



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL IN THE TOWNS OF HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS MIDDLESEX COUNTY

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

DCR CONTRACT NO. P19-3295-D1A

CHARLES D. BAKER, GOVERNOR

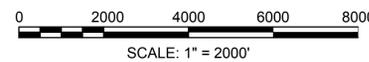
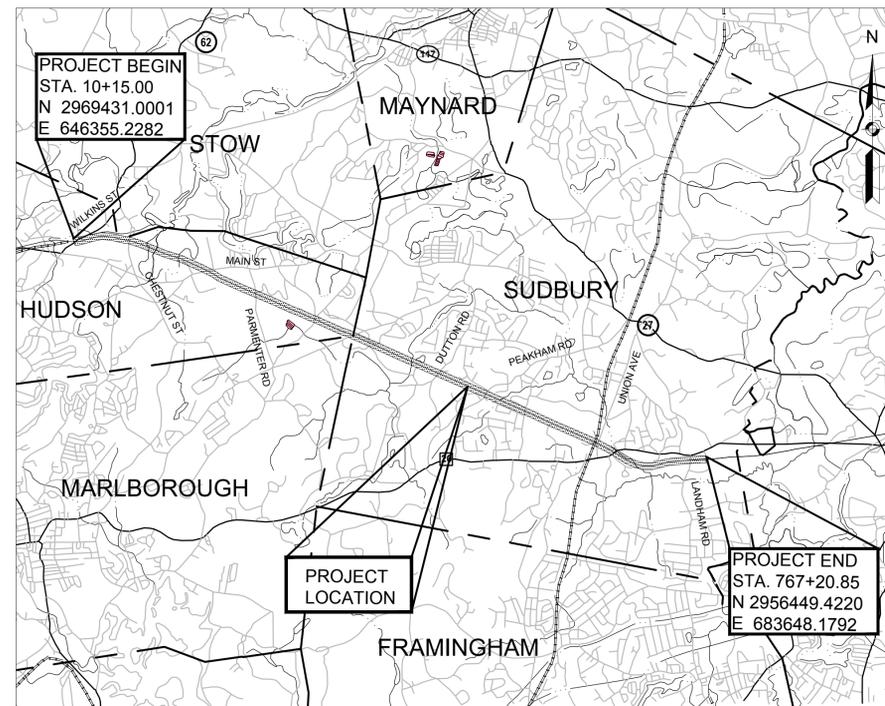
KARYN E. POLITO, LT. GOVERNOR

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EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

JIM MONTGOMERY, INTERIM COMMISSIONER
DEPARTMENT OF CONSERVATION & RECREATION

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LENGTH OF PROJECT = 40,410.06 FEET = 7.653 MILES

**SUDBURY STORMWATER PERMIT PLANS
NOT APPROVED FOR CONSTRUCTION**

ORIGINALLY SUBMITTED JULY 13, 2020
REVISED OCTOBER 21, 2020
REVISED DECEMBER 2, 2020
REVISED JANUARY 13, 2021

REV.	DATE	DESCRIPTION	BY

1-13-2021

Transportation Land Development
Environmental Services
101 Walnut St., P.O. Box 9151
Watertown, MA 02472
617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING							
MASS CENTRAL RAIL TRAIL - WAYSIDE							
MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA							
DESIGNER: JCR CHECKED: SHK DRAWN: JCR CHECKED: TAL	<table border="1"> <tr> <td colspan="2" style="text-align: center;"> TITLE SHEET & INDEX </td> <td style="text-align: center;"> SHEET NO. G-01 </td> </tr> <tr> <td> CONT. P19-3295-D1A ACC. XXXXXXXX </td> <td> SCALE: AS NOTED DATE: JAN 2021 </td> <td style="text-align: center;"> 1 OF 1 </td> </tr> </table>	TITLE SHEET & INDEX		SHEET NO. G-01	CONT. P19-3295-D1A ACC. XXXXXXXX	SCALE: AS NOTED DATE: JAN 2021	1 OF 1
TITLE SHEET & INDEX		SHEET NO. G-01					
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GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		CONCRETE BOUND/DRILL HOLE
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WETLAND FLAG
		WATER METER
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		WOOD GUARD RAIL
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT AREA BUFFER
		APPROX 200 FT RIVERFRONT BUFFER
		100 FT RIVERFRONT AREA BUFFER
		APPROX 100 FT RIVERFRONT AREA BUFFER
		AURA BUFFER
		100 FT AURA BUFFER
		100 FT VERNAL POOL AREA BUFFER
		STATE HIGHWAY LAYOUT/STATE OWNED LAND
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT
		EROSION CONTROL BARRIER
		TRAVERSE OR TRIANGULATION STATION
		CHECK DAM
		SE BENCH W/ CONCRETE PAD

ABBREVIATIONS

GENERAL	DESCRIPTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BOUND	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CB CI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LST	LANDSCAPE TIMBER
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT

ABBREVIATIONS (cont.)

GENERAL	DESCRIPTION
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TMA	TELEPHONE MAST ARM
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

GENERAL NOTES:

- THE PROPERTY LINES SHOWN ON THIS PLAN OF THE PARCELS AT 44 FOREST AVENUE IN HUDSON, 163 BOSTON POST ROAD IN SUDBURY AND THE FORMER RAILROAD RIGHT-OF-WAY ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN 2015 AND FROM DEEDS AND PLANS OF RECORD.
- THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE DEVELOPED FROM A COMBINED EFFORT OF AERIAL PHOTOGRAMMETRIC MAPPING BY EASTERN TOPOGRAPHICS, INC., BASED ON AERIAL PHOTOGRAPHS TAKEN ON FEBRUARY 22, 2013, AND AUGMENTED BY AN ON-THE-GROUND SURVEY PERFORMED BY VHB DURING 2015 AND 2017.
- THE HORIZONTAL CONTROL IS BASED ON THE MASSACHUSETTS MAINLAND STATE PLANE COORDINATE SYSTEM AND THE NATIONAL GEODETIC SURVEY (NAD83). ALL ELEVATION IS US FEET, REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88).
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND GRADES IN THE FIELD BEFORE COMMENCING WORK AND PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- THE DELINEATED WETLANDS SHOWN ON THIS PLAN WERE FLAGGED BY THE VHB ENVIRONMENTAL DEPARTMENT AND FIELD SURVEYED BY THE VHB SURVEY DEPARTMENT IN SEPTEMBER AND OCTOBER 2017 AND WERE UPDATED IN MAY 2018 (SUDBURY ONLY). IN HUDSON, ADDITIONAL WETLANDS WERE DELINEATED AND SURVEYED BY VHB IN JANUARY 2019.
- THE APPROXIMATE WETLANDS AND STREAMS, AND THEIR ASSOCIATED BUFFERS AND RIVERFRONT AREAS, WHERE APPLICABLE, WERE TAKEN FROM AVAILABLE MASSGIS DATA. THESE WERE NOT FIELD DELINEATED OR FIELD VERIFIED.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE AND SEWER STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES AND BOXES TO THE PROPOSED FINISH SURFACE GRADE. REQUIRED NEW MASONRY SHALL BE CLAY BRICK.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- EXISTING UTILITY POLES WILL BE RELOCATED BY OTHERS IF REQUIRED.
- TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
- THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
- JOINTS BETWEEN NEW ASPHALT CONCRETE ROADWAY PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDDED.
- EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- IF SUITABLE, ALL EXISTING GRANITE CURB & EDGING SHALL BE RE-USED IN THE PROPOSED WORK, EXCEPT CURVED STONES OF A DIFFERENT RADIUS THAN PROPOSED CURB.
- ALL PROPOSED HOT MIX ASPHALT CURB SHALL BE MASSDOT TYPE 3 UNLESS STATED OTHERWISE ON THE PLANS.
- ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
- DISPOSAL OF ALL SURPLUS MATERIAL SHALL BE AS APPROVED BY THE ENGINEER AND OWNER.
- ALL EXISTING EROSION CONTROL BARRIER, CONSTRUCTION FENCING AND SILT SACKS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES AND REMOVED AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE.

REV.	DATE	DESCRIPTION	BY

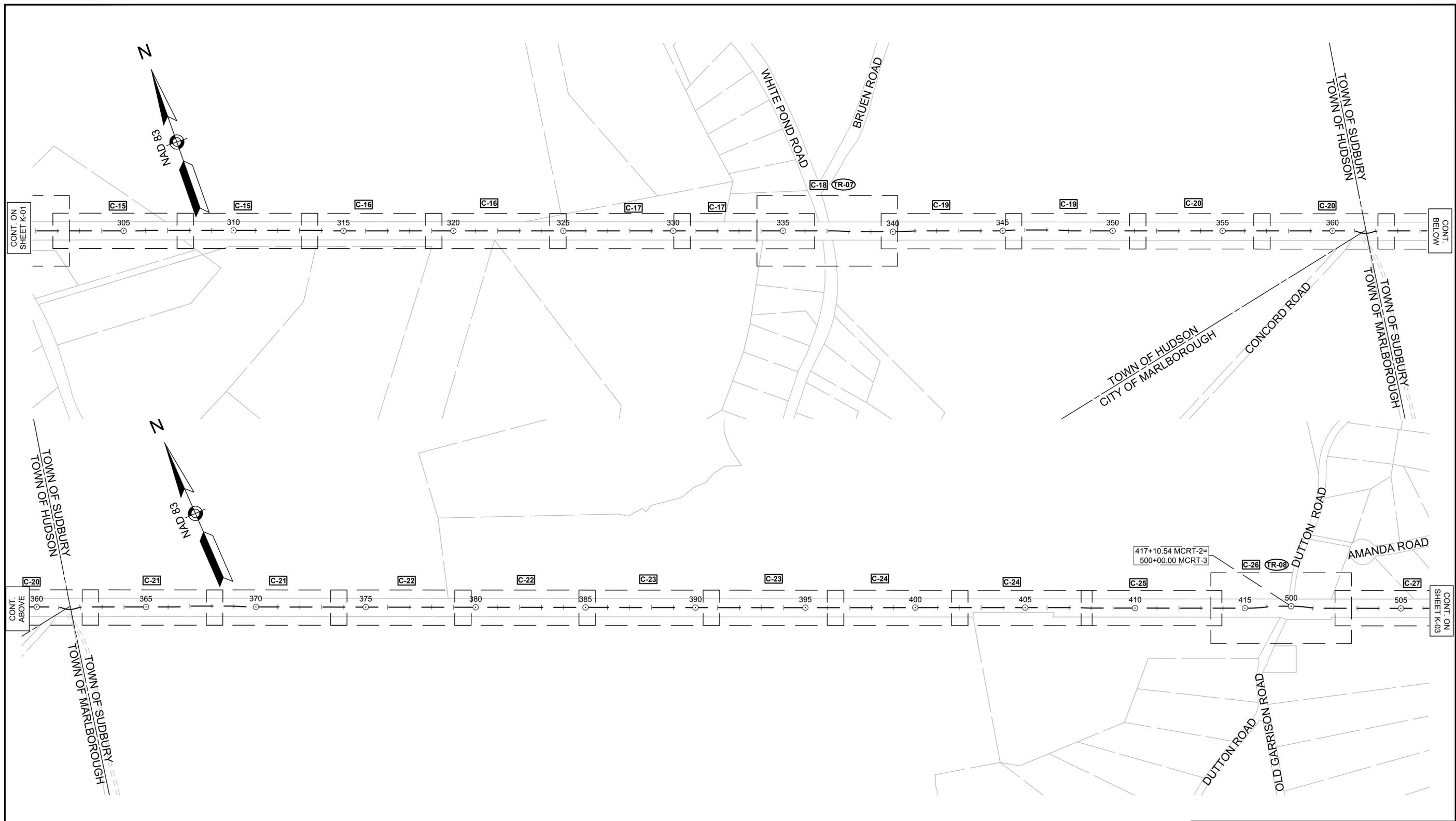
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: JCR	LEGEND ABBREVIATIONS & GENERAL NOTES	SHEET NO.
CHECKED: SHK		L-01
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: NTS
CHECKED: TAL	ACC: XXXXXXXx	DATE: JAN 2021





CONT. ON SHEET K-01

CONT. BELOW

CONT. ABOVE

CONT. ON SHEET K-03

LEGEND

- C-XX CONSTRUCTION PLANS
- TR-XX TRAFFIC PLANS



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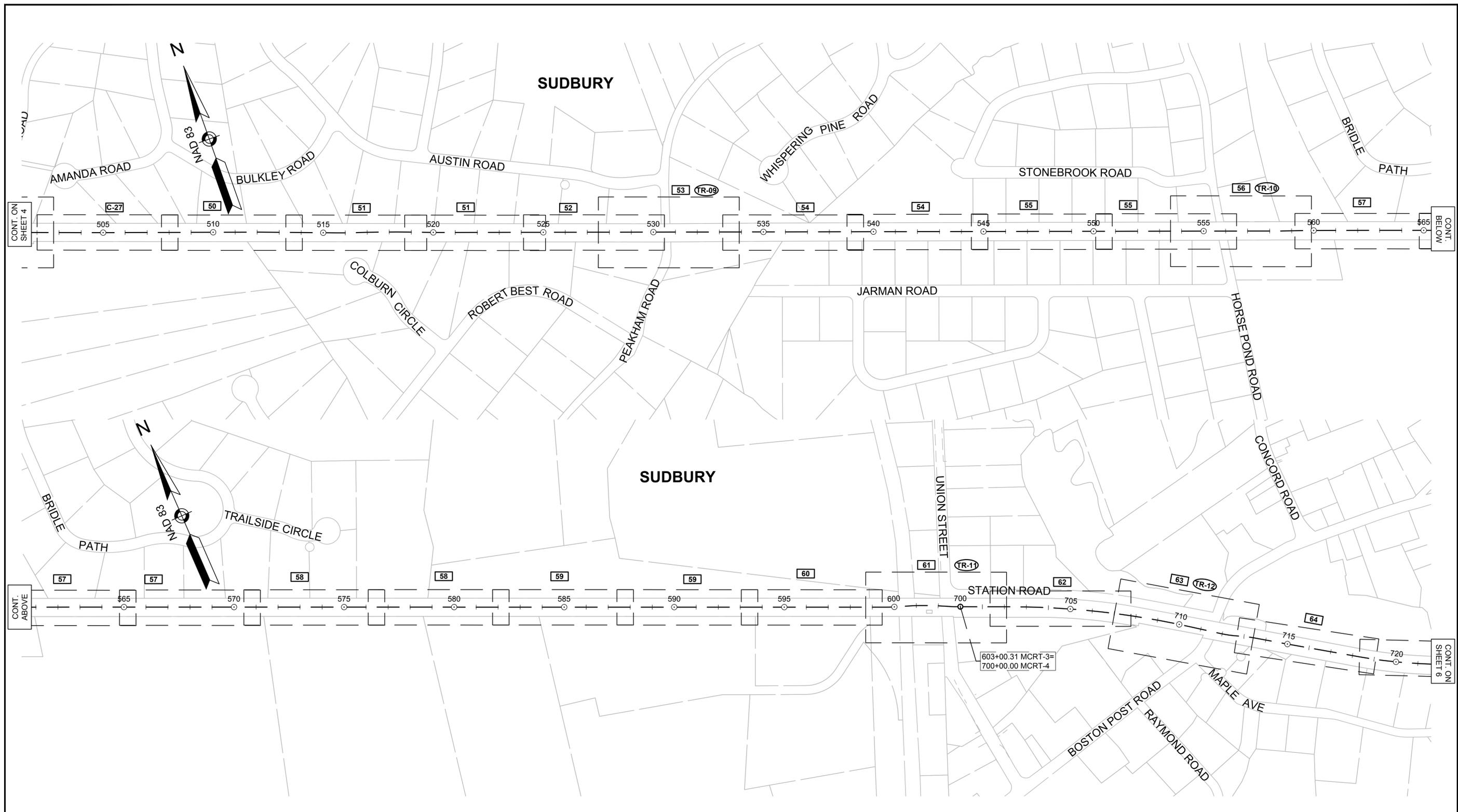


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DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER: JCR	KEY PLAN	SHEET NO.
CHECKED: SHK		K-02
DRAWN: JCR	CONT. P19-3295-D1A	SCALE: NTS
CHECKED: TAL	ACC. XXXXXXXx	DATE: JAN 2021

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CONT. ON SHEET 4

CONT. BELOW

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CONT. ON SHEET 6

LEGEND
 [C-XX] CONSTRUCTION PLANS
 [TR-XX] TRAFFIC PLANS



REV.	DATE	DESCRIPTION	BY

vhb
 Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

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 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
 MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

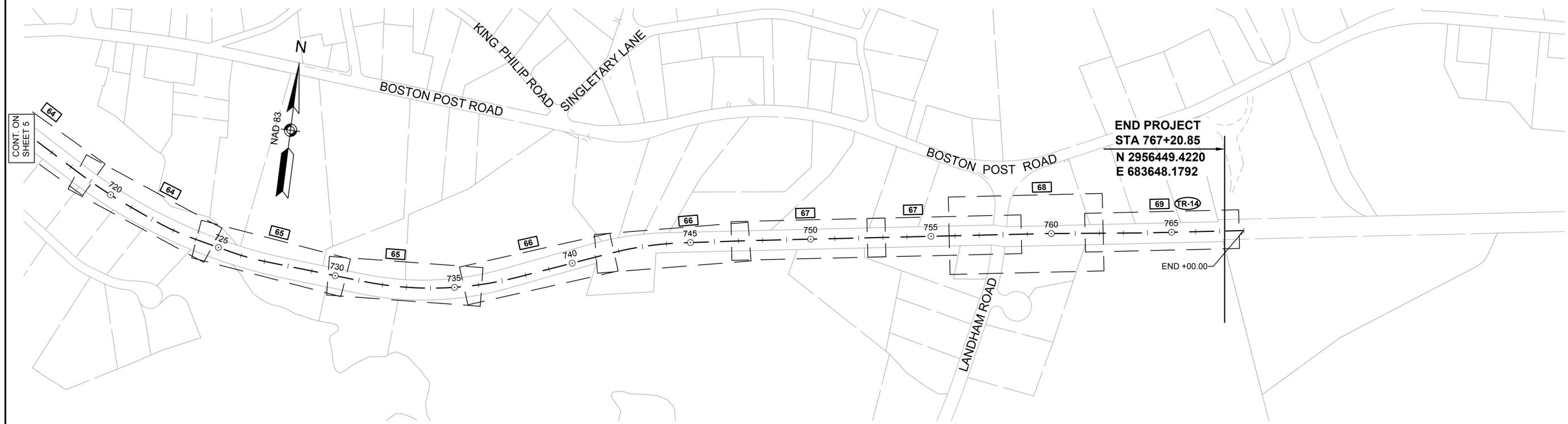
KEY PLAN

DESIGNER: JCR
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CONT. P19-3295-D1A
 ACC. XXXXXXx

SCALE: NTS
 DATE: JAN 2021

SHEET NO. **K-03**
 3 OF 4



LEGEND
 [C-XX] CONSTRUCTION PLANS
 [TR-XX] TRAFFIC PLANS

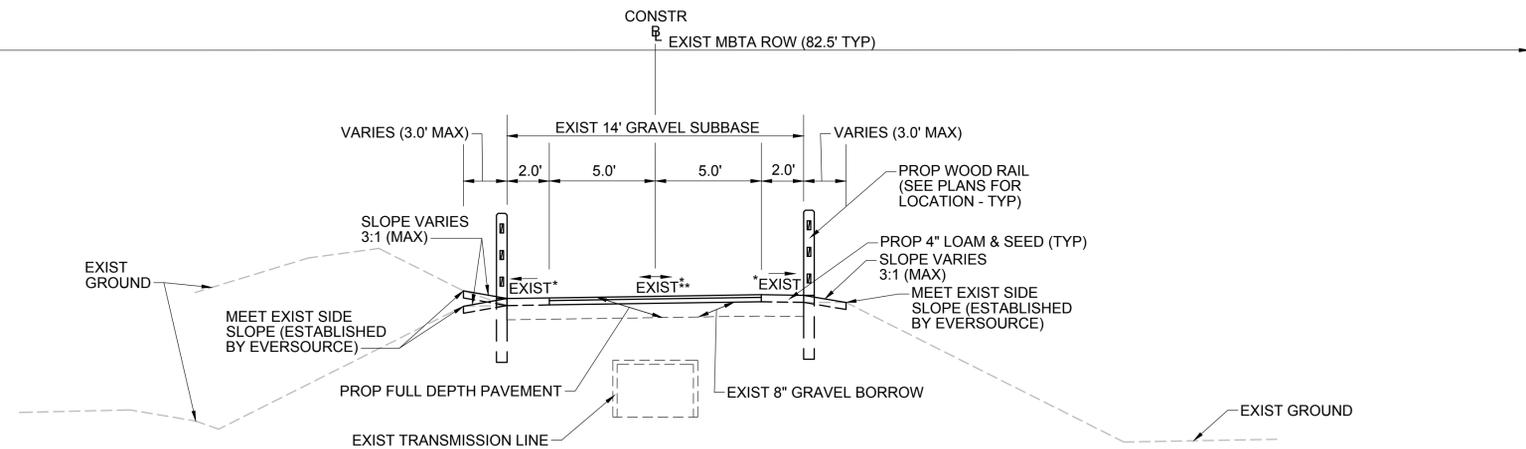


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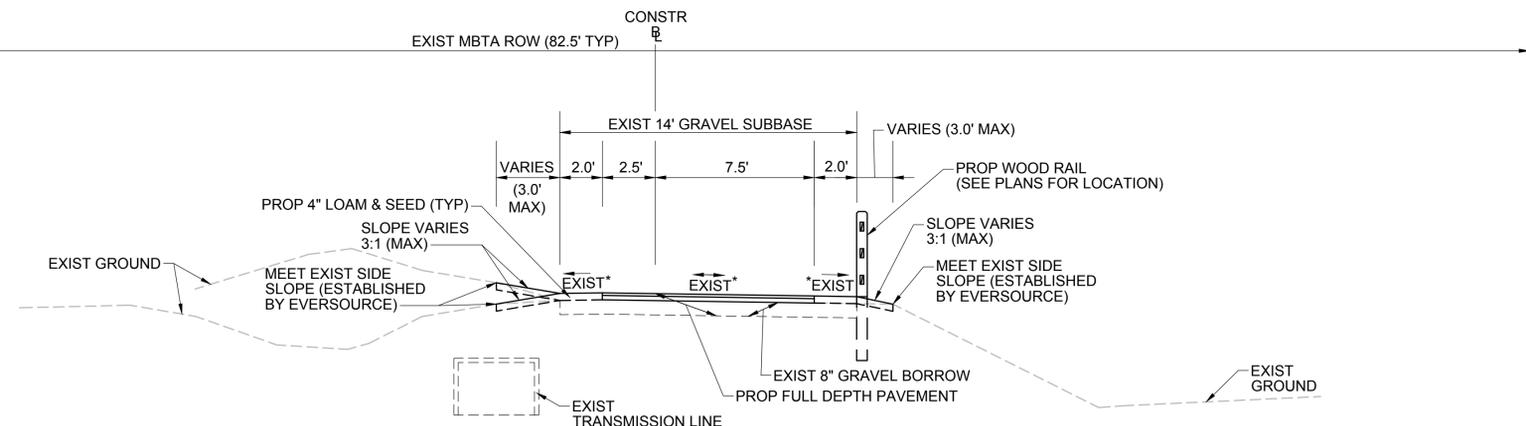
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MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA	
DESIGNER: JCR	KEY PLAN
CHECKED: SHK	SHEET NO. K-04
DRAWN: JCR	CONT. P19-3295-D1A
CHECKED: TAL	ACC. XXXXXXx
	SCALE: NTS
	DATE: JAN 2021
	4 OF 4



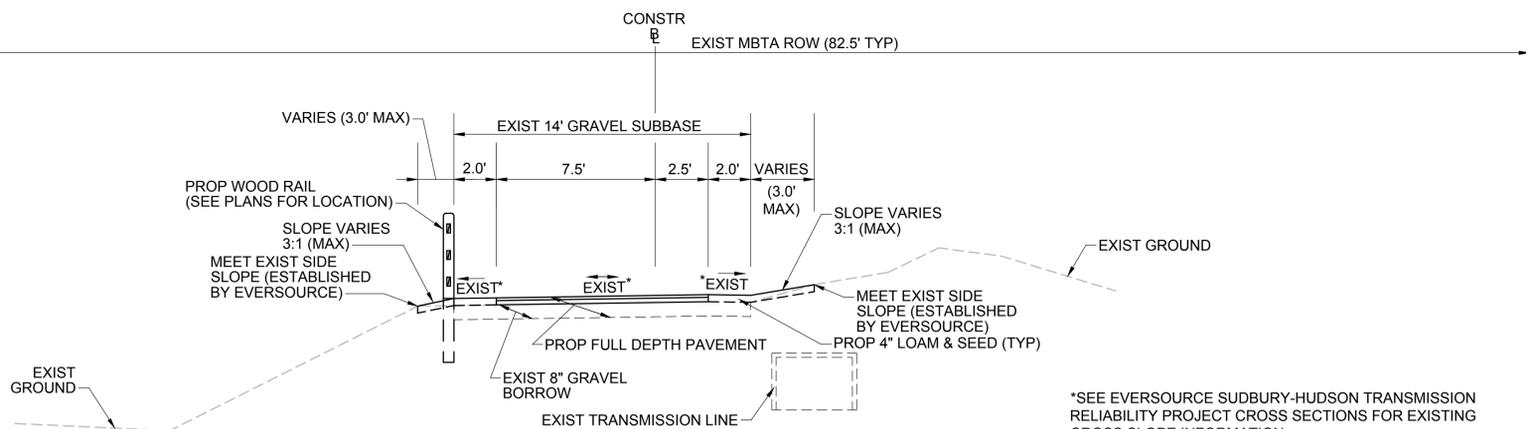
TYPICAL SECTION - TRANSMISSION LINE IN CENTER
NTS

*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION
**CROSS SLOPE IS CROWNED AT CONSTRUCTION @ FROM STATION 704+00 TO 710+50.



TYPICAL SECTION - TRANSMISSION LINE ON LEFT
NTS

*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION



TYPICAL SECTION - TRANSMISSION LINE ON RIGHT
NTS

*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

PAVEMENT NOTES

PROPOSED PATH PAVEMENT
SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)
INTERMEDIATE: 2.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)
SUBBASE: 8" GRAVEL BORROW, TYPE b

*NOTE:
FROM STA 100+00± TO STA 767+20± EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL BE USED FOR SUBBASE MATERIAL.

PROPOSED CATTLE CROSSING PAVEMENT
SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)
INTERMEDIATE: 2.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)

*NOTE:
2.5" SUPERPAVE INTERMEDIATE COURSE TO BE INSTALLED AS PART OF EVERSOURCE SUDBURY-HUDSON TRANSMISSION LINE RELIABILITY PROJECT.

PROPOSED CEMENT CONCRETE WHEELCHAIR RAMP

SURFACE: 6" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610
SUBBASE: 8" GRAVEL BORROW, TYPE b

*NOTE:
EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL BE USED FOR SUBBASE MATERIAL.

PROPOSED CEMENT CONCRETE PULL OFF/TURN AROUND

SURFACE: 4" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610
SUBBASE: 8" GRAVEL BORROW, TYPE b

*NOTE:
EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL BE USED FOR SUBBASE MATERIAL.

