CONTACTS LIST:

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978-962-3541

contact:

Amanda Curtis

LANDSCAPE ARCHITECTS: BROWN, RICHARDSON + ROWE, INC. 65 FRANKLIN STREET, 4th FLOOR BOSTON, MA 02110

617-542-8552

contacts:

Clarissa Rowe

ENGINEERS:

STANTEC

45 NETWORK DRIVE

BURLINGTON, MA 01803

781-221-1000

contact:

John Hendrickson

SHEET LIST:

- G0.0 COVER SHEET
- **EXISTING CONDITIONS PART 1 OF 4**
- **EXISTING CONDITIONS PART 2 OF 4**
- G1.2 EXISTING CONDITIONS PART 3 OF 4
- **EXISTING CONDITIONS PART 4 OF 4**
- TYPICAL CROSS SECTIONS
- C2.0 CONSTRUCTION PLANS PART 1 OF 4
- CONSTRUCTION PLANS PART 2 OF 4
- CONSTRUCTION PLANS PART 3 OF 4
- CONSTRUCTION PLANS PART 4 OF 4
- PROFILES PART 1 OF 2
- PROFILES PART 2 OF 2
- C4.0 CURB TIE PLAN
- TRAFFIC SIGN SUMMARY
- CONSTRUCTION DETAILS PART 1 OF 3
- CONSTRUCTION DETAILS PART 2 OF 3
- C6.2 CONSTRUCTION DETAILS PART 3 OF 3
- C8.0 CROSS SECTIONS PART 1 OF 11
- CROSS SECTIONS PART 2 OF 11
- C8.2 CROSS SECTIONS PART 3 OF 11
- CROSS SECTIONS PART 4 OF 11
- C8.4 CROSS SECTIONS PART 5 OF 11
- C8.5 CROSS SECTIONS PART 6 OF 11
- CROSS SECTIONS PART 7 OF 11
- CROSS SECTIONS PART 8 OF 11
- C8.8 CROSS SECTIONS PART 9 OF 11
- C8.9 CROSS SECTIONS PART 10 OF 11 C8.10 CROSS SECTIONS PART 11 OF 11

CURB RAMP DETAILS

L1.0 MATERIALS PLANS PART 1 OF 3 MATERIALS PLANS PART 2 OF 3 MATERIALS PLANS PART 3 OF 3 LAYOUT PLANS PART 1 OF 3 LAYOUT PLANS PART 2 OF 3 LAYOUT PLANS PART 3 OF 3 GRADING PLANS PART 1 OF 3 GRADING PLANS PART 2 OF 3

GRADING PLANS PART 3 OF 3

- PLANTING PLANS PART 1 OF 3 PLANTING PLANS PART 2 OF 3
- PLANTING PLANS PART 3 OF 3
- LANDSCAPE DETAILS PART 1 OF 5
- LANDSCAPE DETAILS PART 2 OF 5
- LANDSCAPE DETAILS PART 3 OF 5 L5.2
- LANDSCAPE DETAILS PART 4 OF 5
- LANDSCAPE DETAILS PART 5 OF 5

TWIN CITIES RAIL TRAIL LEOMINSTER DEPOT AT WATER STREET TO MAIN STREET

LEOMINSTER, MA



TWIN CITIES RAIL TRAIL WATER STREET TO MAIN STREET LEOMINSTER, MA

DESIGNED: **JP**

DATE: **12.11.2024**

SCALE: NO SCALE

DRAWING NO.

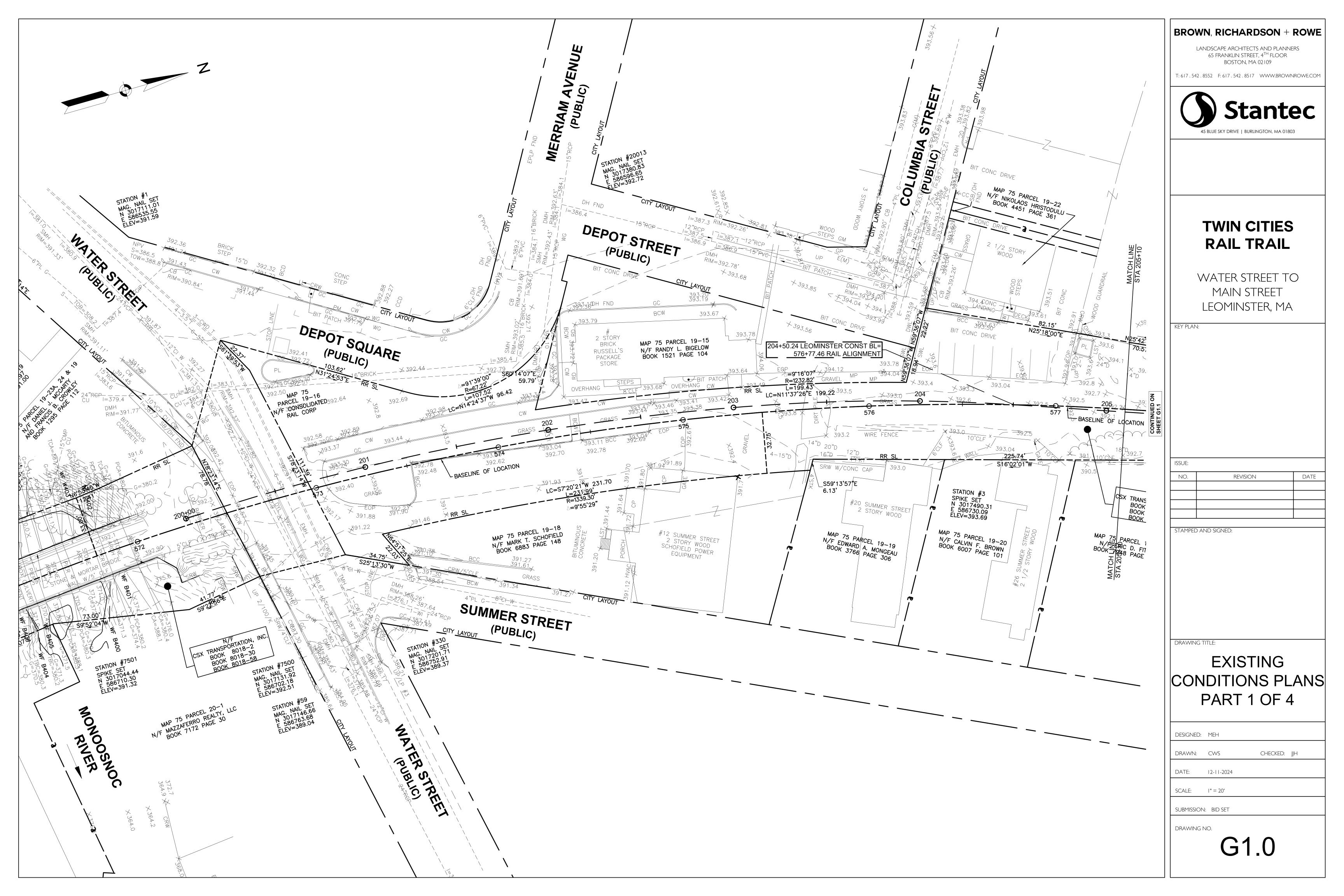
SUBMISSION: BID SET

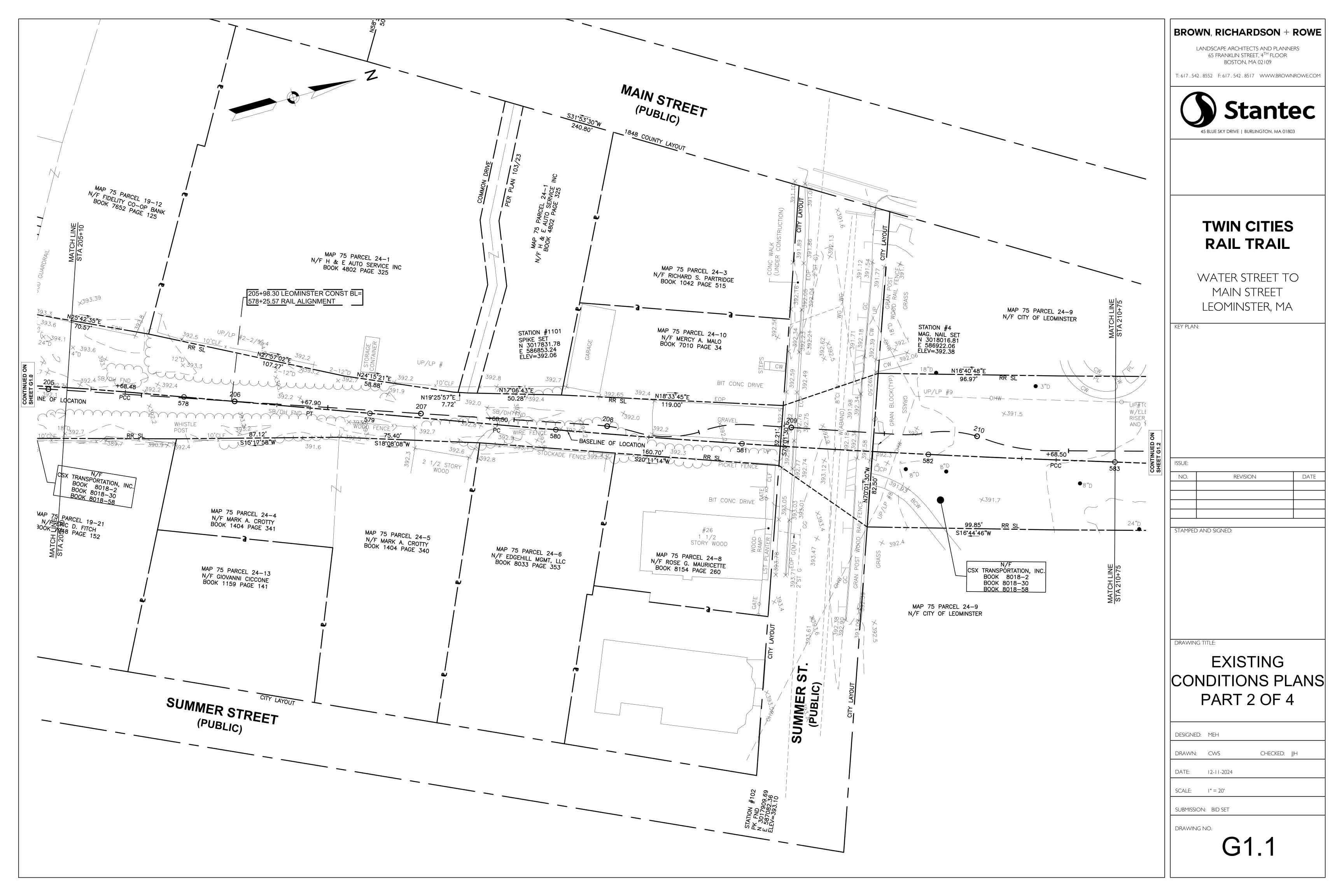
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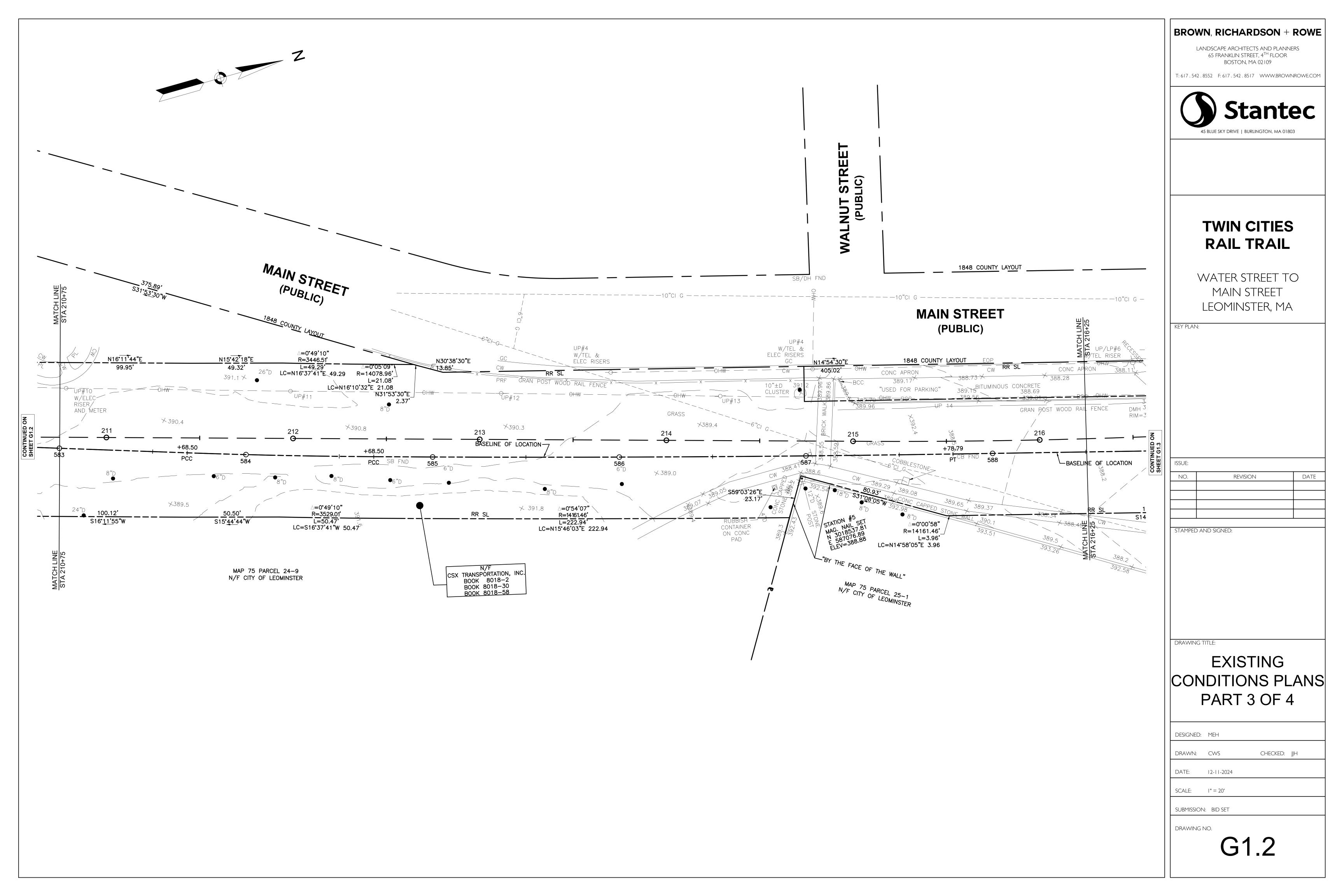
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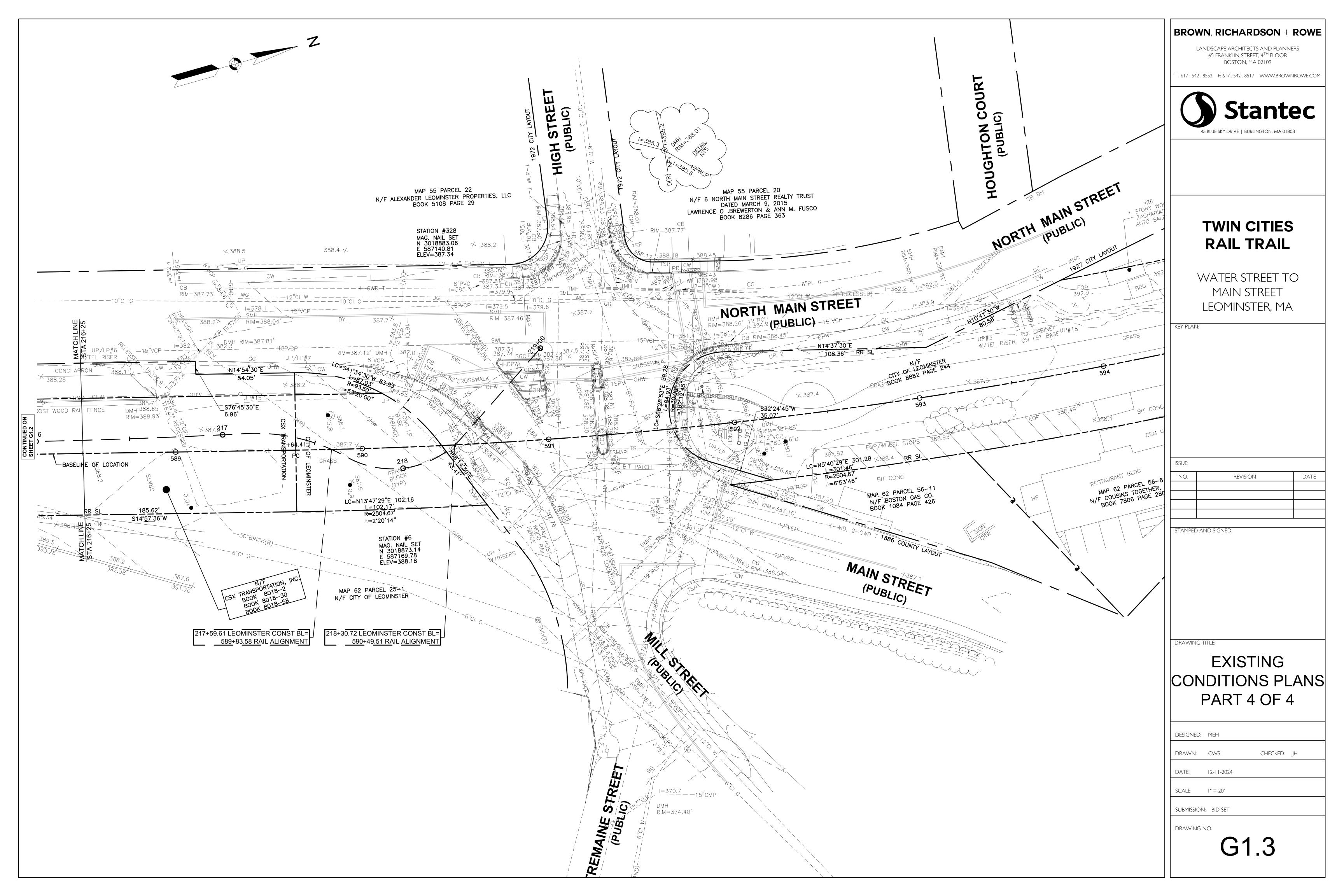
BROWN, RICHARDSON +ROWE

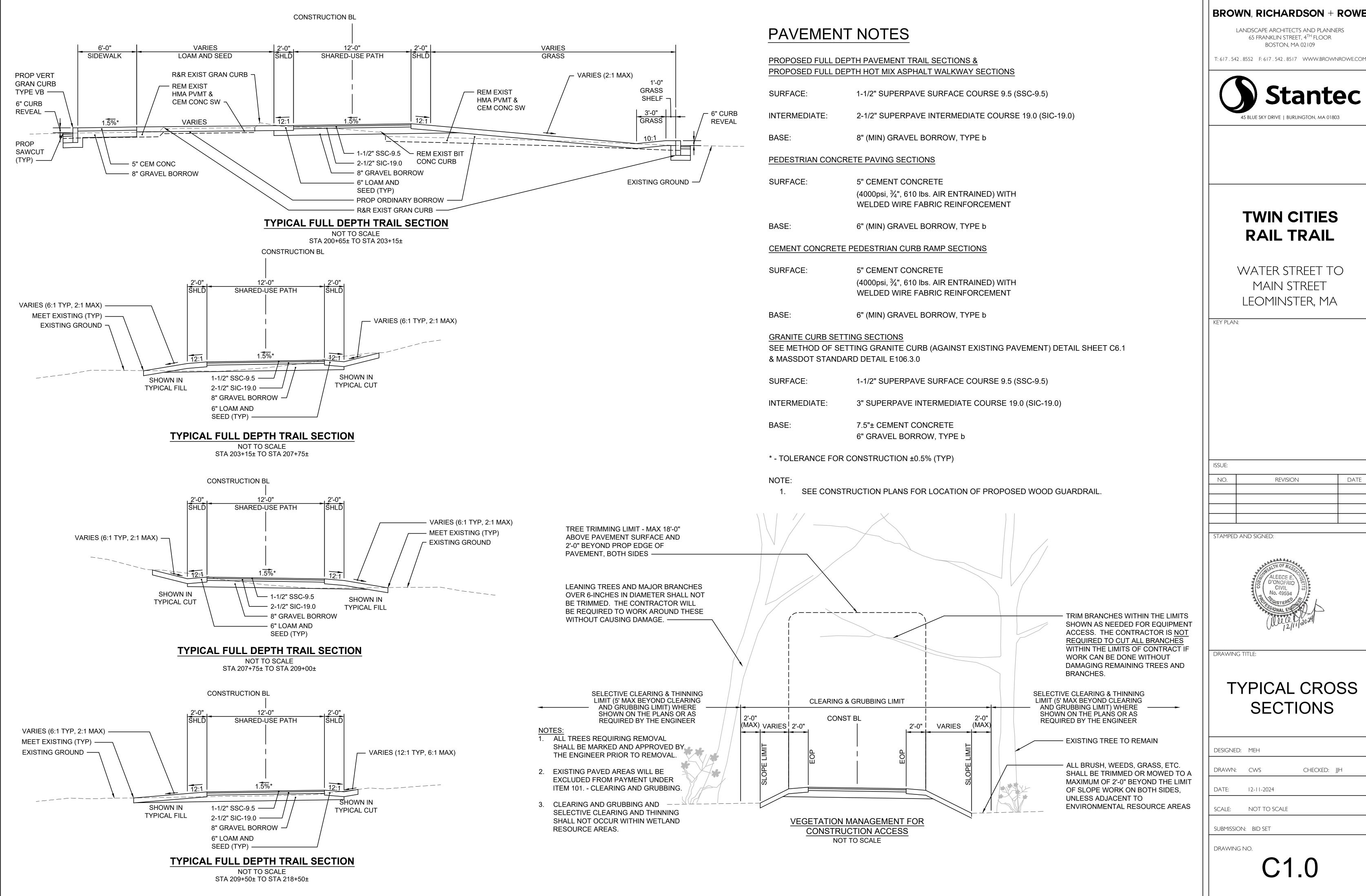
Stantec











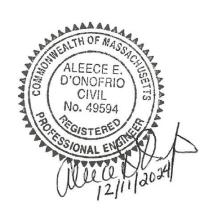
LANDSCAPE ARCHITECTS AND PLANNERS 65 FRANKLIN STREET, 4TH FLOOR



TWIN CITIES

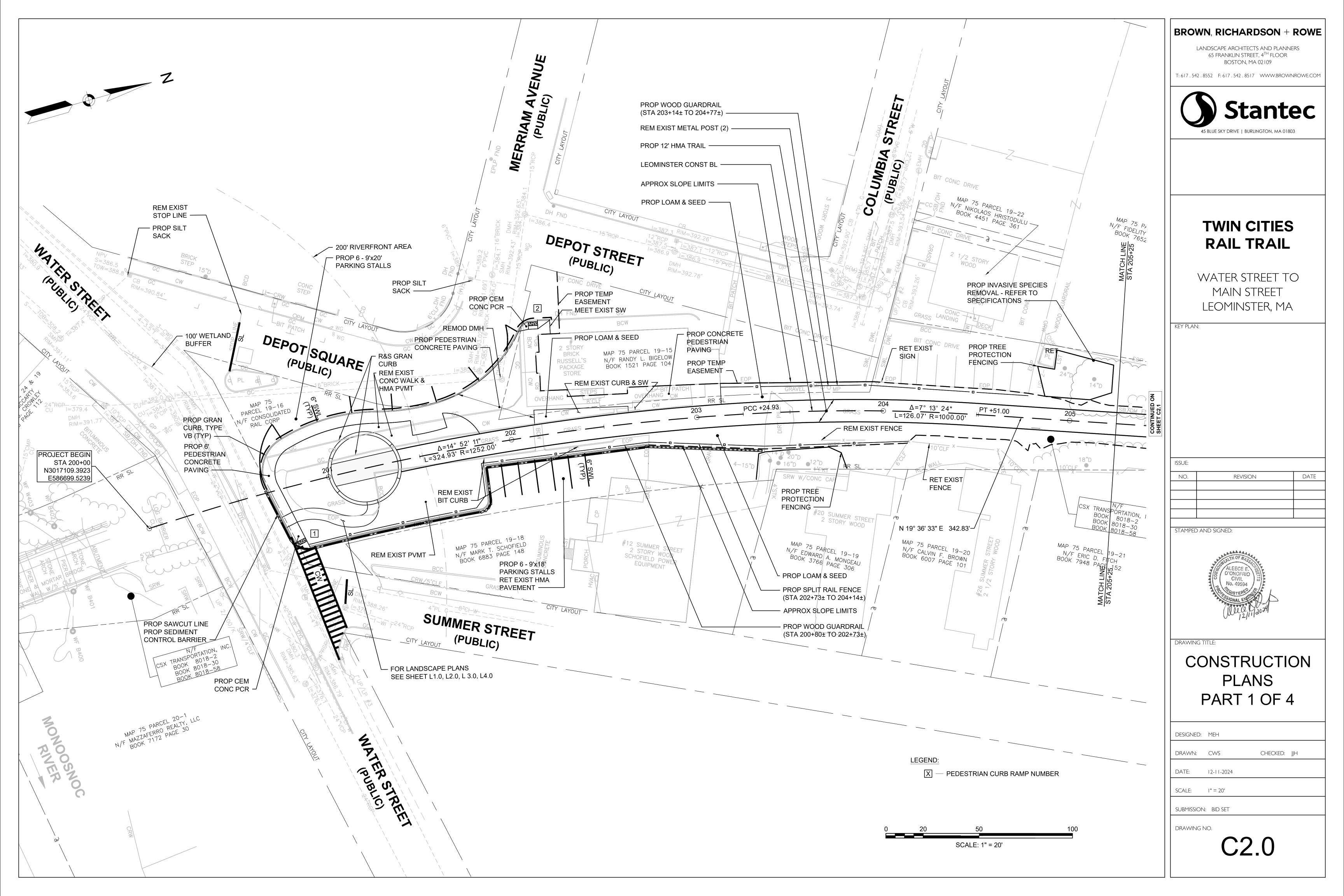
WATER STREET TO MAIN STREET LEOMINSTER, MA

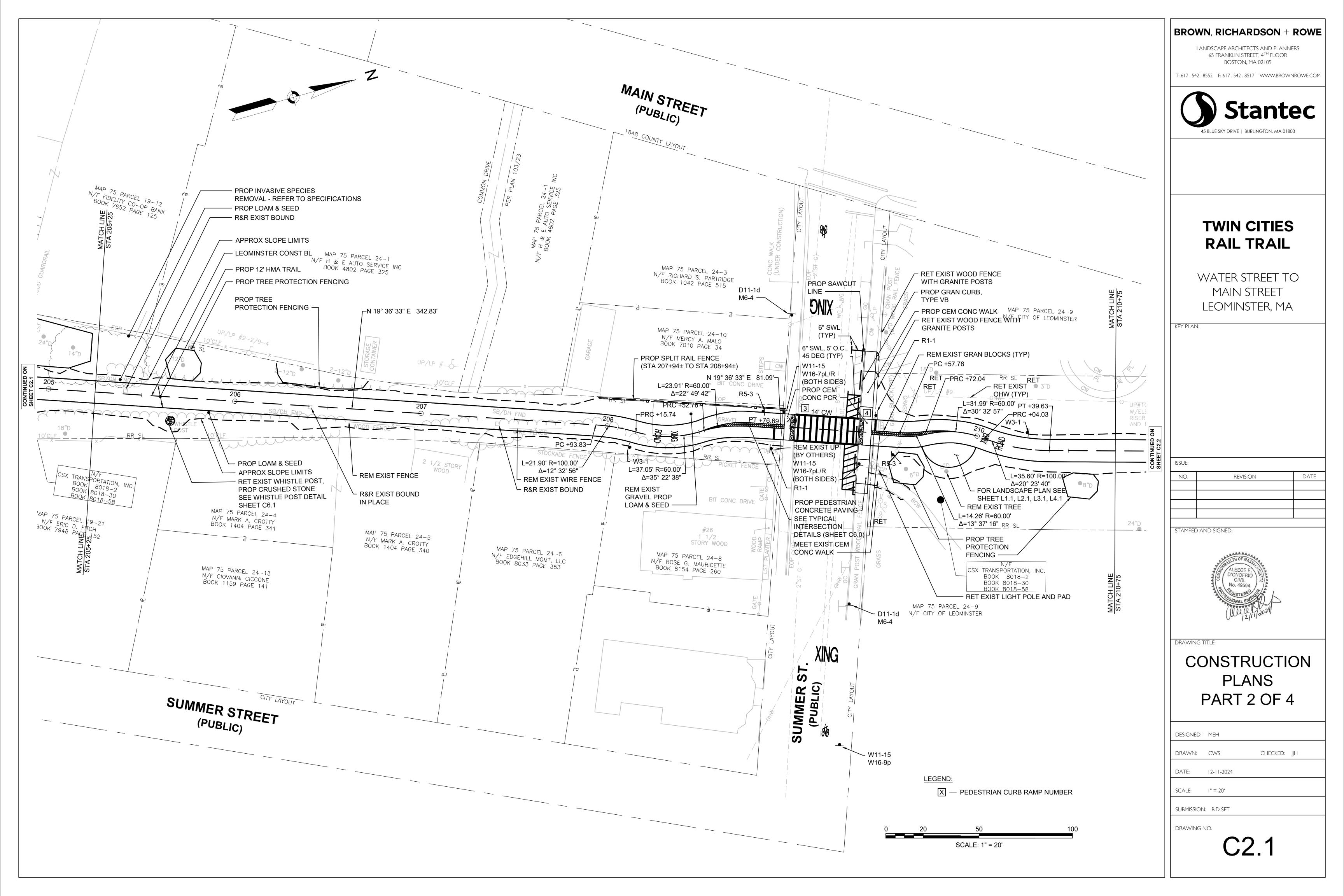
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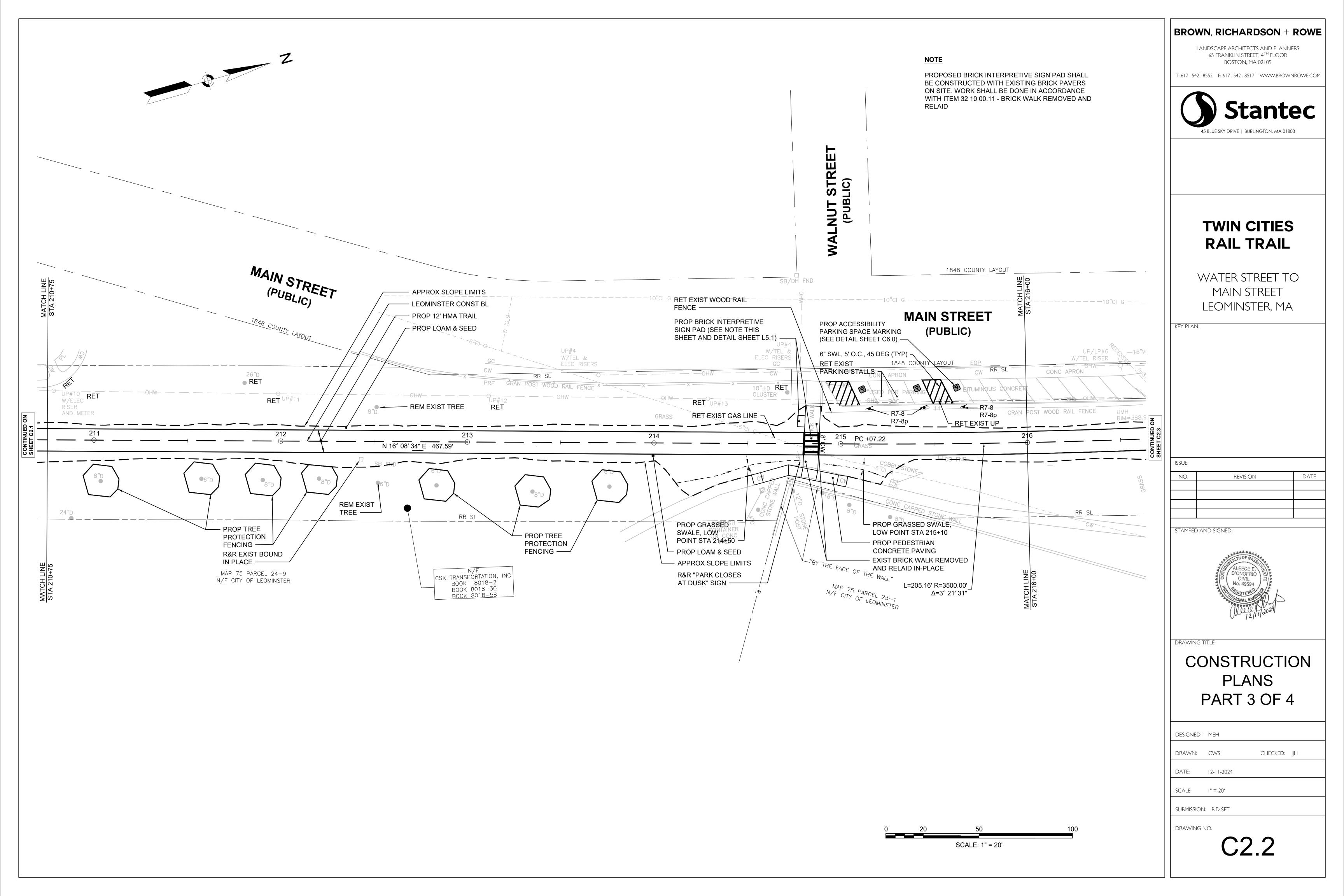


