street EB	EB TR
	4	Martin's Point NB	NB LR*
	6	Veranda Street WB	WB LT

* Indicates an 8 second delay for phase activiation due to right turning vehicles.

VIDEO DETECTION

1. Video detection shall consist of a thermal traffic sensor system per the City of Portland and MaineDOT. For additional information see Special Provisions-Trafisense 2.
2. The Resident reserves the right to direct the Contractor to field adjust the height, either lower or higher, of the video detector for local conditions identified during or after construction. No additional costs will be allowed for field adjusting the video detector.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

PIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON			
DESIGN-DETAILED	RBM	WAD	2\20	
CHECKED-REVIEWED	ARG	DSS	2\20	
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

P.E. NUMBER

DATE

SIGNATURE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

VERANDA STREET SIGNAL NOTES

SHEET NUMBER

157

OF 220

Username:
Division:
Date:3/3/2020
Filename: 157_Signal_Notes.dgn

Username:
Division:
Filename: 158_Interconnect_Plan.dgn
Date:3/3/2020

ATC Controller Cabinet and Foundation

Communications Line to ATC Cabinet

Contractor Installed Utility Stub Pole for Power & Communications to Signal

Traffic Signal (Typ.)

Stop Bar (Typ.)

105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00

3+00 4+00

P1 P2

308+00

Junction Box (Typ.)

Pedestal Pole With Push Button And RIO-3ex (typ.)

3" Conduit For Future Lighting

PLAN

25 0 25 50

Scale of Feet

112+00 113+00 114+00 115+00 116+00 117+00 118+00

5+00 6+00

P1 P2 P3 P4

Stop Bar (Typ.)

Directional Bore (Typ.)

Existing Controller Cabinet To Remain:
Replace Controller & MMU With ATC Controller & Compatible MMU, and Install New Fiber Optic Patch Panel and Switch Gear

Junction Box

3" Conduit For Future Lighting

PLAN

25 0 25 50

Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	RBM	WAD	2\20
CHECKED-REVIEWED	ARG	DSS	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER VERANDA STREET

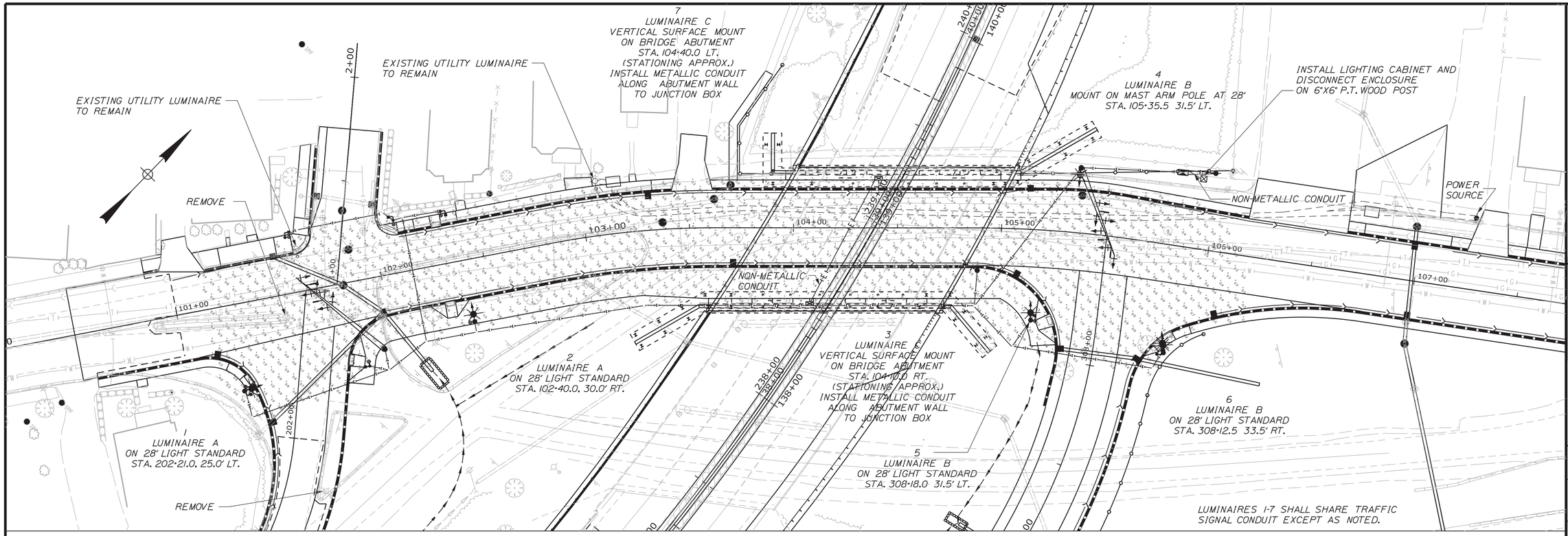
PORTLAND CUMBERLAND COUNTY

INTERCONNECT PLAN

SHEET NUMBER

158

OF 220



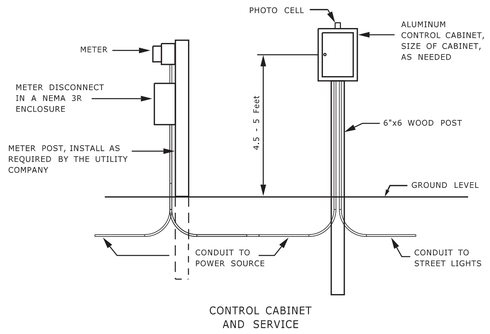
SCALE

25 0 25 50

Scale of Feet

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
NB Off-Ramp Intersection	+	0.7 fc	1.3 fc	0.3 fc	4.3:1	2.3:1
SB On-Ramp Intersection	+	0.7 fc	1.1 fc	0.3 fc	3.7:1	2.3:1
Under-Bridge Lighting	+	0.7 fc	1.6 fc	0.4 fc	4.0:1	1.8:1
Sta. 102+60 to Bridge (existing)	+	0.5 fc	0.9 fc	0.2 fc	4.5:1	2.5:1
Olympia St. Intersection (existing)	+	0.3 fc	0.8 fc	0.1 fc	8.0:1	3.0:1
Oregon St. Intersection (existing)	+	0.1 fc	0.2 fc	0.0 fc	N/A	N/A
Martin's Point Intersection (existing)	+	1.0 fc	2.3 fc	0.1 fc	23.0:1	10.0:1

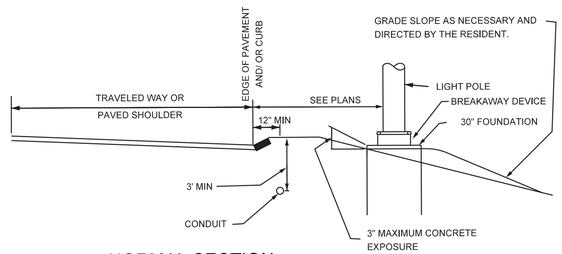
Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	2	American Electric Lighting	ATB0 20BLEDE53 MVOLT R3 4K BK X X UMR-XX AO	ATB0 SERIES LED 525MA TYPE 3 4000K CCT	LED Array	1	ATB0_20BLE DE53_XXXXX_ R3_4K_5K.ies	4704	0.85	36
	B	3	American Electric Lighting	ATB0 20BLEDE53 MVOLT R2 4K BK X X UMR-XX AO	ATB0 SERIES LED 525MA TYPE 2 4000K CCT	LED Array	1	ATB0_20BLE DE53_XXXXX_ R2_4K_5K.ies	4638	0.85	36
	C	2	Holophane	HLWPC2 P10 40K XX T2M BKSDP 70CRI AO DF TP	Wallpack Full Cutoff LED, Performance Package P10, 4000K CCT, Auto-Sensing Voltage, Type II Medium	LED	1	HLWPC2_P10 _40K_XX_ T2M.ies	3110	0.85	28



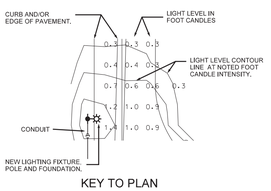
CONTROL CABINET
AND SERVICE

LEGEND for LIGHTING

- Control Cabinet and Service
- Lighting Conduit
- JB Pull Box
- Light Fixture on a 28 Foot Pole and 30" Foundation
- Direction of Luminaire
- Existing Light Fixture on Wood Pole



NORMAL SECTION



KEY TO PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO. 5933

BRIDGE PLANS

ALBERT L GODFREY No. 4226 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

	BY	DATE
SIGNATURE	JLE	11-19
4226		11-19
P.E. NUMBER		
2/24/20		
DATE		

	TRC
PROJ. MANAGER	
DESIGN-DETAILED	ALG
CHECKED-REVIEWED	ALG
DESIGNS-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

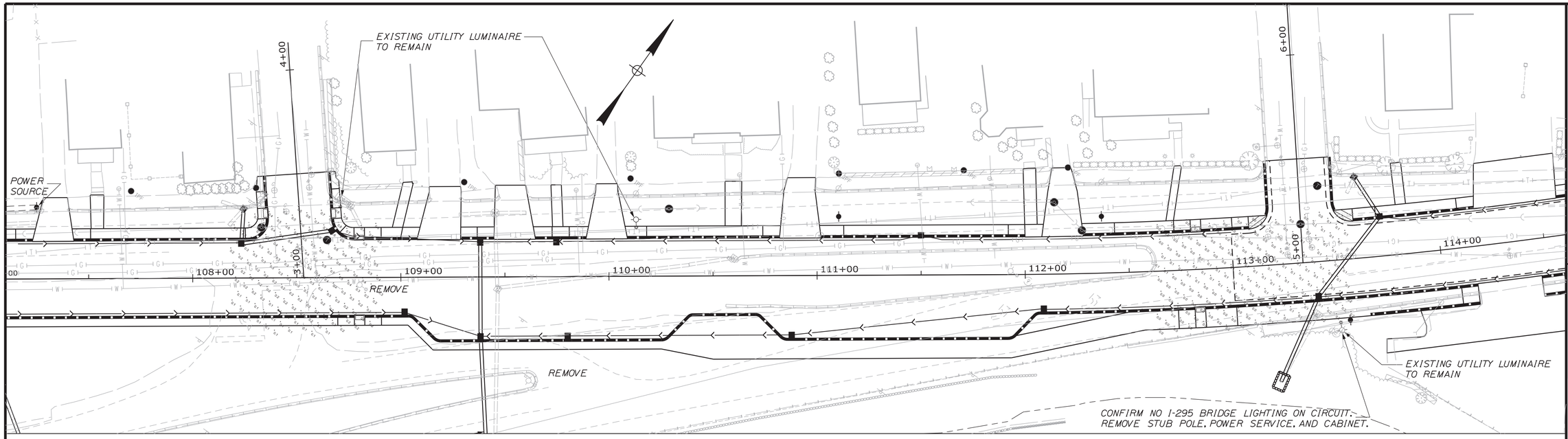
LIGHTING PLAN 1

SHEET NUMBER

159

OF 220

Filename: ...\159_LightingPlan_01.dgn Division: HIGHWAY Username: common Date:3/3/2020



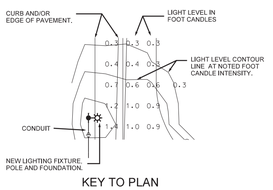
LEGEND for LIGHTING

- Control Cabinet and Service
- Lighting Conduit
- JB Pull Box
- Light Fixture on a 28 Foot Pole and 30" Foundation
  - Direction of Luminaire
- Existing Light Fixture on Wood Pole

SCALE

25 0 25 50

Scale of Feet



KEY TO PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO. 5933

BRIDGE PLANS

STATE OF MAINE — ALBERT L. GODFREY No. 4226 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

4226

P.E. NUMBER

2/24/20

DATE

		BY	DATE
PROJ. MANAGER	TRC		
DESIGN-DETAILED	ALG	JLE	11-19
CHECKED-REVIEWED	ALG		11-19
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

LIGHTING PLAN 2

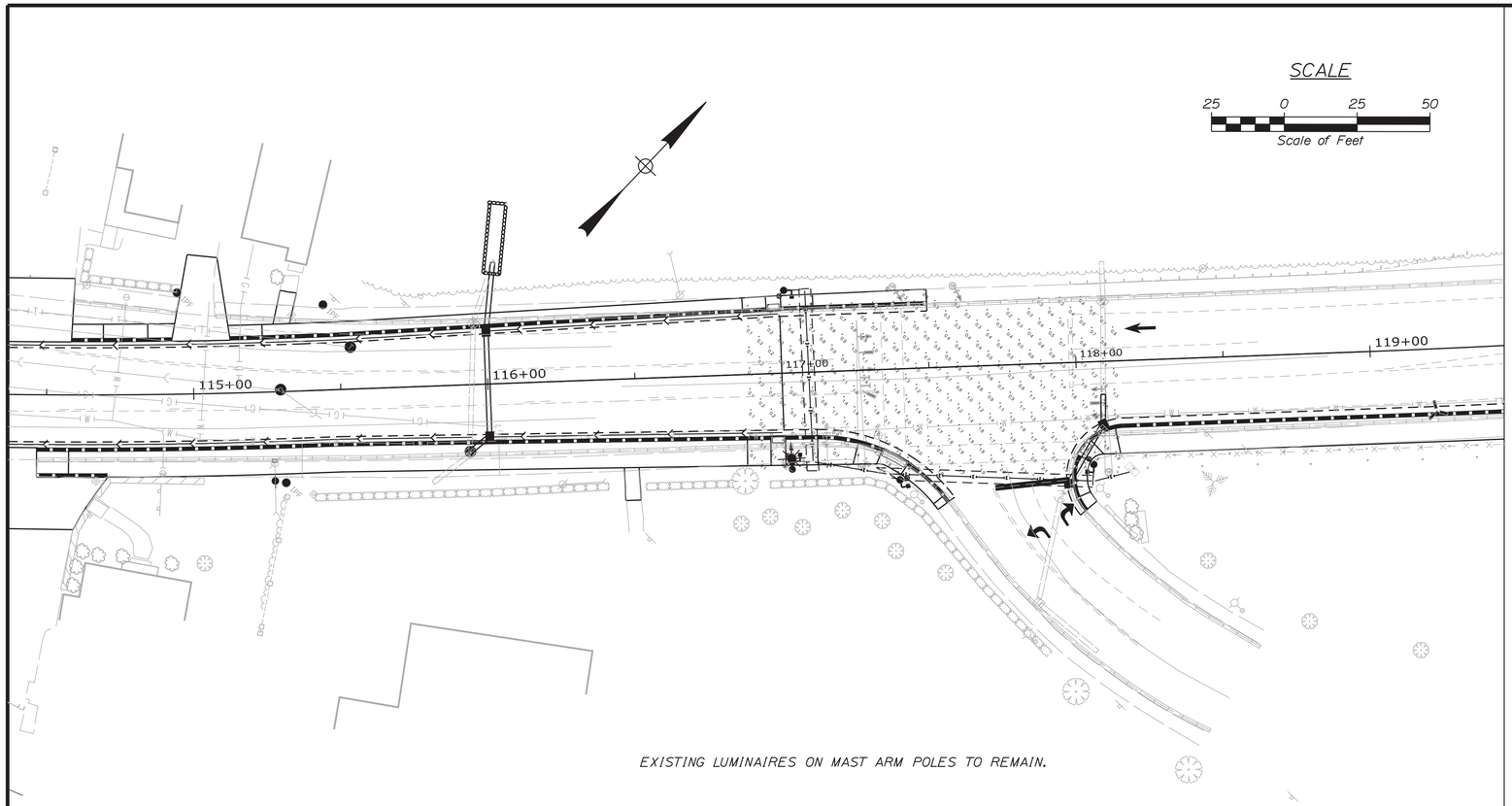
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160

OF 220

Filename: ...\160_LightingPlan_02.dgn Division: HIGHWAY Username: common Date:3/3/2020

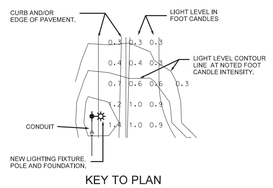
Filename: ...\161_LightingPlan_03.dgn Division: HIGHWAY Username: common Date:3/3/2020



EXISTING LUMINAIRES ON MAST ARM POLES TO REMAIN.

LEGEND for LIGHTING

- Control Cabinet and Service
- Lighting Conduit
- JB Pull Box
- Light Fixture on a 28 Foot Pole and 30" Foundation (Direction of Luminaire)
- Existing Light Fixture on Wood Pole



KEY TO PLAN

VERANDA STREET LIGHTING GENERAL NOTES

1. SCOPE OF WORK - INSTALL LIGHTING AS SHOWN ON THESE PLANS. POWER SERVICE WILL BE SHARED WITH PROPOSED TRAFFIC AND PEDESTRIAN SIGNALS. INSTALL CONTROL CABINETS, CONDUIT, WIRING, FOUNDATIONS, POLES, L.E.D. LUMINAIRES AND RELATED HARDWARE.
2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO APPLICABLE PROVISIONS OF THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD DETAILS, NATIONAL ELECTRICAL CODE AND ANY REQUIREMENTS OF THE POWER COMPANY.
3. THE CONTRACTOR SHALL FIELD VERIFY LIGHTING POLE LOCATIONS TO AVOID NATURAL AND BUILT SITE FEATURES THAT WOULD CONFLICT WITH PROPER INSTALLATION OF FOUNDATIONS.
4. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO ENSURE AWARENESS OF SITE CONDITIONS THAT COULD AFFECT THE BID.
5. LOCATIONS OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE OF UNDERGROUND UTILITY FACILITIES PRIOR TO COMMENCING ANY EXCAVATION WORK OR INSTALLATION OF POLES, FOUNDATIONS, CONDUIT, JUNCTION BOXES OR OTHER WORK INVOLVING SUBSURFACE DISTURBANCE AND SHALL NOTIFY UTILITIES OF PROPOSED WORK IN ACCORDANCE WITH MRSA TITLE 23 SECTION 3360-A, MAINE "DIG SAFE" SYSTEM. CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING OF EXCAVATION. ALL UTILITIES SHALL BE LOCATED BEFORE BEGINNING EXCAVATION.
6. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY OPERATIONS ARE CONDUCTED THAT POTENTIALLY COULD CONFLICT WITH AERIAL UTILITIES.
7. INSTALL LIGHTING CONTROL CABINET AT LOCATION SHOWN ON THE PLANS. CABINET AT STATION 105+93 LT SHALL BE A MULTI-CIRCUIT CABINET. LUMINAIRES 1 THROUGH 4 WILL BE ON CIRCUIT 1. LUMINAIRES 5 THROUGH 7 WILL BE ON CIRCUIT 2.
8. POWER SUPPLY TO LIGHTING CABINETS SHALL BE 120/240V, SINGLE-PHASE, THREE WIRE. THE CONTRACTOR SHALL INSTALL A METER DISCONNECT IN A SEPARATE NEMA 3R ENCLOSURE WITH LIGHTING CABINET. CABINET AND DISCONNECT ENCLOSURE SHALL BE LOCKABLE. EACH SHALL BE MARKED WITH ARC HAZARD TYPE 1, 2, 3 OR 4 AND THE APPROPRIATE PPE REQUIRED.
9. ALL LIGHTING CIRCUITS ARE TO BE PHOTOCELL ACTIVATED BY A PHOTOCELL MOUNTED ON LIGHTING CONTROL CABINET.
10. FIXTURE VOLTAGE SHALL BE 120 VOLTS.
11. CONDUIT NOT UNDER PAVEMENT SHALL BE 3 INCH MINIMUM. PVC SCHEDULE 40. CONDUIT UNDER PAVEMENT SHALL BE 3 INCH MINIMUM SCHEDULE 80 PVC AND SHALL BE INSTALLED BY DIRECTIONAL BORING. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36". TOP 3 INCHES OF CONDUIT SHALL BE SEALED TO PREVENT ENTRY BY RODENTS.
12. ALL EXPOSED STEEL FITTINGS AND HARDWARE SHALL BE GALVANIZED, EXCEPT NON-CONDUCTIVE BUSHINGS SHALL BE USED FOR CONNECTION OF RIGID METAL CONDUIT TO ALUMINUM CABINETS.
13. PULL WIRE SHALL BE INSTALLED IN ALL CONDUIT.
14. ALL CONDUIT THREADS SHALL BE RED-HEADED.
15. THERE SHALL BE NO SPLICES OR JUNCTION BOXES FOR LIGHTING EXCEPT AS NOTED ON THE PROJECT PLANS OR APPROVED BY THE RESIDENT. JUNCTION BOXES ARE INTENDED FOR WIRE PULLING ACCESS ONLY. ESTIMATED QUANTITIES INCLUDE AN ALLOWANCE FOR INSTALLATION OF ITEM 626.11. PRECAST CONCRETE JUNCTION BOX, AT UNDETERMINED LOCATIONS.
16. JUNCTION BOX COVERS SHALL BE LABELED "TRAFFIC" AND SHALL BE GROUNDED.
17. ALL SECONDARY LIGHTING CIRCUIT WIRING SHALL BE #8 AWG OR LARGER XHHW-2 STRANDED COPPER.
18. FOUNDATIONS FOR LIGHT STANDARDS SHALL BE 30 INCHES IN DIAMETER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATION OF POLE BASE REACTIONS AT THE TOP OF FOUNDATION IN ACCORDANCE WITH THE LATEST REVISION OF AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AND THE LATEST REVISION OF MAINEDOT STANDARD SPECIFICATIONS SECTION 634. FOUNDATION LENGTHS SHALL BE DETERMINED FROM SECTION 626 CHARTS IN THE MAINEDOT STANDARD DETAILS BASED ON THE CALCULATED BASE REACTIONS FOR BENDING MOMENT AND TORSION AND ON SPECIFIED SOIL STRENGTH VALUES. FOR POLES 1 AND 2, SOIL SU SHALL BE ASSUMED TO BE 600 PSF. FOR ALL OTHER LIGHTING POLE FOUNDATIONS, SOIL SU SHALL BE ASSUMED TO BE 400 PSF.
19. ALL LIGHTING FOUNDATIONS SHALL HAVE A GROUND ROD LOCATED IN OR ADJACENT TO THE FOUNDATION THAT IS BONDED TO THE GROUNDING CONDUCTOR. PAYMENT FOR THE GROUND ROD SHALL BE INCLUDED IN ITEM 634.160, HIGHWAY LIGHTING.
20. ALL LIGHTING EQUIPMENT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
21. POLE OFFSETS STATED ON THE PLANS ARE TO THE CENTER OF FOUNDATIONS.
22. IF STRUCTURAL ROCK IS ENCOUNTERED DURING INSTALLATION OF FOUNDATIONS, PAYMENT FOR EXCAVATION AND DOWELING REINFORCING INTO ROCK SHALL BE CONSIDERED INCIDENTAL TO FOUNDATION ITEMS.
23. LIGHT STANDARDS SHALL BE 28' ROUND TAPERED ALUMINUM 4-BOLT ANCHOR BASE POLES. POLE BASE DIAMETER SHALL BE 8 INCHES MINIMUM. TAPER RATE SHALL BE APPROXIMATELY 0.14 IN./FT. WALL THICKNESS SHALL BE DETERMINED BY THE MANUFACTURER, SUBJECT TO APPROVAL OF MAINEDOT, BASED ON CALCULATIONS DONE IN ACCORDANCE WITH THE LATEST REVISION OF AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS". LIGHT STANDARDS SHALL BE POLYESTER POWDER-COATED BLACK.
24. LIGHT STANDARDS SHALL HAVE DECORATIVE CAST ALUMINUM CLAMSHELL BASES, VALMONT 'HUNTINGTON ACI' STYLE, MODEL NUMBER HN24AC, OR APPROVED EQUAL. BASES SHALL BE POLYESTER POWDER-COATED BLACK.
25. ALL LIGHTING FIXTURES SHALL BE GASKETED, AND SHALL HAVE SURGE PROTECTION, A DOUBLE FUSE KIT, AND ADJUSTABLE OUTPUT. FIXTURES SHALL BE POLYESTER POWDER-COATED BLACK.
26. LIGHTING FIXTURES ON CONVENTIONAL LIGHT STANDARDS AND TRAFFIC SIGNAL MAST ARM POLES SHALL BE ATTACHED WITH A MINIMUM LENGTH HORIZONTAL TENON AT THE TOP OF LIGHT POLE OR MAST ARM POLE COLUMN. TENON SHALL BE 2 INCH NOMINAL DIAMETER. MOUNTING HEIGHT SHALL BE 29' ABOVE ROAD GRADE, UNLESS OTHERWISE NOTED. ORIENTATION SHALL BE AS INDICATED ON THE PLANS.
27. LUMINAIRES ON CONVENTIONAL LIGHT STANDARDS AND TRAFFIC SIGNAL MAST ARM POLES SHALL BE IES FULL CUTOFF LIGHT EMITTING DIODE (LED) FIXTURES, IES DISTRIBUTION TYPES 2 AND 3 AS NOTED ON THE PLANS. LED MODULES SHALL BE IP66 RATED. LUMINAIRES SHALL BE AMERICAN ELECTRIC LIGHTING 'AUTOBAHN' SERIES ATBO FIXTURES, DISTRIBUTION TYPES AS NOTED IN THE LUMINAIRE SCHEDULE. CATALOG NUMBERS: ATBO 20BLEDE53 MVOLT R2 4K BK X X UMR-XX AO AND ATBO 20BLEDE53 MVOLT R3 4K BK X X UMR-XX AO.
28. SECURELY ATTACH UNDER-BRIDGE WALL PACK LIGHTING UNITS TO STANDARD EXTERIOR WET LOCATION RATED WALL-MOUNT TYPE ELECTRICAL JUNCTION BOXES INSTALLED ON THE VERTICAL FACE OF THE BRIDGE ABUTMENT CLOSEST TO THE LOCATION STATED ON THE LIGHTING PLAN. MOUNTING HEIGHT 16'.
29. INSTALL PRECAST CONCRETE JUNCTION BOXES IN NEW SIDEWALK AT THE BASE OF THE BRIDGE ABUTMENT WALLS FOR WIRING TO THE UNDER-BRIDGE WALL PACK UNITS.
30. ABOVE-GROUND CONDUIT FOR WALL PACK UNITS SHALL BE 3/4" DIAMETER CONDUIT SECURELY ATTACHED TO THE FACE OF THE BRIDGE ABUTMENTS.
31. UNDER-BRIDGE LIGHTING WALL PACK UNITS SHALL BE HOLOPHANE WALLPACK FULL CUTOFF LED FIXTURES. CATALOG NUMBER HLWPC2 P10 40K X T2M BKSDP 70CRI AO DF TP OR APPROVED EQUAL.
32. UNDER-BRIDGE LIGHTING UNITS SHALL BE WET LOCATION LISTED. LIGHT ENGINE HOUSING SHALL BE IP66 RATED. UNITS SHALL BE RATED FOR -40 DEGREES FAHRENHEIT MINIMUM AMBIENT TEMPERATURE. LIGHTING COLOR TEMPERATURE SHALL BE 4000K. OPTICS SHALL BE TYPE 2 MEDIUM DISTRIBUTION. HOUSINGS SHALL HAVE BLACK THERMOSET POWDERCOAT FINISH AND HAVE TAMPER RESISTANT HARDWARE. UNITS SHALL BE DOUBLE FUSED. UNITS SHALL HAVE 20KV/10KA SURGE PROTECTION OR BETTER.
33. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT, LEGIBLE, WEATHERPROOF TAGS SECURELY ATTACHED TO EACH CABLE.
34. THE MAINTENANCE OF HIGHWAY LIGHTING SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY MAINEDOT.
35. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL FURNISH TO MAINEDOT A SET OF AS-BUILT LIGHTING PLANS FOR FUTURE REFERENCE AND SYSTEM MAINTENANCE.
36. PAYMENT UNDER ITEM 634.160, HIGHWAY LIGHTING WILL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PROVIDE A FULLY FUNCTIONING LIGHTING SYSTEM, EXCEPT THOSE ITEMS TO BE PAID UNDER OTHER RELATED BID ITEMS IN THE CONTRACT.
37. PAYMENT UNDER ITEM 634.210, CONVENTIONAL LIGHT STANDARD, WILL INCLUDE, BUT NOT BE LIMITED TO, THE POLE, DECORATIVE BASE, ANCHOR BOLTS, TENON FOR FIXTURE ATTACHMENT, BREAKAWAY BASE IF REQUIRED, AND ALL REQUIRED INCIDENTALS.
38. PAYMENT FOR THE UNDER-BRIDGE WALL PACK LIGHTING UNITS WILL BE MADE UNDER ITEM 634.2042 LED LUMINAIRE. PAYMENT FOR CONDUIT WILL BE MADE UNDER APPLICABLE SECTION 626 ITEMS. PAYMENT FOR PRECAST CONCRETE JUNCTION BOXES WILL BE MADE UNDER ITEM 626.11. PAYMENT FOR WIRING, SURFACE-MOUNT ELECTRICAL JUNCTION BOX, AND ALL WORK AND INCIDENTALS NECESSARY TO PROVIDE FULLY FUNCTIONING UNDER-BRIDGE LIGHTING, EXCEPT FOR WORK AND MATERIALS COVERED BY OTHER PAY ITEMS OF THE CONTRACT, WILL BE MADE UNDER ITEM 634.160 HIGHWAY LIGHTING.
39. REMOVAL OF EXISTING HIGHWAY LIGHTING WILL BE INCIDENTAL TO ITEM 634.160.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO. 5933

BRIDGE PLANS

STATE OF MAINE ALBERT L GODFREY No. 4226 REGISTERED PROFESSIONAL ENGINEER

SIGNATURE		
4226		P.E. NUMBER
2/24/20		DATE

	TRC	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ALG	JLE	11-19
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DESIGN2-DETAILED2			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

LIGHTING PLAN 3

SHEET NUMBER

161

OF 220

Filename: 162_Bridge General Plan.dgn Division: Username: Date:3/3/2020

℄ Brg., Sleeper Slab 1 & Approach Slab 1 Sta. 38+30.30

℄ Brg., Abutment No. 1 Sta. 38+55.30 (Fixed)

℄ Veranda Street/Route 1

℄ Brg., Abutment No. 2 Sta. 39+26.33 (Expansion)

℄ Brg., Sleeper Slab 2 & Approach Slab 2 Sta. 39+51.15

120'-9½"

24'-4½"

71'-0⅛"

25'-4¾"

Measured along Working Line

Abutment No. 1 West Wingwall

Precast Approach Slab 1

Abutment No. 2 West Wingwall

Temporary Earth Structural Support

Precast Approach Slab 2

Precast Sleeper Slab 1

Precast Sleeper Slab 2

Precast Median Barrier

℄ I-295

℄ SB

℄ NB

237+00

37+00

137+00

238+00

38+00

138+00

239+00

39+00

139+00

240

40+

140

103+00

104+00

105+00

SB

NB

A

B

C

D

E

F

G

H

30°0'0" Skew (Typ.)

Abutment No. 1 East Wingwall

Abutment No. 2 East Wingwall

℄ Brg., Existing Abutment No. 1

℄ Brg., Existing Pier No. 1

℄ Brg., Existing Pier No. 2

℄ Brg., Existing Abutment No. 2

GENERAL PLAN

10 0 10 20

Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		SIGNATURE	DATE
P.E. NUMBER			
DATE			

	BY	DATE
D. EATON		
PROJ. MANAGER		
DESIGN-DETAILED	HJW	2\20
CHECKED-REVIEWED	NMW	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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FIELD CHANGES		

INTERSTATE 295 OVER VERANDA STREET

PORTLAND CUMBERLAND COUNTY

BRIDGE GENERAL PLAN

SHEET NUMBER

162

OF 220

The following information is provided for the Contractor's reference. The notes, work items and construction sequencing presented are general in nature and intended only to convey the general scope and sequence of work. The development of a final construction approach, sequence and workflow will be the sole responsibility of the Contractor.

A. GENERAL NOTES

A1. The existing bridge shall not be closed until the compressive test results for the structural concrete placed prior to the lateral slide demonstrate the concrete has reached the specified minimum values.

A2. The Contractor shall survey the top elevation of the abutments and clearly establishing working points, working lines, and benchmark elevations prior to performing the lateral slide.

A3. The superstructure shall be constructed on Temporary Abutment Falsework designed to fully support the superstructure under dead load, construction loading, snow and wind loads, and all other loadings anticipated prior to completion of the lateral slide. The falsework design shall include methods for adjusting the elevation of the slide surface to correct for settlement that may occur prior to the slide. See Special Provisions for additional information.

A4. The Temporary Abutment Falsework design and details shall be prepared by a Professional Engineer licensed in the State of Maine and shall be submitted for review no fewer than 45 calendar days prior to beginning erection of the Temporary Abutment Falsework.

A5. The connection between the Upper Portion of the proposed abutment and the Temporary Abutment Falsework shall be designed as a temporarily rotationally fixed connection. This connection shall be rotationally fixed at all times after placement of the Upper Abutment Portion except during the following times:

-The duration of the test lateral slide procedure.
-The duration of the permanent lateral slide procedure.

In advance of the above two procedures the bridge bearings shall be converted to their temporary rotationally fixed configuration immediately prior to releasing the rotational fixity between the Upper Portion of the proposed abutment and the Temporary Abutment Falsework.

A6. The closure of I-295 within the defined project limits is expected to last up to 60 hours to allow for the rapid demolition of the existing bridge, slide-in of the proposed structure, and completion of approach work. The closure of Veranda Street within the defined project limits is permitted to last up to five calendar days to allow for the mobilization of equipment and stockpiling of materials immediately prior to the lateral slide, completion of the lateral slide, and demobilization of equipment and removal of materials immediately following the lateral slide. See Special Provision 107 for additional information.

A7. Contractor shall provide a critical path method (CPM) schedule for all pre-closure, closure, and post-closure activities showing how the activities will be managed on the construction site. Many of the required construction activities can run concurrently to other activities. The Contractor is alerted that many construction activities will require overlapping access.

B. PRE-CLOSURE CONSTRUCTION SEQUENCE

B1. The following is a generalized anticipated construction sequence for the pre-closure, closure, and post-closure activities.

B2. Remove existing Veranda Street drainage beneath proposed Abutment 1 and install temporary and\or permanent drainage measures required to maintain drainage during construction. Install temporary pavement required to accommodate construction phasing and maintenance of traffic on Veranda Street.

B3. Adjust Veranda Street traffic pattern and install temporary concrete barrier, as necessary, to accommodate Contractor's work zone.

B4. Install foundation piles and construct abutment foundations, lower portions of abutment, and wingwalls beneath existing bridge as shown on the plans.

B5. Construct Temporary Structural Supports to retain roadway embankment at existing Abutment No. 2 wingwalls and remove portions of existing Abutment 2 wingwalls to the limits shown on the plans.

B6. Erect Temporary Structural Supports (Temporary Abutment Falsework) east of the existing bridge. The temporary structural supports shall be of sufficient length to allow for the completion of a trial slide as specified in the project Special Provisions.

B7. Revise traffic patterns on Veranda Street to locate both bounds of traffic, and the sidewalk, beneath the northerly span of the existing bridge.

B8. Excavate for Geofoam Lightweight Fill under the two southern spans of the existing bridge. Place Geofoam Lightweight Fill, Leveling Sand, HDPE Geomembrane, Lightweight Foam Concrete Fill, and Lightweight Foam Concrete Distribution Slabs to the limits shown on the plans. Backfill behind the proposed substructures, and around the existing pier bents, with Lightweight Foam Concrete Fill to the specified elevations.

B9. Construct the upper portion of the abutments on the Temporary Structural Supports (Temporary Abutment Falsework), install bridge bearings and erect structural steel. Form and place the bridge deck, semi-integral backwall, and concrete barriers. Apply High Performance Waterproofing Membrane to the bridge deck.

B10. Conduct a trial slide as defined in the Special Provisions and return the superstructure to the pre-trial slide position.

B11. Install detour signage and mobilize PCMS boards and traffic control devices in advance of the roadway closure. Pre-program existing signal systems with temporary signal timings (provided by others) for activation during the roadway closure period.

C. CLOSURE PERIOD CONSTRUCTION SEQUENCE

C1. Implement Veranda Street Detour and close Veranda Street. Mobilize equipment and stockpile materials necessary to complete the work. Install protective sheeting, matting or other materials over the Veranda Street Roadway to protect the pavement surface during demolition activities.

C2. Implement the I-295 Detour, activate temporary signal timing, and close I-295.

C3. Demolish the existing bridge superstructure, demolish portions of the existing substructure, remove existing median barrier, and excavate I-295 approaches to the limits shown on the plans.

C4. Laterally slide the proposed superstructure into its final position. Complete the bolted connection between the upper and lower portions of the abutments.

C5. Place and compact granular fill in the vicinity of the proposed sleeper slabs, fine grade and place the sleeper slabs. Install the precast sleeper slabs and the precast approach slabs.

C6. Release the bridge bearings from their temporarily fixed condition.

C7. Place Aggregate Subbase Course Gravel on the approaches to the bottom of pavement elevation.

C8. Place approach median barriers on I-295.

C9. Place base pavement on I-295 approaches and bridge.

C10. Install temporary concrete barrier and crash cushions on I-295 at interface between existing and proposed median barrier, and along approaches in place of permanent guardrail.

C11. Open I-295 and Veranda Street to traffic. At Contractor's option, Veranda Street may remain closed for an additional length of time as allowed in the Contract Specifications.

C12. Remove or cover Veranda Street and I-295 detour signage and PCMS boards. Deactivate the temporary signal timing.

POST-CLOSURE CONSTRUCTION SEQUENCE

D1. Cast closure placement between upper and lower portions of the abutments. Remove temporary diaphragms.

D2. Construct wingwalls to final lengths and top elevations as required.

D3. Demolish temporary structural supports.

D4. Backfill behind the abutments, and beneath approach slabs, with Lightweight Foam Concrete Fill. Complete construction of I-295 embankments and install guardrail and bridge transitions. Remove temporary concrete barriers from all areas, except for within the I-295 median.

D5. Apply final lift of pavement along the I-295 approaches and bridge to meet the final profile after the waiting period specified in the Contract Specifications. Install Asphaltic Plug Joints.

D6. Finish reconstruction of Veranda Street and associated intersections and side street improvements.

CLOSURE TIMEFRAME

Following is an estimated schedule for the work completed during the allowed roadway closure period. Note that some work activities occur simultaneously.

Time	Activity Start	Anticipated Duration (hours)
8:00 p.m. Friday	Close I-295	-
8:30 p.m. Friday	Begin demolition	20
4:00 p.m. Saturday	Begin lateral slide	7
8:00 p.m. Saturday	Begin placement of approach subbase and base gravel	14
4:00 p.m. Saturday	Final grade and installation of sleeper slabs	4
11:00 p.m. Saturday	Complete connection btwn. upper and lower abutments	4
3:00 a.m. Sunday	Release temporary bearing fixity connection	2
3:00 a.m. Sunday	Place approach slabs	1
9:00 a.m. Sunday	Install median barrier	5
1:00 p.m. Sunday	Place base pavement, temporary barrier, striping	10
11:00 p.m. Sunday	Re-open I-295	1
-	Schedule Float	8

Time duration for individual activities may vary. However, total closure duration shall not exceed 58.5 hours.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	D. EATON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	HJW	ERB	2\20
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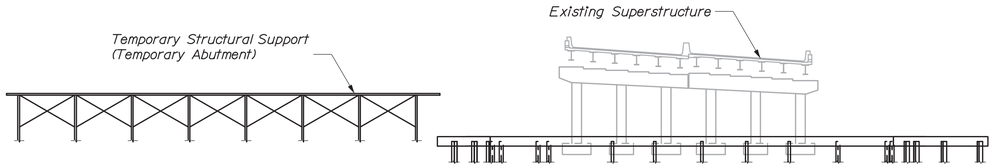
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUGGESTED
CONSTRUCTION SEQUENCE I

SHEET NUMBER
163
OF 220

Filename: 163_Suggested Construction Sequence 1.dgn Division: Username: Date:3/3/2020

Filename: 164_Suggested Construction Sequence II.dgn Division: Username: Date:3/3/2020



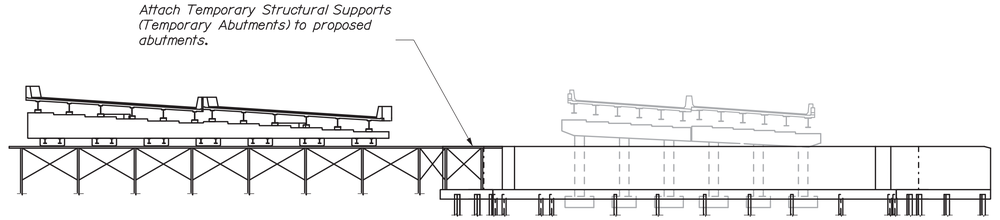
STAGE 1 (PRE-CLOSURE PERIOD)

STAGE NOTES:

1. Install proposed piles and abutment footings.
2. Erect Temporary Structural Supports (Temporary Abutments) for superstructure east of existing bridge.

NOTES:

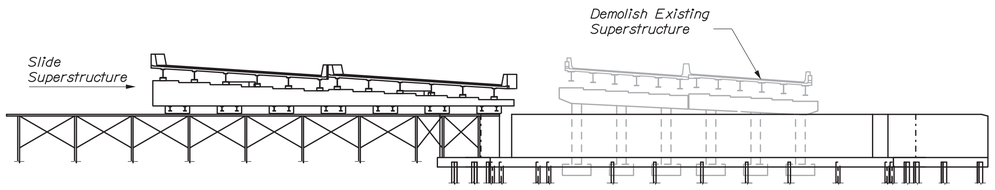
1. All sections are looking at the face of Abutment 1.
2. See Suggested Construction Sequence 1 Sheet for general construction sequence notes and additional information.



STAGE 2 (PRE-CLOSURE PERIOD)

STAGE NOTES:

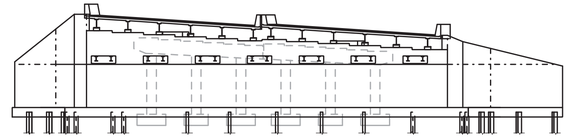
1. Construct proposed upper portions of abutments and superstructure on Temporary Structural Supports.
2. Construct lower portions of abutments and wingwalls up to the slide elevation, backfill to the specified elevations.



STAGE 3 (CLOSURE PERIOD)

STAGE NOTES:

1. Detour traffic.
2. Demolish existing bridge superstructure and substructure to specified elevations.
3. Slide-in proposed superstructure.
4. Connect upper and lower portions of abutments.
5. Place precast sleeper and approach slabs.
6. Remove temporary diaphragms and adjust bearing fixity to final condition.
7. Fill I-295 approaches and place base pavement.
8. Open I-295 to traffic.



STAGE 4 (POST-CLOSURE PERIOD)

STAGE NOTES:

1. Cast concrete connection between upper and lower abutment portions.
2. Install wingwalls to final elevation.
3. Pump Lightweight Concrete Foam Fill behind abutments under approach slabs.
4. Demolish Temporary Structural Supports (Temporary Abutments).
5. Complete base paving, barrier placement, and joint installation.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2/20
CHECKED-REVIEWED	NMW	TRC	2/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

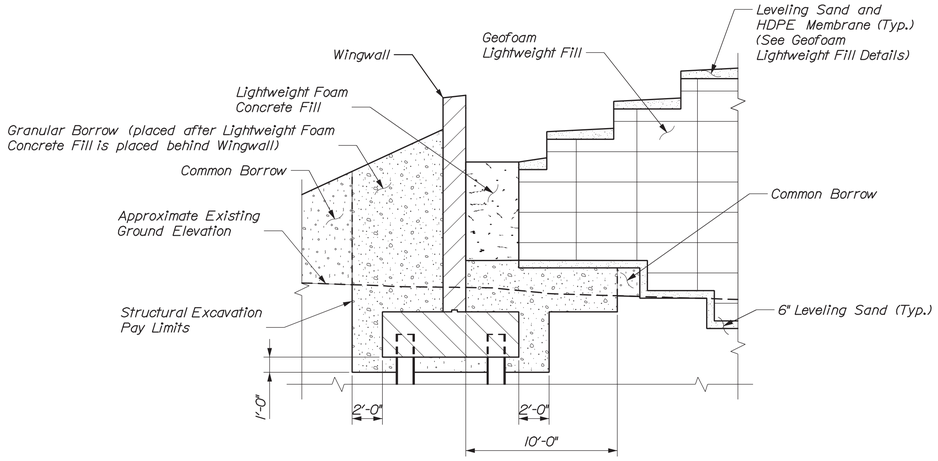
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUGGESTED CONSTRUCTION SEQUENCE II

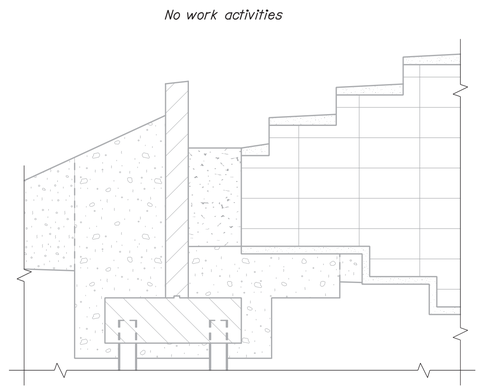
SHEET NUMBER

164

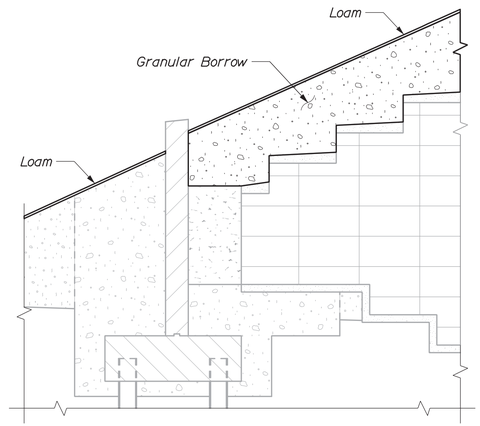
OF 220



SECTION A-A PRE-CLOSURE PERIOD



SECTION A-A CLOSURE PERIOD



SECTION A-A POST-CLOSURE PERIOD

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN
021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS I

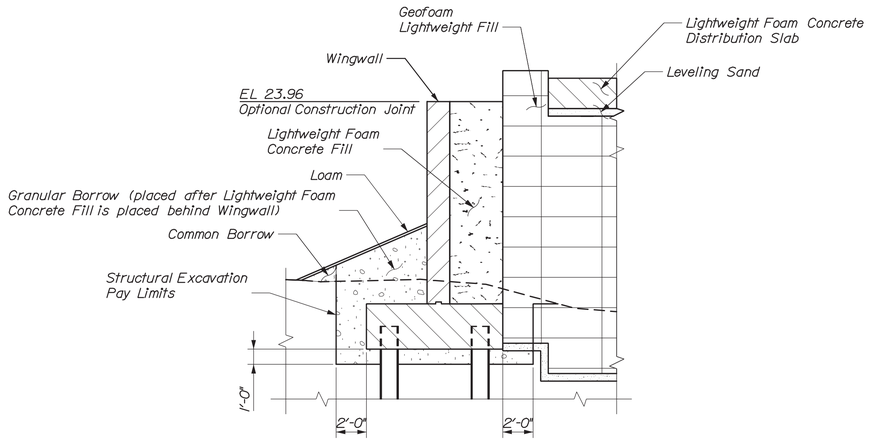
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165

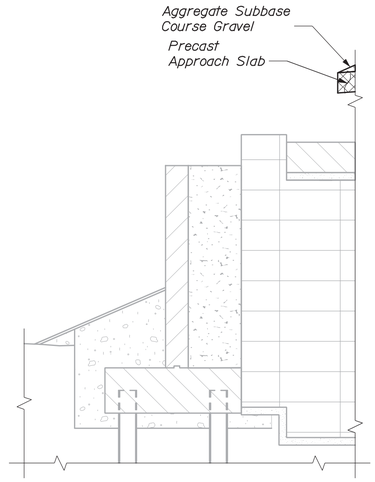
OF 220

HNTB

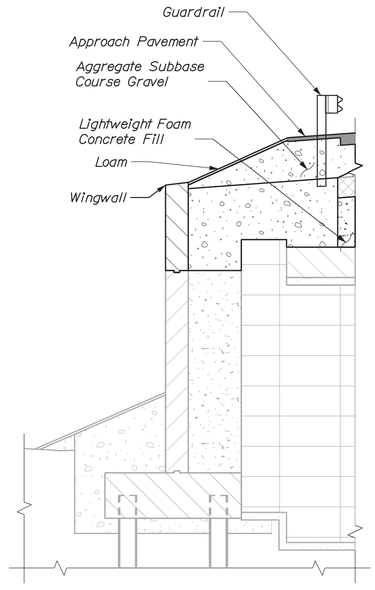
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SECTION B-B PRE-CLOSURE PERIOD



SECTION B-B ABC PERIOD



SECTION B-B POST-ABC PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 — BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	BY	DATE
CHECKED-REVIEWED	AES	ERB	2\20
DESIGN2-DETAILED2		TRC	2\20
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS II

SHEET NUMBER

166

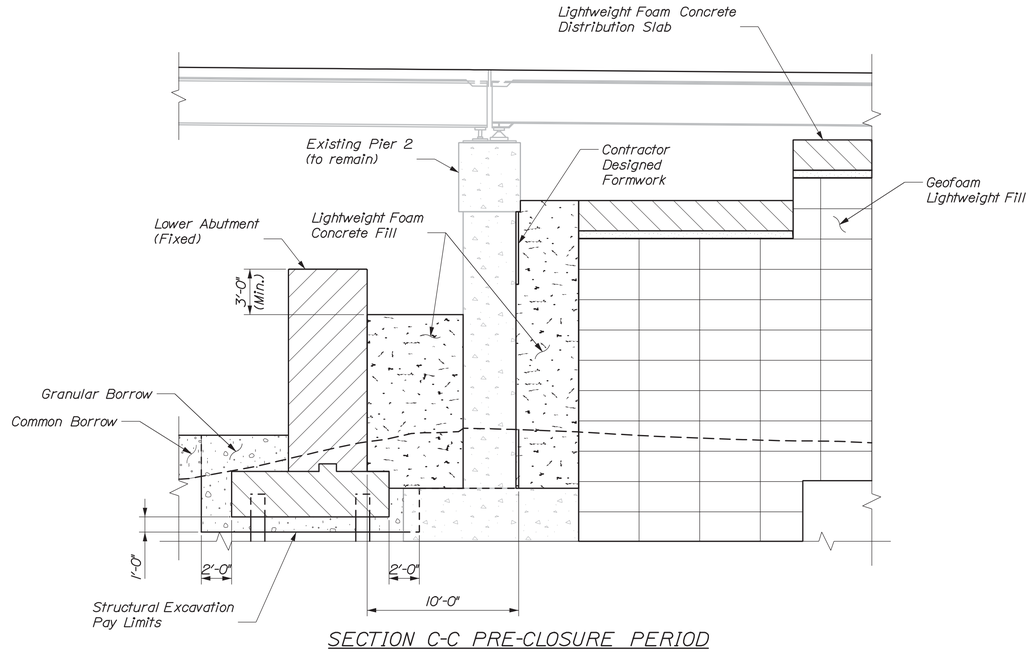
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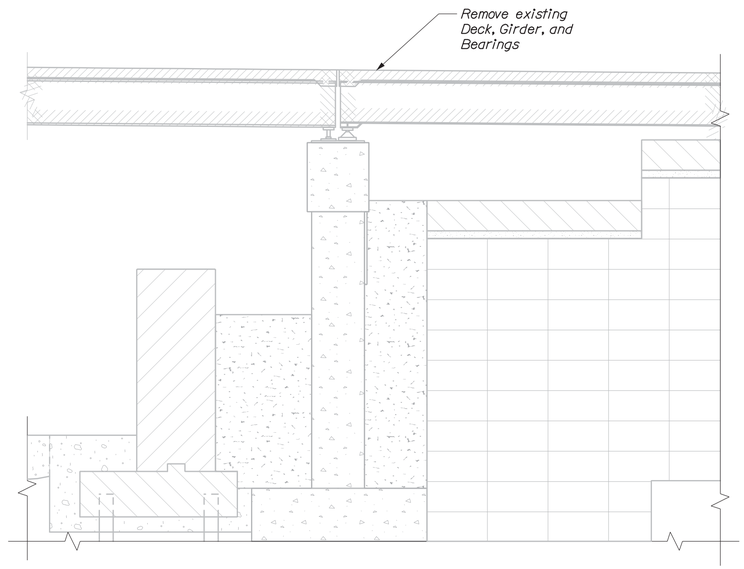
NOTES:

1. Granular borrow material may be replaced with aggregate subbase course gravel.

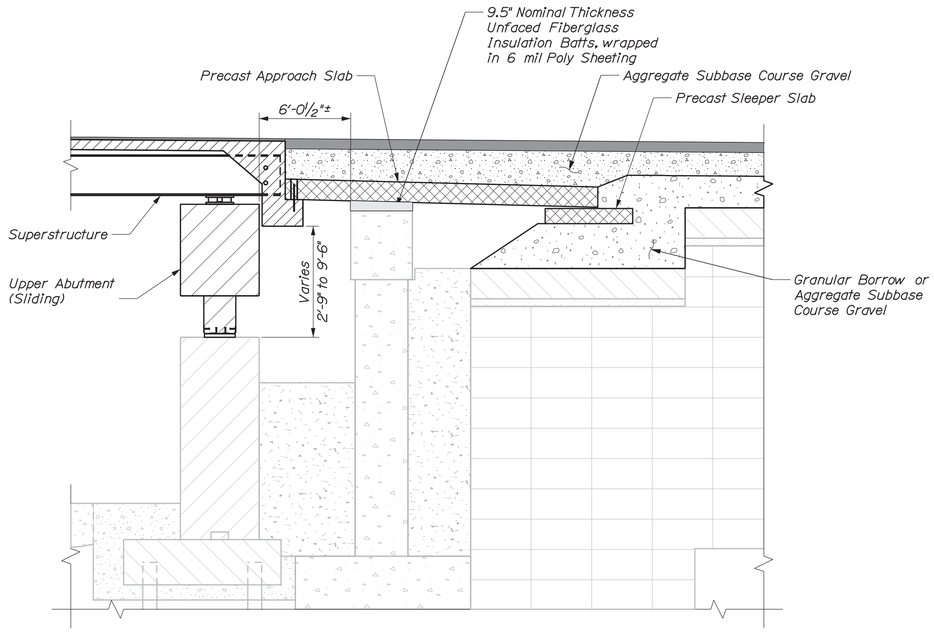
2. Unfaced Fiberglass Insulation Batts and Poly Sheeting placed over the existing pier will be incidental to Pay Item 534.7601 - Precast Approach Slab.



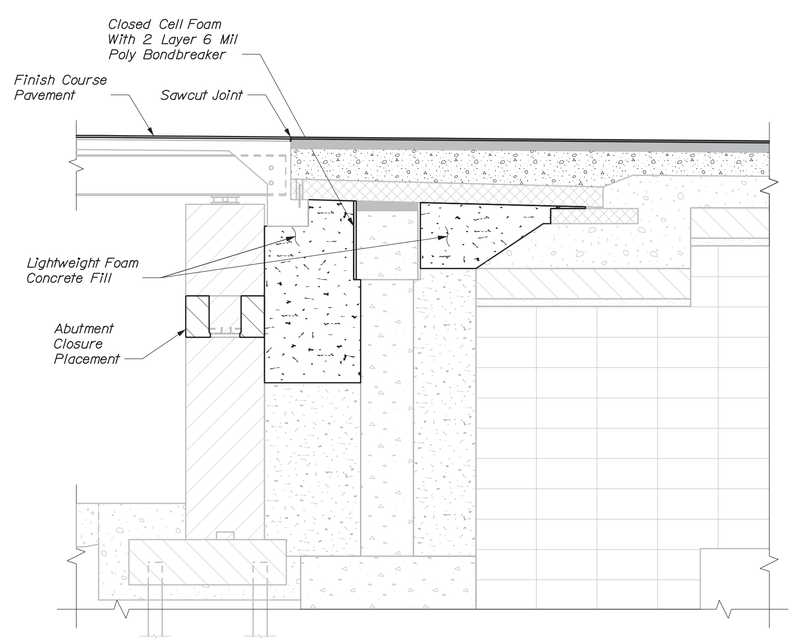
SECTION C-C PRE-CLOSURE PERIOD



SECTION C-C CLOSURE PERIOD, DEMOLITION



SECTION C-C CLOSURE PERIOD, AFTER DEMOLITION



SECTION C-C POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS III

SHEET NUMBER

167

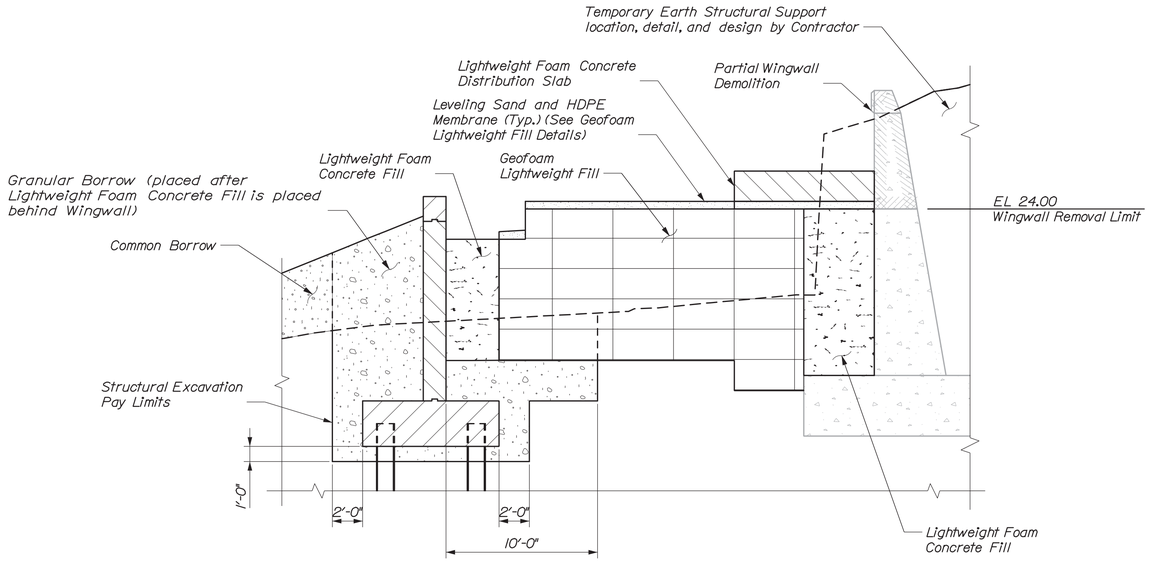
OF 220

Username:

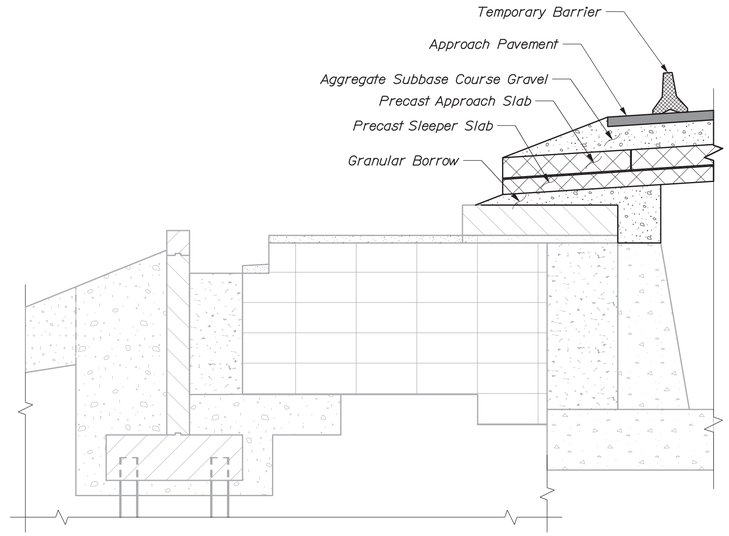
Date:3/3/2020

Division:

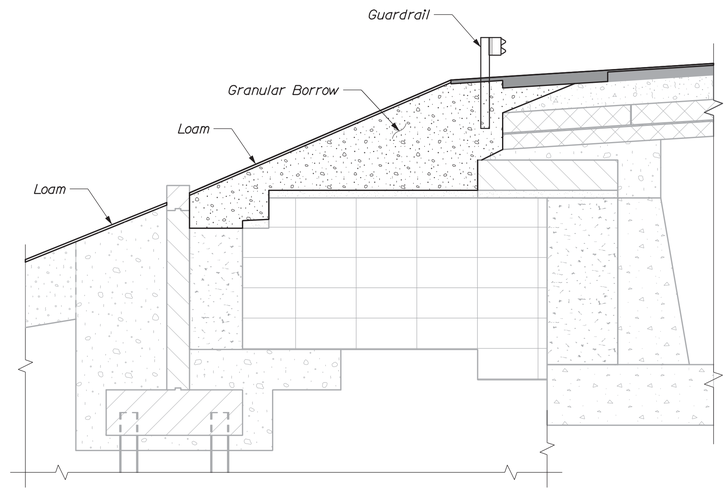
Filename: 167_Construction Sections III.dgn



SECTION D-D PRE-CLOSURE PERIOD



SECTION D-D CLOSURE PERIOD



SECTION D-D POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	D. EATON	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS IV

SHEET NUMBER

168

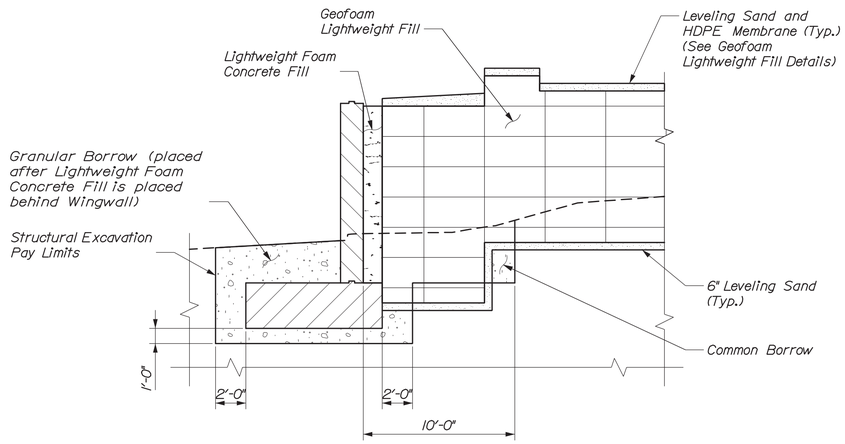
OF 220

Username:

Date:3/3/2020

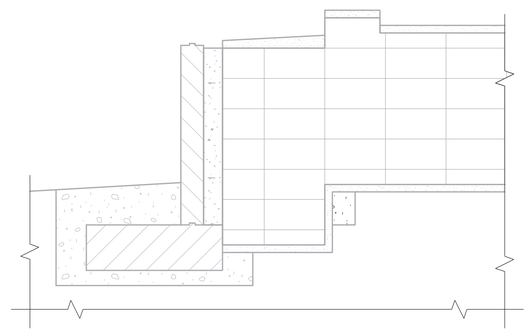
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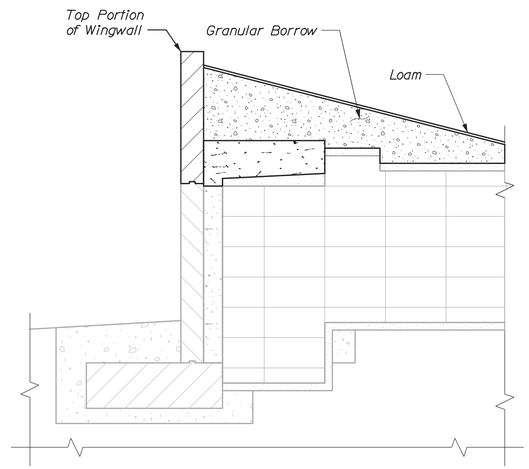


SECTION E-E PRE-CLOSURE PERIOD

No work activities



SECTION E-E CLOSURE PERIOD



SECTION E-E POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS V

SHEET NUMBER

169

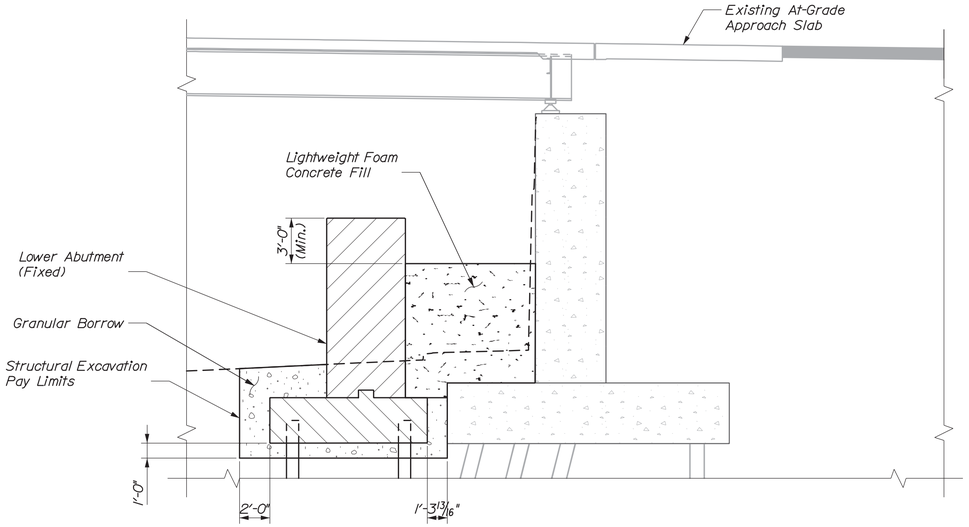
OF 220

Filename: 169_Construction Sections V.dgn Division: Username: Date:3/3/2020

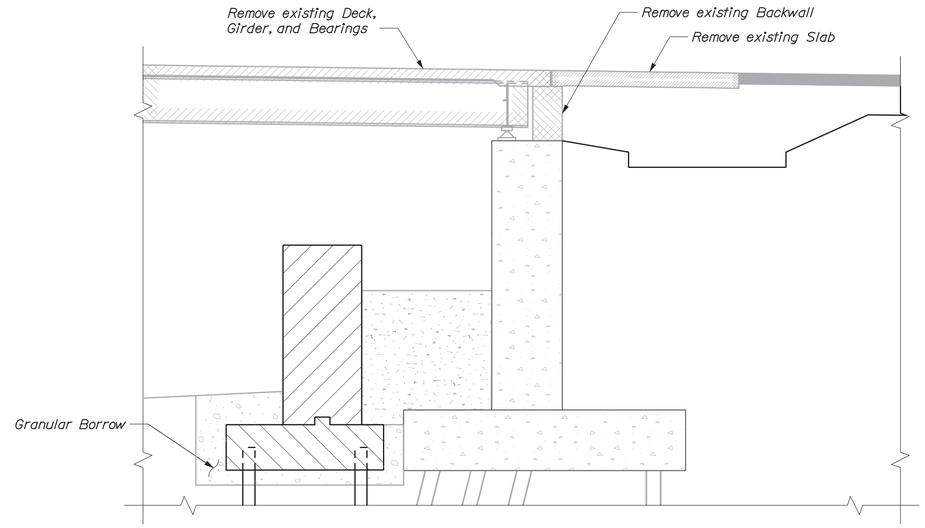
NOTES:

1. Granular borrow material may be replaced with aggregate subbase course gravel.

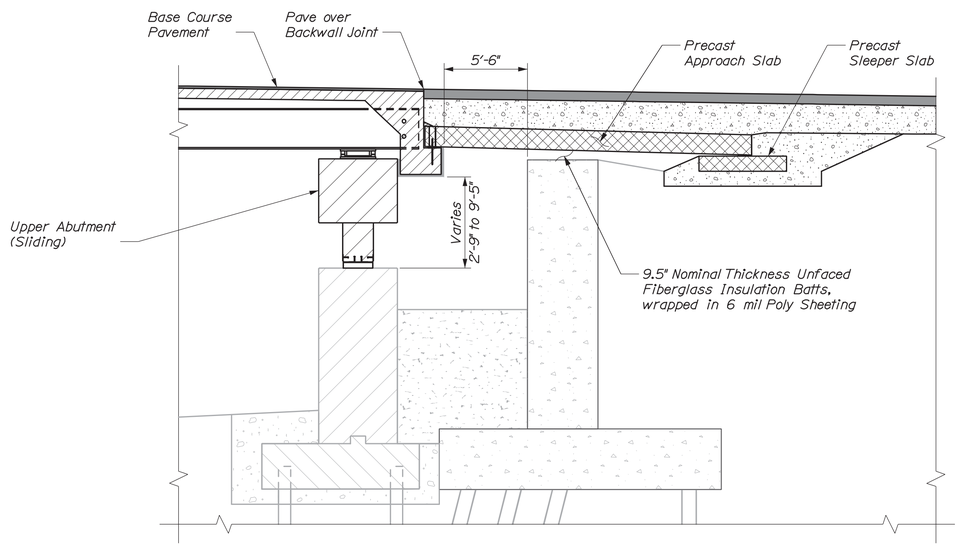
2. Unfaced Fiberglass Insulation Batts and Poly Sheeting placed over the existing abutment will be incidental to Pay Item 534.7601 - Precast Approach Slab.



