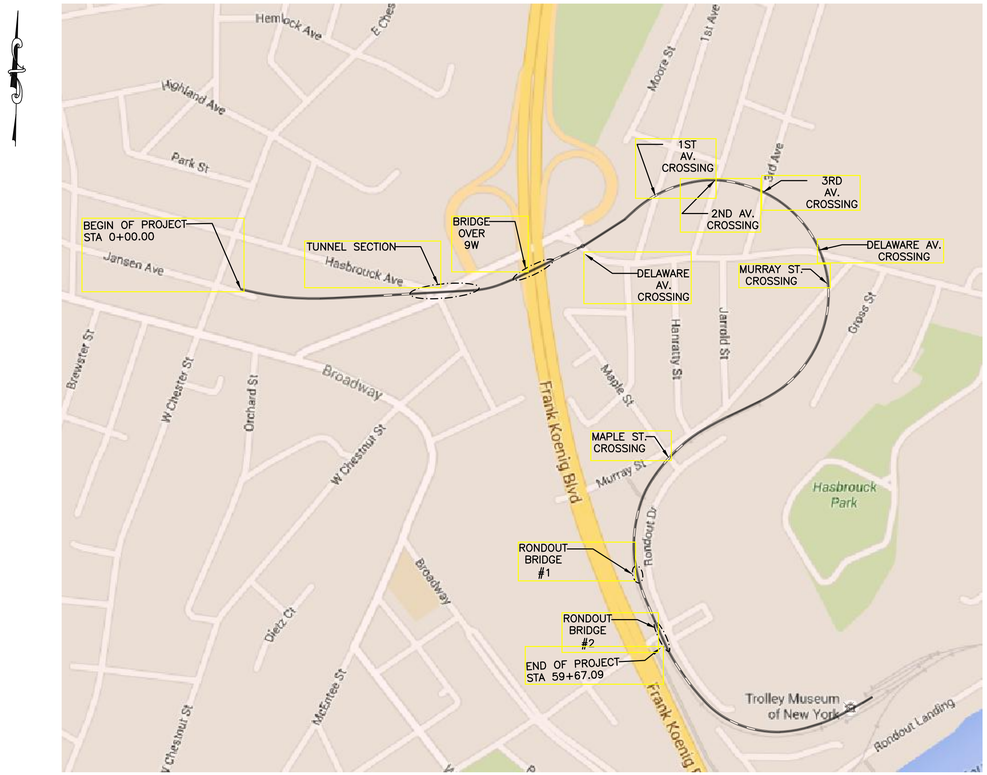
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
CITY OF KINGSTON

CONTRACT CK-EDSP-2015-001

KC JOB No. 4680-001



KEY MAP
SCALE: N.T.S
LENGTH OF THE PROJECT: 1.13 MILES

DECEMBER 2015

SHEET INDEX

CITY OF KINGSTON MAYOR: SHAYNE GALLO

Engineering and
Land Surveying, P.C.
56 Main Street
Poughkeepsie, New York 12601

THESE PLANS WERE PREPARED WITH FUNDING PROVIDED BY THE NEW YORK STATE DEPARTMENT OF STATE UNDER TITLE 11 OF THE ENVIRONMENTAL PROTECTION FUND.

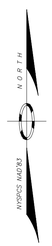
NEW YORK STATE OF OPPORTUNITY. Department of State

OWNER'S CERTIFICATION

ABBREVIATIONS

BW	BOTTOM OF PARAPET WALL	*ELEC.*	ELECTRIC	*PVC*	POINT OF VERTICAL CURVATURE
CL	CENTERLINE	*FT*	FEET	*PVI*	POINT OF VERTICAL INTERSECTION
EX. BIT DWY	EXISTING BITUMINOUS DRIVEWAY	*G*	GAS	*RCCP*	REINFORCED CONCRETE CULVERT PIPE
M.B.	MAIL BOX	*G.R.*	GUIDE RAIL	*RD*	ROAD
RCP	REINFORCED CONCRETE PIPE	*HT.*	HEIGHT	*ROW, R.O.W.*	RIGHT OF WAY
RR WALL	REINFORCED RETAINING WALL	*H.W.*	HEAD WALL	*RT.*	ROUTE, RIGHT
TW	TOP OF PARAPET WALL	*HYD.*	HYDRANT	*SHLDR.*	SHOULDER
UP	UTILITY POLE	*INV.*	INVERT	*ST.*	STREET
±	MORE OR LESS	*L.P.*	LIGHT POLE	*TEL.*	TELEPHONE
BLDG.	BUILDING	*L.O.P.*	LIMIT OF PAVING	*TEMP.*	TEMPORARY
CB	CATCH BASIN	*LB*	POUND	*THK., TH.*	THICK
CO.	COMPANY	*MH, M.H.*	MANHOLE	*TYP.*	TYPICAL
CONC.	CONCRETE	*MIN.*	MINIMUM	*VAR.*	VARIES
CULV.	CULVERT	*N.J.*	NEW JERSEY	*WB*	WEST BOUND
DIA.	DIAMETER	*NB*	NORTH BOUND	*X-SECT*	CROSS SECTION
DIST.	DISTANCE	*NO.*	NUMBER	*EOP*	EDGE OF PAVEMENT
EB	EAST BOUND	*N.T.S.*	NOT TO SCALE	*L.V.C.*	LENGTH OF VERTICAL CURVE
EL., ELEV.	ELEVATION	*PROP.*	PROPOSED	*K*	RATE OF VERTICAL CURVATURE
EXIST.	EXISTING			*MO*	MIDDLE ORDINATE OF VERTICAL CURVE
				BVCE	BEGIN OF VERTICAL CURVE ELEVATION
				BVCS	BEGIN OF VERTICAL CURVE STATION
				EVCE	END OF VERTICAL CURVE ELEVATION
				EVCS	END OF VERTICAL CURVE STATION

NORTH POINT TO BE USED ON STANDARD CONSTRUCTION SHEETS
WHERE BEARINGS REFER TO N.Y. PLANE COORDINATE SYSTEM



Linear Features

EXISTING	PROPOSED	
W W W	W W W	Water Main (Size)
G G G	G G G	Gas Main (Size)
T T T	T T T	Telephone Conduit
E E E	E E E	Electric Conduit (Highway or Utility)
CTV CTV CTV	CTV CTV CTV	Cable TV
FO FO FO	FO FO FO	Fiber Optic
(Size & Type) (Over 30" – Draw to Size)	(SIZE & TYPE)	Sanitary Sewers or Storm Drains
Concrete or Bituminous	Concrete or Bituminous	Pavements (Concrete or Bituminous)
Concrete or Bituminous	Concrete or Bituminous	Shoulders (Concrete or Bituminous)
		Curbs
(F) (C)	(C) (F)	Slopes (Cut & Fill)
5+00	10+00	Base Line
		Twp., City, County Lines
Existing R.O.W. Line	PROPOSED R.O.W. LINE	Right of Way Lines (Access Permitted)
Existing R.O.W. & No Access Line	PROP. R.O.W. & NO ACCESS LINE	Right of Way Lines (No Access)
Easements	Easements	Easements
		Property Line
x x x x x		Fence (Size & Type)
		Reset Fence
		Beam Guide Rail
		Reset Beam Guide Rail
		Noise Walls
		Wetland Limit Line
		Silt Fence
Ditch	DITCH	Ditches

Topographical Features

EXISTING	PROPOSED	
□	■	Inlets (Label Type)
"ES"	"ES"	Inlets (Type ES)
⊗	●	Manholes (Label Type or Utility)
	◪ ◒	Reset (Inlets or Manholes)
	⊠ ⊗	Reconstructed (Inlets or Manholes)
	◒ ●	Cast Iron Extension (Frame or Ring) (Inlet or Manhole)
	■	New Manhole Casting, Square Frame, Circular Cover
		R.C. End Section or C.M. Headwall
		Headwalls
		Headwalls & Aprons
W	W	Water Gate Valves
W	W	Reset Water Gate Valves
G	G	Gas Gate Valves
G	G	Reset Gas Gate Valves
Hyd.	Hyd.	Hydrants
	Hyd.	Reset Hydrants
		Utility Pole (Type & Number)
	TEMP	Temporary Utility Pole
		Traffic Signal
J.B.	J.B.	Junction Box
Ⓕ	Ⓕ	Fiber Optic Junction Box
J.B.	J.B.	Junction Box Foundation
		Signs
		Vertical Panels

Topographical Features

EXISTING	PROPOSED	
○	●	Guide Rail End Terminals
△	▲	Beam Guide Rail Anchorages
Mon. □	Mon. ■	Monuments
	Mon. ◘	ROW Monument (ROW Control Points)
	TEST PIT NUMBER	Test Pit
Boring Number ⊗	BORING NUMBER	Borings (Boring Number)
		Decidous Tree (Size, Kind)
		Evergreens
		Bush
		Hedges
		Swamp

GENERAL NOTES:

1. MATERIAL FABRICATION: ALL MATERIAL FABRICATION SHALL BE IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CONSTRUCTION SPECIFICATION: NEW YORK DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. VERTICAL DATUM IS BASED UPON NAVD 1988.
4. HORIZONTAL DATUM IS BASED ON NEW YORK STATE PLANE NAD 1983.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, COUNTY, AND MUNICIPAL LAWS, ORDINANCES, AND REGULATIONS.
6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY SAFEGUARDS TO PROTECT PUBLIC SAFETY AND ADJOINING PROPERTIES.
7. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT THE UTILITY LOCATION SERVICE BY CALLING 1-800-962-7962 AND WITH THEIR ASSISTANCE, SHALL VERIFY THE LOCATION, SIZE, AND DIMENSION OF ALL BURIED UTILITIES.
8. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE.
9. THE CONTRACTOR SHALL SCHEDULE ALL WORK AND COORDINATE ALL WORK WITH THE UTILITY COMPANIES AS REQUIRED MAINTAINING ALL UTILITIES DURING THE CONSTRUCTION.
10. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF IMPENDING WORK AND FIELD VERIFY THE ACTUAL LOCATION OF ALL UTILITIES PRIOR TO START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL NOTE THAT CABLEVISION, VERIZON, PUBLIC SERVICE ELECTRIC AND GAS COMPANY, KINGSTON WATER DEPARTMENT AND KINGSTON FIRE DEPARTMENT WILL REQUIRE A BUFFER OF 6-8 WEEKS BETWEEN NOTIFICATION AND AVAILABILITY OF CONSTRUCTION CREWS FOR ANY UTILITY RELOCATION.
11. NO TREES ARE TO BE REMOVED UNTIL VERIFIED IN THE FIELD BY THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR TREE REMOVAL. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEM ENTITLED "CLEARING AND GRUBBING".
12. ALL SIGNS AND BARRICADES SHALL BE FURNISHED BY THE CONTRACTOR AND PLACED AT LOCATIONS DESIGNATED BY THE ENGINEER, UNLESS SPECIFICALLY NOTIFIED.
13. ALL DIMENSIONS SHALL BE VERIFIED AND COORDINATED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION. ANY DEVIATIONS ARE TO BE REPORTED TO THE ENGINEER.
14. DETAILS AS SHOWN IN ANY SECTION SHALL APPLY TO ALL SIMILAR SECTIONS UNLESS OTHERWISE NOTED.
15. ALL EARTH FILL SHALL BE FREE FROM BRUSH, ROOTS, AND OTHER ORGANIC MATERIAL SUBJECT TO DECOMPOSITION.
16. COMPACTION OF ALL FILL MATERIALS SHALL BE 95% STANDARD PROCTOR DENSITY (ASTM D698).
17. EXISTING PAVEMENT TO BE REMOVED FULL DEPTH SHALL BE MADE UNDER THE PRICE BID FOR ITEM ENTITLED "EXCAVATION, UNCLASSIFIED". LIMITS OF FULL DEPTH PAVEMENT MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD.
18. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS AND PARKING AREAS THAT MAY BE IMPACTED BY THE WORK AT ALL TIMES.
19. NO SEPARATE PAYMENT WILL BE MADE FOR "RESET", "REMOVE" OR "RELOCATE" ITEMS. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEM ENTITLED "CLEARING SITE".
20. NO SEPARATE PAYMENT WILL BE MADE FOR SAWCUTTING PAVEMENT. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICES BID FOR "EXCAVATION, UNCLASSIFIED".
21. NO SEPARATE PAYMENT WILL BE MADE FOR TACK COAT. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEM ENTITLED "HOT MIX ASPHALT 25 F9 BINDER HMA, 3" THICK"
22. A PRECONSTRUCTION MEETING WILL BE HELD WITH THE CITY ENGINEER'S REPRESENTATIVES PRIOR TO BEGINNING ANY CONSTRUCTION ON THE PROJECT.
23. THE COST OF INCIDENTAL WORK SHOWN IN THE PLANS FOR WHICH THERE IS NO SEPARATE PAY ITEM SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
24. ALL ITEMS WILL BE BASED UPON FIELD MEASURED QUANTITIES.
25. EROSION & SEDIMENT CONTROL SHALL BE AS PER NYSDOT APPLICABLE STANDARD SHEETS AND NOTES (SECTION 209 OF THE STANDARD SPECIFICATIONS)
26. BOUNDARY SURVEY AND PHYSICAL FEATURE LOCATIONS ARE BASED ON SURVEY DATA PROVIDED BY THE CITY OF KINGSTON AND BASED OFF A MAP ENTITLED "MAP OF LANDS OF CITY OF KINGSTON" PREPARED BY BRINNIER & LARIOS P.C. AND DATED 09/12/2013.
27. FIELD VERIFICATION SURVEY COMPLETED ON 08/15/2015 AND 11/23/15.
28. TOPOGRAPHY IS BASED ON 2 FOOT LIDAR PROVIDED BY THE CITY OF KINGSTON AND FIELD VERIFIED BY GROUND SHOTS AT 50' INTERVALS ALONG THE LENGTH OF THE PROJECT.
29. VERTICAL DATUM IS NAVD 88, BASED ON DUAL FREQUENCY STATIC OBSERVATIONS REFERENCING NGS PUBLISHED POINTS NYNB, NYLC, NYHS, AND NYKT PERFORMED ON 08/14/2015.
28. BASIS OF MAP ROTATION IS GRID NORTH, NYS EASTERN ZONE NAD 83(2011) EPOCH 2010.0, DETERMINED BY DUAL FREQUENCY STATIC OBSERVATIONS REFERENCING NGS PUBLISHED POINTS NYNB, NYLC, NYHS, AND NYKT PERFORMED ON 08/14/2015.

DATE:	REVISION:	BY:

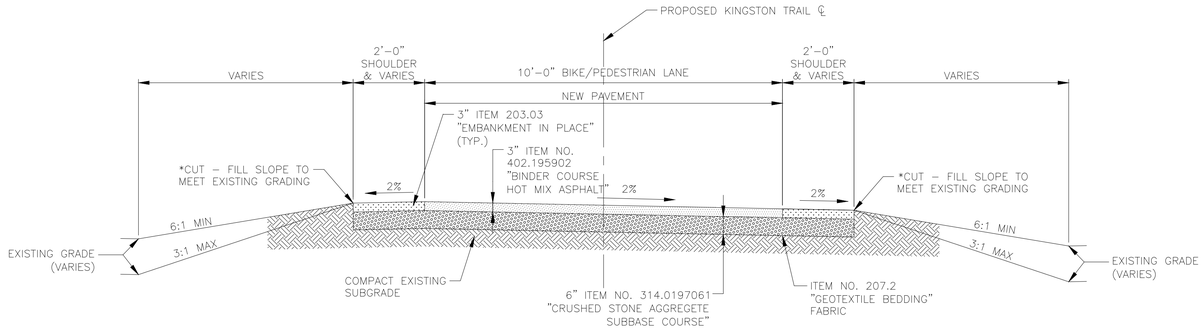
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

LEGEND, ABBREVIATIONS & GENERAL NOTES G2/G5

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 2 OF 25



TYPICAL TRAIL SECTION (TYPE A) (N.T.S)

STA 0+00 – 8+91.35

STA 12+14.26 – 17+51.80

STA 17+89.16 – 21+92.75

STA 22+28.79 – 25+01.66

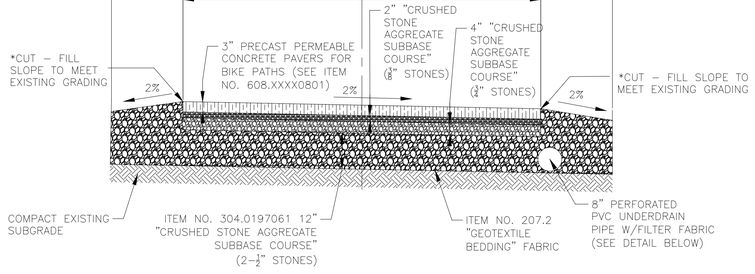
STA 25+42.43 – 27+50.27

STA 27+81.66 – 31+53.97

STA 34+00.15 – 45+71.38

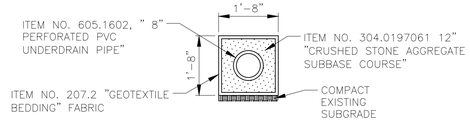
STA 46+05.70 – 52+65.77

STA 59+21.54 – 59+67.09



TYPICAL TUNNEL SECTION (TYPE B) (N.T.S)

STA 8+91.35 – STA 12+14.26

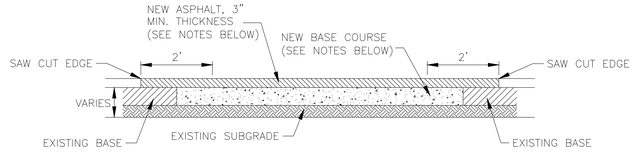


UNDERDRAIN PIPE DETAIL

N.T.S.

NOTE:

THE UNDERDRAIN DETAIL SHOWN IS FOR ILLUSTRATIVE PURPOSES.



PAVEMENT RESTORATION SECTION (TYPE C) (N.T.S.)

