

LOCATION MAP

LATITUDE: 39 °13'29" LONGITUDE: -84°26'24"



PORTION TO BE IMPROVED	=====
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION	US 42 SOUTH OF COLUMBIA AVE	US 42 NORTH OF COLUMBIA AVE
CURRENT ADT (2025)	11,500	16,000
DESIGN YEAR ADT (2045)	11,500	17,500
DESIGN HOURLY VOLUME (2045)	1,300	2,100
DIRECTIONAL DISTRIBUTION	61%	55%
TRUCKS (24 HOUR B&C)	3%	2%
DESIGN SPEED	25 MPH	25 MPH
LEGAL SPEED	25 MPH	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN PRINCIPAL ARTERIAL	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	NO	NO

DESIGN EXCEPTIONS

LANE WIDTH ← Status?

ADA DESIGN WAIVERS

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig

OHIO811.org
Before You Dig

OHIO 811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:

CMT
CRAWFORD, MURPHY & TILLY, INC.

ENGINEER'S SEAL:

SIGNED: _____
DATE: _____

ENGINEER'S SEAL:

SIGNED: _____
DATE: _____

INDEX OF SHEETS:

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storm sewer calculations need submitted for review

Comments provided on turning templates. More information is needed.

Curb ramp detail sheets are incomplete and need resubmitted.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAM US 42 10.07 READING RD

HAMILTON COUNTY
CITY OF READING

REVIEW COMPLETE	
PM	Katherine S. DeStefano, P.E. 02/20/2026
BRIDGES	
CONSTRUCT	Chris Tuminello, P.E. 02/23/2026
DRAINAGE	Tami Brehm, P.E. 02/23/2026
ENVIRON	
GEOTECH	Casey Carriere, P.E. 2/23/2026
ITS	
MOT	Scott Kraus, P.E. 02/24/2026
PAVEMENT	
ROADWAY	Katherine S. DeStefano, P.E. 02/20/2026 John Otis, P.E. 02/25/2026
R/W	
SURVEY	
TRAFFIC	
UTILITIES	
OTHER	Alex Genbauffe, P.E. 02/25/2026
OTHER	

FEDERAL PROJECT NUMBER

E250756

RAILROAD INVOLVEMENT

IORY (NS)

PROJECT DESCRIPTION

IMPLEMENT TARGET SPEED PILOT PROGRAM COUNTERMEASURES ON US-42 IN THE CITY OF READING INCLUDING A ROAD DIET, ENHANCED CROSSWALKS, RAPID RECTANGULAR FLASHING BEACONS, RAISED MEDIANS, IN AN EFFORT TO LOWER TRAVEL SPEEDS AND INCREASE VEHICULAR AND PEDESTRIAN SAFETY.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.975 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A

based on the disposition, the Project EDA is 0.85. (you dont include the Contractor EDA in the Project EDA)

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE SET FORTH ON THE PLANS AND ESTIMATES.

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/19/24	MT-95.31	7/18/25	TC-52.10	10/18/13	800-2023	7/18/25		
BP-5.1	7/18/25	MT-95.32	7/18/25	TC-52.20	1/15/21	814	7/15/16		
BP-7.1	7/18/25	MT-95.60	4/19/19	TC-61.10	4/21/23	832	7/18/25		
CB-3	7/19/24	MT-95.61	4/19/19	TC-71.10	7/18/25				
CB-6	7/19/24	MT-97.12	7/18/25	TC-74.10	7/21/23				
DM-1.1	1/17/25	MT-101.90	7/17/20	TC-81.22	1/17/25				
DM-4.4	1/15/16	MT-110.10	7/19/13	TC-82.10	1/17/25				
MH-3	7/19/24	MT-105.10		TC-83.10	1/17/20				
RM-3.1	7/20/18	TC-16.22	7/18/25	TC-83.20	7/18/25				
RM-5.1	7/18/14	TC-21.21	7/18/25	TC-85.10	1/19/24				
HL-20.11	7/18/25	TC-22.10	1/17/25	TC-85.20	4/21/23				
		TC-41.20	10/18/13	TC-87.10	7/18/25				
		TC-41.30	4/21/23						
		TC-41.40	10/18/13						
		TC-41.41	7/19/19						
		TC-42.20	10/18/13						

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

DESIGN AGENCY

CRAWFORD, MURPHY & TILLY, INC.
1777 WASHINGTON VILLAGE DR
DAYTON, OHIO 45459
www.cmtengr.com

DESIGNER
LDW

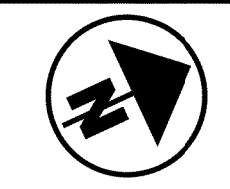
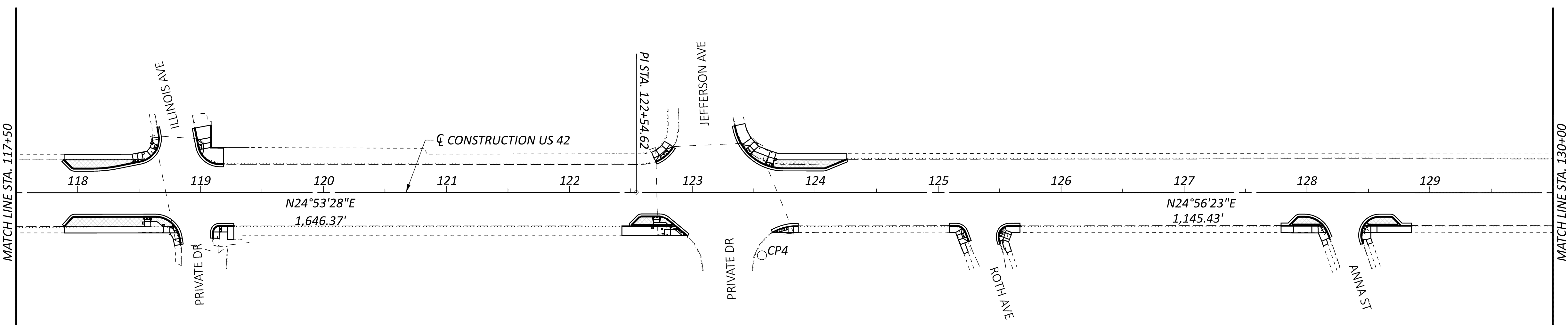
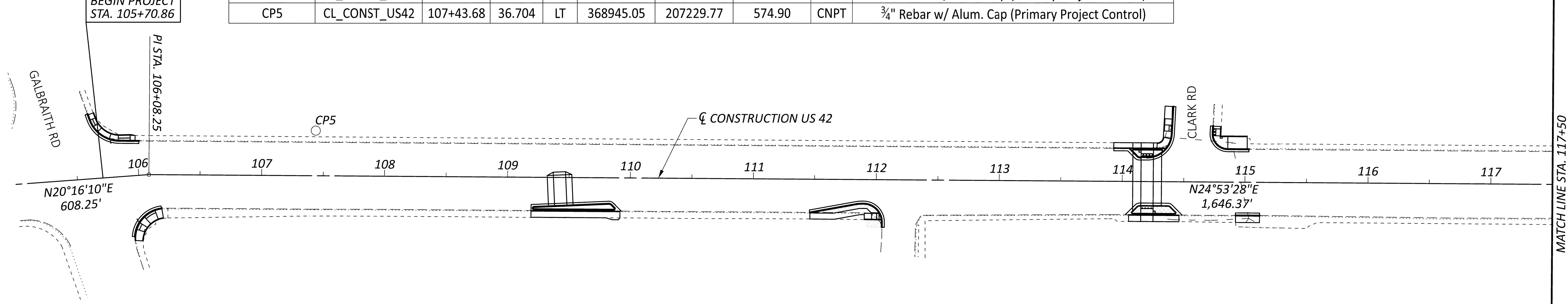
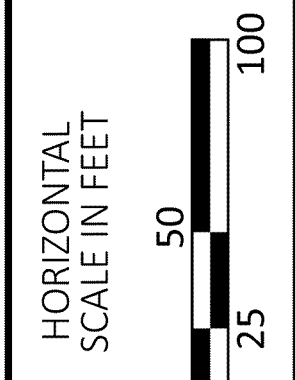
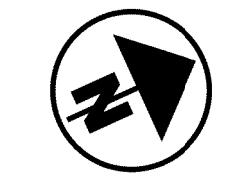
REVIEWER
JWL 02/13/26

PROJECT ID
123369

SHEET TOTAL
P.1 | 117

POINT NAME	ALIGNMENT	STATION	OFFSET	SIDE	NORTHING	EASTING	ELEVATION	TYPE	NOTE
CP100	CL_CONST_US42	166+69.62	41.397	RT	374283.12	209804.26	570.73	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)
CP1	CL_CONST_US42	208+93.09	33.421	LT	378062.98	211684.36	574.98	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)
CP2	CL_CONST_US42	189+10.39	79.58	LT	376340.83	210700.92	580.69	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)
CP3	CL_CONST_US42	149+57.49	41.037	LT	372767.14	209004.25	565.56	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)
CP4	CL_CONST_US42	123+56.65	51.18	RT	370371.13	207988.44	554.77	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)
CP5	CL_CONST_US42	107+43.68	36.704	LT	368945.05	207229.77	574.90	CNPT	¾" Rebar w/ Alum. Cap (Primary Project Control)

NOTE:
 REFER TO THE SURVEYING PARAMETERS NOTE IN THE
 GENERAL NOTES FOR PROJECT CONTROL INFORMATION



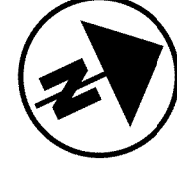
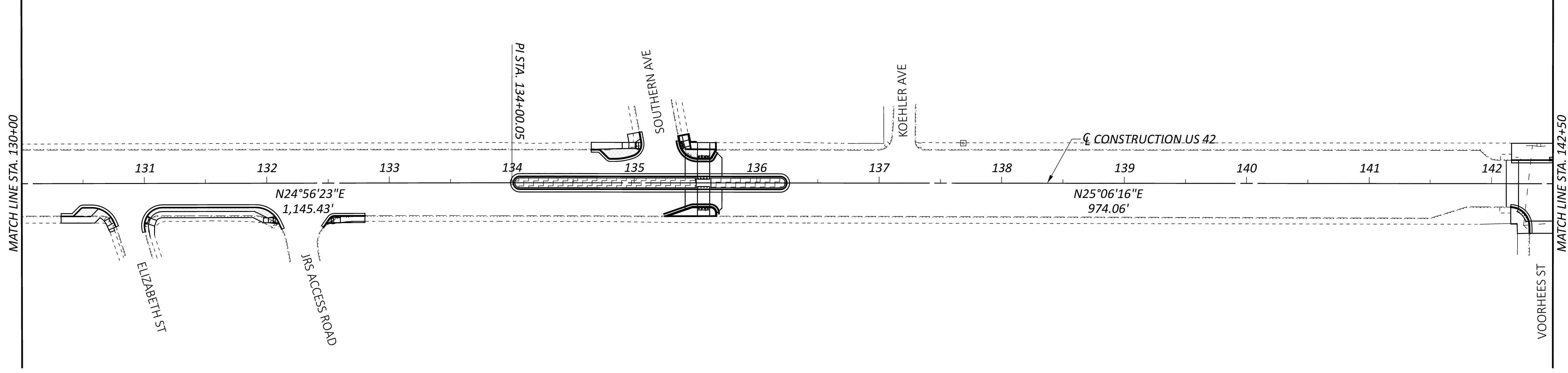
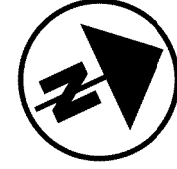
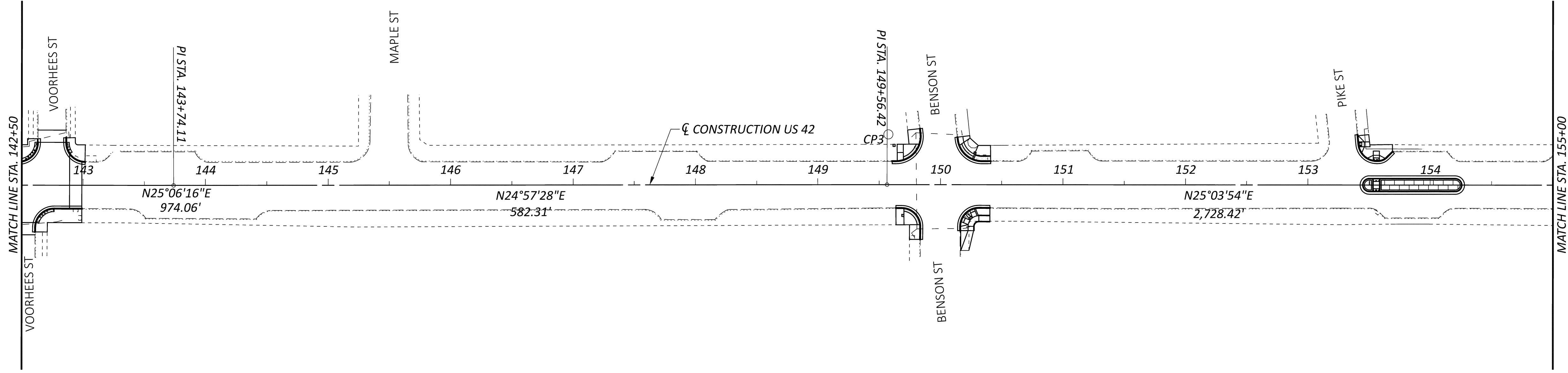
SCHEMATIC PLAN
 STA. 105+50.00 TO STA. 130+00.00

DESIGN AGENCY
CMT
 CMT CONSULTANTS
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
 LDW
 REVIEWER
 JWL 02/13/26
 PROJECT ID
 123369
 SHEET TOTAL
 P.2 117

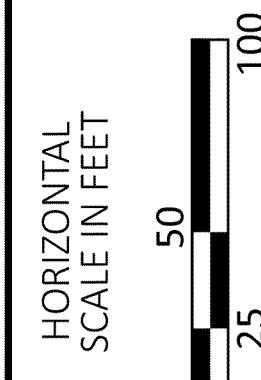
HAM US 42 10.07 READING RD

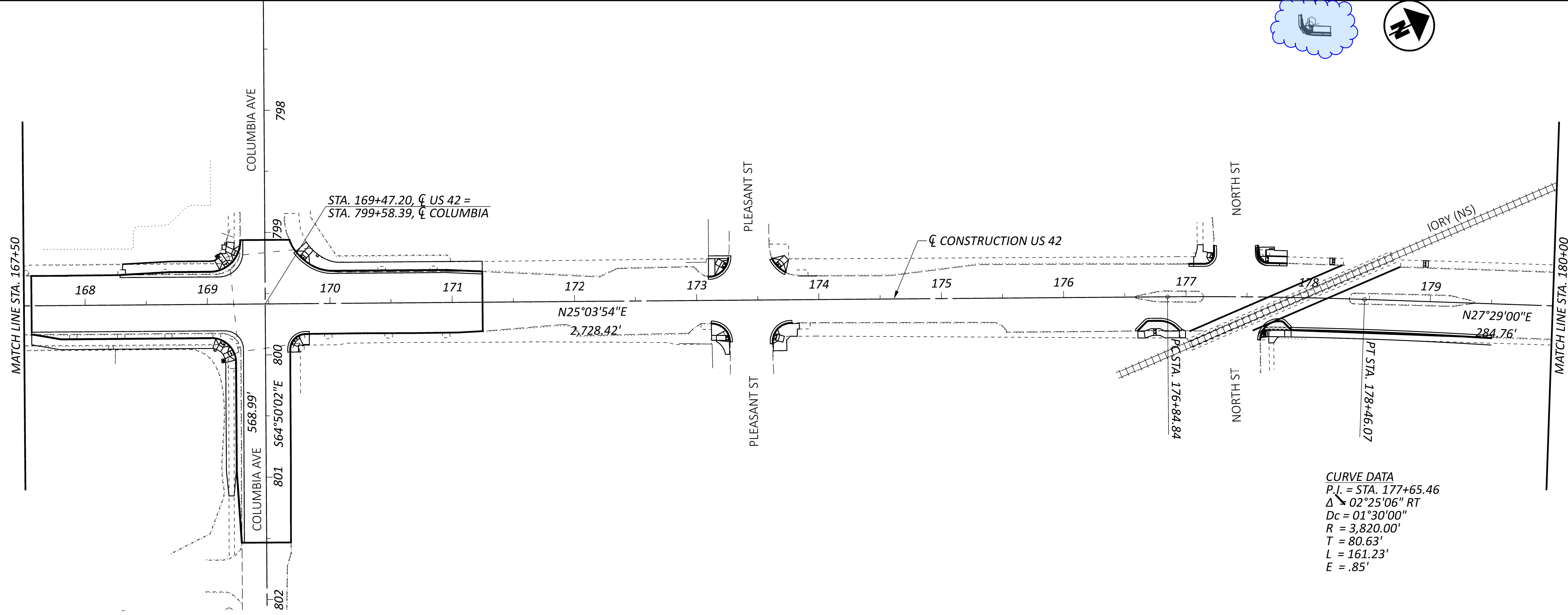
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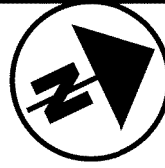
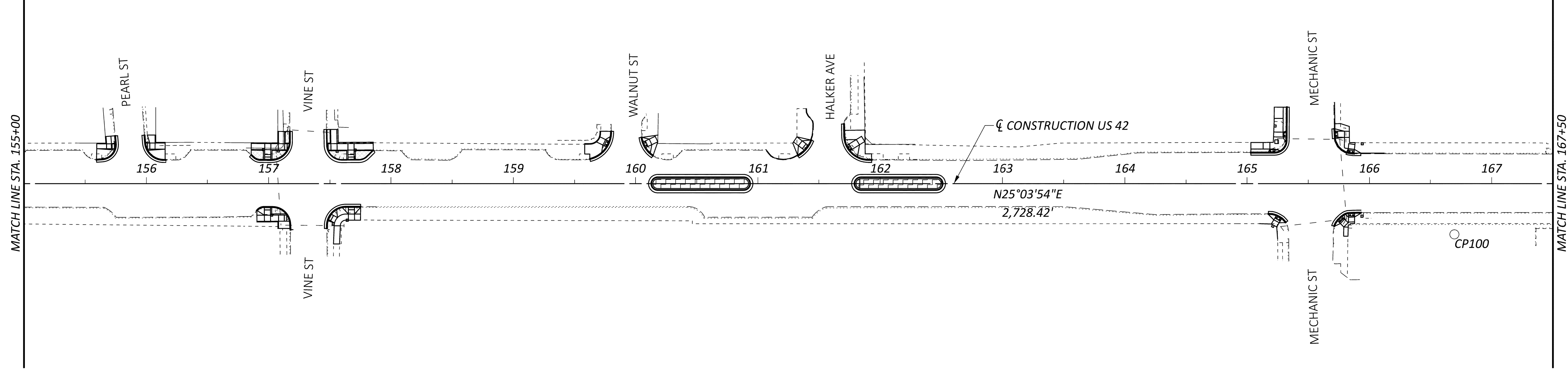
DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	123369
SHEET	P.3
TOTAL	117

SCHEMATIC PLAN
 STA. 130+00 TO STA. 155+00



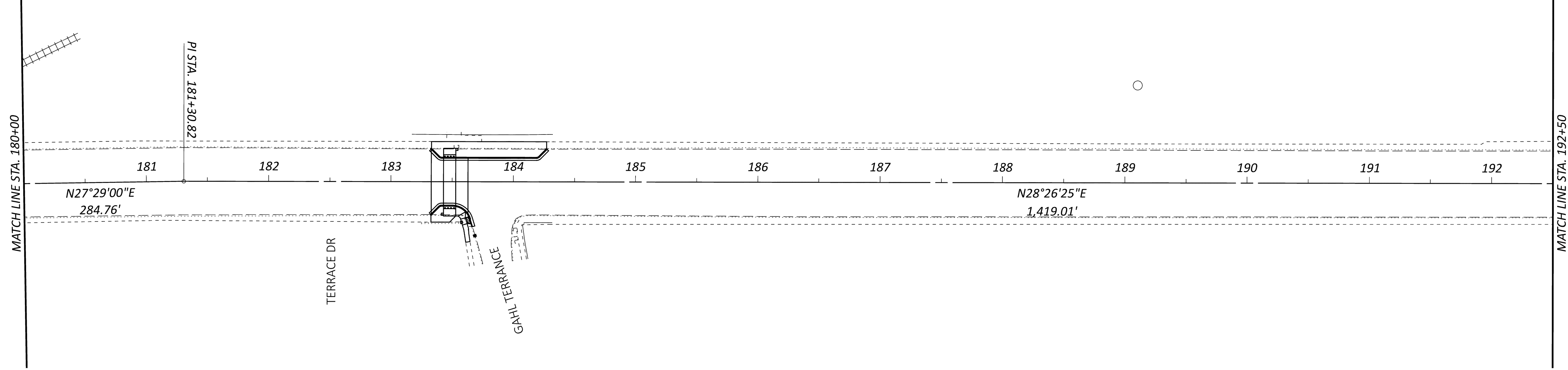
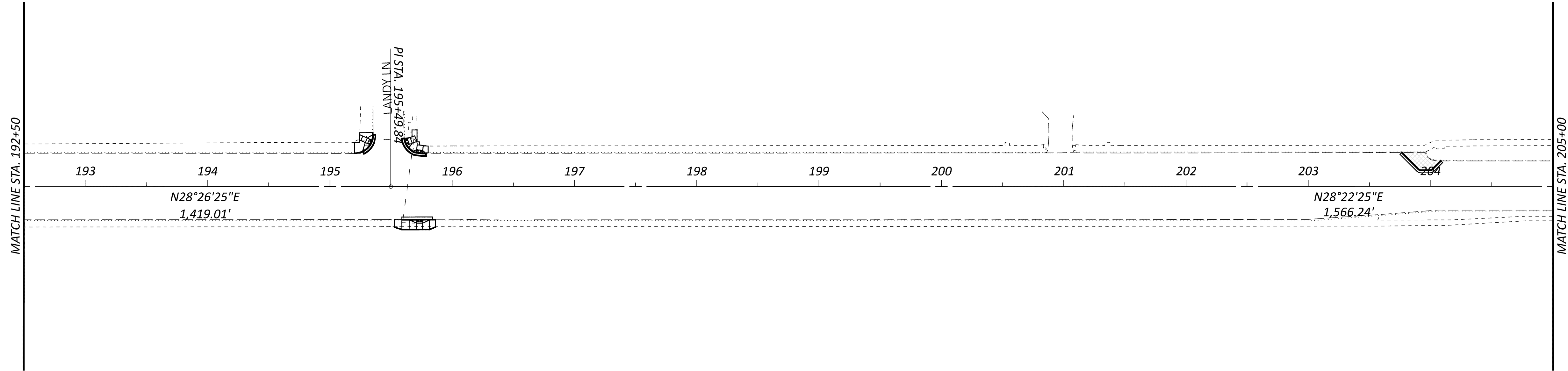


CURVE DATA
 P.I. = STA. 177+65.46
 $\Delta = 02^{\circ}25'06''$ RT
 $D_c = 01^{\circ}30'00''$
 $R = 3,820.00'$
 $T = 80.63'$
 $L = 161.23'$
 $E = .85'$



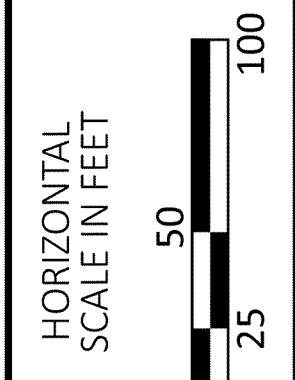
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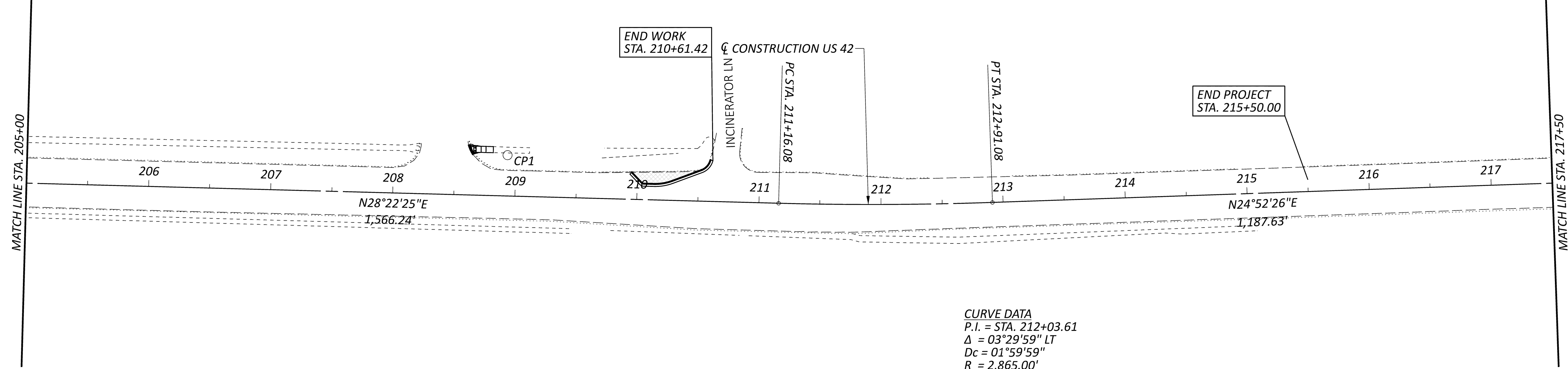
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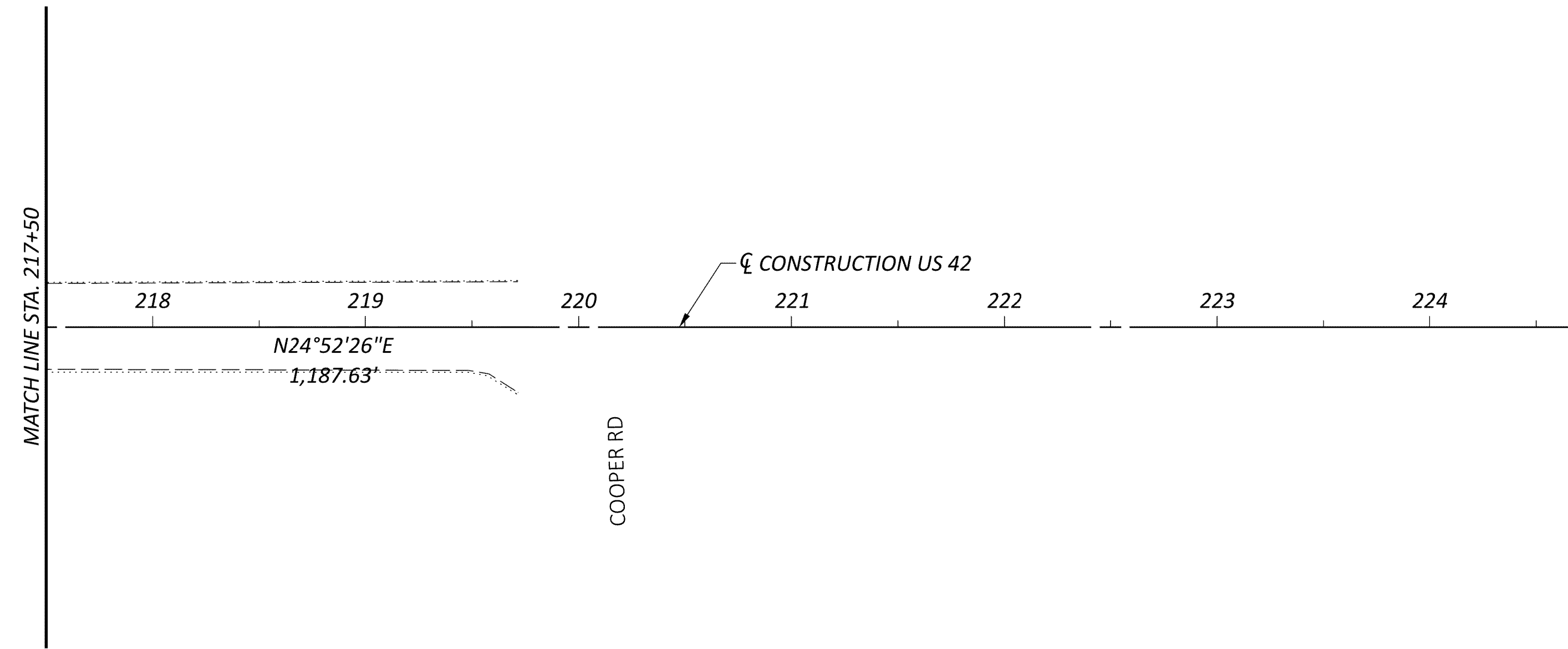
DESIGN AGENCY	
CMT	CONTRACTOR
BRUCE G. MURPHY & ASSOCIATES, INC.	DESIGNER
1777 WASHINGTON VILLAGE DR	LDW
DAYTON, OHIO 45459	REVIEWER
www.cmtengr.com	JWL 02/13/26
PROJECT ID	
123369	
SHEET	TOTAL
P.5	117

SCHEMATIC PLAN
 STA. 180+00 TO STA. 205+00





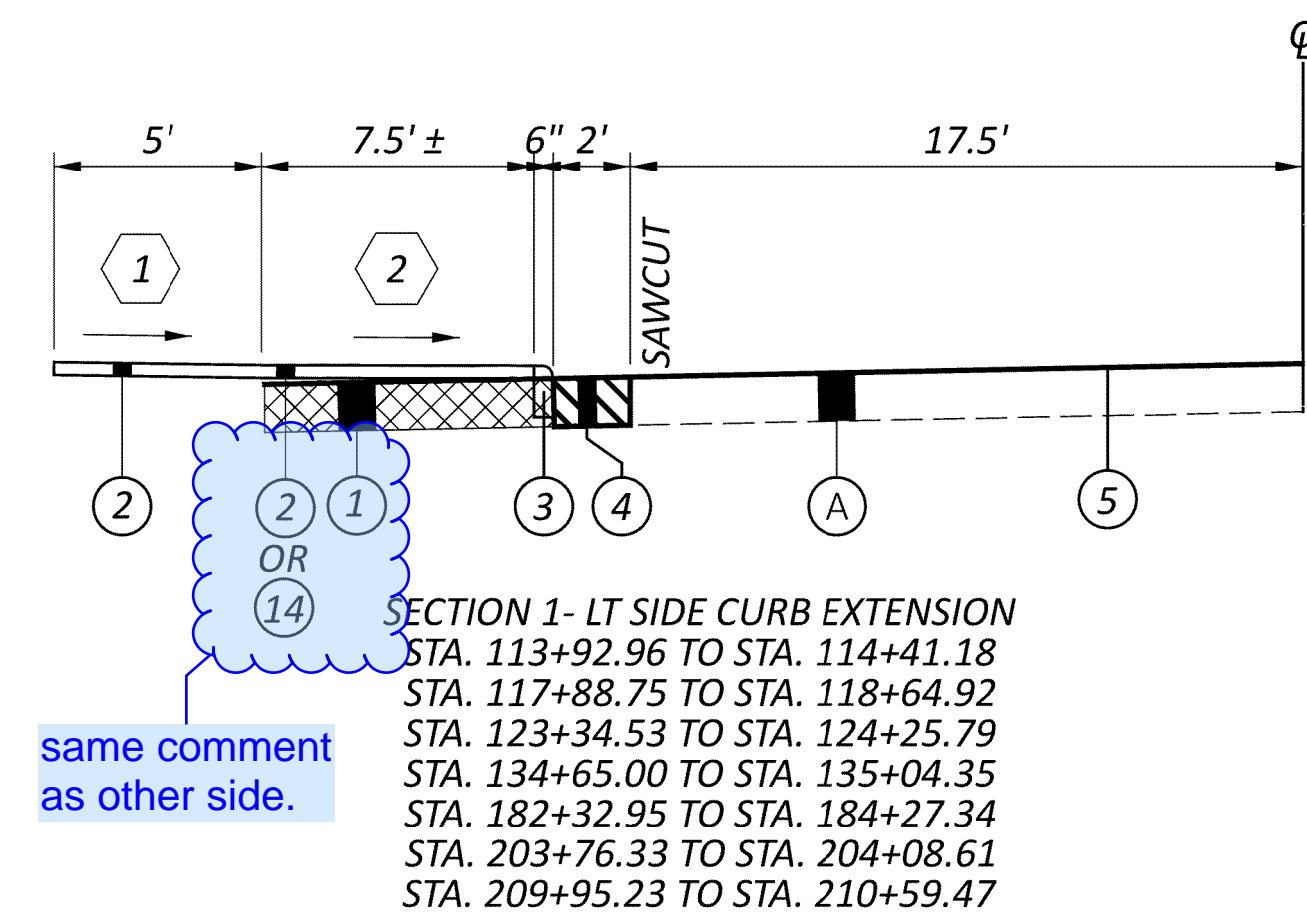
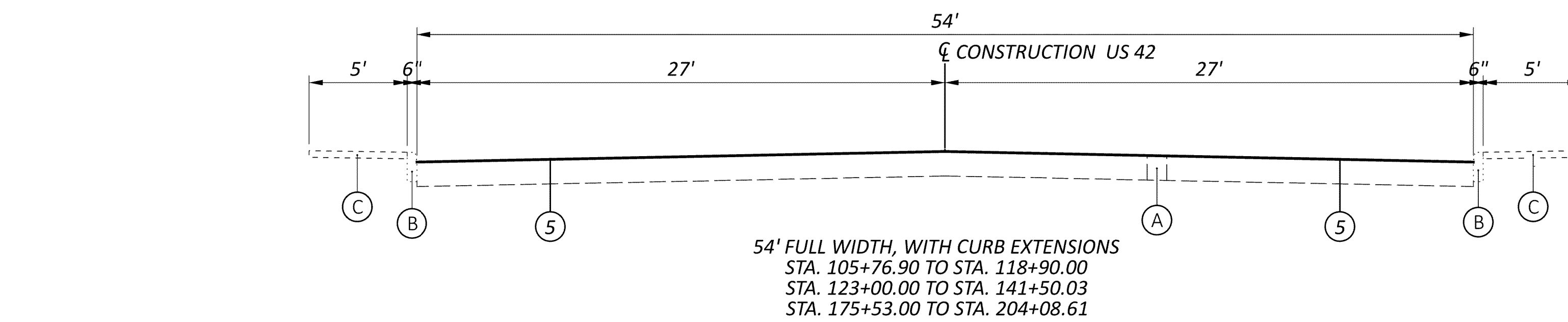
CURVE DATA
 P.I. = STA. 212+03.61
 $\Delta = 03^{\circ}29'59''$ LT
 $Dc = 01^{\circ}59'59''$
 $R = 2,865.00'$
 $T = 87.53'$
 $L = 175.00'$
 $E = 1.34'$



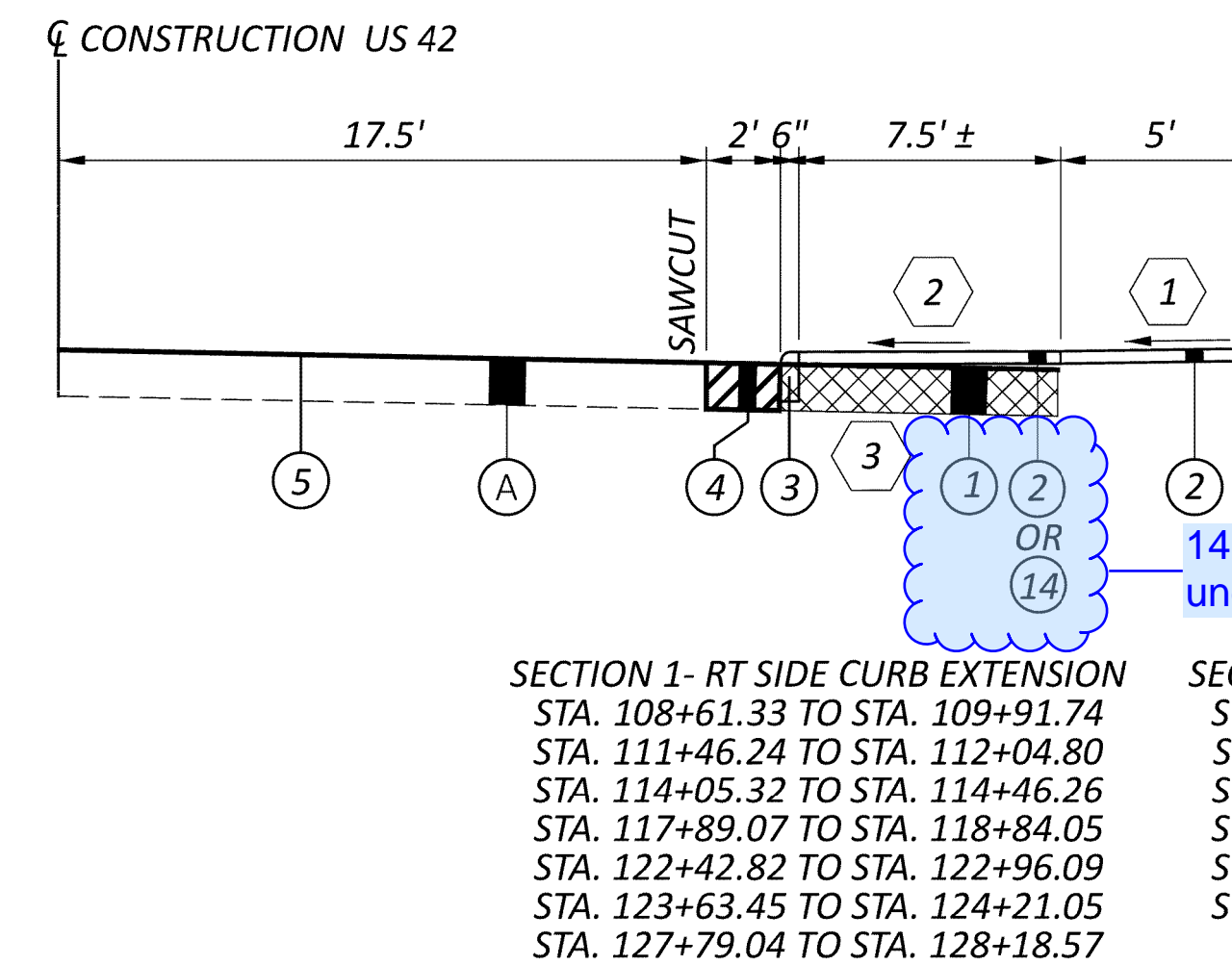
SCHEMATIC PLAN
 STA. 205+00 TO STA. 224+00

DESIGN AGENCY
CMT
 CMT
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
SHEET	123369
TOTAL	P.6
	117

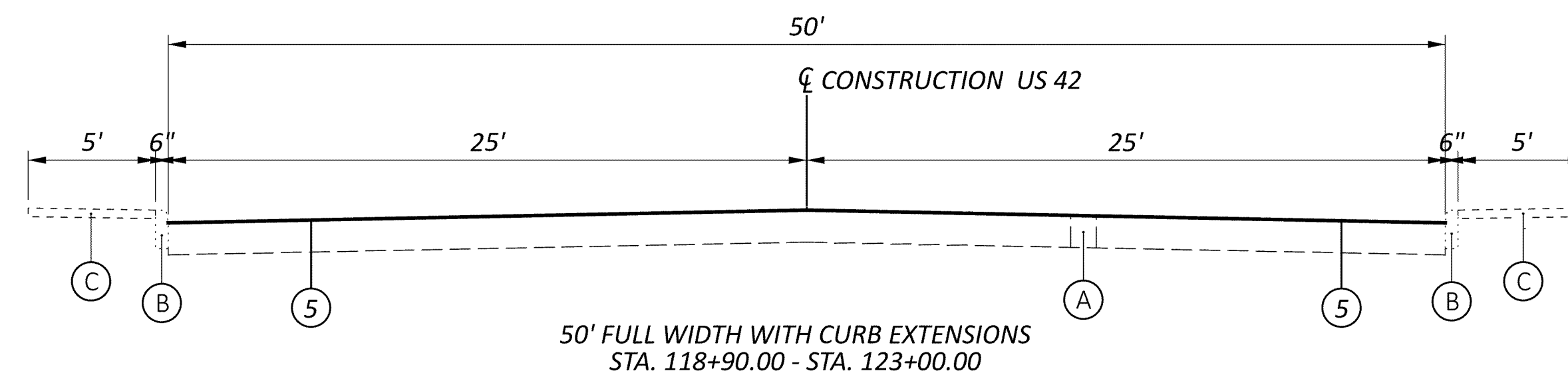


- ① 1.56% UNLESS OTHERWISE NOTED ON PLANS
- ② SLOPE VARIES, SEE CURB RAMP AND INTERSECTION DETAILS
- ③ CONTRACTOR IS TO FILL AND COMPACT VOID LEFT FROM PAVEMENT REMOVAL WITH ITEM 203-EMBANKMENT BASE UP TO BOTTOM OF PROPOSED WALK ELEVATION



SECTION 1- RT SIDE CURB EXTENSION
 STA. 128+45.59 TO STA. 128+85.00
 STA. 130+32.07 TO STA. 130+76.91
 STA. 131+00.49 TO STA. 132+14.15
 STA. 135+25.19 TO STA. 135+67.18
 STA. 176+60.10 TO STA. 176+94.70
 STA. 183+32.76 TO STA. 183+66.66

14 should be under 1.



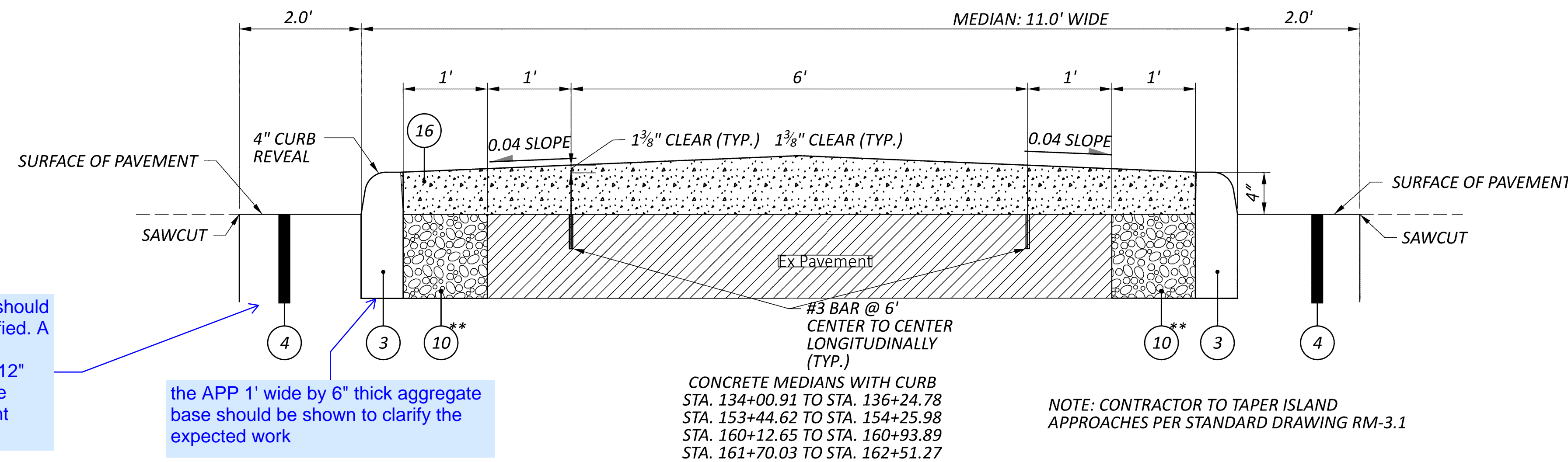
LEGEND

- ① ITEM 202 - PAVEMENT REMOVED, ASPHALT CONCRETE
- ② ITEM 608 - 4" CONCRETE WALK
- ③ ITEM 609 - CURB, TYPE 4-C, AS PER PLAN
- ④ ITEM 253 - PAVEMENT REPAIR, AS PER PLAN
- ⑤ ITEM 421 - MICROSURFACING, SURFACE COURSE
- ⑥ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"
- ⑦ ITEM 407 - NON-TRACKING TACK COAT
- ⑧ ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG 64-22
- ⑨ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22, (449)
- ⑩ ITEM 304 - 6" AGGREGATE BASE
- ⑪ ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 (449), (PG 64-22)
- ⑫ ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449)
- ⑬ ITEM 407 - NON-TRACKING TACK COAT
- ⑭ ITEM 203 - EMBANKMENT
- ⑮ ITEM 623 - SEEDING AND MULCHING
- ⑯ ITEM 609 - 4" CONCRETE TRAFFIC ISLAND
- A EXISTING ASPHALT PAVEMENT
- B EXISTING CURB
- C EXISTING WALK

ODOT-Let projects require an APP note. See attached.

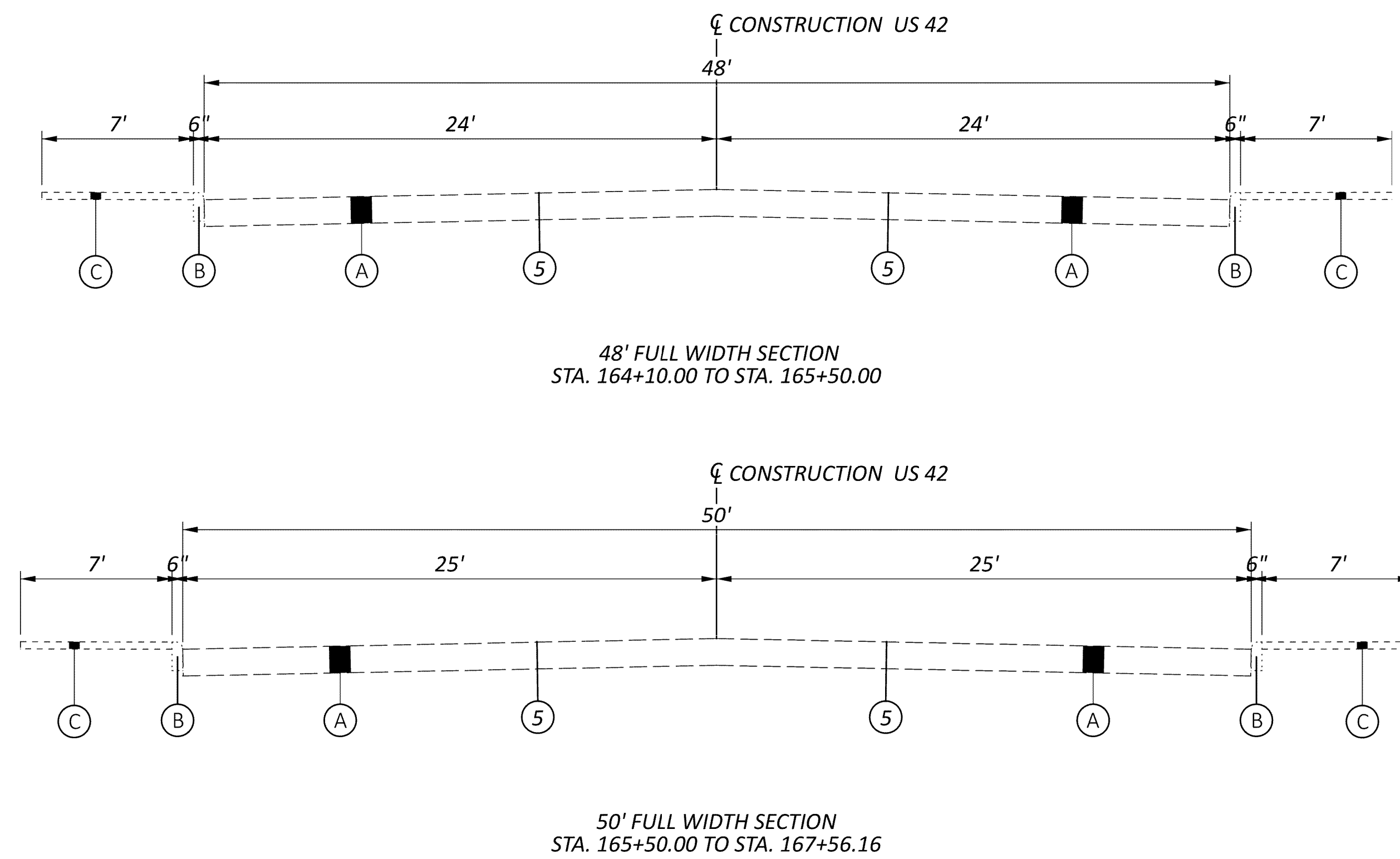
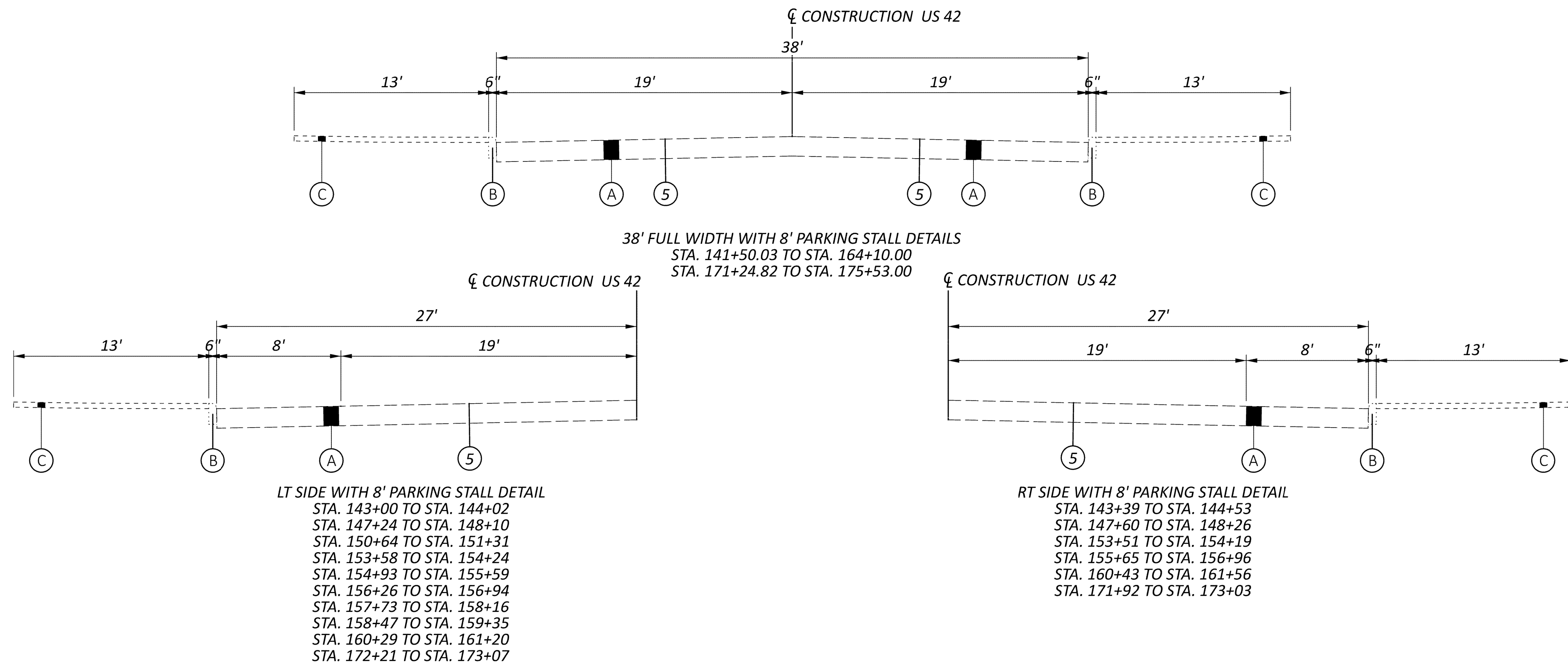
* CONTRACTOR IS TO SAWCUT TO SOUND PAVEMENT

** EXISTING PAVEMENT TO BE REMOVED AS NEEDED FOR INSTALLATION OF CONCRETE MEDIAN. BACKFILL AND COMPACT VOIDS WITH ITEM 304 - AGGREGATE BASE MATERIAL.



a depth should be specified. A type 4-C extends 12" below the pavement surface

the APP 1' wide by 6" thick aggregate base should be shown to clarify the expected work

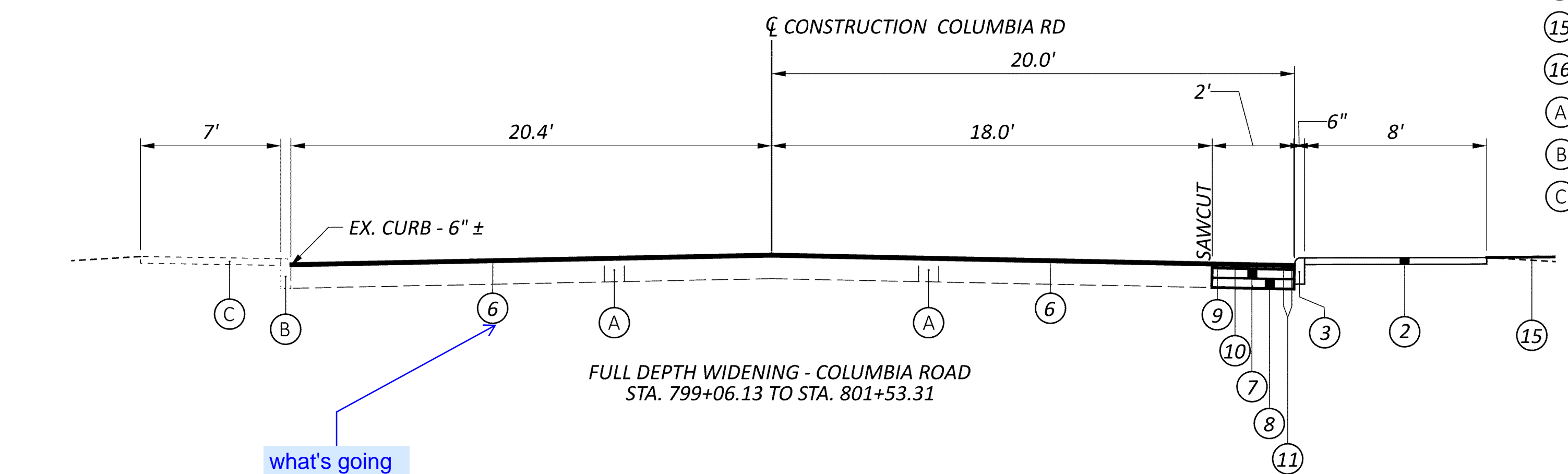
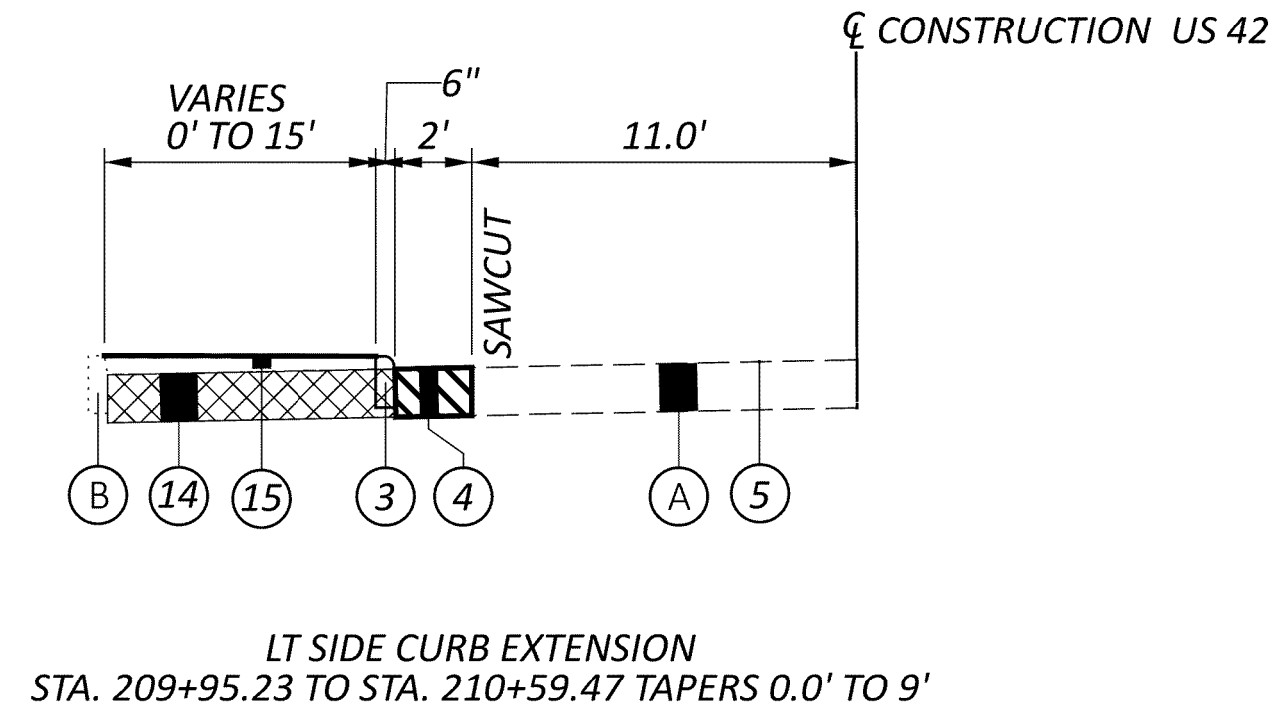
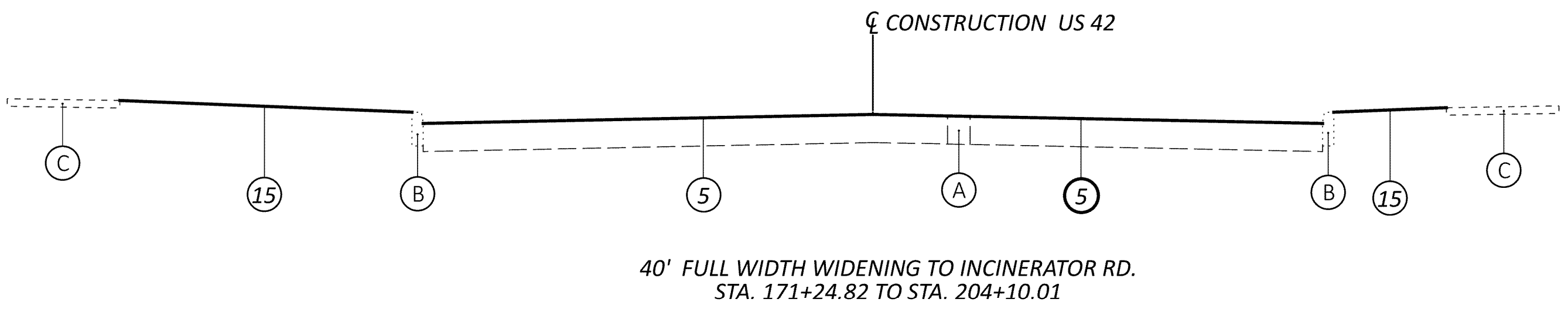
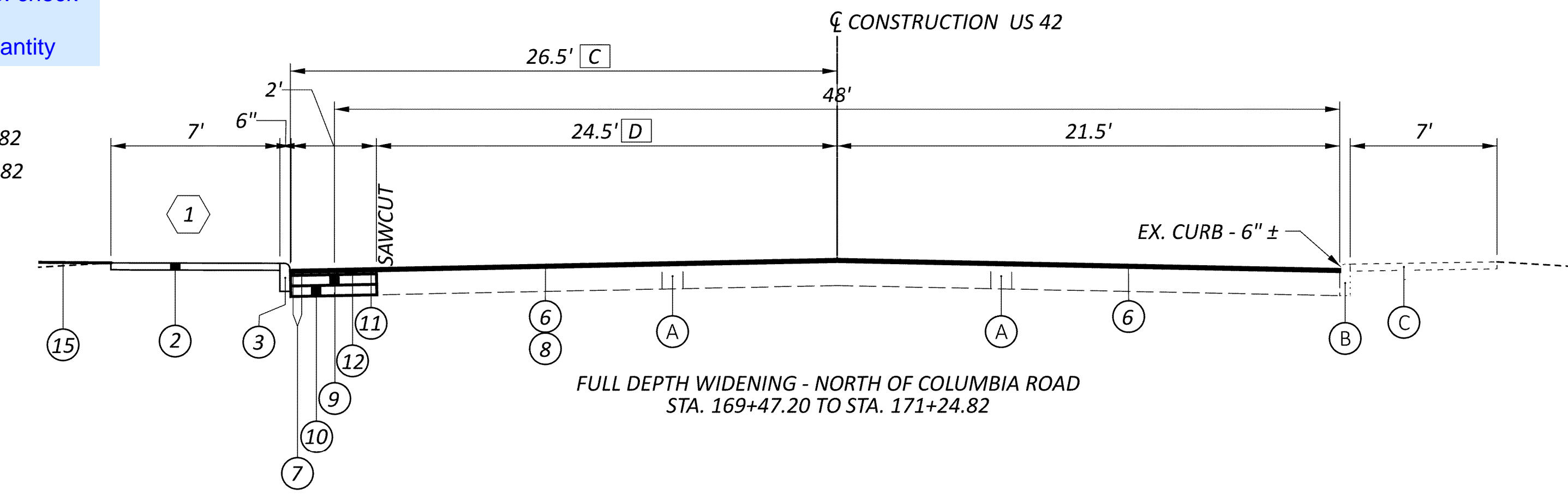
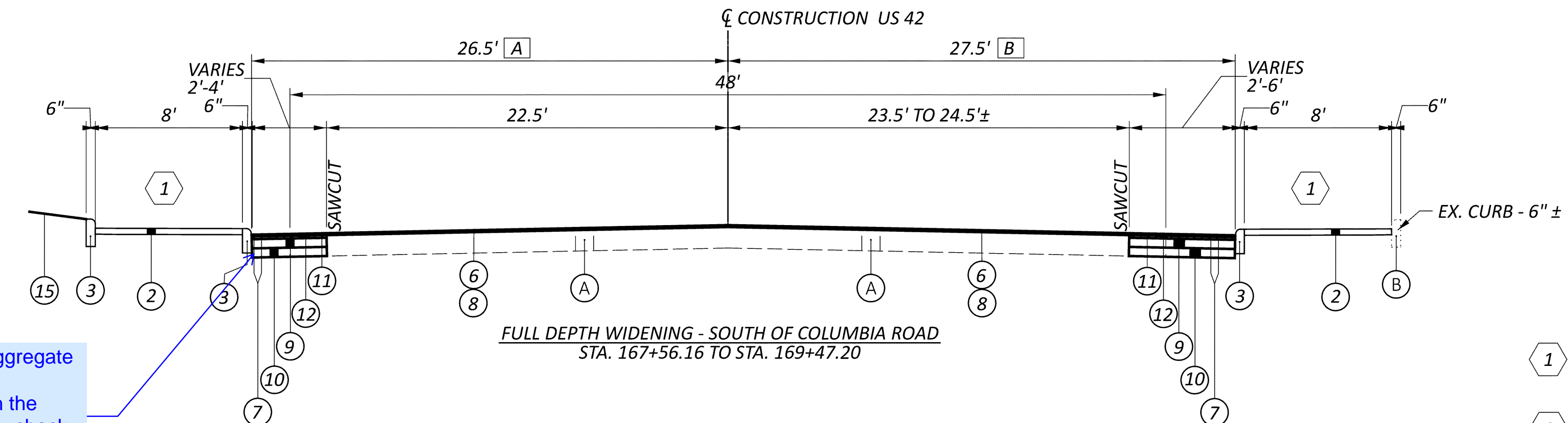


- LEGEND**
- ① ITEM 202 - PAVEMENT REMOVED, ASPHALT CONCRETE
 - ② ITEM 608 - 4" CONCTETE WALK
 - ③ ITEM 609 - CURB, TYPE 4-C, AS PER PLAN
 - ④ ITEM 253 - PAVEMENT REPAIR, AS PER PLAN
 - ⑤ ITEM 421 - MICROSURFACING, SURFACE COURSE
 - ⑥ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"
 - ⑦ ITEM 407 - NON-TRACKING TACK COAT
 - ⑧ ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG 64-22
 - ⑨ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22, (449)
 - ⑩ ITEM 304 - 6" AGGREGATE BASE
 - ⑪ ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 (449), (PG 64-22)
 - ⑫ ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449)
 - ⑬ ITEM 407 - NON-TRACKING TACK COAT
 - ⑭ ITEM 203 - EMBANKMENT
 - ⑮ ITEM 623 - SEEDING AND MULCHING
 - ⑯ ITEM 609 - 4" CONCRETE TRAFFIC ISLAND
 - (A) EXISTING ASPHALT PAVEMENT
 - (B) EXISTING CURB
 - (C) EXISTING WALK

- A 24.5' +/- STA. 167+56.16 TO STA. 168+28.70
VARIES FROM 24.48' TO 26.50' FROM STA. 168+28.70 TO 168+69.99
- B 23.5' +/- STA. 167+56.16 TO STA. 167+58.06
VARIES FROM 23.50' TO 27.50' FROM STA. 167+58.06 TO 167+80

some of this aggregate quantity will be addressed with the curb, APP note. check for potential overlapping quantity

- C VARIES FROM 26.50' TO 25.05' FROM STA. 170+95.31 TO STA. 171+24.82
- D VARIES FROM 24.50' TO 23.05' FROM STA. 170+95.31 TO STA. 171+24.82



what's going back in the planing area?

- 1 1.56% UNLESS OTHERWISE NOTED ON PLANS
- 2 SLOPE VARIES, SEE CURB RAMP AND INTERSECTION DETAILS

- LEGEND
- 1 ITEM 202 - PAVEMENT REMOVED, ASPHALT CONCRETE
 - 2 ITEM 608 - 4" CONCTETE WALK
 - 3 ITEM 609 - CURB, TYPE 4-C, AS PER PLAN
 - 4 ITEM 253 - PAVEMENT REPAIR, AS PER PLAN
 - 5 ITEM 421 - MICROSURFACING, SURFACE COURSE
 - 6 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"
 - 7 ITEM 407 - NON-TRACKING TACK COAT
 - 8 ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449), PG 64-22
 - 9 ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22, (449)
 - 10 ITEM 304 - 6" AGGREGATE BASE
 - 11 ITEM 441 - 1.5" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 (449), (PG 64-22)
 - 12 ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449)
 - 13 ITEM 407 - NON-TRACKING TACK COAT
 - 14 ITEM 203 - EMBANKMENT
 - 15 ITEM 623 - SEEDING AND MULCHING
 - 16 ITEM 609 - 4" CONCRETE TRAFFIC ISLAND
 - A EXISTING ASPHALT PAVEMENT
 - B EXISTING CURB
 - C EXISTING WALK

TYPICAL SECTIONS

DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWL 02/13/26

PROJECT ID
123369

SHEET TOTAL
P.9 | 117

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

GAS
DUKE ENERGY - GAS
RICHARD HACKER
139 EAST 4TH ST
CINCINNATI, OH 45202
513.287.4653

ELECTRIC
DUKE ELECTRIC - DISTRIBUTION
CHRIS TEPE
2010 DANA AVE
CINCINNATI, OH 45207
513.514.8209

DUKE ELECTRIC - TRANSMISSION
TIM MEYER
139 EAST 4TH ST
CINCINNATI, OH 45202
513.287.1266

TELECOM
ALTA FIBER
BRECK COWAN
221 EAST 4TH ST
CINCINNATI, OH 45202
513.565.7187

VERIZON (MCI)
ALLAN GUEST
120 RAVINE ST
AKRON, OH 44303
330.253.8267

SEWER
CITY OF CINCINNATI - MSD
RAY SCHORK
1081 WOODROW ST.
CINCINNATI, OHIO

GREATER CINCINNATI WATER WORKS
EARL BRATFISH
4747 SPRING GROVE AVE
CINCINNATI, OH 45232
EARL BRATFISH
513.591.5633

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

SURVEYING PARAMETERS - OHIO COUNTY COORDINATE SYSTEM (OCCS)

HAM-US.42-10.07-12.37 PID#123369
PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.
USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL:
POSITIONING METHOD: ODOT RTN, LEICA RTK
MONUMENT TYPE: TYPE B

VERTICAL POSITIONING:
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 18A

HORIZONTAL POSITIONING:
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS-80
COORDINATE SYSTEM: HAMILTON COUNTY (OCCS)
MAP PROJECTION: LAMBERT CONFORMAL CONIC
CENTRAL LATITUDE: N 39° 06' 00"
CENTRAL LONGITUDE: E 275° 24' 00"

FALSE NORTHING: 100000
FALSE EASTING: 50000
PROJECTION SCALE FACTOR: 1.000026

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

SUBGRADE IMPROVEMENT

NO LOCATIONS HAVE BEEN IDENTIFIED FOR REQUIRING SUBGRADE IMPROVEMENT BASED ON COMPLETION OF SOIL BORINGS. IF UNSUITABLE SOILS ARE ENCOUNTERED AS IDENTIFIED BY THE ENGINEER, THE UNSUITABLE SOIL SHALL BE EXCAVATED AND PAID FOR BY ITEM 204 EXCAVATION OF SUBGRADE, A LAYER OF ITEM 204 GEOTEXTILE FABRIC SHALL BE PLACED, AND THE SUBGRADE SHALL BE REPLACED USING ITEM 204 GRANULAR MATERIAL, TYPE B.

THE FOLLOWING QUANTITIES ARE PROVIDED FOR EXCAVATION AND REPLACEMENT OF UNSUITABLE SUBGRADE. THESE ITEMS SHALL NOT BE PERFORMED UNLESS DIRECTED BY THE CITY.

ITEM 204 - SUBGRADE COMPACTION	755	CY
ITEM 204 - PROOF ROLLING	0.4	HOUR
ITEM 204 - EXCAVATION OF SUBGRADE	28	CY
ITEM 204 - GRANULAR MATERIAL, TYPE B	28	CY
ITEM 204 - GEOTEXTILE FABRIC	755	SY

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2	EACH
659, TOPSOIL	118	CY
659, SEEDING AND MULCHING	1,061	SY
659, COMMERCIAL FERTILIZER	0.15	TON
659, LIME	0.22	ACRES
659, WATER	6	MGAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	14	0	14

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE THE BACK OF SIDEWALK, EXISTING RIGHT OF WAY, PROPOSED RIGHT OF WAY OR TEMPORARY RIGHT OF WAY, WHICHEVER IS GREATER.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA. ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

ITEM 609 - CURB, TYPE 4-C, AS PER PLAN

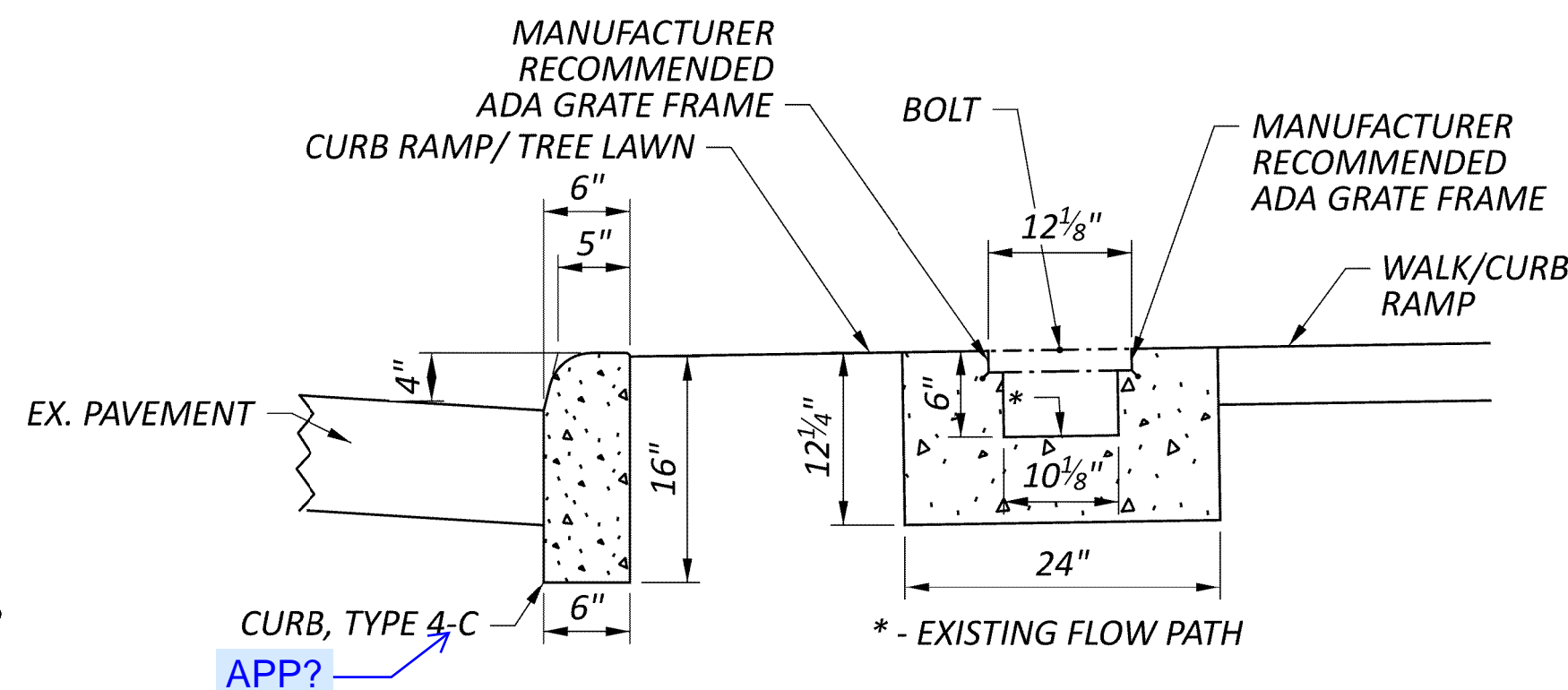
THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF CURB, TYPE 4-C AS PER BP-5.1 WITH THE FOLLOWING EXCEPTIONS.

AFTER PAVEMENT HAS BEEN REMOVED AND PRIOR TO THE INSTALLATION OF CURB. A 1- FOOT WIDE AND 6-INCH THICK COMPACTED BASE OF ITEM 304 - AGGREGATE BASE SHALL BE PROVIDED. THE BASE SHALL BE CENTERED ON THE PROPOSED CURB LOCATION. THE PROPOSED CURB HEIGHT SHALL TRANSITION FROM 4 INCHES TO 6 INCHES AT LOCATIONS SHOWN ON THE PLANS.

PAYMENT FOR THE ADDITIONAL WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 609 CURB, TYPE 4-C, AS PER PLAN.

ITEM 690 - SPECIAL - TRENCH DRAIN WITH ADA GRATE

THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT A GRATE SPANNING THE 8" GAP BETWEEN THE ROADWAY CURB AND BUMPOUT CURB. THE GRATE SHALL BE COMPLIANT WITH ADA REQUIREMENTS AND SLOPED AT 1.56% TOWARD THE ROADWAY. THE TRENCH DRAIN SHALL BE REMOVABLE FOR MAINTENANCE ACCESS. ITEMS SHALL BE APPROVED FROM THE ODOT QUALIFIED PRODUCTS LIST MANUFACTURED BY ONE OF THE FOLLOWING: DURA TRENCH, ZURN INDUSTRIES, ACO INDUSTRIES, OR APPROVED EQUAL.



ITEM 611 - SPECIAL - TRENCH DRAIN WITH ADA GRATE 218 FEET

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

IT IS THE INTENT THAT THE EXISTING PAVEMENT SHALL NOT BE REMOVED OR DISTURBED FOR CONSTRUCTION OF THE PROPOSED CURB AND CURB RAMPS. CURB RADII SHOWN SHALL GENERALLY MATCH THE EXISTING LAYOUTS.

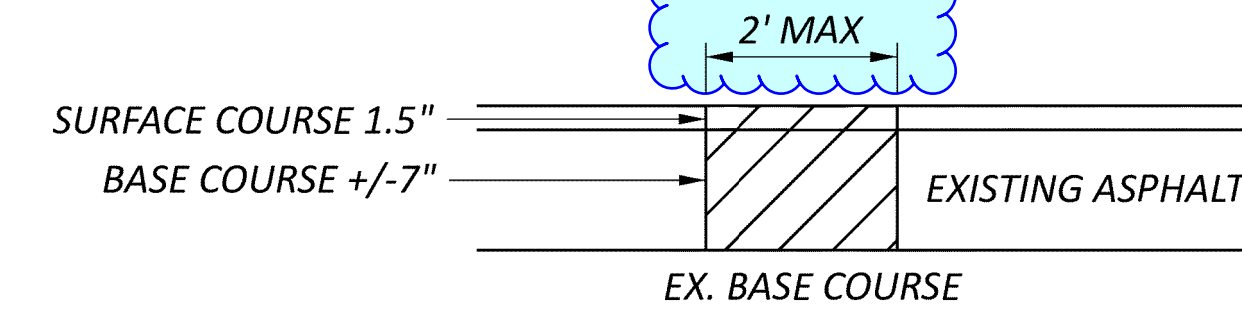
AREAS REQUIRING REPAIR NOT DUE TO CONTRACTOR MEANS AND METHODS AND APPROVED BY THE ENGINEER SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN. THIS WORK SHALL MEET THE REQUIREMENTS OF ITEM 253 AND INCLUDE THE FOLLOWING: SAWCUTTING, PAVEMENT REMOVAL, BASE COMPACTION AND PLACEMENT OF PAVEMENT TO MATCH THE EXISTING DEPTH.

