

LOCATION MAP

LATITUDE: 39° 14' 40" N LONGITUDE: 84° 36' 46" W



PORTION TO BE IMPROVED -----  
STATE & FEDERAL ROUTES -----  
OTHER ROADS -----

DESIGN DESIGNATION

CURRENT ADT (2027) ----- 8,800  
DESIGN YEAR ADT (2047) ----- 10,100  
DESIGN HOURLY VOLUME (2047) ----- 1,100  
DIRECTIONAL DISTRIBUTION ----- 53%  
TRUCKS (24 HOUR B&C) ----- 1%  
DESIGN SPEED ----- 40 MPH  
LEGAL SPEED ----- 35 MPH  
DESIGN FUNCTIONAL CLASSIFICATION:  
05 MAJOR COLLECTOR (URBAN)  
NHS PROJECT ----- NO

DESIGN EXCEPTIONS: NONE REQUIRED

ADA DESIGN WAIVERS: NONE REQUIRED

**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:

**ChoiceOne**  
Engineering  
440 E. HOEWISHER ROAD • SIDNEY, OHIO 45365 • 937.497.0200  
8956 GLENDALE MILFORD ROAD, SUITE 1 • LOVELAND, OHIO 45140 • 513.239.8554  
www.CHOICEONEENGINEERING.com

ENGINEERS SEAL  
FOR ENTIRE PLAN  
EXCEPT TRAFFIC  
SIGNAL PLAN  
  
SIGNED: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ENGINEERS SEAL  
FOR TRAFFIC  
SIGNAL PLAN  
  
SIGNED: \_\_\_\_\_  
DATE: \_\_\_\_\_

All associated  
SCD/SS dates  
should be filled in at  
this point.

comments were made on  
the BMP calcs

STAGE 3 SUBMITTAL - JULY 23, 2025

That's now at  
Stage 3.

DATES TO BE ADDED PRIOR TO FINAL TRACINGS SUBMITTAL

OHIO DEPARTMENT OF TRANSPORTATION STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-4.1	XX/XX/XX	TC-41.20	XX/XX/XX		800	XX/XX/XX
BP-5.1	XX/XX/XX	TC-41.30	XX/XX/XX		832	XX/XX/XX
BP-7.1	XX/XX/XX	TC-42.20	XX/XX/XX			
		TC-52.10	XX/XX/XX		878	
DM-1.1	XX/XX/XX	TC-52.20	XX/XX/XX	TC-71.10		
		TC-74.10	XX/XX/XX			
		TC-83.20	XX/XX/XX			
		TC-87.10	XX/XX/XX			
DM-4.3						
DM-4.4						
		MT-95.61	XX/XX/XX			
		MT-97.10	XX/XX/XX			
		MT-101.90	XX/XX/XX			
		MT-105.10	XX/XX/XX			
		MT-110.10	XX/XX/XX			

INDEX OF SHEETS:

TITLE SHEET  
SCHEMATIC PLAN  
TYPICAL SECTIONS  
GENERAL NOTES  
MAINTENANCE OF TRAFFIC NOTES  
GENERAL SUMMARY  
SUBSUMMARY  
PROJECT SITE PLAN  
PLAN AND PROFILE - SPRINGDALE ROAD  
CROSS SECTIONS - SPRINGDALE ROAD  
DRIVE DETAILS (PROFILES)  
CURB RAMP DETAILS  
TRAFFIC CONTROL PLAN  
TRAFFIC SIGNAL NOTES  
TRAFFIC SIGNAL PLAN  
GREATER CINCINNATI WATERWORKS PLANS

1  
2  
3  
4-6  
7  
8-9  
10-13  
14-15  
16-22  
23-42  
43  
44-45  
46-49  
50-51  
52-53  
1-4 (GCWWI-)

REVIEW COMPLETE

PM	2023 SPECIFICATIONS
BRIDGES	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.
CONSTRUCT	
DRAINAGE	Tami Brehm, P.E. 09/02/2025
ENVIRON	L. Keith Smith, P.E. 07/30/2025
GEOTECH	Casey Carriere, P.E. 7/29/2025
ITS	
MOT	
PAVEMENT	
ROADWAY	Katherine S. DeStefano, P.E. 07/25/2025
R/W	
SURVEY	
TRAFFIC	Teri C. Scanlon, P.E. 09/03/2025
UTILITIES	Lucas W. Braun, P.E. 08/28/2025
OTHER	Katherine S. DeStefano, P.E. 07/25/2025
OTHER	

Douglas A. Gruver, P.E.  
District 08 Deputy Director

Pamela Boratyn  
Director, Department of Transportation

FEDERAL PROJECT NO.  
E240711

RAILROAD INVOLVEMENT  
NONE

PROJECT DESCRIPTION  
THE PROJECT INVOLVES THE CONSTRUCTION OF NEW SIDEWALKS ON BOTH SIDES OF SPRINGDALE ROAD FROM POOLE ROAD TO YELLOWWOOD DRIVE.

EARTH DISTURBED AREAS  
PROJECT EARTH DISTURBED AREA: 1.20 ACRES  
ESTIMATED CONTRACTOR E.D.A.: 0.10 ACRES  
NOTICE OF INTENT E.D.A.: 1.30 ACRES

TITLE SHEET

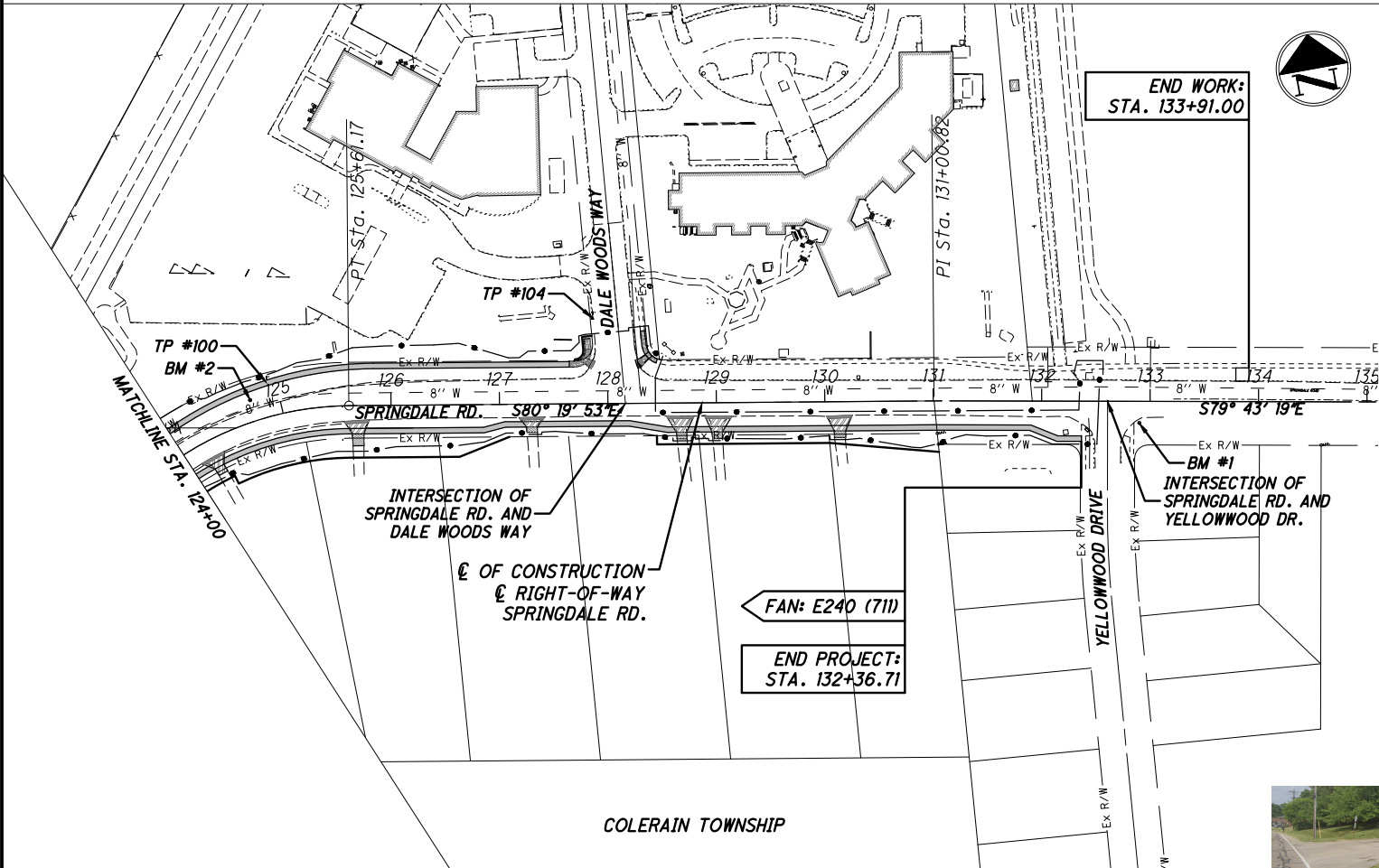
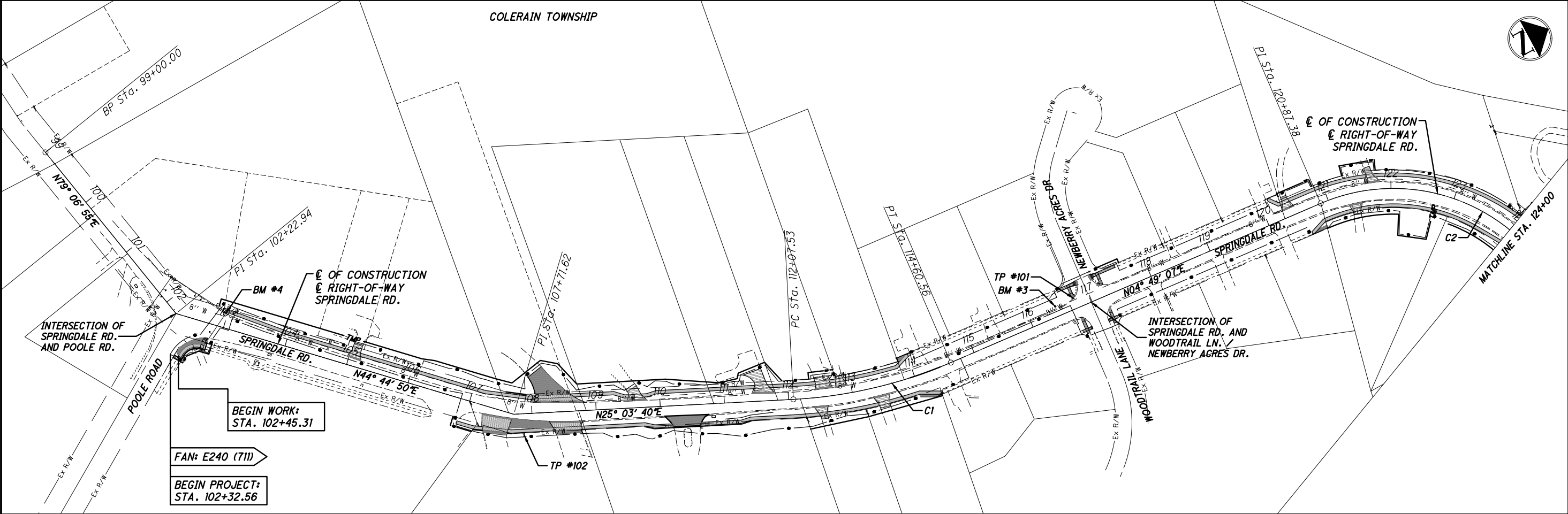
DESIGN AGENCY  
  
CHOICE ONE ENGINEERING

DESIGNER  
IJW

REVIEWER  
BAW 7-23-2025

PROJECT ID  
120861

SHEET TOTAL  
P:1 53



NAD 83(2011) GRID

HORIZONTAL CONTROL:

TRAVERSE POINT #100  
N=460511.3860  
E=1370406.1840  
STA. 124+91.83, 31.37' LT

TRAVERSE POINT #101  
N=459809.6750  
E=1370093.1020  
STA. 116+75.48, 16.68' LT

TRAVERSE POINT #102  
N=458954.8540  
E=1369879.4070  
STA. 107+86.34, 34.26' RT

TRAVERSE POINT #104  
N=460516.9210  
E=1370712.8060  
STA. 127+86.32, 79.05' LT

VERTICAL CONTROL:

BENCHMARK #1 ELEV: 860.01 PT.#: 35000  
MAG NAIL IN POWER POLE AT THE SE  
CORNER OF SPRINGDALE RD. & YELLOWWOOD  
RD. @ STA. 132+90 RT.

BENCHMARK #2 ELEV: 890.58 PT.#: 35001  
BOLT AT TIP ARROW TOP FLANGE OF FIRE  
HYDRANT IN FRONT OF 4300 SPRINGDALE  
RD. @ STA. 124+75 LT.

BENCHMARK #3 ELEV: 896.80 PT.#: 36002  
BOLT AT TIP ARROW TOP FLANGE OF FIRE  
HYDRANT AT THE SW CORNER OF  
SPRINGDALE RD. AND NEWBERRY ACRES. @  
STA. 116+44 LT.

BENCHMARK #4 ELEV: 916.62 PT.#: 36003  
MAG NAIL IN THE POWER POLE AT THE NE  
CORNER OF SPRINGDALE RD. & POOLE RD. @  
STA. 102+98 LT.

Really??

NOTE: THERE ARE NO  
EXISTING LANDSCAPED  
AREAS WITHIN THE WORK  
LIMIT

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	CH DIST	CH BEARING
C1	716.20'	253.03'	20°14'33"	251.72'	N14°56'23"E
C2	286.20'	473.79'	94°51'00"	421.51'	N52°14'37"E





[A] TRANSITIONS FROM 24.44' AT STA. 102+96.96 TO 18.00' AT STA. 104+00.00  
18' FROM STA. 104+00.00 TO STA. 107+19.90  
TRANSITIONS FROM 18.00' FROM STA. 107+19.90 TO STA. 22.00' AT STA. 107+95.50  
22.00' FROM STA. 107+95.50 TO STA. 109+28.52  
TRANSITIONS FROM 22.00' AT STA. 109+28.52 TO 16.00' AT STA. 109+45.00  
16.00' FROM STA. 109+45.00 TO STA. 109+80.00  
TRANSITIONS FROM 16.00' AT STA. 109+80.00 TO 20.00' AT STA. 109+95.00  
20.00' FROM STA. 109+95.00 TO STA. 113+78.00  
TRANSITIONS FROM 20.00' AT STA. 113+78.00 TO 32.67' AT STA. 114+00.81

TRANSITIONS FROM 35.12' AT STA. 120+13.31 TO 22.00' AT STA. 120+25.17  
22.00' FROM STA. 120+25.17 TO STA. 120+75.70  
TRANSITIONS FROM 22.00' AT STA. 120+75.70 TO 34.00' AT STA. 125+83.88  
34.00' FROM STA. 125+83.88 TO STA. 127+64.76

[B] 3:1 MAX SLOPE FROM STA. 106+10.00 TO STA. 111+25.00

Seems reasonable to meet the 4:1 max. slope

△ SIDEWALK CROSS SLOPE VARIES AS DETAILED BELOW

SIDEWALK SLOPES @ 0.015 AWAY FROM ROADWAY BETWEEN:

102+96.96 TO 112+75.00

SIDEWALK SLOPES @ 0.015 TOWARD ROADWAY BETWEEN:

112+75.00 TO 114+00.81

120+13.31 TO 127+64.76

NOTE:  
WHERE SIDEWALK CROSS SLOPE TRANSITIONS, TRANSITION  
LENGTH SHALL BE AT A RATE OF 5' FOR EVERY 1% OF GRADE  
CHANGE.

## HATCH LEGEND FOR PLANS

### ITEM 253 PAVEMENT REPAIR, AS PER PLAN

- ITEM 441 - 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
- ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.060 GAL/SY)
- ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449)
- ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.060 GAL/SY)
- ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22 (449) (2 EQUAL LIFTS) (PROVIDE 0.06 GAL/SY TACK COAT APPLICATION BETWEEN LIFTS)
- ITEM 304 - 6" AGGREGATE BASE
- ITEM 204 - SUBGRADE COMPACTION

### RESIDENTIAL ASPHALT DRIVEWAYS

- ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (DRIVEWAYS)
- ITEM 407 - NON-TRACKING TACK COAT (0.06 GAL/SY)
- ITEM 441 - 2.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449) (DRIVEWAYS)
- ITEM 304 - 8" AGGREGATE BASE

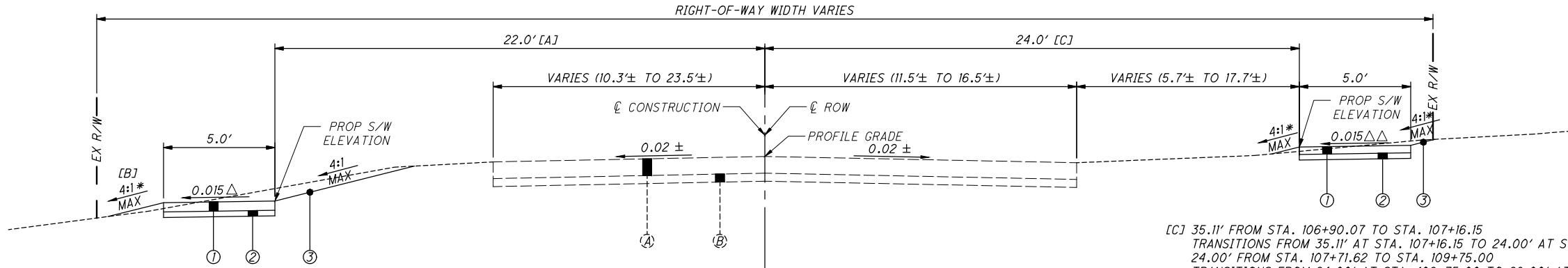
### COMMERCIAL ASPHALT DRIVEWAYS

- ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (DRIVEWAYS)
- ITEM 407 - NON-TRACKING TACK COAT (0.06 GAL/SY)
- ITEM 441 - 2.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449) (DRIVEWAYS)
- ITEM 407 - NON-TRACKING TACK COAT (0.06 GAL/SY)
- ITEM 301 - 4" ASPHALT CONCRETE BASE, PG64-22 (499)
- ITEM 304 - 6" AGGREGATE BASE

### RESIDENTIAL CONCRETE DRIVEWAYS

- ITEM 452 - 7" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
- ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE

RIGHT-OF-WAY WIDTH VARIES



### TYPICAL SECTION - SPRINGDALE ROAD

STA. 102+96.96 TO 114+29.86  
STA. 120+13.31 TO 132+36.68

\* SLOPE VARIES SEE CROSS-SECTIONS  
FOR MORE DETAILS

## LEGEND (ALL TYPICAL SHEETS)

- (A) - EXISTING ASPHALT CONCRETE
- (B) - EXISTING AGGREGATE BASE MATERIAL
- ① - ITEM 608 - 5" CONCRETE WALK
- ② - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- ③ - ITEM 659 - SEEDING AND MULCHING, CLASS 1

## ABBREVIATION LEGEND (ALL PLAN SHEETS)

- (ATG) - ADJUST TO GRADE
- (DND) - DO NOT DISTURB
- (RTG) - RECONSTRUCT TO GRADE
- (R&R) - REMOVE AND REPLACE
- (TBR) - TO BE REMOVED
- (TBRLO) - TO BE RELOCATED BY OTHERS

## SYMBOLS LEGEND (ALL PLAN SHEETS)

- CATCHBASIN (ATG)
- WATER SERVICE VALVE (ATG)
- TREE REMOVAL
- CONST. LIMITS

### COMMERCIAL CONCRETE DRIVEWAYS

- ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P
- ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE

### WALK REMOVED OR PAVEMENT REMOVED AND RE-SEEDED

- ITEM 202 - PAVEMENT/WALK REMOVED
- ITEM 659 - SEEDING AND MULCHING, CLASS 1
- ITEM 653 - TOPSOIL FURNISHED AND PLACED, 12"

### CURB RAMP

- ITEM 608 - CURB RAMP
- ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE

### SIDEWALK

- ITEM 608 - 5" CONCRETE WALK
- ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE

Add Item 204 subgrade compaction for sidewalks.

[C] 35.11' FROM STA. 106+90.07 TO STA. 107+16.15  
TRANSITIONS FROM 35.11' AT STA. 107+16.15 TO 24.00' AT STA. 107+71.62  
24.00' FROM STA. 107+71.62 TO STA. 109+75.00  
TRANSITIONS FROM 24.00' AT STA. 109+75.00 TO 28.00' AT STA. 109+90.00  
28.00' FROM STA. 109+90.00 TO STA. 111+24.44  
TRANSITIONS FROM 28.00' AT STA. 111+24.44 TO 24.00' AT STA. 111+39.44  
24.00' AT STA. 111+39.44 TO STA. 114+00.00  
TRANSITIONS FROM 24.00' AT STA. 114+00.00 TO 35.10' AT STA. 114+29.86

TRANSITIONS FROM 35.16' AT STA. 120+57.49 TO 24.00' AT STA. 120+85.15  
24.00' FROM STA. 120+85.15 TO STA. 123+56.91  
TRANSITIONS FROM 24.00' AT STA. 123+56.91 TO 21' AT STA. 124+00.00  
21.00' FROM STA. 124+00.00 TO STA. 126+85.06  
TRANSITIONS FROM 21.00' AT STA. 126+85.06 TO 16.00' AT STA. 127+05.00  
16.00' FROM STA. 127+05.00 TO STA. 128+20.00  
TRANSITIONS FROM 16.00' AT STA. 128+20.00 TO 22.00' AT STA. 128+55.00  
22.00' FROM STA. 128+55.00 TO STA. 131+90.00  
TRANSITIONS FROM 22.00' AT STA. 131+90.00 TO 32.00' AT STA. 132+15.00  
32.00' FROM STA. 132+15.00 TO STA. 132+36.68

△△ SIDEWALK CROSS SLOPE VARIES AS DETAILED BELOW

SIDEWALK SLOPES @ 0.015 AWAY FROM ROADWAY BETWEEN:

106+90.07 TO 108+80.00

122+80.00 TO 131+30.00

SIDEWALK SLOPES @ 0.015 TOWARD ROADWAY BETWEEN:

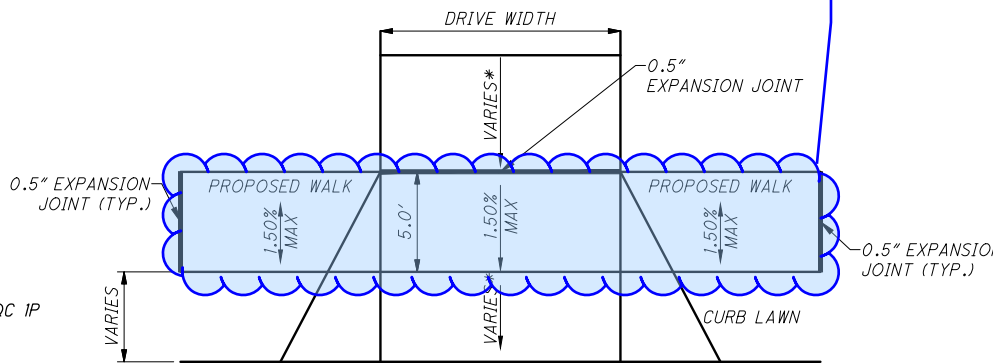
108+80.00 TO 114+29.86

120+57.49 TO 122+80.00

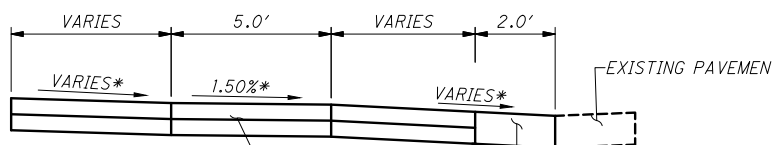
131+30.00 TO 132+36.68

NOTE:  
WHERE SIDEWALK CROSS SLOPE TRANSITIONS, TRANSITION  
LENGTH SHALL BE AT A RATE OF 5' FOR EVERY 1% OF GRADE  
CHANGE.

Per SCD BP-7.1, this slope can be up to 1.56% MAX



### TYPICAL DRIVE PLAN - WITH CURB LAWN



### TYPICAL DRIVE PROFILE WITH CURB LAWN

\*SLOPE VARIES SEE CROSS SECTIONS

## UTILITIES

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

### WATER

GREATER CINCINNATI WATER WORKS  
4747 SPRING GROVE AVE.  
CINCINNATI, OH 45232  
ATTN: EARL BRATFISH  
(513) 591-6533  
ATTN: DANIEL LOUIS  
(513) 352-3723

### SANITARY SEWER

MSD  
1600 GEST ST.  
CINCINNATI, OH 45204  
ATTN: ROB FRANKLIN  
(513) 557-7188

### GAS

DUKE ENERGY  
139 E. FOURTH ST.  
P.O. BOX 960, RM 460A  
CINCINNATI, OH 45202  
ANDY MCNICHOLS  
(513) 384-4731  
ATTN: MARK BRANSCUM  
(513) 287-2517

### PIPELINE

BP PIPELINES (NORTH AMERICA) INC.  
30 S. WACKER DRIVE  
SUITE 900  
CHICAGO, IL 60606  
ATTN: KEITH BOYLE  
(312) 809-4708

ODOT DISTRICT 8  
505 S. STATE ROUTE 741  
ATTN: TOM MAZZA  
(513) 933-6591

### OHIO UTILITIES

PROTECTION SERVICE 2  
WORKING DAYS BEFORE YOU  
DIG CALL TOLL FREE  
800-362-2764

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.

EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ACCORDING TO THE BEST AVAILABLE DATA. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING THEM IN THE FIELD PRIOR TO CONSTRUCTION AND WILL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THEM. CONTRACTOR TO CONTACT OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. NON-MEMBERS MUST BE CALLED DIRECTLY.

## 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.

## CONSTRUCTION NOISE

IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED BETWEEN THE HOURS SPECIFIED IN THE LOCAL NOISE ORDINANCES. IF THERE IS NO NOISE ORDINANCE IN PLACE, POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED BETWEEN THE HOURS TO 7:00 PM TO 7:00 AM.

## MUD AND DEBRIS

THE TRACKING OR SPILLING OF MUD, DIRT OF DEBRIS UPON PUBLIC STREETS IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR.

### COMMUNICATION

MCI  
5400 DUFF ROAD  
CINCINNATI, OH 45129  
ATTN: STEPHEN HOWELL  
(614) 816-0361

### STREETS, STORM SEWER, & TRAFFIC SIGNALS

HAMILTON CO. ENGINEER  
223 W. GALBRAITH ROAD  
CINCINNATI, OH 45215  
ATTN: DAN JONES (STORM & STREETS)  
(513) 946-8432  
ATTN: TOM SPILLE  
(TRAFFIC SIGNALS)  
(513) 946-8412

### COMMUNICATION

CHARTER  
10920 KENWOOD ROAD  
CINCINNATI, OH 45242  
ATTN: TODD VANVRAGEN  
(513) 386-5958

### COMMUNICATION

ALTAFIBER  
221 E. FOURTH ST.  
BUILDING 121-900  
CINCINNATI, OH 45202  
ATTN: BRECK COWAN  
(513) 565-7187

### ELECTRIC

DUKE ENERGY  
2010 DANA AVENUE  
ROOM EF 324  
CINCINNATI, OH 45207  
ATTN: MIKE CROSSLAND  
(513) 882-2994

## SUBCONTRACTOR SUPERVISION

THE CONTRACTOR IS REQUIRED TO HAVE A PROJECT SUPERVISOR ON-SITE TO SUPERVISE THE SUBCONTRACTOR FOR QUALITY CONTROL PURPOSES AND TO PROVIDE ANY NECESSARY ASSISTANCE TO THE SUBCONTRACTOR TO ENSURE QUALITY WORK.

