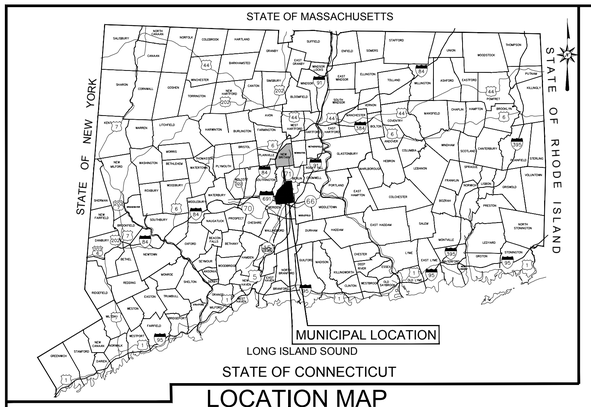


LOCATION MAP
N.T.S.

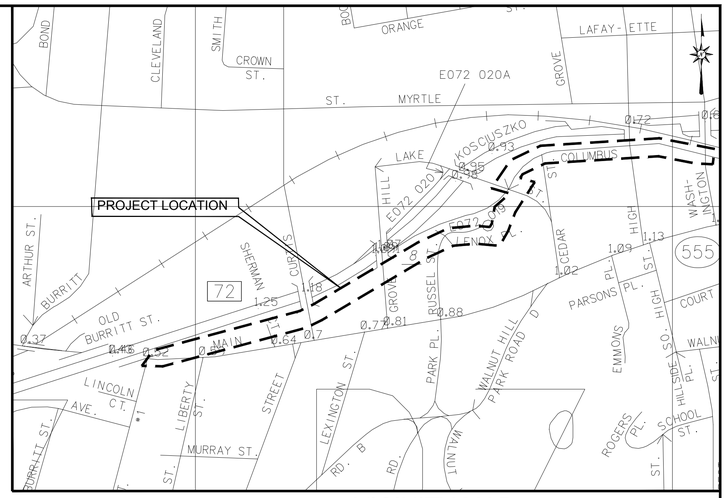
FINAL DESIGN SUBMISSION

BEELINE TRAIL PHASE I
NEW BRITAIN, CONNECTICUT
STATE PROJECT NO. 88-198
FEDERAL AID PROJECT NO. BIKE (092)

PREPARED FOR:

CITY OF NEW BRITAIN
27 WEST MAIN STREET
NEW BRITAIN, CT 06051

CITY ENGINEER: JASON OUTLAW, PE
PUBLIC WORKS DIRECTOR: MARK MORIARTY, PE
MAYOR: ERIN STEWART



VICINITY MAP
SCALE: 1"=350'

CONTENTS

CONSTRUCTION STANDARDS:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 818, DATED 2020; SUPPLEMENTAL SPECIFICATIONS DATED JULY 2023; AND SPECIAL PROVISIONS.

ALL HORIZONTAL GEOMETRY ON THIS PROJECT IS BASED ON A FIELD SURVEY PERFORMED BY MARTINEZ COUCH AND ASSOCIATES DATED: JANUARY 2023 ON HORIZONTAL DATUM NAD83.

ALL ELEVATIONS ON THIS PROJECT BASED ON NAVD88.

2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

DESIGN STANDARDS:

CITY OF NEW BRITAIN DESIGN STANDARDS

CONNECTICUT DEPARTMENT OF TRANSPORTATION HIGHWAY DESIGN MANUAL. (REVISED JANUARY 2023)

A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS 2018 EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO 2012 GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES

2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS

TRAIL TO BE MAINTAINED BY THE CITY OF NEW BRITAIN.

PREPARED BY:

BL Companies

ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

100 CONSTITUTION PLAZA, 10TH FLOOR
HARTFORD, CONNECTICUT 06103
(860) 249-2200
(860) 249-2400 Fax

DATES

ISSUE DATE: AUGUST 9TH, 2024

GRAPHIC SCALE
150 75 0 150
SCALE IN FEET

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BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

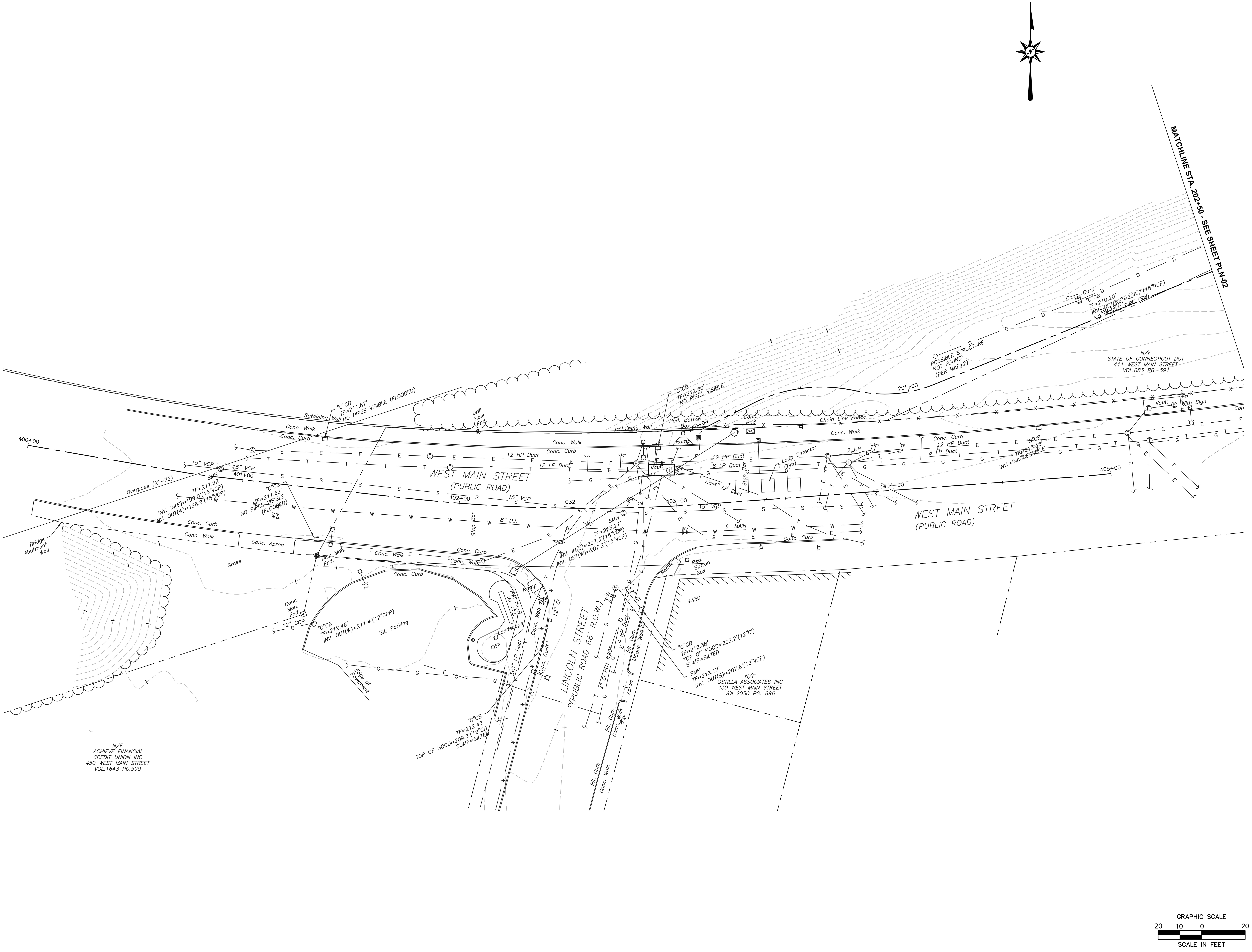
REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=100'
Project No.	2100699
Date	08/09/2024
CAD File: INX2100699O1	

Title
INDEX PLAN

Sheet No.
INX-01

Xref (s) : BD2100699O1 - XZ2100699O1



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BEELINE TRAIL PHASE 1
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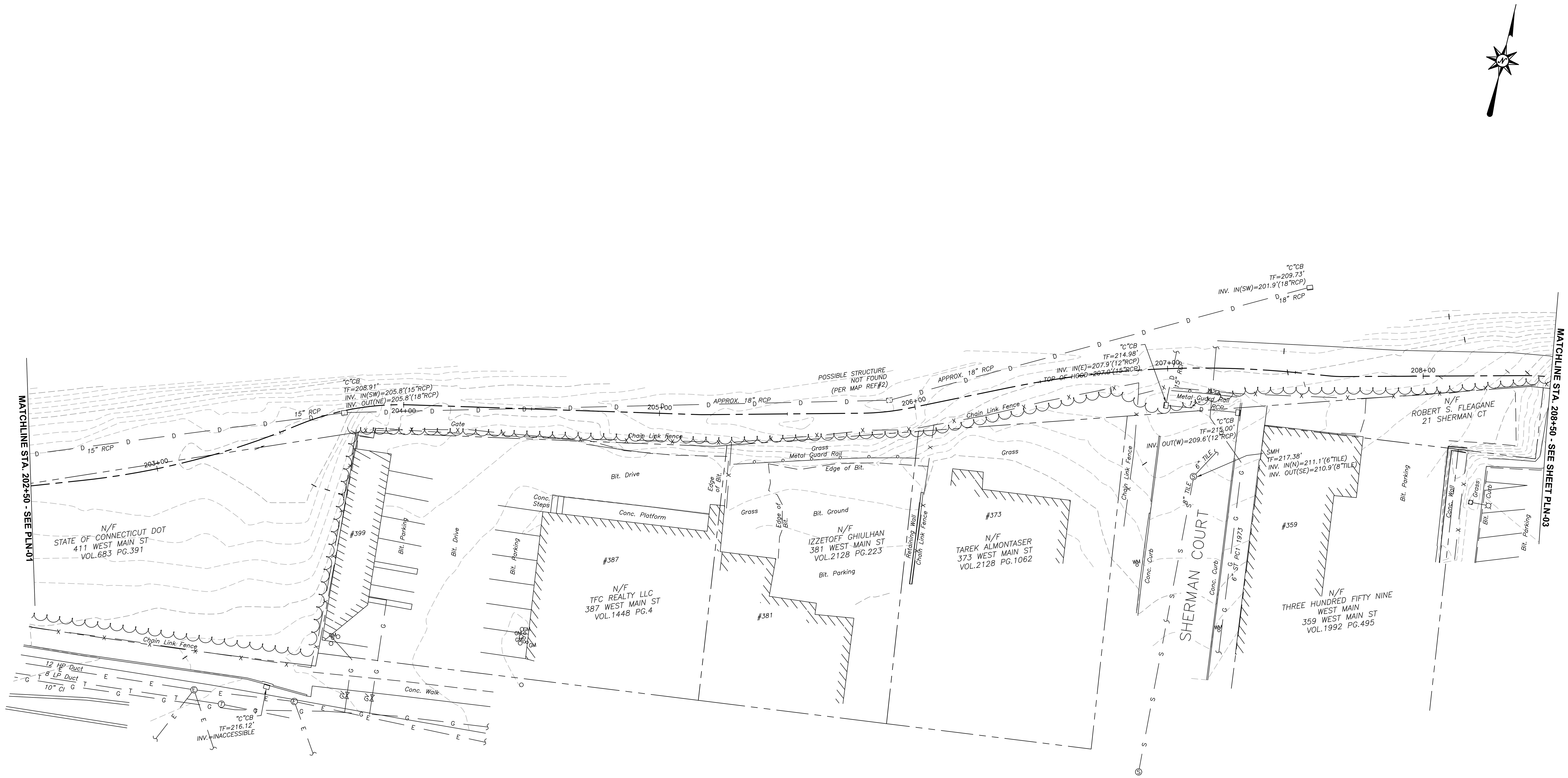
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	EX210069901

Title
EXISTING CONDITIONS

Sheet No.
EX-01



GRAPHIC SCALE
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SCALE IN FEET

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State Project No. 88-198
NEW BRITAIN, CONNECTICUT

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Scale	1"= 40'
Project No.	2100699
Date	08/09/2024
CAD File:	EX2100699O1

Title
EXISTING CONDITIONS

Sheet No.
EX-02

GRAPHIC SCALE
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SCALE IN FEET

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State Project No. 88-198
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Title
EXISTING CONDITIONS

Sheet No.
EX-03

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BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

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Title
EXISTING CONDITIONS

Sheet No.
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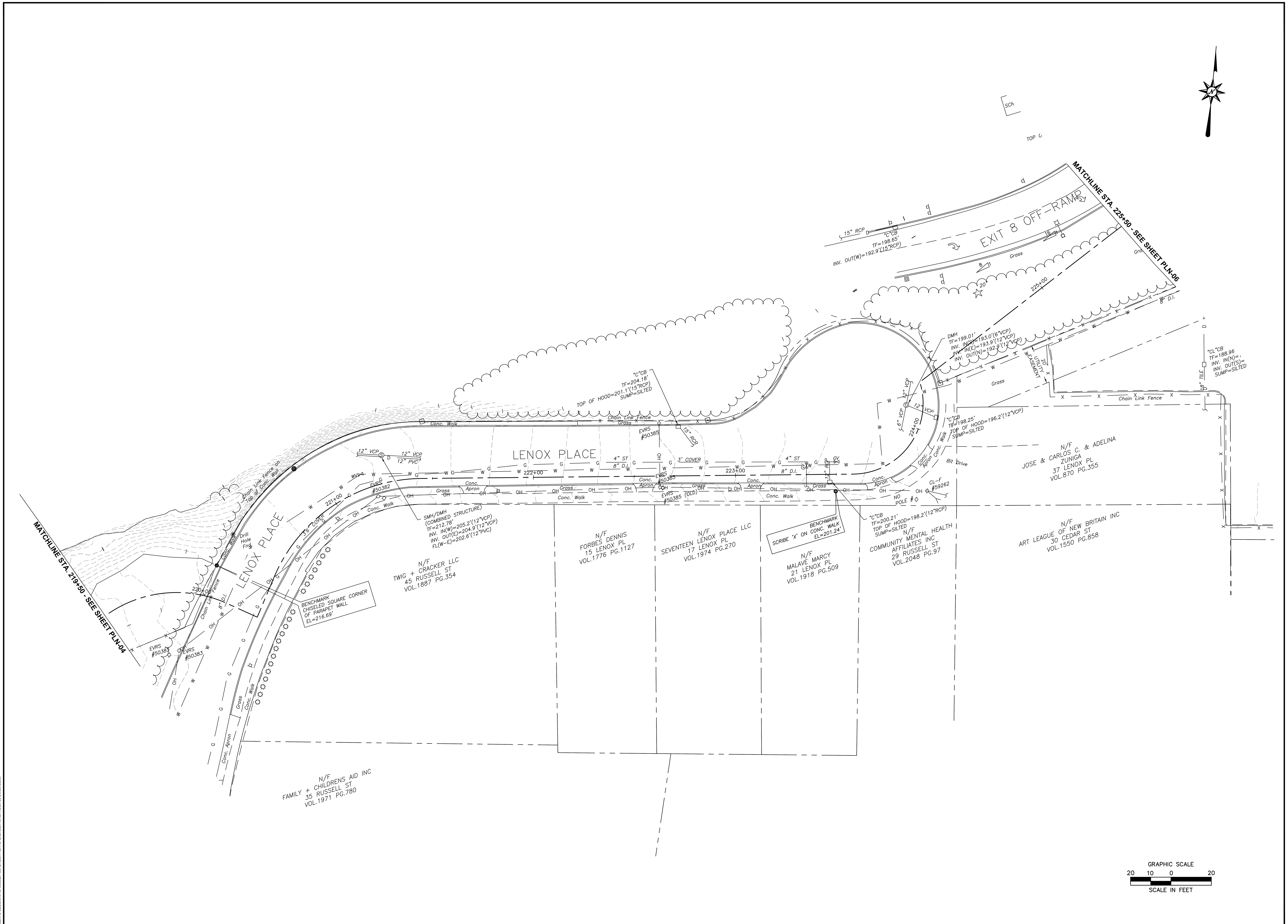

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BEELINE TRAIL PHASE 1

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Title
EXISTING CONDITIONS

Sheet No.
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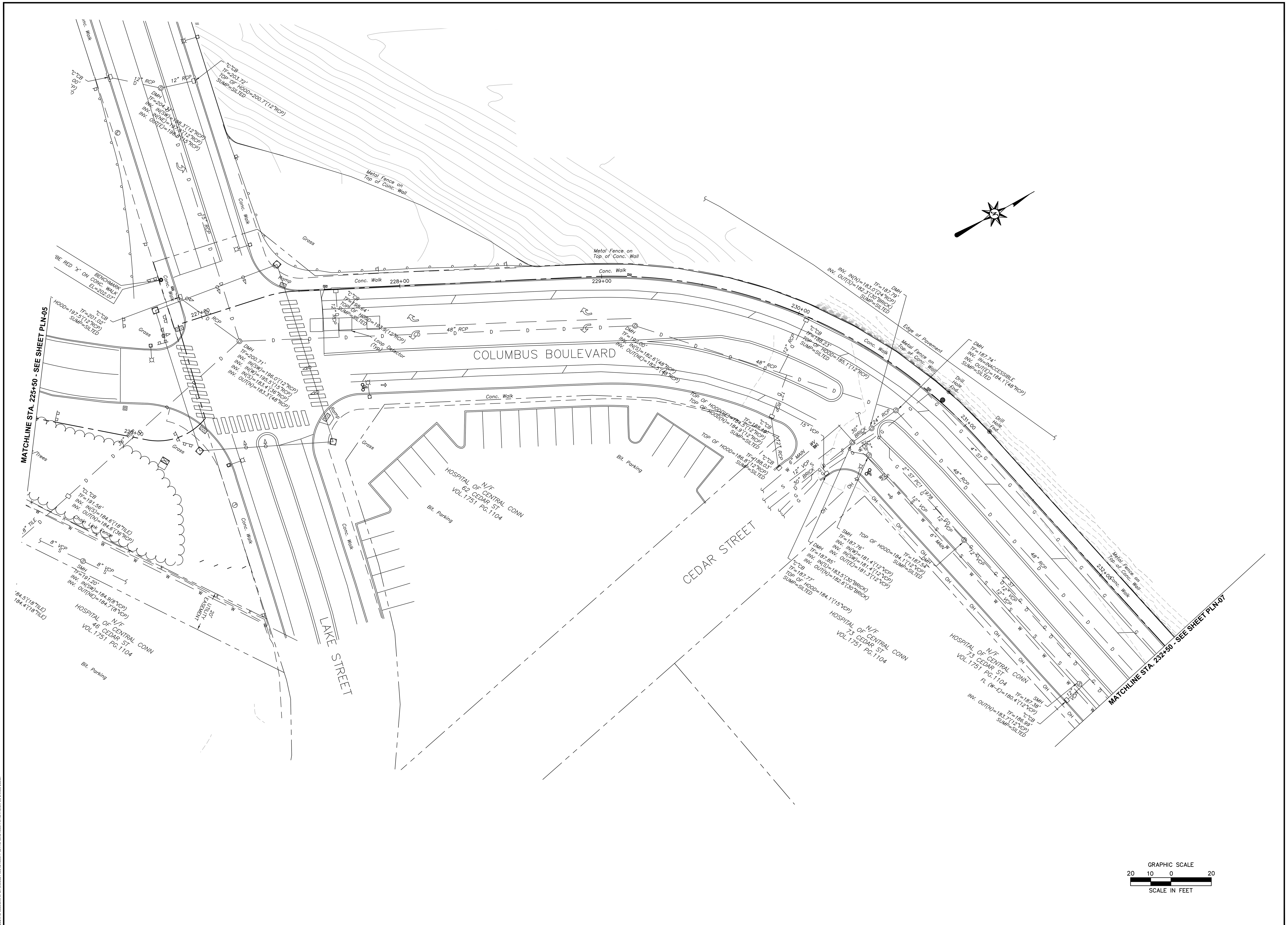

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CAD File:	EX210069901

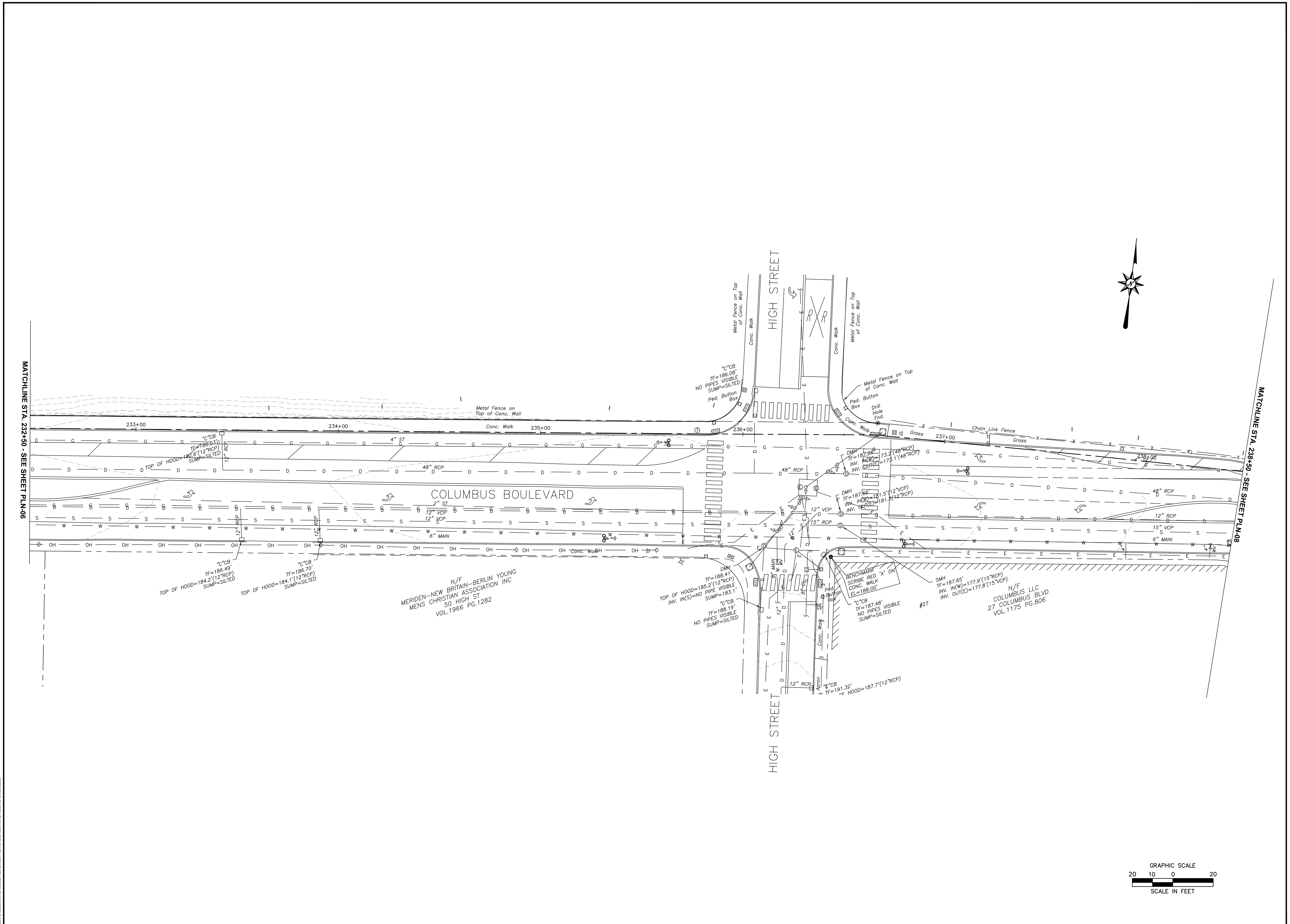
Title

EXISTING CONDITIONS

Sheet No.

EX-06

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo



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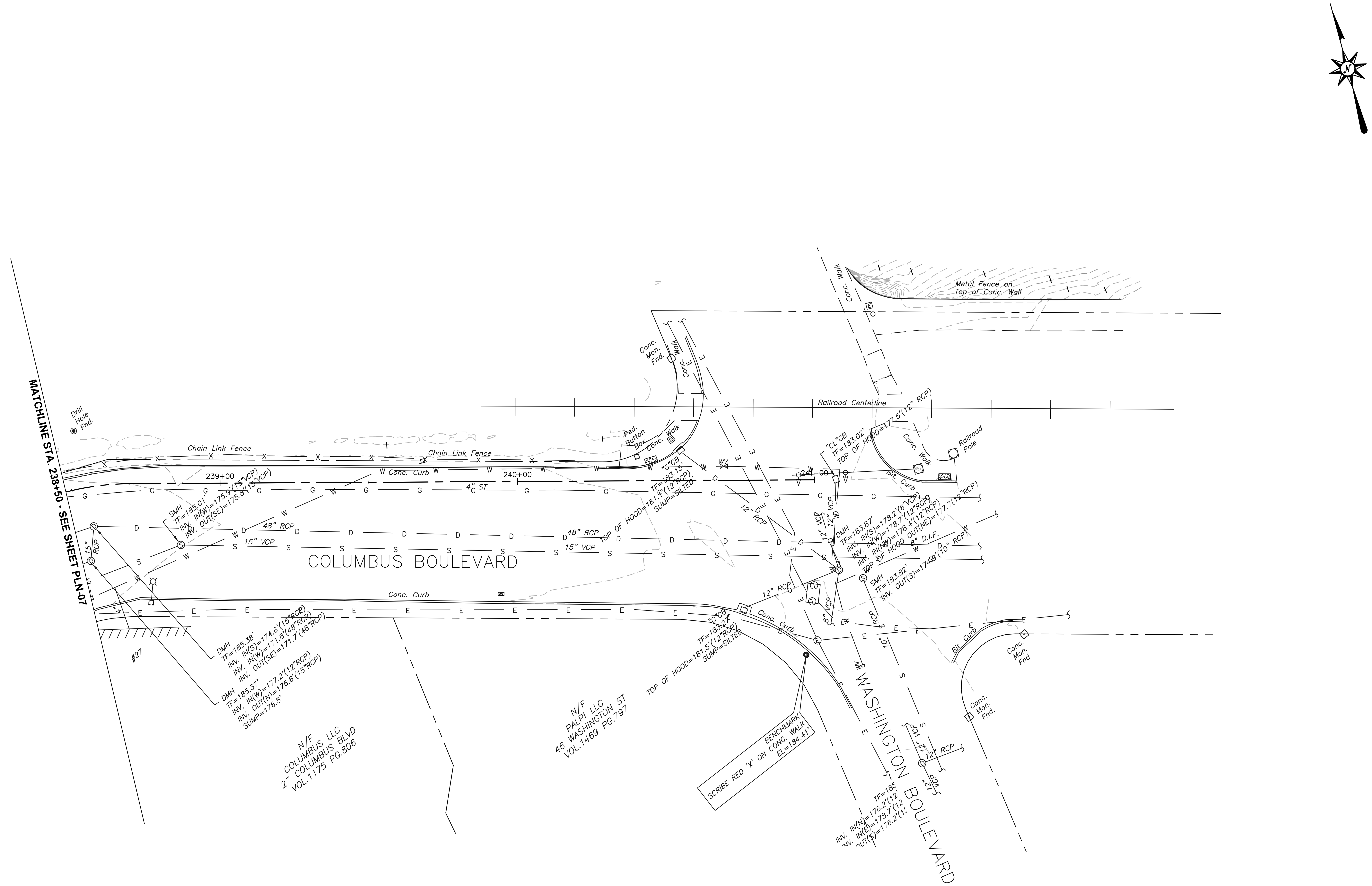
Title

EXISTING CONDITIONS

Sheet No.

EX-07



GRAPHIC SCALE

20 10 0 20

SCALE IN FEET

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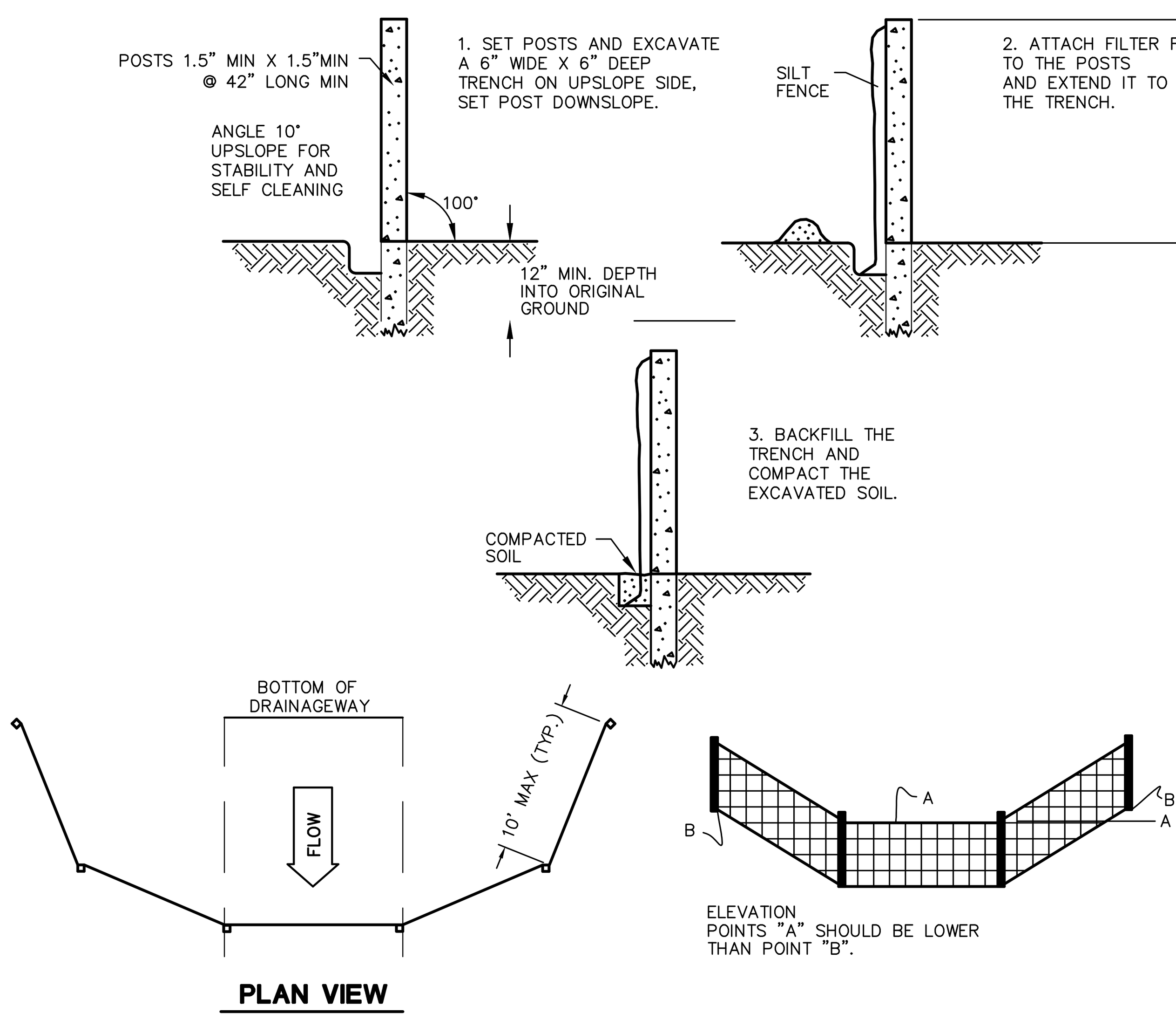
Title

EXISTING CONDITIONS

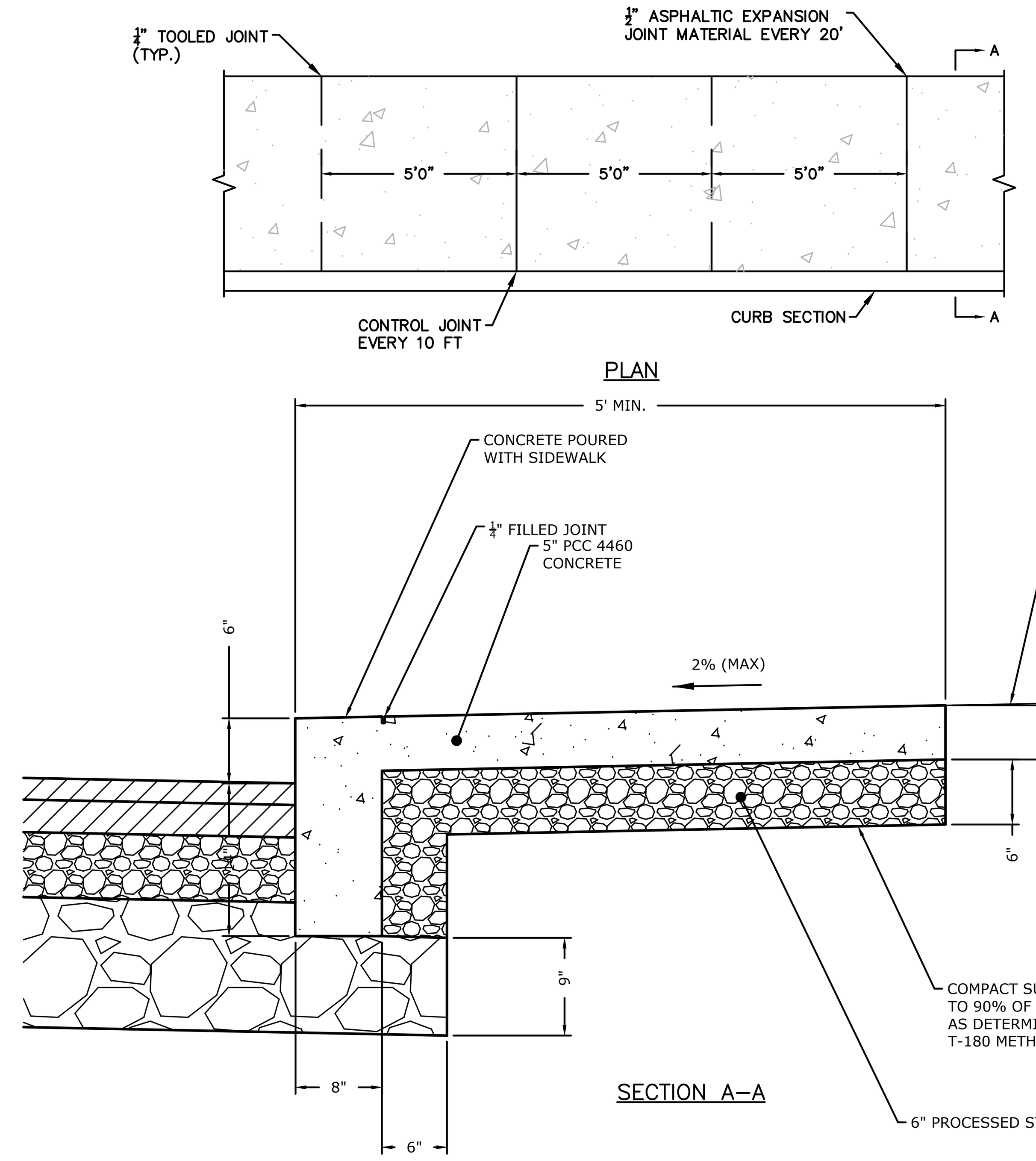
Sheet No.

EX-08



SEDIMENTATION CONTROL SYSTEM

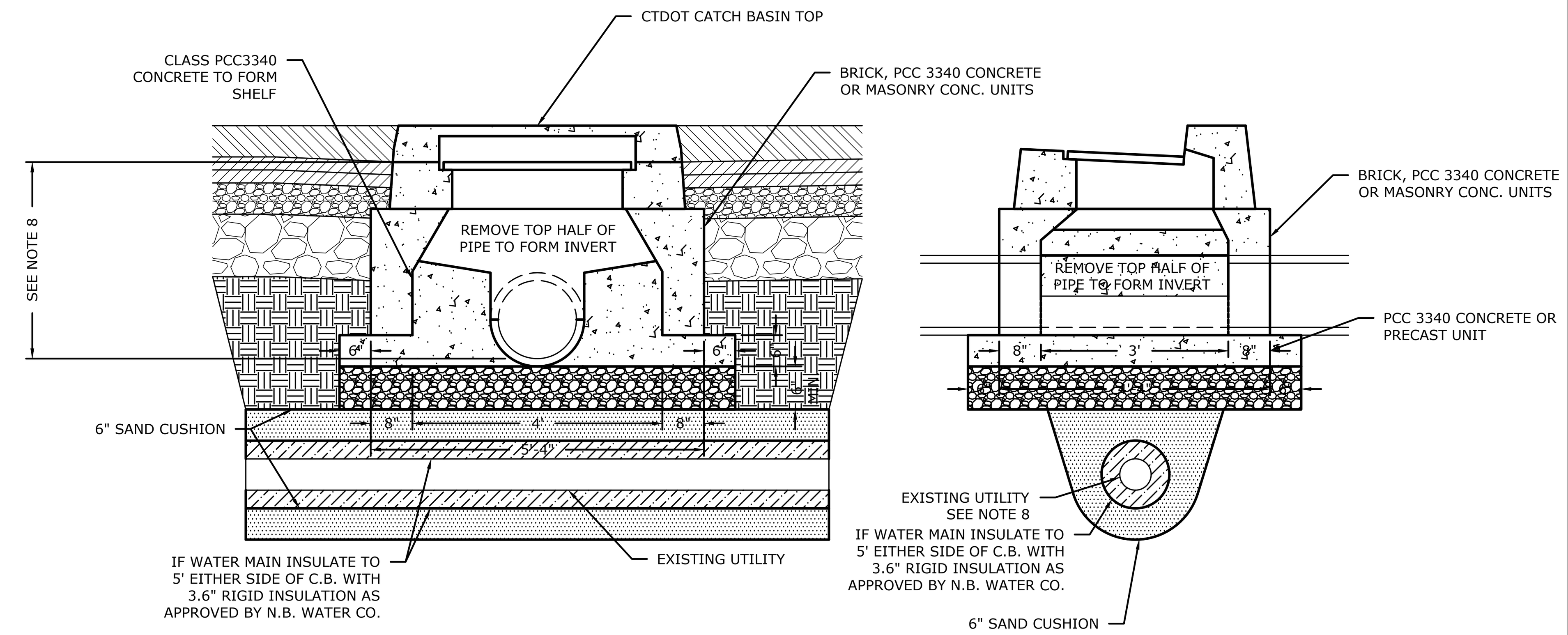
N.T.S.



NOTE:
1. CONCRETE CURB AND CONCRETE SIDEWALK TO BE PAID FOR SEPARATELY UNDER CONCRETE CURB AND CONCRETE SIDEWALK ITEMS RESPECTIVELY. MONOLITHIC CONCRETE SIDEWALK AND CURB TO BE PAID FOR UNDER ITEM NO. 091003A.
2. SEE PLANS FOR SIDEWALK WIDTH

MONOLITHIC CONCRETE CURB AND SIDEWALK

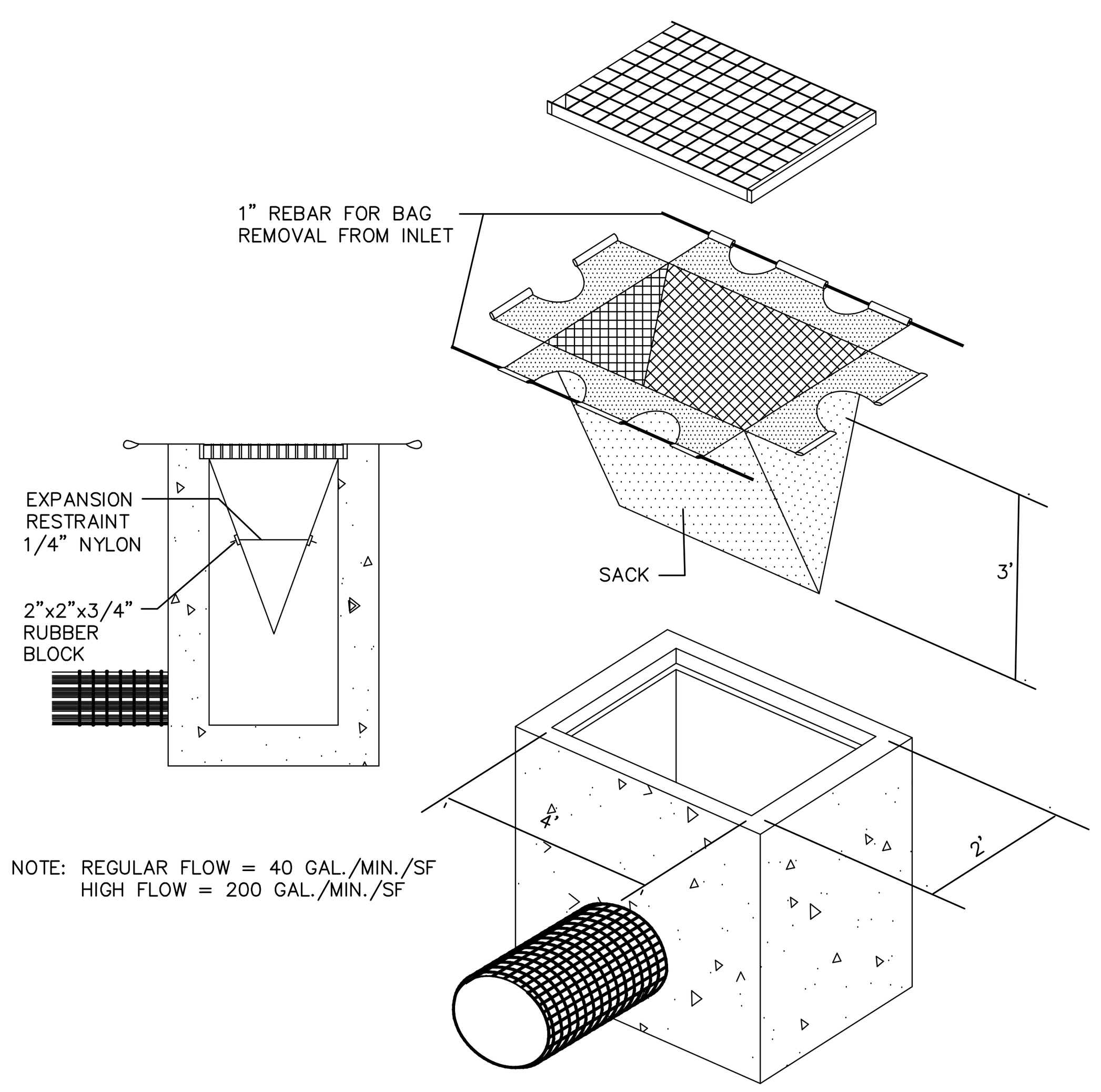
N.T.S.



NOTES:
1. WALLS OF ALL CATCH BASINS OVER 10' DEEP SHALL BE INCREASED TO 12" THICKNESS. INSIDE DIMENSIONS SHALL REMAIN THE SAME.
2. PROVIDE DRAINAGE OPENING IN EACH WALL AT LOWEST INVERT ELEVATION
3. WHERE BRICK OR MASONRY CONCRETE UNITS ARE USED, CORBELLING WILL BE PERMITTED, MAXIMUM CORBEL SHALL BE 3". NO PROJECTION SHALL EXTEND INSIDE OF LIMITS NOTED BY **.
4. PRECAST CONCRETE CATCH BASIN UNITS MAY BE USED, AS DESCRIBED IN THE STANDARD SPECIFICATIONS.
5. WHERE PRECAST CONCRETE UNIT IS USED FOR THE SUMP, THE TOP OF THE UNITS SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLETTING FROM THE CATCH BASINS.
6. TOP OF FRAME ELEVATION SHALL BE DEPRESSED 1" BELOW NORMAL GUTTER GRADE.
7. PROVIDED 6" (MIN.) GRANULAR FILL UNDER STRUCTURE TO REPLACE UNSUITABLE MATERIAL.
8. CONTRACTOR TO FIELD MEASURE THE LOCATION OF THE EXISTING UTILITY PRIOR TO INSTALLATION TO DETERMINE DEPTH OF PROPOSED PIPE INVERT.

DOGHOUSE CATCH BASIN

N.T.S.



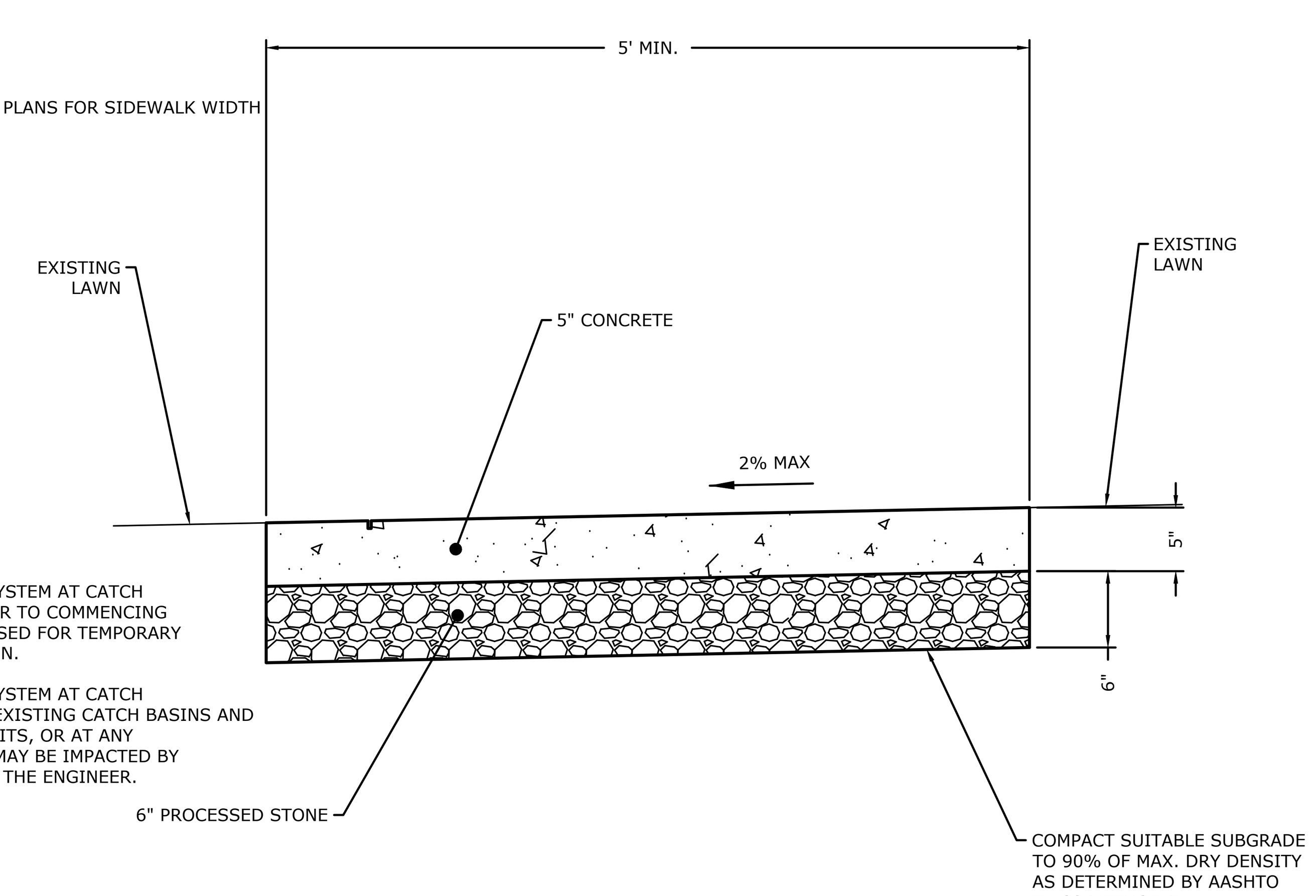
NOTE: REGULAR FLOW = 40 GAL./MIN./SF
HIGH FLOW = 200 GAL./MIN./SF

NOTE:
1. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE USED FOR TEMPORARY USE ONLY DURING CONSTRUCTION.
2. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN SHALL BE PLACED AT ALL EXISTING CATCH BASINS AND INLETS WITHIN THE PROJECT LIMITS, OR AT ANY CATCH BASINS OR INLETS THAT MAY BE IMPACTED BY CONSTRUCTION AS DIRECTED BY THE ENGINEER.

SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN

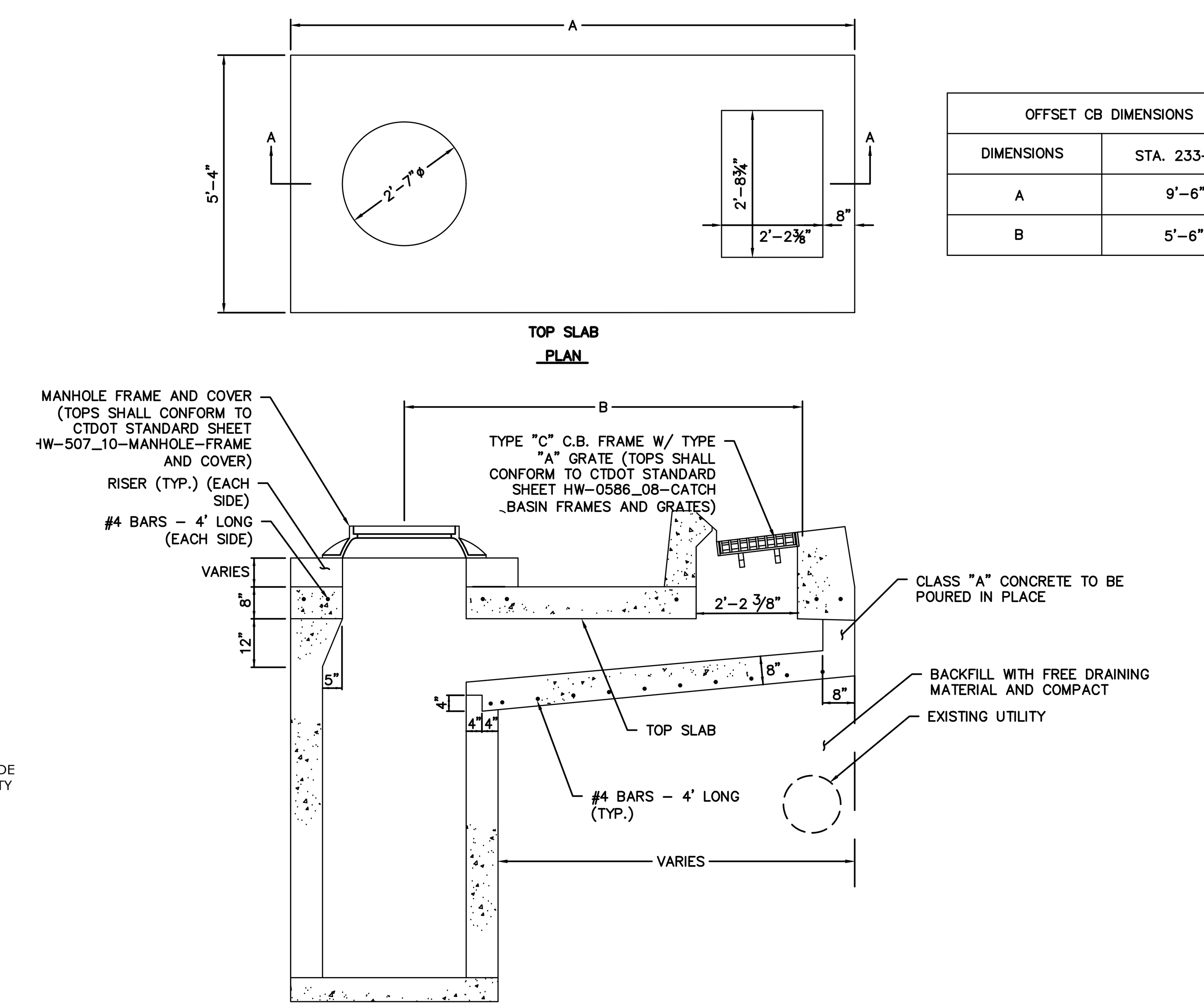
N.T.S.

NOTE:
1. SEE PLANS FOR SIDEWALK WIDTH



CONCRETE SIDEWALK

N.T.S.



OFFSET CB DIMENSIONS	
DIMENSIONS	STA. 233+43
A	9'-6"
B	5'-6"

OFFSET CATCH BASIN - TYPE "A"

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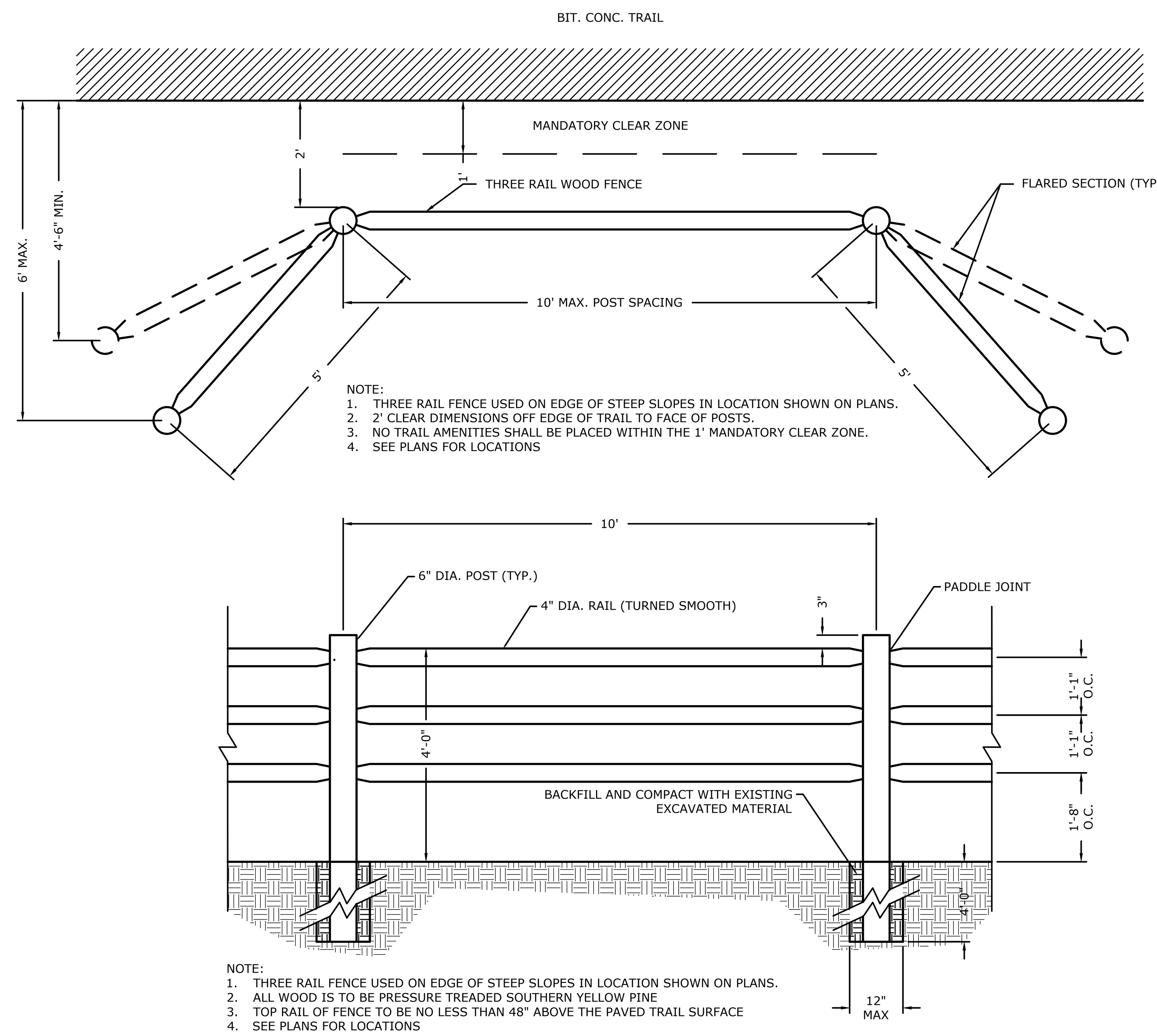
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	NTS
Project No.	2100699
Date	08/09/2024
CAD File:	MDS210069901

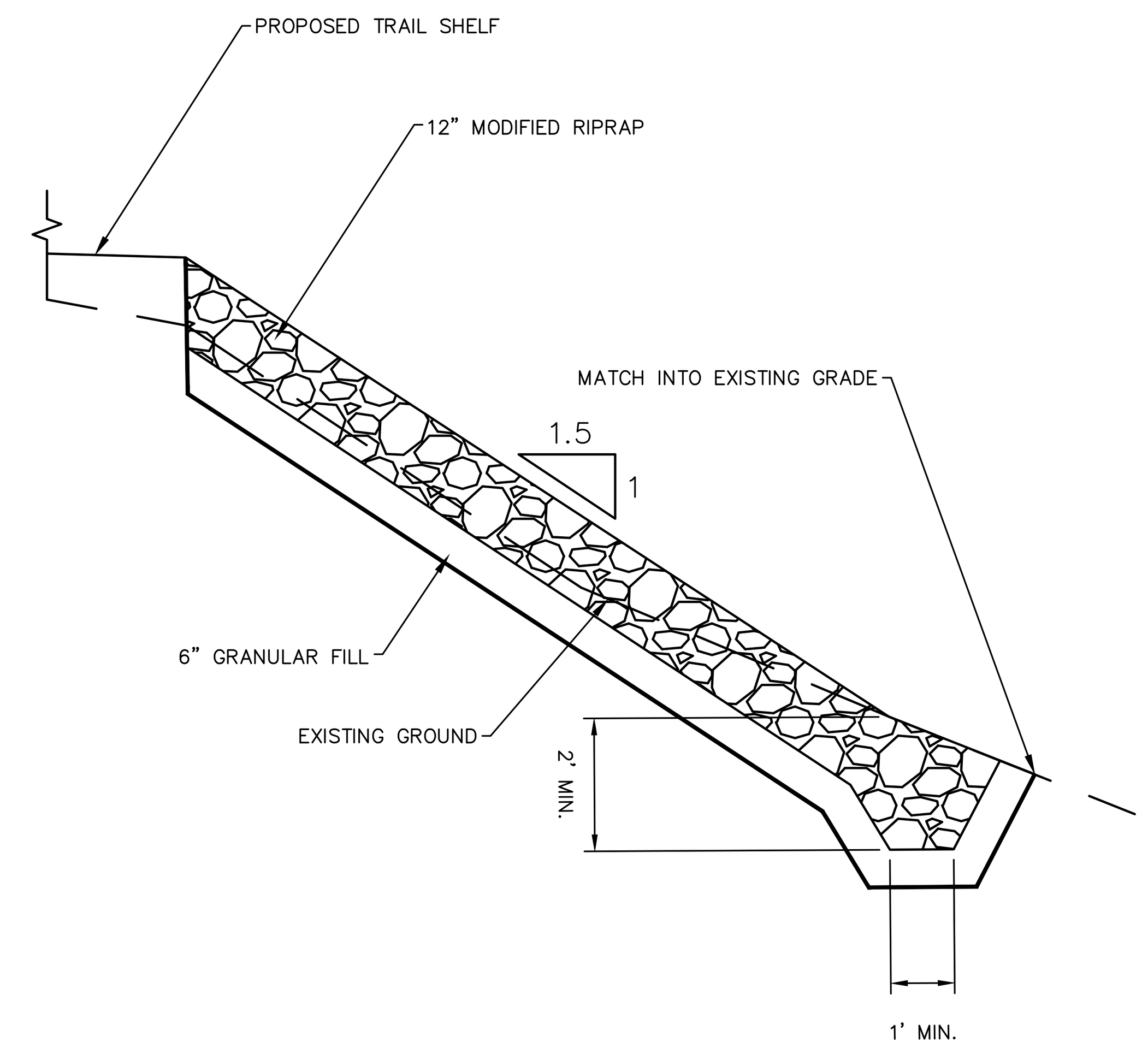
Title
MISCELLANEOUS DETAILS

Sheet No.
MDS-01



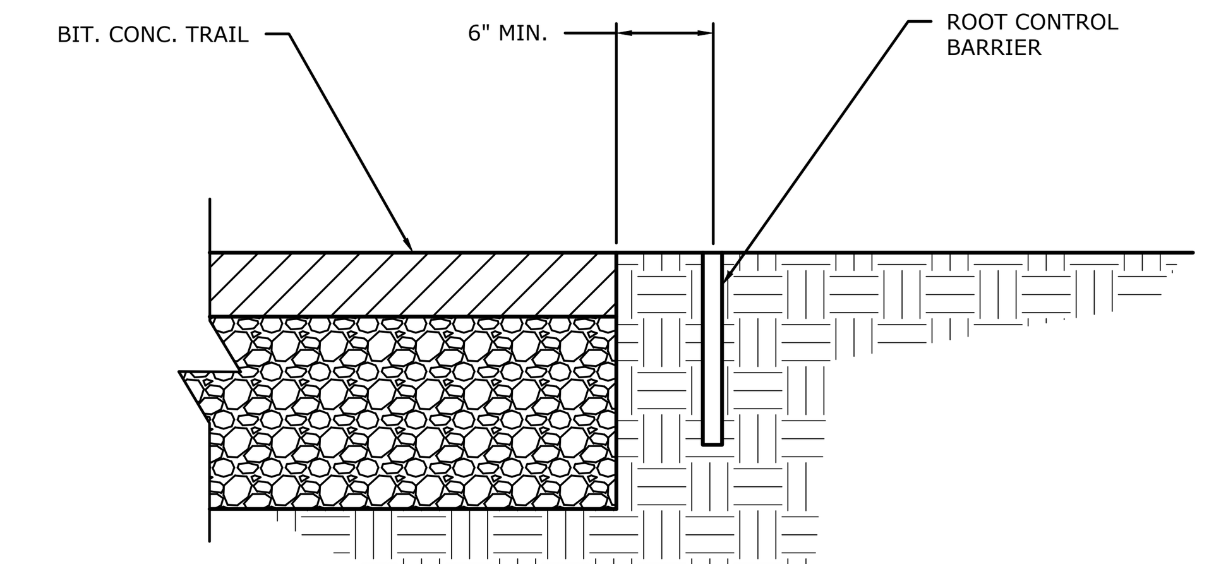
THREE RAIL WOOD FENCE

N.T.S.



RIPRAP FOR SLOPE PROTECTION

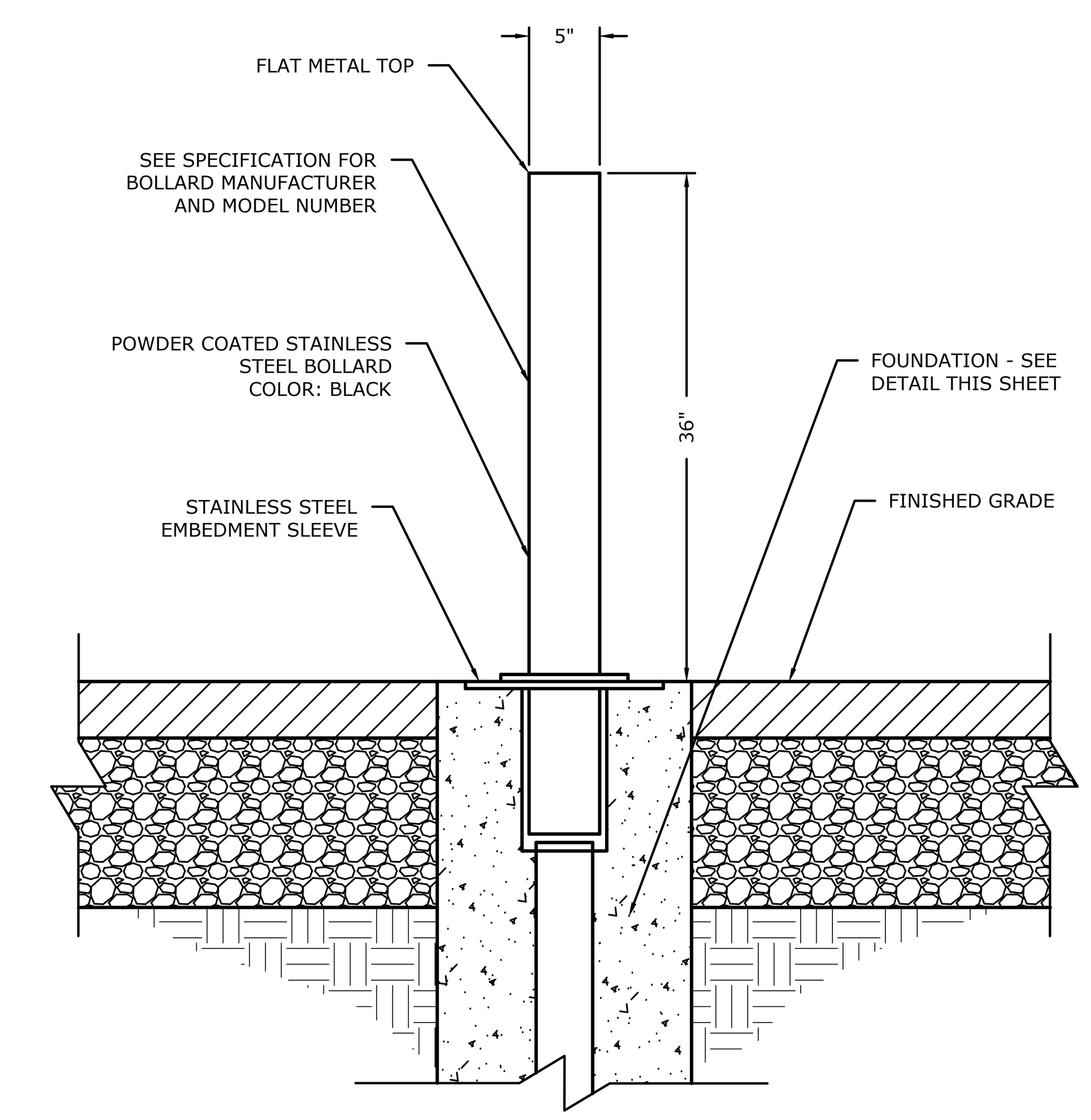
N.T.S.



NOTE:
1. ROOT CONTROL SYSTEM (ROOT BARRIER) INSTALLED TO A DEPTH OF 12 INCHES AT ALL SPECIFIED LOCATIONS.
2. ROOT CONTROL SHALL BE INSTALLED AT A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM EDGE OF TRAIL.

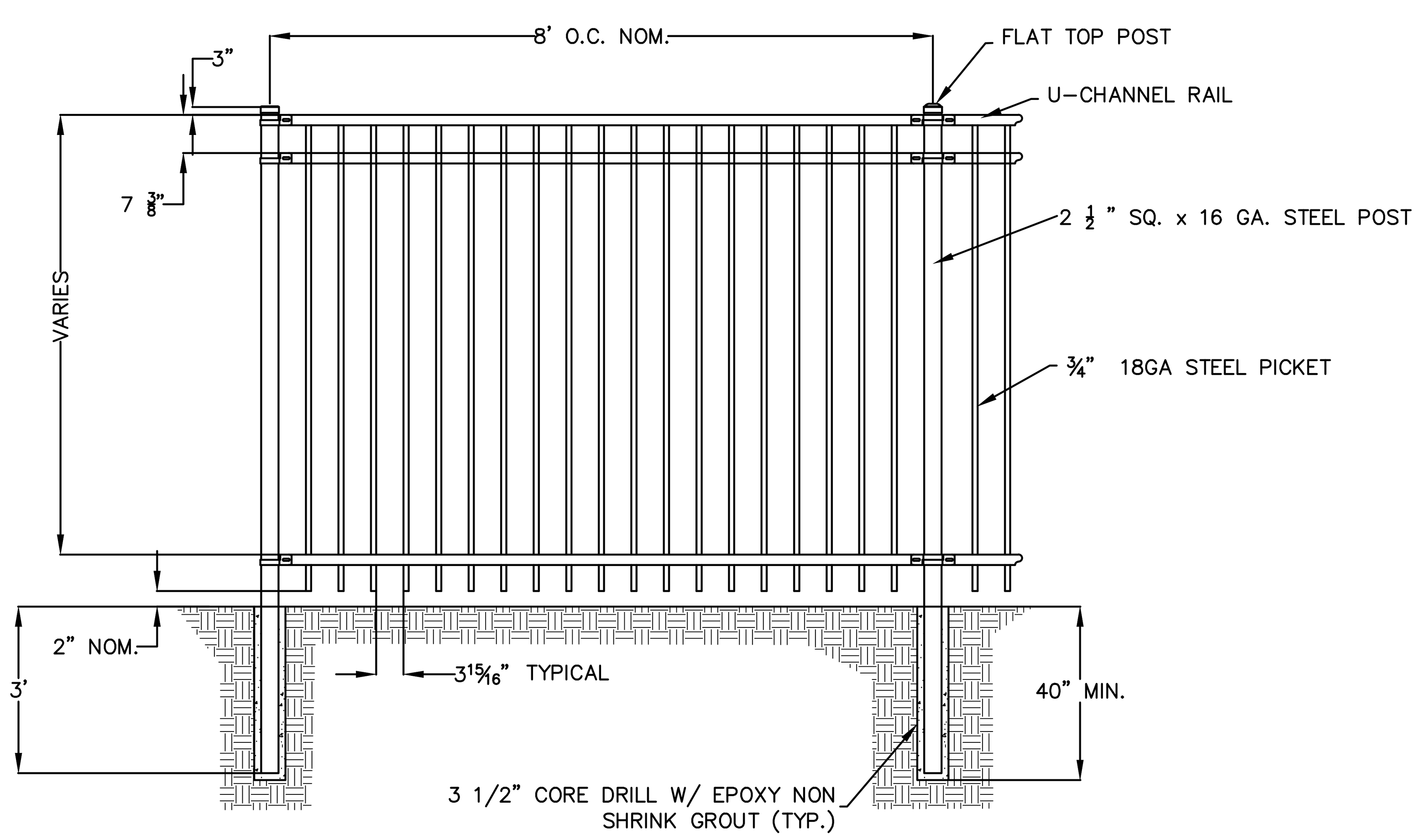
ROOT CONTROL BARRIER

N.T.S.



REMOVABLE STEEL BOLLARD

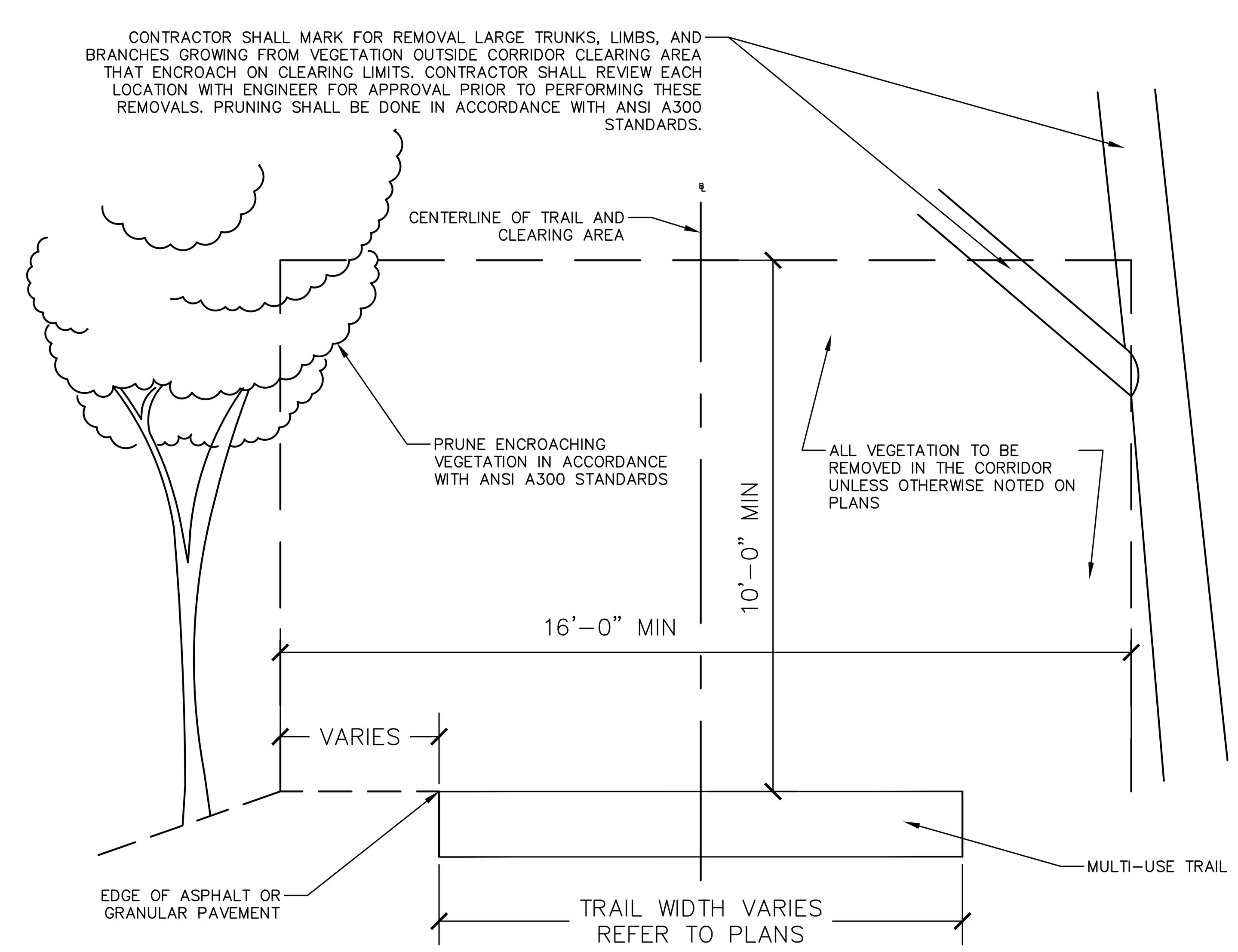
N.T.S.



NOTE:
1. HEIGHT: AS NOTED ON PLANS
2. COLOR: BLACK
3. INSTALL PER MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS. PROVIDE NON-SHRINK GROUT TO DEPTH OF 40" MINIMUM FOR ALL FENCE POSTS OR CUSTOM BRACKETS TO MOUNT TO EXISTING CONCRETE FOOTING OR TOP OF WALL.

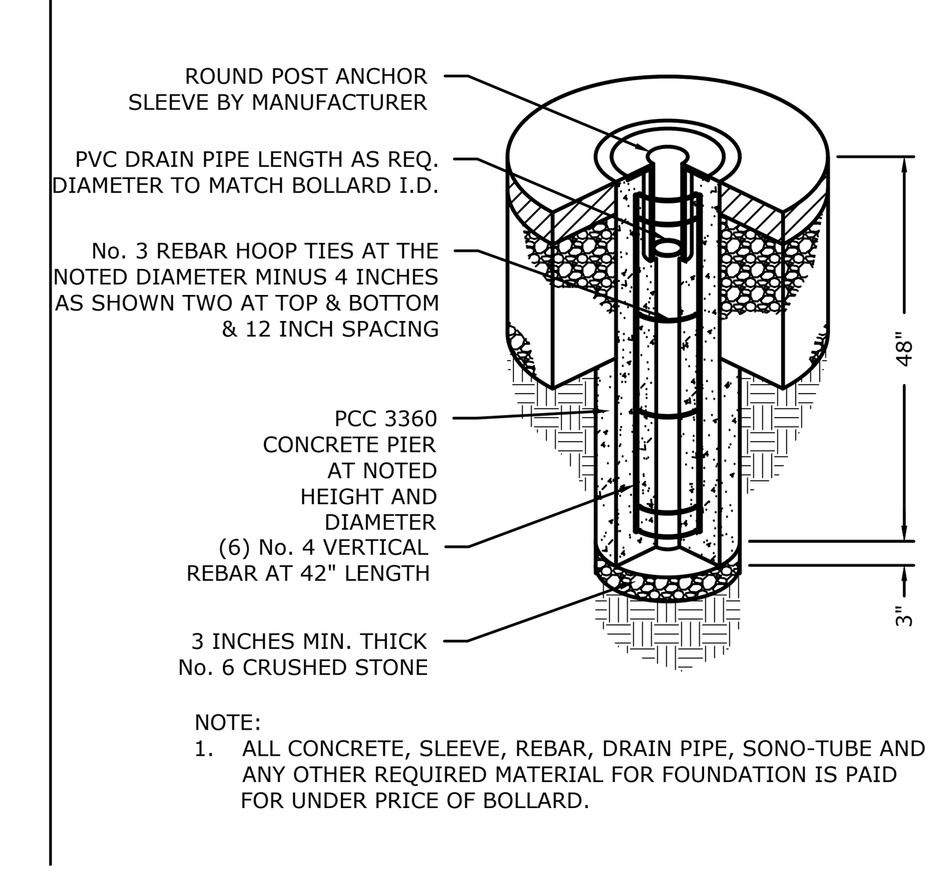
ORNAMENTAL FENCE

N.T.S.



TRAIL CORRIDOR CLEARING

N.T.S.



NOTE:
1. ALL CONCRETE, SLEEVE, REBAR, DRAIN PIPE, SONO-TUBE AND ANY OTHER REQUIRED MATERIAL FOR FOUNDATION IS PAID FOR UNDER PRICE OF BOLLARD.

REMOVABLE STEEL BOLLARD FOUNDATION

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BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

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Reviewed	K.P.R.
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Project No.	2100699
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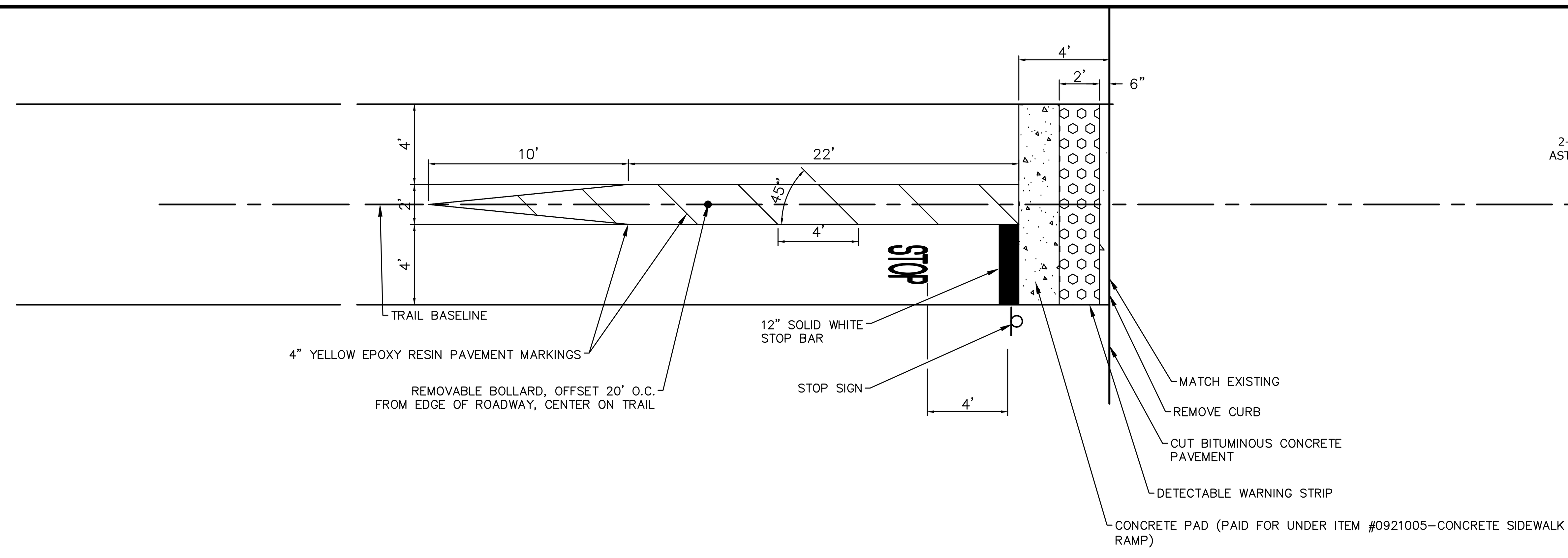
CAD File:	MDS210069901

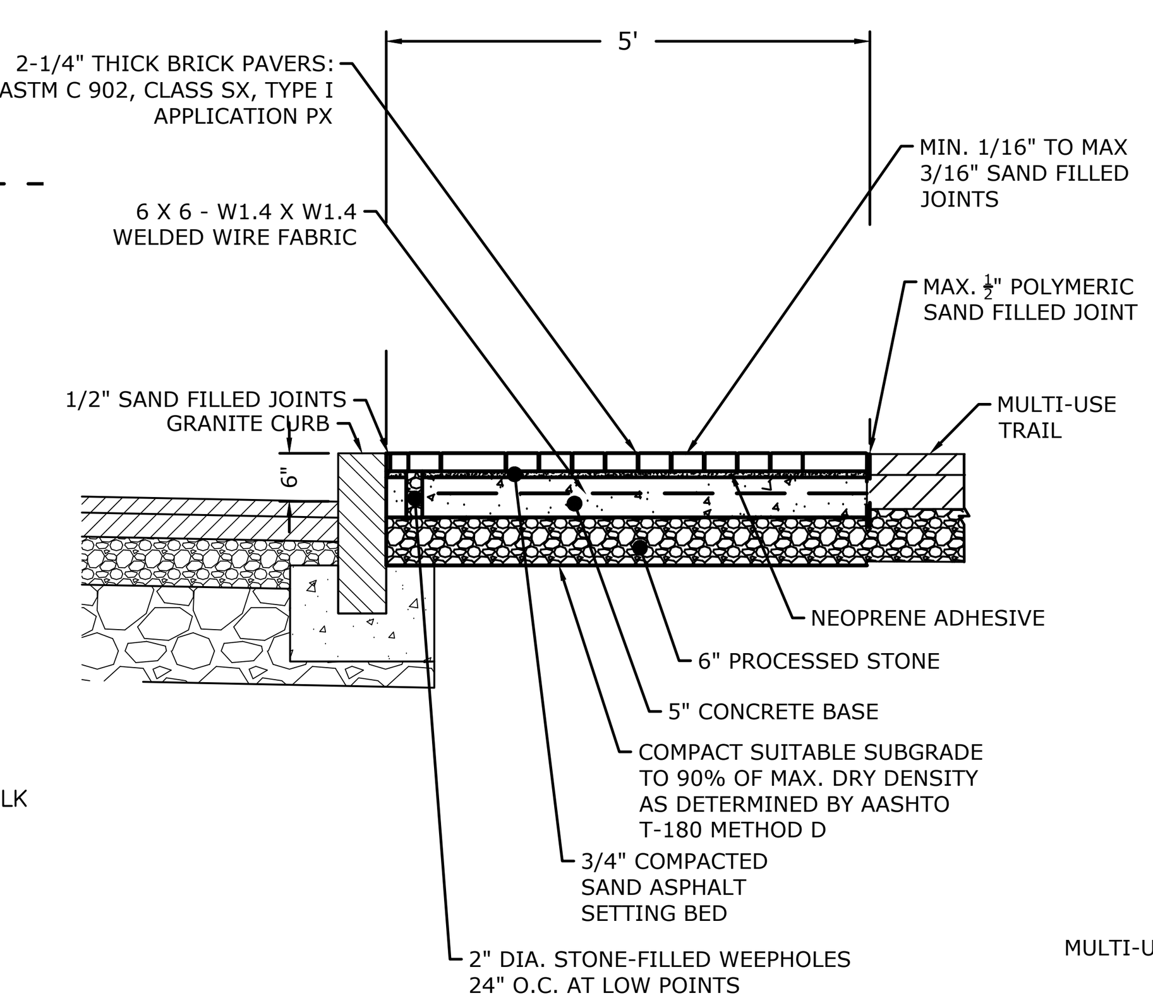
Title
MISCELLANEOUS DETAILS

Sheet No.
MDS-02



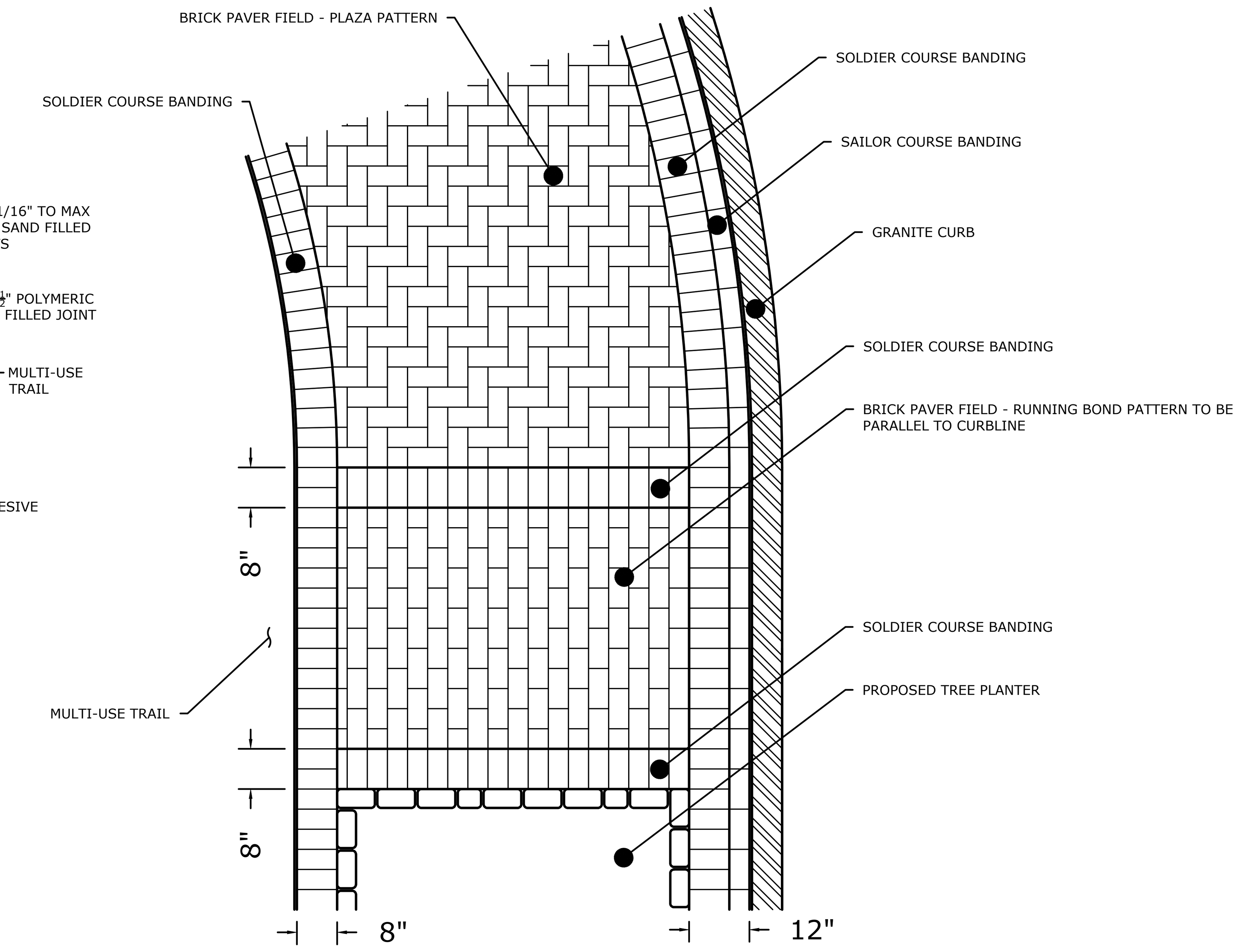
TRAIL CROSSING PAVEMENT MARKINGS - INTERSECTION TYPE A

N.T.S.



BRICK PAVER SIDEWALK

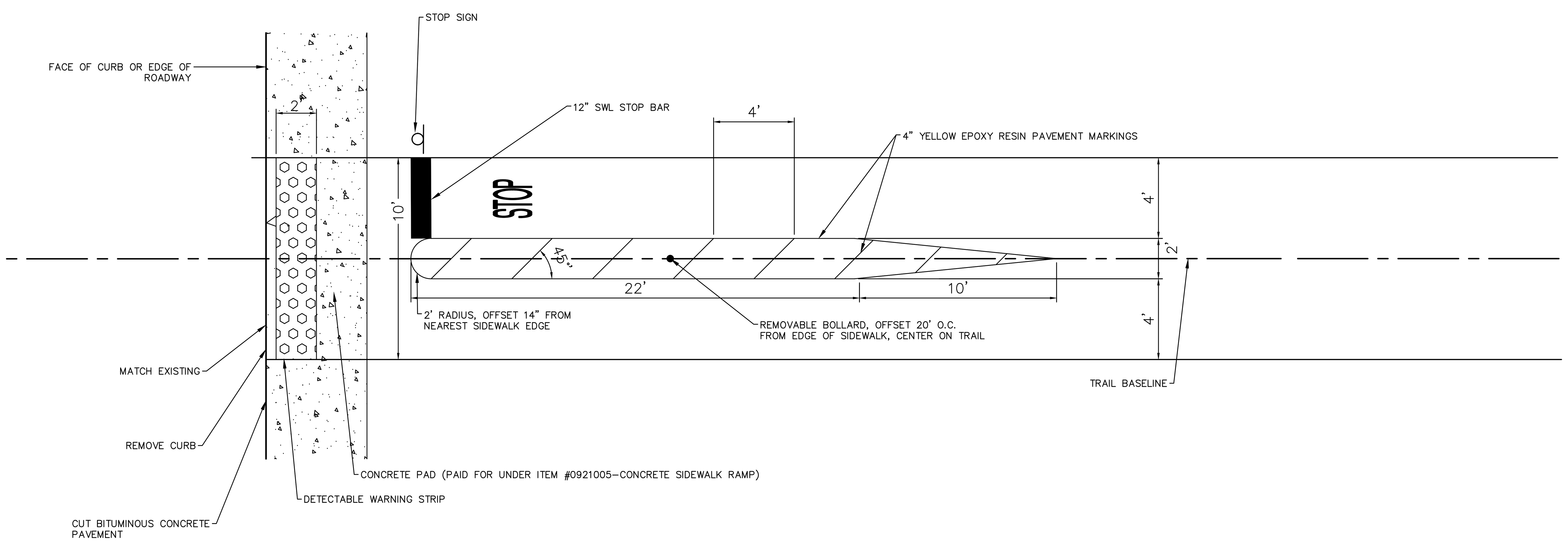
N.T.S.



NOTE:
1. ALL PATTERNS TO BE INCLUDED IN COST OF BRICK PAVER SIDEWALK.
2. FIELD PATTERN TO BE APPROVED BY THE ENGINEER.
3. FULL PAVERS TO START AT EDGE CLOSEST TO STREET. CUT PAVER, WHEN REQUIRED, SHALL BE PLACED AT EDGE FURTHEST FROM THE STREET.
4. ALL PAVERS TO BE 4" X 8" UNLESS OTHERWISE NOTED ON THE PLANS.
5. ALUMINUM EDGE RESTRAIN TO BE INSTALLED IN AREAS WHERE TURF IS ESTABLISHED ADJACENT TO BRICK PAVERS.

BRICK PAVER SIDEWALK

N.T.S.



TRAIL CROSSING PAVEMENT MARKINGS - INTERSECTION TYPE B

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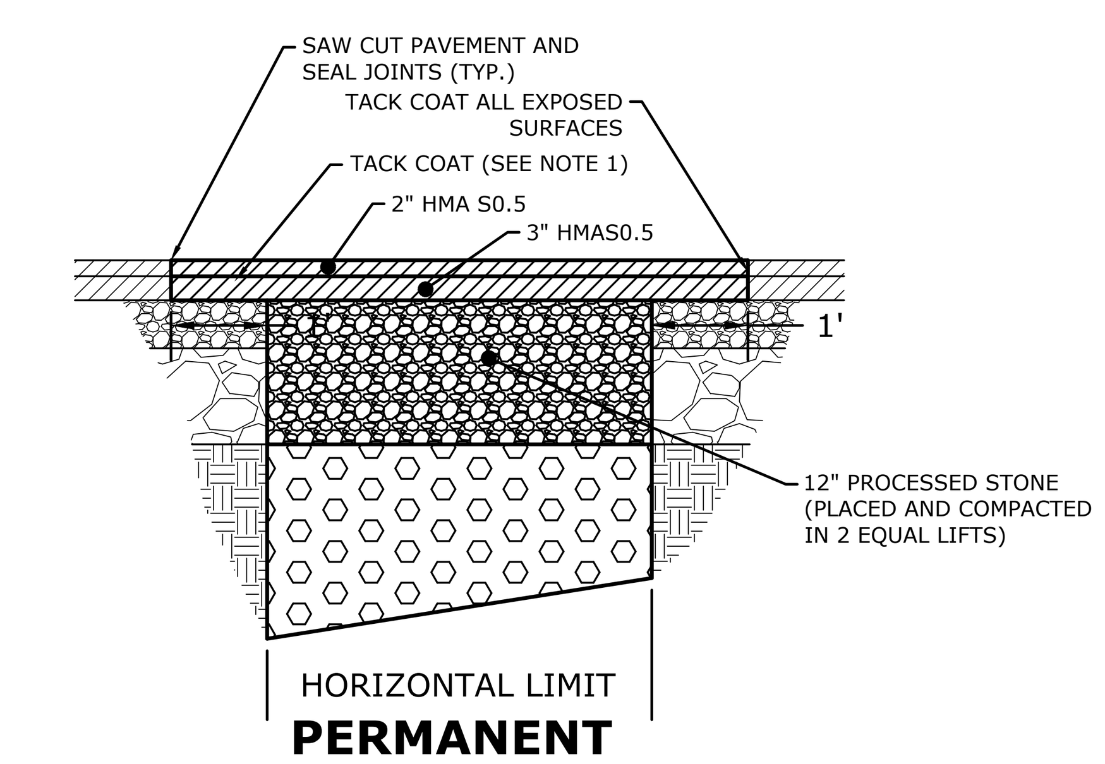
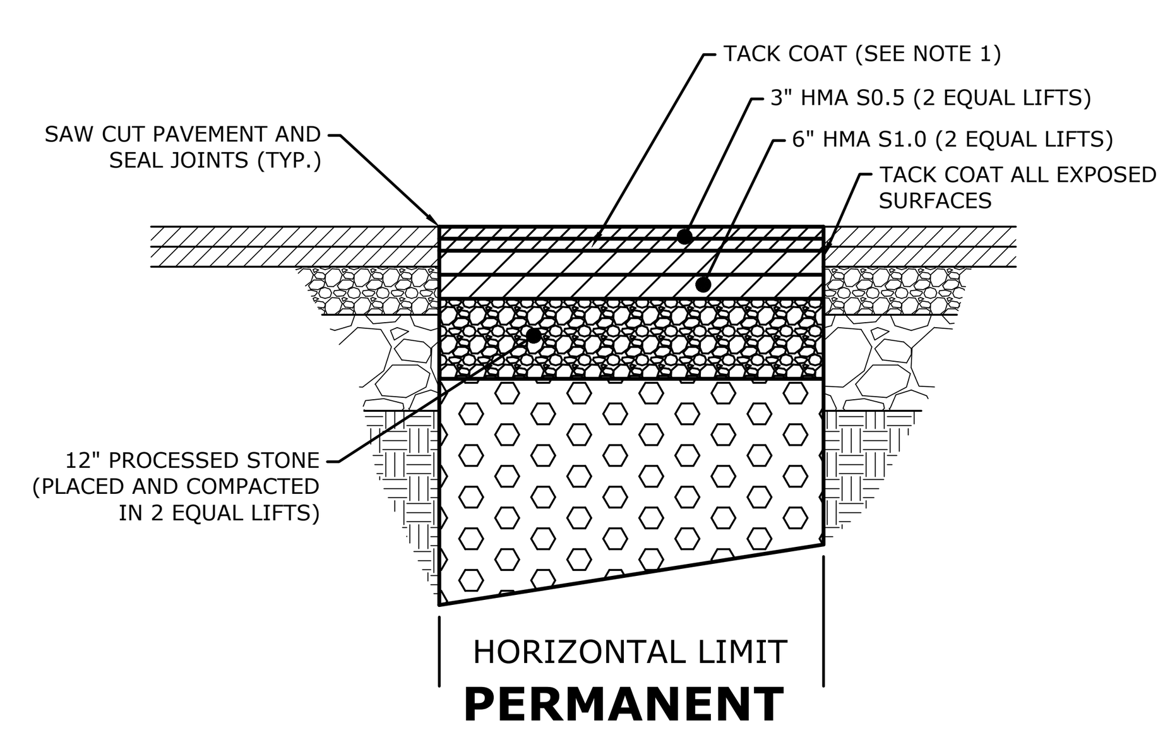


NOTE:
1. TACK COAT REQUIRED BETWEEN PAVEMENT LIFTS WHEN BINDER COURSE IS INSTALLED MORE THAN 24 HOURS BEFORE SURFACE COURSE.
2. BITUMINOUS CONCRETE CLASS 1 MAY BE USED IN PLACE OF HMA S0.5 WHEN APPROVED BY THE CITY ENGINEER.

BIT. CONCRETE PATCHING - CITY

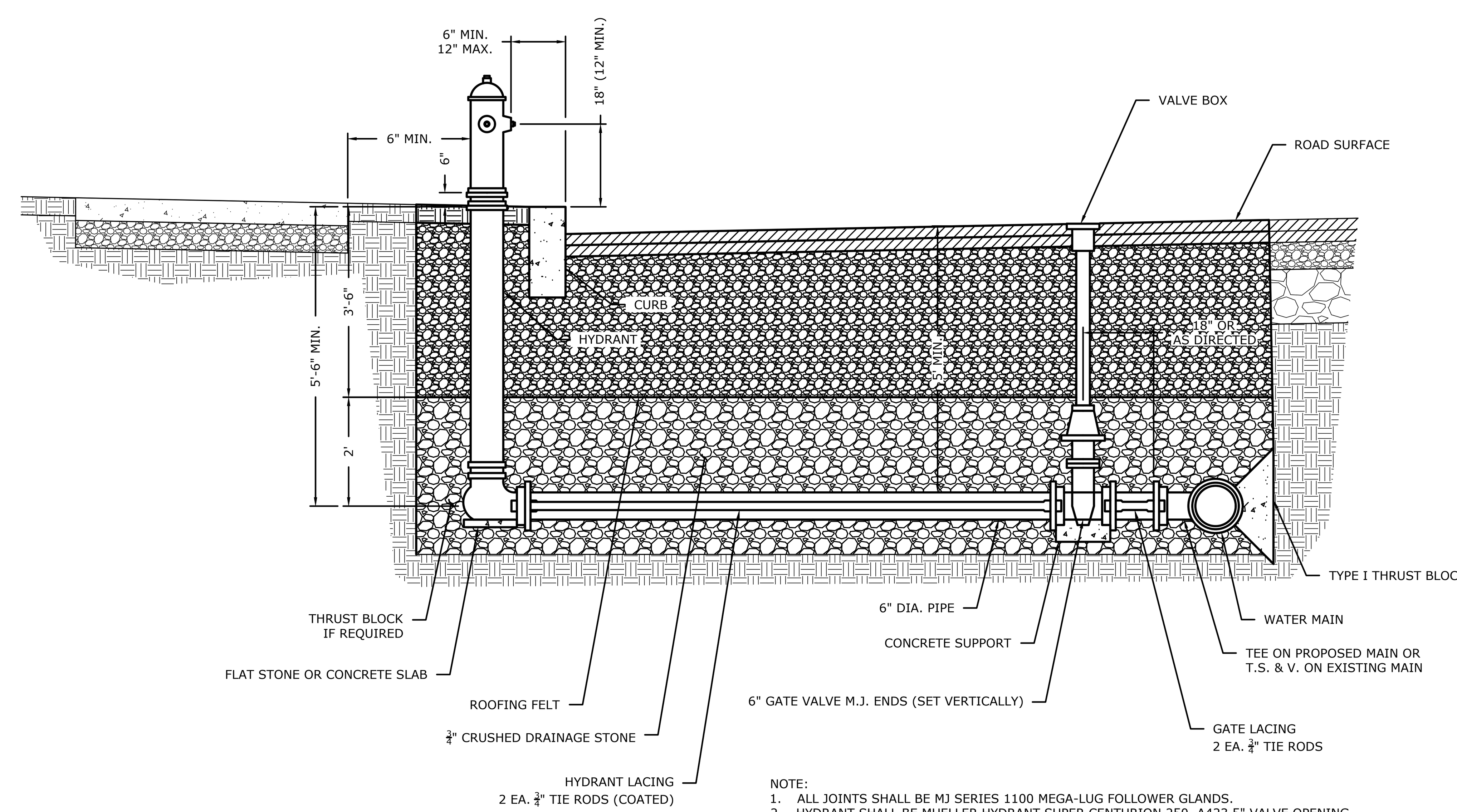
N.T.S.



NOTE:
1. TACK COAT REQUIRED BETWEEN PAVEMENT LIFTS WHEN LAST LIFT COURSE IS INSTALLED MORE THAN 24 HOURS BEFORE THE NEXT LIFT COURSE.
2. TO BE USED ON ALL ROADWAYS WITHIN STATE RIGHT OF WAY.

BIT. CONCRETE PATCHING - STATE

N.T.S.



NOTE:
1. ALL JOINTS SHALL BE MJ SERIES 1100 MEGA-LUG FOLLOWER GLANDS.
2. HYDRANT SHALL BE MUELLER HYDRANT SUPER CENTURION 250, A423 5" VALVE OPENING WITH PUMPER, OPEN LEFT, 5'6" BURY DEPTH.
3. USE OFFSETS WHERE REQUIRED.

HYDRANT ASSEMBLY

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BEELINE TRAIL PHASE 1
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NEW BRITAIN, CONNECTICUT

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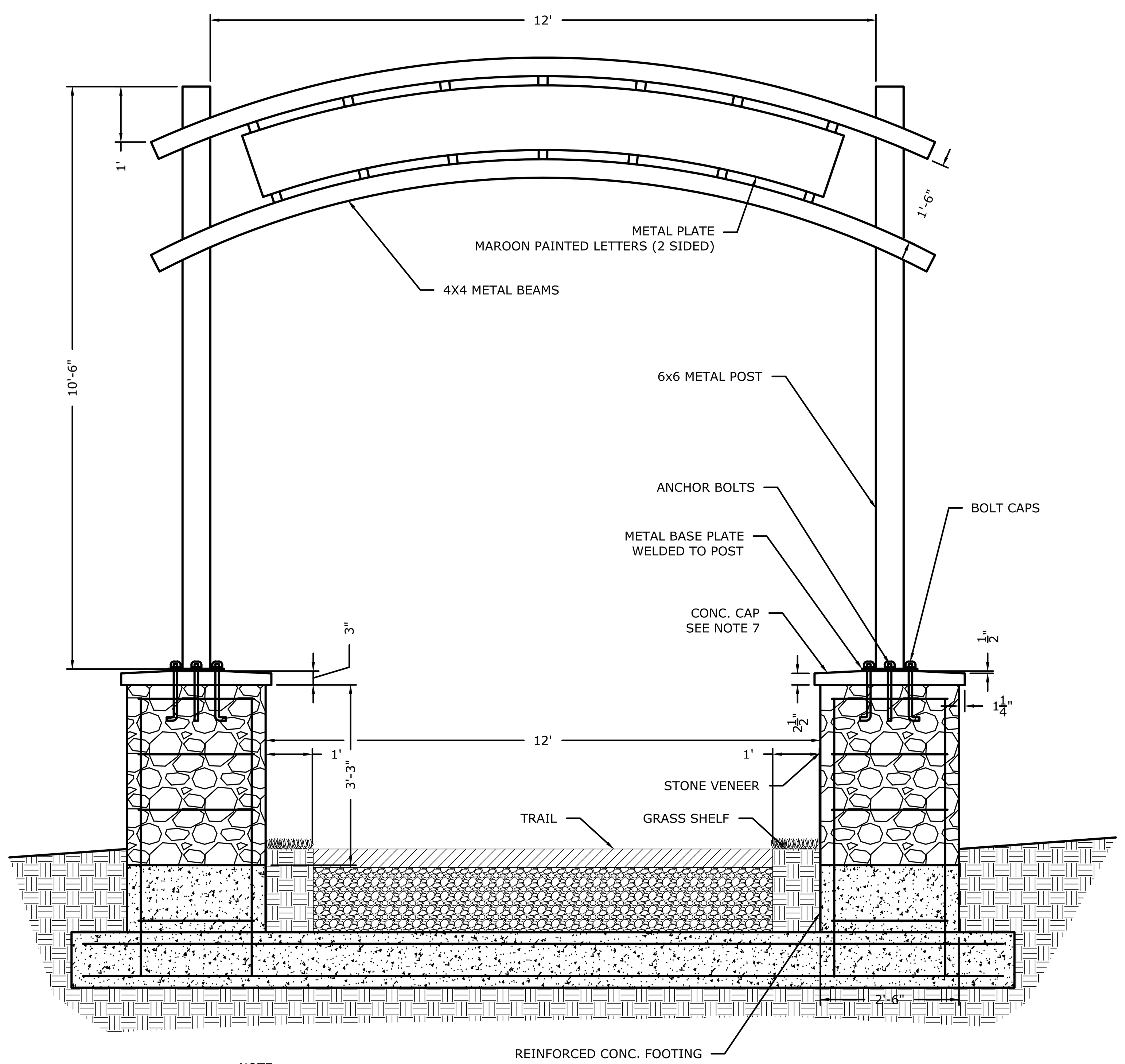
CAD File: MDS210069901

Title
MISCELLANEOUS DETAILS

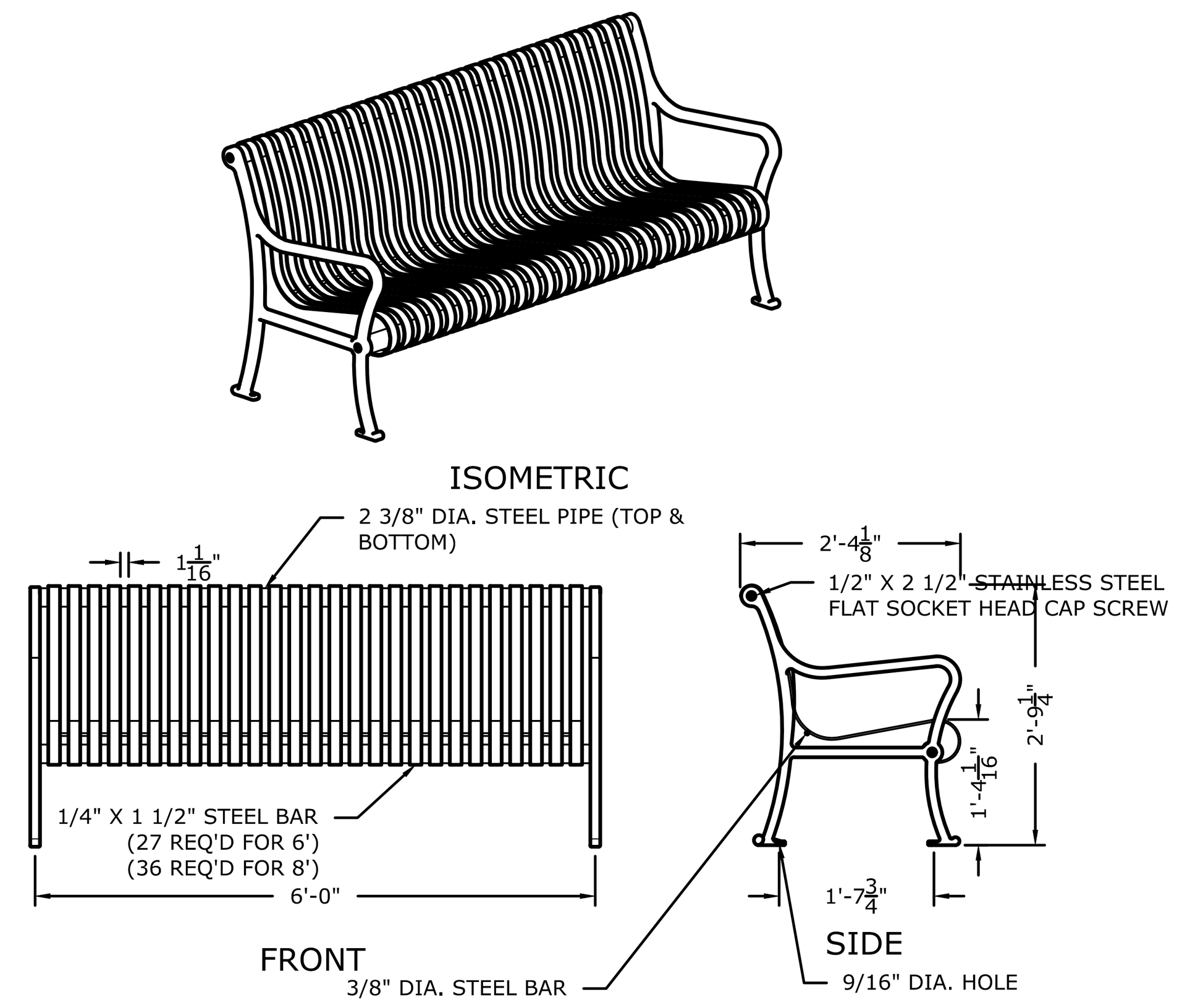
Sheet No.
MDS-03



NOTE:
1. ALL METAL TO BE POWDER COATED BLACK
2. FRAME TO BE WELDED
3. SAMPLE OF STONE VENEER ON FOOTING TO BE SUBMITTED FOR APPROVAL BY THE ENGINEER.
4. SHOP DRAWING TO BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION.
5. CONTRACTOR TO SUBMIT DESIGN FOR REINFORCED CONC. FOOTINGS AND ALL CONNECTIONS STAMPED BY A PROFESSIONAL ENGINEER.
6. COST OF DESIGN AND THE COST OF REINFORCED FOOTING SHALL BE PAID FOR UNDER THE ITEM #0100242A "OVERHEAD GATEWAY SIGN".
7. EDGES OF CONCRETE STONE CAP SHALL BE ROUNDED.

OVERHEAD GATEWAY SIGN AND FOUNDATION

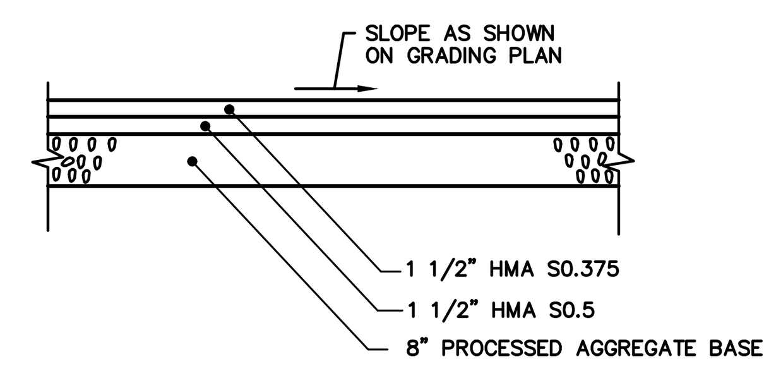
N.T.S.



NOTE:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. ALL STEEL MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED WITH POLYESTER POWDER COATING.
3. 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS MINIMUM.

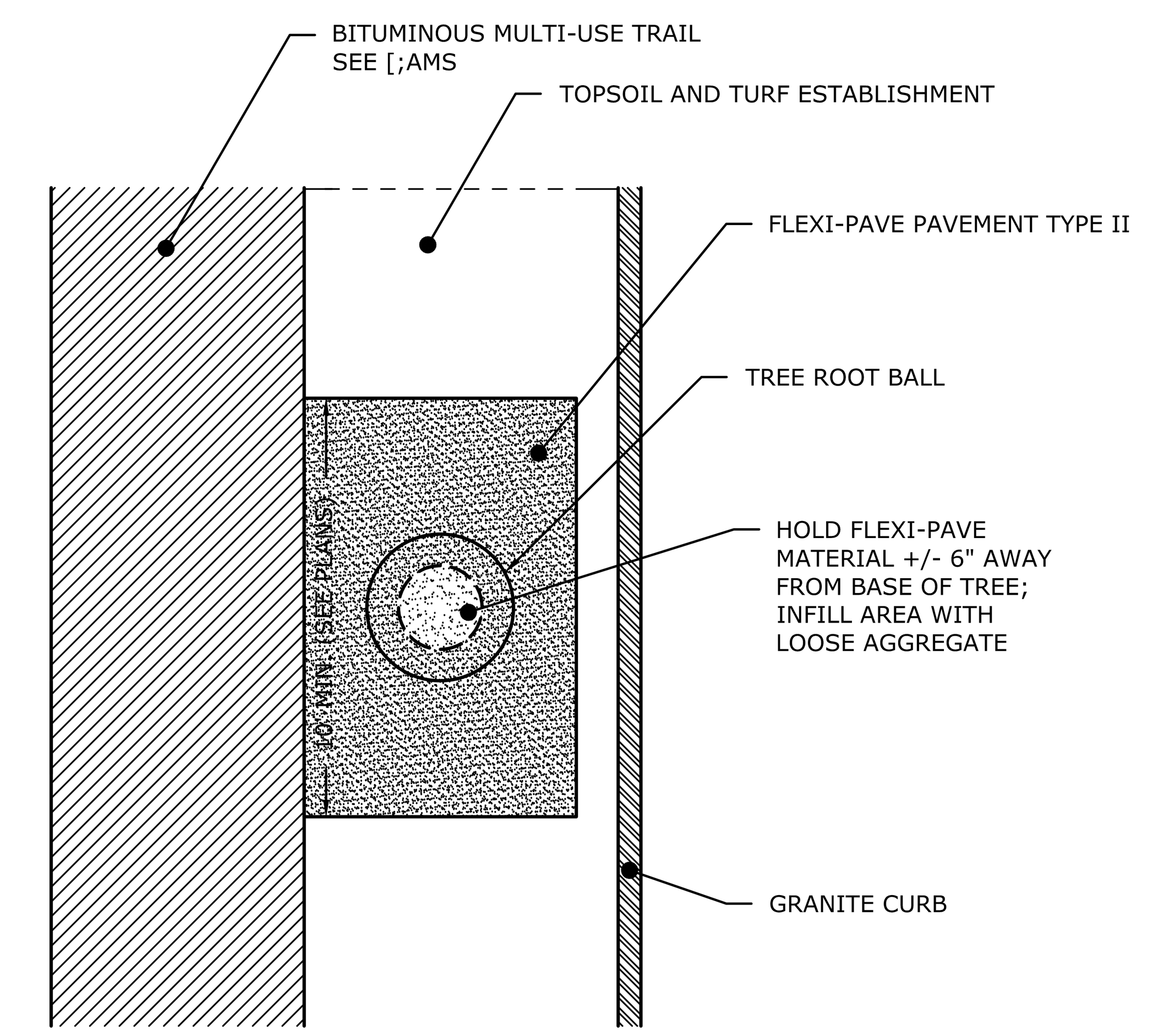
BENCH

N.T.S.



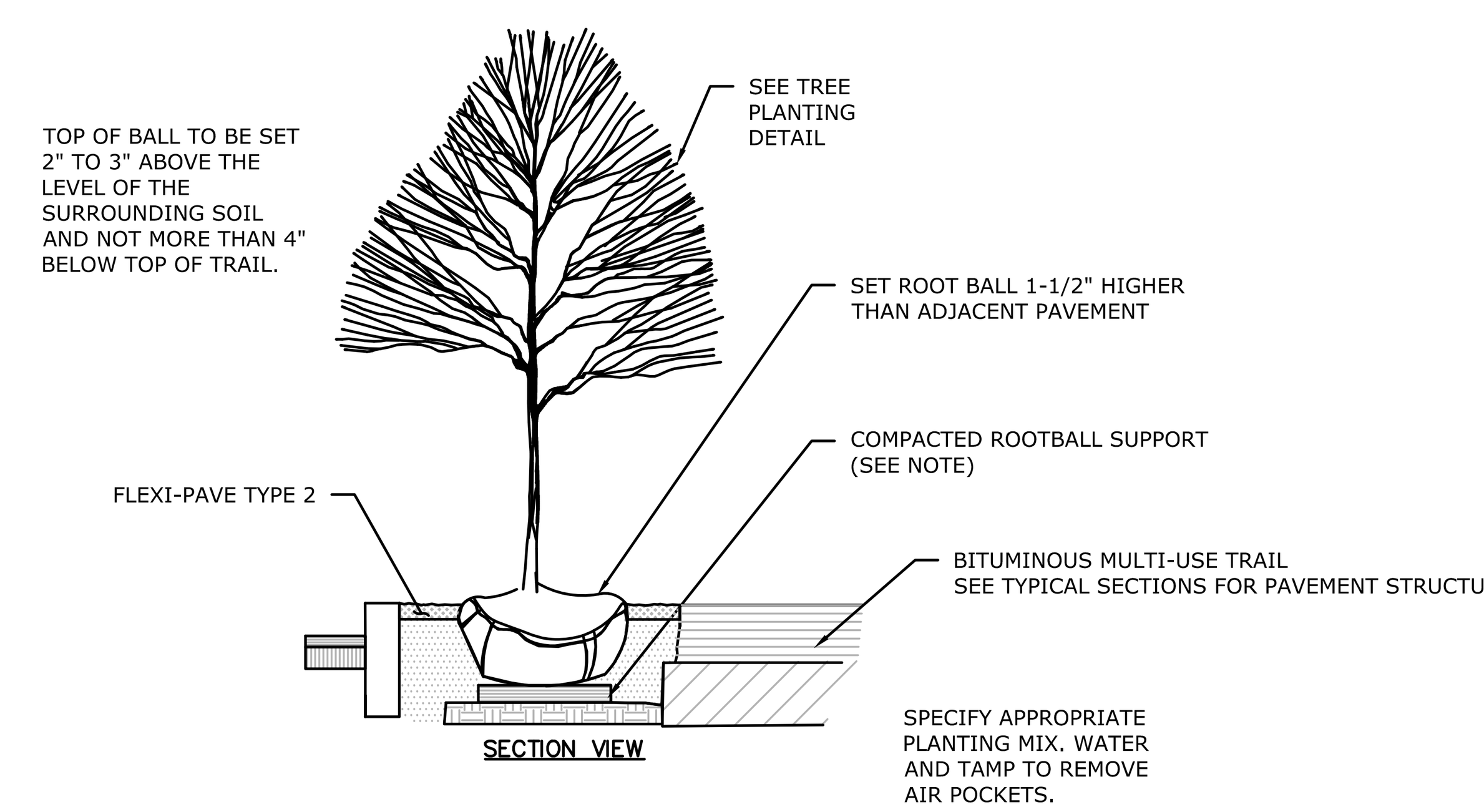
PARKING AREA PAVEMENT SECTION

N.T.S.



FLEXI-PAVE PAVEMENT AT NEW TREE PLAN VIEW

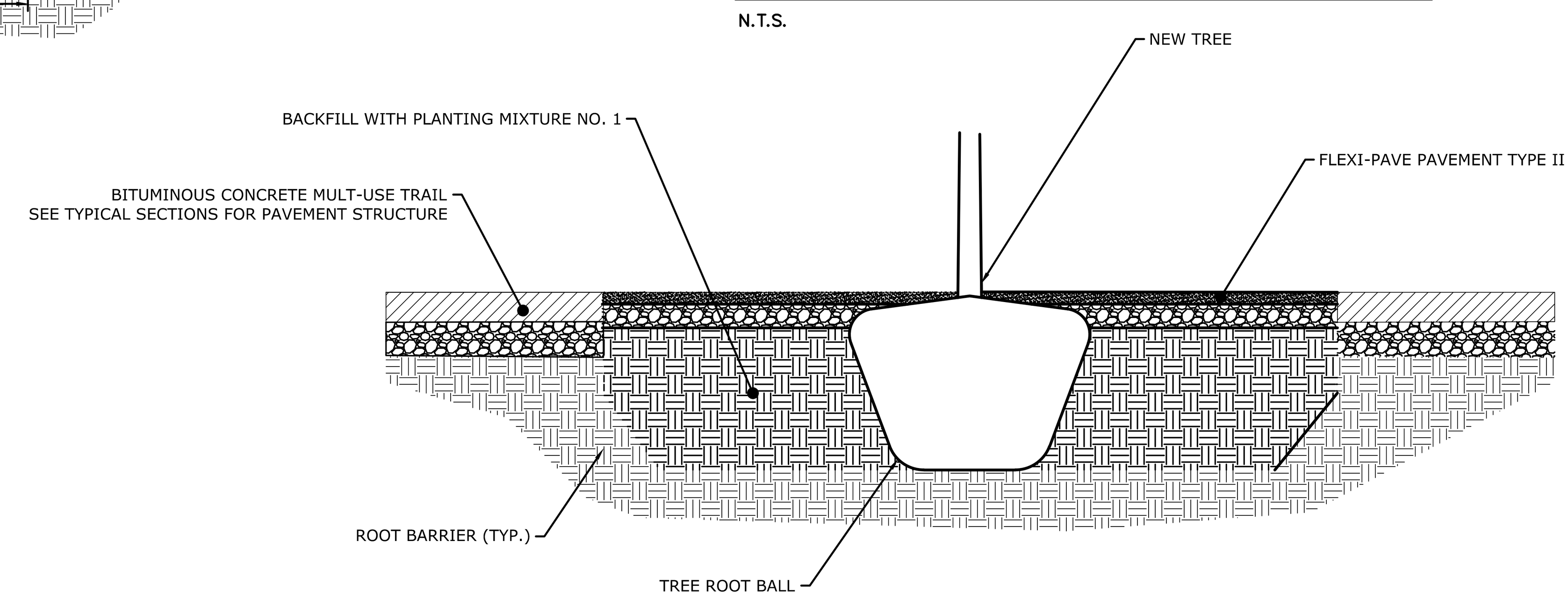
N.T.S.



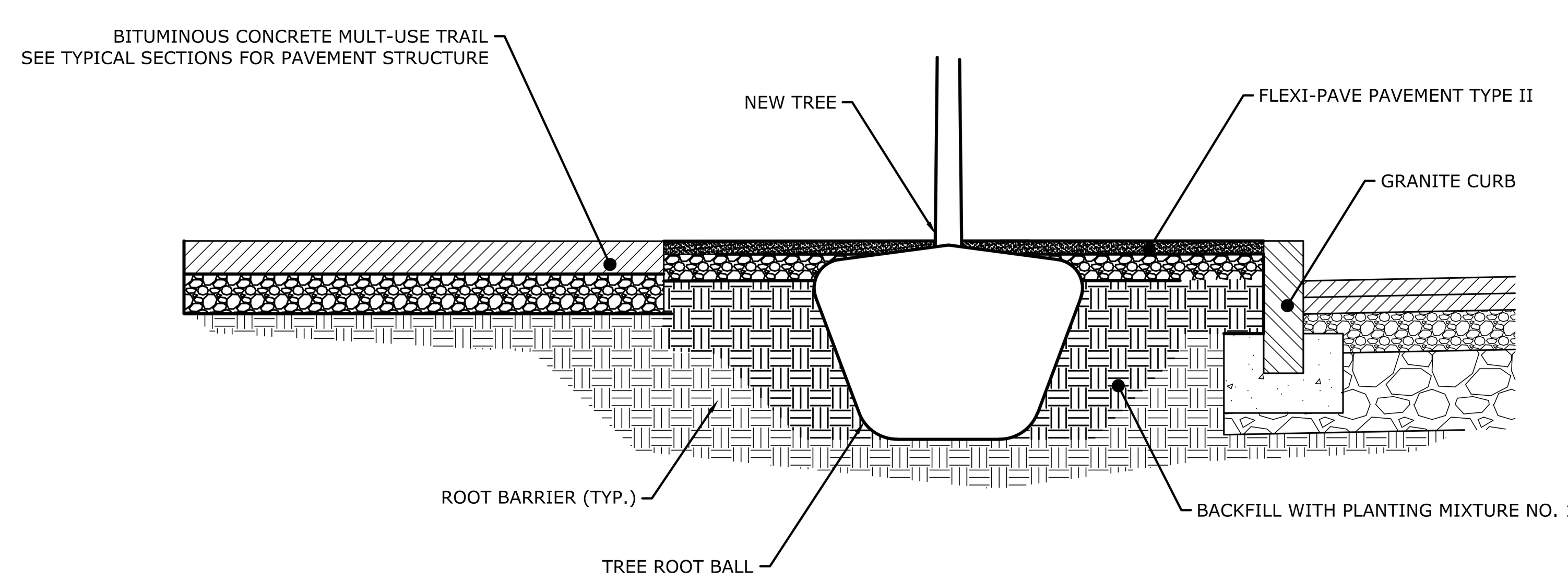
NOTES:
1. REMOVE ALL CONTAINERS, BASKETS, BURLAP, ETC., FROM ROOT BALL.
2. PAINT ALL CUTS OVER 1" DIA.
3. ROOT BALL SUPPORT CONSISTS OF 50% PLANTING SOIL/50% SUBBASE MATERIAL COMPACTED TO 95% DENSITY.

TREE PLANTING

N.T.S.



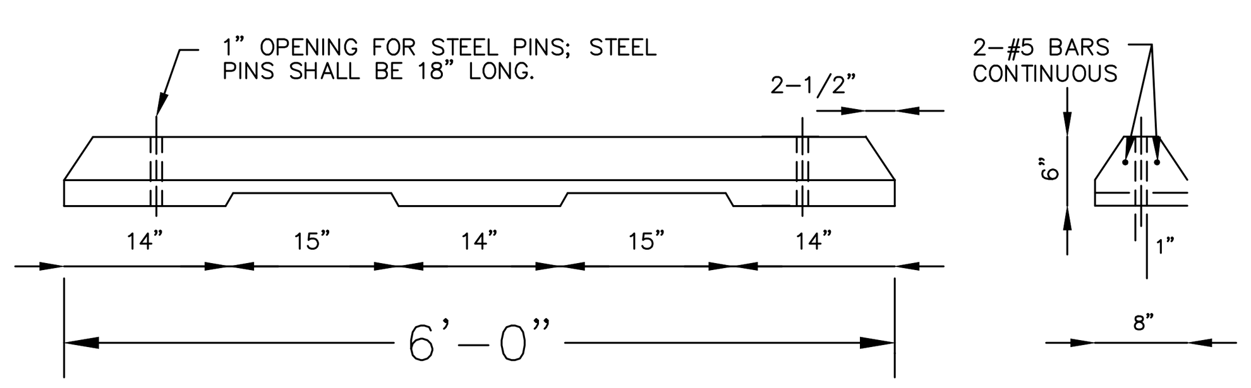
LONGITUDINAL SECTION



TRANSVERSE SECTION

FLEXI-PAVE PAVEMENT AT NEW TREE

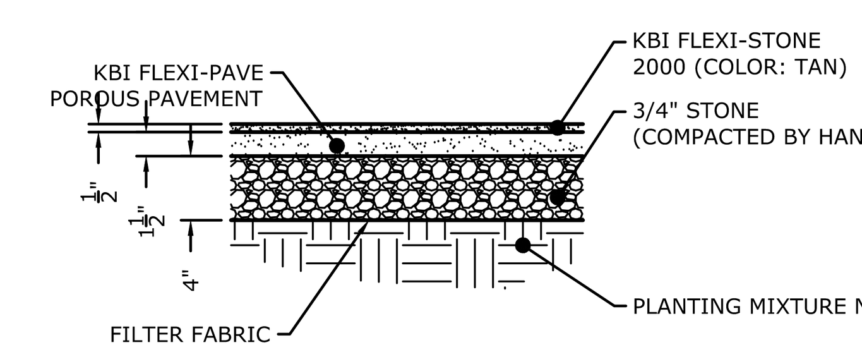
N.T.S.



Note:
1. CONCRETE SHALL BE PCC 03360.
2. CONCRETE SHALL CONFORM TO SECTION M.03 OF CTDOT FORM 818.
3. REINFORCEMENT SHALL CONFORM TO SECTION M.06 OF CTDOT FORM 818.

CONCRETE CURB STOP

N.T.S.



TYPE II

FLEXI-PAVE PAVEMENT SECTION

N.T.S.

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

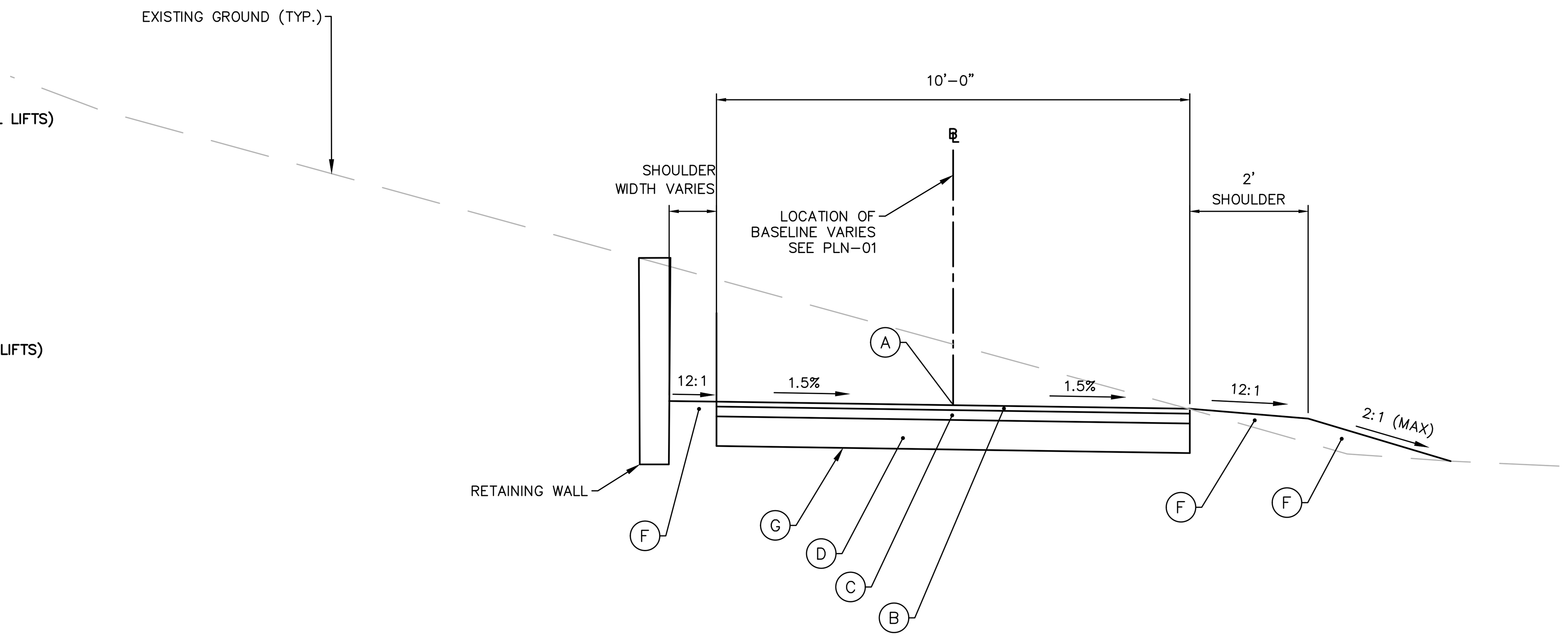
Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	NTS
Project No.	2100699
Date	08/09/2024
CAD File:	MDS210069901

Title
MISCELLANEOUS DETAILS

Sheet No.
MDS-04

LEGEND

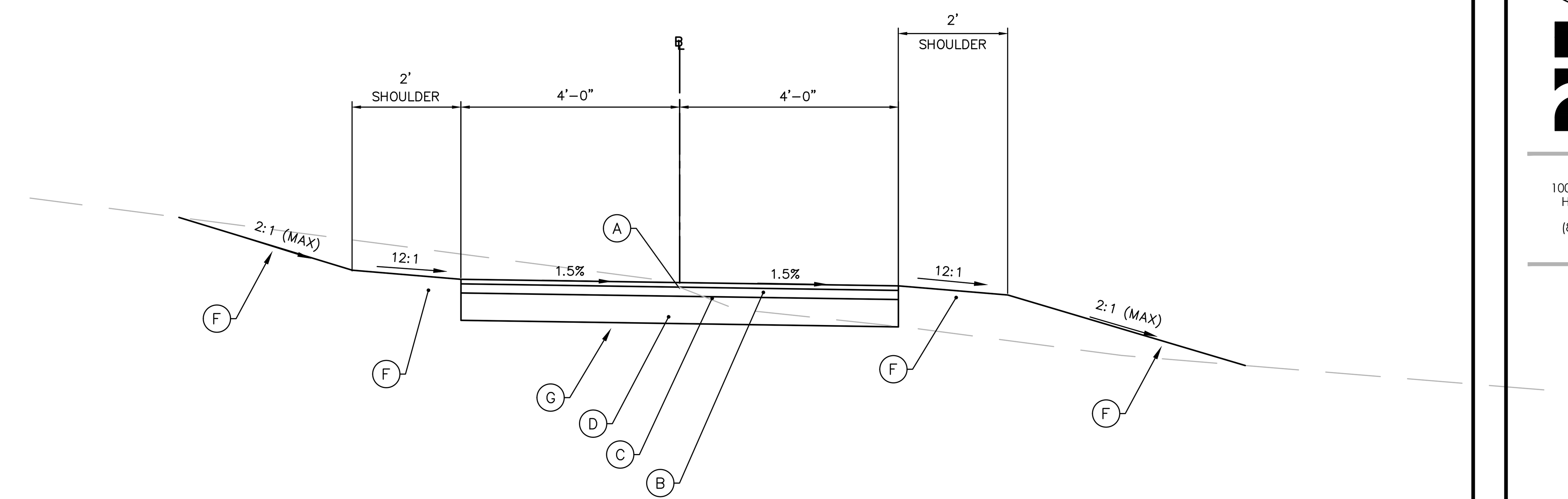
- Ⓐ POINT OF APPLICATION OF GRADE
- Ⓑ 1" HMA S0.25 (TRAFFIC LEVEL 1)
- Ⓒ 5" HMA S0.5 (TRAFFIC LEVEL 1) (TWO EQUAL LIFTS)
- Ⓓ 6" PROCESSED AGGREGATE BASE
- Ⓔ 6" ¾" CRUSHED STONE
- Ⓕ 4" TOPSOIL AND TURF ESTABLISHMENT
- Ⓖ FORMATION OF SUBGRADE
- Ⓗ 18" PROCESSED AGGREGATE BASE
- Ⓘ CONCRETE CURBING
- Ⓙ 5" HMA S0.5 TRAFFIC LEVEL 2 (TWO EQUAL LIFTS)
- Ⓚ CUT BITUMINOUS CONCRETE PAVEMENT
- Ⓛ RIPRAP FOR SLOPE PROTECTION



TYPICAL TRAIL SECTION - PITCH RIGHT RT 72 EMBANKMENT

N.T.S.

