

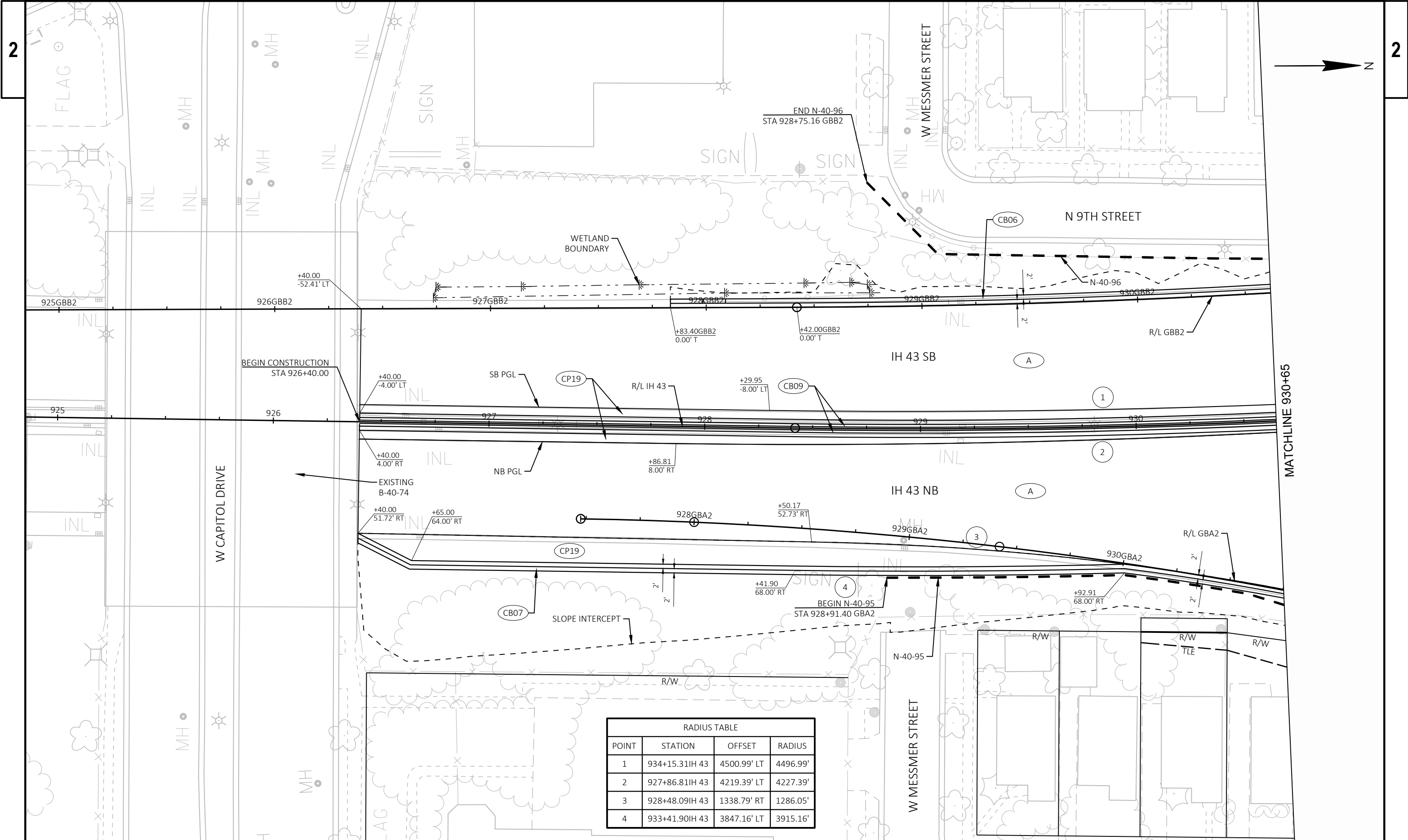




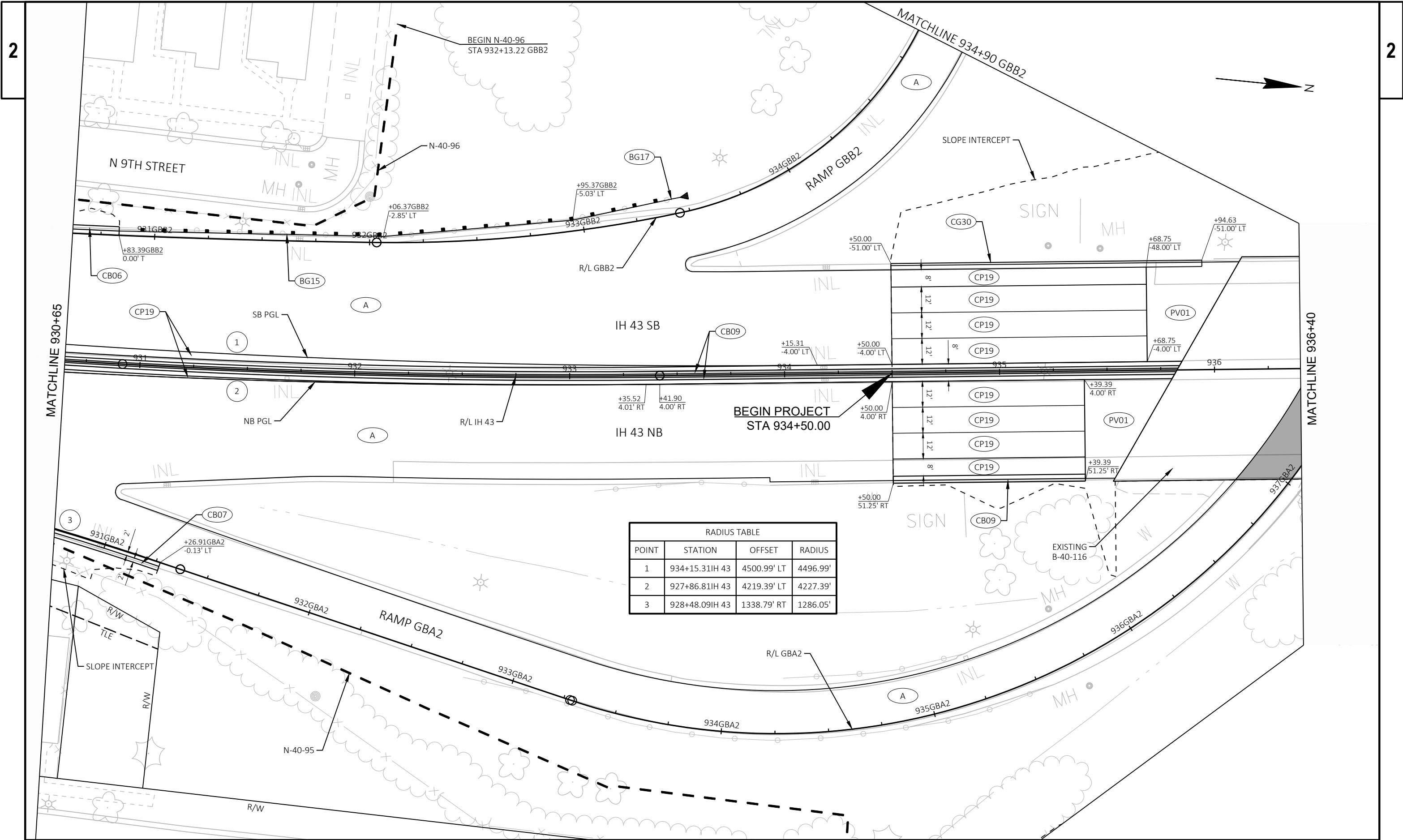
LEGEND

A	HMA PAVEMENT 4 SMA 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 S, 2 1/4-INCH	CM07	CONCRETE SIDEWALK 5-INCH
B	HMA PAVEMENT 4 HT 58-28 H, 2-INCH	CM08	CONCRETE SIDEWALK 6-INCH
C	HMA PAVEMENT 4 MT 58-28 S, 2 1/2-INCH	CB02	CONCRETE BARRIER TYPE S42
CP09	CONCRETE PAVEMENT 9-INCH, DOWELED AND TINED	CB03	CONCRETE BARRIER TYPE S56
CP13	CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED	CB06	CONCRETE BARRIER TYPE S42C
CP19	CONCRETE PAVEMENT 12 1/2-INCH, DOWELED AND TINED	CB07	CONCRETE BARRIER TYPE S56C
PV01	CONCRETE PAVEMENT APPROACH SLAB	CB09	CONCRETE BARRIER SINGLE-FACED 32-INCH
PV09	ASPHALTIC SURFACE, 2-INCH	CB40	CONCRETE BARRIER TRANSITION TYPE S36 TO S42
PV10	ASPHALTIC SURFACE, 3-INCH	CB41	CONCRETE BARRIER TRANSITION TYPE G1
CG16	CONCRETE CURB AND GUTTER 31-INCH	CB42	CONCRETE BARRIER TRANSITION TYPE G2
CG22	CONCRETE CURB PEDESTRIAN	CB49	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
CG30	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	CB62	CONCRETE BARRIER TYPE S42B
CG33	CONCRETE CURB AND GUTTER 4-INCH SLOPED 60-INCH TYPE A	CB63	CONCRETE BARRIER TRANSITION TYPE M1
CG46	CONCRETE CURB AND GUTTER 30-INCH TYPE A	CB72	CONCRETE BARRIER TRANSITION TYPE NJ32SF TO S36
CG53	TRANSITION FROM CG30 TO CG16 MEASURED AND PAID FOR AS CG30	BG15	MGS GUARDRAIL 3
CG54	TRANSITION FROM CG33 TO CG30 MEASURED AND PAID FOR AS CG33	BG16	MGS THRIE BEAM TRANSITION
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1	BG17	MGS GUARDRAIL TERMINAL EAT
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2	BG23	CRASH CUSHION PERMANENT LOW MAINTENANCE TL3