COST OF THIS ITEM SHALL BE INCLUDED IN THE COST OF RELATED PAY ITEMS OF THIS PROJECT.

## CONTROL OF SPILLS

BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. IDLE EQUIPMENT, PETROCHEMICALS, AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE STORED NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. REFUELING SHALL NOT BE UNDERTAKEN NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ONSITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

## NON-RUBBER TIRE VEHICLES

NO NON-RUBBER TIRE VEHICLES SHALL BE MOVED ON TOWNSHIP OR COUNTY STREETS. EXCEPTIONS MAY BE GRANTED BY THE TOWNSHIP WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL USE EXTREME CARE WHEN OPERATING NON-RUBBER TIRE VEHICLES ON STREETS OR DRIVEWAYS TO AVOID MARKING OR DAMAGING THE PAVEMENT. PROTECTION OF THE PAVEMENT FROM DAMAGE RESULTING FROM THE TRACTS OF NON-RUBBER TIRE VEHICLES UTILIZED IN TRENCH EXCAVATION SHALL BE REQUIRED. A WOOD PLANK SYSTEM, USED TIRES, RUBBER MATS, OR OTHER MEANS AS APPROVED BY THE ENGINEER SHALL BE USED TO PROTECT THE PAVEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

## PROTECTION OF RIGHT-OF-WAY LANDSCAPING

IN ADDITION TO ODOT SPECIFICATION 107.10, PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE TOWNSHIP OF COLERAIN 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. THE CONSTRUCTION LIMITS ARE IDENTIFIED IN THE PLANS.

SUBMIT A WRITTEN REQUEST TO THE 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.

Just state that the project will comply with all local noise ordinances.

## SURVEY PARAMETERS

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 VRS

MONUMENT TYPE: IRON PIN

### VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88

GEOID: GEOID 18

### HORIZONTAL POSITIONING

REFERENCE NAME: NAD83 (CORS2011 ADJUSTMENT)

ELLIPSOID: GRS 80

MAP PROJECTION: LAMBERT CONFORMAL CONIC

COORDINATE SYSTEM: OHIO STATE PLANE SOUTH

COMBINED SCALE FACTOR: 1.00009835555907

ORIGIN OF COORDINATE SYSTEM: 460511.3860, 1370406.1840

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 DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE U.S. SURVEY FEET.

### HORIZONTAL CONTROL

Point #	Northing	Easting	Elevation	Type
100	460511.3860	1370406.1840	888.88	IRON PIN
101	459809.6750	1370093.1020	895.18	MAG NAIL
102	458954.8540	1369879.4070	911.50	IRON PIN
104	460516.9210	1370712.8060	876.04	CUT CROSS

### VERTICAL CONTROL

Point #	Northing	Easting	Elevation	Type
BM #1	460332.7560	1371192.1240	860.01	MAG NAIL IN POLE
BM #2	460497.9110	1370388.8120	890.58	FH BOLT TIP ARROW
BM #3	459778.6090	1370091.1560	896.80	FH BOLT TIP ARROW
BM #4	458636.0300	1369491.7540	916.62	MAG NAIL IN POLE

## SEEDING AND MULCHING

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

ITEM 659 - TOPSOIL	305 CU. YD.
ITEM 659 - SEEDING AND MULCHING, CLASS 1	2,750 SQ. YD.
ITEM 659 - REPAIR SEEDING AND MULCHING	137 SQ. YD.
ITEM 659 - INTER-SEEDING	137 SQ. YD.
ITEM 659 - COMMERCIAL FERTILIZER	0.37 TON
ITEM 659 - LIME	0.56 ACRE
ITEM 659 - WATER	15.22 M. GAL

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 BRUSH, 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 LARGER THAN 8" TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
8"	1	0	1
10"	1	0	1
12"	1	0	1
14"	2	0	2
16"	1	0	1
18"	5	0	5
48"	1	0	1

## CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION, OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT ANY EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

## REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.





CLEAN WATER CONNECTIONS

ROOF DRAINS, FOUNDATION DRAINS, AND ALL OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM ARE PROHIBITED.

FUTURE MAINTENANCE OF PROPOSED ITEMS:

ALL PROPOSED DRAINAGE STRUCTURES AND CONVEYANCES SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT RESPONSIBLE TO MAINTAIN, REPAIR OR REPLACE ANY PROPOSED DRAINAGE STRUCTURES AND CONVEYANCES SHOWN ON THESE PLANS. EXCEPT HEREIN MODIFIED WHEN THE DRAINAGE STRUCTURES AND CONVEYANCES CROSS UNDERNEATH COUNTY ROADWAY.

ALL PROPOSED SIDEWALK AND CURB RAMPS SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT RESPONSIBLE TO MAINTAIN, REPAIR OR REPLACE ANY PROPOSED SIDEWALK SHOWN ON THESE PLANS.

ALL PROPOSED CURB AND CURB INLETS SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT RESPONSIBLE TO MAINTAIN, REPAIR OR REPLACE ANY PROPOSED DRAINAGE STRUCTURES AND CONVEYANCES SHOWN ON THESE PLANS.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM OF WORK WILL SHALL CONSIST OF THE REMOVAL OF THE EXISTING ASPHALT AND AGGREGATE AND THE INSTALLATION OF THE NEW AGGREGATE AND ASPHALT PAVEMENT. THE NEW PAVEMENT AND AGGREGATE SHALL FOLLOW THE DETAIL AND PAVEMENT COMPOSITION FOUND ON SHEET 3 OF THESE PLANS. ANY PAVEMENT MARKINGS THAT ARE DISTURBED DURING THIS REPLACEMENT SHALL BE REPLACED IN-KIND WITH ITEM 642 PAINT AND INCIDENTAL TO ITEM 253, PAVEMENT REPAIR, AS PER PLAN.

PAYMENT FOR ITEM 253, PAVEMENT REPAIR, AS PER PLAN FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT CUBIC YARD BID PRICE.

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

THIS 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) AND FHWA INTERIM APPROVAL FOR RRFBs (1A-21).

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 BY THE PEDESTRIAN IN THE DIRECTION OF TRAVEL.

ITEM 630 SIGNING, MISC.: RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY (CONT'D)

This language should go into a maintenance agreement between County and Township. It is not of the contractors concern to build the project

EACH UNIT SHALL UTILIZE SOLAR POWER.

EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT 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:

- 1. RRFB INDICATIONS
  - a. EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.
  - b. 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.
  - c. EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL.
  - d. EACH RRFB SHALL BE LOCATED BETWEEN THE BOTTOM OF THE CROSSING WARNING SIGN AND THE TOP OF THE SUPPLEMENTAL DOWNWARD DIAGONAL ARROW PLAQUE.
  - e. THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM CLASS I SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE, AND SERVICE VEHICLES) DATED JANUARY, 2005.
  - f. TO MINIMIZE EXCESSIVE GLARE DURING NIGHTTIME CONDITIONS, AN AUTOMATIC SIGNAL DIMMING DEVICE SHALL BE USED TO REDUCE THE BRILLIANCE OF THE RRFB INDICATIONS.
  - g. 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.
  - h. 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.

ITEM 630 SIGNING, MISC.: RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY (CONT'D)

- 2. SIGNS
  - a. ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.
  - b. PEDESTRIAN PUSHBUTTONS SIGNS 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.
  - c. TWO SETS OF SIGNS SHALL BE REQUIRED PER UNIT FOR VIEW FROM EACH APPROACH.
  - d. ASSURE SIGN MEETS THE REQUIREMENTS OF C&MS 630.

- 3. CONTROL CIRCUIT
  - a. 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.
  - b. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.
  - c. 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.

- 4. BATTERY AND SOLAR PANELS
  - a. 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.
  - b. THE SOLAR PANEL SHALL PROVIDE A MINIMUM OF 40 WATTS PEAK TOTAL OUTPUT.
  - c. THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES- 60 DEGREES TO PROVIDE MAXIMUM OUTPUT.
  - d. ALL FASTENERS USED SHALL BE ANTI-VANDAL.

- 5. WIRELESS RADIO
  - a. RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.
  - b. RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.
  - c. 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.

- 6. PUSHBUTTON
  - a. THE PUSHBUTTON SHALL BE CAPABLE OF CONTINUOUS OPERATION OVER A TEMPERATURE RANGE OF -30 DEGREES F TO +165 DEGREES F.
  - b. PUSHBUTTON SHALL BE ADA COMPLIANT.

7. 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.

ITEM 630 SIGNING, MISC.: RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY (CONT'D)

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 SPECIAL - MAILBOX AND SUPPORT SYSTEM, SINGLE

FOR MAILBOXES CALLED OUT TO BE REMOVED AND REPLACED THE CONTRACTOR SHALL REMOVE EXISTING MAILBOXES AND SUPPORTS, AND FURNISH AND INSTALL NEW MAILBOXES AND SUPPORTS. ALL MAILBOXES AND SUPPORTS SHALL BE PLACED IN THEIR EXISTING LOCATION ADJACENT TO THE ROADWAY.

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS, ANY ASSOCIATED MOUNTING HARDWARE NECESSARY FOR THE APPROVED MAILBOX TYPE, AND ATTACHING A TOWNSHIP APPROVED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

MAILBOXES SHALL BE BLACK, DOUBLE SIDED MAILBOXES AND THE MAILBOX MAKE/MODEL SHALL BE APPROVED BY THE TOWNSHIP PRIOR TO THE CONTRACTOR ORDERING MATERIALS.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHAL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS, TEMPORARY INSTALLATIONS AND THE REMOVAL OF THE EXISTING MAILBOX AND SUPPORT SHALL BE INCIDENTAL TO ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE). HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE).



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

SHEET

P:5

TOTAL

53



ITEM SPECIAL - PIPE CLEANOUT, 24" AND UNDER

THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER.

CLEANOUT THE PIPE IS PAID FOR AT THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL, PIPE CLEANOUT. THIS PRICE INCLUDES THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

ITEM SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL, THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONS 455 RESPECTIVELY.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

ITEM SPECIAL - CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION (CONTINUED)

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:

- UPON APPROVAL OF CONSULTANT . . . . . 20%
- PROGRESSIVE EQUIVALENT PAYMENTS . . . . . 50%
- UPON SUBMISSION OF FINAL REPORT . . . . . 30%.

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

Remove - see attached email in approval letter.

Remove

Add the following plan notes and adjust as applicable to this project. Carry over to gensum as necessary

ROUNDING

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

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEET NO. P.15 FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 2.0 HOUR.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF THE EXCAVATION LIMITS ARE SHOWN AND LABERLED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).
- IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

ITEM 202 - CURB REMOVED, AS PER PLAN

SAW CUT THE EXISTING CURB FOR THE LIMITS SHOWN ON THE PLANS SUCH THAT THE CURB IS FLUSH WITH THE ADJACENT SURFACES.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. THE VEGETATED FILTER STRIPS ARE CURRENTLY IN PLACE AND FUNCTIONAL SO CONTRACTOR DOESN'T NEED TO PERFORM ANY WORK ON EXISTING VEGETATED FILTER STRIPS.

PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF THE RESURFACING OPERATION. THIS WILL BE NECESSARY TO ASSURE THE CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS (EXCEPT WHERE NOTED). FOR CENTER LINE MARKINGS, THE CONTRACTOR SHALL INSTALL THE PASSING/NO PASSING ZONE MARKINGS ACCORDING TO THE CURRENT CENTER LINE LOGS AVAILABLE AT <http://www.dot.state.oh.us/Divisions/Operations/Traffic/miscellaneous/Pages/CenterlinePassingandNoPassingZoneLogs.aspx>

ALL CROSSWALK MARKINGS WITHIN THE PAVING LIMITS ARE TO BE UPDATED TO HIGH VISIBILITY CROSSWALK MARKINGS (LONGITUDINAL BARS) AS PER SCD TC-74.10. TYPICAL WIDTH OF THE CROSSWALK MARKINGS ARE TO BE 8".

PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAY ITEM.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER UNLESS AUTHORIZED BY THE ENGINEER". THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DIRECTION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING CATCH BASINS TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:  
ITEM 611 - CATCH BASIN ADJUSTED TO GRADE .....19 EACH

ITEM 623 - CONSTRUCTION LAYOUT STAKES, AS PER PLAN  
PRIOR TO THE START OF ROADWAY OPERATION, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 500 FEET INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMIPERMANENT CONDITION.



ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT, UNLESS OTHERWISE APPROVED BY THE ENGINEER IN WHICH IN THAT CASE AT LEAST ONE LANE SHALL BE MAINTAINED WITH FLAGGING OPERATIONS. AREAS WHERE CURB IS TO BE REPLACED SHALL BE HANDLED ACCORDING TO THE OVERNIGHT TRENCH CLOSING NOTE IN THESE PLANS.

IN THE EVENT OF A LANE CLOSURE TRAFFIC SHALL BE MAINTAINED VIA FLAGGING IN ACCORDANCE WITH ODOT'S SCD MT-95.61 AND 97.10. LANE CLOSURES SHALL BE RESTRICTED TO WORKING HOURS OF 7:00 AM TO 7:00 PM.

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.

ACCESS TO AND FROM ALL LOCAL RESIDENTIAL AND BUSINESS DRIVES WITHIN THE LIMITS OF THIS PROJECT SHALL BE MAINTAINED AT ALL TIMES (24 HOURS A DAY) BY USING THE EXISTING PAVEMENT, TEMPORARY PAVEMENT, AND THE PROPOSED PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEQUENCE THE WORK TO HELP MINIMIZE THE NEED FOR TEMPORARY AGGREGATE PAVEMENT. TEMPORARY AGGREGATE PAVEMENT CAN BE ASPHALT GRINDINGS OR OTHER AGGREGATE APPROVED BY THE ENGINEER. THE COST OF INSTALLATION, MATERIAL, AND REMOVAL OF THE TEMPORARY AGGREGATE PAVEMENT IS TO BE PART OF THE ITEM 614 MAINTAINING TRAFFIC LUMP SUM.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (IN PROPER POSITION, CLEAN AND LEGIBLE, AND IN GOOD WORKING CONDITION, AND SUBSEQUENTLY REMOVE ALL LIGHTS, SIGNS, CONES, BARRICADES, EXISTING PAVEMENT MARKINGS, AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC.

THE CONTRACTOR SHALL ADJUST THE LOCATION AND/OR SPACING OF ALL TRAFFIC CONTROL CHANNELING DEVICES AS DICTATED BY THE PROGRESS OF THE REQUIRED WORK TO ALLOW CONSTRUCTION ACCESS TO WORK AREAS WHILE MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL DURING ALL CONSTRUCTION OPERATIONS. THE ORIGINAL LOCATION, PLACEMENT, SPACING AND SUBSEQUENT RELOCATION OR REMOVAL OF ALL TRAFFIC CONTROL DEVICES SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

IT IS INTENDED THAT THE TRAFFIC NOT BE SUBJECTED TO ANY LANE CLOSURES UNLESS ACTIVE WORK IS BEING PERFORMED IN OR IMMEDIATELY ADJACENT TO THE CLOSED LANE. THE ROADWAY SHALL NOT BE RESTRICTED TO ANY LANE CLOSURE DURING PERIODS OF INTERMITTENT OR IRREGULAR WORK, NOR CLOSED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION AS TO WHAT CONSTITUTES ACTIVE WORK AND WHETHER OR NOT THE LANE CLOSURE IS JUSTIFIED.

IF, IN THE OPINION OF THE ENGINEER, THE LANE CLOSURE IS NOT JUSTIFIED, THEY MAY ORDER ALL OR PART OF THE LANE CLOSURE REOPENED TO TRAFFIC (UNTIL SUCH TIME THIS CONDITION IS CORRECTED.)

THE CONTRACTOR SHALL FURNISH AND INSTALL ADVANCE WARNING "ROAD WORK AHEAD" (W20-1) SIGNS AND "END ROAD WORK" (G20-2) SIGNS, ON ALL PUBLIC ROADS ENTERING OR EXITING THE PROJECT LIMITS, AS WELL AS OTHER NECESSARY MAINTENANCE OF TRAFFIC SIGNS.

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.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE, AS PER PLAN

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE ODOT INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE ODOT, 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 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).

IN GENERAL, LEOS SHOULD MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS 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.

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 TOWNSHIP SHALL HAVE FINAL CONTROL OVER THE LEOS' 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 TOWNSHIP. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH 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 CONTINGENT QUANTITIES HAVE BEEN INCLUDED IN THE ESTIMATE.

ITEM 614, LAW ENFORCEMENT OFFICER WITH 8 HOURS  
PATROL CAR FOR ASSISTANCE, AS PER PLAN

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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE, AS PER PLAN.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY, UNLESS THE BASE WIDENING IS SEPARATED FROM TRAFFIC BY DRUMS OR PORTABLE CONCRETE BARRIER AS SHOWN IN THE PLANS. NO UNPROTECTED TRENCH SHALL BE LEFT OPEN OVERNIGHT. 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.

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 OFFICER (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
RAMP &	>= 2 WEEKS	21 CALENDAR DAYS PRIOR
ROAD	>12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR
CLOSURES	< 12 HOURS	4 BUSINESS DAYS PRIOR

LANE	>= 2 WEEKS	14 CALENDAR DAYS PRIOR
CLOSURE &	< 2 WEEKS	5 BUSINESS DAYS PRIOR
RESTRICT.		

START OF CONST. & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR
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ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

Add the following plan notes and adjust as applicable to this project. Carry over to gensum as necessary

ITEM 608 - CURB RAMP, AS PER PLAN

IN AREAS OF INTERSECTION WHERE CURB IS REPLACED, WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED TO MEET ADA REQUIREMENTS IN ACCORDANCE WITH ODOT STANDARD DRAWING BP-7.1 AND AS DIRECTED BY THE ENGINEER.

THE INTENT OF THIS ITEM IS TO INSTALL ADA CURB RAMPS WHERE INDICATED IN THIS SET OF PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE EXISTING WALK AND/OR CURB AND GUTTER IN A MANNER THAT DOES NOT DAMAGE OTHER AREAS MEANT TO REMAIN IN PLACE (SEE CURRENT STANDARD DRAWING BP-7.1). AS THESE INSTALLATIONS ARE BEING MADE TO FIT EXISTING CONDITIONS, VARIATIONS FROM STANDARD MAY OCCUR. ANY DEVIATIONS FROM DETAIL IN THESE PLANS MUST FIRST BE APPROVED BY THE ENGINEER. RESTORATION TO EXISTING PAVEMENT AREAS IN FRONT OF THE PROPOSED CURB RAMPS SHALL BE INCLUDED IN THIS ITEM OF WORK. RESTORATION SHALL BE MADE UP TO AND INCLUDE THE SURFACE COURSE. ALL WORK, LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 608, CURB RAMP, AS PER PLAN.

PAVEMENT REPAIR

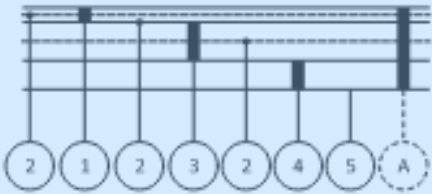
PAVEMENT REPAIR SHALL CONSIST OF PAVEMENT REMOVED AND REPLACED TO CORRECT COUNTER SLOPE AND/OR CROSS SLOPE AT PROPOSED CURB RAMP BASES, AND/OR FOR EASE OF CONSTRUCTION.

IN ADDITION TO THE REQUIREMENT OF ODOT C&MS SECTION 253, THE CONTRACTOR SHALL REMOVE AN ADDITIONAL WIDTH OF PAVEMENT MEASURED 2 FEET FROM THE FACE OF THE CURB/GUTTER TO BE REMOVED. REFER TO THE TYPICAL SECTION BELOW FOR PAVEMENT BUILD-UP OF THE REPLACEMENT MATERIAL.

ESTIMATED QUANTITIES ARE INCLUDED IN THE SUBSUMMARY ON SHEET P.09  
THE 6" AGGREGATE BASE SHALL BE INSTALLED UNDER THE CURB AND SHALL EXTEND WIDTHWISE APPROXIMATELY 10" PAST THE BACK OF CURB.

ALL OF THESE ITEMS, INCLUDING THE PAVEMENT REMOVAL, ARE INCLUDED IN THE SQ FT ITEM, CURB RAMP, AS PER PLAN.

TYPICAL SECTION: PAVEMENT REPAIR, AS PER PLAN



- A ITEM 202 - PAVEMENT REMOVED
- 1 ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (2 LIFTS)
- 2 ITEM 407 - NON-TRACKING TACK COAT
- 3 ITEM 301 - 8" ASPHALT CONCRETE BASE, PG64-22 (2 LIFTS)
- 4 ITEM 304 - 6" AGGREGATE BASE
- 5 ITEM 204 - SUBGRADE COMPACTION

EXISTING PAVEMENT BUILD-UPS WERE NOT FOUND. THE EXISTING PAVEMENT IS EXPECTED TO BE BITUMINOUS CONCRETE OVER PENETRATION MACADAM. REGARDLESS OF MATERIAL FOUND, BACKFILL AS SHOWN IN TYPICAL SECTION ABOVE.

## GENERAL SUMMARY






REF NO.	SHEET NO.	STATION TO STATION				SIDE	MEASURED AREA (S.F.)	202	202	202	253	411	608	608	609	609	653						
								CURB REMOVED	CURB AND GUTTER REMOVED	WALK REMOVED	PAVEMENT REPAIR, AS PER PLAN	STABILIZED CRUSHED AGGREGATE	5" CONCRETE WALK	CURB RAMP	CURB, MISC.: BARRIER CURB REPLACED (IN-KIND)	CURB, MISC.: CURB AND GUTTER REPLACED (IN-KIND)	TOPSOIL FURNISHED AND PLACED						
								FT	FT	SF	CY	CY	SF	SF	FT	FT	CY						
SW1	16	102+40.64	TO	102+81.55		RT	314			617		2.91	253	61			12.65						
SW2	16-17	102+91.32	TO	105+01.91		LT	1065			37		9.86	976	89			0.43						
SW3	17	105+15.61	TO	108+06.21		LT	1395					12.92	1395										
SW4	17	106+90.07	TO	107+32.49		RT	208			108		1.93	208										
SW5	17	107+69.58	TO	108+34.95		RT	366					3.39	366										
SW6	17	108+60.90	TO	109+52.15		LT	441					4.08	441										
SW7	17-18	108+74.99	TO	110+18.65		RT	714					6.61	658	56									
SW8	17-18	109+70.79	TO	111+48.94		LT	877					8.12	877										
SW9	18	110+61.35	TO	112+47.32		RT	928					8.59	868	60									
SW10	18	111+68.26	TO	112+44.60		LT	363					3.36	363										
SW11	18	112+57.60	TO	113+36.79		RT	403					3.73	403										
SW12	18	112+66.14	TO	112+77.99		LT	50					0.46	50										
SW13	18	112+88.29	TO	114+04.87		LT	567			81		5.25	567				1.30						
SW14	18	113+52.58	TO	114+29.98		RT	406					3.76	406										
SW15	19	116+56.15	TO	116+86.63		LT	204			137		1.89		204									
SW16	19	116+68.94	TO	116+84.45		RT	159			78		1.47		159									
SW17	19	117+14.65	TO	117+54.14		LT	227			161		2.10		227									
SW18	19	117+12.38	TO	117+27.60		RT	142			80		1.31		142									
SW19	20	120+13.31	TO	120+33.54		LT	123			20		1.14	123				0.08						
SW20	20	120+42.39	TO	121+64.48		LT	632					5.85	632										
SW21	20	120+57.49	TO	121+34.16		RT	365			101		3.38	365				2.64						
SW22	20	121+46.78	TO	124+19.24		RT	1224					11.33	1224										
SW23	20-21	121+73.00	TO	127+84.70		LT	3345					30.97	3124	221									
SW24	20-21	124+29.37	TO	125+64.38		RT	605					5.60	605										
SW25	21	125+74.75	TO	127+25.00		RT	739					6.84	739										
SW26	21	127+34.62	TO	128+62.95		RT	627					5.81	627										
SW27	21	128+28.03	TO	128+45.90		LT	188			120		1.74		188									
SW28	21	128+72.30	TO	128+95.80		RT	106					0.98	106										
SW29	21-22	129+05.29	TO	130+08.70		RT	503					4.66	503										
SW30	22	130+19.00	TO	132+36.68		RT	1091					10.10	1091										
C1	19	116+85.95	TO	116+89.25		LT	16		7		0.87					7							
C2	19	117+11.94	TO	117+15.59		LT	18		8		1.02					8							
C3	19	117+18.31	TO	117+22.14		LT	14	6			0.79					3							
C4	21	127+82.92	TO	127+86.55		LT	14	7			0.80				7								
C5	21	128+27.58	TO	128+30.66		LT	16	8			0.87				8								
TOTALS CARRIED TO GENERAL SUMMARY								21	15	1540	5	171	16970	1407	15	18	18						

SUBSUMMARY - ROADWAY

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

SHEET

P.10

TOTAL

53



REF NO.	SHEET NO.	STATION			SIDE	MEASURED AREA (S.F.)	202	202	653	SPECIAL
							PAVEMENT REMOVED (ASPHALT)	REMOVAL MISC.: WOOD POST REMOVED	TOPSOIL FURNISHED AND PLACED	MAILBOX SUPPORT SYSTEM, SINGLE
							SY	EACH	CY	EACH
R1	16	104+68.33			LT					1
R2	17	107+69.77	TO	108+32.04	RT	853.4	94.82		29.75	
R3	17	108+29.08			RT					1
R4	17	108+30.82			RT					1
R5	17	109+74.13			LT					1
R6	18	111+37.50			LT					1
R7	18	112+30.74			RT					1
R8	18	112+40.16			LT					1
R9	18	113+03.44			LT					1
R10	18	113+27.92			RT					1
R11	18	113+98.59			LT					1
R12	18	114+42.03			RT					1
R13	19	115+25.16			LT					1
R14	19	118+13.15			RT					1
R15	19	118+58.94			LT					1
R16	19	119+19.29			RT					1
R17	19	119+85.89			LT					1
R18	20	120+26.80			LT					1
R19	20	120+31.49			RT					1
R20	20	121+59.24			RT			1		1
R21	20	124+40.41			RT					1
R22	21	125+86.00			RT					1
R23	21	127+42.55			RT					1
R24	21	128+81.76			RT					1
R25	21	128+87.20			RT					1
R26	22	130+31.20			RT					1
R27	22	131+85.40			RT					1
TOTALS CARRIED TO GENERAL SUMMARY							95	1	30	26

