



TOWNSHIP of HOPEWELL
MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK:

LOT:

ADDRESS:

PROJECT NAME:

PLANS

ROADWAY - ROUNDABOUT

NURSERY ROAD

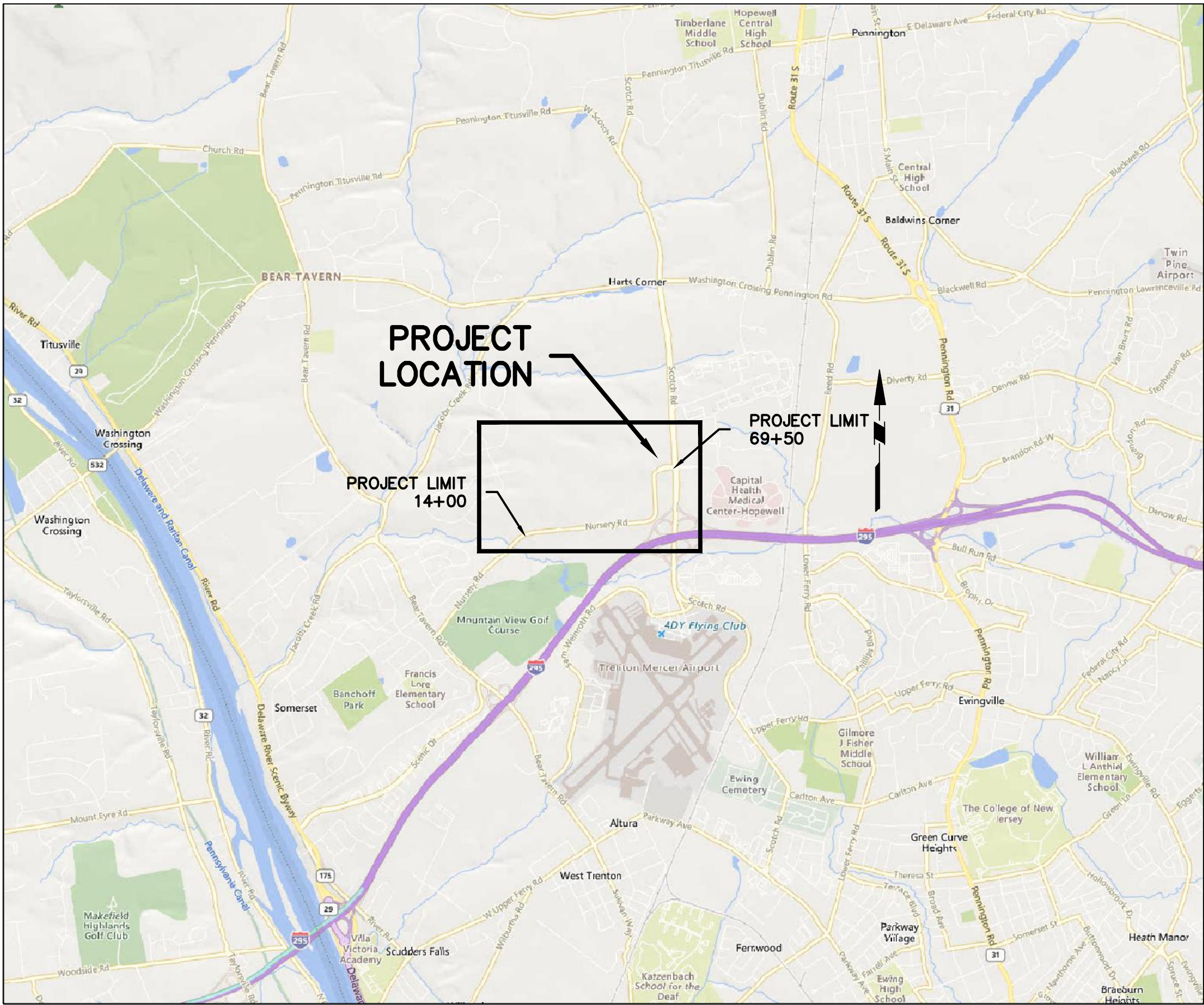
ROADWAY IMPROVEMENTS AND ROUNDABOUT INSTALLATION

NURSERY ROAD

HOPEWELL TOWNSHIP MERCER COUNTY, NEW JERSEY SEPTEMBER 2024

PUBLIC UTILITIES	
ELECTRIC—	PSE&G 4140 QUAKERBRIDGE ROAD LAWRENCE, NJ 08648
CABLE—	COMCAST 1100 CORNWALL ROAD SOUTH BRUNSWICK, NJ 08810
CABLE—	VERIZON 600 HORIZON DR HAMILTON, NJ 08691
GAS—	ELIZABETHTOWN GAS CO. 3 C.R. 635 HAMPTON, NJ 08827
WATER—	TRENTON WATER WORKS 333 CORTLAND ST TRENTON, NJ 08638
SEWER—	TRENTON SEWER UTILITY 1502 LAMBERTON STREET TRENTON, NJ 08611

DESIGN TRAFFIC DATA - NURSERY ROAD		
A.D.T. (2025) — 2 WAY		1,155
A.D.T. (2045) — 2 WAY		1,410
D.H.V. (2045) — 2 WAY		90
D		64%
T		1%
V		40 MPH



KEY MAP

SCALE: 1" = 3000' ±

UNDERGROUND LOCATION SERVICE CALL: 1-800-272-1000.

NOTE:

LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. THE CONTRACTOR IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS SHOWN AS AN AID IN DETERMINING EXACT LOCATIONS.

2019 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO GOVERN.

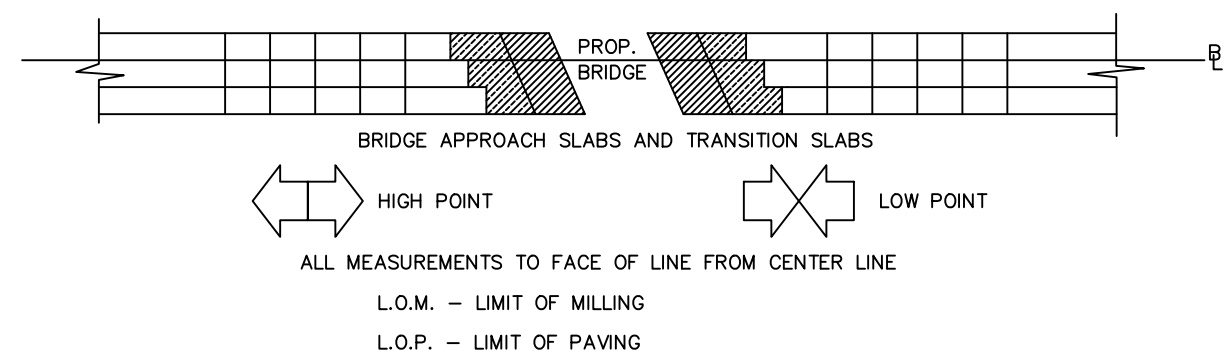
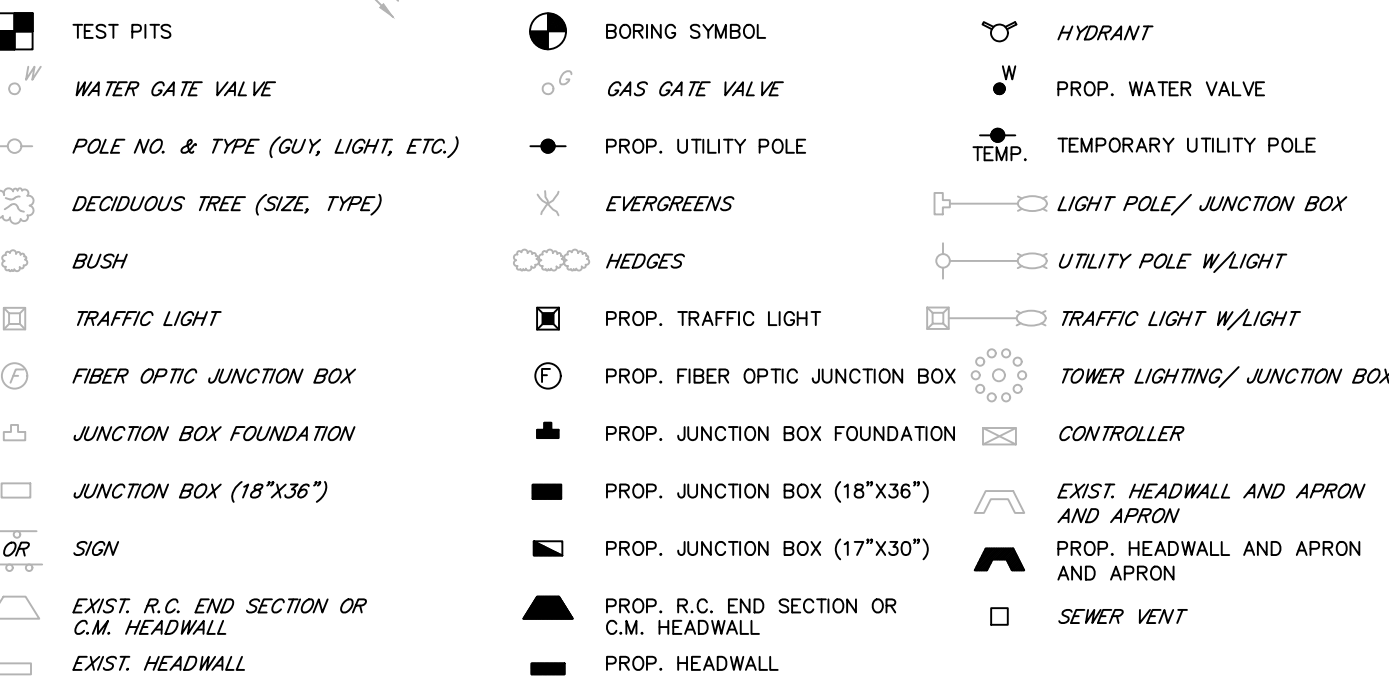
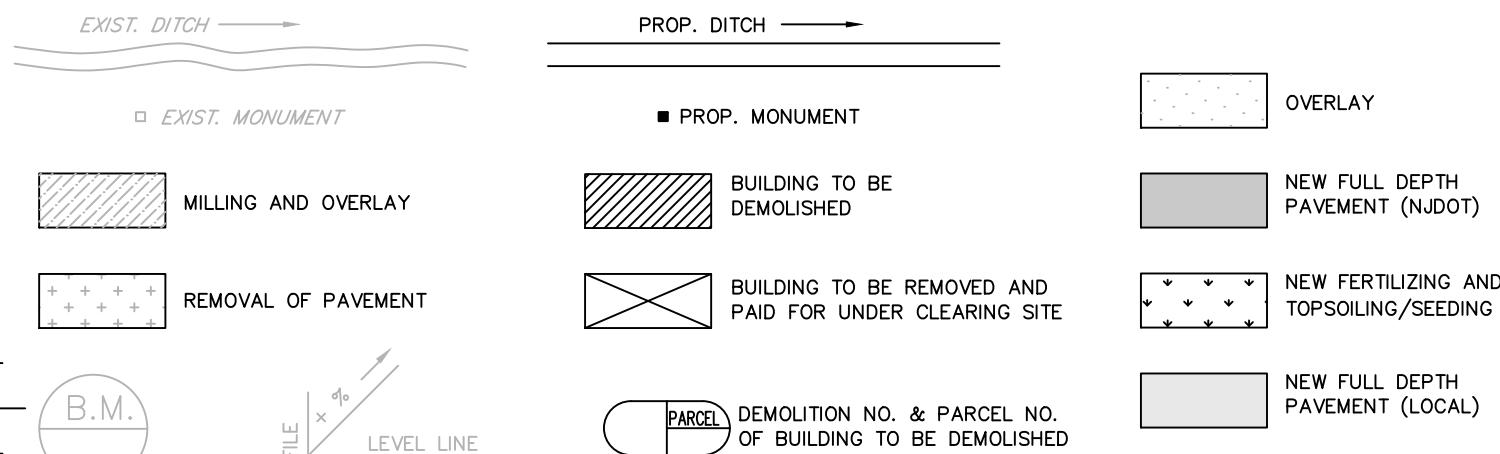
THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS (2016) AND STANDARD ELECTRICAL DETAILS (2007), INCLUDING ALL UPDATES, ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN

CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILED AT THE OFFICE OF THE CONSULTANT.

SHEET INDEX		
SHEET NO.	DRAWING NO.	DESCRIPTION
1	KT001-0101	COVER SHEET
2	KT002-0101	LEGEND & GENERAL NOTES
3	KT400-0101	PLAN SHEET INDEX
4	KT401-0101	TIES
5	KT003-0101	TYPICAL SECTIONS
6-10	KT101-0101	CONSTRUCTION PLANS
11-15	KT103-0101	GRADING PLANS
16-19	KT103-0201	RAMP DETAILS
20-25	KT104-0101	SOIL EROSION & SEDIMENT CONTROL PLANS
26-30	KT102-0101	SIGNING & STRIPING PLAN
31	KT106-0101	LIGHTING PLAN
32-39	KT105-0100	TRAFFIC CONTROL NOTES & PLANS
40-51	KT302-0101	CROSS SECTIONS
52-56	KT100-0101	EXISTING CONDITIONS PLANS
57-58	KT501-0101	CONSTRUCTION DETAILS

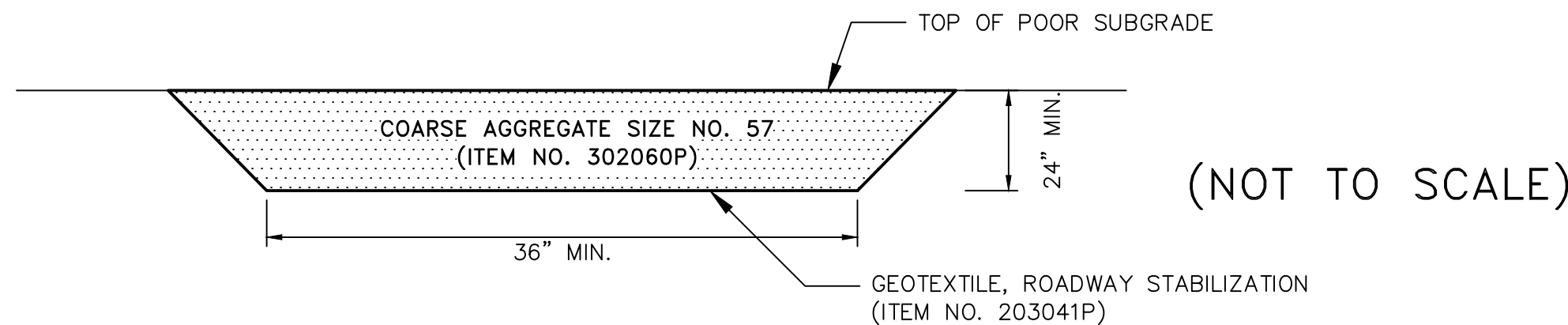
Date	Description	No.	
Revisions			
			
SIGNATURE		DATE SIGNED	
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434			
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL			
MERCER COUNTY		NEW JERSEY	
Drawing Title			
COVER SHEET			
Project No. 130208601		KT001 0101	
Date 9/11/2024			
Scale AS SHOWN			
Drawn By ME	Checked By KP		
Submission Date 9/11/2024			
Sheet 1 of 58			

STANDARD LEGEND



ITEMS WITH NO ALTERNATIVE OR ALTERNATIVE ITEMS

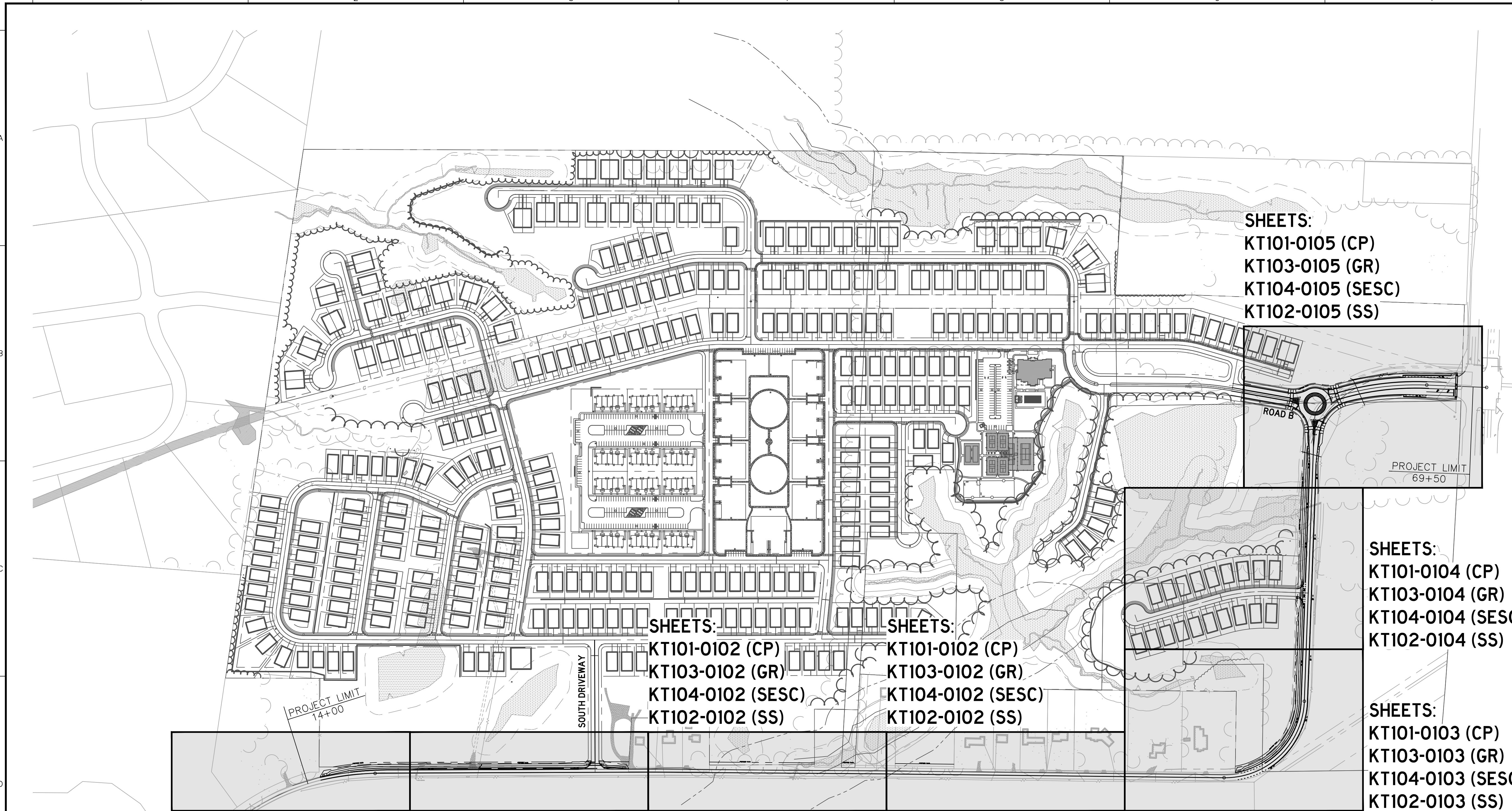
UNDERCUT STABILIZATION DETAIL



A.H., BK.	AHEAD, BACK	J.B.	JUNCTION BOX	RCP, R.C.P.	REINFORCED CONCRETE PIPE
B.C.T.	BARRIER CURB TRANSITION	L.T., LCT.	LINEAR CURB TRANSITION	RMG, R.M.C.	RIGID METALLIC CONDUIT
B.C.	BASELINE	LT., RT.	LEFT, RIGHT	RMG, R.M.M.C.	RIGID NON-METALLIC CONDUIT
B.M.	BENCH MARK	LOP	LIMIT OF PAVEMENT (PAVING)	ROW, R.O.W.	RIGHT OF WAY
B.M., B.M.	BENCHMARK	LOM	LIMIT OF MILLING	RR, R.R.	RAILROAD
B.T.	BELL TELEPHONE	M.B.	MAILBOX	RTE., RT.	ROUTE
BIT., BITUM.	BITUMINOUS	M.P.	MAIL POST	SAN.	SANITARY
BLDG.	BUILDING	MAX., MAX.	MAXIMUM	SDWK.	SIDEWALK
C., C.L.	CENTERLINE	MIN., MIN.	MINIMUM	S.E.	SOIL EROSION & SEDIMENT CONTROL PLAN
C.I.P.	CAST IRON PIPE	NO, NO.	NUMBER	S.H.D.	STATE HIGHWAY DEPARTMENT
C.L.N.	CHAIN LINK FENCE	N.T.S.	NOT TO SCALE	SHLD., SHLD.	SHOULDER
C.M.P.	CORRUGATED METAL PIPE	PWMT, PAV'T	PAVEMENT	S., S.L.	SURVEY LINE
CONC.	CONCRETE	PERF.	PERFORATED	S.O.D.	SUBBASE OUTLET DRAIN
CRT	CURB RAMP TYPE	PGL, P.G.L.	PROFILE GRADE LINE	STB.	STORY
CULV.	CULVERT	P, P.L.	PROPERTY LINE, PROFILE LINE	T	TANGENT
D., DIA.	DIAMETER	PK	PARKER KAYLON MASONRY NAIL	TA	TO BE ABANDONED
DC, D.C.	DROP CURB	POC, P.O.C.	POINT ON CURVE	TBR	TO BE REMOVED
DE	DITCH EXCAVATION	POL, P.O.L.	POINT ON LINE	TEL.	TELEPHONE
DEP., DP	DEPRESSED CURB	POT, P.O.T.	POINT ON TANGENT	TEMP.	TEMPORARY
DH	DRILL HOLE	PROP P.R.C.	PROPOSED POINT OF REVERSE CURVE	THK., TH.	THICK
DWY	DRIVEWAY	PT, P.T.	POINT OF TANGENCY	TYP, TYP.	TYPICAL
E.B., W.B. N.B. S.B.	EASTBOUND, WESTBOUND, NORTHBOUND, SOUTHBOUND	PSV, P.V.C.	POLYVINYL CHLORIDE PIPE	U.D.	UNDERDRAIN
EL., ELEV.	ELEVATION	PSI	PLAN SHEET INDEX	UP, U.P.	UTILITY POLE
EOP	EDGE OF PAVEMENT	PVI, P.V.I.	POINT OF VERTICAL INTERSECTION	VAR, VAR.	VARIABLE, VARIES
EXIST, EXIST.	EXISTING	PVT, P.V.T	POINT OF VERTICAL TANGENCY, PAVEMENT	VCT, V.C.T.	VERTICAL CURB TRANSITION
GR	GRATE	R	RADIUS	W.C.V.C.	WHITE CONCRETE VERTICAL CURB
HT.	HEIGHT	RCP, R.C.P.	REINFORCED CONCRETE PIPE	WM	WATER METER
H.W.	HEADWALL	RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE	X-SECT	CROSS SECTION
HYD.	HYDRANT				
INV	INVERT				
IP	IRON PIN				

E	-DOQ - EST. & DIST. OF QTY	R	DOY T - TIES	T	SS - TRAFFIC SIGNAL, SIGNING AND STRIPING PLANS
T	- SPECIAL SECTIONS	G	- GRADES	SD	- SIGN TEXT DETAIL
PS	- PLAN SHEET INDEX	TC	- TRAFFIC CONTROL/STAGING PLANS	M	- METHOD OF CROSS SECTIONS
C	- CONSTRUCTION PLANS	ES	- ELECTRICAL PLANS/ST	E	- EPLAN SECTIONS
CP	- ENVIRONMENTAL PLANS	ES	- ELECTRICAL SIGNAL PLANS	DTL	- CONSTRUCTION DETAILS
P	- DRAINAGE PLANS	L	- LANDSCAPE PLANS	EOQB	- ESTIMATE OF QUANTITIES - BRIDGE
D	- PROFILES	SL	- SIGN LOCATION PLANS	B	- BRIDGE PLANS

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SHEETS:
KT101-0101 (CP)
KT103-0101 (GR)
KT104-0101 (SESC)
KT102-0101 (SS)

SHEETS:
KT101-0101 (CP)
KT103-0101 (GR)
KT104-0101 (SESC)
KT102-0101 (SS)

SHEETS:
KT101-0102 (CP)
KT103-0102 (GR)
KT104-0102 (SESC)
KT102-0102 (SS)

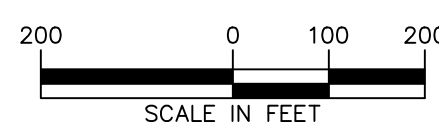
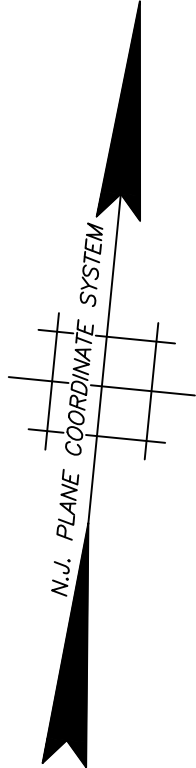
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KT104-0104 (SESC)
KT102-0104 (SS)

SHEETS:
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KT103-0103 (GR)
KT104-0103 (SESC)
KT102-0103 (SS)

NURSERY ROAD (C.R. 647)

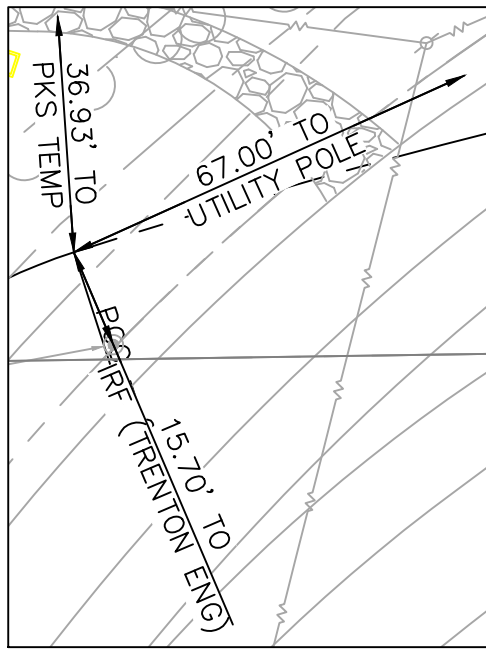


Date	Description	No.	
Revisions			
			
SIGNATURE DATE SIGNED			
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434			
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY			
Drawing Title			
PLAN SHEET INDEX			
Project No. 130208601		Drawing No. KT401 0101	
Date 9/11/2024			
Scale 1" = 200'			
Drawn By ME			
Submission Date 9/11/2024		Checked By KP	Sheet 3 of 58

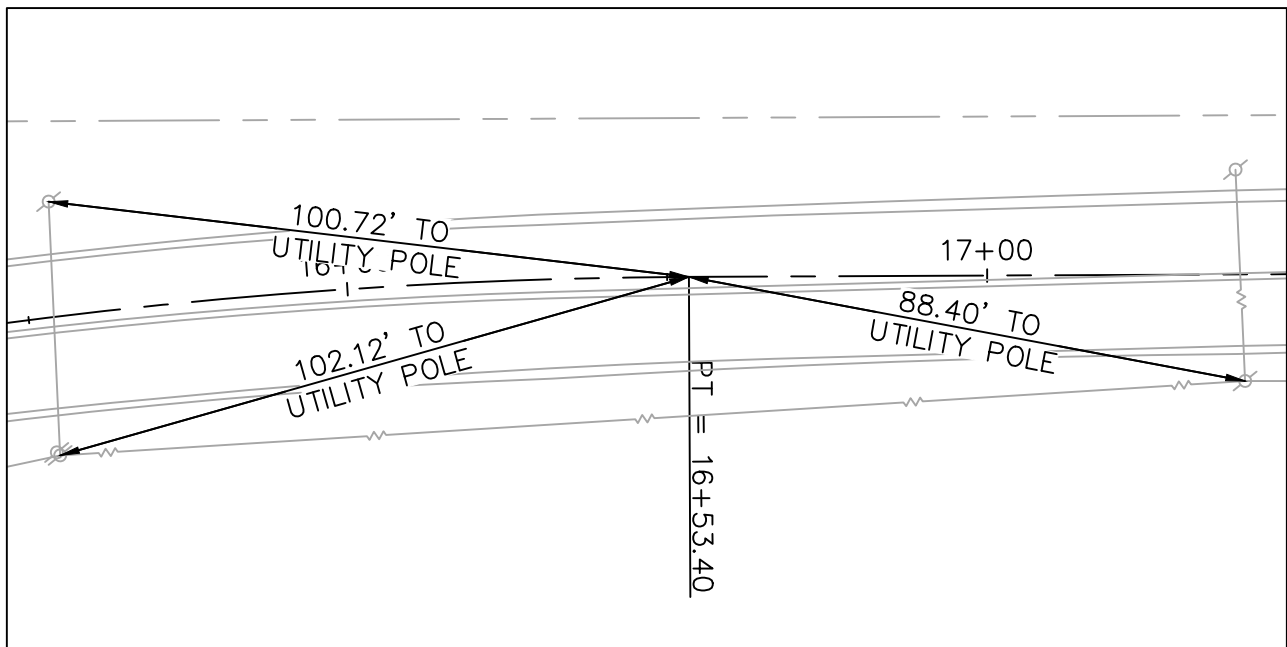
A
B
C
D
E

CONSTRUCTION BASELINE ALIGNMENT DATA			
POINT	STATION	COORDINATE	
		NORTH	EAST
NURSERY ROAD			
BP	10+00.00	530312.8436	400820.7520
PC	10+50.00	530349.1615	400855.1178
PT	16+53.40	530610.4258	401385.0181
PI	26+72.04	530715.2900	402398.2450
PI	35+10.65	530791.6590	403233.3770
PC	48+07.13	530904.7140	404524.9139
PT	52+63.22	531217.0385	404793.6120
PC	63+07.39	532259.1671	404728.3130
PCC	64+17.36	532347.2828	404782.1394
PT	67+77.59	532430.7989	405130.6369
EP	70+00.00	532443.8991	405352.6644

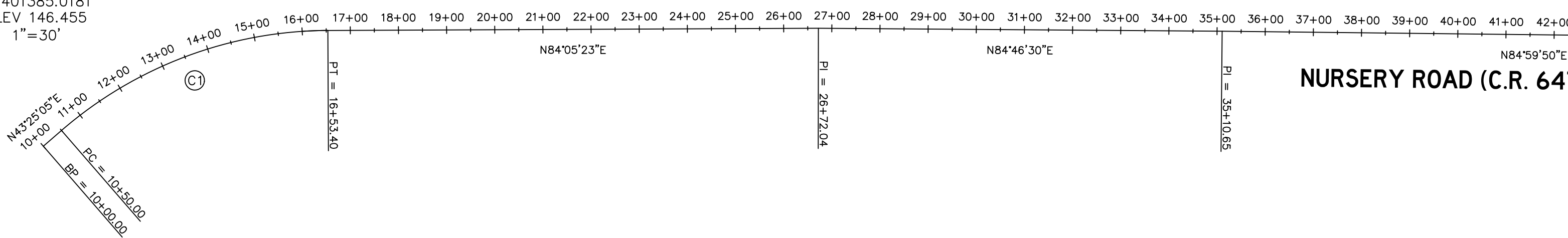
CONSTRUCTION BASELINE CURVE DATA						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	COORDINATE OF CENTER POINT	
					NORTH	EAST
ROUTE 38						
C1	850.00'	608.19'	315.04'	40°40'23"	529764.9419	401472.5216
C2	295.00'	456.09'	287.79'	88°34'58"	531198.5902	404499.1894
C3	90.00'	109.97'	63.03'	70°00'32"	532264.7954	404818.1369
C4	1,021.77'	360.23'	182.00'	20°11'59"	531410.8014	405190.8195



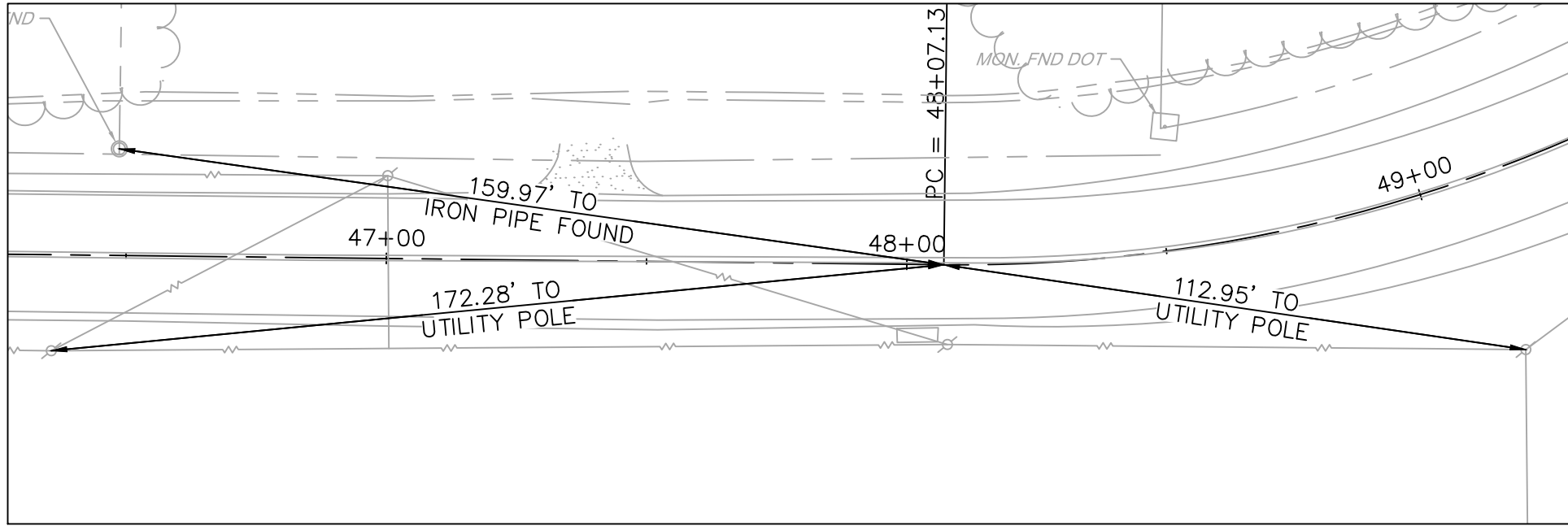
STA 64+17.36
N 532347.2828
E 404782.1394
ELEV 206.182
1"=30'



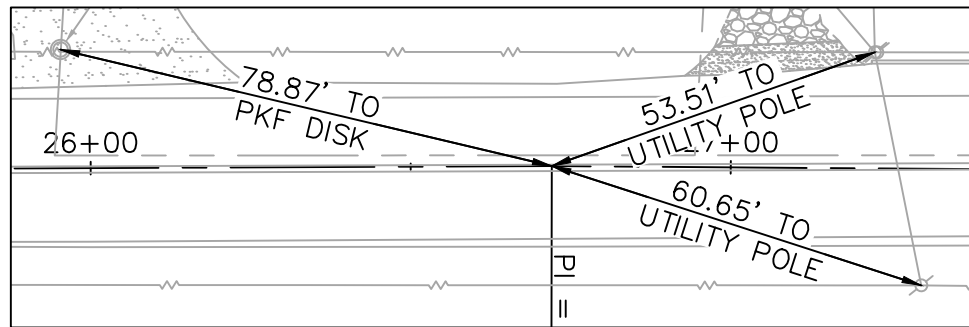
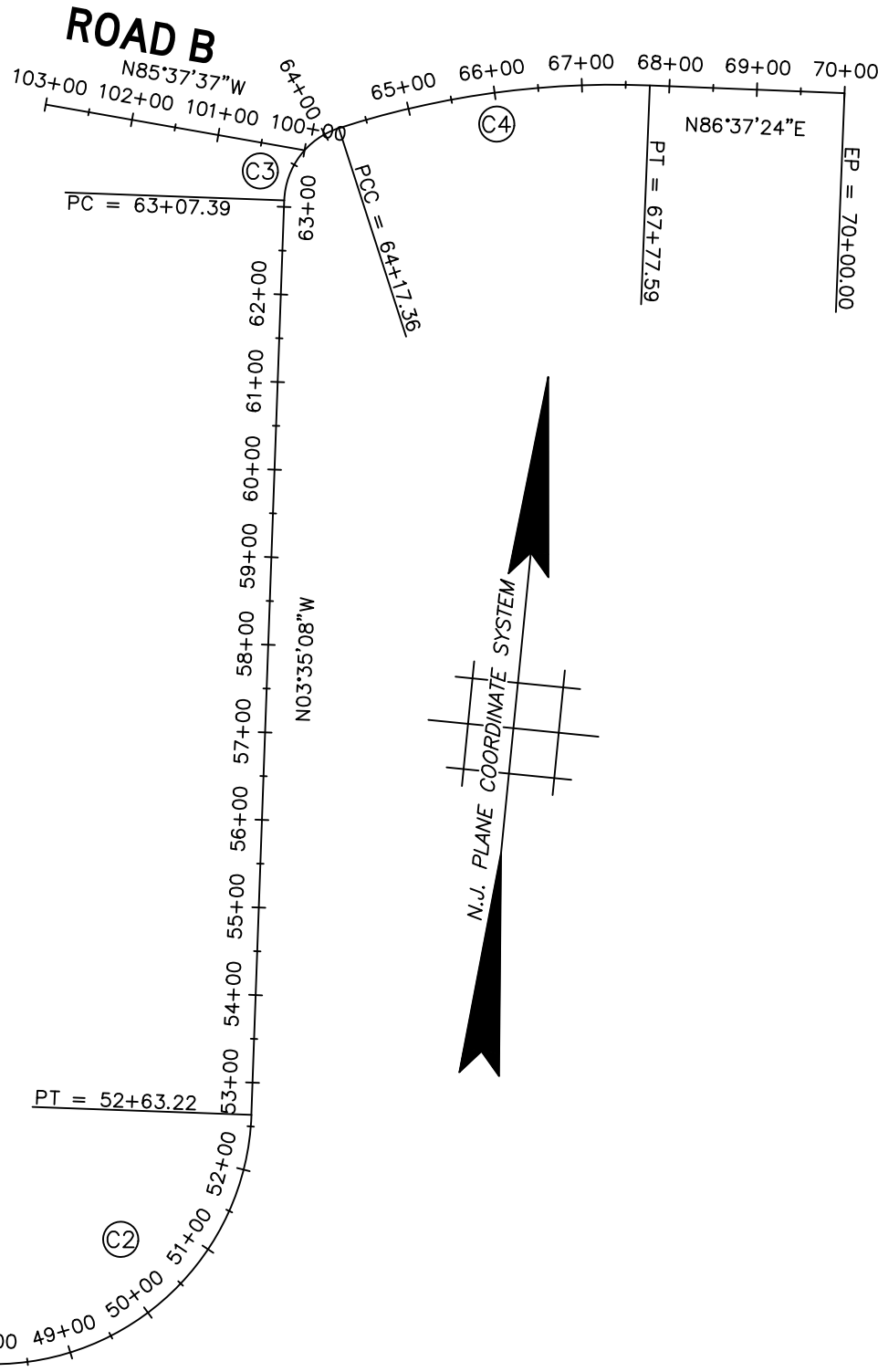
STA 16+50.00
N 530610.4258
E 401385.0181
ELEV 146.455
1"=30'



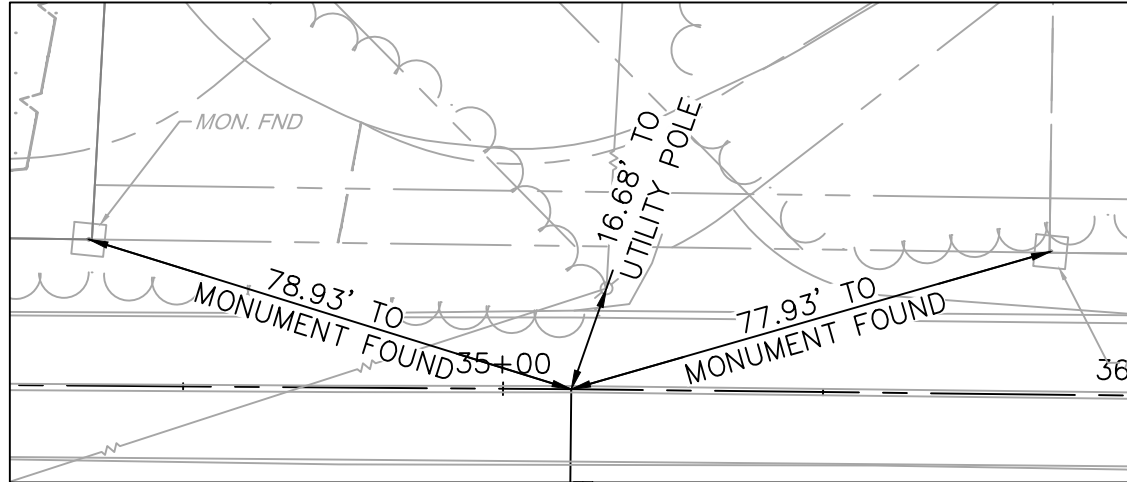
PLAN VIEW
1"=200'
SCALE IN FEET



STA 48+07.13
N 530904.7140
E 404524.9139
ELEV 210.842
1"=30'



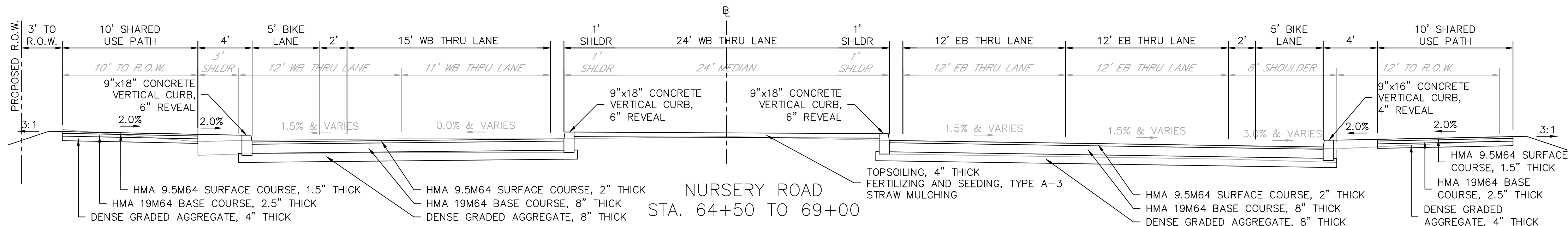
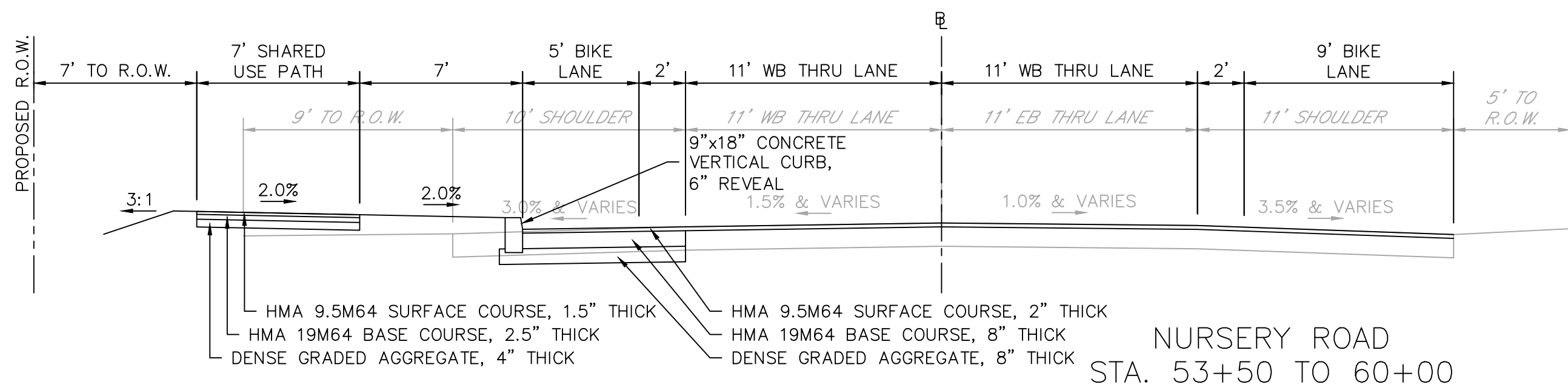
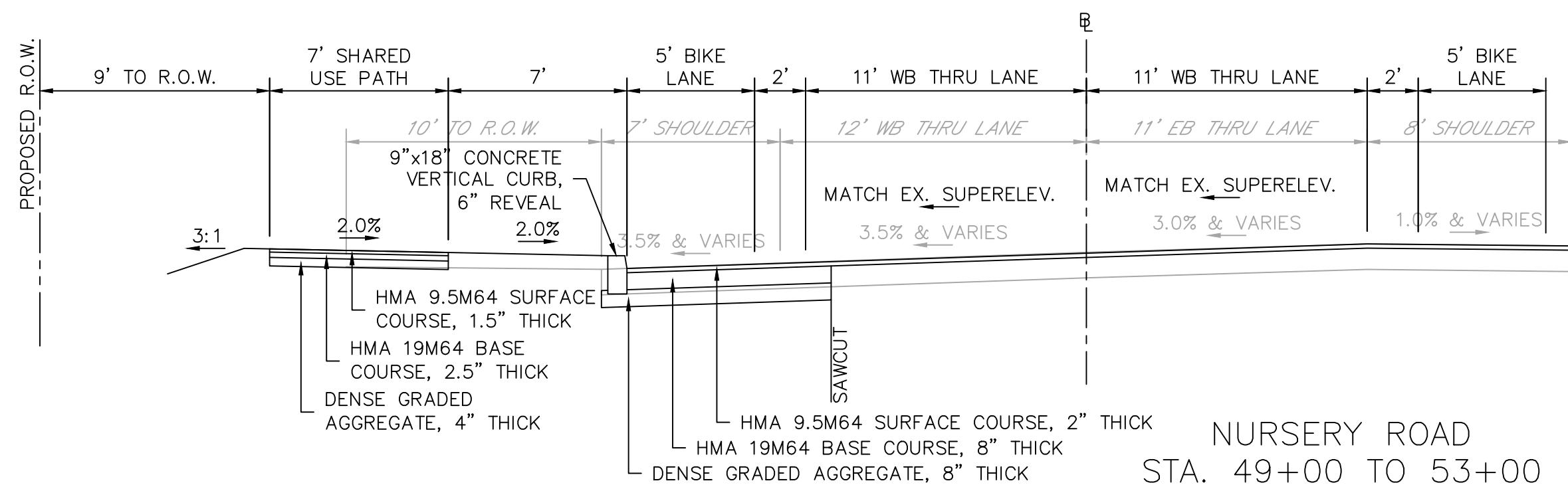
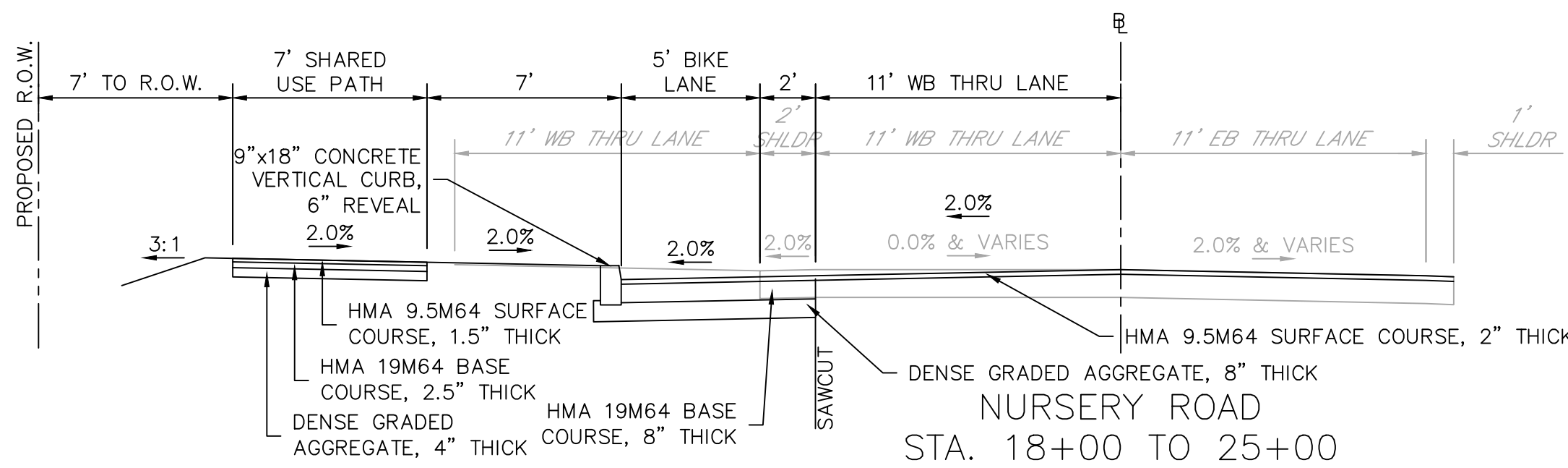
STA 26+72.04
N 530715.2900
E 402398.2450
ELEV 166.368
1"=30'