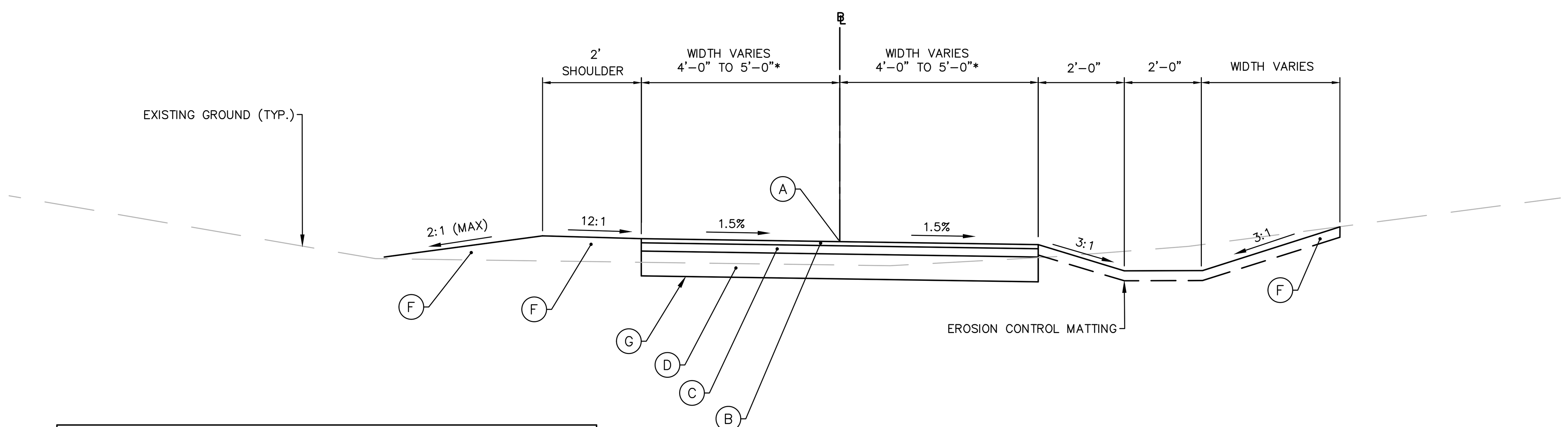
STA. 200+00 TO STA. 200+70



TYPICAL TRAIL SECTION - PITCH RIGHT

N.T.S.

STA. 200+70 TO STA. 202+30
STA. 224+40 TO STA. 226+40

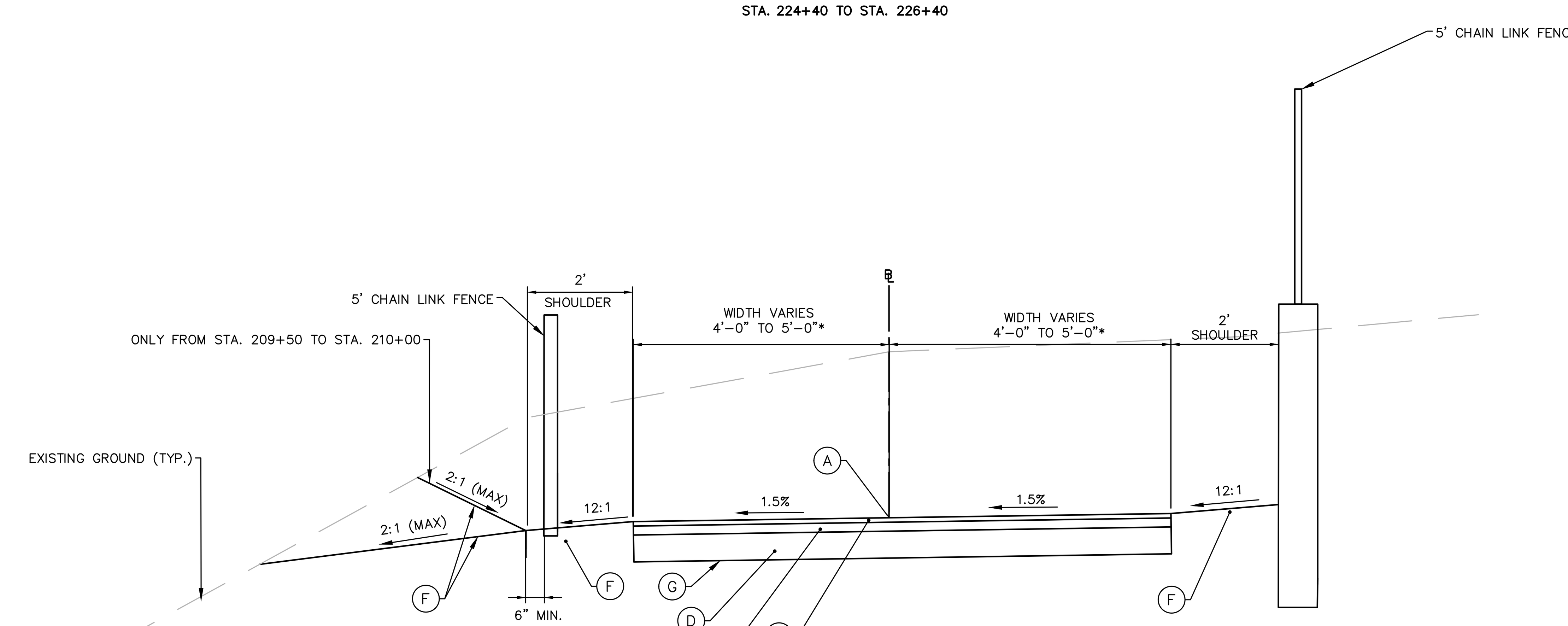


TRAIL PITCH RT TO PITCH LT TRANSITION TABLE			
	STA.	SLOPE LT	SLOPE RT
BEGIN TRANSITION	203+43	1.50%	-1.50%
END TRANSITION	203+68	-1.50%	1.50%

TYPICAL TRAIL SECTION - SWALE RT

N.T.S.

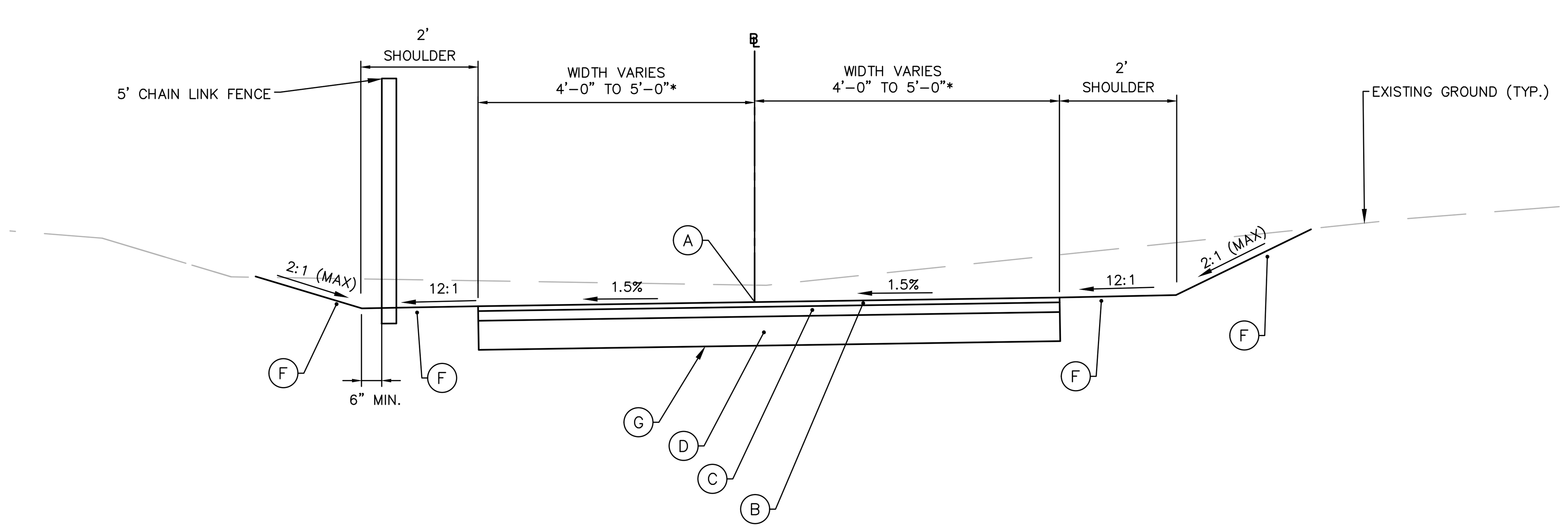
STA. 202+30 TO STA. 203+50
*SEE PLANS FOR TRANSITION AREAS.



TYPICAL TRAIL SECTION - RETAINING WALL

N.T.S.

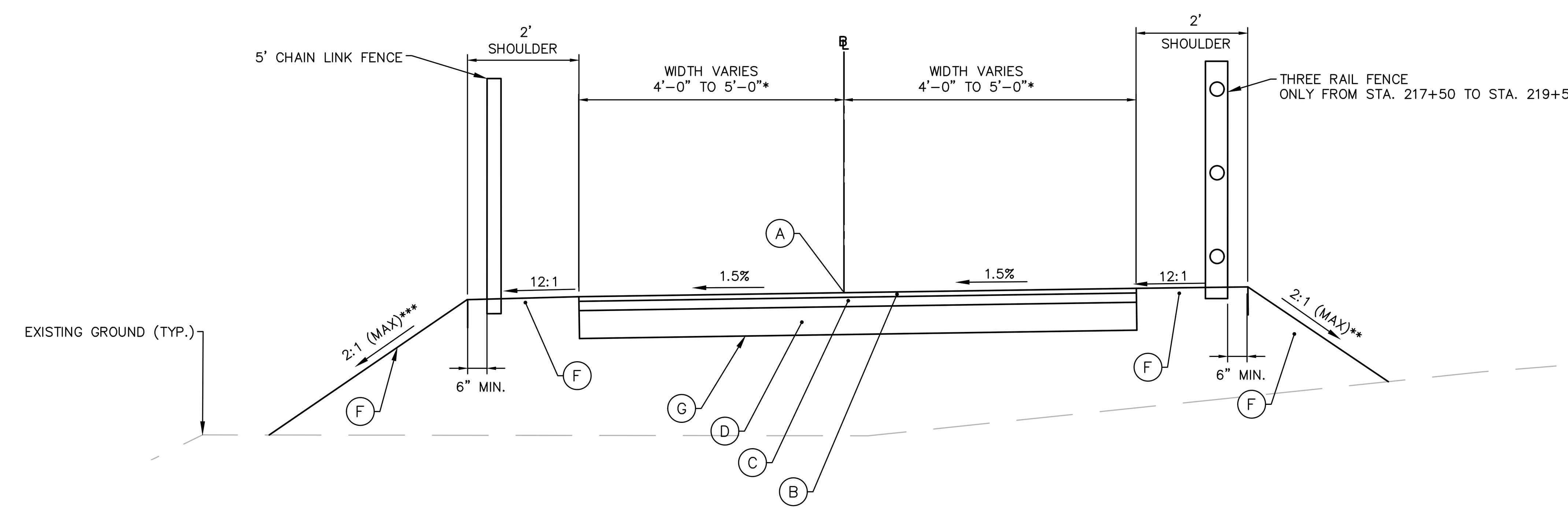
STA. 208+40 TO STA. 210+00
STA. 210+45 TO STA. 211+20
*SEE PLANS FOR TRANSITION AREAS.



TYPICAL TRAIL SECTION PITCH LEFT - CUT CONDITION

N.T.S.

STA. 204+00 TO STA. 204+75
STA. 210+42 TO STA. 211+00
STA. 217+30 TO STA. 217+71
STA. 219+03 TO STA. 219+50
*SEE PLANS FOR TRANSITION AREAS.



TYPICAL TRAIL SECTION PITCH LEFT- FILL CONDITION

N.T.S.

STA. 204+75 TO STA. 206+05
STA. 206+80 TO STA. 208+40
STA. 217+71 TO STA. 219+03
STA. 219+50 TO STA. 220+03
*SEE PLANS FOR TRANSITION AREAS.
**GRADE AT 1.5:1 ONLY FROM STA. 217+00 TO STA. 218+30. INSTALL RIPRAP FOR SLOPE PROTECTION. GRADE AT 6:1 OR FLATTER ONLY FROM STA. 207+42 TO STA. 208+36.
***GRADE AT 1.5:1 ONLY FROM STA. 206+75 TO STA. 208+40. INSTALL RIPRAP FOR SLOPE PROTECTION

Architecture Engineering Environmental Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS No. Date Desc.

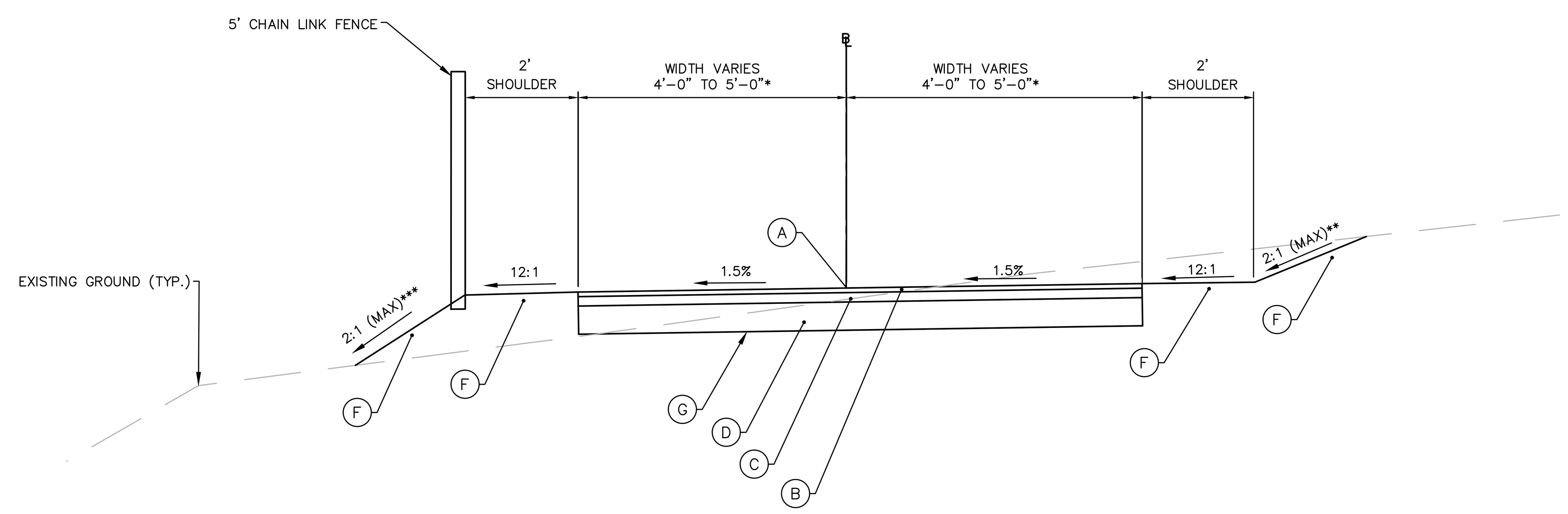
Designed	S.E.P.
Drawn	S.E.P.
Reviewed	S.D.F.
Scale	NTS
Project No.	2100699
Date	08/09/2024
CAD File:	TYP210069901

Title
SECTIONS

Sheet No.
TYP-01

LEGEND

- (A) POINT OF APPLICATION OF GRADE
- (B) 1" HMA S0.25 (TRAFFIC LEVEL 1)
- (C) 5" HMA S0.5 TRAFFIC LEVEL 2 (TWO EQUAL LIFTS)
- (D) 6" PROCESSED AGGREGATE BASE
- (E) 6" PROCESSED AGGREGATE
- (F) 4" TOPSOIL AND TURF ESTABLISHMENT – LAWN
- (G) FORMATION OF SUBGRADE
- (H) 18" PROCESSED AGGREGATE BASE
- (I) 6" GRANITE CURBING
- (J) 5" HMA S0.5 TRAFFIC LEVEL 2 (TWO EQUAL LIFTS)
- (K) CUT BITUMINOUS CONCRETE PAVEMENT
- (L) REMOVE EXISTING CONCRETE SIDEWALK AND CURB
- (M) 4" GRANITE CURBING
- (N) CONCRETE CURBING

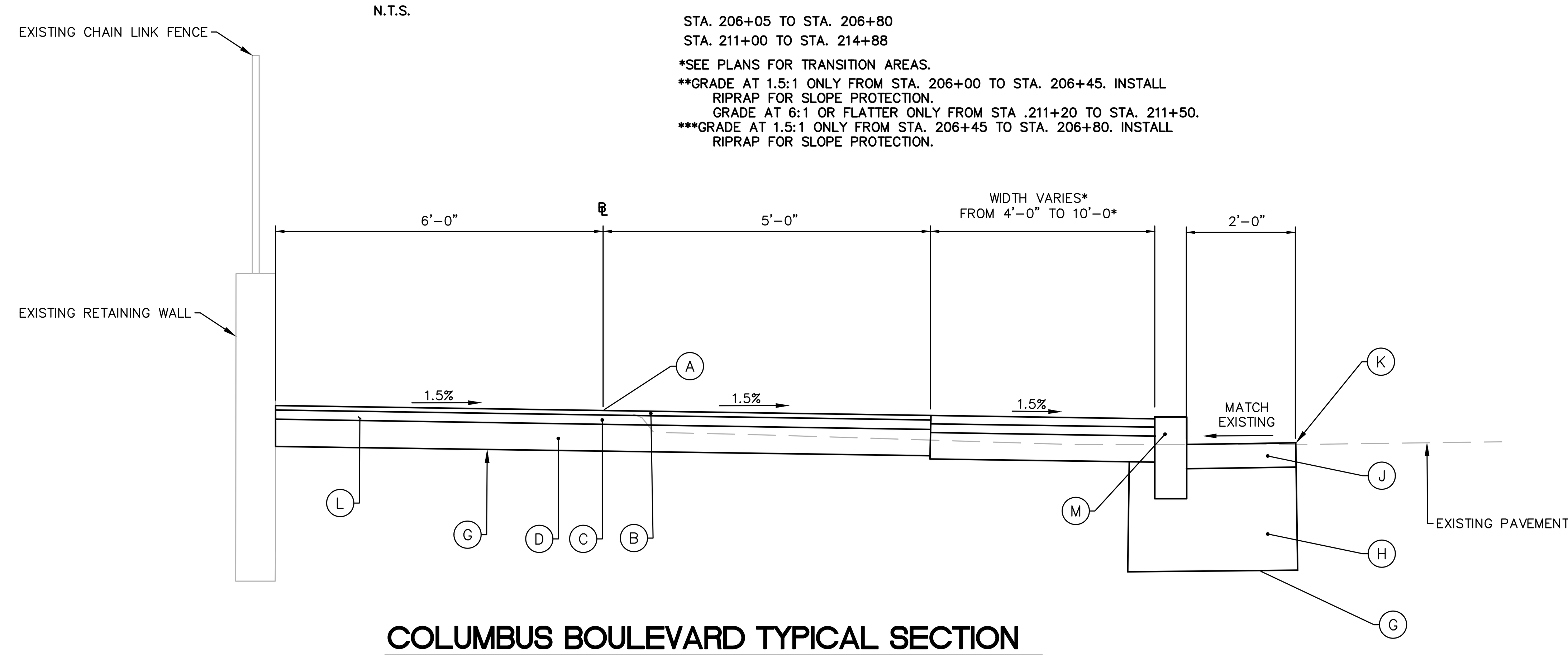


TYPICAL TRAIL SECTION PITCH LEFT- FILL LT CUT RT CONDITION

N.T.S.

STA. 206+05 TO STA. 206+80
STA. 211+00 TO STA. 214+88

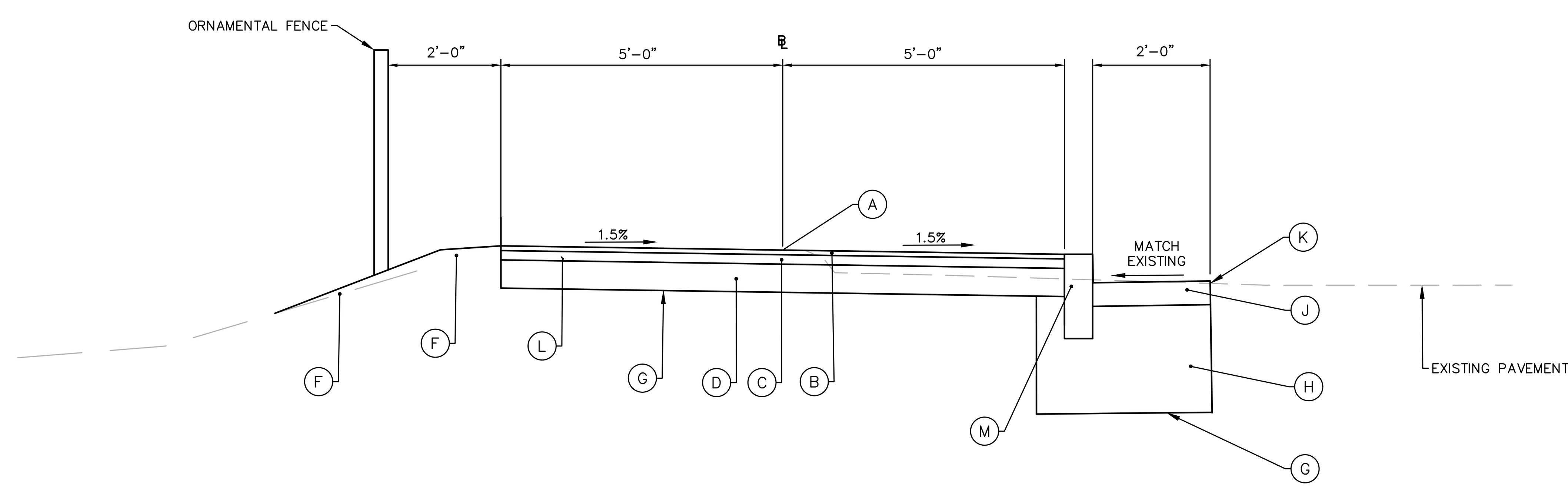
*SEE PLANS FOR TRANSITION AREAS.
**GRADE AT 1.5:1 ONLY FROM STA. 206+00 TO STA. 206+45. INSTALL RIPRAP FOR SLOPE PROTECTION.
GRADE AT 6:1 OR FLATTER ONLY FROM STA .211+20 TO STA. 211+50.
***GRADE AT 1.5:1 ONLY FROM STA. 206+45 TO STA. 206+80. INSTALL RIPRAP FOR SLOPE PROTECTION.



COLUMBUS BOULEVARD TYPICAL SECTION

N.T.S.

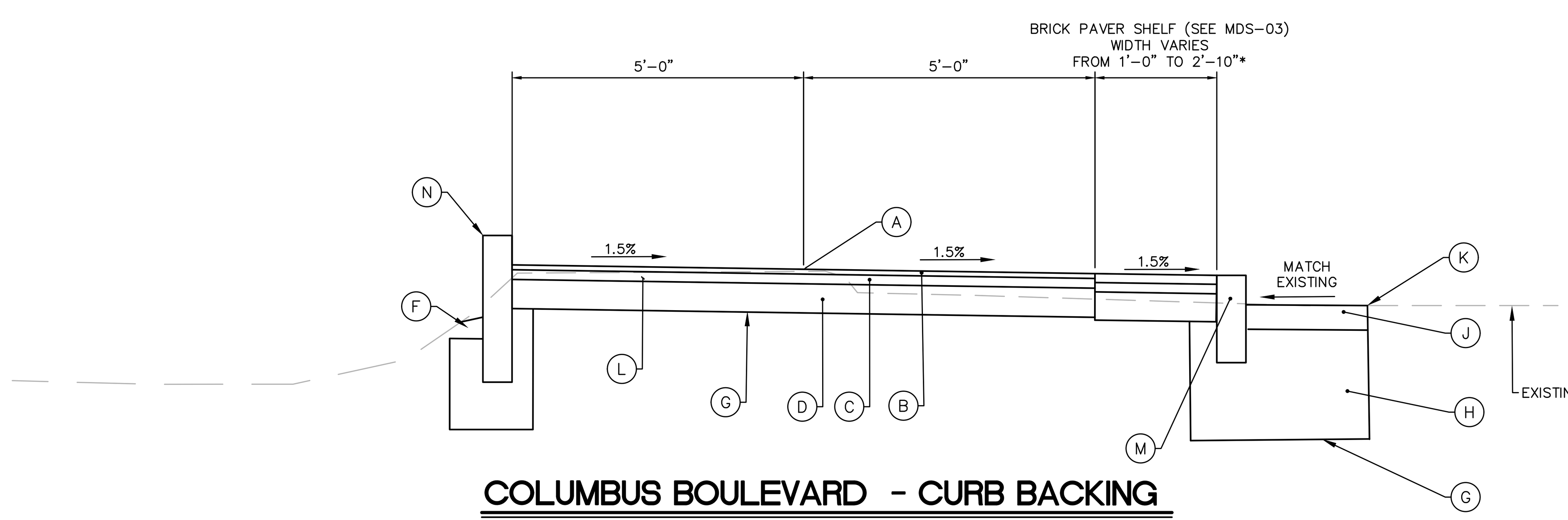
FROM STA. 227+61 TO STA.
*TOPSOIL AND TURF ESTABLISHMENT FROM STA. 227+61 TO 234+94. BRICK PAVER SIDEWALK FROM STA. 234+94 TO 235+76 (SEE MDS-03).



COLUMBUS BOULEVARD - NO SNOW SHELF - TYPICAL SECTION

N.T.S.

FROM STA. 238+50 TO STA. 240+45



COLUMBUS BOULEVARD - CURB BACKING

N.T.S.

FROM STA. 236+75 TO 238+50
*ONLY FROM STA. 236+75 TO 237+03

BL Companies
Architecture
Engineering
Environmental
Land Surveying
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	S.D.F.
Scale	NTS
Project No.	2100699
Date	08/09/2024
CAD File:	TYP210069901

Title
TYPICAL SECTIONS

Sheet No.
TYP-02

LEGEND

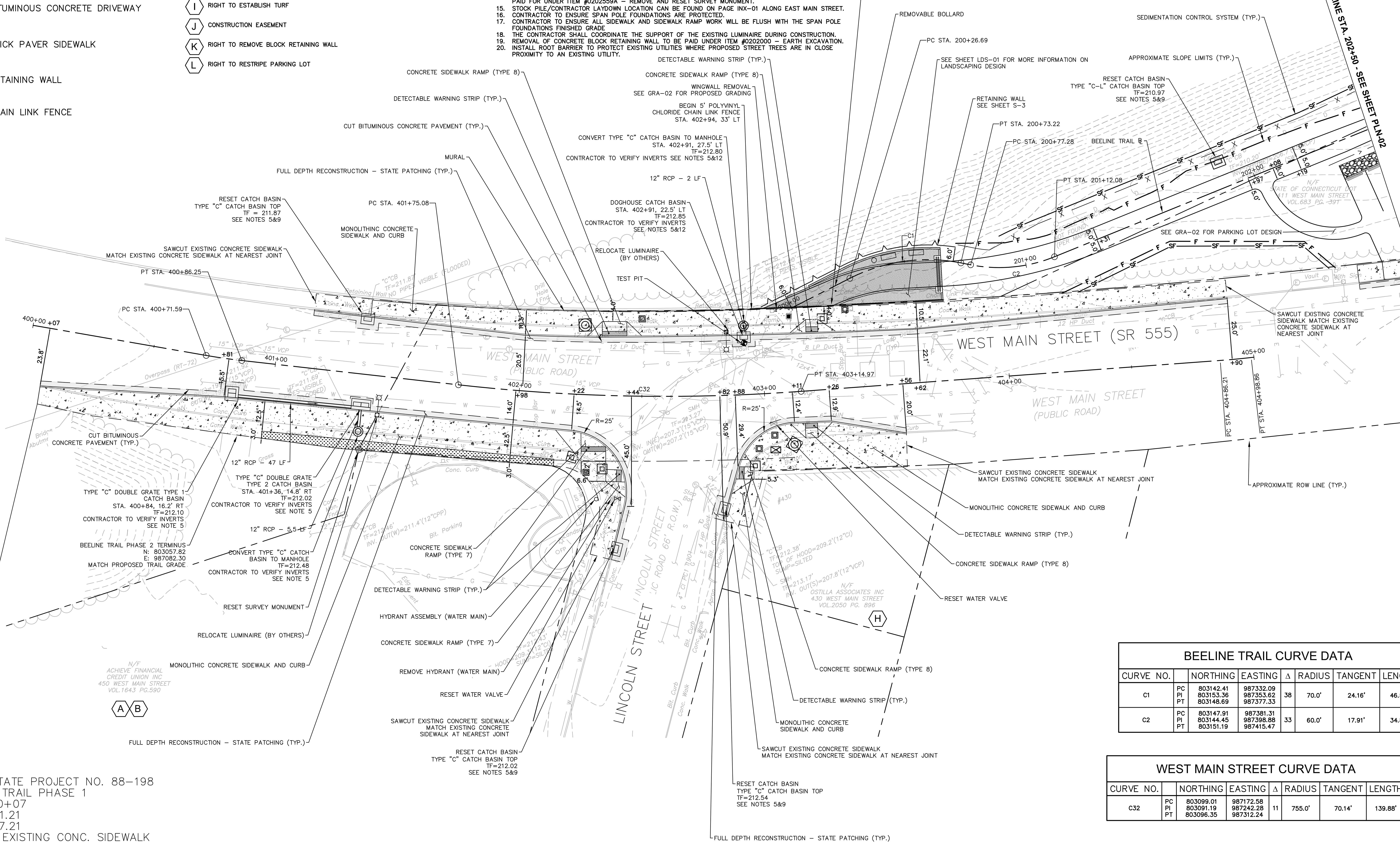
- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
- (B) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED
- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
- (E) SLOPE EASEMENT REQUIRED
- (F) RIGHT TO RECONSTRUCT DRIVEWAY REQUIRED
- (G) EASEMENT TO INSTALL AND MAINTAIN RETAINING WALL REQUIRED
- (H) RIGHT TO RECONSTRUCT SIDEWALK REQUIRED
- (I) RIGHT TO ESTABLISH TURF
- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
3. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN TO BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT LIMITS.
4. ALL PROPOSED SIDEWALK SHALL MAINTAIN A 4' PASSABLE WIDTH FOR PEDESTRIANS WHEN TRAVELING BEHIND ANY EXISTING FEATURES.
5. CONTRACTOR SHALL CLEAN ALL SILTED CATCH BASINS, MANHOLES, AND PIPES THROUGHOUT THE PROJECT LIMITS AND VERIFY EXISTING INVERTS AND PIPE SIZES PRIOR TO COMMENCING PROPOSED DRAINAGE WORK.
6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
7. THE LAST 10' OF THE THREE RAIL FENCE SHALL TAPER AWAY FROM THE TRAIL AT BOTH THE LEADING AND TRAILING ENDS.
8. ALL PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE REPAINTED TO MATCH THE EXISTING CONDITION.
9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
15. STOCK PILE/CONTRACTOR LAYDOWN LOCATION CAN BE FOUND ON PAGE INX–01 ALONG EAST MAIN STREET.
16. CONTRACTOR TO ENSURE SPAN POLE FOUNDATIONS ARE PROTECTED.
17. CONTRACTOR TO ENSURE ALL SIDEWALK AND SIDEWALK RAMP WORK WILL BE FLUSH WITH THE SPAN POLE FOUNDATIONS FINISHED GRADE
18. THE CONTRACTOR SHALL COORDINATE THE SUPPORT OF THE EXISTING LUMINAIRE DURING CONSTRUCTION.
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.



BEGIN STATE PROJECT NO. 88–198
BEELINE TRAIL PHASE 1
STA. 400+07
N:803091.21
E:987007.21
SAWCUT EXISTING CONC. SIDEWALK
MATCH EXISTING CONCRETE SIDEWALK

BEELINE TRAIL CURVE DATA

CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C1	PC PI PT	803142.41 803153.36 803148.69	987332.09 987353.62 987377.33	38	70.0'	24.16'	46.53'
C2	PC PI PT	803147.91 803144.45 803151.19	987381.31 987398.88 987415.47	33	60.0'	17.91'	34.80'

WEST MAIN STREET CURVE DATA

CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C32	PC PI PT	803099.01 803091.19 803096.35	987172.58 987242.28 987312.24	11	755.0'	70.14'	139.88'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

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Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN-01

LEGEND

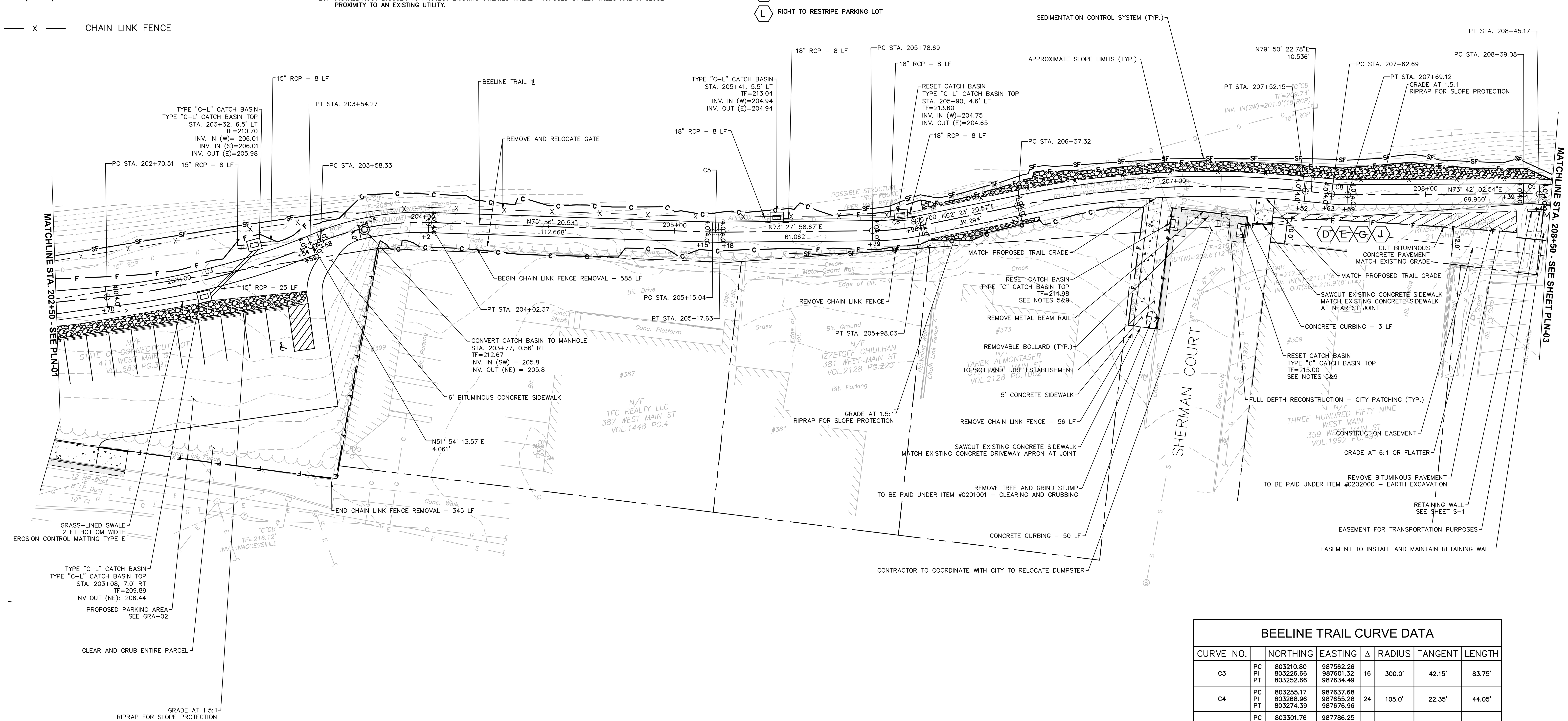
- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
3. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN TO BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT LIMITS.
4. ALL PROPOSED SIDEWALK SHALL MAINTAIN A 4' PASSABLE WIDTH FOR PEDESTRIANS WHEN TRAVELING BEHIND ANY EXISTING FEATURES.
5. CONTRACTOR SHALL CLEAN ALL SILTED CATCH BASINS, MANHOLES, AND PIPES THROUGHOUT THE PROJECT LIMITS AND VERIFY EXISTING INVERTS AND PIPE SIZES PRIOR TO COMMENCING PROPOSED DRAINAGE WORK.
6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
7. THE LAST 10' OF THE THREE RAIL FENCE SHALL TAPER AWAY FROM THE TRAIL AT BOTH THE LEADING AND TRAILING ENDS.
8. ALL PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE REPAINTED TO MATCH THE EXISTING CONDITION.
9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
15. STOCK PILE/CONTRACTOR LAYDOWN LOCATION CAN BE FOUND ON PAGE INX–01 ALONG EAST MAIN STREET.
16. CONTRACTOR TO ENSURE SPAN POLE FOUNDATIONS ARE PROTECTED.
17. CONTRACTOR TO ENSURE ALL SIDEWALK AND SIDEWALK RAMP WORK WILL BE FLUSH WITH THE SPAN POLE FOUNDATIONS FINISHED GRADE
18. THE CONTRACTOR SHALL COORDINATE THE SUPPORT OF THE EXISTING LUMINAIRE DURING CONSTRUCTION.
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.

SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
- (B) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED
- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
- (E) SLOPE EASEMENT REQUIRED
- (F) RIGHT TO RECONSTRUCT DRIVEWAY REQUIRED
- (G) EASEMENT TO INSTALL AND MAINTAIN RETAINING WALL REQUIRED
- (H) RIGHT TO RECONSTRUCT SIDEWALK REQUIRED
- (I) RIGHT TO ESTABLISH TURF
- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT



BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C3	PC PI PT	803210.80 803226.66 803252.66	987562.26 987601.32 987634.49	16	300.0'	42.15'	83.75'
C4	PC PI PT	803255.17 803268.96 803274.39	987637.68 987655.28 987676.96	24	105.0'	22.35'	44.05'
C5	PC PI PT	803301.76 803302.08 803302.45	987786.25 987787.51 987788.75	2	60.0'	1.29'	2.59'
C6	PC PI PT	803319.82 803322.58 803327.08	987847.29 987856.58 987865.17	11	100.0'	9.70'	19.33'
C7	PC PI PT	803345.29 803372.11 803382.31	987899.99 987951.27 988008.22	17	377.0'	57.86'	114.83'
C8	PC PI PT	803384.17 803384.74 803385.64	988018.60 988021.76 988024.85	6	60.0'	3.22'	6.43'
C9	PC PI PT	803405.28 803406.13 803406.81	988092.00 988094.92 988097.90	3	100.0'	3.05'	6.09'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"= 40'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN–02

LEGEND

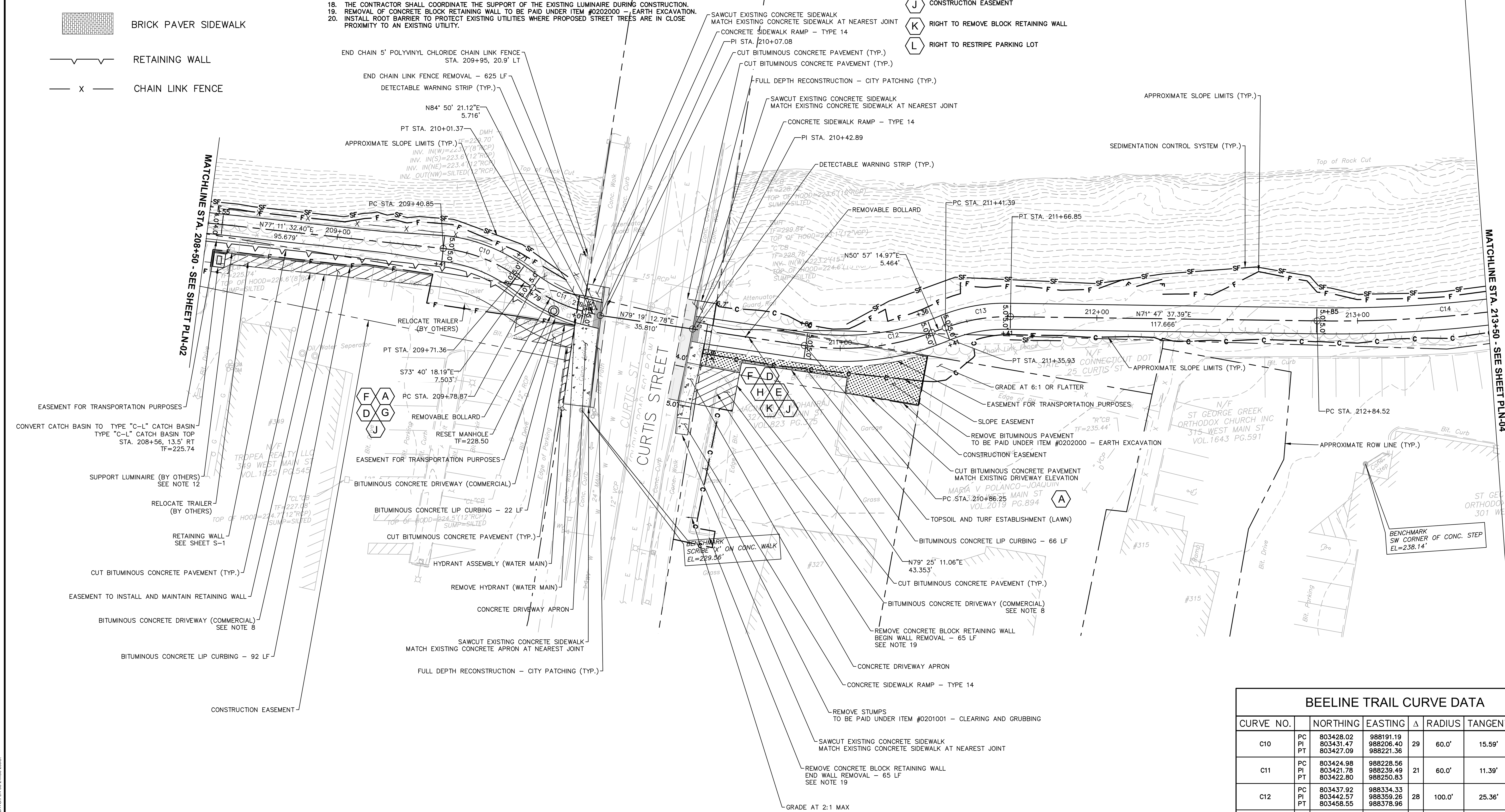
- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
3. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN TO BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT LIMITS.
4. ALL PROPOSED SIDEWALK SHALL MAINTAIN A 4' PASSABLE WIDTH FOR PEDESTRIANS WHEN TRAVELING BEHIND ANY EXISTING FEATURES.
5. CONTRACTOR SHALL CLEAN ALL SILTED CATCH BASINS, MANHOLES, AND PIPES THROUGHOUT THE PROJECT LIMITS AND VERIFY EXISTING INVERTS AND PIPE SIZES PRIOR TO COMMENCING PROPOSED DRAINAGE WORK.
6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
7. THE LAST 10' OF THE THREE RAIL FENCE SHALL TAPER AWAY FROM THE TRAIL AT BOTH THE LEADING AND TRAILING ENDS.
8. ALL PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE REPAINTED TO MATCH THE EXISTING CONDITION.
9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
15. STOCK PILE/CONTRACTOR LAYDOWN LOCATION CAN BE FOUND ON PAGE INX–01 ALONG EAST MAIN STREET.
16. CONTRACTOR TO ENSURE SPAN POLE FOUNDATIONS ARE PROTECTED.
17. CONTRACTOR TO ENSURE ALL SIDEWALK AND SIDEWALK RAMP WORK WILL BE FLUSH WITH THE SPAN POLE FOUNDATIONS FINISHED GRADE
18. THE CONTRACTOR SHALL COORDINATE THE SUPPORT OF THE EXISTING LUMINAIRE DURING CONSTRUCTION.
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.

SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
- (B) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED
- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
- (E) SLOPE EASEMENT REQUIRED
- (F) RIGHT TO RECONSTRUCT DRIVEWAY REQUIRED
- (G) EASEMENT TO INSTALL AND MAINTAIN RETAINING WALL REQUIRED
- (H) RIGHT TO RECONSTRUCT SIDEWALK REQUIRED
- (I) RIGHT TO ESTABLISH TURF
- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT



BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C10	PC PI PT	803428.02 803431.47 803427.09	988191.19 988206.40 988221.36	29	60.0'	15.59'	30.51'
C11	PC PI PT	803424.98 803421.78 803422.80	988228.56 988239.49 988250.83	21	60.0'	11.39'	22.50'
C12	PC PI PT	803437.92 803442.57 803458.55	988334.33 988359.26 988378.96	28	100.0'	25.36'	49.68'
C13	PC PI PT	803461.99 803470.10 803474.12	988383.20 988393.20 988405.43	21	70.0'	12.87'	25.46'
C14	PC PI PT	803510.89 803526.40 803550.89	988517.21 988564.38 988607.57	11	500.0'	49.66'	98.99'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

BL Companies
Architecture
Engineering
Environmental
Land Surveying
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN-03

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
3. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN TO BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT LIMITS.
4. ALL PROPOSED SIDEWALK SHALL MAINTAIN A 4' PASSABLE WIDTH FOR PEDESTRIANS WHEN TRAVELING BEHIND ANY EXISTING FEATURES.
5. CONTRACTOR SHALL CLEAN ALL SILTED CATCH BASINS, MANHOLES, AND PIPES THROUGHOUT THE PROJECT LIMITS AND VERIFY EXISTING INVERTS AND PIPE SIZES PRIOR TO COMMENCING PROPOSED DRAINAGE WORK.
6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
7. THE LAST 10' OF THE THREE RAIL FENCE SHALL TAPER AWAY FROM THE TRAIL AT BOTH THE LEADING AND TRAILING ENDS.
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9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
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17. CONTRACTOR TO ENSURE ALL SIDEWALK AND SIDEWALK RAMP WORK WILL BE FLUSH WITH THE SPAN POLE FOUNDATIONS FINISHED GRADE
18. THE CONTRACTOR SHALL COORDINATE THE SUPPORT OF THE EXISTING LUMINAIRE DURING CONSTRUCTION.
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.

SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
- (B) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED
- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
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- (J) CONSTRUCTION EASEMENT
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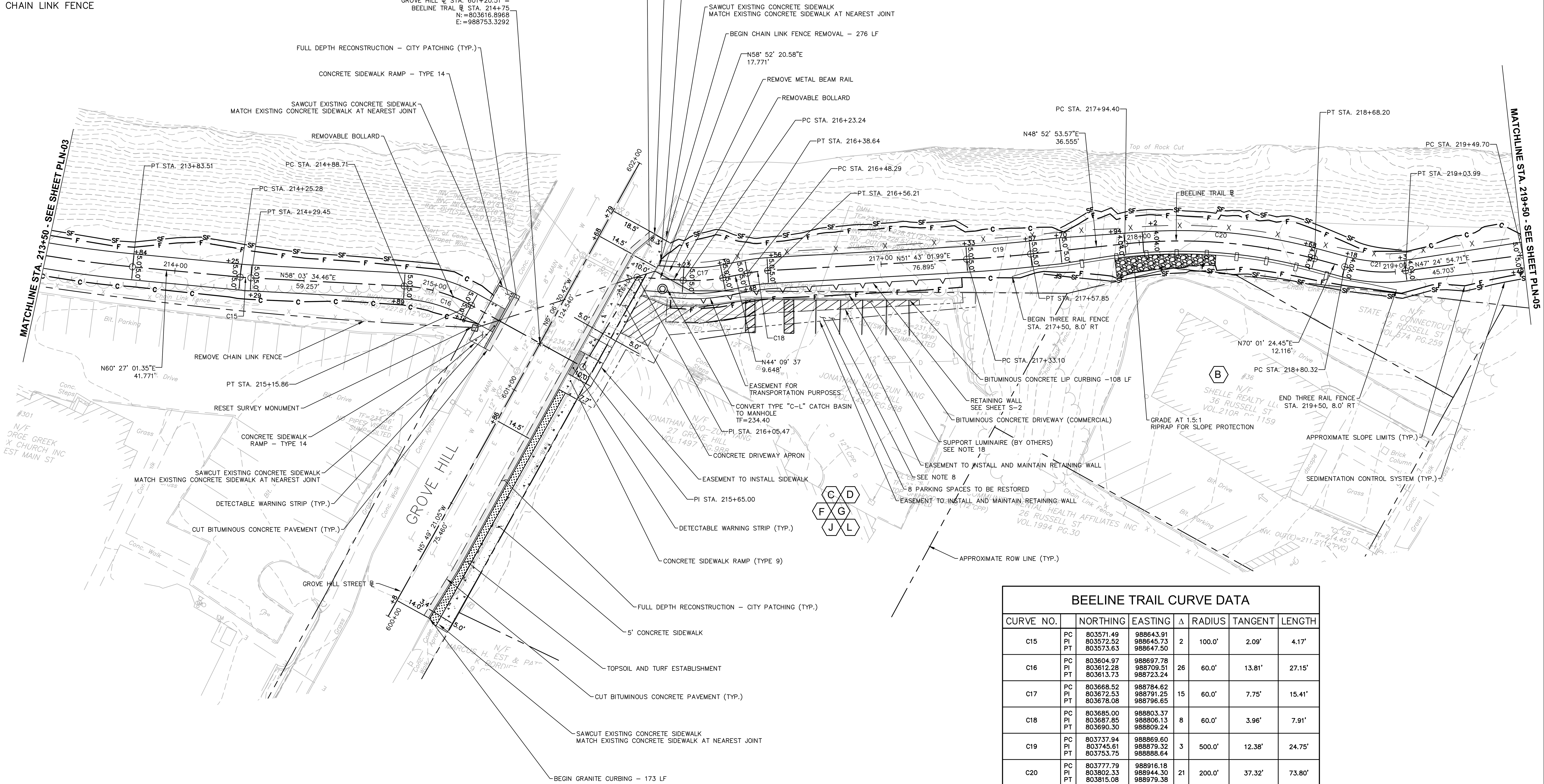
- (L) RIGHT TO RESTRIPE PARKING LOT



GRAPHIC SCALE

20 10 0 20

SCALE IN FEET

BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C15	PC PI PT	803571.49 803572.52 803573.63	988643.91 988645.73 988647.50	2	100.0'	2.09'	4.17'
C16	PC PI PT	803604.97 803612.28 803613.73	988697.78 988709.51 988723.24	26	60.0'	13.81'	27.15'
C17	PC PI PT	803668.52 803672.53 803678.08	988784.62 988791.25 988796.65	15	60.0'	7.75'	15.41'
C18	PC PI PT	803685.00 803687.85 803690.30	988803.37 988806.13 988809.24	8	60.0'	3.96'	7.91'
C19	PC PI PT	803737.94 803745.61 803753.75	988869.60 988879.32 988888.64	3	500.0'	12.38'	24.75'
C20	PC PI PT	803777.79 803802.33 803815.08	988916.18 988944.30 988979.38	21	200.0'	37.32'	73.80'
C21	PC PI PT	803819.22 803823.32 803831.44	988990.76 989002.04 989010.87	23	60.0'	11.99'	23.68'
C22	PC PI PT	803862.36 803886.30 803875.10	989044.52 989070.56 989104.12	61	60.0'	35.38'	63.93'

Architecture
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Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

State Project No. 88-198

NEW BRITAIN, CONNECTICUT

REVISIONS

No.	Date	Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title

SITE PLAN

Sheet No.

PLN–04

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
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6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
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10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
15. STOCK PILE/CONTRACTOR LAYDOWN LOCATION CAN BE FOUND ON PAGE INX–01 ALONG EAST MAIN STREET.
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SCHEDULE OF RIGHTS AND EASEMENTS

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- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
- (E) SLOPE EASEMENT REQUIRED
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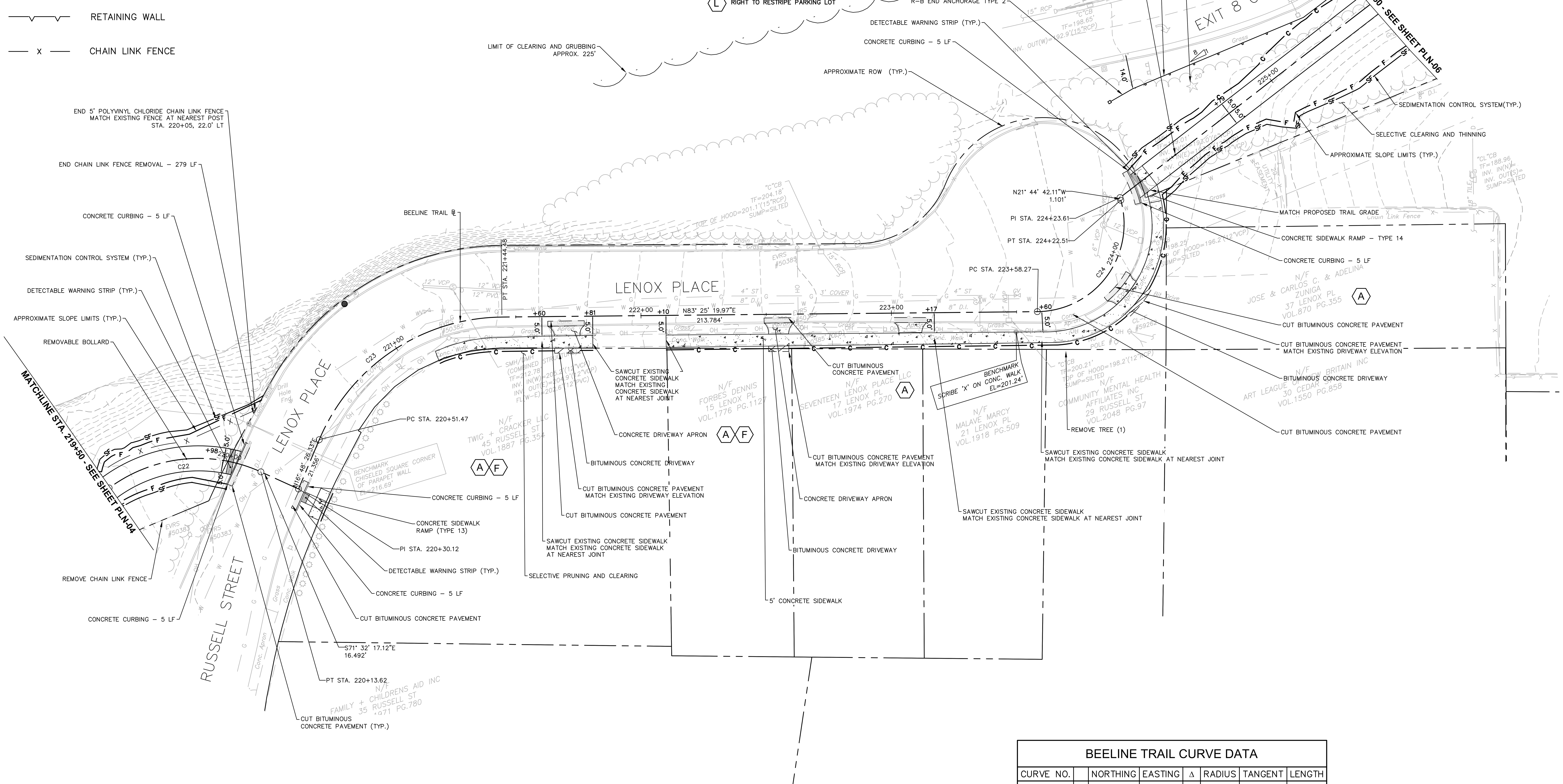
- (I) RIGHT TO ESTABLISH TURF
- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT



BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C23	PC PI PT	803890.32 803940.64 803946.66	989125.94 989141.14 989193.35	67	80.0'	52.57'	93.01'
C24	PC PI PT	803971.15 803976.39 804018.88	989405.73 989451.18 989434.23	105	35.0'	45.75'	64.24'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
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Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

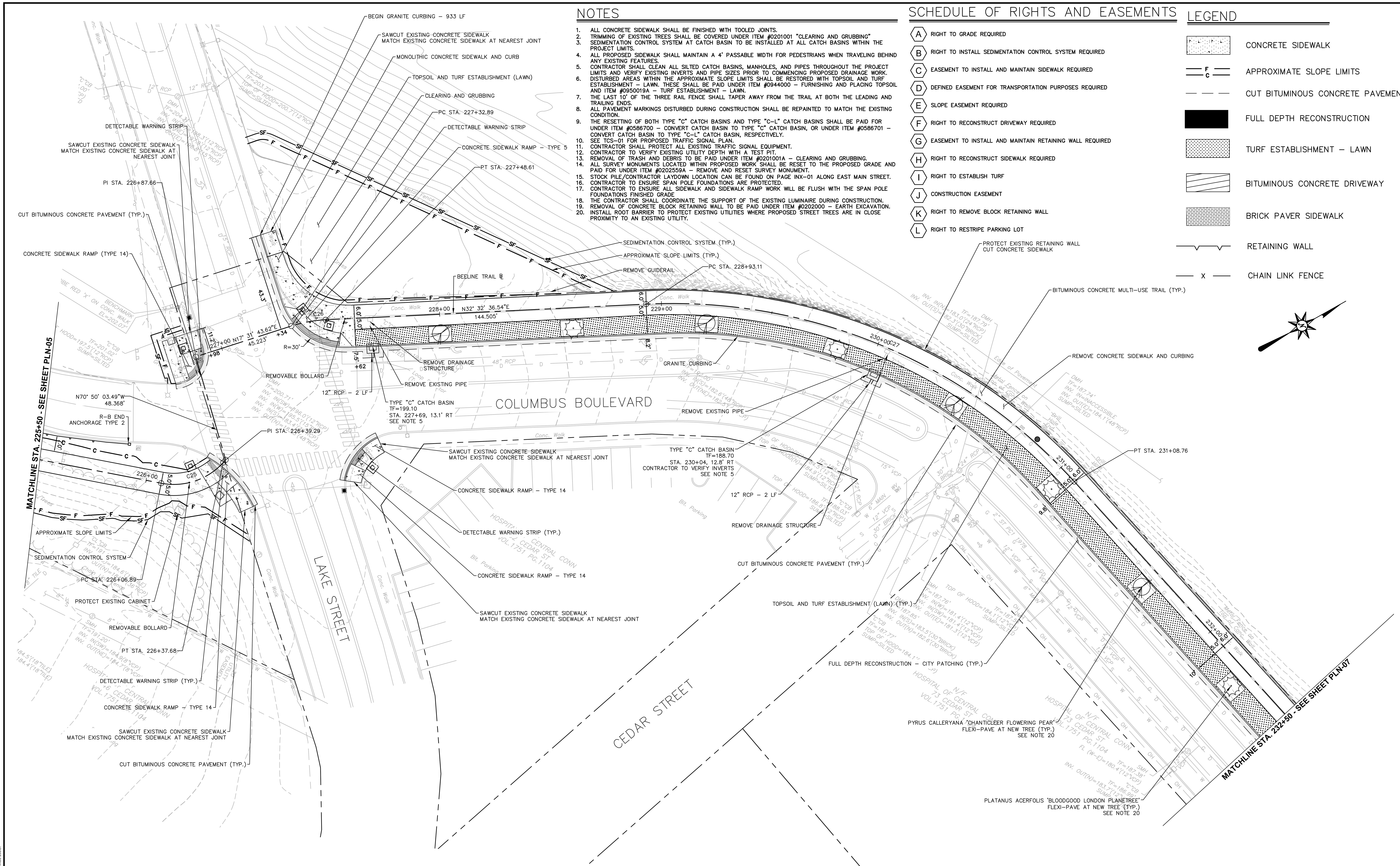
REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN-05

Xref (s): : BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo



NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
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6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
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12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
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SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
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- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
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- BRICK PAVER SIDEWALK
- RETAINING WALL
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BEELINE TRAIL CURVE DATA

CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C25	PC PI PT	804146.52 804158.20 804174.70	989566.34 989578.57 989574.91	59	30.0'	16.90'	30.79'
C26	PC PI PT	804235.28 804242.82 804249.48	989542.49 989544.88 989549.13	15	60.0'	7.91'	15.72'
C27	PC PI PT	804371.30 804468.61 804482.32	989626.86 989688.96 989803.58	51	244.0'	115.44'	215.64'

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN-06

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
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NOTES

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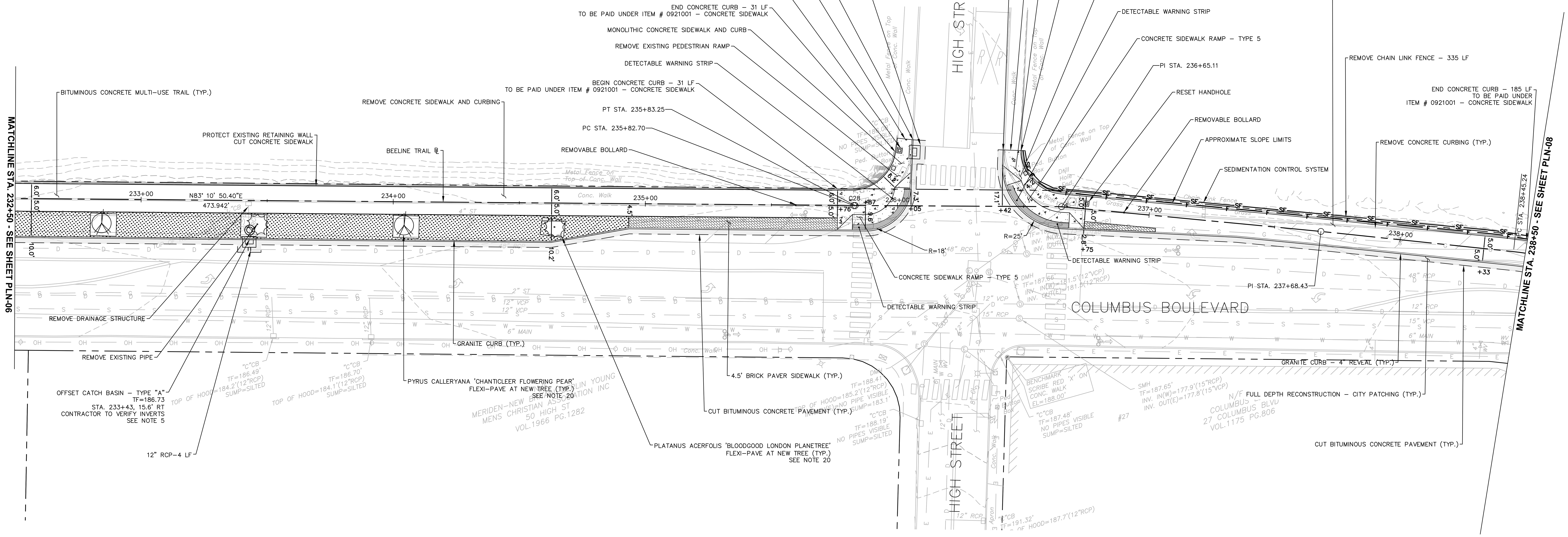
9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
13. REMOVAL OF TRASH AND DEBRIS TO BE PAID UNDER ITEM #0201001A – CLEARING AND GRUBBING.
14. ALL SURVEY MONUMENTS LOCATED WITHIN PROPOSED WORK SHALL BE RESET TO THE PROPOSED GRADE AND PAID FOR UNDER ITEM #0202559A – REMOVE AND RESET SURVEY MONUMENT.
15. STOCK PILE/CONTRACTOR LAYDOWN LOCATION CAN BE FOUND ON PAGE INX–01 ALONG EAST MAIN STREET.
16. CONTRACTOR TO ENSURE SPAN POLE FOUNDATIONS ARE PROTECTED.
17. CONTRACTOR TO ENSURE ALL SIDEWALK AND SIDEWALK RAMP WORK WILL BE FLUSH WITH THE SPAN POLE FOUNDATIONS FINISHED GRADE
18. THE CONTRACTOR SHALL COORDINATE THE SUPPORT OF THE EXISTING LUMINAIRE DURING CONSTRUCTION.
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.



BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C28	PC PI PT	804538.59 804538.62 804538.66	990274.17 990274.44 990274.71	0	200.0'	0.27'	0.55'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

BL Companies
Architecture
Engineering
Environmental
Land Surveying
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=20'
Project No.	2100699
Date	08/09/2024
CAD File:	PLN210069901

Title
SITE PLAN

Sheet No.
PLN-07

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- BRICK PAVER SIDEWALK
- RETAINING WALL
- CHAIN LINK FENCE

SCHEDULE OF RIGHTS AND EASEMENTS

- (A) RIGHT TO GRADE REQUIRED
- (B) RIGHT TO INSTALL SEDIMENTATION CONTROL SYSTEM REQUIRED
- (C) EASEMENT TO INSTALL AND MAINTAIN SIDEWALK REQUIRED
- (D) DEFINED EASEMENT FOR TRANSPORTATION PURPOSES REQUIRED
- (E) SLOPE EASEMENT REQUIRED
- (F) RIGHT TO RECONSTRUCT DRIVEWAY REQUIRED
- (G) EASEMENT TO INSTALL AND MAINTAIN RETAINING WALL REQUIRED
- (H) RIGHT TO RECONSTRUCT SIDEWALK REQUIRED
- (I) RIGHT TO ESTABLISH TURF
- (J) CONSTRUCTION EASEMENT
- (K) RIGHT TO REMOVE BLOCK RETAINING WALL
- (L) RIGHT TO RESTRIPE PARKING LOT

NOTES

1. ALL CONCRETE SIDEWALK SHALL BE FINISHED WITH TOOLED JOINTS.
2. TRIMMING OF EXISTING TREES SHALL BE COVERED UNDER ITEM #0201001 "CLEARING AND GRUBBING"
3. SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN TO BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT LIMITS.
4. ALL PROPOSED SIDEWALK SHALL MAINTAIN A 4' PASSABLE WIDTH FOR PEDESTRIANS WHEN TRAVELING BEHIND ANY EXISTING FEATURES.
5. CONTRACTOR SHALL CLEAN ALL SILTED CATCH BASINS, MANHOLES, AND PIPES THROUGHOUT THE PROJECT LIMITS AND VERIFY EXISTING INVERTS AND PIPE SIZES PRIOR TO COMMENCING PROPOSED DRAINAGE WORK.
6. DISTURBED AREAS WITHIN THE APPROXIMATE SLOPE LIMITS SHALL BE RESTORED WITH TOPSOIL AND TURF ESTABLISHMENT – LAWN. THESE SHALL BE PAID UNDER ITEM #0944000 – FURNISHING AND PLACING TOPSOIL AND ITEM #0950019A – TURF ESTABLISHMENT – LAWN.
7. THE LAST 10' OF THE THREE RAIL FENCE SHALL TAPER AWAY FROM THE TRAIL AT BOTH THE LEADING AND TRAILING ENDS.
8. ALL PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE REPAINTED TO MATCH THE EXISTING CONDITION.
9. THE RESETTING OF BOTH TYPE "C" CATCH BASINS AND TYPE "C–L" CATCH BASINS SHALL BE PAID FOR UNDER ITEM #0586700 – CONVERT CATCH BASIN TO TYPE "C" CATCH BASIN, OR UNDER ITEM #0586701 – CONVERT CATCH BASIN TO TYPE "C–L" CATCH BASIN, RESPECTIVELY.
10. SEE TCS–01 FOR PROPOSED TRAFFIC SIGNAL PLAN.
11. CONTRACTOR SHALL PROTECT ALL EXISTING TRAFFIC SIGNAL EQUIPMENT.
12. CONTRACTOR TO VERIFY EXISTING UTILITY DEPTH WITH A TEST PIT.
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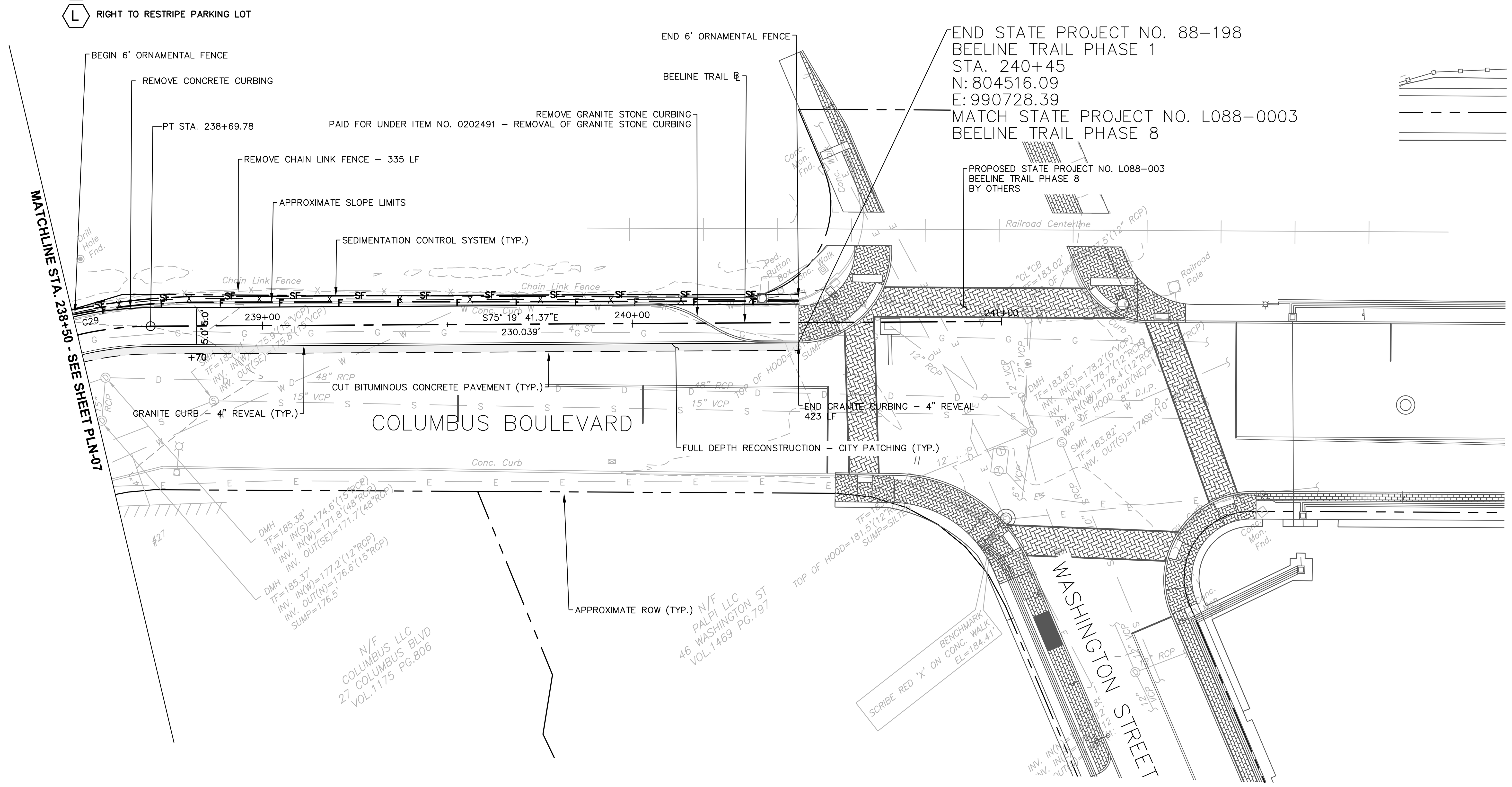
19. REMOVAL OF CONCRETE BLOCK RETAINING WALL TO BE PAID UNDER ITEM #0202000 – EARTH EXCAVATION.
20. INSTALL ROOT BARRIER TO PROTECT EXISTING UTILITIES WHERE PROPOSED STREET TREES ARE IN CLOSE PROXIMITY TO AN EXISTING UTILITY.



BEELINE TRAIL CURVE DATA							
CURVE NO.		NORTHING	EASTING	Δ	RADIUS	TANGENT	LENGTH
C29	PC PI PT	804553.65 804553.93 804550.80	990536.03 990548.37 990560.32	16	88.0'	12.35'	24.53'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
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Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
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BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

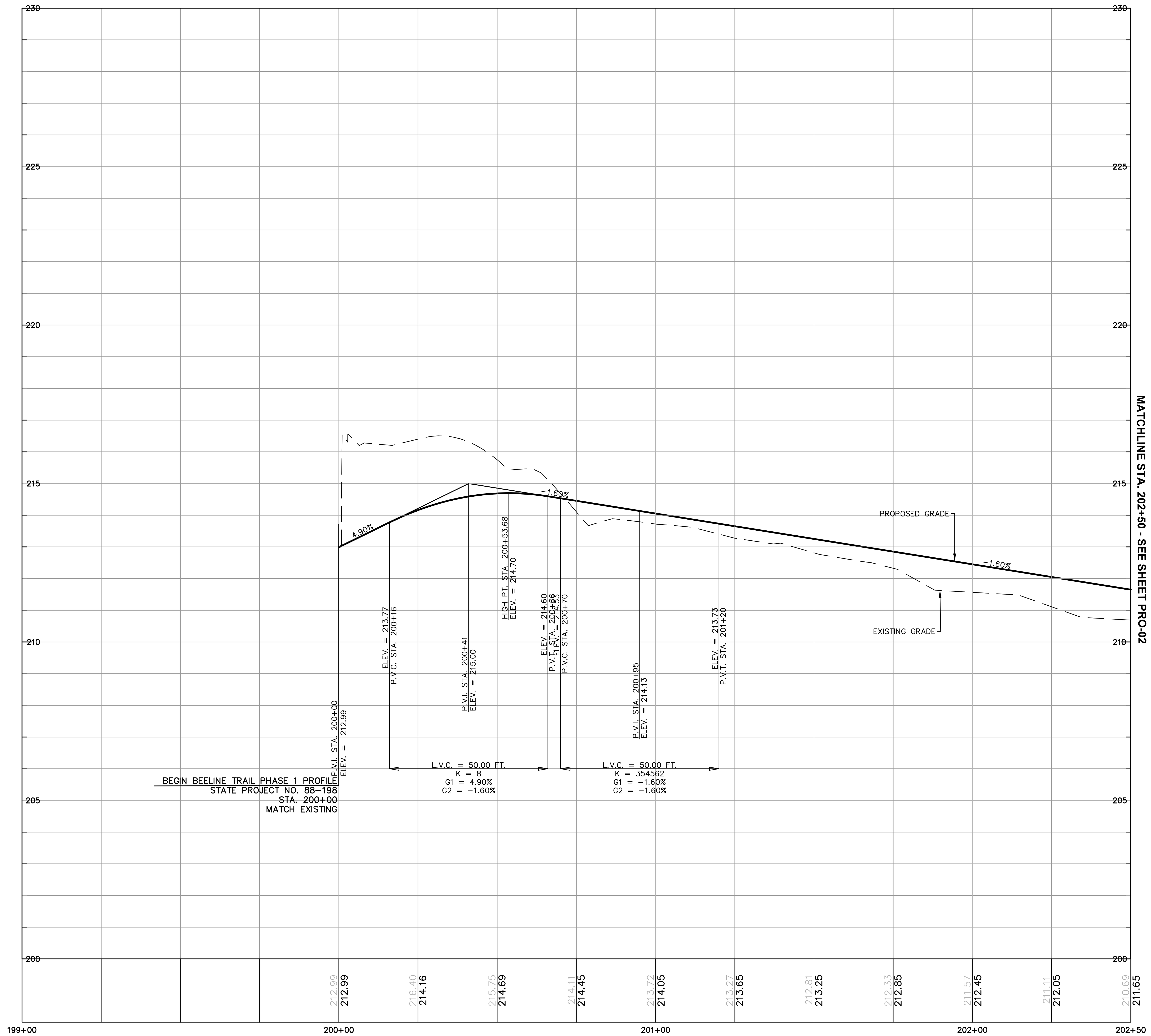
REVISIONS
No. Date Desc.

Designed S.E.P.
Drawn S.E.P.
Reviewed K.P.R.
Scale 1"=20'
Project No. 2100699
Date 08/09/2024
CAD File: PLN210069901

Title
SITE PLAN

Sheet No.
PLN–08

Xref (s) : B0210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XD-4027-RWY-01 ; City of New Britain Site Topo



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

Architecture
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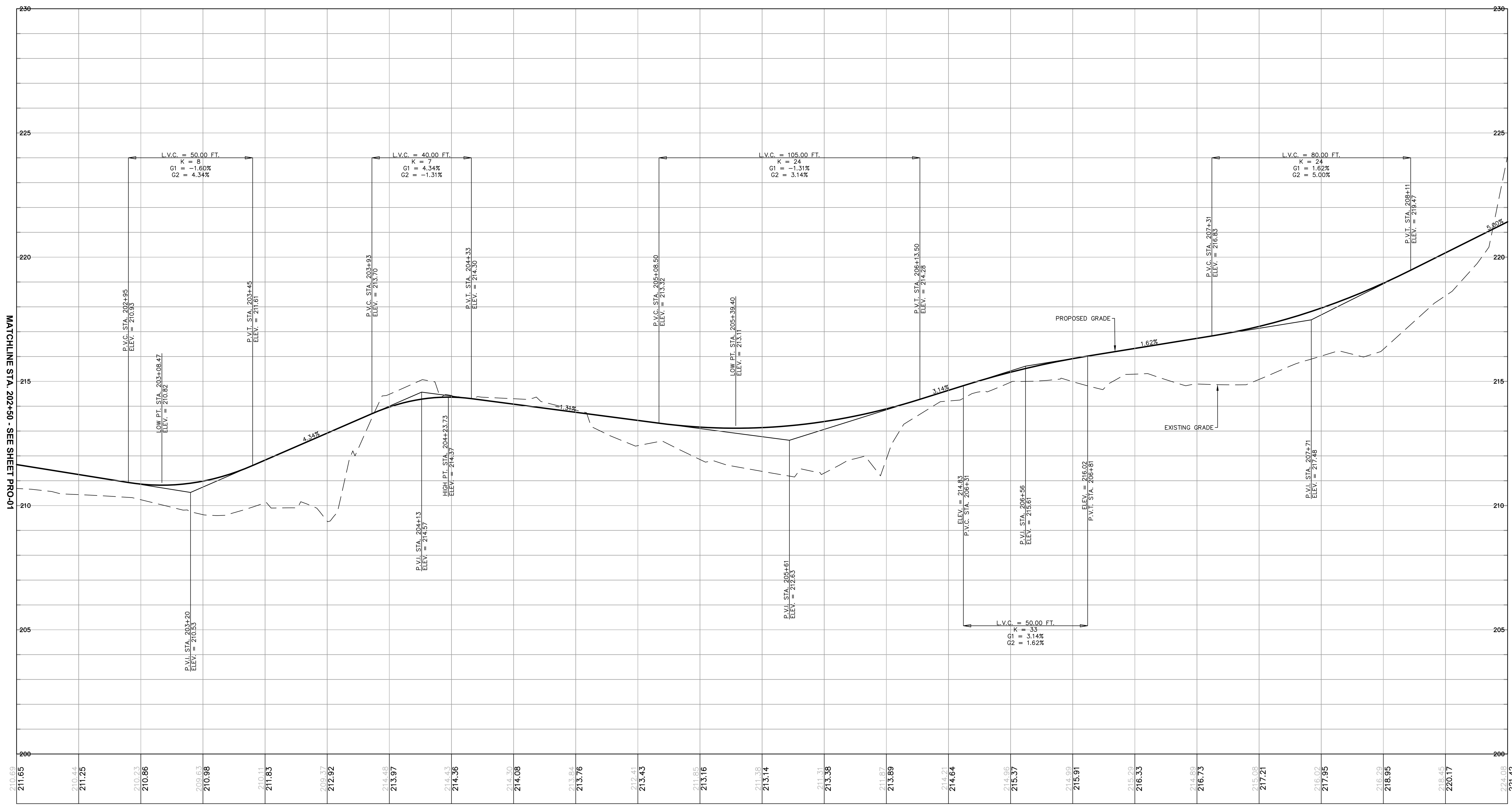
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File: TPRO2100699	

Title
PROFILE

Sheet No.
PRO-01



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

BL Companies
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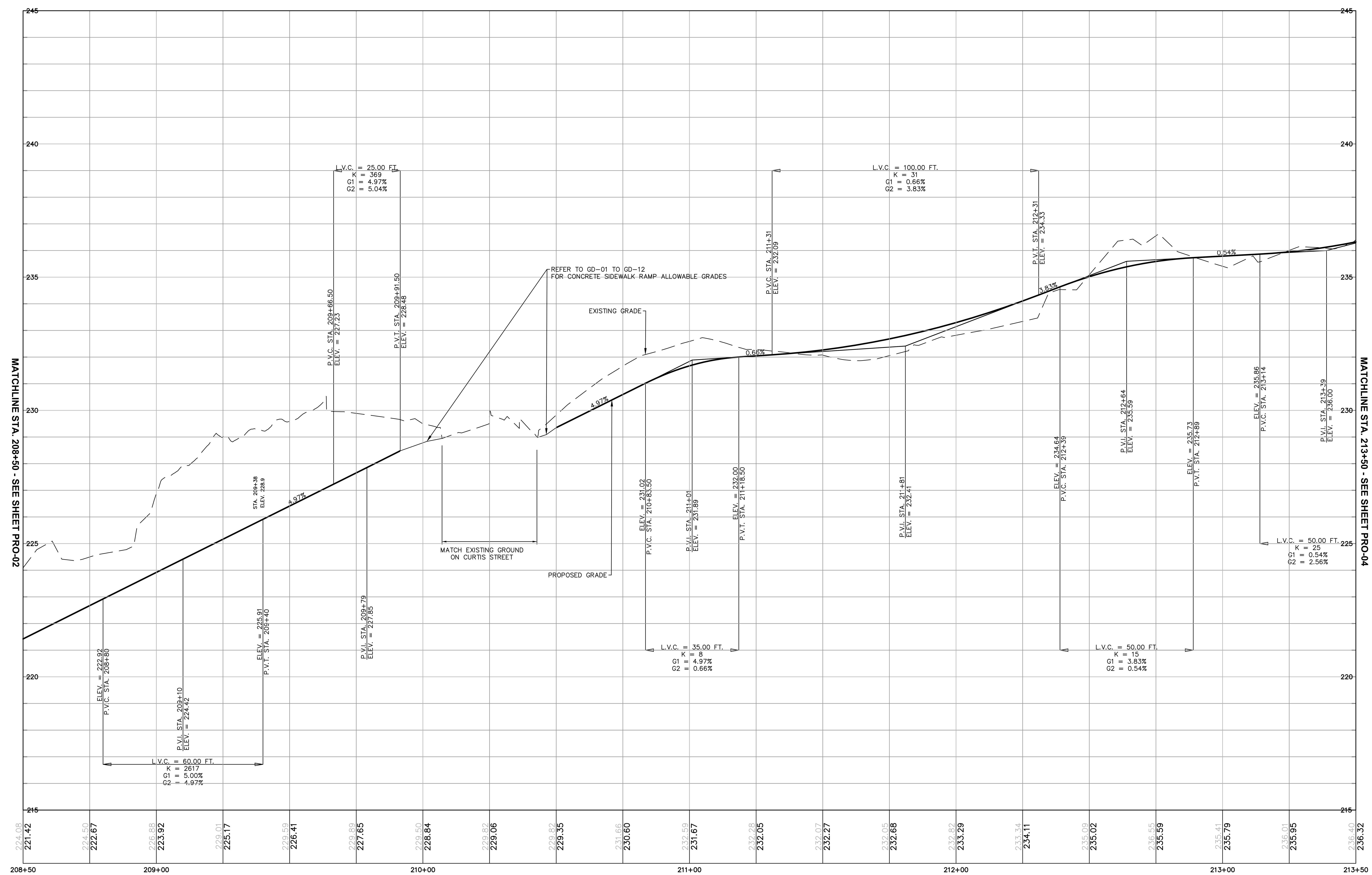
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File: TPRO2100699	

Title
PROFILE

Sheet No.
PRO-02



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

Architecture
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BEELINE TRAIL PHASE 1
State Project No. 88-198
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Scale	AS NOTED
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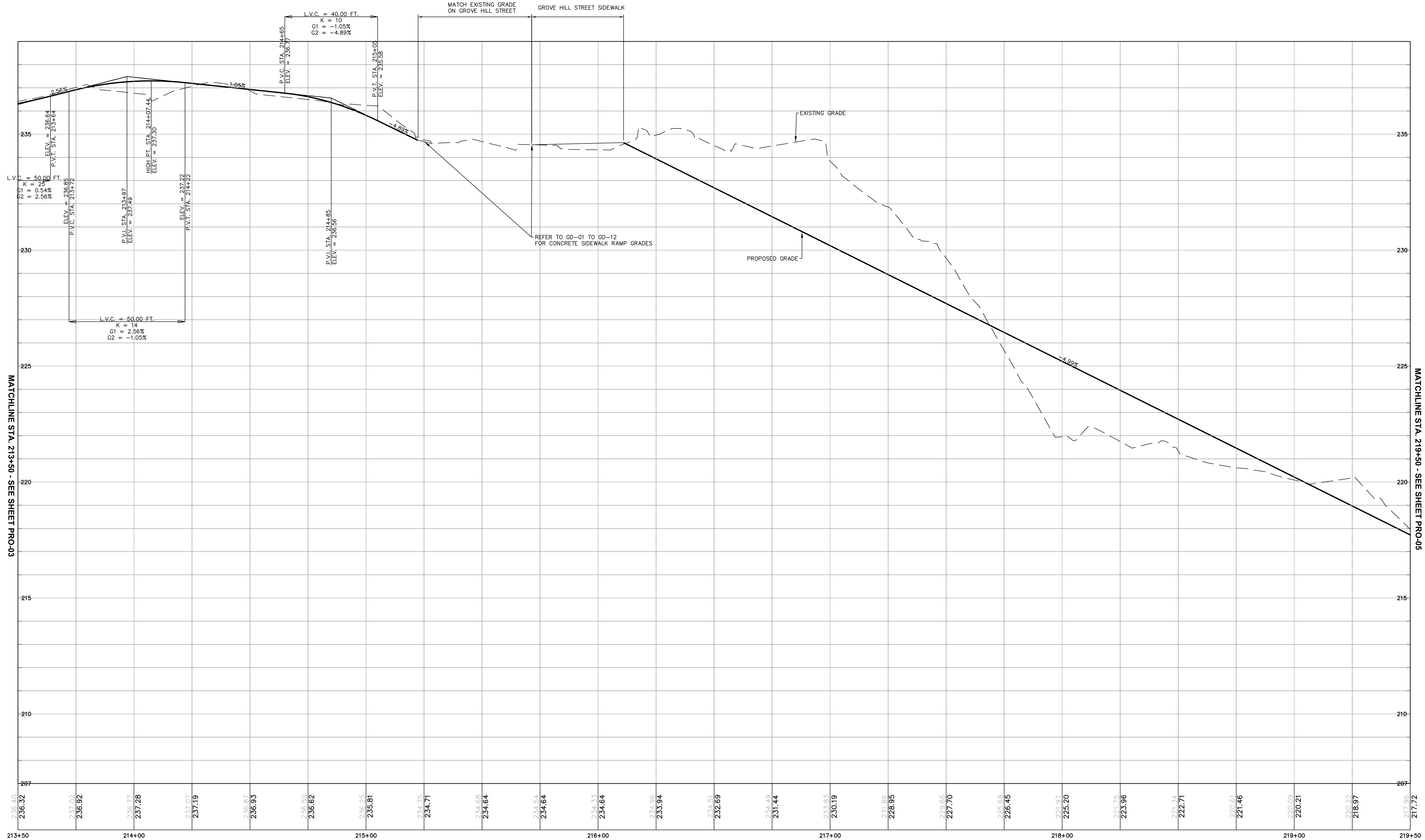
Date	08/09/2024
CAD File: TPRO2100699	

Title
PROFILE

Sheet No.
PRO-03



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

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BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
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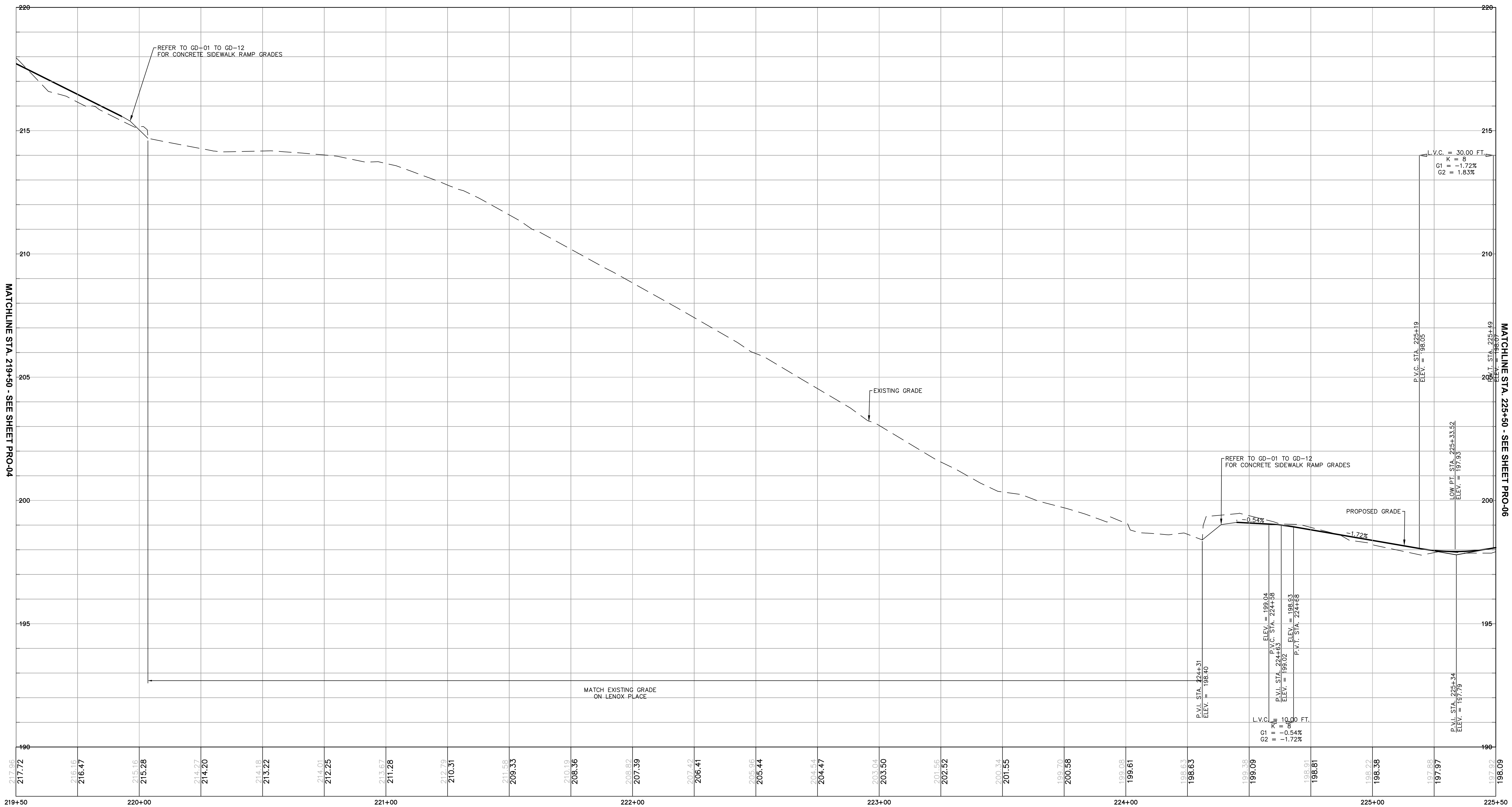
Date	08/09/2024
CAD File:	TPRO2100699

Title
PROFILE

Sheet No.
PRO-04



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

Architecture
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BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

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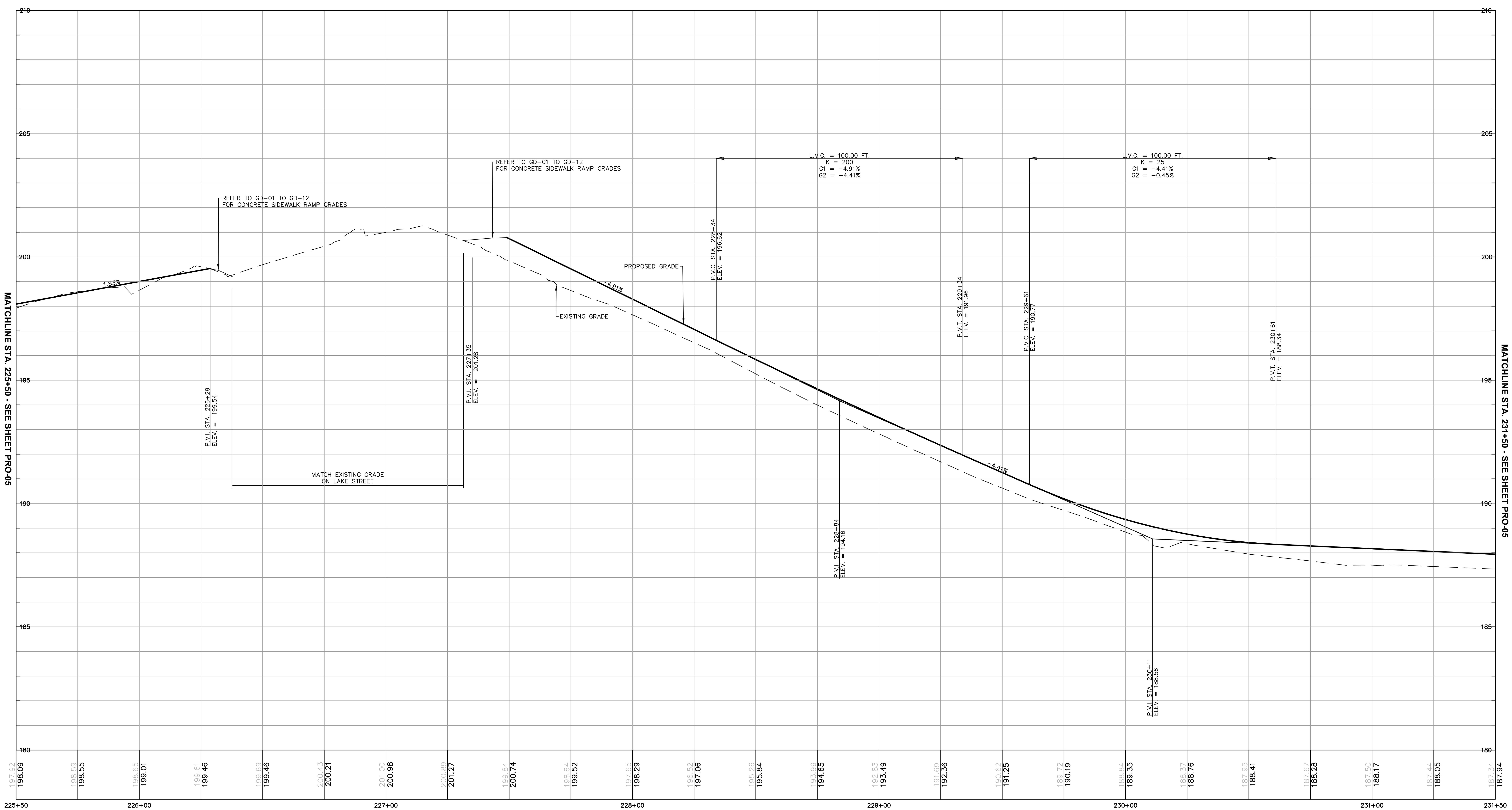
No. Date Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TPRO2100699

Title
PROFILE

Sheet No.
PRO-05



BEELINE TRAIL PROFILE

HORIZONTAL GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

VERTICAL GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

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BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

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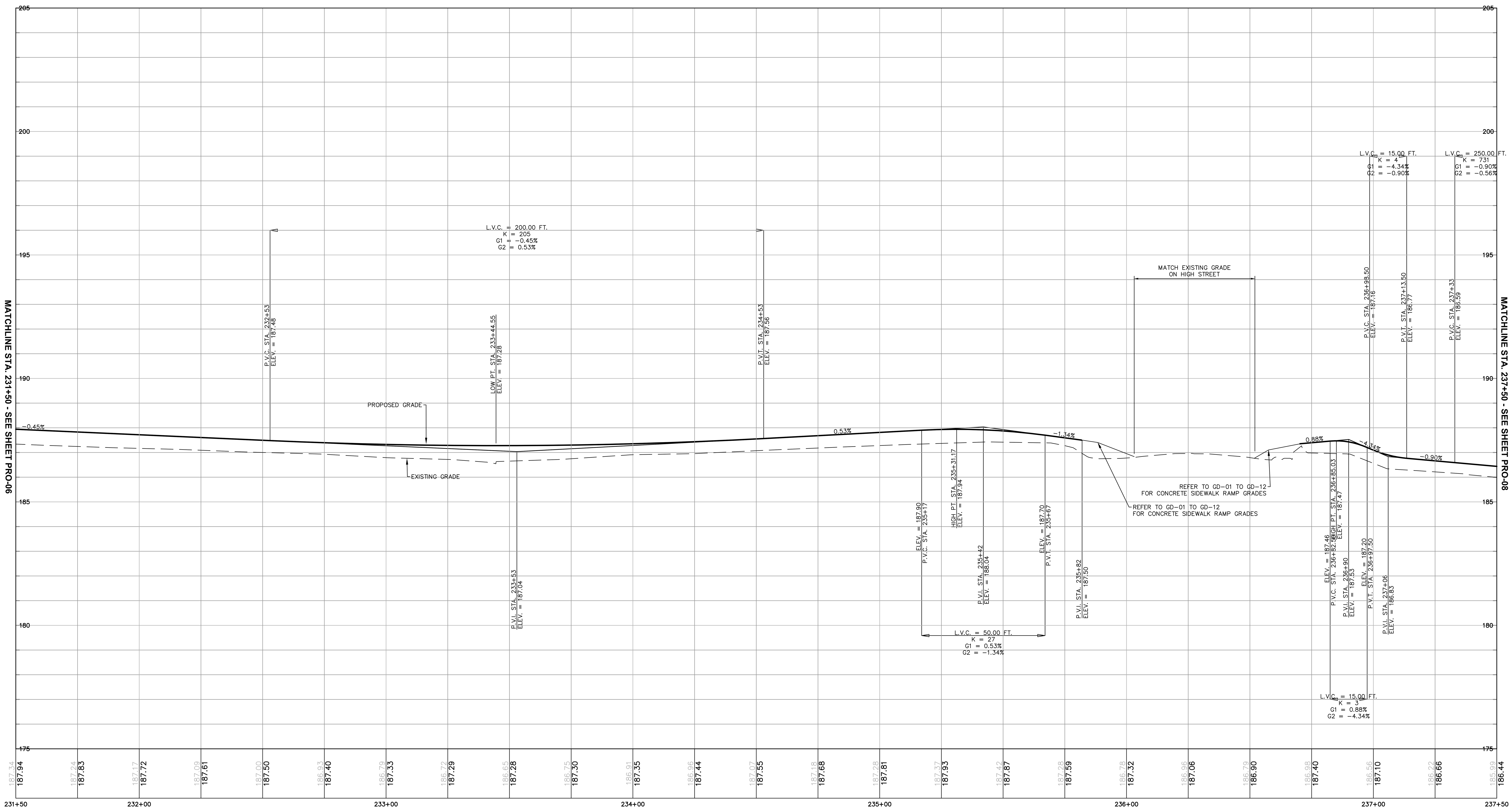
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TPRO2100699

Title
PROFILE

Sheet No.
PRO-06



BEELINE TRAIL PROFILE

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

Architecture
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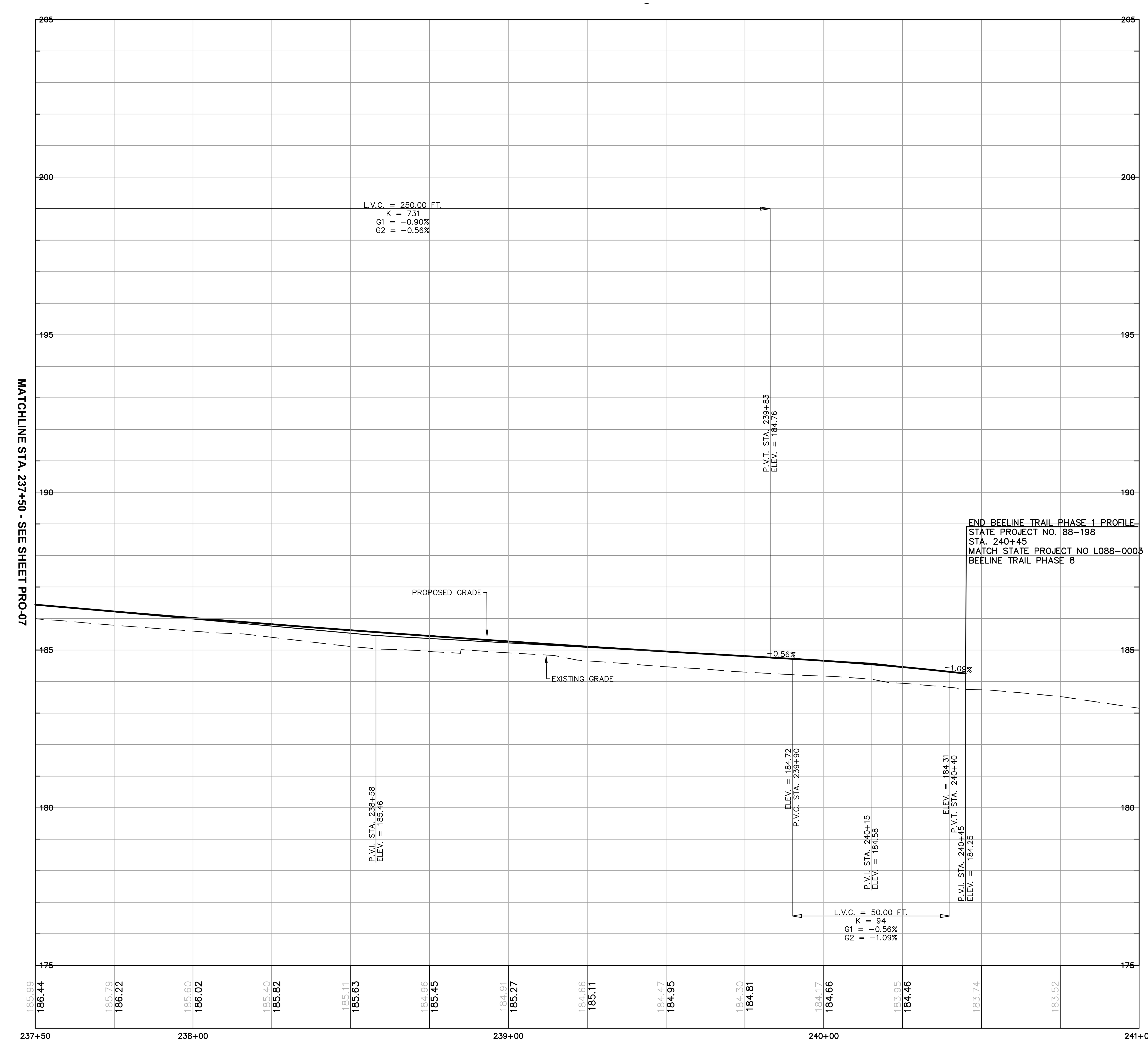
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TPRO2100699

Title
PROFILE

Sheet No.
PRO-07



BEELINE TRAIL PROFILE

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

GRAPHIC SCALE
2 1 0 2
SCALE IN FEET

Architecture
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Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
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BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

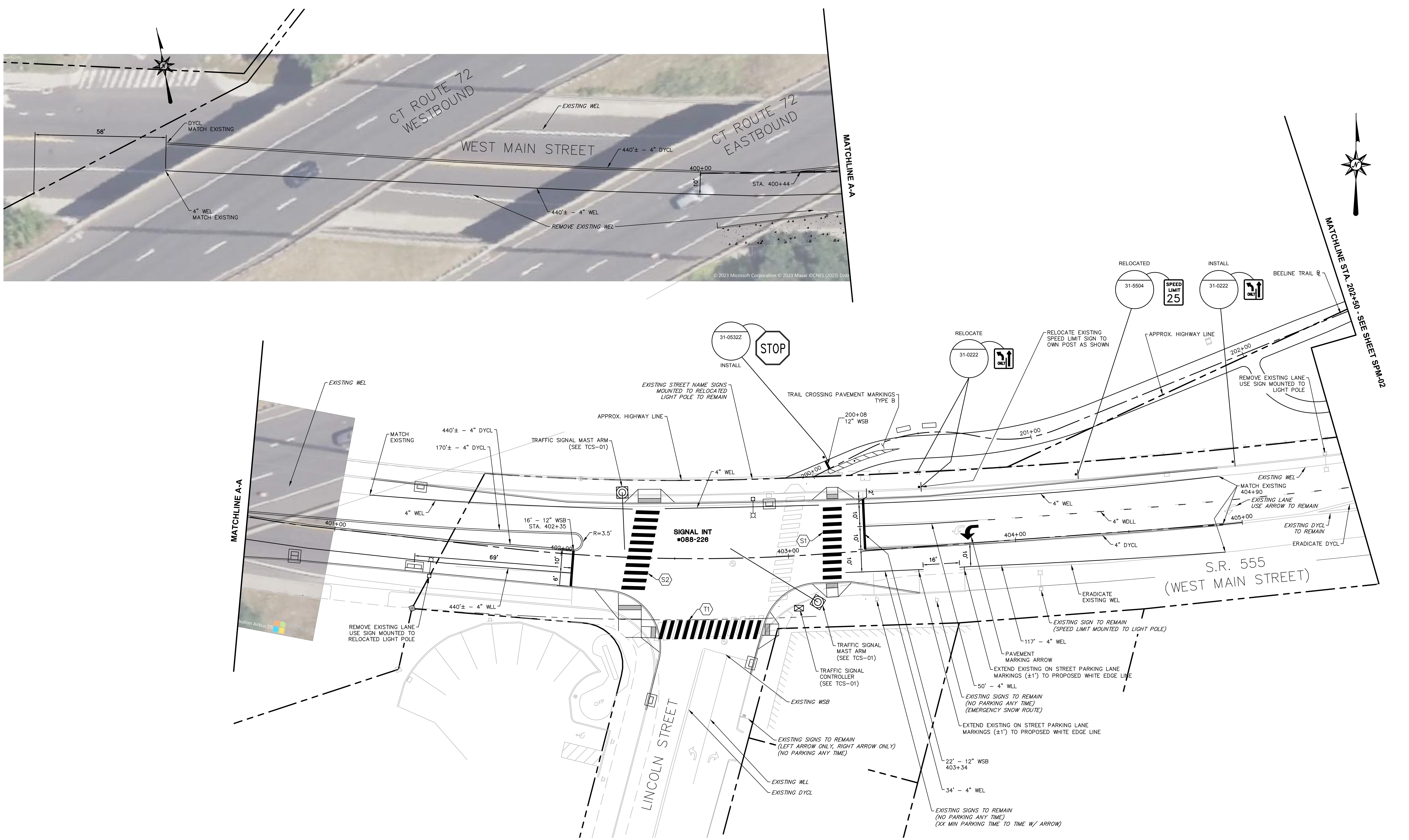
REVISIONS

No.	Date	Desc.

Designed	DKN
Drawn	DKN
Reviewed	
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TPRO2100699

Title
PROFILE

Sheet No.
PRO-08



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR-1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR-1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR-1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF-GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS-01 AND TCS-02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID-BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS-03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR-1208_01 AND TR-1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

SINGLE POST MOUNTING
DOUBLE POST MOUNTING
SPAN WIRE MOUNTING
— REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

000 / 00-0000: LOCATION NO. / SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

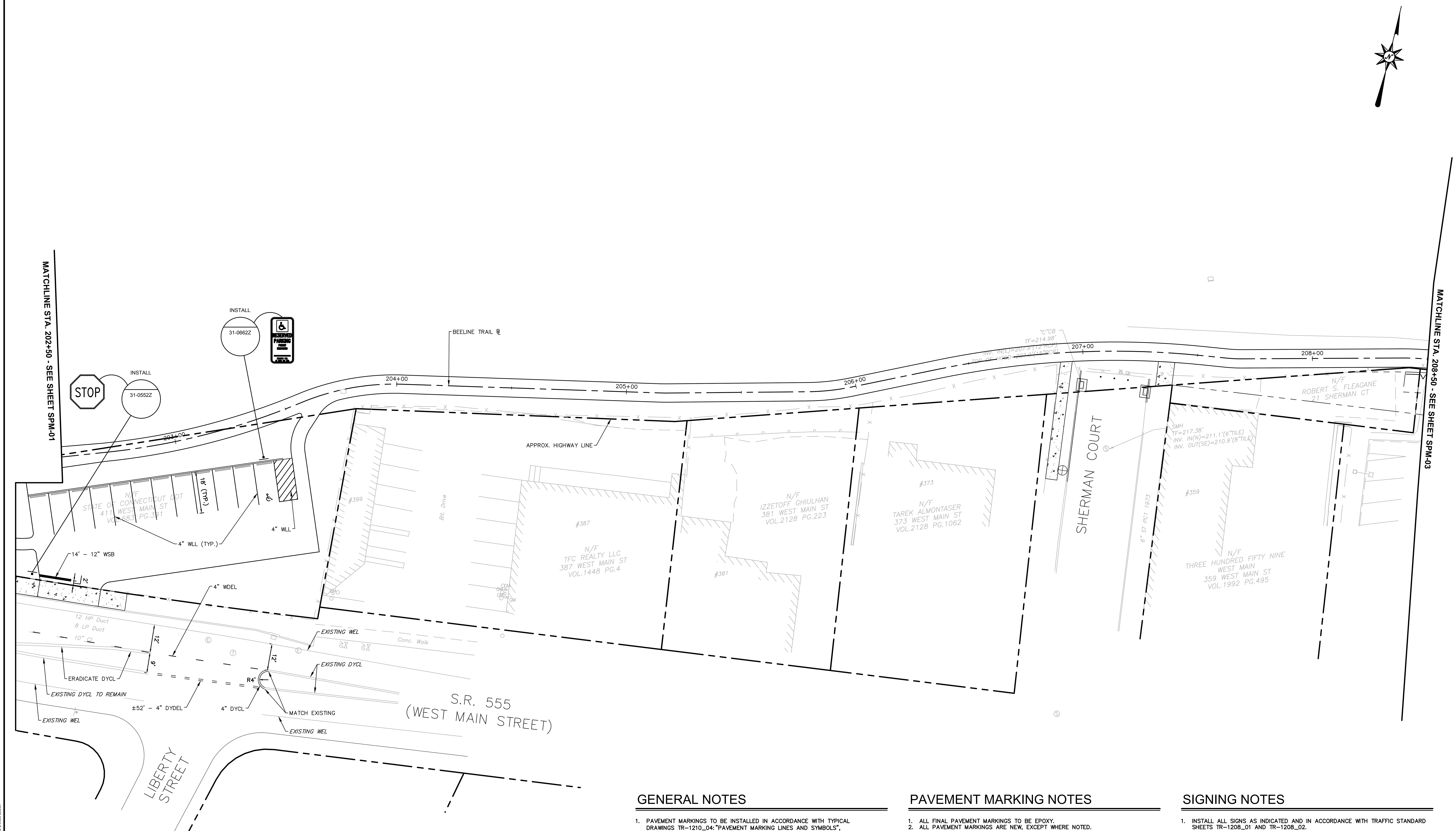
REVISIONS
No. Date Desc.

Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-01

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XT210069901 ; XD-4027-RWY-01



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR-1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR-1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR-1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF-GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS-01 AND TCS-02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID-BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS-03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR-1208_01 AND TR-1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

- SINGLE POST MOUNTING
- DOUBLE POST MOUNTING
- SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
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100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

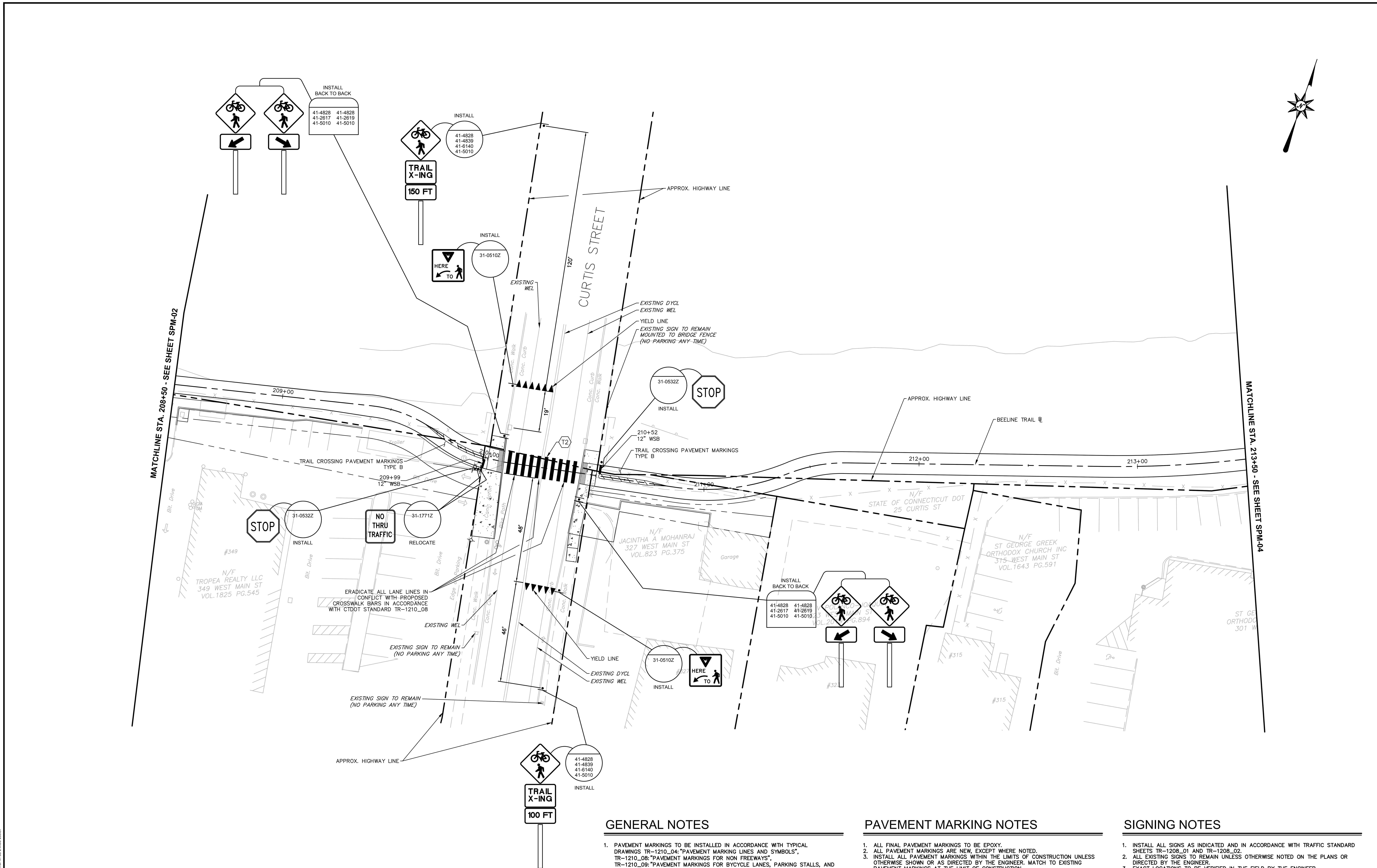
REVISIONS
No. Date Desc.

Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-02

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XT210069901 ; XD-4027-RWY-01



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR–1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR–1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR–1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF–GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS–01 AND TCS–02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID–BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS–03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

(S1) BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

(S2) BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

(T1) BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

(T2) BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR–1208_01 AND TR–1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

- SINGLE POST MOUNTING
- DOUBLE POST MOUNTING
- SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-03

GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR–1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR–1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR–1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF–GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS–01 AND TCS–02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID–BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS–03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

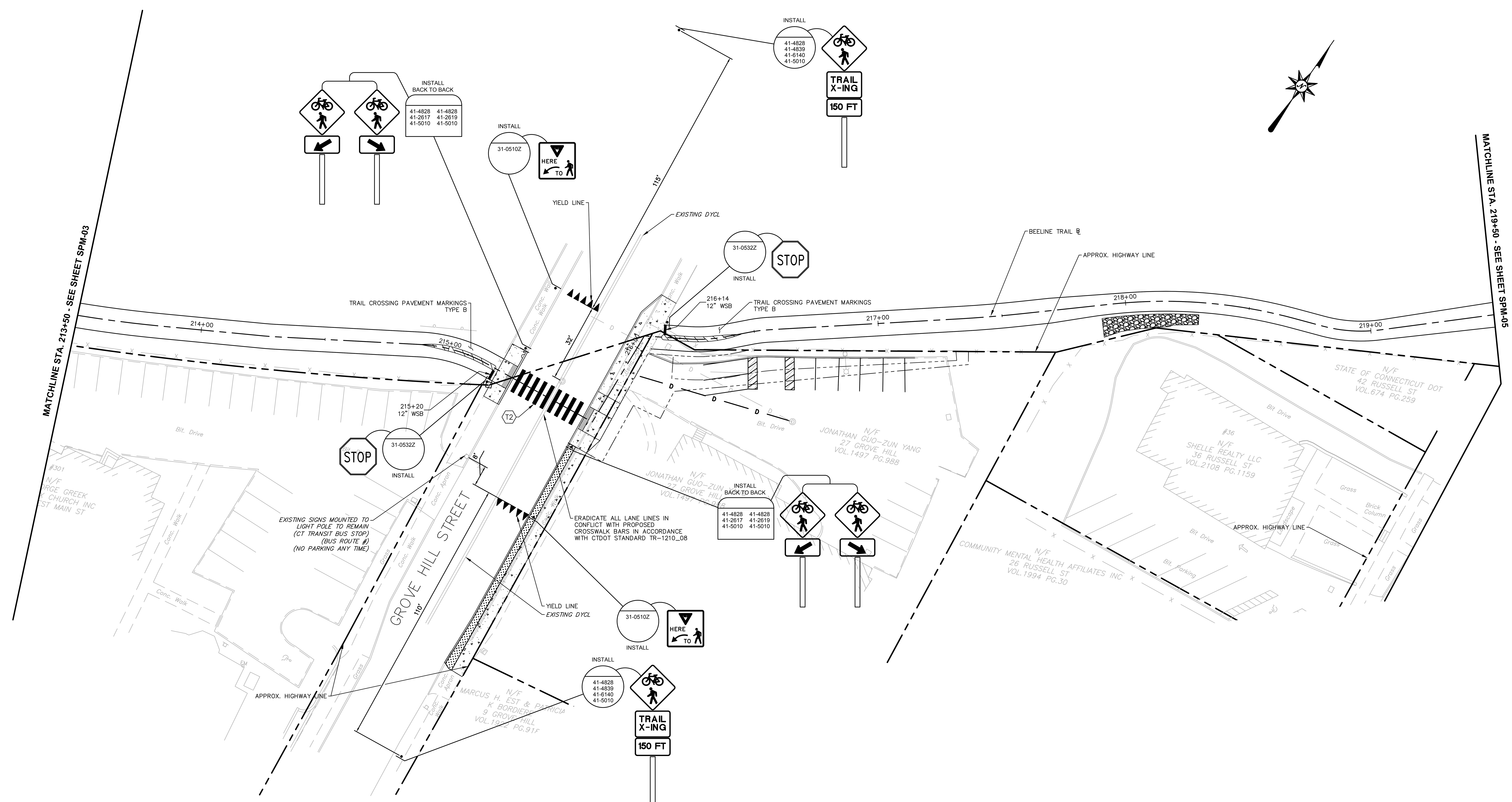
S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR–1208_01 AND TR–1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.



PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

SINGLE POST MOUNTING
DOUBLE POST MOUNTING
SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

SINGLE POST MOUNTING
DOUBLE POST MOUNTING
SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-04

PAVEMENT MARKING LEGEND

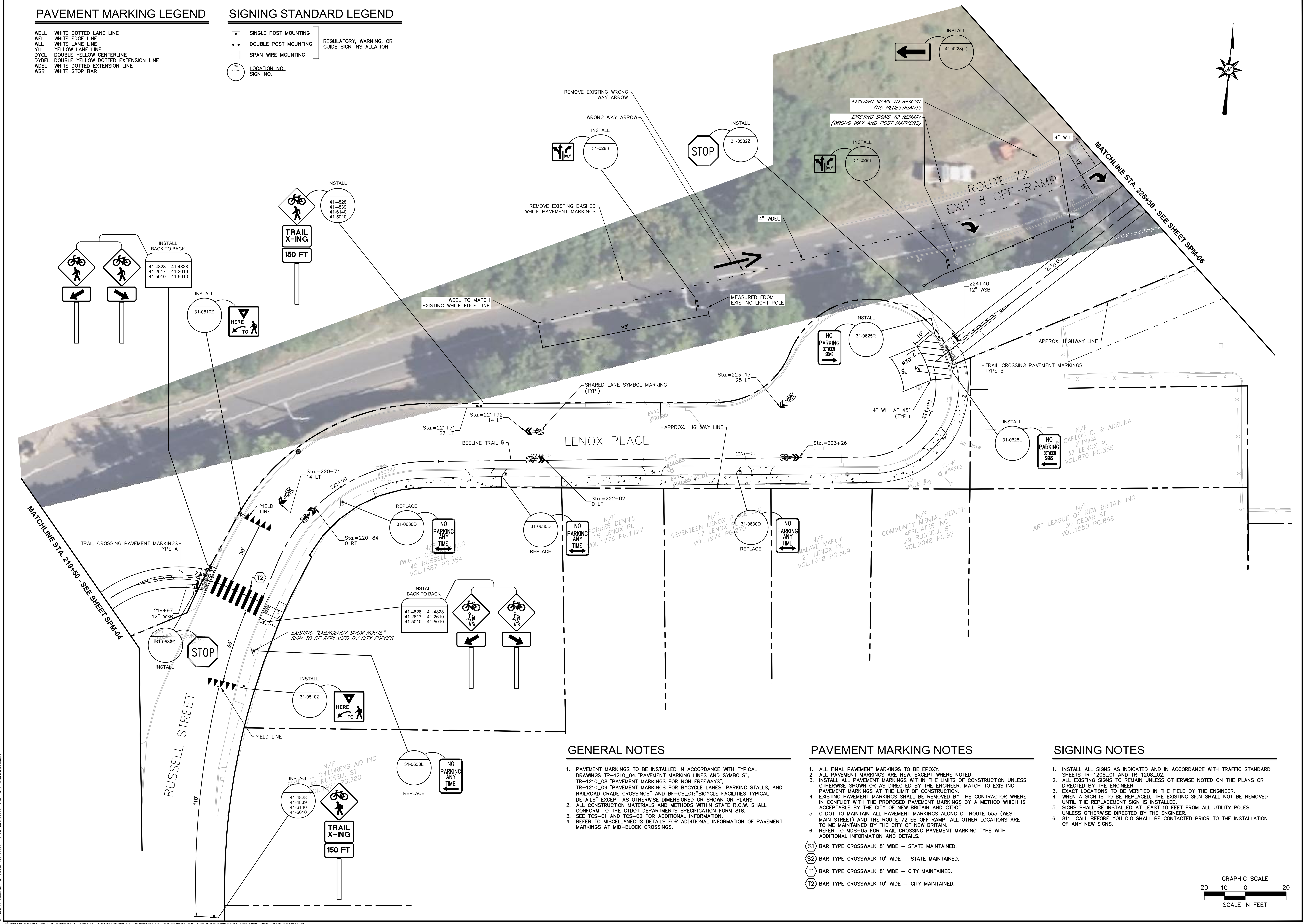
WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

- SINGLE POST MOUNTING
- DOUBLE POST MOUNTING
- SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO. / SIGN NO.



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR–1210_04: "PAVEMENT MARKING LINES AND SYMBOLS", TR–1210_08: "PAVEMENT MARKINGS FOR NON FREEWAYS", TR–1210_09: "PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF–GS_01: "BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS–01 AND TCS–02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID–BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS–03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR–1208_01 AND TR–1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
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5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

GRAPHIC SCALE

20 10 0 20

SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

State Project No. 88-198

NEW BRITAIN, CONNECTICUT

REVISIONS

No.	Date	Desc.

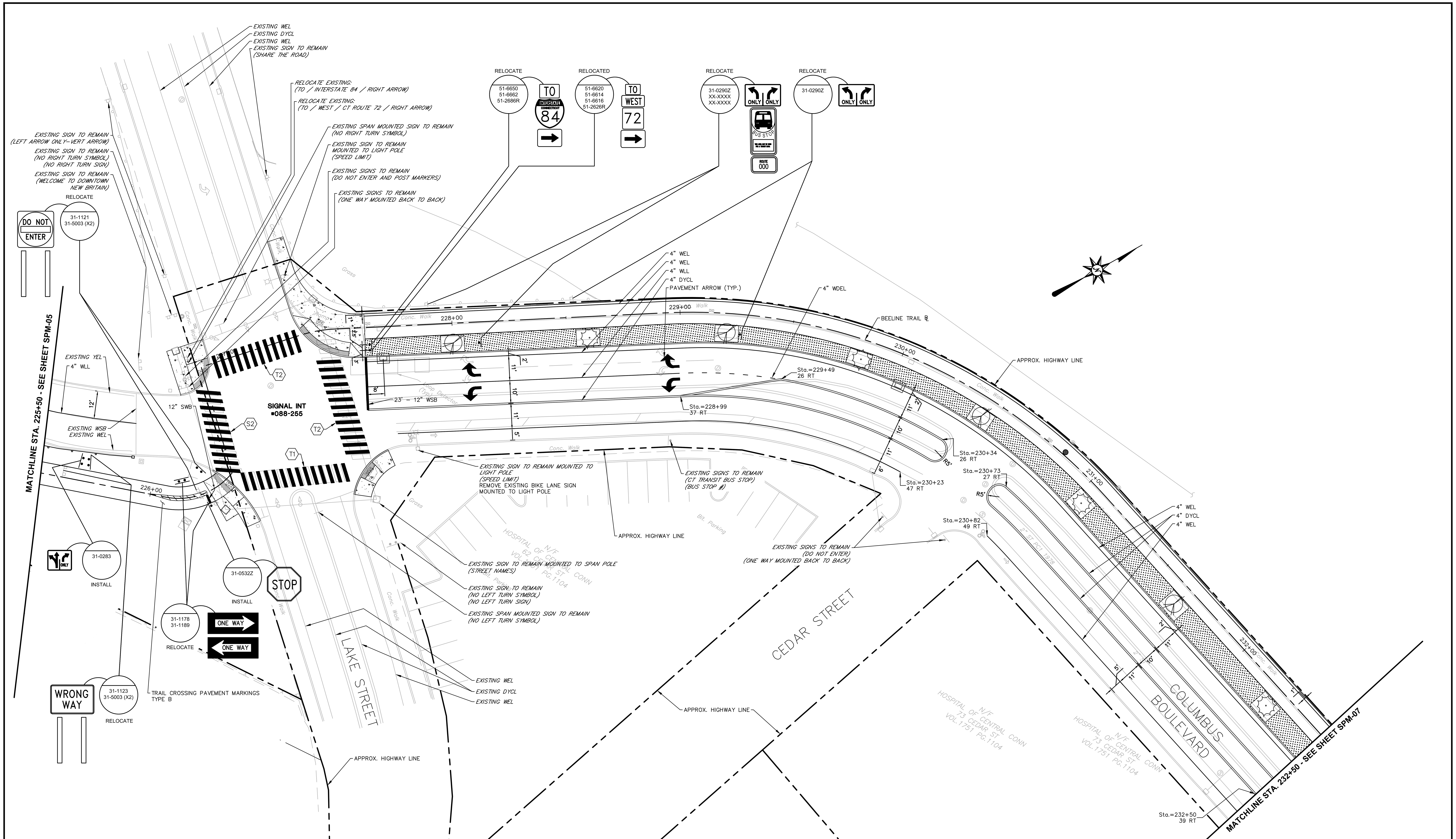
Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

Title

SIGN AND PAVEMENT MARKING PLANS

Sheet No.

SPM-05



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR–1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR–1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR–1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF–GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS–01 AND TCS–02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID–BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
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6. REFER TO MDS–03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

(S1) BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

(S2) BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

(T1) BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

(T2) BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR–1208_01 AND TR–1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
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4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
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PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

- SINGLE POST MOUNTING
- DOUBLE POST MOUNTING
- SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

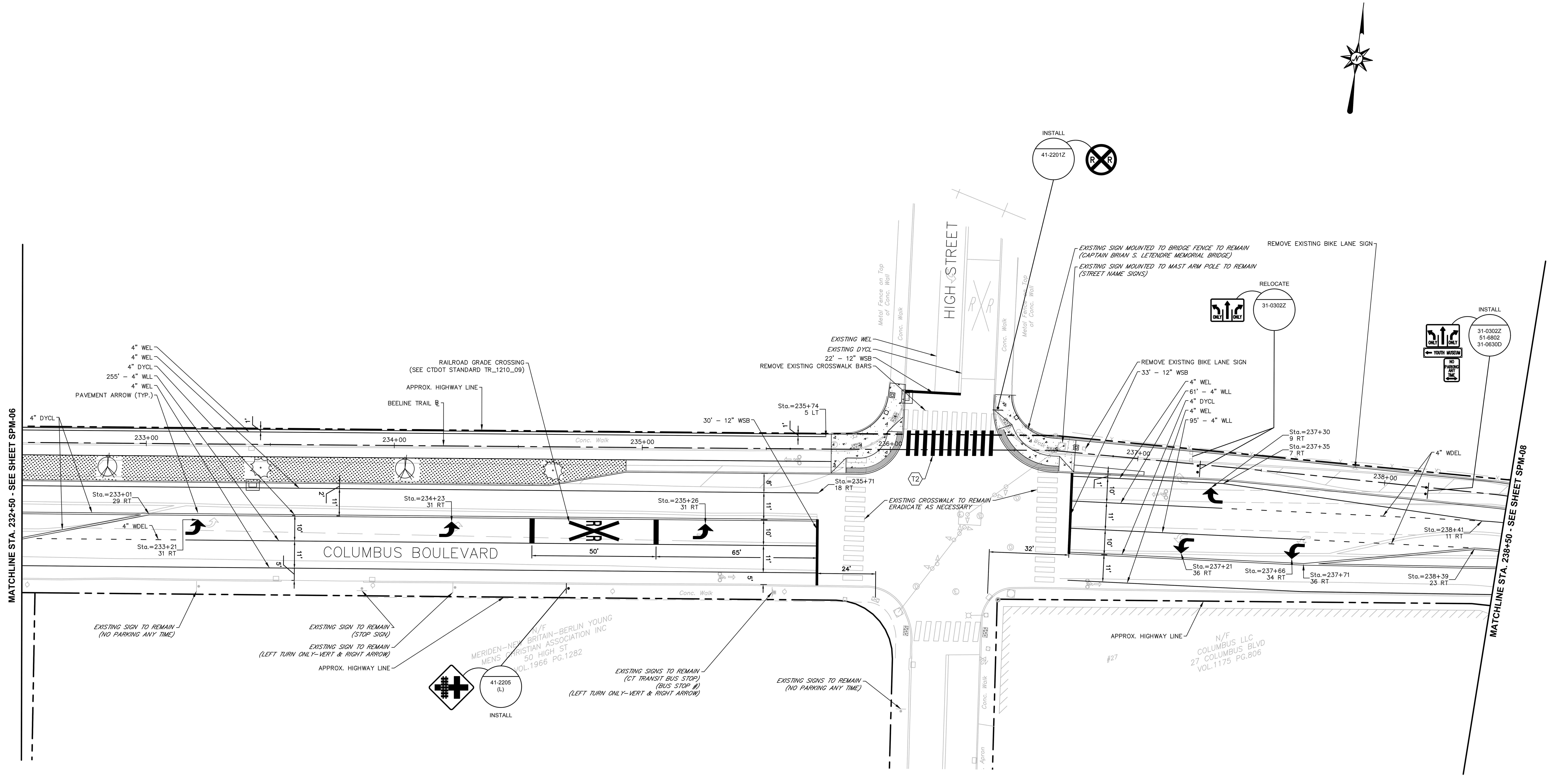
Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024

CAD File: TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-06

Xref (s) : BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XT210069901 ; XD-4027-RWY-01



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR–1210_04:"PAVEMENT MARKING LINES AND SYMBOLS", TR–1210_08:"PAVEMENT MARKINGS FOR NON FREEWAYS", TR–1210_09:"PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF–GS_01:"BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS–01 AND TCS–02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID–BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS–03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.