REF NO.	SHEET NO.	STATION	SIDE	DRIVE TYPE	DRIVE WIDTH (AT BACK OF APRON)	DRIVE WIDTH (AT MEET EXISTING POINT)	DRIVE AREA (MEASURED S.F.)	202	202	202	253	301	304	407	411	441	441	452	452	609
								PAVEMENT REMOVED (CONCRETE)	PAVEMENT REMOVED (ASPHALT)	CURB REMOVED	PAVEMENT REPAIR, AS PER PLAN	ASPHALT CONCRETE BASE, PG64-22, (449)	AGGREGATE BASE	NON-TRACKING TACK COAT, APPLIED AT 0.06 GAL./S. Y.	STABILIZED CRUSHED AGGREGATE	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (DRIVEWAYS)	7" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	CURB, MISC.: BARRIER CURB REPLACED (IN-KIND)
								SY	SY	FT	CY	CY	CY	GAL	CY	CY	CY	SY	SY	FT
DR1	17	105+08.80	LT	RES.	13.5	22.7	377	2.89	32.93		2.38				3.08			37.00		
DR2	17	107+44.90	RT	COMM.	36.3	46.9	1181		121.23	10	5.18	1.83	2.74	1.97	8.70	0.57	1.26		104.40	
DR3	17	108+42.00	LT	COMM.	26.2	86.7	2281		234.80	29	8.82	18.43	27.65	19.91	5.83	5.76	12.67		69.92	29
DR4	17	108+52.70	RT	COMM.	40.4	54.4	818.5		80.17	3	5.55	2.48	3.72	2.68	4.79	0.78	1.71		57.50	5
DR5	17	109+66.40	LT	RES.	16.6	30.9	418.4	33.26	3.21		3.28				3.33			39.91		
DR6	18	110+40.00	RT	COMM.	42.7	69.2	899.1		99.90			11.10	16.65	11.99		3.47	7.63			
DR7	18	111+57.90	LT	RES.	29.3	36.2	857.8	84.53			3.88				7.30			87.54		
DR8	18	112+52.50	RT	RES.	10.6	22.2	300.8		26.50		2.38		1.32	0.36	1.89	0.21	0.45	22.72		
DR9	18	112+54.70	LT	RES.	21.8	26.4	460.3	43.26			2.88				3.78			45.38		
DR10	18	112+83.00	LT	RES.	9.9	19.9	236.8	20.39			2.13				1.84			22.06		
DR11	18	113+45.00	RT	RES.	16.4	26.5	396.1	35.20			2.87				3.19			38.28		
DR12	20	120+38.00	LT	RES.	8.9	18.8	251.9		24.10		2.01		1.31	0.35	1.51	0.20	0.45	18.07		
DR13	20	121+40.30	RT	RES.	11.4	21.7	251.6	18.20			2.31				1.94			23.33		
DR14	20	121+68.40	LT	RES.	9.4	25.4	346		31.92		2.69		2.62	0.71	1.77	0.41	0.90	21.29		
DR15	20	124+24.70	RT	RES.	9.0	23.6	234.1	18.38			2.47				1.76			21.08		
DR16	21	125+69.70	RT	RES.	10.1	23.0	313.2		29.01		2.43		2.77	0.75	1.46	0.43	0.95	17.48		
DR17	21	127+30.50	RT	RES.	9.5	23.5	193.8		16.18		2.44		1.18	0.32	0.95	0.18	0.41	11.34		
DR18	21	128+68.20	RT	RES.	9.2	25.2	313.3		22.32		2.69		1.37	0.37	1.94	0.21	0.47	23.28		
DR19	21	129+01.10	RT	RES.	9.2	24.6	304		21.83		2.62		1.39	0.37	1.86	0.22	0.48	22.31		
DR20	22	130+13.90	RT	RES.	10.3	23.5	298.4		27.66		2.51		1.53	0.41	1.77	0.24	0.52	21.29		
TOTALS CARRIED TO GENERAL SUMMARY								257	772	42	62	34	65	41	59	13	28	473	232	34



REF NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	625	630	630	630	630	630	630	630
							LIGHT POLE FOUNDATION, 24" X 6' DEEP	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN POST REFLECTOR	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	SIGNING, MISC.: RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY
							EACH	FT	EACH	SF	EACH	EACH	EACH	EACH
S1	46	SPRINGDALE RD	103+88.00	LT	M4-5						1		1	
					M1-1					1				
					M6-3					1				
S2	46	SPRINGDALE RD	104+15.00	LT	M4-5	24"X12"		15		2				
					M1-1	30"X24"				5				
					M6-3	21"X15"				2.19				
S3	47	SPRINGDALE RD	110+63.00	RT	R1-1	30"X30"		13	1	6.25				
S4	47	SPRINGDALE RD	110+65.85	RT	R1-1						1		1	
					CUSTOM					1				
S5	48	SPRINGDALE RD	127+76.00	LT	R9-3	12"X18"		12		1.5				
S6	48	SPRINGDALE RD	127+81.00	LT	D3-1							1	1	
					R1-1						1			
					R7-1						1			
					CUSTOM					1				
S7	48	SPRINGDALE RD	127+86.00	LT	R1-1	30"X30"		14	1	6.25				
S8	48	SPRINGDALE RD	127+87.00	RT	R9-3	12"X18"		12		1.5				
S9	48	SPRINGDALE RD	128+27.00	RT	R9-3	12"X18"		12		1.5				
S10	48	SPRINGDALE RD	128+39.00	LT	R9-3	12"X18"		12		1.5				
S11	49	SPRINGDALE RD	131+35.00	RT	W11-2	30"X30"		15		6.25				
					W16-9P	24"X12"				2				
S12	49	SPRINGDALE RD	132+17.00	RT	W11-2						1		1	
					W16-7PL					1				
S13	49	SPRINGDALE RD	132+36.00	RT			1							1
S14	49	SPRINGDALE RD	132+48.00	LT			1							1
S15	49	SPRINGDALE RD	132+33.00	LT	W11-2			12			1		1	
					W16-7PL					1				
					CUSTOM						1			
S16	49	SPRINGDALE RD	133+85.00	LT	W11-2	30"X30"		15		6.25				
					W16-9P	24"X12"				2				
TOTALS CARRIED TO GENERAL SUMMARY							2	132	2	45	12	2	5	2

REF NO.	SHEET NO.	STATION	642	642	642	642	642	642
			STOP LINE, TYPE 1	CROSSWALK LINE, 12", TYPE 1	CROSSWALK LINE, 24", TYPE 1	LANE ARROW, TYPE 1	REMOVAL OF PAVEMENT MARKING	REMOVAL OF PAVEMENT MARKING
			FT	FT	FT	EACH	FT	EACH
TW1	46	102+86.00			80			
TW2	47	116+76.00			60			
TW3	47	117+22.00			70			
XW1	48	128+06.00		82			61	
SL1	48	128+01.00	22					
LA1	48	127+95.38				1		1
LA2	48	128+06.42				1		1
TOTALS CARRIED TO GENERAL SUMMARY			22	82	210	2	61	2





REF NO.	SHEET NO.	STATION TO STATION			SIDE	202	SPECIAL	509	611	611	638	638	638	638	638	638	638	638	638	SPECIAL	
						PIPE REMOVED, 24" AND UNDER	PIPE CLEANOUT, 24" AND UNDER	CONCRETE REINFORCEMENT, MISC.: REINFORCING STEEL (PER GCWW PLANS)	12" CONDUIT, TYPE D	CATCH BASIN ADJUSTED TO GRADE	WATER WORK, MISC.: REMOVING FIRE HYDRANT (PER GCWW PLANS)	WATER WORK, MISC.: REMOVING EXISTING VALVE BOX (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND INSTALLING FIRE HYDRANT (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND INSTALLING FIRE HYDRANT EXTENSION, 6" LONG (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND INSTALLING VALVE BOX COMPLETE (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND INSTALLING CURB AND ROADWAY BOX (PER GCWW PLANS)	WATER WORK, MISC.: RESETTING EXISTING CURB AND ROADWAY BOX (PER GCWW PLANS)	MISC.: RESETTING EXISTING VALVE BOXES COMPLETE (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND LAYING 6" DUCTILE IRON PIPE AND FITTINGS (PER GCWW PLANS)	WATER WORK, MISC.: FURNISHING AND LAYING 8" DUCTILIE IRON PIPE AND FITTINGS (PER GCWW PLANS)	CONCRETE, CLASS "C" (PER GCWW PLANS)
						FT	FT	LB	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	CY	
D1	17-18	109+99.31	TO	111+00.00	RT	88			101												
D2	18	114+47.65	TO	114+67.07	RT		20														
D3	20	121+25.87	TO	121+56.00	RT	24			28												
D4	20	121+58.03	TO	121+84.53	LT	22			28												
D5	21	127+69.62			LT					1											
WW1	16	104+32.39			LT			30			1	1	1	1	1			8	15	1	
WW2	17	107+57.72			RT										1						
WW3	17	108+81.56			LT											1					
WW4	17	109+72.58			LT																
WW5	18	110+81.57			LT											1					
WW6	18	112+00.00			LT												1				
WW7	18	113+21.38			LT												1				
WW8	20	124+03.29			RT												1				
WW9	21	125+31.86			LT												1				
WW10	21	125+89.49			RT												1				
WW11	21	127+09.16			RT												1				
WW12	21	128+21.32			RT												1				
TOTALS CARRIED TO GENERAL SUMMARY						134	20	30	157	1	1	1	1	1	1	9	1	1	8	15	1

SHEET NO.	LOCATION	SIDE	632	632	632	632	633		
			ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN (GENERIC) (ALTERNATE#1)	ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN (POLARA) (ALTERNATE#2)	COVERING OF PEDESTRIAN SIGNAL HEAD	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM, PEDESTRIAN PUSHBUTTON	CONTROLLER ITEM, MISC.: REPROGRAM CABINET		
52	Ex. SP-3 (102+97.53, 23.62' LT)	LT	1	1	1	1			
52	Ex. SP-4 (102+79.61, 33.08' RT)	RT	1	1	1	1	1		
TOTALS CARRIED TO GENERAL SUMMARY			2	2	2	2	1		

SUBSUMMARY - DRAINAGE, WATERWORKS, & TRAFFIC SIGNAL

PROJECT DATA:

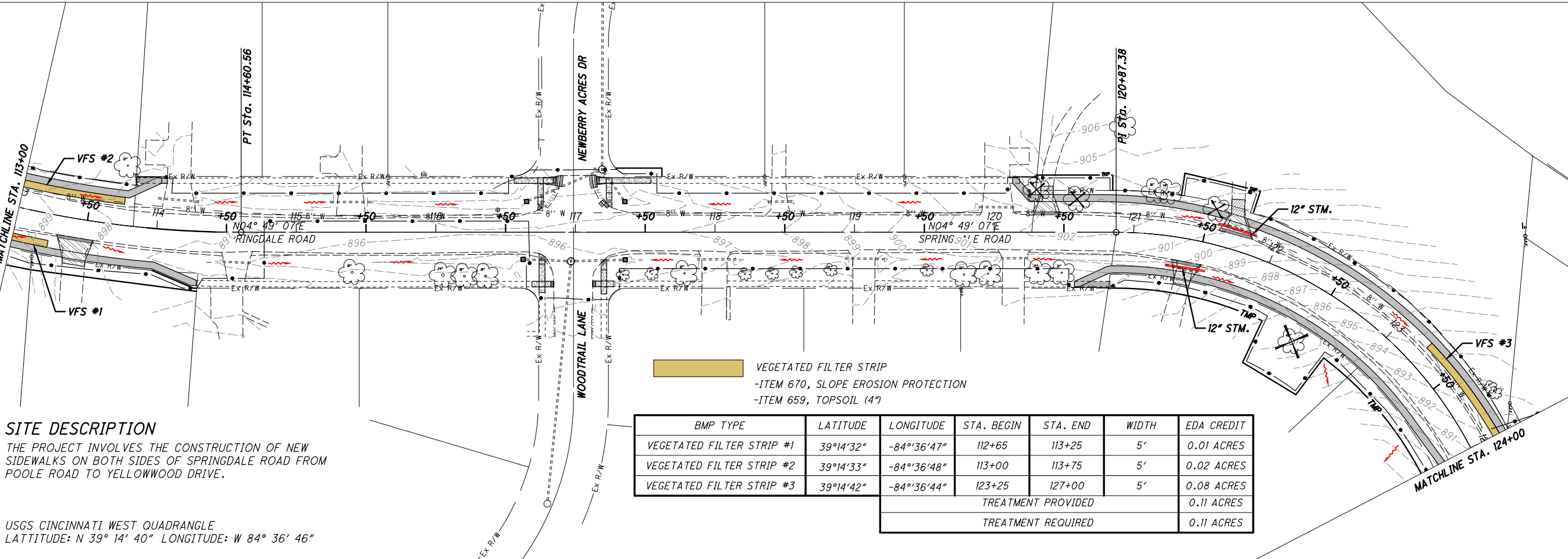
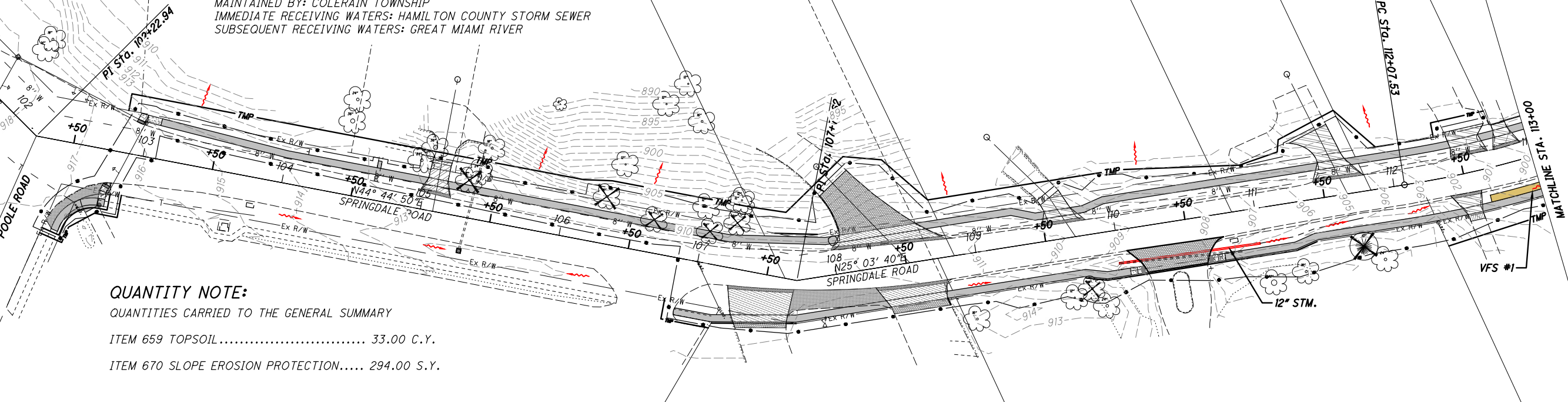
PROJECT AREA = 1.20 ACRES  
PROJECT EARTH DISTURBED AREA = 1.20 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.1 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA = 1.30 ACRES  
IMPERVIOUS AREA FOR PRE-CONSTRUCTION SITE = 0.00 ACRES  
IMPERVIOUS AREA FOR POST-CONSTRUCTION SITE = 0.91 ACRES  
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE = 0.5  
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE = 0.5  
POST CONSTRUCTION BMP: VEGETATED FILTER STRIP  
MAINTAINED BY: COLERAIN TOWNSHIP  
IMMEDIATE RECEIVING WATERS: HAMILTON COUNTY STORM SEWER  
SUBSEQUENT RECEIVING WATERS: GREAT MIAMI RIVER

QUANTITY NOTE:

QUANTITIES CARRIED TO THE GENERAL SUMMARY

ITEM 659 TOPSOIL..... 33.00 C.Y.

ITEM 670 SLOPE EROSION PROTECTION..... 294.00 S.Y.



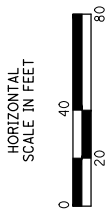
SITE DESCRIPTION

THE PROJECT INVOLVES THE CONSTRUCTION OF NEW SIDEWALKS ON BOTH SIDES OF SPRINGDALE ROAD FROM POOLE ROAD TO YELLOWWOOD DRIVE.

USGS CINCINNATI WEST QUADRANGLE  
LATITUDE: N 39° 14' 40" LONGITUDE: W 84° 36' 46"

VEGETATED FILTER STRIP  
-ITEM 670, SLOPE EROSION PROTECTION  
-ITEM 659, TOPSOIL (4")

BMP TYPE	LATITUDE	LONGITUDE	STA. BEGIN	STA. END	WIDTH	EDA CREDIT
VEGETATED FILTER STRIP #1	39°14'32"	-84°36'47"	112+65	113+25	5'	0.01 ACRES
VEGETATED FILTER STRIP #2	39°14'33"	-84°36'48"	113+00	113+75	5'	0.02 ACRES
VEGETATED FILTER STRIP #3	39°14'42"	-84°36'44"	123+25	127+00	5'	0.08 ACRES
TREATMENT PROVIDED						0.11 ACRES
TREATMENT REQUIRED						0.11 ACRES



PROJECT SITE PLAN  
STA. 102+00 to STA. 124+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

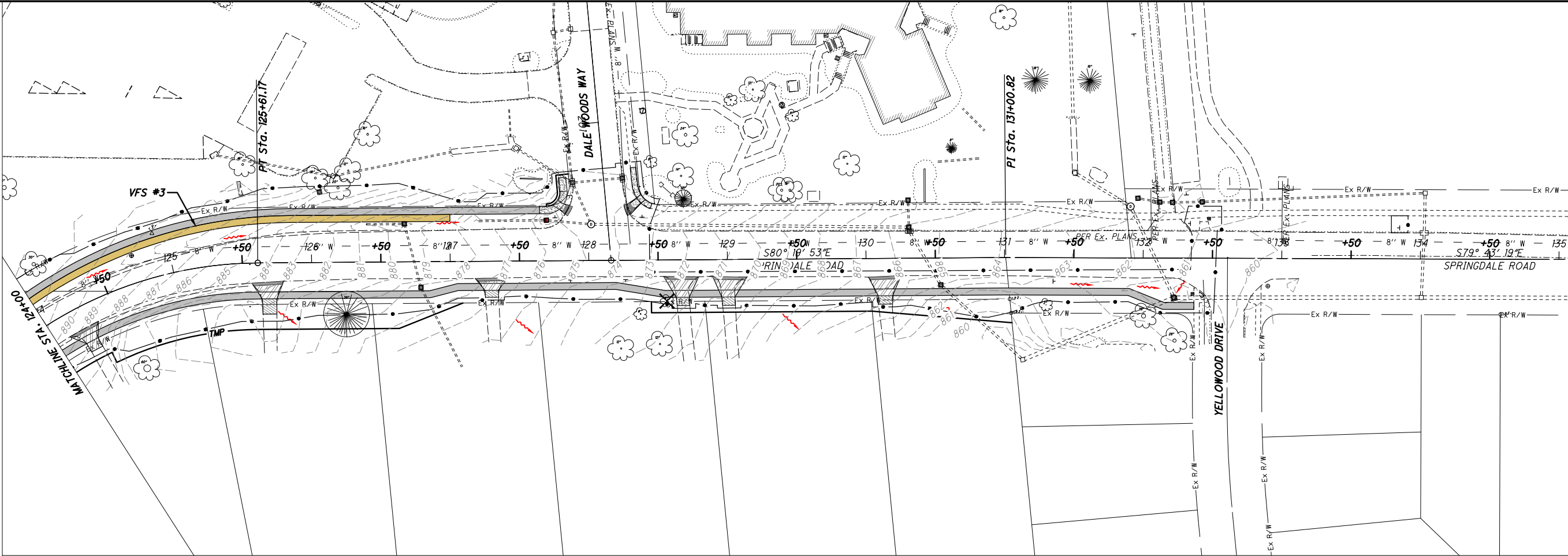
SHEET

P.14

TOTAL

53





- VEGETATED FILTER STRIP
- ITEM 670, SLOPE EROSION PROTECTION
- ITEM 659, TOPSOIL (4")

BMP TYPE	LATITUDE	LONGITUDE	STA. BEGIN	STA. END	WIDTH	EDA CREDIT
VEGETATED FILTER STRIP #1	39°14'32"	-84°36'47"	112+65	113+25	5'	0.01 ACRES
VEGETATED FILTER STRIP #2	39°14'33"	-84°36'48"	113+00	113+75	5'	0.02 ACRES
VEGETATED FILTER STRIP #3	39°14'42"	-84°36'44"	123+25	127+00	5'	0.08 ACRES
TREATMENT PROVIDED						0.11 ACRES
TREATMENT REQUIRED						0.11 ACRES

SITE DESCRIPTION

THE PROJECT INVOLVES THE CONSTRUCTION OF NEW SIDEWALKS ON BOTH SIDES OF SPRINGDALE ROAD FROM POOLE ROAD TO YELLOWWOOD DRIVE.

USGS CINCINNATI WEST QUADRANGLE  
LATITUDE: N 39° 14' 40" LONGITUDE: W 84° 36' 46"



PROJECT SITE PLAN  
STA. 124+00 to STA. 135+00



DESIGN AGENCY	CHOICE ONE ENGINEERING
DESIGNER	IJW
REVIEWER	BAW 7-23-2025
PROJECT ID	120861
SHEET	TOTAL
P.15	53

HATCH LEGEND (ALL PLAN SHEETS)

	FULL DEPTH PAVEMENT REPAIR
	RESIDENTIAL ASPHALT DRIVE
	COMMERCIAL ASPHALT DRIVE
	RESIDENTIAL CONCRETE DRIVE
	COMMERCIAL CONCRETE DRIVE
	REMOVED AND RE-SEED
	CURB RAMP
	SIDEWALK

ABBREVIATION LEGEND (ALL PLAN SHEETS)

(ATG) - ADJUST TO GRADE
(DND) - NO NOT DISTURB
(R&R) - REMOVE AND REPLACE
(TBR) - TO BE REMOVED
(TBRLBO) - TO BE RELOCATED BY OTHERS

SYMBOLS LEGEND (ALL PLAN SHEETS)

	CATCHBASIN (ATG)
	WATER SERVICE VALVE (ATG)
	TREE REMOVAL
	CONST. LIMITS

NOTE: ALL EXISTING MAILBOXES TO BE REMOVED AND REPLACED FOLLOWING AS PER PLAN NOTE ON SHEET 5

add the gold hatching for the

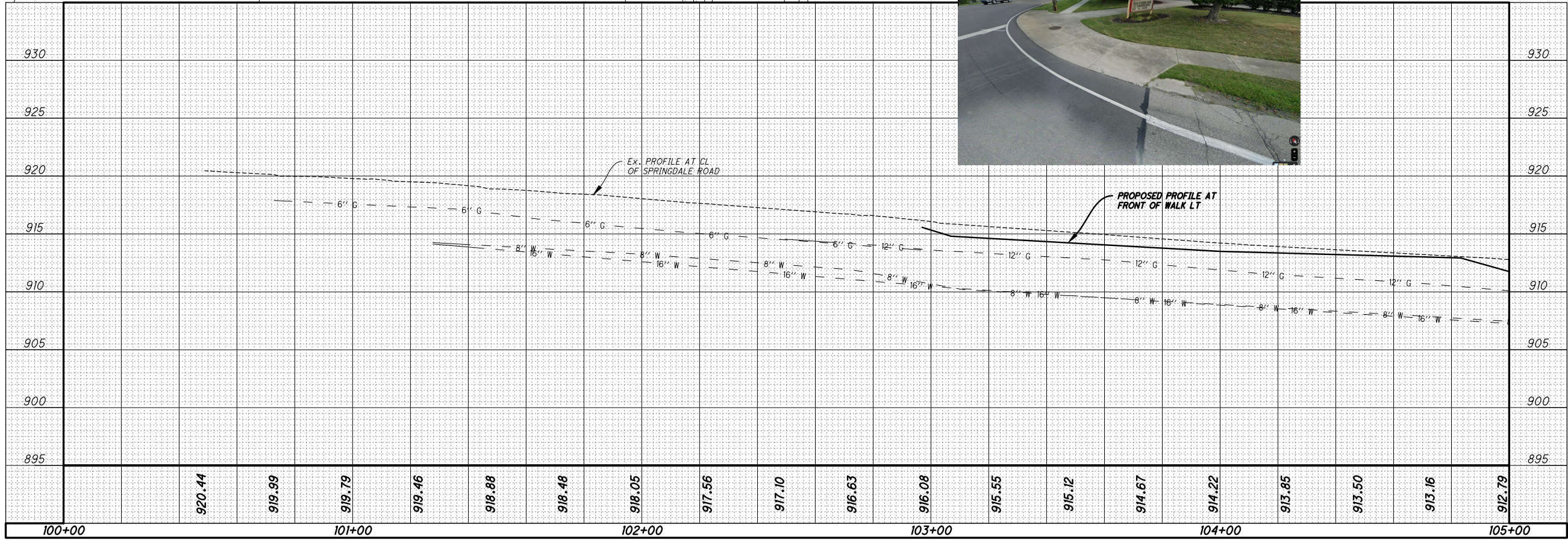
BENCHMARK #4 ELEV. 916.62  
MAG NAIL IN THE POWER POLE AT  
THE NE CORNER OF SPRINGDALE  
RD. & POOLE RD. @ STA. 102+98  
LT.