STA 35+10.65
N 530791.6590
E 403233.3770
ELEV 172.397
1"=30'

TRAVERSE AND BOUNDARY EVIDENCE				
TYPE	STATION	OFFSET	NORTHING	EASTING
IRF (TRENTON ENG)	14+54.98	48.14'L	530612.6900	401175.8230
PKF DISK (TRENTON ENG)	25+95.38	18.54'L	530725.8420	402320.0820
IRF (TRENTON ENG)	32+84.37	22.55'L	530793.5080	403005.9820
MONUMENT FOUND	33+85.51	22.95'L	530803.1190	430106.6610
MONUMENT FOUND	34+35.10	22.85'L	530807.5360	403156.0610
MONUMENT FOUND	35+85.31	22.33'L	530820.4130	403305.8070
IPF	36+18.50	15.74'R	530785.3850	403342.1890
MONUMENT FOUND	38+03.49	21.62'L	530838.7290	403523.2120
IPF	40+49.35	21.44'L	530859.9910	403768.1480
IRF	41+48.61	21.05'L	530868.2610	403867.0660
IRF	42+48.66	21.17'L	530877.1050	403966.7230
IPF	46+48.48	20.48'L	530911.2850	403365.0790
MONF	52+64.01	31.84'R	532078.9390	404771.5070
IRF	64+18.81	15.63'R	532333.5220	404789.6990

Date	Description	No.
Revisions		
		
SIGNATURE DATE SIGNED		
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
TIES		
Project No. 130208601		Drawing No. KT402 0101
Date 9/11/2024		
Scale AS SHOWN		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 4 of 58



Date	Description	No.
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Revisions

[Signature] 9/11/2024
SIGNATURE DATE SIGNED
KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

LANGAN
Langan Engineering and
Environmental Services, Inc.
1 University Square Drive, Suite 110
Princeton, NJ 08540
T: 609.282.8000 F: 609.282.8001 www.langan.com
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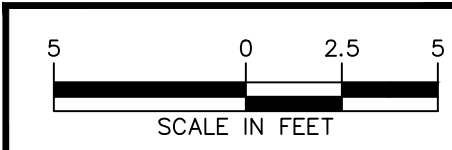
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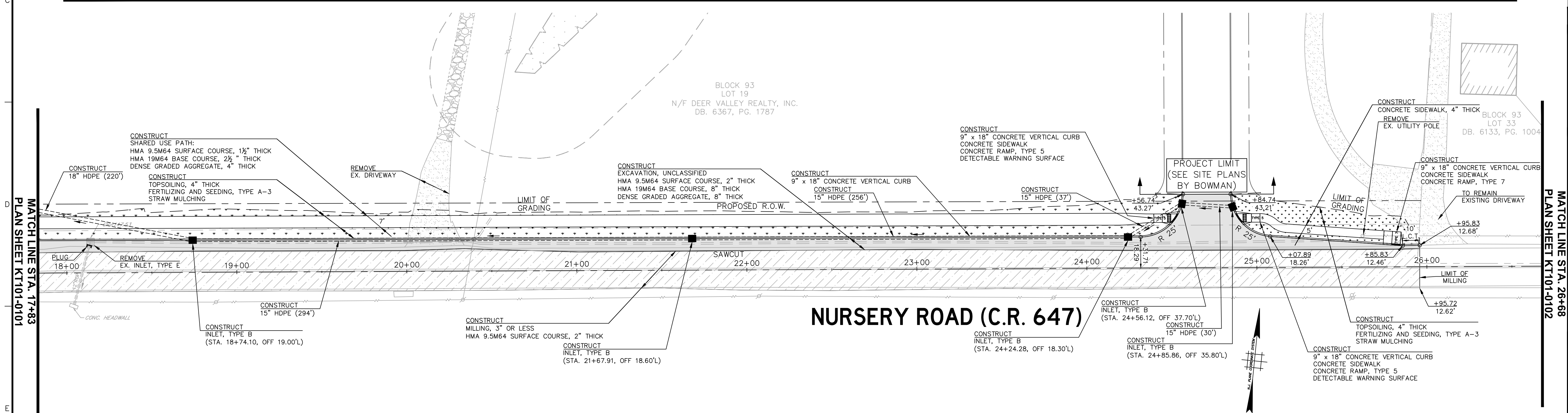
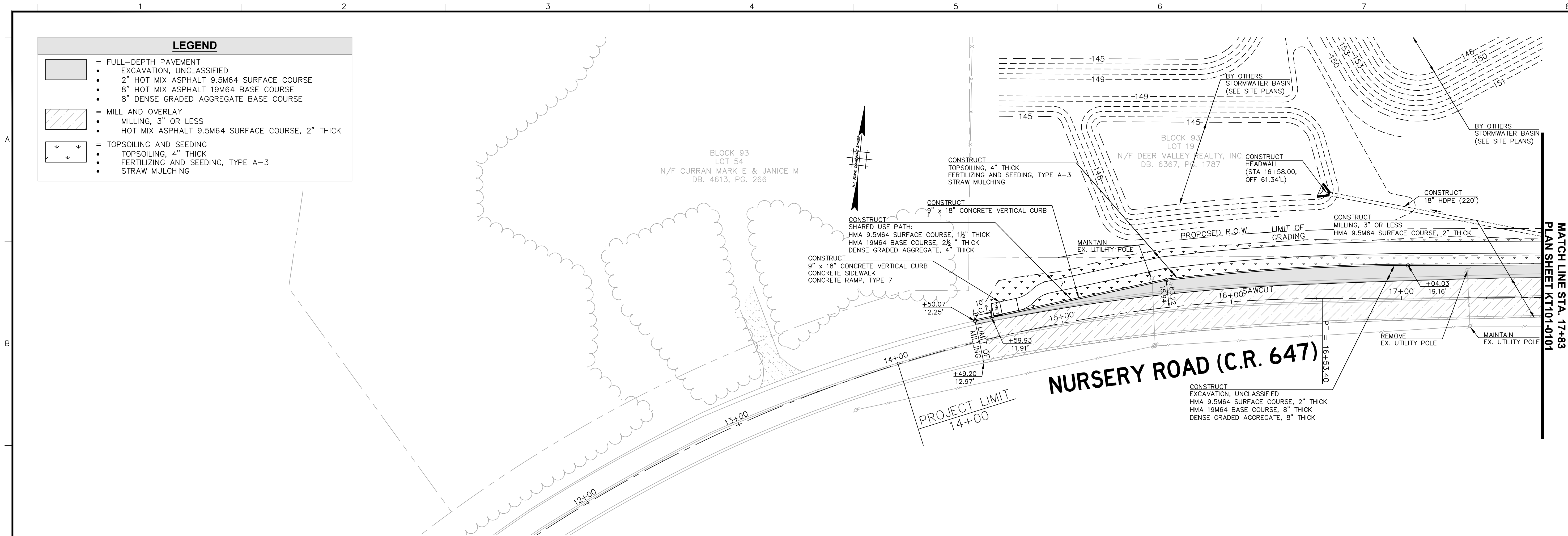
**DEER VALLEY,
HOPEWELL**
TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

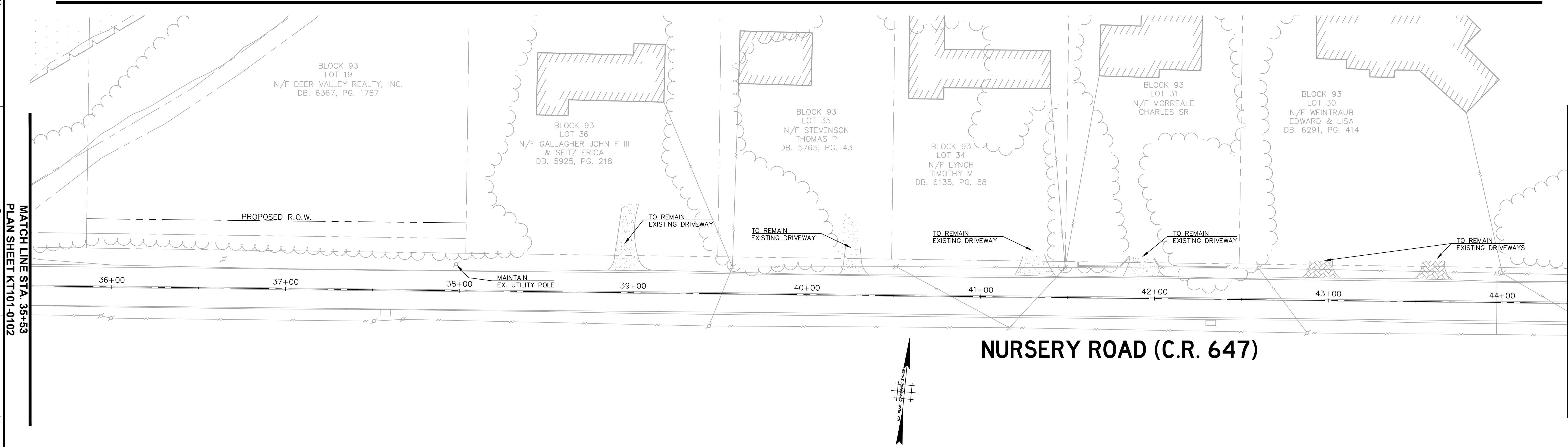
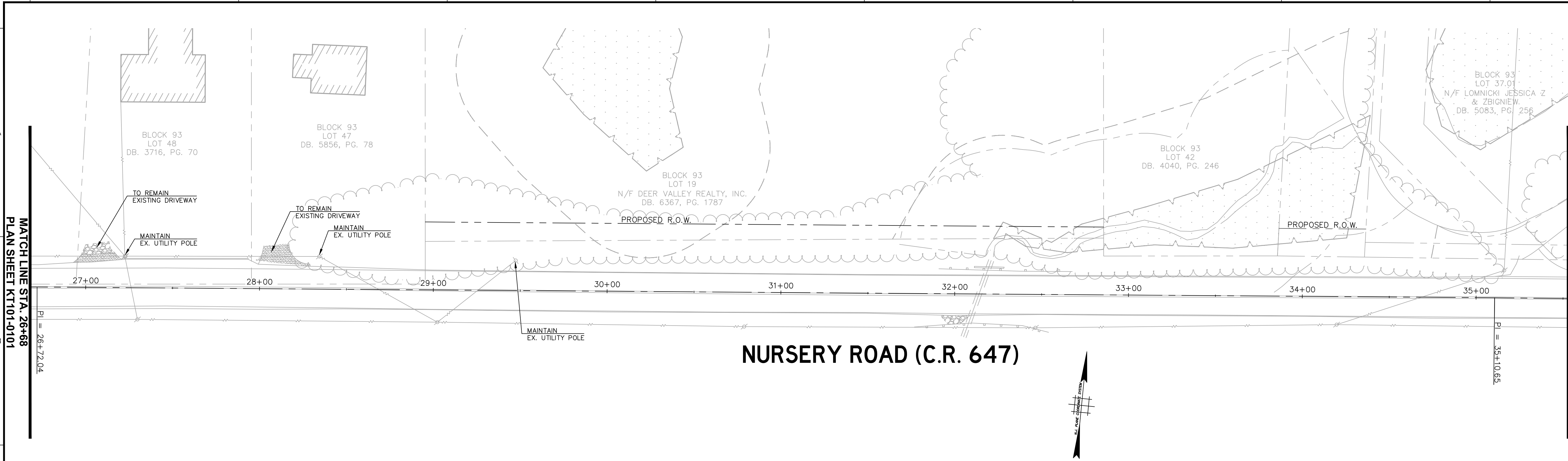
TYPICAL SECTIONS

Project No. 130208601	Drawing No. KT301 0101
Date 9/11/2024	
Scale 1" = 5'	
Drawn By ME	Checked By KP
Submission Date 9/11/2024	Sheet 5 of 58





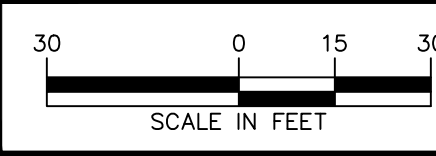
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
CONSTRUCTION PLAN		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT101 0101
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 6 of 58

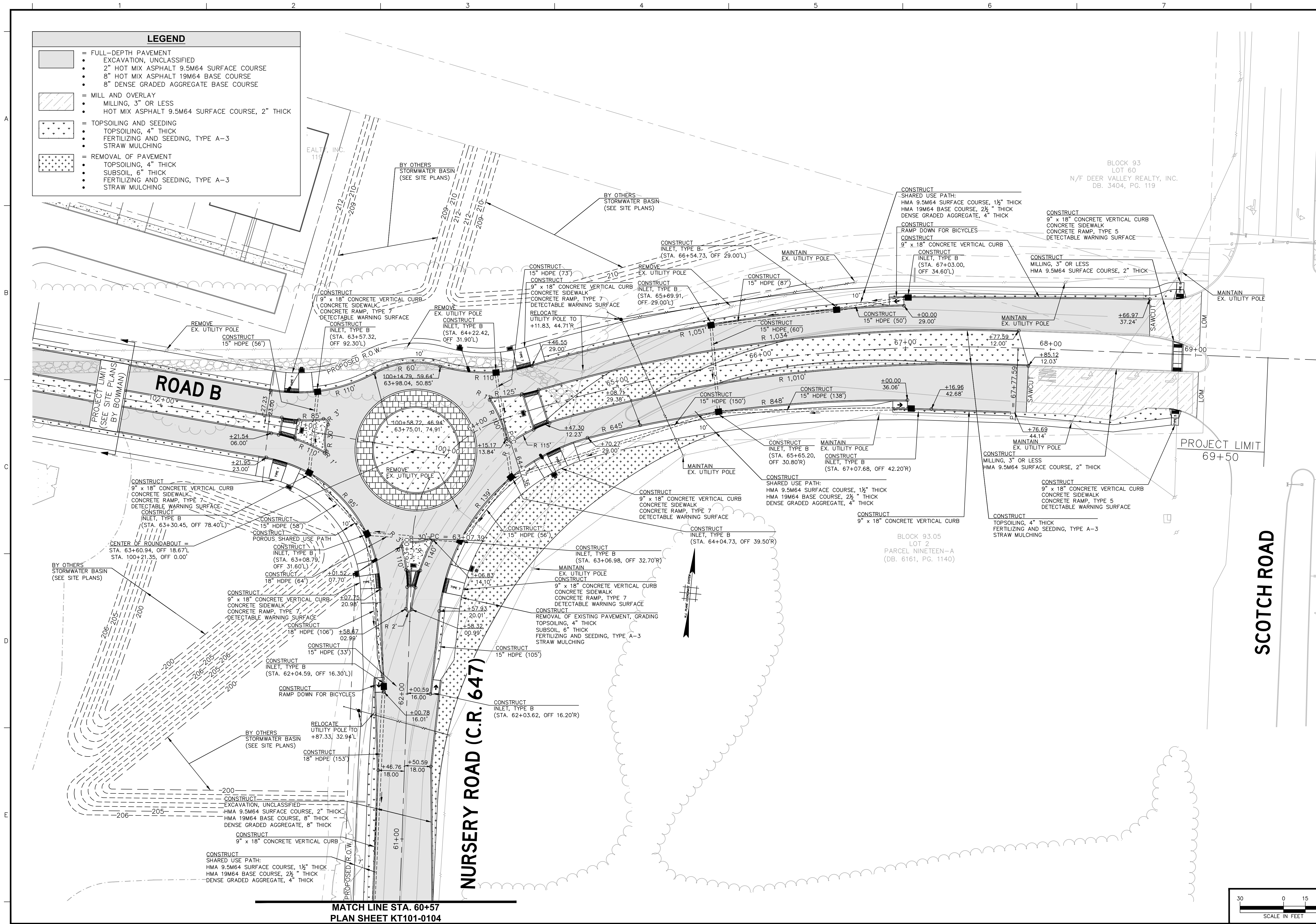


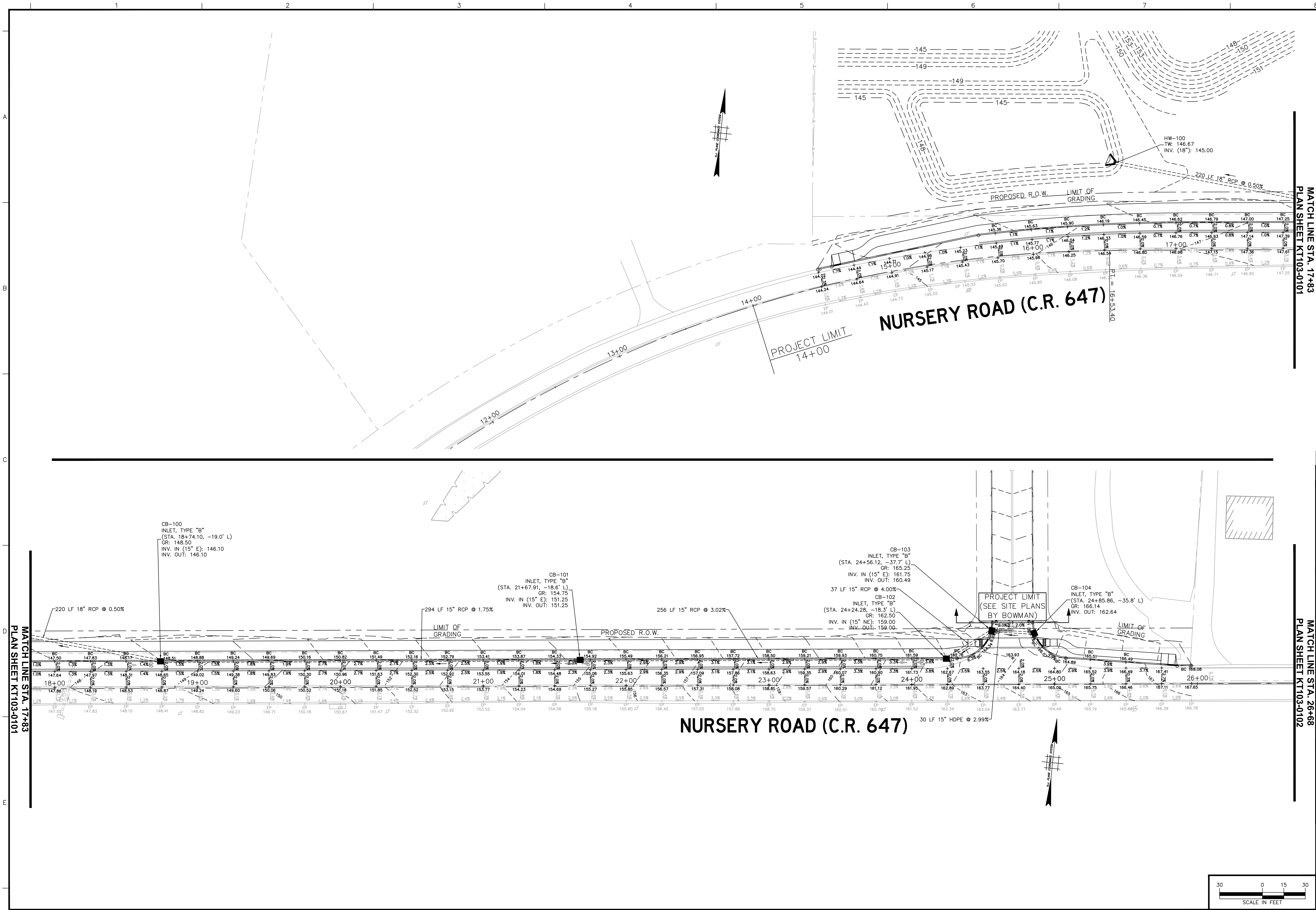
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 SIGNATURE KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434 DATE SIGNED		
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Project	
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TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY	
Drawing Title	
CONSTRUCTION PLAN	

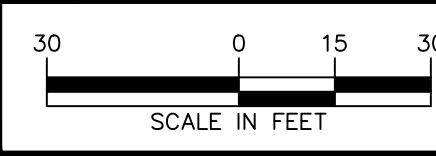
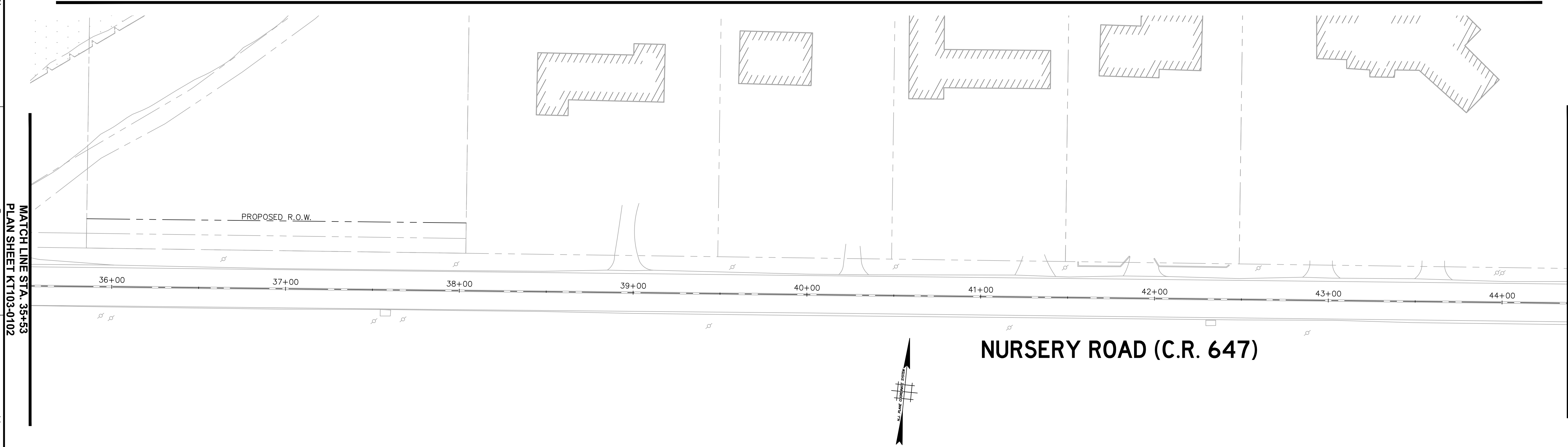
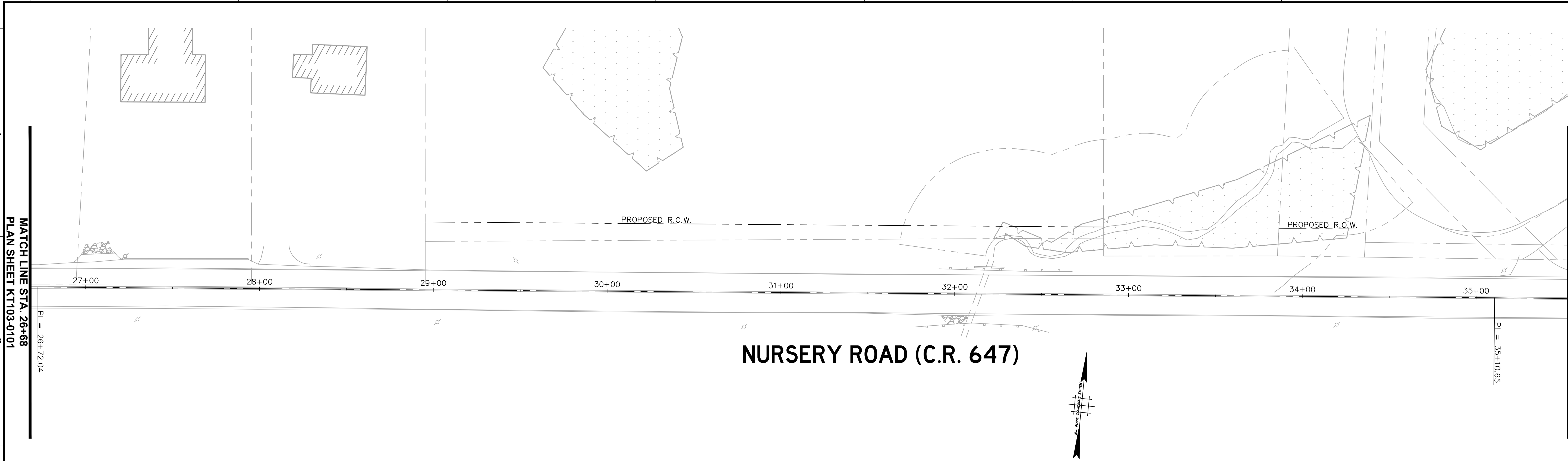
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Scale	1" = 30'		
Drawn By	ME	Checked By	KP
Submission Date	9/11/2024	Sheet	7 of 58



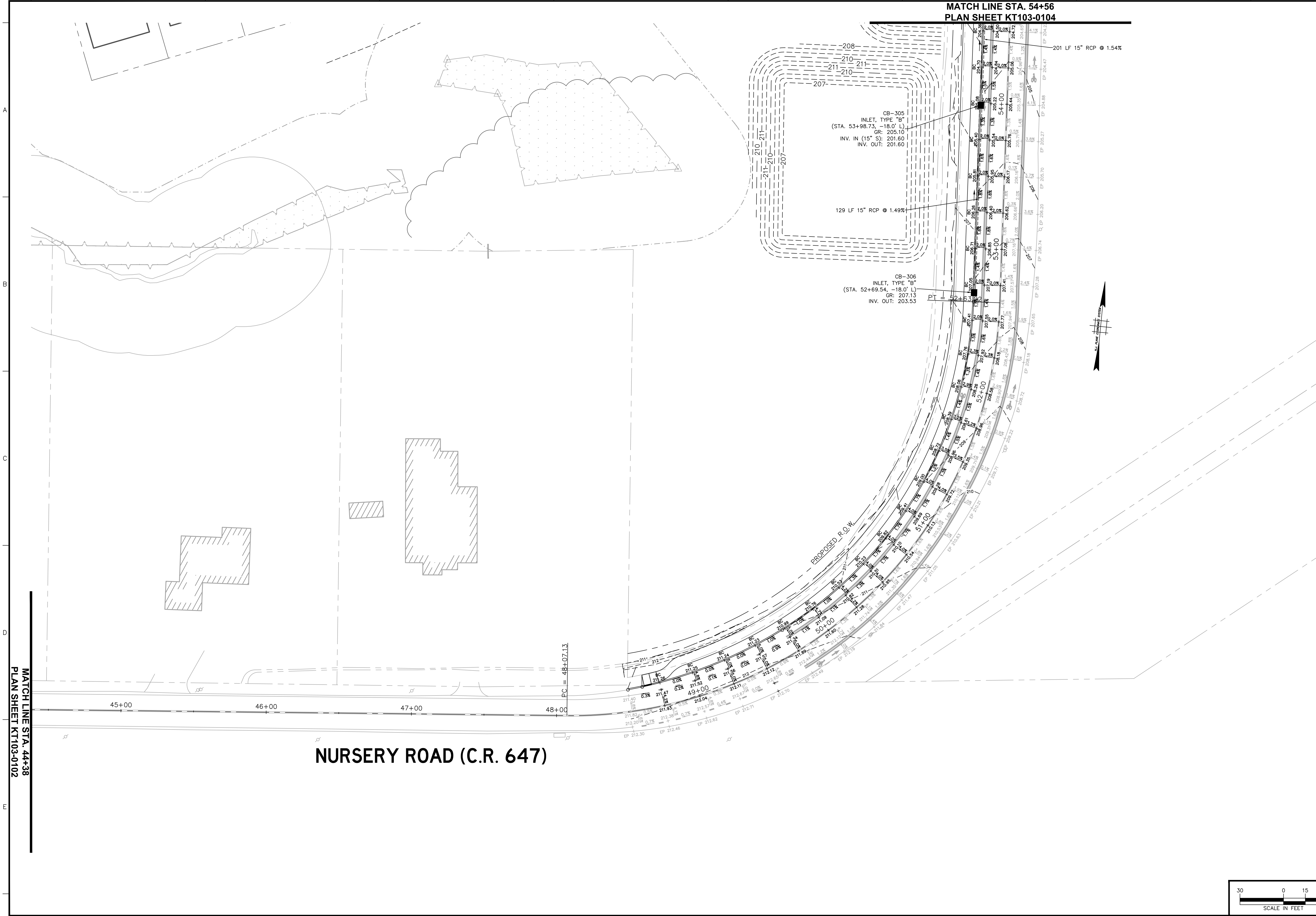




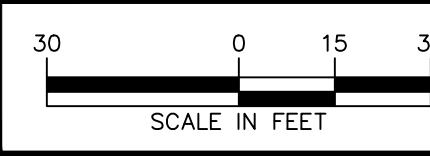
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
GRADING PLAN		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT103 0101
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 11 of 58

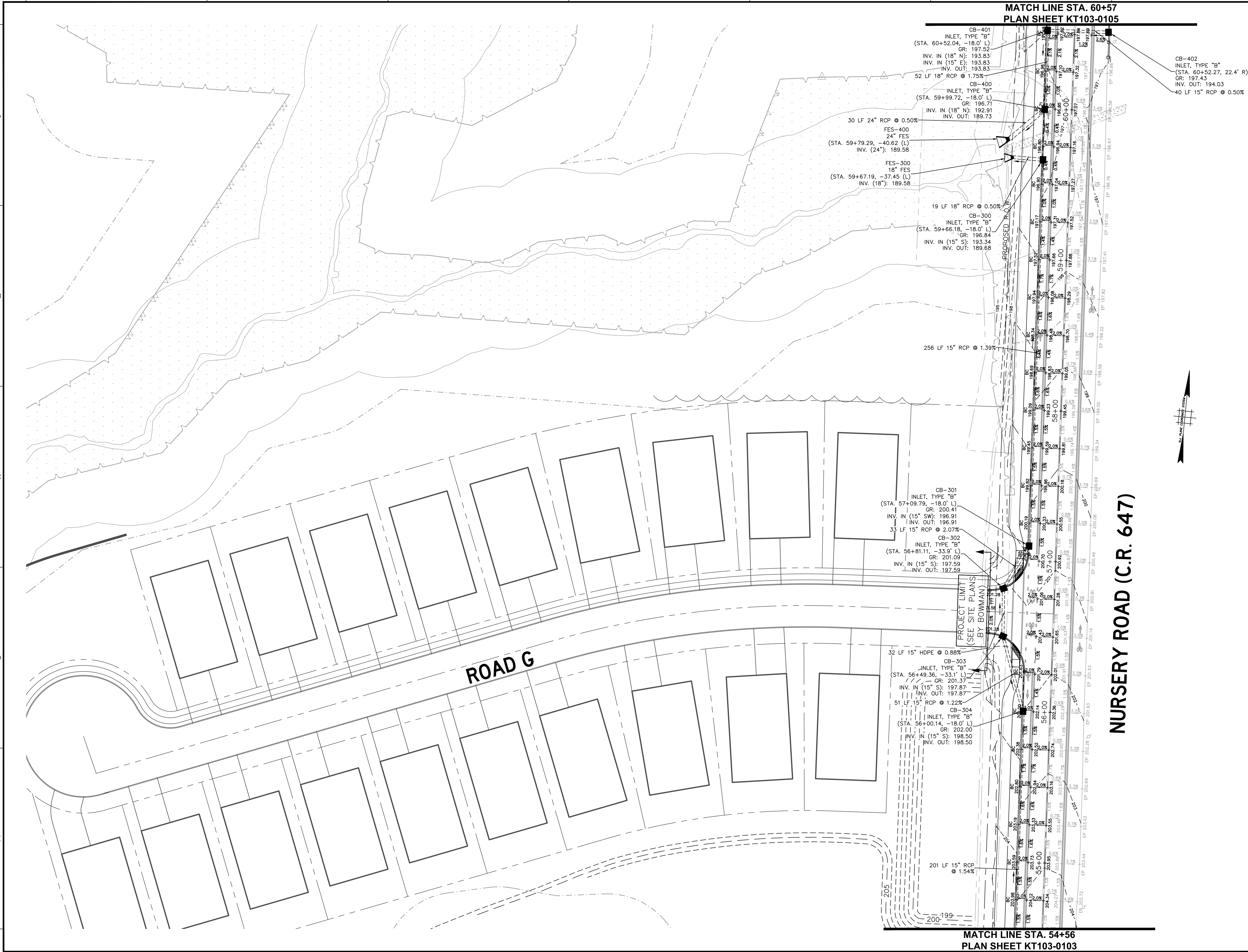


Date	Description	No.	
Revisions			
			
SIGNATURE DATE SIGNED			
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434			
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY			
Drawing Title			
GRADING PLAN			
Project No. 130208601		Drawing No. KT103 0102	
Date 9/11/2024			
Scale 1" = 30'			
Drawn By ME			
Submission Date 9/11/2024		Checked By KP	Sheet 12 of 58

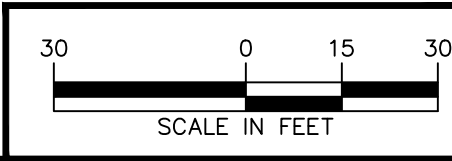
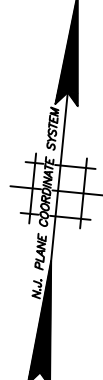


Date	Description	No.
Revisions		
		
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
GRADING PLAN		
Project No. 130208601		Drawing No. KT103 0103
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME		
Checked By KP		Sheet 13 of 58
Submission Date 9/11/2024		

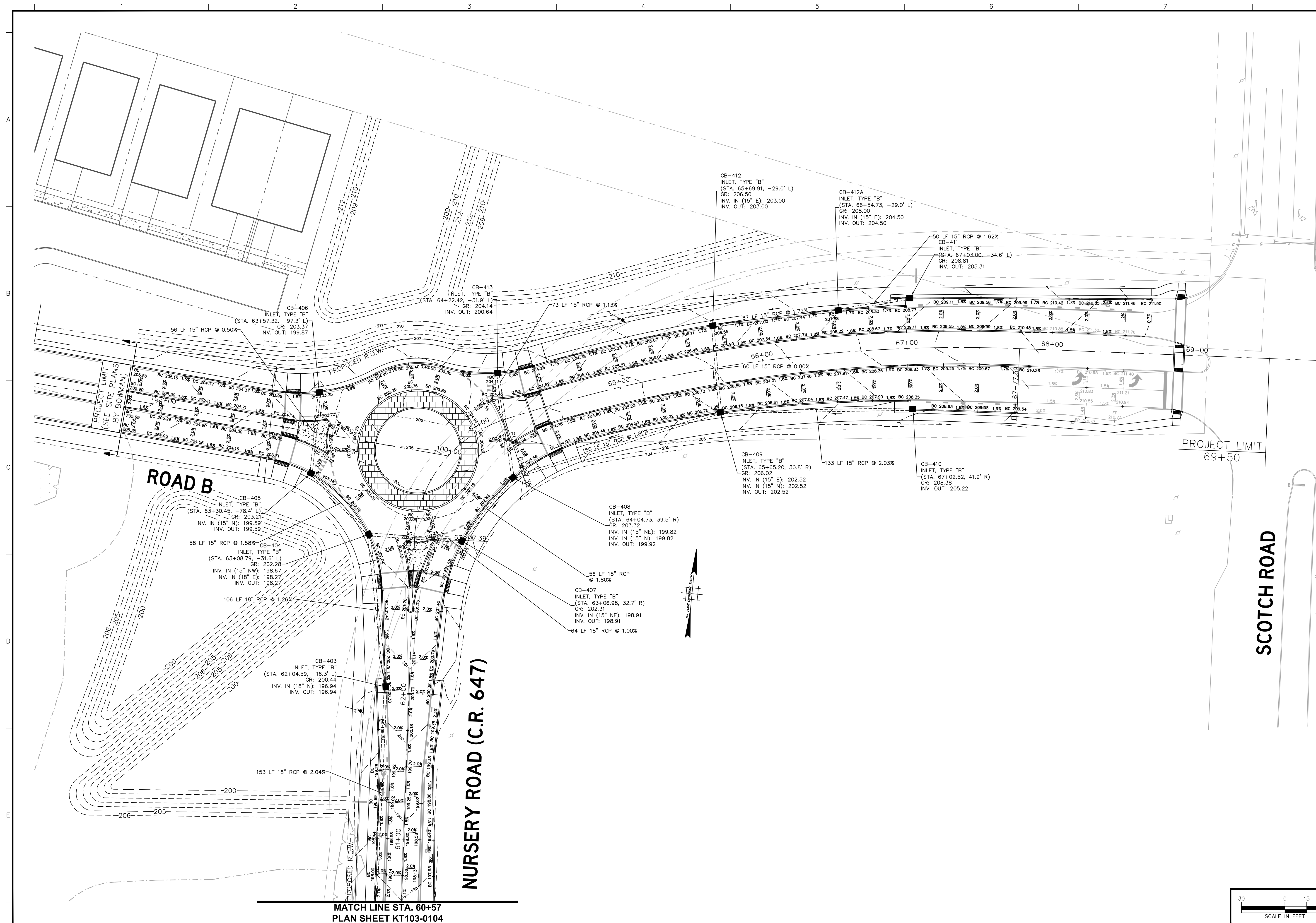




NURSERY ROAD (C.R. 647)



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Revisions		
		
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
GRADING PLAN		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT103 0104
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 14 of 58



Date	Description	No.
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Revisions

 5/10/2015

SIGNATURE DATE SIGNED

SIGNATURE _____ DATE SIGNED _____

KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

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Environmental Services, Inc.
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Princeton, NJ 08540

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

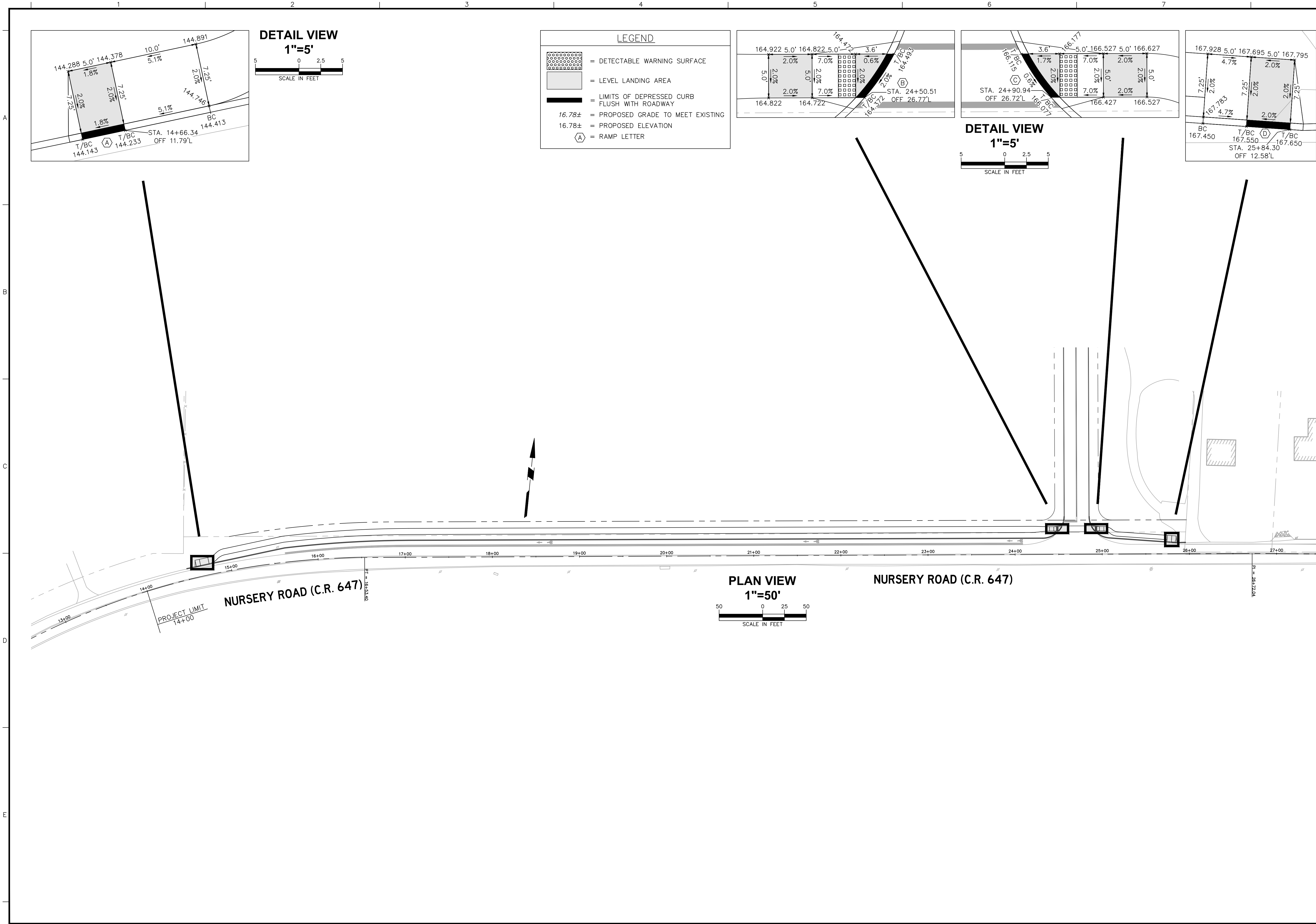
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HOPEWELL**

TOWNSHIP OF HOPEWELL

MERCER COUNTY	NEW JERSEY
Drawing Title	

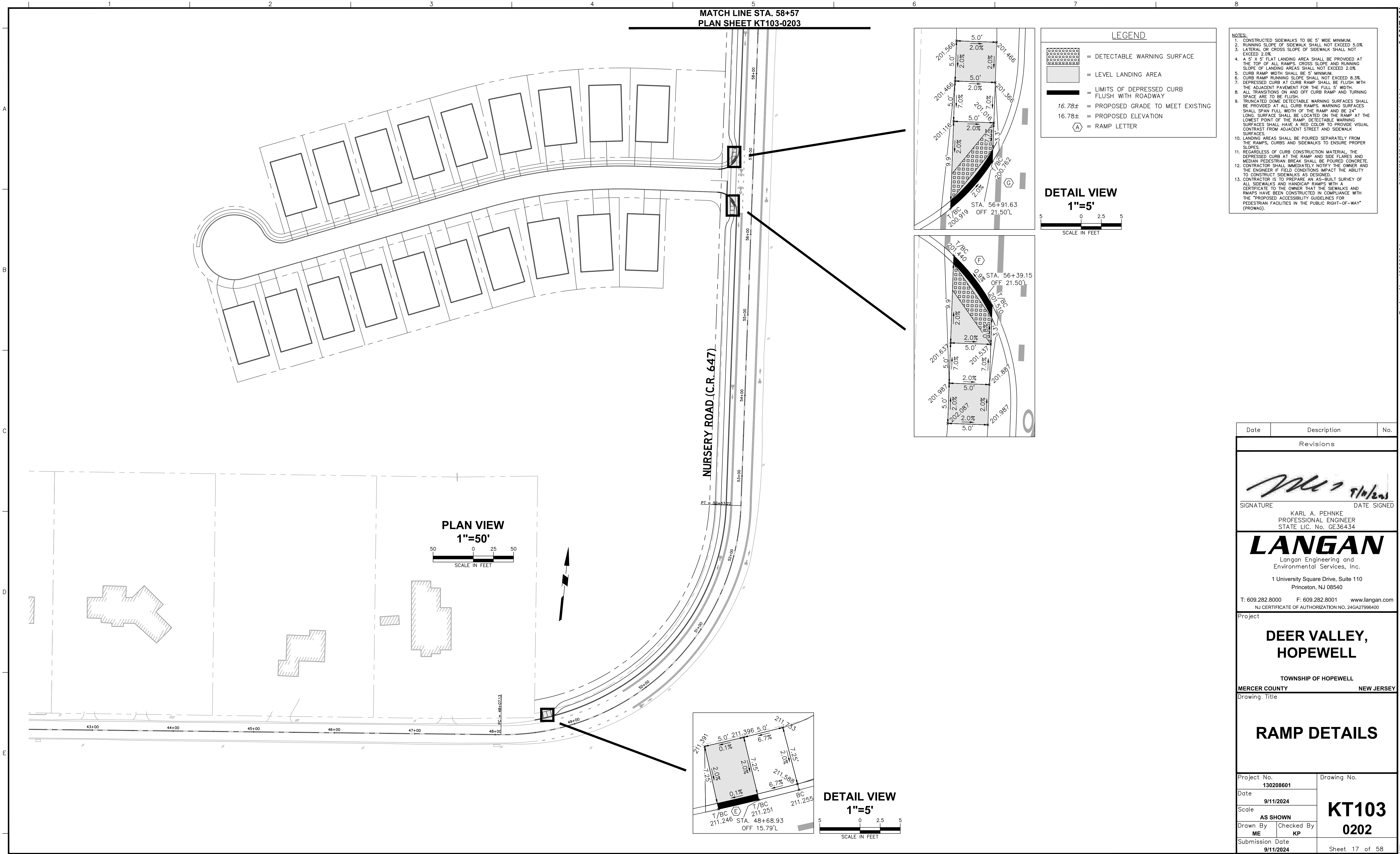
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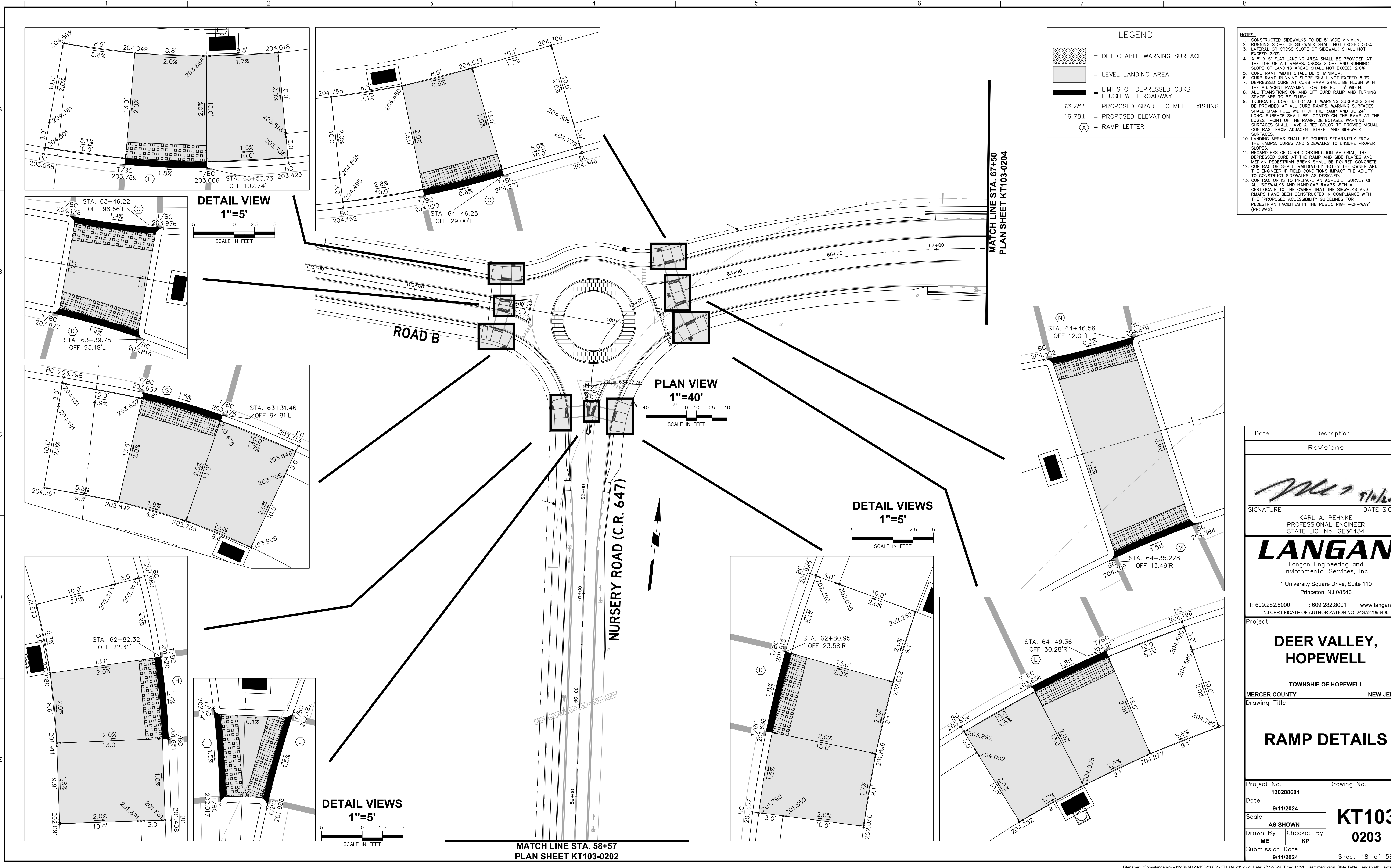
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Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 15 of 58



- NOTES:
- CONSTRUCTED SIDEWALKS TO BE 5' WIDE MINIMUM.
 - RUNNING SLOPE OF SIDEWALK SHALL NOT EXCEED 5.0%.
 - LATERAL OR CROSS SLOPE OF SIDEWALK SHALL NOT EXCEED 2.0%.
 - A 5' X 5' FLAT LANDING AREA SHALL BE PROVIDED AT THE TOP OF ALL RAMP. CROSS SLOPE AND RUNNING SLOPE OF LANDING AREAS SHALL NOT EXCEED 2.0%.
 - CURB RAMP WIDTH SHALL BE 5' MINIMUM.
 - CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.3%.
 - DEPRESSED CURB AT CURB RAMP SHALL BE FLUSH WITH THE ADJACENT PAVEMENT FOR THE FULL 5' WIDTH.
 - ALL TRANSITIONS ON AND OFF CURB RAMP AND TURNING SPACE ARE TO BE FLUSH.
 - TRUNCATED DOME DETECTABLE WARNING SURFACES SHALL BE PROVIDED AT ALL CURB RAMP. WARNING SURFACES SHALL SPAN FULL WIDTH OF THE RAMP AND BE 24" LONG. SURFACE SHALL BE LOCATED ON THE RAMP AT THE LOWEST POINT OF THE RAMP. DETECTABLE WARNING SURFACES SHALL HAVE A RED COLOR TO PROVIDE VISUAL CONTRAST FROM ADJACENT STREET AND SIDEWALK SURFACES.
 - LANDING AREAS SHALL BE POURED SEPARATELY FROM THE RAMP, CURBS AND SIDEWALKS TO ENSURE PROPER SLOPES.
 - REGARDLESS OF CURB CONSTRUCTION MATERIAL, THE DEPRESSED CURB AT THE RAMP AND SIDE FLARES AND MEDIAN PEDESTRIAN BREAK SHALL BE POURED CONCRETE.
 - CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ENGINEER IF FIELD CONDITIONS IMPACT THE ABILITY TO CONSTRUCT SIDEWALKS AS DESIGNED.
 - CONTRACTOR IS TO PREPARE AN AS-BUILT SURVEY OF ALL SIDEWALKS AND HANDICAP RAMPS WITH A CERTIFICATE TO THE OWNER THAT THE SIDEWALKS AND RAMPS HAVE BEEN CONSTRUCTED IN COMPLIANCE WITH THE "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY" (PROWAG).