S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.

T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.

T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR–1208_01 AND TR–1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
5. SIGNS SHALL BE INSTALLED AT LEAST 10 FEET FROM ALL UTILITY POLES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

- SINGLE POST MOUNTING
- DOUBLE POST MOUNTING
- SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

LOCATION NO.
SIGN NO.

Architecture Engineering Environmental Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

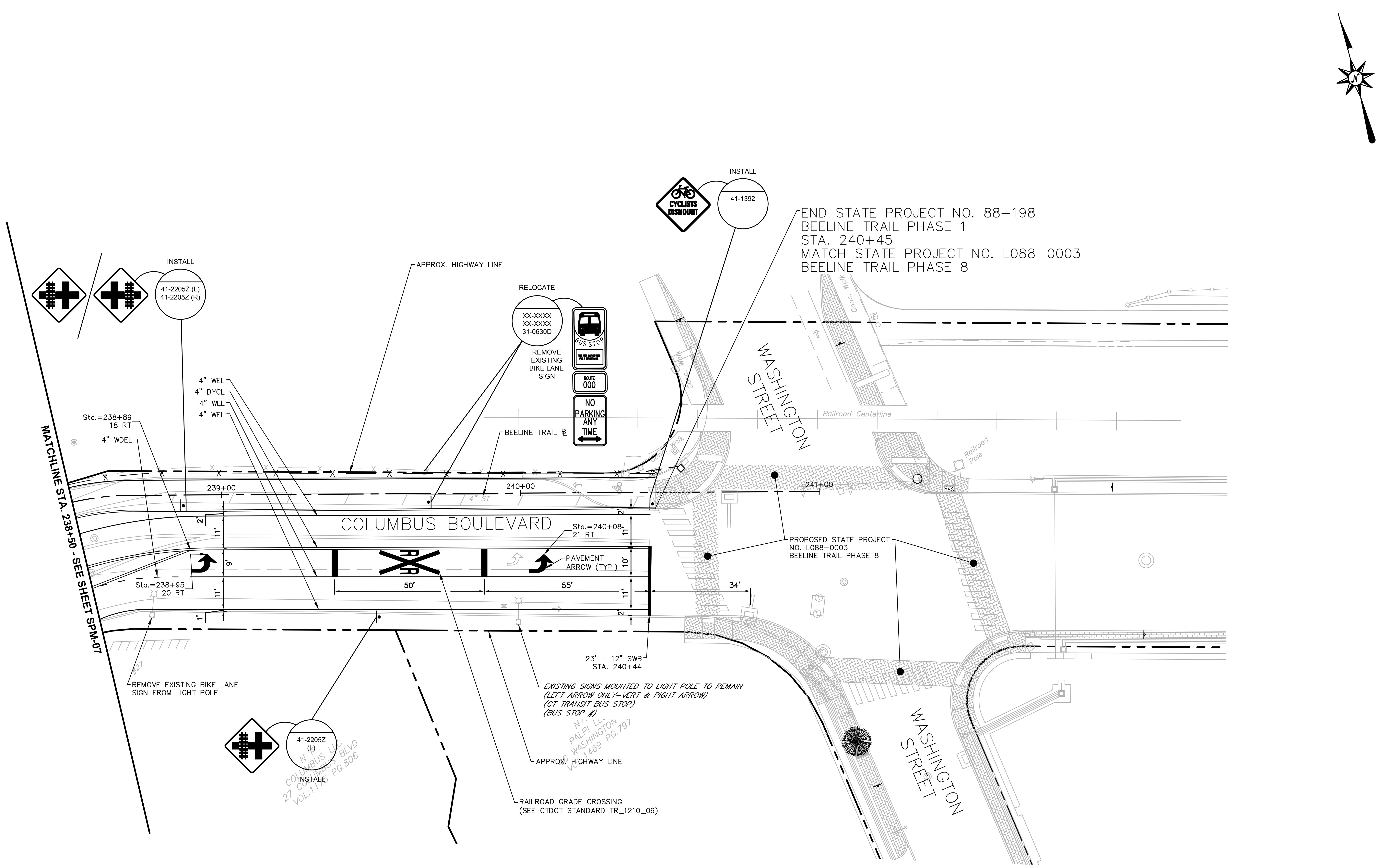
Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024

CAD File: TSPM210069901

Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-07

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XT210069901 ; XD-4027-RWY-01



GENERAL NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED IN ACCORDANCE WITH TYPICAL DRAWINGS TR-1210_04: "PAVEMENT MARKING LINES AND SYMBOLS", TR-1210_08: "PAVEMENT MARKINGS FOR NON FREEWAYS", TR-1210_09: "PAVEMENT MARKINGS FOR BYCYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS" AND BF-GS_01: "BICYCLE FACILITIES TYPICAL DETAILS" EXCEPT AS OTHERWISE DIMENSIONED OR SHOWN ON PLANS.
2. ALL CONSTRUCTION MATERIALS AND METHODS WITHIN STATE R.O.W. SHALL CONFORM TO THE CTDOT DEPARTMENTS SPECIFICATION FORM 818.
3. SEE TCS-01 AND TCS-02 FOR ADDITIONAL INFORMATION.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION OF PAVEMENT MARKINGS AT MID-BLOCK CROSSINGS.

PAVEMENT MARKING NOTES

1. ALL FINAL PAVEMENT MARKINGS TO BE EPOXY.
2. ALL PAVEMENT MARKINGS ARE NEW, EXCEPT WHERE NOTED.
3. INSTALL ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SHOWN OR AS DIRECTED BY THE ENGINEER. MATCH TO EXISTING PAVEMENT MARKINGS AT THE LIMIT OF CONSTRUCTION.
4. EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR WHERE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS BY A METHOD WHICH IS ACCEPTABLE BY THE CITY OF NEW BRITAIN AND CTDOT.
5. CTDOT TO MAINTAIN ALL PAVEMENT MARKINGS ALONG CT ROUTE 555 (WEST MAIN STREET) AND THE ROUTE 72 EB OFF RAMP. ALL OTHER LOCATIONS ARE TO ME MAINTAINED BY THE CITY OF NEW BRITAIN.
6. REFER TO MDS-03 FOR TRAIL CROSSING PAVEMENT MARKING TYPE WITH ADDITIONAL INFORMATION AND DETAILS.

S1 BAR TYPE CROSSWALK 8' WIDE – STATE MAINTAINED.
S2 BAR TYPE CROSSWALK 10' WIDE – STATE MAINTAINED.
T1 BAR TYPE CROSSWALK 8' WIDE – CITY MAINTAINED.
T2 BAR TYPE CROSSWALK 10' WIDE – CITY MAINTAINED.

SIGNING NOTES

1. INSTALL ALL SIGNS AS INDICATED AND IN ACCORDANCE WITH TRAFFIC STANDARD SHEETS TR-1208_01 AND TR-1208_02.
2. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. EXACT LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
4. WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
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6. 811: CALL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY NEW SIGNS.

PAVEMENT MARKING LEGEND

WDLL	WHITE DOTTED LANE LINE
WEL	WHITE EDGE LINE
WLL	WHITE LANE LINE
YLL	YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTERLINE
DYDEL	DOUBLE YELLOW DOTTED EXTENSION LINE
WDEL	WHITE DOTTED EXTENSION LINE
WSB	WHITE STOP BAR

SIGNING STANDARD LEGEND

SINGLE POST MOUNTING
DOUBLE POST MOUNTING
SPAN WIRE MOUNTING

REGULATORY, WARNING, OR GUIDE SIGN INSTALLATION

000 / 00-0000 — LOCATION NO. / SIGN NO.

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

Xref (s): ; BD210069901 ; XZ210069901 ; XR210069902 ; TR_CB_0001_0001_TCS_088_226 ; XT210069901 ; XD-4027-RWY-01

Architecture
Engineering
Environmental
Land Surveying
BL Companies
100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

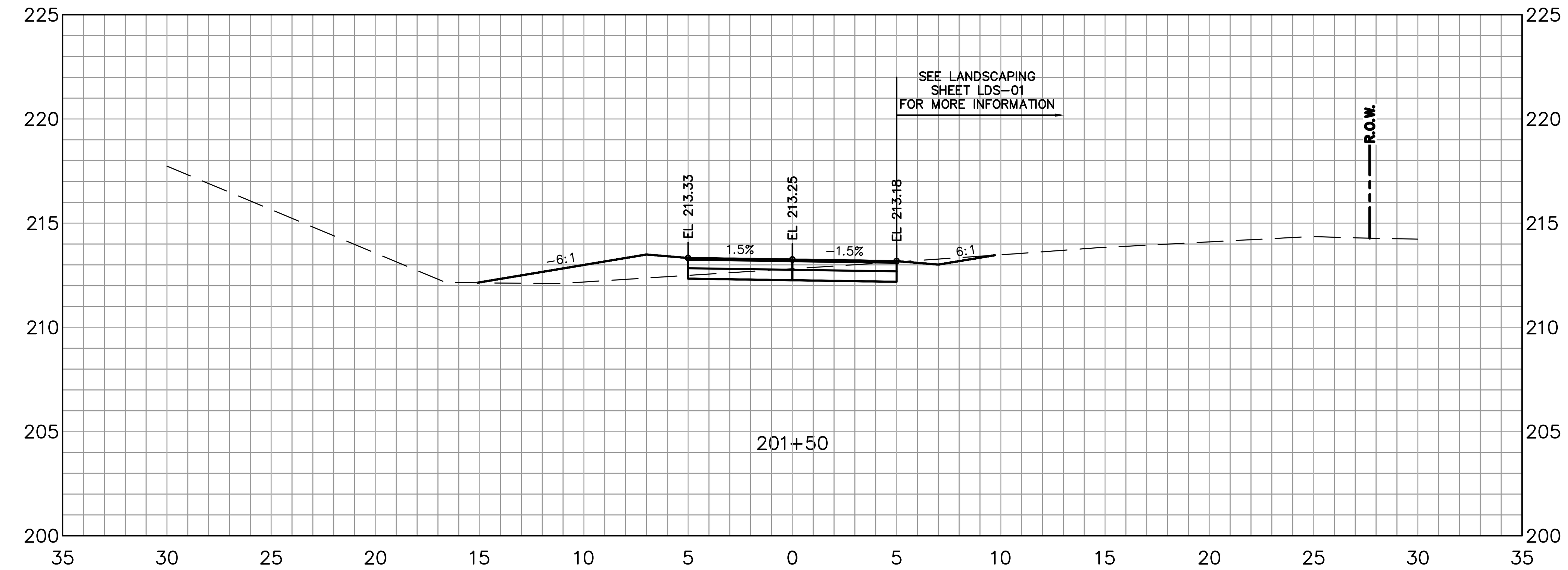
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

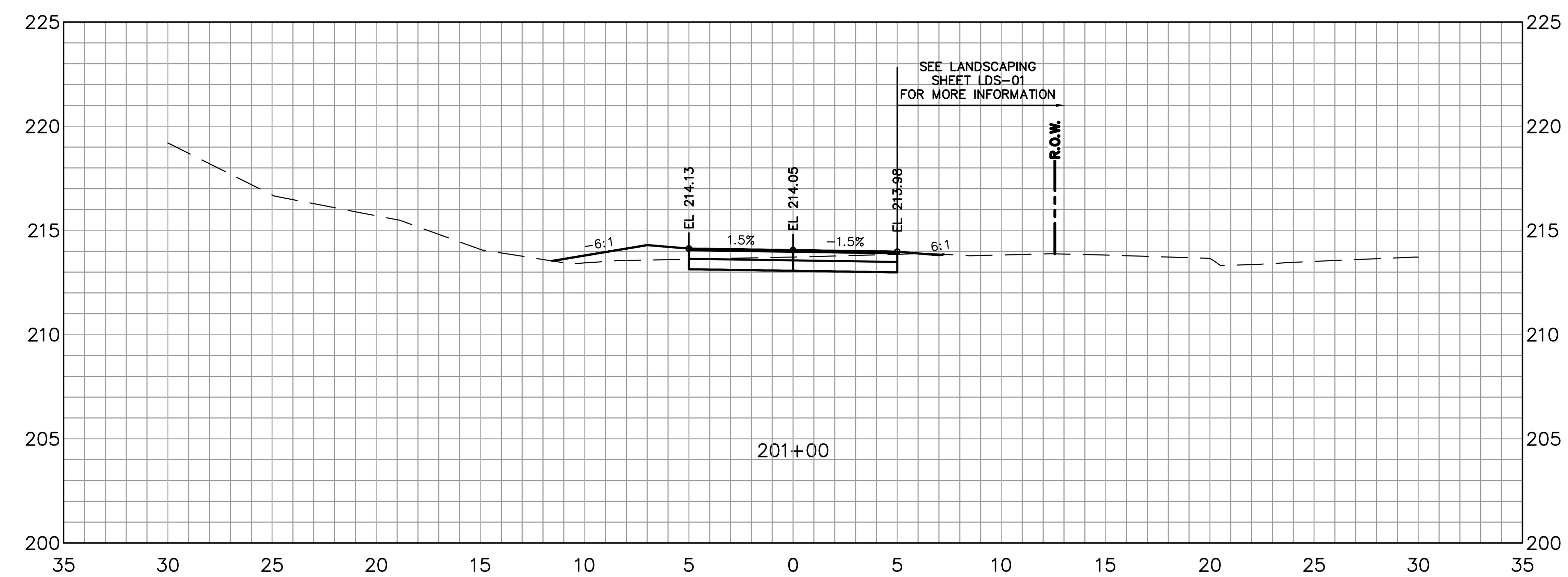
REVISIONS
No. Date Desc.

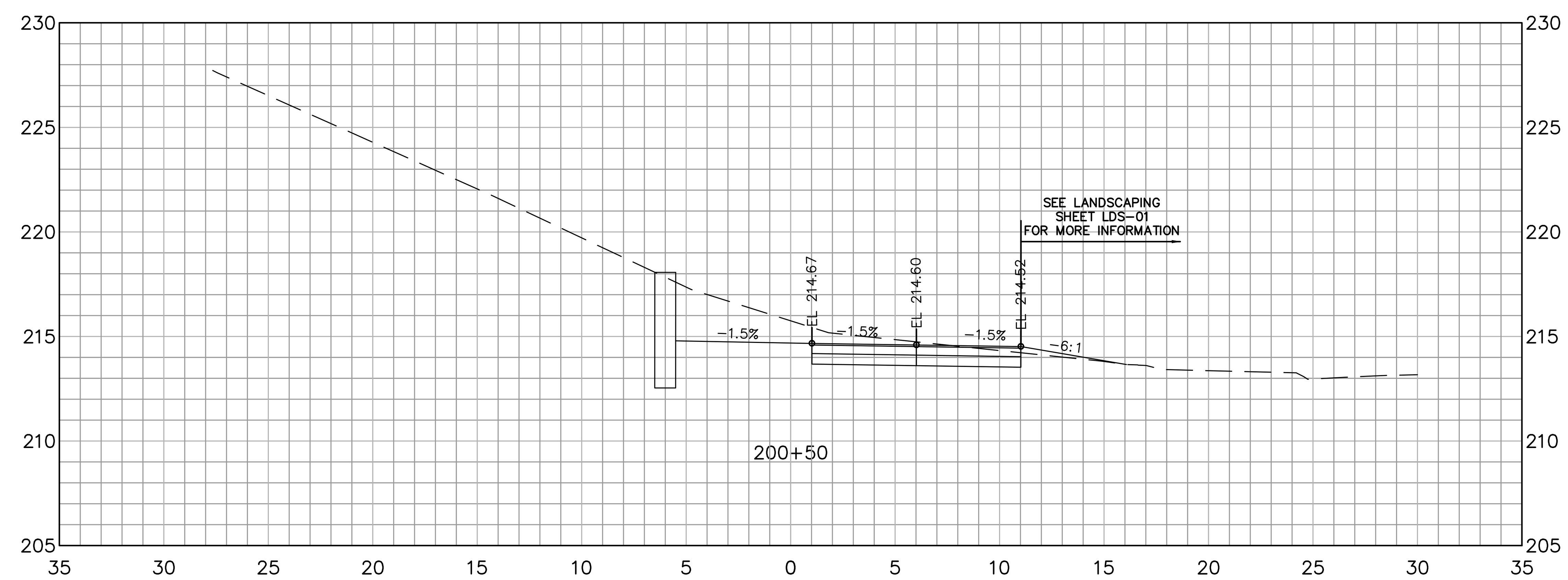
Designed	D.W.G.
Drawn	D.W.G.
Reviewed	M.W.D.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TSPM210069901

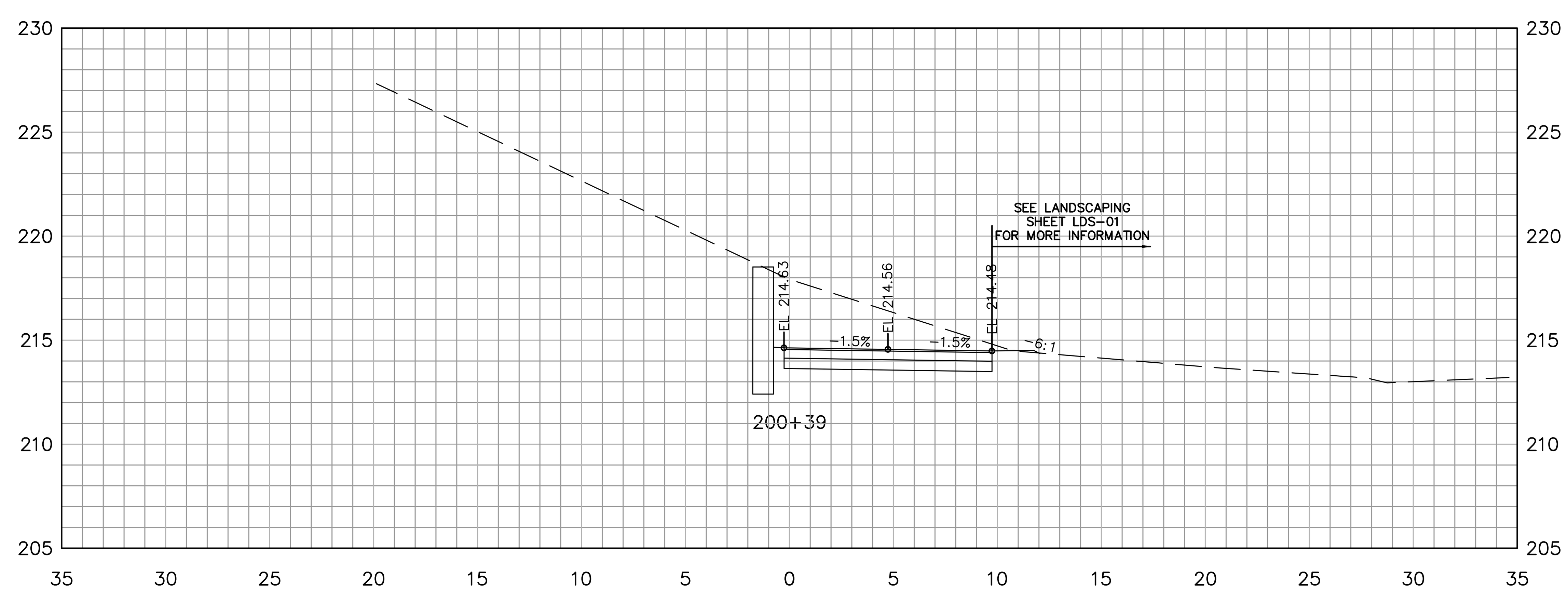
Title
SIGN AND PAVEMENT MARKING PLANS

Sheet No.
SPM-08









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State Project No. 88-198
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REVISIONS
No. Date Desc.

Designed	D.K.N.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=5'
Project No.	2100699
Date	08/09/2024

CAD File:
TXSC210069901

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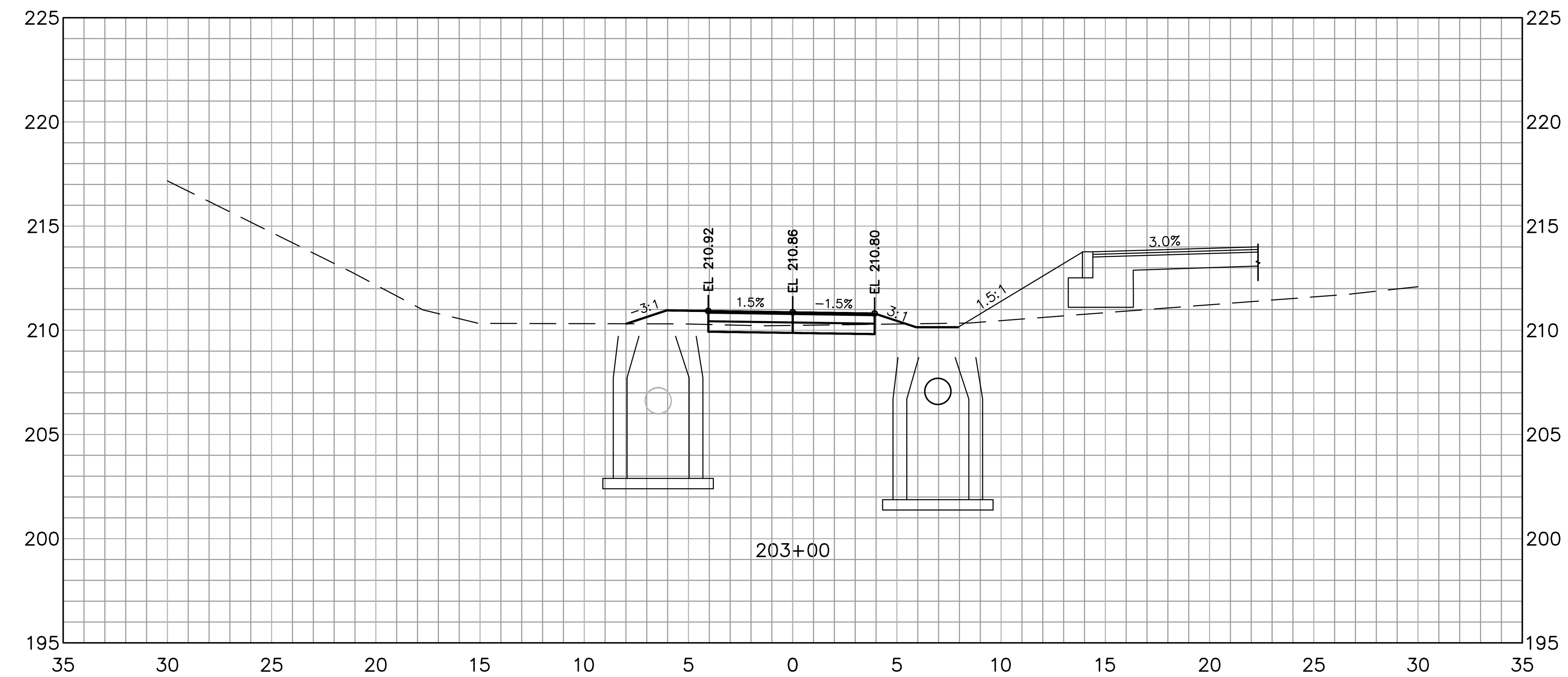
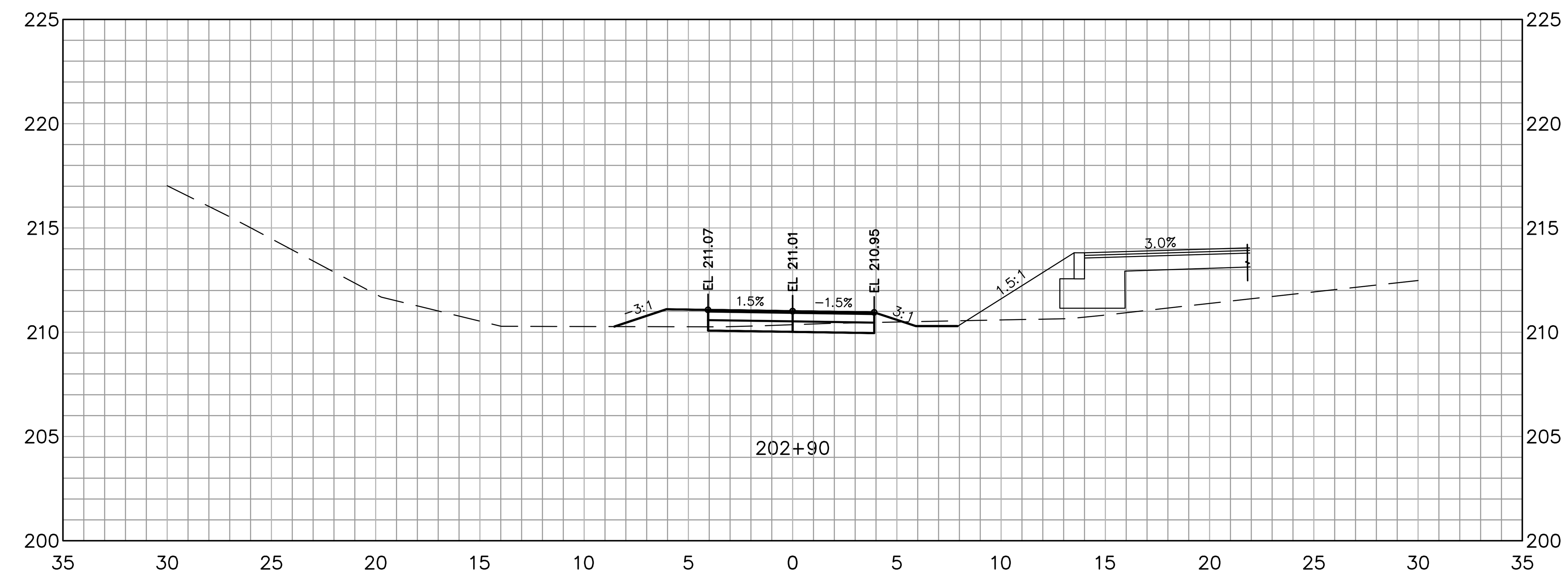
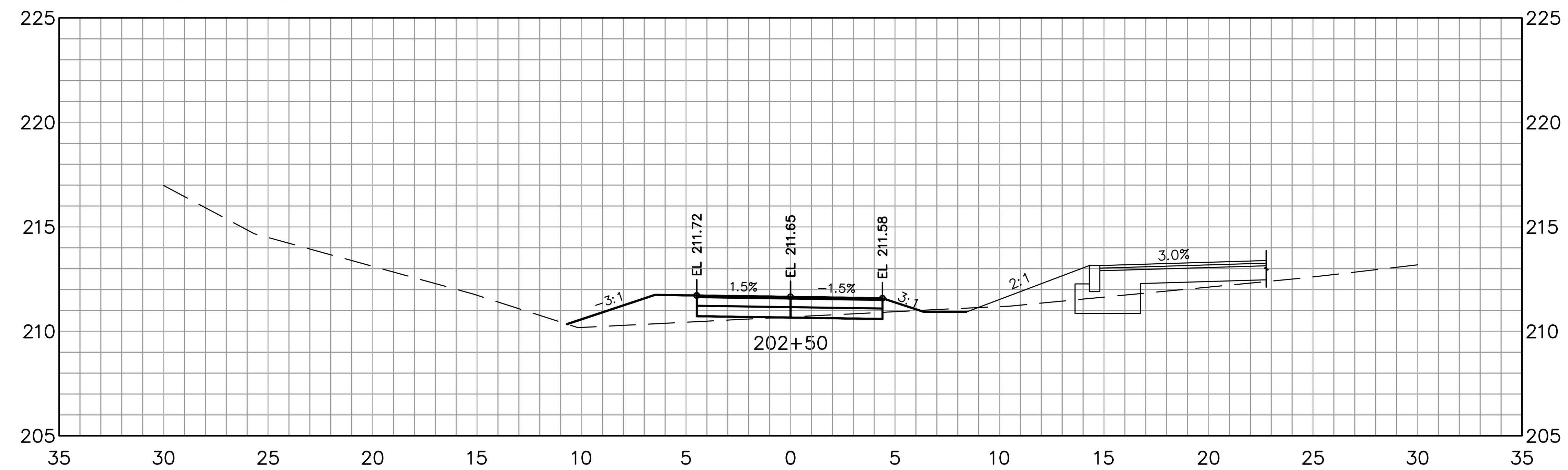
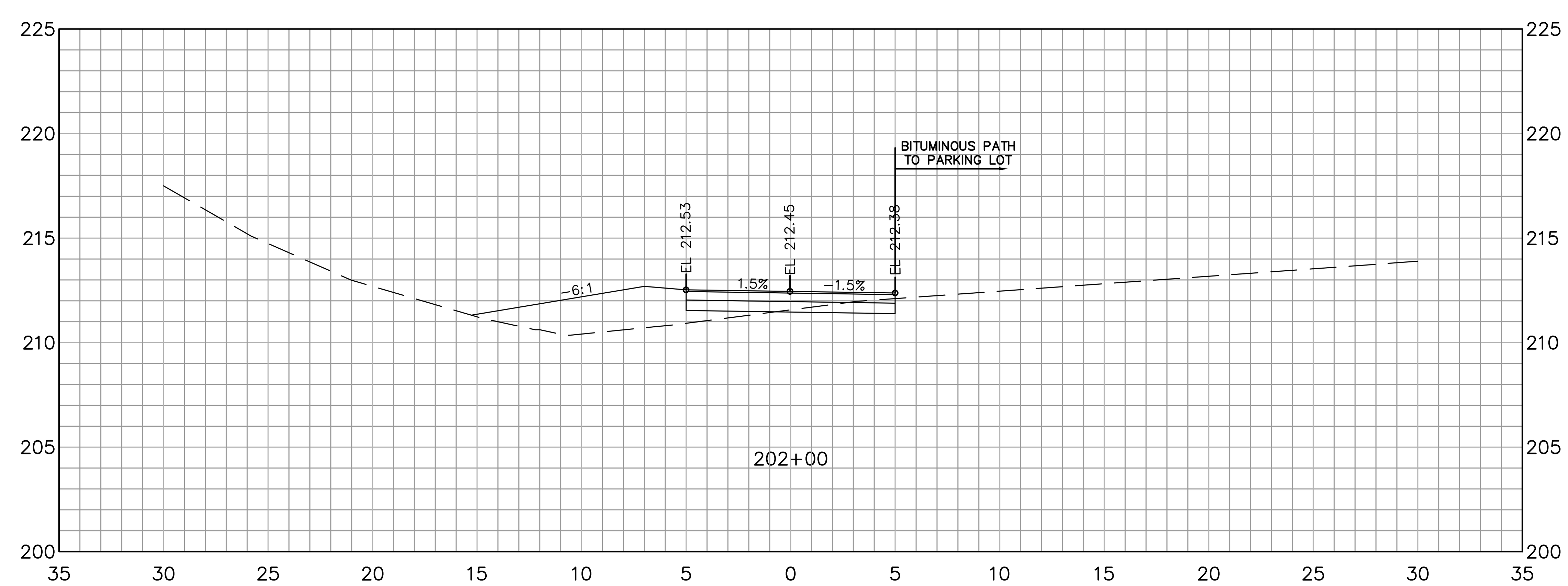
CROSS SECTIONS

Sheet No.
XSC-1









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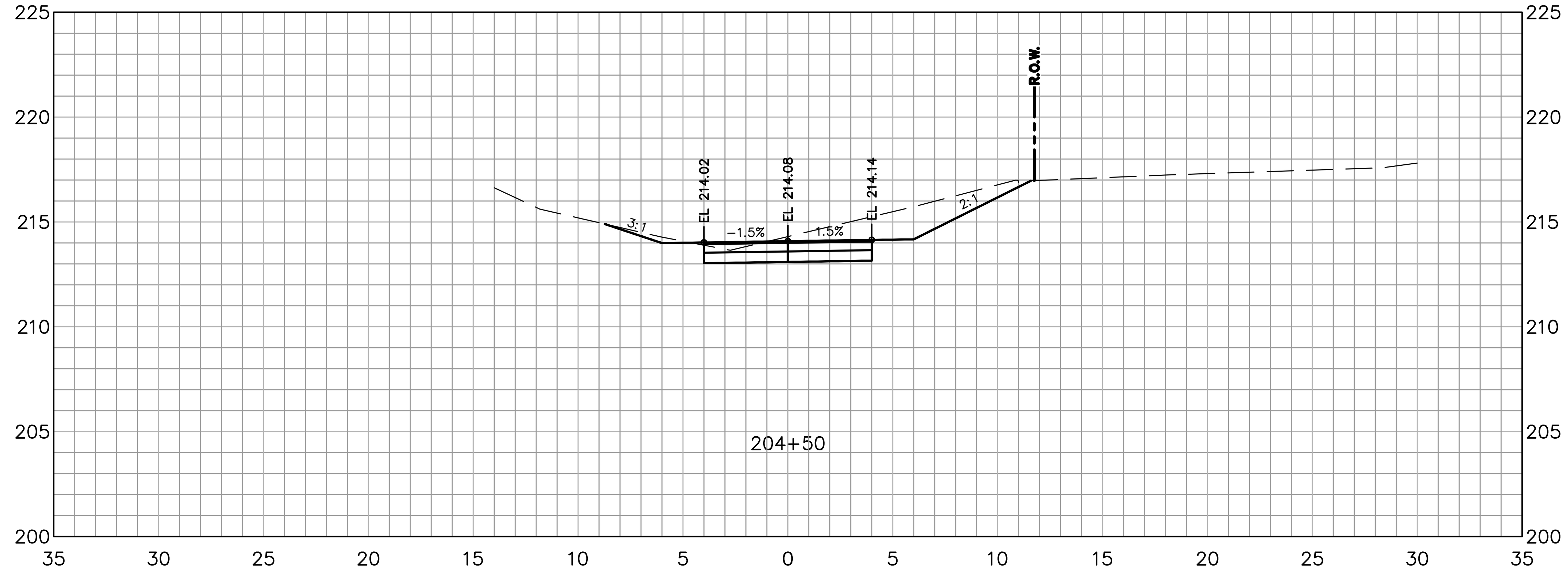
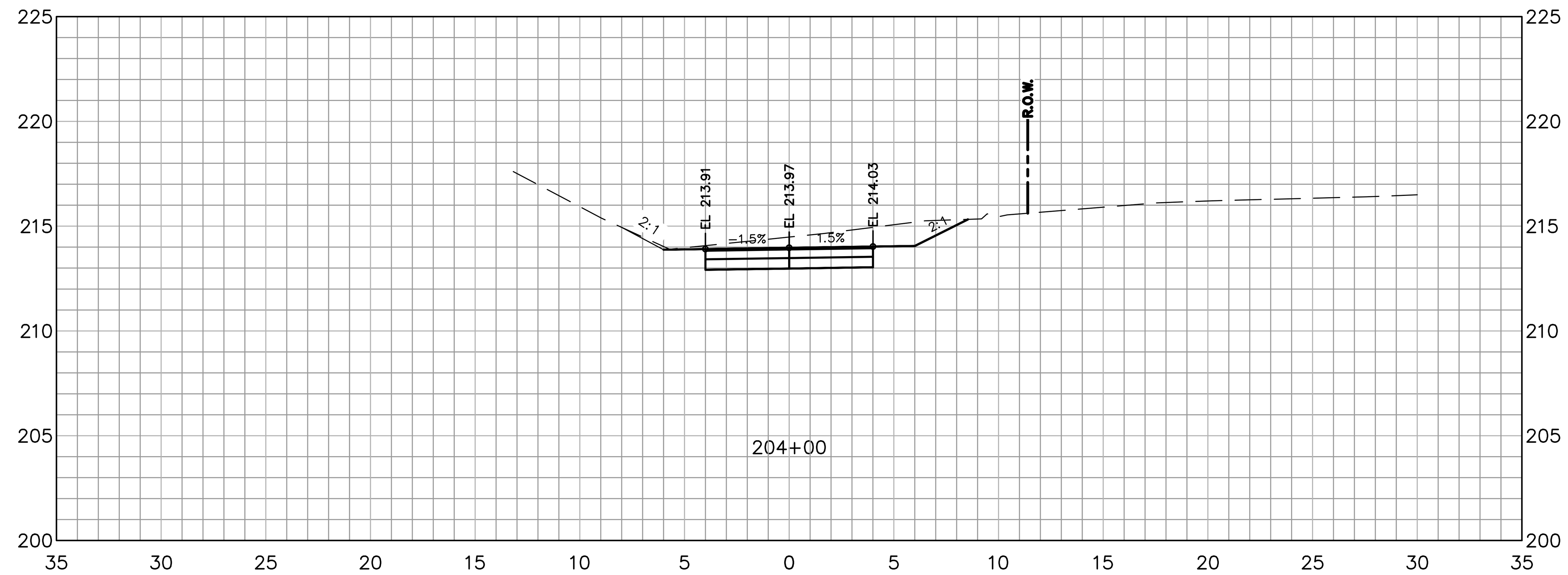
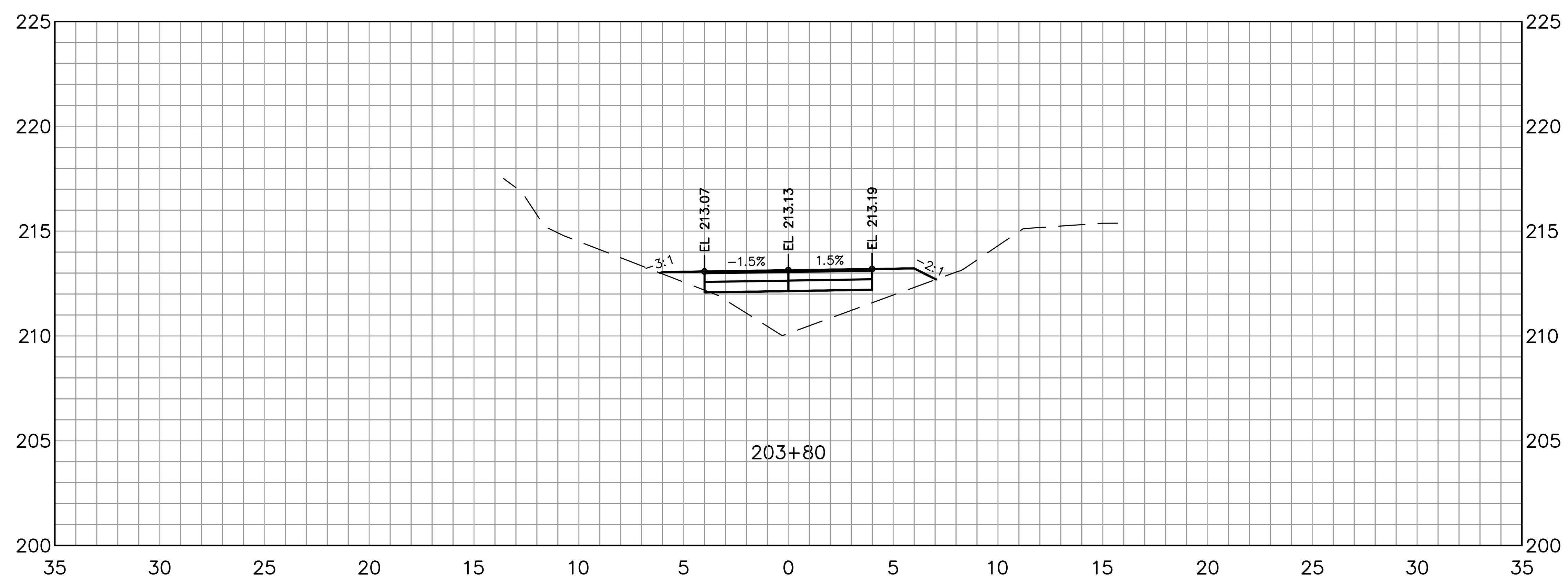
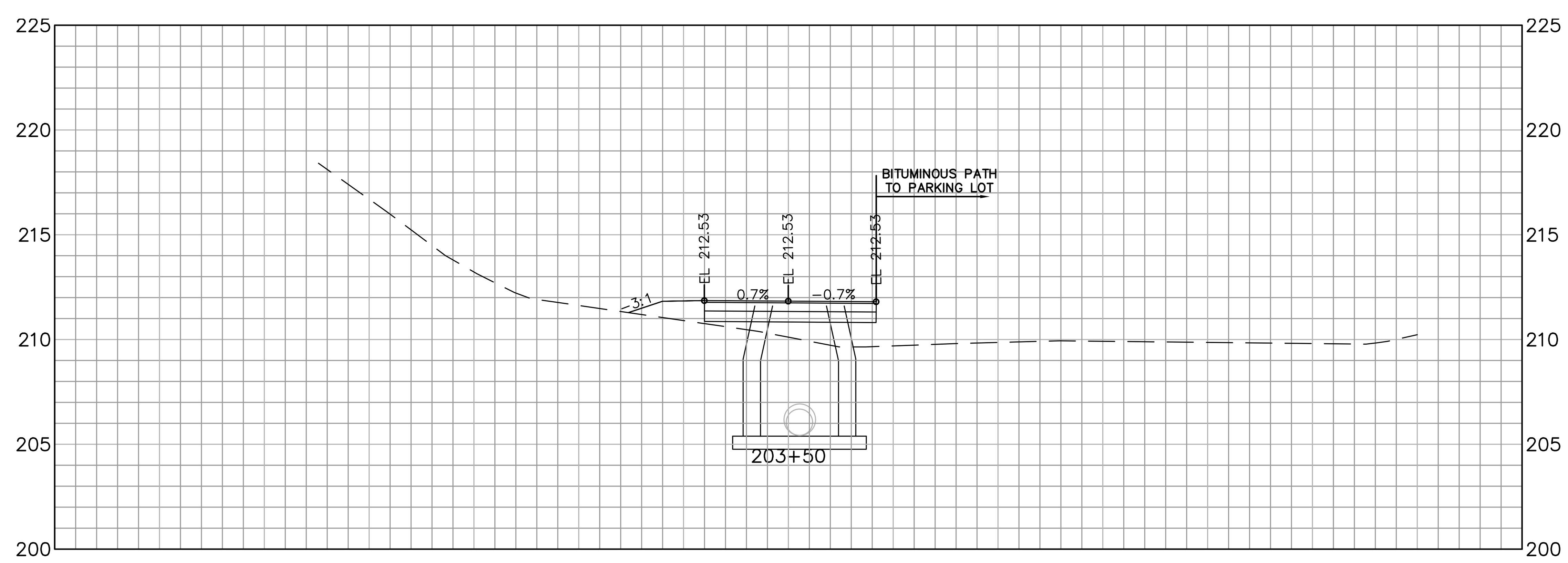
Sheet No.
XSC-2









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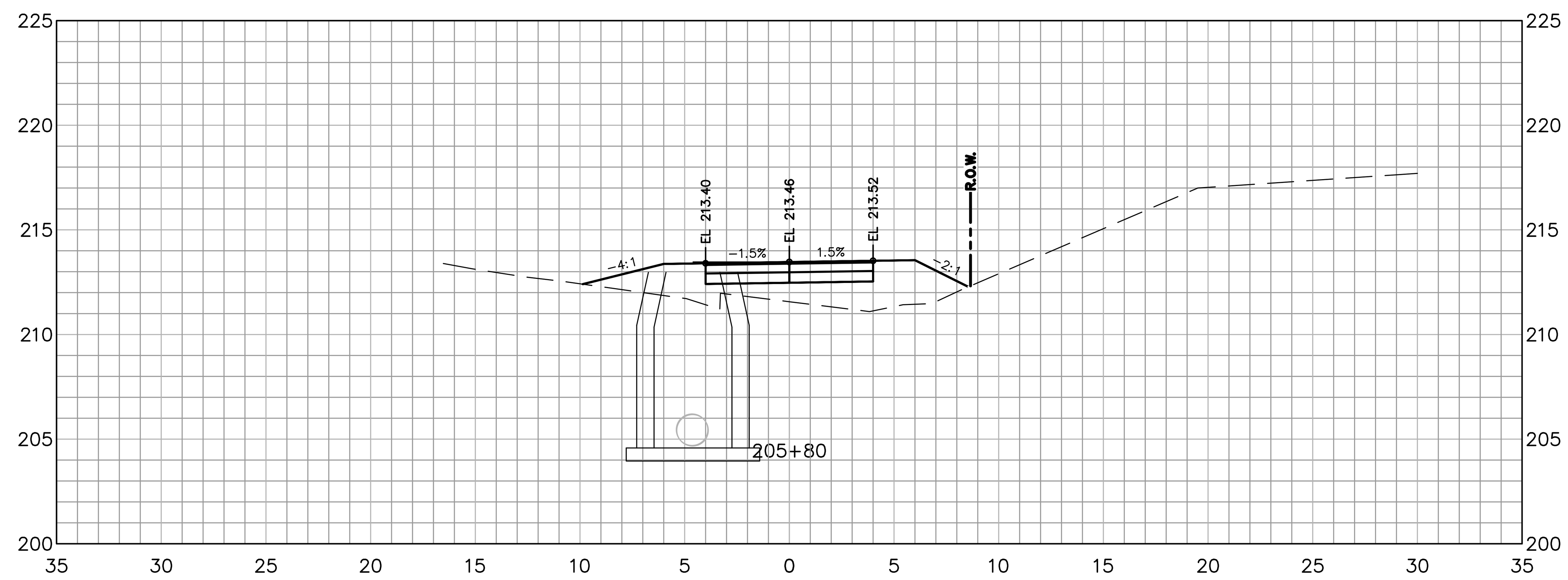
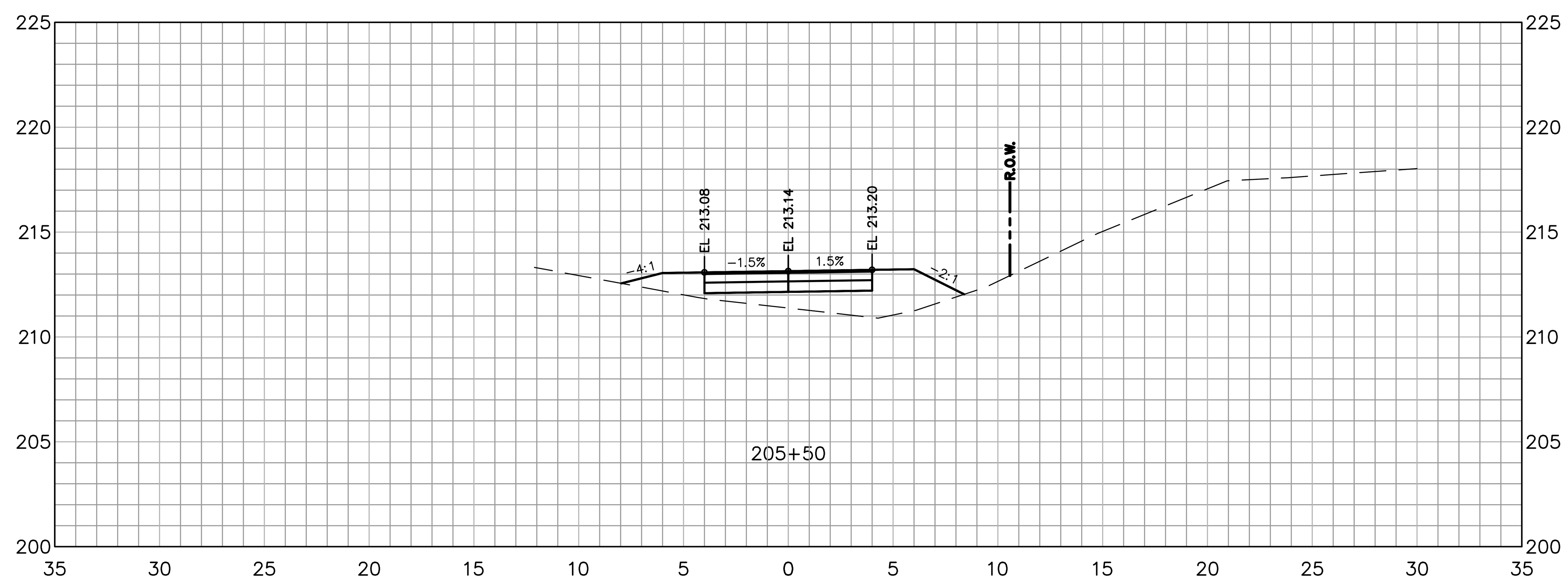
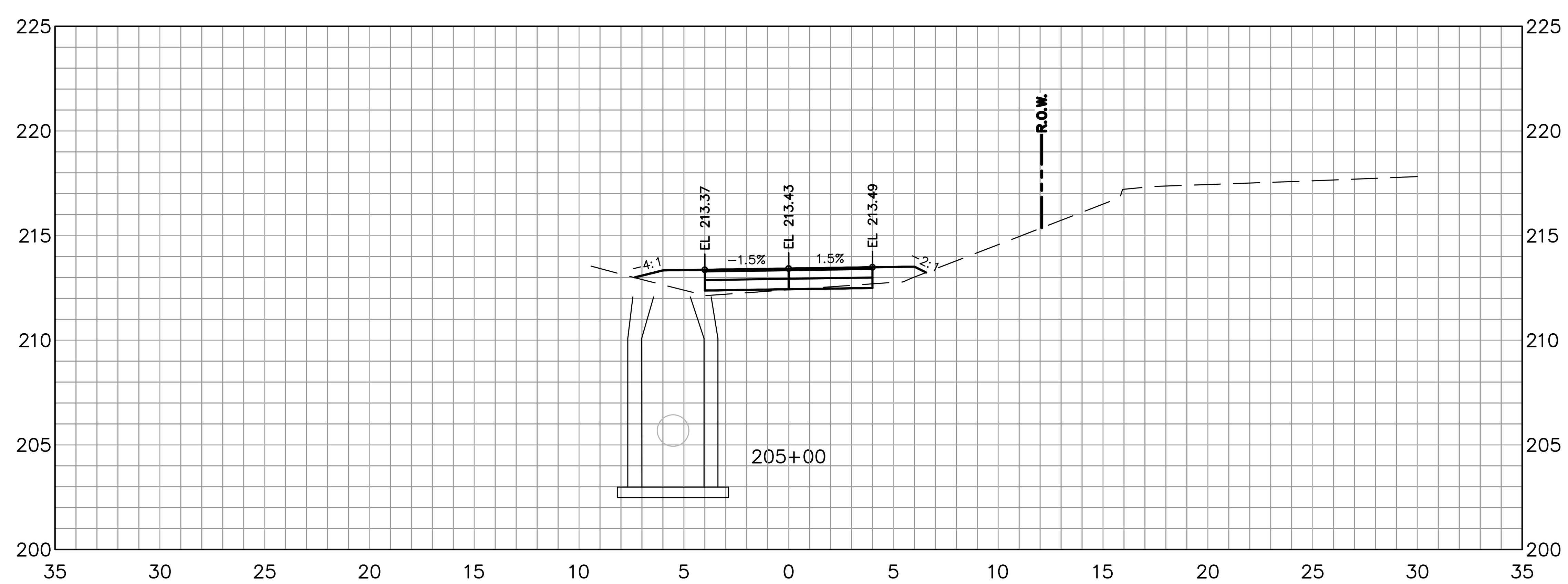
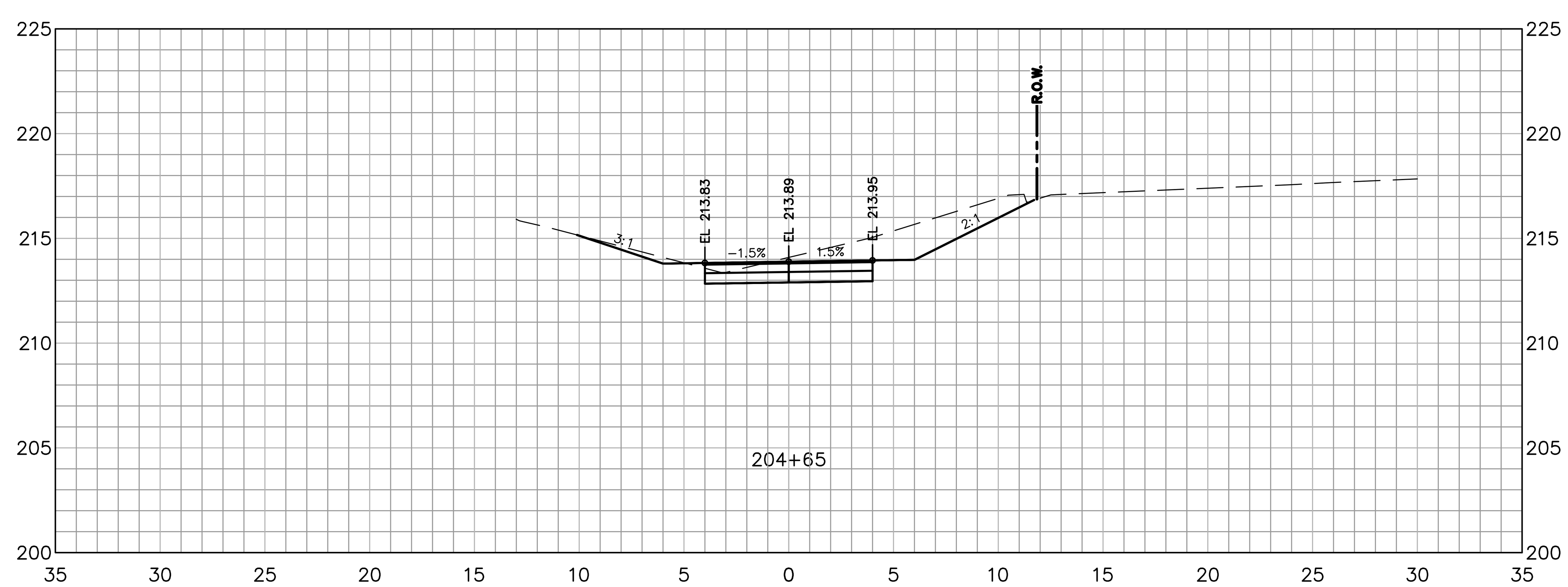
Sheet No.
XSC-3









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CAD File:
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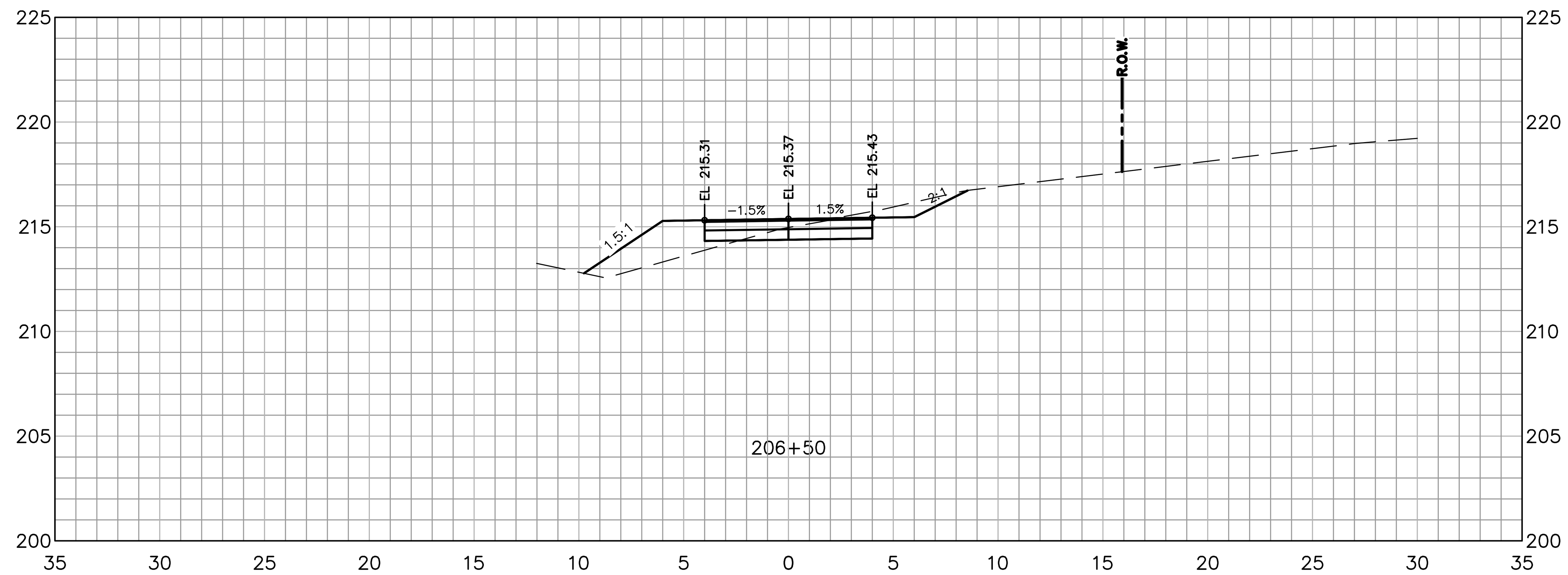
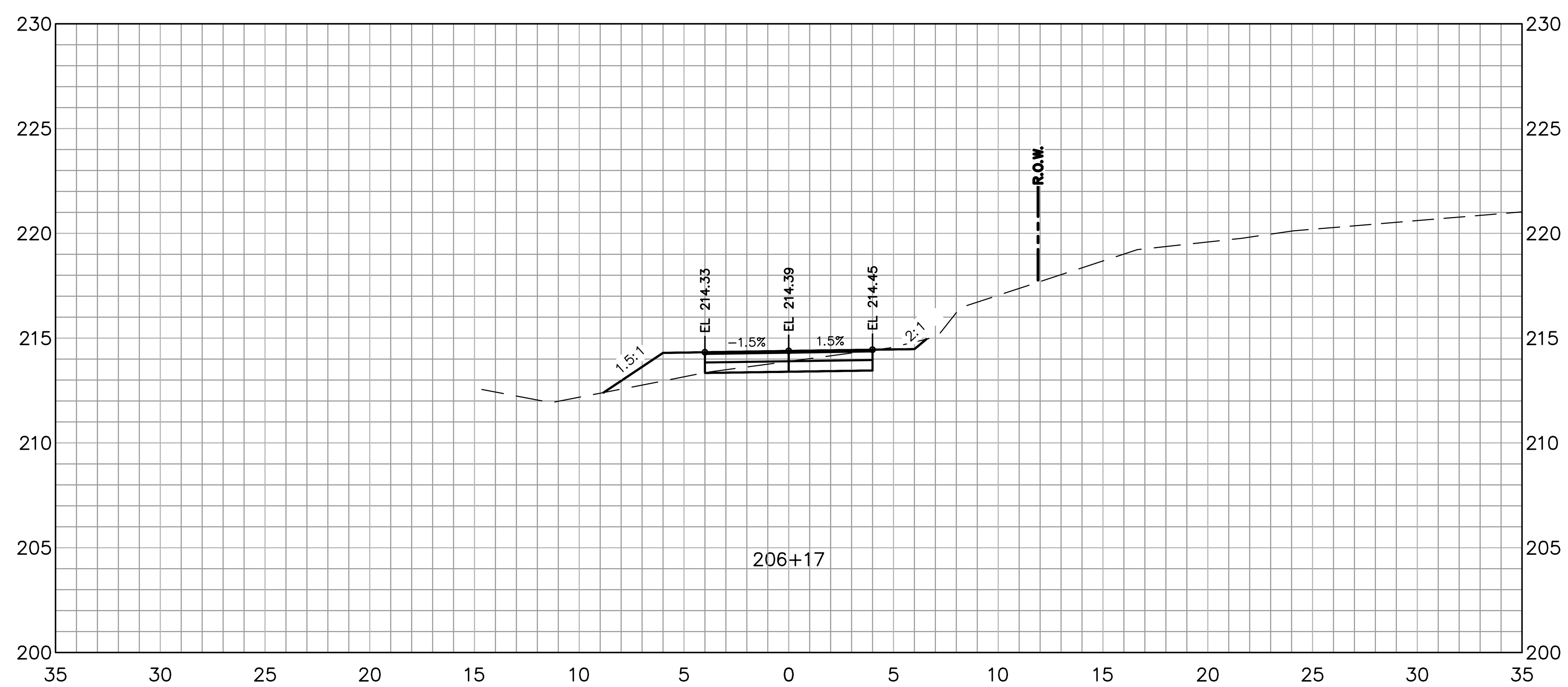
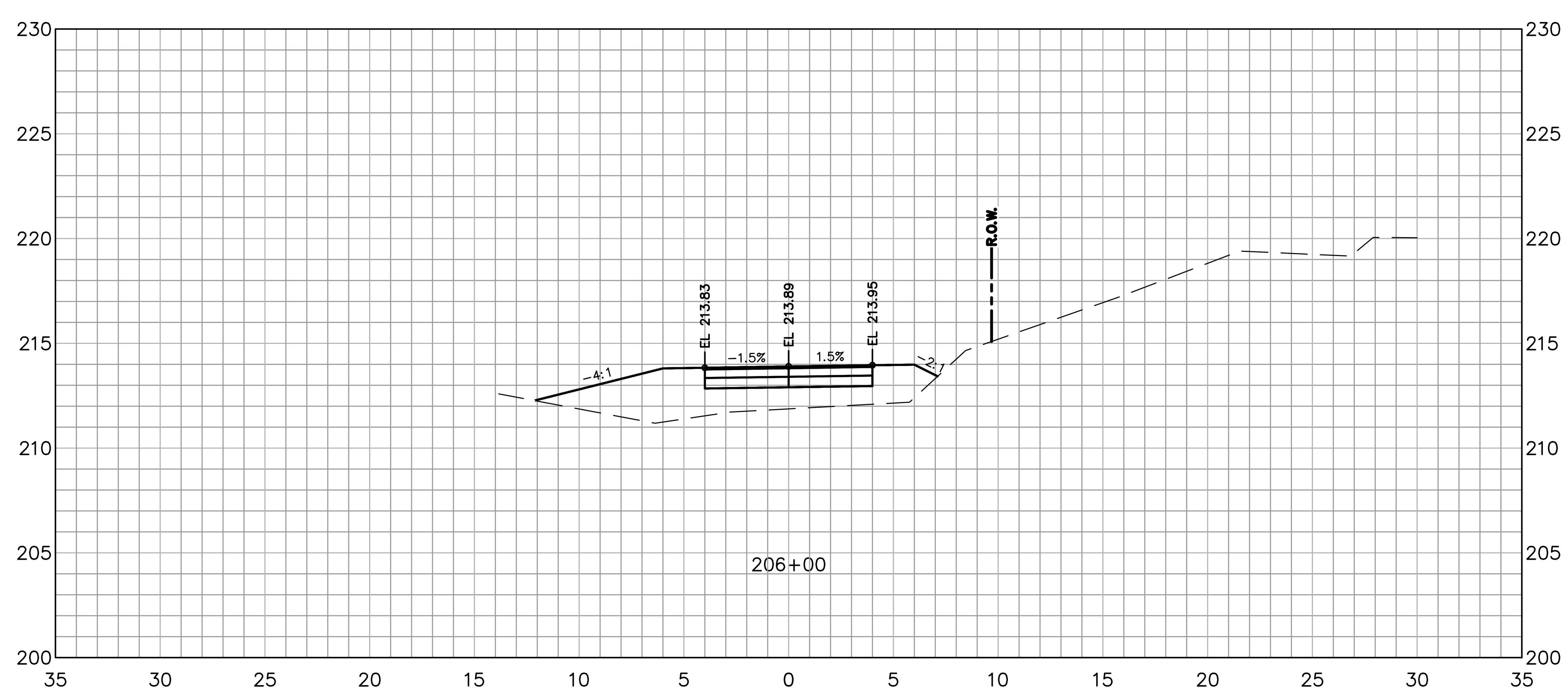
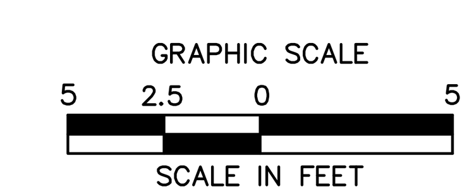
Sheet No.
XSC-4

Xref (s): ; BD210069901 ; XR210069903









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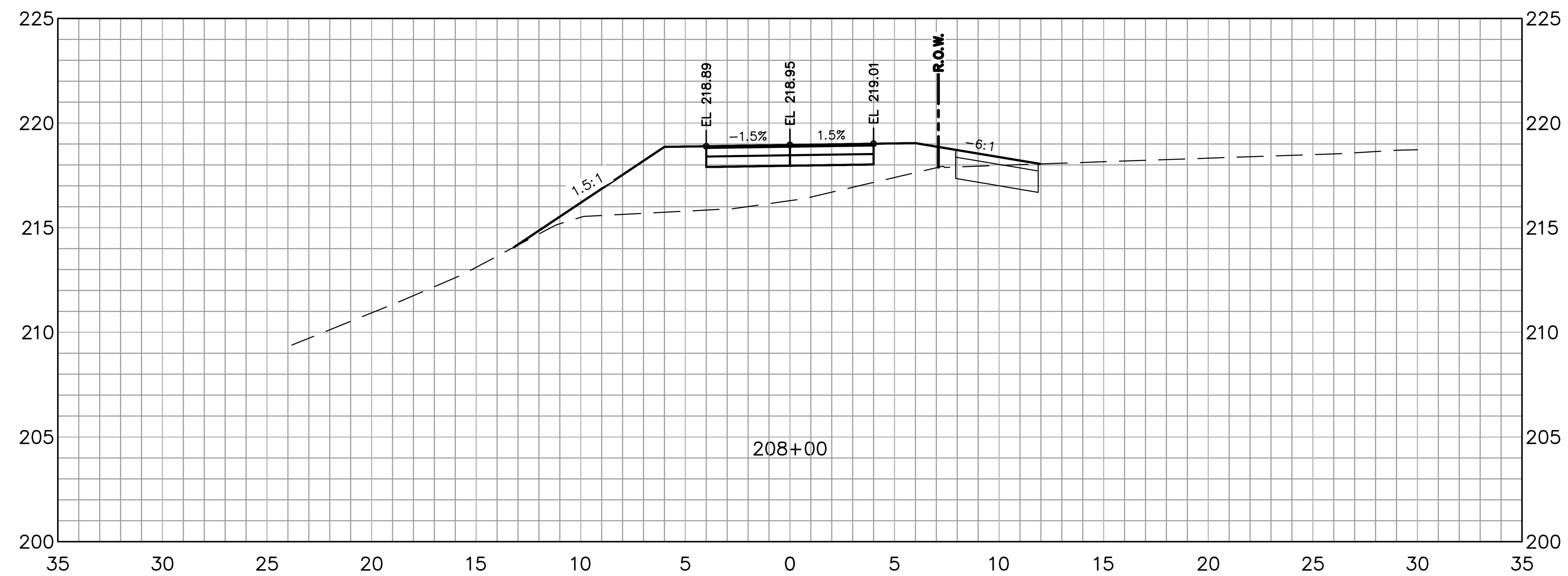
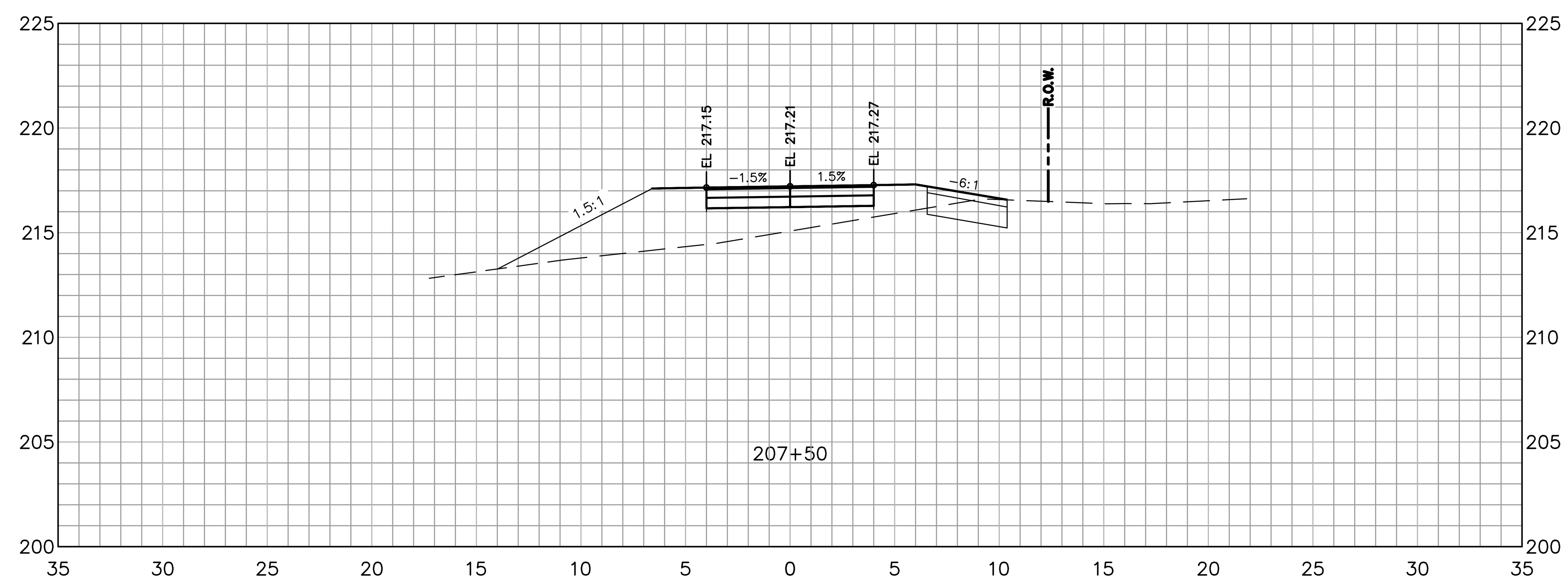
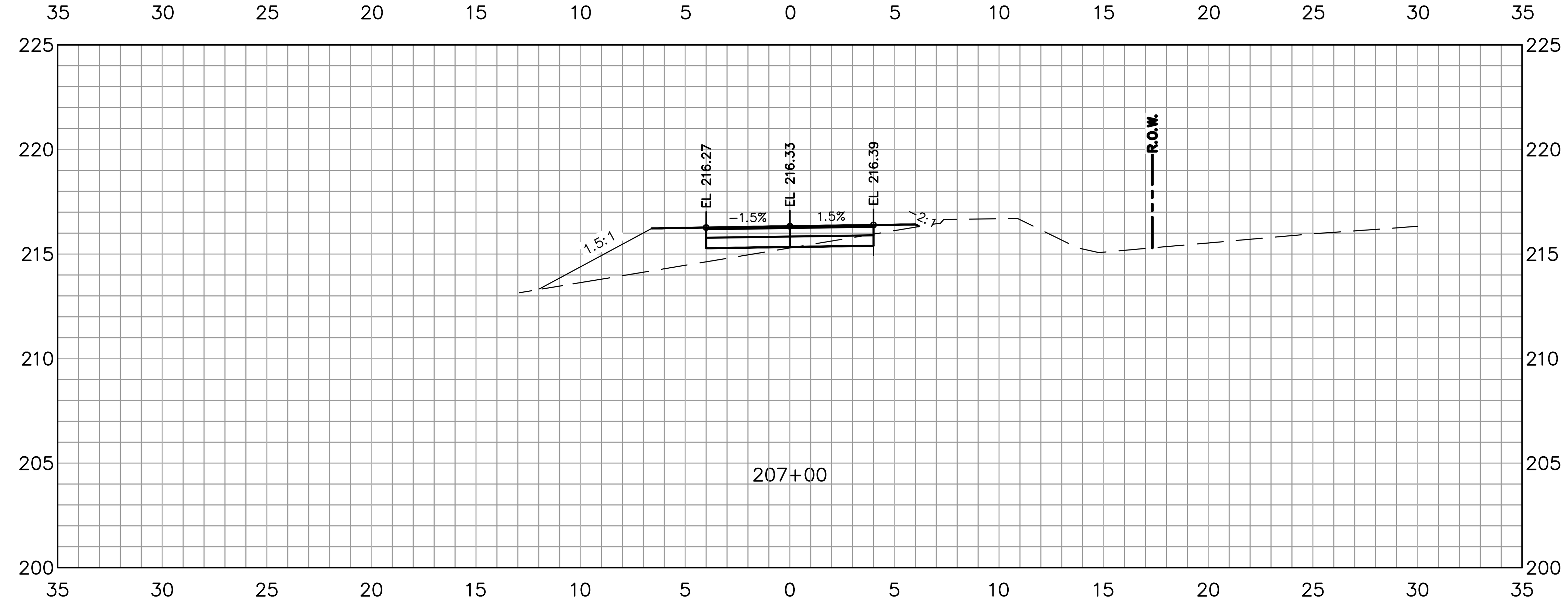
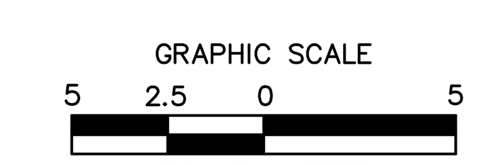
Sheet No.
XSC-5

Xref (s): ; BD210069901 ; XR210069903









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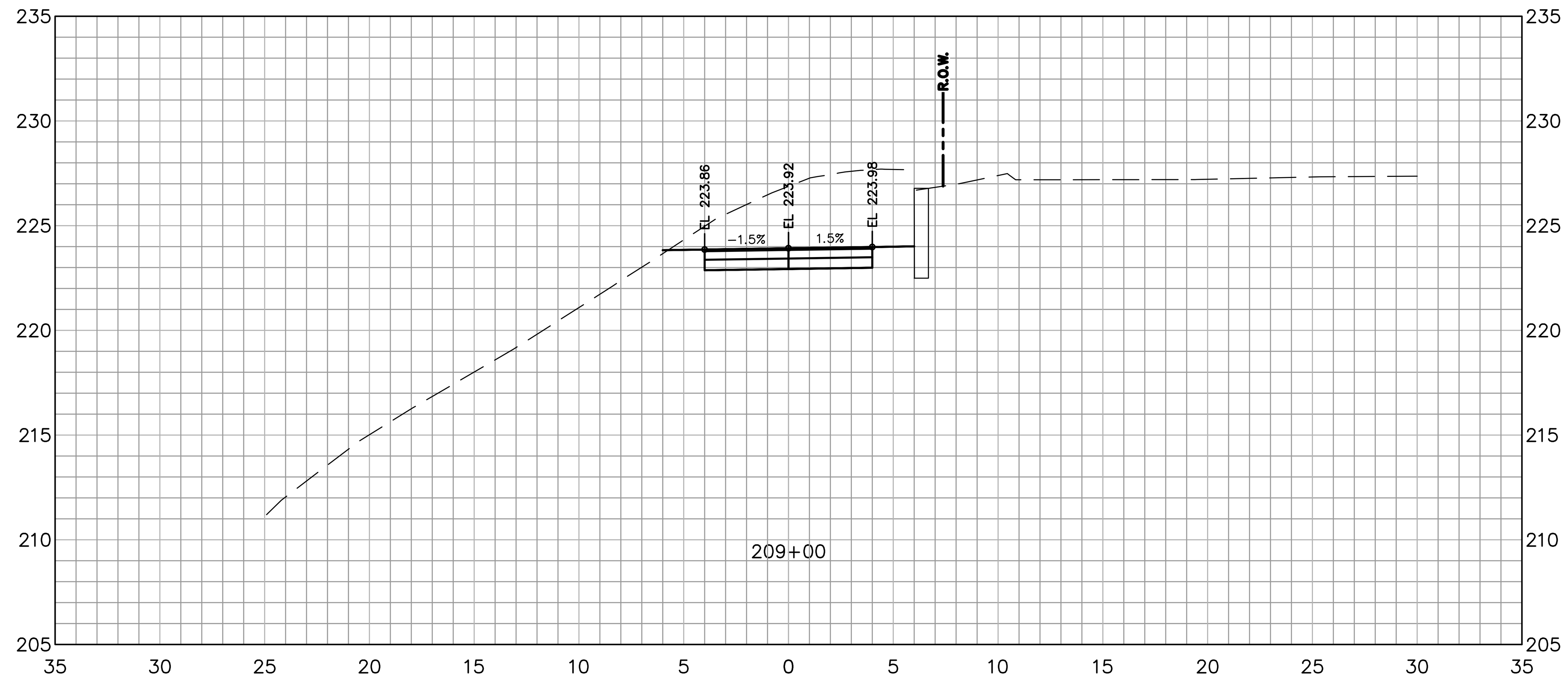
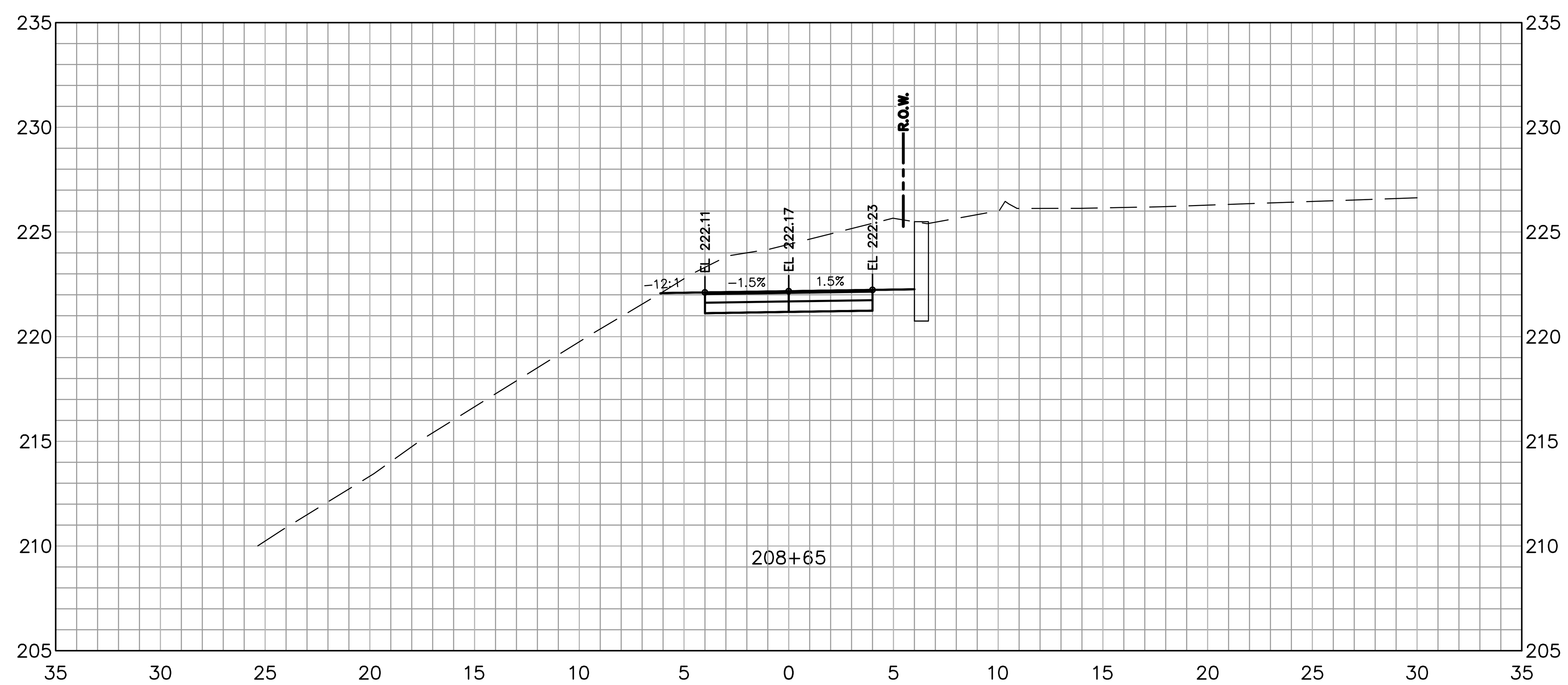
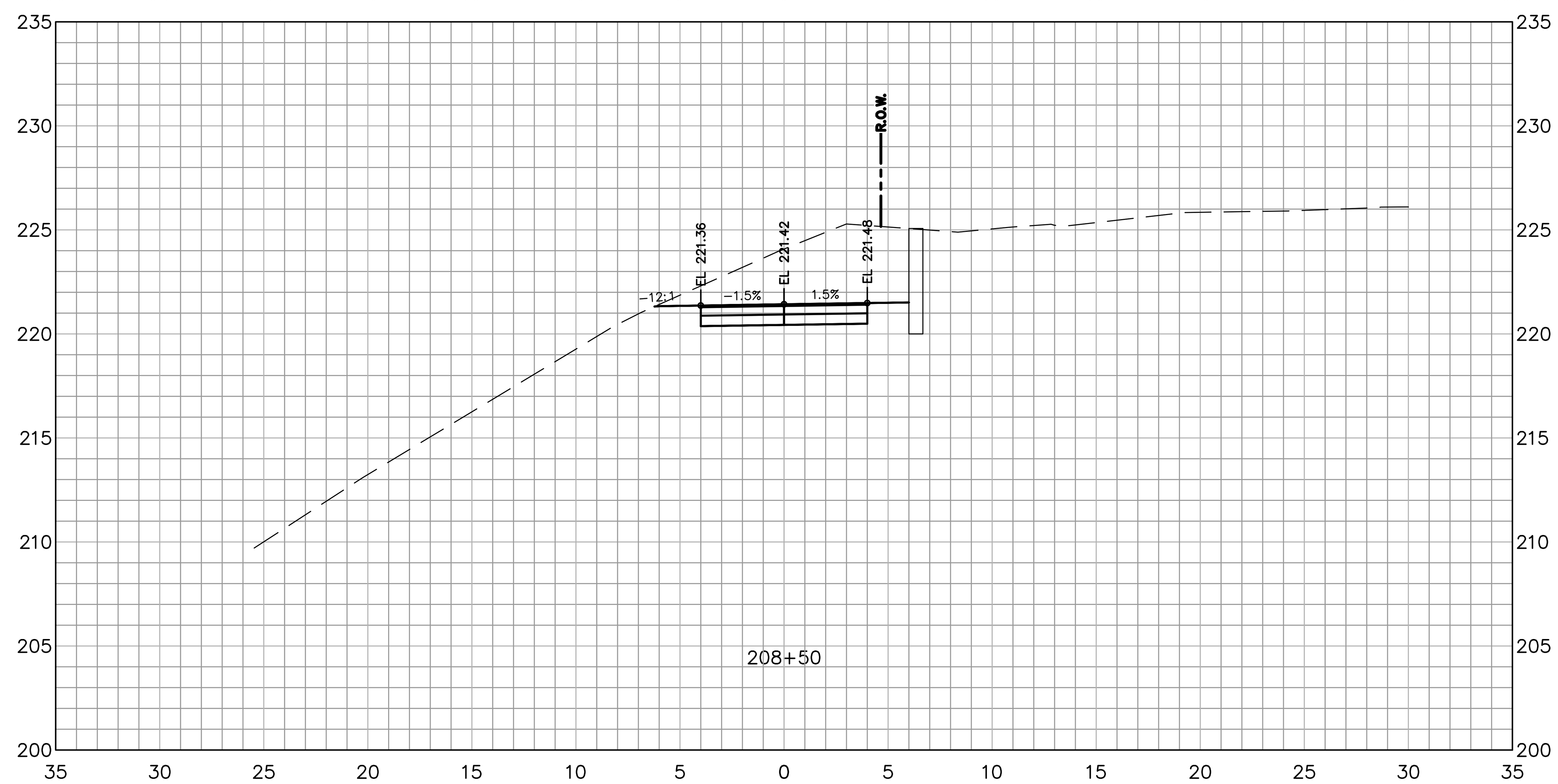
XSC-6







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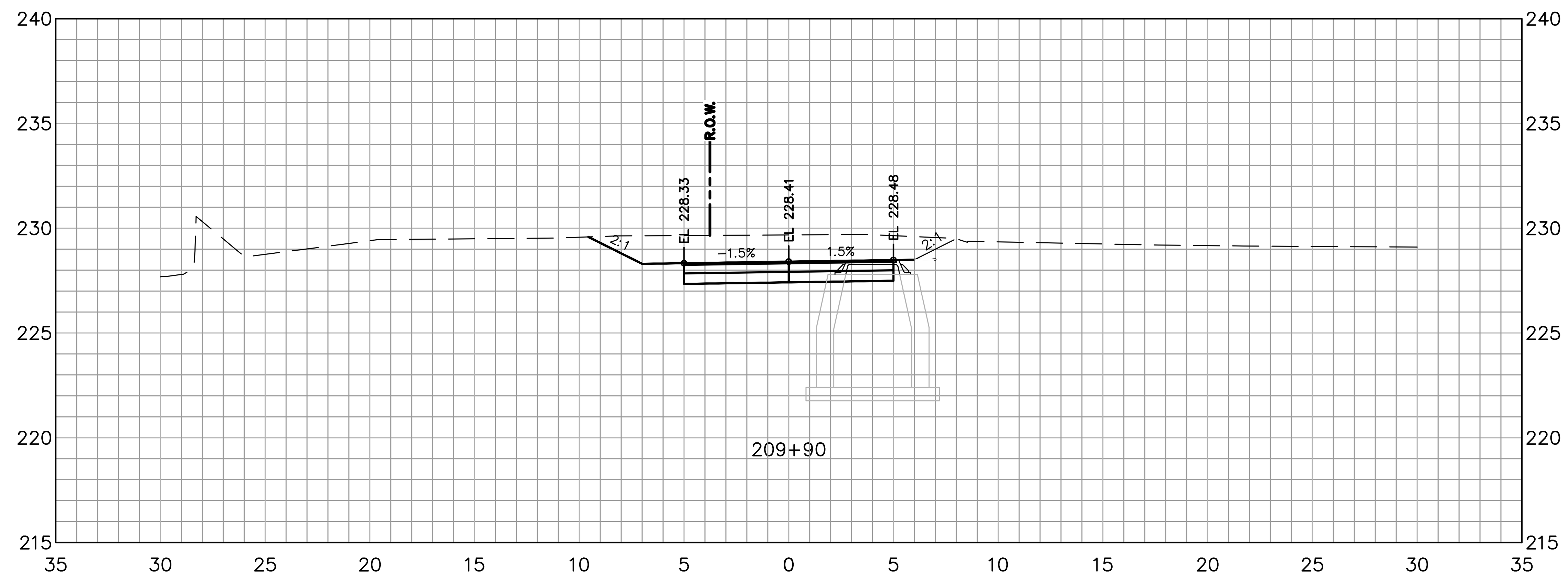
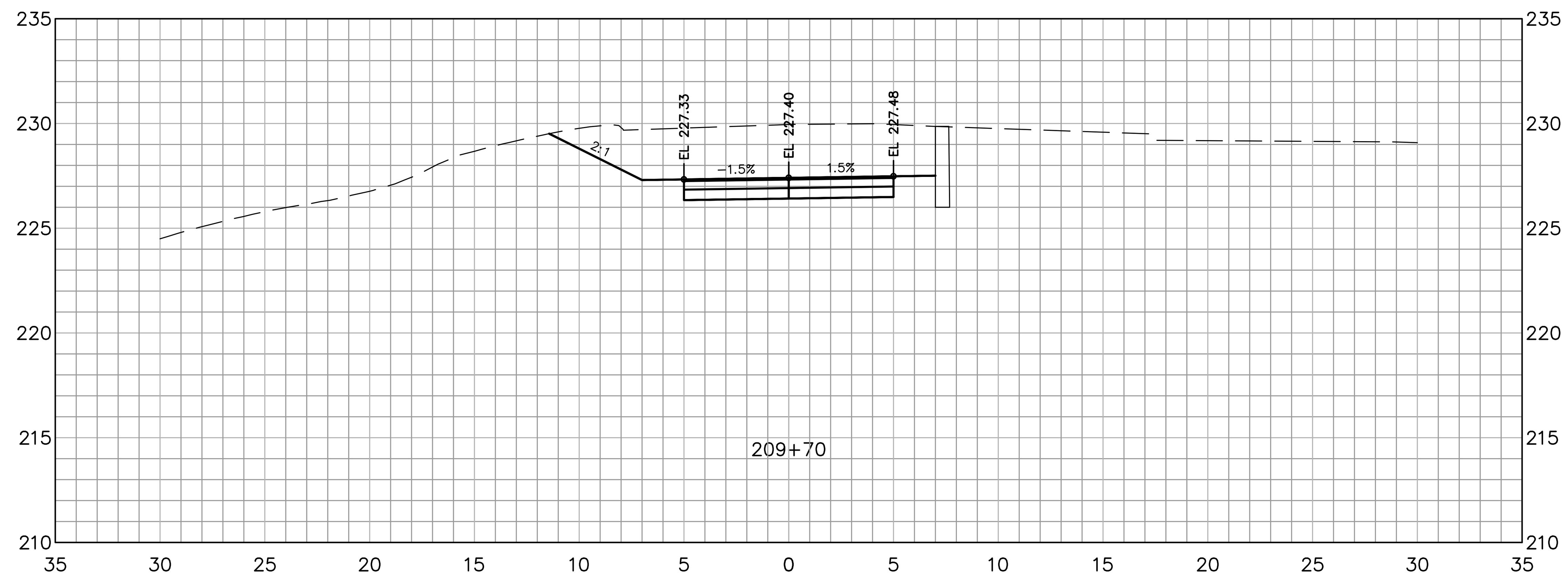
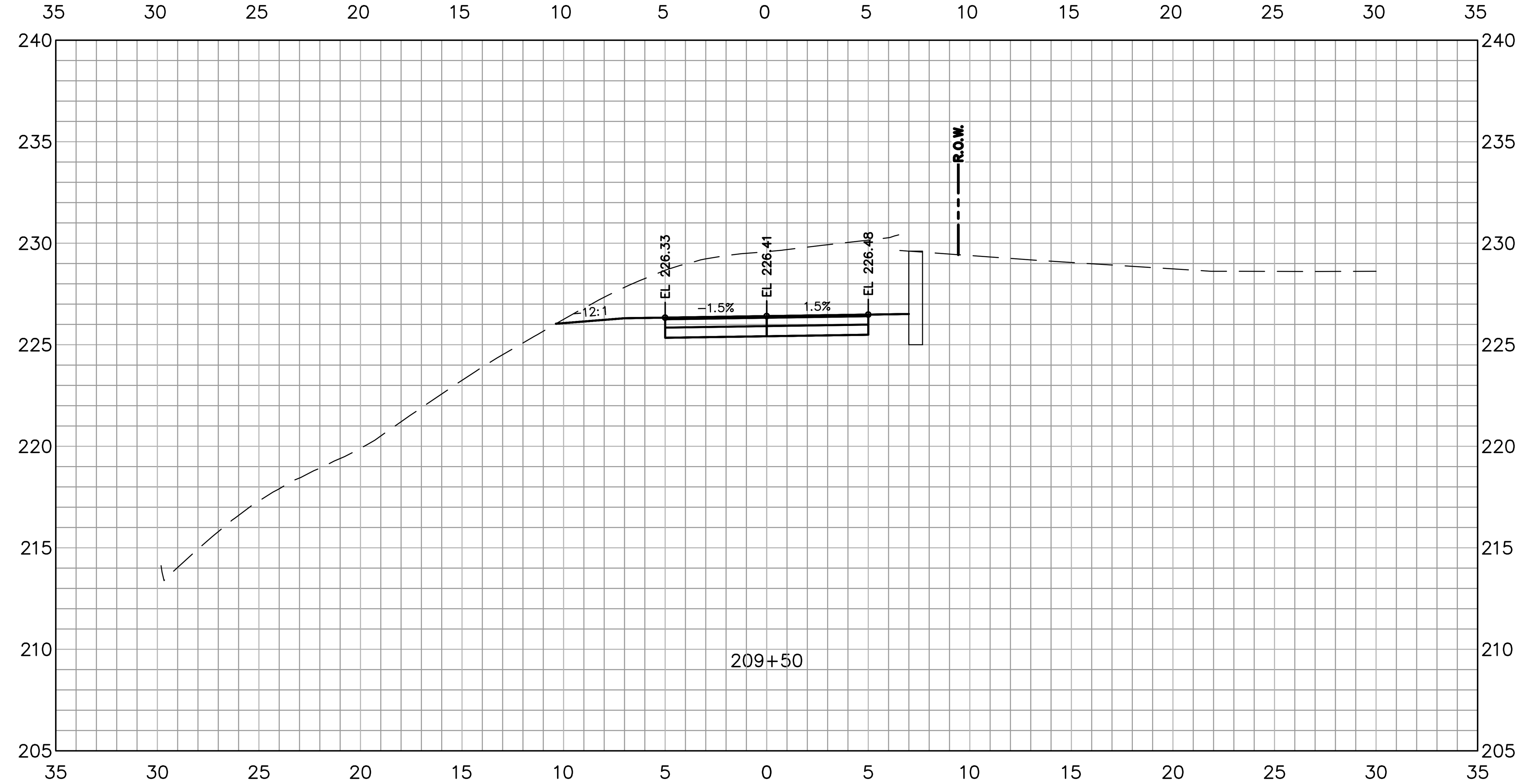
XSC-7







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No.	Date	Desc.

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Scale	1"=5'
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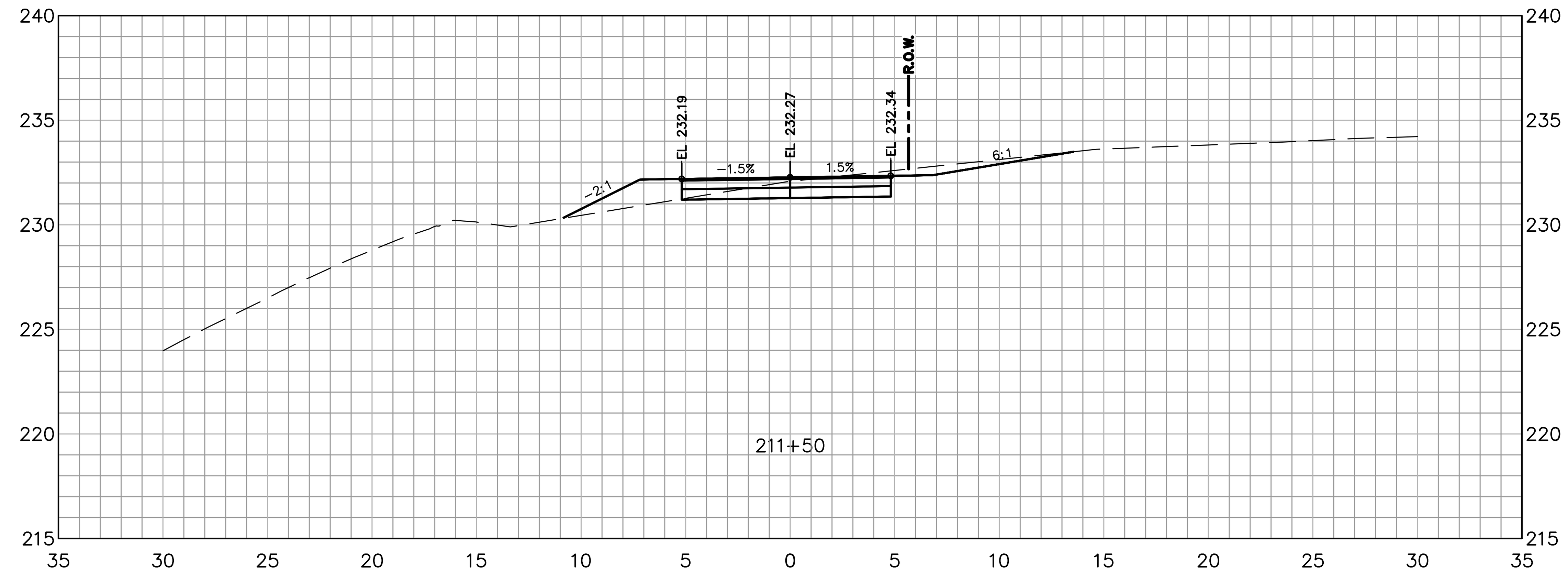
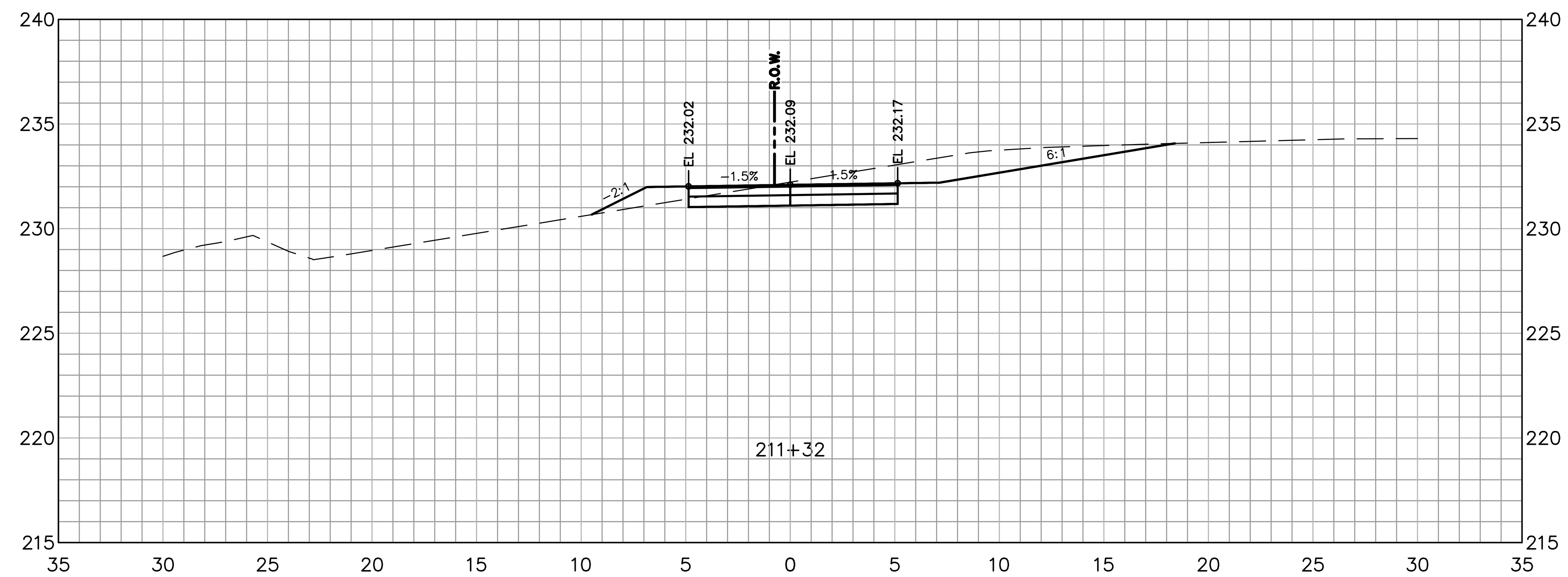
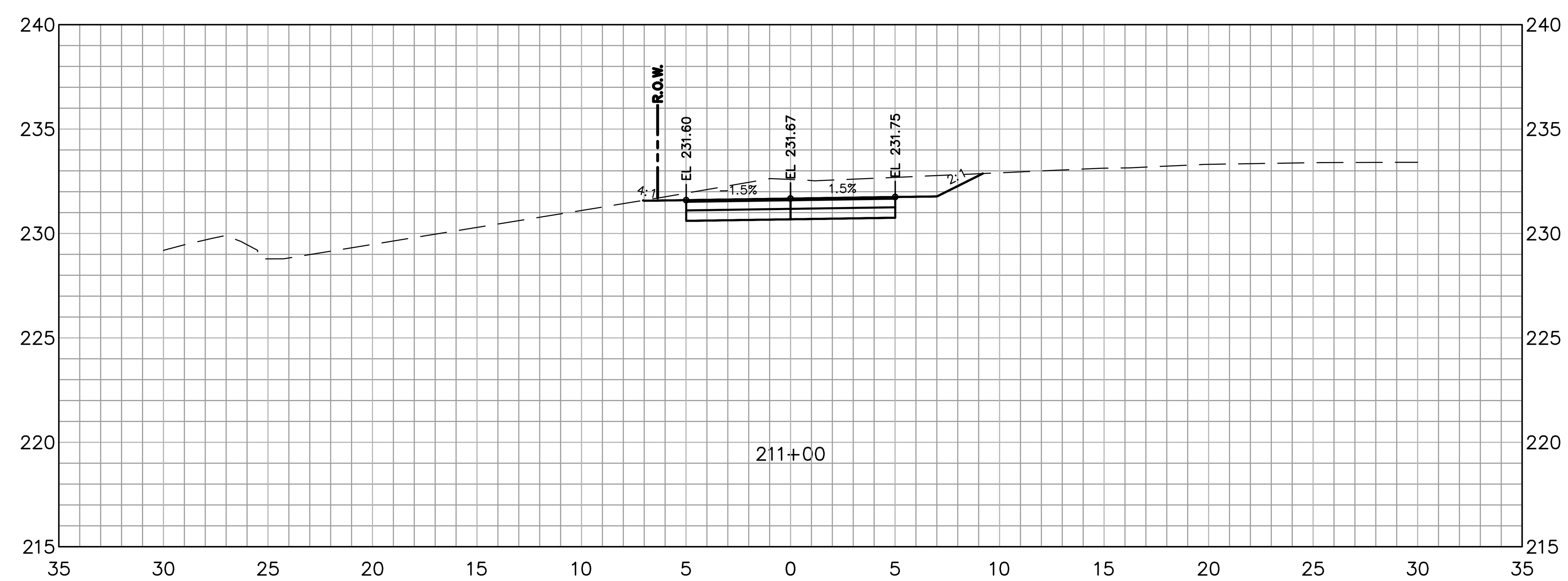
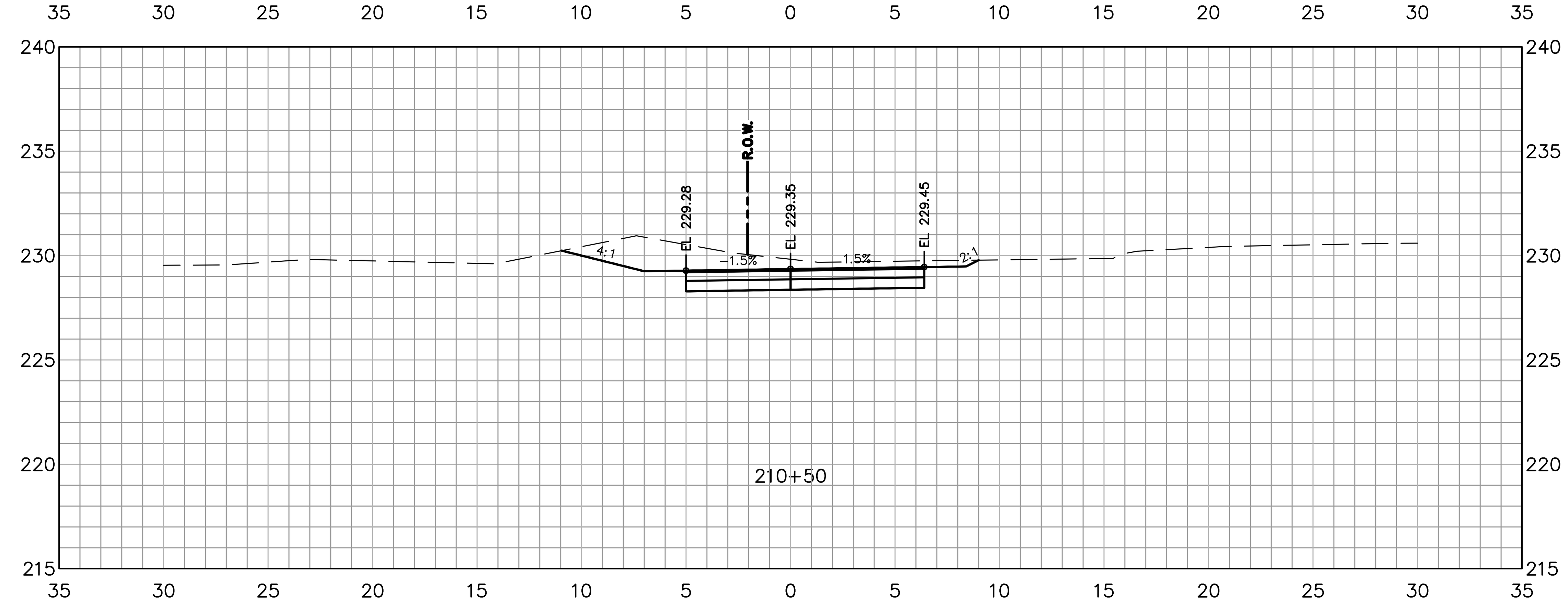
Xref (s): ; BD210069901 ; XR210069903









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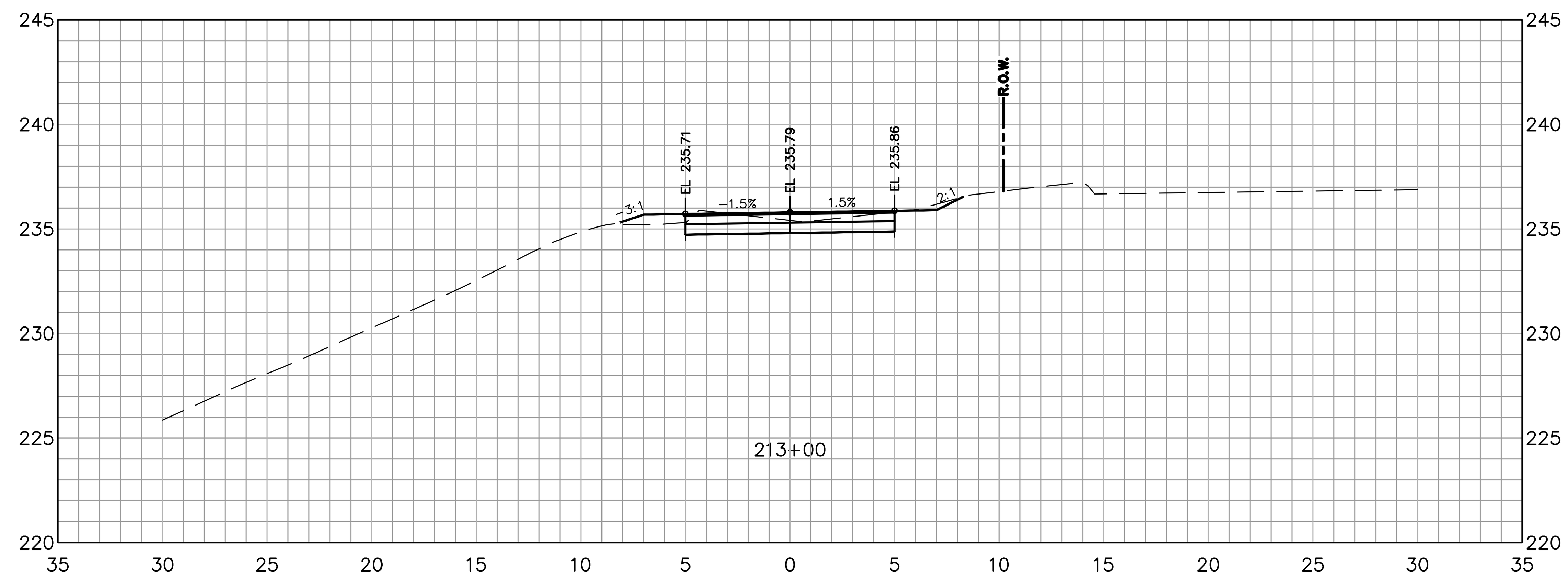

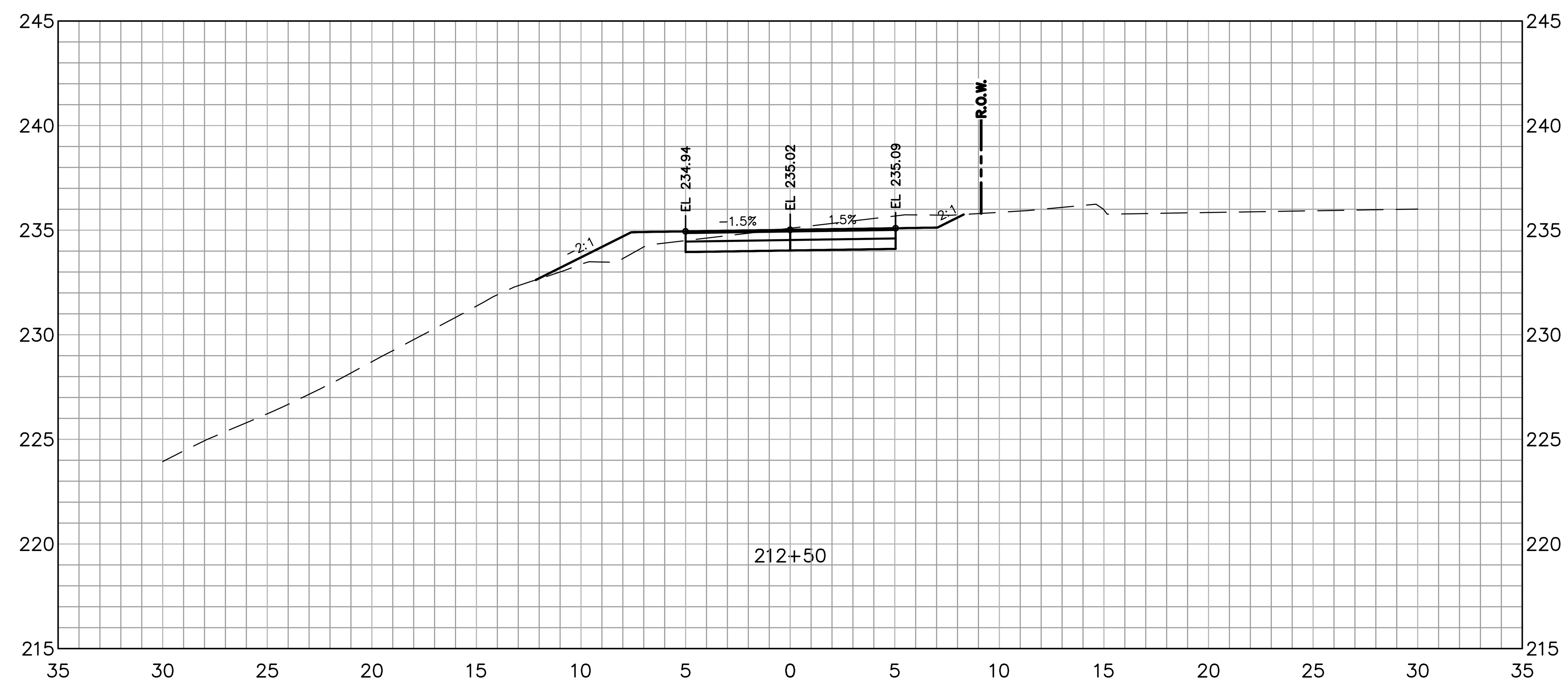

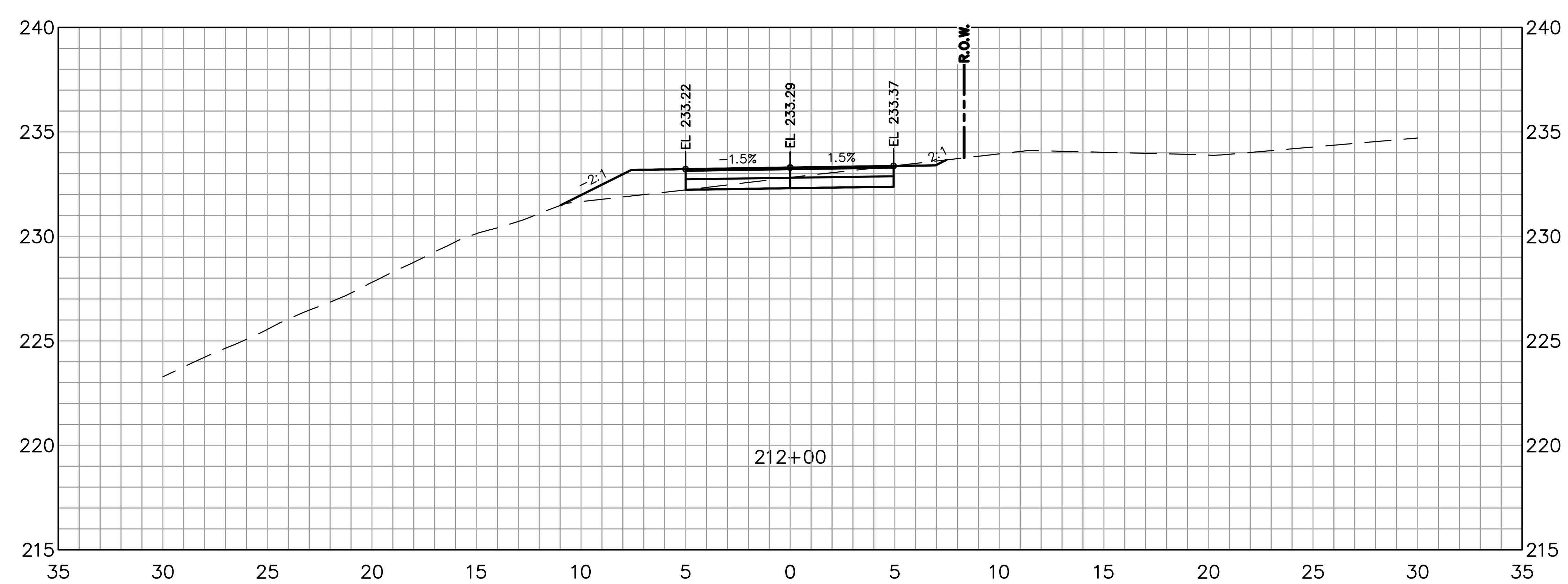

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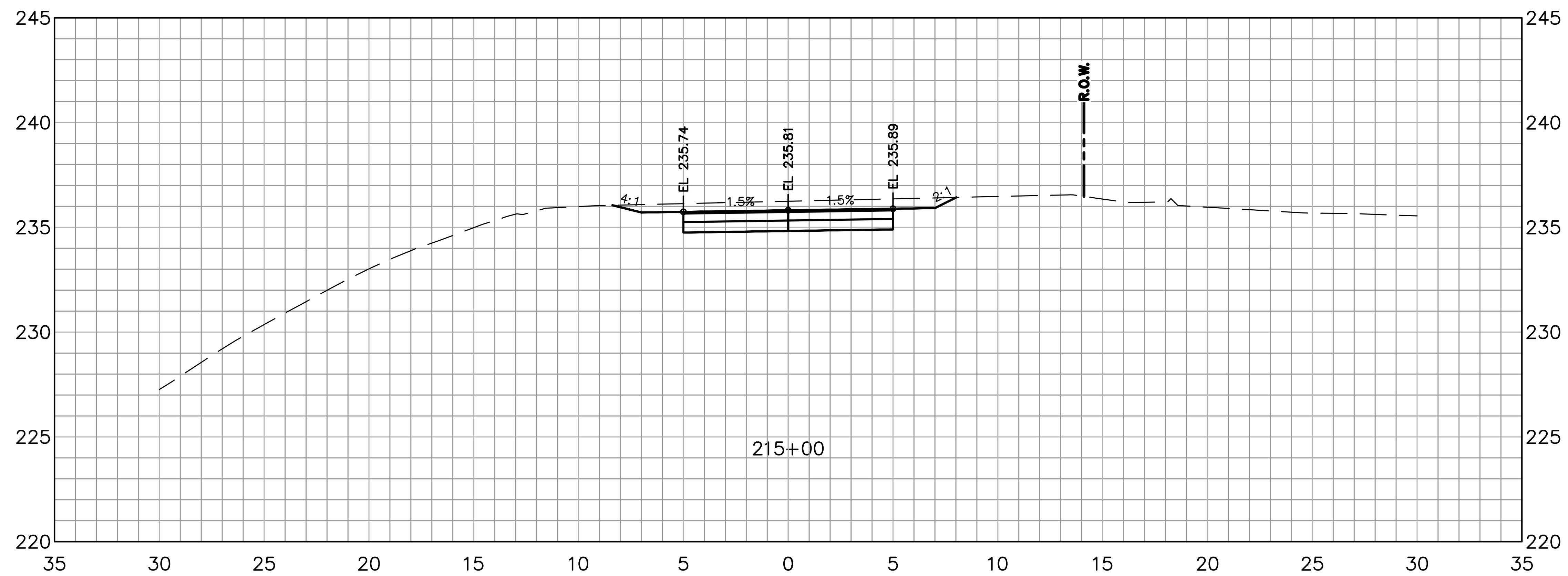

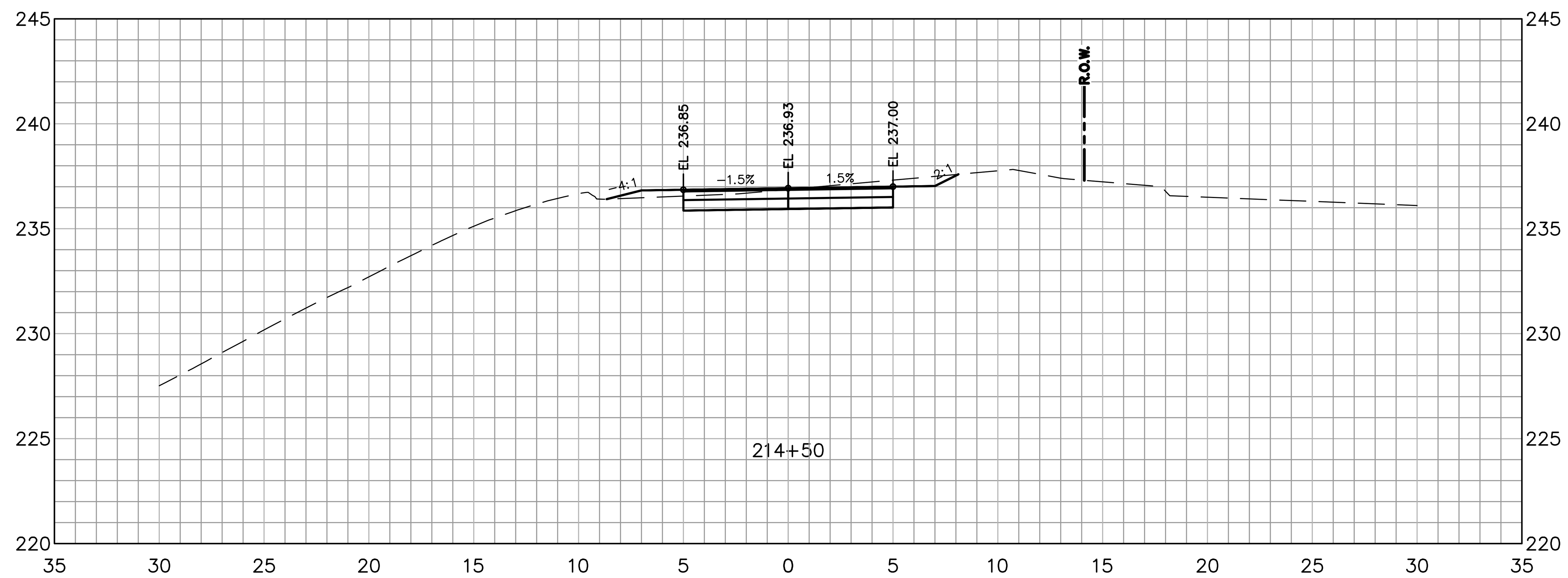

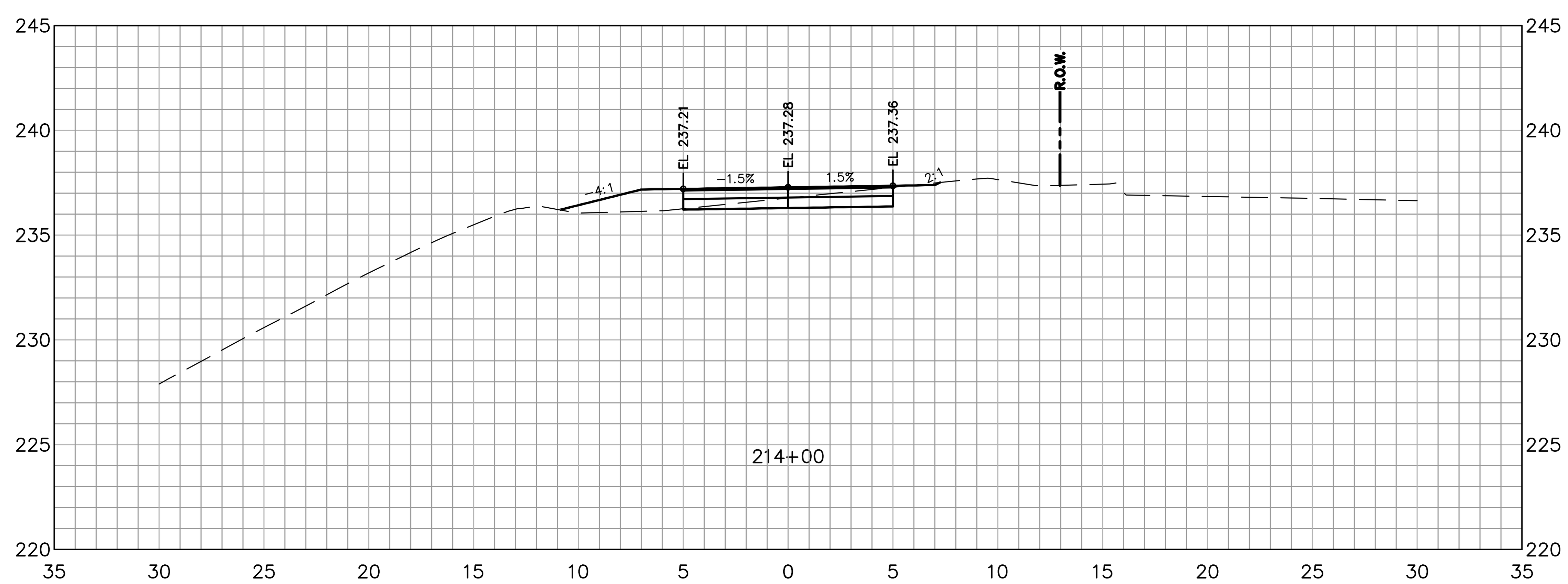

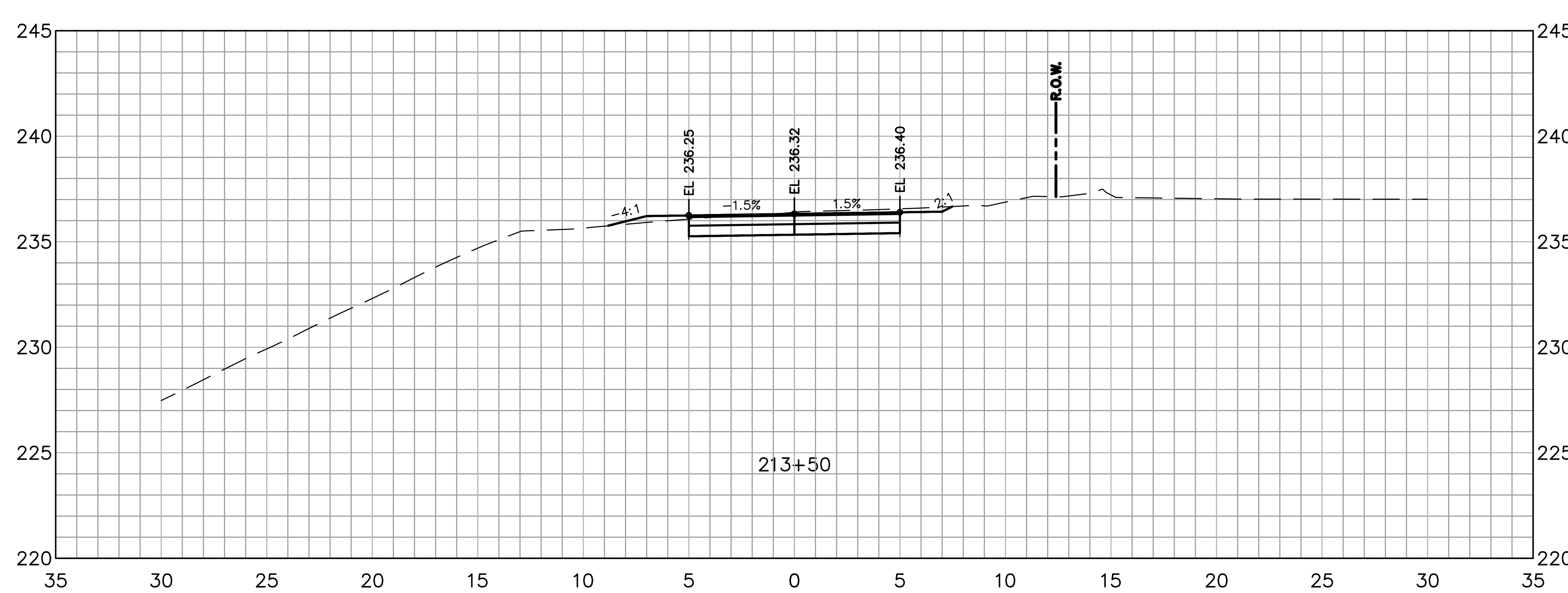

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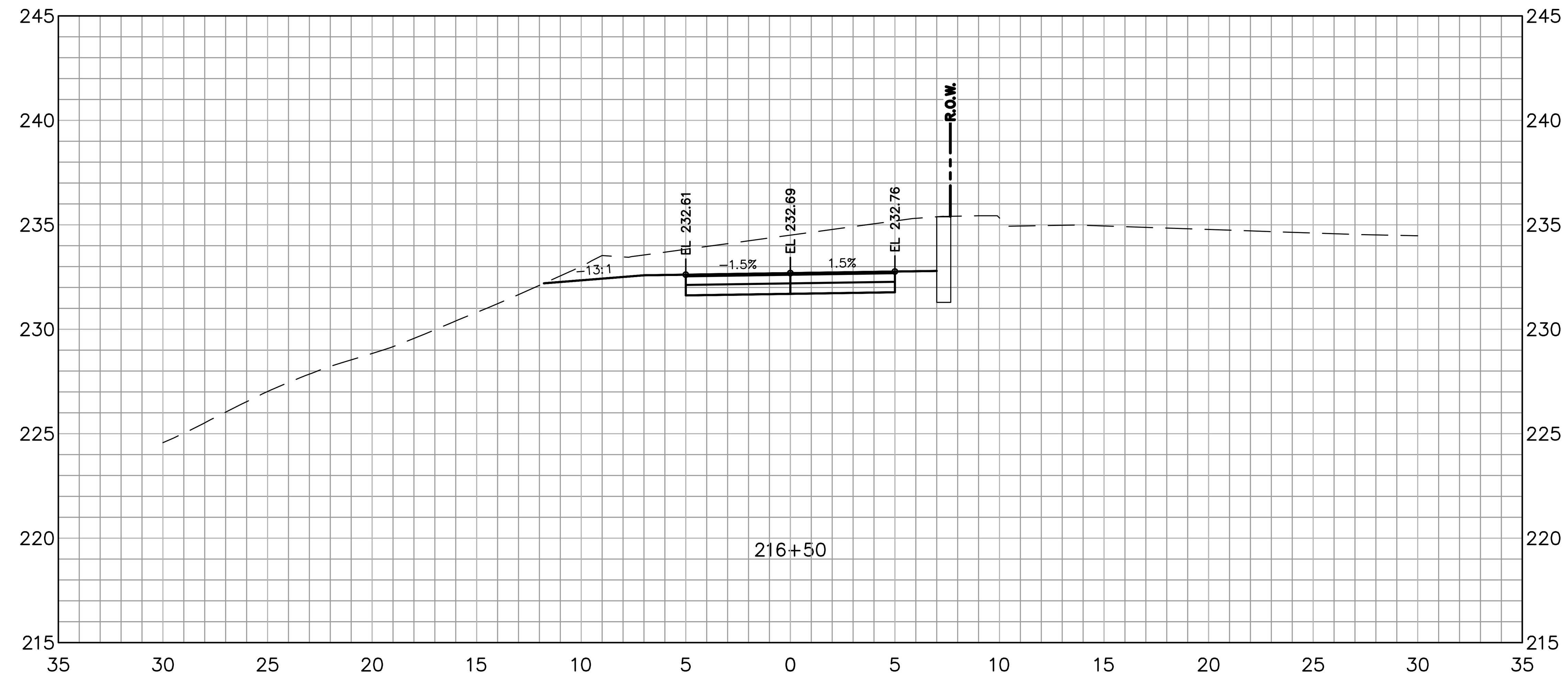