NOTES:
1. CURB AND GUTTER RADIUS AND ANGLE POINT OFFSETS ARE MEASURED TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. ADDITIONAL LAYOUT INFORMATION FOR CURB RAMPS IN CONSTRUCTION DETAILS



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	934+15.31IH 43	4500.99' LT	4496.99'
2	927+86.81IH 43	4219.39' LT	4227.39'
3	928+48.09IH 43	1338.79' RT	1286.05'
4	933+41.90IH 43	3847.16' LT	3915.16'



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DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.05
OPERATING RATING FACTOR: RF = 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 255(KIPS)

EARTHLOAD:
DESIGNED FOR 3.5 TO 4.5 FT. OF FILL.

MATERIAL PROPERTIES:
CONCRETE MASONRY: $f'c = 3,500$ P.S.I.
BAR STEEL REINFORCEMENT: $f_y = 60,000$ P.S.I.

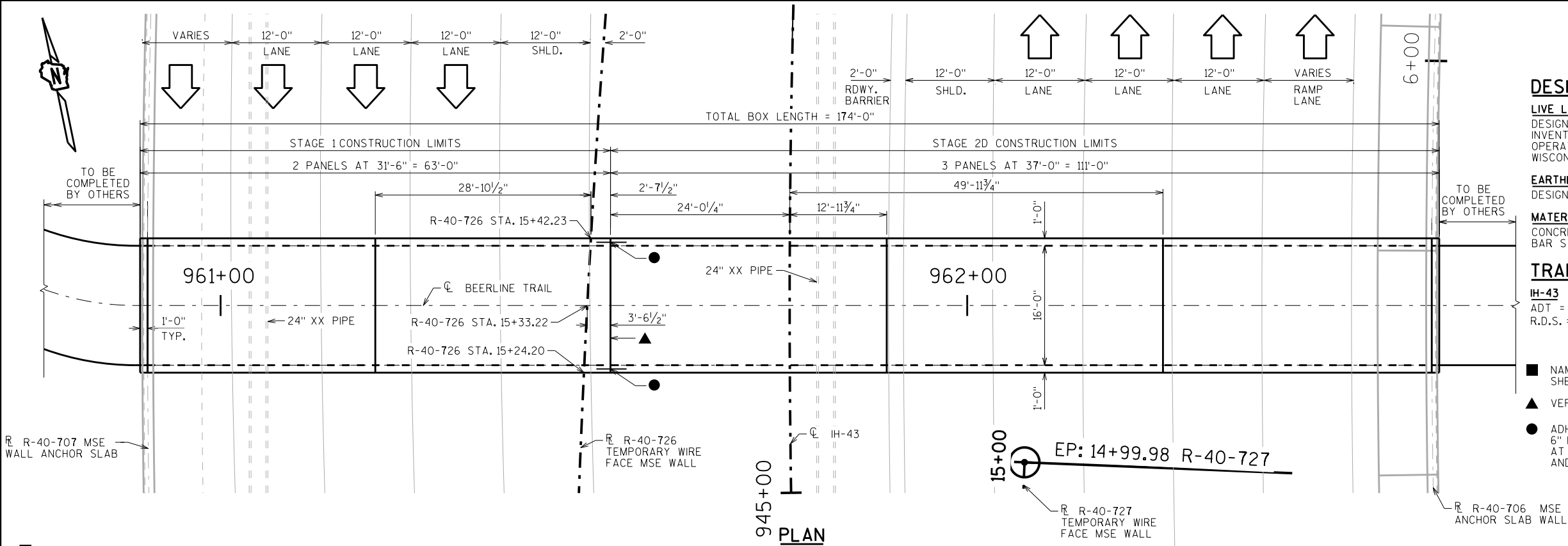
TRAFFIC VOLUME

IH-43
ADT = 125,400 (2021)
R.D.S. = 60 M.P.H.