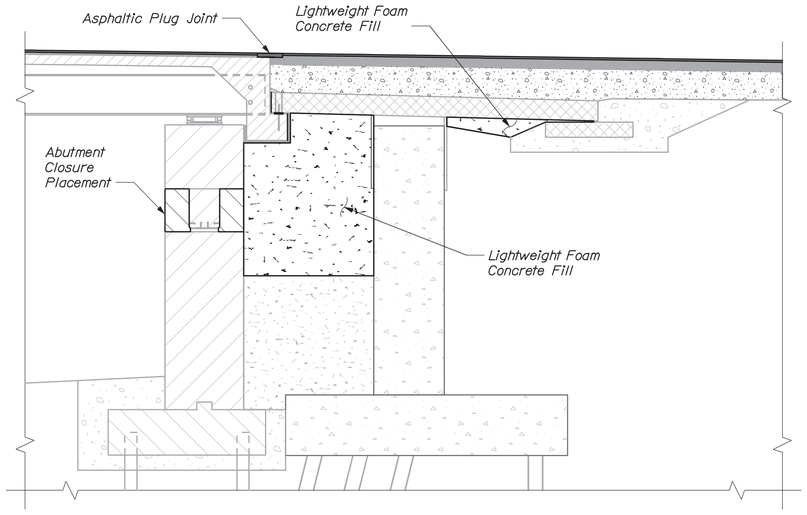
SECTION F-F PRE-CLOSURE PERIOD



SECTION F-F PRE-CLOSURE PERIOD, DEMOLITION



SECTION F-F CLOSURE PERIOD, AFTER DEMOLITION



SECTION F-F POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

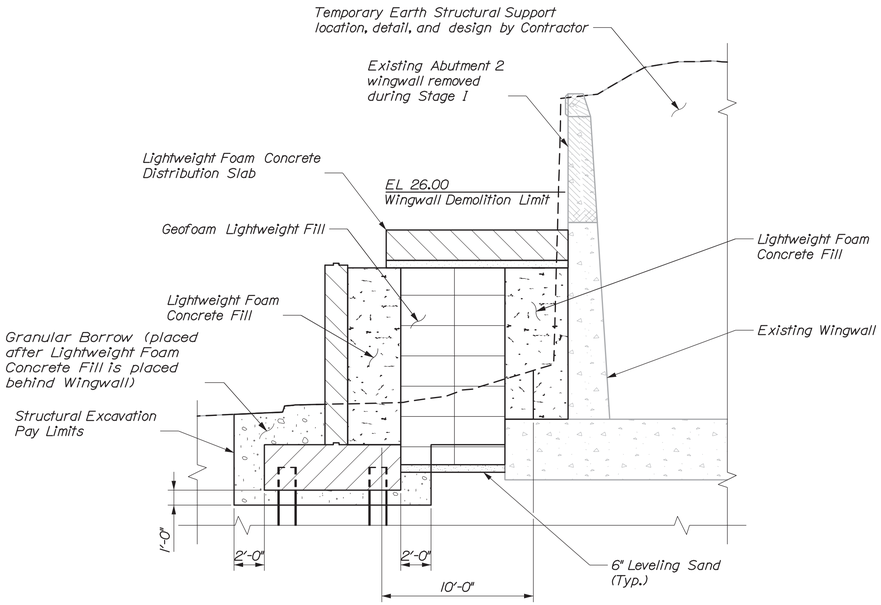
ABUTMENT AND WINGWALL SECTIONS VI

SHEET NUMBER

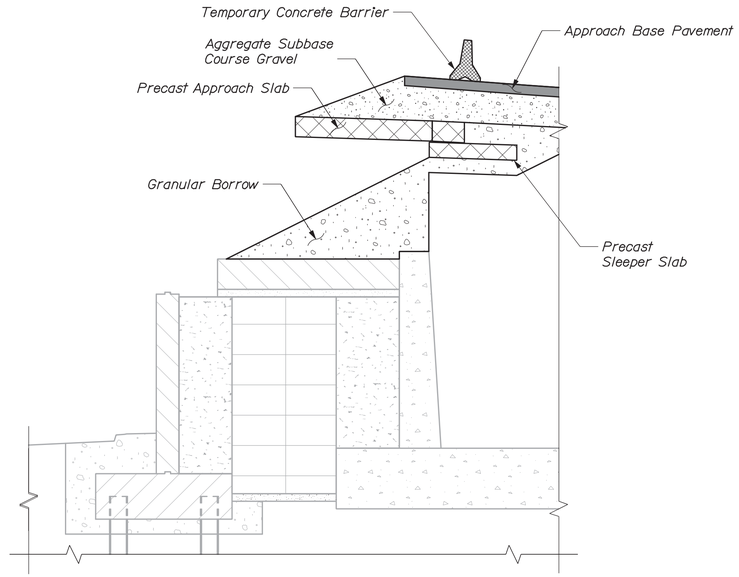
170

OF 220

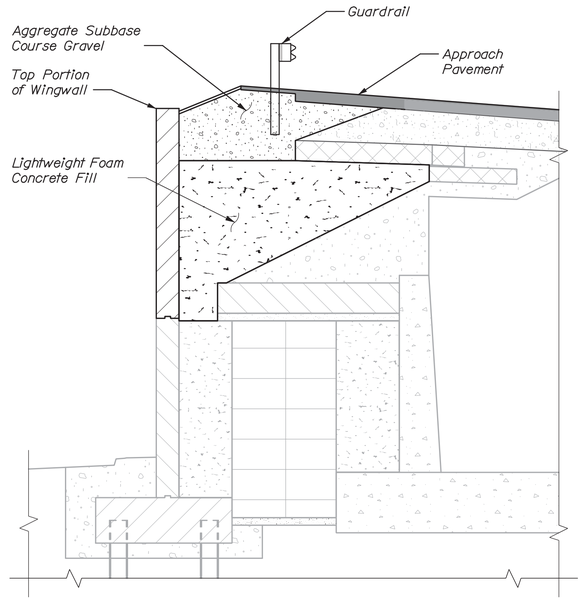
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SECTION G-G PRE-CLOSURE PERIOD



SECTION G-G CLOSURE PERIOD



SECTION G-G POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.JW	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

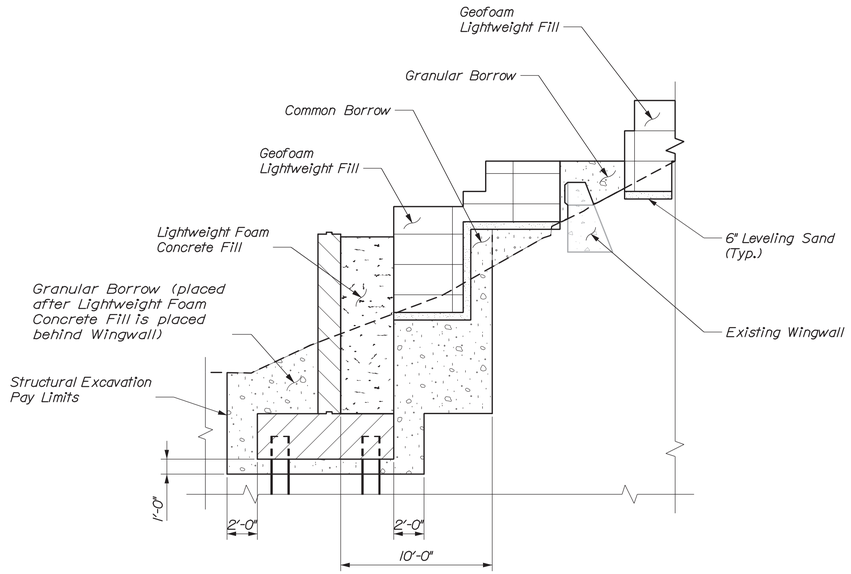
ABUTMENT AND WINGWALL SECTIONS VII

SHEET NUMBER

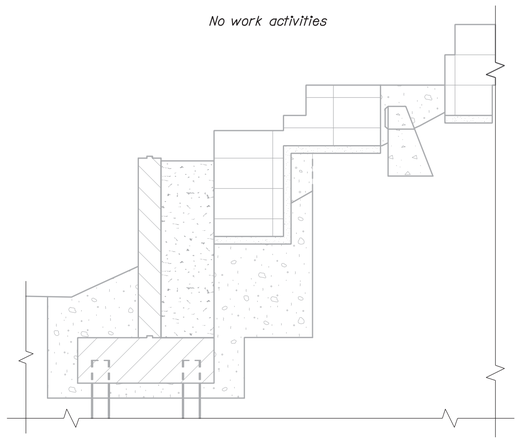
171

OF 220

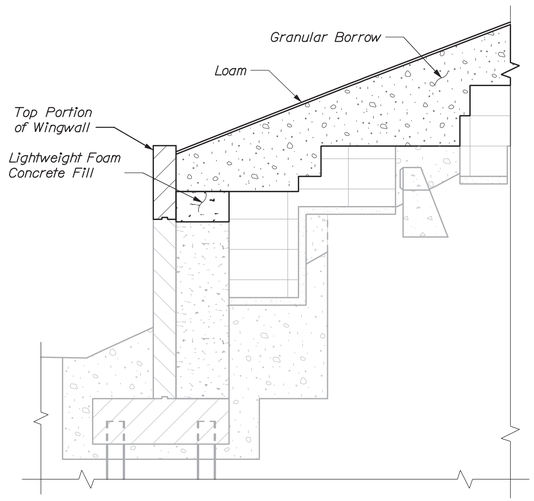
Filename: 171_Construction Sections VII.dgn Division: Username: Date:3/3/2020



SECTION H-H PRE-CLOSURE PERIOD



SECTION H-H CLOSURE PERIOD



SECTION H-H POST-CLOSURE PERIOD

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN
021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	AES	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT AND WINGWALL SECTIONS VIII

SHEET NUMBER

172

OF 220

Filename: 172_Construction Sections VIII.dgn Division: Username: Date:3/3/2020

LEGEND:

Minimum Demolition Limits During Closure Period

Minimum Demolition Limits Prior to Closure Period

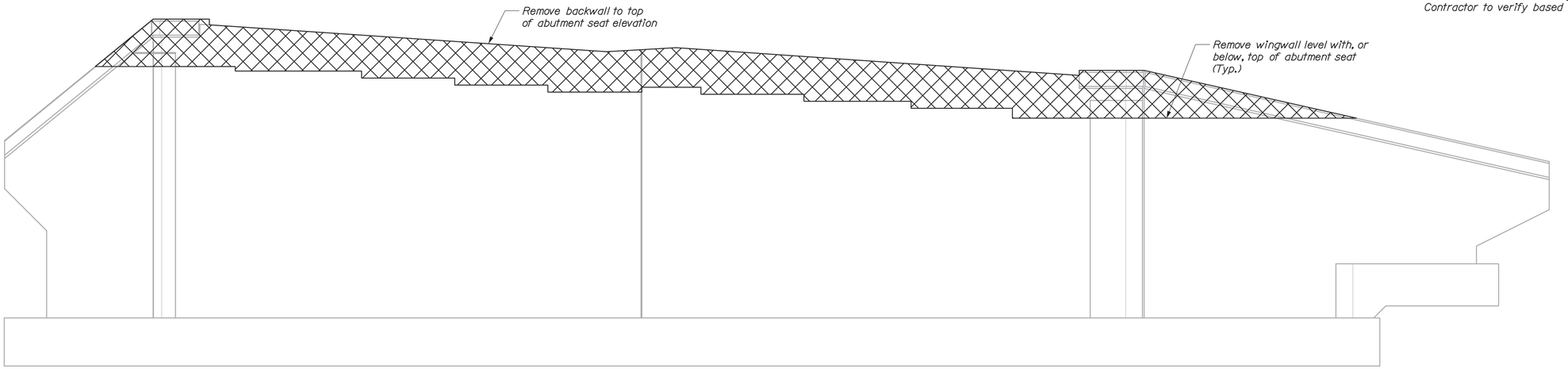
NOTES:

1. The existing superstructure and bearings shall be removed from all substructure units. Anchor rods shall be cut flush to top of concrete.

2. Payment for any temporary structural support or earth support systems will be made under Item 524.301, Temporary Structural Support.

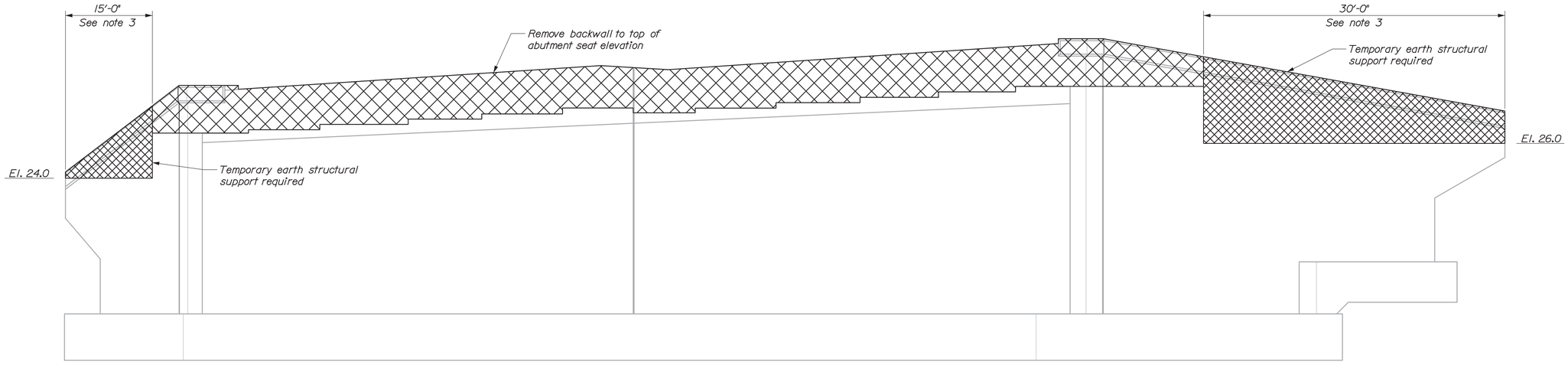
3. Wingwall demolition lengths measured along the length of the wingwall.

4. No demolition of existing piers is expected. Contractor to verify based on pier elevations.



EXISTING ABUTMENT 1 ELEVATION

(Looking Downstation)



EXISTING ABUTMENT 2 ELEVATION

(Looking Upstation)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

D. EATON	BY	DATE	
H.JW	ERB	2\20	
AES	TRC	11/19	

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	
DESIGN-DETAILED	
CHECKED-REVIEWED	
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT DEMOLITION LIMITS

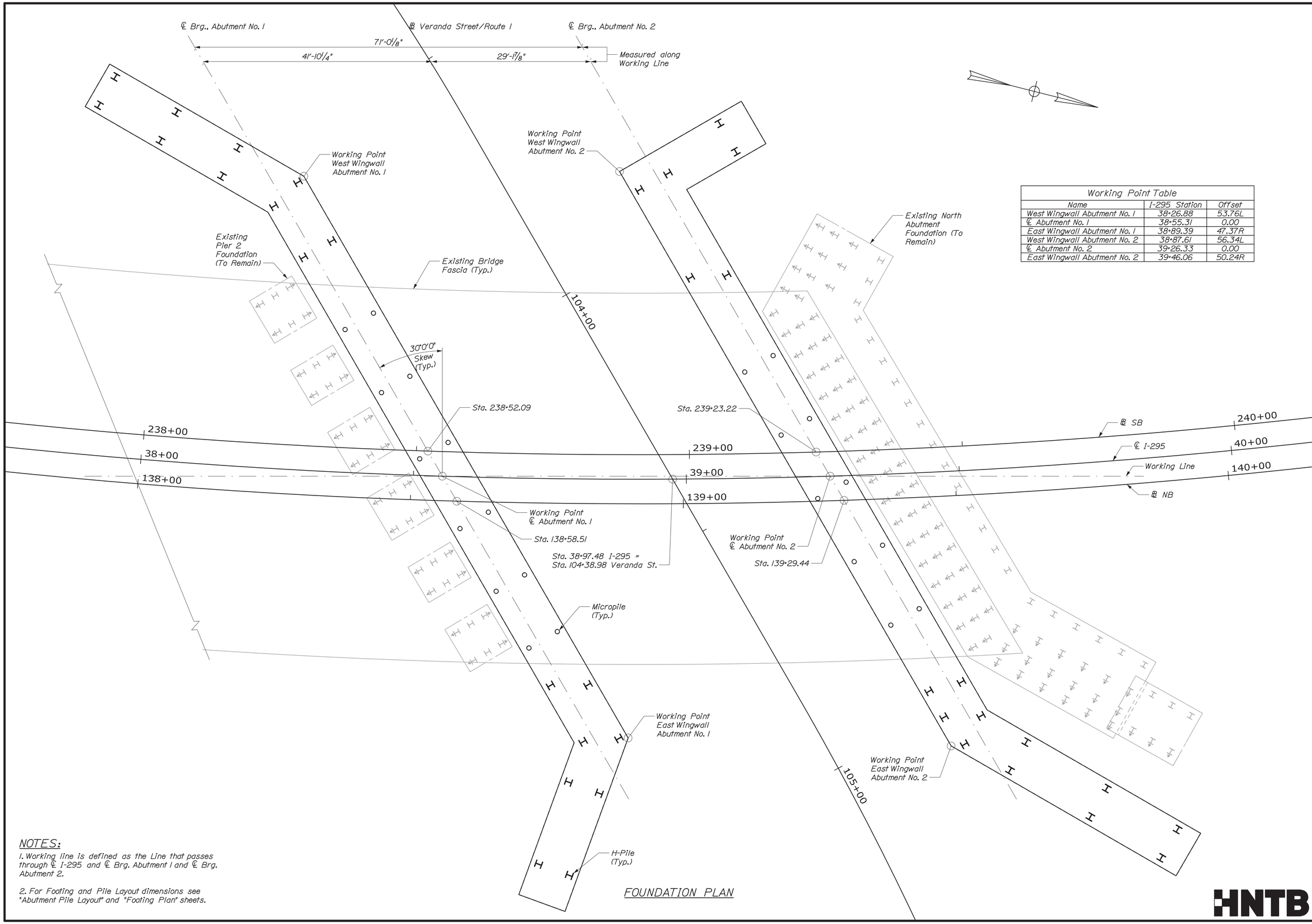
SHEET NUMBER

173

OF 220

HNTB

Filename: 173_Abutment Demolition Limits.dgn Division: Username: Date:3/3/2020



Working Point Table		
Name	I-295 Station	Offset
West Wingwall Abutment No. 1	38+26.88	53.76L
℄ Abutment No. 1	38+55.31	0.00
East Wingwall Abutment No. 1	38+89.39	47.37R
West Wingwall Abutment No. 2	38+87.61	56.34L
℄ Abutment No. 2	39+26.33	0.00
East Wingwall Abutment No. 2	39+46.06	50.24R

NOTES:

1. Working line is defined as the Line that passes through ℄ I-295 and ℄ Brg. Abutment 1 and ℄ Brg. Abutment 2.

2. For Footing and Pile Layout dimensions see "Abutment Pile Layout" and "Footing Plan" sheets.

FOUNDATION PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	2\20
CHECKED-REVIEWED	ERB	2\20
DESIGN2-DETAILED2	TJP	
DESIGN3-DETAILED3	TRC	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

FOUNDATION PLAN

SHEET NUMBER

174

OF 220

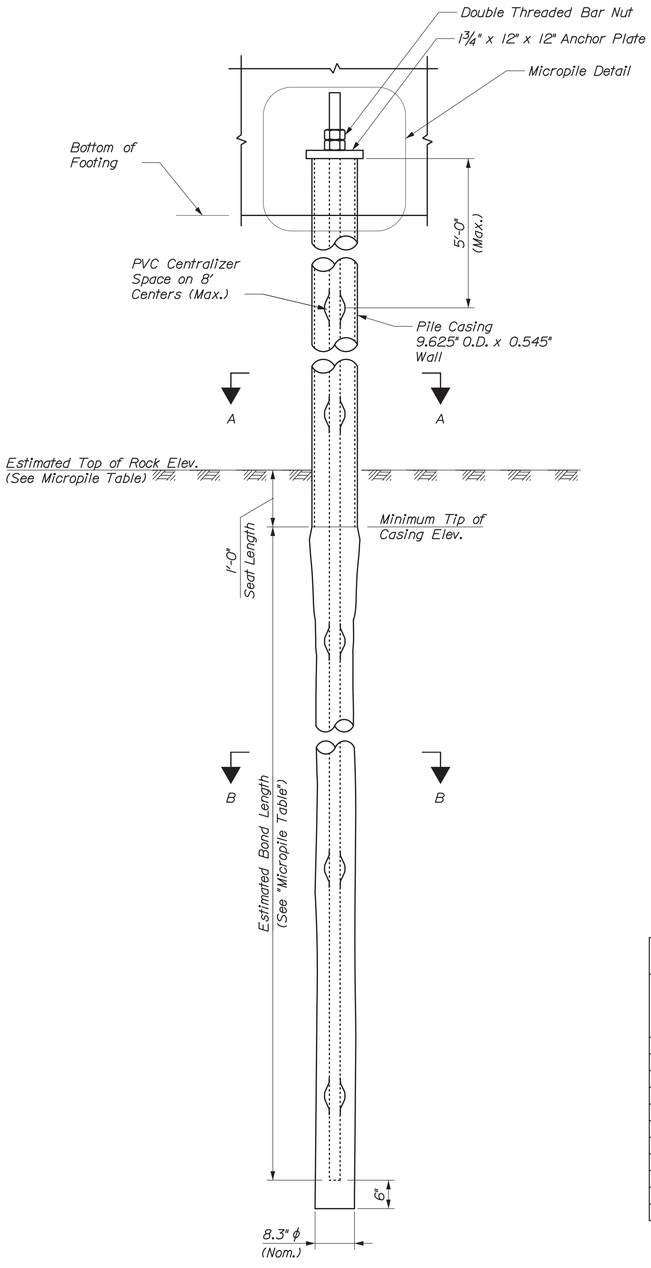
HNTB

Username:

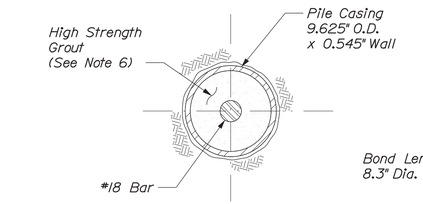
Date:3/3/2020

Division:

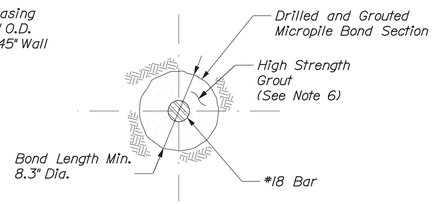
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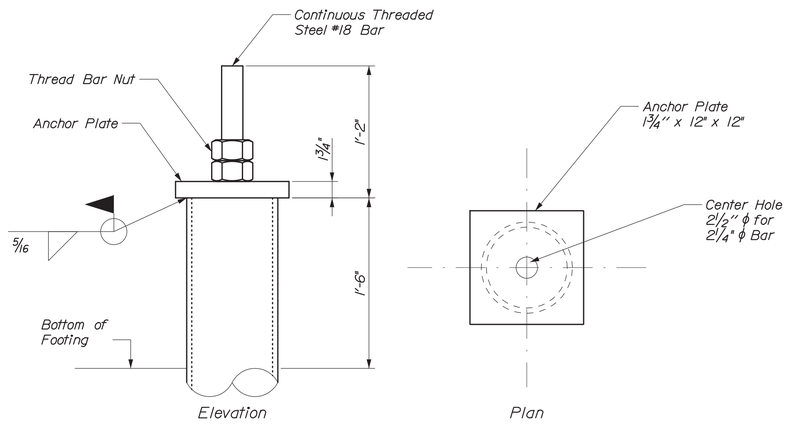
TYPICAL MICROPILE ELEVATION



SECTION A-A
(Cased Zone)



SECTION B-B
(Bond Zone in Bedrock)



MICROPILE DETAIL

MICROPILE TABLE								
Abutment	Micropiles	Required Nominal Resistance		Factored Design Load (FDL)		Bottom of Footing Elevation	Estimated Top of Rock Elevation	Estimated Bond Zone Length (ft.)
		Compression	Tension	Compression	Tension			
1	MP 1-1A, 1-1B	429 kips	0 kips	300 kips	0 kips	7.61	-89	10.0
1	MP 1-2A, 1-2B	429 kips	0 kips	300 kips	0 kips	7.61	-86	10.0
1	MP 1-3A, 1-3B	429 kips	0 kips	300 kips	0 kips	7.61	-83	10.0
1	MP 1-4A, 1-4B	429 kips	0 kips	300 kips	0 kips	7.61	-80	10.0
1	MP 1-5A, 1-5B	429 kips	0 kips	300 kips	0 kips	7.61	-77	10.0
1	MP 1-6A, 1-6B	429 kips	0 kips	300 kips	0 kips	7.61	-74	10.0
2	MP 2-1A, 2-1B	445 kips	0 kips	311 kips	0 kips	8.33	-123	11.0
2	MP 2-2A, 2-2B	445 kips	0 kips	311 kips	0 kips	8.33	-118	11.0
2	MP 2-3A, 2-3B	445 kips	0 kips	311 kips	0 kips	8.33	-113	11.0
2	MP 2-4A, 2-4B	445 kips	0 kips	311 kips	0 kips	8.33	-108	11.0
2	MP 2-5A, 2-5B	445 kips	0 kips	311 kips	0 kips	8.33	-103	11.0

NOTES:

1. Construct micropiles in accordance with Special Provision Section 501, Micropiles.

2. Bedrock bond zone lengths shall be confirmed by Contractor verification load tests on test piles in accordance with Special Provision Section 501, Micropiles.

3. Casing shall be API 5CT N80 pipe with a minimum yield strength of 80 ksi as approved by the Engineer.

4. Reinforcing bar shall be #18 Threaded Bar in accordance with ASTM A615 Grade 75. Reinforcing bars shall be galvanized in accordance with ASTM A153.

5. Anchor plate shall meet requirements of ASTM A709 Grade 50 and shall be galvanized per ASTM A123.

6. Grout shall have minimum 28 day compressive strength of 5,000 psi.

7. Micropile casing, threaded bar, anchor plates, and high strength grout shall be included in the unit bid price for Item 501.222, Micropiles.

8. Micropiles shall not be installed closer than 10 feet from an adjacent micropile, which has been grouted for a period of less than 24 hours.

9. If a micropile cannot be installed in the location indicated on the plans due to a conflict with existing piles, abandon the current micropile and offset a lateral distance determined by the Resident to avoid the current conflict. Payment for the abandoned micropile will be made under Item 501.2221 - Abandoned Micropile.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

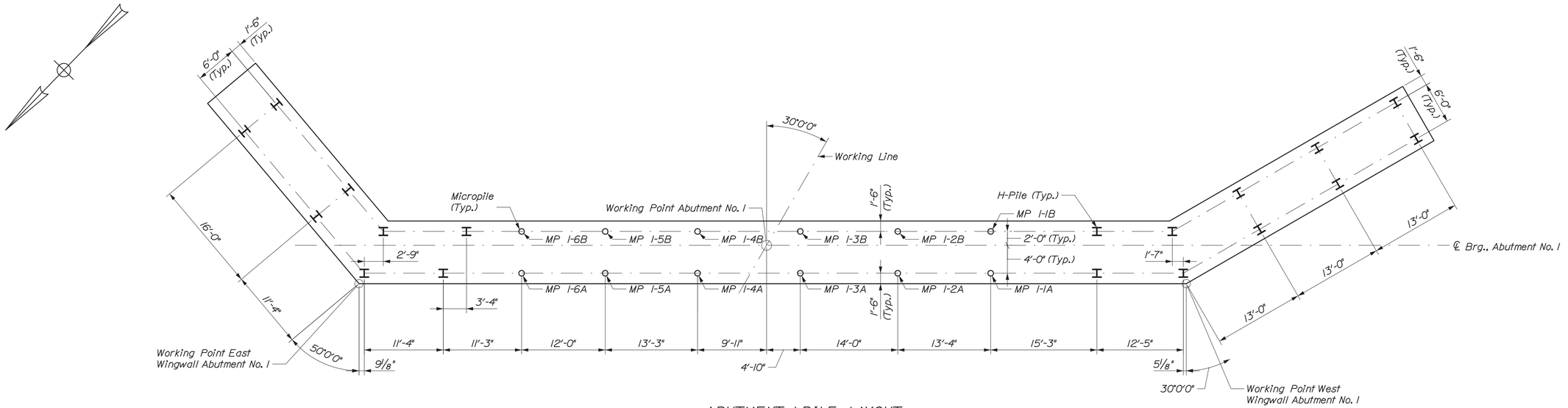
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

MICROPILE DETAILS

SHEET NUMBER
175
OF 220

HNTB

Filename: 175_Micropile Details.dgn Division: Username: Date:3/3/2020



ABUTMENT 1 PILE LAYOUT

H-PILE NOTES:

1. The maximum axial factored pile load is 420 kips for Abutment 1 and 462 kips for Abutment 2 (Strength I Load Combination).

2. H-pile material shall be ASTM A572, Grade 50.

3. Estimate of H-piles Required, assuming driven to rock (includes 5 ft per pile as contingency):

   Abutment No. 1, Southbound: 10 - HP 14x89 @ 107 ft
   Abutment No. 1, Northbound: 8 - HP 14x89 @ 83 ft
   Abutment No. 2, Southbound: 6 - HP 14x89 @ 148 ft
   Abutment No. 2, Northbound: 11 - HP 14x89 @ 111 ft

4. All H-piles shall be equipped with a pile tip in accordance with Standard Specification Section 501.048, Prefabricated Pile Tips.

5. Install H-piles to achieve a nominal geotechnical compressive resistance of 647 kips for Abutment 1 and 711 kips for Abutment 2.

6. H-piles shall not be out of position shown be more than 2 inches in any direction. If the proposed H-pile conflicts with an existing pile the Contractor shall immediately notify the Resident before adjusting pile location.

7. The Contractor shall perform and submit four (4) wave equation analyses for driven H-piles, two at each abutment (one Northbound and one Southbound), for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times Fy. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system.

8. The Contractor shall perform four (4) dynamic load tests with 24-hour restrikes, one at each Northbound and Southbound end of Abutments, to confirm the nominal resistance of the H-piles. The required nominal resistance for the pile is the factored axial H-pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic tests shall be performed on the first production H-pile driven at each Northbound and Southbound end of Abutments.

9. For more information and notes on micropiles, see "Micropile Details" Sheet.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1
PILE LAYOUT

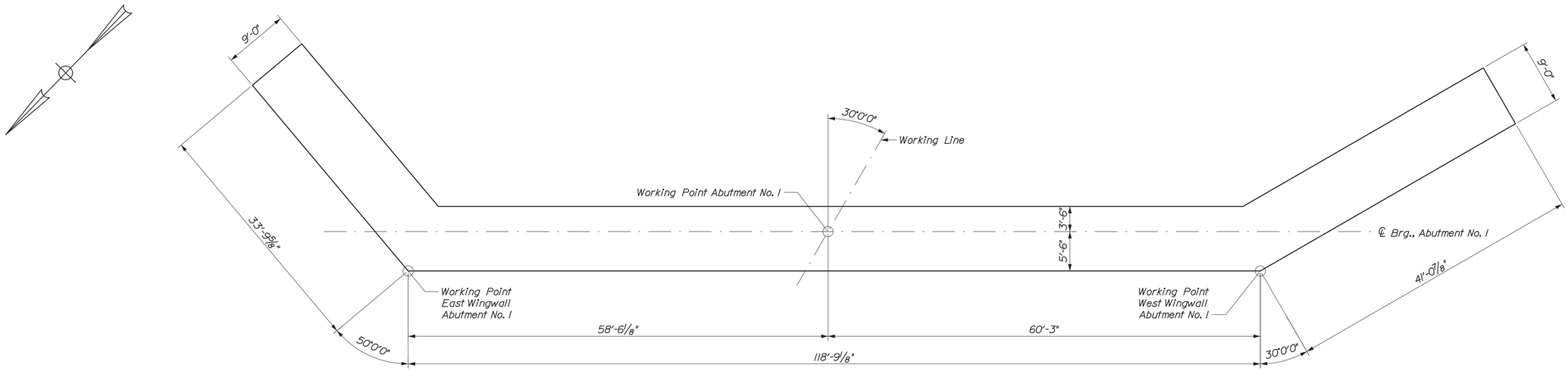
SHEET NUMBER
176
OF 220

Username:

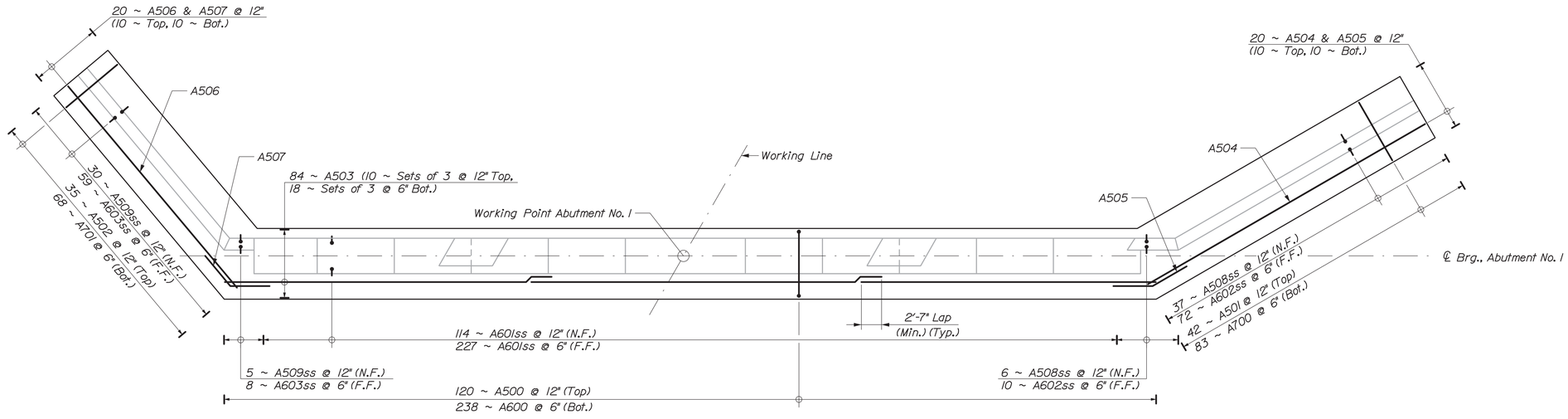
Division:

Date:4/2/2020

Filename: 176_Abutment 1 Pile Layout.dgn



ABUTMENT 1 FOOTING PLAN



ABUTMENT 1 FOOTING PLAN - REINFORCING

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 — BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NWW	TRC	2\20
DESIGN2-DETAILED2	NWW		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1 FOOTING PLAN

SHEET NUMBER

177

OF 220

HNTB

Filename: 177_Abutment 1 Footing Plan.dgn Division: Username: Date:3/3/2020

Filename: 178_Abutment 1 Plan and Elevation.dgn Division: Username: Date:3/3/2020

ABUTMENT NOTES:

1. Reinforcing steel shall have a minimum cover of 2 inches in the walls and 3 inches in the footing unless otherwise noted.

2. Place 4-in. diameter drains in the breastwall and wingwalls at 10-ft maximum spacing. The exact location will be determined by the Resident.

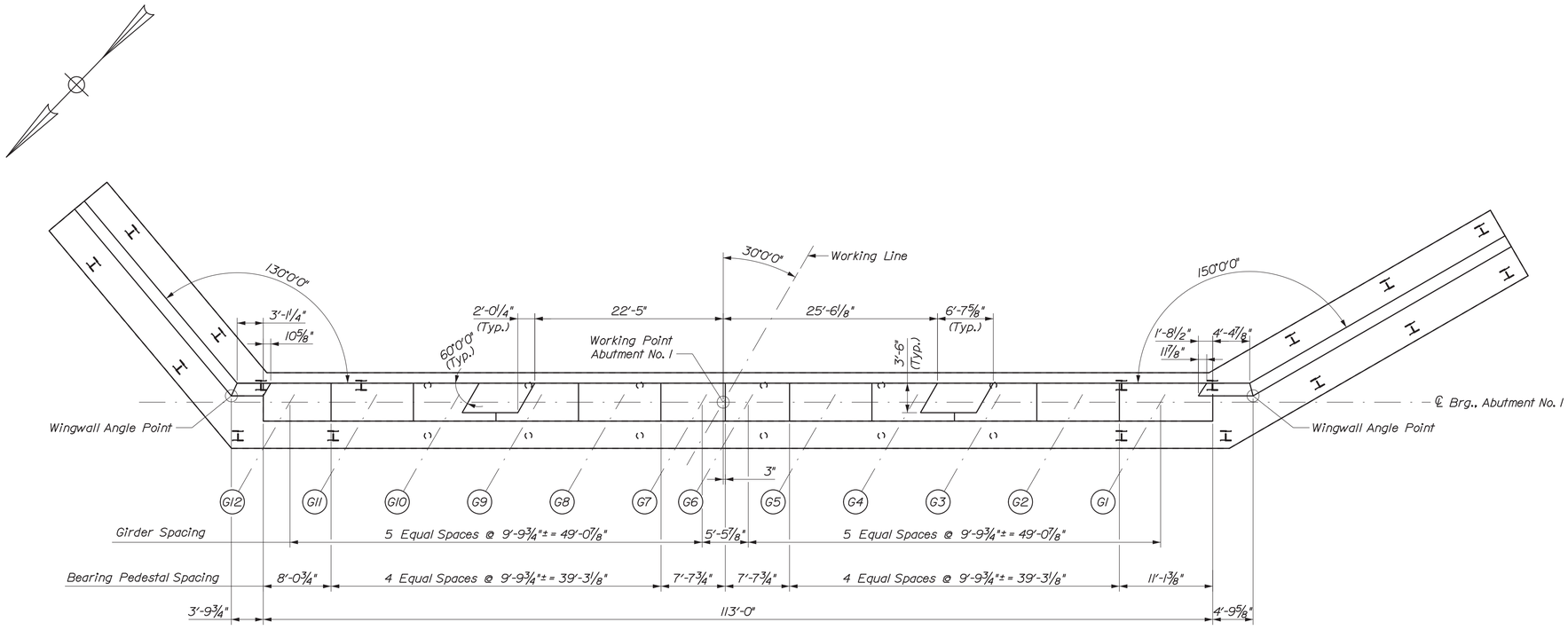
3. Cover joints where waterstops are not required in accordance with Standard Detail 502(01).

4. Construct Drainage Geocomposite behind the abutments and wingwalls in accordance with Special Provision Section 620 Geotextiles - Drainage Geocomposite.

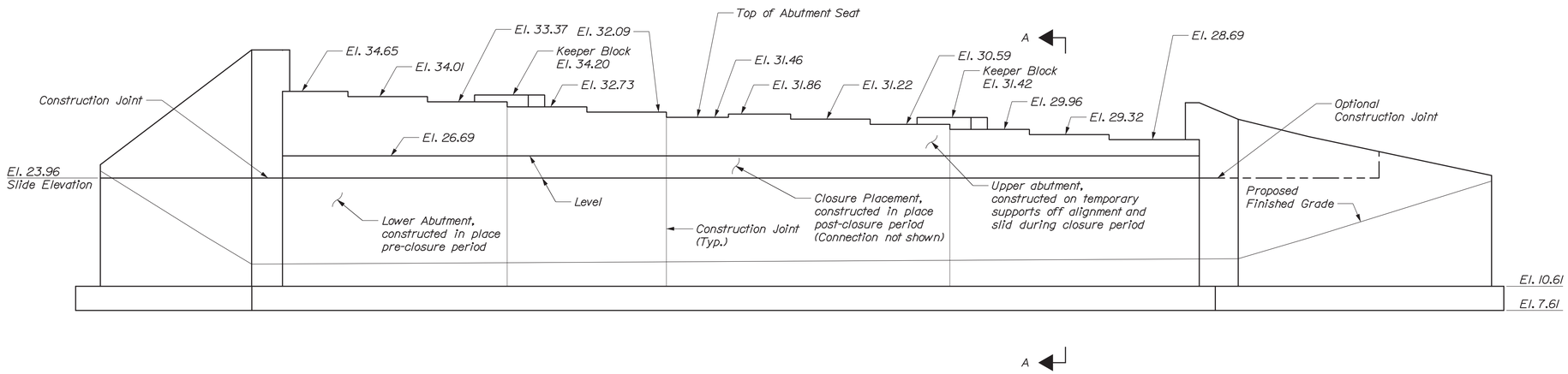
5. All elevations are provided at centerline of bearing unless otherwise noted.

6. For Abutment 1 wingwall geometry, see "Abutment 1 Wingwall Geometry" Sheet.

7. Closure pour concrete may be substituted with Non-shrink grout or Self Consolidated Concrete with a non-shrink additive as approved by the Resident.

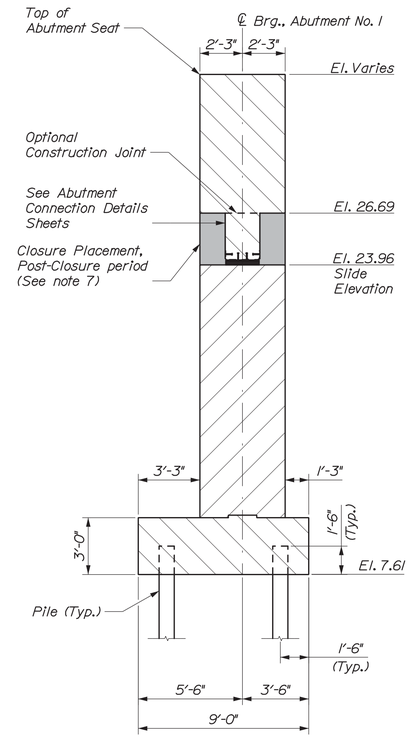


ABUTMENT 1 PLAN



ABUTMENT 1 ELEVATION

(Piles not shown)



SECTION A-A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
D. EATON		
PROJ. MANAGER	EJP	2\20
DESIGN-DETAILED	EJP	2\20
CHECKED-REVIEWED	KEB	
DESIGN2-DETAILED2	TRC	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1 PLAN AND ELEVATION

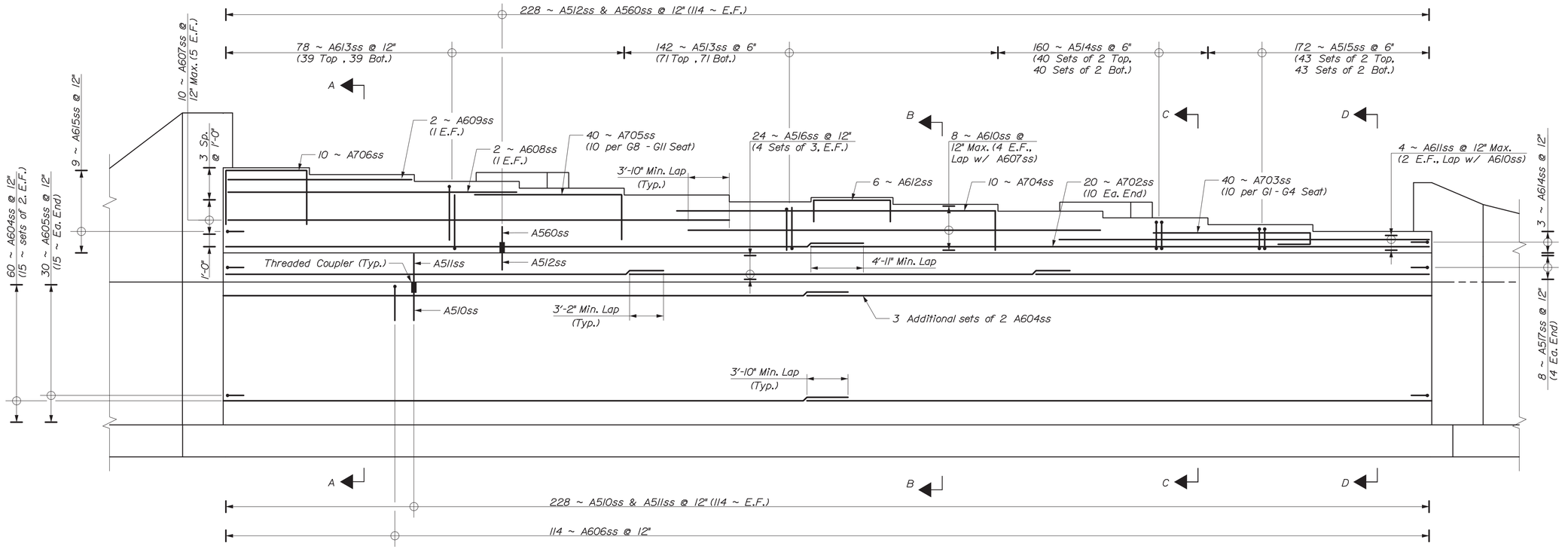
SHEET NUMBER

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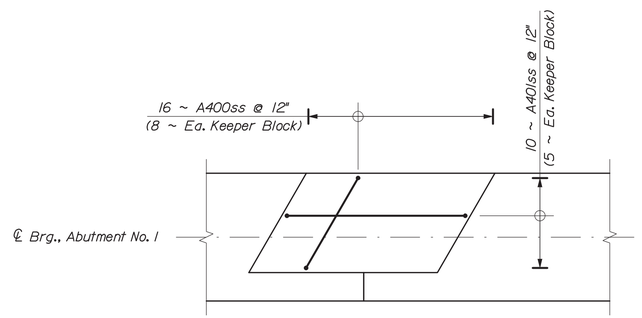
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Username:
Date:3/3/2020
Division:
Filename: 179_Abutment 1 Reinforcing.dgn



ABUTMENT 1 ELEVATION - REINFORCING

(Footing and Wingwall Reinforcing not shown for clarity)



KEEPER BLOCK PLAN

NOTE:
For sections A thru D see "Abutment 1 Reinforcing Sections" sheet.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 — BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	T.JP	ERB 2\20
CHECKED-REVIEWED	KEB	TRC 2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

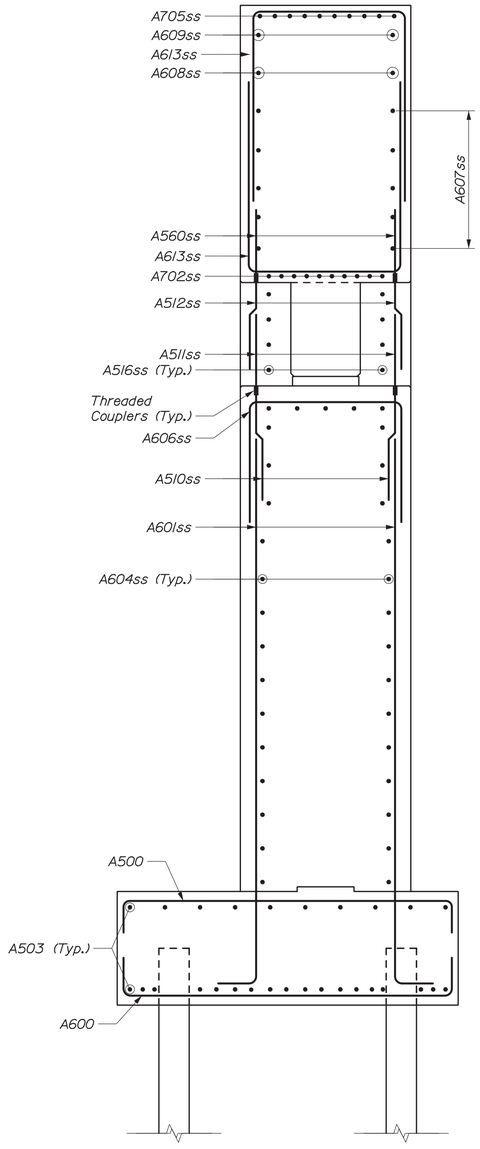
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INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

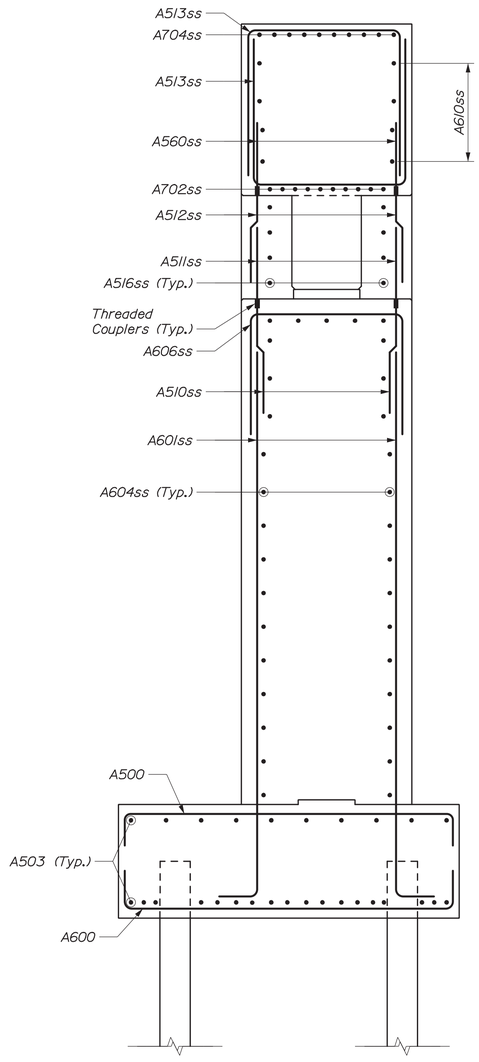
ABUTMENT 1 REINFORCING

SHEET NUMBER
179
OF 220

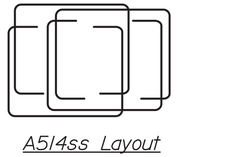
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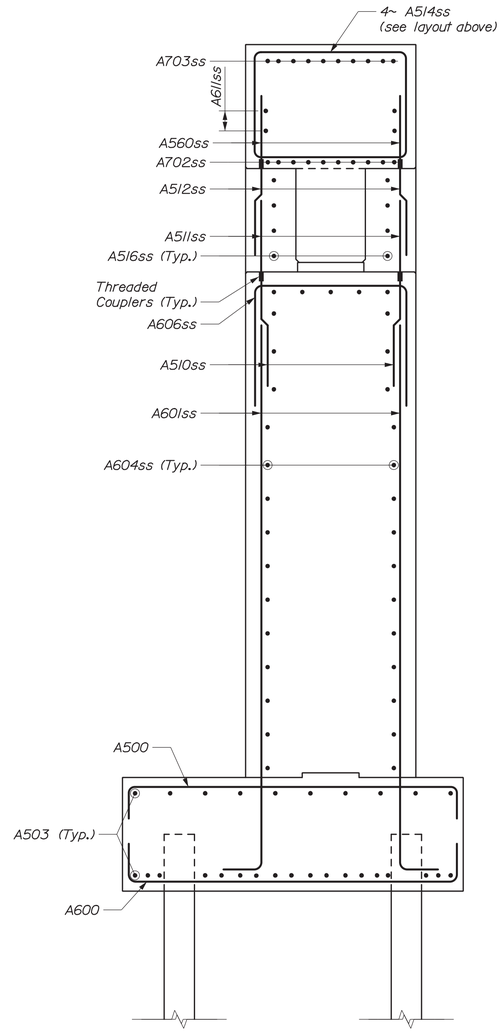
SECTION A-A



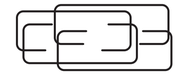
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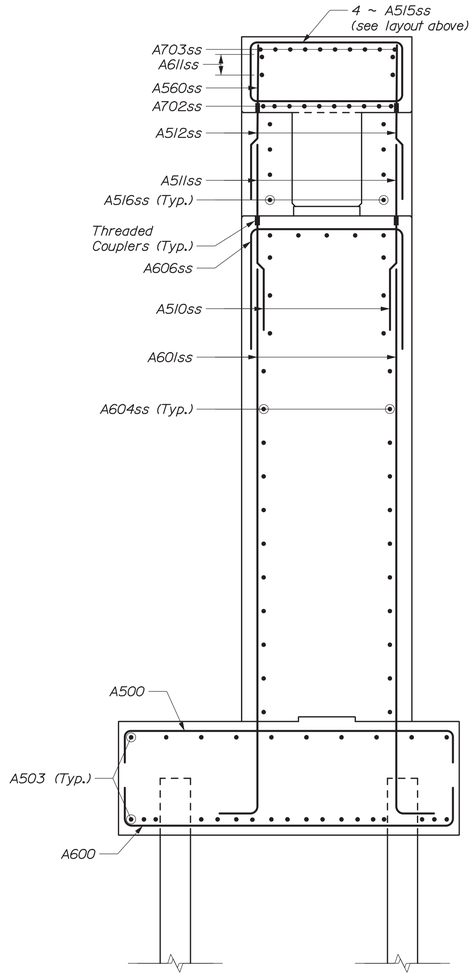
A514ss Layout



SECTION C-C



A515ss Layout



SECTION D-D

NOTE:
Reinforcing in the slide shoe not shown for clarity, refer to "Abutment Connection Details IV" sheet.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	TJP	ERB	2\20
CHECKED-REVIEWED	KEB	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

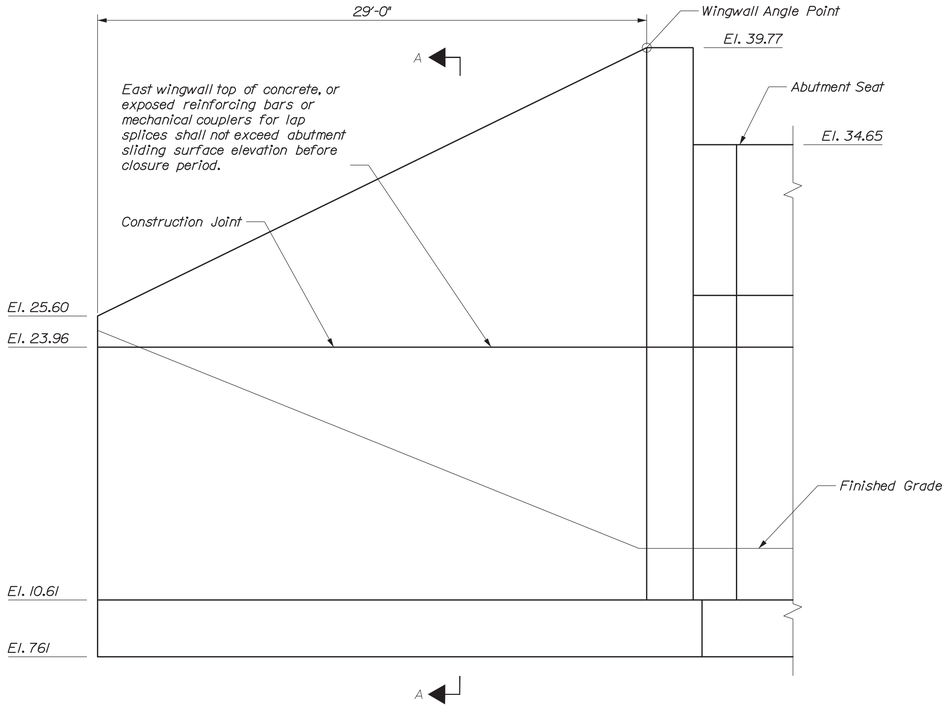
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1 REINFORCING SECTIONS

SHEET NUMBER

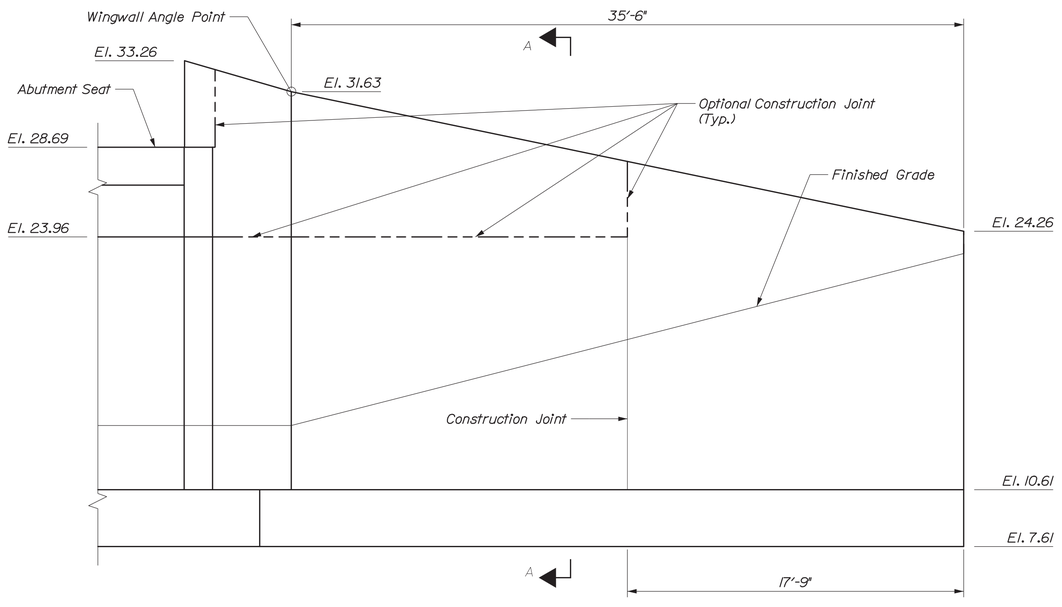
180

OF 220



ABUTMENT 1 EAST WINGWALL ELEVATION

(Piles not shown)



ABUTMENT 1 WEST WINGWALL ELEVATION

(Piles not shown)

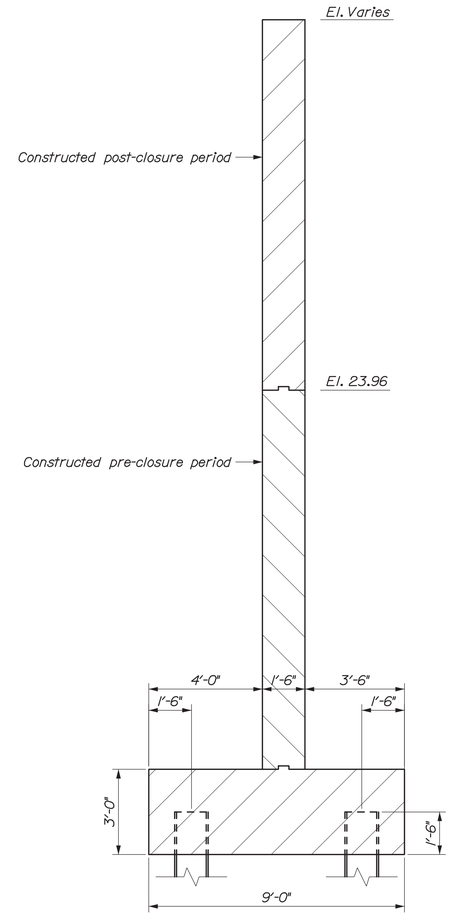
NOTES:

1. Contractor may precast any portion of wingwalls. All connections between precast wingwall components shall be made with grouted splice couplers that develop 125% of the full tension strength of the spliced reinforcing bars.

2. For wingwall backfill details, see "Construction Sections I" through "Construction Sections VIII" Sheets.

3. Abutment west wingwall phasing determined by Contractor.

4. West wingwall construction joints may have protruding bars. Mechanical couplers may be used instead, at no additional cost to the Department.