Date	Description	No.
Revisions		
SIGNATURE		
DATE SIGNED		
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
RAMP DETAILS		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT103 0201
Scale AS SHOWN		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		
Sheet 16 of 58		





LEGEND

[Pattern] = DETECTABLE WARNING SURFACE

[Shaded] = LEVEL LANDING AREA

[Line] = LIMITS OF DEPRESSED CURB FLUSH WITH ROADWAY

16.78± = PROPOSED GRADE TO MEET EXISTING

16.78± = PROPOSED ELEVATION

(A) = RAMP LETTER

- NOTES:
1. CONSTRUCTED SIDEWALKS TO BE 5' WIDE MINIMUM.
 2. RUNNING SLOPE OF SIDEWALK SHALL NOT EXCEED 5.0%.
 3. LATERAL OR CROSS SLOPE OF SIDEWALK SHALL NOT EXCEED 2.0%.
 4. A 5' X 5' FLAT LANDING AREA SHALL BE PROVIDED AT THE TOP OF ALL RAMPS. CROSS SLOPE AND RUNNING SLOPE OF LANDING AREAS SHALL NOT EXCEED 2.0%.
 5. CURB RAMP WIDTH SHALL BE 5' MINIMUM.
 6. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.3%.
 7. DEPRESSED CURB AT CURB RAMP SHALL BE FLUSH WITH THE ADJACENT PAVEMENT FOR THE FULL 5' WIDTH.
 8. ALL TRANSITIONS ON AND OFF CURB RAMP AND TURNING SPACE ARE TO BE FLUSH.
 9. TRUNCATED DOME DETECTABLE WARNING SURFACES SHALL SPAN FULL WIDTH OF THE RAMP AND BE 24" LONG. SURFACE SHALL BE LOCATED ON THE RAMP AT THE LOWEST POINT OF THE RAMP. DETECTABLE WARNING SURFACES SHALL HAVE A RED COLOR TO PROVIDE VISUAL CONTRAST FROM ADJACENT STREET AND SIDEWALK SURFACES.
 10. LANDING AREAS SHALL BE POURED SEPARATELY FROM THE RAMPS, CURBS AND SIDEWALKS TO ENSURE PROPER SLOPES.
 11. REGARDLESS OF CURB CONSTRUCTION MATERIAL, THE DEPRESSED CURB AT THE RAMP AND SIDE FLARES AND MEDIAN PEDESTRIAN BREAK SHALL BE POURED CONCRETE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ENGINEER IF FIELD CONDITIONS IMPACT THE ABILITY TO CONSTRUCT SIDEWALKS AS DESIGNED.
 12. CONTRACTOR IS TO PREPARE AN AS-BUILT SURVEY OF ALL SIDEWALKS AND HANDICAP RAMPS WITH A CERTIFICATE TO THE OWNER THAT THE SIDEWALKS AND RAMPS HAVE BEEN CONSTRUCTED IN COMPLIANCE WITH THE "PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY" (PROWAG).

DETAIL VIEW
1"=5'

SCALE IN FEET

PLAN VIEW
1"=40'

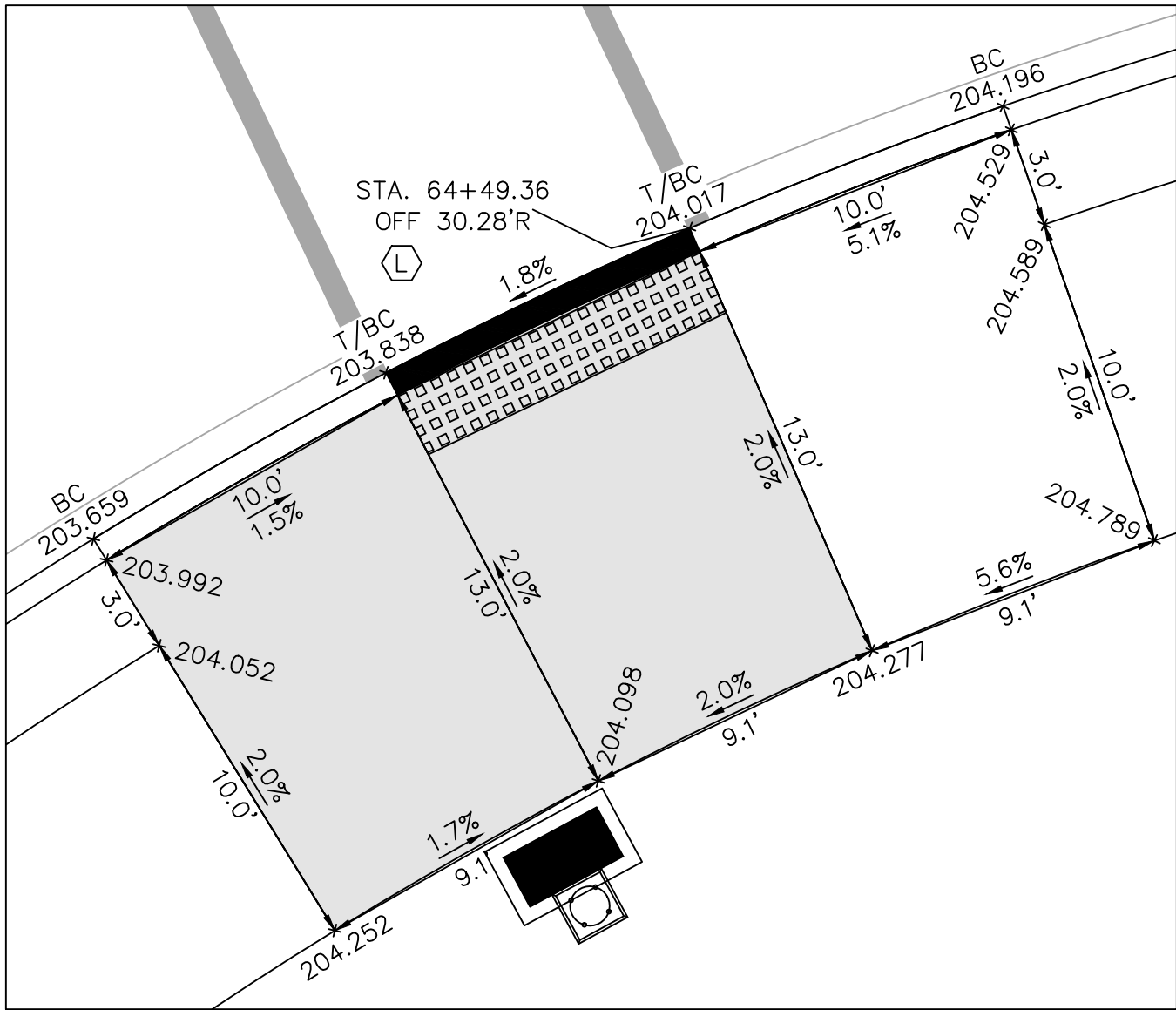
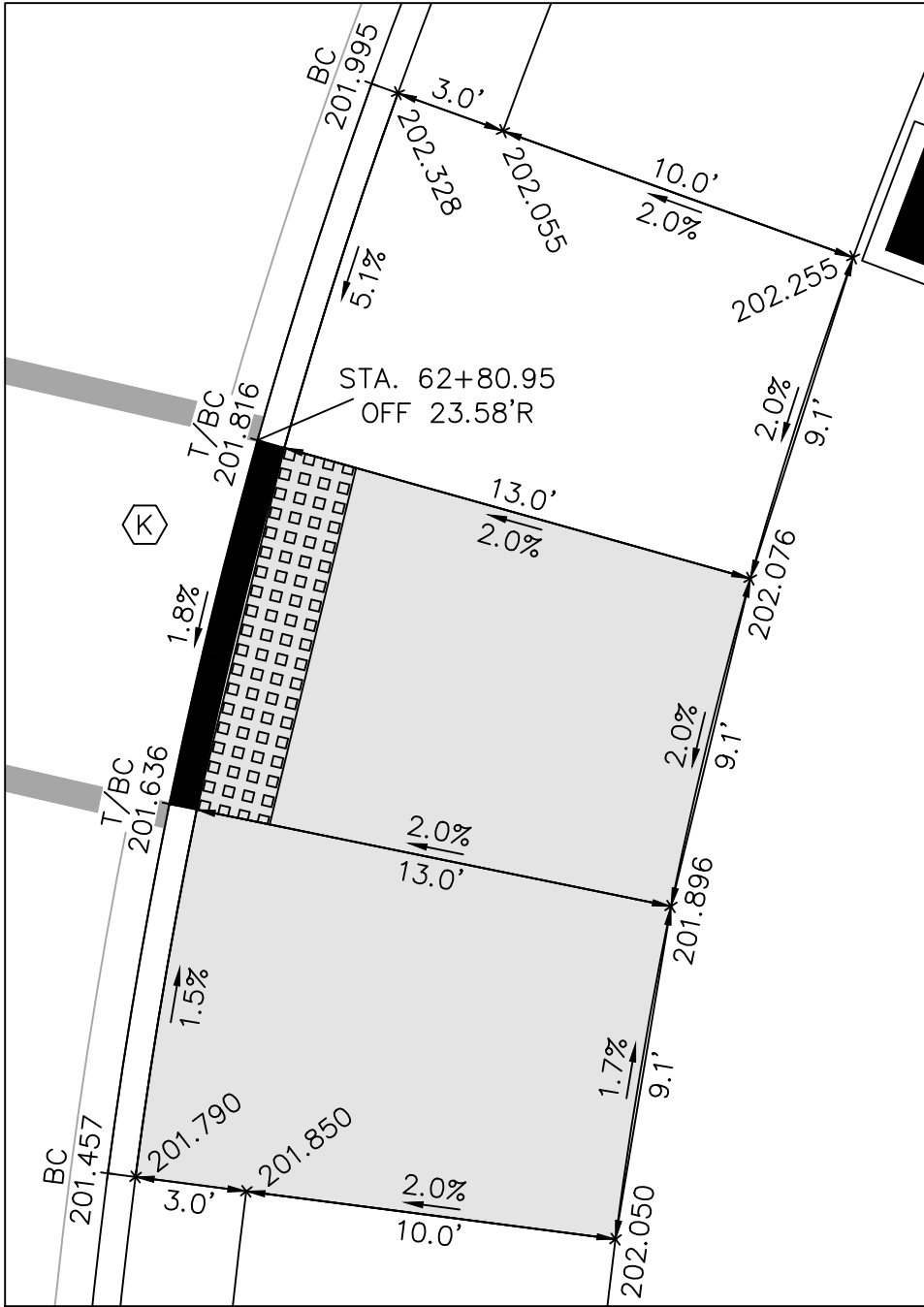
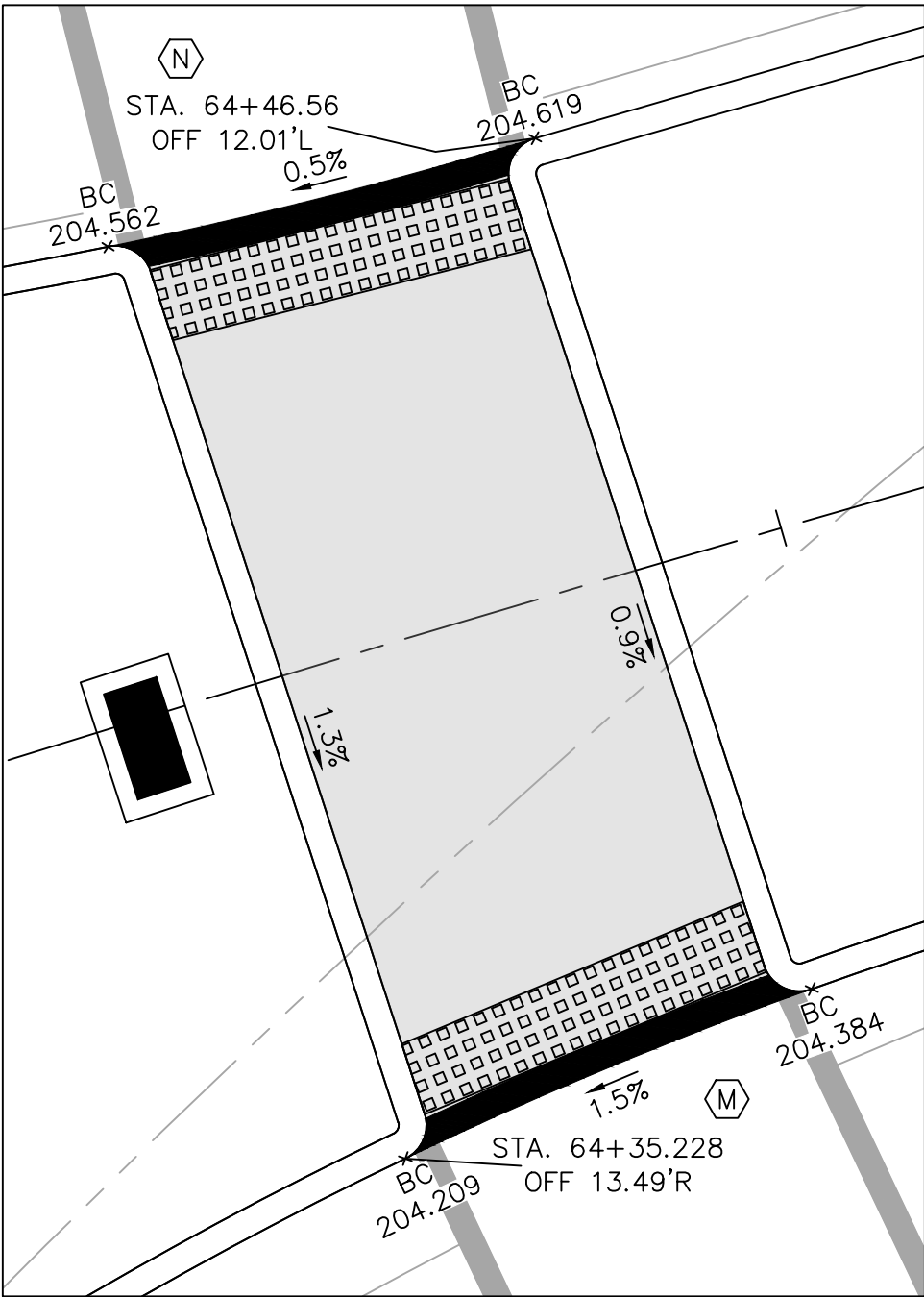
SCALE IN FEET

DETAIL VIEWS
1"=5'

SCALE IN FEET

DETAIL VIEWS
1"=5'

SCALE IN FEET



Date	Description	No.
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Revisions

SIGNATURE: *[Signature]* DATE SIGNED: 9/11/2024

KARL A. PEHNKE
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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

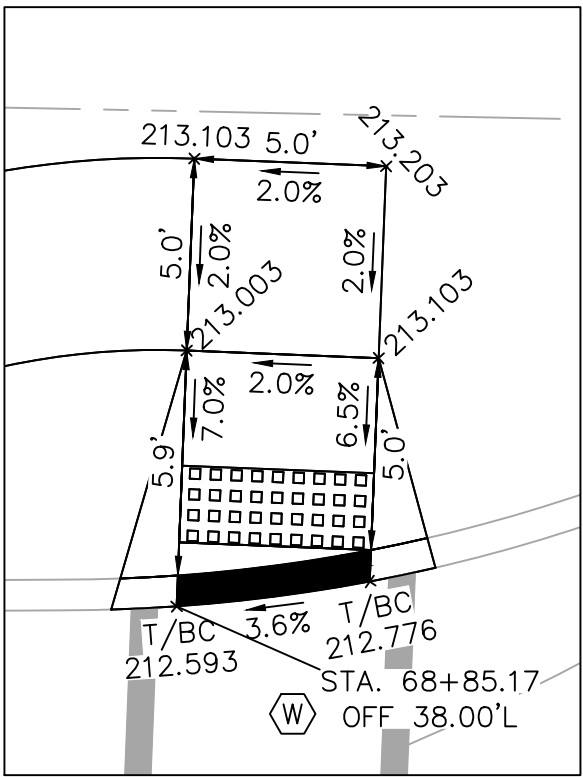
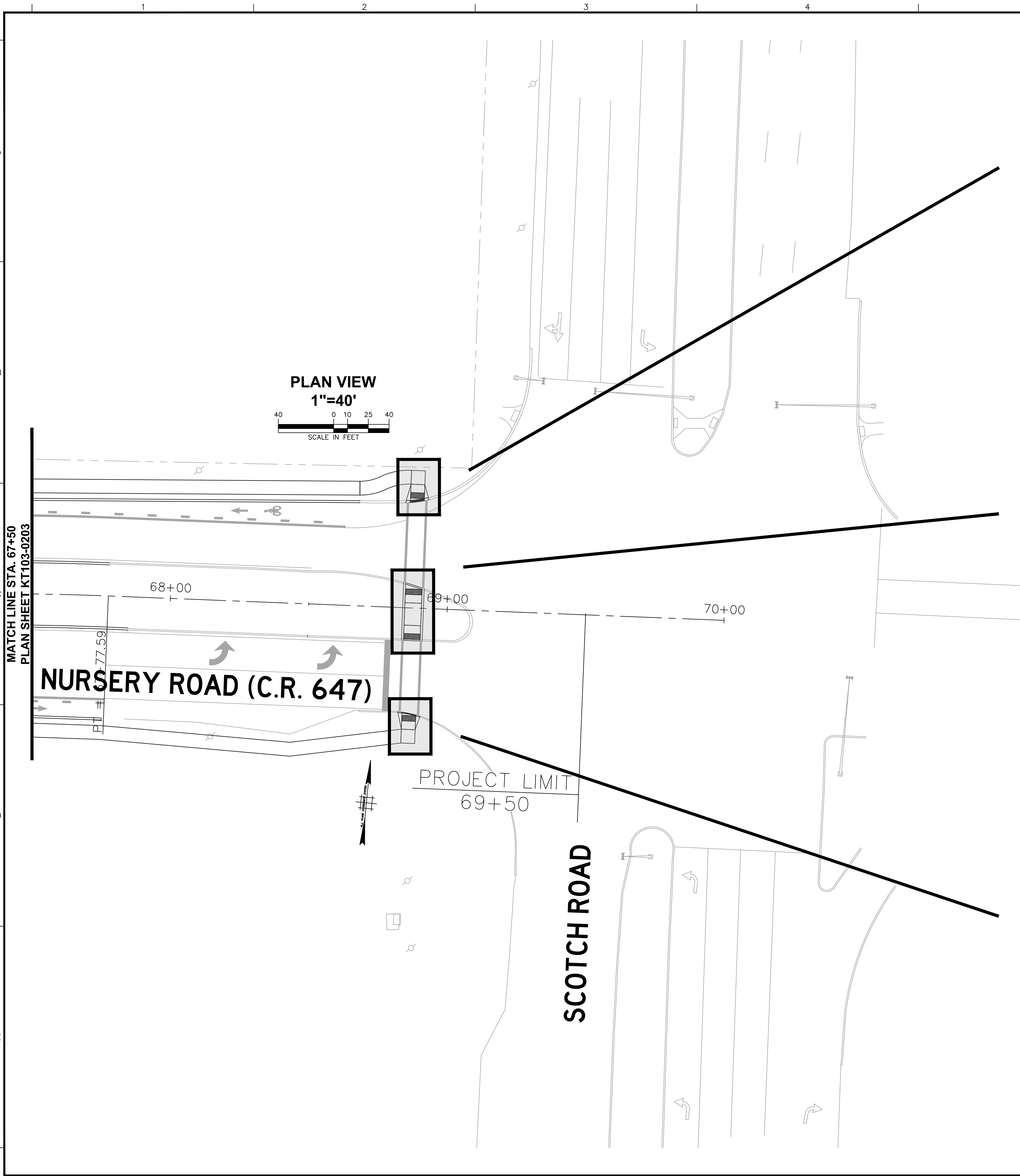
DEER VALLEY, HOPEWELL

TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

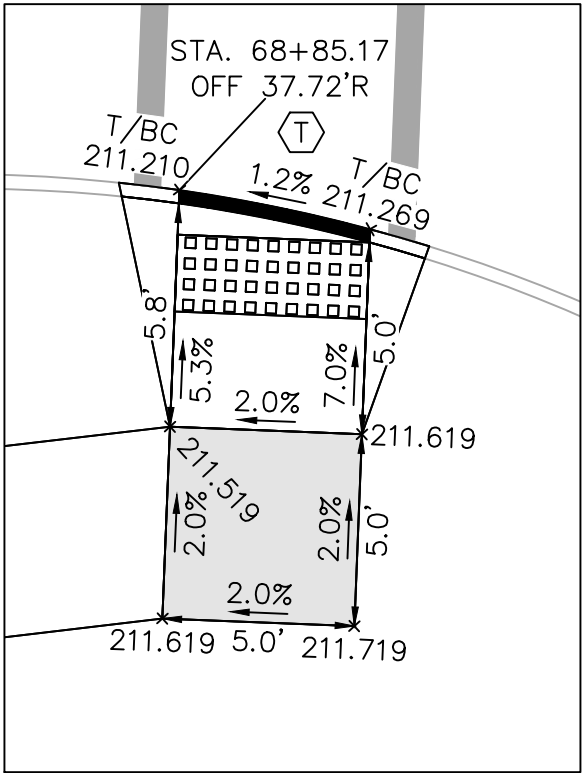
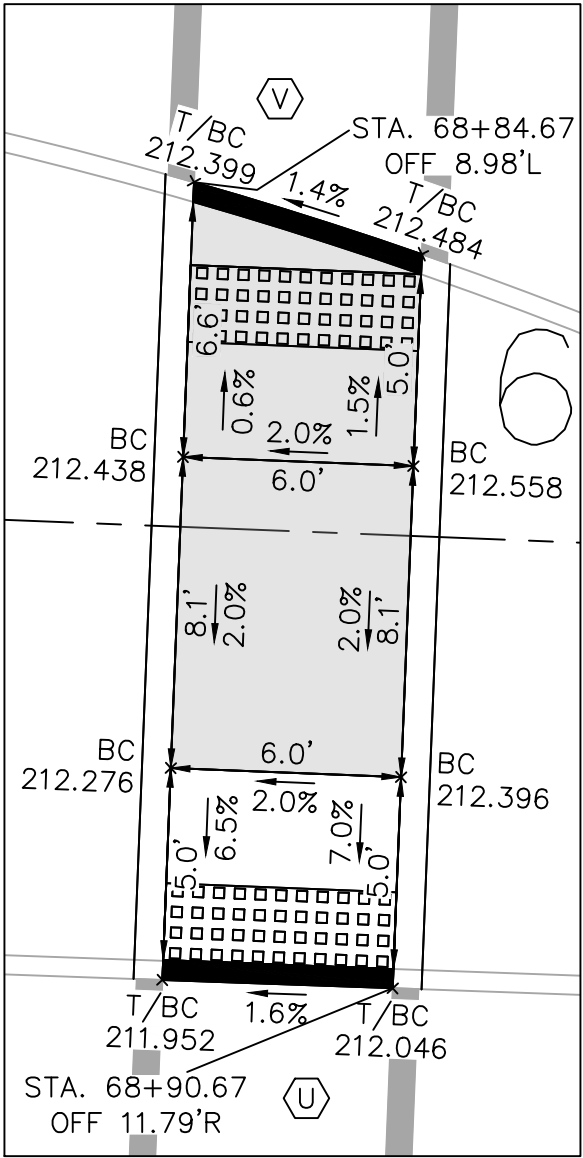
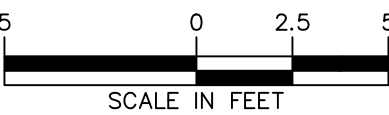
RAMP DETAILS

Project No.	130208601	Drawing No.	KT103
Date	9/11/2024		0203
Scale	AS SHOWN		
Drawn By	ME	Checked By	KP
Submission Date	9/11/2024		



DETAIL VIEWS

1"=5'



LEGEND	
	= DETECTABLE WARNING SURFACE
	= LEVEL LANDING AREA
	= LIMITS OF DEPRESSED CURB FLUSH WITH ROADWAY
16.78±	= PROPOSED GRADE TO MEET EXISTING
16.78±	= PROPOSED ELEVATION
	= RAMP LETTER

- NOTES:
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Date	Description	No.
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Revisions

SIGNATURE

9/11/2024
DATE SIGNED

KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

LANGAN
Langan Engineering and
Environmental Services, Inc.

1 University Square Drive, Suite 110
Princeton, NJ 08540

T: 609.282.8000 F: 609.282.8001 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

**DEER VALLEY,
HOPEWELL**

TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

RAMP DETAILS

Project No.
130208601

Date
9/11/2024

Scale
AS SHOWN

Drawn By
ME

Submission Date
9/11/2024

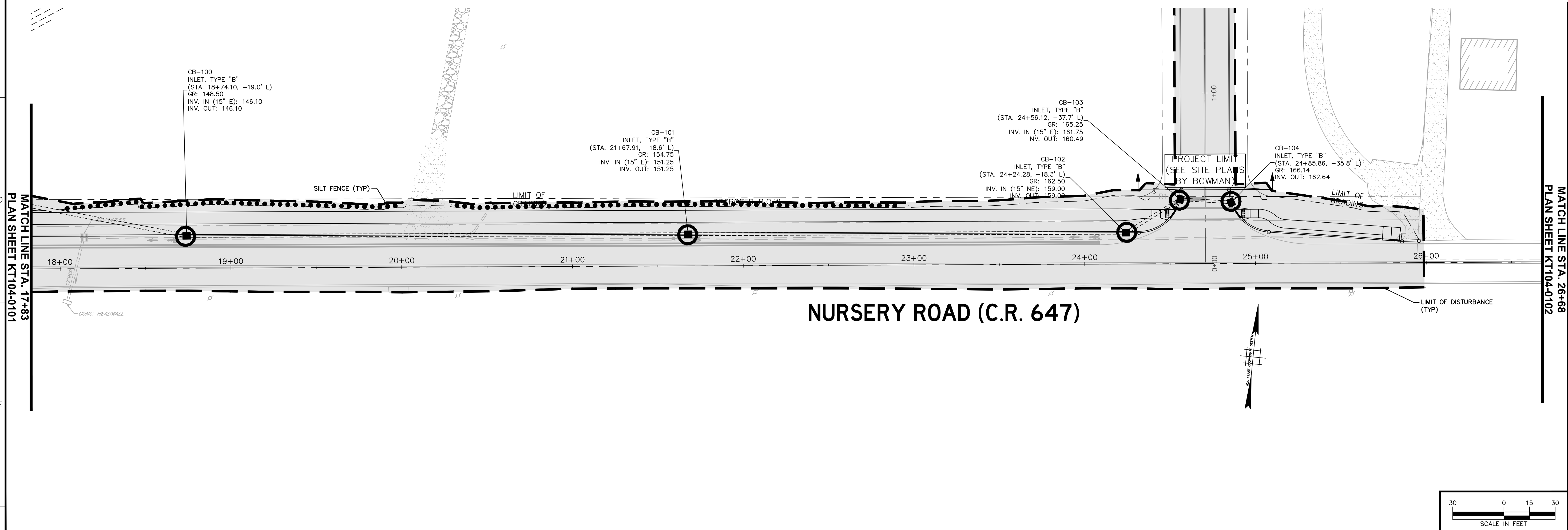
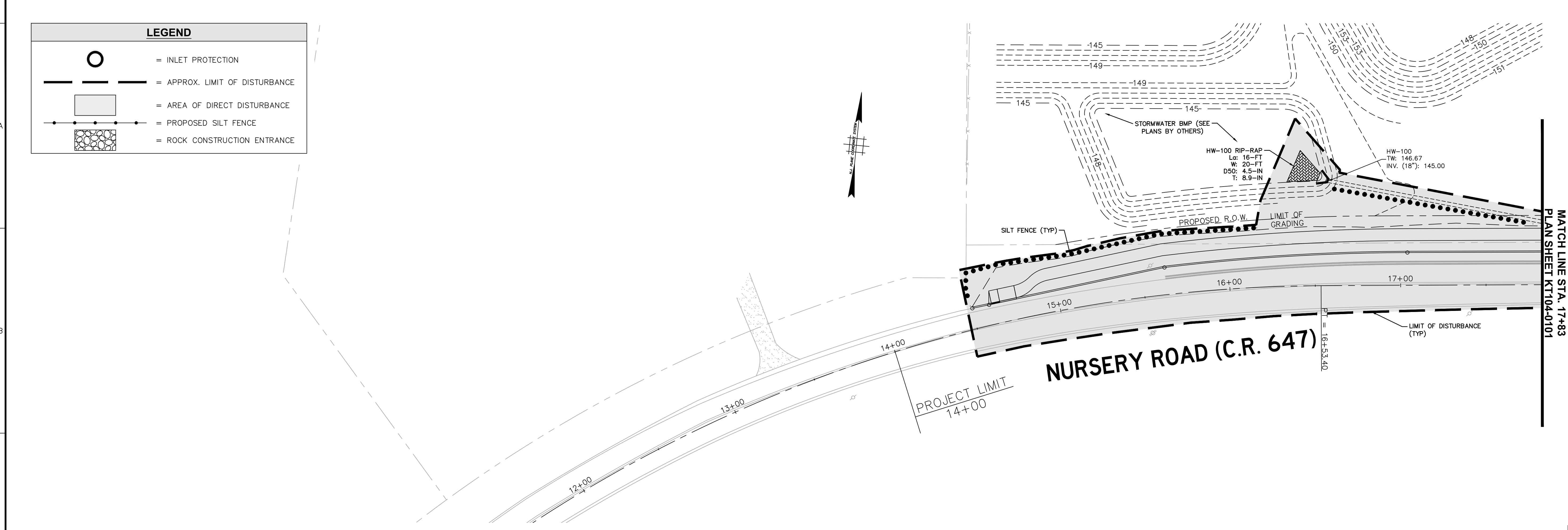
Sheet 19 of 58

Drawing No.

KT103

0204

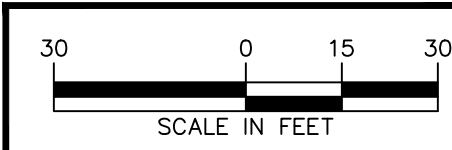
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KP

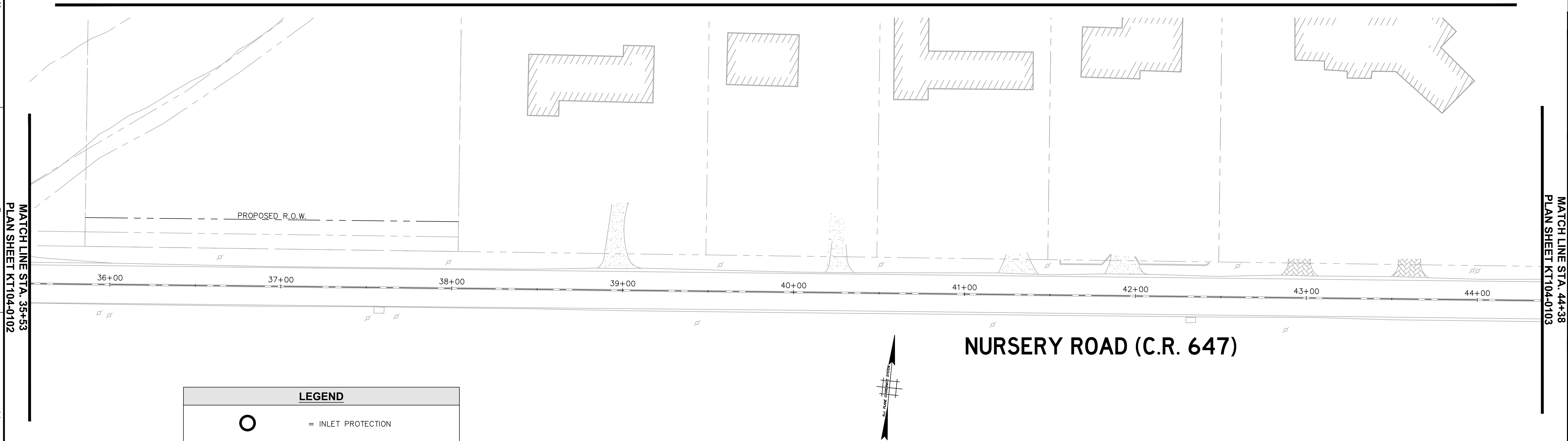
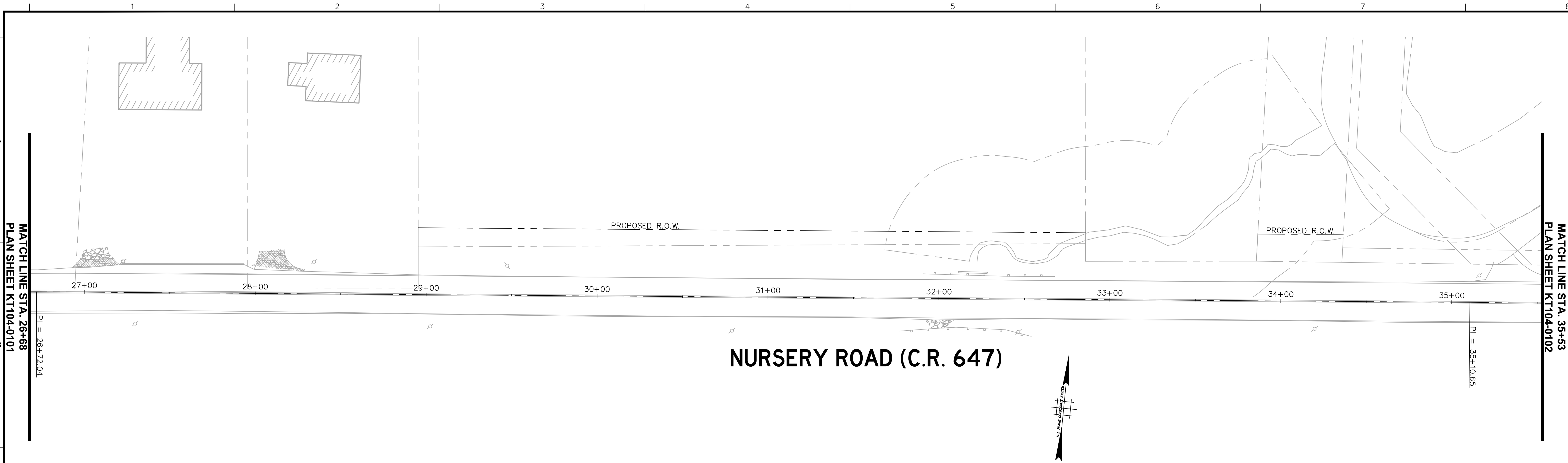


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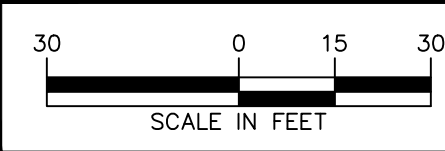
- = INLET PROTECTION
- = APPROX. LIMIT OF DISTURBANCE
- = AREA OF DIRECT DISTURBANCE
- = PROPOSED SILT FENCE
- = ROCK CONSTRUCTION ENTRANCE

Date	Description	No.
Revisions		
 SIGNATURE: KARL A. PEHNKE DATE SIGNED: 9/11/2024 PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title SOIL EROSION & SEDIMENT CONTROL PLAN		
Project No. 130208601		Drawing No. KT104
Date 9/11/2024		0101
Scale 1" = 30'		
Drawn By ME	Checked By KP	Sheet 21 of 58
Submission Date 9/11/2024		

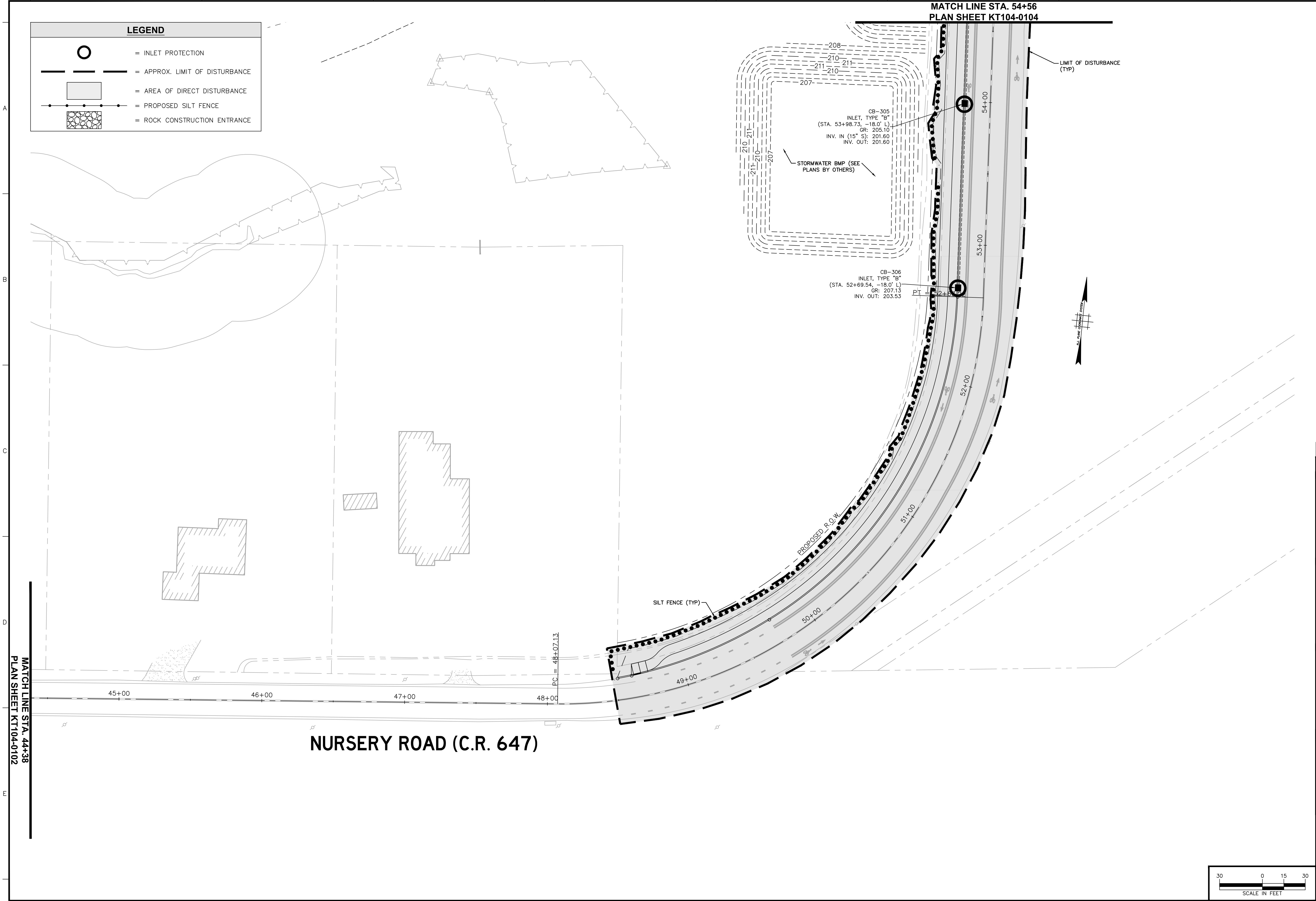




LEGEND	
	= INLET PROTECTION
	= APPROX. LIMIT OF DISTURBANCE
	= AREA OF DIRECT DISTURBANCE
	= PROPOSED SILT FENCE
	= ROCK CONSTRUCTION ENTRANCE



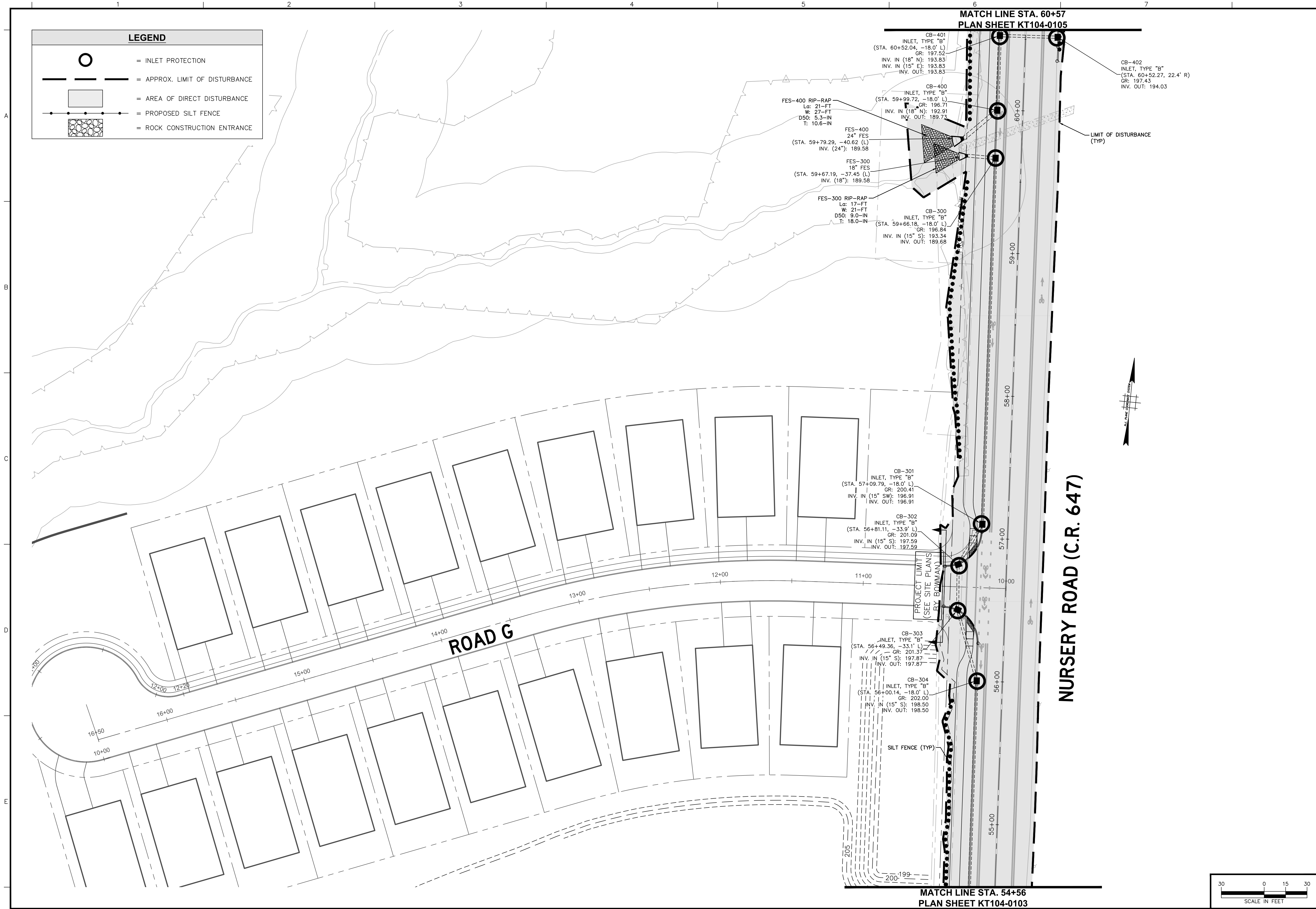
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Revisions			
			
SIGNATURE DATE SIGNED			
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434			
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY			
Drawing Title			
SOIL EROSION & SEDIMENT CONTROL PLAN			
Project No. 130208601		Drawing No. KT104 0102	
Date 9/11/2024			
Scale 1" = 30'			
Drawn By ME			
Submission Date 9/11/2024		Checked By KP	Sheet 22 of 58