STA 17+51.80 – 17+89.16

STA 21+92.75 – 22+28.79

STA 25+01.66 – 25+42.43

STA 27+50.27 – 27+81.66

STA 45+71.38 – 46+05.70

PAVEMENT RESTORATION SECTION NOTES:

DUE TO THE REMOVAL OF ABANDONED RAILS AT STREET CROSSINGS, A STRIP OF STREET EXISTING PAVEMENT SHALL BE RESTORED AS FOLLOWS:

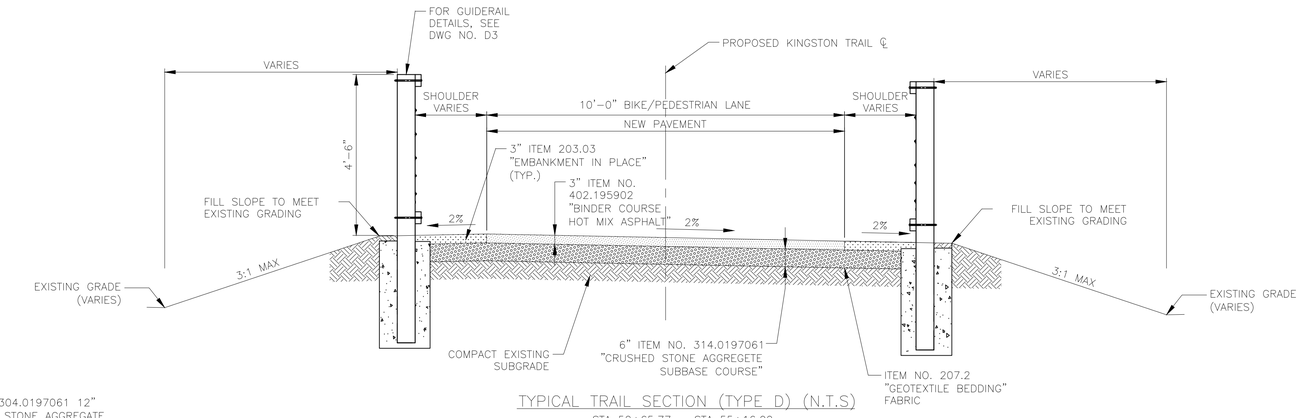
1. SURFACE REPLACEMENT SHALL BE ITEM NO. 402.095202AA HOT MIX ASPHALT TOP COURSE FROM SECTION 402 OF THE NYSDOT STANDARD SPECIFICATIONS.
2. THE THICKNESS OF THE BASE COURSE SHALL BE 8", OR MATCH THE EXISTING PAVEMENT BASE THICKNESS, WHICHEVER IS GREATER.
3. IF THE BASE OF THE EXISTING PAVEMENT IS CONCRETE, THE BASE OF THE PAVEMENT PATCH SHALL ALSO BE CONCRETE.

   IF THE BASE OF THE EXISTING PAVEMENT IS NOT CONCRETE, THE BASE OF THE PAVEMENT PATCH MAY BE ONE OF THE FOLLOWING AS APPROVED BY THE CITY OF KINGSTON:

   A. CONCRETE

   B. ITEM NO. 402.095202AA HOT MIX ASPHALT TOP COURSE FROM SECTION 402 OF THE NYSDOT STANDARD SPECIFICATIONS.

   C. HMA BINDER COURSE, ITEM NO. 402.195902 FROM SECTION 402 OF THE NYSDOT STANDARD SPECIFICATIONS.
4. WHERE THE EXISTING PAVEMENT BASE IS CONCRETE, THE CONCRETE BASE OF THE PATCH SHALL BE DOWELED INTO THE ADJACENT PAVEMENT USING 1 1/4" DOWELS AS DIRECTED BY THE CITY OF KINGSTON.



TYPICAL TRAIL SECTION (TYPE D) (N.T.S)

STA 52+65.77 – STA 55+16.02

STA 56+32.10 – STA 57+79.09

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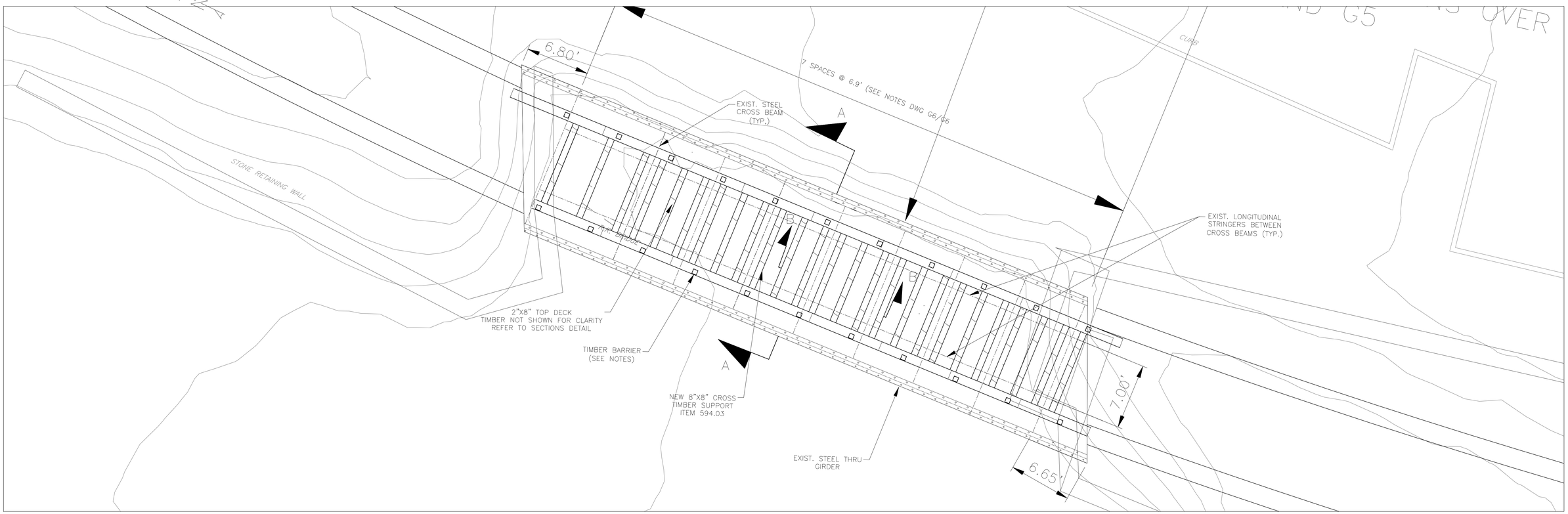
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TYPICAL TRAIL SECTIONS — G3/G5

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

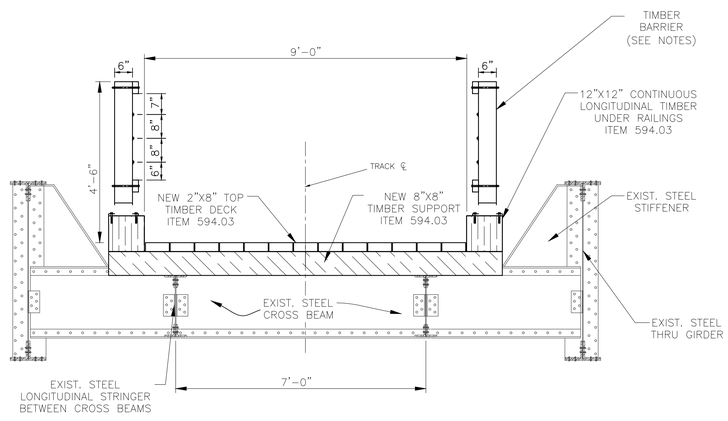
SHEET NO. 3 OF 25



RONDOUT BRIDGE 1 (PLAN VIEW)

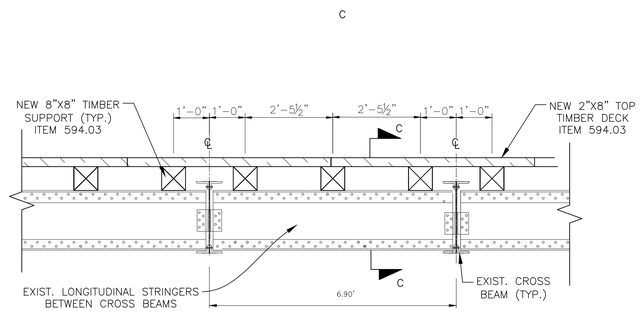
KINGSTON CONNECTIVITY

SCALE: 1 IN. = 5 FT.



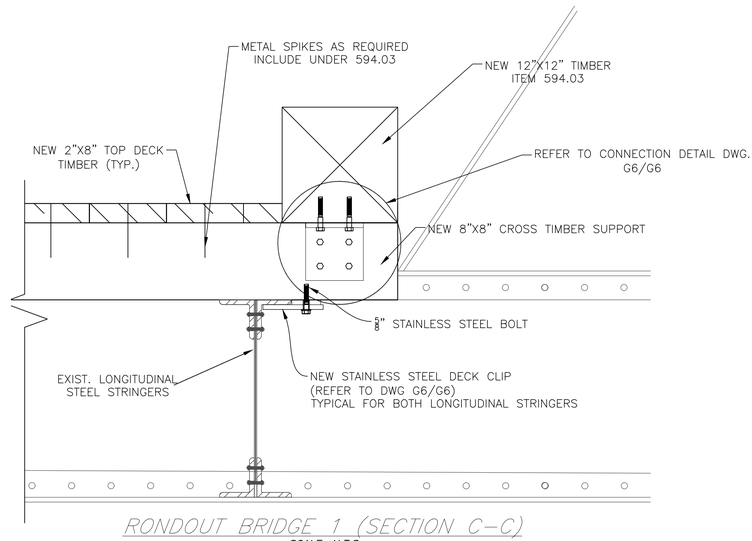
RONDOUT BRIDGE 1 (SECTION A–A)

SCALE: N.T.S



RONDOUT BRIDGE 1 (SECTION B–B)

SCALE: N.T.S



RONDOUT BRIDGE 1 (SECTION C–C)

SCALE: N.T.S

NOTES:

1. REFER TO TIMBER DECKING DETAILS AND NOTES ON DWG. G6/G6
2. FOR TIMBER BARRIER RAIL ON STRUCTURE REFER TO DWG D3

DATE:	REVISION:	BY:

KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TYPICAL RONDOUT BRIDGE 1 SECTION — G4/G6

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

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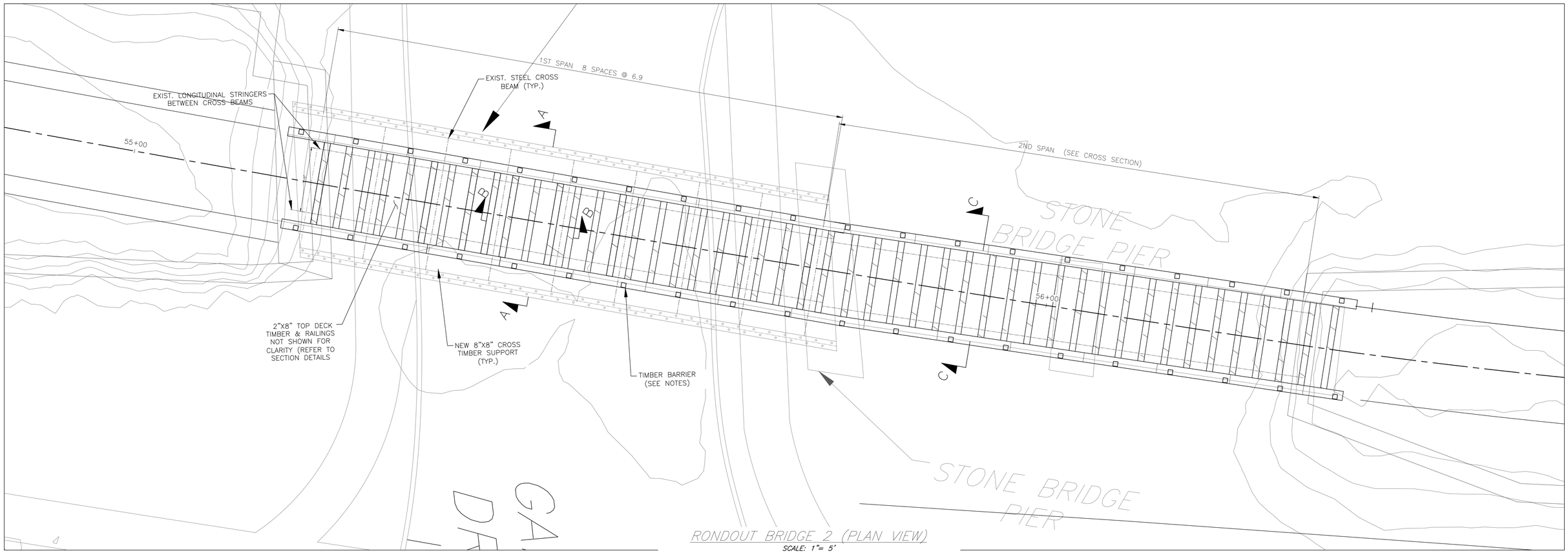
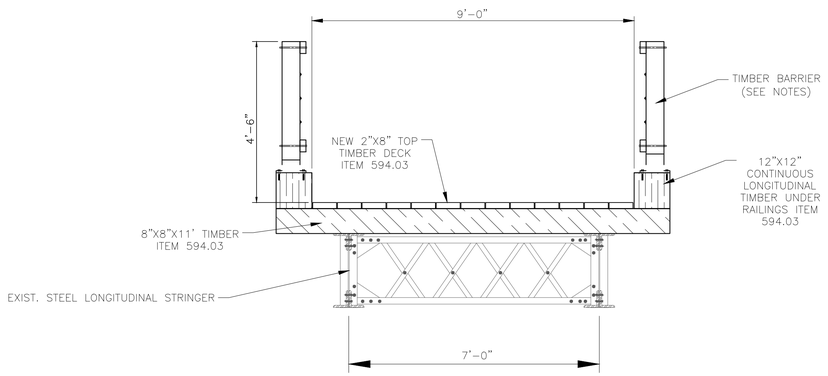


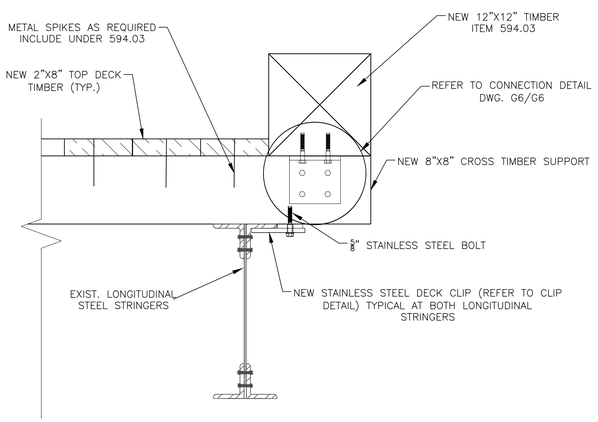
RONDOUT BRIDGE 2 (PLAN VIEW)

SCALE: 1"= 5'



RONDOUT BRIDGE 2 (SECTION C–C)

SCALE: N.T.S



NEW TIMBER DECK TO EXIST. STEEL CONNECTION DETAIL
RONDOUT BRIDGE 2
(NO CROSS BEAM SECTION)

SCALE: N.T.S

NOTES:

1. REFER TO TIMBER DECKING DETAIL AND NOTES ON DWG. G6/G6
2. FOR TIMBER BARRIER RAIL ON STRUCTURE REFER TO DWG D3
3. FOR SECTION A–A AND B–B, REFER TO DWG. G4/G6

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KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TYPICAL RONDOUT BRIDGE 2 SECTION G5/G6

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

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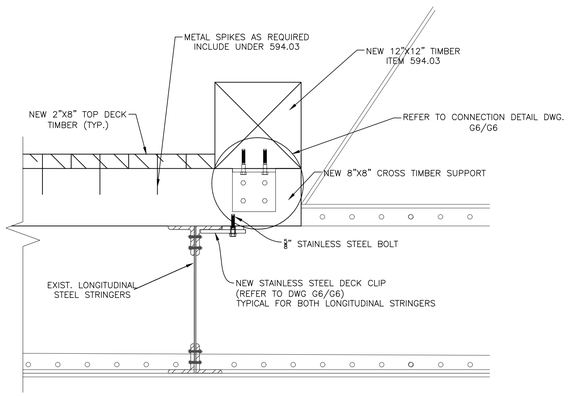
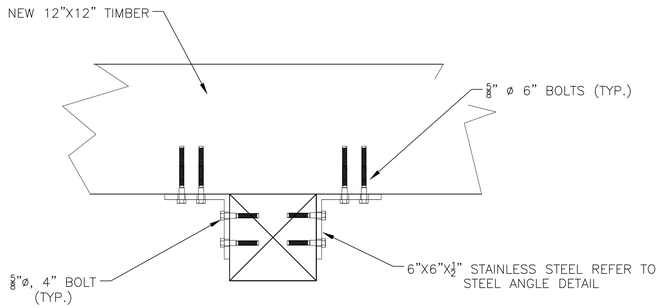
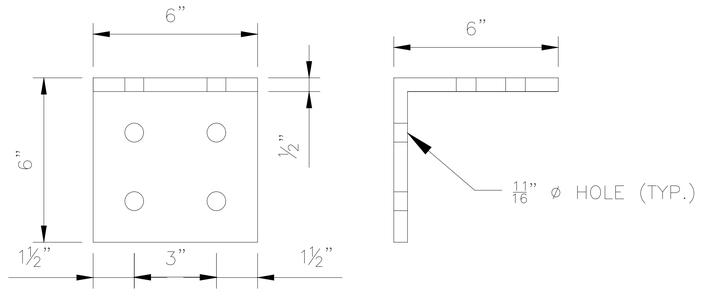


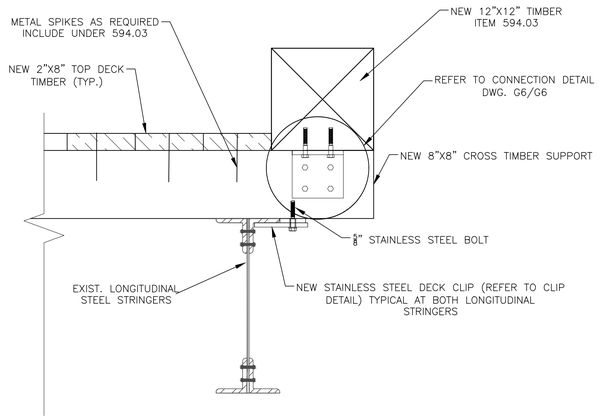
NEW TIMBER DECK TO EXIST. STEEL CONNECTION DETAIL
RONDOUT BRIDGE 1&2
(APPLICABLE AT EXIST. CROSS BEAM SECTIONS)
SCALE: N.T.S



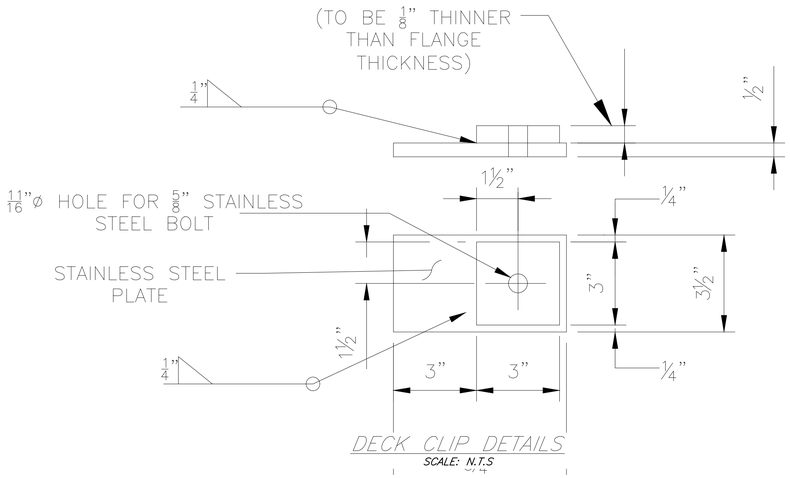
TIMBER BARRIER TO CROSS BEAM CONNECTION DTAIL
SCALE: N.T.S



STAINLESS STEEL ANGLE DETAL
SCALE: N.T.S



NEW TIMBER DECK TO EXIST. STEEL CONNECTION DETAIL
RONDOUT BRIDGE 2
(NO CROSS BEAM SECTIONS)
SCALE: N.T.S



DECK CLIP DETAILS
SCALE: N.T.S

NEW TIMBER DECKING OVER STRUCTURE NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL EXISTING RAILROAD TIMBER TIES AND PAVEMENT MATERIALS FROM TOP OF EXISTING STEEL STRUCTURE. TOP OF EXISTING STEEL MEMBERS (LONGITUDINAL STRINGERS AND CROSS BEAMS) SHALL BE CLEANED OF ALL LOOSE MATERIAL UTILIZING PRESSURED WATER AND AIR, NO WIRE BRUSH OR ANY SIMILAR TOOLS SHALL BE USED TO CLEAN EXISTING STEEL SURFACE. THE COST OF REMOVAL OF EXISTING TIES, PAVEMENT MATERIALS AND CLEANING SHALL BE INCLUDED IN THE TOTAL COST OF ITEM 201.06 CLEARING AND GRABBING.