PROPOSED HOT MIX ASPHALT WALK

SURFACE: 1" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5)
1.5" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)
SUBBASE: 8" GRAVEL BORROW, TYPE b

NOTES:

- ALL HOT MIX ASPHALT SHALL BE PRODUCED WITH A WARM-MIX ASPHALT ADDITIVE.
- ALL HOT MIX ASPHALT PAVEMENTS SHALL BE CONSTRUCTED AND PRODUCED IN ACCORDANCE WITH SECTION 450 HOT MIX ASPHALT PAVEMENT.
- ASPHALT EMULSION FOR TACK COAT (RS-1H) SHALL BE SPRAY APPLIED FOR DOUBLE OVERLAP COVERAGE AT 0.05 GALLONS PER SQUARE YARD OVER SMOOTH SURFACES.
- HMA JOINT SEALANT (ASPHALT RUBBER) SHALL BE APPLIED IN SURFACE COURSE AT ALL VERTICAL COLD JOINTS PRIOR TO PAVING.
- ALL HOT MIX ASPHALT WALKS SHALL BE MEASURED AND PAID FOR UNDER ITEM 702 OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

REV.	DATE	DESCRIPTION	BY



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DEPARTMENT OF CONSERVATION AND RECREATION
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MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

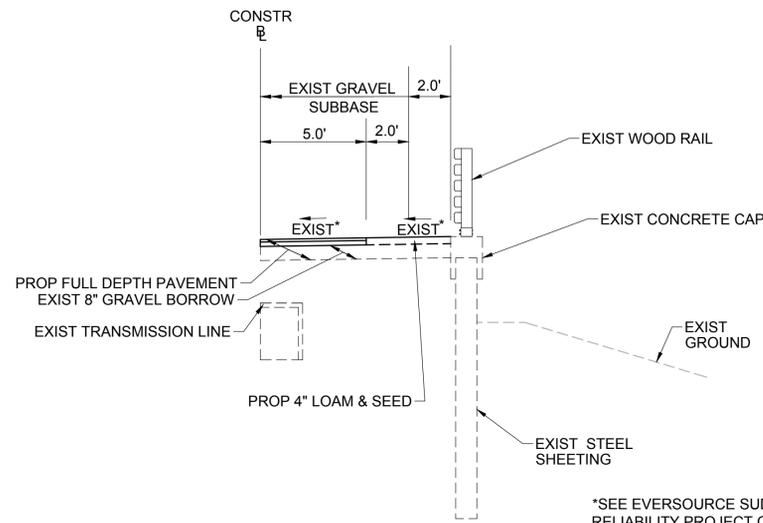
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CHECKED: TAL

TYPICAL SECTIONS & PVMT NOTES

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

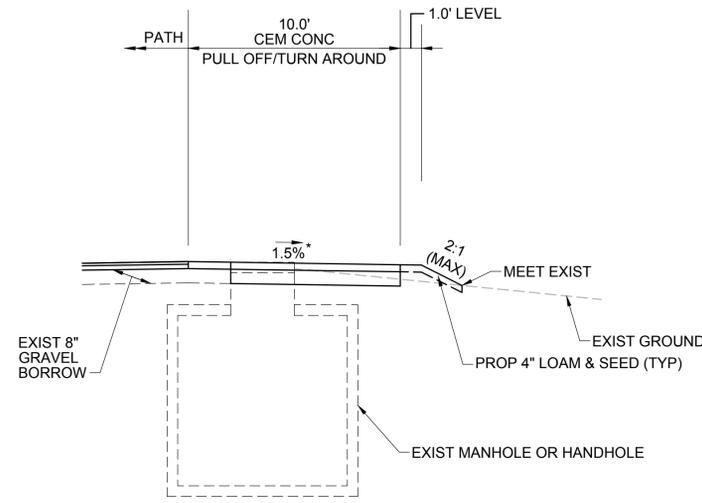
SHEET NO. **TS-01**
1 OF 2



*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

SHEETING SECTION RT

STA 148+25± TO STA 148+49±, STA 149+13± TO STA 149+75±, STA 399+91± TO STA 400+07±, STA 400+58± TO STA 401+25±, STA 724+73± TO STA 725+03±, STA 725+59± TO STA 725+96±, STA 731+00± TO STA 734+25±
NTS



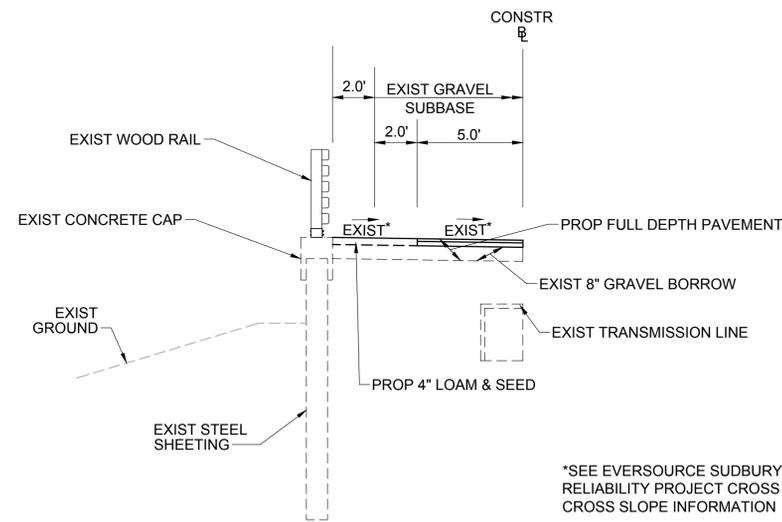
*TOLERANCE FOR CONSTRUCTION ±0.5%

TYPICAL SECTION - PULL OFF/TURN AROUND

NTS

PAVEMENT NOTES

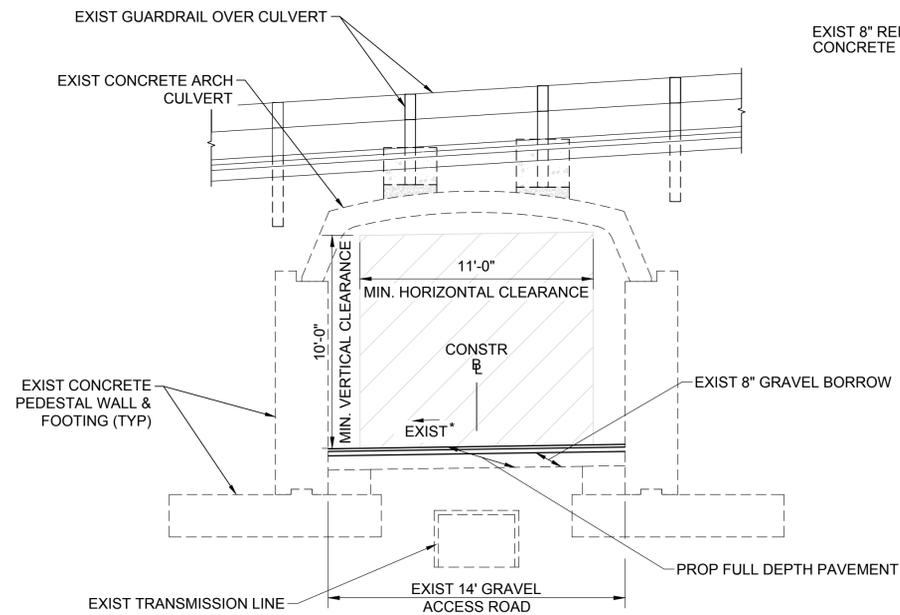
*SEE SHEET TS-01



*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

SHEETING SECTION LT

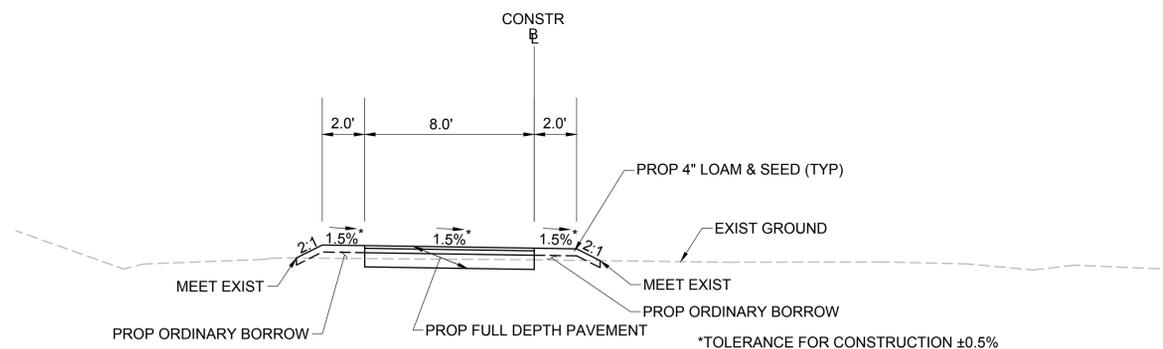
STA 119+00± TO STA 119+38±, STA 119+52± TO STA 125+00±, STA 148+25± TO STA 148+49±, STA 149+13± TO STA 149+75±, STA 300+50± TO STA 400+07±, STA 400+58± TO STA 401+25±, STA 724+73± TO STA 725+03±, STA 725+59± TO STA 725+96±
NTS



*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

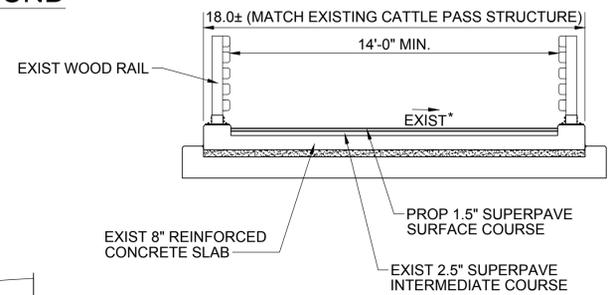
CHESTNUT STREET CULVERT

STA 132+44± TO STA 132+84±
NTS



TYPICAL SECTION - MCRT CONNECTION

STA 10+15± TO STA 12+40±
NTS



CATTLE CROSSING

STA 119+38± TO STA 119+52±
NTS

*SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

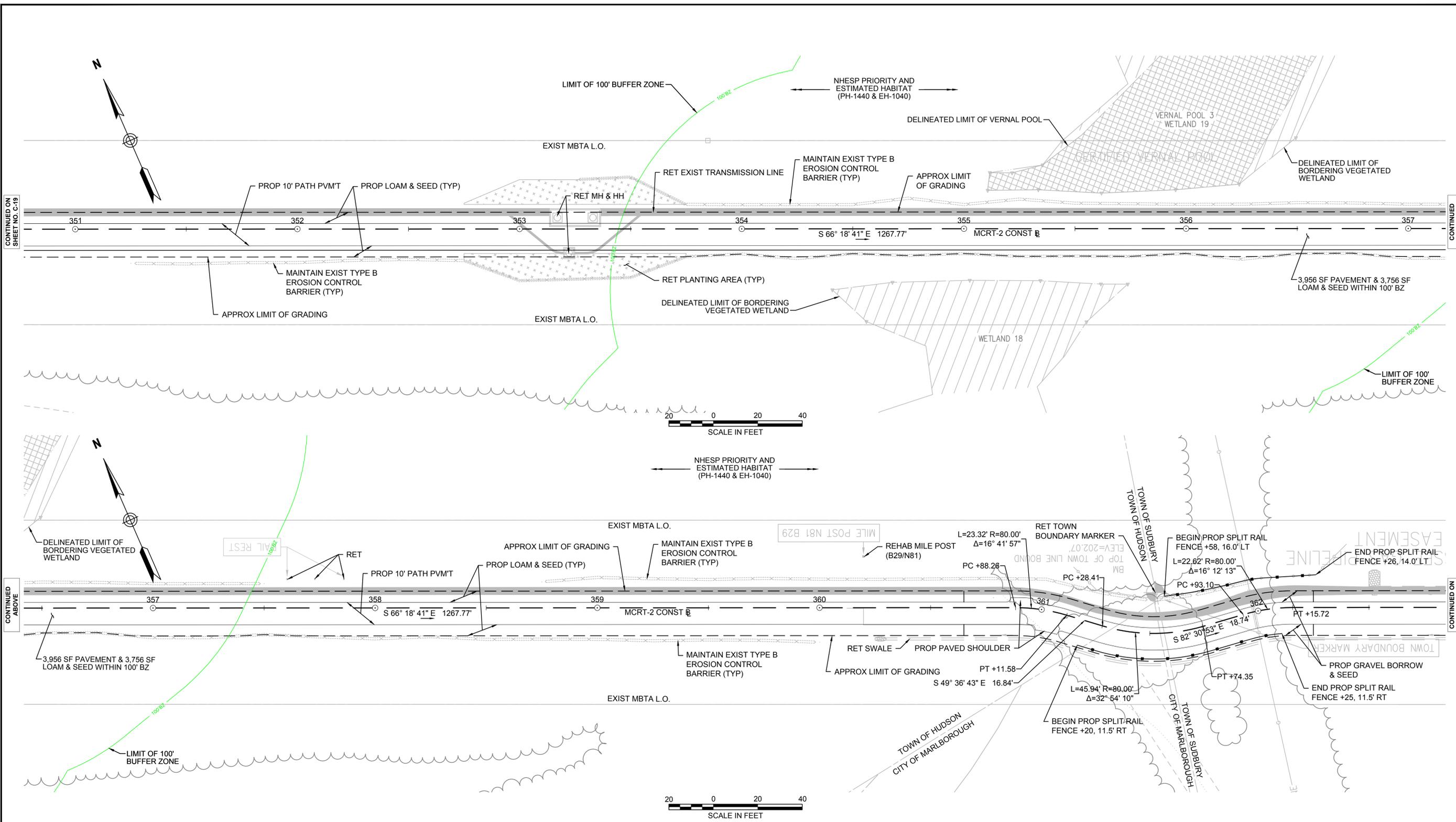
REV.	DATE	DESCRIPTION	BY



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER: JCR	TYPICAL SECTIONS & PVMT NOTES	SHEET NO. TS-02
CHECKED: SHK		
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED FEBRUARY 5, 2018 (MADEP FILE NO. 190-0611).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

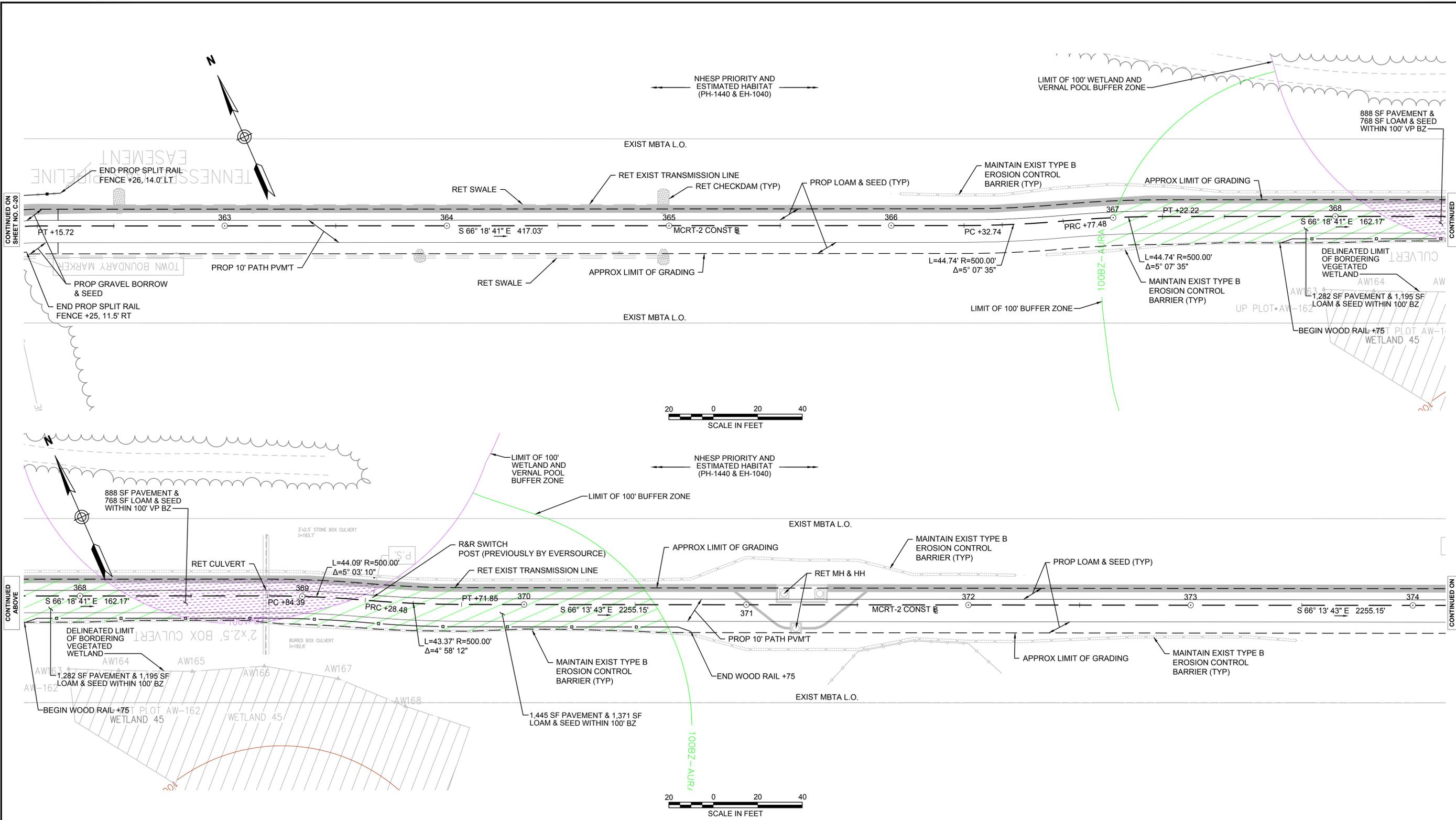
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-20**
 20 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

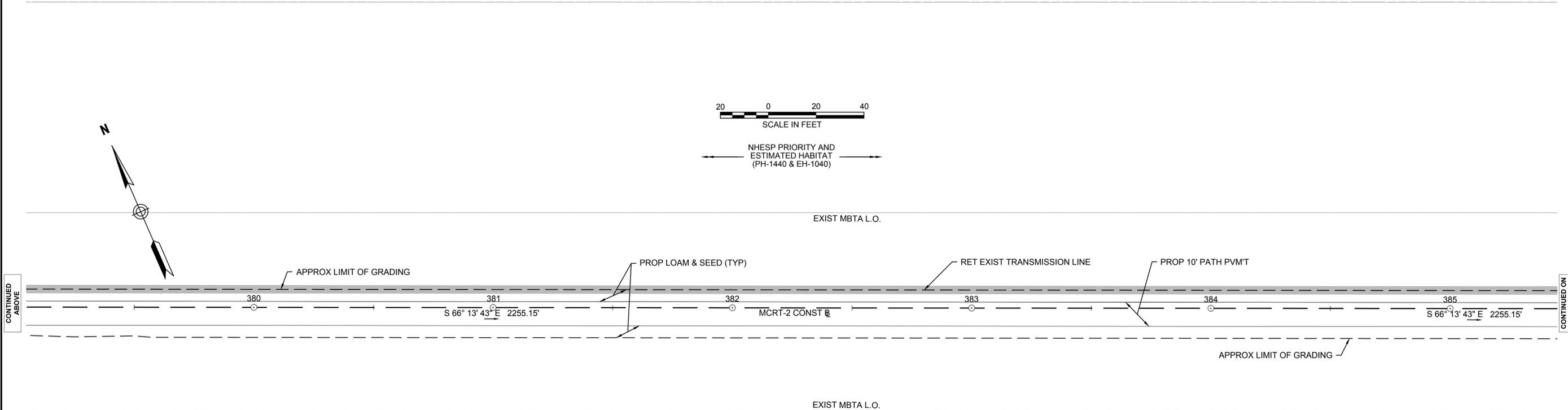
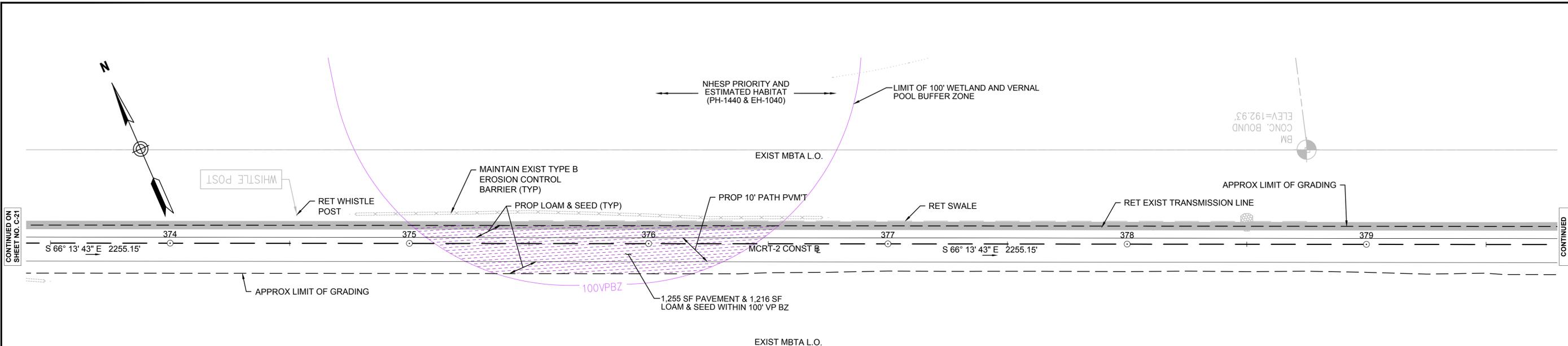
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-21**
 21 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
HATCH	DESCRIPTION
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

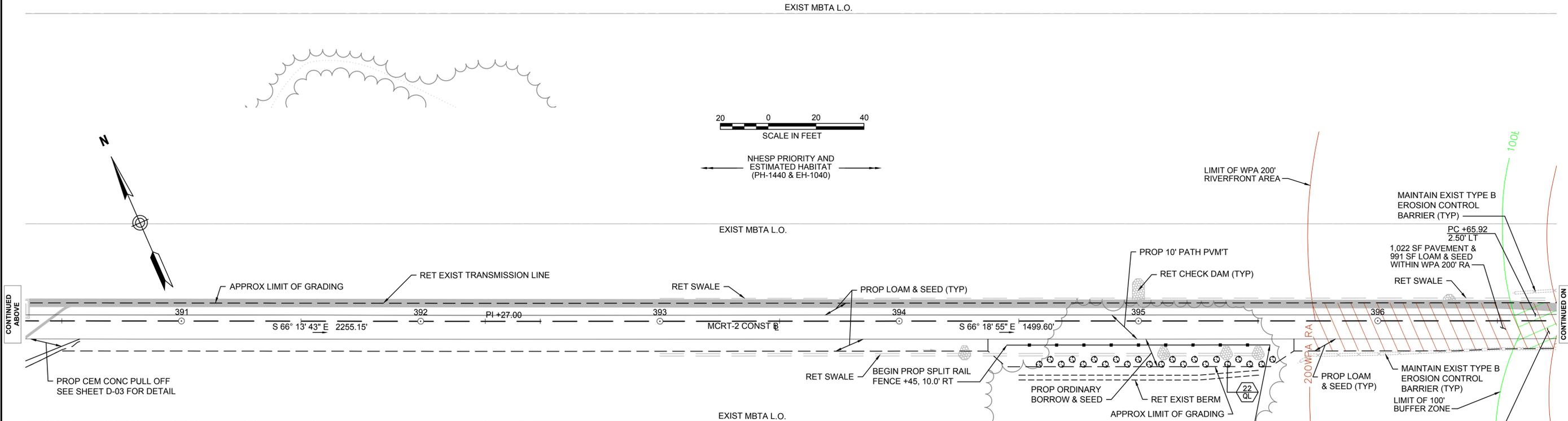
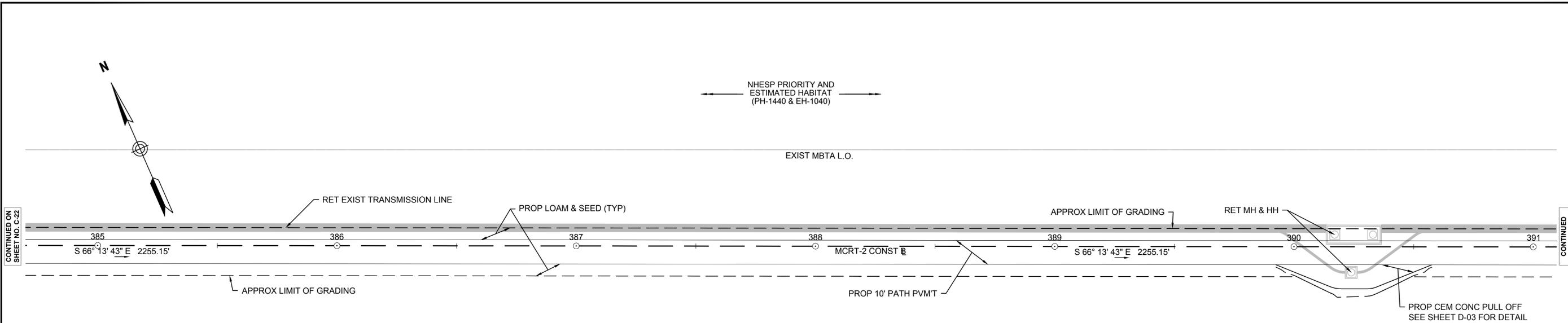
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DESIGNER: JCR
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 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-22**
 22 OF 46



NHESP PRIORITY AND ESTIMATED HABITAT (PH-1440 & EH-1040)



PROPOSED PLANTINGS					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
TREES					
QL	QUERCUS LILICIFOLIA	SCRUB OAK	12-18" HT	60" O.C.	22

NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

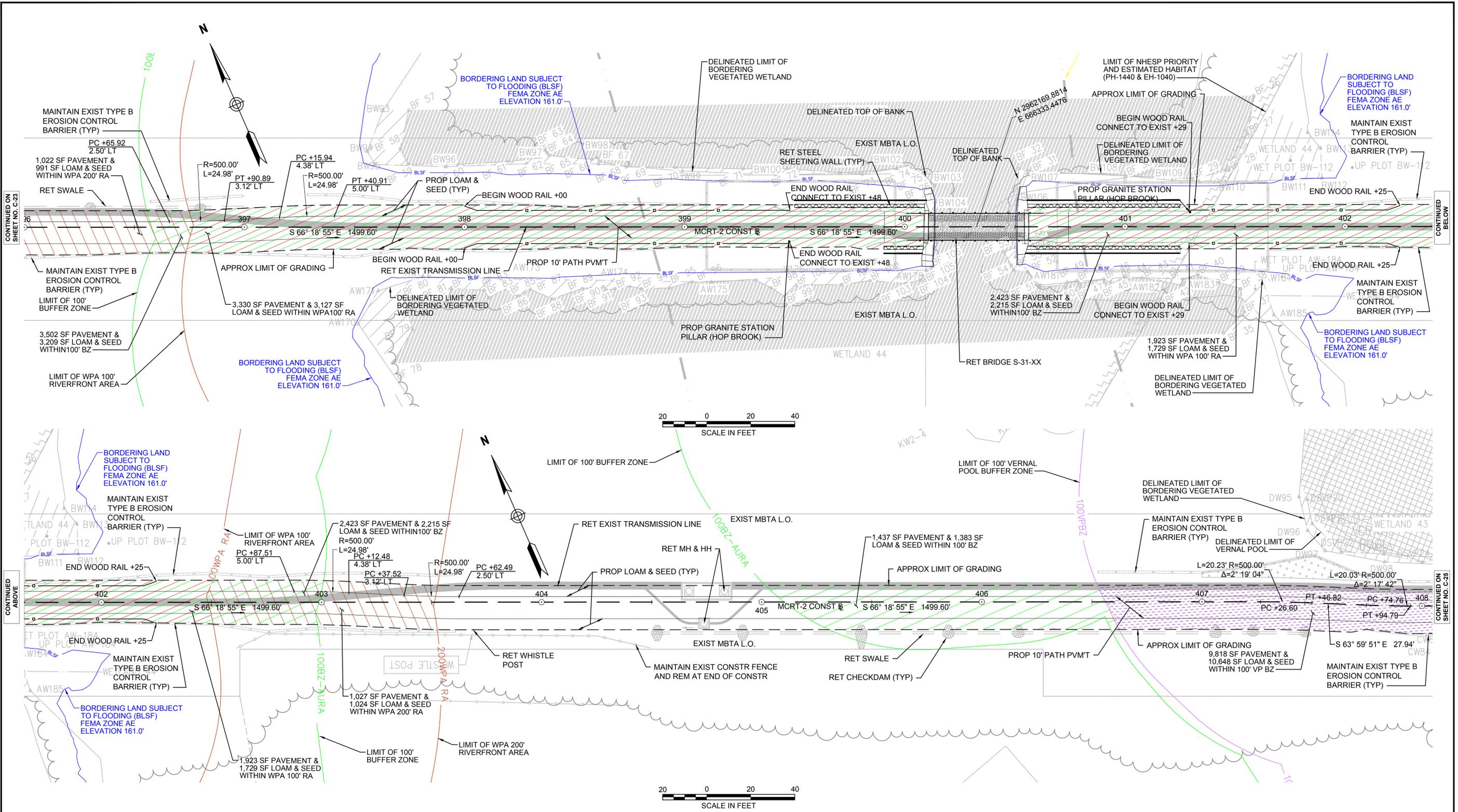
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX
 SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-23**
 23 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
[Hatched Pattern]	ISOLATED VEGETATED WETLAND
[Hatched Pattern]	BORDERING VEGETATED WETLAND
[Hatched Pattern]	LAND UNDER WATER
[Hatched Pattern]	VERNAL POOL
[Hatched Pattern]	PERMANENT DISTURBANCE TO VEGETATED WETLAND
[Hatched Pattern]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
[Hatched Pattern]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Pattern]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Pattern]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Pattern]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Pattern]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Pattern]	DISTURBANCE TO BLSF
[Hatched Pattern]	EXISTING TREE LINE
[Hatched Pattern]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

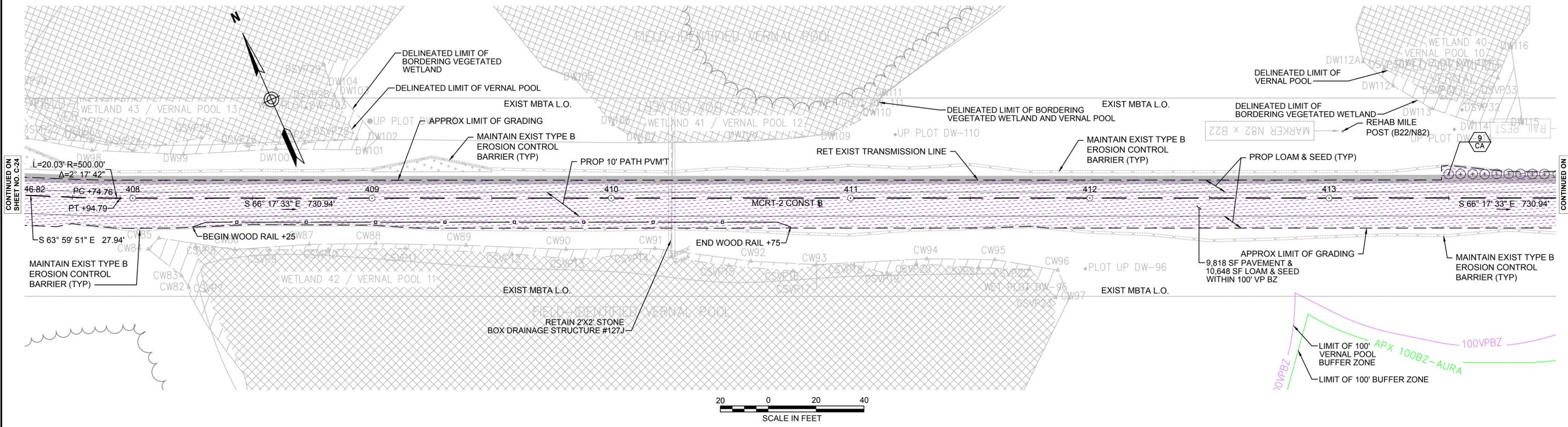
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-24**
 24 OF 46



CONTINUED ON SHEET NO. C-24

CONTINUED ON SHEET NO. C-26

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

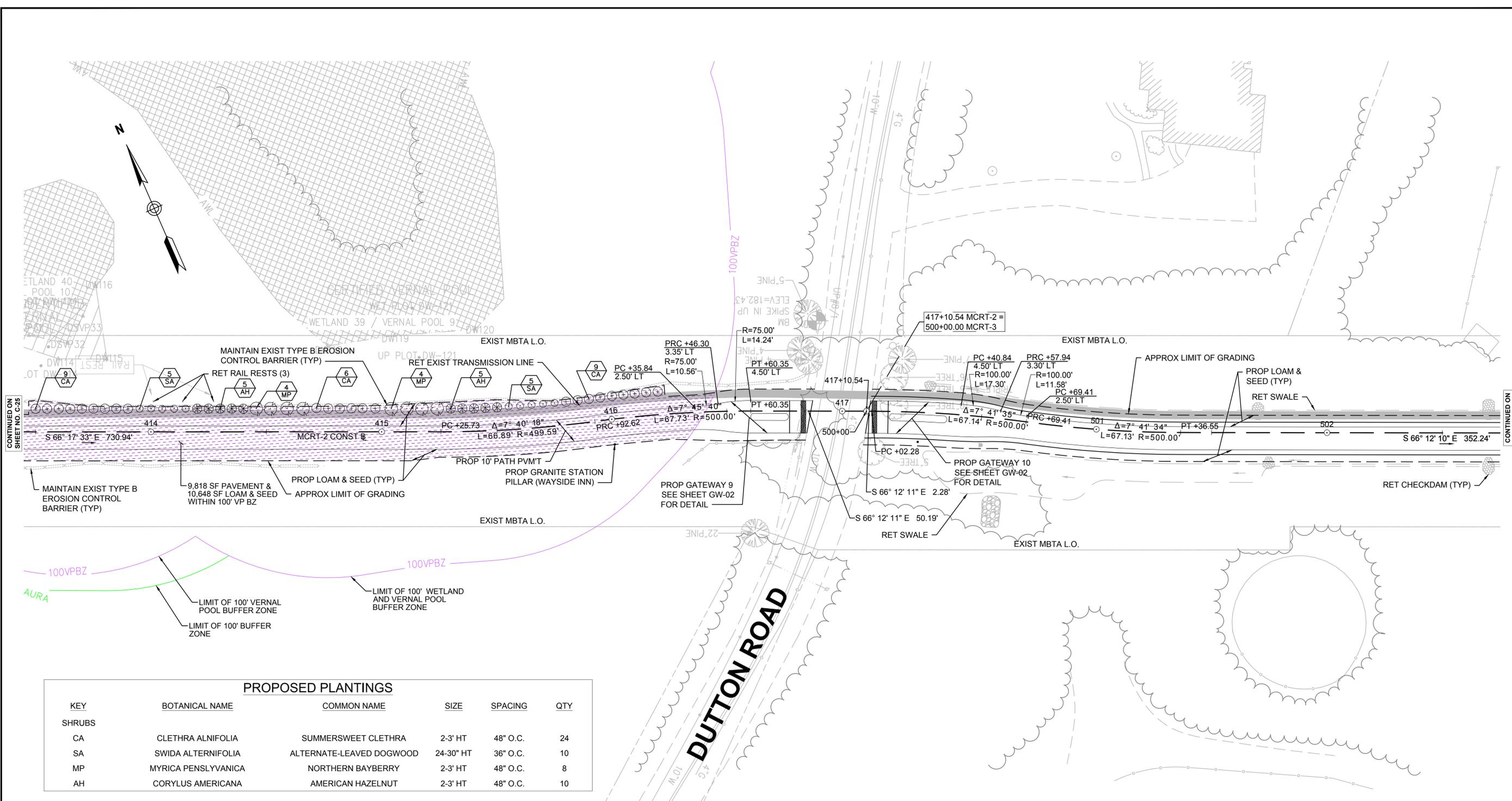
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-25**
 24 OF 46