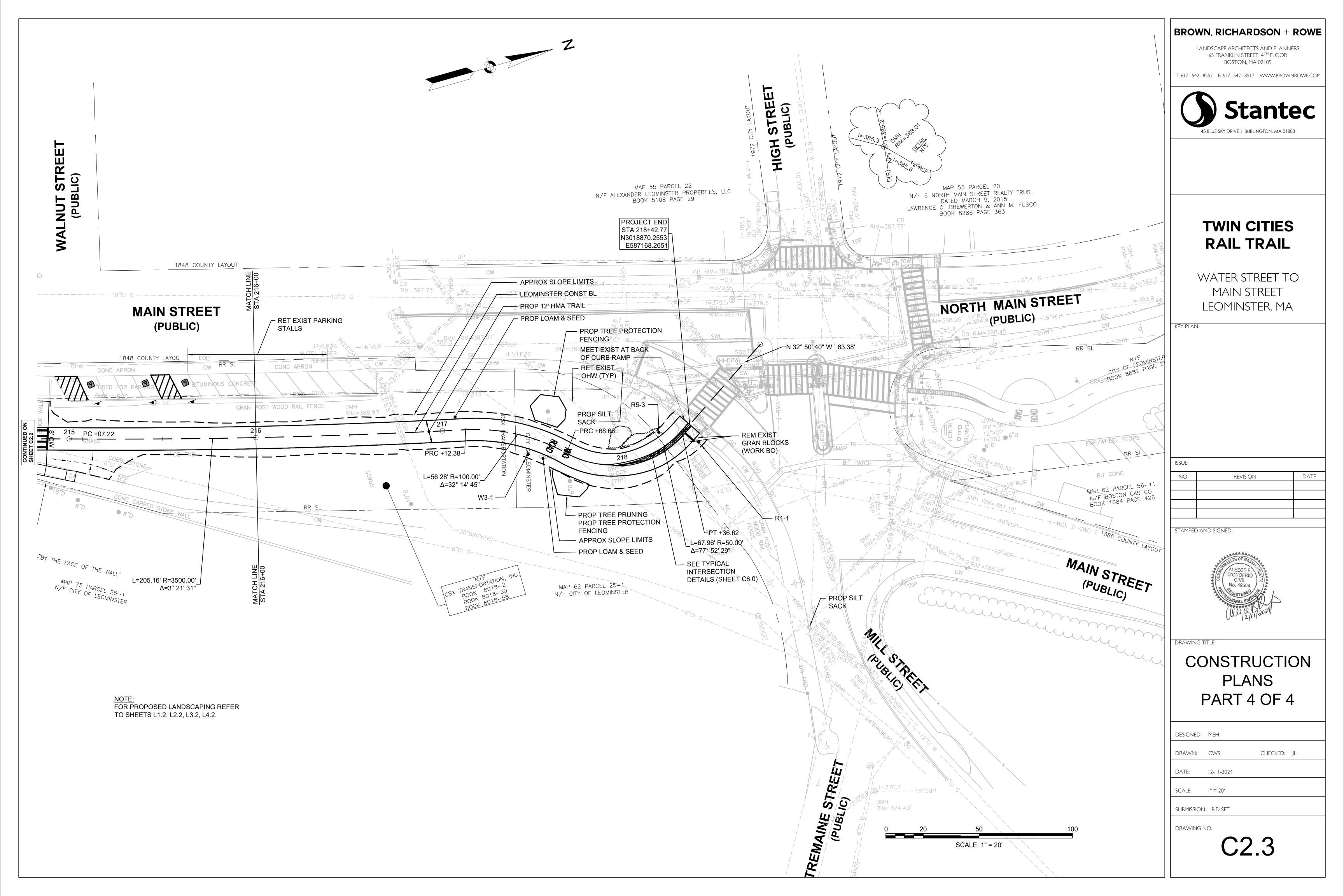
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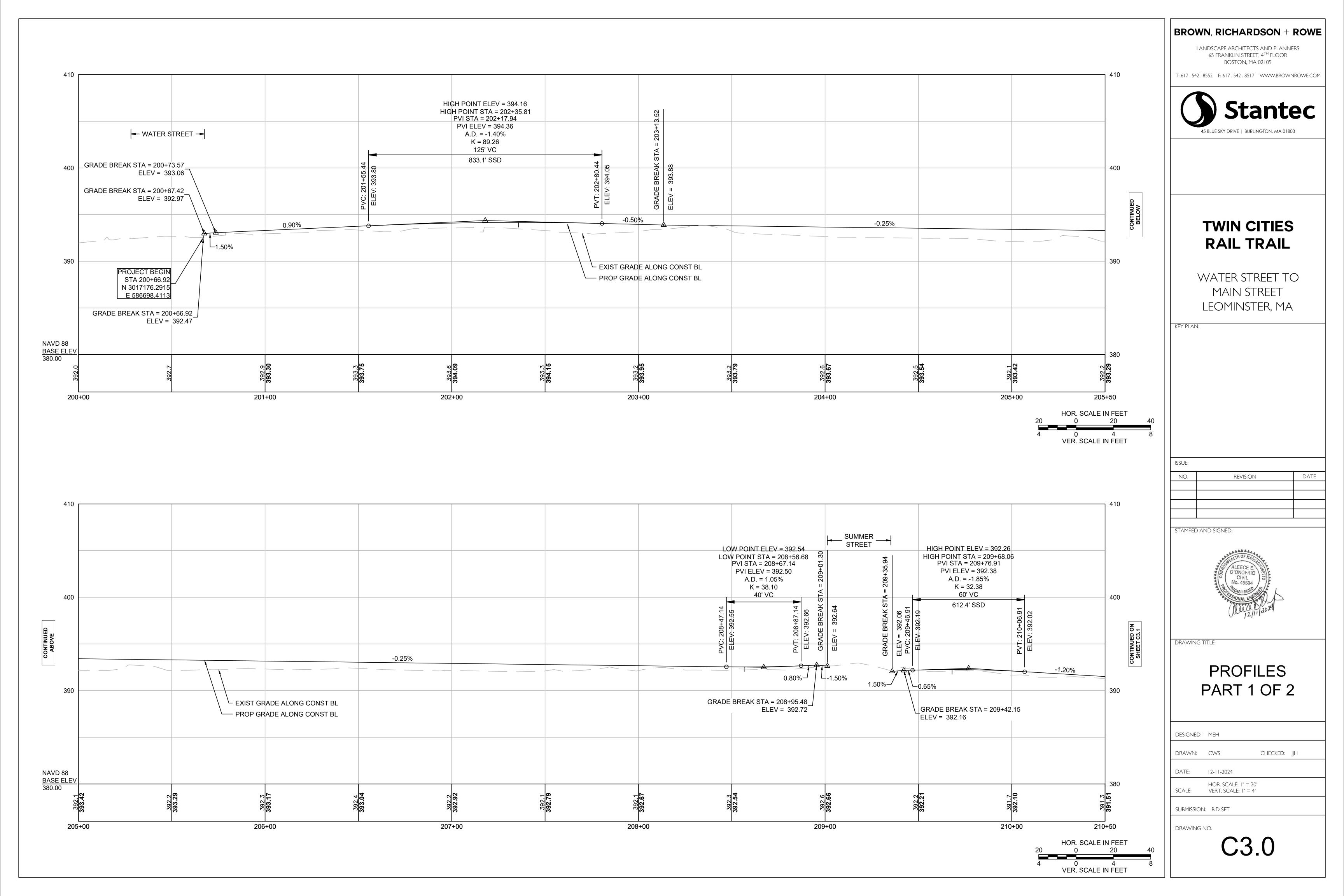
CHECKED: JJH

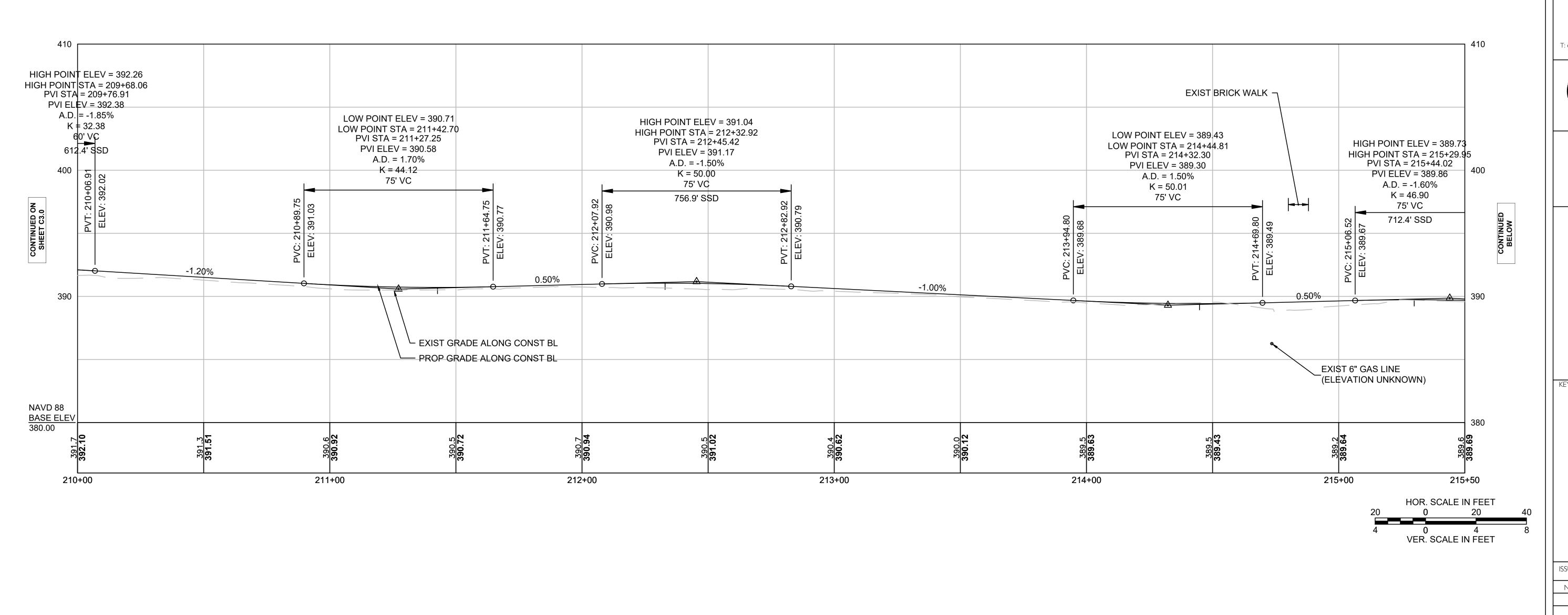


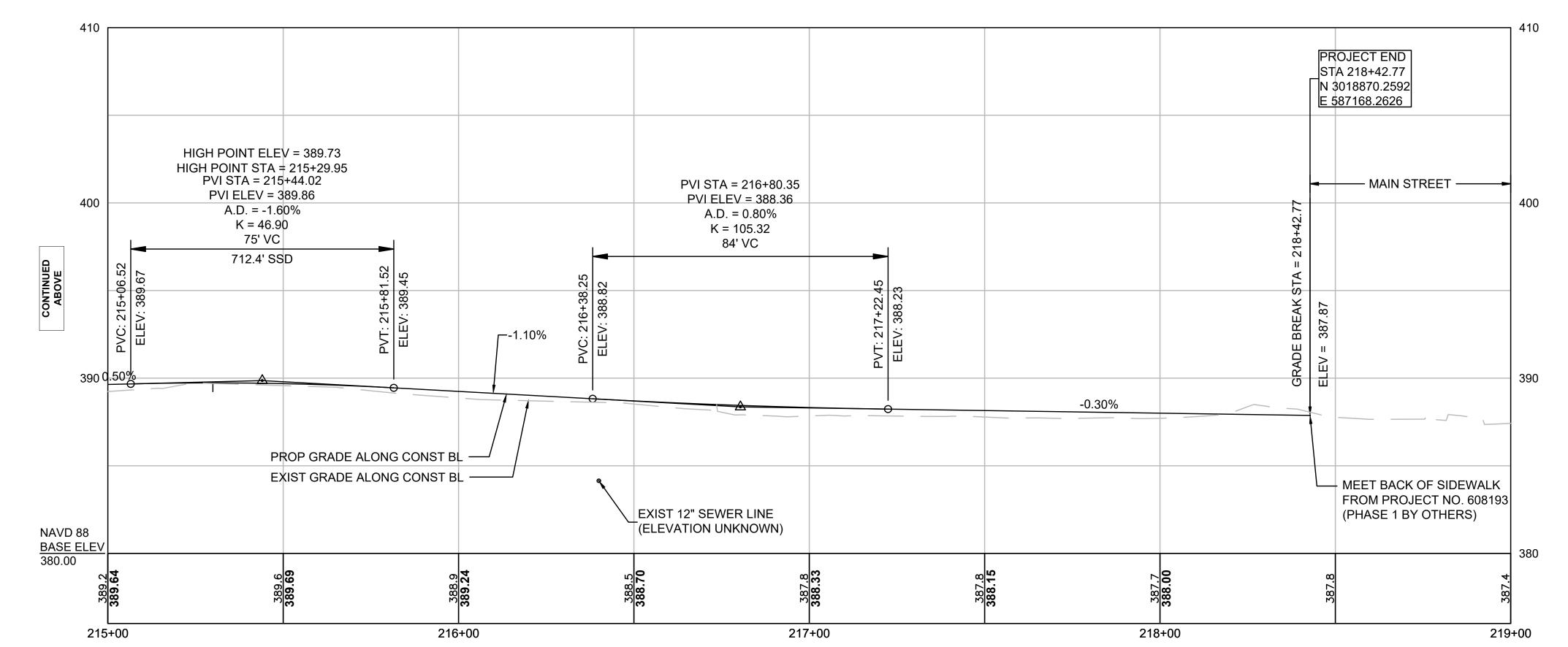












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T: 617 . 542 . 8552 F: 617 . 542 . 8517 WWW.BROWNROWE.COM



TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

	ISSUE:		
	NO.	revision	DATE
	·		

STAMPED AND SIGNED:



DRAWING TITLE:

PROFILES PART 2 OF 2

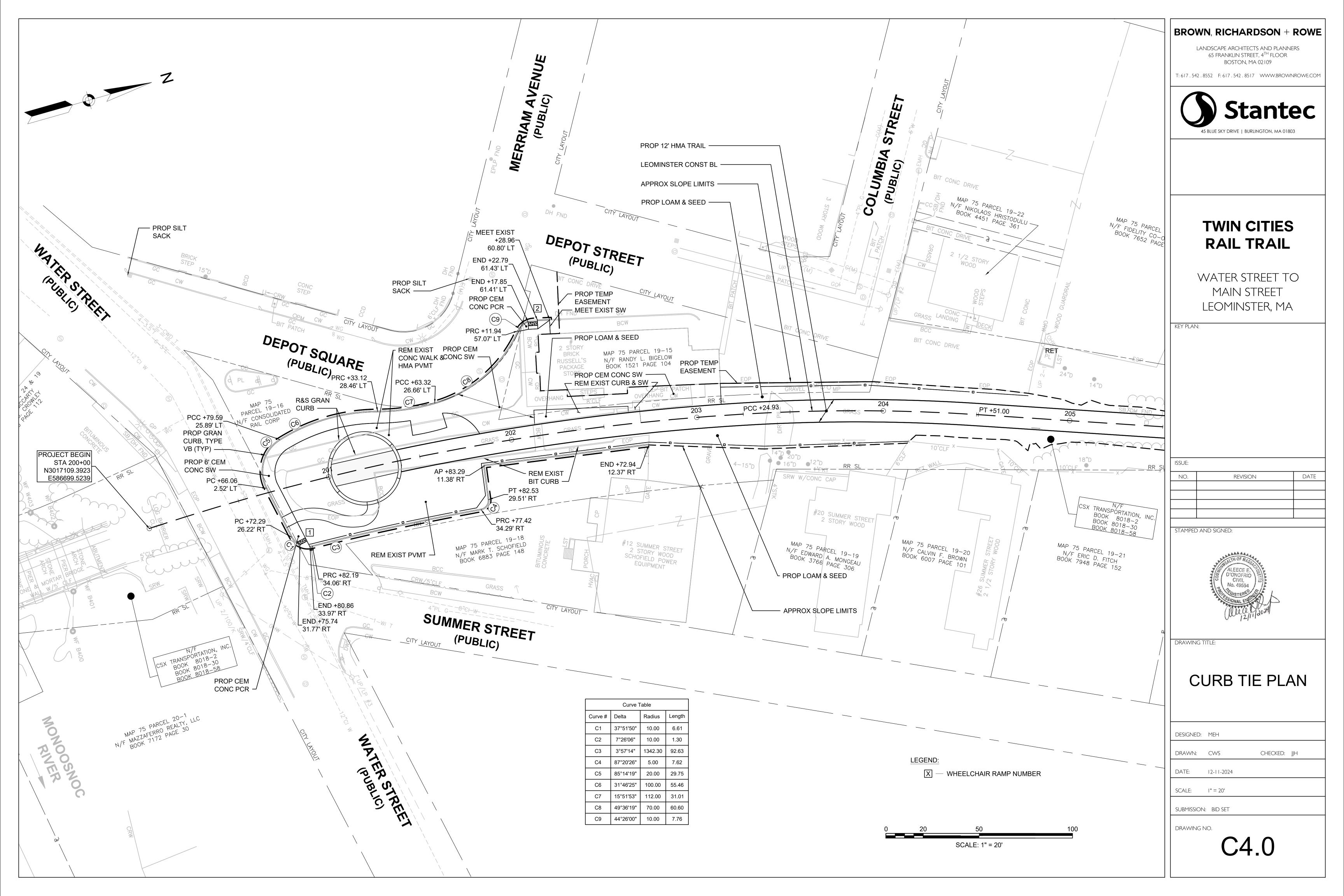
	DESIGNED:	MEH		
	DRAWN:	CWS	CHECKED:	JJH
	DATE:	12-11-2024		
	SCALE:	HOR. SCALE: I" = 20' VERT. SCALE: I" = 4'		
	SUBMISSION	: BID SET		

DRAWING NO.

HOR. SCALE IN FEET

VER. SCALE IN FEET

C3.1



TRAFFIC SIGN SUMMARY

IDENTIFI-	SIZE	SIZE OF SIGN		TEXT	TE	XT DIMENSIC	NS	NUMBER OF		COLOR		POST SIZE AND	AREA IN
CATION NUMBER	WIDTH	HEIGHT	AREA (SF)	IEXI	LETTER HEIGHT	VERTICAL SPACING	ARROW	SIGNS REQUIRED	BACK- GROUND	LEGEND	BORDER	NUMBER REQUIRED	SQUARE FEET
D11-1d	24"	24"	4.00	Twin Cities Rail Trail	2009 MUTCD	2009 MUTCD	2009 MUTCD	2	GREEN	WHITE	WHITE	1-P5 2	8.00
M6-4	12"	9"	0.75					2	GREEN	WHITE	WHITE	MOUNT 2 WITH D11-1d	1.50
R1-1 (PATH)	18"	18"	2.25	STOP				3	RED	WHITE	WHITE	1-P5 3	6.75
R5-3	24"	24"	4.00	NO MOTOR VEHICLES				3	WHITE	BLACK	BLACK	1-P5 3	12.00
R7-8	12"	18"	1.50	RESERVED PARKING				3	WHITE	GREEN / BLUE	GREEN	1-P5 3	4.50
R7-8p	18"	9"	1.125	VAN ACCESSIBLE				3	WHITE	GREEN	GREEN	MOUNT 3 WITH R7-8	3.375
W3-1	18"	18"	2.25					3	YELLOW	BLACK	BLACK	1-P5 3	6.75
W11-15	30"	30"	6.25	(5/A)				5	FLOUR YELLOW- GREEN	BLACK	BLACK	1-P5 3 (MOUNT BACK TO BACK)	31.25
W16-7pL	24"	12"	2.00					2	FLOUR YELLOW- GREEN	BLACK	BLACK	MOUNT 2 WITH W11-15	4.00
W16-7pR	24"	12"	2.00					2	FLOUR YELLOW- GREEN	BLACK	BLACK	MOUNT 2 WITH W11-15	4.00
W16-9p	24"	12"	2.00	AHEAD	V	V	V	1	FLOUR YELLOW- GREEN	GREEN / BLUE	GREEN	1-P5 1	2.00

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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:

NO.	REVISION	DATE

STAMPED AND SIGNED:



DRAWING TITLE:

TRAFFIC SIGN SUMMARY

CHECKED: JJH

DESIGNED: MEH

DRAWN: CWS

DATE: 12-11-2024

SCALE: NOT TO SCALE

SUBMISSION: BID SET

DRAWING NO.

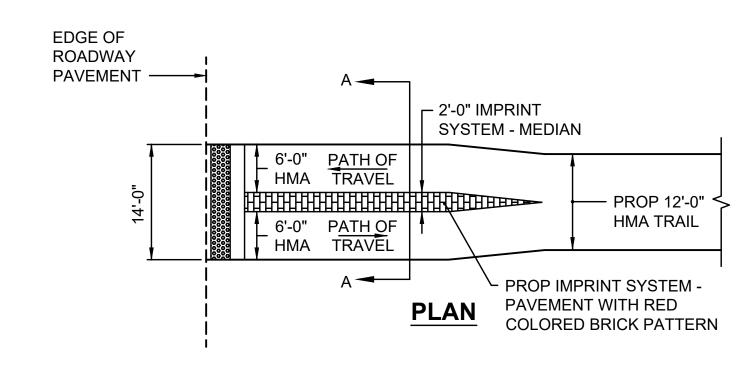
C5.0

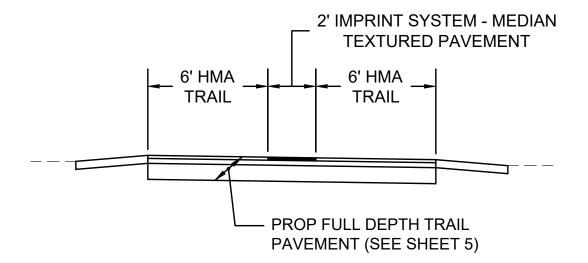


ACCESSIBILITY PARKING SPACE MARKING -24"x28" WHITE SYMBOL (3" STROKE WIDTH) ON 36"x36" BLUE MARKING (BACKGROUND) WITH 3" WHITE BORDER (SEE FHWA STANDARD HIGHWAY SIGNS TEMPLATE)

ACCESSIBILITY PARKING SPACE MARKING

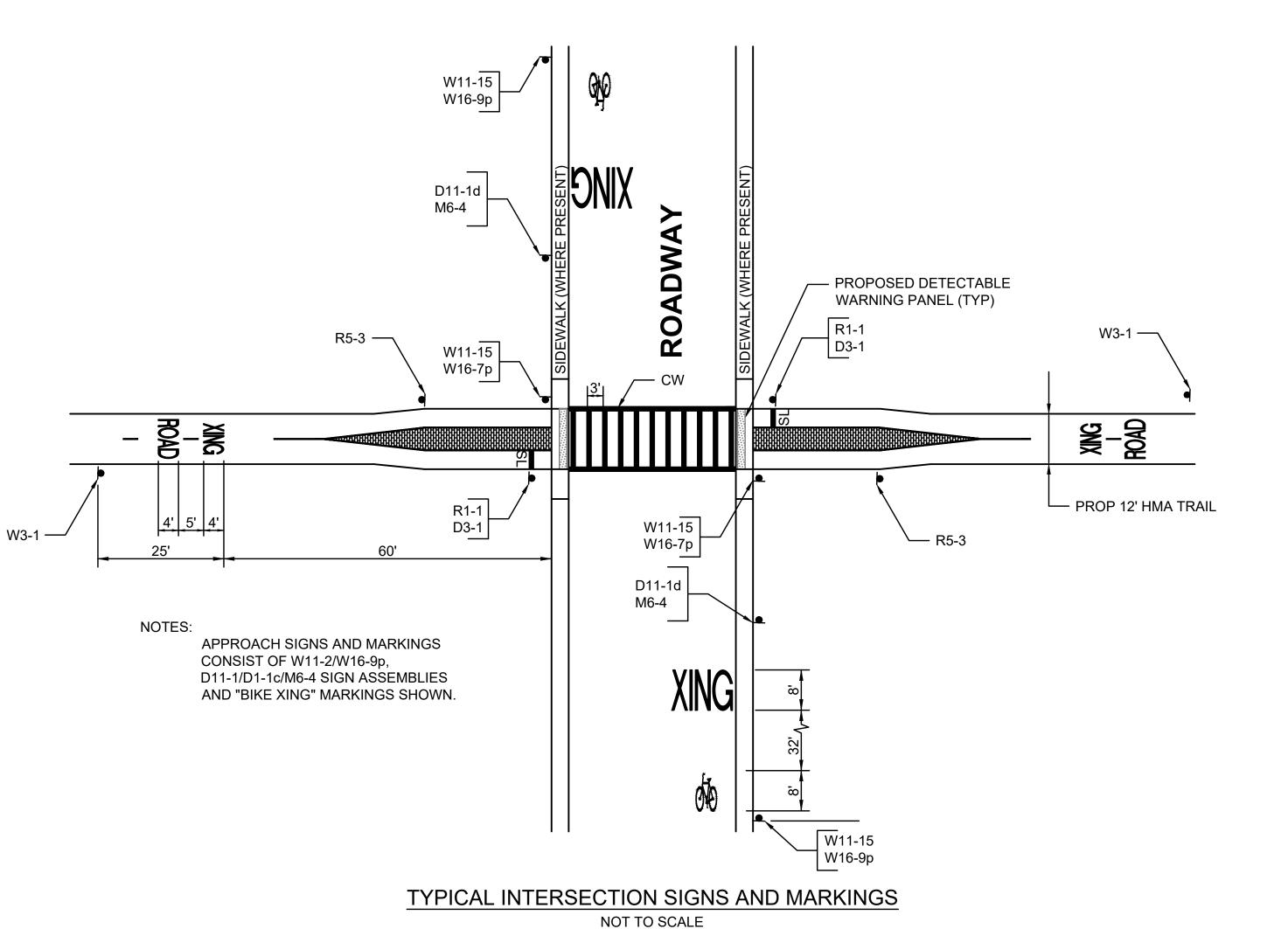
NOT TO SCALE

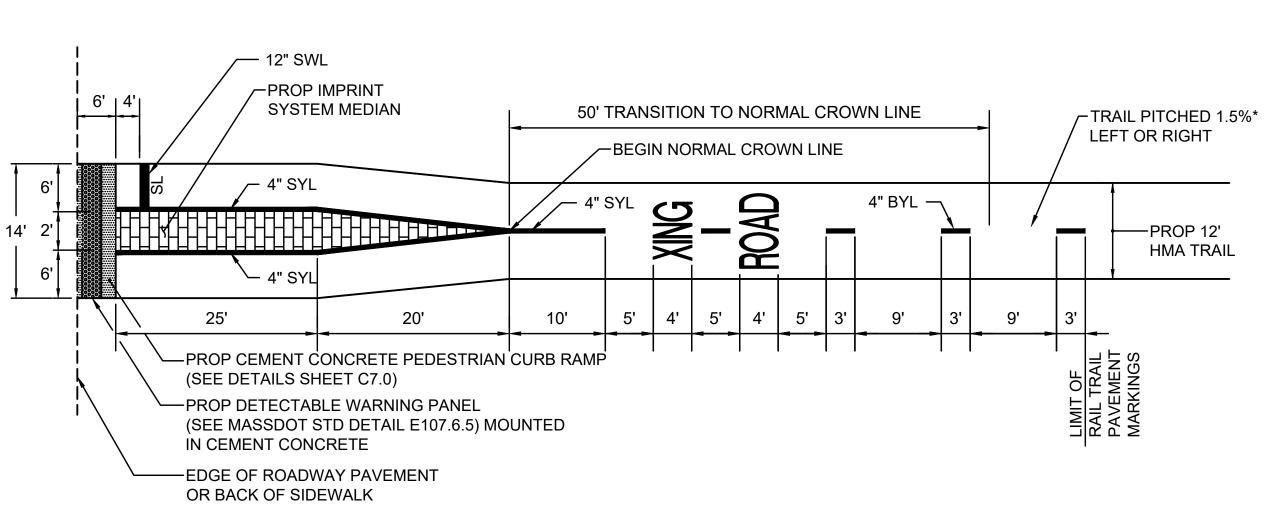




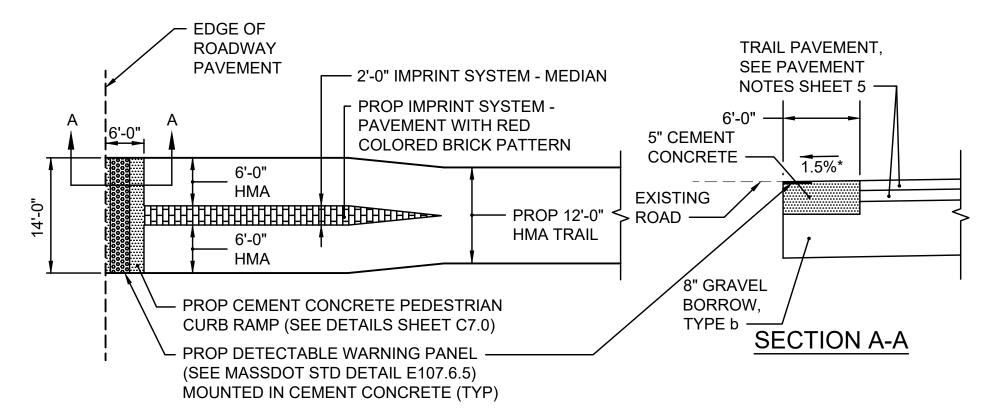
SECTION A-A

IMPRINT SYSTEM - MEDIAN NOT TO SCALE





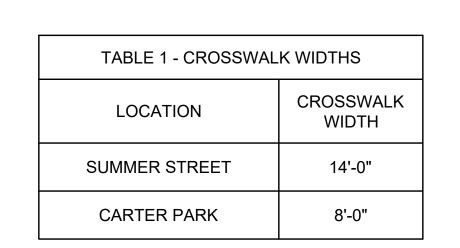
INTERSECTION APPROACH PAVEMENT MARKING DETAIL NOT TO SCALE

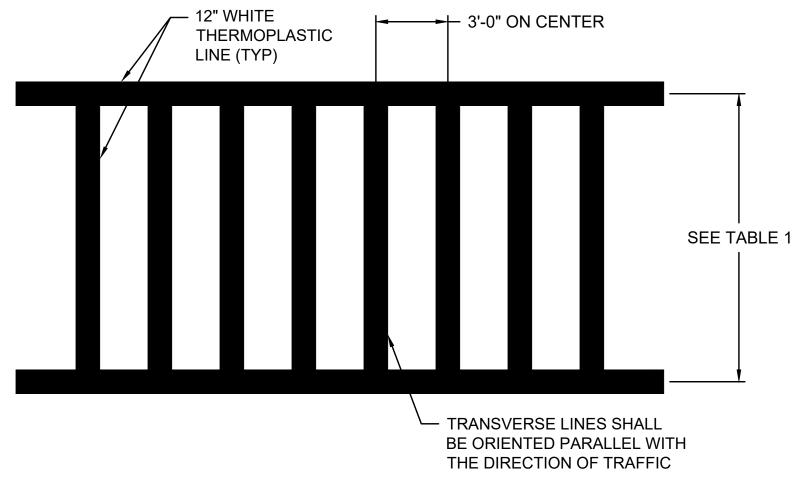


PLAN

- 1. ALL DETECTABLE WARNING PANELS (PROJECT WIDE) SHALL BE MOUNTED IN CEMENT CONCRETE.
- 2. DETECTABLE WARNING PANELS SHALL CONFORM TO
- MASSDOT STANDARD DETAIL E107.6.5.