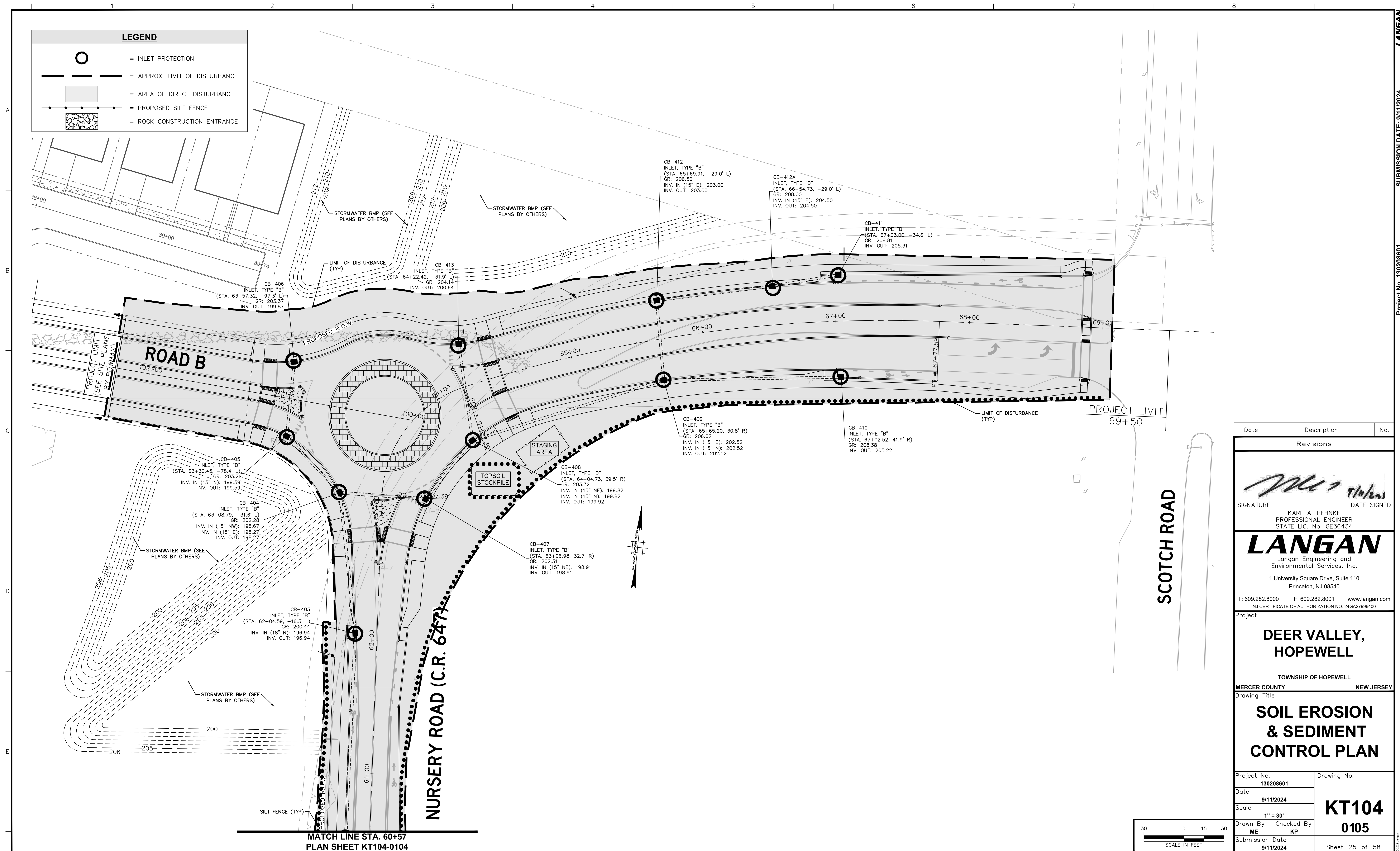
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
SOIL EROSION & SEDIMENT CONTROL PLAN		
Project No. 130208601		Drawing No. KT104 0103
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME		
Checked By KP		Sheet 23 of 58
Submission Date 9/11/2024		

MATCH LINE STA. 44+38
PLAN SHEET KT104-0102

MATCH LINE STA. 54+56
PLAN SHEET KT104-0104

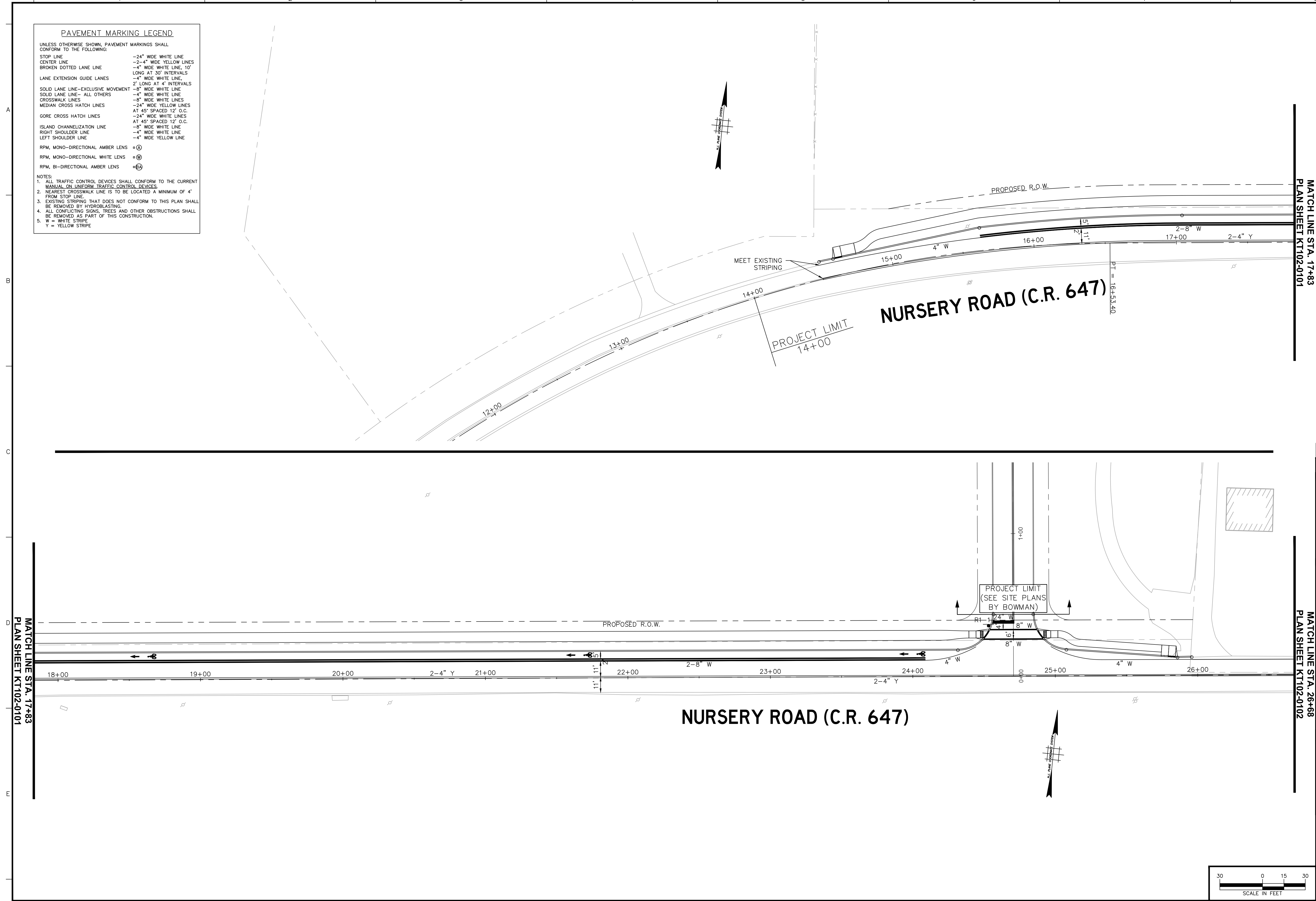


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Revisions		
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Project DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title SOIL EROSION & SEDIMENT CONTROL PLAN		
Project No. 130208601		Drawing No. KT104 0104
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 24 of 58



NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. NEAREST CROSSWALK LINE IS TO BE LOCATED A MINIMUM OF 4' FROM STOP LINE.
3. EXISTING STRIPING THAT DOES NOT CONFORM TO THIS PLAN SHALL BE REMOVED BY HYDROBLASTING.
4. ALL CONFLICTING SIGNS, TREES AND OTHER OBSTRUCTIONS SHALL BE REMOVED AS PART OF THIS CONSTRUCTION.
5. W = WHITE STRIPE
Y = YELLOW STRIPE

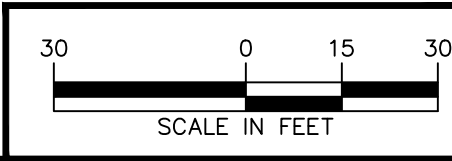


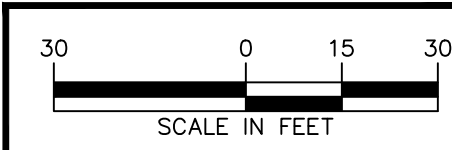
Date	Description	No.
Revisions		
		
SIGNATURE	DATE SIGNED 9/11/2024	
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
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Project		
DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL NEW JERSEY MERCER COUNTY		
Drawing Title		
SIGNING AND STRIPING PLAN		
Project No. 130208601		Drawing No. KT102 0101
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		
Sheet 26 of 58		



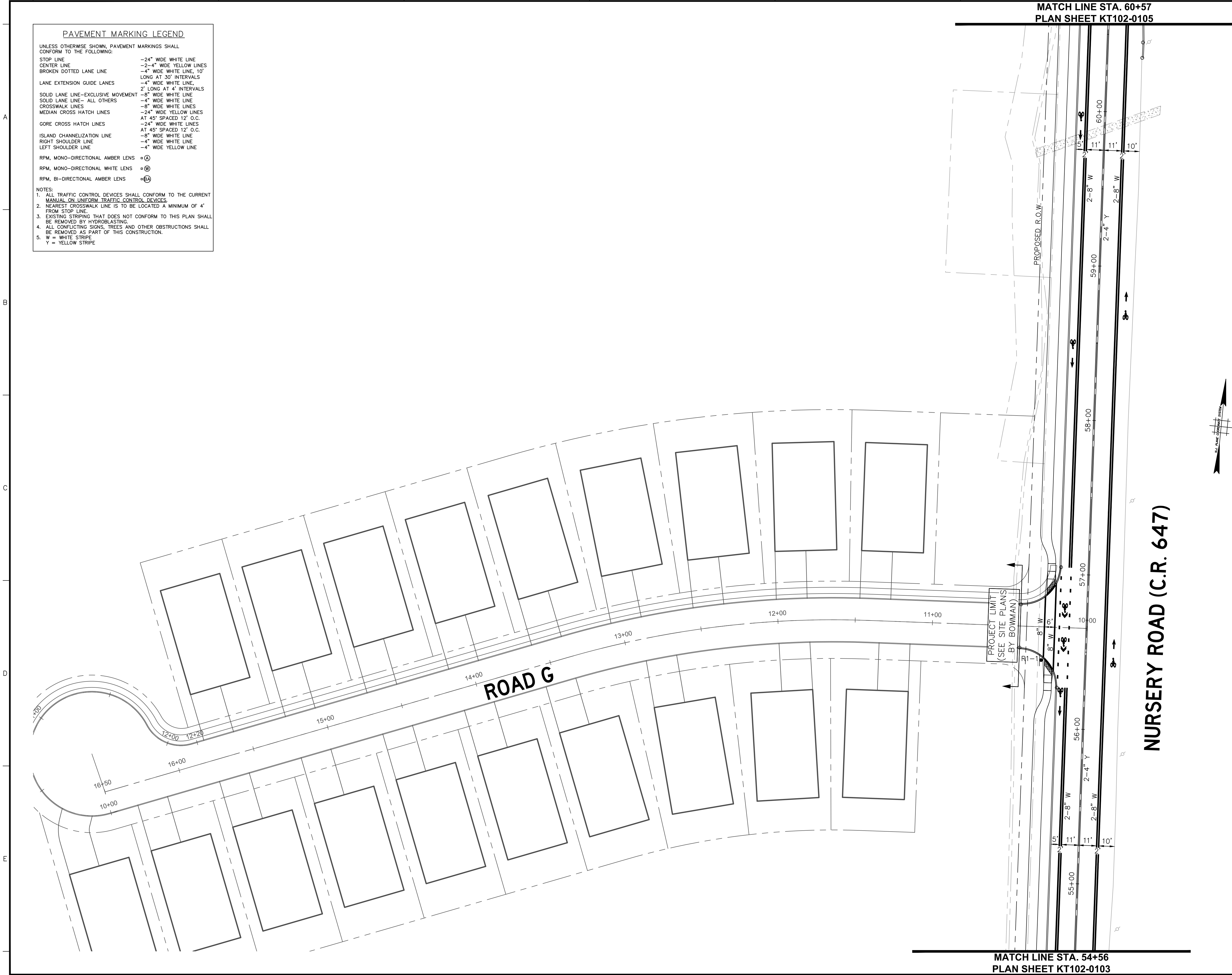
PAVEMENT MARKING LEGEND	
UNLESS OTHERWISE SHOWN, PAVEMENT MARKINGS SHALL CONFORM TO THE FOLLOWING:	
STOP LINE	-24" WIDE WHITE LINE
CENTER LINE	-2-4" WIDE YELLOW LINES
BROKEN DOTTED LANE LINE	-4" WIDE WHITE LINE, 10' LONG AT 30' INTERVALS
LANE EXTENSION GUIDE LANES	-4" WIDE WHITE LINE, 2' LONG AT 4' INTERVALS
SOLID LANE LINE-EXCLUSIVE MOVEMENT	-8" WIDE WHITE LINE
SOLID LANE LINE- ALL OTHERS	-4" WIDE WHITE LINE
CROSSWALK LINES	-8" WIDE WHITE LINES
MEDIAN CROSS HATCH LINES	-24" WIDE YELLOW LINES AT 45° SPACED 12" O.C.
GORE CROSS HATCH LINES	-24" WIDE WHITE LINES AT 45° SPACED 12" O.C.
ISLAND CHANNELIZATION LINE	-8" WIDE WHITE LINE
RIGHT SHOULDER LINE	-4" WIDE WHITE LINE
LEFT SHOULDER LINE	-4" WIDE YELLOW LINE
RPM, MONO-DIRECTIONAL AMBER LENS	⬢(A)
RPM, MONO-DIRECTIONAL WHITE LENS	⬢(B)
RPM, BI-DIRECTIONAL AMBER LENS	⬢(6A)
NOTES:	
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.	
2. NEAREST CROSSWALK LINE IS TO BE LOCATED A MINIMUM OF 4' FROM STOP LINE.	
3. EXISTING STRIPING THAT DOES NOT CONFORM TO THIS PLAN SHALL BE REMOVED BY HYDROBLASTING.	
4. ALL CONFLICTING SIGNS, TREES AND OTHER OBSTRUCTIONS SHALL BE REMOVED AS PART OF THIS CONSTRUCTION.	
5. W = WHITE STRIPE Y = YELLOW STRIPE	

Date	Description	No.	
Revisions			
			
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL			
MERCER COUNTY NEW JERSEY			
Drawing Title			
SIGNING AND STRIPING PLAN			
Project No. 130208601		KT102 0102	
Date 9/11/2024			
Scale 1" = 30'			
Drawn By ME			
Submission Date 9/11/2024		Sheet 27 of 58	
Checked By KP			

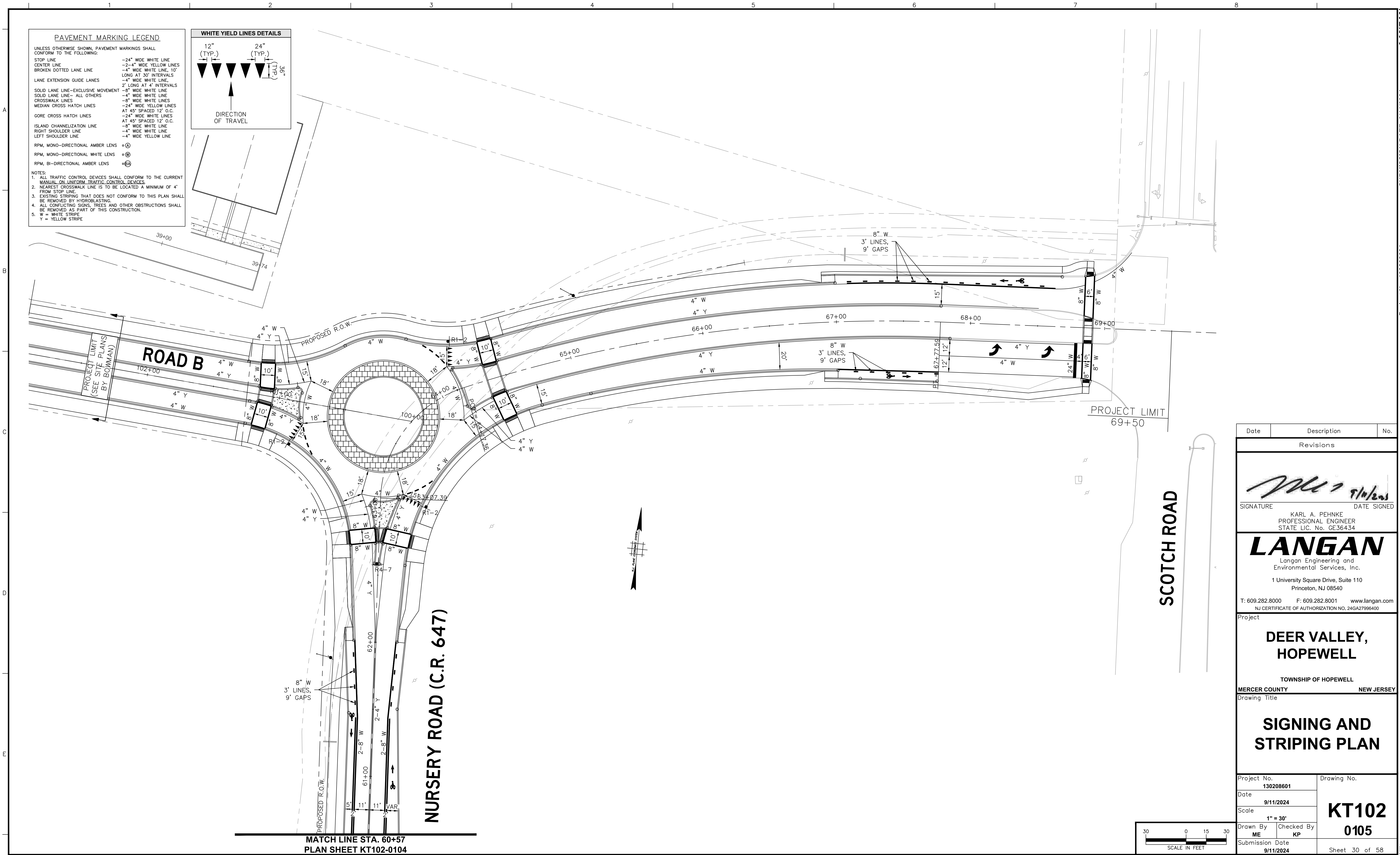




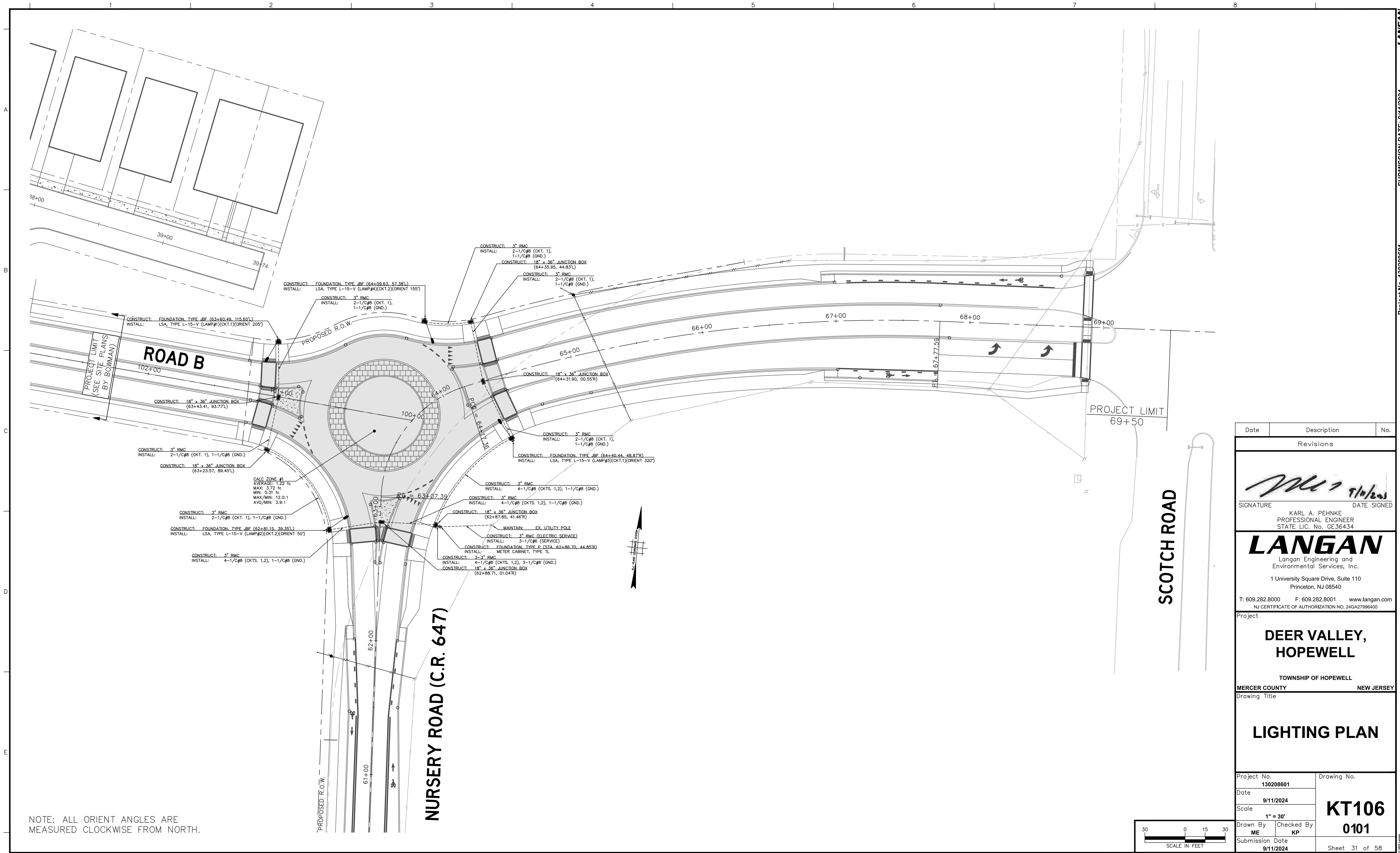
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DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL NEW JERSEY MERCER COUNTY		
Drawing Title		
SIGNING AND STRIPING PLAN		
Project No. 130208601		Drawing No. KT102 0103
Date 9/11/2024		
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DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
SIGNING AND STRIPING PLAN		
Project No. 130208601		Drawing No. KT102 0104
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Drawn By ME		
Checked By KP		
Submission Date 9/11/2024		



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TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
SIGNING AND STRIPING PLAN		
Project No. 130208601		Drawing No.
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Submission Date 9/11/2024		Sheet 30 of 58



Date	Description	No.
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Project DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title LIGHTING PLAN		
Project No. 130208601		Drawing No. KT106
Date 9/11/2024		0101
Scale 1" = 30'		
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GENERAL NOTES:

1. ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY THE NJDOT BUREAU OF TRAFFIC ENGINEERING TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES ARE TO BE IN PLACE.
4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN ARE TO BE PROVIDED WITH AT LEAST ONE W20-1F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN ARE TO BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.
6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS ARE TO BE BAGGED OR COVERED.
7. MAINTENANCE AND PROTECTION OF TRAFFIC TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES – PART 6 "TEMPORARY TRAFFIC CONTROL".
8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) TO BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH TO BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
10. CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) TO BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) TO BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST.
12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER, THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT IS TO MOVE WITH THE WORK AREAS TO KEEP A 70 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.
13. THE CONTRACTOR TO SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN TO BE SUBMITTED TO THE NJDOT BUREAU OF TRAFFIC ENGINEERING AS SPECIFIED IN THE SPECIFICATIONS.
14. BACKFILL ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY AND PLACED ON AT LEAST 6H:1V SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE ARE TO BE BACKFILLED.
15. WHERE REQUIRED, THE CONTRACTOR IS TO MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.
16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES TO BE TRANSITIONED ON A MINIMUM 20H:1V SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
17. THE PLACEMENT AND/ OR RELOCATION OF CONSTRUCTION BARRIER CURB TO BE DONE DURING ALLOWABLE LANE CLOSURE HOURS.
18. CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE BUREAU OF TRAFFIC ENGINEERING, REGIONAL TRAFFIC ENGINEER – WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE RE.
19. THE SPEED LIMIT, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS TO BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE BUREAU OF TRAFFIC ENGINEERING, REGIONAL TRAFFIC ENGINEER – WORK ZONE.
20. THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) TO BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
21. TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17(S), 4 FEET BY 2.5 FEET SIGN TO BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN TO ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN IS TO BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
22. DO NOT CONSTRUCT THE FINAL HMA SURFACE PAVEMENT UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS. SET MANHOLES AND INLETS TO FINISHED GRADE AND CONSTRUCT TEMPORARY PAVEMENT RAMPS AROUND THEM WITH A MINIMUM 20H:1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.

23. PLACE TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. AS SHOWN ON PLANS. NO SIGNS ARE TO BE PLACED WITHOUT ACTUAL LANE CLOSURES AND REMOVE IMMEDIATELY UPON REMOVAL OF THE CLOSURES.
24. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE NJDOT BUREAU OF TRAFFIC ENGINEERING ENGINEER AND NJDOT BUREAU OF TRAFFIC ENGINEERING.
25. TRAFFIC IMPACT NOTICES AND CHANGES

- A. TERMS:
WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING IS AS FOLLOWS:
- i. IMPACTS TO NORMAL TRAFFIC FLOW – WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.
- ii. TEMPORARY LANE CLOSURES – WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.
- iii. PERMANENT LANE CLOSURES – WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.
- B. ADVANCE NOTICES

FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR IS TO NOTIFY THE RE IN WRITING. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE NJDOT BUREAU OF TRAFFIC ENGINEERING IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

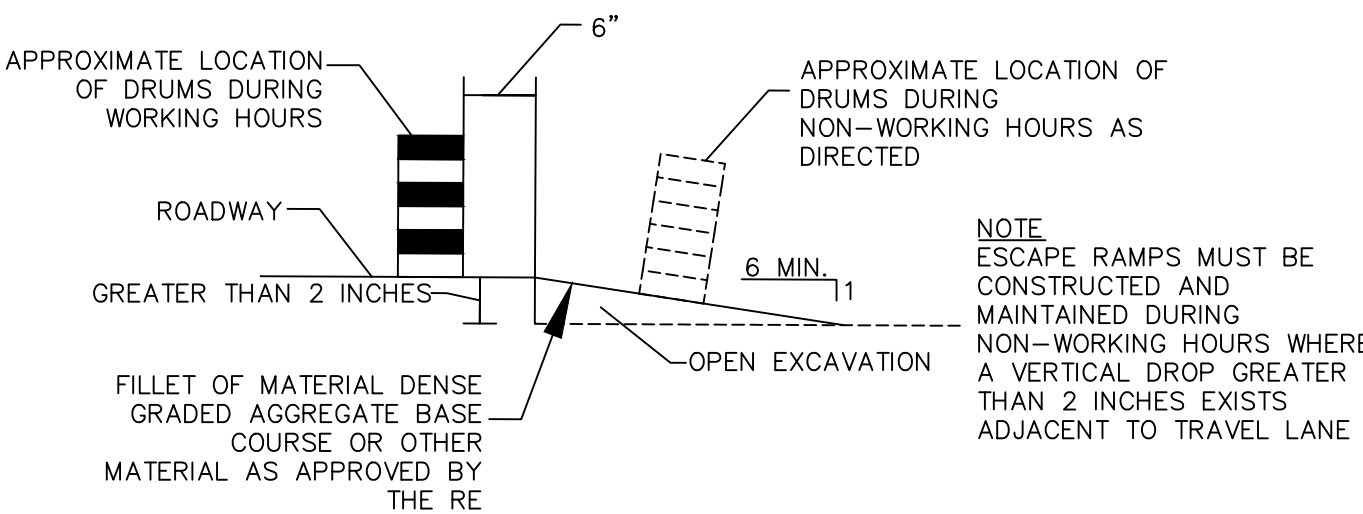
FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR IS TO NOTIFY THE NJDOT BUREAU OF TRAFFIC ENGINEERING IN WRITING, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE IS TO BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR IS TO CONFIRM, IN WRITING TO THE THE NJDOT BUREAU OF TRAFFIC ENGINEERING, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE NJDOT BUREAU OF TRANSPORTATION IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN IS TO BEGIN NO EARLIER THAN 11:00 PM FRIDAY AND BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT IS TO BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.

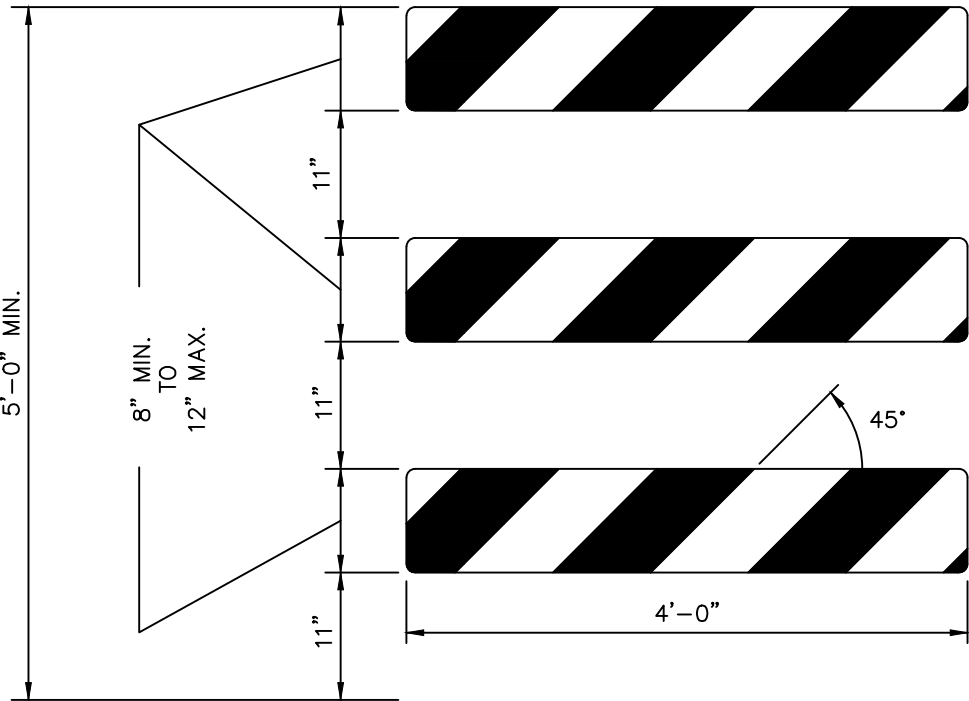
ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING ARE TO BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.

- C. PROGRESS NOTICES
- ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY ARE TO BE SUBMITTED TO THE NJDOT BUREAU OF TRAFFIC ENGINEERING BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-100 PROVIDED BY THE DEPARTMENT.
- EACH DAY OF "TEMPORARY LANE CLOSURES" ARE TO BE SUBMITTED TO THE RE BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.
- "TEMPORARY LANE CLOSURES" FOR WEEKENDS ARE TO BE SUBMITTED TO THE RE BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.
- D. CHANGES TO THE SCHEDULED CLOSURES
- REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE NJDOT BUREAU OF TRAFFIC ENGINEERING AS FOLLOWS:
- CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" ARE TO BE SUBMITTED TO THE NJDOT BUREAU OF TRAFFIC ENGINEERING AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.
- OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" ARE TO BE SUBMITTED TO THE NJDOT BUREAU OF TRAFFIC ENGINEERING.

26. WHERE FINAL HMA PAVING IS PERFORMED AND THE LANE IS TO BE RE-OPENED TO TRAFFIC AND THE ITEM TRAFFIC STRIPES IS UNABLE TO BE APPLIED, APPLY THE ITEM TRAFFIC STRIPES, LATEX. ENSURE THAT THE ITEM TRAFFIC STRIPES IS APPLIED WITHIN 14 DAYS.



ESCAPE RAMP DETAIL
N.T.S.



TYPE III BARRICADE – FRONT VIEW

- NOTES:
1. THE 9" MIN. x 48", OR 12" MAX. x 48" BARRICADE RAILS SHALL BE FABRICATED FROM 0.125" MAX. PLASTIC SHEETING AND SHALL BE ATTACHED, 4 PER RAIL, WITH 1 INCH NO. 14 PAN HEAD METAL SCREWS OR PLASTIC RIVETS. ALL CORNERS SHALL BE ROUNDED.
2. ORANGE AND SILVER (WHITE) STRIPES SHALL BE RETROREFLECTIVE SHEETING, ASTM D 4956 TYPE III, AS SHOWN FOR CONSTRUCTION SIGNS. ALTERNATE ORANGE AND SILVER (WHITE) STRIPES 6" WIDE SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS.
3. THE FRAMING AND BALLAST FOR BARRICADE PANELS SHALL BE NCHRP-350 CRASHED TESTED AND FHWA APPROVED.
4. IF NECESSARY, THE BALLAST SHALL BE FABRICATED AND PLACED ACCORDING TO THE MANUFACTURE'S RECOMMENDATION.

BREAKAWAY BARRICADES

N.T.S.

CD-159-1.3

LANE CLOSURE HOURS

THE FOLLOWING ALLOWABLE LANE CLOSURE HOURS SCHEDULE SHOULD BE USED FOR ALL SHORT AND LONG TERM CONSTRUCTION STAGES ON ROUTE 40 MP 4.29 – 7.1 (TWO TRAVEL LANES – SECTION) AND ROUTE 48 MP 4.0 TO 4.3:

SUMMER SEASON

ALL LANES MAINTAINED (EACH DIRECTION)

MONDAY THROUGH THURSDAY	6:00 AM TO 9:00 AM (AND) 3:00 PM TO 8:00 PM
FRIDAY	6:00 AM TO 9:00 AM (AND) 3:00 PM TO 6:00 AM (MONDAY)

ONE LANE MAINTAINED (ONE LANE CLOSED)

MONDAY THROUGH THURSDAY	9:00 AM TO 3:00 PM (AND) 8:00 PM TO 6:00 AM (NEXT DAY)
FRIDAY	9:00 AM TO 3:00 PM

ALL OTHER TIMES OF THE YEAR

ALL LANES MAINTAINED (EACH DIRECTION)

MONDAY THROUGH FRIDAY	6:00 AM TO 9:00 AM (AND) 3:00 PM TO 8:00 PM
SATURDAY	7:00 AM TO 8:00 PM
SUNDAY	8:00 AM TO 8:00 PM

ONE LANE MAINTAINED (ONE LANE CLOSED)

MONDAY THROUGH THURSDAY	9:00 AM TO 3:00 PM (AND) 8:00 PM TO 6:00 AM (NEXT DAY)
FRIDAY	9:00 AM TO 3:00 PM (AND) 8:00 PM TO 7:00 AM (SATURDAY)
SATURDAY	8:00 PM TO 8:00 AM (SUNDAY)
SUNDAY	8:00 PM TO 6:00 AM (MONDAY)

NO TEMPORARY LANE, SHOULDER CLOSURE, RAMP CLOSURE, OR TRAFFIC SHIFT WILL BE PERMITTED ON THE FOLLOWING HOLIDAYS:

EASTER SUNDAY	(INCLUDING 6:00 AM SATURDAY UNTIL NOON MONDAY)
MEMORIAL DAY	(SEE NOTE BELOW)
JULY 4th	(SEE NOTE BELOW)
LABOR DAY	(SEE NOTE BELOW)
ELECTION DAY	(6:00 AM UNTIL 8:00 PM THE DAY OF)
THANKSGIVING DAY	(SEE NOTE BELOW)
CHRISTMAS DAY	(SEE NOTE BELOW)
NEW YEARS DAY	(SEE NOTE BELOW)

NOTE:

IF HOLIDAY FALLS ON
SUNDAY OR MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY OR SATURDAY

NO LANE CLOSURE PERMITTED
6:00 AM FRIDAY UNTIL NOON TUESDAY
6:00 AM FRIDAY UNTIL NOON WEDNESDAY
6:00 AM TUESDAY UNTIL NOON THURSDAY
6:00 AM WEDNESDAY UNTIL NOON MONDAY
6:00 AM THURSDAY UNTIL NOON MONDAY

THE NJDOT BUREAU OF TRAFFIC ENGINEERING IS RESPONSIBLE TO NOTIFY TRAFFIC OPERATIONS CENTRAL OF ANY TEMPORARY LANE/SHOULDER CLOSURES 24 HOURS IN ADVANCE. A NJDOT APPROVED DAILY LANE AND SHOULDER CLOSURE REQUEST FORM (TO-101) MUST BE COMPLETED AND FAXED OR E-MAILED TO TRAFFIC OPERATIONS CENTRAL.

CONTRACTOR TO PROVIDE ONE (1) VARIABLE MESSAGE SIGN TO AID IN TRAFFIC MITIGATION. LOCATION AND MESSAGES FOR THE PORTABLE VMS TO BE AS DIRECTED BY THE NJDOT BUREAU OF TRAFFIC ENGINEERING.

THE SUMMER SEASON SHALL START ON THE FRIDAY 6 AM OF THE WEEKEND PRIOR TO THE MEMORIAL DAY WEEKEND, AND END AFTER SUNDAY OF THE WEEKEND AFTER THE LABOR DAY WEEKEND.

THE PROPOSED WORK MUST BE COORDINATED WITH OTHER PROJECTS THAT MAY BE UNDERWAY AT THE SAME TIME IN THE PROJECT AREA.

ACCESS TO ALL DRIVEWAYS AND FIRE LANES MUST BE MAINTAINED AT ALL TIMES DURING BUSINESS HOURS AND ONE DRIVEWAY AND ALL FIRE LANES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

SHOULDER CLOSURE WILL BE PERMITTED ANYTIME AS LONG AS CLOSURE DOES NOT IMPACT TRAVEL LANES. HOLIDAY RESTRICTIONS WILL APPLY.

FOR TRAFFIC SHIFTS DURING CONSTRUCTION, SIGNS WILL BE NEEDED TO DESIGNATE BUSINESS DRIVEWAYS TO MINIMIZE TRAFFIC CONFUSION.

LEGEND

- C BREAKAWAY BARRICADES
- C BREAKAWAY BARRICADES WITH SIGN
- GROUND-MOUNTED CONSTRUCTION SIGNS
- DRUMS
- CONE
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DIRECTOR, FLAGGER
- TRAILER MOUNTED MOUNTED VARIABLE MESSAGE BOARD
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
- TEMPORARY CRASH CUSHION, (all other approved)
- BUFFER ZONE
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS		
	DESIRABLE	MINIMUM	
	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET
25	375	525	150
30	450	625	200
35	525	725	250
40	600	825	325
45	675	925	400
50	750	1025	475
55	875	1150	550
60	1000	1275	650
65	1050		725

ROUTE 40, ROUTE 48, POINTERS AUBURN ROAD
ROUTE 40 EB/WB

- NOTES:
1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS				RECOMMENDED SPACING ALONG TANGENTS	
REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	MINIMUM TAPER LENGTH L – FOR LANE WIDTHS	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET	
25	10:5:1	10' 11' 12'	25	50	
30	15:1	150 165 180	30	60	
35	20:5:1	205 225 245	35	70	
40	27:1	270 300 325	40	80	
45	45:1	450 485 540	45	90	
50	50:1	500 550 600	50	100	
55	55:1	550 605 680	55	110	
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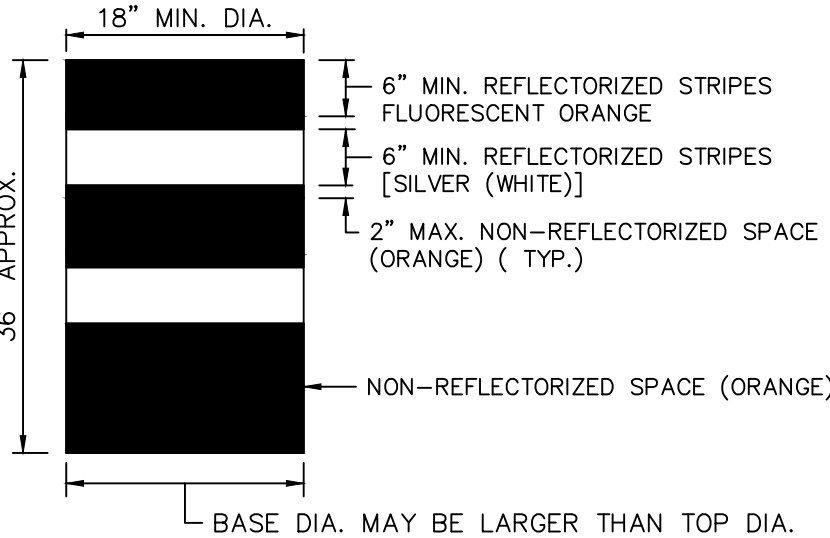
NOTE:

THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

DRUMS SHALL BE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE FLUORESCENT ORANGE AND WHITE RETROREFLECTIVE STRIPES. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE STRIPES, THEY SHALL BE NO MORE THAN 2" WIDE. RETROREFLECTIVE SHEETING FOR STRIPES SHALL CONFORM WITH ASTM D 4956 TYPE VII OR VIII WITH S2 REQUIREMENTS.

THE TOP OF THE DRUM SHALL NOT BE OPEN. DRUMS SHALL BE CONSTRUCTED TO INHIBIT ROLLING IF KNOCKED OVER.

THE REFLECTORIZED AREA OF DRUMS SHALL BE ROUND EXCEPT THAT OTHER SHAPES, WHICH PROVIDE THE SAME VISIBILITY AS AN 18 INCH DIAMETER ROUND DRUM REGARDLESS OF ORIENTATION, MAY BE USED.



DRUMS
N.T.S.

CD-159-1.1

NOTE:

- SEE NJDOT SHEETS CD-159-1 AND CD-159-2 FOR ADDITIONAL TRAFFIC CONTROL DEVICE DETAILS.

Date	Description	No.
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Revisions

[Signature] 9/11/2024

SIGNATURE DATE SIGNED
KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

LANGAN

Langan Engineering and
Environmental Services, Inc.

1 University Square Drive, Suite 110
Princeton, NJ 08540

T: 609.282.8000 F: 609.282.8001 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

**DEER VALLEY,
HOPEWELL**

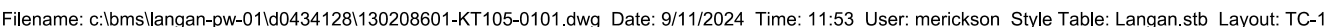
TOWNSHIP OF HOPEWELL

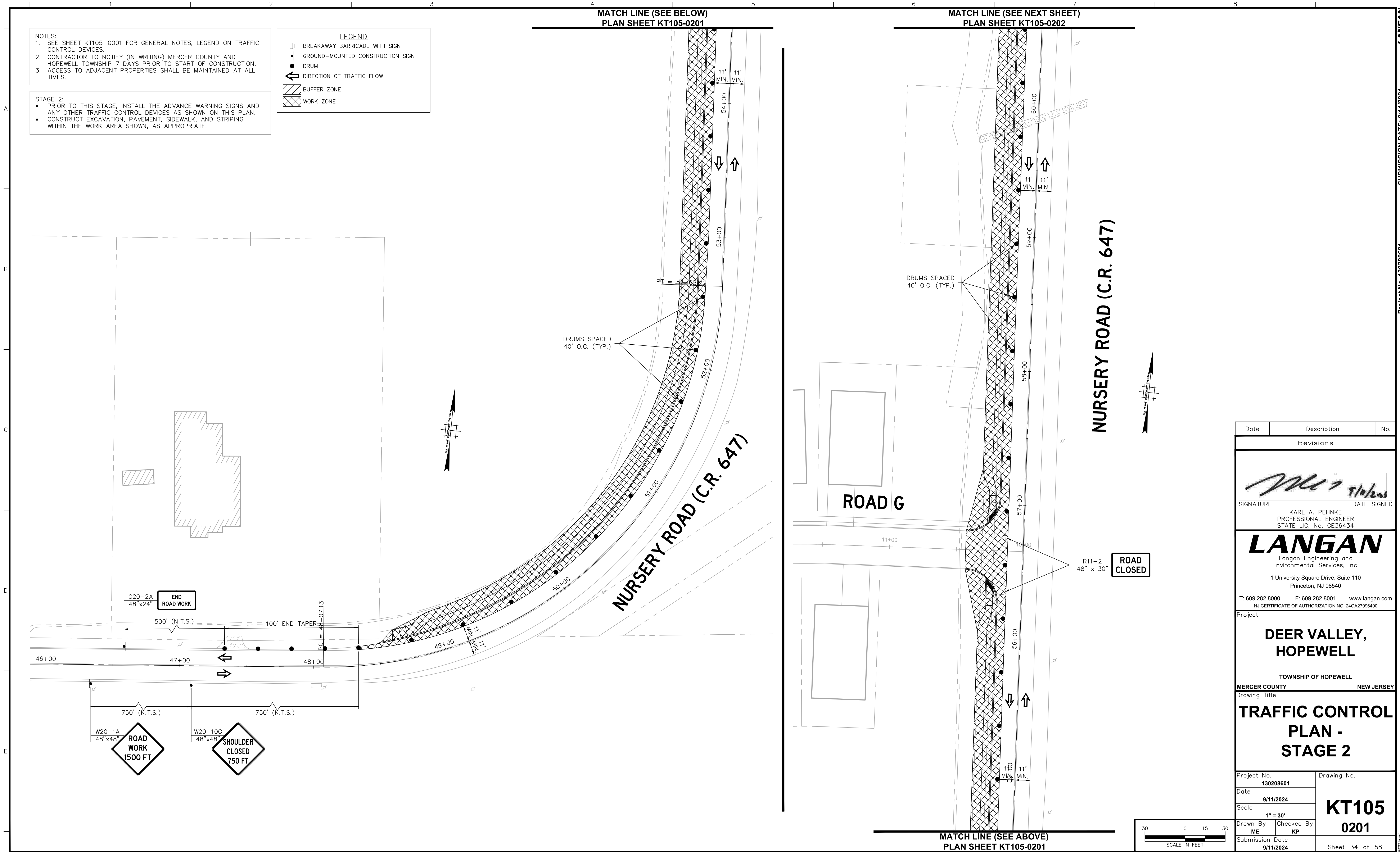
MERCER COUNTY NEW JERSEY

Drawing Title

**TRAFFIC CONTROL
NOTES**

Project No. 130208601	Drawing No.
Date 9/11/2024	
Scale N/A	
Drawn By ME	Checked By KP
Submission Date 9/11/2024	
	KT105 0100
	Sheet 32 of 58

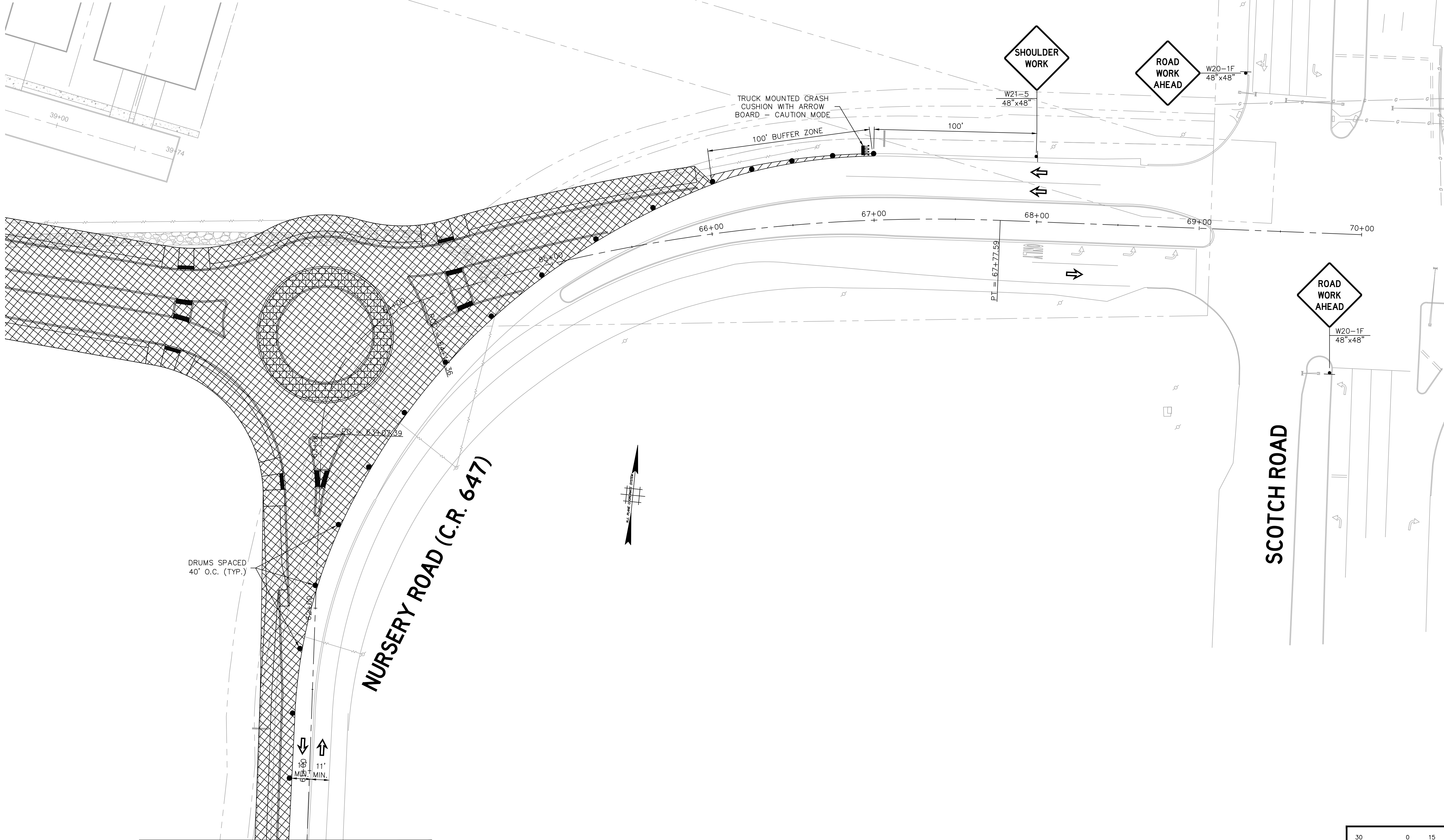




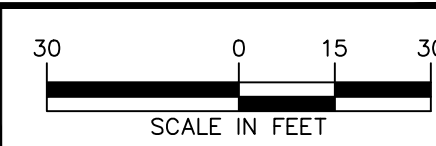
NOTES:
1. SEE SHEET KT105-0001 FOR GENERAL NOTES, LEGEND ON TRAFFIC CONTROL DEVICES.
2. CONTRACTOR TO NOTIFY (IN WRITING) MERCER COUNTY AND HOPEWELL TOWNSHIP 7 DAYS PRIOR TO START OF CONSTRUCTION.
3. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

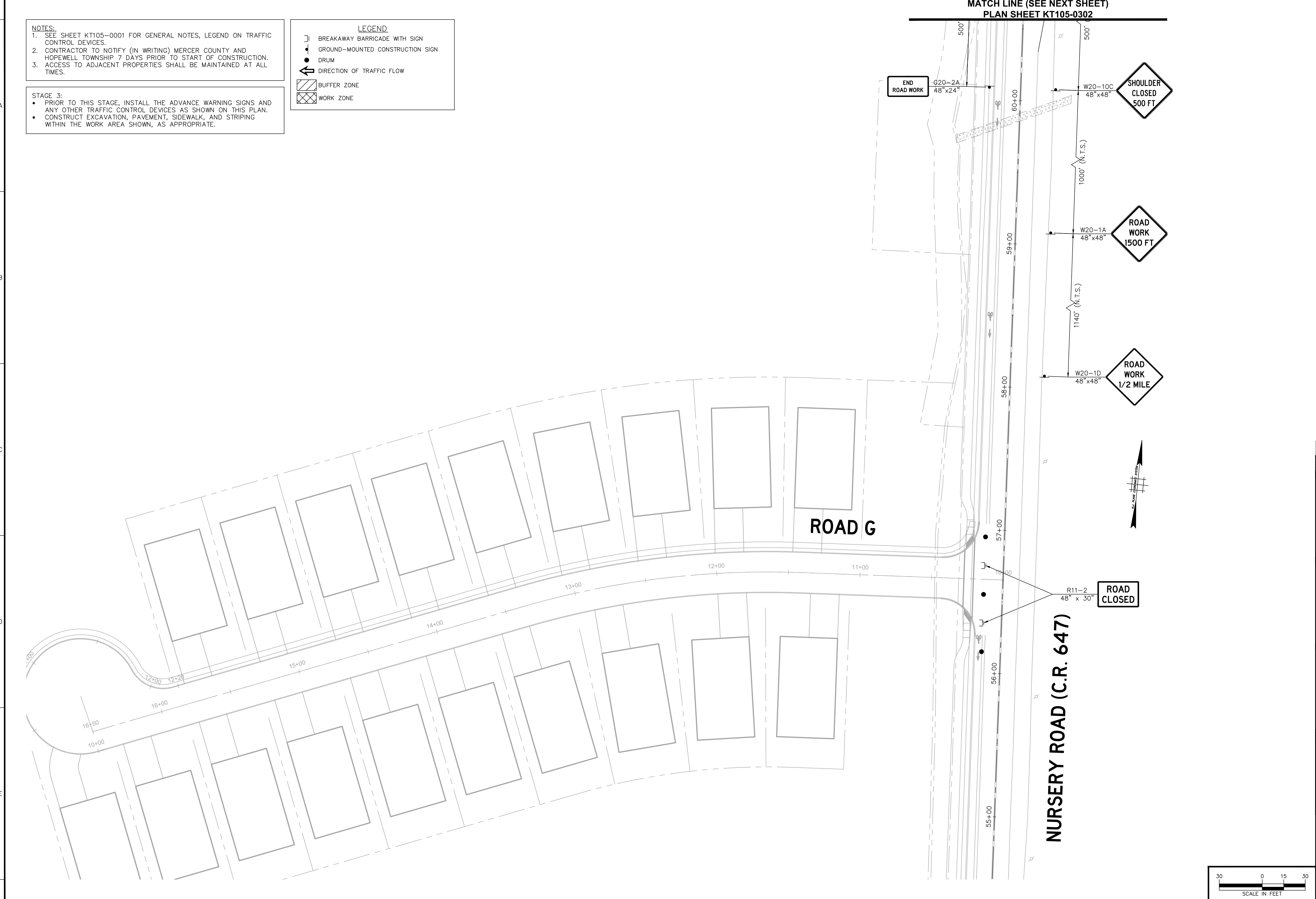
STAGE 2:
• PRIOR TO THIS STAGE, INSTALL THE ADVANCE WARNING SIGNS AND ANY OTHER TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
• CONSTRUCT EXCAVATION, PAVEMENT, SIDEWALK, AND STRIPING WITHIN THE WORK AREA SHOWN, AS APPROPRIATE.