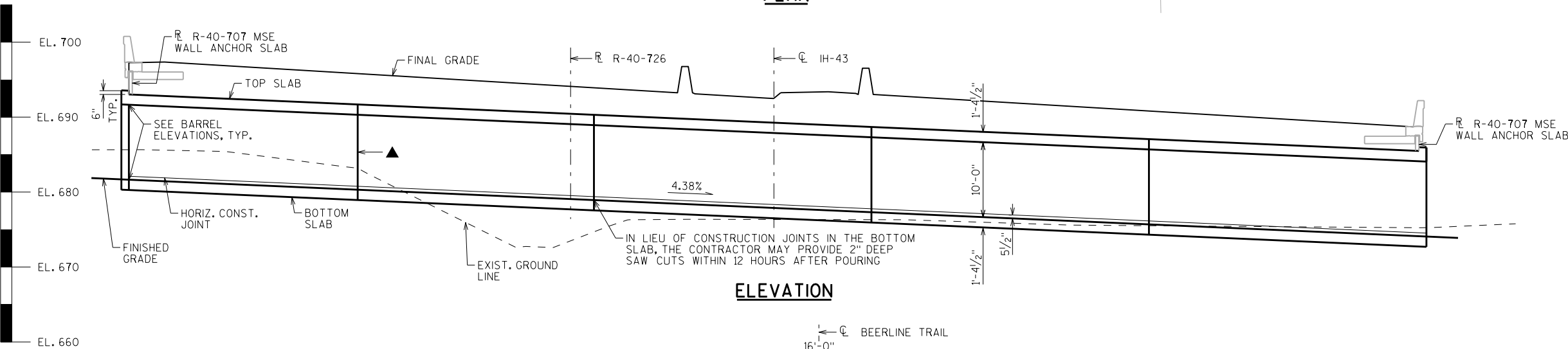
■ NAME PLATE LOCATION (SEE "DETAILS" SHEET)

▲ VERT. CONST. JOINT (TYP.)

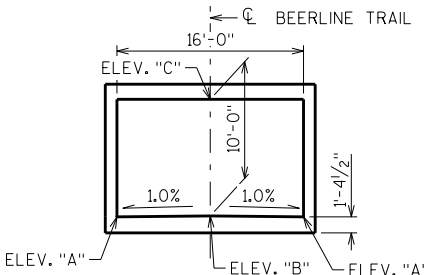
● ADHESIVE ANCHORS NO. 5 BARS, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP SLAB)



PLAN



ELEVATION



CULVERT SECTION

BARREL ELEVATIONS

LOCATION	ELEV. "A"	ELEV. "B"	ELEV. "C"
WEST END	681.61	681.69	691.69
EAST END	673.99	674.07	684.07

BPT = BEERLINE TRAIL

NOTES CON'T

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS ON CHAPTER 36 STANDARDS OF THE CURRENT WISC. DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

THE CONTRACTOR MAY ELECT TO SUBSTITUTE #10R #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE FIELD ENGINEER, IN LIEU OF THE BREAKER RUN, TO BE UTILIZED AS A CONSTRUCTION PLATFORM FOR THE BOX. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

PLACE 18" (MIN.) WIDE SHEET OF "RUBBERIZED MEMBRANE WATERPROOFING" ON TOP SLAB OVER ALL CONSTRUCTION JOINTS AND EXTEND DOWN TO BOTTOM OF OUTSIDE WALLS.

LIST OF DRAWINGS

1. LAYOUT

STRUCTURE DESIGN CONTACTS:

JOHN SENDOR (608) 266-5163
DOMINIQUE BECHLE (608) 261-8205

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-40-111	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	
504.0100	CONCRETE MASONRY CULVERTS	CY	
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	
645.0105	GEOTEXTILE TYPE C	SY	
645.0120	GEOTEXTILE TYPE HR	SY	
	NON-BID ITEMS		
	FILLER	SIZE	$\frac{3}{4}$ "

NO.	DATE	REVISION	BY
ACCEPTED CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE C-40-111			
BEERLINE PED. BIKE TRAIL TUNNEL UNDER IH-43			
COUNTY	MILWAUKEE	CITY	GLENDALE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	JJS	DESIGNED CK'D.	JJS
DRAWN BY	JJS	PLANS CK'D.	JJS
LAYOUT			SHEET 1 OF 3