DETECTABLE WARNING PANEL AT TRAIL INTERSECTION NOT TO SCALE





CROSSWALK (CW) MARKING DETAIL

NOT TO SCALE

BROWN, RICHARDSON + ROWE

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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE: NO. DATE REVISION

STAMPED AND SIGNED:

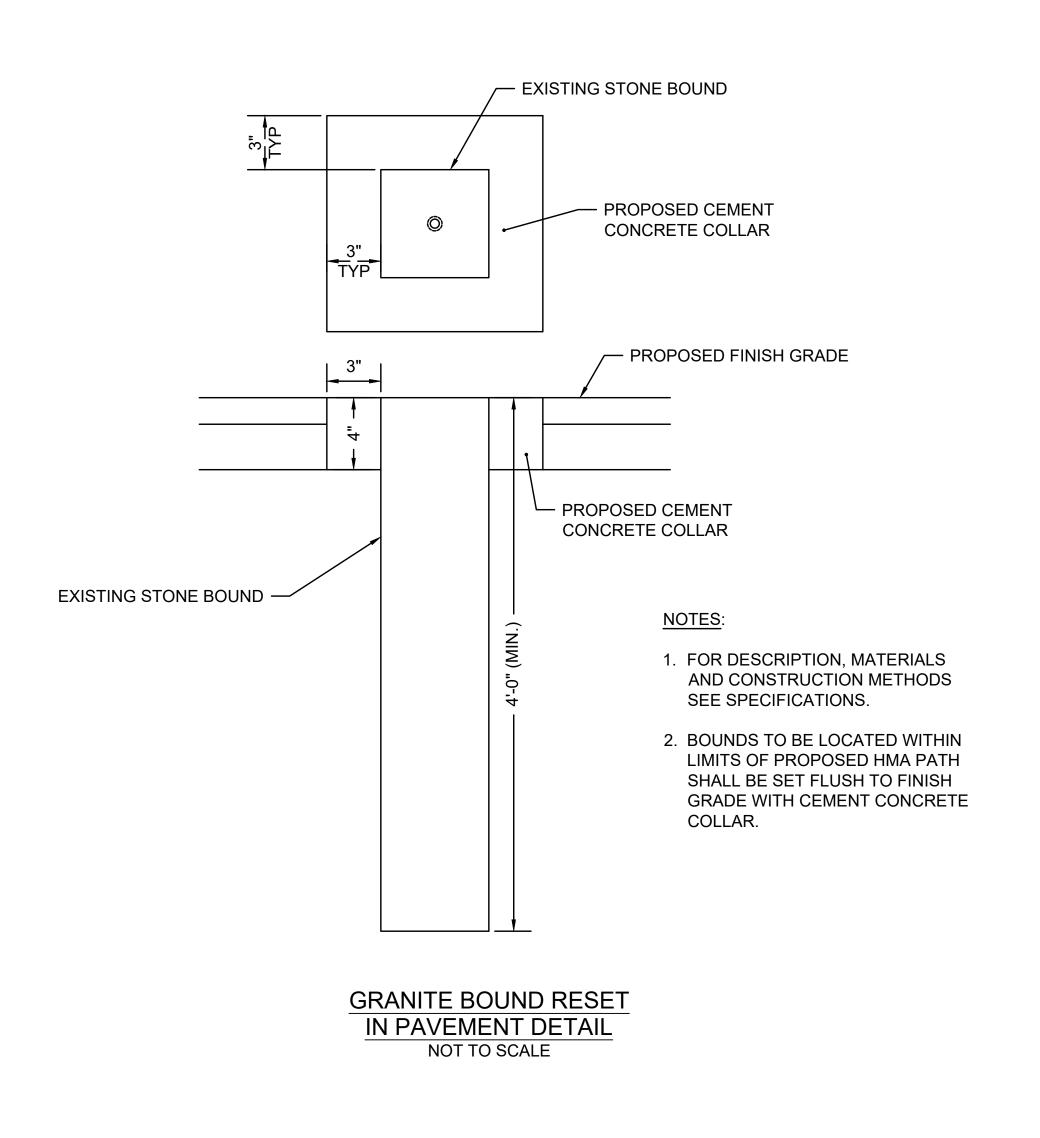


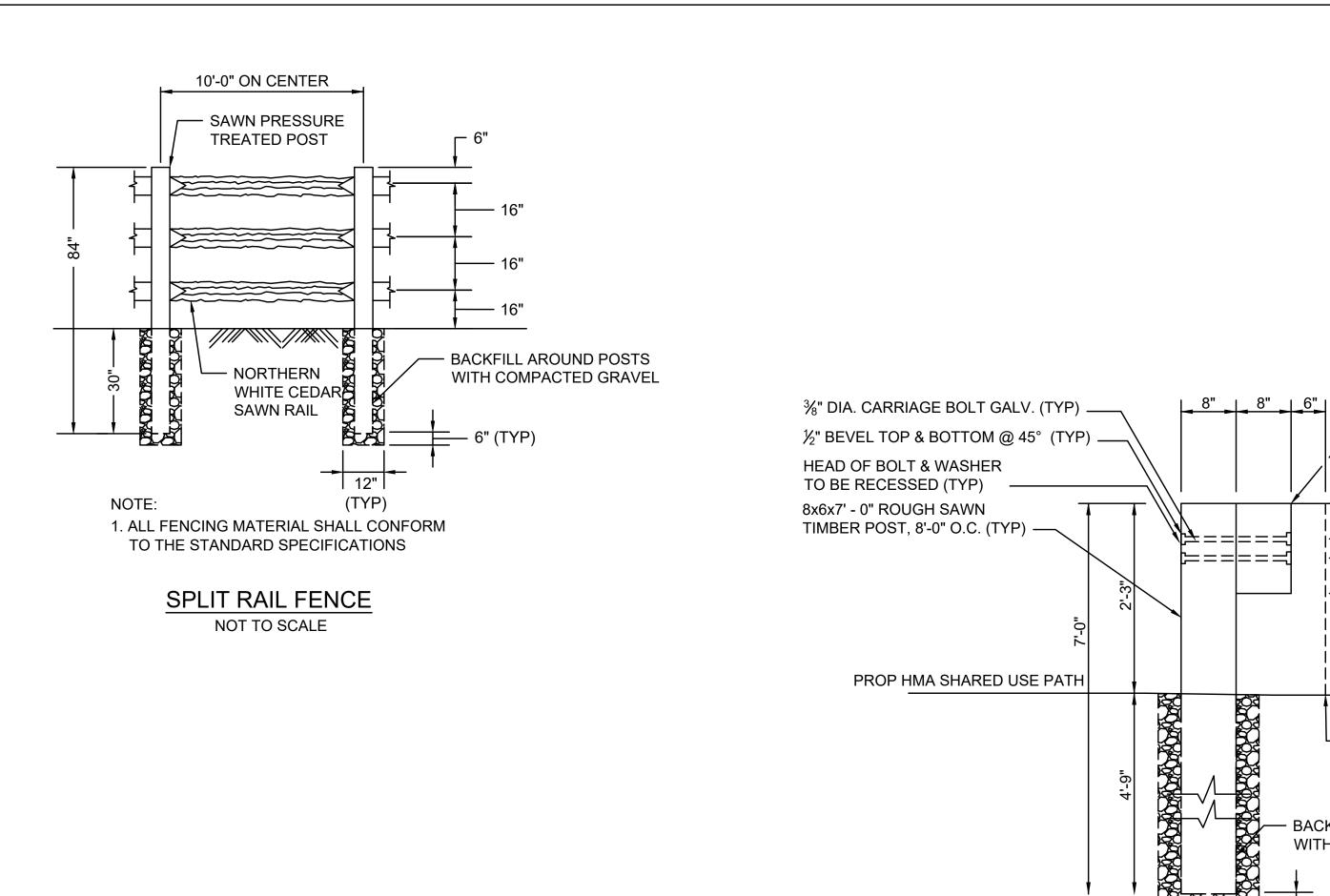
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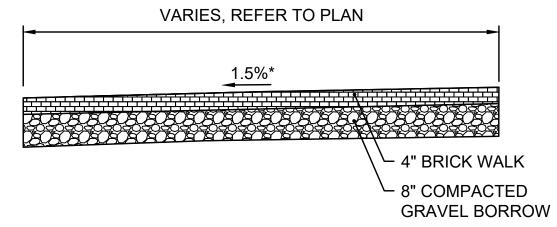
CONSTRUCTION DETAILS PART 1 OF 3

DESIGNED:	MEH		
DRAWN:	CWS	CHECKED:	JJН
DATE:	12-11-2024		
SCALE:	NOT TO SCALE		
SUBMISSION	: BID SET		
DRAWING N	NO.		

C6.0

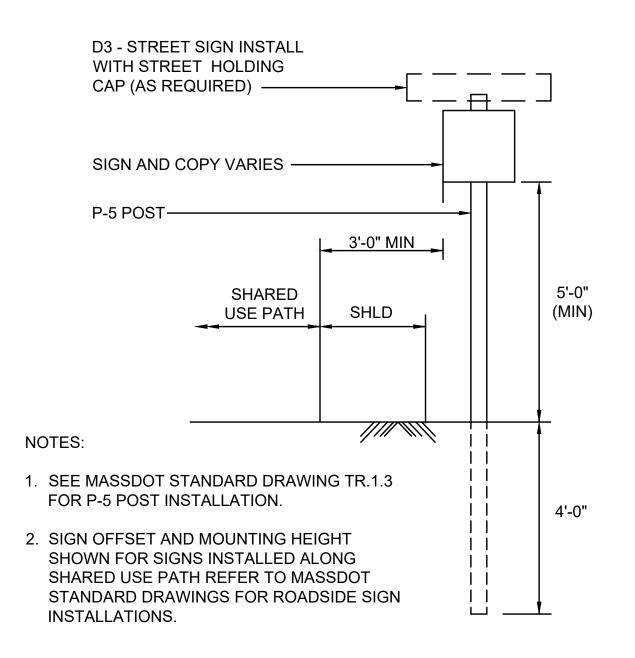






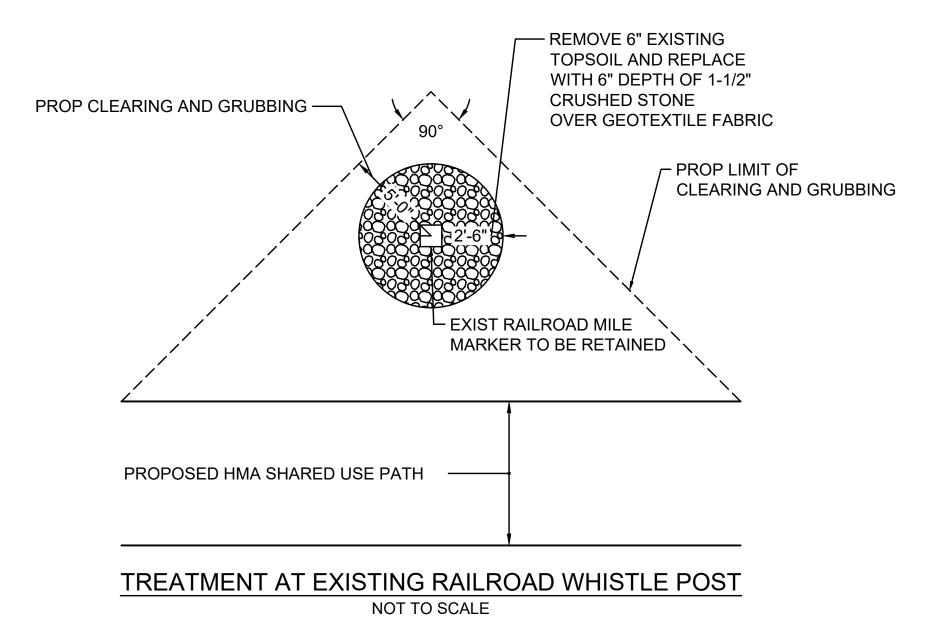
REMOVE AND RELAY EXISTING BRICK WALK

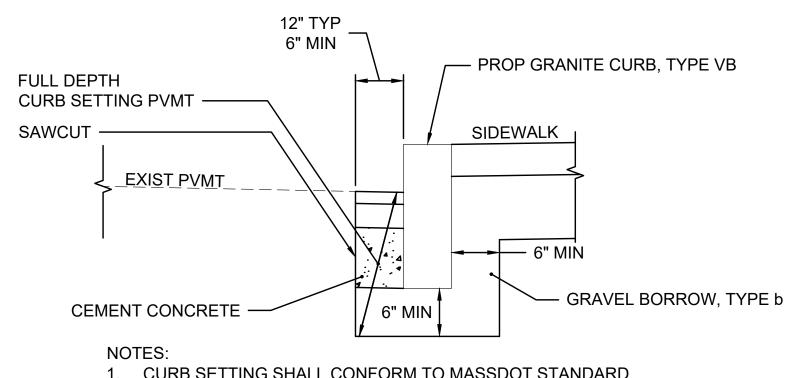
NOT TO SCALE



TYPICAL SIGN LOCATION

NOT TO SCALE





12" (TYP)

WOOD GUARDRAIL DETAIL

NOT TO SCALE

1. CURB SETTING SHALL CONFORM TO MASSDOT STANDARD DETAIL E106.3.0.

METHOD OF SETTING VERTICAL GRANITE CURB

(AGAINST EXISTING PAVEMENT)

NOT TO SCALE

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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

8"x10"x7'-11 ½" ROUGH SAWN TIMBER RAIL

└ PARKING LOT

BACKFILL AROUND POSTS
WITH COMPACTED GRAVEL

	ISSUE:		
	NO.	revision	DATE

STAMPED AND SIGNED:

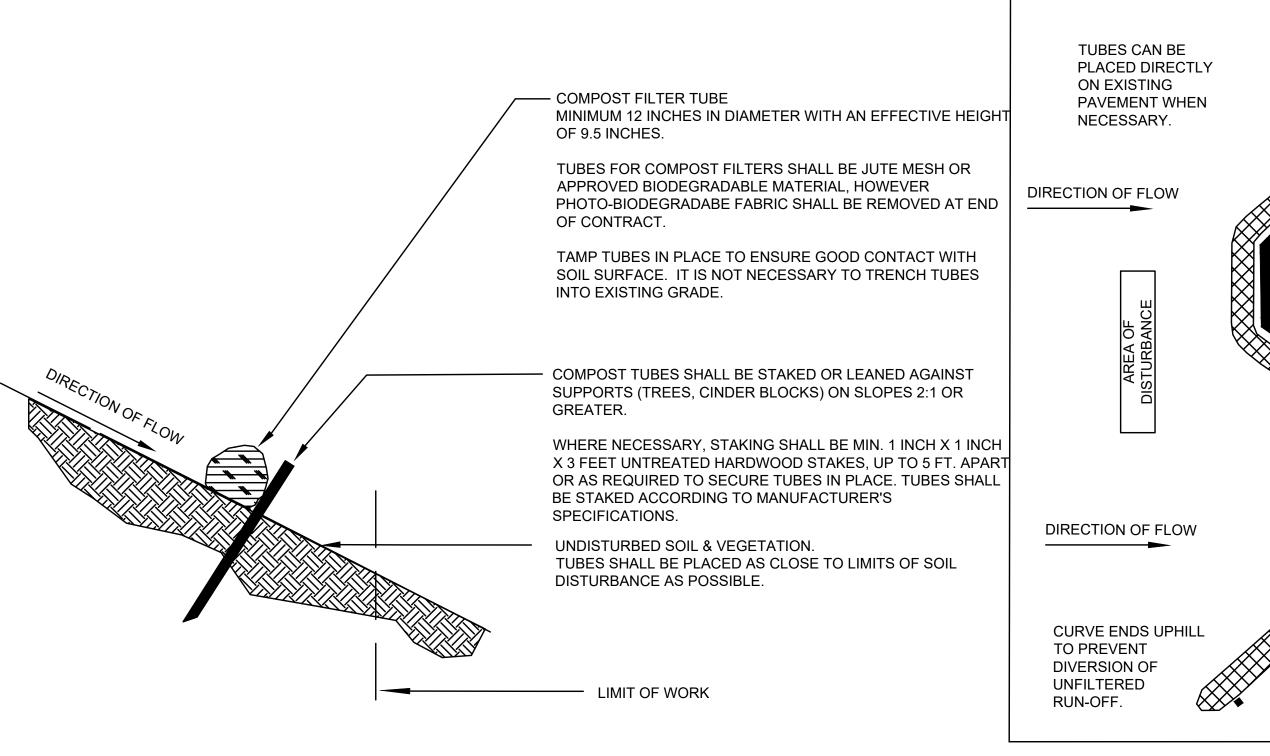


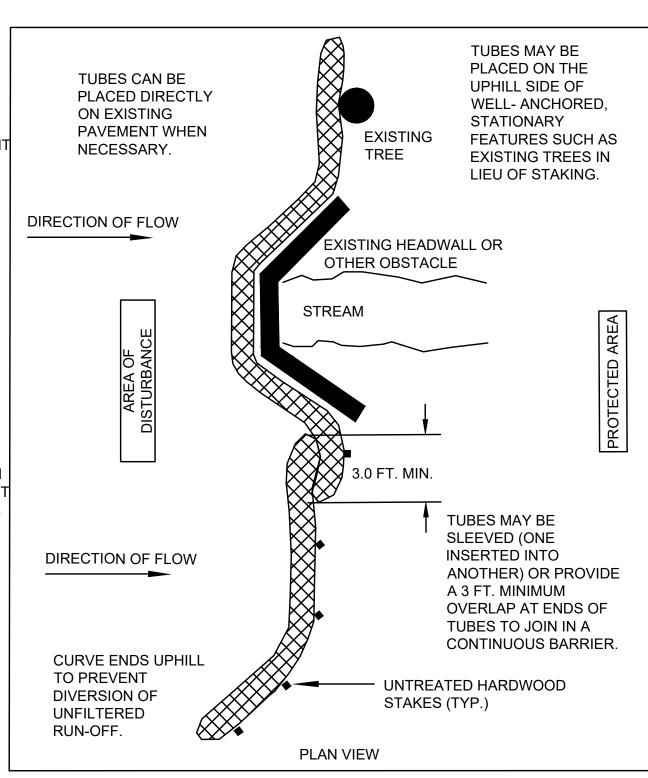
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CONSTRUCTION DETAILS PART 2 OF 3

DESIGNED:	MEH		
DRAWN:	CWS	CHECKED:	JJH
DATE:	12-11-2024		
SCALE:	NOT TO SCALE		
SUBMISSION			
DRAWING 1	NO.		

C6.1

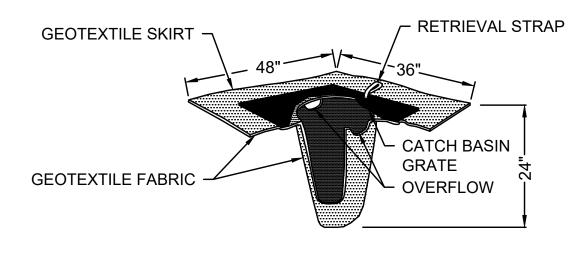




GENERAL NOTES: 1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER

OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.

- 2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW. TUBE LOCATION MAY BE SHIFTED TO
- ADJUST TO LANDSCAPE FEATURES, BUT SHALL PROTECT UNDISTURBED AREA AND VEGETATION TO MAXIMUM EXTENT POSSIBLE.
- 4. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS. 5. ADDITIONAL TUBES SHALL BE USED AT
- THE DIRECTION OF THE ENGINEER. THE DIRECTION OF THE ENGINEER.
- 6. ADDITIONAL STAKING SHALL BE USED AT



SILT SACK FOR SEDIMENT CONTROL

NOT TO SCALE

SEDIMENT CONTROL BARRIER

NOT TO SCALE

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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
		T
NO.	revision	DATE

STAMPED AND SIGNED:



DRAWING TITLE:

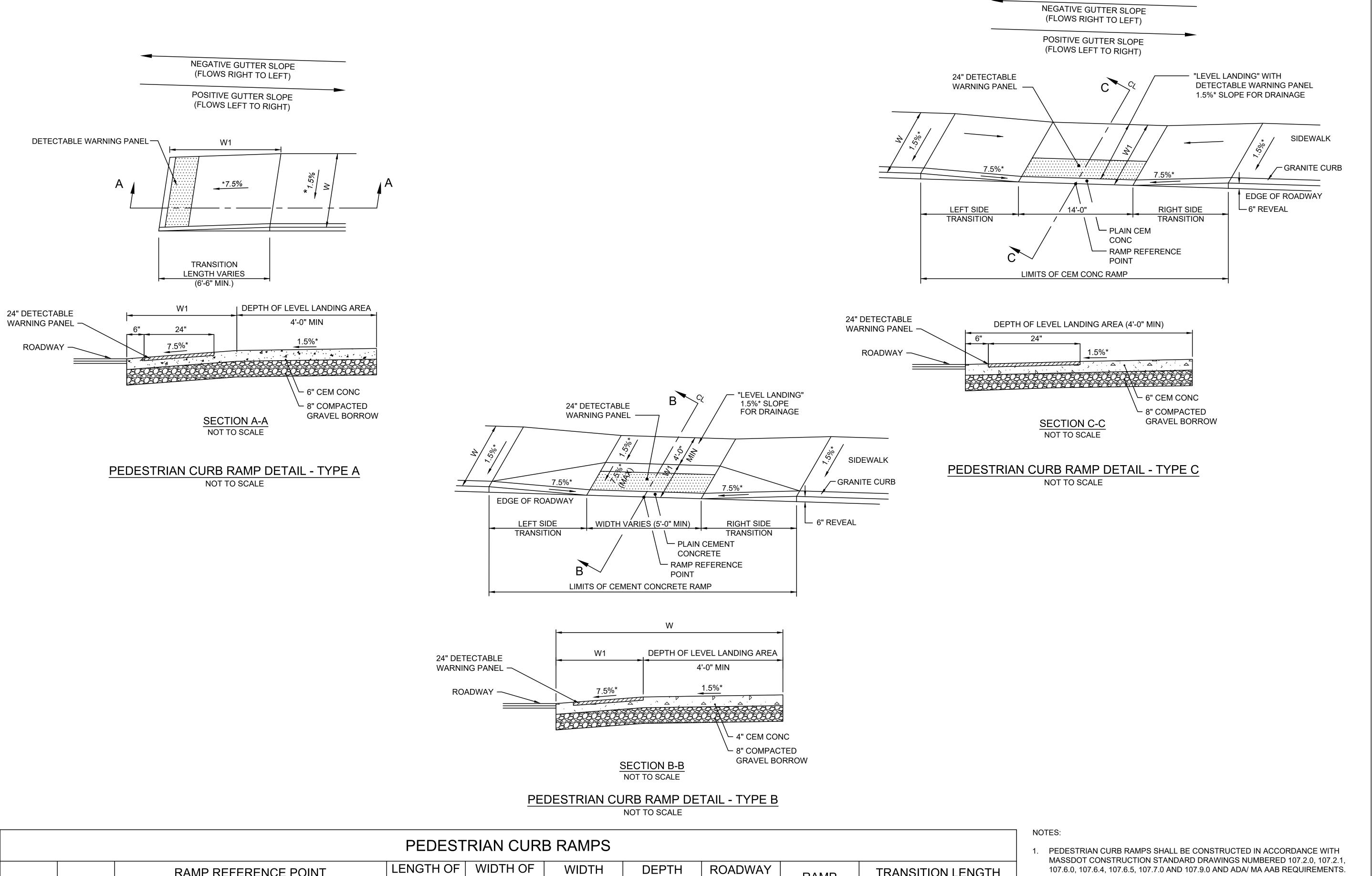
CONSTRUCTION **DETAILS** PART 3 OF 3

DESIGNED: MEH DRAWN: CWS CHECKED: JJH DATE: 12-11-2024

SCALE: NOT TO SCALE

SUBMISSION: BID SET

DRAWING NO.



0.47%

CEM CONC

6'-6"

6.75'

TRANSITION LENGTH RAMP REFERENCE POINT RAMP PRIMARY SIDEWALK OF RAMP PCR# TYPE OF LEVEL **GUTTER** MATERIAL BASELINE STATION OFFSET LEFT SIDE | RIGHT SIDE RAMP (W1) SLOPE **OPENING** LANDING 4.50' 3.35% CEM CONC LEOMINSTER 200+76 29.13', RT 5.50' 6.00' 4.00' 15-'0" 6'-6" 58.70', LT LEOMINSTER 202+20 4.00' **CEM CONC** 6'-6" 7'-8" 4.31' 7.50' 5.00' -1.81% 208+99 0.00' 6.00' -0.71% LEOMINSTER 6.00' 6.00' 14.00' CEM CONC N/A N/A

6.75'

14.00'

6.75'

LEOMINSTER

209+39

0.00'

- 2. DETECTABLE WARNING PANELS ARE REQUIRED ON ALL PROPOSED PEDESTRIAN RAMPS AND ARE TO BE INSTALLED IN ACCORDANCE WITH CONSTRUCTION STANDARD 107.6.5. DETECTIBLE WARNING PANELS SHALL BE PLACED PERPENDICULAR TO THE PATH OF TRAVEL AND NOT THE CURB LINE.
- * TOLERANCE FOR CONSTRUCTION ±0.5% (TYP.)