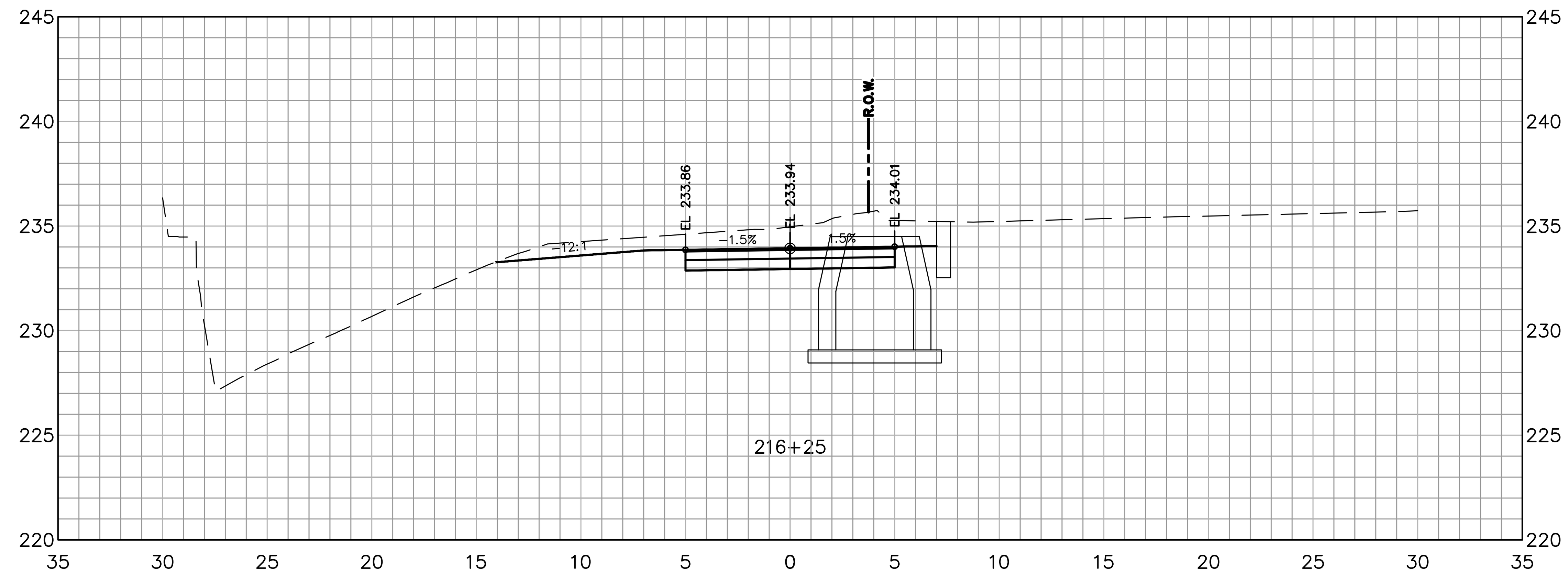

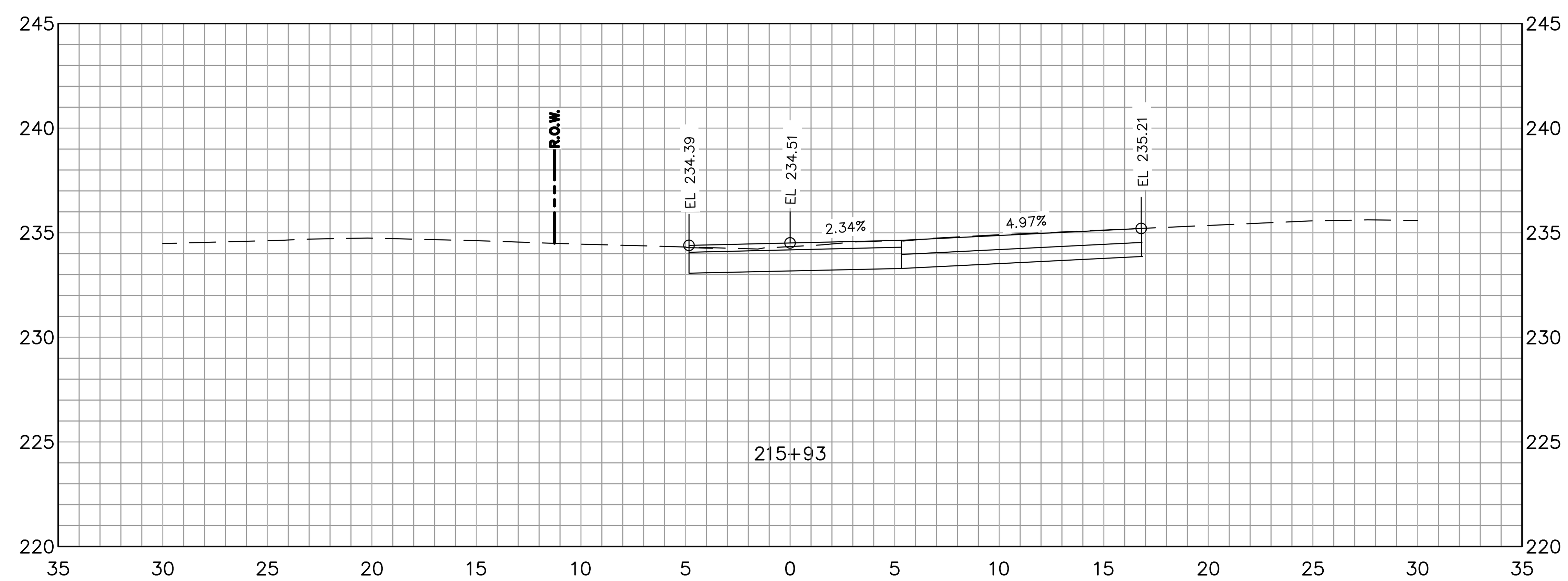

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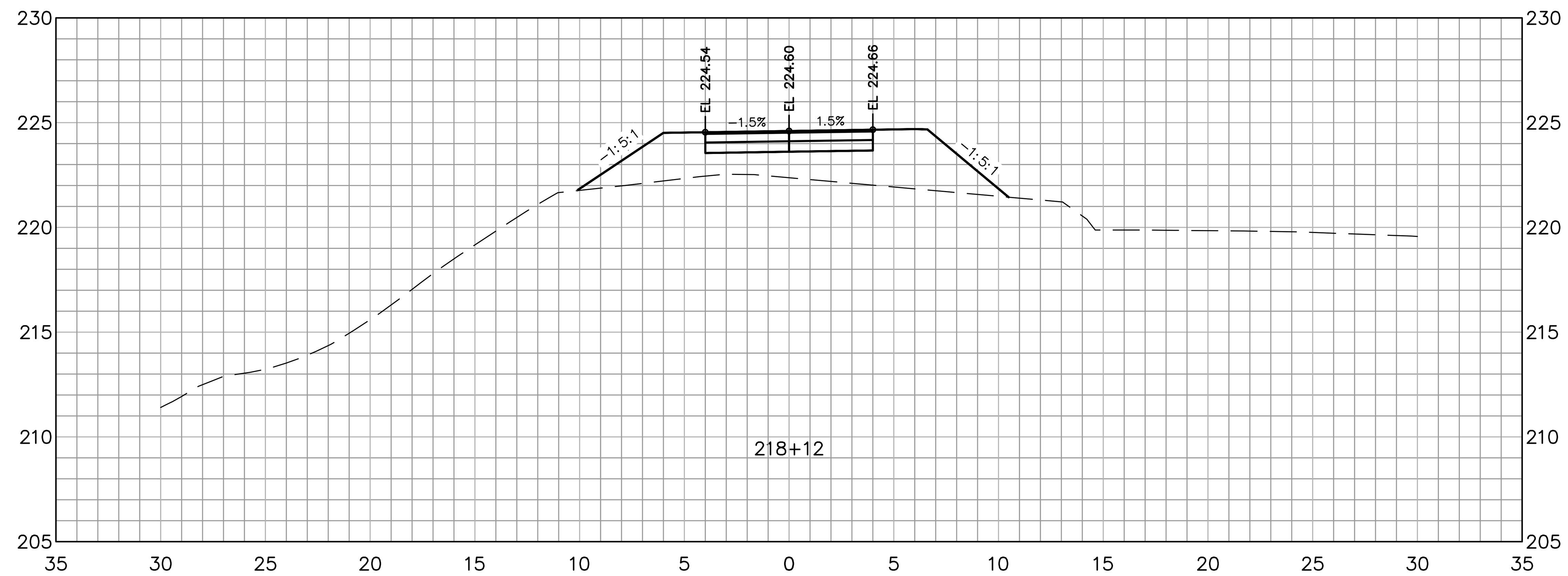

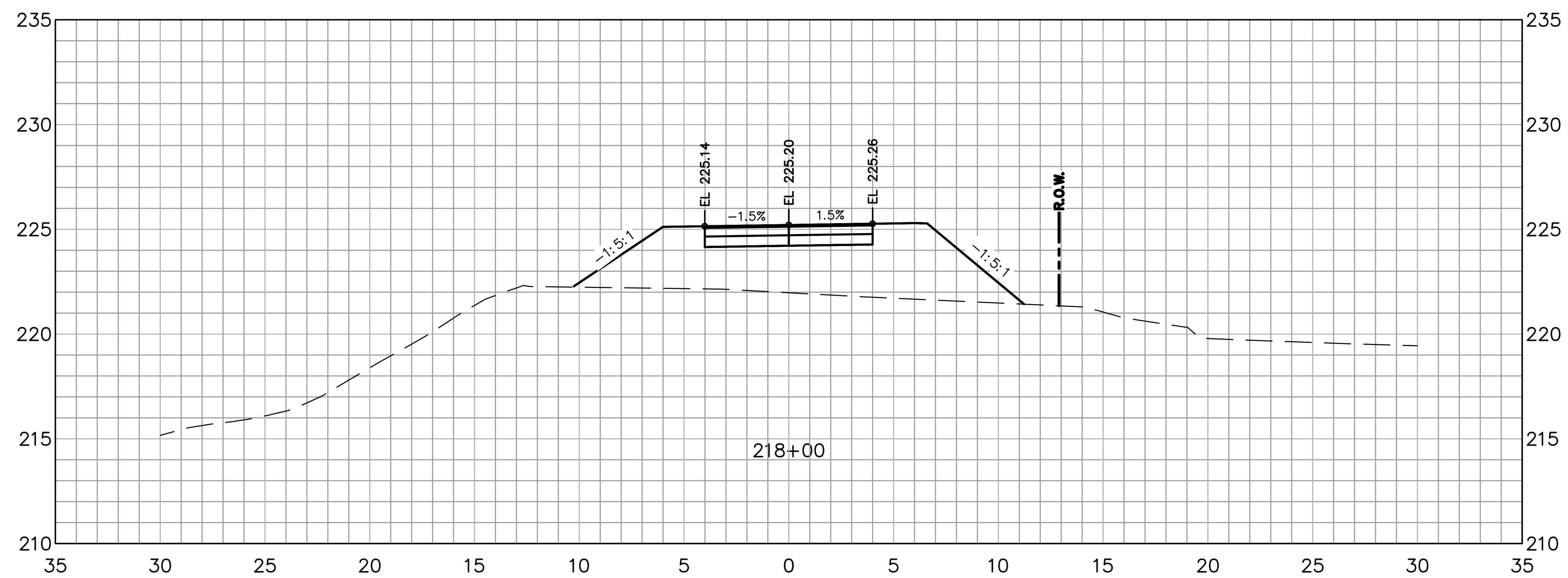

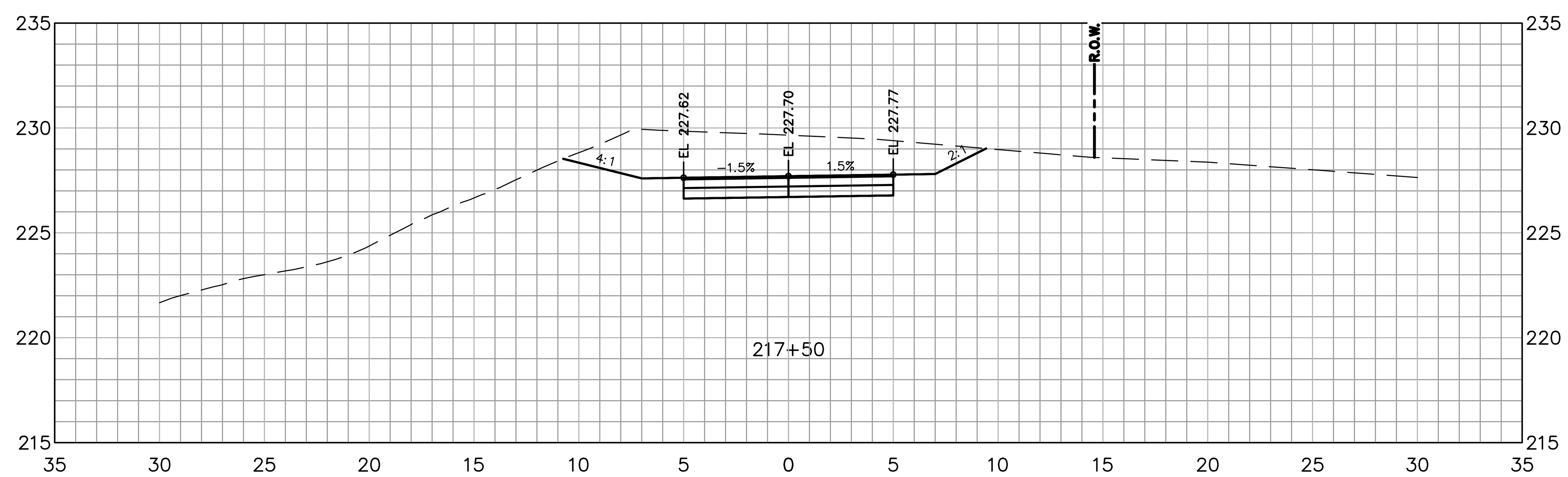

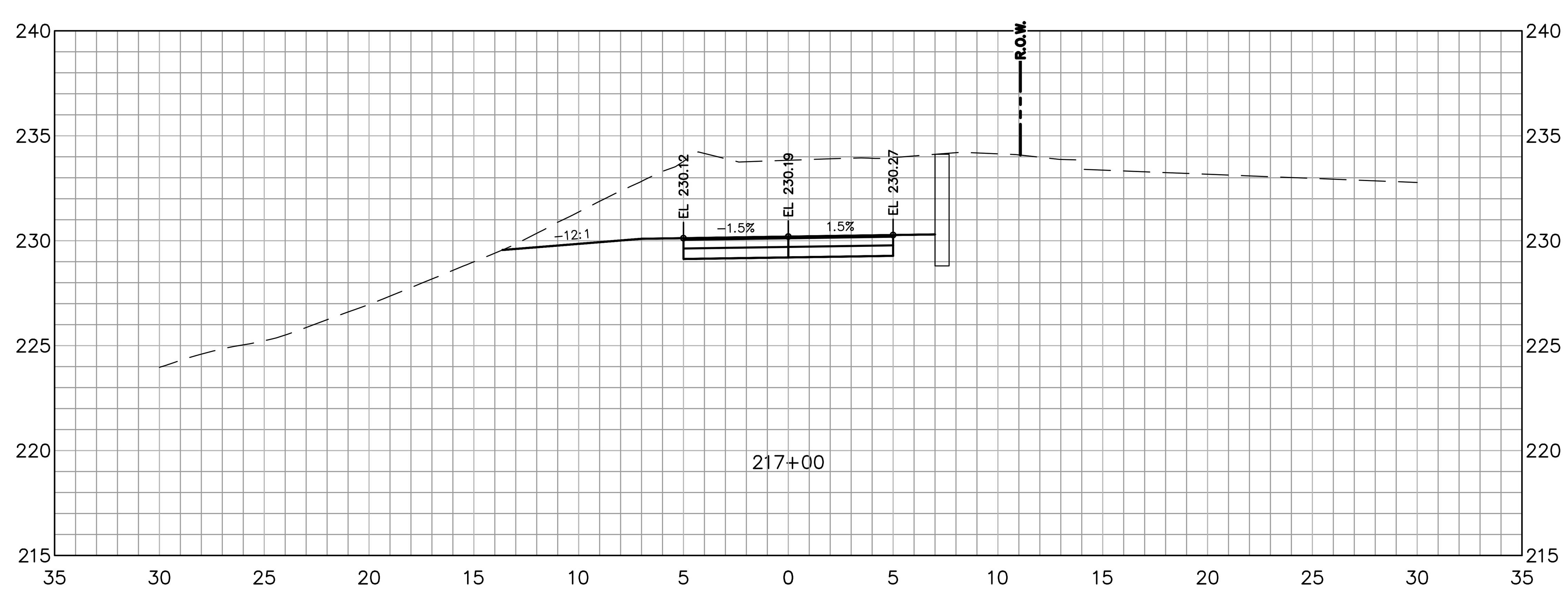

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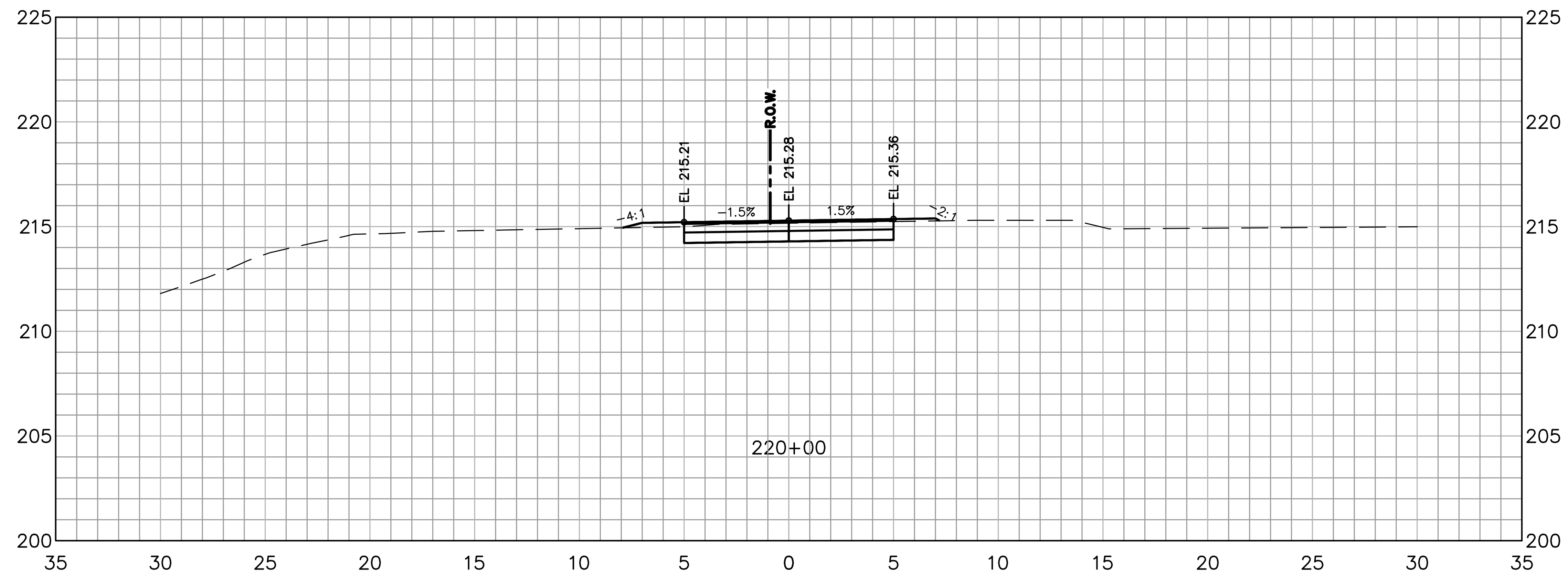

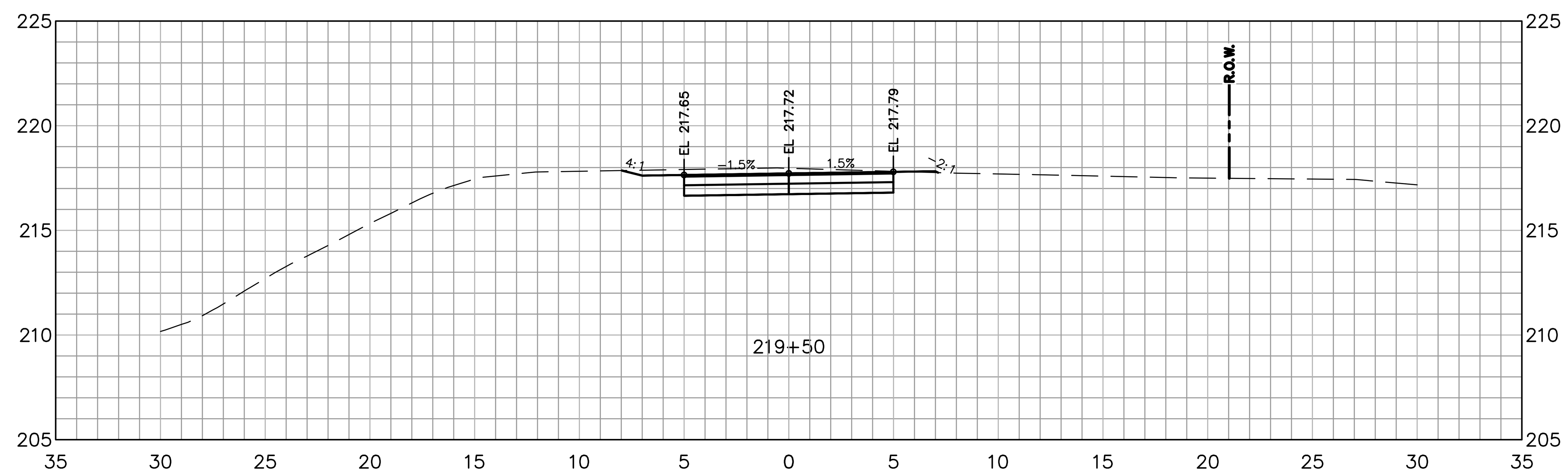

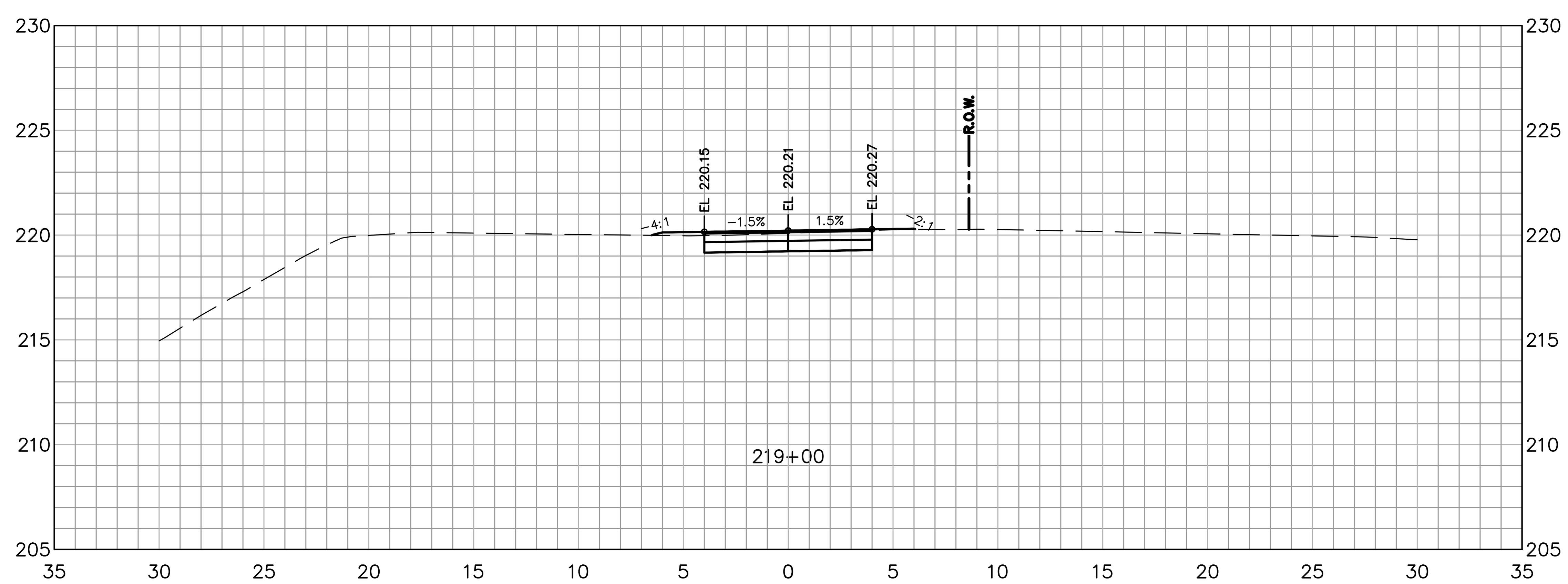

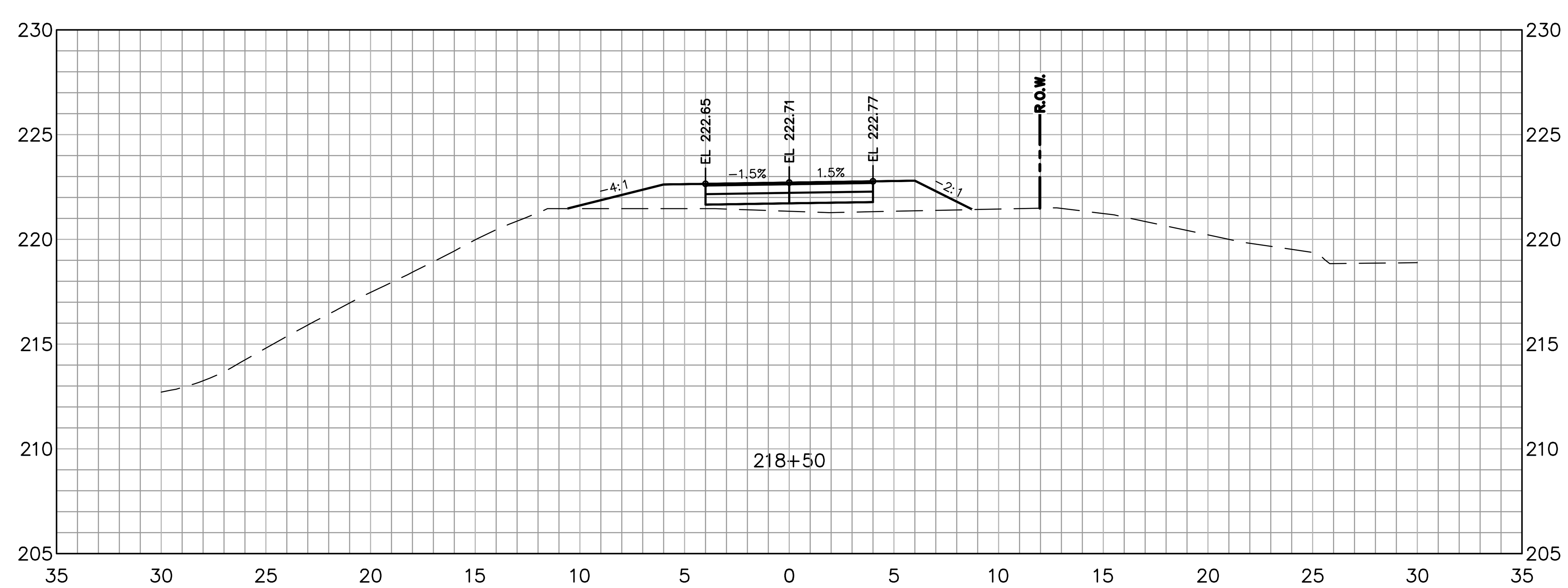

GRAPHIC SCALE
5 2.5 0 5
SCALE IN FEET

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BEELINE TRAIL PHASE 1
State Project No. 88-198
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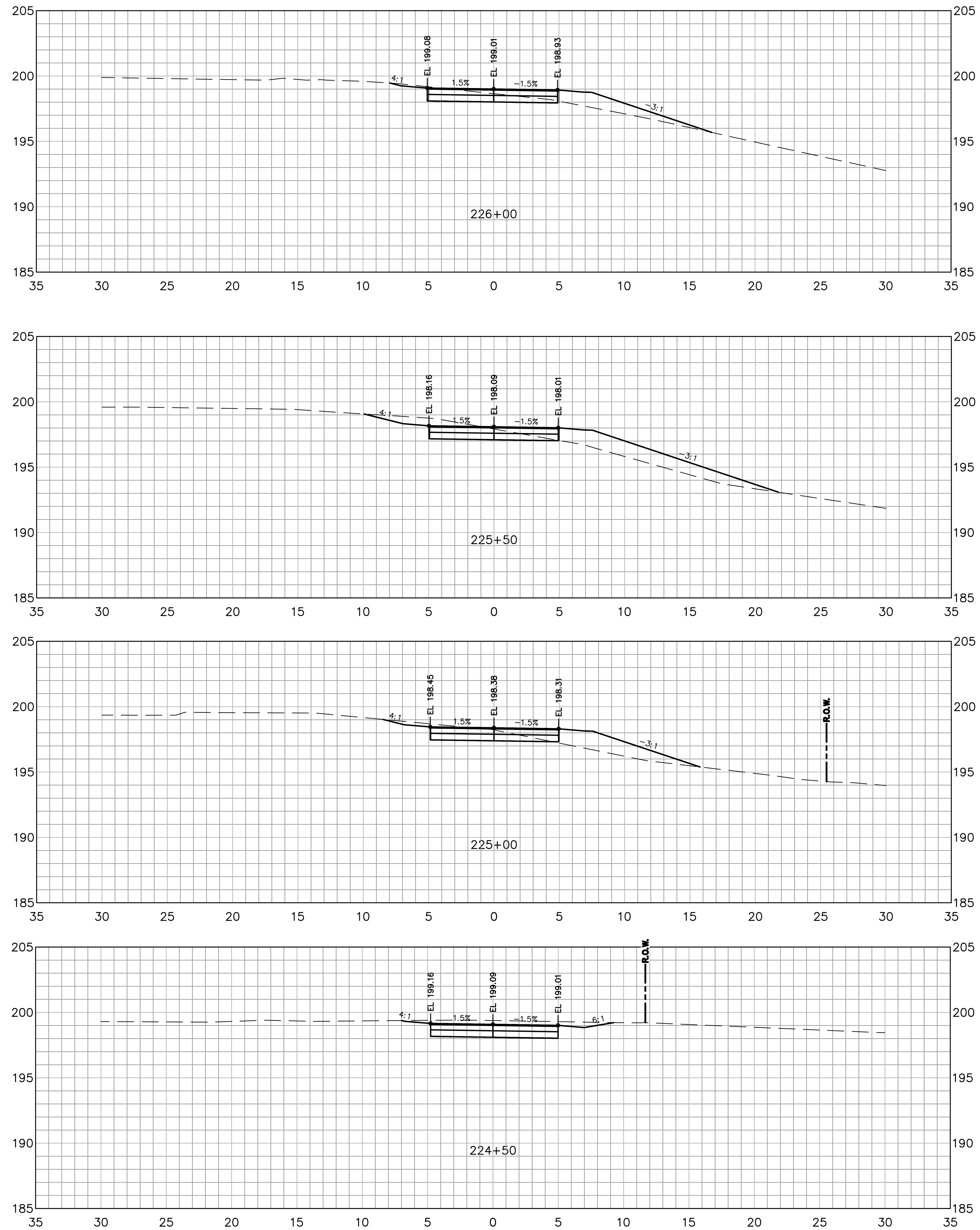
No. Date Desc.

Designed	D.K.N.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=5'
Project No.	2100699
Date	08/09/2024
CAD File:	TXSC210069901

Title
CROSS SECTIONS

Sheet No.
XSC-14



GRAPHIC SCALE

5 2.5 0 5

SCALE IN FEET

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Reviewed	K.P.R.
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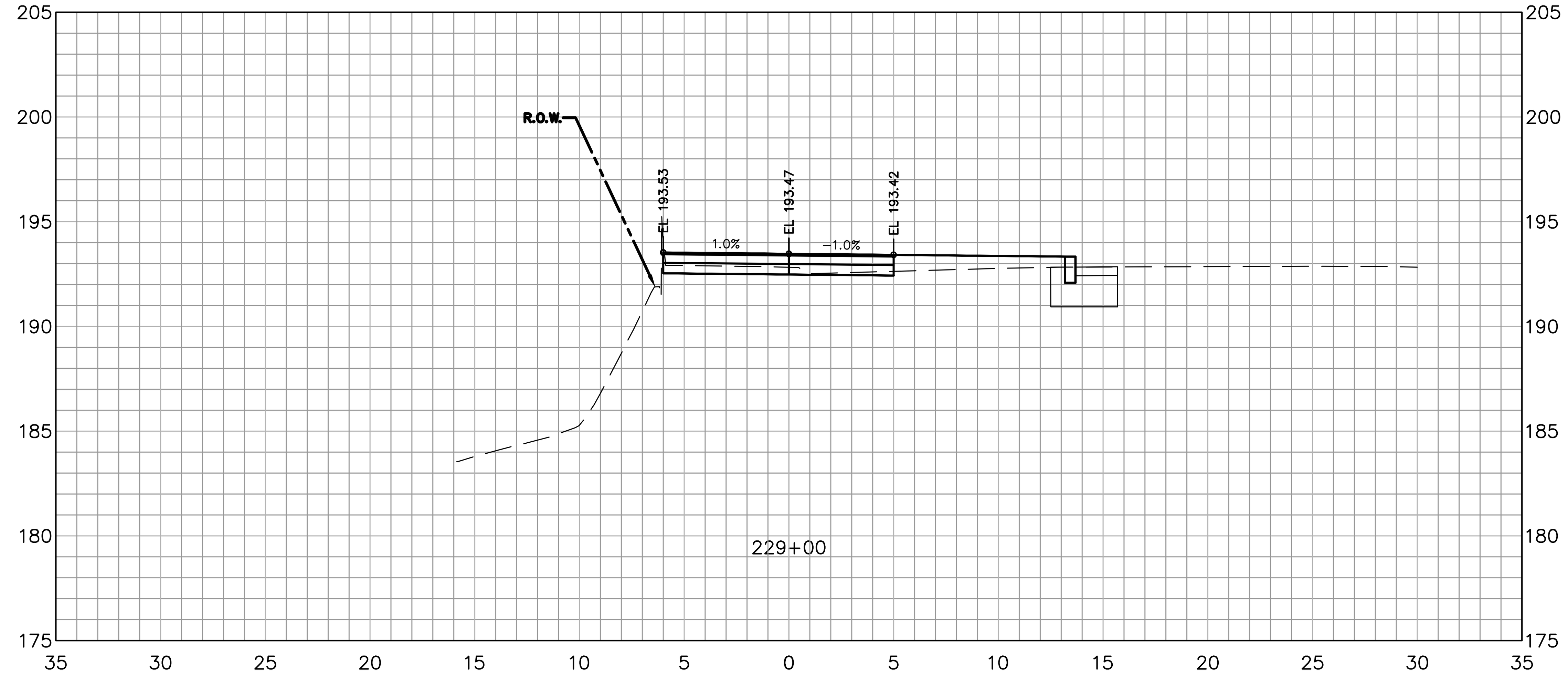
Project No.	2100699
Date	08/09/2024
CAD File: TXSC210069901	

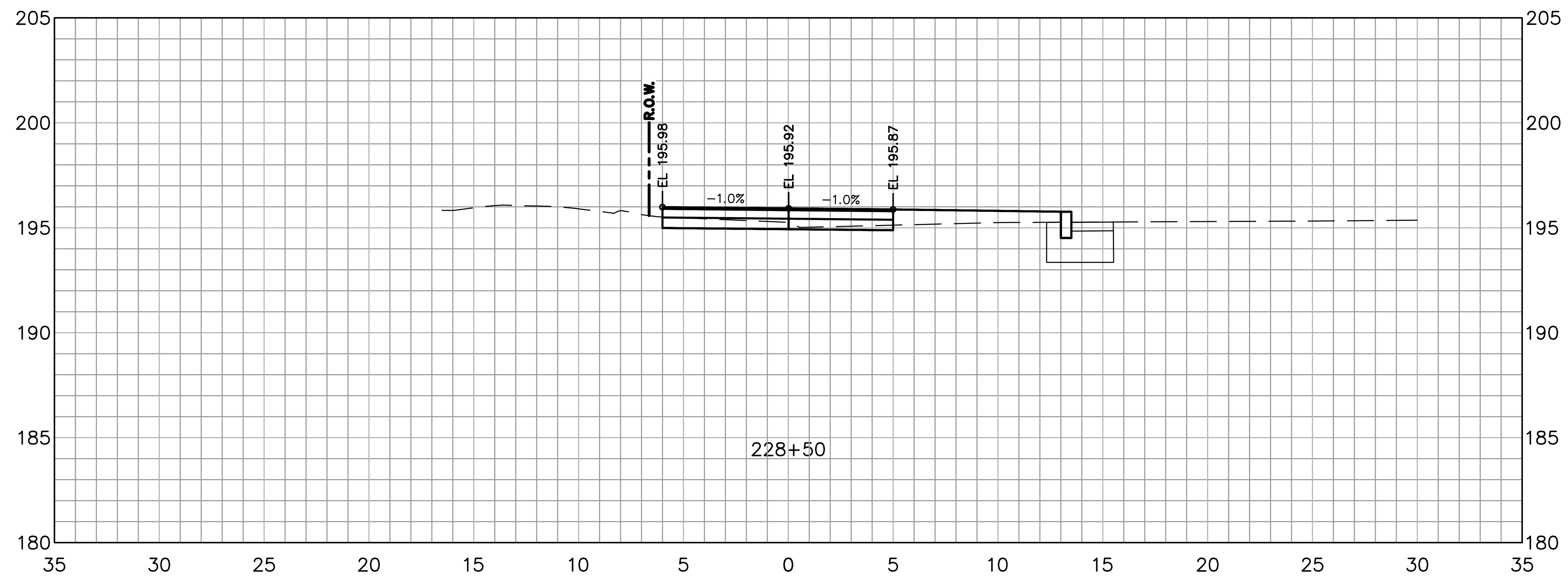
Title

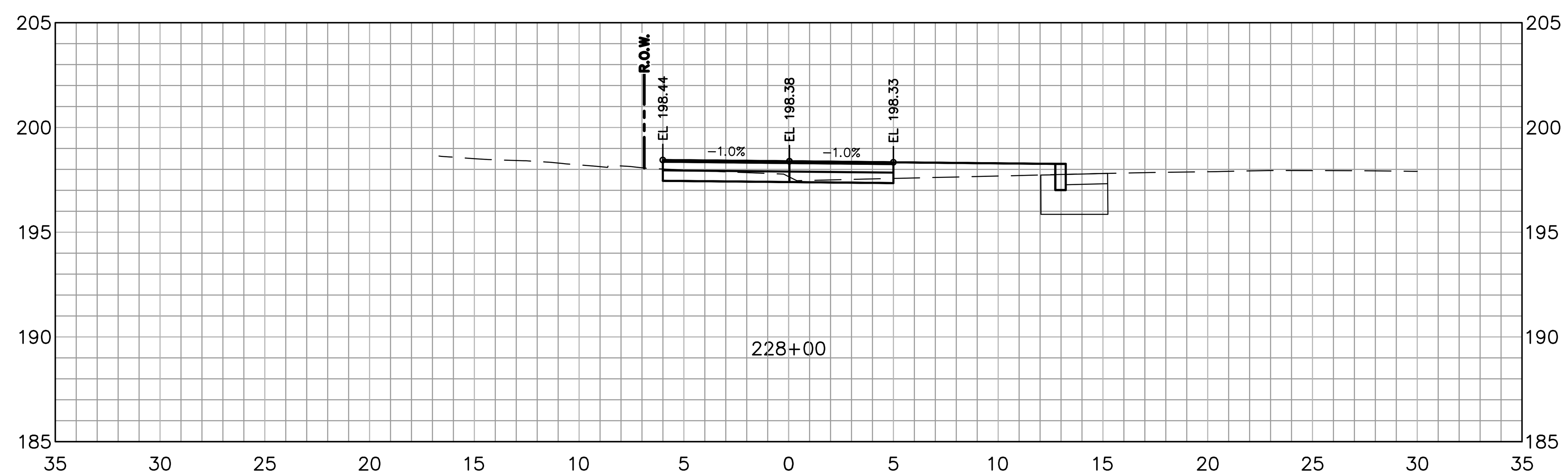
CROSS SECTIONS

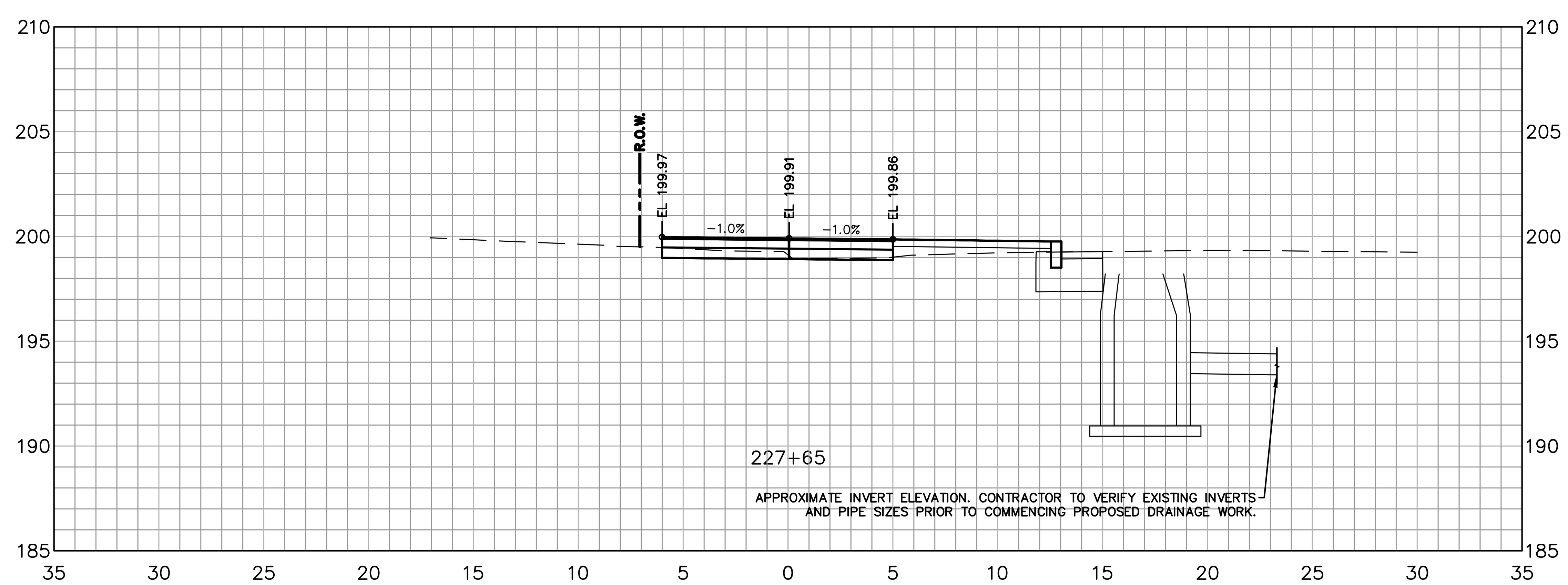
Sheet No.

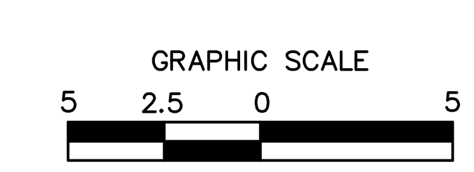
XSC-15











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Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=5'
Project No.	2100699
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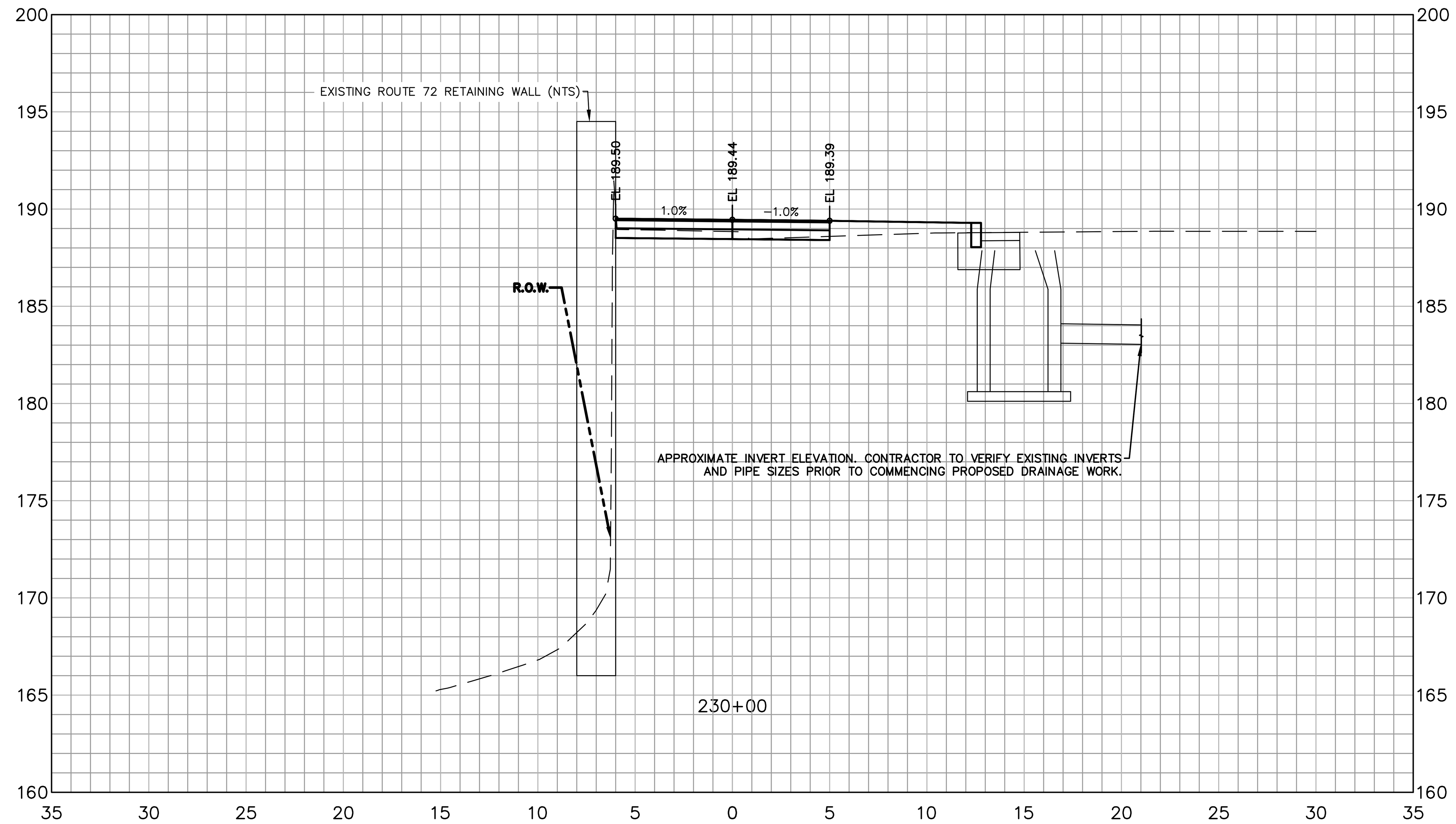
CAD File: TXSC210069901	

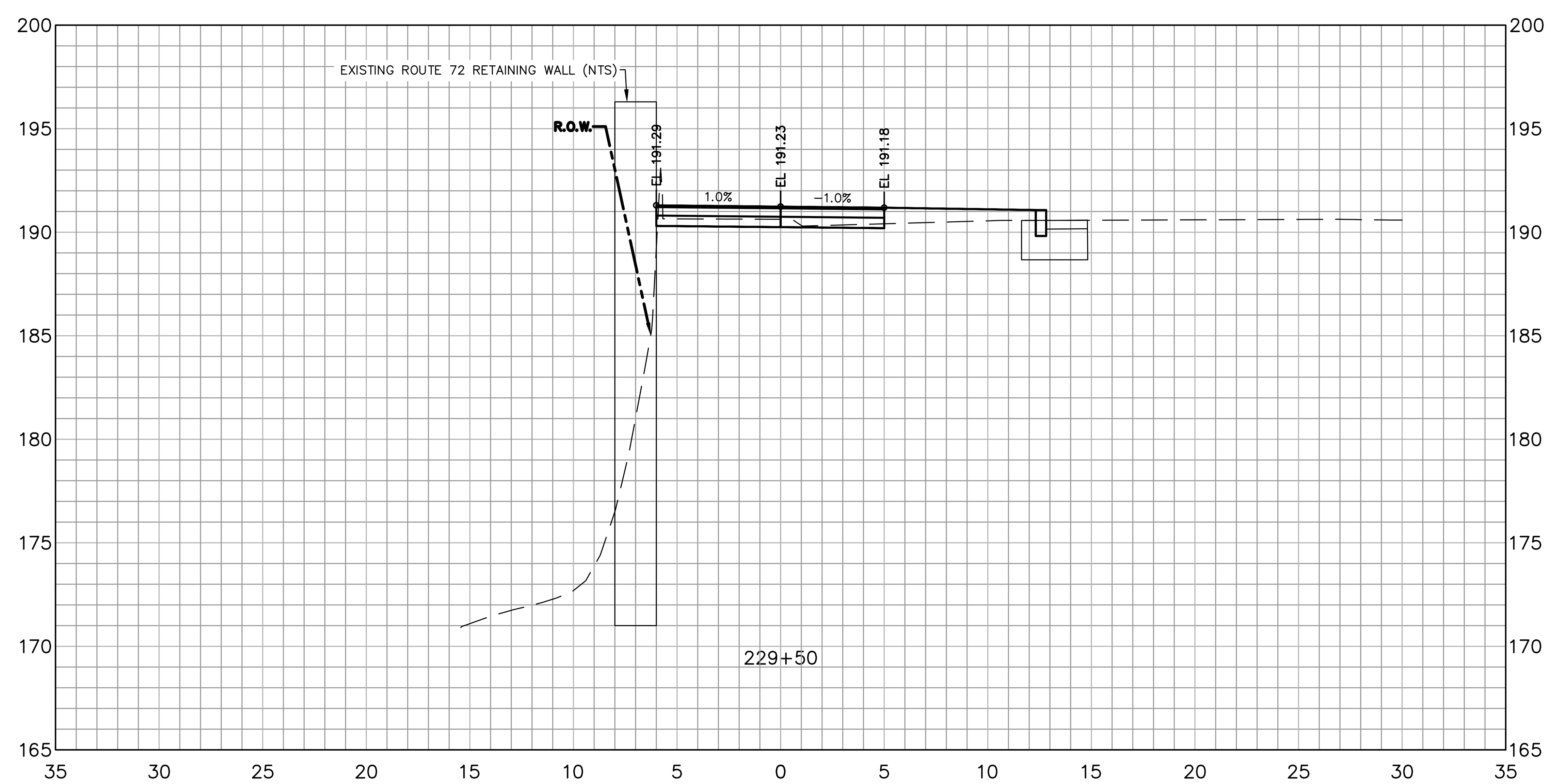
Title

CROSS SECTIONS

Sheet No.

XSC-16





GRAPHIC SCALE
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SCALE IN FEET

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No. Date Desc.

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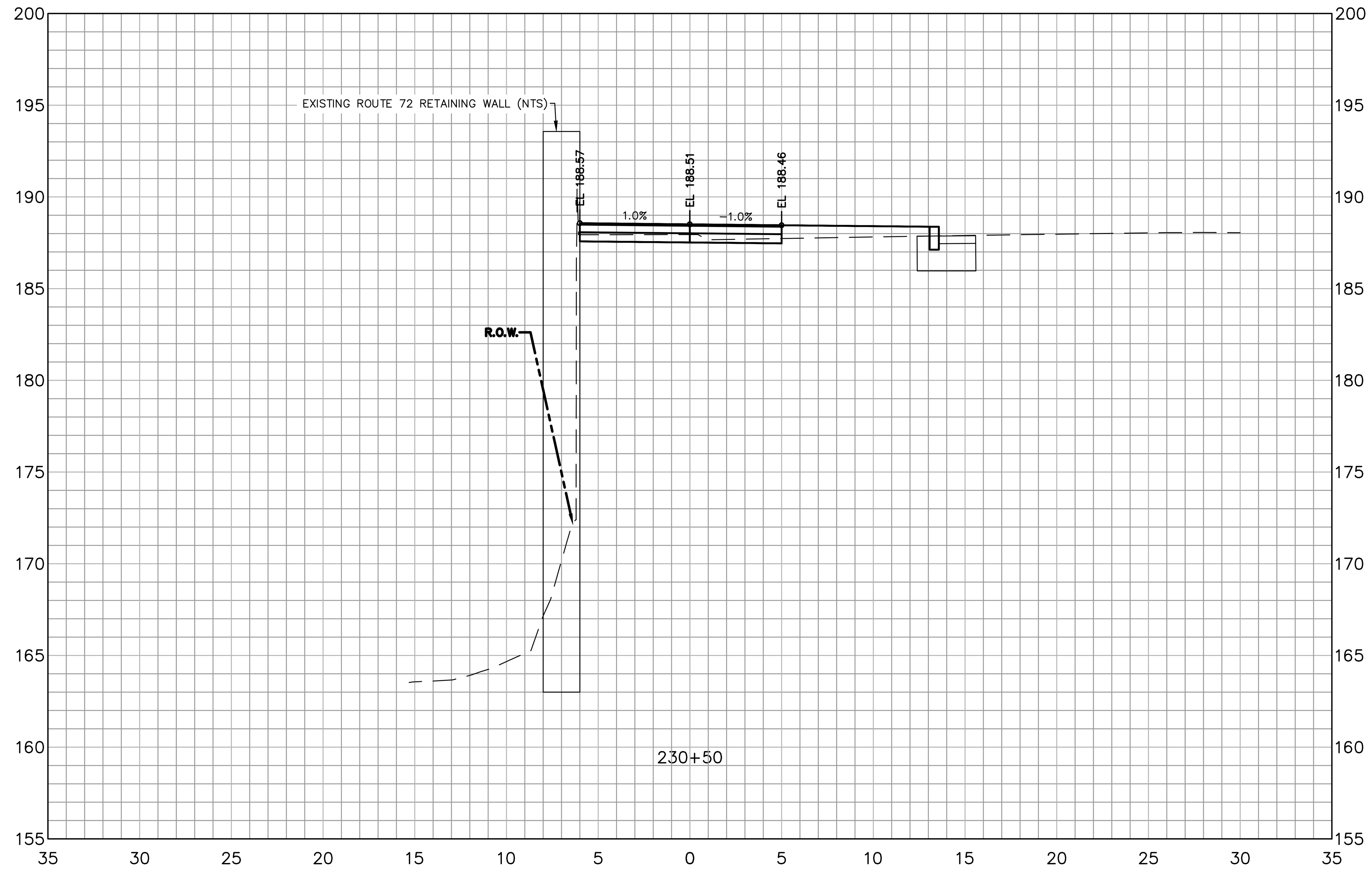
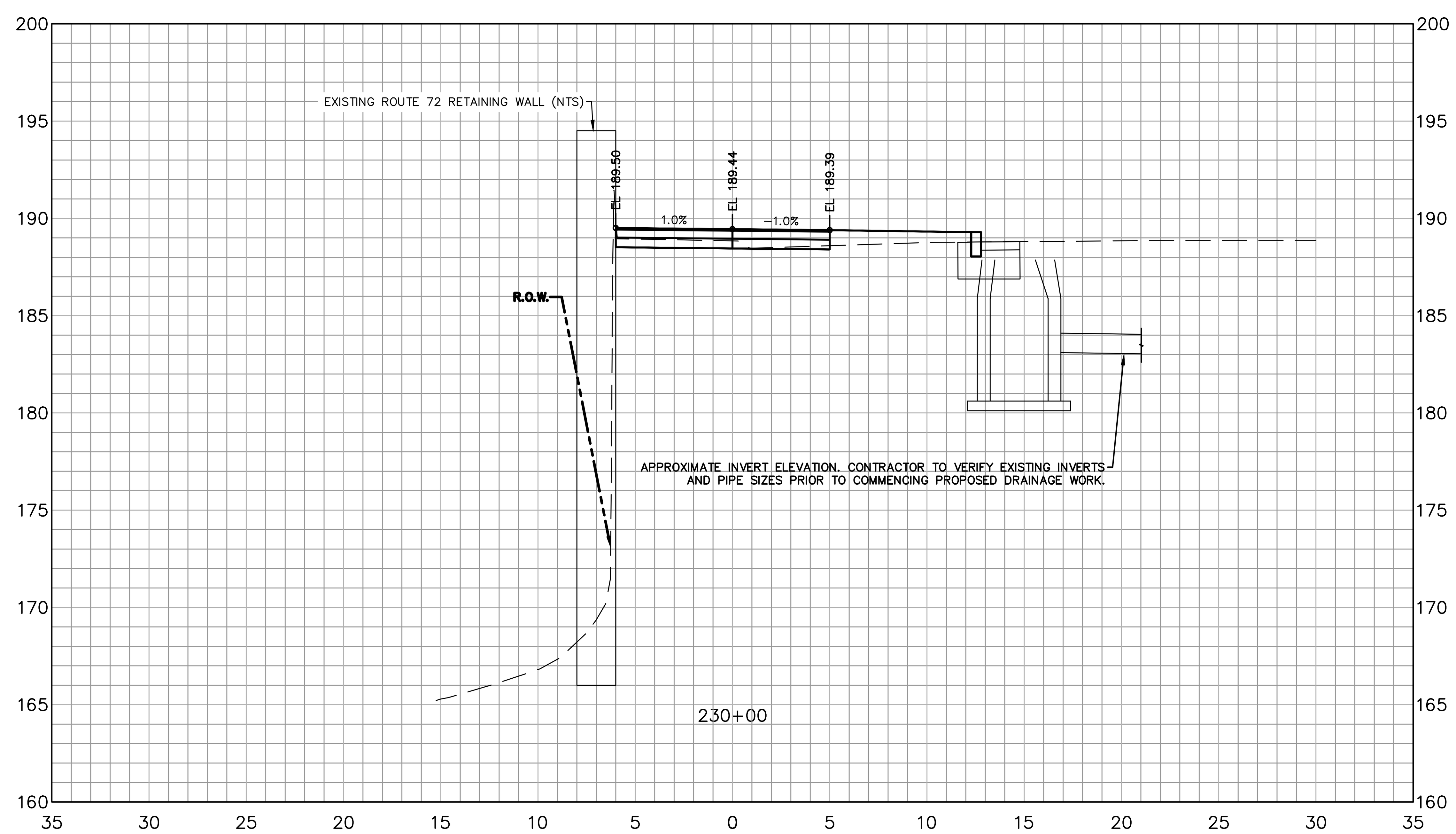
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=5'
Project No.	2100699
Date	08/09/2024
CAD File: TXSC210069901	

Title
CROSS SECTIONS

Sheet No.
XSC-17





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No. Date Desc.

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Drawn	S.E.P.
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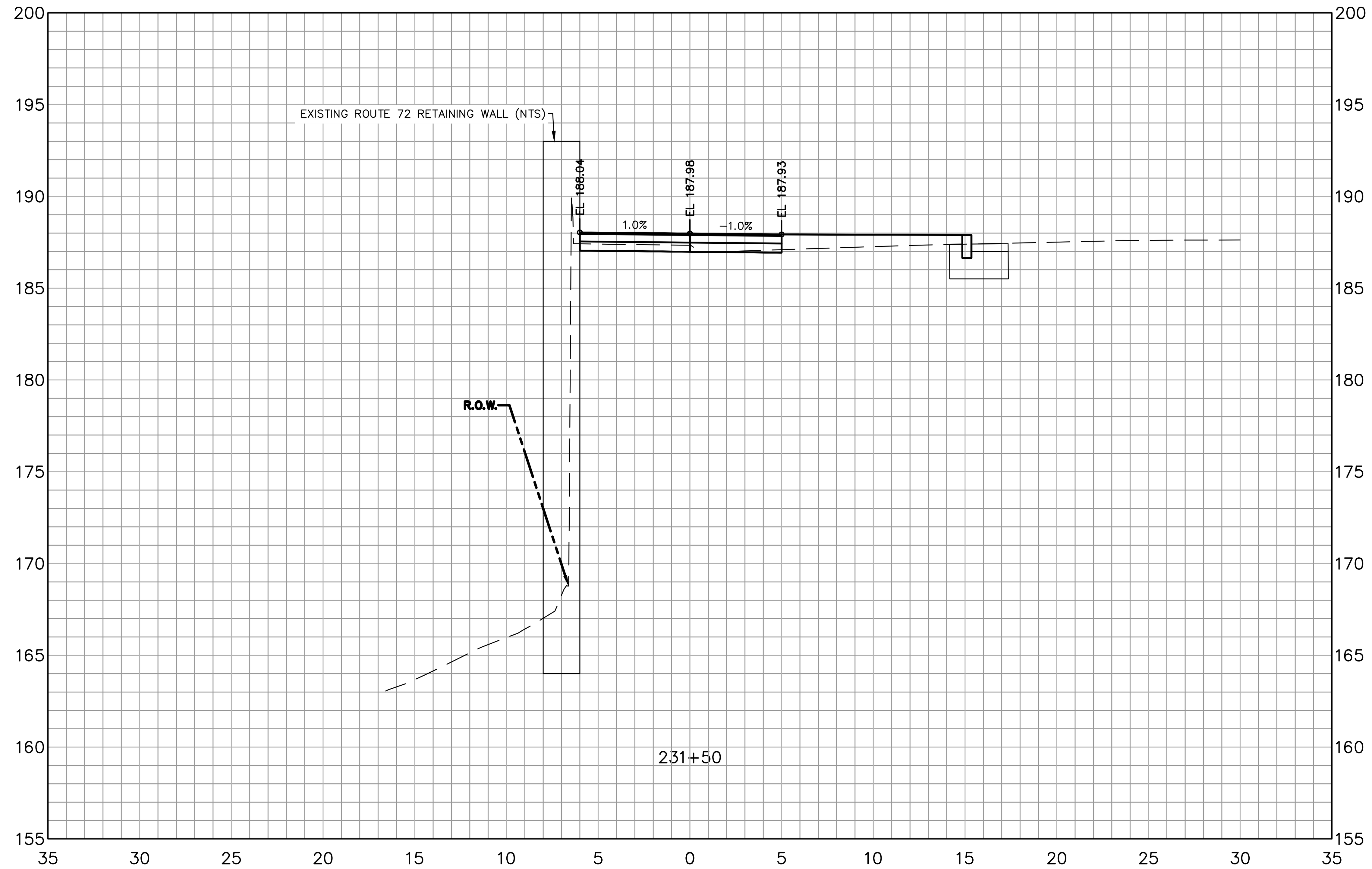
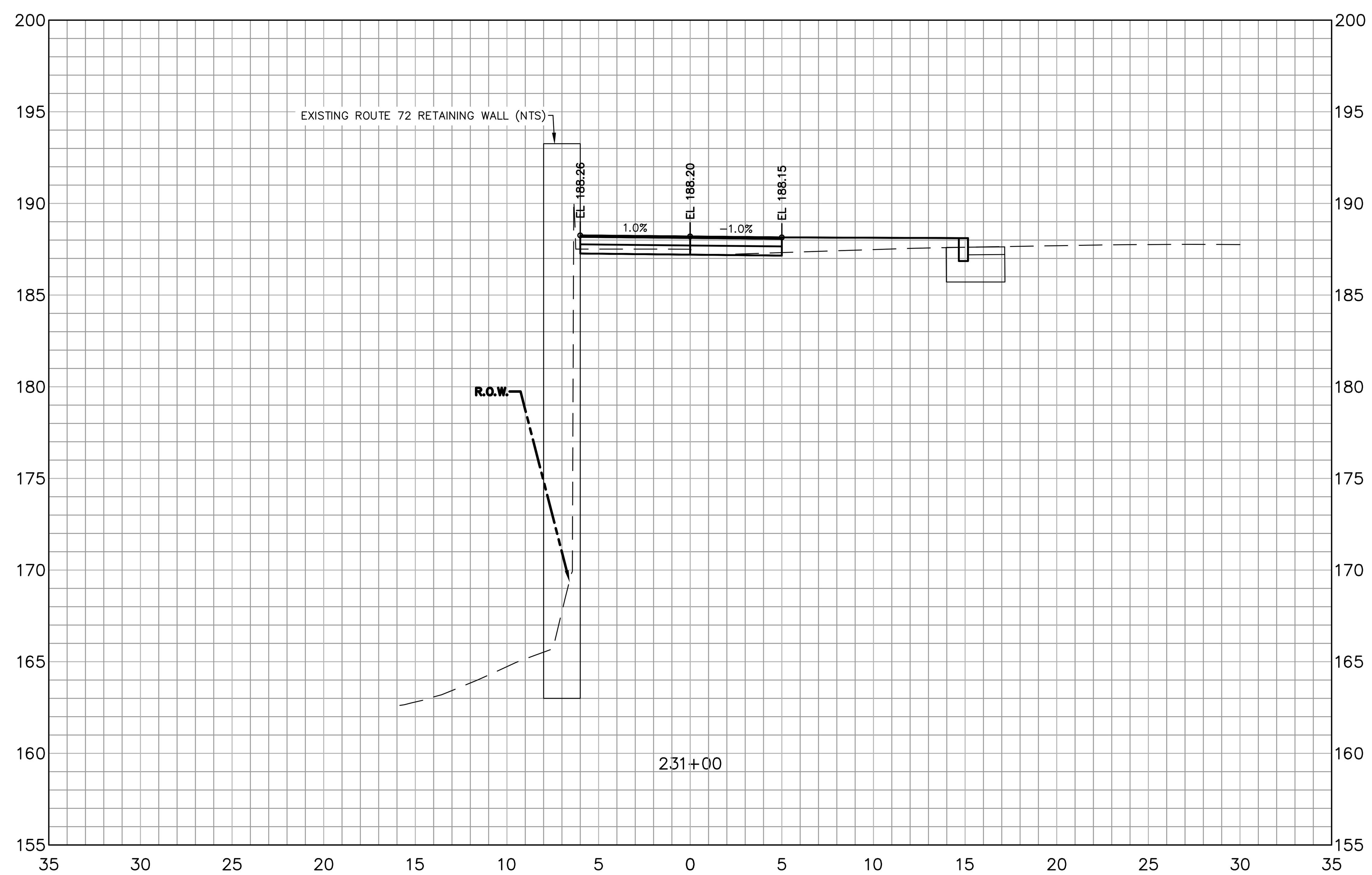
Scale	1"=5'
Project No.	2100699
Date	08/09/2024
CAD File:	TXSC210069901

Title
CROSS SECTIONS

Sheet No.
XSC-18





GRAPHIC SCALE
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No. Date Desc.

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Scale	1"=5'
Project No.	2100699
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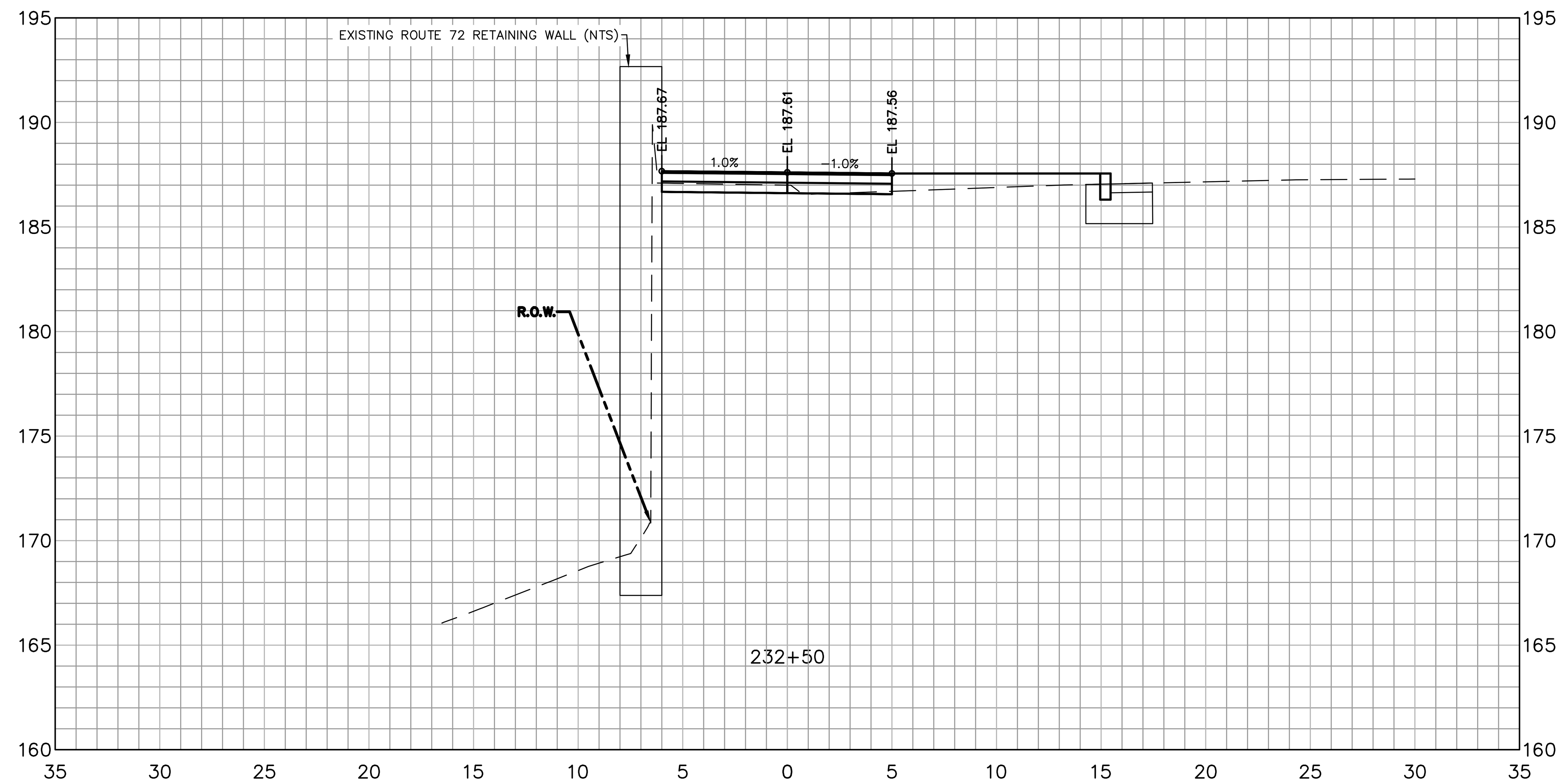
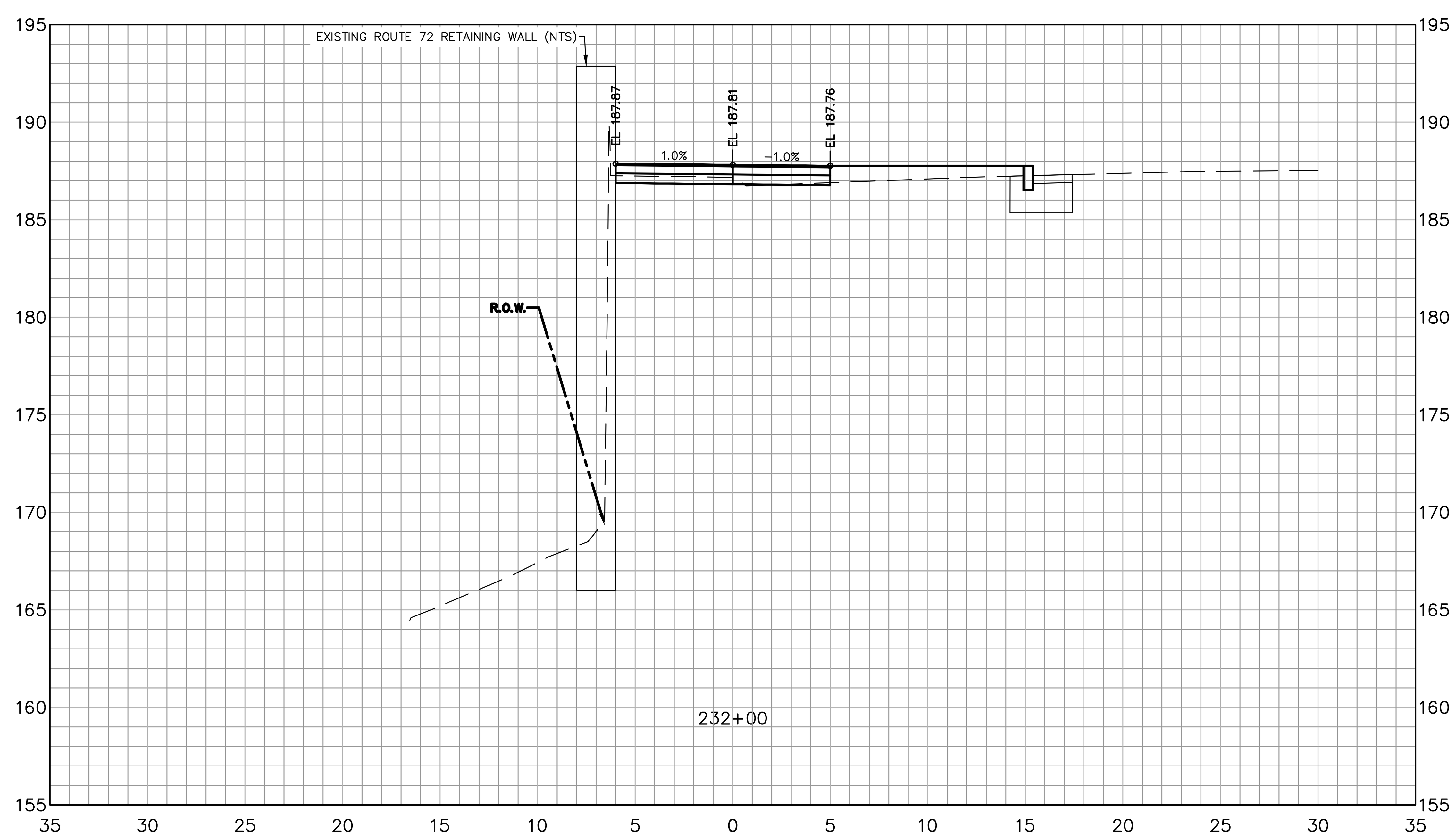
CAD File:	TXSC210069901

Title
CROSS SECTIONS

Sheet No.
XSC-19





GRAPHIC SCALE
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SCALE IN FEET

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Project No.	2100699
Date	08/09/2024
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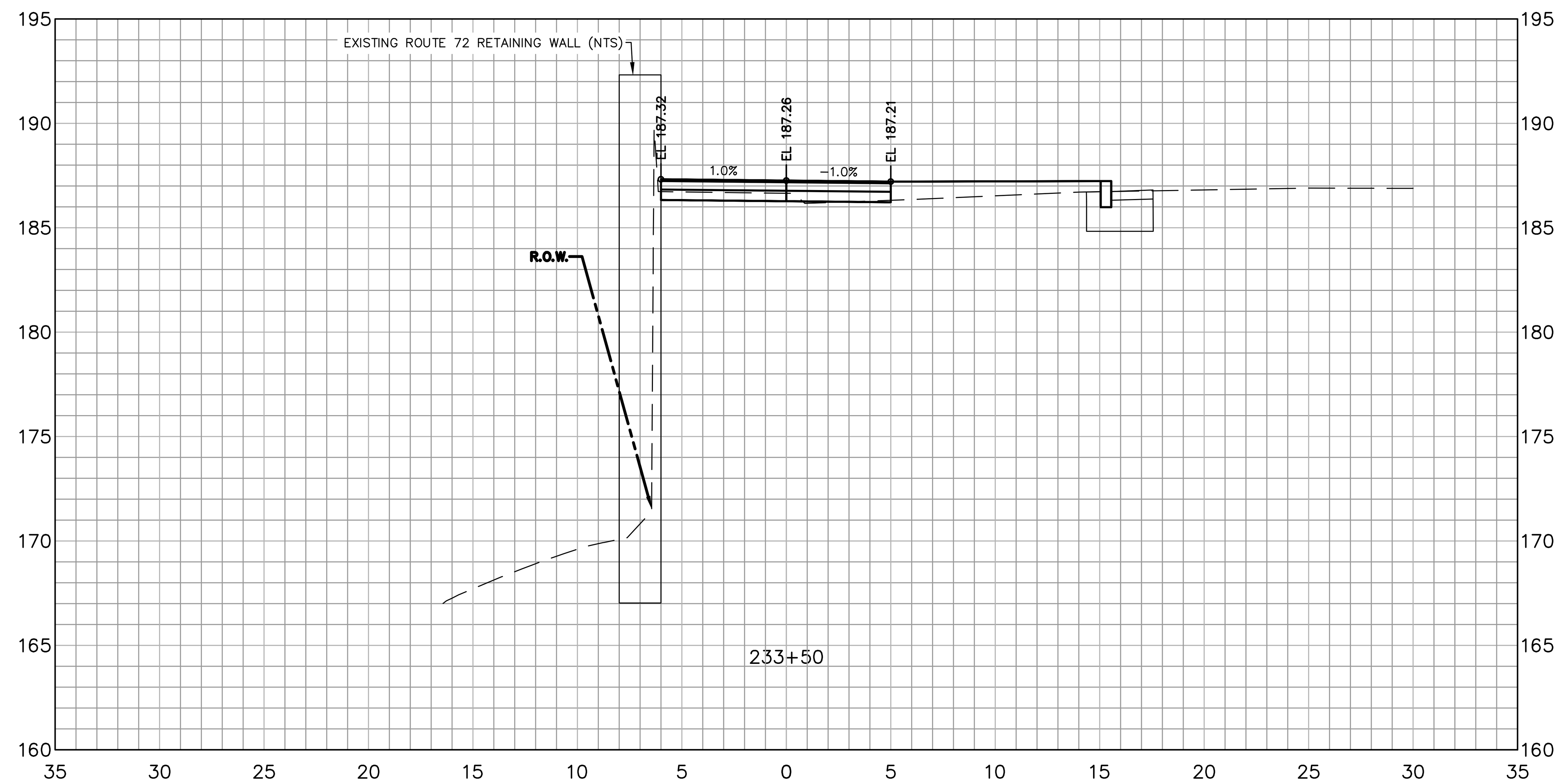
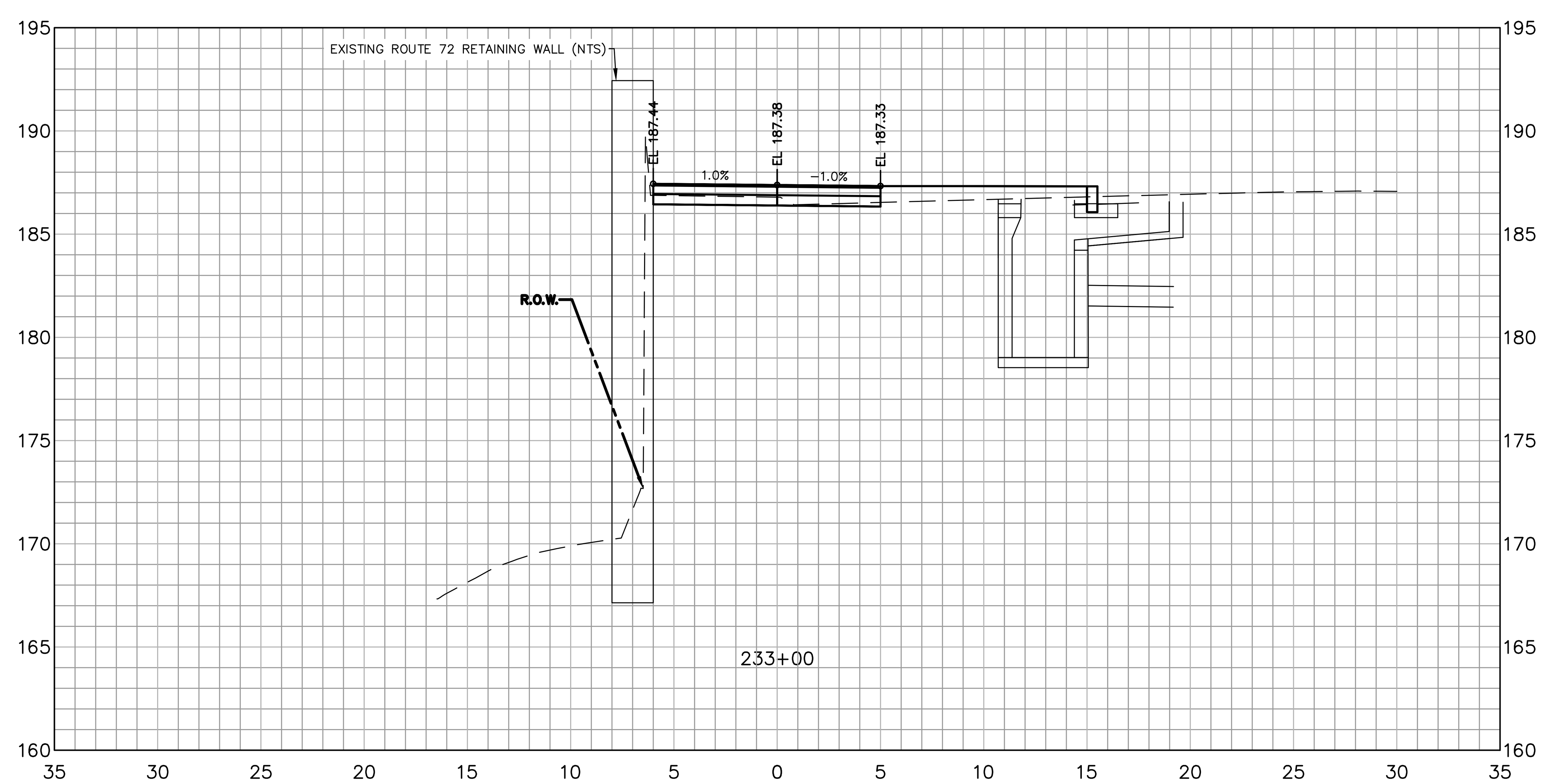
Title
CROSS SECTIONS

Sheet No.
XSC-20





GRAPHIC SCALE
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Project No.	2100699
Date	08/09/2024

CAD File:
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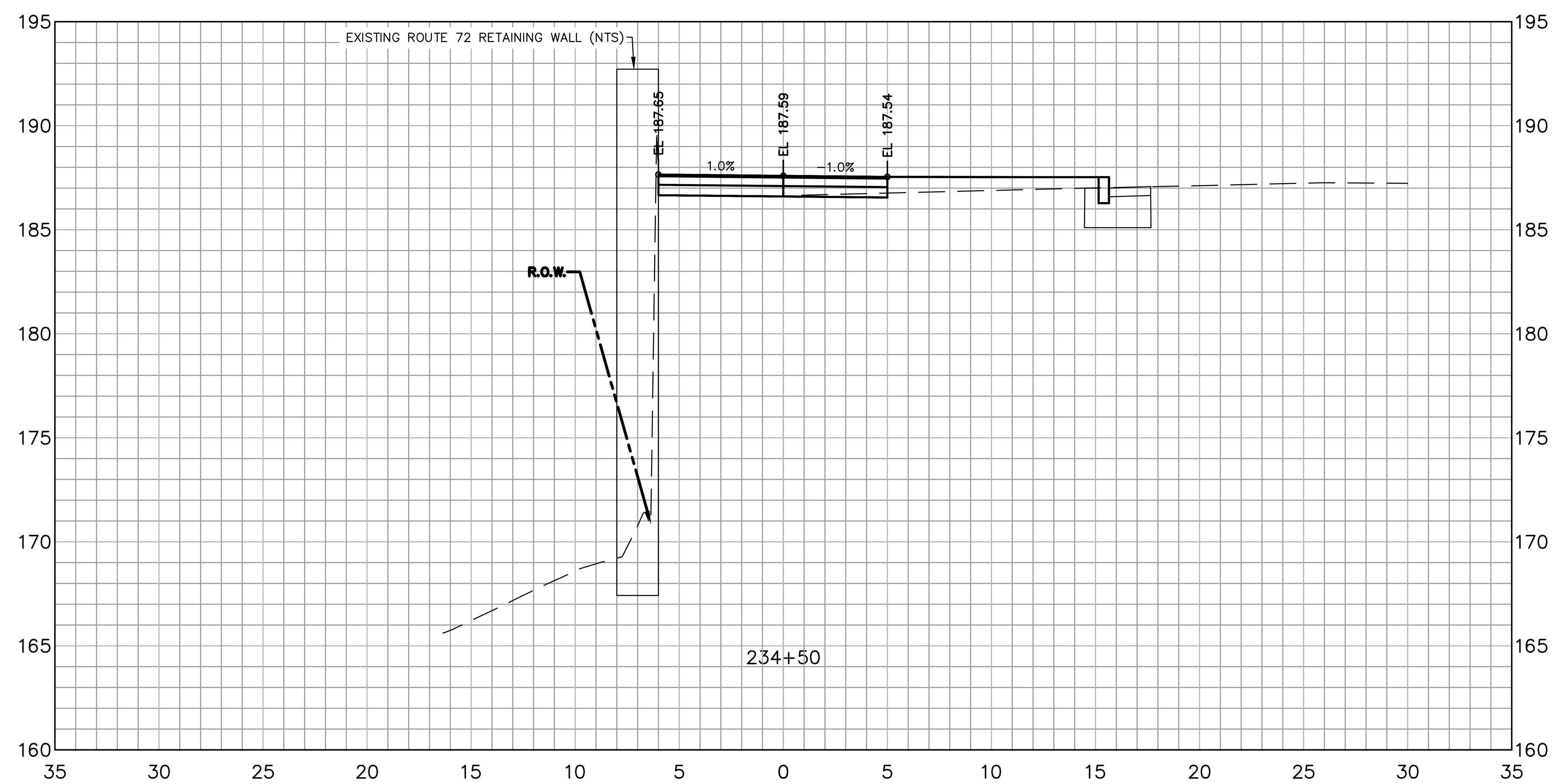
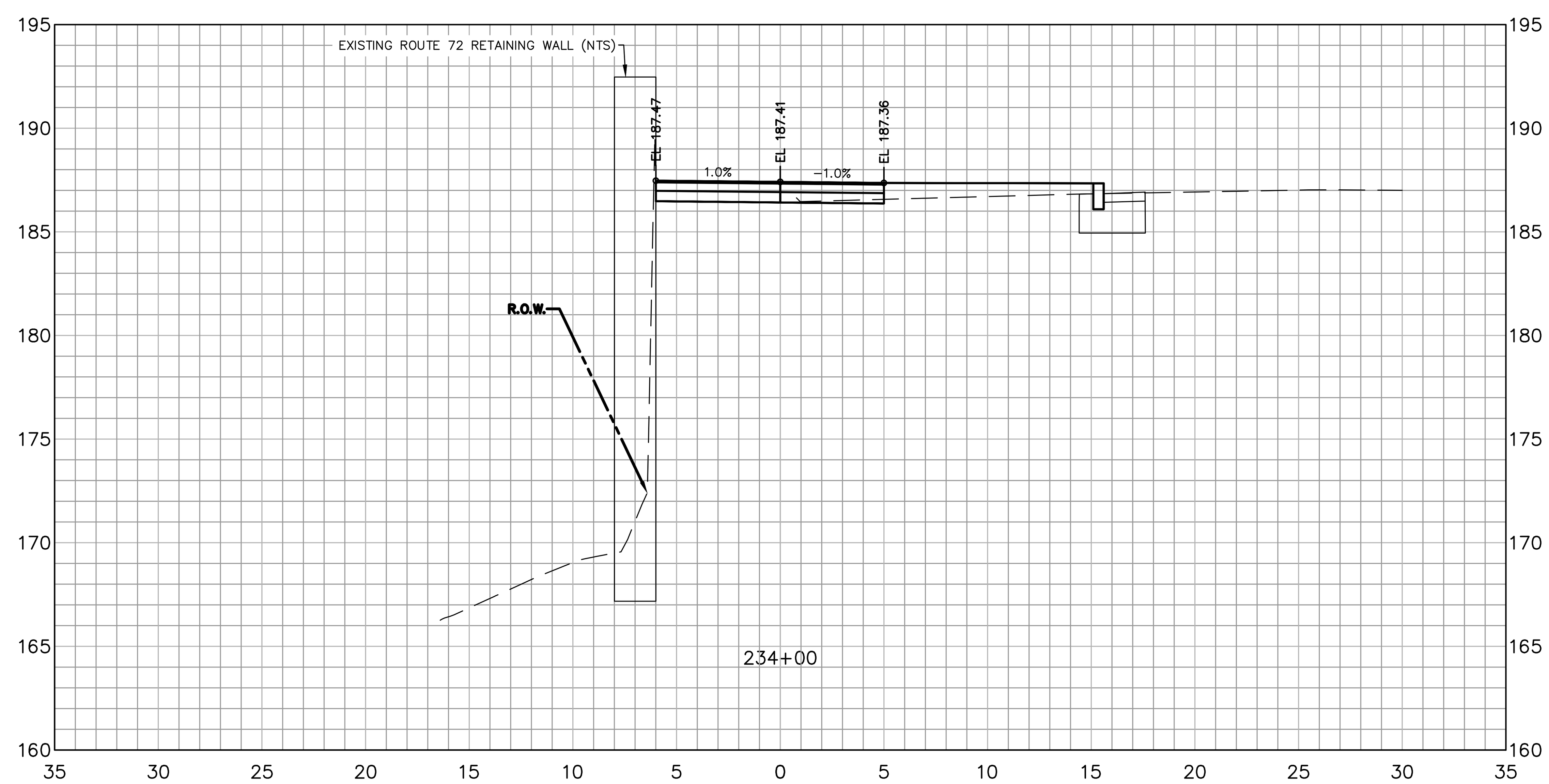
Title
CROSS SECTIONS

Sheet No.
XSC-21





GRAPHIC SCALE
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SCALE IN FEET

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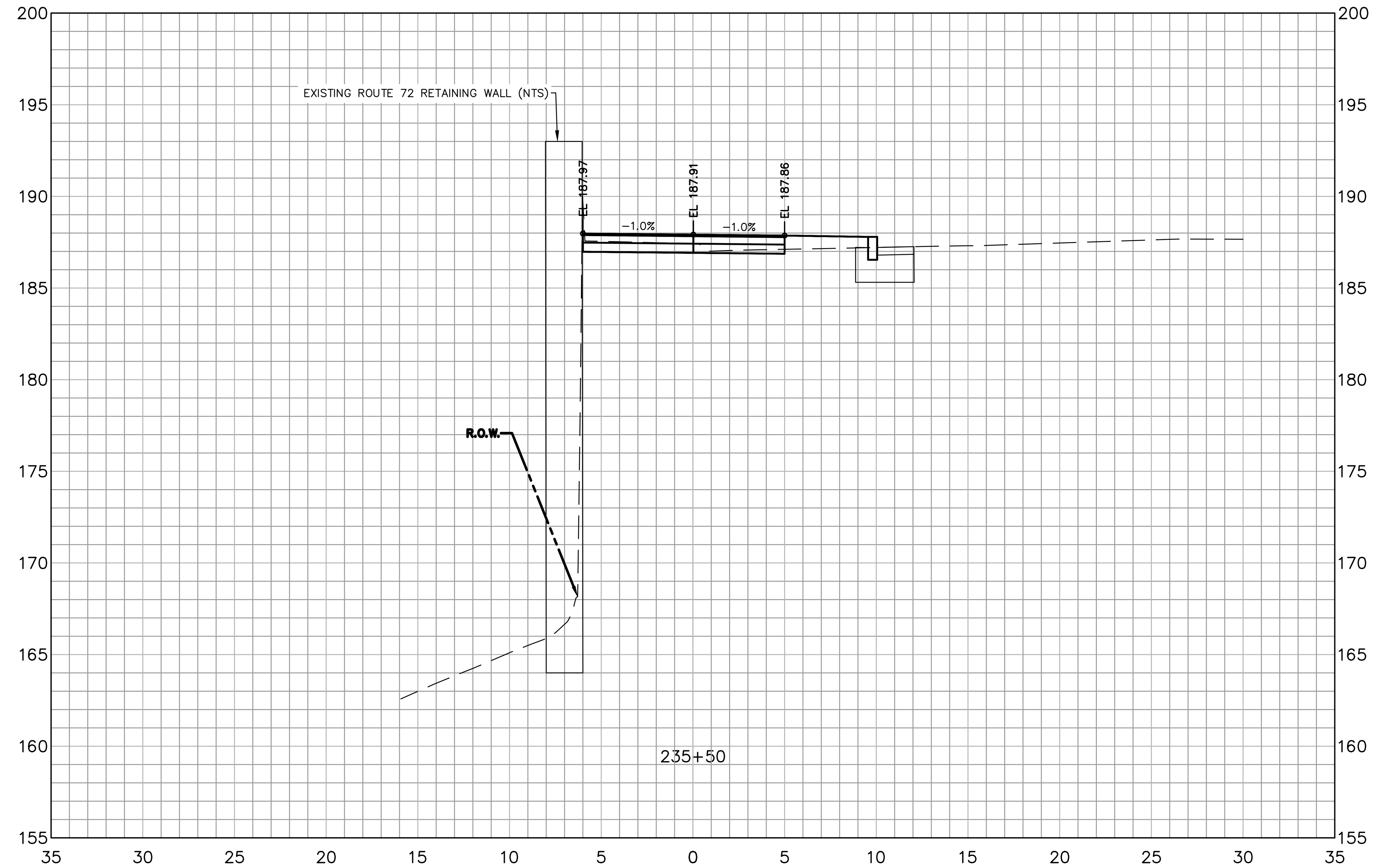
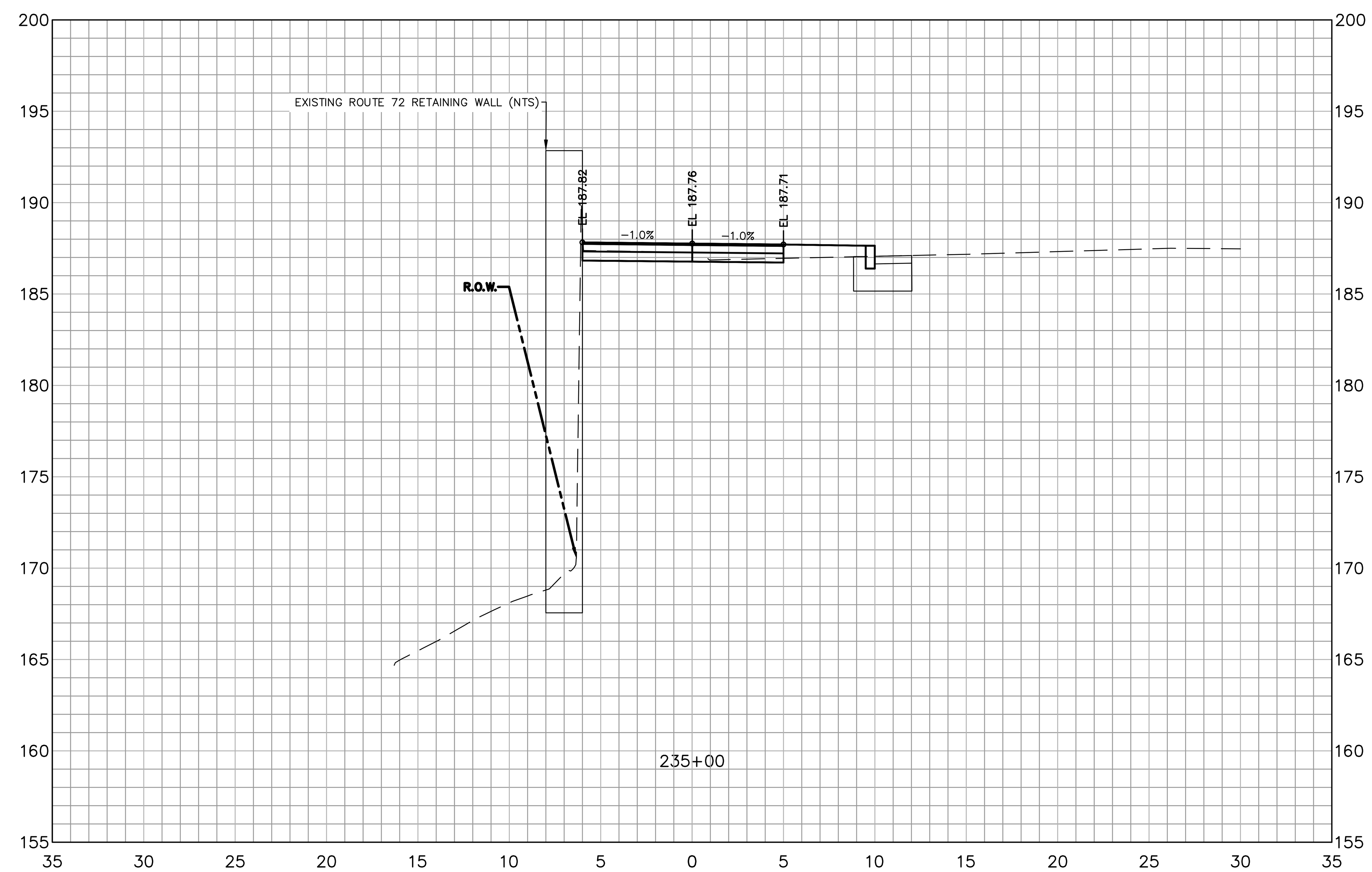
Project No.	2100699
Date	08/09/2024
CAD File: TXSC210069901	

Title
CROSS SECTIONS

Sheet No.
XSC-22





GRAPHIC SCALE
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SCALE IN FEET

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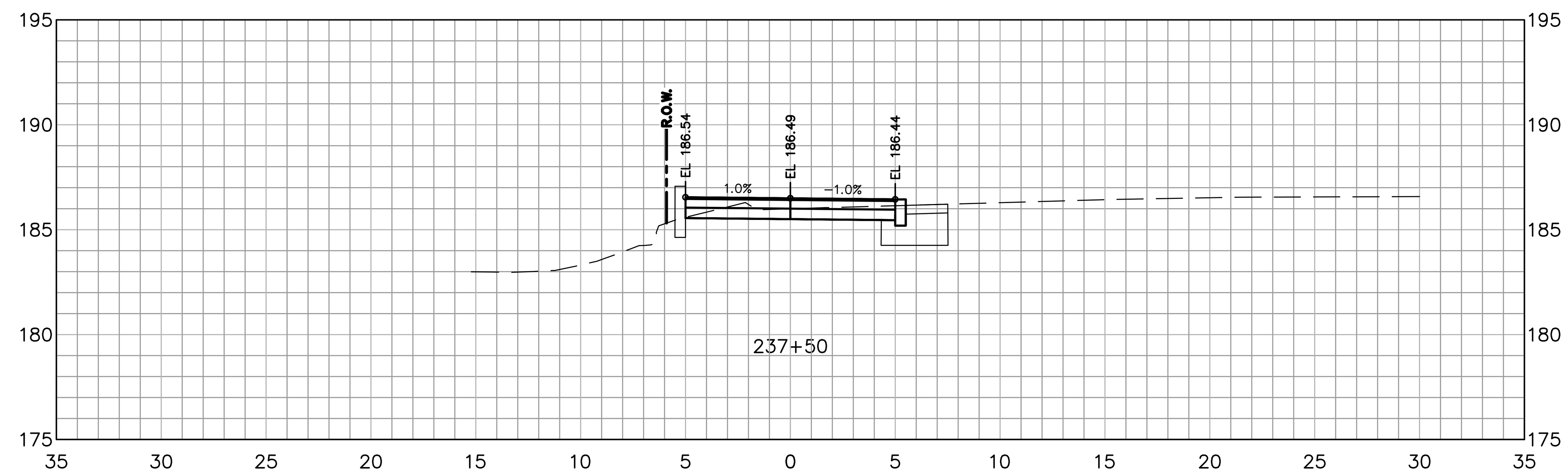
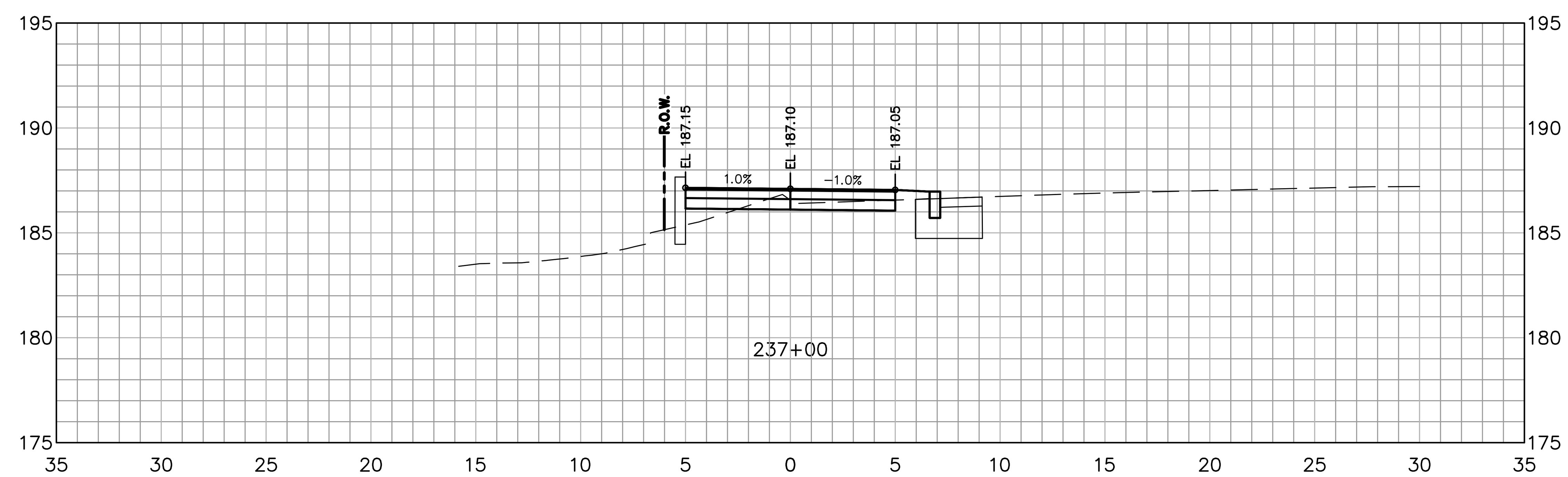
Project No.	2100699
Date	08/09/2024

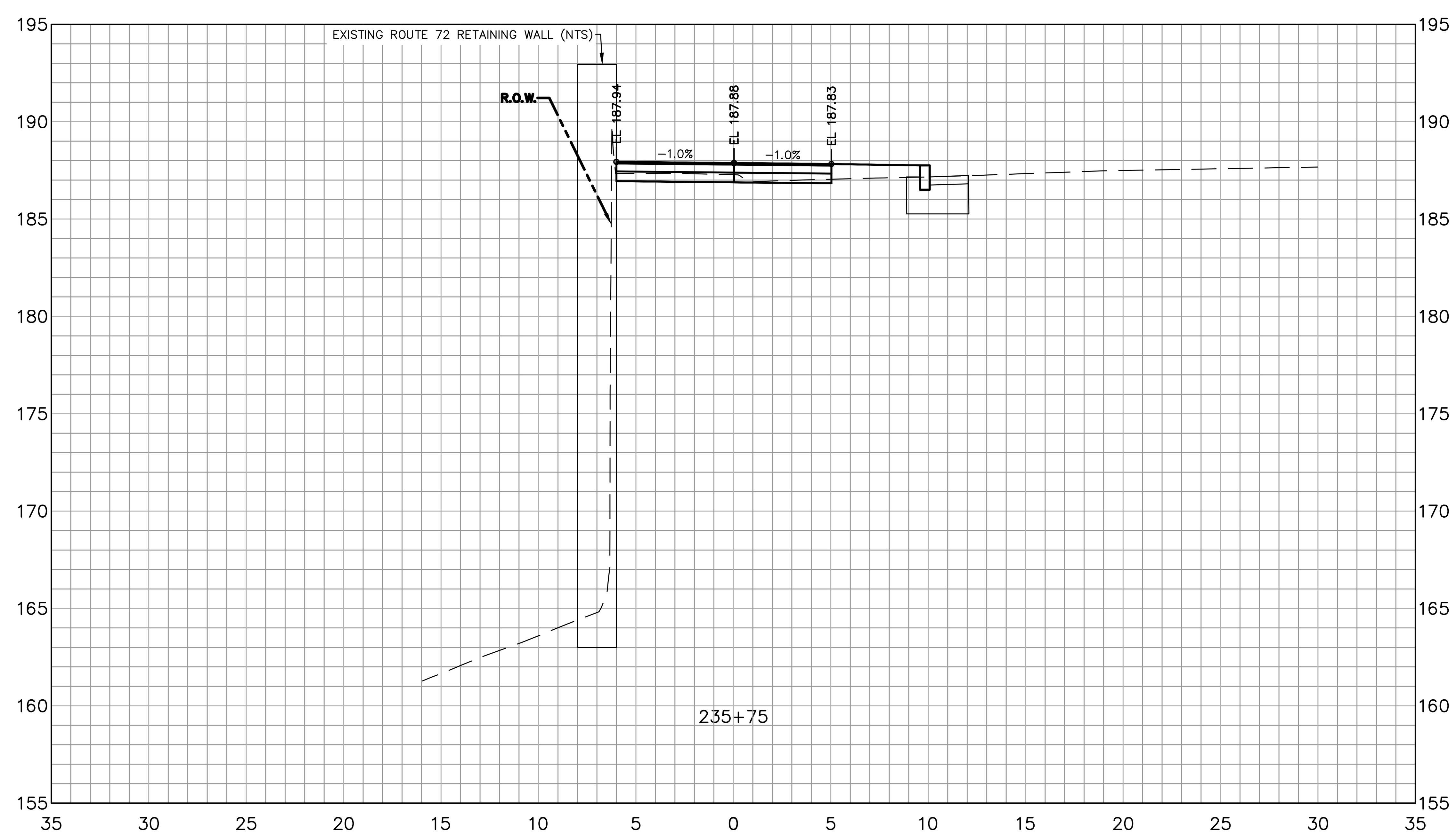
CAD File:
TXSC210069901

Title
CROSS SECTIONS

Sheet No.
XSC-23







GRAPHIC SCALE
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SCALE IN FEET

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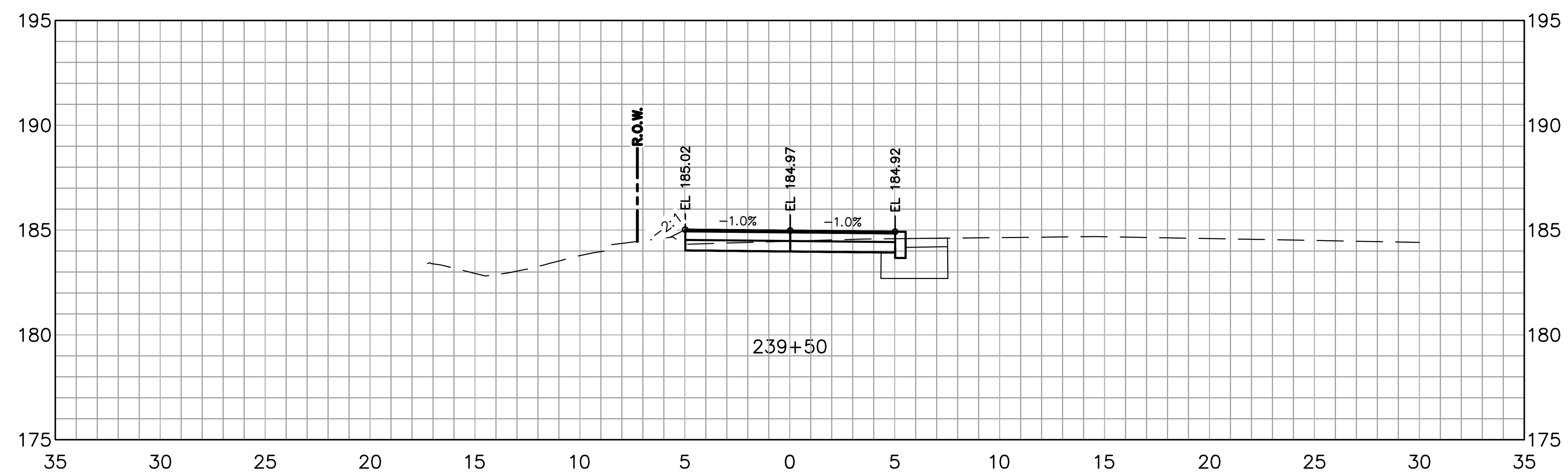
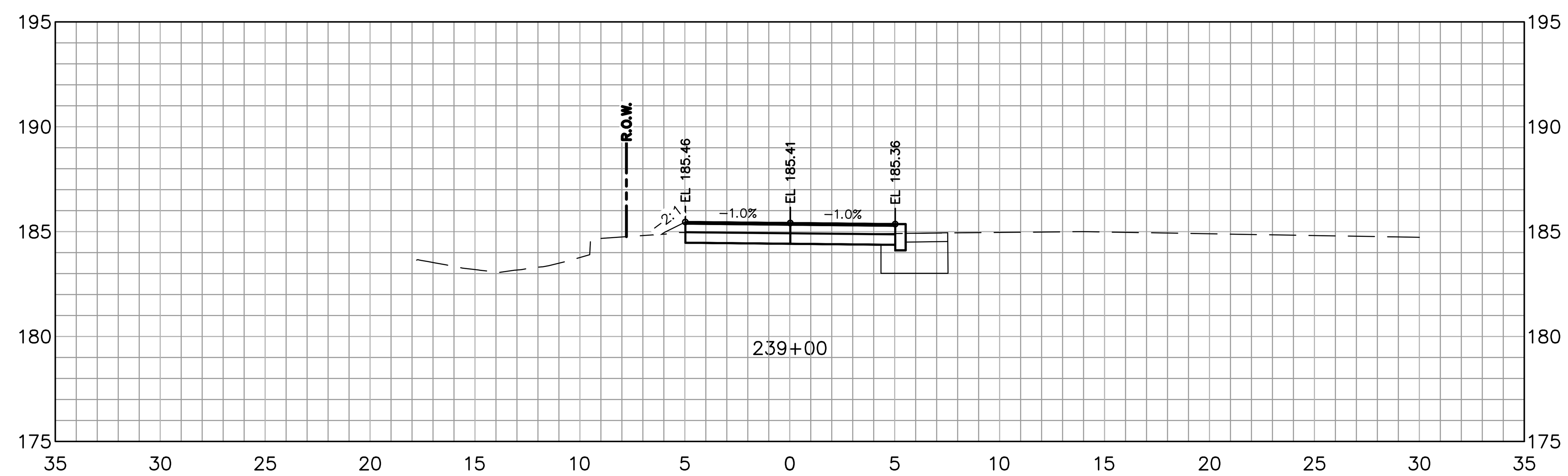
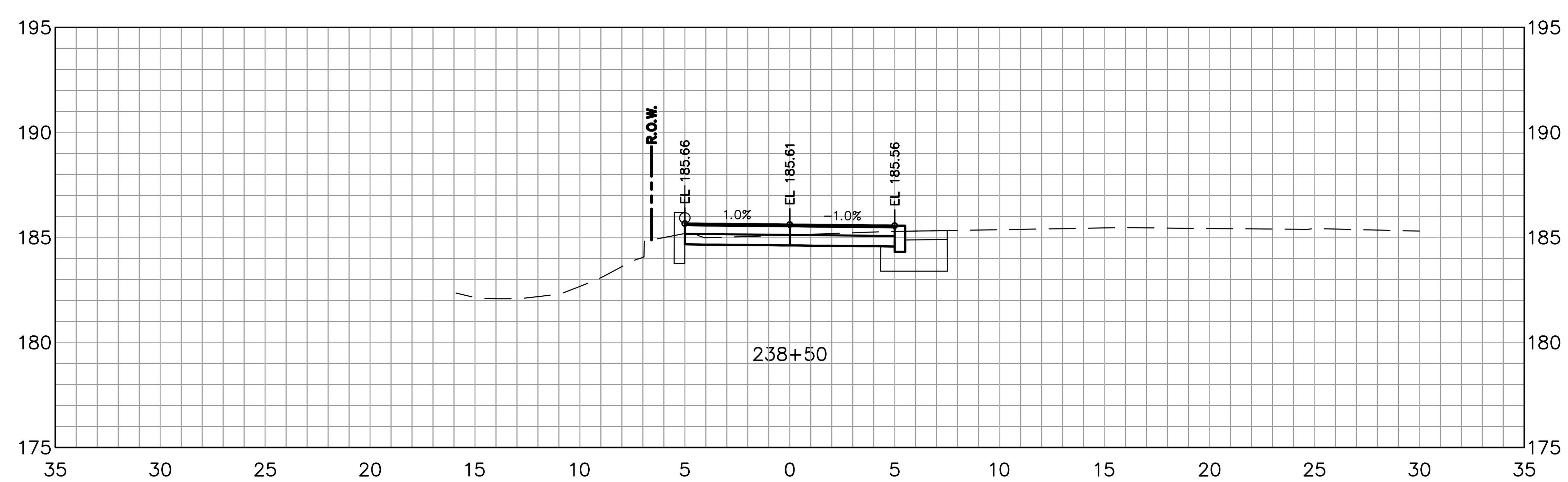
Title
CROSS SECTIONS

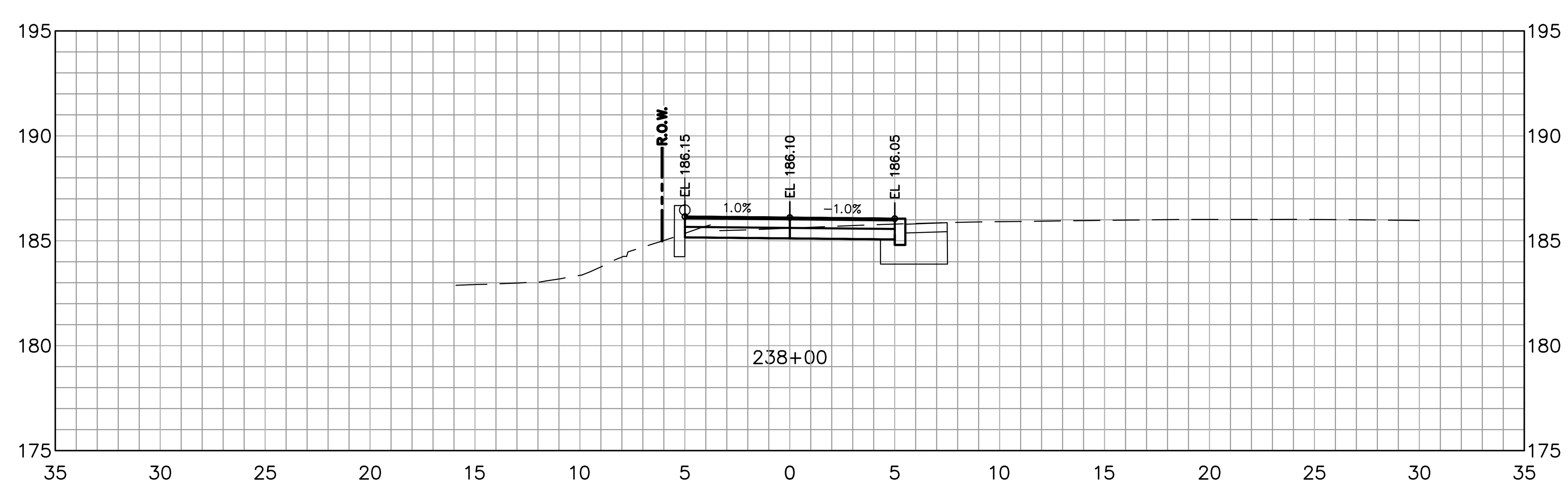
Sheet No.
XSC-24

Xref (s): ; BD210069901 ; XR210069903









GRAPHIC SCALE
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SCALE IN FEET

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Project No.	2100699
Date	08/09/2024

CAD File:
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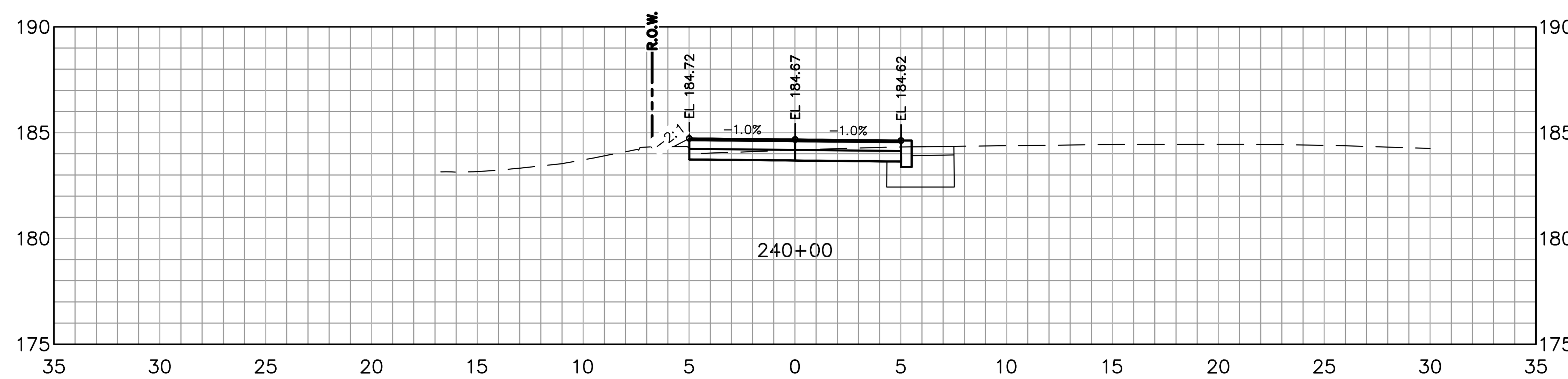
Title
CROSS SECTIONS

Sheet No.
XSC-25

8/9/2024, SPELLEGRINI, G:\JOBS21\...



GRAPHIC SCALE
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Date	08/09/2024
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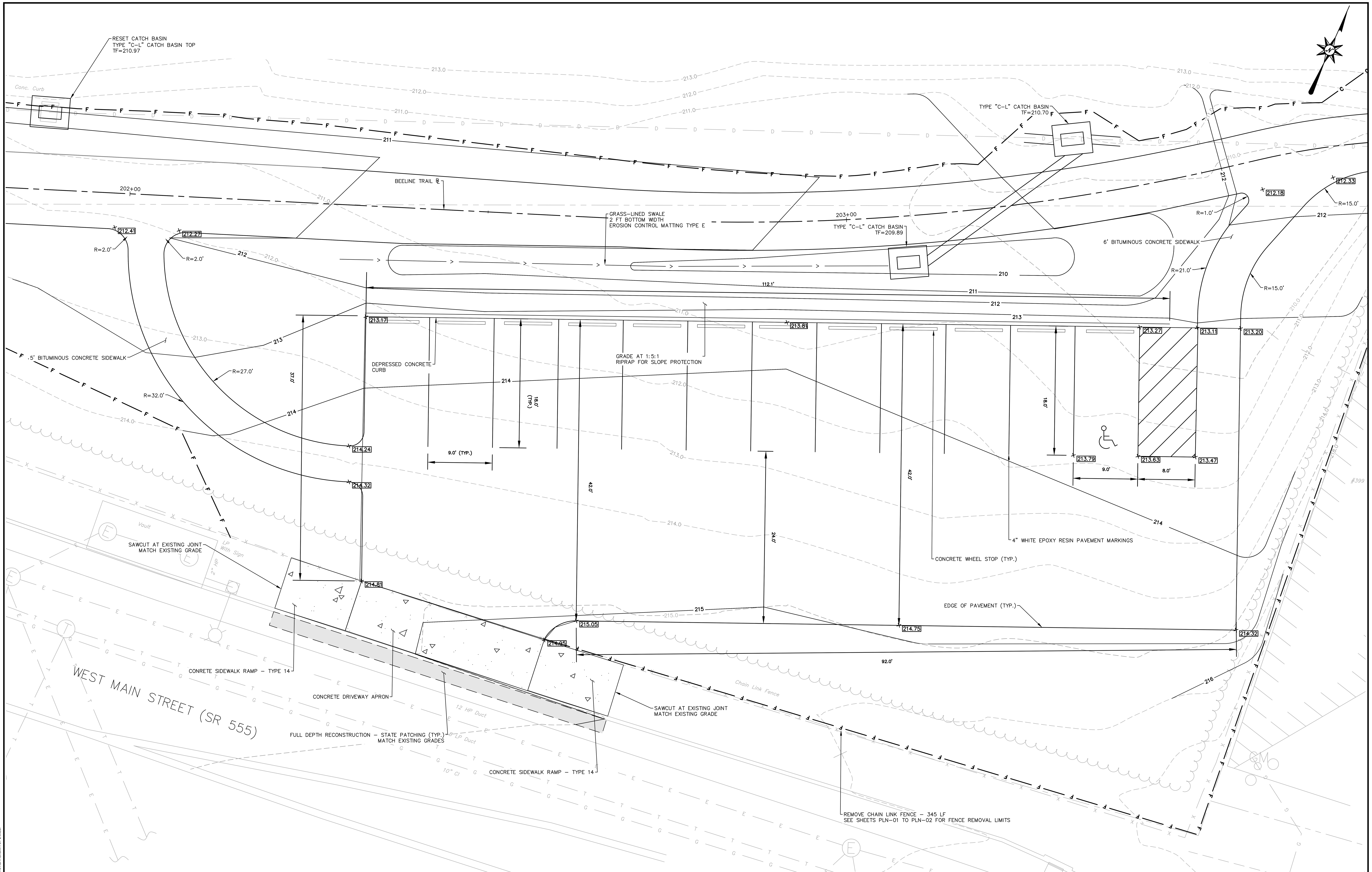
Title
CROSS SECTIONS

Sheet No.
XSC-26


RESET CATCH BASIN
TYPE "C-L" CATCH BASIN TOP
TF=210.97
Conc. Curb
TYPE "C-L" CATCH BASIN
TF=210.70
BEELINE TRAIL
202+00
GRASS-LINED SWALE
2 FT BOTTOM WIDTH
EROSION CONTROL MATTING TYPE E
203+00
TYPE "C-L" CATCH BASIN
TF=209.89
6' BITUMINOUS CONCRETE SIDEWALK
R=1.0'
R=15.0'
R=21.0'
R=2.0'
112.1'
213.17
213.81
213.27
213.11
213.20
212.41
212.27
212.18
212.33
5' BITUMINOUS CONCRETE SIDEWALK
R=27.0'
R=32.0'
DEPRESSED CONCRETE CURB
GRADE AT 1:5:1
RIPRAP FOR SLOPE PROTECTION
18.0' (TYP.)
9.0' (TYP.)
37.0'
42.0'
24.0'
18.0'
214.24
214.32
213.79
213.63
213.47
9.0'
8.0'
4" WHITE EPOXY RESIN PAVEMENT MARKINGS
CONCRETE WHEEL STOP (TYP.)
EDGE OF PAVEMENT (TYP.)
SAWCUT AT EXISTING JOINT
MATCH EXISTING GRADE
214.81
215.05
214.75
214.32
92.0'
CONCRETE SIDEWALK RAMP - TYPE 14
CONCRETE DRIVEWAY APRON
FULL DEPTH RECONSTRUCTION - STATE PATCHING (TYP.)
MATCH EXISTING GRADES
CONCRETE SIDEWALK RAMP - TYPE 14
SAWCUT AT EXISTING JOINT
MATCH EXISTING GRADE
WEST MAIN STREET (SR 555)
Chain Link Fence
12" HP Duct
REMOVE CHAIN LINK FENCE - 345 LF
SEE SHEETS PLN-01 TO PLN-02 FOR FENCE REMOVAL LIMITS
Vault
LP With Sign

NOTES

1. CONTOURS ARE SHOWN AT 1' INTERVALS.

GRAPHIC SCALE
5 2.5 0 5
SCALE IN FEET

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No. Date Desc.

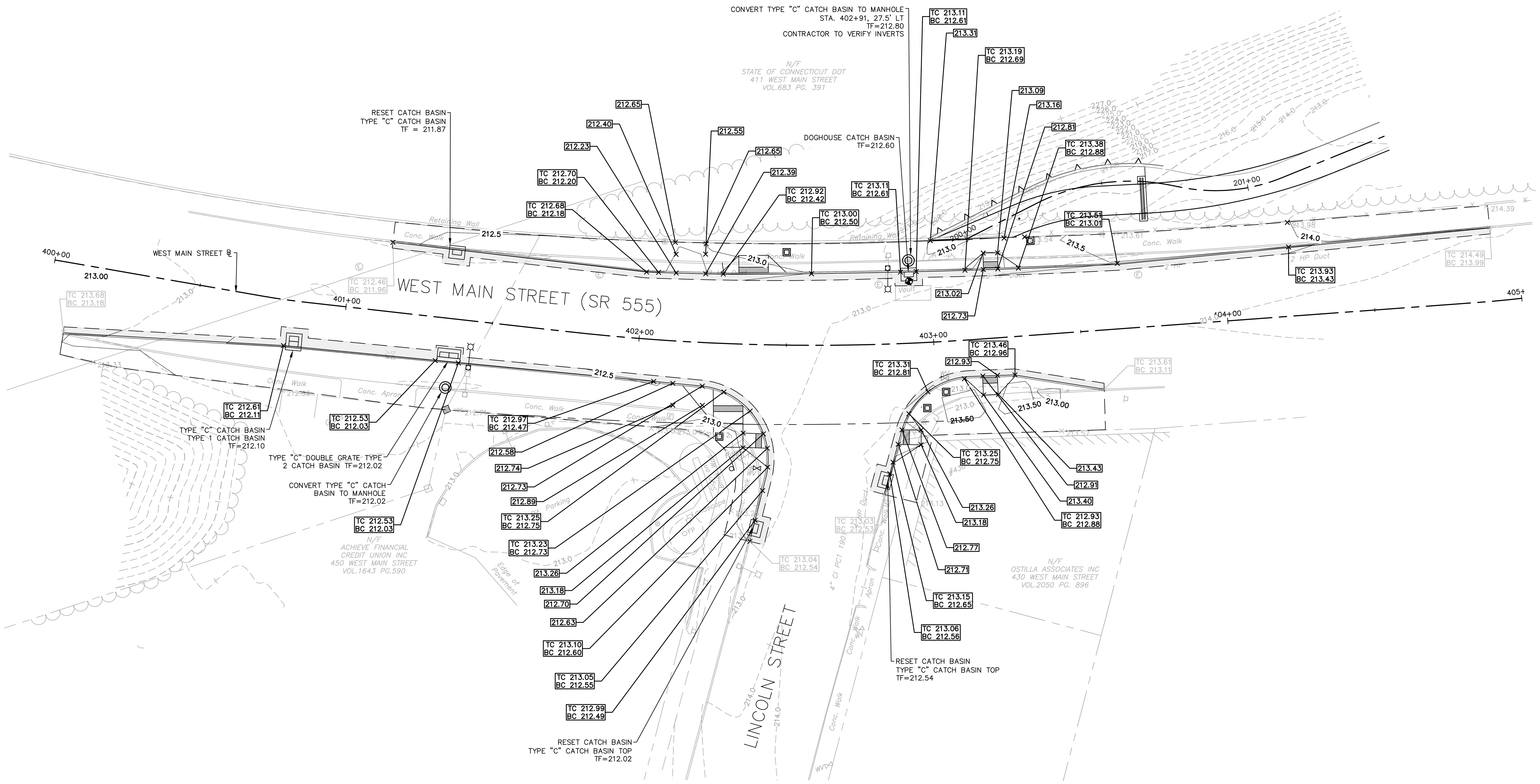
Designed	S.E.P.
Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=5'
Project No.	2100699
Date	08/09/2024
CAD File:	TGRA210069901

Title
GRADING PLAN

Sheet No.
GRA-01

NOTES

1. PROPOSED CONCRETE SIDEWALKS SHALL MATCH EXISTING SIDEWALK ELEVATION AT THE NEAREST JOINT.
2. CONTRACTOR TO VERIFY INVERT ELEVATIONS AND ENSURE WATER WILL DRAIN.
3. CONTRACTOR TO ENSURE WATER WILL DRAIN TOWARDS WEST MAIN STREET OR LINCOLN STREET.
4. EXISTING AND PROPOSED CONTOURS DISPLAYED AT 1' INTERVALS.



WEST MAIN STREET BUMPOUT GRADING

1"=20'

GRAPHIC SCALE

15 10 0 20

SCALE IN FEET

NOTES

1. PROPOSED CONTOURS ARE SHOWN AT .5' INTERVALS. EXISTING CONTOURS ARE SHOWN AT 1' INTERVALS.

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Drawn	S.E.P.
Reviewed	K.P.R.
Scale	1"=15'
Project No.	2100699
Date	08/09/2024
CAD File:	TGRA210069901

Title

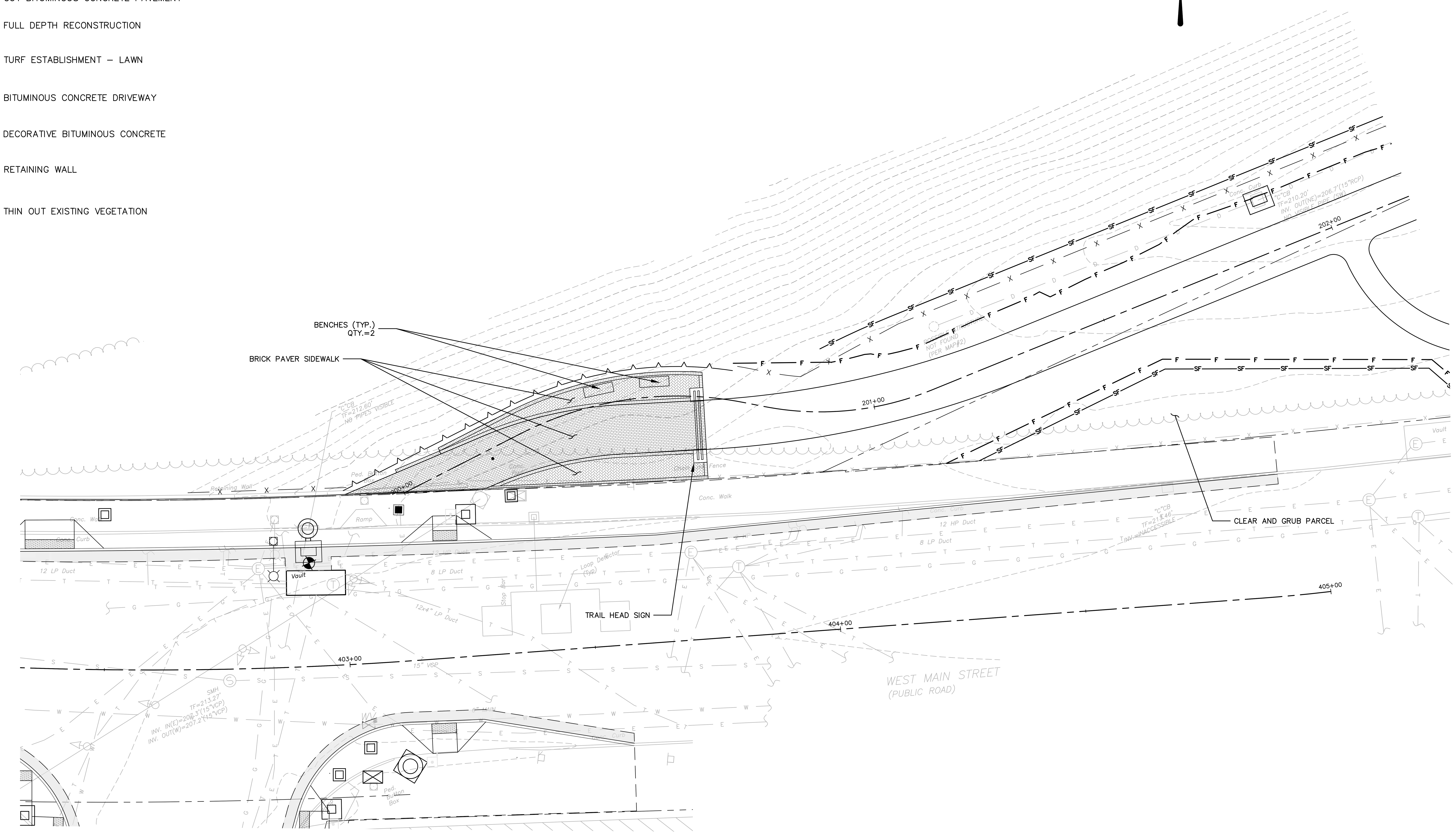
GRADING PLAN

Sheet No.

GRA-02

LEGEND

- CONCRETE SIDEWALK
- APPROXIMATE SLOPE LIMITS
- CUT BITUMINOUS CONCRETE PAVEMENT
- FULL DEPTH RECONSTRUCTION
- TURF ESTABLISHMENT – LAWN
- BITUMINOUS CONCRETE DRIVEWAY
- DECORATIVE BITUMINOUS CONCRETE
- RETAINING WALL
- THIN OUT EXISTING VEGETATION



NOTES:
1) ALL SUBSTITUTIONS MUST RECEIVE APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO SITE.

2) PROVIDE AND INSTALL ALL PLANTS SHOWN ON THE PLANTING PLAN DRAWINGS; THE QUANTITIES IN THE PLANT LIST ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF DISCREPANCIES OCCUR, THE LARGER QUANTITY SHALL APPLY.

3) IF THERE IS A DISCREPANCY BETWEEN BOTANICAL AND COMMON NAME, BOTANICAL NAME PREVAILS.

GRAPHIC SCALE
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No. Date Desc.

Designed	D.J.C
Drawn	N.Y.Y.
Reviewed	D.J.C.
Scale	1"=10'
Project No.	2100699
Date	08/09/2024
CAD File:	LDS2100699O1

Title
POCKET PARK ENLARGEMENT

Sheet No.
LDS-01

MOVEMENT DIAGRAM

NTOR		PHASE 1			PHASE 2 PRE-EMPT 1			PHASE 3			PHASE 4			PHASE 5			PHASE 6 PRE-EMPT 1			PHASE 7			PHASE 8 PRE-EMPT 2			PHASE 9		
NONE																												
	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	R	← R	← Y R	R	R	R	R										G	Y	R				R	R	R	R	R	R
2	R	R	R	R	G	Y	R										R	R	R				R	R	R	R	R	R
6	R	R	R	R	R	R	R										G	Y	R				R	R	R	R	R	R
8	R	R	R	R	R	R	R										R	R	R				G	Y	R	R	R	R
P	OFF	←			DW		→										←	DW	→				←	DW	→	W∅	← DW	→
MIN		5	3	0	15	3	1										15	3	1				5	3	1	7/10	0	0
MAX		10	5	1	45	5	3										45	5	3				20	5	3	9/16	4	1
MIN GRN		5			15												15						5					
WALK																										7 (1)		
PED CLR																										13 (2)		ACCESSIBLE PEDESTRIAN SIGNAL
VEH EXT		2			2												2						2					
MAX 1		9			30												30						12					
MAX 2		9			30												30						12					
YELLOW			3.0			3.4												3.4						3.4			4.0	
RED				1.0			2.7												2.7						1.0			0.0
ADD INIT																												
MAX INIT																												COUNTDOWN PEDESTRIAN SIGNAL
TBR																												
TTR																												
MIN GAP																												
MODE		NON-LOCK			MIN RECALL			OFF			OFF			OFF			MIN RECALL			OFF			NON-LOCK			NON-LOCK		
INT START					THIS PHASE												THIS PHASE											

YIELD POINT

DETECTORS				SYSTEM LOC MASTER
IDENT	SIZE (WXL)	TYPE	MODE	
D1	6' X 40'	VIDEO 360	PRESENCE	
D2	6' X 40'	VIDEO 360	PRESENCE	
D6	6' X 40'	VIDEO 360	PRESENCE	
D8	6' X 40'	VIDEO 360	PRESENCE	
D8A	6' X 40'	VIDEO 360	PRESENCE	

COORDINATION TYPE: CENTRAL SYSTEM

PROGRAM			CYCLE	OFFSET	
FUNCTION	TIME	DAYS		SEC	%
FLASH	NONE				
PATTERN 1	0700-1100 2000-2200	M-F SA-SU	70	10	14
PATTERN 3	1100-2000	M-F	70	36	51
MAX 1	ALL FUTURE TIMES	DAILY			
MAX 2	FUTURE				

PHASE SPLITS	SEC / %								
Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	
9 13	23 33				32 46	15 21	23 33		
9 15	24 34				33 47	14 21	23 33		

PERMIS PERIOD	
Ø	SEC

SIGN LEGEND

(A) EXISTING 31-0290Z (ONLY ONLY)

(B) INSTALL 31-0222 (ONLY)

NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON SR 555 (WEST MAIN ST), AND ALL STOP BARS.

CITY TO MAINTAIN ALL OTHER PAVEMENT MARKINGS ON LINCOLN ST.

(S1) BAR TYPE CROSSWALK (8' WIDE) - STATE MAINTAINED.

(S2) BAR TYPE CROSSWALK (10' WIDE) - STATE MAINTAINED.

(T) BAR TYPE CROSSWALK (8' WIDE) - CITY MAINTAINED.