Section A-A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	T.P	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1
WINGWALL GEOMETRY

SHEET NUMBER

181

OF 220

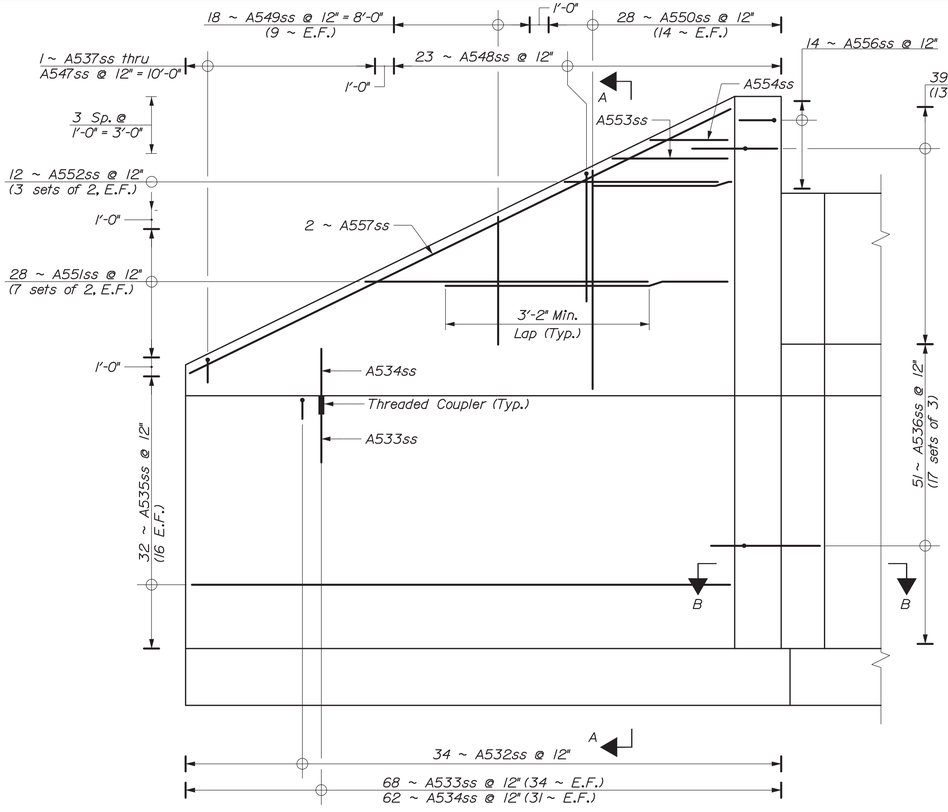
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Username:

Date:3/3/2020

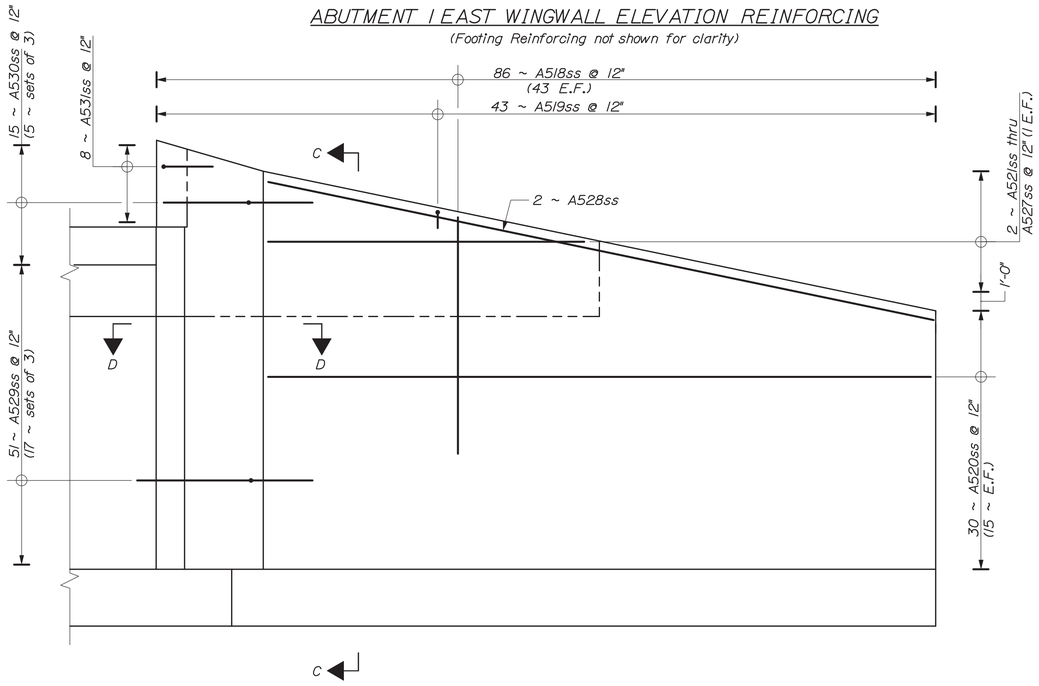
Division:

Filename: 181_Abutment 1 Wingwall Geometry.dgn



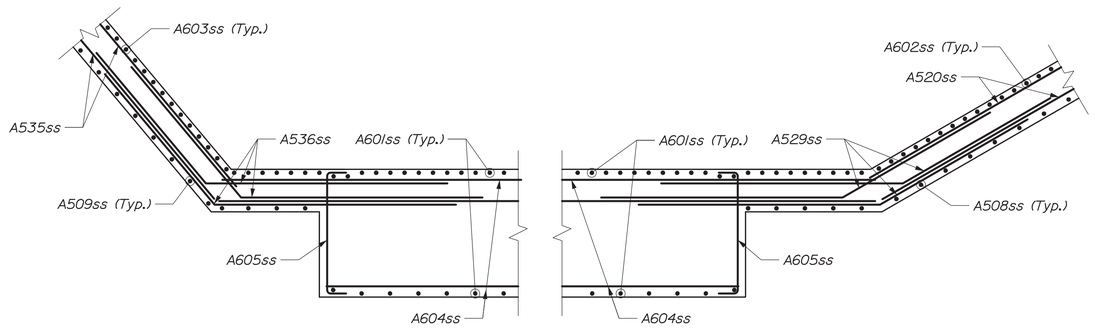
ABUTMENT 1 EAST WINGWALL ELEVATION REINFORCING

(Footing Reinforcing not shown for clarity)



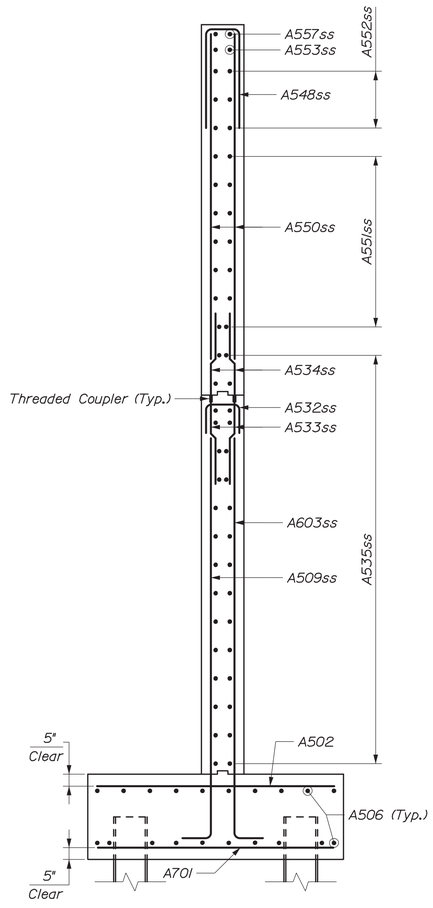
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(Footing Reinforcing not shown for clarity)

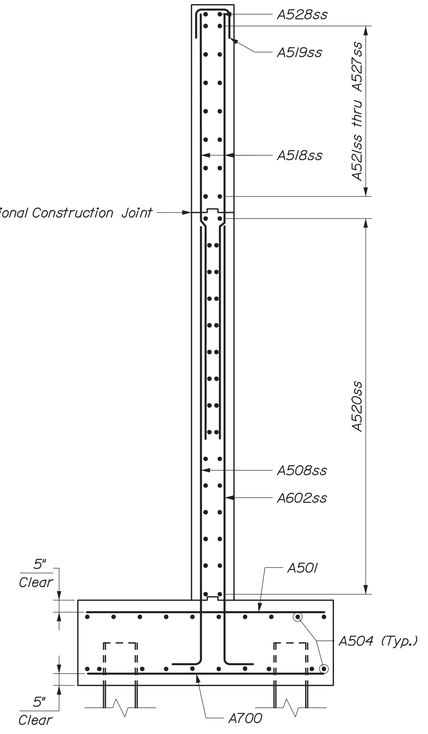


SECTION B-B

SECTION D-D



SECTION A-A



SECTION C-C

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 1
WINGWALL REINFORCING

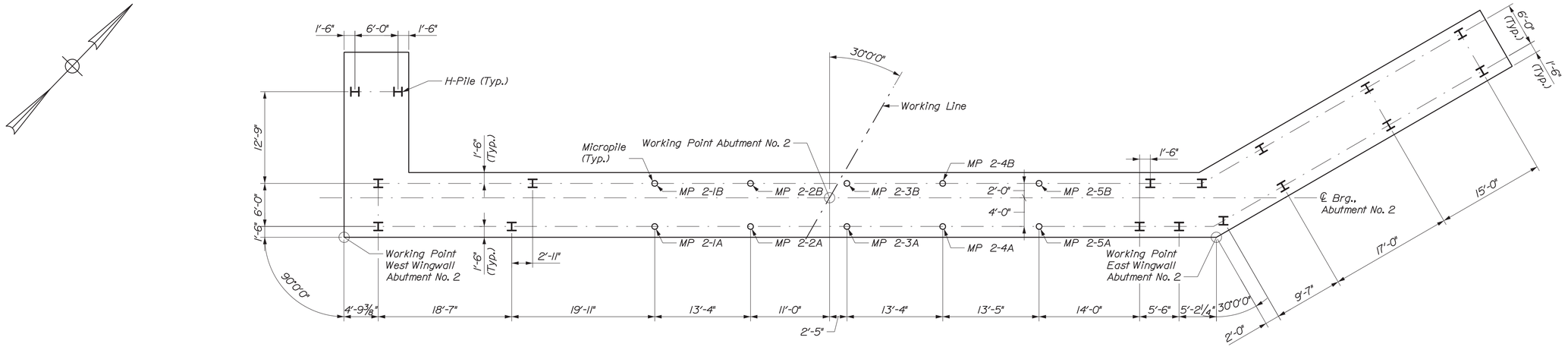
SHEET NUMBER

182

OF 220

HNTB

Filename: 182_Abutment 1 Wingwall Reinforcing.dgn Division: Username: Date:3/3/2020



ABUTMENT 2 PILE LAYOUT

NOTES:

1. For H-pile notes, see "Abutment 1 Pile Layout" Sheet.

2. For more information and notes on micropiles, see "Micropile Details" Sheet.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	T.P	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

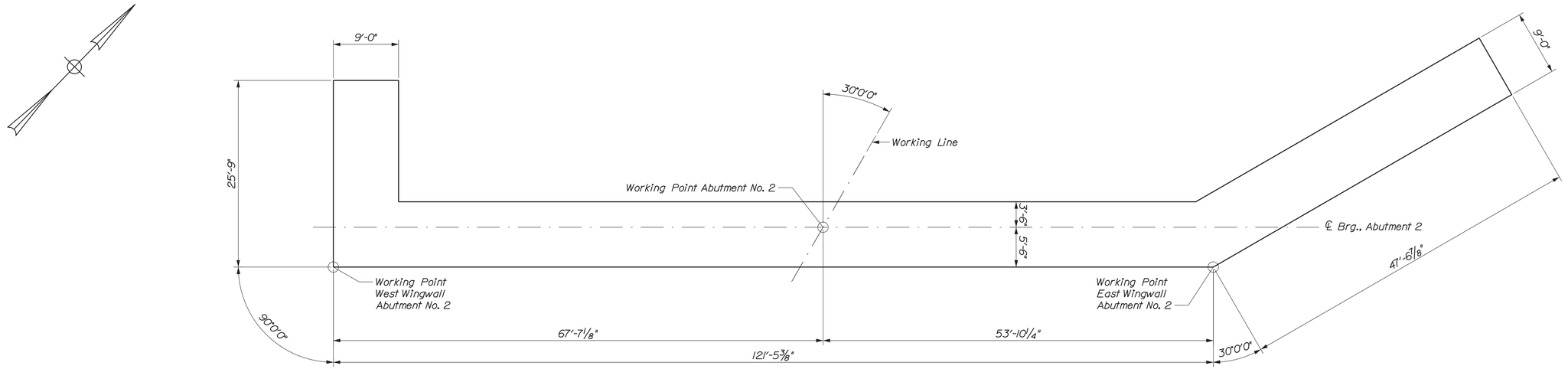
ABUTMENT 2
PILE LAYOUT

SHEET NUMBER

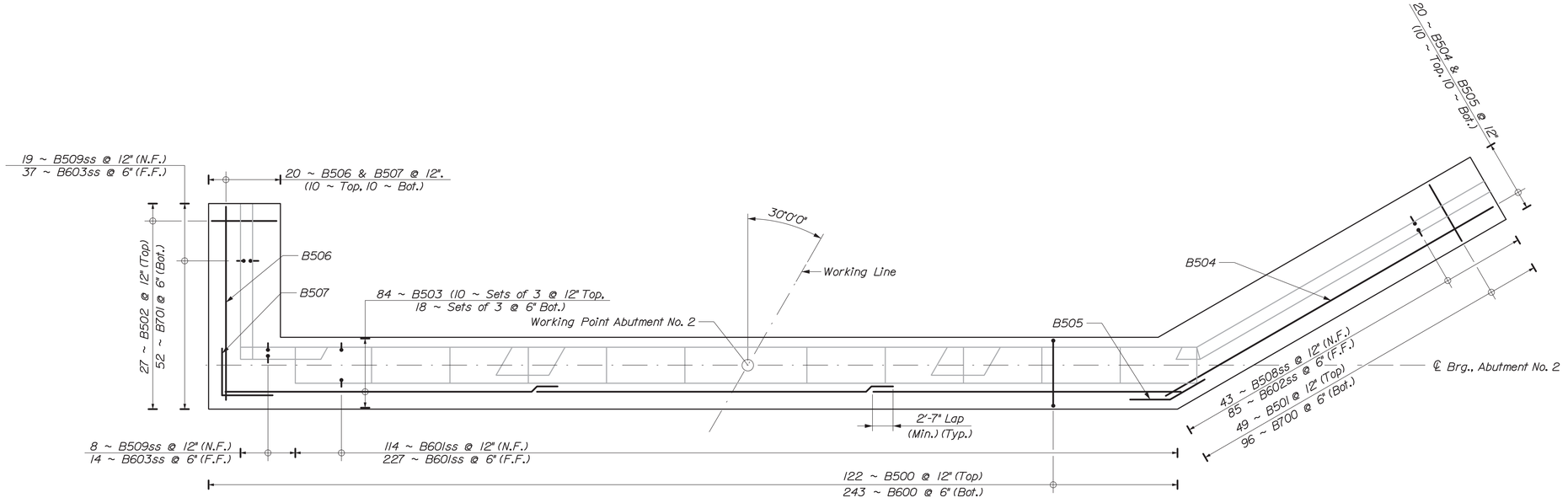
183

OF 220

Filename: 183_Abutment 2 Pile Layout.dgn Division: Username: Date:3/3/2020



ABUTMENT 2 FOOTING PLAN



ABUTMENT 2 FOOTING PLAN - REINFORCING

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 2
FOOTING PLAN

SHEET NUMBER

184

OF 220

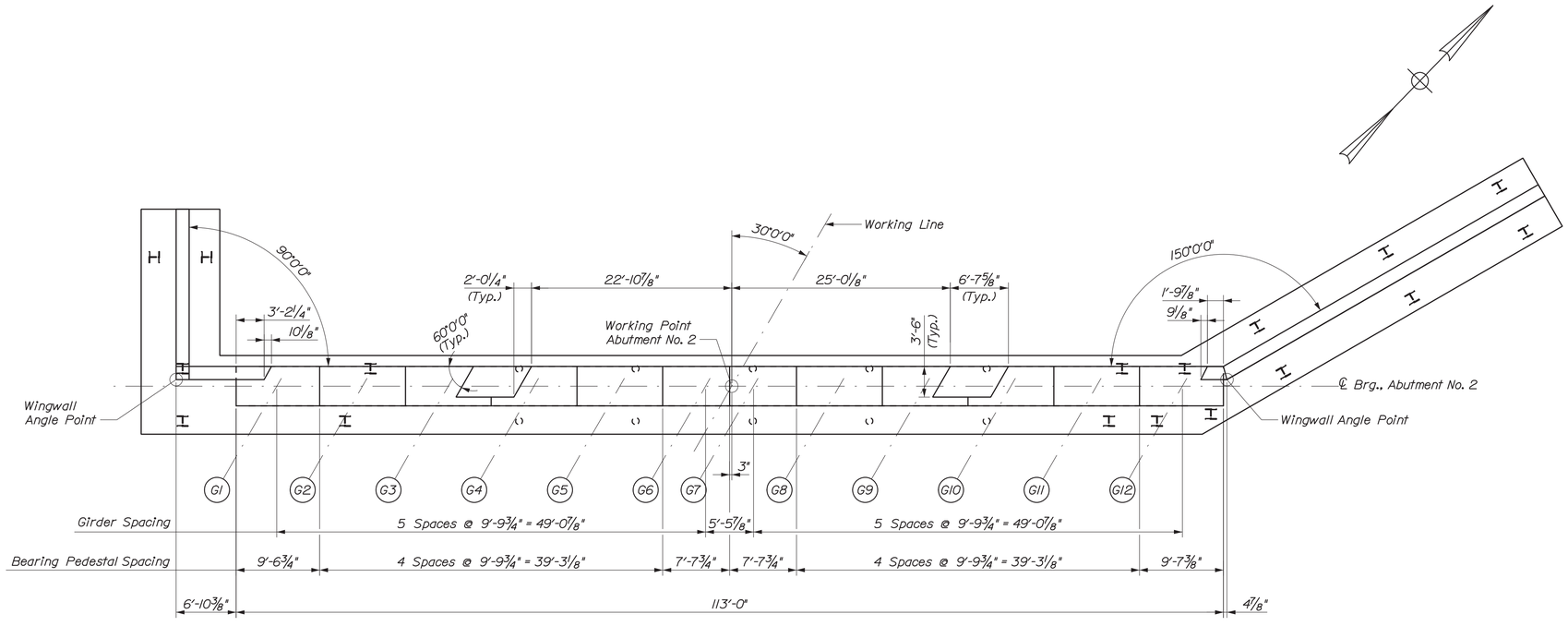
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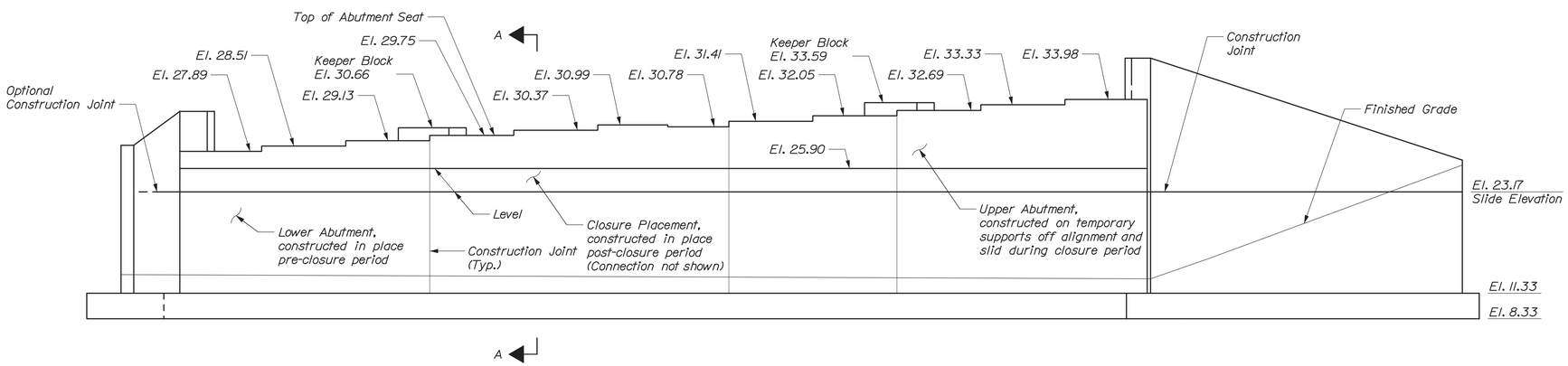
Date:3/3/2020

Division:

Filename: 184_Abutment 2 Footing Plan.dgn



ABUTMENT 2 PLAN

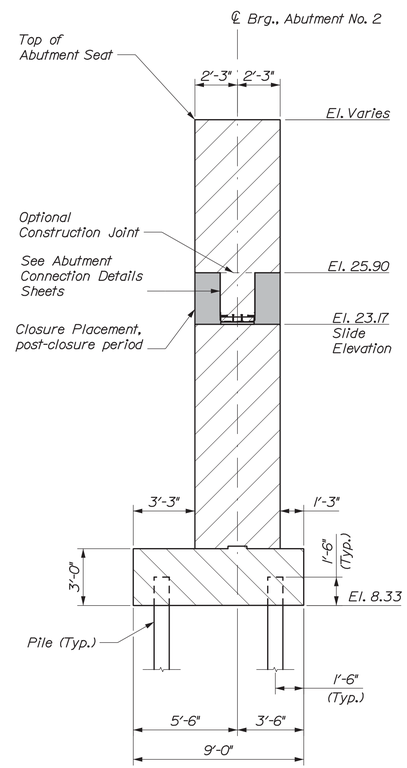


ABUTMENT 2 ELEVATION
(Piles not shown)

ABUTMENT NOTES:

1. For abutment notes, see "Abutment 1 Plan and Elevation" Sheet.

2. For Abutment 2 wingwall geometry, see "Abutment 2 Wingwall Geometry" Sheet



SECTION A-A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	SIGNATURE	P.E. NUMBER	DATE
D. EATON			
PROJ. MANAGER			
DESIGN-DETAILED	TJP		
CHECKED-REVIEWED	KEB		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			

BY	DATE
ERB	2\20
TRC	2\20
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 2 PLAN AND ELEVATION

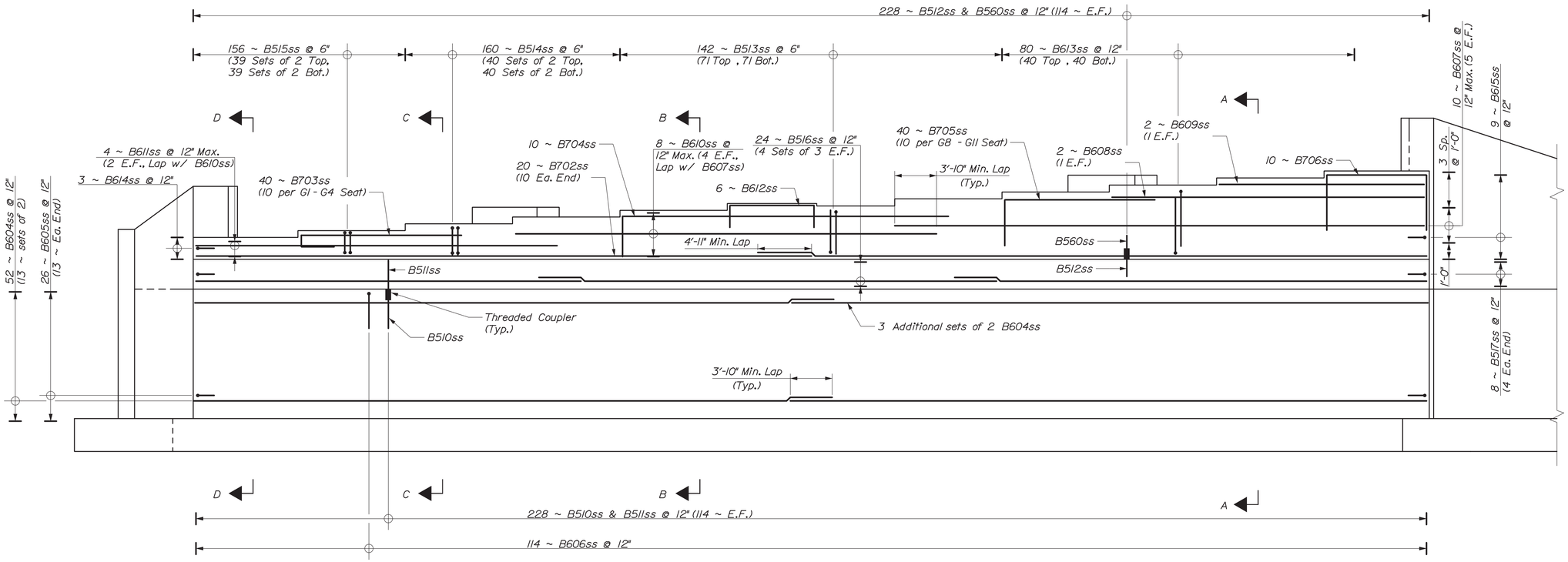
SHEET NUMBER

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OF 220

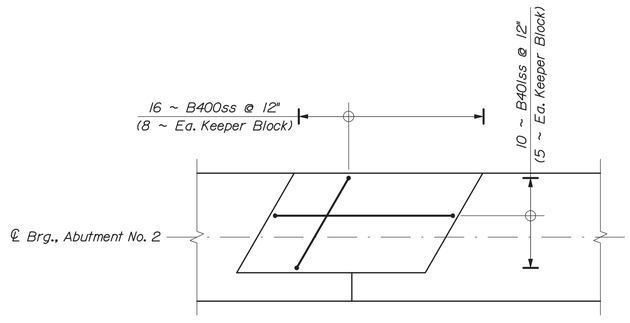
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Filename: 185_Abutment 2 Plan and Elevation.dgn Username: Division: Date:3/3/2020



ABUTMENT 2 ELEVATION - REINFORCING

(Footing and Wingwall Reinforcing not shown for clarity)



KEEPER BLOCK PLAN

NOTES:

1. For sections A thru D see "Abutment 2 Reinforcing Sections" sheet.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 — BRIDGE PLANS

	BY	DATE
D. EATON		
PROJ. MANAGER	TJP	2.'20
DESIGN-DETAILED	ERB	2.'20
CHECKED-REVIEWED	TRC	
DESIGN2-DETAILED2	KEB	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND — CUMBERLAND COUNTY

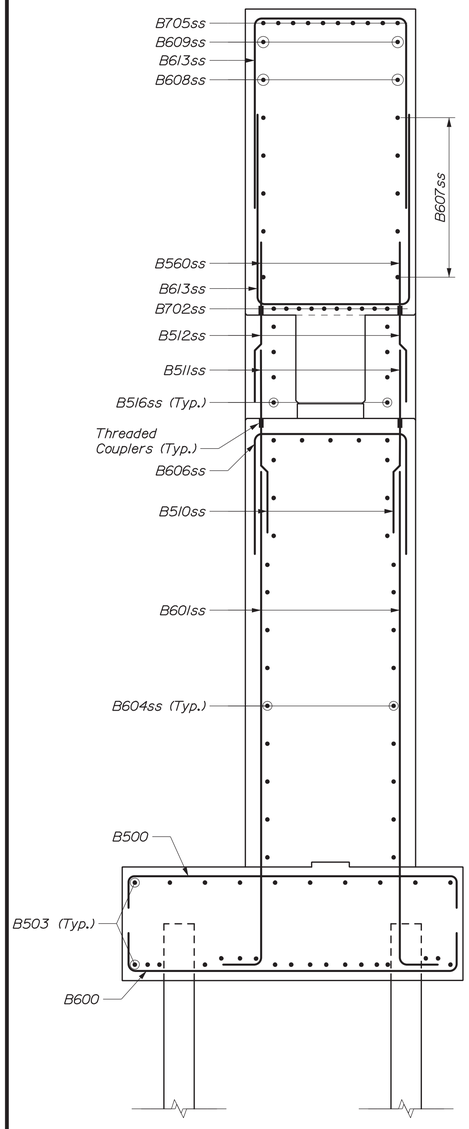
ABUTMENT 2 REINFORCING

SHEET NUMBER

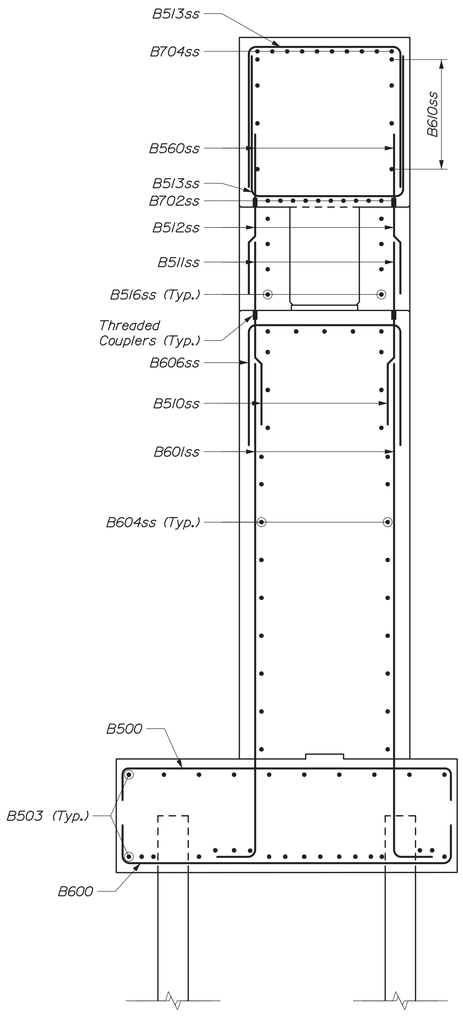
186

OF 220

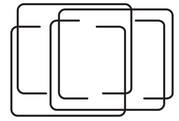
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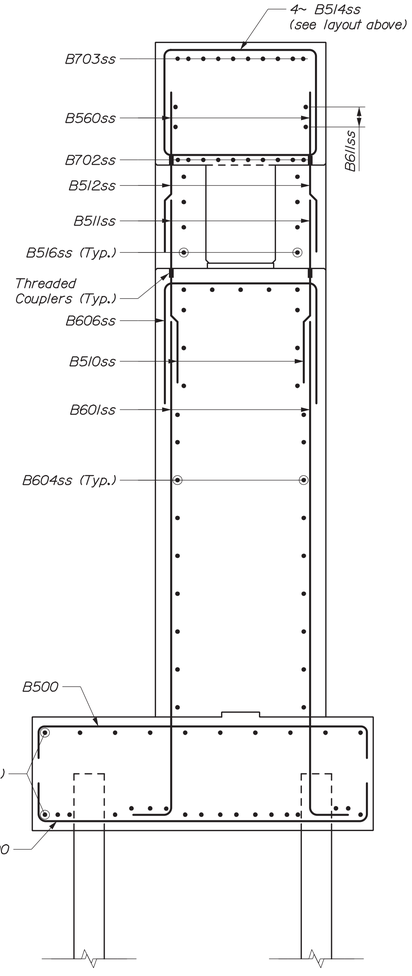
SECTION A-A



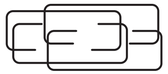
SECTION B-B



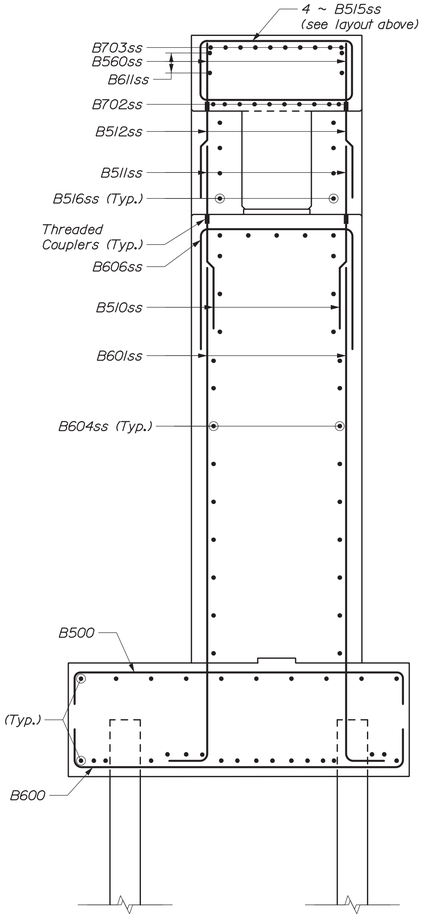
B514ss Layout



SECTION C-C



B515ss Layout



SECTION D-D

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 2
REINFORCING SECTIONS

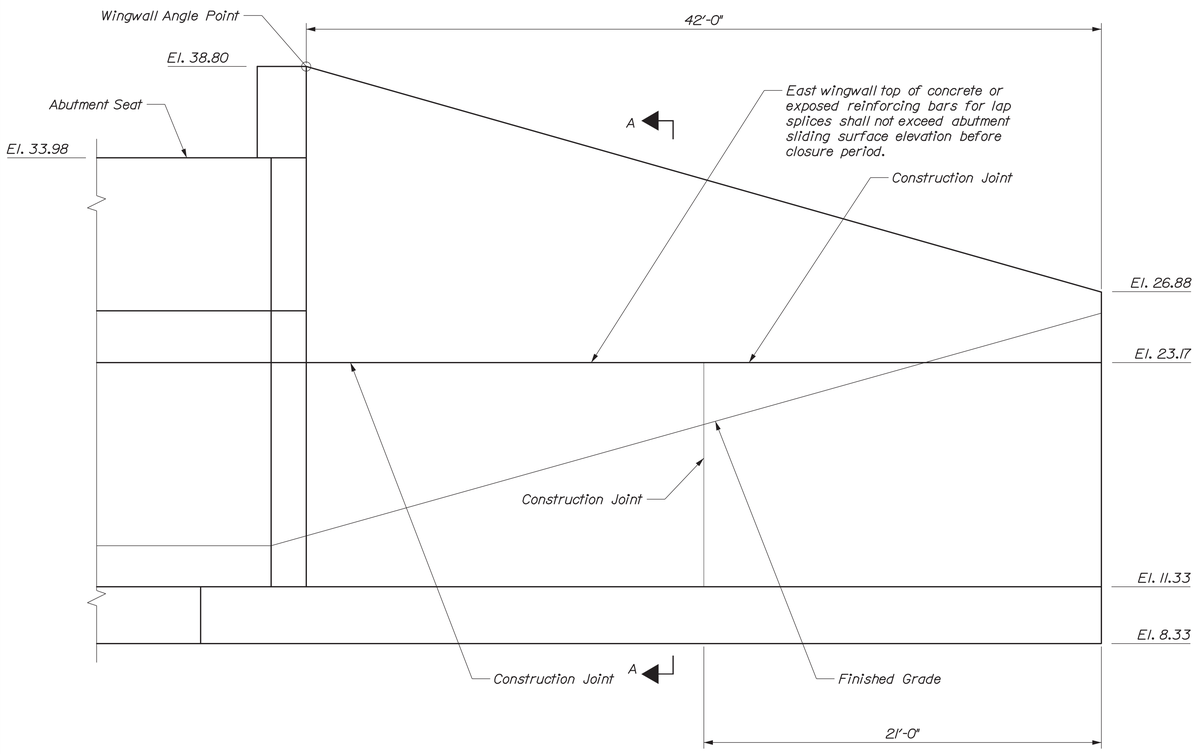
SHEET NUMBER

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OF 220

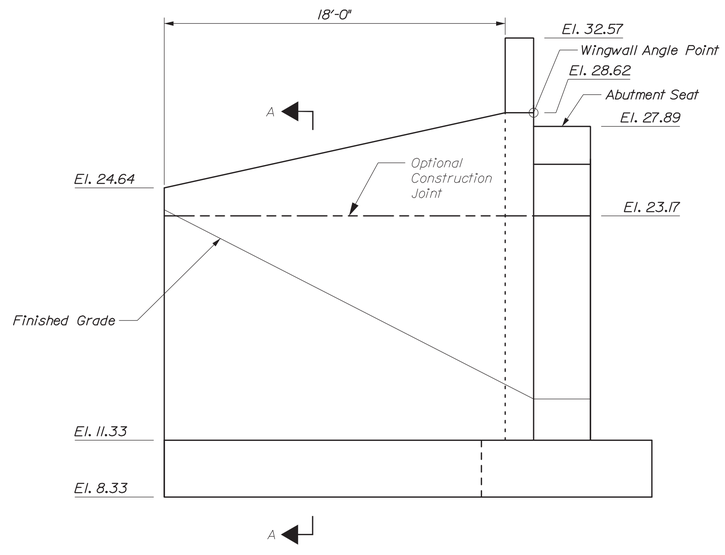
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Filename: 187_Abutment 2 Reinforcing Sections.dgn Division: Username: Date:3/3/2020



ABUTMENT 2 EAST WINGWALL ELEVATION

(Piles not shown)

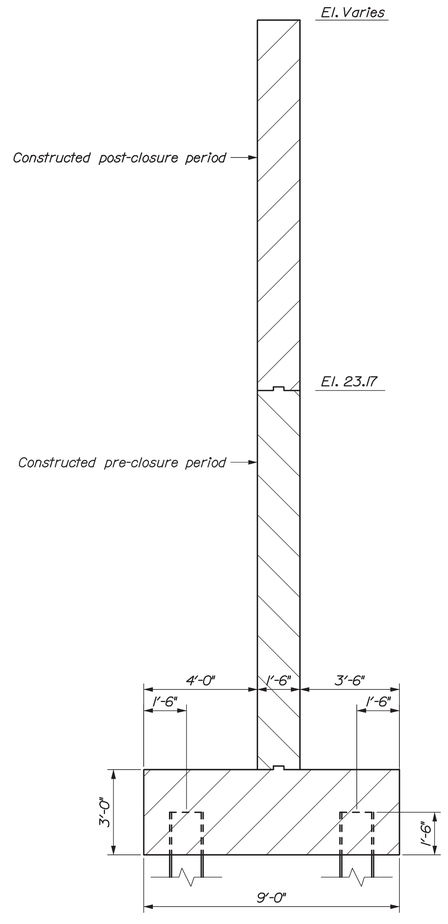


ABUTMENT 2 WEST WINGWALL ELEVATION

(Piles not shown)

NOTES:

1. For wingwall typical sections and wingwall notes, see Abutment I Wingwall Geometry Sheet.



Section A-A

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W	ERB	2\20
CHECKED-REVIEWED	T.P	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 2
WINGWALL GEOMETRY

SHEET NUMBER

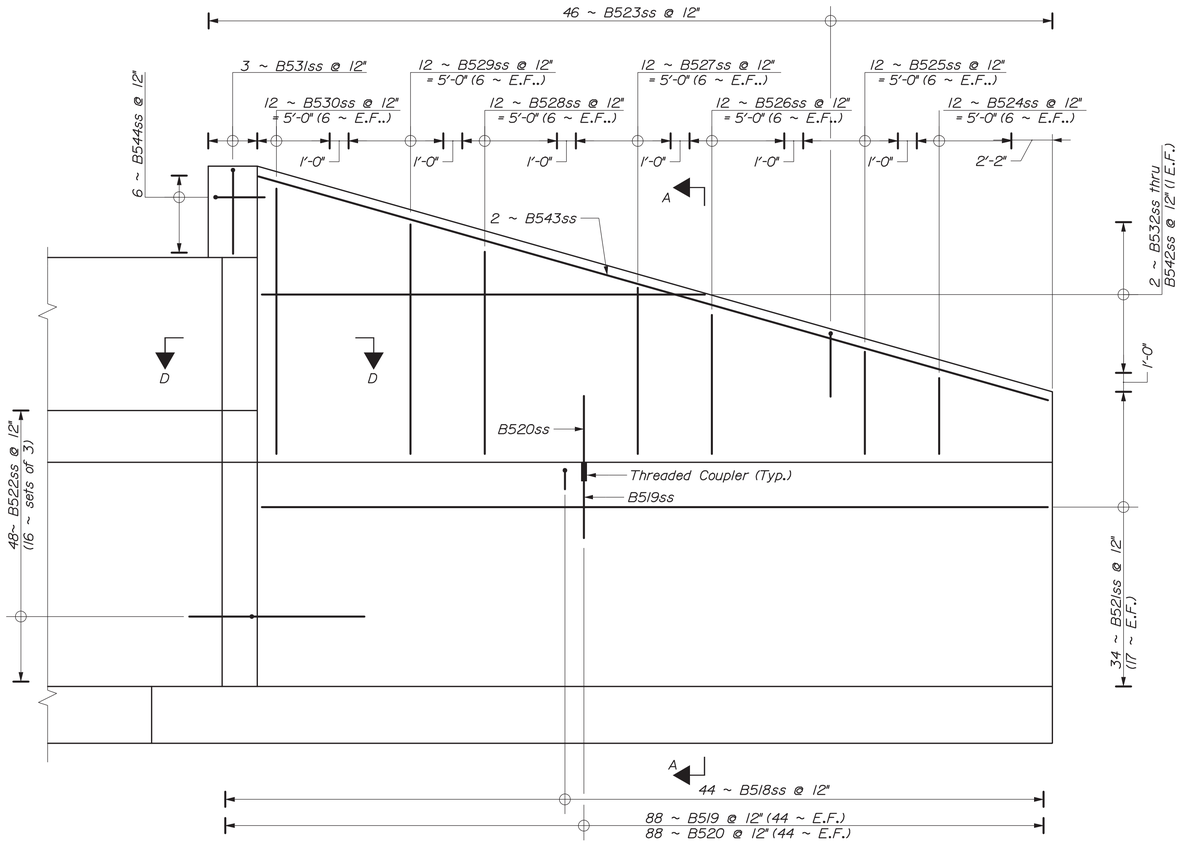
188

OF 220

Username:

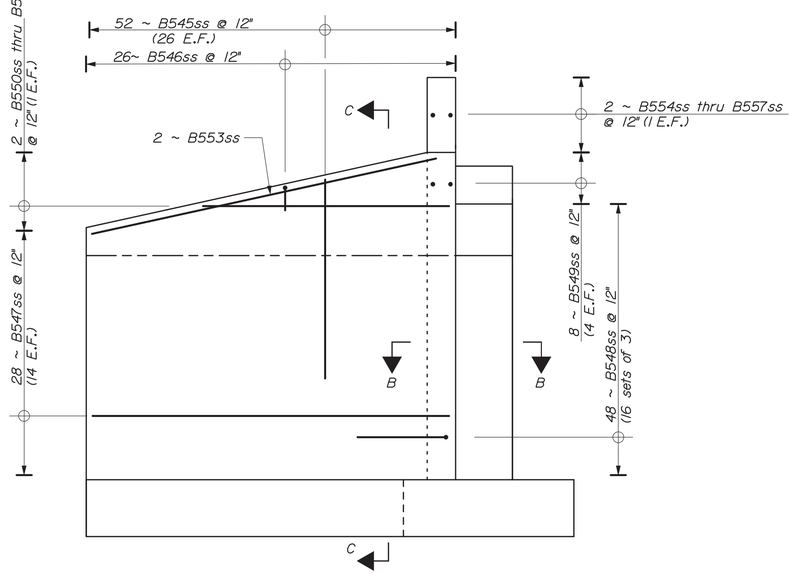
Date:3/3/2020

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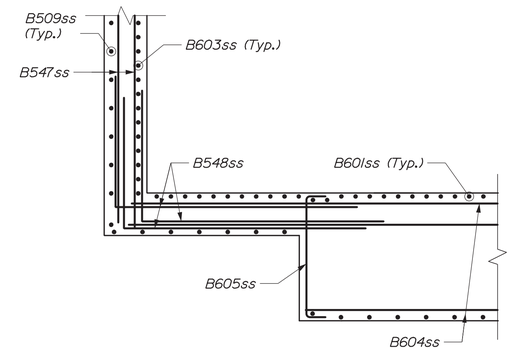
ABUTMENT 2 EAST WINGWALL ELEVATION REINFORCING

(Footing Reinforcing not shown for clarity)

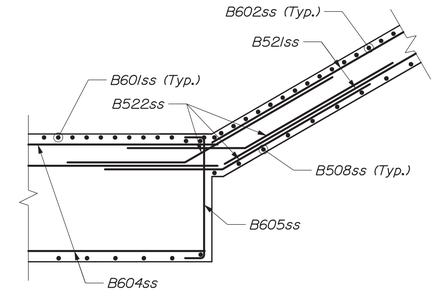


ABUTMENT 2 WEST WINGWALL ELEVATION REINFORCING

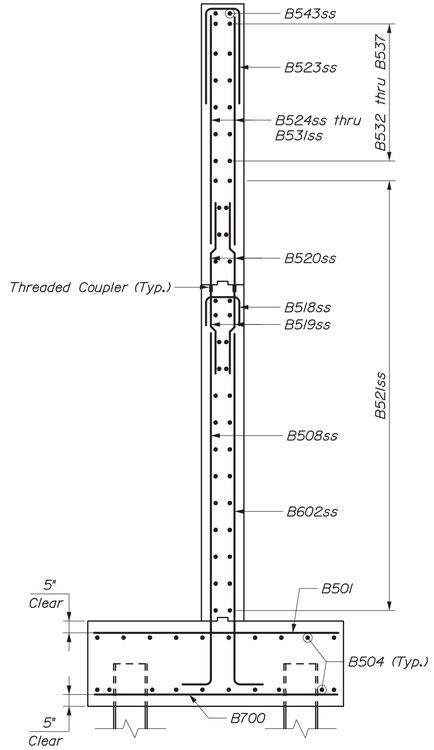
(Footing Reinforcing not shown for clarity)



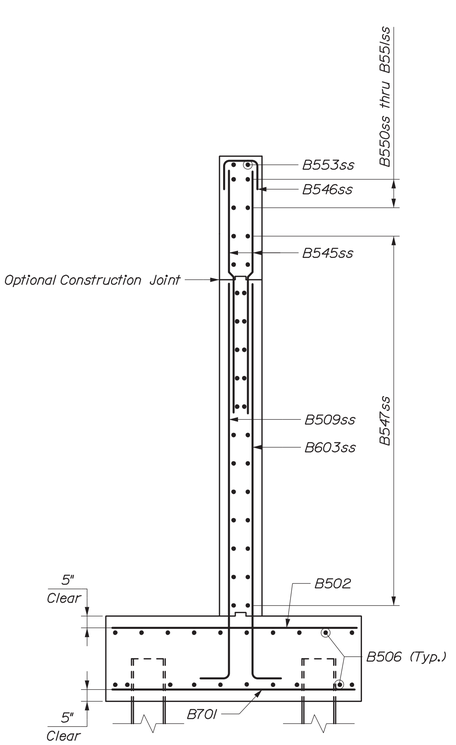
SECTION B-B



SECTION D-D



SECTION A-A



SECTION C-C

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	TJP	2\20
CHECKED-REVIEWED	KEB	2\20
DESIGN2-DETAILED2	TRC	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT 2 WINGWALL REINFORCING

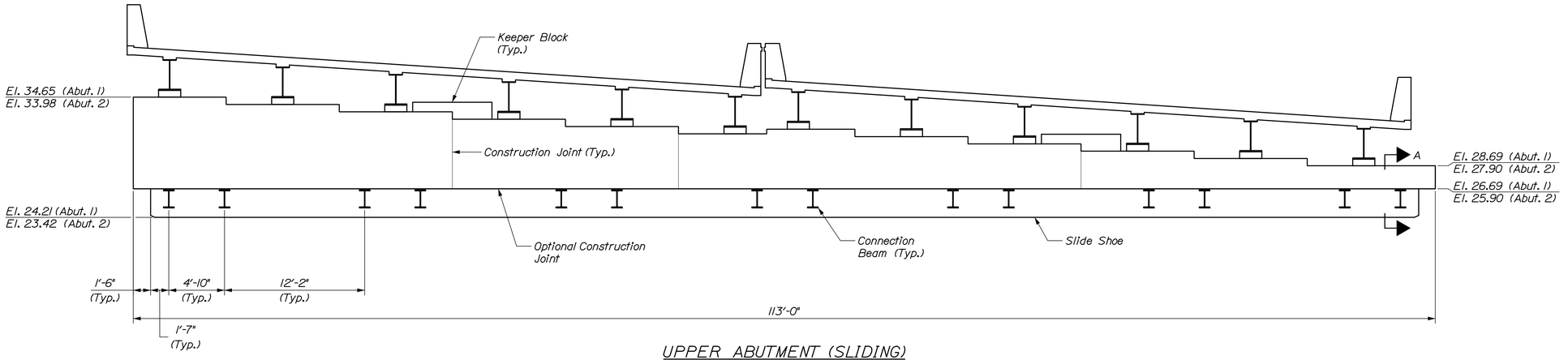
SHEET NUMBER

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OF 220

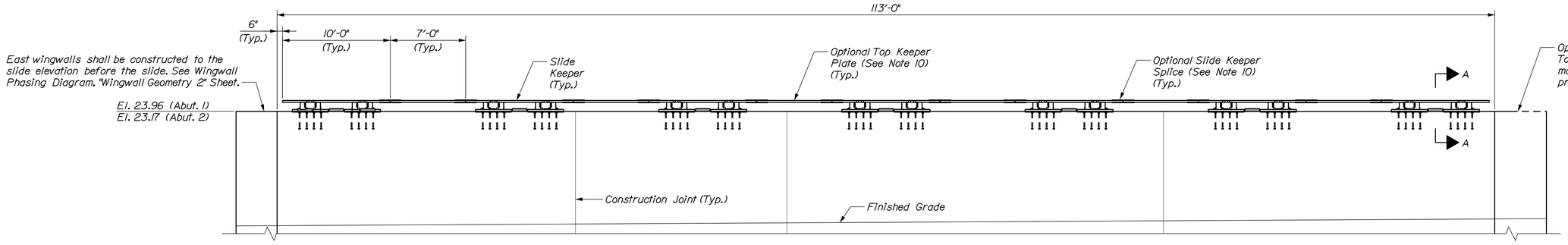
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Filename: 189_Abutment 2 Wingwall Reinforcing.dgn Division: Username: Date:3/3/2020



UPPER ABUTMENT (SLIDING)

(Abutment 1 shown, Abutment 2 opposite hand)



LOWER ABUTMENT (FIXED)

(Abutment 1 shown, Abutment 2 opposite hand)

ABUTMENT CONNECTION NOTES:

1. All components for sliding the bridge, including slide bearings, stainless steel slide plates, connection beams, and slide keepers shall be paid for under lump sum Item 524.302, Bridge Movement System.

2. All rolled and plate steel components in the abutment shall conform to AASHTO M270 grade 50 and shall be hot dip galvanized. Fabrication and coating shall be in conformance with Standard Specification 504 and 506 respectively.

3. The faying surfaces between the Connection Beam and the Slide Keeper shall meet the requirements of an AASHTO Class B Surface for slip.

4. Rolled steel shapes for Connection Beams may be replaced with built-up plate sections matching the nominal rolled member depth, flange plate width, flange plate depth, and web thicknesses, rounded up to the nearest 1/8".

5. The Contractor shall drill 2 holes through the webs at each end of each Connection Beam web to allow for the placement of continuous transverse reinforcement. The holes shall be no larger than 1 1/2" diameter and located entirely within the flat portion of the web (not within the web to flange radius).

6. All Slide Keepers shall be set level to a tolerance of 1/16" over the 13" width of the Slide Keeper Top Plate.

7. The final design and details of the slide bearing system shall be the responsibility of the Contractor and shall be included in the slide system submittal. The plans detail the use of elastomeric slide bearings with a stainless steel lining on the slide shoe. The slide bearing details shown may be used, without the need for a bearing submittal by the Contractor, provided bearing fabrication is completed using 100% polychloroprene (neoprene) with durometer hardness of 50 and a shear modulus of the elastomer between 100 psi and 130 psi. The final design and detailing of alternate slide bearing systems, and required revisions to the abutment seat or slide shoe geometry, shall be the responsibility of the Contractor. Alternate bearing designs shall be capable of supporting a minimum service load of 260 kips per pair of connection beams.

8. The Contractor shall install shim packs of 5"x5" plate washers between the Connection Beam and Slide Keeper at each bolt location. The maximum gap between the Connection Beam and the Slide Keeper after shim installation, and prior to bolting, shall be 1/16". The quantity and thickness of shim plates shall be determined by the Contractor. Shim plates may be uncoated.

9. Following completion of the lateral slide, and before opening the bridge to live load, the Contractor shall complete the 28 bolted continuity connections per abutment located between the Connection Beams and Slide Keepers. The bolting sequence shall consist of 1) installing shim packs at all bolt locations, 2) installing bolts finger tight, and 3) torquing bolts in accordance with Standard Specification 504. A minimum of three bolts per continuity connection shall be installed and torqued prior to opening the bridge to live load. All remaining bolts shall be installed within 5 calendar days of opening the bridge to traffic, and before casting the abutment closure placement.

10. At the Contractor's option the Slide Keeper Extensions and Slide Keeper Splice Plates may be omitted in their entirety. The proposed details for the slide keeper extensions and splice plates may be modified by the Contractor. If the Slide Keeper Extensions are omitted the corners of the Slide Keeper Top Plate may be beveled or radiused to minimize snagging potential. No other changes to the Slide Keeper assemblies, except as noted on the plans, will be allowed without approval.

11. The slide keeper layout shown on the plans provides 1 1/4" clearance between each face of the slide shoe and the adjacent slide keeper. At the Contractors option, the Slide Keeper Top Plate may be increased in width to reduce clearance to the Slide Shoe. Any modifications to the Slide Keeper Top Plate shall be noted in the Contractor's working drawings.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	9/20
CHECKED-REVIEWED	JDW	9/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

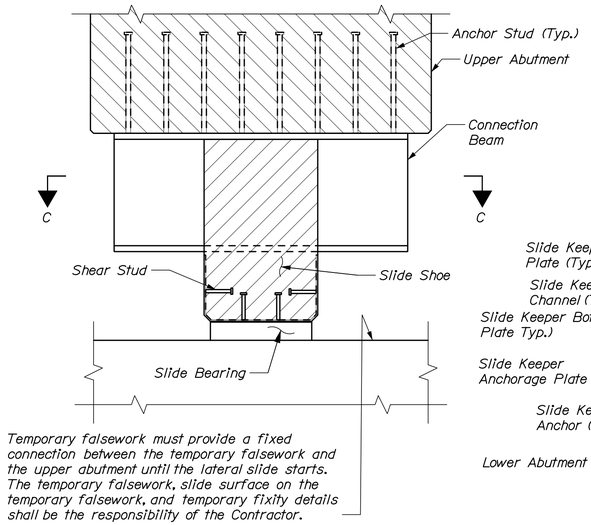
ABUTMENT CONNECTION DETAILS 1

SHEET NUMBER

190

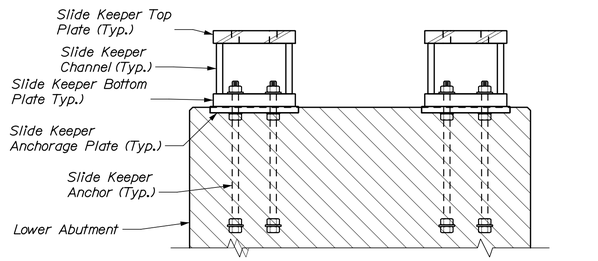
OF 220

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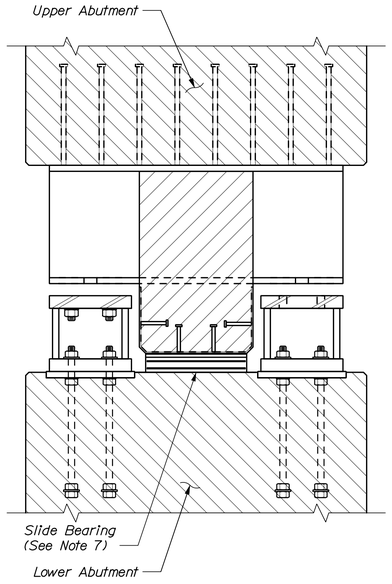
SECTION A-A

(Upper Abutment, Pre-Closure Period)



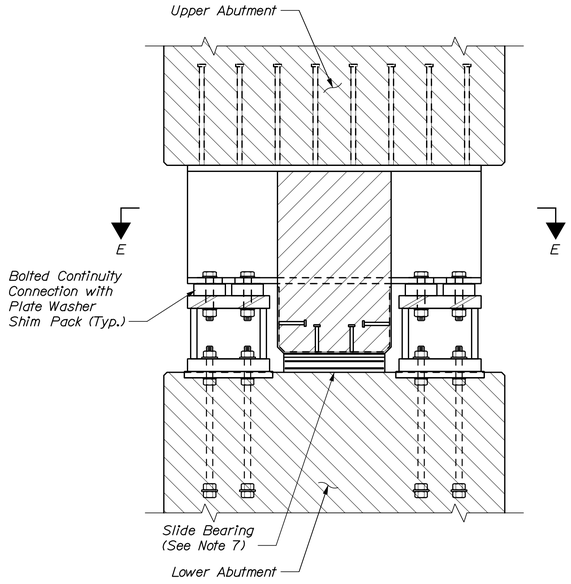
SECTION A-A

(Lower Abutment Pre-Closure Period)



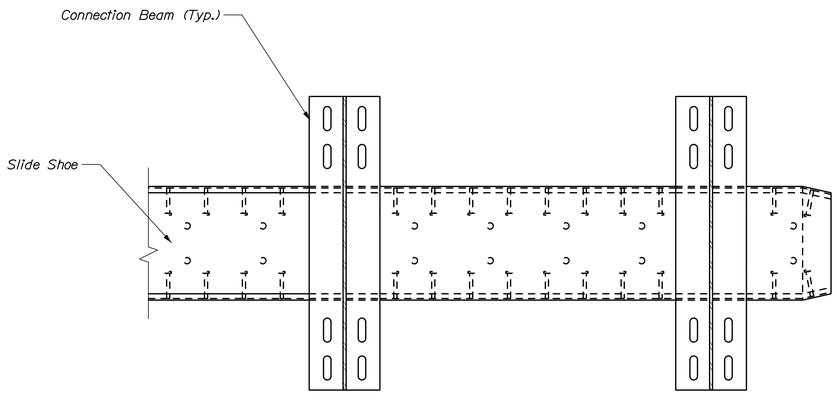
SECTION A-A

(During Slide)

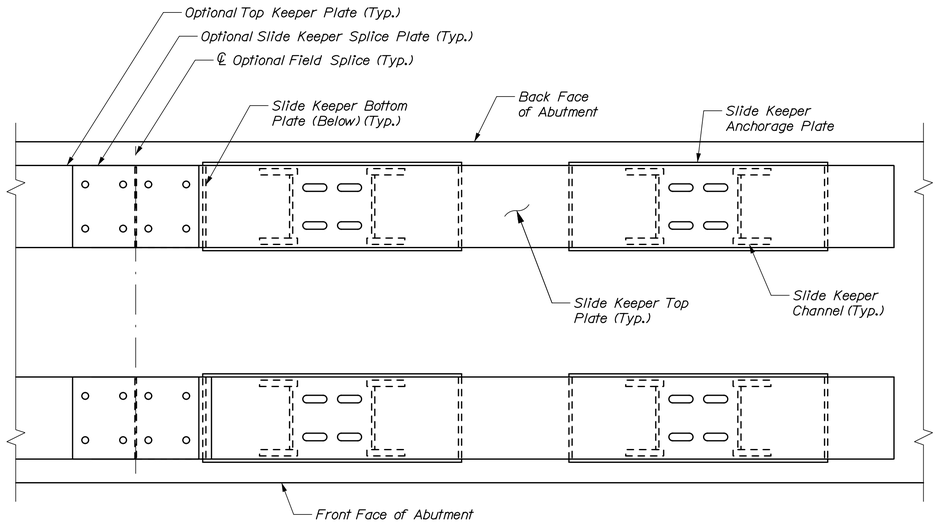


SECTION A-A

(After Slide and Prior to Roadway Opening)



SECTION C-C



SECTION D-D

NOTES:

1. For Section E-E, see "Abutment Connection Details III".

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

P.E. NUMBER			
DATE			
SIGNATURE			

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	9\20
CHECKED-REVIEWED	JDW	TRC	9\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

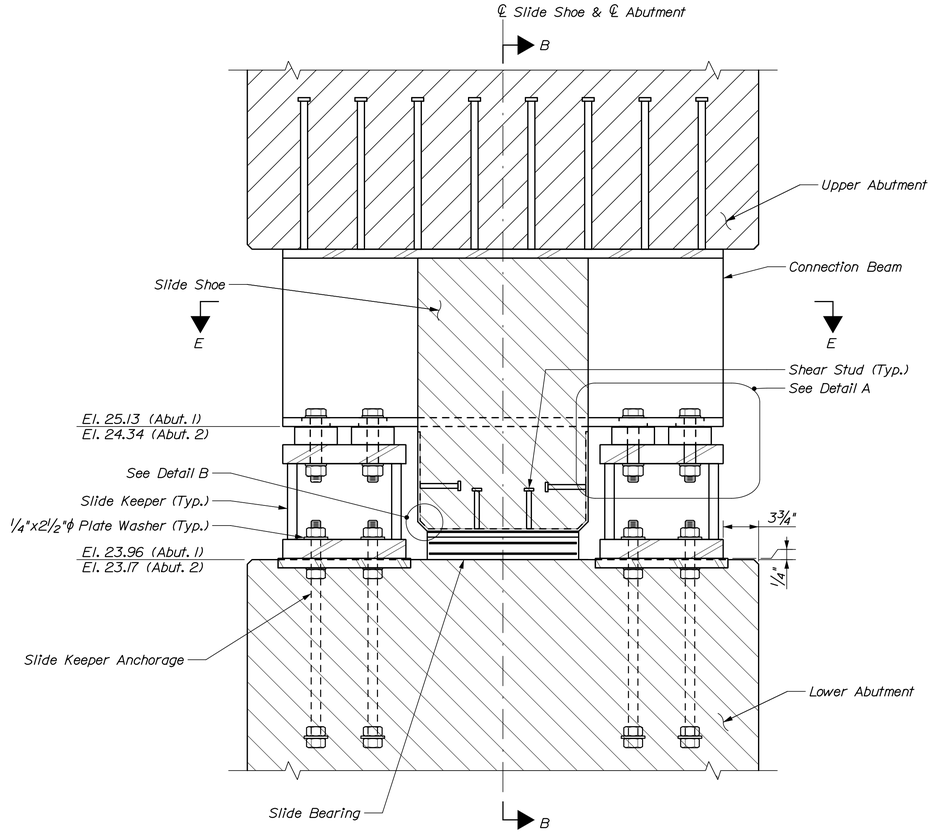
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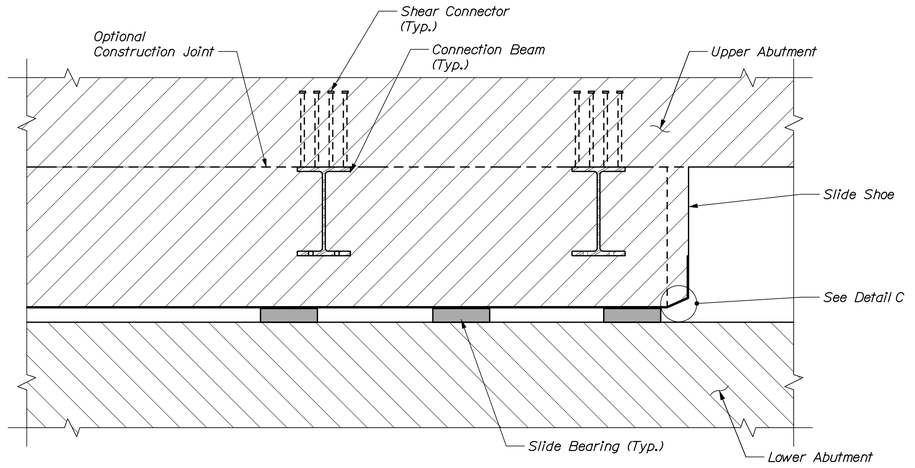
191

OF 220

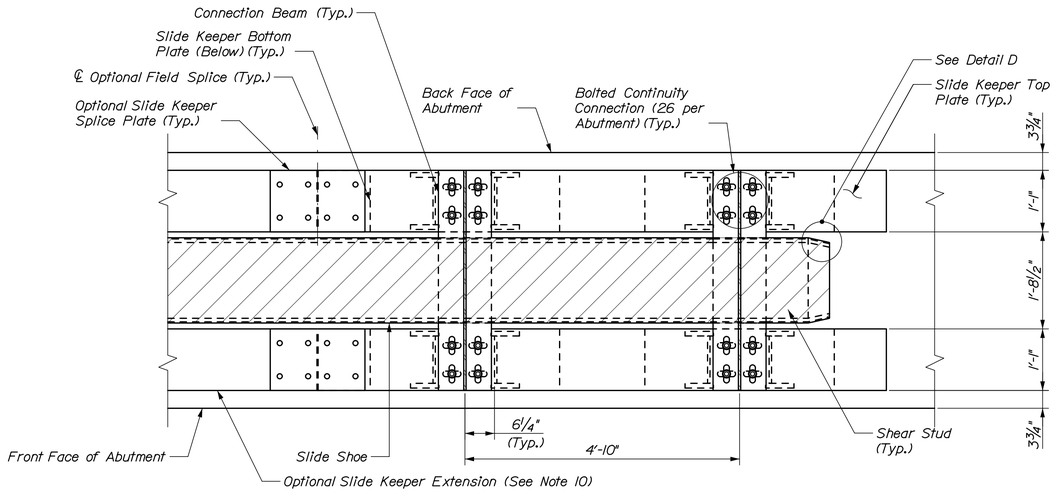
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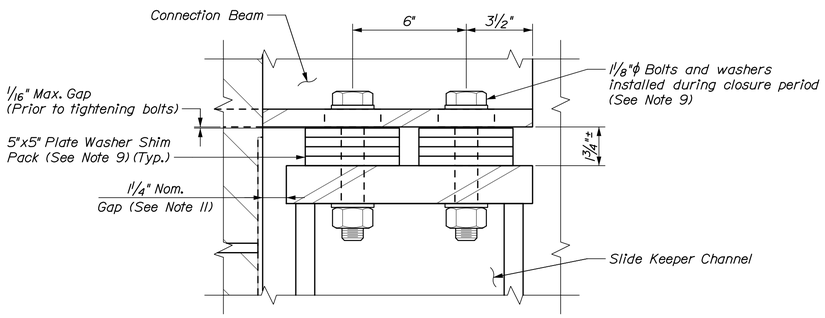
SECTION A-A



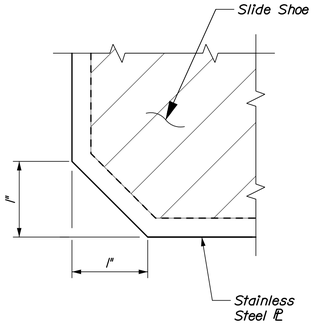
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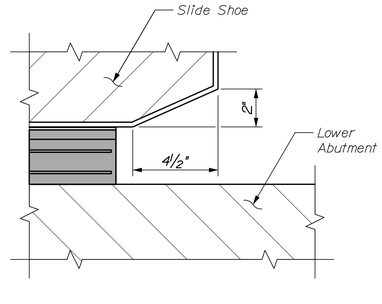
SECTION E-E



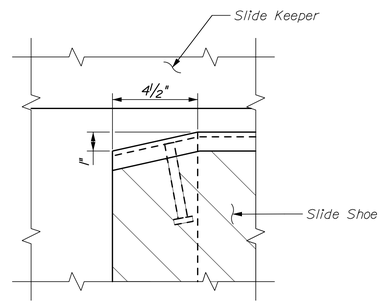
DETAIL A



DETAIL B



DETAIL C



DETAIL D

NOTES:

1. Reinforcing and shear connectors in slide shoe not shown for clarity.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	9\20
CHECKED-REVIEWED	JDW	9\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT CONNECTION DETAILS III

SHEET NUMBER

192

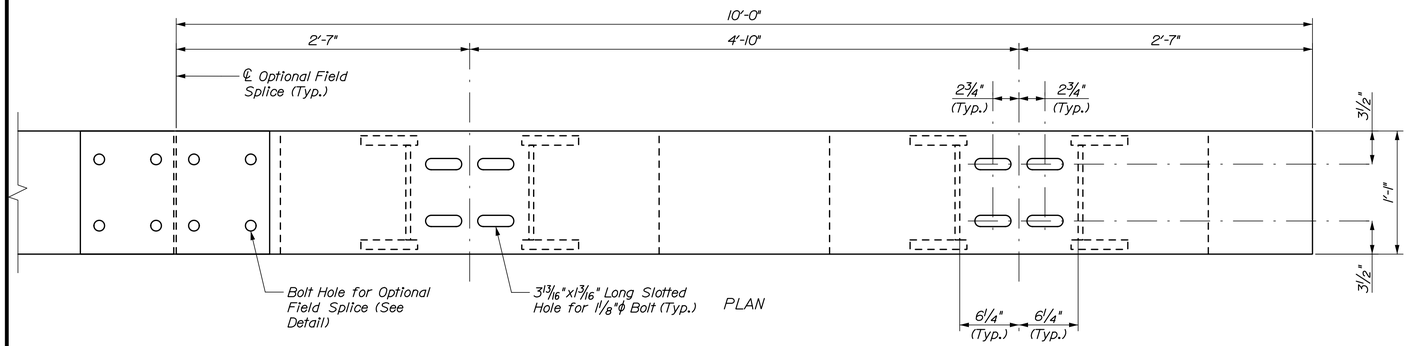
OF 220

Filename: 192_Abutment Connection Details III.dgn Division:

Username:

Date:9/24/2020

Filename: 193_Abutment Connection Details IV.dgn Division: Username: Date:9/24/2020

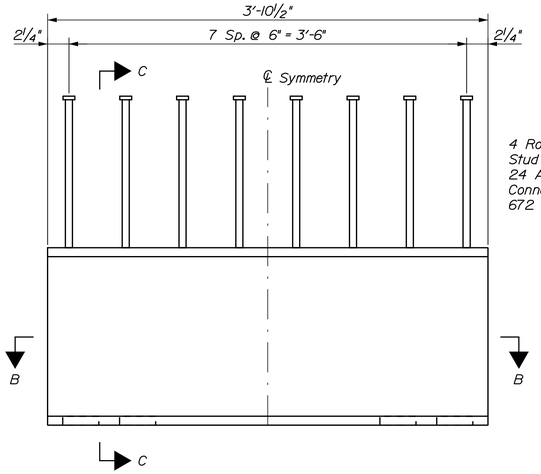


PLAN

ELEVATION

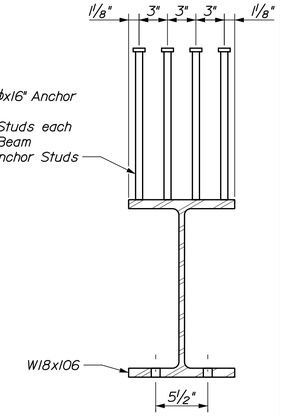
SLIDE KEEPER

(Slide keeper anchorage not shown)
(14 Each Abutment, 28 Total)

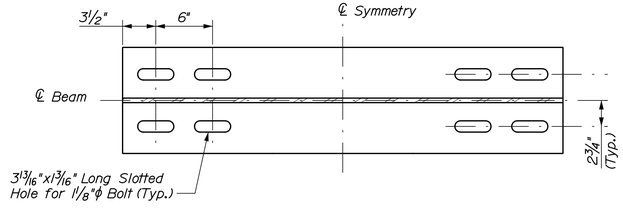


CONNECTION BEAM ELEVATION

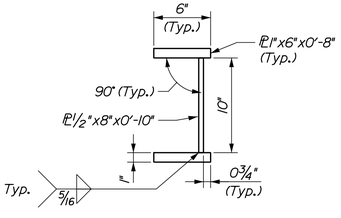
(14 Each Abutment, 28 Total)