THE BUILDUP OF THE REPAIRED PAVEMENT SHALL BE ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (449) UP TO 1.5" BELOW THE EXISTING TOP OF PAVEMENT ELEVATION, COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS, AND 1.5" ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (449) TO MATCH EXISTING TOP OF PAVEMENT ELEVATION.

REPAIR DUE TO CONTRACTOR MEANS AND METHODS SHALL BE REPAIRED AS NOTED ABOVE AT THE COST OF THE CONTRACTOR.

A CONTINGENCY QUANTITY FOR USE AS DIRECTED BY THE ENGINEER HAS BEEN PROVIDED:

ITEM 253 PAVEMENT REPAIR, AS PER PLAN - 580 SY



Provide a typical section for the curb and curb ramp repair showing the 2' wide pavement replacement in front of curb. If the City's intent is to not to replace any pavement please confirm. Is it feasible to assume the existing pavement is in good shape such that the existing sawcut pavement face can be used as a form for concrete curb/ramp?

replace curb but do not disturb existing pavement? Intend to sawcut asphalt in exact location of curb and pour curb flush against sawcut? Usually 2' pavement replacement is specified with new curb ramps

ODOT Let projects use CY to provide more flexibility with the depth during construction.

need to make at least 3' wide to allow for compaction equipment unless unconfined edge

MAINTAINING TRAFFIC

A MINIMUM OF (1) LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, TEMPORARY SURFACES USING ITEMS 410 AND 614.

ALL EXISTING LANES, INCLUDING RAMPS, SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT BETWEEN OCTOBER 15TH AND APRIL 1ST. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 85 PER CALENDAR DAY.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

- NEW YEAR'S (OBSERVED)
- GENERAL/REGULAR ELECTION DAY ((NOV)
- THANKSGIVING
- MEMORIAL DAY
- CHRISTMAS (OBSERVED)
- FOURTH OF JULY (OBSERVED)
- LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY	(GEN./REG. ELECTION) 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY	(THANKSGIVING ONLY) 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRAIN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

this doesn't match table

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER LANE
1 LANE OF US-42 AND ALL SIDE STREETS FROM GALBRAITH ROAD TO COOPER ROAD	7 AM TO 9 AM AND 3PM TO 7 PM	1 MIN	\$85

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B	20 CU. YD.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	20 CU. YD.
ITEM 616, WATER	10 M. GAL.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

Does this mean traffic is reduced to 1 lane in each direction or does this mean 1 lane of two way traffic using flaggers is permitted?

The intent is not clear.

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 1.5 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:
ITEM 616, WATER 10 M. GAL.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICES IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

This is included with other phase 1 work. If the medians are completed last, how will traffic be maintained? There is no work area.

The medians need to be completed before the curb bumpouts are constructed.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEO'S DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03. THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
200 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS. INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HRS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

SEQUENCE OF CONSTRUCTION

USE NOTED ODOT STANDARD CONSTRUCTION DRAWINGS FOR TEMPORARY TRAFFIC CONTROL AS NEEDED BASED ON PHASE OF CONSTRUCTION. INSTALL TEMPORARY STRIPING AS NEEDED TO MAINTAIN TRAFFIC OPERATIONS. ALL TEMPORARY STRIPING SHALL BE INCLUDED AT THE COST OF ITEM 614 MAINTAINING TRAFFIC. THE FOLLOW SEQUENCE OF CONSTRUCTION IS PROVIDED TO THE CONTRACTOR, MODIFICATIONS MAY BE MADE BUT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PHASE 1

FROM GALBRAITH TO SOUTH LIMITS OF PAVEMENT WIDENING AND RESURFACING:

CONSTRUCT STORM SEWER AND DRAINAGE INLETS AS SHOWN ON THE PLANS.

REMOVE PAVEMENT MARKINGS AND RESTRIPE WITH TEMPORARY MARKINGS WITH PROPOSED PERMANENT PAVEMENT MARKINGS LAYOUT. MATCH EXISTING MARKINGS AT COLUMBIA AVENUE INTERSECTION.

INSTALL CURB EXTENSIONS, CURB RAMPS AND SIDEWALK IMPROVEMENTS IN THE NORTHBOUND DIRECTION.

INSTALL CURB EXTENSIONS, CURB RAMPS AND SIDEWALK IMPROVEMENTS IN THE SOUTHBOUND DIRECTION.

INSTALL MEDIANS.

PHASE 2

detail SCD like in Phase 3

COLUMBIA AVENUE:

CLOSE OUTSIDE LANE IN NORTHBOUND DIRECTION ON US-42 AND THRU TRAFFIC IN EASTBOUND DIRECTION IN SOUTHEAST QUADRANT ALONG US-42 AND COLUMBIA AVENUE. CONSTRUCT STORM SEWER IMPROVEMENTS, PAVEMENT WIDENING, SIGNAL IMPROVEMENTS, SIDEWALKS AND CURB RAMPS. CONSTRUCT PAVEMENT WIDENING TO INTERMEDIATE COURSE ONLY.

RECONSTRUCT THE RAMP IN THE NORTHEAST QUADRANT.

OPEN US-42 NORTHBOUND COMBINATION THRU-RIGHT TO NORMAL OPERATIONS WITH TEMPORARY STRIPING AS NECESSARY TO MATCH EXISTING CONDITIONS.

CLOSE OUTSIDE LANE IN SOUTHBOUND DIRECTION ON US-42 AND THRU LANE IN EASTBOUND DIRECTION IN SOUTHWEST AND NORTHWEST QUADRANTS. COMBINE EASTBOUND COLUMBIA TRAFFIC TO A SINGLE COMBINATION LEFT, THROUGH AND RIGHT TURN LANE. CONSTRUCT PAVEMENT WIDENING, SIGNAL IMPROVEMENTS, SIDEWALKS AND CURB RAMPS. CONSTRUCT PAVEMENT WIDENING TO INTERMEDIATE COURSE ONLY.

OPEN US-42 AND COLUMBIA AVENUE TO NORMAL OPERATIONS WITH TEMPORARY STRIPING AS NECESSARY TO MATCH EXISTING CONDITIONS.

PHASE 3

FROM NORTH LIMITS OF PAVEMENT WIDENING AND RESURFACING:

CLOSE OUTSIDE LANE IN BOTH DIRECTION PER ODOT SCD-95.31 TO CONSTRUCT CURB EXTENSIONS WITHIN THOSE LANES. CLOSURES SHALL BE LOCALIZED ONLY TO THE AREAS NEEDED FOR CONSTRUCTION.

INSTALL CURB EXTENSIONS AND SIDEWALK IMPROVEMENTS.

WHERE CURB EXTENSIONS WERE CONSTRUCTED, TEMPORARY TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL MICROSURFACING AND PERMANENT MARKINGS ARE COMPLETED.

PHASE 4

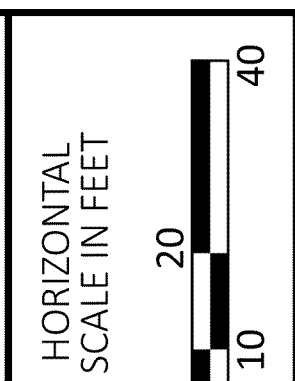
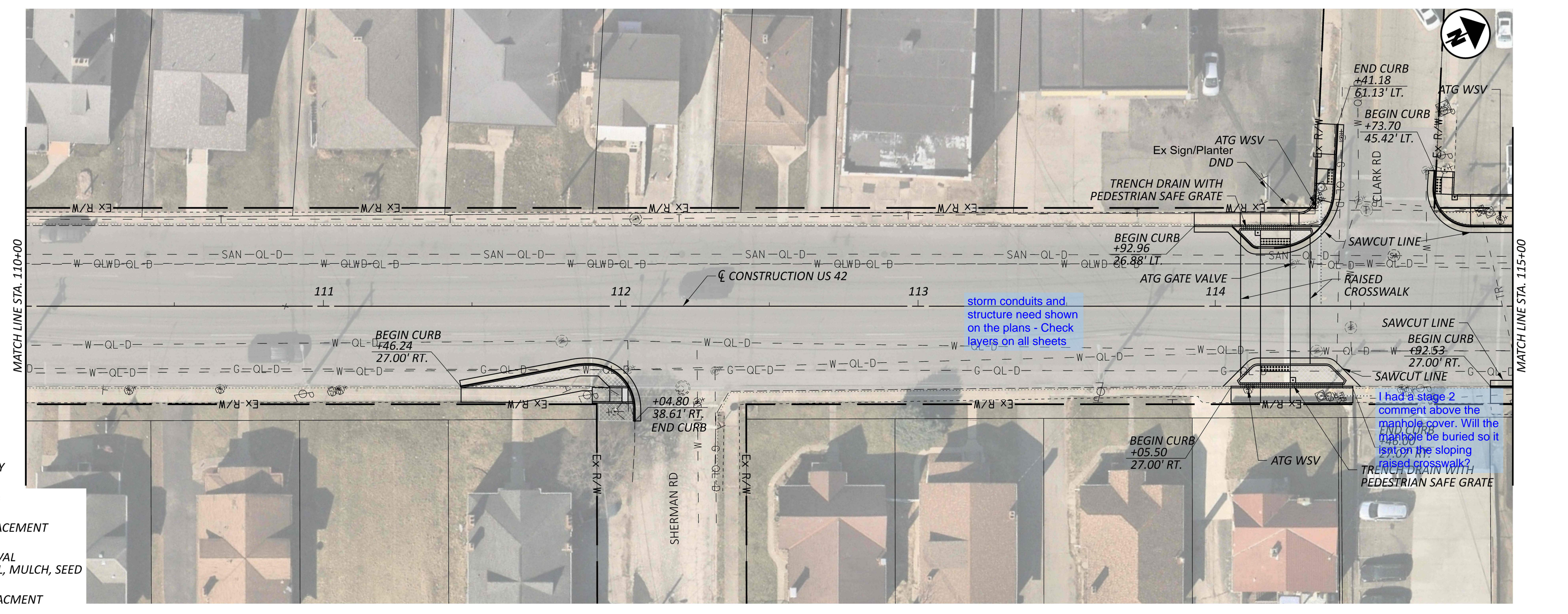
ENTIRE PROJECT LIMITS:

MILL COLUMBIA AVENUE INTERSECTION PAVEMENT AS SHOWN. MICROSURFACE FROM GALBRAITH TO NORTHERN PROJECT LIMITS.

INSTALL SURFACE COURSE AT COLUMBIA AVENUE INTERSECTION AS SHOWN ON THE PLANS.

INSTALL PAVEMENT STRIPING AND TRAFFIC CONTROL DEVICES FOR ENTIRE PROJECT LIMITS.

	PLANING/OVERLAY
	MICROSURFACING
	FULL DEPTH REPLACEMENT WITH OVERLAY
	PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
	FULL DEPTH REPLACEMENT



PLAN SHEET
STA. 105+00 TO STA. 115+00

DESIGN AGENCY
CMT
CMT ENGINEERING, INC.
1777 WASHINGTON VILLAGE DR
DAYTON, OHIO 45424
www.cmtengr.com

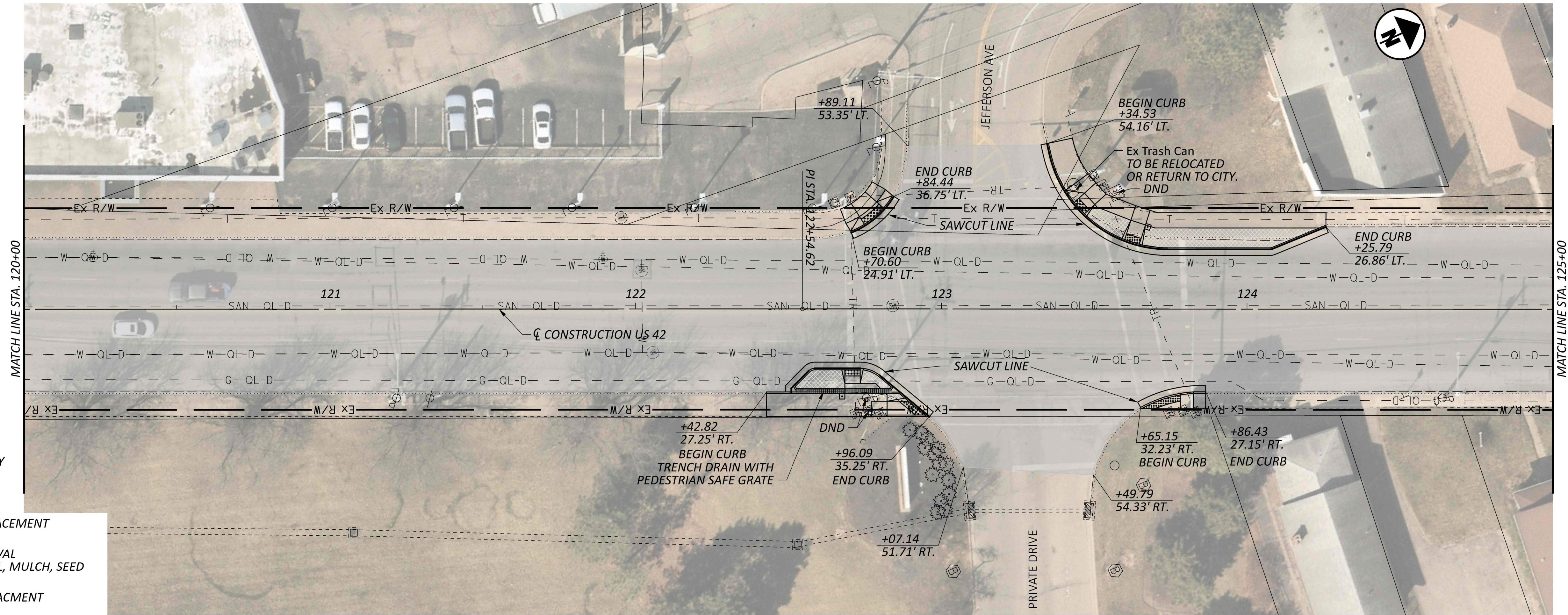
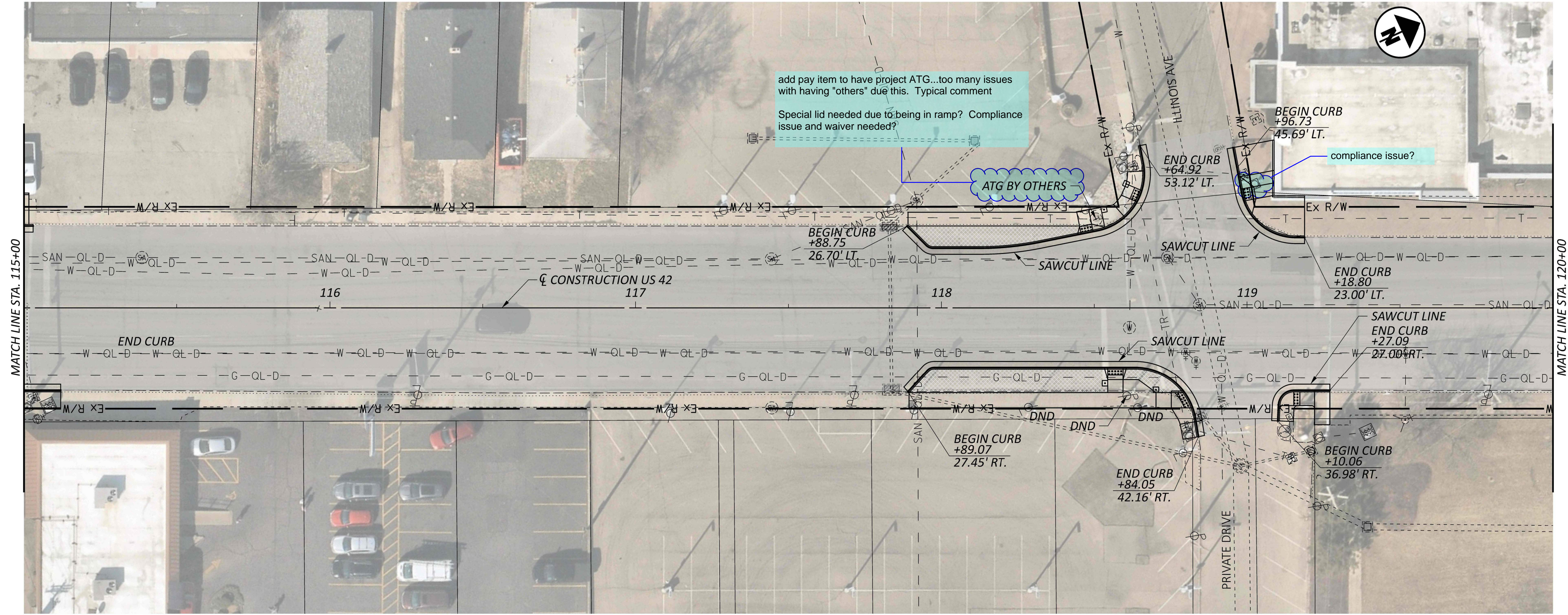
DESIGNER
LDW

REVIEWER
JWL 02/13/26

PROJECT ID
123369

SHEET TOTAL
P.12 117

- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT

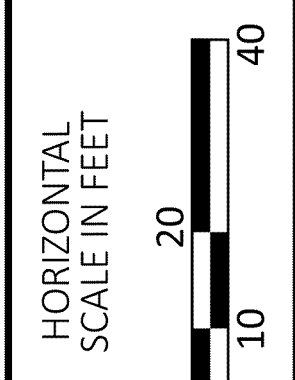


add pay item to have project ATG...too many issues with having "others" due this. Typical comment
Special lid needed due to being in ramp? Compliance issue and waiver needed?

compliance issue?

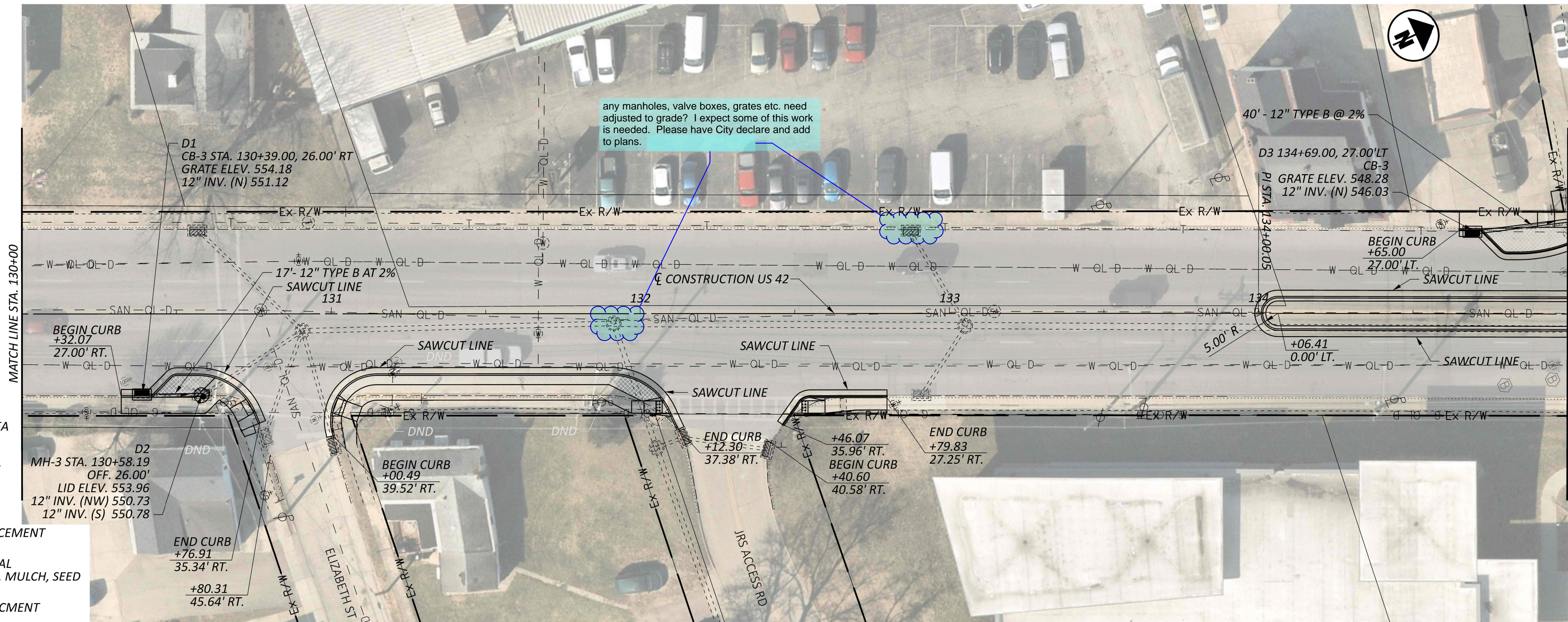
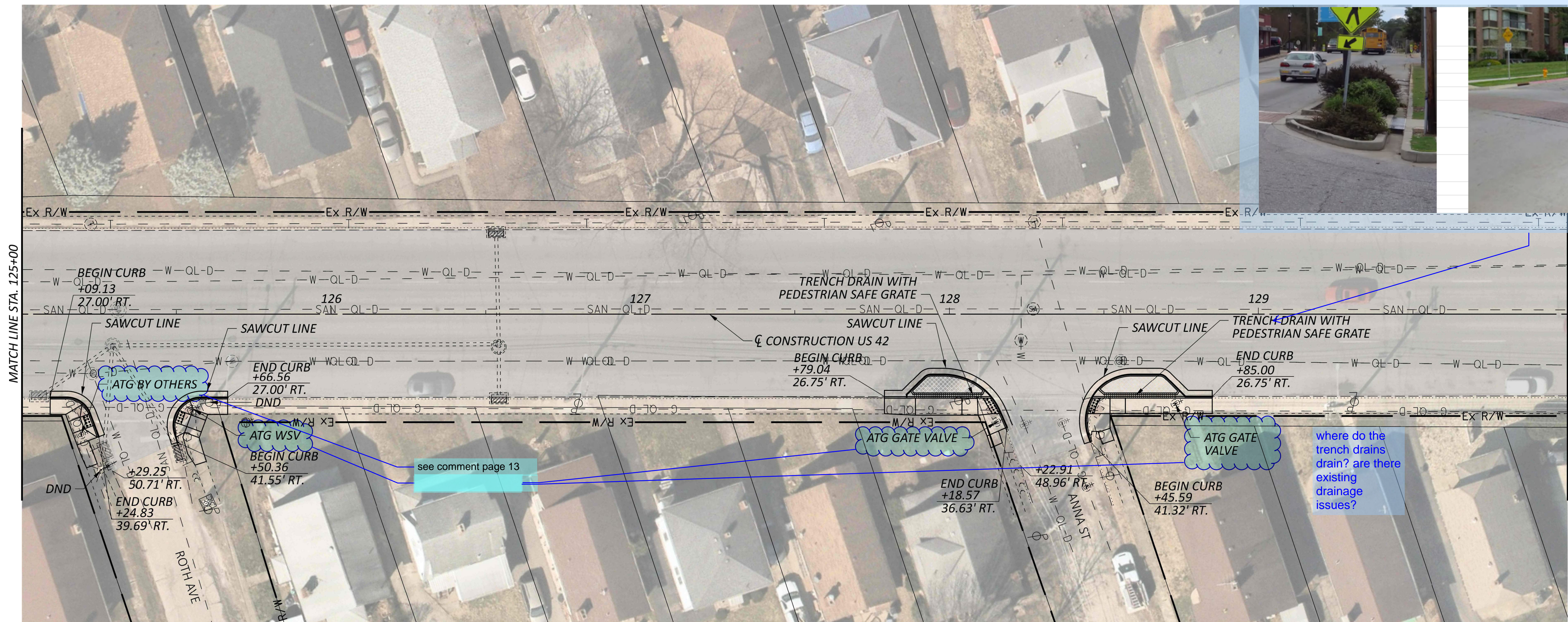
ATG BY OTHERS

Ex Trash Can TO BE RELOCATED OR RETURN TO CITY. DND



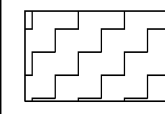





PLAN SHEET
STA. 115+00 TO STA. 125+00

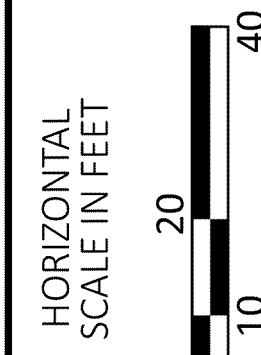
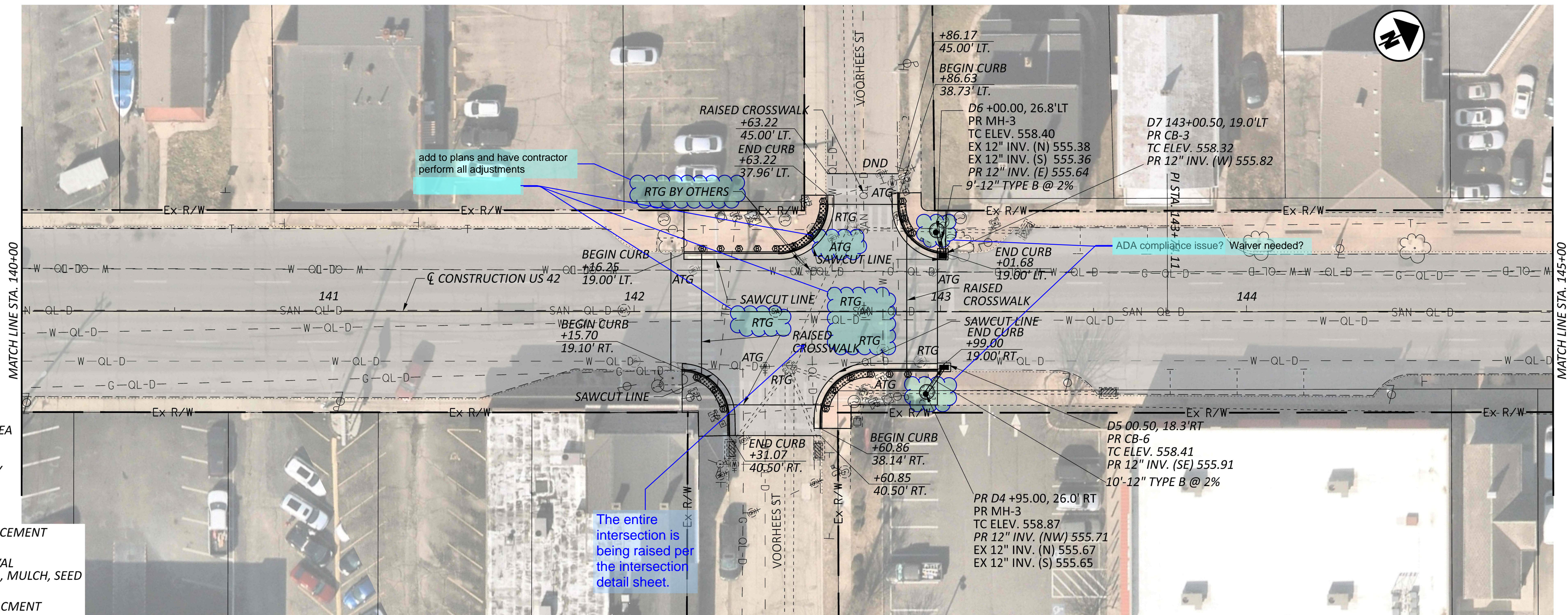
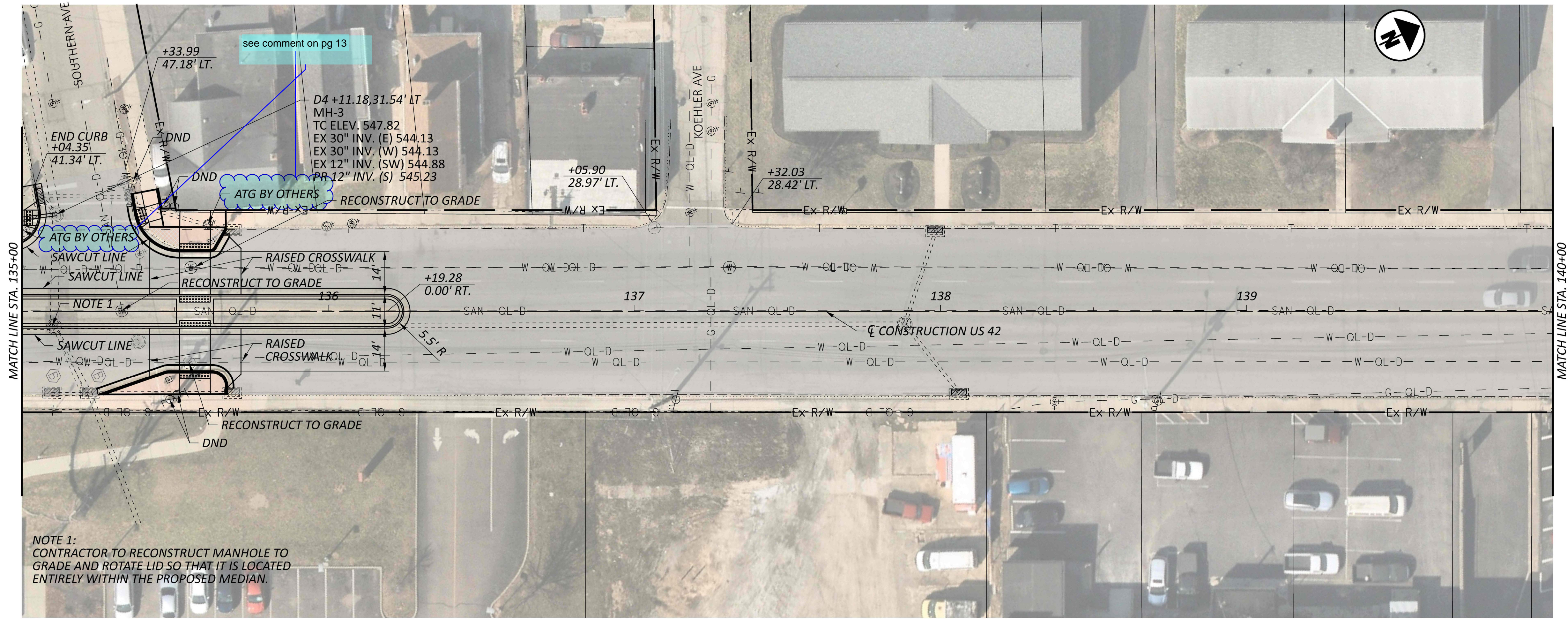
DESIGN AGENCY	
CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45424 www.cmtengr.com	
DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.13
TOTAL	117



- EX. PAVEMENT AREA TO REMAIN
- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT



-  EX. PAVEMENT AREA TO REMAIN
-  PLANING/OVERLAY
-  MICROSURFACING
-  FULL DEPTH REPLACEMENT WITH OVERLAY
-  PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
-  FULL DEPTH REPLACEMENT

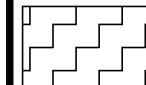







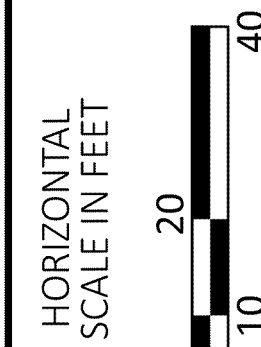
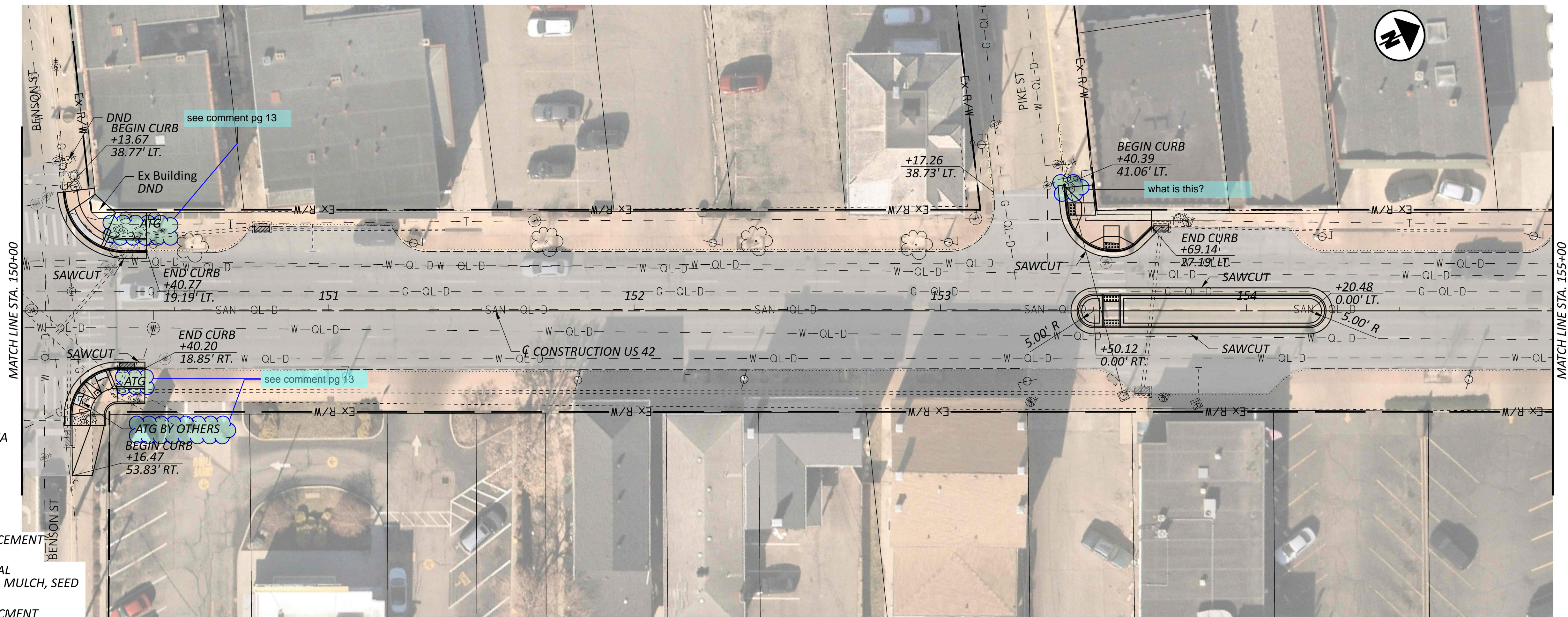
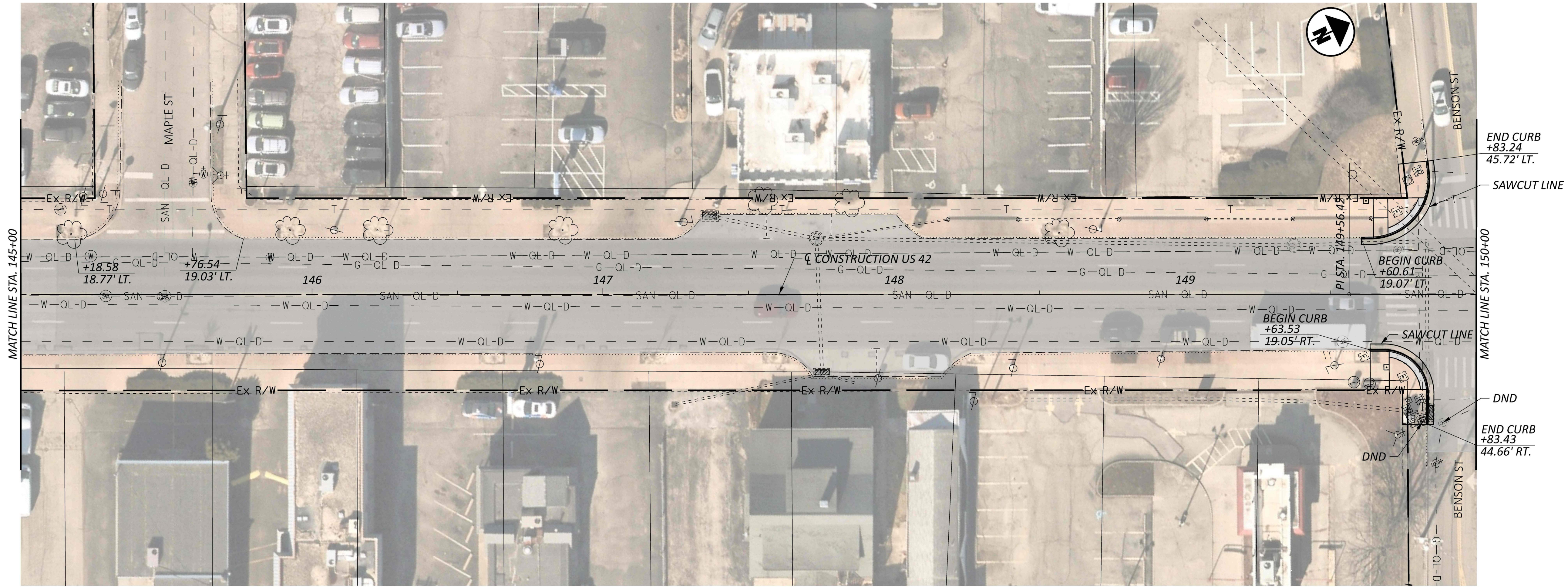
PLAN SHEET
 STA. 135+00 TO STA. 145+00

DESIGN AGENCY	
	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.15	117


HAM US 42 10.07 READING RD

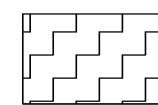





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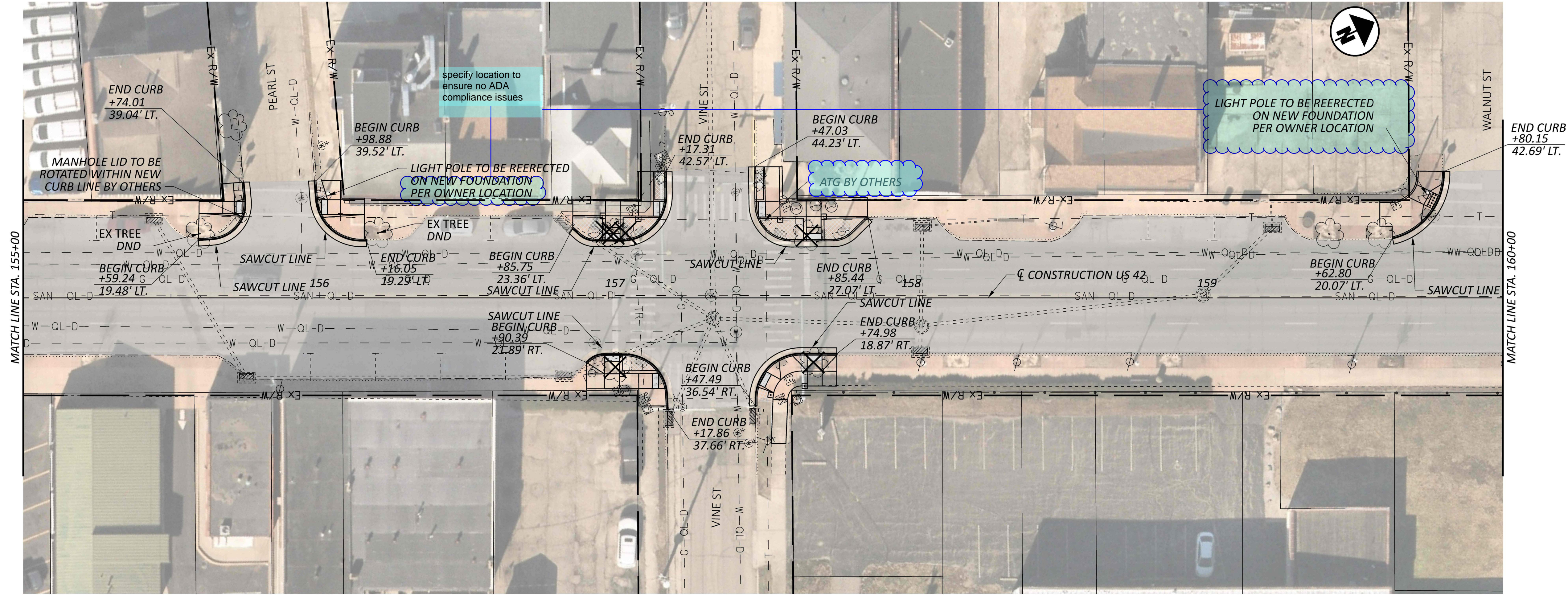
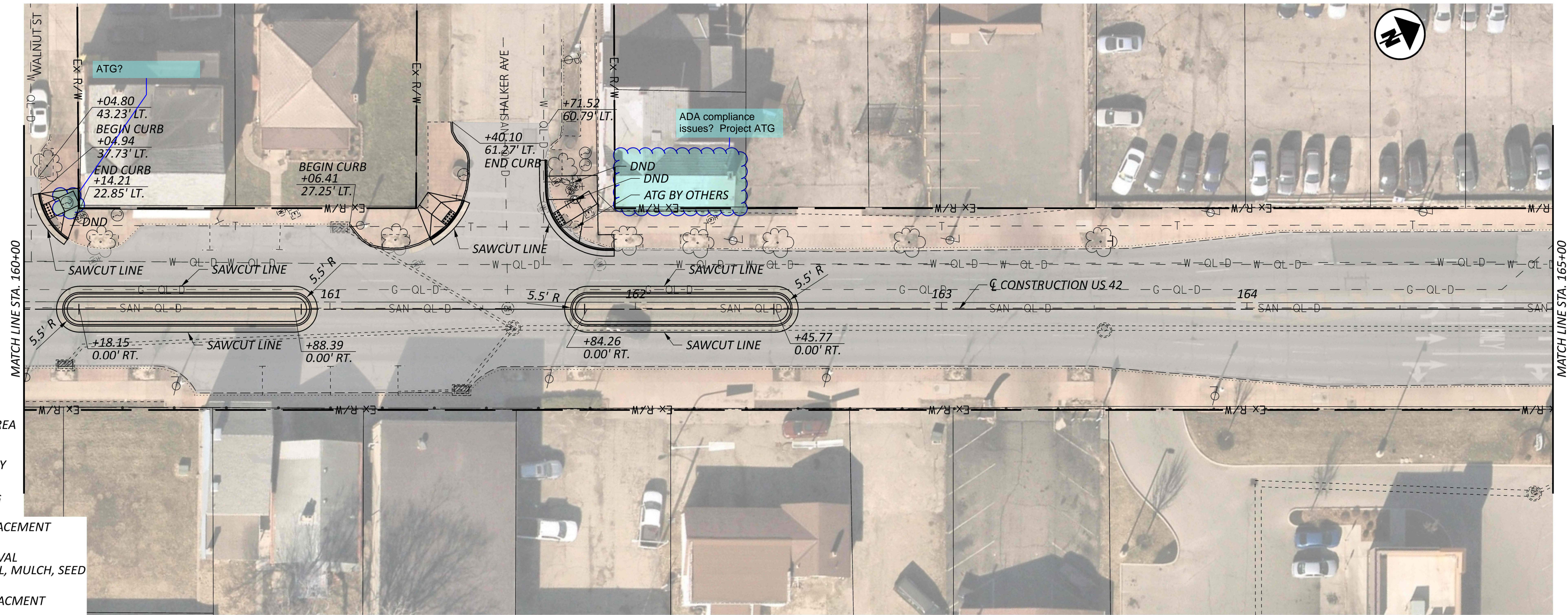
-  EX. PAVEMENT AREA TO REMAIN
-  PLANING/OVERLAY
-  MICROSURFACING
-  FULL DEPTH REPLACEMENT WITH OVERLAY
-  PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
-  FULL DEPTH REPLACMENT



PLAN SHEET
STA. 145+00 TO STA. 155+00

DESIGN AGENCY	
	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.16	117

-  EX. PAVEMENT AREA TO REMAIN
-  PLANING/OVERLAY
-  MICROSURFACING
-  FULL DEPTH REPLACEMENT WITH OVERLAY
-  PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
-  FULL DEPTH REPLACEMENT



DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

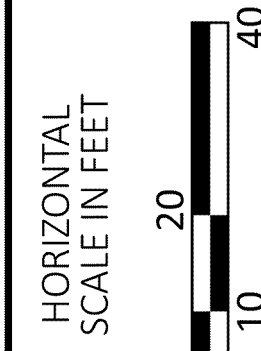
DESIGNER
 LDW

REVIEWER
 JWL 02/13/26

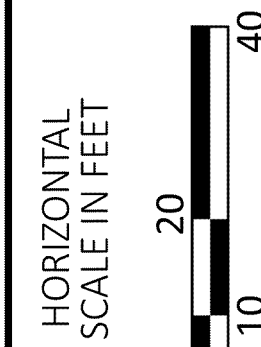
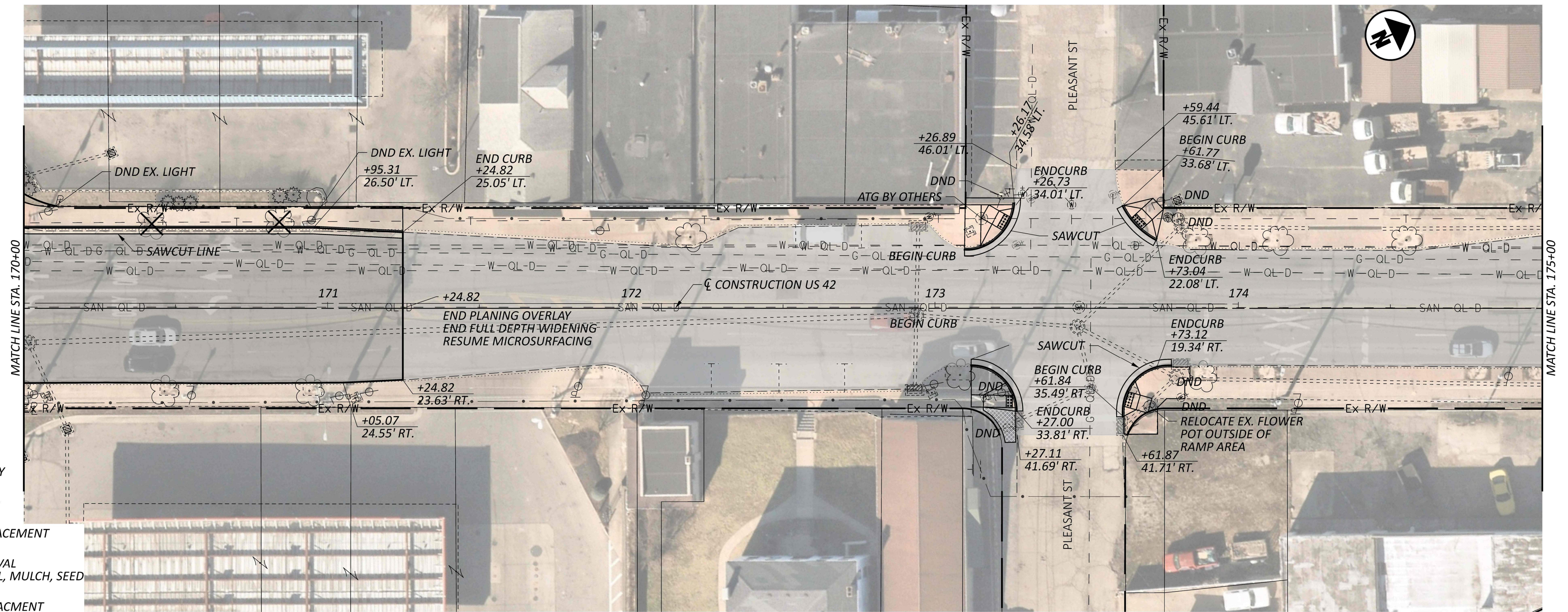
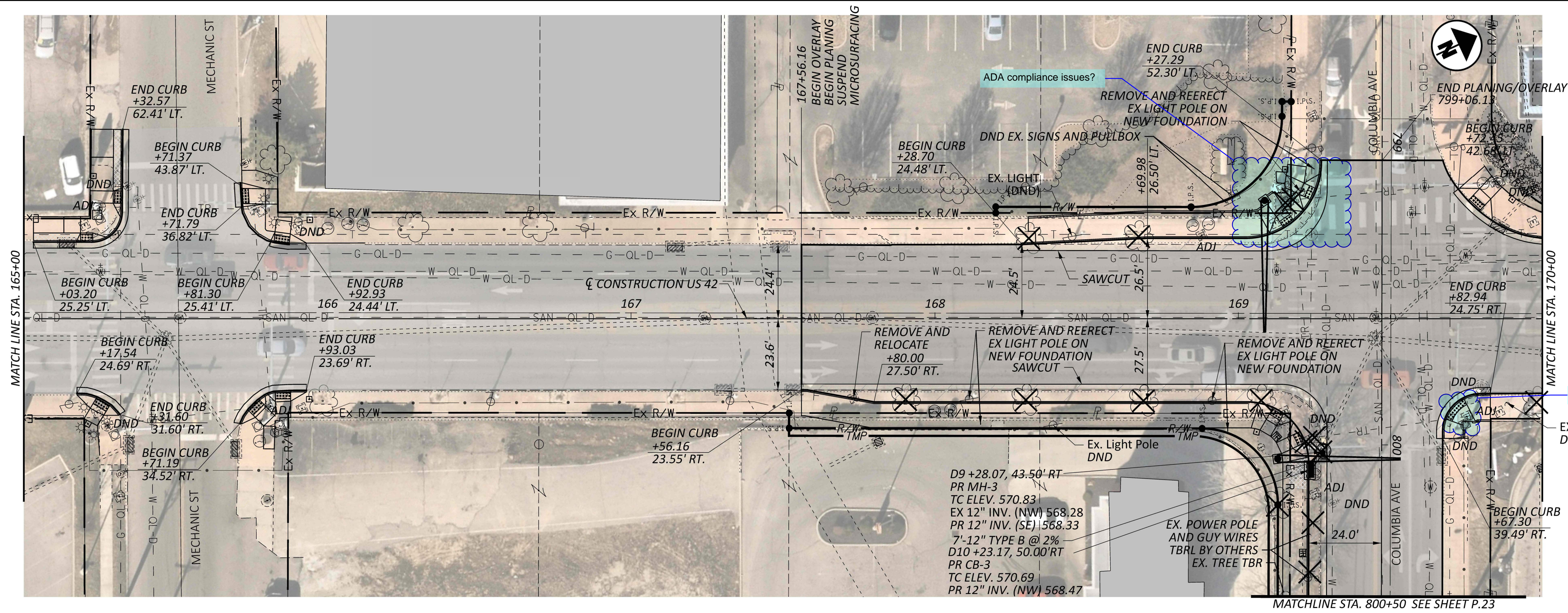
PROJECT ID
 123369

SHEET TOTAL
 P.17 117

PLAN SHEET
 STA. 155+00 TO STA. 165+00



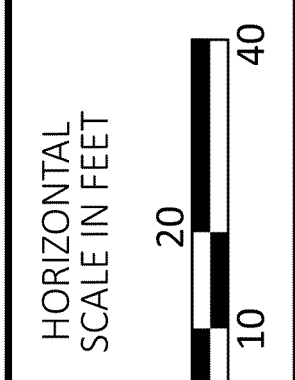
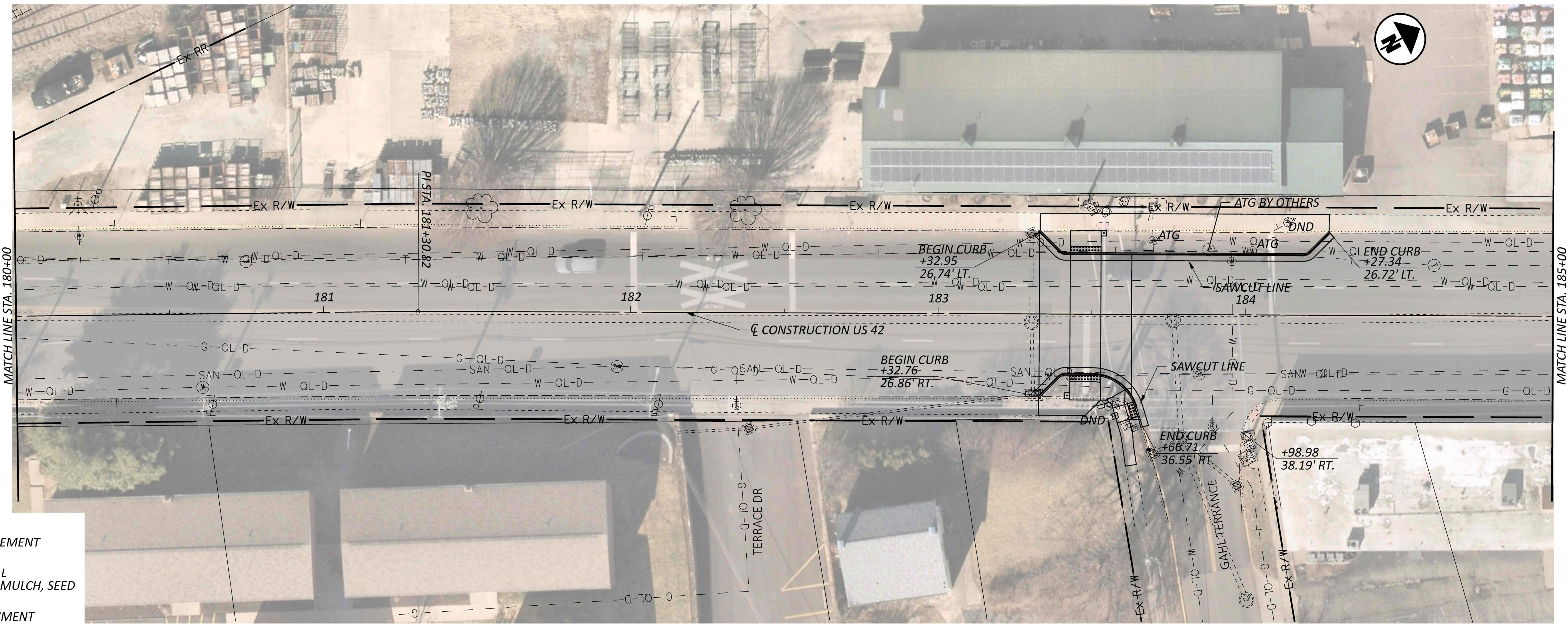
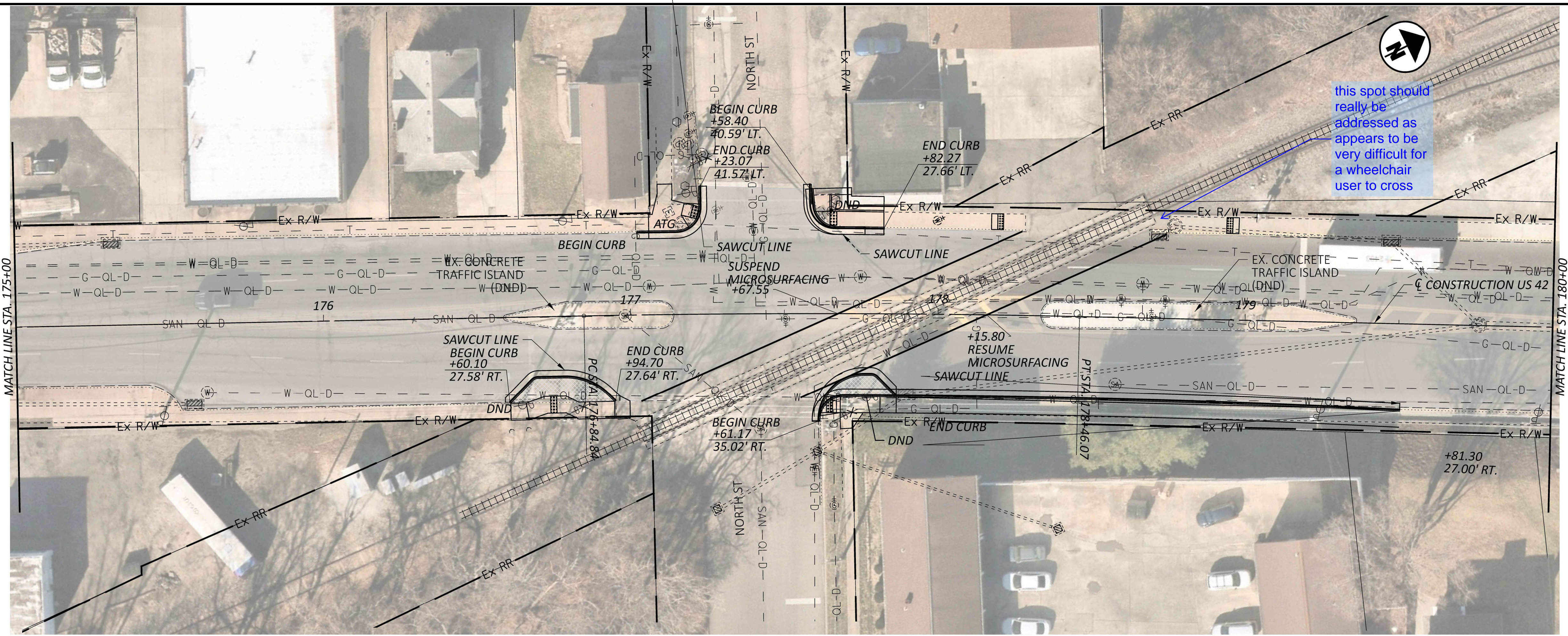
- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL
- REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT



PLAN SHEET
 STA. 165+00 TO STA. STA. 175+00

DESIGN AGENCY	
CMT <small>CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC. 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com</small>	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.18	117

- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT



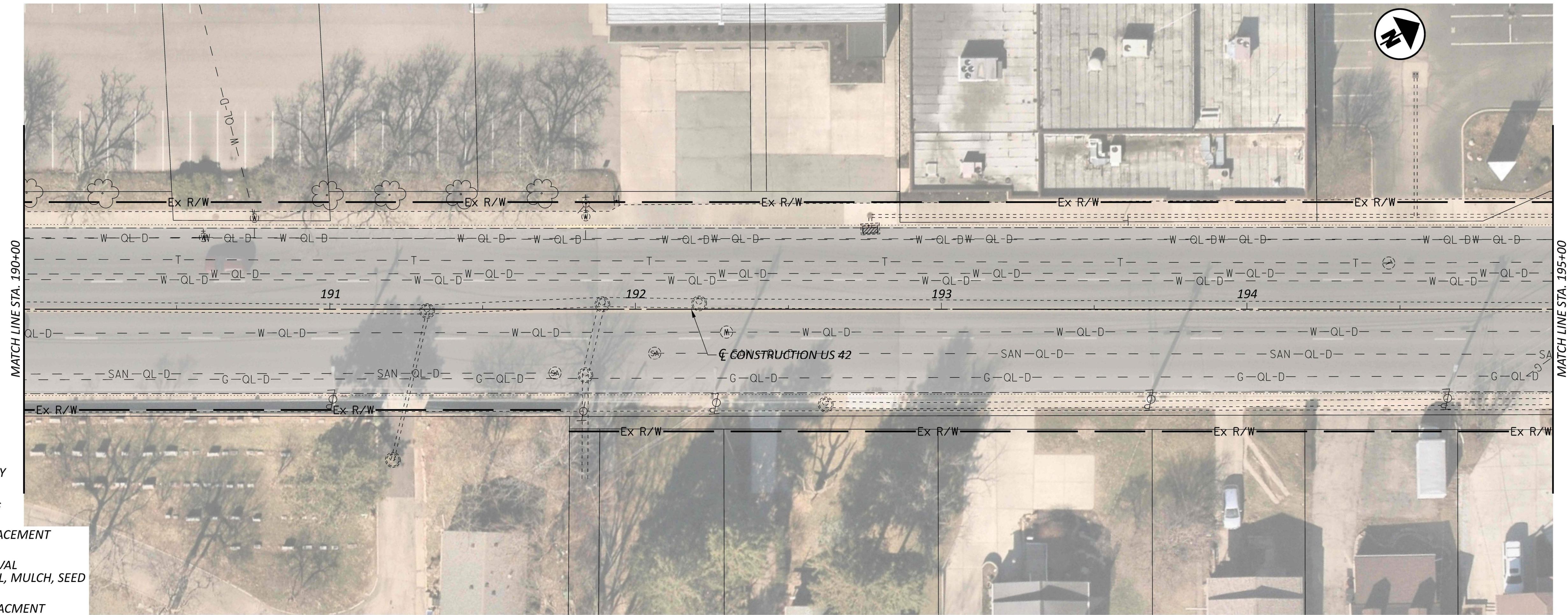
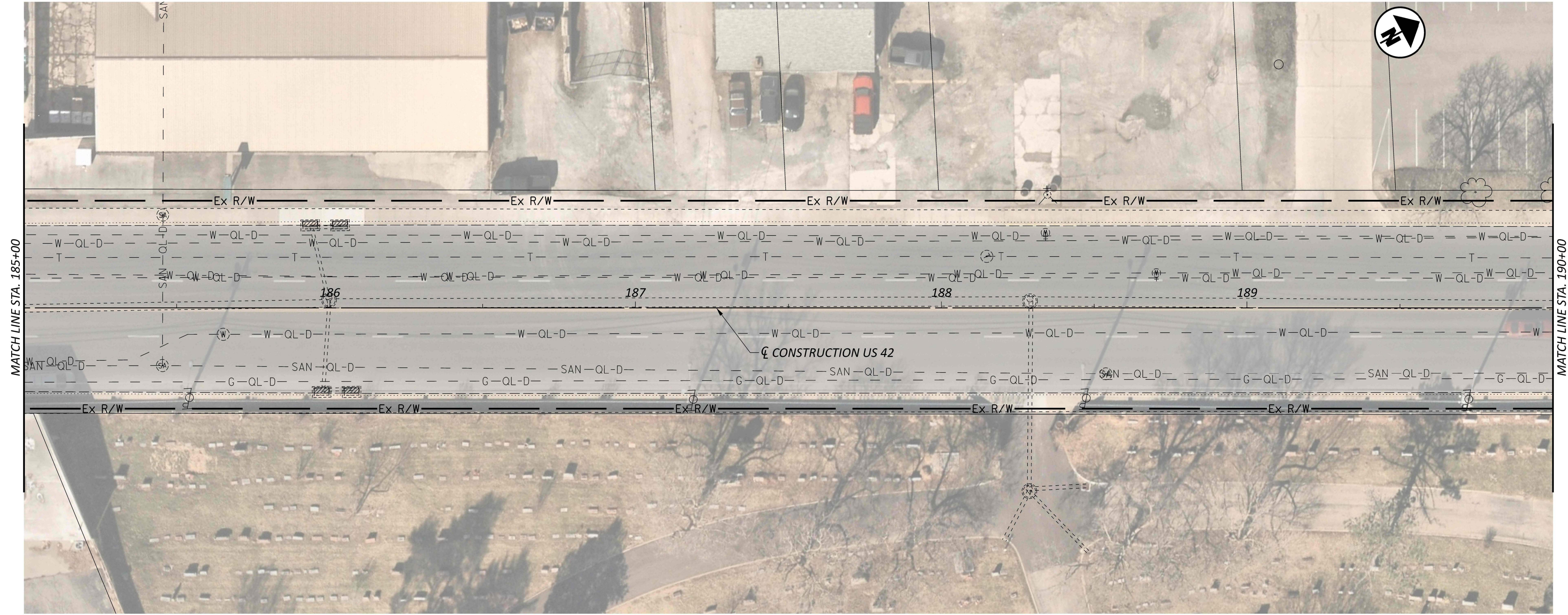
PLAN SHEET
 STA. 175+00 TO STA. STA. 185+00

DESIGN AGENCY	
CMT	
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.19	117

HAM US 42 10.07 READING RD

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-  PLANING/OVERLAY
-  MICROSURFACING
-  FULL DEPTH REPLACEMENT WITH OVERLAY
-  PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
-  FULL DEPTH REPLACEMENT

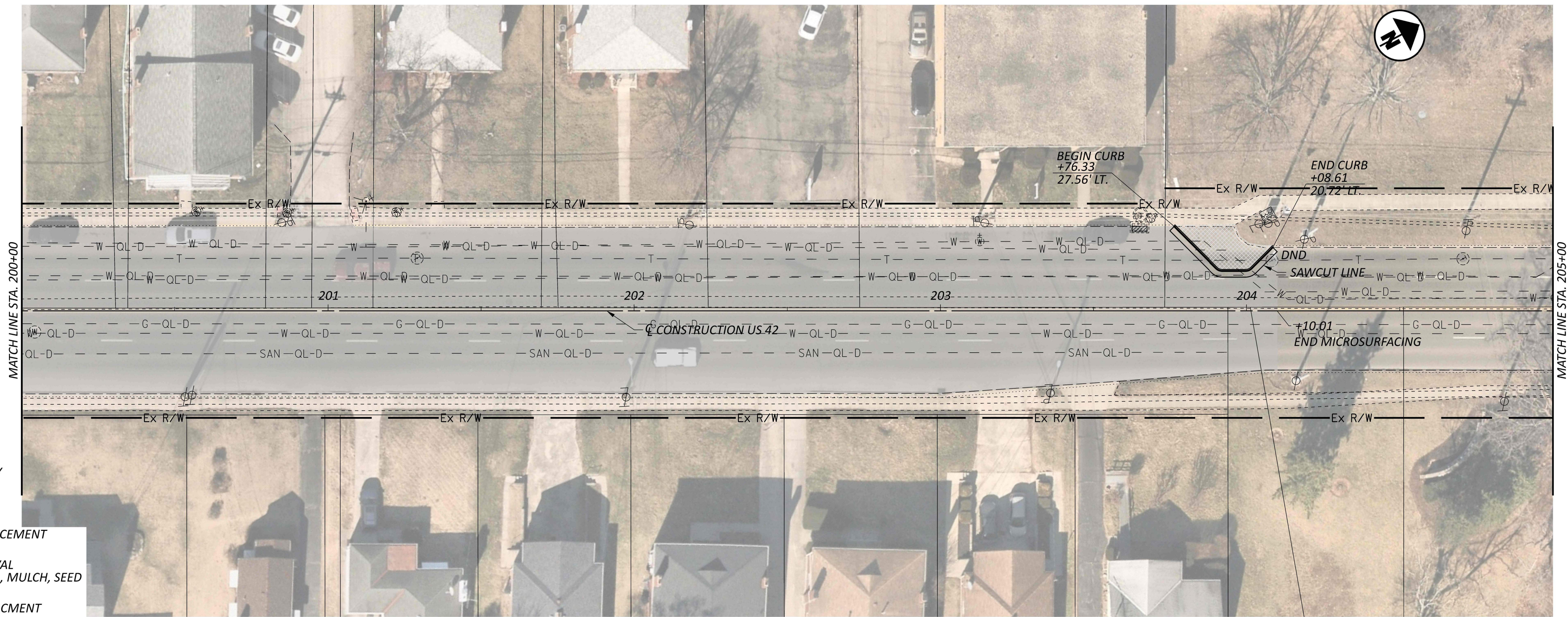


PLAN SHEET
STA. 185+00 TO STA. 195+00

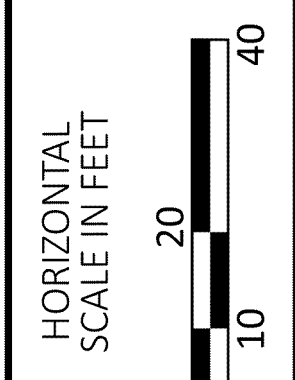
DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
LDW
 REVIEWER
JWL 02/13/26
 PROJECT ID
123369
 SHEET TOTAL
P.20 117

ADA compliance issues?



- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT



PLAN SHEET
 STA. 115+00 TO STA. 125+00

DESIGN AGENCY
CMT
 CMT ENGINEERING, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
 LDW






REVIEWER
 JWL 02/13/26

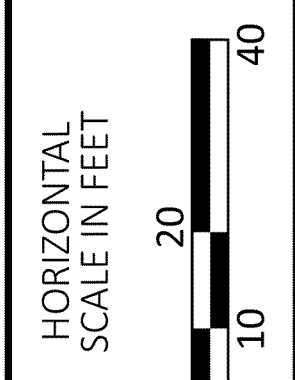
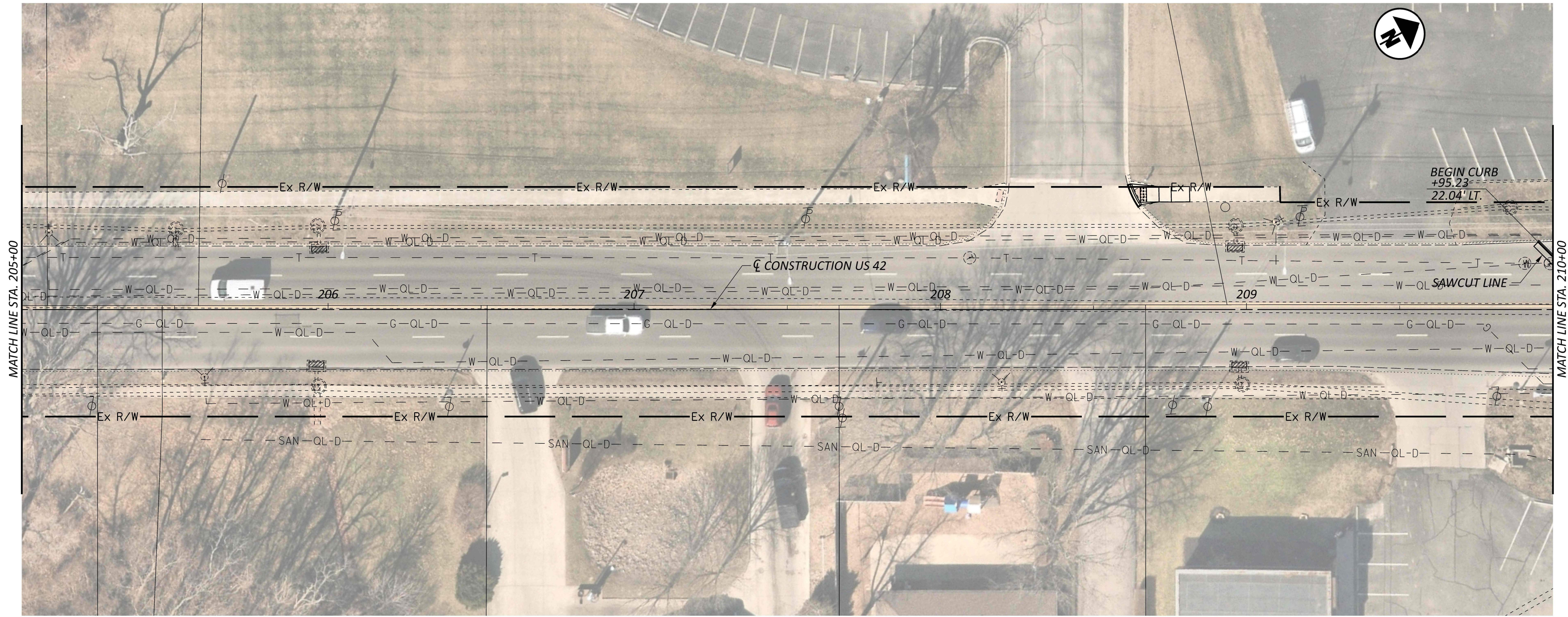
PROJECT ID
 123369

SHEET TOTAL
 P.21 117


HAM US 42 10.07 READING RD

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-  PLANING/OVERLAY
-  MICROSURFACING
-  FULL DEPTH REPLACEMENT WITH OVERLAY
-  PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
-  FULL DEPTH REPLACEMENT



PLAN SHEET
STA. 195+00 TO STA. STA. 205+00

DESIGN AGENCY	
	CRAWFORD, MURPHY & TAYLOR, INC. 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.22	117

- PLANING/OVERLAY
- MICROSURFACING
- FULL DEPTH REPLACEMENT WITH OVERLAY
- PAVEMENT REMOVAL REPLACED TOPSOIL, MULCH, SEED
- FULL DEPTH REPLACEMENT



DESIGN AGENCY
CMT
 COLUMBIA MURPHY & TAYLOR, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45424
 www.cmtengr.com

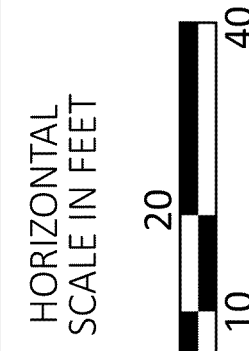
DESIGNER
LDW

REVIEWER
JWL 02/13/26

PROJECT ID
123369

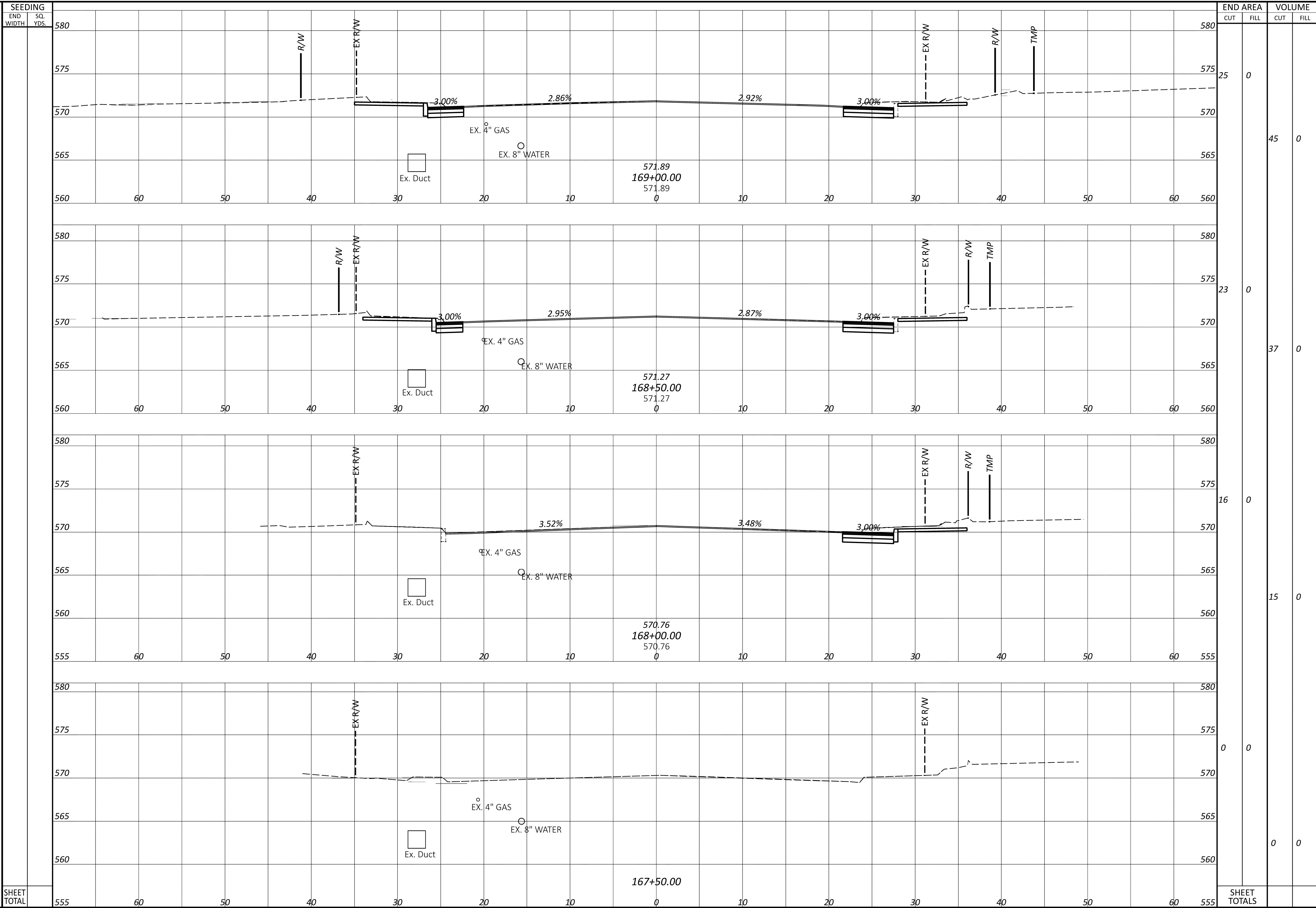
SHEET	TOTAL
P.23	117

PLAN SHEET
 STA. 805+50 TO STA. STA. 802+69.04 - COLUMBIA RD



HAM US 42 10.07 READING RD

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CROSS SECTIONS
 STA. 167+50 TO STA. 169+00 - READING RD

DESIGN AGENCY
CMT
 CMT ENGINEERING, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45424
 www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWL 02/13/26

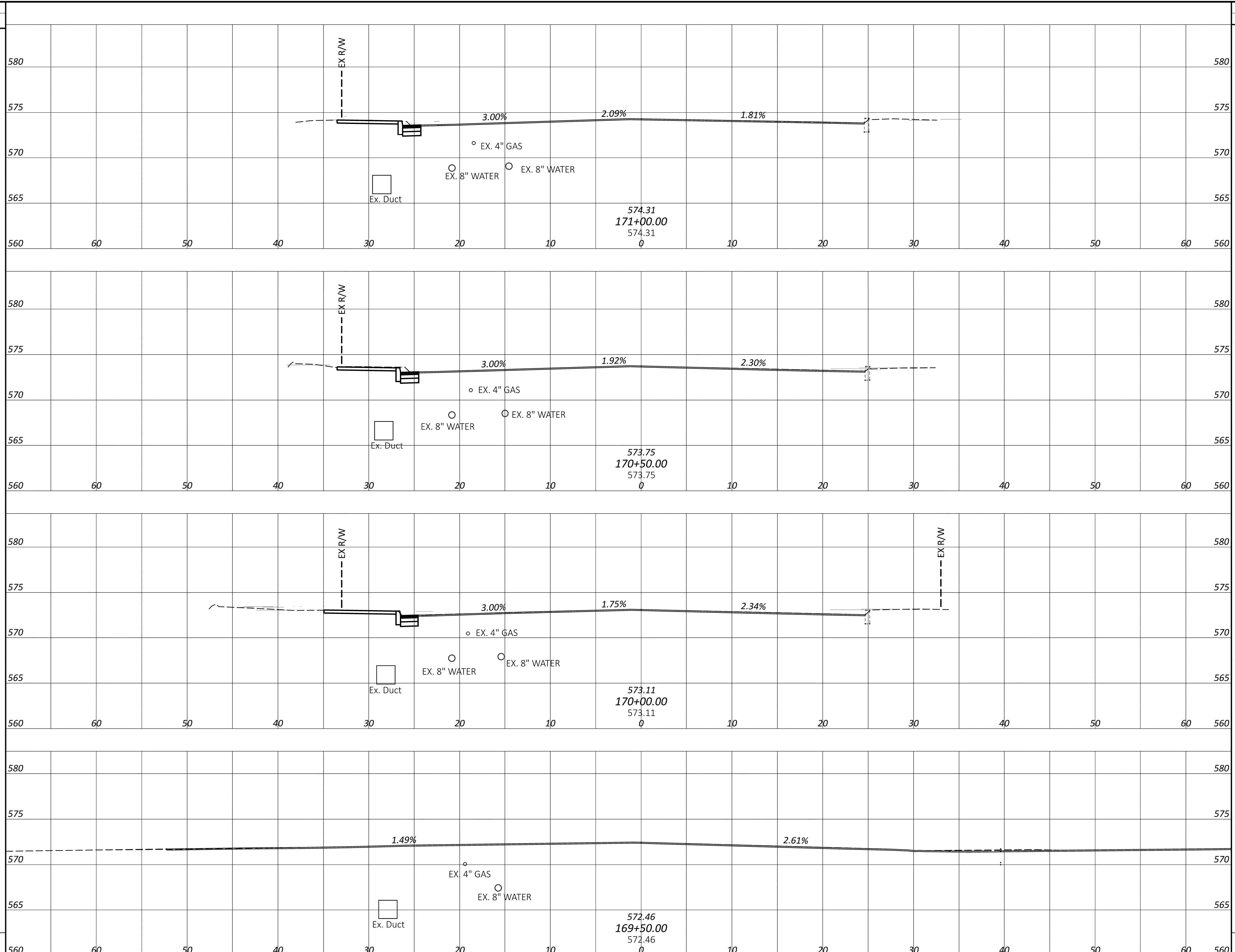
PROJECT ID
123369

SHEET TOTAL
 P.24 | 117

HAM US 42 10.07 READING RD

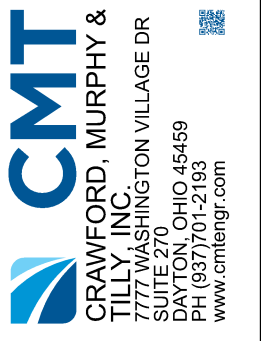
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SEEDING	
END WIDTH	SQ. YDS.
SHEET TOTAL	

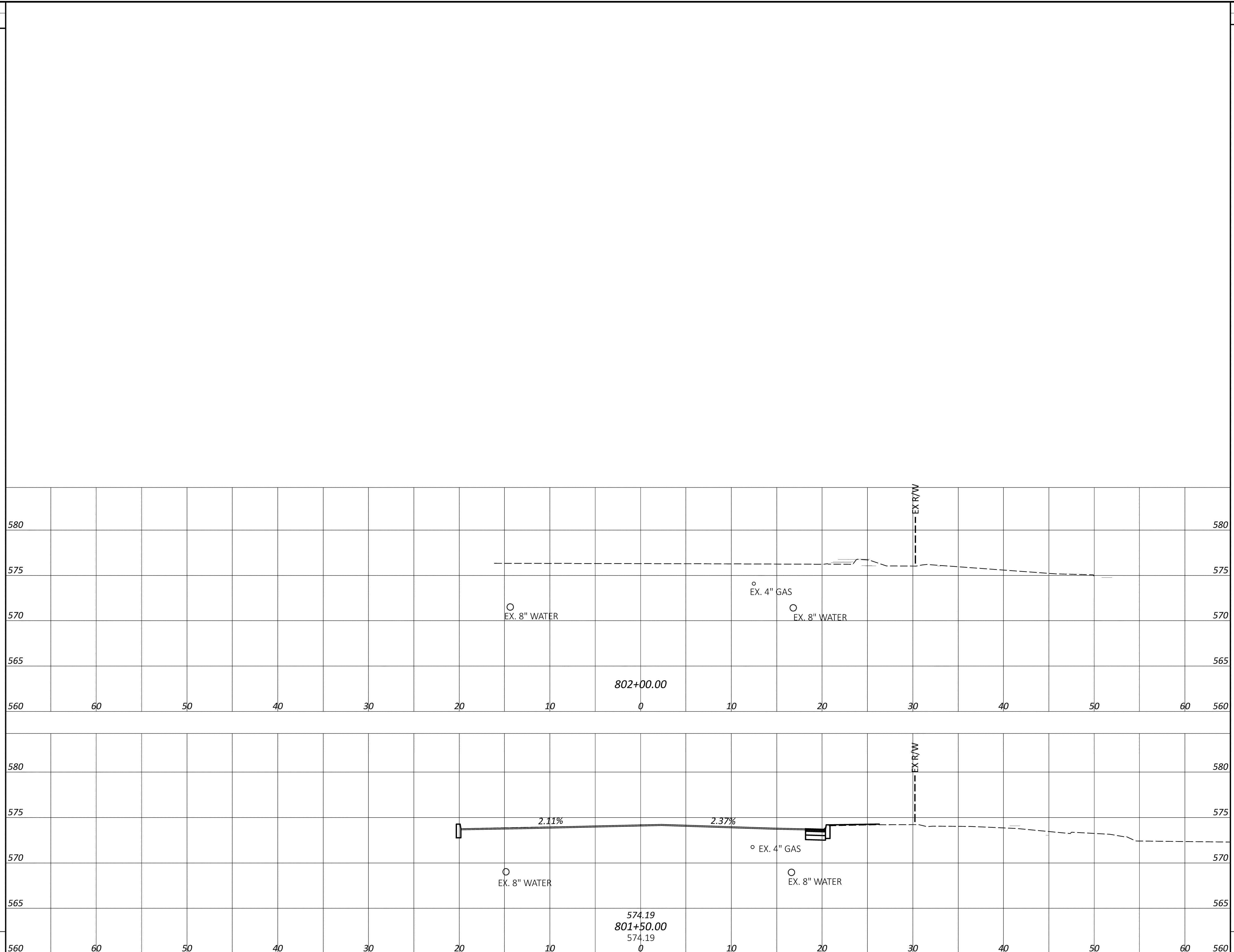


END AREA		VOLUME	
CUT	FILL	CUT	FILL
6	0	11	0
6	0	11	0
6	0	5	0
0	0	23	0
SHEET TOTALS			

CROSS SECTIONS
 STA. 169+50 TO STA. 171+00 - READING RD

DESIGN AGENCY	
 CMT CIVIL & TRANSPORTATION 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.25	117

SEEDING	
END WIDTH	SO. YDS.