CONTINUED ON SHEET NO. C-25

CONTINUED ON SHEET NO. C-27

PROPOSED PLANTINGS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
SHRUBS					
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT	48" O.C.	24
SA	SWIDA ALTERNIFOLIA	ALTERNATE-LEAVED DOGWOOD	24-30" HT	36" O.C.	10
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	2-3' HT	48" O.C.	8
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	2-3' HT	48" O.C.	10



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
[Hatched Box]	ISOLATED VEGETATED WETLAND
[Hatched Box]	BORDERING VEGETATED WETLAND
[Hatched Box]	LAND UNDER WATER
[Hatched Box]	VERNAL POOL
[Hatched Box]	PERMANENT DISTURBANCE TO VEGETATED WETLAND
[Hatched Box]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
[Hatched Box]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Box]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Box]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Box]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Box]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Box]	DISTURBANCE TO BLSF
[Hatched Box]	EXISTING TREE LINE
[Hatched Box]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

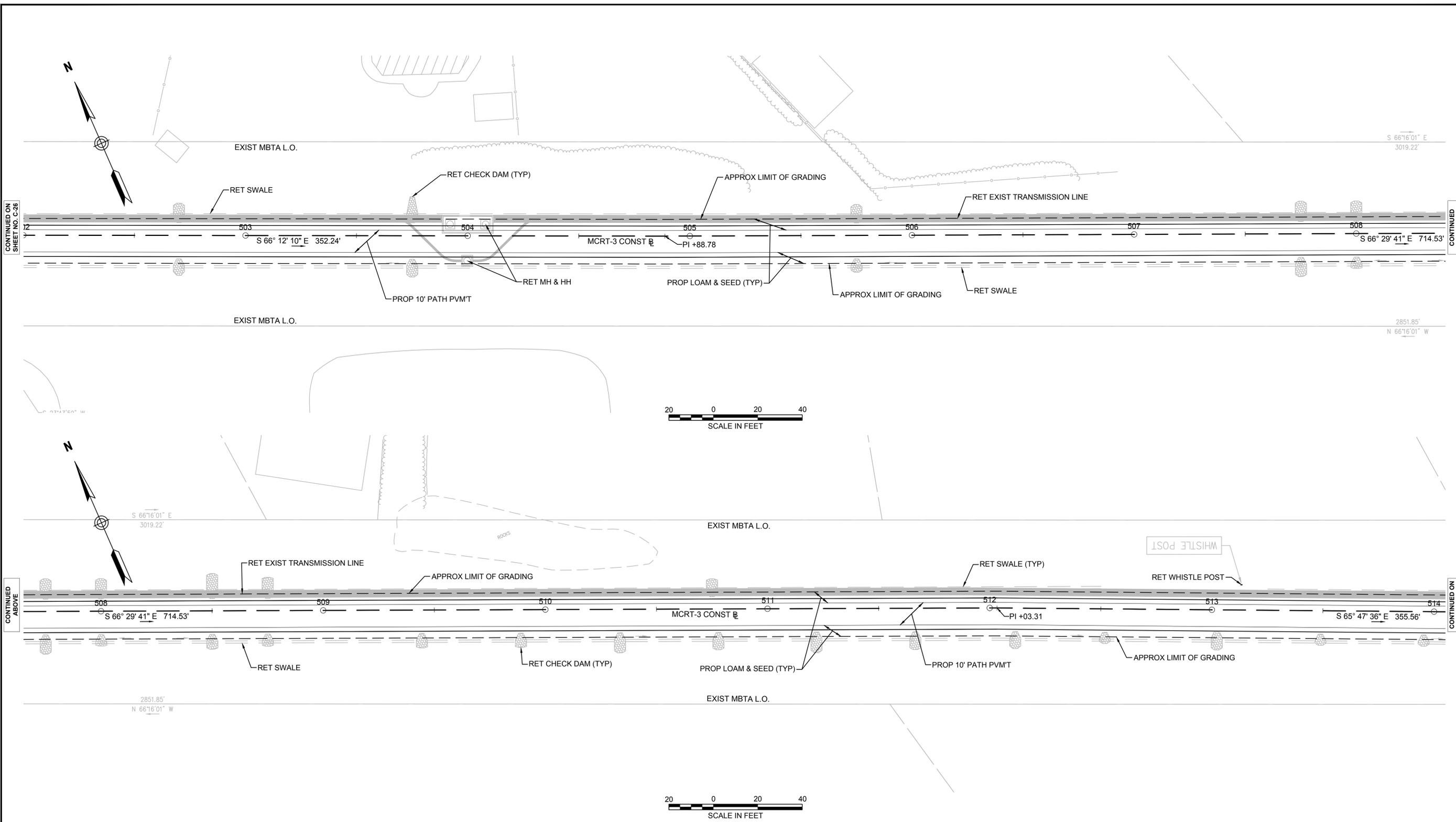
MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX
 SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-26**
 26 OF 46



CONTINUED ON SHEET NO. C-28

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. C-28

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

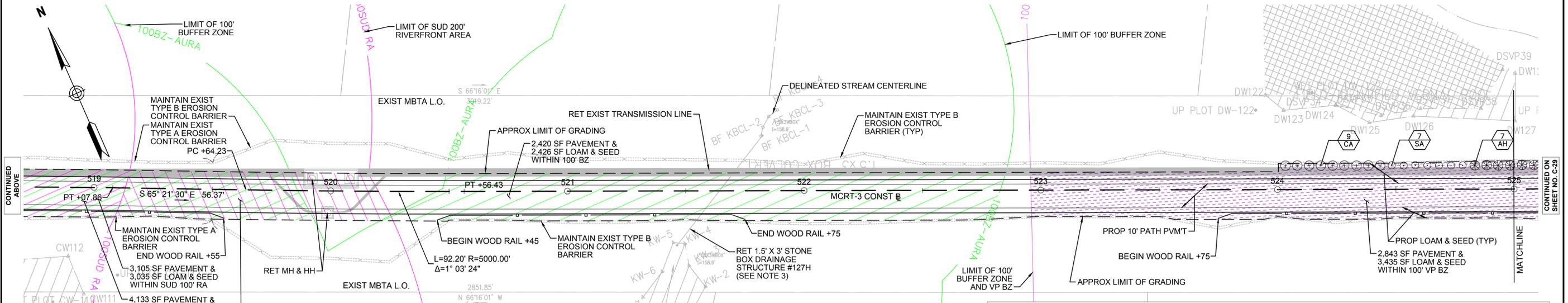
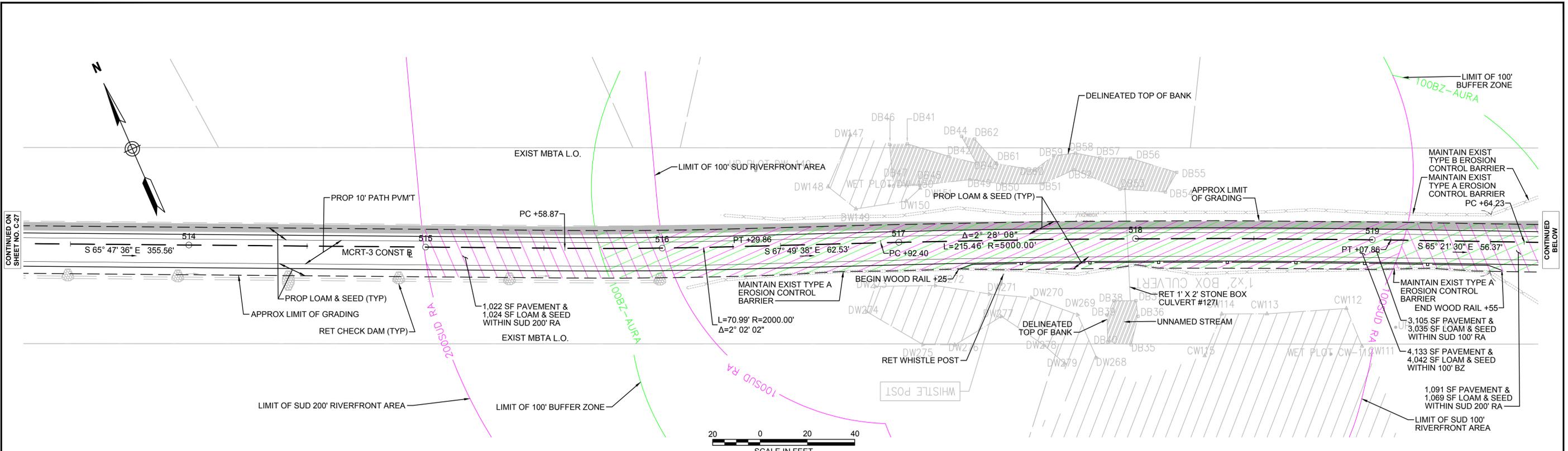
Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

CONSTRUCTION PLANS

DESIGNER: JCR	CONT: P19-3295-D1A ACC: XXXXXXXx	SCALE: 1" = 20'-0"	SHEET NO. C-27 27 OF 46
CHECKED: SHK		DATE: JAN 2021	
DRAWN: JCR			
CHECKED: TAL			



NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatched Box]	ISOLATED VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Box]	BORDERING VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Box]	LAND UNDER WATER	[Hatched Box]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Box]	VERNAL POOL	[Hatched Box]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Box]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Box]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatched Box]	DISTURBANCE TO BLSF
		[Hatched Box]	EXISTING TREE LINE
		[Hatched Box]	LIMIT OF GRADING

PROPOSED PLANTINGS					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
SHRUBS					
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT	48" O.C.	SEE SHEET C-29
SA	SWIDA ALTERNIFOLIA	ALTERNATE-LEAVED DOGWOOD	24-30" HT	36" O.C.	SEE SHEET C-29
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	2-3' HT	48" O.C.	SEE SHEET C-29

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

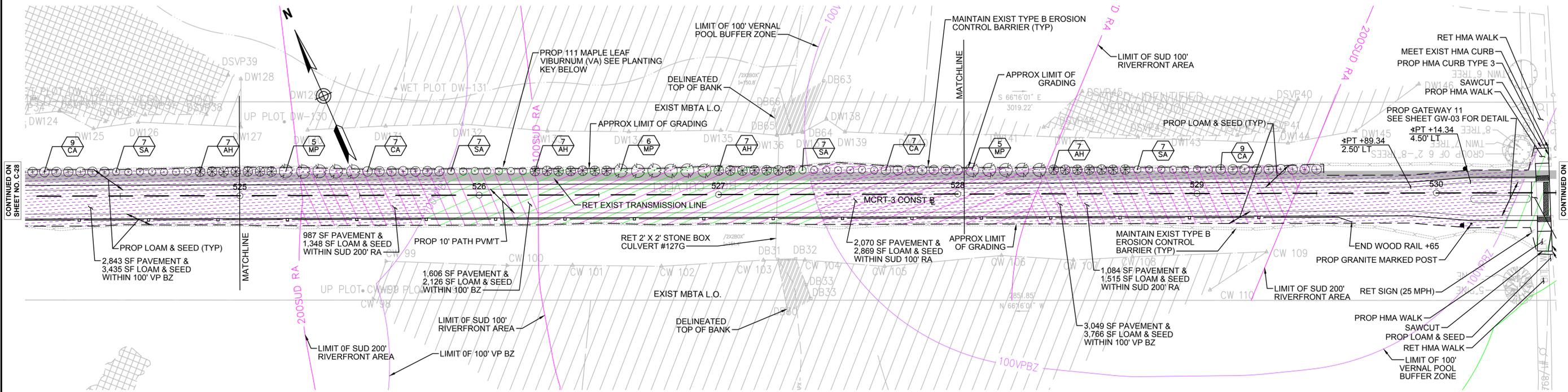
CONSTRUCTION PLANS

DESIGNER: JCR
CHECKED: SHK
DRAWN: JCR
CHECKED: TAL

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

SHEET NO. **C-28**
28 OF 46



PROPOSED PLANTINGS					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
SHRUBS					
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT	48" O.C.	23
SA	SWIDA ALTERNIFOLIA	ALTERNATE-LEAVED DOGWOOD	24-30" HT	36" O.C.	21
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	2-3' HT	48" O.C.	11
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	2-3' HT	48" O.C.	21

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VPBZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-29**
 29 OF 46

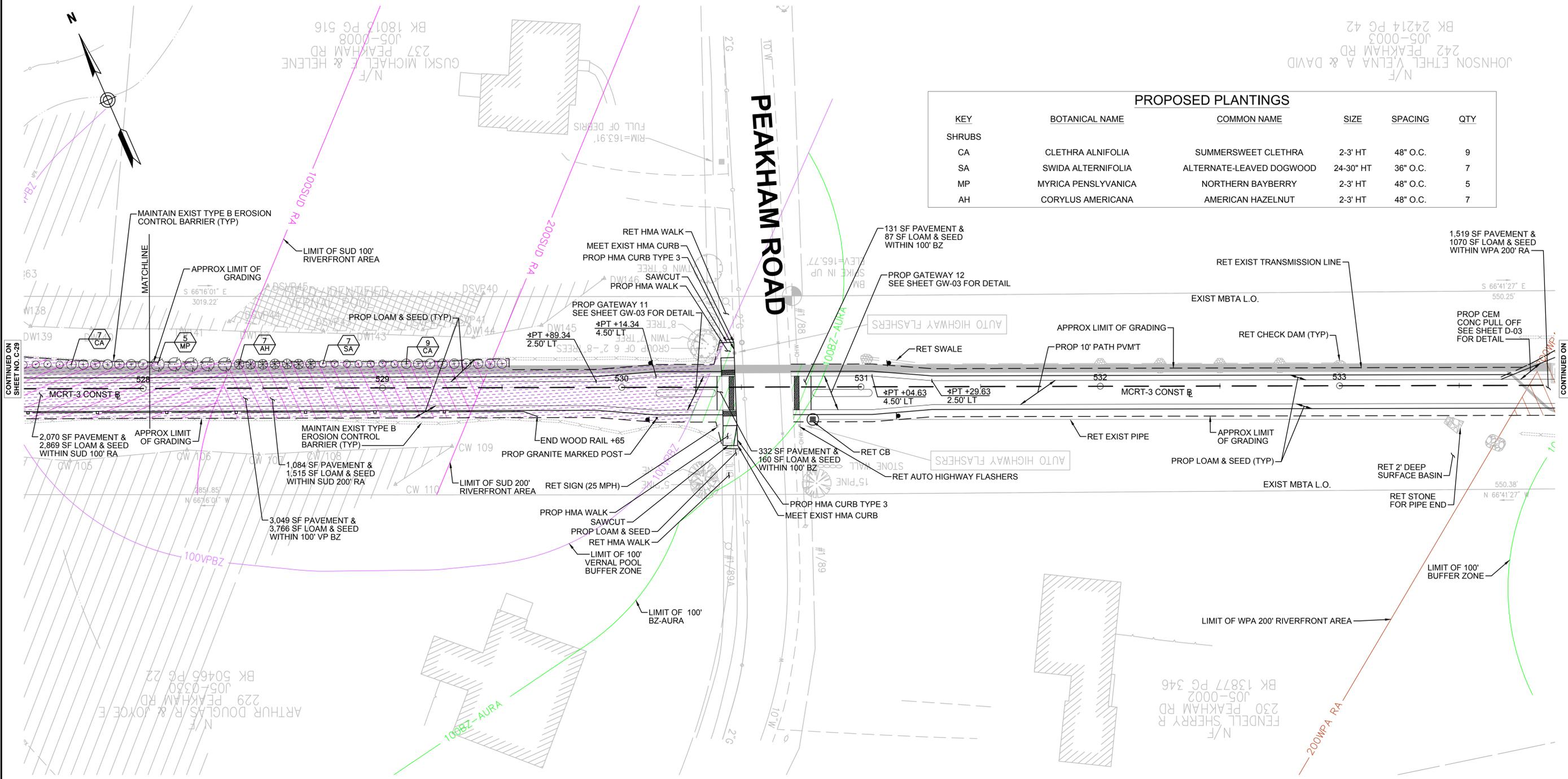
N/
JOHNSON ETHEL VELNA A & DAVID
242 PEAKHAM RD
J05-0003
BK 24214 PG 42

N/
GUSKI MICHAEL E & HELENE
237 PEAKHAM RD
J05-0008
BK 18015 PG 516

N/
ARTHUR DOUGLAS R & JOYCE E
229 PEAKHAM RD
J05-0350
BK 50465 PG 22

N/
FENDELL SHERRY R
230 PEAKHAM RD
J05-0002
BK 13877 PG 346

PROPOSED PLANTINGS					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
SHRUBS					
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT	48" O.C.	9
SA	SWIDA ALTERNIFOLIA	ALTERNATE-LEAVED DOGWOOD	24-30" HT	36" O.C.	7
MP	MYRICA PENNSYVANICA	NORTHERN BAYBERRY	2-3' HT	48" O.C.	5
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	2-3' HT	48" O.C.	7



NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
[Hatched pattern]	ISOLATED VEGETATED WETLAND
[Hatched pattern]	BORDERING VEGETATED WETLAND
[Hatched pattern]	LAND UNDER WATER
[Hatched pattern]	VERNAL POOL
[Hatched pattern]	PERMANENT DISTURBANCE TO VEGETATED WETLAND
[Hatched pattern]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
[Hatched pattern]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched pattern]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched pattern]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched pattern]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched pattern]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched pattern]	DISTURBANCE TO BLSF
[Hatched pattern]	EXISTING TREE LINE
[Hatched pattern]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

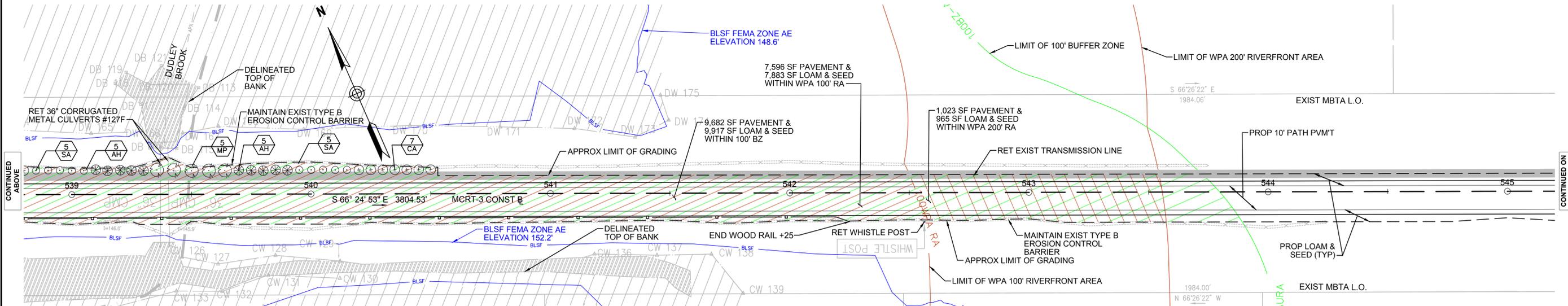
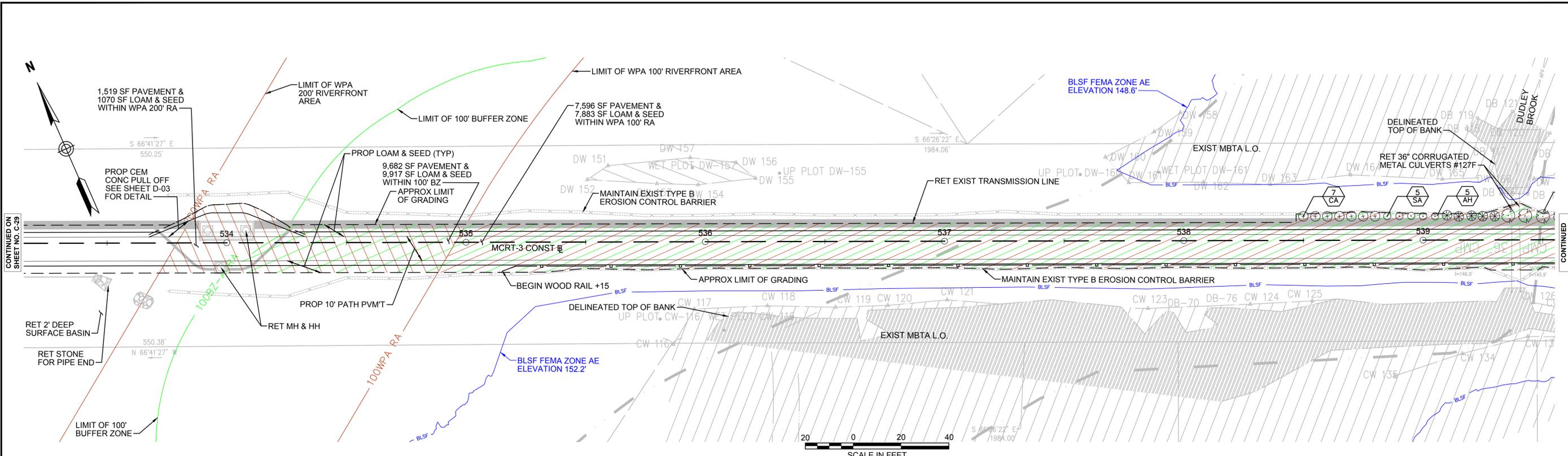
CONSTRUCTION PLANS

DESIGNER: JCR
CHECKED: SHK
DRAWN: JCR
CHECKED: TAL

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

SHEET NO. **C-30**
30 OF 46



PROPOSED PLANTINGS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
SHRUBS					
CA	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	2-3' HT	48" O.C.	14
SA	SWIDA ALTERNIFOLIA	ALTERNATE-LEAVED DOGWOOD	24-30" HT	36" O.C.	10
MP	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	2-3' HT	48" O.C.	5
AH	CORYLUS AMERICANA	AMERICAN HAZELNUT	2-3' HT	48" O.C.	10

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND

HATCH	DESCRIPTION
[Hatched Box]	ISOLATED VEGETATED WETLAND
[Hatched Box]	BORDERING VEGETATED WETLAND
[Hatched Box]	LAND UNDER WATER
[Hatched Box]	VERNAL POOL
[Hatched Box]	PERMANENT DISTURBANCE TO VEGETATED WETLAND
[Hatched Box]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
[Hatched Box]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Box]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Box]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Box]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Box]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Box]	DISTURBANCE TO BLSF
[Hatched Box]	EXISTING TREE LINE
[Hatched Box]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

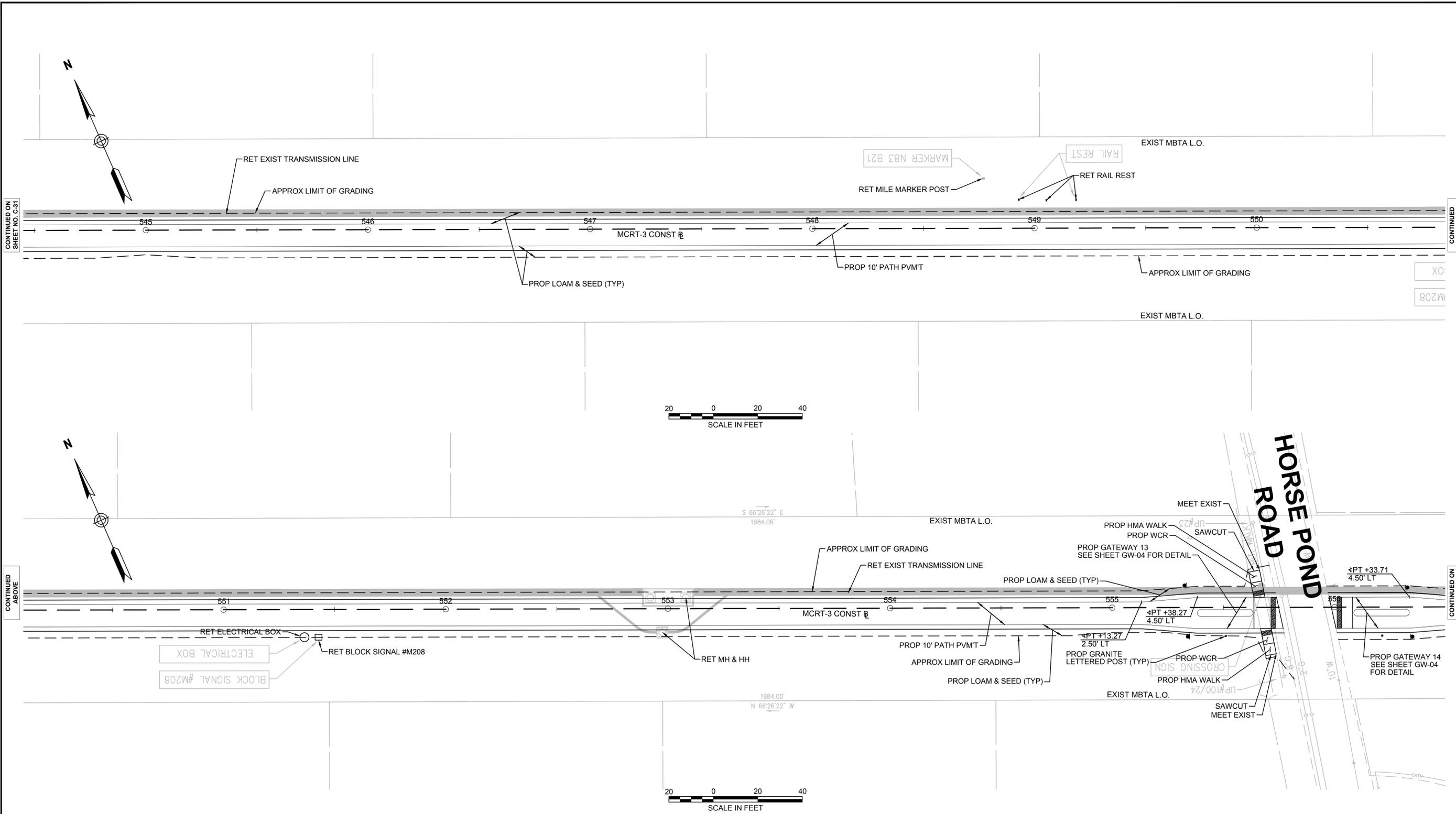
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-31**
 31 OF 46



CONTINUED ON SHEET NO. C-31

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CONTINUED ABOVE

CONTINUED ON SHEET NO. C-33

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

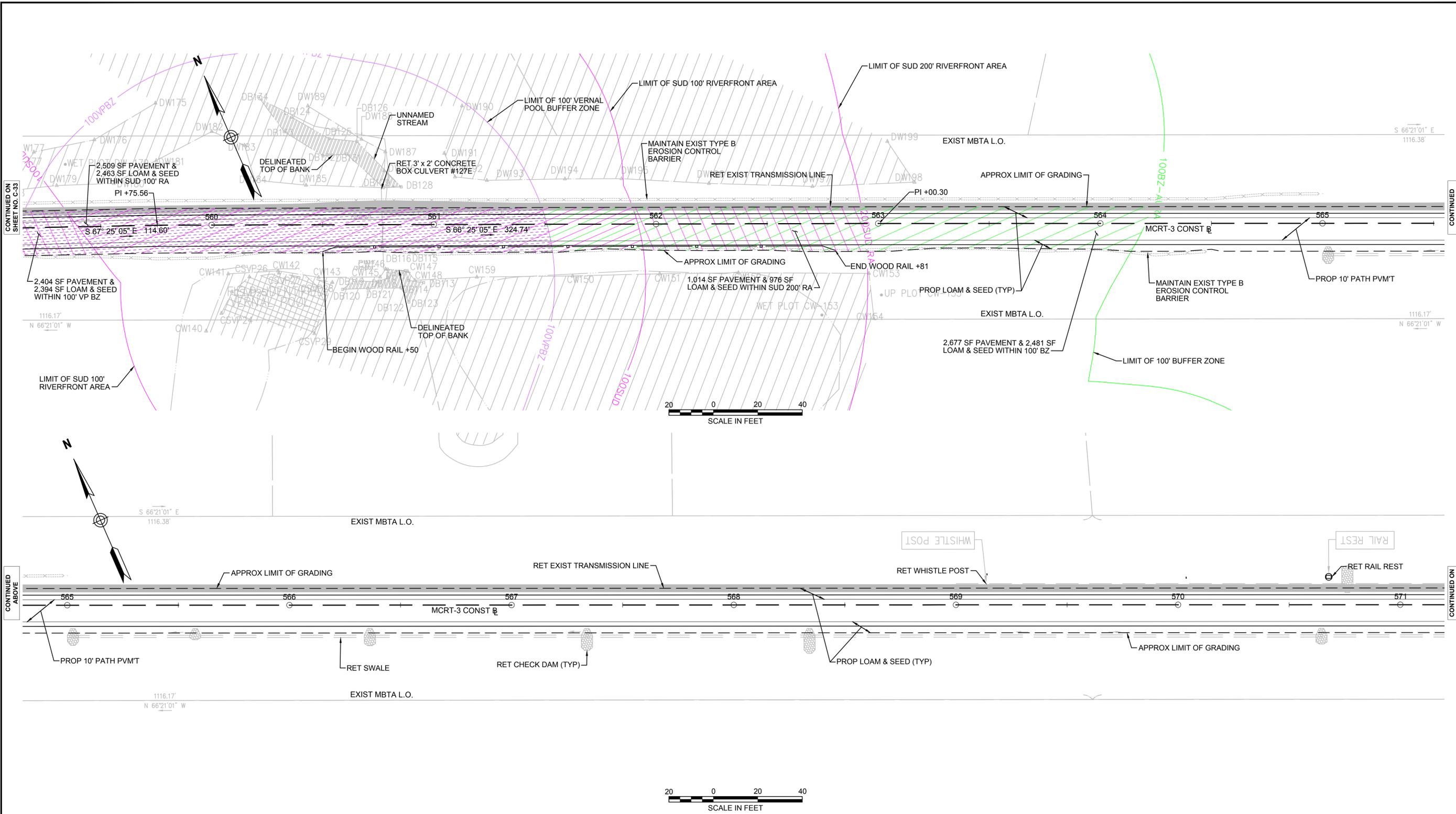
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-32**
 32 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