7'-8"

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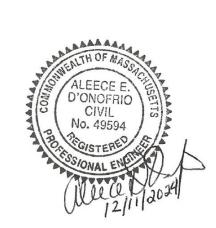
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE

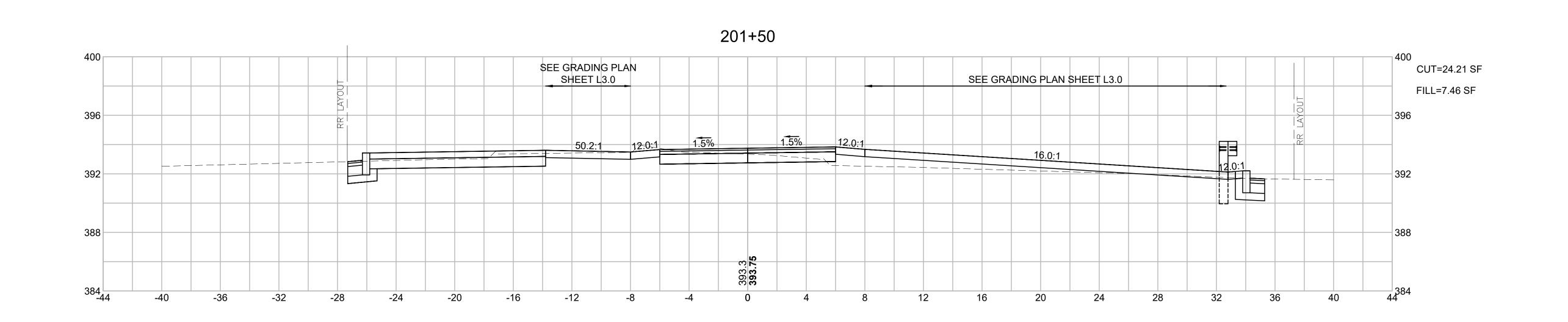
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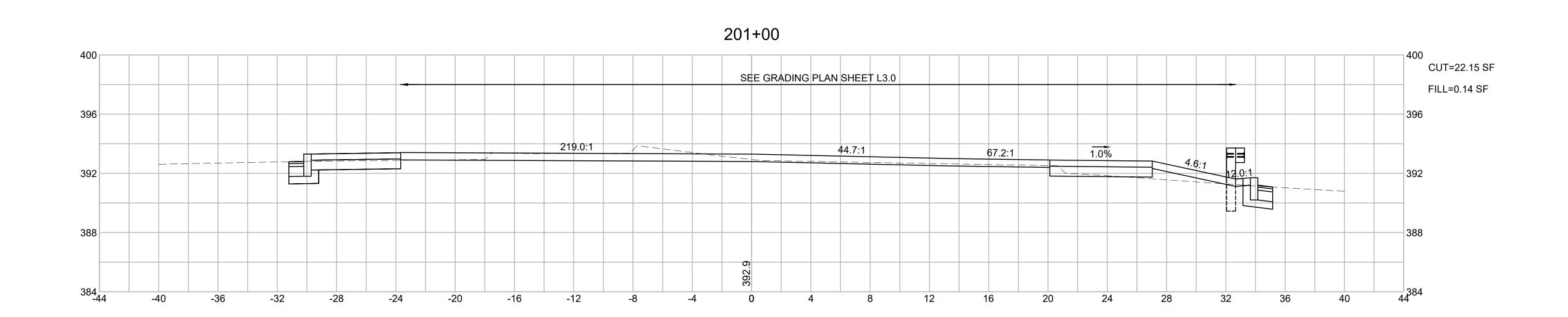


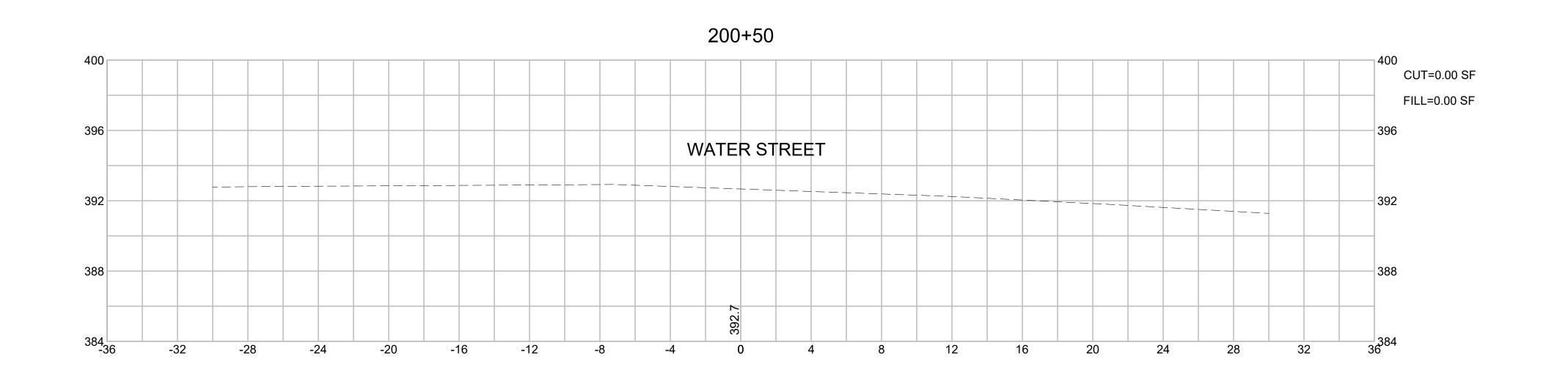
DRAWING TITLE:

CURB RAMP DETAILS

SCALE:	NOT TO SCALE		
DRAWING N		.0	







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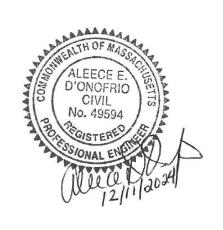
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

	ISSUE:		
	NO.	REVISION	DATE
Ι			

STAMPED AND SIGNED:



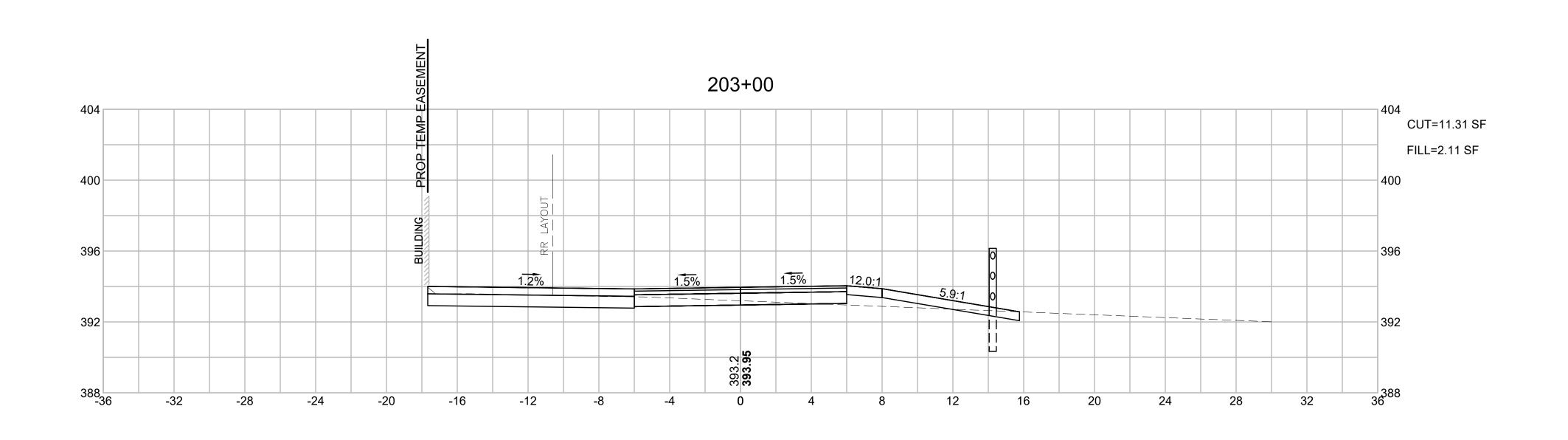
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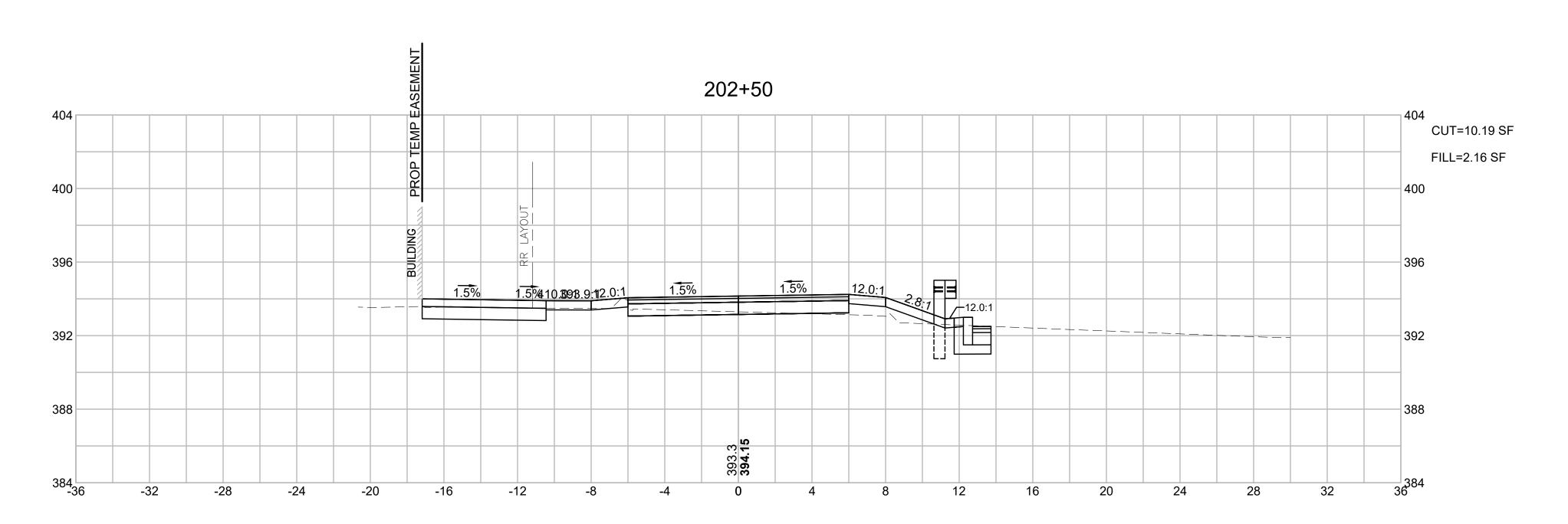
CROSS SECTIONS PART 1 OF 11

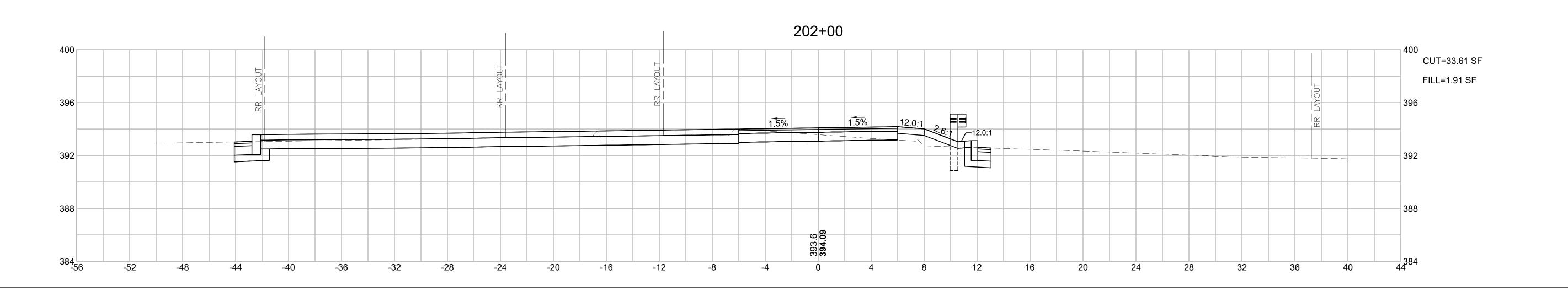
	designed:	MEH		
	DRAWN:	CWS	CHECKED: JJH	
	DATE:	12-11-2024		_
	SCALE:	I" = 4'		•

SUBMISSION: BID SET

DRAWING NO.







LANDSCAPE ARCHITECTS AND PLANNERS 65 FRANKLIN STREET, 4TH FLOOR BOSTON, MA 02109

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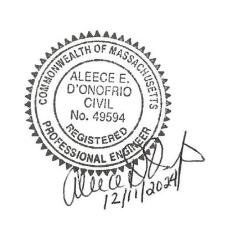
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE
		·

STAMPED AND SIGNED:



DRAWING TITLE:

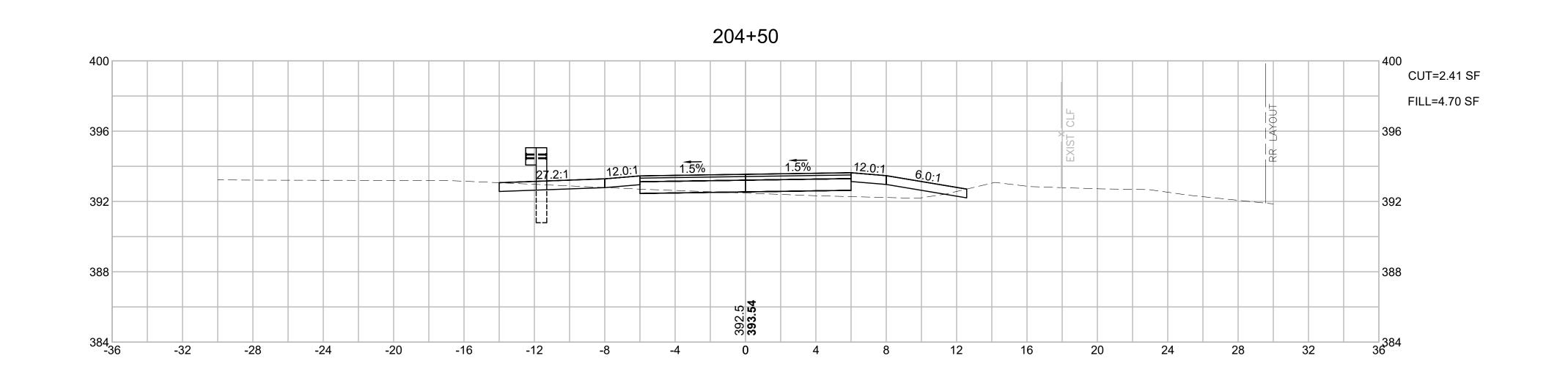
CROSS SECTIONS PART 2 OF 11

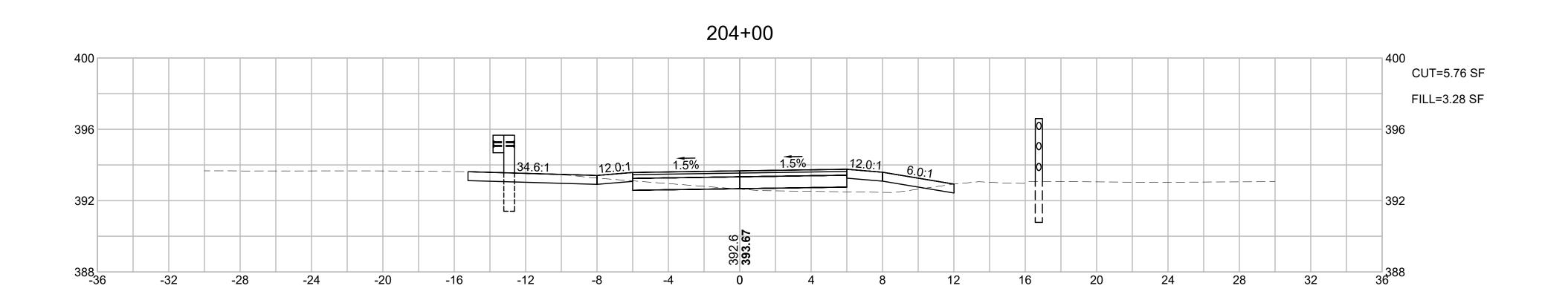
DESIGNED:	MEH	
DRAWN:	CWS	CHECKED: JJH
DATE:	12-11-2024	

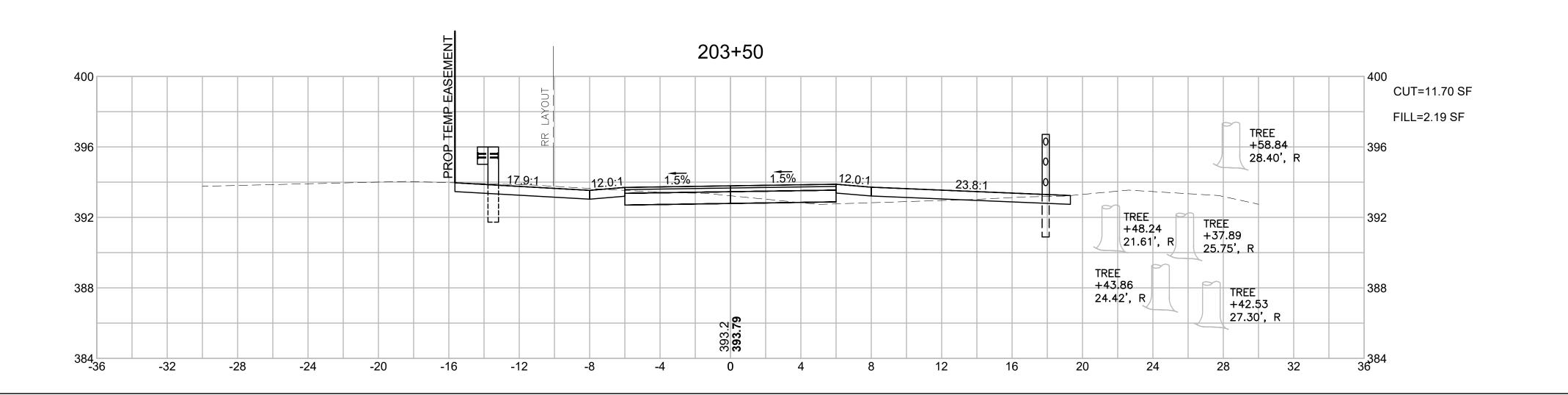
SCALE: I" = 4'

SUBMISSION: BID SET

DRAWING NO.







LANDSCAPE ARCHITECTS AND PLANNERS 65 FRANKLIN STREET, 4TH FLOOR BOSTON, MA 02109

T: 617 . 542 . 8552 F: 617 . 542 . 8517 WWW.BROWNROWE.COM



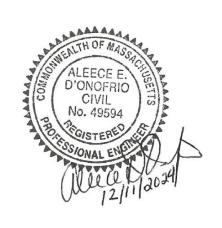
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

- 1			
	ISSUE:		
	NO.	REVISION	DATE
ı			

STAMPED AND SIGNED:



DRAWING TITLE:

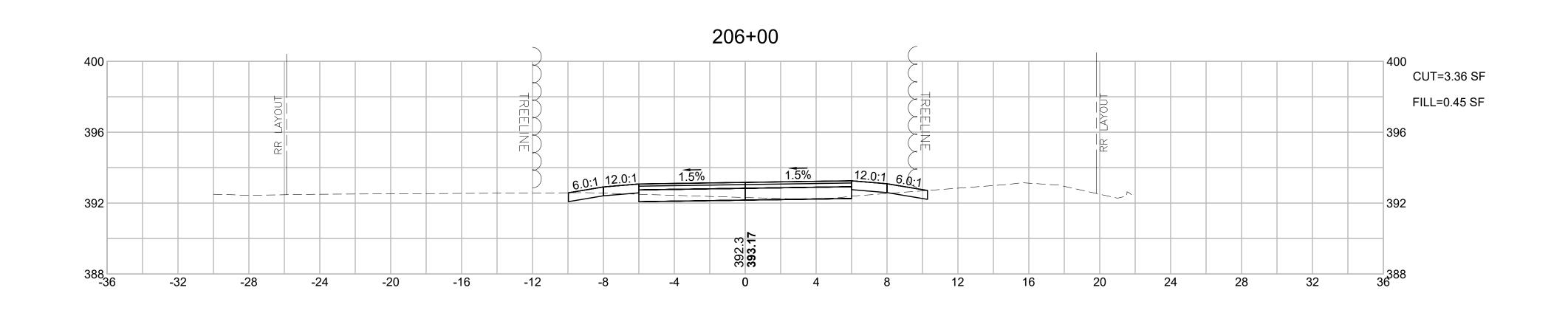
CROSS SECTIONS PART 3 OF 11

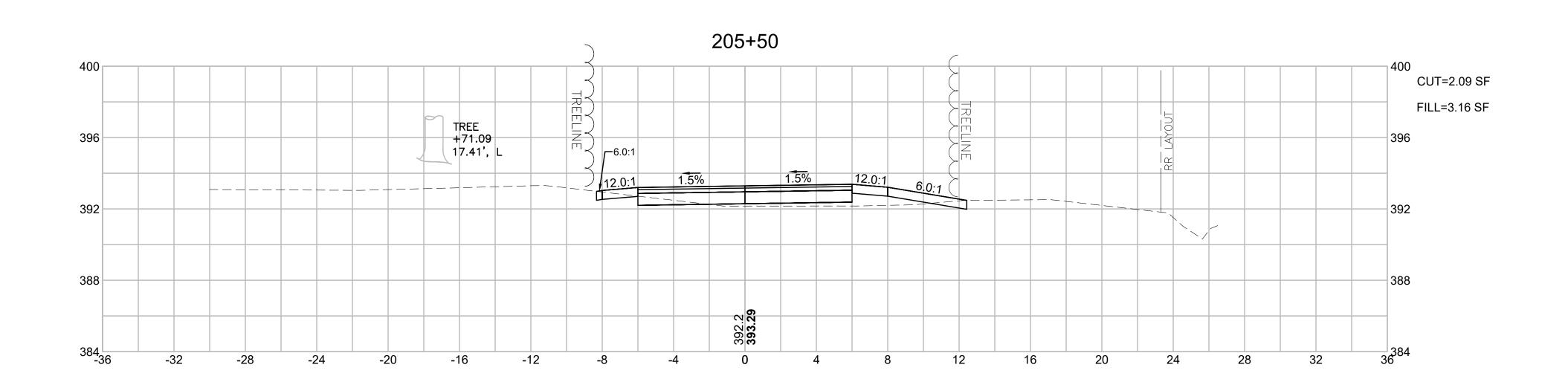
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	DRAWN:	CWS	CHECKED:	JJH
	DATE:	12-11-2024		

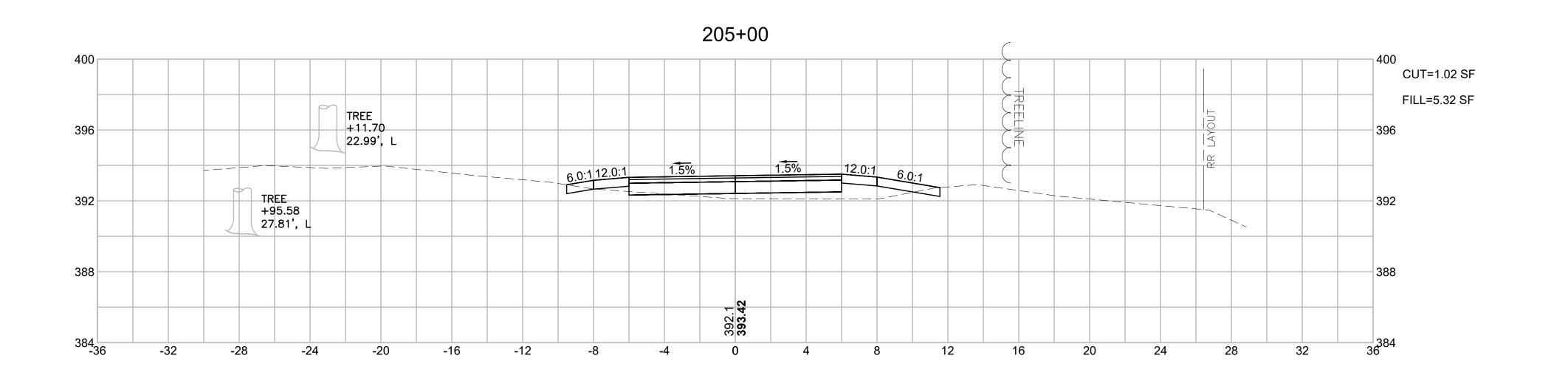
SCALE: | " = 4'

submission: bid set

DRAWING NO.







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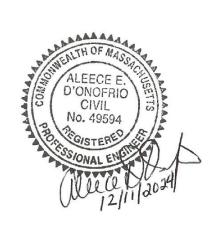
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE
		·

STAMPED AND SIGNED:



DRAWING TITLE:

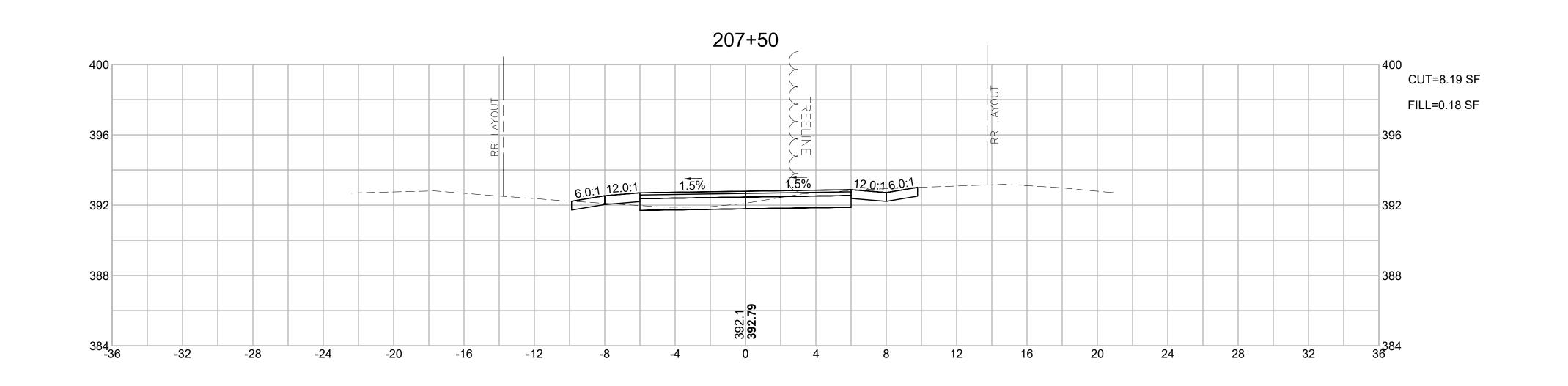
CROSS SECTIONS PART 4 OF 11

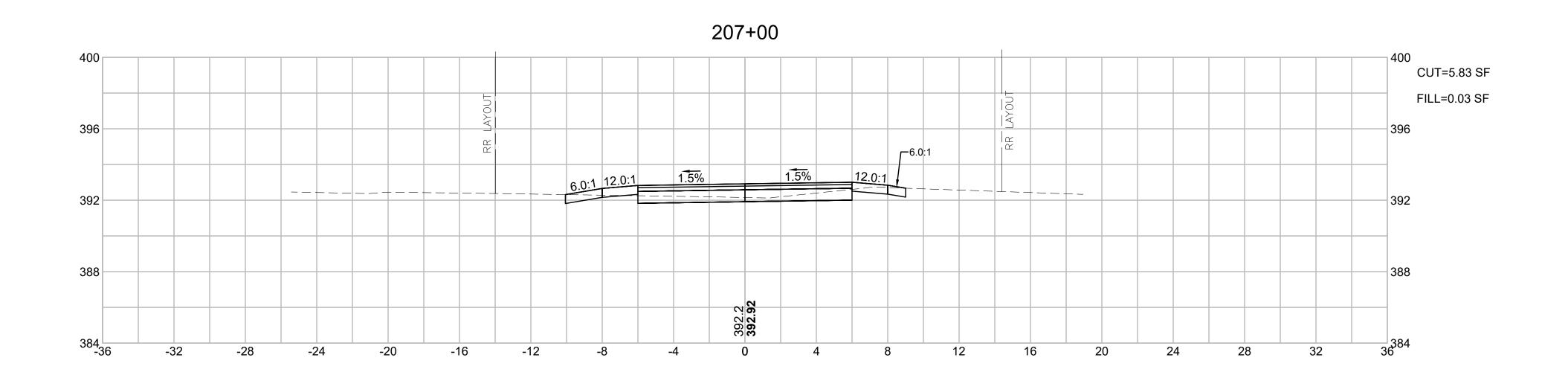
DESIG	SNED: ME	Н		
DRAV	VN: CV	VS	CHECKED:	JJH
DATE	: 12-	11-2024		

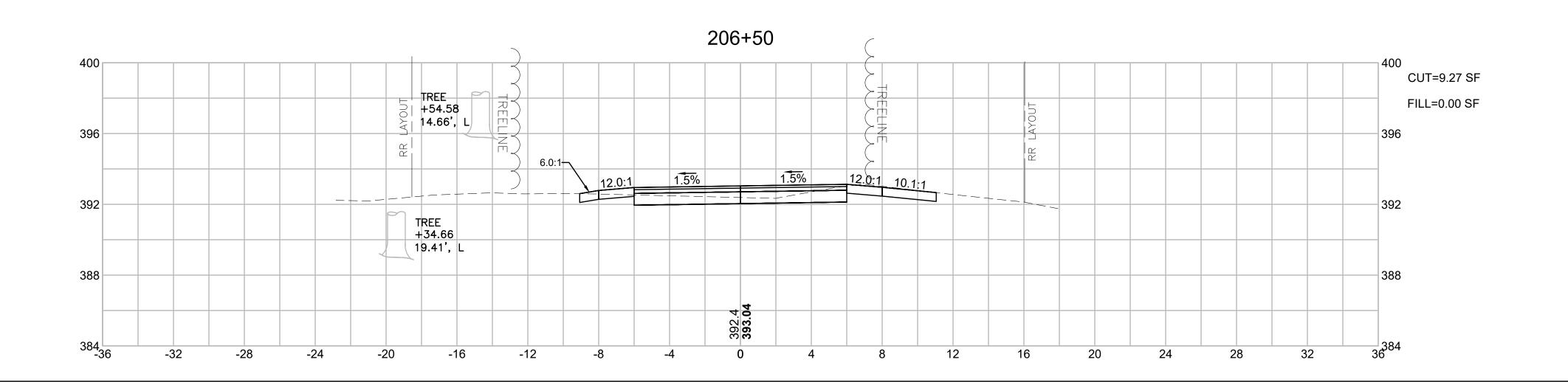
SCALE: |" = 4'

SUBMISSION: BID SET

DRAWING NO.







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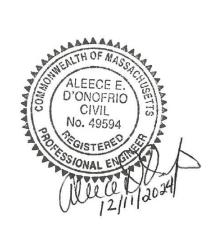
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE
		·

STAMPED AND SIGNED:



DRAWING TITLE:

CROSS SECTIONS PART 5 OF 11

DESIGNED: MEH

DRAWN: CWS CHECKED: JJH

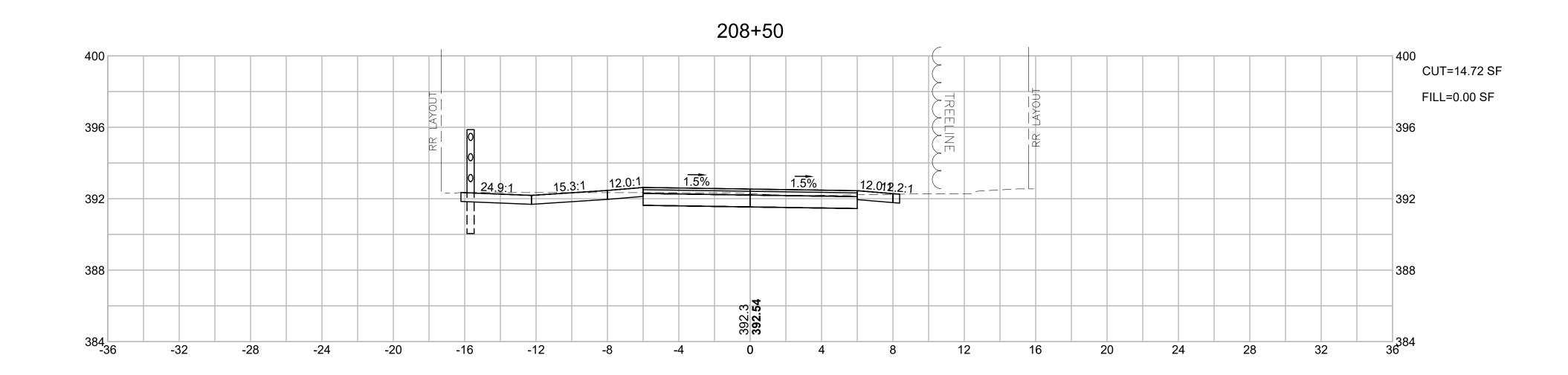
DATE: 12-11-2024

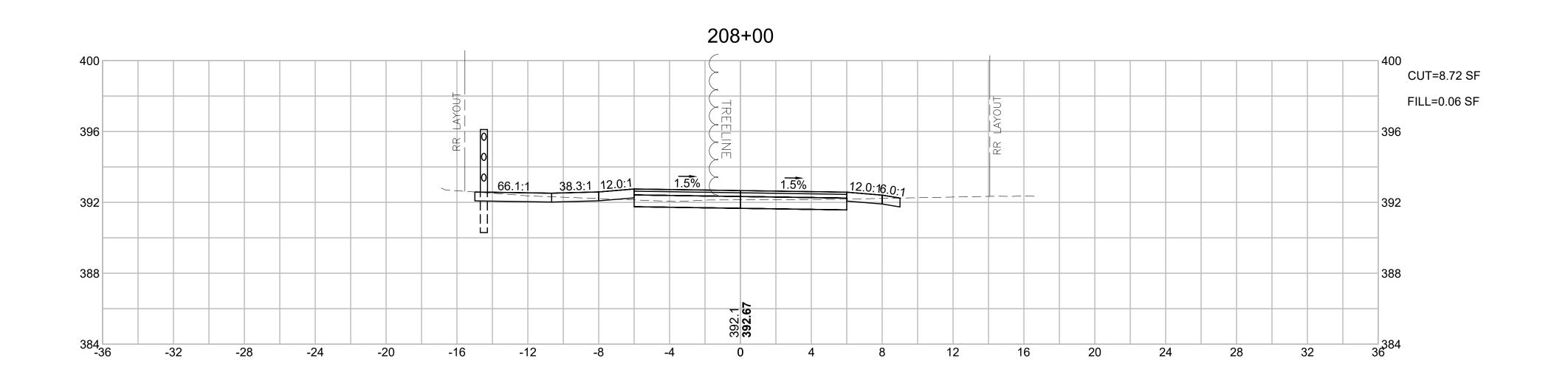
SCALE: | " = 4'

SUBMISSION: BID SET

DRAWING NO.