END AREA	VOLUME				
		CUT	FILL	CUT	FILL
0	0				
3	0				
13	0				
SHEET TOTALS					

CROSS SECTIONS
STA. 801+50 - COLUMBIA RD

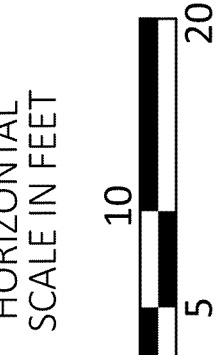
DESIGN AGENCY COLUMBIA TWP. ENGINEERING 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmteng.com
DESIGNER LDW
REVIEWER JWL 02/13/26
PROJECT ID 123369
SHEET TOTAL P.27 117

HAM US 42 10.07 READING RD

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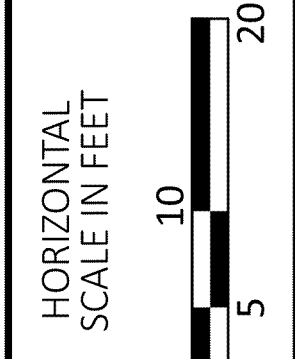
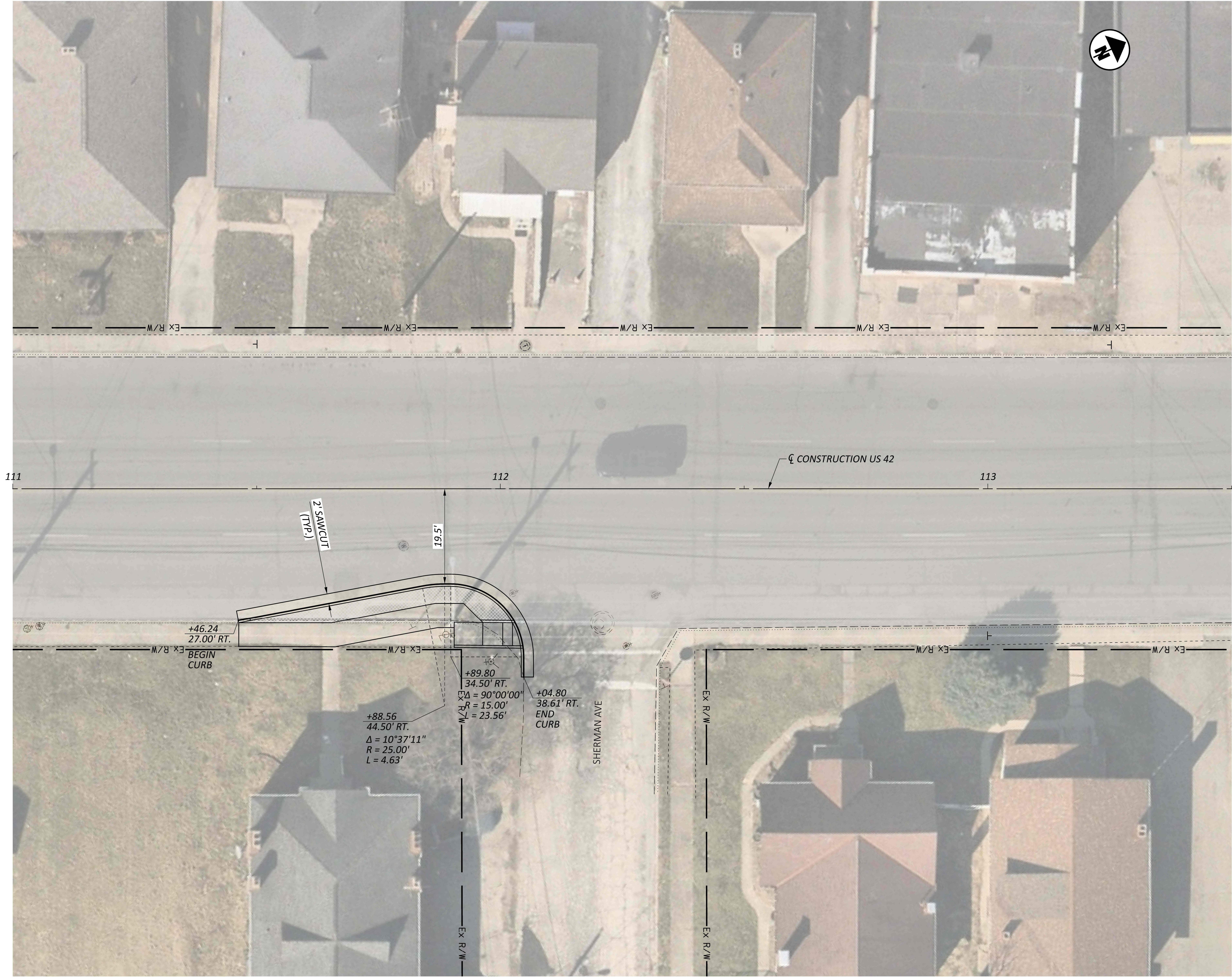


INTERSECTION DETAILS
 READING RD. AT GALBRAITH RD



DESIGN AGENCY
CMT
 CIVIL & TRANSPORTATION
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

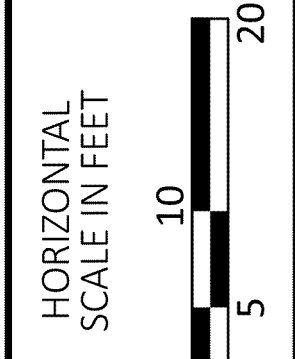
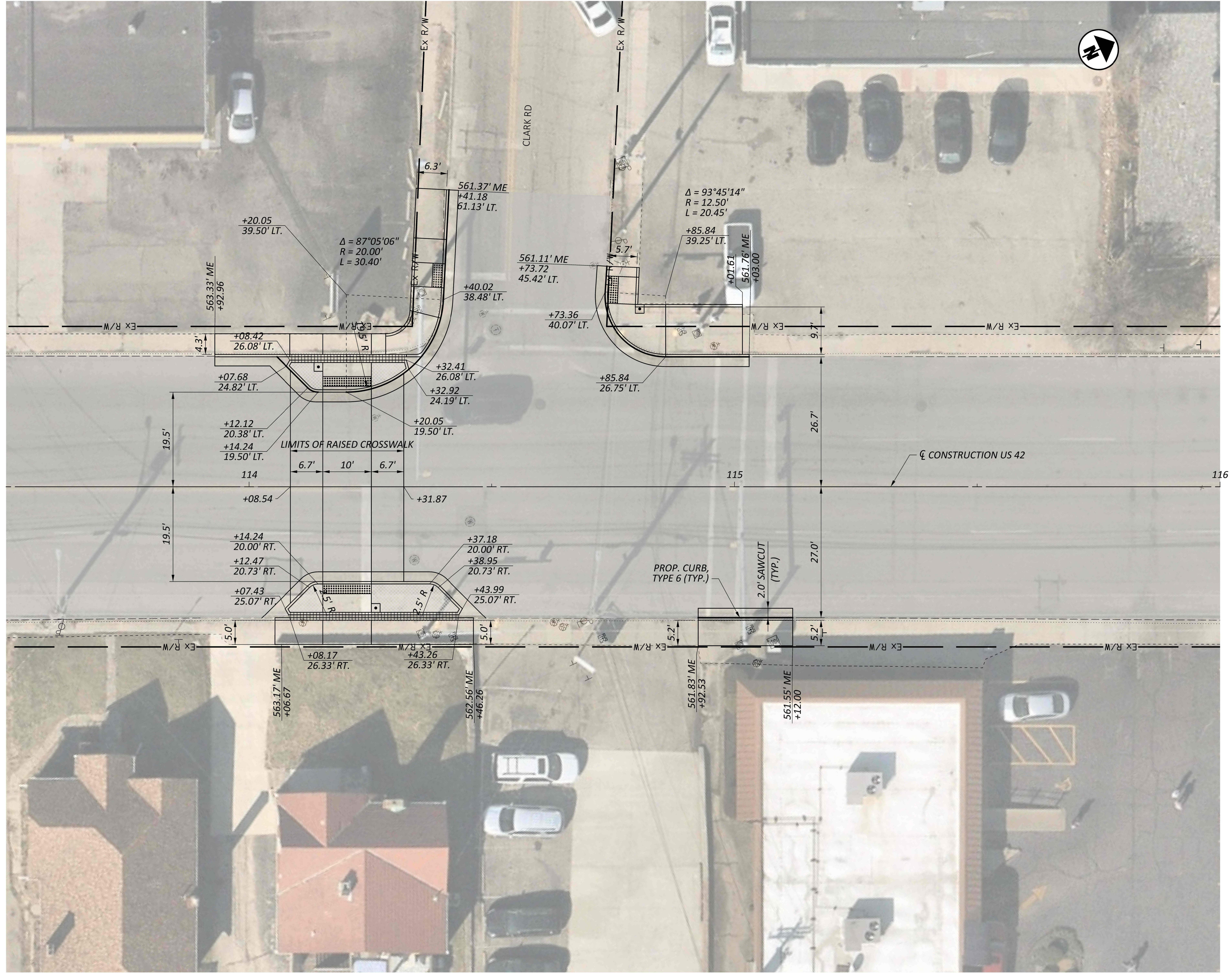
DESIGNER	LDW
REVIEWER	JWL
DATE	02/13/26
PROJECT ID	123369
SHEET	P.28
TOTAL	117



INTERSECTION DETAILS
 READING RD. AT SHERMAN AVE

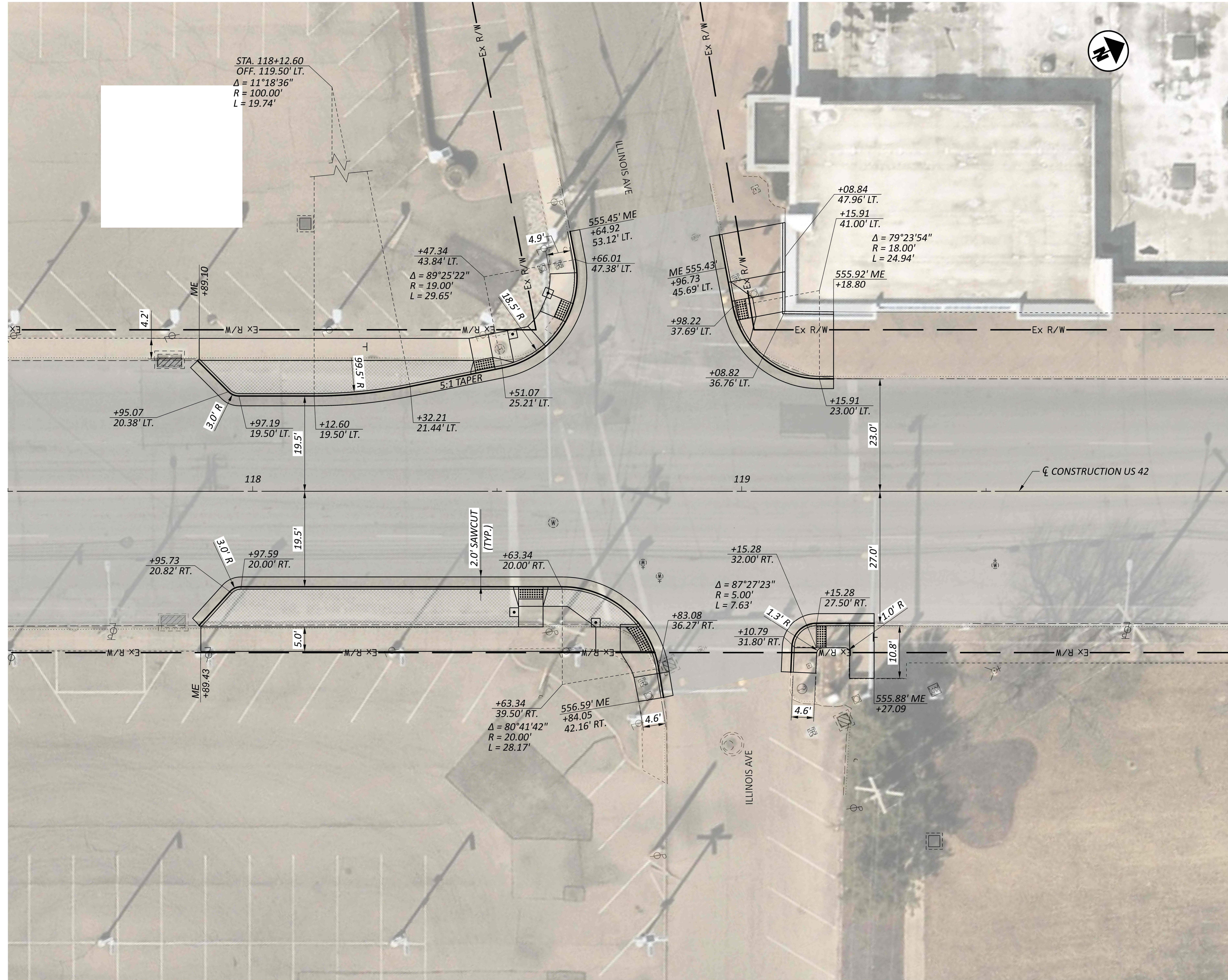
DESIGN AGENCY
CMT
 CONSTRUCTION MANAGEMENT TECHNOLOGIES
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.29
TOTAL	117

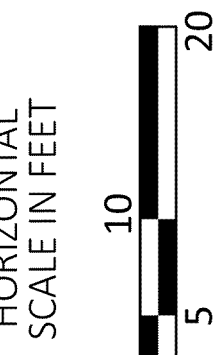


INTERSECTION DETAILS
 READING RD. AT CLARK RD

DESIGN AGENCY	
CMT	CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.30	117

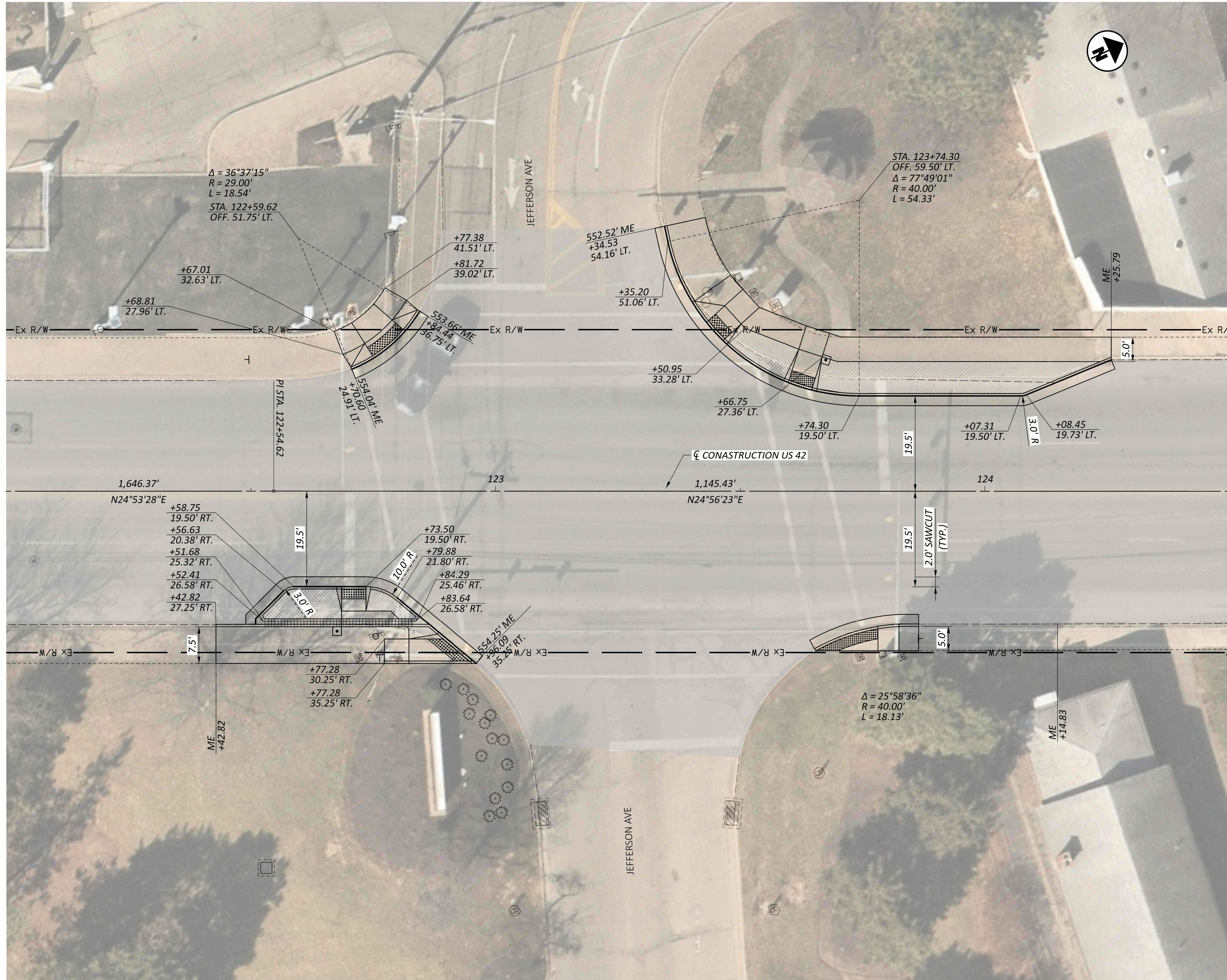


INTERSECTION DETAILS
 READING RD. AT ILLINOIS AVE



DESIGN AGENCY
CMT
 CONSULTING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
	123369
SHEET	TOTAL
P.31	117

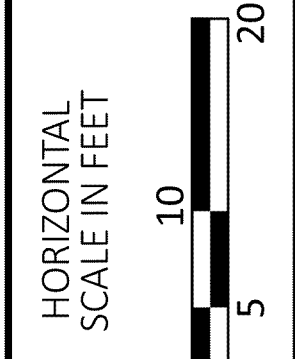
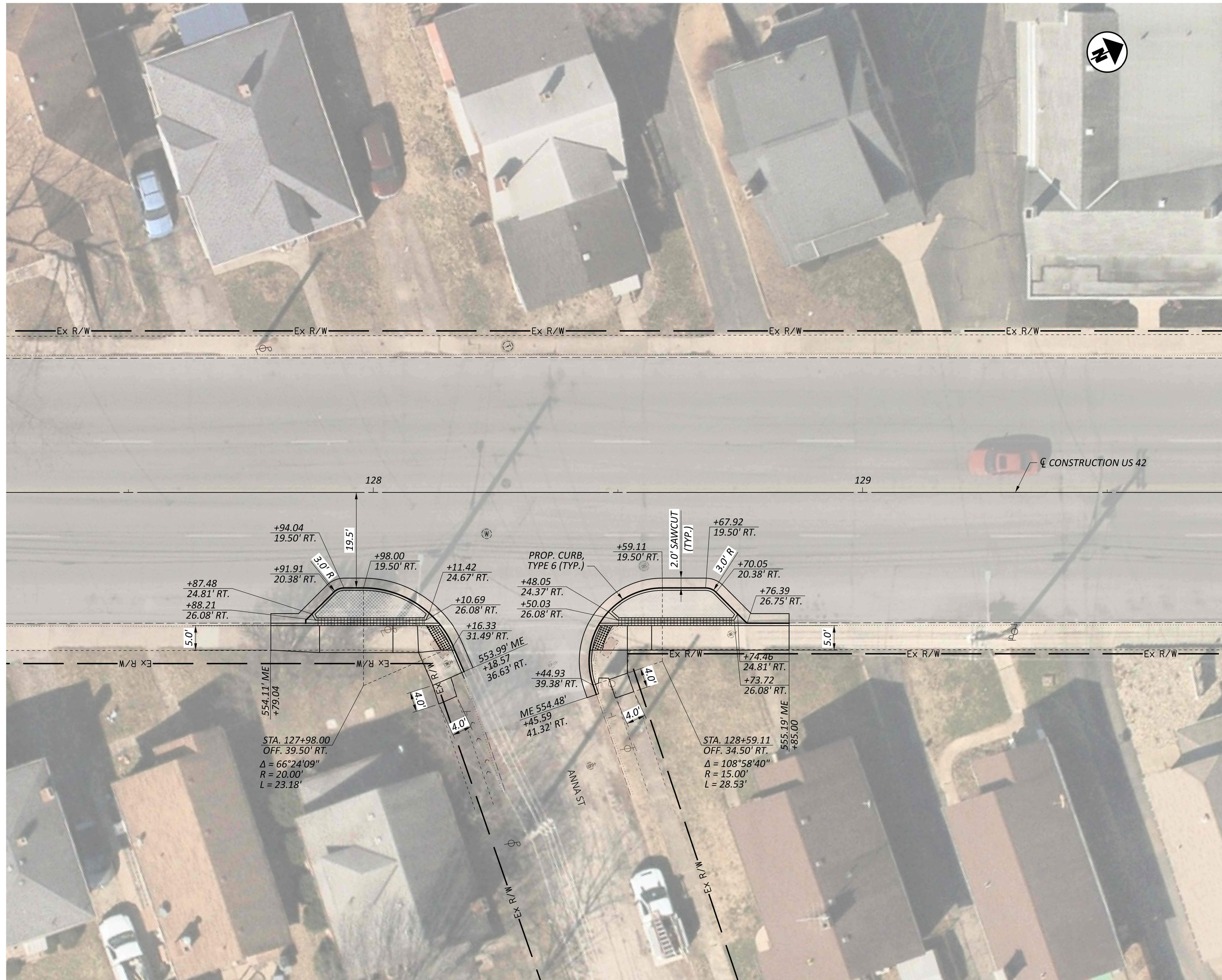


INTERSECTION DETAILS
 READING RD. AT JEFFERSON AVE



DESIGN AGENCY
CMT
 CONSULTING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.32
TOTAL	117



INTERSECTION DETAILS
 READING RD. AT ANNA ST

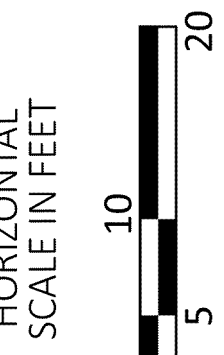
DESIGN AGENCY	
CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtinc.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.33	117

HAM US 42 10.07 READING RD

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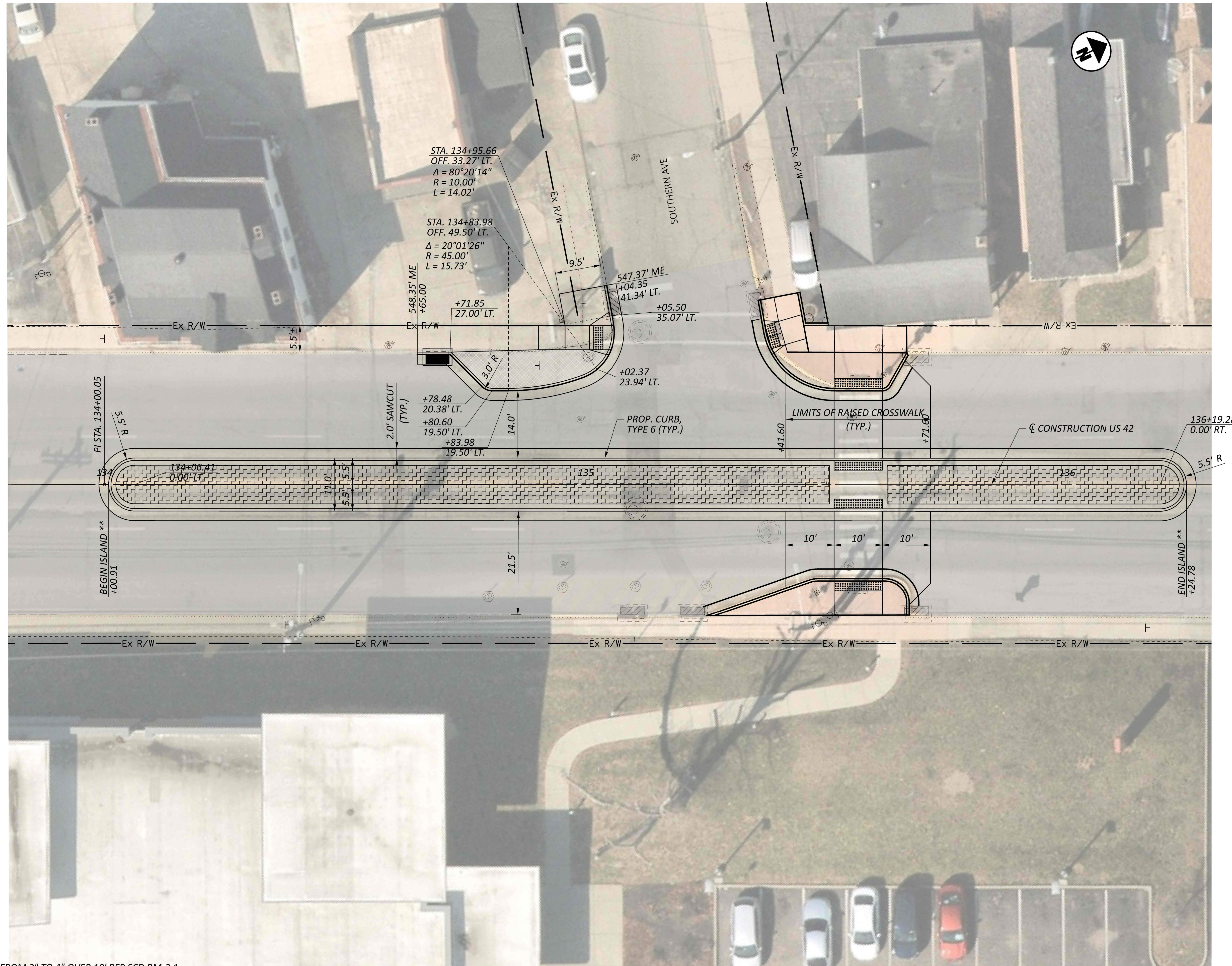


INTERSECTION DETAILS
 READING RD. AT JRS ACCESS RD



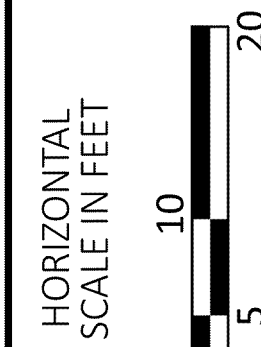
DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWL
DATE	02/13/26
PROJECT ID	123369
SHEET	P.34
TOTAL	117



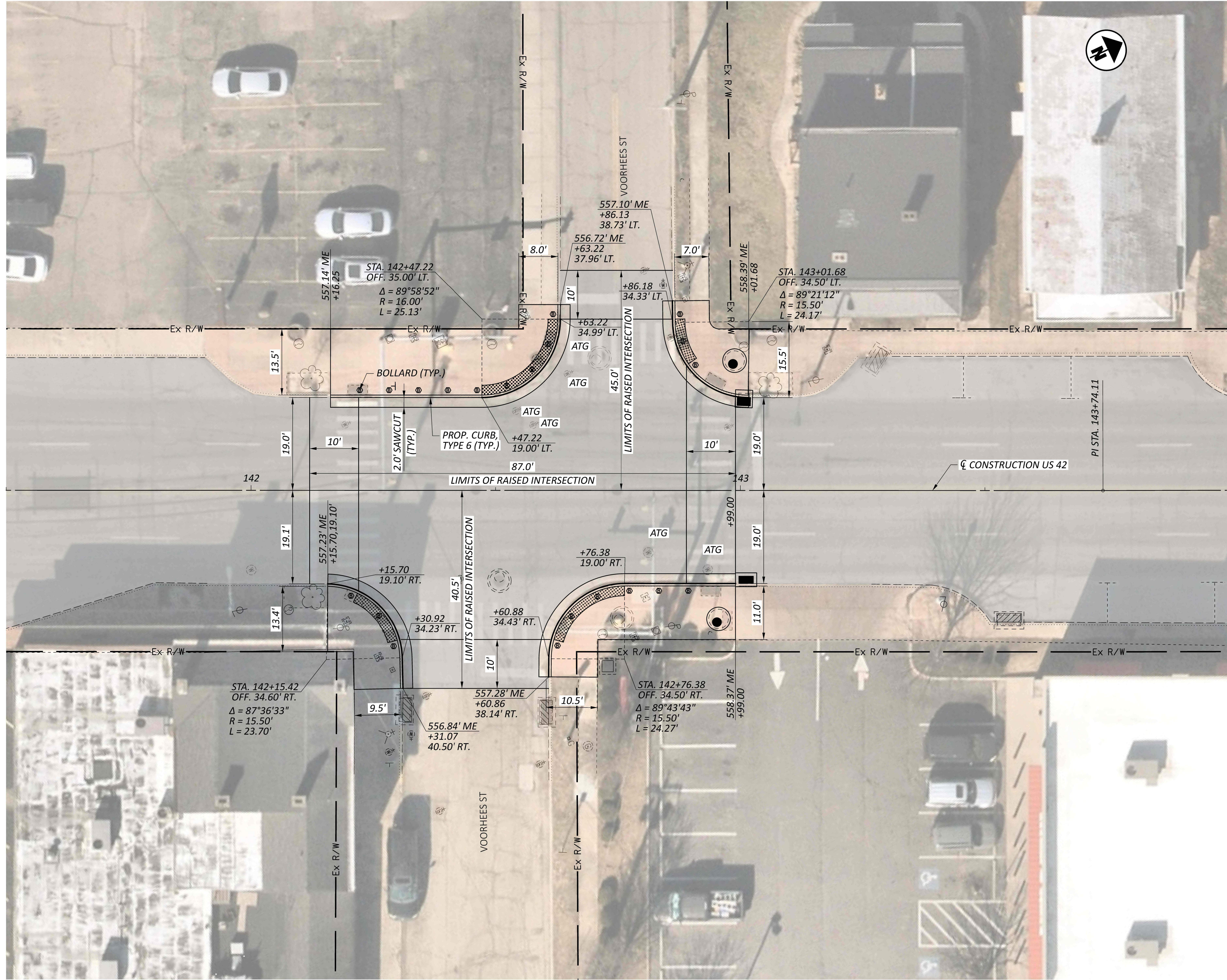
** TAPER NOSE HEIGHT FROM 2" TO 4" OVER 10' PER SCD RM-3.1

INTERSECTION DETAILS
 READING RD. AT SOUTHERN AVE



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DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.35
TOTAL	117

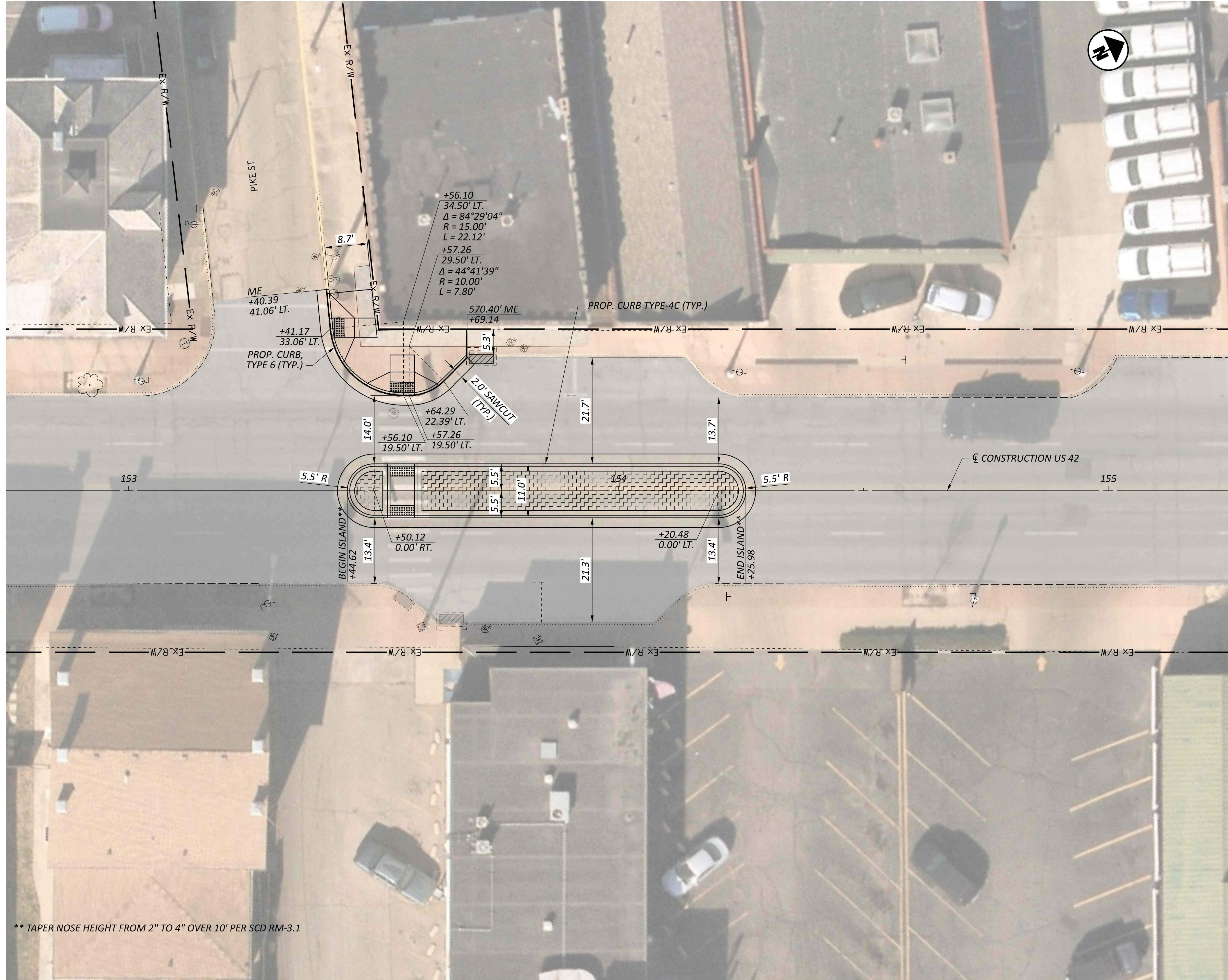


INTERSECTION DETAILS
READING RD. AT VOORHEES ST



DESIGN AGENCY	CMT
DESIGNER	LDW
REVIEWER	JWL
DATE	02/13/25
PROJECT ID	123369
SHEET TOTAL	P.36 117





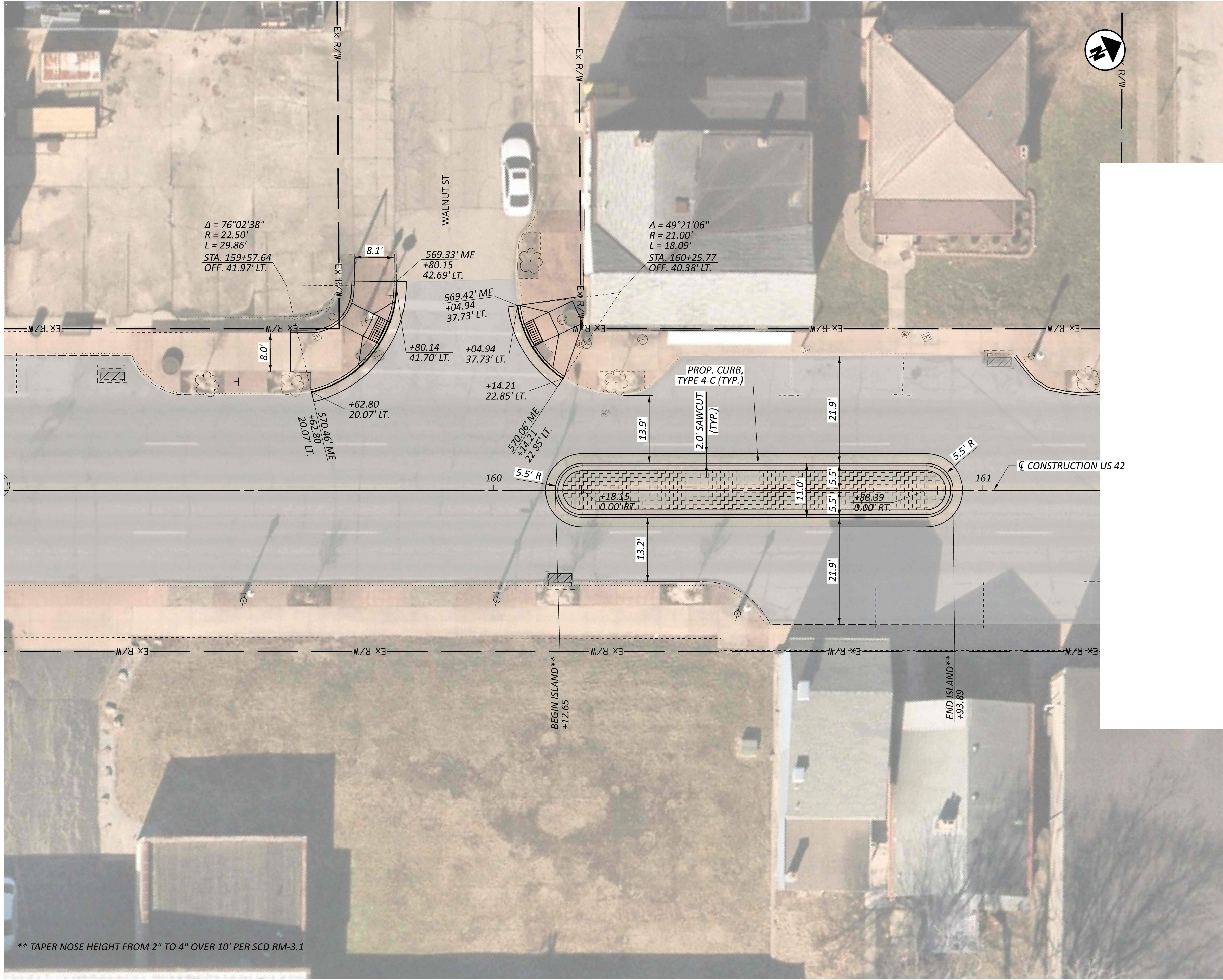
** TAPER NOSE HEIGHT FROM 2" TO 4" OVER 10' PER SCD RM-3.1

INTERSECTION DETAILS
 READING AT PIKE ST

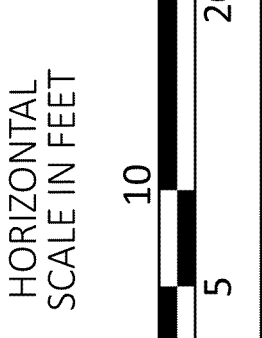


DESIGN AGENCY
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DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.37
TOTAL	117



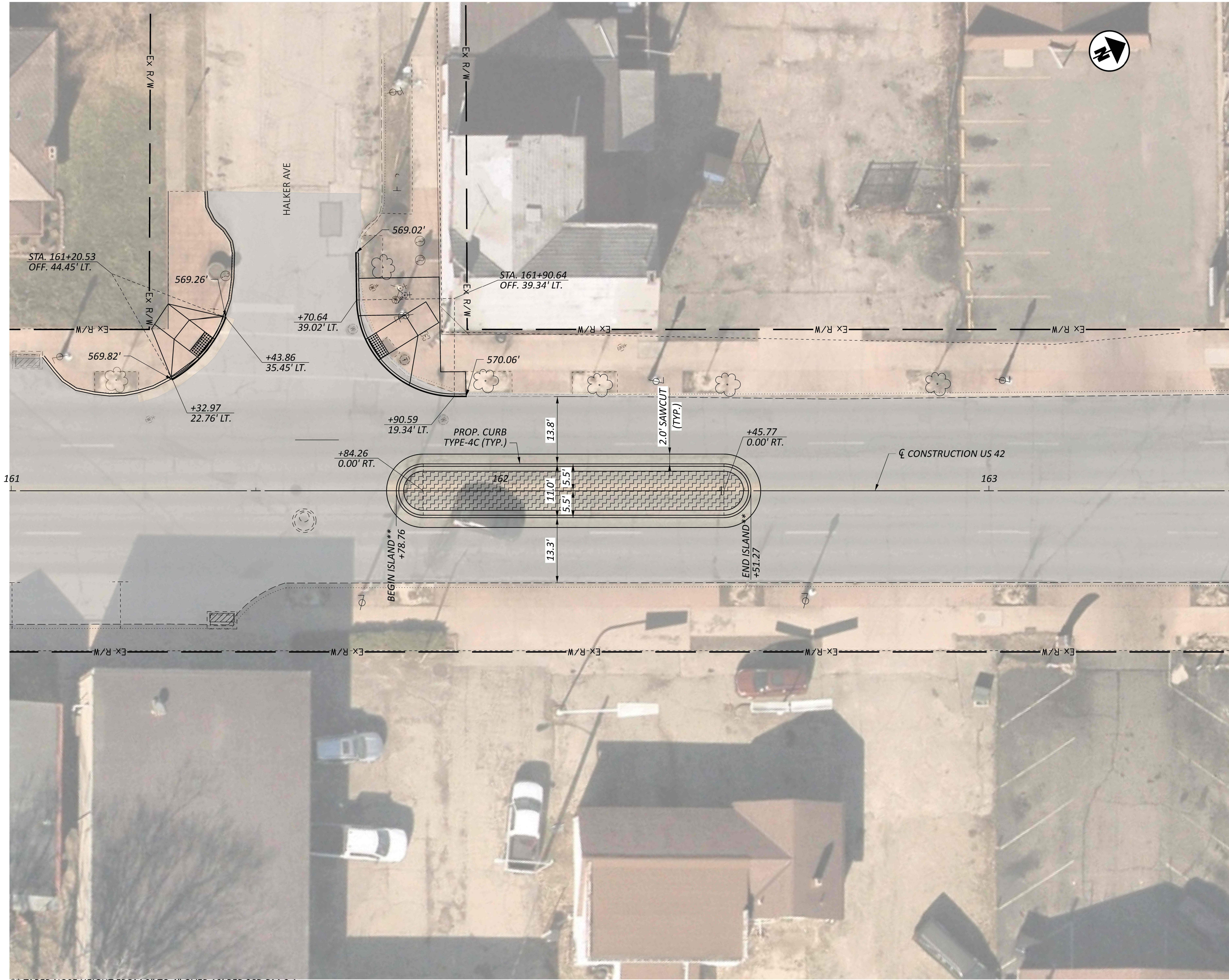
** TAPER NOSE HEIGHT FROM 2" TO 4" OVER 10' PER SCD RM-3.1



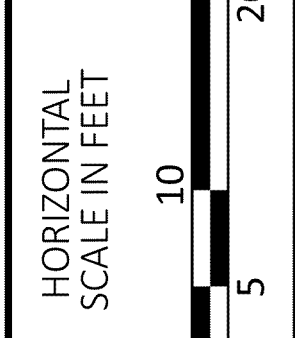
INTERSECTION DETAILS
 READING RD. AT WALNUT ST

DESIGN AGENCY
CMT
 CIVIL & TRANSPORTATION
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DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
	123369
SHEET	TOTAL
P.38	117



** TAPER NOSE HEIGHT FROM 2" TO 4" OVER 10' PER SCD RM-3.1

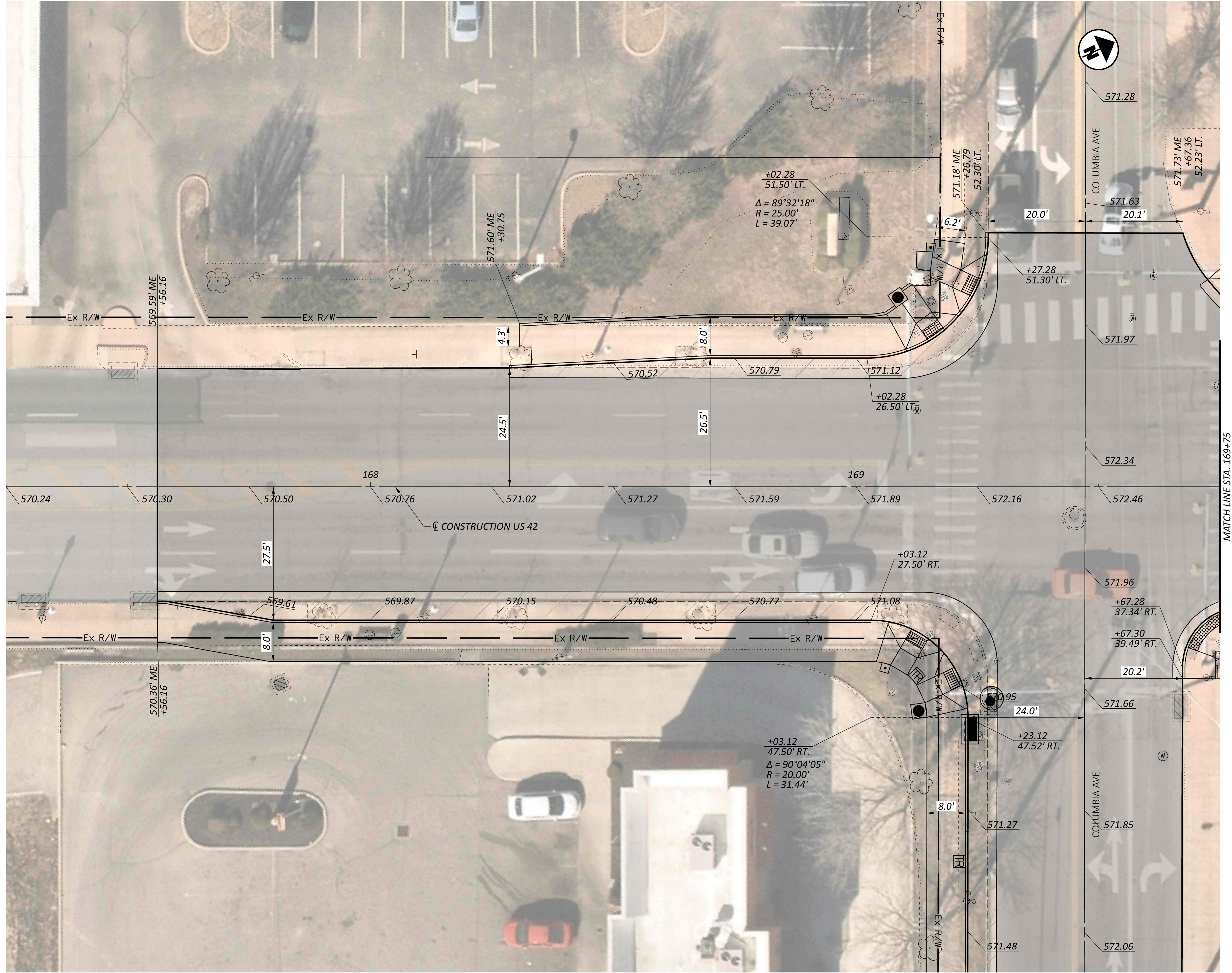


INTERSECTION DETAILS
READING RD. AT HALKER AVE

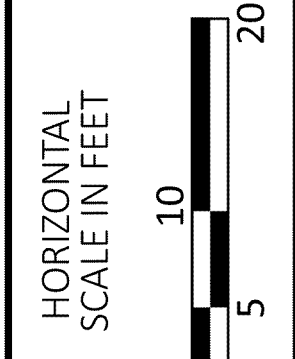
DESIGN AGENCY	
 CMT CONSULTING & ENGINEERING 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45424 www.cmtengr.com	
DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
SHEET	123369
TOTAL	117
P.39	

HAM US 42 10.07 READING RD

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MATCH LINE STA. 169+75

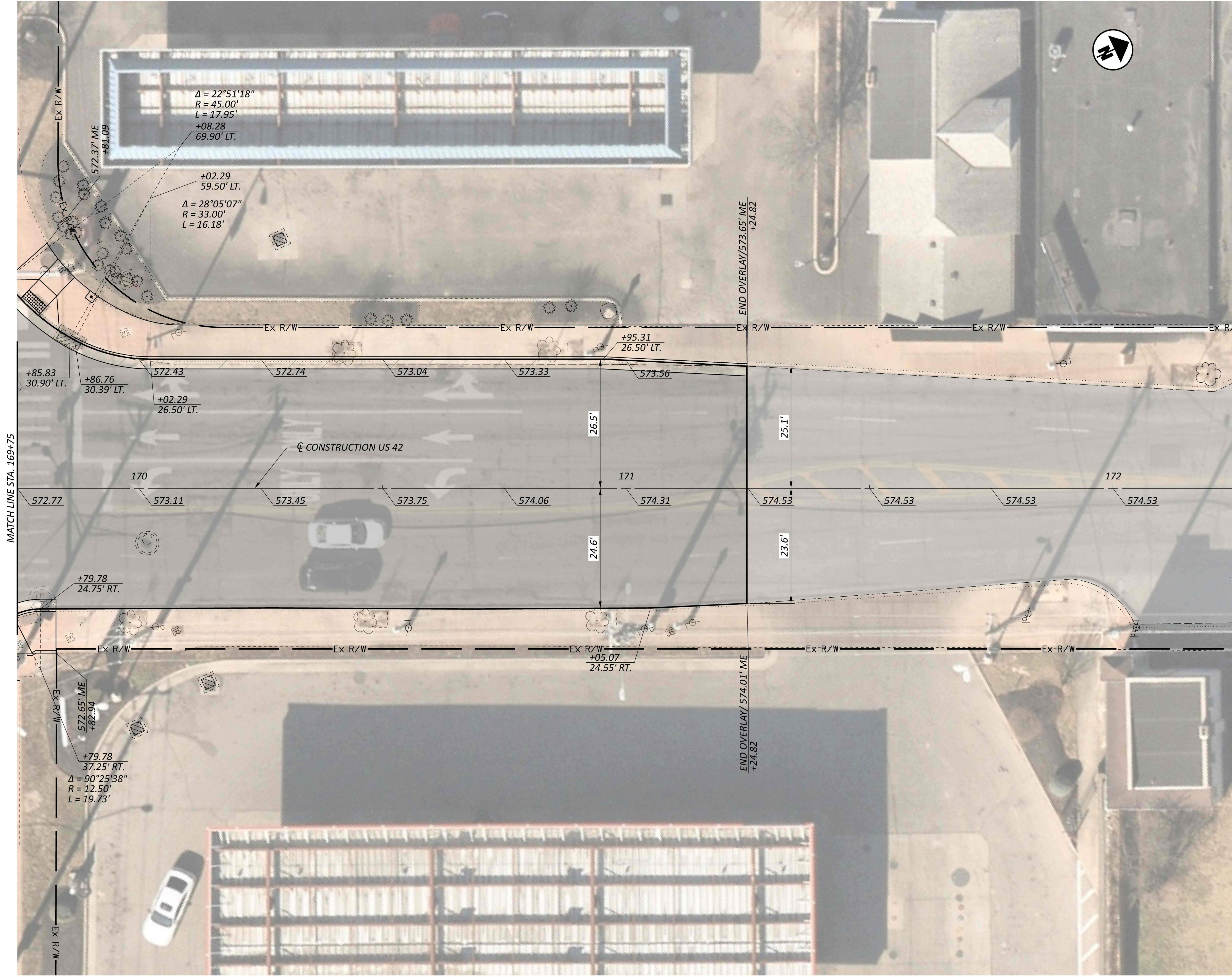


INTERSECTION DETAILS
 READING RD. AT COLUMBIA AVE

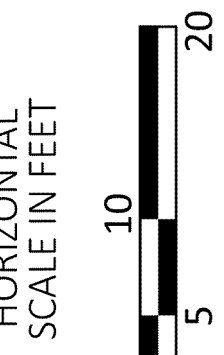
DESIGN AGENCY	
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LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.40	117

HAM US 42 10.07 READING RD

MODEL: 123369_G1116 PAPER SIZE: 34x42 (in.) DATE: 2/16/2026 TIME: 5:02:59 PM PLOTORV: OHDOT_PDF.plt PLOTORV: OHDOT_PDF.plt USER: nbrickner@cmtegr.com WORKSPACE: ODOT 2024 WORKSET: 123369_PRODUCT: OpenRoadsDesigner 24.00.02.25
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INTERSECTION DETAILS READING RD.

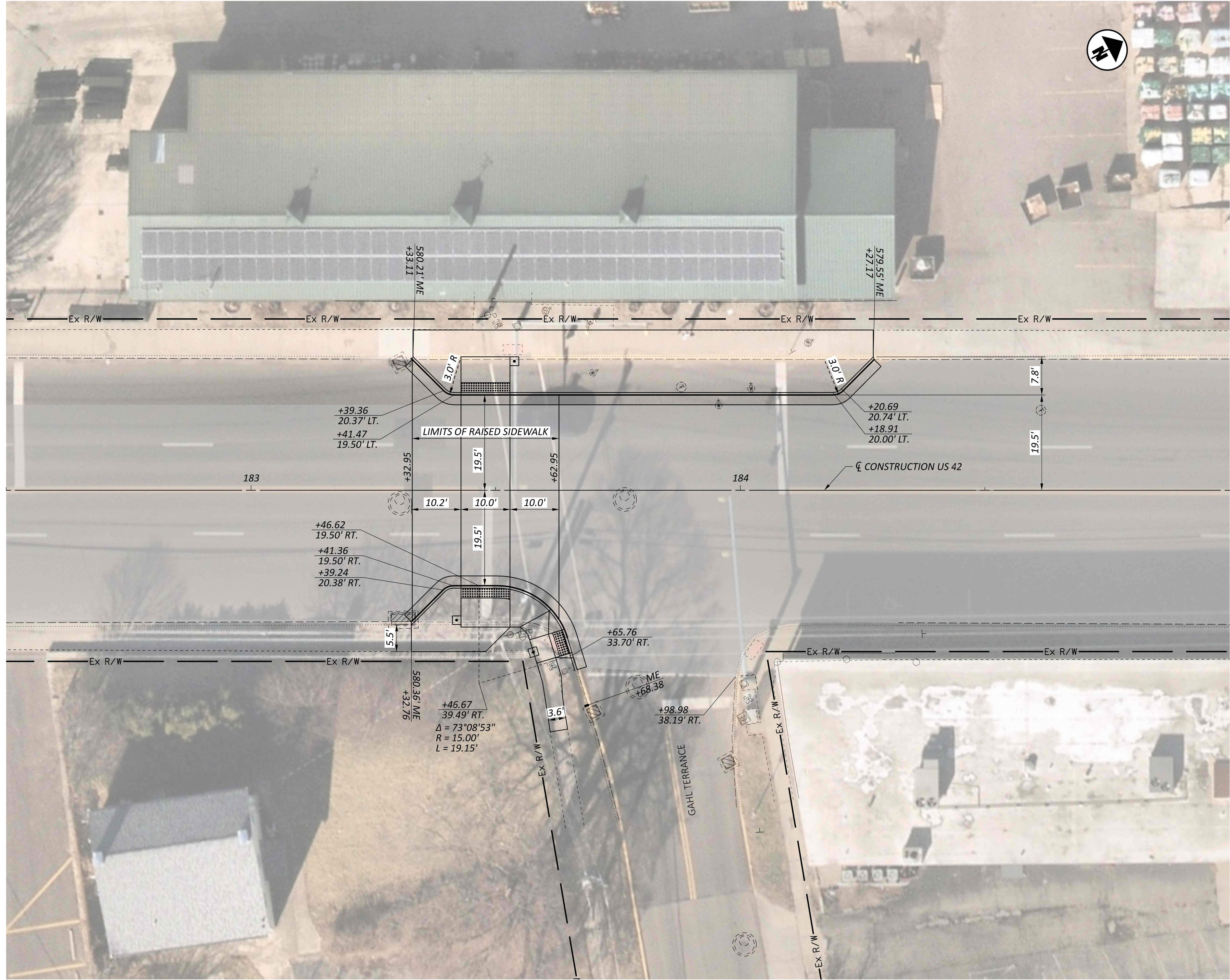


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DESIGNER	LDW
REVIEWER	JWL
DATE	02/13/26
PROJECT ID	123369
SHEET	P.41
TOTAL	117

HAM US 42 10.07 READING RD

MODEL: 123369_G1117 PAPER SIZE: 34x42 (in.) DATE: 2/16/2025 TIME: 5:03:18 PM PLTDRV: OHDOT_PDF.plt PLOTORV: OHDOT_Pen.tbl USER: nbrickner@cmtegr.com WORKSPACE: ODOT 2024 WORKSET: 123369 PRODUCT: OpenRoadsDesigner 24.00.02.25
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INTERSECTION DETAILS
 READING AT GAHL TERRACE



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DESIGNER	LDW
REVIEWER	JWL
DATE	02/13/26
PROJECT ID	123369
SHEET	P.42
TOTAL	117

HAM US 42 10.07 READING RD

MODEL: 123369_G1118 PAPER SIZE: 34x42 (in.) DATE: 2/16/2026 TIME: 5:03:36 PM PLOTORV: OHDOT_PDF.plt USER: nbrickner@cmtegr.com WORKSPACE: ODOT 2024 WORKSET: 123369 PRODUCT: OpenRoadsDesigner 24.00.02.25
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**INTERSECTION DETAILS
READING RD.**

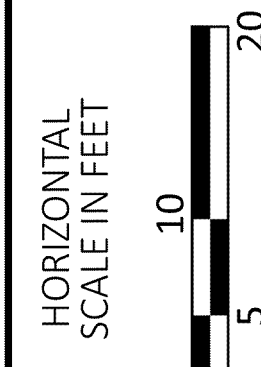


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DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
	123369
SHEET	TOTAL
P.43	117



INTERSECTION DETAILS
 READING RD. AT INCINERATOR LN



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DESIGNER	LDW
REVIEWER	JWL
PROJECT ID	02/13/26
SHEET	123369
TOTAL	117
P.44	

Confirm all ramp counterslopes were checked for ADA compliance per BP-7.1. Typical comment for all ramps.

label ramp cross slope. if doesn't meet ADA then replace additional adjacent walk, provide ADA compliant cross slope at ramp, then transition the cross slope back to existing over 1 or 2 walk panels. typical comment for all curb ramps.

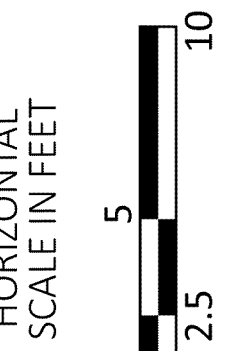
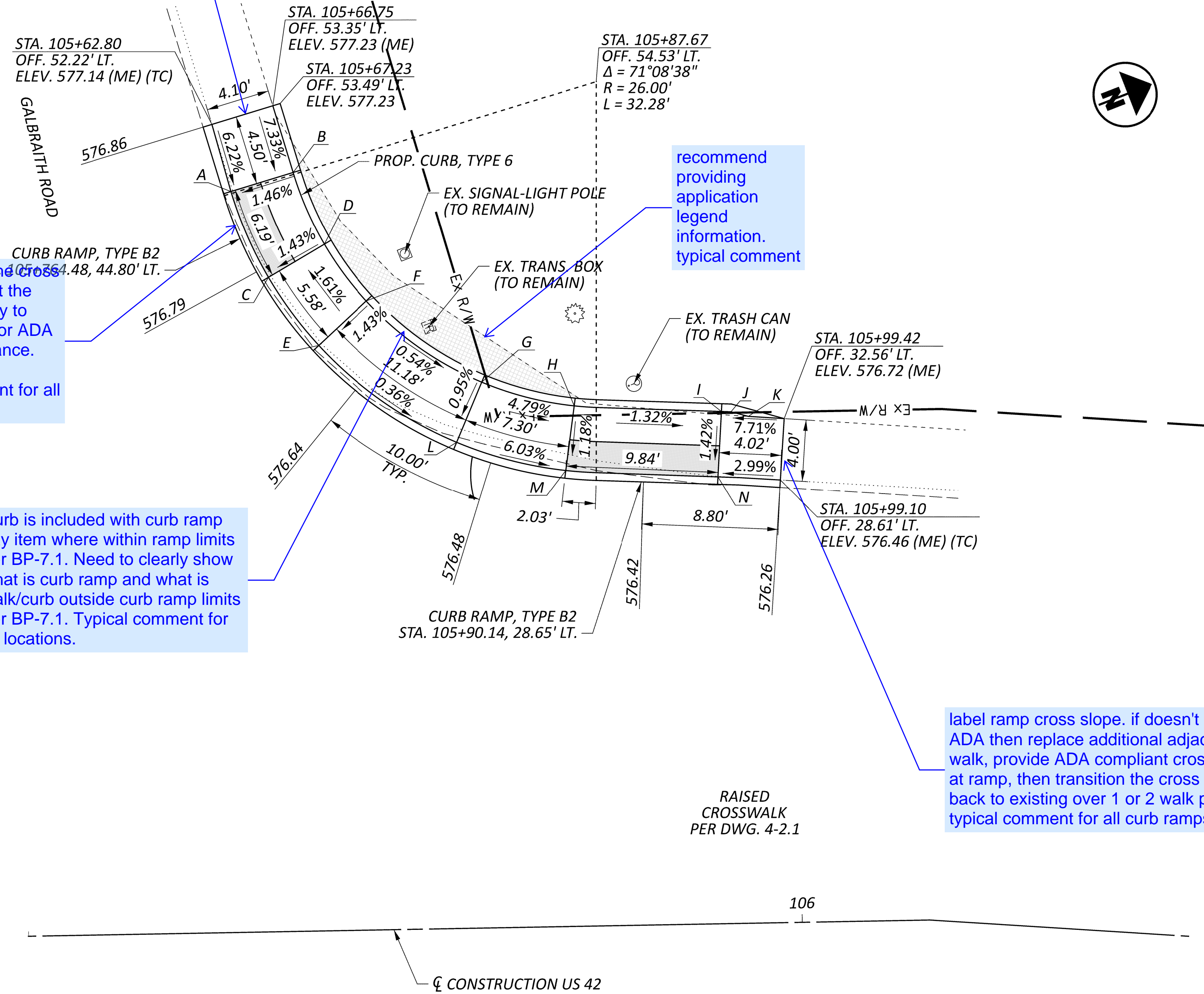
Label the cross slope at the roadway to check for ADA compliance. Typical comment for all ramps.

Curb is included with curb ramp pay item where within ramp limits per BP-7.1. Need to clearly show what is curb ramp and what is walk/curb outside curb ramp limits per BP-7.1. Typical comment for all locations.

recommend providing application legend information. typical comment

label ramp cross slope. if doesn't meet ADA then replace additional adjacent walk, provide ADA compliant cross slope at ramp, then transition the cross slope back to existing over 1 or 2 walk panels. typical comment for all curb ramps.

POINT	STATION	OFFSET	ELEV.
A	105+63.95	47.86' LT	576.84
B	105+67.99	49.02' LT	576.90
C	105+66.27	42.27' LT	576.80
D	105+69.92	44.34' LT	576.86
E	105+69.44	37.82' LT	576.89 (TC)
F	105+72.57	40.62' LT	576.95
G	105+79.94	35.26' LT	576.89
H	105+85.87	33.63' LT	576.54
I	105+95.38	33.10' LT	576.40
J	105+96.00	33.06' LT	576.45
K	105+97.11	32.75' LT	576.54
L	105+78.25	31.42' LT	576.85 (TC)
M	105+85.26	29.47' LT	576.49
N	105+95.08	28.88' LT	576.34



CURB RAMP DETAILS
 READING RD. AT GALBRAITH ROAD (NW)

DESIGN AGENCY



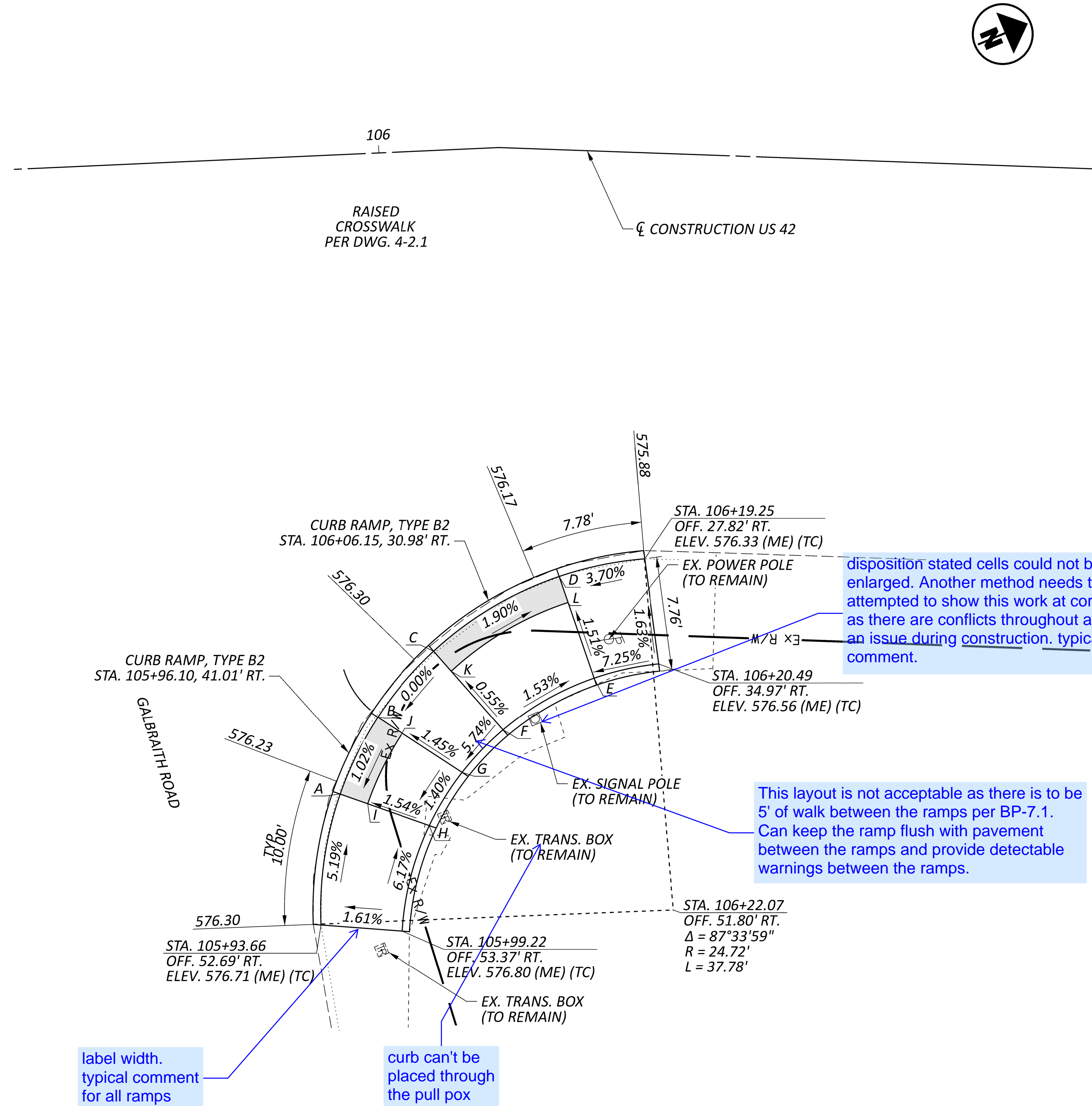
DESIGNER
 DEY

REVIEWER
 AMT 02/13/26

PROJECT ID
 123369

SHEET TOTAL
 P.45 117

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB



disposition stated cells could not be enlarged. Another method needs to be attempted to show this work at correct scale as there are conflicts throughout and will be an issue during construction. typical comment.