BEGIN PROJECT:  
STA. 102+32.56

FAN: E240 (711)

BEGIN WORK:  
STA. 102+45.31

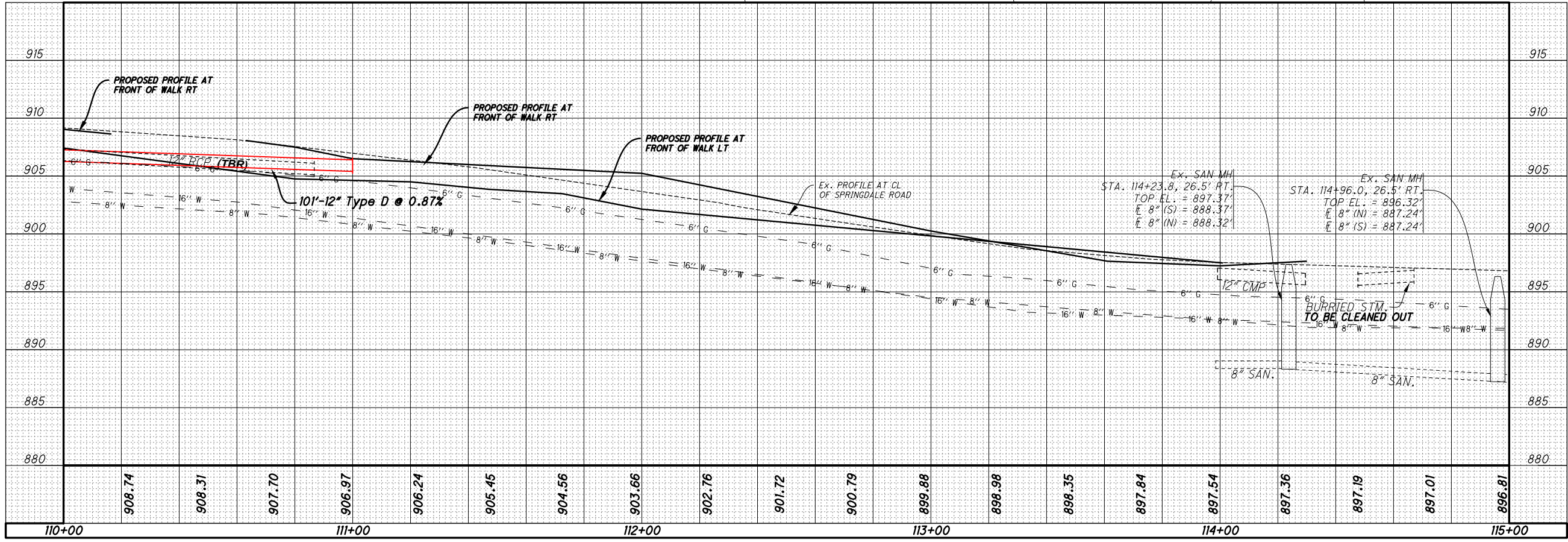
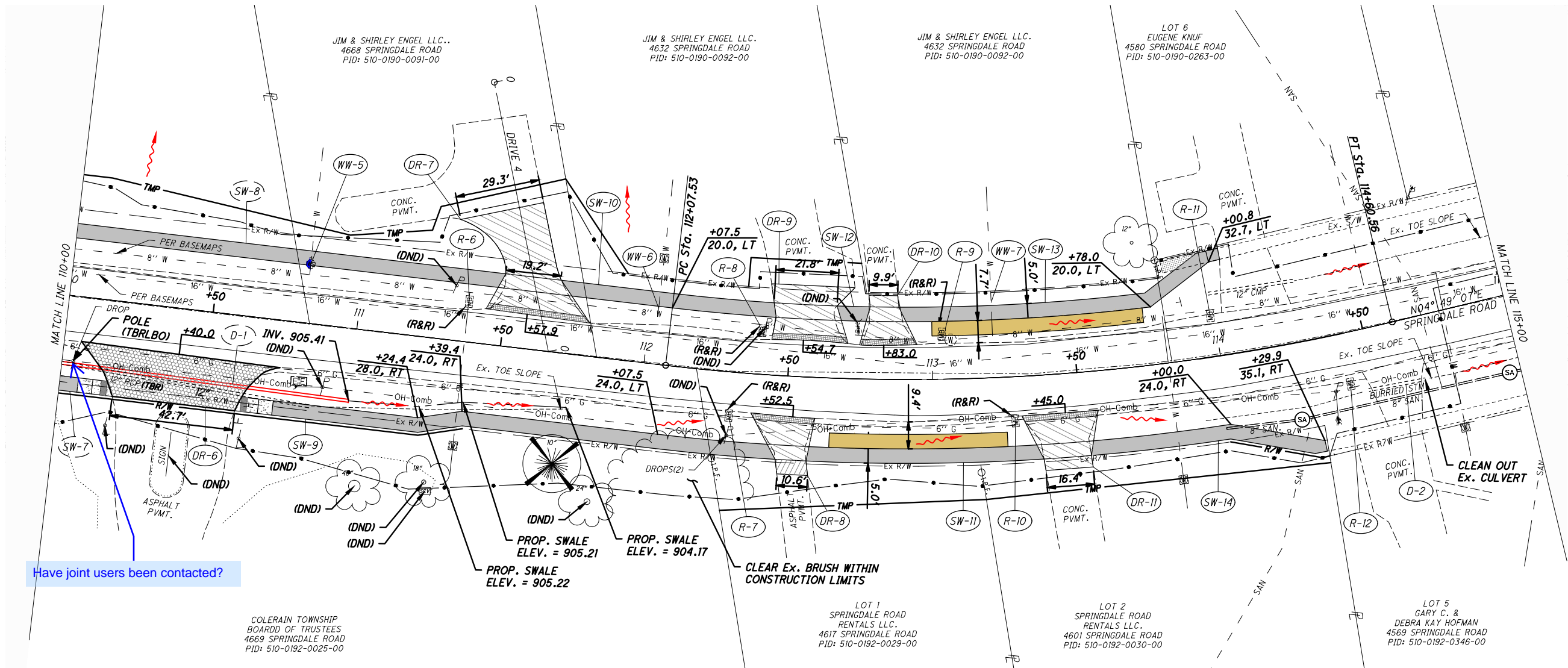
This proposed grass area will  
become damaged and rutted by  
turning vehicles. Consider  
installing curb around the radius.  
Would have to add some  
pavement repair quantity as well.



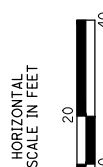
PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 100+00 to STA. 105+00







PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 110+00 to STA. 115+00



DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

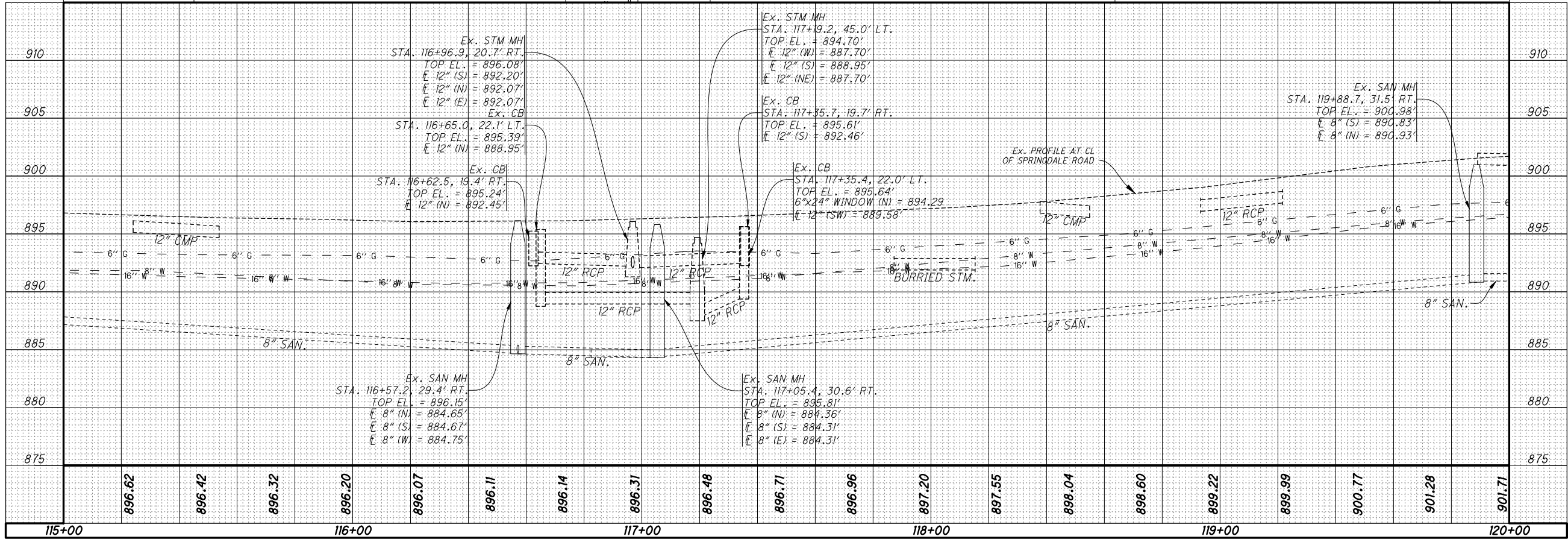
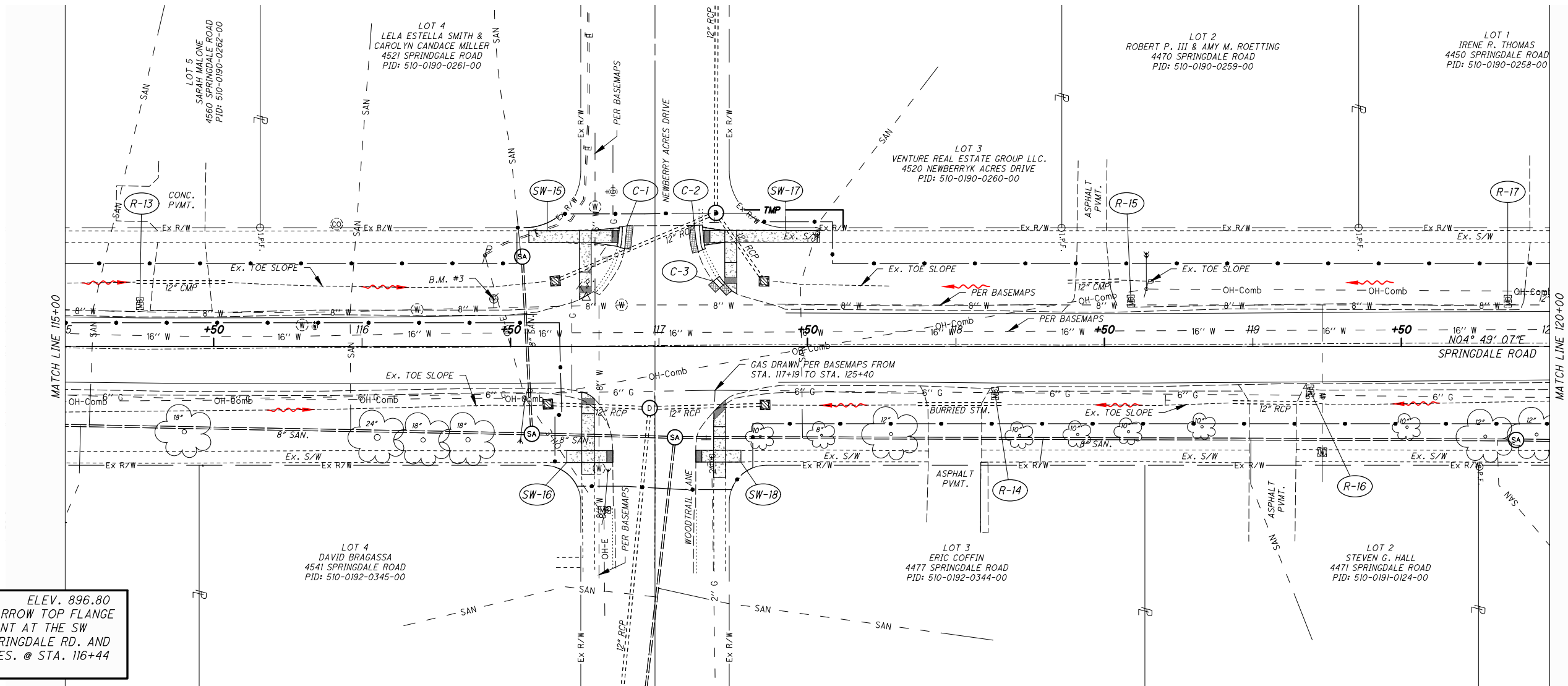
120861

SHEET TOTAL

P.18 53

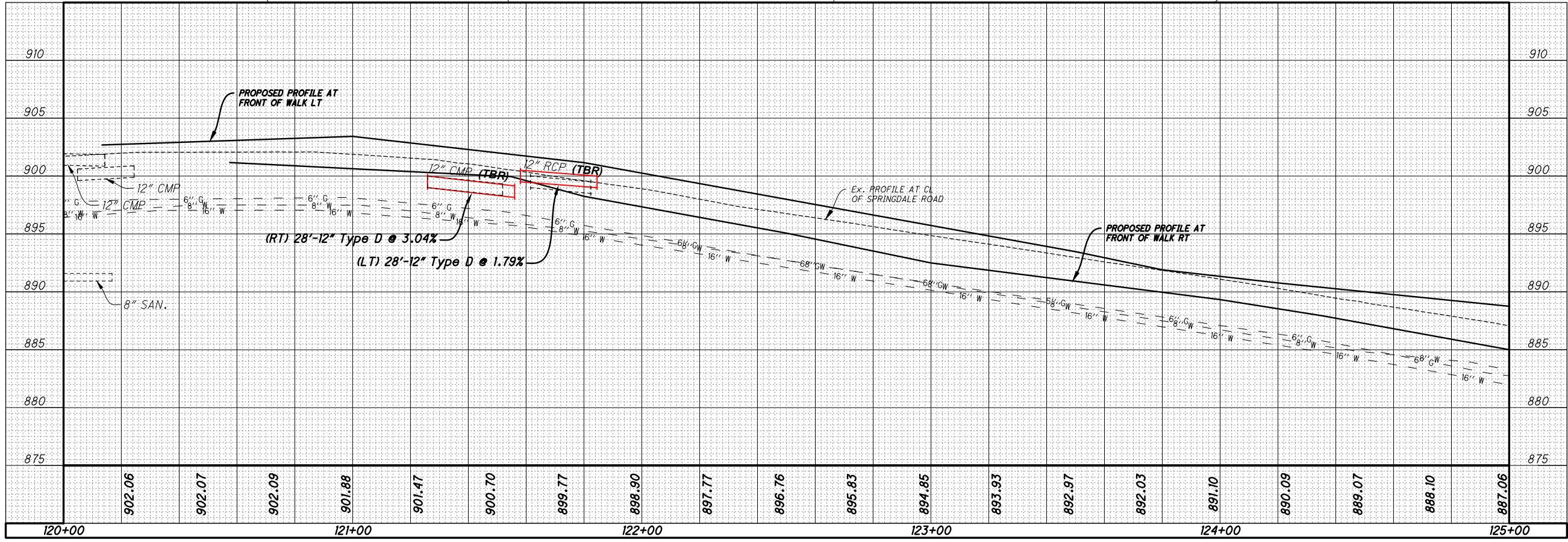
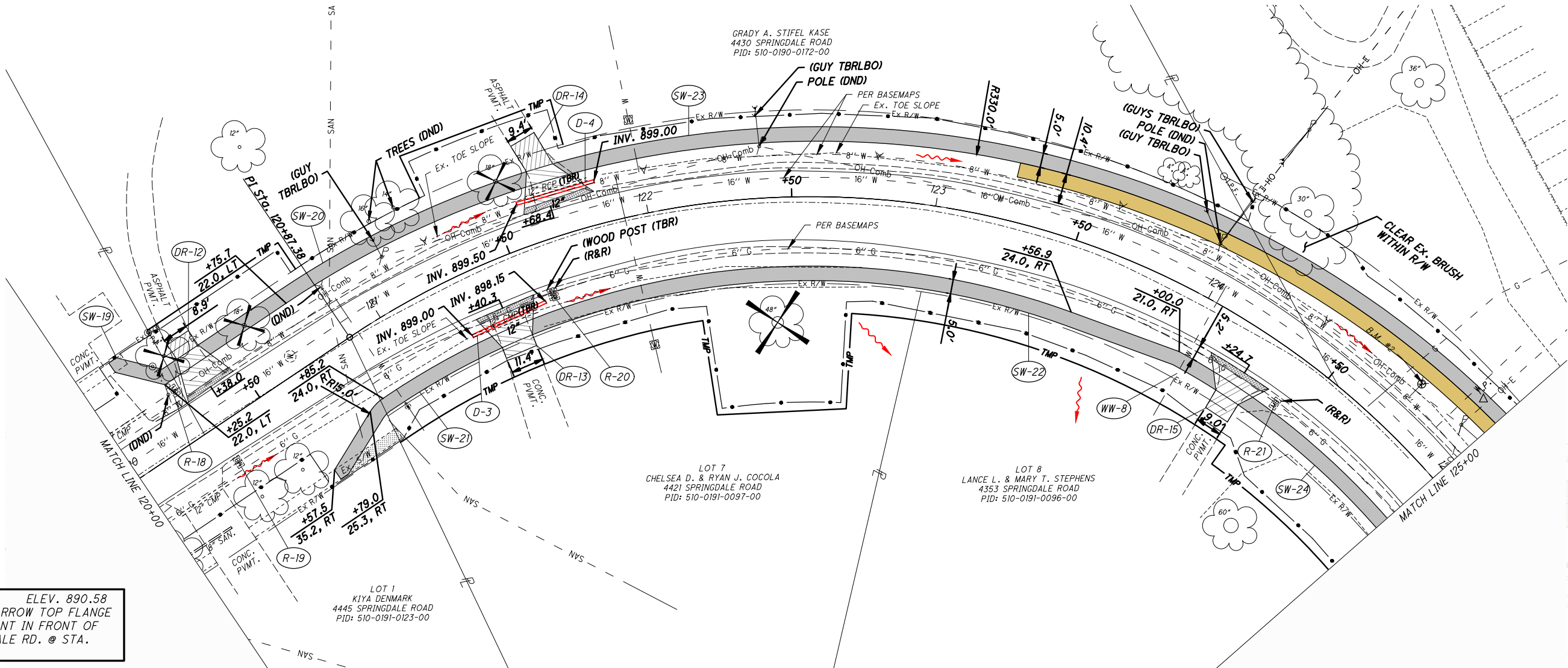


BENCHMARK #3 ELEV. 896.80  
BOLT AT TIP ARROW TOP FLANGE  
OF FIRE HYDRANT AT THE SW  
CORNER OF SPRINGDALE RD. AND  
NEWBERRY ACRES. @ STA. 116+44  
LT.



PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 115+00 to STA. 120+00

BENCHMARK #2 ELEV. 890.58  
BOLT AT TIP ARROW TOP FLANGE  
OF FIRE HYDRANT IN FRONT OF  
4300 SPRINGDALE RD. @ STA.  
124+75 LT.



PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 120+00 to STA. 125+00

HORIZONTAL SCALE IN FEET

0 10 20 40

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

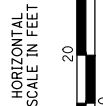
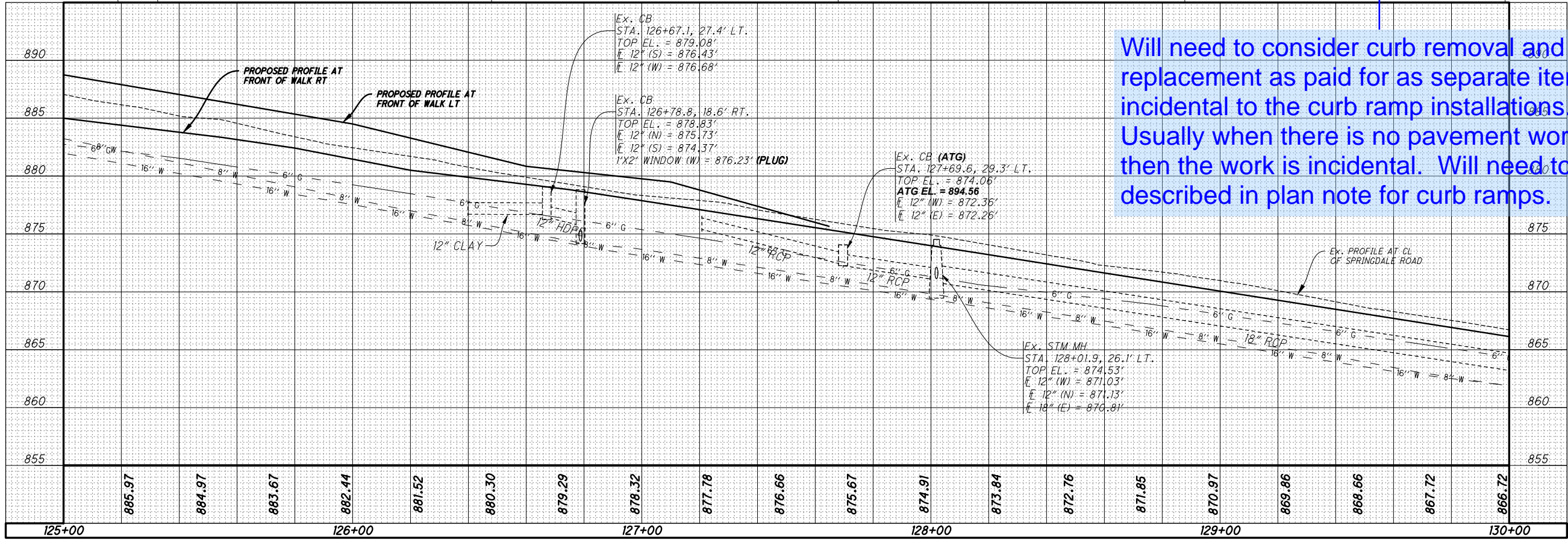
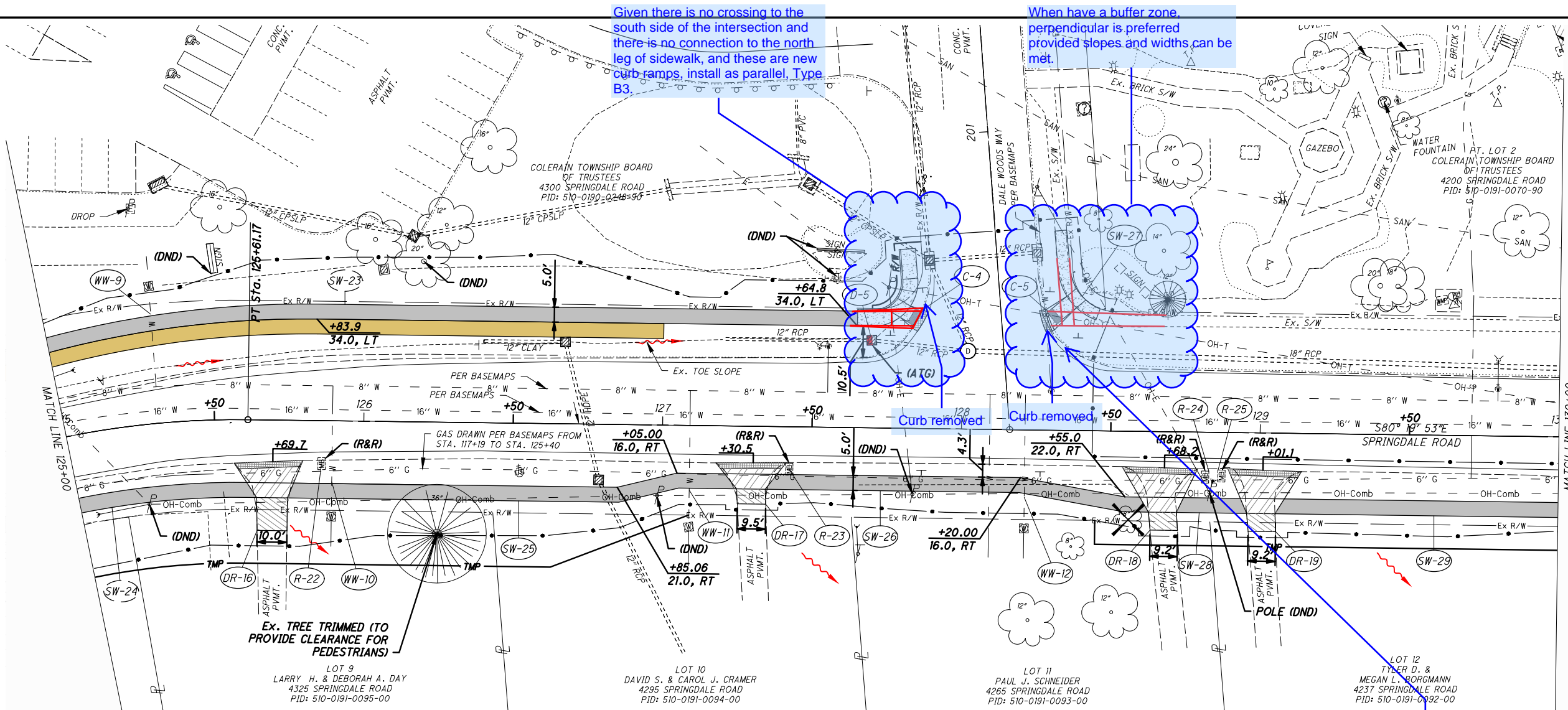
PROJECT ID

120861

SHEET TOTAL

P.20 53





PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 125+00 to STA. 130+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

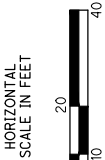
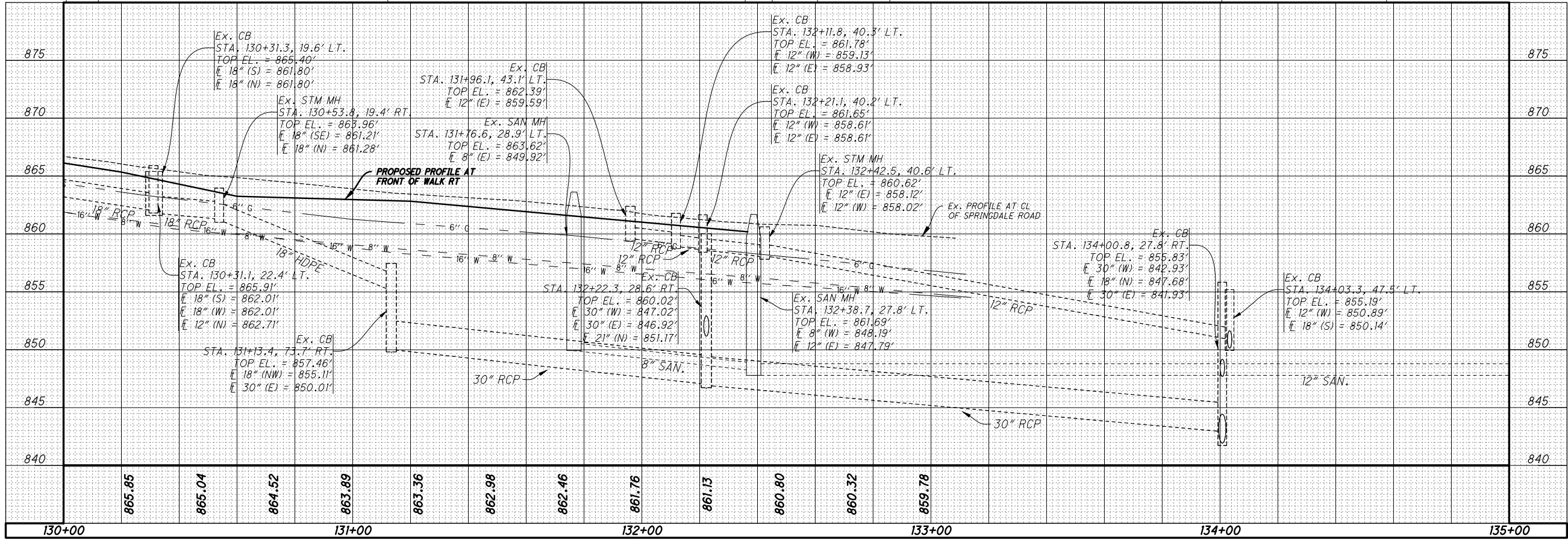
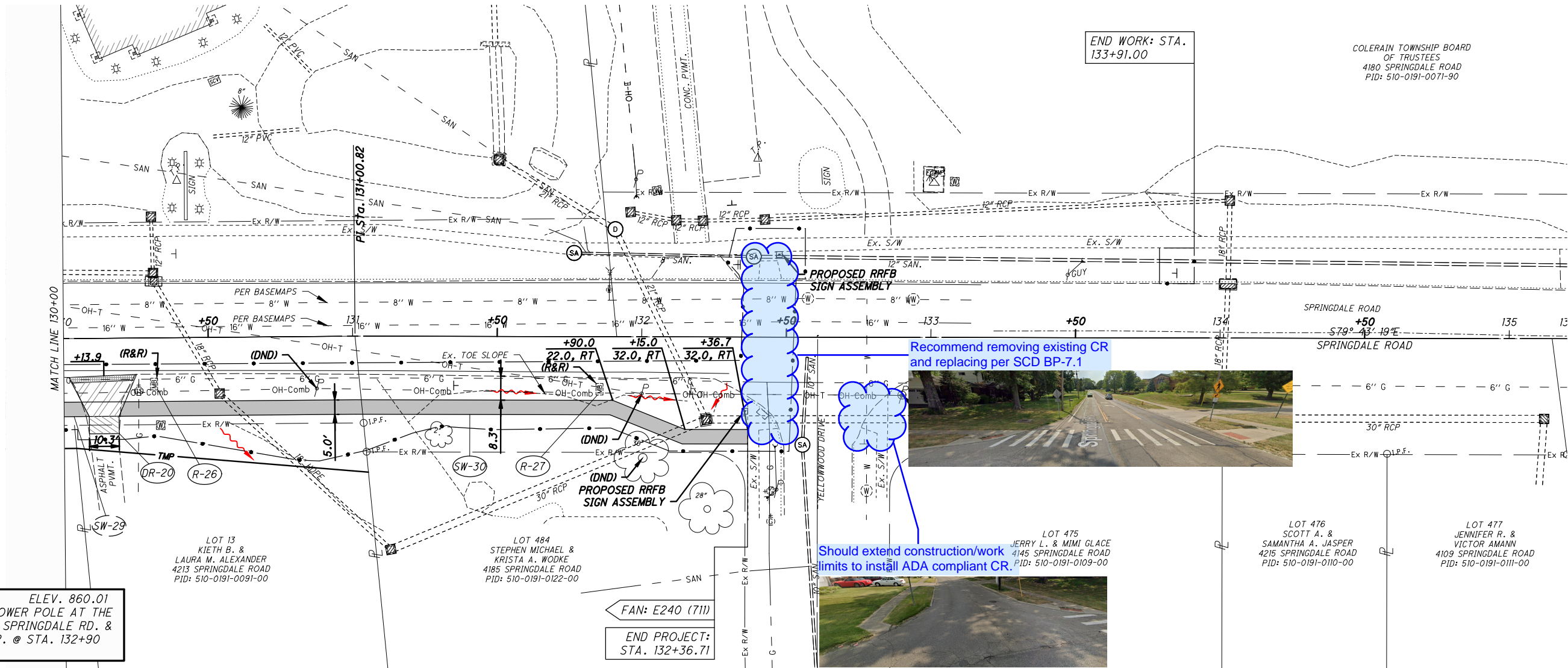
PROJECT ID

120861

SHEET TOTAL

P.21 53

BENCHMARK #1  
ELEV. 860.01  
MAG NAIL IN POWER POLE AT THE  
SE CORNER OF SPRINGDALE RD. &  
YELLOWWOOD DR. @ STA. 132+90  
RT.