2. THE DIMENSIONS SHOWN ON DRAWINGS G4/G6 THRU G6/G6 ARE BASED ON VISUAL INSPECTION OF EXISTING STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ACCURATE MEASUREMENT OF EXISTING STEEL MEMBERS AND CONNECTION DETAILS REQUIRED TO VERIFY ALL DIMENSIONS SHOWN ON THE NEW TIMBER DECKING OVER STRUCTURE DETAILS ON DRAWINGS G4/G6 THRU G6/G6.

3. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS BASED ON HIS VERIFIED MEASUREMENTS SHOWING ALL FABRICATION AND CONSTRUCTION DETAILING, NOTES AND QUANTITIES AND SUBMIT FOR THE ENGINEER'S REVIEW AND APPROVAL BEFORE FABRICATION AND/OR DELIVERY OF ANY MATERIAL REQUIRED FOR THE CONSTRUCTION OF THE NEW TIMBER DECKING AND RAILINGS OVER EXISTING STRUCTURES.

4. DECK CLIP AND BOLT SHALL BE STAINLESS STEEL PAID UNDER ITEM 594.03

NOTES:
1. FOR PLANS AND SECTIONS OF TIMBER DECKING ON STRUCTURES REFER TO DWG. G4/G6 THRU G5/G6.

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KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

RONDOUT BRIDGES DETAILS 1&2 G6/G6

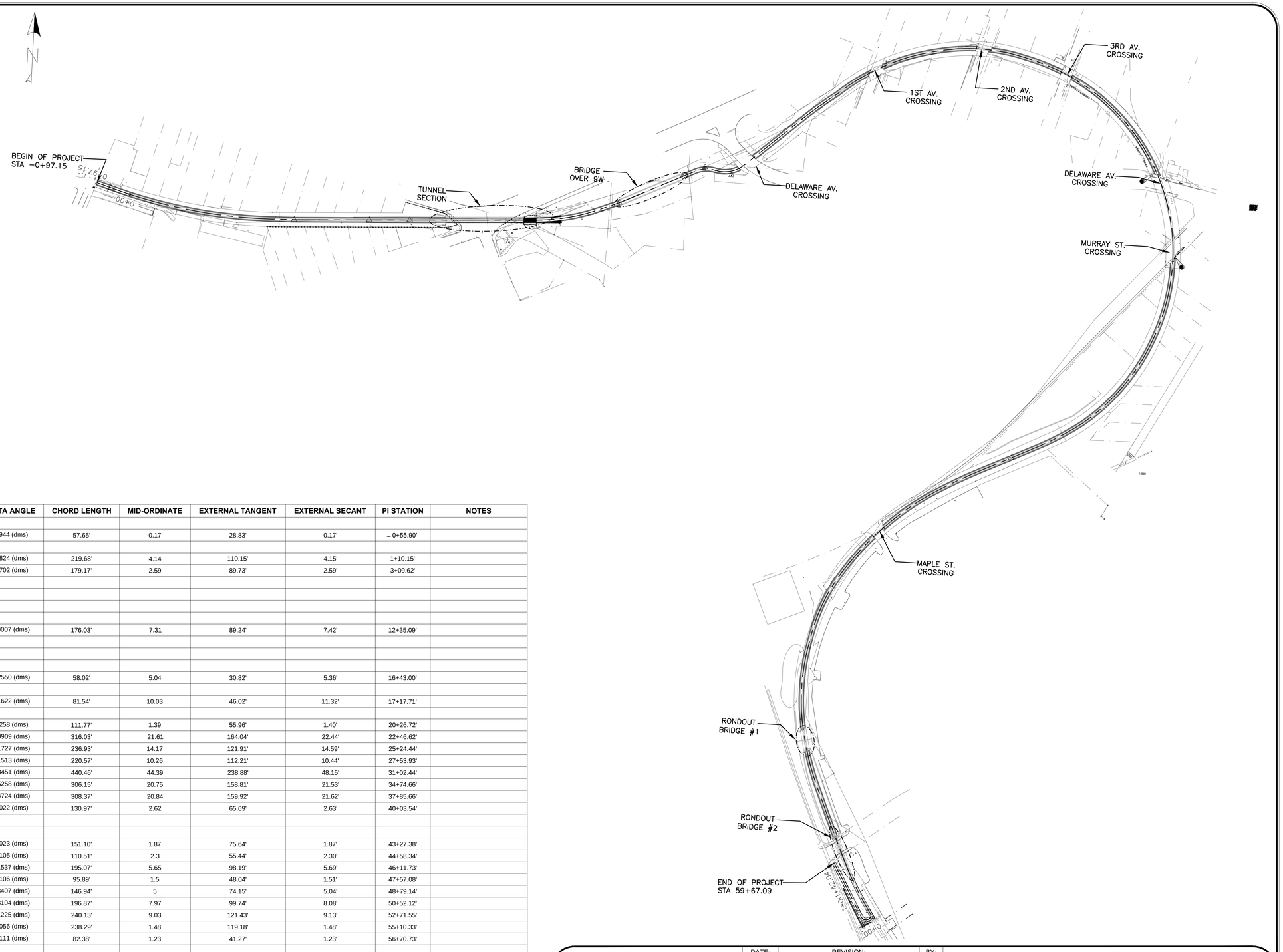
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

LEGEND

RELEVENT FOR DRAWINGS EC-1 THROUGH EC-11

- PROPERTY LINE
- OVERHEAD WIRE
- RETAINING WALL
- CONTOUR (MINOR)
- CONTOUR (MAJOR)
- CHAIN LINK FENCE
- WOOD FENCE
- CURBING
- GUIDERAIL
- WET AREA
- CATCH BASIN
- SEWER MANHOLE
- ELECTRICAL MANHOLE
- TELEPHONE MANHOLE
- TRAFFIC CONTROL VAULT
- UTILITY POLE
- GAS AND WATER UTILTIES
- SURVEY LOCATION
- BOLLARDS
- STEEL FENCE
- POINT OF TANGENT INTERSECTION



NO.	TYPE	LENGTH	Radius	START STATION	END STATION	DELTA ANGLE	CHORD LENGTH	MID-ORDINATE	EXTERNAL TANGENT	EXTERNAL SECANT	PI STATION	NOTES
1	Line	27.07'		0+00.00'	– 0+27.07'							
2	Curve	57.65'	2486.04'	– 0+27.07'	– 0+84.73'	1.1944 (dms)	57.65'	0.17	28.83'	0.17'	– 0+55.90'	
3	Line	12.42'		– 0+84.73'	– 0+97.15'							
5	Curve	219.89'	1458.18'	0+00.00'	2+19.89'	8.3824 (dms)	219.68'	4.14	110.15'	4.15'	1+10.15'	
6	Curve	179.27'	1552.19'	2+19.89'	3+99.15'	6.3702 (dms)	179.17'	2.59	89.73'	2.59'	3+09.62'	
7	Line	67.96'		3+99.15'	4+67.11'							
8	Line	210.39'		4+67.11'	6+77.51'							
9	Line	112.92'		6+77.51'	7+90.43'							
10	Line	355.42'		7+90.43'	11+45.85'							
11	Curve	176.84'	533.23'	11+45.85'	13+22.69'	19.0007 (dms)	176.03'	7.31	89.24'	7.42'	12+35.09'	
12	Line	61.40'		13+22.69'	13+84.09'							
13	Line	190.36'		13+84.09'	15+74.45'							
14	Line	37.74'		15+74.45'	16+12.19'							
15	Curve	59.18'	86.00'	16+12.19'	16+71.37'	39.2550 (dms)	58.02'	5.04	30.82'	5.36'	16+43.00'	
16	Line	0.32'		16+71.37'	16+71.69'							
17	Curve	84.79'	87.89'	16+71.69'	17+56.47'	55.1622 (dms)	81.54'	10.03	46.02'	11.32'	17+17.71'	
18	Line	214.28'		17+56.47'	19+70.76'							
19	Curve	111.82'	1120.86'	19+70.76'	20+82.58'	5.4258 (dms)	111.77'	1.39	55.96'	1.40'	20+26.72'	
20	Curve	319.96'	588.47'	20+82.58'	24+02.54'	31.0909 (dms)	316.03'	21.61	164.04'	22.44'	22+46.62'	
21	Curve	239.18'	502.15'	24+02.54'	26+41.72'	27.1727 (dms)	236.93'	14.17	121.91'	14.59'	25+24.44'	
22	Curve	221.84'	598.04'	26+41.72'	28+63.56'	21.1513 (dms)	220.57'	10.26	112.21'	10.44'	27+53.93'	
23	Curve	452.29'	568.53'	28+63.56'	33+15.85'	45.3451 (dms)	440.46'	44.39	238.88'	48.15'	31+02.44'	
24	Curve	309.89'	574.92'	33+15.85'	36+25.74'	30.5258 (dms)	306.15'	20.75	158.81'	21.53'	34+74.66'	
25	Curve	312.11'	580.80'	36+25.74'	39+37.85'	30.4724 (dms)	308.37'	20.84	159.92'	21.62'	37+85.66'	
26	Curve	131.11'	818.94'	39+37.85'	40+68.96'	9.1022 (dms)	130.97'	2.62	65.69'	2.63'	40+03.54'	
27	Line	91.04'		40+68.96'	41+60.00'							
28	Line	91.74'		41+60.00'	42+51.74'							
29	Curve	151.16'	1526.65'	42+51.74'	44+02.90'	5.4023 (dms)	151.10'	1.87	75.64'	1.87'	43+27.38'	
30	Curve	110.63'	665.98'	44+02.90'	45+13.53'	9.3105 (dms)	110.51'	2.3	55.44'	2.30'	44+58.34'	
31	Curve	195.51'	844.76'	45+13.53'	47+09.04'	13.1537 (dms)	195.07'	5.65	98.19'	5.69'	46+11.73'	
32	Curve	95.95'	765.15'	47+09.04'	48+04.99'	7.1106 (dms)	95.89'	1.5	48.04'	1.51'	47+57.08'	
33	Curve	147.39'	542.42'	48+04.99'	49+52.38'	15.3407 (dms)	146.94'	5	74.15'	5.04'	48+79.14'	
34	Curve	197.73'	611.81'	49+52.38'	51+50.11'	18.3104 (dms)	196.87'	7.97	99.74'	8.08'	50+52.12'	
35	Curve	241.04'	802.61'	51+50.11'	53+91.15'	17.1225 (dms)	240.13'	9.03	121.43'	9.13'	52+71.55'	
36	Curve	238.31'	4793.06'	53+91.15'	56+29.47'	2.5056 (dms)	238.29'	1.48	119.18'	1.48'	55+10.33'	
37	Curve	82.43'	689.19'	56+29.47'	57+11.90'	6.5111 (dms)	82.38'	1.23	41.27'	1.23'	56+70.73'	
38	Line	30.19'		57+11.90'	57+42.09'							
39	Curve	9.15'	245.54'	57+42.09'	57+51.24'	2.0807 (dms)	9.15'	0.04	4.58'	0.04'	57+46.66'	
40	Line	4.50'		57+51.24'	57+55.74'							
41	Curve	14.11'	9.49'	57+55.74'	57+69.85'	85.0932 (dms)	12.84'	2.5	8.72'	3.40'	57+64.46'	This curve lies in Ramp Down
42	Line	1.88'		57+69.85'	57+71.73'							
43	Curve	25.24'	14.62'	57+71.73'	57+96.96'	98.5342 (dms)	22.22'	5.12	17.09'	7.87'	57+88.81'	This curve lies in Ramp Down
44	Line	20.48'		57+96.96'	58+17.45'							
45	Line	77.91'		58+17.45'	58+95.35'							
46	Line	43.42'		58+95.35'	59+38.78'							
47	Line	28.31'		59+38.78'	59+67.09'							

DATE:	REVISION:	BY:

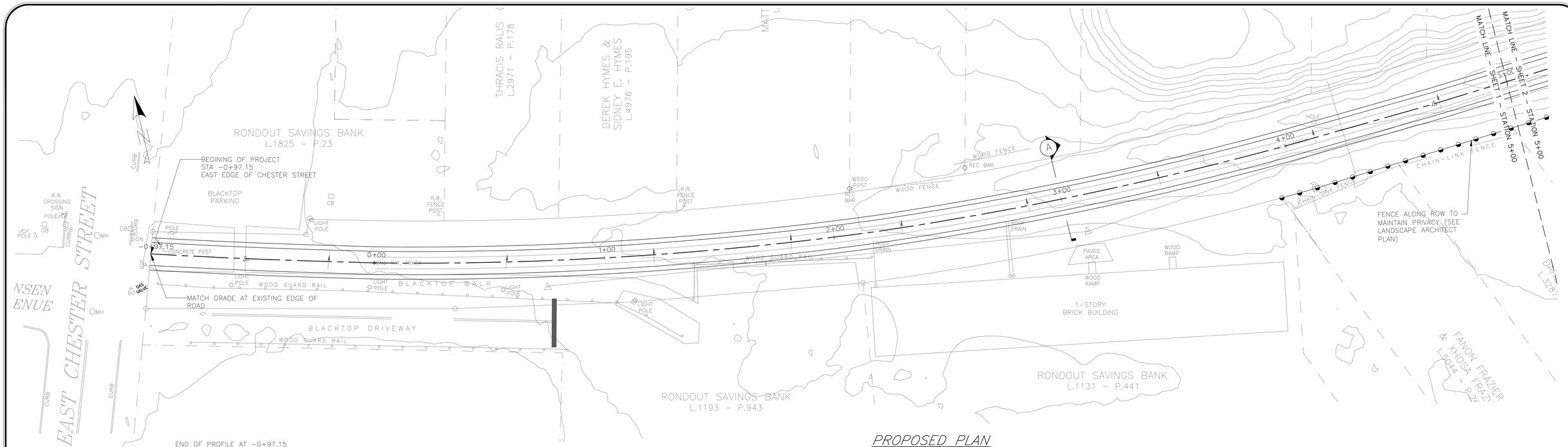
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 1 — T1/T11

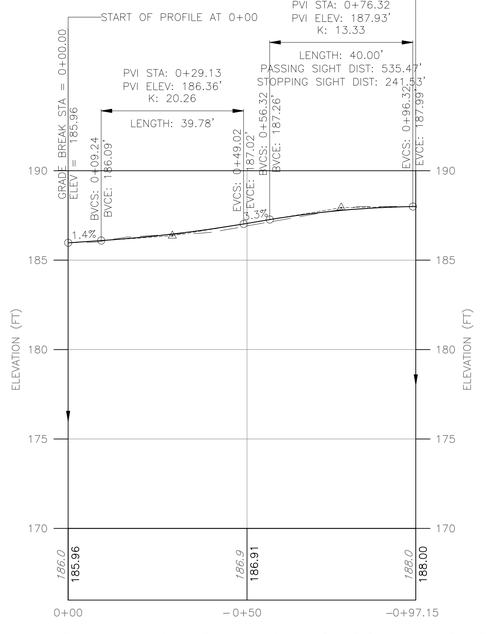
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 7 OF 25

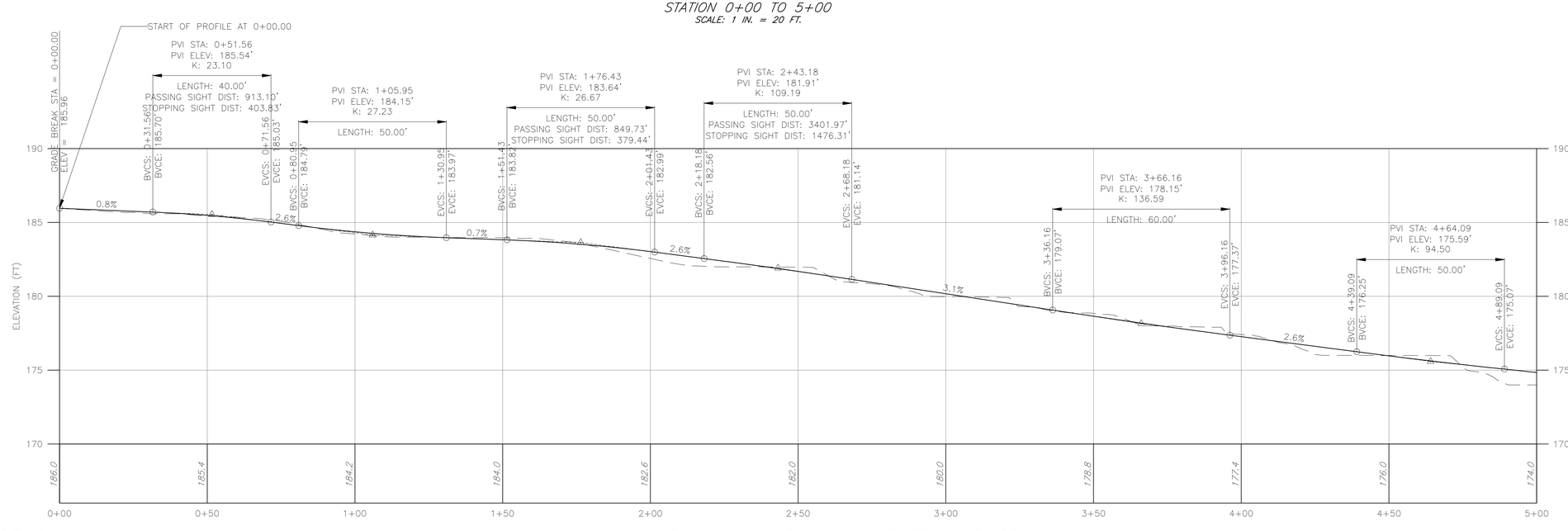


PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 0+00 TO 5+00
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 0+00 to –0+97.15

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.