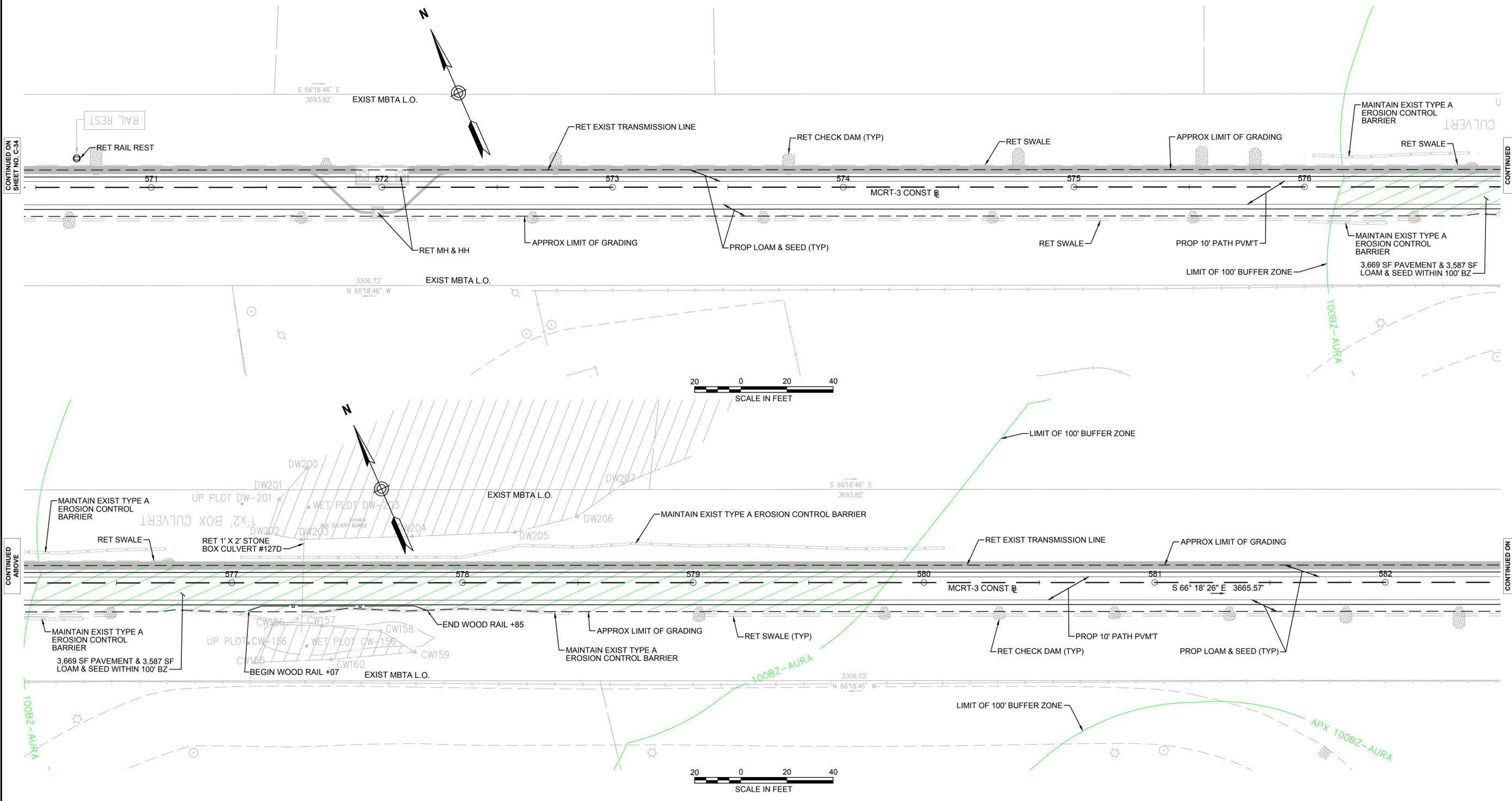
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-34**
 34 OF 46



CONTINUED ON SHEET NO. C-34

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CONTINUED ON SHEET NO. C-38

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatched Box]	ISOLATED VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Box]	BORDERING VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Box]	LAND UNDER WATER	[Hatched Box]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Box]	VERNAL POOL	[Hatched Box]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Box]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Box]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatched Box]	DISTURBANCE TO BLSF
		[Hatched Box]	EXISTING TREE LINE
		[Hatched Box]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

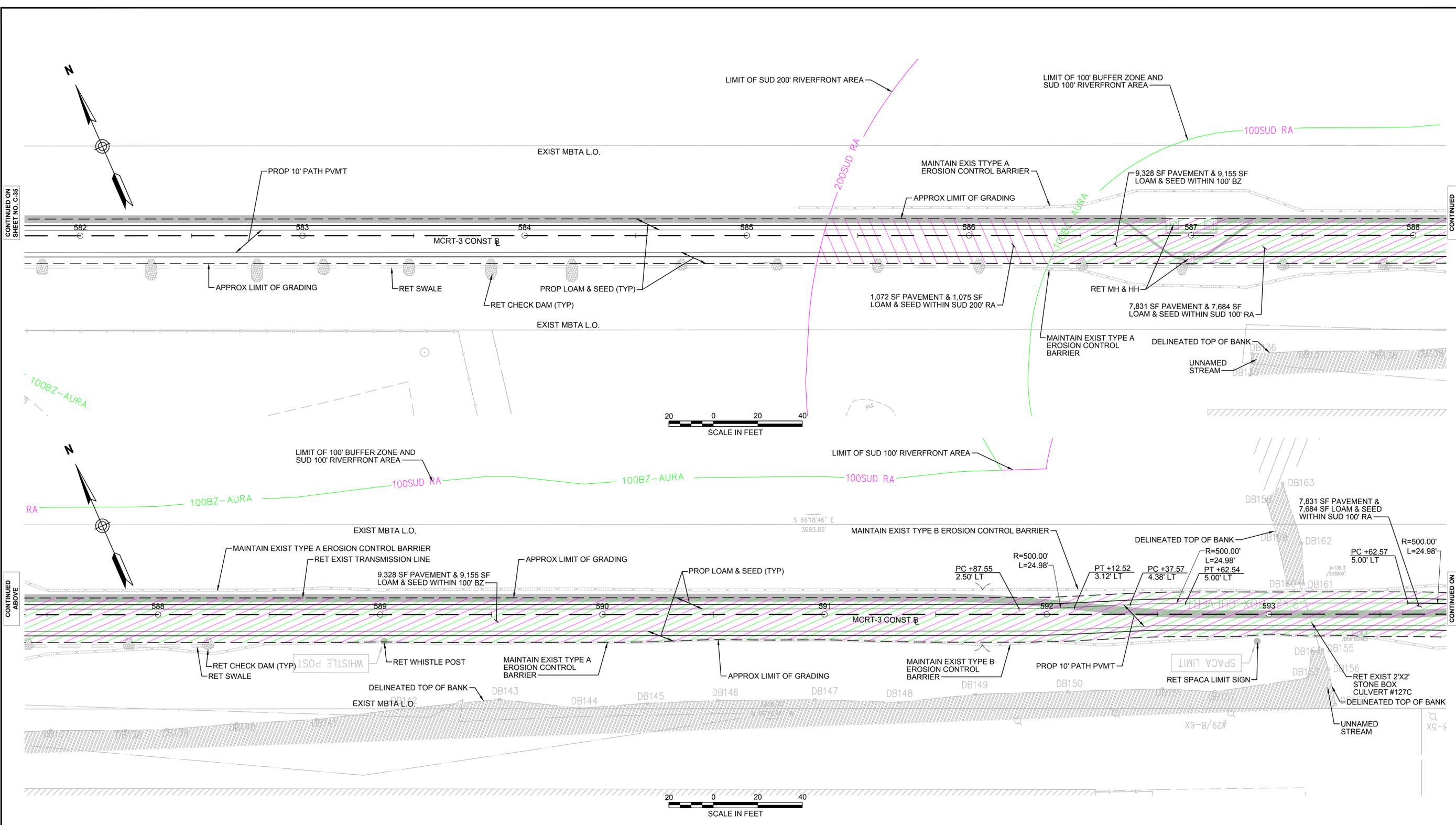
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXx

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-35**
 35 OF 46



CONTINUED ON SHEET NO. C-35

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. C-37

NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatch: Diagonal lines /]	ISOLATED VEGETATED WETLAND	[Hatch: Diagonal lines \]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatch: Diagonal lines / and \]	BORDERING VEGETATED WETLAND	[Hatch: Dotted]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatch: Horizontal lines]	LAND UNDER WATER	[Hatch: Stippled]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatch: Vertical lines]	VERNAL POOL	[Hatch: Green diagonal lines /]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatch: Red diagonal lines /]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatch: Green diagonal lines \]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatch: Blue diagonal lines /]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatch: Blue diagonal lines \]	DISTURBANCE TO BLSF
		[Hatch: Dashed line]	EXISTING TREE LINE
		[Hatch: Dashed line]	LIMIT OF GRADING

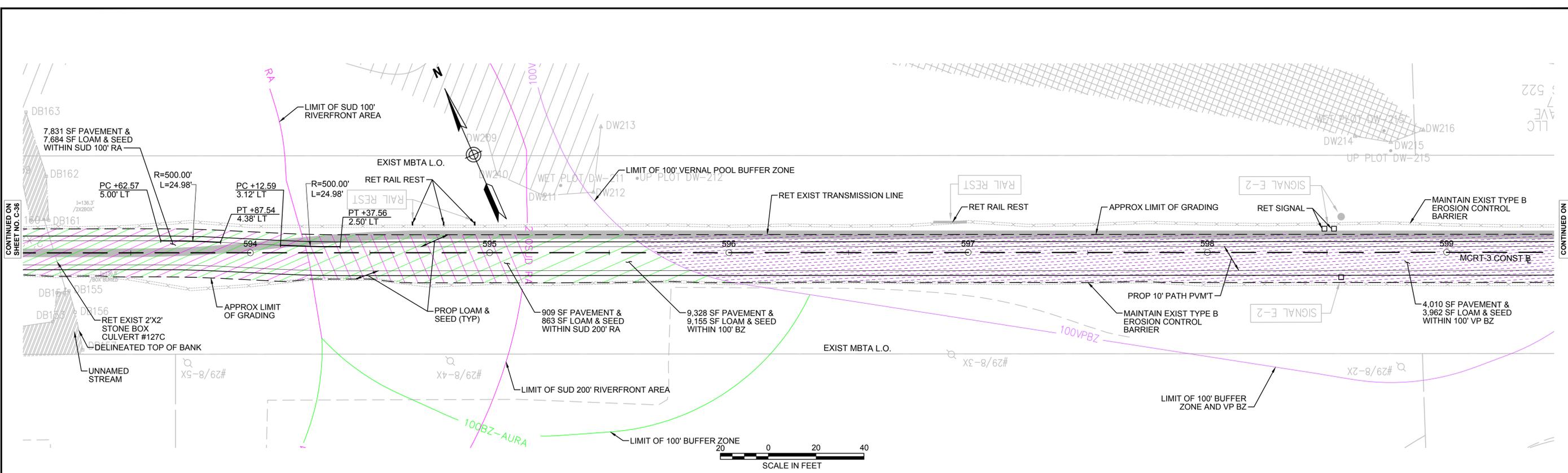
REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER: JCR	CONSTRUCTION PLANS	SHEET NO. C-36
CHECKED: SHK		
DRAWN: JCR		
CHECKED: TAL	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
	ACC: XXXXXXXX	DATE: JAN 2021
		36 OF 46



CONTINUED ON SHEET NO. C-36

CONTINUED ON SHEET NO. C-38



NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
Environmental Services
101 Walnut St., P.O. Box 9151
Watertown, MA 02472
617 924 1770 FAX 617 924 2286

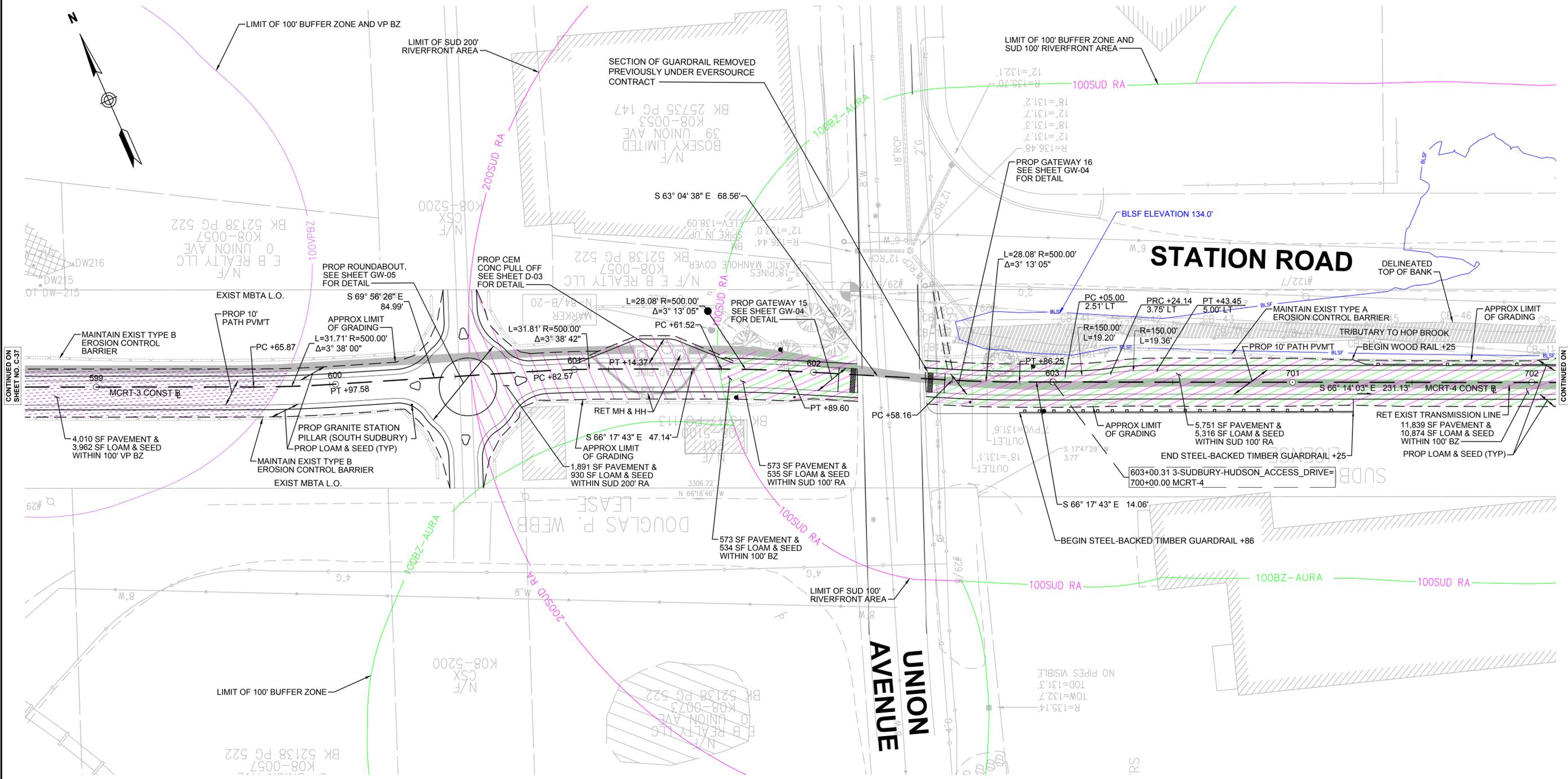
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: JCR CHECKED: SHK	SHEET NO. C-37
DRAWN: JCR CHECKED: TAL	37 OF 46

CONSTRUCTION PLANS	SCALE: 1" = 20'-0"
CONT: P19-3295-D1A	DATE: JAN 2021
ACC: XXXXXXXX	



CONTINUED ON SHEET NO. C-37

CONTINUED ON SHEET NO. C-39



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
 MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

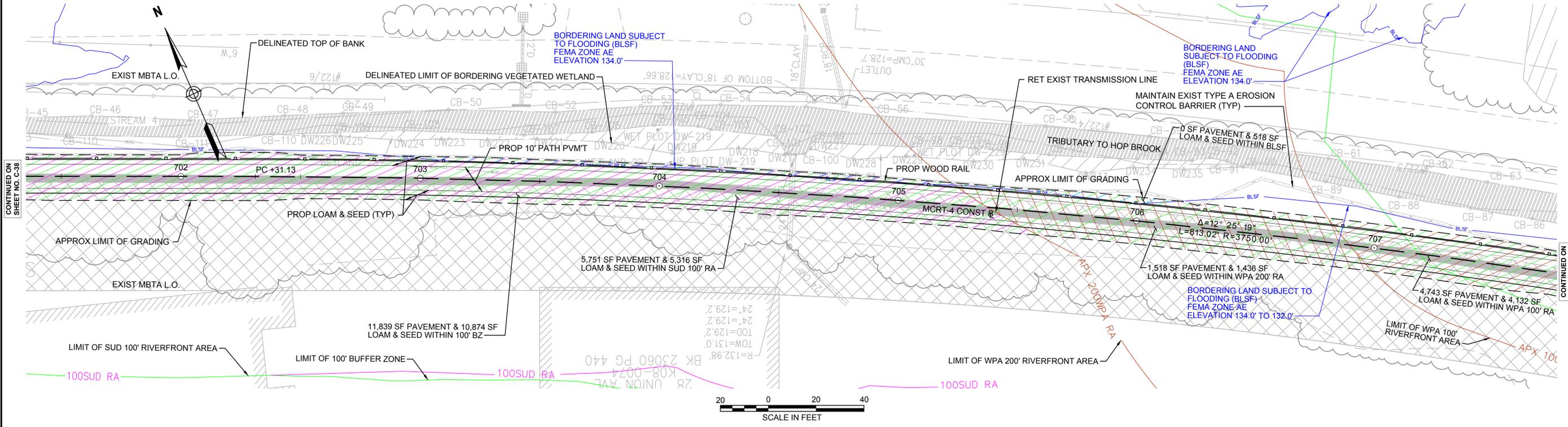
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. C-38
 38 OF 46



CONTINUED ON SHEET NO. C-38

CONTINUED ON SHEET NO. C-40

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

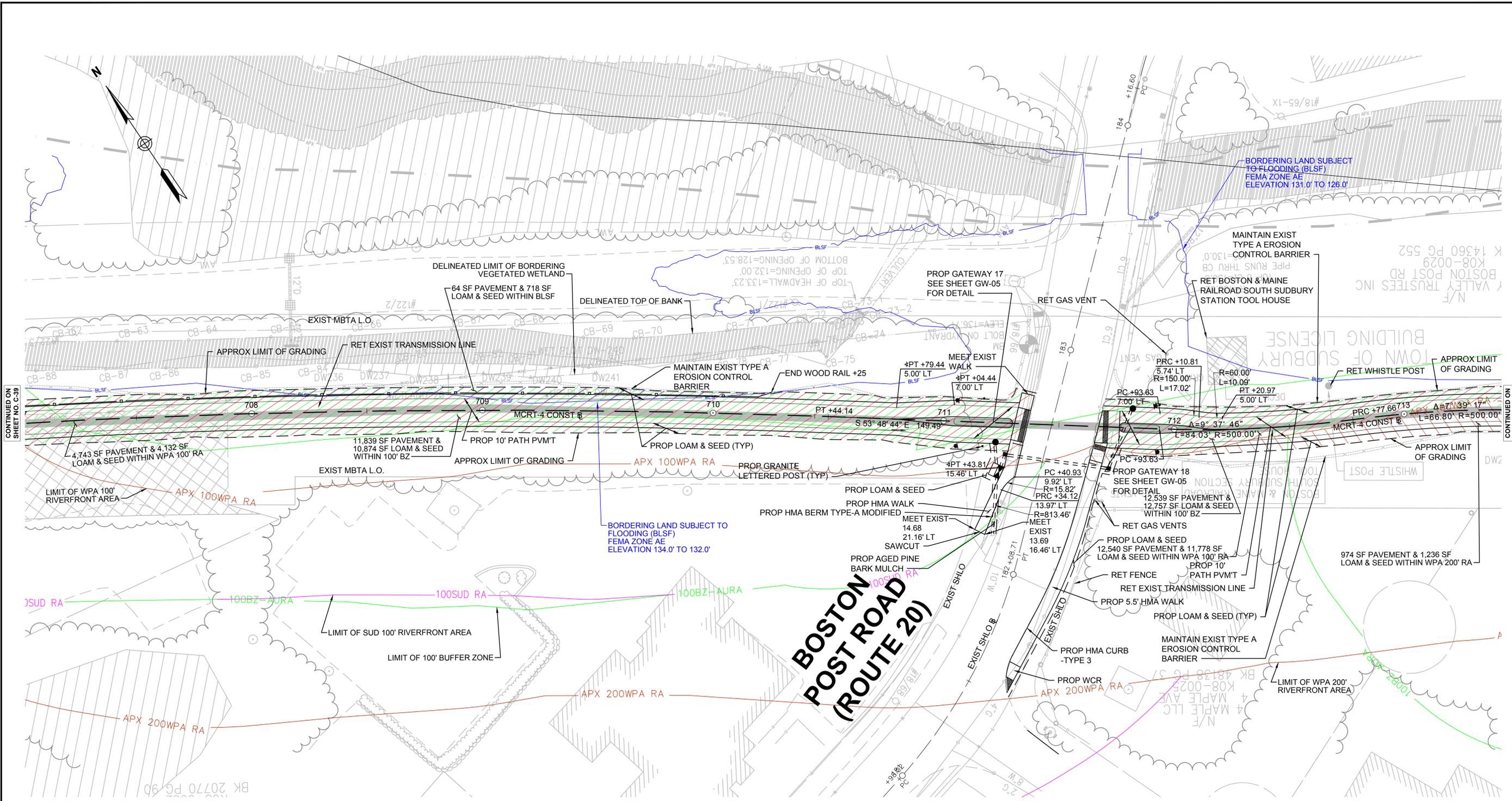
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-39**
 39 OF 46



CONTINUED ON SHEET NO. C-39

CONTINUED ON SHEET NO. C-41

NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY

vhb
 Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

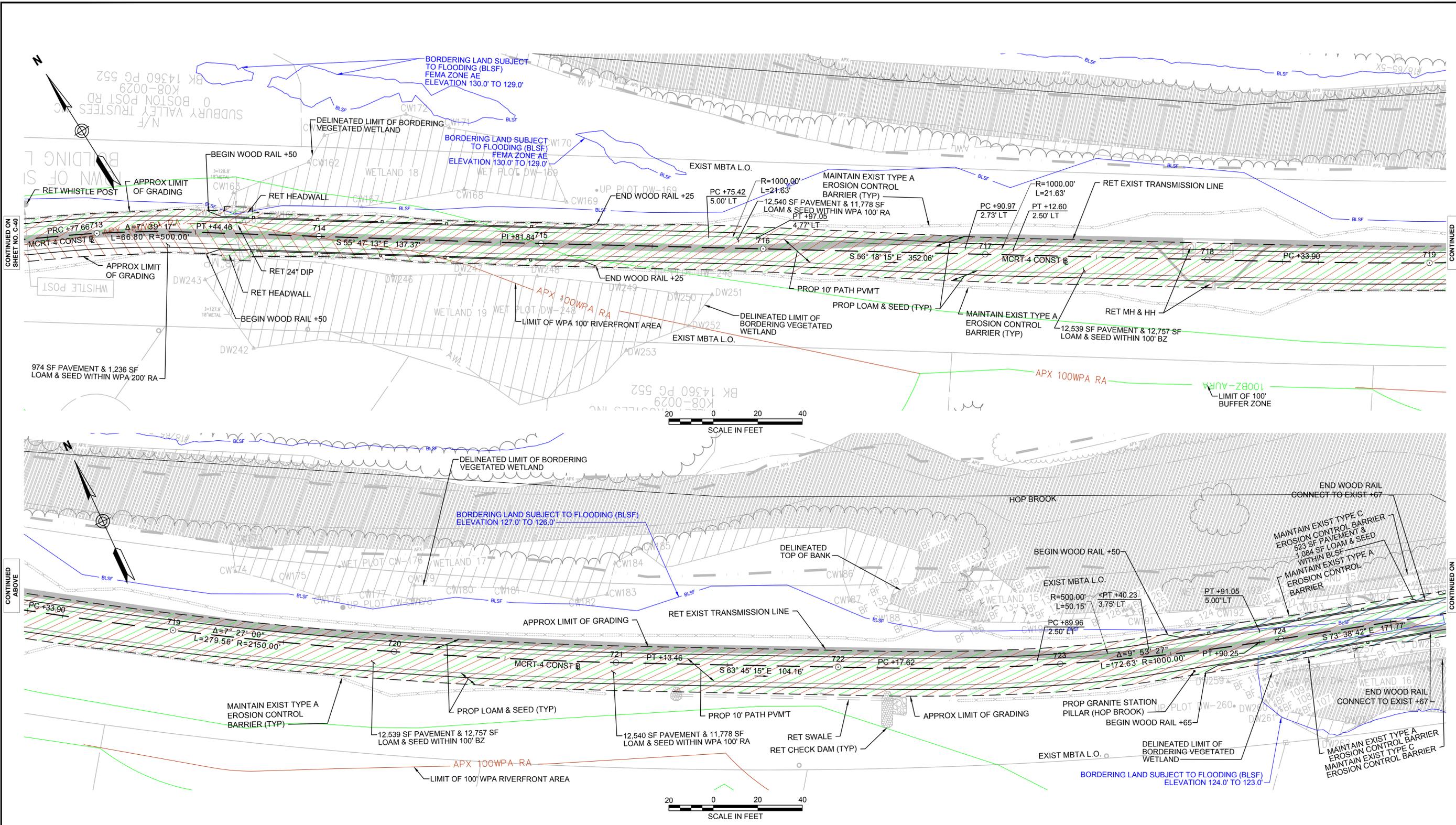
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO.
C-40
 40 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatched Box]	ISOLATED VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatched Box]	BORDERING VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatched Box]	LAND UNDER WATER	[Hatched Box]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatched Box]	VERNAL POOL	[Hatched Box]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatched Box]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatched Box]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatched Box]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatched Box]	DISTURBANCE TO BLSF
		[Hatched Box]	EXISTING TREE LINE
		[Hatched Box]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

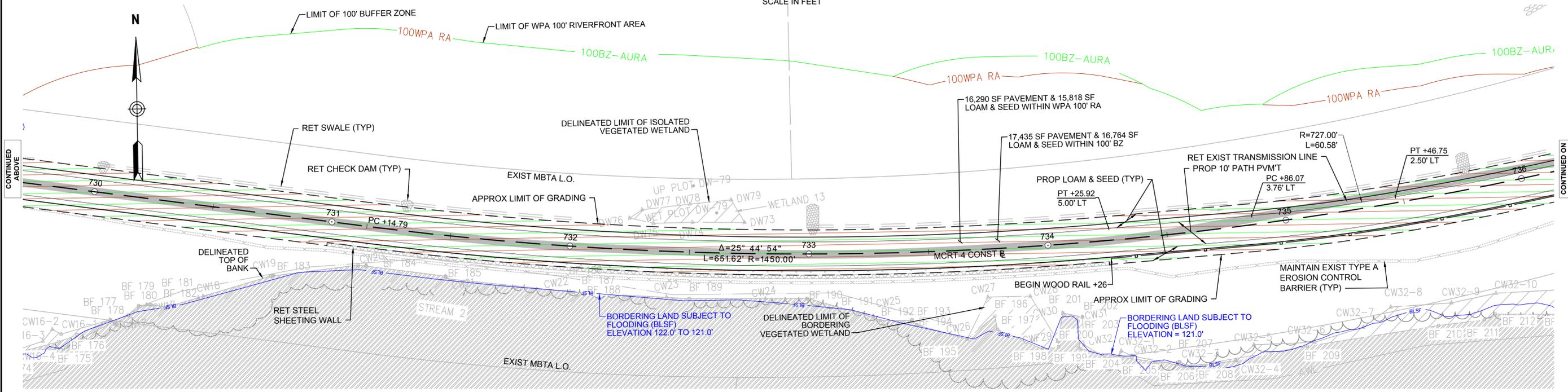
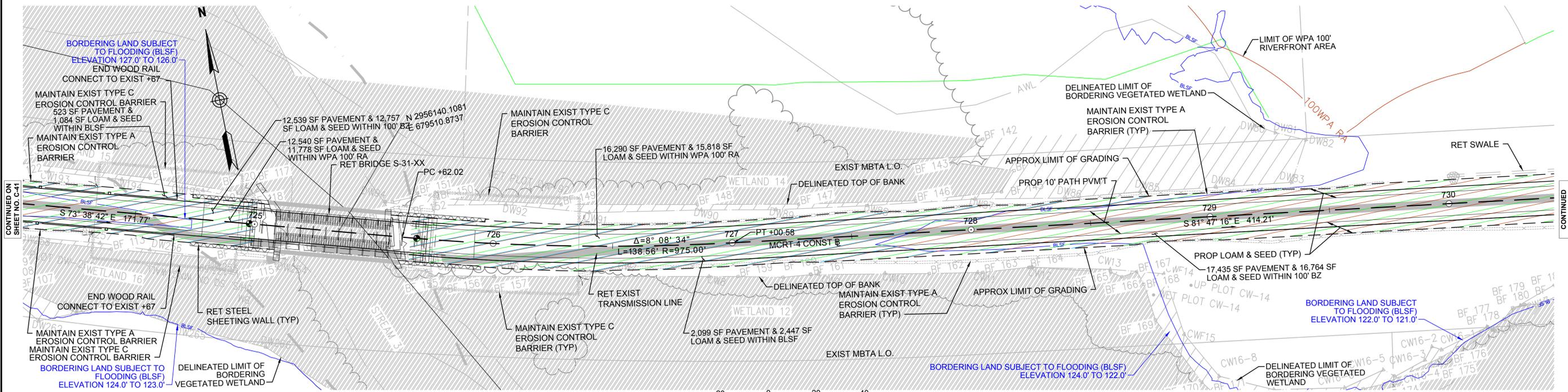
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-41**
 41 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatch Pattern]	ISOLATED VEGETATED WETLAND	[Hatch Pattern]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatch Pattern]	BORDERING VEGETATED WETLAND	[Hatch Pattern]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatch Pattern]	LAND UNDER WATER	[Hatch Pattern]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatch Pattern]	VERNAL POOL	[Hatch Pattern]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatch Pattern]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatch Pattern]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatch Pattern]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatch Pattern]	DISTURBANCE TO BLSF
		[Hatch Pattern]	EXISTING TREE LINE
		[Hatch Pattern]	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