PLAN AND PROFILE - SPRINGDALE ROAD  
STA. 130+00 to STA. 135+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

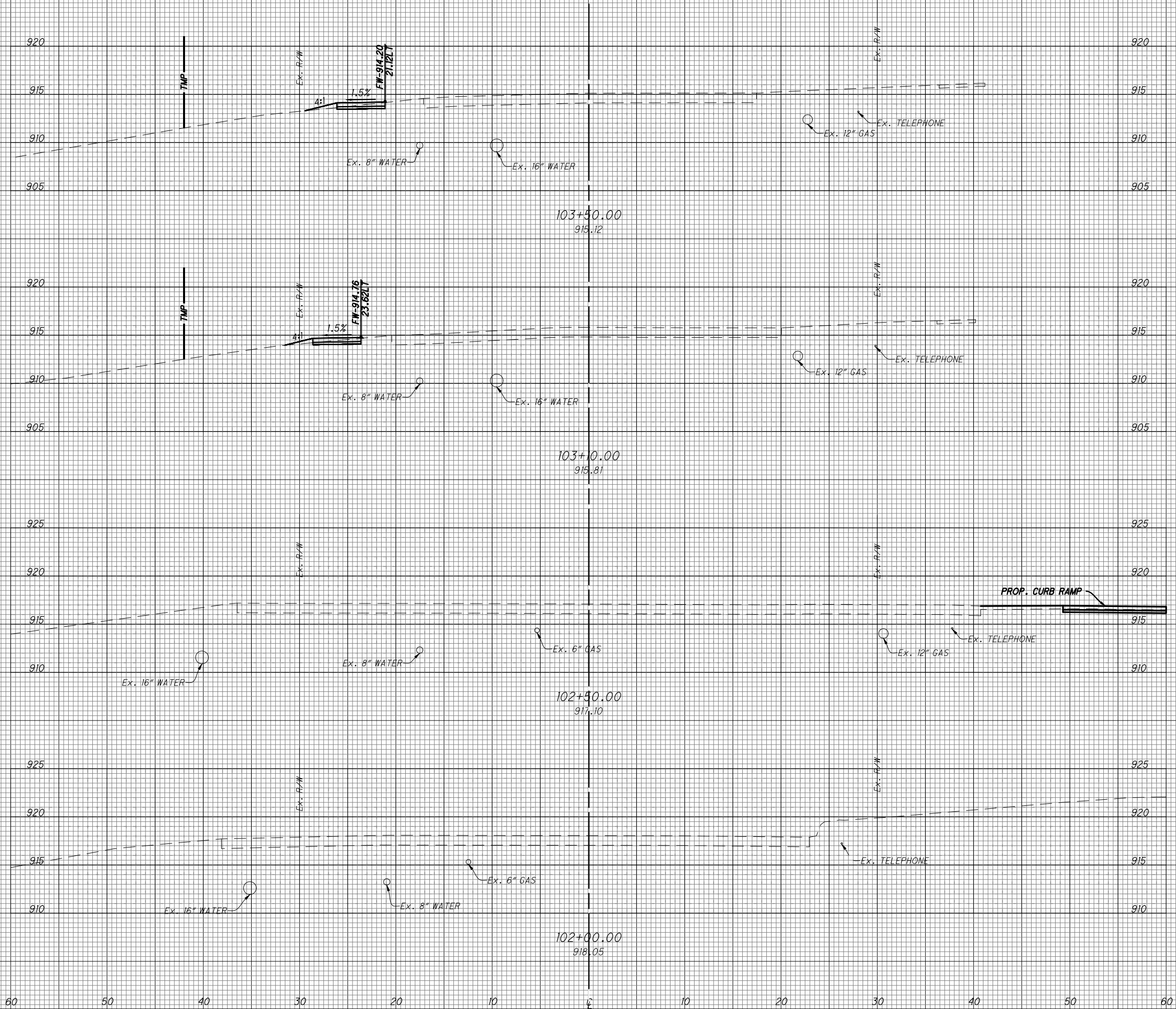
SHEET TOTAL

P.22 53



SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.2	0.8	1.8	1.1
1.2	0.7	1.3	0.8
0	0	0	0
0	0	0	0
2.4	1.5	3.1	1.9

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 102+00 TO STA. 103+50

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

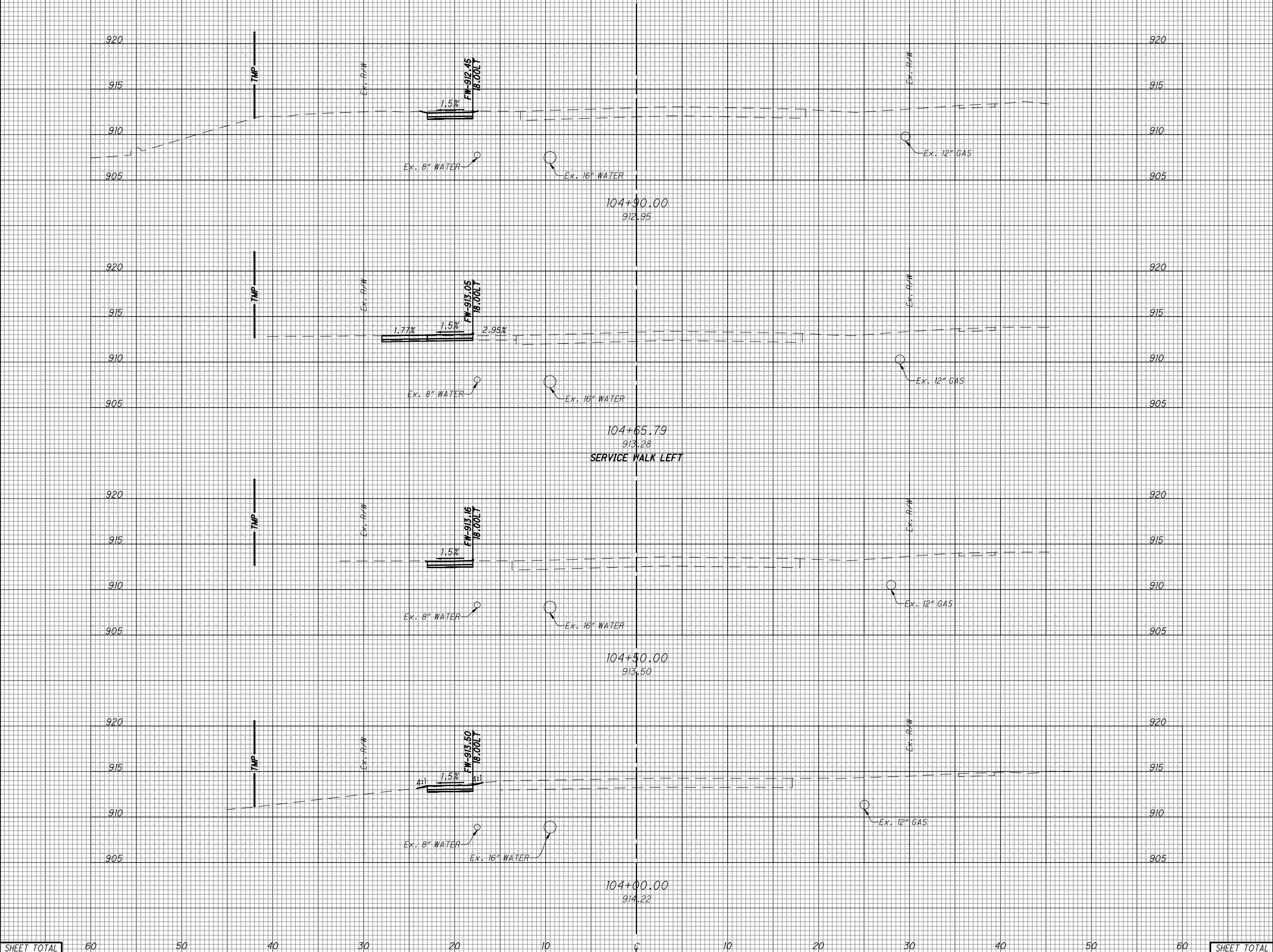
SHEET

P.23

TOTAL

53

SEEDING END WIDTH	SO. YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES									



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.4	0	1.0	0.2
0.8	0.4	0.6	0.1
1.3	0	2.5	0.1
1.4	0.1	2.4	0.1
4.9	0.5	6.5	0.5

**CROSS SECTIONS - SPRINGDALE ROAD**  
**STA. 104+00 TO STA. 104+90**

DESIGN AGENCY  
  
CHOICE ONE ENGINEERING

DESIGNER  
IJW

REVIEWER  
BAW 7-23-2025

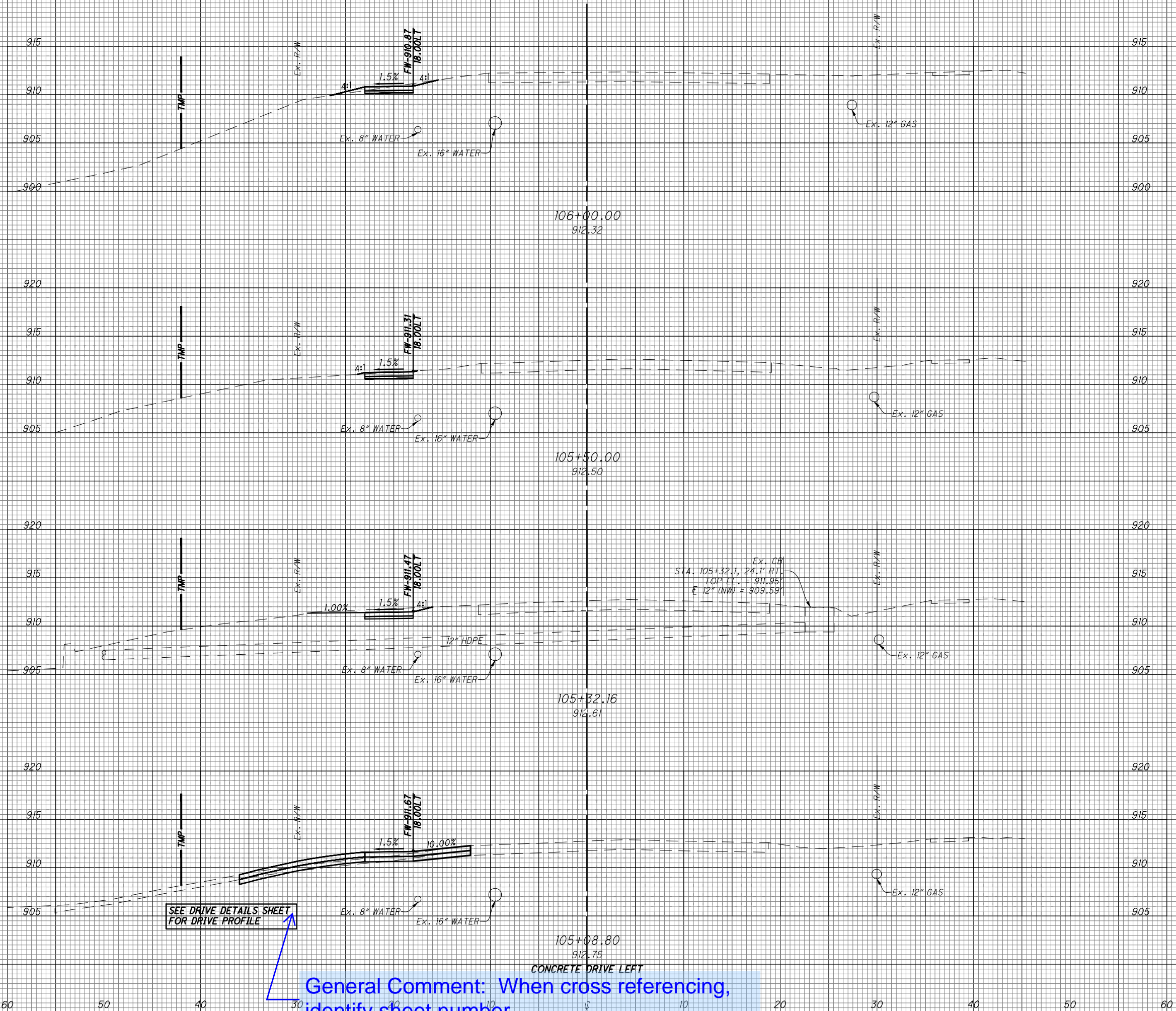
PROJECT ID  
120861

SHEET	TOTAL
P.24	53



SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.4	0.4	2.5	0.5
1.3	0.1	1.3	0
2.7	0	4.5	0
7.6	0	3.1	0
13.0	0.5	11.4	0.5

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 105+08.80 TO STA. 106+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

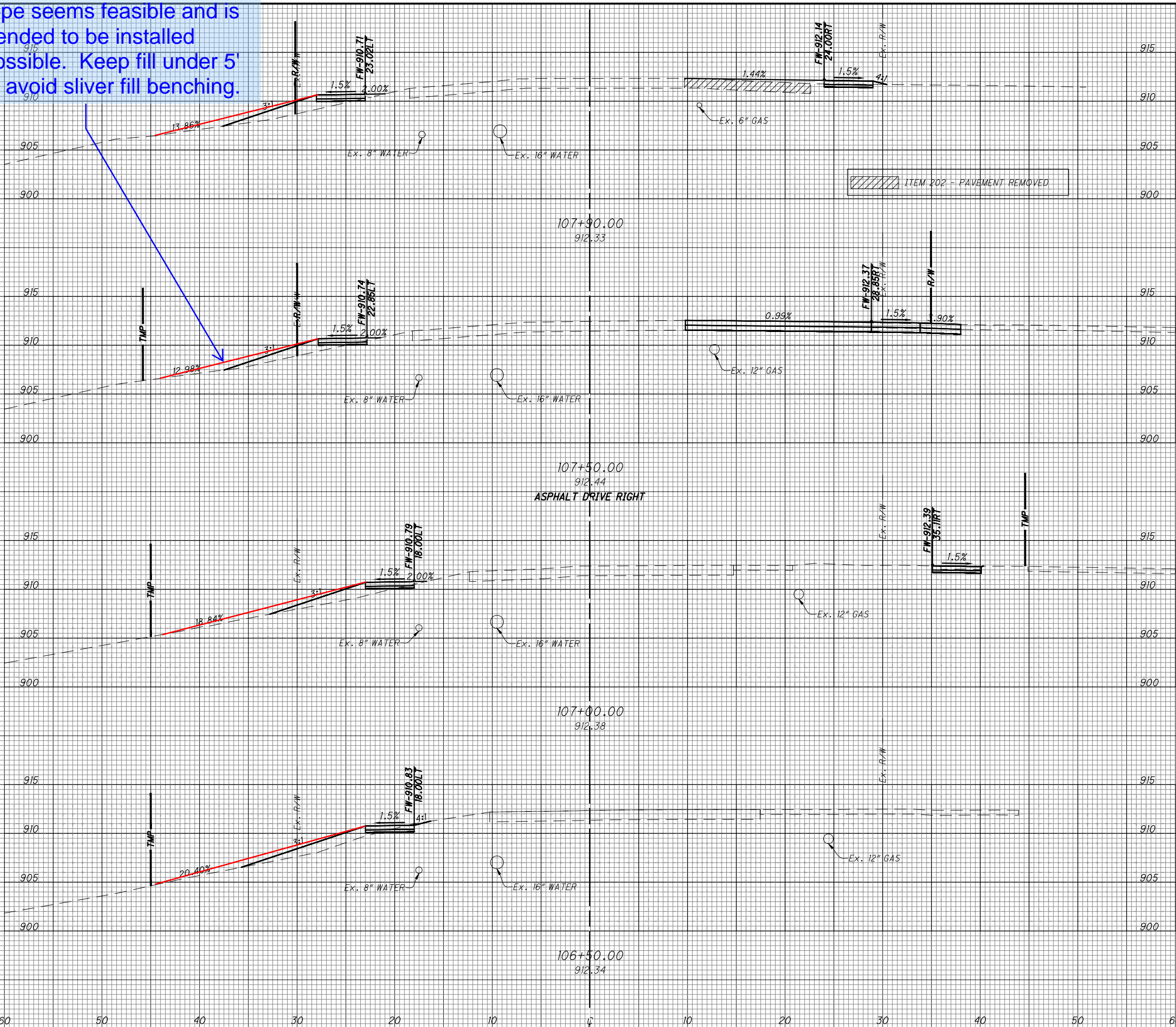
SHEET TOTAL

P.25 53

General Comment: When cross referencing,  
identify sheet number.

SEEDING		SO.		GENERAL NOTES	
END	SO.	WIDTH	YDS.		

A 4:1 slope seems feasible and is recommended to be installed where possible. Keep fill under 5' high and avoid sliver fill benching.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.4	24.1	14.8	23.9
18.6	8.2	18.7	15.3
1.6	8.3	2.3	16.7
0.9	9.7	2.1	9.4
SHEET TOTAL	22.5	50.3	37.9

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 106+50 TO STA. 107+90

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

SHEET

P.26

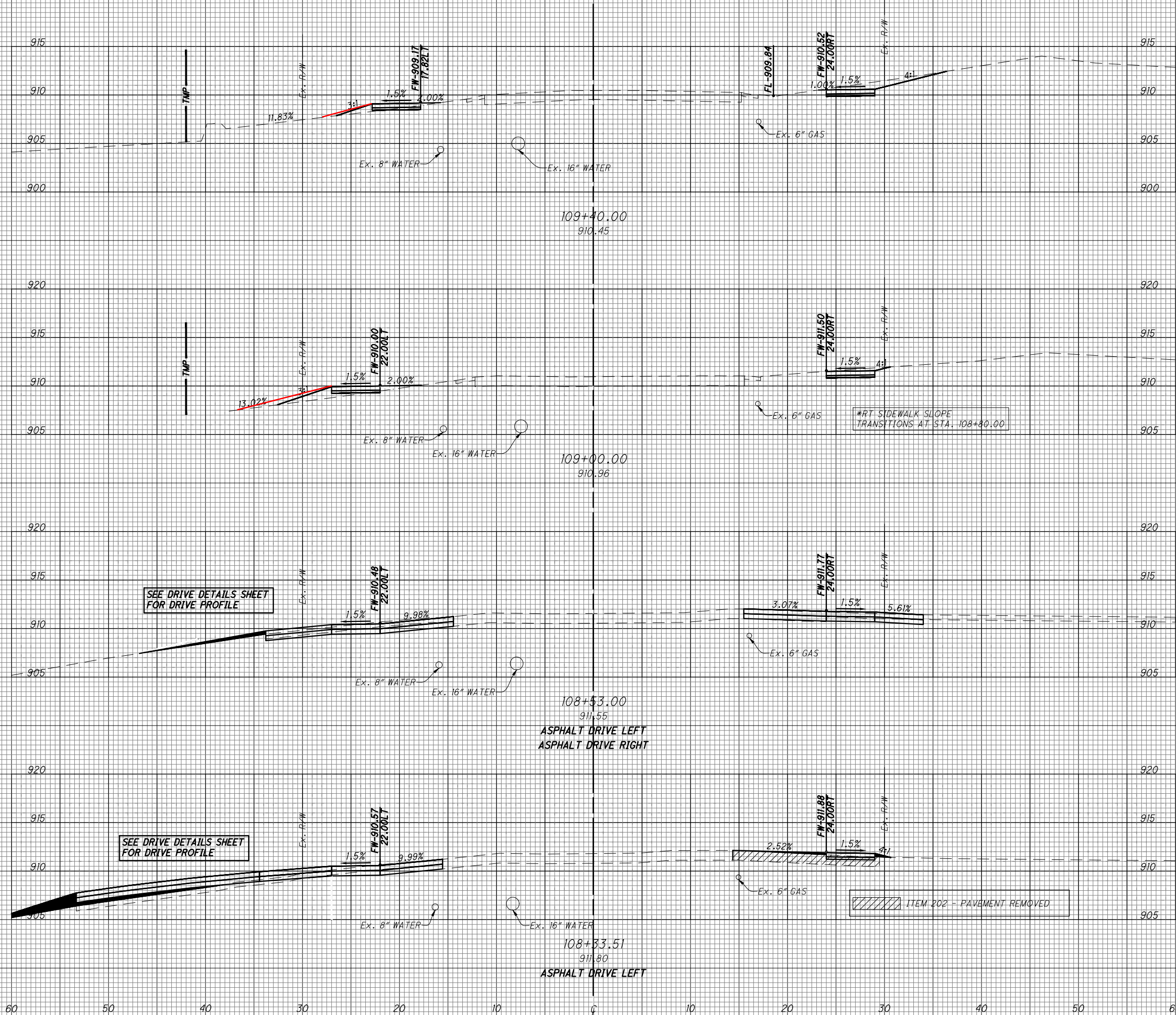
TOTAL

53



SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
4.7	1.8	4.7	5.0
1.6	5.0	21.1	6.4
22.6	2.3	11.0	11.9
7.8	30.7	7.4	44.1
SHEET TOTAL		36.7	39.8
		6.9	67.4

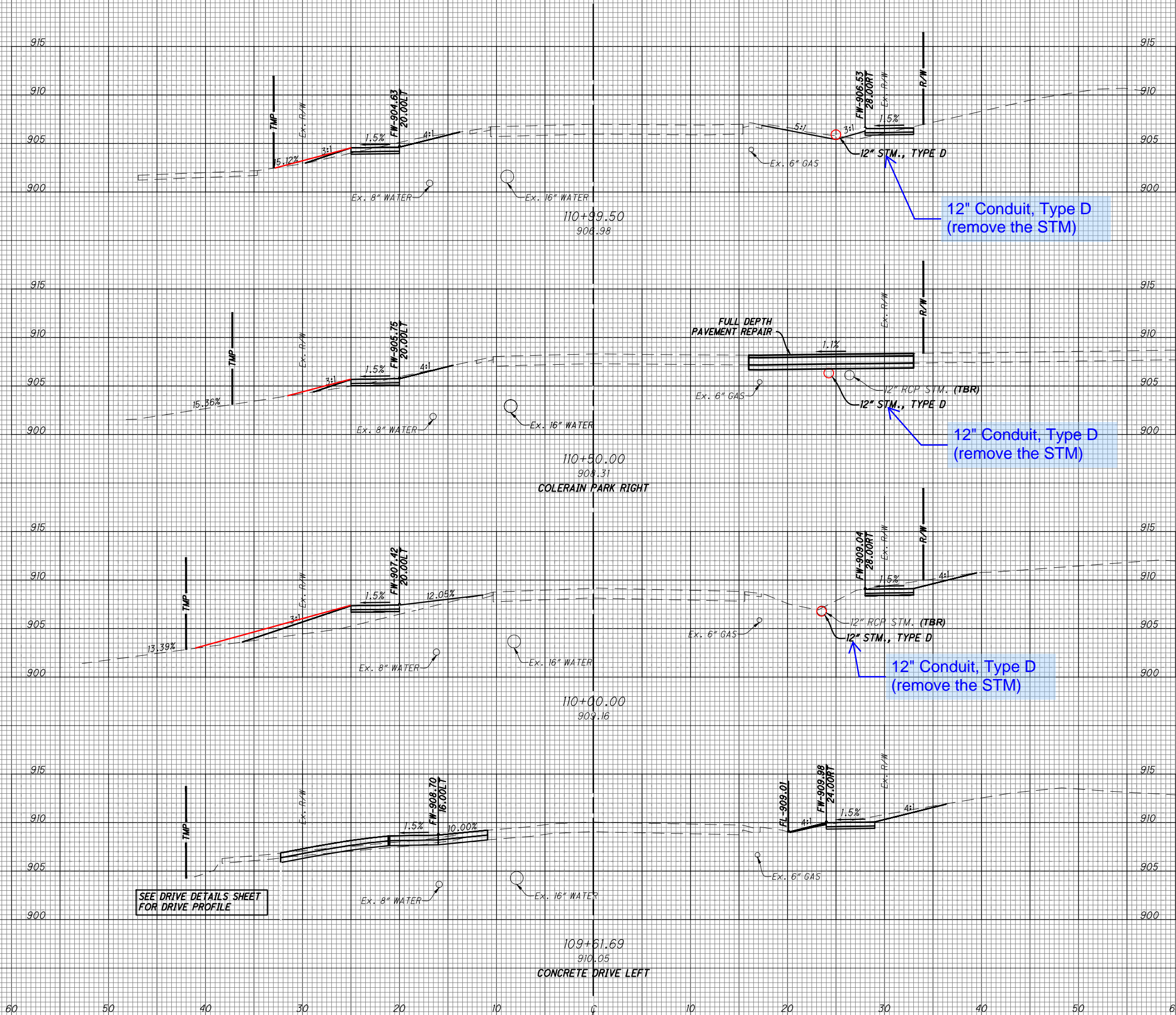
CROSS SECTIONS - SPRINGDALE ROAD  
STA. 108+33.51 TO STA. 109+40



DESIGN AGENCY  
CHOICE ONE ENGINEERING  
DESIGNER  
IJW  
REVIEWER  
BAW 7-23-2025  
PROJECT ID  
120861  
SHEET TOTAL  
P.27 53

SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
5.9	2.4	25.1	1.3
21.5	1.4	23.1	20.9
3.5	21.2	9.5	15.5
9.9	0.6	5.9	1.0
40.8	25.6	63.6	38.3

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 109+61.69 TO STA. 110+99.50