LEGEND
BREAKAWAY BARRICADE WITH SIGN
GROUND-MOUNTED CONSTRUCTION SIGN
DRUM
DIRECTION OF TRAFFIC FLOW
BUFFER ZONE
WORK ZONE



Date	Description	No.
Revisions		
		
SIGNATURE DATE SIGNED		
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
TRAFFIC CONTROL PLAN - STAGE 2		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT105 0202
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 35 of 58





NOTES:
1. SEE SHEET KT105-0001 FOR GENERAL NOTES, LEGEND ON TRAFFIC CONTROL DEVICES.
2. CONTRACTOR TO NOTIFY (IN WRITING) MERCER COUNTY AND HOPEWELL TOWNSHIP 7 DAYS PRIOR TO START OF CONSTRUCTION.
3. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

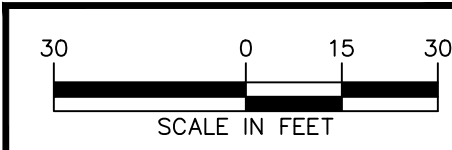
STAGE 3:
• PRIOR TO THIS STAGE, INSTALL THE ADVANCE WARNING SIGNS AND ANY OTHER TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
• CONSTRUCT EXCAVATION, PAVEMENT, SIDEWALK, AND STRIPING WITHIN THE WORK AREA SHOWN, AS APPROPRIATE.

LEGEND

- BREAKAWAY BARRICADE WITH SIGN
- GROUND-MOUNTED CONSTRUCTION SIGN
- DRUM
- DIRECTION OF TRAFFIC FLOW
- BUFFER ZONE
- WORK ZONE

MATCH LINE (SEE NEXT SHEET)
PLAN SHEET KT105-0302

Date	Description	No.
Revisions		
		
SIGNATURE		DATE SIGNED
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
TRAFFIC CONTROL PLAN - STAGE 3		
Project No. 130208601		Drawing No. KT105 0301
Date 9/11/2024		
Scale 1" = 30'		Sheet 36 of 58
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		



NOTES:

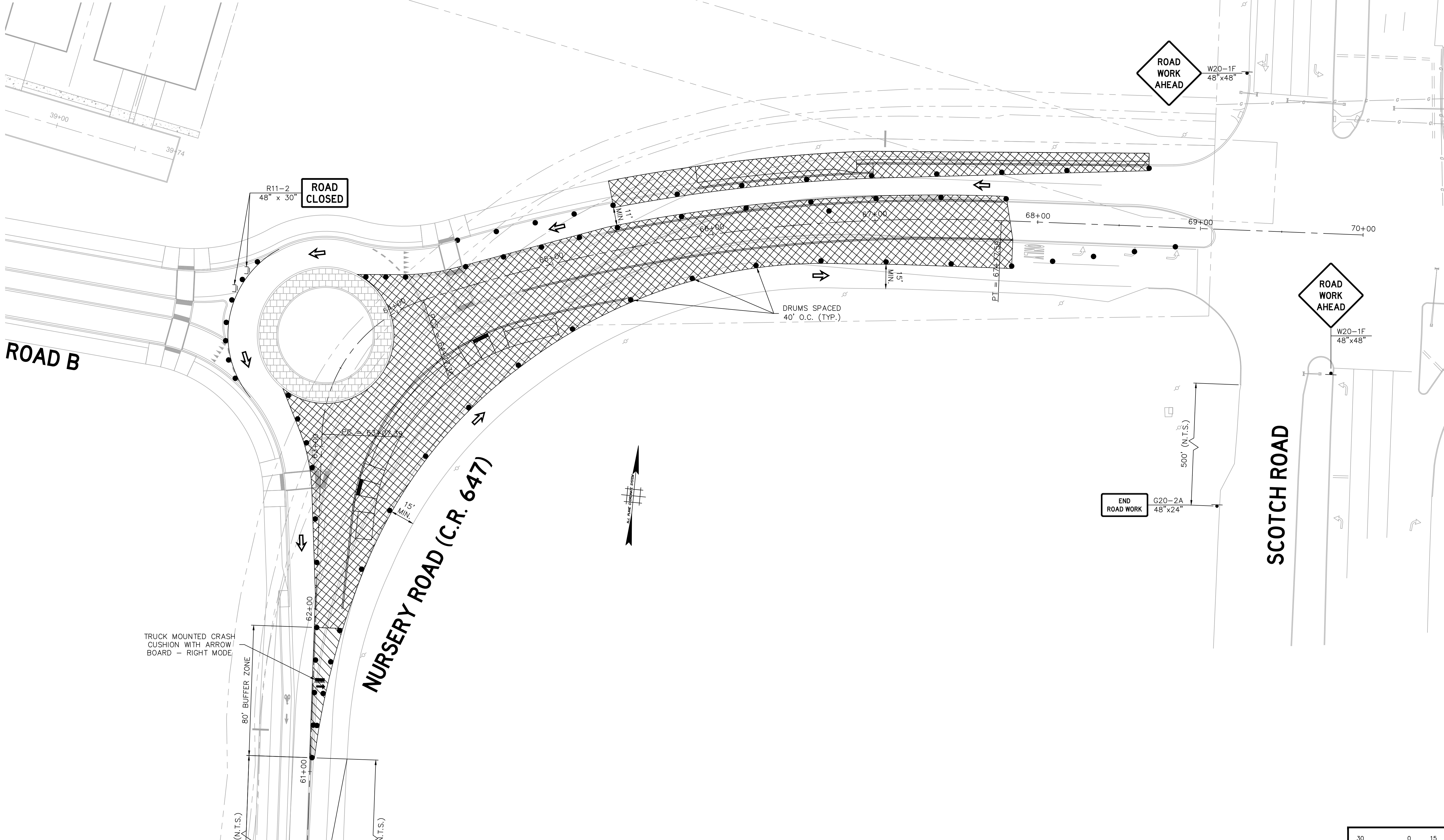
- SEE SHEET KT105-0001 FOR GENERAL NOTES, LEGEND ON TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO NOTIFY (IN WRITING) MERCER COUNTY AND HOPEWELL TOWNSHIP 7 DAYS PRIOR TO START OF CONSTRUCTION.
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STAGE 3:

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- CONSTRUCT EXCAVATION, PAVEMENT, SIDEWALK, AND STRIPING WITHIN THE WORK AREA SHOWN, AS APPROPRIATE.

LEGEND

- BREAKAWAY BARRICADE WITH SIGN
- GROUND-MOUNTED CONSTRUCTION SIGN
- DRUM
- DIRECTION OF TRAFFIC FLOW
- BUFFER ZONE
- WORK ZONE



MATCH LINE (SEE PREVIOUS SHEET)
PLAN SHEET KT105-0301

Date	Description	No.
Revisions		

[Signature] 9/11/2024
SIGNATURE DATE SIGNED

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PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

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Environmental Services, Inc.

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Princeton, NJ 08540

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

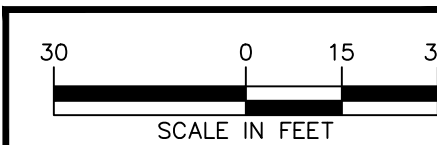
**DEER VALLEY,
HOPEWELL**

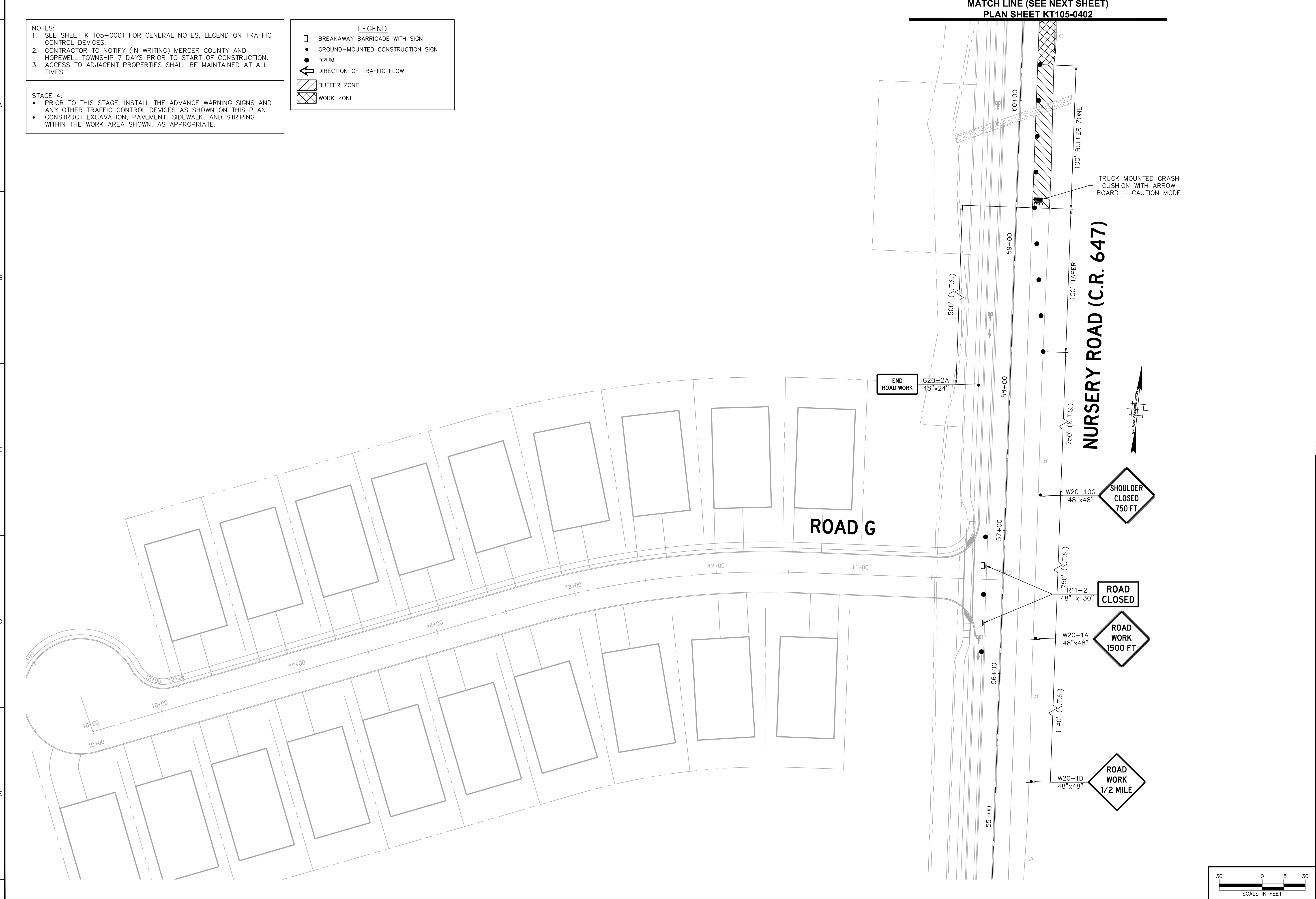
TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

**TRAFFIC CONTROL
PLAN -
STAGE 3**

Project No. 130208601	Drawing No. KT105 0302
Date 9/11/2024	
Scale 1" = 30'	
Drawn By ME	Checked By KP
Submission Date 9/11/2024	Sheet 37 of 58





NOTES:

- SEE SHEET KT105-0001 FOR GENERAL NOTES, LEGEND ON TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO NOTIFY (IN WRITING) MERCER COUNTY AND HOPEWELL TOWNSHIP 7 DAYS PRIOR TO START OF CONSTRUCTION.
- ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

STAGE 4:

- PRIOR TO THIS STAGE, INSTALL THE ADVANCE WARNING SIGNS AND ANY OTHER TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
- CONSTRUCT EXCAVATION, PAVEMENT, SIDEWALK, AND STRIPING WITHIN THE WORK AREA SHOWN, AS APPROPRIATE.

LEGEND

- BREAKAWAY BARRICADE WITH SIGN
- GROUND-MOUNTED CONSTRUCTION SIGN
- DRUM
- DIRECTION OF TRAFFIC FLOW
- BUFFER ZONE
- WORK ZONE

MATCH LINE (SEE NEXT SHEET)
PLAN SHEET KT105-0402

NURSERY ROAD (C.R. 647)

ROAD G

TRUCK MOUNTED CRASH CUSHION WITH ARROW BOARD - CAUTION MODE

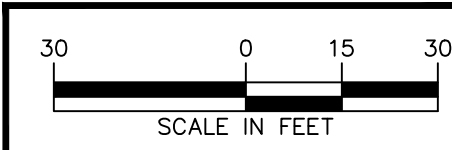
SHOULDER CLOSED
750 FT

ROAD CLOSED

ROAD WORK
1500 FT

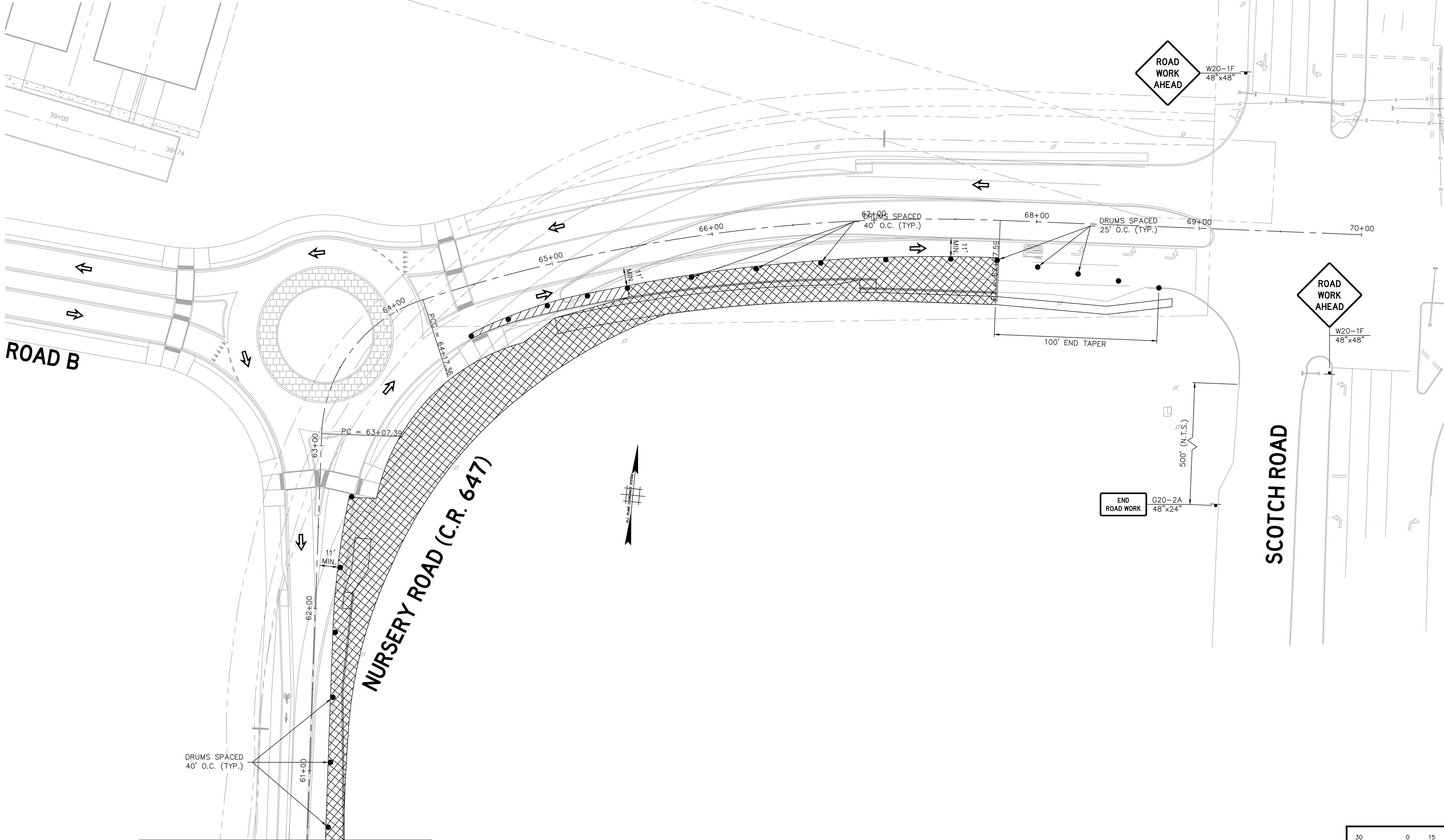
ROAD WORK
1/2 MILE

Date	Description	No.
Revisions		
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KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
TRAFFIC CONTROL PLAN - STAGE 4		
Project No. 130208601		Drawing No. KT105 0401
Date 9/11/2024		
Scale 1" = 30'		Sheet 38 of 58
Drawn By ME		
Submission Date 9/11/2024		Checked By KP



- NOTES:**
- SEE SHEET KT105-0001 FOR GENERAL NOTES, LEGEND ON TRAFFIC CONTROL DEVICES.
 - CONTRACTOR TO NOTIFY (IN WRITING) MERCER COUNTY AND HOPEWELL TOWNSHIP 7 DAYS PRIOR TO START OF CONSTRUCTION.
 - ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
- STAGE 4:**
- PRIOR TO THIS STAGE, INSTALL THE ADVANCE WARNING SIGNS AND ANY OTHER TRAFFIC CONTROL DEVICES AS SHOWN ON THIS PLAN.
 - CONSTRUCT EXCAVATION, PAVEMENT, SIDEWALK, AND STRIPING WITHIN THE WORK AREA SHOWN, AS APPROPRIATE.

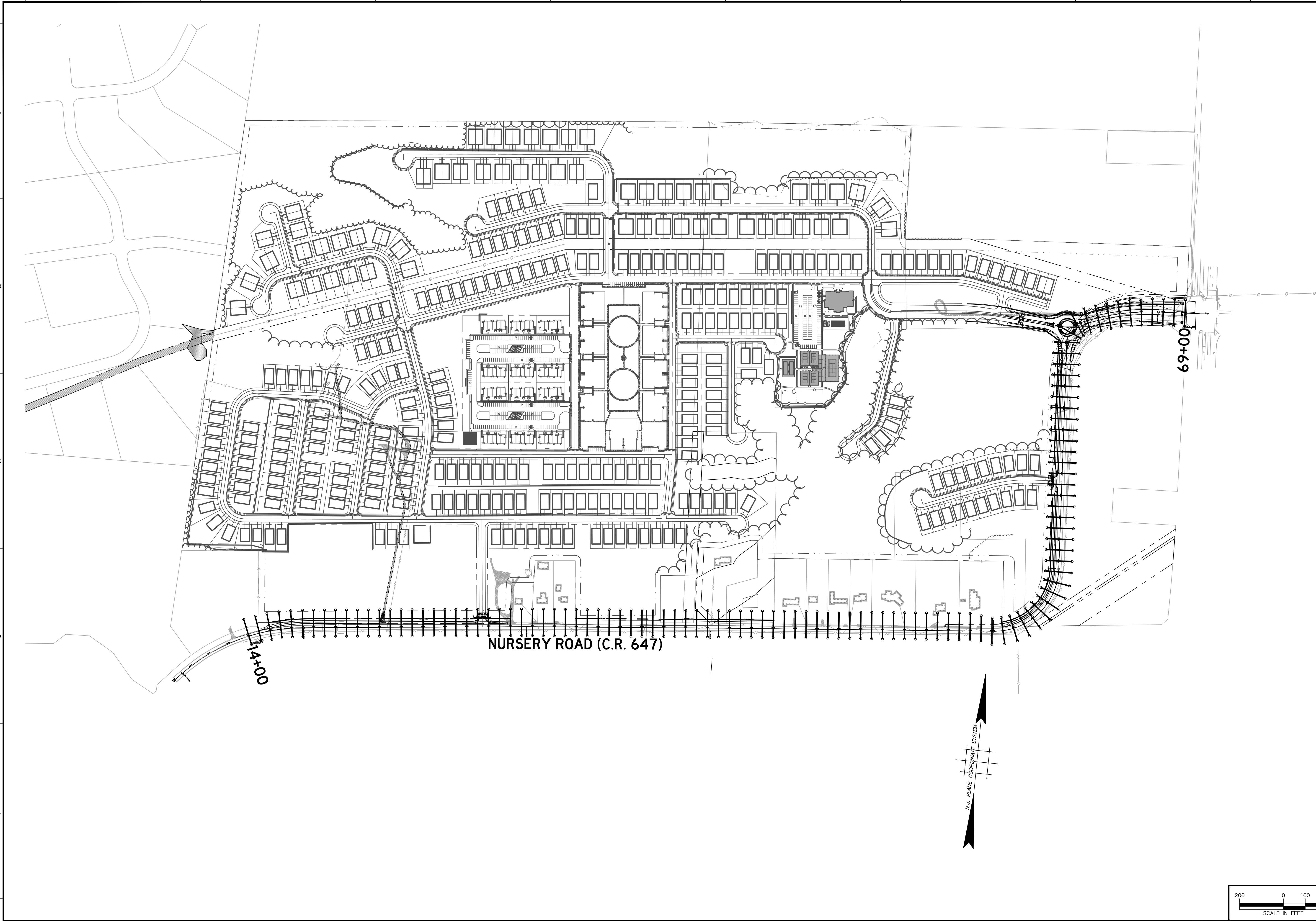
- LEGEND**
- BREAKAWAY BARRICADE WITH SIGN
 - GROUND-MOUNTED CONSTRUCTION SIGN
 - DRUM
 - DIRECTION OF TRAFFIC FLOW
 - BUFFER ZONE
 - WORK ZONE



DRUMS SPACED
40' O.C. (TYP.)

MATCH LINE (SEE PREVIOUS SHEET)
PLAN SHEET KT105-0401

Date	Description	No.
Revisions		
		
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
TRAFFIC CONTROL PLAN - STAGE 4		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT105 0402
Scale 1" = 30'		
Drawn By ME	Checked By KP	Submission Date 9/11/2024
Sheet 39 of 58		



Date	Description	No.
------	-------------	-----

Revisions

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SIGNATURE DATE SIGNED

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Princeton, NJ 08540

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

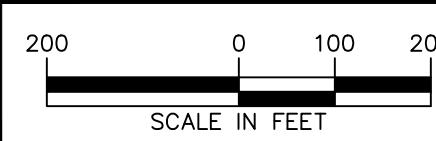
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HOPEWELL**

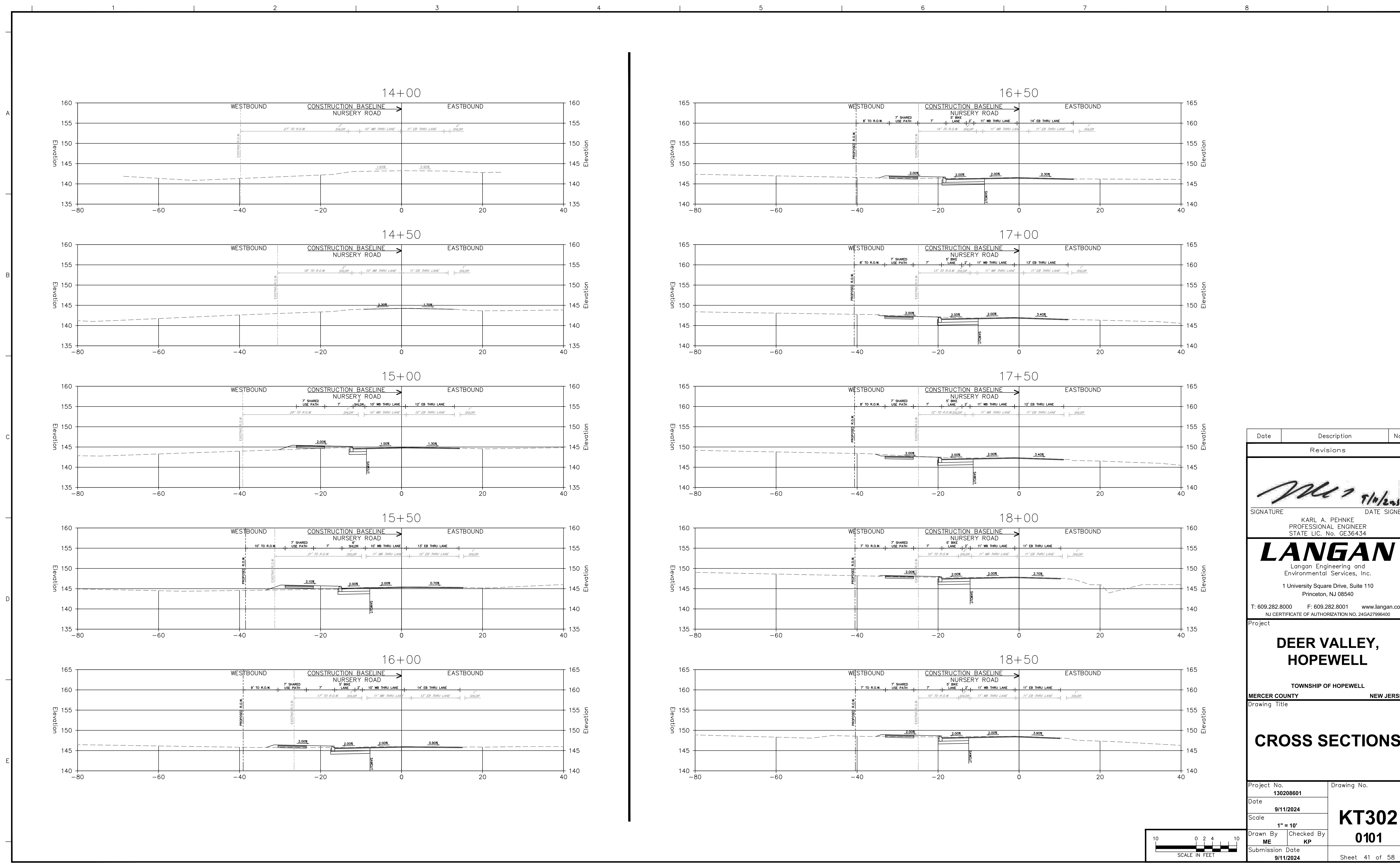
TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

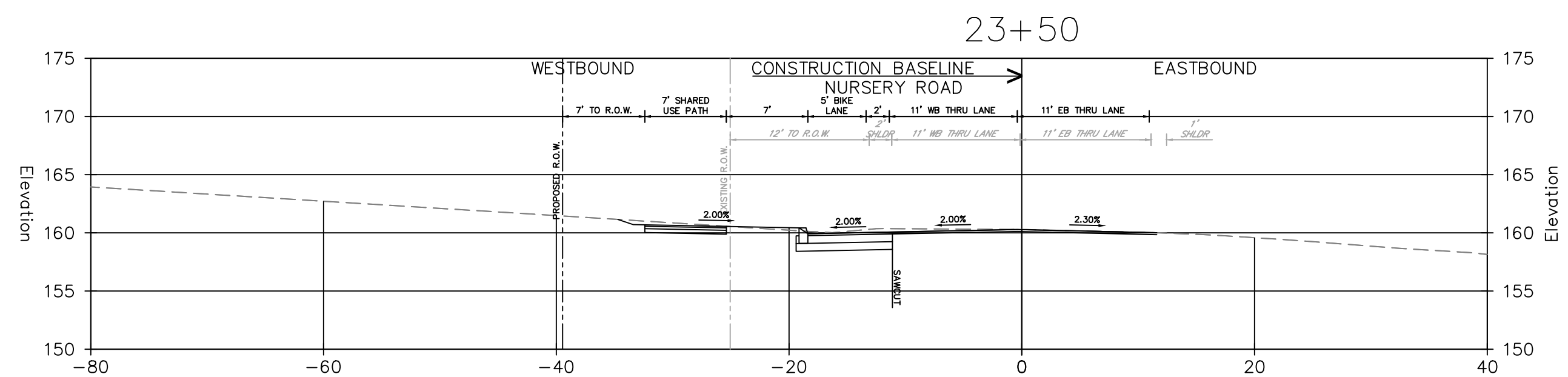
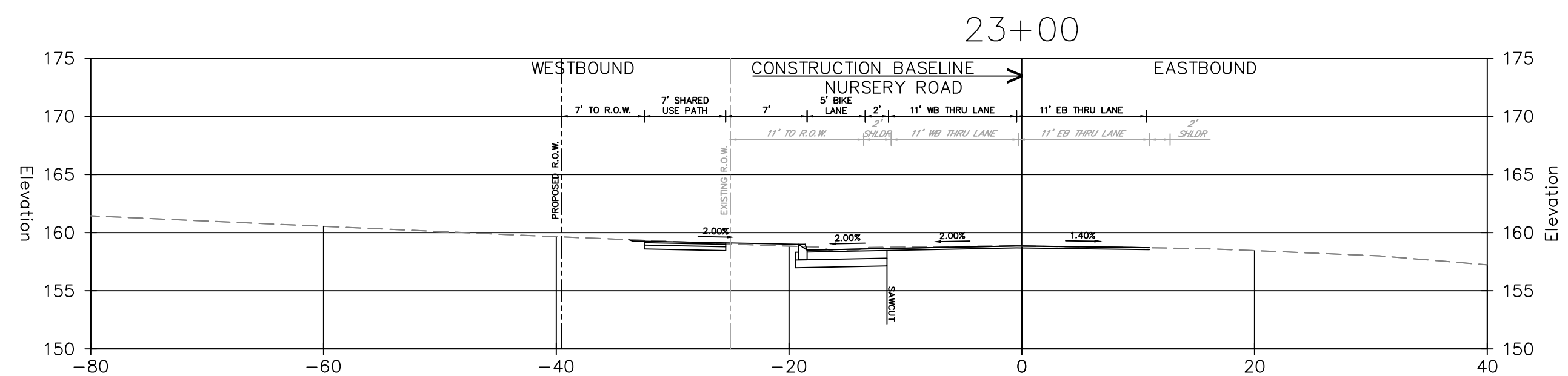
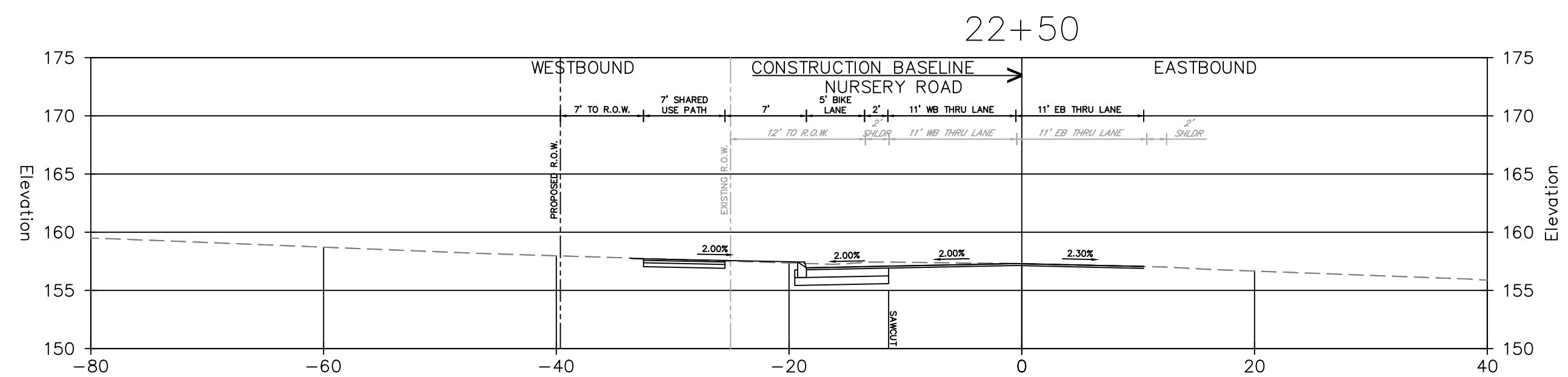
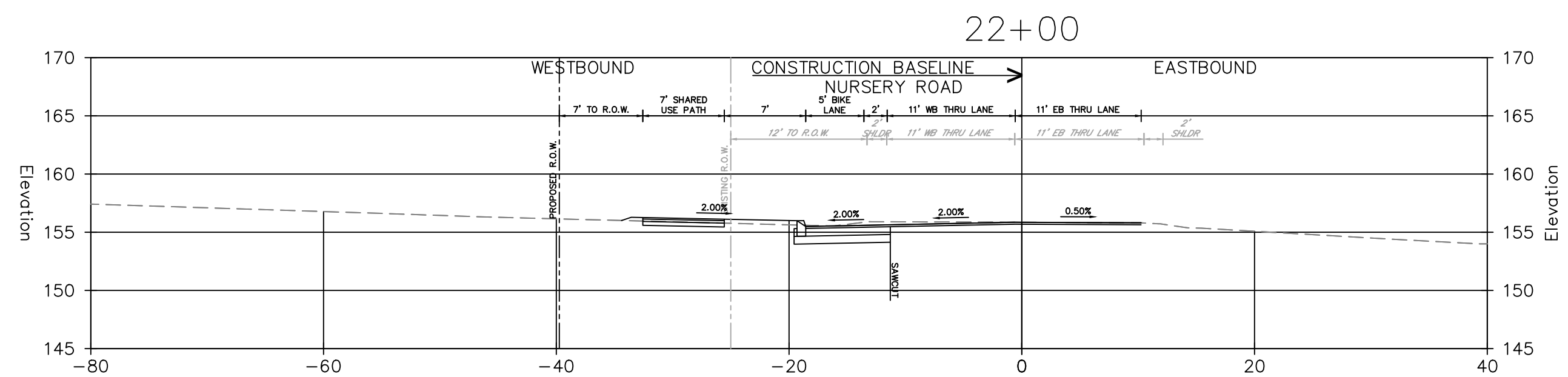
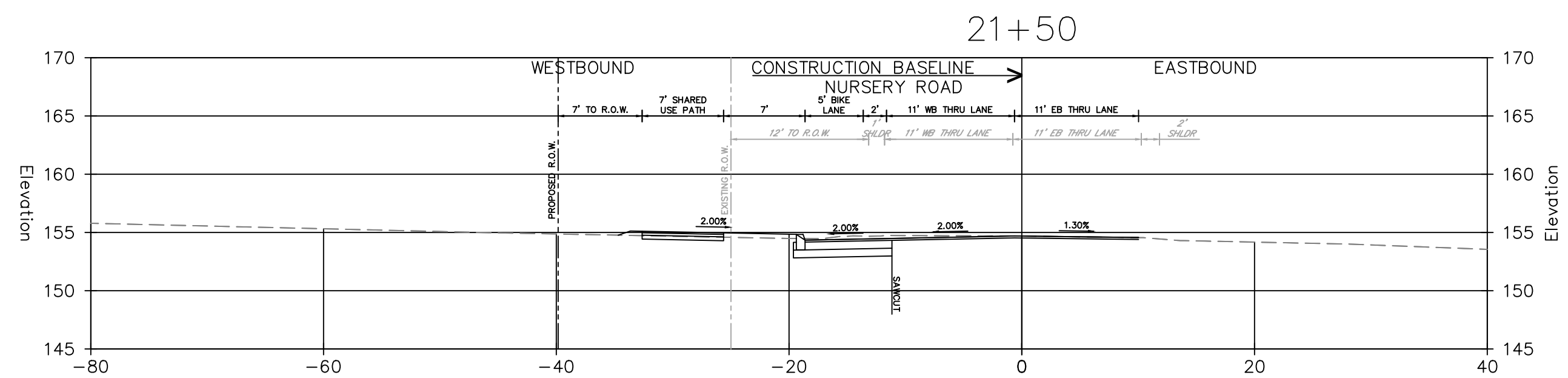
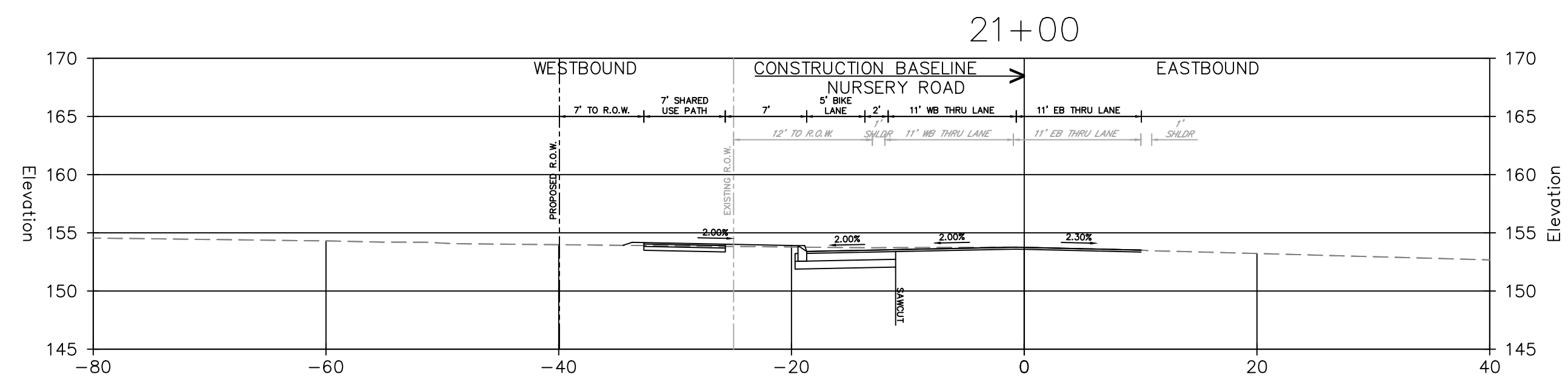
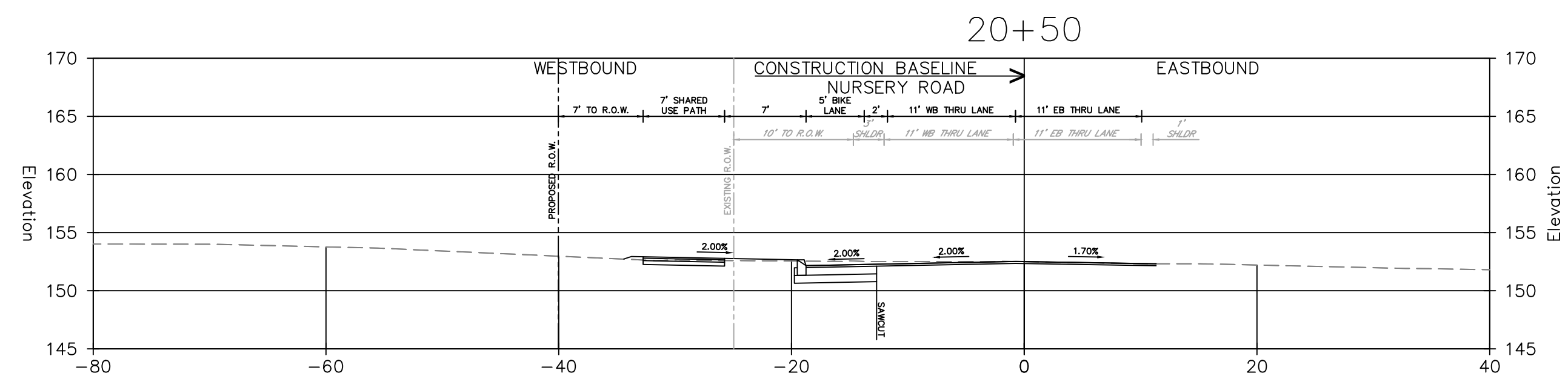
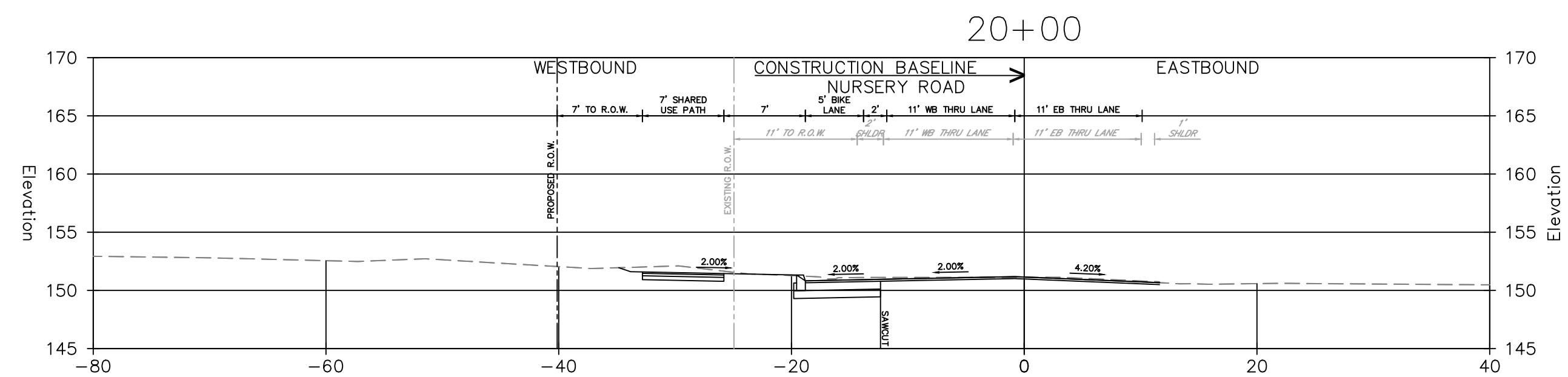
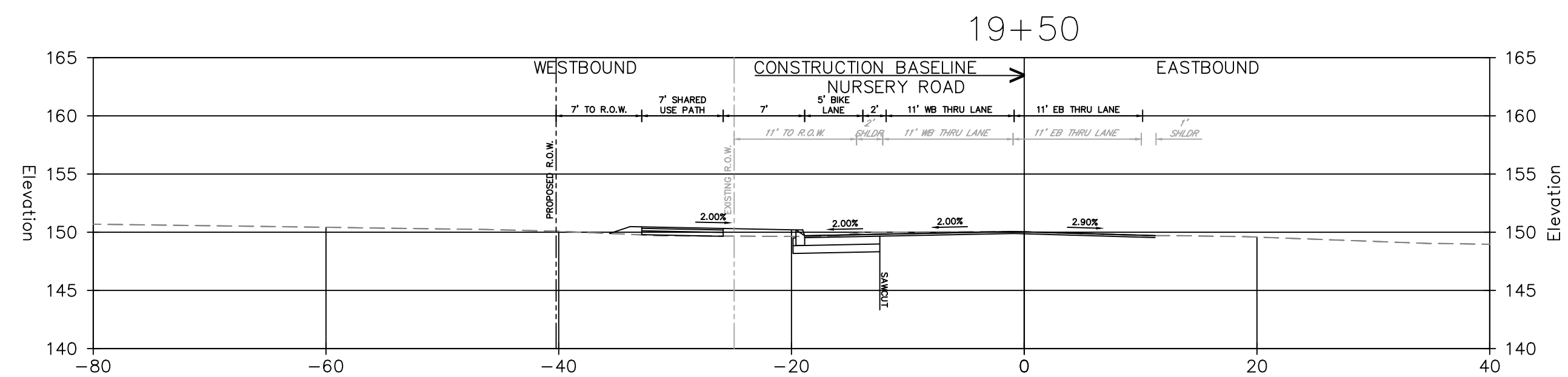
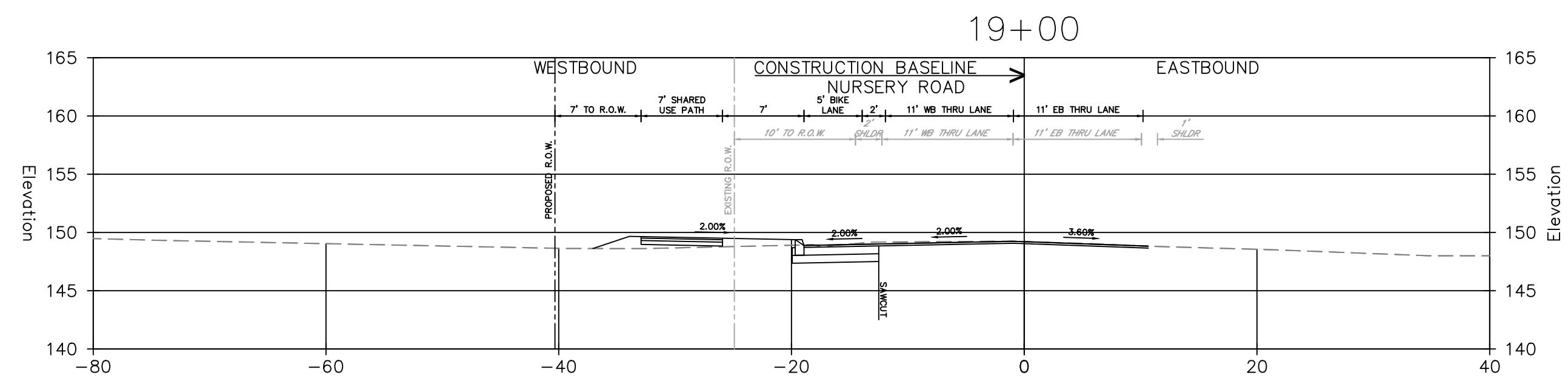
**METHOD OF
SECTIONS**