Kingston Connectivity Centerline 0+00 to 5+00

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

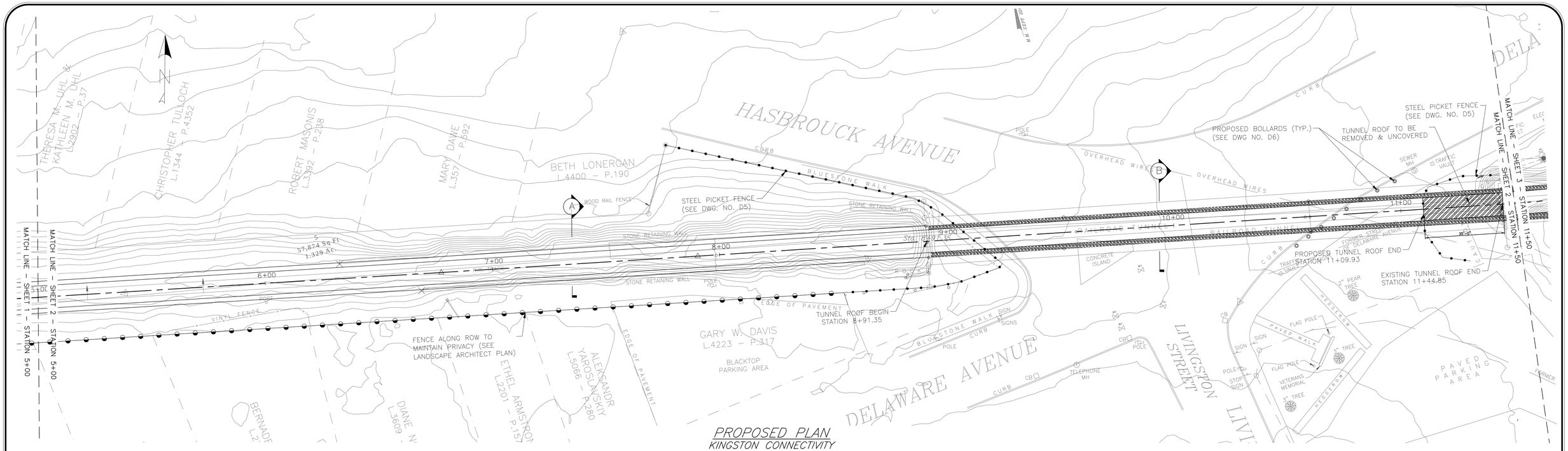
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 2 — T2/T11

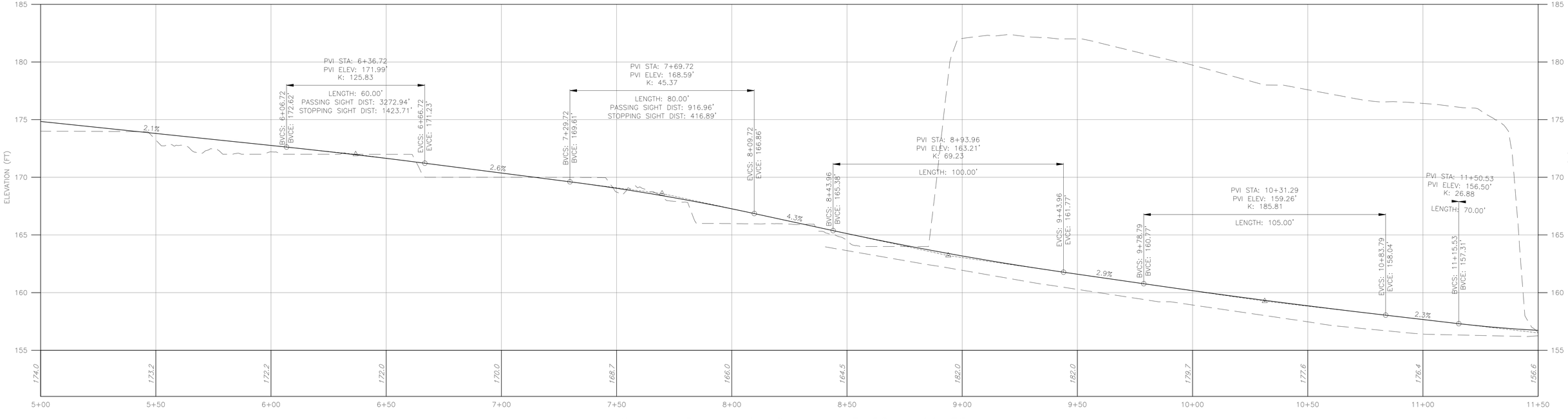
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 8 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 5+00 TO 11+50
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 5+00 to 11+50

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

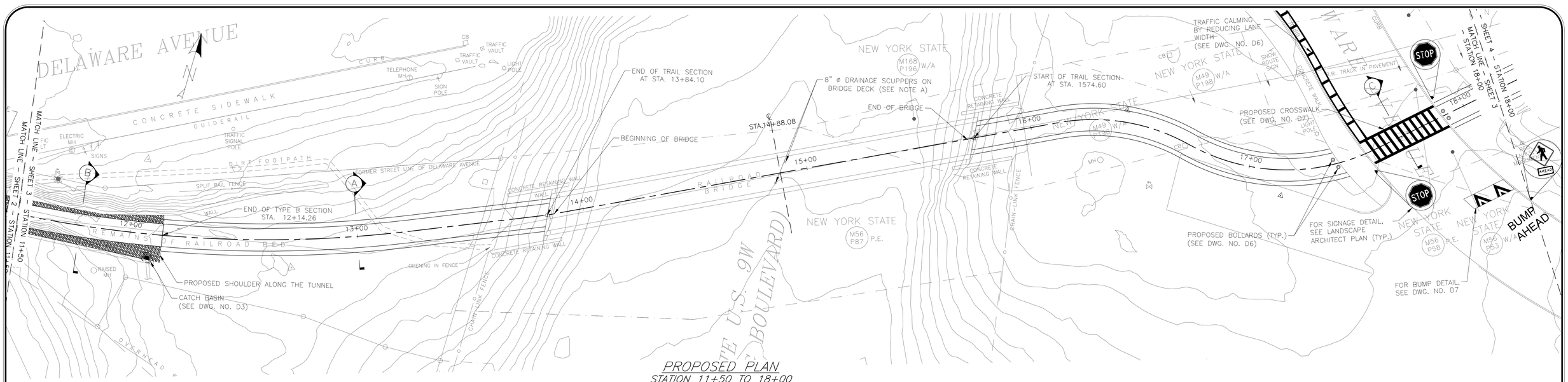
DATE:	REVISION:	BY:

KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

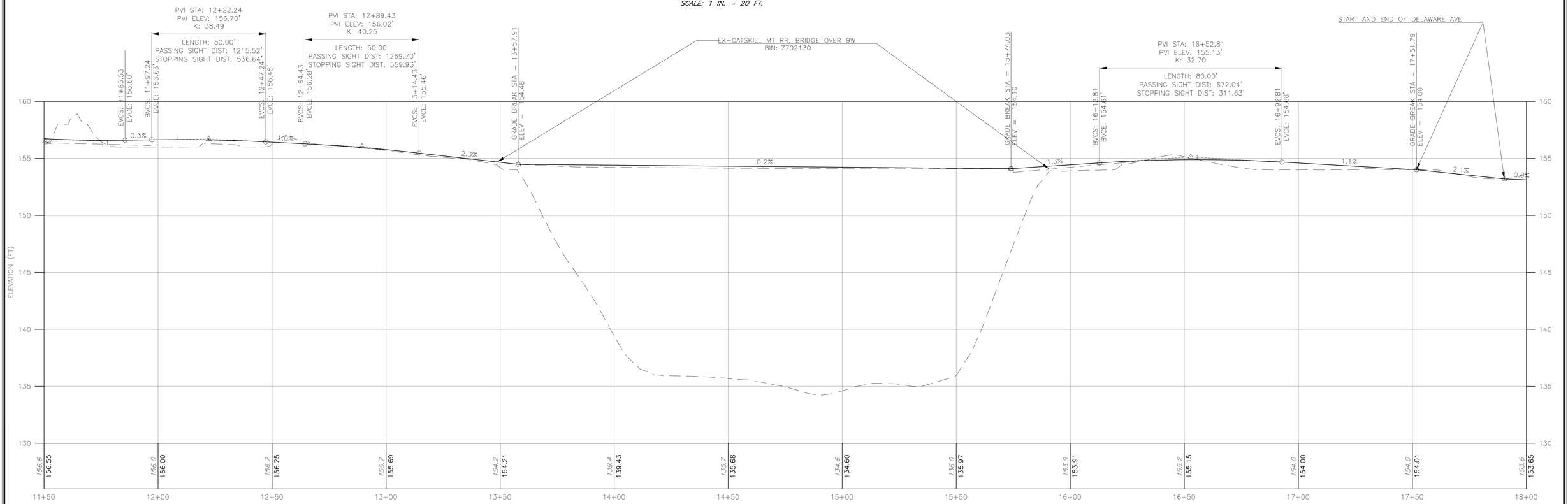
TRAIL CONSTRUCTION PLAN 3 — T3/T11

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15



PROPOSED PLAN
STATION 11+50 TO 18+00
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 11+50 to 18+00

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

NOTE A:
EX-CATSKILL MT RR BRIDGE OVER ROUTE 9W (BIN: 7702130) IS UNDER THE JURISDICTION OF NYSDOT. EXISTING BRIDGE FINISH GRADE AND PROFILE ARE MAINTAINED.
TYPICAL NEW TRAIL PAVEMENT SECTION WILL MEET EXISTING BRIDGE APPROACH AS SHOWN ON PLAN AND PROFILE.
THE BRIDGE DECK INCLUDES 2 SCUPPERS LOCATED AT THE LOW POINTS NEAR THE CENTER PIER. SCUPPERS SHALL BE CLEANED AND MAINTAINED BY NYSDOT.

DATE:	REVISION:	BY:

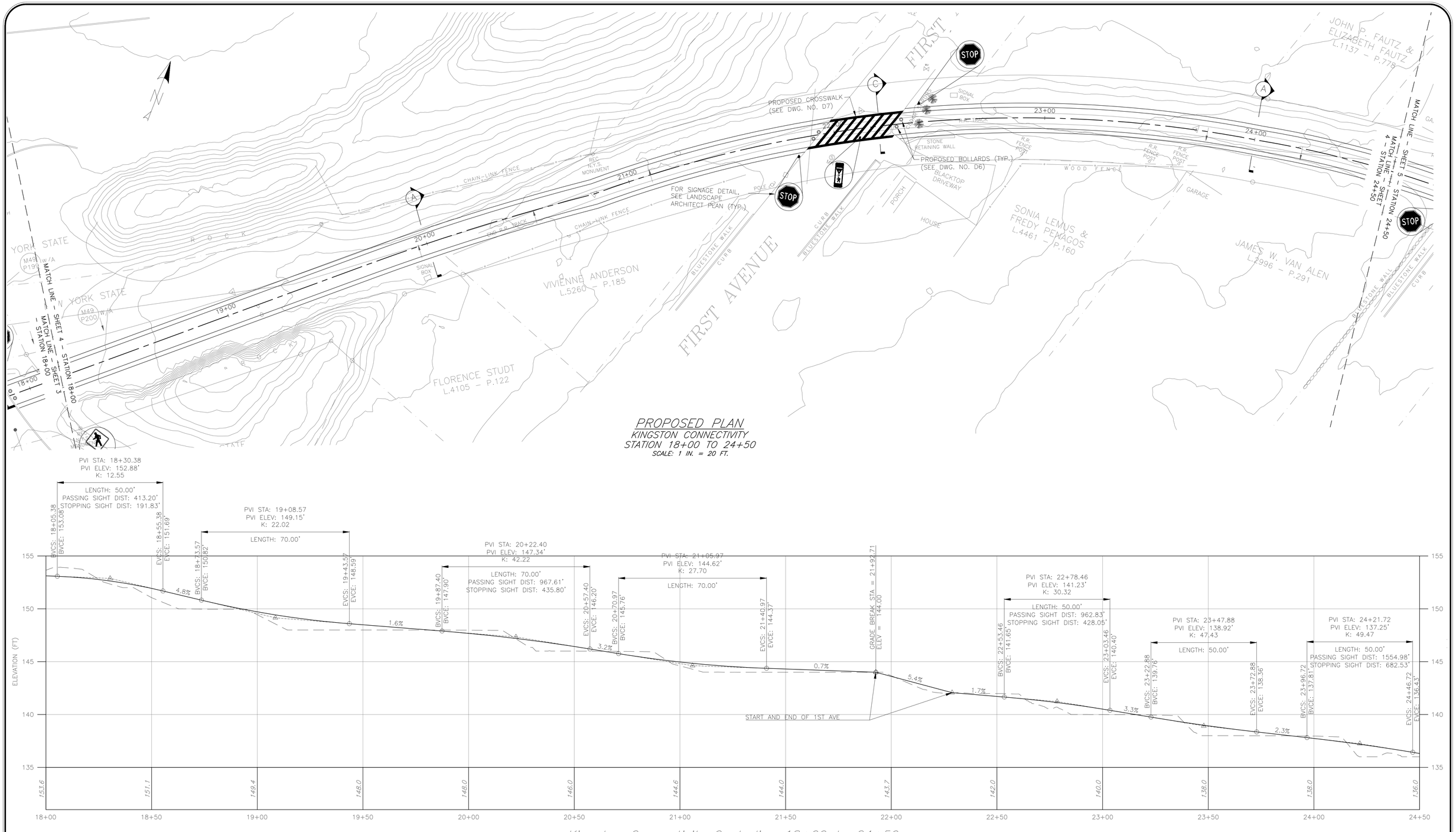
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 4 — T4/T11

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 10 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 18+00 TO 24+50
SCALE: 1 IN. = 20 FT.

Kingston Connectivity Centerline 18+00 to 24+50

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

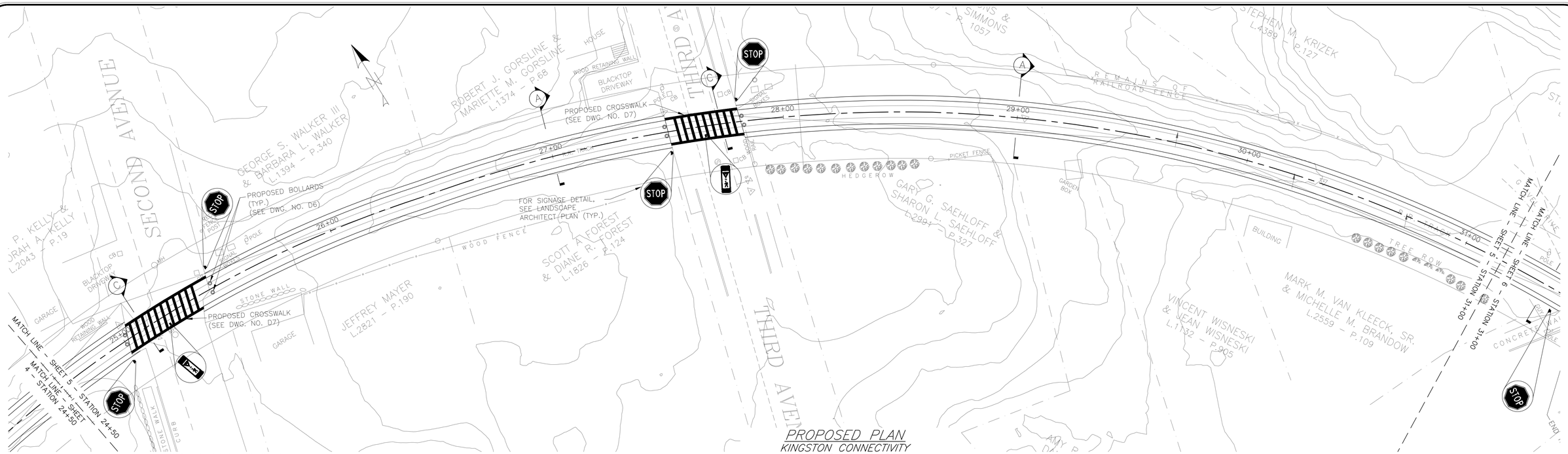
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 5 — T5/T11

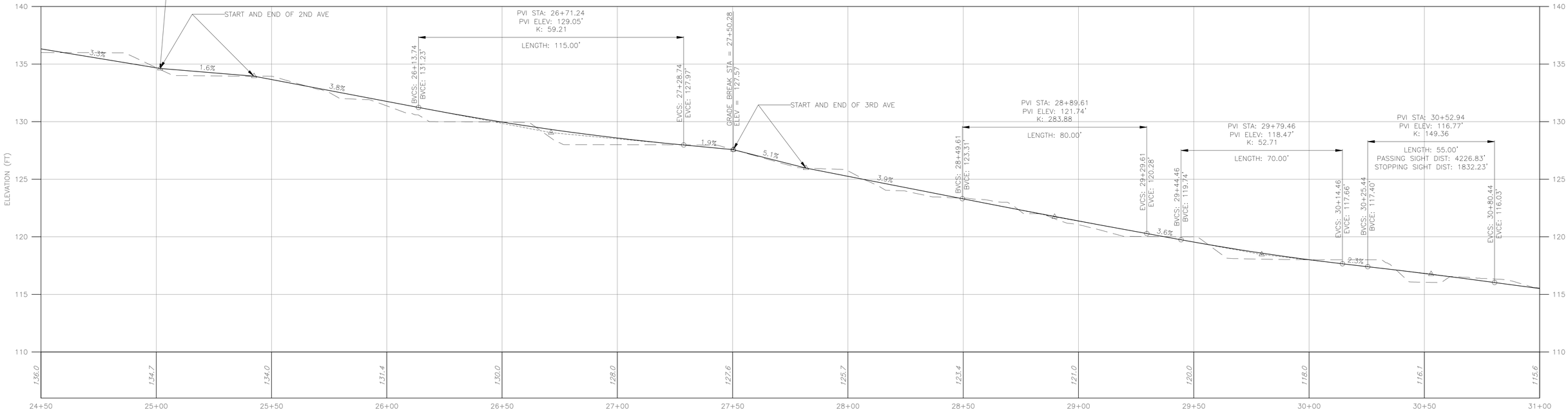
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 11 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
24+50 TO 31+00
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 24+50 to 31+00