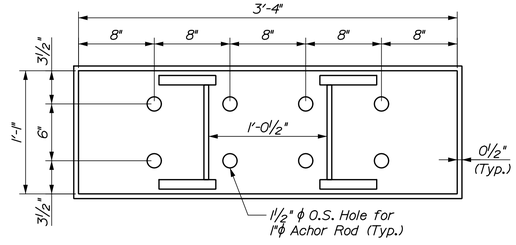
SECTION C-C



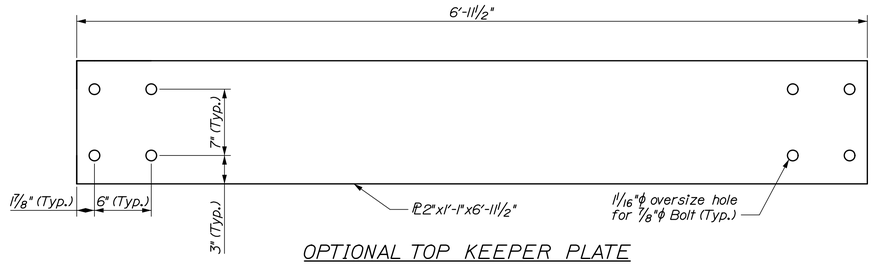
SECTION B-B



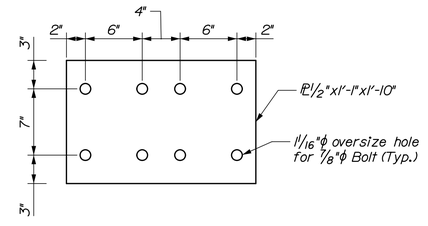
SLIDE KEEPER CHANNEL PLAN



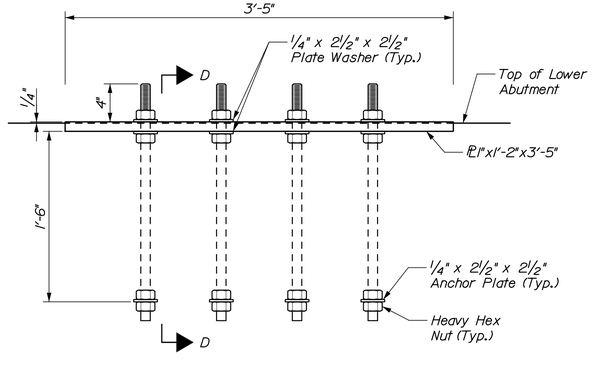
SECTION A-A



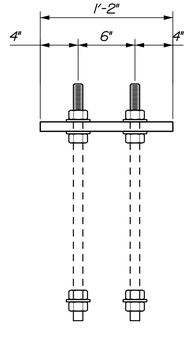
OPTIONAL TOP KEEPER PLATE



OPTIONAL SLIDE KEEPER SPLICE PLATE



SLIDE KEEPER ANCHORAGE



SECTION D-D

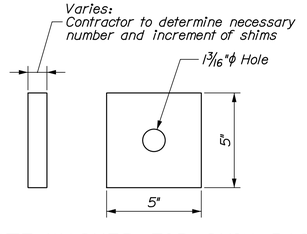


PLATE WASHER FOR SHIM PACK

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.JW	ERB	9.20
CHECKED-REVIEWED	J.DW	TRC	9.20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

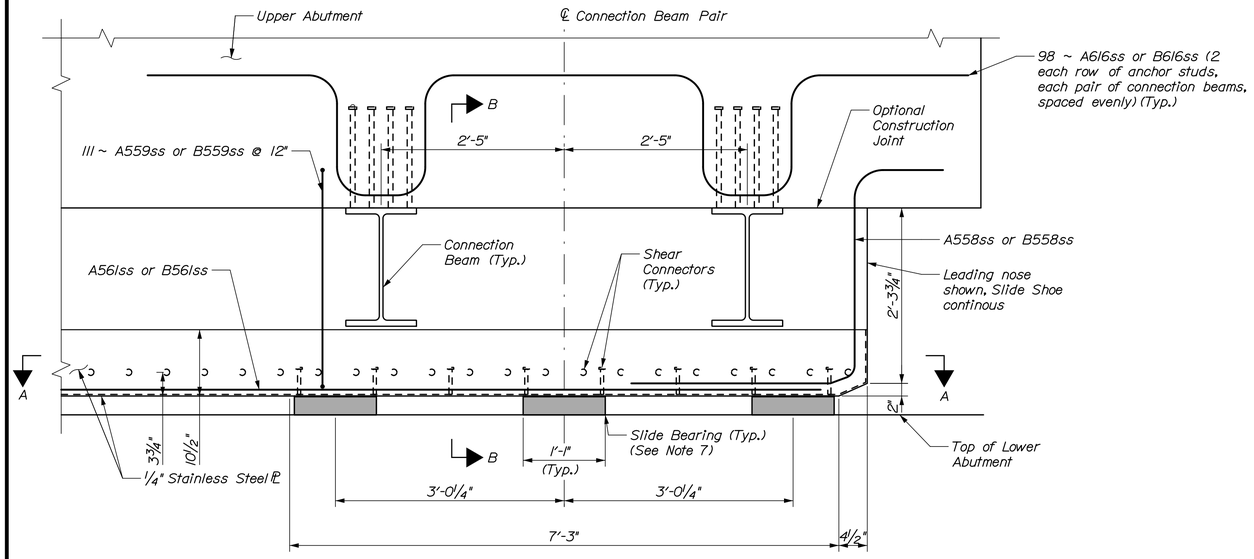
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT CONNECTION DETAILS IV

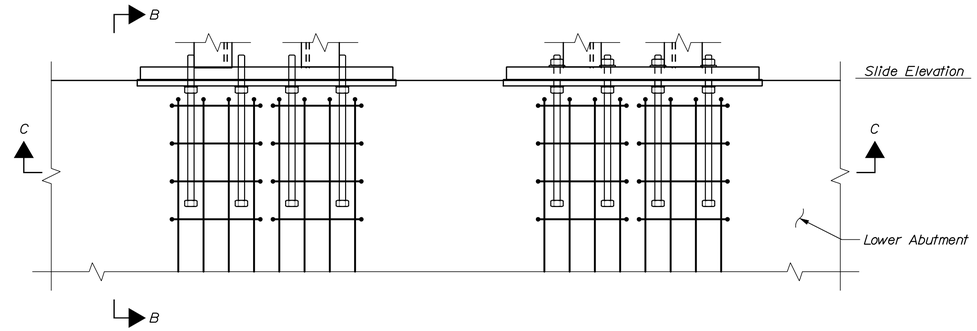
SHEET NUMBER

193

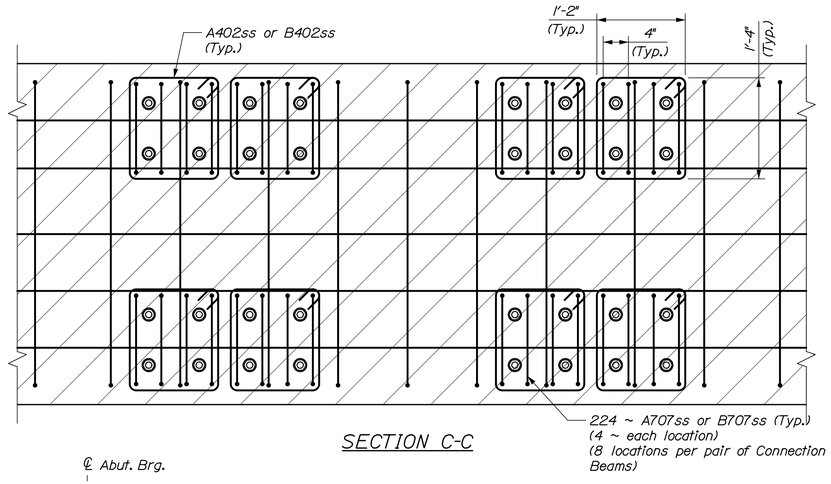
OF 220



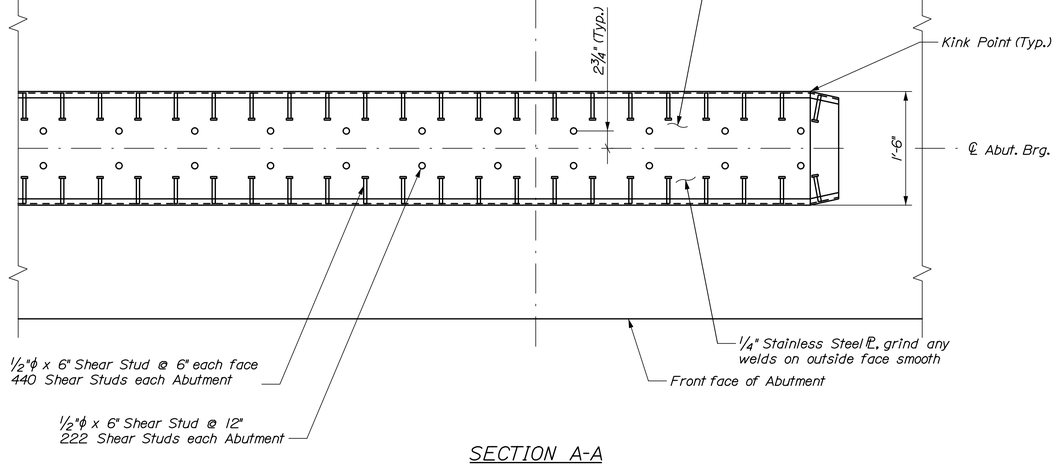
SLIDE SHOE ELEVATION
(Slide Keepers not shown for clarity)



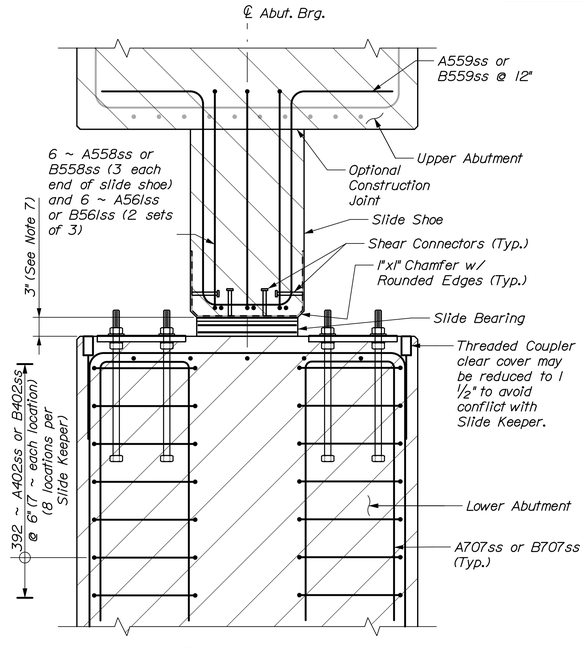
LOWER ABUTMENT ELEVATION



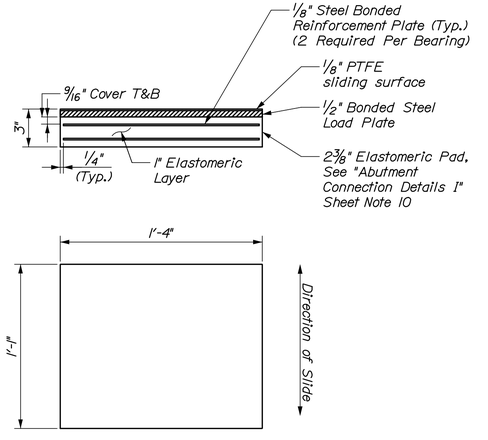
SECTION C-C



SECTION A-A



SECTION B-B



SLIDE BEARING

NOTES:

1. Reinforcing for Abutment 1 shown. Reinforcing for Abutment 2 similar.

Draft 100% Plans
August 12, 2020

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN
021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	DATE
DESIGN-DETAILED	HJW	ERB	9.'20
CHECKED-REVIEWED	JDW	TRC	9.'20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

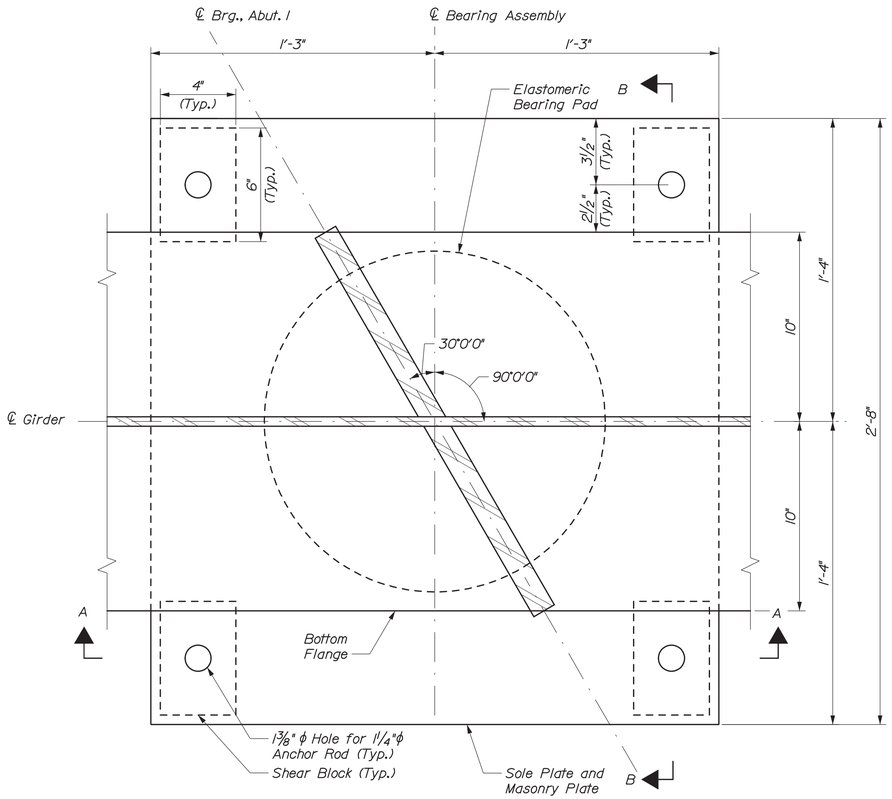
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

ABUTMENT CONNECTION DETAILS V

SHEET NUMBER
194
OF 220

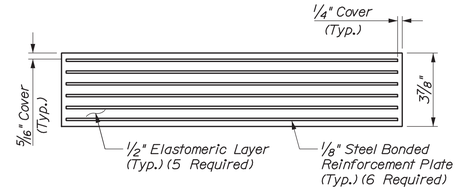
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Username:
Date:9/24/2020

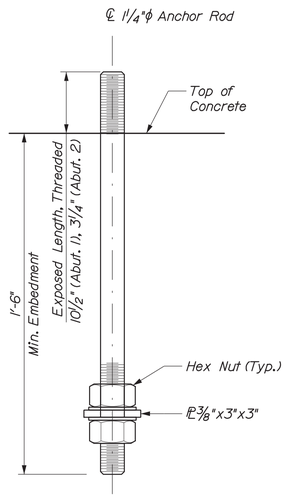


PLAN

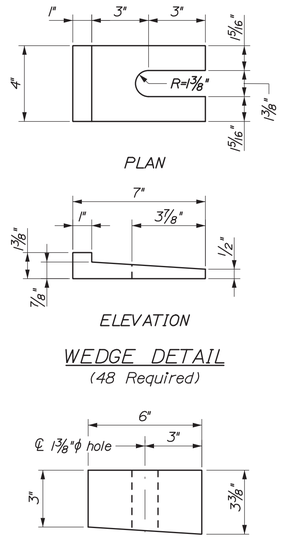
BEARING DESIGN CRITERIA		
Criteria	Abutment 1	Abutment 2
Unfactored Dead Load (kips)	182	182
Unfactored Live Load (kips)	100	100
Max. Longitudinal Displ. (in.)	0	0.61



ELASTOMERIC BEARING PAD
(24 Required)

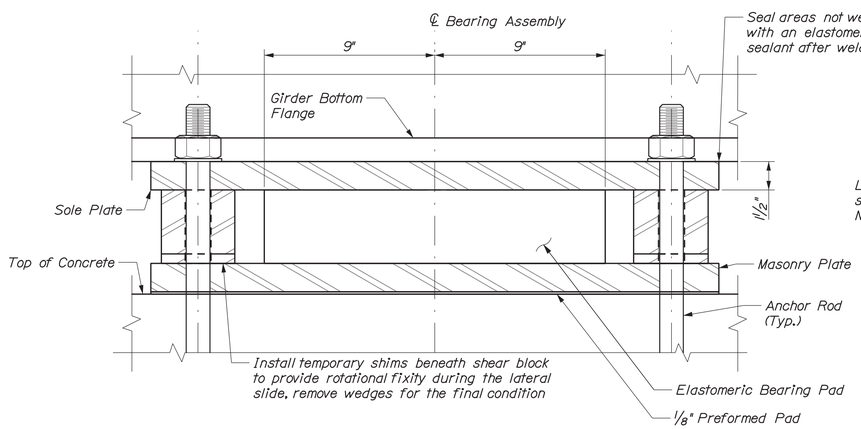


ANCHOR ROD DETAIL

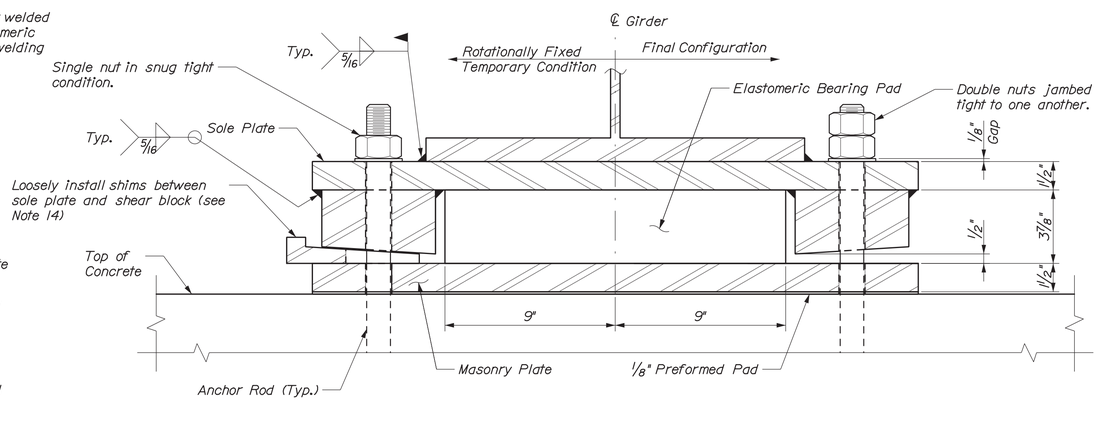


WEDGE DETAIL
(48 Required)

SHEAR BLOCK DETAIL



SECTION A-A
(Rotationally Fixed Temporary Condition)



SECTION B-B

FIXED BEARING ASSEMBLY
(12 Required)

BEARING NOTES:

1. Elastomer shall be 100% polychloroprene (neoprene) with durometer hardness of 50. The shear modulus of the elastomer shall be between 95 and 130 psi.

2. Vulcanizing of the elastomer to the sole plate and masonry plate shall be done during the primary mold process.

3. For the Normal Configuration, single nut the anchor rods in expansion bearings and double nut the anchor rods in fixed bearings. Upset the threads on the anchor rods after the lateral slide and before the bridge is opened to traffic.

4. Sole plate, masonry plate, shim plates, and shear block shall be AASHTO M270 Grade 36. Anchor rods shall meet the requirements of ASTM F1554, Grade 105.

5. Bearings shall be covered during transit.

6. Masonry and Sole plates shall be galvanized in accordance with Section 506. Anchor rods, washers and nuts shall be galvanized to ASTM A 153 or ASTM B 695, Class 50, Type I. Temporary shims may be uncoated.

7. Bearings are designed such that the superstructure may be erected when the ambient temperature is within the range of 30°F and 80°F. If the ambient temperature is outside of this range, the bearings shall be reset as directed by the Resident.

8. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge, and a direction arrow that points up-station. All marks shall be permanent and shall be visible after the bearing is installed.

9. The Contractor shall not weld the girders to the sole plates until after all adjustments have been made in accordance with Section 523.

10. All necessary precautions shall be taken to protect bearing components from field weld flash and spatter. Heat from welding operations shall be controlled such that steel adjacent to the elastomer does not exceed 200°F. The temperature shall be verified by use of temperature indicating crayons or other suitable means.

11. Contractor shall re-finish galvanizing and girder metallizing, as directed by Resident, in accordance with ASTM A780 after welding.

12. Bearing pads were designed using "Method A" and shall be subsequently tested in accordance with the specifications.

13. All bearings shall be in their rotationally fixed condition during the times indicated in Special Provision 524 - Lateral Slide. At all other times, bearings shall be in their Final Configuration. For Notes on expansion bearing rotationally fixed condition see Sheet "Bearing Details II".

14. To achieve the rotationally fixed condition for fixed bearings, the Contractor shall loosely install steel wedges between the masonry plate and shear blocks at each of the four anchor bolt locations. Following installation of the wedges the Contractor shall bring the anchor rod nuts to a snug tight condition. After bolt tightening the contractor shall tap each wedge with a steel hammer to confirm the wedges are securely clamped in place. If loose wedges are encountered the Contractor shall repeat the process. The Contractor shall not drive the wedges to a snug tight condition prior to tightening the anchor rod nuts whereas the additional load added to the structure following the lateral slide, and prior to removal of the wedges, will compress the bearings and make wedge removal difficult.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON				
DESIGN-DETAILED	HJW	ERB	2\20		
CHECKED-REVIEWED	NMW	TRC	2\20		
DESIGN2-DETAILED2					
DESIGN3-DETAILED3					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

SIGNATURE

P.E. NUMBER

DATE

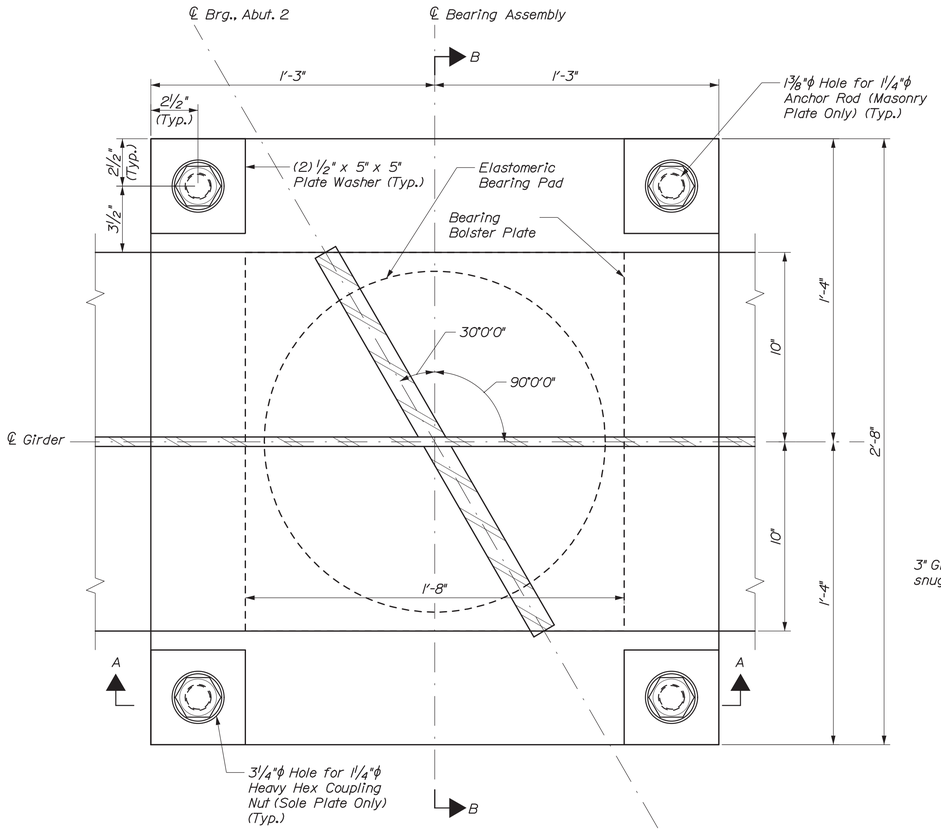
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

BEARING DETAILS I

SHEET NUMBER
195
OF 220

HNTB

Filename: 195_Bearing Details I.dgn Division: Username: Date:3/3/2020



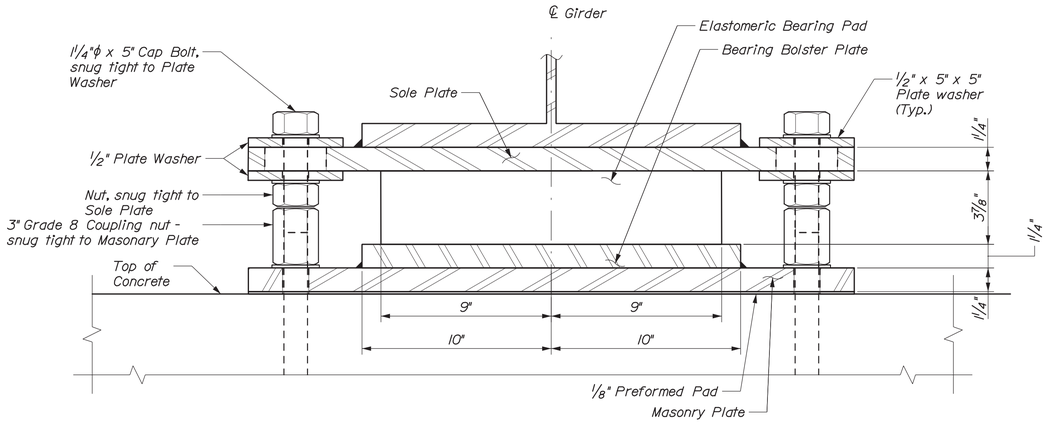
PLAN

NOTES:

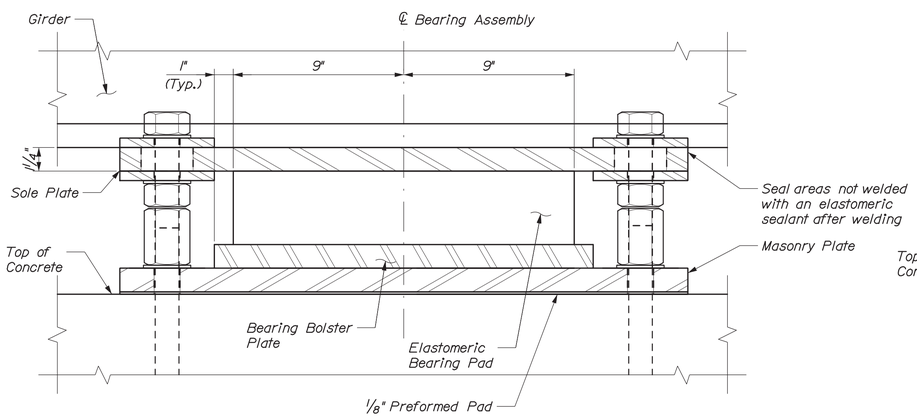
1. For general notes on bearings see "Bearing Notes" on Sheet "Bearing Details I".

2. Prior to starting the trial slide, the Contractor shall verify that all anchor rods for expansion bearings have a projection of 3¼" ⅛" from face of concrete abutment seat. Any anchor rods with project greater than the allowable tolerance shall be cut to meet tolerance.

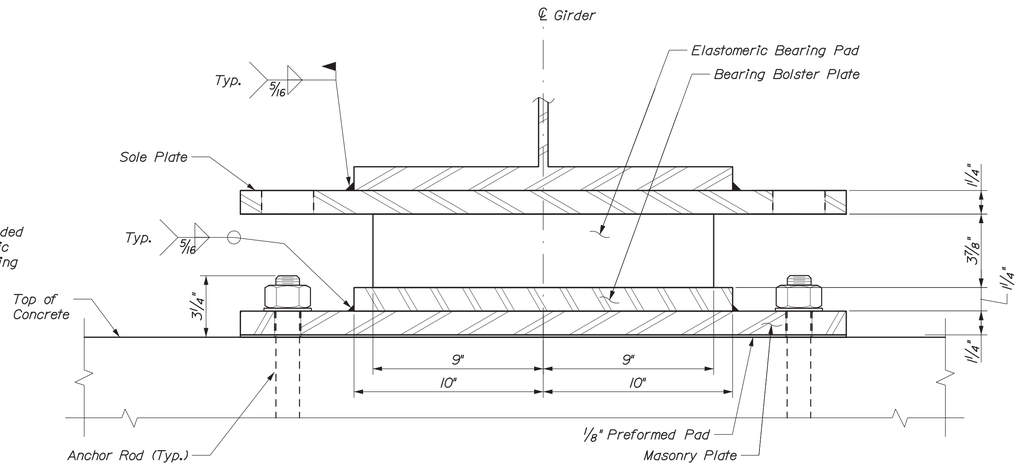
3. To achieve the rotationally fixed condition for expansion bearings, the Contractor shall remove the anchor rod nut, thread a hex coupler nut to the anchor rod, place a heavy hex jamming nut and a ½" thick plate washer between the coupler nut and the sole plate, place a ½" plate washer and a standard 1¼"ϕ washer on top of the sole plate, and thread a 5" cap bolt through the jamming nut and into the coupling nut to a finger tight condition. After all four cap bolts are installed finger tight with the coupling nut, each cap bolt shall be tightened to a snug tight condition to the coupling nut, making sure that the jamming nut is not bearing on the coupling nut. All cap bolts shall be tightened together; turn the cap bolts no more than ¼ turn with a wrench at a time before moving to the next cap bolt, tightening all cap bolts in sequence. After tightening the cap bolts, the Contractor shall verify that the top plate washers are not free to spin by hand. If one plate washer is free to spin, and a gap is visible between the cap bolt and the washer, remove the cap bolt that is not bearing, insert an additional standard washer between the head of the bolt and the plate washer, re-thread the cap bolt into the jamming nut and the cap bolt, and tighten the cap bolt to a snug tight condition in the coupling nut. If two or more top plate washers are free to spin, loosen all cap bolts to a finger tight condition, install an additional washer where necessary, and re-tighten all cap bolts to a snug tight condition. After all four cap bolts are tightened to a snug tight condition in the coupling nut, tighten all four jamming nuts to a snug tight condition against the sole plate, making sure the cap bolt doesn't loosen in the coupling nut.



SECTION B-B
(Rotationally Fixed Temporary Condition)



SECTION A-A
(Rotationally Fixed Temporary Condition)



SECTION B-B

EXPANSION BEARING ASSEMBLY
(12 Required)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		DATE
PROJ. MANAGER	D. EATON	BY
DESIGN-DETAILED	HJW	ERB 2\20
CHECKED-REVIEWED	TJP	TRC 2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

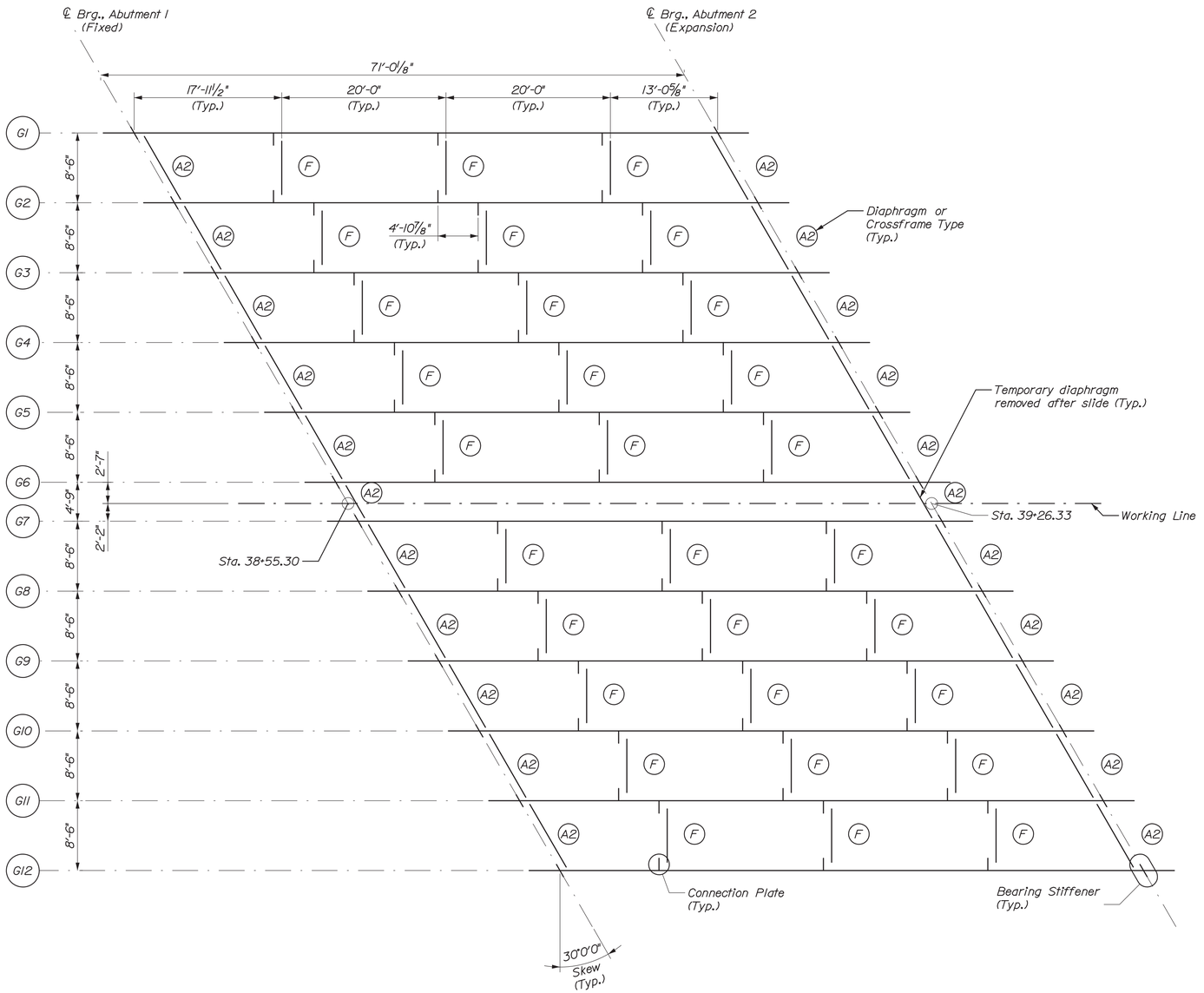
INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

BEARING DETAILS II

SHEET NUMBER
196
OF 220

HNTB

Username: Division: Date:3/3/2020
Filename: 196_Bearing Details II.dgn



FRAMING PLAN

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 BRIDGE PLANS

	BY	DATE
DESIGN-DETAILED	ERB	2\20
CHECKED-REVIEWED	TRC	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PROJ. MANAGER: D. EATON

SIGNATURE

P.E. NUMBER

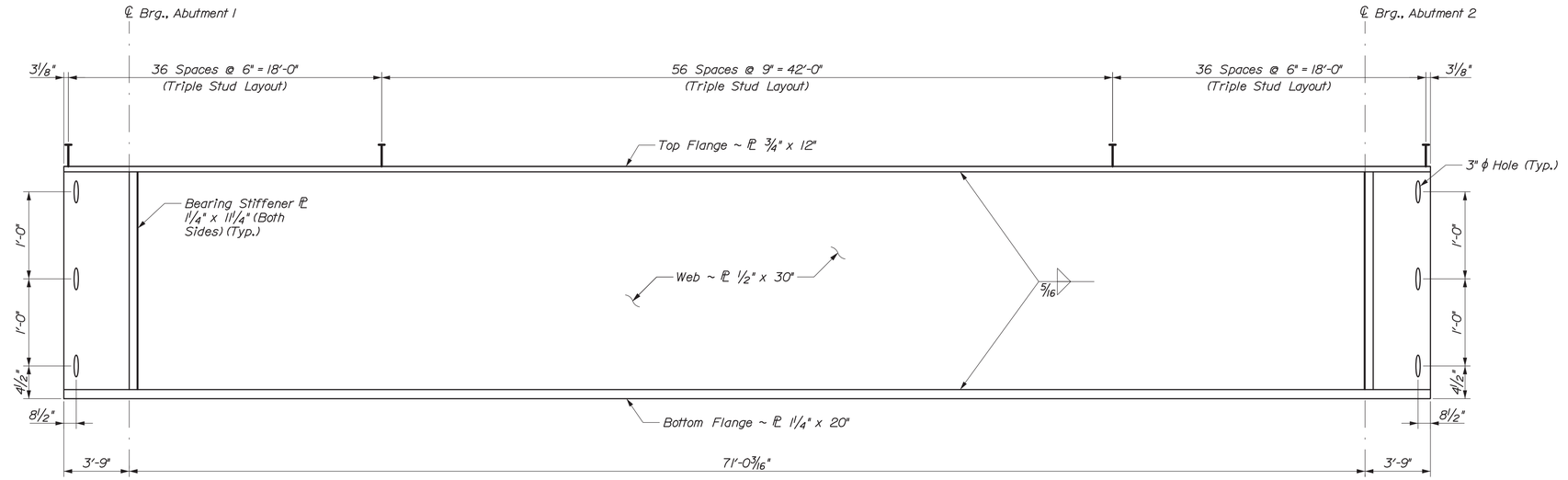
DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

FRAMING PLAN

SHEET NUMBER
197
OF 220

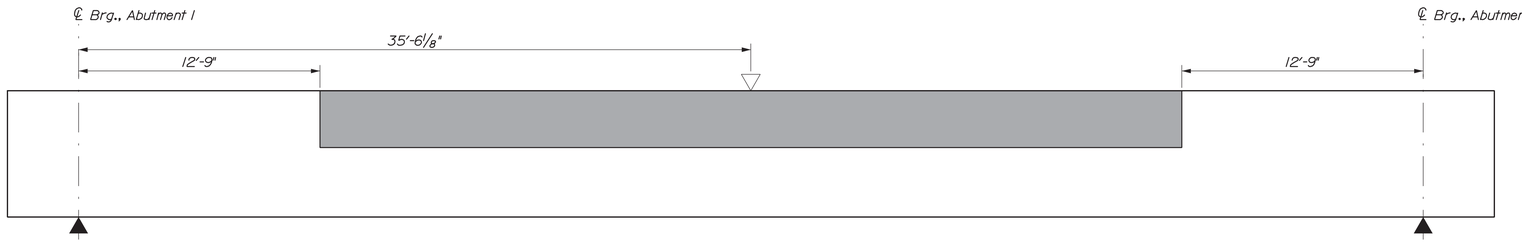
Filename: 197_Framing Plan.dgn Division: Username: Date:3/3/2020



GIRDER ELEVATION

387 studs per girder (4644 studs total)

GIRDER	BOTTOM OF SLAB ELEVATIONS										
	℄ Brg., Abut. 1	0.10 x L	0.20 x L	0.30 x L	0.40 x L	0.50 x L	0.60 x L	0.70 x L	0.80 x L	0.90 x L	℄ Brg., Abut. 2
G1	32.12	32.10	32.08	32.05	32.00	31.94	31.85	31.76	31.64	31.52	31.39
G2	32.76	32.75	32.73	32.70	32.65	32.59	32.50	32.40	32.28	32.15	32.01
G3	33.40	33.38	33.37	33.34	33.29	33.22	33.14	33.03	32.91	32.77	32.63
G4	34.03	34.02	34.00	33.97	33.92	33.85	33.76	33.65	33.53	33.39	33.25
G5	34.66	34.64	34.62	34.59	34.54	34.47	34.38	34.27	34.15	34.01	33.87
G6	35.29	35.27	35.24	35.20	35.15	35.08	34.99	34.88	34.76	34.63	34.49
G7	34.89	34.87	34.85	34.82	34.78	34.73	34.66	34.58	34.48	34.38	34.28
G8	35.53	35.52	35.51	35.48	35.44	35.39	35.32	35.24	35.14	35.03	34.91
G9	36.17	36.16	36.15	36.13	36.09	36.04	35.97	35.88	35.78	35.67	35.55
G10	36.81	36.80	36.79	36.77	36.73	36.68	36.61	36.52	36.42	36.31	36.19
G11	37.45	37.44	37.42	37.40	37.36	37.31	37.24	37.16	37.06	36.95	36.83
G12	38.08	38.07	38.05	38.03	37.99	37.94	37.87	37.78	37.69	37.58	37.47



LEGEND

- Indicates areas always in compression. All other areas are in tension or have stress reversal.
- ▽ Point of maximum positive moment.
- ▲ Point of maximum negative moment.

STEEL GIRDER BEAM STRESS DIAGRAM

Username:

Division:

Date:3/3/2020

Filename: 198_Structural Steel Details 1.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
DESIGNED	D. EATON	
DETAILED	PEB	2\20
CHECKED	HJW	
REVIEWED	NMW	2\20
PROJ. MANAGER	TRC	
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

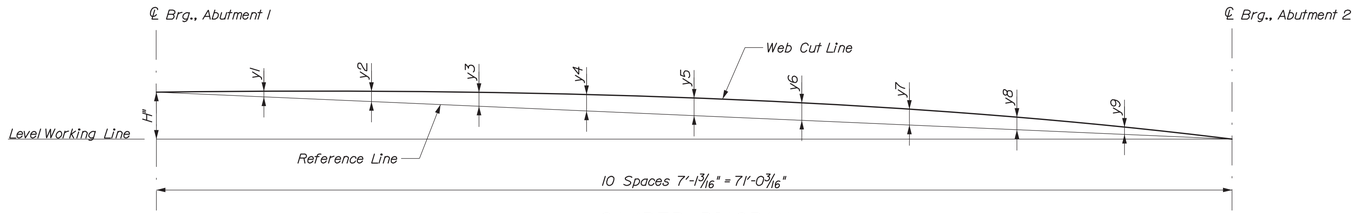
STRUCTURAL STEEL DETAILS 1

SHEET NUMBER

198

OF 220

HNTB



CAMBER DIAGRAM

GIRDER	CAMBER ORDINATES (INCHES)											
	H	℄ Brg., Abut. 1	y1	y2	y3	y4	y5	y6	y7	y8	y9	℄ Brg., Abut. 2
G1	8 13/16	0	1 3/16	1 9/16	2 1/8	2 1/2	2 5/8	2 1/2	2 1/8	1 9/16	1 3/16	0
G2	9	0	7/8	1 3/4	2 3/8	2 3/4	2 7/8	2 3/4	2 3/8	1 11/16	7/8	0
G3	9 3/16	0	1 5/16	1 13/16	2 7/16	2 7/8	3 1/16	2 7/8	2 1/2	1 13/16	1 5/16	0
G4	9 3/8	0	1 5/16	1 13/16	2 7/16	2 7/8	3	2 7/8	2 7/16	1 13/16	1 5/16	0
G5	9 1/2	0	7/8	1 3/4	2 3/8	2 13/16	2 15/16	2 3/4	2 3/8	1 3/4	1 5/16	0
G6	9 5/8	0	1 3/16	1 5/8	2 3/16	2 9/16	2 3/4	2 5/8	2 3/16	1 5/8	1 3/16	0
G7	7 7/16	0	11/16	1 1/4	1 3/4	2 1/8	2 3/16	2 1/16	1 3/4	1 1/4	11/16	0
G8	7 3/8	0	3/4	1 1/2	2 1/16	2 3/8	2 9/16	2 3/8	2 1/16	1 1/2	3/4	0
G9	7 3/8	0	1 3/16	1 9/16	2 3/16	2 9/16	2 11/16	2 9/16	2 3/16	1 9/16	1 3/16	0
G10	7 3/8	0	1 3/16	1 9/16	2 3/16	2 9/16	2 11/16	2 9/16	2 3/16	1 9/16	1 3/16	0
G11	7 3/8	0	3/4	1 1/2	2 1/8	2 7/16	2 5/8	2 7/16	2 1/8	1 1/2	3/4	0
G12	7 5/16	0	11/16	1 3/8	1 7/8	2 1/4	2 3/8	2 1/4	1 15/16	1 3/8	11/16	0

GIRDER	DEAD LOAD COMPONENT	DEAD LOAD DEFLECTIONS (INCHES)										
		℄ Brg., Abut. 1	y1	y2	y3	y4	y5	y6	y7	y8	y9	℄ Brg., Abut. 2
G1	Steel Dead Load	0.00	-0.16	-0.29	-0.40	-0.47	-0.49	-0.47	-0.40	-0.29	-0.16	0.00
	Deck Concrete Load	0.00	-0.46	-0.90	-1.24	-1.44	-1.55	-1.45	-1.25	-0.91	-0.47	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.14	-0.14	-0.13	-0.11	-0.07	-0.02	0.00
G2	Steel Dead Load	0.00	-0.16	-0.30	-0.41	-0.49	-0.50	-0.49	-0.41	-0.30	-0.16	0.00
	Deck Concrete Load	0.00	-0.55	-1.07	-1.48	-1.72	-1.81	-1.72	-1.48	-1.07	-0.55	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.12	-0.14	-0.12	-0.11	-0.07	-0.02	0.00
G3	Steel Dead Load	0.00	-0.16	-0.31	-0.42	-0.49	-0.53	-0.49	-0.42	-0.31	-0.16	0.00
	Deck Concrete Load	0.00	-0.59	-1.15	-1.58	-1.85	-1.94	-1.85	-1.58	-1.15	-0.59	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.13	-0.14	-0.13	-0.11	-0.07	-0.02	0.00
G4	Steel Dead Load	0.00	-0.16	-0.31	-0.42	-0.49	-0.53	-0.49	-0.42	-0.31	-0.16	0.00
	Deck Concrete Load	0.00	-0.60	-1.15	-1.60	-1.86	-1.96	-1.86	-1.60	-1.15	-0.60	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.10	-0.12	-0.13	-0.12	-0.10	-0.07	-0.02	0.00
G5	Steel Dead Load	0.00	-0.16	-0.30	-0.41	-0.49	-0.50	-0.49	-0.41	-0.30	-0.16	0.00
	Deck Concrete Load	0.00	-0.56	-1.10	-1.52	-1.78	-1.87	-1.78	-1.54	-1.10	-0.58	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.12	-0.14	-0.12	-0.11	-0.07	-0.02	0.00
G6	Steel Dead Load	0.00	-0.16	-0.29	-0.40	-0.47	-0.49	-0.47	-0.40	-0.29	-0.16	0.00
	Deck Concrete Load	0.00	-0.52	-1.01	-1.38	-1.62	-1.73	-1.62	-1.38	-1.01	-0.52	0.00
	Superimposed Dead Load	0.00	-0.02	-0.06	-0.10	-0.12	-0.14	-0.13	-0.10	-0.06	-0.02	0.00
G7	Steel Dead Load	0.00	-0.16	-0.29	-0.40	-0.47	-0.49	-0.47	-0.40	-0.29	-0.16	0.00
	Deck Concrete Load	0.00	-0.44	-0.85	-1.18	-1.38	-1.46	-1.38	-1.18	-0.85	-0.43	0.00
	Superimposed Dead Load	0.00	-0.04	-0.08	-0.12	-0.16	-0.16	-0.14	-0.12	-0.06	-0.04	0.00
G8	Steel Dead Load	0.00	-0.16	-0.30	-0.41	-0.49	-0.50	-0.49	-0.41	-0.30	-0.16	0.00
	Deck Concrete Load	0.00	-0.54	-1.06	-1.46	-1.69	-1.79	-1.69	-1.45	-1.04	-0.54	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.13	-0.16	-0.13	-0.11	-0.07	-0.02	0.00
G9	Steel Dead Load	0.00	-0.16	-0.31	-0.42	-0.49	-0.53	-0.49	-0.42	-0.31	-0.16	0.00
	Deck Concrete Load	0.00	-0.59	-1.15	-1.58	-1.85	-1.94	-1.85	-1.58	-1.15	-0.59	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.13	-0.14	-0.13	-0.11	-0.07	-0.02	0.00
G10	Steel Dead Load	0.00	-0.16	-0.31	-0.42	-0.49	-0.53	-0.49	-0.42	-0.31	-0.16	0.00
	Deck Concrete Load	0.00	-0.60	-1.15	-1.60	-1.86	-1.96	-1.86	-1.60	-1.15	-0.60	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.13	-0.14	-0.13	-0.11	-0.07	-0.02	0.00
G11	Steel Dead Load	0.00	-0.16	-0.30	-0.41	-0.49	-0.50	-0.49	-0.41	-0.30	-0.16	0.00
	Deck Concrete Load	0.00	-0.56	-1.09	-1.52	-1.76	-1.87	-1.78	-1.52	-1.10	-0.56	0.00
	Superimposed Dead Load	0.00	-0.02	-0.07	-0.11	-0.12	-0.16	-0.12	-0.11	-0.07	-0.02	0.00
G12	Steel Dead Load	0.00	-0.16	-0.29	-0.40	-0.47	-0.49	-0.47	-0.40	-0.29	-0.16	0.00
	Deck Concrete Load	0.00	-0.50	-0.98	-1.34	-1.58	-1.69	-1.60	-1.36	-1.00	-0.52	0.00
	Superimposed Dead Load	0.00	-0.02	-0.06	-0.11	-0.13	-0.16	-0.14	-0.11	-0.07	-0.02	0.00

STRUCTURAL STEEL NOTES:

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the finished grade profile.

2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 feet or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. Butt weld splices in flanges shall be not less than 3 feet from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 3 feet of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt weld splices will be allowed in areas of stress reversal.

3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be not less than 20 feet in length unless otherwise shown on the plans.

4. Bearing stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.

5. Crossframe and diaphragm connection plates may be either plumb or normal to the top flange.

6. All connection plates shall be welded to the web and top and bottom flanges using 5/16" fillet welds.

7. Shear Connectors shall be installed per Standard Detail 505(01).

8. Drip bars shall be installed in accordance with Standard Detail 504(10).

9. Girders shall be metallized in accordance with Standard Specifications Section 506. Diaphragms may be metallized or hot-dipped galvanized after fabrication.

10. Diaphragms between girders G06 and G07 shall be removed after the bridge has been slid into its final position. Diaphragm removal shall occur within two weeks of opening the bridge to traffic.

11. Cross frames shall be detailed and fabricated to fit under total steel dead load.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	2\20
CHECKED-REVIEWED	NMW	2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

STRUCTURAL STEEL DETAILS II

SHEET NUMBER

199

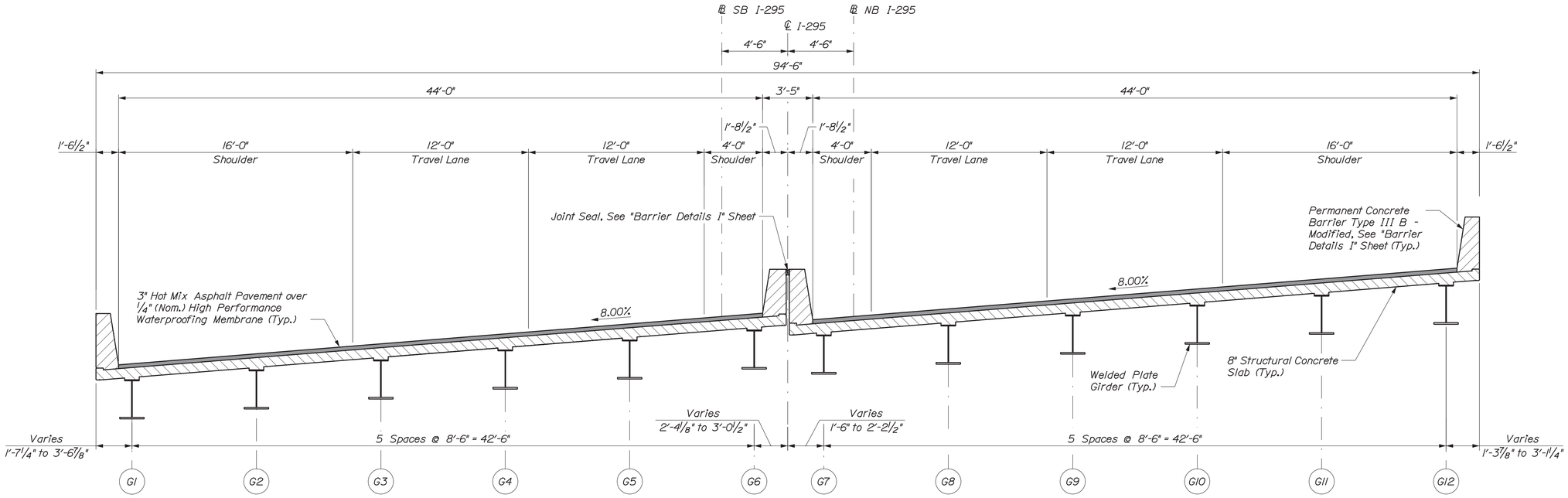
OF 220

Username:

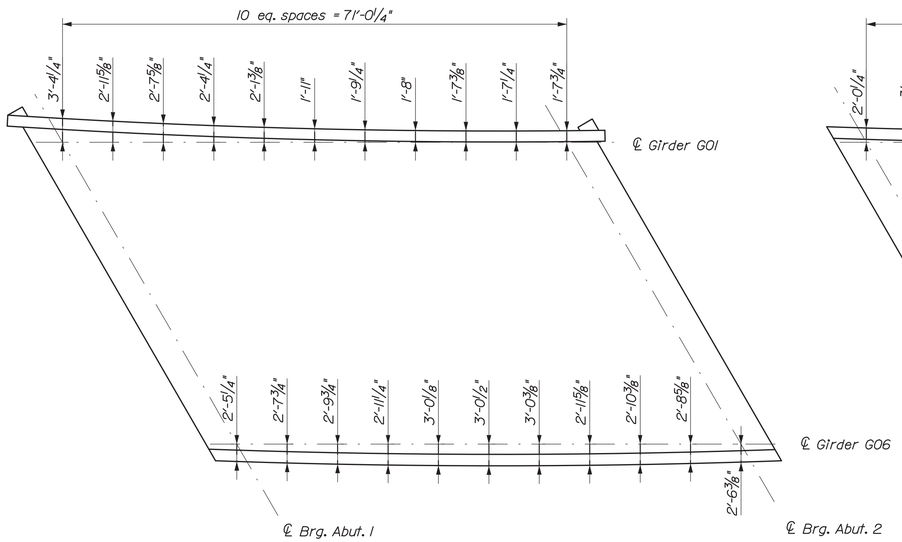
Division:

Date:3/3/2020

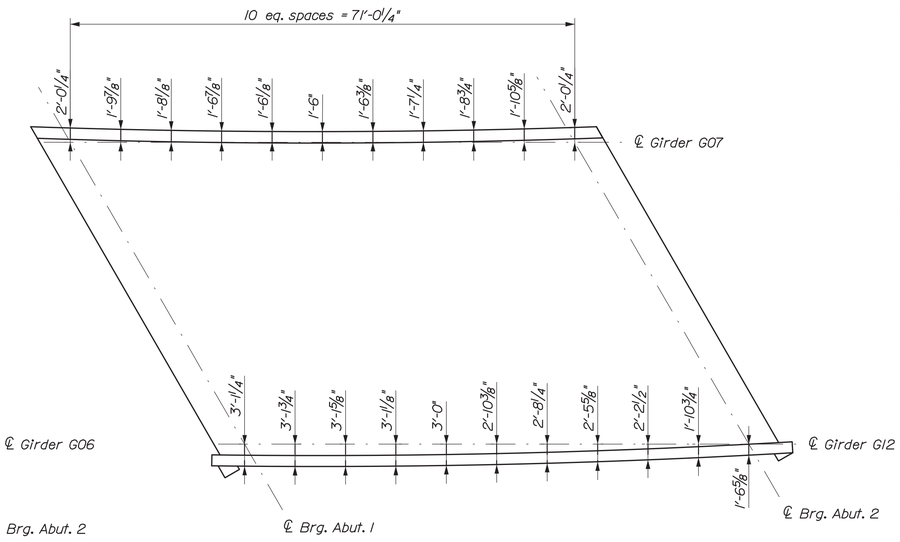
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TRANSVERSE SECTION



SOUTHBOUND FASCIA OFFSET PLAN



NORTHBOUND FASCIA OFFSET PLAN

SUPERSTRUCTURE NOTES:

1. The theoretical blocking used for design of the structure is 3" (2¼" clear) at the centerline of bearing of the abutments. Refer to Standard Detail 502(03) for blocking details.

2. Reinforcing bars shall have a minimum concrete cover of 2" unless otherwise noted.

3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.

4. The superstructure slab and semi-integral backwall for each bound shall be placed in one continuous operation and shall be kept plastic until the entire placement has been made.

5. The use of Precast Concrete Deck Panels will not be allowed on this project.

6. Concrete for the semi-integral backwall will be paid as part of Pay Item 502.26, Structural Concrete Roadway and Sidewalk Slab on Steel Bridges.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.JW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

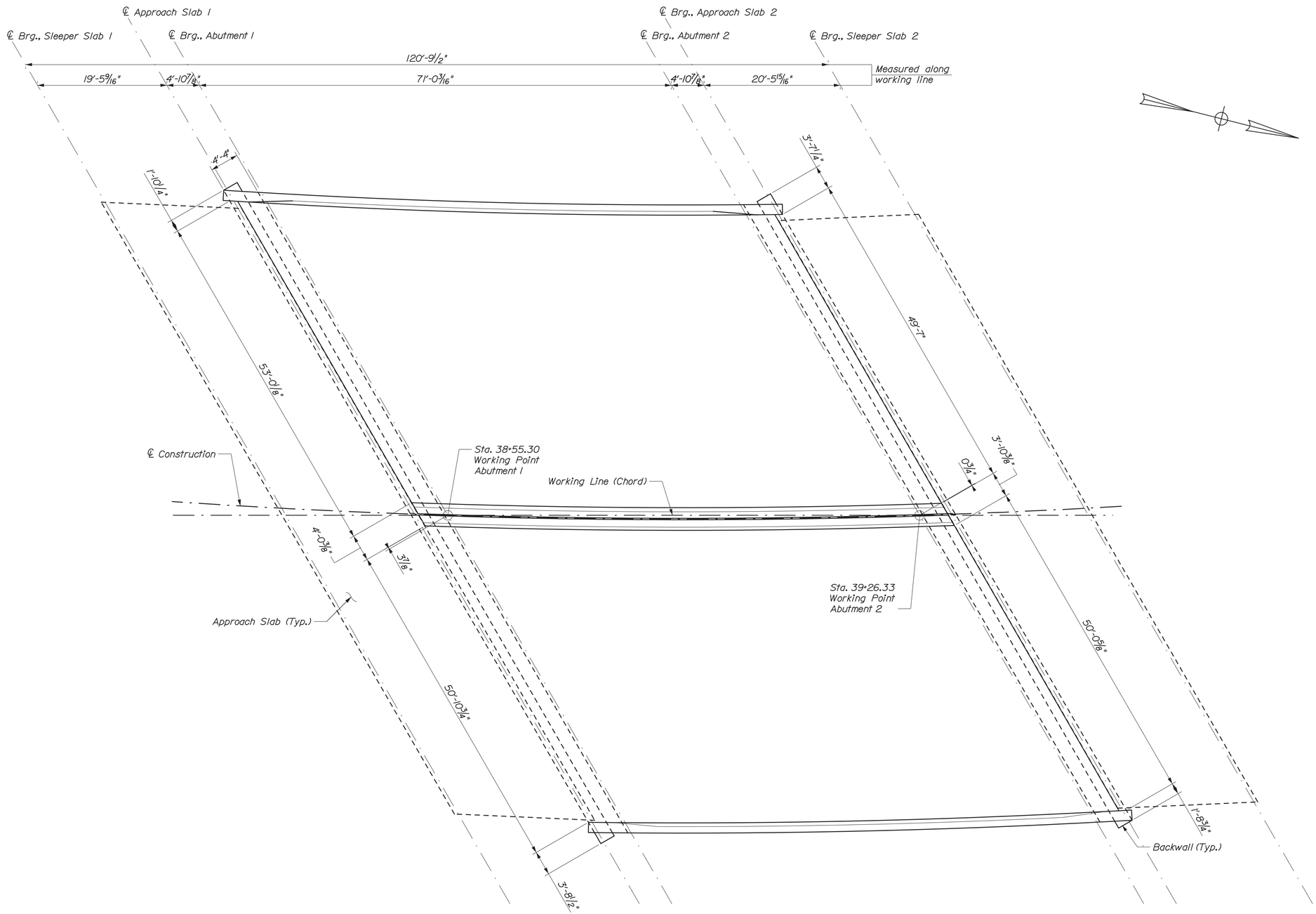
INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

TRANSVERSE SECTION

SHEET NUMBER
200
OF 220

HNTB

Date:4/13/2020
Username:
Division:
Filename: 200_Transverse Section.dgn



SUPERSTRUCTURE PLAN

Filename: 201_Superstructure Plan.dgn Division: Username: Date:3/3/2020

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

D. EATON	BY	DATE	
PROJ. MANAGER			
DESIGN-DETAILED	ERB	2\20	SIGNATURE
CHECKED-REVIEWED	TRC	2\20	
DESIGN2-DETAILED2			P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

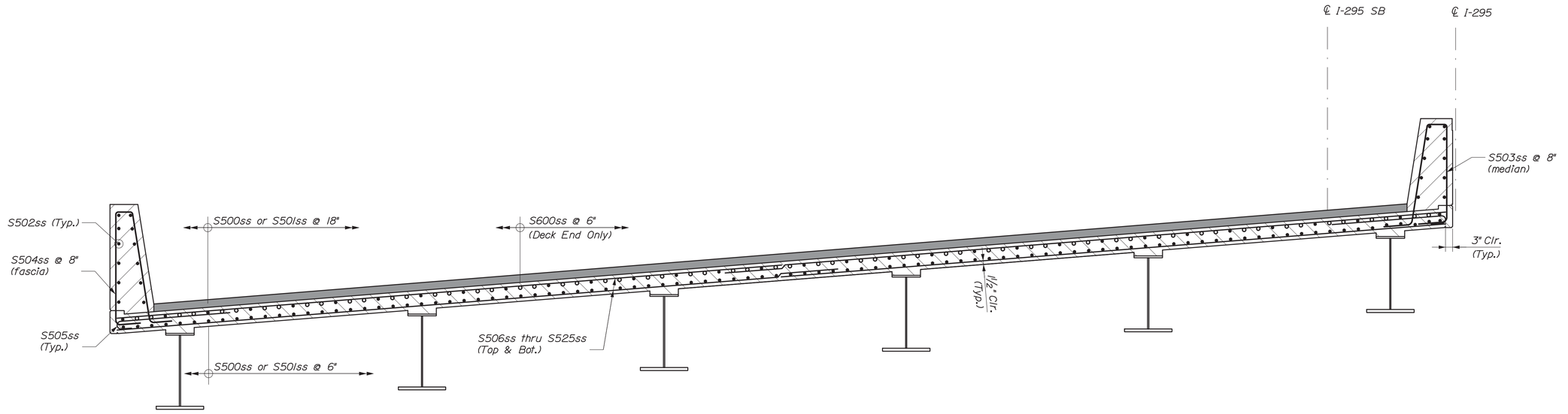
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUPERSTRUCTURE PLAN

SHEET NUMBER

201

OF 220



TRANSVERSE SECTION - REINFORCING

(Southbound Shown, Looking Upstation)
(Northbound Similar, Opposite Hand)

NOTES:

1. Shear connectors on girder top flanges not shown for clarity.
2. Refer to "Barrier Details" for additional information regarding barrier reinforcing.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 — BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	ERB 2\20
CHECKED-REVIEWED	NMW	TRC 2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

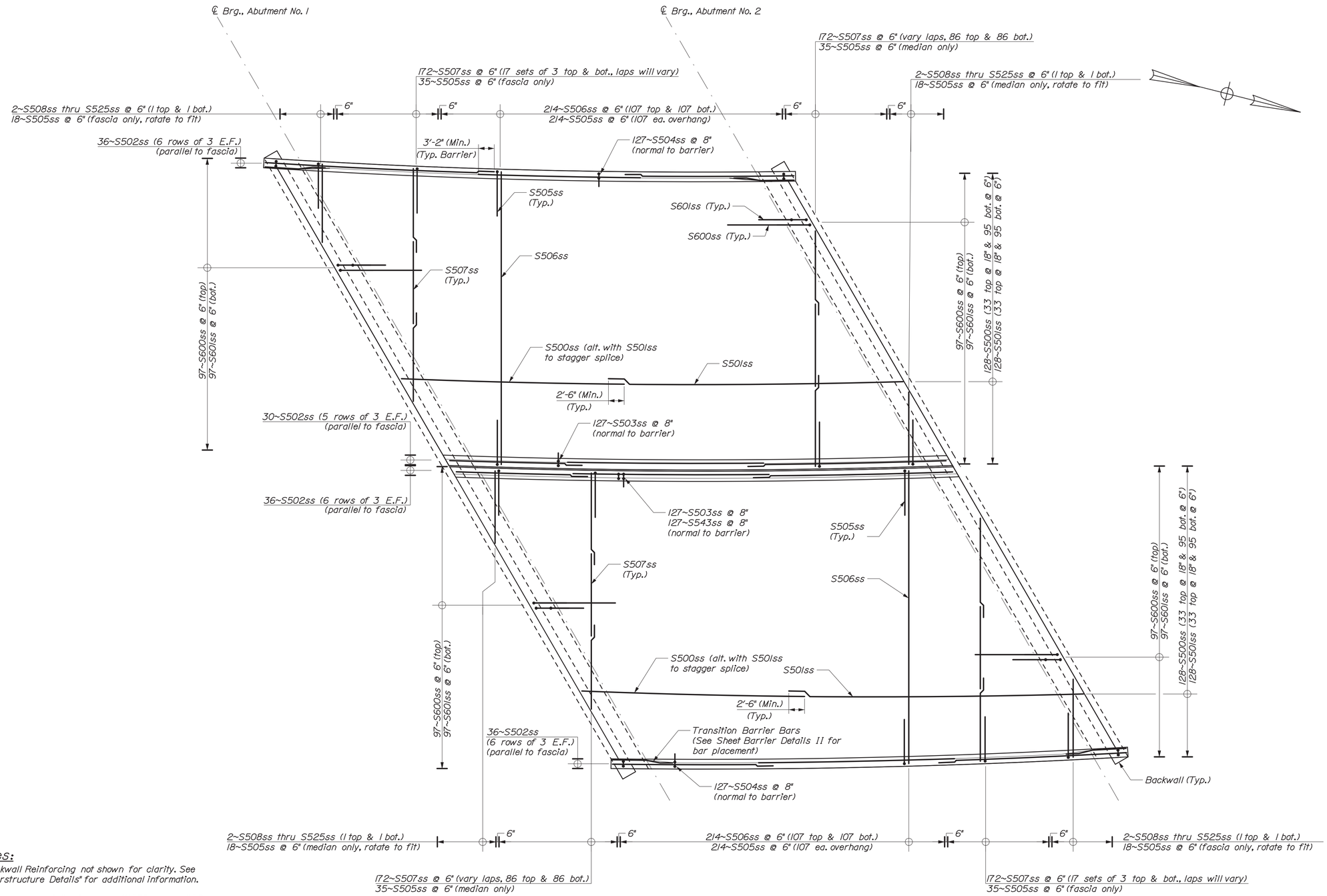
TRANSVERSE SECTION
REINFORCING

SHEET NUMBER
202
OF 220

HNTB

Filename: 202_Transverse Section Reinforcing.dgn Division:
Username:
Date:3/3/2020

Filename: 203_Superstructure Plan Reinforcing.dgn Division: Username: Date:3/3/2020



Notes:

1. Backwall Reinforcing not shown for clarity. See "Superstructure Details" for additional information.

2. Longitudinal reinforcing bars (S500ss and S501ss) shall be placed along the bridge curve.

4. All bars layed out normal or parallel to girders unless otherwise noted.

SUPERSTRUCTURE PLAN - REINFORCING

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.W.	ERB	2.'20
CHECKED-REVIEWED	NMW	TRC	2.'20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

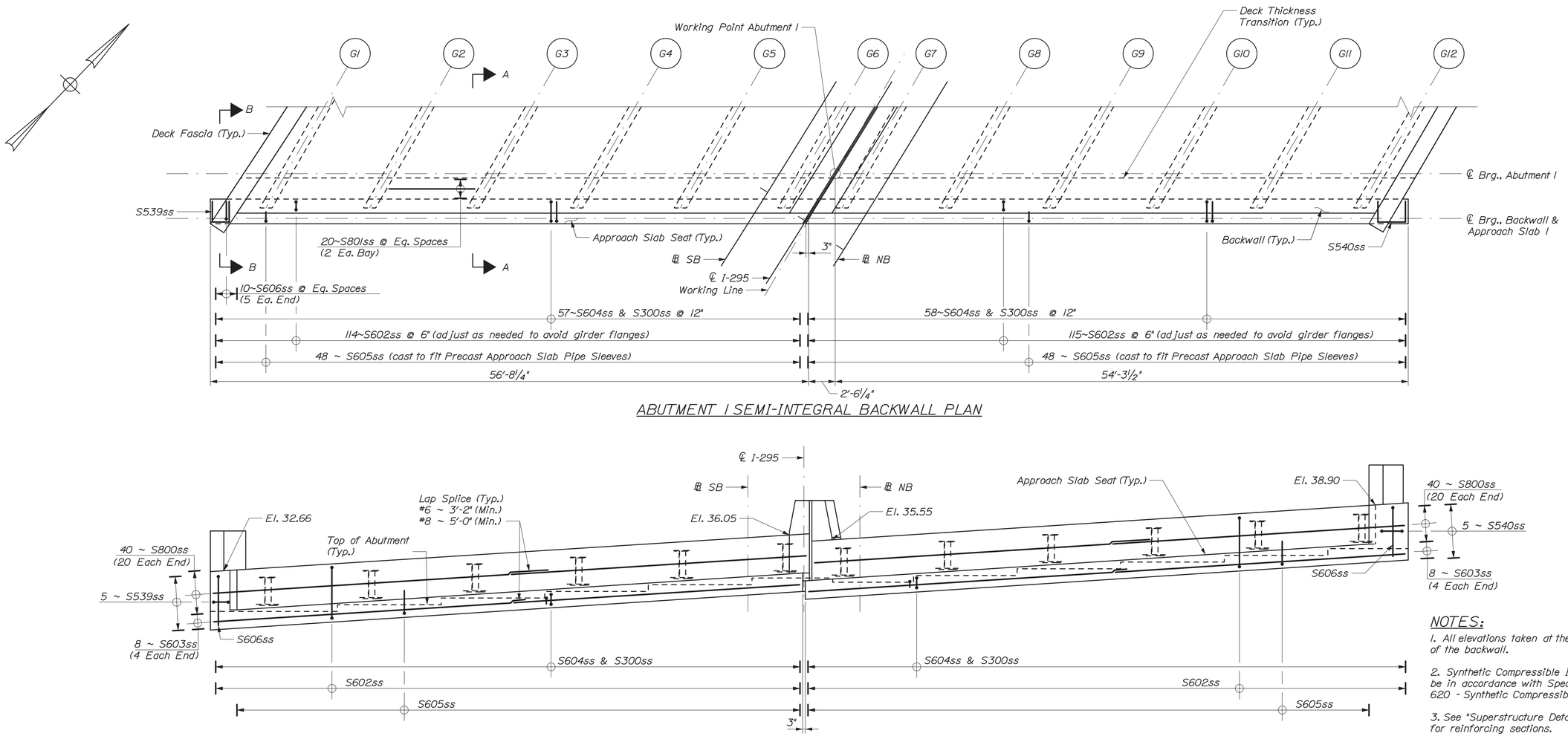
INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUPERSTRUCTURE PLAN
REINFORCING

SHEET NUMBER

203

OF 220

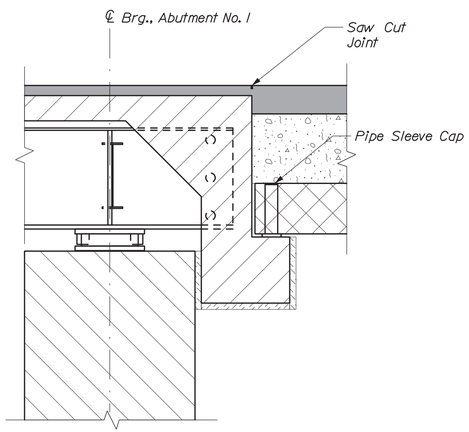


ABUTMENT 1 SEMI-INTEGRAL BACKWALL PLAN

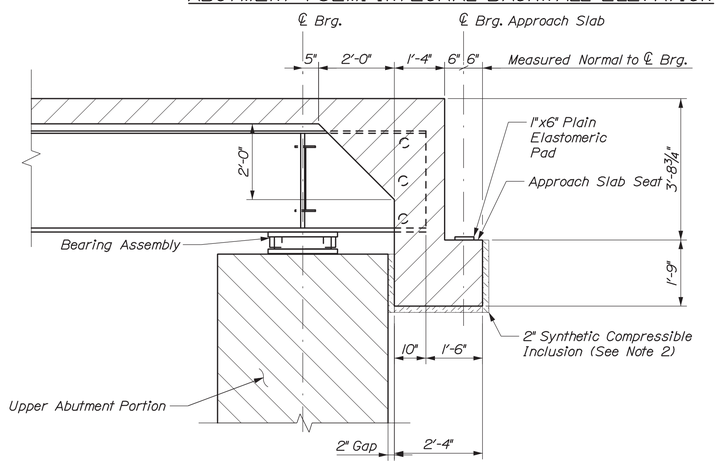
ABUTMENT 1 SEMI-INTEGRAL BACKWALL ELEVATION

NOTES:

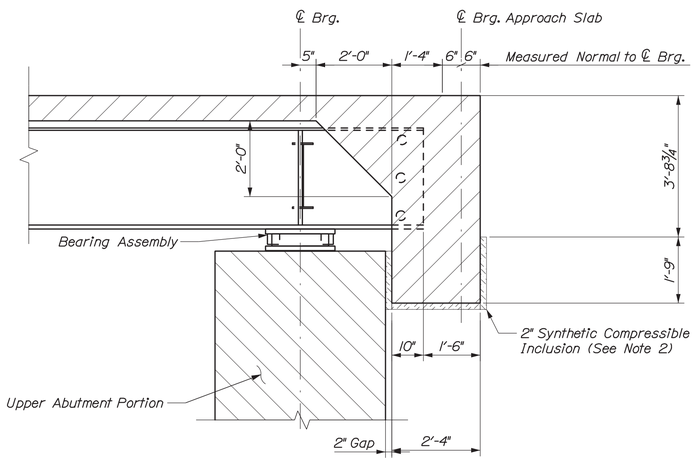
1. All elevations taken at the south face of the backwall.
2. Synthetic Compressible Inclusion shall be in accordance with Special Provision 620 - Synthetic Compressible Inclusion
3. See "Superstructure Details 11" sheet for reinforcing sections.
4. The Contractor may drill and anchor the S605ss approach slab dowel bars.