Project No. 130208601		Drawing No. KT302 0100
Date 9/11/2024		
Scale 1" = 200'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 40 of 58





Date	Description	No.
Revisions		
		
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KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
CROSS SECTIONS		
Project No. 130208601		Drawing No.
Date 9/11/2024	KT302 0101	
Scale 1" = 10'		
Drawn By ME		
Submission Date 9/11/2024	Checked By KP	Sheet 41 of 58



Date	Description	No.
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Revisions

 5/10/2015

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KARL A. PEHNKE
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STATE LIC. No. GE36434

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Princeton, NJ 08540

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

**DEER VALLEY,
HOPEWELL**

TOWNSHIP OF HOPEWELL

MERCER COUNTY	NEW JERSEY
Drawing Title	

CROSS SECTIONS

Project No. 130208601	Drawing No.
---------------------------------	-------------

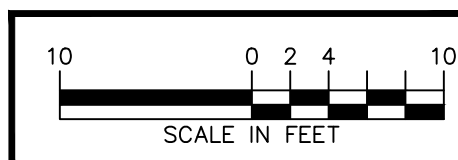
Date 9/11/2024

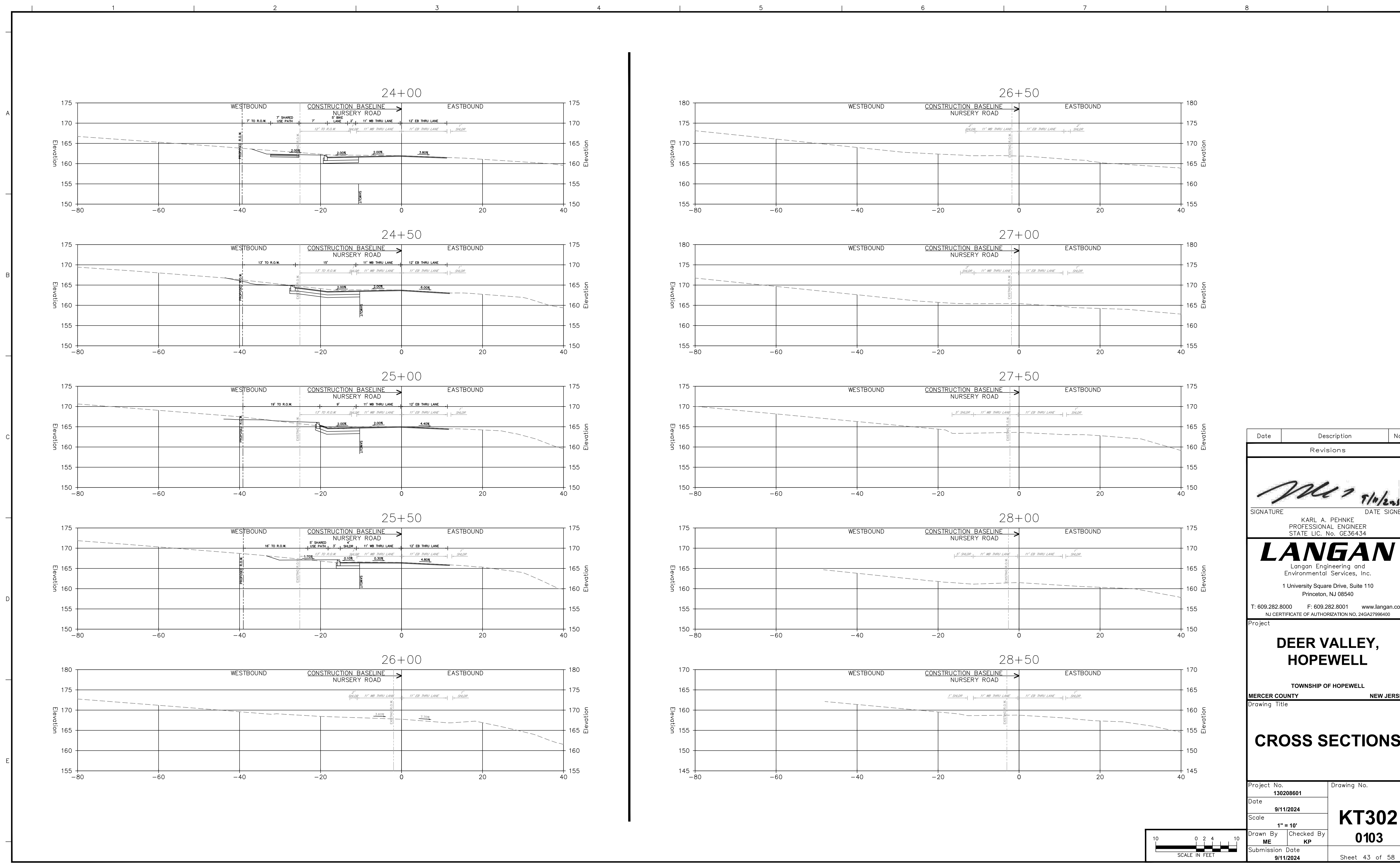
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1" = 10'

Drawn By ME	Checked By KP	0102
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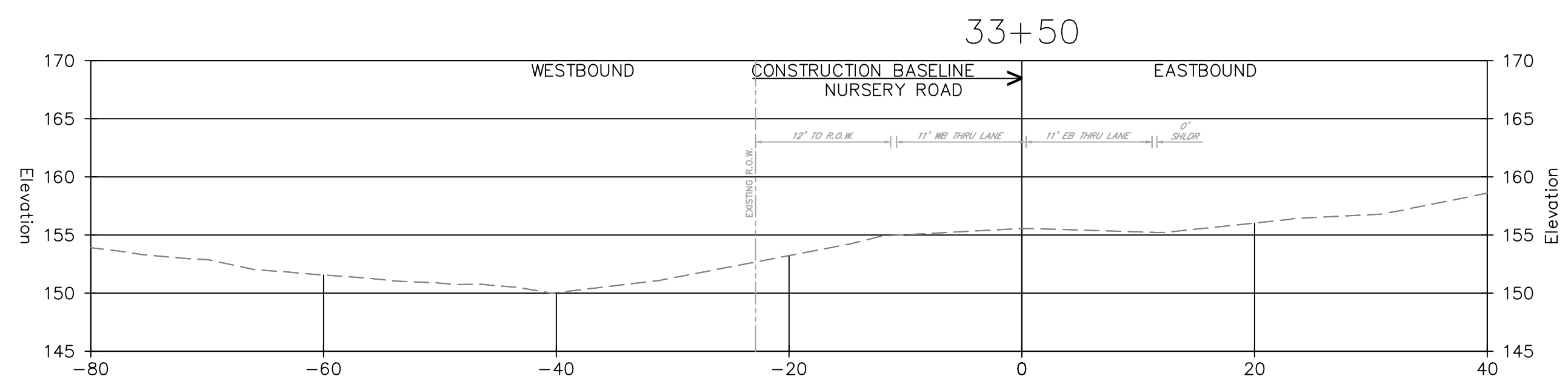
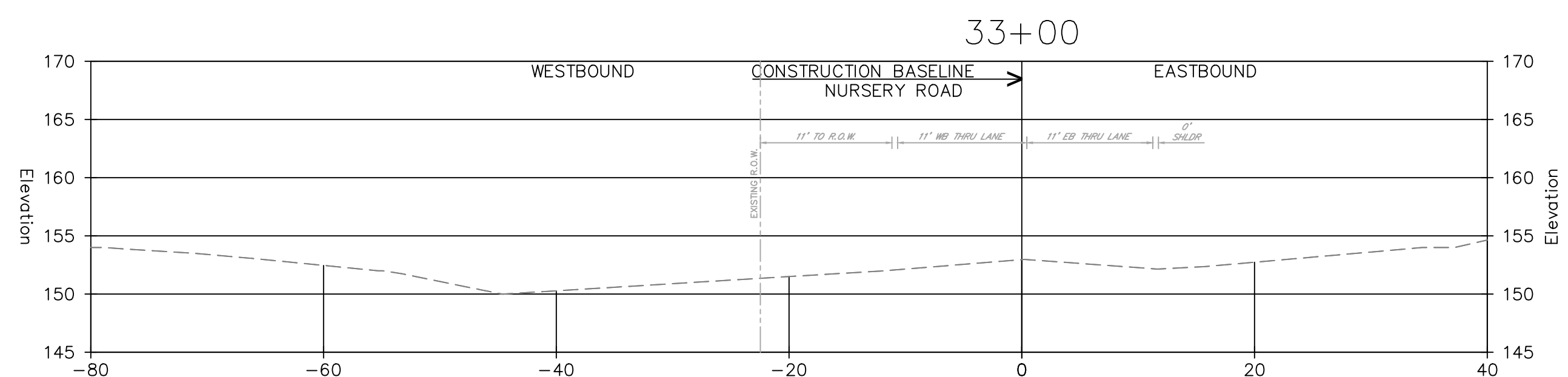
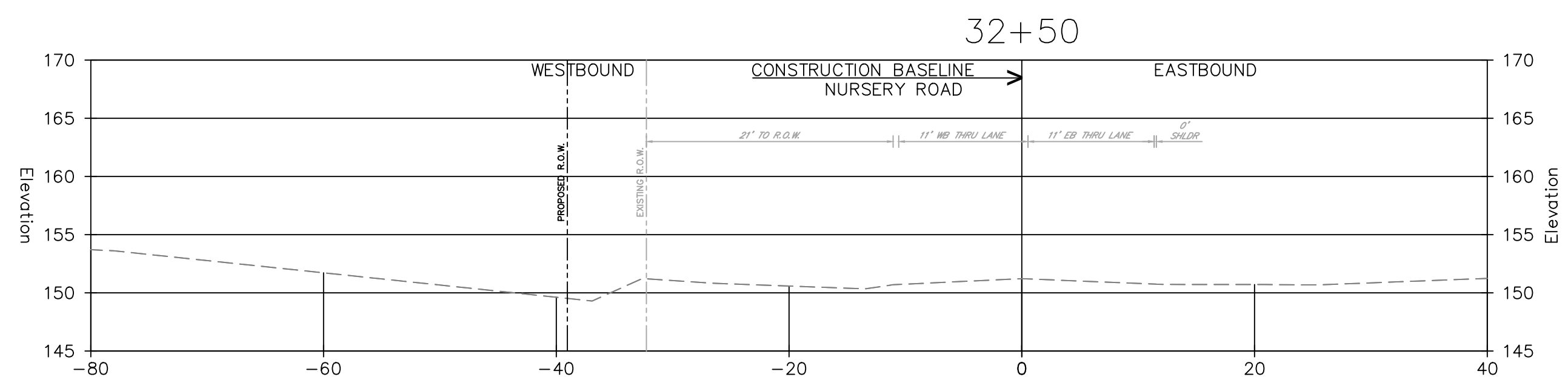
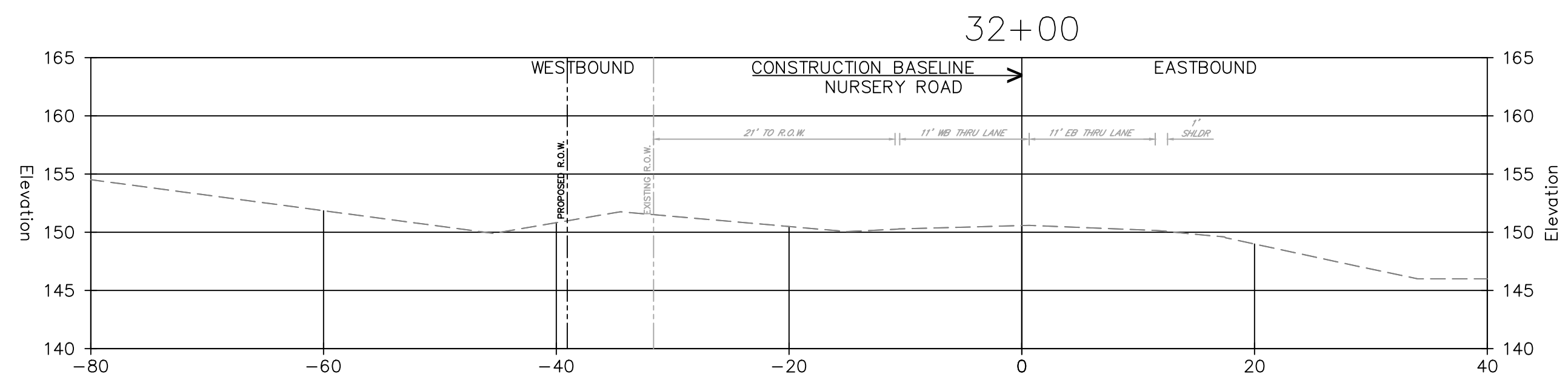
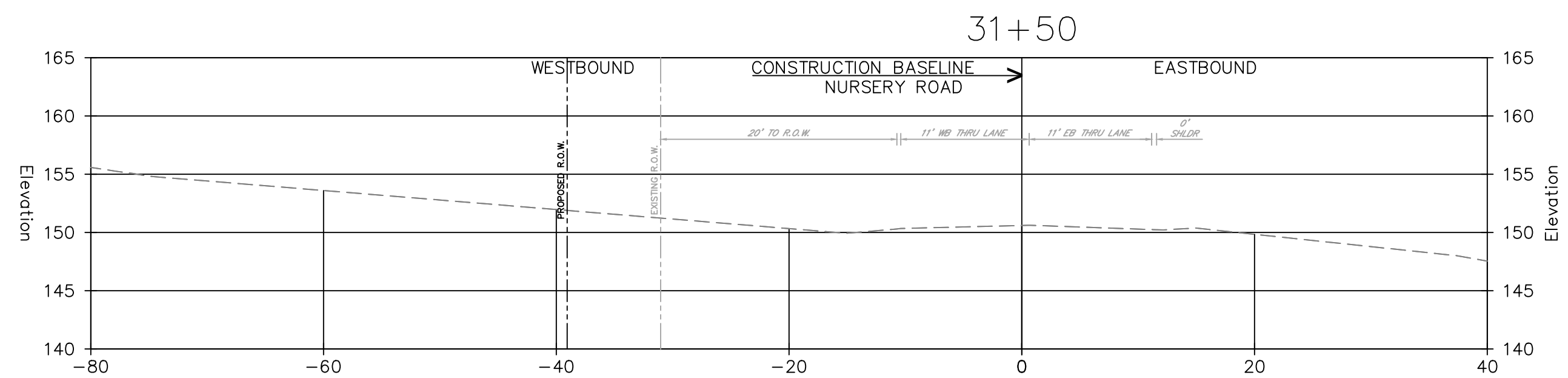
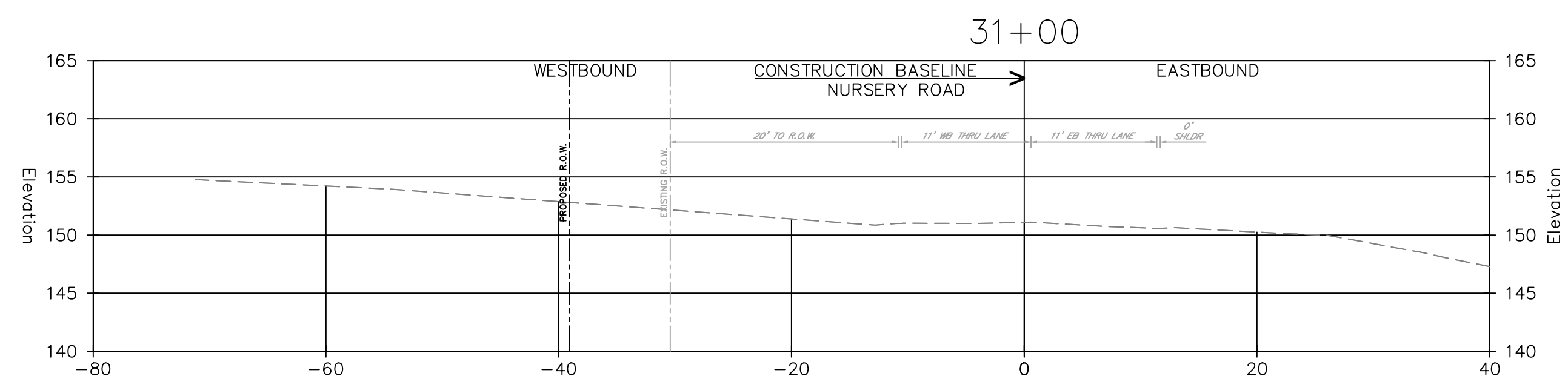
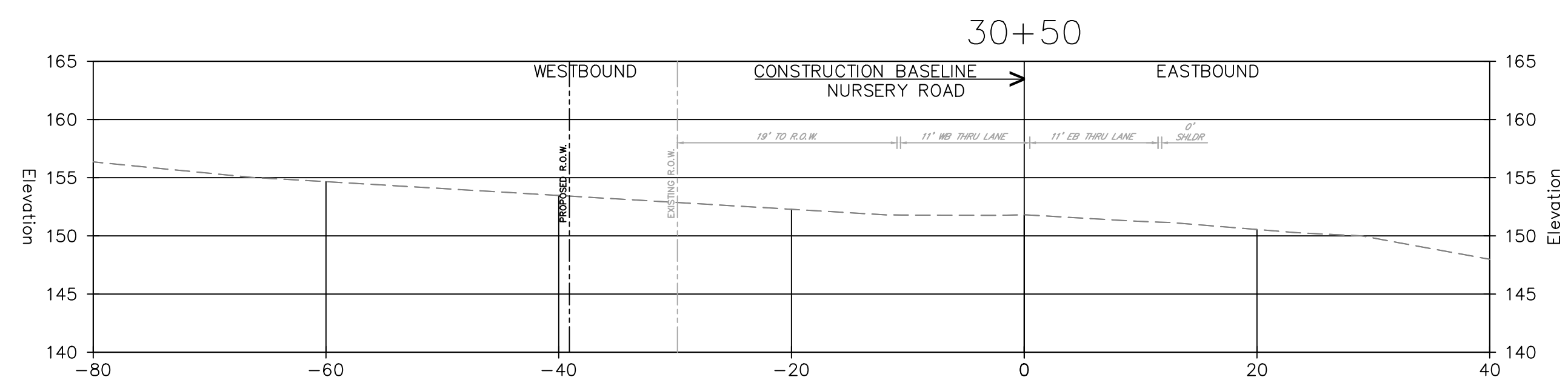
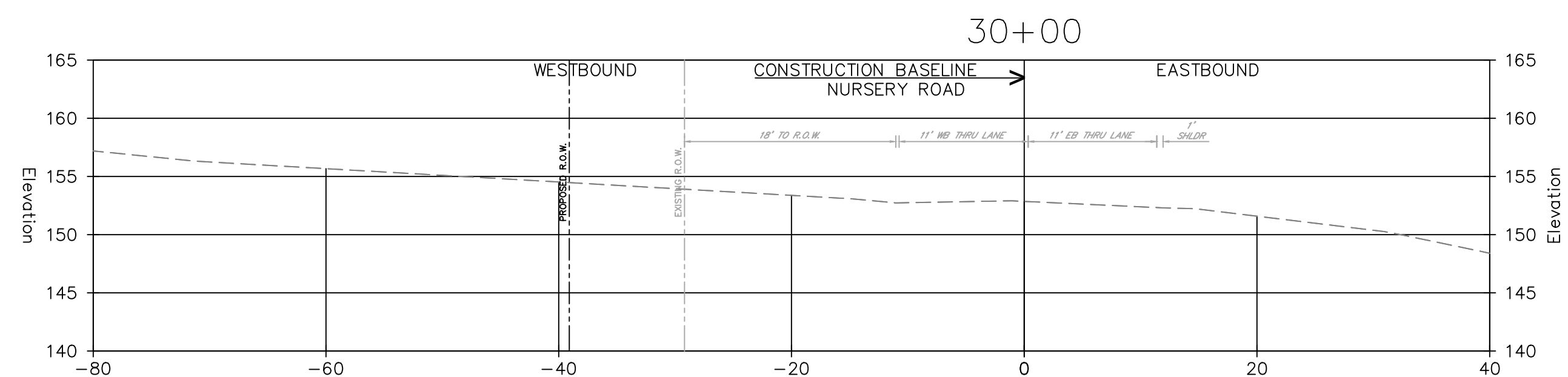
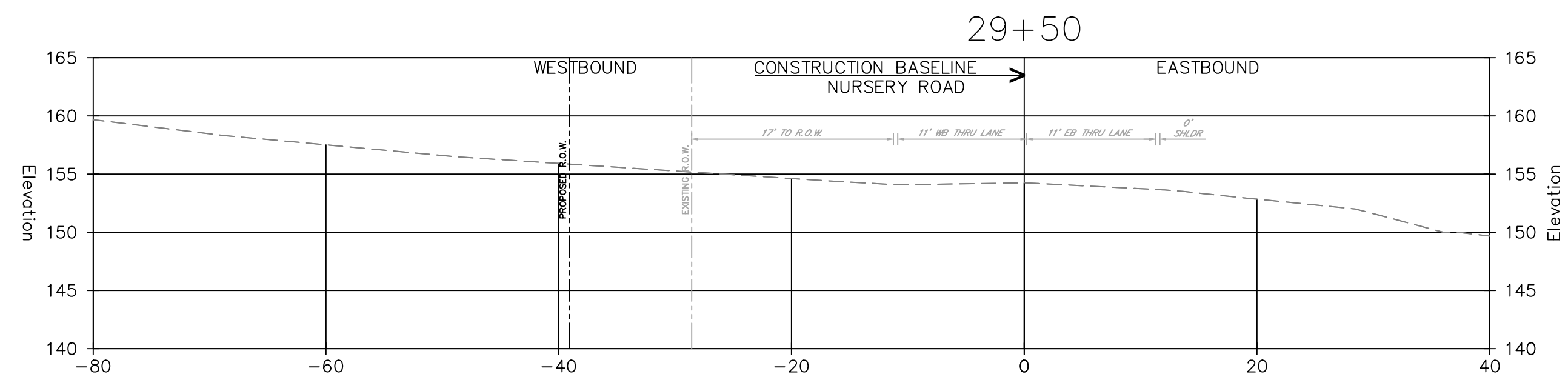
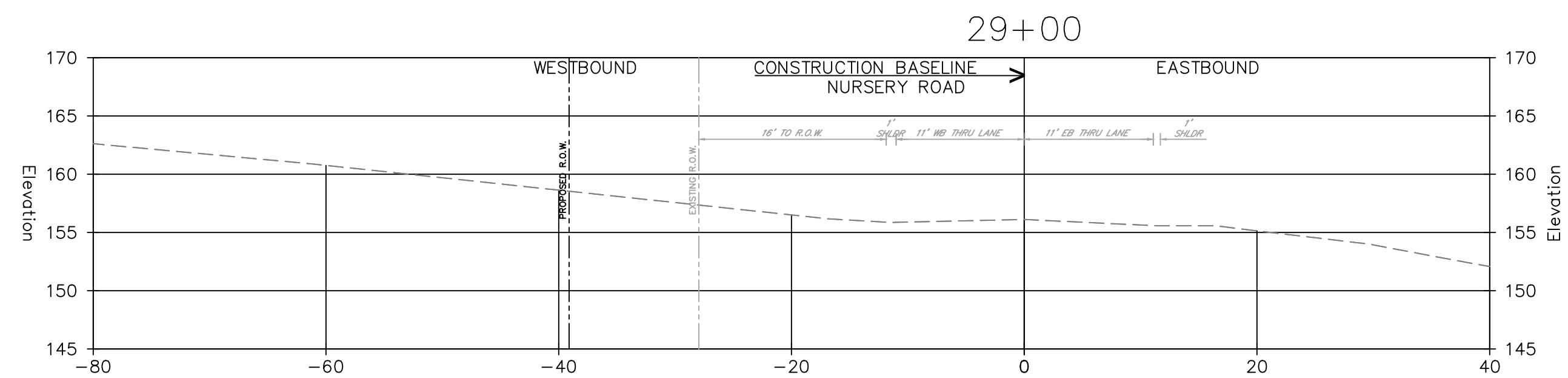
Submission Date 9/11/2024	Sheet 42 of 58
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dwg Date: 9/11/2024 Time: 11:54 User: merickson Style Table: Langan.stb Layout: XS-2





Date	Description	No.
Revisions		
		
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KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL NEW JERSEY		
MERCER COUNTY		
Drawing Title		
CROSS SECTIONS		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT302 0103
Scale 1" = 10'		
Drawn By ME		
Submission Date 9/11/2024		Sheet 43 of 58



Date	Description	No.
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Revisions

 5/10/2015

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Project

**DEER VALLEY,
HOPEWELL**

TOWNSHIP OF HOPEWELL

MERCER COUNTY	NEW JERSEY
Drawing Title	

CROSS SECTIONS

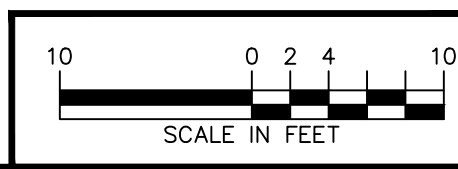
Project No. 130208601	Drawing No.
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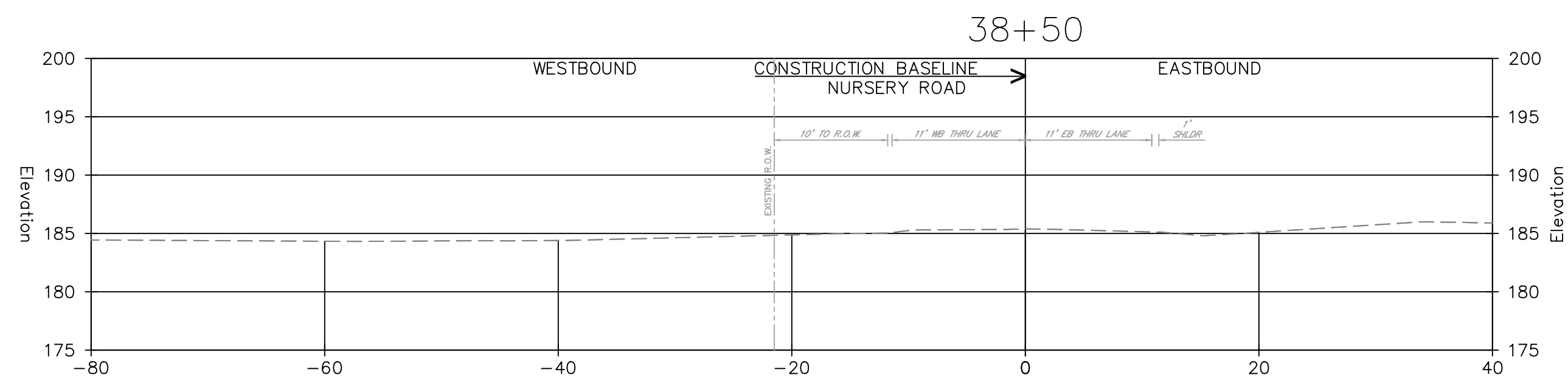
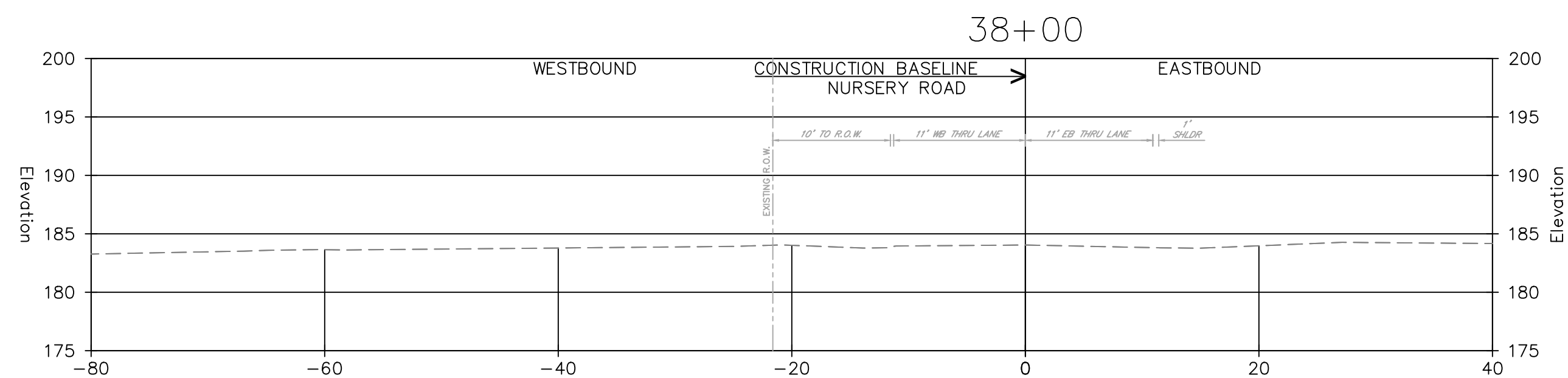
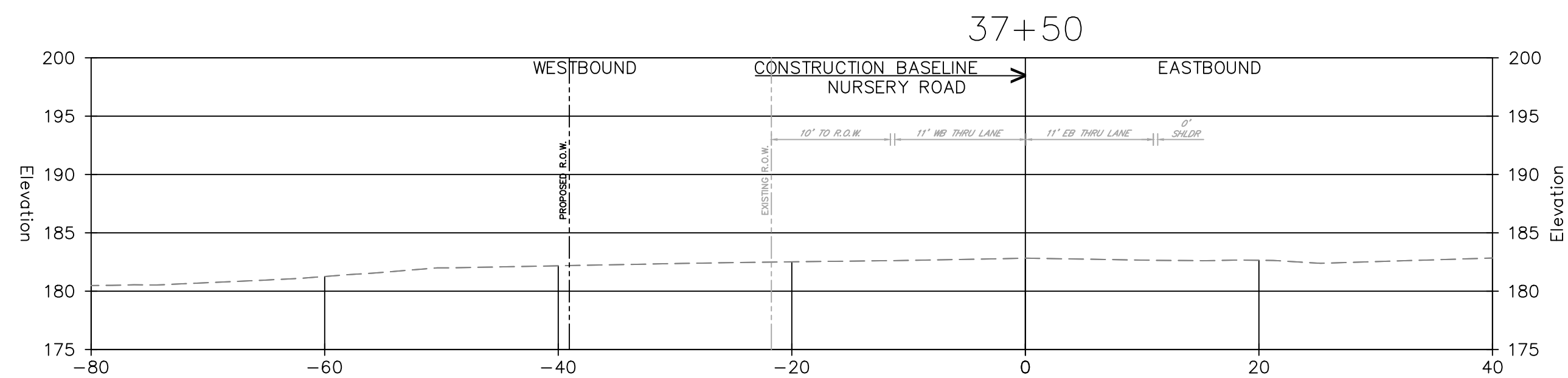
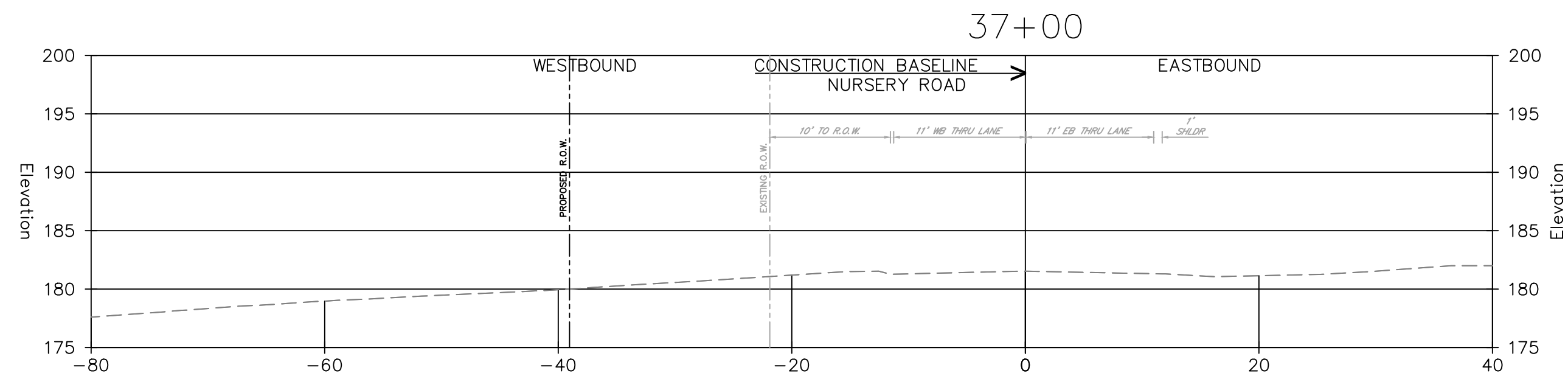
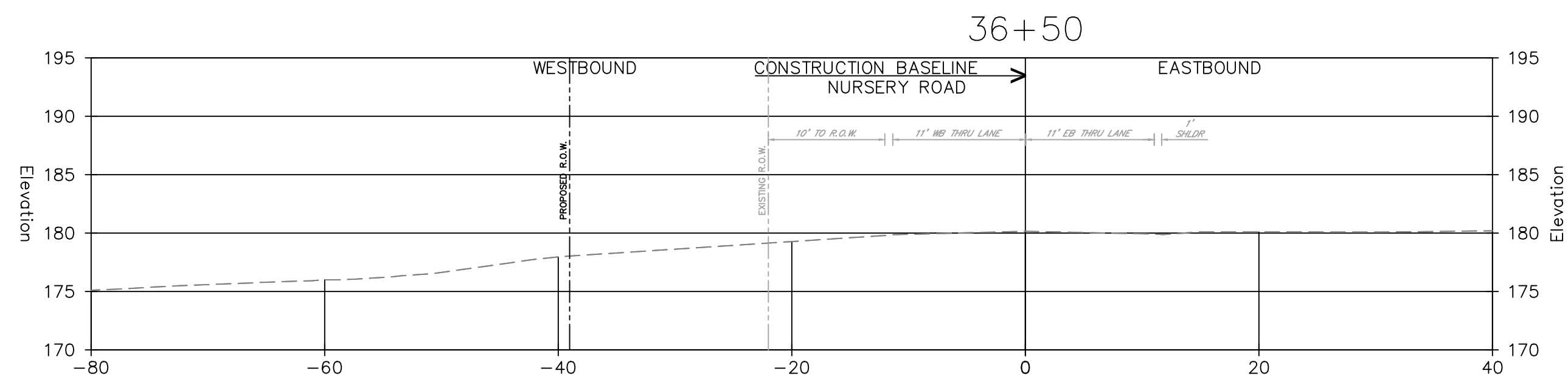
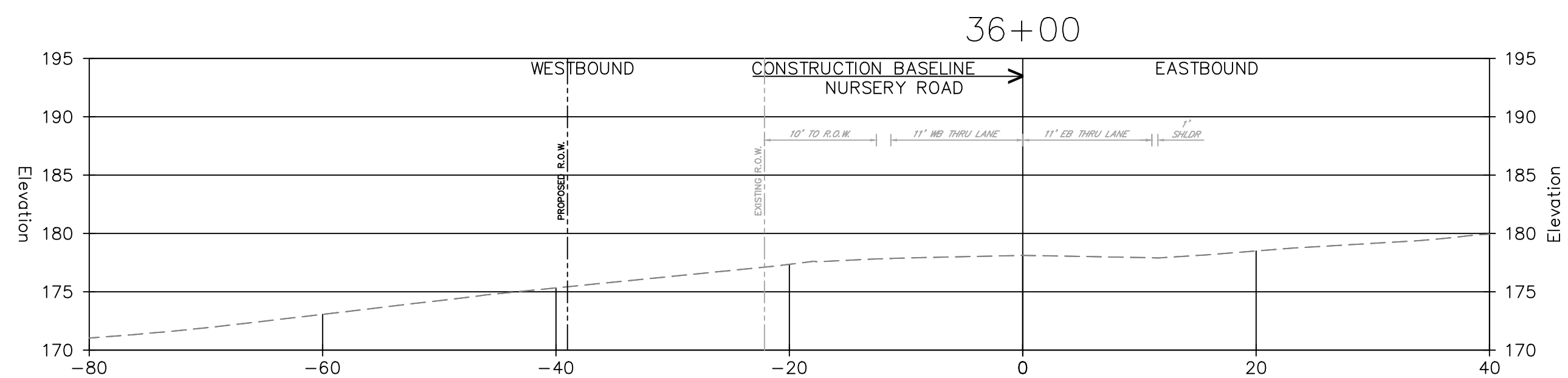
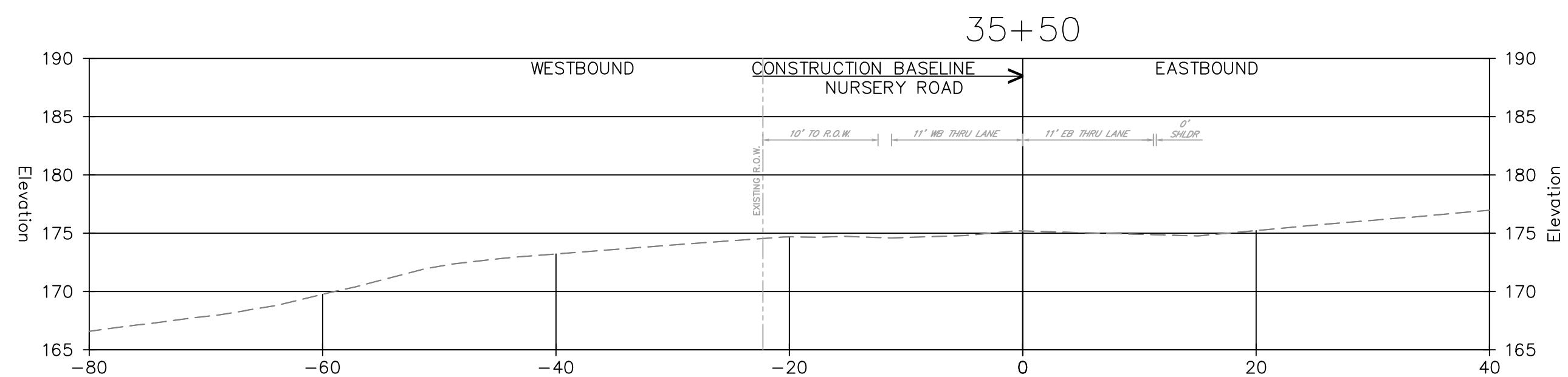
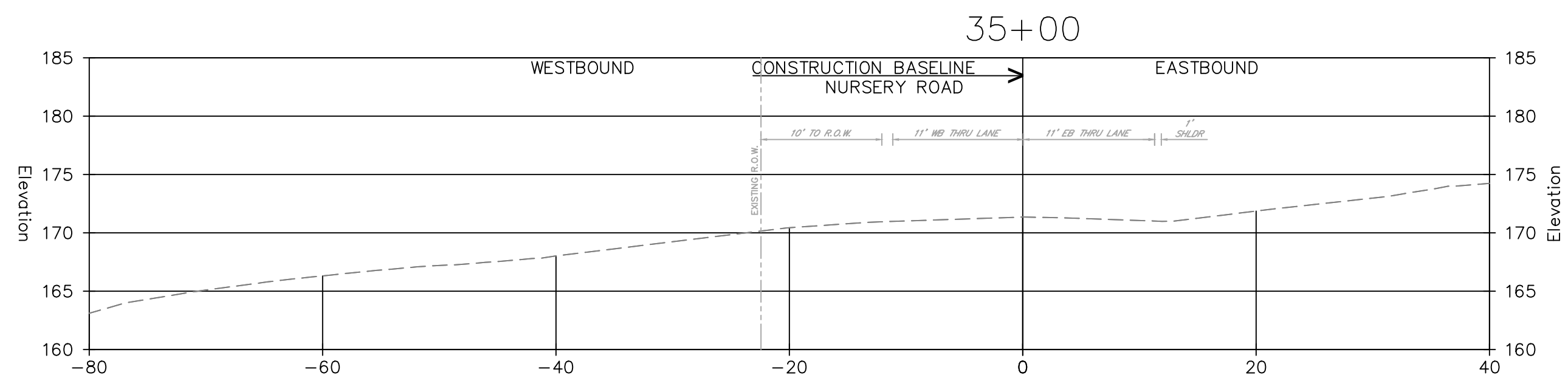
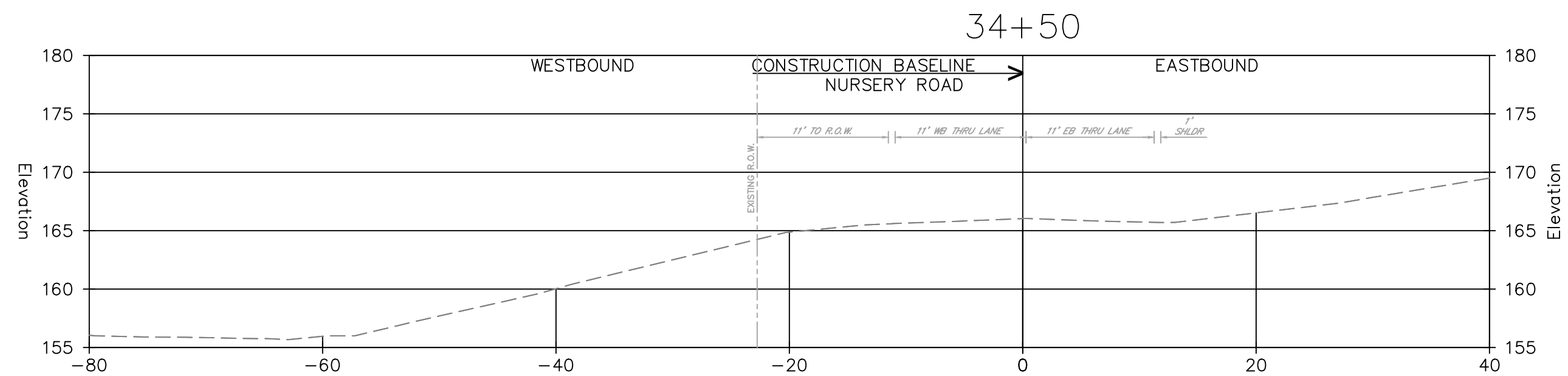
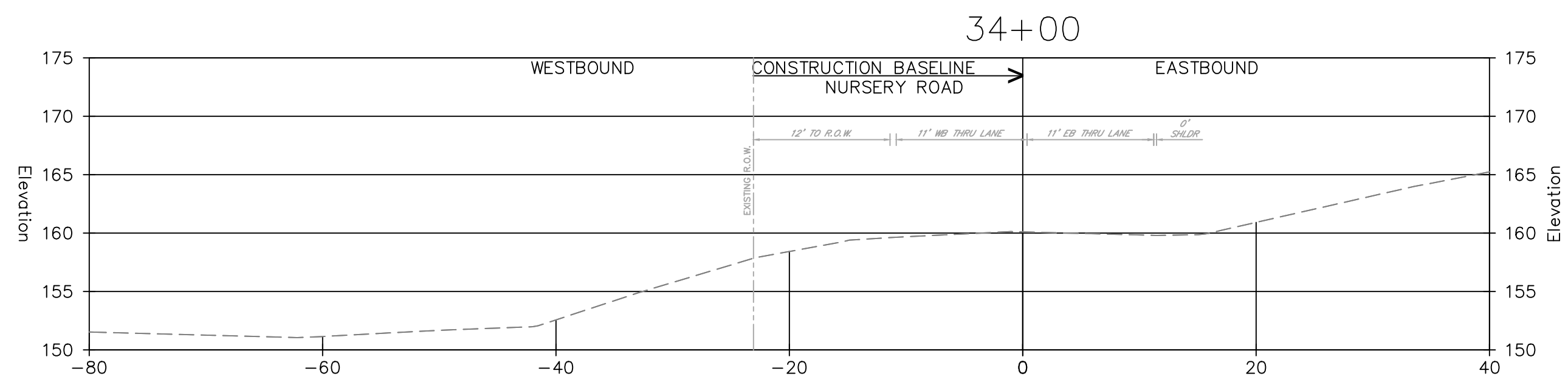
Date **9/11/2024**

Scale
1" = 10'

Drawn By ME	Checked By KP	0104
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Submission Date 9/11/2024	Sheet 44 of 58
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Date	Description	No.
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Revisions