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

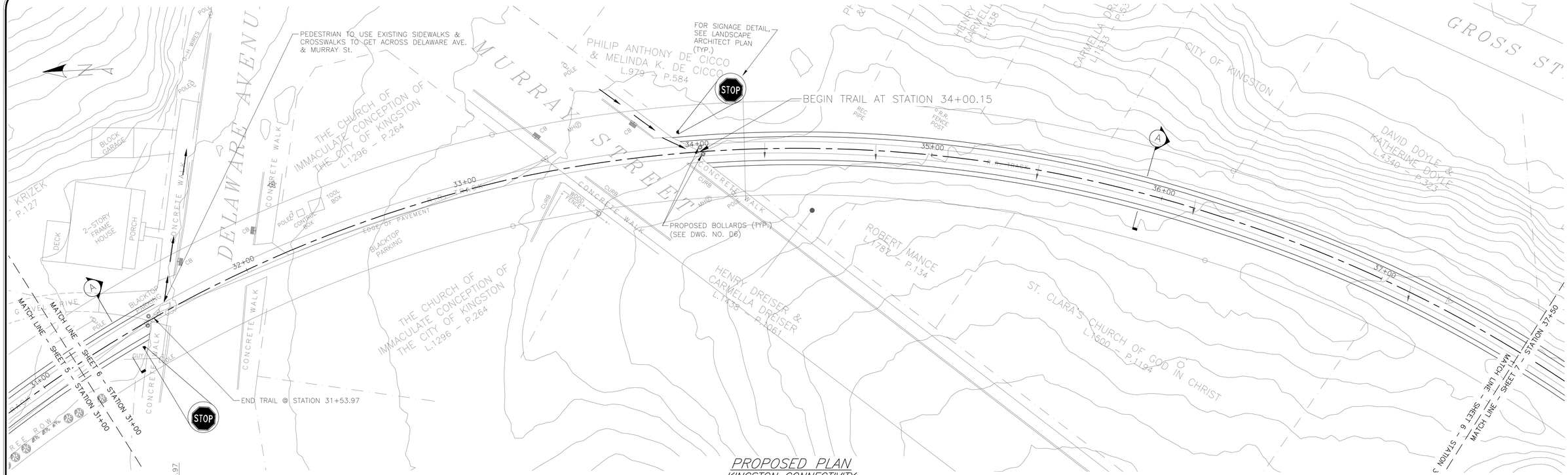
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 6 — T6/T11

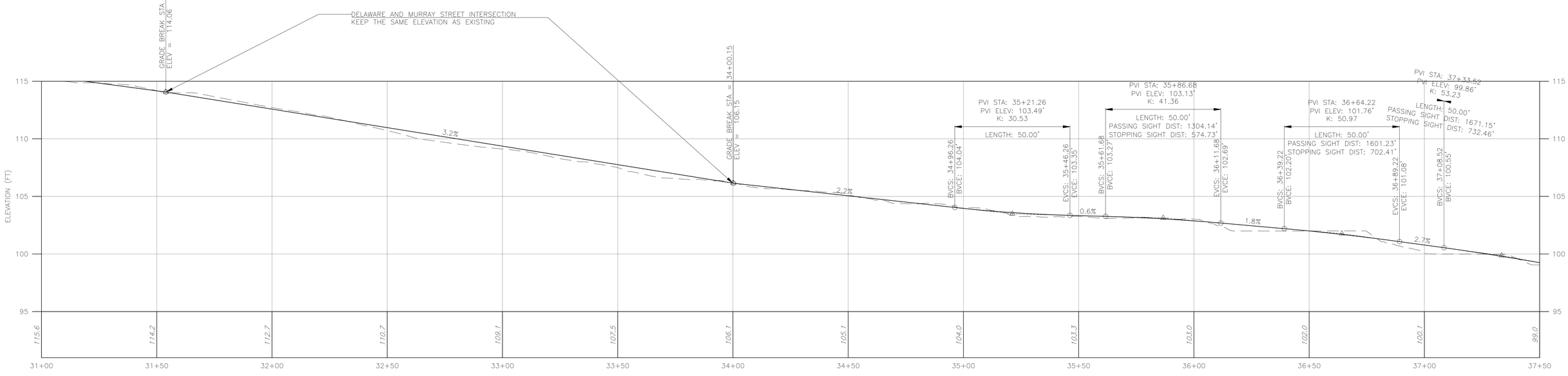
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO.12 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 31+00 TO 37+50
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 31+00 to 37+50

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

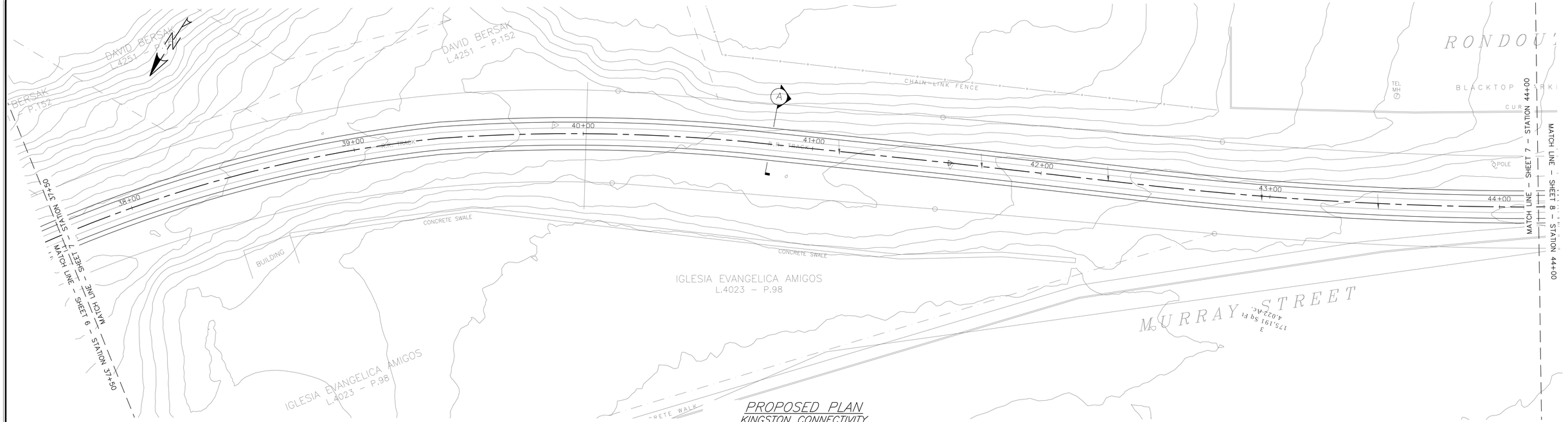
DATE:	REVISION:	BY:

KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

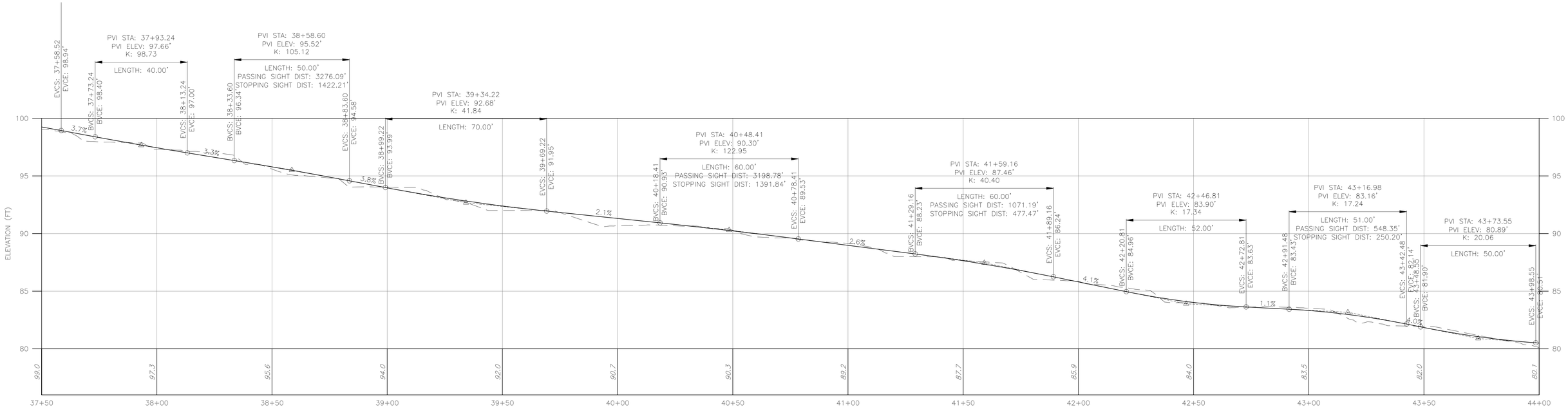
TRAIL CONSTRUCTION PLAN 7 — T7/T11

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 37+50 TO 44+00
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 37+50 to 44+00

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

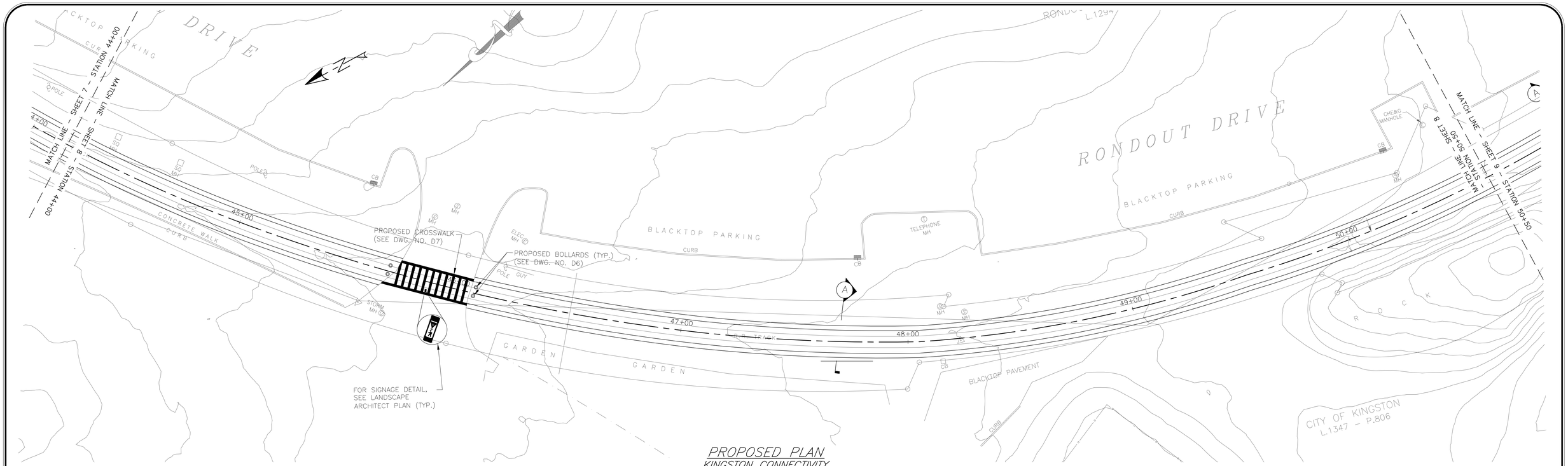
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 8 — T8/T11

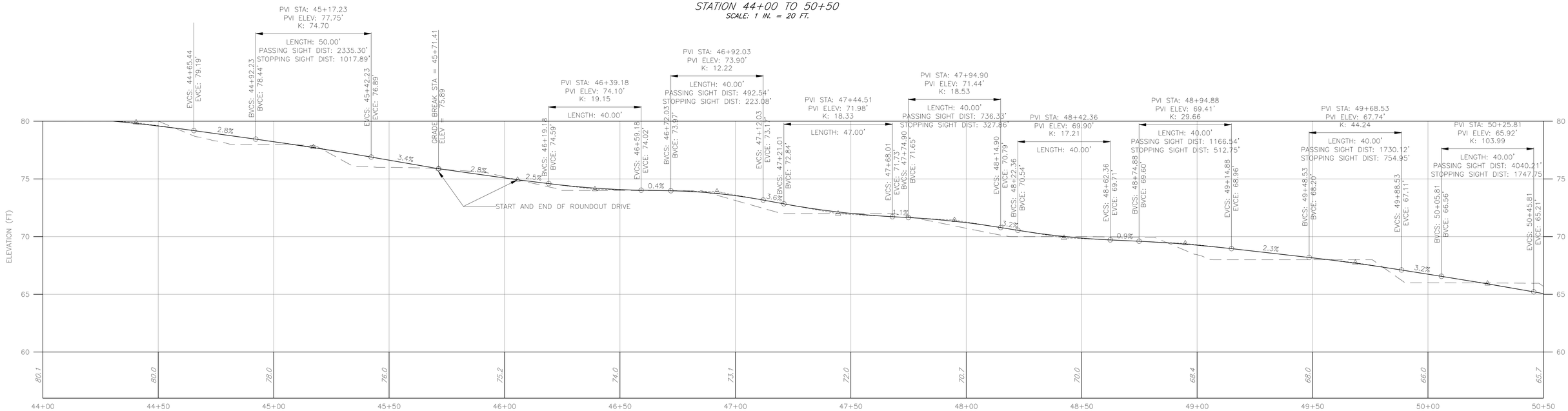
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 14 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 44+00 TO 50+50
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 44+00 to 50+50

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

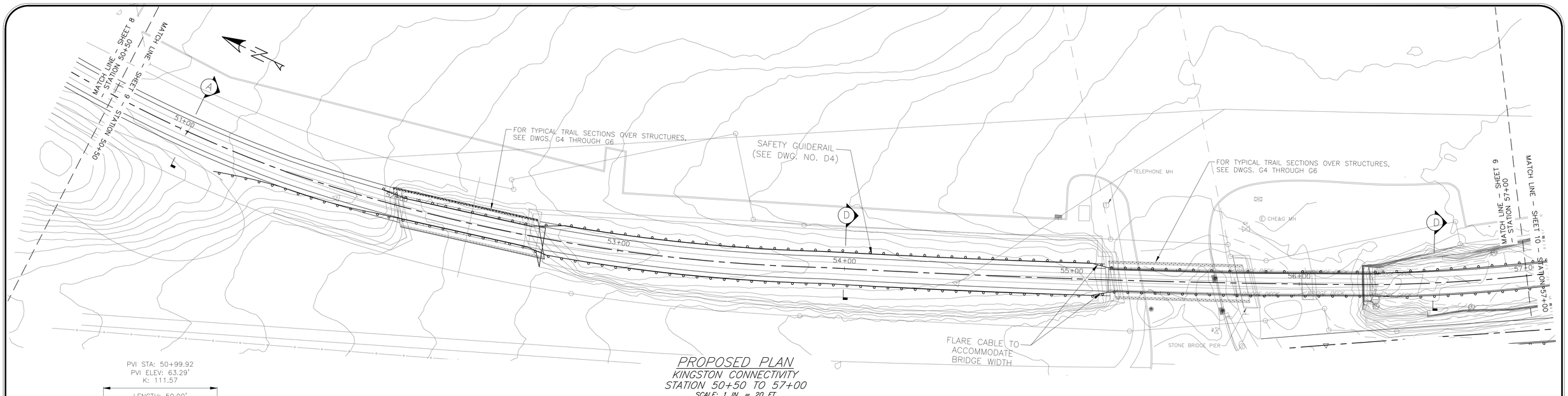
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 9 — T9/T11

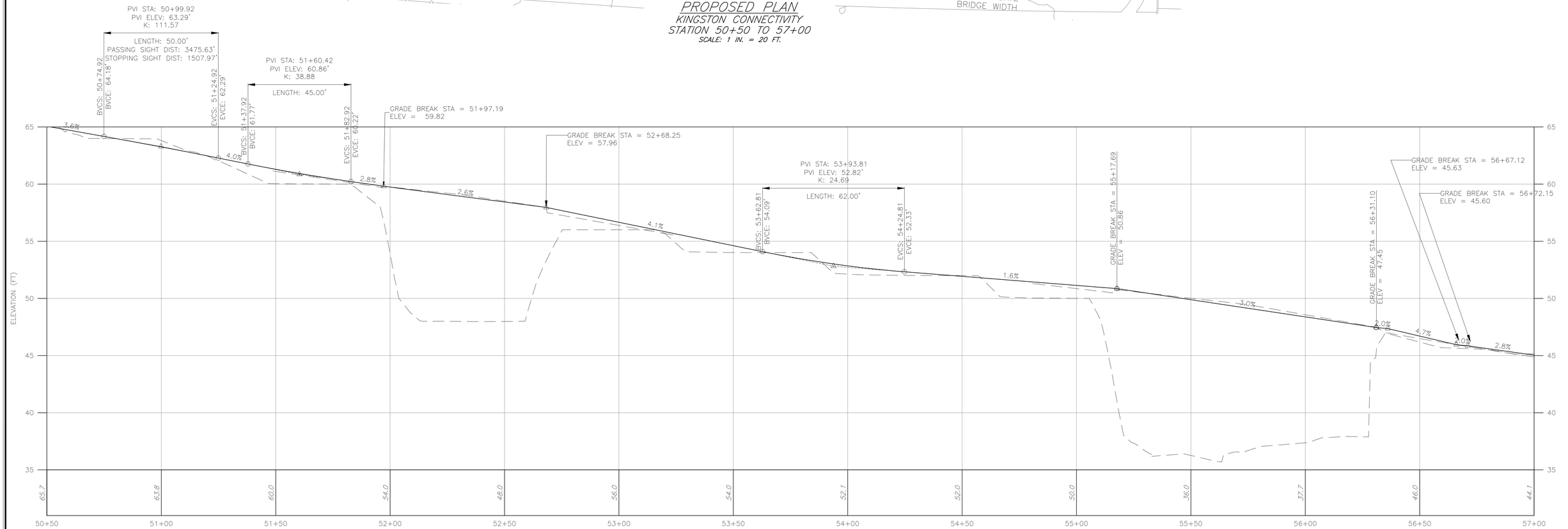
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO. 15 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 50+50 TO 57+00
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 50+50 to 57+00