SECTION A-A - PAVEMENT DETAIL



SECTION A-A



SECTION B-B
(Barrier not shown for clarity)

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

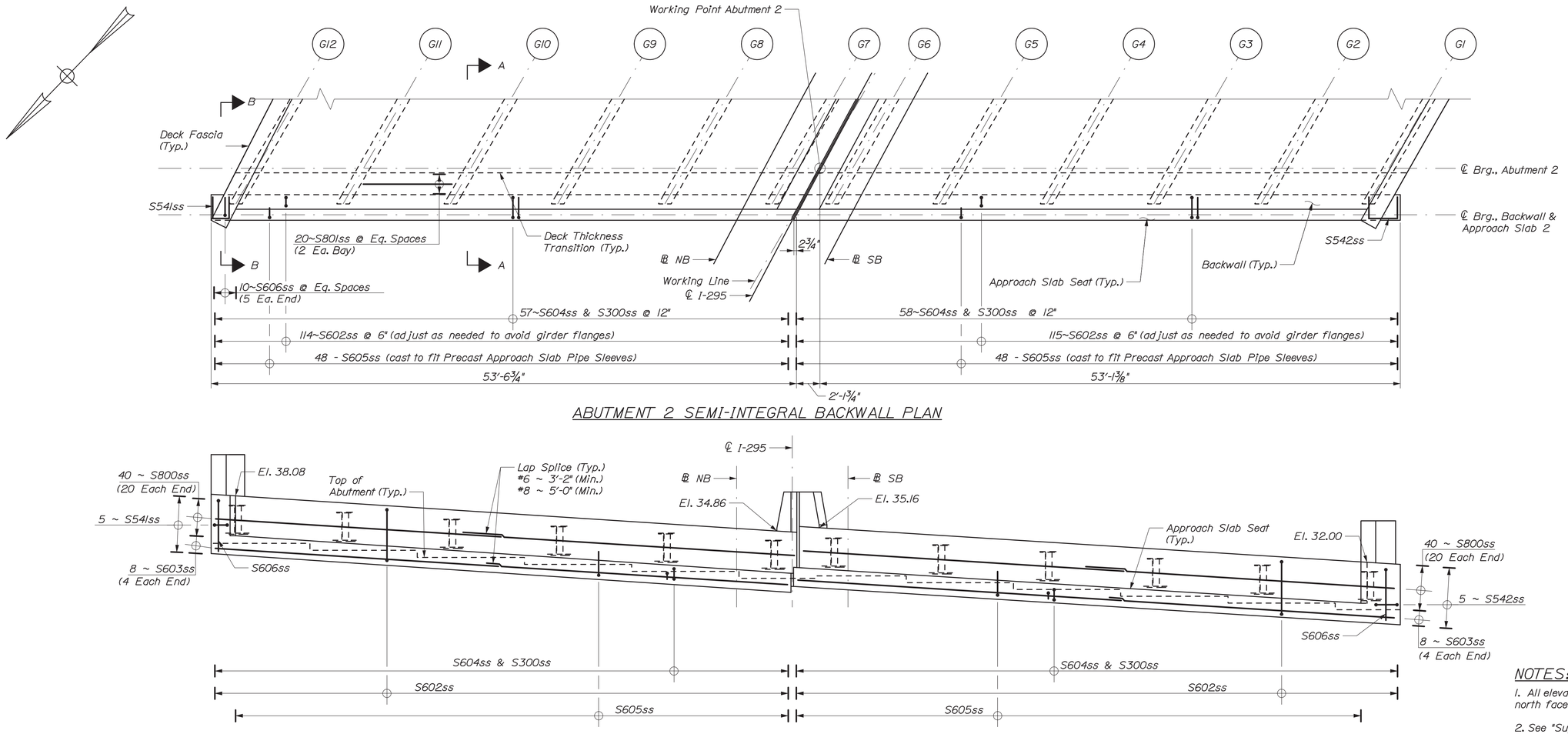
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INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUPERSTRUCTURE DETAILS I

SHEET NUMBER
204
OF 220

Username:
Date:3/3/2020
Division:
Filename: 204_Superstructure Details 1.dgn

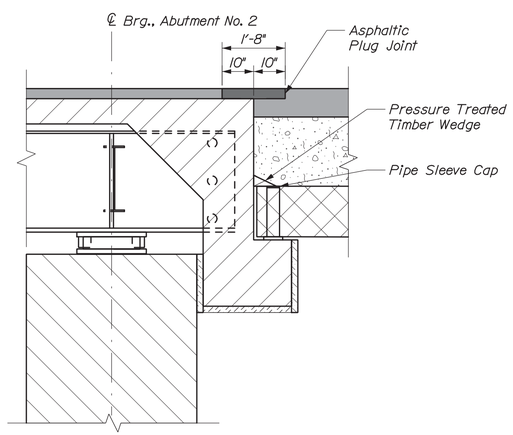


ABUTMENT 2 SEMI-INTEGRAL BACKWALL PLAN

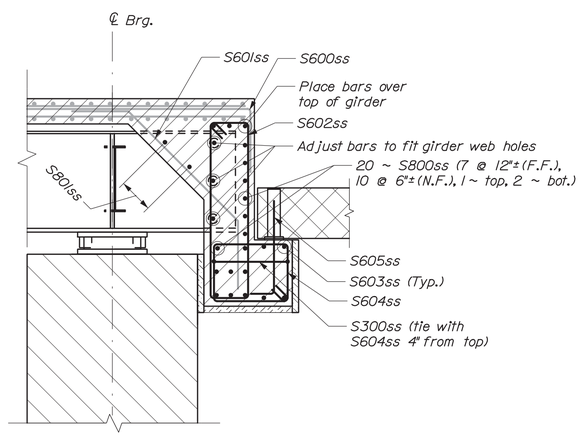
ABUTMENT 2 SEMI-INTEGRAL BACKWALL ELEVATION

NOTES:

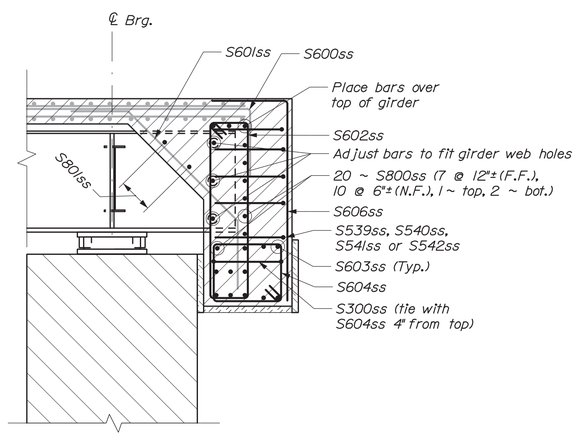
1. All elevations taken at the north face of the backwall.
2. See "Superstructure Details I" sheet for geometry sections.



SECTION A-A - PAVEMENT DETAIL



SECTION A-A - REINFORCING DETAIL



SECTION B-B - REINFORCING DETAIL

(Barrier not shown for clarity)

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

SUPERSTRUCTURE DETAILS II

SHEET NUMBER

205

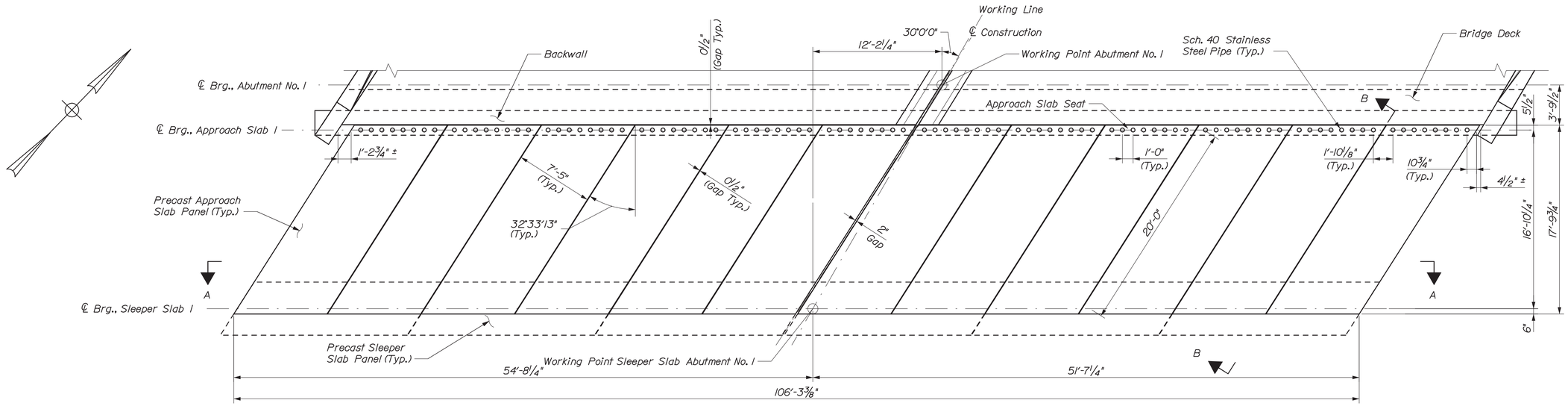
OF 220

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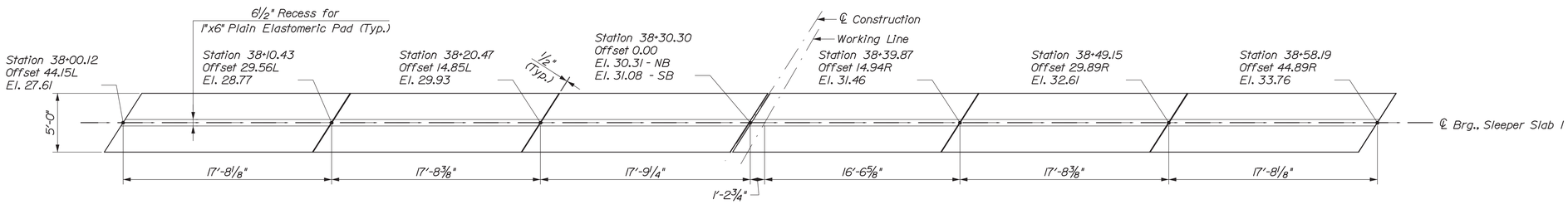
Date:3/3/2020

Division:

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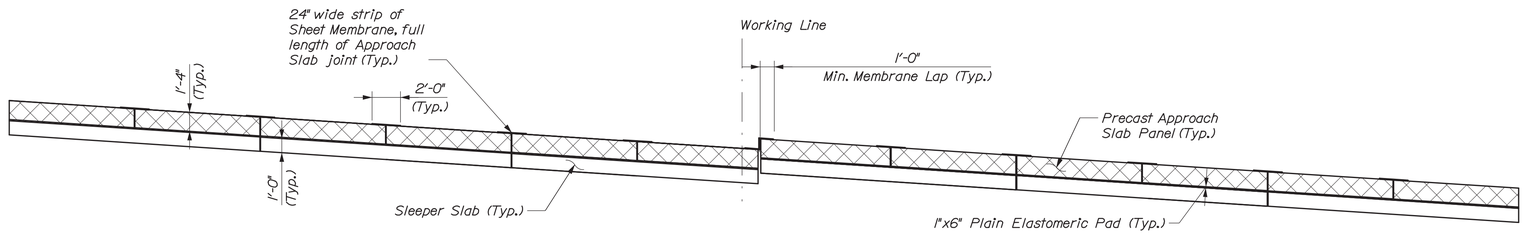


APPROACH SLAB NO. 1 PLAN



SLEEPER SLAB APPROACH NO. 1

NOTE: Elevations are to bottom of sleeper slab.



SECTION A-A

NOTES:

1. Sleeper Slabs shall be placed on a minimum of 6" of Granular Borrow, see sheet "Abutment and Wingwall Sections V1".

2. No connection is required between adjacent sleeper or approach slab sections.

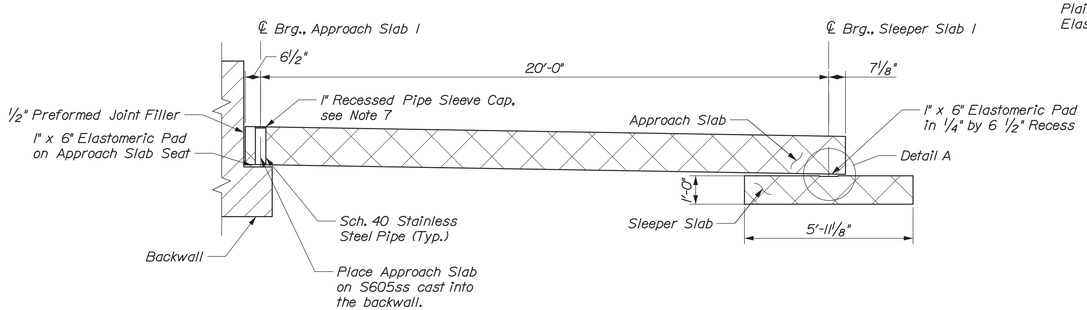
3. Sheet membrane for the backwall connection, shown on sheets "Superstructure Details I" and "Superstructure Details II" longitudinal slab joints, and the longitudinal joint between the northbound and southbound center approach slabs will be incidental to Pay Item 534.7601 - Precast Approach Slab.

4. Elastomeric bearing pads shall be incidental to Pay Item 534.7601 - Precast Approach Slab.

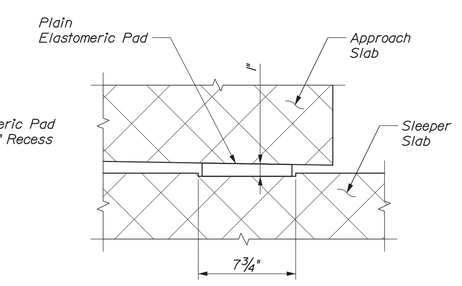
5. Concrete for precast sleeper slabs and approach slabs shall meet the requirements of Class P concrete. The Contractor may self-perform the construction of the approach slabs and sleeper slabs. If so, the Contractor shall construct the precast approach slabs and sleeper slabs on site or at a location coordinated with the Department.

6. The Contractor shall adjust the center location of each approach slab pipe sleeve to correspond to the center of the backwall dowels as necessary.

7. The Contractor shall design the recessed pipe sleeve cap. The cap may be either an insert to the pipe sleeve or a cover in a recessed blockout in the top of the concrete approach slab. The pipe sleeve cap must meet the following: be made of an environmentally durable material i.e. galvanized steel or stainless steel, sit flush or below the top of the approach slab, not interfere with the movement between the pipe sleeve and the S605ss dowel bar, prevent soil migration into the pipe sleeve, and withstand a 400 pound impact.



SECTION B-B



DETAIL A

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.JW	ERB	2\20
CHECKED-REVIEWED	KEB	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

APPROACH SLAB 1
PLAN AND SECTION

SHEET NUMBER

206

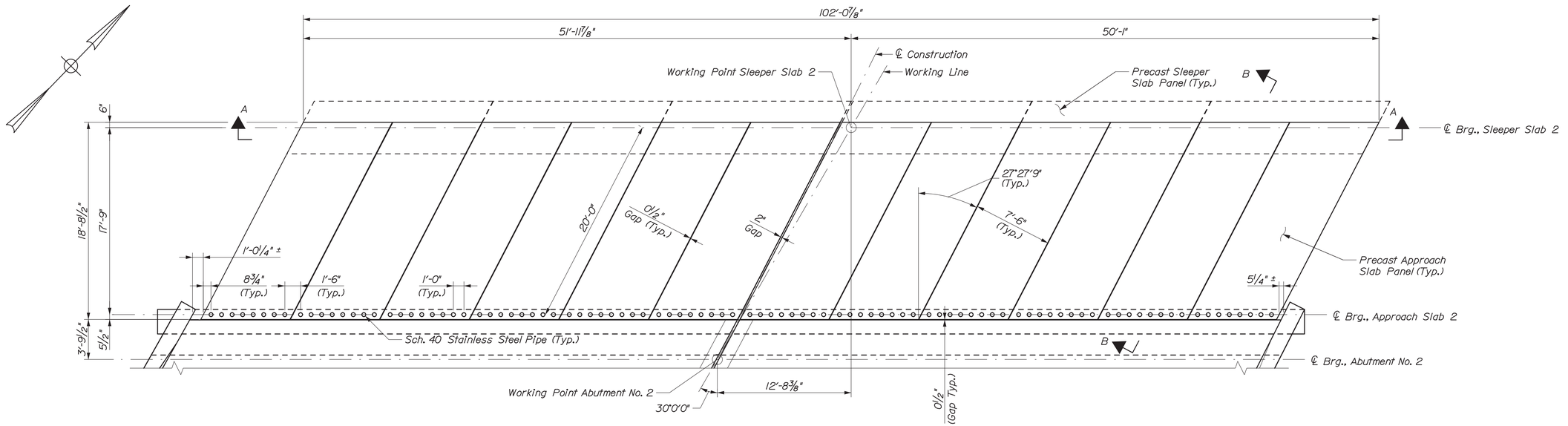
OF 220

Username:

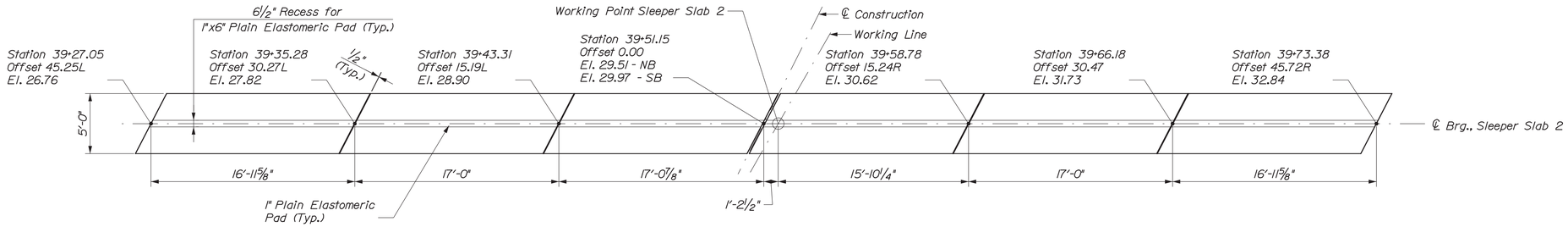
Division:

Date:3/3/2020

Filename: 206_Approach Slab 1.dgn

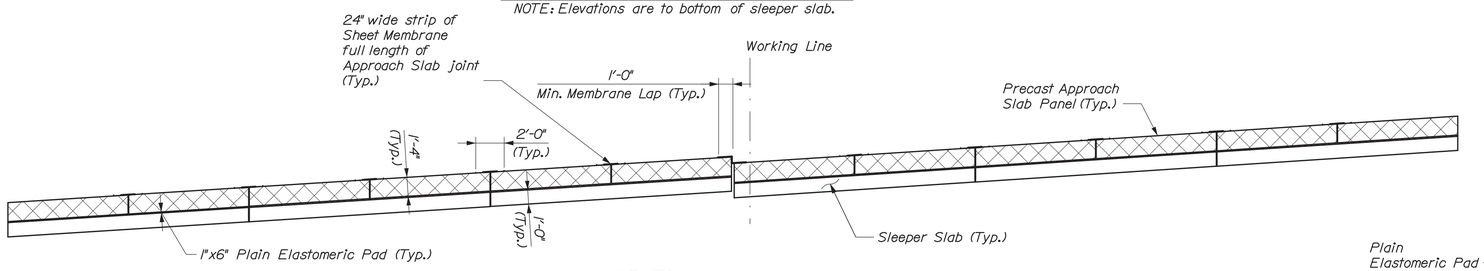


APPROACH SLAB NO. 2 PLAN

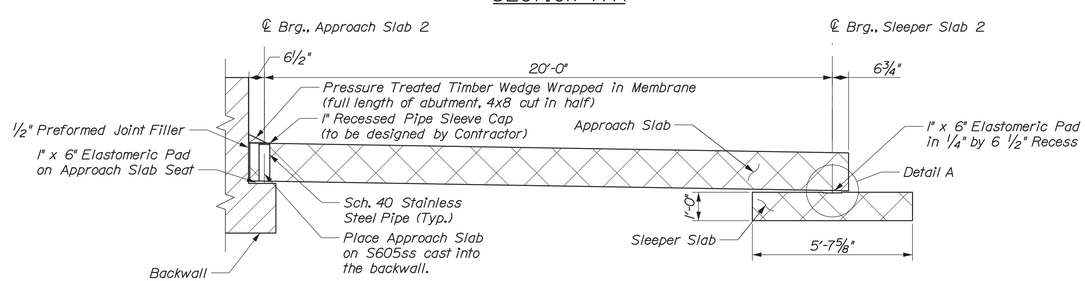


SLEEPER SLAB APPROACH NO. 2

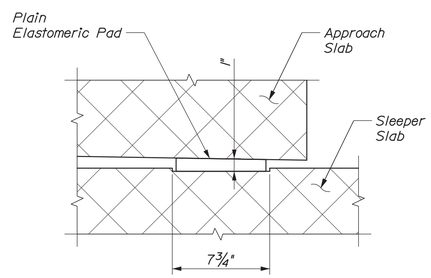
NOTE: Elevations are to bottom of sleeper slab.



SECTION A-A



SECTION B-B



DETAIL A

NOTES:

1. See "Approach Slab 1 Plan and Section" for Approach Slab Notes.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	2\20
CHECKED-REVIEWED	KEB	2\20
DESIGN2-DETAILED2	EEB	
DESIGN3-DETAILED3	TRC	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

APPROACH SLAB 2 PLAN AND SECTION

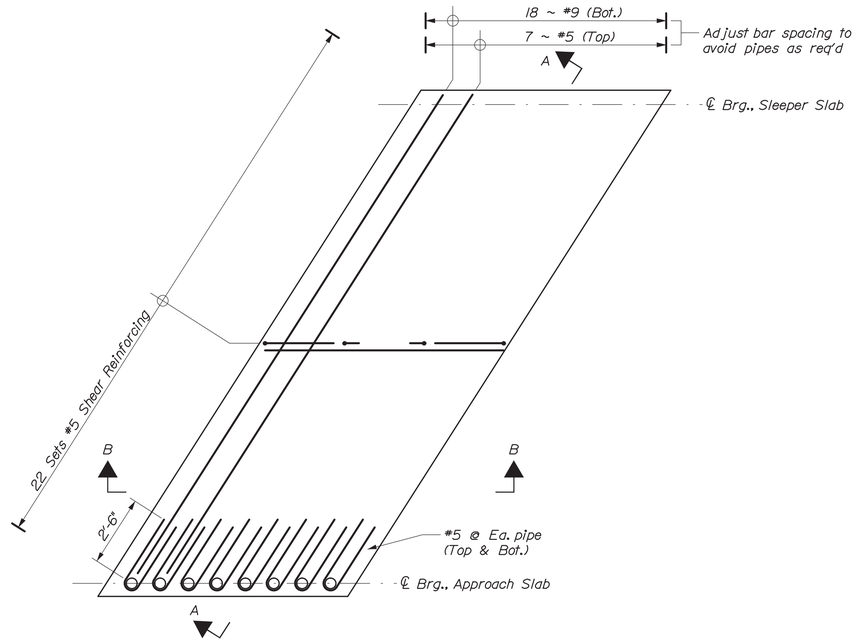
SHEET NUMBER

207

OF 220

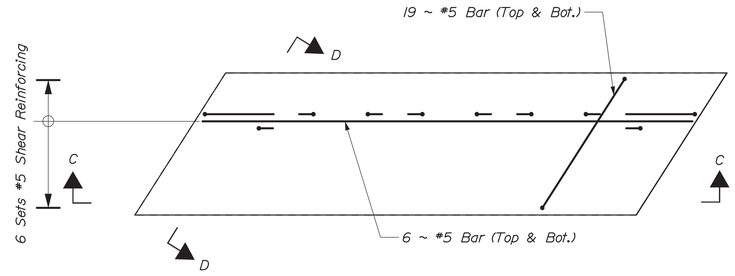
HNTB

Filename: 207_Approach Slab 2.dgn Division: Username: Date:3/3/2020



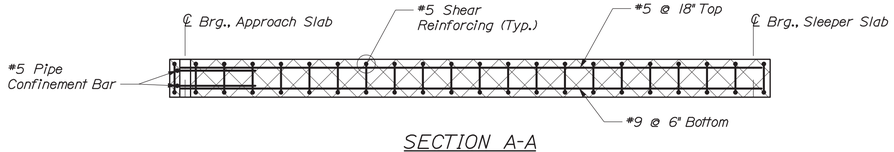
APPROACH SLAB PANEL REINFORCING PLAN

(Approach Slab 1 shown, Approach Slab 2 similar)

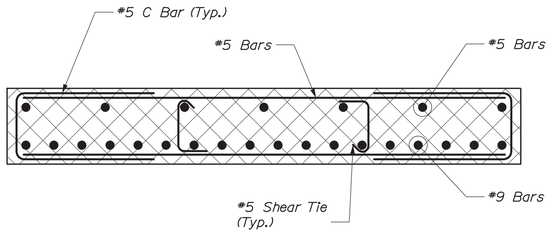


SLEEPER SLAB PANEL REINFORCING PLAN

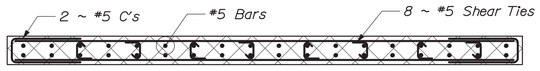
(Sleeper Slab 1 shown, Sleeper Slab 2 similar)



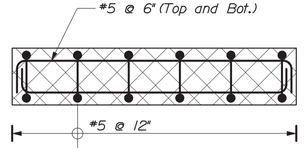
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	H.JW	E.R.B	2\20
CHECKED-REVIEWED	K.E.B	T.R.C	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

APPROACH SLAB REINFORCING

SHEET NUMBER

208

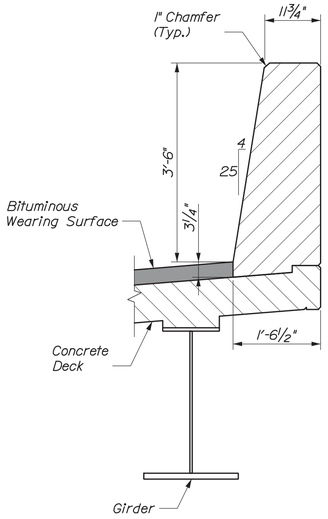
OF 220

Username:

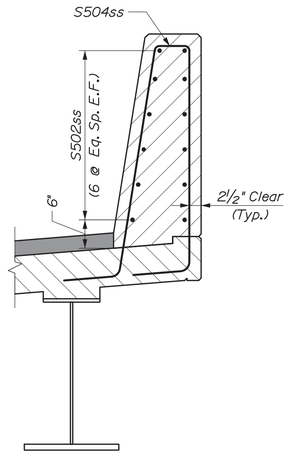
Date:3/3/2020

Division:

Filename: 208_Approach Slab Reinforcing.dgn



FASCIA BARRIER - MASONRY

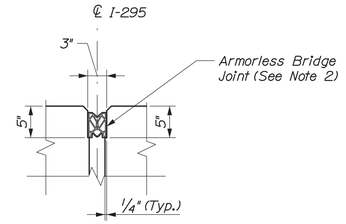


FASCIA BARRIER - REINFORCING

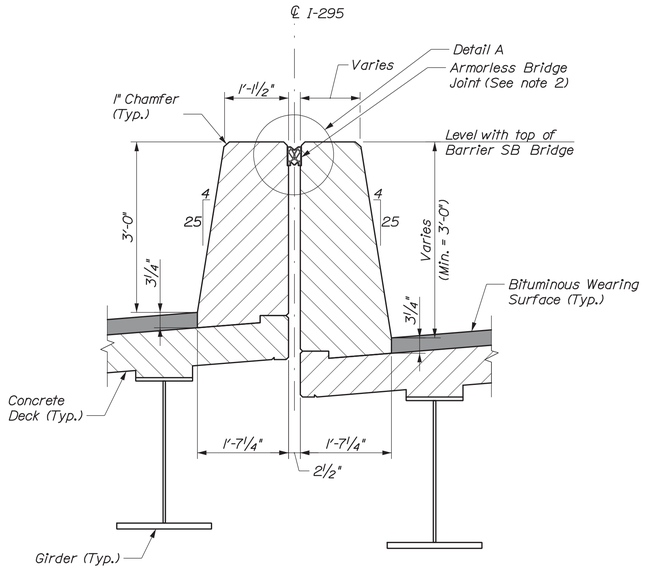
NOTES:

1. All bridge barriers shall have full perimeter ¾" chamfered dummy joints spaced at a maximum of 20'-0" on center. Contraction joints shall be no more than 40'-0" on center and chamfers shall be similar to dummy joints.

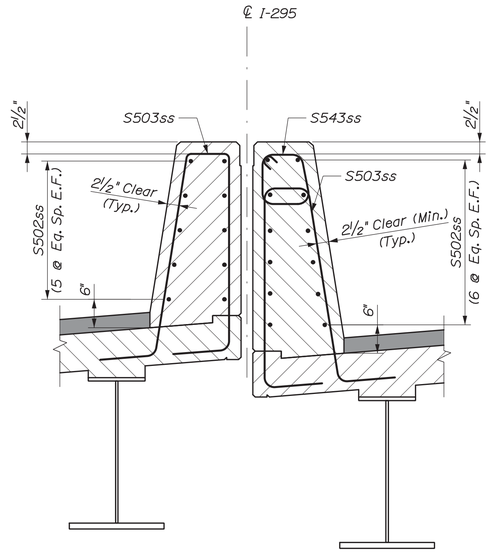
2. Armorless bridge joint shall be in accordance with Special Provision 520.223 "Armorless Bridge Joint".



DETAIL A



MEDIAN BARRIER - MASONRY



MEDIAN BARRIER - REINFORCING

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		DATE
PROJ. MANAGER	D. EATON	BY
DESIGN-DETAILED	HJW	ERB 2/20
CHECKED-REVIEWED	NMW	TRC 2/20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

BARRIER DETAILS I
BRIDGE BARRIER

SHEET NUMBER

209

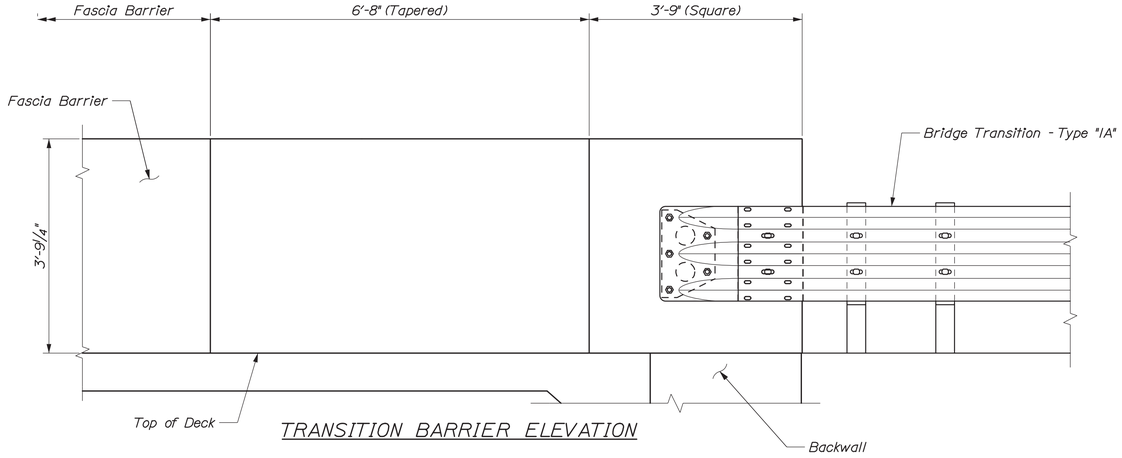
OF 220

Username:

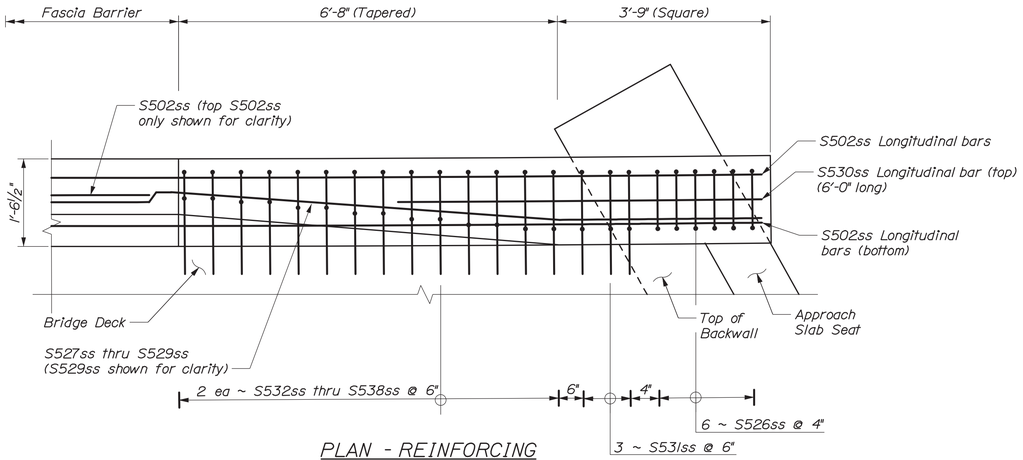
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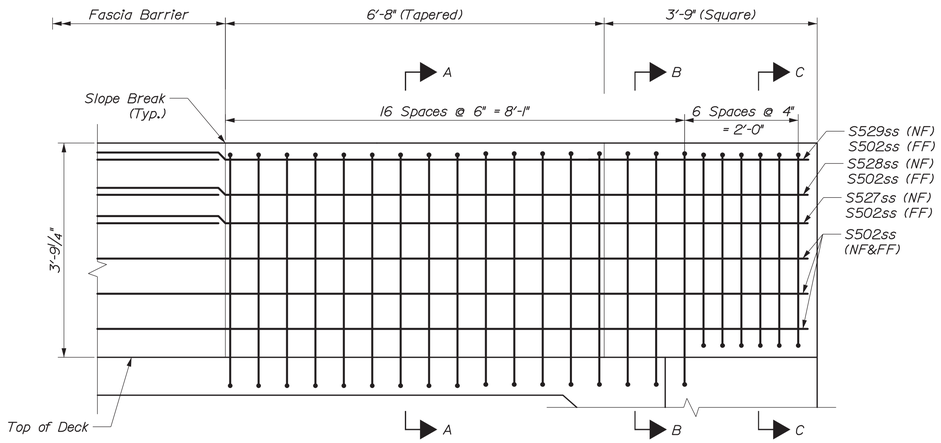
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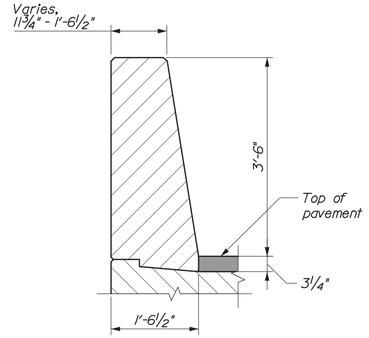
TRANSITION BARRIER ELEVATION



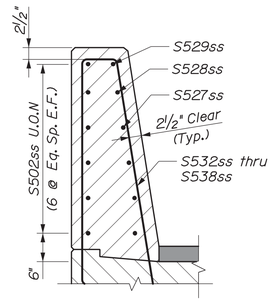
PLAN - REINFORCING



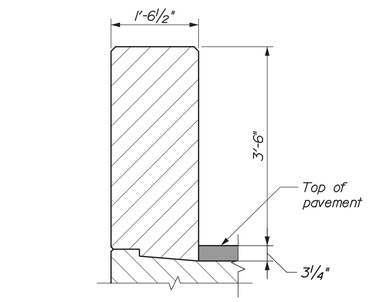
ELEVATION - REINFORCING



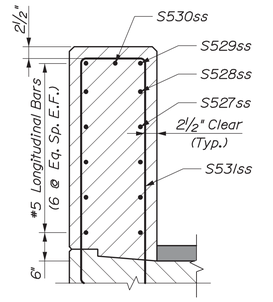
SECTION A-A (MASONRY)



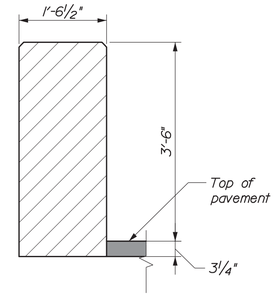
SECTION A-A (REINFORCING)



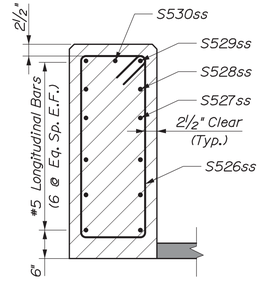
SECTION B-B (MASONRY)



SECTION B-B (REINFORCING)



SECTION C-C (MASONRY)



SECTION C-C (REINFORCING)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	ERB 2\20
CHECKED-REVIEWED	NMW	TRC 2\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

BARRIER DETAILS II
BRIDGE BARRIER

SHEET NUMBER

210

OF 220

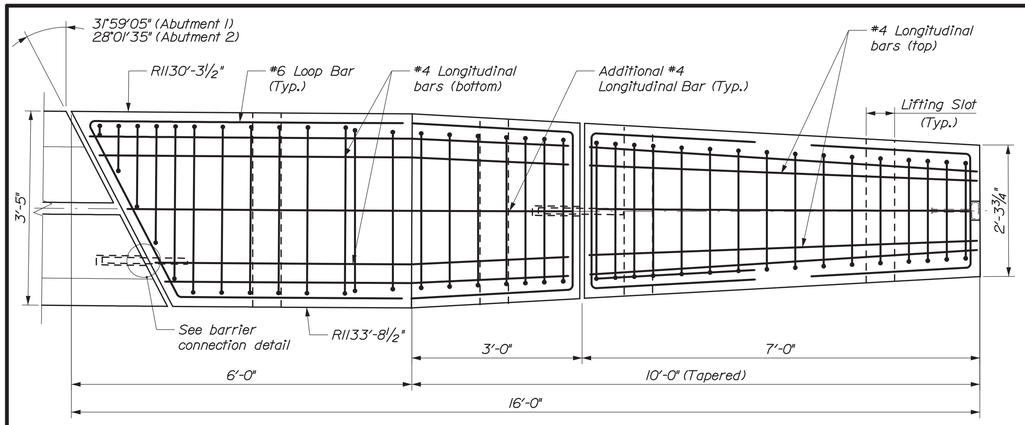
HNTB

Username:

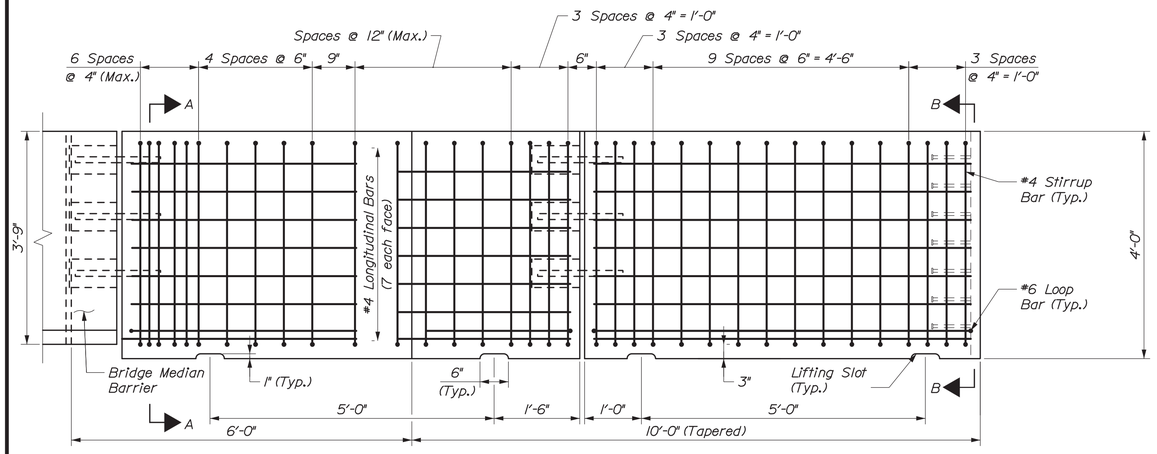
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Division:

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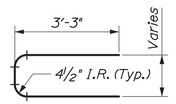


PLAN
(Abutment 2 shown, Abutment 1 similar)



ELEVATION

CONCRETE BARRIER REINFORCING SCHEDULE *				
DESCRIPTION	SIZE	NO.	UNBENT LENGTH	TYPE
LONGITUDINAL (EACH FACE)	#4	11	VARIES	
STIRRUPS	#4	8	VARIES	
STIRRUPS	#4	8	VARIES	
STIRRUPS	#4	13	VARIES	
LOOP BAR	#6	2	VARIES	



#6 LOOP BAR (TOP VIEW)



DIMENSIONS VARY

#4 STIRRUP BAR



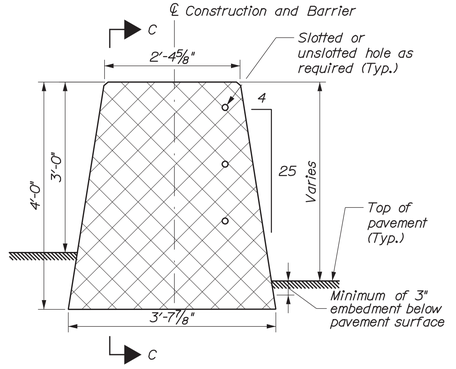
DIMENSIONS VARY

#4 STIRRUP BAR

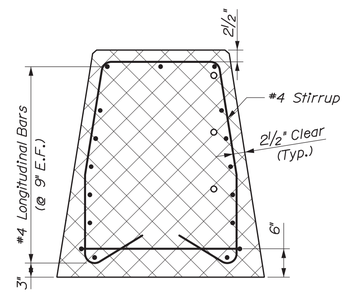


DIMENSIONS VARY

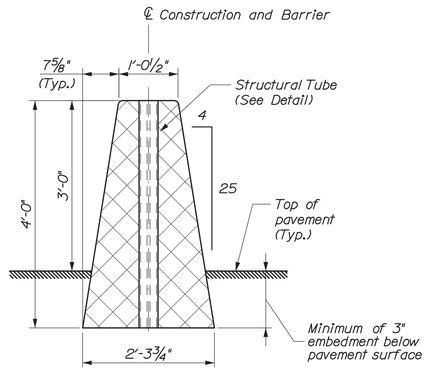
#4 STIRRUP BAR



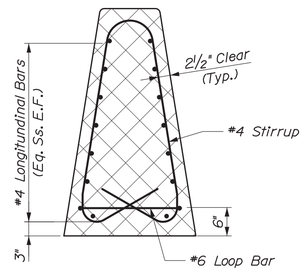
SECTION A-A (MASONRY)



SECTION A-A (REINFORCEMENT)



SECTION B-B (MASONRY)



SECTION B-B (REINFORCEMENT)

NOTES:

1. See Barrier Details IV Sheet for barrier connection detail.

2. Preparation of subgrade shall be performed to ensure proper height of connection guardrail prior to setting concrete transition barrier.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	ERB	2/20
CHECKED-REVIEWED	NMW	TRC	2/20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET

PORTLAND CUMBERLAND COUNTY

BARRIER DETAILS III
MEDIAN TRANSITION

SHEET NUMBER

211

OF 220

Username:

Date:3/3/2020

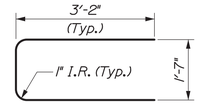
Division:

Filename: 211_Barrier Details III.dgn

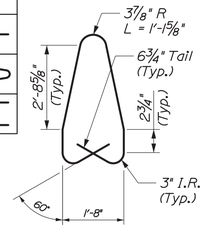
Username:
Division:
Date:3/3/2020
Filename: 212_Barrier Details IV.dgn

CONCRETE BARRIER REINFORCING SCHEDULE*

Description	Size	No.	Unbent Length	Type
Longitudinal	#4	10	19'-6"	
Stirrups	#4	29	8'-6"	
Loop Bar	#6	2	7'-11"	

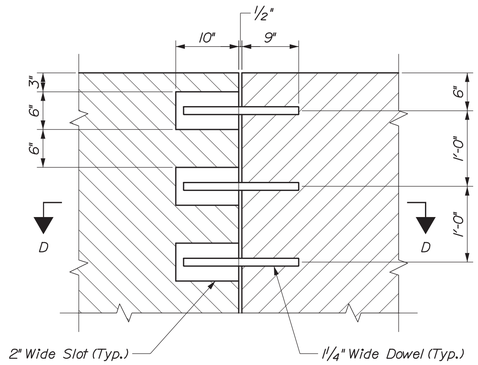


#6 LOOP BAR (TOP VIEW)

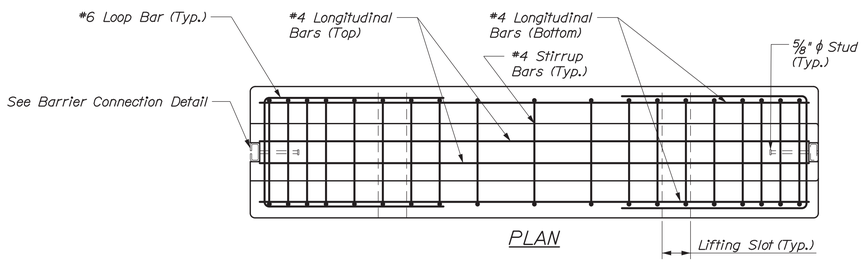


#4 STIRRUP BAR

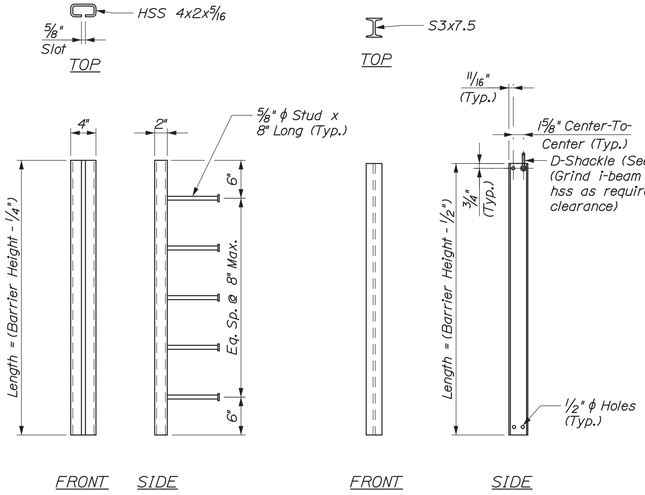
* Quantities Based On 20'-0" Barrier Length.



SECTION C-C

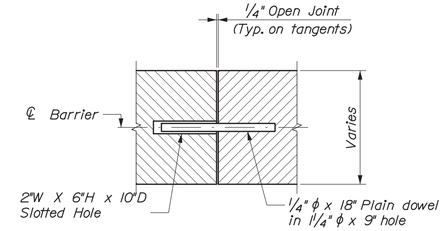


PLAN

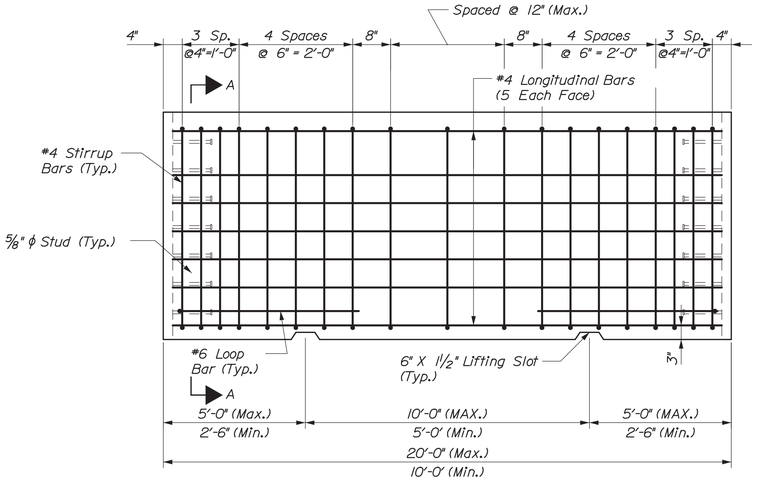


STRUCTURAL TUBE DETAILS

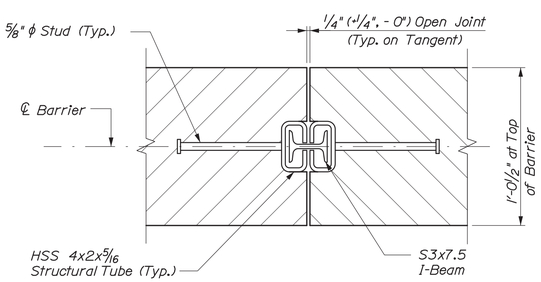
I-BEAM DETAILS



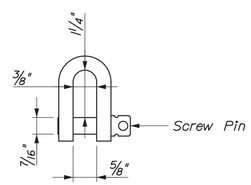
SECTION D-D



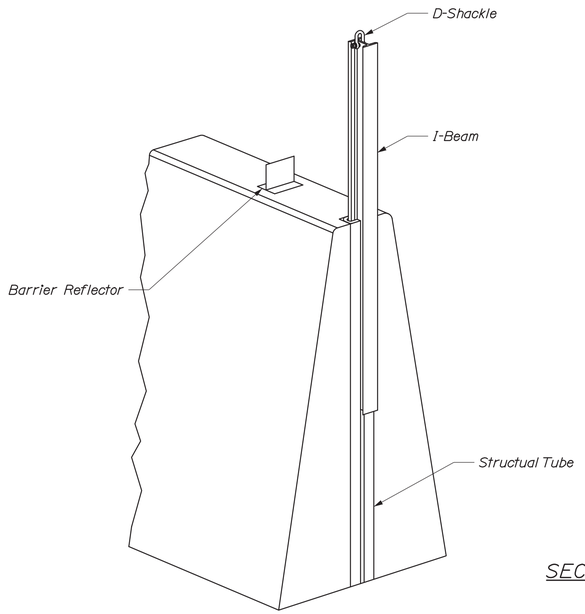
ELEVATION



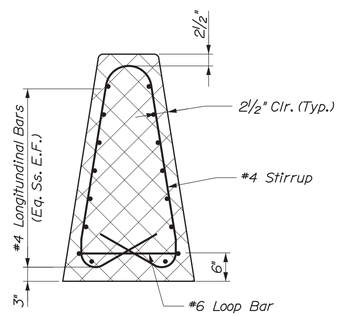
BARRIER CONNECTION DETAIL



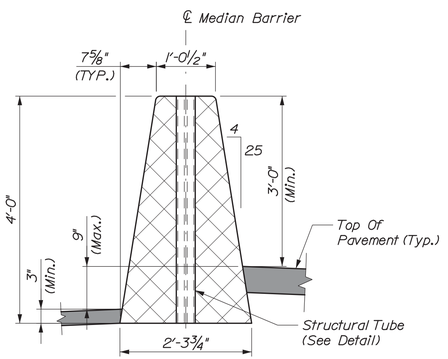
D-SHACKLE DETAIL
(One Per I-Beam)



PERSPECTIVE VIEW
NOT TO SCALE



SECTION A-A (REINFORCEMENT)



SECTION A-A (MASONRY)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON			
DESIGN-DETAILED	HJW	ERB	2\20	
CHECKED-REVIEWED	NMW	TRC	2\20	
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				1
REVISIONS 2				2
REVISIONS 3				3
REVISIONS 4				4
FIELD CHANGES				5

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

BARRIER DETAILS IV
PRECAST BARRIER DETAILS

SHEET NUMBER

212

OF 220

HNTB

Username:

Date:3/3/2020

Division:

Filename: 213_Reinforcing Schedule 1.dgn

STRAIGHT BARS

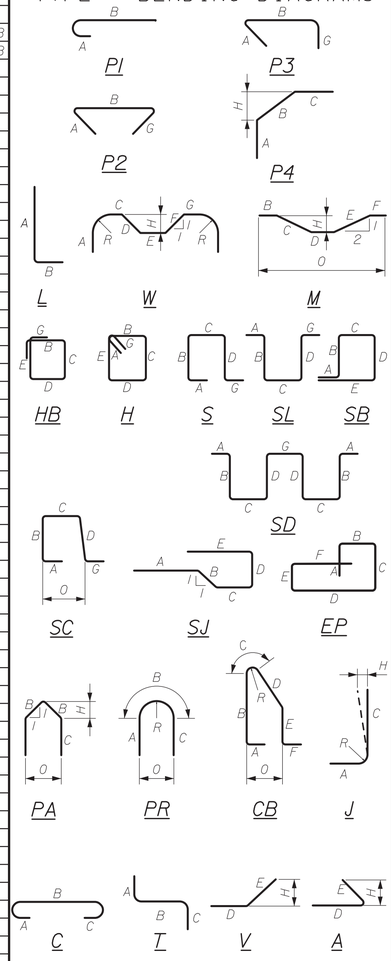
MARK	QTY.	LENGTH	LOCATION
Abutment 1 (Plain Bars)			
A501	42	8'-6"	West Wingwall Footing Long. Top
A502	35	8'-6"	East Wingwall Footing Long. Top
A503	84	42'-0"	Footing Transverse Top & Bot.
A504	20	40'-9"	West Wingwall Footing Transv. T & B
A506	20	33'-5"	East Wingwall Footing Transv. T & B
A700	83	8'-6"	West Wingwall Footing Long. Bot.
A701	68	8'-6"	East Wingwall Footing Long. Bot.

MARK	QTY.	LENGTH	LOCATION
Abutment 1 (Stainless Steel)			
A510ss	228	1'-11"	Closure Pour Coupler Bars (Bot.)
A511ss	228	1'-11"	Closure Pour Coupler Bars (Top)
A512ss	228	1'-11"	Cap Vertical Dowel (Bot.)
A516ss	24	40'-0"	Closure Pour Longitudinal
A518ss	86	12'-4"	West Wingwall Vertical
A520ss	30	35'-3"	West Wingwall Horizontal
A521ss	2	30'-5"	West Wingwall Horizontal
A522ss	2	25'-7"	West Wingwall Horizontal
A523ss	2	20'-9"	West Wingwall Horizontal
A524ss	2	15'-11"	West Wingwall Horizontal
A525ss	2	11'-1"	West Wingwall Horizontal
A526ss	2	6'-3"	West Wingwall Horizontal
A527ss	2	2'-0"	West Wingwall Horizontal
A528ss	2	36'-0"	West Wingwall Top
A533ss	68	3'-0"	East Wingwall Coupler Bars (Bot.)
A534ss	62	3'-0"	East Wingwall Coupler Bars (Top)
A535ss	32	28'-8"	East Wingwall Horizontal
A549ss	18	6'-10"	East Wingwall Vertical
A550ss	28	11'-1"	East Wingwall Vertical
A551ss	28	14'-11"	East Wingwall Horizontal
A552ss	12	8'-1"	East Wingwall Horizontal
A553ss	2	6'-1"	East Wingwall Horizontal
A554ss	2	4'-1"	East Wingwall Horizontal
A557ss	2	31'-11"	East Wingwall Top
A560ss	228	1'-10"	Cap Vertical Dowel (Top)
A604ss	66	58'-6"	Stem Horizontal
A607ss	10	47'-2"	Cap Horizontal Mid
A608ss	2	27'-8"	Cap Horizontal Top
A609ss	2	17'-6"	Cap Horizontal Top
A610ss	8	39'-0"	Cap Horizontal Mid
A611ss	4	34'-9"	Cap Horizontal Mid
A702ss	20	59'-0"	Cap Horizontal Bot.

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Abutment 1 (Plain Bars)														
A500	120	10'-2"	S	0"	10"	8'-6"	10"			0"				Footing Longitudinal Top
A505	20	5'-2"	V				2'-7"	2'-7"			1'-4"			West Wingwall Footing to Abut. T & B
A507	20	5'-2"	V				2'-7"	2'-7"			2'-0"			West Wingwall Footing to Abut. T & B
A600	238	10'-6"	S	0"	1'-0"	8'-6"	1'-0"			0"				Footing Longitudinal Bot.
Abutment 1 (Stainless Steel)														
A400ss	16	11'-7"	S	0"	4'-0"	3'-7"	4'-0"			0"				Keeper Block Long.
A401ss	10	15'-3"	S	0"	4'-0"	7'-3"	4'-0"			0"				Keeper Block Trans.
A402ss	392	5'-8"	H	6"	1'-2"	1'-2"	1'-2"	1'-2"		6"				Slide Shoe Reinforcing
A508ss	43	16'-7"	L	15'-9"	10"									Footing to West Wingwall (NF)
A509ss	35	16'-7"	L	15'-9"	10"									Footing to East Wingwall (NF)
A513ss	142	11'-10"	S	0"	3'-10"	4'-2"	3'-10"			0"				Cap Stirrups (G5-G12)
A514ss	160	10'-7"	EP	0"	10"	2'-10"	3'-3"	2'-10"	10"					Cap Stirrups (G3-G4)
A515ss	172	8'-1"	EP	0"	10"	1'-7"	3'-3"	1'-7"	10"					Cap Stirrups (G1-G2)
A517ss	8	5'-10"	S	0"	10"	4'-2"	10"			0"				Closure Pour Ends
A519ss	43	2'-10"	S	0"	10"	1'-2"	10"			0"				West Wingwall Vertical
A529ss	51	14'-6"	V				8'-6"	6'-0"			3'-0"			West Wingwall Corner
A530ss	15	7'-6"	V				3'-10"	3'-8"			1'-10"			West Wingwall Corner
A531ss	8	11'-10"	CB	0"	6'-0"	4"	1'-2"	4'-4"	0"			1'-2"	2"	West Wingwall Corner
A532ss	34	2'-10"	S	0"	10"	1'-2"	10"			0"				East Wingwall Vertical
A536ss	51	11'-4"	V				7'-8"	3'-8"			2'-10"			East Wingwall Corner
A537ss	1	3'-10"	S	0"	1'-4"	1'-2"	1'-4"			0"				East Wingwall Vertical
A538ss	1	4'-10"	S	0"	1'-10"	1'-2"	1'-10"			0"				East Wingwall Vertical
A539ss	1	5'-10"	S	0"	2'-4"	1'-2"	2'-4"			0"				East Wingwall Vertical
A540ss	1	6'-10"	S	0"	2'-10"	1'-2"	2'-10"			0"				East Wingwall Vertical
A541ss	1	7'-10"	S	0"	3'-4"	1'-2"	3'-4"			0"				East Wingwall Vertical
A542ss	1	8'-10"	S	0"	3'-10"	1'-2"	3'-10"			0"				East Wingwall Vertical
A543ss	1	9'-10"	S	0"	4'-4"	1'-2"	4'-4"			0"				East Wingwall Vertical
A544ss	1	10'-10"	S	0"	4'-10"	1'-2"	4'-10"			0"				East Wingwall Vertical
A545ss	1	11'-10"	S	0"	5'-4"	1'-2"	5'-4"			0"				East Wingwall Vertical
A546ss	1	12'-10"	S	0"	5'-10"	1'-2"	5'-10"			0"				East Wingwall Vertical
A547ss	1	13'-10"	S	0"	6'-4"	1'-2"	6'-4"			0"				East Wingwall Vertical
A548ss	23	14'-10"	S	0"	6'-10"	1'-2"	6'-10"			0"				East Wingwall Vertical
A555ss	39	4'-3"	V				2'-2"	2'-1"			1'-7"			East Wingwall Corner
A556ss	14	9'-6"	CB	0"	3'-11"	5"	1'-2"	3'-7"	0"			1'-2"	2"	East Wingwall Corner
A558ss	21	14'-8"	SL	10"	2'-8"	7'-8"	2'-8"			10"				Slide Shoe Reinforcing
A559ss	63	8'-6"	SL	10"	2'-8"	1'-6"	2'-8"			10"				Slide Shoe Reinforcing
A601ss	341	16'-9"	L	15'-9"	1'-0"									Footing to Abutment Stem
A602ss	82	16'-9"	L	15'-9"	1'-0"									Footing to West Wingwall (FF)
A603ss	67	16'-9"	L	15'-9"	1'-0"									Footing to East Wingwall (FF)
A605ss	30	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Seat Ends
A606ss	114	10'-6"	S	0"	3'-2"	4'-2"	3'-2"			0"				Stem U-Bar at Construction Joint
A612ss	6	13'-1"	S	0"	2'-11"	7'-3"	2'-11"			0"				Cap Horizontal (G6)
A613ss	78	15'-0"	S	0"	5'-5"	4'-2"	5'-5"			0"				Cap Stirrup (G9-G12)
A614ss	3	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Cap End (G1)
A615ss	9	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Cap End (G12)
A616ss	98	17'-8"	SD	2'-6"	1'-8"	1'-2"	1'-8"			3'-8"				Slide Shoe Reinforcing
A703ss	40	19'-0"	SJ	0"	0"	3'-9"	1'-8"	13'-7"						Cap Horizontal Top (G1-G4)
A704ss	10	32'-6"	L	28'-11"	3'-7"									Cap Horizontal Top (G5-G7)
A705ss	40	17'-10"	L	13'-7"	4'-3"									Cap Horizontal Top (G8-G11)
A706ss	10	16'-2"	S	0"	4'-3"	7'-8"	4'-3"			0"				Cap Horizontal Top (G12)
A707ss	224	11'-0"	S	0"	5'-0"	1'-0"	5'-0"			0"				Slide Shoe Reinforcing

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
ASTM A955, GRADE 75
CSA S807-10, ACI 440.1r-15

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6
   Mark "S650ss" = bar size #6 Stainless Steel
   Mark "S600G" = bar size #6 GFRP

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with 'G' indicate GFRP. Bar marks ending with 'ss' indicate stainless steel. All other bars are plain (uncoated).