209+00 400 396 397 388 384 400 386 382 288 240 2016 160 172 8 140 0 4 8 12 16 20 24 28 32 36 40 44 384 384





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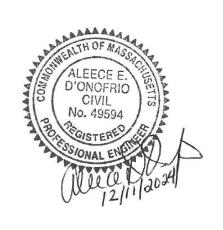
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

- 1			
	ISSUE:		
	NO.	revision	DATE
- 1			

STAMPED AND SIGNED:



DRAWING TITLE:

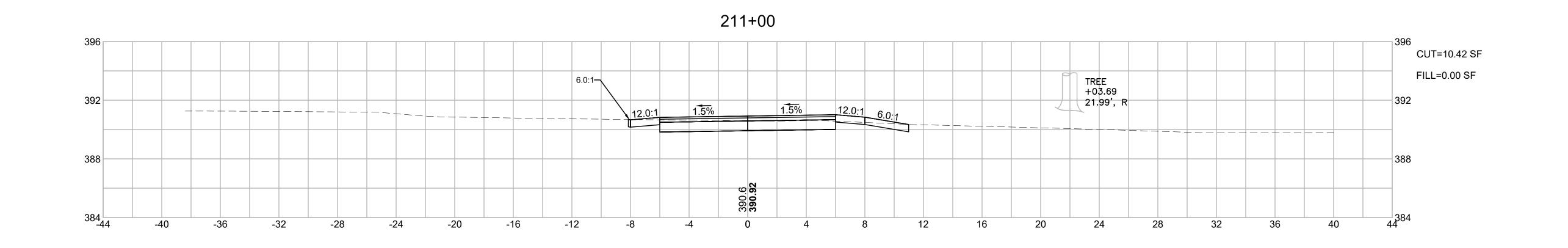
CROSS SECTIONS PART 6 OF 11

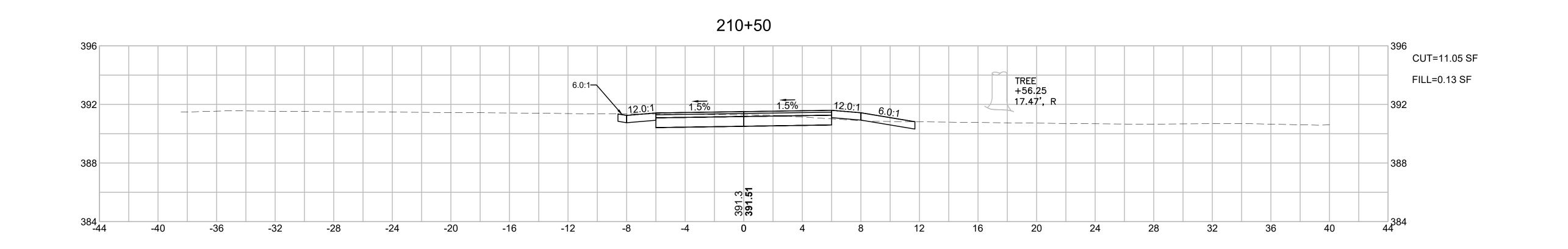
DESIGNED:	MEH		
DRAWN:	CWS	CHECKED:	JJH
DATE:	12-11-2024		

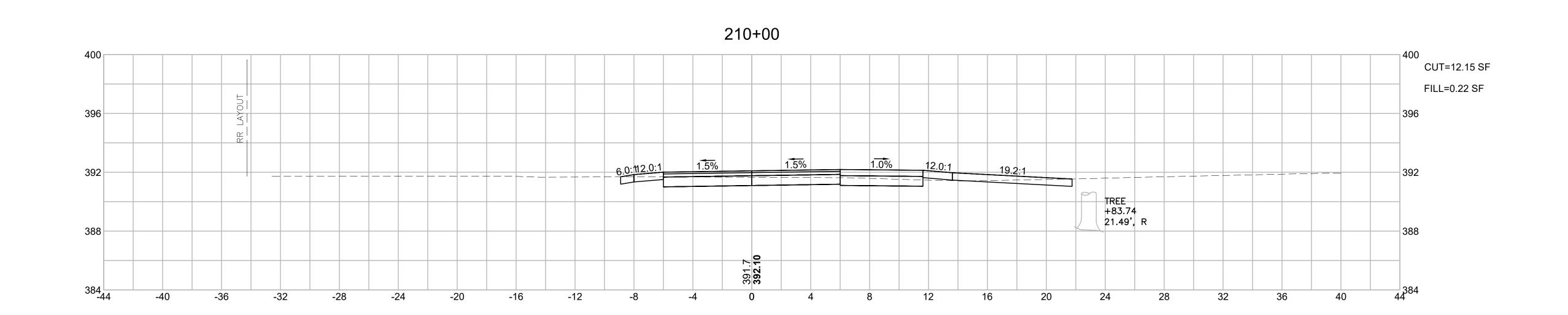
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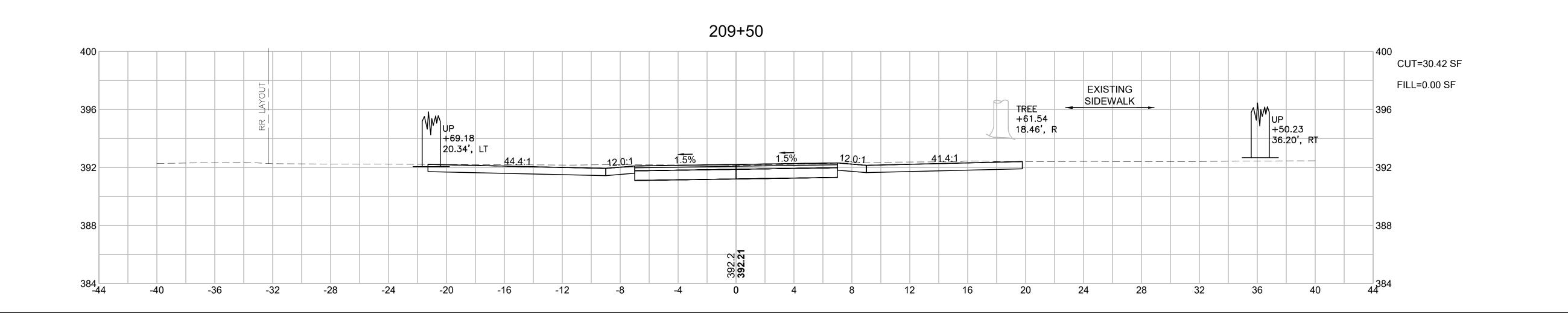
SUBMISSION: BID SET

DRAWING NO.









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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE

STAMPED AND SIGNED:



DRAWING TITLE:

CROSS SECTIONS PART 7 OF 11

DESIGNED: MEH

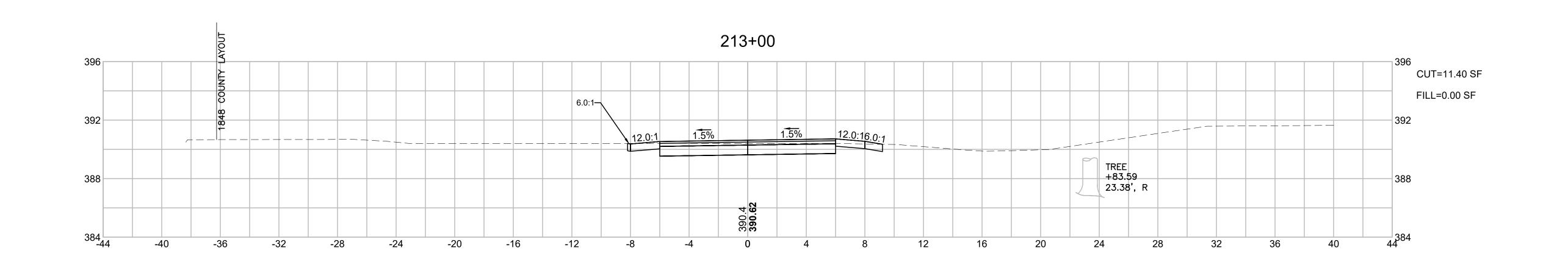
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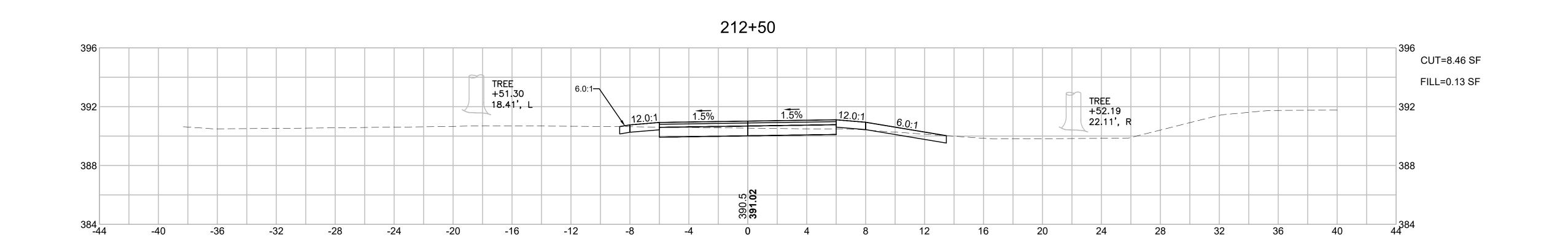
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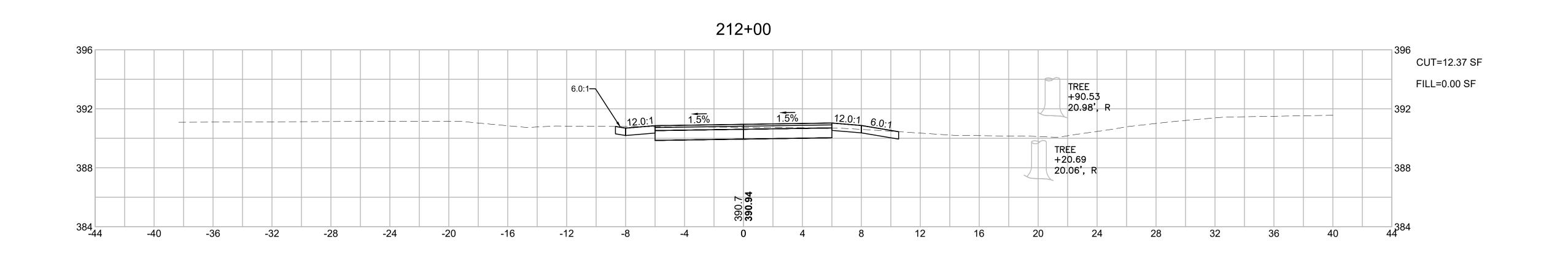
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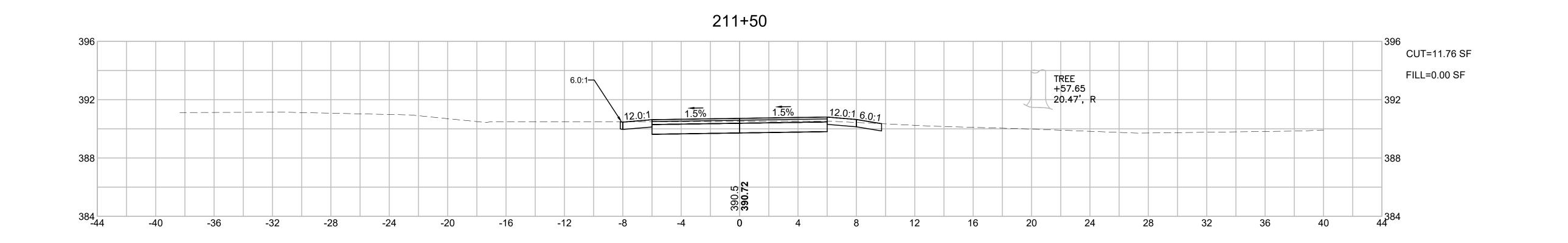
SUBMISSION: BID SET

DRAWING NO.









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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE

STAMPED AND SIGNED:



DRAWING TITLE:

CROSS SECTIONS PART 8 OF 11

DESIGNED: MEH

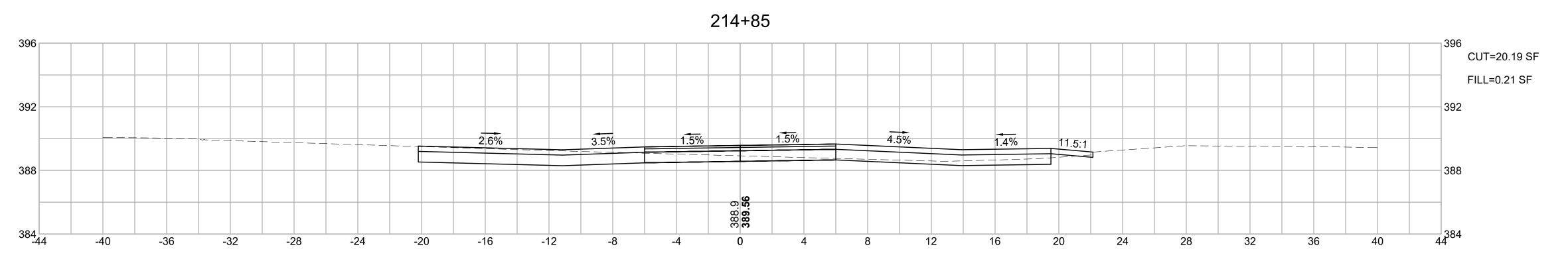
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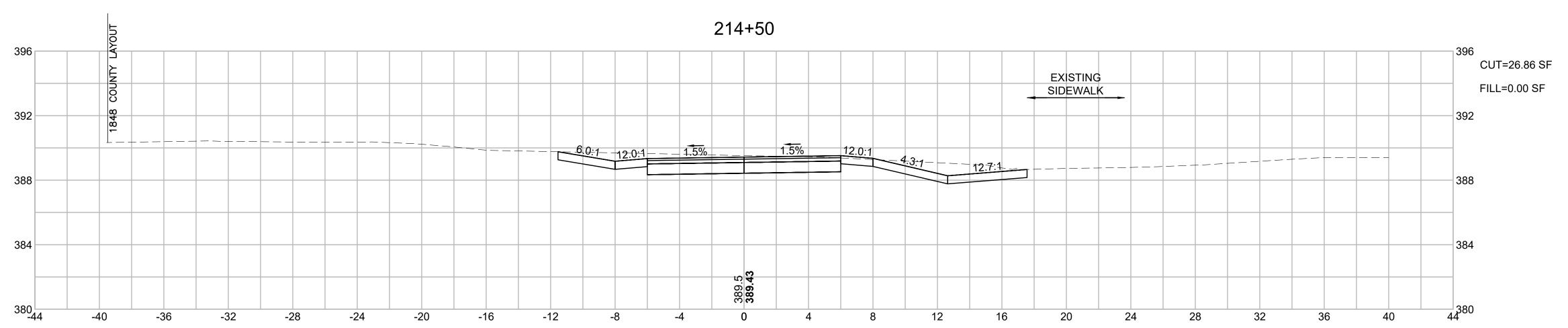
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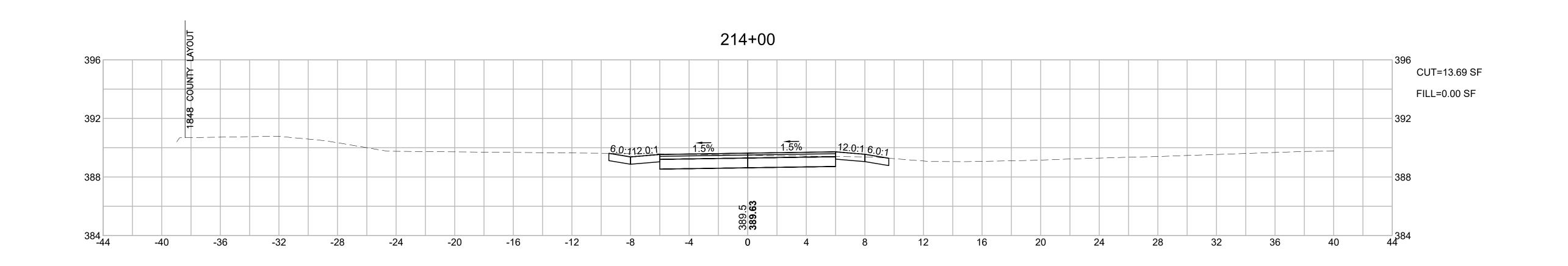
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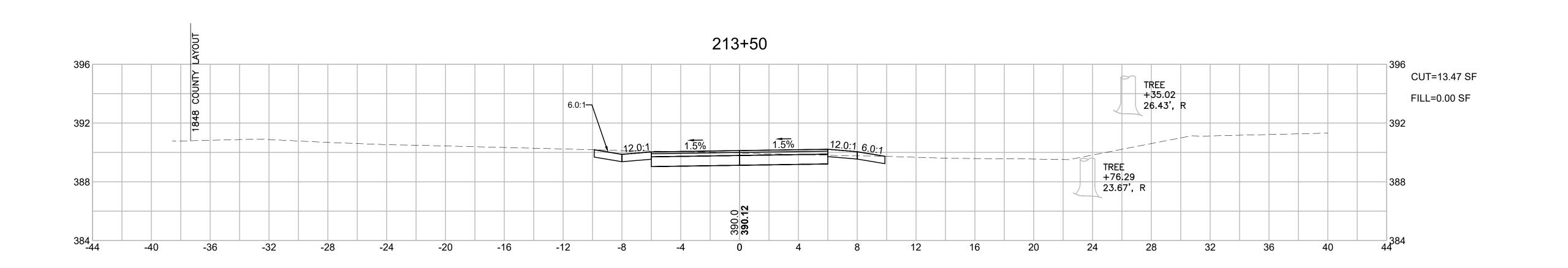
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DRAWING NO.









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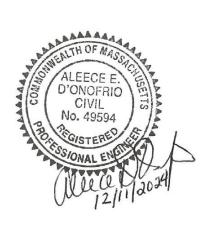
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSUE:		
NO.	REVISION	DATE

STAMPED AND SIGNED:



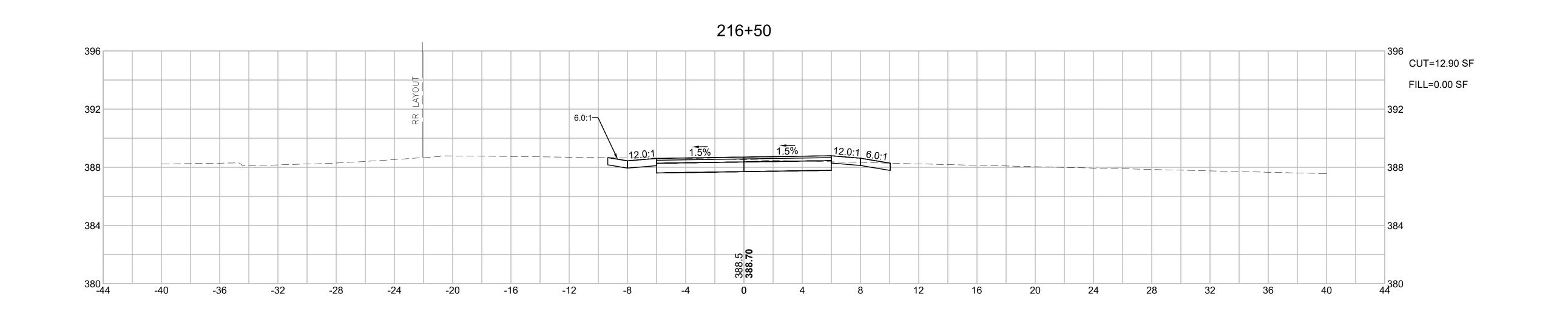
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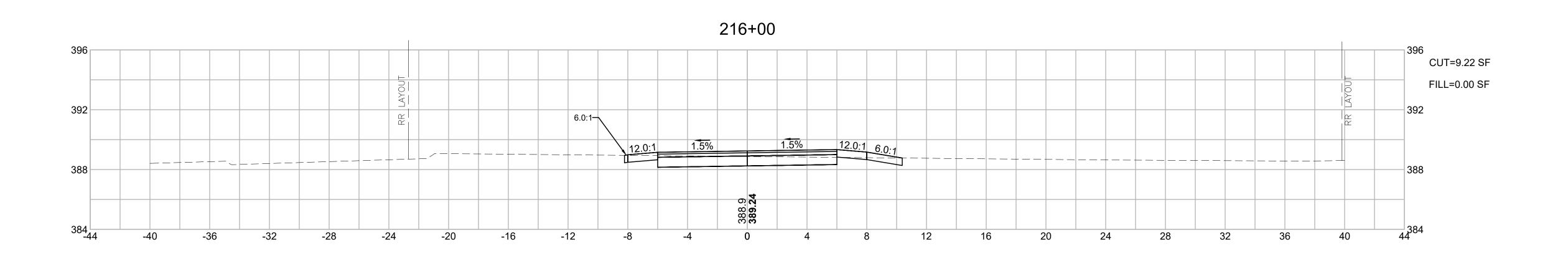
CROSS SECTIONS PART 9 OF 11

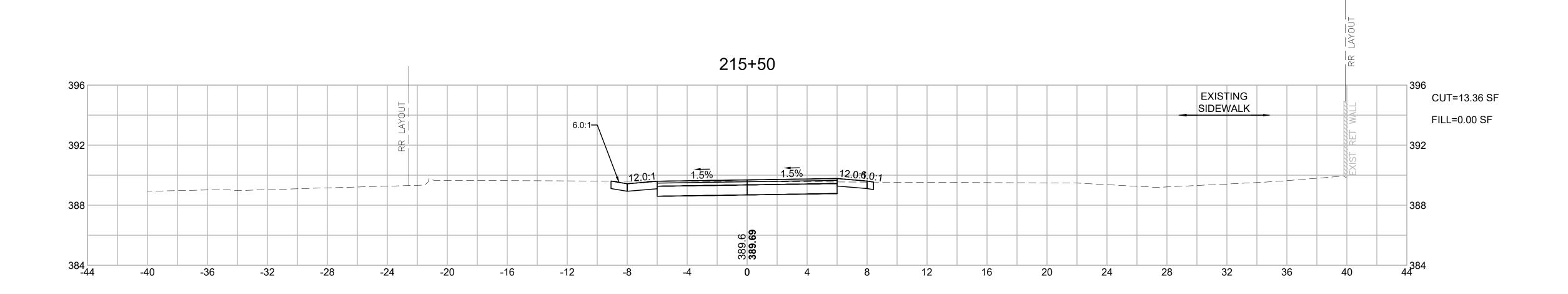
DESIGI	NED: MEH		
DRAW	/N: CWS	CHECK	ŒD: JJH
DATE:	12-11-202	24	
SCALE	: " = 4'		

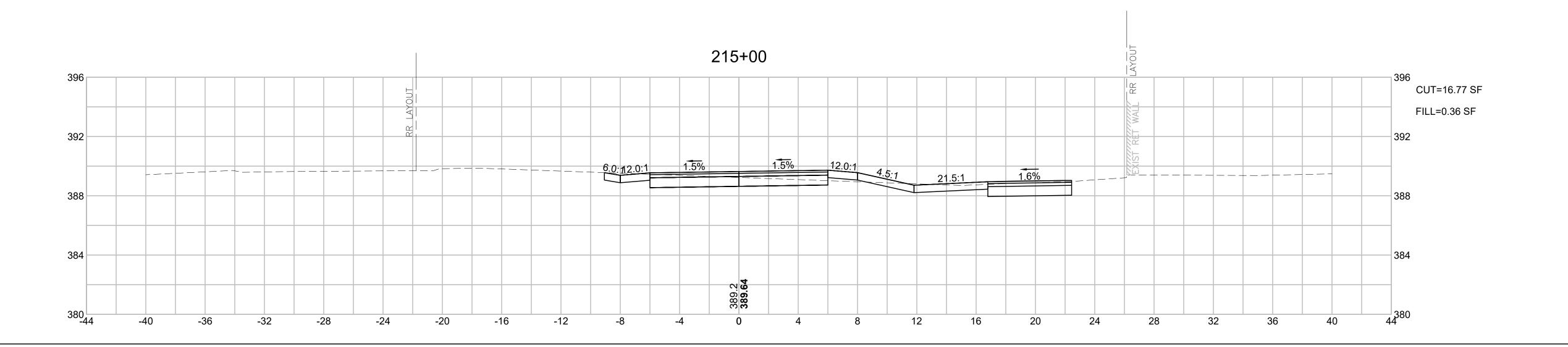
SUBMISSION: BID SET

DRAWING NO.









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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

ISSU	E:		
NO	Э.	REVISION	DATE

STAMPED AND SIGNED:



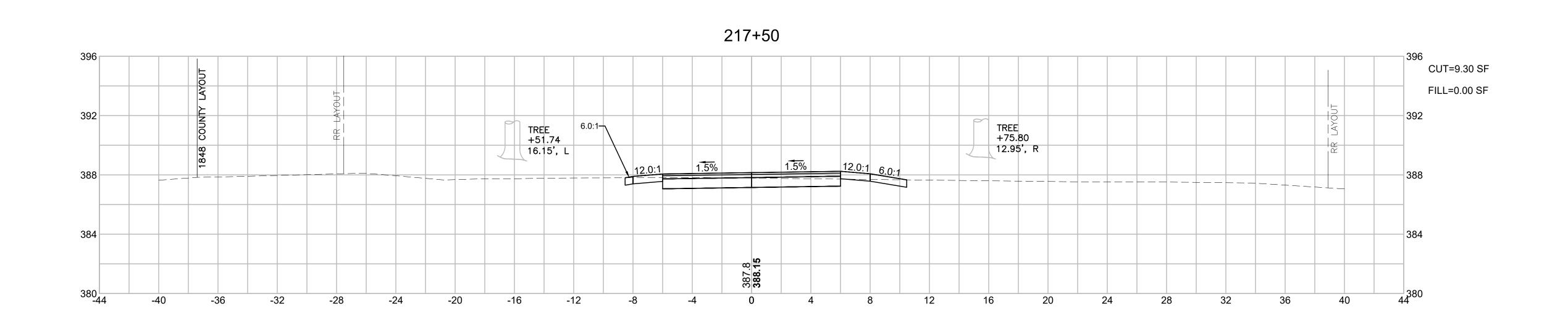
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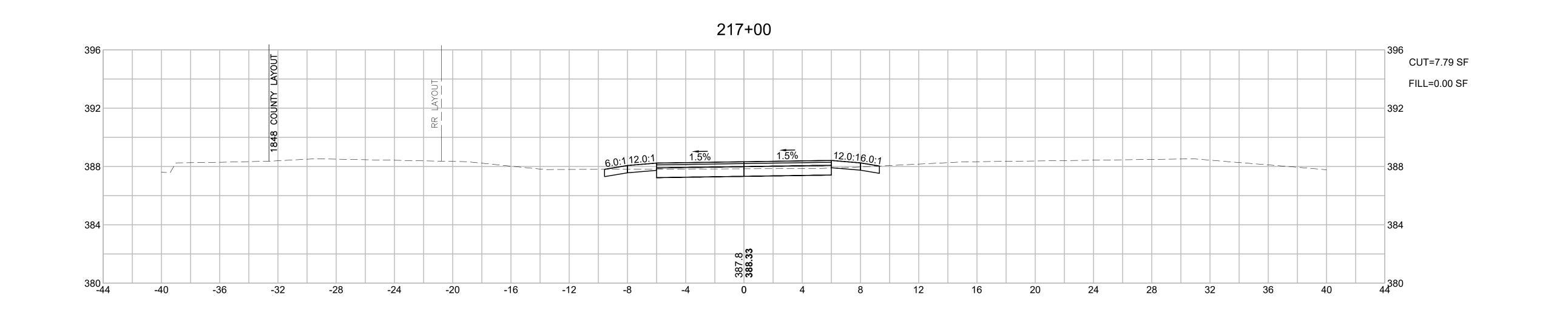
CROSS SECTIONS PART 10 OF 11

	DESIGNED:	MEH	
	DRAWN:	CWS	CHECKED: JJH
	DATE:	12-11-2024	
	SCALE:	" = 4'	

SUBMISSION: BID SET

DRAWING NO.