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

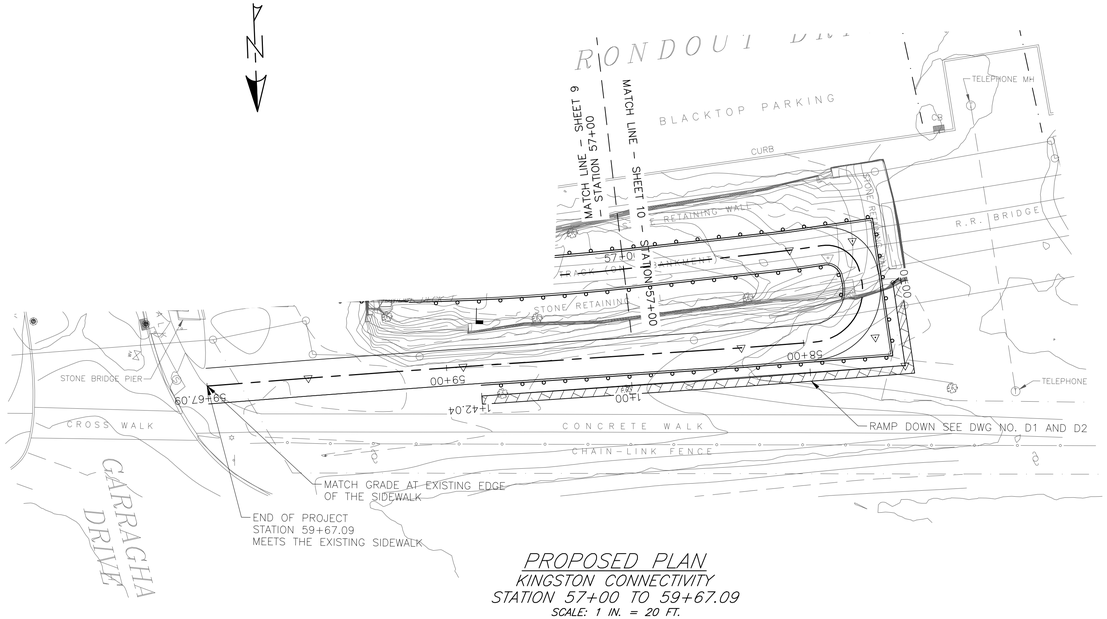
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 10 — T10/T11

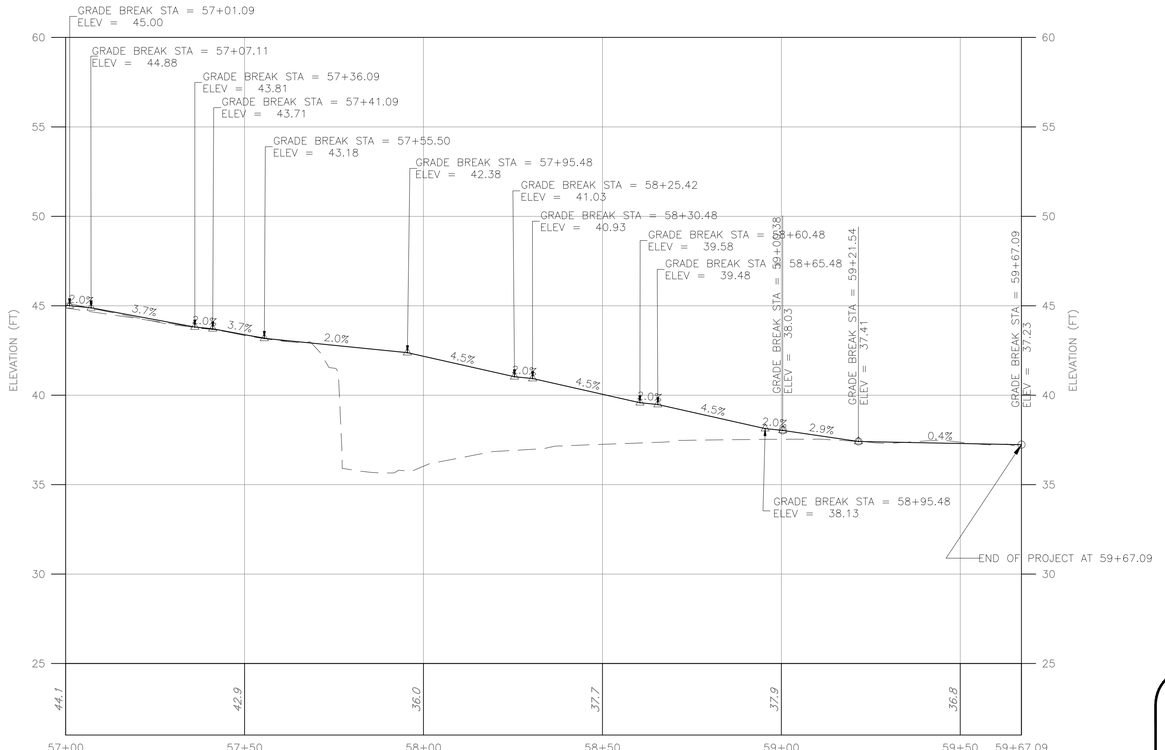
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

SHEET NO.16 OF 25



PROPOSED PLAN
KINGSTON CONNECTIVITY
STATION 57+00 TO 59+67.09
SCALE: 1 IN. = 20 FT.



Kingston Connectivity Centerline 57+00 to 59+67.09

PROFILE SCALE:
HORIZ: 1 IN. = 20 FT.
VERT: 1 IN. = 4 FT.

DATE:	REVISION:	BY:

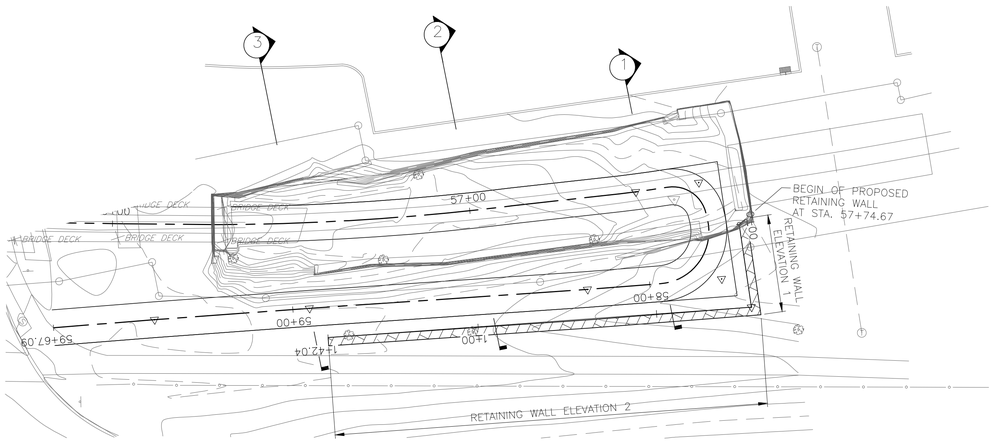
KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

TRAIL CONSTRUCTION PLAN 11 — T11/T11

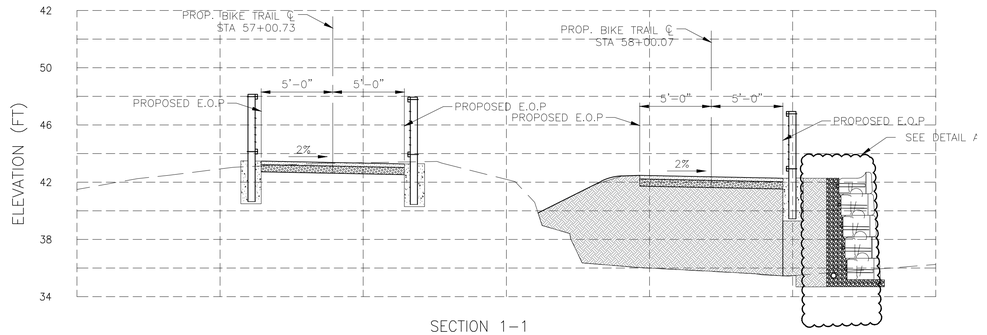
Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

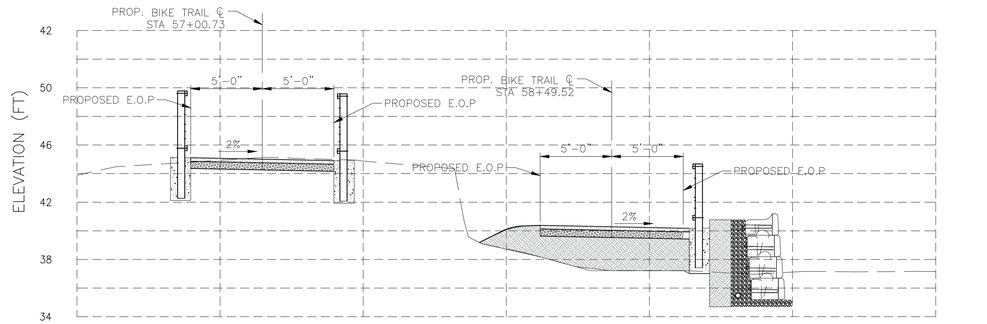
SHEET NO. 17 OF 25



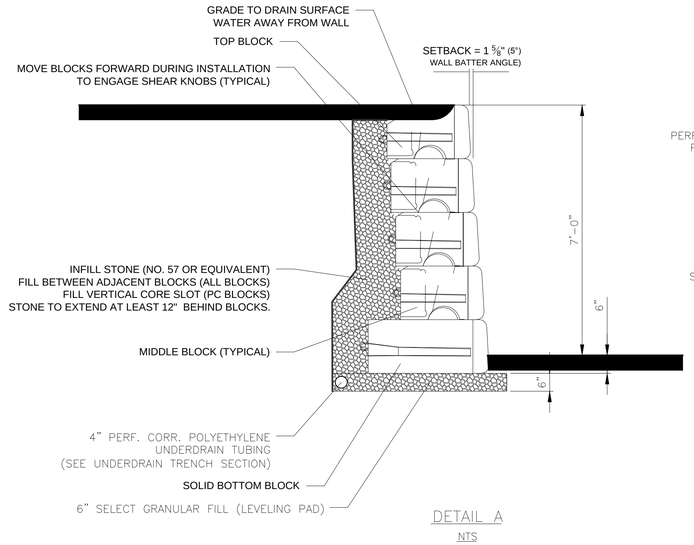
PROPOSED PLAN



SECTION 1-1

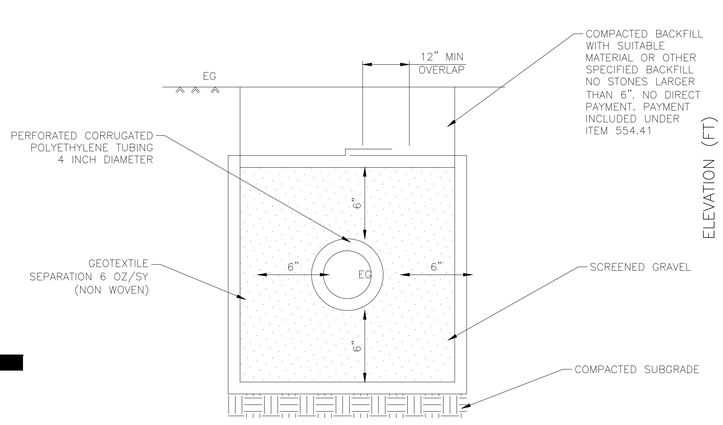


SECTION 2-2



DETAIL A

NTS

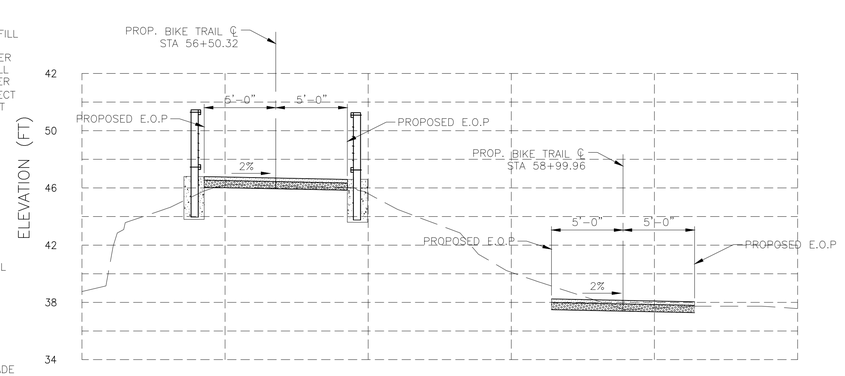


UNDERDRAIN TRENCH SECTION

NOT TO SCALE

NOTE:

THE UNDERDRAIN DETAIL SHOWN IS FOR ILLUSTRATIVE PURPOSE. DCDPW EXPECTS TO BE PART OF A SUBSURFACE DRAINAGE SYSTEM REFERENCED BY ITEM 554.41



SECTION 3-3

DATE:	REVISION:	BY:

KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
KINGSTON, NEW YORK

RAMP DOWN DETAIL 1 — D1/D7

Engineering and Land Surveying, P.C.
56 MAIN ST, POUGHKEEPSIE, NY 12601

DATE: 12/15/15

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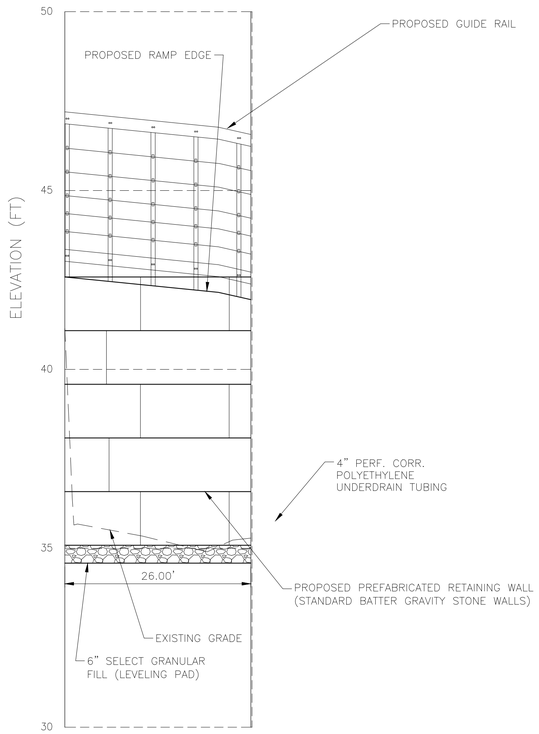
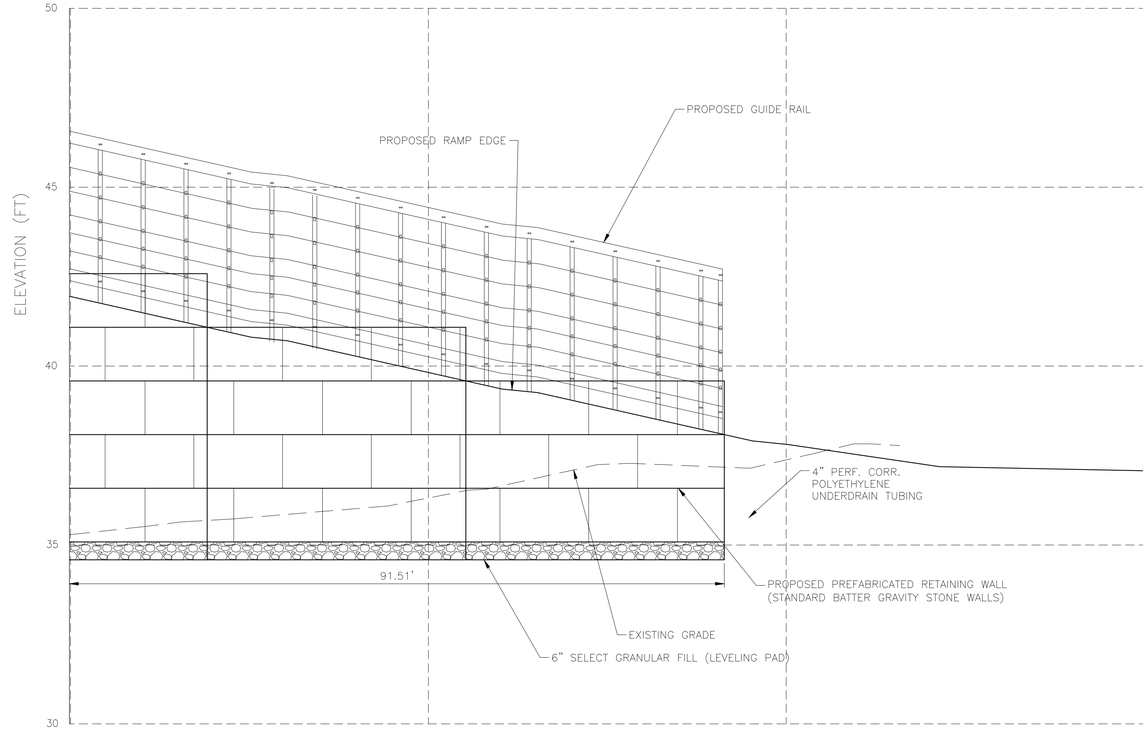


ELEVATION 1



ELEVATION 2

RETAINING WALL ELEVATIONS

PROFILE SCALE:
HORIZ: 1 IN. = 10 FT.
VERT: 1 IN. = 2 FT.

NOTES:

1. THE FILL TYPE CLASSIFICATION REFERS TO THE CONSTRUCTION METHOD USED FOR THE INSTALLATION OF THE WALL. FILL TYPE RETAINING WALLS ARE RETAINING STRUCTURES CONSTRUCTED FROM THE BASE OF THE WALL TO THE TOP (I.E. "BOTTOM–UP CONSTRUCTION").

2. A GRANULAR LEVELING PAD OR AN UNREINFORCED CONCRETE LEVELING PAD SHALL BE CONSTRUCTED BENEATH THE FIRST COURSE OF WALL UNITS IN A MANNER ACCEPTABLE TO THE ENGINEER, AND AT THE LOCATION SHOWN IN THE CONTRACT DOCUMENTS. THE LEVELING PAD SHALL BE PROPERLY INSTALLED, TO ASSURE A LEVEL FIRST COURSE OF WALL UNITS.

3. GRANULAR LEVELING PAD INSTALLATION:
   - GRADE AND LEVEL THE AREA ON WHICH THE LEVELING PAD AND WALL UNITS WILL REST. COMPACT THE AREA IN ACCORDANCE WITH SECTION 554
   - PLACE THE LEVELING PAD MATERIAL TO ENSURE COMPLETE CONTACT OF THE FIRST COURSE OF WALL UNITS.
   - STEP THE LEVELING PAD TO CONFORM TO GRADE CHANGES.