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON				
DESIGN-DETAILED	T.JP				
CHECKED-REVIEWED	KEB	ERB	2\20		
DESIGN2-DETAILED2		TRC	2\20		
DESIGN3-DETAILED3					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

REINFORCING STEEL SCHEDULE I

SHEET NUMBER

213

OF 220

Username:

Date:3/3/2020

Division:

Filename: 214_Reinforcing Schedule II.dgn

STRAIGHT BARS

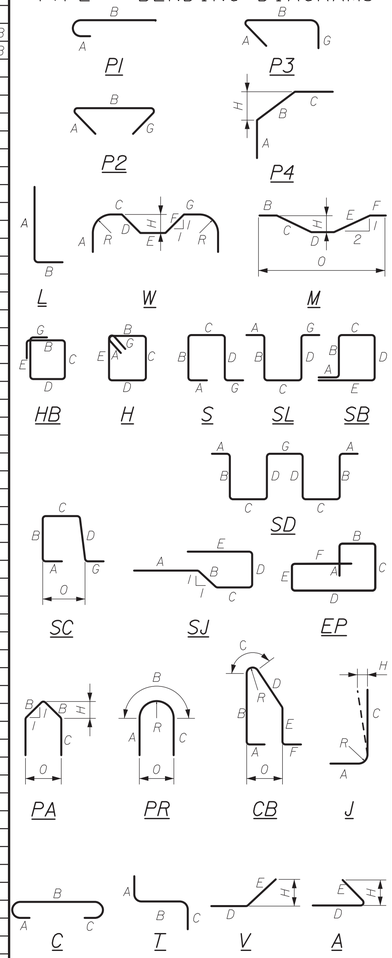
MARK	QTY.	LENGTH	LOCATION
Abutment 2 (Plain Bars)			
B501	49	8'-6"	East Wingwall Footing Long. Top
B502	27	8'-6"	West Wingwall Footing Long. Top
B503	84	43'-0"	Footing Transverse Top & Bot.
B504	20	47'-3"	East Wingwall Footing Transv. T & B
B506	20	25'-3"	West Wingwall Footing Transv. T & B
B700	96	8'-6"	East Wingwall Footing Long. Bot.
B701	52	8'-6"	West Wingwall Footing Long. Bot.

MARK	QTY.	LENGTH	LOCATION
Abutment 2 (Stainless Steel)			
B510ss	228	1'-11"	Closure Pour Coupler Bars (Bot.)
B511ss	228	1'-11"	Closure Pour Coupler Bars (Top)
B512ss	228	1'-11"	Cap Vertical Dowel (Bot.)
B516ss	24	40'-0"	Closure Pour Longitudinal
B519ss	88	3'-0"	East Wingwall Coupler Bars (Bot.)
B520ss	88	3'-6"	East Wingwall Coupler Bars (Top)
B521ss	34	41'-8"	East Wingwall Horizontal
B524ss	12	4'-0"	East Wingwall Vertical
B525ss	12	5'-8"	East Wingwall Vertical
B526ss	12	7'-4"	East Wingwall Vertical
B527ss	12	9'-0"	East Wingwall Vertical
B528ss	12	10'-8"	East Wingwall Vertical
B529ss	12	12'-4"	East Wingwall Vertical
B530ss	12	14'-0"	East Wingwall Vertical
B532ss	2	38'-2"	East Wingwall Horizontal
B533ss	2	34'-8"	East Wingwall Horizontal
B534ss	2	31'-2"	East Wingwall Horizontal
B535ss	2	27'-8"	East Wingwall Horizontal
B536ss	2	24'-2"	East Wingwall Horizontal
B537ss	2	20'-8"	East Wingwall Horizontal
B538ss	2	17'-2"	East Wingwall Horizontal
B539ss	2	13'-8"	East Wingwall Horizontal
B540ss	2	10'-2"	East Wingwall Horizontal
B541ss	2	6'-8"	East Wingwall Horizontal
B542ss	2	3'-2"	East Wingwall Horizontal
B543ss	2	43'-4"	East Wingwall Top
B545ss	52	12'-2"	West Wingwall Vertical
B547ss	28	19'-2"	West Wingwall Horizontal
B549ss	8	6'-6"	West Wingwall Horizontal
B550ss	2	14'-8"	West Wingwall Horizontal
B551ss	2	10'-2"	West Wingwall Horizontal
B552ss	2	5'-8"	West Wingwall Horizontal
B553ss	2	19'-6"	West Wingwall Horizontal
B554ss	2	8'-0"	West Wingwall Horizontal
B555ss	2	6'-4"	West Wingwall Horizontal
B556ss	2	4'-8"	West Wingwall Horizontal
B560ss	228	1'-10"	Cap Vertical Dowel (Top)
B604ss	58	58'-6"	Stem Horizontal
B607ss	10	48'-6"	Cap Horizontal Mid
B608ss	2	28'-10"	Cap Horizontal Top
B609ss	2	19'-1"	Cap Horizontal Top
B610ss	8	39'-0"	Cap Horizontal Mid
B611ss	4	33'-3"	Cap Horizontal Mid
B702ss	20	59'-0"	Cap Horizontal Bot.

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Abutment 2 (Plain Bars)														
B500	122	10'-2"	S	0"	10"	8'-6"	10"			0"				Footing Longitudinal Top
B505	20	5'-2"	V				2'-7"	2'-7"			1'-4"			East Wingwall Footing to Abut. T & B
B507	20	5'-2"	L	2'-7"	2'-7"									West Wingwall Footing to Abut. T & B
B600	243	10'-6"	S	0"	1'-0"	8'-6"	1'-0"			0"				Footing Longitudinal Bot.
Abutment 2 (Stainless Steel)														
B400ss	16	11'-9"	S	0"	4'-1"	3'-7"	4'-1"			0"				Keeper Block Long.
B401ss	10	14'-5"	S	0"	4'-1"	6'-3"	4'-1"			0"				Keeper Block Trans.
B402ss	392	5'-8"	H	6"	1'-2"	1'-0"	1'-2"	1'-0"		6"				Slide Shoe Reinforcing
B508ss	43	15'-1"	L	14'-3"	10"									Footing to East Wingwall (NF)
B509ss	27	15'-1"	L	14'-3"	10"									Footing to West Wingwall (NF)
B513ss	142	11'-10"	S	0"	3'-10"	4'-2"	3'-10"			0"				Cap Stirrups (G5-G8)
B514ss	160	10'-7"	EP	0"	10"	2'-10"	3'-3"	2'-10"	10"					Cap Stirrups (G3-G4)
B515ss	156	8'-1"	EP	0"	10"	1'-7"	3'-3"	1'-7"	10"					Cap Stirrups (G1-G2)
B517ss	8	5'-10"	S	0"	10"	4'-2"	10"			0"				Closure Pour Ends
B518ss	44	2'-10"	S	0"	10"	1'-2"	10"			0"				East Wingwall Vertical (Top Phase I)
B522ss	48	7'-11"	V				4'-3"	3'-8"			1'-10"			East Wingwall Corner
B523ss	46	7'-10"	S	0"	3'-4"	1'-2"	3'-4"			0"				East Wingwall Top
B531ss	3	10'-0"	S	0"	4'-5"	1'-2"	4'-5"			0"				East Wingwall Horizontal
B544ss	6	6'-4"	CB	0"	2'-5"	4"	1'-2"	2'-5"	0"			1'-2"	2"	East Wingwall Top
B546ss	26	2'-10"	S	0"	10"	1'-2"	10"			0"				West Wingwall Vertical
B548ss	48	13'-4"	L	4'-8"	8'-8"									West Wingwall Horizontal
B557ss	2	10'-5"	V				2'-10"	7'-7"			3'-11"			West Wingwall Horizontal
B558ss	21	14'-8"	SL	10"	2'-8"	7'-8"	2'-8"			10"				Slide Shoe Reinforcing
B559ss	63	8'-6"	SL	10"	2'-8"	1'-6"	2'-8"			10"				Slide Shoe Reinforcing
B601ss	341	15'-3"	L	14'-3"	1'-0"									Footing to Abutment Stem
B602ss	85	15'-3"	L	14'-3"	1'-0"									Footing to East Wingwall (FF)
B603ss	51	15'-3"	L	14'-3"	1'-0"									Footing to West Wingwall (FF)
B605ss	26	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Seat Ends
B606ss	114	10'-6"	S	0"	3'-2"	4'-2"	3'-2"			0"				Stem U-Bar at Construction Joint
B612ss	6	13'-1"	S	0"	2'-11"	7'-3"	2'-11"			0"				Cap Horizontal (G6)
B613ss	80	15'-0"	S	0"	5'-5"	4'-2"	5'-5"			0"				Cap Stirrup (G9-G12)
B614ss	3	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Cap End (G1)
B615ss	9	6'-2"	S	0"	1'-0"	4'-2"	1'-0"			0"				Cap End (G12)
B616ss	98	17'-8"	SD	2'-6"	1'-8"	1'-2"	1'-8"			3'-8"				Slide Shoe Reinforcing
B703ss	40	19'-0"	SJ	0"	0"	3'-9"	1'-8"	13'-7"						Cap Horizontal Top (G1-G4)
B704ss	10	32'-6"	L	28'-11"	3'-7"									Cap Horizontal Top (G5-G7)
B705ss	40	18'-2"	L	13'-7"	4'-7"									Cap Horizontal Top (G8-G11)
B706ss	10	17'-9"	L	0"	4'-3"	9'-3"	4'-3"			0"				Cap Horizontal Top (G12)
B707ss	224	11'-0"	S	0"	5'-0"	1'-0"	5'-0"			0"				Slide Shoe Reinforcing
MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
ASTM A955, GRADE 75
CSA S807-10, ACI 440.1r-15

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6
   Mark "S650ss" = bar size #6 Stainless Steel
   Mark "S600G" = bar size #6 GFRP

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with 'G' indicate GFRP. Bar marks ending with 'ss' indicate stainless steel. All other bars are plain (uncoated).

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	D. EATON	
DESIGN-DETAILED	HJW	ERB	2\20
CHECKED-REVIEWED	NMW	TRC	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
PORTLAND CUMBERLAND COUNTY

REINFORCING STEEL SCHEDULE II

SHEET NUMBER

214

OF 220

Username:

Date:3/3/2020

Division:

Filename: 215_Reinforcing Schedule III.dgn

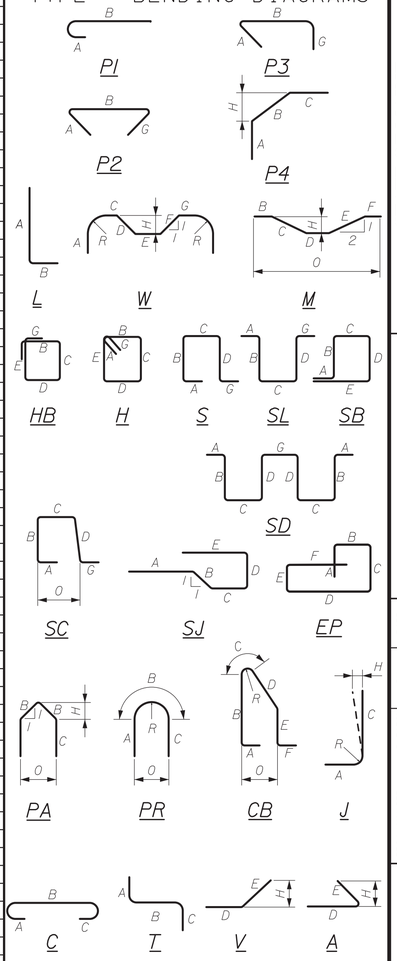
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION
Superstructure (Stainless Steel)							
S500ss	256	50'-0"	Top & Bot Longitudinal				
S501ss	256	33'-6"	Top & Bot Longitudinal				
S502ss	138	30'-6"	Barrier Longitudinal				
S506ss	428	46'-11"	Top & Bot Transverse				
S507ss	688	17'-4"	Top & Bot Transverse				
S508ss	8	16'-6"	Top & Bot Transverse				
S509ss	8	15'-8"	Top & Bot Transverse				
S510ss	8	14'-10"	Top & Bot Transverse				
S511ss	8	14'-0"	Top & Bot Transverse				
S512ss	8	13'-2"	Top & Bot Transverse				
S513ss	8	12'-4"	Top & Bot Transverse				
S514ss	8	11'-6"	Top & Bot Transverse				
S515ss	8	10'-8"	Top & Bot Transverse				
S516ss	8	9'-10"	Top & Bot Transverse				
S517ss	8	9'-0"	Top & Bot Transverse				
S518ss	8	8'-2"	Top & Bot Transverse				
S519ss	8	7'-4"	Top & Bot Transverse				
S520ss	8	6'-6"	Top & Bot Transverse				
S521ss	8	5'-8"	Top & Bot Transverse				
S522ss	8	4'-10"	Top & Bot Transverse				
S523ss	8	4'-0"	Top & Bot Transverse				
S524ss	8	3'-2"	Top & Bot Transverse				
S525ss	8	2'-4"	Top & Bot Transverse				
S530ss	4	6'-0"	Barrier Transition Long. Middle				
S603ss	32	30'-6"	Backwall Corbel Transverse				
S800ss	160	31'-6"	Backwall Transverse				
S801ss	40	9'-2"	Backwall Haunch Btwn Girders				

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Superstructure (Stainless Steel)														
S300ss	230	2'-10"	C	5"	2'-0"	5"								Backwall Corbel Tie
S503ss	254	9'-9"	SC	1'-0"	3'-6"	8"	3'-7"			1'-0"		1'-2"		Barrier Stirrup (Median)
S504ss	254	10'-7"	SC	1'-0"	4'-0"	6"	4'-1"			1'-0"		1'-2"		Barrier Stirrup (Fascia)
S505ss	640	9'-7"	C	7"	9'-0"	0"								Top Transverse Overhang
S526ss	24	9'-10"	H	6"	1'-1"	3'-4"	1'-1"	3'-4"		6"				Barrier Transition Vertical Hoop End
S527ss	4	13'-8"	M		3'-6"	4'-5"	3'-2"	0"	0"		2"	13'-8"		Barrier Transition Long. Taper
S528ss	4	13'-8"	M		3'-6"	4'-5"	3'-2"	0"	0"		4"	13'-8"		Barrier Transition Long. Taper
S529ss	4	13'-9"	M		3'-6"	4'-5"	3'-2"	0"	0"		6"	13'-8"		Barrier Transition Long. Taper
S531ss	12	10'-1"	SC	1'-0"	3'-6"	1'-0"	3'-7"			1'-0"		1'-2"		Barrier Transition Vertical Hoop
S532ss	8	10'-1"	SC	1'-0"	3'-6"	1'-0"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S533ss	8	10'-0"	SC	1'-0"	3'-6"	11"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S534ss	8	9'-11"	SC	1'-0"	3'-6"	10"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S535ss	8	9'-10"	SC	1'-0"	3'-6"	9"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S536ss	8	9'-9"	SC	1'-0"	3'-6"	8"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S537ss	8	9'-8"	SC	1'-0"	3'-6"	7"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S538ss	8	9'-7"	SC	1'-0"	3'-6"	6"	3'-7"			1'-0"		1'-1"		Barrier Transition Vertical Hoop
S539ss	5	5'-2"	S	0"	1'-11"	1'-4"	1'-1"			0"				Backwall Ends
S540ss	5	6'-6"	S	0"	1'-11"	2'-8"	1'-1"			0"				Backwall Ends
S541ss	5	5'-2"	S	0"	1'-11"	1'-4"	1'-1"			0"				Backwall Ends
S542ss	5	6'-6"	S	0"	1'-11"	2'-8"	1'-1"			0"				Backwall Ends
S543ss	127	3'-6"	H	6"	7"	8"	7"	8"		6"				Barrier Stirrup (NB Median Only)
S600ss	388	19'-5"	L	15'-9"	3'-8"									Deck End Top Longitudinal
S601ss	388	8'-8"	P4	2'-6"	3'-8"	2'-6"								Deck End Bottom Longitudinal
S602ss	458	12'-0"	H	6"	1'-0"	4'-6"	1'-0"	4'-6"		6"				Backwall Stirrup
S604ss	230	7'-10"	H	6"	2'-0"	1'-5"	2'-0"	1'-5"		6"				Backwall Corbel Stirrup
S605ss	192	3'-8"	L	1'-6"	2'-2"									Approach Slab Dowel
S606ss	20	6'-5"	L	4'-6"	1'-11"									Backwall Ends

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
ASTM A955, GRADE 75
CSA S807-10, ACI 440.1r-15

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6
   Mark "S650ss" = bar size #6 Stainless Steel
   Mark "S600G" = bar size #6 GFRP

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with "G" indicate GFRP. Bar marks ending with "ss" indicate stainless steel. All other bars are plain (uncoated).

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933

BRIDGE PLANS

PROJ. MANAGER	D. EATON		
DESIGN-DETAILED	HJW	BY	DATE
CHECKED-REVIEWED	NMW	ERB	2\20
DESIGN2-DETAILED2		TRC	2\20
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

INTERSTATE 295 OVER
VERANDA STREET
CUMBERLAND COUNTY
PORTLAND

REINFORCING STEEL SCHEDULE III

SHEET NUMBER

215

OF 220

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Username: Mark.Poulin Date:4/16/2020 Division: BRIDGE

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Sanitary Sewer		Traveled Way	
Approx. Property Lines	P.L.	Building	Clearing Limit Line	Telephone Line		Ditch	
Existing Right of Way		Trees Conifer	Deciduous	Electric Line		Catch Basin	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Water Line		Manhole	
Control Of Access	C.O.A.	Water Edge		Underdrain Line		Sewer Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Gas Line		Utility Pole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Guardrail		Fire Hydrant	
New Temporary Rights		Sign	Well WELL Mailbox	Culvert		Curbing	
New R/W Within Existing R/W							

	Existing	Proposed
Sanitary Sewer		
Telephone Line		
Electric Line	E	E
Water Line	W	W
Underdrain Line		
Gas Line		
Guardrail		
Culvert		

	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		
Curbing		

Cut Line C—C—C Fill Line F—F—F
Stonewall Retaining Wall
Baseline 10+00 11+00 12+00
Monument Traverse Point
Iron Rod Found ● IRF Pipe Found ● IPF
Replacement Pin Set

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

PLAN OF LOTS ARCADIA PARK
EAST DEERING DISTRICT, PORTLAND, ME
BY F.A. MERRIAM & CO.
RECORDING DATE NOVEMBER, 25, 1904
C.C.R.D. PLAN BOOK 10, PAGE 101

CONTROL INFORMATION
HORIZONTAL DATUM:
US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM:
NAVD88 COMBINED
FACTOR - 0.9999832

GRID NORTH

PLAN OF VERANDA PARK
FESSENDEN PARK CO.
RECORDING DATE: JANUARY 30, 1904
C.C.R.D. PLAN BOOK 10, PAGE 55

BOUNDARY SURVEY FOR NATALIE J. MCMANUS
182 VERANDA STREET, PORTLAND
BY TITCOMB ASSOCIATES
DATED OCTOBER 25, 1995
JOB NO. 95081

I-295 ON RAMP
CURVE DATA #1
PI = 201+49.91
D = 38°11'49.9"
Δ = 42°01'10.0" Lt.
R = 150.00'
L = 110.01'
T = 57.61'
E = 10.68'

VERANDA STREET
CURVE DATA #1
PI = 103+22.94
D = 13°28'52.9"
Δ = 10°55'56.5" Rt.
R = 425.00'
L = 81.09'
T = 40.67'
E = 1.94'

COLUMBIA SOCIAL & ALTHETIC CLUB OF PORTLAND

POB = STA. 98+34.13

HAWTHORNE STREET

2G PROPERTIES, LLC

LUX LLC
ITEM NO. (1)
TEMP. CONST. RIGHTS = 137± S.F. (1)
TOTAL AREA = 0.13± AC (CITY)

STA. 101+63.15 VERANDA STREET =
STA. 202+71.21 I-295 SB ON RAMP

STA. 101+78.27 VERANDA STREET =
STA. 1+00.00 WORDSWORTH STREET

MARGARET CARY CURRAN
WILLIAM CARY LAIRD
ITEM NO. (2)
TEMP. CONST. RIGHTS = 348± S.F.(1)
TOTAL AREA = 0.12± AC. (CITY)

WORDSWORTH STREET

LAWRENCE J. DONAHUE, III
SANDRA L. DONAHUE

JIMMY H. DANG
ITEM NO. (3)
TEMP. CONST. RIGHTS = 77± S.F. (1)
TOTAL AREA = 0.12± AC. (CITY)

IAN SCHLEH
ITEM NO. (4)
TEMP. CONST. RIGHTS = 889± S.F. (3)
TOTAL AREA = 0.19± AC. (CITY)

STA. 103+59±, 171± LT.

TEMP. CONST. LIMITS 420± S.F.
PROPOSED PAVED DRIVE
TEMP. CONST. LIMITS

TEMP. CONST. LIMITS 348± S.F.
TEMP. CONST. LIMITS 137± S.F.
TEMP. CONST. LIMITS 24± S.F.
TEMP. CONST. LIMITS 77± S.F.
TEMP. CONST. LIMITS 445± S.F.

BARBARA GARDNER

STA. 103+54± 117± LT.
STA. 103+66± 117± LT.
STA. 103+67± 128± LT.
STA. 103+57± 129± LT.
STA. 103+57± 117± LT.

S.H.C. FILE 3-132

BEGIN C.O.A.

520 PTRA PK

348± S.F. PLOT

PRWM PLUG W/DISK

98+34 99+00 BEGIN B.L. 100+00 101+00 102+00 103+00

VERANDA STREET/STATE AID HIGHWAY NO. 32

N 34°55'07.6" E 282.27'

PC CURVE #1 = STA. 102+82.27

21745-13 PUNCH IN DMH RIM

81.09'

VERANDA STREET CURVE #1

N 45°51'0

BM-160 AN 40"ELM

PBMK 160

6X6 GRAN FLUSH

5/8 REBAR BENT DOWN

BEGIN C.O.A.

PT = STA. 202+02.31

SHERENE M. BERNIER
IRIS D. MICUCCI
(LIFE ESTATE)

SHIRLEY R. DUTTON

FAYETTE STREET

I-295 ON RAMP CURVE #1

N 39°36'46.5" W

202+00

BOUNDARY SURVEY FOR LEO MICUCCI
163 VERANDA STREET, PORTLAND
BY TITCOMB ASSOCIATES
DATED SEPTEMBER, 27, 1991
JOB NO. 91078

CONTROL OF ACCESS
S.H.C. FILE 3-132

PC = STA. 200+92.31

200+00

I-295 SOUTHBOUND ON-RAMP/U.S. ROUTE 1

N 2°24'23.5" E

201+00

PTRA 521 PK

SEE DEED FROM STATE OF MAINE TO SHIRLEY R. DUTTON BOOK 17402, PAGE 204 DATED 1-30-2002

PC CURVE #1 = STA. 103+62.36

BM-161 AN 18" MAPLE PBMK 161

38+00

37+00

I-295 SOUTHBOUND

VERANDA ST. BRIDGE OVER VERANDA STREET

BRIDGE NO. 5933 WIN 021745.08

R/W REFERENCES

I-295:
S.H.C. FILE 3-132 (1960) SHEETS 1-5 OF 18
S.H.C. FILE 3-75 (1952) SHEETS 4-8 & 11-12 OF 13

VERANDA STREET (WESTERLY OF I-295):
VERANDA STREET MONUMENT LAYOUT PLAN
BY CITY OF PORTLAND PUBLIC WORKS DEPT.
DATED JANUARY 1996 (SHEETS 1 & 2 OF 2)
CITY PLAN 944/5A

VERANDA STREET (EASTERLY OF I-295):
VERANDA STREET CITY BLUESHEETS
NUMBERED 3 THROUGH 6
(ON FILE WITH PORTLAND ENGINEERING DEPT.)

CUMBERLAND COUNTY COMMISSIONERS RECORDS (C.C.C.R.)
VOLUME 16, PAGE 943, DATED 1896, 60' WIDE WITHIN PROJECT LOCUS
AND ASSOCIATED PLAN: COMMISSIONER'S PLAN BOOK 3, BOOK 51

D.O.T. FILE 3-586 (2012) MARTIN'S POINT BRIDGE, WIN 16731.00
S.H.C. FILE 3-51 (1940)

SIDE ROADS:
HAWTHORNE, FAYETTE, & WORDSWORTH STREETS:
SEE CITY PLAN 944/5A (SHEET 2)

OLYMPIA & OREGON STREETS
SEE CITY BLUESHEETS

CONTROLLED ACCESS LIMIT

CONTROLLED ACCESS LIMIT LINE ALONG R/W LINE

CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE

NO ACCESS WILL BE PERMITTED TO OR FROM STATE HIGHWAY "295" AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

PLAN OF LOTS, MARINE TERRACE
F.A. MERRIAM & CO.
BY V.C. RICHARDSON C.E.
RECORDING DATE: NOVEMBER, 25, 1904
C.C.R.D. PLAN BOOK 10, PAGE 103

TECH	CHECKED
N.T.A.	C.W.K.
R.M.C.	C.W.K.
R.M.C.	E.M.S.

ITEM	
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	4/6/2020	36566	164

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "295" &
STATE AID HIGHWAY NO. 32
I-295 AND VERANDA STREET
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. NHPP-2174(500)

DECEMBER 2019 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 3-652
SCALE 1" = 25' | SHEET 1 OF 4

SHEET NUMBER
216
OF 220

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: BRIDGE Username: Mark.Poulin Date:4/16/2020

PLAN LEGEND

Town, County, State; Approx. Property Lines; Existing Right of Way; Limits of Wrought Portion (L.O.W.P.); Control Of Access (C.O.A.); New Right of Way; New Easement; New Temporary Rights; New R/W Within Existing R/W

New R/W Along Existing R/W; Building; Clearing Limit Line; Trees (Conifer, Deciduous); Tree Line; Bush Line; Water Edge; Ledge; Rock/Boulder; Flag Pole; Fence (Chain Link, Barb Wire, Stockade); Sign; Well; Mailbox

	Existing	Proposed
Sanitary Sewer		
Telephone Line		
Electric Line	E	E
Water Line	W	W
Underdrain Line		
Gas Line		
Guardrail		
Culvert		

	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		
Curbing		

Cut Line C–C; Fill Line F–F; Stonewall; Retaining Wall; Baseline 10+00 11+00 12+00; Monument; Traverse Point; Iron Rod Found ● IRF; Pipe Found ● IPF; Replacement Pin Set

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____ REGISTER

CONTROL INFORMATION
HORIZONTAL DATUM:
US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM:
NAVD88 COMBINED
FACTOR - 0.9999832

GRID NORTH

VERANDA STREET CURVE DATA #2
PI = 105+26.63
D = 10°25'02.7"
Δ = 8°28'01.1" Rt.
R = 550.00'
L = 81.28'
T = 40.71'
E = 1.50'

I-295 NB OFF RAMP CURVE DATA #2
PI = 305+79.51
D = 10°25'02.7"
Δ = 19°16'34.5" Lt.
R = 550.00'
L = 185.04'
T = 93.40'
E = 7.87'

I-295 NB OFF RAMP CURVE DATA #3
PI = 307+47.57
D = 20°50'05.4"
Δ = 31°03'45.9" Lt.
R = 275.00'
L = 149.09'
T = 76.43'
E = 10.42'

CONDOMINIUM PLAT OF
226 VERANDA STREET CONDOMINIUM
MADE FOR JWAY, LLC
BY OWEN HASKELL, INC.
DATED JULY 10, 2015
C.C.R.D. PLAN BOOK 216, PAGE 29

PLAN OF OCEAN VIEW PARK
EAST DEERING, ME
OWNED BY J. W. WILBUR
PREPARED BY A. L. ELIOT
DATED AUGUST 3, 1898
C.C.R.D. PLAN BOOK 8, PAGE 141

STA. 108+54.98, VERANDA STREET =
STA. 3+00.00, OLYMPIA STREET

CITY OF PORTLAND
ITEM NO. (13)
TEMP. CONST.
RIGHTS = 518± S.F. (1)
ENTIRE LOT

HEWITT PROPERTIES, LLC
ITEM NO. (5)
TEMP. CONST. RIGHTS = 0.13±AC. (1)
TOTAL AREA = 2.87± AC. (CITY)

IAN SCHLEH
ITEM NO. (4)
TEMP. CONST. RIGHTS = 889± S.F. (3)
TOTAL AREA = 0.19± AC. (CITY)

CINDY LOU MEOLI LIVING TRUST
CINDY LOU MEOLI, TRUSTEE
RICHARD A. MEOLI, TRUSTEE
ITEM NO. (6)
TEMP. CONST. RIGHTS = 59± S.F. (1)
TOTAL AREA = 0.14± AC. (PLAN)

226 VERANDA STREET CONDOMINIUM ASSOCIATION

MATTHEW CARDINALI
ITEM NO. (7)
TEMP. CONST. RIGHTS = 249± S.F. (1)
TOTAL AREA = 0.14± AC. (CITY)

242 VERANDA STREET, LLC

HARBO
CONDO
OWNER

I-295 SOUTHBOUND
I-295 NORTHBOUND
I-295 NORTHBOUND OFF-RAMP
RELOCATED I-295 NORTHBOUND OFF-RAMP
PRESENT I-295 NORTHBOUND OFF-RAMP
VERANDA STREET/U.S. ROUTE 1/STATE AID HIGHWAY NO. 22
4+00 OLYMPIA STREET

STA. 103+70±, 175±' LT.
STA. 103+59±, 171±' LT.
STA. 103+54±, 117± Lt.
STA. 103+57±, 129± Lt.
STA. 103+66±, 117± Lt.
STA. 103+67±, 128± Lt.
STA. 106+03±, 90' LT.
STA. 105+67.19 PT CURVE #2
STA. 105+50.71 VERANDA STREET = STA. 308+62.82 I-295 NB RELOCATED OFF RAMP
STA. 308+20.24 PT CURVE #3
STA. 306+71.15 PCC
PT CURVE #1 = STA. 103+62.36
PC CURVE #2 = STA. 104+85.91
VERANDA STREET CURVE #1
VERANDA STREET CURVE #2
RELOCATED I-295 NORTHBOUND OFF RAMP CURVE #3
RELOCATED I-295 NORTHBOUND OFF RAMP CURVE #2
PBMK 162 BM-162 AN 15"MAPLE
21745-12 PUNCH IN DMH RIM
PCT 12
PTRA 524 PK
PTRA 528 PK
PTRA 525 PK
PTRA 522 SPK
PFLY 622
PK (PAINT)
TEMP. CONST. LIMITS 59± S.F.
TEMP. CONST. LIMITS 249± S.F.
TEMP. CONST. 445± S.F.
PROPOSED PAVED DRIVE
TEMP. CONST. LIMITS
CONST. LIMITS 420± S.F.
TEMP. CONST. LIMITS
0.13± AC.
BEGIN C.O.A.
END C.O.A.
CONTROL OF ACCESS
S.H.C. FILE 3-132
S.H.C. FILE 3-75
S.H.C. FILE 3-582
RIGHT OF WAY TO OTHERS
P.L.
CLL
N 45°51'04.2" E
N 54°19'05.2" E
N 39°17'56.2" W
N 37°23'56.1" W
122.55'
81.28'
624.80'
81.09'
103+00
104+00
105+00
106+00
107+00
108+00
109+00
110+00
38+00
39+00
40+00
41+00
307+00

CONTROLLED ACCESS LIMIT
CONTROLLED ACCESS LIMIT LINE ALONG R/W LINE
CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE
NO ACCESS WILL BE PERMITTED TO OR FROM STATE HIGHWAY "295" AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

R/W REFERENCES

I-295:
S.H.C. FILE 3-132 (1960) SHEETS 1-5 OF 18
S.H.C. FILE 3-75 (1952) SHEETS 4-8 & 11-12 OF 13

VERANDA STREET (WESTERLY OF I-295):
VERANDA STREET MONUMENT LAYOUT PLAN
BY CITY OF PORTLAND PUBLIC WORKS DEPT.
DATED JANUARY 1996 (SHEETS 1 & 2 OF 2)
CITY PLAN 944/5A

VERANDA STREET (EASTERLY OF I-295):
VERANDA STREET CITY BLUESHEETS
NUMBERED 3 THROUGH 6
(ON FILE WITH PORTLAND ENGINEERING DEPT.)

CUMBERLAND COUNTY COMMISSIONERS RECORDS (C.C.C.R.)
VOLUME 16, PAGE 943, DATED 1896, 60' WIDE WITHIN PROJECT LOCUS
AND ASSOCIATED PLAN: COMMISSIONER'S PLAN BOOK 3, BOOK 51

D.O.T. FILE 3-586 (2012) MARTIN'S POINT BRIDGE, WIN 16731.00
S.H.C. FILE 3-51 (1940)

SIDE ROADS:
HAWTHORNE, FAYETTE, & WORDSWORTH STREETS:
SEE CITY PLAN 944/5A (SHEET 2)

OLYMPIA & OREGON STREETS
SEE CITY BLUESHEETS

VERANDA ST. BRIDGE
OVER
VERANDA STREET
BRIDGE NO. 5933 WIN 021745.00

TECH	CHECKED
N.T.A.	C.W.K.
R.M.C.	C.W.K.
R.M.C.	E.M.S.

ITEM	AREAS
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	4/6/2020	36566	164

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "295" &
STATE AID HIGHWAY NO. 22
I-295 AND VERANDA STREET/U.S.ROUTE 1
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. NHPP-2174(500)

DECEMBER 2019 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 3-652
SCALE 1" = 25' | SHEET 2 OF 4

SHEET NUMBER
217
OF 220

Filename: ...\00\ROW\MSTA\003_RWPLAN3.dgn Division: BRIDGE Username: Mark.Poulin Date:4/16/2020

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Sanitary Sewer	Traveled Way
Approx. Property Lines P.L.	Building	Telephone Line	Ditch
Existing Right of Way	Clearing Limit Line	Electric Line	Catch Basin
Limits of Wrought Portion L.O.W.P.	Trees Conifer / Deciduous	Water Line	Manhole
Control Of Access C.O.A.	Tree Line / Bush Line	Underdrain Line	Sewer Manhole
New Right of Way	Water Edge	Gas Line	Utility Pole
New Easement	Ledge / Rock/Boulder / Flag Pole	Guardrail	Fire Hydrant
New Temporary Rights	Fence CHAIN LINK / BARB WIRE / STOCKADE	Culvert	Curbing
New R/W Within Existing R/W	Sign / Well / Mailbox		

Existing / Proposed

Cut Line C—C—C	Fill Line F—F—F
Stonewall	Retaining Wall
Baseline 10+00 11+00 12+00	
Monument	Traverse Point
Iron Rod Found ● IRF	Pipe Found ● IPF
Replacement Pin Set	

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER

CONTROL INFORMATION
HORIZONTAL DATUM:
US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM:
NAVD88 COMBINED
FACTOR - 0.9999832

GRID NORTH

PLAN OF OCEAN VIEW PARK
EAST DEERING, ME
OWNED BY J. W. WILBUR
PREPARED BY A. L. ELIOT
DATED AUGUST 3, 1898
C.C.R.D. PLAN BOOK 8, PAGE 141

HARBOR'S EDGE
CONDOMINIUM PLAT
244 VERANDA STREET
BY OWEN HASKELL, INC.
DATED FEBRUARY 14, 2002
C.C.R.D. PLAN BOOK 202, PAGE 57

BOUNDARY SURVEY FOR LEO BIFULCO
BY TITCOMB ASSOCIATES
DATED NOVEMBER 1, 1995
C.C.R.D. PLAN BOOK 195, PAGE 388

CONDOMINIUM PLAT/SITE PLAN
AT 256 VERANDA STREET
FOR VERANDA STREET CONDOMINIUM
BY BACK BAY BOUNDARY, INC.
DATED MARCH 18, 2003
C.C.R.D. PLAN BOOK 203, PAGE 316

VERANDA STREET
CURVE DATA #3
PI = 113+64.92
D = 2°51'53.2"
Δ = 9°53'01.8" Lt.
R = 2000.00'
L = 345.01'
T = 172.93'
E = 7.46'

STA. 113+33.64, VERANDA STREET =
STA. 5+00.00, OREGON STREET

OREGON STREET

N 38°59'38.6" W

HARBOR'S EDGE CONDOMINIUM OWNER'S ASSOCIATION

LEOPOLDO ANGELO BIFULCO
RACHELENA MICHELENA BROOKS

ACCESS EASEMENT (PB 195/388)

256 VERANDA STREET CONDOMINIUM ASSOCIATION

JAMES E. MCPHERSON

JAMES I. PHILLIPS
MEGHAN R. PHILLIPS
ITEM NO. (8)
TEMP. CONST.
RIGHTS = 197± S.F. (2)
TOTAL AREA =
0.22± AC. (CITY)

MARIA J. GLAD
ITEM NO. (9)
TEMP. CONST.
RIGHTS = 366± S.F. (1)
TOTAL AREA =
0.18± AC. (CITY)

MARK L. RAJOTTE
ITEM NO. (10)
TEMP. CONST.
RIGHTS = 620± S.F. (1)
TOTAL AREA =
0.17± AC. (CITY)

TEMP. CONST. LIMITS 104± S.F.
TEMP. CONST. LIMITS 93± S.F.
TEMP. CONST. LIMITS 366± S.F.
TEMP. CONST. LIMITS 620± S.F.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

VERANDA STREET/U.S. ROUTE 1/STATE AID HIGHWAY NO. 22

624.80'
345.01'
361.58'
N 44°26'03.4" E

110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00

BM-163
CHIS SQR
SE CNR PAD

VERANDA STREET CURVE #3

PC CURVE #3 =
STA. 111+91.99

TEMP. PT CURVE#3 =
STA. 115+37.00

S.H.C. FILE 3-75, SHT. 8 (1952)

0.05± AC.

0.12± AC. CONST.

C.C.R.C. BOOK 16, PAGE 943 & PLAN BOOK 3, PAGE 51

APPROXIMATE LOCATION
CITY OF PORTLAND SEWER EASEMENT
SEE C.C.R.D. BOOK 4815, PAGE 160

APPROX. LOCATION

APPROXIMATE LOCATION
PORTLAND WATER DISTRICT EASEMENT
SEE C.C.R.D. BOOK 2254, PAGE 97

PORTLAND WATER DISTRICT EASEMENT
C.C.R.D. BOOK 2115, PAGE 301
PARAGRAPH 7

DRAINAGE EASE.
1,272± S.F.
TEMP. CONST. LIMITS

OUTLET DRAINAGE STRUCTURE
STA. 112+88 RT. TO
STA. 113+58 RT.

ATLANTIC PROPERTIES, LLC
ITEM NO. (11)
DRAINAGE EASE. = 1,272± S.F. (1)
TEMP. CONST. RIGHTS = 0.05± AC. (1)
TOTAL AREA = 0.53± AC. (CITY)

MARTIN'S POINT HEALTH CARE, INC.
ITEM NO. (12)
TEMP. CONST. RIGHTS = 0.12± AC. (1)
TOTAL AREA = 9.1± AC. (CITY)

VERANDA ST. BRIDGE
OVER
VERANDA STREET
BRIDGE NO. 5933 WIN 021745.00

S.H.C. FILE NO. 3-51 & 3-75

PBMK 163
PBMK 164
BM-164
AN 36" OAK

PFLY 620
PK (PIN 10158)
PTRA 526 PK
PTRA 527 PK
PTRA 511 PK (PIN 10158)

R/W REFERENCES

I-295:
S.H.C. FILE 3-132 (1960) SHEETS 1-5 OF 18
S.H.C. FILE 3-75 (1952) SHEETS 4-8 & 11-12 OF 13

VERANDA STREET (WESTERLY OF I-295):
VERANDA STREET MONUMENT LAYOUT PLAN
BY CITY OF PORTLAND PUBLIC WORKS DEPT.
DATED JANUARY 1996 (SHEETS 1 & 2 OF 2)
CITY PLAN 944/5A

VERANDA STREET (EASTERLY OF I-295):
VERANDA STREET CITY BLUESHEETS
NUMBERED 3 THROUGH 6
(ON FILE WITH PORTLAND ENGINEERING DEPT.)

CUMBERLAND COUNTY COMMISSIONERS RECORDS (C.C.C.R.)
VOLUME 16, PAGE 943, DATED 1896, 60' WIDE WITHIN PROJECT LOCUS
AND ASSOCIATED PLAN: COMMISSIONER'S PLAN BOOK 3, BOOK 51

D.O.T. FILE 3-586 (2012) MARTIN'S POINT BRIDGE, WIN 16731.00
S.H.C. FILE 3-51 (1940)

SIDE ROADS:
HAWTHORNE, FAYETTE, & WORDSWORTH STREETS:
SEE CITY PLAN 944/5A (SHEET 2)

OLYMPIA & OREGON STREETS
SEE CITY BLUESHEETS

END C.O.A.

S.H.C. FILE 3-75, SHT. 8
STATE OF MAINE OWNS THE TIDE FLATS TO THE MEAN LOW WATER LINE (S.H.C. 3-75 SHTS. 11 & 12, AND C.C.R.D. BOOK 2217, PAGE 255)

CONTROLLED ACCESS LIMIT

CONTROLLED ACCESS LIMIT LINE ALONG R/W LINE
R/W LINE
CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE

NO ACCESS WILL BE PERMITTED TO OR FROM STATE HIGHWAY "295" AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	4/6/2020	36566	164

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

TECH	CHECKED
N.T.A.	C.W.K.
R.M.C.	C.W.K.
R.M.C.	E.M.S.

ITEM
EXISTING CONDITION PLAN
FINAL RIGHT OF WAY
AREAS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

STATE HIGHWAY "295" &
STATE AID HIGHWAY NO. 22
I-295 AND VERANDA STREET/U.S. ROUTE 1
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. NHPP-2174(500)

DECEMBER 2019	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-652
SCALE 1" = 25'	SHEET 3 OF 4	

SHEET NUMBER
218
OF 220

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Sanitary Sewer	Existing / Proposed	Traveled Way	Existing / Proposed	Cut Line C—C—C	Fill Line F—F—F
Approx. Property Lines P.L.	Building / Clearing Limit Line	Telephone Line		Ditch		Stonewall	Retaining Wall
Existing Right of Way	Trees Conifer / Deciduous	Electric Line		Catch Basin		Baseline 10+00 11+00 12+00	
Limits of Wrought Portion L.O.W.P.	Tree Line / Bush Line	Water Line		Manhole		Monument	Traverse Point
Control Of Access C.O.A.	Water Edge	Underdrain Line		Sewer Manhole		Iron Rod Found ● IRF	Pipe Found ● IPF
New Right of Way	Ledge / Rock/Boulder / Flag Pole	Gas Line		Utility Pole		Replacement Pin Set	
New Easement	Fence CHAIN LINK / BARB WIRE / STOCKADE	Guardrail		Fire Hydrant			
New Temporary Rights	Sign / Well WELL / Mailbox	Culvert		Curbing			
New R/W Within Existing R/W							

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and
recorded in Plan Bk _____, Pg. _____
Attest: _____
REGISTER

CONTROL INFORMATION
HORIZONTAL DATUM:
US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM:
NAVD88 COMBINED
FACTOR - 0.9999832

GRID NORTH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

VERANDA STREET
CURVE DATA #4
PI = 120+02.10
D = 1°47'25.8"
Δ = 3°42'20.6" Lt.
R = 3200.00'
L = 206.96'
T = 103.52'
E = 1.67'

PC = STA. 118+98.58
PT = STA. 121+05.54

VERANDA STREET/U.S. ROUTE 1/STATE AID HIGHWAY NO. 22
VERANDA STREET CURVE #4
117+00 118+00 119+00 120+00 121+00 122+00 123+00
°26'03.4" E 361.58' 206.96' 94.46' N 40°43'42.8" E
END B.L.

PTRA 529 PK
PBMK 164
BM-164 AN 36" OAK
PTRA 60
16731-60 ROD/DISK

0.12± AC. CONST.
0.12± AC. CONST.
LIMITS
LIMITS
TEMP.

30' WIDE EASEMENT
PORTLAND WATER DISTRICT
C.C.R.D. BOOK 2115, PAGE 410
PARAGRAPH 7

SIGNAL EASEMENT EXHIBIT A
AT MARTIN'S POINT HEALTH CARE, INC.
331 VERANDA STREET, PORTLAND, MAINE
BY OWEN HASKELL, INC.
DRWG. NO. 1E, DATED JULY 29, 2010
C.C.R.D. BOOK 28274, PAGE 60

APPROXIMATE LOCATION OF A 40' EASEMENT
CITY OF PORTLAND
SEE C.C.R.D. BOOK 4015, PAGE 160

APPROXIMATE LOCATION
PORTLAND SEWER EASEMENT
BOOK 4015 PAGE 160

MARTIN'S POINT HEALTH CARE, INC.
ITEM NO. (12)
TEMP. CONST. RIGHTS = 0.12± AC. (1)
TOTAL AREA = 9.1± AC. (CITY)

NOTE: FOR ITEM NO. 13, SEE SHEET 2

R/W REFERENCES

I-295:
S.H.C. FILE 3-132 (1960) SHEETS 1-5 OF 18
S.H.C. FILE 3-75 (1952) SHEETS 4-8 & 11-12 OF 13

VERANDA STREET (WESTERLY OF I-295):
VERANDA STREET MONUMENT LAYOUT PLAN
BY CITY OF PORTLAND PUBLIC WORKS DEPT.
DATED JANUARY 1996 (SHEETS 1 & 2 OF 2)
CITY PLAN 944/5A

VERANDA STREET (EASTERLY OF I-295):
VERANDA STREET CITY BLUESHEETS
NUMBERED 3 THROUGH 6
(ON FILE WITH PORTLAND ENGINEERING DEPT.)

CUMBERLAND COUNTY COMMISSIONERS RECORDS (C.C.C.R.)
VOLUME 16, PAGE 943, DATED 1896, 60' WIDE WITHIN PROJECT LOCUS
AND ASSOCIATED PLAN: COMMISSIONER'S PLAN BOOK 3, BOOK 51

D.O.T. FILE 3-586 (2012) MARTIN'S POINT BRIDGE, WIN 16731.00
S.H.C. FILE 3-51 (1940)

SIDE ROADS:
HAWTHORNE, FAYETTE, & WORDSWORTH STREETS:
SEE CITY PLAN 944/5A (SHEET 2)

OLYMPIA & OREGON STREETS
SEE CITY BLUESHEETS

BOUNDARY & TOPOGRAPHIC SURVEY ON VERANDA STREET
FOR MARTIN'S POINT HEALTH CARE CENTER
BY OWEN HASKELL, INC.
DATED DECEMBER 2, 2004, REVISED DECEMBER 7, 2005
JOB NO. 8644P

CONVEYANCE PLAN ON VERANDA STREET, PORTLAND
FOR MARTIN'S POINT HEALTH CARE, INC.
F/K/A PENOBSCOT BAY MEDICAL ASSOCIATES, INC.
331 VERANDA STREET, PORTLAND
BY OWEN HASKELL, INC.
DATED JUNE 13, 2006
C.C.R.D. PLAN BOOK 207, PAGE 364

VERANDA ST. BRIDGE
OVER
VERANDA STREET

BRIDGE NO. 5933 WIN 021745.00

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	N.T.A.	C.W.K.
FINAL RIGHT OF WAY	R.M.C.	C.W.K.
AREAS	R.M.C.	E.M.S.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

REVISIONS				PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD					
NO.	DATE	DESCRIPTION	BY	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
						COND.	4/6/2020	36566	164

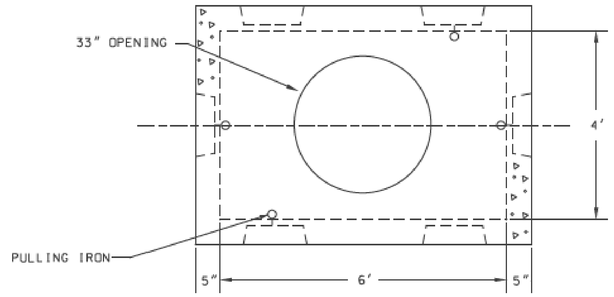
BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 22
VERANDA STREET/U.S.ROUTE 1
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. NHPP-2174(500)

DECEMBER 2019	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-652
SCALE 1" = 25'	SHEET 4 OF 4	

SHEET NUMBER
219
OF 220

Filename: ...\00\ROW\MSTA\004_RWPLAN4.dgn Division: BRIDGE Username: Mark.Poulin Date:4/16/2020



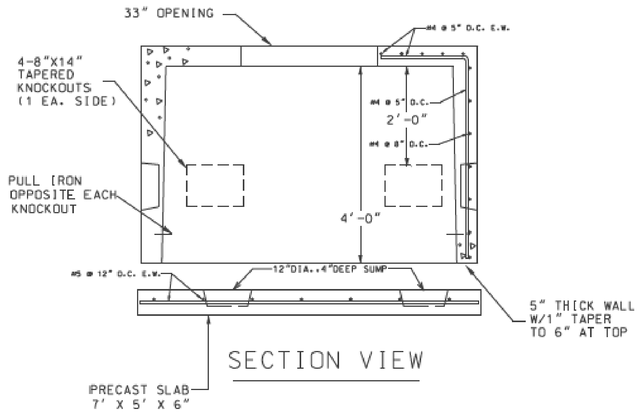
PLAN VIEW

NOTES:

1) Splice box shall be designed to withstand H20 wheel loading with 6 inches of overburden. The design shall also comply with National Electrical Safety Code Section 323A. Provide shop drawings stamped by a State of Maine Registered Professional Engineer upon Request.

2) For use with 32" cover marked CMP Co., S/C62-1830 (Min. one course of brick to grade.)

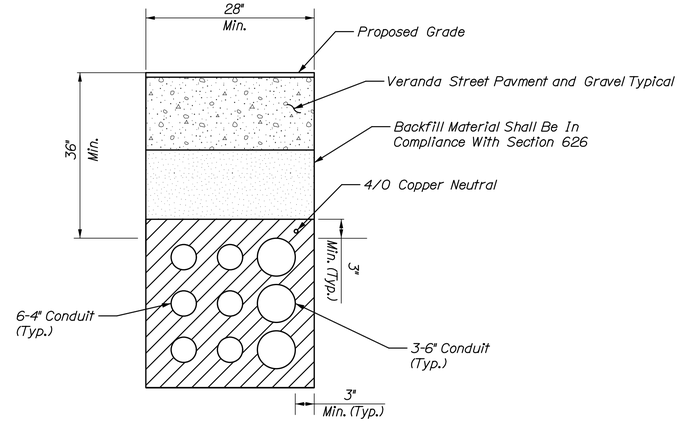
3) Splice box and slab shall be set on a suitable gravel base.



SECTION VIEW

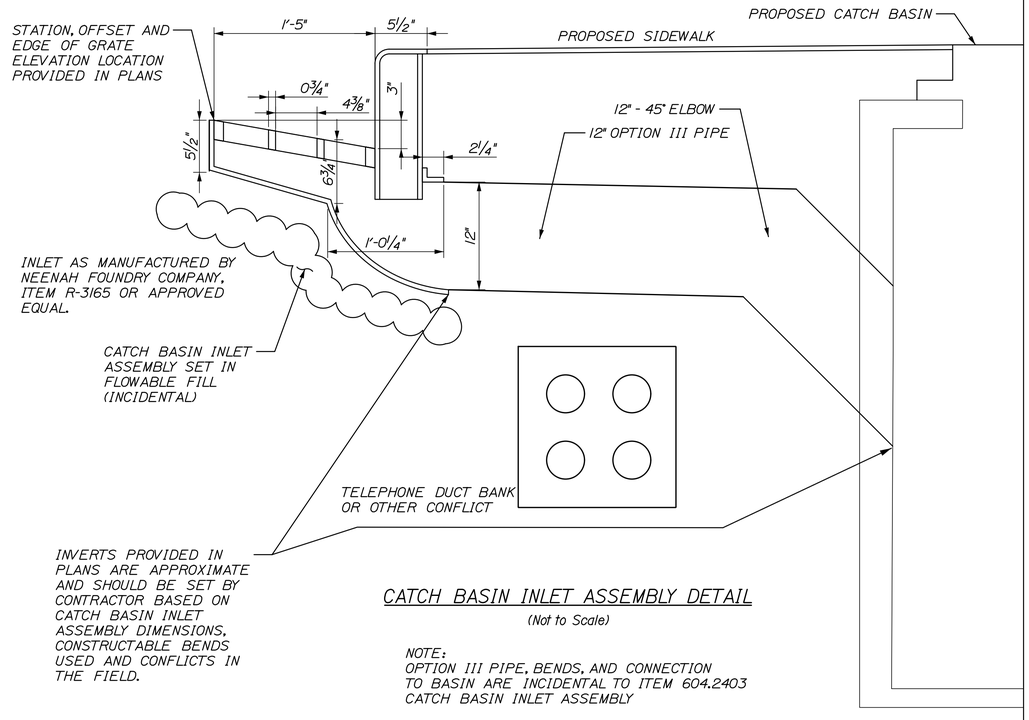
4' X 6' SPLICE BOX

(NOT TO SCALE)



3X3 UTILITY CONDUIT CONCRETE DUCT BANK

(Not to Scale)



CATCH BASIN INLET ASSEMBLY DETAIL

(Not to Scale)

NOTE:
OPTION III PIPE, BENDS, AND CONNECTION TO BASIN ARE INCIDENTAL TO ITEM 604.2403 CATCH BASIN INLET ASSEMBLY

THIS DRAWING SHALL BE REVISED ON THE CADD SYSTEM ONLY

	ORIGINAL	REVISED	REVISED
BY	REC	REC	
APPROVED	BAC	BCB	
APPROVED			
DATE	12/12/03	08/06/07	

CMP CADD Engineered by Bentley

DISTRIBUTION ENGINEERING | 4 X 6 SPLICE BOX WITH 32" ROUND COVER

CENTRAL MAINE POWER CO. | 905A-4

FILE NAME _____ SCANNED _____

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2174(500)

WIN 021745.00

BRIDGE NO.5933 | BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	
DESIGN-DETAILED	EDD	CDH	2\20
CHECKED-REVIEWED	RWH	LZD	2\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

INTERSTATE 295 OVER VERANDA STREET
PORTLAND CUMBERLAND COUNTY

UTILITY DETAILS

SHEET NUMBER
220
OF 220

HNTB

Filename: 220_Utility Details.dgn Division: Username: Date:4/10/2020



NOTES

1. CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED PIPING AND APPURTENANCES. SALVAGE ALL REMOVED HYDRANTS AND DELIVER TO PWD YARD AT 225 DOUGLASS ST - PORTLAND.

2. ALL MAINS AND SERVICES SHALL BE INSTLLED WITH 5.5' OF COVER MEASURED FROM PROPOSED ROAD GRADE UNLESS INDICATED OTHERWISE ON THE DRAWINGS OR APPROVED BY A PWD REPRESENTATIVE.

3. THE PORTLAND WATER DISTRICT WILL NOTIFY CUSTOMERS FOR ALL WORK INVOLVING TEMPORARY SHUTDONW OF SERVICE. CUSTOMERS MUST RECEIVE AT LEAST 48 HOURS NOTIFICATION PRIO TO ANY SHUTDOWN. THE DISTRICT MUST RECEIVE NOTICE FROM THE CONTRACTOR OF THE SHUTDOWN AT LEAST 48 HOURS PRIOR TO CUSTOMER NOTIFICATION.

4. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY-WRAPPED PER SPECIICATIONS.

5. INSTALL 4" TEMPORARY FIRE DEPARTMENT. CONNECTION (TYP.). 4" GATE VALVE, 90° ELBOW, AND 4-1/2" NPT STEAMER PORT CONNECTION WITH CAP AT LOCATIONS SHOWN ON THE DRAWINGS. ALL JOINTS TO BE RESTRAINED. STEAMER PORT AND RISER TO BE ANCHORED TO THE GROUND. OUTLET TO BE BETWEEN 1' AND 2' OFF THE GROUND. OUTLET AND TEE TO BE BRACED.

6. TEMPORARY WATER SYSTEM SHALL ONLY BE ACTIVE BETWEEN APRIL 15TH AND OCTOBER 15TH. ALL WATER MAIN, EITHER EXISTING OR NEWLY INSTALLED, MUST BE ACTIVE BETWEEN OCTOBER 16TH AND APRIL 14TH.

7. CONTRACTOR MUST ALLOW OWNER SUFFICIENT TIME TO TRANSFER WATER SERVICES FROM EXISTING WATER MAIN TO TEMPORARY WATER MAIN SERVICES INSTALLED BY CONTRACTOR AND TO TRANSFER SERVICE TO NEW WATER MAIN/SERVICE LINE UPON SUCCESSFUL TESTING OF SAMPLE FOR ABSENCE OF BACTERIA. THE CONTRCTOR SHALL NOT CLAIM ANY DELAY-RELATED COST OR TIME RELATD TO THIS WORK.

8. REPLACE ALL SERVICES TO BE RENEWED FROM MAIN TO STREET LINE WITH 1" COPPER PIPING, UNLESS OTHERWISE NOTED.

9. LOCATIONS OF UTILITIES OTHER THAN WATER ARE APPROXIMATE, AND NOT ALL UTILITES ARE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, SUPPORTING AND PROTECTING ALL UTILITIES DURING INSTALLATION OF THE WATER MAIN.

10. INSTALL SWIVEL TYPE TEES FOR ALL HYDRANT CONNECTIONS.

11. A SHUTDOWN IS REQUIRED FOR INSTALLATION OF ALL CUT-IN VALVES AND FITTINGS ON EXISTING WATER MAINS.

12. ALL FITTINGS SHALL BE MECHANICAL JOINT (RETAINED).

13. REMOVE THE TOP SECTION OF ALL ABANDONED VALVE BOXES AND FILL WITH SAND.

14. INSTALL A MECHANICAL JOINT CAP ON ENDS OF ALL ABANDONED MAINS.

15. CONTRACTOR SHALL TEST AND ACTIVATE PHASE 1 BEFORE INSTALLATION CAN BEGIN IN PHASE 2.

16. ALL TEMPORARY WATER MAIN TO BE BURIED BELOW GRADE AT ALL STREET AND DRIVEWAY CROSSINGS. INSTALL AND MAINTAIN TEMPORARY PAVEMENT IN THESE AREAS.

LEGEND

EXISTING WATER MAIN

TEMPORARY WATER MAIN

PROJECT:

374376

VERANDA STREET
PORTLAND, MAINE
WATER MAIN REPLACEMENT
TEMPORARY WATER MAIN

STATE OF MAINE · TIMOTHY J. MCMULLIN · 9385 · REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: BSJ

DESIGN BY: TM

DATE: 12/10/2019

Portland Water District

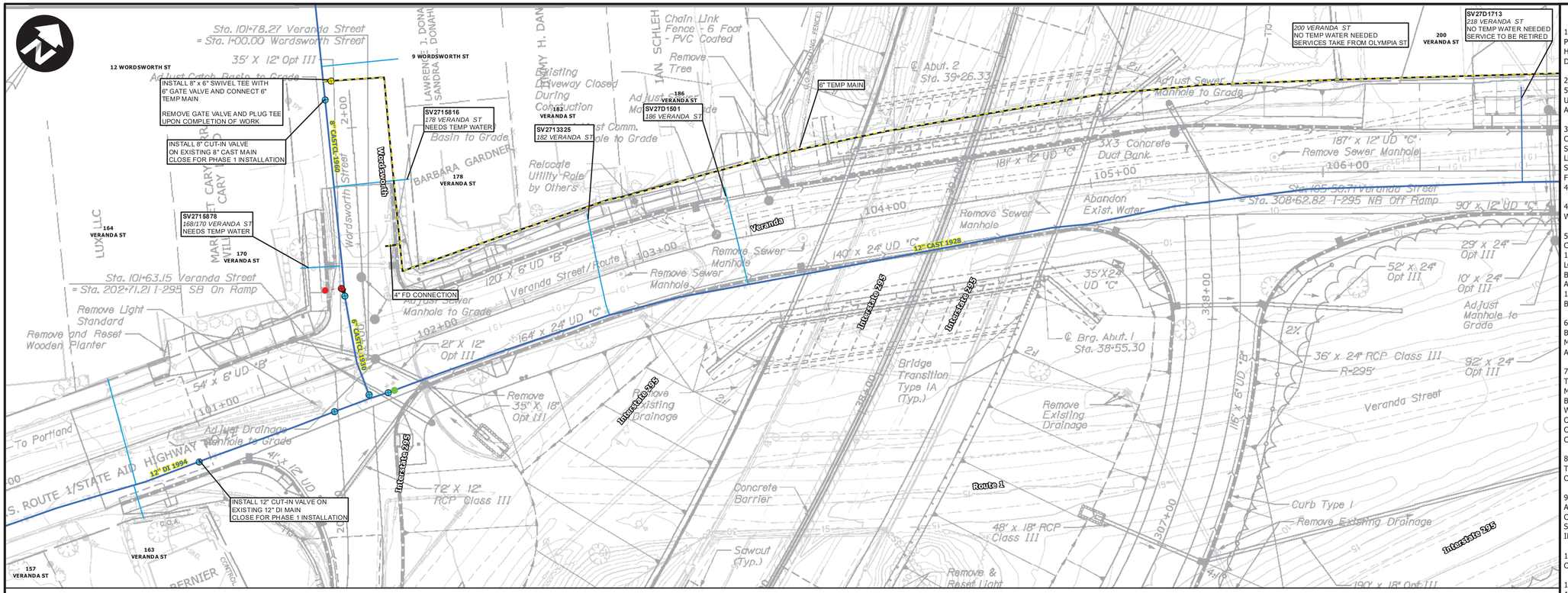
ASSET MANAGEMENT AND PLANNING DEPARTMENT

225 DOUGLASS STREET, PORTLAND ME 04104

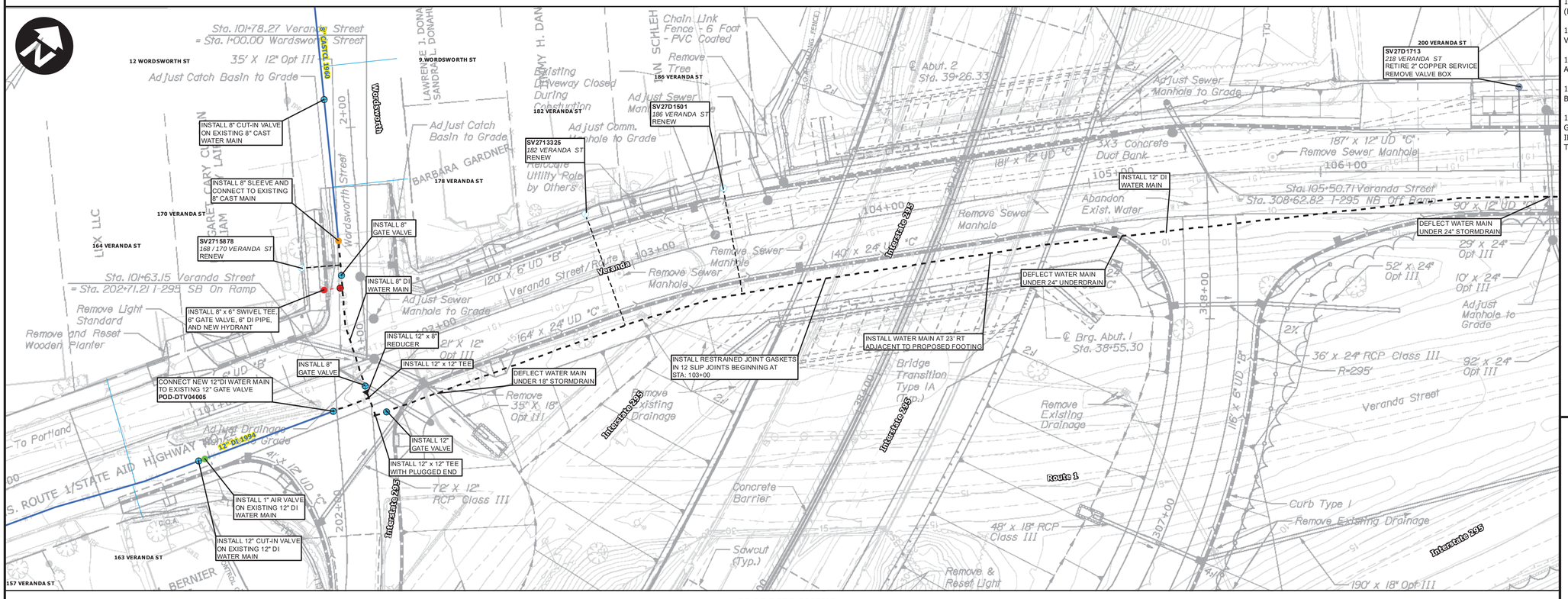
(207) 774-5961 • WWW.PWD.ORG

SHEET:

W1 OF W6



EXISTING AND TEMPORARY MAINS
1 " = 25 '



PROPOSED MAINS
1 " = 25 '

NOTES

1. CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED PIPING AND APPURTENANCES. SALVAGE ALL REMOVED HYDRANTS AND DELIVER TO PWD YARD AT 225 DOUGLASS ST - PORTLAND.

2. ALL MAINS AND SERVICES SHALL BE INSTLLED WITH 5.5' OF COVER MEASURED FROM PROPOSED ROAD GRADE UNLESS INDICATED OTHERWISE ON THE DRAWINGS OR APPROVED BY A PWD REPRESENTATIVE.

3. THE PORTLAND WATER DISTRICT WILL NOTIFY CUSTOMERS FOR ALL WORK INVOLVING TEMPORARY SHUTDONW OF SERVICE. CUSTOMERS MUST RECEIVE AT LEAST 48 HOURS NOTIFICATION PRIO TO ANY SHUTDOWN. THE DISTRICT MUST RECEIVE NOTICE FROM THE CONTRACTOR OF THE SHUTDOWN AT LEAST 48 HOURS PRIOR TO CUSTOMER NOTIFICATION.