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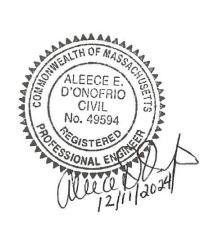
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

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	NO.	REVISION	DATE
Ι			

STAMPED AND SIGNED:



DRAWING TITLE:

CROSS SECTIONS PART 11 OF 11

DESIGNED: MEH

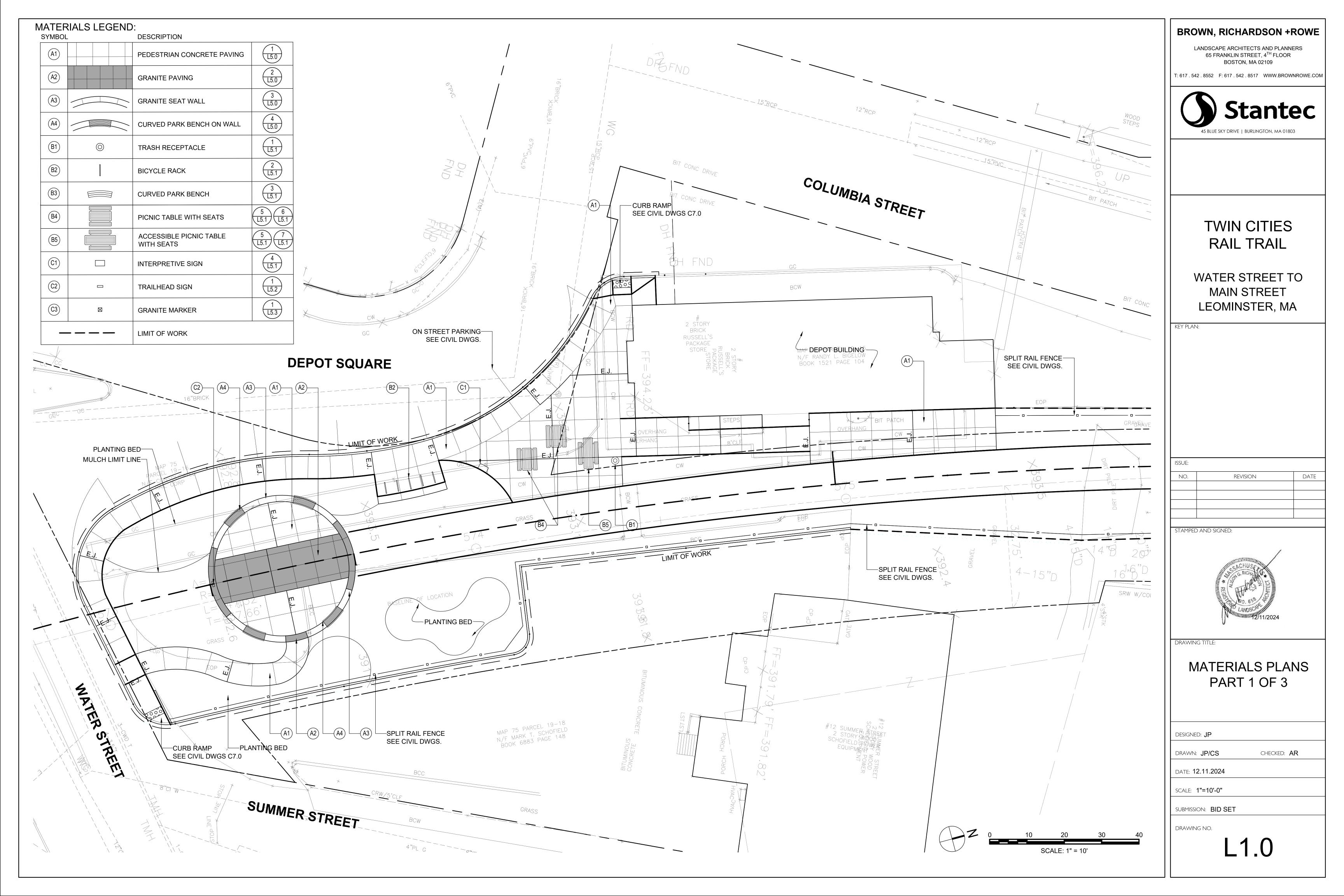
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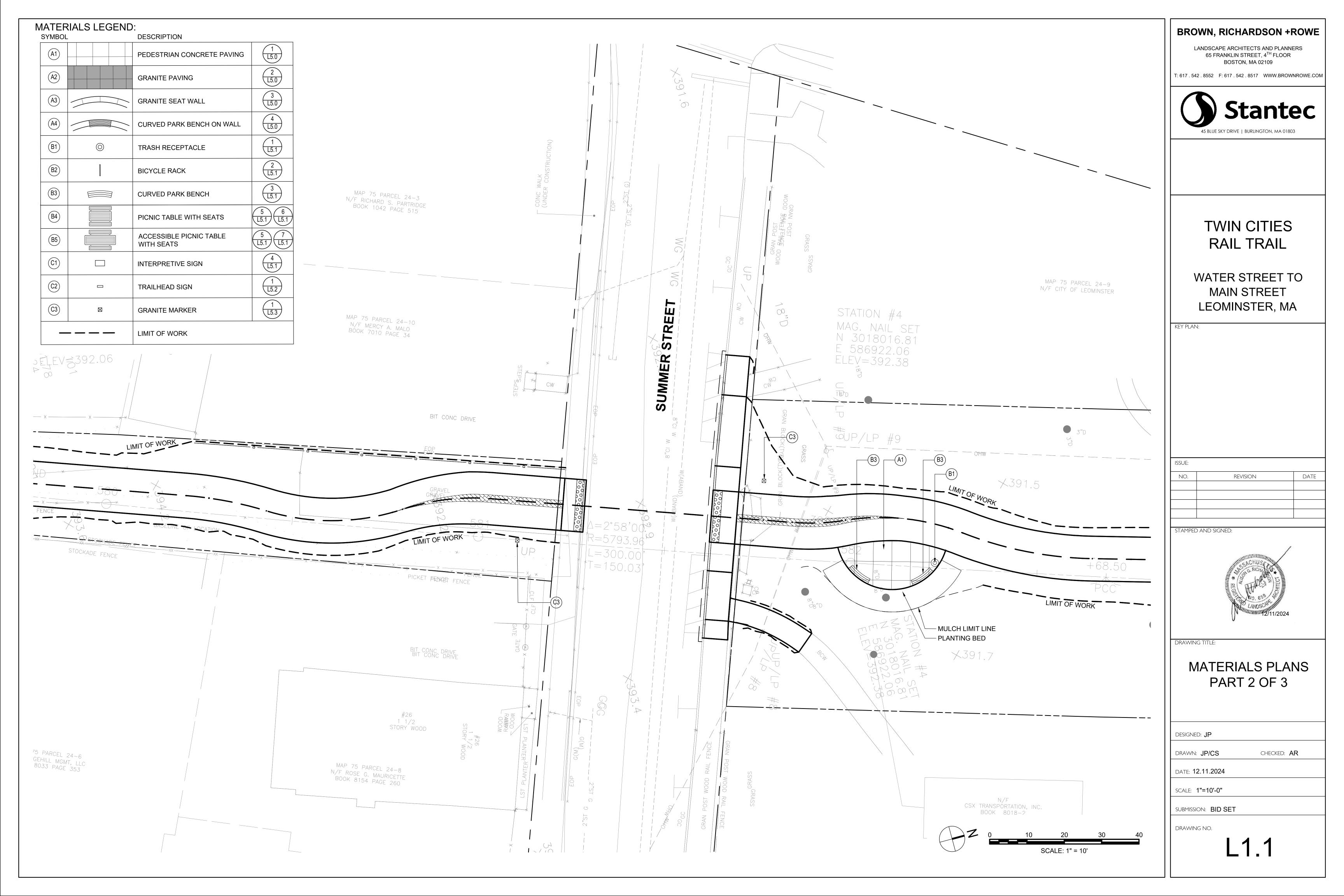
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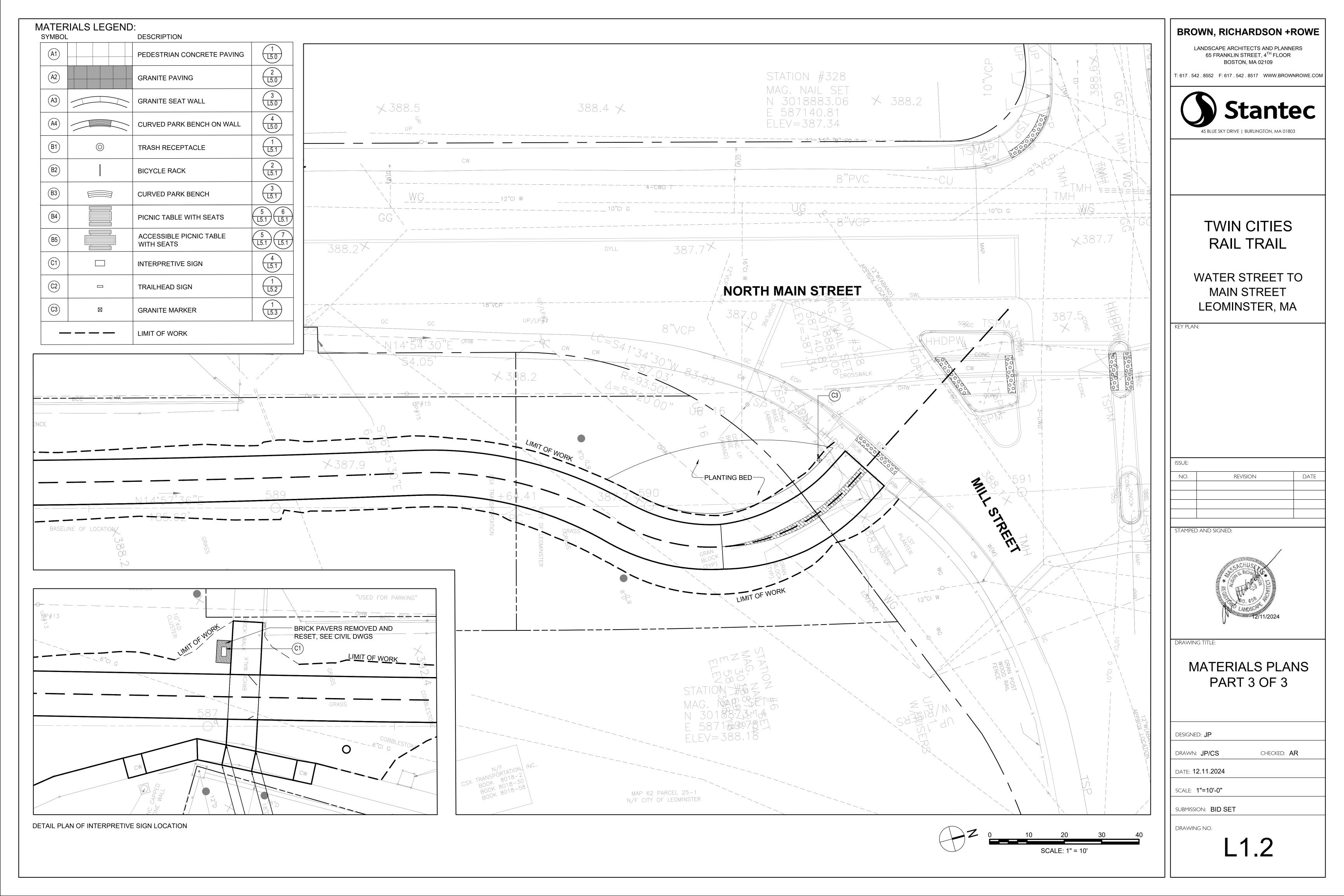
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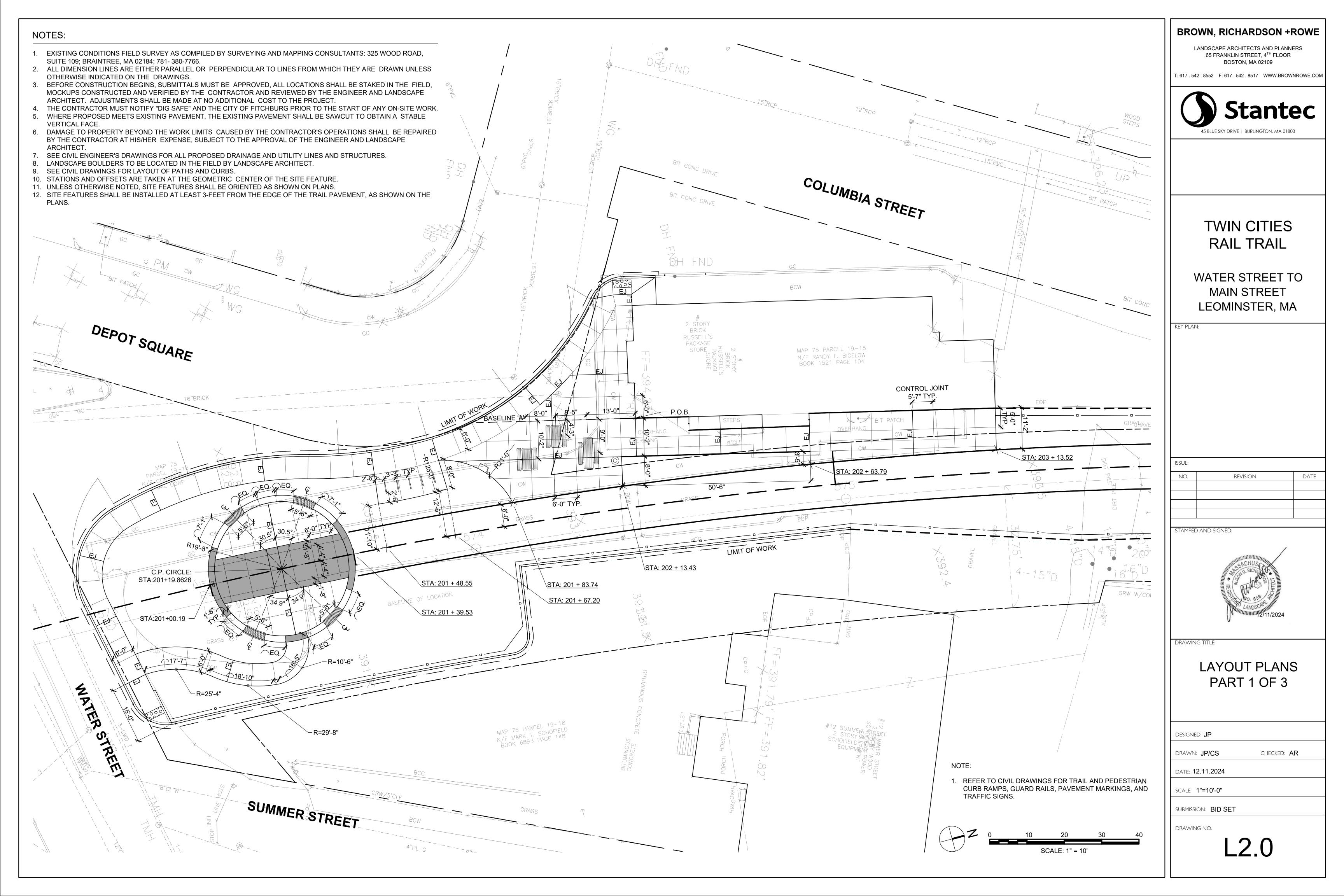
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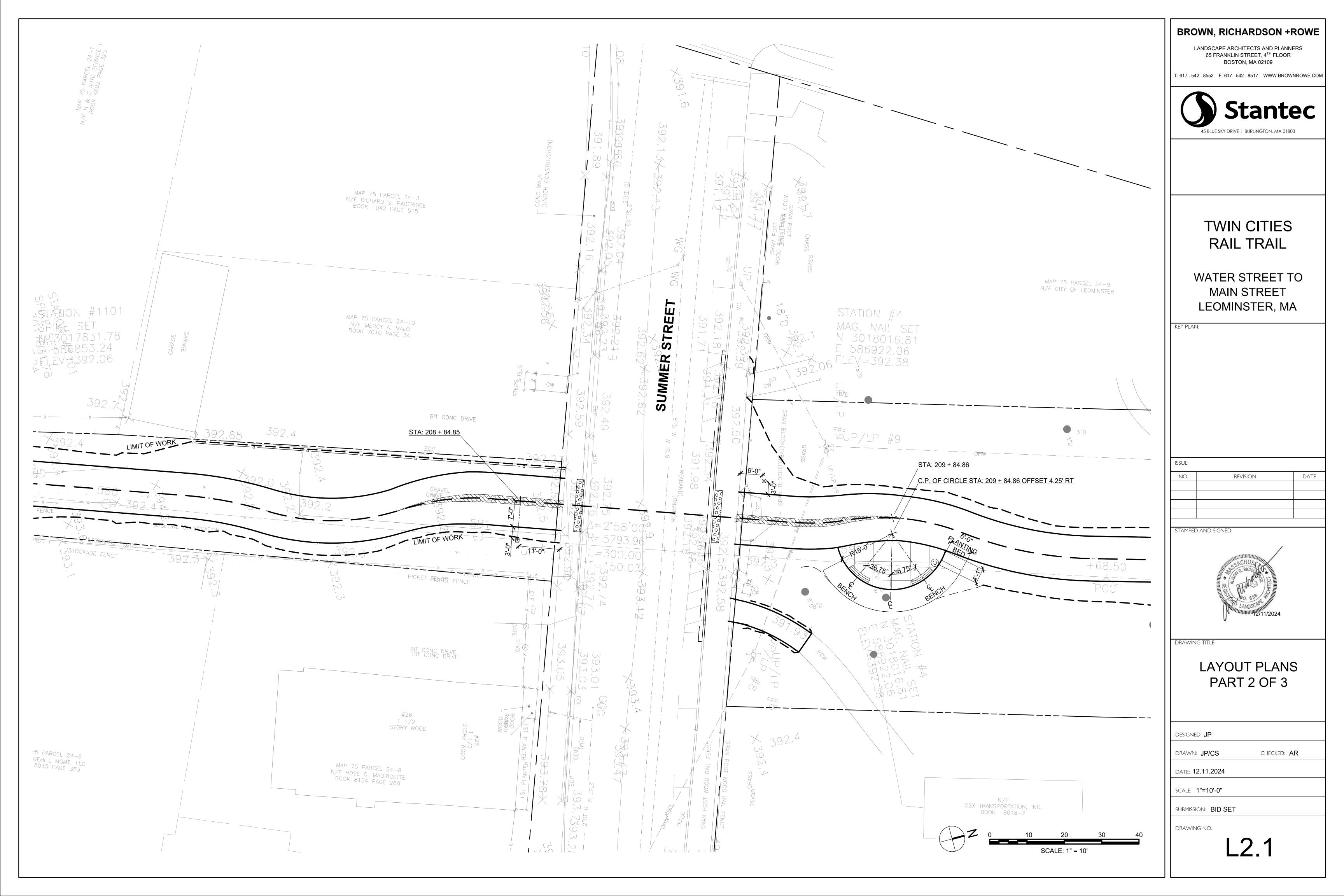
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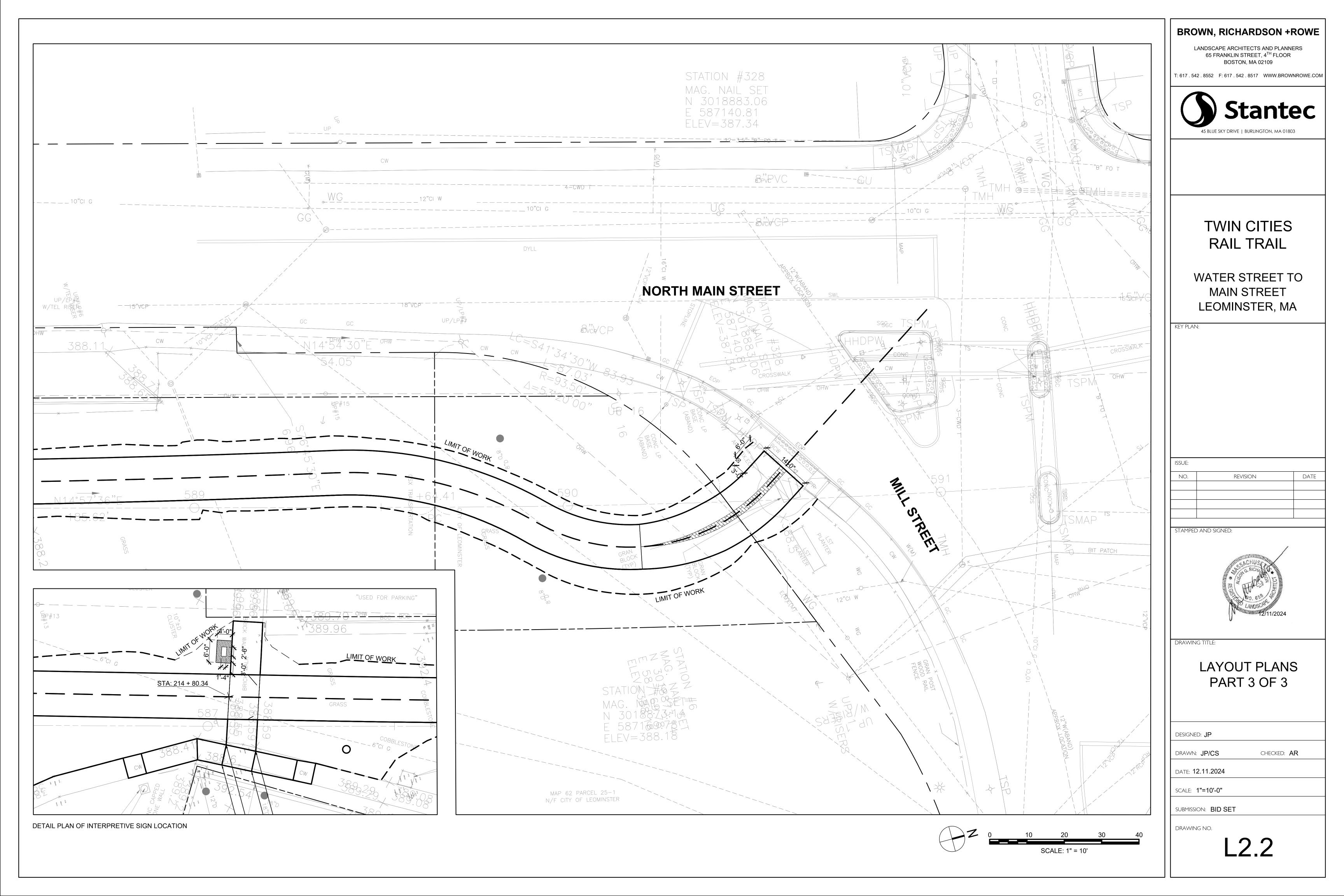