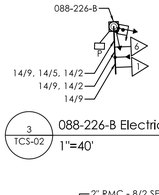
(W) 30" X 30" HANDHOLE. ALL HANDHOLES SHALL BE TYPE I UNLESS OTHERWISE NOTED.

(X) CAST IRON HANDHOLE COVER.

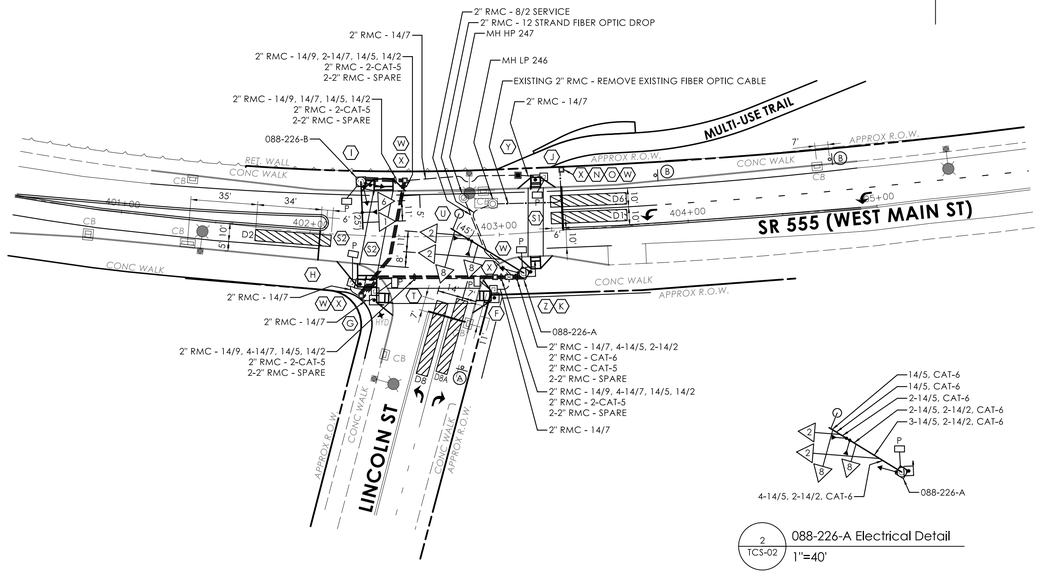
MAST ARM INFORMATION

ID #	APPROX. ARM ATTACHMENT HEIGHT	ARM LENGTH	CAMERA BRACKET LENGTH	CAMERA BRACKET ORIENTATION	VERTICAL RISER FOR 360 DEGREE CAMERA	YEAR INSTALLED	NORTHING	EASTING
088-226-A	(*)	45'	-	-	10'	202x	803073.560	987308.249
088-226-B	(*)	25'	-	-	-	202x	803121.724	987222.303

* TO BE CALCULATED BY CONTRACTOR BASED ON FIELD CONDITIONS.

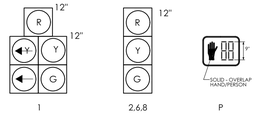


3 TCS-02 088-226-B Electrical Detail 1"=40'



2 TCS-02 088-226-A Electrical Detail 1"=40'

SIGNAL FACES

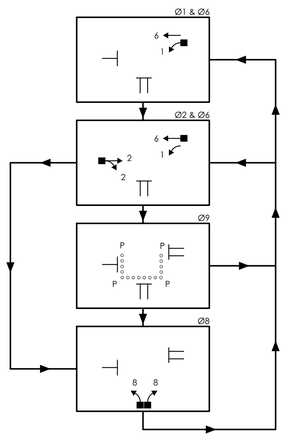


ALL INDICATIONS HAVE LED LAMPS.

ALL VEHICLE INDICATIONS TO HAVE RETROREFLECTIVE BACKPLATES

PRE-EMPTION SETTINGS	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	9	9
HOLD GREEN	15	15
HOLD YELLOW	3.4	3.4
HOLD RED	2.7	1.0
HOLD PHASE	2&6	8
EXIT PHASE	1&6	1&6
EXIT CALL	NONE	NONE

SIGNAL PHASING DIAGRAM



TECHNICAL NOTES	OFFICE RECORD
STANDARD OVERLAP SKIP FEATURES APPLY.	REV # TIR #088-2401-01 SM # SIGNAL REVISED:
ARTERY PHASE DETECTORS TO BE NON-ACTUATING DURING COORDINATION.	SIGNAL REVISED: REPLACED SIGNAL EQUIPMENT UNDER STATE PROJECT NO. 0088-0198.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 9 PEDESTRIAN CHANGE INTERVAL.	
PHASE SPLITS SHOWN REPRESENT PRELIMINARY COORDINATION DATA.	
PHASE 2 AND 6 ON TO OMIT PHASE 1.	
PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION.	
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.	
(2) COUNTDOWN ONLY DURING PEDESTRIAN CHANGE INTERVAL.	

CONSTRUCTION NOTES

ALL EQUIPMENT IS NEW, EXCEPT WHERE NOTED.

STAKE ALL R.O.W. PRIOR TO EXCAVATION.

ALL PEDESTRIAN PUSH BUTTONS TO BE "ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR (TYPE A)". INSTALL SIGN NO. 31-0856 WITH APPROPRIATE ARROW AT PEDESTRIAN PUSH BUTTON LOCATIONS.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY OF NEW BRITAIN PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE, NOTIFY THE ENGINEER AND CONTACT THE CITY OF NEW BRITAIN.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

COORDINATE THIS REVISION WITH CITY OF NEW BRITAIN AT LEAST 45 DAYS PRIOR TO REVISION.

CLEAN EXISTING HANDHOLES TO REMAIN. WORK TO BE PAID FOR UNDER ITEM NO. 1010060A - CLEAN EXISTING HANDHOLE.

CLEAN EXISTING CONDUIT(S). WORK TO BE PAID FOR UNDER ITEM NO. 1018908A - CLEAN EXISTING CONDUIT.

ALL CCTV CAMERAS ARE NEW. CCTV CAMERAS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. WORK TO BE PAID UNDER ITEM NO. 1112214A - IP VIDEO CAMERA ASSEMBLY.

CONTRACTOR TO INSTALL NEW 12 STRAND FIBER OPTIC DROP CABLE BETWEEN MH LP 246 AND PROPOSED CONTROLLER.

CONTRACTOR TO VERIFY MAST ARM INFORMATION INCLUDING CROSS SECTIONS AND DIMENSIONS, BASED ON FIELD SURVEY, PRIOR TO SUBMISSION OF WORKING DRAWINGS.

(F) INSTALL NEW PEDESTAL FOUNDATION, 8' PEDESTAL, APS, AND PEDESTRIAN COUNTDOWN SIGNAL ADJACENT TO LANDING AREA AT 402+96, 30 RT.

(G) INSTALL NEW PEDESTAL FOUNDATION, 8' PEDESTAL, APS, AND PEDESTRIAN COUNTDOWN SIGNAL ADJACENT TO LANDING AREA AT 402+34, 33 RT.

(H) INSTALL NEW PEDESTAL FOUNDATION, 8' PEDESTAL, APS, AND PEDESTRIAN COUNTDOWN SIGNAL ADJACENT TO LANDING AREA AT 402+22, 25 RT.

(I) INSTALL MAST ARM FOUNDATION (MAST ARM ASSEMBLY B) WITH APS AND PEDESTRIAN COUNTDOWN SIGNAL AT 402+25, 26 LT.

(J) INSTALL NEW PEDESTAL FOUNDATION, 8' PEDESTAL, APS, AND PEDESTRIAN COUNTDOWN SIGNAL ADJACENT TO LANDING AREA AT 403+24, 29 LT.

(K) INSTALL MAST ARM FOUNDATION (MAST ARM ASSEMBLY A) WITH APS AND PEDESTRIAN COUNTDOWN SIGNAL AT 403+12, 22 RT.

(N) CONVERT EXISTING CONTROLLER FOUNDATION TO TYPE I CONCRETE HANDHOLE.

(O) LOCATE EXISTING 2" RMC FOR EXISTING FIBER OPTIC CABLE. EXTEND TO NEW CONTRETE HANDHOLE.

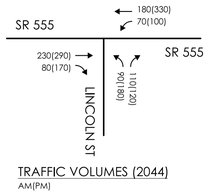
(U) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA ON MAST ARM ID #088-226-A.

(W) INSTALL 30" X 30" HANDHOLE. ALL HANDHOLES SHALL BE TYPE I UNLESS OTHERWISE NOTED.

(X) INSTALL CAST IRON HANDHOLE COVER.

(Y) RESET CONCRETE HANDHOLE AND CAST IRON HANDHOLE COVER.

(Z) INSTALL TRAFFIC CONTROLLER CABINET AT 403+04, 24 RT. CABINET TO OPEN STREET SIDE. CENETR OF CABINET IS AT LOCATION:
NORTHING: 803071.354
EASTING: 987300.516



TRAFFIC VOLUMES (2044)
AM(PM)

CITY SIGNAL

FINAL DESIGN
NOT FOR CONSTRUCTION
AUGUST 2024

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER	BL Companies ARCHITECTURE ENGINEERING ENVIRONMENTAL LAND SURVEYING			08/2024
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

REV #	INTERSECTION #088-226
ENERGY BY: CITY	ADDRESS:
MAINT LEVEL: CITY	SERVICE POLE: MH 247
	UNMETERED SERVICE

REVISION DESCRIPTION
DATE
REV.

LEGEND:
R RED, Y YELLOW, G GREEN
FL. FLASHING
RED ARROW, YELLOW ARROW, GREEN ARROW
W∅ WALK/ PED. CLR, D.W. DON'T WALK
~~ DET. LEADS IN SAW CUT
PROPOSED RMC, EXISTING RMC
CABLE CLOSURE
VC VIDEO CAMERA CABLE
RC RADAR CABLE
PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON
TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
PROPOSED CONTROLLER
EXISTING CONTROLLER
IP DETECTOR
RADAR DETECTOR
THERMAL DETECTOR
AUDIO DETECTOR
360° CAMERA ASSEMBLY
OPTICAL DETECTOR
SD SYSTEM DETECTOR
VIDEO DETECTION ZONE
LOOP DETECTOR
RADIO ANTENNA
CCTV CAMERA

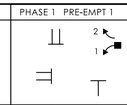
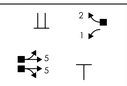
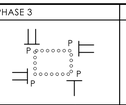
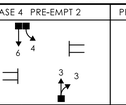
CITY OF NEW BRITAIN

PROJECT NUMBER: 0088-0198
SR 555 (WEST MAIN STREET) AT LINCOLN STREET
TOWN(S): NEW BRITAIN
DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

DRAWING NO. TCS-01
SHEET NO.

LASTED SAVED BY: dgehring **FILE NAME:** G:\JOBS21\06\2100699\DGN\CONNECT\Traffic\Contract_Plans\TR_CP_0088_0198_Signal_088_226.dgn
PLOTTED DATE: 8/8/2024

MOVEMENT DIAGRAM

NTOR		PHASE 1 PRE-EMPT 1			PHASE 2			PHASE 3			PHASE 4 PRE-EMPT 2			PHASE 5			PHASE 6			PHASE 7			PHASE 8			PHASE 9		
NONE																											
	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	← G	← G	G	G	Y	R	R	R	R	R	R	R															
2	Y	G	G	G	G	Y	R	R	R	R	R	R	R															
3	R	R	R	R	R	R	R	R	R	R	G	Y	R															
4	R	R	R	R	R	R	R	R	R	R	G	Y	R															
5	Y	R	R	R	G	Y	R	R	R	R	R	R	R															
6	R	R	R	R	R	R	R	R	R	R	↑	Y	R															
P	OFF	←			DW		→	WØ		→	DW		→															
MIN GRN		5			15			7 (1)			7																	
WALK								15 (2)	ACCESSIBLE PEDESTRIAN SIGNAL																			
PED CLR																												
VEH EXT		1			2.5						1.5																	
MAX 1		5			25						17																	
MAX 2		10			40						32																	
YELLOW			3.0			3.7			4.0			3.6																
RED				1.5			2.5			0.0			1.7															
ADD INIT									COUNTDOWN PEDESTRIAN SIGNAL																			
MAX INIT																												
TBR																												
TTR																												
MIN GAP																												
MODE		NON-LOCK			MIN RECALL			NON-LOCK			NON-LOCK			OFF			OFF			OFF			OFF			OFF		
INT START					THIS PHASE																							

DETECTORS				SYSTEM LOC MASTER
IDENT	SIZE (WXL)	TYPE	MODE	
D1	6' X 37'	VIDEO 360	PRESENCE	
D2	6' X 37'	VIDEO 360	PRESENCE	
D2D	16' X 6'	VIDEO 360	PRESENCE	
D2E	11' X 6'	VIDEO 360	PRESENCE	
D3	6' X 34'	VIDEO 360	PRESENCE	
D4	6' X 34'	VIDEO 360	PRESENCE	
D4A	6' X 34'	VIDEO 360	PRESENCE	
DWW	SEE PLAN	VIDEO 360	PRESENCE	

COORDINATION TYPE: NONE		
PROGRAM		
FUNCTION	TIME	DAYS
FLASH	NONE	
MAX 1	ALL OTHER TIMES	
MAX 2	0600-1800	DAILY

CYCLE	OFFSET	
	SEC	%

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK.	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	15	15
HOLD GREEN	15	15
HOLD YELLOW	3.0	3.6
HOLD RED	1.5	1.7
HOLD PHASE	1	4
EXIT PHASE	2	1
EXIT CALL	NONE	NONE

SIGN LEGEND

- (A) EXISTING 31-1603 — SPAN MTD.
- (B) EXISTING 31-1604 — SPAN MTD.
- (C) EXISTING 31-1629 / EXISTING 31-1630 — NO LEFT TURN
- (D) EXISTING 31-1627 / EXISTING 31-1628 — NO RIGHT TURN
- (E) RELOCATED 31-1178/31-1189 BACK TO BACK — ONE WAY
- (F) RELOCATED 31-1120 — DO NOT ENTER
- (G) EXISTING 31-0290Z — ONLY / ONLY
- (H) EXISTING 31-0222 — ONLY
- (I) INSTALL 31-0283 — ONLY
- (J) RELOCATED 31-1178/31-1189 BACK TO BACK — ONE WAY
- (K) RELOCATED 31-1120 — DO NOT ENTER

NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 72 OFF-RAMP, AND ALL STOP BARS.

CITY TO MAINTAIN ALL OTHER PAVEMENT MARKINGS ON LAKE AVE AND COLUMBUS BLVD.

CITY OF NEW BRITAIN TO OWN AND MAINTAIN EMERGENCY PRE-EMPTION EQUIPMENT.

(S) BAR TYPE CROSSWALK (10' WIDE) - STATE MAINTAINED.

(T1) BAR TYPE CROSSWALK (8' WIDE) - CITY MAINTAINED.

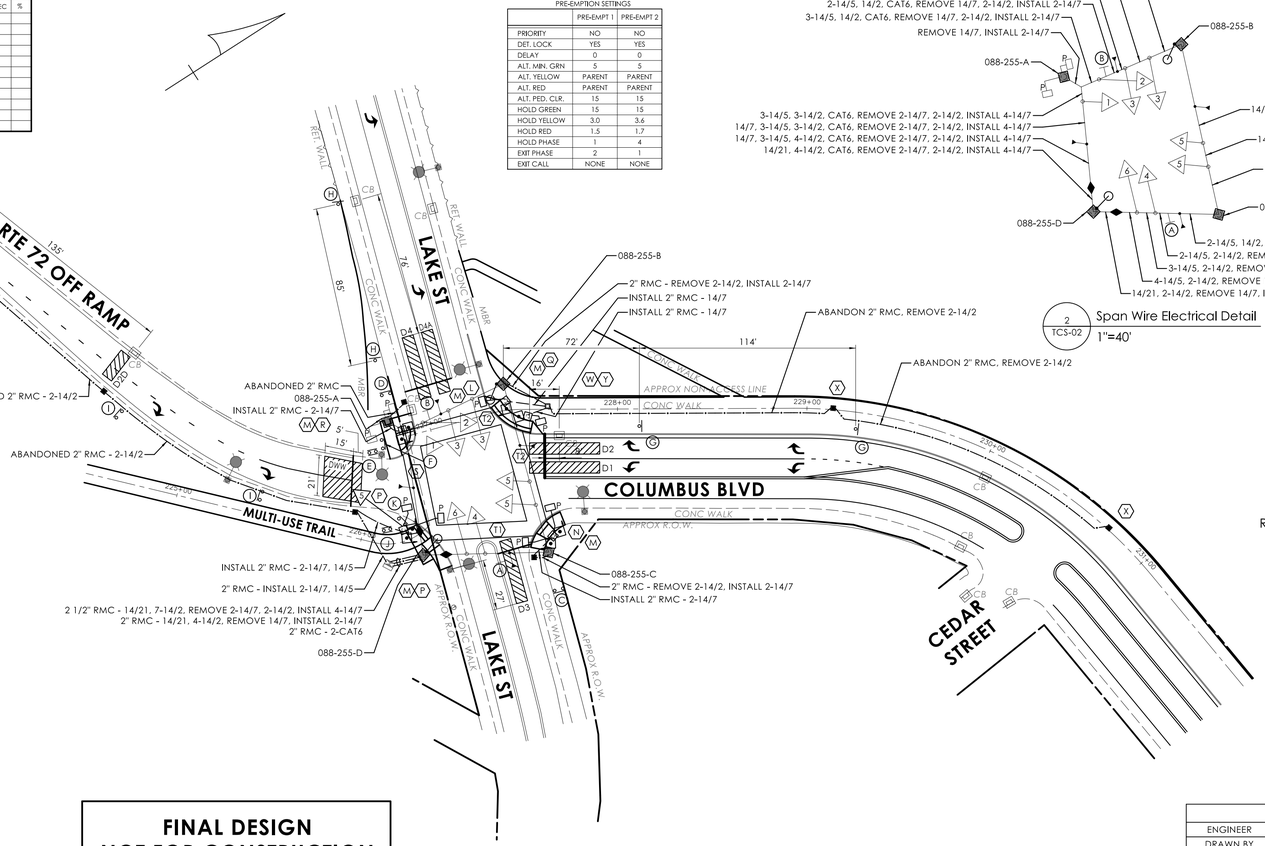
(T2) BAR TYPE CROSSWALK (10' WIDE) - CITY MAINTAINED.

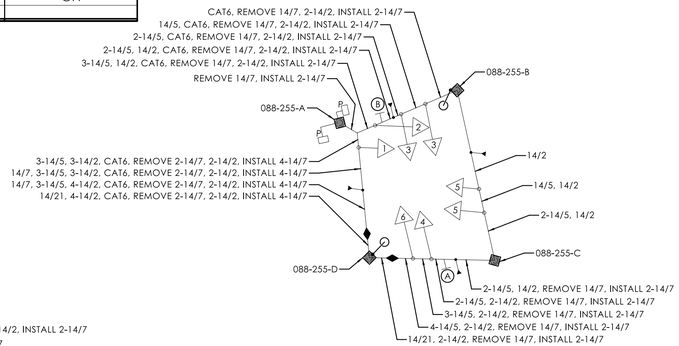
(W) 30" X 30" CONCRETE HANDHOLE. ALL OTHERS TYPE II.

(Y) CAST IRON HANDHOLE COVER.

SPAN POLE INFORMATION

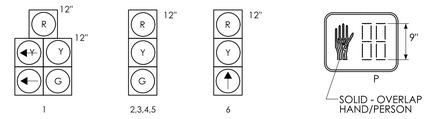
ID #	POLE HEIGHT	BOLT CIRCLE	LOAD AT YIELD	YEAR INSTALLED
088-255-A	28'	20"	6100 LBS	2010
088-255-B	28'	20"	6100 LBS	2010
088-255-C	28'	20"	6100 LBS	2010
088-255-D	28'	20"	6100 LBS	2010





2 TCS-02 Span Wire Electrical Detail 1"=40'

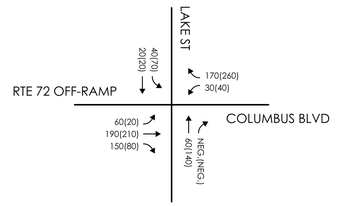
SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS AND TUNNEL VISORS.

TRAFFIC VOLUMES (2044)

AM(PM)



TECHNICAL NOTES	OFFICE RECORD
STANDARD OVERLAP SKIP FEATURES APPLY.	REV # TIR # SM # SIGNAL REVISED:
PHASE 2 ON TO OMIT PHASE 1.	REVISED PEDESTRIAN SIGNAL INDICATIONS AND INSTALLED ACCESSIBLE PEDESTRIAN SIGNALS UNDER
D1 TO CALL AND EXTEND PHASE 1.	STATE PROJECT NO. 0088-0198.
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.	
(2) COUNTDOWN ONLY DURING PEDESTRIAN CHANGE INTERVAL.	
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PEDESTRIAN CHANGE INTERVAL.	

CONSTRUCTION NOTES

ALL EQUIPMENT IS EXISTING, EXCEPT WHERE NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ALL PEDESTRIAN PUSH BUTTONS TO BE "ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR (TYPE A)". INSTALL SIGN NO. 31-0845 WITH APPROPRIATE ARROW AT PEDESTRIAN PUSH BUTTON LOCATIONS.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A CLEAR PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT PATH IS UNAVAILABLE, NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREA.

CONTRACTOR SHALL ENSURE EXISTING TRAFFIC CONTROL FOUNDATIONS ARE PROTECTED DURING CONTRUCTION. ENSURE SIDEWALK AND RAMP FINAL FINISHED GRADES ARE FLUSH WITH SPAN POLE FOUNDATIONS EXISTING FINISH GRADE. REFER TO ROADWAY PLANS FOR ADDITIONAL INFORMATION.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 3 PAPER COPIES OF REVISED CABINET WIRING DIAGRAMS AND EMAIL A PDF COPY TO DOT.SIGNALLAB@CT.GOV.

CLEAN EXISTING CONDUITS. WORK TO BE PAID UNDER ITEM NO. 1018908A - CLEAN EXISTING CONDUIT.

CLEAN EXISTING HANDHOLES. WORK TO BE PAID UNDER ITEM NO. 1010060A - CLEAN EXISTING HANDHOLE.

ALL PEDESTRIAN SIGNAL HEADS TO BE RELOCATED AND APPLICABLE HARDWARE SHALL BE PAID FOR UNDER ITEM NO. 1118012A - REMOVE AND/OR RELOCATION OF TRAFFIC SIGNAL EQUIPMENT.

(L) REMOVE EXISTING PEDESTRIAN PUSH BUTTON FROM EXISTING SIGNAL POLE, INSTALL 8' PEDESTAL AT STA. 227+42, 5 LT. INSTALL APS PUSH BUTTON AND RELOCATE EXISTING COUNTDOWN PEDESTIRAN SIGNAL HEADS ONTO NEW 8' PEDESTALS AT LOCATION SHOWN.

(M) INSTALL A TOGGLE BOLT AND WASHER TO EFFECTIVELY SEAL EACH HOLE LEFT IN THE SPAN POLE WHERE ANY TRAFFIC SIGNAL EQUIPMENT HAS BEEN REMOVED.

(N) REMOVE EXISTING PEDESTRIAN PUSH BUTTONS FROM EXISTING SIGNAL POLE. INSTALL 8' PEDESTAL AT STA. 227+66, 67 RT. INSTALL APS PUSH BUTTONS AND RELOCATE EXISTING COUNTDOWN PEDESTIRAN SIGNAL HEADS ONTO NEW 8' PEDESTAL.

(P) REMOVE EXISTING PEDESTRIAN PUSH BUTTON FROM EXISTING SIGNAL POLE, INSTALL 12' PEDESTAL AT STA. 226+25, 6 LT. INSTALL APS PUSH BUTTON ONTO 12' PEDESTAL. INSTALL SIGNAL FACE #5 ON PEDESTAL. RELOCATE COUNTDOWN PEDESTRIAN SIGNAL HEADS TO NEW 12' PEDESTAL.

(Q) REMOVE EXISTING PEDESTRIAN PUSH BUTTON FROM EXISTING SIGNAL POLE, INSTALL 8' PEDESTAL AT STA. 227+52. 2 RT, INSTALL APS PUSH BUTTON AND RELOCATE EXISTING COUNTDOWN PEDESTIRAN SIGNAL HEADS ONTO NEW 8' PEDESTALS AT LOCATION SHOWN.

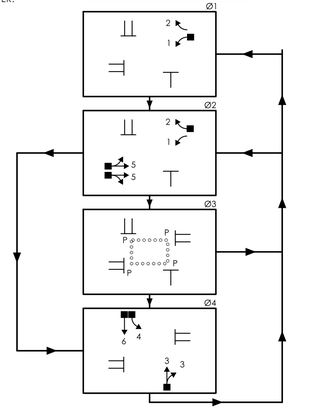
(R) REMOVE EXISTING PEDESTRIAN PUSH BUTTON FROM EXISTING SIGNAL POLE, INSTALL 4'-4" PEDESTAL AT STA. 226+88. 4 LT. INSTALL APS PUSH BUTTON ONTO 4'-4" PEDESTAL. EXTEND NEW RMC TO EXISTING SPARE SWEEP IN SPAN POLE FOUNDATION. EXISTING COUNTDOWN PEDESTRIAN SIGNAL HEADS TO REMAIN ON EXISTING STEEL SPAN POLE.

(W) REPLACE EXISTING TYPE II CONCRETE HANDHOLE WITH 30" X 30" HANDHOLE.

(X) REMOVE CONCRETE HANDHOLE.

(Y) INSTALL CAST IRON HANDHOLE COVER.

SIGNAL PHASING DIAGRAM



FINAL DESIGN
NOT FOR CONSTRUCTION
AUGUST 2024

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY	BL Companies ARCHITECTURE ENGINEERING ENVIRONMENTAL LAND SURVEYING			08/2024
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

REV #	INTERSECTION #088-255
ENERGY BY: CITY	ADDRESS:
MAINT LEVEL: 5	SERVICE POLE: UNDERGROUND
	UNMETERED SERVICE

REVISION DESCRIPTION

DATE

REV

LEGEND: FL. FLASHING; R RED; Y YELLOW; G GREEN; RED ARROW; YELLOW ARROW; GREEN ARROW; W/Ø WALK/ PED. CLR; D.W. DONT WALK; DET. LEADS IN SAW CUT; PROPOSED RMC; EXISTING RMC; CABLE CLOSURE; VC VIDEO CAMERA CABLE; RC RADAR CABLE; PROPOSED WOOD SPAN POLE; EXISTING WOOD SPAN POLE; PROPOSED STEEL SPAN POLE; EXISTING STEEL SPAN POLE; PROPOSED UTILITY POLE; EXISTING UTILITY POLE; PEDESTAL MOUNTING; PEDESTRIAN PUSH BUTTON & SIGN; DIRECTIONAL ARW. FOR PUSH BUTTON; TRAFFIC SIGNAL FACE; PEDESTRIAN SIGNAL FACE; GUY WIRE; PROPOSED HANDHOLE; EXISTING HANDHOLE; AUXILIARY TERMINATION CABINET; AUXILIARY EQUIPMENT CABINET; PROPOSED CONTROLLER; EXISTING CONTROLLER; IP DETECTOR; RADAR DETECTOR; THERMAL DETECTOR; AUDIO DETECTOR; 360° CAMERA ASSEMBLY; OPTICAL DETECTOR; SD SYSTEM DETECTOR; VIDEO DETECTION ZONE; LOOP DETECTOR; RADIO ANTENNA

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 0088-0198
ROUTE 72 EXIT 8 OFF RAMP AT COLUMBUS BLVD AND LAKE ST
TOWN(S): NEW BRITAIN
DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

DRAWING NO. TCS-02
SHEET NO.

LASTED SAVED BY: dgehring **FILE NAME:** G:\JOBS21\06\2100699\DGN\CONNECT\Traffic\Contract_Plans\TR_CP_0088_0198_Signal_088_255.dgn
PLOTTED DATE: 8/8/2024

MOVEMENT DIAGRAM

	NTOR	PHASE 1	PHASE 2 (PRE-EMPT 2)	PHASE 3	PHASE 4 (PRE-EMPT 3)	PHASE 5	PHASE 6 (PRE-EMPT 2)	PHASE 7	PHASE 8 (PRE-EMPT 3)	RAILROAD PRE-EMPT 1: TRACK CLEAR	RAILROAD PRE-EMPT 1: TRACK HOLD	RR PRE-EMPT FROM FAIL SAFE / EMERGENCY FLASH
	FLASH	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL
FACE # 1	R	← R ↰ R R	R R R	R R R	R R R	R R R	G Y R	R R R	R R R	R R R	G Y R	R
2	R	R R R	G Y R	R R R	G Y R	R R R	R R R	R R R	R R R	R R R	G Y R	R
4	R	R R R	R R R	R R R	R Y R	R R R	R R R	R R R	R R R	G Y R	R R R	FL R
5	R	R R R	G Y R	R R R	R R ← R	R R R	R R ← R	R R R	R R R	R R R	G Y R	R
6	R	R R R	R R R	R R R	R R R	R R R	G Y R	R R R	R R R	R R R	G Y R	R
7	R	R R R	R R R	R R R	G Y R	R R R	R R R	R R ← R	R R R	← G Y R	R R R	FL R
8	R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	G Y R	R R R	R R R	R
P	OFF	← DW	← DW	W⌀ ← DW	← DW	← DW	← DW	← DW	← DW	← DW	← DW	← OFF
NRT	OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← ON	← ON	← ON
NLT	OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← OFF	← ON	← ON	← ON
					← YIELD PT.				← YIELD PT.			
MIN		5 3 1	9 3 1	7 12 4 0	7 3 1	5 3 1	9 3 1	5 3 1	7 3 1	18 2 1	25 2 1	
MAX		12 3 2	35 3 2	15 16 4 0	30 3 2	15 3 2	30 3 2	12 3 2	30 3 2	30 3 3	35 3 3	
INTERVALS: MIN GRN		5	9	7	7	5	9	5	7	20	25	
WALK				7 ② 12 ① COUNTDOWN PEDESTRIAN SIGNAL								
PED CLR												
VEH EXT		2	2		2	2	2	2	2		2	
MAX 1		7	30		20	12	30	7	20	20	*③	*③
MAX 2		7	30		20	12	30	7	20	20	*③	*③
YELLOW		3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	
RED		1.0	2.0	0	2.0	1.0	2.0	1.0	2.0	2.0	2.0	
ADD INIT				ACCESSIBLE PEDESTRIAN SIGNAL								
MAX INIT												
TBR												
TTR												
MIN GAP												
MODE		NON-LOCK	MIN RECALL THIS PHASE	NON-LOCK	NON-LOCK	NON-LOCK	MIN RECALL THIS PHASE	NON-LOCK	NON-LOCK	ON/OMIT	ON/OMIT	
INT START												

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

ARTERY PHASE DETECTORS TO BE NON-ACTUATING DURING COORDINATION.

MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.

PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION

PHASE SPLITS SHOWN REPRESENT PRELIMINARY COORDINATION DATA.

① COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.

② PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.

③ INTERVAL TO BE DETERMINED BY PRESENCE OF TRAIN.

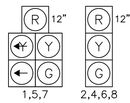
OFFICE RECORD

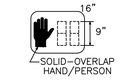
REV # 1 TIR # SM # N/A

OSTA #

PLAN REVISED TO INCLUDE NEW CURB LINES AND CONDUIT LAYOUT PER EXISTING CONDITIONS.

SIGNAL FACES





RAILROAD OPERATIONAL NOTES
RAILROAD PRE-EMPTION (NORMAL OPERATION)

1. WHEN THE TRAIN ENTERS TRACK CIRCUIT, R.R. PROVIDES IMMEDIATE PRE-EMPTION CIRCUIT TO THE TRAFFIC SIGNAL CONTROLLER CABINET.
2. THE TRAFFIC SIGNAL CONTROLLER IMMEDIATELY ADVANCES THE SEQUENCE TO THE "TRACK CLEAR" PHASE VIA THE PROPER YELLOW AND RED CLEARANCE INTERVALS.
3. THE TURN RESTRICTION SIGNS WILL BE ILLUMINATED WITH THE TRAFFIC SIGNAL PRE-EMPTION "TRACK CLEAR" PHASE.
4. THE "TRACK CLEAR"PHASE WILL TERMINATE, AND THE TRAFFIC SIGNAL CONTROLLER WILL HOLD IN THE "TRACK HOLD" PHASE.
5. THE R.R. FLASHING LIGHTS, BELL, AND GATES WILL COMMENCE OPERATION 7 TO 13 SECONDS INTO THE "TRACK CLEAR" PHASE DEPENDING ON WHAT INTERVAL THE TRAFFIC SIGNAL CONTROLLER IS IN WHEN THE PRE-EMPTION CALL IS RECEIVED. STANDARD R.R. TIMING FOR LIGHTS, BELL, AND GATES WILL COMMENCE OPERATION A MINIMUM OF 29 SECONDS PRIOR TO THE TRAIN ENTERING THE CROSSING.
6. WHEN THE TRAIN HAS LEFT THE CROSSING AND THE TRACK CIRCUIT, THE TRAFFIC CONTROL SIGNAL SHALL RETURN TO NORMAL OPERATION, PHASE 4 & 8.

RAILROAD PRE-EMPTION (FAIL/SAFE FLASH & EMERGENCY FLASH OPERATION)

1. TRAIN ENTERS TRACK CIRCUIT – RR PROVIDES IMMEDIATE PRE-EMPTION CIRCUIT TO THE TRAFFIC SIGNAL CONTROLLER CABINET.
2. THE FLASHING OPERATION REVERTS TO A STEADY RED ON SIGNAL FACES 1,2,5,6 AND 8 AND REMAINS FLASHING RED ON SIGNAL FACES 4 AND 7.
3. THE TURN RESTRICTION SIGNS WILL BE ILLUMINATED IMMEDIATELY UPON RECEIPT OF THE RAILROAD PRE-EMPTION CALL.
4. THE RR FLASHING LIGHTS, BELL AND GATES WILL COMMENCE OPERATION 14 SECONDS AFTER THE TRAIN HAS ENTERED THE TRACK CIRCUIT. STANDARD RR TIMING FOR BELL, LIGHTS AND GATES WILL COMMENCE A MINIMUM OF 29 SECONDS PRIOR TO THE TRAIN ENTERING THE CROSSING.
5. WHEN THE TRAIN HAS LEFT THE CROSSING AND THE TRACK CIRCUIT, THE TURN RESTRICTION SIGNS ARE DEACTIVATED, AND THE TRAFFIC CONTROL SIGNAL SHALL REVERT TO FAIL SAFE/EMERGENCY ALL RED FLASHING OPERATION.

TECHNICAL NOTES (CONTINUED)

UPON RECEIPT OF A RAILROAD PRE-EMPTION CALL THE SIGNAL TO IMMEDIATELY ADVANCE OUT OF ANY GREEN INCLUDING MINIMUM GREEN INTO CLEARANCE INTERVAL TIMINGS GOING TO PRE-EMPT, THEN GO IMMEDIATELY TO RAILROAD PRE-EMPTION "TRACK CLEAR"PHASE.

IF PRE-EMPTION OCCURS DURING THE CLEARANCE INTERVALS OF ANY PHASE, THE CONTROLLER TO DROP NEXT PHASE CALL, FINISH TIMING THE CLEARANCE INTERVALS GOING TO PRE-EMPT AND THEN GO IMMEDIATELY TO THE RAILROAD PRE-EMPTION "TRACK CLEAR"PHASE.

IF PRE-EMPTION OCCURS DURING EITHER THE WALK OR PEDESTRIAN CHANGE INTERVAL, THE SIGNAL SHALL IMMEDIATELY ADVANCE OUT OF THE WALK AND PEDESTRIAN CHANGE INTERVALS INTO THE CLEARANCE INTERVAL TIMINGS GOING TO PRE-EMPT, THEN GO IMMEDIATELY TO THE RAILROAD PRE-EMPTION "TRACK CLEAR"PHASE.

POLICE BOX MANUAL CONTROL SHALL BE ABLE TO BE PRE-EMPTED BY RAILROAD CIRCUIT. THE POLICE BOX MANUAL CONTROL SHALL REMAIN INOPERATIVE FROM THE TIME A RAILROAD PRE-EMPTION CALL IS RECEIVED UNTIL THE CONTROLLER LEAVES THE RAILROAD HOLD PHASE AND RETURNS TO PHASE 4 & 8.

ANY CHANGE IN THE CLEARANCE INTERVALS NOTED ON THIS PLAN MAY REQUIRE A MODIFICATION OF THE RAILROAD TRACK CIRCUIT.

EMERGENCY VEHICLE PRE-EMPTION TO BE INOPERATIVE DURING RAILROAD PRE-EMPTION AND FAIL SAFE/EMERGENCY FLASHING OPERATIONS.

TRAFFIC SIGNAL SHALL NOT BE PLACED ON PROGRAMMED FLASH.

CONSTRUCTION NOTES :

1. ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING, EXCEPT AS NOTED.
2. STAKE ALL R.O.W. PRIOR TO EXCAVATION.
3. ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY OF NEW BRITAIN PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND CITY PERMITS, INCLUDING BUT NOT LIMITED TO: SIDEWALK, CURB, AND ROAD OPENING.
5. REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS.
6. ALL SIGNS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
7. CONTRACTOR SHALL TELEPHONE "CALL BEFORE YOU DIG" 48 HOURS PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY REPRESENTATIVES AND CITY AGENCIES TWO WEEKS PRIOR TO EXCAVATION.
8. COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 – LEGAL RELATIONS AND RESPONSIBILITIES.
9. REMOVE ALL EXISTING SIGNS THAT CONFLICT WITH THE PROPOSED SIGNS, AS DIRECTED BY THE ENGINEER.
10. THE TOP OF MAST ARM AND PEDESTAL FOUNDATIONS WITHIN SIDEWALK AREAS ARE TO BE LEVEL WITH SIDEWALK. IN EARTH AREAS, MAST ARM AND PEDESTAL FOUNDATIONS TO HAVE A 3" REVEAL.
11. ALL MAST ARM MOUNTED TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE MAST ARM BY USE OF ADJUSTABLE BRACKETS.
12. ALL MAST ARM MOUNTED SIGNS ARE FIXED MOUNTED.
13. THE COLOR OF THE FINISH COAT FOR STEEL MAST ARMS, ANCHOR BOLT COVERS, POST CAPS, END CAPS, ALUMINUM PEDESTALS, TRAFFIC/PEDESTRIAN SIGNAL HEADS, PUSHBUTTONS AND ALL BRACKETS AND HARDWARE, INCLUDING STAINLESS STEEL BANDS, SHALL BE BLACK, AEROSPACE MATERIAL SPECIFICATION – STANDARD 595 (AMS-STD-595) COLOR NO. 27038. COLOR SAMPLES TO BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
14. REPLACE ALL PAVEMENT MARKINGS ALONG ALL APPROACHES WITHIN 200-FEET OF THE INTERSECTION, AS SHOWN ON THE PLANS. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED USING NON-DESTRUCTIVE METHODS ACCEPTED BY THE CITY.
15. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR PAVEMENT MARKING LAYOUT AND SIGN INFORMATION.
16. REFER TO TRAIL PLANS FOR SIDEWALK RAMP LAYOUT.

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6' X 40'	VIDEO 360	PRESENCE
D2	13' X 40'	VIDEO 360	PRESENCE
D4	6' X 40'	VIDEO 360	PRESENCE
D5	6' X 40'	VIDEO 360	PRESENCE
D6	14' X 40'	VIDEO 360	PRESENCE
D7	6' X 40'	VIDEO 360	PRESENCE
D8	6' X 40'	VIDEO 360	PRESENCE

SYSTEM LOC: MASTER

COORDINATION TYPE: CENTRAL SYSTEM

FUNCTION	PROGRAM TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
PATTERN 1	0700 - 1500 1500 - 2200	M-E SA-SU	80	20	25
PATTERN 3	1500-1900	M-F	90	0	0
MAX 1	ALL OTHER TIMES	DAILY			
MAX 2	FUTURE				

PHASE SPLITS SEC / %: ø1 ø2 ø3 ø4 ø5 ø6 ø7 ø8 ø9

PERMIS PERIOD: ø SEC

PRE-EMPTION SETTINGS

	RAILROAD PRE-EMPT 1	PRE-EMPT 2	PRE-EMPT 3
PRIORITY	YES	NO	NO
DET. LOCK	YES	YES	YES
DELAY	0	0	0
ALT. MIN. GRN	0	5	5
ALT. YELLOW	PARENT	PARENT	PARENT
ALT. RED	PARENT	PARENT	PARENT
ALT. PED. CLR.	NO	12	12
TRACK CLR GRN	20	–	–
TRACK CLR YELLOW	2.0	–	–
TRACK CLR RED	2.0	–	–
TRACK CLR PHASE	TRACK CLEAR	–	–
HOLD GREEN	* ③	12	7
HOLD YELLOW	2.0	3.0	3.0
HOLD RED	2.0	2.0	2.0
HOLD PHASE	TRACK HOLD	2&6	4&8
EXIT PHASE	4&8	4&8	2&6
EXIT CALL	NONE	NONE	NONE

DETECTOR	LOCAL
D1	ø1 C&E
D2	ø2 E
D4	ø4 C&E
D5	ø5 C&E
D6	ø6 E
D7	ø7 C&E
D8	ø8 C&E

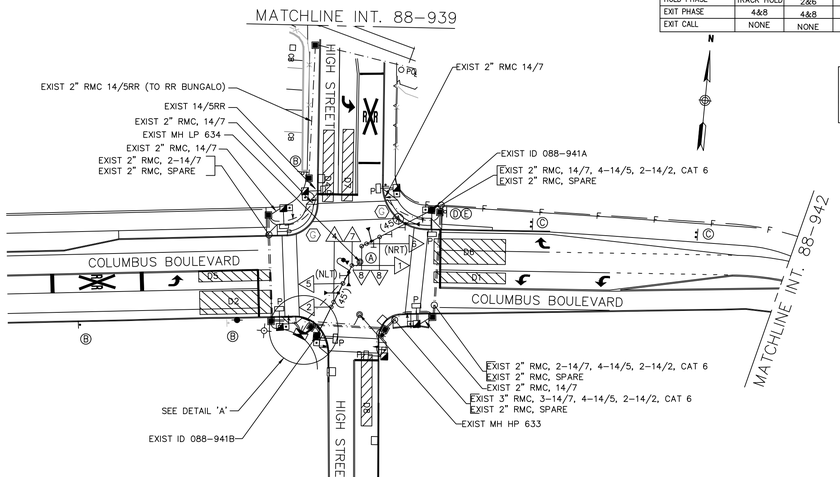
C&E = CALL AND EXTEND
E = EXTEND

TIME	EVENT
0"	START OF TRAFFIC SIGNAL PRE-EMPTION
14"	START OF RAILROAD FLASHING LIGHTS
21"	RAILROAD GATE-ARMS START TO DROP
31"	RAILROAD GATE ARMS ARE HORIZONTAL
43"	TRAIN ENTERS CROSSING

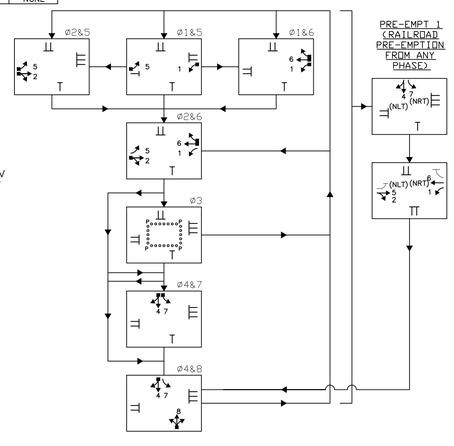
RAILROAD PRE-EMPTION

SIGN LEGEND

Ⓐ EXISTING 31-0816Z (NO TURN ON RED) – MAST ARM
Ⓑ EXISTING 31-0282Z (↰ ↑)
Ⓒ 31-0302Z (↰ ↑ ↱)
Ⓓ EXISTING 31-0564Z (BIKE LANE)
Ⓔ EXISTING 31-0824Z (NO TURN ON RED)



PHASE DIAGRAM

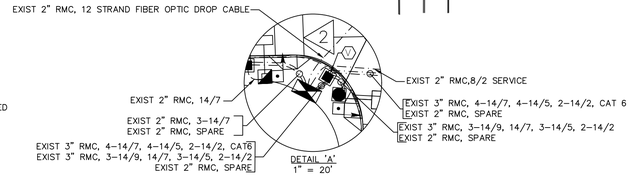


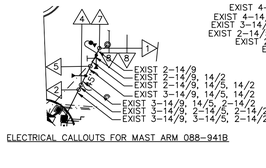
NOTES:

1. CITY TO MAINTAIN ALL PAVEMENT MARKINGS AND SIGNING.
2. CROSSWALKS SHALL BE BAR TYPE (16" BAR, 16" SPACE, 8' WIDTH) – CITY MAINTAINED.

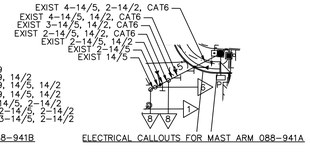
MAST ARM INFORMATION

ID #	APPROX. ARM ATTACHMENT HEIGHT	ARM LENGTH	YEAR INSTALLED
088-941A	16.5'	45'	2021
088-941B	17.5'	45'	2021





ELECTRICAL CALLOUTS FOR MAST ARM 088-941B



ELECTRICAL CALLOUTS FOR MAST ARM 088-941A

THIS SHEET IS FOR INFORMATION ONLY. NO TRAFFIC SIGNAL MODIFICATIONS REQUIRED.

CITY SIGNAL

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

INTERSECTION # 088-941

ENERGY BY - CITY | METER # - N/A

MAINT LEVEL - CITY | SERVICE - MH HP 633

UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION
1	1	NORTH CURBLINE REVISED, CONDUIT LOCATION REVISED

LEGEND:
R RED
Y YELLOW
G GREEN
◀R RED ARROW
◀Y YELLOW ARROW
◀G GREEN ARROW
W⌀ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

○ PROPOSED WOOD SPAN POLE
● EXISTING WOOD SPAN POLE
◯ PROPOSED STEEL SPAN POLE
■ EXISTING STEEL SPAN POLE
◈ PROPOSED UTILITY POLE
◆ EXISTING UTILITY POLE
□ PEDESTAL MOUNTING
⊡ PEDESTRIAN PUSH BUTTON & SIGN
⊡➤ DIRECTIONAL ARW. FOR PUSH BUTTON

EXISTING PEDESTAL
TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

EXISTING LIGHT POLE
PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
AUDIO DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
CAT 6 CATEGORY 6 CABLE

EXISTING LIGHT POLE WITH ARM
PROPOSED LIGHT POLE WITH ARM
SIDEWALK RAMP
CABLE CLOSURE
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

CITY OF NEW BRITAIN

COLUMBUS BOULEVARD AT HIGH STREET

DATE PLOTTED : Mar 15, 2024 PS-88-198 -TCS-03.dwg

SCALE 1" = 40'

TOWN: NEW BRITAIN

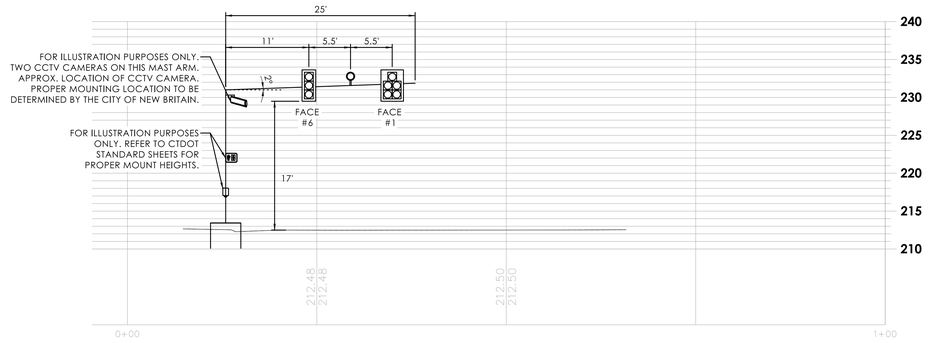
DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

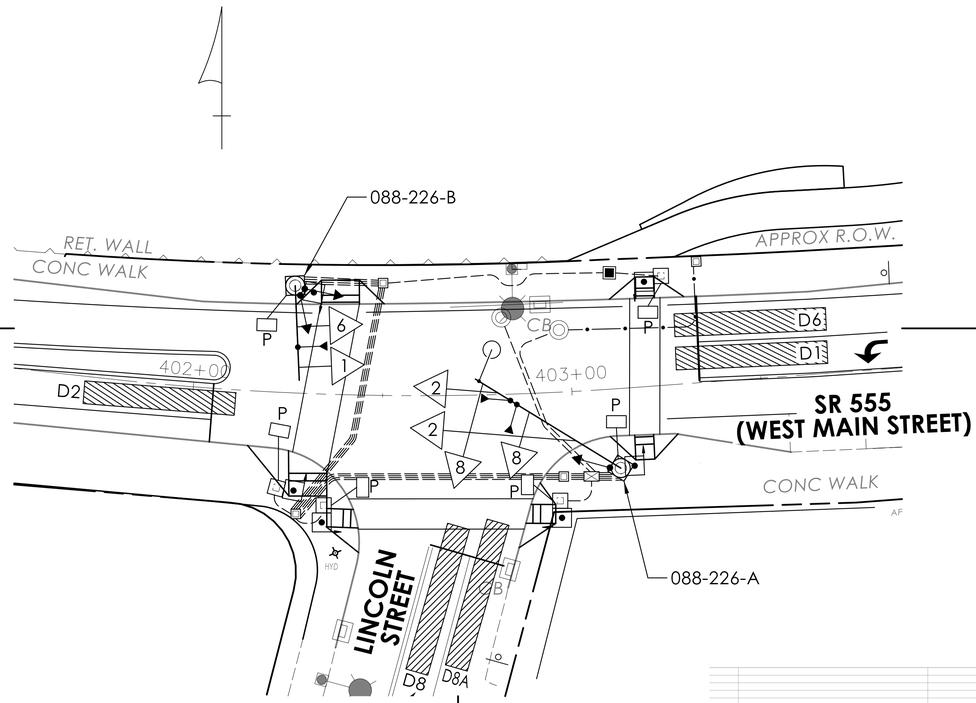
PROJECT NO. 0088-0198

DRAWING NO. TCS-03

SHEET NO.

MAST ARM 088-226-B PROFILE VIEW





1 TXSC-01 Signal Plan XSC
1"=20'

DETECTOR NOTES

LOCATIONS OF AUDIBLE DETECTORS ARE FOR ILLUSTRATION PURPOSES ONLY. LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OF THEIR DESIGNATED REPRESENTATIVE. DETECTOR CABLES SHALL BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

MAST ARM NOTES

CONTRACTOR TO VERIFY ALL MAST ARMS INFORMATION INCLUDING CROSS SECTIONS AND DIMENSIONS, BASED ON FIELD SURVEY, PRIOR TO SUBMISSION OF WORKING DRAWINGS.

NOTES

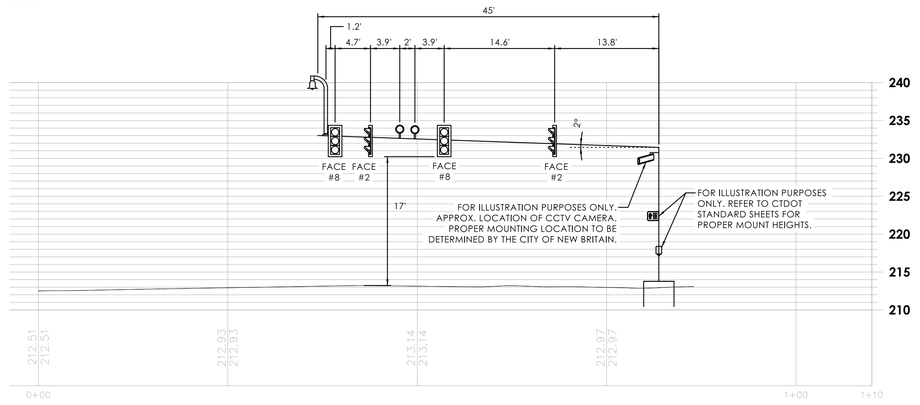
SEE TCS-01 FOR ADDITIONAL LEGEND INFORMATION.

MAST ARM PROFILE IS PERPENDICULAR TO ARM.

LEGEND

- TRAFFIC DIGNAL FACE
- 360 VIDEO DETECTOR
- EMERGENCY PRE-EMPTION DETECTOR
- CTV CAMERA
- PEDESTRIAN SIGNAL EQUIPMENT

MAST ARM 088-226-A PROFILE VIEW



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

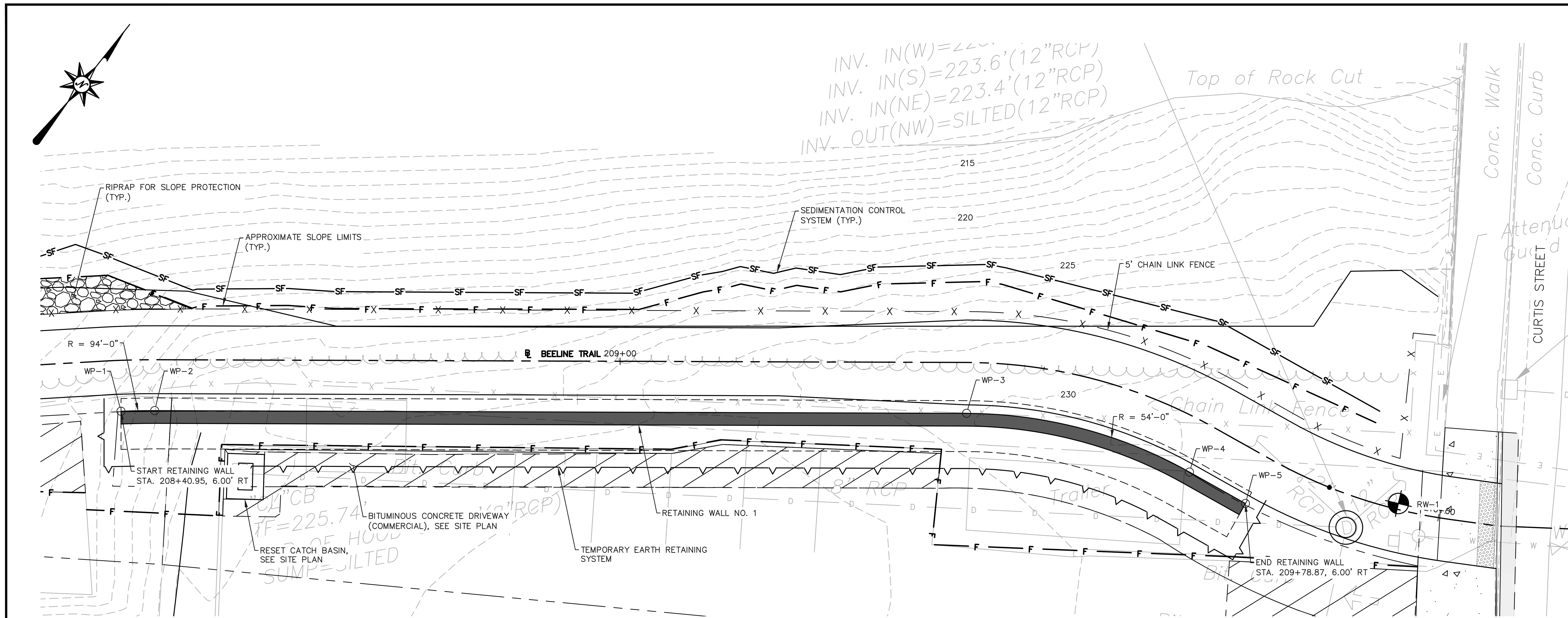
SIGNATURE/ BLOCK:

CITY OF NEW BRITAIN

PROJECT NUMBER: 0088-0198
PROJECT DESCRIPTION: SR 555 (WEST MAIN STREET) AT LINCOLN STREET
TOWN(S): NEW BRITAIN
DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN CROSS SECTIONS - 088-226

DRAWING NO. TXSC-01
SHEET NO.

LASTED SAVED BY: dgehring **FILE NAME:** G:\JOBS21\06\2100699\DGN\CONNECT\Traffic\Contract_Plans\TR_CP_0088_0198_XSC_088_226.dgn
PLOTTED DATE: 8/8/2024



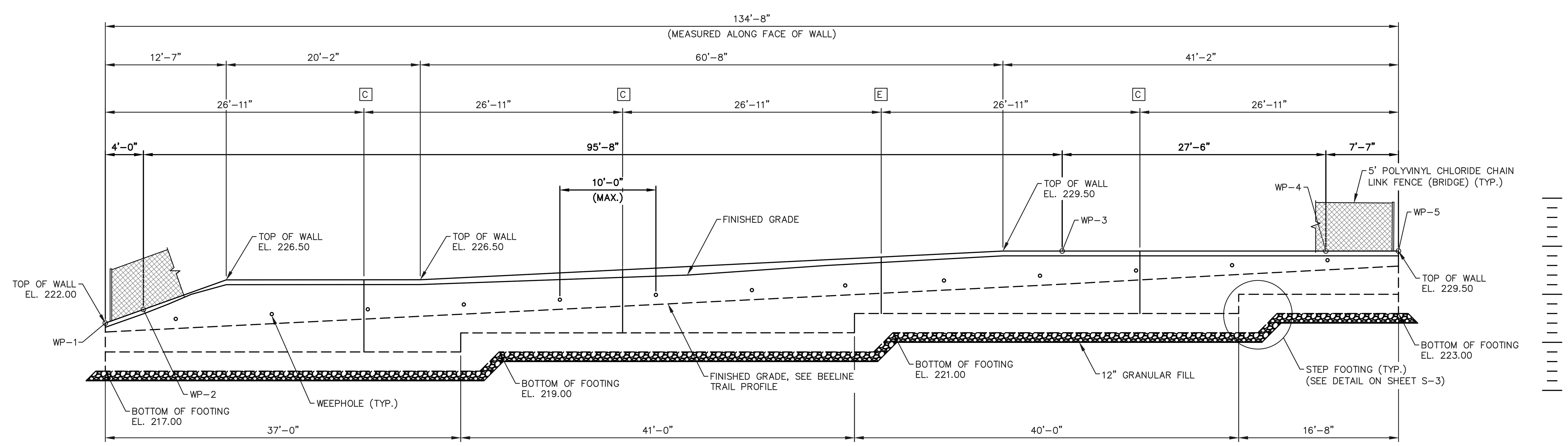
PLAN

1/8" = 1'-0"

NOTE: SEE BEELINE TRAIL PROFILE FOR TRAIL GRADING.

LEGEND
RW-X APPROXIMATE BORING LOCATION

WORKING POINT COORDINATES			
WP	STATION	NORTHING	EASTING
WP-1	208+40.95	803400.00	988095.38
WP-2	208+45.17	803400.96	988099.23
WP-3	209+40.96	803422.17	988192.52
WP-4	209+71.36	803421.33	988219.68
WP-5	209+78.87	803419.21	988226.93



DEVELOPED SOUTH ELEVATION

1/8" = 1'-0"

LEGEND

- C CONTRACTION JOINT
- E EXPANSION JOINT

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020), SUPPLEMENTAL SPECIFICATIONS DATED JULY, 2023 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD SPECIFICATIONS FOR HIGHWAY BRIDGES (9TH EDITION, 2020) AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003 WITH REVISIONS UP TO AND INCLUDING 2022).

MATERIAL STRENGTHS:

CONCRETE:
CLASS PCC 03342 CONCRETE...........................f'c = 3,000 psi

REINFORCEMENT:
(ASTM A615 GRADE 60).......................................fy = 60,000 psi

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

FOUNDATION PRESSURES:

FACTORED BEARING PRESSURE (STRENGTH LIMIT STATE): 2.22 KIPS/SQUARE FOOT
FACTORED BEARING PRESSURE (SERVICE LIMIT STATE): 1.55 KIPS/SQUARE FOOT

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

UTILITIES: THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES LOCATED WITHIN THE VICINITY OF THE SITE DURING CONSTRUCTION. THE METHOD OF SUPPORTING AND PROTECTING UTILITIES MUST BE APPROVED BY THE UTILITY COMPANY. UTILITY MODIFICATIONS SHALL BE MADE BY THE RESPECTIVE UTILITY COMPANIES EXCEPT WHERE NOTED OTHERWISE.

1. FINISHED GRADE AT BACK OF WALL REFERS TO THE TOP OF TRAIL ELEVATION.
2. BOTTOM OF FOOTING IS DEPENDENT ON THE TYPE OF RETAINING WALL. IT IS PRESUMED THAT THE RETAINING WALL IS A CAST-IN-PLACE REINFORCED CONCRETE CANTILEVER WALL WITH BOTTOM OF FOOTING 4' BELOW GRADE.

CONCRETE NOTES

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

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

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

WEEPHOLES: THE COST OF FURNISHING AND INSTALLING WEEPHOLES SHALL BE INCLUDED IN THE ITEM "ABUTMENT AND WALL CONCRETE".

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER IS PAID FOR AS "½" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES."

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

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

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	RETAINING WALL FOOTING	PCC03342
ABUTMENT AND WALL CONCRETE	RETAINING WALL STEM	PCC03342

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Land Surveying
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(860) 249-2400 Fax

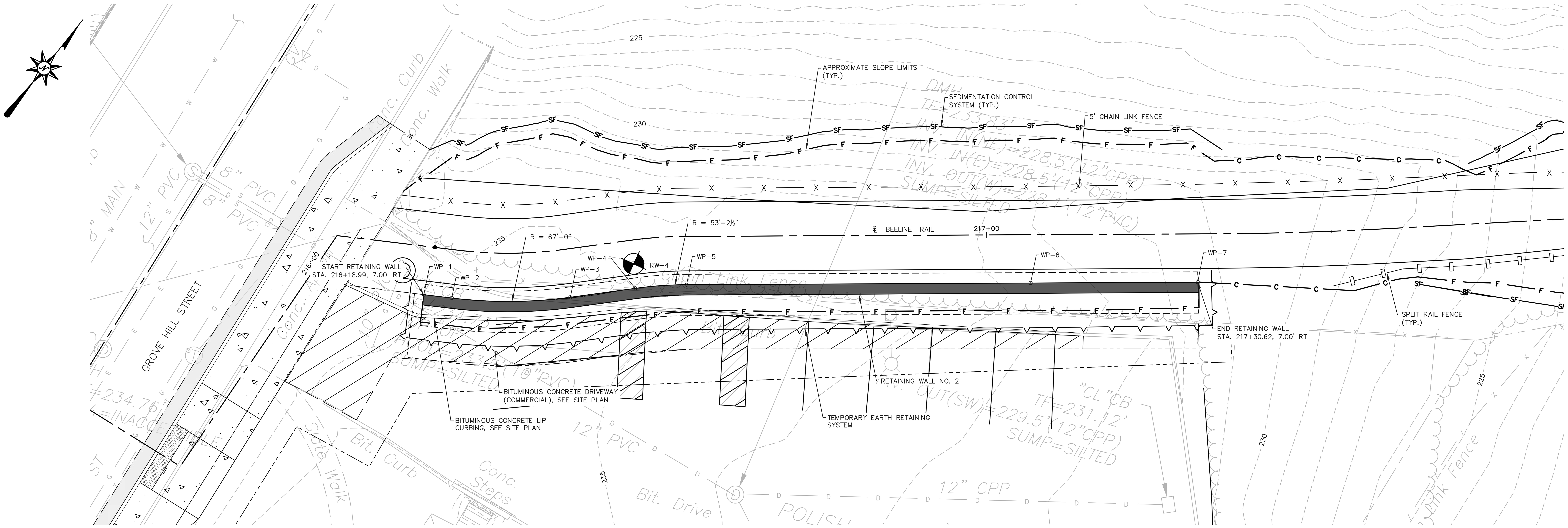
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS: No. | Date | Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069901

Title
RETAINING WALL SITE NO. 1 PLAN, ELEVATION AND GENERAL NOTES

Sheet No.
S-01



PLAN

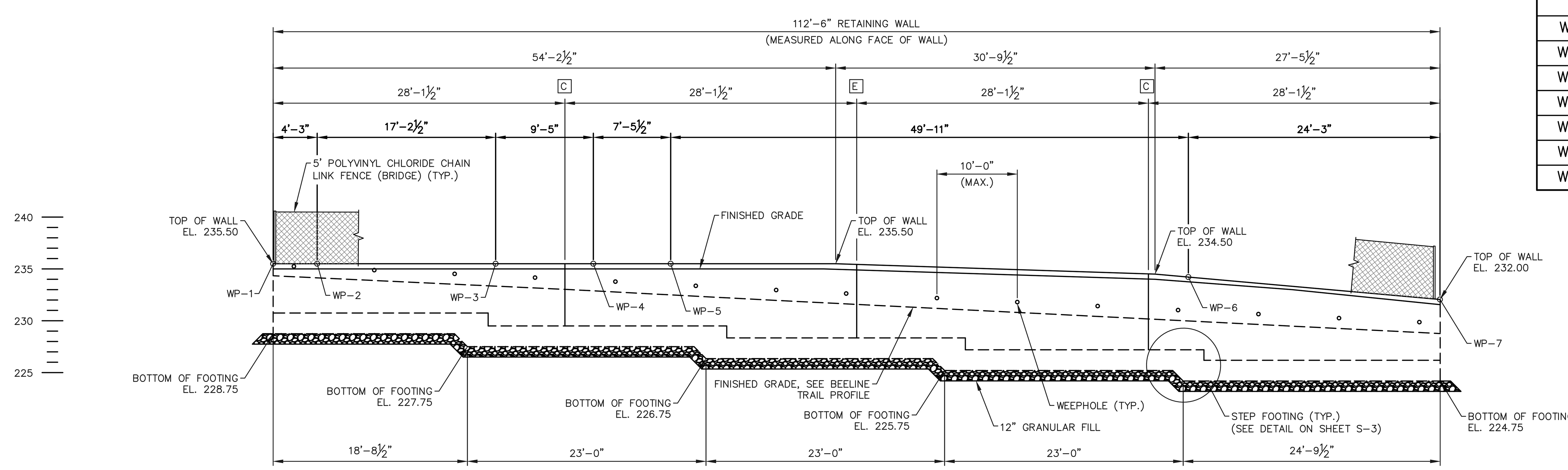
1/8" = 1'-0"

NOTE: SEE BEELINE TRAIL PROFILE FOR TRAIL GRADING.

LEGEND	
RW–X	APPROXIMATE BORING LOCATION

WORKING POINT COORDINATES

WP	STATION	NORTHING	EASTING
WP–1	216+18.99	803660.34	988784.61
WP–2	216+23.24	803662.53	988788.24
WP–3	216+38.64	803673.21	988801.67
WP–4	216+48.06	803679.96	988808.23
WP–5	216+56.44	803684.95	988813.76
WP–6	217+06.35	803715.87	988852.94
WP–7	217+30.62	803730.91	988871.99



DEVELOPED SOUTH ELEVATION

1/8" = 1'-0"

LEGEND

- C CONTRACTION JOINT
- E EXPANSION JOINT

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(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

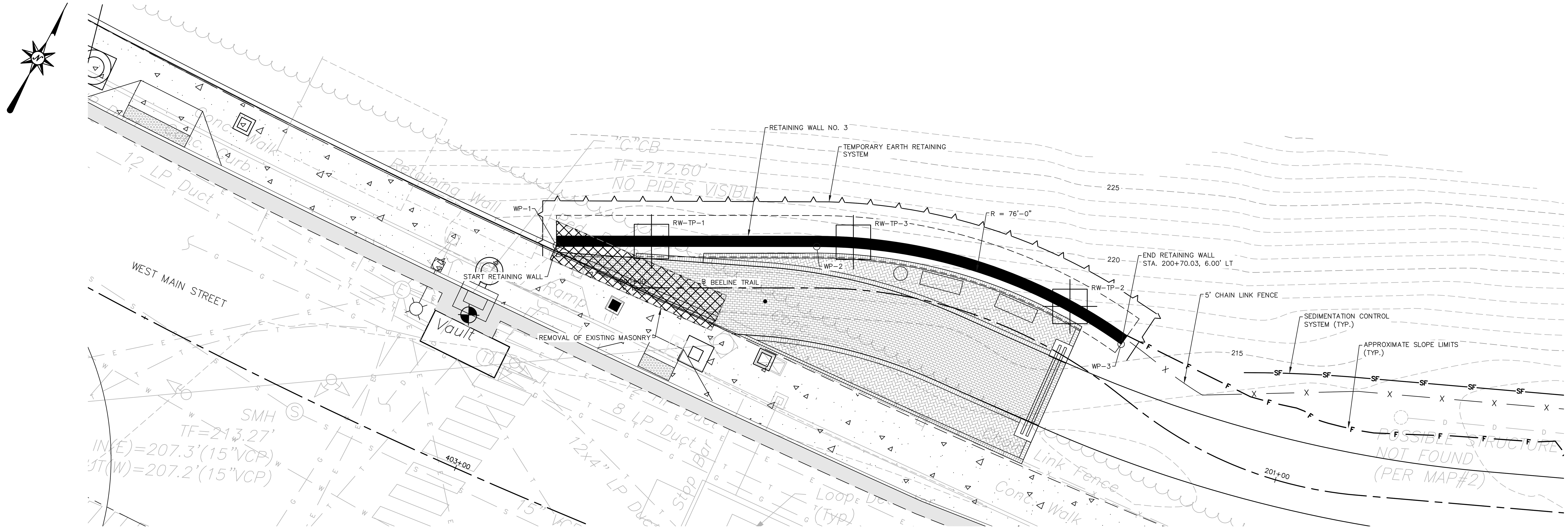
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069902

Title
RETAINING WALL SITE NO. 2 PLAN AND ELEVATION

Sheet No.
S-02



PLAN

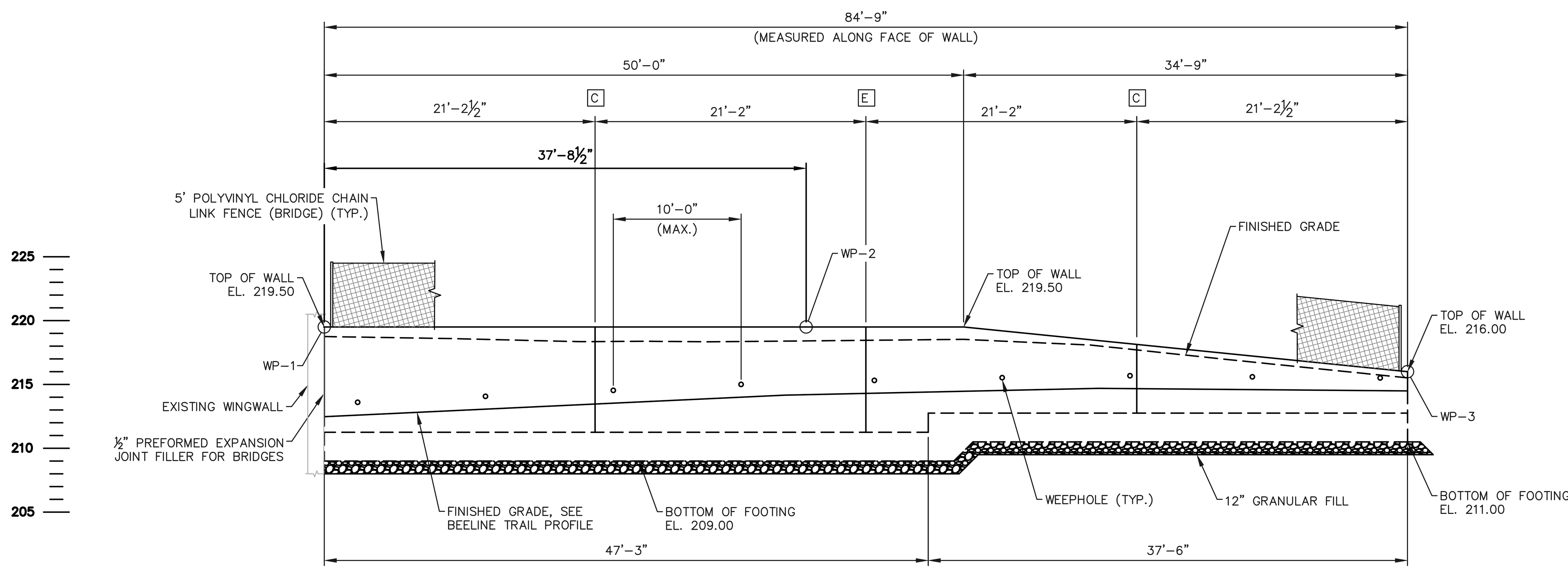
1/8" = 1'-0"

NOTE: SEE BEELINE TRAIL PROFILE FOR TRAIL GRADING.

LEGEND	
RW-TP-X	APPROXIMATE BORING LOCATION

WORKING POINT COORDINATES

WP	STATION	NORTHING	EASTING
WP-1		803130.67	987295.76
WP-2	200+26.69	803147.76	987329.37
WP-3	200+70.03	803155.17	387375.07



DEVELOPED SOUTH ELEVATION

1/8" = 1'-0"

LEGEND

- C CONTRACTION JOINT
- E EXPANSION JOINT

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Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

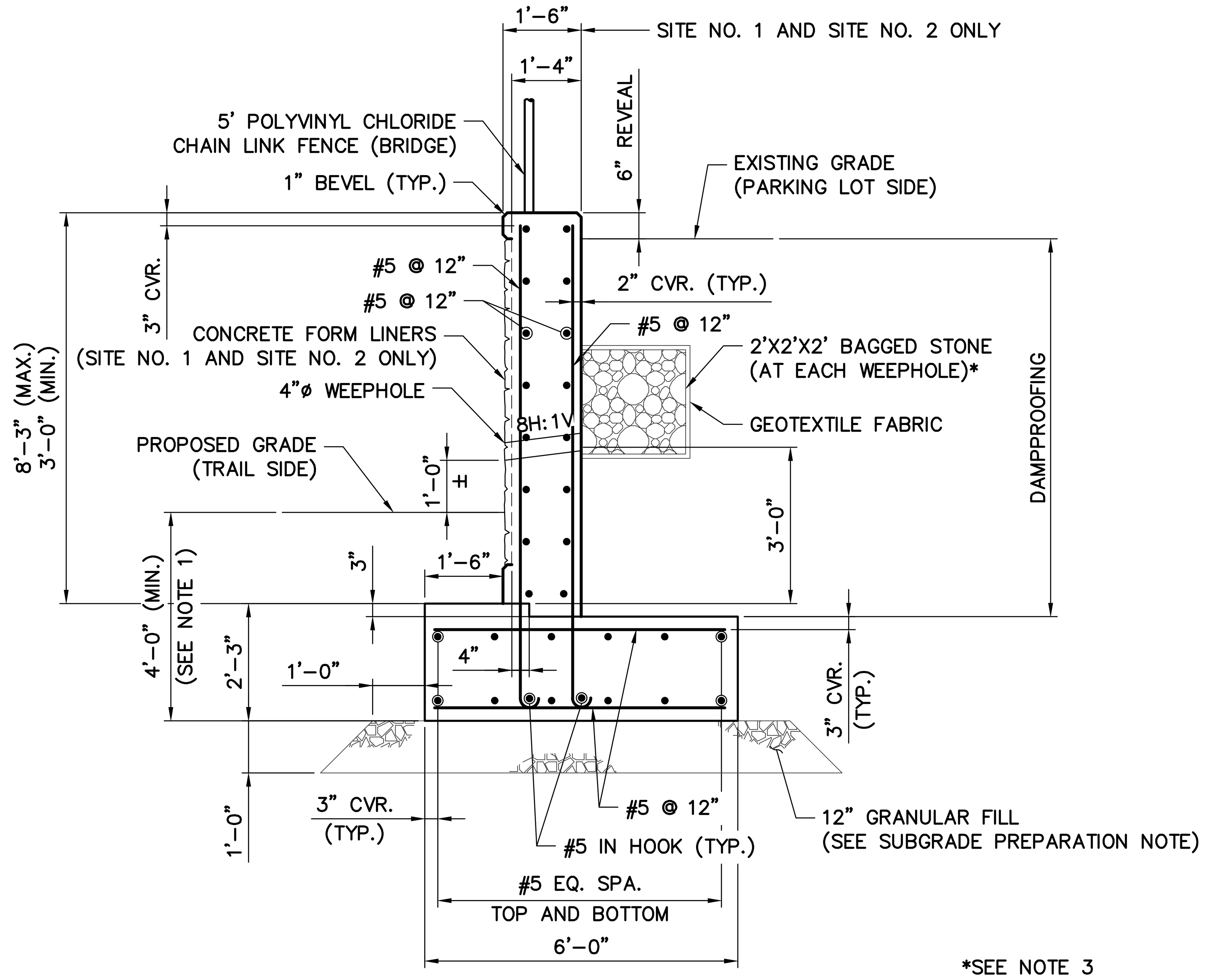
BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS No. Date Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069903

Title
RETAINING WALL SITE NO. 3 PLAN AND ELEVATION

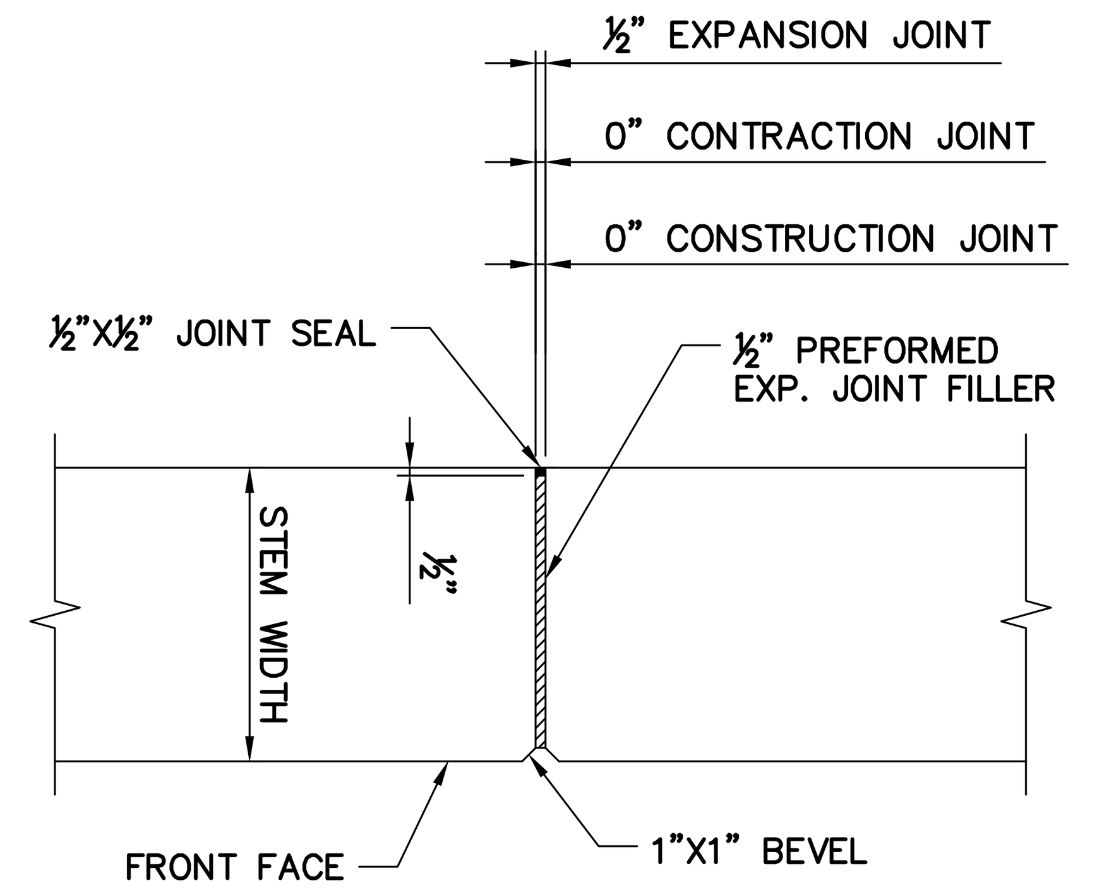
Sheet No.
S-03



*SEE NOTE 3

CAST-IN-PLACE RETAINING WALL SECTION

1/2" = 1'-0"



NOTE:
1. JOINT SEAL TO EXTEND FROM TOP OF FOOTING TO TOP OF WALL.
2. NO REINFORCEMENT SHALL PASS THROUGH EXPANSION OR CONTRACTION JOINTS. REINFORCEMENT SHALL PASS THROUGH CONSTRUCTION JOINTS.

VERTICAL STEM JOINT DETAIL

1" = 1'-0"

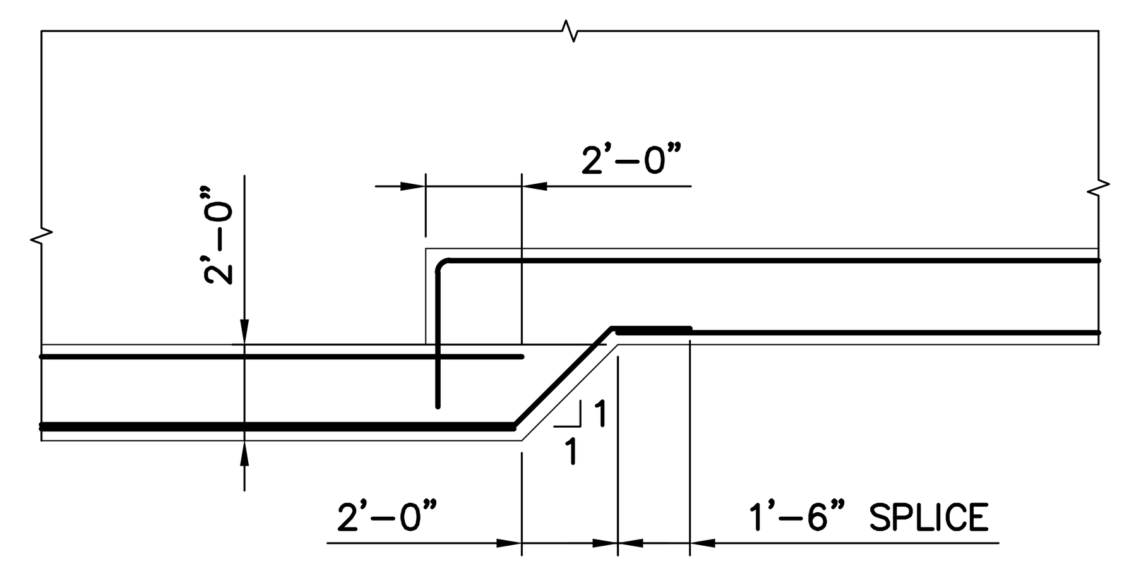
NOTES

1. THE CONTRACTOR MAY SELECT THE OPTION OF A CAST-IN-PLACE RETAINING WALL, PREFABRICATED MODULAR WALL, OR MECHANICALLY STABILIZED EARTH (MSE) WALL AS SHOWN ON THE PLANS HEREIN. WALLS ARE PAID UNDER THE UNIT PRICE OF "RETAINING WALL (SITE NO. 1)" AND "RETAINING WALL (SITE NO. 2)", SEE SPECIAL PROVISIONS. PREFABRICATED MODULAR WALLS AND MECHANICALLY STABILIZED EARTH (MSE) WALLS SHALL BE SELECTED FROM THE CTDOT QUALIFIED PRODUCT LIST.
2. RETAINING WALL (SITE NO. 3) IS REQUIRED TO BE A CAST-IN-PLACE RETAINING WALL. RETAINING WALL (SITE NO. 3) SHOULD NOT HAVE FORMLINER.
3. FACTORED BEARING PRESSURE (STRENGTH LIMIT STATE) = 2.22 KSF
   FACTORED BEARING PRESSURE (SERVICE LIMIT STATE) = 1.55 KSF
4. WEEPHOLES ARE SHOWN AS SUBSURFACE DRAINAGE FOR THE CAST-IN-PLACE RETAINING WALL OPTION. SUBSURFACE DRAINAGE IS ALSO REQUIRED FOR THE PREFABRICATED MODULAR WALL AND THE MECHANICALLY STABILIZED EARTH (MSE) WALL. THE CHOSEN METHOD OF SUBSURFACE DRAINAGE FOR THESE WALLS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. TEMPORARY EARTH RETAINING SYSTEM BELOW PAY LIMITS AND ANY TIEBACKS AND BRACING ASSOCIATED WITH SAME SHALL BE INCLUDED IN THE LUMP SUM COST OF THE WALL.
6. REINFORCING TO HAVE 2" COVER EXCEPT WHERE SHOWN OTHERWISE.
7. ANY ADDITIONAL PERVIOUS STRUCTURE BACKFILL REQUIRED OUTSIDE THIS LIMIT SHALL ALSO BE INCLUDED IN THE LUMP SUM PRICE.

SUBGRADE PREPARATION NOTE:

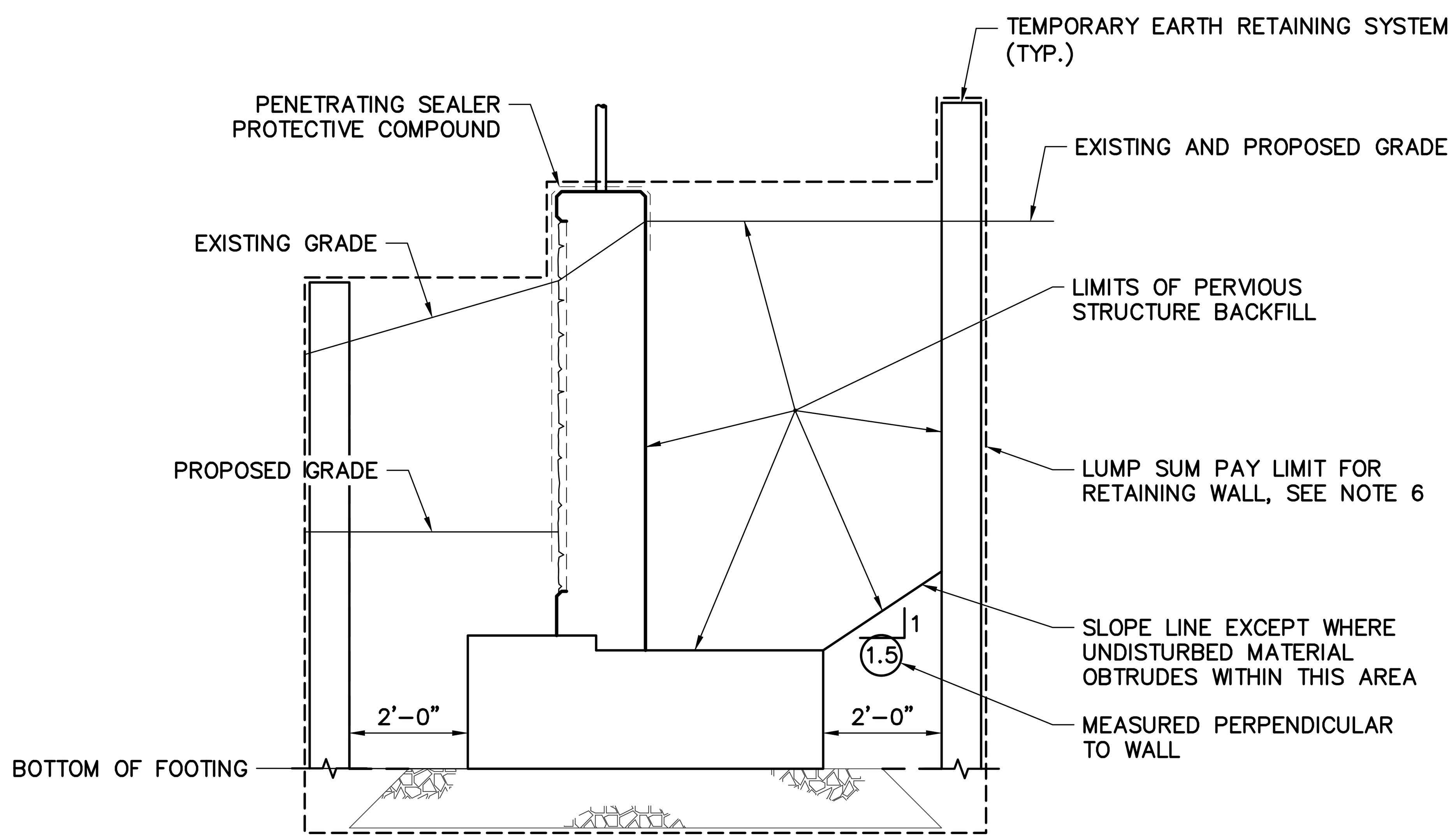
THE PROPOSED RETAINING WALLS SPREAD FOOTINGS MAY BEAR ON PREPARED FILL AND/OR NATURAL, GLACIAL TILL DEPOSITS OR ON COMPACTED GRANULAR FILL. EXISTING FILL IS NOT CONSIDERED A SUITABLE BEARING MATERIAL AND MUST BE EXCAVATED IN THE AREA OF THE PROPOSED FOOTINGS DURING SITE PREPARATION.

EXCAVATION TO RETAINING WALL SUBGRADE ELEVATIONS SHOULD BE PERFORMED USING A SMOOTH-EDGED BUCKET TO MINIMIZE POSSIBLE DISTURBANCE TO THE SUBGRADE. SOIL SUBGRADES SHOULD BE PROOF-COMPACTED PRIOR TO GRANULAR FILL PLACEMENT WITH A VIBRATORY PLATE COMPACTOR WITH A MINIMUM OF 2,500 POUNDS OF CENTRIFUGAL FORCE. ANY SOFT OR LOOSE ZONES, OR AREAS WITH NESTLED BOULDERS OR DEBRIS, IDENTIFIED DURING COMPACTION SHOULD BE EXCAVATED AND REPLACED WITH COMPACTED GRANULAR FILL, AS NECESSARY, AND AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. THE BASE OF FOUNDATION EXCAVATIONS SHOULD BE FREE OF DEBRIS MATERIALS, WATER, ICE, AND LOOSE AND FROZEN SOILS PRIOR TO PLACING GRANULAR FILL. SHOULD THE MATERIALS AT BEARING LEVEL BECOME DISTURBED, THE IMPACTED MATERIALS SHOULD BE REMOVED PRIOR TO PLACING GRANULAR FILL. SUBGRADE PREPARATIONS SHOULD BE COMPLETED TO THE SATISFACTION OF THE ENGINEER.



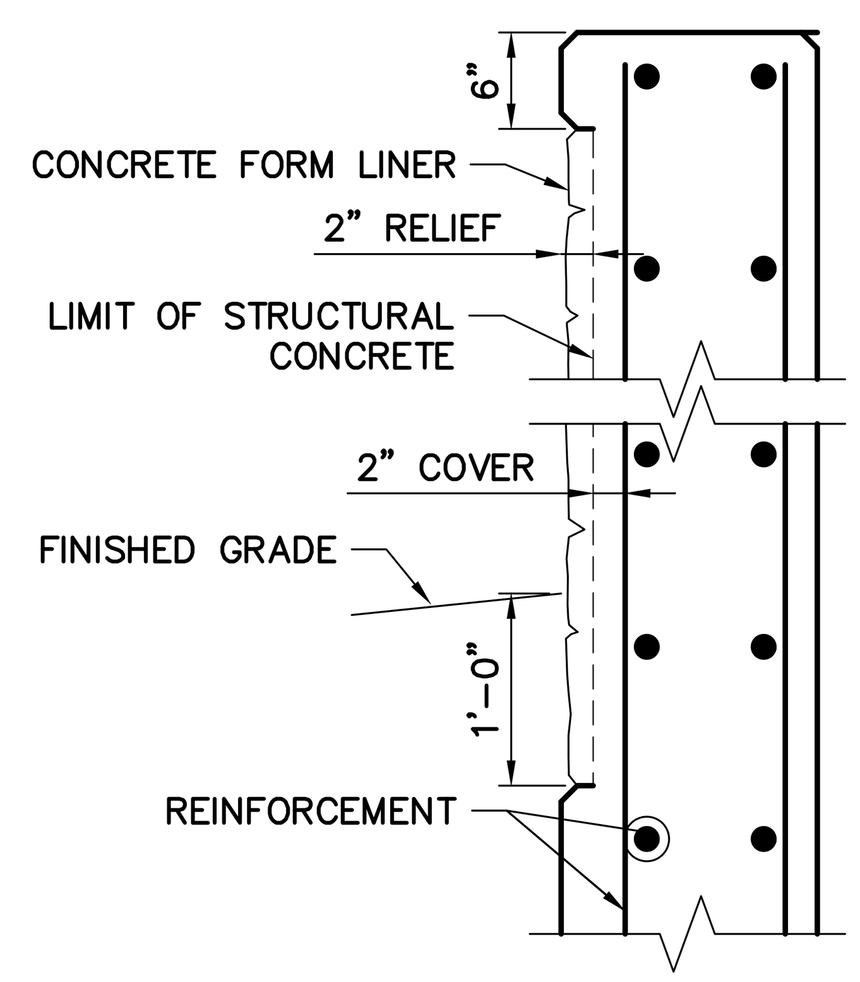
STEP FOOTING DETAILS

1/4" = 1'-0"



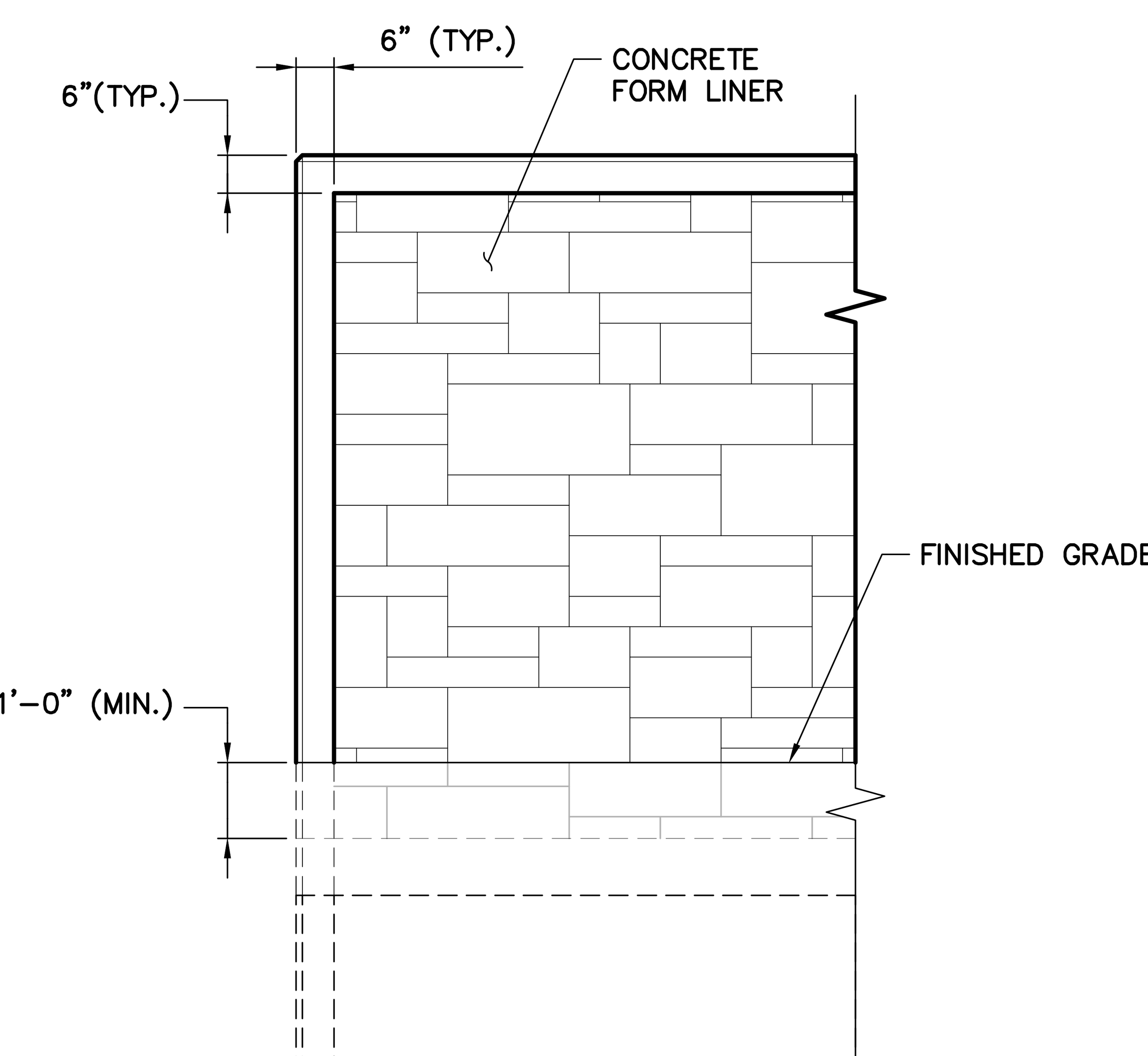
RETAINING WALL PAY LIMITS

1/2" = 1'-0"



FORMLINER DETAIL

NOT TO SCALE



FORMLINER ELEVATION

1/2" = 1'-0"

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(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS

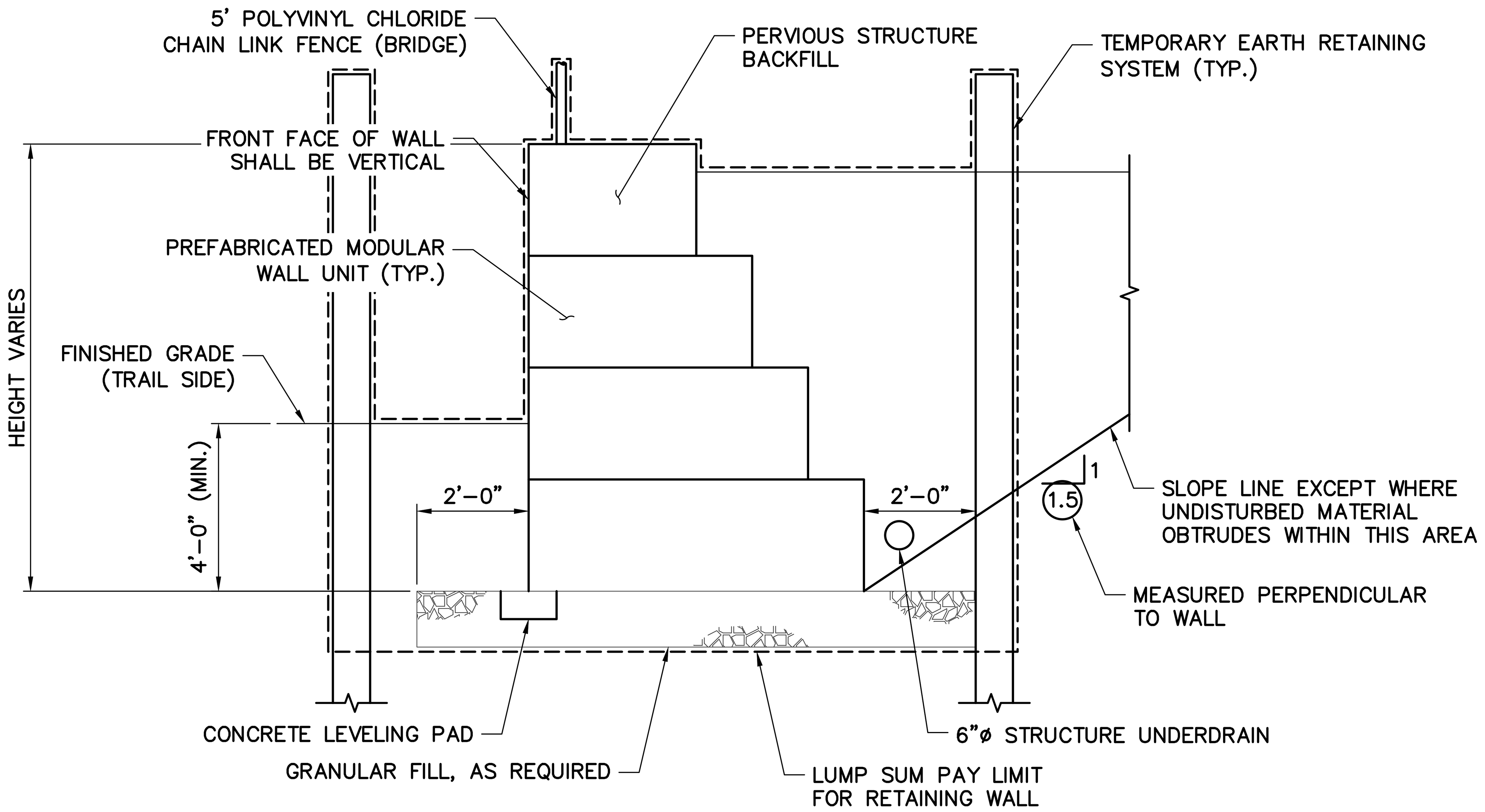
No.	Date	Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069904

Title
RETAINING WALL DETAILS 1 OF 2

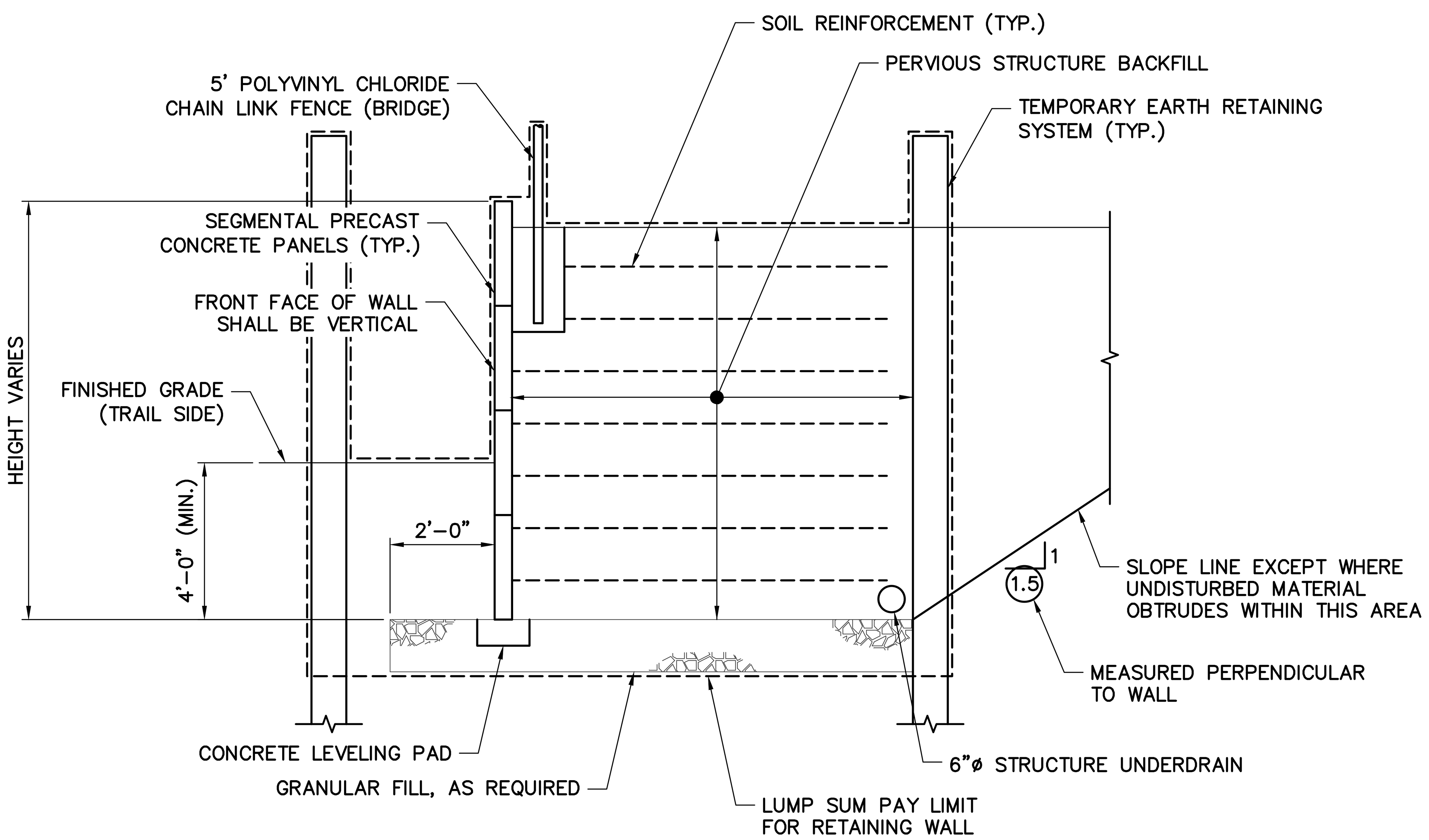
Sheet No.
S-04

Xref (s): : BD210069901 : XZ210069901 : XR210069902 : XBRG210069901



PREFABRICATED MODULAR WALL SECTION

NOT TO SCALE



MECHANICALLY STABILIZED EARTH (MSE) WALL SECTION

NOT TO SCALE

NOTES

1. THE CONTRACTOR SHALL SELECT, DESIGN (FOR PROPRIETARY WALLS ONLY), AND CONSTRUCT ONE OF THE FOLLOWING WALL OPTIONS IN ACCORDANCE WITH THE SPECIAL PROVISION "RETAINING WALL (SITE NO. 1), RETAINING WALL (SITE NO. 2) AND RETAINING WALL (SITE NO. 3)".
2. FACTORED BEARING PRESSURE (STRENGTH LIMIT STATE) = 2.22 KSF
   FACTORED BEARING PRESSURE (SERVICE LIMIT STATE) = 1.55 KSF
3. THE PREFABRICATED MODULAR WALL AND THE MECHANICALLY STABILIZED EARTH WALL (MSE) FACING SHALL HAVE AN ARCHITECTURAL CONCRETE FINISH SIMILAR TO THAT OF A CONCRETE FORM LINER AS SHOWN ON SHEET S-03.
4. TEMPORARY EARTH RETAINING SYSTEM BELOW PAY LIMITS AND ANY TIEBACKS AND BRACING ASSOCIATED WITH SAME SHALL BE INCLUDED IN THE LUMP SUM COST OF THE WALL.
5. DETAILS SHOWN ON THIS SHEET ARE NOT SPECIFIC. THE CONTRACTOR'S DESIGNER SHALL MODIFY EACH SECTION FOR EACH SPECIFIC SITE.
6. REINFORCING TO HAVE 2" COVER EXCEPT WHERE SHOWN OTHERWISE.
7. ALL DIMENSIONS ARE SPECIFIED WITH THE APPLICABLE UNITS OF MEASUREMENT.
8. ANY ADDITIONAL PERVIOUS STRUCTURE BACKFILL REQUIRED OUTSIDE THIS LIMIT SHALL ALSO BE INCLUDE IN THE LUMP SUM PRICE.

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BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069905

Title
RETAINING WALL DETAILS 2 OF 2

Sheet No.
S-05

Driller:	Mike St. John	**Connecticut DOT Boring Report**		Hole No.:	RW-1
Inspector:	M. Fekieta	Town:	New Britain	Sta./Offset:	209+95/ 1'L
Engineer:	R. Janeiro	Project No.:	088-198	Northing:	803423.3
Start Date:	1/12/2023	Route No.:	Route 72 R.O.W.	Easting:	988244.5
Finish Date:	1/12/2023	Bridge No.:	-	Surface Elevation:	229'+/-
Project Description: Proposed Beeline Trail (Phase I)					
Casing Size/Type: 4" ID FJ (HW)		Sampler Type/Size: 1 3/8" ID SS		Core Barrel Type: NQ	
Hammer Wt. 300lb Fall: 24in.		Hammer Wt. 140lb. Fall: 30in.			
Groundwater Observations: Not Encountered					

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
	S -1	2 2 7 8	24	3		MISC. FILL	Dark brown, C-F SAND, some m-f Gravel, some Silt, trace Roots	
5	S -2	3 3 6 8	24	4			Dark red-brown, C-F SAND and C-F GRAVEL, little Silt, trace Roots	- 224+/-
	S -3	11 37 33 34	24	15		GLACIAL TILL	Red-brown to gray-brown, C-F GRAVEL and C-F SAND, little Silt	
	S -4	41 42 50/4"	16	16			Gray-brown, C-F GRAVEL, some c-f Sand, little Silt	
10						WEATHERED BEDROCK		- 219+/-
	C-1		60	60	8	BEDROCK	Very Poor Quality, Strong, Moderately Weathered, Intensely Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 4, 4, 4, 4.5, 7]	
15								- 214+/-
	C-2		60	60	52		Fair Quality, Strong to Very Strong, Moderately to Slighlty Weathered, Highly Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 5, 5, 6, 5.5, 5.5]	
20								- 209+/-
25							END OF BORING AT 20ft	
30								
35								
40								
45								

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

Total Penetration in		NOTES: 1) Stratification lines represent approx. boundaries between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.	Sheet 1 of 1
Earth: 10ft	Rock: 10ft		
No. of Soil Samples : 4	No. of Core Runs: 2		

Driller:	Mike St. John	**Connecticut DOT Boring Report**		Hole No.:	RW-2
Inspector:	M. Fekieta	Town:	New Britain	Sta./Offset:	210+53/ 12'L
Engineer:	R. Janeiro	Project No.:	088-198	Northing:	803443.5
Start Date:	1/12/2023	Route No.:	Route 72 R.O.W.	Easting:	988299.6
Finish Date:	1/13/2023	Bridge No.:	-	Surface Elevation:	230'+/-
Project Description: Proposed Beeline Trail (Phase I)					
Casing Size/Type: 4" ID FJ (HW)		Sampler Type/Size: 1 3/8" ID SS		Core Barrel Type: NQ	
Hammer Wt. 300lb Fall: 24in.		Hammer Wt. 140lb. Fall: 30in.			
Groundwater Observations: Not Encountered					

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
	S -1	5 6 8 17	24	18		MISC. FILL	Dark red-brown, C-F SAND and SILT, some f Gravel, trace Roots	
5	S -2	13 16 18 21	24	10			Dark red-brown, C-F SAND, some m-f Gravel, little Silt	- 225+/-
	S -3	7 6 10 50/5"	23	16		GLACIAL TILL/ WEATHERED BEDROCK	Red-brown to gray-brown, C-F GRAVEL and C-F SAND, little Silt, with decomposed gneiss fragments at sample tip	
10								- 220+/-
	C-1		60	55	12	BEDROCK	Very Poor Quality, Medium Strong to Strong, Moderately Weathered, Intensely Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 3, 3, 5, 5, 5]	
15								- 215+/-
	C-2		60	57	59		Fair Quality, Strong, Moderately Weathered Highly Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 4, 3, 3, 3, 3]	
20								- 210+/-
25							END OF BORING AT 20ft	
30								
35								
40								
45								

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

Total Penetration in		NOTES: 1) Stratification lines represent approx. boundaries between soil types, transitions may be gradual. 2) Water level readings have been made at times and under conditions stated, fluctuations may occur due to other factors.	Sheet 1 of 1
Earth: 10ft	Rock: 10ft		
No. of Soil Samples 3	No. of Core Runs: 2		

Driller:	Mike St. John	**Connecticut DOT Boring Report**		Hole No.:	RW-3
Inspector:	T. Orszulak	Town:	New Britain	Sta./Offset:	215+01/ 9'R
Engineer:	R. Janeiro	Project No.:	088-198	Northing:	803602
Start Date:	1/13/2023	Route No.:	Route 72 R.O.W.	Easting:	988712
Finish Date:	1/13/2023	Bridge No.:	-	Surface Elevation:	238'+/-
Project Description: Proposed Beeline Trail (Phase I)					
Casing Size/Type: 4" ID FJ (HW)		Sampler Type/Size: 1 3/8" ID SS		Core Barrel Type: NQ	
Hammer Wt. 300lb Fall: 24in.		Hammer Wt. 140lb. Fall: 30in.			
Groundwater Observations: Not Encountered					

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
	S -1	4 6 8 4	24	10		MISC. FILL	Dark brown/black, SILT and C-F SAND, some f Gravel, trace Organic debris, trace Porcelain fragments	
5	S -2	3 50/2"	8	3			Dark brown/black, C-F SAND, some m-f Gravel, little Silt, trace Brick/Concrete/Asphalt fragments	
	S -3	50/3"	3	2		GLACIAL TILL/ WEATHERED BEDROCK	Gray, COBBLE/BOULDER fragments	- 231+/-
10								- 226+/-
	C-1		60	58	47	BEDROCK	Poor Quality, Strong, Moderately Weathered, Highly Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 2, 2.5, 2, 2.5, 3]	
15								- 221+/-
	C-2		60	60	52		Fair Quality, Strong, Moderately Weathered, Highly Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 2.5, 4.5, 2, 2.5, 3]	
20								- 216+/-
25							END OF BORING AT 20ft	
30								
35								
40								
45								

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

Total Penetration in		NOTES: 1) Stratification lines represent approx. boundaries between soil types, transitions may be gradual. 2) Intermittent auger chatter observed from about 3 to 8 feet below grade (fbg) on inferred cobbles/boulders. 3) 4" SSAs advanced to refusal at about 7 fbg prior to advancing FJ-casing for confirmation rock coring.	Sheet 1 of 1
Earth: 10ft	Rock: 10ft		
No. of Soil Samples 3	No. of Core Runs: 2		

Driller:	Mike St. John	**Connecticut DOT Boring Report**		Hole No.:	RW-4
Inspector:	T. Orszulak	Town:	New Britain	Sta./Offset:	216+48/ 4'R
Engineer:	R. Janeiro	Project No.:	088-198	Northing:	803682.6
Start Date:	1/16/2023	Route No.:	Route 72 R.O.W.	Easting:	988806.1
Finish Date:	1/16/2023	Bridge No.:	-	Surface Elevation:	235'+/-
Project Description: Proposed Beeline Trail (Phase I)					
Casing Size/Type: 4" ID FJ (HW)		Sampler Type/Size: 1 3/8" ID SS		Core Barrel Type: NQ	
Hammer Wt. 300lb Fall: 24in.		Hammer Wt. 140lb. Fall: 30in.			
Groundwater Observations: Not Encountered					

Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)
	S -1	11 5 5 5	24	11		MISC. FILL	Dark red-brown, C-F SAND and C-F GRAVEL, some Silt	
	S -2	5 4 21 11	24	0			No Recovery	
5								- 230+/-
	S -3	50/3"	3	0		GLACIAL TILL/ WEATHERED BEDROCK	No Recovery, with cobbles and boulders	
10								- 225+/-
	C-1		60	57	63	BEDROCK	Fair Quality, Strong, Slightly Weathered, Highly to Moderately Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 2, 1.5, 3.5, 2, 3.5]	
15								- 220+/-
	C-2		60	60	67		Fair Quality, Strong, Slightly Weathered, Highly Fractured, gray, fine- to medium-grained BASALT [Core Times (min./ft): 6, 2, 2.5, 2, 4]	
20								- 215+/-
25							END OF BORING AT 20ft	
30								
35								
40								
45								

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

Total Penetration in		NOTES: 1) Stratification lines represent approx. boundaries between soil types, transitions may be gradual. 2) Intermittent auger chatter observed from about 4 to 7 feet below grade (fbg) on inferred cobbles/boulders. 3) 4" SSAs advanced to refusal at about 8 fbg prior to advancing FJ-casing for confirmation rock coring.	Sheet 1 of 1
Earth: 10ft	Rock: 10ft		
No. of Soil Samples 3	No. of Core Runs: 2		

BORING NOTES

1. BORINGS PERFORMED BY NEW ENGLAND BORING CONTRACTORS, INC. BETWEEN JANUARY 12, 2023 AND JANUARY 16, 2023.

Architecture
Engineering
Environmental
Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1

State Project No. 88-198
NEW BRITAIN, CONNECTICUT

REVISIONS
No. Date Desc.

Designed	T.M.B.
Drawn	T.M.B.
Reviewed	C.A.P.
Scale	AS NOTED
Project No.	2100699
Date	08/09/2024
CAD File:	TBRG210069906

Title

BORING LOGS

Sheet No.

S-06

Xref (s) : TB21006990

TEST PIT NOTES

1. TEST PITS PERFORMED BY THE CITY OF NEW BRITAIN DEPARTMENT OF PUBLIC WORKS ON JUNE 18, 2024.

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-1
RETAINING WALL NO. 3		SHEET	1 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	8:00 - 8:40
		Date	6/18/2024

Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description (view to the North)	Excavation Effort	Boulder Qty/Class	Remarks
1	MISC. FILL	El. 219'+/-			
2		El. 217'+/-			
3		Brown, COBBLES, some coarse to fine Gravel, some coarse to fine Sand, trace Silt, trace Roots, trace Metal, with boulders	M	3 - A	Groundwater not observed.
4			D		
5					
6		End of Exploration (Refusal) at 3 feet below grade (El. 214'+/-)			
7					
8					
9					
10					
11					
12					
13					
14					
15					

Notes: Equipment refusal encountered at about 3 feet below grade on inferred boulder.

WATER SYMBOLS
Groundwater
Estimated Seasonal High Groundwater

7' × 4' N

BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

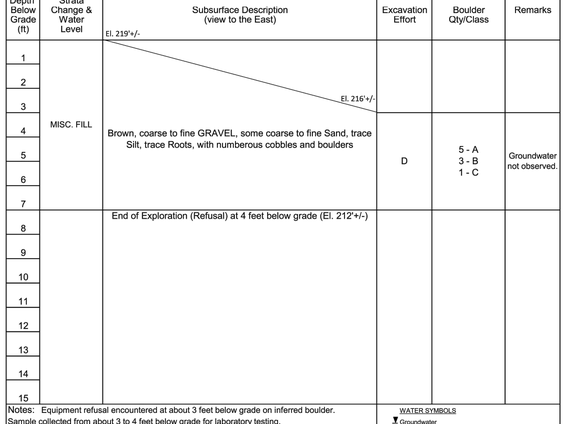
PROPORTIONS USED	
0-10%	Trace
10-20%	Little
20-35%	Some
35-50%	And

EXCAVATION EFFORT
E = Easy
M = Moderate
D = Difficult

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-1
RETAINING WALL NO. 3		SHEET	2 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	8:00 - 8:40
		Date	6/18/2024



Notes: 1.) Photo of in-progress TP-1

7' × 4' N

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-2
RETAINING WALL NO. 3		SHEET	1 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	8:40 - 9:10
		Date	6/18/2024

Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description (view to the West)	Excavation Effort	Boulder Qty/Class	Remarks
1	MISC. FILL	El. 219'+/-			
2					
3		El. 216'+/-			
4		BOULDER	M	5 - A 2 - B 1 - C	Groundwater not observed.
5					
6		Red-brown, coarse to fine GRAVEL, some coarse to fine Sand, trace Silt, trace Roots, trace Brick, trace Asphalt, with cobbles and boulders	D		
7					
8					
9		End of Exploration (Refusal) at 5 feet below grade (El. 211'+/-)			
10					
11					
12					
13					
14					
15					

Notes: Equipment refusal encountered at about 3 feet below grade on inferred boulder.
Sample collected from about 2 to 3 feet below grade for laboratory testing.

WATER SYMBOLS
Groundwater
Estimated Seasonal High Groundwater

3' × 6' N

BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

PROPORTIONS USED	
0-10%	Trace
10-20%	Little
20-35%	Some
35-50%	And

EXCAVATION EFFORT
E = Easy
M = Moderate
D = Difficult

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-2
RETAINING WALL NO. 3		SHEET	2 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	8:40 - 9:10
		Date	6/18/2024

Notes: 1.) Photo of in-progress TP-2

3' × 6' N

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-3
RETAINING WALL NO. 3		SHEET	1 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	9:10 - 10:00
		Date	6/18/2024

Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description (view to the East)	Excavation Effort	Boulder Qty/Class	Remarks
1	MISC. FILL	El. 219'+/-			
2					
3		El. 216'+/-			
4		Brown, coarse to fine GRAVEL, some coarse to fine Sand, trace Silt, trace Roots, with numberous cobbles and boulders	D	5 - A 3 - B 1 - C	Groundwater not observed.
5					
6					
7					
8		End of Exploration (Refusal) at 4 feet below grade (El. 212'+/-)			
9					
10					
11					
12					
13					
14					
15					

Notes: Equipment refusal encountered at about 3 feet below grade on inferred boulder.
Sample collected from about 3 to 4 feet below grade for laboratory testing.

WATER SYMBOLS
Groundwater
Estimated Seasonal High Groundwater

3' × 6' N

BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

PROPORTIONS USED	
0-10%	Trace
10-20%	Little
20-35%	Some
35-50%	And

EXCAVATION EFFORT
E = Easy
M = Moderate
D = Difficult

TEST PIT LOG

DOWN TO EARTH CONSULTING, LLC

PROJECT		TEST PIT NO.	RW-TP-3
RETAINING WALL NO. 3		SHEET	2 of 2
BEELINE TRAIL (PHASE 1)		FILE NO.	0038-037.01
NEW BRITAIN, CONNECTICUT		CHKD BY	TJO
Engineer	R. Janeiro, P.E.	Make	Takeuchi
Contractor	New Britain DPW	Model	TB145
Operator	M. Deschanes	Capacity	≈ 1/10 yd3
Weather	70s, Sunny	Reach	20 feet +/-
		Ground El.	See Log
		Datum	NAVD88
		Time Start/End	9:10 - 10:00
		Date	6/18/2024

Notes: 1.) Photo of in-progress TP-3

5' × 8' N

Architecture
Engineering
Environmental
Land Surveying

BL Companies

100 Constitution Plaza
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

BEELINE TRAIL PHASE 1
State Project No. 88-198
NEW BRITAIN, CONNECTICUT

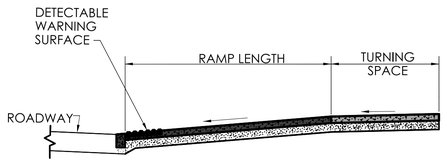
REVISIONS
No. Date Desc.

Designed T.M.B.
Drawn T.M.B.
Reviewed C.A.P.
Scale AS NOTED
Project No. 2100699
Date 08/09/2024
CAD File: TBRG210069907

Title
TEST PIT LOGS

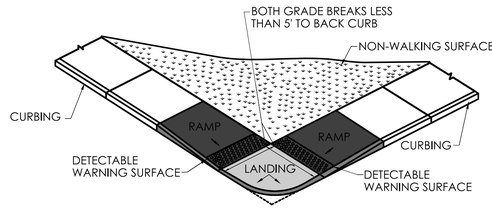
Sheet No.
S-07

Xref (s) : TB210069901



BASIC RAMP ATTRIBUTES

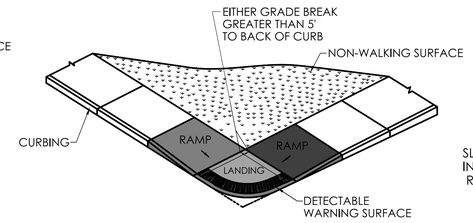
- Plan view of Ramp Components
- Section View of Typical Ramp
- Wheelchair Cross-slope Criteria
- Ramp Warping Detail
- Gutter Counter Slope Details
- Grade Break Details



PERPENDICULAR RAMP(S) GRADE BREAK OF 5' OR LESS

TYPE 1 SIDEWALK ABUTS ROADWAY

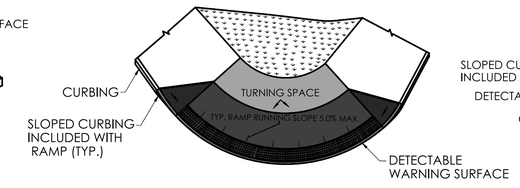
TYPE 3 SIDEWALK SEPARATED FROM ROADWAY WITH NONWALK AREA



PERPENDICULAR RAMP(S) GRADE BREAK GREATER THAN 5'

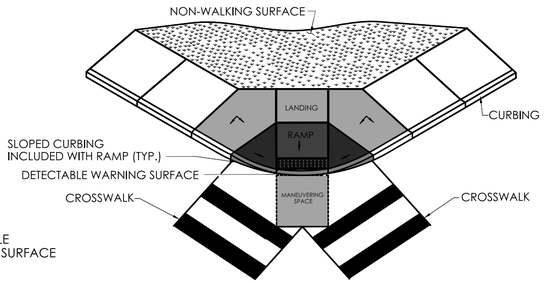
TYPE 2 SIDEWALK ABUTS ROADWAY

TYPE 4 SIDEWALK SEPARATED FROM ROADWAY WITH NONWALK AREA



BLENDED RAMP WITH TURNING SPACE AT THE TOP

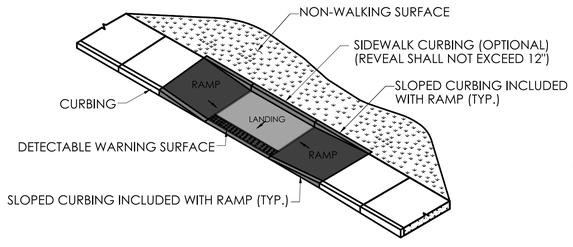
TYPE 5 SIDEWALK ABUTS ROADWAY



PERPENDICULAR RAMP(S) WITH STREET MANEUVERING SPACE

TYPE 6 LANDING OBSTRUCTION PRESENT

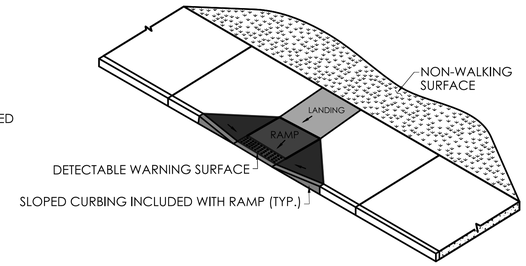
TYPE 7 NO LANDING OBSTRUCTION



PARALLEL RAMP(S)

TYPE 9 TWO RAMP(S) APPROACH TO LANDING

TYPE 10 SINGLE RAMP TO LANDING



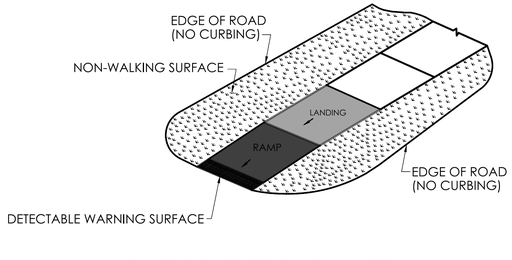
PERPENDICULAR RAMP(S)

TYPE 8 LANDING BYPASS WITH WALKABLE SURFACE

TYPE 13 LANDING WITH NON-WALKABLE SURFACE

TYPE 12 60" X 48" LANDING WITH NON-WALKABLE SURFACE

TYPE 11 60" X 60" LANDING WITH NON-WALKABLE SURFACE



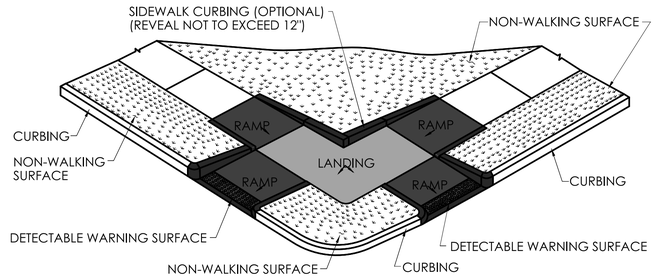
SINGLE DIRECTION RAMP(S)

TYPE 15 LANDING'S GRADE BREAK OF 5 FT OR LESS

TYPE 14 LANDING'S GRADE BREAK GREATER 5 FT

TYPE 16 RAMP WITH RETURN CURBING

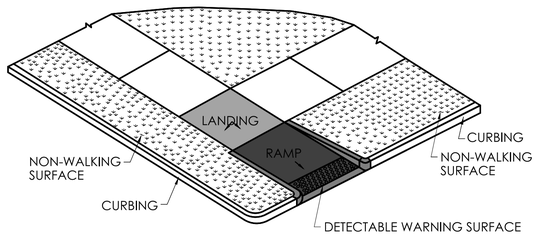
TYPE 17 RAMP WITH NO RETURN CURBING



PERPENDICULAR RAMP(S)

TYPE 18 EXAMPLE OF RAMP FLARE/CURB APPLICATIONS

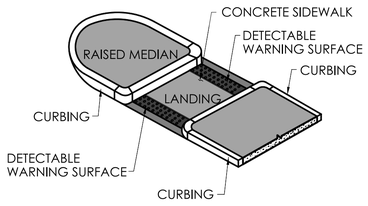
TYPE 19 COMBINATION SIDEWALK RAMPS



RESTRICTED PEDESTRIAN CROSSING SIDEWALK RAMP(S)

TYPE 20 SINGLE RAMP FROM LANDING

TYPE 21 TWO RAMP(S) TO LANDING



PEDESTRIAN REFUGE ISLAND(S)

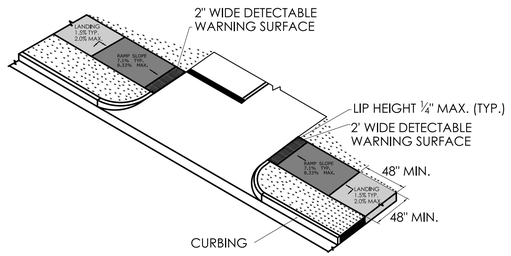
TYPE 22 ISLAND WIDTH 6 FT OR MORE

TYPE 23 ISLAND LESS THAN 6 FT WIDE

TYPE 24 REFUGE ISLAND WITH ELEVATED LANDING

TYPE 25 RIGHT TURN SLIP-LANE REFUGE ISLAND

TYPE 26 REFUGE ISLAND WITH OFFSET ACCESS



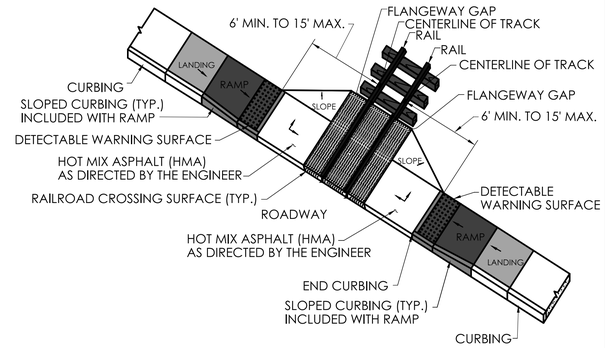
RESIDENTIAL AND COMMERICAL DRIVEWAY(S)

TYPE 29 SIGNALIZED OR STOP CONTROLLED COMMERCIAL DRIVEWAY WITH DETECTABLE WARNING SURFACE

TYPE 30 RESIDENTIAL OR COMMERCIAL DRIVEWAY WITHOUT DETECTABLE WARNNG SURFACE

TYPE 31 SIGNALIZED OR STOP CONTROLLED MAJOR COMMERCIAL DRIVWAY WITH DETECTABLE WARNING SURFACE

TYPE 32 RESIDENTIAL OR MINOR COMMERCIAL DRIVEWAY WITHOUT DETECTABLE WARNING SURFACE



RAILROAD CROSSING RAMPS

TYPE 27 RAILROAD CROSSING WITHOUT GATE

TYPE 28 RAILROAD CROSSING WITH GATE

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

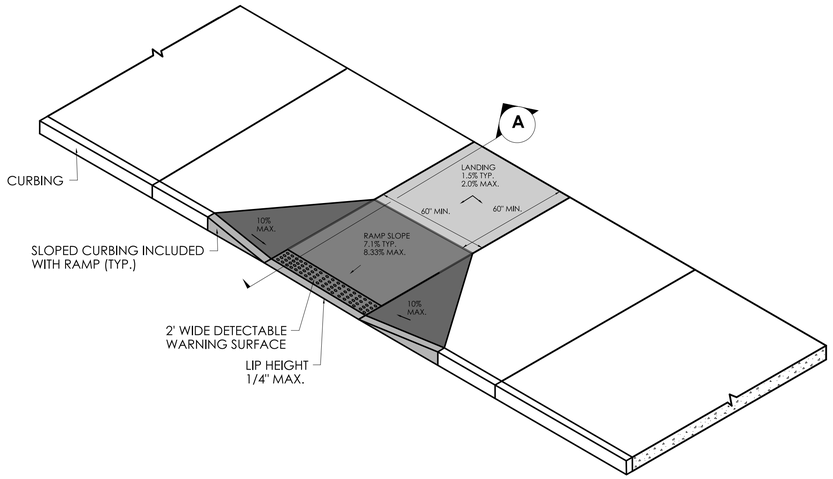
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

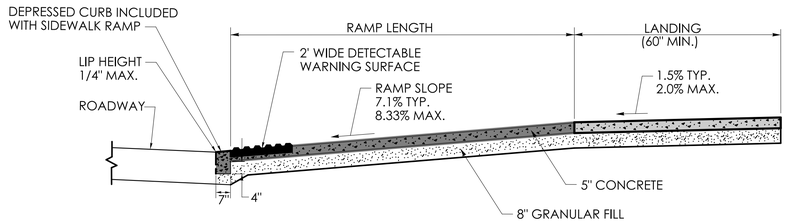
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-01

DRAWING NO. GD-01
SHEET NO.