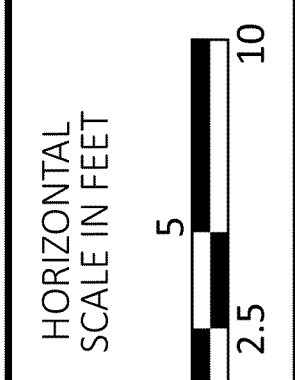
This layout is not acceptable as there is to be 5' of walk between the ramps per BP-7.1. Can keep the ramp flush with pavement between the ramps and provide detectable warnings between the ramps.

label width. typical comment for all ramps

curb can't be placed through the pull pox

POINT	STATION	OFFSET	ELEV.
A	105+95.38	43.80' RT	576.24
B	105+98.20	38.65' RT	576.30
C	106+02.24	34.28' RT	576.30
D	106+13.43	29.24' RT	576.11
E	106+16.08	36.11' RT	576.23
F	106+09.97	38.89' RT	576.34
G	106+03.81	42.69' RT	576.40
H	106+01.40	46.23' RT	576.34
I	105+97.23	44.54 RT	576.27
J	105+99.82	39.81 RT	576.33
K	106+03.38	35.71 RT	576.31
L	106+14.11	30.99 RT	576.14

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB



CURB RAMP DETAILS
 READING RD. AT GALBRAITH ROAD (NE) & SHERMAN AVENUE

DESIGN AGENCY

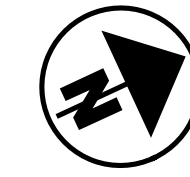
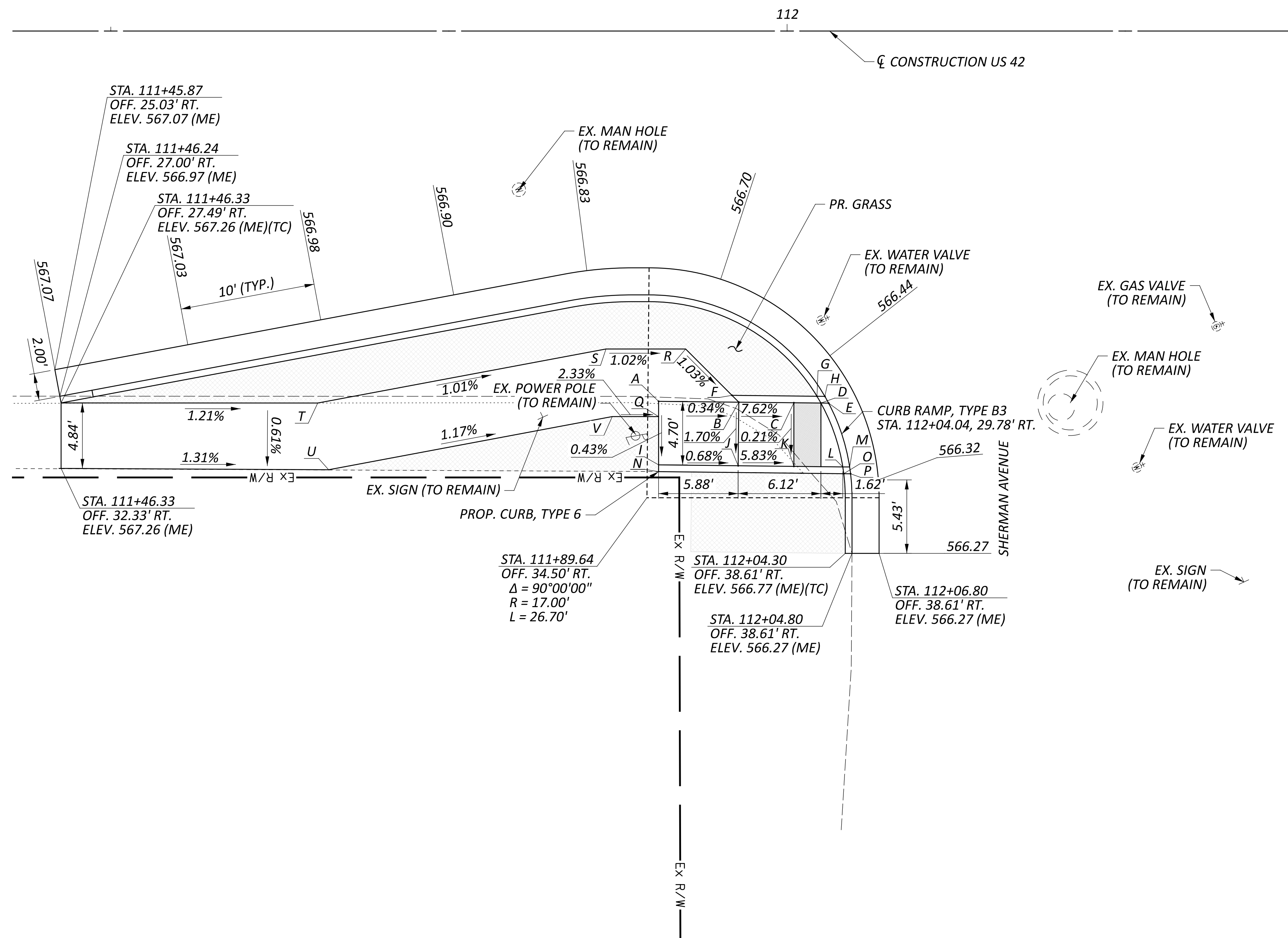


DESIGNER
 DEY

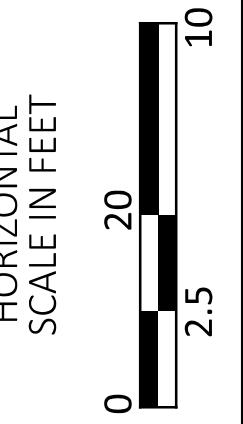
REVIEWER
 AMT 02/13/26

PROJECT ID
 123369

SHEET TOTAL
 P.46 | 117



POINT	STATION	OFFSET	ELEVATION
A	111+90.50	27.37 RT	566.67
B	111+96.44	27.43 RT	566.69
C	112+00.50	27.48 RT	566.38
D	112+02.50	27.50 RT	566.34
E	112+03.07	27.51 RT	566.34
F	111+95.93	26.93 RT	566.70 (TC)
G	112+02.21	27.00 RT	566.87 (TC)
H	112+02.80	27.00 RT	566.87 (TC)
I	111+90.59	32.07 RT	566.65
J	111+96.38	32.13 RT	566.61
K	112+00.50	32.18 RT	566.37
L	112+04.12	32.22 RT	566.31
M	112+04.63	32.22 RT	566.31
N	111+90.50	32.57 RT	566.65 (TC)
O	112+04.19	32.72 RT	566.82 (TC)
P	112+04.70	32.72 RT	566.82 (TC)
Q	111+90.50	28.50 RT	566.67
R	111+92.50	23.50 RT	566.75
S	111+86.61	23.50 RT	566.81
T	111+65.30	27.49 RT	567.03
U	111+66.11	32.43 RT	567.00
V	111+87.07	28.50 RT	566.75



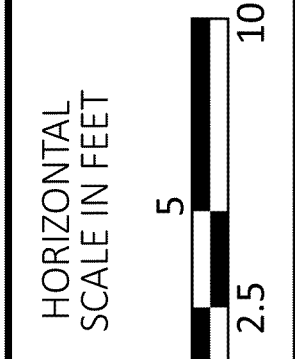
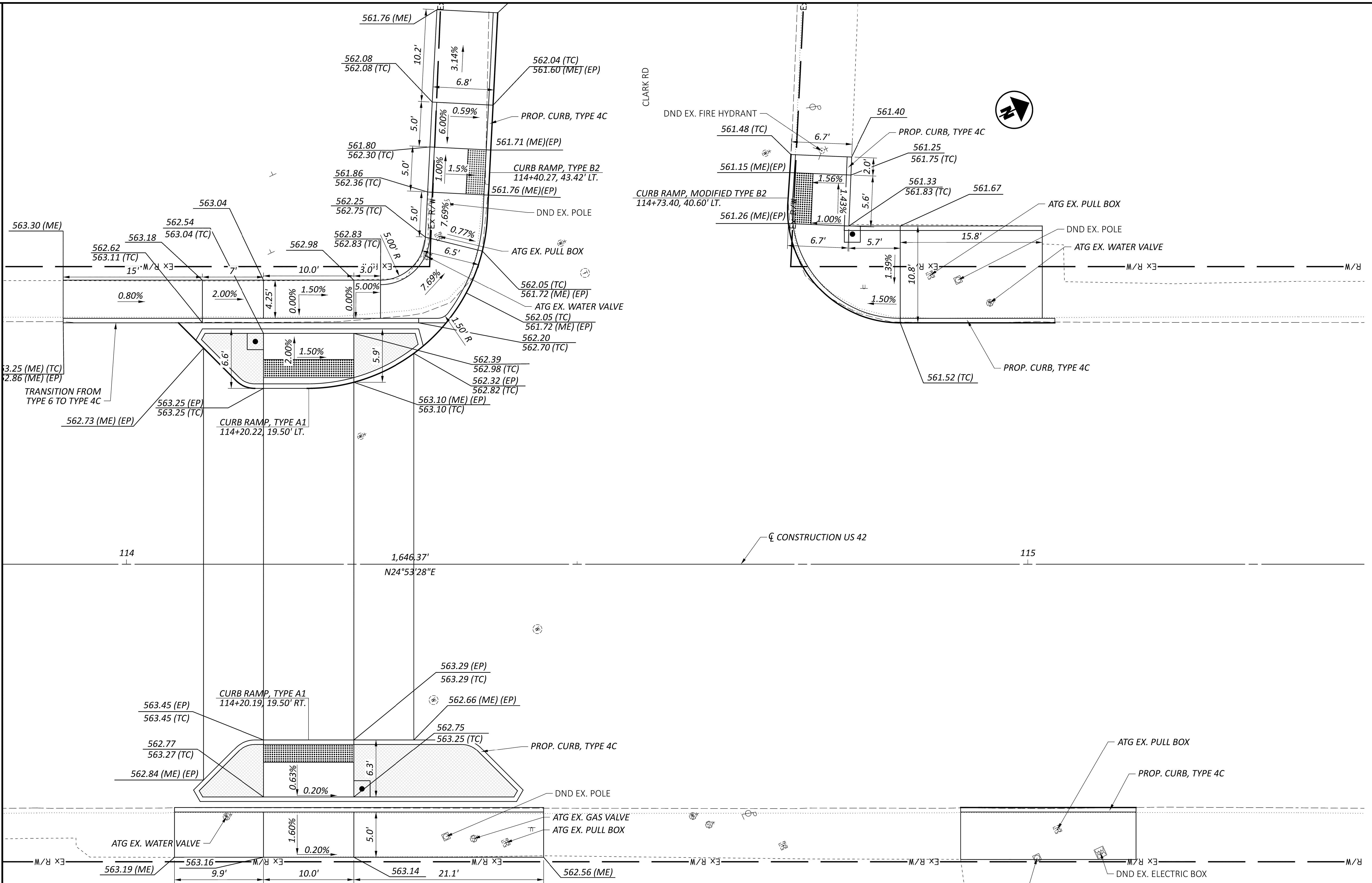
CURB RAMP DETAILS
 READING RD. AT SHERMAN AVE.

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB

DESIGN AGENCY

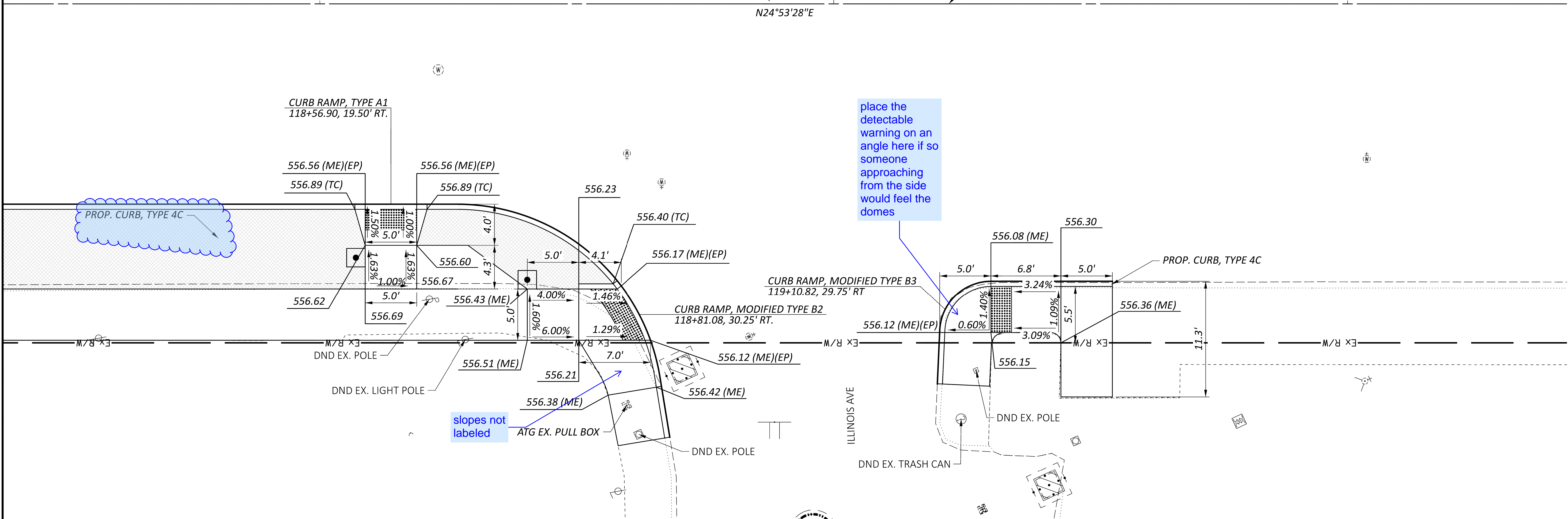
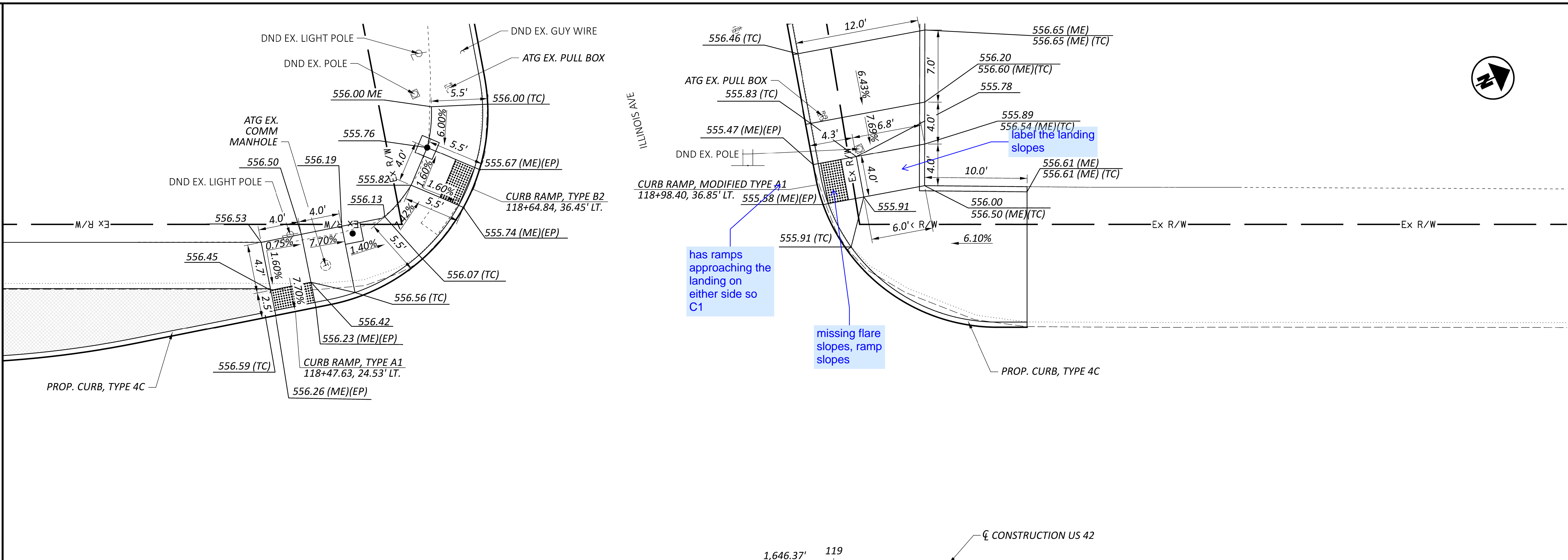


DESIGNER	TBW
REVIEWER	AMT 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.47 117



CURB RAMP DETAILS
READING RD. AT CLARK RD

DESIGN AGENCY	
 CMT CONSTRUCTION MANAGEMENT TECHNOLOGIES 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.48
TOTAL	117



has ramps approaching the landing on either side so C1

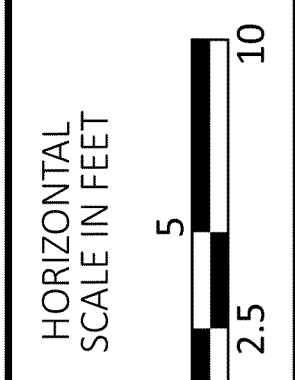
missing flare slopes, ramp slopes

label the landing slopes

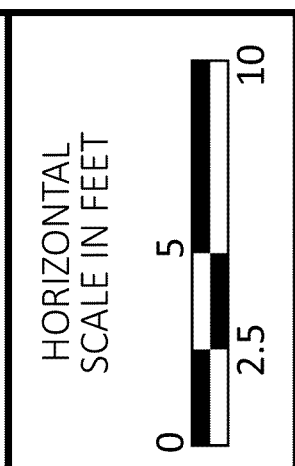
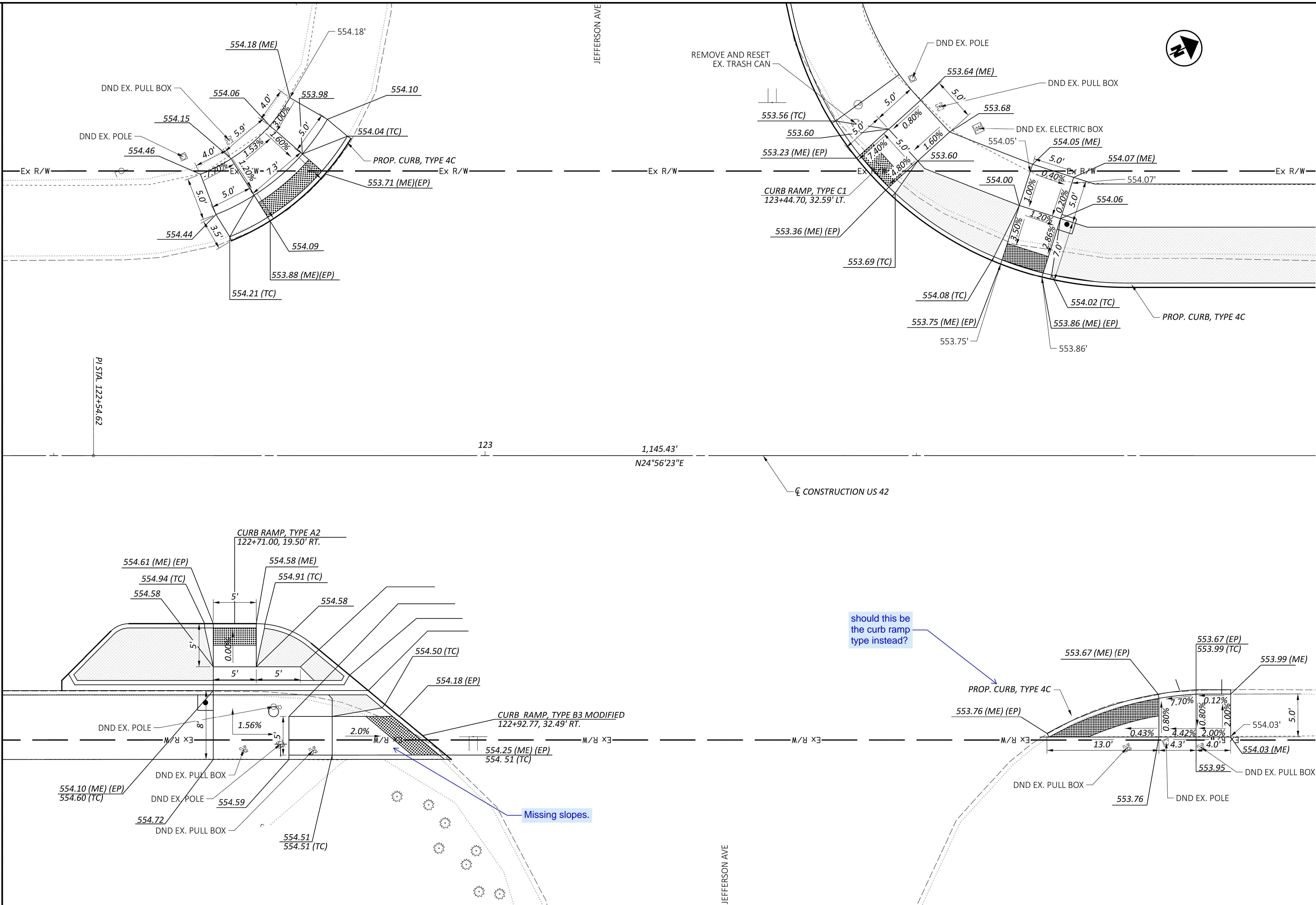
place the detectable warning on an angle here if so someone approaching from the side would feel the domes

slopes not labeled

CURB RAMP DETAILS
READING RD. AT ILLINOIS AVE



DESIGN AGENCY	
BRUCE R. MURPHY & CONSULTANTS 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45424 (937) 233-1100 www.cmtinc.com	
DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.49	117

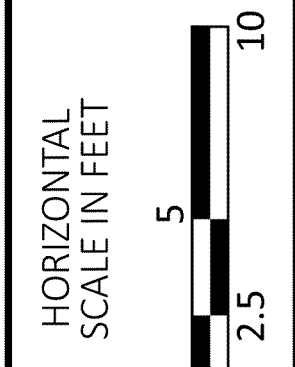
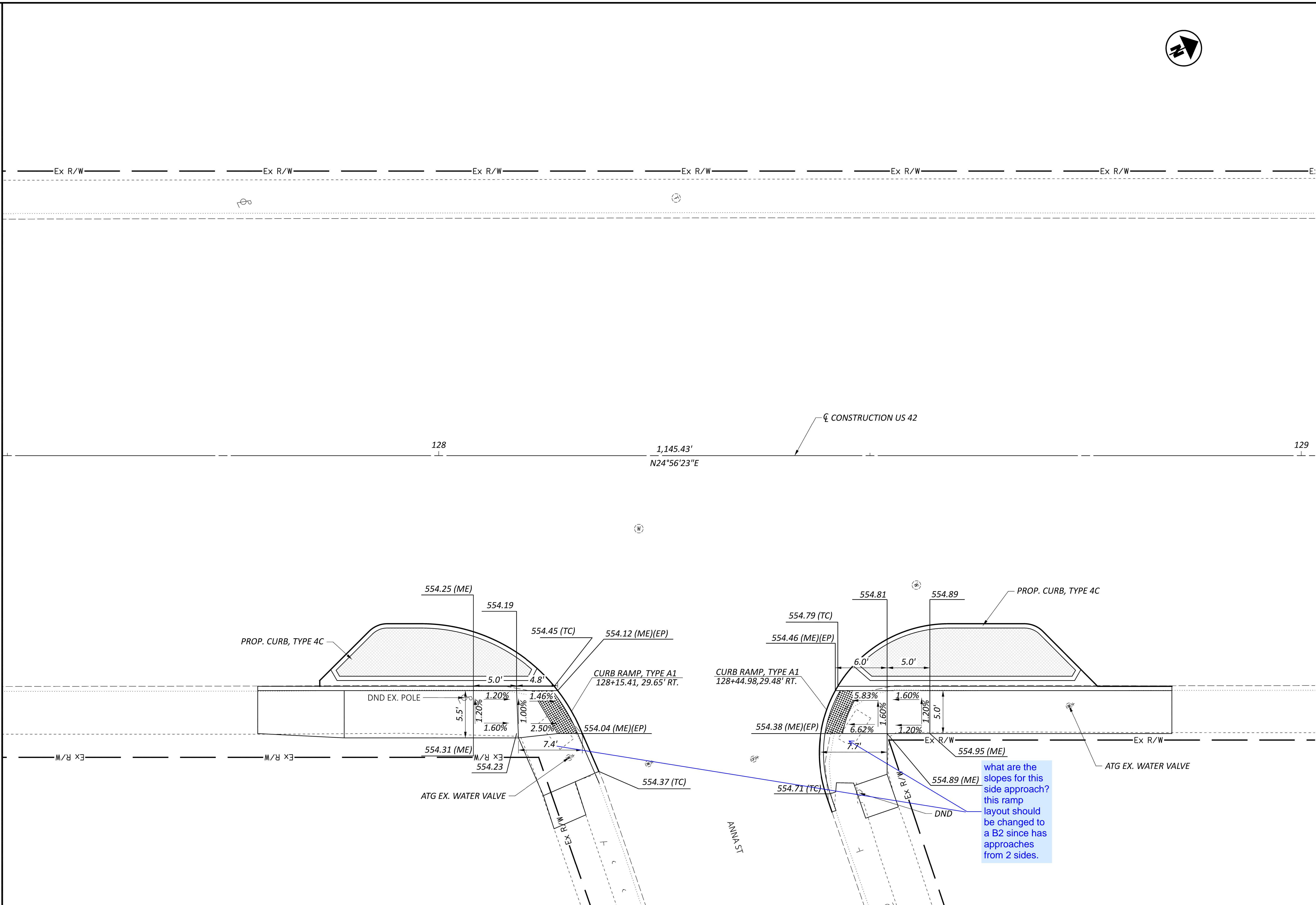


CURB RAMP DETAILS
READING RD. AT JEFFERSON AVE

should this be the curb ramp type instead?

Missing slopes.

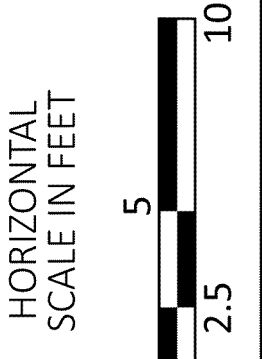
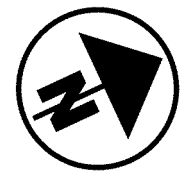
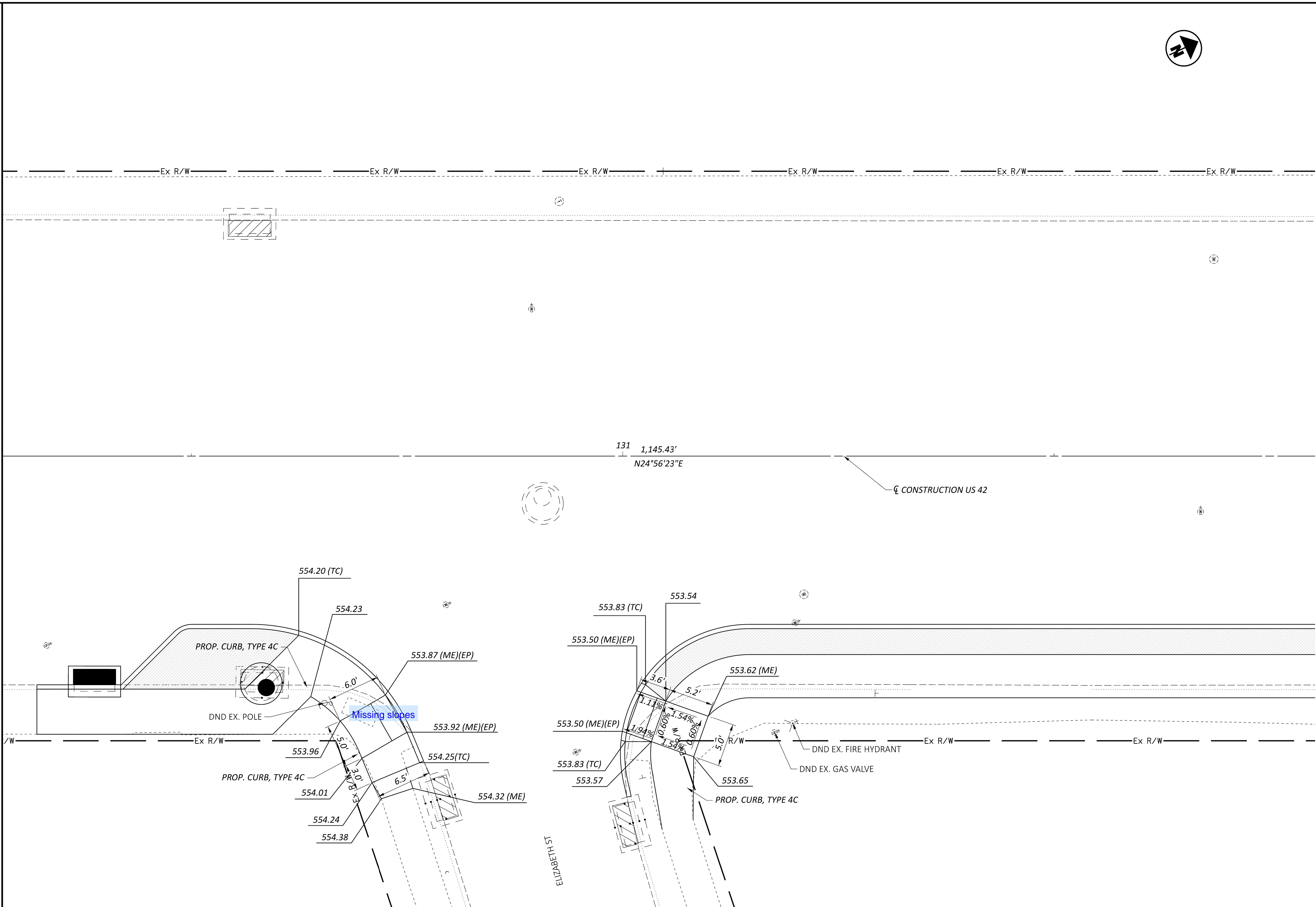
DESIGN AGENCY	
CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45424 www.cmtengr.com	
DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.50	117



CURB RAMP DETAILS
READING RD. AT ANNA ST

what are the slopes for this side approach? this ramp layout should be changed to a B2 since has approaches from 2 sides.

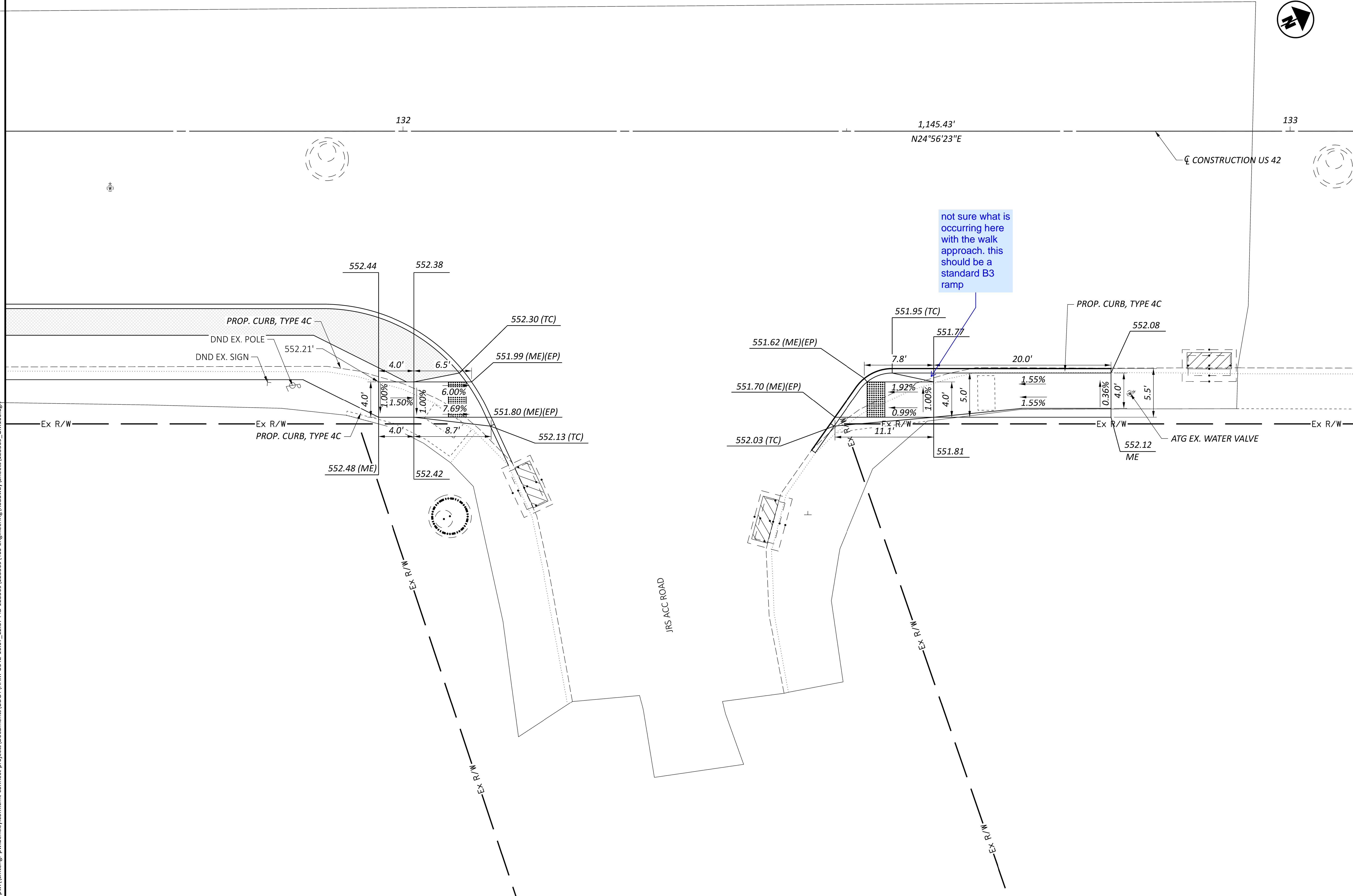
DESIGN AGENCY	
 CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.51	117



CURB RAMP DETAILS
READING RD. AT ELIZABETH ST

DESIGN AGENCY
CMT
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1777 WASHINGTON VILLAGE DR
DAYTON, OHIO 45459
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DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.52
TOTAL	117



CURB RAMP DETAILS
READING RD. AT JRS ACCESS RD

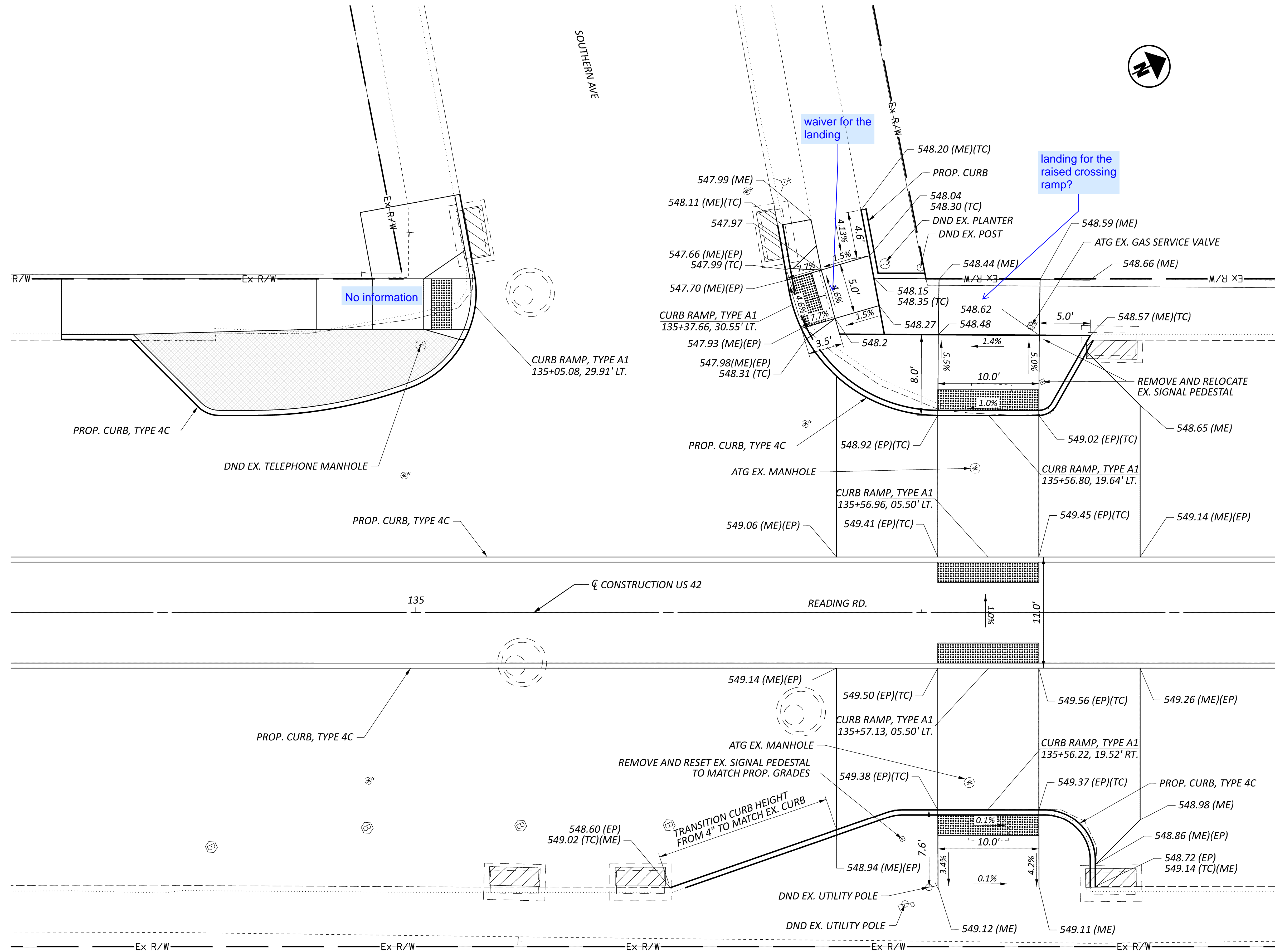
DESIGN AGENCY
CMT
 CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
 1777 WASHINGTON VILLAGE DR
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DESIGNER
 LDW

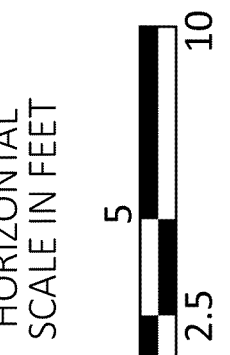
REVIEWER
 JWL 02/13/26

PROJECT ID
 123369

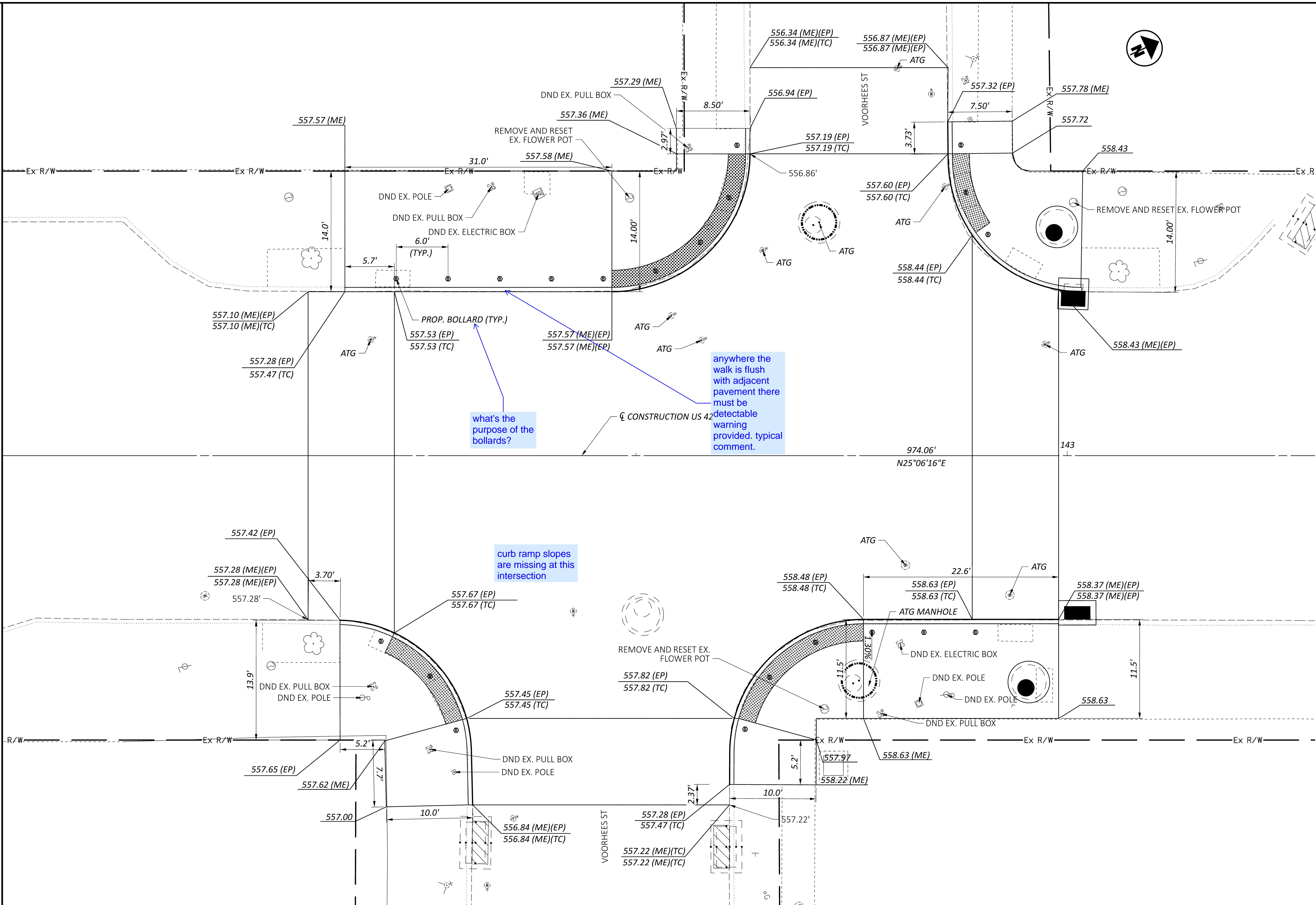
SHEET TOTAL
 P.53 | 117



CURB RAMP DETAILS
READING RD. AT SOUTHERN AVE.



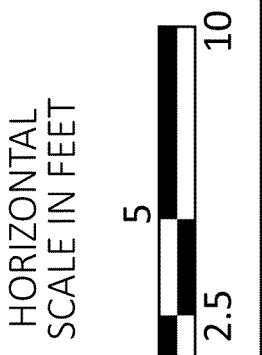
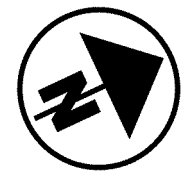
DESIGN AGENCY	TOOLE DESIGN
DESIGNER	XXX
REVIEWER	XXX
PROJECT ID	123369
SHEET TOTAL	P.54 117



what's the purpose of the bollards?

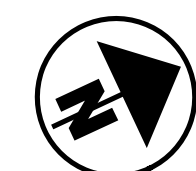
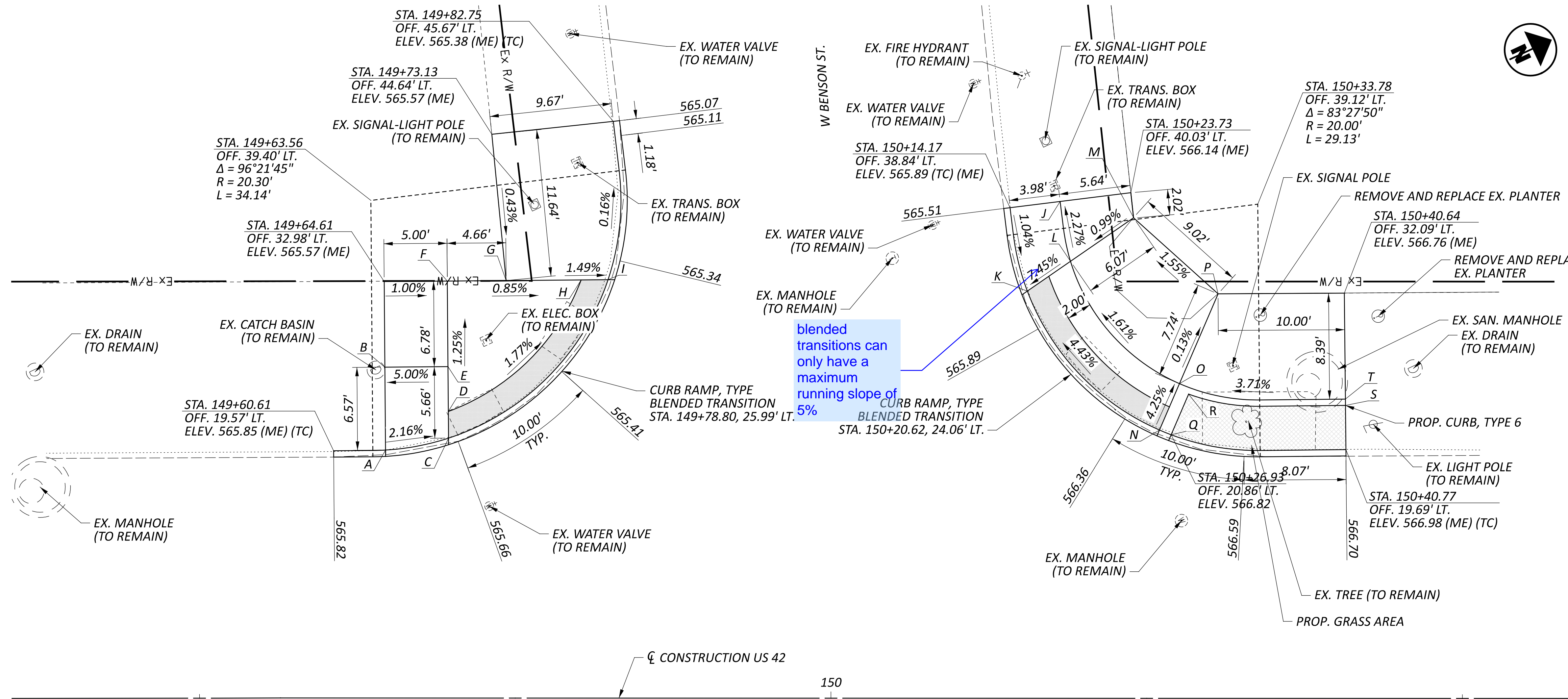
anywhere the walk is flush with adjacent pavement there must be detectable warning provided. typical comment.

curb ramp slopes are missing at this intersection



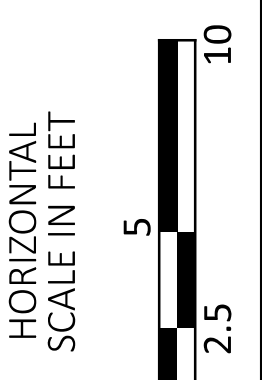
CURB RAMP DETAILS
READING RD. AT VOORHEES ST

DESIGN AGENCY	
CMT CIVIL & SURVEYING 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	LDW
REVIEWER	JWL 02/13/26
PROJECT ID	123369
SHEET	P.55
TOTAL	117



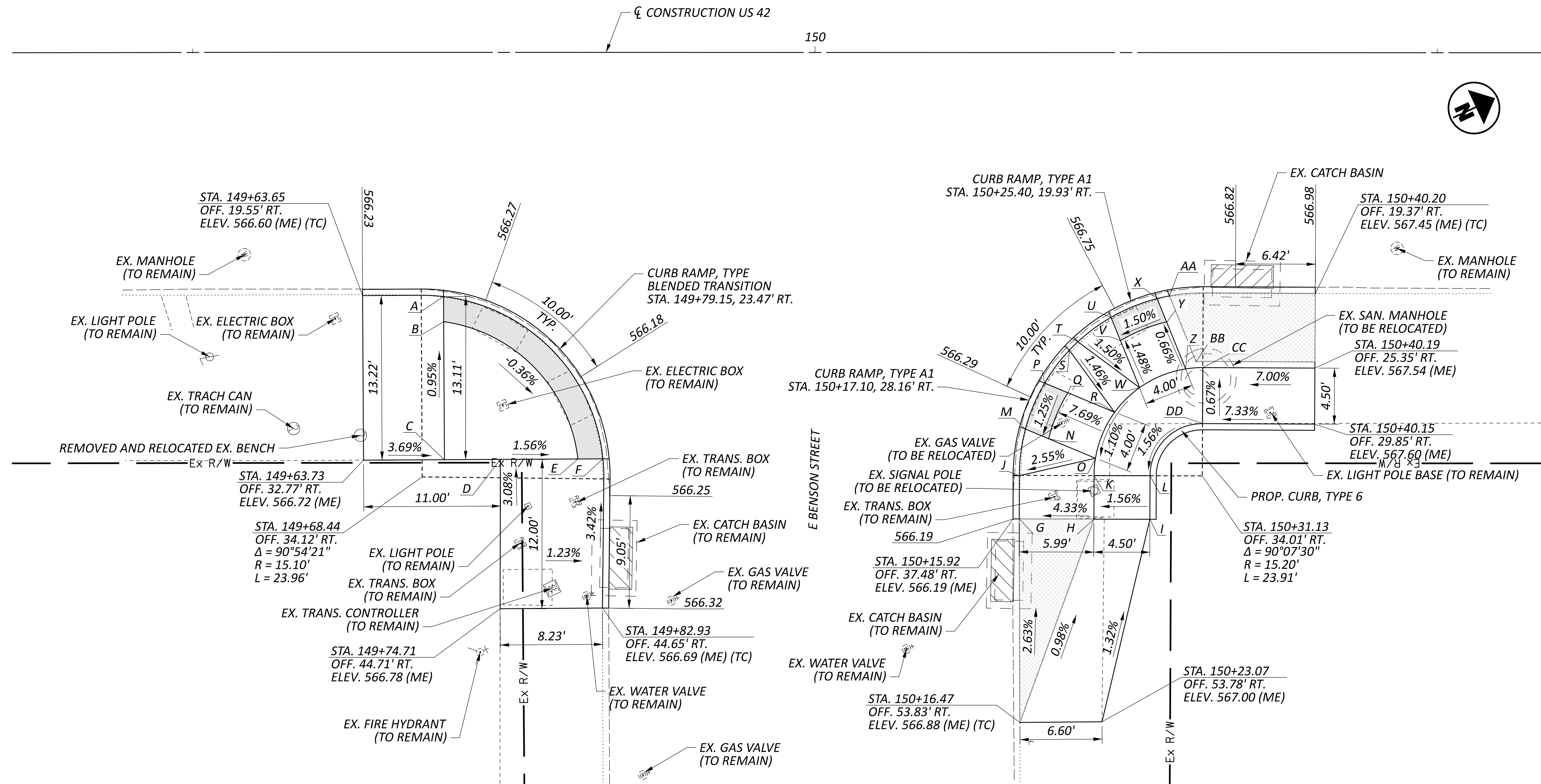
POINT	STATION	OFFSET	ELEV.
A	149+64.72	19.63' LT	565.84 (TC)
B	149+64.67	26.20' LT	565.41
C	149+69.71	20.58' LT	565.73
D	149+69.70	22.69' LT	565.70
E	149+69.67	26.24' LT	565.66
F	149+69.61	33.02' LT	565.52
G	149+74.27	33.06' LT	565.52
H	149+80.21	33.11' LT	565.43
I	149+82.34	33.12' LT	565.40
J	150+18.13	39.33' LT	566.02
K	150+15.54	32.23' LT	565.82
L	150+18.96	34.60' LT	566.13
M	150+23.95	38.06' LT	566.18
N	150+26.01	21.24' LT	566.51
O	150+27.58	24.91' LT	566.34
P	150+30.64	32.02' LT	566.33
Q	150+26.93	20.86' LT	566.97 (TC)
R	150+28.32	24.08' LT	566.81 (TC)
S	150+40.73	23.19' LT	566.86 (TC)
T	150+40.73	23.69' LT	566.83

CURB RAMP DETAILS
 READING RD. AT BENSON STREET (1 OF 2)



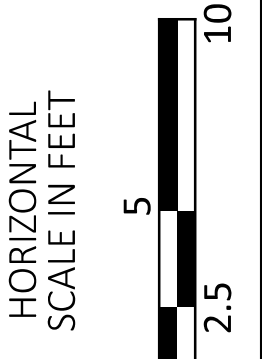
DESIGN AGENCY	2LMN
DESIGNER	KAZ
REVIEWER	AMT 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.47 117

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB



POINT	STATION	OFFSET	ELEV.
A	149+70.15	19.62' RT	566.35
B	149+70.17	21.64' RT	566.37
C	149+70.23	32.73' RT	566.48
D	149+74.72	32.71' RT	566.41
E	149+80.96	32.67' RT	566.31
F	149+82.97	32.66' RT	566.28
G	150+16.42	37.48' RT	566.45 (TC)
H	150+22.42	37.49' RT	566.71
I	150+26.92	37.50' RT	566.78
J	150+16.43	34.01' RT	566.62 (TC)
K	150+22.43	33.99' RT	566.76
L	150+26.93	34.00' RT	566.83
M	150+16.92	30.25' RT	566.31
N	150+18.78	31.03' RT	566.47
O	150+22.56	32.60' RT	566.78
P	150+18.46	26.56' RT	566.38
Q	150+20.32	27.34' RT	566.52
R	150+24.09	28.90' RT	566.82
S	150+20.44	23.92' RT	566.91 (TC)
T	150+21.13	23.24' RT	566.95 (TC)
U	150+23.79	21.28' RT	566.76
V	150+24.55	23.15' RT	566.81
W	150+26.08	26.92' RT	566.85
X	150+27.49	19.77' RT	566.86
Y	150+28.27	21.68' RT	566.87
Z	150+29.79	25.42' RT	566.90
AA	150+28.49	19.55' RT	567.23 (TC)
BB	150+30.63	24.83' RT	567.40 (TC)
CC	150+31.16	25.31' RT	566.91
DD	150+31.14	29.80' RT	566.94

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB



CURB RAMP DETAILS
 READING RD. AT BENSON STREET (2 OF 2)

DESIGN AGENCY

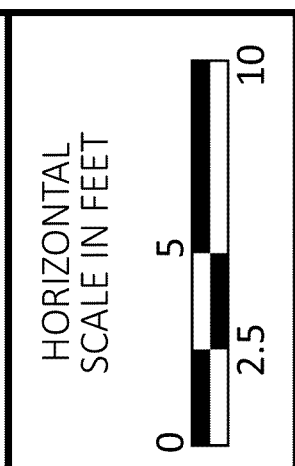
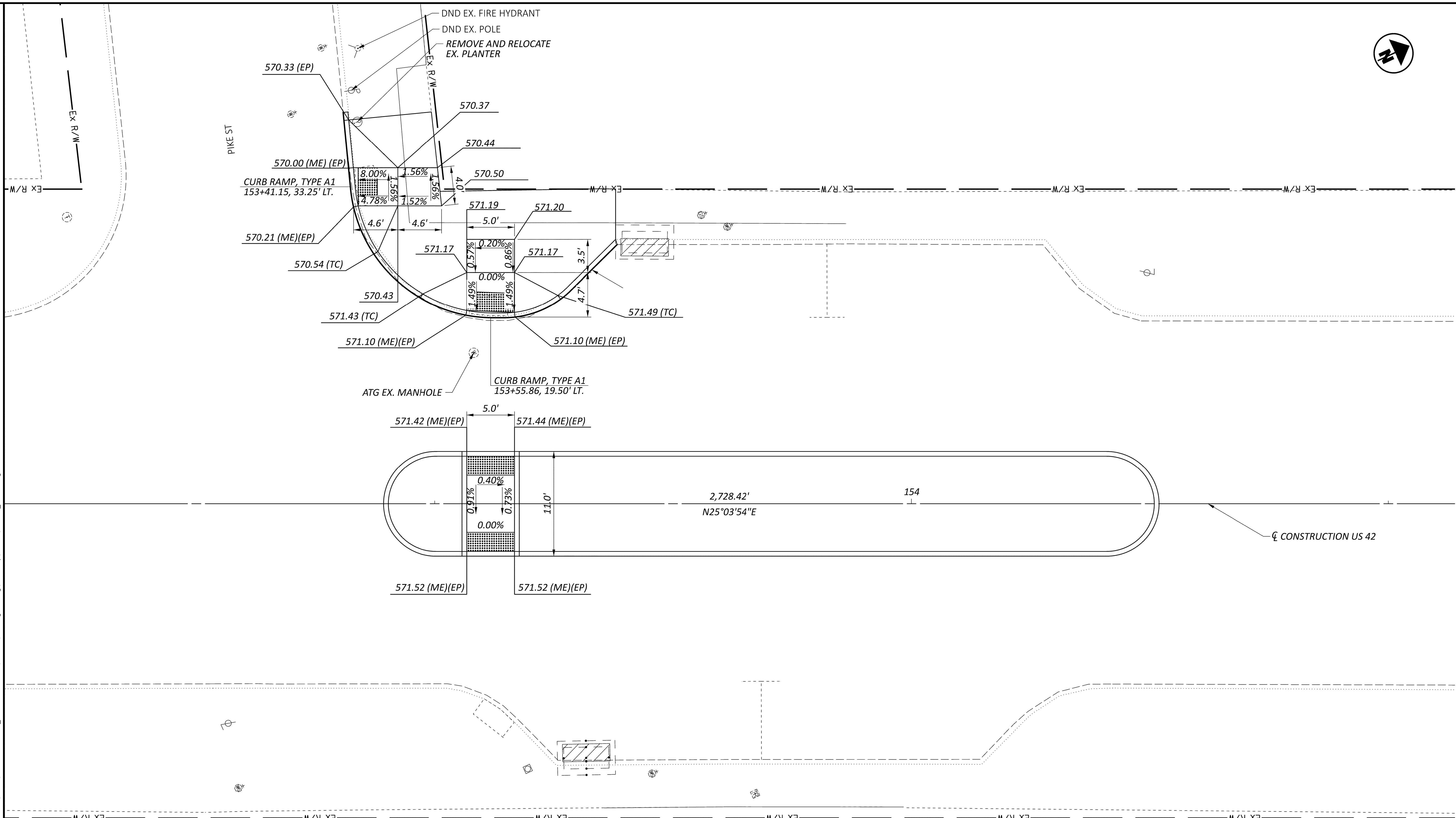


DESIGNER
 KAZ

REVIEWER
 AMT 02/13/26

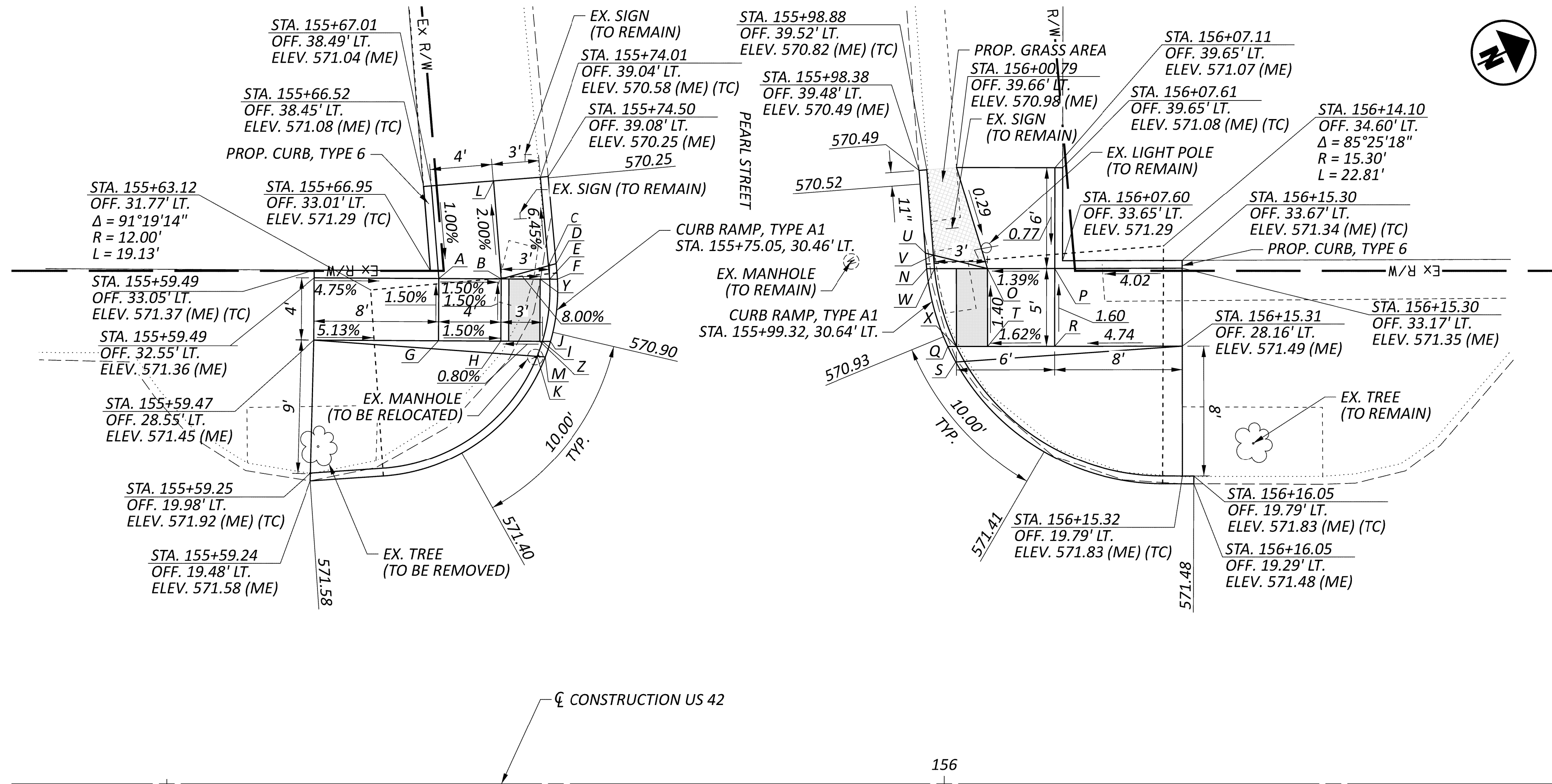
PROJECT ID
 123369

SHEET TOTAL
 P.48 | 117



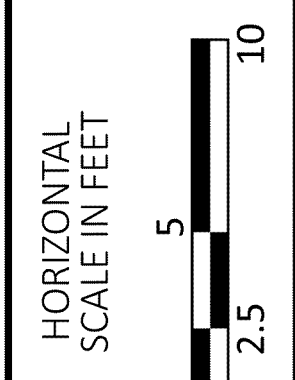
CURB RAMP DETAILS
READING RD. AT PIKE ST

DESIGN AGENCY	
 CMT CIVIL & TRANSPORTATION 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.58	117



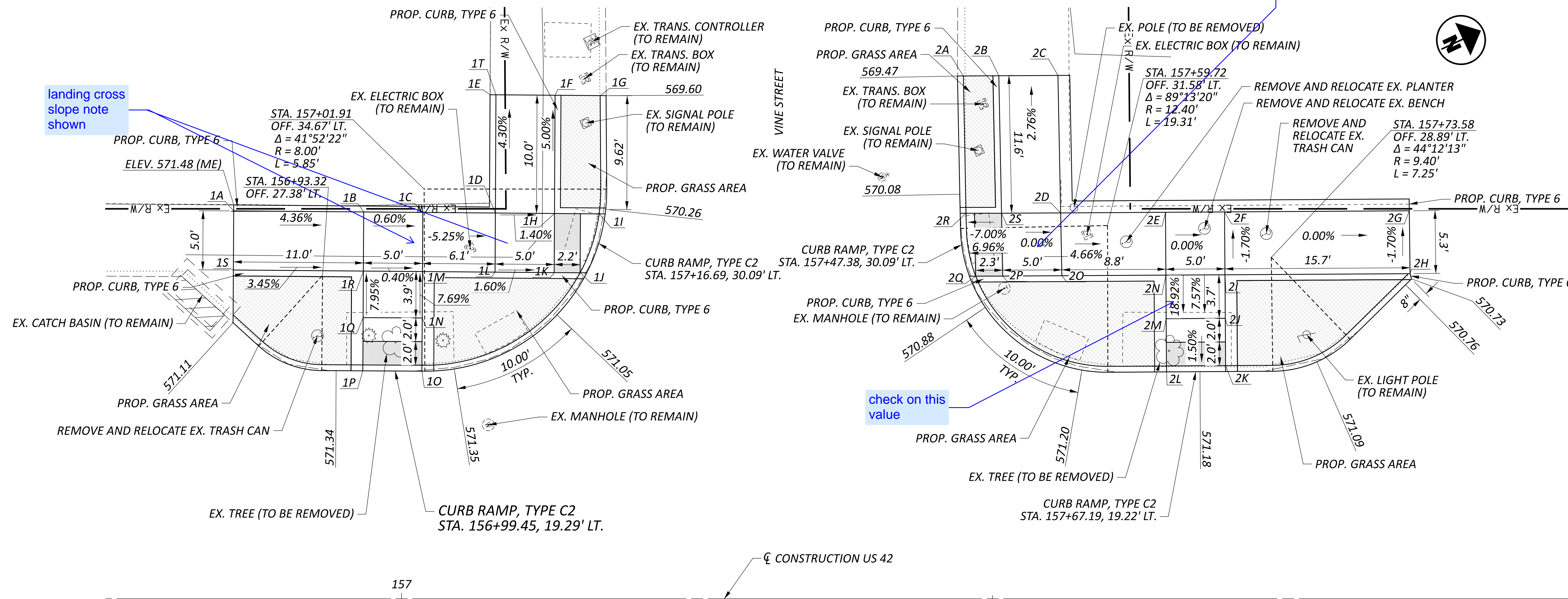
POINT	STATION	OFFSET	ELEVATION
A	155+67.49	32.50 LT	570.98
B	155+71.49	32.48 LT	570.92
C	155+74.53	33.33 LT	570.95 (TC)
D	155+75.02	33.46 LT	570.92 (TC)
E	155+74.60	32.47 LT	570.71
F	155+75.10	32.46 LT	570.67
G	155+67.47	28.51 LT	571.04
H	155+71.47	28.48 LT	570.98
I	155+74.14	28.47 LT	571.00
J	155+74.66	28.47 LT	570.96
K	155+73.80	27.50 LT	571.38 (TC)
L	155+71.00	38.80 LT	570.80
M	155+74.32	27.47 LT	571.35 (TC)
N	155+98.87	33.14 LT	570.74
O	156+02.78	33.14 LT	570.96
P	156+07.10	33.15 LT	571.02
Q	156+00.23	28.14 LT	570.98
R	156+07.09	28.15 LT	571.10
S	156+00.74	27.14 LT	571.34 (TC)
T	156+02.78	28.14 LT	571.03
U	155+98.79	34.14 LT	571.01 (TC)
V	155+99.37	33.14 LT	570.78
X	156+00.78	28.14 LT	571.02
Y	155+73.99	32.47 LT	570.72
Z	155+73.97	28.47 LT	570.96

CURB RAMP DETAILS
 READING RD. AT PEARL STREET

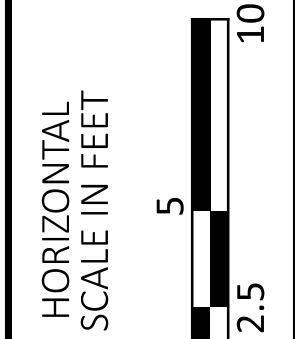
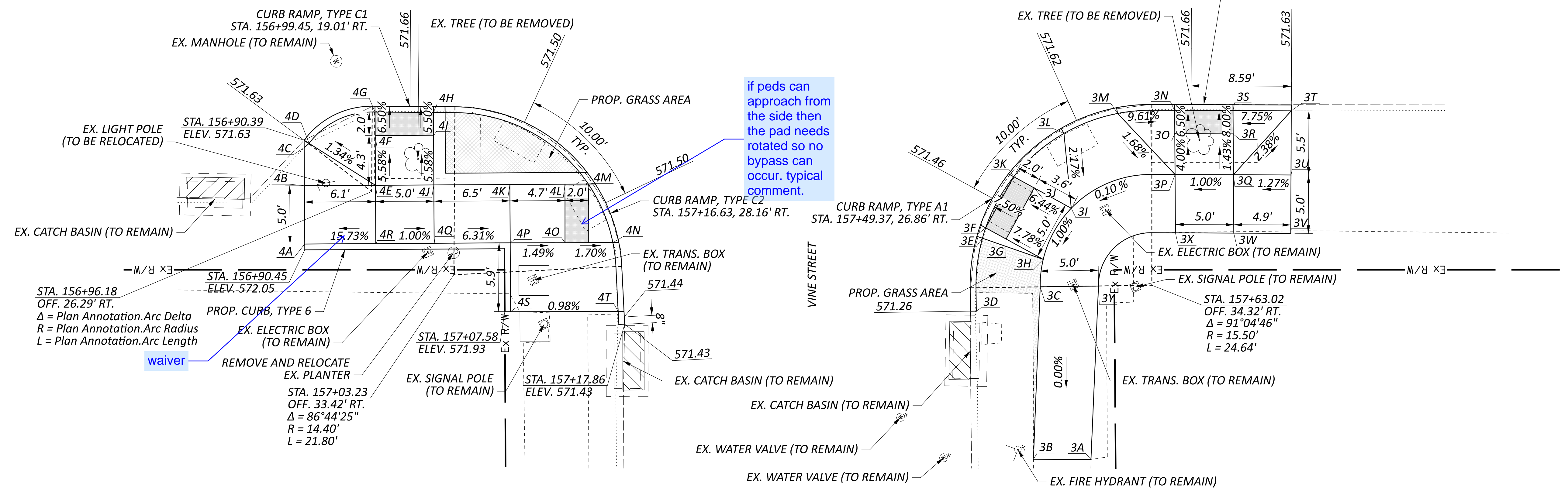


NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB

DESIGN AGENCY	2LMN
DESIGNER	KAZ
REVIEWER	AMT 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.59 117



CONSTRUCTION US 42



CURB RAMP DETAILS
READING RD. AT VINE ST.

DESIGN AGENCY	2LMN
DESIGNER	XXX
REVIEWER	AMT 02/13/26
PROJECT ID	123369
SHEET	P.52
TOTAL	117

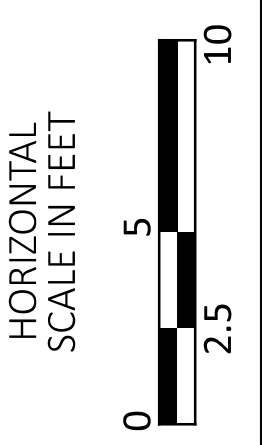
POINT	STATION	OFFSET	ELEV.
1A	156+85.80	32.82' LT	571.46 (ME)
1B	156+96.80	32.73' LT	570.98
1C	157+01.80	32.69' LT	570.95
1D	157+07.94	32.64' LT	570.63
1E	157+07.49	42.65' LT	570.21 (ME)
1F	157+12.99	42.60' LT	570.06 (ME)
1G	157+16.81	42.57' LT	569.74 (ME)
1H	157+12.94	32.60' LT	570.56
1I	157+16.72	32.57' LT	570.31
1J	157+15.11	27.59' LT	570.75
1K	157+12.91	27.60' LT	570.63
1L	157+07.91	27.64' LT	570.71
1M	157+01.77	27.69' LT	571.03
1N	157+01.75	23.77' LT	571.33
1O	157+01.72	19.27' LT	571.35
1P	156+96.72	19.30' LT	571.34
1Q	156+96.75	23.80' LT	571.36
1R	156+96.77	27.73' LT	571.05
1S	156+85.77	27.82' LT	571.43 (ME)
1T	157+07.99	42.64' LT	570.20 (ME)

POINT	STATION	OFFSET	ELEV.
3A	157+57.81	49.25' RT	572.54 (ME)
3B	157+52.88	49.23' RT	572.42 (ME)
3C	157+53.46	34.46' RT	571.89
3D	157+47.99	36.54' RT	571.78 (TC)
3E	157+48.51	30.29' RT	571.93 (TC)
3F	157+48.79	29.40' RT	571.48
3G	157+50.54	30.36' RT	571.63
3H	157+53.72	32.10' RT	571.91
3I	157+69.12	27.72' RT	571.96
3J	157+52.94	25.98' RT	571.71
3K	157+51.19	25.02' LT	571.56
3L	157+55.49	21.31' RT	572.10 (TC)
3M	157+60.09	19.60' RT	572.18 (TC)
3N	157+64.98	19.33' RT	571.71
3O	157+64.99	21.33' RT	571.84
3P	157+65.02	24.83' RT	572.06
3Q	157+70.02	24.85' RT	572.11
3R	157+69.99	21.35' RT	571.85
3S	157+69.98	19.35' RT	571.69
3T	157+74.97	19.37' RT	572.07 (ME)
3U	157+74.95	24.87' RT	572.18 (ME)
3V	157+74.93	29.87' RT	572.25 (ME)
3W	157+70.05	29.85' RT	572.17
3X	157+65.05	29.83' RT	572.10
3Y	157+58.46	34.39' RT	571.97

POINT	STATION	OFFSET	ELEV.
2A	157+47.53	44.23' LT	569.67 (TC)
2B	157+50.53	44.25' LT	569.82 (ME)
2C	157+55.53	44.28' LT	570.71 (ME)
2D	157+55.76	32.65' LT	570.39
2E	157+64.63	32.71' LT	570.80
2F	157+69.63	32.74' LT	570.83
2G	157+85.25	32.83' LT	570.80 (ME)
2H	157+85.32	27.51' LT	570.89 (ME)
2I	157+69.66	27.42' LT	570.89
2J	157+69.69	23.74' LT	571.17
2K	157+69.71	19.74' LT	571.23
2L	157+64.71	19.71' LT	571.23
2M	157+64.69	23.71' LT	571.17
2N	157+64.66	27.39' LT	570.89
2O	157+55.86	27.34' LT	570.55
2P	157+50.86	27.31' LT	570.47
2Q	157+48.57	27.31' LT	570.63
2R	157+47.76	32.62' LT	570.18
2S	157+50.76	32.62' LT	570.39

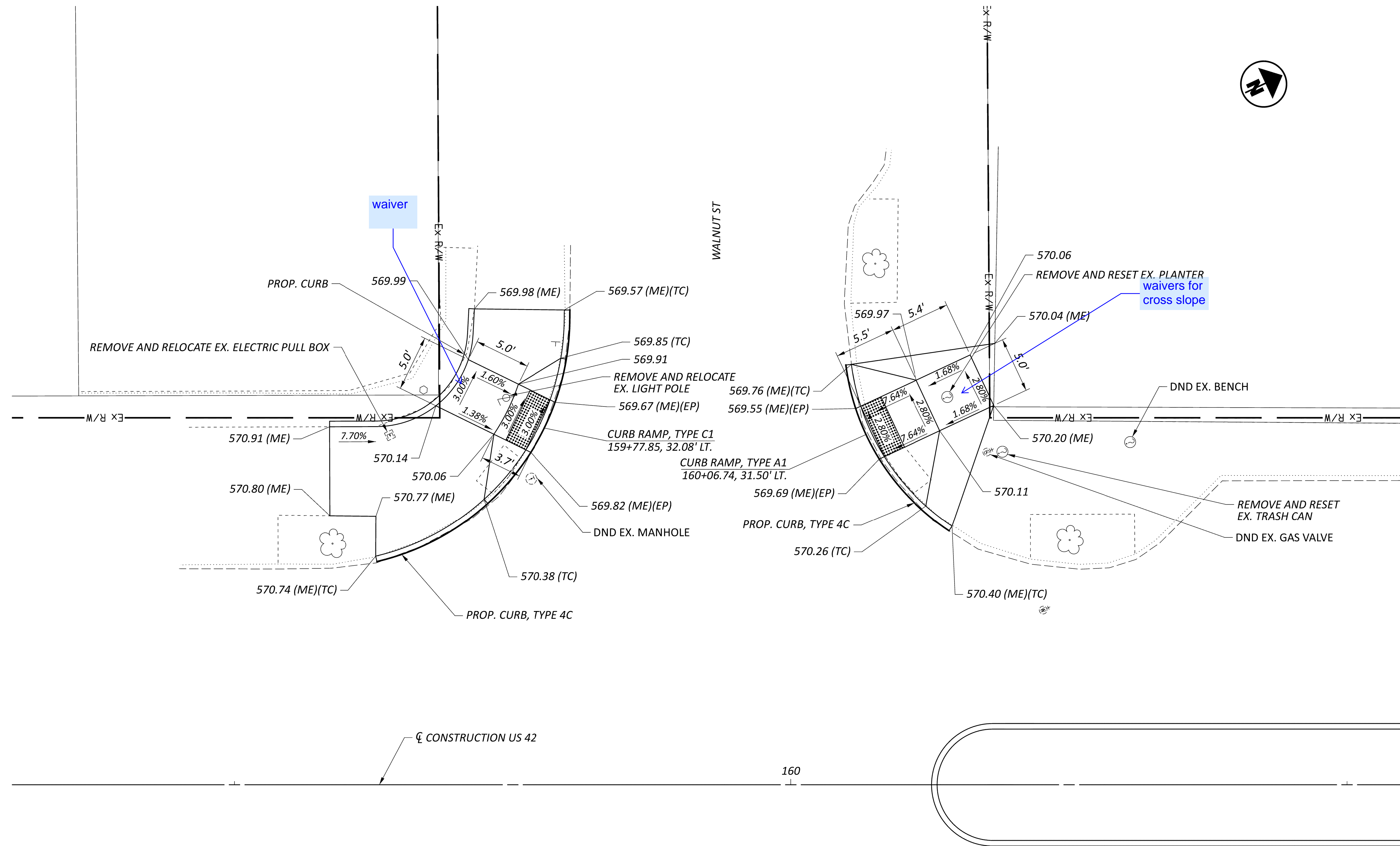
POINT	STATION	OFFSET	ELEV.
4A	156+90.45	30.79' RT	572.03 (ME)
4B	156+90.42	25.79' RT	572.01 (ME)
4C	156+90.40	22.53' RT	571.98 (ME)
4D	156+90.82	22.16' RT	571.99 (TC)
4E	156+96.51	25.75' RT	572.08
4F	156+96.48	21.48' RT	571.84
4G	156+96.47	19.48' RT	571.72
4H	157+01.47	19.51' RT	571.68
4I	157+01.48	21.51' RT	571.79
4J	157+01.51	25.72' RT	572.03
4K	157+08.02	25.69' RT	571.61
4L	157+12.75	25.66' LT	571.58
4M	157+14.75	25.65' RT	571.56
4N	157+16.87	30.66' RT	571.55
4O	157+12.75	30.67' RT	571.62
4P	157+08.05	30.69' RT	571.69
4Q	157+01.54	30.72' RT	572.10
4R	156+96.54	30.75' RT	572.15
4S	157+08.08	36.59' RT	571.94 (ME)
4T	157+17.30	36.58' RT	571.85 (ME)

NOTE:
 ME = MATCH EXISTING
 TC = TOP OF CURB

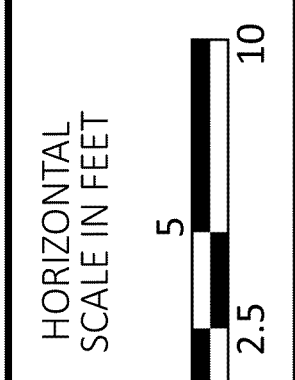


CURB RAMP DETAILS
 READING RD. AT VINE ST. (2 OF 2)

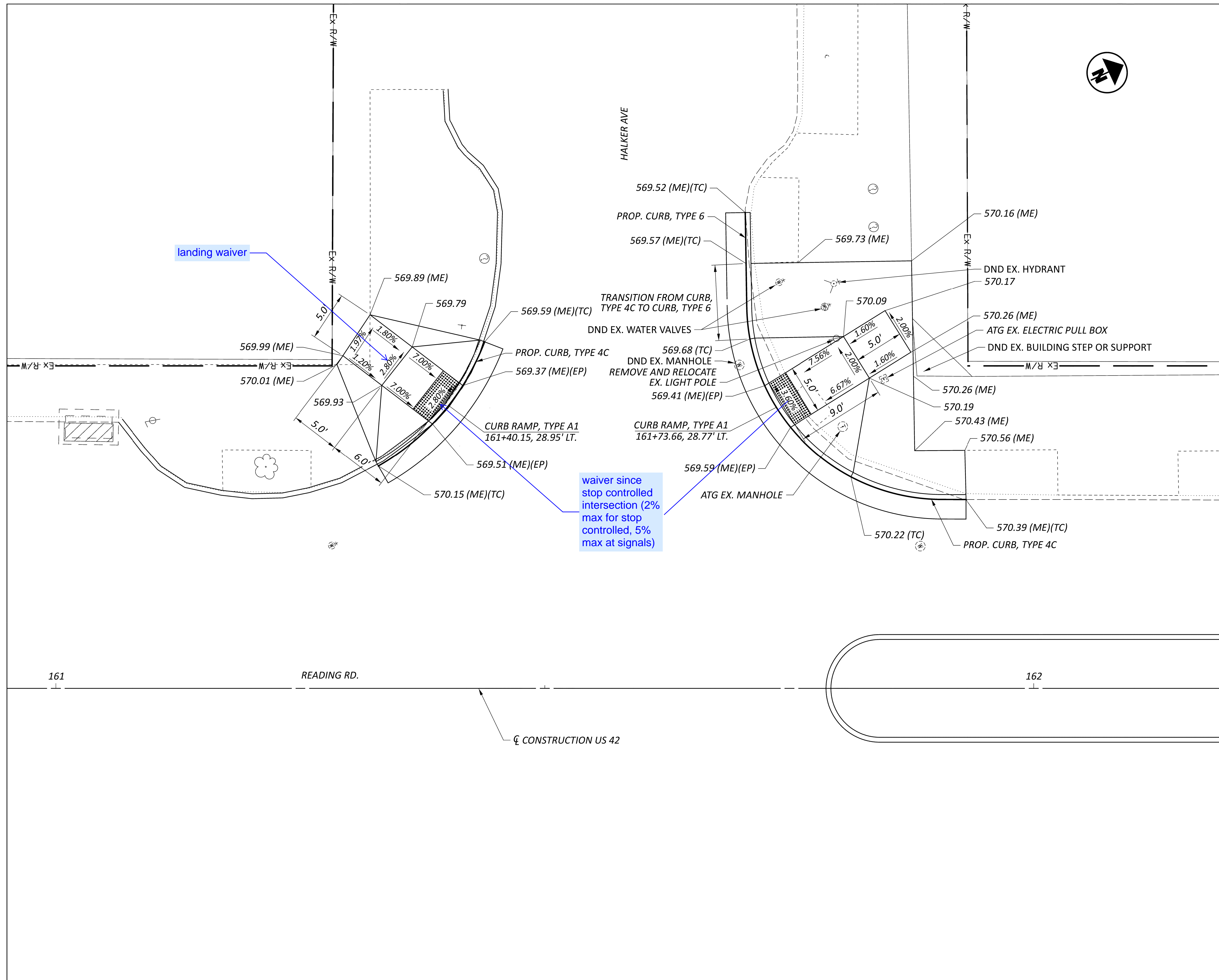
DESIGN AGENCY	
2LMN	
DESIGNER	DEY
REVIEWER	AMT 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.53 117



CURB RAMP DETAILS
 READING RD. AT WALNUT ST.