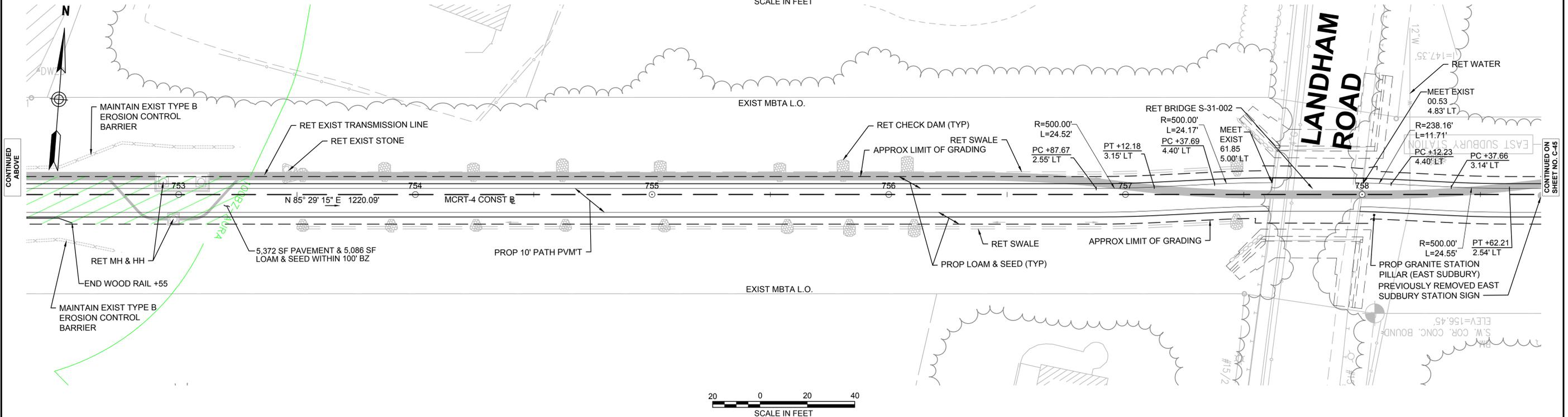
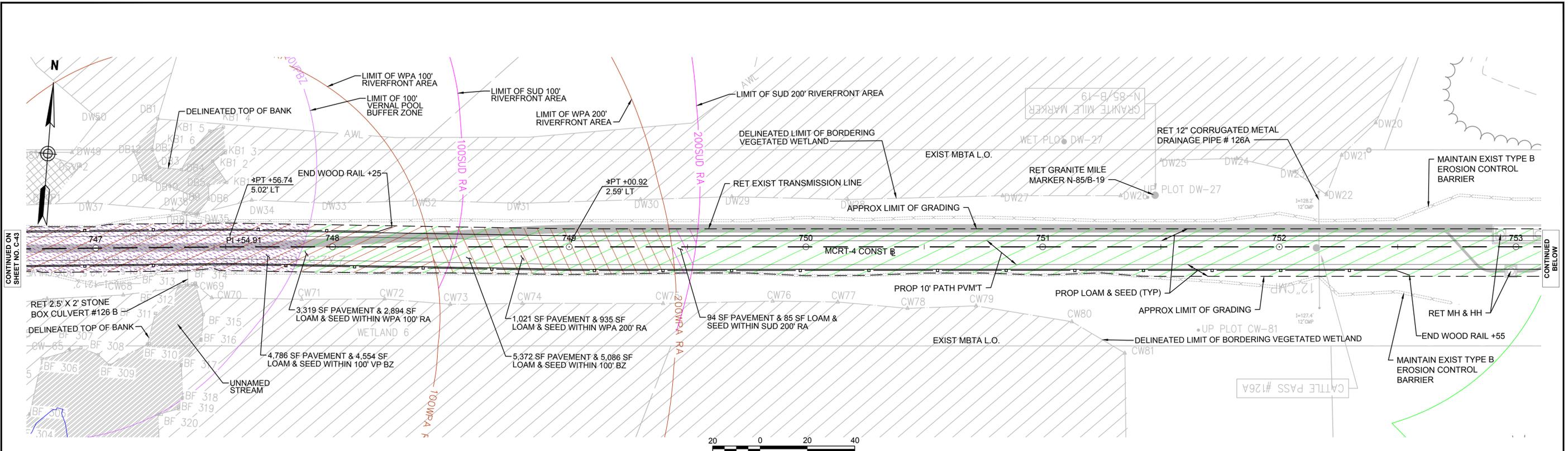
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-42**
 42 OF 46



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

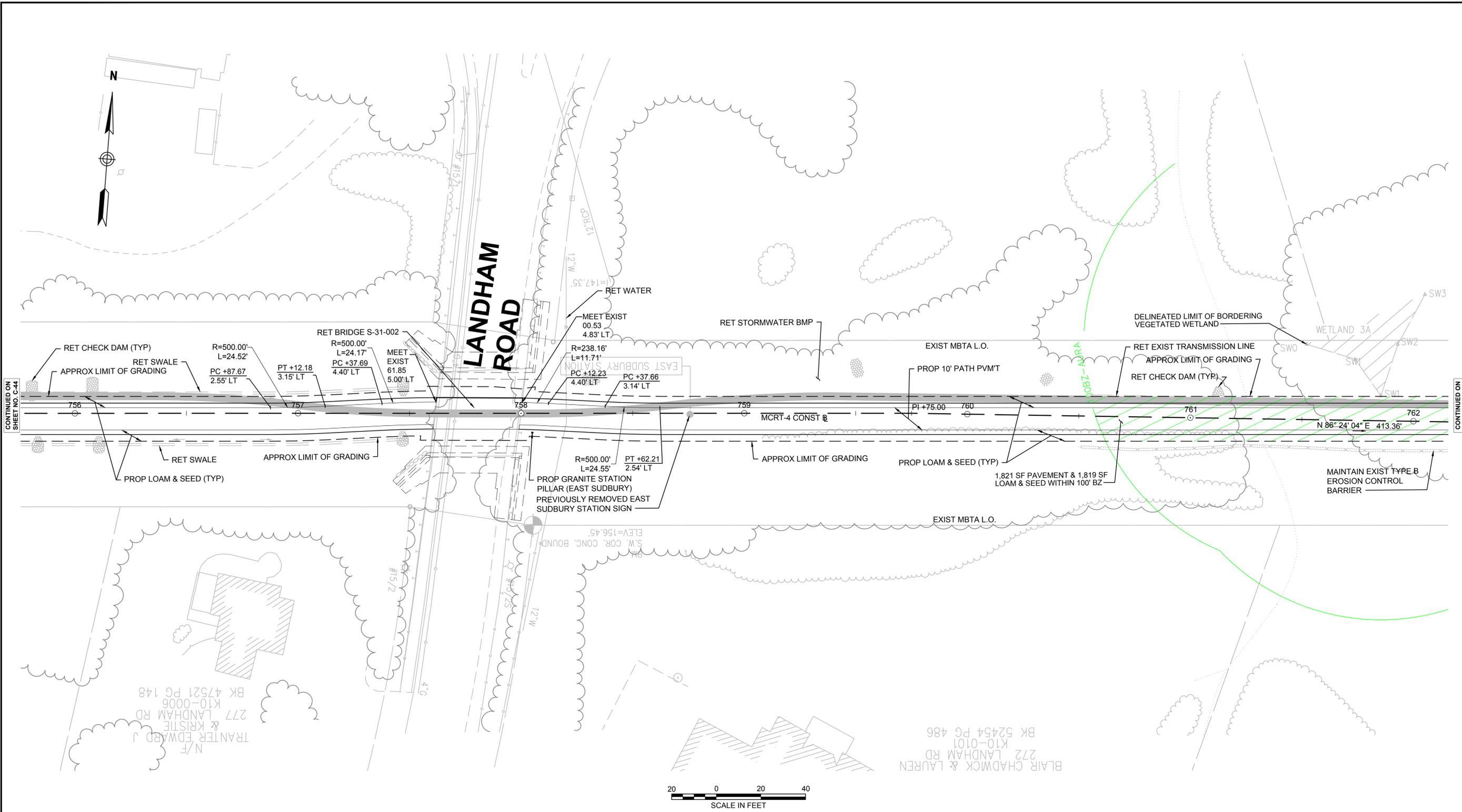
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-44**
 44 OF 46



CONTINUED ON SHEET NO. C-44

CONTINUED ON SHEET NO. C-46

N/F
TRANTRER EDWARD J
& KRISTIE
277 LANDHAM RD
K10-0006
BK 47521 PG 148

BLAIR CHADWICK & LAUREN
K10-0101
BK 52454 PG 486

NOTE:
1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND		DESCRIPTION	
HATCH	DESCRIPTION	HATCH	DESCRIPTION
[Hatch: Diagonal lines /]	ISOLATED VEGETATED WETLAND	[Hatch: Diagonal lines \]	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
[Hatch: Diagonal lines / and \]	BORDERING VEGETATED WETLAND	[Hatch: Horizontal lines]	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
[Hatch: Dotted]	LAND UNDER WATER	[Hatch: Vertical lines]	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
[Hatch: Wavy lines]	VERNAL POOL	[Hatch: Diagonal lines / and \]	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
[Hatch: Solid red]	PERMANENT DISTURBANCE TO VEGETATED WETLAND	[Hatch: Diagonal lines / and \]	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
[Hatch: Wavy lines]	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)	[Hatch: Dotted]	DISTURBANCE TO BLSF
[Hatch: None]		[Hatch: Dotted]	EXISTING TREE LINE
[Hatch: None]		[Hatch: Dashed line]	LIMIT OF GRADING

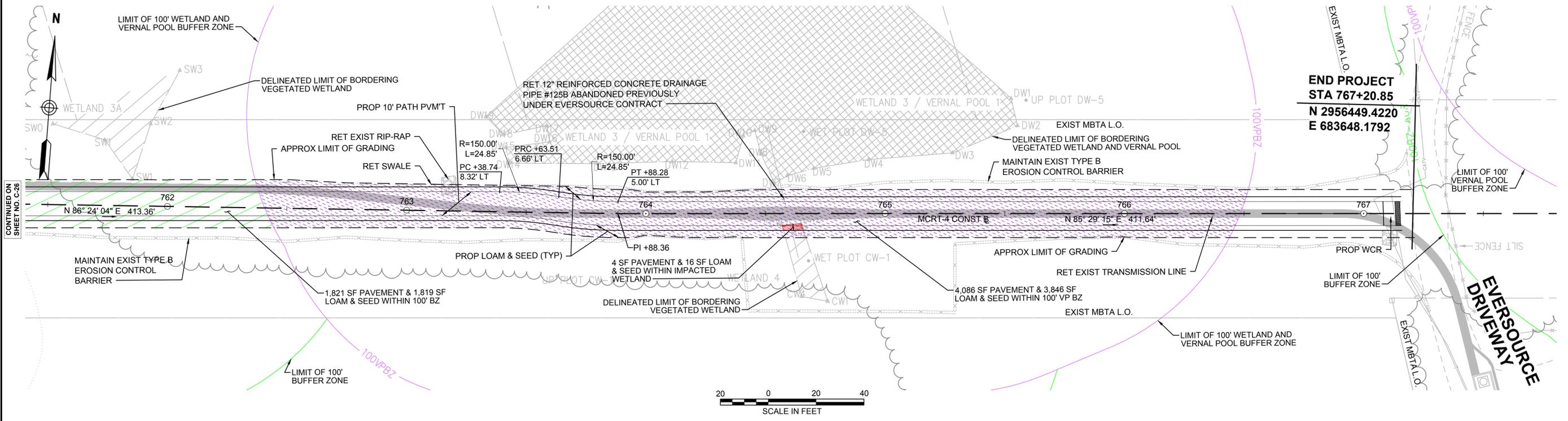
REV.	DATE	DESCRIPTION	BY


 Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER: JCR	CONSTRUCTION PLANS SCALE: 1" = 20'-0" DATE: JAN 2021	SHEET NO.
CHECKED: SHK		C-45
DRAWN: JCR		45 OF 46
CHECKED: TAL	CONT: P19-3295-D1A ACC: XXXXXXXX	



CONTINUED ON SHEET NO. C-28



NOTE:
 1. WETLAND RESOURCE AREA BOUNDARIES SHOWN HEREIN WERE APPROVED IN AN ORAD DATED AUGUST 27, 2018 (MADEP FILE NO. 301-1227).

ENVIRONMENTAL IMPACTS LEGEND	
HATCH	DESCRIPTION
	ISOLATED VEGETATED WETLAND
	BORDERING VEGETATED WETLAND
	LAND UNDER WATER
	VERNAL POOL
	PERMANENT DISTURBANCE TO VEGETATED WETLAND
	DISTURBANCE TO 100' VERNAL POOL BUFFER ZONE (100' VP BZ)
	DISTURBANCE TO WPA 200' RIVERFRONT AREA (WPA 200' RA)
	DISTURBANCE TO SUDBURY 200' RIVERFRONT AREA (SUD 200' RA)
	DISTURBANCE TO WPA 100' RIVERFRONT AREA (WPA 100' RA)
	DISTURBANCE TO SUDBURY 100' RIVERFRONT AREA (SUD 100' RA)
	DISTURBANCE TO 100' BUFFER ZONE (100' BZ-AURA)
	DISTURBANCE TO BLSF
	EXISTING TREE LINE
	LIMIT OF GRADING

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE
 MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

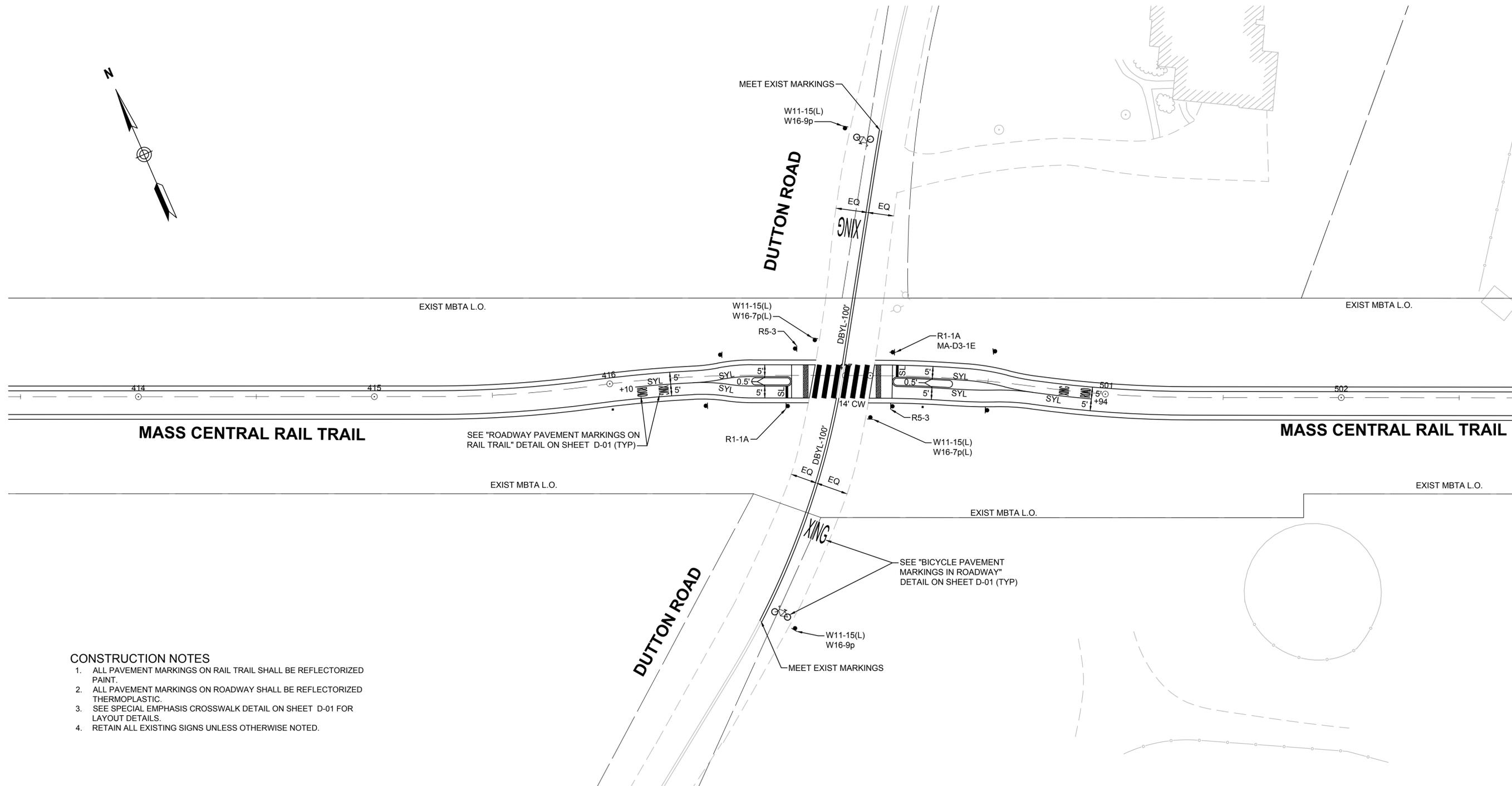
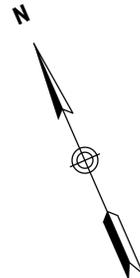
CONSTRUCTION PLANS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. **C-46**
 46 OF 46



- CONSTRUCTION NOTES**
1. ALL PAVEMENT MARKINGS ON RAIL TRAIL SHALL BE REFLECTORIZED PAINT.
 2. ALL PAVEMENT MARKINGS ON ROADWAY SHALL BE REFLECTORIZED THERMOPLASTIC.
 3. SEE SPECIAL EMPHASIS CROSSWALK DETAIL ON SHEET D-01 FOR LAYOUT DETAILS.
 4. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.



REV.	DATE	DESCRIPTION	BY



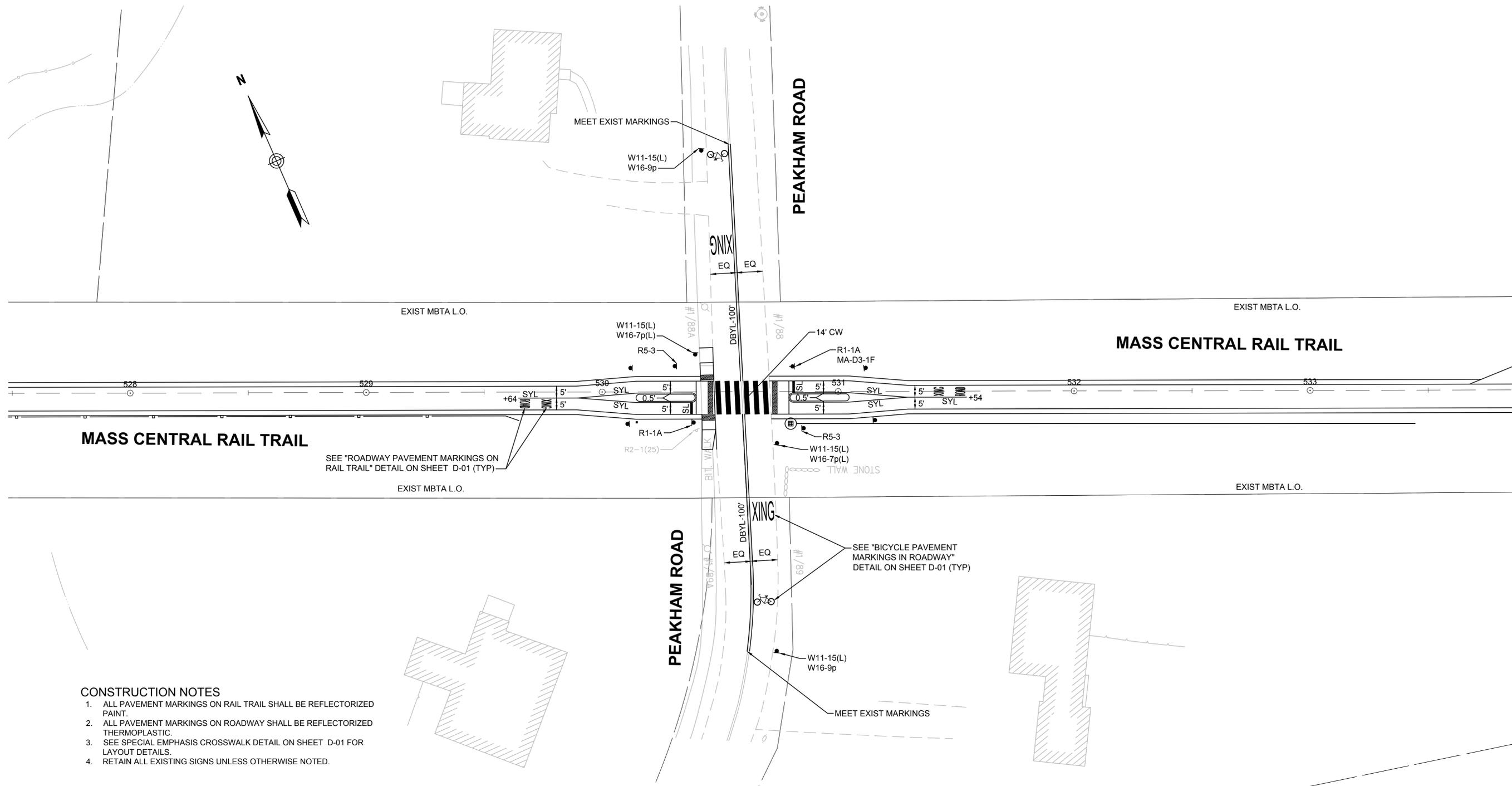
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: KEW	TRAFFIC PLANS	SHEET NO. TR-08
CHECKED: SHK		
DRAWN: KEW	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: PTN	ACC: XXXXXXXX	DATE: JAN 2021

8 OF 14



- CONSTRUCTION NOTES**
1. ALL PAVEMENT MARKINGS ON RAIL TRAIL SHALL BE REFLECTORIZED PAINT.
 2. ALL PAVEMENT MARKINGS ON ROADWAY SHALL BE REFLECTORIZED THERMOPLASTIC.
 3. SEE SPECIAL EMPHASIS CROSSWALK DETAIL ON SHEET D-01 FOR LAYOUT DETAILS.
 4. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.



REV.	DATE	DESCRIPTION	BY



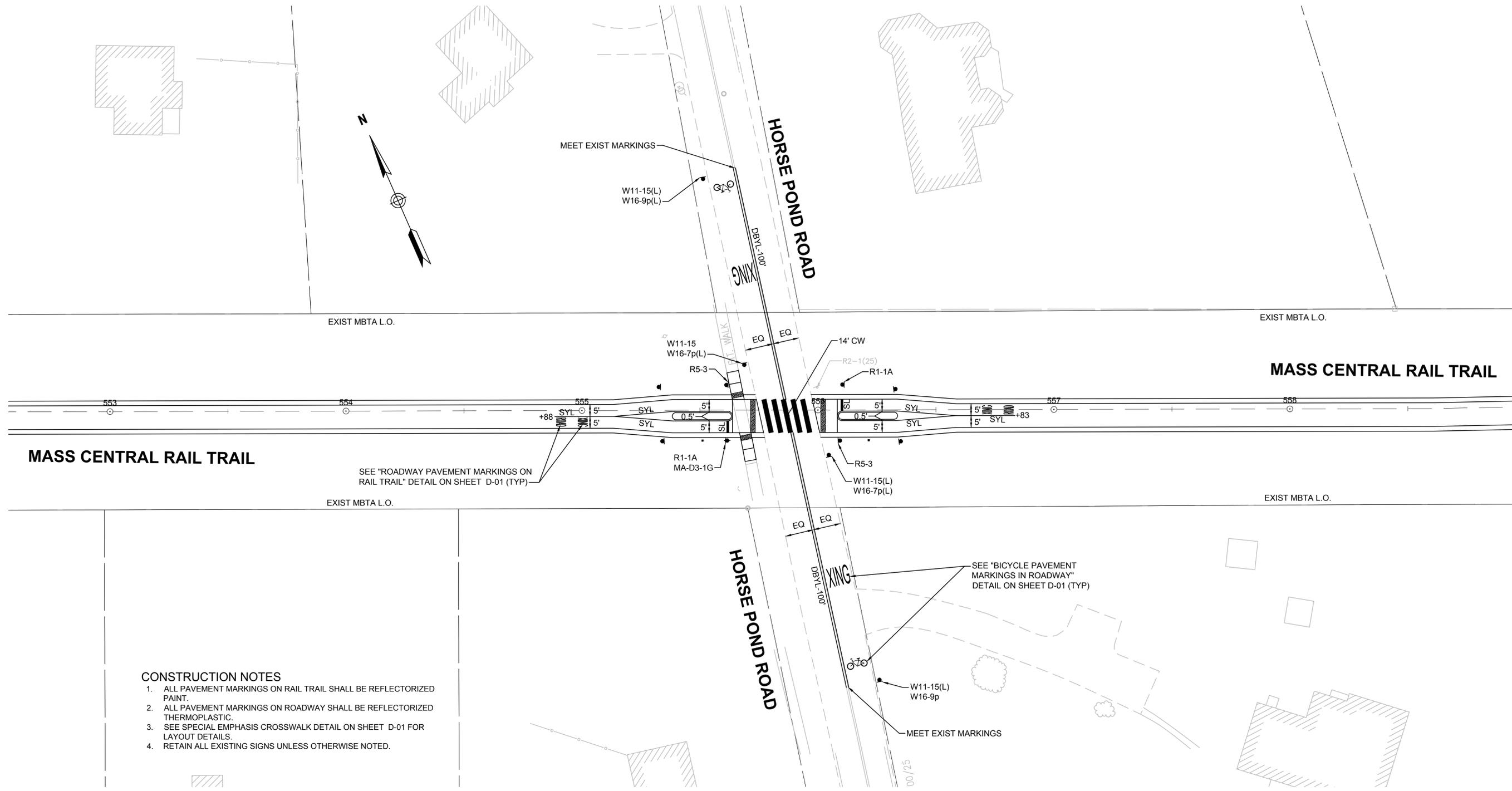
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: KEW	TRAFFIC PLANS	SHEET NO.
CHECKED: SHK		TR-09
DRAWN: KEW	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: PTN	ACC: XXXXXXXX	DATE: JAN 2021

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MASS CENTRAL RAIL TRAIL

MASS CENTRAL RAIL TRAIL

HORSE POND ROAD

- CONSTRUCTION NOTES**
1. ALL PAVEMENT MARKINGS ON RAIL TRAIL SHALL BE REFLECTORIZED PAINT.
 2. ALL PAVEMENT MARKINGS ON ROADWAY SHALL BE REFLECTORIZED THERMOPLASTIC.
 3. SEE SPECIAL EMPHASIS CROSSWALK DETAIL ON SHEET D-01 FOR LAYOUT DETAILS.
 4. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.



REV.	DATE	DESCRIPTION	BY



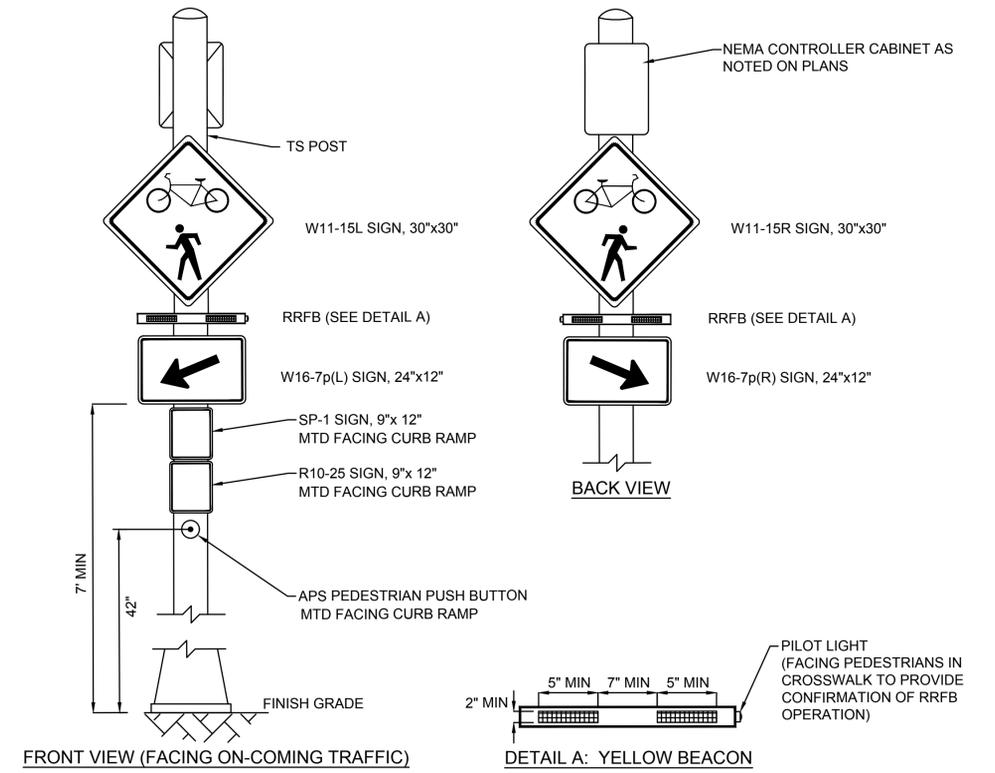
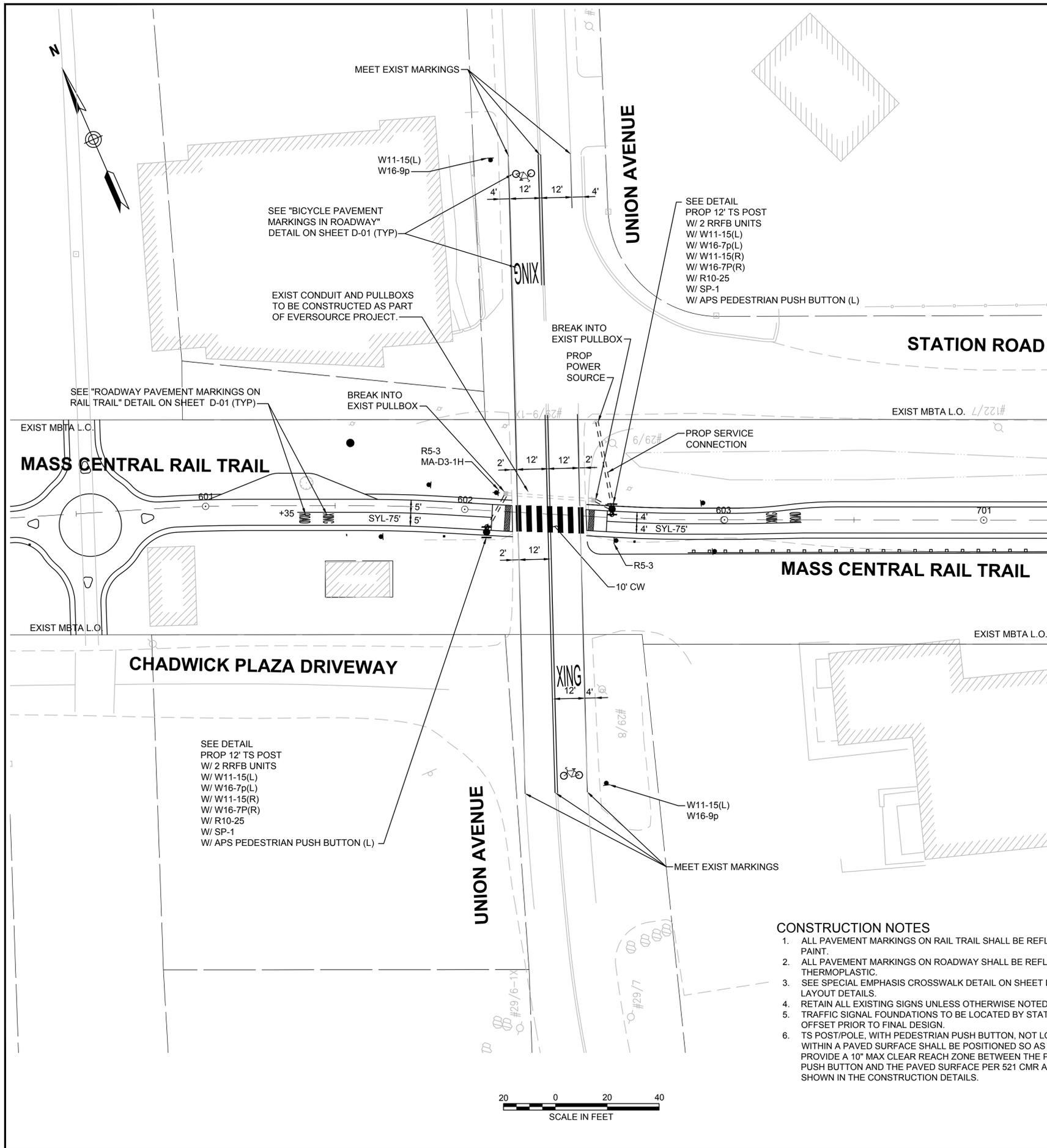
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: KEW	TRAFFIC PLANS	SHEET NO. TR-10
CHECKED: SHK		
DRAWN: KEW	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: PTN	ACC: XXXXXXXX	DATE: JAN 2021

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- NOTES:
- DURATION OF FLASHING UPON RECEIPT OF VALID PEDESTRIAN PUSHBUTTON ACTUATION SHALL BE INITIALLY SET FOR 15 SECONDS. THE MINIMUM ALLOWABLE TIME INTERVAL BETWEEN ACTUATION WILL BE 1 MINUTE.
 - ALL RRFB UNITS SHALL FLASH SIMULTANEOUSLY.
 - SEE SPECIAL PROVISIONS ITEMS 824.212 FOR MORE DETAILS.