4. CONCRETE LEVELING PAD INSTALLATION:
   - PRECAST: THE CONTRACTOR MAY SUBSTITUTE, AT NO ADDITIONAL COST TO THE STATE, CUSHION SAND MEETING THE REQUIREMENTS OF 703–06, IN LIEU OF SELECT STRUCTURAL FILL, DIRECTLY BENEATH THE LEVELING PAD TO FACILITATE PLACEMENT OF THE PAD. THICKNESS OF THE CUSHION SAND SHALL NOT EXCEED 6".
   - CAST–IN–PLACE: THE CONTRACTOR MAY ELIMINATE THE 6" EXCAVATION AND CUSHION SAND, AND CAST THE LEVELING PAD DIRECTLY ON THE EXCAVATED WALL FOUNDATION AREA.
   - STEP THE LEVELING PAD TO CONFORM TO GRADE CHANGES.
   - THE USE OF SHIMS WILL NOT BE ALLOWED TO CORRECT FOR IMPROPER OR INCORRECT PLACEMENT OF LEVELING PAD AND/OR POOR CONSTRUCTION PRACTICES. SHIMS WILL BE ALLOWED TO CORRECT FOR MINOR FABRICATION IRREGULARITIES.
   - FOR A PRECAST CONCRETE LEVELING PAD, A ½" TO ¾" JOINT SHALL BE PROVIDED AT ALL WALL CONSTRUCTION JOINTS, CHANGES IN PAD ELEVATION, OR AT THE MAXIMUM INTERVAL OF 20'–0", WHICHEVER IS LESS.
   - SEEPAGE ZONES INTERCEPTING THE EXCAVATION SLOPE OR THE WALL FOUNDATION AREA SHALL BE POSITIVELY DRAINED BY PROVIDING ADDITIONAL UNDERDRAIN AND UNDERDRAIN FILTER MATERIAL AT THE SEEPAGE ZONE, AS DIRECTED BY THE ENGINEER.

5. WALL CONSTRUCTION:
   - WALL CONSTRUCTION AT ALL STAGES SHALL BE TRUE TO LINE AND GRADE. ANY DEVIATION FROM LINE AND GRADE WHICH IS EITHER DANGEROUS TO THE STABILITY OR DETRACTS FROM THE APPEARANCE OF THE WALL SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
   - TOLERANCES SHALL NOT EXCEED THOSE PROVIDED IN THE SPECIFICATION.
   - A VERTICAL JOINT PATTERN IS DEPICTED FOR ILLUSTRATIVE PURPOSES.
   - CERTAIN OPEN FACE UNIT PREFABRICATED WALLS MAY REQUIRE A BRICK JOINT PATTERN, DEPENDING ON THE WALL ASSEMBLY REQUIREMENTS.
   - SOLID FACE UNIT PREFABRICATED WALLS EXHIBIT INDIVIDUALIZED PATTERNS (BRICK JOINT, ALTERNATING SIZES, ETC.), DEPENDING ON THE WALL SYSTEM MANUFACTURER.

6. PLACEMENT OF THE INFILL AND BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
   - THE ELEVATION OF THE BACKFILL BEHIND THE WALL SHALL NOT EXCEED THE ELEVATION OF THE INFILL MATERIAL PLACED WITHIN THE WALL UNITS.

   PREFABRICATED WALL SYSTEM:
   - AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BETWEEN THE INFILL AND BACKFILL EXCEED 4'–0".
   - AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BETWEEN THE INFILL AND BACKFILL EXCEED THE HEIGHT OF ONE UNIT.

7. INSTALLATION OF THE FACE UNITS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
   a. OPEN FACE UNITS:
   - ALL UNITS ABOVE THE FIRST COURSE SHALL INTERLOCK WITH THE LOWER COURSE.
   - THE VERTICAL JOINT OPENING SHALL BE BETWEEN ¼" AND ½".
   - THE VERTICAL JOINT OPENING SHALL BE ACCOUNTED FOR IN DETERMINING THE TOTAL LENGTH OF THE WALL.

   b. SOLID FACE UNITS:
   - THE BASE UNITS SHALL BE SET SUCH THAT EACH UNIT'S CONNECTION DEVICE (TONGUE AND GROOVE, SHEAR ROD, ETC.) PROVIDES THE CORRECT BATTER OF THE WALL FACE.
   - ALL UNITS ABOVE THE FIRST COURSE SHALL INTERLOCK WITH THE LOWER COURSE.
   - SWEEP CLEAN ALL UNITS PRIOR TO PLACING ADDITIONAL LEVELS TO ENSURE DIRECT CONTACT.

   c. INSTALL CAP UNITS USING MASTIC ADHESIVE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

8. PAYMENT FOR RETAINING WALL SHALL BE UNDER ITEM 554.41 "FILL TYPE RETAINING WALL (GREATER THAN 6FT. – 12FT.) PAYMENT SHALL INCLUDE ALL WORK REQUIRED FOR THE CONSTRUCTION OF THE RETAINING WALL INCLUDING BACKFILLING, SELECT GRANULAR FILL, UNDERDRAIN AND GEOTEXTILE MATERIAL.

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KINGSTON POINT RAIL TRAIL CONSTRUCTION PROJECT
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RAMP DOWN DETAIL 2 — D2/D7

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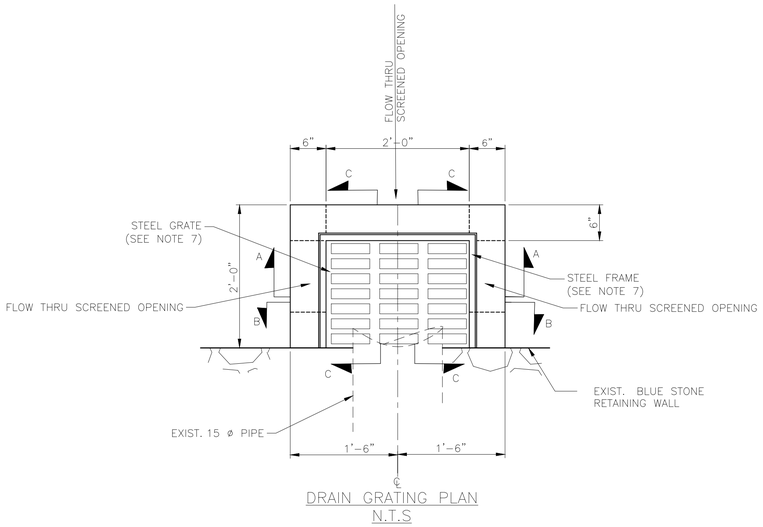
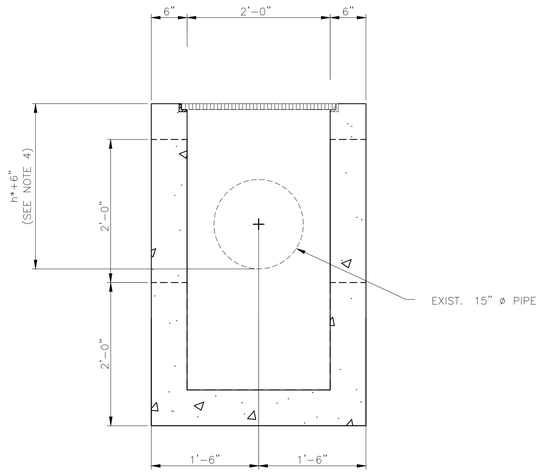
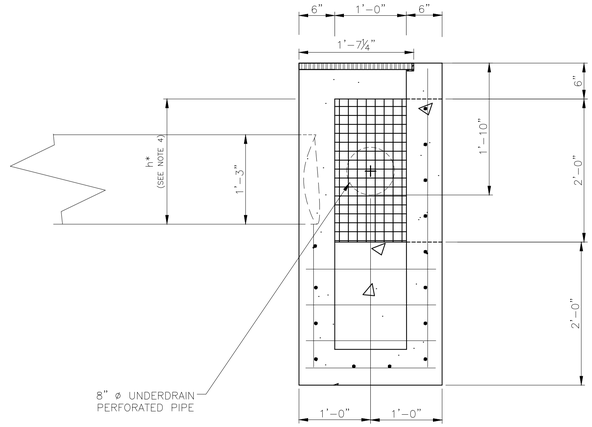
DATE: 12/15/15



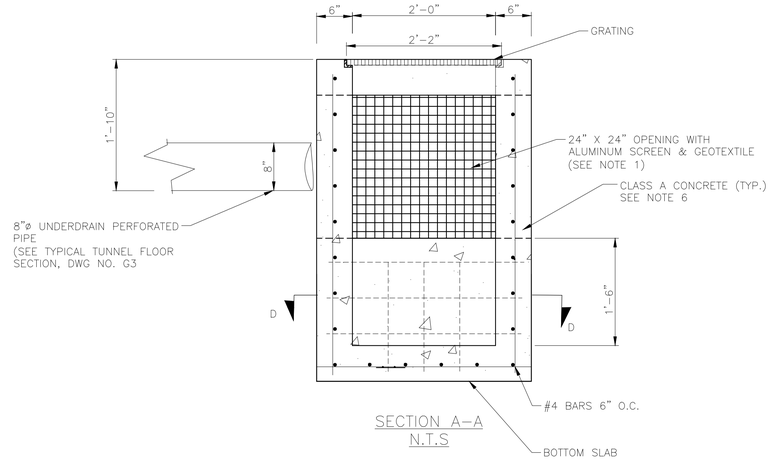
DRAIN GRATING PLAN
N.T.S



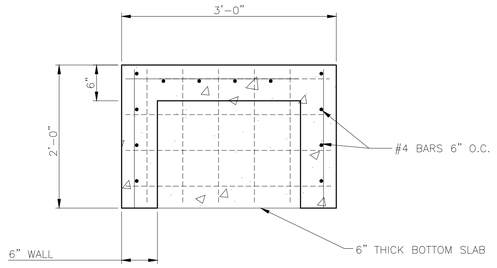
SECTION B–B
N.T.S



SECTION C–C
N.T.S



SECTION A–A
N.T.S



SECTION D–D
N.T.S

NOTES:

1. ALUMINUM SCREEN SHALL BE PROVIDED 6" LONGER THAN SIZE OF OPENINGS SHOWN IN BOTH DIRECTIONS, ON (3) THREE SIDES. ALUMINUM SCREEN SHALL BE ¼" THICK WITH 1"X1" OPENINGS ON ALL (3) SIDES OF CONCRETE MANHOLE. SCREEN SHOULD BE SEPARATED FROM CRUSHED STONE WITH GEOTEXTILE FABRIC.
2. INSTALL SCREEN ON OUTSIDE FACE OF WALLS.
3. COST OF SCREEN SHALL BE INCLUDED IN TOTAL COST OF CATCH BASIN
4. ELEVATION OF THE INVERT OF EXIST. 15" DIAMETER DRAIN SHALL BE VERIFIED IN THE FIELD.
5. FINAL SIZE OF SIDE OPENINGS IN CONCRETE WALL TO BE DETERMINED BASED ON FIELD MEASUREMENTS BY CONTRACTOR AND CONSISTENT WITH PROPOSED TRAIL PROFILE.
6. USE CAST–IN–PLACE CLASS A CONCRETE AT 3500 PSI
7. SEE SPECIAL MANHOLE SPECIAL SPECIFICATION 604.XX0801 FOR DETAILS REGARDING FRAME AND GRATE
8. PAYMENT FOR SPECIAL MANHOLE AND ALL MISCELLANEOUS ITEMS SHOULD BE PAID FOR UNDER ITEM NO. 604XX0801 "SPECIAL MANHOLE"

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KINGSTON, NEW YORK

CATCH BASIN DETAIL — D3/D7

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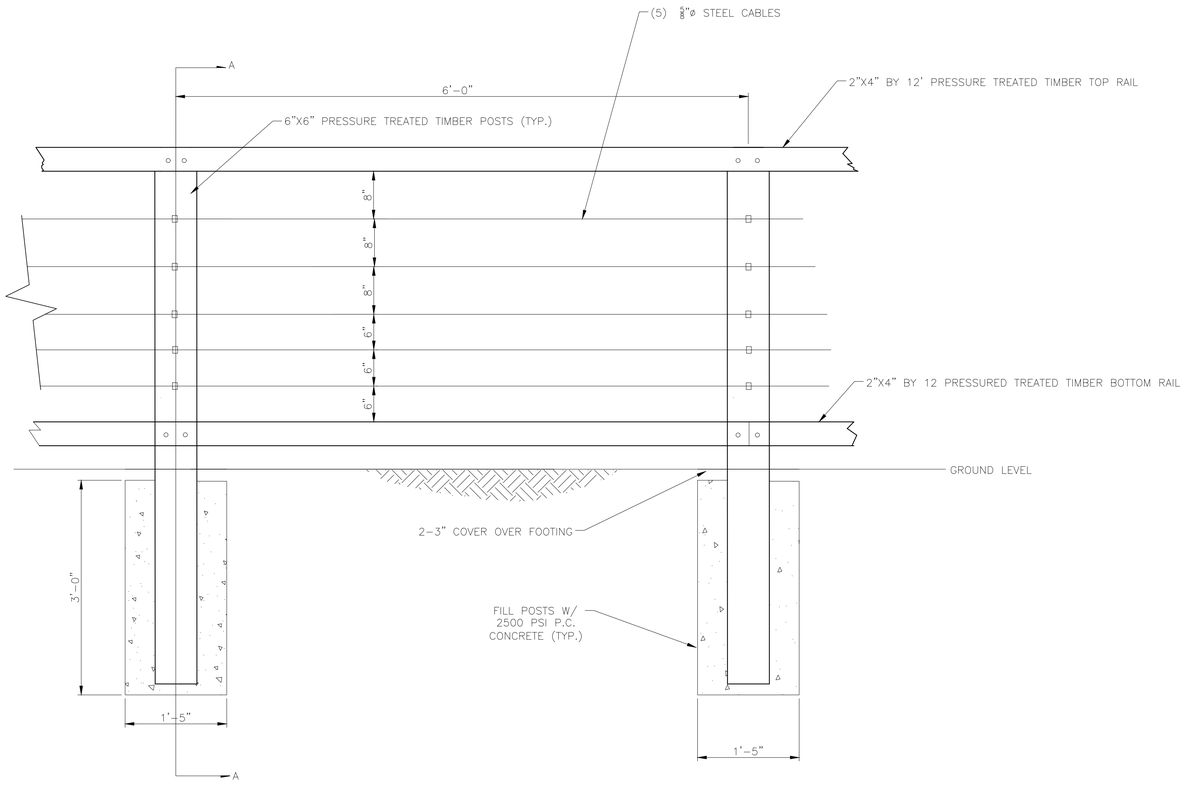
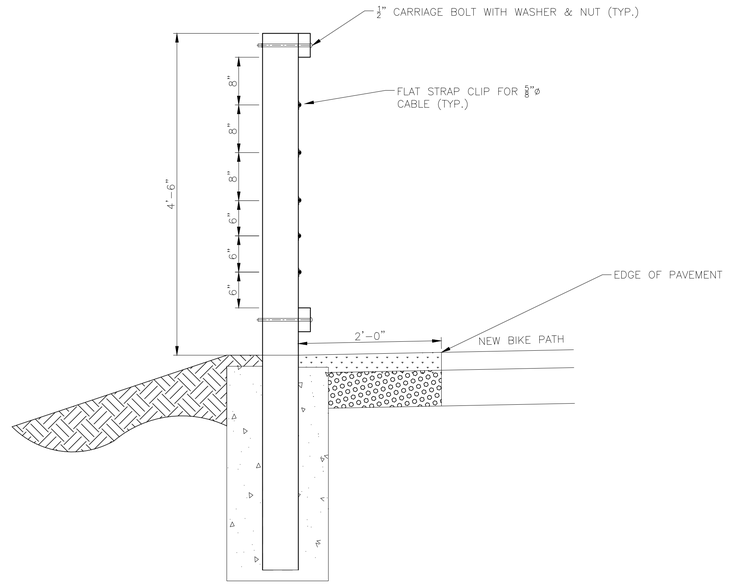
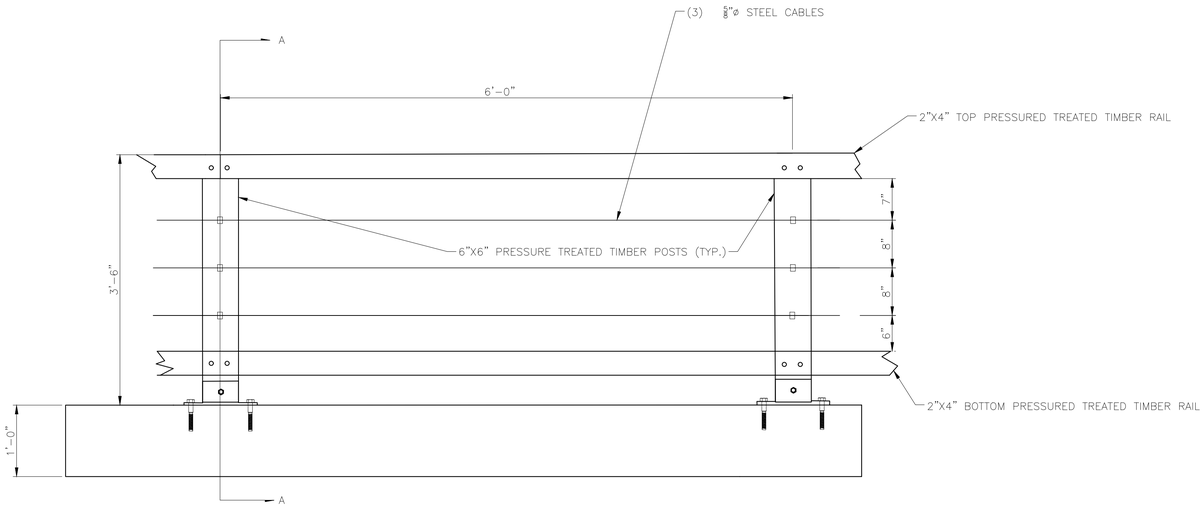


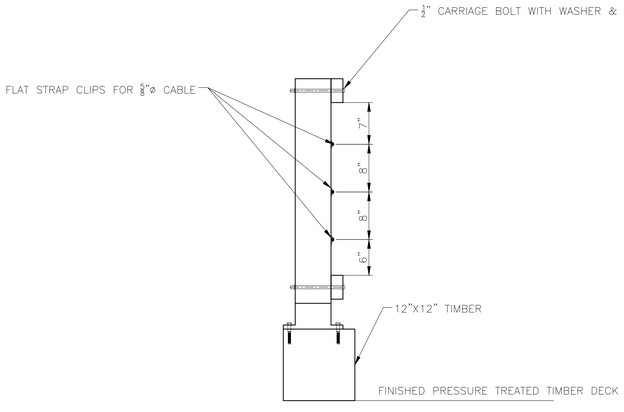
SAFETY GUIDERAIL SECTION AT BERM
N.T.S



SECTION A-A
N.T.S



SAFETY GUIDERAIL SECTION AT BRIDGES
N.T.S



SECTION A-A
N.T.S

NOTES

1. ALL POSTS SHALL BE ALIGNED TO A TOLERANCE OF ±1/2" FOR PLUMB AND GRADE
2. PROVIDE TIMBER RAILINGS THAT ARE SMOOTH AND SPLINTER FREE.
3. STAGGER BUTT ENDS OF THE TOP RAIL AND THE LOWER FACE RAIL (ON ALTERNATE POSTS). CENTER ALL BUTT END JOINTS ON THE POSTS
4. ALL TIMBER SHALL BE PRESSURED TREATED
5. ALL HARDWARE TO BE HOT-DIPPED GALVANIZED (G185), STAINLESS STEEL OR CORROSION-RESISTANT POLYMER COATING.