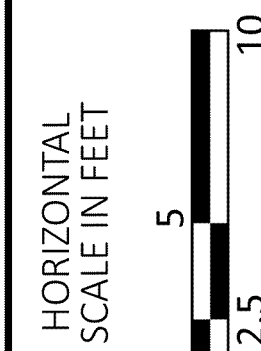
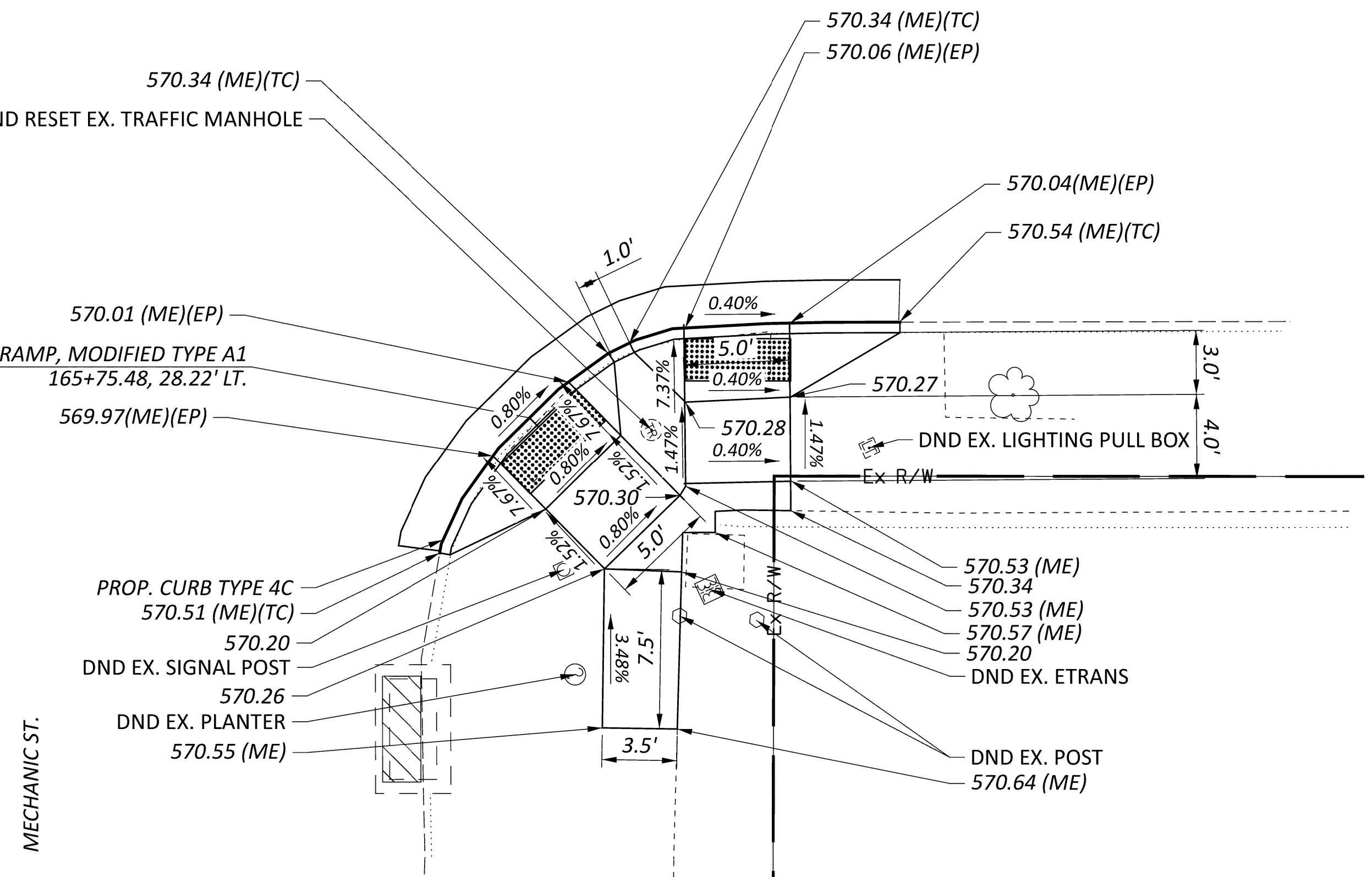
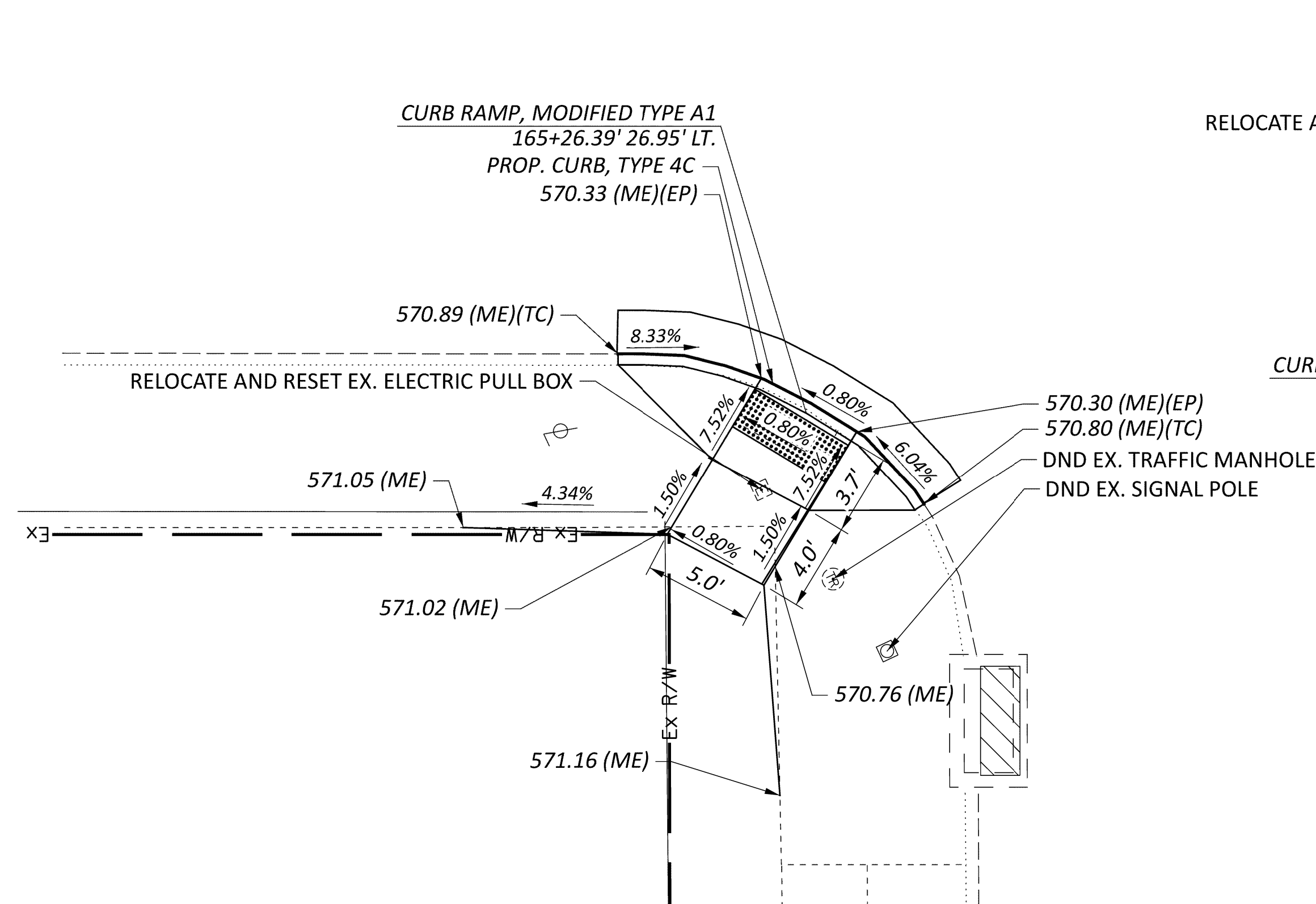
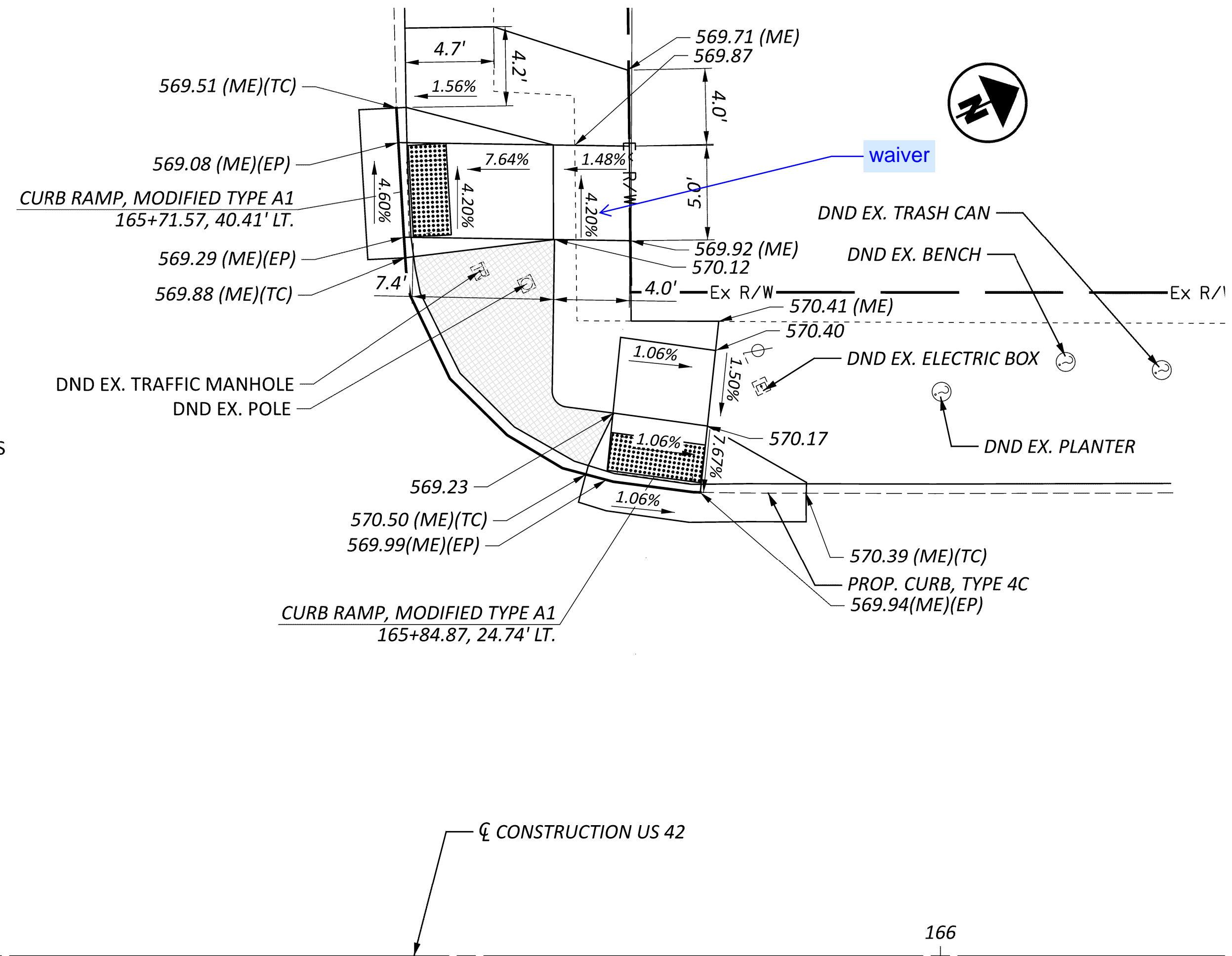
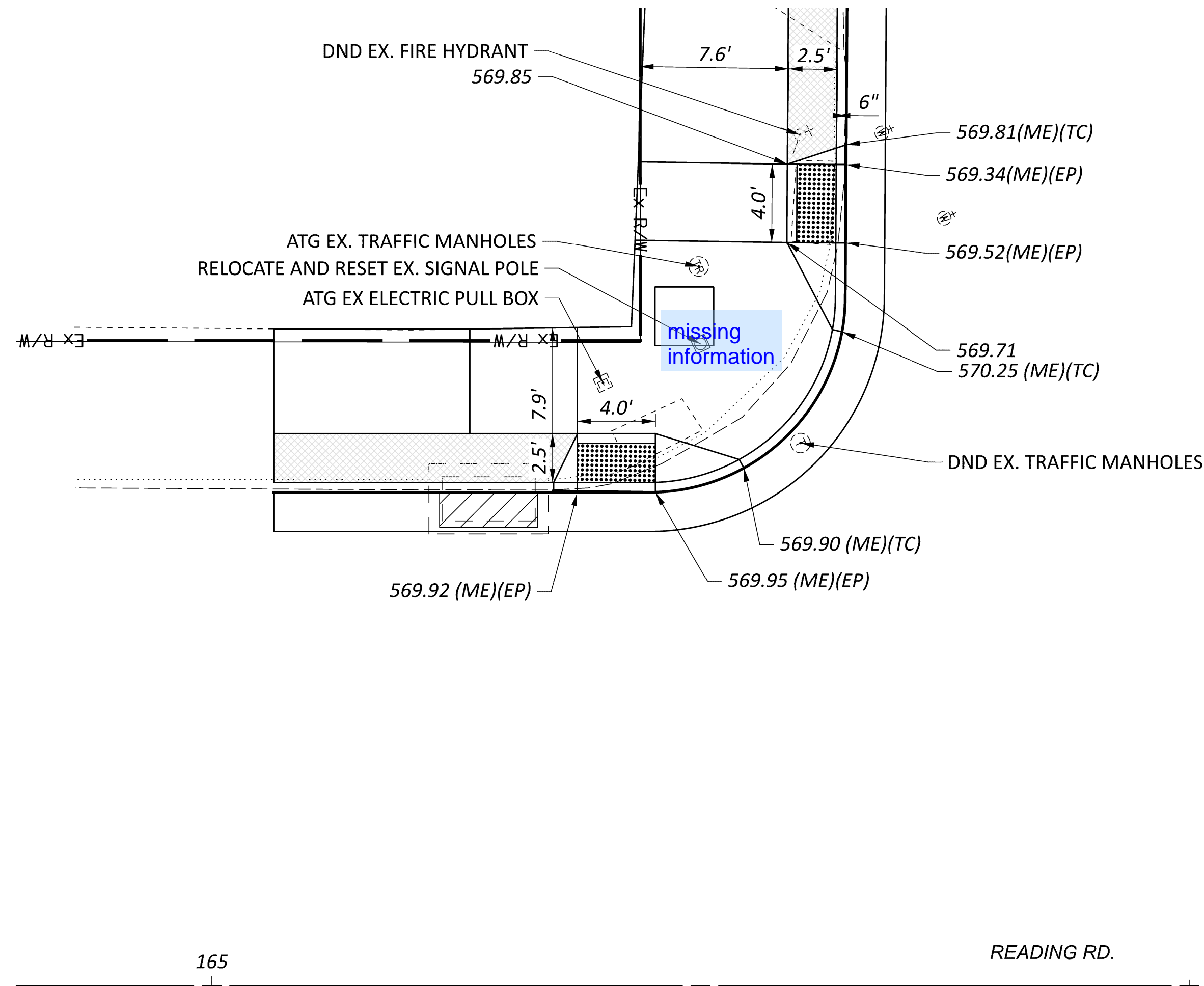


DESIGN AGENCY	
TOOLE DESIGN	
DESIGNER	XXX
REVIEWER	XXX
PROJECT ID	02/13/26
SHEET	123369
TOTAL	117
P.62	



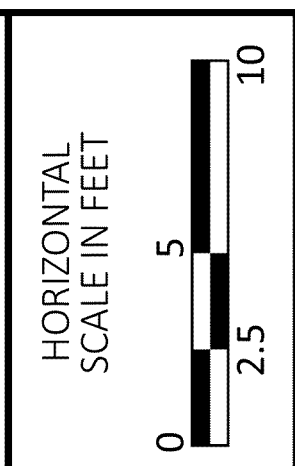
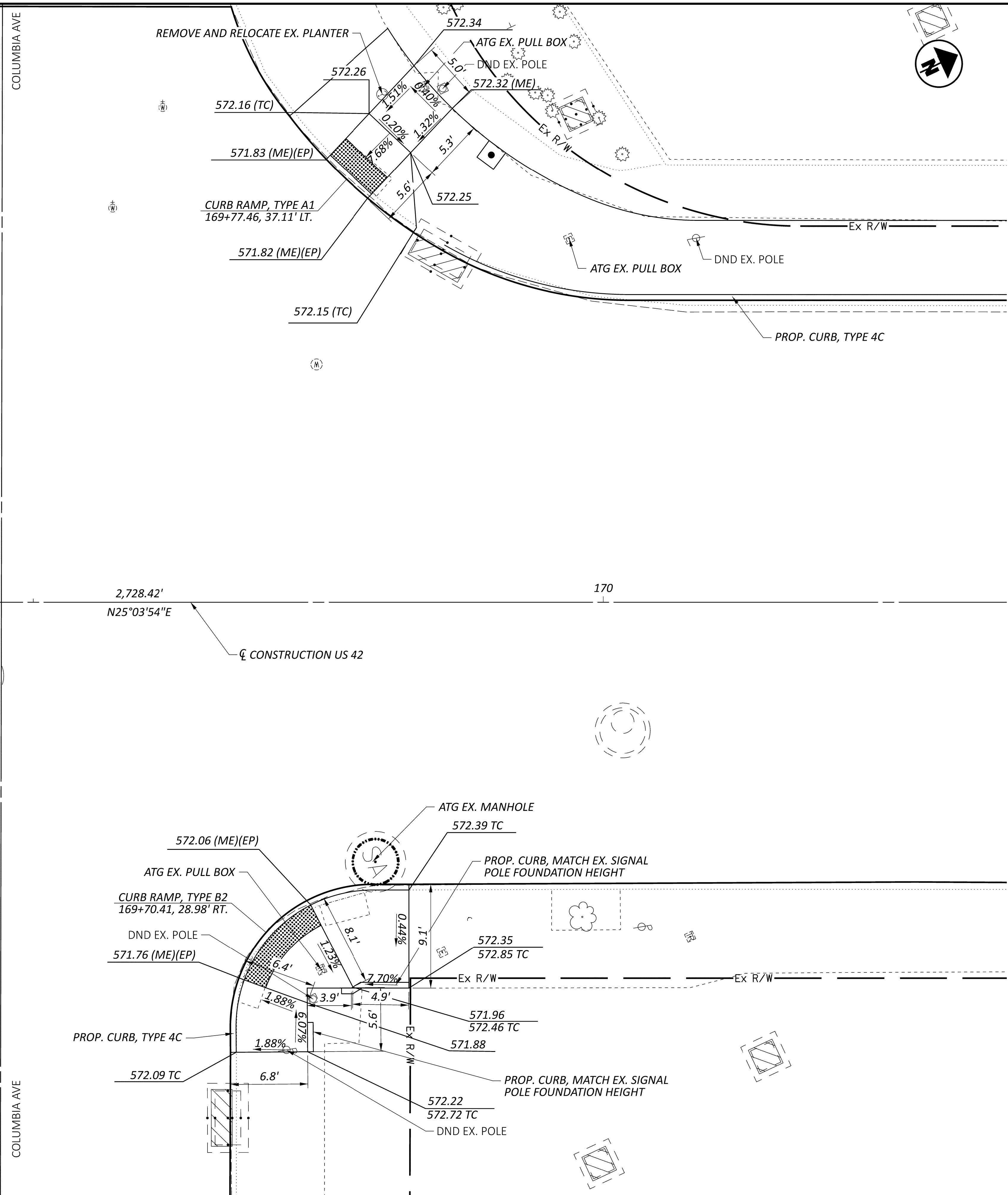
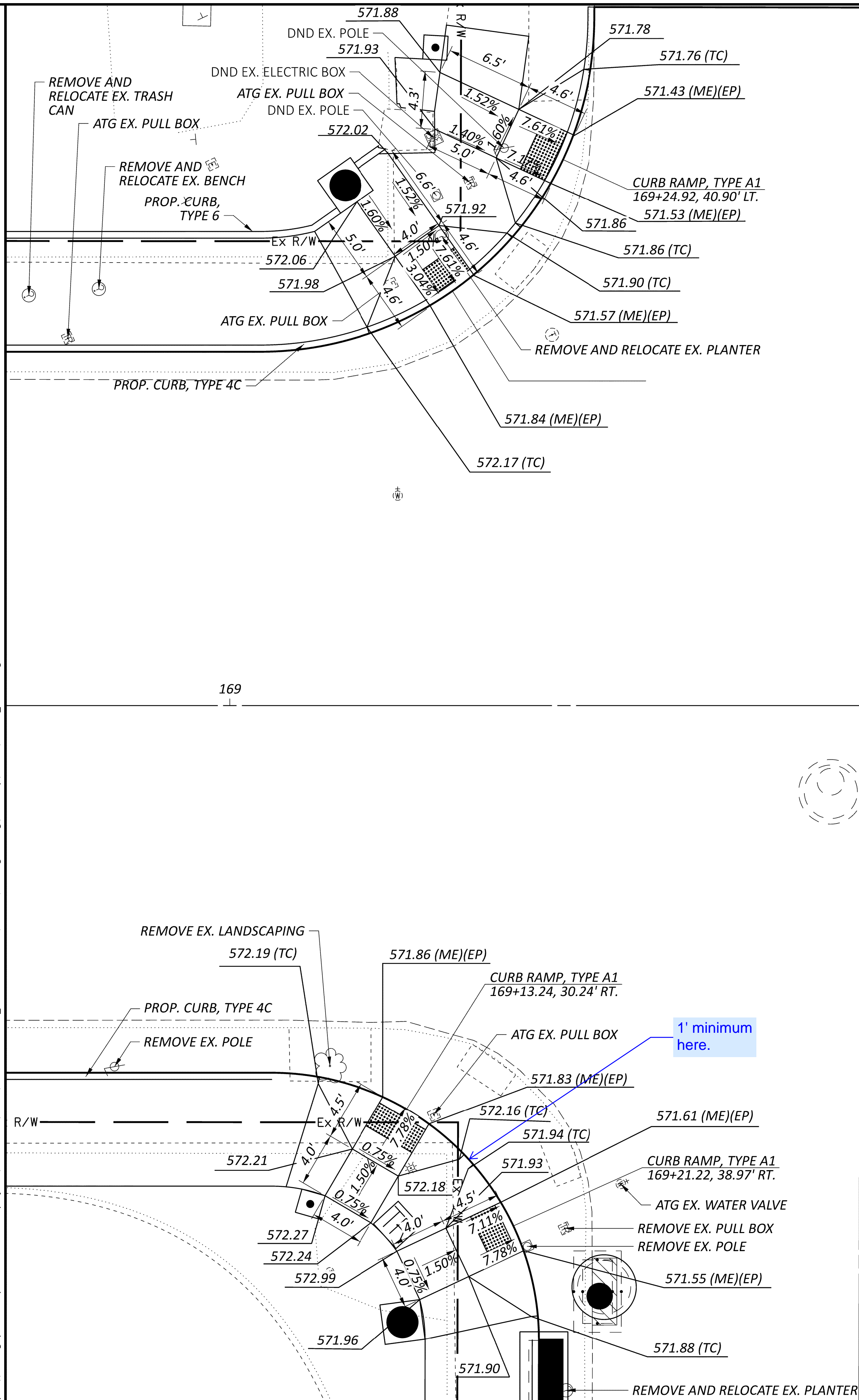
CURB RAMP DETAILS
 READING RD. AT HALKER AVE.

DESIGN AGENCY	
TOOLE DESIGN	
DESIGNER	XXX
REVIEWER	XXX
PROJECT ID	02/13/26
SHEET	123369
TOTAL	117
P.63	



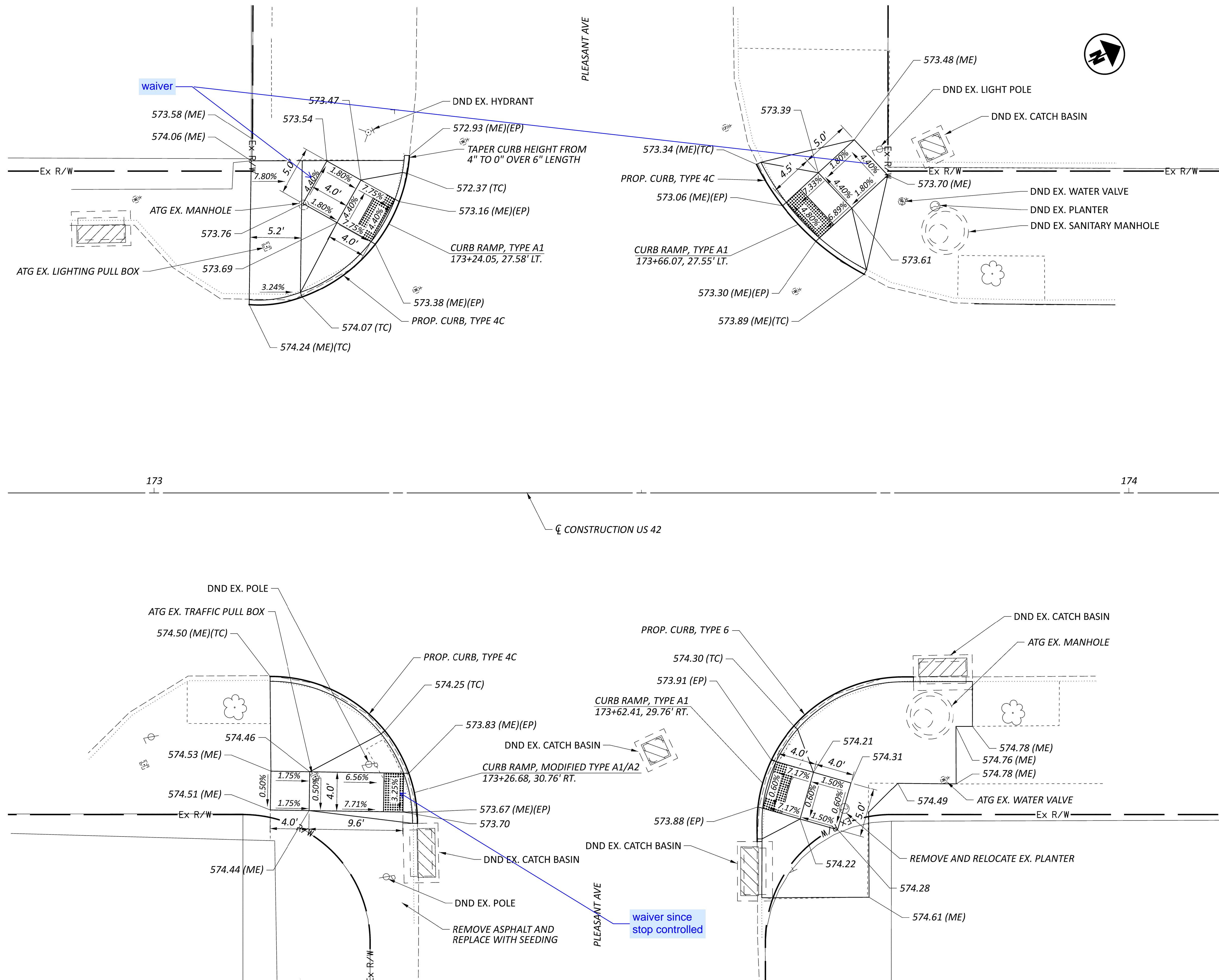
CURB RAMP DETAILS
READING RD. AT MECHANIC ST.

DESIGN AGENCY	TOOLE DESIGN
DESIGNER	XXX
REVIEWER	XXX 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.64 117

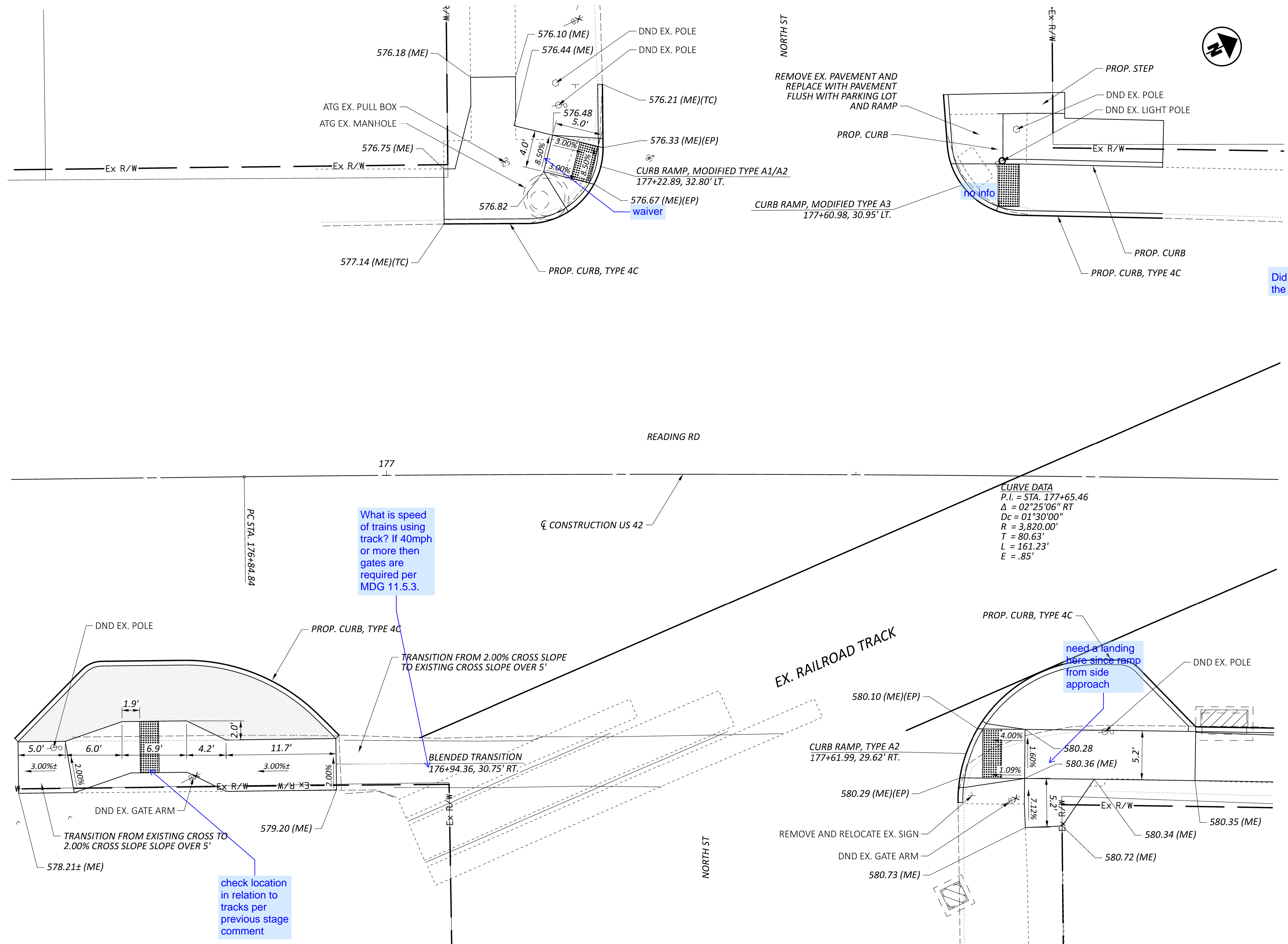


CURB RAMP DETAILS
READING RD. AT COLUMBIA AVE

DESIGN AGENCY	
	CMT
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET TOTAL	
P.65	117



CURB RAMP DETAILS
 READING RD. AT PLEASANT AVE.



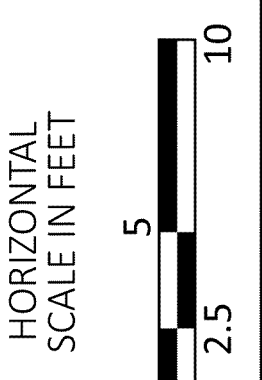
What is speed of trains using track? If 40mph or more then gates are required per MDG 11.5.3.

need a landing here since ramp from side approach

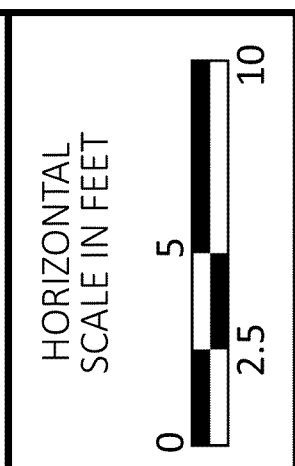
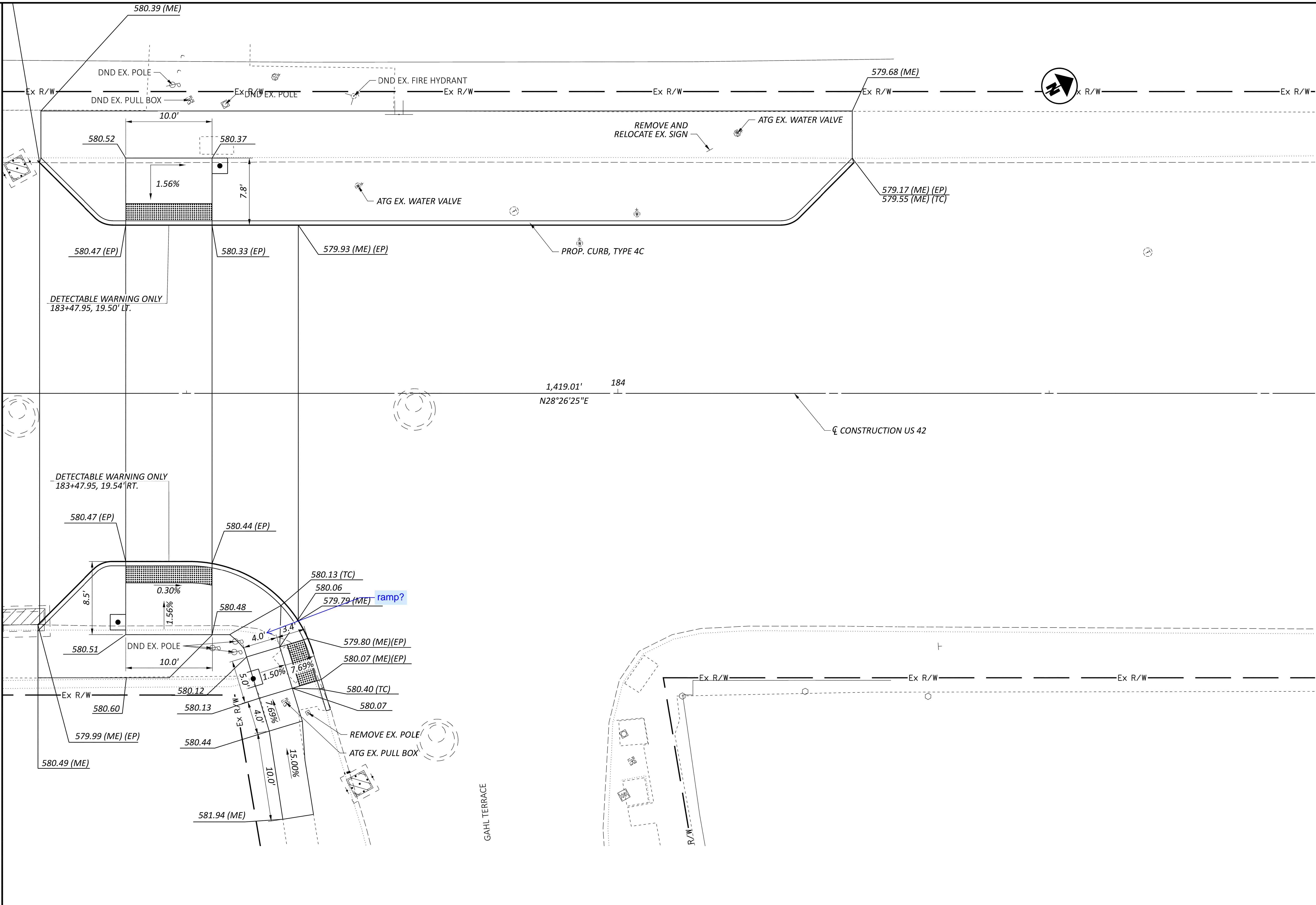
check location in relation to tracks per previous stage comment

Did not see the ramps for the other RR crossing

CURB RAMP DETAILS
READING RD. AT NORTH ST.

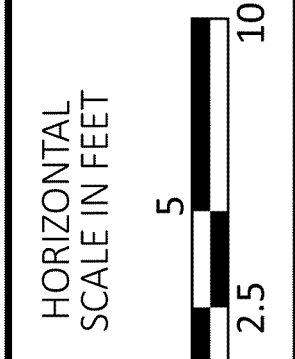
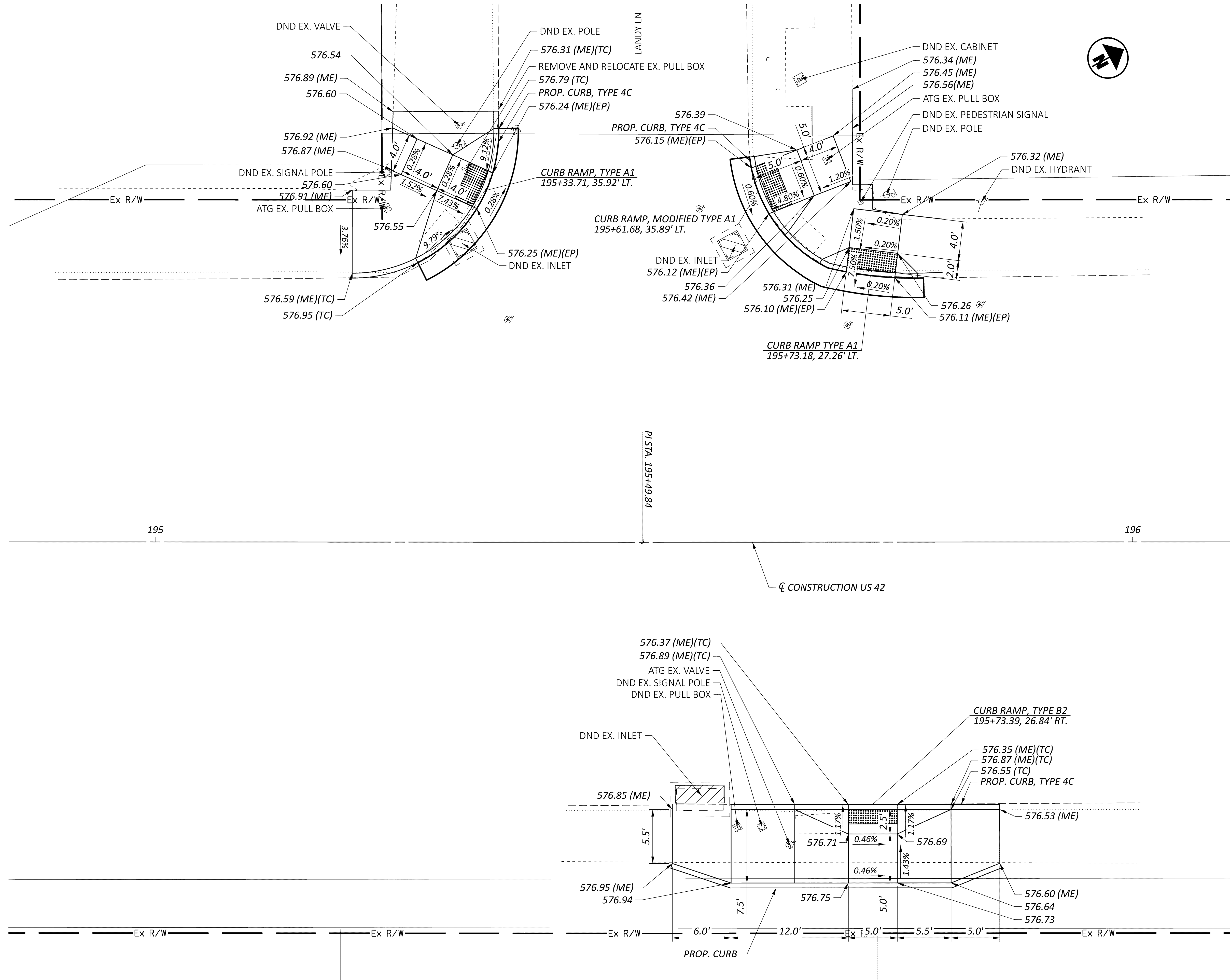


DESIGN AGENCY	TOOLE DESIGN
DESIGNER	XXX
REVIEWER	XXX
PROJECT ID	02/13/26
SHEET	123369
TOTAL	117



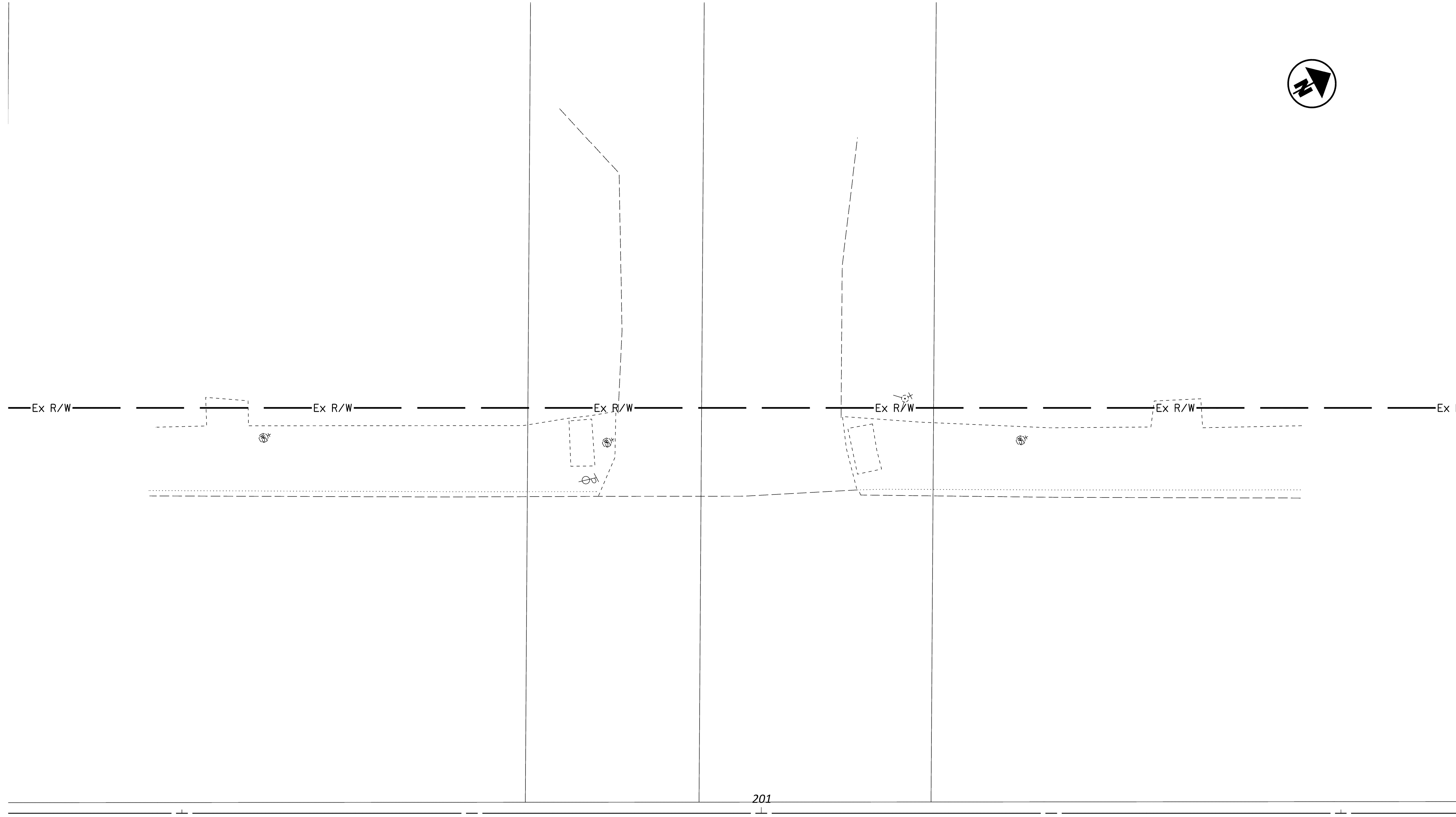
CURB RAMP DETAILS
READING RD. AT GAHL TERRACE

DESIGN AGENCY	
 CMT CIVIL & MECHANICAL ENGINEERS 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45424 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.68	117



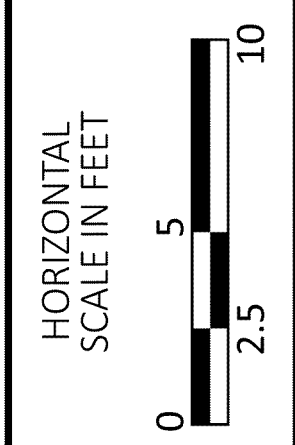
CURB RAMP DETAILS
READING RD. AT LANDY LN.

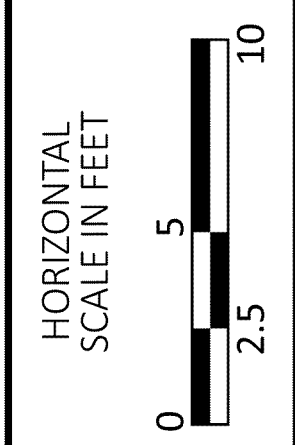
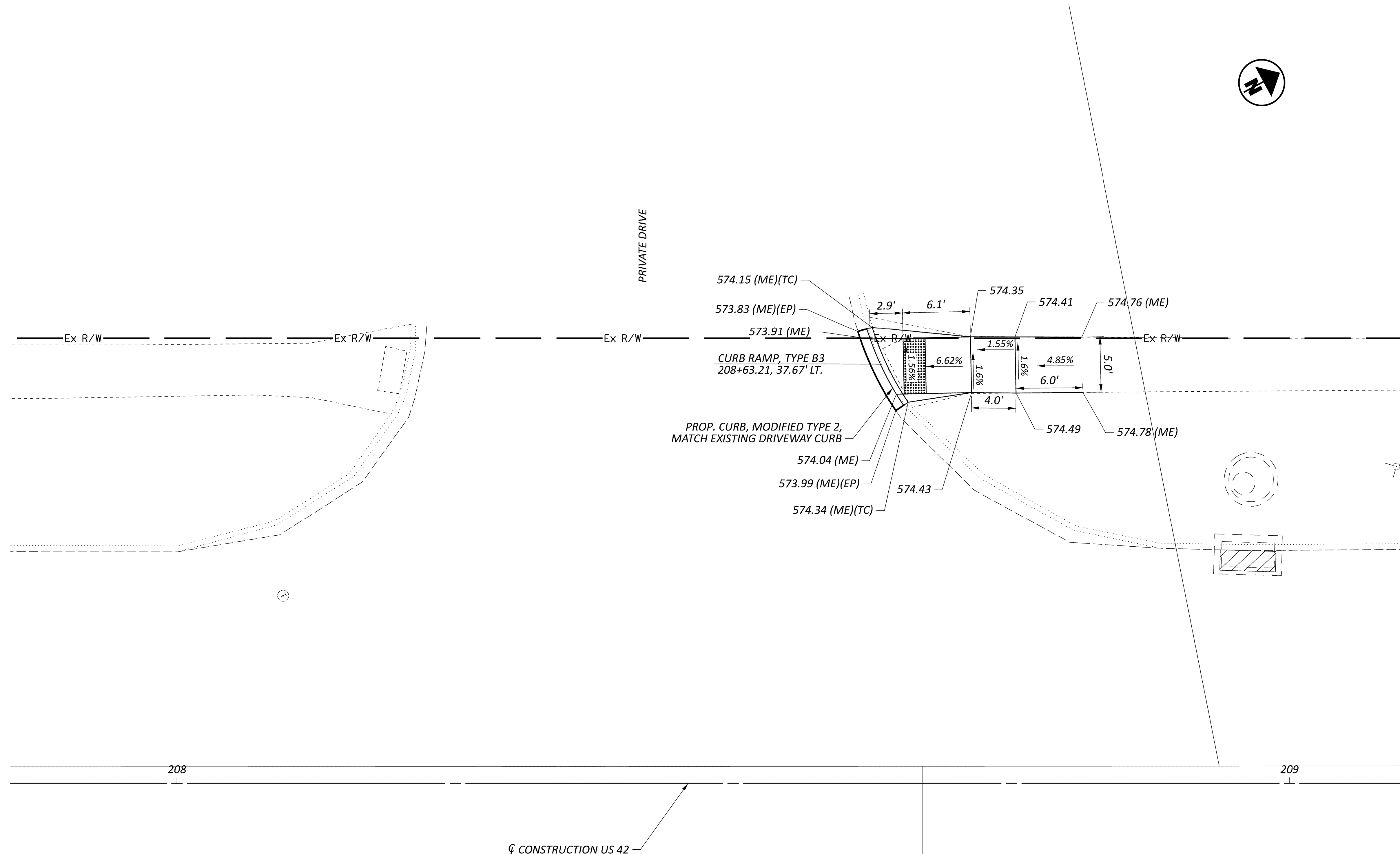
DESIGN AGENCY	
TOOLE DESIGN	
DESIGNER	
XXX	
REVIEWER	
XXX 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.69	117



DESIGN AGENCY	
TOOLE DESIGN	
DESIGNER	XXX
REVIEWER	XXX 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.70	117

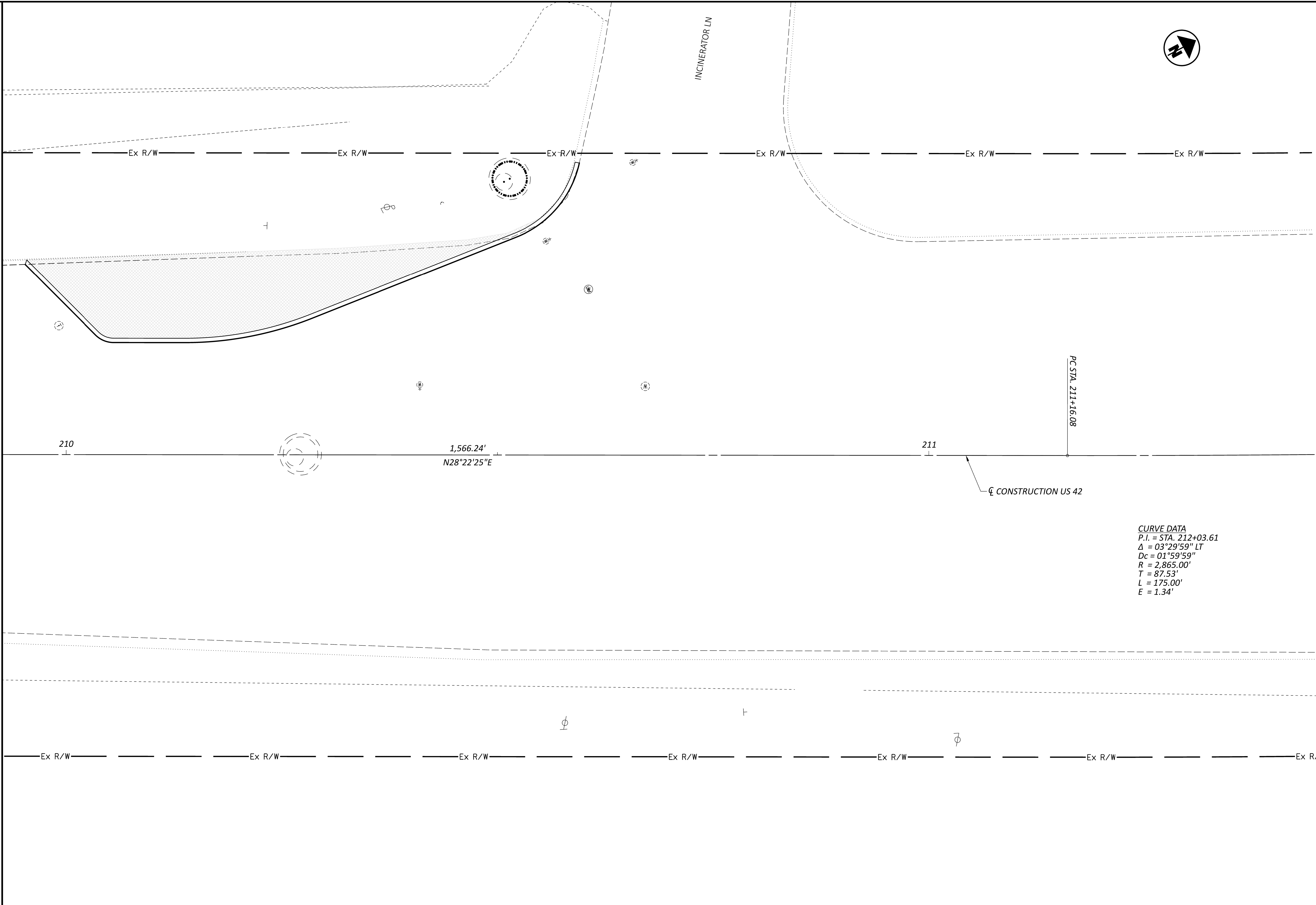
CURB RAMP DETAILS
READING RD. AT STA. 201+00 ALLEY



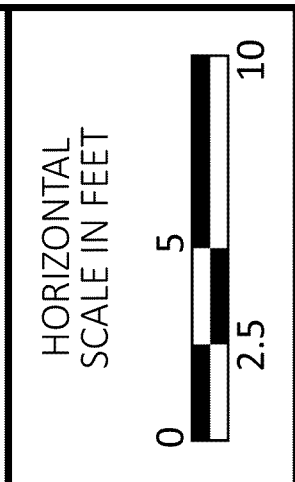


CURB RAMP DETAILS
 READING RD. AT STA. 208+50 DRIVE

DESIGN AGENCY	
TOOLE DESIGN	
DESIGNER	XXX
REVIEWER	XXX
DATE	02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.71	117

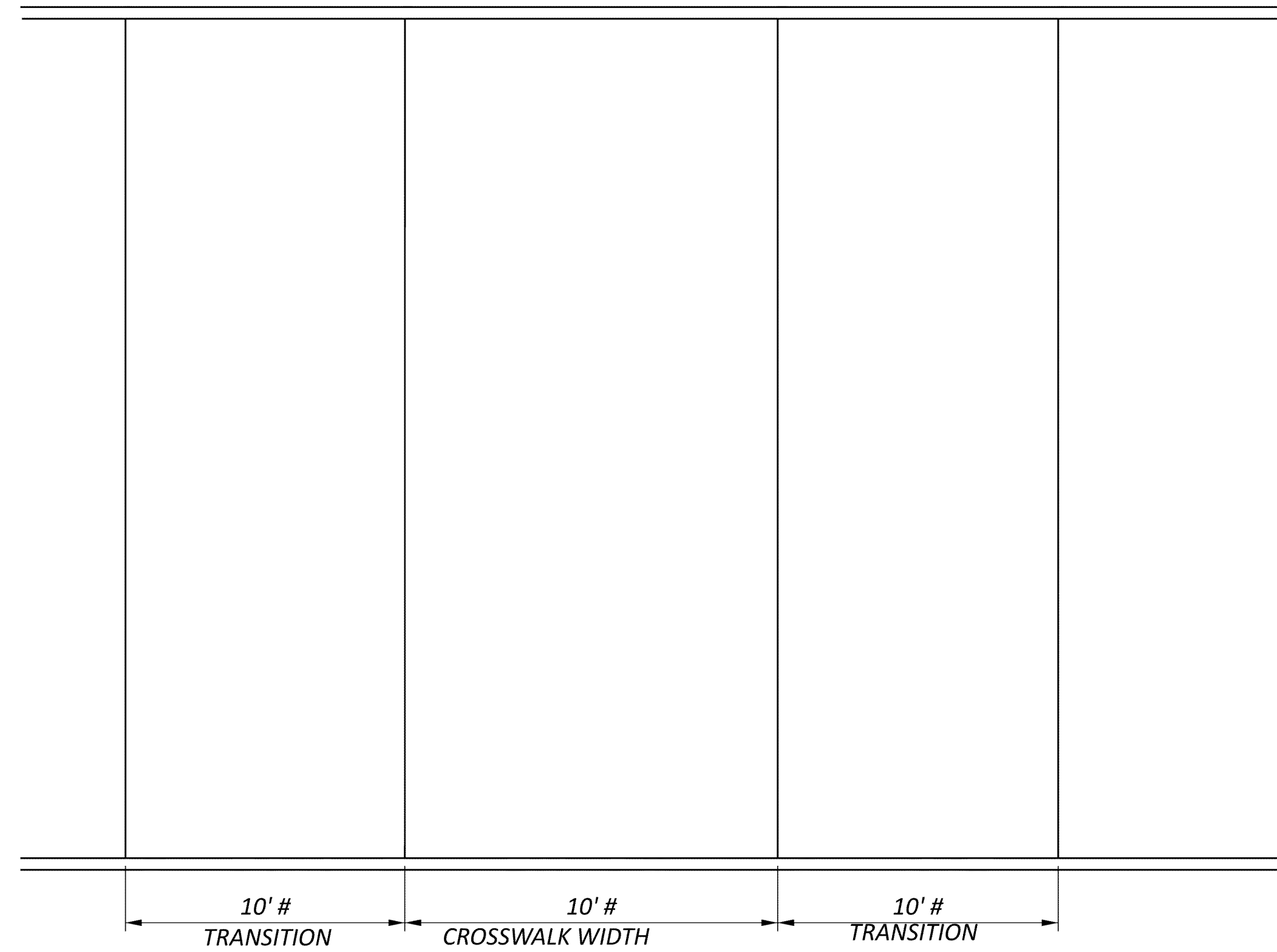


CURVE DATA
 P.I. = STA. 212+03.61
 $\Delta = 03^{\circ}29'59''$ LT
 Dc = $01^{\circ}59'59''$
 R = 2,865.00'
 T = 87.53'
 L = 175.00'
 E = 1.34'



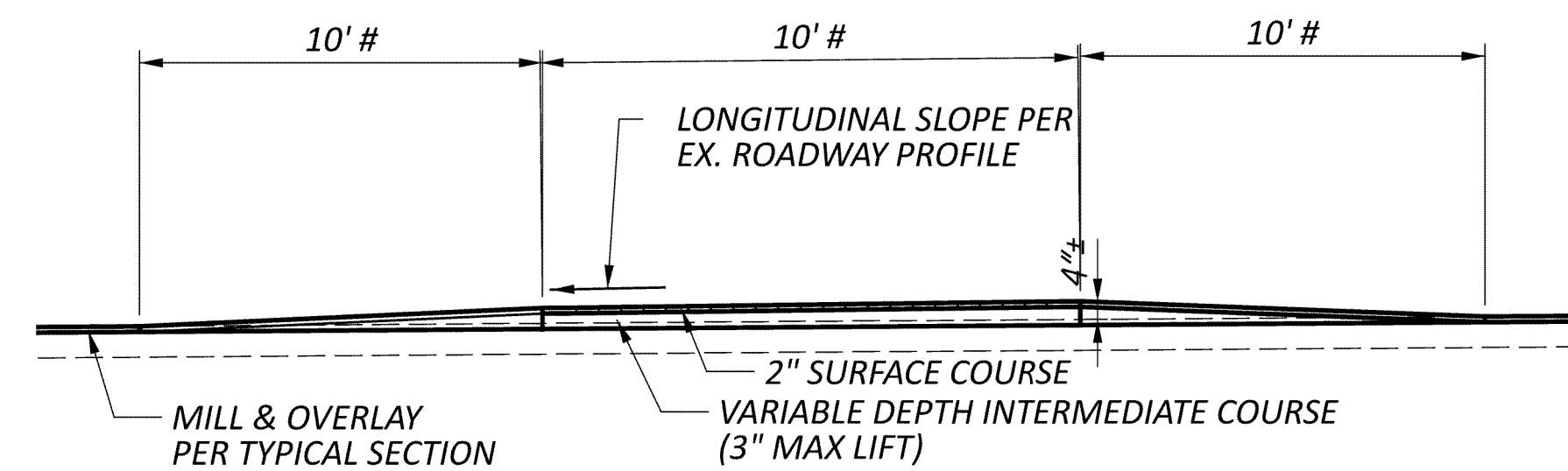
CURB RAMP DETAILS
 READING RD. AT INCINERATOR LN

DESIGN AGENCY	
 CMT CONSULTING & ENGINEERING 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
LDW	
REVIEWER	
JWL 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.72	117

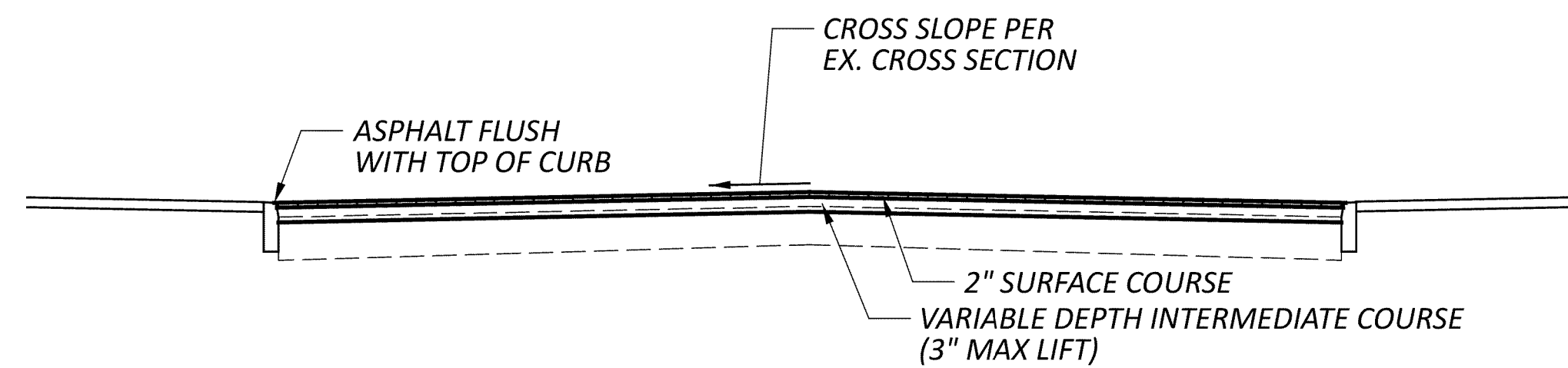


RAISED CROSSWALK DETAIL - PLAN

Provide information per Stage 1 comments

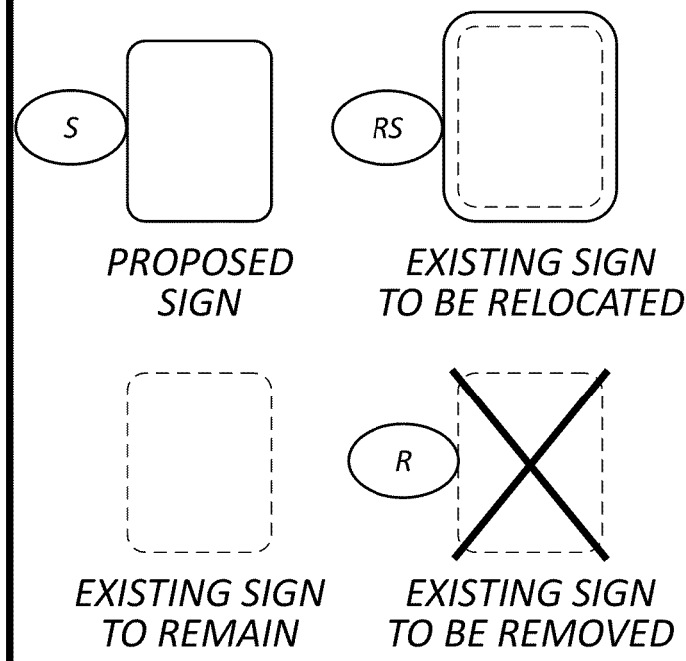


RAISED CROSSWALK DETAIL - PROFILE

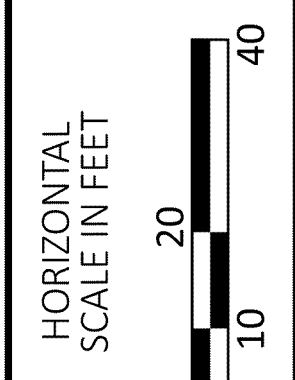


RAISED CROSSWALK DETAIL - CROSS SECTION

SIGN LEGEND



- NOTES:
1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
 2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.



Can the items in the legend be grouped by marking material?