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6. TEMPORARY WATER SYSTEM SHALL ONLY BE ACTIVE BETWEEN APRIL 15TH AND OCTOBER 15TH. ALL WATER MAIN, EITHER EXISTING OR NEWLY INSTALLED, MUST BE ACTIVE BETWEEN OCTOBER 16TH AND APRIL 14TH.

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LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- TEMPORARY WATER MAIN
- PROPOSED/RENEWED SERVICE
- RECONNECT SERVICE

PROJECT:
374376

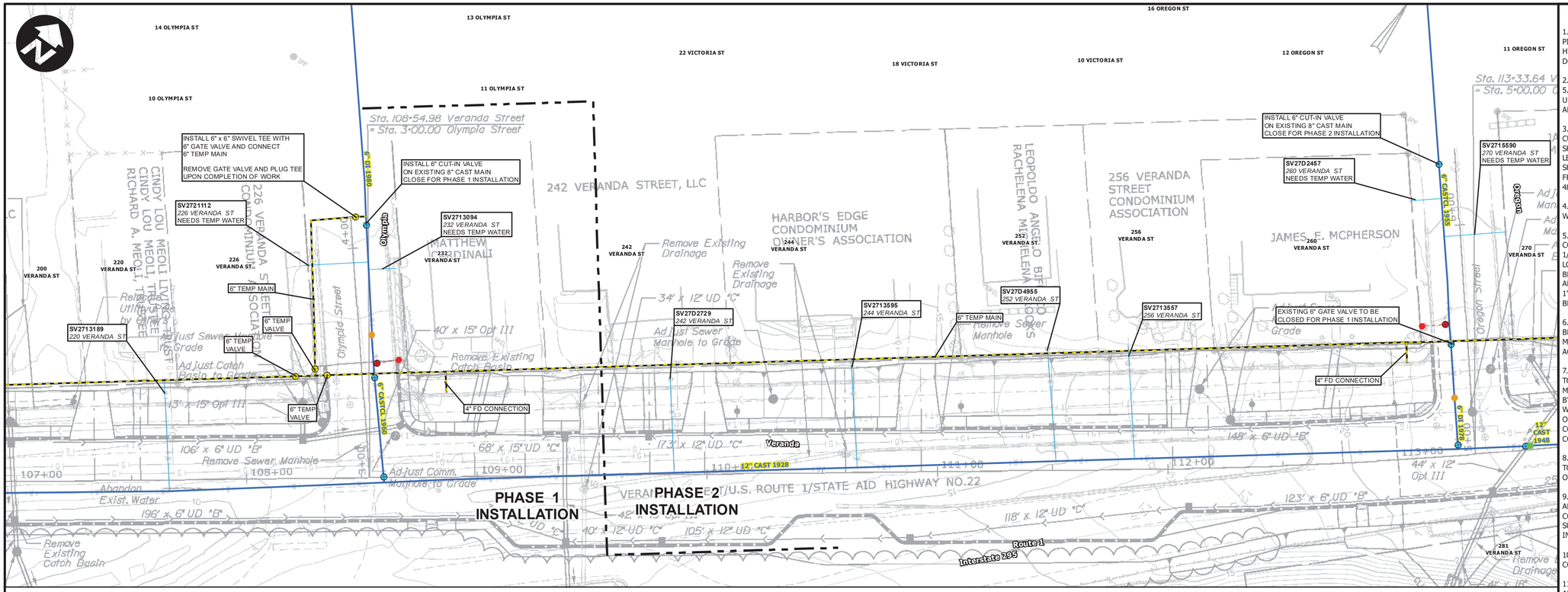
VERANDA STREET
PORTLAND, MAINE
WATER MAIN REPLACEMENT

STATE OF MAINE · TIMOTHY J. MCMULLIN · 13855 · REGISTERED PROFESSIONAL ENGINEER

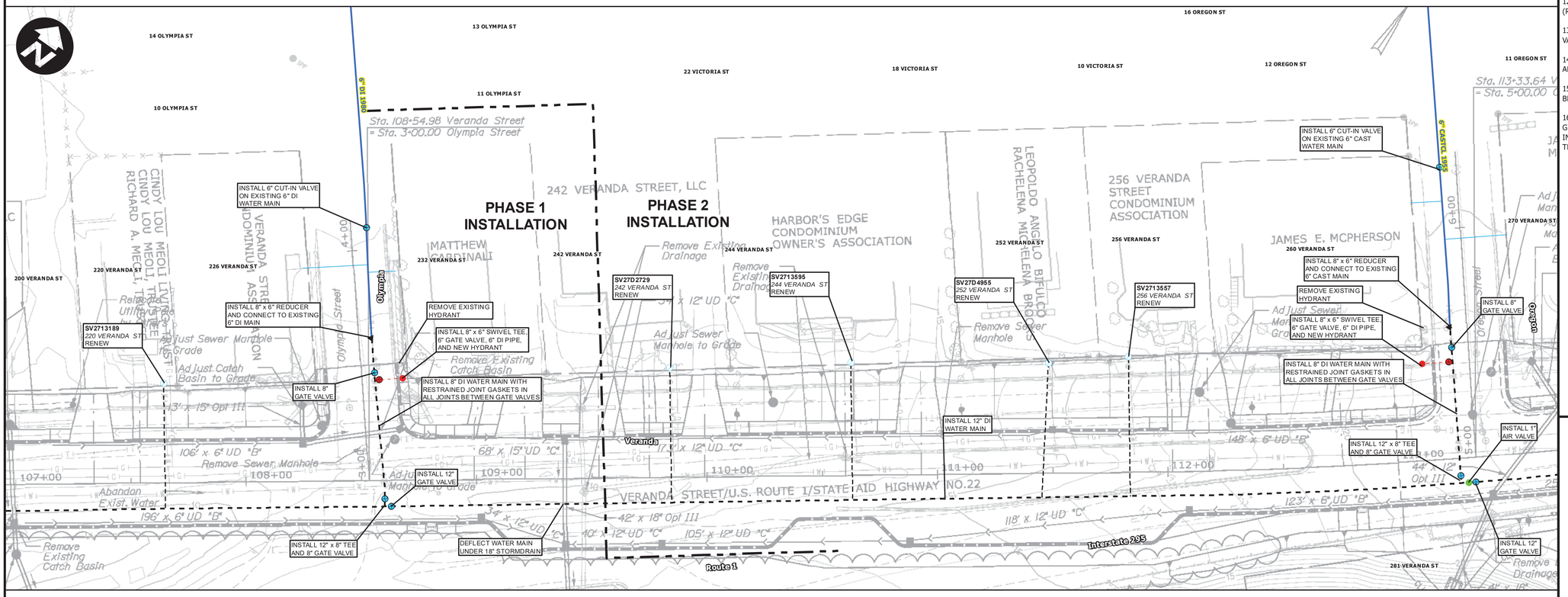
DRAWN BY: BSJ
DESIGN BY: TM
DATE: 12/10/2019

Portland Water District
ASSET MANAGEMENT AND PLANNING DEPARTMENT
225 DOUGLASS STREET, PORTLAND ME 04104
(207) 774-5961 • WWW.PWD.ORG

SHEET:
W2 OF W6



EXISTING AND TEMPORARY MAINS
1 " = 25 '



PROPOSED MAINS
1 " = 25 '

NOTES

1. CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED PIPING AND APPURTENANCES. SALVAGE ALL REMOVED HYDRANTS AND DELIVER TO PWD YARD AT 225 DOUGLASS ST - PORTLAND.

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LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- TEMPORARY WATER MAIN
- PROPOSED/RENEWED SERVICE
- RECONNECT SERVICE

PROJECT:
374376

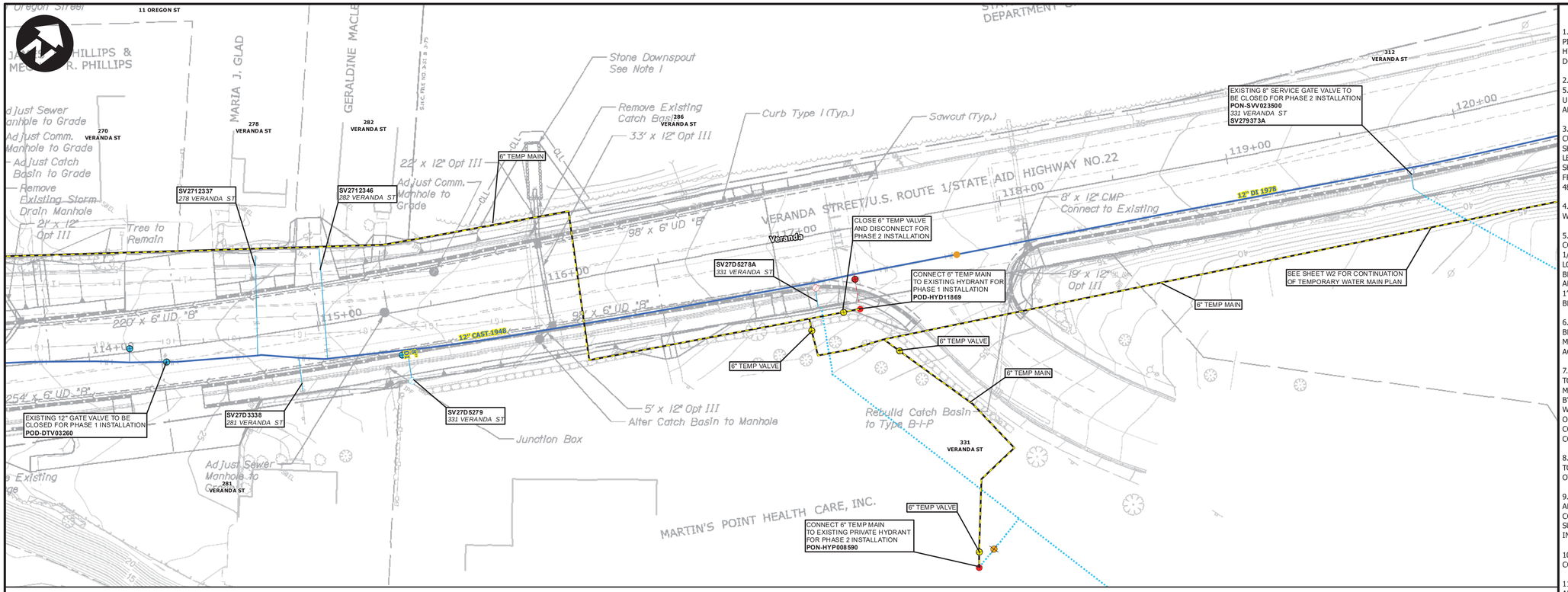
VERANDA STREET PORTLAND, MAINE WATER MAIN REPLACEMENT

STATE OF MAINE · TIMOTHY J. MCMULLIN · 9355 · REGISTERED PROFESSIONAL ENGINEER

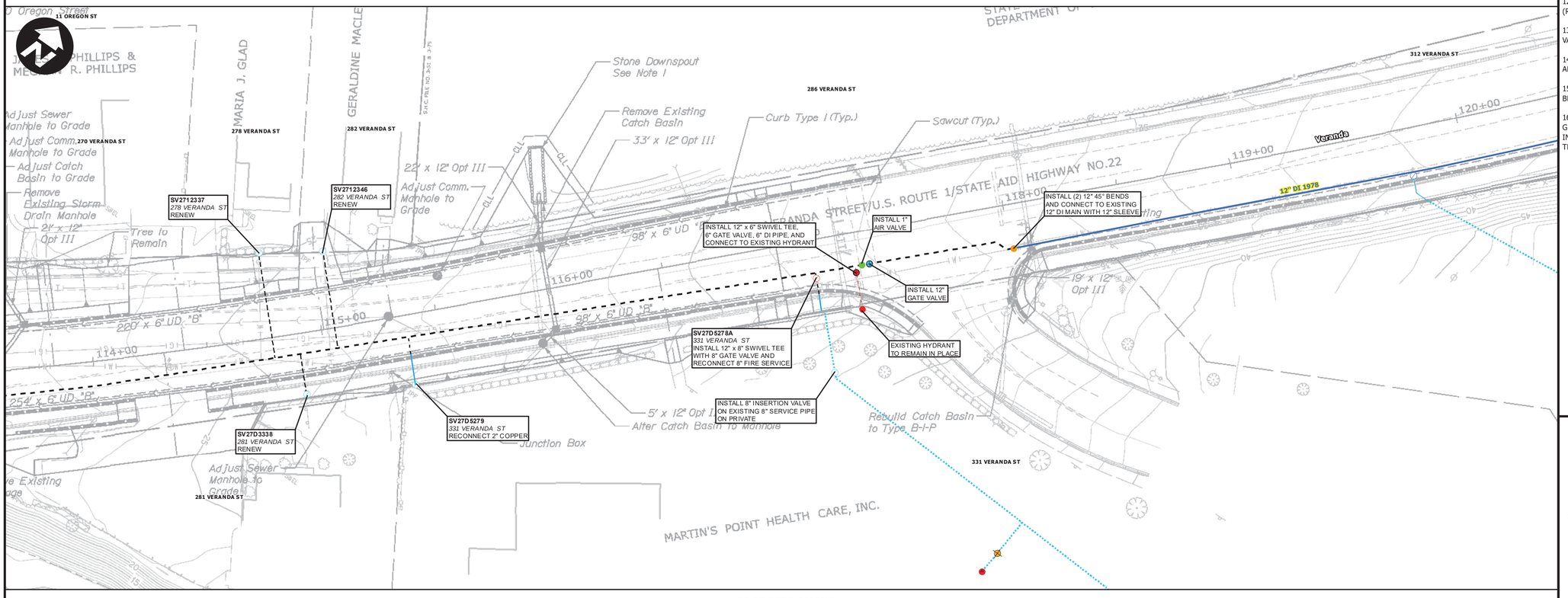
DRAWN BY: BSJ
DESIGN BY: TM
DATE: 12/10/2019

Portland Water District
ASSET MANAGEMENT AND PLANNING DEPARTMENT
225 DOUGLASS STREET, PORTLAND ME 04104
(207) 774-5961 • WWW.PWD.ORG

SHEET:
W3 OF W6



EXISTING AND TEMPORARY MAINS
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PROPOSED MAINS
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LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- TEMPORARY WATER MAIN
- PROPOSED/RENEWED SERVICE
- RECONNECT SERVICE

PROJECT:
374376

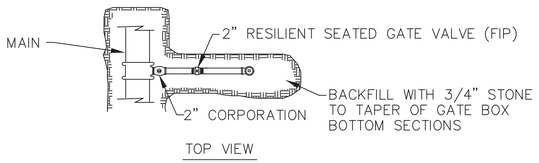
VERANDA STREET PORTLAND, MAINE WATER MAIN REPLACEMENT

STATE OF MAINE · TIMOTHY J. MCMULLIN · 13855 · REGISTERED PROFESSIONAL ENGINEER

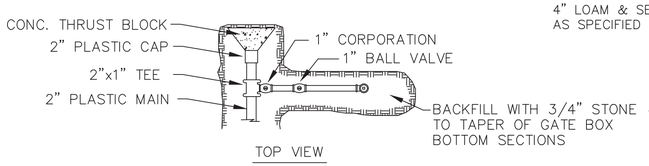
DRAWN BY: BSJ
DESIGN BY: TM
DATE: 12/10/2019

Portland Water District
ASSET MANAGEMENT AND PLANNING DEPARTMENT
225 DOUGLASS STREET, PORTLAND ME 04104
(207) 774-5961 • WWW.PWD.ORG

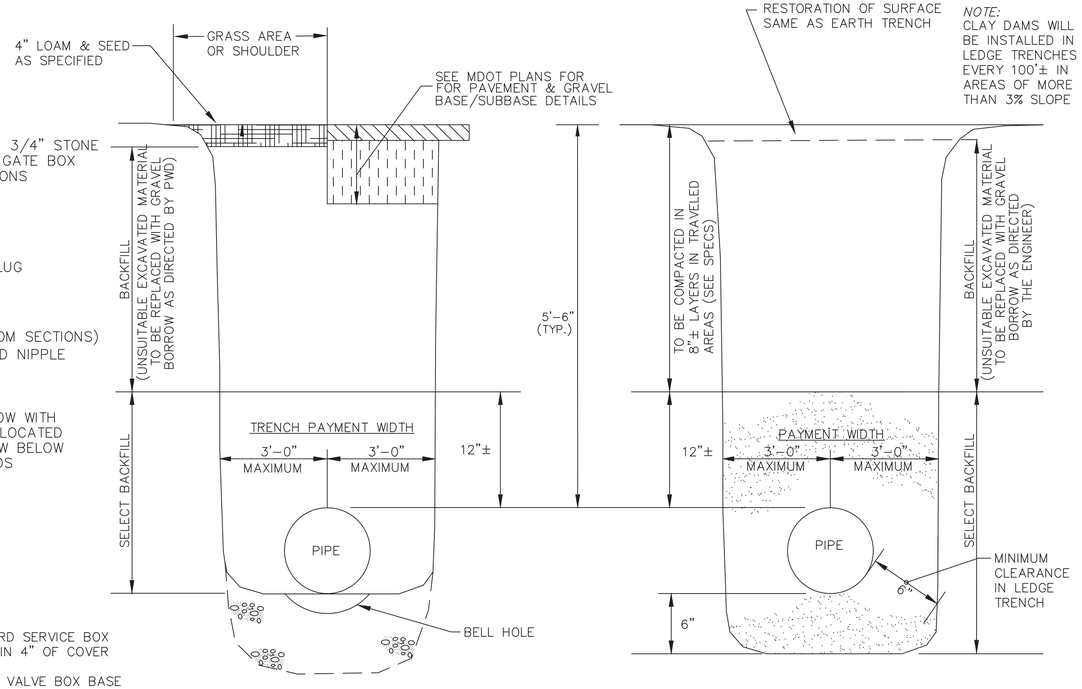
SHEET:
W4 OF W6



SIDE-ARM BLOW-OFF 4" & LARGER MAINS

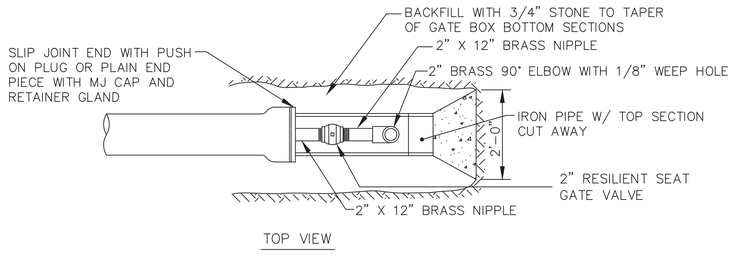


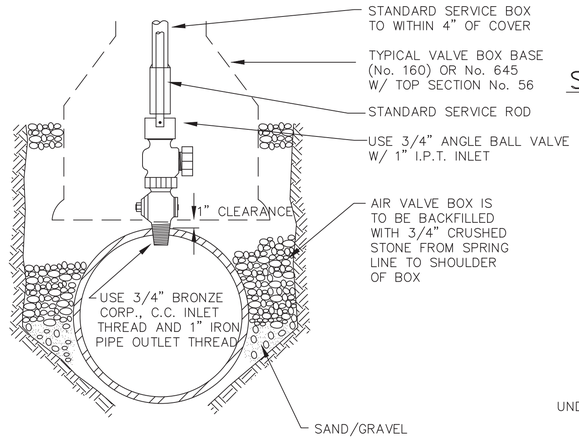
SIDE-ARM BLOW-OFF 2" MAIN



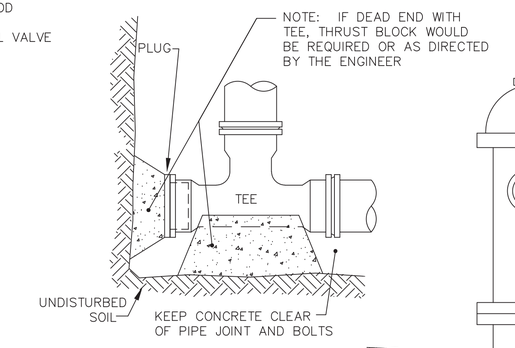
SECTION THRU EARTH TRENCH

SECTION THRU LEDGE TRENCH

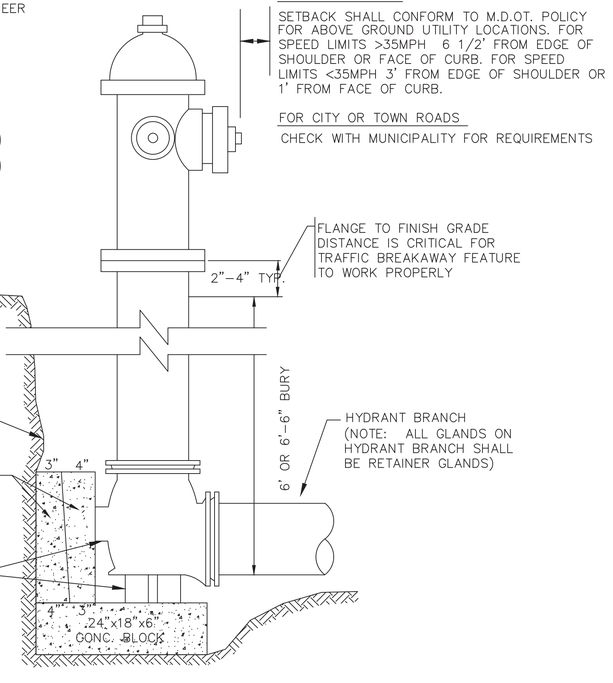




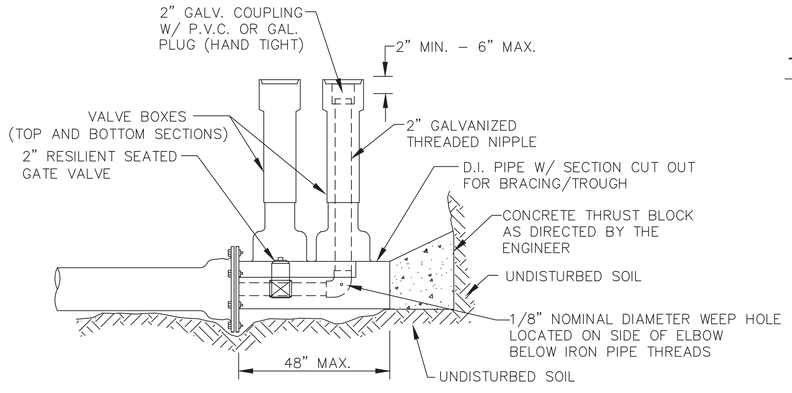
TYPICAL AIR VALVE (1")



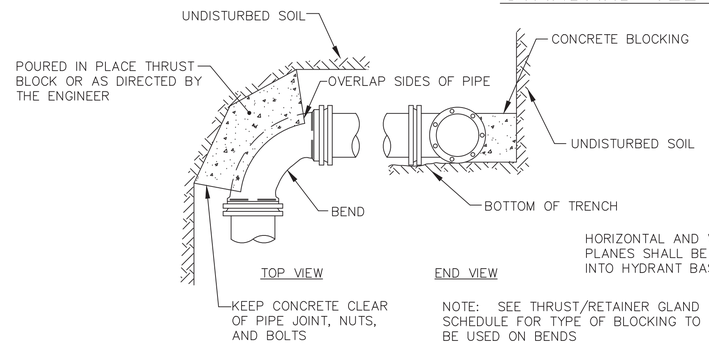
STANDARD TEE BLOCKING



TYPICAL HYDRANT INSTALLATION DETAIL



STANDARD 2" BLOW OFF



STANDARD BEND BLOCKING

PROJECT:
374376

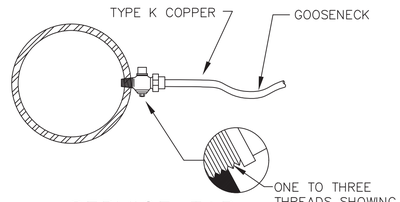
VERANDA STREET PORTLAND, MAINE WATER MAIN REPLACEMENT STANDARD DETAILS

STATE OF MAINE · TIMOTHY J. MCMULLEN 9375 · REGISTERED PROFESSIONAL ENGINEER

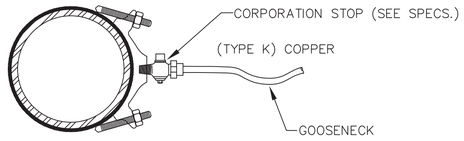
DRAWN BY: BSJ
CHECKED BY: TM
DATE: 11/18/2019

Portland Water District
ASSET MANAGEMENT AND PLANNING DEPARTMENT
225 DOUGLASS STREET, PORTLAND ME 04104
(207) 774-5961 EXT. 3041 • MEANS@PWD.ORG

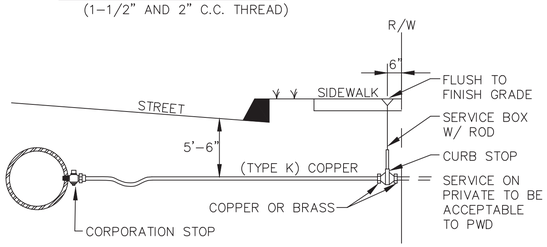
SHEET:
W5 OF W6



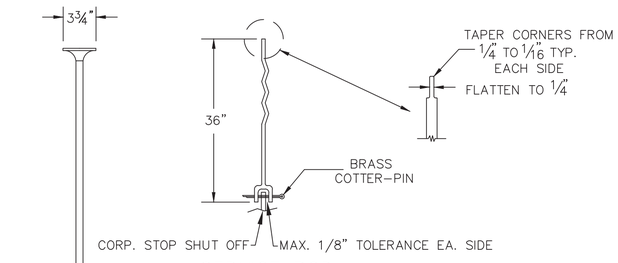
SERVICE TAP
(3/4" AND 1" C.C. THREAD)



SERVICE SADDLE
(1–1/2" AND 2" C.C. THREAD)



TYPICAL SERVICE CONNECTION



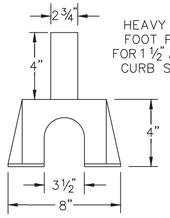
SERVICE ROD



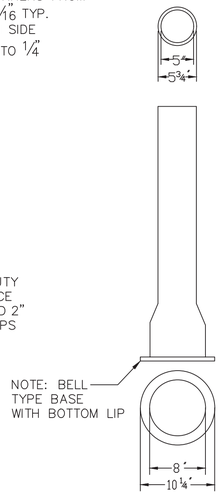
COVER

STANDARD
FOOT, PIECE
FOR ¾" AND 1"
CURB STOPS

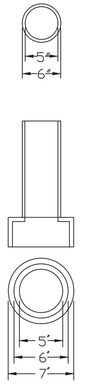
SERVICE BOX



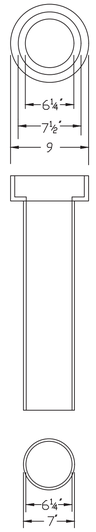
FOOT PIECE



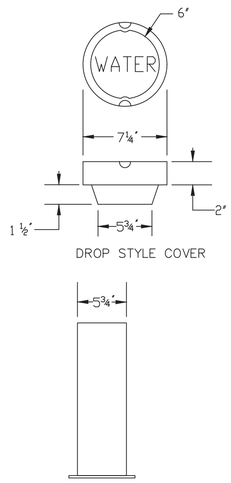
BASE SECTION
NO. 645



INTERMEDIATE
SECTION NO.58



TOP SECTION
NO.56



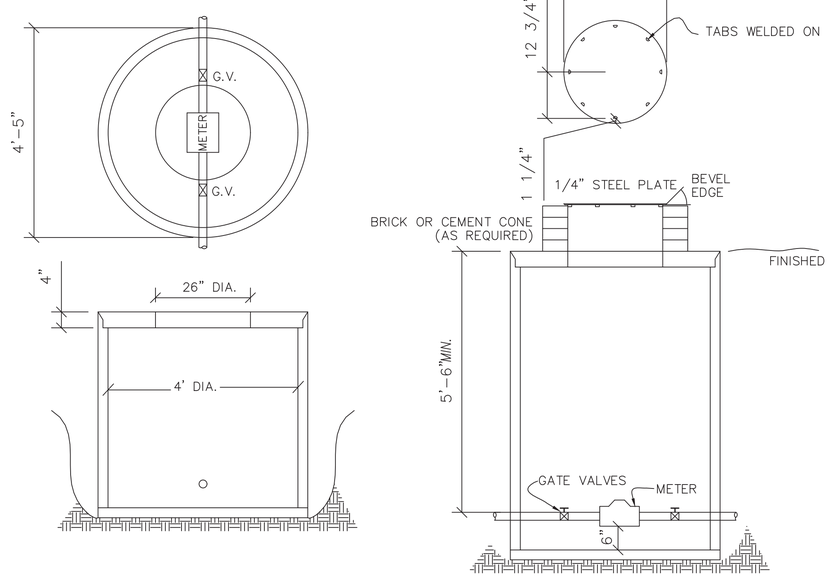
DROP STYLE COVER

(NUMBERS ARE FOR 5 1/4" BUFFALO VALVE BOXES)
(BASE SECTION MAY BE USED AS INTERMEDIATE SECTION)

VALVE BOX & COVER

NOTE : ANY EXTENSION OF SERVICE BOX REQUIRES:
1) 1" FEMALE IRON PIPE COUPLING
2) 1" THREADED PIPE

(THIS IS TO BE A NON–WELDED, TWO PIECE ARRANGEMENT.
SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)



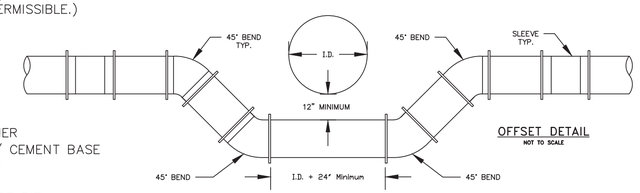
TYPICAL METER PIT

5/8" TO 2" METERS

METER BOX
1) TO BE INSTALLED AND SUPPLIED BY OWNER
2) MINIMUM 4'–0" DIAMETER CONC. M.H. W/ CEMENT BASE
3) WATER METER TO HAVE 5'–6" OF COVER
AND IS TO BE SUPPLIED BY P.W.D.
4) OWNER IS TO SUPPLY 2 VALVES INSIDE OF PIT
(MINIMUM SEPARATION OF 2'–0")
5) COPPER PIPE REQUIRED THRU METER PIT

COVER PLATE
1) COVER MUST WEIGH LESS THAN 60 lbs.
2) MINIMUM SIZE OF COVER WILL BE 28"
DIAMETER.
3) IF STEEL PLATE IS USED, TREAT WITH A
COAT OF RUST INHIBITING PAINT.

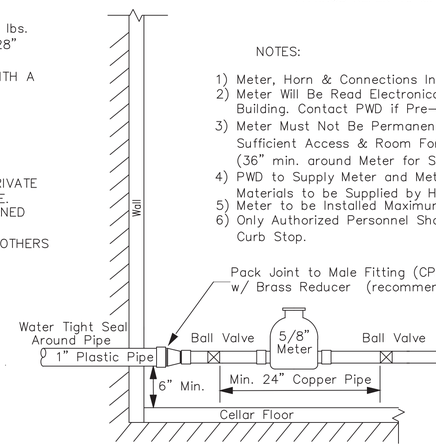
NOTES
1) THIS PIT IS TO BE PLACED ON PRIVATE
PROPERTY NEAR THE STREET LINE.
2) THIS TYPICAL PIT WAS NOT DESIGNED
FOR ANY TRAFFIC LOAD
3) THE PIT CAN BE ORDERED THRU OTHERS
WITH SPECIAL DETAILS SUCH AS
LARGER M.H. COVERS, ETC.
4) THIS PIT WILL HOUSE UP TO
TWO 5/8", 3/4", OR 1" METERS



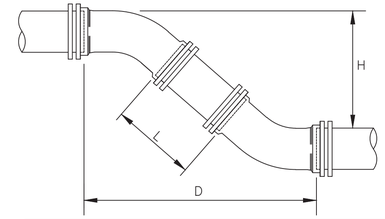
OFFSET DETAIL
NOT TO SCALE

NOTE: DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS.
FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION
AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER
FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

NOTES:
1) Meter, Horn & Connections Installed by PWD
2) Meter Will Be Read Electronically From Outside of
Building. Contact PWD if Pre–Wiring is Required.
3) Meter Must Not Be Permanently "Boxed" Without
Sufficient Access & Room For Future Servicing
(36" min. around Meter for Servicing).
4) PWD to Supply Meter and Meter Horn. All Other
Materials to be Supplied by Homeowner.
5) Meter to be Installed Maximum 18" from Entrance.
6) Only Authorized Personnel Shall Operate Service
Curb Stop.



TYP. HORIZONTAL METER SET



	6" PIPE		8" PIPE		12" PIPE	
H	D	L	D	L	D	L
12"	1' 6–1/2"	0' 10–1/2"	1' 7–1/2"	0' 9–1/2"	1' 11–1/2"	0' 5–1/2"
13"	1' 7–1/2"	0' 11–7/8"	1' 8–1/2"	0' 10–7/8"	2' 0–1/2"	0' 6–7/8"
14"	1' 8–1/2"	1' 1–5/16"	1' 9–1/2"	1' 0–5/16"	2' 1–1/2"	0' 8–5/16"
15"	1' 9–1/2"	1' 2–11/16"	1' 10–1/2"	1' 1–11/16"	2' 2–1/2"	0' 9–11/16"
16"	1' 10–1/2"	1' 4–1/8"	1' 11–1/2"	1' 3–1/8"	2' 3–1/2"	0' 11–1/8"
17"	1' 11–1/2"	1' 5–9/16"	2' 0–1/2"	1' 4–9/16"	2' 4–1/2"	1' 0–9/16"
18"	2' 0–1/2"	1' 6–15/16"	2' 1–1/2"	1' 5–15/16"	2' 5–1/2"	1' 1–15/16"
19"	2' 1–1/2"	1' 8–3/8"	2' 2–1/2"	1' 7–3/8"	2' 6–1/2"	1' 3–3/8"
20"	2' 2–1/2"	1' 9–13/16"	2' 3–1/2"	1' 8–13/16"	2' 7–1/2"	1' 4–13/16"
21"	2' 3–1/2"	1' 11–3/16"	2' 4–1/2"	1' 10–3/16"	2' 8–1/2"	1' 6–3/16"
22"	2' 4–1/2"	2' 0–5/8"	2' 5–1/2"	1' 11–5/8"	2' 9–1/2"	1' 7–5/8"
23"	2' 5–1/2"	2' 2"	2' 6–1/2"	2' 1"	2' 10–1/2"	1' 9"
24"	2' 6–1/2"	2' 3–7/16"	2' 7–1/2"	2' 2–7/16"	2' 11–1/2"	1' 10–7/16"
25"	2' 7–1/2"	2' 4–7/8"	2' 8–1/2"	2' 3–7/8"	3' 0–1/2"	1' 11–7/8"
26"	2' 8–1/2"	2' 6–1/4"	2' 9–1/2"	2' 5–1/4"	3' 1–1/2"	2' 1–1/4"
27"	2' 9–1/2"	2' 7–11/16"	2' 10–1/2"	2' 6–11/16"	3' 2–1/2"	2' 2–11/16"
28"	2' 10–1/2"	2' 9–1/8"	2' 11–1/2"	2' 8–1/8"	3' 3–1/2"	2' 4–1/8"
29"	2' 11–1/2"	2' 10–1/2"	3' 0–1/2"	2' 9–1/2"	3' 4–1/2"	2' 5–1/2"
30"	3' 0–1/2"	2' 11–15/16"	3' 1–1/2"	2' 10–15/16"	3' 5–1/2"	2' 6–15/16"
31"	3' 1–1/2"	3' 1–5/16"	3' 2–1/2"	3' 0–5/16"	3' 6–1/2"	2' 8–5/16"
32"	3' 2–1/2"	3' 2–3/4"	3' 3–1/2"	3' 1–3/4"	3' 7–1/2"	2' 9–3/4"
33"	3' 3–1/2"	3' 4–3/16"	3' 4–1/2"	3' 3–3/16"	3' 8–1/2"	2' 11–3/16"
34"	3' 4–1/2"	3' 5–9/16"	3' 5–1/2"	3' 4–9/16"	3' 9–1/2"	3' 0–9/16"
35"	3' 5–1/2"	3' 7"	3' 6–1/2"	3' 6"	3' 10–1/2"	3' 2"
36"	3' 6–1/2"	3' 8–7/16"	3' 7–1/2"	3' 7–7/16"	3' 11–1/2"	3' 3–7/16"
37"	3' 7–1/2"	3' 9–13/16"	3' 8–1/2"	3' 8–13/16"	4' 0–1/2"	3' 4–13/16"
38"	3' 8–1/2"	3' 11–1/4"	3' 9–1/2"	3' 10–1/4"	4' 1–1/2"	3' 6–1/4"
39"	3' 9–1/2"	4' 0–11/16"	3' 10–1/2"	3' 11–11/16"	4' 2–1/2"	3' 7–11/16"
40"	3' 10–1/2"	4' 2–1/16"	3' 11–1/2"	4' 1–1/16"	4' 3–1/2"	3' 9–1/16"
41"	3' 11–1/2"	4' 3–1/2"	4' 0–1/2"	4' 2–1/2"	4' 4–1/2"	3' 10–1/2"
42"	4' 0–1/2"	4' 4–7/8"	4' 1–1/2"	4' 3–7/8"	4' 5–1/2"	3' 11–7/8"
43"	4' 1–1/2"	4' 6–5/16"	4' 2–1/2"	4' 5–5/16"	4' 6–1/2"	4' 1–5/16"
44"	4' 2–1/2"	4' 7–3/4"	4' 3–1/2"	4' 6–3/4"	4' 7–1/2"	4' 2–3/4"
45"	4' 3–1/2"	4' 9–1/8"	4' 4–1/2"	4' 8–1/8"	4' 8–1/2"	4' 4–1/8"
46"	4' 4–1/2"	4' 10–9/16"	4' 5–1/2"	4' 9–9/16"	4' 9–1/2"	4' 5–9/16"
47"	4' 5–1/2"	4' 11–15/16"	4' 6–1/2"	4' 10–15/16"	4' 10–1/2"	4' 6–15/16"
48"	4' 6–1/2"	5' 1–3/8"	4' 7–1/2"	5' 0–3/8"	4' 11–1/2"	4' 8–3/8"
49"	4' 7–1/2"	5' 2–13/16"	4' 8–1/2"	5' 1–13/16"	5' 0–1/2"	4' 9–13/16"
50"	4' 8–1/2"	5' 4–3/16"	4' 9–1/2"	5' 3–3/16"	5' 1–1/2"	4' 11–3/16"
51"	4' 9–1/2"	5' 5–5/8"	4' 10–1/2"	5' 4–5/8"	5' 2–1/2"	5' 0–5/8"
52"	4' 10–1/2"	5' 7–1/16"	4' 11–1/2"	5' 6–1/16"	5' 3–1/2"	5' 2–1/16"
53"	4' 11–1/2"	5' 8–7/16"	5' 0–1/2"	5' 7–7/16"	5' 4–1/2"	5' 3–7/16"
54"	5' 0–1/2"	5' 9–7/8"	5' 1–1/2"	5' 8–7/8"	5' 5–1/2"	5' 4–7/8"
55"	5' 1–1/2"	5' 11–5/16"	5' 2–1/2"	5' 10–5/16"	5' 6–1/2"	5' 6–5/16"

TYPICAL MAIN OFFSET

PROJECT:
374376

VERANDA STREET
PORTLAND, MAINE
WATER MAIN REPLACEMENT
STANDARD DETAILS

STATE OF MAINE
TIMOTHY J. McMULLIN
9385
REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: BSJ
CHECKED BY: TM
DATE: 11/18/2019

Portland Water District
ASSET MANAGEMENT AND PLANNING DEPARTMENT
225 DOUGLASS STREET, PORTLAND ME 04104
(207) 774-5961 EXT. 3041 • MEANS@PWD.ORG

SHEET:
W6 OF W6

Catch basin and pipe to be furnished and installed by Bridge Contractor

Path culvert to be installed by others

Catch basin and pipe to be furnished and installed by Bridge Contractor

CB
Rim 11.75

CB
Rim 10.75

Naturalized area

Naturalized area

HP

Grass

Grass

13.75+/-

13.75+/-

12' Path

HP

Grass

Naturalized area

Paved paths through Open Space to be installed by others

Rough grading of Open Space, catch basins, and pipes tying into roadway drainage network to be completed by Bridge Contractor. Fine grading, naturalization, plantings, and paths to be completed by others.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

Keith Smith Landscape Architecture
ksla
207.318.7714
ksmithsmla@gmail.com

Owner/Client:
City of Portland, Maine

Draft: KBS
Scale: As Shown
Date: 09.20.19

Stamp

Rev	Date	By
-	02.14.2020	KBS
	Reference in MDOT Plan Set	
	Issued for	

Status
Concept

Project
Veranda Bridge Replacement Open Space

Drawing Name
Concept Plan

Sheet
OS-1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eigth Edition 2017.

DESIGN LOADING

Live Load ..... HL - 93

TRAFFIC DATA

	I-295 NB	I-295 SB
Current (2019) AADT	30,470	29,990
Future (2039) AADT	31,990	31,490
DHV - % of AADT	13%	13%
Design Hour Volume	4,358	4,289
Heavy Trucks (% of AADT)	6%	6%
Heavy Trucks (% of DHV)	3%	3%
Directional Distribution (% of DHV)	100%	100%
18 kip Equivalent P 2.0	1,895	2,013
18 kip Equivalent P 2.5	1,806	1,918
Design Speed (mph)	50	50

MATERIALS

Concrete (Unless noted otherwise) ..... Class "A"
Concrete (Transition Barriers) ..... Class "LP" or Class "P"

Reinforcing Steel ..... ASTM A 615/A 615M, Grade 60

Steel Plating ..... ASTM A 572, Grade 50

BASIC DESIGN STRESSES

Concrete, Class "A" ..... f 'c = 4,000 psi
Concrete, Class "LP" ..... f 'c = 5,000 psi

Reinforcing Steel ..... f y = 60,000 psi

Steel Plating ..... f y = 50,000 psi

PORTLAND
CUMBERLAND COUNTY
CNRR CROSSING BRIDGE
OVER
CNRR
US 1 & I-295
FEDERAL AID PROJECT NO. 2354500
PROJECT LENGTH 0.031 mi.
BRIDGE NO. 5616

INTERSTATE 295 SOUTHBOUND
OVER
WASHINGTON AVENUE
US 1 & I-295
FEDERAL AID PROJECT NO. 2361503
PROJECT LENGTH 0.026 mi.
BRIDGE NO. 0816

LIST OF DRAWINGS

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General and Construction Phasing Notes 2
Quantities 3
CNRR:
- Plan and Transverse Section 4
- Joint Modification Details I 5
- Joint Modification Details II 6
- Temporary Roadway Plate 7
- Median Transition Barrier Details 8
- Superstructure Repairs 9

Washington Avenue:
- Plan and Transverse Section - SB 10
- Joint Modification Details 11
- Pavement Details 12

Bridge Phasing 13-14
Traffic Control Details 15
Traffic Control Plan 16
I-295 Southbound Detour Plan - Washington Ave 17
Veranda Street Southbound On Ramp Detour Plan 18
Local Signing Plan 19
Traffic Control Sign Summary 20-21

UTILITIES

Maine Department of Transportation
St. Lawrence and Atlantic Railroad

MAINTENANCE OF TRAFFIC

Night work using interstate closures, interstate lane closures and phased construction.

PROJECT LOCATION:	I-295 over CNRR, located 0.2 miles north of Washington Avenue, Latitude 43°40'53", Longitude 70°15'16" I-295 over Washington Avenue, located 0.1 miles north of Tukey's Bridge, Latitude 43°40'46", Longitude 70°15'22"
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Rehabilitation

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

	DATE
APPROVED	4-8-2020
COMMISSIONER:	
CHIEF ENGINEER: Daryl Wall Taylor	4-3-2020

STATE OF MAINE — TIMOTHY R. COTE No. 10671 — REGISTERED PROFESSIONAL ENGINEER

PROJECT INFORMATION

PROGRAM	BRIDGE	SIGNATURE	
PROJECT MANAGER	MACKENZIE KERSBERGEN		
DESIGNER	T. COTE	P.E. NUMBER	10671
CONSULTANT	HNTB CORP.	DATE	02/24/2020
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

WIN 023545.00 & 023615.03
2354500 & 2361503

PORTLAND
CNRR & WASHINGTON AVENUE
BRIDGES

TITLE SHEET

SHEET NUMBER
1
OF 21

HNTB

Date:2/24/2020
Username:
Division:
Filename:001_Title.dgn

GENERAL NOTES

1. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

2. Project info referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/contractors/

3. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

4. All dimensions, angles and stationing shown on existing plans are taken from as-built construction drawings from 1968 through 1994, supplemented by limited field measurements and are not guaranteed to be correct. All existing bridge information shall be verified in the field by the Contractor prior to commencing any work.

5. Contractor shall note that MaineDOT may have other active projects in the area. Contractor shall coordinate this work and associated traffic control with the other contracts.

6. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

   a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

   b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

   c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications section 109.7, Equitable Adjustments to Compensation.

7. Reinforcing steel shall have a minimum concrete cover of 2" unless otherwise noted.

8. Where new pavement joins existing pavement, the existing pavement shall be saw cut along a smooth line to a neat, even, vertical joint, as directed by the Resident. Broken or raveled edges will not be permitted. All work necessary for the preparation of this joint will be considered incidental to the related Contract items.

9. All reinforcing steel that is exposed and remain in place shall be cleaned by a method approved by the Resident. Payment shall be incidental to related contract items.

10. All expansion joints shall be fabricated so their construction joints align with the bridge phasing. New seals shall be installed full length after all sections of the joint armor have been installed.

11. All existing materials which are removed from the work area shall be removed from the site and properly disposed of by the Contractor in a manner approved by the Resident. These existing materials include, but are not limited to, concrete, metal casing, reinforcing steel, silt and other debris on or attached to the structure within the work areas. The cost of removal and disposal shall be incidental to the cost of the work items for which these removals are required.

12. If the depth of the deteriorated concrete extends below the reinforcing steel, the concrete shall be removed to a minimum depth of 1 inch below the reinforcing steel.

13. If the depth of the deteriorated concrete extends below the reinforcing steel, the concrete shall be removed to a minimum depth of 1 inch below the reinforcing steel.

14. All transverse reinforcing steel in the deck and backwall shall run continuously along the full width of the bridge. Lap splices and threaded couplers will be required due to the bridge phasing work. Payment for lap splices and threaded couplers will not be paid for directly, but shall be considered incidental to the related Contract items.

15. The reinforcing steel anchoring material shall be selected from Maine DOT's qualified products list. The contractor shall submit the proposed system to the resident for approval. The selected anchoring material shall be installed in strict accordance with the manufacturer's recommendations. Reinforcing steel drilled and anchored into existing concrete, shall be embedded to develop 125% of the yield strength of the bar.

16. When a new joint is being installed, or an existing joint is being substantially modified, and field conditions permit, the approach side of the joint shall be set 1/8" - 1/4" higher than the departure side of the joint. Under no circumstances shall the departing side of the joint be higher than the approach side of the joint.

17. Deck or backwall repairs located below areas of elastomeric concrete shall be repaired in accordance with Standard Specification 518 and allowed to cure prior to placing elastomeric concrete. The concrete repairs shall be completed to provide an elastomeric concrete thickness of 3" minimum. The depth of elastomeric concrete may be increased to 4" maximum only in cases where doing so eliminates the need for patching.

18. Contractor shall install longitudinal pavement joints at crown lines or lane lines.

19. Any Temporary Earth Support Systems required to support the earth adjacent to the back walls during bridge joint replacement or structural concrete repairs will not be measured separately, but shall be incidental to the related Contract items.

20. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody, and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling, or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment, and other costs required to remove and dispose of the existing bridge will be considered incidental to the bearing clean and seal pay item.

CONSTRUCTION PHASING

1. All traffic control shall be in accordance with the Manual for Uniform Traffic Control Devices for Streets and Highways, USDOT, FHWA, Latest Edition

2. Traffic Control Plans are provided in this plan set. If the Contractor proposes a different traffic control scheme, the Contractor shall submit revised traffic control plans in accordance with Special Provisions 107 & 652 and the Manual of Uniform Traffic Control Devices, latest edition.

3. Work zone time restrictions exist for all work zones. See Special Provision 107 for specific work zone time restrictions.

4. The Contractor shall provide a minimum travel lane width of 11 feet and shoulder widths of at least one foot in all work zones. The Contractor shall maintain the number of travel lanes in work zones as defined on the Traffic Control Details and Traffic Control Plans.

5. Excessively wide lane widths may cause driver confusion. Contractor shall avoid lane widths in excess of 15'-0" unless approved by the Resident.

6. Wide load restrictions shall be in place for the construction duration. Advanced wide load signing shall be provided in accordance with the Traffic Control Plans. The Contractor shall contact the Maine Department of Motor Vehicles, Oversized Load Section at 207-624-9063 to coordinate the wide load restrictions, prior to the start of the work. Work shall be coordinated with the Resident. Payment for work will be considered incidental to the 652 pay items.

7. The Contractor shall cover all existing signs that conflict with the work zone signing (Incidental to Item 652.35.)

8. The Contractor shall note that construction signing will be mounted on the concrete median barrier. Contractor shall securely fasten the signs in a manner that does not present a safety risk to the traveling public. Trimming of the construction sign edges may be required to prevent signs from overhanging into the travel lanes. Coordinate work with Resident. All labor, material and equipment associated with installing median signage is incidental to Item 652.35.

9. All construction signs will be provided by the Contractor. See Sign Summary Sheet. See Special Provision 652 for information on specialty construction signs.

Date:3/4/2020
Username:
Division:
Filename: 002_General Notes.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
5616 & 0816 **023545.00 & 023615.03** BRIDGE PLANS

			DATE
PROJ. MANAGER	M. Kerstetter	BY	
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

GENERAL AND CONSTRUCTION PHASING NOTES

SHEET NUMBER
2
OF 21

HNTB

Filename: ...\003_Estimated Quantities.dgn Division: BRIDGE Username: Mark.Poulin Date:4/22/2020

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY SB Washington Ave. Br. No. *0816	QUANTITY CNRR Br. No. *5616	TOTAL	UNIT
202.202	Removing Pavement Surface	530	670	1200	SY
203.20	Common Excavation*	2	140	142	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	0	15	15	CY
304.10	Aggregate Subbase Course - Gravel	0	15	15	CY
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	10	100	110	TON
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Polymer Modified)	45	110	155	TON
403.211	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)	7	0	7	TON
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)	10	110	120	TON
403.2131	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course, Polymer Modified)	15	100	115	TON
409.15	Bituminous Tack Coat, Applied	30	55	85	GAL
461.131	Temporary Pavement*	10	25	35	TON
508.13	Sheet Waterproofing Membrane (135 SY)	0	1	1	LS
518.51	Repair of Upward Facing Surfaces - below Reinforcing Steel < 8 inches*	20	0	20	SF
518.52	Repair of Upward Facing Surfaces > 8 inches*	1	0	1	CY
518.70	Repair of Overhead Surfaces < 8 inches*	0	125	125	SF
518.71	Repair of Overhead Surfaces > 8 inches*	0	3	3	CY
520.243	Bridge Joint Modification Type 3	2	0	2	EA
520.245	Bridge Joint Modification Type 5	0	4	4	EA
523.312	Clean and Seal Bearings	0	40	40	EA
524.50	Temporary Roadway Mat	1	1	2	EA
526.503	Precast Concrete Transition Barrier	0	1	1	LS
527.33	Truck Mounted Attenuator	0	2	2	EA
627.744	6" White or Yellow Painted Pavement Marking Line	700	2400	3100	LF
629.05	Hand Labor, Straight Time	10	10	20	HR
631.10	Air Compressor (including operator)	10	10	20	HR
631.11	Air Tool (including operator)	10	10	20	HR
631.12	All Purpose Excavator (including operator)	5	5	10	HR
631.172	Truck-Large (including operator)	5	5	10	HR
652.30	Flashing Arrow	0	2	2	EA
652.312	Type III Barricades	6	3	9	EA
652.33	Drum	9	92	101	EA
652.34	Cone	10	20	30	EA
652.35	Construction Signs	550	550	1100	SF
652.361	Maintenance of Traffic Control Devices: CNRR/Washington Avenue SB	0.5	0.5	1	LS
652.38	Flaggers	50	50	100	HR
652.381	Traffic Officers	55	0	55	HR
652.41	Portable-Changeable Message Sign	1	1	2	EA
652.46	Sequential Flashing Warning Lights	0	10	10	EA
656.75	Temporary Soil Erosion and Water Pollution Control	0.5	0.5	1	LS
659.10	Mobilization	0.5	0.5	1	LS

* Undetermined Location

Notes:

1. Estimated Quantities for each bridge are provided here for reference purposes only.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
BRIDGE NO. 5616 WIN 23545.00 BRIDGE PLANS

PROJ. MANAGER	M. KERSBERGEN		
DESIGN-DETAILED	T. Cole	E. Beausoleil	02/2020
CHECKED-REVIEWED	A. Stephens	K. Brayley	02/2020
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

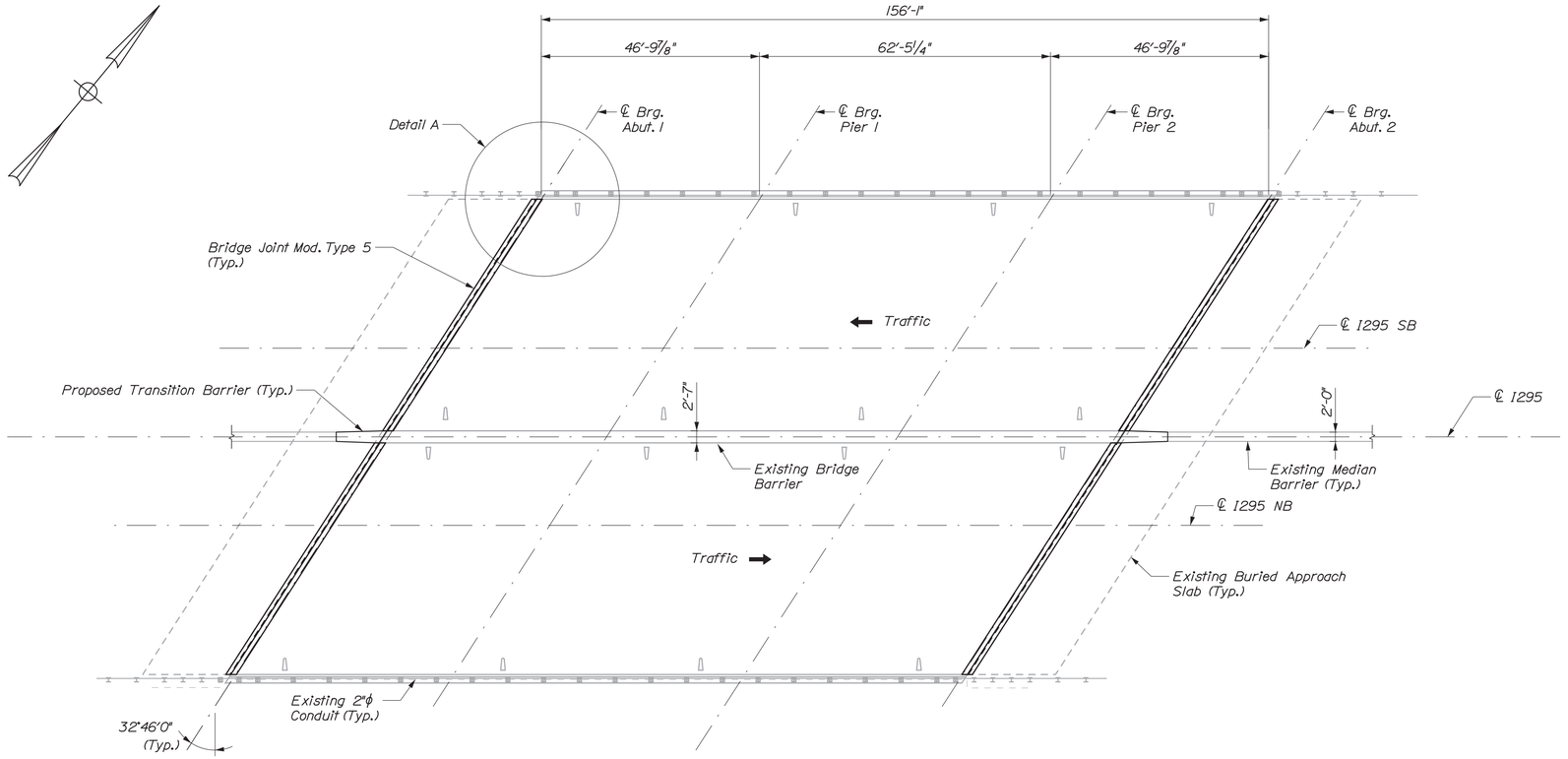
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DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

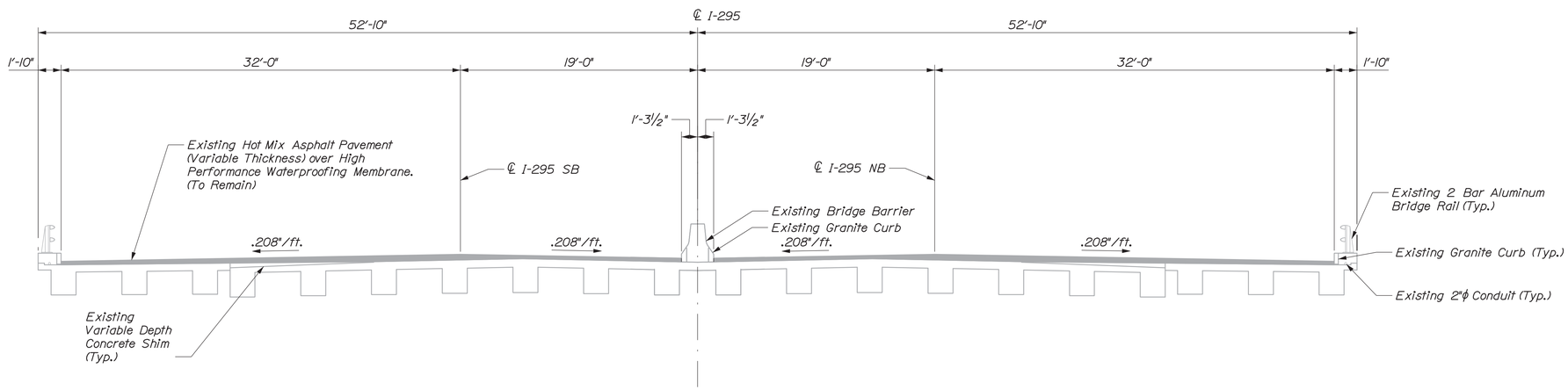
ESTIMATED QUANTITIES

SHEET NUMBER
3
OF 21



INTERSTATE 295 OVER CNRR

Portland ~ Bridge No. 5616



TRANSVERSE SECTION

NOTES:

1. For Bridge Joint Modification, Type 5, see "CNRR Joint Modification Details".
2. For Detail A, see "CNRR Modification Details 11".
3. For Transition Barrier Details, see "CNRR Median Transition Barrier".