 5/10/2015

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

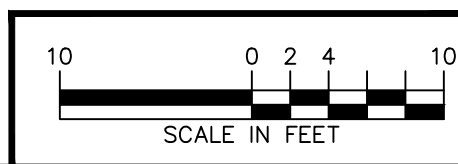
**DEER VALLEY,
HOPEWELL**

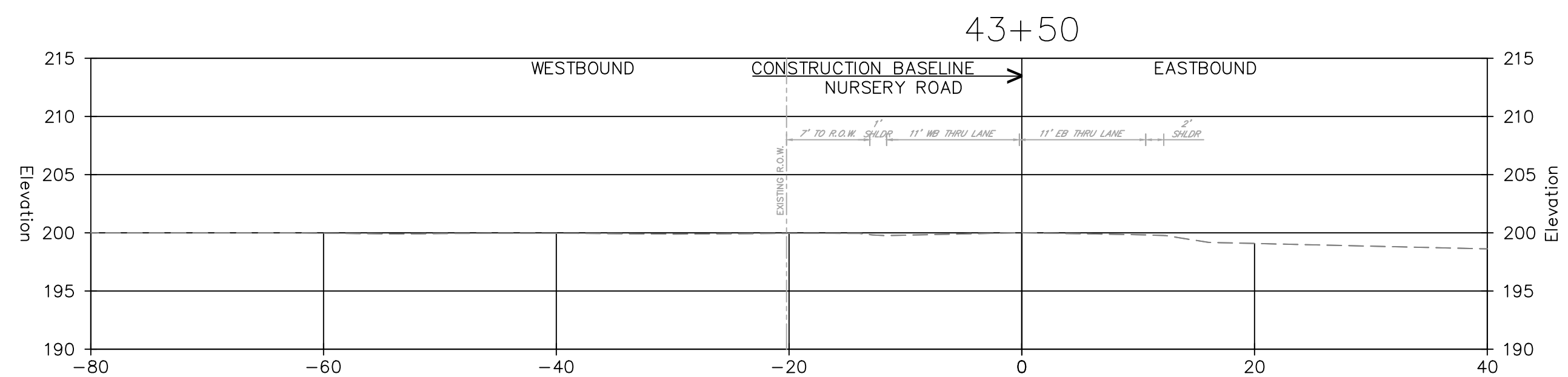
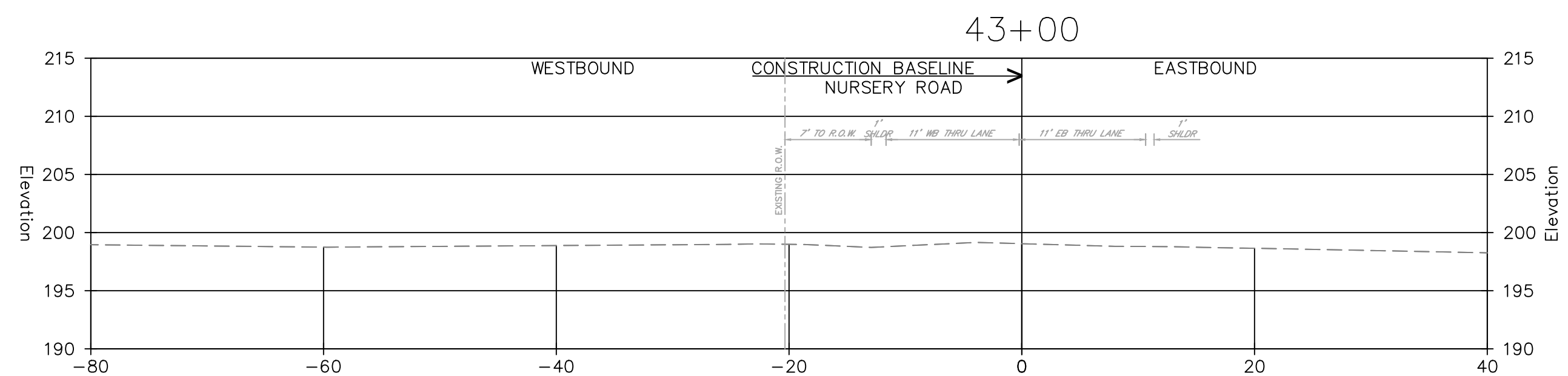
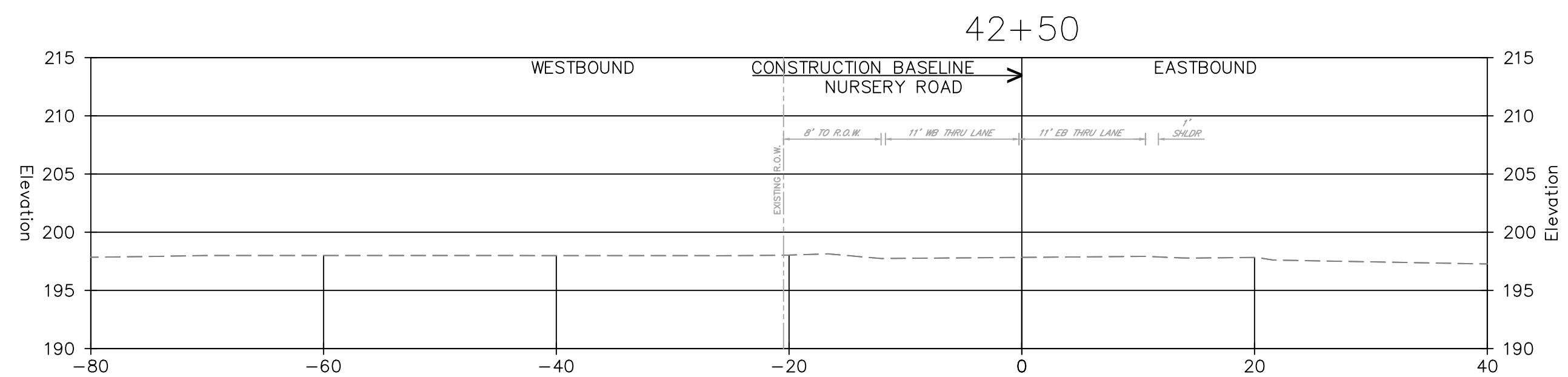
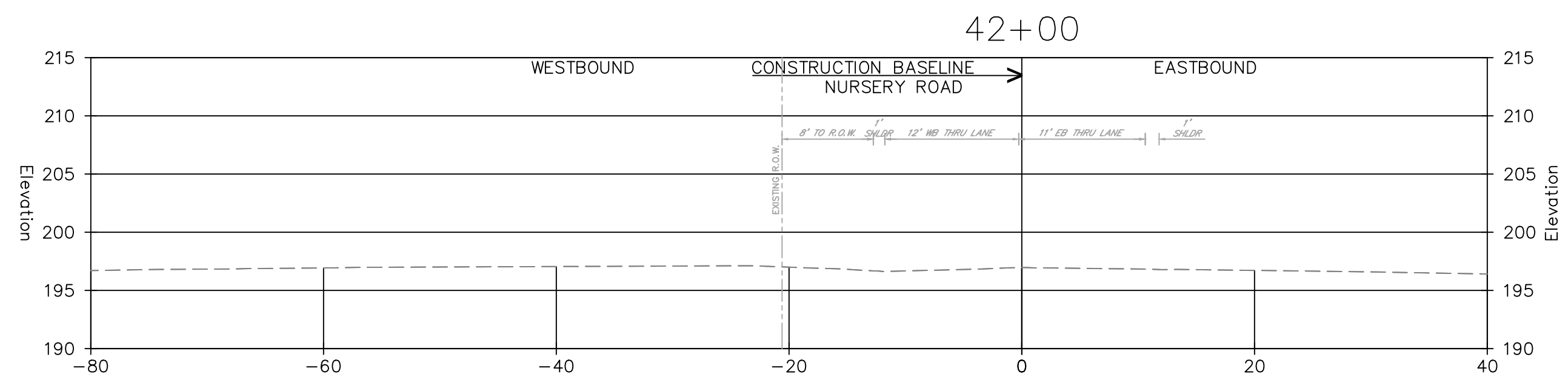
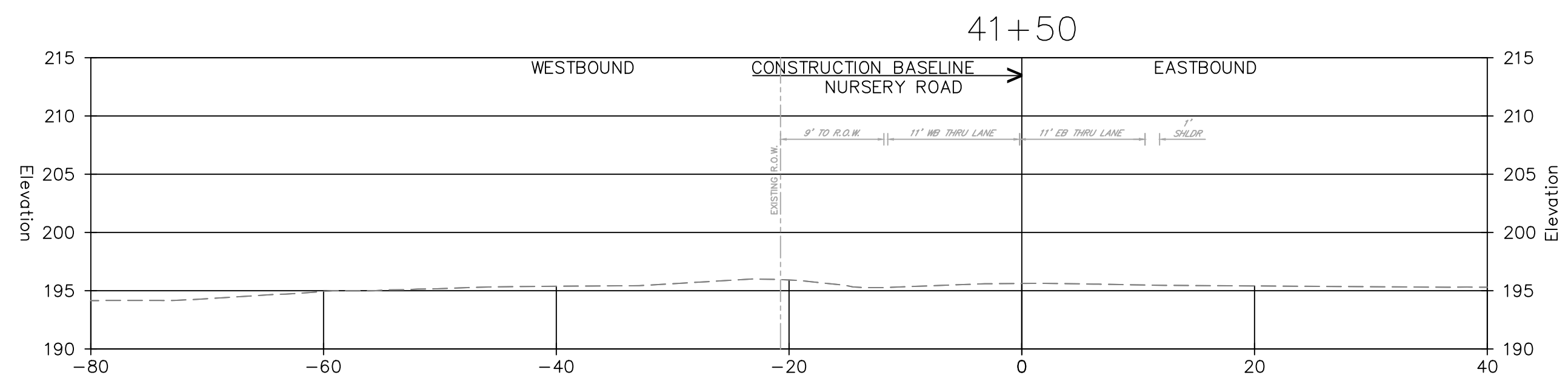
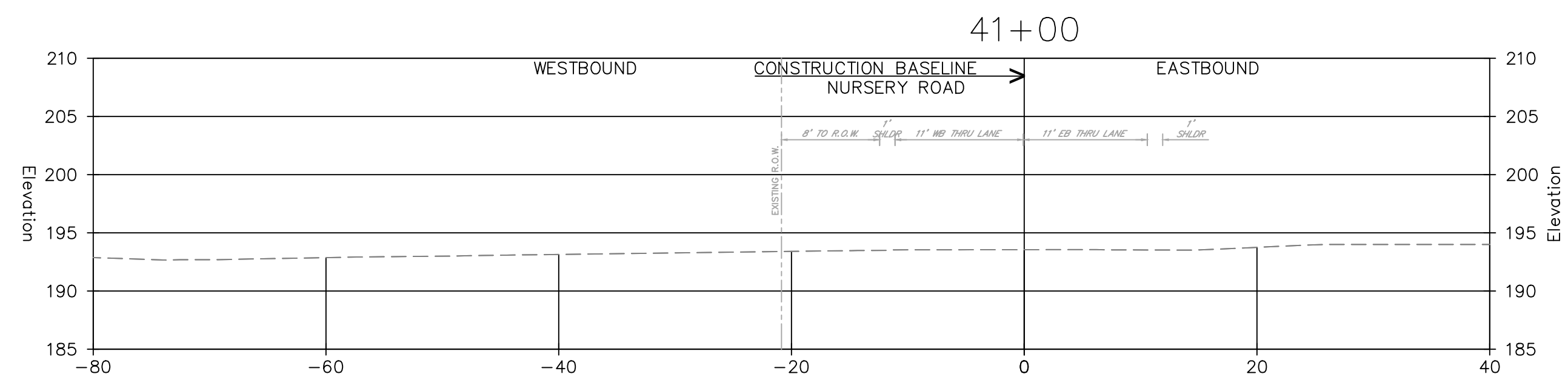
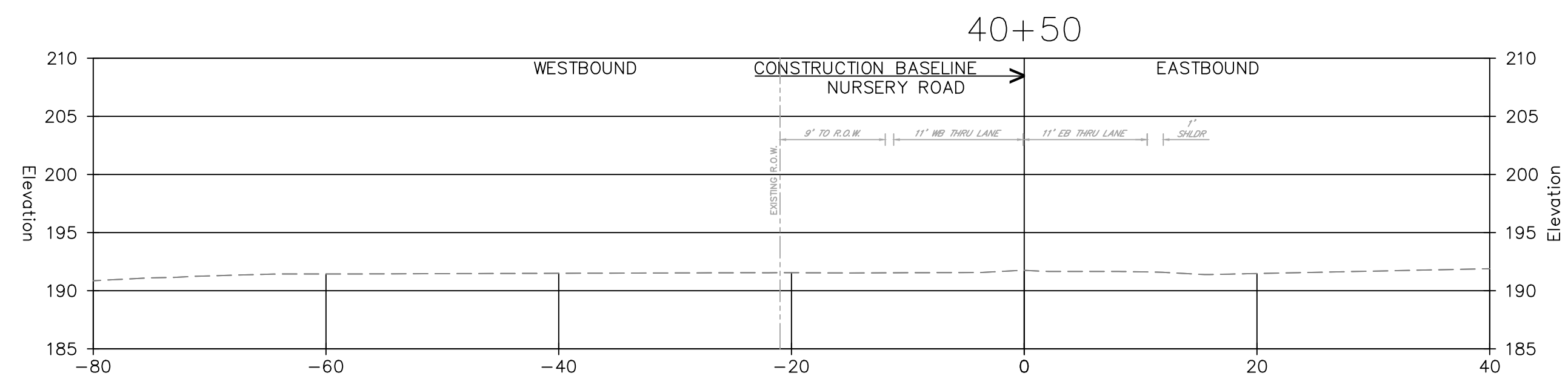
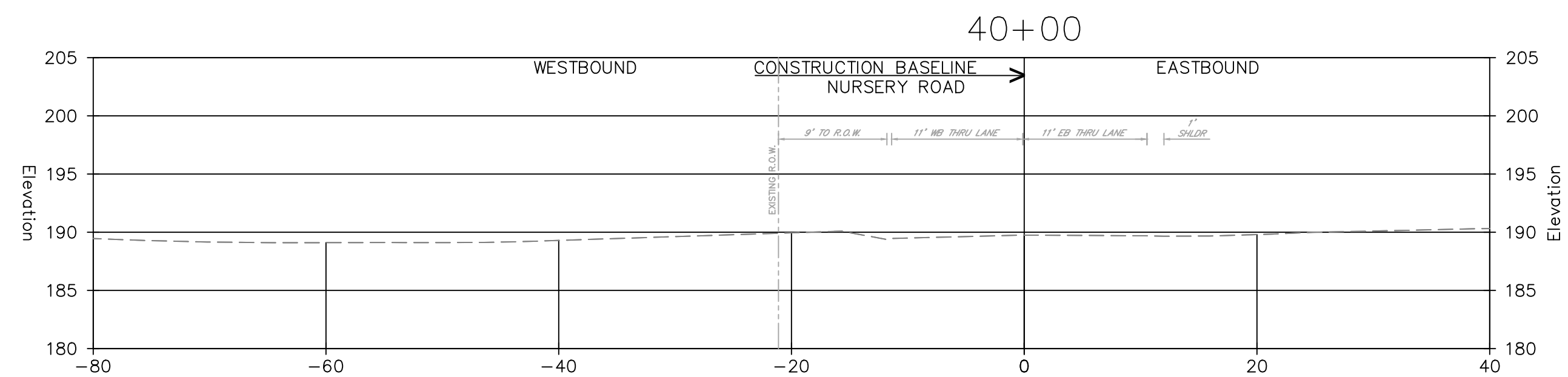
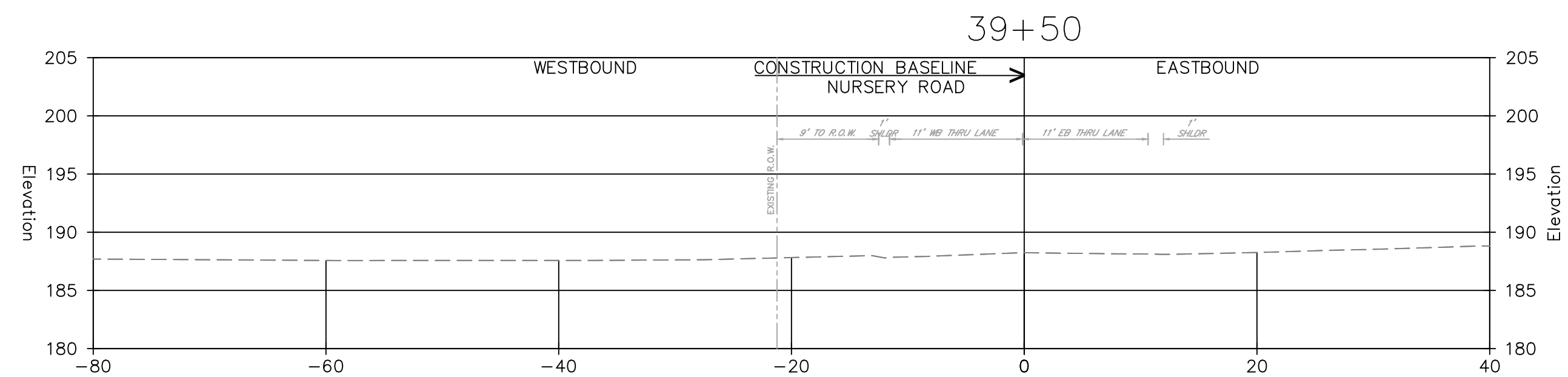
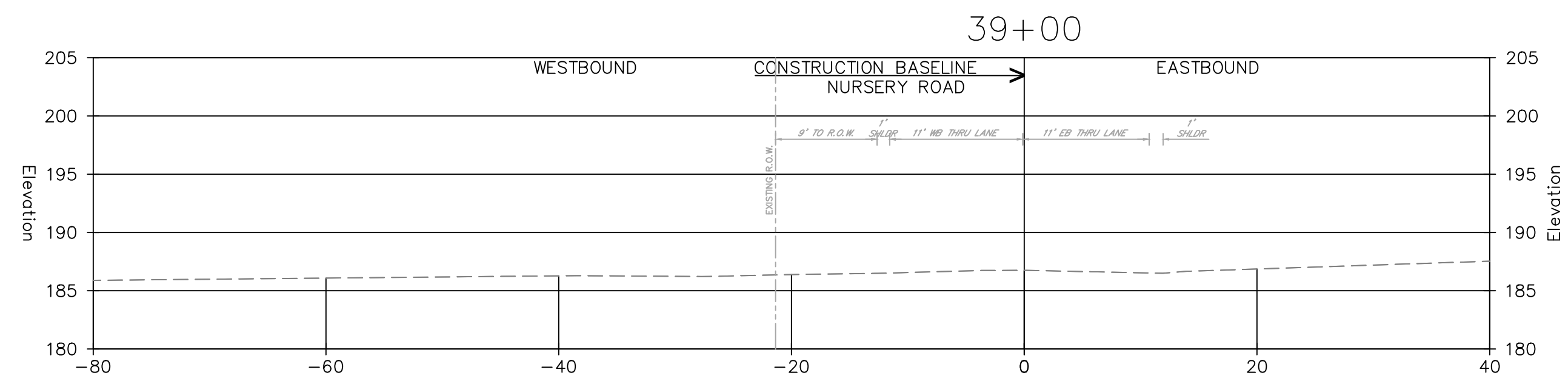
TOWNSHIP OF HOPEWELL

MERCER COUNTY	NEW JERSEY
Drawing Title	

CROSS SECTIONS

Project No. 130208601		Drawing No. KT302 0105	
Date 9/11/2024			
Scale 1" = 10'			
Drawn By ME	Checked By KP		
Submission Date 9/11/2024		Sheet 45 of 58	





Date	Description	No.
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[illegible]

 5/10/2015

SIGNATURE DATE SIGNED

KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

LANGAN
Langan Engineering and
Environmental Services, Inc.
1 University Square Drive, Suite 110
Princeton, NJ 08540

T: 609.282.8000 F: 609.282.8001 www.langan.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

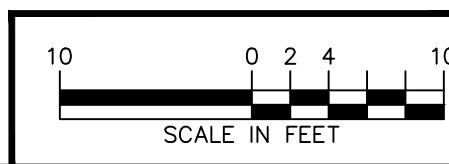
**DEER VALLEY,
HOPEWELL**

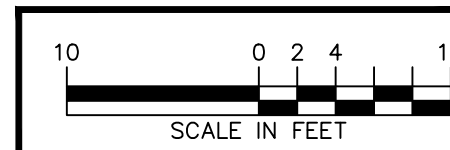
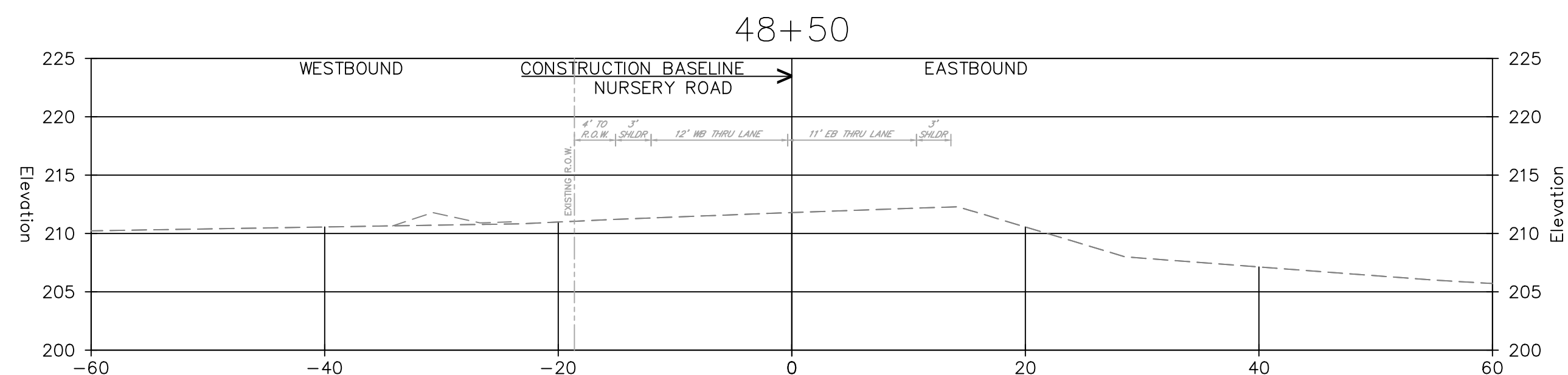
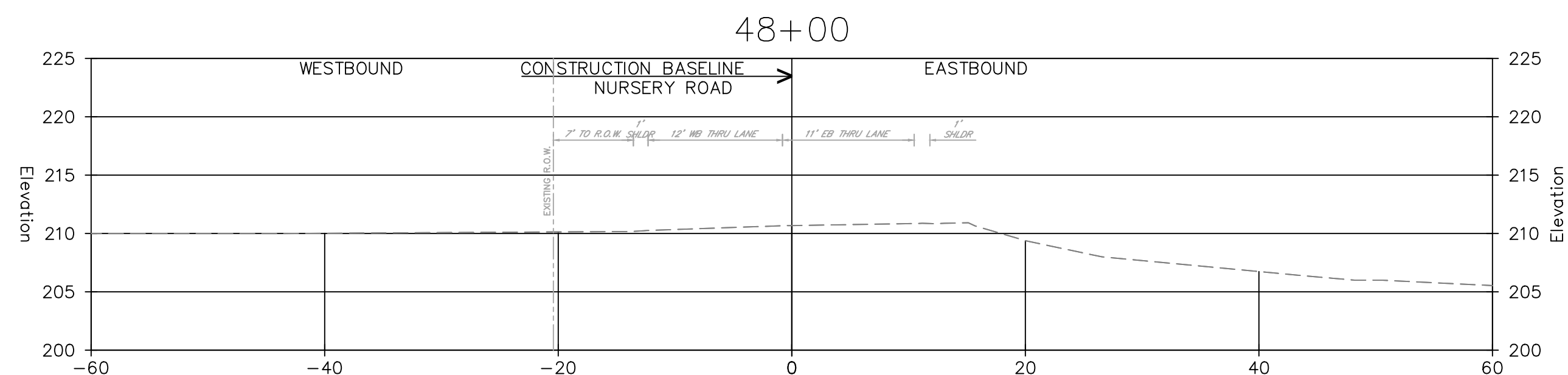
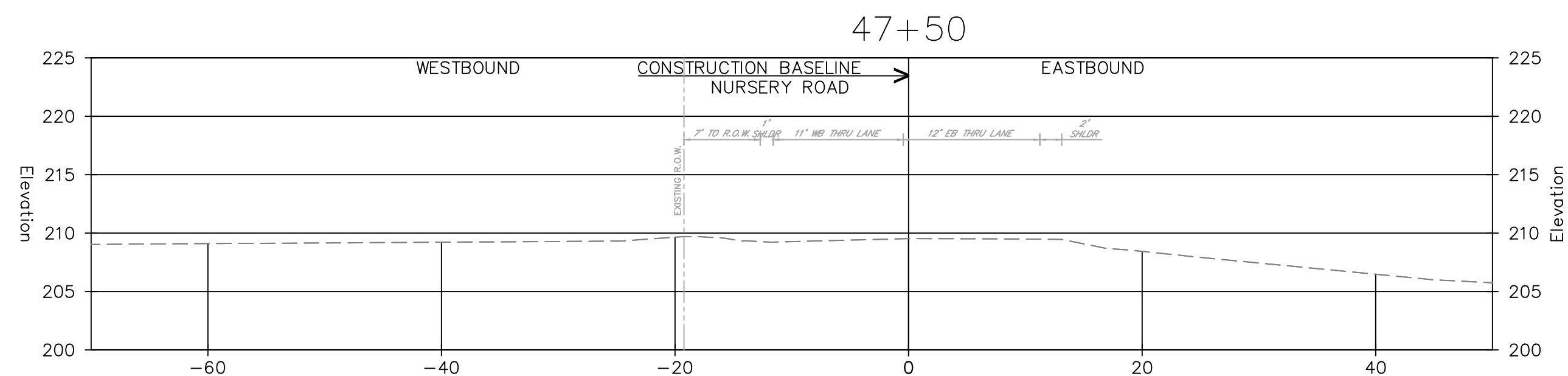
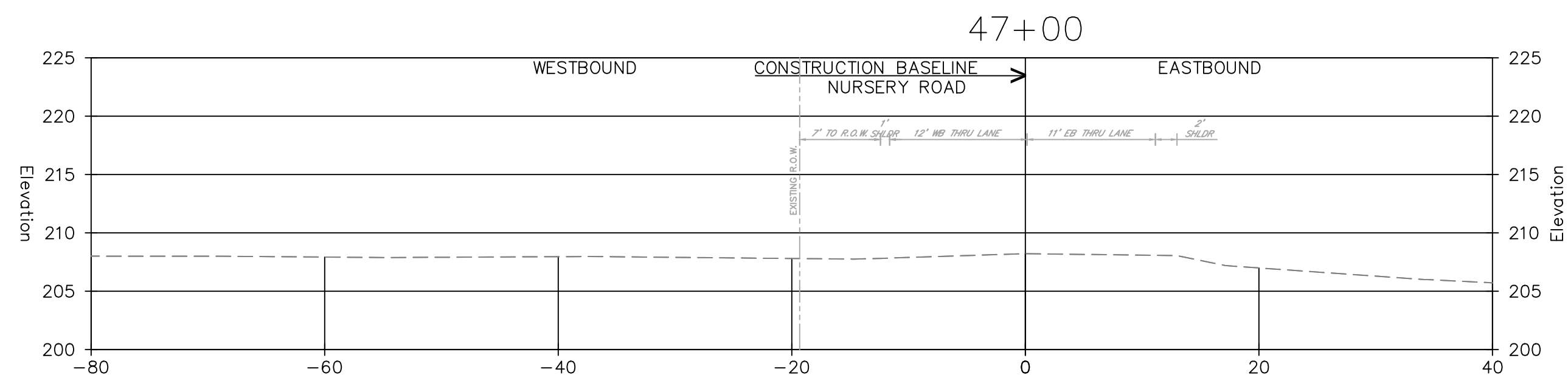
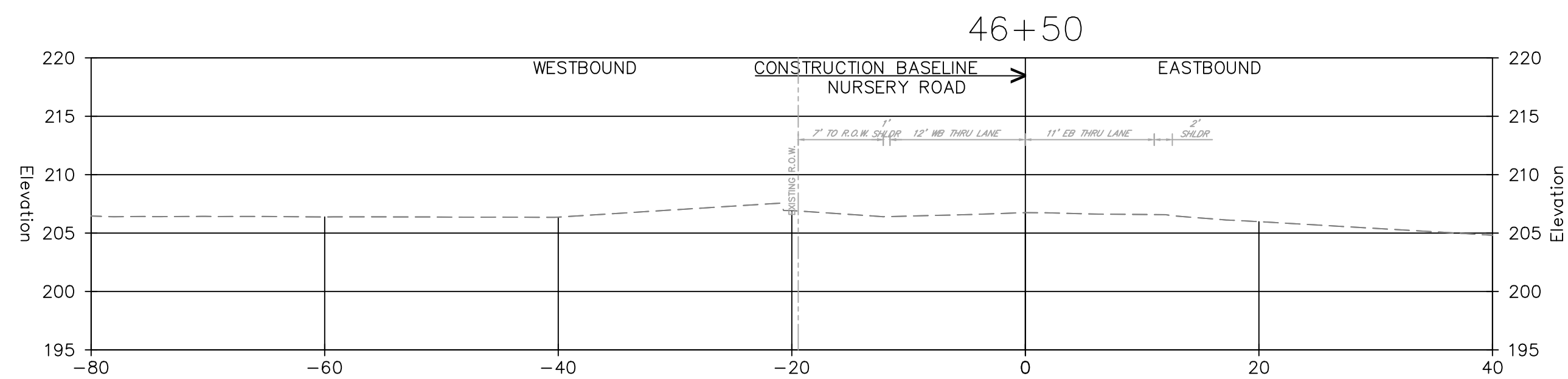
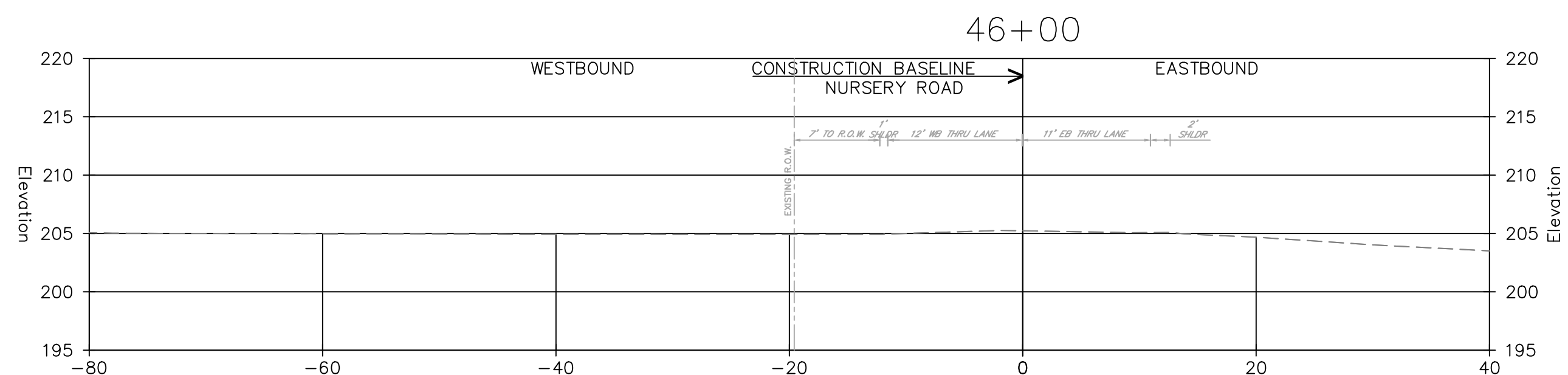
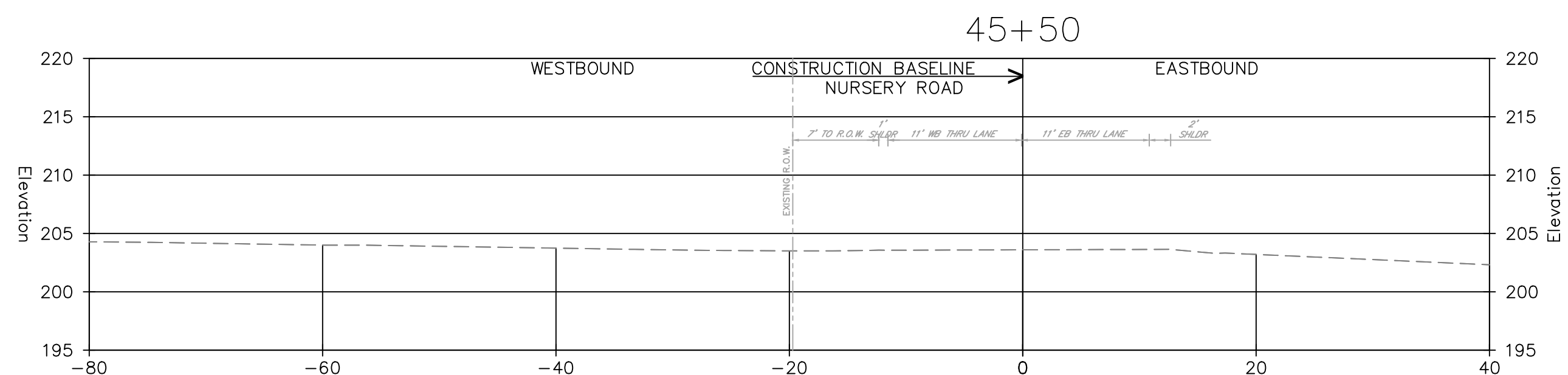
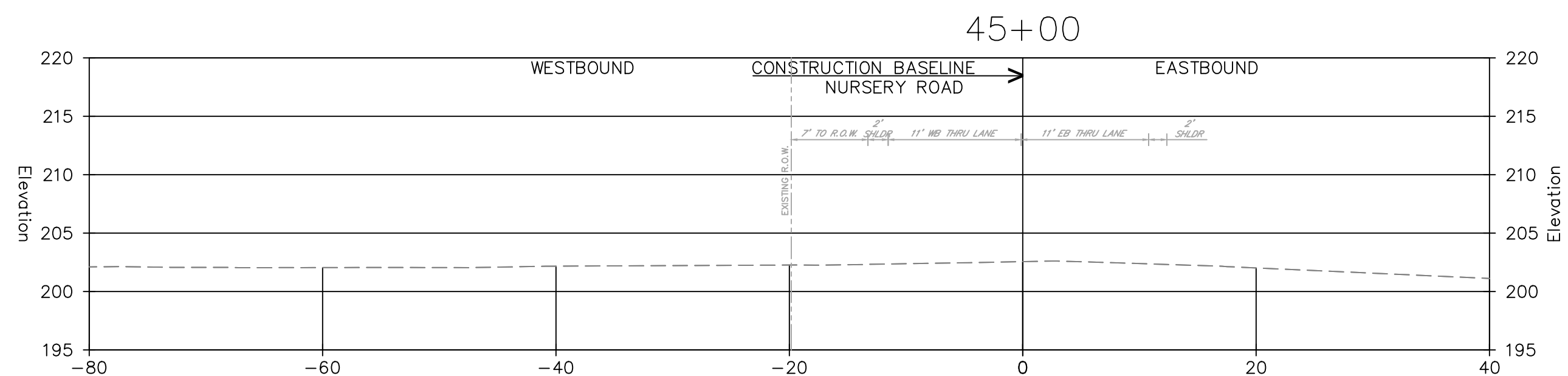
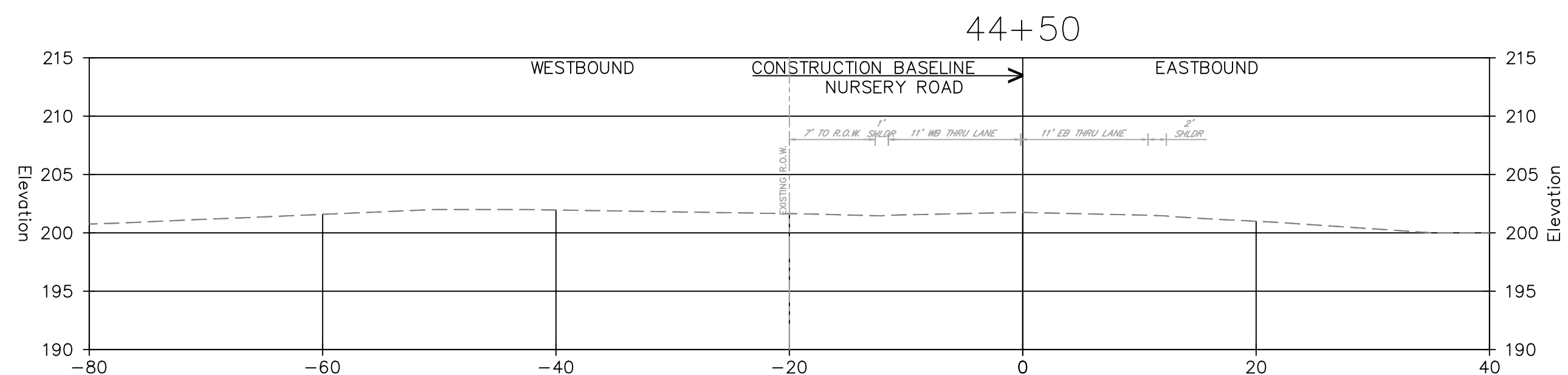
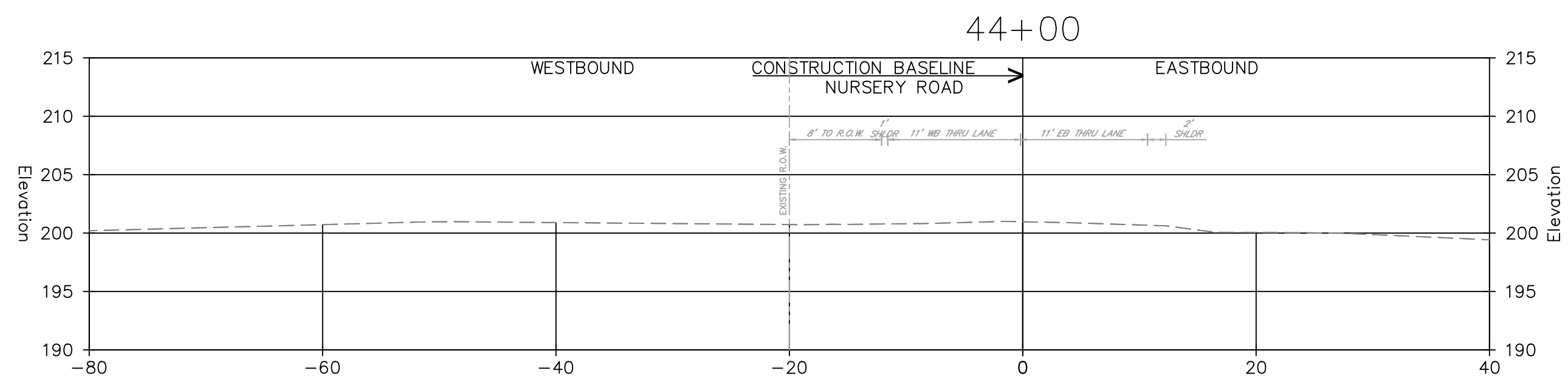
TOWNSHIP OF HOPEWELL

MERCER COUNTY	NEW JERSEY
Drawing Title	

CROSS SECTIONS

Project No. 130208601		Drawing No. KT302 0106	
Date 9/11/2024			
Scale 1" = 10'			
Drawn By ME	Checked By KP		
Submission Date 9/11/2024		Sheet 46 of 58	





Date	Description	No.
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PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

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Environmental Services, Inc.
1 University Square Drive, Suite 110
Princeton, NJ 08540

T: 609.282.8000 F: 609.282.8001 www.langan.com
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Project	
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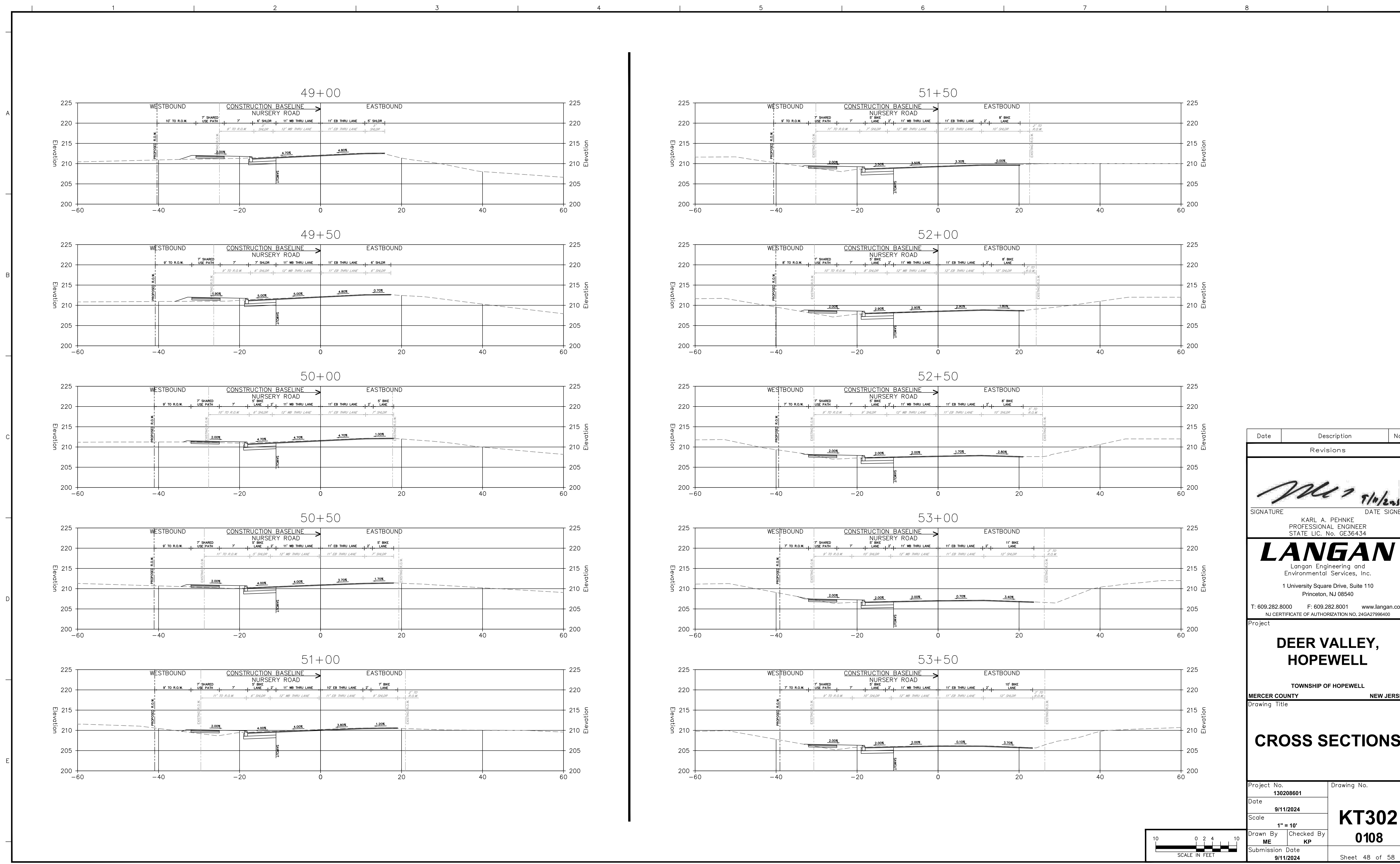
**DEER VALLEY,
HOPEWELL**

TOWNSHIP OF HOPEWELL

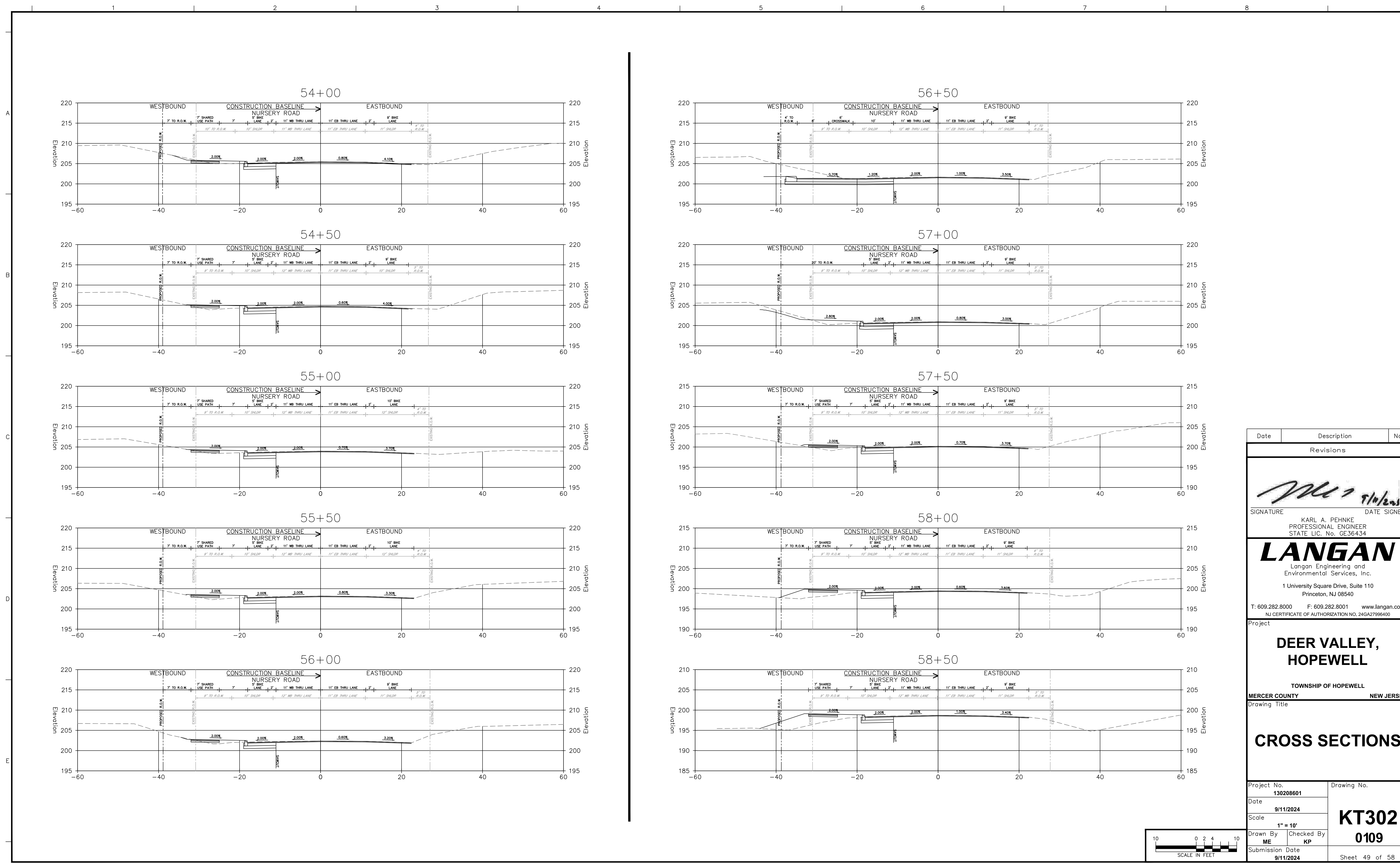
MERCER COUNTY	NEW JERSEY
Drawing Title	

CROSS SECTIONS

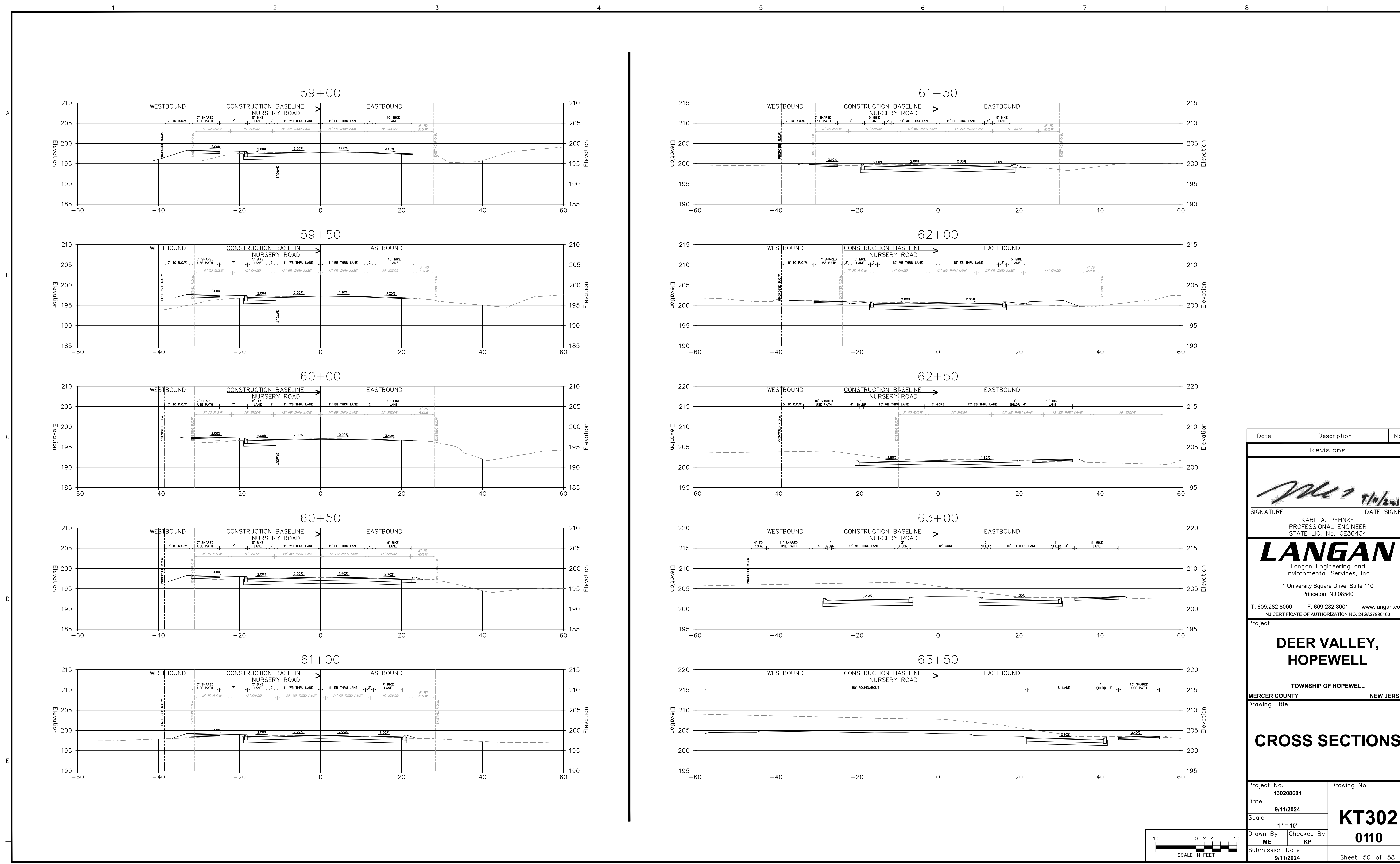
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Date 9/11/2024			
Scale 1" = 10'			
Drawn By ME	Checked By KP		
Submission Date 9/11/2024		Sheet 47 of 58	