PAVEMENT MARKING LEGEND

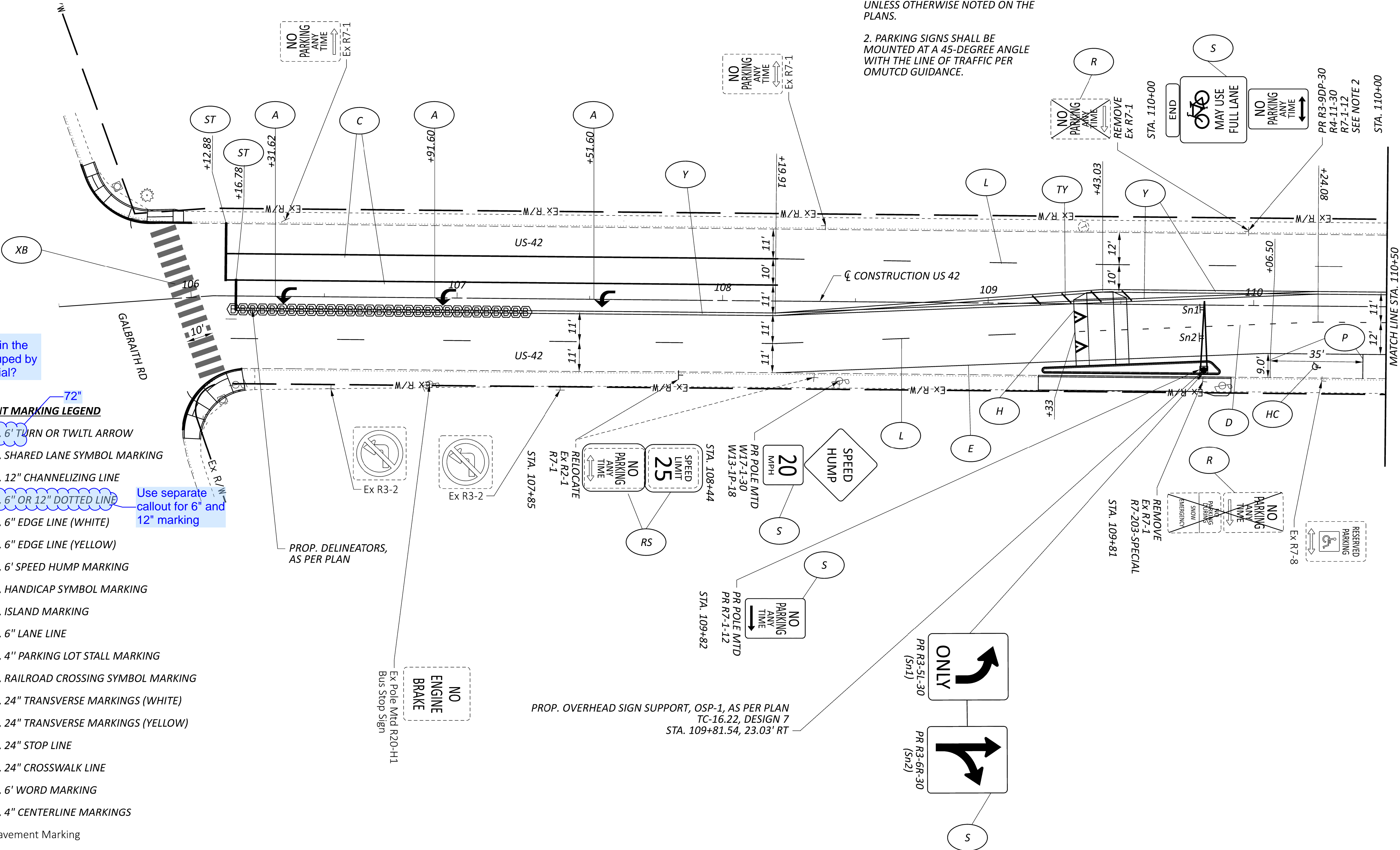
- A ITEM 642, 6" TURN OR TWLTL ARROW
- B ITEM 642, SHARED LANE SYMBOL MARKING
- C ITEM 648, 12" CHANNELIZING LINE
- D ITEM 642, 6" OR 12" DOTTED LINE
- E ITEM 648, 6" EDGE LINE (WHITE)
- EY ITEM 648, 6" EDGE LINE (YELLOW)
- H ITEM 642, 6" SPEED HUMPH MARKING
- HC ITEM 642, HANDICAP SYMBOL MARKING
- I ITEM 642, ISLAND MARKING
- L ITEM 648, 6" LANE LINE
- P ITEM 642, 4" PARKING LOT STALL MARKING
- RR ITEM 642, RAILROAD CROSSING SYMBOL MARKING
- TW ITEM 642, 24" TRANSVERSE MARKINGS (WHITE)
- TY ITEM 642, 24" TRANSVERSE MARKINGS (YELLOW)
- ST ITEM 642, 24" STOP LINE
- XB ITEM 642, 24" CROSSWALK LINE
- W ITEM 642, 6" WORD MARKING
- Y ITEM 648, 4" CENTERLINE MARKINGS
- Existing Pavement Marking

Use separate callout for 6" and 12" marking

PROP. DELINEATORS, AS PER PLAN

NO ENGINE BRAKE Bus Stop Sign

PROP. OVERHEAD SIGN SUPPORT, OSP-1, AS PER PLAN TC-16.22, DESIGN 7 STA. 109+81.54, 23.03' RT



TRAFFIC CONTROL STA. 105+50 TO STA. 110+50

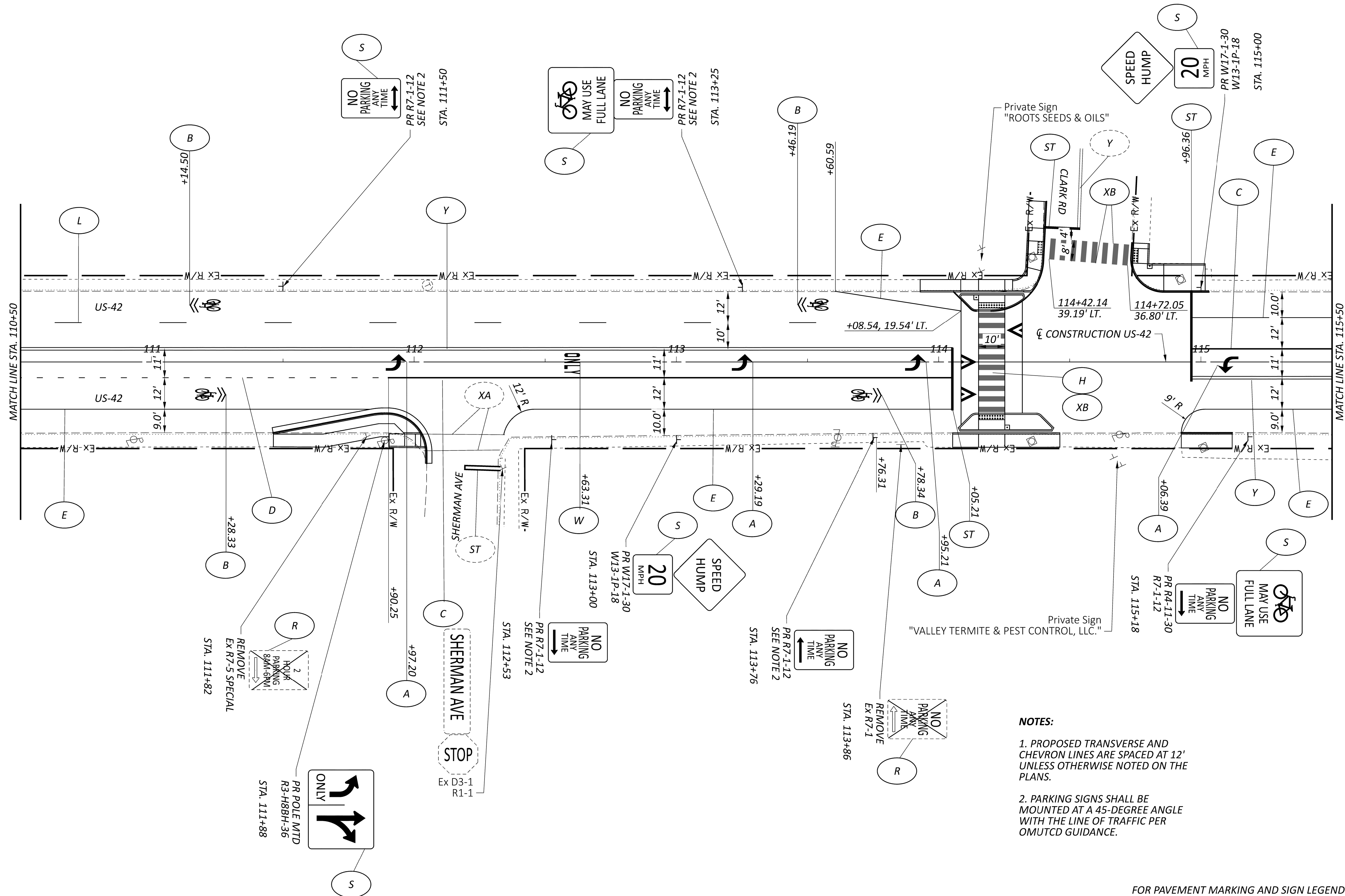
DESIGN AGENCY
CMT
 CMT CONSULTING, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45424
 www.cmtinc.com

DESIGNER
 CMS

REVIEWER
 GSH 02/13/26

PROJECT ID
 123369

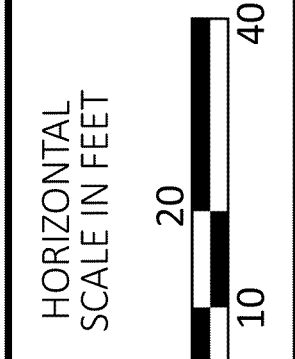
SHEET TOTAL
 P.74 117



NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

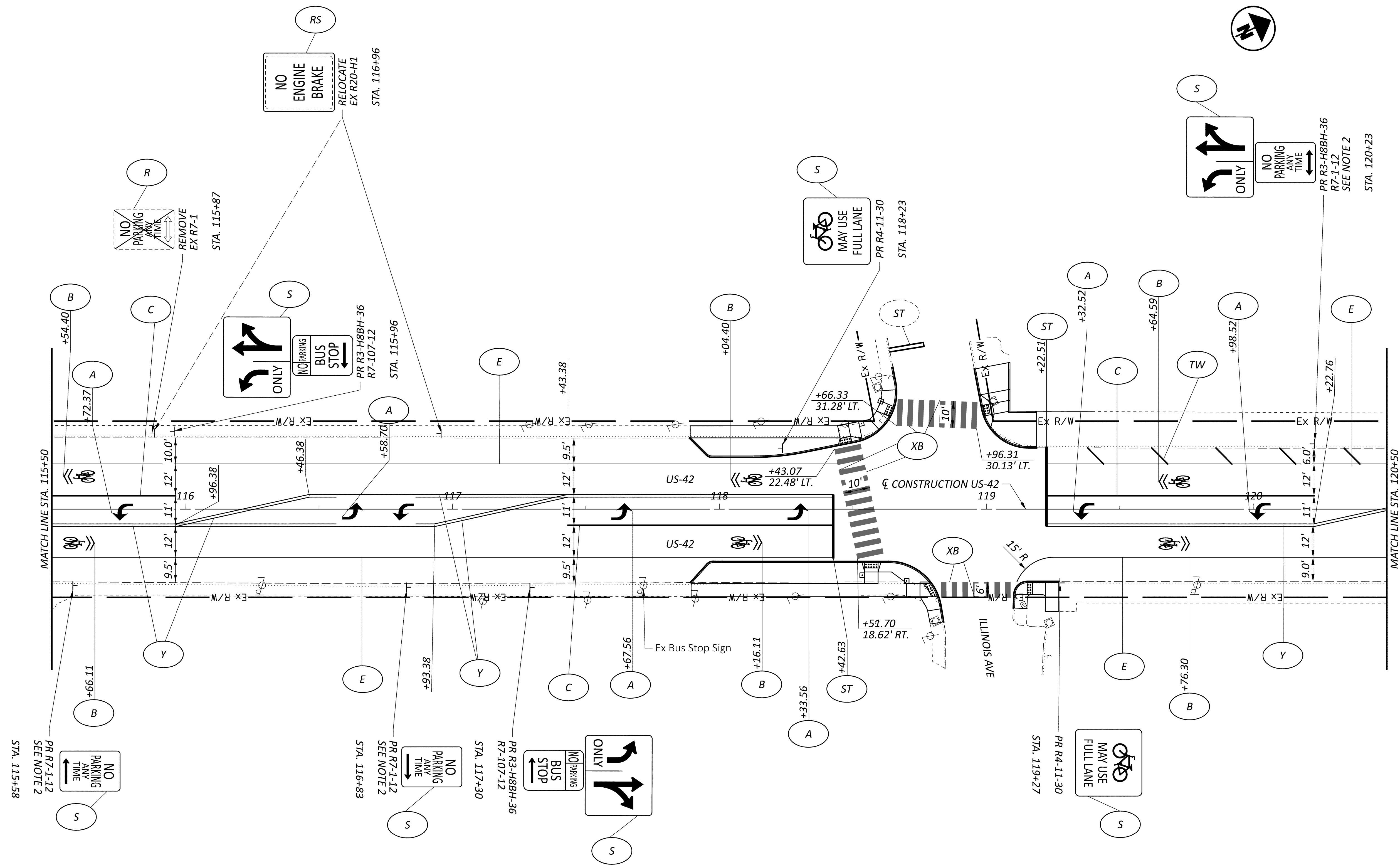


TRAFFIC CONTROL
STA. 110+50 TO STA. 115+50

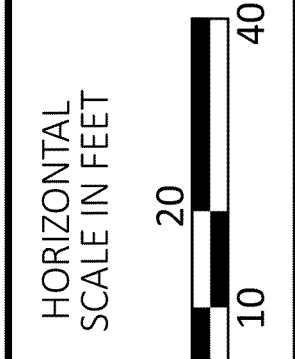
DESIGN AGENCY	
CMT	CENTRAL MURPHY & TAYLOR, INC.
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtinc.com	
DESIGNER	
CMS	
REVIEWER	
GSH 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.75	117

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.



FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

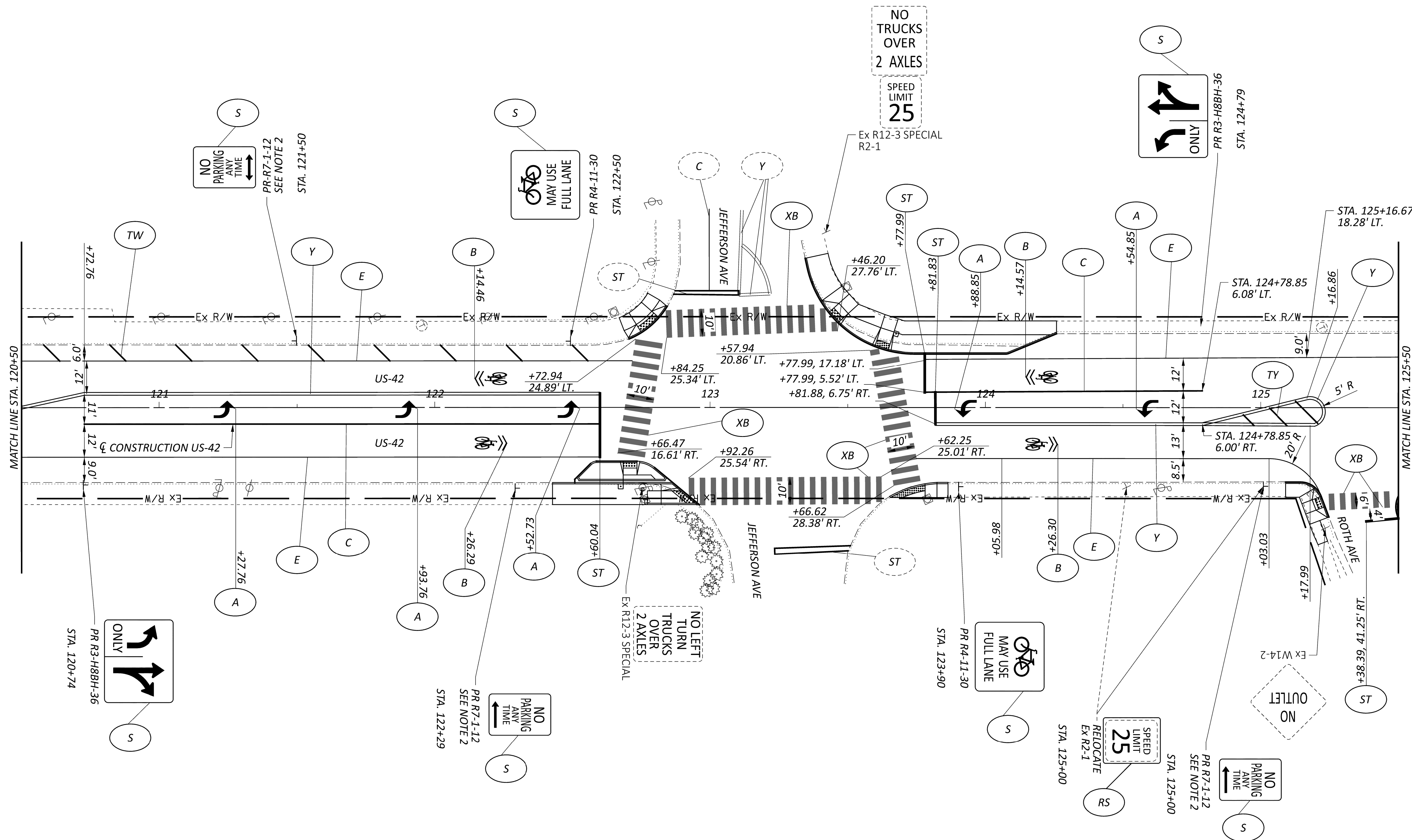


TRAFFIC CONTROL
STA. 115+50 TO STA. 120+50

DESIGN AGENCY	
CMT	CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.76	117

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER ODOTCD GUIDANCE.



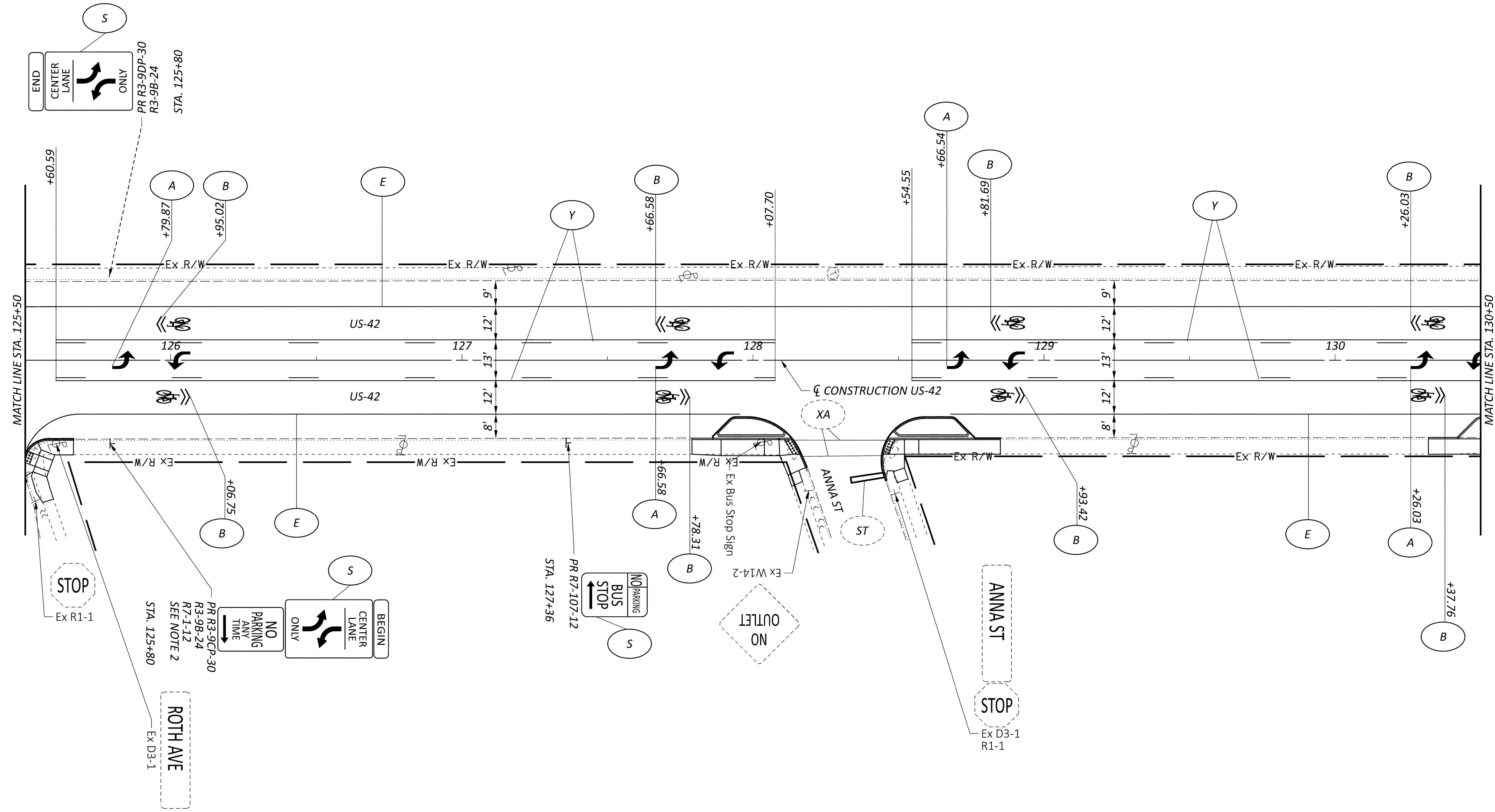
FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74



TRAFFIC CONTROL
 STA. 120+50 TO STA 125+50

DESIGN AGENCY
CMT
 CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

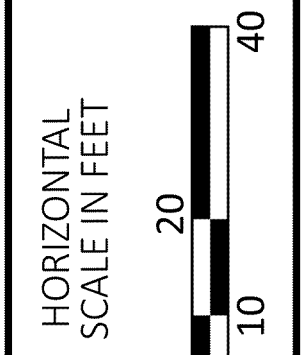
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	P.77
TOTAL	117

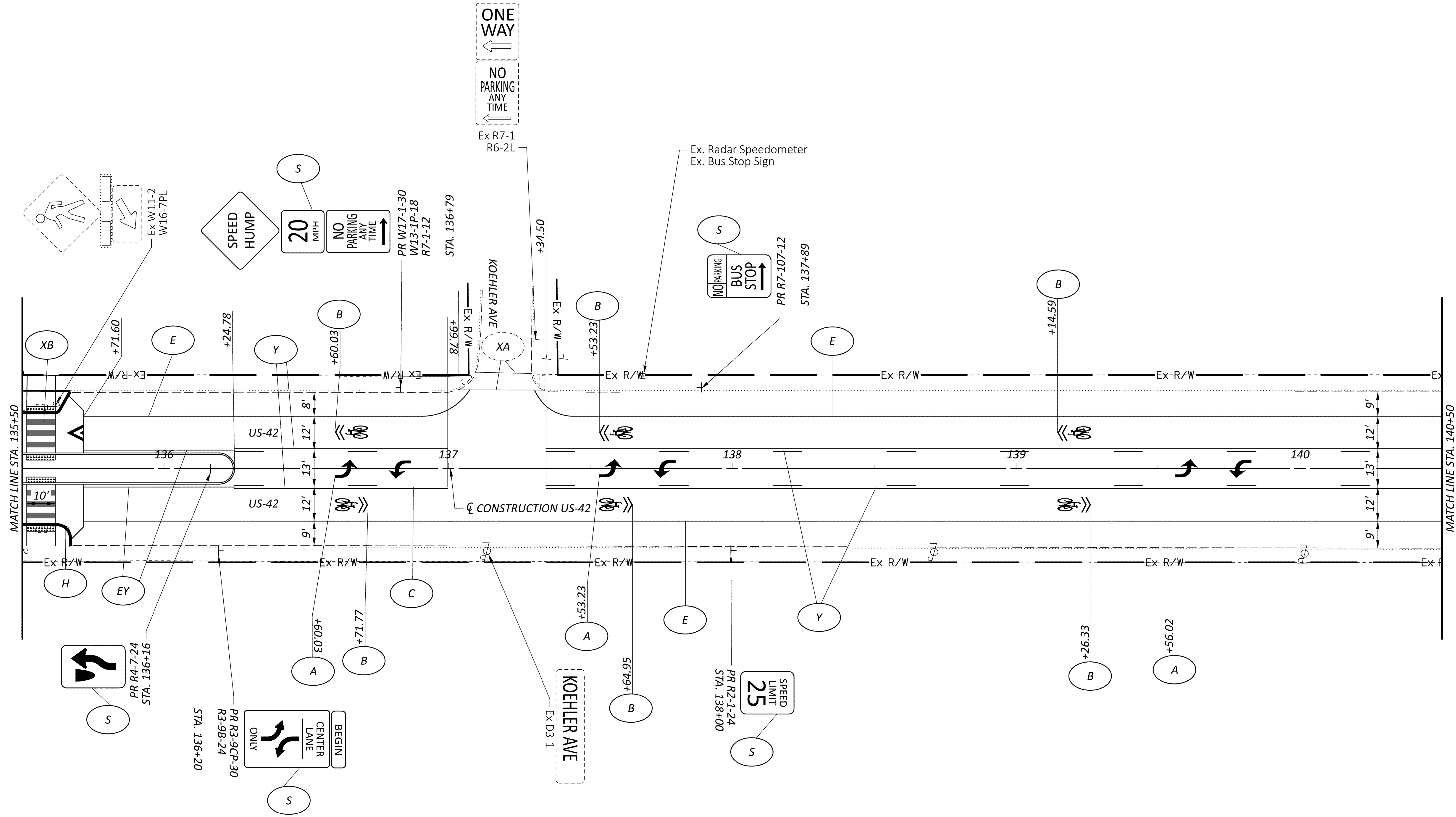


FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

 DESIGN AGENCY CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.78	117

TRAFFIC CONTROL
 STA. 125+50 TO STA. 130+50





FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

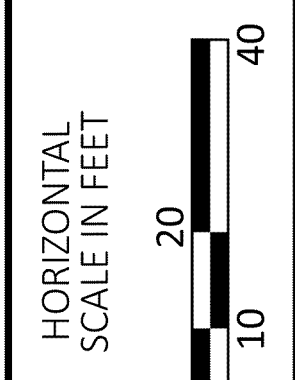
DESIGNER
 CMS

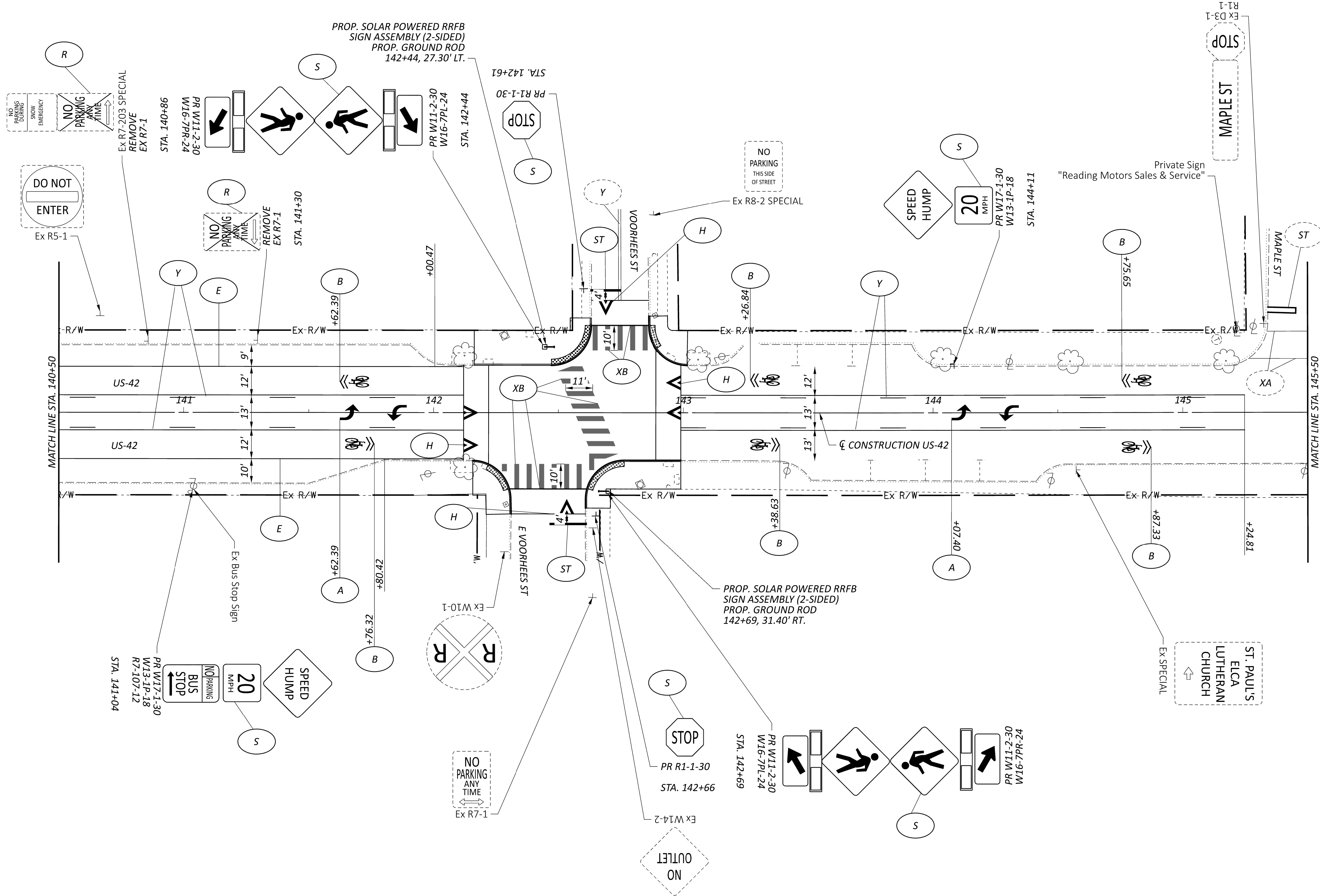
REVIEWER
 GSH 02/13/26

PROJECT ID
 123369

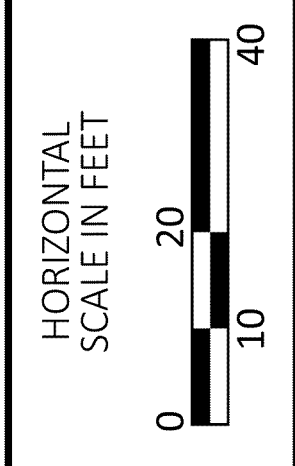
SHEET TOTAL
 P.80 117

TRAFFIC CONTROL
 STA. 135+50 TO STA. 140+50



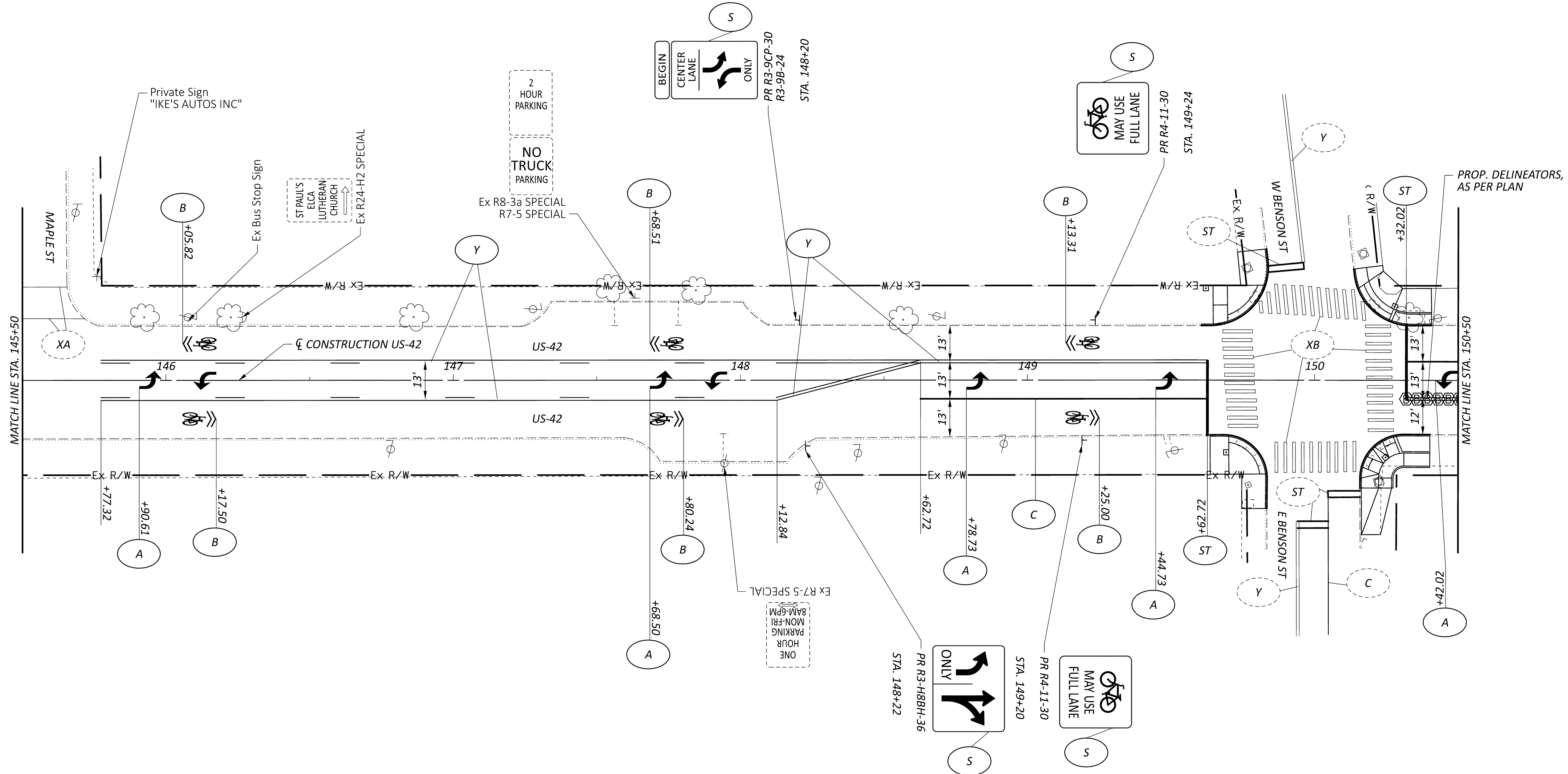


FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74

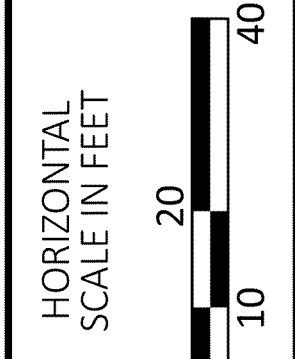


TRAFFIC CONTROL
 STA. 140+50 TO STA. 145+50

DESIGN AGENCY	
CMT	CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
CMS	
REVIEWER	
GSH 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.81	117

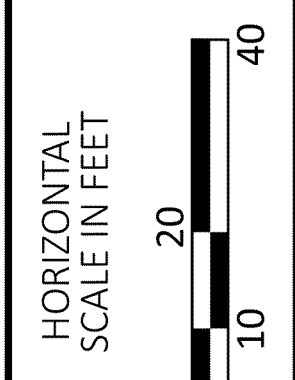
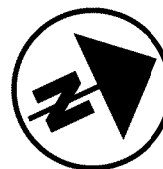
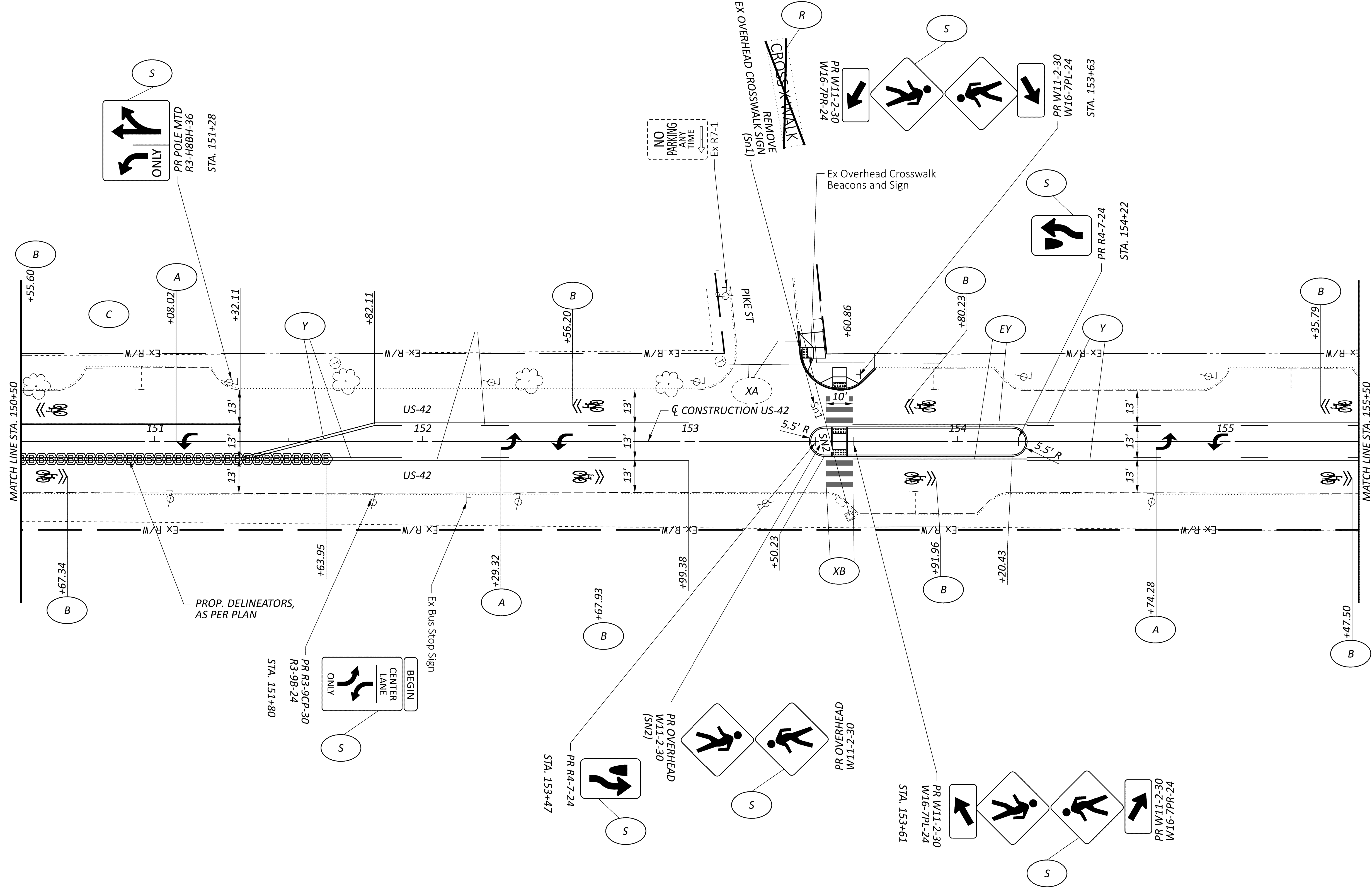


FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74



TRAFFIC CONTROL
 STA. 145+50 TO STA. 150+50

DESIGN AGENCY	
CMT	CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	
CMS	
REVIEWER	
GSH 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.82	117



TRAFFIC CONTROL
STA. 150+50 TO STA. 155+50

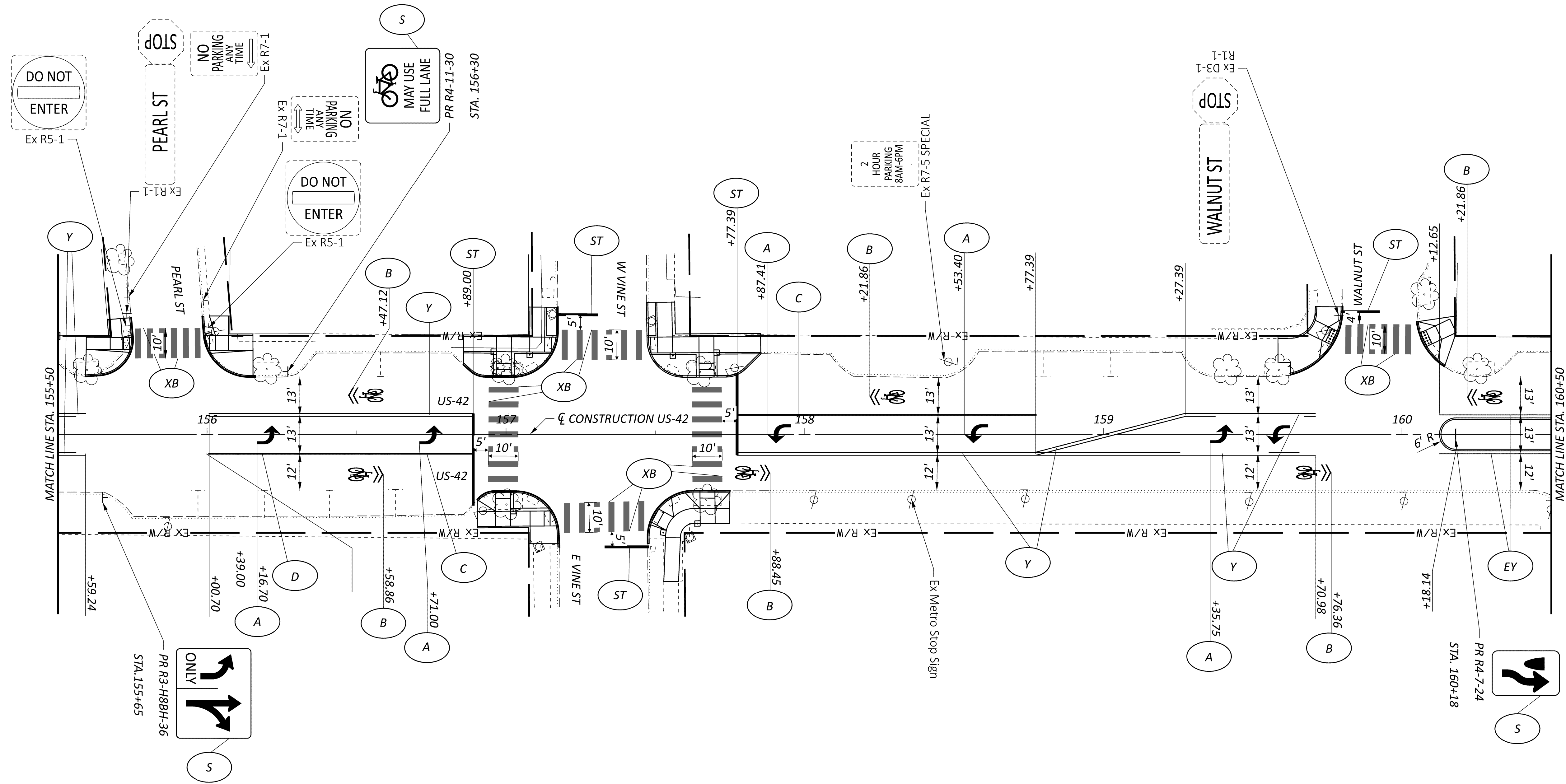
DESIGN AGENCY
CMT
 CMT ENGINEERING, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmteng.com

DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.83	117

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

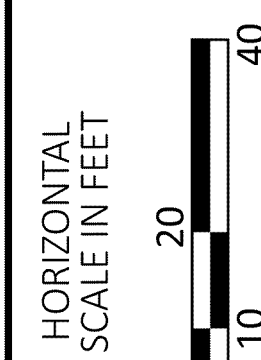
NOTES:

1. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMTUCD GUIDANCE.



DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.84	117

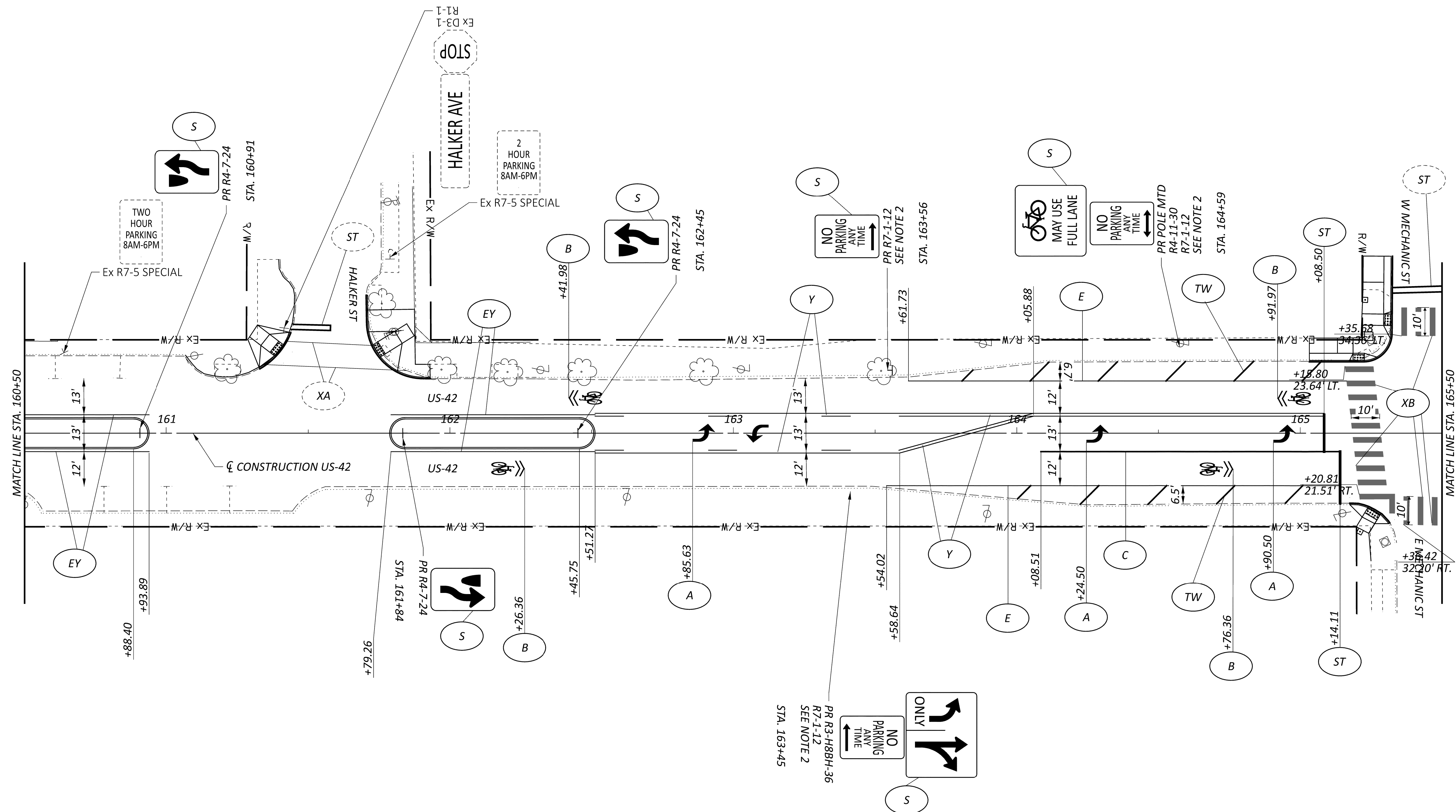
TRAFFIC CONTROL
STA. 155+50 TO STA. 160+50



FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.



FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74



DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.85 117

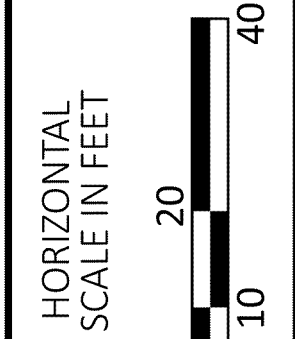
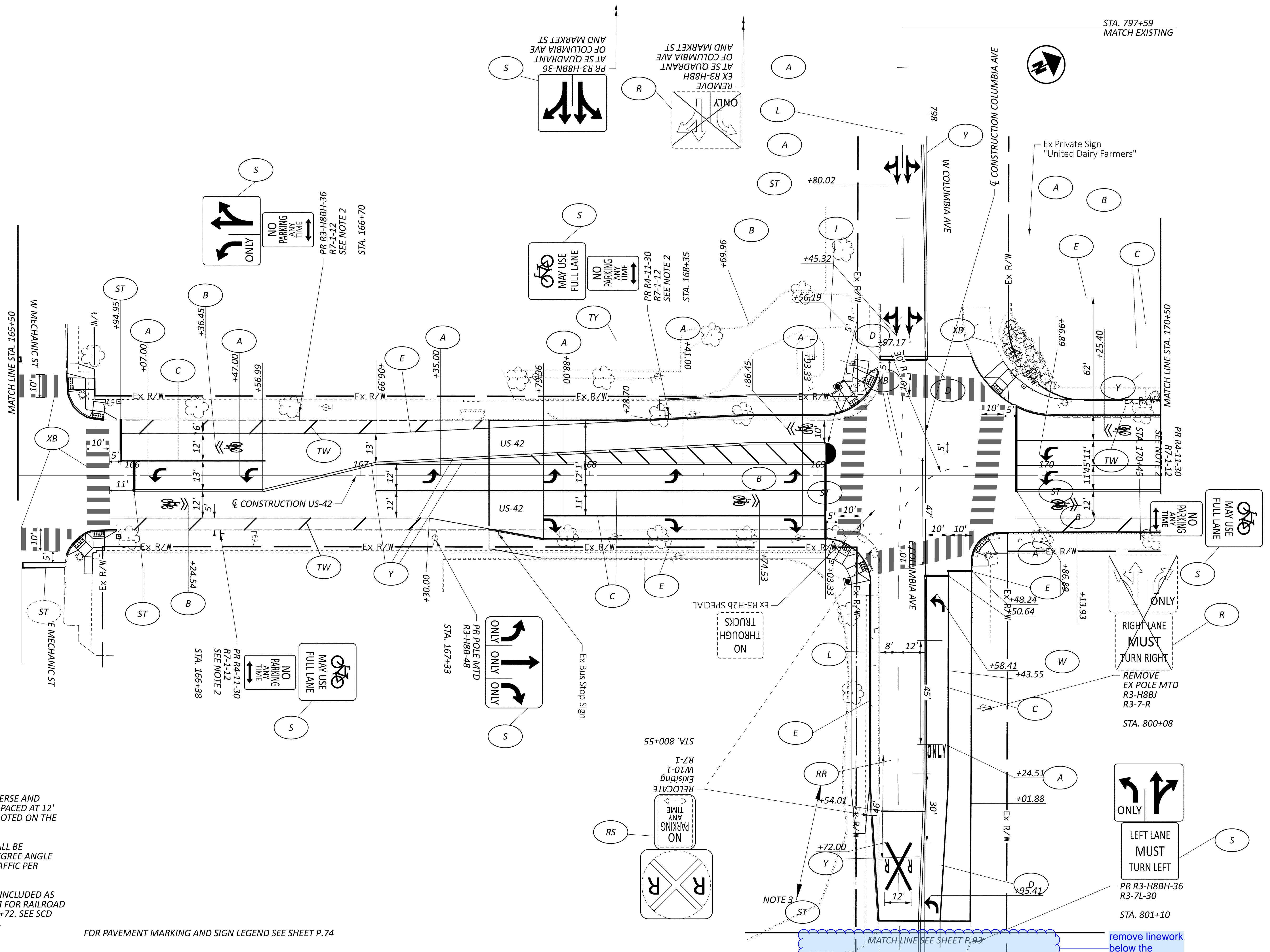
TRAFFIC CONTROL
 STA. 160+50 TO STA. 165+50



NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER ODOTCD GUIDANCE.
3. PROP. STOP LINE IS INCLUDED AS PART OF THE PAY ITEM FOR RAILROAD MARKING AT STA. 800+72. SEE SCD TC-71.10 FOR DETAILS.

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74



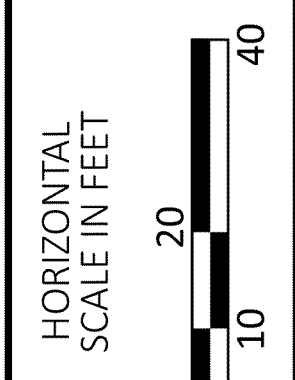
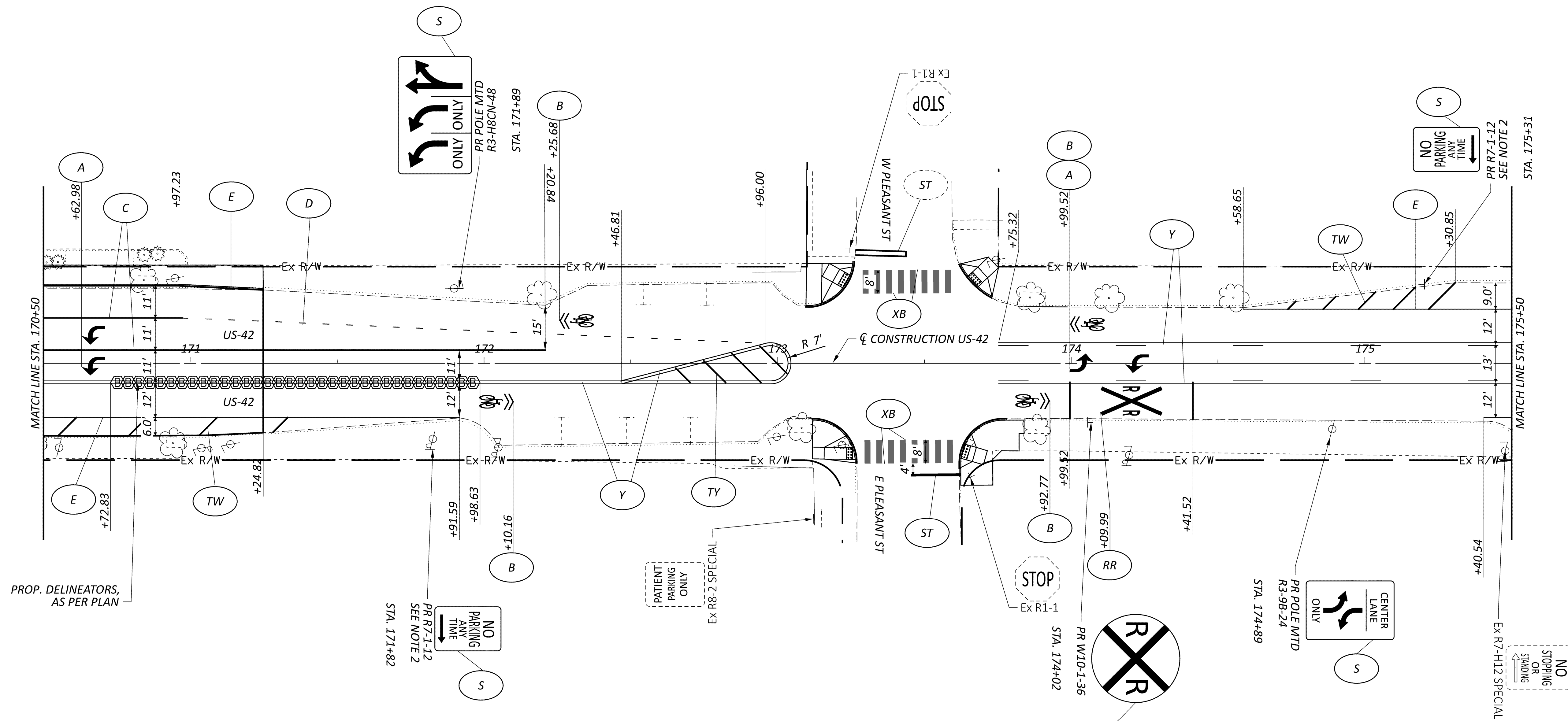
TRAFFIC CONTROL
STA. 165+50 TO STA. 170+50

DESIGN AGENCY	CMT
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	P.86
TOTAL	117

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.

2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER ODOTCD GUIDANCE.



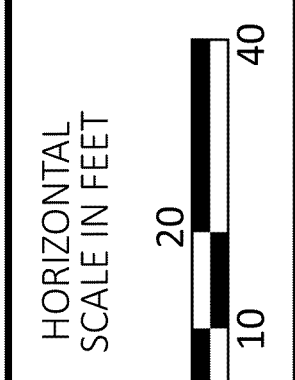
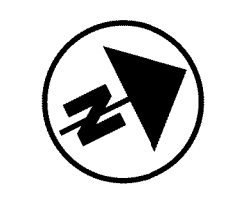
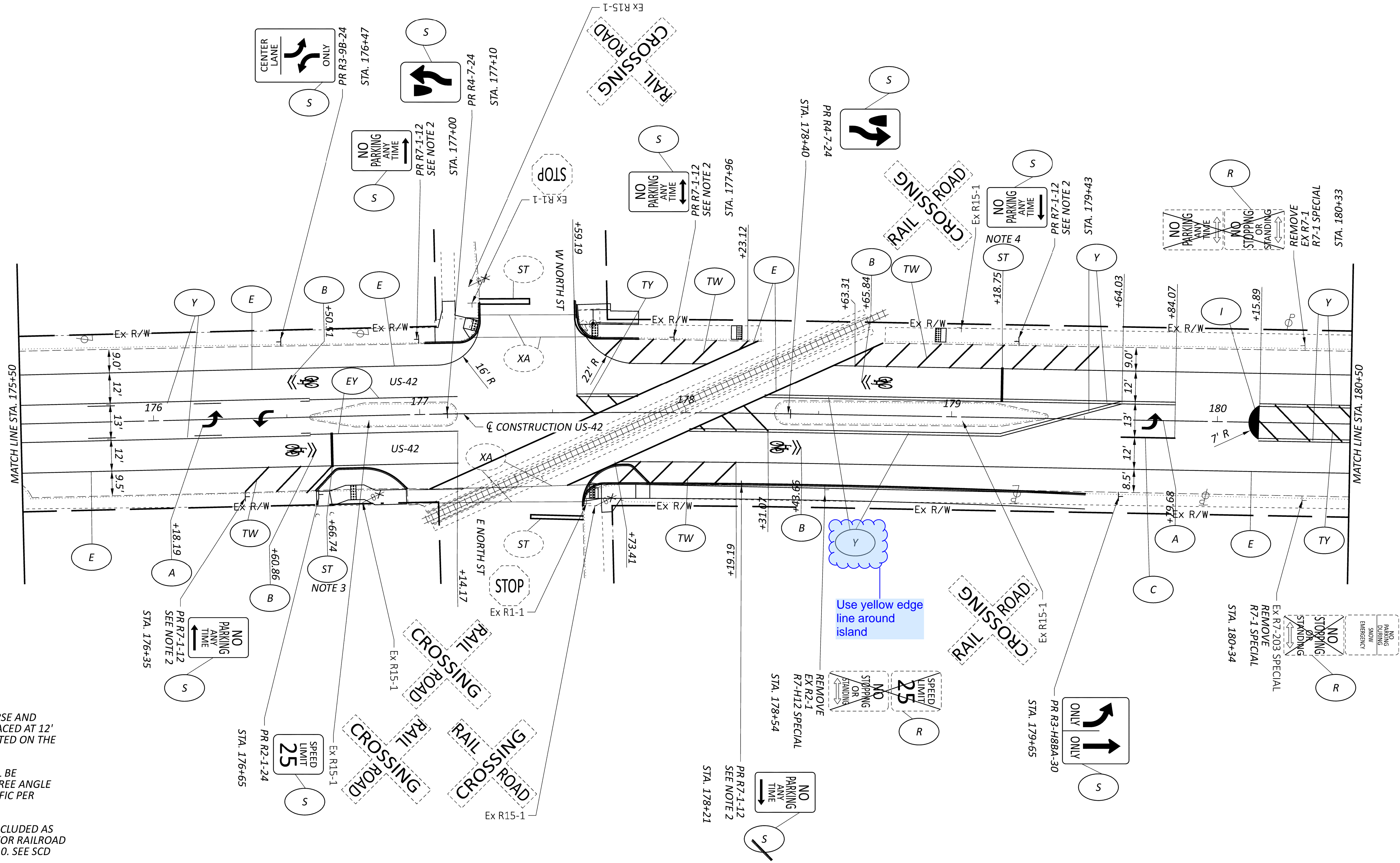
TRAFFIC CONTROL
 STA. 170+50 TO STA. 175+50

DESIGN AGENCY	
CMT	CONTRACTOR
DESIGNER	
CMS	REVIEWER
GSH 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.87	117

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.
2. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.
3. PROP. STOP LINE IS INCLUDED AS PART OF THE PAY ITEM FOR RAILROAD MARKING AT STA. 174+10. SEE SCD TC-71.10 FOR DETAILS.
4. PROP. STOP LINE IS INCLUDED AS PART OF THE PAY ITEM FOR RAILROAD MARKING AT STA. 181+65. SEE SCD TC-71.10 FOR DETAILS.

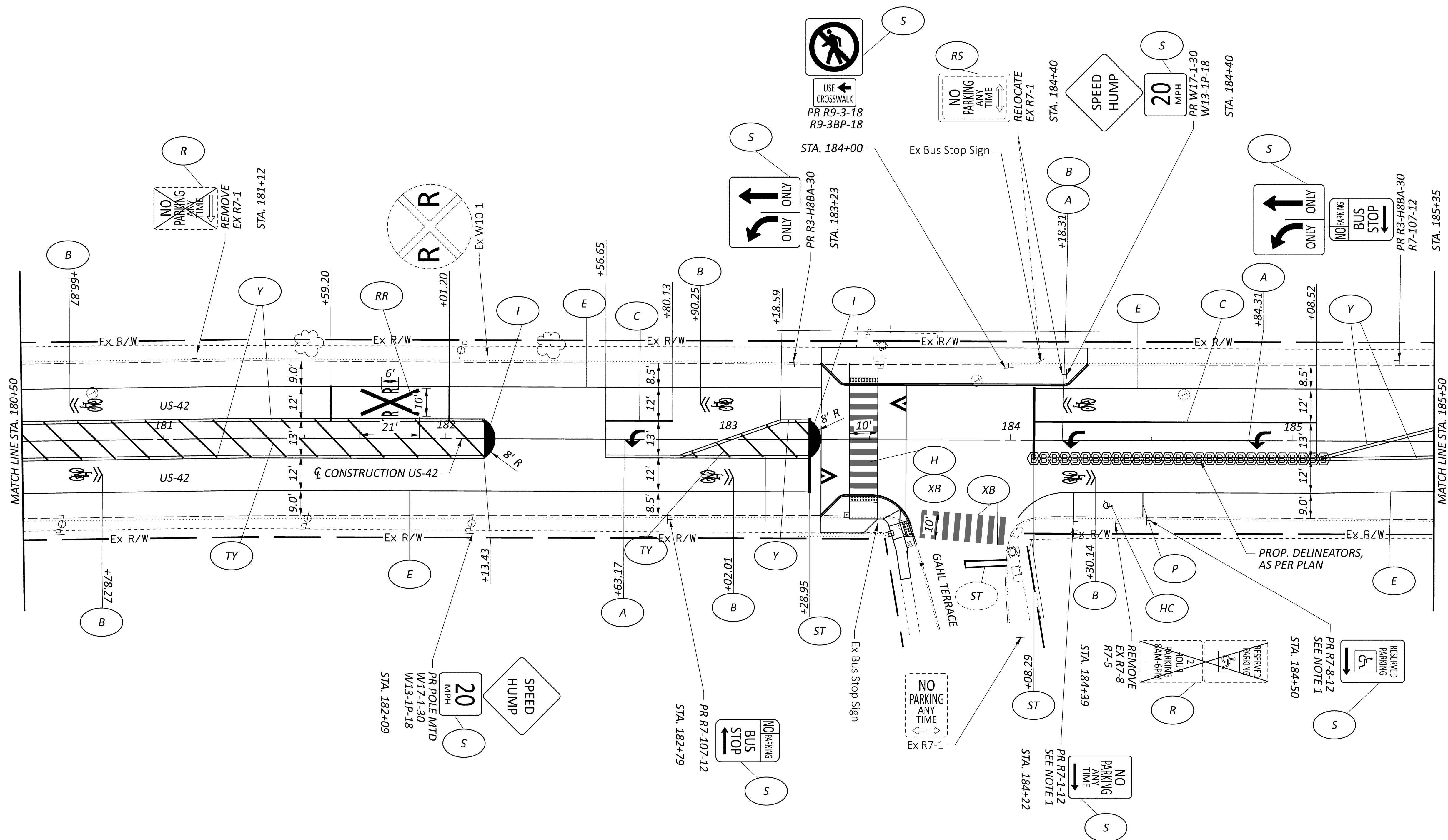


TRAFFIC CONTROL
STA. 175+50 TO STA. 180+50

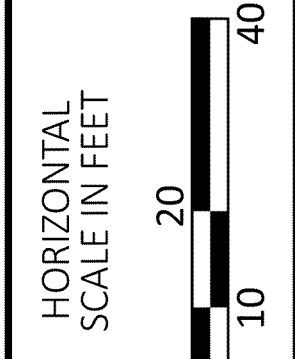
DESIGN AGENCY	
DESIGNER CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	CMS
REVIEWER	GSB 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.88	117

NOTES:

1. PARKING SIGNS SHALL BE MOUNTED AT A 45-DEGREE ANGLE WITH THE LINE OF TRAFFIC PER OMUTCD GUIDANCE.
2. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.



FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

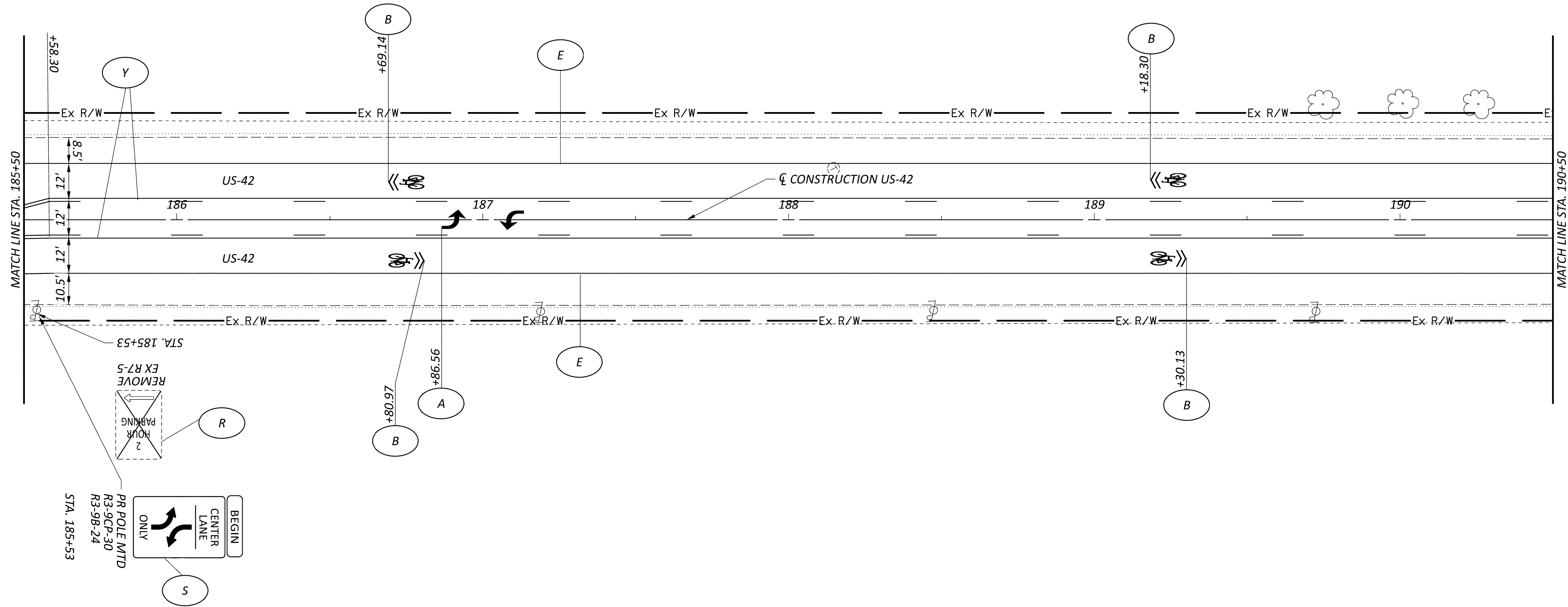


TRAFFIC CONTROL
STA. 180+50 TO STA. 185+50

DESIGN AGENCY	
CMT	CONTRACTOR
CMT 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.89	117

HAM US 42 10.07 READING RD

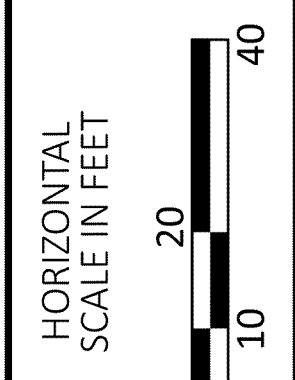
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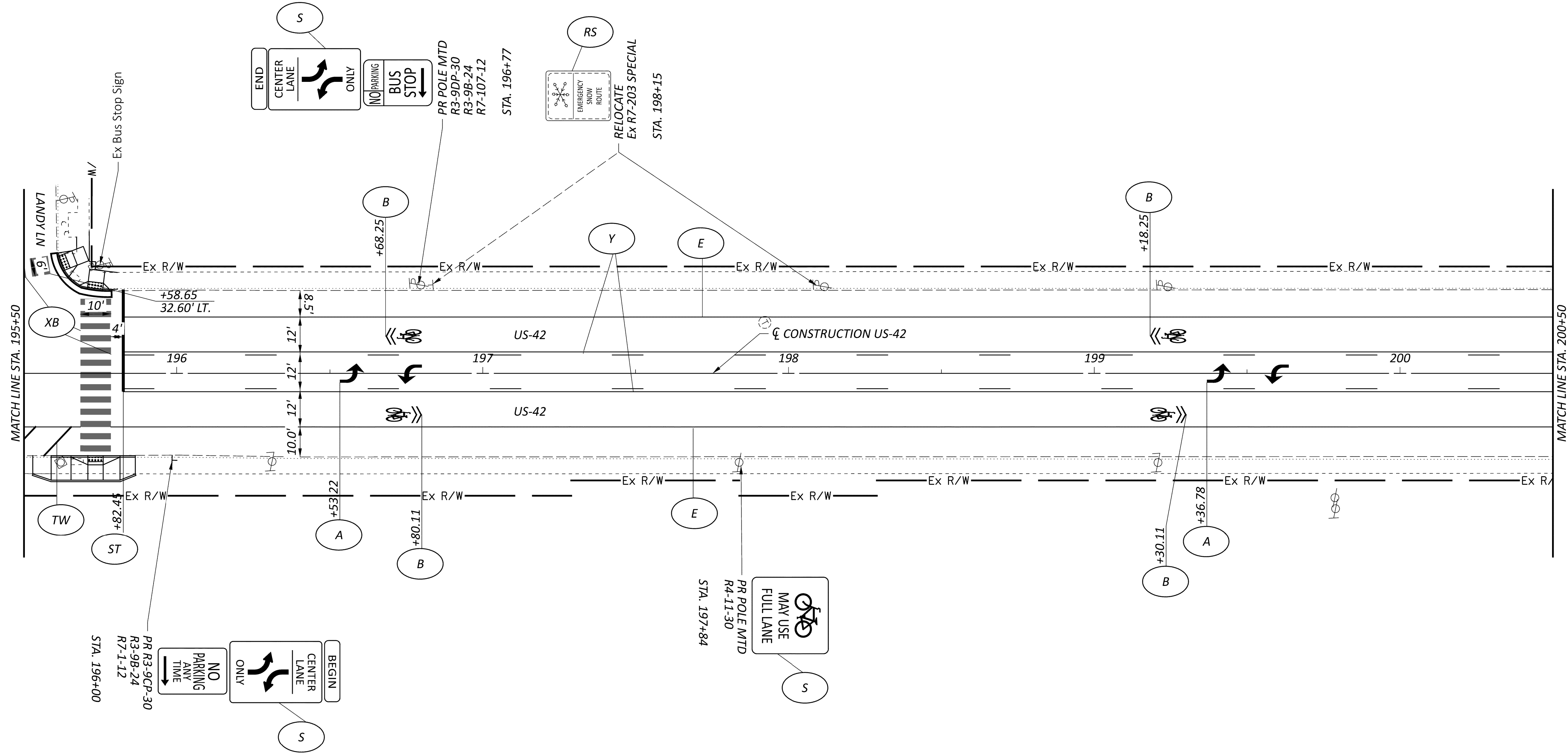


FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74

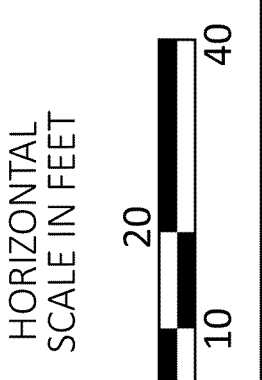
<p>DESIGN AGENCY CMT CRAWFORD, MURPHY & CONSULTANTS, INC. 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtinc.com</p>	
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.90	117

**TRAFFIC CONTROL
 STA. 185+50 TO STA. 190+50**





FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.74

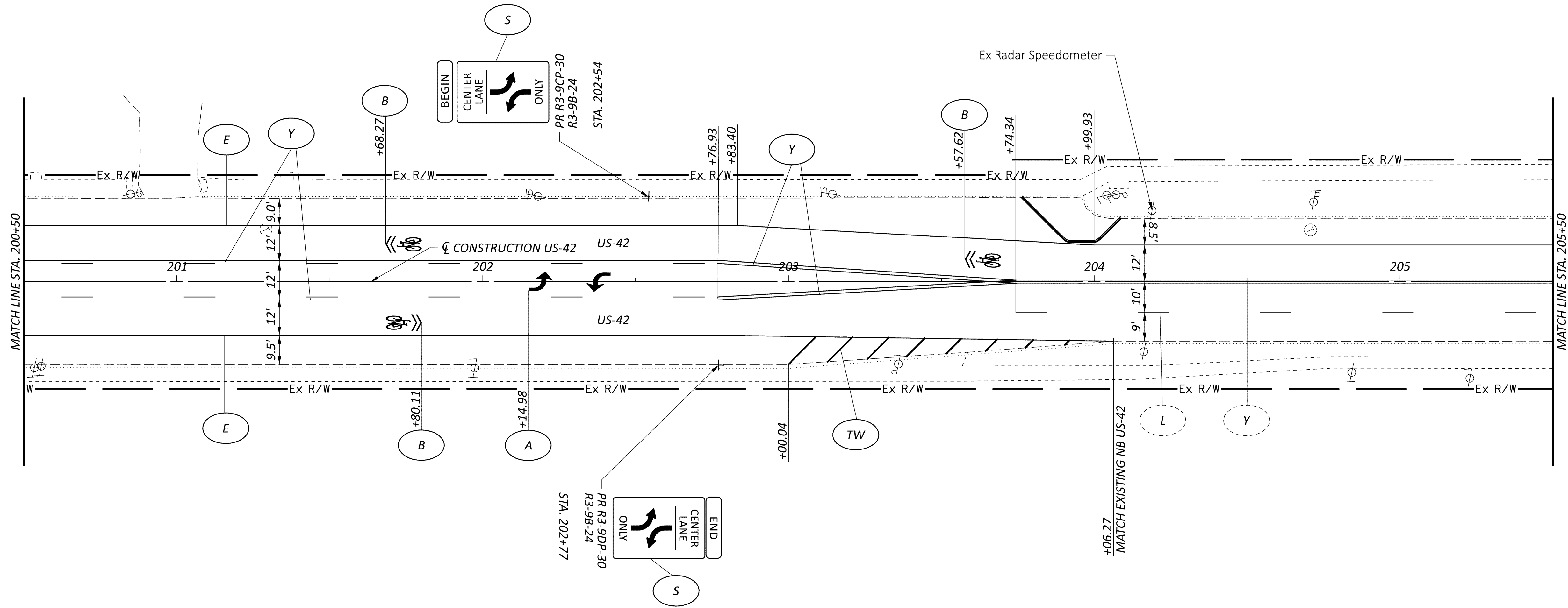


TRAFFIC CONTROL
 STA. 195+50 TO STA. 200+50

DESIGN AGENCY	
 CMT CRAWFORD, MURPHY & CONSULTING ENGINEERS 1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.92	117

NOTES:

1. PROPOSED TRANSVERSE AND CHEVRON LINES ARE SPACED AT 12' UNLESS OTHERWISE NOTED ON THE PLANS.



DESIGN AGENCY
CMT
 CONSTRUCTION MANAGEMENT TECHNOLOGIES, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

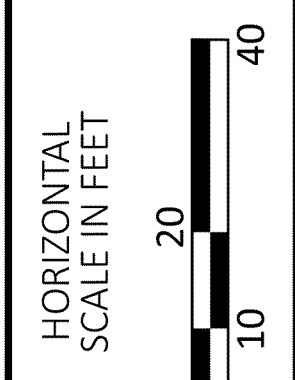
DESIGNER
 CMS

REVIEWER
 GSH 02/13/26

PROJECT ID
 123369

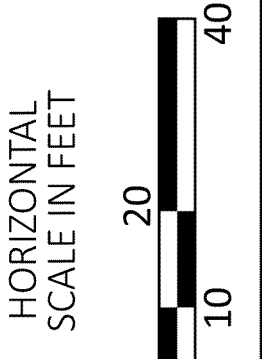
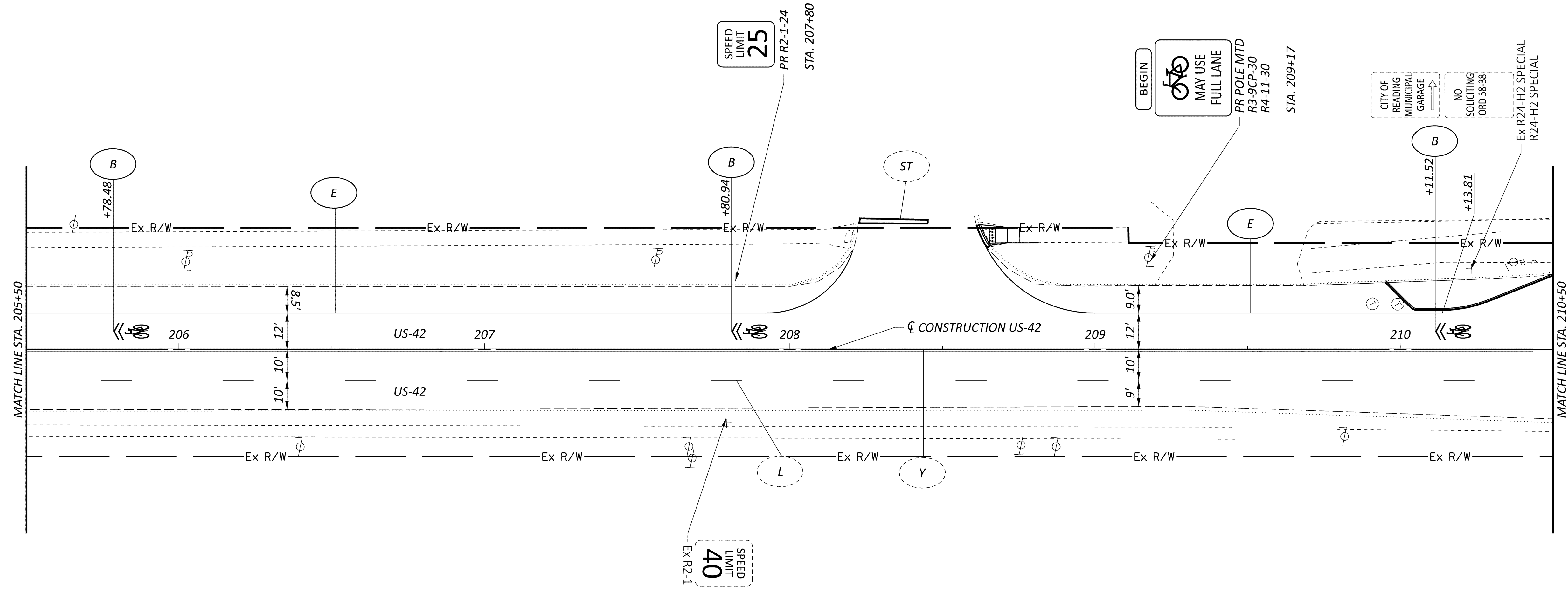
SHEET TOTAL
 P.93 117

TRAFFIC CONTROL
 STA. 200+50 TO STA. 205+50



HAM US 42 10.07 READING RD

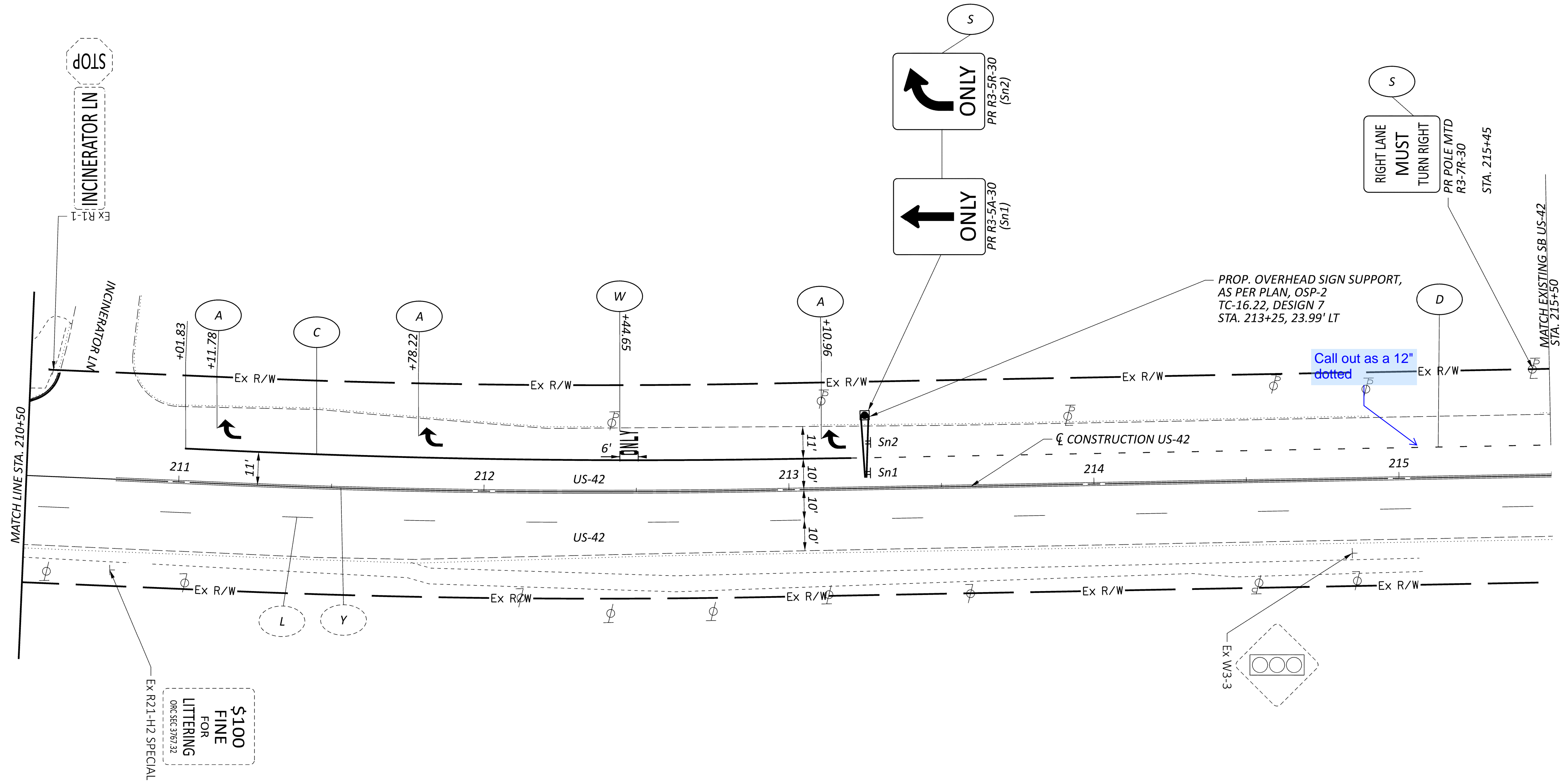
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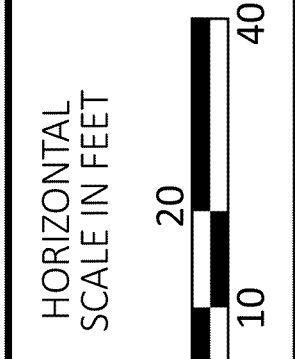
TRAFFIC CONTROL
STA. 205+50 TO STA. 210+50

DESIGN AGENCY	
CMT	CONTRACTOR
1777 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cmtengr.com	DESIGNER
CMS	REVIEWER
GSH 02/13/26	PROJECT ID
123369	SHEET TOTAL
P.94	117

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74

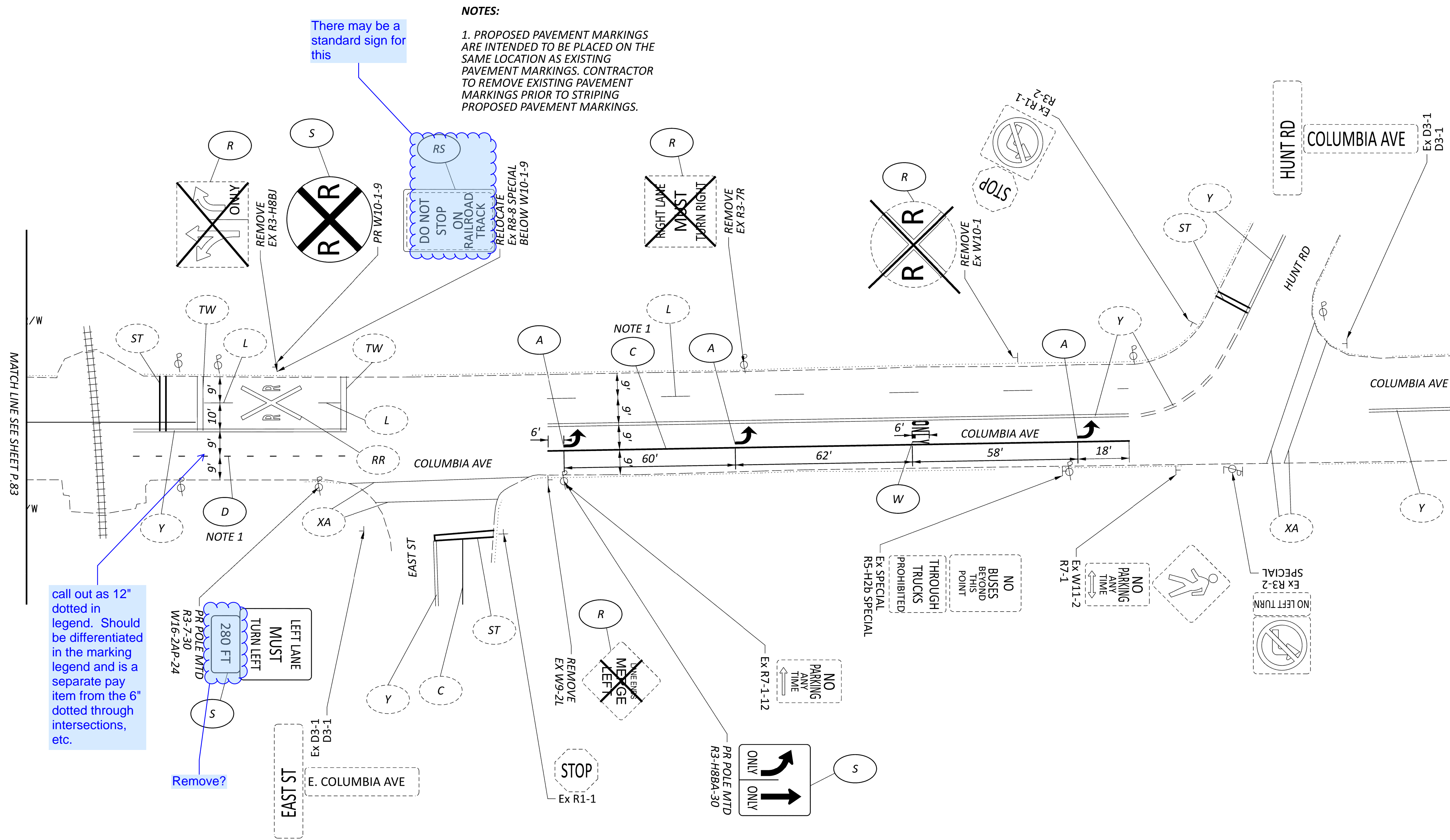


FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P. 74



TRAFFIC CONTROL
STA. 210+50 TO STA. 215+50

DESIGN AGENCY	
CMT	CONTRACTOR
DESIGNER	
CMS	
REVIEWER	
GSH 02/13/26	
PROJECT ID	
123369	
SHEET	TOTAL
P.95	117



call out as 12" dotted in legend. Should be differentiated in the marking legend and is a separate pay item from the 6" dotted through intersections, etc.