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
5616 & 0816 **023545.00 & 023615.03** BRIDGE PLANS

PROJ. MANAGER	M. Kersbergen	BY	DATE
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

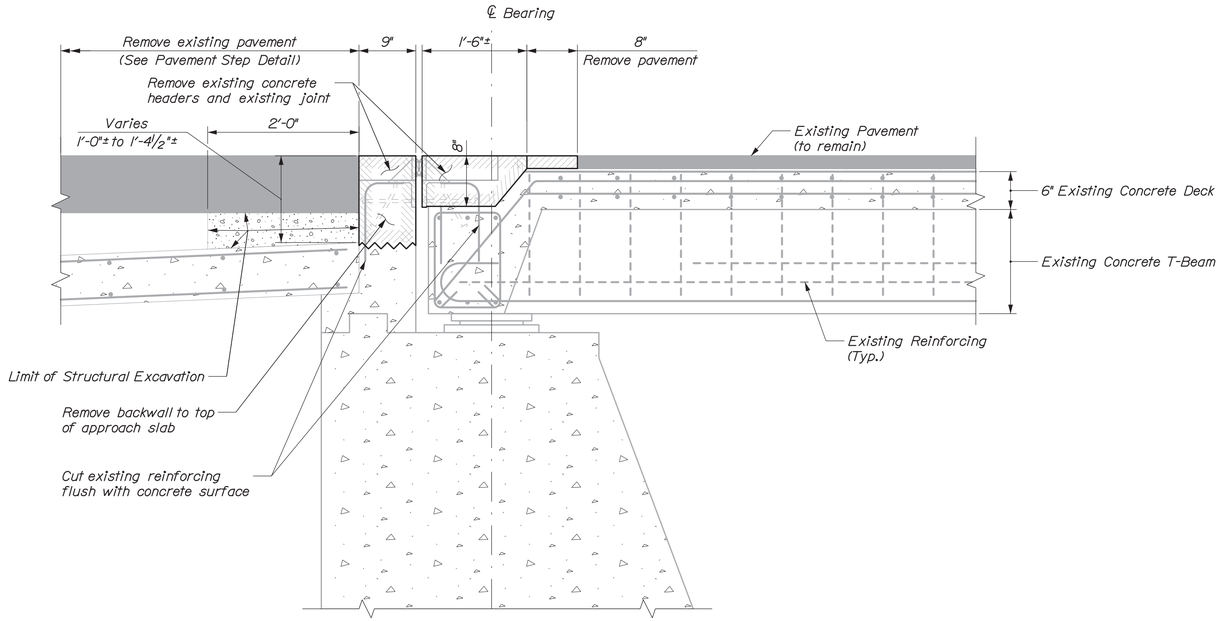
CNRR
PLAN AND SECTION

SHEET NUMBER

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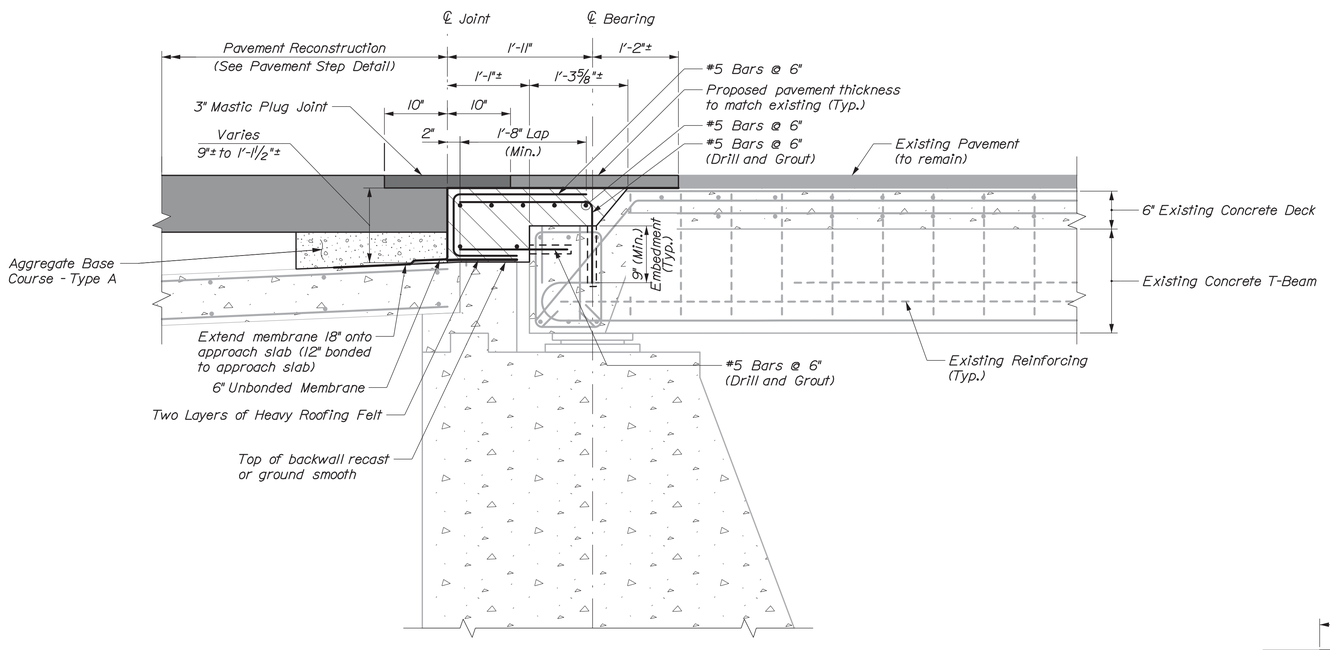
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Username: Date:3/4/2020
Division:
Filename: 004_PlanSect - CNRR.dgn



DEMOLITION

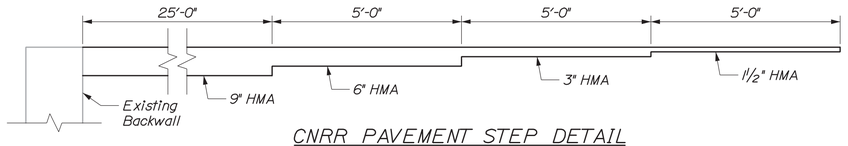
(Abutment 1 shown, Abutment 2 similar)



CONSTRUCTION

(Abutment 1 shown, Abutment 2 similar)

BRIDGE JOINT MODIFICATION TYPE 5



CNRR PAVEMENT STEP DETAIL

Notes:

1. Membrane, where specified, shall be sheet membrane.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

PROJ. MANAGER	M. Kerstergen		
DESIGN-DETAILED	E. Beausoleil	02\20	
CHECKED-REVIEWED	T. Cote	02\20	
DESIGN2-DETAILED2	A. Stephens	K. Brayley	
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

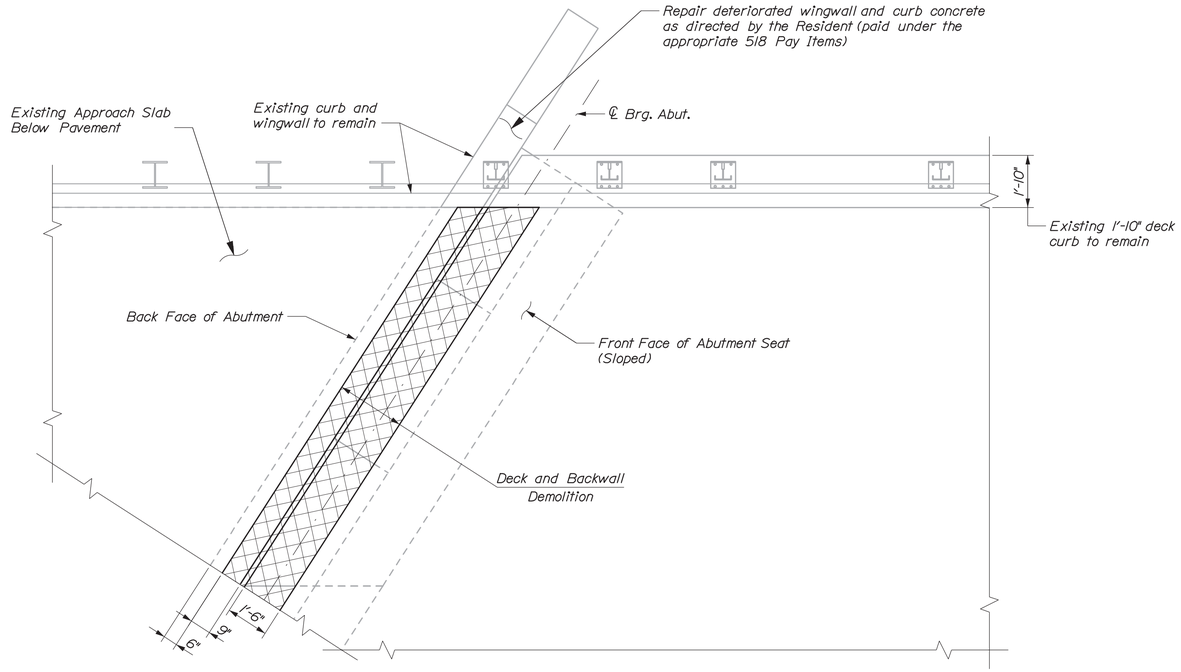
CNRR JOINT MODIFICATION
DETAILS I

SHEET NUMBER

5

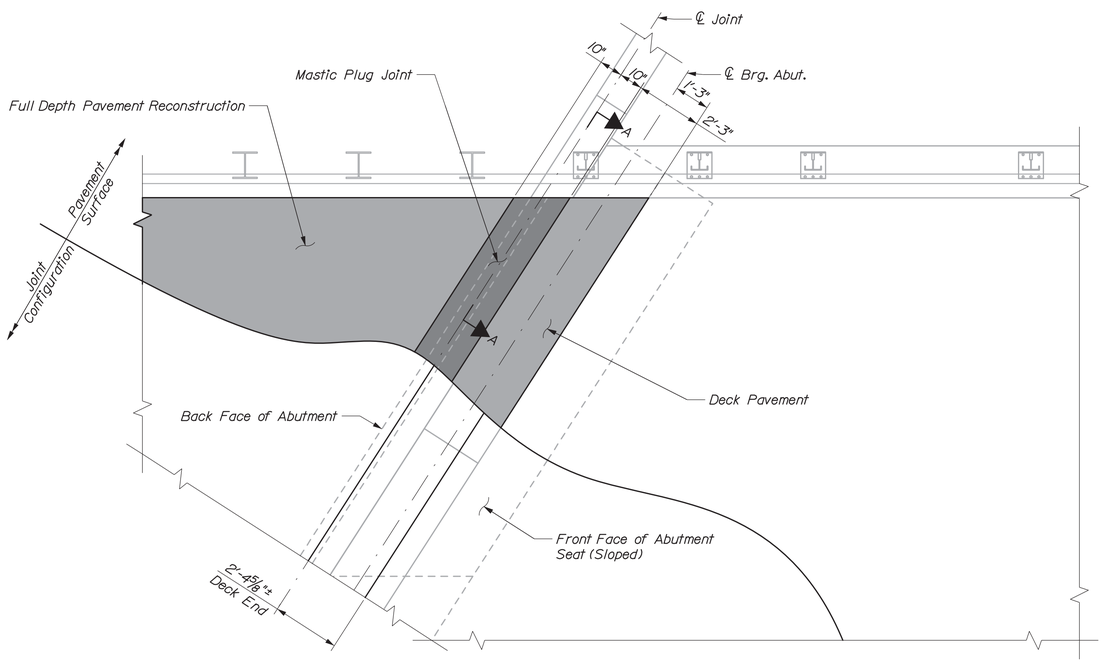
OF 21

Filename: 005_Joint Modificatios 1_CNRR.dgn Username: Division: Date:3/4/2020



DEMOLITION PLAN

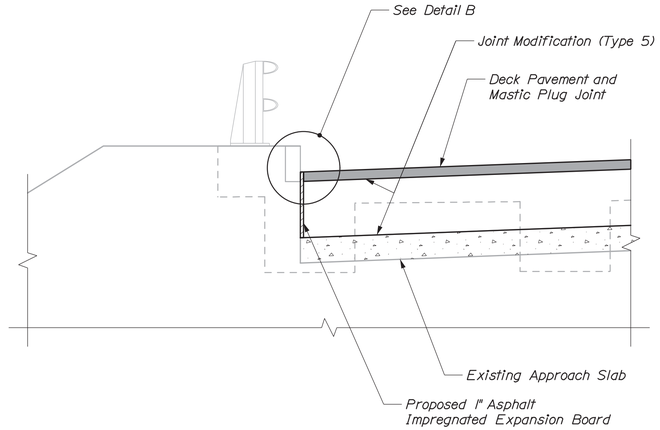
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SE & NW Corners Similar)



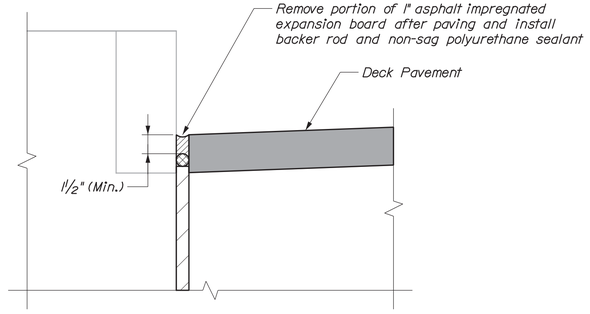
CONSTRUCTION PLAN

(SW & NE Corners Shown
SE & NW Corners Similar)

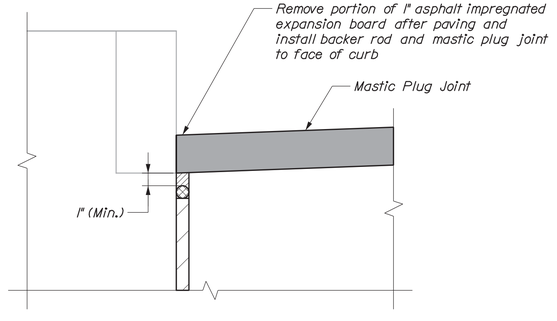
DETAIL A



SECTION A-A



AT DECK PAVEMENT



AT MASTIC PLUG JOINT

DETAIL B

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

PROJ. MANAGER	M. Kerstetter	BY	DATE
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

CNRR JOINT MODIFICATION DETAILS II

SHEET NUMBER

6

OF 21

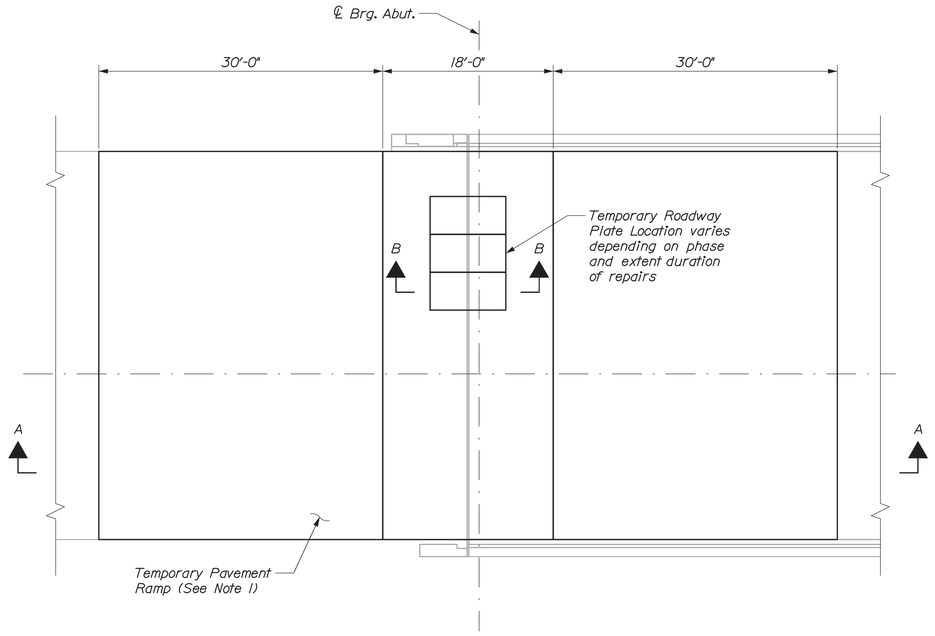
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NOTES:

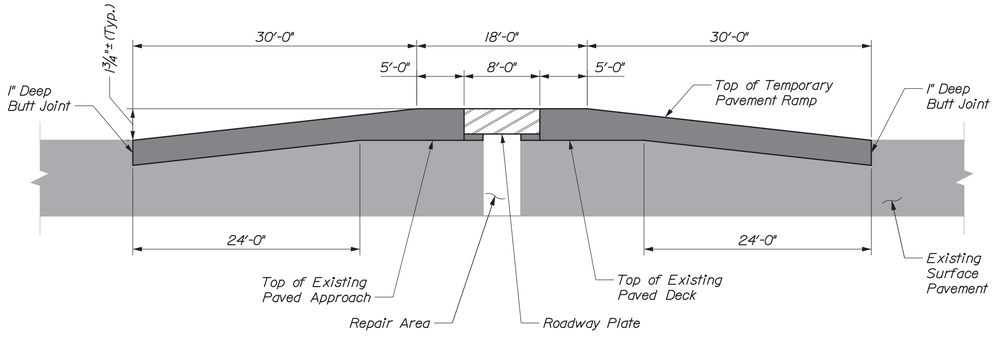
1. Butt Joints, Temporary Earth Support System, and Temporary Pavement Ramps shall be incidental to Pay Item 524.50, "Temporary Roadway Mat".

2. Contractor may propose alternate roadway plate designs in accordance with Special Provision 524.

3. Expansion Anchors shall be fully removable and shall be installed in accordance with the manufacturer's requirements. Expansion Anchors shall have minimum projection above Temporary Roadway Plate. Each Expansion Anchor shall be able to resist 5.0 kips of shear force and 2.0 kips of pullout force. Holes shall be filled with grout selected from the Qualified Products List after work is complete.



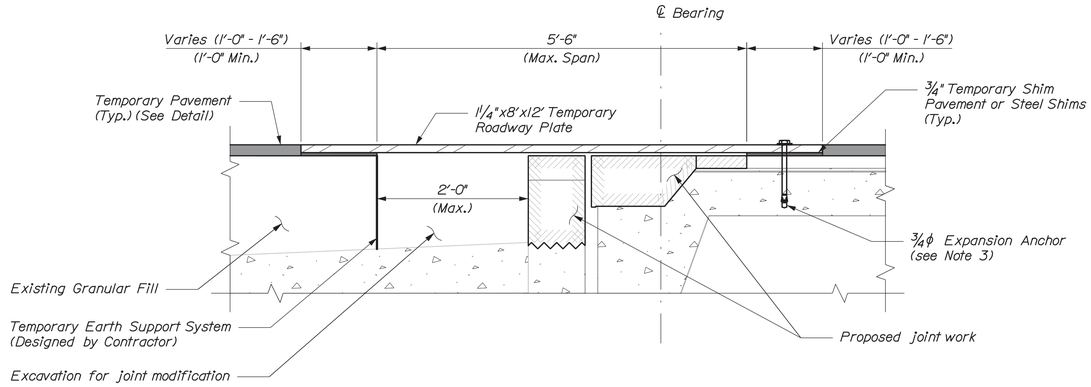
PLAN VIEW



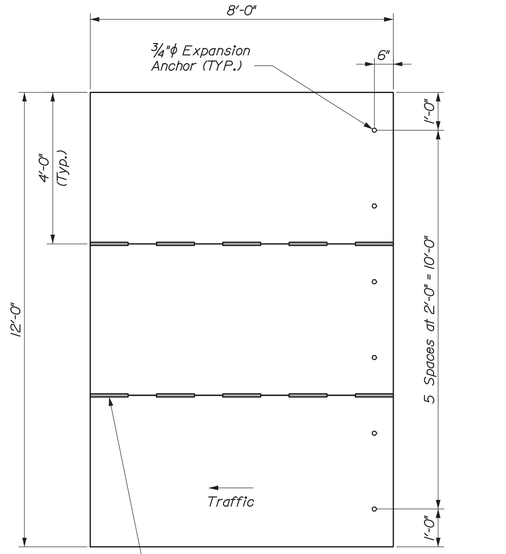
SECTION A-A
TEMPORARY PAVEMENT DETAIL

(Vertical Scale Exaggerated)

Note: Washington Avenue has a concrete wearing surface that shall not be removed. Alternative pavement detail will be required if temporary roadway plate is needed.



SECTION B-B



Use a minimum of (5) 12" welds along each seam. Bevel the plate ½" to allow for a 7/16" weld. Field weld locations as shown. Typical each plate connection. Grind welds smooth before allowing traffic.

TEMPORARY ROADWAY PLATE PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03

BRIDGE PLANS

5616 & 0816

PROJ. MANAGER	M. Kershaw		
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

CNRR
TEMP. ROADWAY PLATE

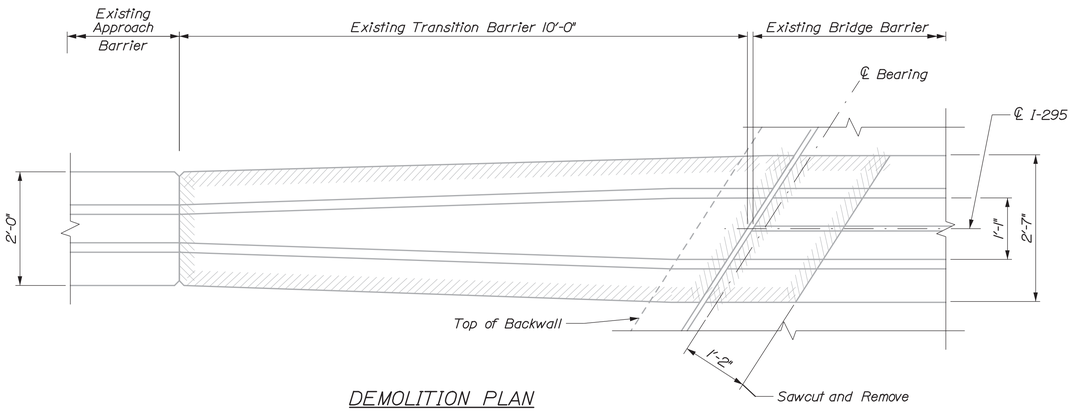
SHEET NUMBER
7
OF 21

HNTB

Username:

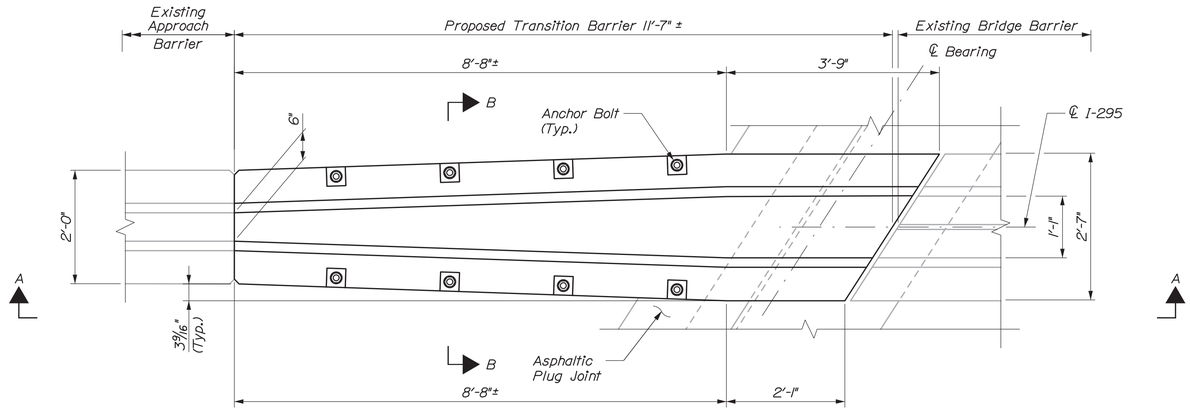
Date:3/4/2020

Filename: 007_Plating Joint Modification Details.dgn Division:



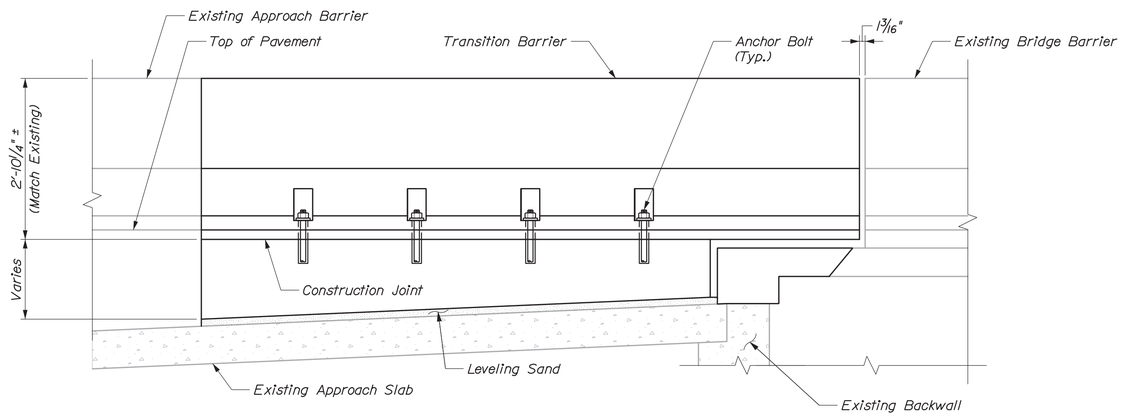
DEMOLITION PLAN

(South End of Bridge Shown, North End of Bridge Similar)

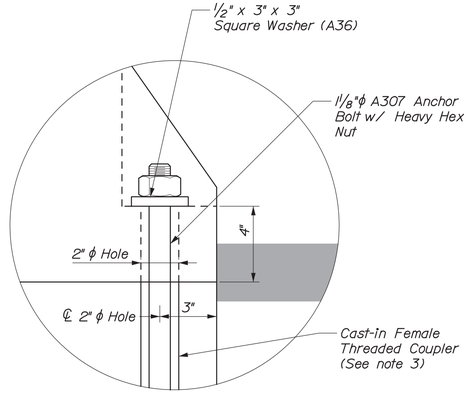


PROPOSED PLAN

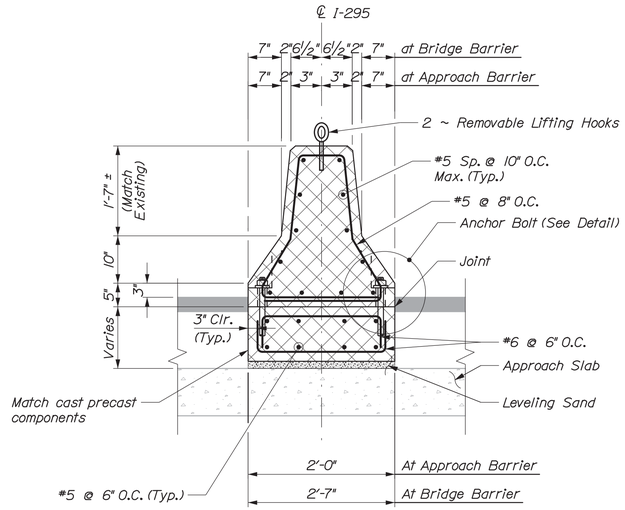
(South End of Bridge Shown, North End of Bridge Similar)



SECTION A-A



ANCHOR BOLT DETAIL



SECTION B-B

NOTES:

1. Contractor shall field verify barrier dimensions prior to fabrications.

2. The proposed concrete transition barrier shall have two removable lifting hooks. Each hook shall be rated to lift the barrier with a safety factor of 3.0.

3. Threaded female couplers shall be installed within the reinforcement of the lower concrete section. Coupler embedment depth shall be per manufacturer recommendations such that each coupler will be able to resist the full tension strength of the anchor bolt.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

PROJ. MANAGER	M. Kershberger	BY	DATE
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

CNRR MEDIAN TRANSITION BARRIER

SHEET NUMBER

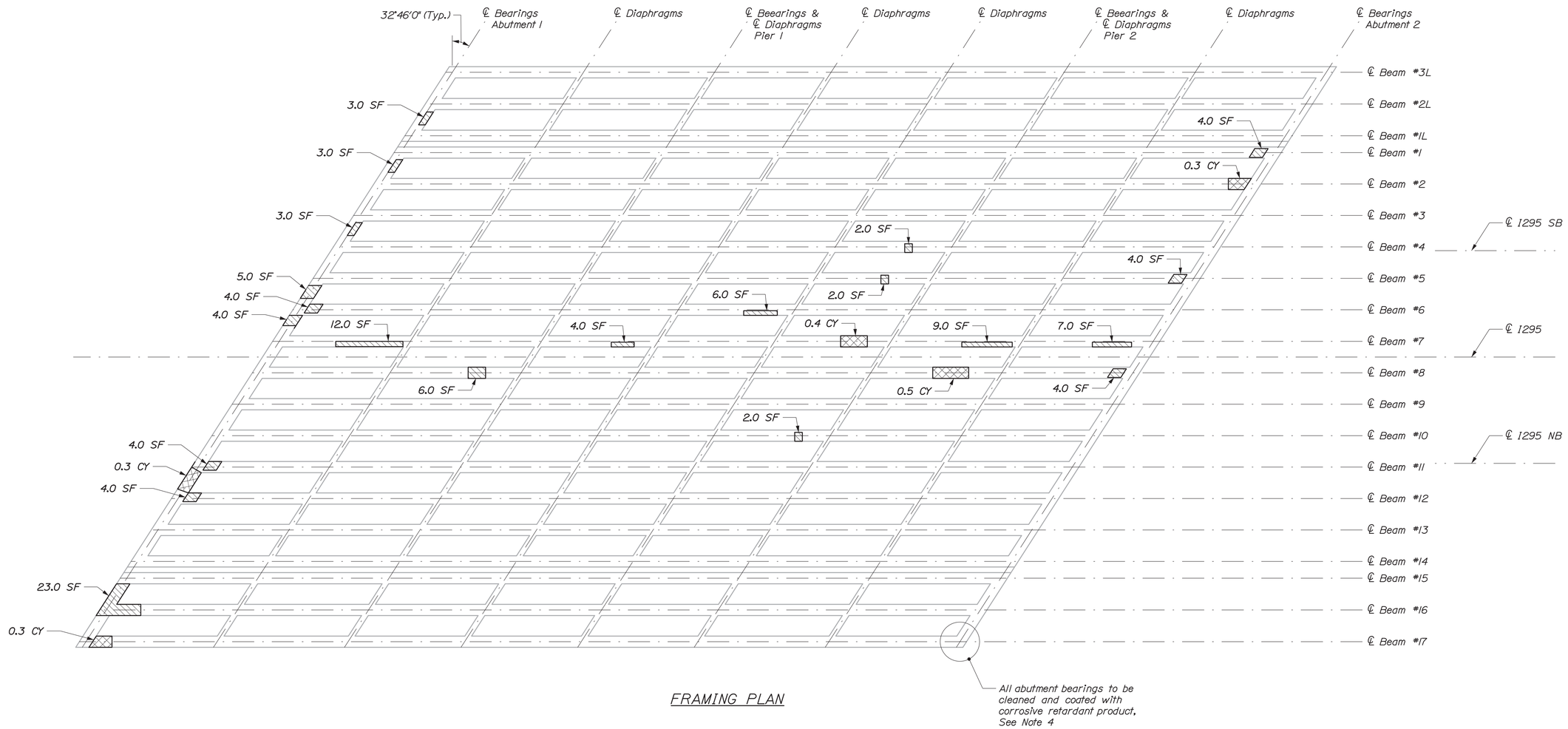
8

OF 21

Username:

Date:3/4/2020

Filename: 008_Median Transition Barrier_CNRR.dgn Division:



FRAMING PLAN

NOTES:

1. The concrete beam repair locations and quantities noted are approximated based on a visual inspection completed in December 2017. Actual repair areas will be determined by the Resident during construction.

2. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any reinforcing steel damaged by the Contractors operations shall be replaced as directed by the Resident at no expense to the Department.

3. All broken or corroded reinforcing bars shall be supplemented in accordance with Standard Specification Section 518.04. Payment for supplemental bars shall be included in the respective 518 Pay Item.

4. The Contractor shall remove all debris and loosely adhered materials, rinse bearings and seats, and apply Fluid Film, or approved equal, to steel bearings in accordance with Special Provision 523 - Clean and Seal Bearing.

LEGEND:

Beam Repairs - Repair of Overhead Surfaces < 8 inches
(Total Quantity = 125.0 SF*)
*Includes 10.0 SF of contingency for unknown areas of repair

Beam Repairs - Repair of Overhead Surfaces ≥ 8 inches
(Total Quantity = 3.0 CY*)
*Includes 1.2 CY of contingency for unknown areas of repair

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03

5616 & 0816

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	M. Kerstergard	
DESIGN-DETAILED	T. Cote	02\20
CHECKED-REVIEWED	A. Stephens	02\20
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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FIELD CHANGES		

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

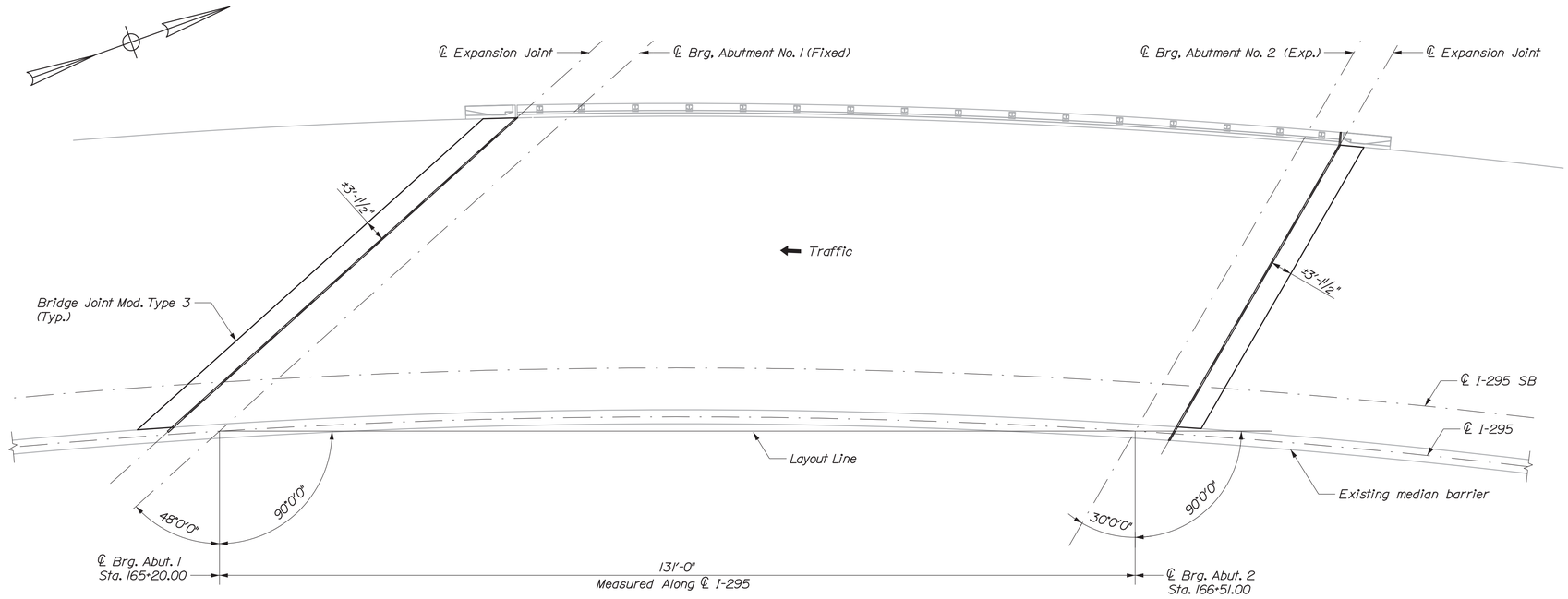
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SHEET NUMBER

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OF 21

Filename: 009_Superstructure Repairs_CNRR.dgn Division: Username: Date:3/4/2020

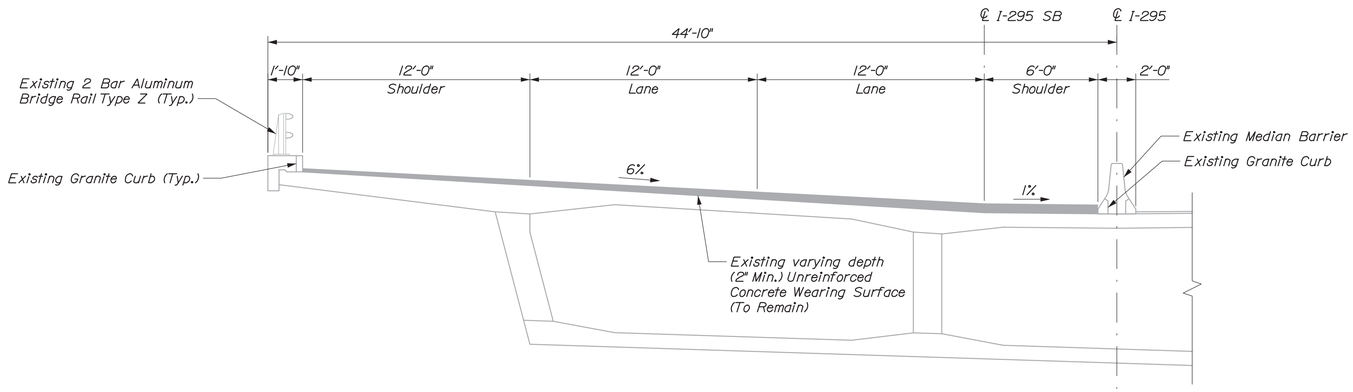


INTERSTATE 295 SOUTHBOUND OVER WASHINGTON AVENUE

Portland ~ Bridge No. 0816

NOTES:

1. Contractor shall repair areas of backwall deterioration under and adjacent to the existing elastomeric header concrete as directed by the Resident. Locations of backwall repairs are undetermined for this bridge. Resident shall identify areas for backwall repair after removing the existing header concrete and shall progress the repair work to reopen the travel lanes daily with temporary pavement and/or plating as required. Coordinate work with Resident. Payment for concrete repair work shall be under the 518 pay items.



HALF TRANSVERSE SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

			DATE
PROJ. MANAGER	M. Kerstergen	BY	
DESIGN-DETAILED	T. Cole	E. Beausoleil	02\20
CHECKED-REVIEWED	A. Stephens	K. Brayley	02\20
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

WASHINGTON AVENUE
PLAN AND SECTION

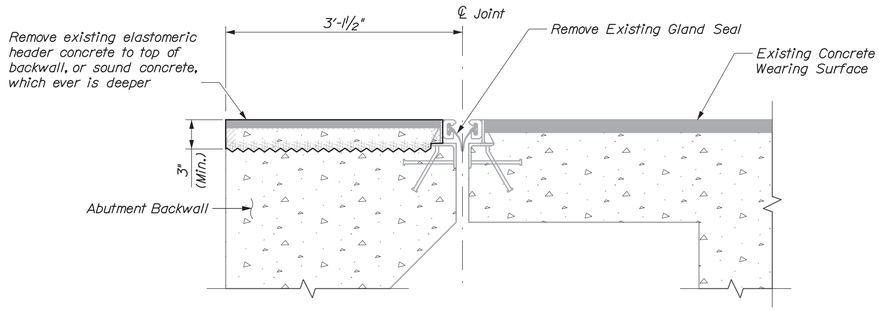
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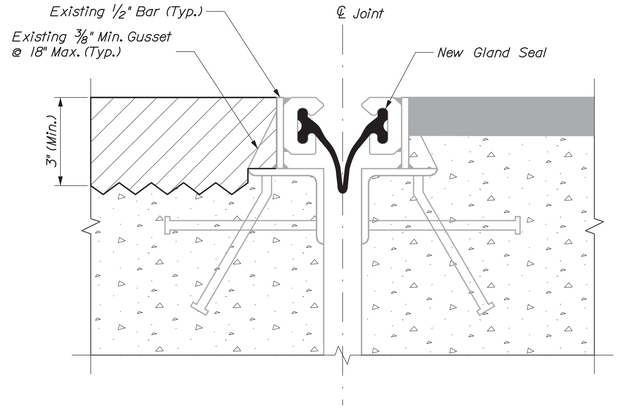
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HNTB

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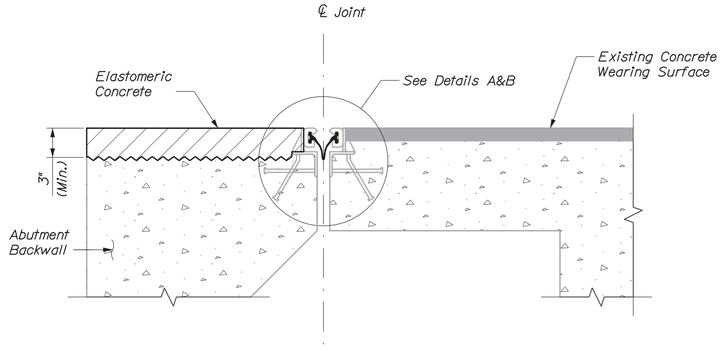


DEMOLITION
(South Abutment shown, North Abutment similar)



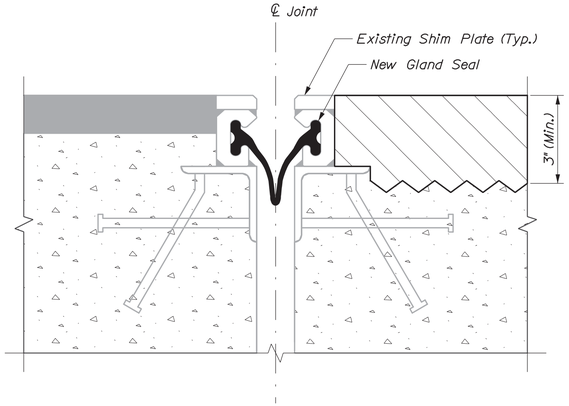
NOTE:
1. The height of the existing extrusion varies across the bridge width.

JOINT DETAIL A
(South Abutment)



CONSTRUCTION
(South Abutment shown, North Abutment similar)

JOINT MODIFICATION TYPE 3



JOINT DETAIL B
(North Abutment)

NOTES:

1. All concrete surfaces where elastomeric concrete is to be applied shall have a 1/4-in. minimum anchor profile or roughened surface.

2. The Contractor shall be fully responsible for selecting the appropriate gland seal based on a ± 1 1/2" movement rating from the Qualified Products List.

3. Removal and replacement of existing Elastomeric Header Concrete shall be completed along the full width of the roadway. Replacement seals shall be full width into curb and shall be installed in a single piece.

4. Elastomeric concrete headers shall be set to the proposed roadway profile grade and deck cross slope established through the Contractor's field survey. See Special Provision 403.

5. All elastomeric header concrete shall be formed. Elastomeric header concrete shall not be cast against existing pavement.

6. The existing elastomeric header concrete shall be removed full depth on the backwall. The As-Built Plans specified the elastomeric header concrete be installed to a minimum of 3 inches in depth. Actual conditions may vary.

7. After completing the elastomeric header concrete replacement, and associated backwall concrete repairs, remove the existing approach (departure) bituminous pavement to the bottom of the deepest repair of the backwall and place HMA to the roadway profile grade and deck cross slope. Install a pavement transition down to the existing approach pavement.

8. Upon completion of the permanent HMA repairs mill and fill the approaches per the details on Sheet 12.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

SIGNATURE

P.E. NUMBER

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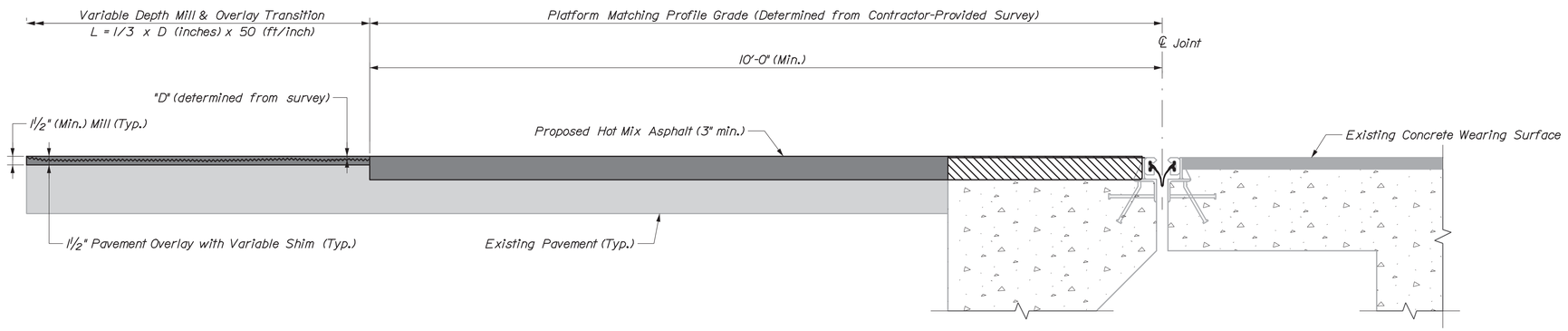
	BY	DATE
PROJ. MANAGER	M. Kerstergen	
DESIGN-DETAILED	E. Beausoleil	02\20
CHECKED-REVIEWED	T. Cote	02\20
DESIGN2-DETAILED2	A. Stephens	K. Brayley
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CNRR & WASHINGTON AVENUE
INTERSTATE 295
CUMBERLAND
PORTLAND

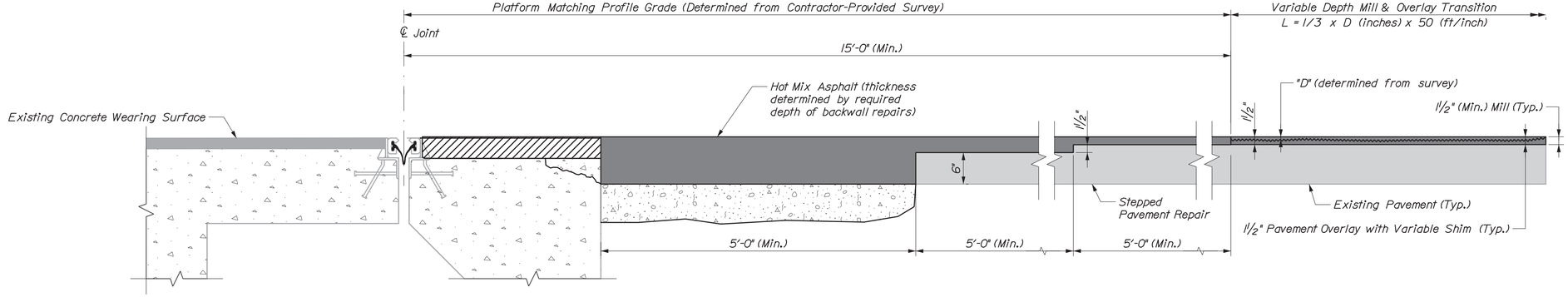
WASHINGTON AVENUE
JOINT MODIFICATION DETAILS

SHEET NUMBER
11
OF 21

Filename: 011_Joint Modifications_Washington Ave.dgn Division: Username: Date:3/4/2020



PROFILE GRADE CORRECTION (WITH NO BACKWALL REPAIRS)



PROFILE GRADE CORRECTION (WITH BACKWALL REPAIRS)

PAVEMENT MODIFICATION - BRIDGE JOINT MODIFICATION TYPE 3

(Backwall - Left, Deck - Right as shown)
(Deck - Left, Backwall - Right similar)

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

SIGNATURE

P.E. NUMBER

DATE

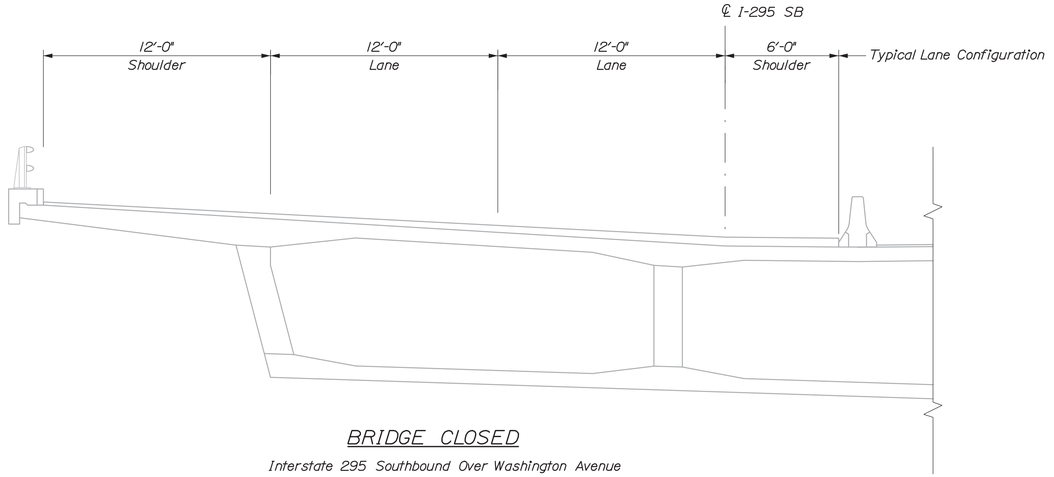
	BY	DATE
PROJ. MANAGER	M. Kerstergen	
DESIGN-DETAILED	E. Beausoleil	02\20
CHECKED-REVIEWED	T. Cote	
DESIGN2-DETAILED2	A. Stephens	
DESIGN3-DETAILED3	K. Brayley	02\20
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

WASHINGTON AVENUE
PAVEMENT DETAILS

SHEET NUMBER
12
OF 21

Date:3/4/2020
Username:
Filename: 012_Joint Modification Details Type 3.dgn Division:



BRIDGE CLOSED

Interstate 295 Southbound Over Washington Avenue

NOTES:

1. *Sections are shown looking northbound.*
2. *Washington Avenue bridge work will be done at night under a closure of I-295 Southbound. Work maybe completed during the Veranda Street closure following details and specifications of WIN 021745.00 I-295 over Veranda Street. Work completed outside of the Veranda Street closure shall follow the I-295 Southbound Detour Plan.*
3. *The Veranda Street southbound on ramp shall be closed during bridge work. See Veranda Street Southbound On Ramp Detour Plan.*
4. *Washington Avenue bridge work zone is detailed to occur in a single continuous work zone with the CNRR bridge work.*

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
5616 & 0816 **023545.00 & 023615.03** BRIDGE PLANS

PROJ. MANAGER	M. Kierstergard	BY	DATE
DESIGN-DETAILED	AJS	AJS	12/19
CHECKED-REVIEWED	AJS	TRC	12/19
DESIGN2-DETAILED2	JRH		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

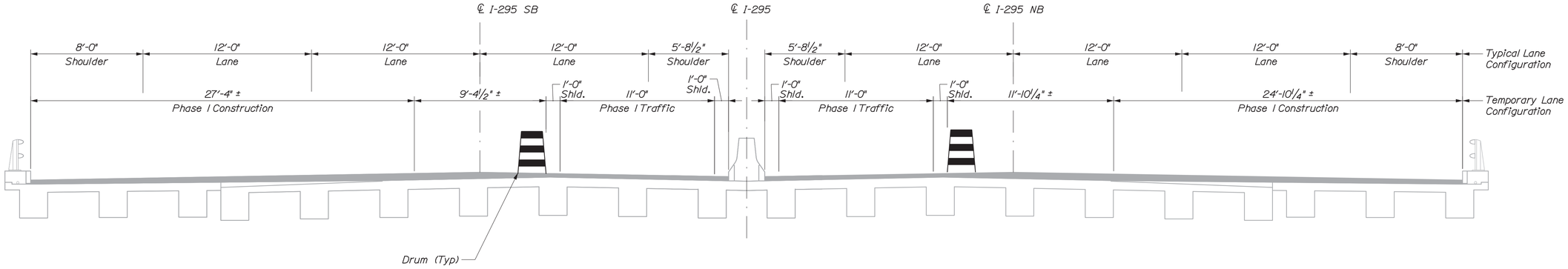
BRIDGE PHASING
WASHINGTON AVENUE

SHEET NUMBER

13

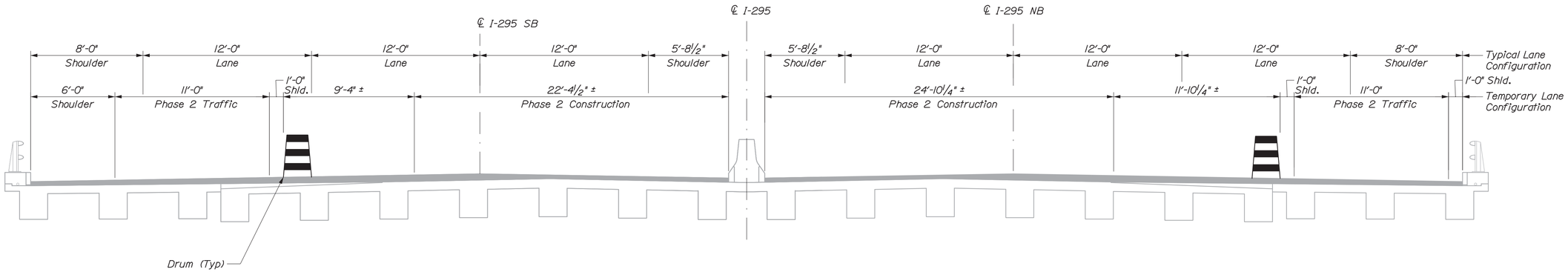
OF 21

Filename: 013_WashingtonAve_SB.dgn Division: Username: Date:3/4/2020



PHASE I

Interstate 295 Over CNRR



PHASE 2

Interstate 295 Over CNRR

NOTES:

1. Sections are shown looking northbound.
2. The Veranda Street southbound on ramp shall be closed during bridge work. See Veranda Street Southbound On Ramp Detour Plan.
3. CNRR southbound bridge work zone is detailed to occur in a single continuous work zone with the Washington Avenue southbound bridge work.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

PROJ. MANAGER	M. Kerstetter	BY	DATE
DESIGN-DETAILED	AJS	AJS	12/19
CHECKED-REVIEWED	JRH	TRC	12/19
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
CUMBERLAND
PORTLAND

BRIDGE PHASING
CNNR

SHEET NUMBER

14

OF 21

Username:

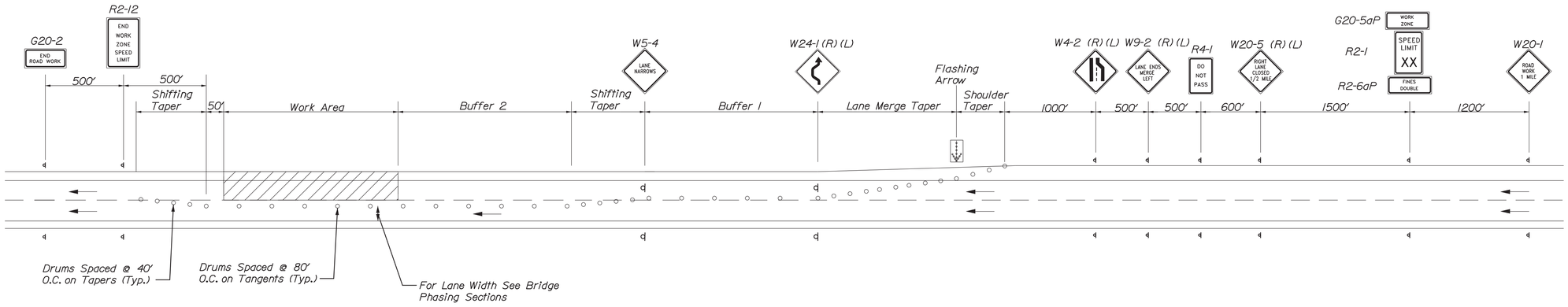
Division:

Date:3/4/2020

Filename: 014_CNRR_SB.dgn

Taper Table

Work Zone	Bridge	Work Zone Speed (mph)	Buffer 2 (ft)	Phase 1 Shifting Taper (ft)	Phase 2 Shifting Taper (ft)	Buffer 1 (ft)	Lane Merge Taper (ft)	Shoulder Taper (ft)
1	CNRR - Southbound	40	150	200	200	150	320	110
1	CNRR - Northbound	40	150	270	270	585	320	110



STANDARD LANE CLOSURE DETAIL

Detail Shown Is For Travel Lane Closure.
Passing Lane Closure Similar, But Opposite Hand.

NOTES:

1. Construction sign placement shall be adjusted by the Resident to avoid conflicts with existing signing.
2. This detail shall be modified as shown in the "Traffic Control Plans".

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
023545.00 & 023615.03 BRIDGE PLANS

5616 & 0816

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	M. Kersbergen	
DESIGN-DETAILED	AJS	12/19
CHECKED-REVIEWED	JRH	12/19
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

TRAFFIC CONTROL DETAILS

SHEET NUMBER

15

OF 21

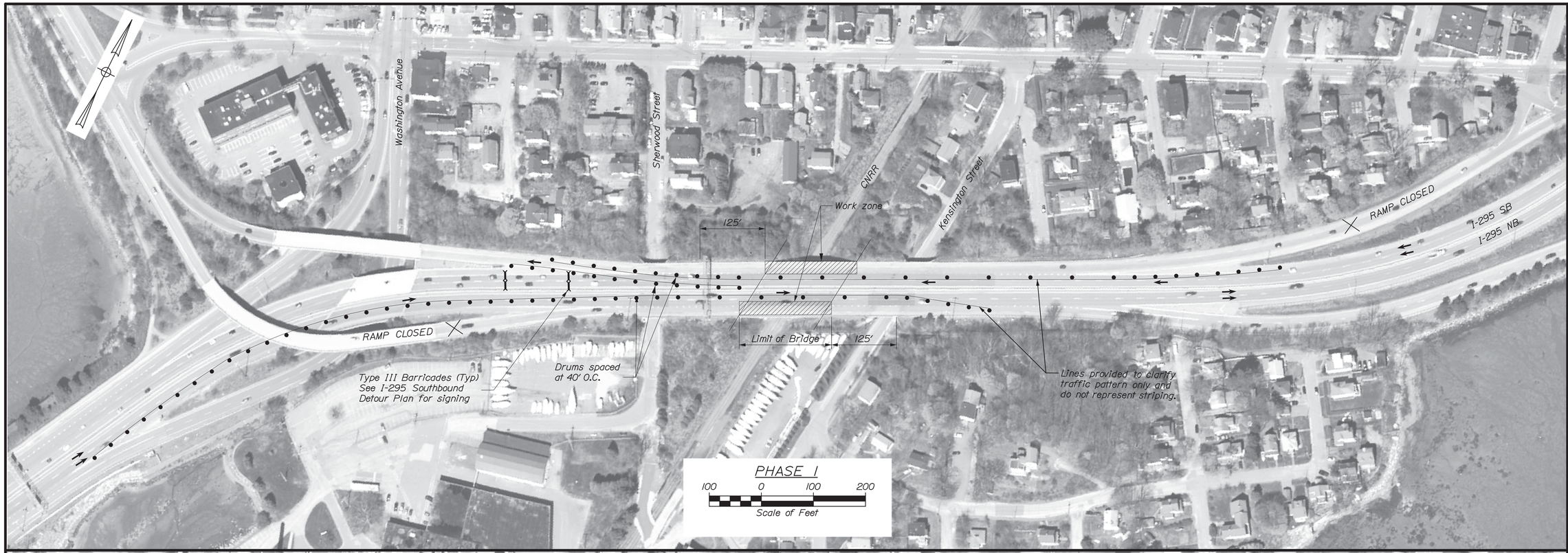
Username:

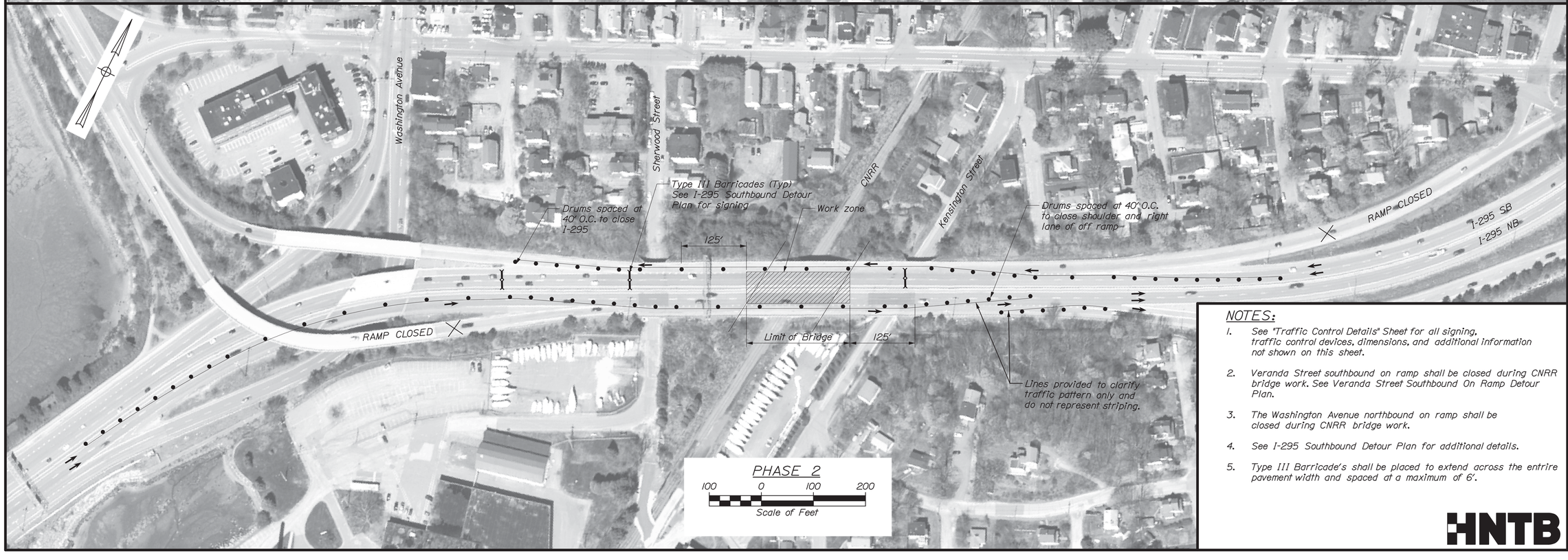
Date:3/4/2020

Division:

Filename: 015_MOT TypicalDetail.dgn

Username:
Date:3/4/2020
Division:
Filename: 016_CNRR MOT Detail.dgn





NOTES:

1. See "Traffic Control Details" Sheet for all signing, traffic control devices, dimensions, and additional information not shown on this sheet.
2. Veranda Street southbound on ramp shall be closed during CNRR bridge work. See Veranda Street Southbound On Ramp Detour Plan.
3. The Washington Avenue northbound on ramp shall be closed during CNRR bridge work.
4. See I-295 Southbound Detour Plan for additional details.
5. Type III Barricade's shall be placed to extend across the entrire pavement width and spaced at a maximum of 6'.

HNTB

PROJ. MANAGER	M. Kerstetgen	BY
DESIGN-DETAILED	AJS	EPR
CHECKED-REVIEWED	JRH	TRC
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DATE
12/19
12/19

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

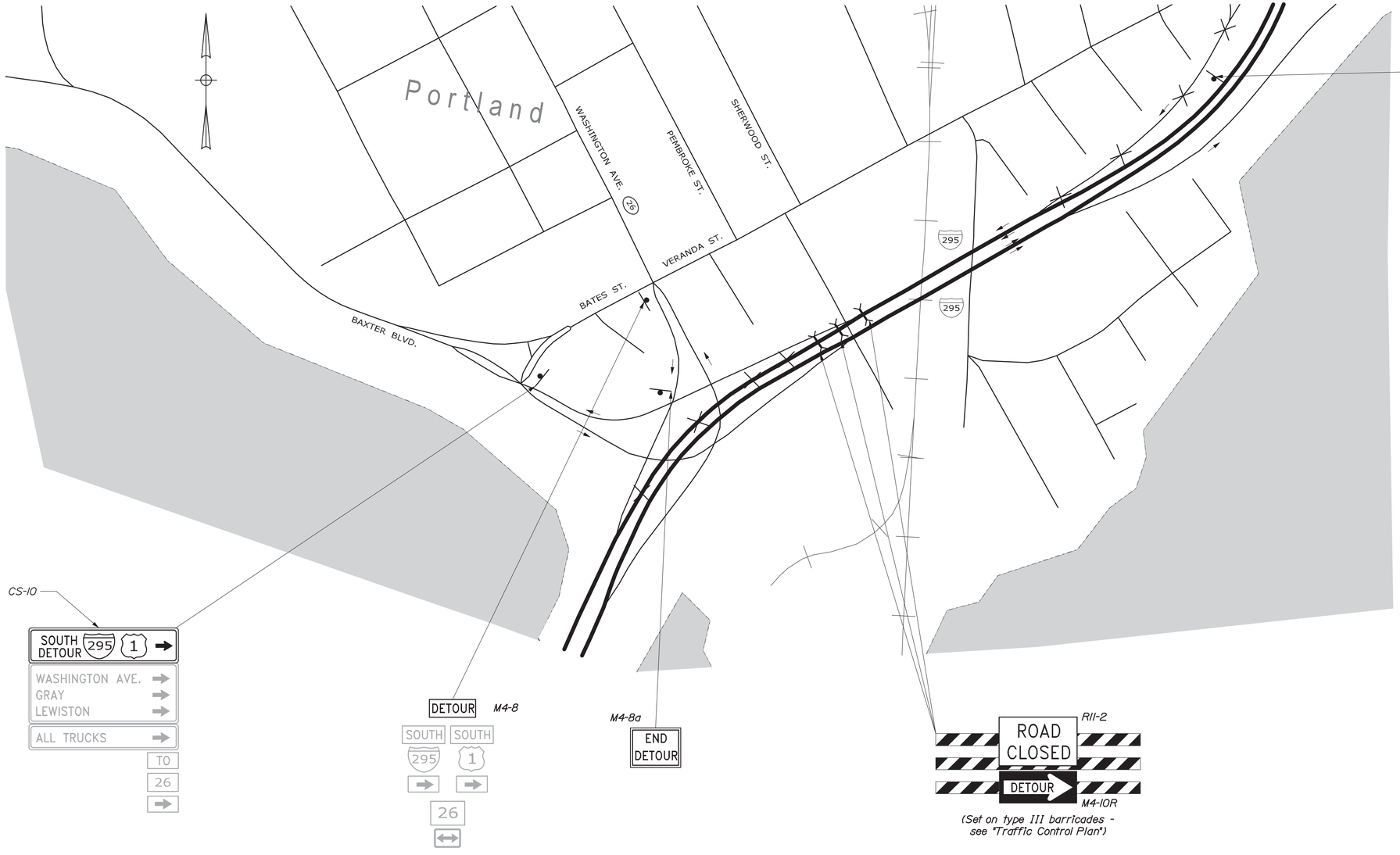
2354500 & 2361503

WIN
5616 & 0816 **023545.00 & 023615.03** BRIDGE PLANS

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

TRAFFIC CONTROL PLAN
WASHINGTON AVENUE & CNRR

SHEET NUMBER
16
OF 21



NOTES:

1. The Veranda Street southbound on ramp detour must be used in conjunction with this I-295 detour.
2. For additional detail see the Washington Ave and CNRR "Traffic Control Plan".
3. PCMS #1 shall utilize existing PCMS south of Exit 10.

HNTB

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
5616 & 0816 023545.00 & 023615.03 BRIDGE PLANS

PROJ. MANAGER	M. Kerstetter	BY	DATE
DESIGN-DETAILED	AJS	EPR	12/19
CHECKED-REVIEWED	JRH	TRC	12/19
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

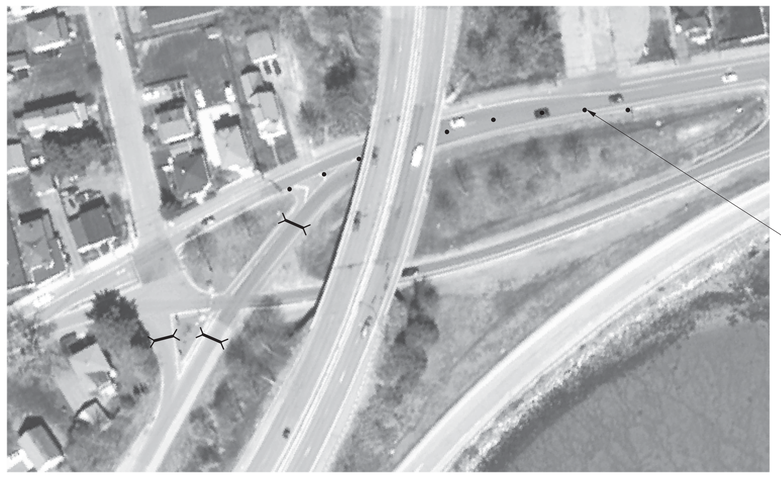
I-295 SOUTHBOUND DETOUR
PLAN-WASHINGTON AVENUE

SHEET NUMBER
17
OF 21

Username: Division: Date:3/4/2020
Filename: 017_WashingtonAve_Closure.dgn

Filename: 018_VerandaSt_OnRamp_Closure.dgn Division: Username: Date:3/4/2020





Drums spaced 80' o.c. to close left lane

PCMS #1
(1 Week prior to closure)

RAMP CLOSED NIGHTS

XX/XX TO XX/XX

NOTES:

1. Type III barricades shall be placed to extend across the entire pavement width and spaced at a maximum of 6'.
2. PCMS #1 shall utilize existing PCMS south of Exit 10.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN 23615.00

BRIDGE NO. Varies

BRIDGE PLANS

PROJ. MANAGER	M. Kerstetter	BY	DATE
DESIGN-DETAILED	AJS	AJS	12/19
CHECKED-REVIEWED	JRH	TRC	12/19
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVE.
INTERSTATE 295
PORTLAND CUMBERLAND

VERANDA STREET SOUTHBOUND
ON RAMP DETOUR PLAN

SHEET NUMBER

18

OF 21

WIDE LOADS OVER 10'-0"
PROHIBITED
I-295 NB PORTLAND

CS-7

WIDE LOADS OVER 10'-0"
PROHIBITED
I-295 SB PORTLAND

CS-8

WIDE LOADS OVER 10'-0"
PROHIBITED
I-295

CS-9

WIDE LOADS OVER 10'-0"
PROHIBITED
I-295 SB PORTLAND

VMS #1

Portland

South Portland

SCARBOROUGH

WASHINGTON AVE
BRIGHTON AVE
CONGRESS ST
ST. JAMES ST
ST. JOHN ST
FOREST AVE
PARK AVE
MARGINAL WAY
FRANKLIN ST
VERANDA ST
FORE RIVER PKWY
STATE ST
HIGH ST
COMMERCIAL ST
WESTBROOK ST
MAIN ST
SR703
SR701

CS-7
CS-8
CS-9

NOTE:

1. All signs on this sheet shall be placed to not conflict with signing shown on Detour Plans.
2. VMS #1 shall utilize existing VMS at mile 11.8.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN 23615.00

BRIDGE NO. Varies

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M. Kierstergen	
DESIGN-DETAILED	AJS	12/19
CHECKED-REVIEWED	JRH	12/19
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

LOCAL SIGNING PLAN

SHEET NUMBER

19

OF 21

Filename: 019_LocalSigning.dgn Division: Username: Date:3/4/2020

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET
G20-2	48"	24"	END ROAD WORK	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			4	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			8.00 (32)
G20-5aP	36"	24"	WORK ZONE				4				6.00 (24)
M4-8	24"	12"	DETOUR				2				2.00 (4)
M4-8a	24"	18"	END DETOUR				2				3.00 (6)
M4-10R	48"	18"	DETOUR				6				6.00 (36)
M4-10L	48"	18"	DETOUR				1				6.00 (6)
M6-3	21"	15"					3				2.20 (6.6)
R2-1 (40)	48"	60"	SPEED LIMIT 40				4				20.00 (80)
R2-6aP	48"	36"	FINES DOUBLE				4				12.00 (48)
R2-12	36"	54"	END WORK ZONE SPEED LIMIT				4				13.50 (54)
R4-1	48"	60"	DO NOT PASS				4				20.00 (80)
R11-2	48"	30"	ROAD CLOSED				4				8.00 (32)

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET
W4-2L	48"	48"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			2	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			16.00 (32)
W4-2R	48"	48"					2				16.00 (32)
W5-4 (MODIFIED)	48"	48"	LANE NARROWS				4				16.00 (64)
W9-2L	48"	48"	LANE ENDS MERGE LEFT				2				16.00 (32)
W9-2R	48"	48"					2				16.00 (32)
W20-1 (1 Mile)	48"	48"	ROAD WORK 1 MILE				4				16.00 (64)
W20-5R (1/2 Mile)	48"	48"	RIGHT LANE CLOSED 1/2 MILE				2				16.00 (32)
W20-5L (1/2 Mile)	48"	48"					2				16.00 (32)
W24-1L	48"	48"					2				16.00 (32)
W24-1R	48"	48"					2				16.00 (32)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN 023545.00 & 023615.03

BRIDGE NO. VARIES BRIDGE PLANS

PROJ. MANAGER	M. Kerstetter	BY	DATE
DESIGN-DETAILED	AJS	AJS	12/19
CHECKED-REVIEWED	JRH	TRC	12/19
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

SIGN SUMMARY

SHEET NUMBER

20

OF 21

HNTB

Username:

Division:

Date:3/4/2020

Filename: 020_Sign Summary 01.dgn

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET
CS-1	48"	30"	RAMP CLOSED	SEE SPECIAL PROVISION 652 FOR TEXT DIMENSIONS			3	WHITE	BLACK		10.00 (30)
CS-2	72"	60"	SOUTH 295 SOUTH 1 DETOUR				1	ORANGE	BLACK		30.00 (30)
CS-3	72"	60"	SOUTH 295 SOUTH 1 ON RAMP CLOSED AHEAD				1	ORANGE	BLACK		30.00 (30)
CS-7	108"	36"	WIDE LOADS OVER 10'-0" PROHIBITED I-295 NB PORTLAND				2	WHITE	BLACK		27.00 (54)
CS-8	108"	36"	WIDE LOADS OVER 10'-0" PROHIBITED I-295 SB PORTLAND				1	WHITE	BLACK		27.00 (27)
CS-9	108"	36"	WIDE LOADS OVER 10'-0" PROHIBITED I-295				1	WHITE	BLACK		27.00 (27)
CS-10	120"	24"	SOUTH 295 1 DETOUR				1	ORANGE	BLACK		20.00 (20)
CS-11	90"	42"	I-295 CLOSED AHEAD USE EXIT 9				1	ORANGE	BLACK		26.25 (26.25)

Username:

Division:

Date:3/4/2020

Filename: 021_Sign Summary 02.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

WIN
BRIDGE NO. VARIES 023545.00 & 023615.03 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M. Kerstetter	
DESIGN-DETAILED	AJS	12/19
CHECKED-REVIEWED	JRH	12/19
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND CUMBERLAND

SIGN SUMMARY

SHEET NUMBER

21

OF 21

HNTB