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GUIDERAIL DETAILS — D4/D7

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DATE: 12/15/15

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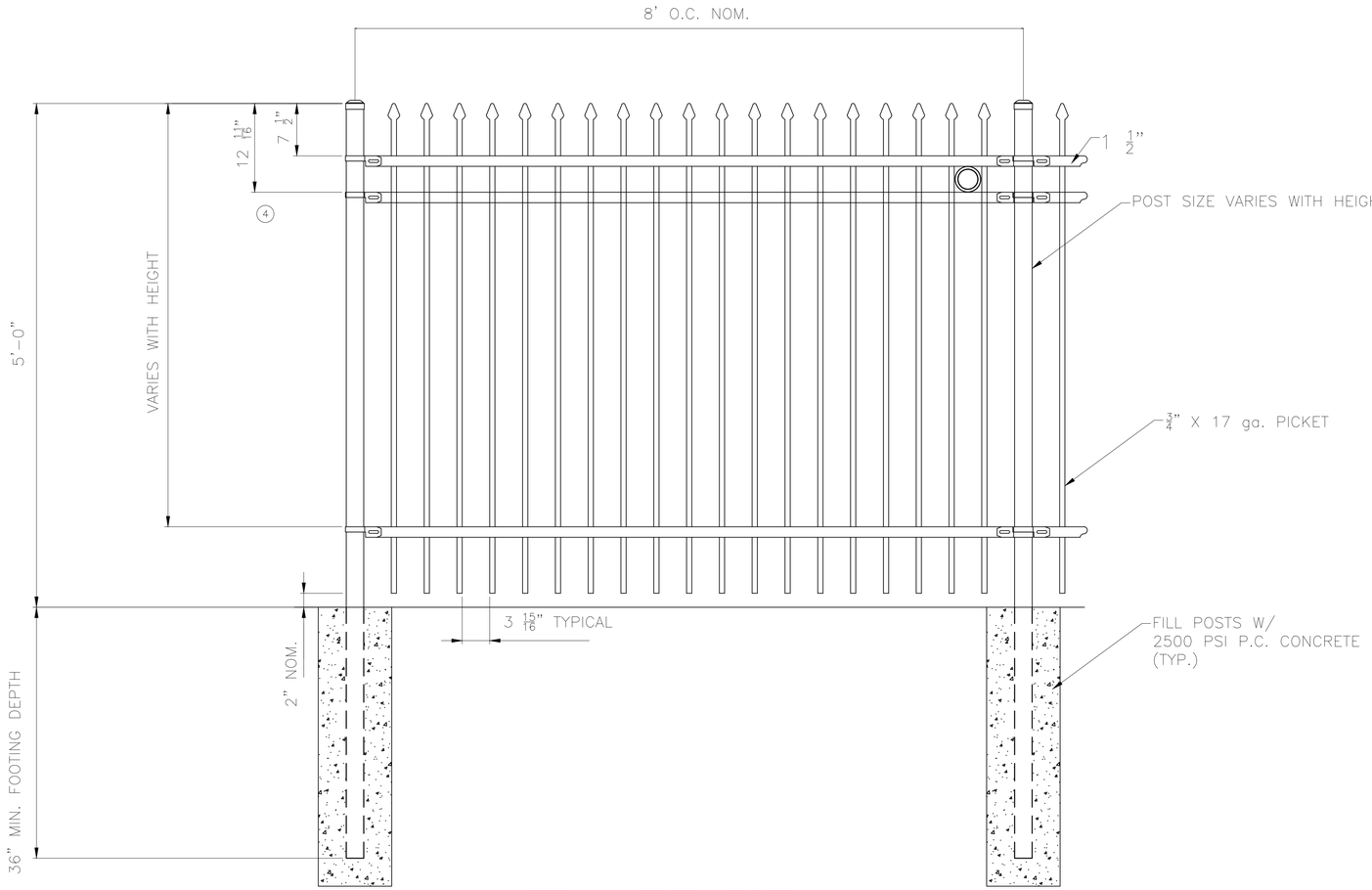

STEEL PICKET FENCE DETAILS
N.T.S.

FOR LOCATION SEE DWG. NO. T3/T11

DATE:	REVISION:	BY:

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KINGSTON, NEW YORK

STEEL PICKET FENCE DETAILS D5/D7

Engineering and
Land Surveying, P.C.
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DATE: 12/15/15

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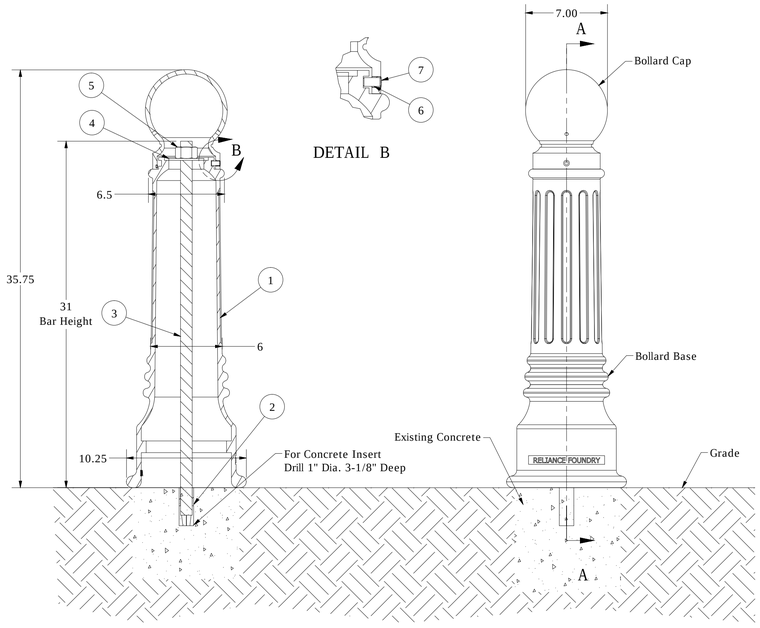

SECTION A-A

Fixed Mount, for installation into existing concrete using concrete insert

Notes:

- Embedment details are for reference illustration only. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
- Bollard post is provided as shown, with material detailed in legend below. Concrete, foundation and/or installation ordered separately or provided by others.
- This drawing is not drawn to scale. Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

PARTS LIST					
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R-7539	Bollard Post	Ductile Iron	75 lbs
2	1	Anchor Insert	Concrete Anchor Insert	Steel	
3	1	3/4" Dia. Rod	3/4" Dia. Rod Threaded Both Ends	Steel	
4	1	3/4" Washer	Plain Washer	Steel	
5	1	3/4" Nut	Hex Nut	Steel	
6	3	3/8" Set Screw	Hexagon Socket Set Screw - Flat Point	Stainless Steel	
7	3	Hole Plug	Plastic Hole Plug	Polyethylene	

Mount Options:

- ○ Fixed Mount, for new construction (see sheet 2 of 10)
- ✓ Fixed Mount, for installation into existing concrete using concrete insert (see sheet 3 of 10)
- ○ Fixed Mount, for installation into existing concrete using concrete adhesive (see sheet 4 of 10)
- ○ Security Post Cover, to fit over new steel pipe bollard (shown at maximum height) (see sheet 5 of 10)
- ○ Security Post Cover, to fit over low-profile steel pipe bollard (see sheet 6 of 10)
- ○ Security Post Cover, to fit over existing steel pipe bollard using concrete adhesive (see sheet 7 of 10)
- ○ Removable Mount, for installation into new concrete (see sheet 8 of 10)
- ○ Removable Mount, for installation into existing concrete using concrete insert (see sheet 9 of 10)
- ○ Removable/Retractable Mount, for installation into new concrete (see sheet 10 of 10)

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BOLLARD DETAIL — D6/D7

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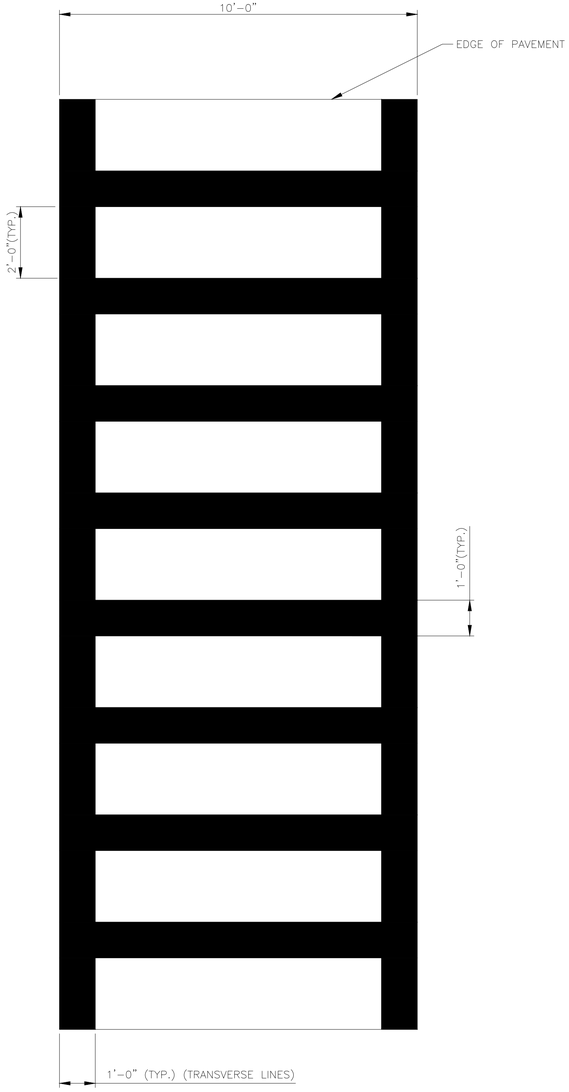
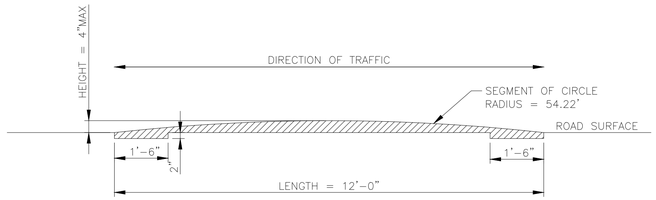


TYPICAL CROSSWALK DETAIL

COMBINED TYPE LS
N.T.S.

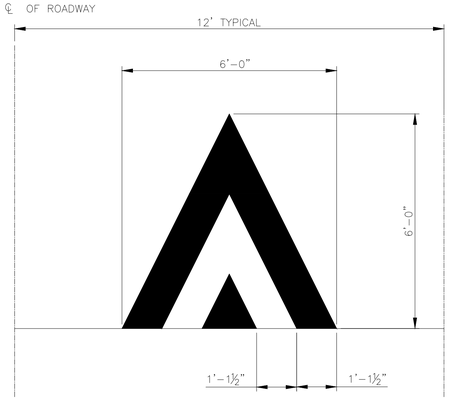
NOTES:

1. ALL CROSSWALK MARKINGS SHALL BE WHITE PREFORMED REFLECTORIZED PAVEMENT STRIPES, ITEM NO. 688.01 IN NYSDOT STANDARD SPECIFICATIONS
2. TYPE "LS" CROSSWALKS SHALL HAVE THE LONGITUDINAL LINES PARALLEL TO THE LANE LINES.

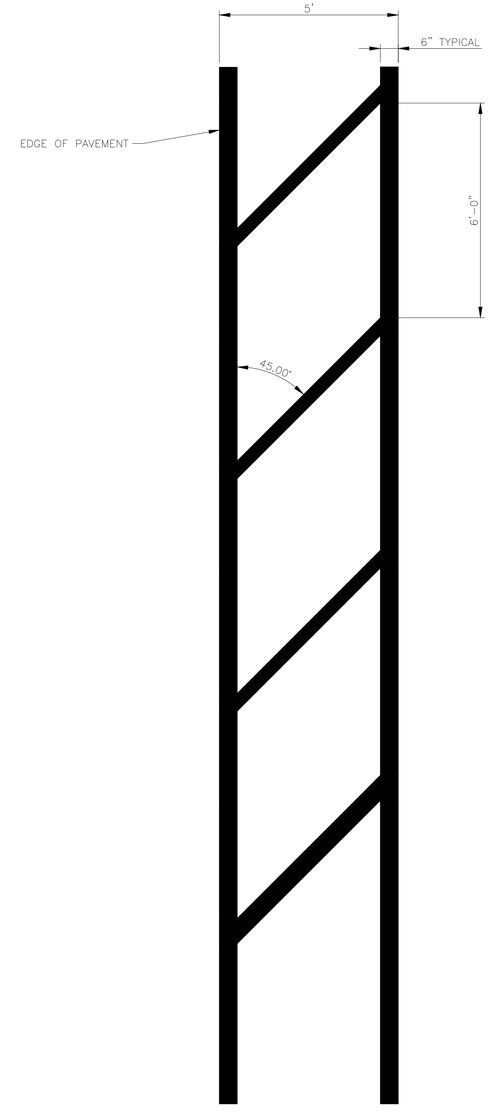


SPEED HUMP DETAIL

N.T.S.



PAVEMENT MARKING FOR SPEED HUMP



TRAFFIC CALMING PAVEMENT MARKING FOR REDUCING LANE WIDTH

NOTES:

1. PAVEMENT MARKINGS FOR REDUCING LANE WIDTH SHALL BE YELLOW PREFORMED REFLECTORIZED PAVEMENT STRIPES, ITEM NO. 640.11 IN NYSDOT STANDARD SPECIFICATIONS

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TYPICAL CROSSWALK DETAIL — D7/D7

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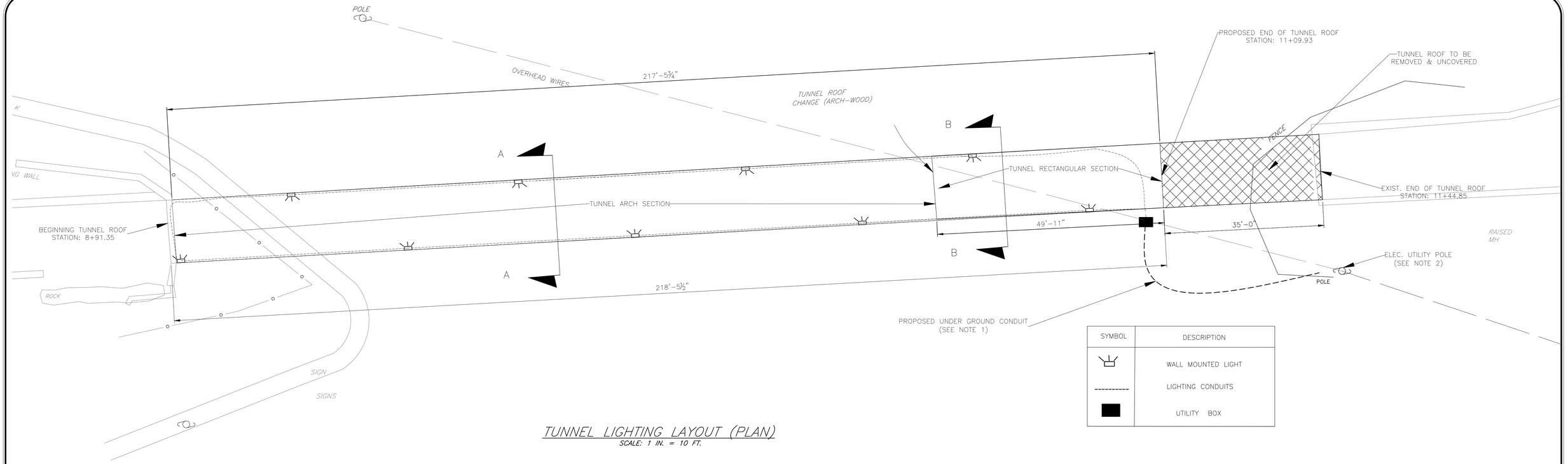
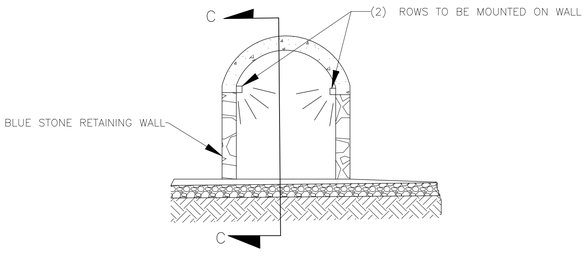
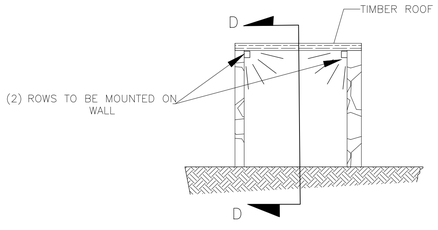


SYMBOL	DESCRIPTION
	WALL MOUNTED LIGHT
----------	LIGHTING CONDUITS
■	UTILITY BOX

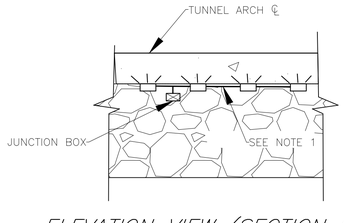
TUNNEL LIGHTING LAYOUT (PLAN)
SCALE: 1 IN. = 10 FT.



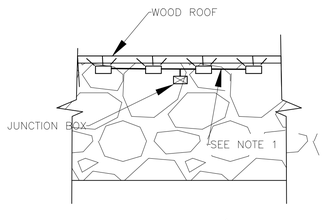
ARCH SECTION OF TUNNEL (SECTION A-A)
SCALE: N.T.S



RECTANGULAR SECTION OF TUNNEL (SECTION B-B)
SCALE: N.T.S



ELEVATION VIEW (SECTION C-C)
SCALE: N.T.S



ELEVATION VIEW (SECTION D-D)
SCALE: N.T.S

NOTES:

1. SIZES, MOUNTING HEIGHT, SPACING AND TYPES OF FIXTURES/CONDUITS TO BE DETERMINED BY LANDSCAPE ARCHITECT.
2. RUN CONDUIT FROM EXISTING OVERHEAD CABLES
3. CONTRACTOR TO COORDINATE WITH ELECTRICAL UTILITY COMPANY FOR ELECTRICAL SERVICE FOR SITE LIGHTING. INSTALLATION IS TO BE CONSISTENT WITH NATIONAL ELECTRIC CODE

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TUNNEL LIGHTING PLAN — TL1

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