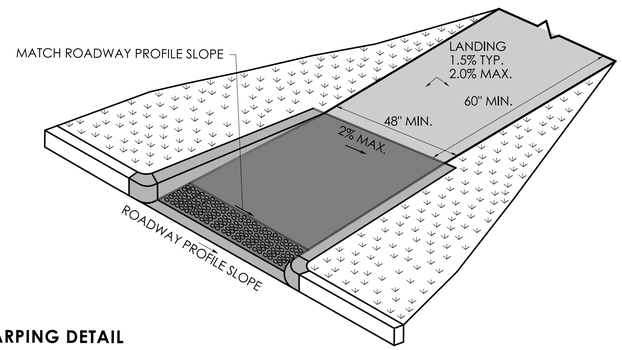
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



PERPENDICULAR SIDEWALK RAMP AND SECTION



SECTION A

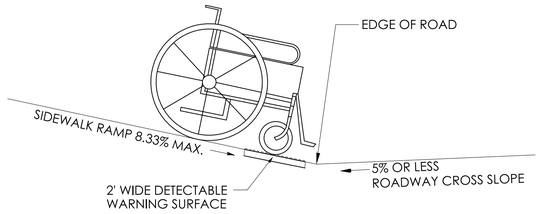


RAMP WARPING DETAIL

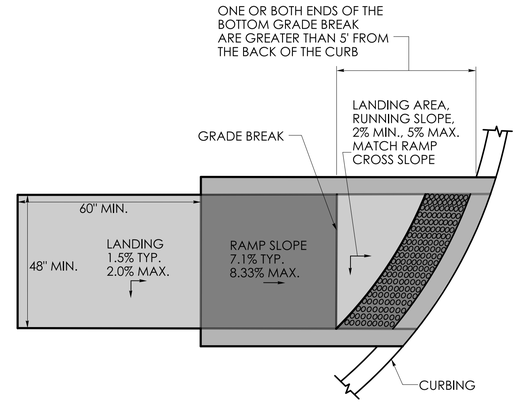
1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3 % PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
2. COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE.

GENERAL NOTES:

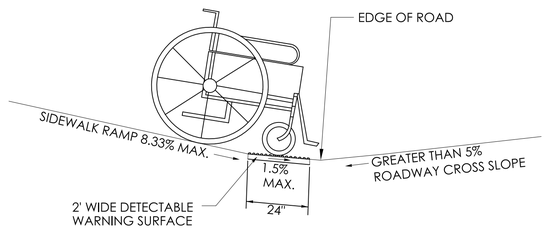
1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED ¼ INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.33 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.



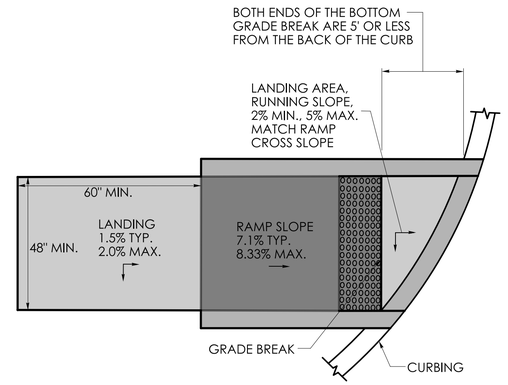
SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF 5% OR LESS GUTTER COUNTER SLOPE



GRADE BREAK GREATER THAN 5' DETECTABLE WARNING SURFACE LOCATION



SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF GREATER THAN 5% GUTTER COUNTER SLOPE



GRADE BREAK OF 5' OR LESS DETECTABLE WARNING SURFACE LOCATION

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

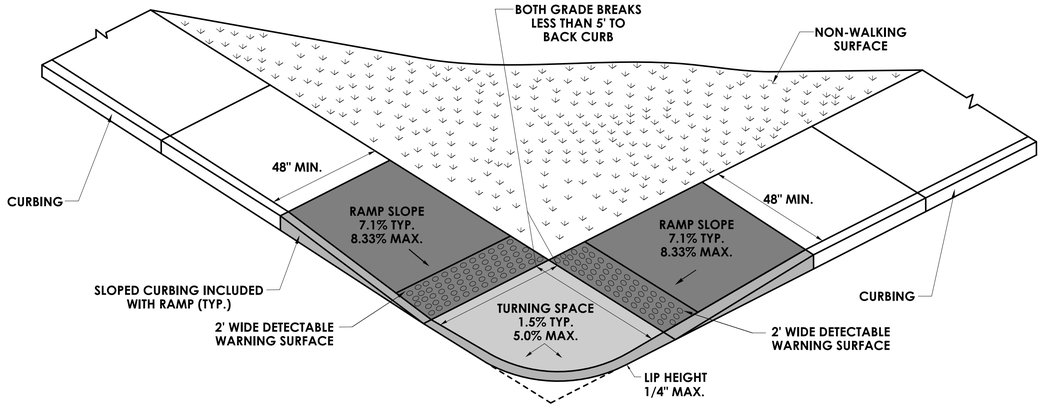
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

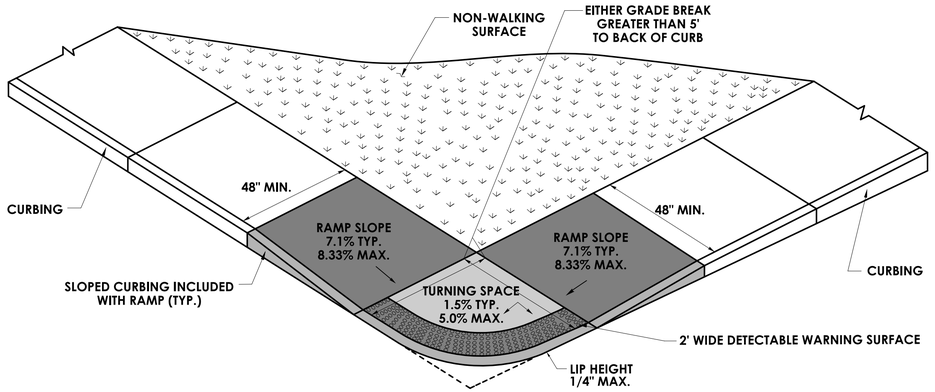
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-02

DRAWING NO. GD-02
SHEET NO.

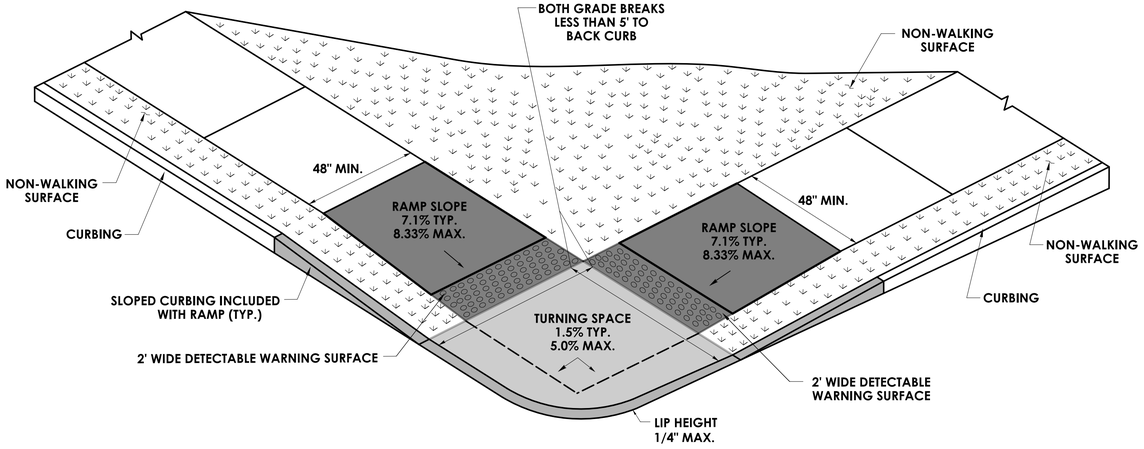
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



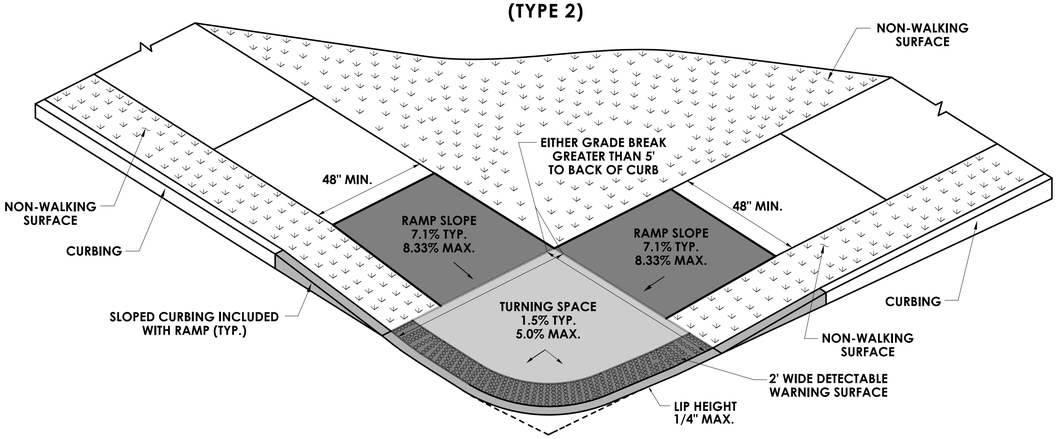
PERPENDICULAR RAMP
WITH A GRADE BREAK TO BACK OF CURB OF 5' OR LESS
(TYPE 1)



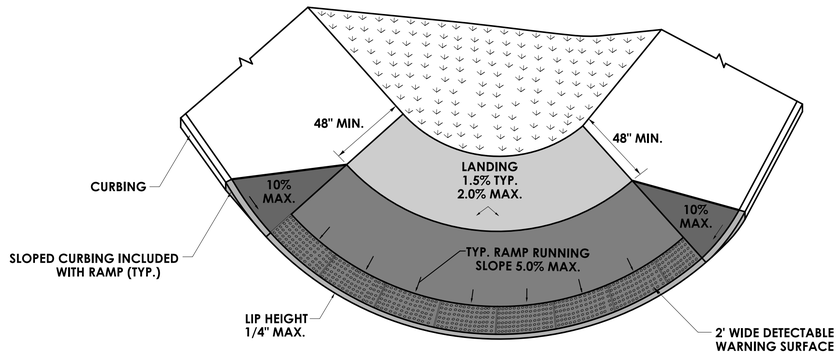
BLENDED TRANSITION
WITH GRADE BREAK TO BACK OF CURB GREATER THAN 5'
(TYPE 2)



PERPENDICULAR RAMP
WITH A GRADE BREAK
TO BACK OF CURB OF 5' OR LESS
WITH NON-WALKING SURFACE
(TYPE 3)



BLENDED TRANSITION
WITH A GRADE BREAK
TO BACK OF CURB GREATER THAN 5'
WITH NON-WALKING SURFACE
(TYPE 4)



BLENDED TRANSITION
WITH LANDING AT TOP
(TYPE 5)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

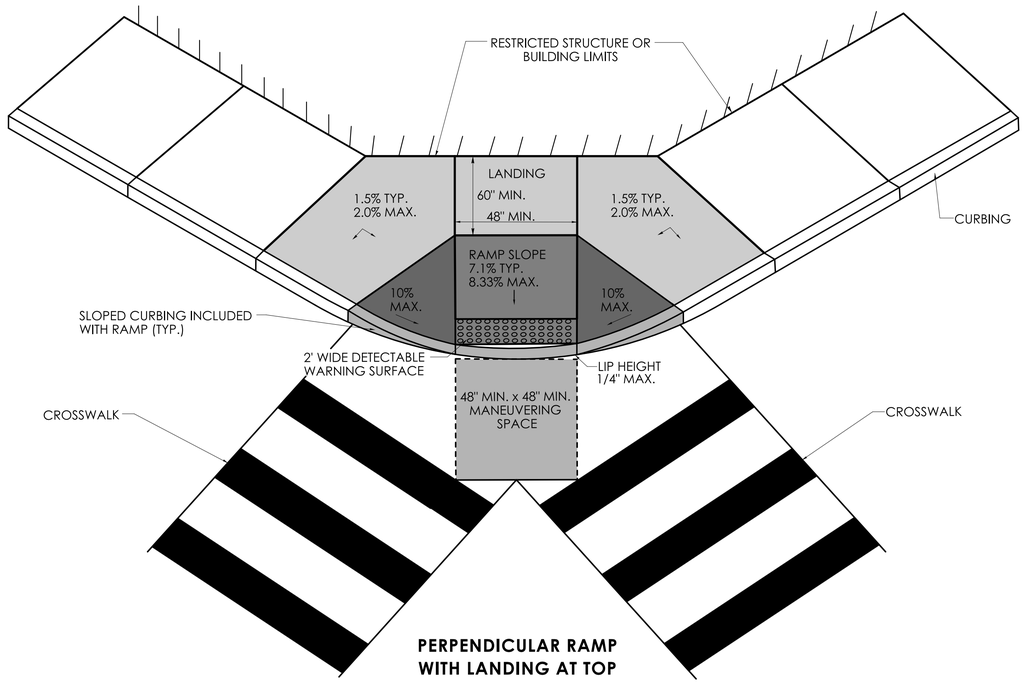
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

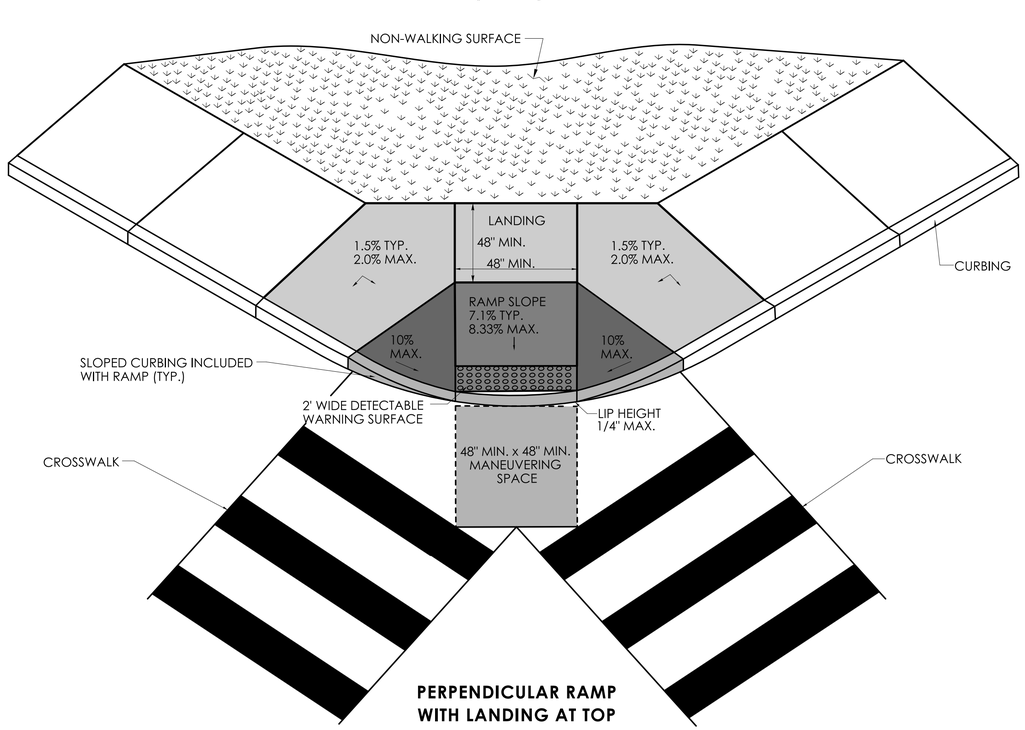
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-03

DRAWING NO. GD-03
SHEET NO.

LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 6)



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 7)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

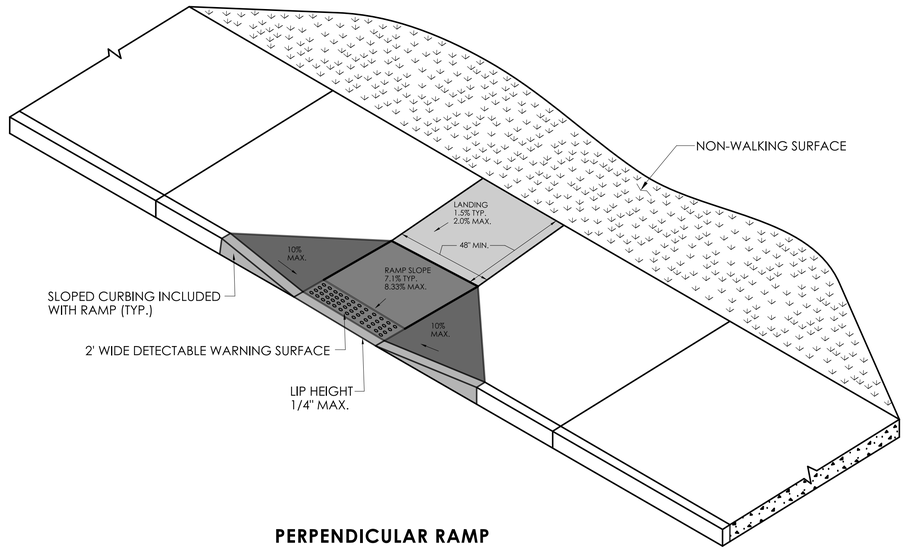
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

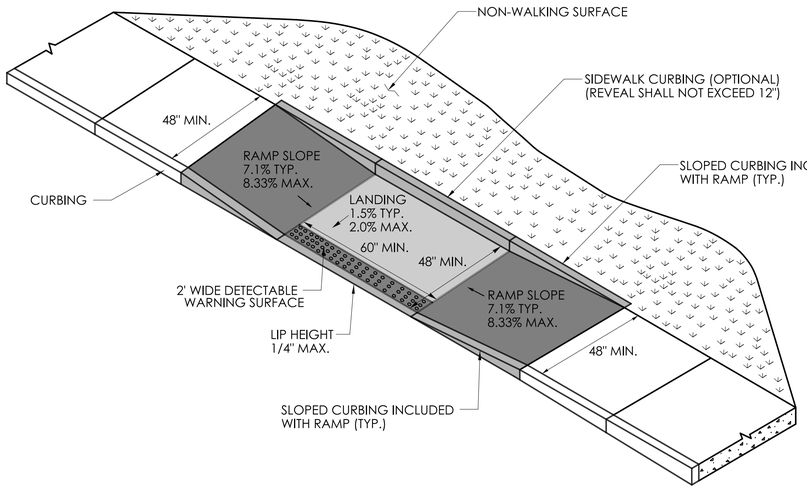
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-04

DRAWING NO. GD-04
SHEET NO.

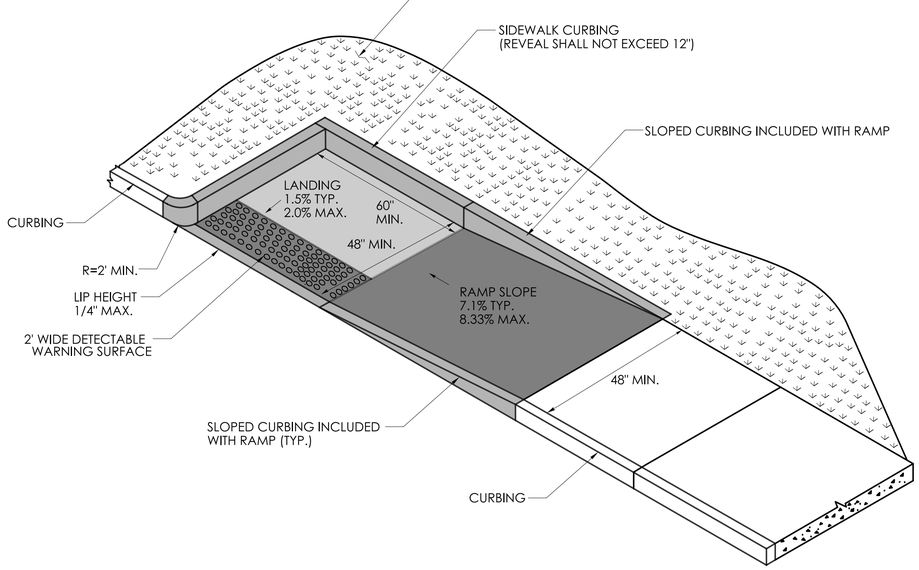
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



PERPENDICULAR RAMP
WITH 48" BY-PASS
(TYPE 8)



PARALLEL RAMP WITHOUT
NON-WALKING SURFACE
(TYPE 9)



PARALLEL RAMP
WITH LANDING AT BOTTOM ON CORNER
(TYPE 10)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/
BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

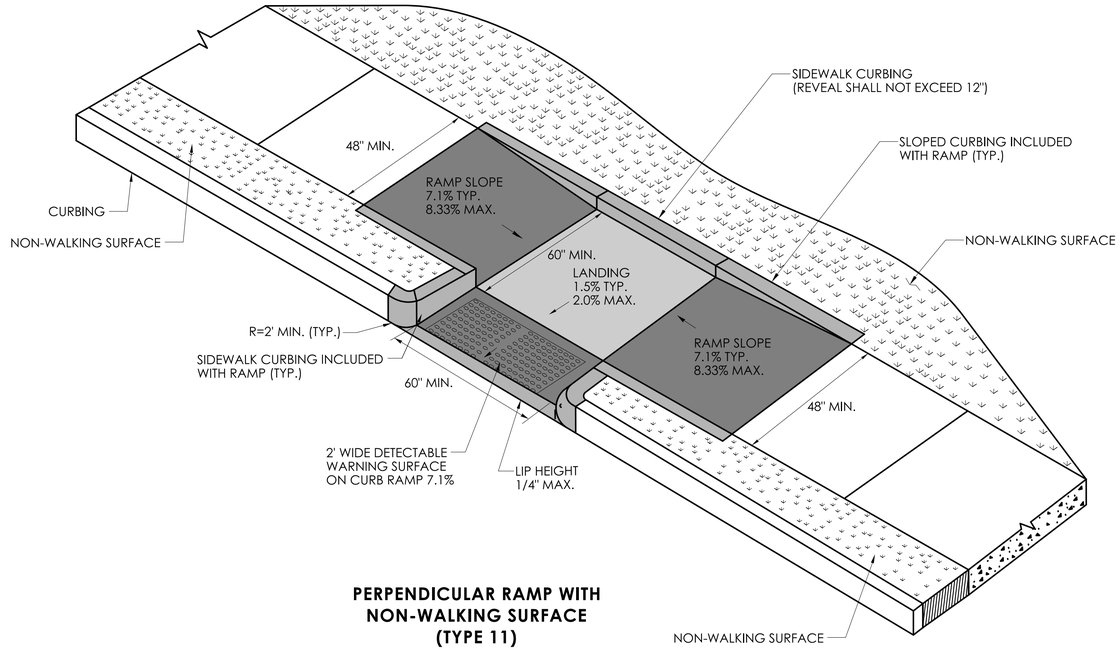
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

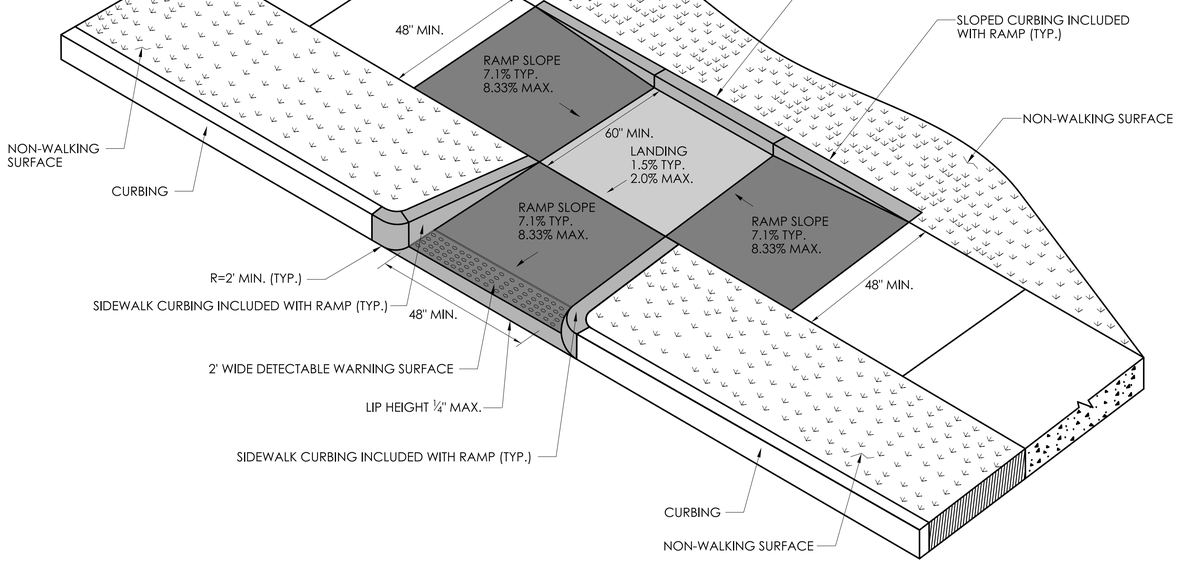
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-05

DRAWING NO.
GD-05
SHEET NO.

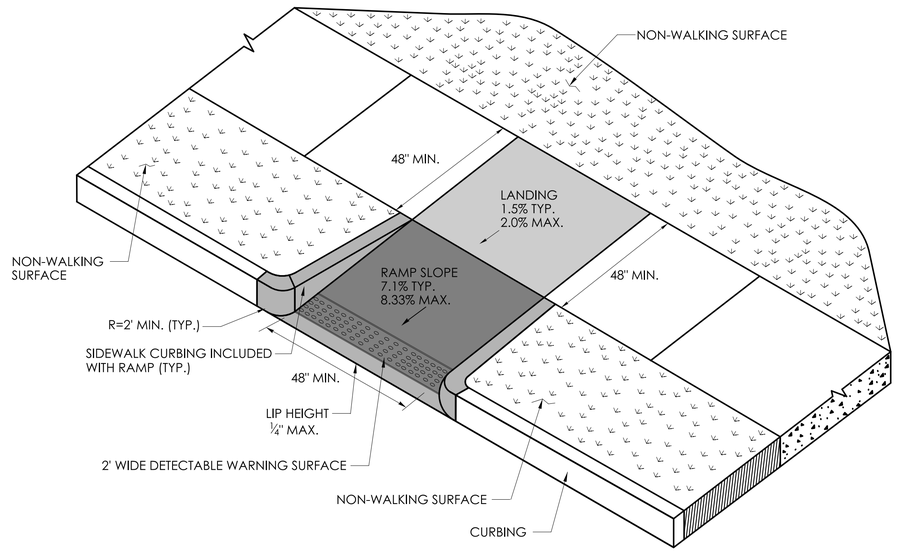
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 11)



PERPENDICULAR RAMP WITH SIDEWALK CURB AND NON-WALKING SURFACE (TYPE 12)



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 13)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

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2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

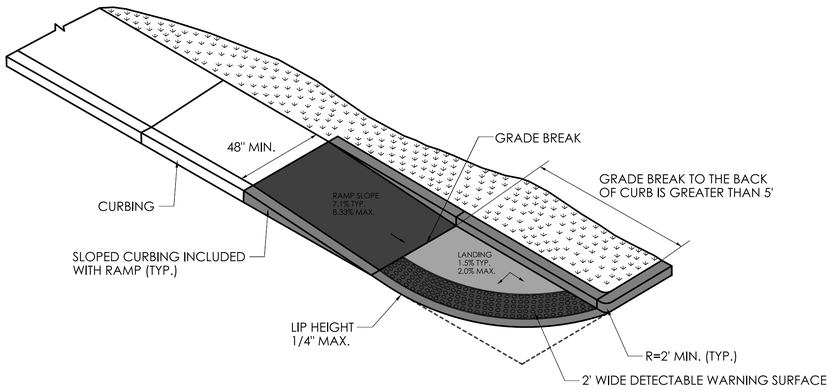
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

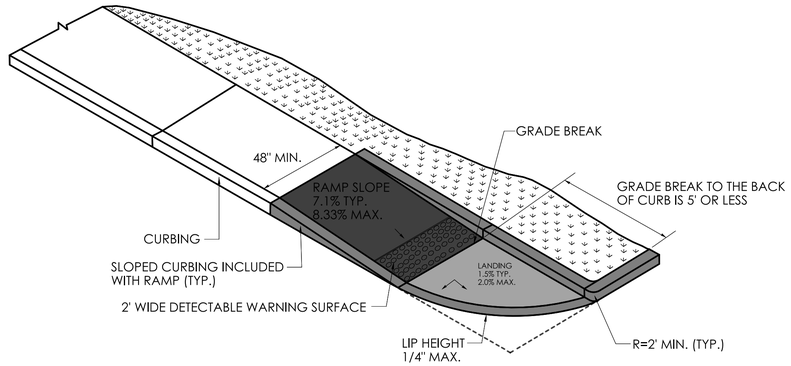
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-06

DRAWING NO. GD-06
SHEET NO.

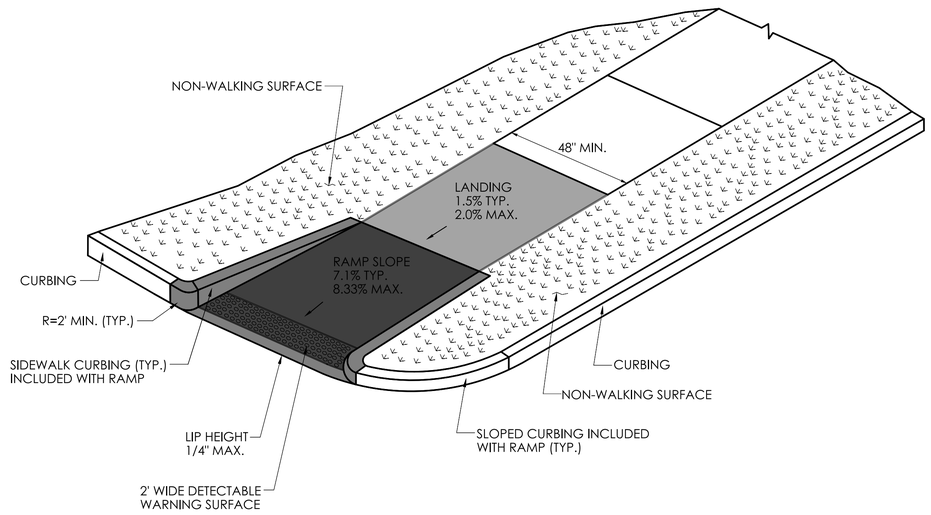
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



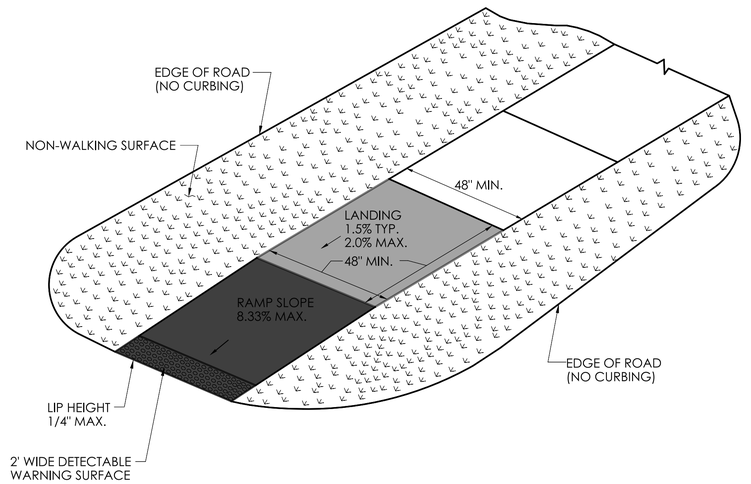
SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK GREATER THAN 5'
(TYPE 14)



SINGLE DIRECTION RAMP
GRADE BREAK TO THE BACK
OF CURB IS 5' OR LESS
(TYPE 15)



SINGLE DIRECTION - RETURN CURB
WITH NON-WALKING SURFACE
(TYPE 16)



SINGLE DIRECTION - NO CURB
WITH NON-WALKING SURFACE
(TYPE 17)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

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2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

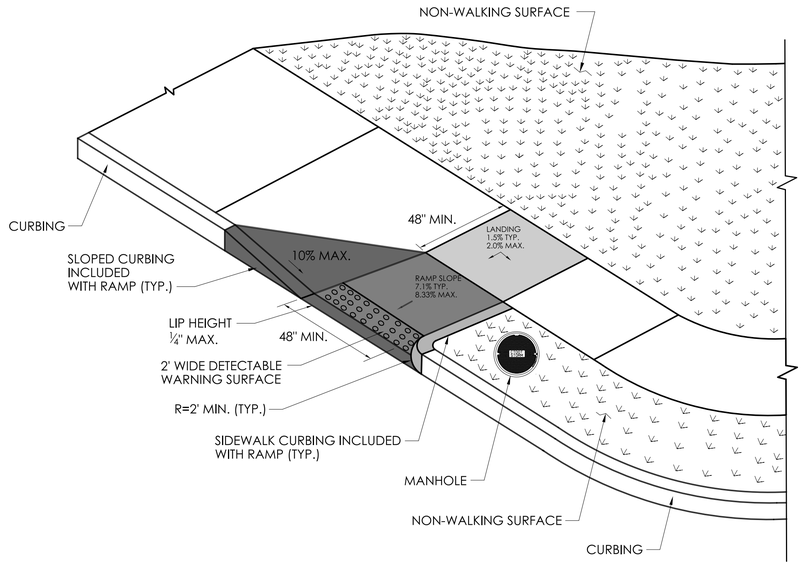
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

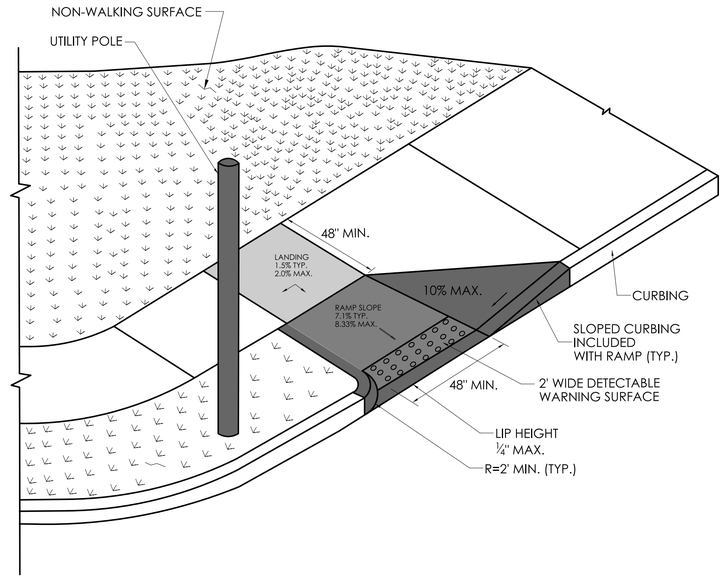
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-07

DRAWING NO. GD-07
SHEET NO.

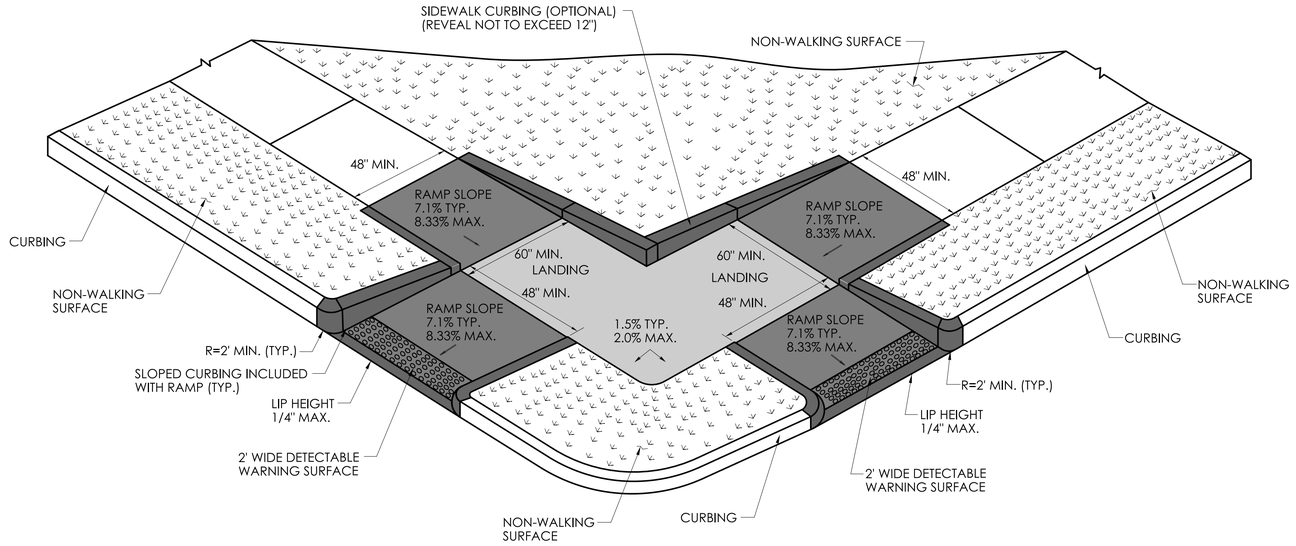
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 LEFT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 RIGHT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 19)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/
BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

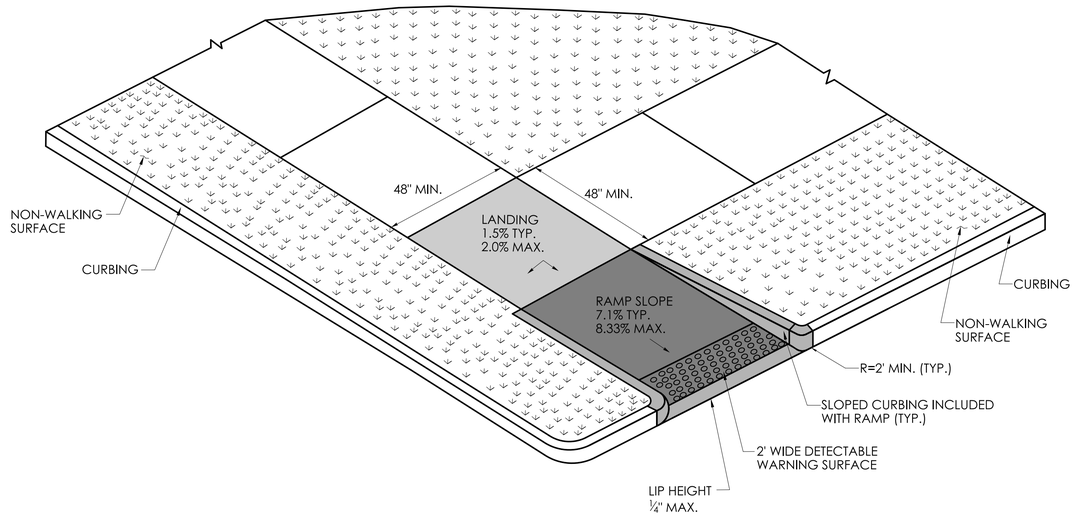
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

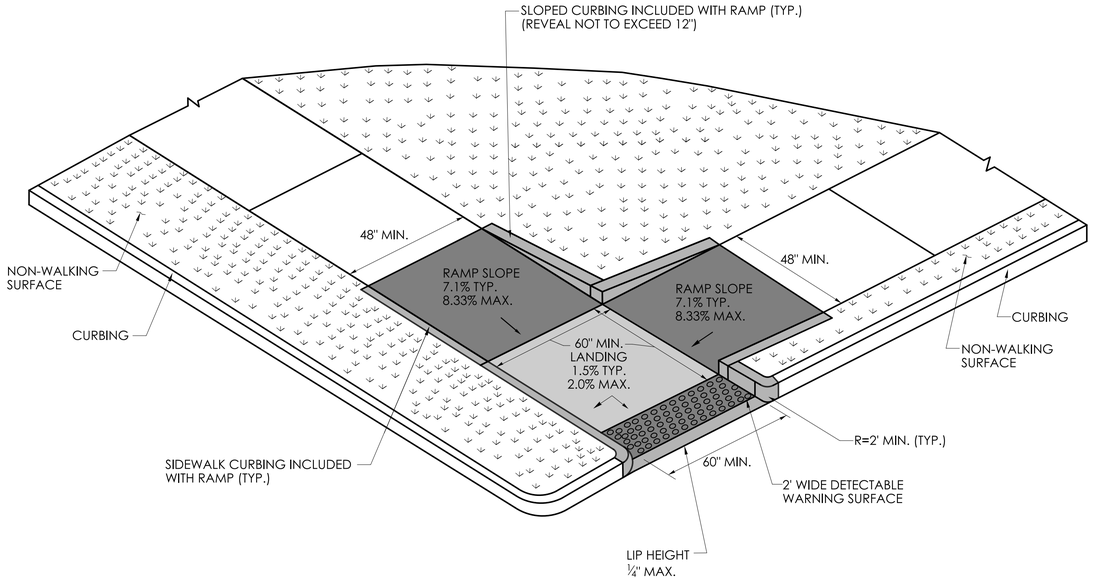
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-08

DRAWING NO.
GD-08
SHEET NO.

LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



RESTRICTED PEDESTRIAN CROSSING SIDEWALK RAMP WITH NON-WALKING SURFACE (TYPE 20)



RESTRICTED PEDESTRIAN CROSSING WITH LANDING AT BOTTOM AND NON-WALKING SURFACE (TYPE 21)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

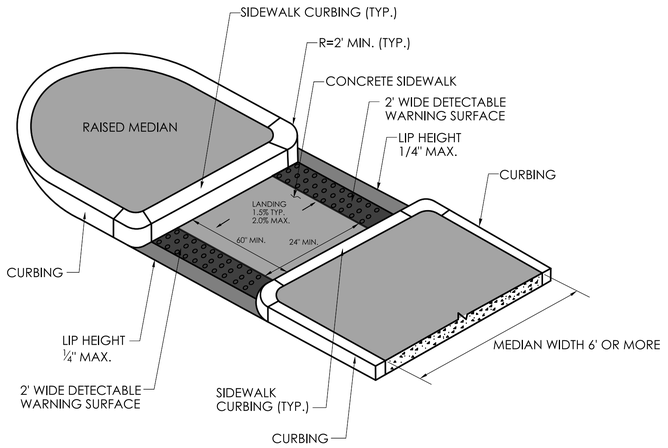
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

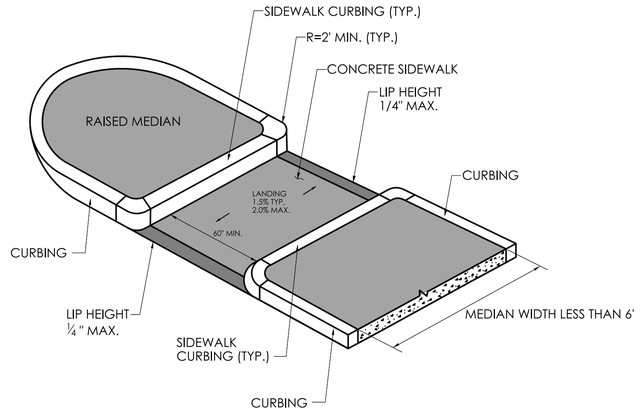
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-09

DRAWING NO. GD-09
SHEET NO.

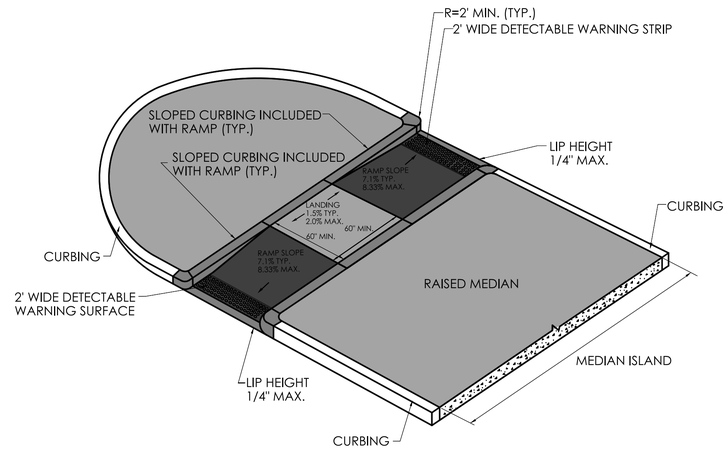
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



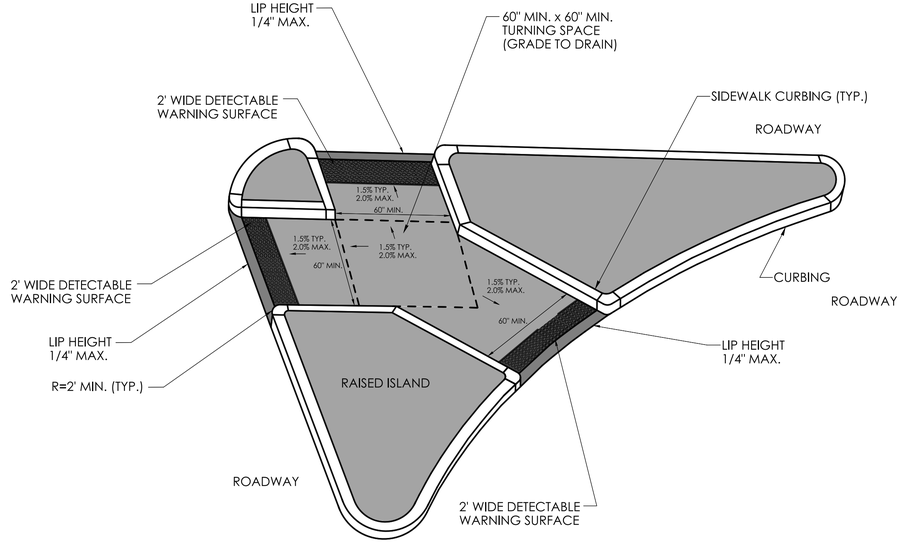
CUT-THROUGH PEDESTRIAN REFUGE ISLAND
MEDIAN WIDTH 6' OR MORE
(TYPE 22)



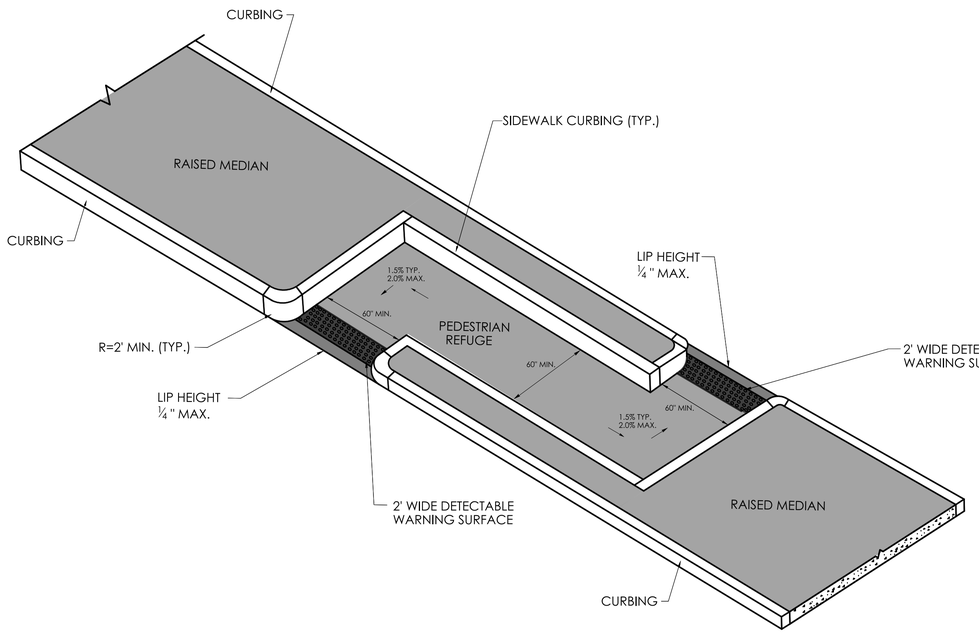
CUT-THROUGH PEDESTRIAN REFUGE ISLAND
MEDIAN WIDTH LESS THAN 6'
(TYPE 23)



PEDESTRIAN REFUGE ISLAND WITH LANDING AND RAMPS
(TYPE 24)



CUT-THROUGH PEDESTRIAN REFUGE ISLAND
(TYPE 25)



CUT-THROUGH PEDESTRIAN REFUGE ISLAND
OFFSET CONFIGURATION
(TYPE 26)

REVISION DESCRIPTION | DATE | REV.

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

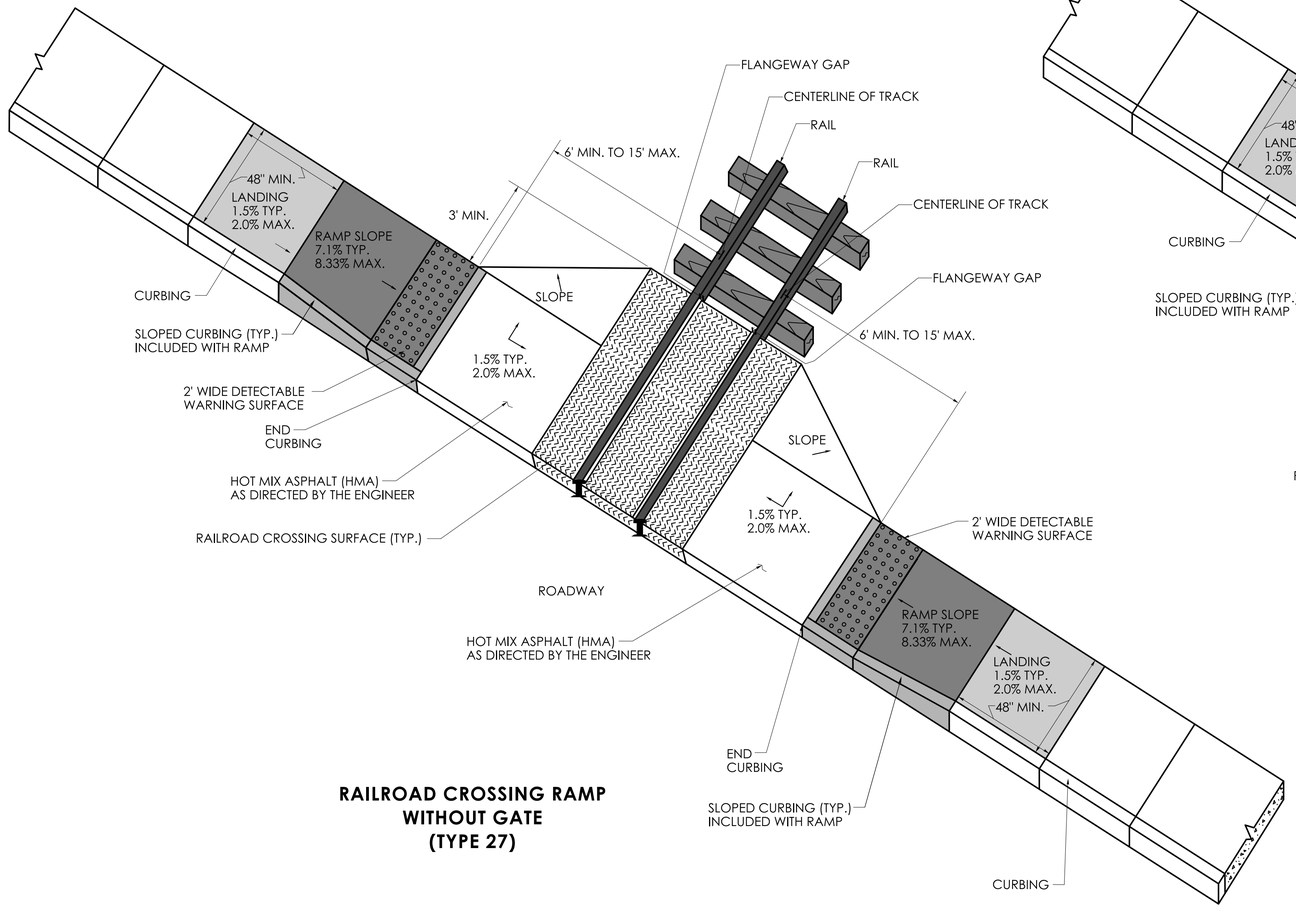
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

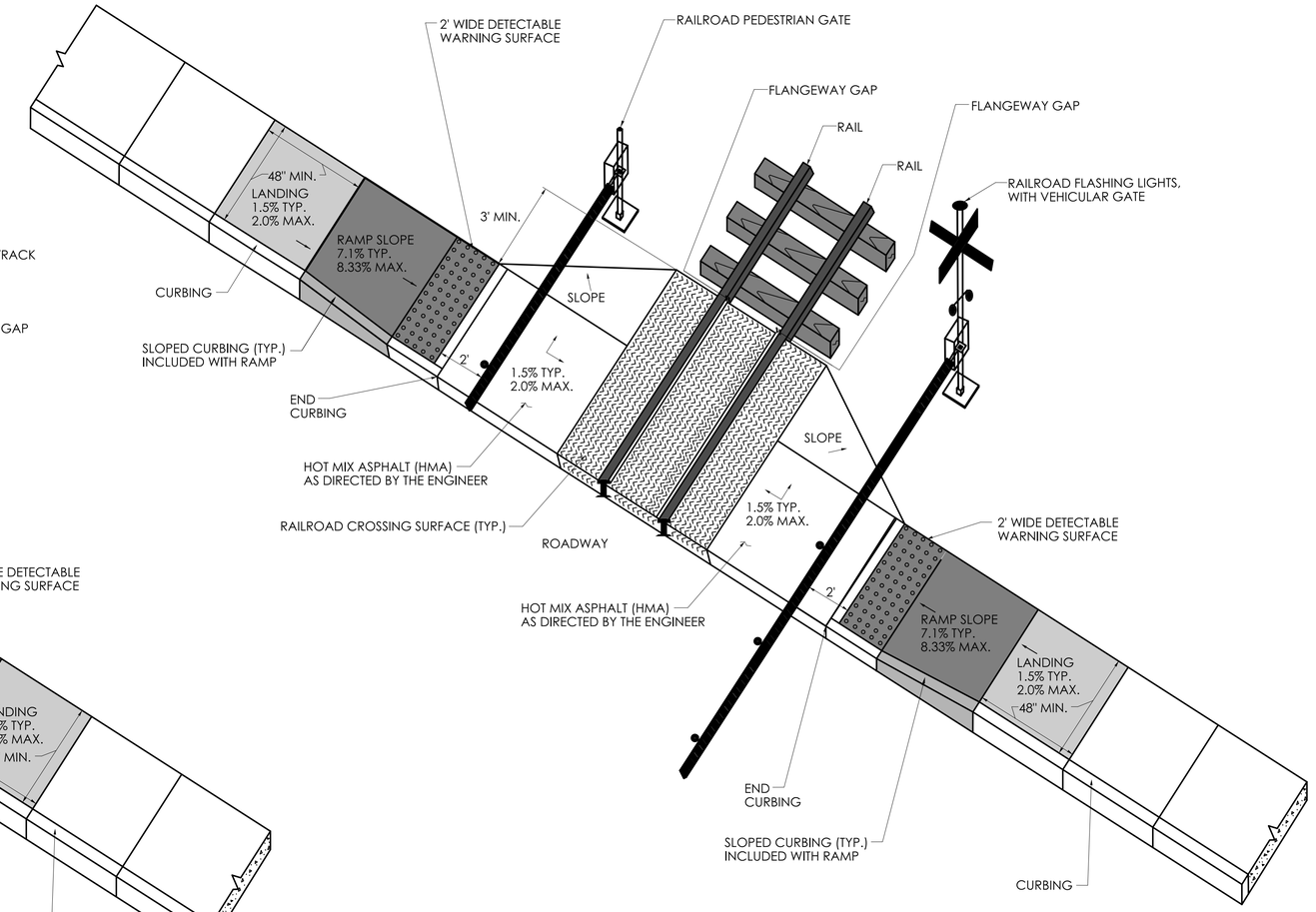
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-10

DRAWING NO. GD-10
SHEET NO.

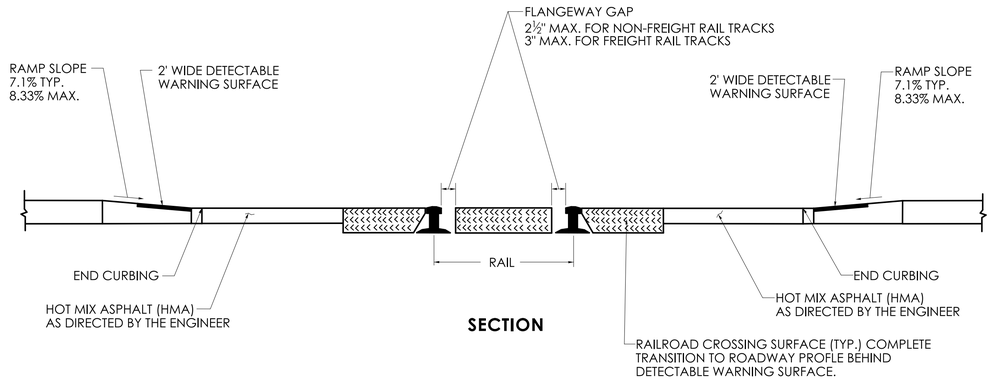
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



RAILROAD CROSSING RAMP
WITHOUT GATE
(TYPE 27)



RAILROAD CROSSING RAMP
WITH GATE
(TYPE 28)



SECTION

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/
BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

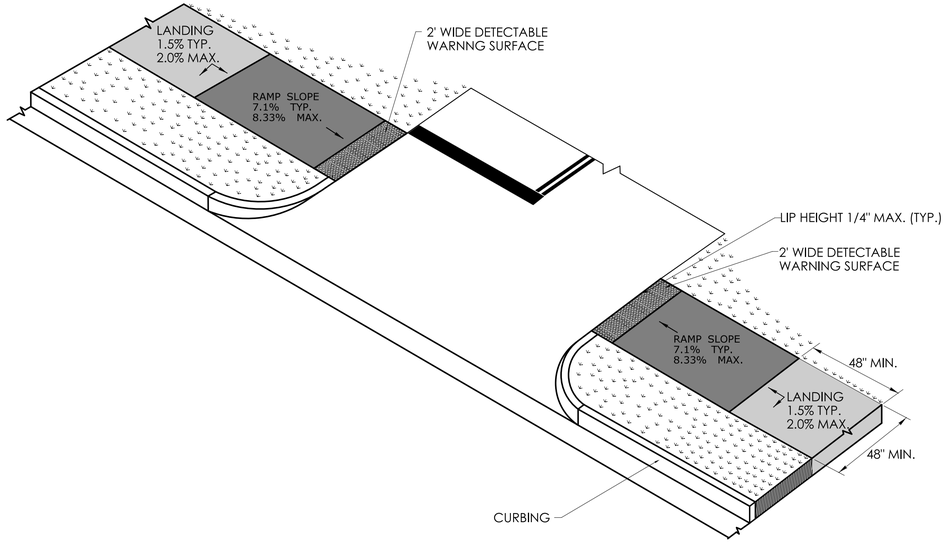
APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

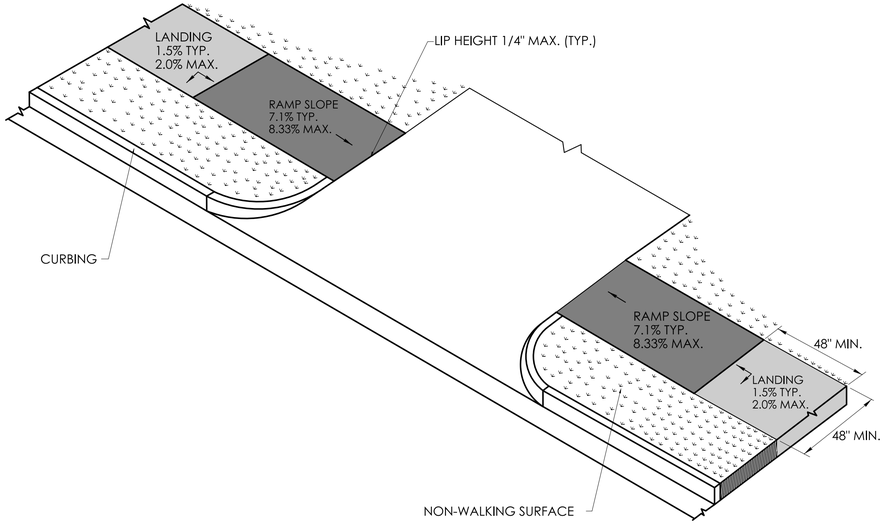
PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-11

DRAWING NO. GD-11
SHEET NO.

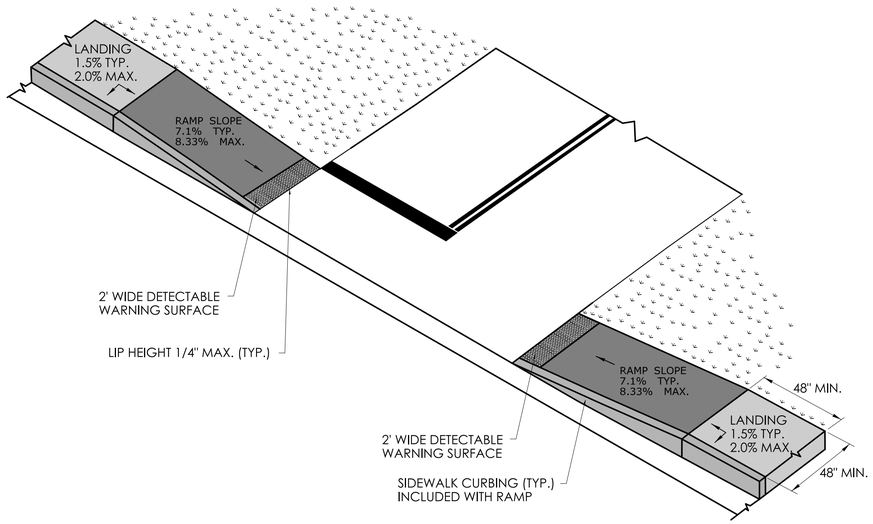
LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022



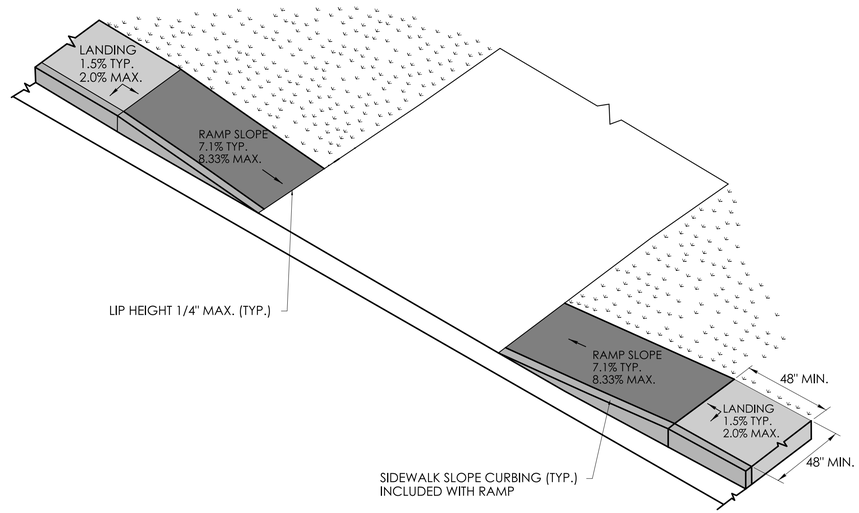
SINGLE DIRECTION
FOR SIGNALIZED OR STOP CONTROLLED MAJOR COMMERCIAL DRIVEWAY
WITH DETECTABLE WARNING SURFACE
(TYPE 29)



SINGLE DIRECTION
FOR RESIDENTIAL OR MINOR COMMERCIAL DRIVEWAY
WITHOUT A DETECTABLE WARNING SURFACE
(TYPE 30)



SINGLE DIRECTION
FOR SIGNALIZED OR STOP CONTROLLED MAJOR COMMERCIAL DRIVEWAY
WITH DETECTABLE WARNING SURFACE
(TYPE 31)



SINGLE DIRECTION
FOR RESIDENTIAL OR MINOR COMMERCIAL DRIVEWAY
WITHOUT DETECTABLE WARNING SURFACE
(TYPE 32)

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

APPROVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 88-198
PROJECT DESCRIPTION: BEELINE TRAIL
TOWN(S): NEW BRITAIN
DRAWING TITLE: GD-12

DRAWING NO. GD-12
SHEET NO.

LASTED SAVED BY: RichardEH **FILE NAME:** W:\CT_CONNECT_DDE\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 11/23/2022

R1 - SERIES

R1-1 *

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.85	18	31-0532	1	.080
5.19	30	31-0552	1	.080
7.98	36	31-0553	1	.080
13.3	48	31-0557	2	.100

R1-2 *

LEGEND - RED
BACKGROUND -WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.97	18	31-0520	1	.080
3.90	36	31-0523	1	.080
6.77	48	31-0522	2	.100
10.83	60	31-0528	2	.100

R1-3P *

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.75	18X6	31-0508		.080

R1-5

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	18x18	31-0508	1	.080

R2 - SERIES

R2-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-5505	1	.080
7.50	30X36	31-5504	1	.080
12.00	36X48	31-5506	2	.100
20.00	48X60	31-5507	2	.100

R2-4a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32	48X96	31-5510	2	.125

R3 - SERIES

R3-1

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1604	1	.080
9.00	36X36	31-1627	2	.080

R3-2

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1603	1	.080
9.00	36X36	31-1629	2	.080

R3-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1648	1	.080
9.00	36X36	31-1647	2	.080

R3-4

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

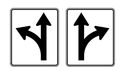
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1622	1	.080
9.00	36X36	31-1632	2	.080

R3-5

31-0183 31-0184

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36		1	.080

R3-6



31-0157 31-0158

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36		1	.080

R3-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-0117	1	.080
9.00	36X36	31-0120	2	.080

R3-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-0118	1	.080
9.00	36X36	31-0123	2	.080

R3-6

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X24	31-0175	1	.080

R3-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30	31-0290	1	.080

R3-8

31-0222 31-0223

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30		1	.080

R3-8

31-0262 31-0261

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30		1	.080

R3-8

31-0282 31-0283

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30		2	.080

R3-8

31-0295 31-0219

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30		2	.080

R3-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30	31-0279	2	.100

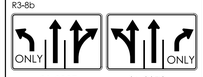
R3-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.

R3-8b

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
10.00	48X30	31-0302	2	.100

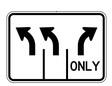
R3-8b



31-0307 31-0372

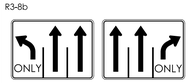
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
10.00	48X30		2	.100

R3-8b



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30	31-0334	2	.100

R3-8b



31-0370 31-0371

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30		2	.100

R4 - SERIES

R4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1502	1	.080

R4-16

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
20.00	48X60	31-1574	2	.100

R4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1562	1	.080
20.00	48X60	31-1564	2	.100

R4-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1526	1	.080
12.00	36X48	31-1536	2	.100
20.00	48X60	31-1546	2	.100

R5 - SERIES

R5-1 *

LEGEND - WHITE
BACKGROUND - WHITE
CIRCLE - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-1119	1	.080
9.00	36X36	31-1120	2	.080
16.00	48X48	31-1121	2	.100

R5-10a(CT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36X36	31-1775	2	.100

R5-1a *

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	36X24	31-1122	2	.080
8.75	42X30	31-1123	2	.100

R5-11

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	31-1790	1	.080
20.00	48X36	31-1792	2	.100

R5-10a(CT)

LEGEND - BLACK
TOP SECTION BACKGROUND - YELLOW
BOTTON SECTION BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32.50	60X78	31-1719	2	.125

R5-10c

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	31-1774	1	.080

R6 - SERIES

R6-1 *

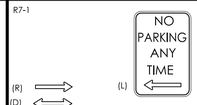
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	36X12	31-1188	1	.080
6.75	54X18	31-1189	2	.100

R6-1 *

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	36X12	31-1177	1	.080
6.75	54X18	31-1178	2	.100

R7 - SERIES

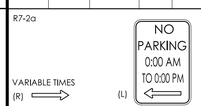
R7-1



LEGEND - RED
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-0630	1	.080

R7-2a



LEGEND - RED
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-0603	1	.080

R8 - SERIES

R8-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	48X36	31-0670	2	.100

R9 - SERIES

R9-3

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

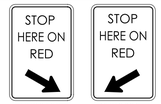
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	18X18	31-1705	1	.080
4.00	24x24	31-1769	1	.080
6.25	30x30	31-1770	1	.080

R9-3a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-1702	1	.080

R10 - SERIES

R10-6



31-0801 31-0802

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	24X36		1	.080

R10-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-0806	1	.080

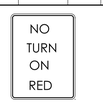
R10-11b

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36X36	31-0816	2	.080

R10-10L

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0852	1	.080

R10-11a



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0830	1	.080
12.00	36X48	31-0819	2	.100

R10-11c(CT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0847	1	.080

R10-15 *

31-1626 31-1625

LEGEND AND SYMBOLS - BLACK
YIELD SYMBOL - RED
BACKGROUND:
TOP - FLUORESCENT YELLOW-GREEN
BOTTOM - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30		1	.080

R11 - SERIES

R11-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1915	1	.080
20.00	48X60	31-1918	2	.100

R11-4(CT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1771	1	.080

RETROREFLECTIVE STRIP

LEGEND - N/A
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.00	4X48	31-5003	1	.080
2.00	4X72	31-5004	1	.080

* THIS SIGN ADDED FOR THIS PROJECT ONLY.

NOTES:

1. THE LEGEND "O.S.T.A." SHALL APPEAR ON ALL R- SERIES SIGNS EXCEPT WHEN SUFFIXED WITH THE LETTER "Z".
2. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
3. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
4. POSTS SHALL BE 4 LBS./FT.
5. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
6. FOR OVERHEAD MOUNTED SIGNS, SEE STANDARD SHEET TR-1114_01 - "BONDING AND UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAIL."

COLORS:

BACKGROUND - WHITE - EXCEPT AS NOTED.

LEGEND - BLACK - EXCEPT AS NOTED.

ALL SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING WITH THE EXCEPTION OF OVERHEAD MOUNTED SIGNS AND SIGNS DESIGNATED WITH AN * WHICH SHALL BE TYPE XI RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
4	10-2021	REVISED SHEETING TYPE	TR-GS_01
3	12-2018	REVISED RETROREFLECTIVE STRIPS	TR-GS_01
2	10-2018	REVISED R5-11 SIGNS PER MUTCD	TR-GS_01
1	6-2018	NEW SHEET ISSUED	TR-GS_01

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

Plotted Date: 3/11/2024

DESIGNER/DRAFTER: A. MERMELSTEIN
CHECKED BY: B. SCHILLING

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\TR-GS-01_03-2100699_CTDOT_TRAFFIC_GS.dgn

SIGNATURE/ BLOCK:

PROJECT TITLE: BEELINE TRAILPHASE I

TOWN: NEW BRITAIN

DRAWING TITLE: SIGN FACE SHEET ALUMINUM R-SERIES TYPICAL SIGN DETAILS

PROJECT NO. 0088-0198
DRAWING NO. TR-GS_01
SHEET NO. X

S - SERIES

S1-1

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.75	36	41-2112	1	.080
12.00	48	41-2113	2	.100

W1 - SERIES

W1-1L

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4006	1	.080
9.00	36	41-4031	1	.080

W1-1R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4005	1	.080
9.00	36	41-4160	1	.080

W1-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4029	1	.080
9.00	36	41-4169	1	.080

W1-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4168	1	.080
9.00	36	41-4032	1	.080

W1-6

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW
(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.00	48X24	41-4223	2	.100
12.50	60X30	41-4262	2	.100

W1-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.00	48X24	41-4207	2	.100
12.50	60X30	41-4208	2	.100

W1-8

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW
(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	18X24	41-3951	1	.080
7.50	30X36	41-4211	1	.080
12.00	36X48	41-4260	2	.080

W2 - SERIES

W2-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4226	1	.080
9.00	36	41-4236	1	.080

W2-2

(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4225	1	.080
9.00	36	41-4235	1	.080

W3 - SERIES

W3-1

OCTAGON - RED

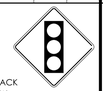
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0501	1	.080
16.00	48	41-0503	2	.100

W3-2

TRIANGLE - RED & WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0504	1	.080
16.00	48	41-0506	2	.100

W3-3



SYMBOL & LEGEND - BLACK
BACKGROUND - YELLOW
TOP CIRCLE - RED
BOTTOM CIRCLE - GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0835	1	.080
16.00	48	41-0848	2	.100

WHEN FLASHING STOP AHEAD

W/ FLASHERS

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
25.00	60	41-0534	2	.125

W4 - SERIES

W4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4448	1	.080
16.00	48	41-4452	2	.100

W4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4449	1	.080
16.00	48	41-4459	2	.100

W4-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4442	1	.080
16.00	48	41-4446	2	.100

W4-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4441	1	.080
16.00	48	41-4447	2	.100

W4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4468	1	.080
16.00	48	41-4435	2	.100

W4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4470	1	.080
16.00	48	41-4434	2	.100

W5 - SERIES

W5-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4402	1	.080
16.00	48	41-4404	2	.100

W6 - SERIES

W6-1

W6-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4335	1	.080
16.00	48	41-4330	2	.100

W6-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4329	1	.080
16.00	48	41-4331	2	.100

W7 - SERIES

W7-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4506	1	.080
9.00	36	41-4530	1	.080
16.00	48	41-4508	2	.100

W8 - SERIES

W8-5

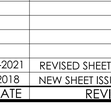
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4519	1	.080
9.00	36	41-4520	1	.080
16.00	48	41-4521	2	.100

W8-10

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-1392	1	.080

W9 - SERIES

W9-1



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4443	1	.080
16.00	48	41-4444	2	.100

W9-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4454	1	.080
16.00	48	41-4456	2	.100

W9-1

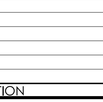
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4440	1	.080
16.00	48	41-4445	2	.100

W9-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4453	1	.080
16.00	48	41-4455	2	.100

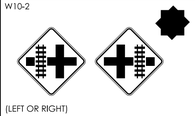
W10 - SERIES

W10-1



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-2205	1	.080

W10-2



(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-2205	1	.080

W11 - SERIES

W11-2

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4829	1	.080
9.00	36	41-4830	1	.080

W11-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4680	1	.080
9.00	36	41-4681	1	.080

W11-15

LEGEND - BLACK
(1) BACKGROUND - FLUORESCENT YELLOW GREEN
(2) BACKGROUND - FLUORESCENT YELLOW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4828 (1)	1	.080
6.25	30	41-4832 (2)	1	.080

W12 - SERIES

W12-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4213	1	.080
9.00	36	41-4215	1	.080

LEFT LANE

(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	41-4721		.080

W11-15P

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	24x18	41-4839	1	.080

W12-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4706	1	.080
16.00	48	41-4708	2	.100

RIGHT LANE

(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	41-4722		.080

W13 - SERIES

W13-1P

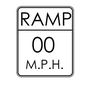
(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	18X18	41-5566		.080
4.00	24X24	41-5567		.080
6.25	30X30	41-5574		.080

W13-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	36X48	41-5596	2	.100

W13-3



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	36X48	41-5581	2	.100

W16 - SERIES

W16-2aP

(SUBPLATE)
USE AT ADVANCE SIGN LOCATION
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6140		.080

W16-7PL

(SUBPLATE)
USE AT CROSSWALK
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-2617		.080

W16-7PR

(SUBPLATE)
USE AT CROSSWALK
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

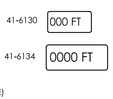
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-2619		.080

W16-9P

(SUBPLATE)
USE AT ADVANCE SIGN LOCATION
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6126		.080
3.75	30X18	41-6137		.080

W16-2aP



(SUBPLATE)
USE AT ADVANCE SIGN LOCATION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6130		.080
3.75	30X18	41-6134		.080

RETROREFLECTIVE STRIP

LEGEND - N/A
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	4X72	41-5010	1	.080

LEGEND - N/A
BACKGROUND - FLUORESCENT YELLOW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	4X48	41-5001	1	.080
2.00	4X72	41-5006	1	.080

NOTES:

1. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
2. POSTS - SEE STANDARD SHEET TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
3. POSTS SHALL BE 4 LBS./FT.
4. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
5. FLUORESCENT YELLOW RETROREFLECTIVE STRIPS SHALL BE INSTALLED ON ALL SIGN POSTS FOR W1-6 AND W1-8 SIGNS. FLUORESCENT YELLOW GREEN RETROREFLECTIVE STRIPS SHALL BE INSTALLED ON ALL SIGN POSTS FOR S1-1 AND W11-2 SIGNS LOCATED AT CROSSINGS. RETROREFLECTIVE STRIPS SHOULD NOT BE INSTALLED ON ADVANCE CROSSING WARNING SIGNS. SEE STANDARD SHEET TR-1208_01 "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS" FOR RETROREFLECTIVE STRIP DETAILS AND INSTALLATION.

COLORS:

BACKGROUND - YELLOW - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS TO USE TYPE XI RETROREFLECTIVE SHEETING.

(Y) THIS SIGN ADDED FOR THIS PROJECT ONLY.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
2	10-2021	REVISED SHEETING TYPE	TR-GS_02
1	6-2018	NEW SHEET ISSUED	TR-GS_02

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

Plotted Date: 3/11/2024

DESIGNER/DRAFTER: A. MERMELSTEIN
CHECKED BY: B. SCHILLING
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\TR-GS-01_03-2100699_CTDOT_TRAFFIC_GS.dgn

SIGNATURE/ BLOCK:

PROJECT TITLE: BEELINE TRAIL PHASE I

TOWN: NEW BRITAIN

DRAWING TITLE: SIGN FACE SHEET ALUMINUM S&W SERIES TYPICAL SIGN DETAILS

PROJECT NO. 0088-0198
DRAWING NO. TR-GS_02
SHEET NO.

D1 - SERIES

D1-1
51-5202 Variable →

D1-2
51-5203 Variable Variable →

VARIABLE LEGEND & ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
				.100
5.00	60X12	51-5202	2	.100
10.00	60X24	51-5203	2	.100

D3 - SERIES

D3-1
Variable Road Name

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	48X18	51-2004	2	.100
7.50	60X18	51-2001	2	.100
9.00	72X18	51-2002	2	.125
10.50	84X18	51-2003	2	.125

D4 - SERIES

D4-2
PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6006	1	.080
7.50	30X36	51-6007	1	.080

D4-2
EXIT 000
PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2082	3	.125

D4-2
PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6033	1	.080
7.50	30X36	51-6034	1	.080

D4-2
EXIT 000
PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2095	3	.125

D4-2
PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6044	1	.080
7.50	30X36	51-6045	1	.080

D4-2
EXIT 000
PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2097	3	.125

D4-2
EXIT 000
PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2099	3	.125

D5 - SERIES

D5-2b
REST AREA →

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
42.25	78X78	51-6901	2	.125

SERVICE PLAZA →

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
39.00	72X78	51-6158	2	.125

D7 - SERIES

D-7
51-6802 Variable →
51-6803 Variable Variable →

W or W/O ARROW
VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.17	60X12	51-6802	2	.100
8.33	60X24	51-6803	2	.100

D9 - SERIES

D9-2
H

** FOR ARROW SUBPLATES USE M5 & M6 SERIES

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6788	1	.080

51-6705 DIESEL →
51-6706 FOOD →
51-6708 GAS →
51-6709 LODGING →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	36X9		2	.080

51-5405 STATE POLICE →
51-6714 CAMPING →
51-6960 INFO →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	36X9		2	.080

D10 - SERIES

D10-4
NORTH
INTERSTATE 95
MILE 000

CARDINAL DIRECTION, SHIELD AND NUMERALS ARE VARIABLE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.75	18X54	51-5307	1	.080

RECREATIONAL RS- SERIES

RS-054

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6873	1	.080

RS-117

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-7872	1	.080

51-2705
51-2706 L or R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.19	21X15	51-2705		.080
2.19	21X15	51-2706		.080

E5 - SERIES

E5-1a
EXIT →

FOR USE AT "NO NUMBERED" EXITS

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
30.00	72X60	51-6150	2	.125

E5-1a
EXIT 00 →
51-6125

EXIT 00 →
51-6124

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32.50	78X60		2	.125

E5-1a
EXIT 00 B →
51-6127

EXIT 00 B →
51-6126

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
45.00	108X60		2	.125

E5-1a
EXIT 00 A-B →
51-6129

EXIT 00 A-B →
51-6128

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
57.50	138X60		2	.125

I - SERIES

I-3
(Variable) River

VARIABLE: RIVER, BROOK, CREEK

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	18X12	51-2009	1	.080
4.50	36X18	51-2007	2	.080
12.00	48X36	51-2051	2	.100

(Town Name)
(INCORPORATED (DATE) OR SETTLED)
TOWN LINE

VARIABLE: TOWN / CITY

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	40X27	51-2020	2	.080

I-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-1448	1	.080
6.25	30X30	51-1445	1	.080

PARKING AREA PATROLLED

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30	51-5937	2	.080

INCIDENT MANAGEMENT

N 0 .0 | N 0 0 .0 | N 0 0 0 .0

CARDINAL DIRECTION VARIABLE - N, S, E, W

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	12X36	51-5103	1	.080
4.00	12X48	51-5104	1	.080
5.00	12X60	51-5105	1	.080

SYMBOL - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	18X24	51-5943	1	.080

51-6504 Variable
51-6505 Variable Variable

TO BE SUBMOUNTED W/ 51-5943
LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.75	18X6	51-6504		.080
1.50	18X12	51-6505		.080

M1 - SERIES

M1-1
INTERSTATE CONNECTICUT 00
51-6662
51-6666
VARIABLE: 1 or 2 DIGITS

INTERSTATE CONNECTICUT 000
51-6663
51-6667
VARIABLE: 3 DIGITS

LEGEND - WHITE
BACKGROUND - RED & BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.20	24X24	51-6662	1	.080
3.99	30X24	51-6663	1	.080
7.20	36X36	51-6666	2	.080
8.99	45X36	51-6667	2	.100

M1-4
00
51-6615
51-6635
VARIABLE: 1 or 2 DIGITS

000
51-6644
51-6645
VARIABLE: 3 DIGITS

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6615	1	.080
5.00	30X24	51-6644	1	.080
9.00	36X36	51-6635	2	.080
11.25	45X36	51-6645	2	.100

M1-5
00
51-6616
51-6636
VARIABLE: 1 or 2 DIGITS

000
51-6647
51-6646
VARIABLE: 3 DIGITS

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6616	1	.080
5.00	30X24	51-6647	1	.080
9.00	36X36	51-6636	2	.080
11.25	45X36	51-6646	2	.100

M2 - SERIES

M2-1
JCT

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-6640	(1)	.080
2.19	21X15	51-6610	(2)	.080

M3 - SERIES

M3-1
NORTH

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6651	(1)	.080
2.00	24X12	51-6611	(2)	.080
4.50	36X18	51-6655	(1)	.080
4.50	36X18	51-6625	(2)	.080

M3-4
WEST

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6654	(1)	.080
2.00	24X12	51-6614	(2)	.080
4.50	36X18	51-6658	(1)	.080
4.50	36X18	51-6628	(2)	.080

M3-2
EAST

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6652	(1)	.080
2.00	24X12	51-6612	(2)	.080
4.50	36X18	51-6656	(1)	.080
4.50	36X18	51-6626	(2)	.080

M3-3
SOUTH

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6653	(1)	.080
2.00	24X12	51-6613	(2)	.080
4.50	36X18	51-6657	(1)	.080
4.50	36X18	51-6627	(2)	.080

M4 - SERIES

M4-5
TO

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6650	(1)	.080
2.00	24X12	51-6620	(2)	.080

M5 - SERIES

M5-1
51-2690 51-2630
51-2691 51-2631

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2690	(1)	.080
2.19	21X15	51-2691	(1)	.080
2.19	21X15	51-2630	(2)	.080
2.19	21X15	51-2631	(2)	.080

M5-2
51-2692 51-2632
51-2693 51-2633

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2692	(1)	.080
2.19	21X15	51-2693	(1)	.080
2.19	21X15	51-2632	(2)	.080
2.19	21X15	51-2633	(2)	.080

M6 - SERIES

M6-1
L or R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2686	(1)	.080
2.19	21X15	51-2626	(2)	.080

M6-4

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2687	(1)	.080
2.19	21X15	51-2627	(2)	.080

M6-2
51-2688 51-2629
51-2689 51-2628 51-2609

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2688	(1)	.080
2.19	21X15	51-2689	(1)	.080
2.19	21X15	51-2628	(2)	.080
2.19	21X15	51-2629	(2)	.080
4.38	30X21	51-2609	(2)	.080

M6-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2685	(1)	.080
2.19	21X15	51-2625	(2)	.080

NOTES:

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2. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
3. POSTS SHALL BE 4 LBS./FT.
4. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.

COLORS:

D - SERIES
- D1, 2, 3, 4, 10 BACKGROUND-GREEN, LEGEND-WHITE
- D7, RS BACKGROUND-BROWN, LEGEND-WHITE
- D9 BACKGROUND-BLUE, LEGEND-WHITE
- ALL OTHER D-SERIES AS NOTED

E - SERIES
- BACKGROUND-GREEN, LEGEND-WHITE

I - SERIES
- BACKGROUND-GREEN, LEGEND-WHITE (EXCEPT AS NOTED)

M2 - M6 SERIES
- (1) BACKGROUND-BLUE, LEGEND-WHITE
- (2) BACKGROUND-WHITE, LEGEND-BLACK

ALL SIGNS TO USE TYPE XI RETROREFLECTIVE SHEETING WITH THE EXCEPTION OF SIDE MOUNTED SIGNS WITH WHITE BACKGROUND WHICH SHALL BE TYPE IX RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
4	10-2021	REVISED SHEETING TYPE	TR-GS_04
3	12-2018	REVISED D2, D3, D9, AND I SIGN SERIES.	TR-GS_03
2	7-2018	REVISED BROWN COLOR TO TYPE IV.	TR-GS_03
1	6-2018	NEW SHEET ISSUED	TR-GS_03

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

Plotted Date: 3/11/2024

DESIGNER/DRAFTER: A. MERMELSTEIN
CHECKED BY: B. SCHILLING

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\TR-GS-01_03-2100699_CTDOT_TRAFFIC_GS.dgn

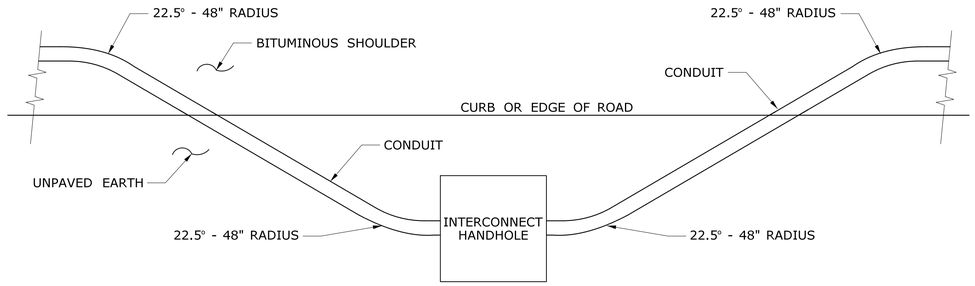
SIGNATURE/ BLOCK:

PROJECT TITLE: BEELINE TRAIL PHASE I

TOWN: NEW BRITAIN

DRAWING TITLE: SIGN FACE SHEET ALUMINUM D,RS,E,I,&M SERIES TYPICAL SIGN DETAILS (2)

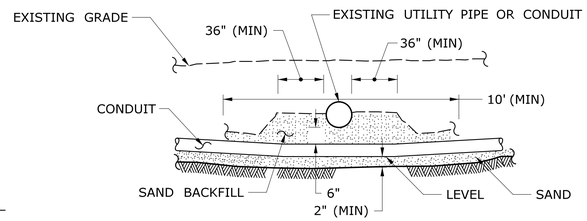
PROJECT NO. 0088-0198
DRAWING NO. TR-GS_03
SHEET NO.



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

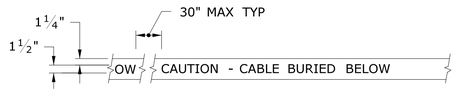
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.



CROSSING UNDER EXISTING UTILITY

NOTES:

1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.

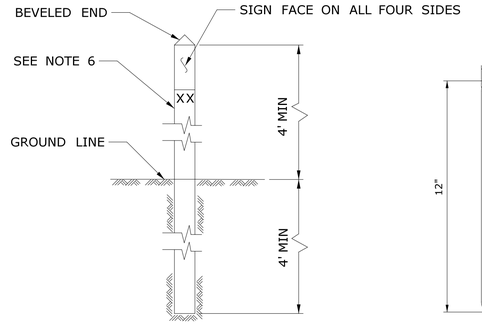


DETECTABLE WARNING TAPE

NOTE:

STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

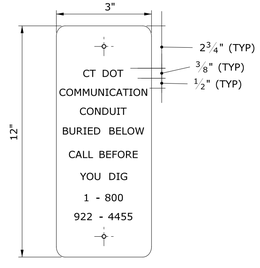
1. TAPE COLORS:
   COMMUNICATION - ORANGE BACKGROUND / BLACK LEGEND
   POWER - RED BACKGROUND / BLACK LEGEND



INTERCONNECT CONDUIT IDENTIFICATION POST

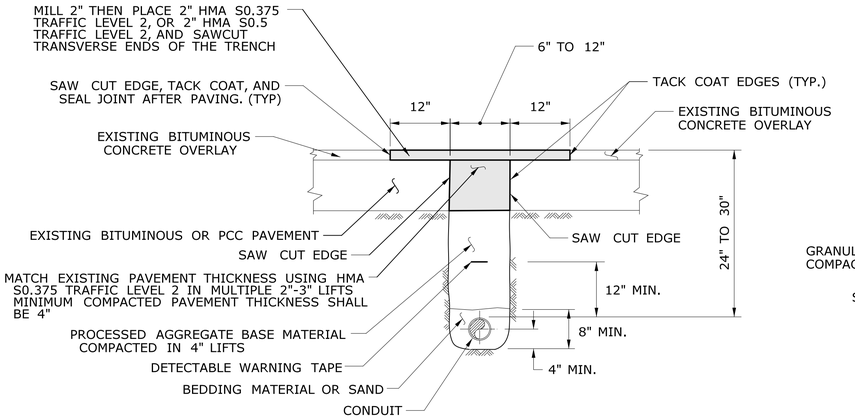
NOTES:

1. 4" x 4" NOMINAL, PRESSURE TREATED WOOD POST.
2. ATTACH SIGN TO POST WITH ¼" x 1¼" STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
3. SIGN COLORS: BACKGROUND - ORANGE (RETROREFLECTIVE)
   LEGEND - BLACK (OPAQUE).
4. INSTALL POST APPROX 24" FROM RMC IN VICINITY OF EACH INTERCONNECT HANDHOLE.
5. INSTALL ADDITIONAL POST(S) WHERE SPACING BETWEEN INTERCONNECT HANDHOLES IS GREATER THAN 1500' APART.
6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE IN FEET TO TRENCH CONTAINING COMMUNICATION CABLE.
   ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT.
7. IDENTIFICATION POSTS WITH SIGNS SHALL BE PAID UNDER THE COMMUNICATION CABLE ITEM.



SIGN FACE DETAIL

SIGN # 41-4669

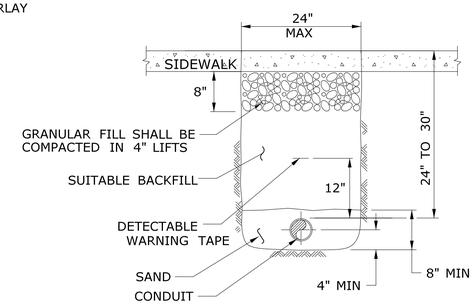


PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:

STANDARD SPECIFICATION, SECTION 3.04 AND STANDARD SPECIFICATION, ARTICLE 4.06.03

1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM SHALL BE AT LEAST 20" BELOW SURFACE.

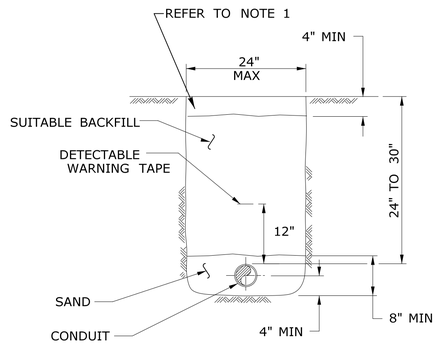


SIDEWALK

NOTES:

STANDARD SPECIFICATIONS, SECTIONS 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK IS DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK".



GENERAL NOTES:

1. TOP OF CONDUIT AT LEAST 24" DEEP.
2. COMPACT BACKFILL IN ≤6" LIFTS.
   HAND COMPACTION NOT PERMITTED.

EARTH

NOTES:

STANDARD SPECIFICATIONS, SECTION 9.50 OR SEEDING TYPE CALLED OUT ON THE PLANS.

1. IN MOWED AREAS: PLACE TOPSOIL, FERTILIZER, SEED, & MULCH.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED RMC (RIGID METAL CONDUIT)
- EXISTING RMC (RIGID METAL CONDUIT)

REV.	DATE	REVISION DESCRIPTION
5	1-2024	REVISED INTERCONNECT, ID POST DETAIL & MINOR REVS.
4	9-2023	REVISED THE ARTICLES & SECTIONS REFERENCED FROM THE STANDARD SPECS.
3	7-2021	SEC. 4.06.03 IS REFERENCED IN THE STANDARD SPECS.
2	4-2019	REVISED FILL & OVERLAY REQS. & MINOR REVS.
1	4-2012	REVISED BIT. CONCRETE TO HMA, & MINOR REVS.

DESIGNER/DRAFTER: CHECKED BY:

NOT TO SCALE

SIGNATURE/ BLOCK:

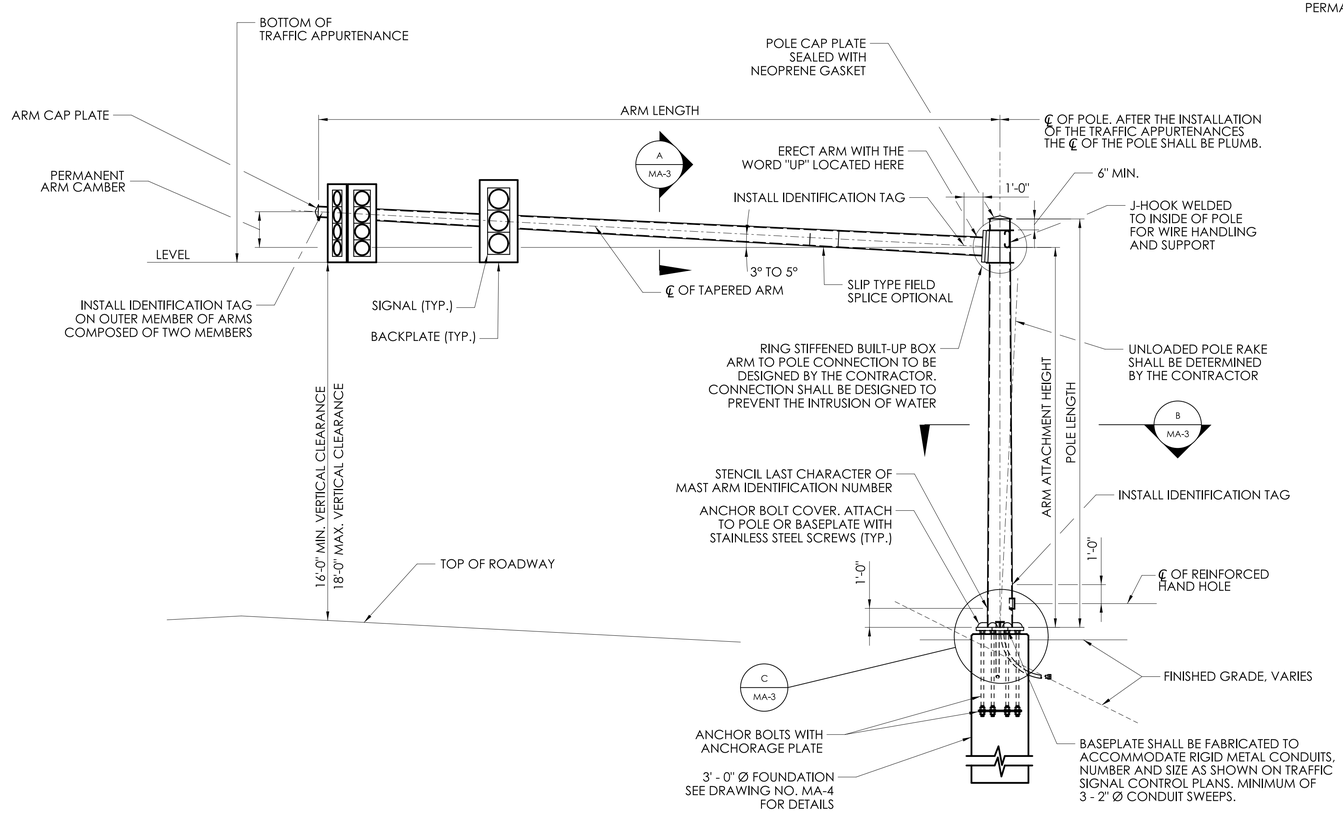
OFFICE OF ENGINEERING

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER:
PROJECT DESCRIPTION: **BEELINE TRAIL - PHASE 1**
TOWN(S): **NEW BRITAIN**
DRAWING TITLE: TRENCHING & BACKFILLING, ELECTRICAL CONDUIT

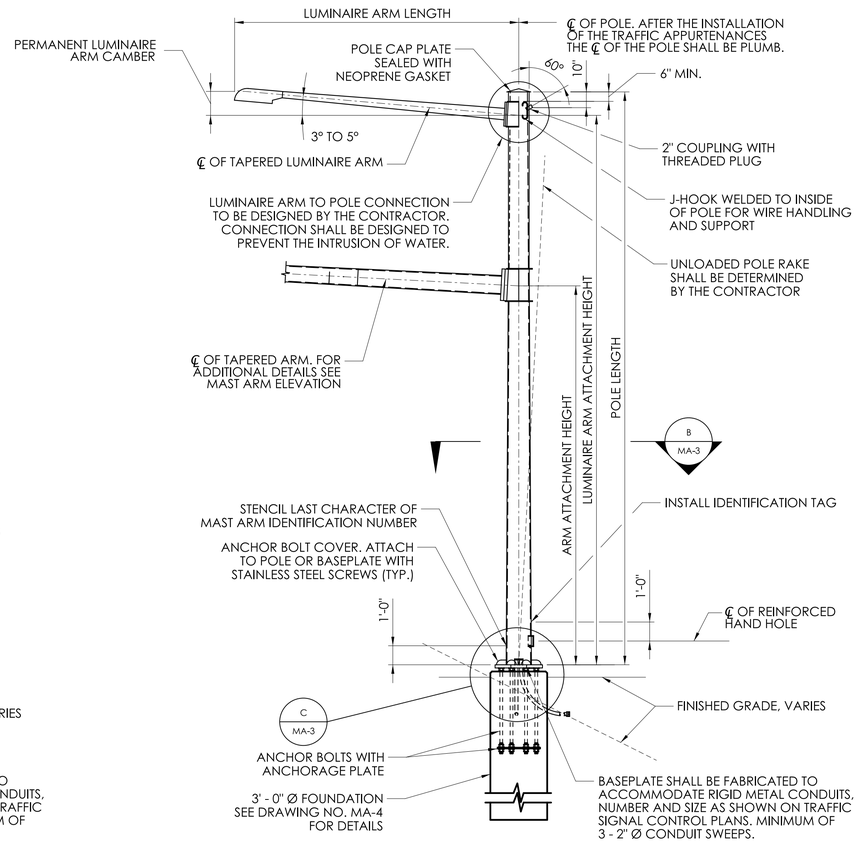
DRAWING NO. **TR_GS-04**
SHEET NO.

LASTED SAVED BY: RichardEH **FILE NAME:** C:\Users\richardeh\State of Connecticut\DOT CTDOT_DDE - CONNECT_WIP\CT_Configuration\Organization\Cell\CTDOT_Borders_Contract.cel
PLOTTED DATE: 1/23/2024



ELEVATION - MAST ARM

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



ELEVATION - COMBINATION MAST ARM

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

MAST ARM ASSEMBLY NOTES

THE MAST ARM ASSEMBLY, INCLUDING THE ANCHORAGE TO THE FOUNDATION, SHALL BE DESIGNED, FABRICATED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "XX STEEL MAST ARM ASSEMBLY" OR "XX STEEL COMBINATION MAST ARM ASSEMBLY".

THE MAST ARM ASSEMBLY, INCLUDING THE ARM SPAN, ARM ORIENTATION, AND THE LOCATIONS OF THE TRAFFIC APPURTANENCES SUPPORTED BY THE STRUCTURE ARE SHOWN ON THE TRAFFIC CONTROL SIGNAL PLAN. PRIOR TO DESIGN OF EACH MAST ARM ASSEMBLY, THE CONTRACTOR SHALL PREPARE A LAYOUT DRAWING BASED ON A FIELD SURVEY AND THE CONTRACT DOCUMENTS TO VERIFY THE MAST ARM ASSEMBLY WHEN INSTALLED WILL MEET THE GEOMETRIC AND CLEARANCE REQUIREMENTS IN THE CONTRACT DOCUMENTS. IF THE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

THE MAST ARM ASSEMBLIES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, INCLUDING THE LATEST INTERIM SPECIFICATIONS, AS AMENDED BY THE SPECIAL PROVISION "XX STEEL MAST ARM ASSEMBLY" OR "XX STEEL COMBINATION MAST ARM ASSEMBLY".

THE MAST ARM ASSEMBLIES SHALL BE DESIGNED TO SUPPORT TRAFFIC APPURTENANCES WITH PROPERTIES NO LESS THAN THOSE SHOWN ON THE TRAFFIC PLANS.

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

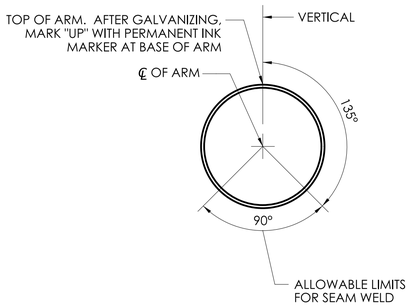
SIGNATURE/ BLOCK:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

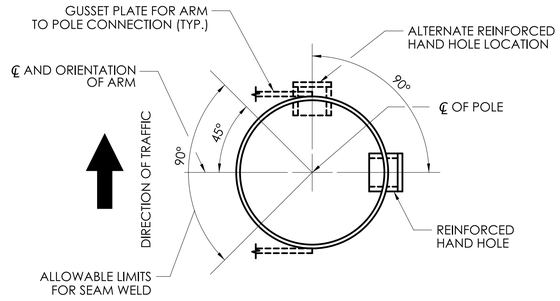
PROJECT NUMBER: **0088-0198**
PROJECT DESCRIPTION: **BEELINE TRAIL PHASE I**
TOWN(S): **NEW BRITAIN**
DRAWING TITLE: STEEL MAST ARM ASSEMBLY ELEVATION

DRAWING NO. MA-2
SHEET NO.

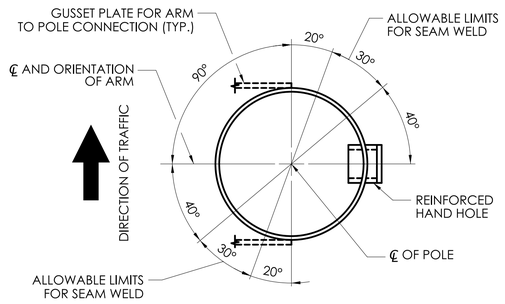
LASTED SAVED BY: **FILE NAME:**
PLOTTED DATE: 6/22/2023



SECTION (A / MA-2)
SCALE: 1 1/2" = 1'-0"

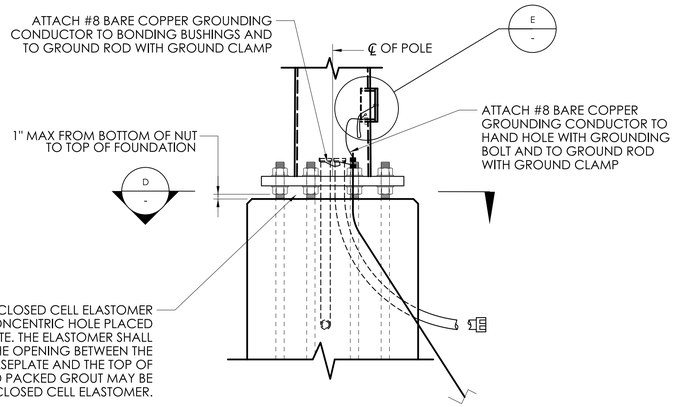


POLE WITH 1 SEAM WELD

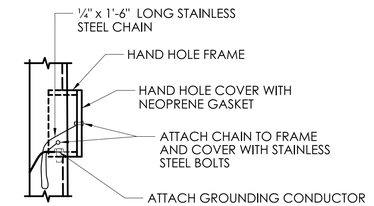


POLE WITH 2 SEAM WELD

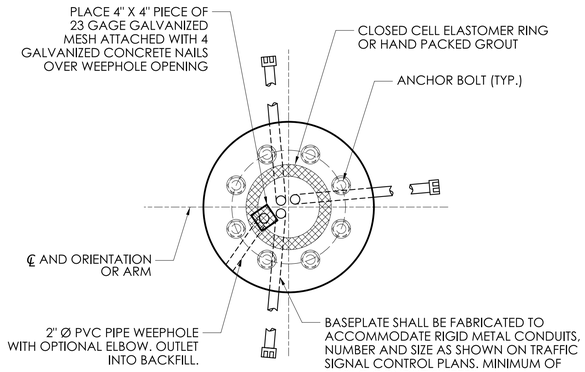
SECTION (B / MA-2)
SCALE: 1 1/2" = 1'-0"



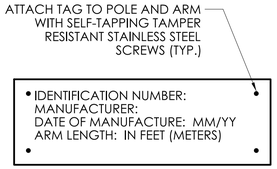
DETAIL (C / MA-2)
SCALE: 3/4" = 1'-0"



DETAIL (E / -)
SCALE: 1 1/2" = 1'-0"



SECTION (D / -)
SCALE: 3/4" = 1'-0"



IDENTIFICATION TAG - N.T.S

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

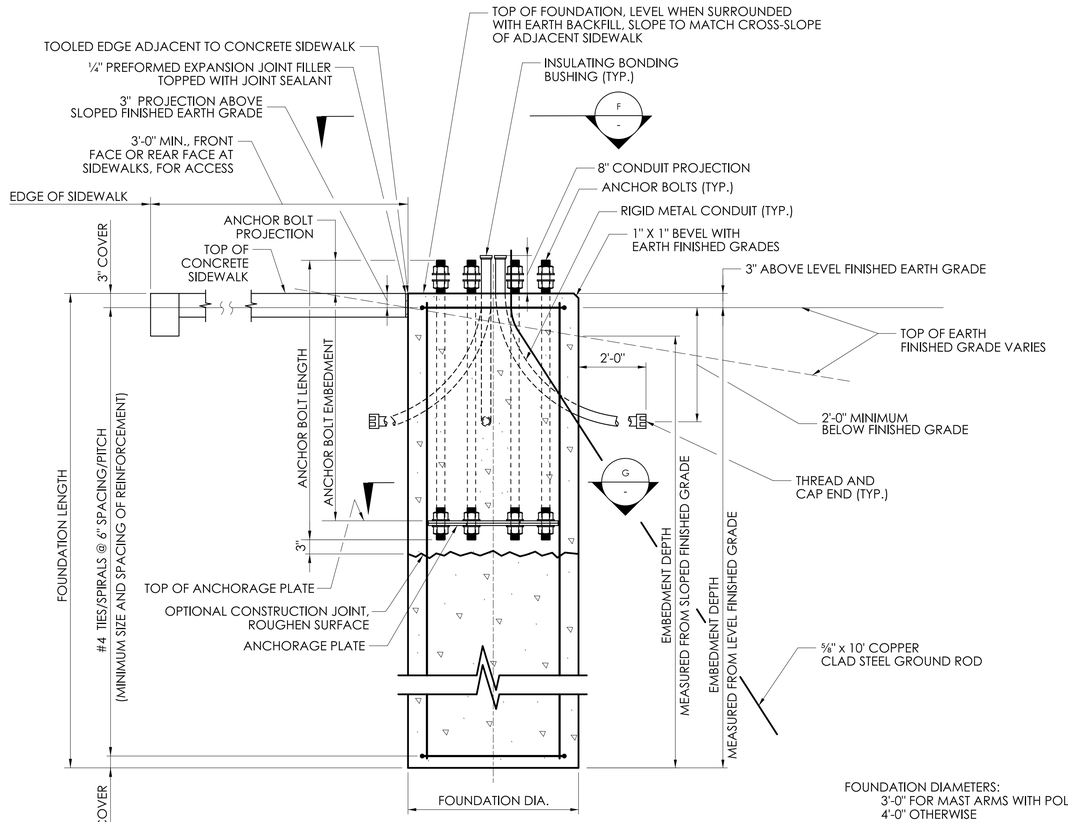
SIGNATURE/ BLOCK:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: **0088-0198**
PROJECT DESCRIPTION: **BEELINE TRAIL PHASE I**
TOWN(S): **NEW BRITAIN**
DRAWING TITLE: STEEL MAST ARM ASSEMBLY DETAILS

DRAWING NO. MA-3
SHEET NO.

LASTED SAVED BY: **FILE NAME:**
PLOTTED DATE: 6/22/2023

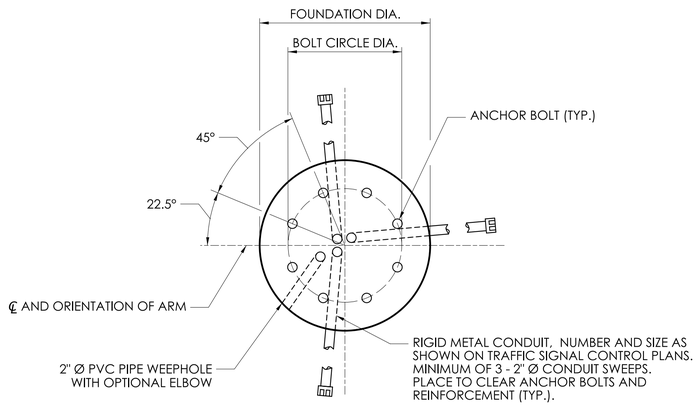


FOUNDATION DETAIL

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

FOUNDATION DIAMETERS:
3'-0" FOR MAST ARMS WITH POLE DIAMETERS AT THE BASE LESS THAN OR EQUAL TO 1'-6"
4'-0" OTHERWISE

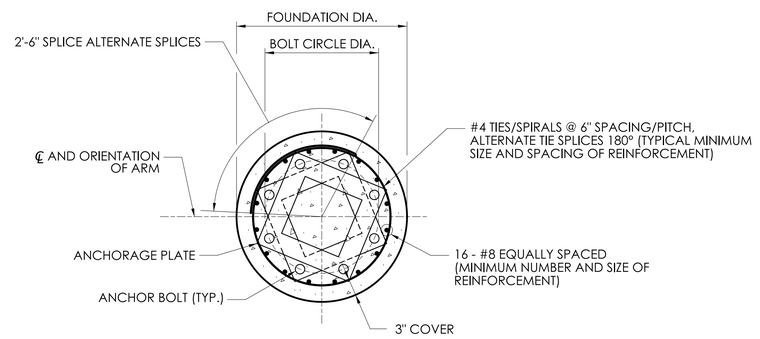
BOLT CIRCLE DIAMETERS:
DIAMETER OF THE POLE AT THE BASE PLUS 6" ± 1"



SECTION

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

F
-



SECTION

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

G
-

FOUNDATION NOTES

THE DRILLED SHAFT FOUNDATION FOR THE MAST ARM ASSEMBLY SHALL BE DESIGNED, FABRICATED, AND CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "TRAFFIC CONTROL FOUNDATION - MAST ARM".

THE FOUNDATION SHALL BE DESIGNED FOR THE SOILS AND ROCK PROPERTIES BASED ON THE SUBSURFACE CONDITIONS (CHARACTER OF THE SOIL AND ROCK, PRESENCE OF GROUND WATER, ETC.) IN THE LOCATION OF, ADJACENT TO AND BELOW THE DRILLED SHAFT FOUNDATION EXCAVATION. THE NEED AND EXTENT OF ALL SUBSURFACE EXPLORATIONS AND INVESTIGATIONS SHALL BE DETERMINED BY THE CONTRACTOR.

THE DESIGN OF THE FOUNDATION SHALL BE COORDINATED WITH THE MAST ARM ASSEMBLY AND THE MAST ARM ANCHORAGE TO ENSURE THAT THE FOUNDATION IS ADEQUATE FOR THE MAST ARM REACTIONS AND TO AVOID CONFLICTS BETWEEN THE EMBEDDED MAST ARM ANCHORAGE AND THE FOUNDATION REINFORCEMENT.

THE CONCRETE FOR THE FOUNDATION SHALL CONFORM TO CLASS PCC04460. THE COMPRESSIVE STRENGTH, f'c, USED IN DESIGN OF THE FOUNDATION SHALL BE 4,000 PSI. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED FOUNDATION SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND AND HYDRAULIC CEMENT CONCRETE.

THE REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM A615, GRADE 60. THE REINFORCEMENT SHALL BE ASSEMBLED WITH WIRE TIES. WELDING TO ASSEMBLE REINFORCEMENT IS NOT PERMITTED. ALL REINFORCEMENT SHALL HAVE 3" COVER, UNLESS OTHERWISE NOTED.

THE CONCRETE SHALL BE PLACED IN THE EXCAVATION AGAINST UNDISTURBED EARTH.

THE MAST ARM SHALL NOT BE ERECTED ON THE FOUNDATION UNTIL THE CONCRETE IN THE SHAFT HAS ATTAINED A COMPRESSIVE STRENGTH, f'c, GREATER THAN OR EQUAL TO 4000 PSI.

THE COST OF THE FOUNDATION, INCLUDING THE EXCAVATION, CONCRETE, REINFORCEMENT, CASING AND WEEPHOLES, INCLUDING THE DESIGN AND FABRICATION, TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "TRAFFIC CONTROL FOUNDATION - MAST ARM".

WHERE AN EXISTING CONCRETE SIDEWALK ABUTTING A FOUNDATION IS DAMAGED OR CUT DURING INSTALLATION, REPLACE THE ENTIRE SECTION. ALL SIDEWALK REPLACED DUE TO FOUNDATION INSTALLATION SHALL BE PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK".

THE COST OF PREFORMED EXPANSION JOINT FILLER AND JOINT SEALANT SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "CONCRETE SIDEWALK".

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: CHECKED BY:

SCALE AS NOTED

SIGNATURE/ BLOCK:

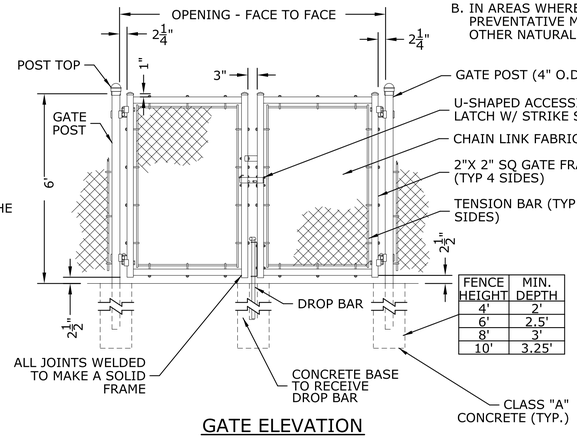
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: **0088-0198**
PROJECT DESCRIPTION: **BEELINE TRAIL PHASE I**
TOWN(S): **NEW BRITAIN**
DRAWING TITLE: STEEL MAST ARM ASSEMBLY FOUNDATION DETAILS

DRAWING NO. MA-4
SHEET NO.

LASTED SAVED BY: **FILE NAME:**
PLOTTED DATE: 6/22/2023

GATE PLAN



FENCE HEIGHT	MIN. DEPTH
4'	2'
6'	2.5'
8'	3'
10'	3.25'

GATE ELEVATION

NOTE:

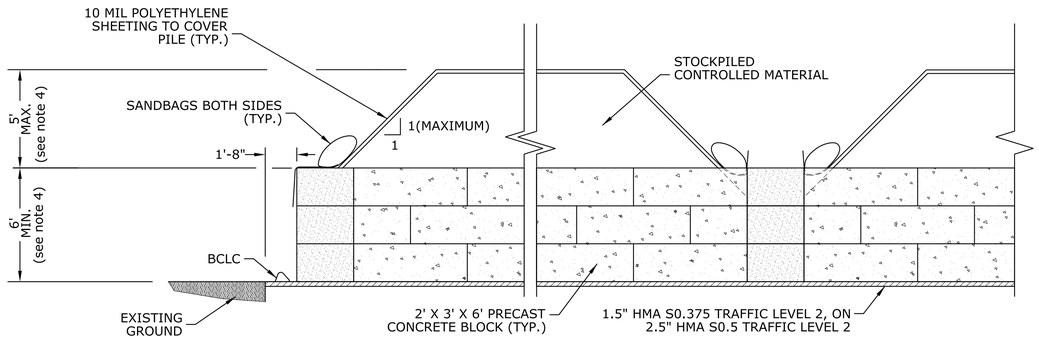
GATES SHOULD HAVE THE ABILITY TO SWING 180 DEGREES.

NOTES:

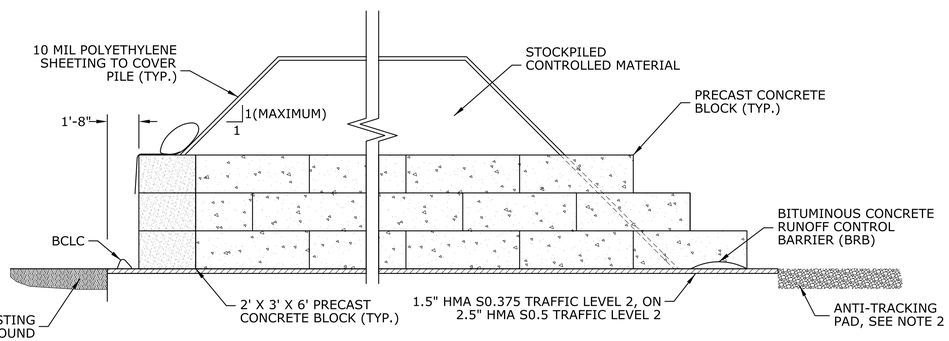
A. CHAIN LINK FENCE MAY BE UTILIZED IN RESIDENTIAL NEIGHBORHOODS TO PREVENT UNAUTHORIZED ENTRY ONTO STOCKPILES WHERE THERE IS UNLIMITED ACCESS AVAILABLE TO PEDESTRIANS AND/OR TRAFFIC.

B. IN AREAS WHERE THERE IS LIMITED ACCESS, OTHER APPROPRIATE PREVENTATIVE MEASURES MAY BE ACCOMPLISHED THROUGH THE USE OF OTHER NATURAL OR ARTIFICIAL BARRIERS.

1 TYPICAL DOUBLE SWING GATES

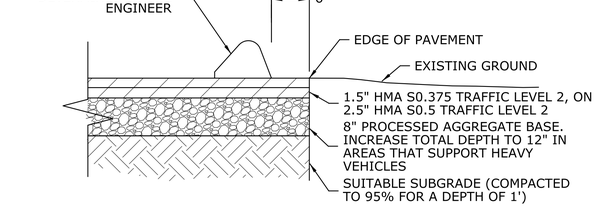


SECTION B-B



SECTION A-A

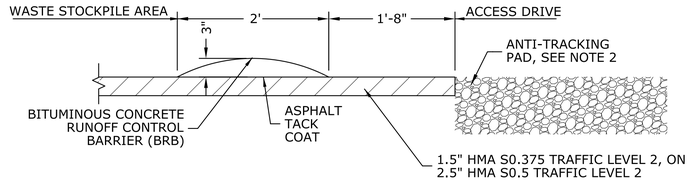
2 WASTE STOCKPILE AREA DETAIL



NOTE:

IF THE WSA IS TO BE LOCATED ON EXISTING PAVEMENT SUCH AS ROADWAY AND OR PARKING LOT A COMPOSITE PAVEMENT STRUCTURE WILL NOT BE REQUIRED.

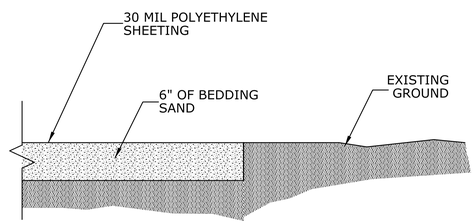
3 COMPOSITE PAVEMENT STRUCTURE DETAIL



NOTE:

INSTALLATION OF BRB SHALL BE ON PAVEMENT ONLY AND IS BASED ON FIELD CONDITIONS OR AS DETERMINED BY THE ENGINEER.

4 BITUMINOUS CONCRETE RUNOFF CONTROL BARRIER (BRB) DETAIL



5 BEDDING SAND OVER EXISTING GROUND DETAIL

GENERAL NOTES:

1. WSA INSTALLATION AND ALL REQUIRED MATERIALS ARE AS INDICATED ON THE WSA PLAN.
2. ANTI-TRACKING PAD SHALL BE INSTALLED AS SHOWN ON THE WSA PLAN AND IN ACCORDANCE WITH "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, 2002-SECTION 5-12."
3. WHERE FEASIBLE, A MINIMUM DISTANCE OF 5' IMMEDIATELY OUTSIDE THE PERIMETER OF THE WSA CONCRETE BLOCK WALLS SHALL REMAIN CLEAR AND FREE OF ANY OBJECT TO PROVIDE ACCESS FOR MAINTENANCE.
4. HEIGHT OF THE CONCRETE BLOCKS, STOCKPILED CONTROLLED MATERIAL AND CONFIGURATION OF THE BIN(S) MAY VARY BASED ON THE SIZE AS INDICATED ON THE WSA PLAN OR AS DIRECTED BY THE ENGINEER.
5. THE WSA SURFACE SHALL BE SUFFICIENTLY IMPERVIOUS TO PREVENT OR MINIMIZE THE TRANSFER OR INFILTRATION OF CONTAMINANTS FROM THE STOCKPILES TO THE GROUND. THE WSA SURFACE WILL VARY BASED ON PROJECT SPECIFICS AND MAY BE CONSTRUCTED ON NEW OR EXISTING PAVEMENT, BEDDING SAND, OR OTHER MATERIAL AS SHOWN ON THE WSA PLAN OR THE AREAS OF ENVIRONMENTAL CONCERN PLAN(S).

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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

Plotted Date: 10/19/2021

DESIGNER/DRAFTER: -

CHECKED BY: -

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_ENV_COMPL_GDS.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

BEELINE TRAIL PHASE I

TOWN: NEW BRITAIN

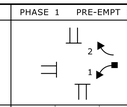
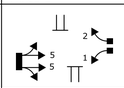
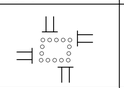
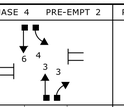
DRAWING TITLE: WASTE STOCKPILE AREA (WSA) DETAILS

PROJECT NO. 88-198

DRAWING NO. EC-01

SHEET NO.

MOVEMENT DIAGRAM

NTOR		PHASE 1 PRE-EMPT 1			PHASE 2			PHASE 3			PHASE 4 PRE-EMPT 2			PHASE 5			PHASE 6			PHASE 7			PHASE 8					
NONE																												
	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	◀ G	◀ Y G	G	G	Y	R	R	R	R	R	R	R															
2	Y	G	G	G	G	Y	R	R	R	R	R	R	R															
3	R	R	R	R	R	R	R	R	R	R	G	Y	R															
4	R	R	R	R	R	R	R	R	R	R	G	Y	R															
5	Y	R	R	R	G	Y	R	R	R	R	R	R	R															
6	R	R	R	R	R	R	R	R	R	R	↑	Y	R															
P	OFF	◀		▶	DW		▶	WØ	◀	DW			▶															
MIN GRN		5			15						7																	
WALK								7																				
PED CLR								15																				
VEH EXT		1			2.5						1.5																	
MAX 1		5			25						17																	
MAX 2		10			40						32																	
YELLOW			3.0			3.7			4.0			3.6																	
RED				1.0			2.5			0.0			1.7															
ADD INIT									COUNTDOWN PEDESTRIAN SIGNAL																			
MAX INIT																												
TBR																												
TTR																												
MIN GAP																												
MODE		NON-LOCK			MIN RECALL			NON-LOCK			NON-LOCK			OFF			OFF			OFF			OFF			OFF		
INT START					THIS PHASE																							

TECHNICAL NOTES

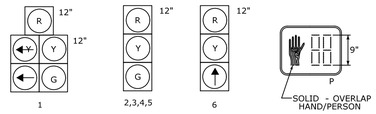
STANDARD OVERLAP SKIP FEATURES APPLY
PHASE 2 ON TO OMIT PHASE 1.
D1 TO CALL AND EXTEND PHASE 1.

OFFICE RECORD

REV # 8 TIR # N/A SM # 101663 SIGNAL REVISED: 6/17/2019
REVISED TIMINGS UNDER STATE PROJECT NO. 171-398.

REV # 9 TIR # N/A SM # N/A SIGNAL REVISED: 08/31/2022
TRAFFIC & ELECT. DES: TRAFFIC SIGNALS UNIT
REVISED SIGNAL FACE 6 TO HAVE GREEN ARROW AND REVISED PEDESTRIAN SIGNAL INDICATIONS UNDER STATE PROJECT NO. 0171-0449.

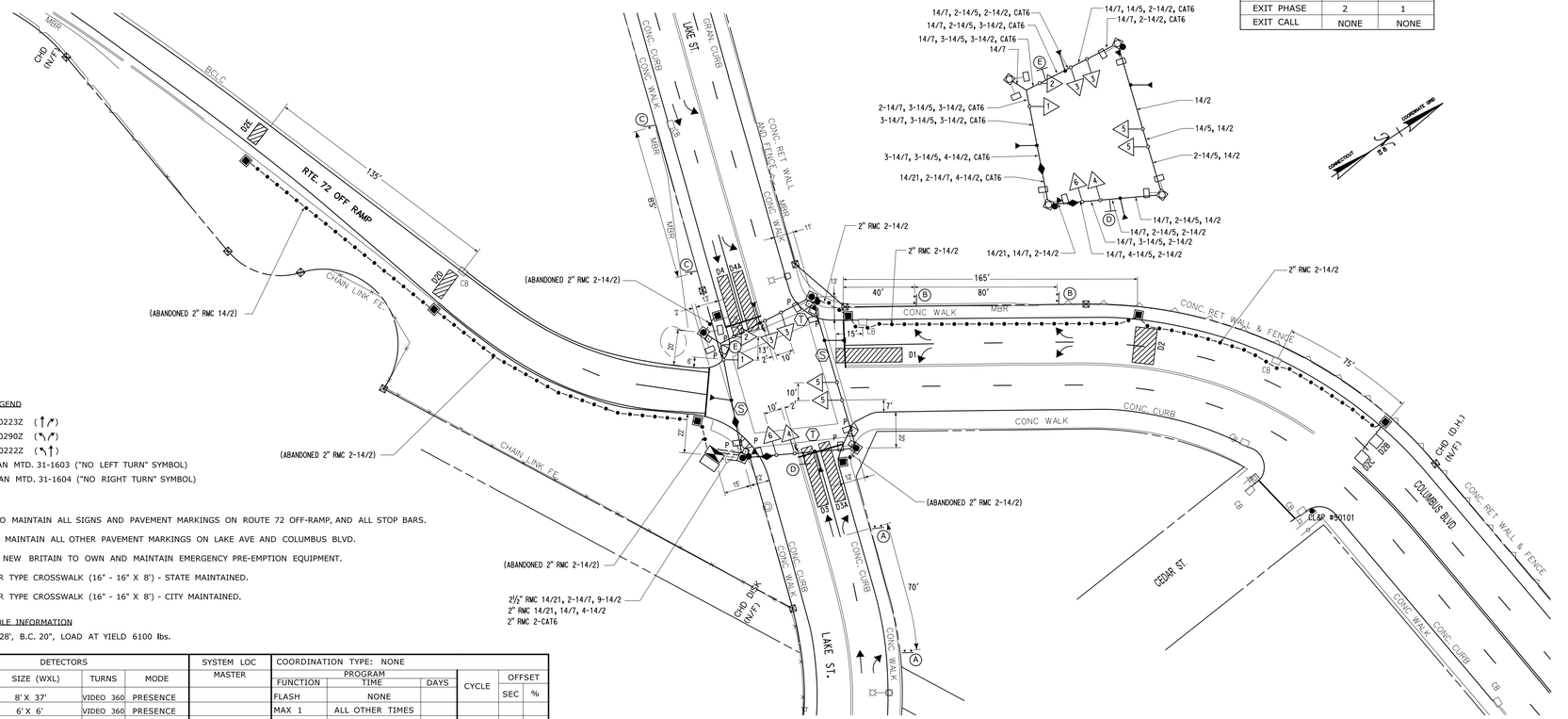
SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS AND TUNNEL VISORS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	15	15
HOLD GREEN	15	15
HOLD YELLOW	3.0	3.6
HOLD RED	1.0	1.7
HOLD PHASE	1	4
EXIT PHASE	2	1
EXIT CALL	NONE	NONE



SIGN LEGEND

(A) 31-0223Z (↑↱)
(B) 31-0290Z (↰↱)
(C) 31-0222Z (↰↑)
(D) SPAN MTD. 31-1603 ("NO LEFT TURN" SYMBOL)
(E) SPAN MTD. 31-1604 ("NO RIGHT TURN" SYMBOL)

NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 72 OFF-RAMP, AND ALL STOP BARS.

CITY TO MAINTAIN ALL OTHER PAVEMENT MARKINGS ON LAKE AVE AND COLUMBUS BLVD.

CITY OF NEW BRITAIN TO OWN AND MAINTAIN EMERGENCY PRE-EMPTION EQUIPMENT.

(S) BAR TYPE CROSSWALK (16" - 16" X 8') - STATE MAINTAINED.

(T) BAR TYPE CROSSWALK (16" - 16" X 8') - CITY MAINTAINED.

SPAN POLE INFORMATION

HEIGHT 28', B.C. 20", LOAD AT YIELD 6100 lbs.

DETECTORS				SYSTEM LOC
IDENT	SIZE (WXL)	TURNS	MODE	MASTER
D1	8' X 37'	VIDEO 360	PRESENCE	
D2	6' X 6'	VIDEO 360	PRESENCE	
D2B/D2C	6' X 6'	3	PRESENCE	
D2D	6' X 16'	VIDEO 360	PRESENCE	
D2E	6' X 11'	VIDEO 360	PRESENCE	
D3	6' X 34'	VIDEO 360	PRESENCE	
D3A	6' X 34'	VIDEO 360	PRESENCE	
D4	6' X 34'	VIDEO 360	PRESENCE	
D4A	6' X 34'	VIDEO 360	PRESENCE	

COORDINATION TYPE: NONE

PROGRAM			CYCLE	OFFSET	
FUNCTION	TIME	DAYS		SEC	%
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	0600-1800	DAILY			

NO.	DATE	REVISION DESCRIPTION

LEGEND:

R RED
Y YELLOW
G GREEN
◀R RED ARROW
◀Y YELLOW ARROW
◀G GREEN ARROW
W/Ø WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

SIDEWALK RAMP
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSMITTER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 12/9/2022 C:\Users\huangvl\State of Connecticut\0171-0449 - Design\Traffic\Contract_Plans\As-Builts\VLH\New Britain\088-255\009_TR_ASSET_088_255.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 72 OFF RAMP AT
COLUMBUS BLVD AND LAKE ST

SCALE 1" = 40'

FOR REFERENCE ONLY

FOR REV # 8

Tighe&Bond
www.tighebond.com
213 Court Street
Suite 1100
Middletown, CT 06457
(860) 704-4760

CLEARANCE INTERVALS DESIGNED BY:
TIGHE & BOND

ENGINEER'S SEAL & SIGNATURE APPLY TO CLEARANCE INTERVALS ONLY.

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

REV # 9 INTERSECTION #088-255

ENERGY BY - CITY	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - UNDERGROUND
	UNMETERED SERVICE

TOWN: **NEW BRITAIN**

PROJECT NO.

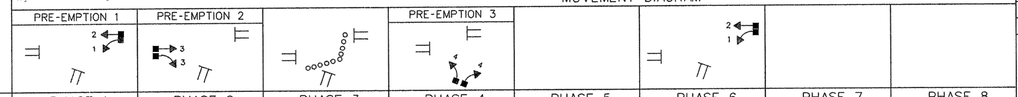
DRAWING NO.

SHEET NO.