RECTANGULAR RAPID FLASHING BEACON (RRFB) - POST MOUNTED
SCALE: N.T.S.

LIST OF MAJOR ITEMS REQUIRED

UNION AVENUE AT MASS CENTRAL RAIL TRAIL		
PAY ITEMS	QUANTITY	DESCRIPTION
824.211	1	3R NEMA ENCLOSURE FOR ALL COMPONENTS NEEDED TO MEET FUNCTIONAL REQUIREMENTS PER SPECIAL PROVISION
	1	SERVICE CONNECTION (OVERHEAD)
	2	12' TRAFFIC SIGNAL POST & PEDESTAL INCL FOUNDATION
	2	APS PEDESTRIAN PUSHBUTTON
	4	DUAL RECTANGULAR YELLOW LED BEACON IN NEMA ENCLOSURE
	2	R10-25 SIGN
804.3	55±	3 INCH ELECTRICAL CONDUIT TYPE NM - PLASTIC - (UL)
	2	W11-15L SIGN
832	2	W11-15R SIGN
	2	W16-7pL SIGN
	2	W16-7pR SIGN

PLUS NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION AND PROVIDE AN OPERATING RECTANGULAR RAPID FLASHING BEACON SYSTEM.

REV.	DATE	DESCRIPTION	BY

vhb
Transportation Land Development
Environmental Services
101 Walnut St., P.O. Box 9151
Watertown, MA 02472
617 924 1770 FAX 617 924 2286

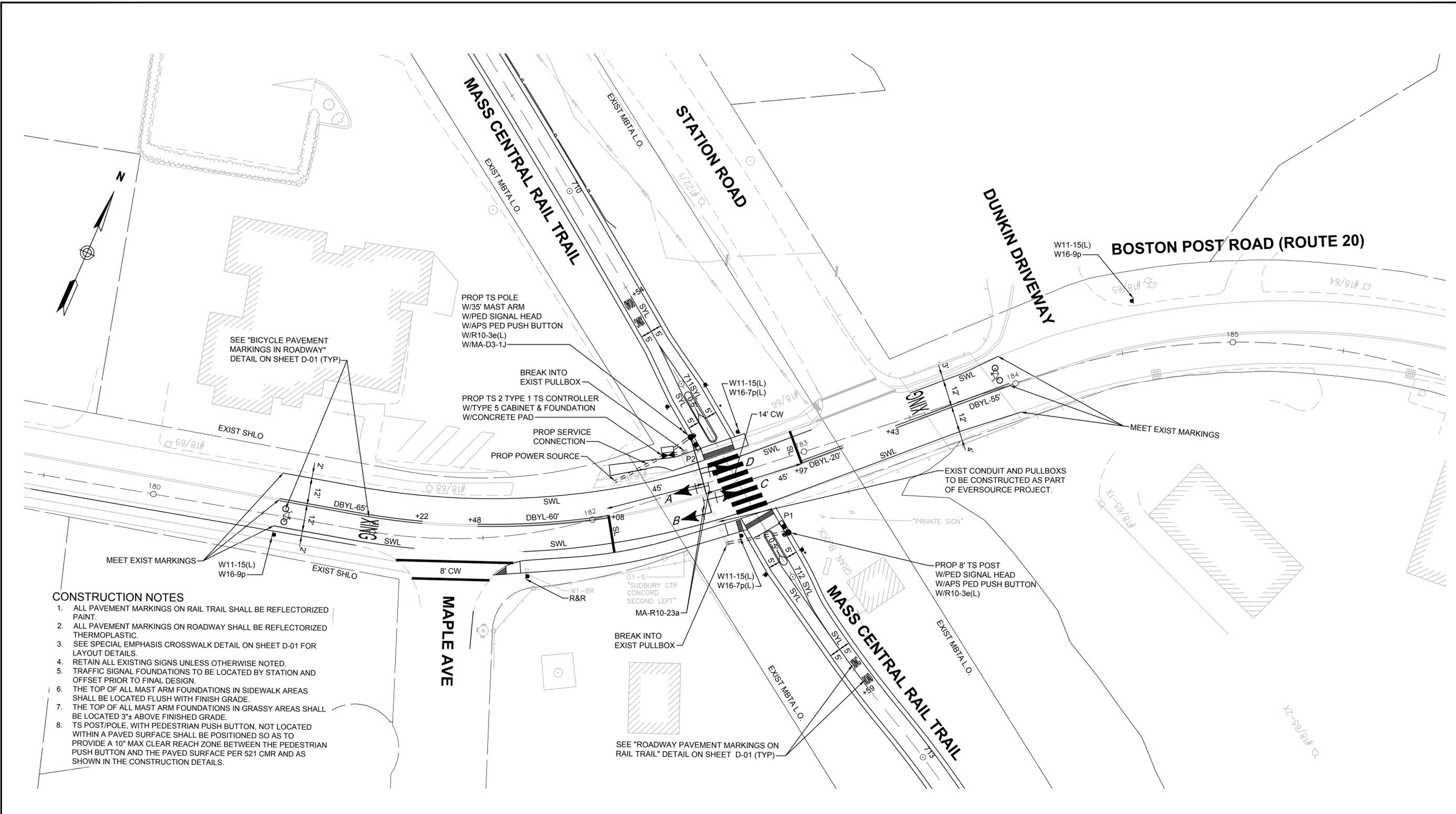
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: KEW	TRAFFIC PLANS	SHEET NO. TR-11
CHECKED: SHK		
DRAWN: KEW	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: PTN	ACC: XXXXXXXX	DATE: JAN 2021

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- CONSTRUCTION NOTES**
1. ALL PAVEMENT MARKINGS ON RAIL TRAIL SHALL BE REFLECTORIZED PAINT.
 2. ALL PAVEMENT MARKINGS ON ROADWAY SHALL BE REFLECTORIZED THERMOPLASTIC.
 3. SEE SPECIAL EMPHASIS CROSSWALK DETAIL ON SHEET D-01 FOR LAYOUT DETAILS.
 4. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.
 5. TRAFFIC SIGNAL FOUNDATIONS TO BE LOCATED BY STATION AND OFFSET PRIOR TO FINAL DESIGN.
 6. THE TOP OF ALL MAST ARM FOUNDATIONS IN SIDEWALK AREAS SHALL BE LOCATED FLUSH WITH FINISH GRADE.
 7. THE TOP OF ALL MAST ARM FOUNDATIONS IN GRASSY AREAS SHALL BE LOCATED 3"± ABOVE FINISHED GRADE.
 8. TS POST/POLE, WITH PEDESTRIAN PUSH BUTTON, NOT LOCATED WITHIN A PAVED SURFACE SHALL BE POSITIONED SO AS TO PROVIDE A 10" MAX CLEAR REACH ZONE BETWEEN THE PEDESTRIAN PUSH BUTTON AND THE PAVED SURFACE PER 521 CMR AND AS SHOWN IN THE CONSTRUCTION DETAILS.



REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

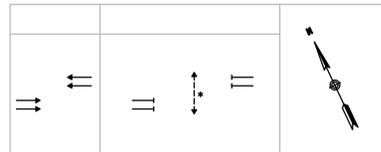
TRAFFIC PLANS

DESIGNER: KEW
CHECKED: SHK
DRAWN: KEW
CHECKED: PTN

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

SHEET NO. **TR-12**
12 OF 14



SEQUENCE AND TIMING FOR PRE-TIMED CONTROL (ISOLATED)

APPROACH	DIRECTION	HOUSING	1	2	3	4	5	FLASH
RTE 20 (BOSTON POST RD)	EB	A,B	DARK	FY	Y	R	FR	FY
RTE 20 (BOSTON POST RD)	WB	C,D	DARK	FY	Y	R	FR	FY
PEDESTRIAN X-ING	NB	P1-P2	DW	DW	DW	W	FDW	OUT

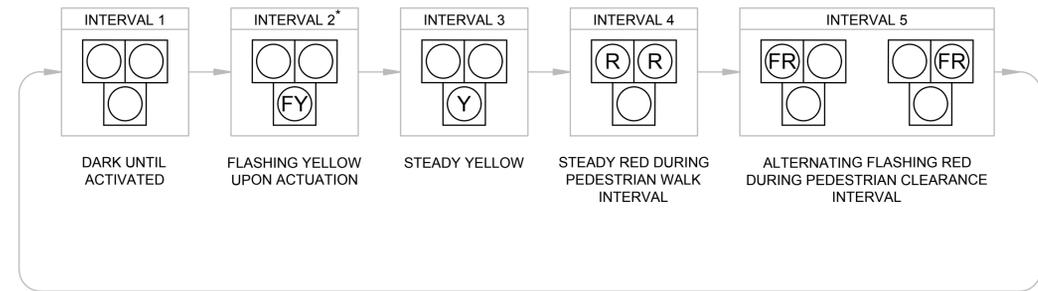
TIMING IN SECONDS	
MINIMUM GREEN (INITIAL)	40 5
PASSAGE TIME (VEHICLE)	- -
MAXIMUM 1	40 5
MAXIMUM 2	40 5
STEADY YELLOW INTERVAL	4
STEADY RED INTERVAL	7
PEDESTRIAN WALK INTERVAL	7
PEDESTRIAN CLEARANCE INTERVAL	15

CONFLICT FLASH OPERATION ONLY

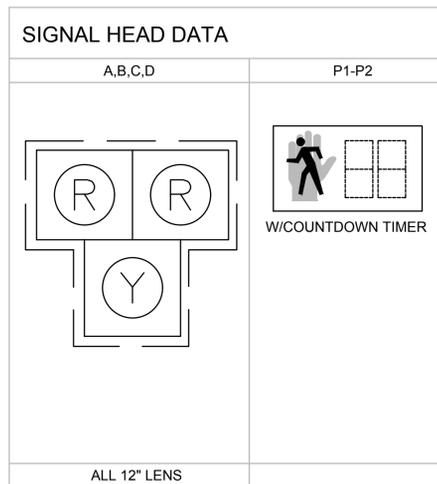
- NOTES:**
1. AUTOMATIC FLASHING OPERATION PER 2009 M.U.T.C.D., AS AMENDED.
 2. * UPON PEDESTRIAN PUSH BUTTON ACTUATION
 3. FR = ALTERNATING FLASHING RED
 4. MAXIMUM 1 = NORMAL OPERATION
 5. MAXIMUM 2 = NOT USED
 6. STOP AND GO OPERATION FOR 24 HOURS PER DAY. FLASHING OPERATION FOR EMERGENCY ONLY.
 7. DURING PEDESTRIAN INTERVAL, FDW THROUGH YELLOW OPERATION SHALL NOT BE IN EFFECT.

- SEQUENCE & TIMING NOTES:**
1. IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.
 2. THE RIGHT OF WAY MAY BE ASSIGNED TO ANY PHASE OR ANY COMBINATION OF NON-CONFLICTING PHASES.
 3. IF CALLS EXIST ON ALL PHASES, THE ASSIGNMENT OF RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE PREFERENTIAL PHASE SEQUENCE.
 4. IF THE ASSIGNED RIGHT-OF-WAY FOR ANY TRAFFIC MOVEMENT IS TO CHANGE DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATION FOR THAT MOVEMENT WILL DISPLAY THE APPROPRIATE CLEARANCE INTERVALS.
 5. THE HYBRID BEACON SHALL OPERATE THROUGH NORMAL SEQUENCE WHEN ACTIVATED BY INFRARED CAMERA. DURATION OF HYBRID BEACON OPERATION UPON RECEIPT OF VALID INFRARED CAMERA ACTUATION SHALL BE AS SHOWN IN THE SEQUENCE & TIMING CHART.

HAWK (PEDESTRIAN) PHASE SEQUENCE



* UPON PEDESTRIAN PUSH BUTTON ACTUATION
 R = STEADY RED
 FR = FLASHING RED
 Y = STEADY YELLOW
 FY = FLASHING YELLOW



- NOTES:**
1. ALL SIGNAL HEADS SHALL BE RIGID MOUNTED.
 2. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH 5"± NON-LOUVERED BACKPLATES. ALL BACKPLATES SHALL CONTAIN A 3" WIDE YELLOW REFLECTIVE BORDER.
 3. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH TUNNEL VISORS.
 4. ALL SIGNAL DISPLAYS SHALL BE EQUIPPED WITH L.E.D. MODULES.

LIST OF MAJOR ITEMS REQUIRED
 BOSTON POST ROAD (ROUTE 20) AT MASS CENTRAL RAIL TRAIL

PAY ITEM	QUANTITY	DESCRIPTION
824.02	1	8Ø TS 2 TYPE 1 CONTROLLER IN A TYPE 5 BASE MOUNTED CABINET INCLUDING FOUNDATION AND CONCRETE PAD
	1	TS 35' MAST ARM TYPE 2, STEEL, INCL. FOUNDATION
	1	TS POST 8' STANDARD INCL. FOUNDATION
	4	SIGNAL HEAD, 3-SECTION, 12" LENSES (HAWK DISPLAY)
	2	PEDESTRIAN SIGNAL HEAD (L.E.D.)
	2	PEDESTRIAN PUSH BUTTON W/R10-3e(L) AND SIGN SADDLE
	1	SERVICE CONNECTION (OVERHEAD)
804.3	65'±	3 INCH ELECTRICAL CONDUIT TYPE NM - PLASTIC - (UL)

PLUS NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION AND PROVIDE AN OPERATING PEDESTRIAN HYBRID BEACON.

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
 Environmental Services
 101 Walnut St., P.O. Box 9151
 Watertown, MA 02472
 617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

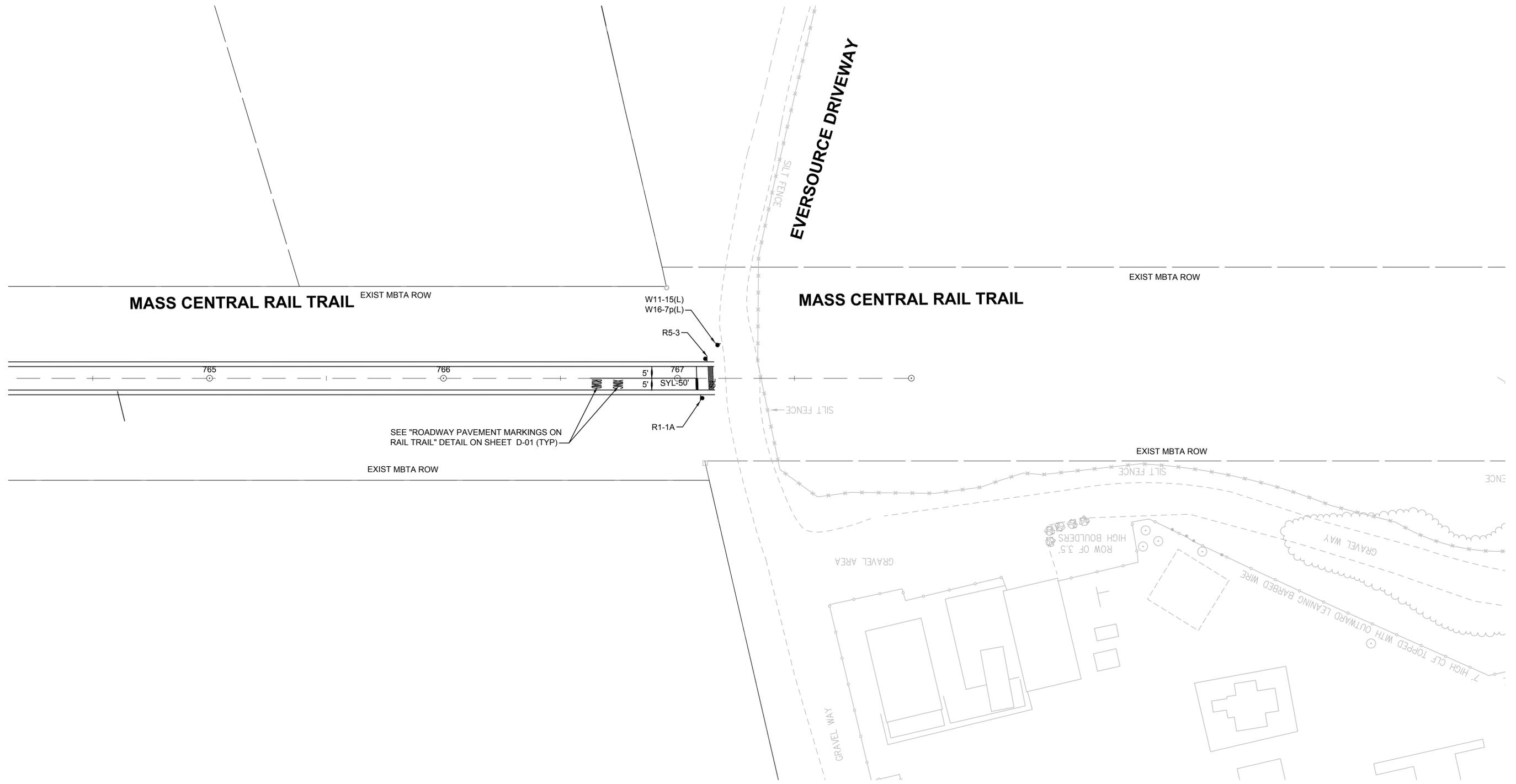
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 CHECKED: PTN

TRAFFIC PLANS

CONT: P19-3295-D1A
 ACC: XXXXXXXx

SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO.
 TR-13
 13 OF 14



SEE "ROADWAY PAVEMENT MARKINGS ON RAIL TRAIL" DETAIL ON SHEET D-01 (TYP)



REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: KEW	TRAFFIC PLANS	SHEET NO. TR-14
CHECKED: SHK		
DRAWN: KEW	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: PTN	ACC: XXXXXXXX	DATE: JAN 2021

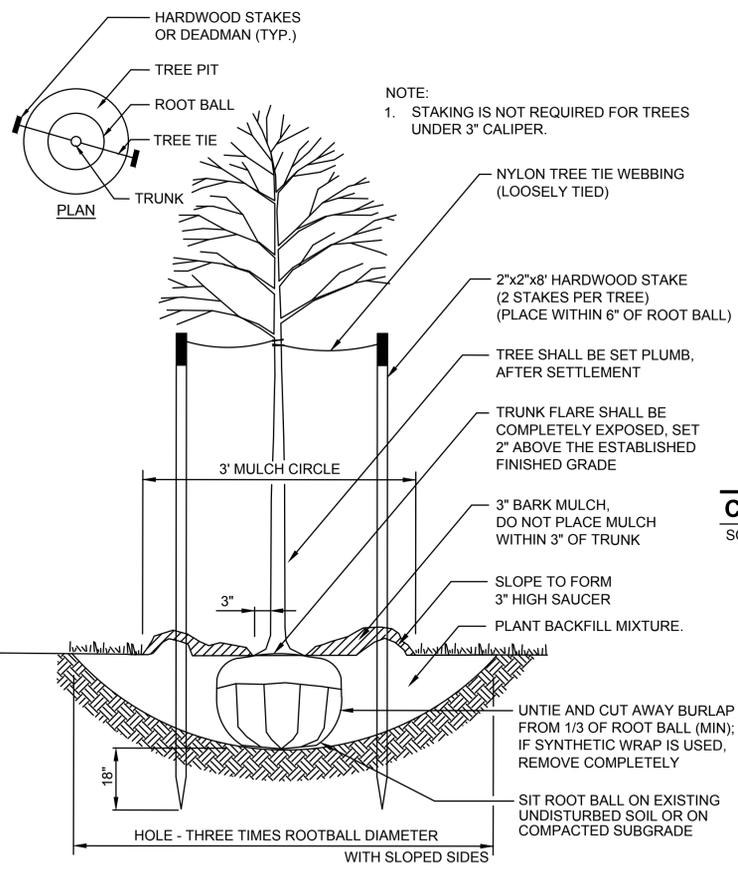
14 OF 14

TRAFFIC SIGN SUMMARY													
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R1-1A	18"	18"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			15	RED	WHITE	WHITE	P5-15	1.86	27.90
R1-1	30"	30"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			2	RED	WHITE	WHITE	P5-2	5.18	10.36
R5-3	24"	24"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			23	WHITE	BLACK	BLACK	P5-23	4.00	92.00
R10-3e(L)	9"	15"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			4	WHITE	WHITE/BLACK/ORANGE	BLACK	4 MTD ON TS POST	INCLUDED UNDER ITEMS 824.01 & 824.02	
MA-R10-23a	30"	36"		AS PER MASSDOT STANDARD			4	YELLOW/WHITE	BLACK	BLACK	4 MTD ON MAST ARM	7.50	30.0
R10-25	12"	9"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			4	WHITE	BLACK	BLACK	4 MTD ON TS POLE	INCLUDED UNDER ITEMS 824.111 & 824.112	
W11-15(L)	30"	30"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			41	YELLOW	BLACK	BLACK	4 MTD ON TS POST P5-37	6.25	256.25
W11-15(R)	30"	30"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			4	YELLOW	BLACK	BLACK	4 MTD ON TS POST	6.25	25.00
W16-7p(L)	24"	12"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			21	YELLOW	BLACK	BLACK	4 MTD ON TS MOST 17 MTD WITH OTHERS	2.00	42.0
W16-7p(R)	24"	12"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			4	YELLOW	BLACK	BLACK	4 MTD ON TS POST	2.00	8.00
W16-9p	24"	12"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			18	YELLOW	BLACK	BLACK	18 MTD WITH OTHERS	2.00	36.00
SP-1	9"	12"		1"C	1.5"		4	YELLOW	BLACK	BLACK	4 MTD ON TS POST	INCLUDED UNDER ITEMS 824.111 & 824.112	
			1"C	1"	N/A								
			1"C	1"									
			1"C	1"									
			1"C	1.5"									

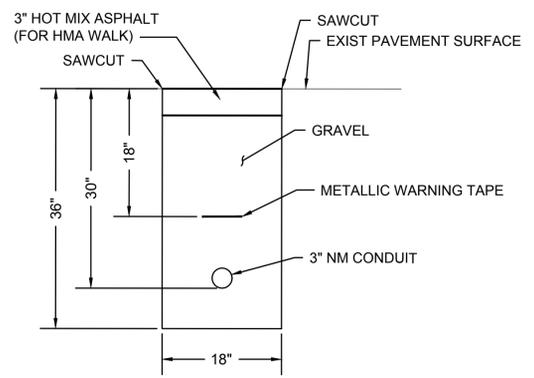
TRAFFIC SIGN SUMMARY													
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
MA-D3-1A	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1B	VARIABLE	12"		6"D/4.5"D	5"	N/A	1	GREEN	WHITE	WHITE	1 MTD ON TS POLE	INCLUDED UNDER ITEM 874	
MA-D3-1C	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1D	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1E	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1F	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1G	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1H	VARIABLE	12"		6"D/4.5"D	3"	N/A	1	GREEN	WHITE	WHITE	1 MTD WITH OTHERS	INCLUDED UNDER ITEM 874	
MA-D3-1J	VARIABLE	12"		6"D/4.5"D	5"	N/A	1	GREEN	WHITE	WHITE	1 MTD ON TS POLE	INCLUDED UNDER ITEM 874	

NOTES:
1. HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1977 MASSHIGHWAY DEPARTMENT CONSTRUCTION AND TRAFFIC STANDARD DETAILS, AS AMENDED, FOR SIGNS AND SUPPORTS; AND THE MASSHIGHWAY DEPARTMENT SIGN LISTINGS 1993 EDITION, AS AMENDED.

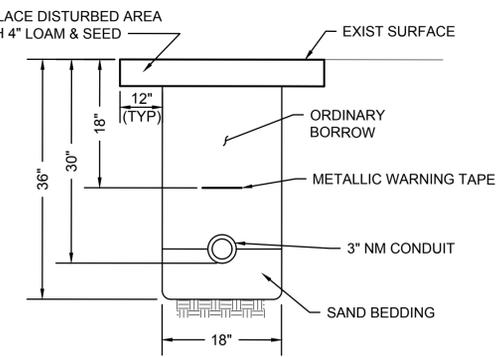
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING		
MASS CENTRAL RAIL TRAIL - WAYSIDE		
MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA		
DESIGNER: JCR	TRAFFIC SIGN SUMMARY	SHEET NO.
CHECKED: SHK		SS-01
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: NTS
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021
		1 OF 1



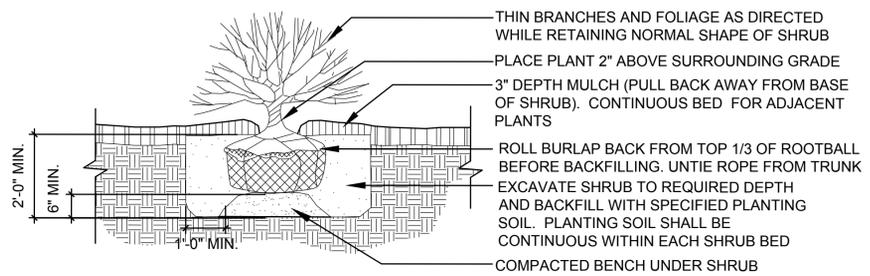
TREE PLANTING
SCALE: N.T.S.



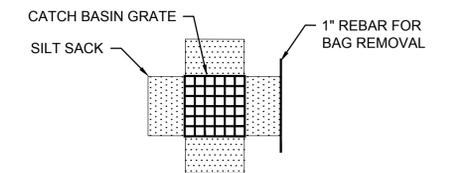
CONDUIT IN SIDEWALK
SCALE: N.T.S.



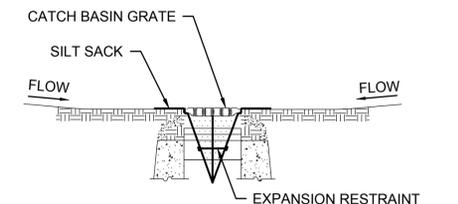
CONDUIT IN GRASS
SCALE: N.T.S.



SHRUB PLANTING
SCALE: N.T.S.



PLAN VIEW



SECTION VIEW

- NOTES:**
- INSTALL SILT SACK IN EXISTING CATCH BASINS, BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL SURFACE COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
 - GRATE TO BE PLACED OVER SILT SACK.
 - SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED

INLET PROTECTION - SILT SACK IN CATCH BASIN
SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

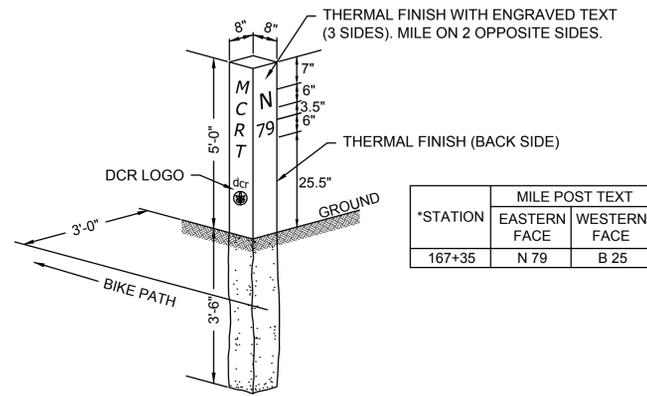
MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

DESIGNER: JCR	CONSTRUCTION DETAILS	SHEET NO. D-02
CHECKED: SHK		
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021

2 OF 8

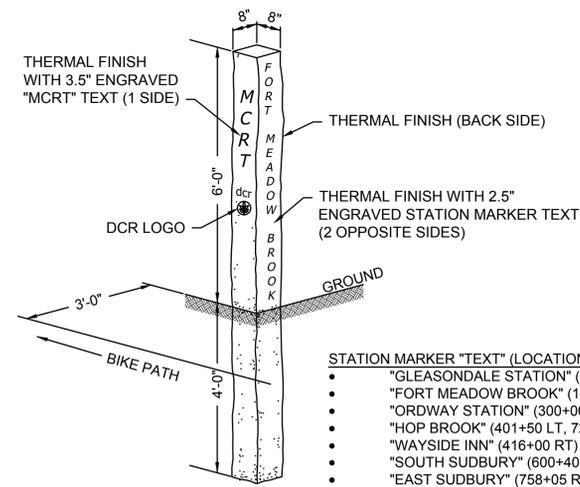
NOTE:
 ALL LETTERING TO BE 1/2" "V"
 SUNK LETTER IN TACOMA TEXT



*STATIONING IS APPROXIMATE.
 CONTRACTOR SHALL VERIFY
 LOCATIONS PRIOR TO INSTALLATION

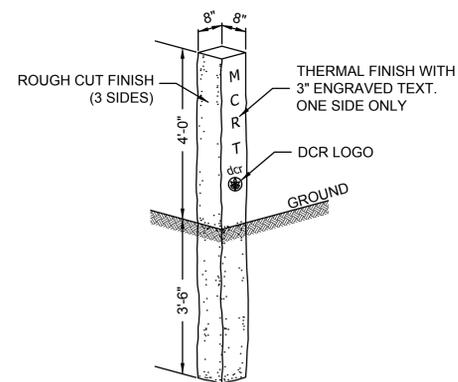
GRANITE MILE POST

SCALE: N.T.S.



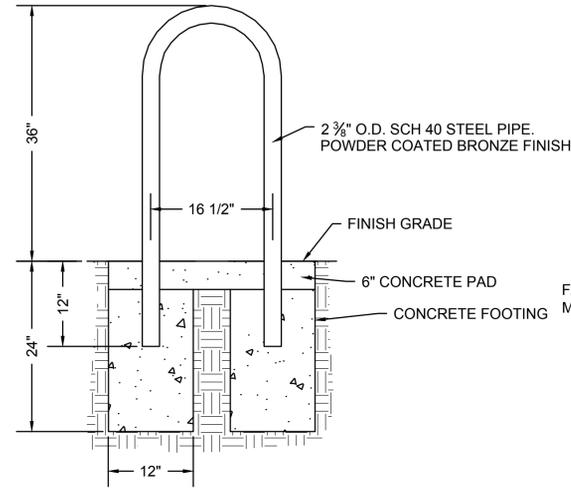
GRANITE STATION PILLAR

SCALE: N.T.S.



GRANITE LETTERED POST

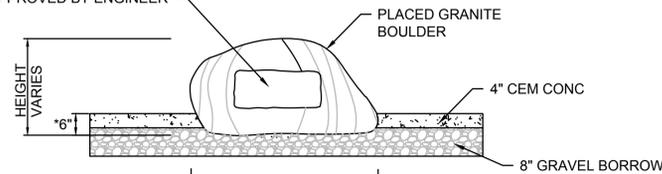
SCALE: N.T.S.



BICYCLE RACK

SCALE: N.T.S.

ENGRAVED GRAPHICS ON
 FACE OF BOULDER AS
 APPROVED BY ENGINEER

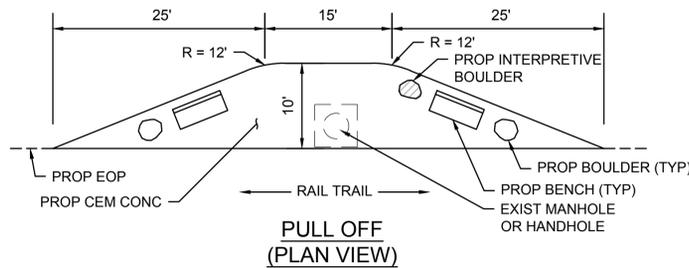


*ADEQUATE BURIAL DEPTH SHALL BE
 PROVIDED AS TO CREATE A STABLE
 STRUCTURE FREE OF MOVEMENT

NOTE:
 1. LOCATION AND FACING TO BE
 APPROVED BY ENGINEER IN THE
 FIELD.
 2. STANDARD BOULDERS TO BE
 INSTALLED IN SAME MANOR.