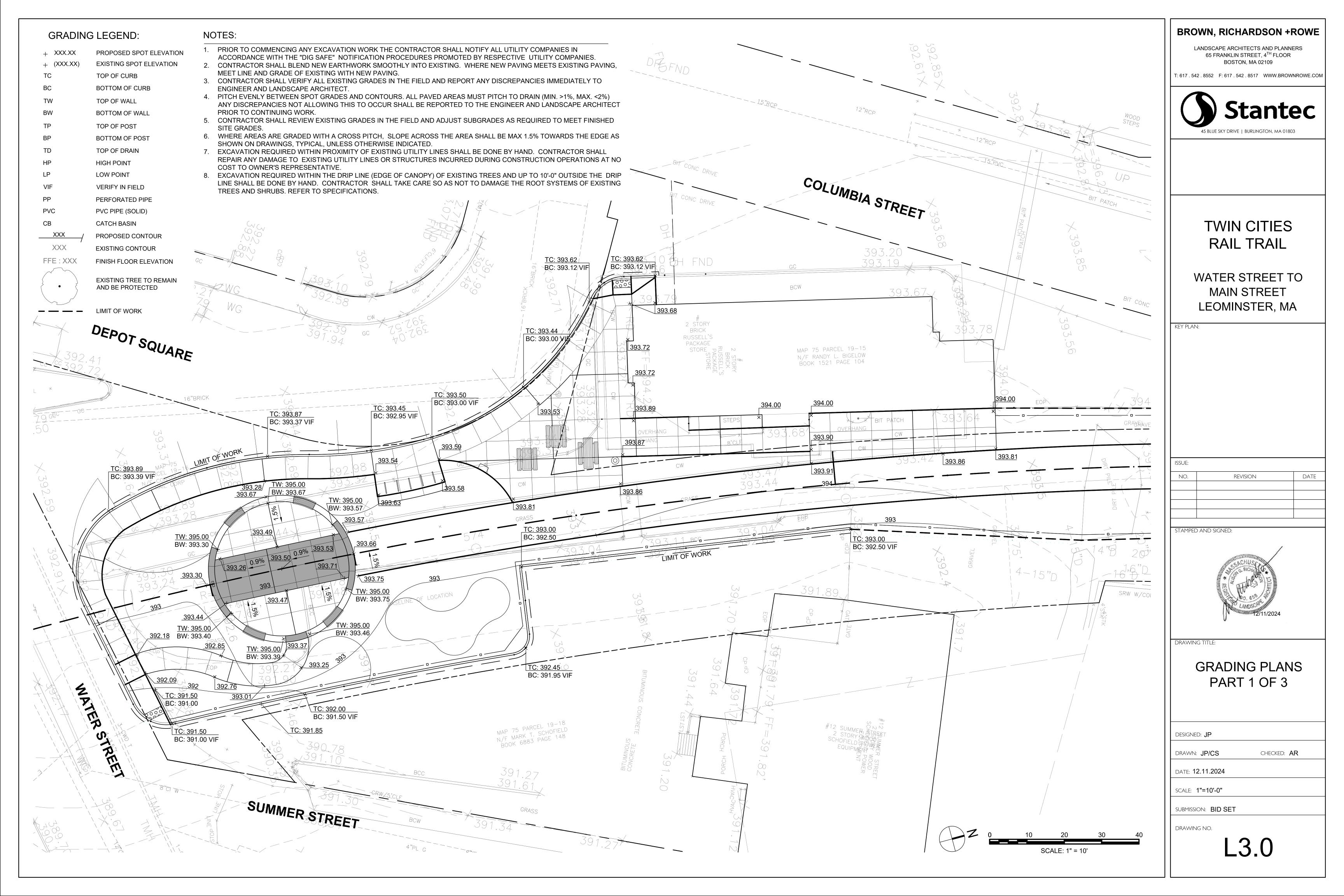


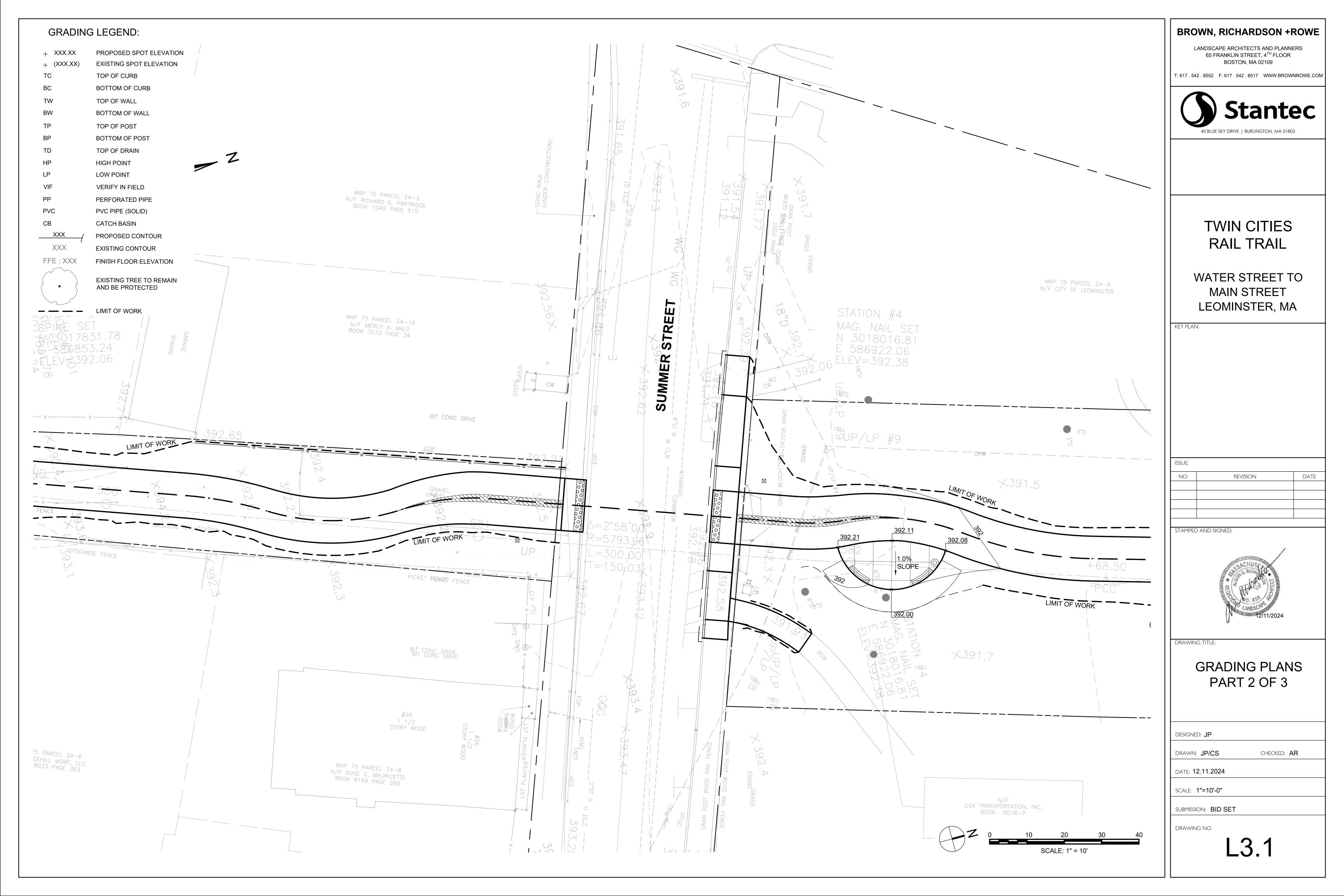


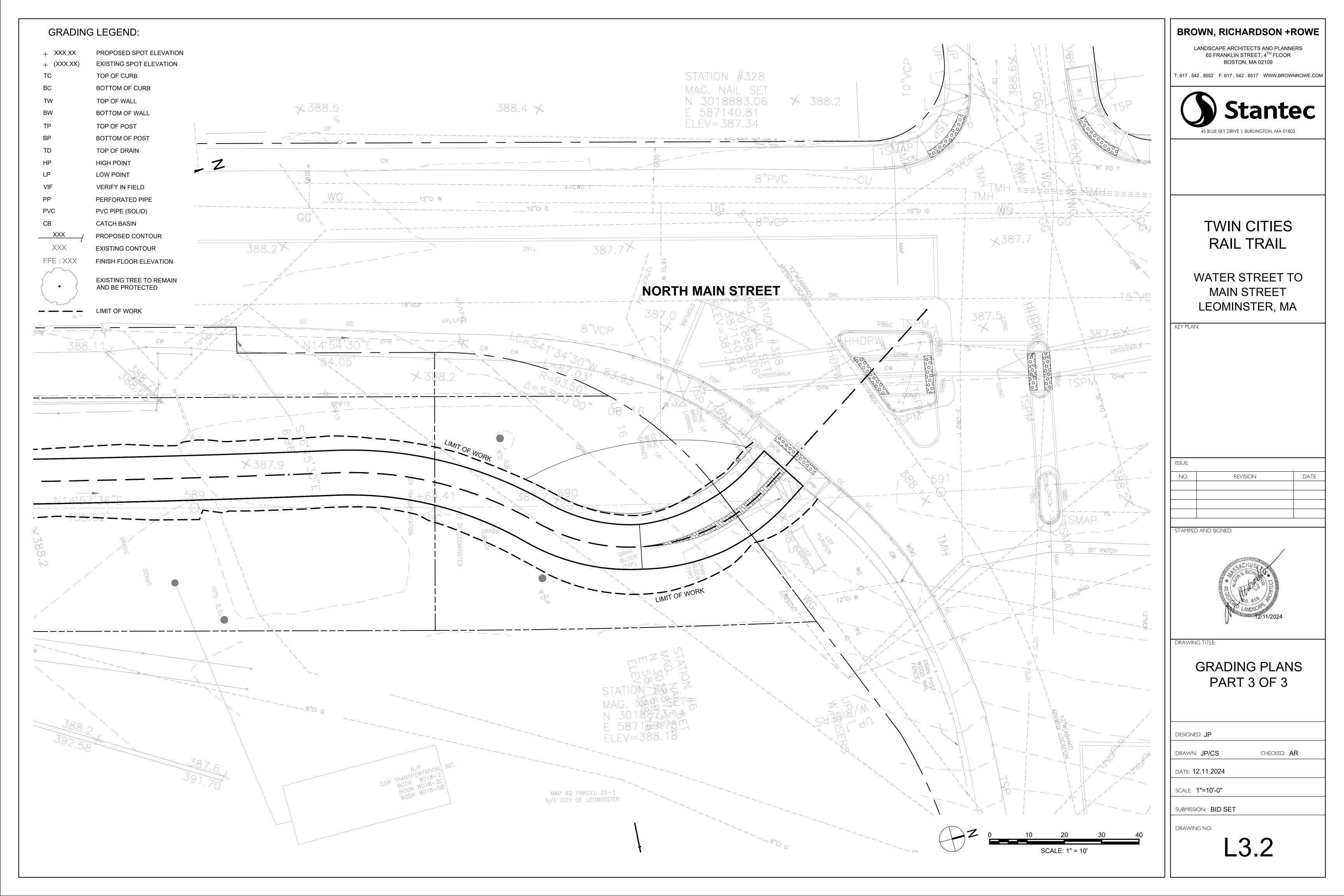


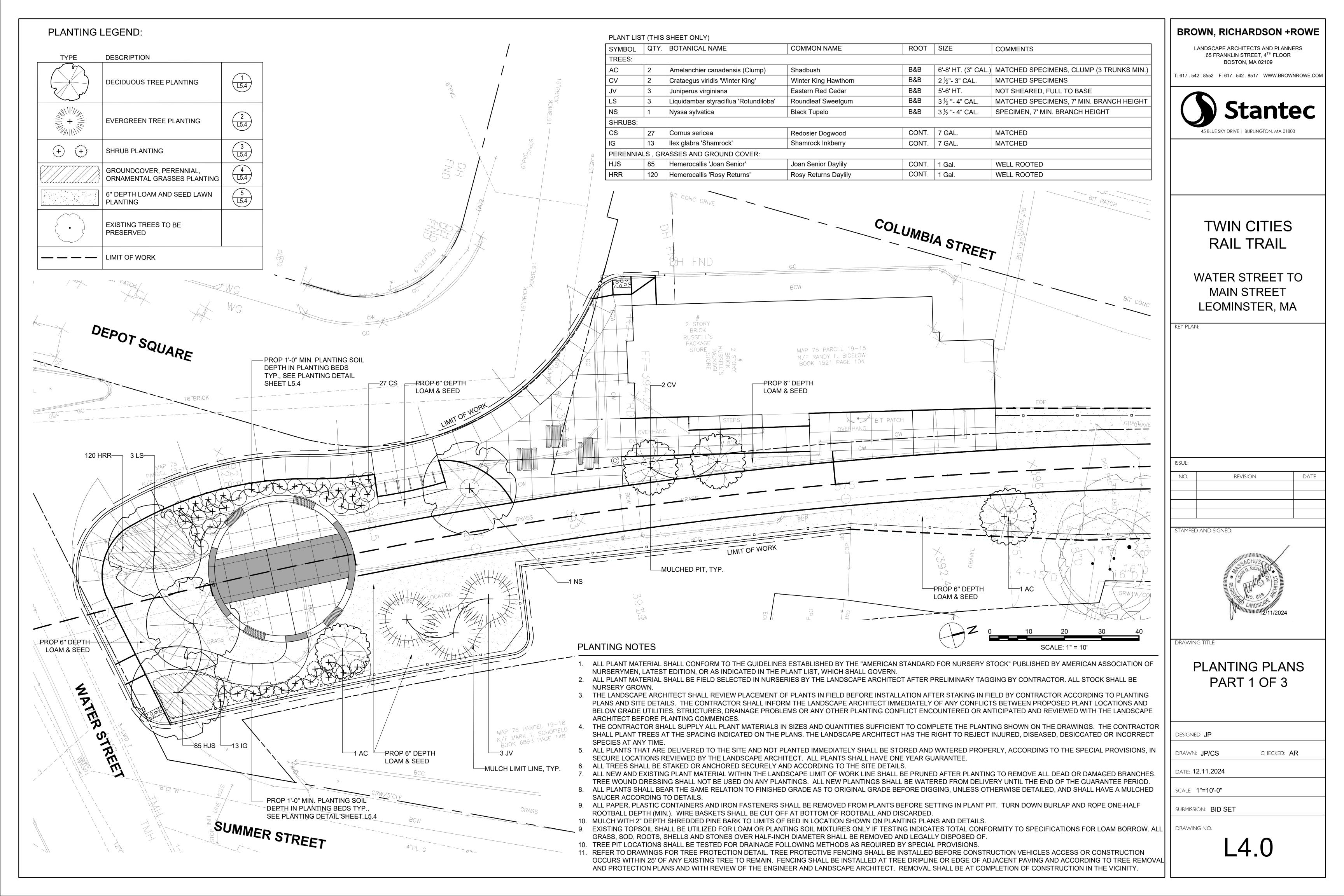


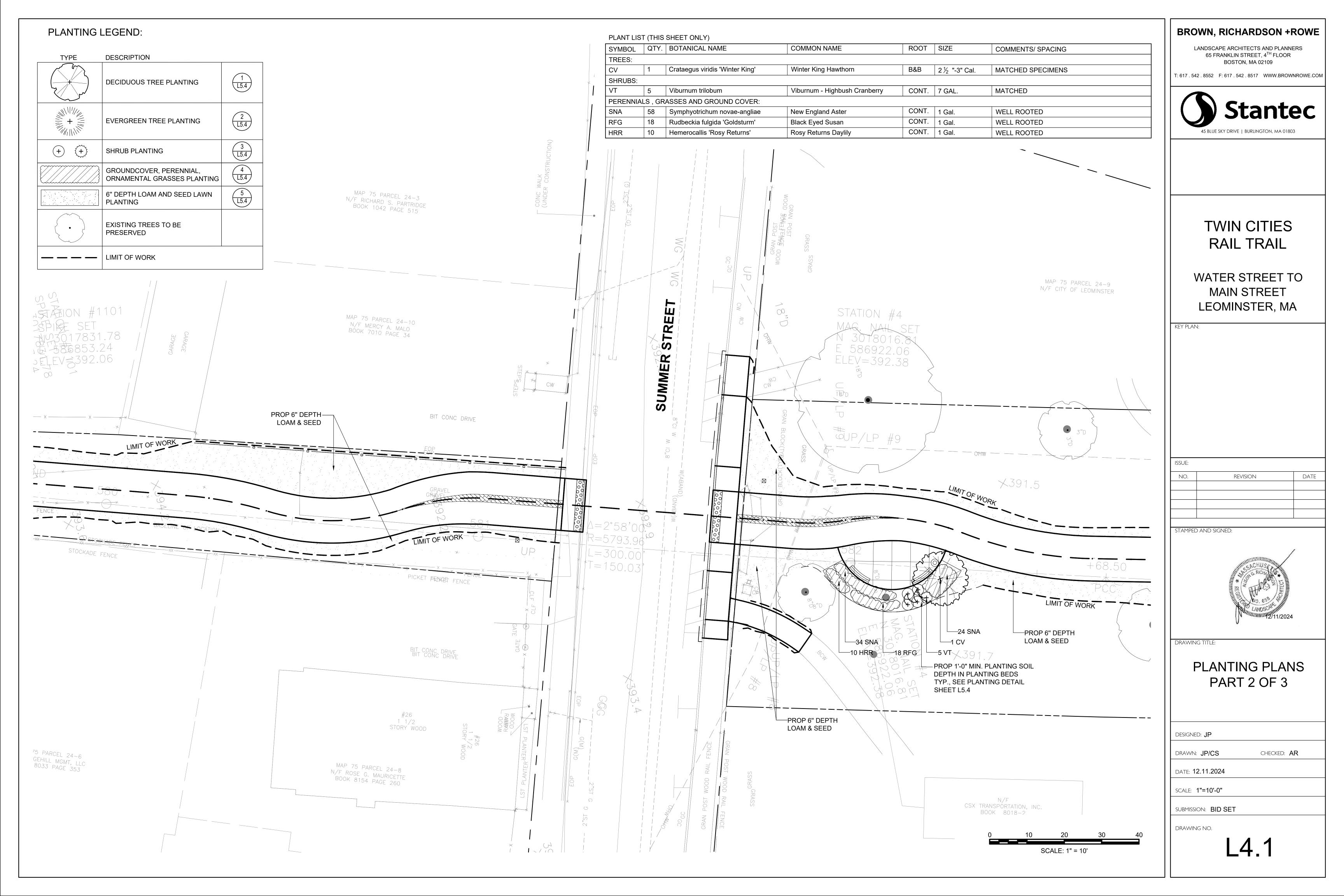


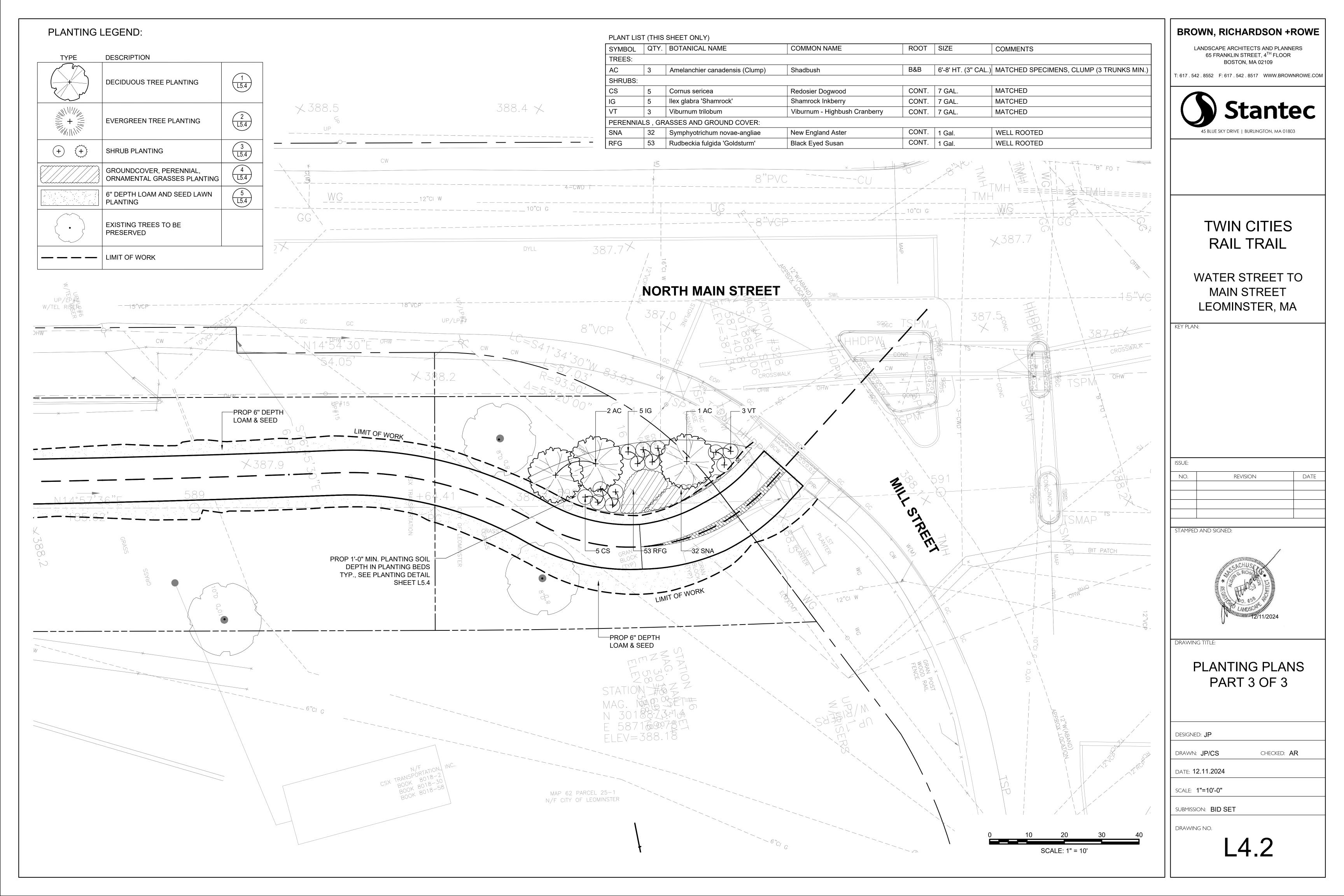


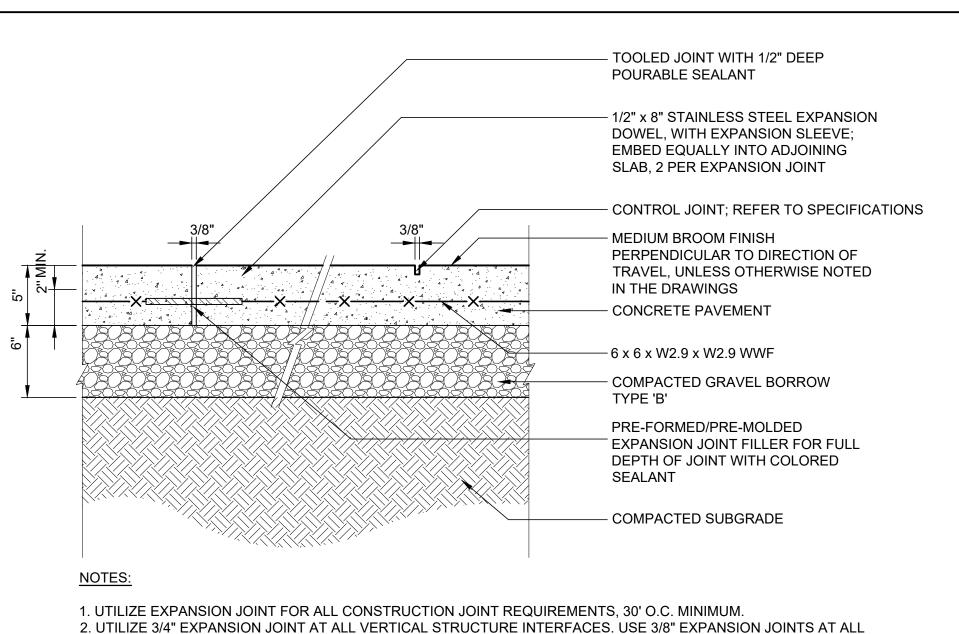












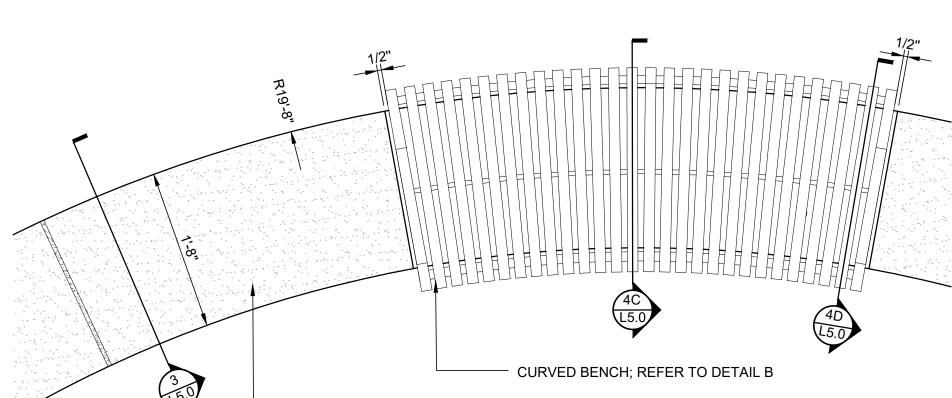
2. UTILIZE 3/4" EXPANSION JOINT AT ALL VERTICAL STRUCTURE INTERFACES. USE 3/8" EXPANSION JOINTS AT ALL PAVING JOINT.

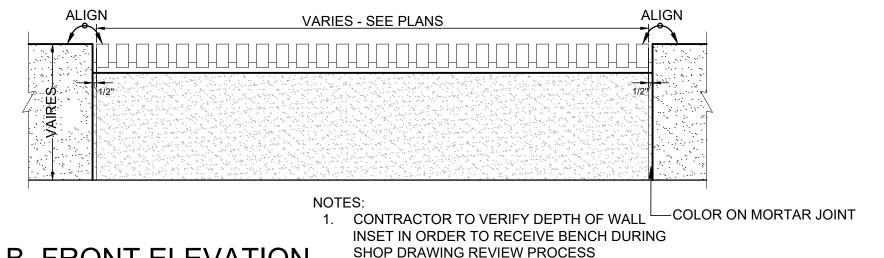
3. PROVIDE CONTROL JOINTS IN LAYOUT APPROVED IN SHOP DRAWING. 4. REFER TO PLANS AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

PEDESTRIAN CONCRETE PAVING

GRANITE PAVING

NOTES:





GRANITE SEAT WALL WITH BENCH



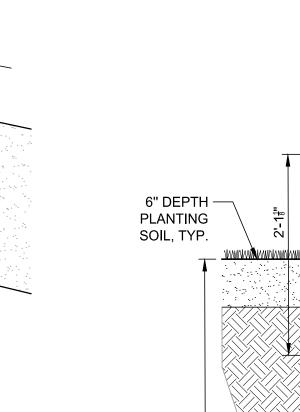
1. ALL PAVERS ARE 2 ½" THICK, MIN. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. ALL EXPOSED EDGES OF GRANITE SHALL BE THERMAL FINISH.

5. INSTALL 3/8" EXPANSION JOINT AT ALL PAVING JOINTS, 30' O.C. MIN.

4. INSTALL 3/4" EXPANSION JOINT AT ALL VERTICAL STRUCTURE INTERFACE.

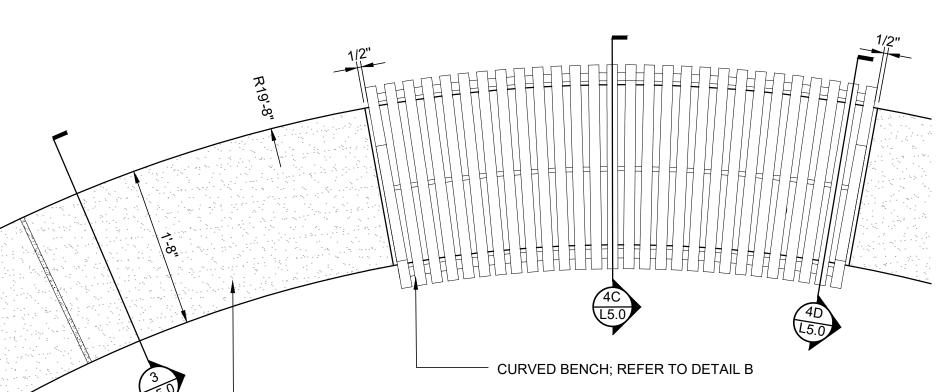
3. JOINT SAND COLOR TO BE SELECTED FROM SAMPLES.



SET IN PRE-DRILLED HOLES WITH EPOXY · 12" L X ¾" DIA. STAINLESS STEEL DOWEL, SET IN EPOXY. 2 PER **GRANITE BLOCK** $-\frac{3}{4}$ " MORTAR SETTING BED - CONCRETE FOUNDATION - COMPACTED GRAVEL BORROW TYPE 'B' - COMPACTED SUBGRADE

C. SECTION

D. SECTION



SOLID GRANITE STONE WALL

3/8" WIDE JOINTS, FILL JOINTS WITH

POLYMERIC JOINT SAND

MORTAR, MOISTENED

SLAB DRAINAGE

MESH

TYPE 'B'

- 2" THICK GAUGED GRANITE

PAVERS WITH THERMAL FINISH

- 3/4" DEPTH (3" MAX.) 4:1 STONE DUST: LATEX MODIFIED DRY

PROVIDE 4" DIA. PVC WEEPS WITH

STONEDUST, 6' O.C. MINIMUM FOR

6" x 6", W1.4 x W1.4 WELDED WIRE

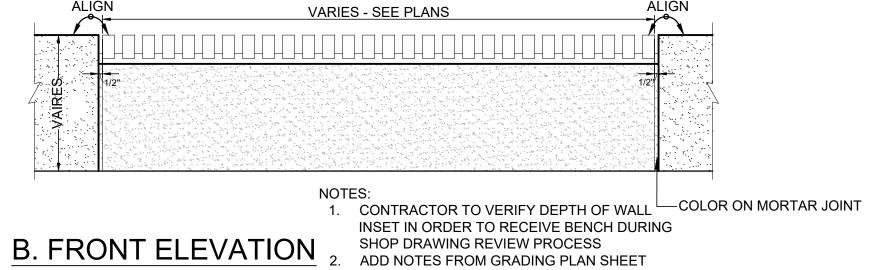
COMPACTED GRAVEL BORROW

COMPACTED SUBGRADE

REINFORCED CONCRETE SLAB WITH

FILTER FABRIC FILLED WITH

A. PLAN



GRANITE INSET TO RECEIVE BENCH TOP OF WALL ADJACENT TO INSET

TOP OF GRANITE WALL BEYOND TO MATCH

STANDARD "IN GROUND" MOUNT, CUT TO 6")

SEAT HEIGHT OF INSET BENCH

TUBULAR POST (MANUFACTURER

BENCH

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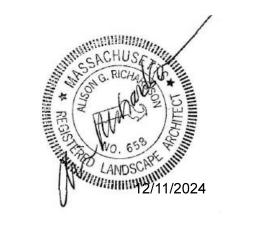
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

KEY PLAN:

	ISSUE:		
	NO.	REVISION	DATE

STAMPED AND SIGNED:



DRAWING TITLE:

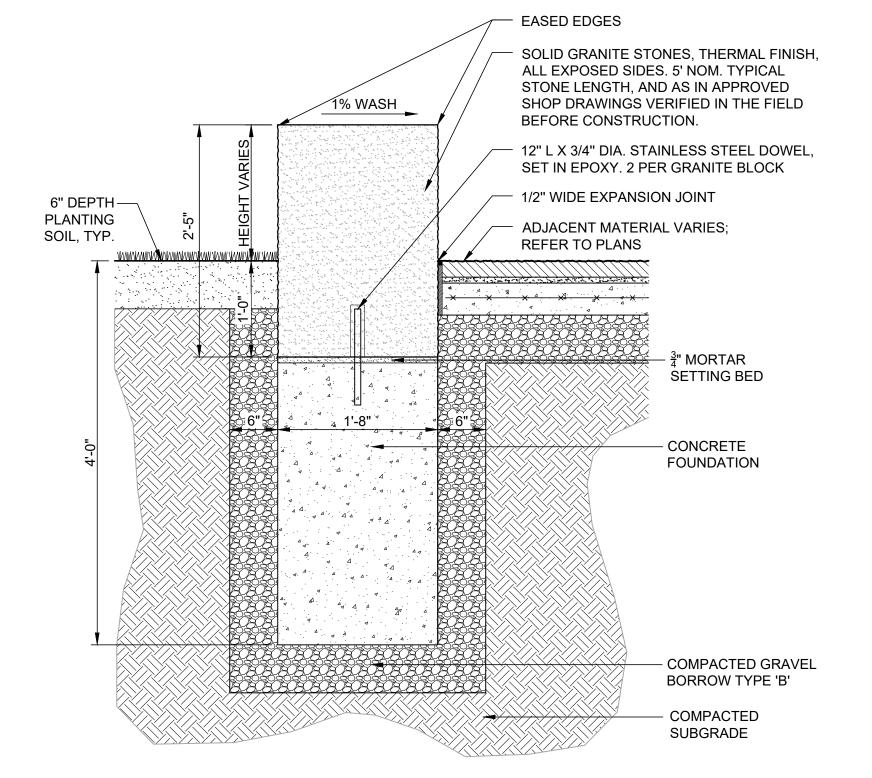
LANDSCAPE DETAILS PART 1 OF 5

	DESIGNED: JP	
	DRAWN: JP/CS	CHECKED: AR
	DATE: 12.11.2024	

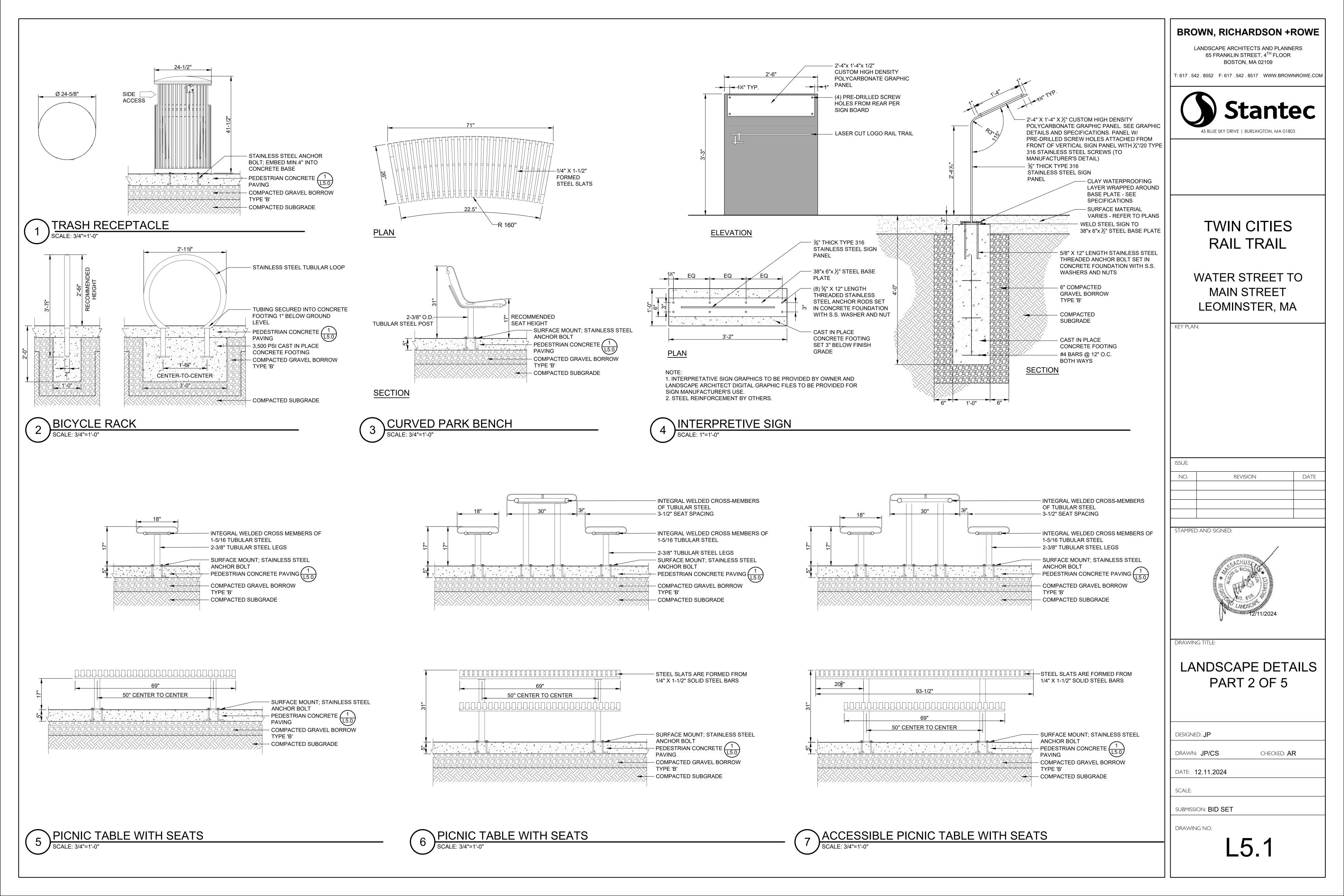
SUBMISSION: BID SET

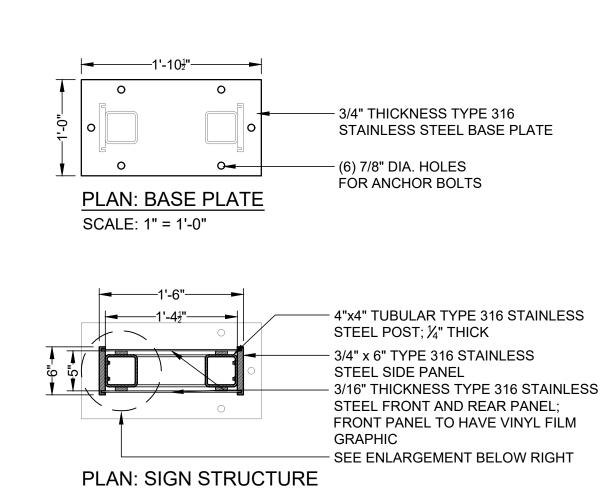
DRAWING NO.

L5.0

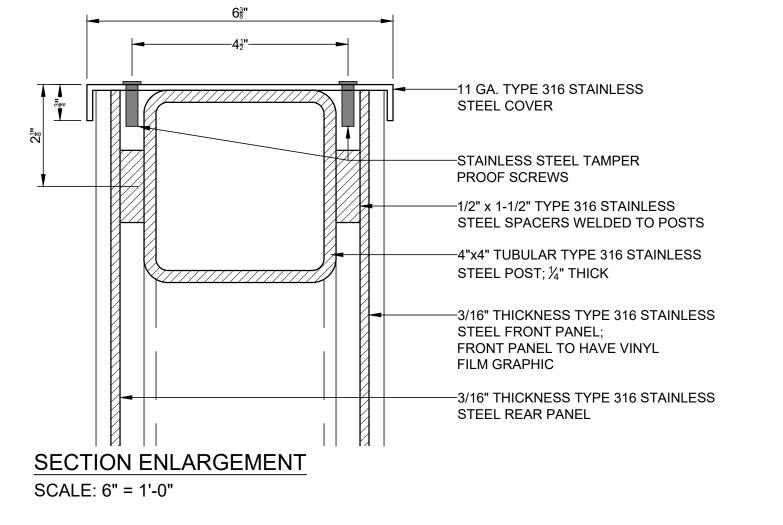


3 GRANITE SEAT WALL
SCALE: 1"=1'-0"





SCALE: 1" = 1'-0"



-SEE SECTION

REAR PANELS;

-SPACER BARS

-1/2" x 1-1/2" TYPE 316

-4"x4" TUBULAR TYPE

CROSS PIECE; 1/4"

THICK

316 STAINLESS STEEL

STAINLESS STEEL SPACERS

GRAPHIC

ENLARGEMENT ABOVE

-3/16" THICKNESS TYPE 316 STAINLESS STEEL FRONT AND

FRONT PANEL TO HAVE VINYL FILM

- CAULKED EXPANSION JOINT

TO BE DETERMINED BY

LANDSCAPE ARCHITECT

- FINISH GRADE;

AT GRANITE PAVING, COLOR

SURFACE VARIES, SEE PLAN

- CLAY WATERPROOFING LATER AROUND BASE PLATE; SEE SPEC.

-3/4" THICK STAINLESS STEEL

BASE PLATE SET ON 3/8"

MORTAR SETTING BED

(6) 5/8" DIA. STAINLESS

STEEL ANCHOR BOLTS

SET ON CONCRETE

FOOTING W/ #4 BARS

STEEL REINFORCEMENT,

·C.I.P. CONCRETE

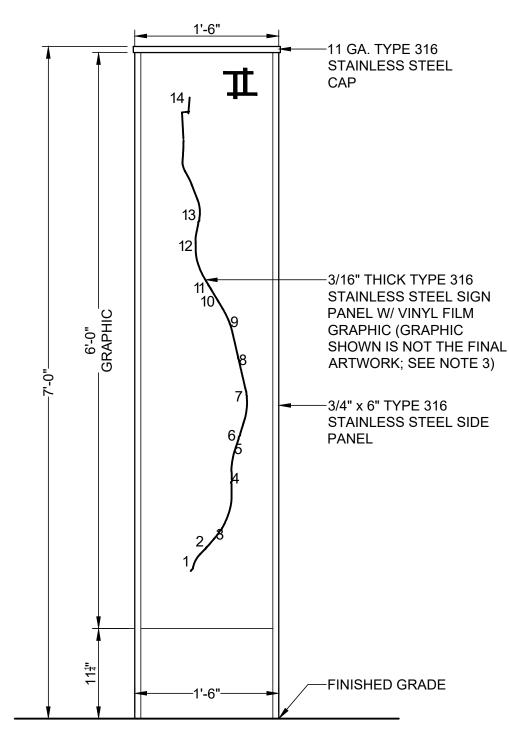
-6" COMPACTED

-COMPACTED

SUBGRADE

GRAVEL BORROW

TYP.