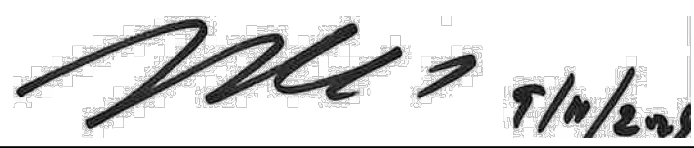
Date	Description	No.
Revisions		
		
SIGNATURE DATE SIGNED		
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
CROSS SECTIONS		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT302 0108
Scale 1" = 10'		
Drawn By ME		
Submission Date 9/11/2024		Sheet 48 of 58



Date	Description	No.
Revisions		
		
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL		
MERCER COUNTY NEW JERSEY		
Drawing Title		
CROSS SECTIONS		
Project No. 130208601		Drawing No. KT302 0109
Date 9/11/2024		
Scale 1" = 10'		Sheet 49 of 58
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		



Date	Description	No.
Revisions		


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STATE LIC. No. GE36434

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

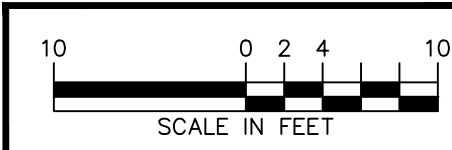
DEER VALLEY,
HOPEWELL

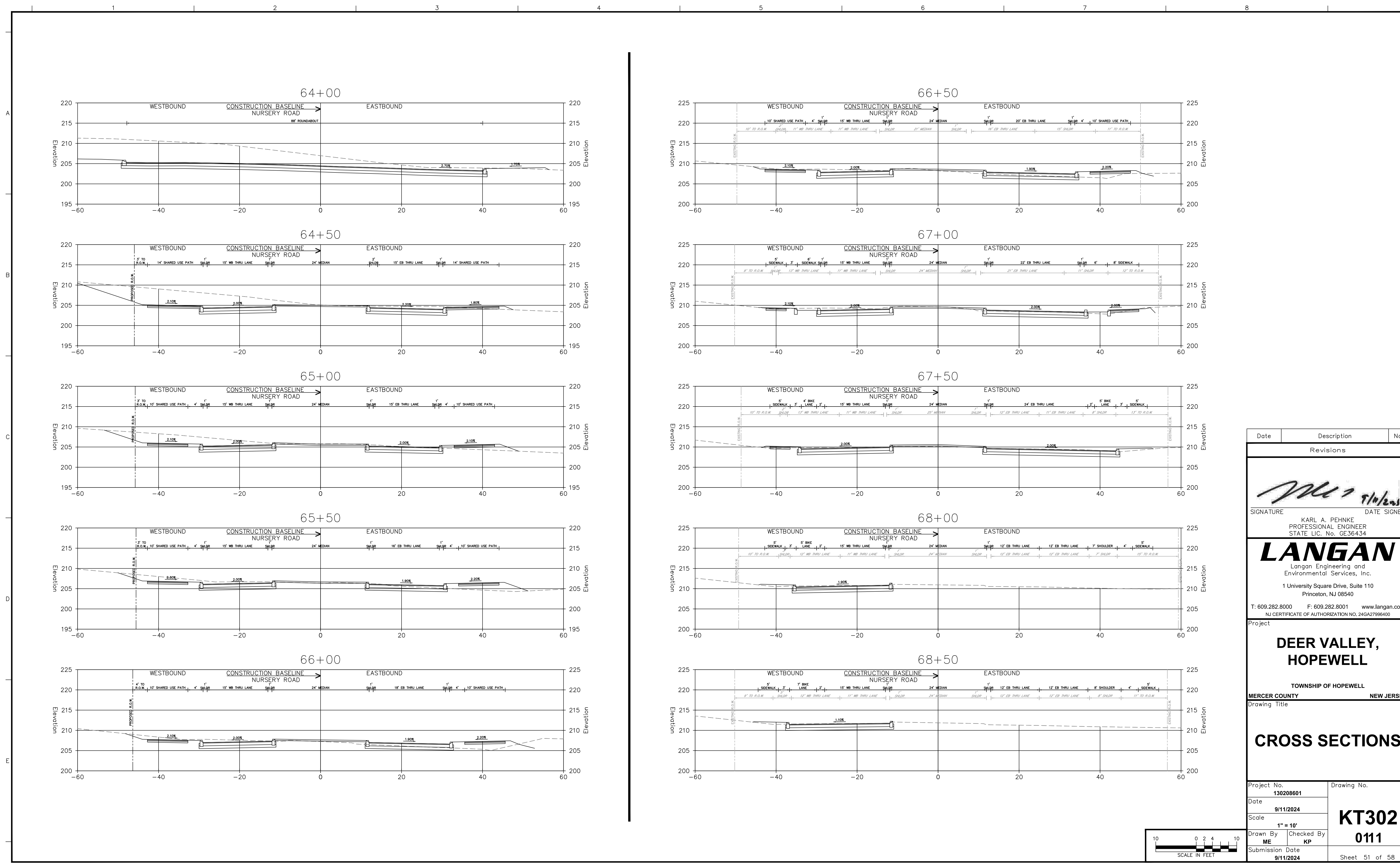
TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

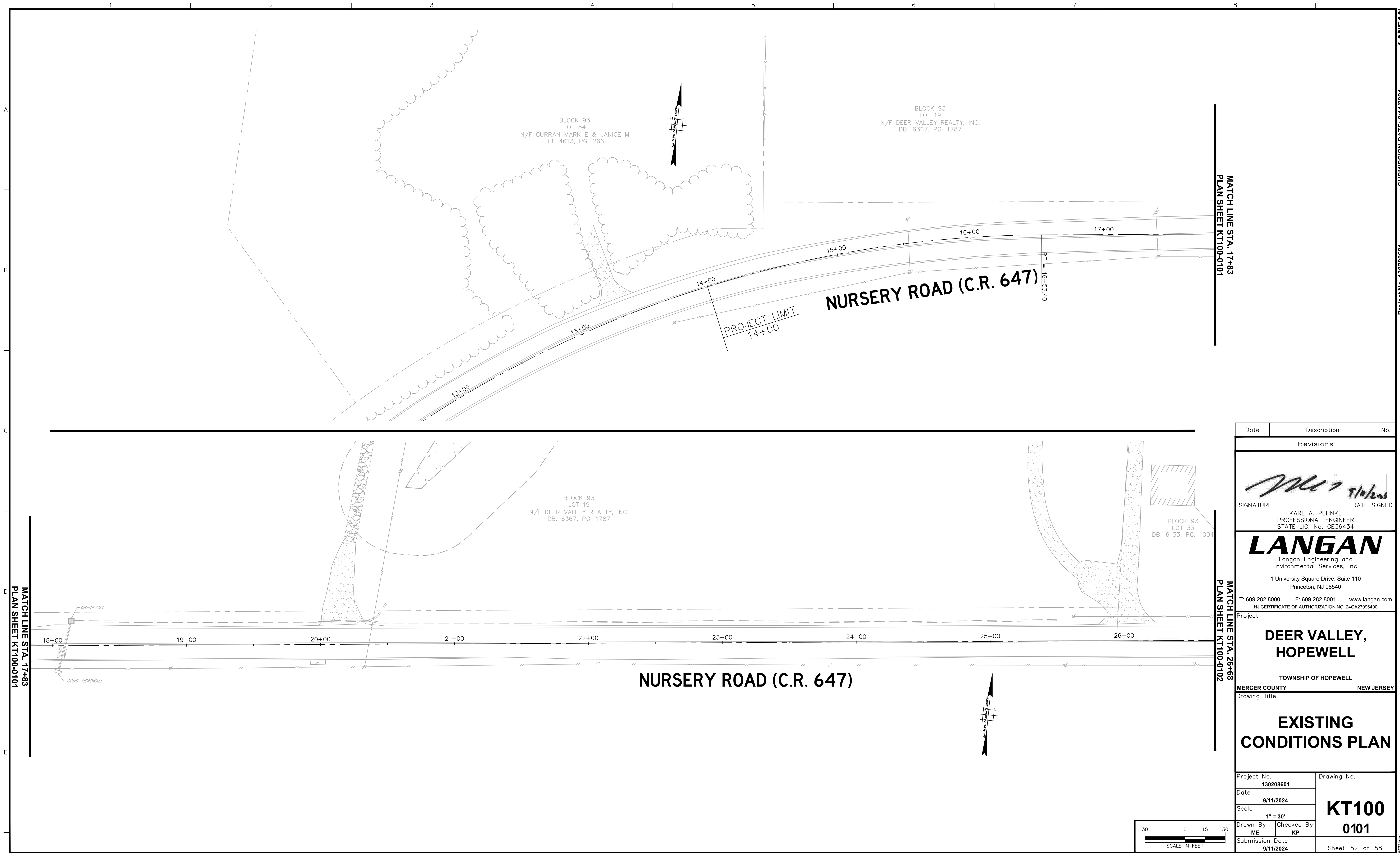
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Date	9/11/2024		0110
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Drawn By	ME	Checked By	KP
Submission Date	9/11/2024		
		Sheet	50 of 58



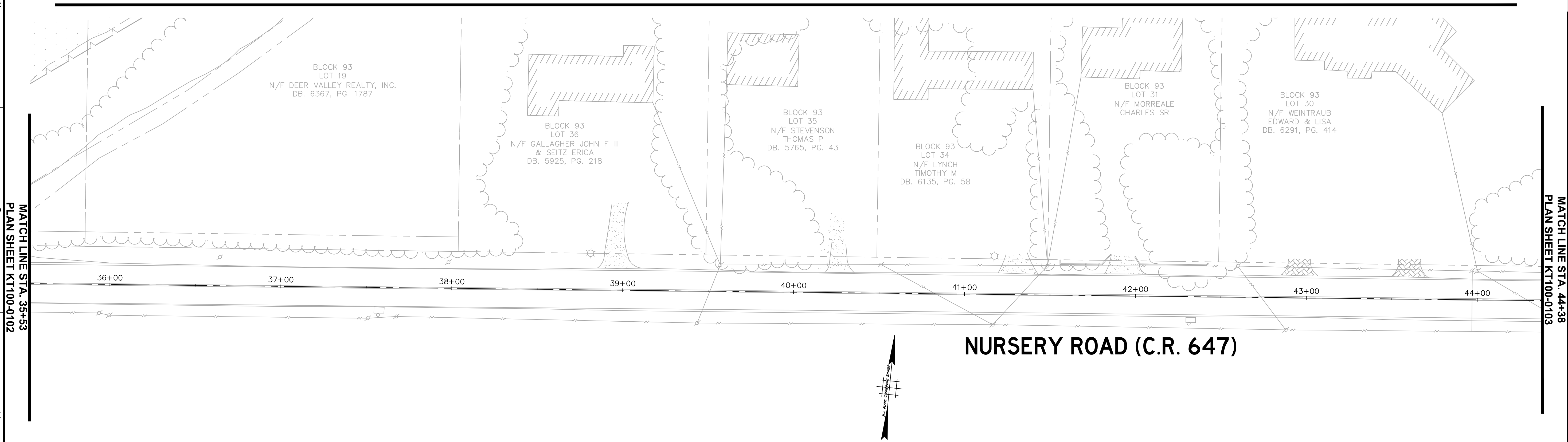
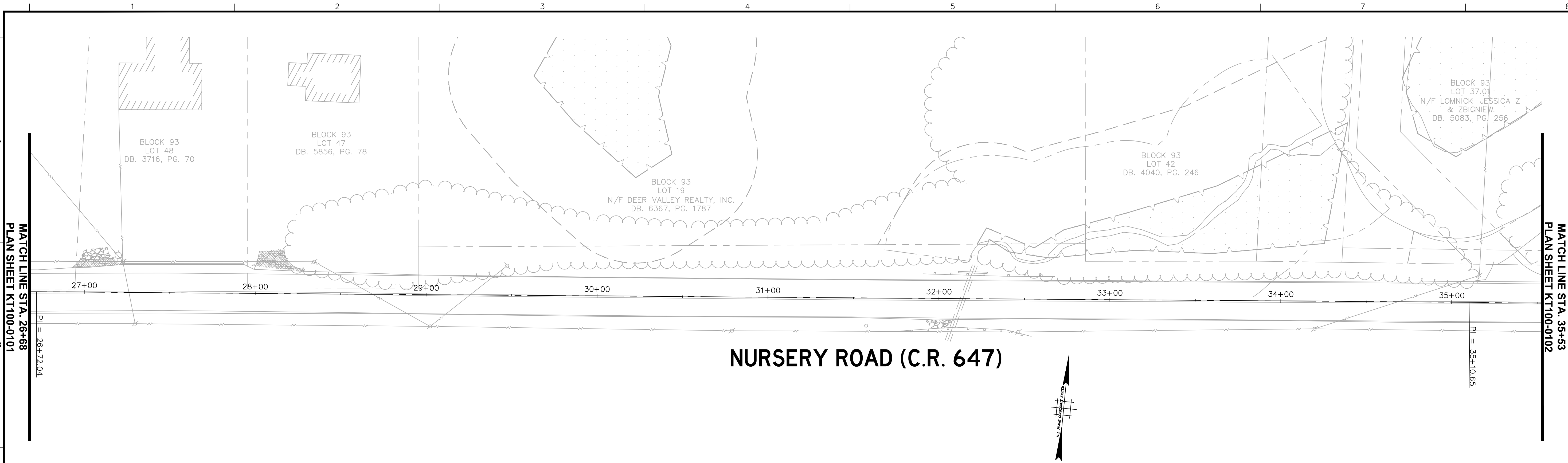


Date	Description	No.
Revisions		
		
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
CROSS SECTIONS		
Project No. 130208601		Drawing No.
Date 9/11/2024		KT302 0111
Scale 1" = 10'		
Drawn By ME	Checked By KP	Submission Date 9/11/2024
Sheet 51 of 58		

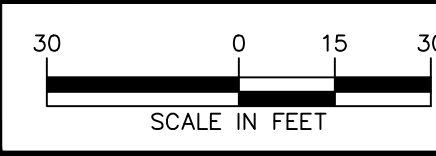


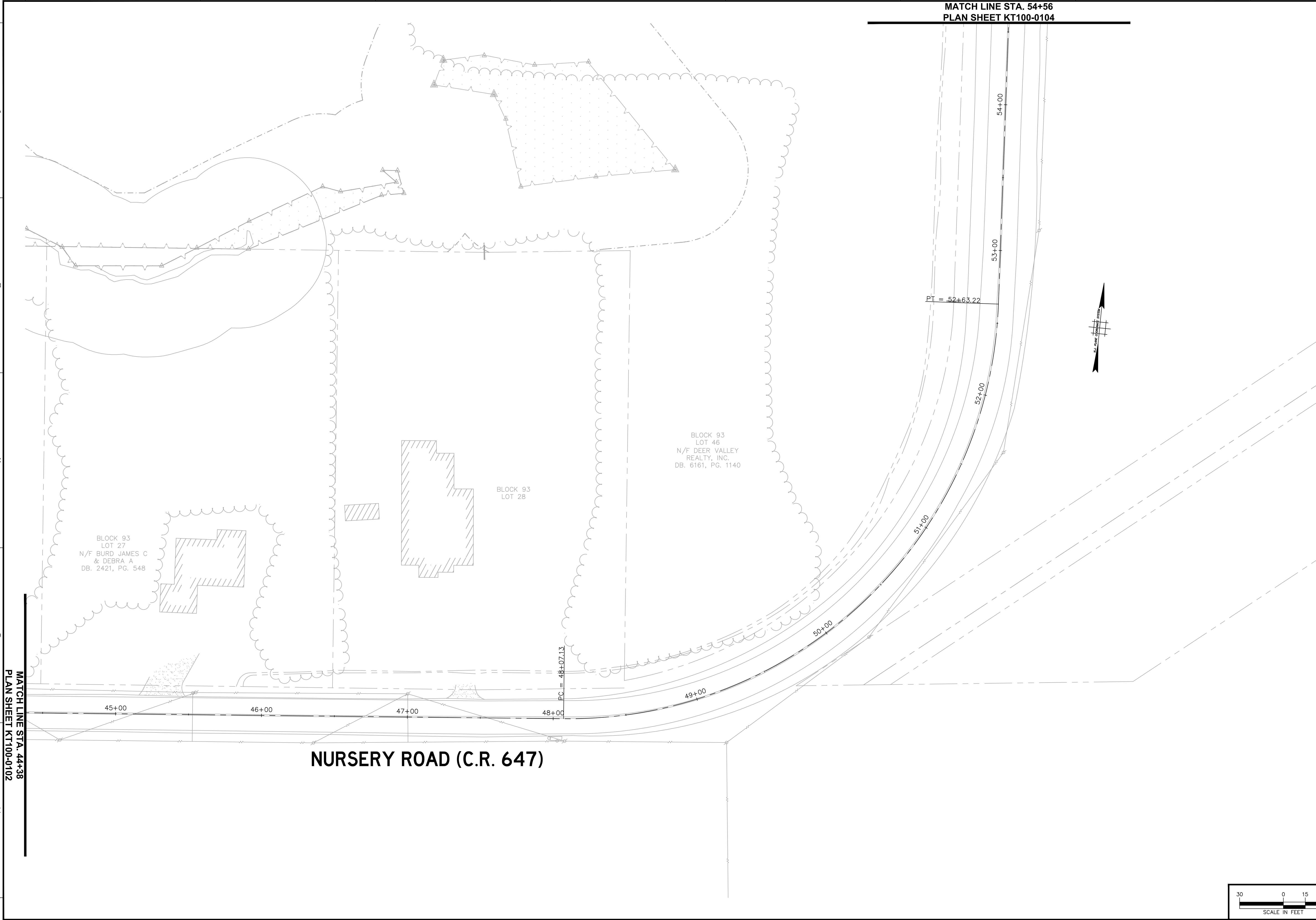
Date	Description	No.
Revisions		
 SIGNATURE DATE SIGNED KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434 LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		

Project No. 130208601		Drawing No. KT100 0101
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 52 of 58



Date	Description	No.
Revisions		
		
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
EXISTING CONDITIONS PLAN		
Project No. 130208601		Drawing No. KT100 0102
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME		
Checked By KP		Sheet 53 of 58
Submission Date 9/11/2024		





Date	Description	No.
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Revisions


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DATE SIGNED

KARL A. PEHNKE
PROFESSIONAL ENGINEER
STATE LIC. No. GE36434

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

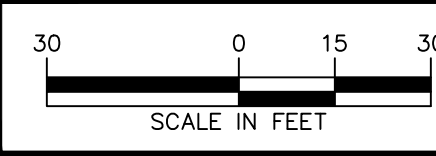
**DEER VALLEY,
HOPEWELL**

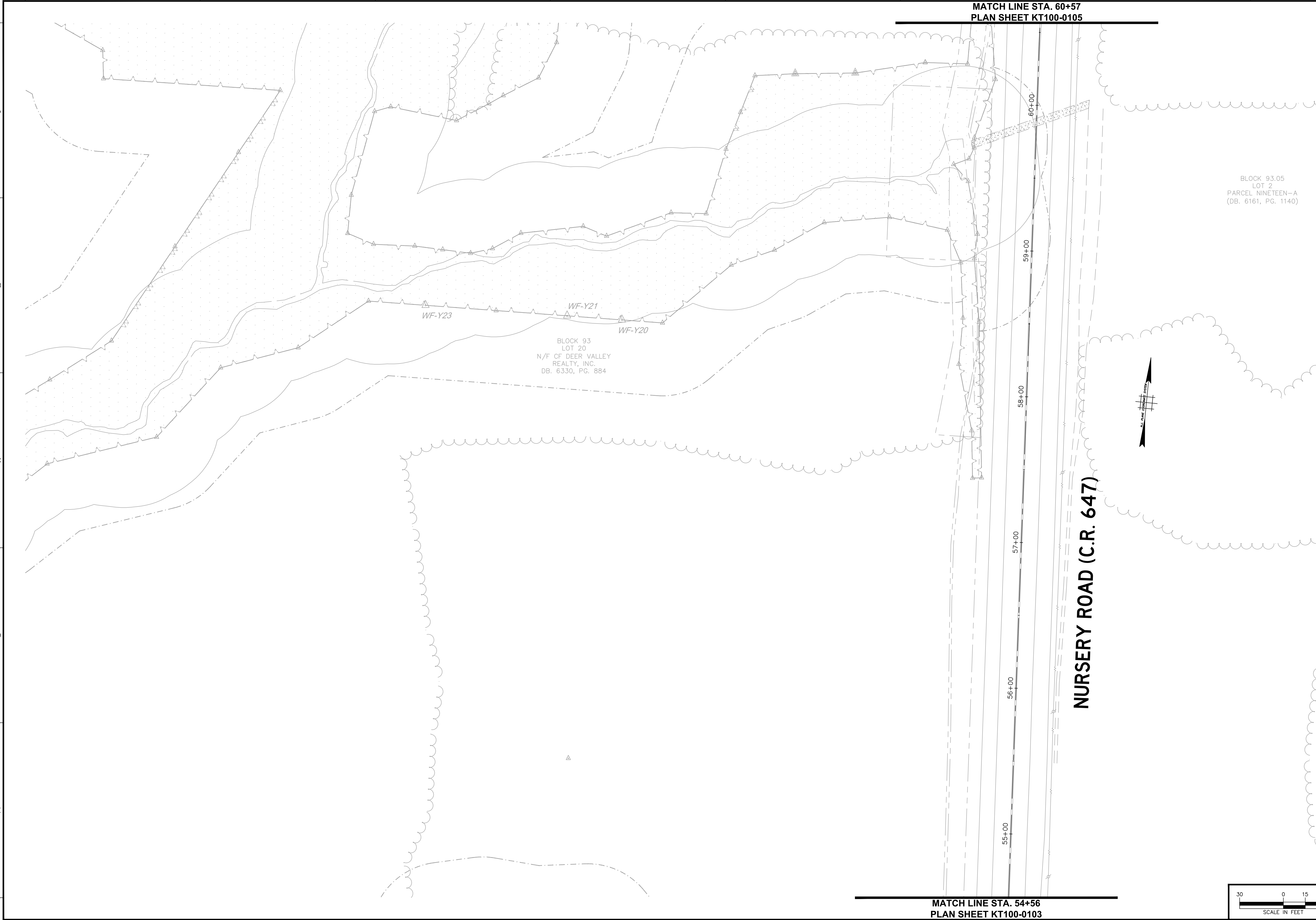
TOWNSHIP OF HOPEWELL
MERCER COUNTY NEW JERSEY

Drawing Title

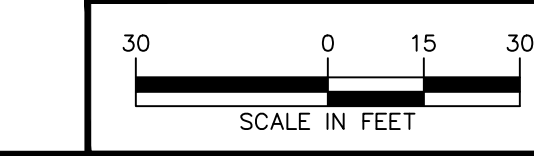
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CONDITIONS PLAN**

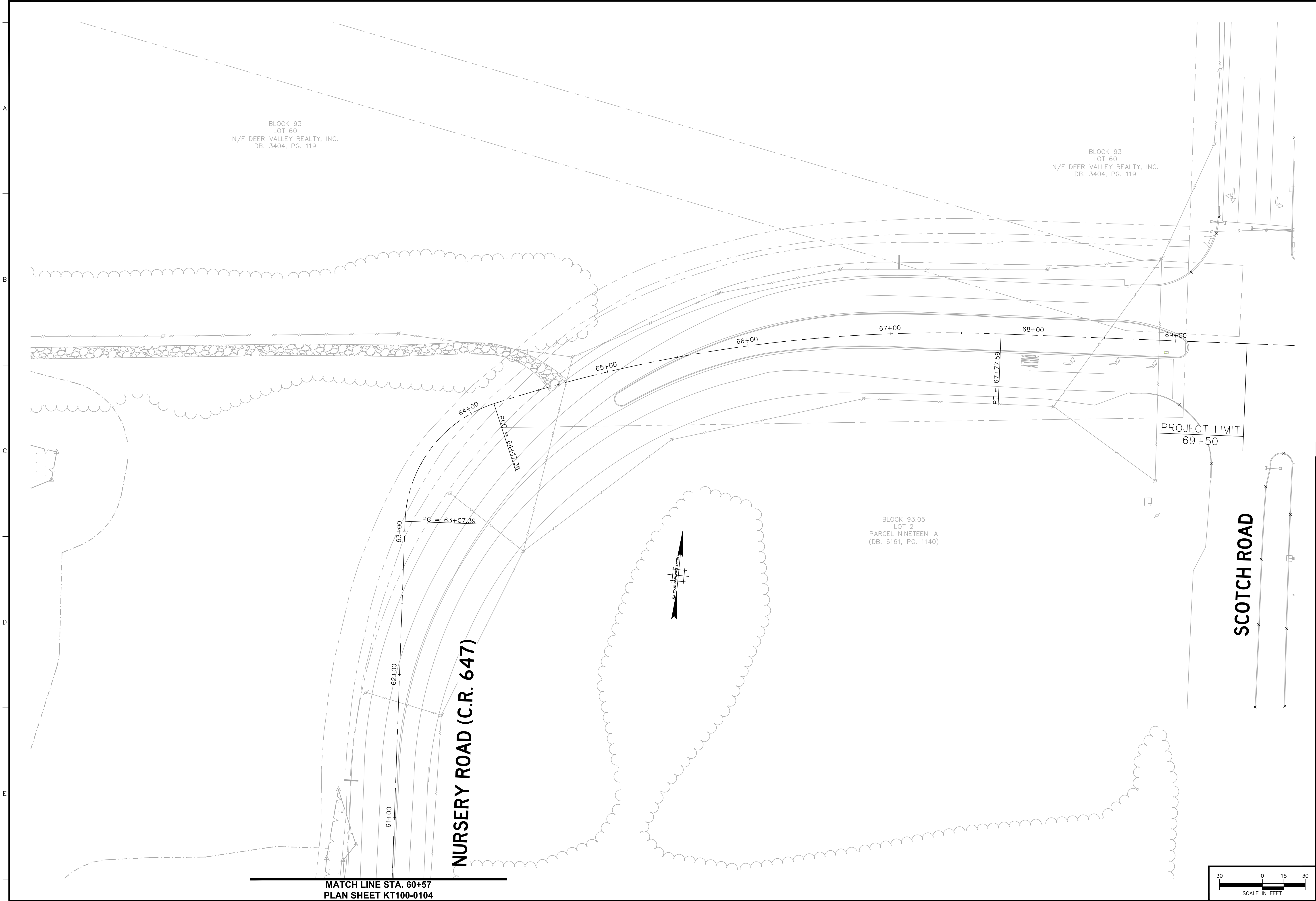
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Date 9/11/2024	
Scale 1" = 30'	
Drawn By ME	Checked By KP
Submission Date 9/11/2024	Sheet 54 of 58



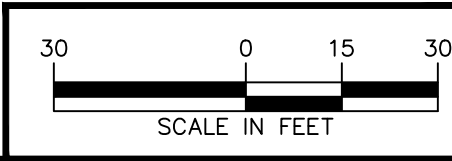


Date	Description	No.
Revisions		
 SIGNATURE DATE SIGNED KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434		
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Project		
DEER VALLEY, HOPEWELL		
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY		
Drawing Title		
EXISTING CONDITIONS PLAN		
Project No. 130208601		Drawing No. KT100 0104 Sheet 55 of 58
Date 9/11/2024		
Scale 1" = 30'		
Drawn By ME		
Submission Date 9/11/2024		

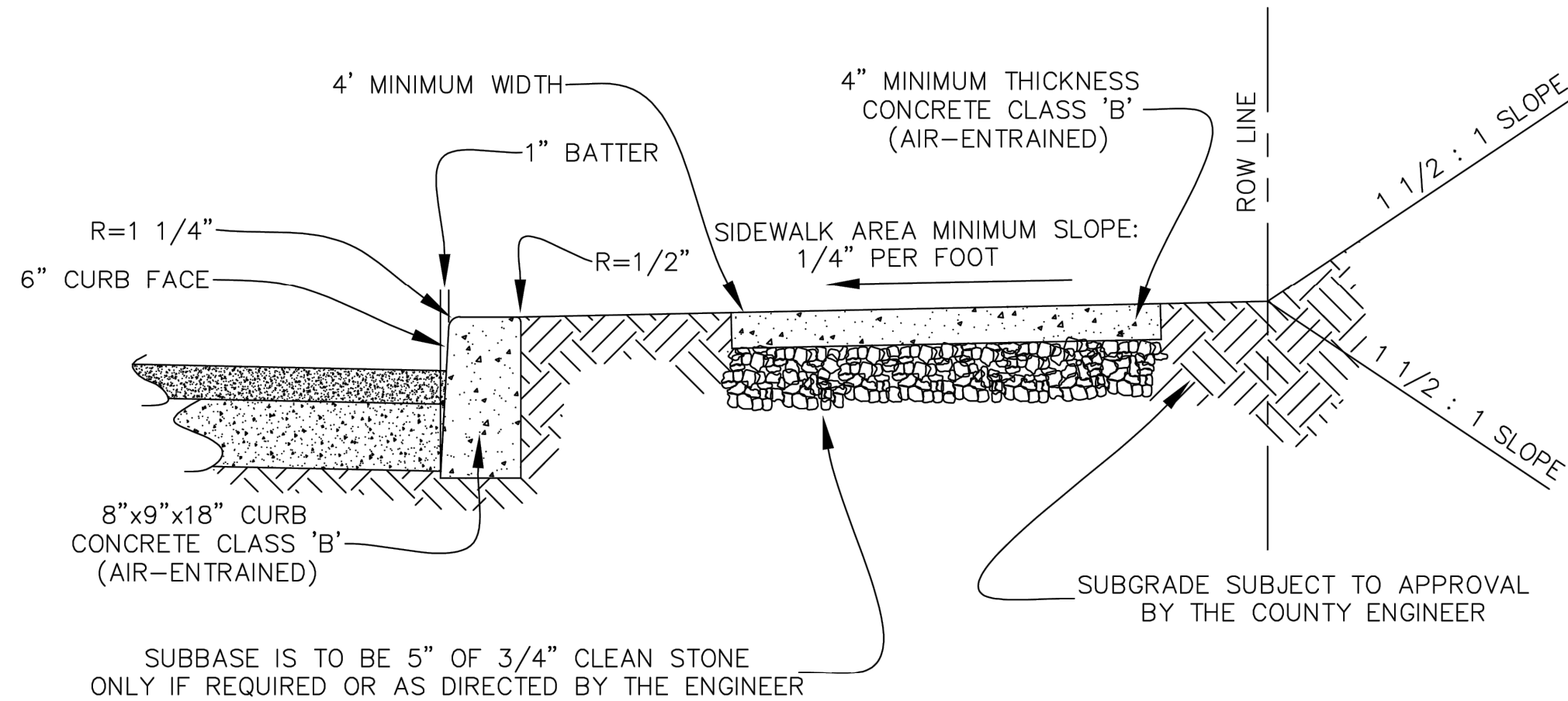




Date	Description	No.	
Revisions			
			
SIGNATURE DATE SIGNED			
KARL A. PEHNKE PROFESSIONAL ENGINEER STATE LIC. No. GE36434			
LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400			
Project			
DEER VALLEY, HOPEWELL			
TOWNSHIP OF HOPEWELL MERCER COUNTY NEW JERSEY			
Drawing Title			
EXISTING CONDITIONS PLAN			
Project No. 130208601		Drawing No. KT100 0105	
Date 9/11/2024			
Scale 1" = 30'			
Drawn By ME			
Submission Date 9/11/2024		Checked By KP	Sheet 56 of 58



NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AT 20' INTERVALS AND 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT. CONSTRUCTION JOINTS TO BE PROVIDED EVERY 20' ALTERNATING WITH EXPANSION JOINTS.

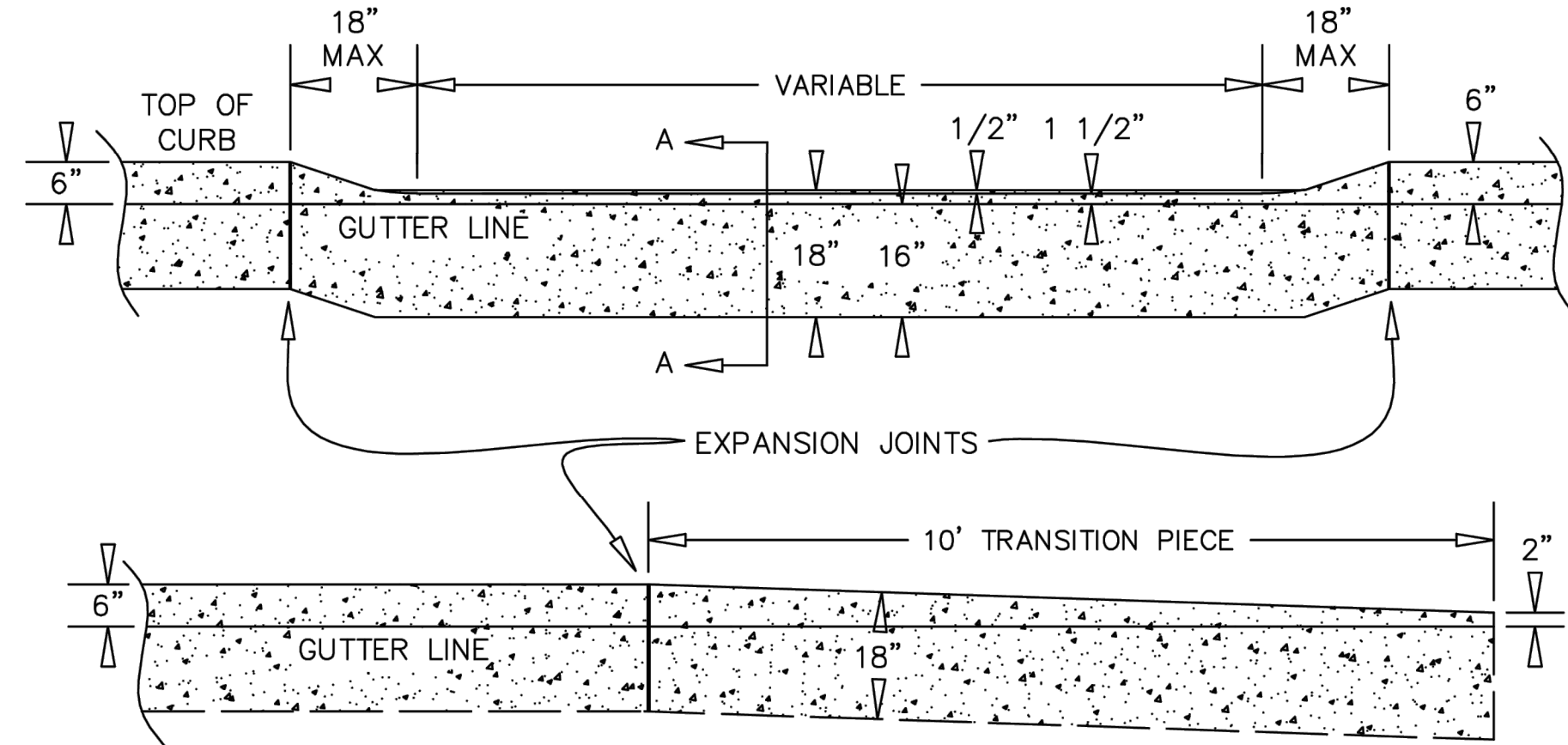
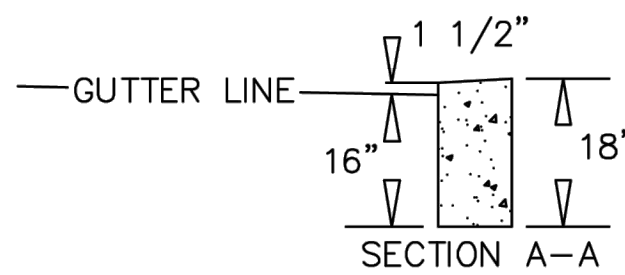


REVISED: 2.04.14 CLASS 'B' CONCRETE
PER: GREG SANDUSKY, COUNTY ENGINEER

TYPICAL SECTION
OF CURB
& SIDEWALK DETAIL
SCALE: NTS

COUNTY OF MERCER

DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
DIVISION OF ENGINEERING
GREGORY SANDUSKY, P.E. P.L.S. COUNTY ENGINEER
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 36758
DRAWN BY: MIKE WILLIAMSON



- 1) CURB END TRANSITIONS SHALL BE CONSTRUCTED AT CURB ENDS.
- 2) AN EXPANSION JOINT SHALL BE PROVIDED BETWEEN THE END OF THE FULL HEIGHT CURB AND THE 10' TRANSITION PIECE.
- 3) CONCRETE USED SHALL BE CLASS 'B' (AIR-ENTRAINED)

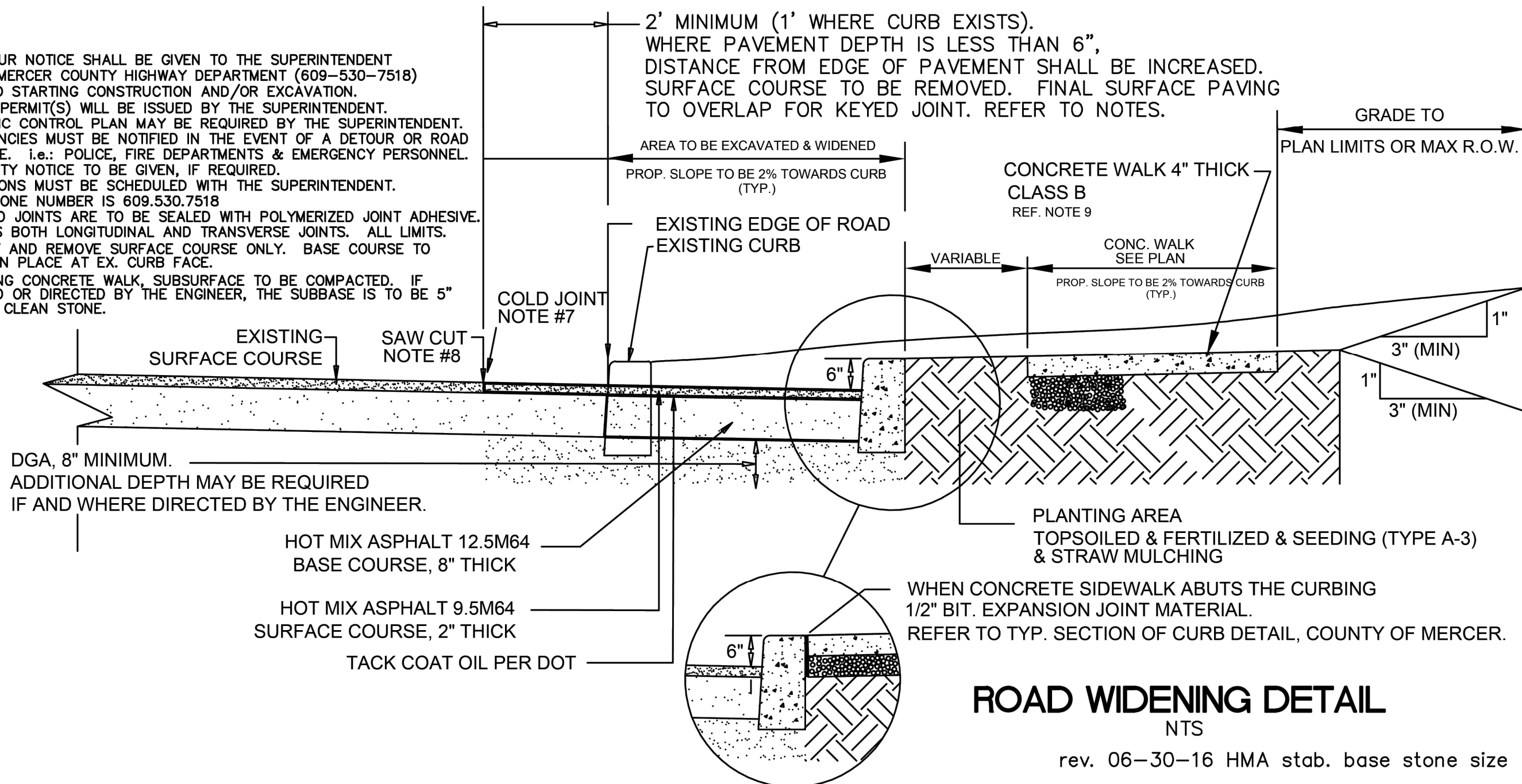
TYPICAL SECTION OF DEPRESSED CURB AT DRIVEWAYS AND CURB TRANSITION PIECE SCALE: NTS

NOTE: 1/2" EXPANSION JOINTS OF CELLULAR COMPRESSION MATERIAL TO BE PLACED AS SHOWN. 1/4" PREMOLDED EXPANSION JOINTS TO BE PLACED LONGITUDINALLY ADJACENT TO ALL ABUTTING CONCRETE STRUCTURES AS THE ENGINEER MAY DIRECT.

COUNTY OF MERCER
DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
DIVISION OF ENGINEERING
GREGORY SANDUSKY, P.E. P.L.S. COUNTY ENGINEER
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 36758
DRAWN BY: MIKE WILLIAMSON

NOTES

1. A 48 HOUR NOTICE SHALL BE GIVEN TO THE SUPERINTENDENT OF THE MERCER COUNTY HIGHWAY DEPARTMENT (609-530-7518) PRIOR TO STARTING CONSTRUCTION AND/OR EXCAVATION.
2. PROPER PERMIT(S) WILL BE ISSUED BY THE SUPERINTENDENT.
3. A TRAFFIC CONTROL PLAN MAY BE REQUIRED BY THE SUPERINTENDENT.
4. ALL AGENCIES MUST BE NOTIFIED IN THE EVENT OF A DETOUR OR ROAD CLOSURE. I.e.: POLICE, FIRE DEPARTMENTS & EMERGENCY PERSONNEL.
5. COMMUNITY NOTICE TO BE GIVEN, IF REQUIRED.
6. INSPECTIONS MUST BE SCHEDULED WITH THE SUPERINTENDENT. THAT PHONE NUMBER IS 609.530.7518.
7. ALL COLD JOINTS ARE TO BE SEALED WITH POLYMERIZED JOINT ADHESIVE. INCLUDES BOTH LONGITUDINAL AND TRANSVERSE JOINTS. ALL LIMITS.
8. SAW CUT AND REMOVE SURFACE COURSE ONLY. BASE COURSE TO REMAIN IN PLACE AT EX. CURB FACE.
9. REGARDING CONCRETE WALK, SUBSURFACE TO BE COMPACTED. IF REQUIRED OR DIRECTED BY THE ENGINEER, THE SUBBASE IS TO BE 5" OF 3/4" CLEAN STONE.



ROAD WIDENING DETAIL NTS

rev. 06-30-16 HMA stab. base stone size

Date	Description	No.
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Revisions


SIGNATURE DATE SIGNED

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Environmental Services, Inc.

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Princeton, NJ 08540

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NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400

Project

**DEER VALLEY,
HOPEWELL**

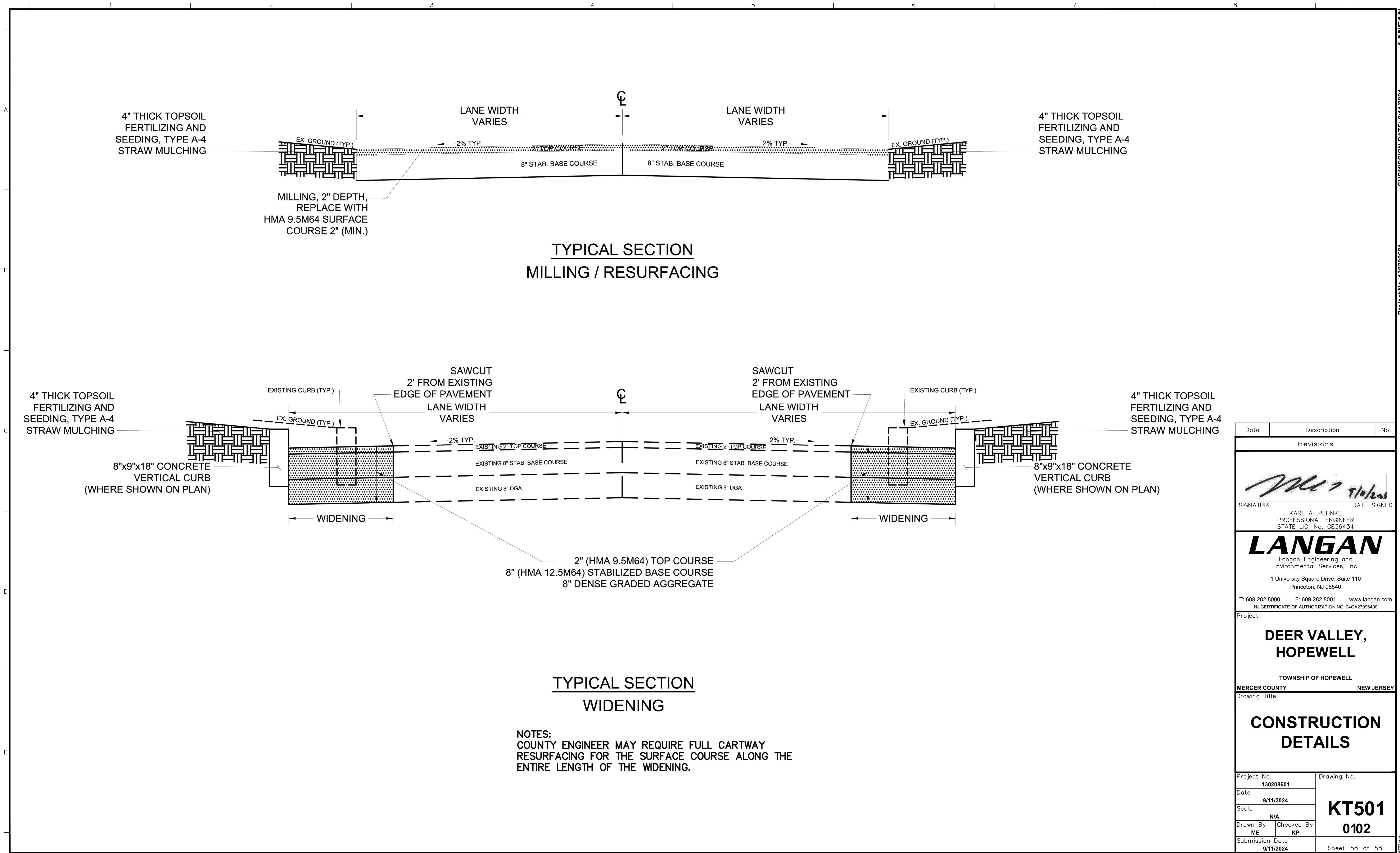
TOWNSHIP OF HOPEWELL

MERCER COUNTY NEW JERSEY

Drawing Title

**CONSTRUCTION
DETAILS**

Project No. 130208601	Drawing No. KT501
Date 9/11/2024	
Scale N/A	
Drawn By ME	Checked By KP
Submission Date 9/11/2024	Sheet 57 of 58



Date	Description	No.
Revisions		
		
SIGNATURE		DATE SIGNED
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LANGAN Langan Engineering and Environmental Services, Inc. 1 University Square Drive, Suite 110 Princeton, NJ 08540 T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION NO. 24GA27996400		
Project		
DEER VALLEY, HOPEWELL TOWNSHIP OF HOPEWELL NEW JERSEY		
MERCER COUNTY		
Drawing Title		
CONSTRUCTION DETAILS		
Project No. 130208601		Drawing No. KT501 0102
Date 9/11/2024		
Scale N/A		
Drawn By ME	Checked By KP	
Submission Date 9/11/2024		Sheet 58 of 58