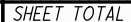


DESIGN AGENCY  
CHOICE ONE ENGINEERING  
DESIGNER  
IJW  
REVIEWER  
BAW 7-23-2025  
PROJECT ID  
120861  
SHEET TOTAL  
P.28 53



Z:\project\Hamilton\ColerainTownship\HAM-COL-2301SpringdaleRoadSidewalkPhase2\120861\_XS001.dwg 17-Jul-25 1:53 PM

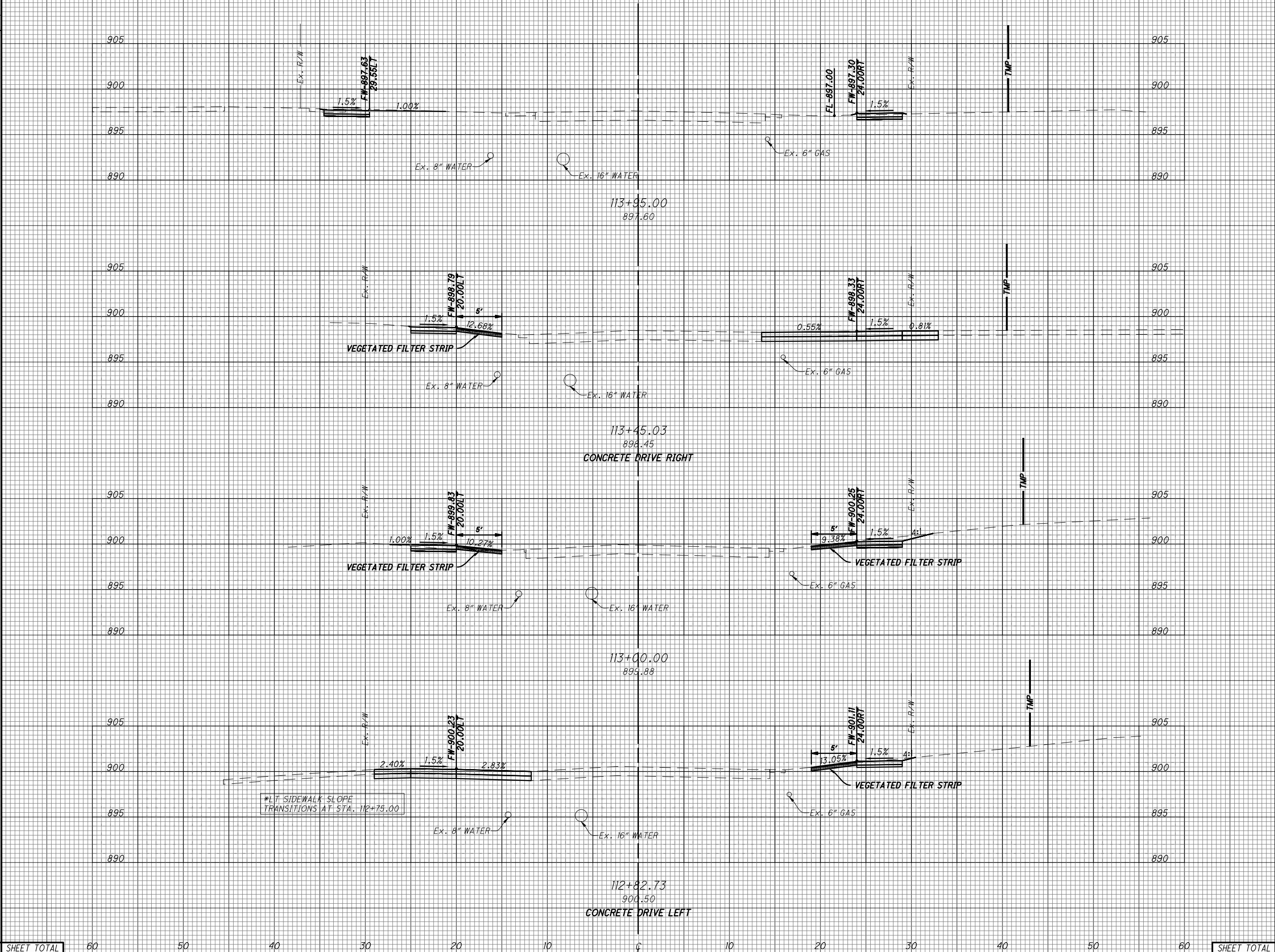
SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



<h1 style="margin: 0;">CROSS SECTIONS - SPRINGDALE ROAD</h1> <h2 style="margin: 0;">STA. 111+25 TO STA. 112+55</h2>	
<div style="display: flex; align-items: center;"> <div> <p>DESIGN AGENCY</p> <p>CHOICE ONE ENGINEERING</p> </div> </div>	
<p>DESIGNER</p> <p style="text-align: center;">IJW</p>	<p>REVIEWER</p> <p style="text-align: center;">BAW 7-23-2025</p>
<p>PROJECT ID</p> <p style="text-align: center;">120861</p>	
<p>SHEET</p> <p>P.29</p>	<p>TOTAL</p> <p>53</p>

**CROSS SECTIONS - SPRINGDALE ROAD  
STA. 111+25 TO STA. 112+55**

SEEDING	END WIDTH	SO. YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES												END AREA		VOLUME	
															CUT	FILL	CUT	FILL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
3.0	0	17.9	0
16.3	0	18.9	0
6.4	0	6.5	0
13.9	0	21.1	0
SHEET TOTAL		42.6	0
		64.4	0

**CROSS SECTIONS - SPRINGDALE ROAD**  
**STA. 112+82.73 TO STA. 113+95**

DESIGN AGENCY



CHOICE ONE ENGINEERING

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I JW

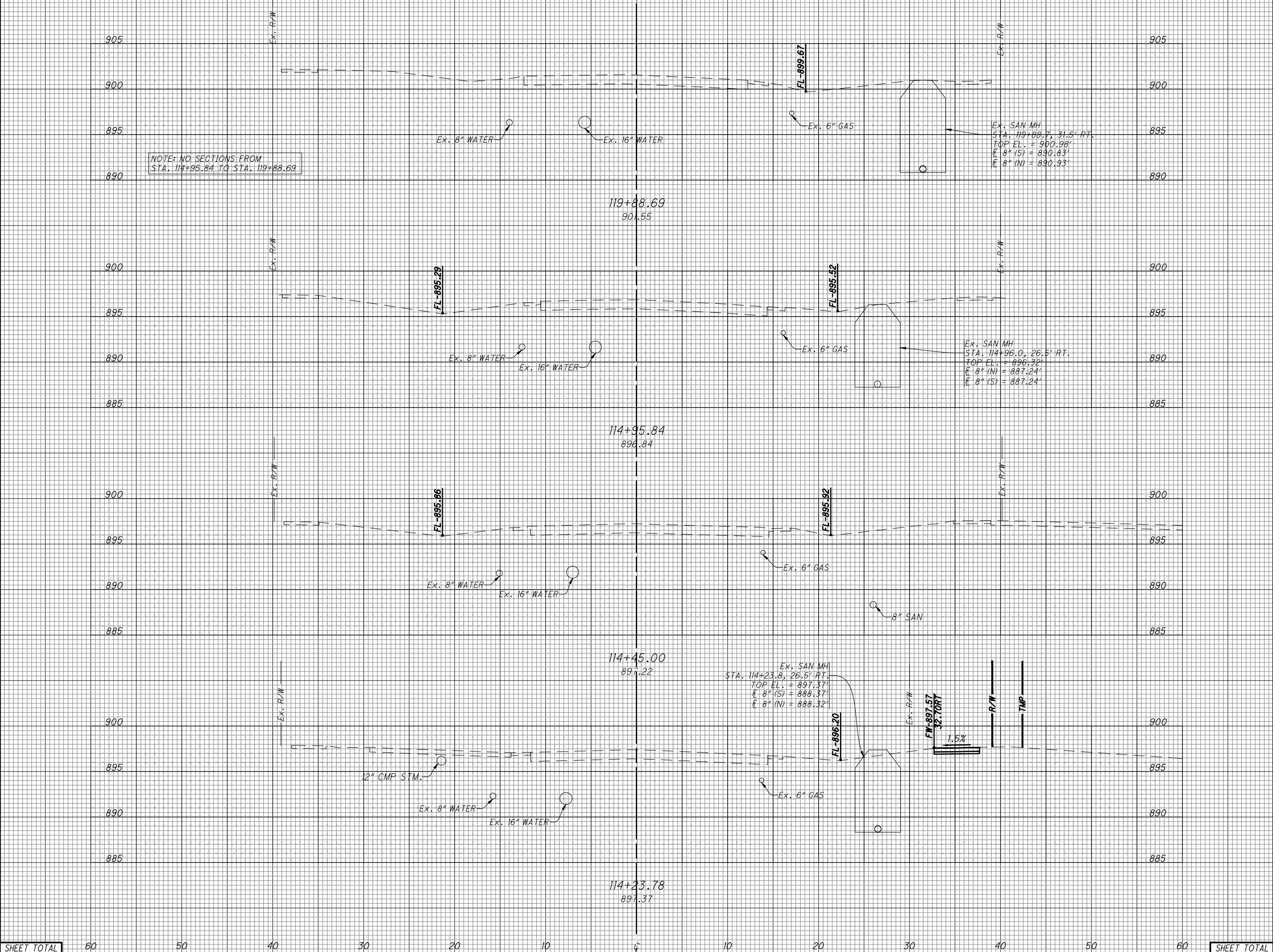
REVIEWER  
BAW 7-23-2025

PROJECT ID  
120861

SHEET TOTAL  
P.30 53



SEEDING	END SO. WIDTH	YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES												END AREA		VOLUME	
															CUT	FILL	CUT	FILL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0.5	0
1.3	0	2.3	0
SHEET TOTAL	1.3	0	2.8

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 114+23.78 TO STA. 119+88.69

DESIGN AGENCY

CHOICE ONE ENGINEERING

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BAW 7-23-2025

PROJECT ID

120861

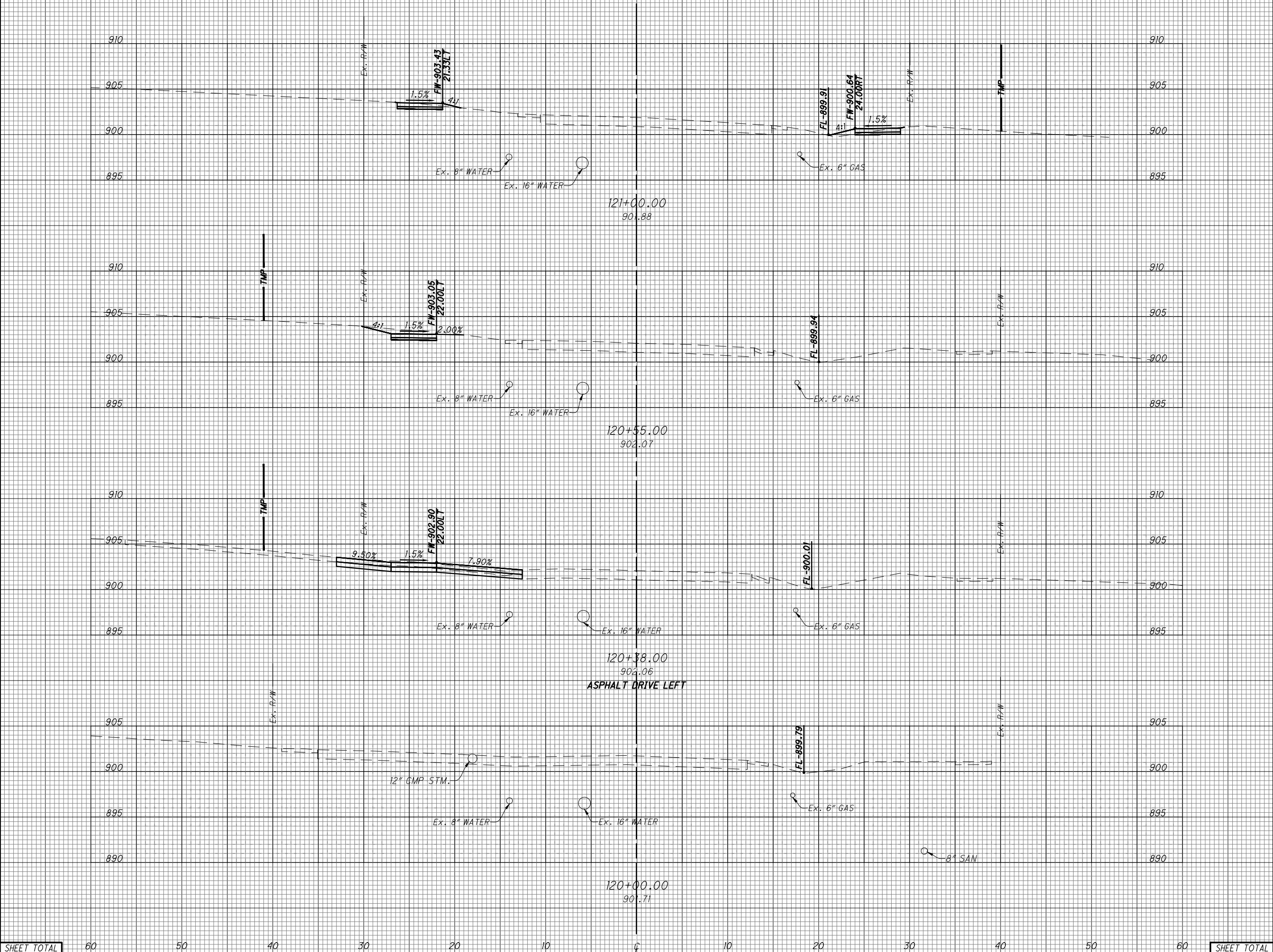
SHEET

P.31

TOTAL

53

SEEDING END WIDTH	SO. YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES									



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2.4	1.4	4.2	1.2
2.6	0	4.9	0
12.9	0	9.1	0
0	0	0	0
15.9	1.4	18.2	1.2

**CROSS SECTIONS - SPRINGDALE ROAD**  
**STA. 120+00 TO STA. 121+00**

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER  
I JW

REVIEWER  
BAW 7-23-2025

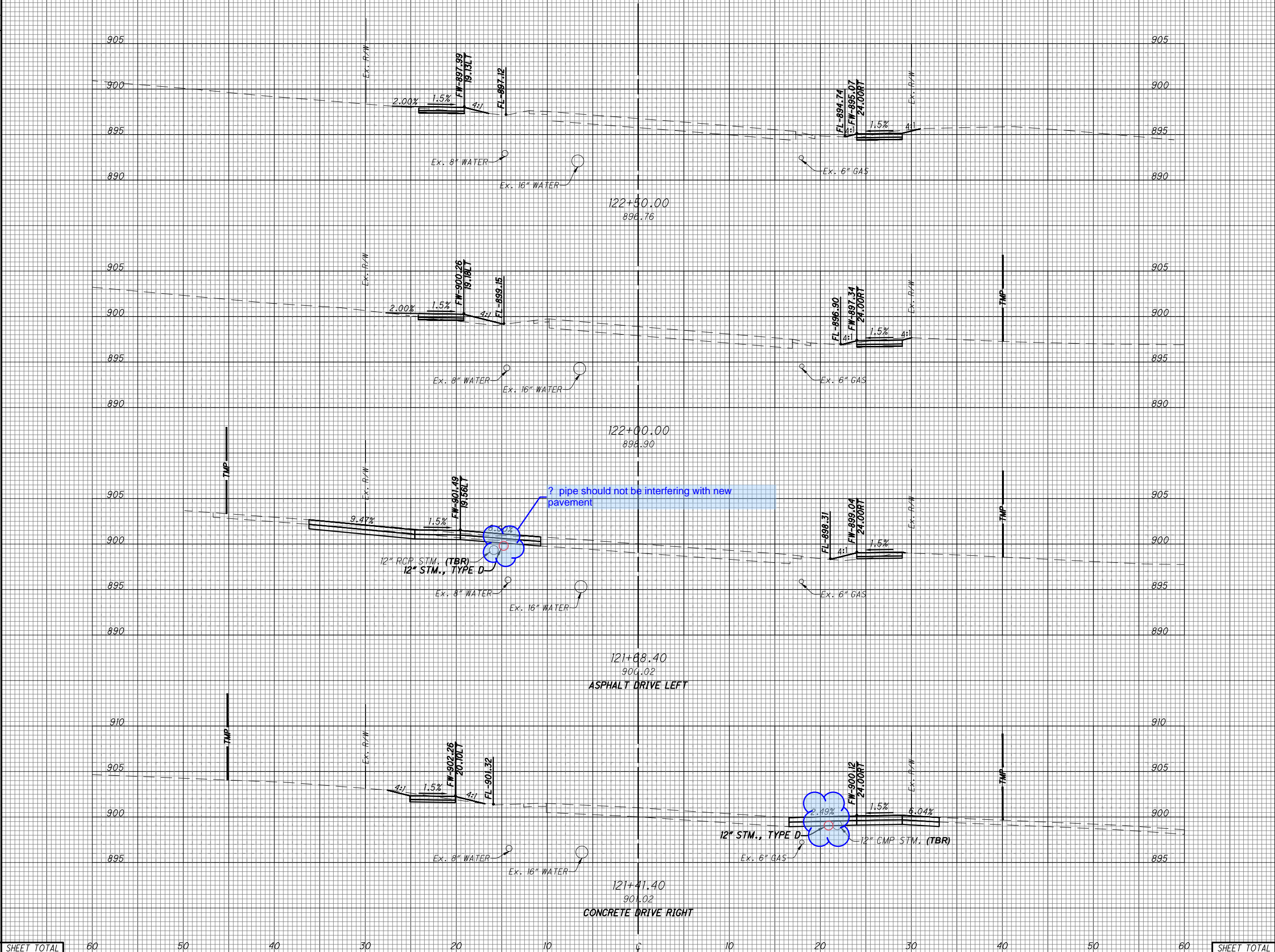
PROJECT ID  
120861

SHEET	TOTAL
P.32	53



SEEDING END WIDTH	SO. YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2.8	1.1	4.4	3.1
1.9	3.3	10.5	2.6
16.0	1.2	14.3	0.9
12.6	0.6	11.5	1.5
33.3	6.2	40.7	8.1

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 121+41.40 TO STA. 122+50

DESIGN AGENCY

CHOICE ONE ENGINEERING

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BAW 7-23-2025

PROJECT ID

120861

SHEET

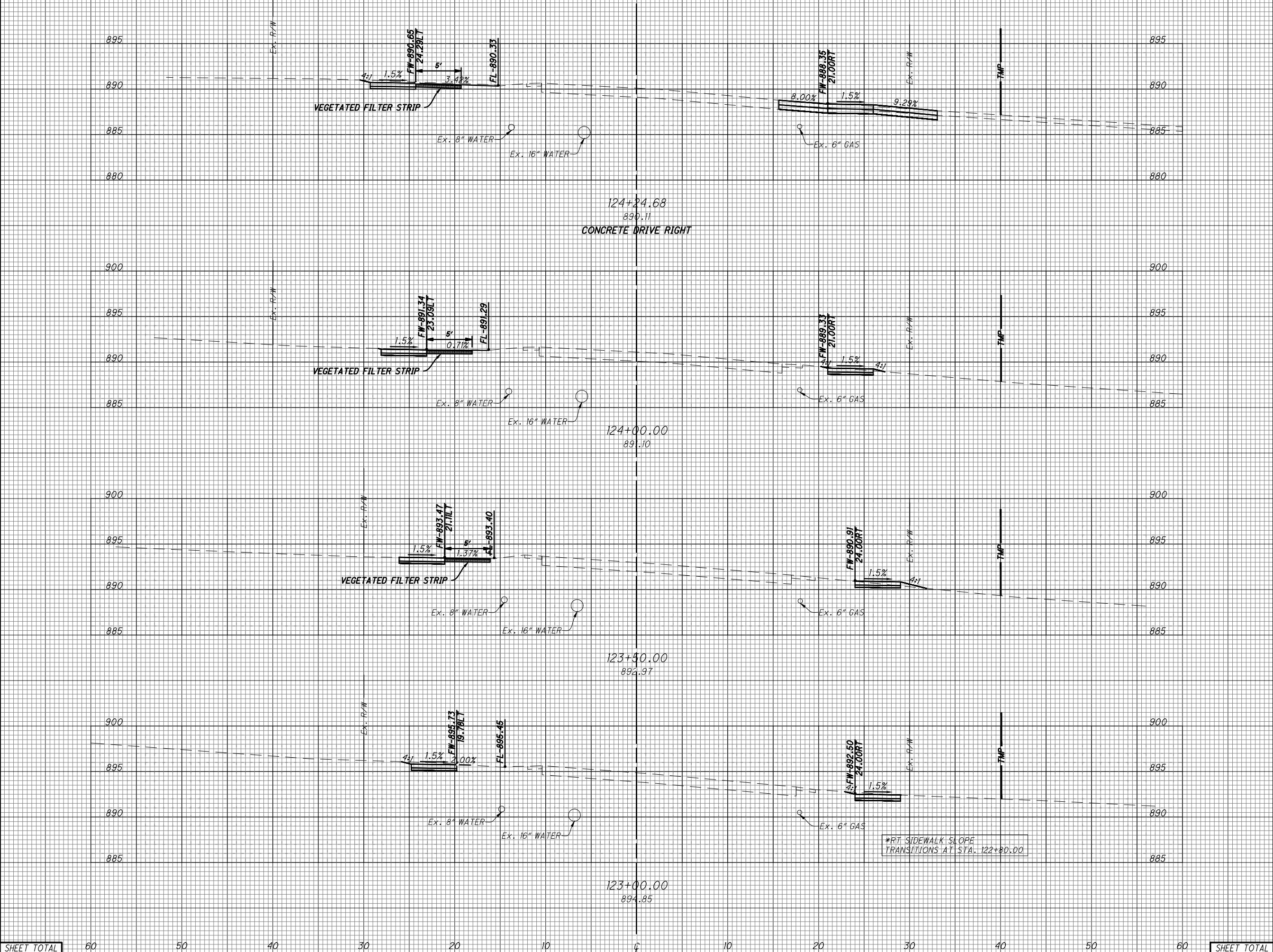
P.33

TOTAL

53

SEEDING		SO.	
END	WIDTH	YDS.	

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
15.9	0	9.4	0
4.7	0.1	8.5	0.6
4.5	0.6	6.7	0.6
2.7	0	5.1	1.0
27.8	.7	29.7	2.2

CROSS SECTIONS - SPRINGDALE ROAD

STA. 123+00 TO STA. 124+24.68

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

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PROJECT ID

120861

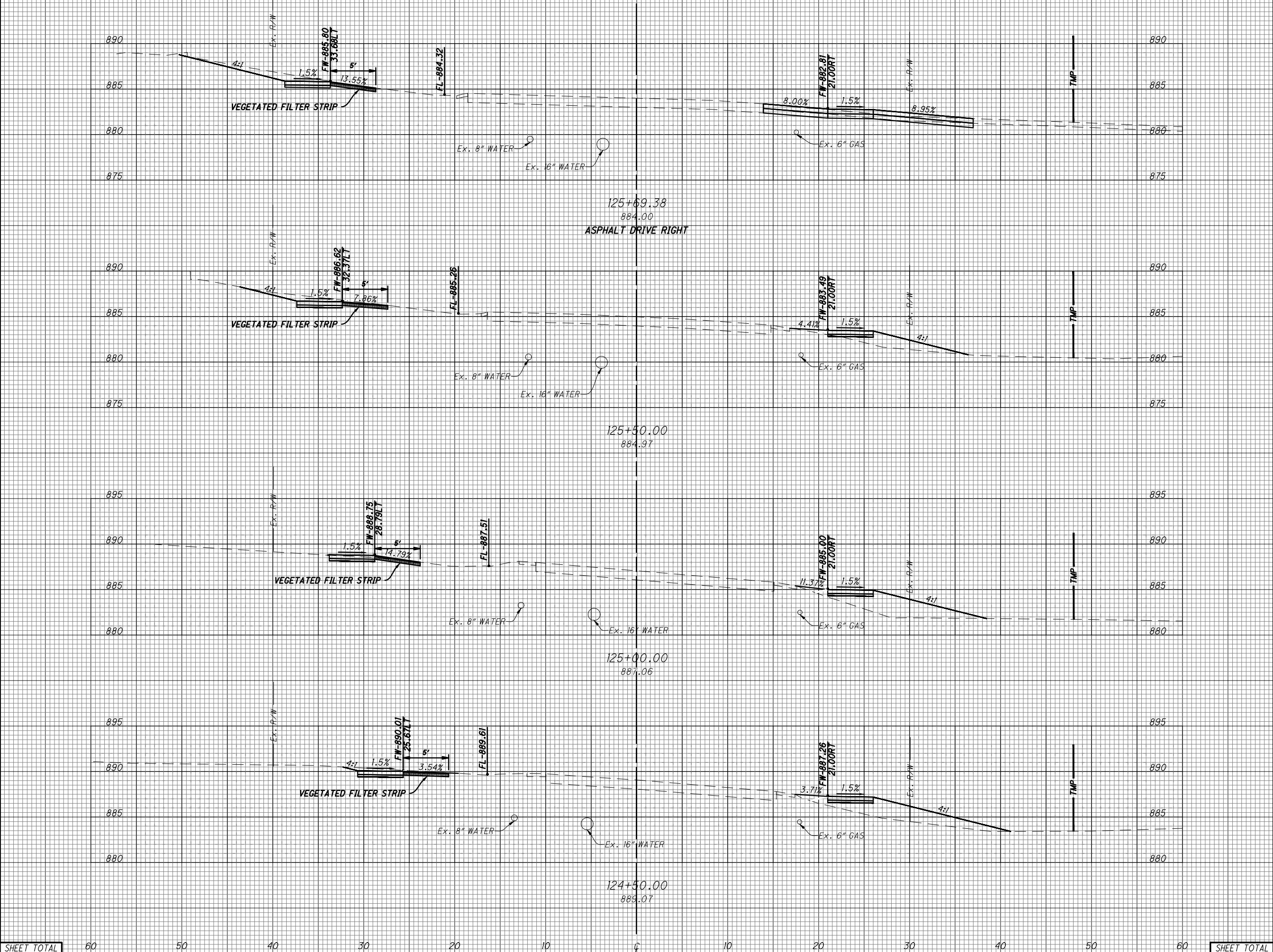
SHEET TOTAL

P.34 53



SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
18.7	0	8.8	4.0
5.7	11.2	7.9	33.3
2.8	24.8	6.3	46.0
4.0	24.9	9.3	11.7
SHEET TOTAL	31.2	60.9	34.3
			95