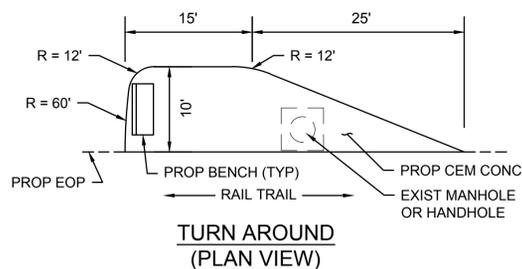
INTERPRETIVE BOULDER

SCALE: N.T.S.



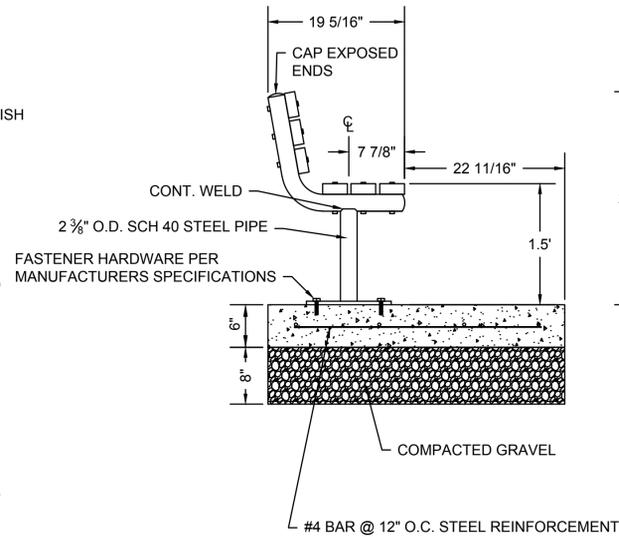
CEMENT CONCRETE PULL OFF

SCALE: N.T.S.



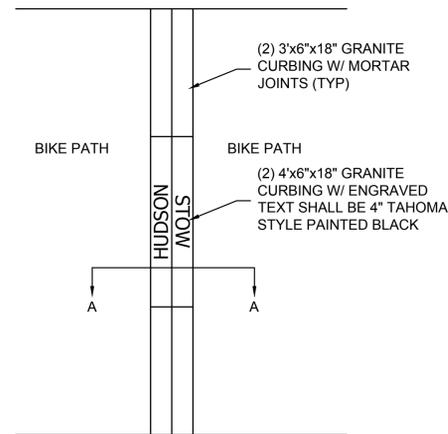
CEMENT CONCRETE TURN AROUND

SCALE: N.T.S.



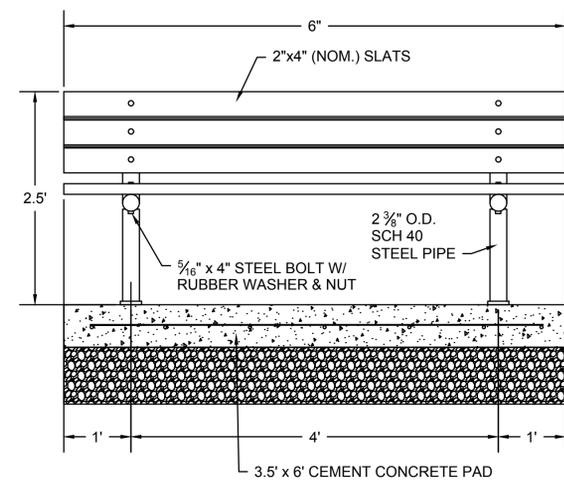
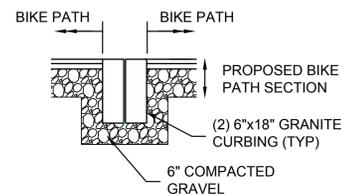
BENCH

SCALE: N.T.S.

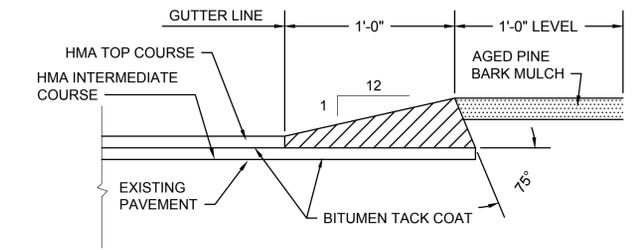


INLAID GRANITE TOWN LINE MARKER

SCALE: N.T.S.



BENCH NOTES:
 1. STEEL PIPING SHALL BE POWDER COATED
 BRONZE FINISH
 2. SLATS SHALL BE 2x4 (NOM.). MATERIAL AND FINISH
 TO BE PER SPECIAL PROVISIONS.
 3. ALL HARDWARE SHALL BE STAINLESS STEEL
 UNLESS OTHERWISE NOTED.



HMA BERM TYPE A-MODIFIED

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY



COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION
 DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
 MASS CENTRAL RAIL TRAIL
 HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

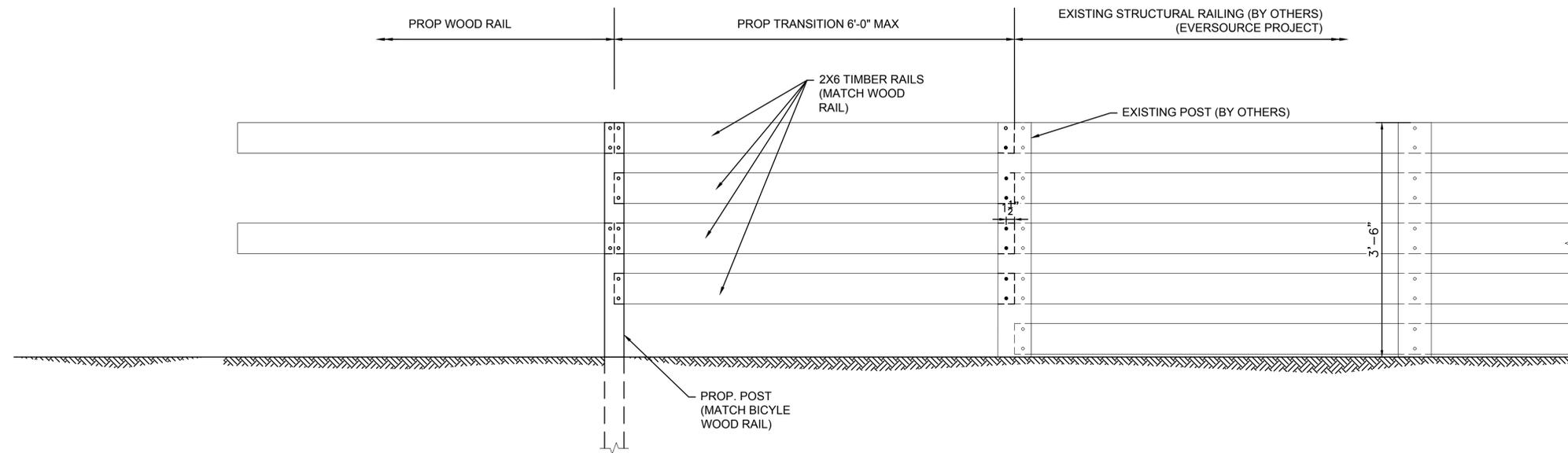
CONSTRUCTION DETAILS

DESIGNER: JCR
 CHECKED: SHK
 DRAWN: JCR
 CHECKED: TAL

CONT: P19-3295-D1A
 ACC: XXXXXXXX

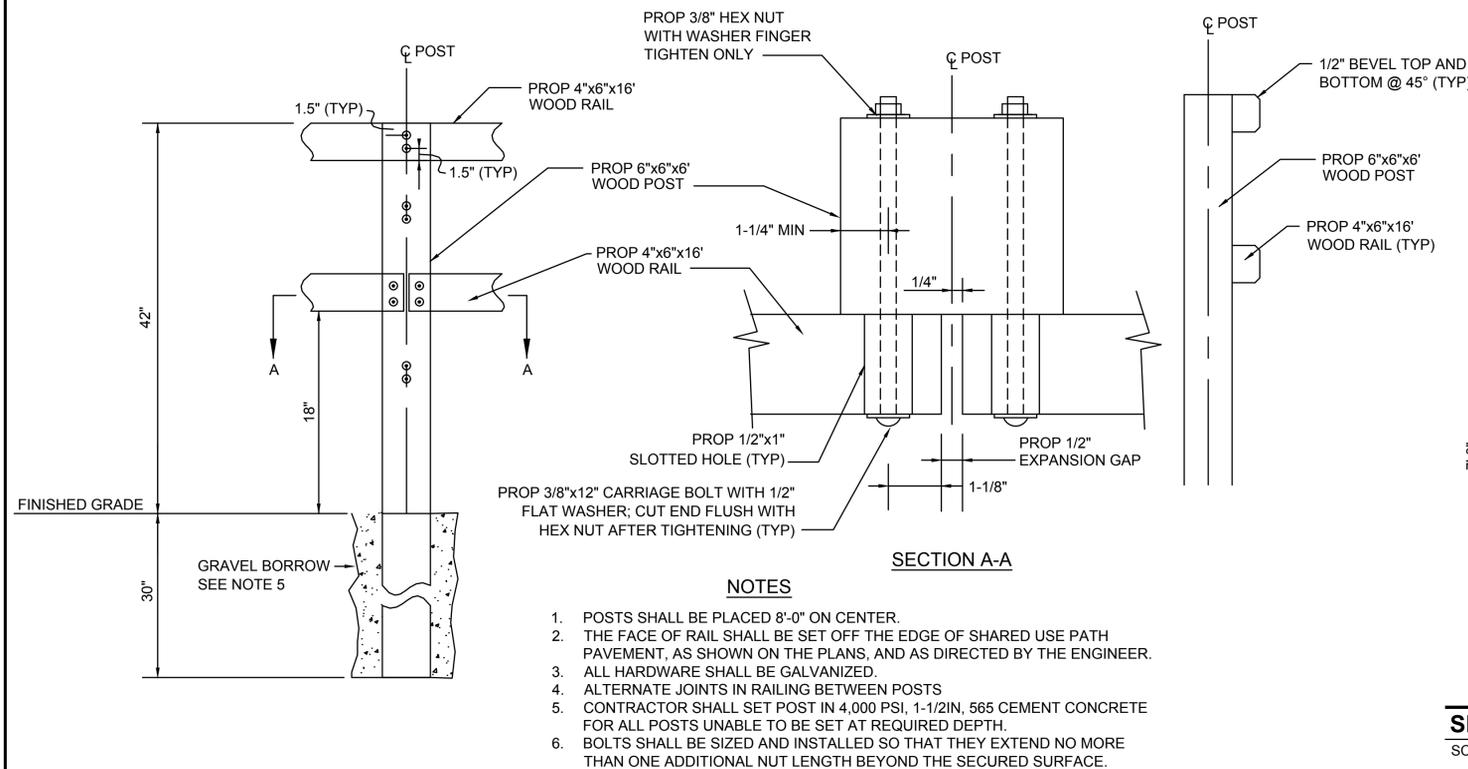
SCALE: 1" = 20'-0"
 DATE: JAN 2021

SHEET NO. D-03
 3 OF 8



WOOD RAIL TRANSITION DETAIL AT EXISTING STRUCTURAL RAILING

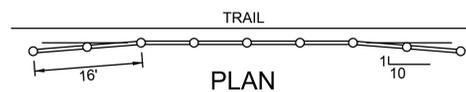
SCALE: NTS



- NOTES**
1. POSTS SHALL BE PLACED 8'-0" ON CENTER.
 2. THE FACE OF RAIL SHALL BE SET OFF THE EDGE OF SHARED USE PATH PAVEMENT, AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
 3. ALL HARDWARE SHALL BE GALVANIZED.
 4. ALTERNATE JOINTS IN RAILING BETWEEN POSTS
 5. CONTRACTOR SHALL SET POST IN 4,000 PSI, 1-1/2IN, 565 CEMENT CONCRETE FOR ALL POSTS UNABLE TO BE SET AT REQUIRED DEPTH.
 6. BOLTS SHALL BE SIZED AND INSTALLED SO THAT THEY EXTEND NO MORE THAN ONE ADDITIONAL NUT LENGTH BEYOND THE SECURED SURFACE.

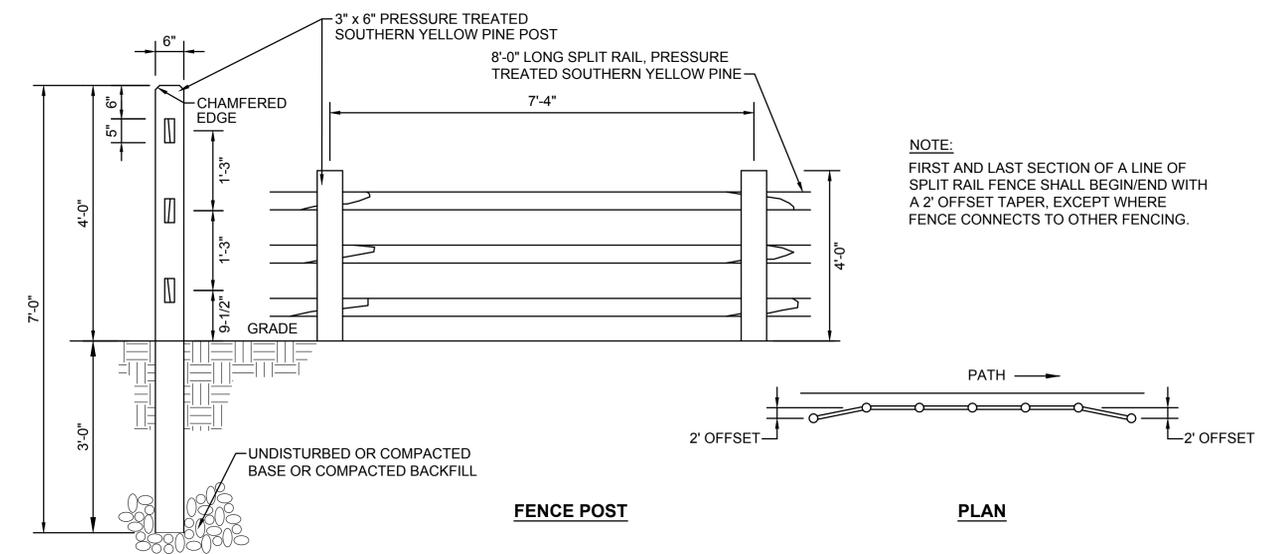
WOOD RAIL - ELEVATION AND SECTION VIEWS

SCALE: NTS



WOOD RAIL TERMINAL END - PLAN VIEW

SCALE: NTS



NOTE:
FIRST AND LAST SECTION OF A LINE OF SPLIT RAIL FENCE SHALL BEGIN/END WITH A 2' OFFSET TAPER, EXCEPT WHERE FENCE CONNECTS TO OTHER FENCING.

SPLIT RAIL WOOD FENCE

SCALE: NTS

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

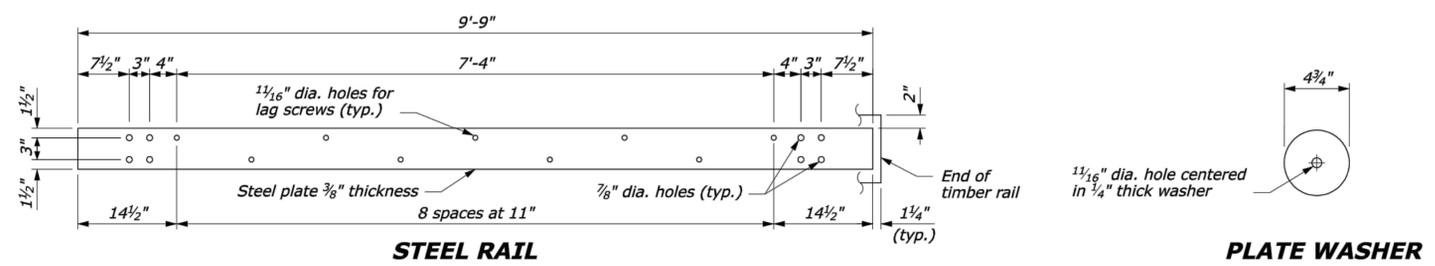
MASS CENTRAL RAIL TRAIL - WAYSIDE

**MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

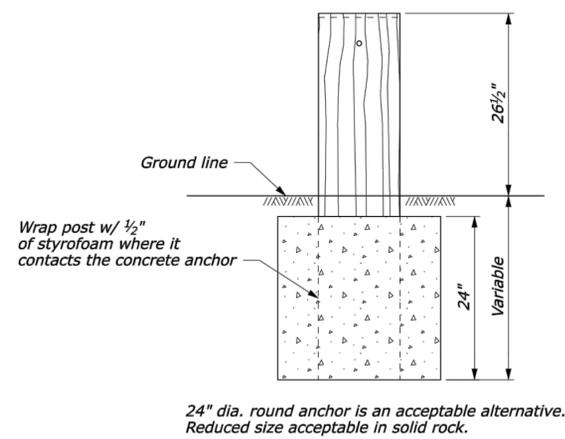
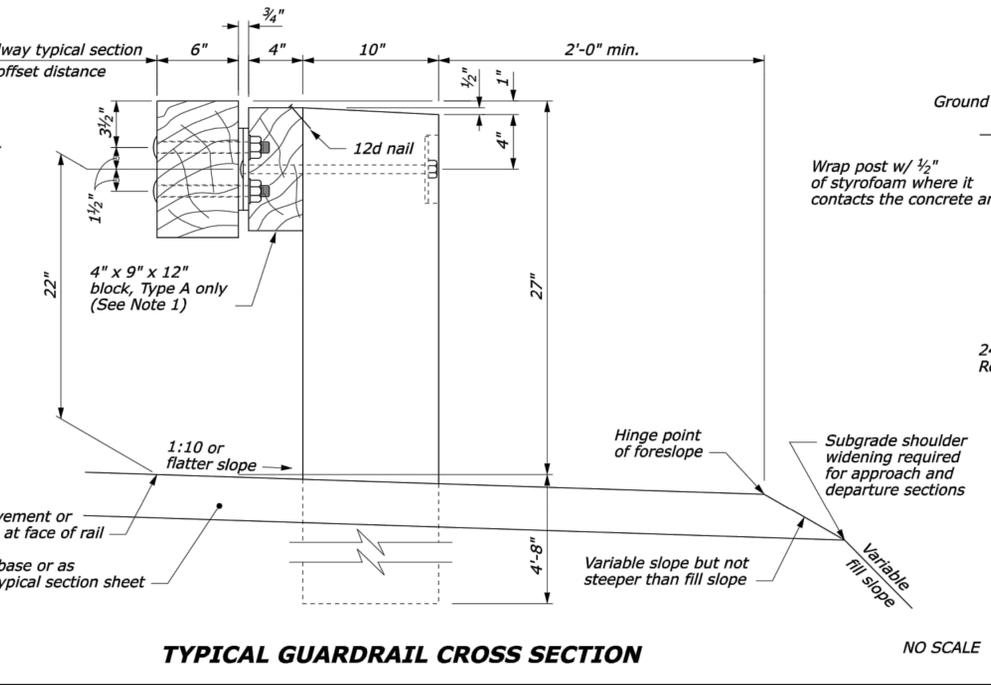
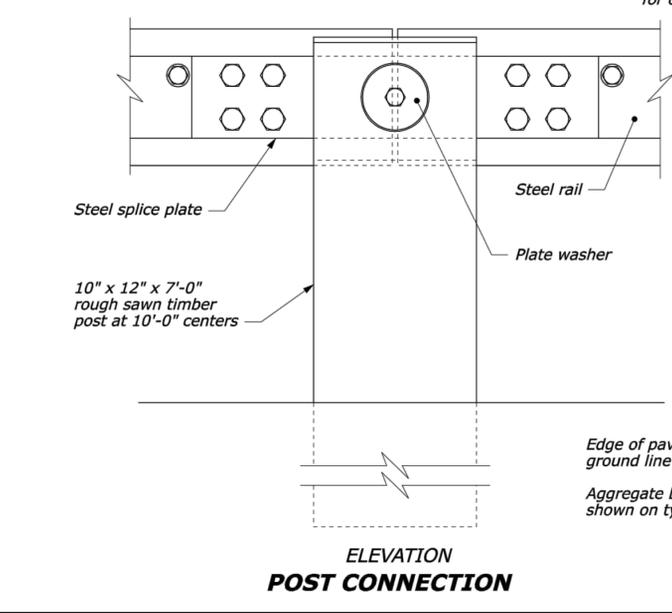
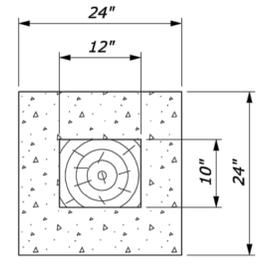
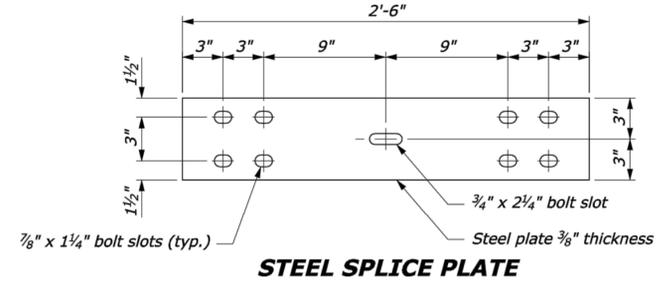
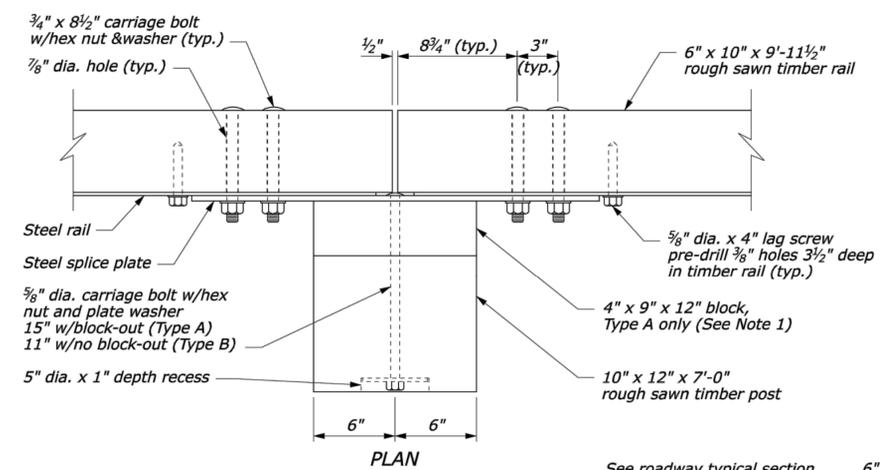
DESIGNER: JCR	CONSTRUCTION DETAILS	SHEET NO. D-04
CHECKED: SHK		
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021

4 OF 8

STATE	PROJECT	SHEET NUMBER



- NOTES:
1. EXTEND THE FILL WIDENING A MINIMUM OF 5 FEET BEHIND THE GUARDRAIL, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 2. THE GUARDRAIL SHALL BE TYPE A, BLOCKED-OUT GUARDRAIL.



CONCRETE ANCHOR FOR SHORT GUARDRAIL POST

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
STEEL-BACKED TIMBER GUARDRAIL TYPE A & TYPE B	
STANDARD APPROVED FOR USE 3/1990	STANDARD
REVISED: 4/1994 6/2005	617-60

STEEL-BACKED TIMBER GUARDRAIL
SCALE: NTS

REV.	DATE	DESCRIPTION	BY



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER: JCR
CHECKED: SHK
DRAWN: JCR
CHECKED: TAL

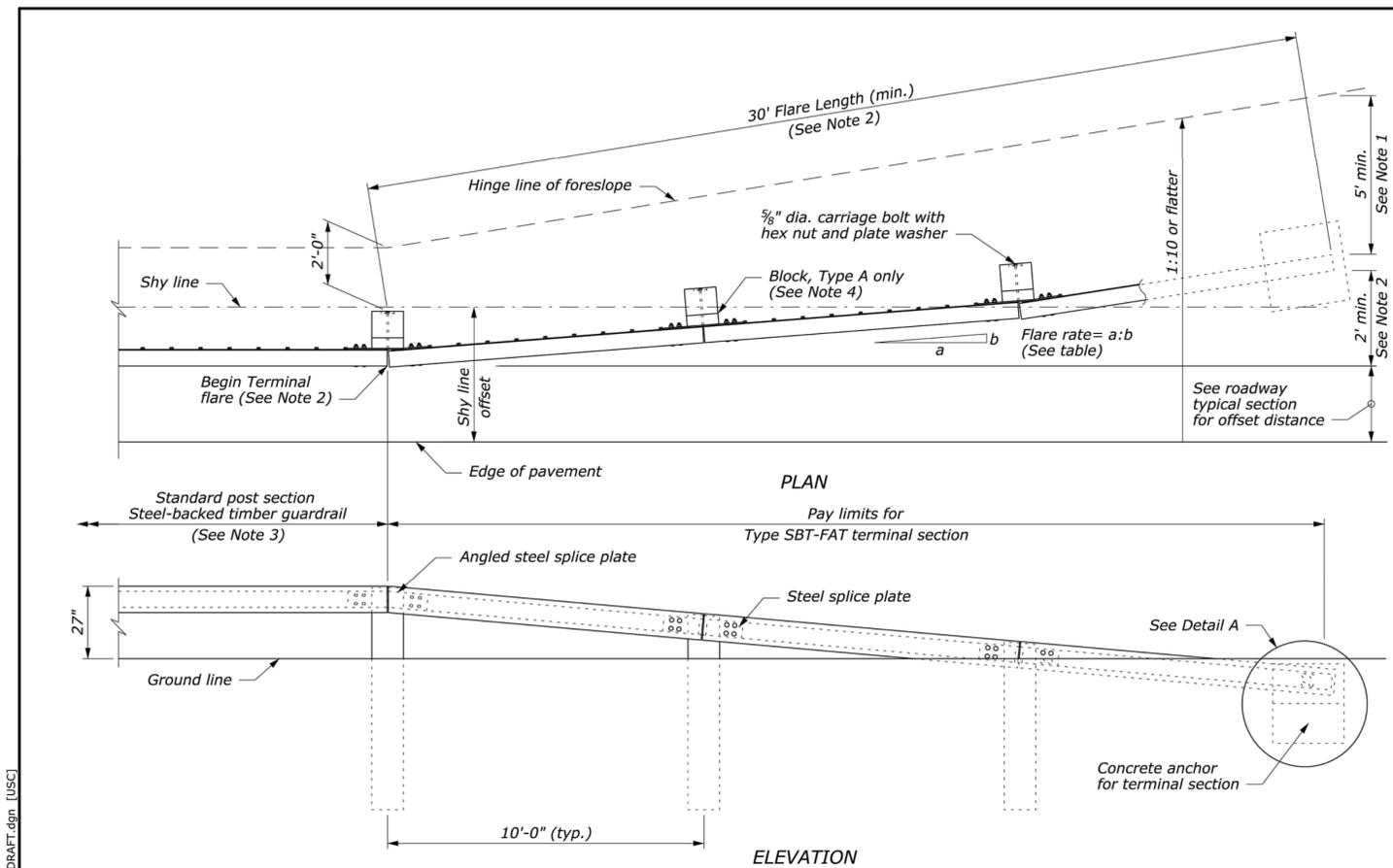
CONSTRUCTION DETAILS

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

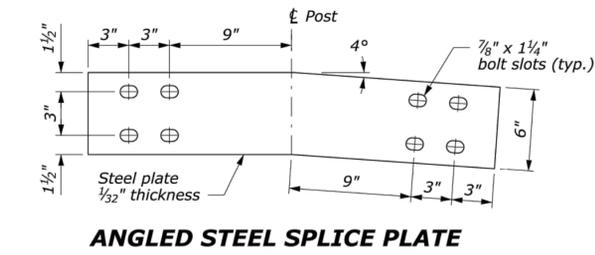
SHEET NO. D-05
5 OF 8

STATE	PROJECT	SHEET NUMBER

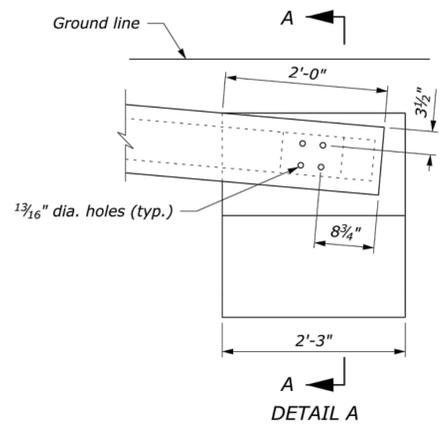


- NOTES:
1. EXTEND THE FILL WIDENING A MINIMUM OF 5 FEET BEHIND THE GUARDRAIL, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 2. SEE STANDARD 617-60, STEEL BACKED TIMBER GUARDRAIL, TYPE SBTA AND SBTB, FOR TIMBER, STRUCTURAL STEEL AND HARDWARE.
 3. ON THE TYPE A, BLOCKED-OUT GUARDRAIL, INCLUDE THE BLOCKS IN THE TERMINAL SECTION, EXCEPT ON THE CONCRETE ANCHOR.