FRONT ELEVATION SCALE: 1" = 1'-0"

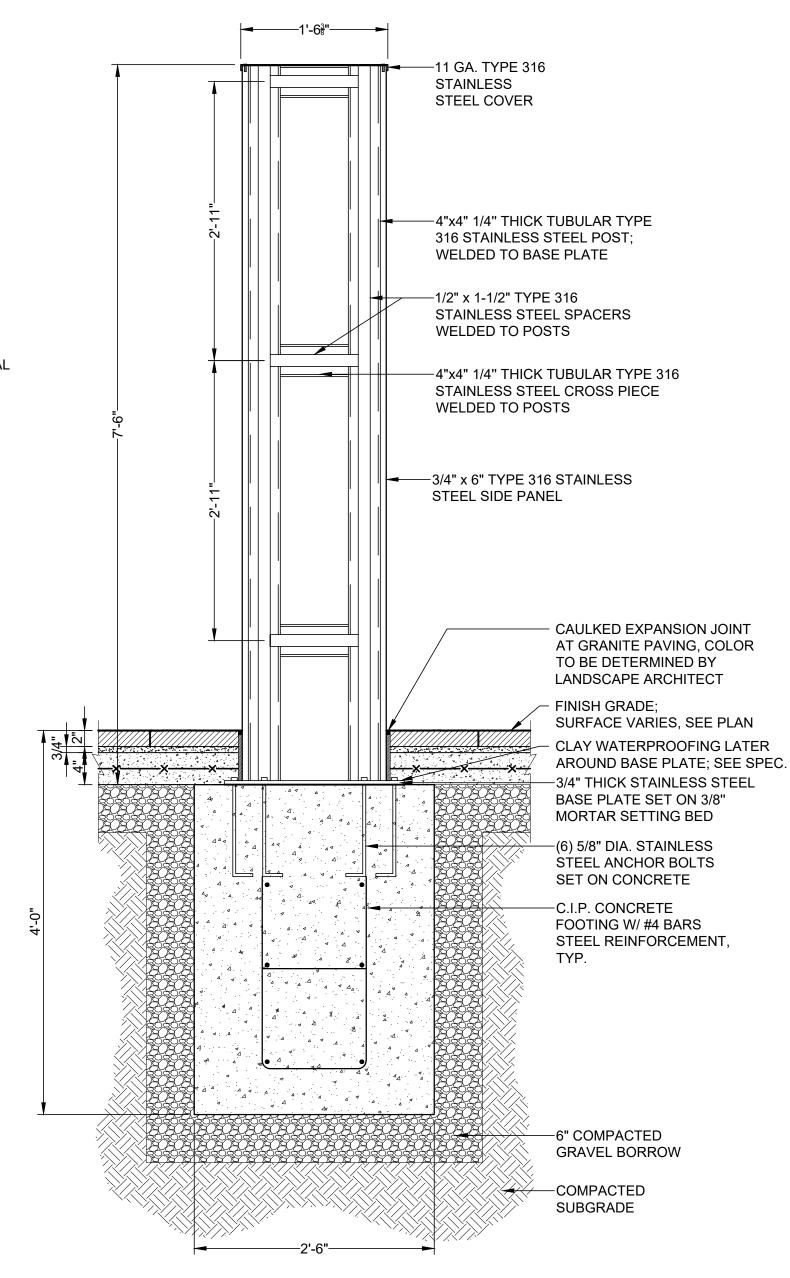
NOTES:

1. ALL ATTACHMENT HARDWARE TO BE TYPE 316 STAINLESS STEEL.

2. SEE SPECIFICATIONS FOR METAL FINISHES.

3. TRAIL SIGN GRAPHICS TO BE PROVIDED BY OWNER AND LANDSCAPE ARCHITECT. DIGITAL GRAPHIC FILES TO BE PROVIDED FOR SIGN MANUFACTURER'S USE.

4. STEEL REINFORCEMENT BY OTHERS.

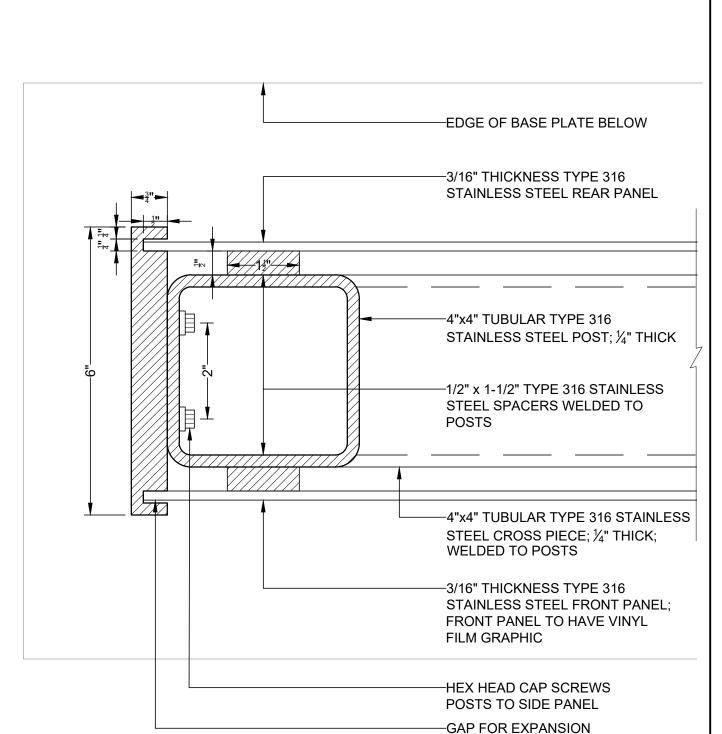


SECTION: FRONT/BACK

SCALE: 1" = 1'-0"

SECTION: SIDE SCALE: 1" = 1'-0"

--1'-10"---



PLAN ENLARGEMENT: TOP SCALE: 6" = 1'-0"

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TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

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STAMPED AND SIGNED:



DRAWING TITLE:

LANDSCAPE DETAILS PART 3 OF 5

DESIGNED: JP

DRAWN: JP/CS

CHECKED: AR

DATE: **12.11.2024**

SCALE:

SUBMISSION: BID SET

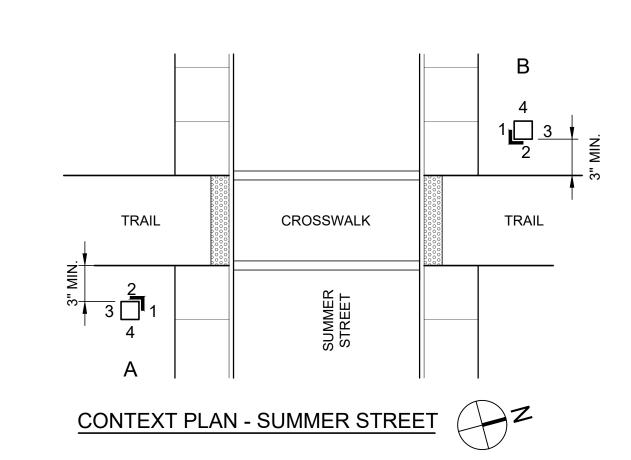
DRAWING NO.

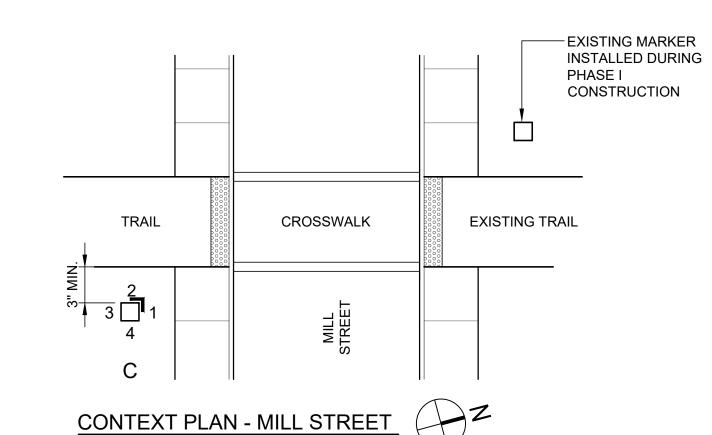
L5.2

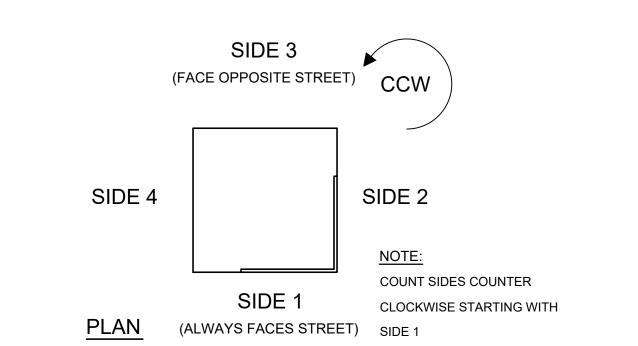
1 TRAILHEAD SIGN
SCALE: AS NOTED

	LOCATION/STREET NAME	STEEL F ORIENT		TEXT CONTENT
Α	SUMMER STREET (SOUTH SIDE) STA 208+89.75 (RT)	SIDE 1 & 2	3 1 1	T SUMMER STREET
В	SUMMER STREET (NORTH SIDE) STA 209+49.35 (LT)	SIDE 1 & 2	4 1 <u>1</u> 3	T SUMMER STREET
С	MILL STREET (SOUTH SIDE) STA 218+36.17 (RT)	SIDE 1 & 2	3 1 1	T MILL STREET

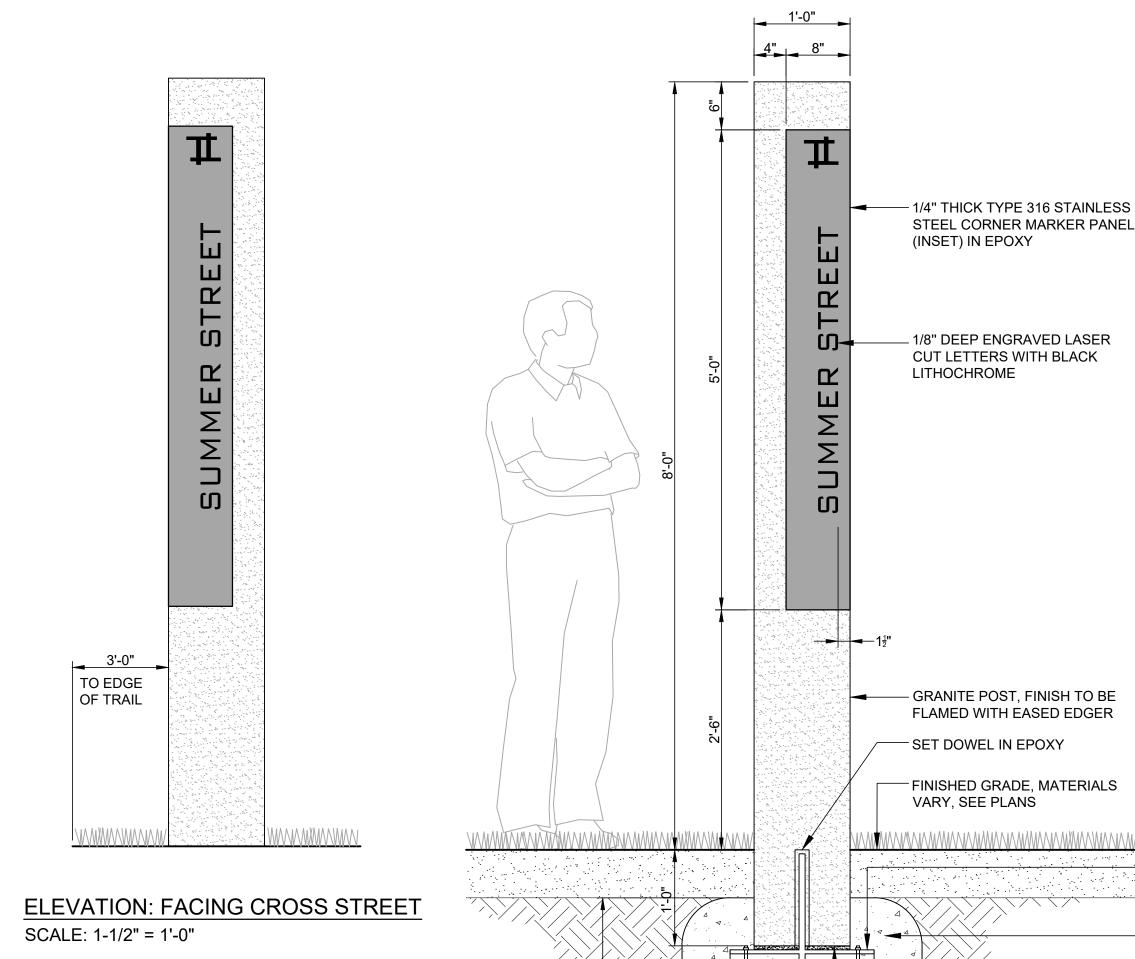
NOTE: TEXT IS ON SIDES 1 AND 2.



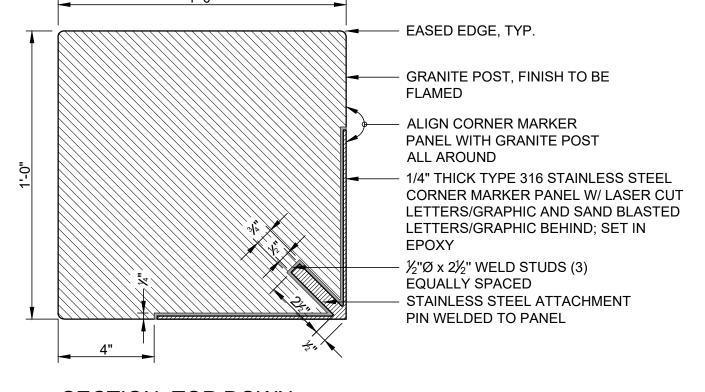




LT = LEFT SIDE OF TRAIL RT = RIGHT SIDE OF TRAIL



CONTRACTOR TO EXAMINE AS BUILT SIGNAGE PACKAGE ON PHASE 1 OF TRAIL IN LEOMINSTER. ALL DETAILS TO MATCH AS BUILT ELEMENTS.



SECTION: TOP DOWN SCALE: 3" = 1'-0"

CLAY WATERPROOFING LAYER AROUND BASE PLATE; SEE

CONCRETE CRADLE

-1/2" MORTAR JOINT

FOOTING

TYPE 'B'

1'-6"

SECTION: FACING TRAIL

SCALE: 1" = 1'-0"

3/4"x2' STAINLESS STEEL DOWEL WELDED TO 1/2" BASE

PLATE W/ (4) 1/2"x1' STAINLESS

STEEL BOLTS INTO CONCRETE

COMPACTED ORDINARY FILL

OR UNDISTURBED SUBGRADE

C.I.P. CONCRETE FOOTING W/

#4 BARS 12" O.C. BOTH WAYS

STEEL REINFORCEMENT, TYP.

COMPACTED GRAVEL BORROW,

GRANITE MARKER SCALE: 1"=1'-0"

BROWN, RICHARDSON +ROWE

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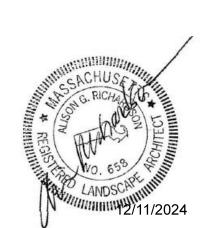
TWIN CITIES RAIL TRAIL

WATER STREET TO MAIN STREET LEOMINSTER, MA

ISSUE:		
NO.	REVISION	DATE

STAMPED AND SIGNED:

KEY PLAN:

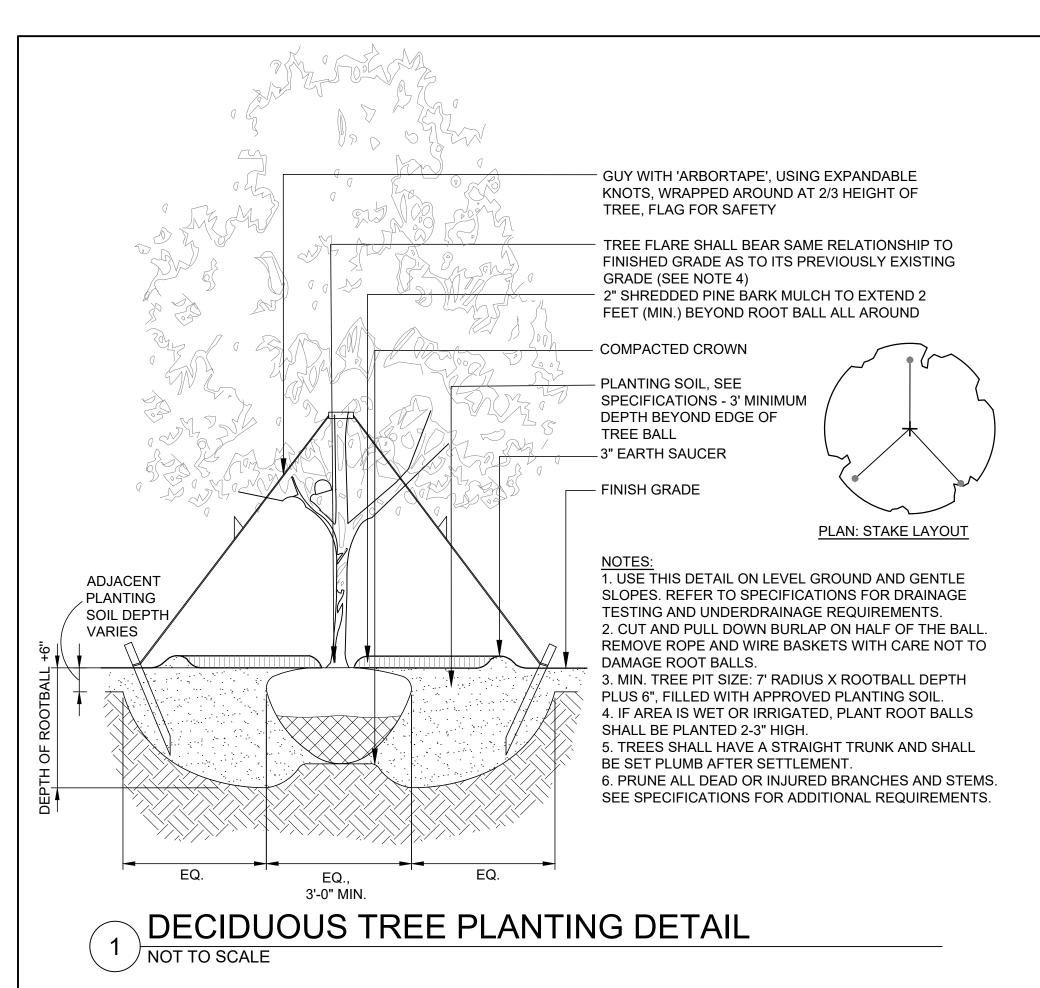


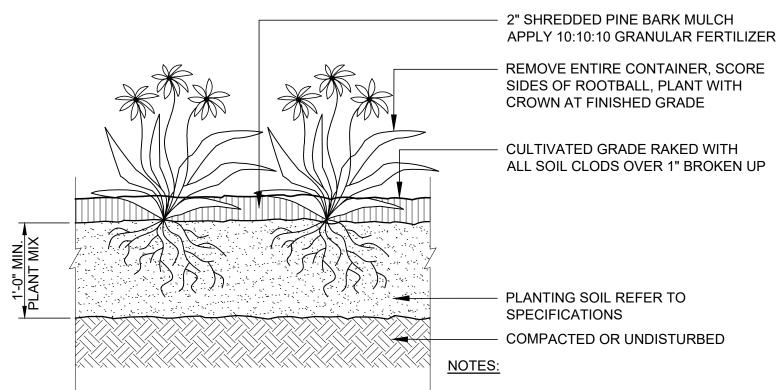
DRAWING TITLE:

LANDSCAPE DETAILS PART 4 OF 5

Designed: JP		
DRAWN: JP/CS	CHECKED: AR	
DATE: 12.11.2024		
SCALE:		
SUBMISSION: BID SET		
DRAWING NO.		

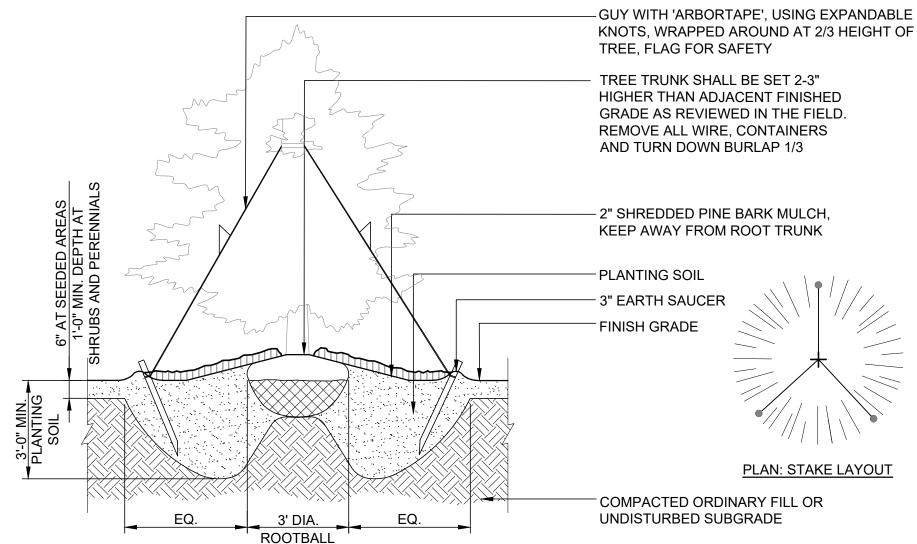
L5.3





- SEE PLANT LIST AND PLANS FOR TYPICAL SPACING.
 REMOVE ALL TAGS AFTER REVIEW AND APPROVAL IN
- THE FIELD BY THE LANDSCAPE ARCHITECT.
- 3. KEEP MULCH BEDS WEED AND GRASS-FREE.
- 4. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

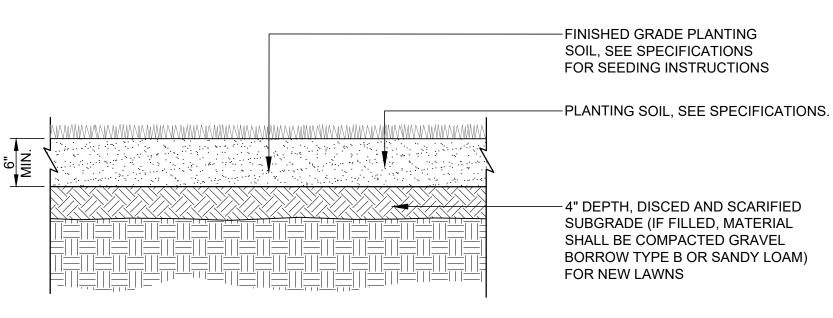
GROUNDCOVER, PERENNIAL, ORNAMENTAL GRASSES, PLANTING DETAIL



SHOWN

- 1. LIGHTLY PRUNE DAMAGED TREE BRANCHES OR NEEDLES AFTER PLANTING,
- KEEPING NATURAL SHAPE OF TREE. DO NOT SHEAR
- 2. SET TREE PLUMB, AFTER SETTLEMENT.
- 3. APPLY ANTI-DESSICANT PER SPECIFICATION REQUIREMENTS.
- INSTALL FERTILIZER PACKETS PER SPECIFICATION REQUIREMENTS.
 KEEP MULCH SAUCERS WEED AND GRASS-FREE.
- 6. DO NOT MOUND MULCH OVER TREE BALLS >2" DEPTH.
- 7. REFER TO SPECIFICATIONS FOR TREE PIT DRAINAGE TESTING BEFORE PLANTING.
- 8. MIN. TREE PIT SIZE: 5' RADIUS x ROOTBALL DEPTH PLUS 6", FILLED WITH
- APPROVED PLANTING SOIL.

EVERGREEN TREE PLANTING DETAIL NOT TO SCALE



NOTES:

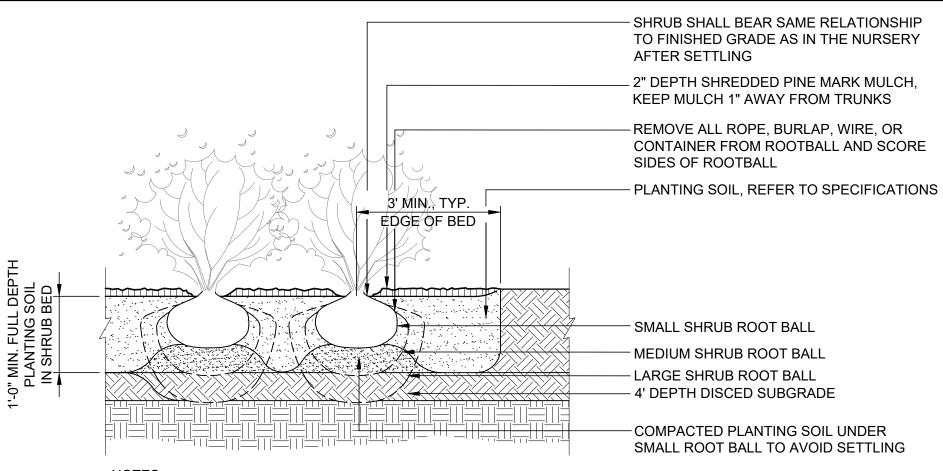
- 1. PLANTING SOIL DEPTH, NEW LAWN, SHALL BE 6" MINIMUM, VARIATIONS TO DEPTH MAY OCCUR ONLY AFTER REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.
- 2. SEE PLANTING PLAN AND SPECIFICATIONS FOR SEED MIXES AND
- APPLICATION RATES.

 3. PROTECTIVE FENCING SHALL BE ERECTED AND MAINTAINED AT PERIMETER OF ALL SODDED AND SEEDED AREAS UNTIL FINAL ACCEPTANCE.
- 4. FOR REFURBISHED LAWN AREAS, WEED EXISTING LAWN, RAKE EXISTING TOPSOIL, TOP DRESS WITH 1" NEW PLANTING SOIL AND SEED BARE SPOTS WITH APPROVED SEED MIXES. PROTECT UNTIL ACCEPTANCE.

SEEDED LAWN PLANTING DETAIL 5 SCALE: 1"=1'-0"

PLANT LIST

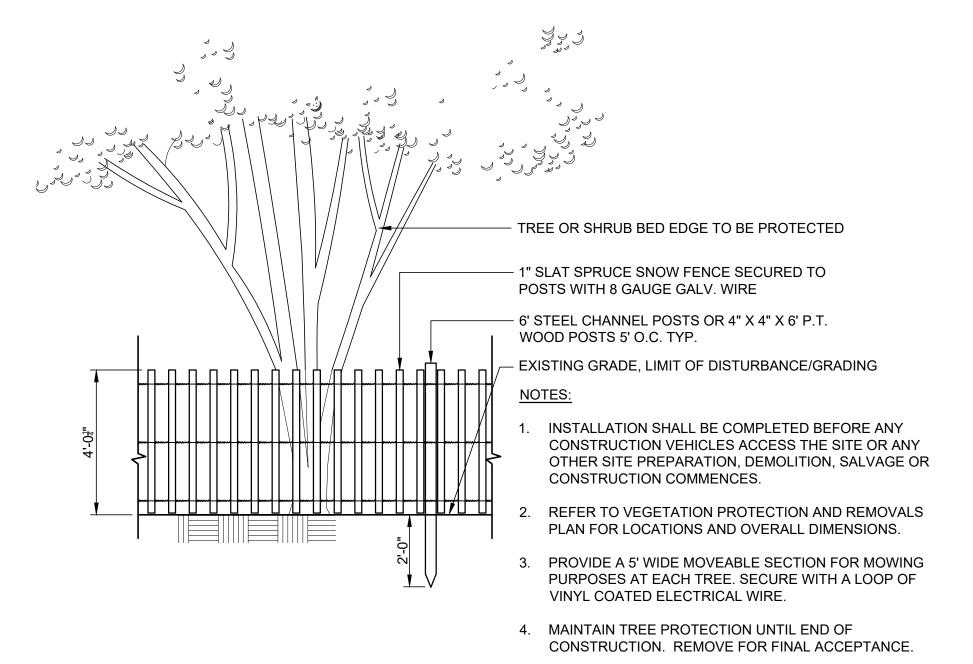
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SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	COMMENTS
TREES:	•			•	•	
AC	5	Amelanchier canadensis (Clump)	Shadbush	B&B	6'-8' HT. (3" CAL)	MATCHED SPECIMENS, CLUMP (3 TRUNKS MIN.)
CV	3	Crataegus viridis 'Winter King'	Winter King Hawthorn	B&B	2 ½"- 3" CAL.	MATCHED SPECIMENS
JV	3	Juniperus virginiana	Eastern Red Cedar	B&B	5'-6' HT.	NOT SHEARED, FULL TO BASE
LS	3	Liquidambar styraciflua 'Rotundiloba'	Roundleaf Sweetgum	B&B	3½"-4" CAL.	MATCHED SPECIMENS, 7' MIN. BRANCH HEIGHT
NS	1	Nyssa sylvatica	Black Tupelo	B&B	3½"-4" CAL.	SPECIMEN, 7' MIN. BRANCH HEIGHT
SHRUBS:	•				•	
CS	32	Cornus sericea	Redosier Dogwood	CONT.	7 GAL.	MATCHED
IG	18	llex glabra 'Shamrock'	Shamrock Inkberry	CONT.	7 GAL.	MATCHED
VT	8	Viburnum trilobum	Highbush Cranberry	CONT.	7 GAL.	MATCHED
PERENNIA	LS , GR	ASSES AND GROUND COVER:		•	•	
HJS	85	Hemerocallis 'Joan Senior'	Joan Senior Daylily	CONT.	1 Gal.	WELL ROOTED
HRR	130	Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	CONT.	1 Gal.	WELL ROOTED
RFG	71	Rudbeckia fulgida 'Goldsturm'	Black Eyed Susan	CONT.	1 Gal.	WELL ROOTED
SNA	90	Symphyotrichum novae-angliae	New England Aster	CONT.	1 Gal.	WELL ROOTED

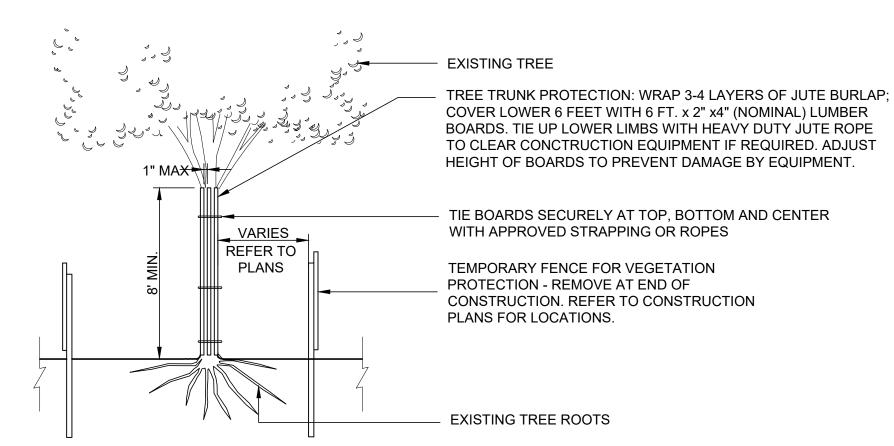


NOTES

- SEE PLANT LIST AND PLANS FOR TYPICAL SPACING.
 REMOVE ALL TAGS AFTER REVIEW AND APPROVAL
- IN THE FIELD BY THE LANDSCAPE ARCHITECT.
- 3. KEEP MULCH BEDS WEED AND GRASS-FREE.
- 4. REVIEW SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

3 SHRUB PLANTING DETAIL SCALE: 1/2"=1'-0"





5. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NOTES

- REMOVE ALL BURLAP, BOARDS, TIES AND FENCING AT COMPLETION OF CONSTRUCTION UPON APPROVAL OF OWNER.
- 2. ALL TREES IMPACTED BY CONSTRUCTION SHALL BE PRUNED, DEEP ROOT WATERED, FERTILIZED AND MULCHED (AS DIRECTED BY THE LANDSCAPE ARCHITECT) REFER TO SPECIFICATIONS.
- 3. TREE ROOTS SHOULD BE PROTECTED UP TO THE DRIPLINE OF TREE WHENEVER POSSIBLE.

6 TREE PROTECTION FENCING SCALE: NTS

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WATER STREET TO
MAIN STREET
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ISSUE:		
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DRAWING TITLE:

KEY PLAN:

LANDSCAPE DETAILS PART 5 OF 5

designed: JP	
DRAWN: JP/CS	CHECKED: AR
DATE: 12.11.2024	
SCALE:	
SUBMISSION: BID SET	
DRAWING NO.	

L5.4