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 124+50 TO STA. 125+69.38

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

IJW

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BAW 7-23-2025

PROJECT ID

120861

SHEET

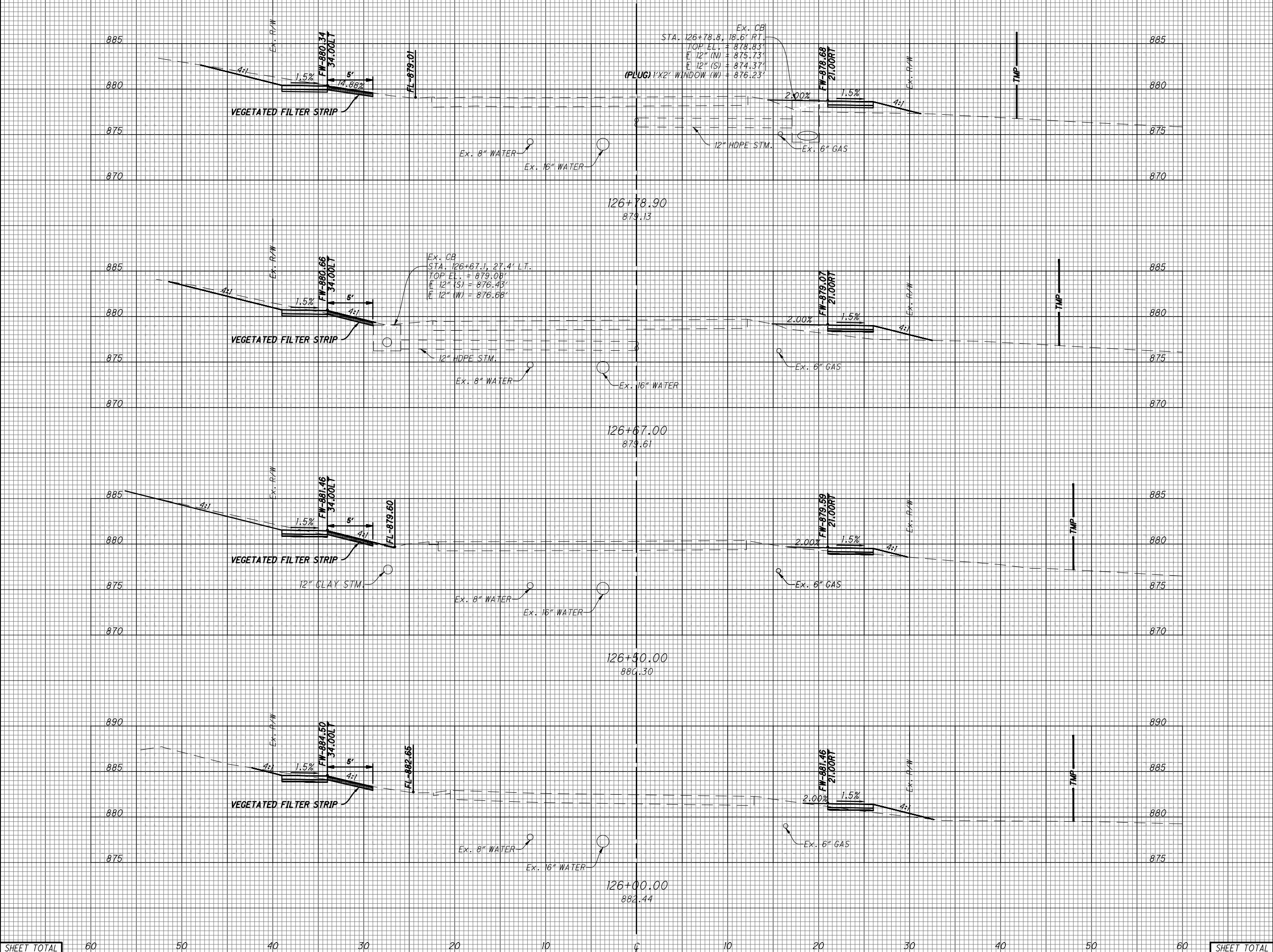
P.35

TOTAL

53

SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
7.1	11.5	3.1	3.3
6.8	11.4	4.0	4.2
5.9	1.9	8.6	5.0
3.4	3.5	12.5	2.0
SHEET TOTAL		23.2	28.3
		28.2	14.5

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 126+00 TO STA. 126+78.90

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

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PROJECT ID

120861

SHEET

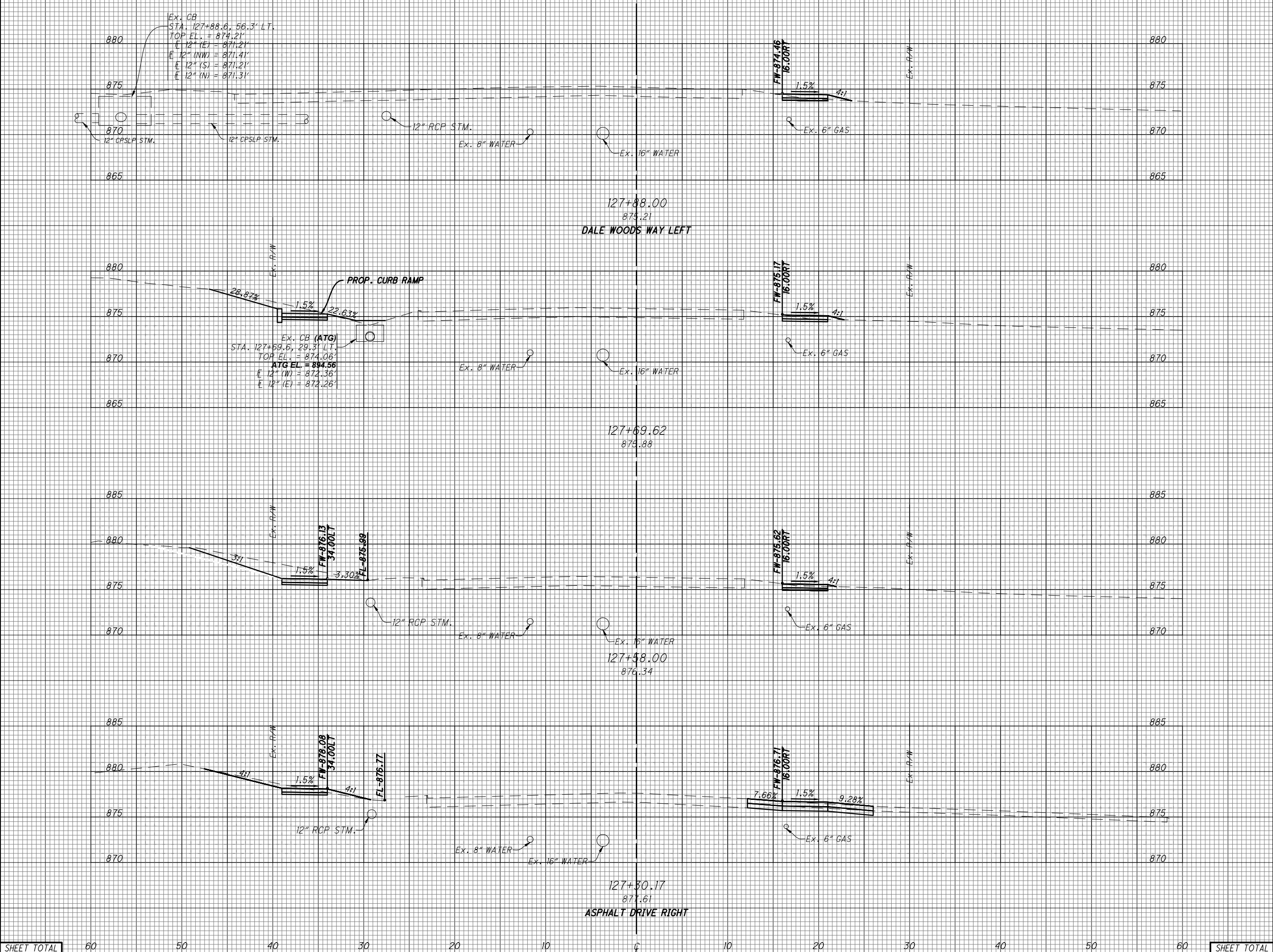
36

TOTAL

53



SEEDING	END	SO.	WIDTH		YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES												END AREA		VOLUME	



CROSS SECTIONS - SPRINGDALE ROAD  
STA. 127+30.17 TO STA. 127+88

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.1	0.7	2.9	0.7
7.3	1.4	4.3	0.3
12.5	0	12.4	0.5
11.5	1.0	17.7	11.9
SHEET TOTAL	32.4	3.1	37.3

DESIGN AGENCY

CHOICE ONE ENGINEERING

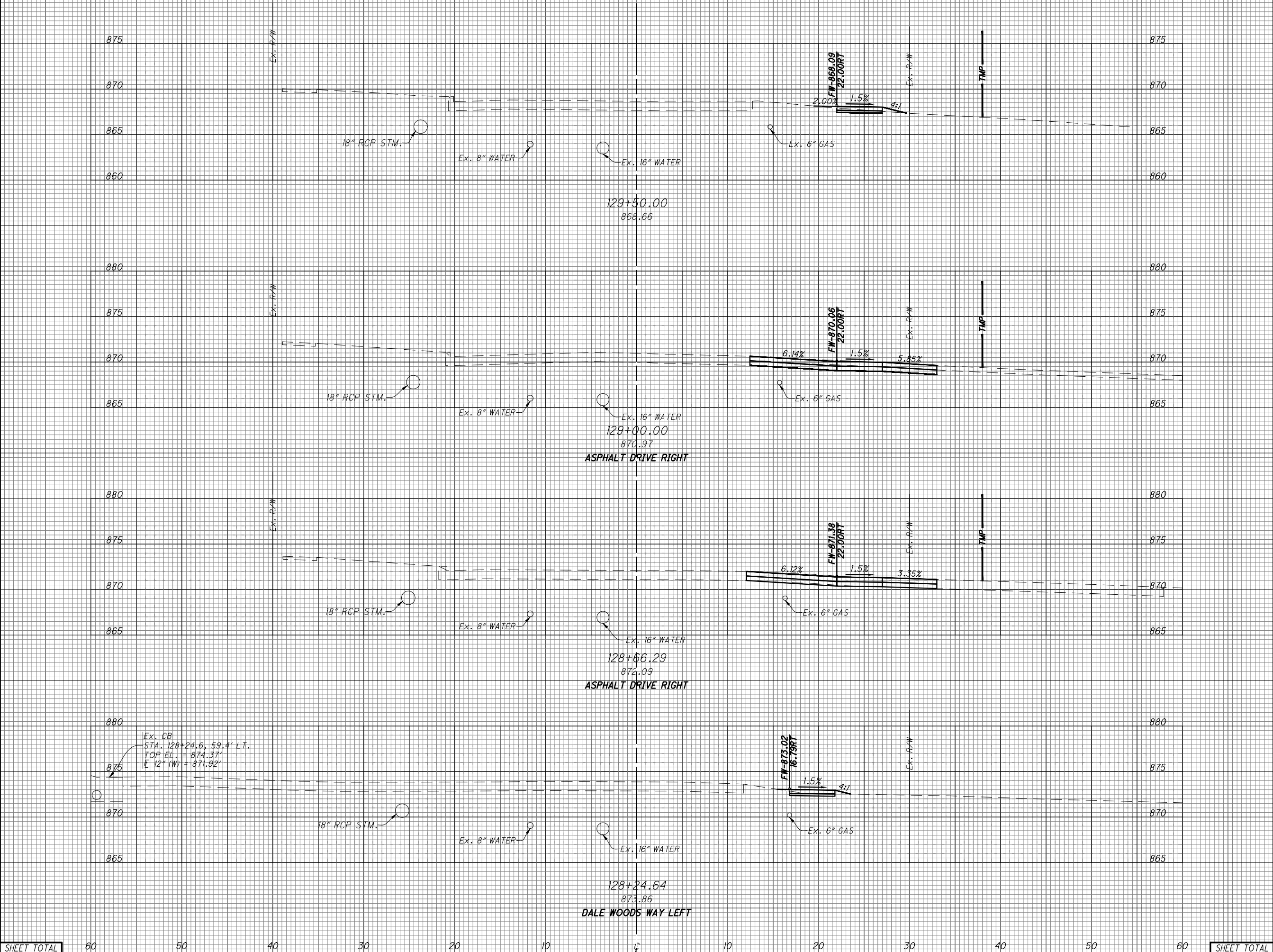
DESIGNER  
I JW

REVIEWER  
BAW 7-23-2025

PROJECT ID  
120861

SHEET TOTAL  
P.37 53

SEEDING END SO. WIDTH YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
1.2	0.8	14.5	0
14.5	0	18.4	0
15.0	0	12.6	0.3
1.3	0.4	1.6	0.7
32.0	1.2	47.1	1.0

**CROSS SECTIONS - SPRINGDALE ROAD**  
**STA. 128+24.64 TO STA. 129+50**

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER  
IJW

REVIEWER  
BAW 7-23-2025

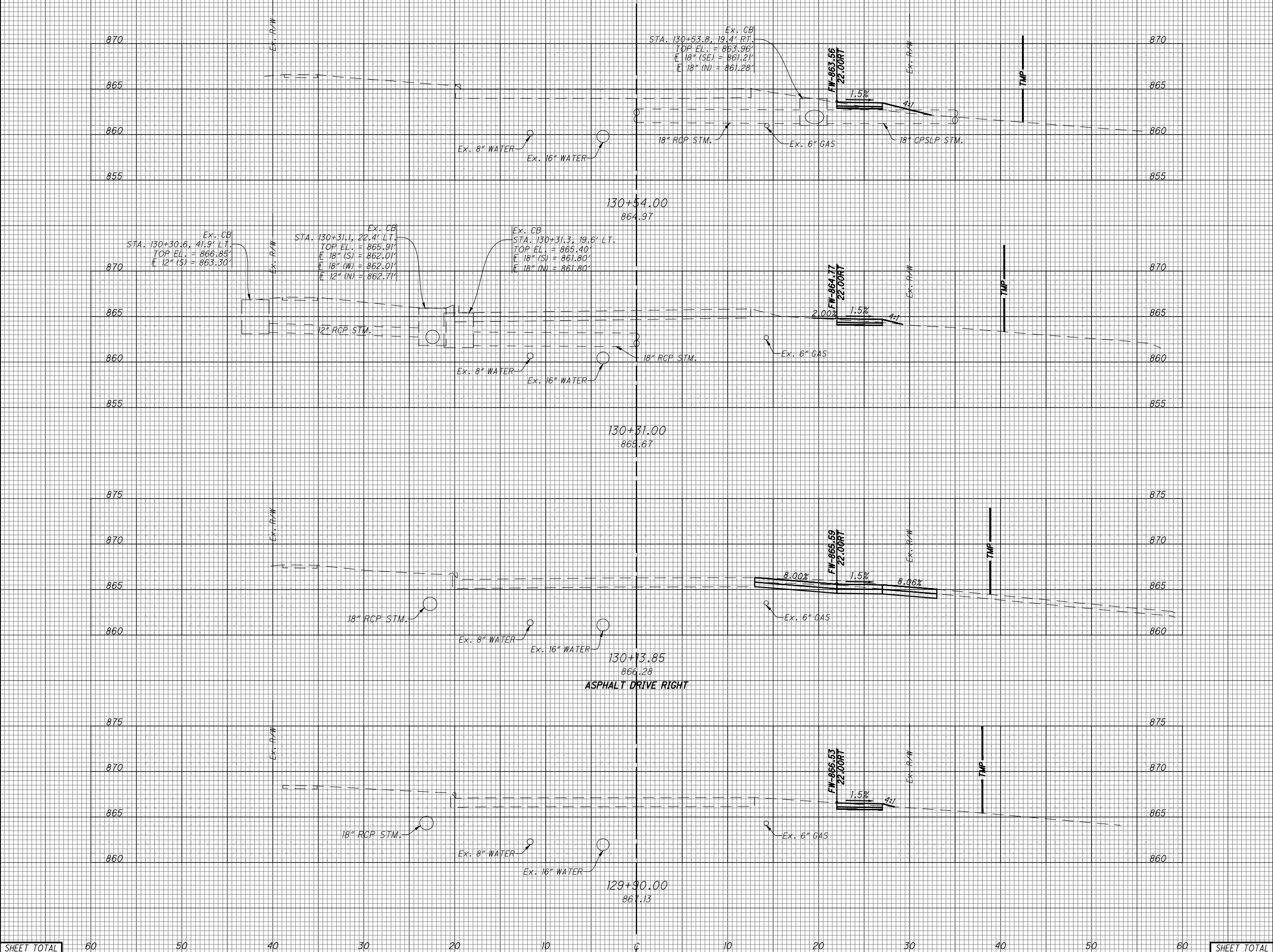
PROJECT ID  
120861

SHEET	TOTAL
P.38	53



SEEDING  
END SO.  
WIDTH YDS.

SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0.9	2.3	0.9	0.2
1.3	0.5	5.7	0.2
16.6	0	7.9	0.1
1.3	0.2	1.9	0.7
SHEET TOTAL		20.1	3
		16.4	1.2

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 129+90 TO STA. 130+54

DESIGN AGENCY



CHOICE ONE ENGINEERING

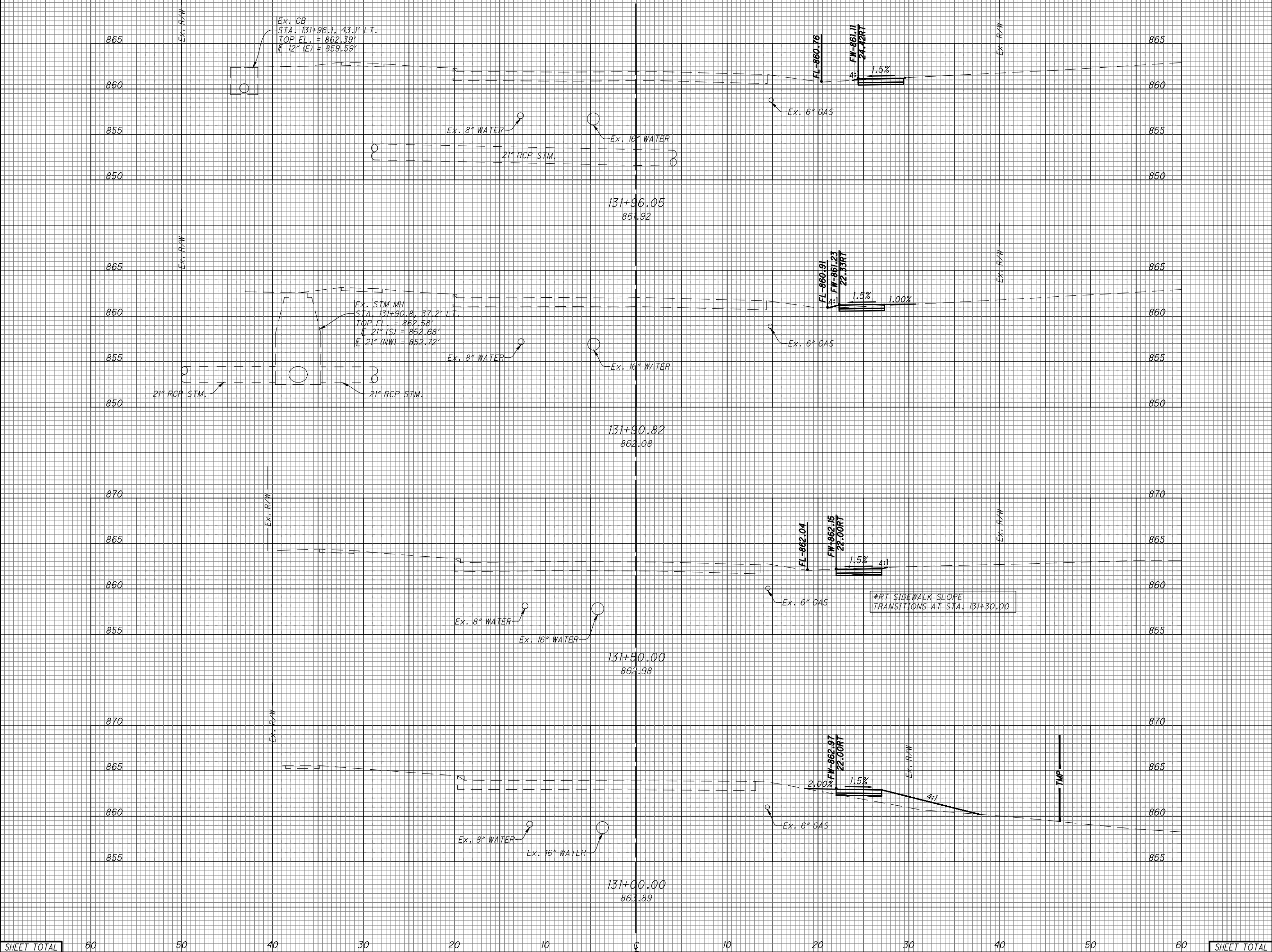
DESIGNER  
I JW

REVIEWER  
BAW 7-23-2025

PROJECT ID  
120861

SHEET TOTAL  
P.39 53

SEEDING END WIDTH	SO. YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES												END AREA		VOLUME	
														CUT	FILL	CUT	FILL



CROSS SECTIONS - SPRINGDALE ROAD  
STA. 131+00 TO STA. 131+96.05

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

SHEET

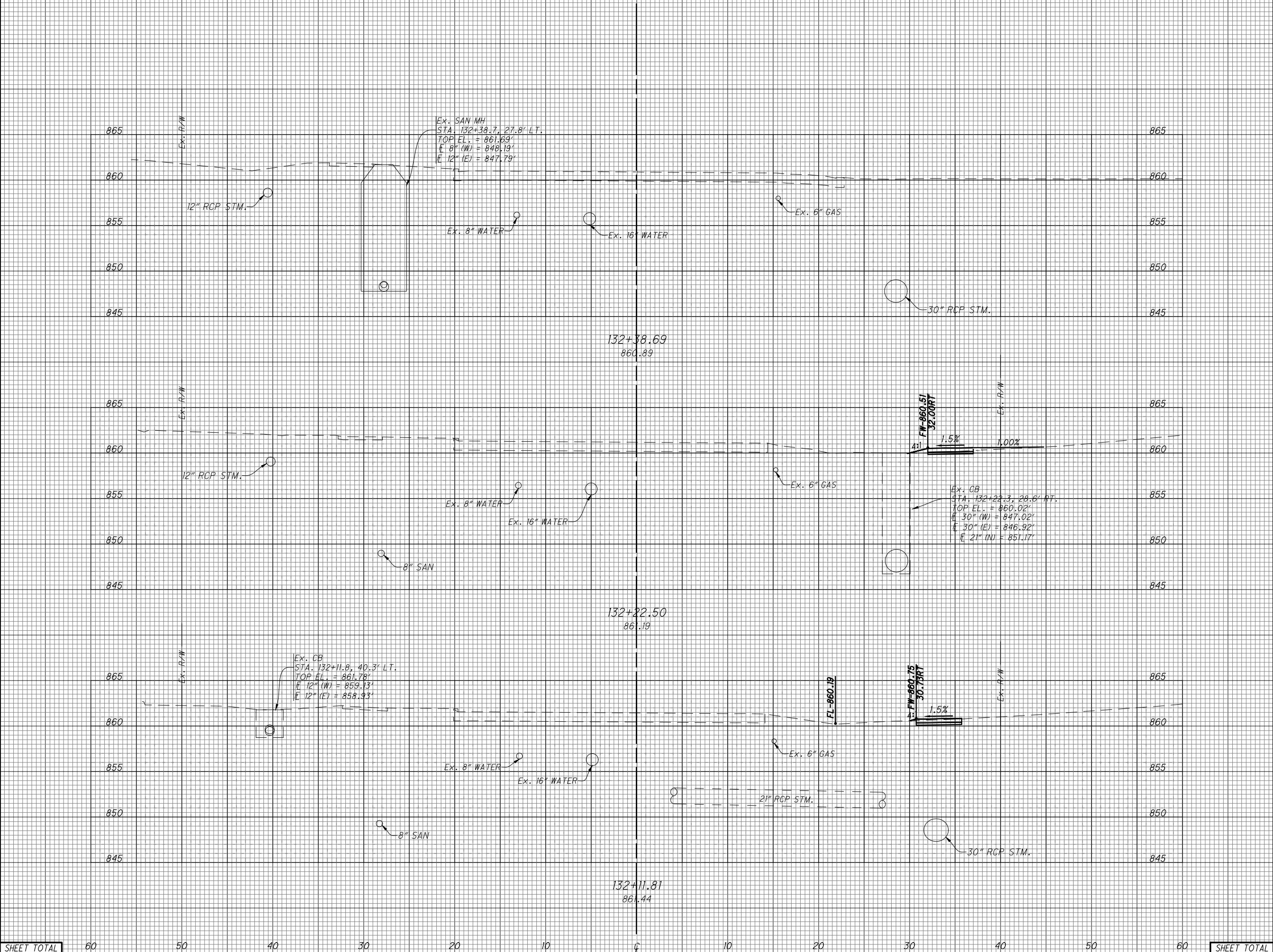
P.40

TOTAL

53

SHEET TOTAL	60	50	40	30	20	10	0	10	20	30	40	50	60	SHEET TOTAL	20.1	3	16.4	1.2
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SEEDING END WIDTH	SO. YDS.	SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES												END AREA				VOLUME			
														CUT	FILL	CUT	FILL	CUT	FILL	CUT	FILL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	0.4	0.5
1.3	1.7	0.5	0.3
1.3	0	0.8	0
20.1	3	16.4	1.2