Remove?

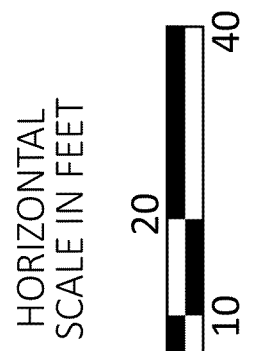
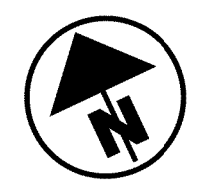
There may be a standard sign for this

NOTES:

1. PROPOSED PAVEMENT MARKINGS ARE INTENDED TO BE PLACED ON THE SAME LOCATION AS EXISTING PAVEMENT MARKINGS. CONTRACTOR TO REMOVE EXISTING PAVEMENT MARKINGS PRIOR TO STRIPING PROPOSED PAVEMENT MARKINGS.

DO NOT STOP ON RAILROAD TRACK RELOCATE EX R8-8 SPECIAL BELOW W10-1-9

NOTE 1



TRAFFIC CONTROL
 COLUMBIA AVE (RAILROAD TRACKS TO HUNT RD)

DESIGN AGENCY
CMT
 CMT ENGINEERING & CONSULTING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmteng.com

DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	P.96
TOTAL	117

GENERAL REQUIREMENTS

THE PURPOSE OF THIS SPECIFICATION AND THE ASSOCIATED PLANS IS TO PERFORM TRAFFIC SIGNAL EQUIPMENT ADJUSTMENTS AT NINE (9) EXISTING TRAFFIC SIGNAL LOCATIONS AT THE US ROUTE 42 (READING ROAD) CORRIDOR IN THE CITY OF READING, OHIO. THESE PLANS AND SPECIFICATIONS ARE TO RESULT IN THE COMPLETE INSTALLATION OF FULLY FUNCTIONAL TRAFFIC SIGNALS UTILIZING SIGNAL SUPPORTS (MAST ARMS) AND SHALL OPERATE ACCORDING TO THE REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

THE 2023 OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATION, LATEST REVISION, SHALL GOVERN THIS PROJECT EXCEPT WHEN OTHERWISE NOTED. ITEMS LISTED SHALL CONFORM TO THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATION MANUAL, TO THE ODOT OFFICE OF ROADWAY ENGINEERING STANDARD CONSTRUCTION DRAWINGS, AND TO ANY SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIFIC REQUIREMENTS NOTED.

BIDDERS SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE OHIO REVISED CODE AND ADMINISTRATIVE CODE.

POWER SUPPLY FOR TRAFFIC SIGNALS (COLUMBIA AVE)

ELECTRIC POWER AT THE US-42 AND COLUMBIA AVE SHALL BE OBTAINED FROM THE EXISTING POWER SOURCE. POWER SUPPLIED SHALL BE 120/240 VOLTS.

SIGNAL ACTIVATION

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNAL TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, ALL ITEMS IN THE PROPOSED SIGNAL PLAN SHALL BE FULLY COMPLETED, (I.E., VEHICLE DETECTION, PEDESTRIAN SIGNAL HEADS, ETC.). IF THERE ARE CONSTRUCTABILITY ISSUES (I.E., ROADWAY WIDENING, ETC.) THAT PREVENT THE SIGNAL FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER AND CITY TRAFFIC ENGINEER. THE CITY TRAFFIC ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND CITY TRAFFIC ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED CITY TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE INTERSECTION, THE SIGNAL SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY CITY TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. ODOT FORCES SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND CITY TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE CITY TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDON, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

WORK INSPECTION

THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER AND THE CITY OF READING WITH 72 HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITES SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

ITEM 620 DELINEATOR, POST GROUND MOUNTED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 620, THIS ITEM OF WORK SHALL RESULT IN THE INSTALLATION OF HARDENED CENTERLINE CONSISTENT WITH THE REQUIREMENTS OF THE ODOT MULTIMODAL GUIDE CHAPTER 7.2.7.

HARDENED CENTERLINES SHALL BE INSTALLED ON TOP OF PROPOSED CENTERLINE MARKINGS AT LOCATIONS NOTED IN THE PLANS. THE HARDENED CENTERLINES SHALL CONSIST OF FLEXIBLE DELINEATORS MOUNTED ON MOUNTABLE CURB DRILLED INTO THE PAVEMENT.

THE FLEXIBLE DELINATORS AND MOUNTABLE CURB SHALL BE YELLOW WITH BLACK STRIPES.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH LOCATION REQUIRING ITEM 620 DELINATOR, POST GROUND MOUNTED, AS PER PLAN INSTALLATION, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 630 OVERHEAD SIGN SUPPORT, TYPE TC-16.22, (BY DESIGN), AS PER PLAN

IN ADDITION TO PROVISIONS OF THE ODOT C&MS, FURNISH AND INSTALL OVERHEAD SIGN SUPPORT AS SPECIFIED IN THE PLANS.

OVERHEAD SIGN SUPPORTS HAVE BEEN DESIGNED FOLLOWING ODOT SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN SHOP DRAWINGS FROM THE OVERHEAD SIGN SUPPORT MANUFACTURER VERIFYING THE SUPPORT MEETS THE INTENT OF THE PLANS. THE SHOP DRAWINGS SHALL HAVE AN OHIO PE STAMP AND BE PROVIDED TO THE ENGINEER PRIOR TO ORDERING. NO OVERHEAD SIGN SUPPORTS SHALL BE ORDERED PRIOR TO SUBMITTING THE SHOP DRAWING INFORMATION.

THE SUPPORT SHALL BE A ROUND TAPERED OVERHEAD SIGN SUPPORT CONSISTENT WITH THE ODOT STANDARD CONSTRUCTION DRAWING AND ITEM 630.06B OF THE ODOT CMS. POLES CONSISTING OF STRAIGHT SECTIONS WITH A TAPERED EFFECT ACCOMPLISHED BY THE USE OF REDUCERS SHALL NOT BE PERMITTED. POLES SHALL BE ROUND IN SHAPE. OCTAGON SHAPED POLES ARE NOT PERMITTED.

THE HORIZONTAL MAST ARM SHALL BE CURVED EXTENDING 6 FEET FROM THE VERTICAL SUPPORT AS SHOWN IN THE OVERHEAD SIGN SUPPORT DETAIL UNLESS OTHERWISE NOTED. THE CURVE OF THE MAST ARM SHALL HAVE A 3-6' RISE ABOVE THE POINT OF ATTACHMENT TO THE OVERHEAD SIGN SUPPORT. THE POLE HEIGHT SHALL BE NOTED IN THE SIGN ATTACHMENT CHART.

PAYMENT FOR ITEM 630 OVERHEAD SIGN SUPPORT, TC-16.22, (BY DESIGN), AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH COMPLETE AND IN PLACE, AND SHALL INCLUDE ALL DOCUMENTATION, LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK.

ITEM 630 SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN

IN ADDITION TO ITEM 630, SIGNS SHALL RIGIDLY ATTACHED TO THE MAST ARM INSTEAD OF BEING SUSPENDED FROM THE MAST ARM. THE SIGN SUPPORT ASSEMBLY SHALL COMPLY WITH ITEM 630.06 AND BE FULLY ADJUSTABLE TO ENABLE ORIENTATION OF SIGN FACES PERPENDICULAR TO THE APPROACH LANES. THIS ITEM SHALL INCLUDE ALL NECESSARY HARDWARE FASTENERS THAT ARE CORROSION RESISTANT, AND ACCESSORIES.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH OF ITEM 630 SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN IN PLACE.

ITEM 630 SIGNING MISC.: SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY. THE FLASHING UNIT SHALL BE SOLAR POWERED, PEDESTRIAN ACTIVATED, AND 2-SIDED WITH TWO

LED ARRAY BASED YELLOW INDICATIONS ON EACH SIDE. MULTIPLE UNITS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED. THE UNIT SHALL BE COMPLIANT WITH THE MOST CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

GENERAL REQUIREMENTS
EACH RRFB SHALL CONSIST OF TWO RAPIDLY FLASHED RECTANGULAR-SHAPED YELLOW INDICATIONS HAVING LED ARRAY BASED LIGHT SOURCE.

EACH RRFB SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.).

EACH RRFB SHALL CONTAIN A PEDESTRIAN INDICATION LIGHT VISIBLE TO THE PEDESTRIAN IN THE DIRECTION OF TRAVEL.

FUNCTIONAL REQUIREMENTS
EACH RRFB SHALL UTILIZE SOLAR POWER.

EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT ACCESSIBLE PEDESTRIAN PUSHBUTTONS.

THE RRFB SHALL BE NORMALLY DARK, SHALL INITIATE OPERATION ONLY UPON PEDESTRIAN ACTUATION, AND SHALL CEASE OPERATION AFTER A PREDETERMINED TIME LIMIT (BASED ON OMUTCD PROCEDURES).

EACH REMOTE RRFB SHALL BE WIRELESSLY ACTIVATED.

ALL RRFB LIGHT INDICATIONS SHALL BE WIRELESSLY SYNCHRONIZED (ALL LIGHTS WILL TURN ON WITHIN 120 MSEC AND REMAIN SYNCHRONIZED THROUGHOUT THE DURATION OF THE FLASHING CYCLE).

THE UNIT SHALL BE CAPABLE OF RUNNING 14 DAYS WITHOUT SUNLIGHT.

MATERIALS
FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS, AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). THE RRFB ASSEMBLY INCLUDES THE FOLLOWING ITEMS:

- RRFB INDICATIONS
 - EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.
 - THE RRFB INDICATIONS SHALL BE ALIGNED HORIZONTALLY, WITH THE LONGER DIMENSION OF THE INDICATION HORIZONTAL. THERE SHALL BE TWO INDICATIONS ON THE FRONT AND TWO INDICATIONS ON THE BACK.
 - EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL.
 - EACH RRFB SHALL BE LOCATED BETWEEN THE BOTTOM OF THE CROSSING WARNING SIGN AND THE TOP OF THE SUPPLEMENTAL DOWNWARD DIAGONAL ARROW PLAQUE.
 - THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM CLASS 1 SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE, AND SERVICE VEHICLES) DATED JANUARY, 2005.
 - TO MINIMIZE EXCESSIVE GLARE DURING NIGHTTIME CONDITIONS, AN AUTOMATIC SIGNAL DIMMING DEVICE SHALL BE USED TO REDUCE THE BRILLIANCE OF THE RRFB INDICATIONS.
 - AN LED PEDESTRIAN CONFIRMATION LIGHT DIRECTED AT AND VISIBLE TO PEDESTRIANS IN THE CROSSWALK SHALL BE INSTALLED INTEGRAL TO THE RRFB OR PUSHBUTTON TO GIVE CONFIRMATION THAT THE RRFB IS IN OPERATION.
 - THE PEDESTRIAN CONFIRMATION LIGHT SHALL HAVE A MINIMUM AREA OF 0.5 SQUARE INCHES AND BE CONSPICUOUS TO PEDESTRIANS AT ALL DISTANCES FROM THE BEGINNING OF THE CONTROLLED CROSSWALK TO A POINT 10 FEET FROM THE END OF THE CONTROLLED CROSSWALK DURING BOTH DAY AND NIGHT.

- SIGNS
 - ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.
 - ACCESSIBLE PEDESTRIAN PUSHBUTTONS SIGNS (R10-25) SHALL BE PROVIDED AND INCLUDE THE LEGEND "PUSH BUTTON TO TURN ON WARNING LIGHTS / WAIT FOR GAP IN TRAFFIC". SIGNS SHOULD BE MOUNTED ADJACENT TO OR INTEGRAL WITH EACH PEDESTRIAN PUSHBUTTON.
 - TWO SETS OF SIGNS SHALL BE REQUIRED PER UNIT FOR VIEW FROM EACH APPROACH.
 - ENSURE THE SIGN MEETS THE REQUIREMENTS OF C&MS 630.

- CONTROL CIRCUIT
 - THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING UP TO TWO INDEPENDENT OUTPUTS. THE LED LIGHT OUTPUTS AND FLASH PATTERN SHALL BE COMPLETELY PROGRAMMABLE.

- THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.
- THE LEDS SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURE AND TO PROTECT ALL INTERNAL LED AND ELECTRICAL COMPONENTS.
- BATTERY AND SOLAR PANELS
 - BATTERY UNIT SHALL BE A 12VDC, 35 AHR MINIMUM, SEALED GEL OR AGM LEAD ACID BATTERY. BATTERIES SHALL HAVE A WRITTEN TWO-YEAR FULL REPLACEMENT WARRANTY.
 - THE SOLAR PANEL SHALL PROVIDE A MINIMUM OF 40 WATTS PEAK TOTAL OUTPUT.
 - THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES- 60 DEGREES TO PROVIDE MAXIMUM OUTPUT.
 - ALL FASTENERS USED SHALL BE ANTI-VANDAL.

- WIRELESS RADIO
 - RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.
 - RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.
 - THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE RRFB LIGHT INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.

- ACCESSIBLE PEDESTRIAN PUSHBUTTON
 - THE PUSHBUTTON SHALL BE CAPABLE OF CONTINUOUS OPERATION OVER A TEMPERATURE RANGE OF -30 DEGREES F TO +165 DEGREES F.
 - PUSHBUTTON SHALL BE ADA COMPLIANT.
 - THE PUSHBUTTONS SHALL ALERT VISUALLY IMPAIRED PEDESTRIANS OF THE WALK AND FLASH DON'T WALK INDICATIONS USING SPEECH MESSAGES INSTEAD OF AUDIBLE TONES. THE AUDIBLE MESSAGE SHOULD BE A SPEECH MESSAGE THAT SAYS "WARNING LIGHTS ARE FLASHING" AND BE SPOKEN TWICE PER THE OMUTCD.

- PEDESTAL SHAFT AND BASE - MOUNT ON A STANDARD 4.5-INCH OD ALUMINUM PEDESTAL POLE WITH BREAKAWAY BASE. A 14 FOOT POLE SHALL BE PROVIDED AND FIELD ADJUSTED AND CAPPED TO MAINTAIN THE PROPER SIGN MOUNTING HEIGHTS, UNLESS SPECIFIED OTHERWISE IN THE PLANS. POLE AND BASE MANUFACTURER SHALL BE LISTED ON ODOT'S QUALIFIED PRODUCTS LIST.

CONSTRUCTION
THE RRFB SHALL BE ASSEMBLED AND CONSTRUCTED BY THE CONTRACTOR AS SHOWN AND SPECIFIED ON THE PLANS.

WARRANTY
WARRANTY SHALL BE TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE.

MEASUREMENT
THE DEPARTMENT WILL MEASURE THE ITEM COMPLETE IN PLACE, INCLUDING ALL MATERIALS, TESTING, LABOR AND SOFTWARE FOR A FULLY FUNCTIONAL UNIT.

PAYMENT
PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 630 SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY.

ITEM 644 REMOVAL OF PAVEMENT MARKING

THE MAJORITY OF EXISTING PAVEMENT MARKINGS ON US-42 AND SIDE STREETS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED AND REPLACED WITH PROPOSED PAVEMENT MARKINGS. THE CONTRACTOR SHALL REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS AS SHOWN IN THE PLANS. THE FOLLOWING QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR PAVEMENT MARKINGS REMOVED WITHIN PROJECT LIMITS:

ITEM 644 REMOVAL OF PAVEMENT MARKING – 8 MILE
ITEM 644 REMOVAL OF PAVEMENT MARKING – 35 EACH

ITEM 632 REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: PUSHBUTTON AND SIGN

IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.26, THE CONTRACTOR SHALL FILL OR PLUG HOLES LEFT BEHIND ON THE SIGNAL OR PEDESTAL SUPPORT DUE TO REMOVING THE PUSHBUTTON AND ASSOCIATED SIGN. SIGNAL CABLES USED BY THE REMOVED PUSHBUTTON SHALL BE REMOVED. REMOVED PUSHBUTTONS AND ASSOCIATED SIGNS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY THE CITY OF READING. SIGNAL CABLES SHALL BE DISPOSED BY THE CONTRACTOR.

Does City also want ped heads? Need pay item and note for that as well

DESIGN AGENCY	
	CITY OF READING, OHIO 1776 WASHINGTON VILLAGE DR DAYTON, OHIO 45459 www.cityofreading.com
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.97	117

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID, PER EACH ITEM 632 REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: PUSHBUTTON AND SIGN, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM FOR EACH REMOVED PUSHBUTTON, SIGN, AND SIGNAL CABLE.

ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN (COLUMBIA AVE)

A PORTION OF THE TRAFFIC SIGNAL INSTALLATION AT THE US-42 AND COLUMBIA AVE INTERSECTION, INCLUDING SIGNAL HEADS, CABLE, SIGNAL SUPPORTS (SW AND SE QUADRANTS), PULL BOXES, PEDESTRIAN SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, SIGNS, ETC. SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. POWER SERVICES SHALL BE REMOVED IN ACCORDANCE WITH C&MS 625.21.F. REMOVED ITEMS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY THE CITY OF READING IN ACCORDANCE WITH THE LISTING GIVEN HEREIN.

- ITEMS TO BE STORED:
- PUSHBUTTON (4)
- PUSHBUTTON SIGN (4)
- VEH SIGNAL HEAD (8)
- OVERHEAD SIGN (10)
- SIGNAL SUPPORT (2)

THE CONTRACTOR SHALL CONTACT CITY OF READING TO DETERMINE A LOCATION AND TIME TO DELIVER THE EQUIPMENT.

IN THE EVENT THE ITEMS STORED ON THE PROJECT FOR SALVAGE BY THE CITY OF READING ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

ITEMS NOT SPECIFIED FOR STORAGE SHALL BE DISPOSED OF BY THE CONTRACTOR.

ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN, AUDIBLE

IN ADDITION TO THE ACCESSIBLE PEDESTRIAN PUSHBUTTON REQUIREMENTS OF C&MS 632.09, ODOT, AND PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), THIS ITEM SHALL INCLUDE THE FOLLOWING FEATURE:

THE AUDIBLE MESSAGE SHALL ALERT VISUALLY IMPAIRED PEDESTRIANS OF THE WALK AND FLASH DON'T WALK INDICATIONS USING SPEECH MESSAGES INSTEAD OF AUDIBLE TONES. SAMPLE MESSAGE WORDING: "READING ROAD. WALK SIGN IS ON TO CROSS READING ROAD".

PAYMENT FOR ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN, AUDIBLE SHALL BE MADE FOR THE NUMBER OF COMPLETE PUSHBUTTONS FURNISHED AND INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE.

Provide the elevations in the plans

SIGNAL SUPPORT AND PEDESTAL FOUNDATION ELEVATIONS

ELEVATIONS SHOWN IN THE PLANS FOR STRAIN ROL AND PEDESTAL FOUNDATIONS ARE FOR COMPUTATIONAL PURPOSES ONLY. THE ACTUAL ELEVATION OF THE FOUNDATION SHALL BE IN ACCORDANCE WITH TRAFFIC SCD TC-21.21 PROVIDED THE EXISTING SLOPE IS LESS THAN 6:1.

AT LOCATIONS WHERE THE EXISTING SLOPE IS 6:1 OR GREATER, THE BURIED DEPTH OF FOUNDATION, AS SHOWN IN SCD TC-21.21 SHALL APPLY TO THE LOW SIDE OF THE SLOPE. THE TOP OF THE FOUNDATION SHALL BE SET 2 INCHES ABOVE THE EXISTING SURFACE ON THE HIGH SIDE OF THE SLOPE. THE ADDITIONAL DEPTH OF FOUNDATION NECESSARY TO MEET THESE REQUIREMENTS SHALL BE ADDED TO THE FORMED TOP.

AT LOCATIONS WHERE THE FOUNDATION IS LOCATED ADJACENT TO A SIDEWALK, THE BURIED DEPTH OF FOUNDATION, AS SHOWN IN SCD TC-21.21 SHALL APPLY TO THE LOWEST ELEVATION ABOVE THE GROUND. THE ADDITIONAL DEPTH OF FOUNDATION NECESSARY TO MEET THESE REQUIREMENTS SHALL BE ADDED TO THE FORMED TOP.

THE TOP OF FOUNDATION SHALL BE EQUAL TO THE ELEVATION OF THE PROPOSED SIDEWALK OR RAMP ADJACENT TO THE FOUNDATION. NOTE THAT THE ELEVATION MAY DIFFER DEPENDING UPON ELEVATION OF THE SIDEWALK OR RAMP ADJACENT TO THE FOUNDATION.

SIGNAL, PEDESTAL AND OVERHEAD SIGN SUPPORT FOUNDATION

PRIOR TO ORDERING THE SIGNAL, PEDESTAL, AND OVERHEAD

SIGN SUPPORTS, THE CONTRACTOR SHALL CONTACT OUPS TO HAVE ALL THE UTILITIES LOCATED IN THE FIELD. THEN, THE CONTRACTOR SHALL MEET THE PROJECT ENGINEER TO LOCATE THE PROPOSED SUPPORT LOCATIONS TO INSURE THERE ARE NO CONFLICTS WITH UTILITIES. IF THERE ARE ISSUES, THE PROJECT ENGINEER SHALL PROVIDE GUIDANCE AS TO THE RELOCATION OF THE SUPPORTS.

DUE TO THE FURTHER POSSIBILITY OF CONFLICT WITH EXISTING OR PROPOSED UNDERGROUND OBSTRUCTIONS (INCLUDING THE POSSIBILITY OF UNRECORDED OBSTRUCTIONS) WHICH COULD AFFECT THE LOCATION OF THE FOUNDATION FOR THIS ITEM, AND CONSEQUENTLY, THE DESIGN OF THE SUPPORT AND/OR ARMS, THE CONTRACTOR SHALL NOT PLACE FINAL ORDERS FOR THE ITEM UNTIL THE FOUNDATIONS HAVE BEEN INSTALLED, AT FINAL GRADE, AND THE CONTRACTOR HAS RECEIVED, FROM ENGINEER, WRITTEN NOTICE TO PROCEED WITH THE ORDERS FOR THE ITEM.

IF ANY FOUNDATION LOCATIONS MUST BE ADJUSTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND MAINTAINING AGENCY, WHO WILL DETERMINE THE REVISED LOCATION AND IF NEEDED, THE SUPPORT DESIGN. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DETERMINING THE REVISED DESIGN. THE ENGINEER WILL INFORM THE CONTRACTOR OF ANY CHANGES NECESSARY AND AUTHORIZE THE CONTRACTOR TO ORDER THE SUPPORT.

THE CONTRACTOR SHALL, WHEN DEVELOPING THE PROGRESS SCHEDULE, AND THOSE OF SUBCONTRACTORS, ENSURE THAT THE FOUNDATIONS ARE INSTALLED AT THE EARLIEST TIME AS IS FEASIBLE AND PRACTICAL, AND SHALL INCLUDE SUFFICIENT TIME IN THE PROGRESS SCHEDULE FOR ORDERING, MANUFACTURING, DELIVERY, AND INSTALLATION OF THE SUPPORT ITEMS AFTER THE FOUNDATIONS ARE IN PLACE.

NO PAYMENTS FOR DELIVERED MATERIALS FOR THE FOUNDATION OR SUPPORT ITEMS SHALL BE MADE UNTIL THE FOUNDATIONS ARE IN PLACE, AND IF CHANGES IN THE DESIGN OF THIS ITEM ARE REQUIRED, NO PAYMENT SHALL BE MADE FOR THE ITEMS MANUFACTURED TO THE ORIGINAL DESIGN.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632 POWER SERVICE, AS PER PLAN

POWER SERVICE SHALL BE AS PER C&MS ITEM 632 AND SCD TC-83.10 WITH THE FOLLOWING EXCEPTIONS:

1. THE METER BASE MOUNTING HEIGHT SHALL BE NO MORE THAN 5 FEET HIGH TO THE CENTER OF THE METER BASE FROM THE GROUND.
2. THE CONTRACTOR SHALL SUPPLY THE NECESSARY METER BASES.
3. ALL POWER SERVICES SHALL BE METERED. THE METER SHALL HAVE A LEVER-OPERATED BYPASS.

DISCONNECT SWITCH ENCLOSURES FURNISHED IN ACCORDANCE WITH CMS ITEM 632 - POWER SERVICE, AS PER PLAN, SHALL INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS AND KEYING SHALL BE TO THE STATE MASTER.

THE CONTRACTOR SHALL CONTACT THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THAT THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE VOLTAGE SUPPLIED SHALL BE NOMINALLY 120 VOLTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNAL IS ACCEPTED BY THE CITY OF READING.

THE COST FOR ALL NECESSARY ITEMS AND ASSOCIATED LABOR SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 632 - POWER SERVICE, AS PER PLAN

ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: PULLBOX

EXISTING PULLBOXES THAT ARE NOTED AS BEING REUSED IN THE PLANS ARE EXPECTED TO BE DISTURBED DUE TO NEW CABLE OR CONDUIT INSTALLATION, OR READJUSTED DUE TO PROPOSED SIDEWALK. IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.27 THE FOLLOWING SHALL APPLY:

1. REUSED PULLBOXES SHALL BE CLEAR OF DEBRIS AND UNUSED EQUIPMENT PRIOR TO OPERATING THE SIGNAL.

2. AT LOCATIONS WHERE THE PULLBOX NEEDS TO BE READJUSTED AS NOTED IN THE PLANS, THE CONTRACTOR SHALL REUSE THE EXISTING PULLBOX BY REGRADING AND/OR ROTATING THE PULL BOX WHEN NECESSARY, SUCH THAT THE TOP OF PULL BOX ELEVATION EQUALS THE ELEVATION OF THE SURROUNDING SIDEWALK. COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN UNIT PRICE BID OF EACH ITEM 632 REUSE TRAFFIC CONTROL ITEM: PULLBOX.

ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: PEDESTRIAN SIGNAL HEAD

IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.27, THE CONTRACTOR SHALL FILL OR PLUG HOLES LEFT BEHIND ON THE SIGNAL OR PEDESTAL SUPPORT DUE TO THE RELOCATED PEDESTRIAN SIGNAL HEAD. SIGNAL CABLES USED BY THE RELOCATED PEDESTRIAN SIGNAL HEAD SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR.

COST ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID OF EACH ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: PEDESTRIAN SIGNAL HEAD, AND INCLUDE CABLE REMOVAL AND DISPOSAL.

ITEM 632 REUSE OF VEHICULAR SIGNAL HEAD

IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.06 AND 632.27, THIS LINE ITEM SHALL CONSIST OF RELOCATING AN EXISTING VEHICULAR SIGNAL HEAD TO THE PROPOSED LOCATION AT THE EXISTING SIGNAL ARM SUPPORT NOTED IN THE PLANS.

AT LOCATIONS WHERE VEHICULAR SIGNAL HEAD IS RELOCATED CLOSER TO THE VERTICAL SUPPORT, THE EXISTING SIGNAL SUPPORT IS EXPECTED TO ACCOMMODATE THE NEW LOAD DUE TO SHORTER RESULTING MOMENT ARM.

EXISTING VEHICULAR SIGNAL HEAD RELOCATED ON THE SAME SIGNAL SUPPORT SHALL REUSE THE EXISTING CABLE.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH REUSED VEHICULAR SIGNAL HEAD AND WILL BE FULL COMPENSATION FOR ALL LABOR, TOOLS, EQUIPMENT, AND OTHER INCIDENTALS NECESSARY FOR INSTALLING REUSED VEHICULAR SIGNAL HEAD.

ITEM 633 CONTROLLER ITEM, MISC.: REPROGRAMMING OF EXISTING CONTROLLERS

THIS ITEM WILL COVER ANY REPROGRAMMING OR PHASING MODIFICATIONS REQUIRED FOR EXISTING CONTROLLERS WHICH ARE TO REMAIN IN SERVICE. THE REPROGRAMMING EFFORT SHALL INCLUDE PROGRAMMING OF PEDESTRIAN AND VEHICULAR PHASES, AND UPLOADING PROPOSED SIGNAL TIMING CHANGES AS SHOWN IN THE PLANS.

CONTROLLER REPROGRAMMING WILL BE MEASURED PER EXISTING CONTROLLER PROGRAMMED OR MODIFIED. PAYMENT WILL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO COMPLETE THE WORK TO HAVE THE INTERSECTION OPERATE AS INTENDED.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 180 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION, THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY.

EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLER, CABINET, UNINTERRUPTIBLE POWER SUPPLY, VEHICLE DETECTION EQUIPMENT, LED LAMP UNITS, NETWORK AND COMMUNICATION/ INTERCONNECT EQUIPMENT.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH. A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.

B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.

C. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.

D. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.

E. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.

F. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

2. CONDUITS.

A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.

B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.

C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3. WIRE FOR GROUNDING AND BONDING

A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:

- I. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
- II. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
- III. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
- IV. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.

B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

4. GROUND ROD.

A. A 3/4-INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.

B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

5. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR No.4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

COND. NO./	COLOR/	VEHICLE SIGNAL/	PED SIGNAL
1/	BLACK/	GREEN BALL/	#1 WALK
2/	WHITE/	AC NEUTRAL/	AC NEUTRAL
3/	RED/	RED BALL/	#1 DW/FDW
4/	GREEN/	EQUIPMENT GROUND/	EQUIPMENT GROUND
5/	ORANGE/	YELLOW BALL/	#2 DW FDW
6/	BLUE/GRN	ARROW/	#2 WALK
7/	WHITE W/ BLK STRIPE	YELLOW ARROW/	NOT USED

6. POWER AND DISCONNECT SWITCH.

A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.

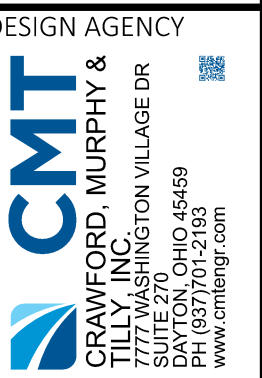
B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.

I. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.

II. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

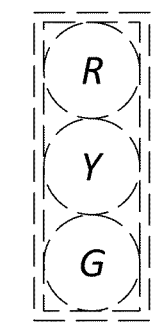
7. PAYMENT – ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

SIGNAL NOTES



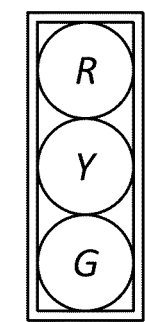
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET	TOTAL
P.99	117

SIGNAL HEADS



EX. SIGNAL HEAD

4A, 4B, 8A, 8B



REUSED SIGNAL HEAD (SEE NOTE 1)

2A, 2B, 6A, 6B



EX. PEDESTRIAN SIGNAL HEAD

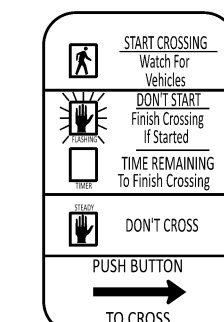
P2, P5, P6



PR. / REUSED PEDESTRIAN SIGNAL HEAD

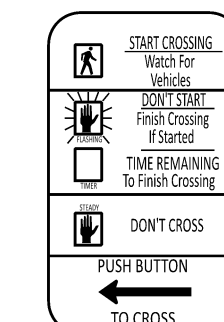
P1, P3, P4

SIGNS



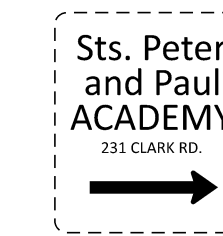
PR. R10-3E-9

Sn3, Sn4, Sn6



PR. R10-3E-9

Sn1, Sn2, Sn5



EX. SPECIAL SIGN

Sn7



PR. R9-3-18 R9-3BP-18

Sn8



PR. R9-3-18 R9-3BP-18

Sn9



EX. D3-1

Sn11, Sn13



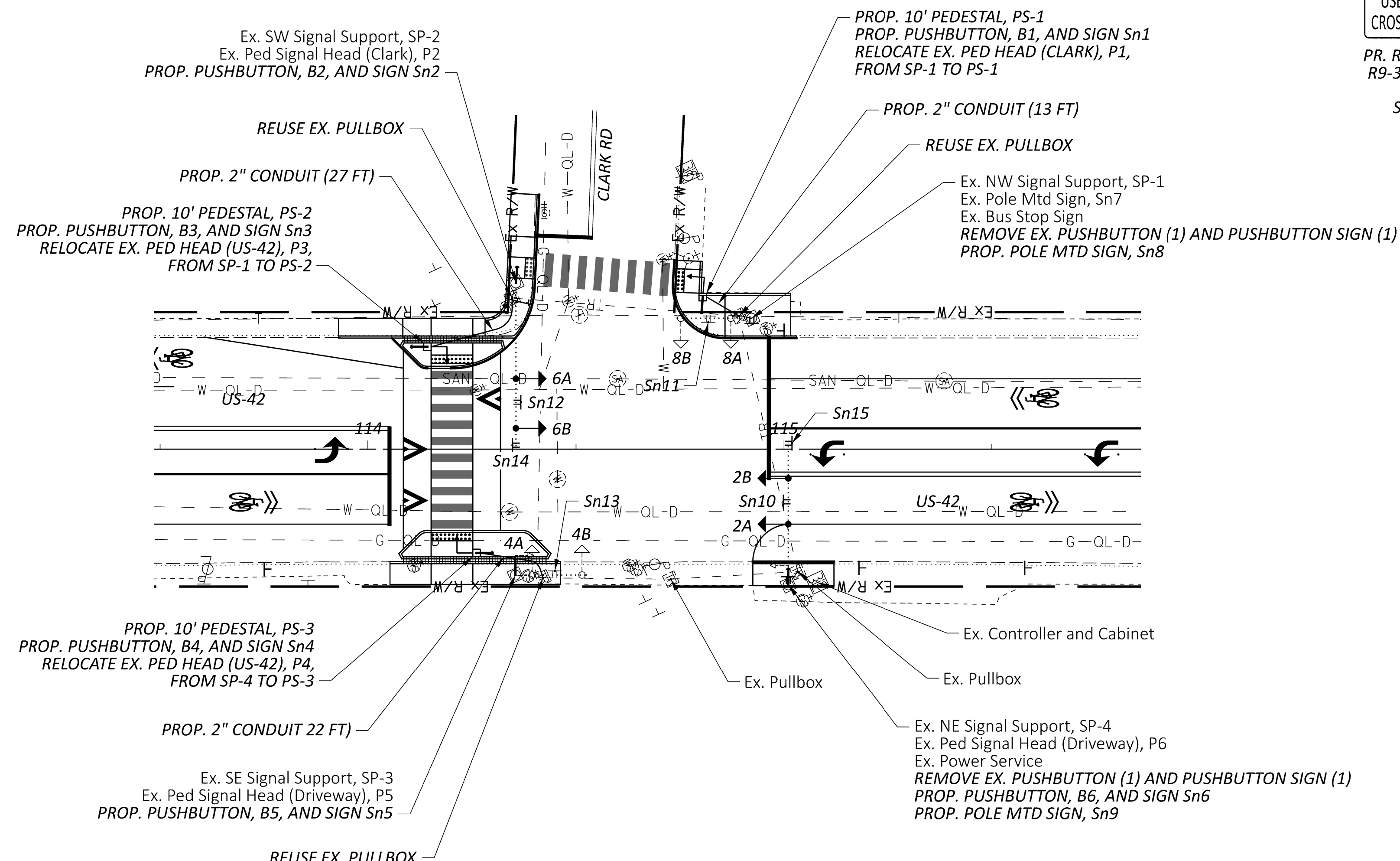
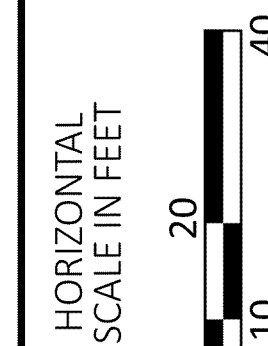
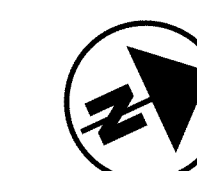
REUSED EX. D3-1

Sn10, Sn12



PR. R3-5L-30

Sn14, Sn15



- NOTES:**
1. CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
 2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
 3. SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY. EXISTING SIGNAL PHASING SHALL BE RETAINED.
 4. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:
 PUSHBUTTON (2)
 PUSHBUTTON SIGN (2)

LEGEND		
	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	○→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	○→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	○→
SIGNAL SUPPORT POLE	■	□
PEDESTRIAN HEAD	↓	○↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊗	⊗
TRAFFIC PULL BOX	▣	▣

SIGNAL PLAN
 US42 AT CLARK RD

DESIGN AGENCY
CMT
 CMT ENGINEERING, INC.
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
 CMS

REVIEWER
 GSH 02/13/26

PROJECT ID
 123369

SHEET TOTAL
 P.100 | 117

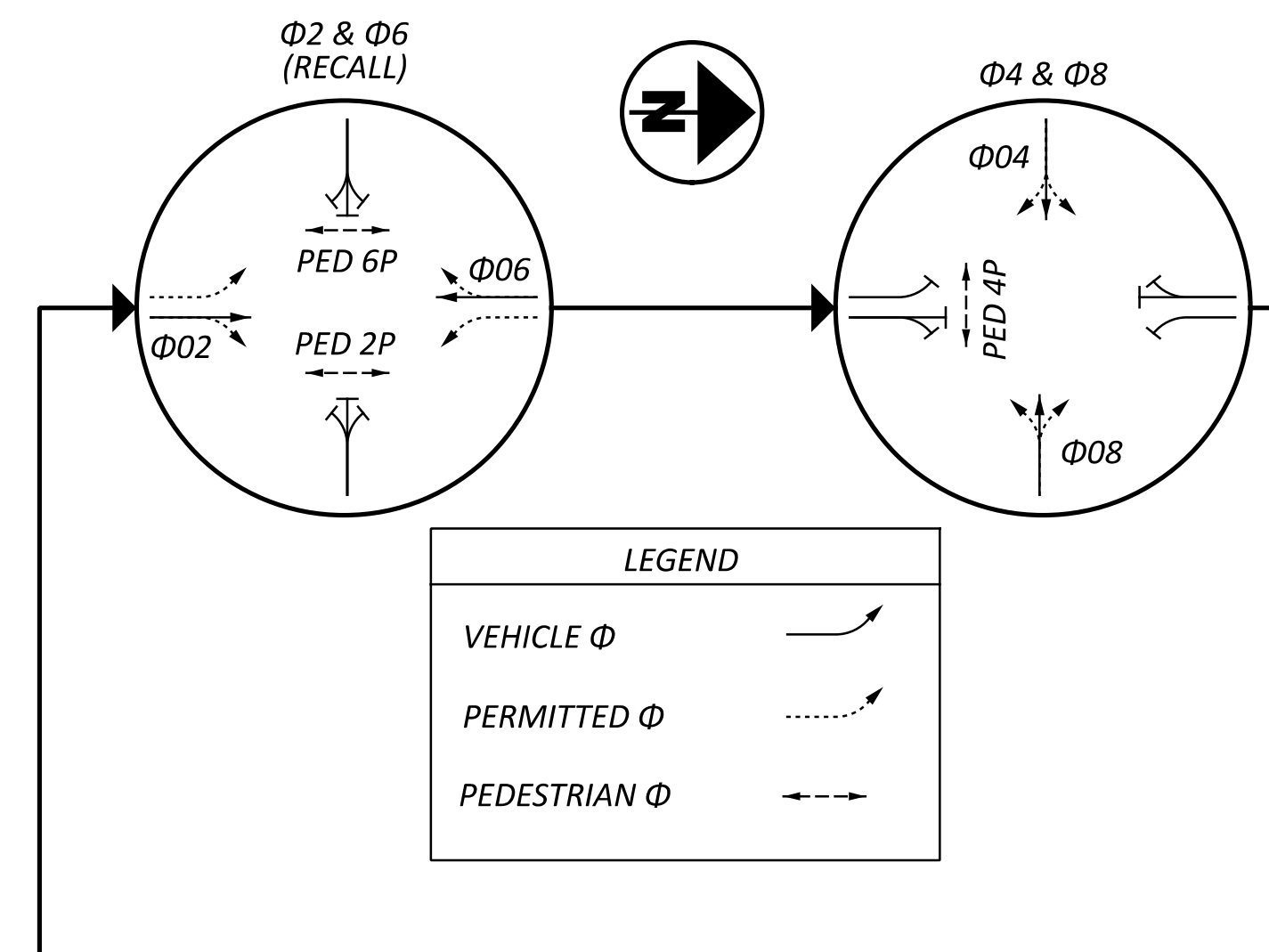
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT CLARK RD MAINTAINING AGENCY: CITY OF READING										
START UP	DUAL ENTRY:	EX	PHASES:				EX			
			REST IN RED:				RING 1	-	RING 2	-
START IN:	EX		OVERLAP				A	B	C	D
TIME FOR: FLASH, ALL RED (SEC.):	EX	EX	PHASES				-	-	-	-
FIRST PHASE(S):	EX									
COLOR DISPLAYED:	EX									
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.									
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8		
DIRECTION	-	NB	-	EB	-	SB	-	WB		
MINIMUM GREEN (INITIAL) (SEC.)	-	EX	-	EX	-	EX	-	EX		
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-		
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-		
PASSAGE TIME (PRESET GAP) (SEC.)	-	EX	-	EX	-	EX	-	EX		
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-		
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-		
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-		
MAXIMUM GREEN I (SEC.)	-	EX	-	EX	-	EX	-	EX		
MAXIMUM GREEN II (SEC.)	-	EX	-	EX	-	EX	-	EX		
YELLOW CHANGE (SEC.)	-	3.5	-	3.4	-	3.5	-	3.4		
ALL RED CLEARANCE (SEC.)	-	1.3	-	1.2	-	1.3	-	1.2		
DELAYED GREEN (LPI) (SEC.)	-	-	-	-	-	-	-	-		
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-		
WALK (SEC.)	-	7	-	7	-	7	-	-		
PEDESTRIAN CLEARANCE (SEC.)	-	9	-	7	-	9	-	-		
RECALL	MAXIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX	
	MINIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX	
	PEDESTRIAN (ON/OFF)	-	OFF	-	OFF	-	OFF	-	OFF	
MEMORY (ON/OFF)	-	EX	-	EX	-	EX	-	EX		
*VOLUME DENSITY CONTROLS										
# FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET										
^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.										

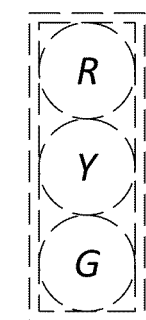
NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER ODOTCD FIGURE 4I-4.

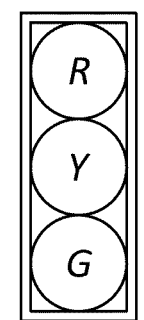
PHASING DIAGRAM (TYPICAL)



SIGNAL HEADS



EX. SIGNAL HEAD
4A, 4B, 8A, 8B



REUSED SIGNAL HEAD (SEE NOTE 1)
2A, 2B, 6A, 6B



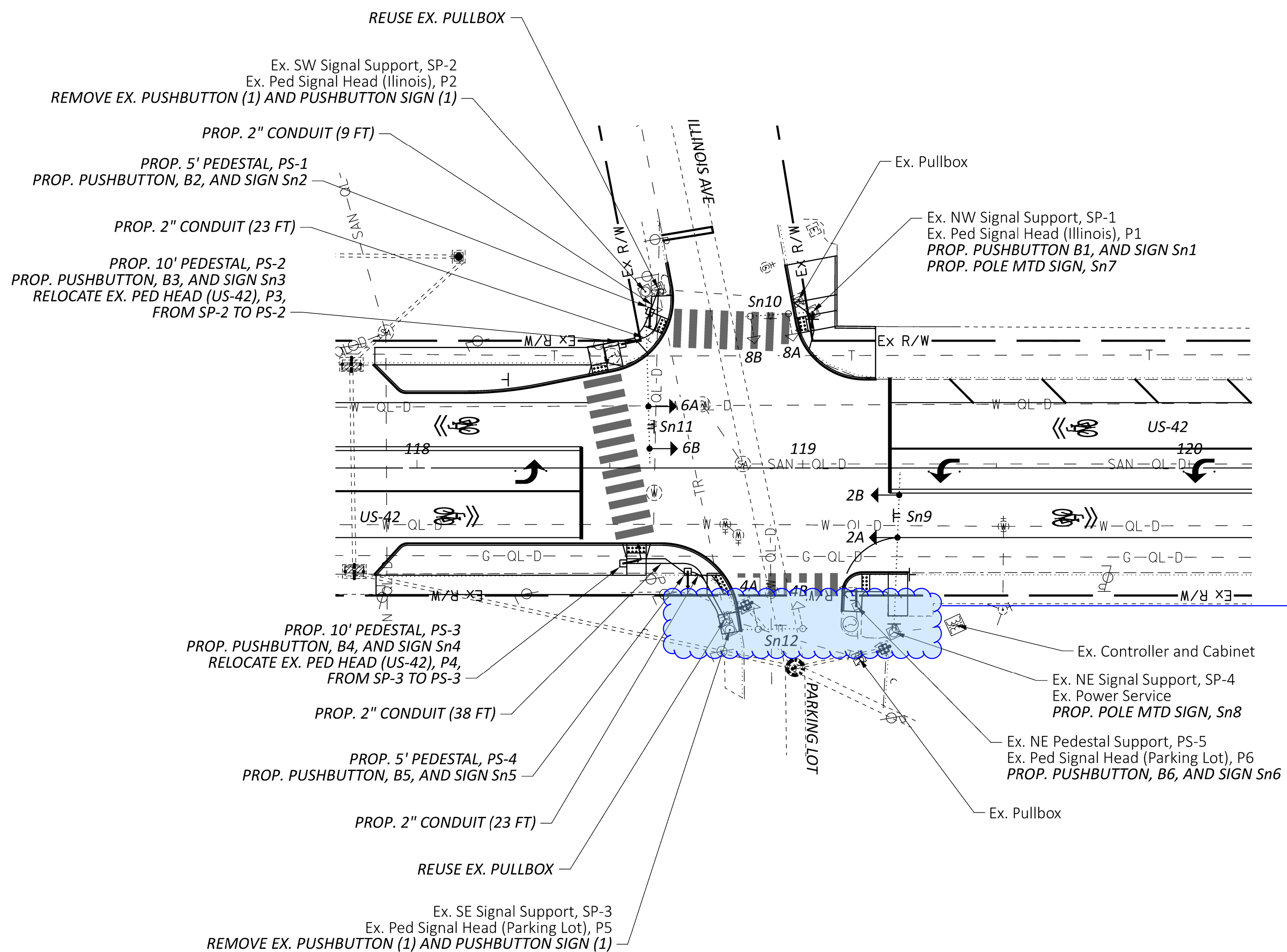
EX. PEDESTRIAN SIGNAL HEAD
P1, P2, P5, P6



PR. / REUSED PEDESTRIAN SIGNAL HEAD
P3, P4

NOTES:

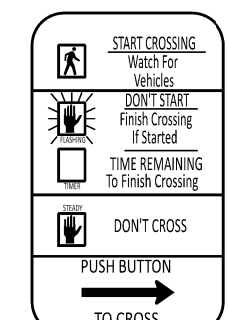
- CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
- EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
- SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY, EXISTING SIGNAL PHASING SHALL BE RETAINED.
- EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.



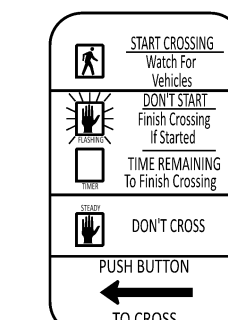
REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:
 PUSHBUTTON (2)
 PUSHBUTTON SIGN (2)

Work and existing equipment is outside R/W. This seems to be the case for many signals on the project. Will permanent R/W be purchased with the project? Typ comment

SIGNS



PR. R10-3E-9
Sn2, Sn4, Sn5, Sn6



PR. R10-3E-9
Sn1, Sn3



EX. D3-1
Sn10, Sn12



REUSED EX. D3-1
Sn9, Sn11



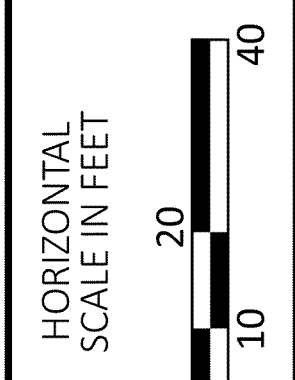
PR. R9-3-18
R9-3BP-18
Sn7



PR. R9-3-18
R9-3BP-18
Sn8

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	○→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	○→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	○→
SIGNAL SUPPORT POLE	■	□
PEDESTRIAN HEAD	↓	○↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊠	⊠
TRAFFIC PULL BOX	⊞	⊞



**SIGNAL PLAN
US42 AT ILLINOIS AVE**

DESIGN AGENCY
CMT
 CMT ENGINEERING & CONSULTING
 1777 WASHINGTON VILLAGE DR
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 www.cmtengr.com

DESIGNER
CMS

REVIEWER
GSH 02/13/26

PROJECT ID
123369

SHEET TOTAL
P.102 | 117

SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT ILLINOIS AVE									
MAINTAINING AGENCY: CITY OF READING									
START UP	DUAL ENTRY:		PHASES:				EX		
	EX	EX	RING 1		RING 2				
START IN:	EX		OVERLAP		A	B	C	D	
TIME FOR: FLASH, ALL RED (SEC.):		EX	PHASES		-	-	-	-	
FIRST PHASE(S):	EX								
COLOR DISPLAYED:	EX								
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8	
DIRECTION	-	NB	-	EB	-	SB	-	WB	
MINIMUM GREEN (INITIAL) (SEC.)	-	EX	-	EX	-	EX	-	EX	
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-	
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-	
PASSAGE TIME (PRESET GAP) (SEC.)	-	EX	-	EX	-	EX	-	EX	
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-	
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-	
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-	
MAXIMUM GREEN I (SEC.)	-	EX	-	EX	-	EX	-	EX	
MAXIMUM GREEN II (SEC.)	-	EX	-	EX	-	EX	-	EX	
YELLOW CHANGE (SEC.)	-	3.5	-	EX	-	3.5	-	EX	
ALL RED CLEARANCE (SEC.)	-	1.0	-	EX	-	1.0	-	EX	
DELAYED GREEN (LPI) † (SEC.)	-	-	-	-	-	-	-	-	
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-	
WALK (SEC.)	-	7	-	7	-	7	-	-	
PEDESTRIAN CLEARANCE (SEC.)	-	6	-	9	-	6	-	-	
RECALL	MAXIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	MINIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	PEDESTRIAN (ON/OFF)	-	OFF	-	OFF	-	OFF	-	OFF
MEMORY (ON/OFF)	-	EX	-	EX	-	EX	-	EX	

*VOLUME DENSITY CONTROLS

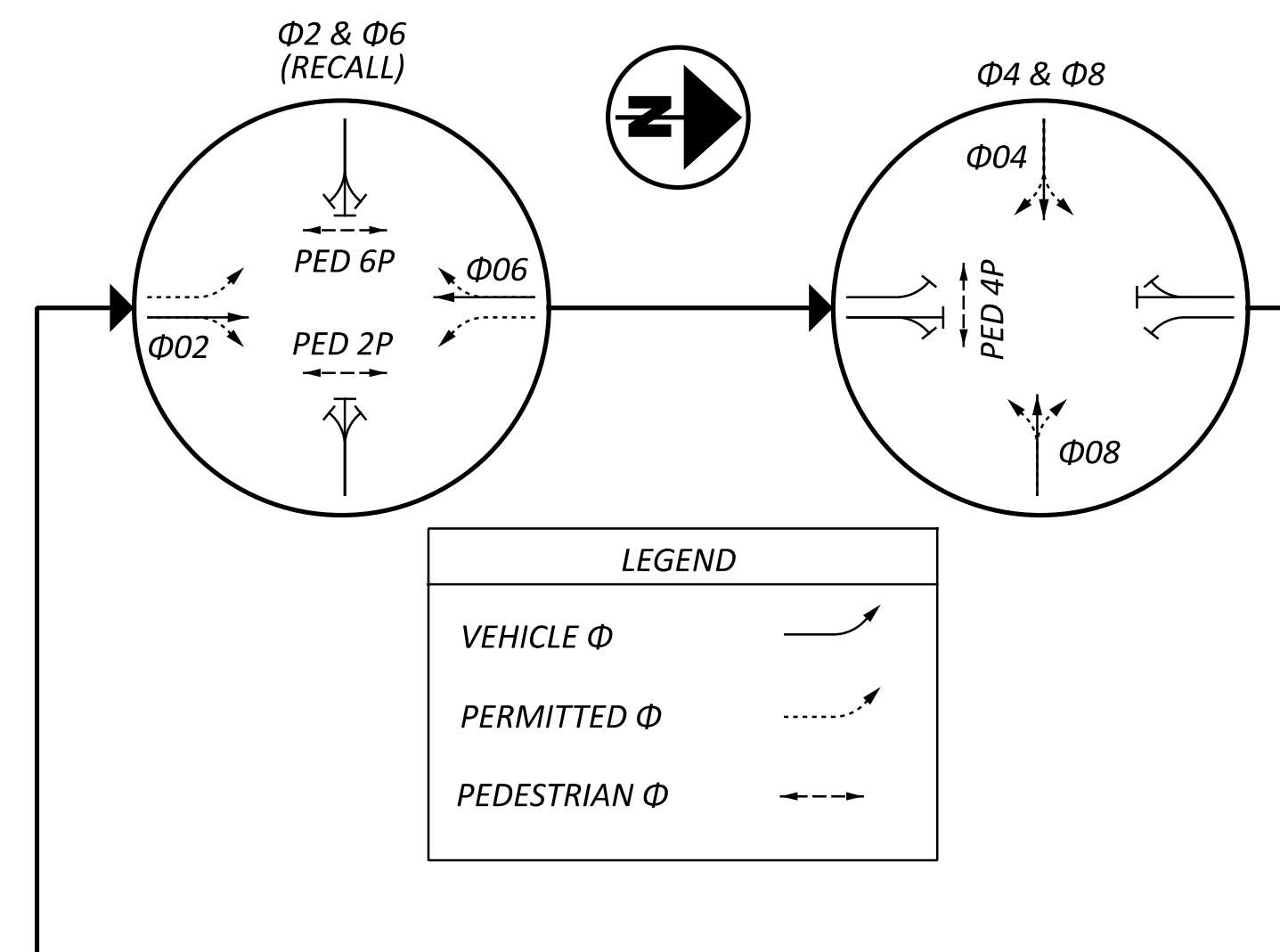
FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.

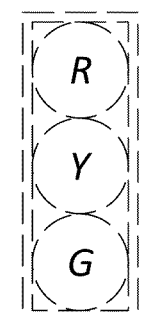
NOTES:

- PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
- EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
- COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4I-4.

PHASING DIAGRAM

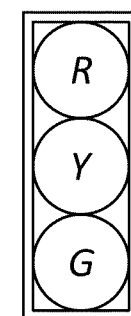


SIGNAL HEADS



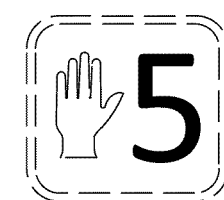
EX. SIGNAL HEAD

4A, 4B, 6C, 8A, 8B



REUSED SIGNAL HEAD (SEE NOTE 1)

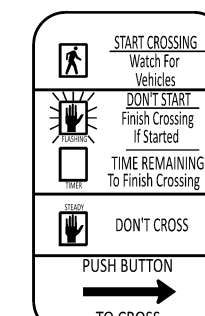
2A, 2B, 6A, 6B



EX. PEDESTRIAN SIGNAL HEAD

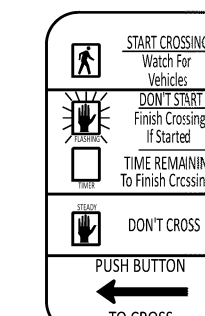
P1, P2, P3, P4
P5, P6, P7, P8

SIGNS



PR. R10-3E-9

Sn3, Sn5, Sn7, Sn8



PR. R10-3E-9

Sn1, Sn2, Sn4, Sn6



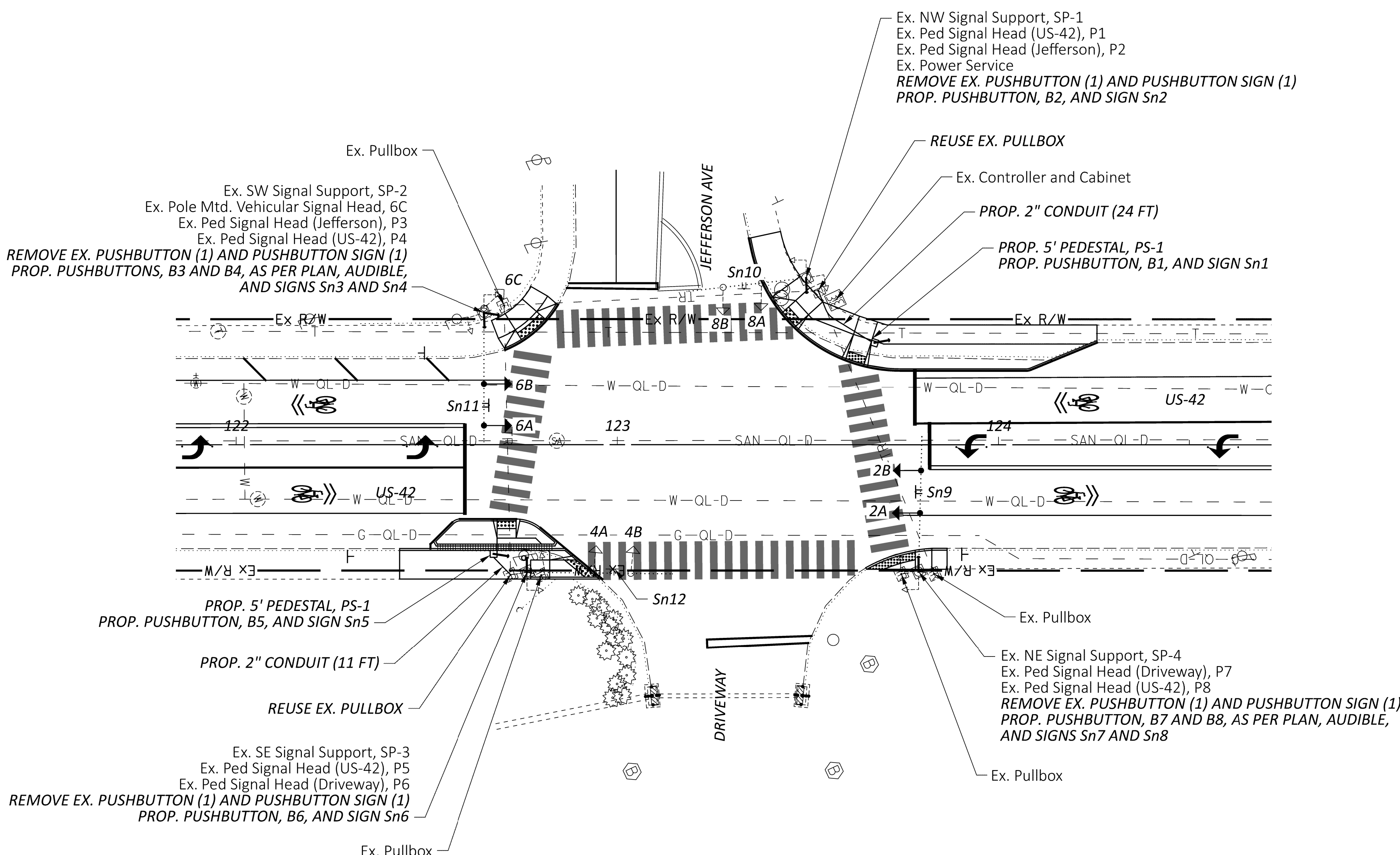
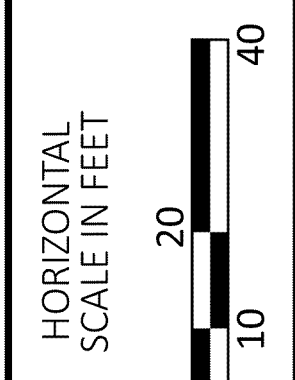
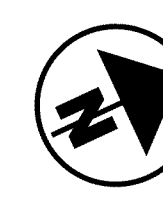
EX. D3-1

Sn10, Sn12



REUSED EX. D3-1

Sn9, Sn11



REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

- PUSHBUTTON (2)
- PUSHBUTTON SIGN (2)

- NOTES:**
1. CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
 2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
 3. SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY, EXISTING SIGNAL PHASING SHALL BE RETAINED.
 4. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	→
SIGNAL SUPPORT POLE	■	■
PEDESTRIAN HEAD	↓	↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊠	⊠
TRAFFIC PULL BOX	⊞	⊞

SIGNAL PLAN
US42 AT JEFFERSON AVE

DESIGN AGENCY
CMT
 CMT ENGINEERING & CONSULTING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
CMS

REVIEWER
GSB 02/13/26

PROJECT ID
123369

SHEET TOTAL
 P.104 | 117

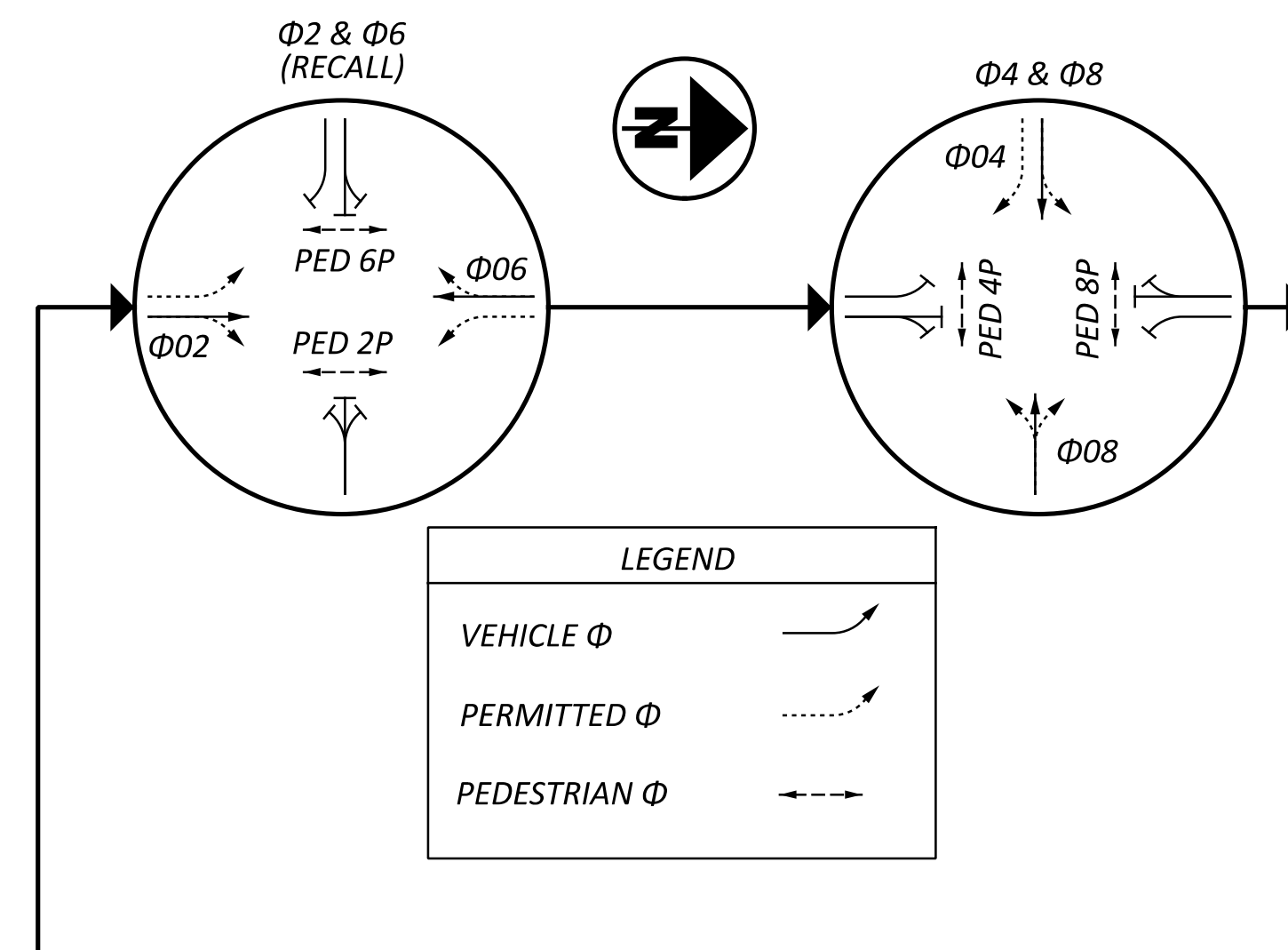
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT JEFFERSON AVE									
MAINTAINING AGENCY: CITY OF READING									
START UP	DUAL ENTRY:	EX	PHASES:				EX		
			RING 1		RING 2				
START IN:	EX								
TIME FOR: FLASH, ALL RED (SEC.):	EX	EX							
FIRST PHASE(S):	EX								
COLOR DISPLAYED:	EX								
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8	
DIRECTION	-	NB	-	EB	-	SB	-	WB	
MINIMUM GREEN (INITIAL) (SEC.)	-	EX	-	EX	-	EX	-	EX	
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-	
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-	
PASSAGE TIME (PRESET GAP) (SEC.)	-	EX	-	EX	-	EX	-	EX	
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-	
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-	
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-	
MAXIMUM GREEN I (SEC.)	-	EX	-	EX	-	EX	-	EX	
MAXIMUM GREEN II (SEC.)	-	EX	-	EX	-	EX	-	EX	
YELLOW CHANGE (SEC.)	-	3.4	-	EX	-	3.4	-	EX	
ALL RED CLEARANCE (SEC.)	-	1.4	-	EX	-	1.4	-	EX	
DELAYED GREEN (LPI) (SEC.)	-	-	-	-	-	-	-	-	
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-	
WALK (SEC.)	-	9	-	7	-	9	-	7	
PEDESTRIAN CLEARANCE (SEC.)	-	17	-	10	-	17	-	10	
RECALL	MAXIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	MINIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	PEDESTRIAN (ON/OFF)	-	OFF	-	OFF	-	OFF	-	OFF
MEMORY (ON/OFF)	-	EX	-	EX	-	EX	-	EX	
*VOLUME DENSITY CONTROLS									
# FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET									
^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.									

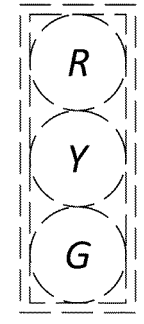
NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4I-4.