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

MOVEMENT DIAGRAM

NONE



NTOR		PHASE 1			PHASE 2			PHASE 3			PHASE 4			PHASE 5			PHASE 6			PHASE 7			PHASE 8		
	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	R	← G	←Y G	G	R	R	R	R	R	R	R	R	R				G	Y	R						
2	R	G	G	G	R	R	R	R	R	R	R	R	R				G	Y	R						
3	R	R	R	R	G	Y	R	R	R	R	R	R	R				R	R	R						
4	R	R	R	R	R	R	R	R	R	R	G	Y	R				R	R	R						
P	OFF	←			DW		→	WØ	←		DW		→				←	DW	→						
					← YIELD PT.												← YIELD PT.								
MIN.		5	3	0	15	3	1	7/10	0	0	5	3	1				15	3	1						
MAX.		10	5	1	45	5	3	9/15	4.0	1	20	5	3				45	5	3						

INTERVALS																									
MIN GRN		5			15						5						15								
WALK								7																	
PED CLR								12																	
VEH EXT		1			2						2						2								
MAX 1		5			20						12						20								
MAX 2		5			20						12						20								
YELLOW			3			3.4			4.0			3.4						3.4							
RED				1.0			2.7			0			1						2.7						
ADD INI																									
MAX INT																									
TBR																									
TTR																									
MIN GAP																									
MODE		NON-LOCK			MIN RECALL			NON-LOCK			NON-LOCK			OFF			MIN RECALL			OFF			OFF		
INI START					THIS PHASE												THIS PHASE								

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6' X 40'	VIDEO 360	PRESENCE
D2	6' X 40'	VIDEO 360	PRESENCE
D3	6' X 40'	VIDEO 360	PRESENCE
D3A	6' X 40'	VIDEO 360	PRESENCE
D4	6' X 40'	VIDEO 360	PRESENCE
D4A	6' X 40'	VIDEO 360	PRESENCE

SYSTEM LOC: MASTER

COORDINATION TYPE: CENTRAL SYSTEM

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
PATTERN 1	0700 – 1100 0900 – 2200	M–F SA–SU	70	10	14
PATTERN 3	1100–2000	M–F	70	36	51
MAX 1	ALL OTHER TIMES	DAILY			
MAX 2	FUTURE				

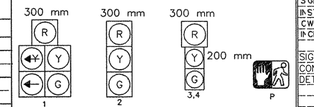
PHASE SPLITS SEC / %	ø1	ø2	ø3	ø4	ø5	ø6	ø7	ø8	ø9
	9 13	23 33	23 33	15 21		32 46			
	9 13	24 34	23 33	14 20		33 47			

PERMIS PERIOD: ø SEC

ENERGY BY– CITY | METER # –
MAINT 24hr ☐ Norm ☒ | SERVICE – MH 247

UNMETERED SERVICE

SIGNAL FACES



ALL CIRCULAR RED INDICATIONS TO HAVE LED LAMPS.

(FUTURE) PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2	PRE-EMPT 3
PRIORITY	NO	NO	NO
DET. LOCK	YES	YES	YES
DELAY	0	0	0
ALT. MIN. GRN	5	5	5
ALT. YELLOW	NO	NO	NO
ALT. RED	NO	NO	NO
ALT. PED. CLR.	12	12	12
HOLD GREEN	15	15	15
HOLD YELLOW	3.0	3.4	3.4
HOLD RED	1.0	2.7	1.0
HOLD PHASE	1	2	4
EXIT PHASE	2,6	2,6	1
EXIT CALL	ALL	ALL	ALL

OFFICE RECORD

REVISION #

STC # 088-9510-02 SM # N/A
SIGNAL REVISED
INSTALLED NEW EQUIPMENT IN STATE PROJ. 88-141. SIGNAL OWNERSHIP TRANSFERRED FROM STATE TO CITY INCLUDED IN CLOSED LOOP SYSTEM.

SIGNAL REVISED:
CONTROLLER UPGRADED, TIMINGS REVISED, AND VIDEO DETECTION EQUIPMENT INSTALLED UNDER SPN. 88-192.

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
ARTERY PHASE DETECTORS TO BE NON-ACTUATING DURING COORDINATION.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.
PHASE SPLITS SHOWN REPRESENT PRELIMINARY COORDINATION DATA.
PHASE 2 AND 6 ON TO OMIT PHASE 1.
PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION.

CONSTRUCTION NOTES :

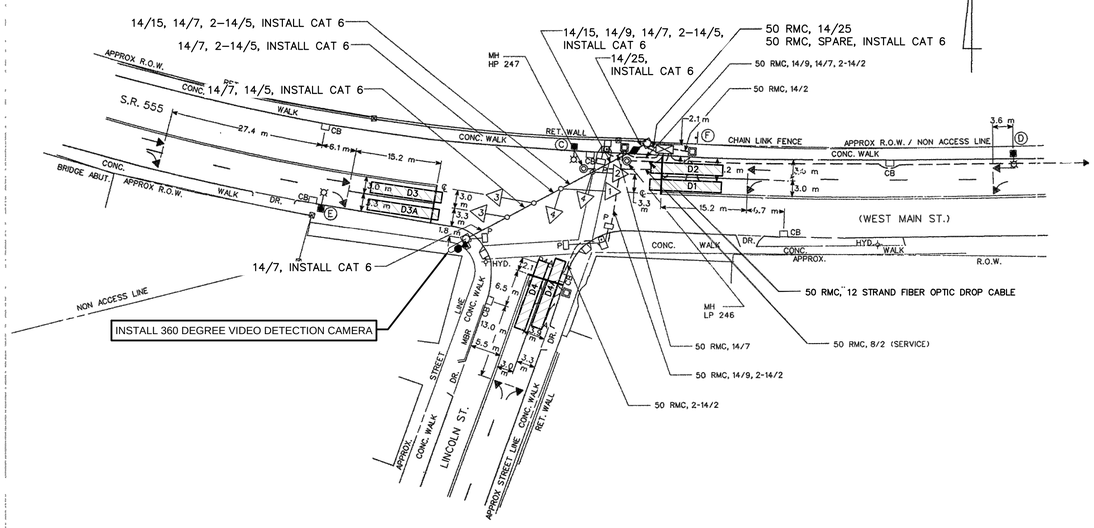
ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING, EXCEPT AS NOTED BELOW:

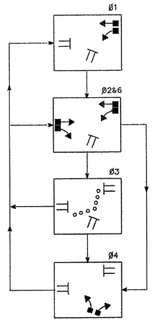
- INSTALL NEW CONTROLLER UNIT IN EXISTING CABINET AND IMPLEMENT SIGNAL PHASING AND TIMING SETTINGS SHOWN ON THE PLAN. REFER TO SPECIAL PROVISION FOR ITEM #1108165A – REPLACE CONTROLLER IN EXISTING CABINET.
- INSTALL NEW ETHERNET SWITCH IN EXISTING CABINET. REFER TO SPECIAL PROVISION FOR ITEM #1108660A – ETHERNET SWITCH.
- INSTALL NEW VIDEO DETECTION PROCESSOR IN EXISTING CABINET AND NEW 360 DEGREE VIDEO DETECTION CAMERA AT LOCATION TO BE DETERMINED BY MANUFACTURER REPRESENTATIVE AS APPROVED BY THE ENGINEER. INSTALL CAT 6 CAMERA CABLE CONTINUOUSLY BETWEEN THE CAMERA AND EXISTING CONTROLLER CABINET. SETUP VIDEO DETECTION ZONES D1, D2, D3, D3A, D4, D4A AS SHOWN ON THE PLAN. VIDEO DETECTION ZONES ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE VIDEO DETECTION MANUFACTURER OR DESIGNATED REPRESENTATIVE.

ALL OTHER INFORMATION SHOWN ON THE PLAN IS BASED ON RECORD PLANS PROVIDED BY THE CITY AND IS INCLUDED FOR INFORMATION ONLY.

REV. # | INTERSECTION # 088-226

SIGN LEGEND
(D) 31-0329 (↖↑) BANDED TO LUMINARE.
(E) EXISTING 31-0330 (↑↗) BANDED TO LUMINARE.
(F) 31-0329 (↖↑)





SPAN POLE INFORMATION
HEIGHT 9000 mm, B.C. 510 mm, LOAD AT YIELD 34 710 NEWTONS

FOR REFERENCE ONLY

CITY SIGNAL

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

vhb — 100 Great Meadow Road, Suite 200 Wethersfield, Connecticut 06109 Tel: 860 807-4300 Fax: 860 372-4570

INTERSECTION # 088-226

ENERGY BY - CITY | METER # - N/A
MAINT LEVEL - CITY | SERVICE - MH 247
UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R RED
Y YELLOW
G GREEN
◀R▶ RED ARROW
◀+▶ YELLOW ARROW
◀– GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

○ PROPOSED WOOD SPAN POLE
● EXISTING WOOD SPAN POLE
▢ PROPOSED STEEL SPAN POLE
■ EXISTING STEEL SPAN POLE
◇ PROPOSED UTILITY POLE
◆ EXISTING UTILITY POLE
□ PEDESTAL MOUNTING
⊡ PEDESTRIAN PUSH BUTTON & SIGN
⊡ DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
TERMINATION CABINET
AUXILIARY TERMINATION CABINET
VIDEO DETECTION ZONE

EXISTING LIGHT POLE
PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
AUDIO DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
CAT 6 CATEGORY 6 CABLE

EXISTING LIGHT POLE WITH ARM
PROPOSED LIGHT POLE WITH ARM
SIDEWALK RAMP
CABLE CLOSURE
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : Jan 23, 2020 TCS-4627400-EQP UPG.dwg

CITY OF NEW BRITAIN

WEST MAIN STREET (S.R. 555)
AT LINCOLN STREET

SCALE 1:500 METRIC

TOWN: NEW BRITAIN

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0088-0192
DRAWING NO. TCS-08
SHEET NO. 21 of 52

*ONLY STANDARD SHEETS MARKED WITH AN "✓" ARE IN THIS PROJECT #

**REVISED OR ADDED

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-211_01	ANTI-TRACKING PAD	11-09-22
✓	HW-286_01	DRAINAGE TRENCH EXCAVATION	11-09-22
	HW-505 01a	STRAIGHT ENDWALLS	02-28-24
	HW-505 01b	STEEL REINFORCING FOR STRAIGHT ENDWALLS (2" DIFF BASE TO FLOW LINE)	01-05-24
	HW-505 01c	STEEL REINFORCING FOR STRAIGHT ENDWALLS (STANDARD RIPRAP APPLICATION)	01-05-24
	HW-505_02	TYPE "D-G" & "L" ENDWALLS	01-05-24
✓	HW-586_01	CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" STRUCTURES	01-05-24
✓	HW-586_02	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I STRUCTURES	01-05-24
✓	HW-586_03	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II STRUCTURES	01-05-24
	HW-586_04	PRECAST CATCH BASIN AND ROUND STRUCTURE	11-08-22
	HW-586_05	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE I	11-08-22
	HW-586_06	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE II	11-08-22
✓	HW-586 07a	CATCH BASIN TYPE "C" AND "C-L" TOPS	01-05-24
✓	HW-586 07b	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	11-09-22
✓	HW-586 07c	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	11-08-22
	HW-586 07d	CATCH BASIN TYPE "C-G" AND "C-M" BARRIER CURB TOPS	11-09-22
✓	HW-586_08	CATCH BASIN FRAMES AND GRATES	11-09-22
	HW-586_09	CATCH BASIN LOCK DOWN TOPS	11-09-22
✓	HW-586_10a	MANHOLE FRAME AND COVER	01-05-24
	HW-586_10b	MANHOLE FRAME AND GRATE	01-05-24
✓	HW-586_10c	REINFORCED PRECAST CONCRETE MANHOLE	11-08-22
	HW-586_10d	MANHOLE NON-PRECAST CONCRETE UNIT	11-08-22
	HW-686_01a	CONCRETE PIPE CONNECTION SHEET 1	11-08-22
	HW-686_01b	CONCRETE PIPE CONNECTION SHEET 2	11-08-22
	HW-686_02a	DRAINANGE PIPE ENDS SHEET 1 [CORRUGATED METAL PIPE]	11-08-22
	HW-686_02b	DRAINAGE PIPE ENDS SHEET 2 [CONCRETE PIPE]	11-08-22
	HW-751_01	UNDERDRAINS AND UNDERDRAIN OUTLETS	02-28-24
	HW-803_01	PAVED APRONS	11-08-22
	HW-811_01	CONCRETE CURBING	11-08-22
	HW-813_01	GRANITE STONE TRANSITION CURBING	11-08-22
✓	HW-813_02	STONE CURBING	11-08-22
✓	HW-815_01	BITUMINOUS CONCRETE CURBING	11-08-22

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-821_01a	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_01b	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_01c	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_02a	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 1	11-08-22
	HW-821_02b	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 2	11-08-22
	HW-821_03a	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_03b	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_03c	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_03d	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 4	11-08-22
	HW-821_03e	TRANSITION - 32" JERSEY SHAPE TO 45" F-SHAPE	11-08-22
	HW-821_04a	MERRITT PARKWAY NARROW MEDIAN BARRIER	11-08-22
	HW-821_04b	MERRITT PARKWAY - 2' WIDE MEDIAN BARRIER AND ROADSIDE BARRIER	11-08-22
	HW-821_05a	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_05b	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_06	54" VERTICAL SHAPE BARRIER	11-08-22
	HW-821_07	MISCELLANOUS DETAILS FOR BARRIER TRANSITIONS	11-08-22
	HW-821_08a	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM	11-08-22
	HW-821_08b	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_09a	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM	11-08-22
	HW-821_09b	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_10a	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM	11-08-22
	HW-821 10b	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM REINF.	11-08-22
	HW-821_11a	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 1	01-05-24
	HW-821_11b	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 2	01-05-24
	HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB	11-08-22
	HW-822 02a	TEMPORARY TRAFFIC BARRIER - DETAILS	11-08-22
	HW-822 02b	TEMPORARY TRAFFIC BARRIER (BOLTED)	02-02-24
	HW-822 02c	TEMPORARY TRAFFIC BARRIER & TEMPORARY TRAFFIC BARRIER (PINNED)	11-08-22
	HW-905_01	STONE WALL FENCE	11-09-22
	HW-906_01	WIRE FENCE	11-08-22

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SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

STANDARD SHEET TITLE:
HIGHWAY STANDARD SHEET INDEX

STANDARD SHEET NO.:
1 OF 2

PLOTTED DATE: 3/5/2024

*ONLY STANDARD SHEETS MARKED WITH AN " ✓ " ARE IN THIS PROJECT #

**REVISED OR ADDED

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE	11-08-22
✓	HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	11-08-22
	HW-910_03	METAL BEAM RAIL (TYPE MD-B 350) GUIDERAIL	11-08-22
	HW-910_04	METAL BEAM RAIL (TYPE R-B 350) SYSTEMS 5, 5A, & 6	11-08-22
	HW-910_05	METAL BEAM RAIL R-B 350 SPAN TYPE I, II, III SECTIONS	11-08-22
	HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET	11-08-22
	HW-910_07	R-B 350 BRIDGE ATTACHMENT VERTICAL SHAPE PARAPET	11-08-22
	HW-910 09a	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 1	11-08-22
	HW-910 09b	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 2	11-08-22
	HW-910 10	METAL BEAM RAIL 8" x 6" BOX BEAM	11-08-22
	HW-910 11	CURVED GUIDERAIL TREATMENT DETAIL	11-08-22
	HW-910_12a	MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENTS AND SYSTEMS 2&3	11-08-22
	HW-910_12b	MERRITT PARKWAY GUIDERAIL HARDWARE DETAILS	11-08-22
	HW-910_12c	MERRITT PARKWAY GUIDERAIL TRAILING END ATTACHMENTS	11-02-22
	HW-910_12d	MERRITT PARKWAY MEDIAN GUIDERAIL AND END ANCHOR	11-08-22
	HW-910_13a	THRIE-BEAM METAL BEAM RAIL HARDWARE	11-08-22
	HW-910_13b	THRIE-BEAM TRANSITIONS	11-08-22
	HW-910_14a	THRIE-BEAM 350 BRIDGE ATTACHMENT	11-08-22
	HW-910_14b	THRIE-BEAM 350 GUIDERAIL TRANSITION TO R-B 350 GUIDERAIL	11-08-22
	HW-910_15	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE I	11-08-22
	HW-910_16	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE II	11-08-22
	HW-910_17	R-B TERMINAL SECTION	11-08-22
	HW-910_18	METAL BEAM RAIL (TYPE MD-I) GUIDERAIL	11-08-22
	HW-910_19a	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE I	11-09-22
	HW-910_19b	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE II	11-08-22
	HW-910_19c	METAL BEAM RAIL (MODIFIED TYPE R-I) SYSTEMS 2 AND 3	11-08-22
	HW-910_20	MASH W-BEAM HARDWARE	01-05-24
	HW-910_21	METAL BEAM RAIL (R-B MASH) GUIDERAIL	01-05-24
	HW-910_22	METAL BEAM RAIL (MD-B MASH) GUIDERAIL	11-08-22
	HW-910_23	METAL BEAM RAIL (R-B MASH) HALF & QUARTER POST SPACING GUIDERAIL	11-08-22
	HW-910_24	METAL BEAM RAIL SPAN SECTION TYPES II AND III	11-08-22

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-910_25a	METAL BEAM RAIL TRANSITION 350 TO MASH	01-05-24
	HW-910_25b	METAL BEAM RAIL MEDIAN APPLICATION TRANSITION 350 TO MASH GUIDERAIL	01-05-24
	HW-910_26	THRIE-BEAM ATTACHMENT HARDWARE	11-08-22
	HW-910_27	THRIE-BEAM ATTACHMENT	11-08-22
	HW-910_29	THRIE-BEAM BRIDGE ATTACHMENT TRAILING END	02-02-24
✓	HW-911_01	R-B END ANCHORAGE TYPE I AND II	02-28-24
	HW-911_02	MD-B END ANCHORAGE TYPE I	02-28-24
	HW-911_03	ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE	01-05-24
	HW-911_05	MERRITT PARKWAY GUIDERAIL END ANCHORS	11-08-22
✓	HW-913_01a	CHAIN LINK FENCE	11-08-22
✓	HW-913_01b	CHAIN LINK FENCE HARDWARE	11-08-22
	HW-913_02	CHAIN LINK FENCE GATES	11-08-22
	HW-918_01a	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 1	11-08-22
	HW-918_01b	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 2	11-08-22
	HW-918_01c	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 3	11-08-22
	HW-921_01	CONCRETE SIDEWALKS	11-08-22
✓	HW-922_01	BITUMINOUS CONCRETE SIDEWALK AND BITUMINOUS CONCRETE DRIVEWAY	11-08-22
✓	HW-924_01	CONCRETE DRIVEWAY RAMPS	11-09-22
	HW-930_01	OBJECT MARKER (MAINTENANCE)	02-28-24
	HW-949_01a	LANDSCAPE PLANTING	11-09-22
	HW-949_01b	TREE STAKING	11-02-22
	HW-1800_01	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (FLARED AND TANGENTIAL)	11-02-22
	HW-1800 02	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (MEDIAN/GORE)	11-02-22

NOT TO SCALE

SIGNATURE BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

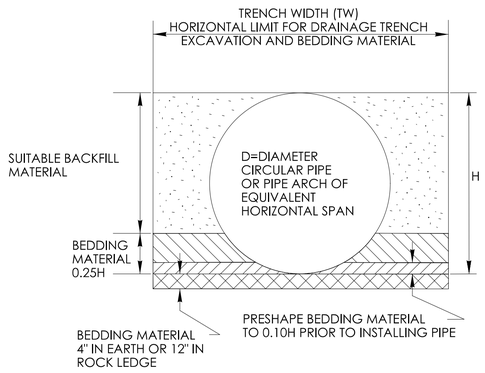
STANDARD SHEET TITLE:

HIGHWAY STANDARD SHEET INDEX

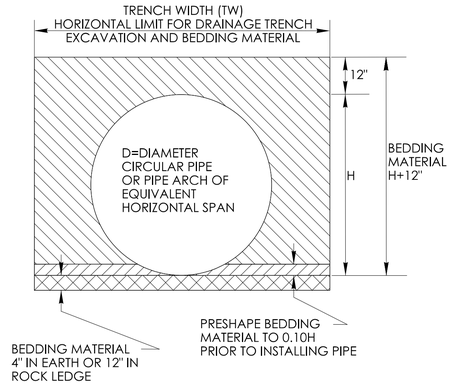
STANDARD SHEET NO.:

2 OF 2

PLOTTED DATE: 3/5/2024



PIPE TRENCH
FOR PIPES LESS THAN 48"



PIPE TRENCH
FOR PIPES GREATER THAN
OR EQUAL TO 48"

TRENCH WIDTH (TW) CHART

PIPE, PIPE-ARCH, OR DRAINAGE STRUCTURE	TRENCH WIDTH
PIPE OR PIPE-ARCH WITH NOMINAL INSIDE HORIZONTAL SPAN LESS THAN 30"	2' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
PIPE OR PIPE-ARCH WITH NOMINAL INSIDE HORIZONTAL SPAN GREATER THAN OR EQUAL TO 30"	3' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
PIPE OR PIPE-ARCH FABRICATED FROM STRUCTURAL PLATES	4' GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
DRAINAGE STRUCTURES	2' BEYOND ALL EXTERIOR OR FOUNDATION WALLS

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 14:24:13-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.09 13:47:30-05'00'

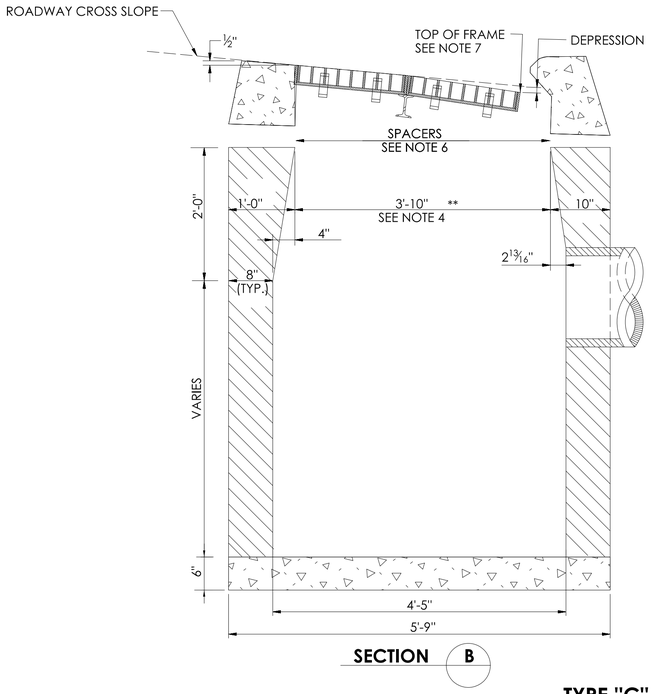
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

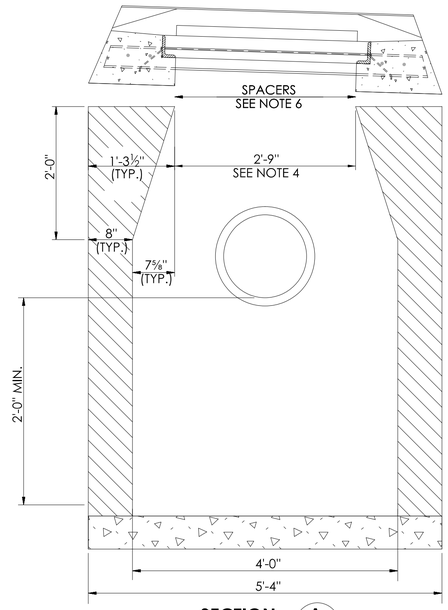
STANDARD SHEET TITLE:
DRAINAGE TRENCH EXCAVATION

STANDARD SHEET NO.:
HW-286_01

PLOTTED DATE: 9/21/2022

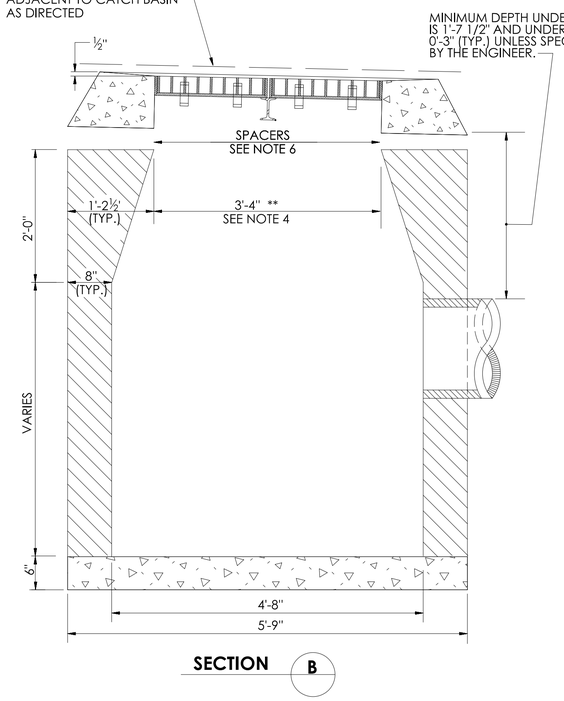


SECTION B

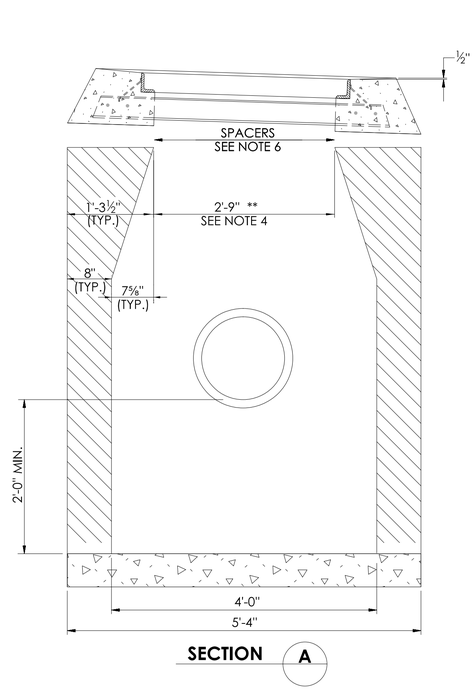


SECTION A

TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE I



SECTION B

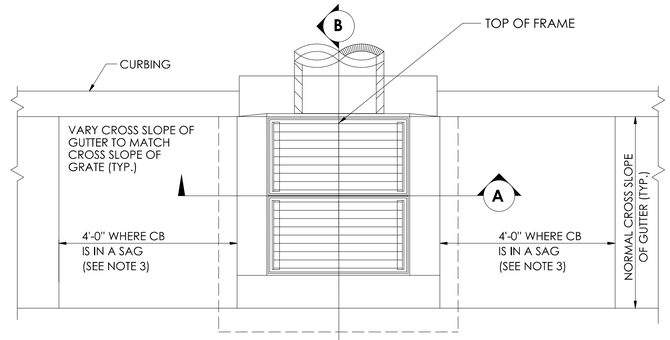


SECTION A

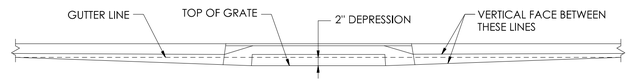
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE I

GENERAL NOTES:

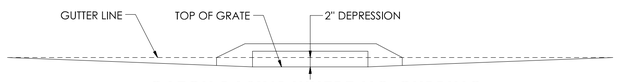
1. FOR CATCH BASIN TOPS, SEE SHEET NO. HW-586_07.
2. ALL FACES OF THE STRUCTURE IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUAL.
3. USE 6'-0" ON THE UPGRADE SIDE (SEE PLAN VIEW) OF CONTINUOUS GRADE AND 1'-0" ON DOWNGRADE SIDE OF CONTINUOUS GRADE AS DIRECTED BY THE ENGINEER.
4. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH DIMENSIONS SHOWN. CORBELLING SHALL BE PERMITTED TO A MAXIMUM OF 3". NO PROJECTION SHALL EXTEND INSIDE THE LIMITS BY **.
5. WALL THICKNESS OF ALL CATCH BASINS OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSIONS SHALL REMAIN THE SAME. 12" THICKNESS SHALL START AFTER THE FIRST 10'.
6. FOR GRADE ADJUSTMENT OF THE CATCH BASIN TOP (TO MATCH THE ROADWAYS' PROFILE AND CROSS-SLOPE SHOWN ON THE PLANS) USE: SPACERS EITHER CONCRETE MASONRY UNIT OR PRECAST WITH THE REQUIRED REINFORCING (RECOMMENDED BY THE MANUFACTURER) COMBINED WITH MORTAR AS NEEDED TO PROVIDE THE PROPER GRADE ADJUSTMENTS.
7. TOP OF FRAME ELEVATION SHALL BE MEASURED IN THE CENTER OF THE GRATE AT THE GUTTER LINE.



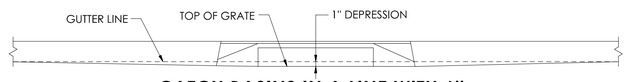
PLAN



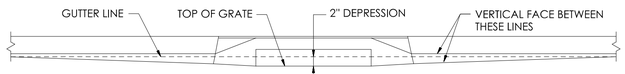
CATCH BASINS IN A LINE WITH 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING



CATCH BASINS WHERE NO CURBING OF ANY TYPE EXISTS OR IS PROPOSED



CATCH BASINS IN A LINE WITH 6" CONCRETE CURBING OR 6" STONE CURBING

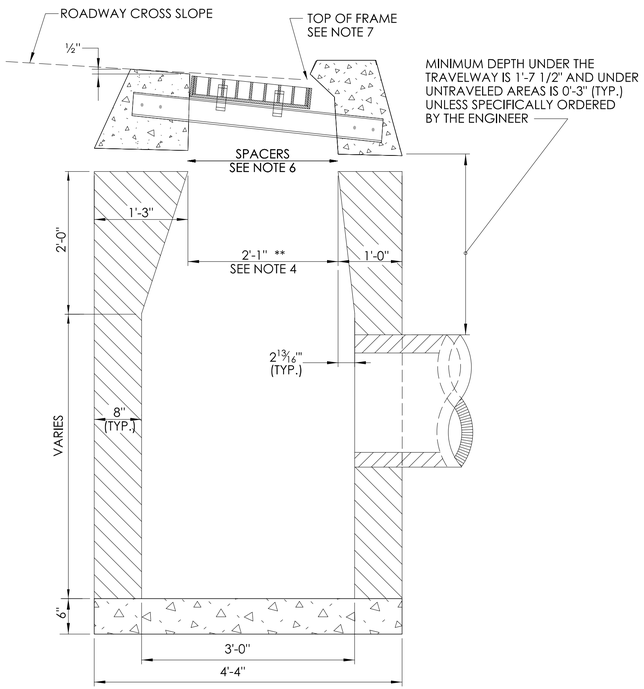


CATCH BASINS IN A LINE WITH 6" BITUMINOUS CONCRETE LIP CURBING (MACHINE FORMED)

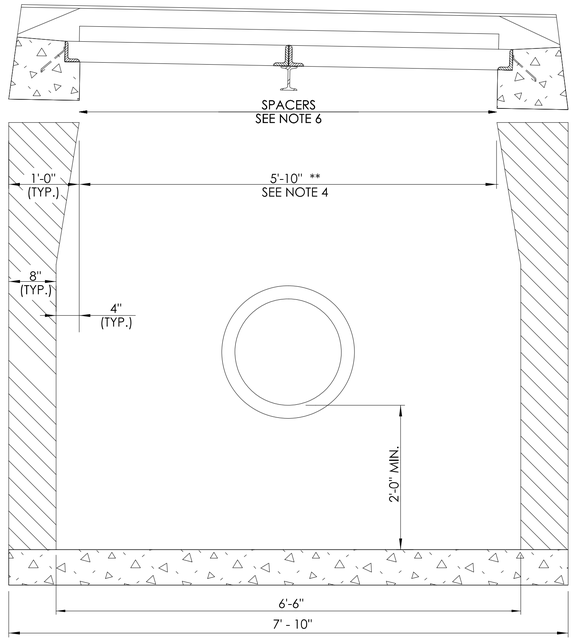
DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2023.12.28 14:47:50-05'00'	APPROVED BY: Michael N. Calabrese, P.E. 2024.01.04 21:56:52-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN (TYPES "C" and "C-L") FOR DOUBLE GRATE TYPE I STRUCTURES	STANDARD SHEET NO.: HW-586_02

PLOTTED DATE: 12/28/2023



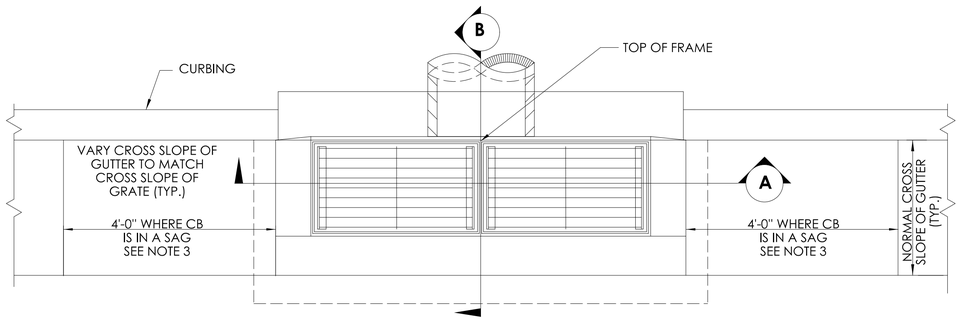
SECTION B



SECTION A

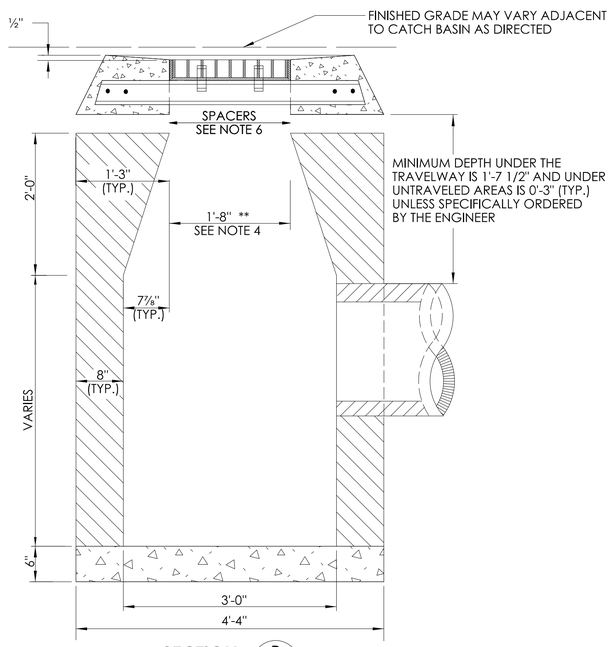
GENERAL NOTES:

1. FOR CATCH BASIN TOPS, SEE SHEET NO. HW-586_07.
2. ALL THE FACES OF THE STRUCTURE IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUAL.
3. USE 6'-0" ON UPGRADE SIDE (SEE PLAN VIEW) OF CONTINUOUS GRADE AND 1'-0" ON DOWNGRADE SIDE OF CONTINUOUS GRADE AS DIRECTED BY THE ENGINEER.
4. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH DIMENSIONS SHOWN. CORBELLING SHALL BE PERMITTED TO A MAXIMUM OF 3". NO PROJECTION SHALL EXTEND INSIDE THE LIMITS NOTED BY **.
5. WALL THICKNESS OF ALL CATCH BASINS OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. 12" THICKNESS SHALL START AFTER THE FIRST 10'.
6. FOR GRADE ADJUSTMENT OF THE CATCH BASIN TOP (TO MATCH THE ROADWAYS' PROFILE AND CROSS-SLOPE SHOWN ON THE PLANS) USE; SPACERS EITHER CONCRETE MASONRY UNIT OR PRECAST WITH THE REQUIRED REINFORCING (RECOMMENDED BY THE MANUFACTURER) COMBINED WITH MORTAR AS NEEDED TO PROVIDE THE PROPER GRADE ADJUSTMENTS.
7. TOP OF FRAME ELEVATION SHALL BE MEASURED IN BETWEEN BOTH GRATES AT THE GUTTER.

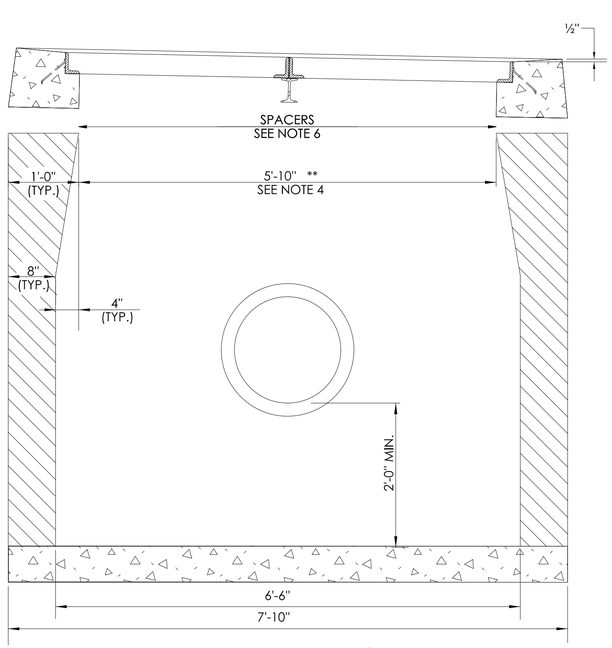


PLAN

TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II



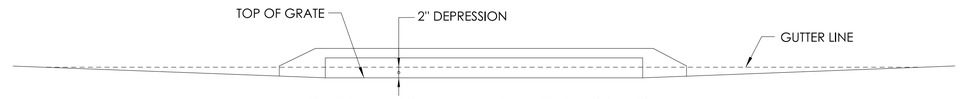
SECTION B



SECTION A

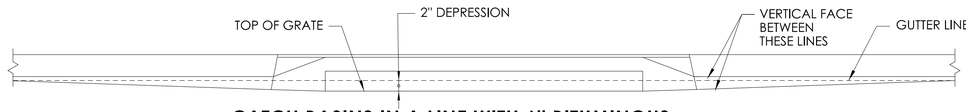
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II

CATCH BASINS IN A LINE WITH 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING



CATCH BASINS WHERE NO CURBING OF ANY TYPE EXISTS OR IS PROPOSED

CATCH BASINS IN A LINE WITH 6" CONCRETE CURBING OR 6" STONE CURBING



CATCH BASINS IN A LINE WITH 6" BITUMINOUS CONCRETE LIP CURBING (MACHINE FORMED)

DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II

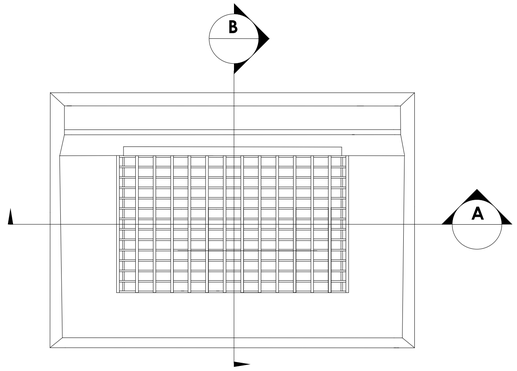
	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2023.12.28 14:45:03-05'00'	APPROVED BY: Michael N. Calabrese, P.E. 2024.01.04 21:59:24-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II STRUCTURES	STANDARD SHEET NO.: HW- 586_03

PLOTTED DATE: 12/28/2023

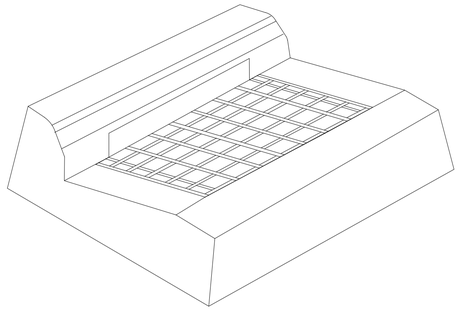
GENERAL NOTES:

1. SEE SHEET HW-586_08, FOR CATCH BASIN FRAMES AND GRATES AND HW-586_09 FOR CATCH BASIN LOCK DOWN TOPS.
2. SEE SHEET HW-586_01, CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" TO DETERMINE THE TOP OF FRAME DEPRESSION AT THE GUTTER.
3. ALL BARS SHALL HAVE A MINIMUM 2" COVER.
4. Manufacturing Dimensional Tolerance Table

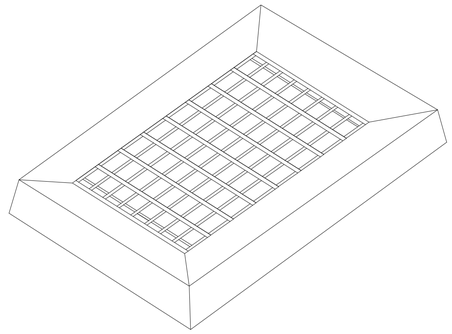
Any Dimension (D)	Allowable Tolerance
D < 5"	± ¼"
5" ≤ D ≤ 10"	± ½"
D > 10"	± 1"



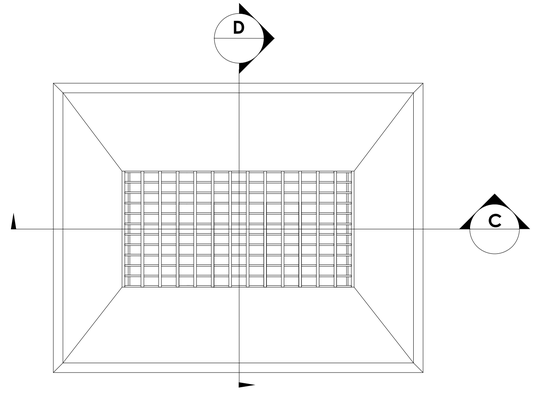
TYPE "C" CATCH BASIN TOP PLAN



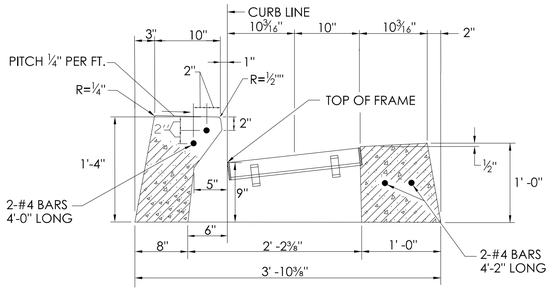
TYPE "C" CATCH BASIN TOP



TYPE "C-L" CATCH BASIN TOP

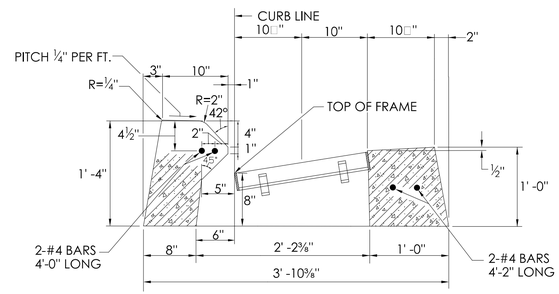


TYPE "C-L" CATCH BASIN TOP PLAN



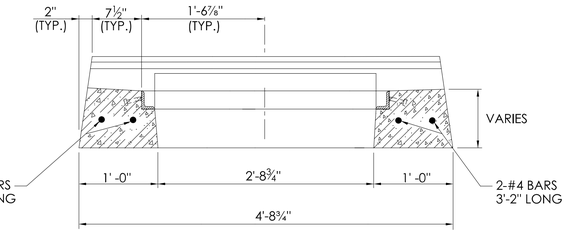
TYPE "C" CATCH BASIN TOP FOR 6" CONCRETE CURBING OR 6" STONE CURBING

SECTION B



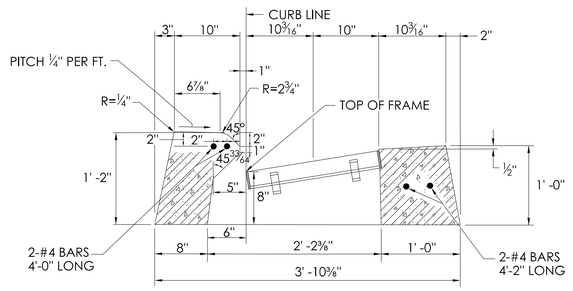
TYPE "C" CATCH BASIN TOP FOR 6" BITUMINOUS CONCRETE LIP CURBING

SECTION B



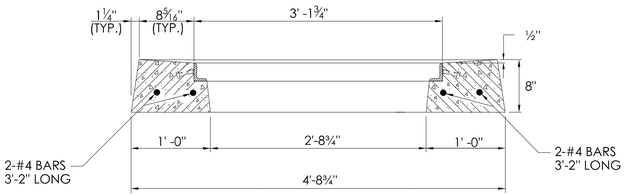
TYPE "C" CATCH BASIN TOP

SECTION A



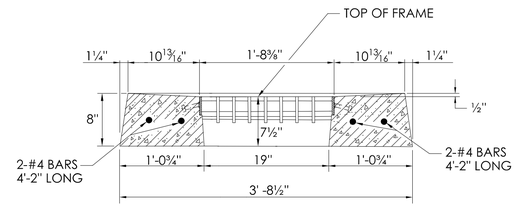
TYPE "C" CATCH BASIN TOP FOR 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING

SECTION B



TYPE "C-L" CATCH BASIN TOP

SECTION C



TYPE "C-L" CATCH BASIN TOP

SECTION D

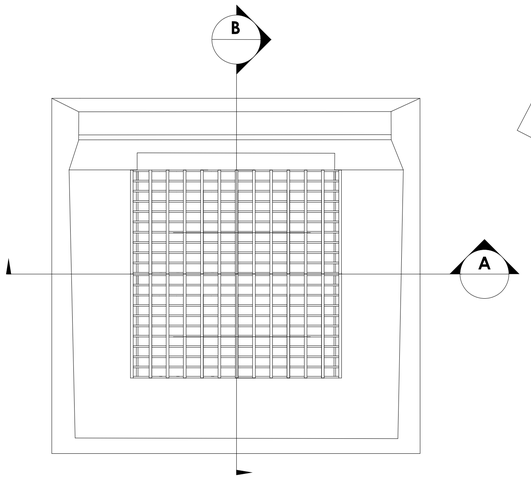
	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2023.12.28 14:26:18-05'00'	APPROVED BY: Michael N. Calabrese, P.E. 2024.01.04 22:00:22-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN TYPE "C" AND "C-L" TOPS	STANDARD SHEET NO.: HW- 586_07a

PLOTTED DATE: 12/28/2023

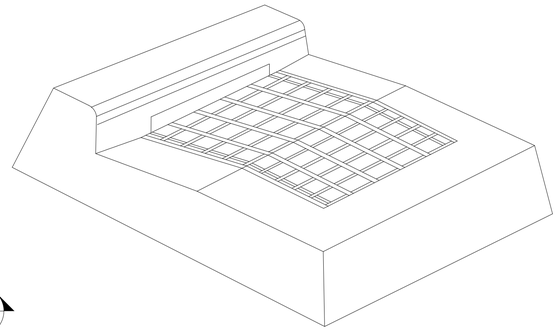
GENERAL NOTES:

1. SEE SHEET HW-586_08 FOR CATCH BASIN FRAMES AND GRATES, AND HW-586_09 CATCH BASIN LOCK DOWN TOPS.
2. SEE SHEET HW-586_02 CATCH BASIN TOPS (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I TO DETERMINE THE TOP OF FRAME AT THE GUTTER.
3. ALL BARS SHALL HAVE A MINIMUM 2" COVER.
4. MANUFACTURING DIMENSIONAL TOLERANCE TABLE

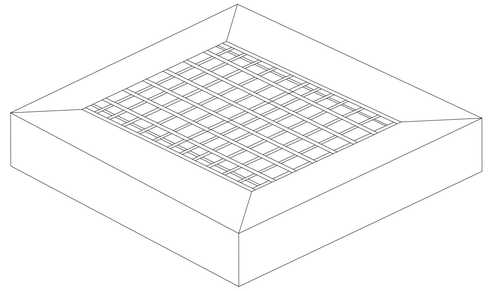
Any Dimension (D)	Allowable Tolerance
D < 5"	± ¼"
5" ≤ D < 10"	± ½"
D > 10"	± 1"



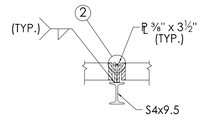
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP PLAN



TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP

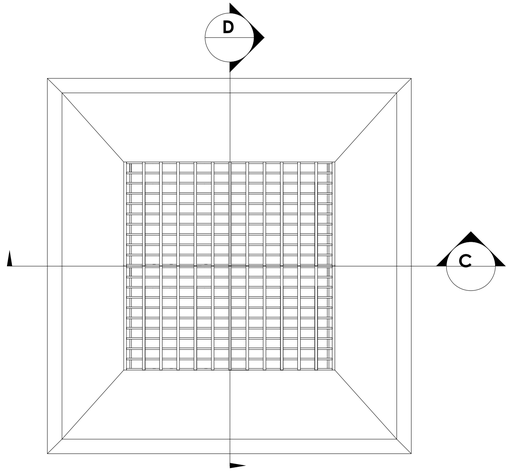


TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE I TOP

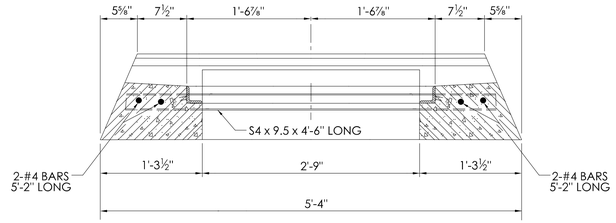


DETAIL 1

DETAIL 2

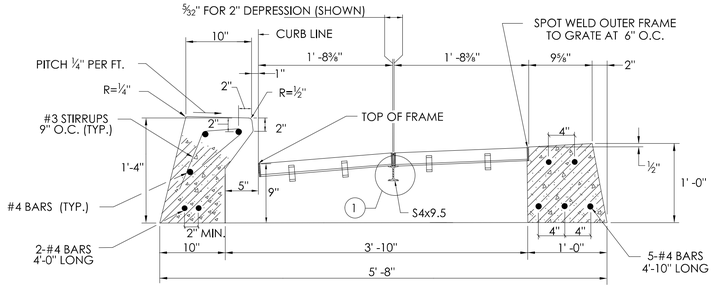


TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE I TOP PLAN



TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP

SECTION A

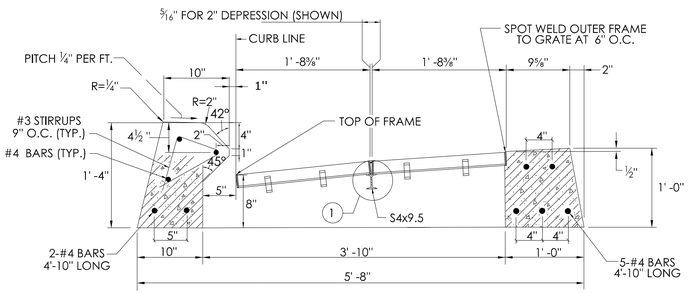


TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP FOR 6" CONCRETE CURBING OR 6" STONE CURBING

SECTION B

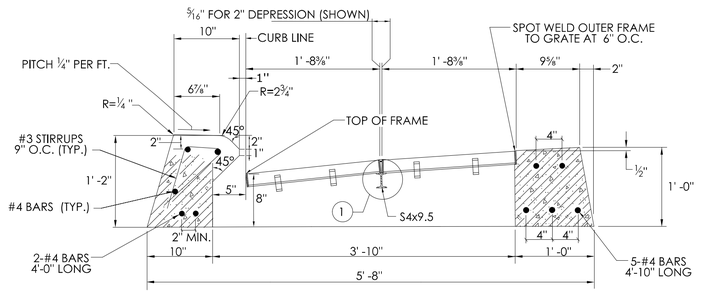
TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE I TOP

SECTION C



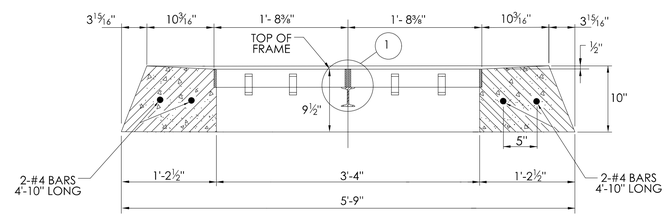
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP FOR 6" BITUMINOUS CONCRETE LIP CURBING

SECTION B



TYPE "C" CATCH BASIN DOUBLE GRATE TYPE I TOP FOR 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING

SECTION B



TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE I TOP

SECTION D

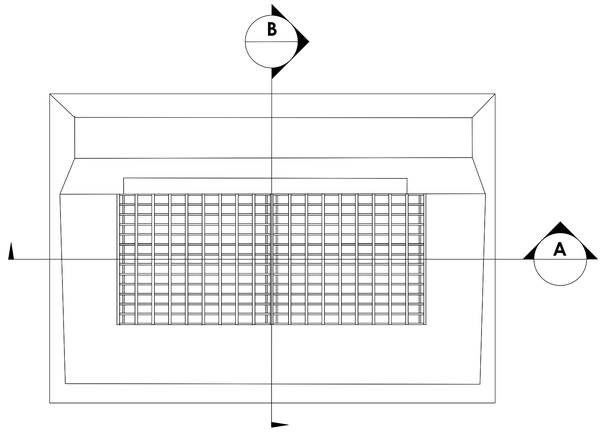
	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.10.05 14:18:04-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.09 13:52:10-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	STANDARD SHEET NO.: HW-586_07b

PLOTTED DATE: 9/21/2022

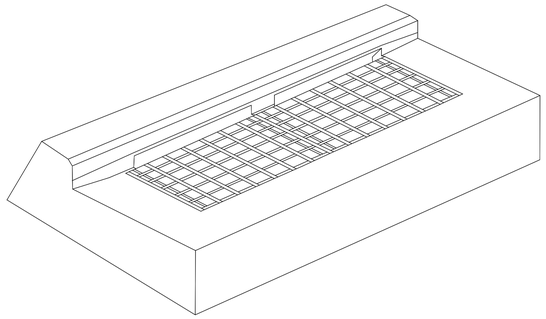
GENERAL NOTES:

1. SEE SHEET HW-586_08 FOR CATCH BASIN FRAMES AND GRATES, AND HW-586_09 CATCH BASIN LOCK DOWN TOPS.
2. SEE SHEET HW-586_03 CATCH BASIN TOPS (TYPE "C" AND "C-L") FOR DOUBLE GRATE TYPE II, TO DETERMINE THE TOP OF FRAME AT THE GUTTER.
3. ALL BARS SHALL HAVE A MINIMUM 2" COVER
4. MANUFACTURING DIMENSIONAL TOLERANCE TABLE

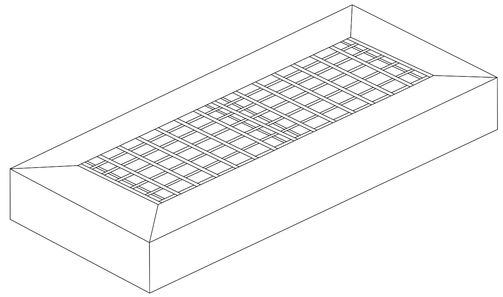
Any Dimension (D)	Allowable Tolerance
D < 5"	± ¼"
5" ≤ D ≤ 10"	± ½"
D > 10"	± 1"



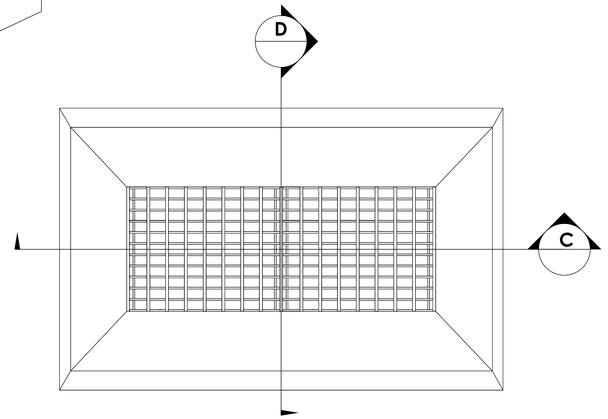
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP PLAN



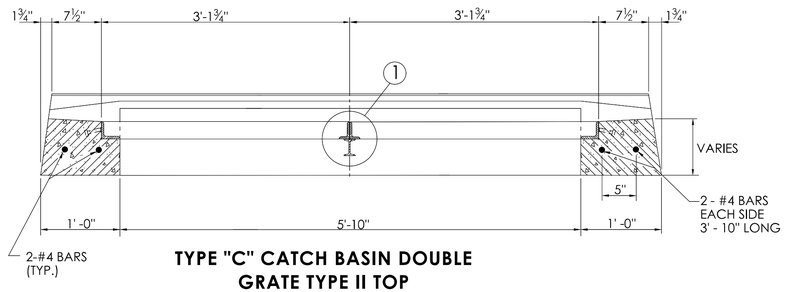
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP



TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE II TOP

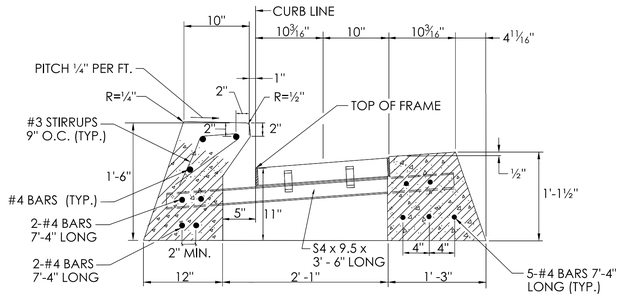


TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE II TOP PLAN



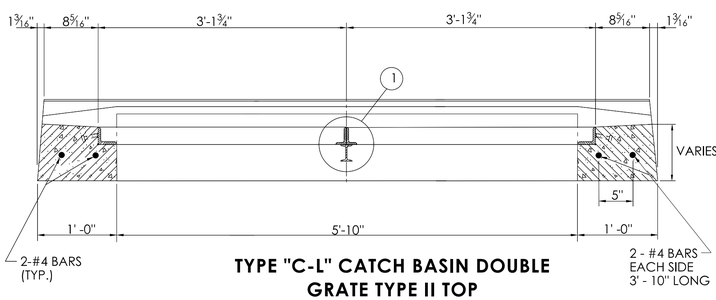
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP

SECTION A



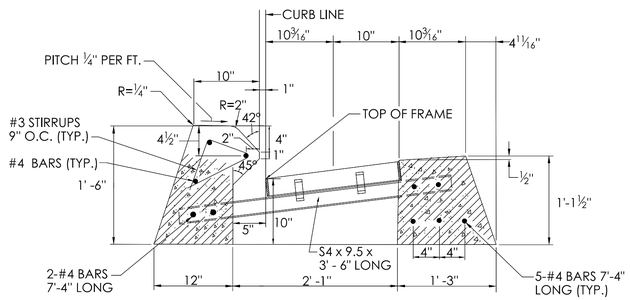
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP FOR 6" CONCRETE CURBING OR 6" STONE CURBING

SECTION B



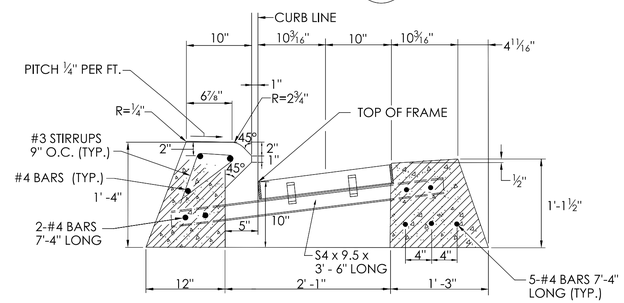
TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE II TOP

SECTION C



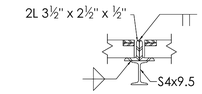
TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP FOR 6" BITUMINOUS CONCRETE LIP CURBING

SECTION B

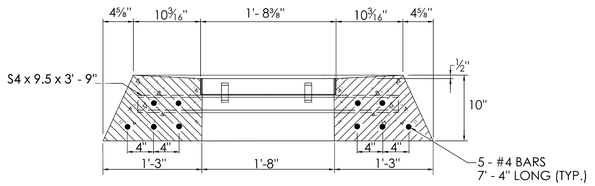


TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II TOP FOR 4" CONCRETE PARK CURBING OR 4" BITUMINOUS CONCRETE PARK CURBING

SECTION B



DETAIL 1

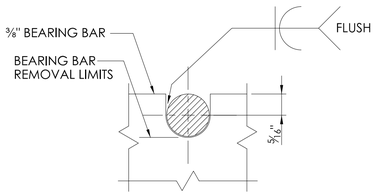


TYPE "C-L" CATCH BASIN DOUBLE GRATE TYPE II TOP

SECTION D

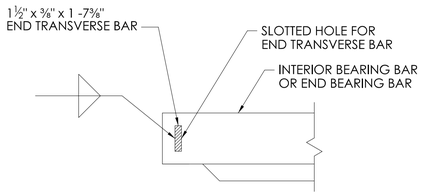
	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.10.05 14:18:19-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.09 13:53:51-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	STANDARD SHEET NO.: HW- 586_07c

PLOTTED DATE: 9/21/2022

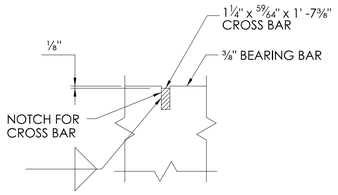


NOTE:
⅝" DIA. ROUND BAR SHALL CONTACT BEARING BAR AT BOTTOM AND BE FLUSH AT TOP.

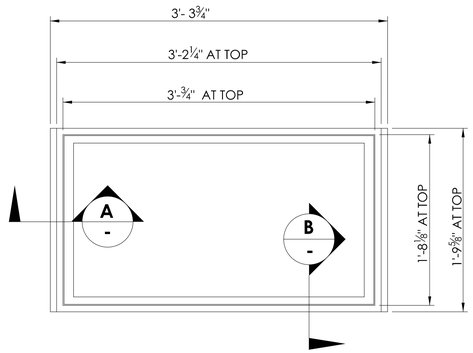
ROUND BAR ATTACHMENT
CATCH BASIN GRATE TYPE A



END TRANSVERSE BAR ATTACHMENT
CATCH BASIN GRATE TYPE A AND B



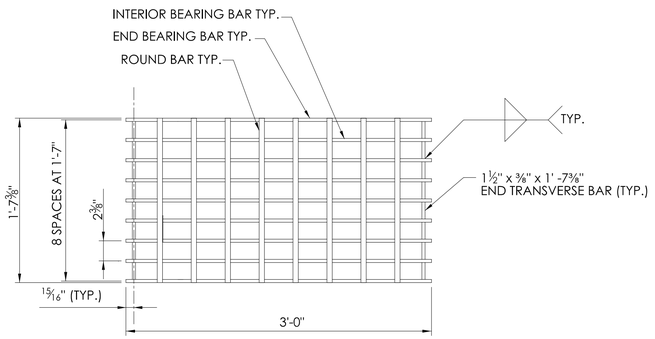
CROSS BAR ATTACHMENT
CATCH BASIN GRATE TYPE B



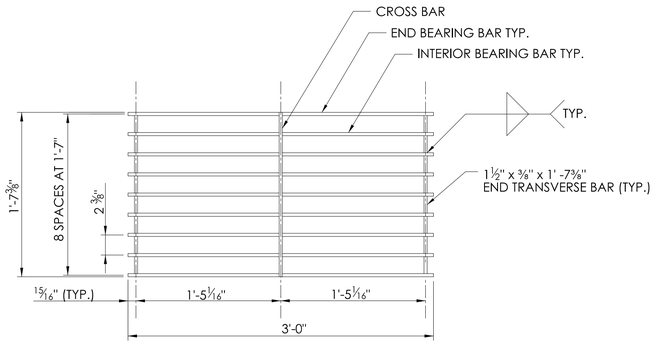
PLAN

GENERAL NOTES:

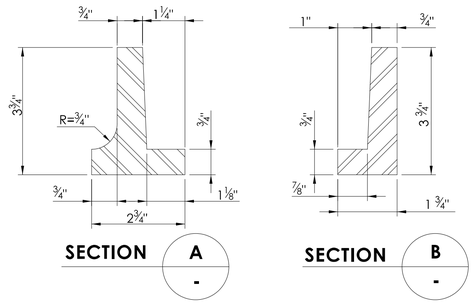
1. STEEL OR CAST IRON SHALL BE USED FOR FRAMES. STEEL SHALL BE USED FOR TYPE "A" AND "B" GRATES.
2. TYPE "A" GRATES SHALL BE USED ON ALL ROADWAYS WHERE BICYCLE TRAFFIC IS ALLOWED OR ON HEAVY DUTY LOCK DOWN TOPS AS DIRECTED BY THE ENGINEER.
3. TYPE "B" GRATES SHALL BE USED ON ALL LIMITED ACCESS HIGHWAYS, RAMPS AND WHERE BICYCLE TRAFFIC IS NOT ALLOWED OR AS DIRECTED BY THE ENGINEER.
4. DO NOT GALVANIZE CAST IRON FRAMES.
5. DIMENSIONAL TOLERANCES SHALL BE ± 3/16".
6. ALL STEEL BARS SHALL BE WELDED AT ALL INTERSECTIONS.



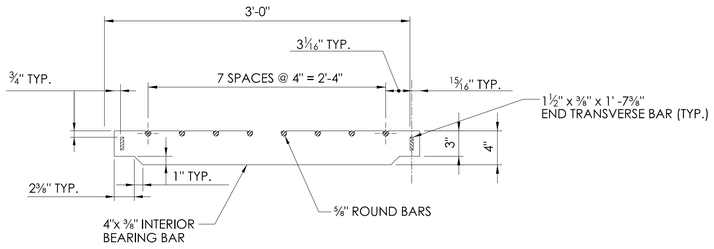
PLAN



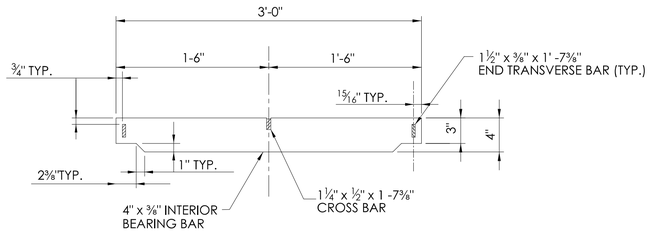
PLAN



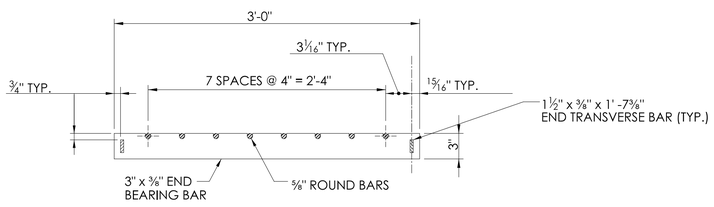
CAST IRON FRAME ALTERNATE



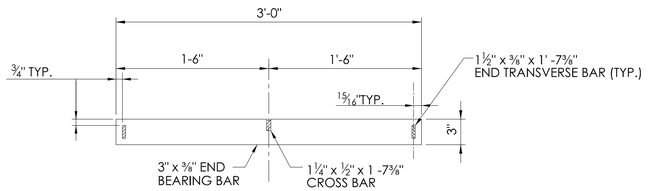
ELEVATION- INTERIOR BEARING BAR



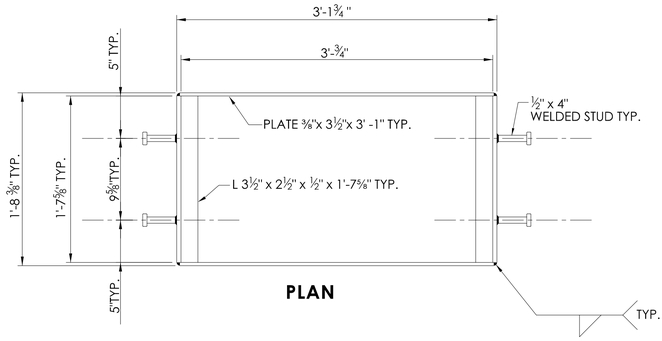
ELEVATION- INTERIOR BEARING BAR



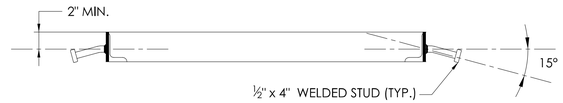
ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE A



ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE B



PLAN



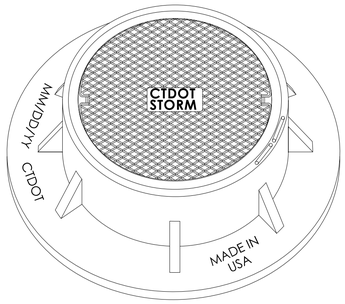
WELDED STUD ANCHOR DETAILS
STEEL FRAME

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.10.05 14:19:16-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.09 14:00:56-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: CATCH BASIN FRAMES AND GRATES	STANDARD SHEET NO.: HW- 586_08

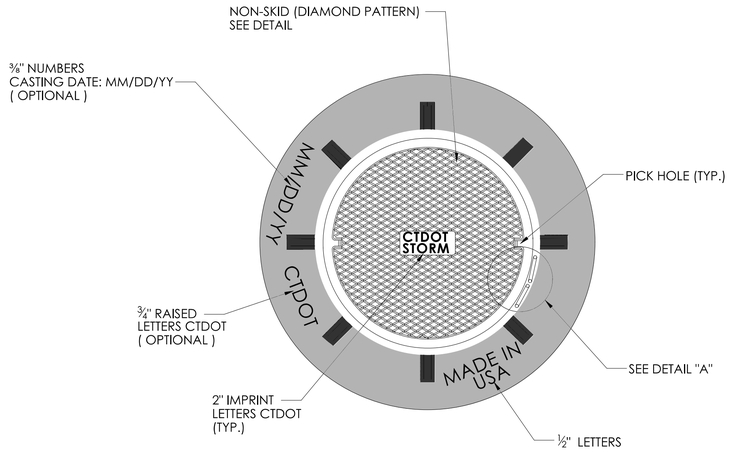
PLOTTED DATE: 9/21/2022

GENERAL NOTES:

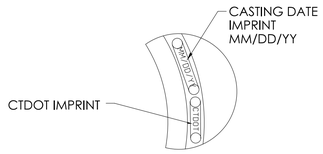
1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
2. CASTING DATE SHALL BE INDICATED ON EACH; FRAME (SEE DETAIL A) AND COVER (PLACED ON UNDERSIDE).



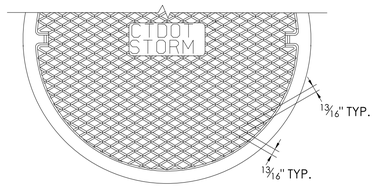
MANHOLE FRAME AND COVER



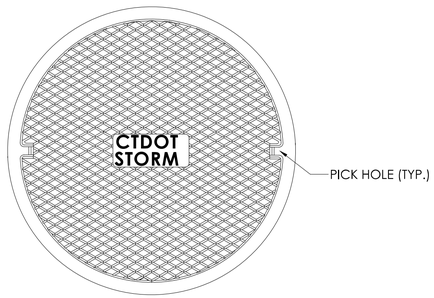
PLAN



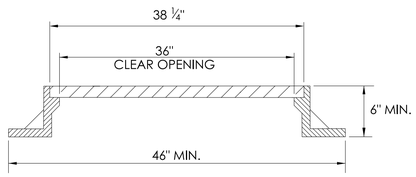
DETAIL "A"



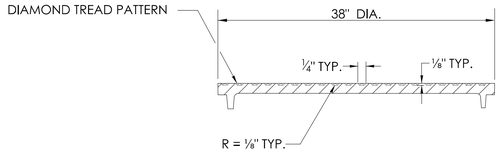
DIAMOND PATTERN PLAN



MANHOLE COVER PLAN



MANHOLE FRAME AND COVER



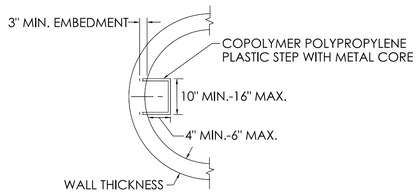
MANHOLE COVER WITH DIAMOND PATTERN

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2023.12.28 14:47:18-05'00'	APPROVED BY: Michael N. Calabrese, P.E. 2024.01.04 21:57:27-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: MANHOLE FRAME AND COVER	STANDARD SHEET NO.: HW-586_10a

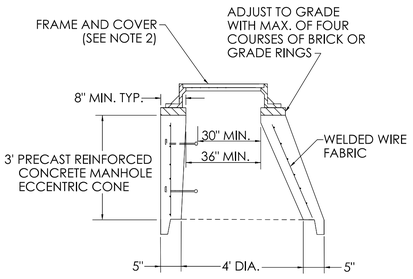
PLOTTED DATE: 12/28/2023

GENERAL NOTES:

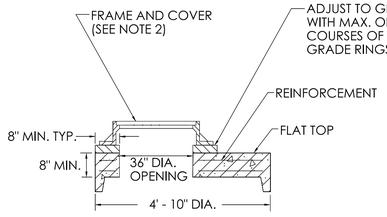
1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE.
2. SEE SHEETS HW-586_10a, AND HW-586_10b FOR MANHOLE FRAME, GRATE AND COVER DETAIL.



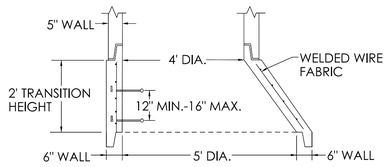
STEP DETAIL



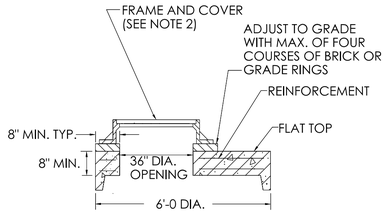
ECCENTRIC CONE SECTION



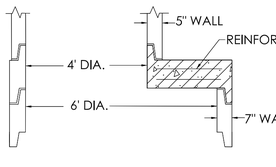
FLAT SLAB TOP FOR RISER SECTION



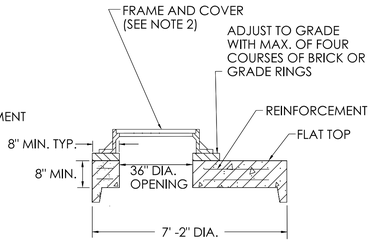
TRANSITION SECTION



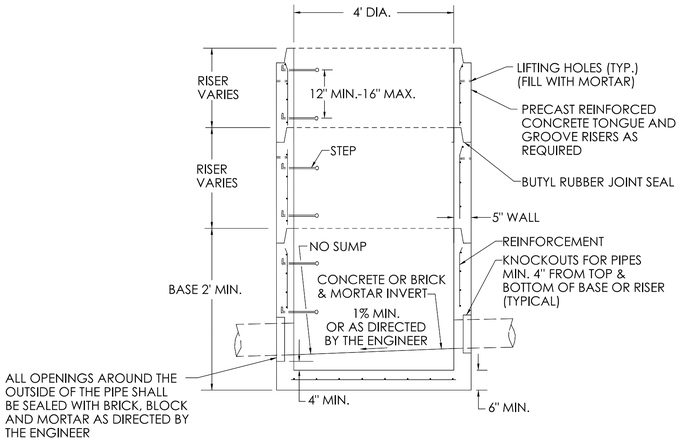
FLAT SLAB TOP FOR RISER SECTION



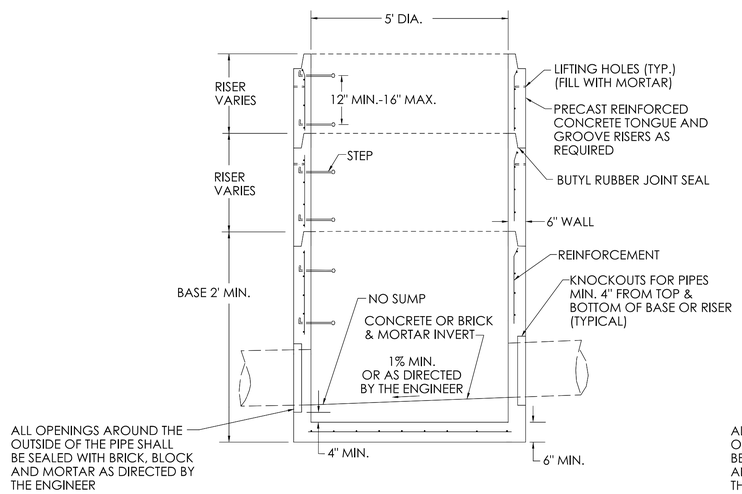
REDUCER SECTION



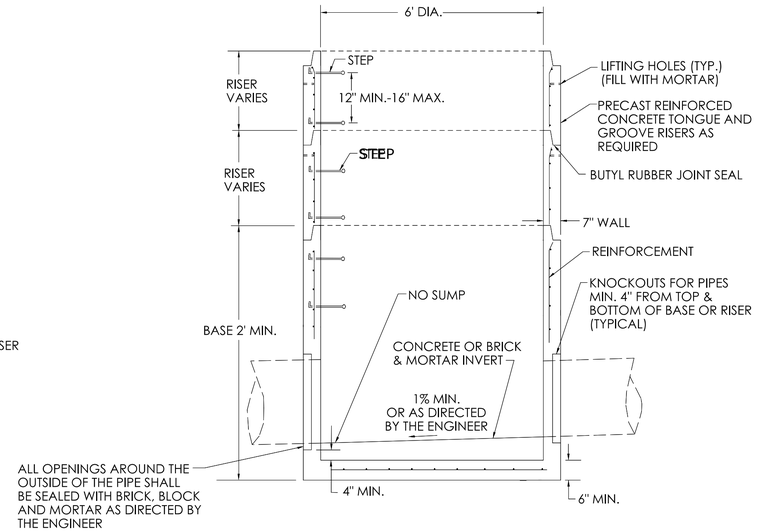
FLAT SLAB TOP FOR RISER SECTION



4' DIAMETER REINFORCED PRECAST CONCRETE MANHOLE SECTION



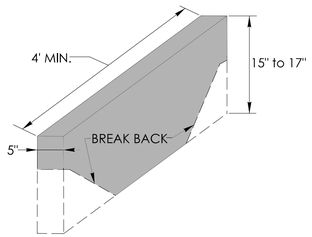
5' DIAMETER REINFORCED PRECAST CONCRETE MANHOLE SECTION



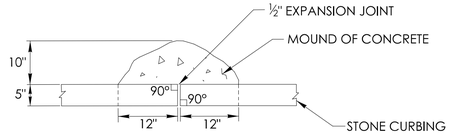
6' DIAMETER REINFORCED PRECAST CONCRETE MANHOLE SECTION

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.09.27 14:36:19-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.08 11:44:21-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	**CTDOT STANDARD SHEET**	STANDARD SHEET TITLE: **REINFORCED PRECAST CONCRETE MANHOLE**	STANDARD SHEET NO.: **HW- 586_10c**

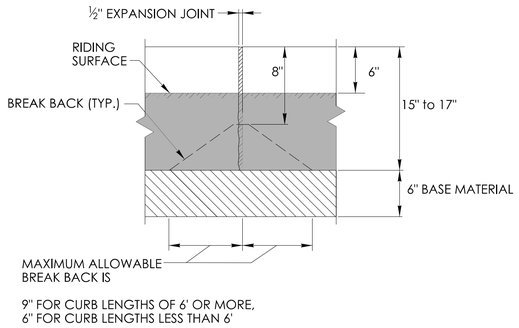
PLOTTED DATE: 9/21/2022



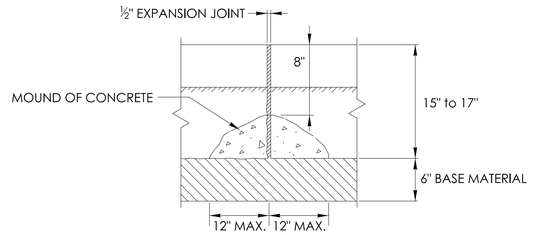
STONE CURBING



PLAN

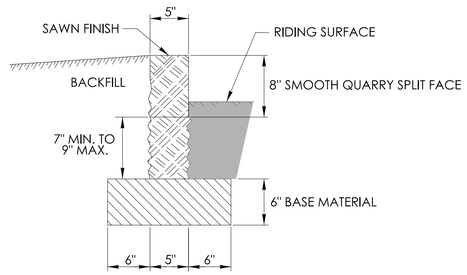


FRONT ELEVATION



BACK ELEVATION

MOUND OF CONCRETE AT ALL JOINTS FOR STONE CURBING



SECTION

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 14:42:55-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.08 11:40:25-05'00'

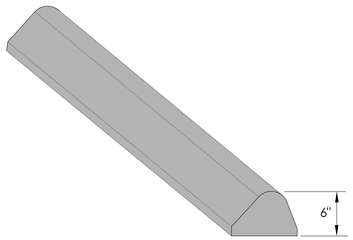
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

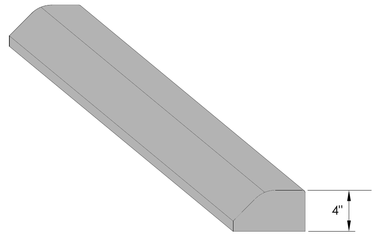
STANDARD SHEET TITLE:
STONE CURBNG

STANDARD SHEET NO.:
HW-813_02

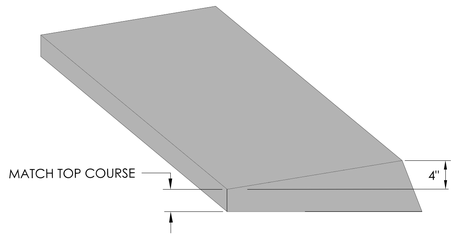
PLOTTED DATE: 9/23/2022



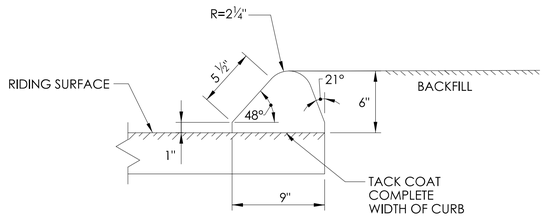
BITUMINOUS CONCRETE LIP CURBING
(6" HIGH)



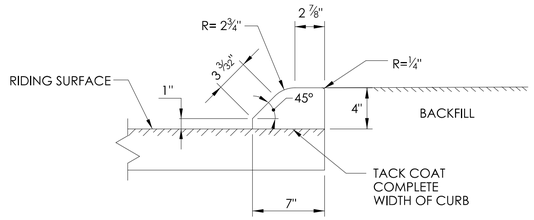
BITUMINOUS CONCRETE PARK CURBING
(4" HIGH)



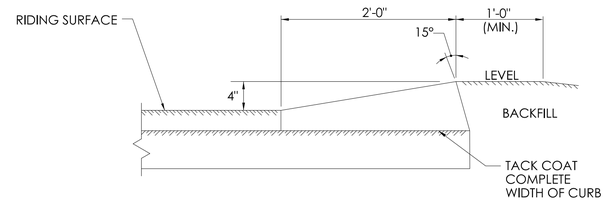
BITUMINOUS CONCRETE BERM CURBING
(4" HIGH)



SECTION



SECTION



SECTION

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 14:43:18-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.08 11:39:39-05'00'

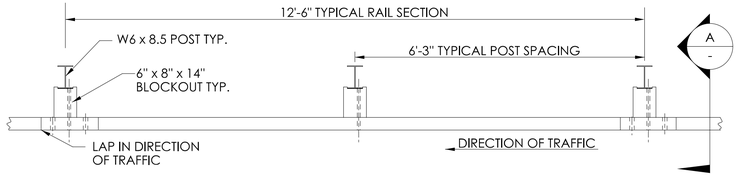
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

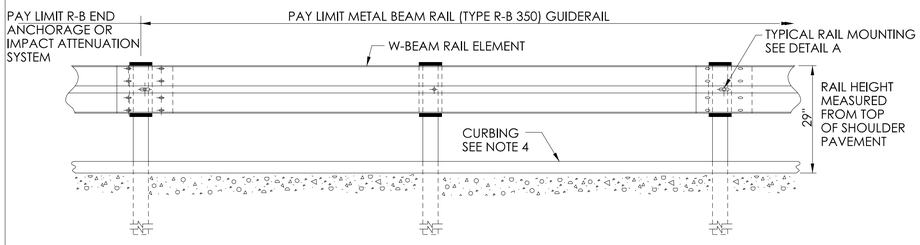
STANDARD SHEET TITLE:
BITUMINOUS CONCRETE CURBING

STANDARD SHEET NO.:
HW-815_01

PLOTTED DATE: 9/21/2022



PLAN



ELEVATION

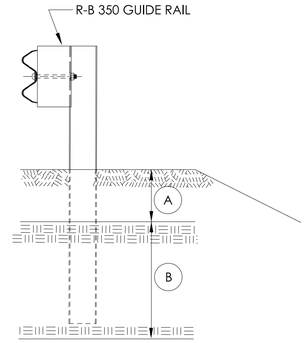
METAL BEAM RAIL (TYPE R-B 350)

CONDITION 1 :

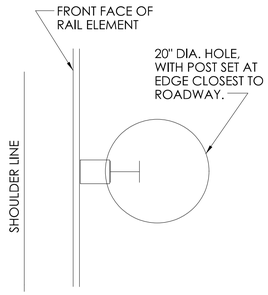
IF SOIL DEPTH IS ≤ 18" DEEP (A) DRILL 20" DIA. HOLE 24" INTO LEDGE. (B)

CONDITION 2 :

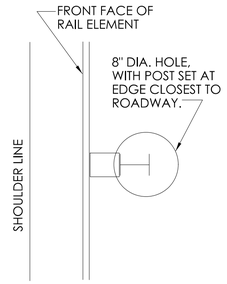
IF SOIL DEPTH IS > 18" DEEP (A) DRILL 8" DIA. HOLE 1' INTO LEDGE (B) OR TO THE DEPTH OF FULL EMBEDMENT OF 42⅛" WHICHEVER IS LESS.



ELEVATION
(SEE NOTE 8)



PLAN
CONDITION 1
(SEE NOTE 8)

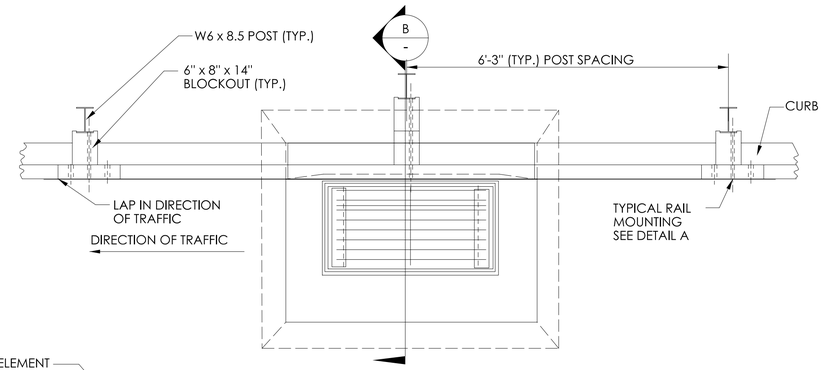


PLAN
CONDITION 2
(SEE NOTE 8)

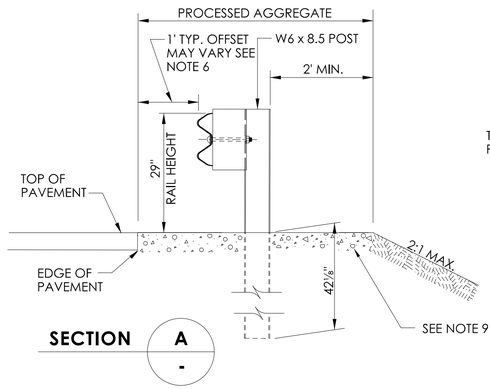
DRILLING IN ROCK FOR GUIDERAIL POSTS

GENERAL NOTES:

1. SEE SHEET HW-910_01 FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3" IS 4'-3". DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150' OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (>45mph), 4" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph) , 6" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9" BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1' OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2' OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2' FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2' BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" ± 1".

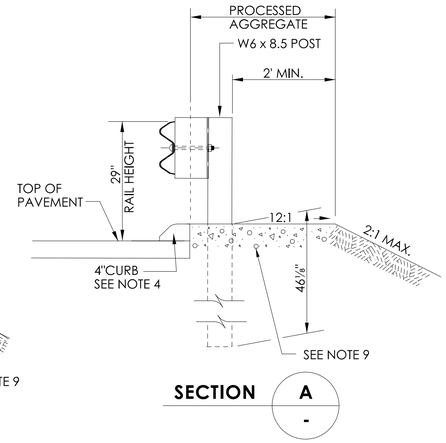


PLAN



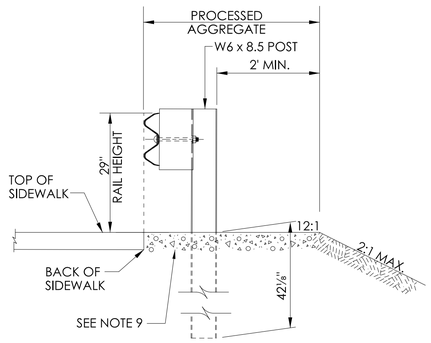
SECTION A -

NO CURB APPLICATION



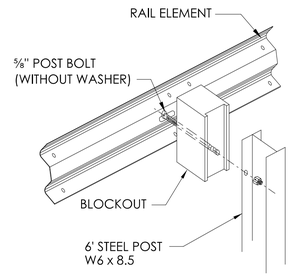
SECTION A -

CURB APPLICATION

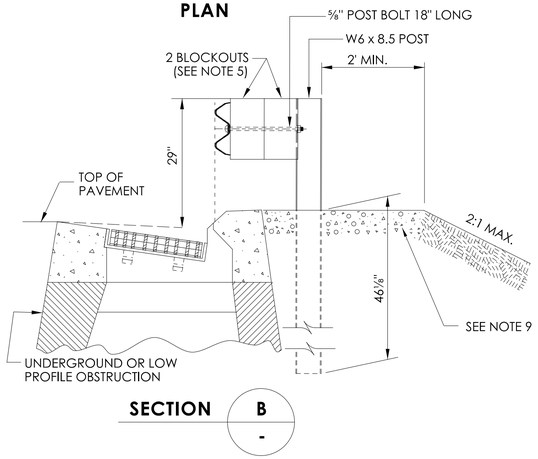


SECTION A -

SIDEWALK APPLICATION



DETAIL A
RAIL MOUNTING

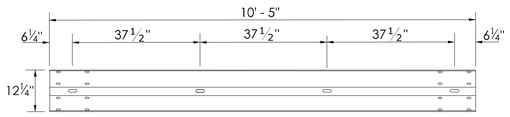


SECTION B -

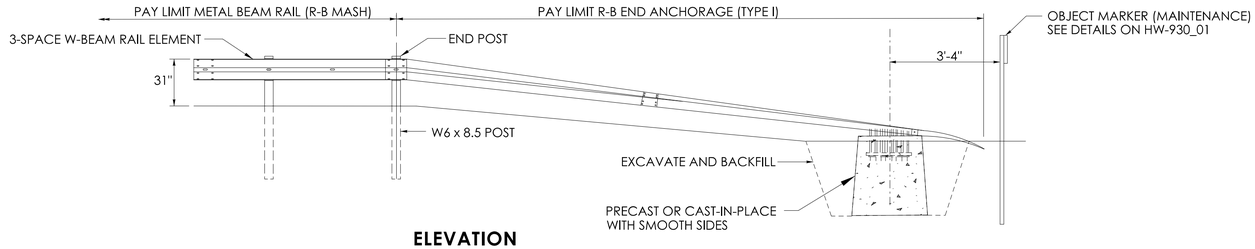
MULTIPLE BLOCKOUT APPLICATION (MAY BE USED TO AVOID UNDERGROUND OR LOW PROFILE OBSTRUCTION)

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.09.27 15:02:52-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.08 10:16:01-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL / STANDARD SHEET NO.: HW-910_02

PLOTTED DATE: 9/21/2022



3-SPACE W-BEAM RAIL ELEMENT

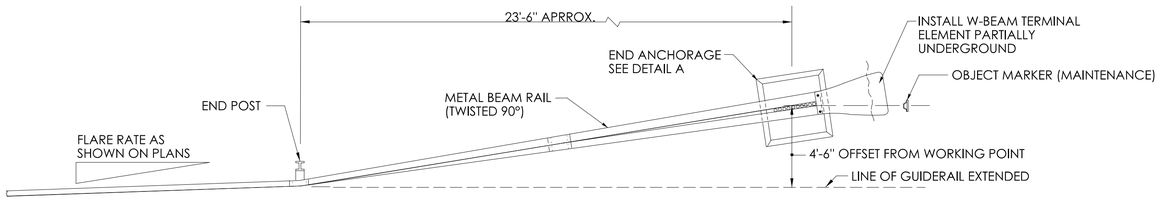


ELEVATION

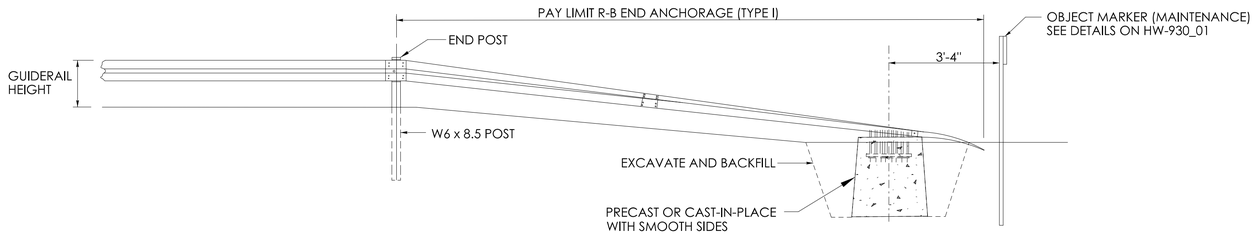
GENERAL NOTES:

1. J-HOOK BOLTS MAY BE SUBSTITUTED FOR BOTTOM PLATE ANCHORAGE IN CONCRETE END ANCHORS USING THE SAME SIZE, STRENGTH, AND LENGTH AS NOTED ON THE PLANS.
2. INSTALLATION OF RADII DIFFERENT THAN WHAT IS SHOWN IN DETAIL "C" FOR R-B END ANCHORAGE TYPE II MUST BE APPROVED BY THE ENGINEER.
3. 3-SPACE W-BEAM GUIDERAIL FOR SPLICE TRANSITION MAYBE INSTALLED ON EITHER R-B END ANCHORAGE TYPE I OR II FOR ATTACHING TO METAL BEAM RAIL (R-B MASH).

R-B END ANCHORAGE TYPE I OR II (TYPE I SHOWN) WITH 3-SPACE W-BEAM GUIDERAIL FOR SPLICE TRANSITION (SEE NOTE 3)

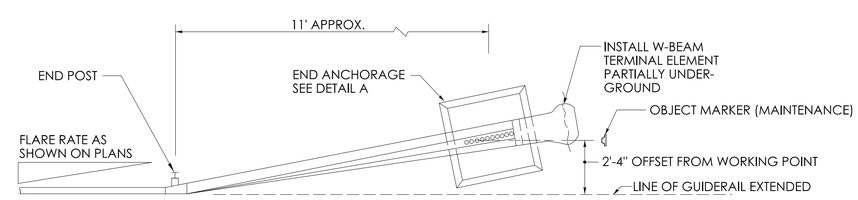


PLAN

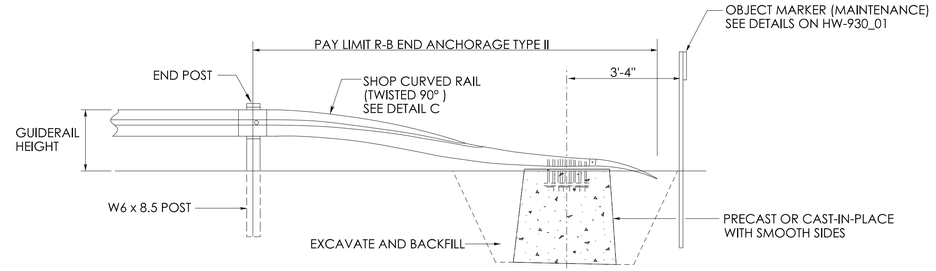


ELEVATION

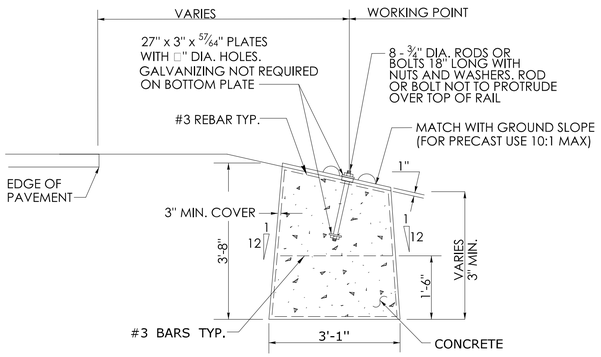
R-B END ANCHORAGE TYPE I



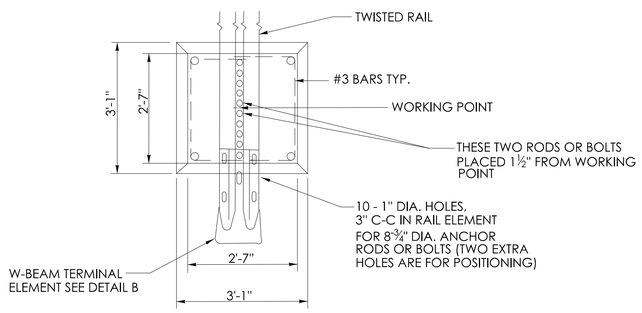
PLAN



ELEVATION
R-B END ANCHORAGE TYPE II

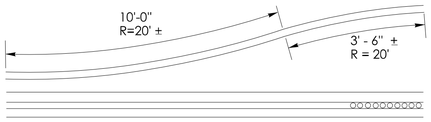


ELEVATION

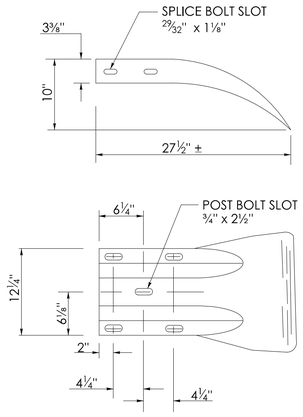


PLAN

DETAIL A
ROADSIDE CONCRETE END ANCHOR
SEE NOTE 2



DETAIL C
SHOP CURVED RAIL
SEE NOTE 2



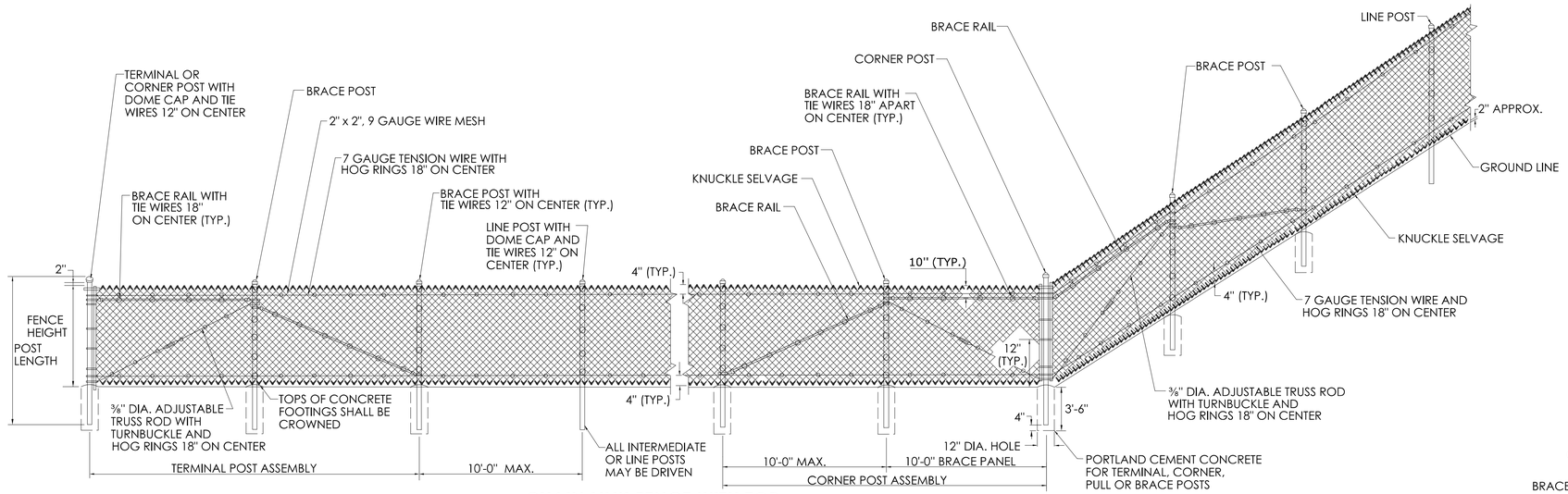
DETAIL B
W-BEAM TERMINAL ELEMENT

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2024.02.09 13:31:15-05'00'	APPROVED BY: Michael N. Calabrese, P.E. 2024.02.28 11:44:01-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	**CTDOT STANDARD SHEET**	STANDARD SHEET TITLE: **R-B END ANCHORAGE TYPE I AND II**	STANDARD SHEET NO.: **HW- 911_01**

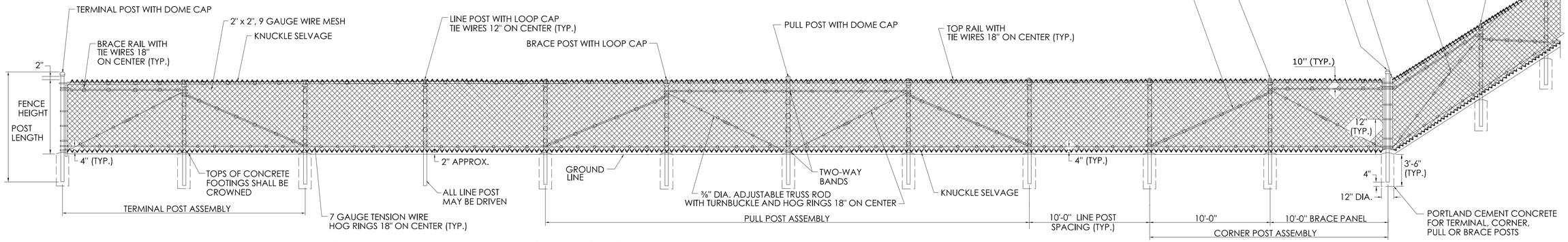
PLOTTED DATE: 2/9/2024

GENERAL NOTES:

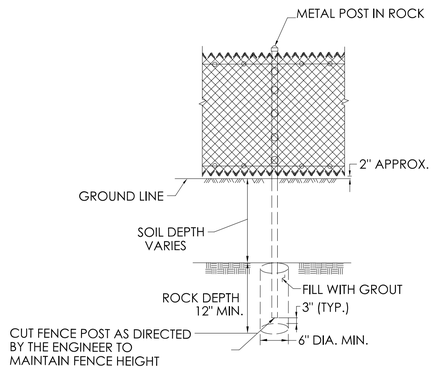
1. INSTALL PULL POST ASSEMBLIES AT ALL CHANGES IN VERTICAL TO HORIZONTAL OF 10 DEGREES OR MORE.
2. ALL POSTS WILL BE CAPPED.
3. WHERE ROCK IS ENCOUNTERED, IT SHALL BE DRILLED AND THE POSTS SET IN MORTAR.
4. FENCE SHALL BE PLACED WITH FABRIC FACING OUTSIDE HIGHWAY RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
5. SEE HW-913_01b FOR CHAIN LINK FENCE HARDWARE.



CHAIN LINK FENCE WITH TOP TENSION WIRE



CHAIN LINK FENCE WITH TOP BRACE RAIL AND INTERMEDIATE OR BOTTOM TENSION WIRE



METAL POST IN ROCK

FENCE FABRIC HEIGHT	GROUP 1A ASTM F1083 SCH. 40 PIPE 50,000 PSI DIAMETER	GROUP 1C ASTM F1043 ELEC. RESISTANCE WELDED PIPE 50,000 PSI DIAMETER
LINE OR INTERMEDIATE POST		
UP TO 5'-0"	1⅞"	1⅞"
6'-0" TO 7'-0"	2⅜"	2⅜"
8'-0" TO 9'-0"	2⅞"	2⅞"
10'-0"	3½"	3½"
12'-0" OR HIGHER	4"	4"
TERMINAL, CORNER OR PULL POST		
UP TO 5'-0"	2⅜"	2⅜"
6'-0" TO 7'-0"	2⅞"	2⅞"
8'-0" TO 9'-0"	3½"	3½"
10'-0" OR HIGHER	4"	4"
TOP OR BRACE RAIL POSTS UP TO 6'-0"	1⅝"	1⅝"
POSTS HIGHER THAN 6'-0"	1⅞"	1⅞"

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 15:15:13-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.08 09:46:25-05'00'

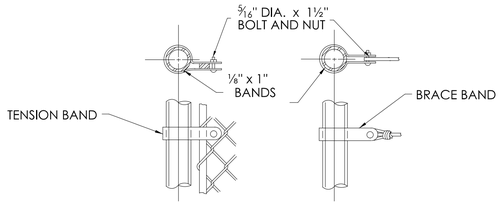
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

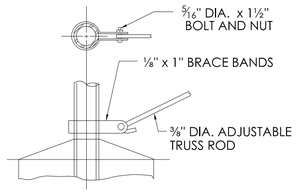
STANDARD SHEET TITLE:
CHAIN LINK FENCE

STANDARD SHEET NO.:
HW-913_01a

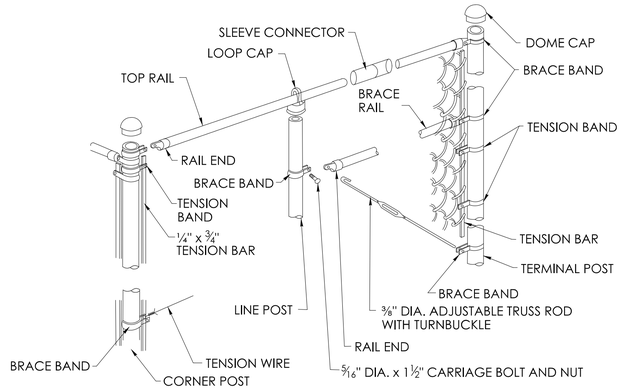
PLOTTED DATE: 9/22/2022



TENSION BAR **TENSION WIRE**

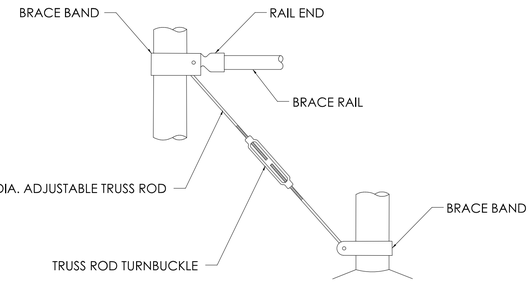


ADJUSTABLE TRUSS ROD

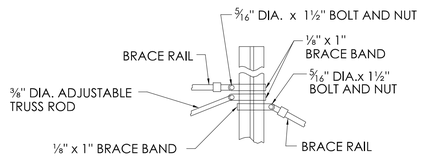


TOP RAIL / TRUSSED BRACE RAIL WITH BOTTOM TENSION WIRE

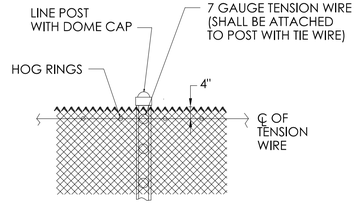
TIE WIRE



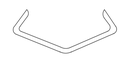
BRACE & TRUSS CONNECTIONS



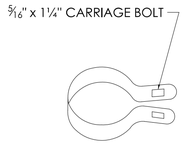
BRACE RAILS ATTACHMENT TO LINE POSTS



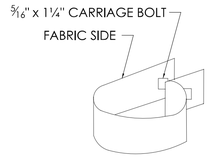
TENSION WIRE



HOG RING

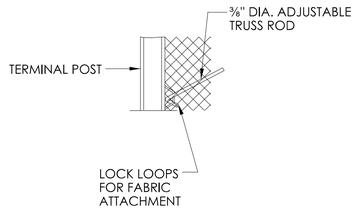


1/8" x 1" BRACE BAND

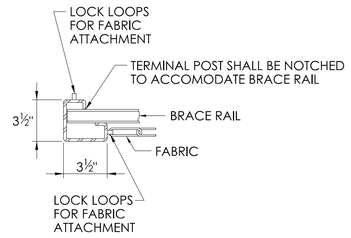


1/8" x 1" TENSION BAND

KNUCKLE SELVAGE



TRUSS ROD ATTACHMENT



FABRIC AND BRACE RAIL ATTACHMENT

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 15:17:19-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.08 09:45:51-05'00'

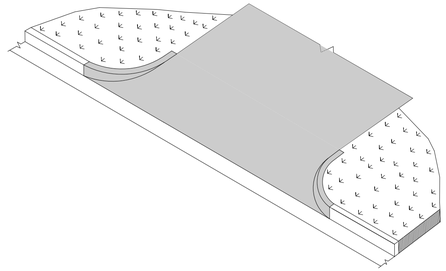
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

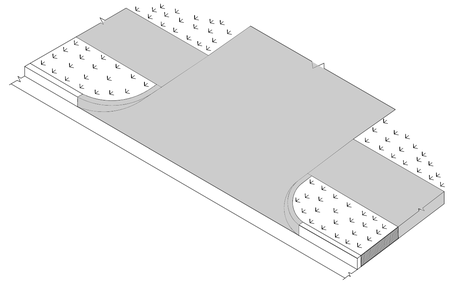
STANDARD SHEET TITLE:
CHAIN LINK FENCE HARDWARE

STANDARD SHEET NO.:
HW-913_01b

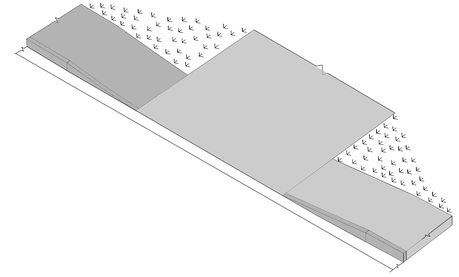
PLOTTED DATE: 9/22/2022



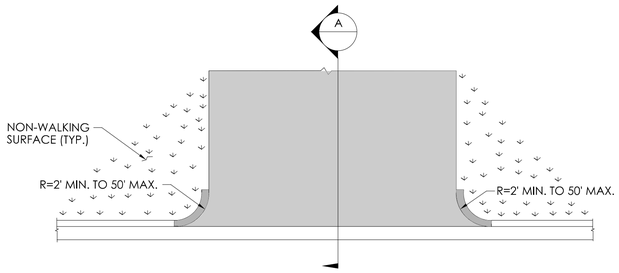
BITUMINOUS CONCRETE DRIVEWAY



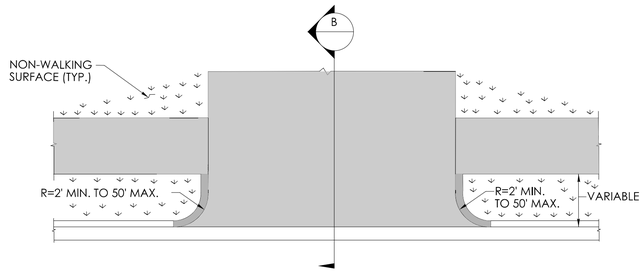
BITUMINOUS CONCRETE DRIVEWAY
WITH A PEDESTRIAN SIDEWALK SETBACK



BITUMINOUS CONCRETE DRIVEWAY
WITH PEDESTRIAN SIDEWALK AT THE CURB



PLAN



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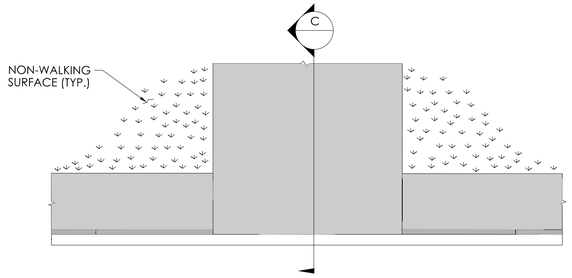

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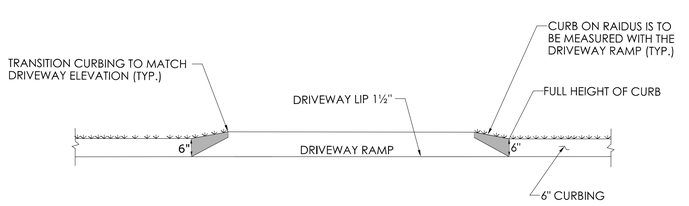
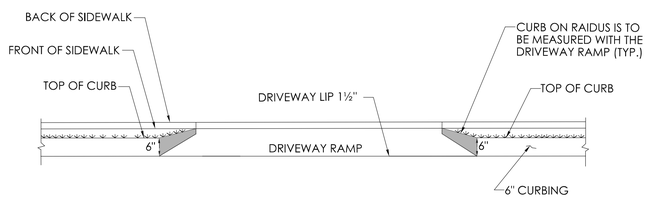


ELEVATION



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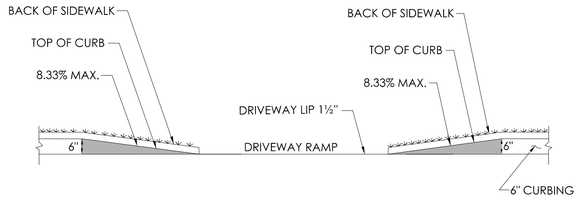

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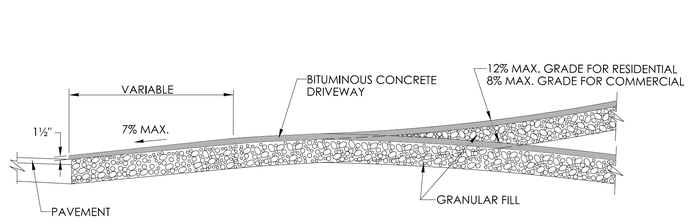
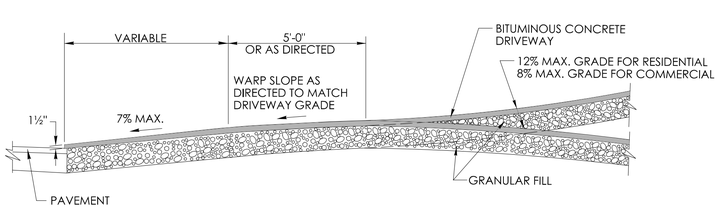
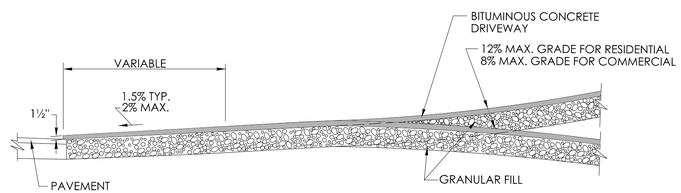


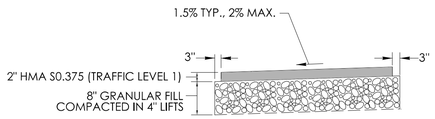
SECTION A



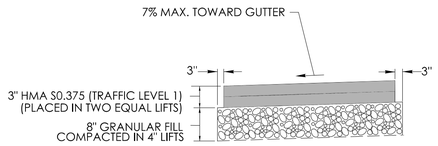
SECTION B



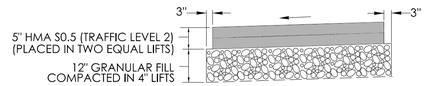
SECTION C



BITUMINOUS CONCRETE SIDEWALK



BITUMINOUS CONCRETE DRIVEWAY



COMMERCIAL
BITUMINOUS CONCRETE DRIVEWAY

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Digitally signed by Leo Fontaine, P.E.
Date: 2022.09.27 15:14:43-04'00'

APPROVED BY:
Digitally signed by Calabrese, Michael
Date: 2022.11.08 09:41:50-05'00'

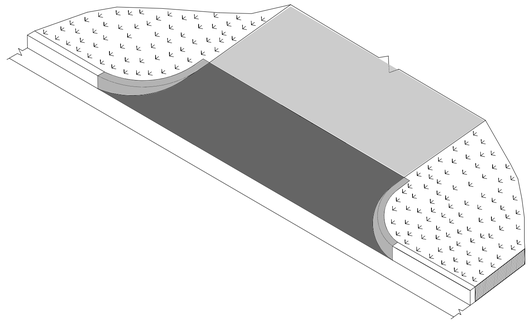
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

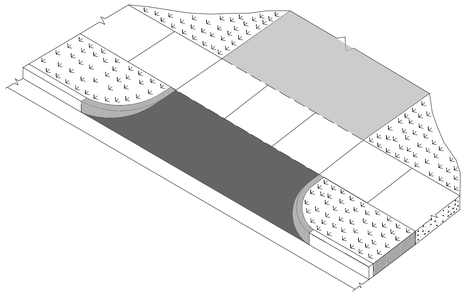
STANDARD SHEET TITLE:
BITUMINOUS CONCRETE SIDEWALK AND BITUMINOUS CONCRETE DRIVEWAY

STANDARD SHEET NO.:
HW-922_01

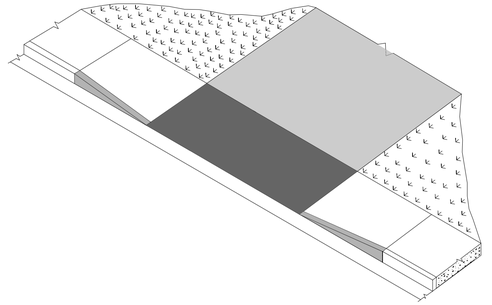
PLOTTED DATE: 9/23/2022



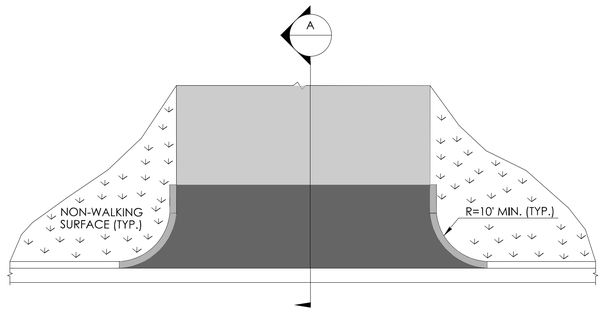
CONCRETE DRIVEWAY RAMP



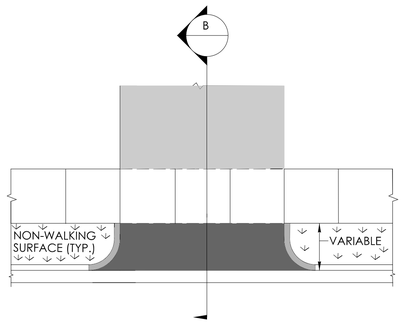
CONCRETE DRIVEWAY RAMP
WITH A PEDESTRIAN SIDEWALK SETBACK



CONCRETE DRIVEWAY RAMP
WITH PEDESTRIAN SIDEWALK AT THE CURB



PLAN



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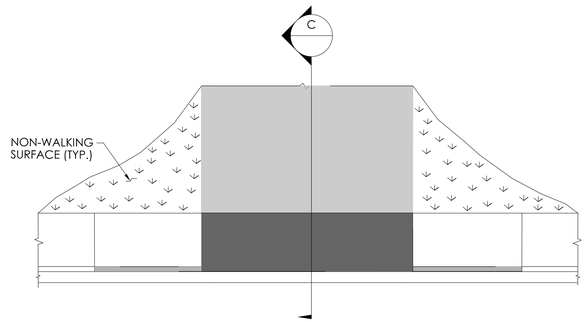

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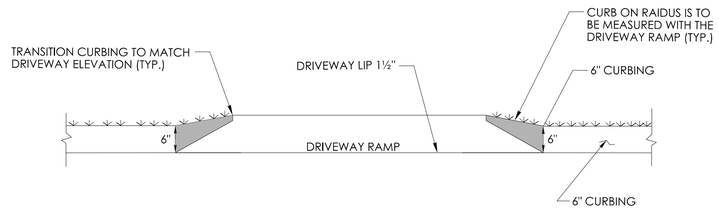
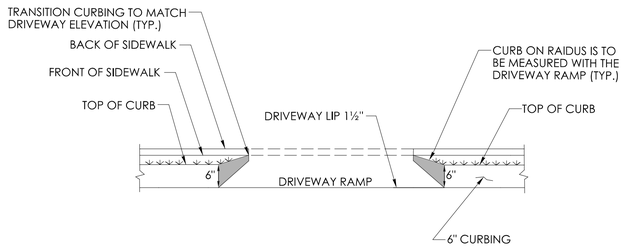


ELEVATION



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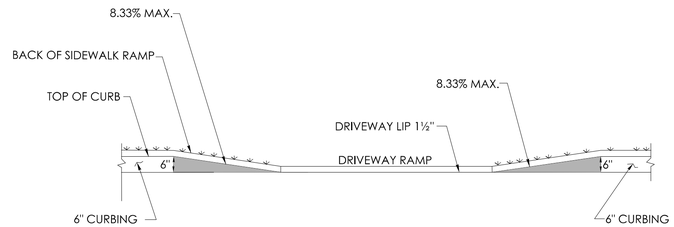

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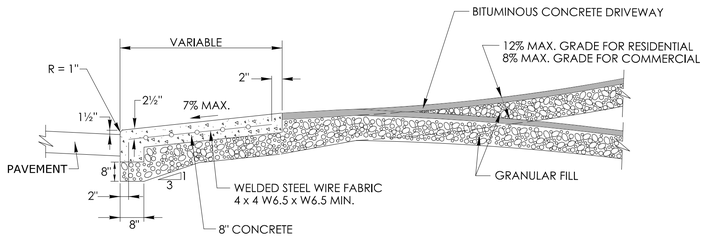
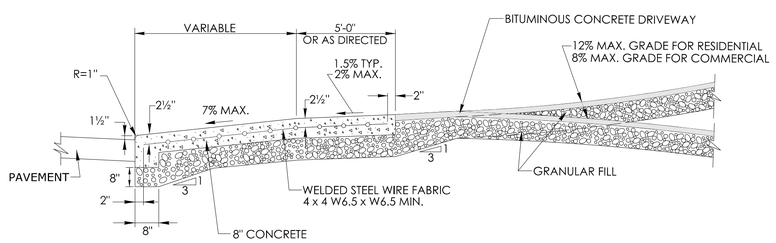
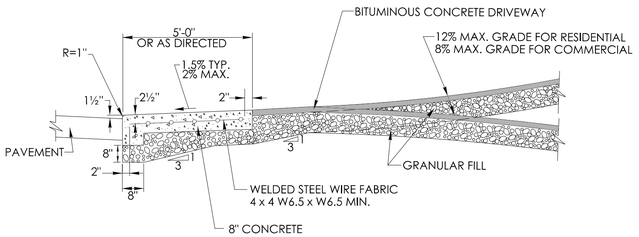


SECTION A



SECTION B



SECTION C

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY: Digitally signed by Leo Fontaine, P.E. Date: 2022.10.05 14:20:04-04'00'	APPROVED BY: Digitally signed by Calabrese, Michael Date: 2022.11.09 14:04:44-05'00'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	**CTDOT STANDARD SHEET**	STANDARD SHEET TITLE: **CONCRETE DRIVEWAY RAMPS**	STANDARD SHEET NO.: **HW-924_01**

PLOTTED DATE: 10/5/2022

ONLY STANDARD SHEETS MARKED WITH AN "✓" ARE IN THIS PROJECT # 0088-0198

****REVISED OR ADDED**

	SHEET NO.	TITLE	APPROVAL DATE**
✓	TR-1000_01	GENERAL CLAUSES (TEST PROCEDURES)	1/2014
✓	TR-1001_01	TRENCHING & BACKFILLING, ELECTRICAL CONDUIT	2/2024
✓	TR-1002_01	TRAFFIC CONTROL FOUNDATIONS	2/2024
✓	TR-1010_01	CONCRETE HANDHOLE	2/2024
✓	TR-1102_01	PEDESTALS, PEDESTRIAN SIGNALS	4/2012
✓	TR-1105_01	TRAFFIC SIGNALS AND CABLE ASSIGNMENTS	8/2018
✓	TR-1107_01	PEDESTRIAN PUSH BUTTON	8/2018
✓	TR-1108_01	CONTROLLERS	5/2013
	TR-1111_01	LOOP VEHICLE DETECTOR AND SAWCUT	4/2014
	TR-1113_01	CONTROL CABLE	4/2014
	TR-1114_01	BONDING & UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAILS	8/2018

	SHEET NO.	TITLE	APPROVAL DATE**
	TR-1205_01	DELINEATION, DELINEATOR AND OBJECT MARKER DETAILS	8/2018
✓	TR-1208_01	SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS	8/2018
✓	TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS	6/2017
✓	TR-1210_04	PAVEMENT MARKINGS LINES AND SYMBOLS	8/2018
	TR-1210_05	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	4/2017
	TR-1210_06	PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS	8/2018
✓	TR-1210_07	PAVEMENT MARKINGS FOR EXIT RAMPS	4/2017
✓	TR-1210_08	PAVEMENT MARKINGS FOR NON FREEWAYS	8/2018
✓	TR-1210_09	PAVEMENT MARKINGS FOR BICYCLE LANES, PARKING STALLS, AND RR CROSSINGS	4/2017
✓	TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS	8/2018
✓	TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES	8/2018

STANDARD SHEETS SHALL BE USED WITH STANDARD SPECIFICATIONS

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:

APPOVED BY:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

CTDOT STANDARD SHEET

STANDARD SHEET TITLE:
TRAFFIC STANDARD SHEET INDEX

STANDARD SHEET NO.:
TR-STD_INDEX

DOCUMENT ALL LOOP DETECTOR VALUES BOTH CALCULATED AND MEASURED.

DEFINITIONS:

LOOP: #14 AWG WIRE IN SAWCUT, TERMINATED IN HANDHOLE, IMSA SPEC 51-7.
LEAD-IN: 14/2 SHIELDED TWISTED PAIR CABLE FROM HANDHOLE TO CONTROLLER, IMSA SPEC 50-2.
LOOP CIRCUIT: LOOP SAWCUT WIRE SPLICED TO 14/2 LEAD-IN CABLE.
AMPLIFIER: ELECTRONIC DEVICE CONNECTED TO LOOP CIRCUIT. SENSES CHANGE IN RESONANT FREQUENCY AND CREATES AN OUTPUT TO THE CONTROLLER.
MEGOHMETER: INSTRUMENT SPECIFICALLY DESIGNED TO TEST THE INSULATION RESISTANCE OF A CIRCUIT. COMMON MANUFACTURERS: AMEC®, AMPROBE®, FLUKE®, MEGGER®.

1: RESISTANCE:

1a: INSULATION RESISTANCE: PERFORM A 600 VOLT (MINIMUM) MEGOHMETER TEST ON LOOP CIRCUIT. THE LOOP AMPLIFIER MUST BE DISCONNECTED FROM THE LOOP CIRCUIT OR THE LOOP AMPLIFIER WILL BE DAMAGED. THE RESISTANCE OF THE LOOP WIRE TO GROUND MUST BE GREATER THAN 100 MEG OHMS.

1b: WIRE RESISTANCE: MEASURE THE DC RESISTANCE OF THE LOOP CIRCUIT. THE LOOP CIRCUIT MUST BE DISCONNECTED FROM THE AMPLIFIER. USING AN OHMMETER CONNECTED ACROSS THE LOOP CIRCUIT, MEASURE THE DC RESISTANCE OF THE CONDUCTORS. THE RESISTANCE SHOULD BE LESS THAN 4 OHMS.

NOTE: ALL TESTS SHALL BE DONE AT THE CONTROLLER ASSEMBLY (CA), HOWEVER IT IS RECOMMENDED TO PERFORM A PRELIMINARY MEGOHMETER TEST AT THE HANDHOLE PRIOR TO SEALING THE SAWCUT AND SPLICING TO THE LEAD-IN. IF A DEFECTIVE LOOP WIRE IS FOUND, IT MAY BE EASILY REPLACED.

2: LOOP CIRCUIT INDUCTANCE:

2a: CALCULATE INDUCTANCE OF LOOP (L_{LOOP}) AND LEAD-IN CABLE ($L_{14/2}$).

LOOP INDUCTANCE (ENGLISH)

$L_{LOOP} = (P/4)(N^2 + N)$

LEAD-IN INDUCTANCE

$L_{14/2} = (0.24\ \mu h/FT)(D)$

LOOP INDUCTANCE (METRIC)

$L_{LOOP} = (3.28P/4)(N^2 + N)$

LEAD-IN INDUCTANCE

$L_{14/2} = (0.78\ \mu h/m)(D)$

WHERE:

L_{LOOP} = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS IN MICROHENRIES (μh).
$L_{14/2}$ = INDUCTANCE OF LEAD-IN CABLE.
P = PERIMETER OF INDIVIDUAL LOOP SEGMENT, IN FEET OR METERS.
N = NUMBER OF TURNS.
D = LENGTH OF LEAD-IN CABLE FROM SPLICE IN HANDHOLE TO CONTROLLER, IN FEET OR METERS.

$L_T = L_1 + L_2 + L_3$ etc.,
(TOTAL INDUCTANCE OF SEGMENTED LOOP SPLICED IN SERIES.)

$L_T = 1 / [(1 / L_1) + (1 / L_2) + (1 / L_3) + \text{etc.}]$,
(TOTAL INDUCTANCE OF SEGMENTED LOOP SPLICED IN PARALLEL.

WHERE:

L_T = TOTAL INDUCTANCE OF THE SEGMENTED ARRANGEMENT.
L_1, L_2, L_3 = INDUCTANCE OF INDIVIDUAL LOOP SEGMENTS.

EXAMPLE: (IN ENGLISH)

6' x 6', 4 TURNS, APPROXIMATELY 300' FROM THE CONTROLLER

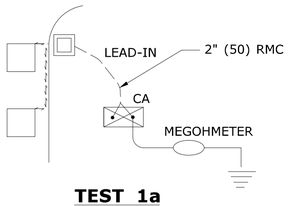
$L_{LOOP} = (24/4)(4^2 + 4)$
$L_{LOOP} = (6)(20)$
$L_{LOOP} = 120\ \mu h$

$L_{14/2} = (0.24\ \mu h/FT)(300)$
$L_{14/2} = (0.24)(300)$
$L_{14/2} = 72\ \mu h$

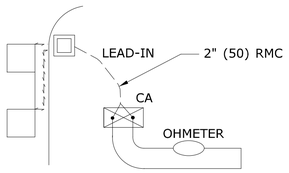
2b: MEASURE INDUCTANCE OF LOOP AND LEAD-IN AT CONTROLLER. USE INSTRUMENT DESIGNED TO MEASURE LOOP CIRCUIT INDUCTANCE.

3: POWER INTERRUPTION:

AFTER THE AMPLIFIER HAS TUNED AND IS OPERATING, DISCONNECT POWER BY REMOVING FUSE OR HARNESS CONNECTOR. RETURN POWER TO THE AMPLIFIER AND CONFIRM IT RE-TUNES AUTOMATICALLY WITHOUT ANY MANUAL ADJUSTMENTS.



TEST 1a



TEST 1b

PROJECT:
TOWN: LOCATION:

LOOP NUMBER	RESISTANCE OHMS		INDUCTANCE MICROHENRIES (μh)		AMPLIFIER POWER INTERRUPTION
	TO GROUND (1a)	LOOP WIRE (1b)	CALCULATED (2a)	MEASURED (2b)	PASS/FAIL (3)
D1 FRONT					
D1 REAR					
D2A					
D2B					
D4A FRONT					
D4B REAR					
D5					
D6A					
D6B					

LOOP CIRCUIT TEST DATA (EXAMPLE)

INDUCTIVE LOOP TEST PROCEDURE

PIN	COLOR	FUNCTION
A	WHITE	110 VAC Neutral
B	BROWN	Output Relay Common (moving contact)
C	BLACK	110 VAC (Fused)
D	RED	Loop
E	ORANGE	Loop
F	YELLOW	Output Relay Contact (Closes with moving contact when detecting vehicle)
G	BLUE	Output Relay Contact (Opens with moving contact when detecting vehicle)
H	GREEN	Chassis Ground
J	GREY	110 VAC Delay/Extend Override
Shell		Ground (shall be connected to pin H in the connector)

DETECTOR AMPLIFIER PIN DESIGNATION

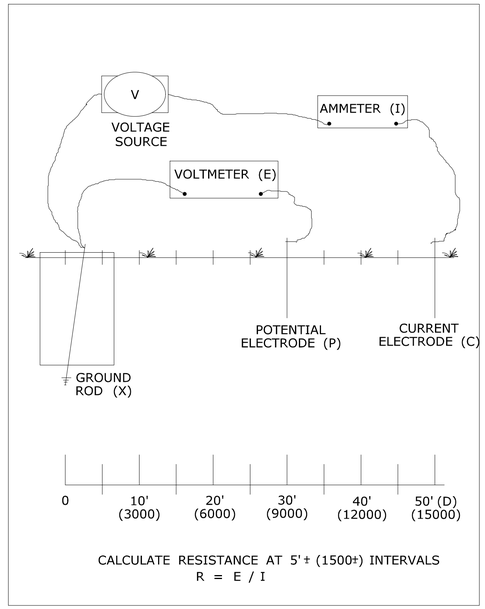
TEST PROCEDURE:

- INSERT ELECTRODE (C) A DISTANCE (D) FROM THE FOUNDATION. RECOMMEND A MINIMUM 50'.
- CONNECT A VOLTAGE SOURCE AND AMMETER BETWEEN THE FOUNDATION GROUND ROD (X) AND C.
- MEASURE THE CURRENT FLOW (I) BETWEEN X AND C.
- INSERT POTENTIAL ELECTRODE (P) AT 5'(1500) INTERVALS IN A STRAIGHT LINE TO ELECTRODE C.
- MEASURE VOLTAGE (E) AT EACH LOCATION OF P.
- CALCULATE RESISTANCE (R) AT EACH LOCATION OF P USING THE FORMULA R=E/I.
- PLOT THE VALUES ON A RxD GROUND RESISTANCE CHART.
- THE ACTUAL GROUND RESISTANCE IS WHERE THE PLOTTED CURVE IS RELATIVELY FLAT, USUALLY AT 62%± OF D.
  SEE EXAMPLE CHART: CURVE FLATTENS OUT AT 10 OHMS, APPROXIMATELY 30'(9000) FROM FOUNDATION.
- IF GROUND RESISTANCE IS GREATER THAN 10 OHMS, PERFORM CORRECTIVE ACTION AND RE-TEST.