Design Speed (mph)	Shy line offset (ft)	Flare rate inside shy line (a:b)	Flare rate outside shy line (a:b)
60	8.0	26:1	14:1
50	6.5	21:1	11:1
40	5.0	16:1	8:1
30 and less	3.5	13:1	7:1

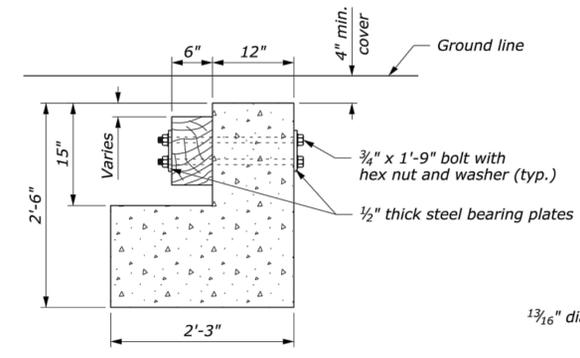


ANGLED STEEL SPLICE PLATE

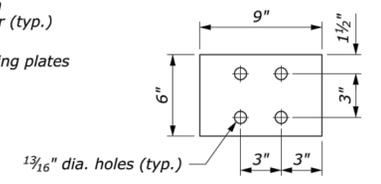


DETAIL A

CONCRETE ANCHOR



SECTION A-A



STEEL BEARING PLATE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

**STEEL-BACKED TIMBER GUARDRAIL
TERMINAL SECTION
TYPE SBT-FAT**

STANDARD APPROVED FOR USE 1/1990
REVISED: 4/1994 6/2005
DRAFT: 12/2013

STANDARD 617-61

NO SCALE

24 December 2013 6:54 AM c:\myfiles\pw_production\mms67487\Standard_617-61.DRA\FT.dgn [USC]

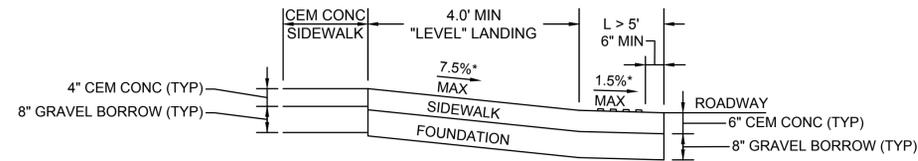
STEEL-BACKED TIMBER GUARDRAIL - TERMINAL SECTION TYPE SBT-FAT
SCALE: NTS

REV.	DATE	DESCRIPTION	BY

Transportation Land Development
Environmental Services
101 Walnut St., P.O. Box 9151
Watertown, MA 02472
617 924 1770 FAX 617 924 2286

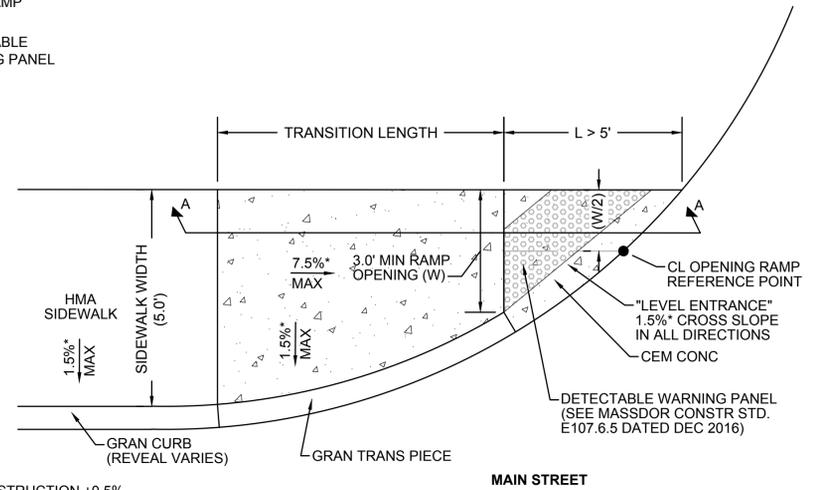
**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE	
MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA	
DESIGNER: JCR	CHECKED: SHK
DRAWN: JCR	CHECKED: TAL
CONT: P19-3295-D1A	ACC: XXXXXXX
SCALE: 1" = 20'-0"	DATE: JAN 2021
SHEET NO. D-06	6 OF 8



LEGEND

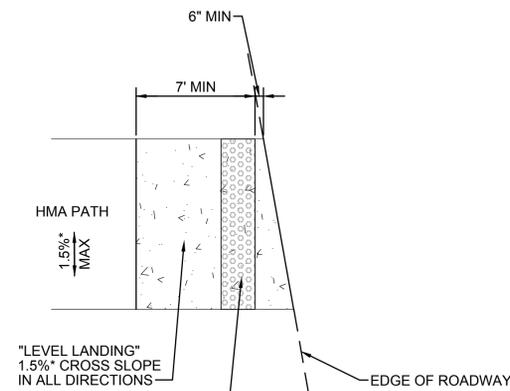
-  LIMITS OF CEM CONC RAMP
-  DETECTABLE WARNING PANEL



*TOLERANCE FOR CONSTRUCTION ±0.5%

WHEELCHAIR RAMP - 'L' IS GREATER THAN 5'

SCALE: NTS



LEGEND

-  LIMITS OF CEM CONC RAMP
 -  DETECTABLE WARNING PANEL
- *TOLERANCE FOR CONSTRUCTION ±0.5%

WHEELCHAIR RAMP - PATH

SCALE: N.T.S.

REV.	DATE	DESCRIPTION	BY

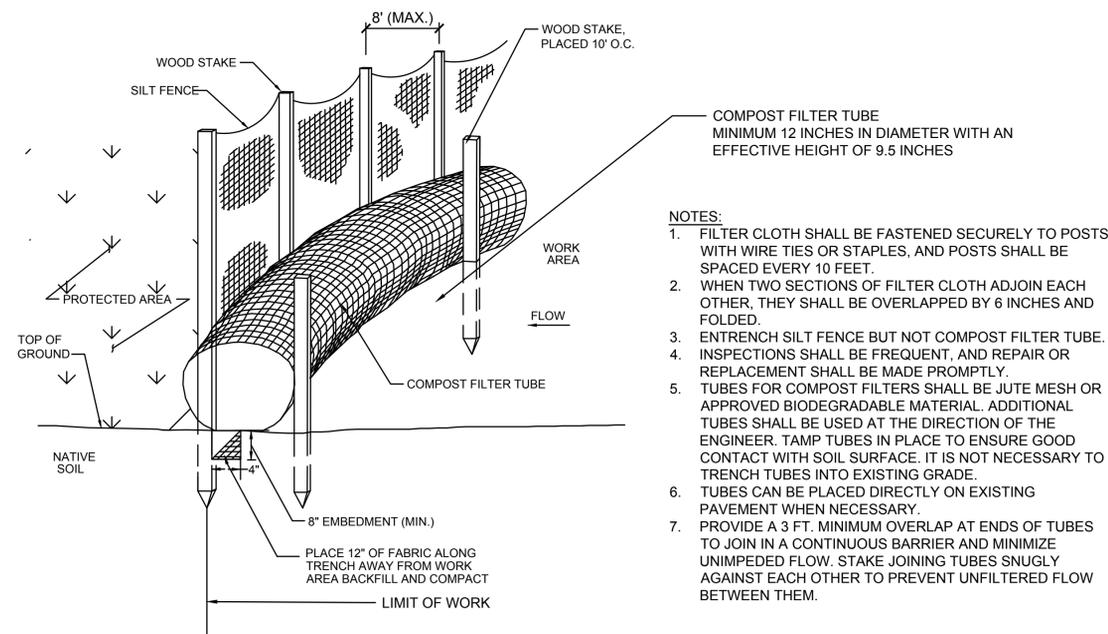


COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

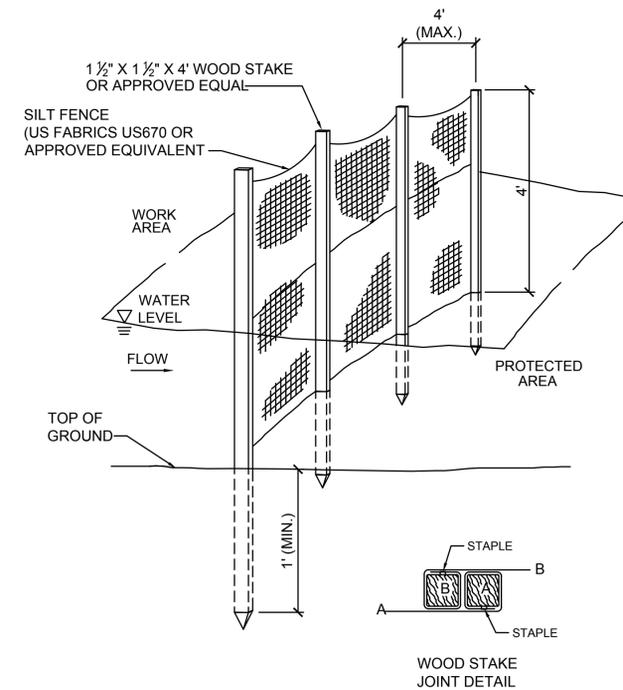
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CHECKED: SHK		D-07
DRAWN: JCR		CONT: P19-3295-D1A
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021



- NOTES:**
1. FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES, AND POSTS SHALL BE SPACED EVERY 10 FEET.
 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED.
 3. ENTRENCH SILT FENCE BUT NOT COMPOST FILTER TUBE.
 4. INSPECTIONS SHALL BE FREQUENT, AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY.
 5. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
 6. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
 7. PROVIDE A 3 FT. MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.

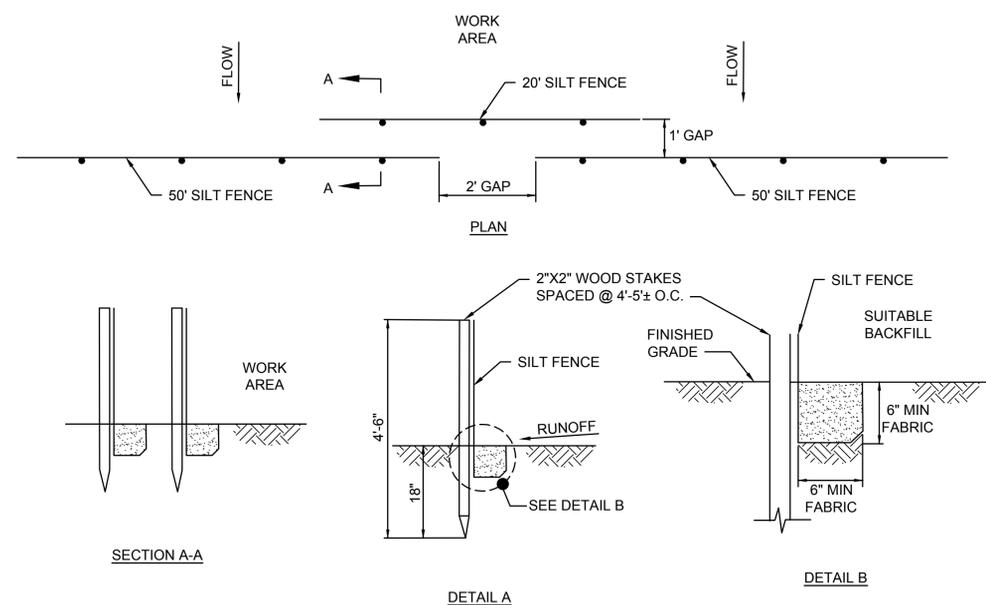
COMPOST FILTER TUBE AND SILT FENCE DETAIL - TYPE A EROSION CONTROL BARRIER

SCALE: N.T.S.



4' HIGH SILT FENCE BARRIER DETAIL - EROSION CONTROL BARRIER TYPE C (OPTION 1)

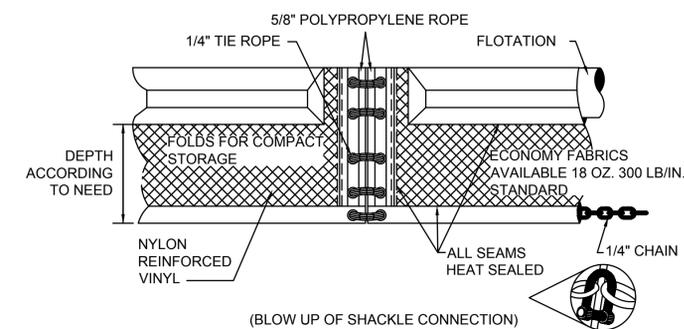
SCALE: N.T.S.



- NOTES:**
1. SYNCOPATED SILT FENCE SHALL BE USED WITHIN ALL PRIORITY HABITAT AREAS AND WITHIN 450' OF VERNAL POOLS.
 2. INSTALL GAP AFTER EVERY 50' OF EROSION CONTROL BARRIER.

SYNCOPATED SILT FENCE DETAIL - TYPE B EROSION CONTROL BARRIER

SCALE: N.T.S.



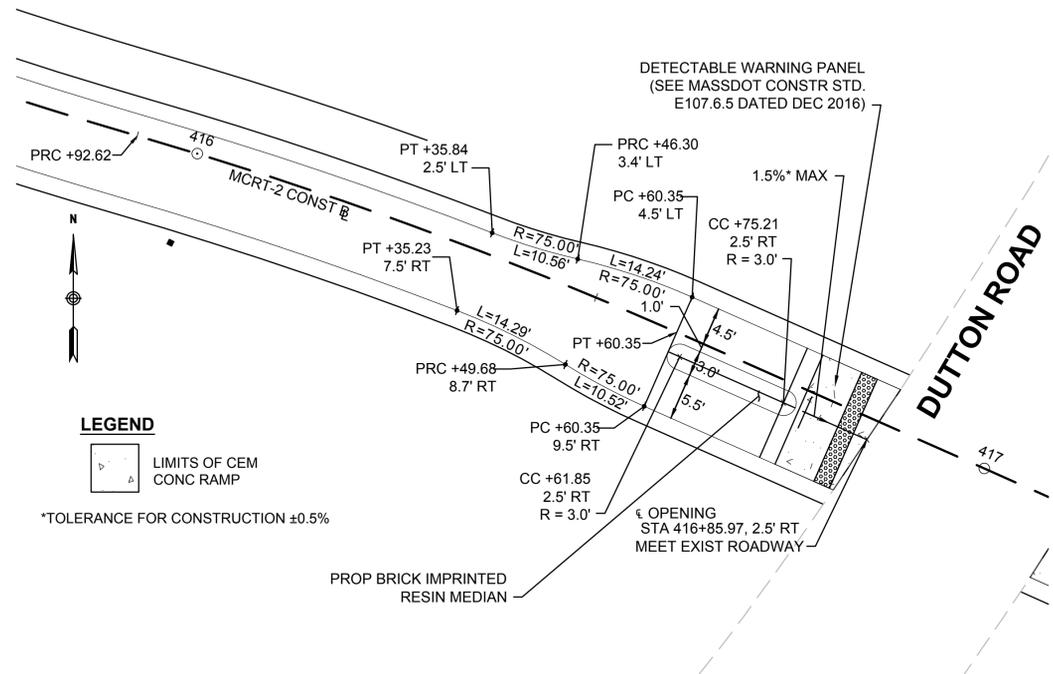
TURBIDITY CURTAIN DETAIL - EROSION CONTROL BARRIER TYPE C (OPTION 2)

SCALE: N.T.S.

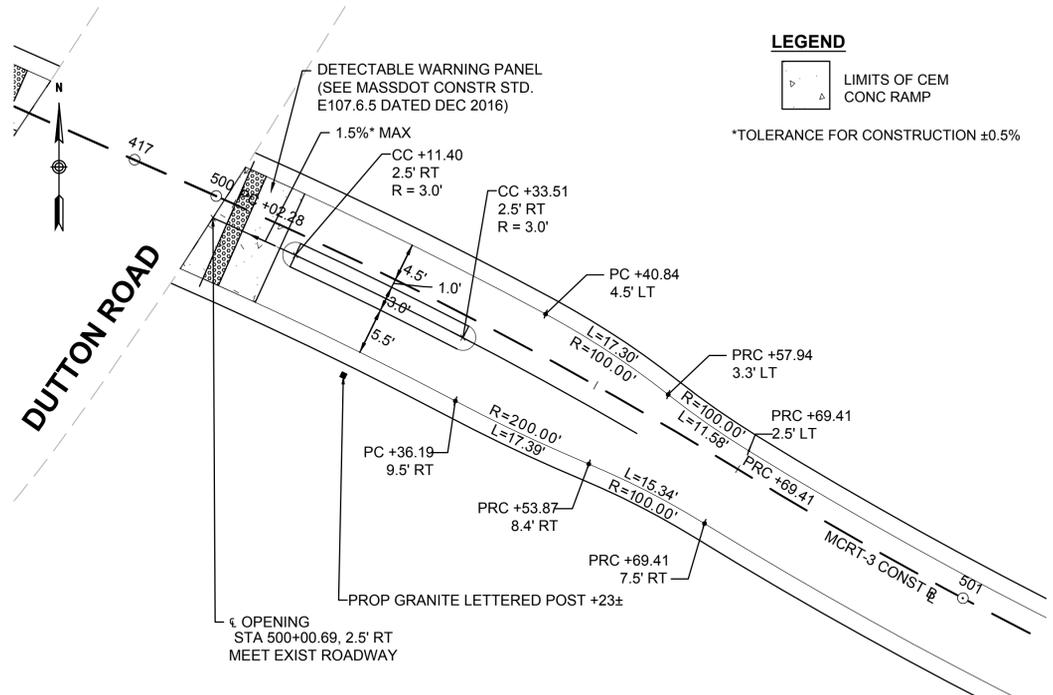
REV.	DATE	DESCRIPTION	BY

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING			
MASS CENTRAL RAIL TRAIL - WAYSIDE			
MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA			
DESIGNER: JCR	CONSTRUCTION DETAILS		SHEET NO.
CHECKED: SHK			D-08
DRAWN: JCR	CONT: P19-3295-D1A	SCALE: 1" = 20'-0"	
CHECKED: TAL	ACC: XXXXXXXX	DATE: JAN 2021	8 OF 8

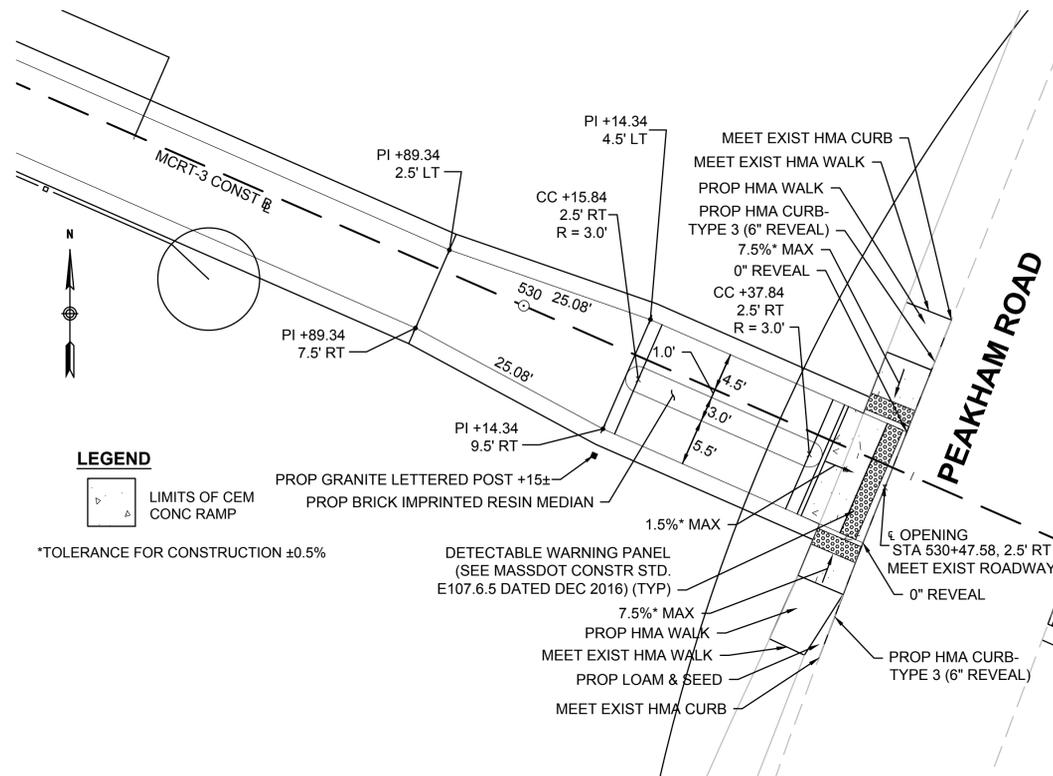




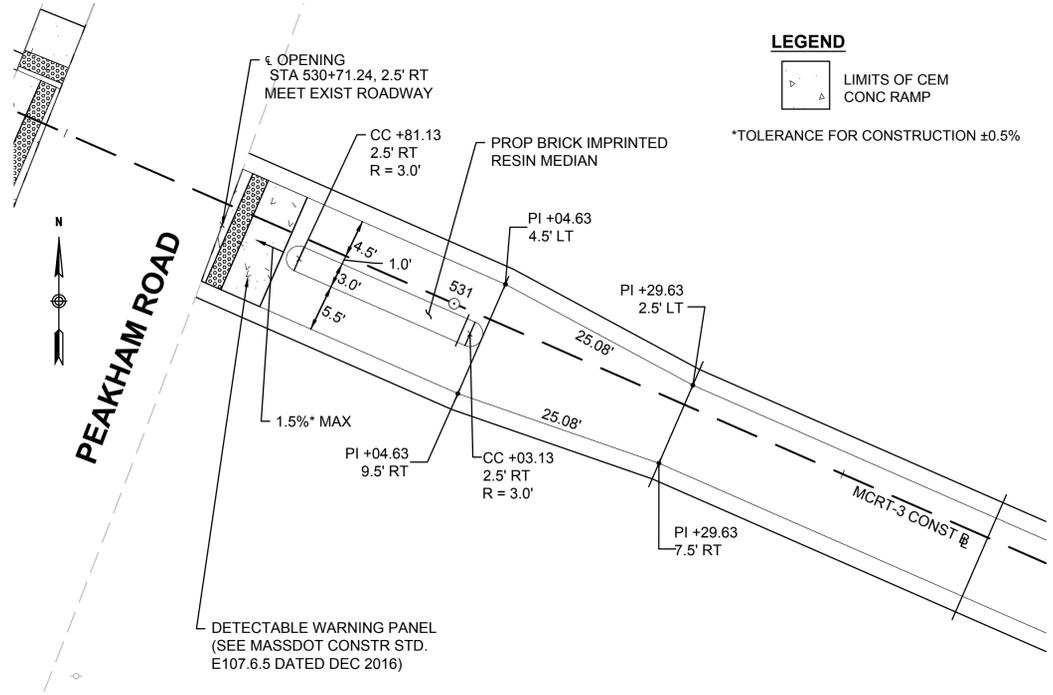
GATEWAY 9 - DUTTON ROAD (WEST)
SCALE: 1" = 10'



GATEWAY 10 - DUTTON ROAD (EAST)
SCALE: 1" = 10'



GATEWAY 11 - PEAKHAM ROAD (WEST)
SCALE: 1" = 10'



GATEWAY 12 - PEAKHAM ROAD (EAST)
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

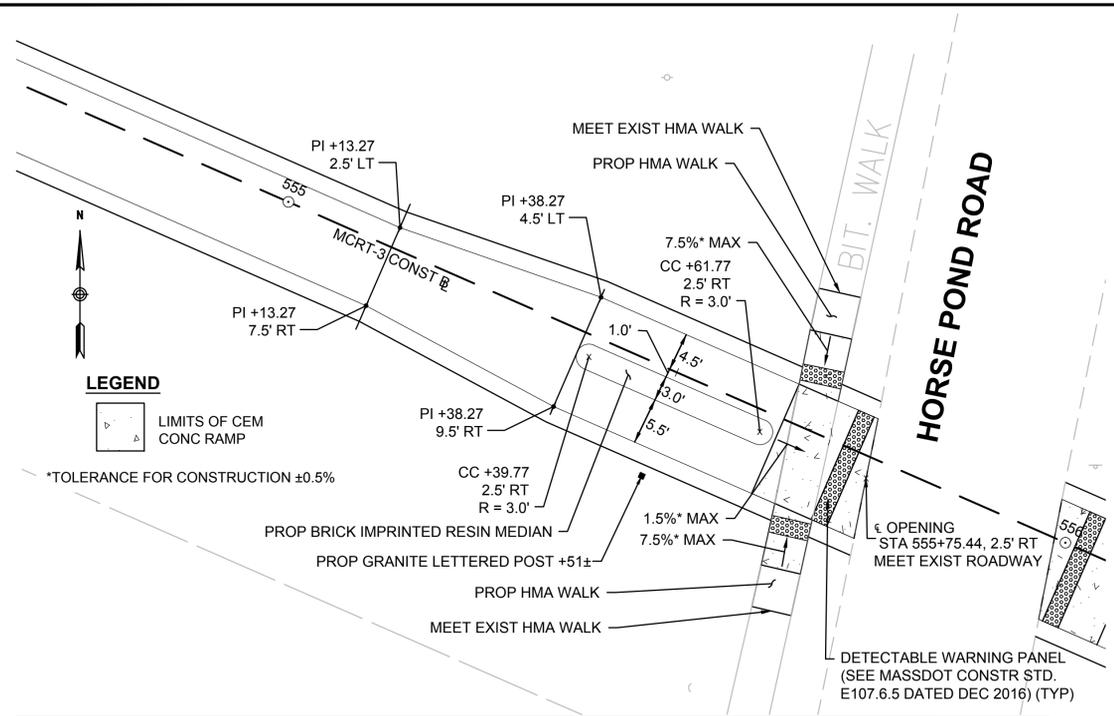
GATEWAY DETAILS

DESIGNER: JCR
CHECKED: SHK
DRAWN: JCR
CHECKED: TAL

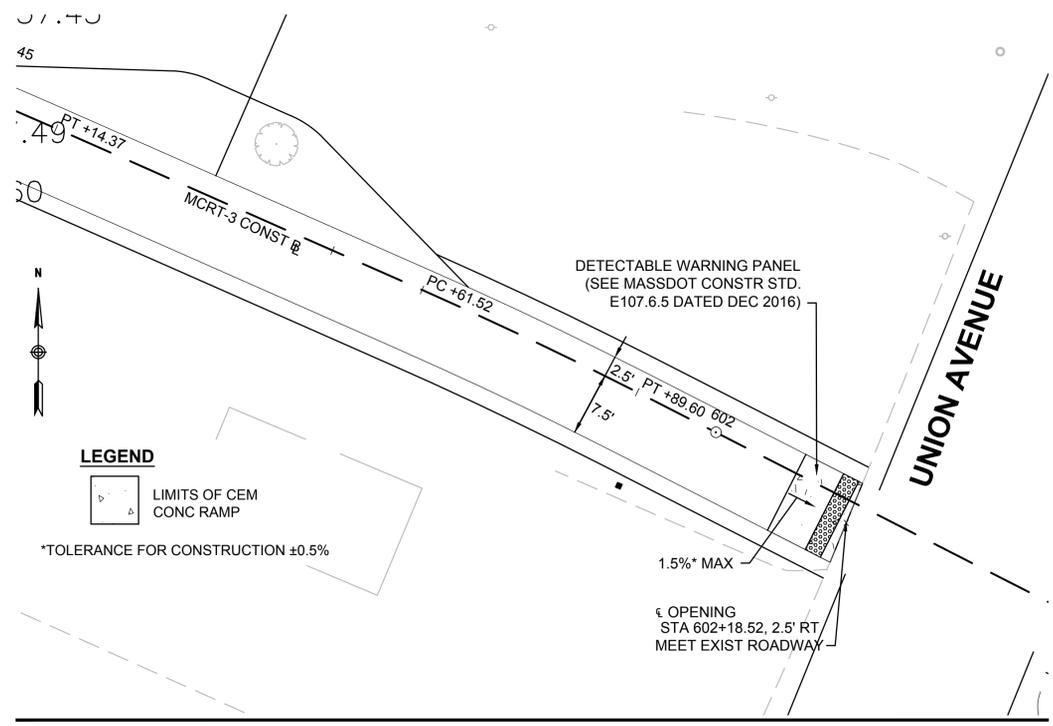
CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

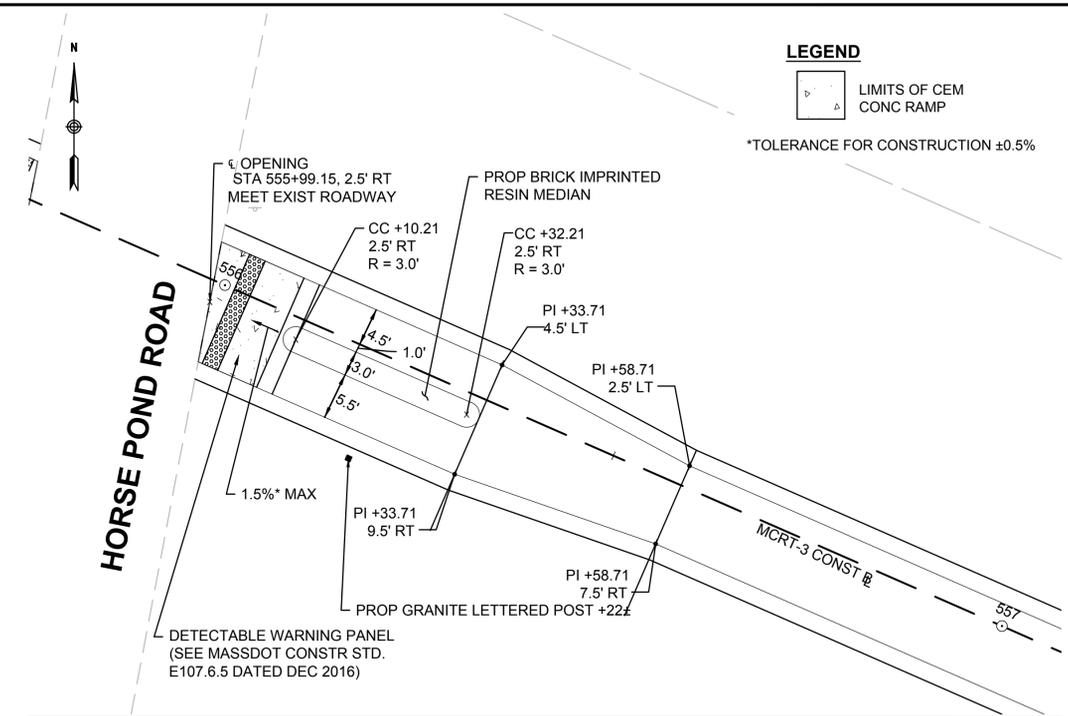
SHEET NO.
GW-03
3 OF 5



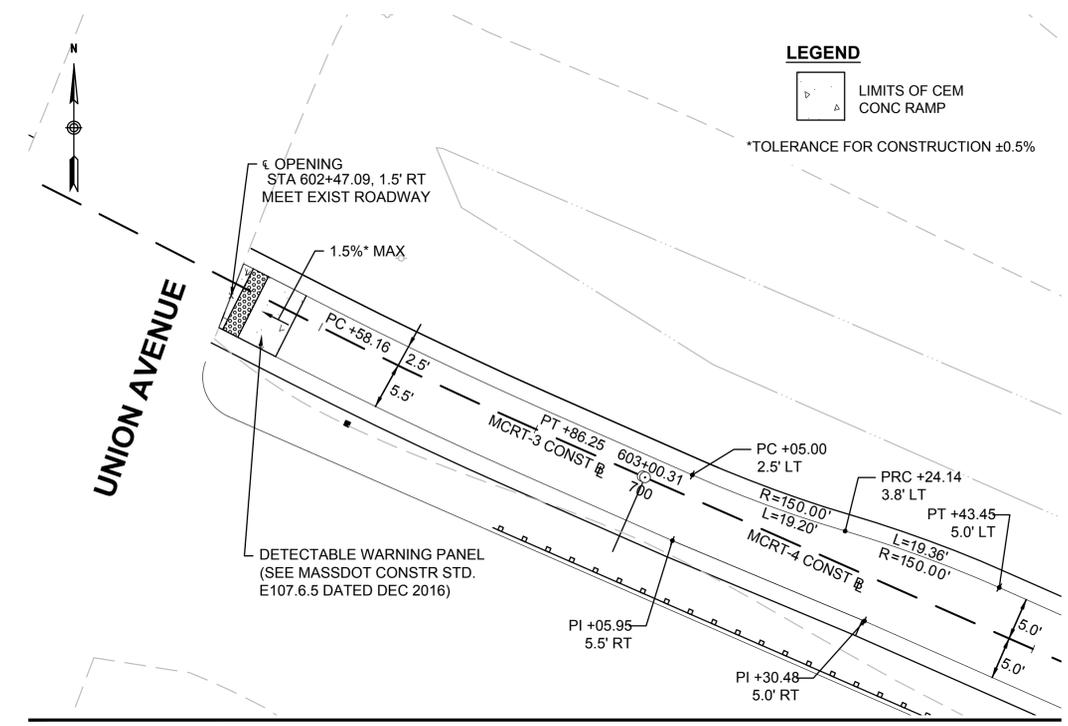
GATEWAY 13 - HORSE POND ROAD (WEST)
SCALE: 1" = 10'



GATEWAY 15 - UNION AVENUE (WEST)
SCALE: 1" = 10'



GATEWAY 14 - HORSE POND ROAD (EAST)
SCALE: 1" = 10'



GATEWAY 16 - UNION AVENUE (EAST)
SCALE: 1" = 10'

REV.	DATE	DESCRIPTION	BY



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING**

**MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA**

GATEWAY DETAILS

DESIGNER: JCR
CHECKED: SHK
DRAWN: JCR
CHECKED: TAL

CONT: P19-3295-D1A
ACC: XXXXXXXX

SCALE: 1" = 20'-0"
DATE: JAN 2021

SHEET NO.
GW-04
4 OF 5