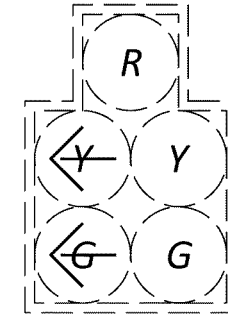
PHASING DIAGRAM



SIGNAL HEADS



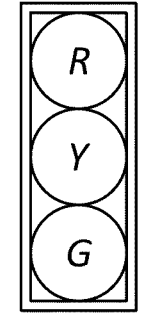
EX. SIGNAL HEAD
4B, 8A



EX. SIGNAL HEAD
4A, 8B

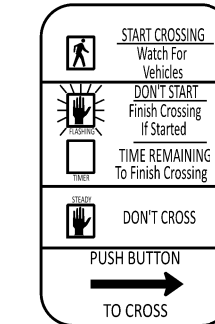


EX. PEDESTRIAN SIGNAL HEAD
P1, P2, P3, P4, P5, P6, P7, P8

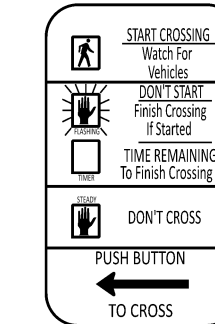


REUSED SIGNAL HEAD (SEE NOTE 1)
2A, 2B, 6A, 6B

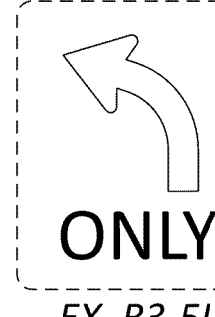
SIGNS



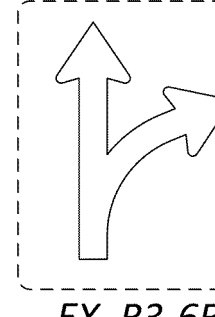
PR. R10-3E-9
Sn4, Sn5, Sn7



PR. R10-3E-9
Sn1, Sn2, Sn3, Sn6, Sn8



EX. R3-5L
Sn12

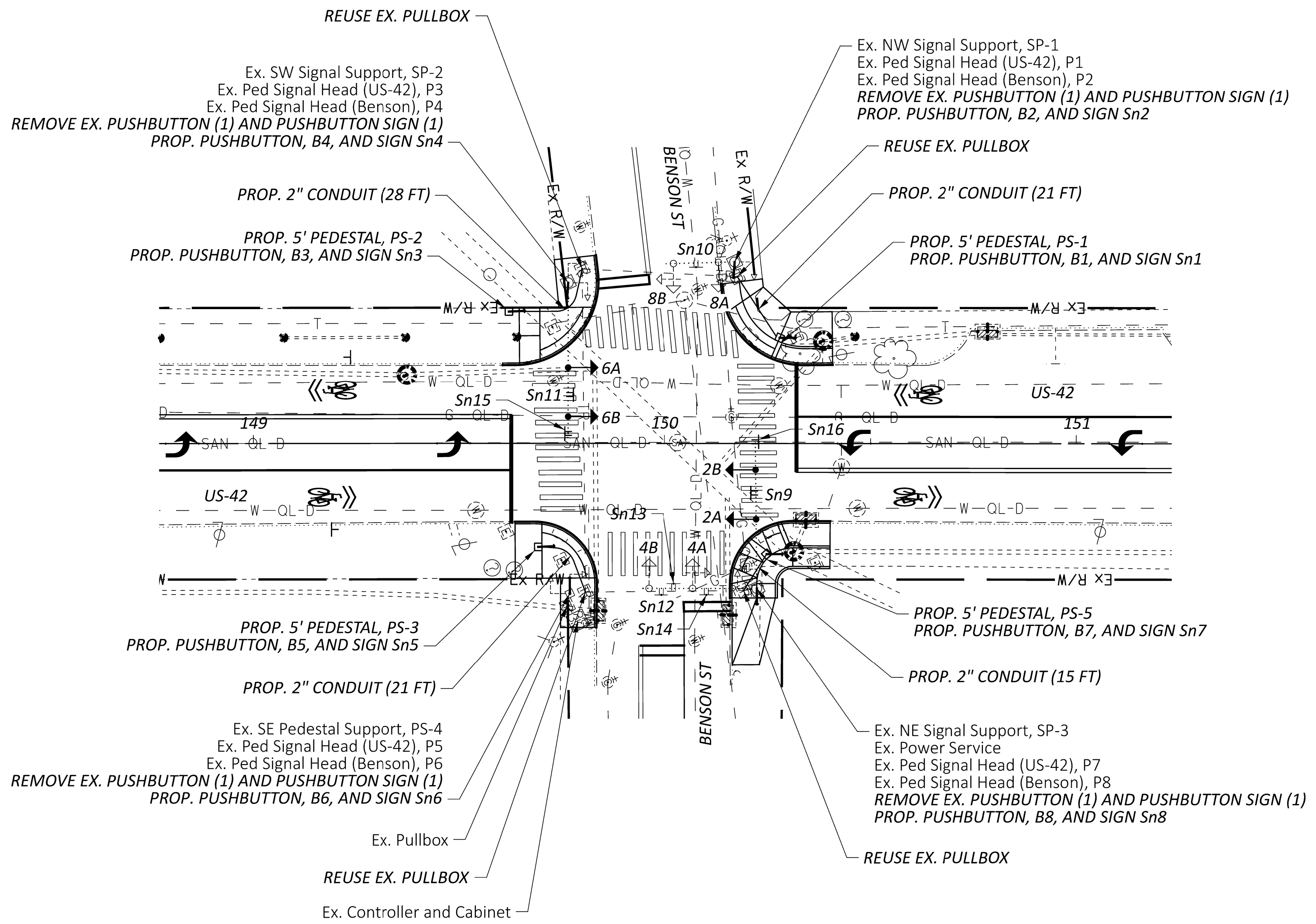
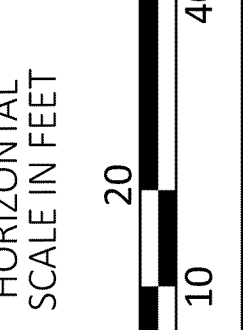
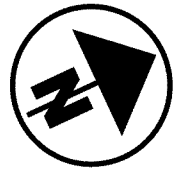


EX. R3-6R
Sn14

READING RD
EX. D3-1
Sn10, Sn13

BENSON ST
REUSED EX. D3-1
Sn9, Sn11

ONLY
EX. R3-5L-30
Sn15, Sn16



- NOTES:**
- CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
 - EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
 - SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY, EXISTING SIGNAL PHASING SHALL BE RETAINED.
 - EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

PUSHBUTTON (4)
PUSHBUTTON SIGN (4)

LEGEND		
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	PR./REUSED	EX.
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS		
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN HEAD		
PEDESTRIAN PUSH BUTTON		
PEDESTAL SUPPORT		
CONTROLLER		
TRAFFIC PULL BOX		

SIGNAL PLAN
US42 AT BENSON ST

DESIGN AGENCY	CMT
DESIGNER	CMS
REVIEWER	GSH 02/13/26
PROJECT ID	123369
SHEET TOTAL	P.106 117

SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT BENSON ST MAINTAINING AGENCY: CITY OF READING										
START UP		DUAL ENTRY: EX		PHASES: EX						
START IN:		EX	EX	REST IN RED: RING 1		RING 2				
TIME FOR: FLASH , ALL RED (SEC.):		EX	EX	OVERLAP		A	B	C	D	
FIRST PHASE(S):		EX	EX	PHASES		-	-	-	-	
COLOR DISPLAYED:		EX	EX	PHASES		-	-	-	-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8	
DIRECTION		-	NB	-	EB	-	SB	-	WB	
MINIMUM GREEN (INITIAL)		(SEC.)	-	EX	-	EX	-	EX	-	EX
ADDED INITIAL		*(SEC./ACTUATION)	-	-	-	-	-	-	-	
MAXIMUM INITIAL		*(SEC.)	-	-	-	-	-	-	-	
PASSAGE TIME (PRESET GAP)		(SEC.)	-	EX	-	EX	-	EX	-	EX
TIME BEFORE REDUCTION		*(SEC.)	-	-	-	-	-	-	-	
MINIMUM GAP		*(SEC.)	-	-	-	-	-	-	-	
TIME TO REDUCE		*(SEC.)	-	-	-	-	-	-	-	
MAXIMUM GREEN I		(SEC.)	-	EX	-	EX	-	EX	-	EX
MAXIMUM GREEN II		(SEC.)	-	EX	-	EX	-	EX	-	EX
YELLOW CHANGE		(SEC.)	-	3.5	-	EX	-	3.5	-	EX
ALL RED CLEARANCE		(SEC.)	-	1.0	-	EX	-	1.0	-	EX
DELAYED GREEN (LPI) ^		(SEC.)	-	-	-	-	-	-	-	
FLASHING YELLOW ARROW DELAY^		(SEC.)	-	-	-	-	-	-	-	
WALK		(SEC.)	-	7	-	8	-	7	-	8
PEDESTRIAN CLEARANCE		(SEC.)	-	7	-	9	-	7	-	9
RECALL	MAXIMUM	(ON/OFF)	-	EX	-	EX	-	EX	-	EX
	MINIMUM	(ON/OFF)	-	EX	-	EX	-	EX	-	EX
	PEDESTRIAN	(ON/OFF)	-	OFF	-	OFF	-	OFF	-	OFF
MEMORY		(ON/OFF)	-	EX	-	EX	-	EX	-	EX

*VOLUME DENSITY CONTROLS

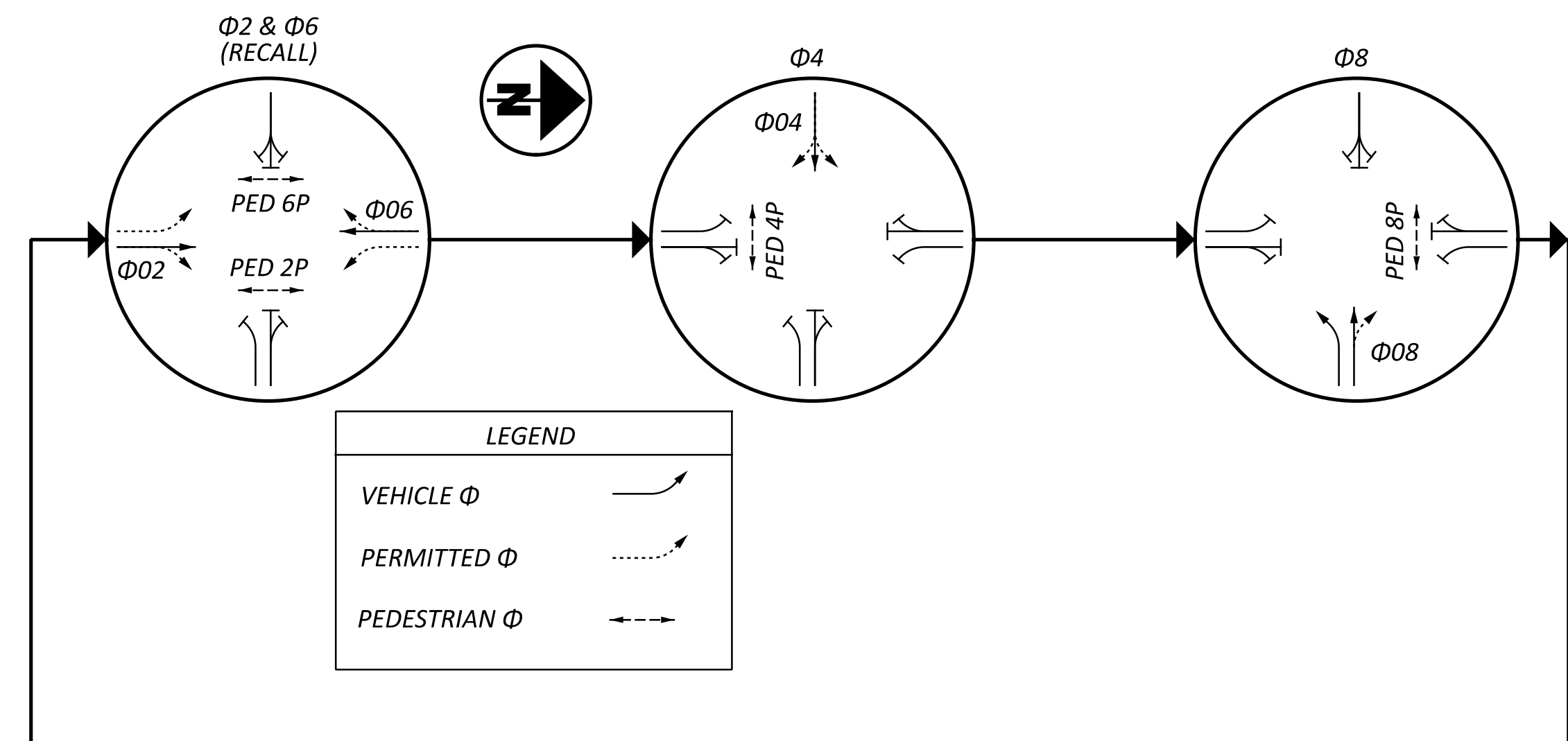
FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.

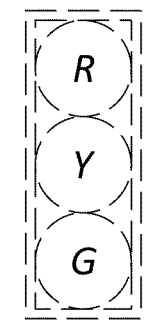
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2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER ODOTCD FIGURE 4I-4.

PHASING DIAGRAM

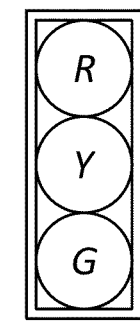


SIGNAL HEADS



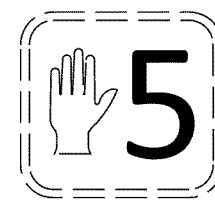
EX. SIGNAL HEAD

4A, 4B, 8A, 8B



REUSED SIGNAL HEAD (SEE NOTE 1)

2A, 2B, 6A, 6B



EX. PEDESTRIAN SIGNAL HEAD

P2, P3, P6, P7, P8



PR. / REUSED PEDESTRIAN SIGNAL HEAD

P1, P4, P5

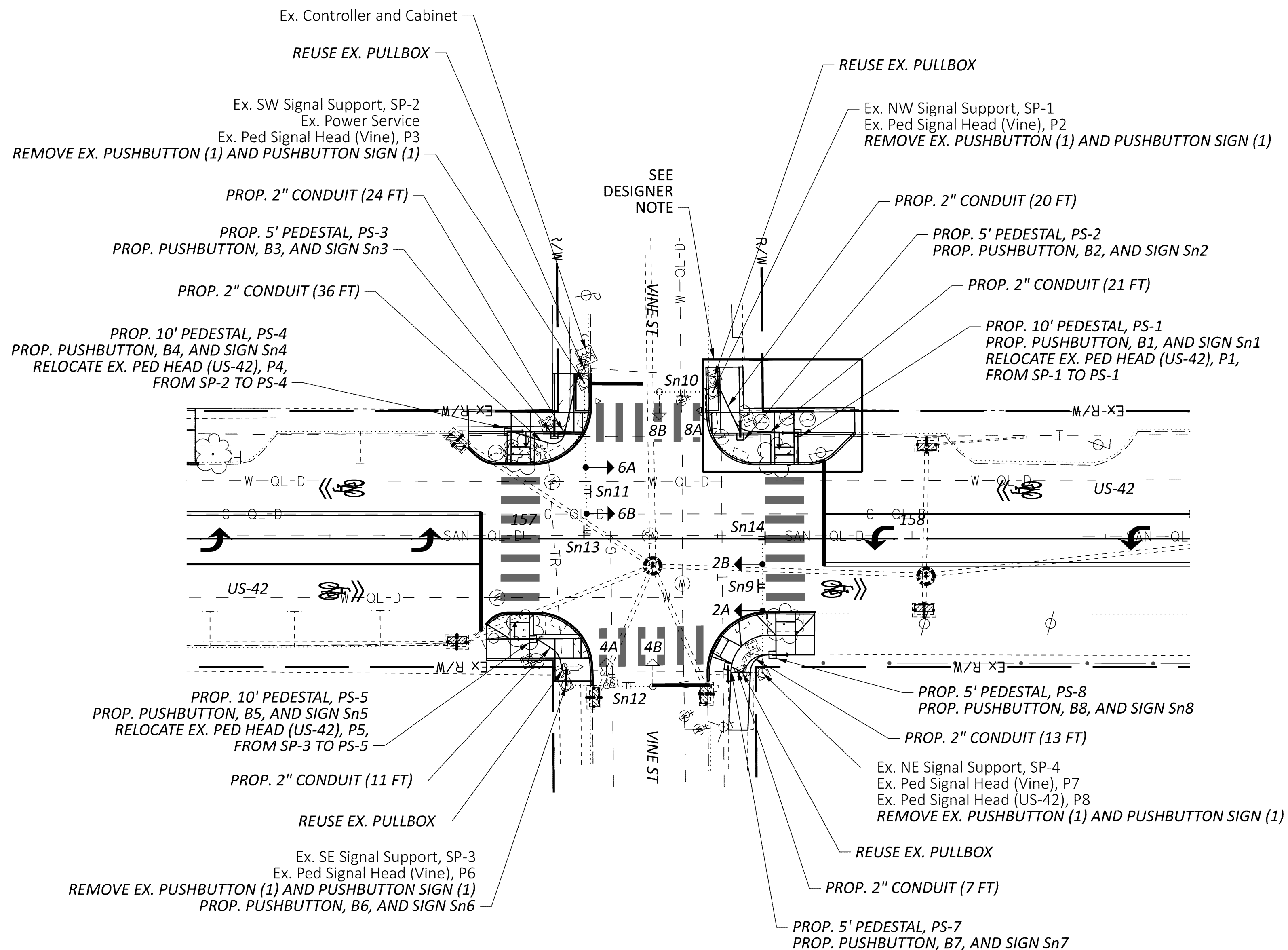
DESIGNER NOTE:
 CURB RAMP AND PEDESTAL LOCATIONS AT THE NW QUADRANT OF US-42 AND VINE STREET INTERSECTION TO BE REFINED FOR THE STAGE 3 SUBMITTAL.

NOTES:

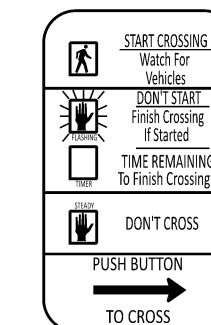
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- EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
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- EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

- PUSHBUTTON (4)
- PUSHBUTTON SIGN (4)

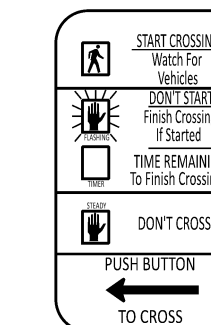


SIGNS



PR. R10-3E-9

Sn1, Sn2, Sn8



PR. R10-3E-9

Sn3, Sn4, Sn5, Sn6, Sn7



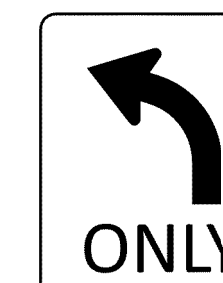
EX. D3-1

Sn10, Sn12



REUSED EX. D3-1

Sn9, Sn11

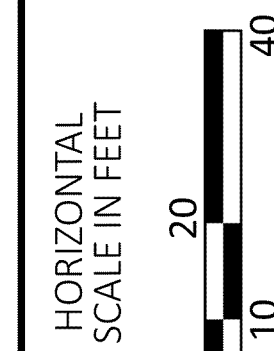


PR. R3-5L-30

Sn13, Sn14

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"		
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS		
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN HEAD		
PEDESTRIAN PUSH BUTTON		
PEDESTAL SUPPORT		
CONTROLLER		
TRAFFIC PULL BOX		



**SIGNAL PLAN
 US42 AT VINE ST**

DESIGN AGENCY
CMT
 CMT ENGINEERING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45459
 www.cmtengr.com

DESIGNER
CMS

REVIEWER
GSH 02/13/26

PROJECT ID
123369

SHEET TOTAL
P.108 | 117

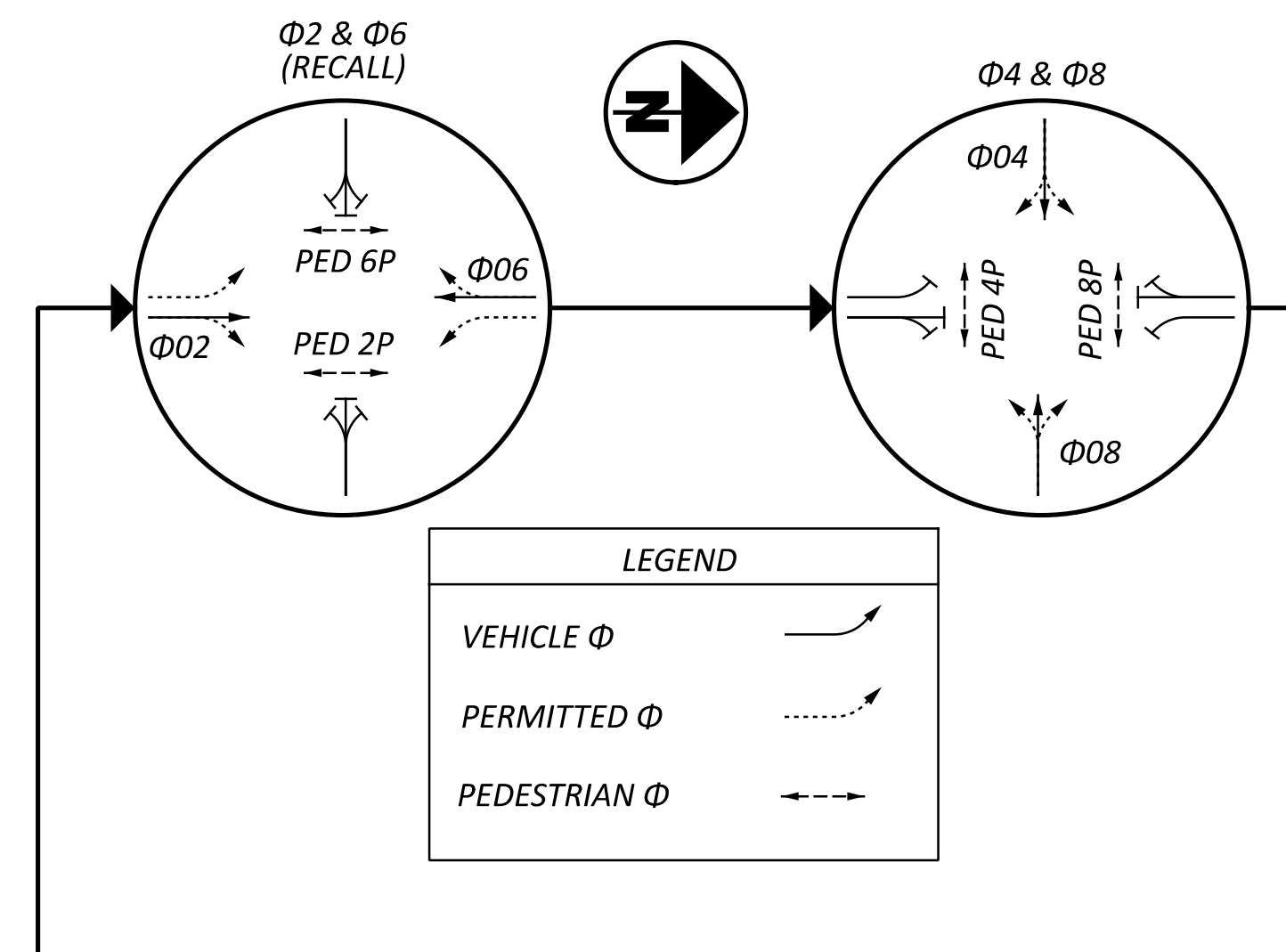
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT VINE ST									
MAINTAINING AGENCY: CITY OF READING									
START UP	DUAL ENTRY:		PHASES:				EX		
	EX	EX	RING 1		RING 2				
START IN:	EX		OVERLAP		A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):		EX	PHASES		-	-	-	-	
FIRST PHASE(S):	EX								
COLOR DISPLAYED:	EX								
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8	
DIRECTION	-	NB	-	EB	-	SB	-	WB	
MINIMUM GREEN (INITIAL) (SEC.)	-	EX	-	EX	-	EX	-	EX	
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-	
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-	
PASSAGE TIME (PRESET GAP) (SEC.)	-	EX	-	EX	-	EX	-	EX	
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-	
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-	
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-	
MAXIMUM GREEN I (SEC.)	-	EX	-	EX	-	EX	-	EX	
MAXIMUM GREEN II (SEC.)	-	EX	-	EX	-	EX	-	EX	
YELLOW CHANGE (SEC.)	-	3.4	-	EX	-	3.4	-	EX	
ALL RED CLEARANCE (SEC.)	-	1.0	-	EX	-	1.0	-	EX	
DELAYED GREEN (LPI) (SEC.)	-	-	-	-	-	-	-	-	
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-	
WALK (SEC.)	-	7	-	7	-	7	-	7	
PEDESTRIAN CLEARANCE (SEC.)	-	6	-	8	-	6	-	8	
RECALL	MAXIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	MINIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	EX
	PEDESTRIAN (ON/OFF)	-	OFF	-	OFF	-	OFF	-	OFF
MEMORY (ON/OFF)	-	EX	-	EX	-	EX	-	EX	
*VOLUME DENSITY CONTROLS									
# FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET									
^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.									

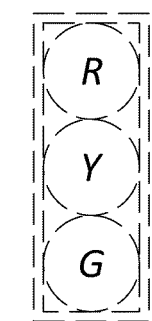
NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMTUCD FIGURE 4I-4.

PHASING DIAGRAM

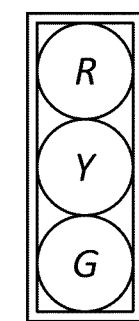


SIGNAL HEADS



EX. SIGNAL HEAD

4A, 4B, 8A, 8B



REUSED SIGNAL HEAD (SEE NOTE 1)

2A, 2B, 6A, 6B



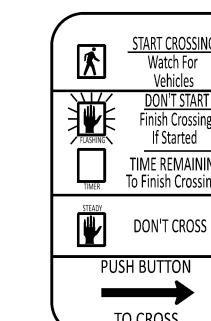
EX. PEDESTRIAN SIGNAL HEAD

P1, P2, P3, P4, P5, P6, P7, P8

NOTES:

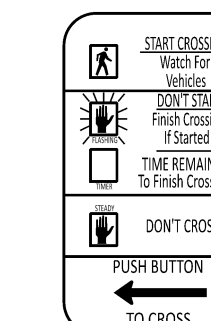
1. CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
3. SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY, EXISTING SIGNAL PHASING SHALL BE RETAINED.
4. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

SIGNS



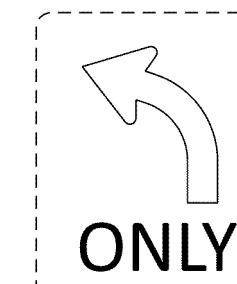
PR. R10-3E-9

Sn2, Sn6, Sn7, Sn8



PR. R10-3E-9

Sn1, Sn3, Sn4, Sn5



EX. R3-5L

Sn10, Sn13

READING RD

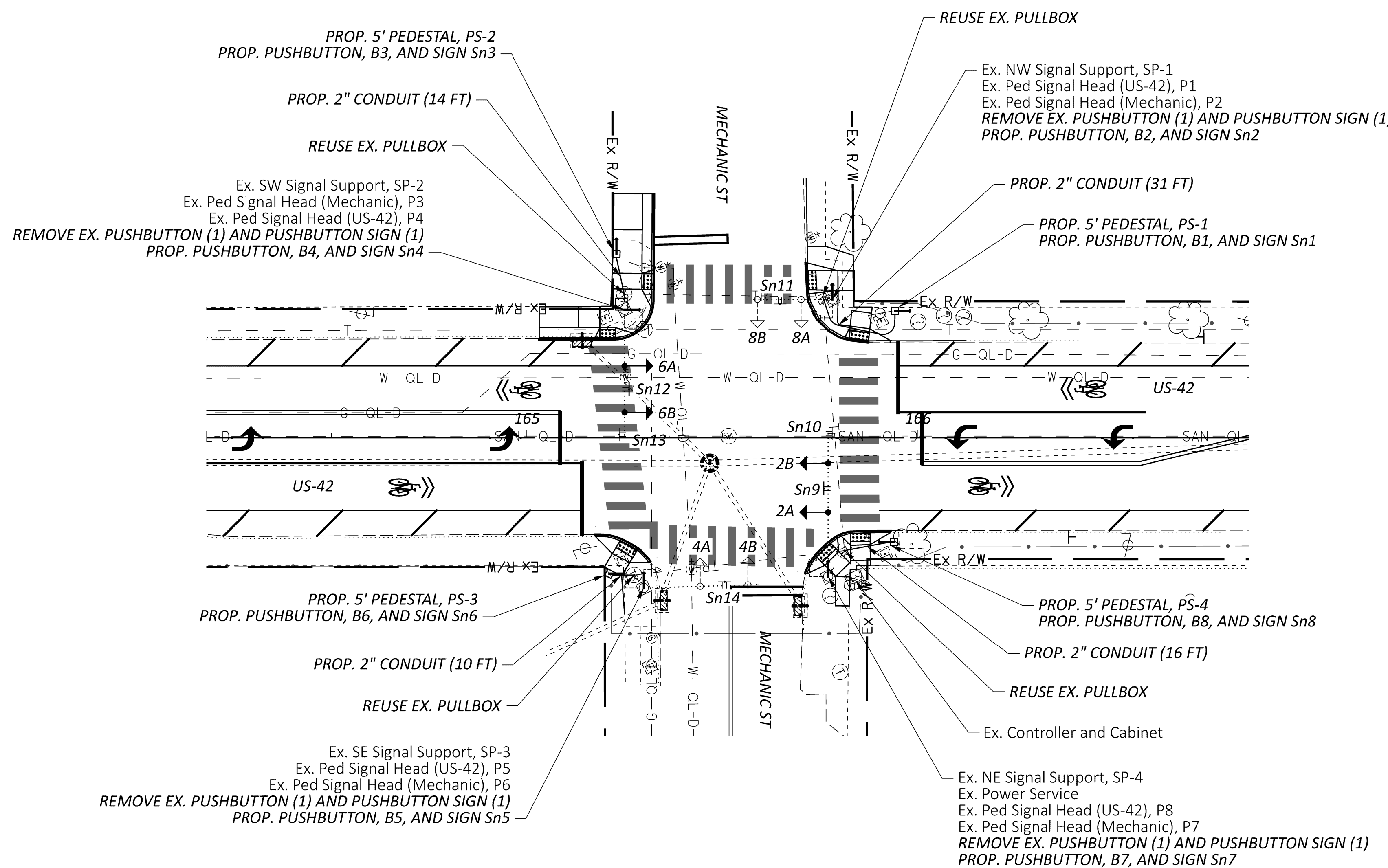
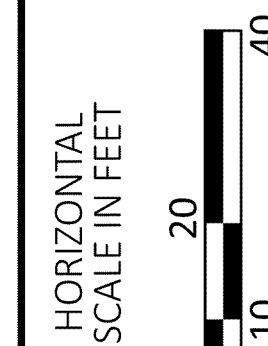
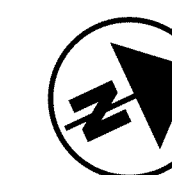
EX. D3-1

Sn11, Sn14

MECHANIC ST

REUSED EX. D3-1

Sn9, Sn12



REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

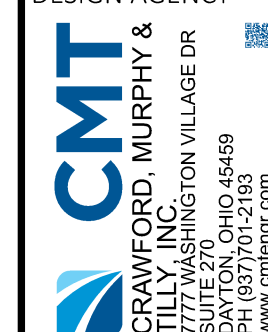
- PUSHBUTTON (4)
- PUSHBUTTON SIGN (4)

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	○→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	○→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	○→
SIGNAL SUPPORT POLE	■	□
PEDESTRIAN HEAD	↓	○↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊗	⊗
TRAFFIC PULL BOX	⊞	⊞

SIGNAL PLAN US42 AT MECHANIC ST

DESIGN AGENCY



DESIGNER

CMS

REVIEWER

GSH 02/13/26

PROJECT ID

123369

SHEET TOTAL

P.110 117

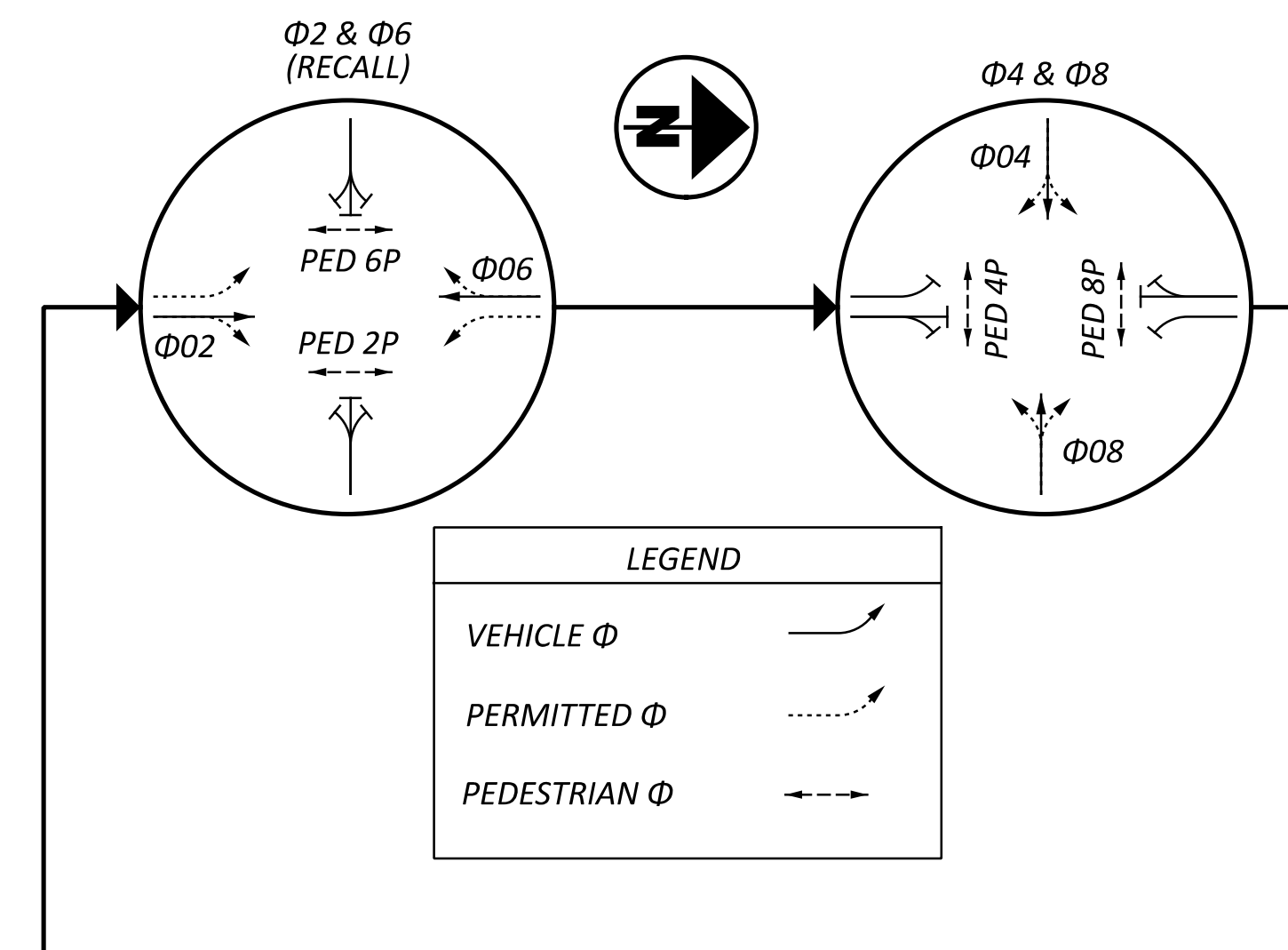
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT MECHANIC ST MAINTAINING AGENCY: CITY OF READING								
START UP		DUAL ENTRY:	EX	PHASES:				EX
		REST IN RED:		RING 1	-	RING 2		-
START IN:	EX	OVERLAP		A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.):	EX	PHASES		-	-	-	-	
FIRST PHASE(S):	EX							
COLOR DISPLAYED:	EX							
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.						
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7
DIRECTION		-	NB	-	EB	-	SB	-
MINIMUM GREEN (INITIAL)		(SEC.)	EX	-	EX	-	EX	-
ADDED INITIAL		*(SEC./ACTUATION)	-	-	-	-	-	-
MAXIMUM INITIAL		*(SEC.)	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP)		(SEC.)	EX	-	EX	-	EX	-
TIME BEFORE REDUCTION		*(SEC.)	-	-	-	-	-	-
MINIMUM GAP		*(SEC.)	-	-	-	-	-	-
TIME TO REDUCE		*(SEC.)	-	-	-	-	-	-
MAXIMUM GREEN I		(SEC.)	EX	-	EX	-	EX	-
MAXIMUM GREEN II		(SEC.)	EX	-	EX	-	EX	-
YELLOW CHANGE		(SEC.)	3.4	-	EX	-	3.4	-
ALL RED CLEARANCE		(SEC.)	1.0	-	EX	-	1.0	-
DELAYED GREEN (LPI) ^		(SEC.)	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY ^		(SEC.)	-	-	-	-	-	-
WALK		(SEC.)	7	-	7	-	7	-
PEDESTRIAN CLEARANCE		(SEC.)	10	-	12	-	10	-
RECALL	MAXIMUM	(ON/OFF)	EX	-	EX	-	EX	-
	MINIMUM	(ON/OFF)	EX	-	EX	-	EX	-
	PEDESTRIAN	(ON/OFF)	OFF	-	OFF	-	OFF	-
MEMORY		(ON/OFF)	EX	-	EX	-	EX	-
*VOLUME DENSITY CONTROLS								
# FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET								
^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.								

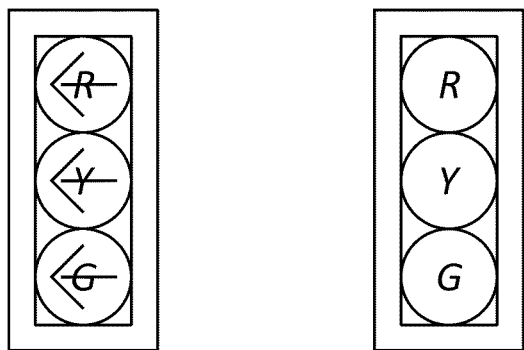
NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER ODOTCD FIGURE 4E-2.

PHASING DIAGRAM

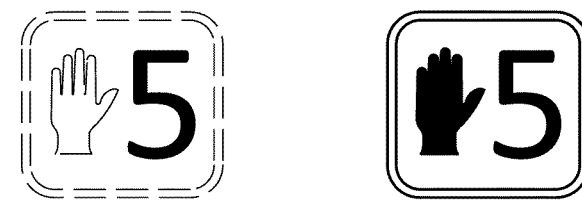


SIGNAL HEADS



PR. SIGNAL HEAD
1A, 1B, 5A

PR. SIGNAL HEAD
2A, 2B, 4A, 4B, 6A, 6B, 8A, 8B



EX. PEDESTRIAN SIGNAL HEAD
P1, P2, P7, P8

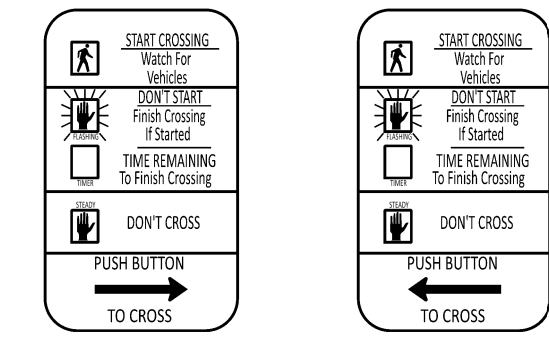
PR. / REUSED PEDESTRIAN SIGNAL HEAD
P3, P4, P5, P6

could the left turn lane utilize this space for positive offset and run concurrent with phase 1 and be permitted with phase 2? May require a new support for SP-4, but it could be justified for operational efficiency. (Could also place the dual left lane use signs on the backside of a longer mast arm.)

REUSE EX. PULLBOX, SEE NOTES 1 AND 4
PROP. 2" CONDUIT (5 FT)

Per notes 1 and 3 this pull box is to be relocated. May need a new pull box and conduit

SIGNS

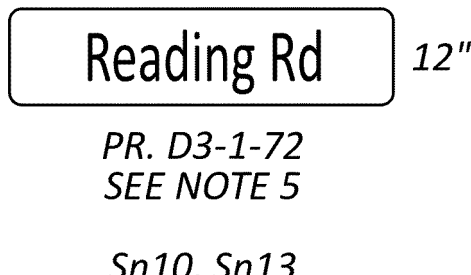


PR. R10-3E-9
Sn1, Sn3, Sn5, Sn7

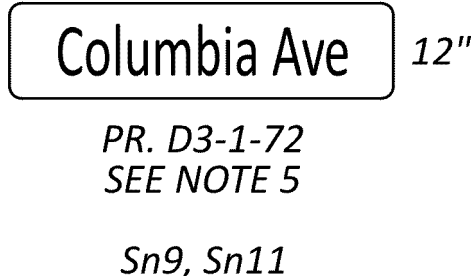
PR. R10-3E-9
Sn2, Sn4, Sn6, Sn8



PR. R3-5L-30
Sn12, Sn14



Reading Rd 12"
PR. D3-1-72
SEE NOTE 5
Sn10, Sn13



Columbia Ave 12"
PR. D3-1-72
SEE NOTE 5
Sn9, Sn11

REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

- PUSHBUTTON (4)
- PUSHBUTTON SIGN (4)
- VEH SIGNAL HEAD (8)
- OVERHEAD SIGN (10)
- SIGNAL SUPPORT (2)

LEGEND

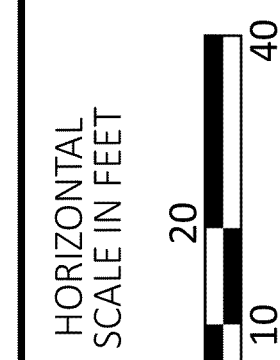
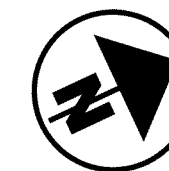
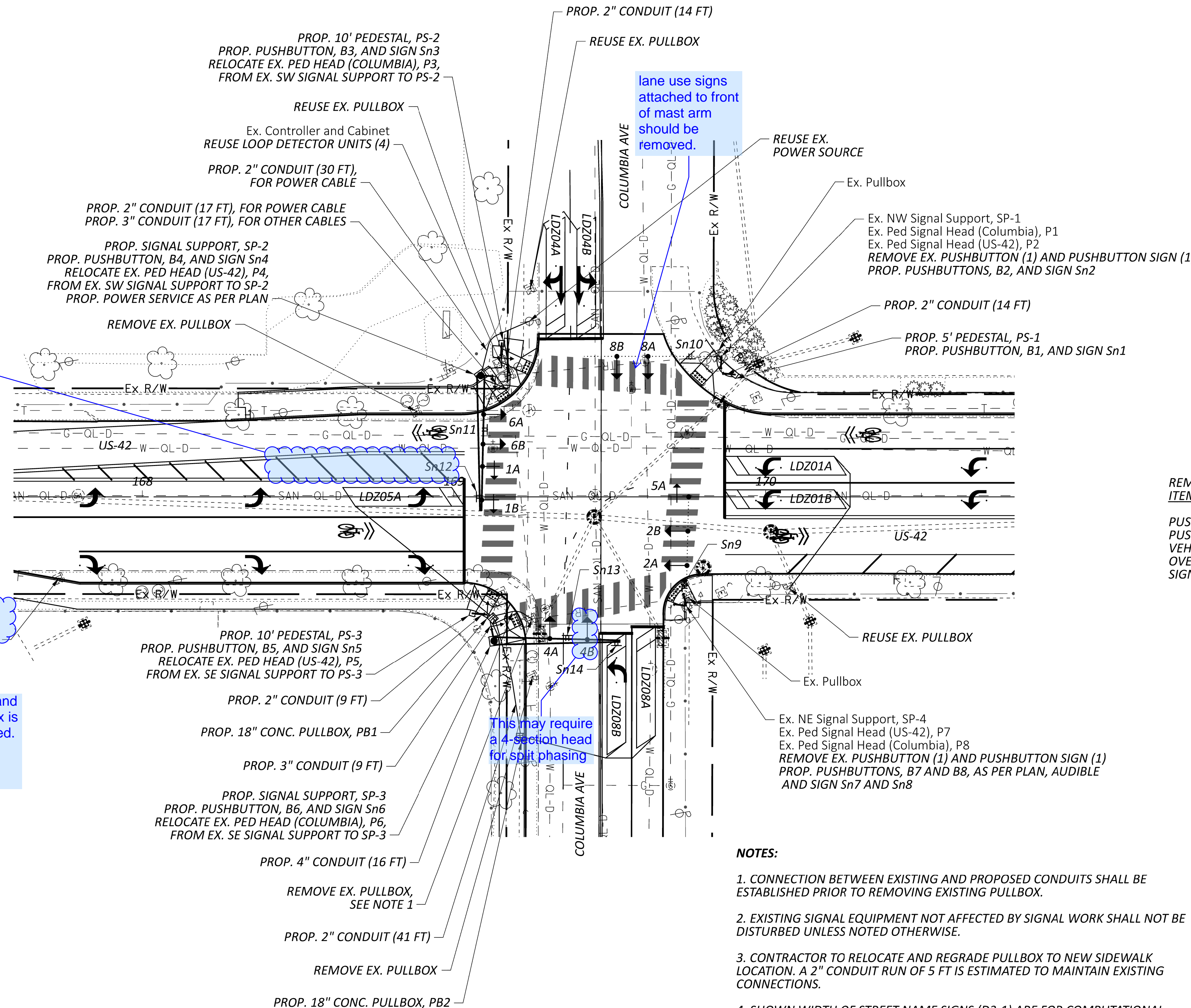
	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	→
SIGNAL SUPPORT POLE	■	■
PEDESTRIAN HEAD	↓	↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊞	⊞
TRAFFIC PULL BOX	▣	▣
DETECTOR LOOP	□	□

NOTES:

1. CONNECTION BETWEEN EXISTING AND PROPOSED CONDUITS SHALL BE ESTABLISHED PRIOR TO REMOVING EXISTING PULLBOX.
2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
3. CONTRACTOR TO RELOCATE AND REGRADE PULLBOX TO NEW SIDEWALK LOCATION. A 2" CONDUIT RUN OF 5 FT IS ESTIMATED TO MAINTAIN EXISTING CONNECTIONS.
4. SHOWN WIDTH OF STREET NAME SIGNS (D3-1) ARE FOR COMPUTATIONAL PURPOSES ONLY. ACTUAL DIMENSIONS SHALL MATCH EXISTING, BE DETERMINED BY MANUFACTURER, AND MEET ODOT STANDARDS.
5. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

PULLBOX TABLE

PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
PB1	-	LT	-	18
PB2	-	RT	-	18
-	-	-	-	-



**SIGNAL PLAN
US42 AT COLUMBIA AVE**

DESIGN AGENCY
CMT
 CMT ENGINEERING & CONSULTING
 1777 WASHINGTON VILLAGE DR
 DAYTON, OHIO 45424
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DESIGNER
CMS

REVIEWER
 GSH 02/13/26

PROJECT ID
 123369

SHEET TOTAL
 P.112 117

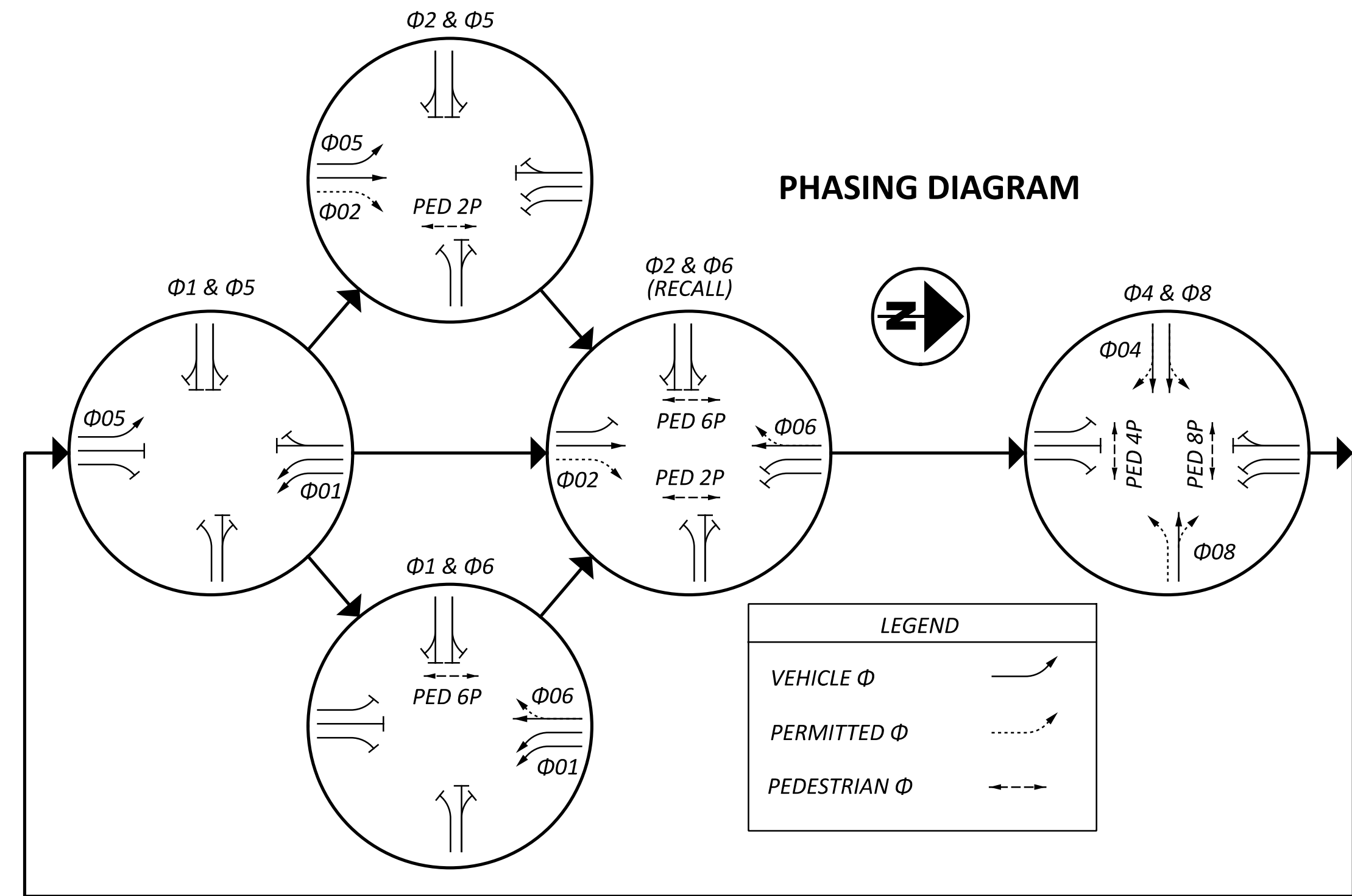
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT COLUMBIA AVE									
MAINTAINING AGENCY: CITY OF READING									
START UP	DUAL ENTRY: YES		PHASES: 2&6, 4&8						
	REST IN RED:		RING 1		RING 2				
START IN:	YELLOW/RED FLASH								
TIME FOR FLASH / ALL RED (SEC.):	9, 6								
FIRST PHASE(S):	2, 6								
COLOR DISPLAYED:	GREEN								
			CONTROLLER MOVEMENT NO.						
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8	
DIRECTION	SBLT	NB	-	EB	NBLT	SB	-	WB	
MINIMUM GREEN (INITIAL) (SEC.)	7	20	-	10	7	20	-	10	
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-	
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-	
PASSAGE TIME (PRESET GAP) (SEC.)	3	3	-	3	3	3	-	3	
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-	
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-	
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-	
MAXIMUM GREEN I (SEC.)	15	30	-	20	15	30	-	20	
MAXIMUM GREEN II (SEC.)	15	30	-	20	15	30	-	20	
YELLOW CHANGE (SEC.)	3.0	3.4	-	3.6	3.0	3.4	-	3.6	
ALL RED CLEARANCE (SEC.)	1.7	1.0	-	1.1	1.7	1.0	-	1.1	
DELAYED GREEN (LPI) (SEC.)	-	-	-	-	-	-	-	-	
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-	
WALK (SEC.)	-	7	-	8	-	7	-	8	
PEDESTRIAN CLEARANCE (SEC.)	-	12	-	14	-	12	-	14	
RECALL	MAXIMUM (ON/OFF)	OFF	ON	-	OFF	OFF	ON	-	OFF
	MINIMUM (ON/OFF)	OFF	OFF	-	OFF	OFF	OFF	-	OFF
	PEDESTRIAN (ON/OFF)	OFF	OFF	-	OFF	OFF	OFF	-	OFF
MEMORY (ON/OFF)	OFF	OFF	-	OFF	OFF	OFF	OFF	-	OFF

*VOLUME DENSITY CONTROLS

FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.



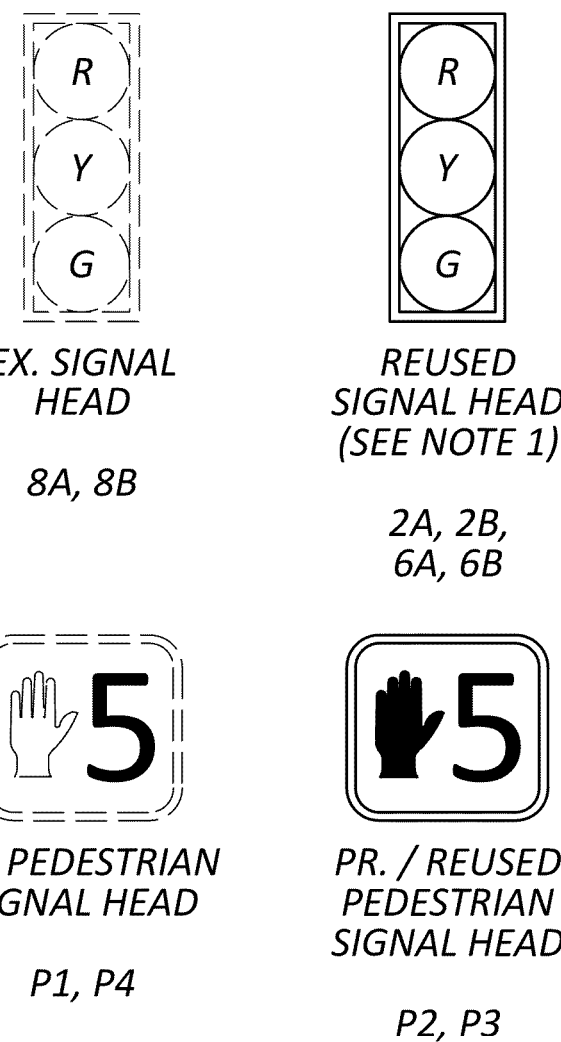
NOTES:

1. $\Phi 1$, $\Phi 4$, $\Phi 5$, AND $\Phi 8$ SHALL BE ACTUATED. THE PRIMARY THROUGH MOVEMENT SHALL HAVE MINIMUM RECALL ACTIVE TO REST IN GREEN.
2. ENABL $\Phi 1$ AND $\Phi 5$ DETECTOR SWITCHING TO ALLOW $\Phi 1$ AND $\Phi 5$ TO EXTEND $\Phi 2$ AND $\Phi 6$, RESPECTIVELY, WHEN ALLOCATED GREEN TIME FOR LEFT TURN PHASES ARE EXHAUSTED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4I-4.
4. ALL DETECTOR DELAYS SHALL BE PLACED ON THE CONTROLLER.
5. FOR ANY ENTRY TO FLASHING OPERATION PROGRAMMING SHALL RUN MINOR STREET GREEN ($\Phi 4$ AND $\Phi 8$), ALL-RED CLEARANCE AND THEN FLASHING OPERATION.

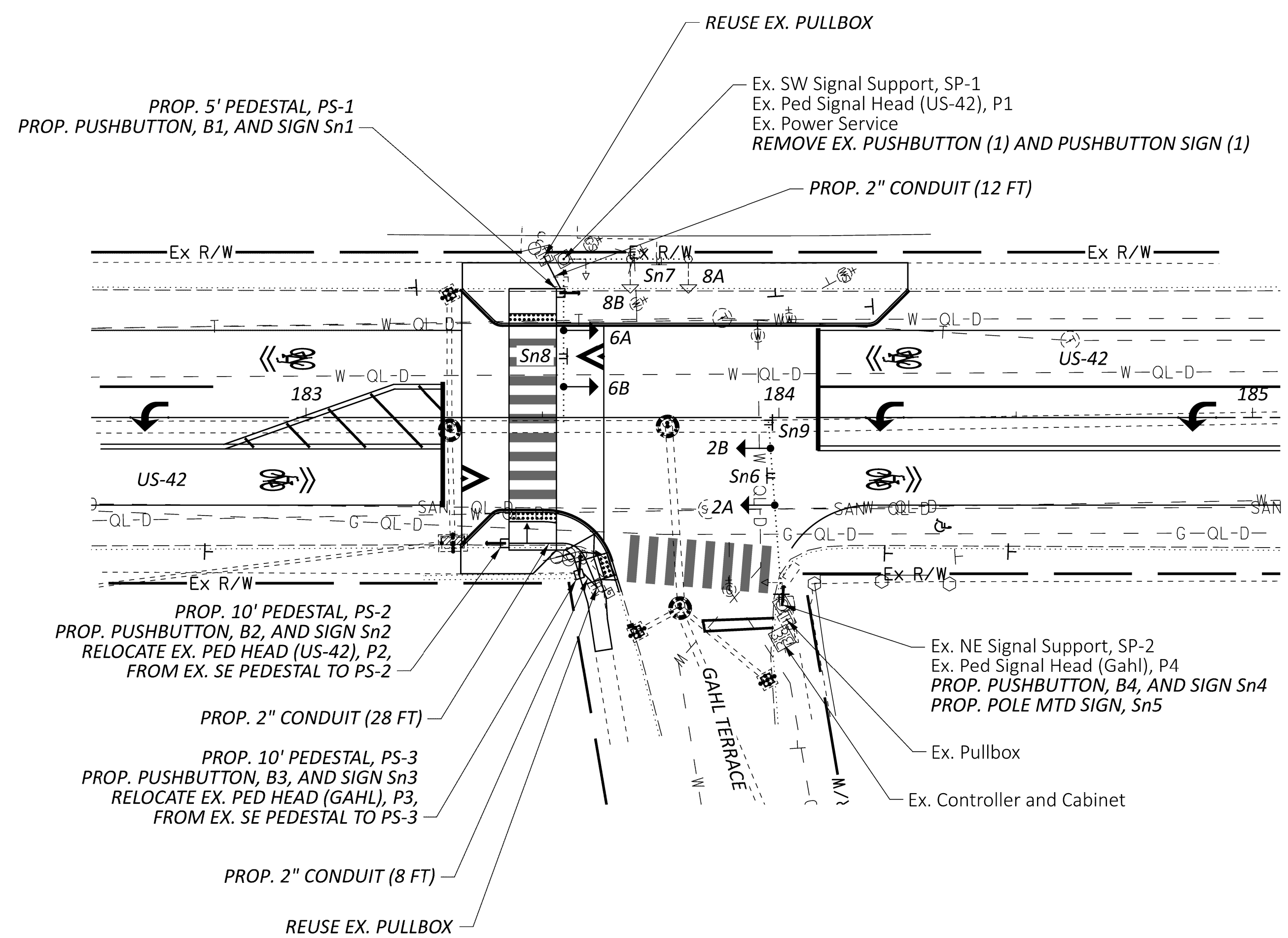
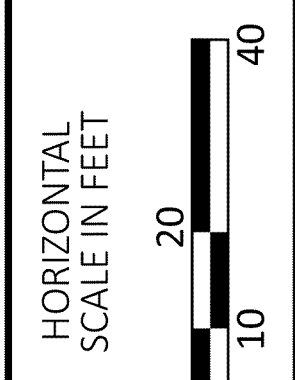
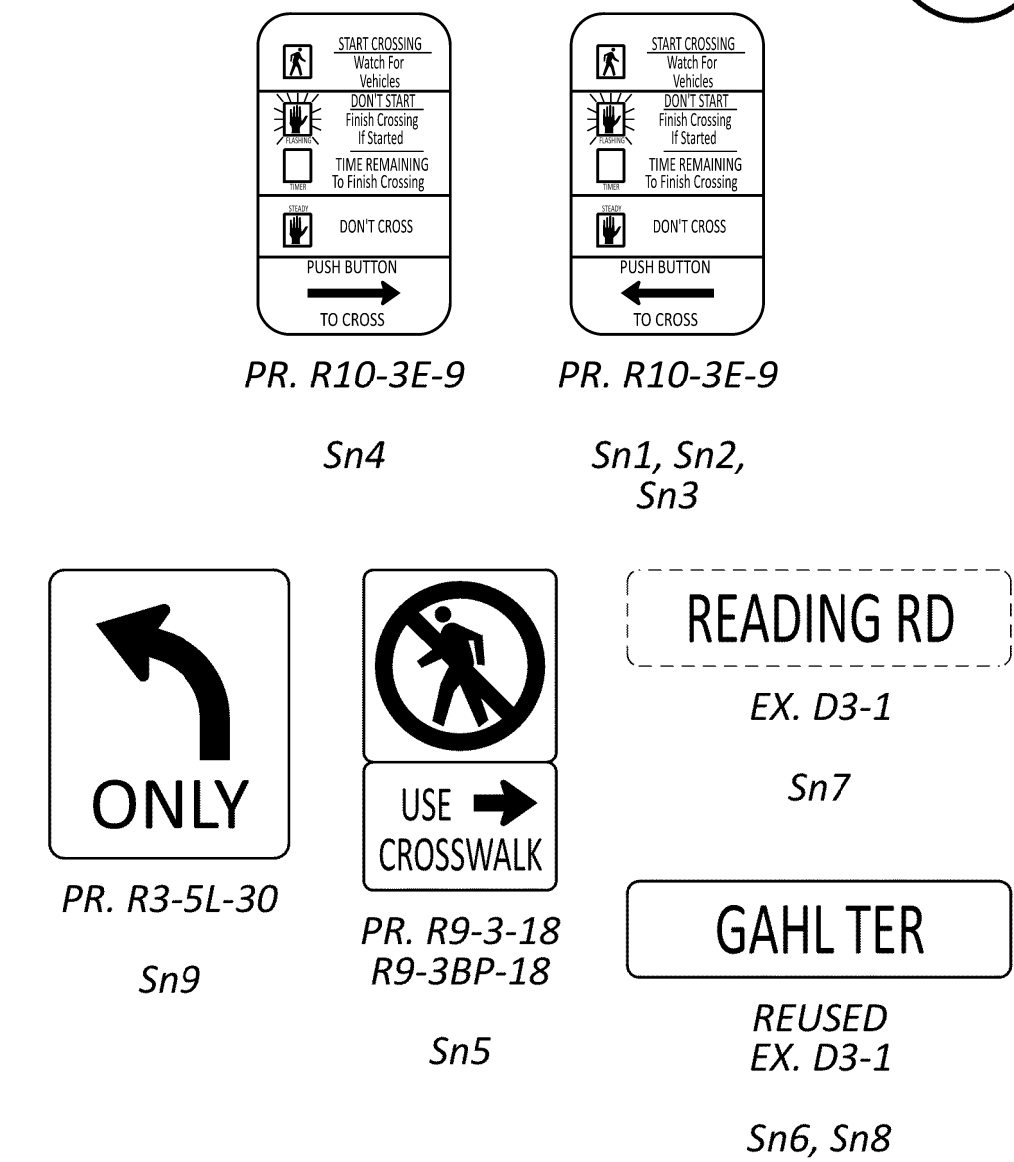
TRAFFIC SIGNAL DETECTION CHART (TEM FORM 496-4)

LOOP DESIGNATION	LOOP CONFIGURATION *	SIZE (FT.)	PULSE OR PRESENCE	DELAY PROGRAMMED IN CONTROLLER (SEC.)	EXTENSION PROGRAMMED IN CONTROLLER (SEC.)	CONNECT TO DETECTOR UNIT (UNIT-CHANNEL)	ASSOCIATED CONTROLLER PHASE
LDZ01A	P	35	PRESENCE	-	3	1-1	1
LDZ01B	P	35	PRESENCE	-	3	1-2	1
LDZ04A	P	35	PRESENCE	5	3	2-1	4
LDZ04B	P	35	PRESENCE	-	3	2-2	4
LDZ05A	P	35	PRESENCE	-	3	3-1	5
LDZ08A	P	35	PRESENCE	5	3	4-1	8
LDZ08B	P	35	PRESENCE	-	3	4-2	8

SIGNAL HEADS



SIGNS



REMOVAL OF TRAFFIC SIGNAL
 ITEMS FOR STORAGE:
 PUSHBUTTON (2)
 PUSHBUTTON SIGN (2)
 PEDESTAL (1)

- NOTES:**
1. CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
 2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
 3. SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY, EXISTING SIGNAL PHASING SHALL BE RETAINED.
 4. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	○→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	○→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	○→
SIGNAL SUPPORT POLE	■	□
PEDESTRIAN HEAD	↓	○↓
PEDESTRIAN PUSH BUTTON	—	—
PEDESTAL SUPPORT	□	□
CONTROLLER	⊠	⊠
TRAFFIC PULL BOX	⊞	⊞

**SIGNAL PLAN
 US42 AT GAHL TERRACE**

DESIGN AGENCY
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CMS

REVIEWER
GSH 02/13/26

PROJECT ID
123369

SHEET TOTAL
 P.114 | 117

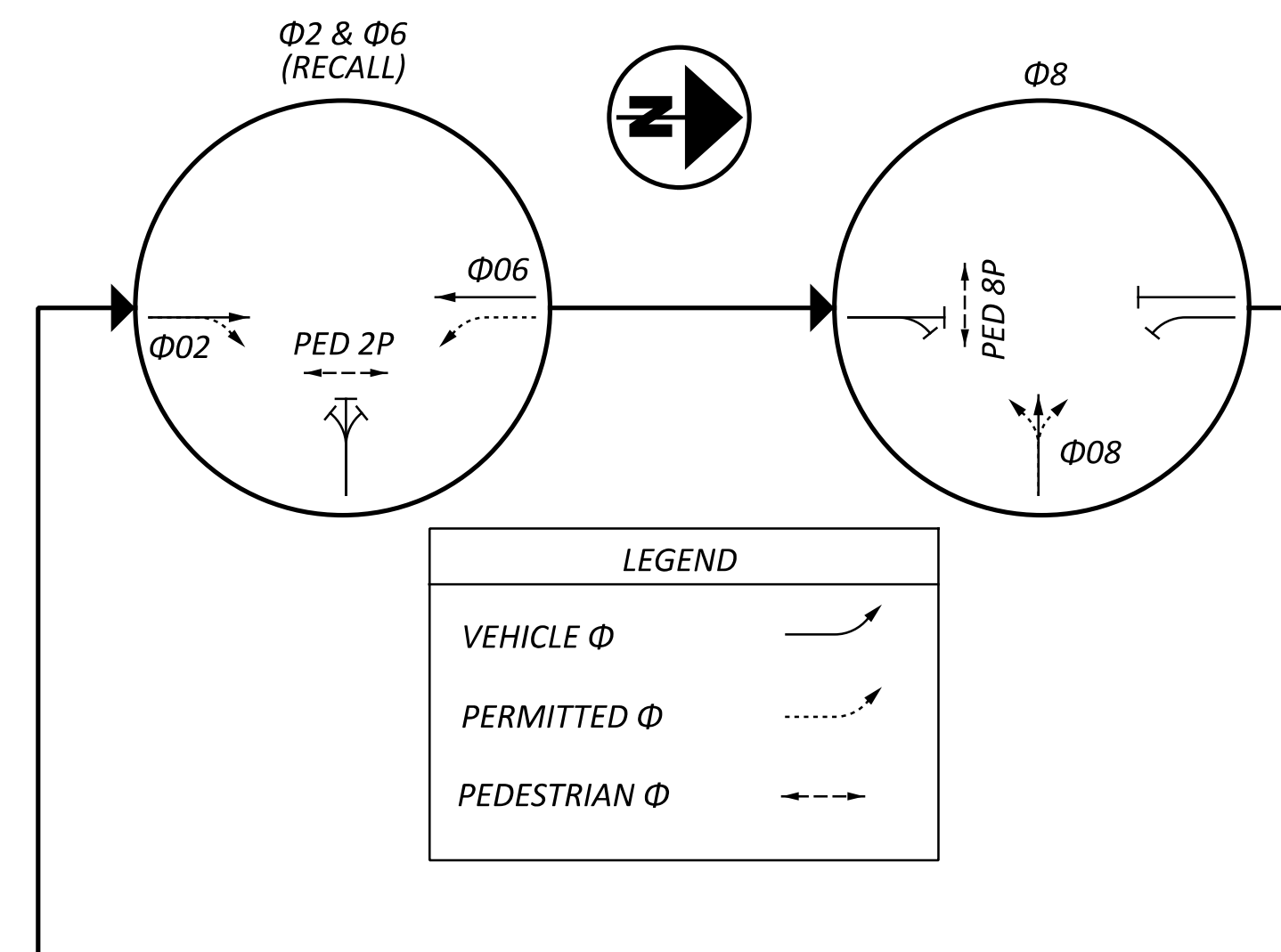
SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT GAHL TERRACE									
MAINTAINING AGENCY: CITY OF READING									
START UP		DUAL ENTRY: EX		PHASES:				EX	
START IN:		REST IN RED:		RING 1		RING 2			
TIME FOR: FLASH, ALL RED (SEC.):		OVERLAP		A		B		C D	
FIRST PHASE(S):		PHASES		-		-		-	
COLOR DISPLAYED:		PHASES		-		-		-	
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	NB	-	-	-	SB	-	WB
MINIMUM GREEN (INITIAL) (SEC.)		-	EX	-	-	-	EX	-	EX
ADDED INITIAL *(SEC./ACTUATION)		-	-	-	-	-	-	-	-
MAXIMUM INITIAL *(SEC.)		-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)		-	EX	-	-	-	EX	-	EX
TIME BEFORE REDUCTION *(SEC.)		-	-	-	-	-	-	-	-
MINIMUM GAP *(SEC.)		-	-	-	-	-	-	-	-
TIME TO REDUCE *(SEC.)		-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)		-	EX	-	-	-	EX	-	EX
MAXIMUM GREEN II (SEC.)		-	EX	-	-	-	EX	-	EX
YELLOW CHANGE (SEC.)		-	3.4	-	-	-	3.4	-	EX
ALL RED CLEARANCE (SEC.)		-	1.0	-	-	-	1.0	-	EX
DELAYED GREEN (LPI) * (SEC.)		-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY^ (SEC.)		-	-	-	-	-	-	-	-
WALK (SEC.)		-	7	-	-	-	-	-	7
PEDESTRIAN CLEARANCE (SEC.)		-	8	-	-	-	-	-	8
RECALL	MAXIMUM (ON/OFF)	-	EX	-	-	-	EX	-	EX
	MINIMUM (ON/OFF)	-	EX	-	-	-	EX	-	EX
	PEDESTRIAN (ON/OFF)	-	OFF	-	-	-	OFF	-	OFF
MEMORY (ON/OFF)		-	EX	-	-	-	EX	-	EX
*VOLUME DENSITY CONTROLS									
# FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET									
^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.									

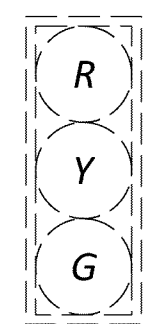
NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER ODOTCD FIGURE 41-4.

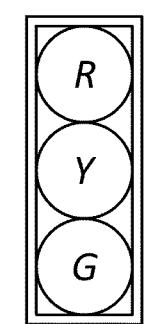
PHASING DIAGRAM



SIGNAL HEADS



EX. SIGNAL HEAD
4A, 4B



REUSED SIGNAL HEAD
(SEE NOTE 1)

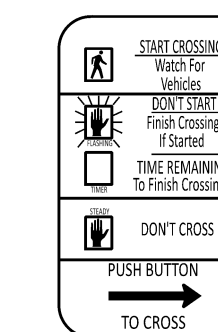
2A, 2B,
6A, 6B



EX. PEDESTRIAN SIGNAL HEAD

P1, P2,
P3, P4

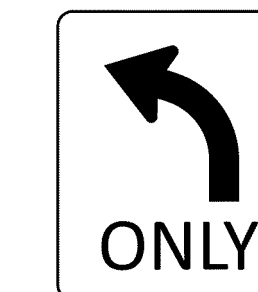
SIGNS



PR. R10-3E-9
Sn1, Sn2,
Sn3, Sn4



PR. R9-3-18
R9-3BP-18
Sn8



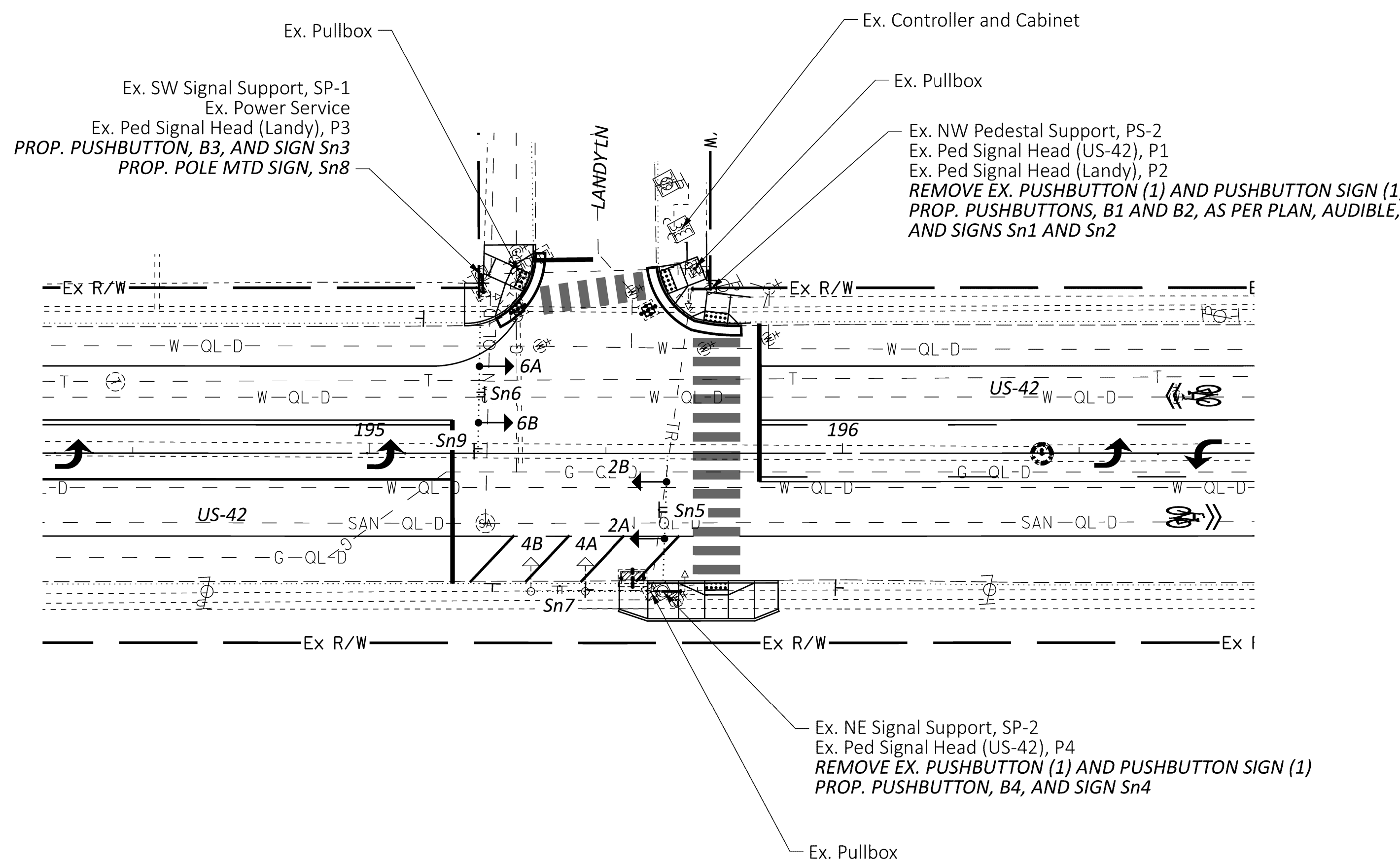
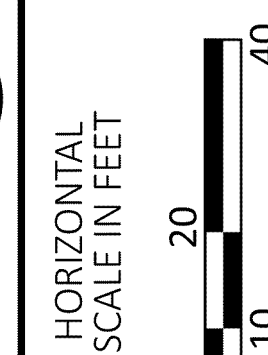
PR. R3-5L-30
Sn9



EX. D3-1
Sn7



REUSED EX. D3-1
Sn5, Sn6



REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

- PUSHBUTTON (2)
- PUSHBUTTON SIGN (2)

NOTES:

1. CONTRACTOR TO RELOCATE EXISTING SIGNAL HEADS TO BE CENTERED ABOVE THE CENTERLINE OR EDGE LINE.
2. EXISTING SIGNAL EQUIPMENT NOT AFFECTED BY SIGNAL WORK SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.
3. SIGNAL PHASING SHOWN IS BASED ON RECORD PLANS AND FOR REFERENCE ONLY. EXISTING SIGNAL PHASING SHALL BE RETAINED.
4. EXISTING UTILITIES SHOWN ARE BASED ON LIMITED SURVEY AND RECORD PLAN INFORMATION. CONTRACTOR SHALL CONTACT OUPS PRIOR TO CONSTRUCTION.

LEGEND

	PR./REUSED	EX.
TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"	→	○→
TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS	→	○→
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"	→	○→
SIGNAL SUPPORT POLE	■	□
PEDESTRIAN HEAD	↓	○↓
PEDESTRIAN PUSH BUTTON	—	- -
PEDESTAL SUPPORT	□	□
CONTROLLER	⊠	⊠
TRAFFIC PULL BOX	⊞	⊞

**SIGNAL PLAN
US42 AT LANDY LN**

DESIGN AGENCY



DESIGNER

CMS

REVIEWER

GSH 02/13/26

PROJECT ID

123369

SHEET TOTAL

P.116 117

SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: US42 AT LANDY LN									
MAINTAINING AGENCY: CITY OF READING									
START UP	DUAL ENTRY:	EX	PHASES:				EX		
			RING 1		RING 2				
START IN:	EX								
TIME FOR: FLASH , ALL RED (SEC.):		EX							
FIRST PHASE(S):		EX							
COLOR DISPLAYED:		EX							
			OVERLAP	A	B	C	D		
			PHASES	-	-	-	-		
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.								
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8	
DIRECTION	-	NB	-	EB	-	SB	-	-	-
MINIMUM GREEN (INITIAL) (SEC.)	-	EX	-	EX	-	EX	-	-	-
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-	-
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)	-	EX	-	EX	-	EX	-	-	-
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-	-
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-	-
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)	-	EX	-	EX	-	EX	-	-	-
MAXIMUM GREEN II (SEC.)	-	EX	-	EX	-	EX	-	-	-
YELLOW CHANGE (SEC.)	-	3.4	-	3.0	-	3.4	-	-	-
ALL RED CLEARANCE (SEC.)	-	1.0	-	1.2	-	1.0	-	-	-
DELAYED GREEN (LPI) (SEC.)	-	-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY^ (SEC.)	-	-	-	-	-	-	-	-	-
WALK (SEC.)	-	-	-	7	-	7	-	-	-
PEDESTRIAN CLEARANCE (SEC.)	-	-	-	12	-	5	-	-	-
RECALL	MAXIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	-
	MINIMUM (ON/OFF)	-	EX	-	EX	-	EX	-	-
	PEDESTRIAN (ON/OFF)	-	OFF	-	OFF	-	OFF	-	-
MEMORY (ON/OFF)	-	EX	-	EX	-	EX	-	-	

***VOLUME DENSITY CONTROLS**

FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.

NOTES:

1. PHASING DIAGRAM SHOWN ARE BASED ON AVAILABLE RECORD PLANS OR CONTROLLER TIMING OUTPUTS. THE CONTRACTOR SHALL RETAIN ALL EXISTING TIMING AND PHASING PARAMETERS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION UNLESS OTHERWISE AFFECTED BY PROPOSED TIMING.
2. EXISTING VEHICLE DETECTION CONFIGURATION AND SETTINGS CODED IN THE CONTROLLER AT THE TIME OF CONSTRUCTION SHALL BE RETAINED.
3. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4I-4.

PHASING DIAGRAM