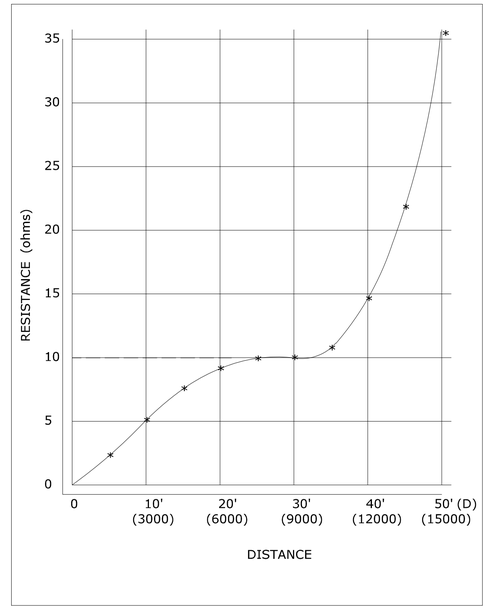
SUGGESTED CORRECTIVE ACTION:

A. INSTALL ADDITIONAL 10'(3000) GROUND ROD(S).
   REFER TO NESC SECTION 09, RULE 94.B.2.
   DRIVE ADDITIONAL GROUND RODS NO CLOSER TO FOUNDATION THAN 6'(1800). IF MORE THAN ONE IS NEEDED, SPACE MINIMUM 6'(1800) APART.
   BONDS TO ADDITIONAL GROUND ROD(S) SHALL BE MADE BY A CLAMP DESIGN FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.
   TOP OF ADDITIONAL GROUND ROD(S) SHALL BE 6" (150) BELOW GRADE.

B. IN AREAS OF SHALLOW BEDROCK, INSTALL A GROUND GRID OR ARRAY CONSISTING OF BURIED WIRE, RODS, STRIPS OR PLATES.
   REFER TO NESC SECTION 09, RULE 94.B.3.
   REFER TO NEC SECTION 250.
   MINIMUM DEPTH OF 18" (450).
   GRID CONNECTIONS AND BONDS ON GROUND GRID SHALL BE MADE BY CLAMPS DESIGNED FOR DIRECT BURIAL OR BY EXOTHERMIC WELDING TECHNIQUE.



3 POINT GROUND RESISTANCE TEST CIRCUIT



GROUND RESISTANCE CHART (EXAMPLE)

NOTES:
1. WHEN REQUESTED BY THE ENGINEER, MEASURE RESISTANCE-TO-GROUND OF GROUND ROD AT TRAFFIC CONTROL FOUNDATIONS. SEE FALL-OF-POTENTIAL METHOD. IF LESS THAN 10 ohms, INSTALL SUPPLEMENTAL ELECTRODES AS REQUIRED. NEC ARTICLE 250.
2. DURING THE TEST, THE GROUND ROD SHOULD NOT BE BONDED TO ANY RMC IN THE FOUNDATION.
3. THE VOLTAGE SOURCE, VOLTMETER, AMMETER, ELECTRODES P AND C, AND CONNECTING CABLES ARE AVAILABLE AS A SPECIALIZED TEST INSTRUMENT.
4. REFER TO NATIONAL ELECTRICAL SAFETY CODE (NESC) SECTION 09, GROUNDING METHODS FOR ELECTRIC SUPPLY AND COMMUNCATIONS FACILITIES.
5. REFER TO NATIONAL ELECTRICAL CODE (NEC) CHAPTER 2, ARTICLE 250, GROUNDING.

3 POINT FALL-OF-POTENTIAL GROUND RESISTANCE TEST

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- INDUCTIVE LOOP DETECTOR
- SAW CUT
- RIGID METAL CONDUIT
- HANDHOLE

REV.	DATE	REVISION DESCRIPTION
2	1-2014	REVISED GROUND RESISTANCE NOTES.
1	4-2012	MINOR REVISIONS.

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

Plotted Date: 1/7/2014

DIMENSIONS ARE IN ENGLISH (‘.”) & METRIC UNITS (mm).
METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.DGN Model: TR-1000_01

SUBMITTED BY: NAME/DATE/TIME:
Tracy L. Fogarty 2014.01.07 16:11:26-05'00'

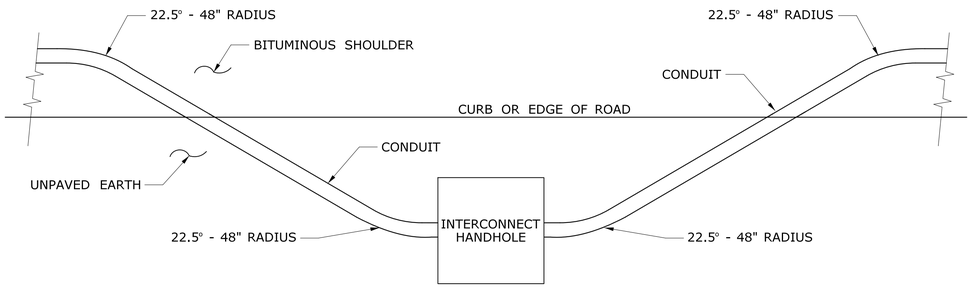
APPROVED BY: NAME/DATE/TIME:
Charles S. Harlow 2014.01.08 09:02:11-05'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
GENERAL CLAUSES (TEST PROCEDURES)

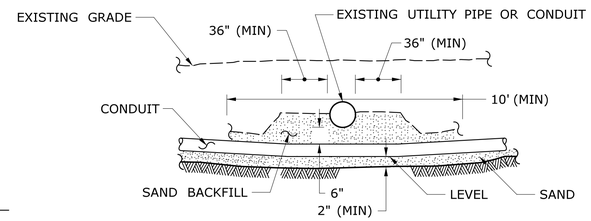
STANDARD SHEET NO.:
TR-1000_01



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

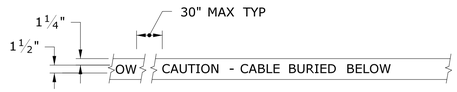
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.



CROSSING UNDER EXISTING UTILITY

NOTES:

1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.

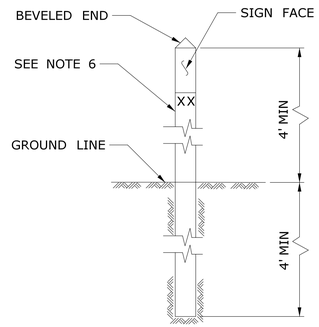


DETECTABLE WARNING TAPE

NOTE:

STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

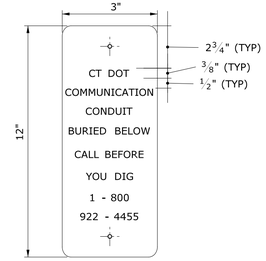
1. TAPE COLORS:
   COMMUNICATION - ORANGE BACKGROUND / BLACK LEGEND
   POWER - RED BACKGROUND / BLACK LEGEND



INTERCONNECT CONDUIT IDENTIFICATION POST

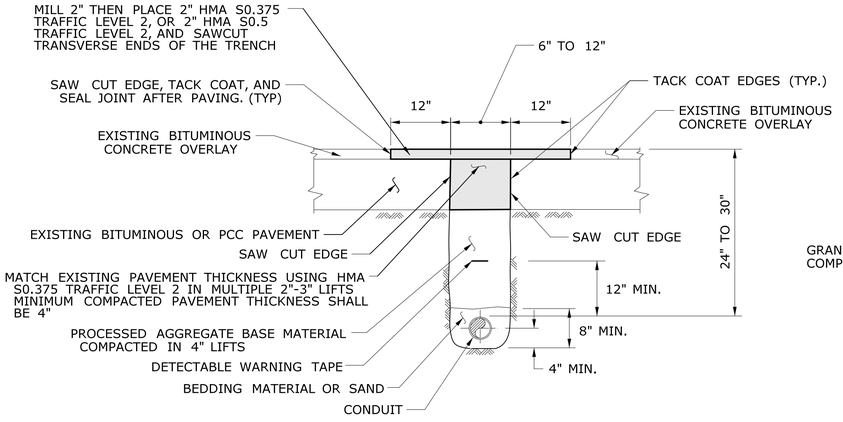
NOTES:

1. 4" x 4" NOMINAL, PRESSURE TREATED WOOD POST.
2. ATTACH SIGN TO POST WITH ¼" x 1¼" STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
3. SIGN COLORS: BACKGROUND - ORANGE (RETROREFLECTIVE)
   LEGEND - BLACK (OPAQUE).
4. INSTALL POST APPROX 24" FROM RMC IN VICINITY OF EACH INTERCONNECT HANDHOLE.
5. INSTALL ADDITIONAL POST(S) WHERE SPACING BETWEEN INTERCONNECT HANDHOLES IS GREATER THAN 1500' APART.
6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE IN FEET TO TRENCH CONTAINING COMMUNICATION CABLE. ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT.
7. IDENTIFICATION POSTS WITH SIGNS SHALL BE PAID UNDER THE COMMUNICATION CABLE ITEM.



SIGN FACE DETAIL

SIGN # 41-4669

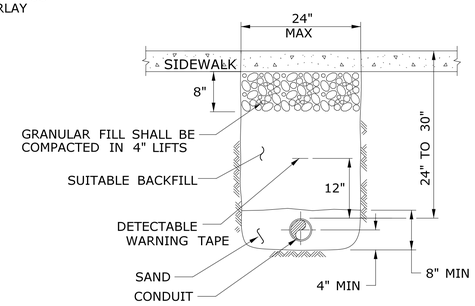


PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:

STANDARD SPECIFICATION, SECTION 3.04 AND STANDARD SPECIFICATION, ARTICLE 4.06.03

1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM SHALL BE AT LEAST 20" BELOW SURFACE.

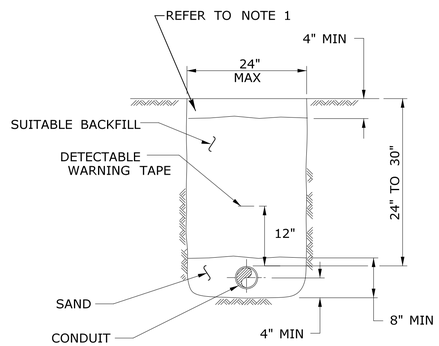


SIDEWALK

NOTES:

STANDARD SPECIFICATIONS, SECTIONS 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK IS DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK".



EARTH

NOTES:

STANDARD SPECIFICATIONS, SECTION 9.50 OR SEEDING TYPE CALLED OUT ON THE PLANS.

1. IN MOWED AREAS: PLACE TOPSOIL, FERTILIZER, SEED, & MULCH.

GENERAL NOTES:

1. TOP OF CONDUIT AT LEAST 24" DEEP.
2. COMPACT BACKFILL IN ≤6" LIFTS. HAND COMPACTION NOT PERMITTED.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Lisa N. Conroy, P.E.
2024.01.23
08:17:40-05'00'

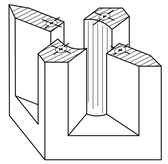
APPOVED BY:
Digitally signed by Matthew C. Blume, P.E., PTOE
Date: 2024.02.21 08:26:47-05'00'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

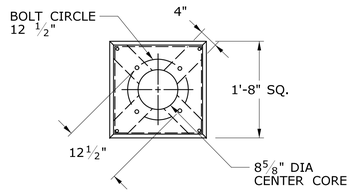
CTDOT STANDARD SHEET

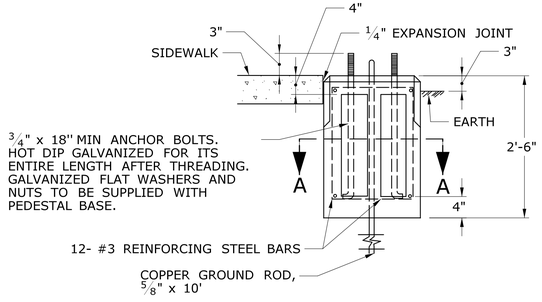
STANDARD SHEET TITLE:
TRENCHING & BACKFILLING, ELECTRICAL CONDUIT

STANDARD SHEET NO.:
TR-1001_01



PICTORIAL
SECTION A-A

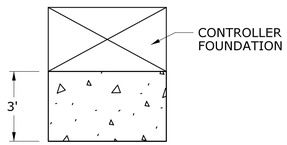




TRAFFIC CONTROL FOUNDATION
PEDESTAL - TYPE I - PRECAST

TRAFFFIC CONTROL FOUNDATION PEDESTAL TYPE I NOTES:

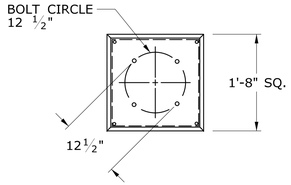
INSTALL FOUNDATION ON 12" OF COMPACTED GRANULAR FILL IN ACCORDANCE WITH SECTION 2.13
LEVEL FOUNDATION WITH A PROJECTION OF 3" ABOVE FINISHED GRADE.
INSTALL COPPER GROUND ROD: 5/8" X 10'
PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND GROUND ROD HAVE BEEN INSTALLED.
CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION.
CONCRETE: (CAST-IN PLACE) PCC04460 IN ACCORDANCE WITH SECTION M.03
CONCRETE: (PRECAST) PRC04060 IN ACCORDANCE WITH ARTICLE M.14.01

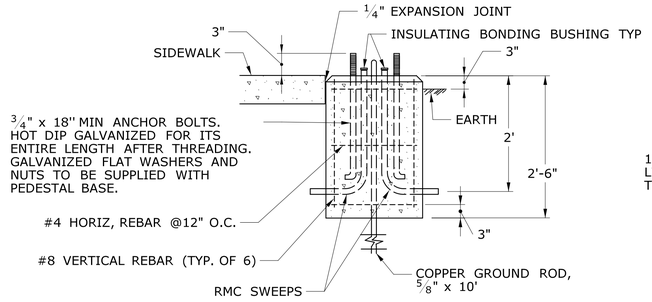


INSTALL PRECAST OR CAST IN PLACE CONCRETE SIDEWALK ON CABINET DOOR SIDE OF CONTROLLER FOUNDATION.
PITCH SIDEWALK 1/4" PER FOOT AWAY FROM THE CONTROLLER FOUNDATION.
REFER TO HIGHWAY STANDARD SHEET HW-921_01 FOR SIDEWALK CONSTRUCTION.

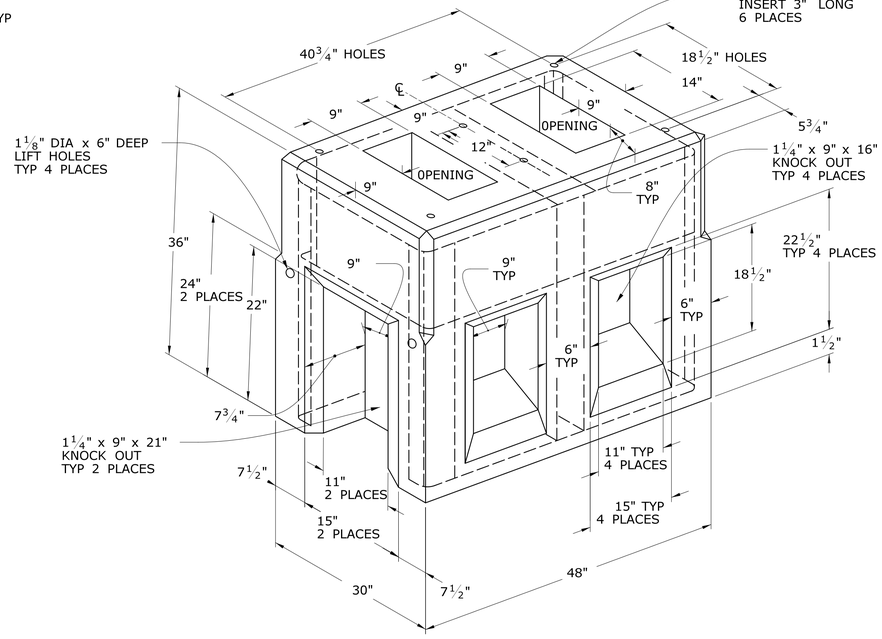
TYPICAL CONCRETE SIDEWALK
AT CONTROLLER FOUNDATION

NOT TO SCALE





TRAFFIC CONTROL FOUNDATION
PEDESTAL - TYPE I - CAST IN PLACE



TRAFFIC CONTROL FOUNDATION
CONTROLLER - TYPE IV - PRECAST

TRAFFFIC CONTROL FOUNDATION CONTROLLER TYPE IV NOTES:

INSTALL FOUNDATION ON 12" OF COMPACTED GRANULAR FILL IN ACCORDANCE WITH SECTION 2.13
LEVEL FOUNDATION WITH A PROJECTION OF 4" ABOVE FINISHED GRADE.
INSTALL COPPER GROUND ROD: 5/8" x 10'
PLACE NO. 6 CRUSHED STONE IN THE CENTER OPENINGS AFTER THE CONDUITS AND GROUND ROD HAVE BEEN INSTALLED. THE OPENINGS SHALL BE CAPPED WITH A 2" GROUT LEVEL WITH THE TOP OF THE FOUNDATION AND NEATLY FINISHED. THE GROUT SHALL CONFORM WITH THE REQUIREMENTS OF ARTICLE M.03.05.
#4 REBAR 2" MIN COVER AROUND ALL OPENINGS, 3-#4 REBARS IN ALL CORNERS.
CONDUITS SHALL NOT PROJECT MORE THAN 2" ABOVE FOUNDATION.
CONCRETE: (PRECAST) PRC04060 IN ACCORDANCE WITH ARTICLE M.14.01

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED CONTROLLER
- EXISTING CONTROLLER
- PEDESTAL MOUNTING

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Lisa N. Conroy, P.E.
2024.01.23
08:18:30-05'00'

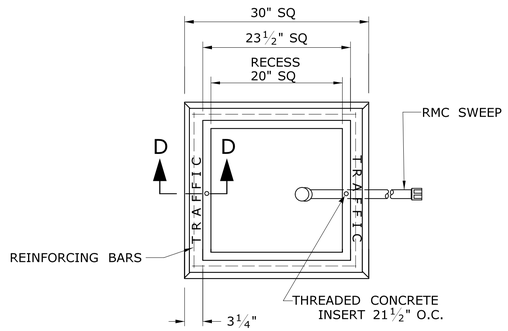
APPROVED BY:
Digitally signed by Matthew C. Blume, P.E., PTOE
Date: 2024.02.21 08:15:37-05'00'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

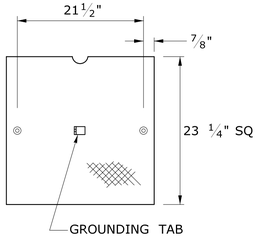
CTDOT STANDARD SHEET

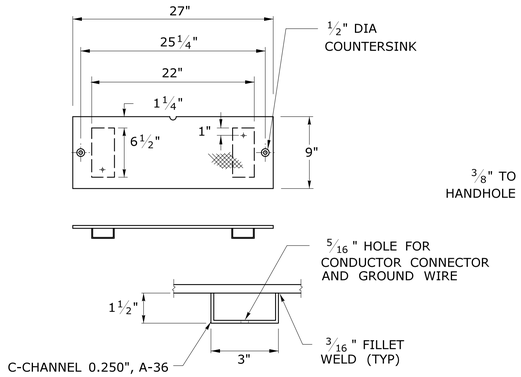
STANDARD SHEET TITLE:
TRAFFIC CONTROL FOUNDATIONS

STANDARD SHEET NO.:
TR-1002_01

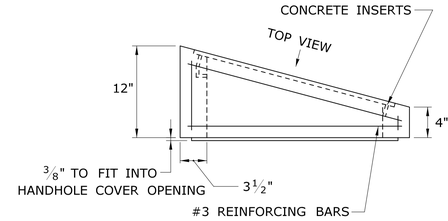


PLAN VIEW

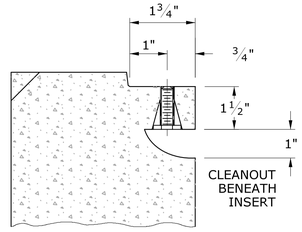




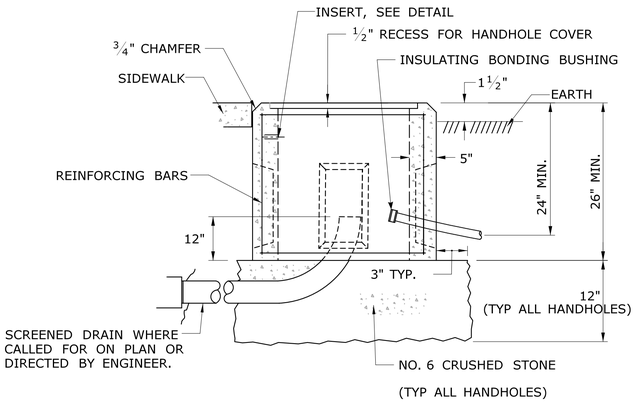
GALVANIZED, NON-SKID 3/8" FLOOR PLATE STEEL HANDHOLE COVERS



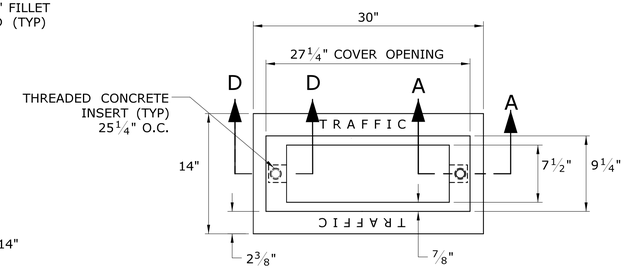
BANK ADAPTER



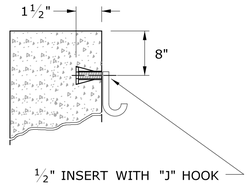
SECTION D-D



CONCRETE HANDHOLE TYPE I

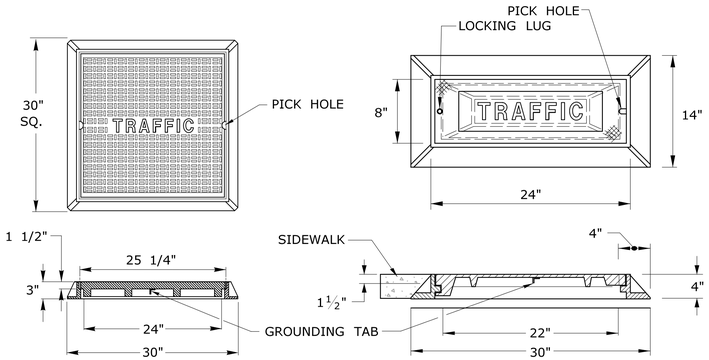


PLAN VIEW

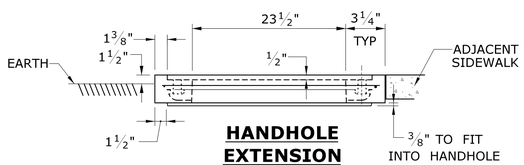


INSERT DETAIL

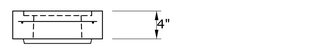
TYP IN TWO PLACES FOR ALL HANDHOLES



CAST IRON HANDHOLE COVERS

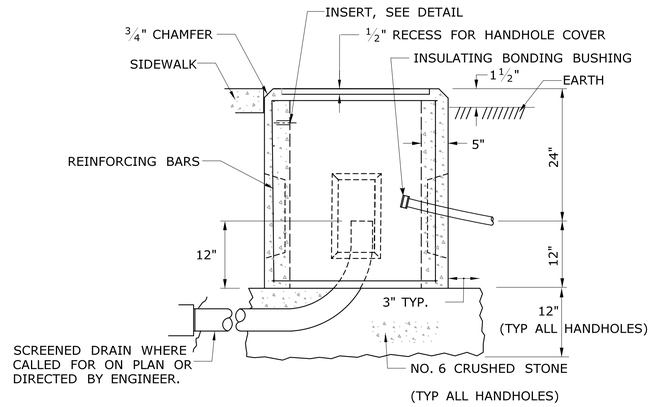


HANDHOLE EXTENSION

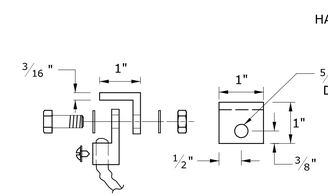


HANDHOLE EXTENSION

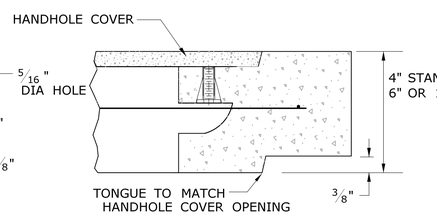
SIDE VIEW



CONCRETE HANDHOLE TYPE I FOR SPLICING INTERCONNECT

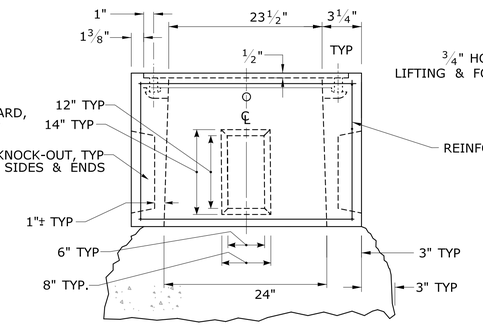


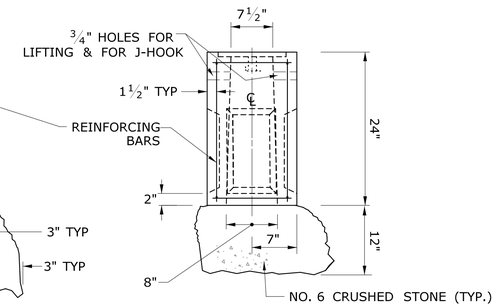
STEEL GROUNDING TAB w/ CONDUCTOR CONNECTOR



SECTION A-A HANDHOLE EXTENSIONS

4 - #8 REINFORCING BARS REQ'D





BASE SECTION

CONCRETE HANDHOLE TYPE II

COVER NOTES:

1. GROUNDING TAB WELDED TO BOTTOM CENTER OF COVER WITH 3/16" WELD (3 SIDES).
2. ATTACH 6' LENGTH OF NO. 8 GROUND WIRE TO GROUNDING TAB WITH CONDUCTOR CONNECTOR, ¼" - 20 X ¾" LG STAINLESS STEEL HEX HEAD BOLT, AND STAINLESS STEEL FLAT WASHER. ATTACH FREE END OF GROUND WIRE TO CONDUIT BONDING BUSHING IN HANDHOLE.
3. CONDUCTOR CONNECTOR: COPPER ALLOY BODY, BRASS SCREW, BRASS OR COPPER ALLOY PRESSURE PLATE.
4. COVER SCREW INSERT: ⅜"-16, 1½"L, STAINLESS STEEL.
5. COVER SCREW: ⅜"-16, 1"L, FLAT HEAD, SLOTTED, STAINLESS STEEL.

HANDHOLE NOTES:

1. CONCRETE: (PRECAST) PRC04060 IN ACCORDANCE WITH ARTICLE M.14.01
2. COMPLETE TYPE II HANDHOLE:
   IN EARTH AREAS, CONSISTS OF A BASE SECTION WITH HANDHOLE EXTENSION IF NEEDED, AND STEEL COVER.
   IN SIDEWALK AREAS, CONSISTS OF A BASE SECTION WITH HANDHOLE EXTENSION IF NEEDED, AND CAST IRON COVER PAID UNDER A SEPARATE ITEM.
3. PLAN VIEW DIMENSIONS, SECTION VIEW, & DETAILS, SAME FOR BASE SECTION, EXTENSIONS & BANK ADAPTER.
4. GROUT AROUND ALL CONDUITS.
5. INSTALL 30" SIDE PARALLEL TO ROAD UNLESS OTHERWISE NOTED.
6. INSTALL HANDHOLES APPROX. 12" BEHIND CURB OR IF NO CURB, 24" BEHIND EDGE OF ROAD UNLESS OTHERWISE SPECIFIED.
7. CAST THE WORD "TRAFFIC" INTO TOP EDGE OF HANDHOLE, 1½" LETTERS.
8. WHERE AN EXISTING CONCRETE SIDEWALK SLAB ABUTTING A HANDHOLE IS DAMAGED OR CUT DURING INSTALLATION, REPLACE THE ENTIRE SIDEWALK SECTION.
9. 12-#3 REINFORCING BARS REQUIRED FOR ALL HANDHOLES. (8 HORIZONTAL, 4 VERTICAL)
10. FOR TYPE I INTERCONNECT HANDHOLE 2" RMC ENTERING AND EXITING HANDHOLE MUST BE INSTALLED PERPENDICULAR TO THE SIDEWALL OF THE HANDHOLE.
11. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THE RADIUS OF THE INSTALLED RMC IS NOT GREATER THAN THE MINIMUM ALLOWED FOR FIBER OPTIC CABLE.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED HANDHOLE
- EXISTING HANDHOLE

NOT TO SCALE

SIGNATURE BLOCK:
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:
Lisa N. Conroy, P.E.
2024.01.23
08:19:13-05'00'

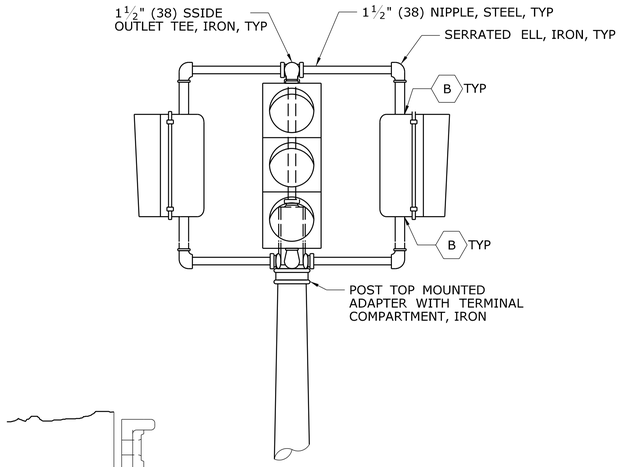
APPOVED BY:
Digitally signed by Matthew C. Blume, P.E., PTOE
Date: 2024.02.21 08:26:02-05'00'

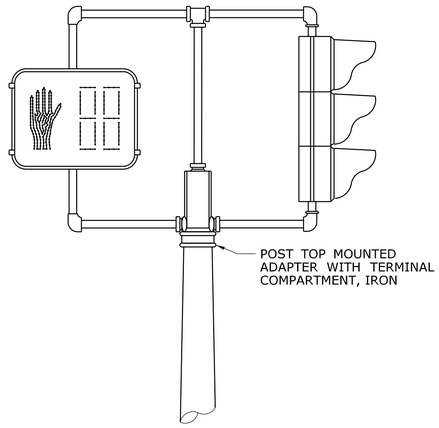
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

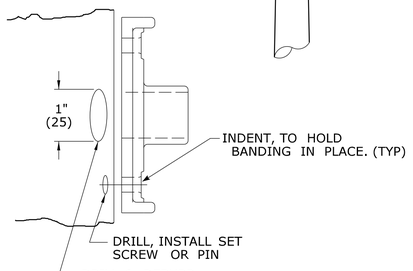
CTDOT STANDARD SHEET

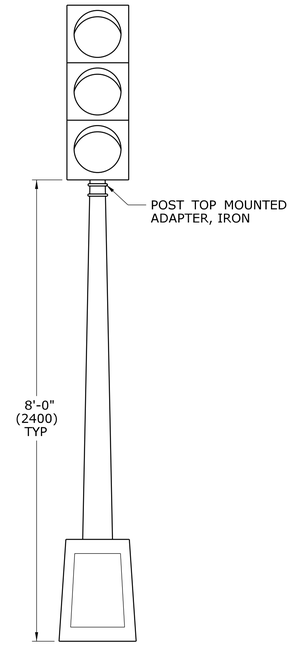
STANDARD SHEET TITLE:
CONCRETE HANDHOLE

STANDARD SHEET NO.:
TR-1010_01

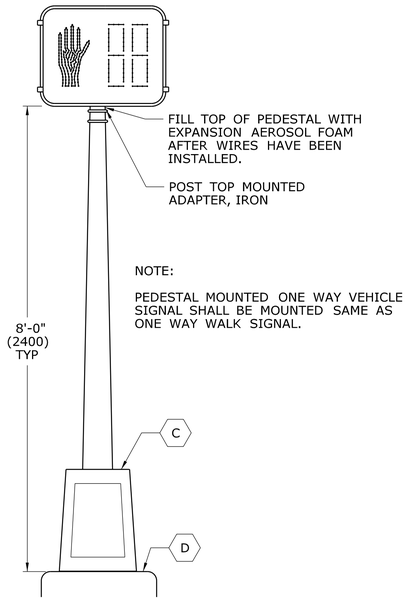








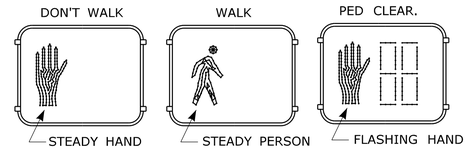
ONE WAY TRAFFIC SIGNAL PEDESTAL MOUNTED



NOTE:

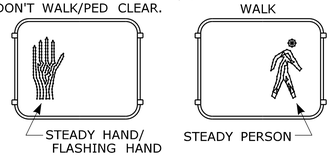
PEDESTAL MOUNTED ONE WAY VEHICLE SIGNAL SHALL BE MOUNTED SAME AS ONE WAY WALK SIGNAL.

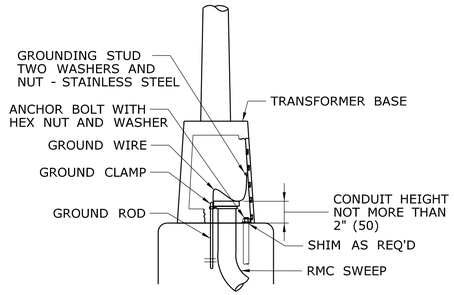
ONE WAY WALK SIGNAL PEDESTAL MOUNTED



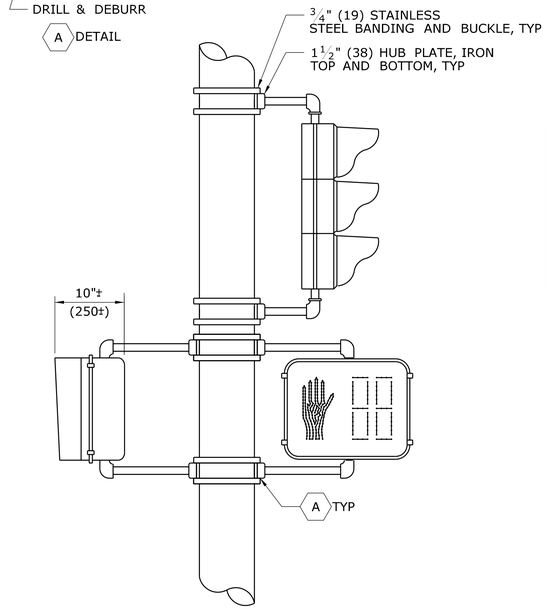
TYPICAL INDICATION WHEN LIT

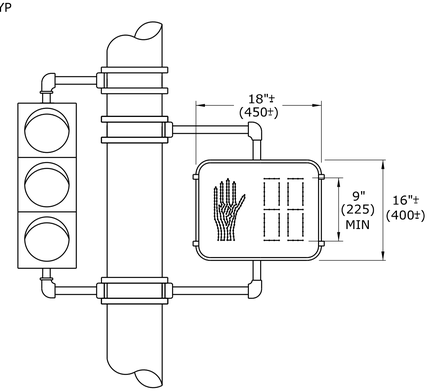
NON-COUNTDOWN DISPLAY, ONLY WHEN SHOWN ON PLAN.

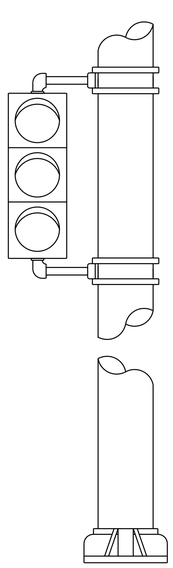




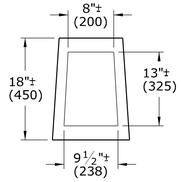
ALUMINUM PEDESTAL INSTALLATION DETAIL



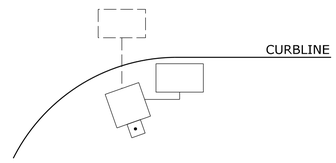




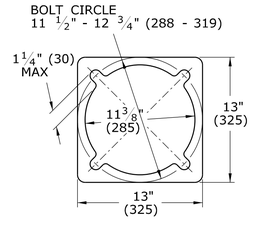
ONE WAY TRAFFIC SIGNAL POLE MOUNTED



ALUMINUM PEDESTAL DOOR OPENING DETAIL



WHEN PEDESTALS OR SPAN POLES ARE INSTALLED CLOSE TO THE CURB, SIDE MOUNT PEDESTRIAN OR TRAFFIC SIGNALS TO AVOID VISOR DAMAGE FROM TURNING VEHICLES.



PEDESTAL BASE PLAN

NOTES:

A. SECURE LOWER HUB PLATE WITH STAINLESS STEEL SET SCREW OR PIN PRIOR TO BANDING TO PREVENT MOVEMENT. INSTALL CABLE THROUGH BOTTOM OF HUB PLATE.

B. REFER TO CTDOT TRAFFIC STANDARD SHEET, TR-1105_01, TRAFFIC SIGNALS & CABLE ASSIGNMENTS.

C. IF THREADED, MIN 1" (25) THREADED INTO BASE, SECURED WITH STAINLESS STEEL SET SCREWS.

D. BASE DESIGNED AS BREAK-AWAY.

INCANDESCENT WALK SIGNAL LAMPS ARE 67 WATTS, RATED AT 8000 HOURS LAMP LIFE. LED WALK SIGNAL LAMPS ARE MAXIMUM 15 WATTS, WARRANTEED AT 5 YEAR LIFE.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- STEEL SPAN POLE, MAST ARM ASSEMBLY SHAFT
- ALUMINM PEDESTAL
- TRAFFIC SIGNAL
- PEDESTRIAN SIGNAL
- PEDESTAL MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS
- POLE MOUNTED, TRAFFIC & PEDESTRIAN SIGNALS

REV.	DATE	REVISION DESCRIPTION
2	4-2012	MINOR REVISIONS.
1	1-2010	INCLUDED COUNTDOWN PEDESTRIAN SIGNALS.

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

Plotted Date: 4/14/2012

DIMENSIONS ARE IN ENGLISH (".") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.dgn Model: TR-1102_01

SUBMITTED BY: NAME/DATE/TIME:
Tracy L. Fogarty 2012.05.01 12:55:27-04'00'

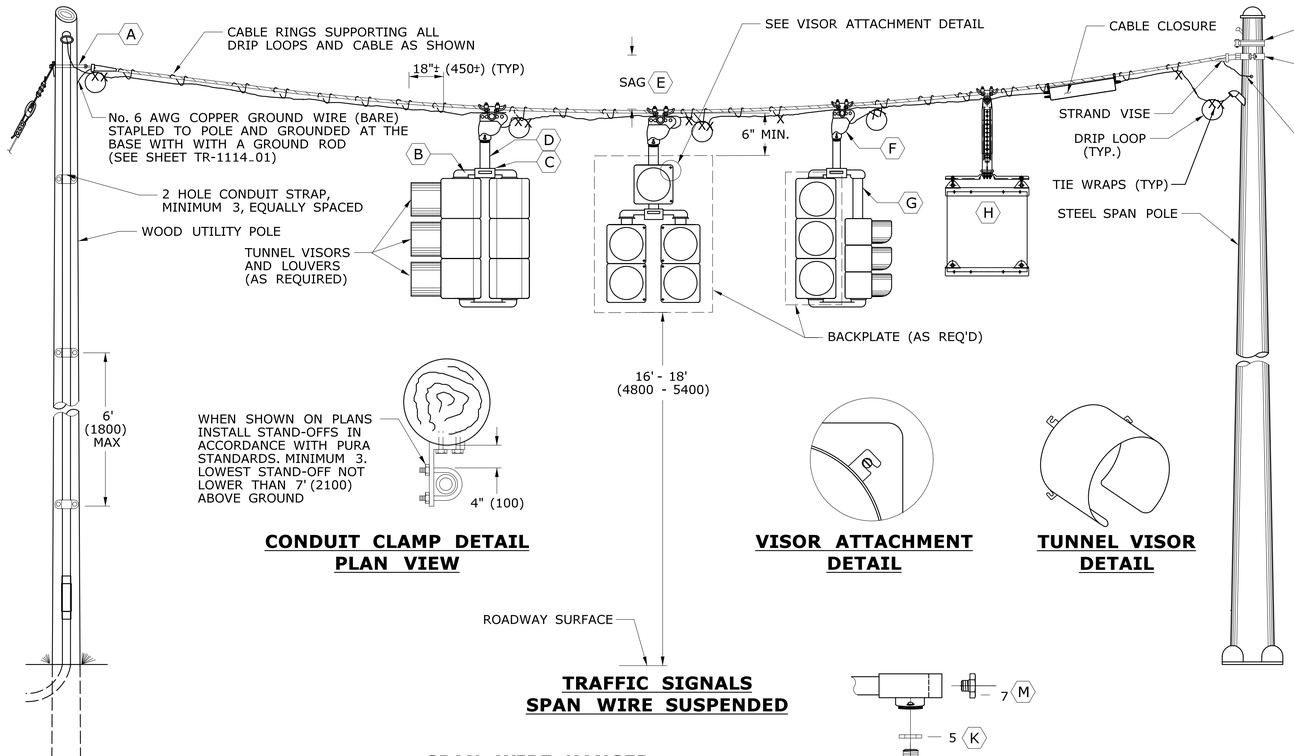
APPROVED BY: NAME/DATE/TIME:
Timothy M. Wilson 2012.05.09 10:24:58-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
PEDESTALS, PEDESTRIAN SIGNALS

STANDARD SHEET NO.:
TR-1102_01

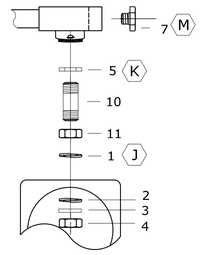


TRAFFIC SIGNALS
SPAN WIRE SUSPENDED

CONDUIT CLAMP DETAIL
PLAN VIEW

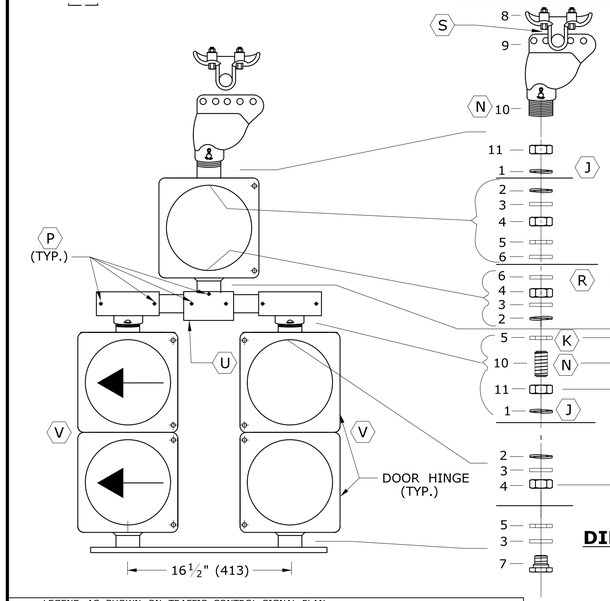
VISOR ATTACHMENT DETAIL

TUNNEL VISOR DETAIL



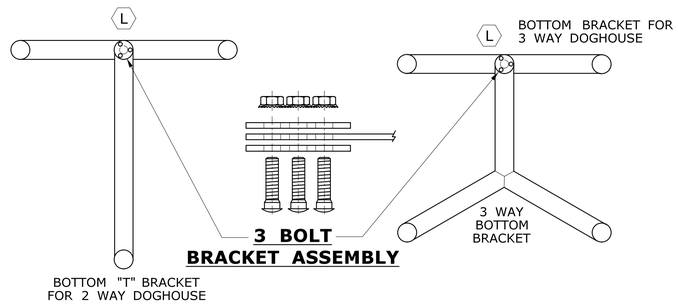
TWO WAY, THREE WAY
& FOUR WAY NIPPLE DOWN
ASSEMBLY DETAIL

SPAN WIRE HANGER
ASSEMBLY DETAIL



UPPER CENTER
SUPPORT DETAIL

DIRECT ASSEMBLY DETAIL



LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PROPOSED WOOD SPAN POLE
- EXISTING WOOD SPAN POLE
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE
- PROPOSED UTILITY POLE
- EXISTING UTILITY POLE
- POLE ANCHOR & GUY
- CABLE CLOSURE
- SPAN MOUNTED SIGN
- SPAN MOUNTED TRAFFIC SIGNAL

ITEM DESCRIPTION, FOR ASSEMBLY DETAILS
1 - SERRATED TABBED LOCKRING, ALUMINUM (TAB MUST BE FULL WIDTH OF RING)
2 - GASKET, NEOPRENE
3 - WASHER, STEEL
4 - HEX NUT, STEEL
5 - CONDUIT LOCKNUT, STEEL
6 - BUSHING PLASTIC (ONLY IN JUNCTION BOX OR NIPPLED DOWN TRAFFIC SIGNAL)
7 - OCTAGONAL CAP, ALUMINIUM
8 - SPAN WIRE CLAMP
9 - WIRE OUTLET BODY, IRON, FEMALE ONLY
10 - NIPPLE, STEEL
11 - HEX NUT, STEEL, NOTCHED W/SETSCREWS

NOTES: FOR ASSEMBLY DETAILS
(J) APPLY SILICONE CAULK BETWEEN OR AROUND SERRATED LOCKRING AND HOUSING.
(K) OPTIONAL USE IF NIPPLE THREADS TOO FAR INTO ELBOW.
(L) DRILL HOLE IN CENTER OF 2 WAY BOTTOM BRACKET - INSTALL 3 BOLT BRACKET (SEE DETAIL).
(M) DO NOT INSERT ORNAMENTAL CAP PAST DOTTED LINE.
(N) ALL THREAD.
(P) SETSCREW (SQUARE OR ALLEN) ON ALL FITTINGS.
(R) CHASE NIPPLE CAN BE SUBSTITUTED FOR THE COMBINATION OF ITEMS 6, 5 AND 10.
(S) INSTALL STAINLESS STEEL WASHER ON INSIDE OF COTTER PIN. COTTER PIN AND WASHER SHALL BE ON SIDE OF HANGER AWAY FROM SIGNAL CABLES.
(T) CHASE NIPPLE CAN BE SUBSTITUTED FOR COMBINATION 4, 5, 10 AND 11.
(U) CENTER HUB SAME AS (C) EXCEPT TOP OPENING MAY BE THREADED.
(V) DOOR HINGE ON OUTSIDE OF SIDE BY SIDE ASSEMBLY.

TRAFFIC SIGNAL CABLE COLOR ASSIGNMENTS

SIGNAL ASSEMBLY & CABLE USED	SIGNAL FUNCTION	ARTERY 1	ARTERY 2	SIDE STREET 1	SIDE STREET 2
2 - WAY 9 CONDUCTOR	RED	RED		BLACK	
	YELLOW	ORANGE		WHITE \ BLACK	
	GREEN	GREEN		BLUE	
	SPARE	GREEN\BLACK		RED \ BLACK	
	NEUTRAL	WHITE			
3 - WAY 12 CONDUCTOR	RED	RED	RED \ BLACK	BLACK	
	YELLOW	ORANGE	ORANGE \ BLACK	WHITE \ BLACK	
	GREEN	GREEN	GREEN \ BLACK	BLUE	
	SPARE	BLUE\BLACK	BLACK \ WHITE		
	NEUTRAL	WHITE			
4 - WAY 15 CONDUCTOR	RED	RED	RED \ BLACK	BLACK	RED \ WHITE
	YELLOW	ORANGE	ORANGE \ BLACK	WHITE \ BLACK	BLACK \ WHITE
	GREEN	GREEN	GREEN \ BLACK	BLUE	GREEN \ WHITE
	SPARE	BLUE\BLACK		BLUE \ WHITE	
	NEUTRAL	WHITE			

PEDESTRIAN SIGNAL CABLE COLOR ASSIGNMENTS

SIGNAL ASSEMBLY & CABLE USED	SIGNAL FUNCTION	WIRE COLOR
WALK SIGNAL W/ PUSHBUTTON 7 CONDUCTOR	DON'T WALK	RED
	WALK	GREEN
	NEUTRAL FOR WALK SIGNAL	WHITE
	PEDESTRIAN PUSHBUTTON	BLACK
	NEUTRAL FOR PUSHBUTTON	ORANGE
	SPARE CONDUCTOR	WHITE \ BLACK
	SPARE CONDUCTOR *	BLUE \ BLACK
WALK SIGNAL W/ PUSHBUTTON 7 CONDUCTOR	RED	RED
	YELLOW	ORANGE
	GREEN	GREEN
	NEUTRAL FOR TRAFFIC SIGNAL	WHITE
	PEDESTRIAN PUSHBUTTON	BLACK
	NEUTRAL FOR PUSHBUTTON	WHITE \ BLACK
	SPARE CONDUCTOR *	BLUE \ BLACK

* IF 14/7 FEEDS MORE THAN ONE BUTTON, SPLIT THE BUTTONS AND USE BLUE WITH BLACK TRACER FOR THE ADDITIONAL BUTTON.

TABLE NOTES:
1. INSTALL SEPARATE CABLE BETWEEN CLOSURE AND EACH TRAFFIC SIGNAL ASSEMBLY. WIRE EACH TRAFFIC SIGNAL SECTION SEPARATELY BACK TO CABLE CLOSURE. JUMPERS BETWEEN TERMINALS ARE NOT ALLOWED EXCEPT ON NEUTRAL CONDUCTORS.
2. WIRE ALL SIGNALS, SAME DIRECTION FROM CONTROLLER, SEPARATELY WITH CONDUCTORS IN 21 CONDUCTOR CABLE, EVEN IF INDICATIONS ARE IDENTICAL.
3. CABLES THAT FEED PEDESTRIAN INDICATIONS, PUSH BUTTONS, AND DETECTORS BYPASS CABLE CLOSURE.
4. REFER TO STANDARD SHEET TR-1113_01 FOR CABLE CLOSURE - TYPE A.

NOTES:
SERVICE CONDUCTORS: THW, THWN OR XHHW. INDIVIDUAL WIRES MAY BE USED IN LIEU OF MULTI-CONDUCTOR CABLE.
ALL WORK ON UTILITY POLES MUST COMPLY WITH CURRENT PURA REGULATIONS AND NESC RULES.
(A) ATTACH SPAN AT LEAST 12" (300) BELOW LOWEST POWER COMPANY ATTACHMENT, AND AT LEAST 40" (1000) ABOVE HIGHEST COMMUNICATIONS ATTACHMENT, UNLESS OTHERWISE DIRECTED ON PLANS.
(B) ELBOW OR "T" FITTING MUST HAVE NOTCH FOR SERRATED TABBED LOCKRING.
(C) TOP BRACKET CENTER HUB SHALL BE MIN 4" (100) ROUND AND 3" (75) DEEP OR EQUAL VOLUME. SERRATION CAST IN HUB OR TABBED OR SERRATED LOCKRING, TOP OPENING NOT THREADED.
(D) NIPPLE LENGTH DEPENDS ON SPAN HEIGHT.
(E) SAG OF SPAN TO BE 5%± LENGTH, UNLESS OTHERWISE ALLOWED BY ENGINEER.
(F) FACE ALL ENTRANCE FITTINGS TOWARD CABLE CLOSURE.
(G) INSTALL EXTENSION NIPPLE ON TOP OF SIGNAL HOUSING SO BOTTOM OF ALL SIGNALS ARE EVEN.
(H) REFER TO TR-GS_01 "SIGN FACE SHEET ALUMINUM, R-SERIES SIGNS TYPICAL DETAILS", AND TO TR-1114_01 FOR SIGN HANGER ASSEMBLY. MAXIMUM SIGN SIZE 36" X 36" (900 X 900). ALL STAINLESS STEEL HARDWARE.
SECURE LOUVERS TO TUNNEL VISORS WITH 3 STAINLESS STEEL SCREWS.

REV.	DATE	REVISION DESCRIPTION
4	1-2018	REVISED GROUNDING NOTE FOR SPAN AND OTHER MINOR REVISIONS.
3	3-2015	REMOVED STRAIN INSULATOR.
2	5-2013	MINOR REVISIONS.
1	4-2012	MINOR REVISIONS.

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

Plotted Date: 5/22/2018

DIMENSIONS ARE IN ENGLISH (") & METRIC UNITS (mm).
METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

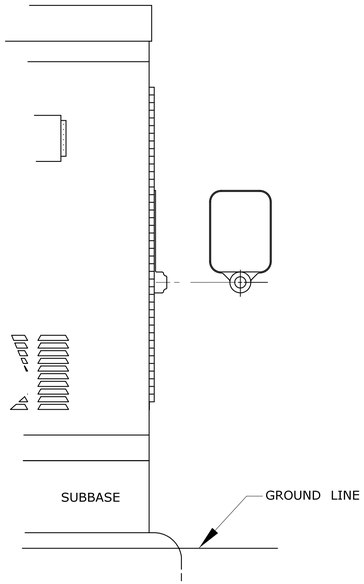
Filename: CTDOT_TRAFFIC_STD_2018-05-21.dgn Model: TR-1105_01

SUBMITTED BY: NAME/DATE/TIME:
Tracy L. Fogarty, P.E. 2018.08.16 12:13:06-04'00'
APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E. 2018.08.21 07:46:03-04'00'

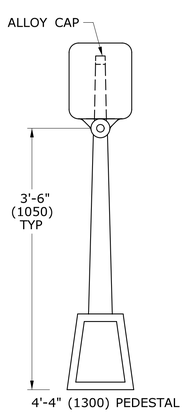
CTDOT STANDARD SHEET
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
TRAFFIC SIGNALS & CABLE ASSIGNMENTS

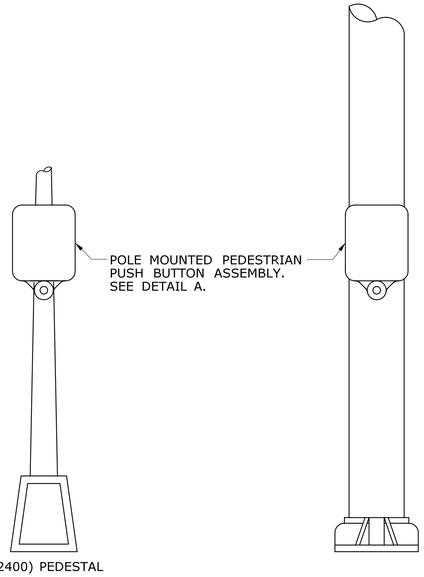
STANDARD SHEET NO.:
TR-1105_01



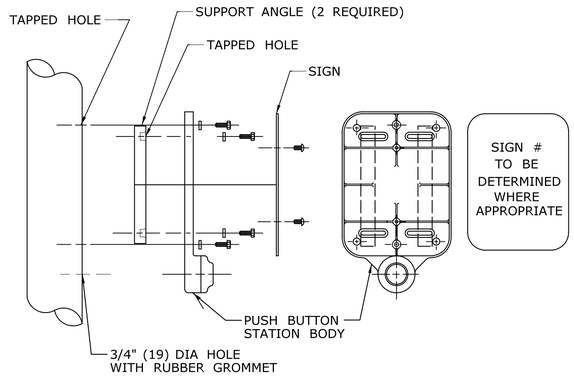
SURFACE MOUNTED



PEDESTAL MOUNTED



SPAN POLE/MAST ARM MOUNTED



DETAIL A

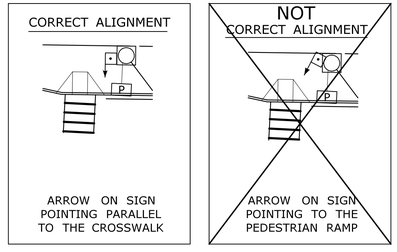
SIGN # 31-0833
USE APPROPRIATE LEFT OR RIGHT ARROW

SIGN # 31-0835

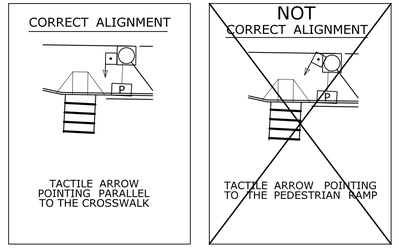
FOR CROSSING WITH SIDE STREET GREEN

GENERAL NOTES:

3'-6" (1050) FROM FINISHED GRADE SUCH AS SIDEWALK TO CENTER OF PUSH BUTTON.
PUSH BUTTON INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, CURRENT EDITION GOVERNS.
4'-4" (1300) PEDESTAL TO INCLUDE ALLOY CAP SECURED WITH STAINLESS STEEL SET SCREW.

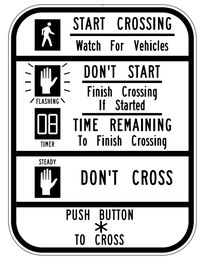


PEDESTRIAN PUSH BUTTON ALIGNMENT



ACCESSIBLE PEDESTRIAN SIGNAL AND DETECTOR

EXAMPLE ALIGNMENTS FOR EXCLUSIVE PEDESTRIAN PHASE



*USE APPROPRIATE ARROW UNLESS OTHERWISE NOTED ON PLAN.

FOR NEW PUSHBUTTON HOUSING, USE 9" x 15" SIGN NO. 31-0856.

FOR EXISTING PUSHBUTTON HOUSING, WITH 9" x 12" SIZE, USE SIGN NO. 31-0845.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN PUSH BUTTON, PEDESTAL MOUNTED
- PEDESTRIAN PUSH BUTTON, POLE MOUNTED

REV.	DATE	REVISION DESCRIPTION
3	8-2018	UPDATED PEDESTRIAN SIGN LEGENDS AND NOTES.
2	4-2014	ADDED PEDESTRIAN EXAMPLE ALIGNMENTS
1	4-2012	MINOR REVISIONS & UPDATED SIGN #31-0845.

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

Plotted Date: 8/9/2018

DIMENSIONS ARE IN ENGLISH (.") & METRIC UNITS (mm).
METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD_2018-01-25.dgn Model: TR-1107_01

SUBMITTED BY: NAME/DATE/TIME:
Tracy L. Fogarty, P.E.
2018.08.16 12:13:35-04'00'

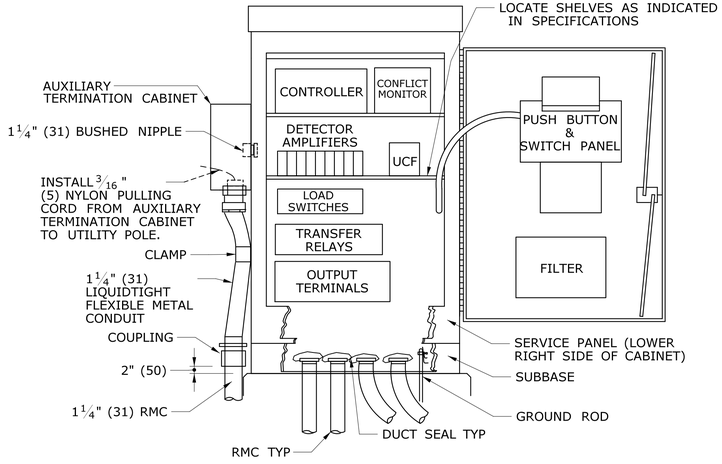
APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E.
2018.08.21 07:46:57-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

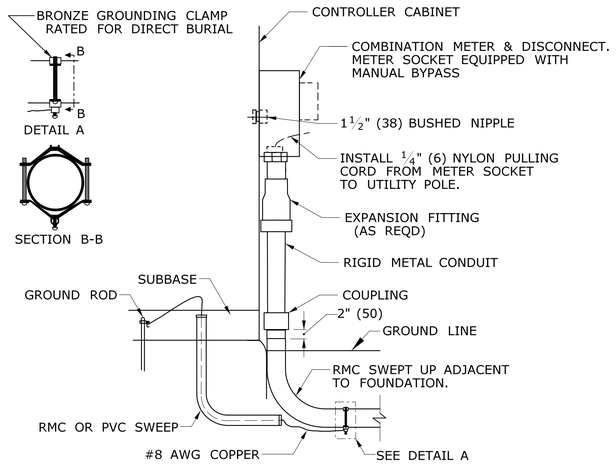
STANDARD SHEET TITLE:
PEDESTRIAN PUSH BUTTONS

STANDARD SHEET NO.:
TR-1107_01

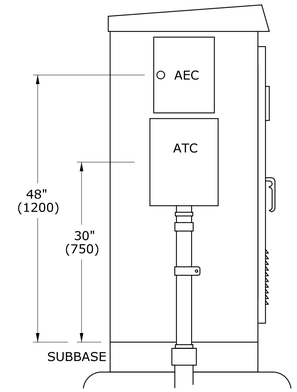


PROVIDE A MINIMUM CLEARANCE OF 6" (150) FROM THE CABINET BASE TO ALL COMPONENTS AND TERMINALS.

TYPICAL BASE MOUNTED CONTROLLER ON TYPE IV FOUNDATION

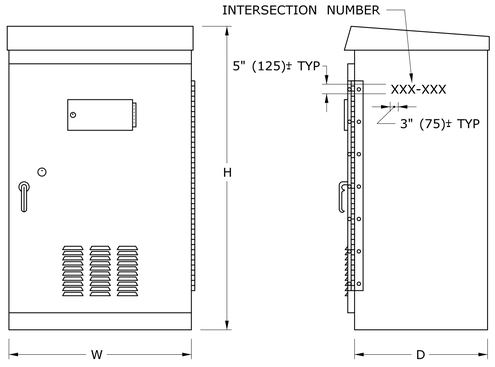


CONTROLLER CABINET WITH METERED SERVICE



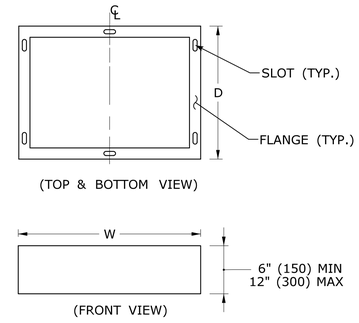
AUXILIARY EQUIPMENT CABINET (AEC)
AUXILIARY TERMINATION CABINET (ATC)

CABINET TYPE	HEIGHT	WIDTH	DEPTH
ATC	16"(400)	12"(300)	6"(150)
AEC	14"(350)	11"(275)	11"(275)



BASE MOUNTED TRAFFIC CONTROLLER (TYPE B, D & E)

CABINET TYPE	DEPTH		WIDTH		HEIGHT	
	MIN	MAX	MIN	MAX	MIN	MAX
B	17" (425)	19" (475)	30" (750)	34" (850)	52" (1300)	56" (1400)
D	25" (625)	27" (675)	42" (1050)	45" (1125)	54" (1350)	59" (1475)
E	17" (425)	19" (475)	30" (750)	32" (800)	49" (1225)	52" (1300)



SUBBASE

SLOT AND FLANGE DIMENSIONS TO BE PER MANUFACTURER.

GENERAL NOTES:

GROUT ALL BASES AFTER MOUNTING ON FOUNDATIONS, WHERE NECESSARY.
3'-0" (900) FROM SIDEWALK TO BOTTOM OF CONTROLLER.
INSTALL PEDESTALS AND POLES SO THAT DOORS AND COVERS ARE ON THE SIDE AWAY FROM THE STREET, UNLESS OTHERWISE SPECIFIED.
INSTALL CABINET SO THAT DOOR OPENS FIELD SIDE UNLESS OTHERWISE NOTED ON PLANS.
CAULK SEAM BETWEEN SUBBASE AND FOUNDATION.
STENCIL SIX DIGIT INTERSECTION NUMBER, USING BLACK PAINT ON SIDE, FRONT OR BACK OF CABINET MOST VISIBLE FROM THE ROAD.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:
- CONTROLLER ASSEMBLY
- AUXILIARY EQUIPMENT CABINET
- AUXILIARY TERMINTION CABINET

REV.	DATE	REVISION DESCRIPTION
2	5-2013	REVISED SUBBASE.
1	4-2012	REVISED CABINET TYPES & MINOR REVISIONS.

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

Plotted Date: 5/15/2013

DIMENSIONS ARE IN ENGLISH (.") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: CTDOT_TRAFFIC_STD.dgn Model: TR-1108_01

SUBMITTED BY: NAME/DATE/TIME:
Tracy L. Fogarty 2013.07.29 14:04:24-04'00'

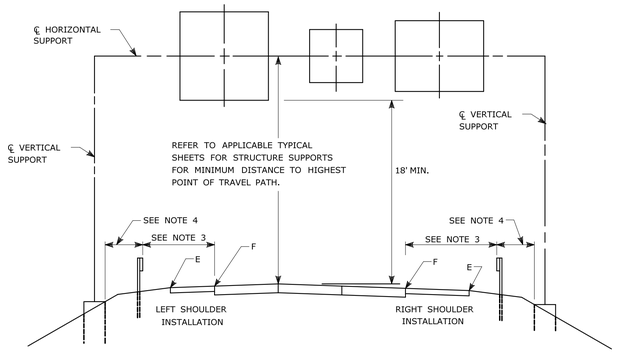
APPROVED BY: NAME/DATE/TIME:
Charles S. Harlow 2013.07.29 14:59:45-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
CONTROLLERS

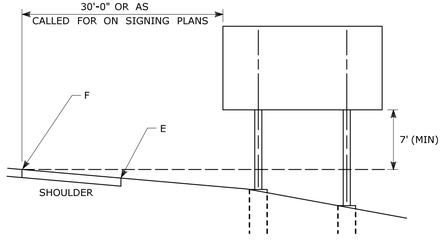
STANDARD SHEET NO.:
TR-1108_01



TYPICAL PLACEMENT OF OVERHEAD SIGNS ON SIGN SUPPORTS

NOTES:

1) FOR PLACEMENT OF CANTILEVER SIGN SUPPORT USE APPLICABLE PORTION OF ABOVE DETAIL.
2) BARRIER SYSTEMS MAY BE REQUIRED FOR BOTH SIDES OF SUPPORTS IN MEDIANS.
3) IMPACT PROTECTION SHALL BE PROVIDED FOR THE SIGN SUPPORTS LOCATED WITHIN CLEAR ZONE.
4) SIGN SUPPORT FOUNDATIONS SHALL BE LOCATED OUTSIDE OF BARRIER SYSTEMS DEFLECTION AREA.
5) ALL SIGNS ARE TO BE LEVEL, REGARDLESS OF CAMBER IN SUPPORT.



TYPICAL PLACEMENT OF SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

NOTES:

1) MIN. VERTICAL CLEARANCE ABOVE SIDEWALKS SHALL BE 7'.
2) WHERE GUIDE RAIL IS USED, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE AS SHOWN ELSEWHERE IN THE CONTRACT PLANS.
3) ON INTERSECTING ROADS AT RAMP TERMINI, THE OFFSET TO THE NEAR EDGE OF OF SIGN FACE SHALL BE 6' MIN. FROM POINT "E".
4) IF 30'-0" MIN. CANNOT BE MET, PLEASE CONTACT THE ENGINEER.

FOR MAXIMUM EFFECTIVENESS, POSITION SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS AS FOLLOWS:

ON A TANGENT SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES. SIGNS LOCATED 30 FT OR MORE FROM THE EDGE OF THE ROAD SHALL BE TURNED APPROXIMATELY 3° TOWARD THE ROAD.

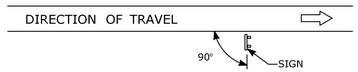


DIAGRAM "A"

ON A HORIZONTAL CURVE SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH A STRAIGHT LINE BETWEEN THE SIGN AND THE POINT AT WHICH THE SIGN SHALL BE READ.

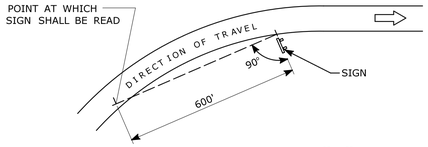
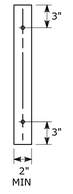


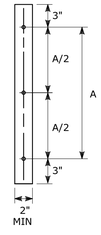
DIAGRAM "B"

SIGN ORIENTATION DETAILS FOR SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS

RETROREFLECTIVE STRIPS 48" LONG OR LESS:



RETROREFLECTIVE STRIPS OVER 48" LONG:

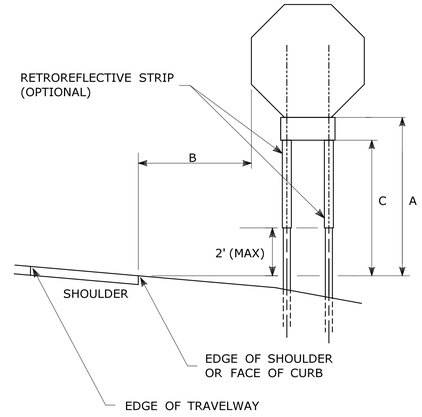


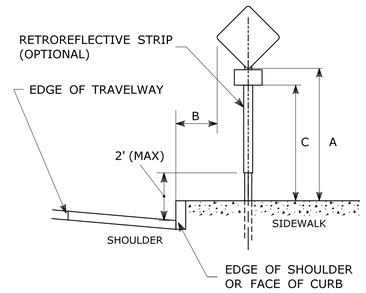
RETROREFLECTIVE STRIP DETAIL

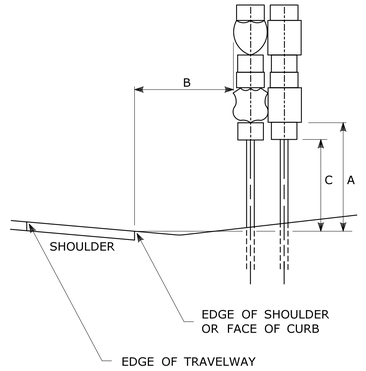
NOTES:

RETROREFLECTIVE STRIPS WHICH ARE 48 IN LONG OR LESS SHALL BE ATTACHED USING 2 BOLTS AND RETROREFLECTIVE STRIPS OVER 48 IN LONG SHALL BE ATTACHED USING 3 BOLTS AS SHOWN ON THE DETAILS ABOVE.
REFER TO STANDARD SHEET No. TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR MOUNTING DETAILS.

RETROREFLECTIVE STRIP COLOR SHALL MATCH THE BACKGROUND COLOR OF THE SIGN, EXCEPT THAT THE COLOR OF THE STRIP FOR "YIELD" AND "DO NOT ENTER" SIGNS SHALL BE RED.







TYPICAL SIGN PLACEMENT DETAIL

NOTES:

ALL SIGNS AND SHIELDS ON DIRECTIONAL ASSEMBLIES SHALL ABUT VERTICALLY.

REFER TO STANDARD SHEET No. TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR SIGN POSTS AND SIGN MOUNTING.

IF A RETFOREFLECTIVE STRIP IS USED ON SIGN SUPPORT, IT SHALL BE PLACED FOR THE FULL LENGTH OF THE SUPPORT FROM THE BOTTOM OF THE SIGN TO WITHIN 2 FT ABOVE THE EDGE OF THE ROADWAY.

PARKING SIGNS TYPICALLY USE 45° MOUNTING BRACKET.

DIM."A" MIN SIGN HEIGHT	DIM."B" MIN LATERAL OFFSET (1)	DIM."C" MIN PLAQUE HEIGHT (1)	ASSEMBLY LOCATION
7' (2)	6' 12' (3)	5'	SIGNS ON FREEWAYS AND EXPRESSWAYS EXCEPT CHEVRON ALIGNMENT SIGNS, ONE-DIRECTION LARGE ARROW SIGNS, DO NOT ENTER SIGNS, AND WRONG WAY SIGNS
5'	2'	4'	• SIGNS IN RURAL AREAS • DO NOT ENTER AND WRONG WAY SIGNS ALONG EXIT RAMPS • DO NOT ENTER AND WRONG WAY SIGNS ON LIMITED ACCESS HIGHWAYS
5'	2'	N/A	• CHEVRON ALIGNMENT SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMPS, AND IN RURAL AREAS • ONE-DIRECTION LARGE ARROW SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMPS, AND IN RURAL AREAS
4'	6' 12' (3)	N/A	INCIDENT MANAGEMENT SIGNS AND MILE POST MARKER ASSEMBLIES LOCATED ON FREEWAYS AND EXPRESSWAYS
4'	2'	4'	CENTRAL ISLANDS OF ROUNDABOUTS
7'	2' (4)	6'	BUSINESS & RESIDENTIAL AREAS WHERE PARKING OR OTHER OBSTRUCTIONS LIMIT VISIBILITY
7'	2' (4)	7'	SIDEWALKS (5)

(1) OR AS DIRECTED BY THE ENGINEER

(2) 8 FT MINIMUM HEIGHT REQUIRED IF A SUPPLEMENTAL PLAQUE IS SUBMOUNTED BELOW THE MAJOR SIGN.

(3) 6 FT FROM EDGE OF SHOULDER, WHEN SHOULDER IS OVER 6 FT WIDE
12 FT FROM EDGE OF TRAVELWAY, WHEN SHOULDER IS LESS THAN 6 FT WIDE.

(4) A LATERAL OFFSET OF AT LEAST 1 FT FROM THE FACE OF THE CURB MAY BE USED WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING UTILITY POLES ARE CLOSE TO THE CURB.

(5) A CLEAR PATH OF NOT LESS THAN 4 FT SHALL BE PROVIDED IN SIDEWALK AREAS.

REV.	DATE	REVISION DESCRIPTION
3	8-2018	INCLUDED INCIDENT MANAGEMENT AND MILE MARKER SIGNS.
2	4-2017	MINOR REVISIONS.
1	2-2011	MINOR REVISIONS.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR_1208_01_1_2018.dgn Model: TR-1208_01

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E.
2018.08.17 09:06:06-04'00'

APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E.
2018.08.21 07:48:06-04'00'

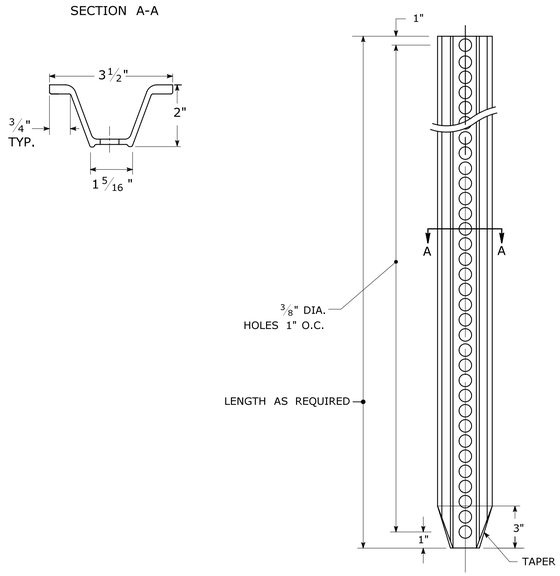
CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

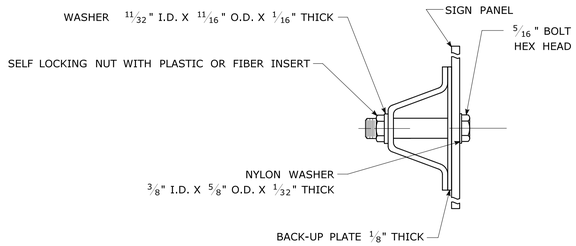
STANDARD SHEET TITLE:
SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS

STANDARD SHEET NO.:
TR-1208_01

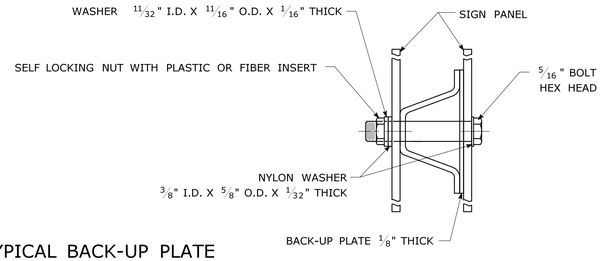
TYPICAL METAL SIGN POSTS



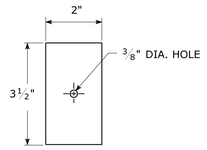
TYPICAL SIGN PANEL ATTACHMENT



TYPICAL BACK TO BACK SIGN PANEL ATTACHMENT



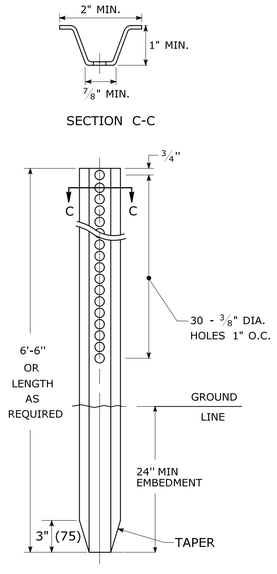
TYPICAL BACK-UP PLATE



BOLTS - STAINLESS STEEL CONFORMING TO ASTM F593, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
SELF LOCKING NUTS - STAINLESS STEEL CONFORMING TO ASTM F594, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
WASHERS - STAINLESS STEEL CONFORMING TO ASTM A240, (ALLOY TYPES 304 OR 316).

METAL DELINEATOR POST

WT./FT. = 1.12 LBS./FT. MIN.

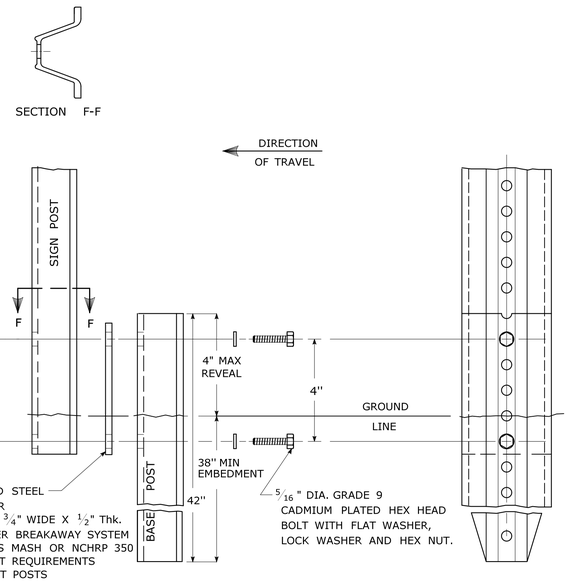


GENERAL NOTES:

1. STEEL FOR DELINEATOR POSTS SHALL BE ASTM A36 STEEL. STEEL FOR ALL OTHER POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499 GRADE 80 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT (MASS) OF 91 LBS. OR GREATER PER LINEAR YARD.
2. AFTER FABRICATION, ALL STEEL POSTS, STRAPS AND PLATES SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A123.
3. WASHERS FOR BREAKAWAY INSTALLATIONS SHALL MEET ASTM F436, TYPE 1.
4. SPACER BAR FOR BREAKAWAY INSTALLATION SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A36.
5. ALL BOLTS, NUTS, AND WASHERS FOR BREAKAWAY INSTALLATIONS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A153.
6. ALL SIGN POSTS SHALL HAVE BREAKAWAY FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS." THE BREAKAWAY FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 mph WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. SIGN POSTS SHALL BE 4 LBS./FT.

BREAKAWAY INSTALLATION

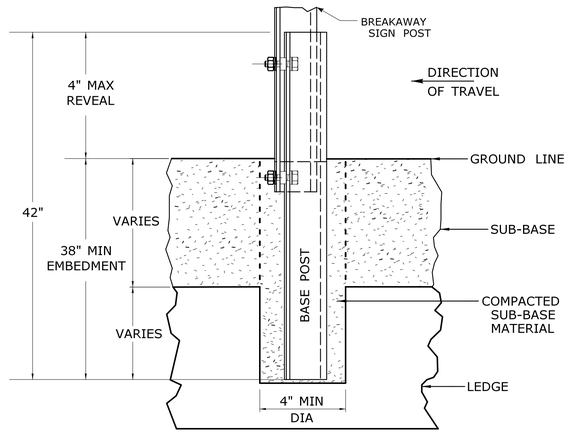
FOR 4 LBS./FT. POSTS



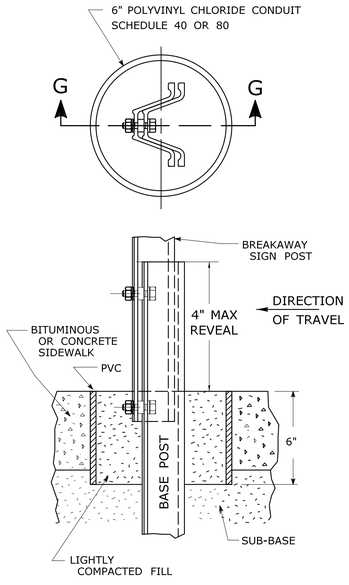
TYPICAL SIGN POST INSTALLATION IN LEDGE

LEDGE SHALL BE REMOVED TO DRIVE THE BASE POST TO A DEPTH OF 38".

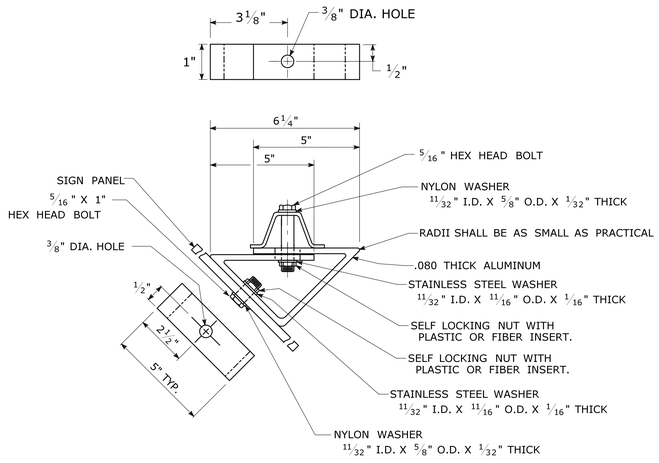
HOLE SHALL BE FILLED WITH SUB-BASE MATERIAL AND COMPACTED WITH A TAMPING BAR, OR TECHNIQUE APPROVED BY THE ENGINEER, PRIOR TO BASE POST INSTALLATION.



TYPICAL SLEEVE FOR PAVED AREAS



45° MOUNTING BRACKET FOR INSTALLATION OF PARKING SIGNS



REV.	DATE	REVISION DESCRIPTION
2	6-2017	SIGN POST REVISIONS.
1	2-2011	MINOR REVISIONS.

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

Plotted Date: 6/6/2017

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1208_02_May_2017_Revision.dgn Model: TR-1208_02

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E. 2017.06.07 07:30:30-04'00'
Mary E. Baker, P.E. 2017.06.13 15:28:14-04'00'
APPROVED BY: NAME/DATE/TIME:
Gregory M. Dorosh, P.E. 2017.06.15 09:27:29-04'00'

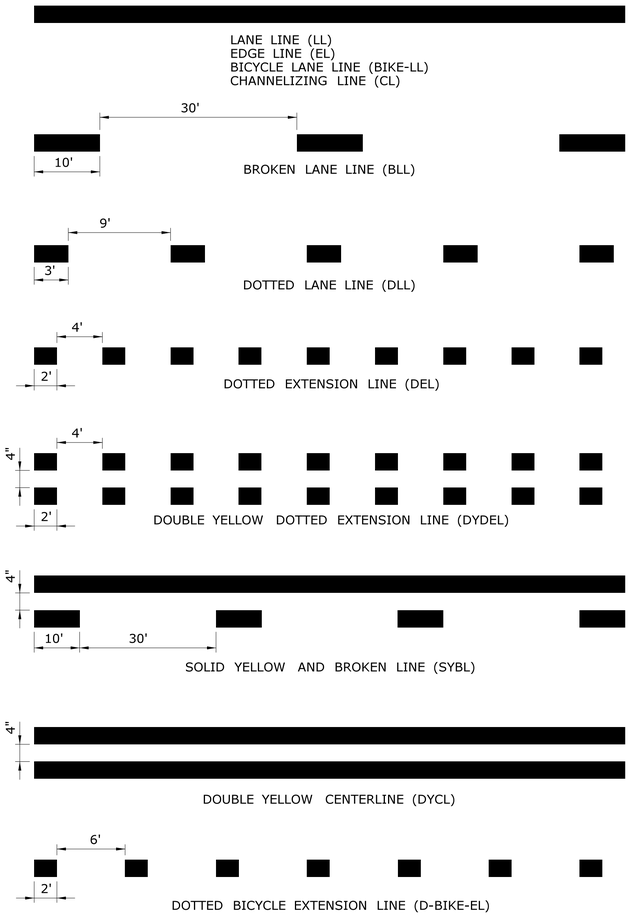
CTDOT STANDARD SHEET

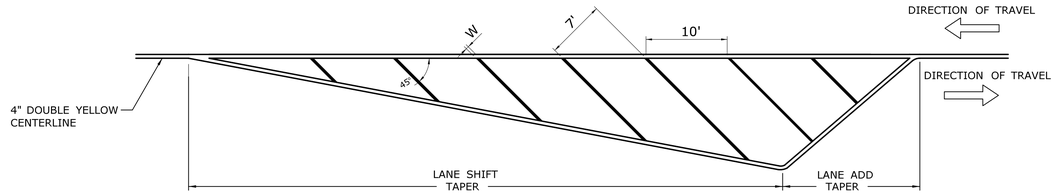
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

METAL SIGN POSTS AND SIGN MOUNTING DETAILS

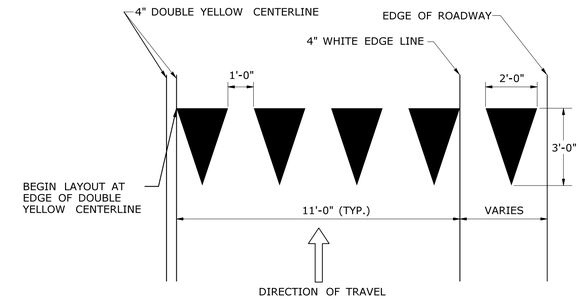
GUIDE SHEET NO.: **TR-1208_02**



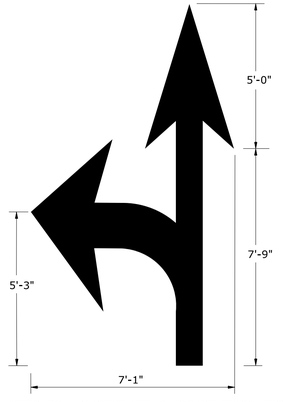


CROSS HATCHED ISLAND DETAIL
(YELLOW)

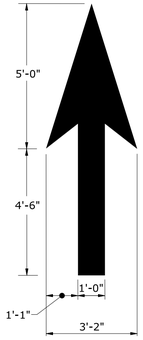
W IS TO BE 6" WHEN POSTED SPEED ≤ 45 MPH
W IS TO BE 12" WHEN POSTED SPEED > 45 MPH
CROSS HATCHED ISLANDS ARE TO BE INSTALLED WHERE CALLED FOR ON THE PLANS



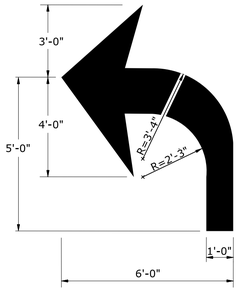
YIELD LINE DETAIL
(WHITE)



REFER TO ADJACENT VIEWS FOR DIMENSIONING
27.0 S.F.



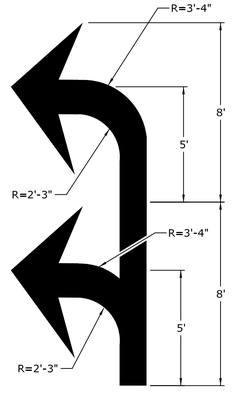
12.5 S.F.



15.5 S.F.

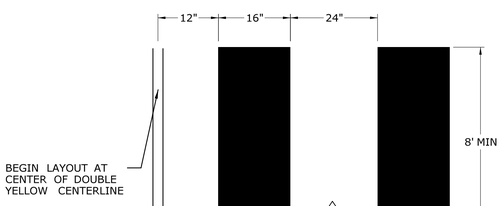
27.0 S.F.
LEFT & RIGHT
ARROW COMBO

38.5 S.F.
3 WAY ARROW
COMBO



35 S.F.
DOUBLE LEFT
ARROW

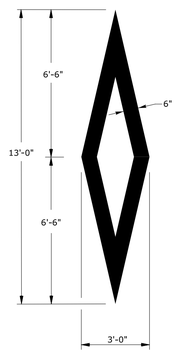
PAVEMENT ARROW DETAILS
(WHITE)
ARROWS SHALL BE CENTERED IN TRAVEL LANE



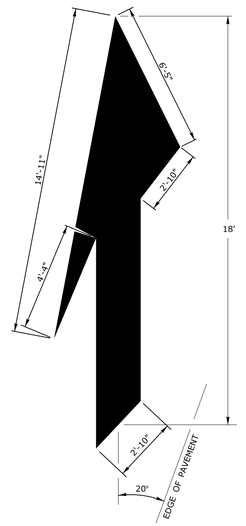
CROSSWALK DETAIL
(WHITE)

NOTES :

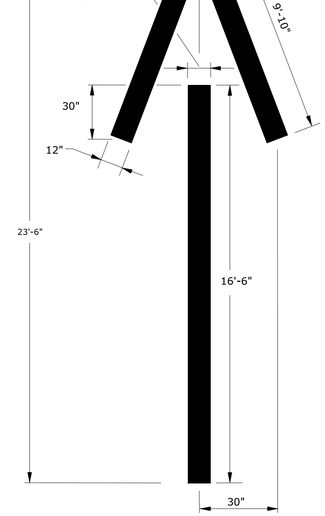
1. AREA OF PAVEMENT MARKINGS AS INDICATED IS APPROXIMATE.
2. RIGHT TURN PAVEMENT MARKING ARROWS ARE MIRROR IMAGE OF LEFT TURN PAVEMENT MARKING ARROWS.



WHITE PREFERENTIAL
LANE SYMBOL
13.0 S.F.



WHITE LANE
REDUCTION ARROW
41.8 S.F.



WHITE WRONG WAY
PAVEMENT ARROW
36.2 S.F.

REV.	DATE	REVISION DESCRIPTION
1	8-2018	REMOVED ROUNDABOUT MARKINGS.

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

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_04.dgn Model: CT_Civil_2D_Sheet

SUBMITTED BY:	NAME/DATE/TIME:
Mark Makuch	Mark F. Makuch, P.E. 2018.08.17 09:07:44-04'00'
APPROVED BY:	NAME/DATE/TIME:
	Mark F. Carlino, P.E. 2018.08.21 07:48:45-04'00'

CTDOT
STANDARD SHEET

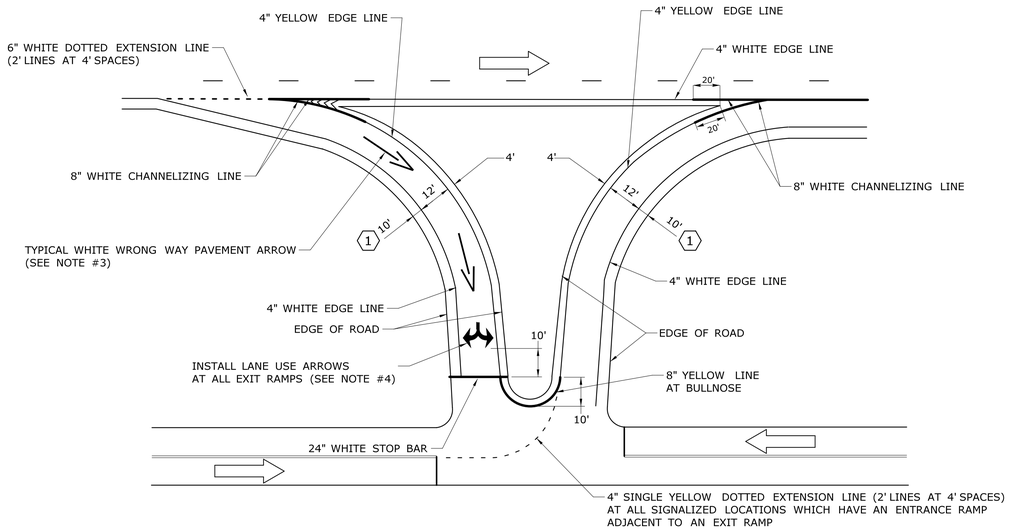
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

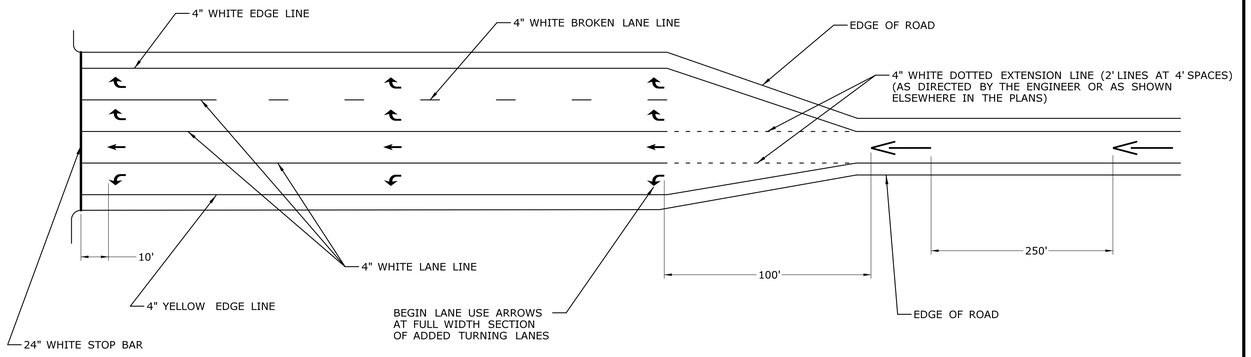
PAVEMENT MARKING LINES AND SYMBOLS

STANDARD SHEET NO.:

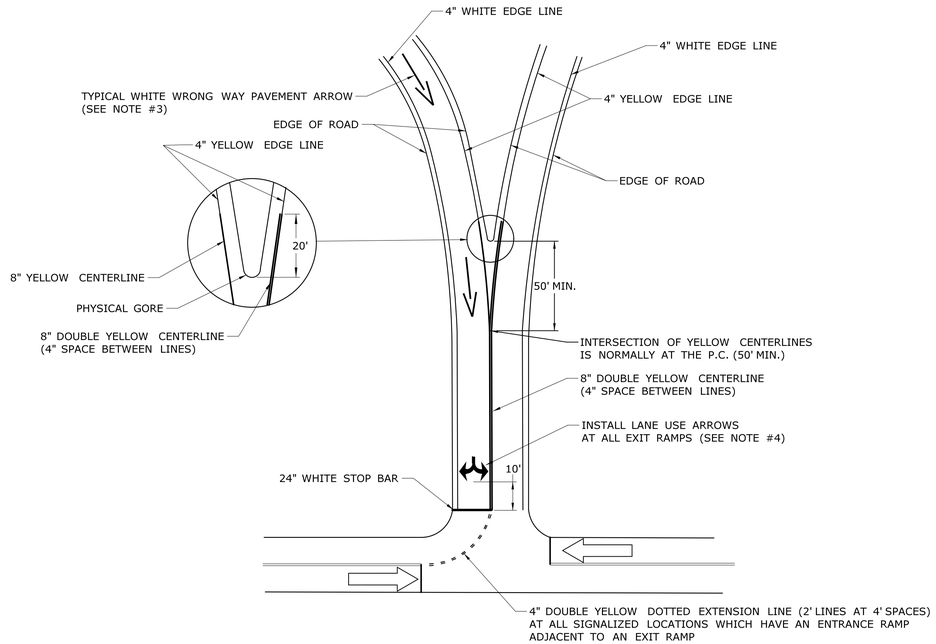
TR-1210_04



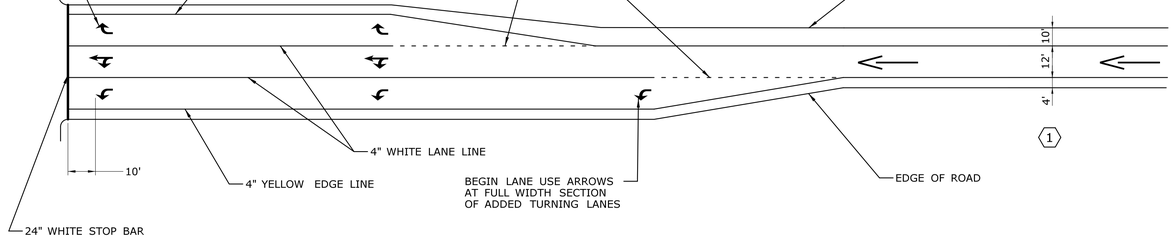
(R) TYPICAL RAMP TREATMENT ON ABUTTING RAMPS WITH MEDIAN



(T) TYPICAL RAMP TREATMENT FOR DOUBLE TURN LANES



(S) TYPICAL RAMP TREATMENT ON ABUTTING RAMPS WITHOUT MEDIAN



(U) TYPICAL RAMP TREATMENT FOR SHARED DOUBLE TURN LANES

NOTES :

1. IF LANE OR SHOULDER WIDTH IS LESS THAN DIMENSION SHOWN, CONTACT THE ENGINEER.
2. SEE DETAILS (J) AND (P) ON STANDARD SHEET "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS" (SHEET #TR-1210_06) FOR RELATIONSHIP OF DIRECTIONAL LINES AND NORMAL EDGE LINE TO EDGE OF TRAVELWAY.
3. TWO WHITE WRONG WAY PAVEMENT ARROWS SHOULD BE INSTALLED ON ALL EXIT RAMPS. THE FIRST SHALL BE INSTALLED 100' FROM THE LANE-USE ARROW(S), THE SECOND SHOULD BE 250'± FROM THE FIRST WHERE SPACE PERMITS.
4. FOR EXIT RAMPS WITH MORE THAN ONE LANE, INSTALL LANE USE ARROWS IN EACH LANE. INSTALL SETS OF LANE USE ARROWS EQUALLY SPACED FROM THE STOP BAR TO THE BEGINNING OF THE MULTI LANE SECTION (160' MAX SPACING).
5. USE A 4" WHITE LANE LINE TO SEPARATE AN EXCLUSIVE LEFT (OR RIGHT) TURN LANE FROM AN ADJACENT THROUGH LANE OR AN ADJACENT SHARED THROUGH LANE.
6. USE A 4" BROKEN LANE LINE TO SEPARATE DUAL EXCLUSIVE LEFT (OR RIGHT) TURN LANES.
7. DIMENSION FROM THE FIRST LANE USE ARROW TO STOP BAR IS FOR EXIT RAMPS ONLY.
8. SEE STANDARD SHEETS "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS" (SHEET #TR-1210_05 & SHEET #TR-1210_06) FOR DETAILS (A) THRU (Q).

REV.	DATE	REVISION DESCRIPTION

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

Plotted Date: 4/3/2017

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_07.dgn Model: CT_Civil_2D_Sheet

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E. 2017.04.19 11:12:43-04'00'

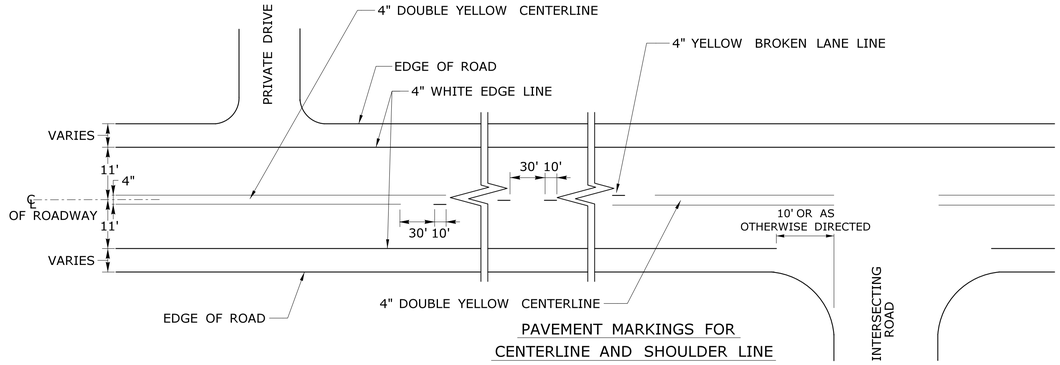
APPROVED BY: NAME/DATE/TIME:
Gregory M. Dorosh, P.E. 2017.04.20 13:23:45-04'00'

CTDOT
STANDARD SHEET

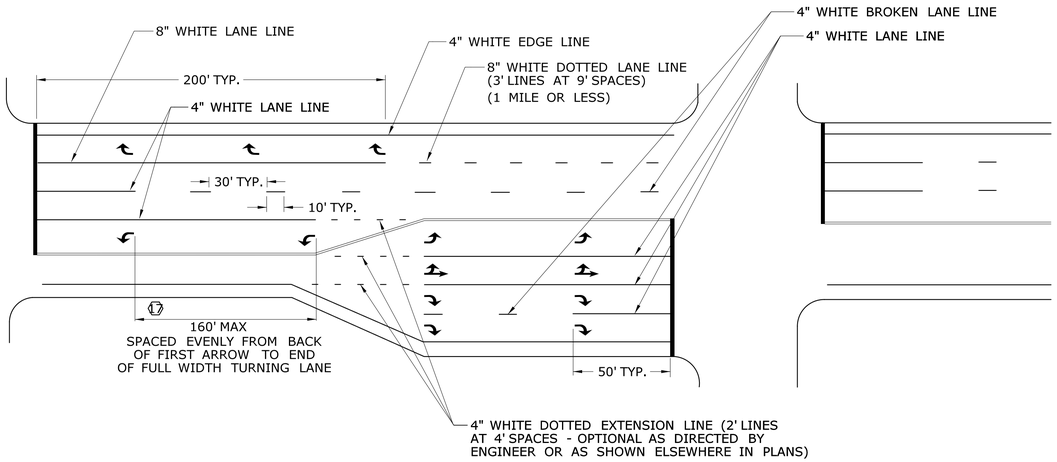
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
PAVEMENT MARKINGS FOR EXIT RAMPS

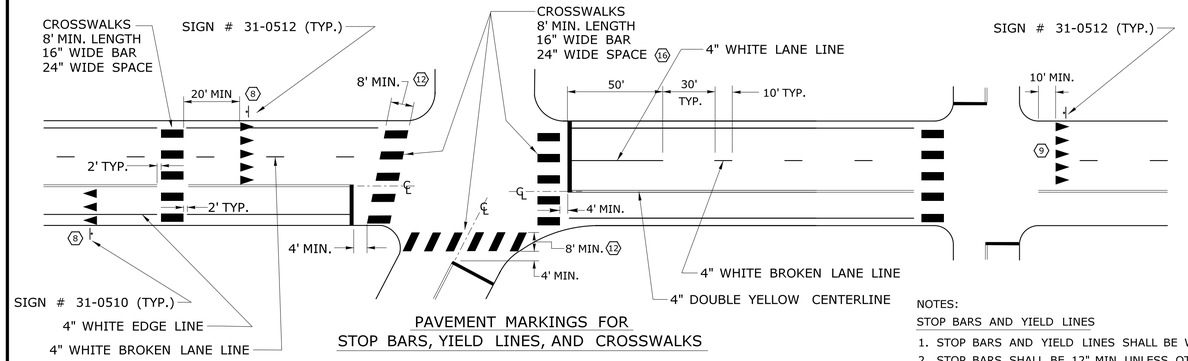
STANDARD SHEET NO.:
TR-1210_07



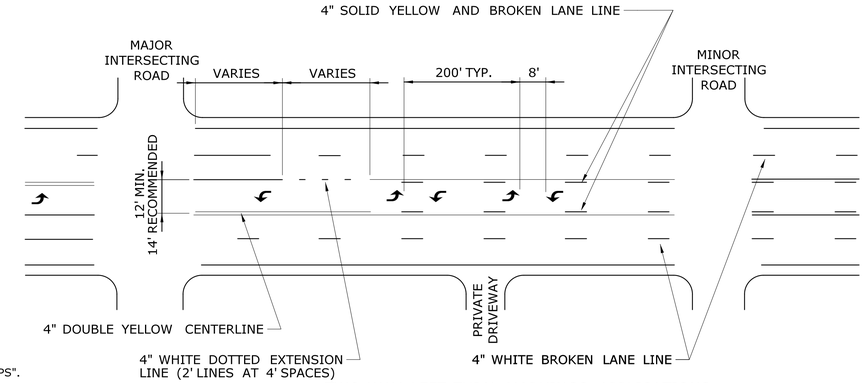
PAVEMENT MARKINGS FOR
CENTERLINE AND SHOULDER LINE



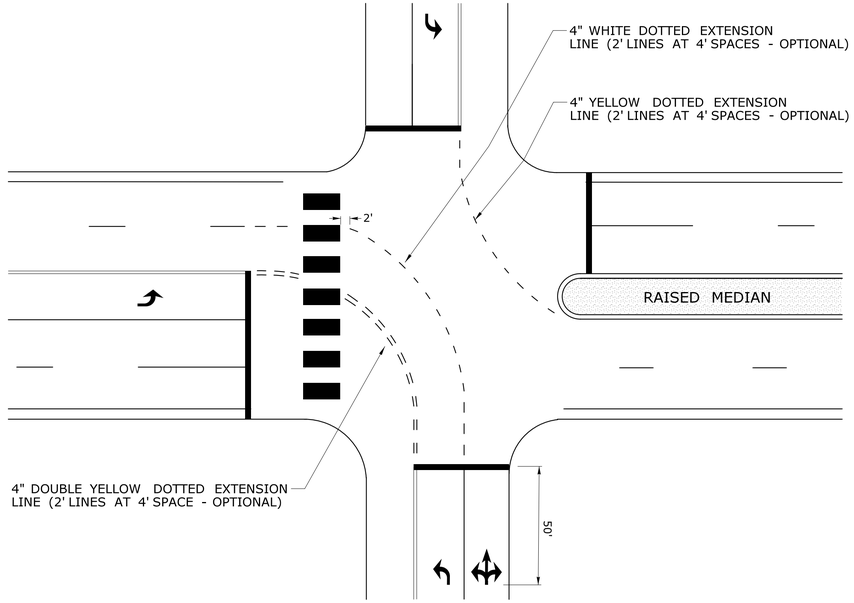
PAVEMENT MARKINGS FOR TURNING LANES
AND ROAD LANE-DROP



PAVEMENT MARKINGS FOR
STOP BARS, YIELD LINES, AND CROSSWALKS



TWO-WAY LEFT-TURN MARKINGS APPLICATIONS



TURNING EXTENSIONS

NOTES:

STOP BARS AND YIELD LINES

1. STOP BARS AND YIELD LINES SHALL BE WHITE.
2. STOP BARS SHALL BE 12" MIN. UNLESS OTHERWISE NOTED ON PLANS.
3. STOP BARS TO BE PLACED A MINIMUM OF 4' IN ADVANCE OF THE NEAREST EDGE OF CROSSWALK AND SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY.
4. IN THE ABSENCE OF A MARKED CROSSWALK THE STOP BAR SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY, AT THE DESIRED STOPPING POINT AT LEAST 5' AND NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.
5. THE STOP SIGN SHOULD BE PLACED IN LINE WITH THE STOP BAR. HOWEVER, IF THE STOP SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP BAR SHOULD BE PLACED AT THE STOPPING POINT.
6. FOR STOP BARS AT RAMPS SEE DETAILS "R", "S", "T", & "U" AND NOTES ON TRAFFIC STANDARD SHEET TR-1210 07 "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS EXIT RAMPS".
7. FOR YIELD LINE INSTALLATIONS, ONLY FULL TRIANGLES ARE TO BE INSTALLED.

(8) MID-BLOCK CROSSWALKS ARE CROSSWALKS LOCATED MORE THAN 50 FEET FROM A SIGNALIZED OR UNSIGNALIZED INTERSECTION. YIELD LINES ASSOCIATED WITH MIDBLOCK CROSSWALKS SHALL BE INSTALLED AND SHOULD BE LOCATED 20 TO 50 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE OR AS DIRECTED BY THE ENGINEER.
WHERE A YIELD LINE EXISTS ON AN APPROACH TO A CROSSWALK, THE APPROAPRIATE "YIELD TO PEDESTRIANS" SIGN IS REQUIRED.

(9) FOR CROSSWALKS AT UNSIGNALIZED INTERSECTIONS WITH MINOR STREET STOP CONTROL, YIELD LINES SHALL BE INSTALLED ON MULTI-LANE APPROACHES, BUT NOT SINGLE LANE APPROACHES.

10. THE YIELD SIGN SHOULD BE PLACED IN LINE WITH A YIELD LINE. HOWEVER, IF THE YIELD SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO YIELD, THE YIELD LINE SHOULD BE PLACED AT THE YIELDING POINT.

CROSSWALKS

11. CROSSWALK MARKINGS SHALL BE WHITE.

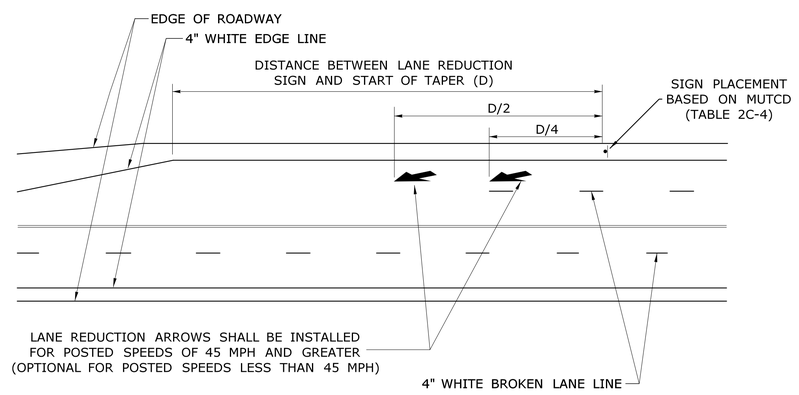
(12) AT LOCATIONS WHERE THE CROSSWALK IS SKEWED, BARS TO BE PARALLEL TO ℄ AND ENDS OF BARS TO BE PARALLEL. THE LENGTH OF THE BARS WILL VARY DEPENDING ON THE ANGLE OF SKEW.

13. BARS SHOULD BE NO CLOSER THAN 1' FROM EDGE OF ROAD.
14. ONLY FULL LENGTH BARS ARE TO BE INSTALLED.
15. DECORATIVE CROSSWALKS SHALL BE BANDED FROM CURB TO CURB WITH A MINIMUM 12" WIDE WHITE TRANSVERSE LINE ALONG EACH EDGE.

(16) 24" WIDE SPACE TO BE CENTERED ON YELLOW CENTERLINE.

PAVEMENT MARKINGS FOR TURNING LANES

(17) INSTALL AT LEAST TWO ARROWS PER LANE WHERE STORAGE LENGTH IS GREATER THAN 150 FEET.



LANE REDUCTION TRANSITIONS

REV.	DATE	REVISION DESCRIPTION
1	8-2018	REVISED YIELD LINE SIGNAGE AND NOTES.

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

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_08.DGN Model: TR-1210_05

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E.
2018.08.17 09:10:18-04'00'

APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E.
2018.08.21 07:49:18-04'00'

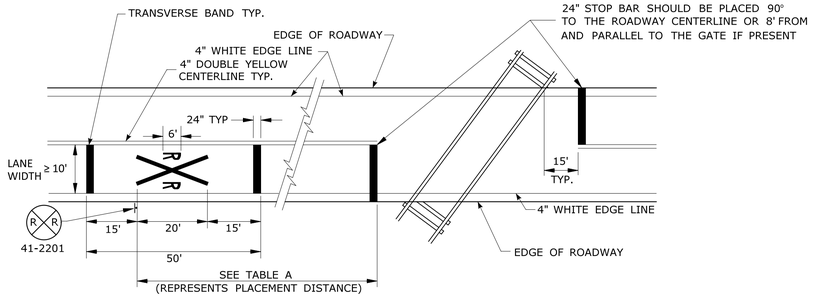
CTDOT
STANDARD SHEET

OFFICE OF ENGINEERING

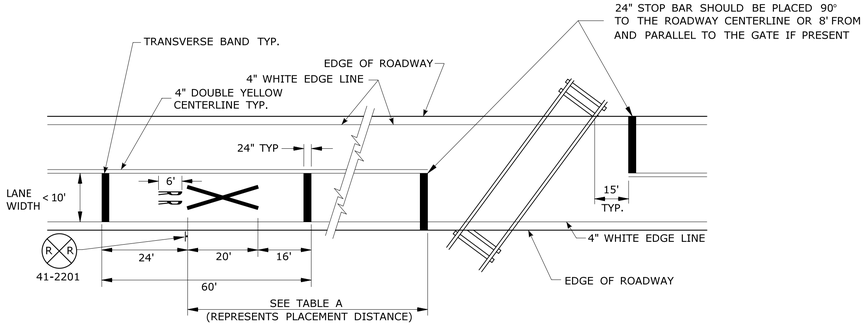
STANDARD SHEET TITLE:
PAVEMENT MARKINGS
FOR NON FREEWAYS

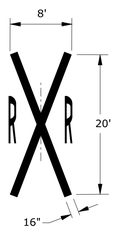
STANDARD SHEET NO.:
TR-1210_08

TYPICAL RAILROAD GRADE CROSSING DETAIL (LANE WIDTH ≥ 10')

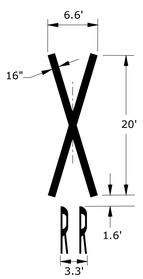


TYPICAL RAILROAD GRADE CROSSING DETAIL (LANE WIDTH < 10')

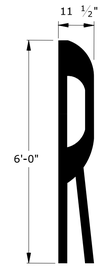




67.5 S.F.



67.5 S.F.



5.75 S.F.

TABLE A	
POSTED OR 85 PERCENTILE SPEED M.P.H.	MINIMUM DISTANCE FT.
20	100
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400
65	475

NOTES:

GENERAL:

1. AREA OF PAVEMENT MARKING SYMBOLS AS INDICATED IS APPROXIMATE.
2. REFER TO STANDARD SHEET TR-1210_04 FOR PAVEMENT MARKING LINE DETAILS.

RAILROAD GRADE CROSSINGS:

3. RAILROAD MARKINGS SHALL BE WHITE.
4. ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS THE APPROACH LANES AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

PARKING STALLS:

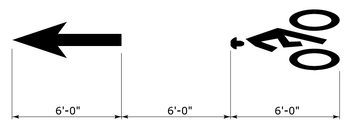
(5) AUTOMOBILE ACCESSIBLE PARKING SPACES SHALL BE 15' WIDE INCLUDING 5' OF CROSSHATCH.

(6) VAN ACCESSIBLE PARKING SPACES SHALL BE 16' WIDE INCLUDING 8' OF CROSSHATCH.

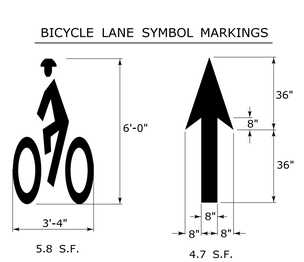
(7) ACCESS AISLES FOR ANGLED VAN PARKING SPACES SHALL BE LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE.

8. CROSS HATCHED ACCESS AISLES SHALL NOT BE SHARED BETWEEN PARKING SPACES.

TYPICAL LONGITUDINAL SPACING



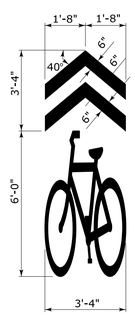
BICYCLE LANE SYMBOL MARKINGS



5.8 S.F.

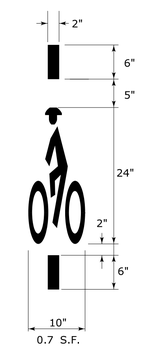
4.7 S.F.

SHARED LANE SYMBOL MARKING



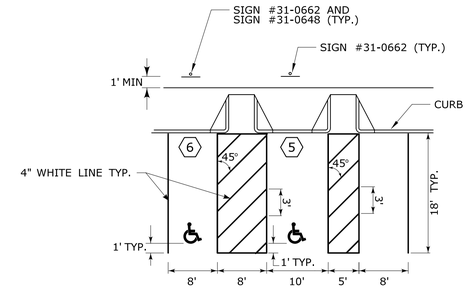
9.7 S.F.

BICYCLE DETECTOR SYMBOL MARKING

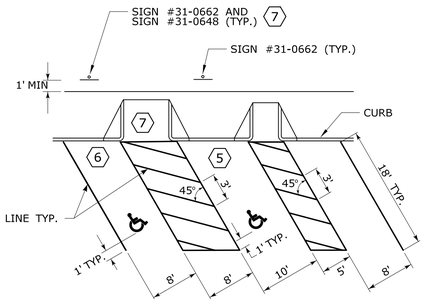


0.7 S.F.

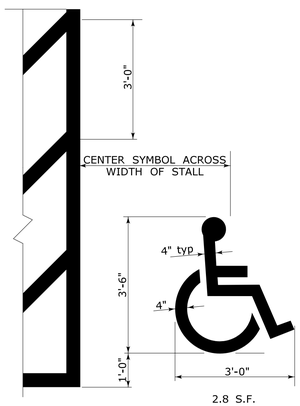
TYPICAL PERPENDICULAR PARKING STALLS DETAIL



TYPICAL ANGLE PARKING STALLS DETAIL



ACCESSIBLE PARKING SPACE SYMBOL



2.8 S.F.

REV.	DATE	REVISION DESCRIPTION

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

Plotted Date: 4/3/2017

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_09.dgn Model: CT_Civil_2D_Sheet

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E. 2017.04.19 11:17:36-04'00'

APPROVED BY: NAME/DATE/TIME:
Gregory M. Dorosh, P.E. 2017.04.20 13:26:20-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

PAVEMENT MARKINGS FOR BICYCLE LANES, PARKING STALLS, AND RAILROAD GRADE CROSSINGS

STANDARD SHEET NO.:

TR-1210_09

E5 - SERIES

E5-1

COPY & BORDER - WHITE
BACKGROUND - GREEN

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	51-6147	2

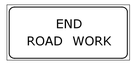
16 - SERIES

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-M	5.0	30X24	80-1613	1
16-H	17.5	60X42	80-1608	2
16-E	35.0	84X60	80-1605	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-S	10.0	48X30	80-1619	2

G20 - SERIES

G20-2a



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	8.0	48X24	80-9612	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9711	1
	16.0	48	80-9712	2

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	7.0	72X14	80-9720	

VARIABLE ARROW
COPY & BORDER - WHITE
BACKGROUND - BLUE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	50-5934	2

G20-2a

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	90.0	120X108	80-9728	

M4 - SERIES

M4-8

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9707	1

M4-8a

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	24X18	80-9708	1

M4-10

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.0	48X18	80-9701R	2
	6.0	48X18	80-9702L	2

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	30X24	80-9710	1

M4-9b

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	30X24	80-9703	1

M4-9b

VARIABLE ARROW

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.25	30X30	80-9706	1

R4 - SERIES

R4-7

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	24X30	31-1526	1

R4-9

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.0	24X30	31-1517	1
	12.0	36X48	31-1518	1
	20.0	48X60	31-1519	2

R1 - SERIES

R1-1

COPY & BORDER - WHITE
BACKGROUND - RED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	5.19	30	31-0552	1
	13.30	48	31-0557	2

R1-2

COPY & BORDER - RED
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.90	36	31-0523	1
	10.83	60	31-0528	2

R9 & R11 - SERIES

R9-9

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.75	30X18	80-9076	1

R9-11

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	24X18	80-9074	1

R9-11a

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9075	1

R11-2

COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.0	48X30	80-9080	2

R11-3a

VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

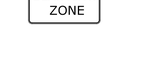
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9077	2

R11-3b

VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

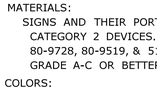
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9078	2

R11-3b



COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9081	2



COPY & BORDER - BLACK
BACKGROUND - WHITE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	22.5	60X54	31-1907	2

W1 - SERIES

W1-4

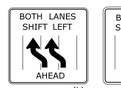
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9432L	1
	9.0	36	80-9431R	1
	16.0	48	80-9452L	2
	16.0	48	80-9451R	2

W1-6

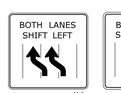
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	8.0	48X24	80-9424	2
	12.5	60X30	80-9423	2

W1-8

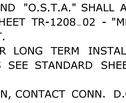
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	3.0	18X24	80-9401	1
	5.0	24X30	80-9403	1
	7.5	30X36	80-9404	1



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9433L	2
	16.0	48	80-9435R	2

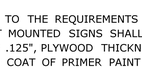


	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9434L	2
	16.0	48	80-9436R	2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9443L	2
	25.0	60	80-9445R	2

W1-4b



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9444L	2
	25.0	60	80-9446R	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9483L	2
	25.0	60	80-9485R	2

W1-4c

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	25.0	60	80-9484L	2
	25.0	60	80-9486R	2

W3 - SERIES

W3-1

OCTAGON - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9050	1
	16.0	48	80-9051	2

W3-2

TRIANGLE - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9054	1
	16.0	48	80-9055	2

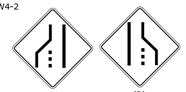
W3-3

TOP CIRCLE - RED
MIDDLE CIRCLE - YELLOW
BOTTOM CIRCLE - GREEN
COPY & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9052	1
	16.0	48	80-9053	2

W4-W6 - SERIES

W4-2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9918L	2
	16.0	48	80-9917R	2

W6-3

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9945	2

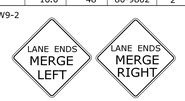
W8-W9 - SERIES

W8-1

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9901	1
	16.0	48	80-9902	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9801	1
	16.0	48	80-9802	2

W9-2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9910L	2
	16.0	48	80-9911R	2

W13 - SERIES

W13-1

SUBPLATE
VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	4.0	24	80-9569	1
	6.25	30	80-9567	1

VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9506	1
	16.0	48	80-9508	2

W3-5

VARIABLE SPEED

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9520	1
	16.0	48	80-9521	2

W16 - SERIES

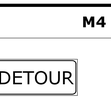
W16-15P

COPY & BORDER - BLACK
BACKGROUND - ORANGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9049	

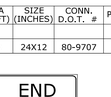
W20 - SERIES

W20-1



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	6.25	30	80-9602	1
	9.0	36	80-9603	1
	16.0	48	80-9604	2

W20-1



VARIABLE DISTANCE

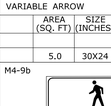
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9614	1
	16.0	48	80-9615	2

W20-2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9805	1
	16.0	48	80-9806	2

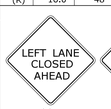
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9834	1
	16.0	48	80-9835	2

W20-1

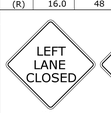


	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9837	2
(R)	16.0	48	80-9838	2

W20-2



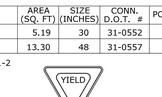
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9847	2
(R)	16.0	48	80-9848	2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L)	16.0	48	80-9846	2
(R)	16.0	48	80-9849	2

W20-7a

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9803	1
	16.0	48	80-9804	2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	32.0	96X48	80-9815	2

W16-9P

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.0	24X12	80-9870	
	3.75	30X18	80-9871	

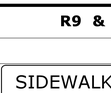
W16-3aP

VARIABLE MILEAGE

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.5	30X12	80-9872	
	4.5	36X18	80-9873	

W21 - SERIES

W21-6



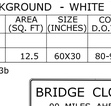
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9607	1

W22 - SERIES

W22-1

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9620	1
	16.0	48	80-9625	2

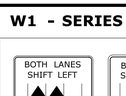
W22-2



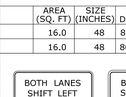
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.5	42X36	80-9623	2

W22-3

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	10.5	42X36	80-9621	2



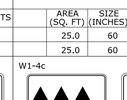
	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	4.17	60X10	80-9913	2
	12.0	96X18	80-9914	2
	3.33	48X10	80-9916	2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	16.0	48	80-9956	2

BLANK OR
VARIABLE LEGEND

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	9.0	36	80-9933	1
	16.0	48	80-9934	2



	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(1)	16.0	48	80-9957	2
(2)	9.0	36	80-9958	1
(2)	16.0	48	80-9959	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	12.5	60X30	80-9928	2
	24.0	72X48	80-9929	2

STOP-SLOW PADDLE

SIDE A
BACKGROUND - RED
COPY & BORDER - WHITE
SIDE B
BACKGROUND - ORANGE
COPY & BORDER - BLACK PLAIN

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
	2.25	18	80-9950	PADDLE

NOTES:
1. R1-SERIES SIGN THE LEGEND "O.S.T.A." SHALL APPEAR.
2. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS".
3. POSTS SHALL BE 4 LBS./FT.
4. ALL POSTS NOTED ARE FOR LONG TERM INSTALLATION. SEE STANDARD SHEET TR-1208_02.
5. FOR TEMPORARY SUPPORTS SEE STANDARD SHEET TR-1220_02 - "CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES".
6. FOR SPECIFIC SIGN DESIGN, CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
7. ALL CONSTRUCTION SIGNS TO BE PAID FOR UNDER THE CONSTRUCTION SIGNS ITEM IN THE CONTRACT.
8. MATERIALS & COLORS SHALL CONFORM TO STATE SPECIFICATIONS.

MATERIALS:
SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES. ALUMINUM THICKNESS FOR POST MOUNTED SIGNS SHALL BE .100" EXCEPT SIGN #s. 80-1605, 80-9914, 80-9815, 80-9728, 80-9519, & 51-6147 (L OR R) WHICH SHALL BE .125", PLYWOOD THICKNESS FOR POST MOUNTED SIGNS SHALL BE 1/2" EXTERIOR GRADE A-C OR BETTER. SIGN BLANKS SHALL HAVE ONE COAT OF PRIMER PAINT PRIOR TO APPLICATION OF RETROREFLECTIVE SHEETING & COPY.

COLORS:
BACKGROUND - FLUORESCENT ORANGE - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS WITH FLUORESCENT ORANGE BACKGROUND TO USE TYPE VIII RETROREFLECTIVE SHEETING.
ALL OTHER SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION
6	8-2018	REVISED POST REQUIREMENTS AND SHEETING TYPE.
5	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
4	6-2012	REVISED NOTE #1 TO REFERENCE "O.S.T.A."
3	4-2012	REVISED NEW SIGNAL SIGN(S) TO CONFORM TO 2009 MUTCD.
2	2-2011	MINOR REVISIONS.
1	3-2010	REMOVED OBSOLETE SIGNS (50-5925, 50-5935).

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

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_01_1_2018.dgn Model: TR-1220_01

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E.
2018.08.17 09:11:08-04'00'

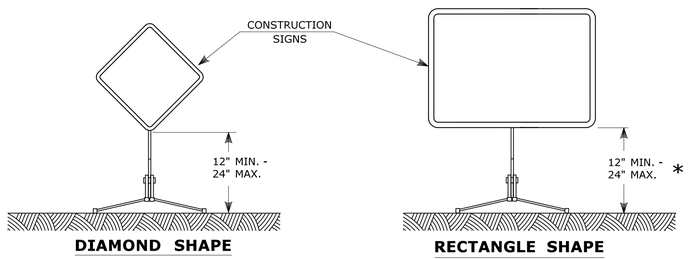
APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E.
2018.08.21 07:49:34-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS

STANDARD SHEET NO.:
TR-1220_01

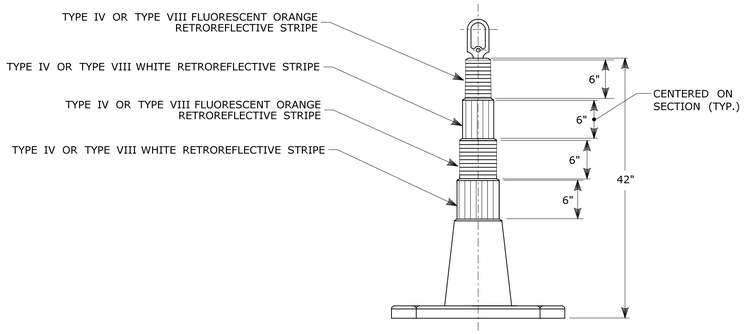


PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

1. SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
3. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
4. PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
5. PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1. SEE STANDARD SHEET TR-1220_01 - "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" FOR SIGN DETAILS.

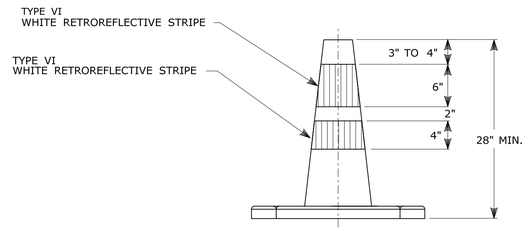
* FOR E5-1 (EXIT SIGNS) USE MIN 48".



42" TRAFFIC CONE

NOTES:

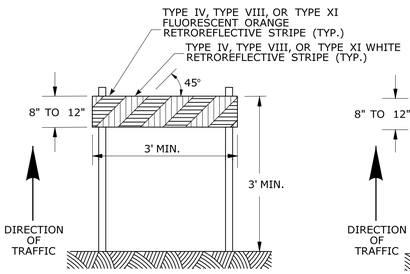
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



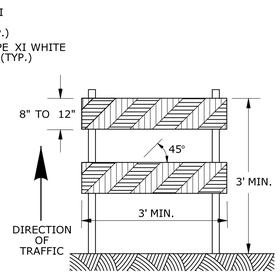
TRAFFIC CONE

NOTES:

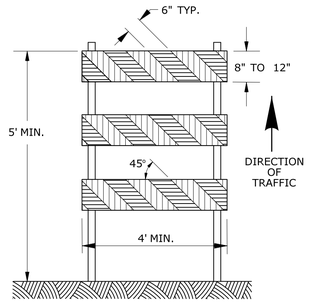
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. THE ENTIRE AREA OF WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
6. TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
7. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



TYPE I BARRICADE



TYPE II BARRICADE

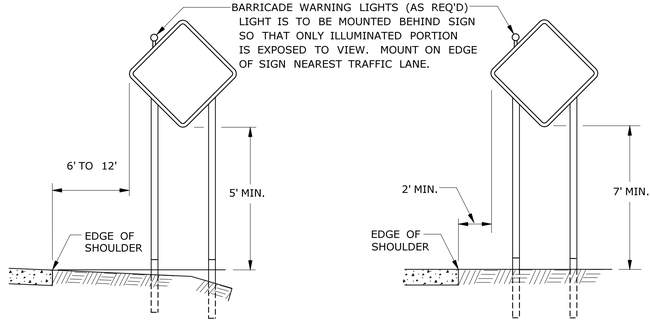


TYPE III BARRICADE

CONSTRUCTION BARRICADES

NOTES:

1. CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
2. MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE FLUORESCENT ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
6. SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



RURAL AREA

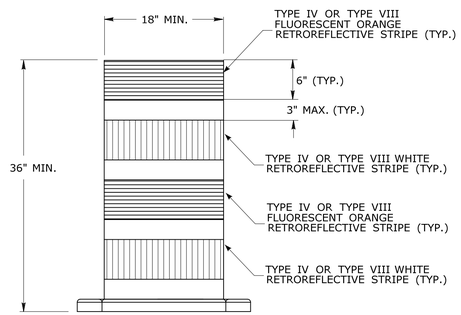
URBAN AREA

PLACEMENT OF CONSTRUCTION SIGNS
TYPICAL LONG TERM INSTALLATION

NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.

REFER TO STANDARD SHEETS:
TR-1208_01 - "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS."
TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."



TRAFFIC DRUM
FRONT VIEW

NOTES:

1. TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
4. THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.

REV.	DATE	REVISION DESCRIPTION
3	8-2018	UPDATED SHEETING TYPE AND COLOR.
2	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
1	2-2011	MINOR REVISIONS.

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

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_02_3_2018.dgn Model: TR-1220_02

SUBMITTED BY: NAME/DATE/TIME:
Mark F. Makuch, P.E.
2018.08.17 09:12:43-04'00'

APPROVED BY: NAME/DATE/TIME:
Mark F. Carlino, P.E.
2018.08.21 07:49:51-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:
CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

STANDARD SHEET NO.:
TR-1220_02