CROSS SECTIONS - SPRINGDALE ROAD  
STA. 132+11.81 TO STA. 132+38.69

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

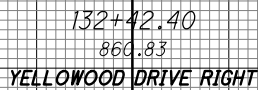
SHEET

P.41

TOTAL

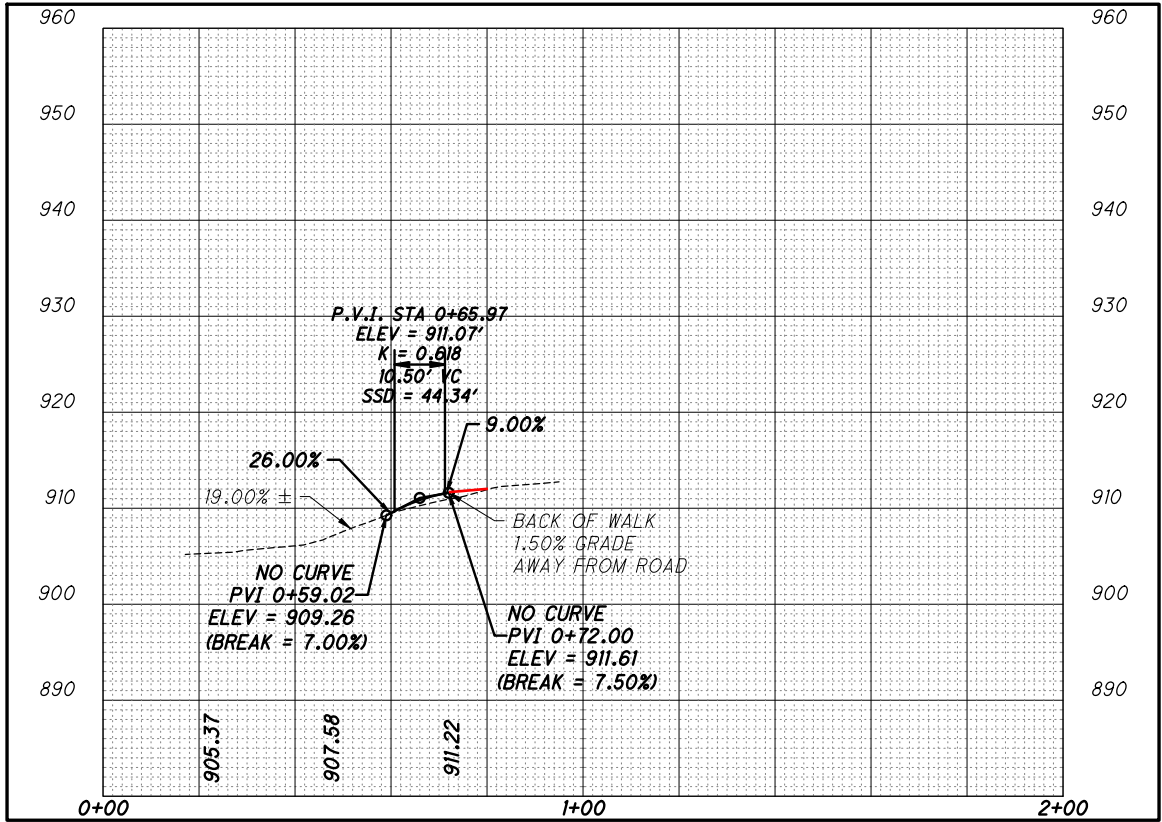
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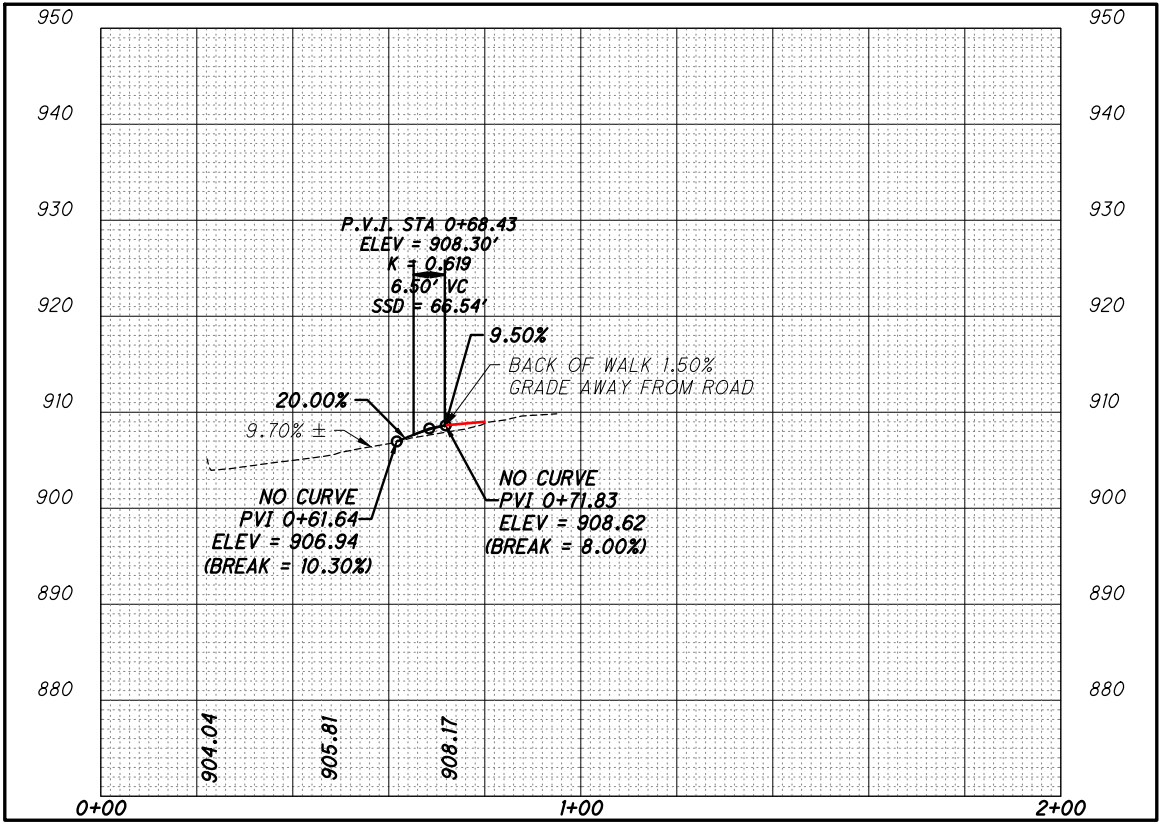
SEEDING AND MULCHING AREAS MEASURED IN AUTOCAD - QUANTITY SHOWN IN GENERAL NOTES

SHEET	TOTAL
P.42	53

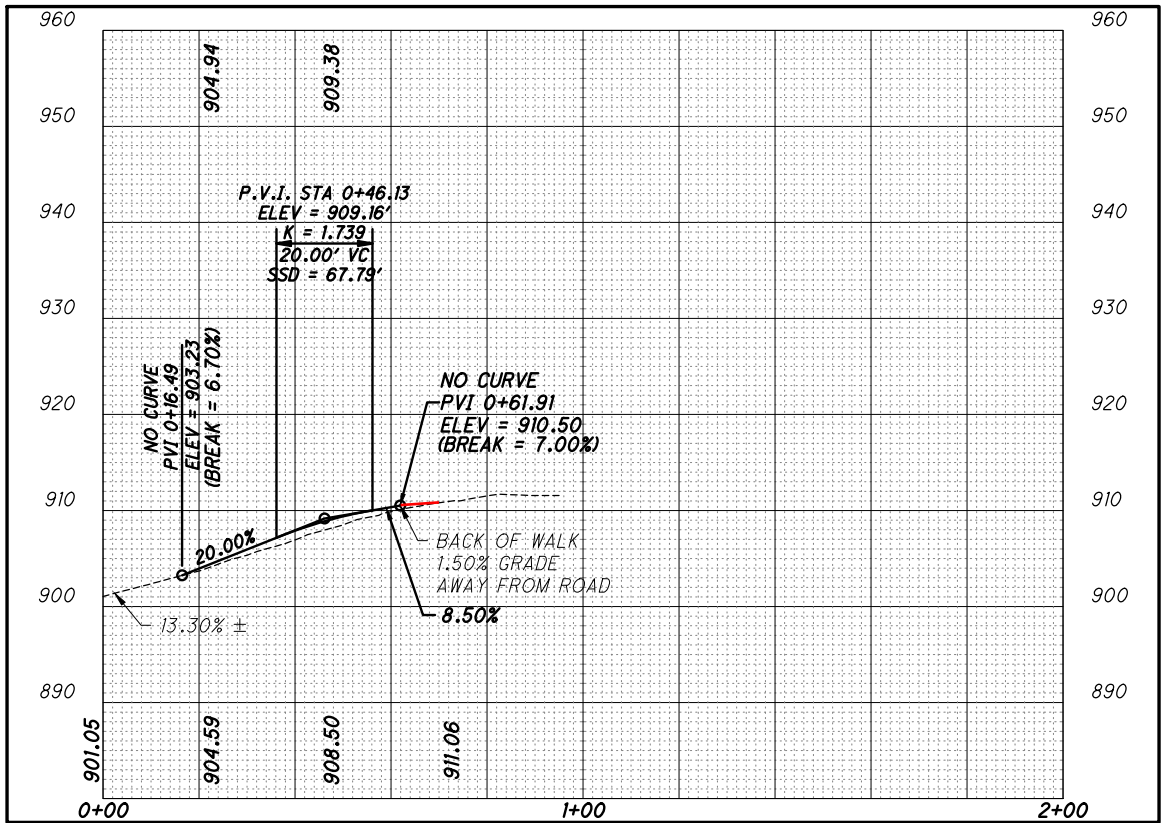
DESIGNER	IJW
REVIEWER	BAW 7-23-202
PROJECT ID	120861



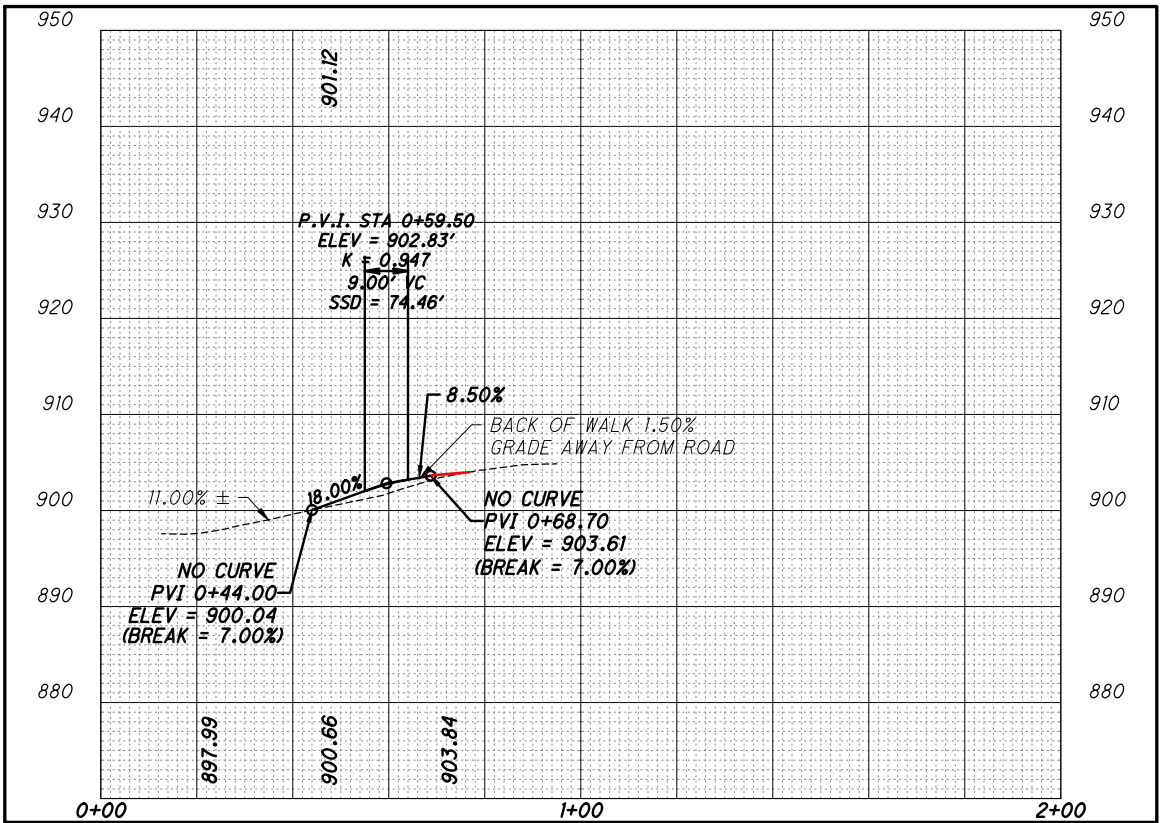
DRIVE #1  
STA. 105+08.80, LT



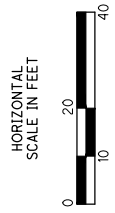
DRIVE #3  
STA. 109+71.48, LT



DRIVE #2  
STA. 108+52.64, LT



DRIVE #4  
STA. 111+66.69, LT



DRIVE DETAILS (PROFILES)

DESIGN AGENCY



CHOICE ONE ENGINEERING

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BAW 7-23-2025

PROJECT ID

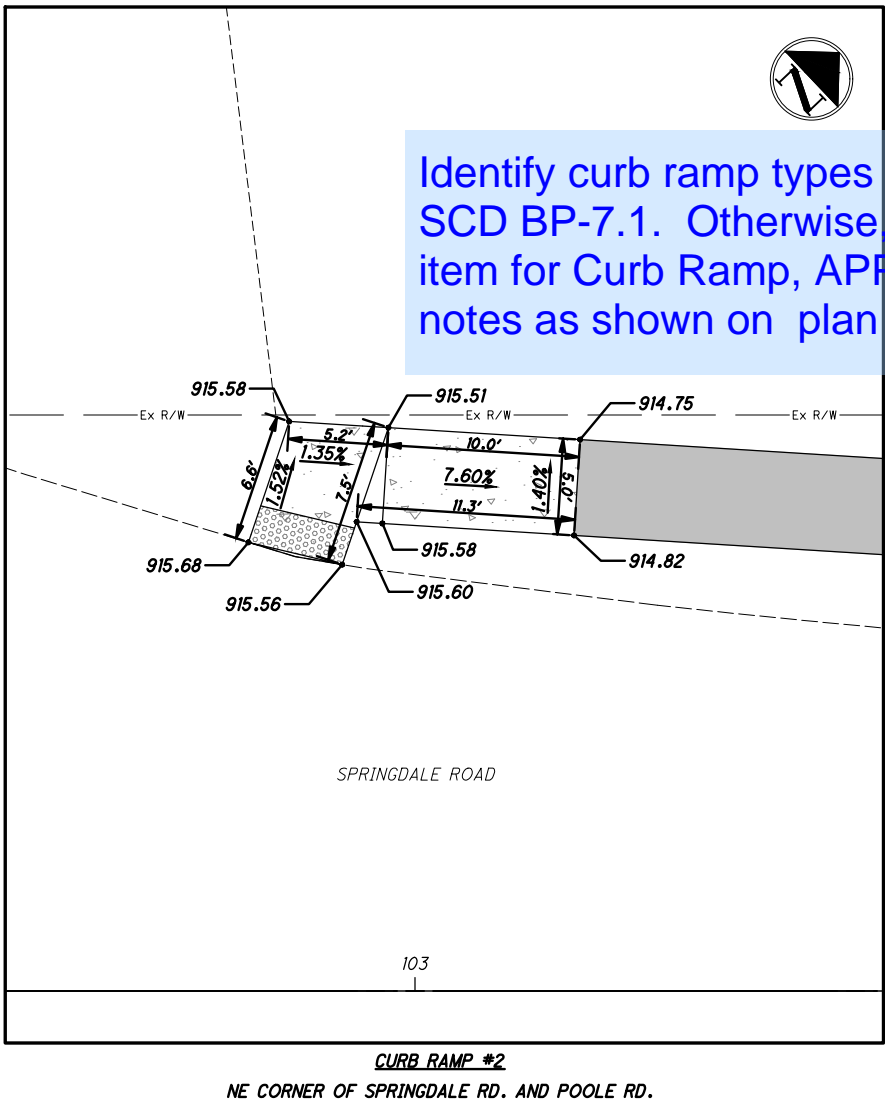
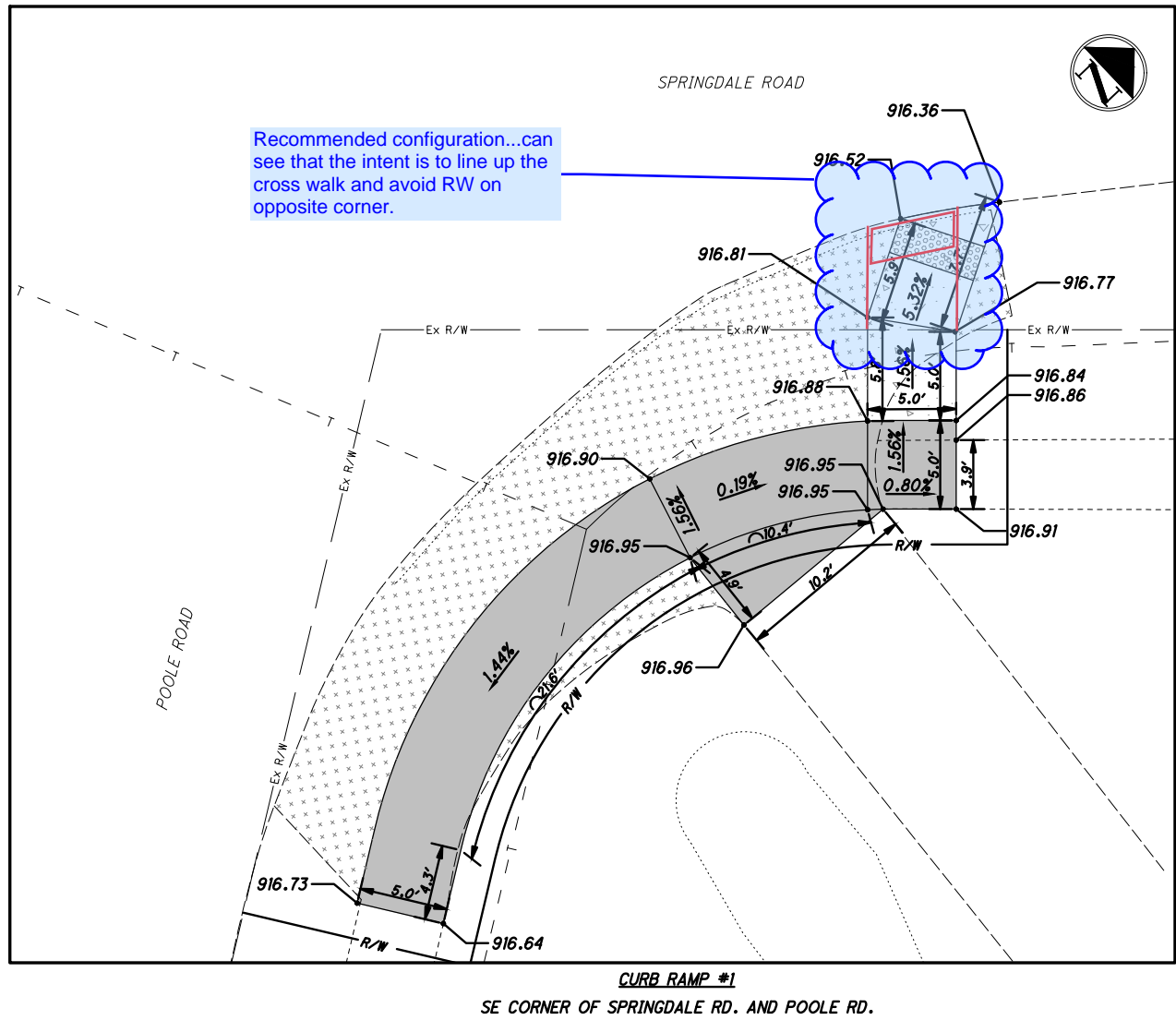
120861

SHEET

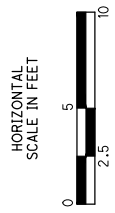
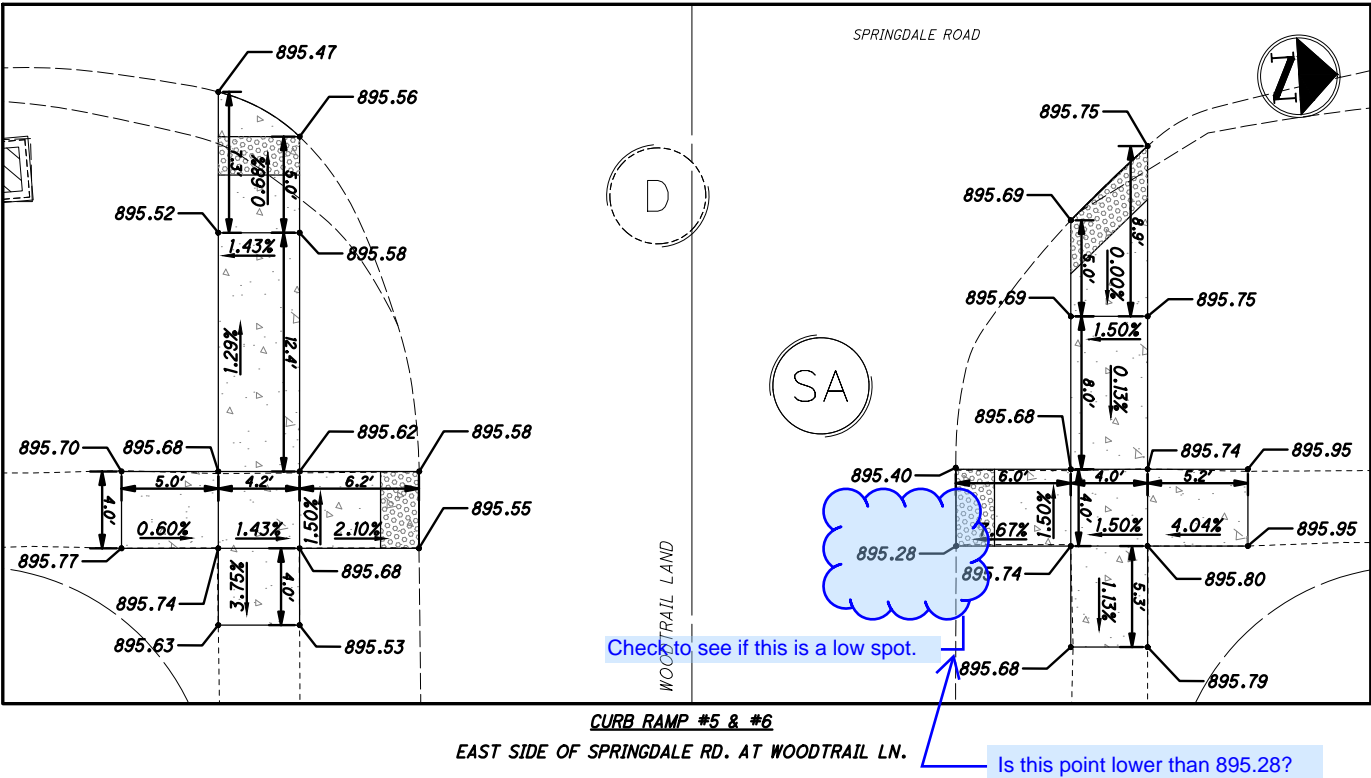
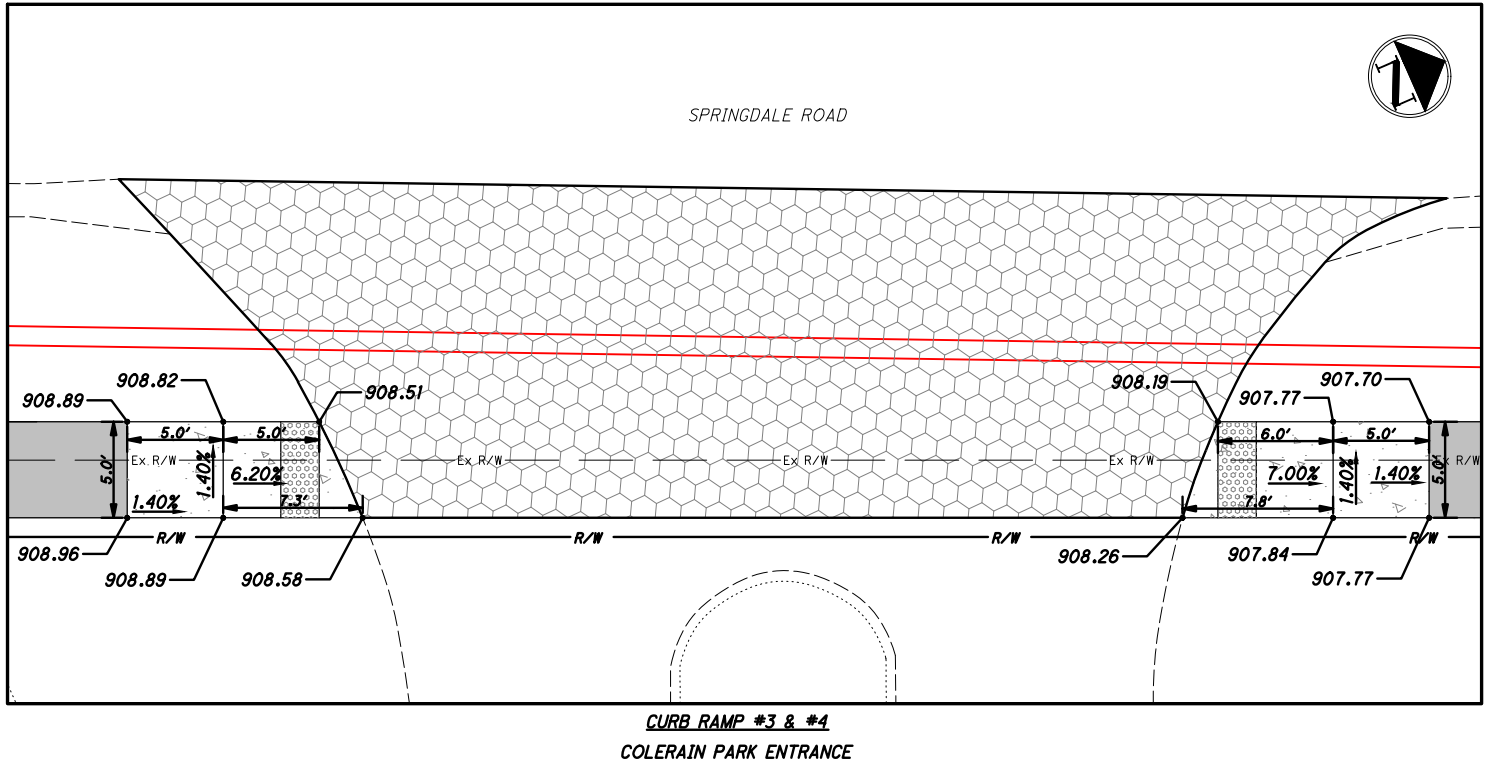
P.43

TOTAL

53

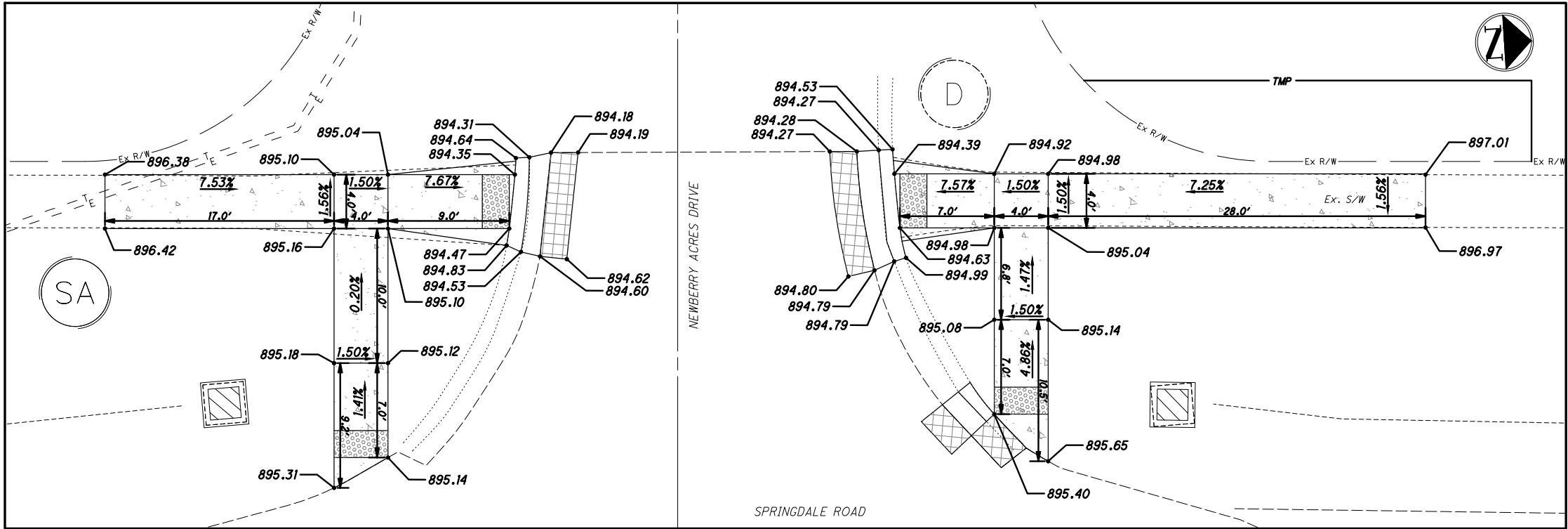


Identify curb ramp types as defined in SCD BP-7.1. Otherwise, provide pay item for Curb Ramp, APP. and add notes as shown on plan sheet 6.

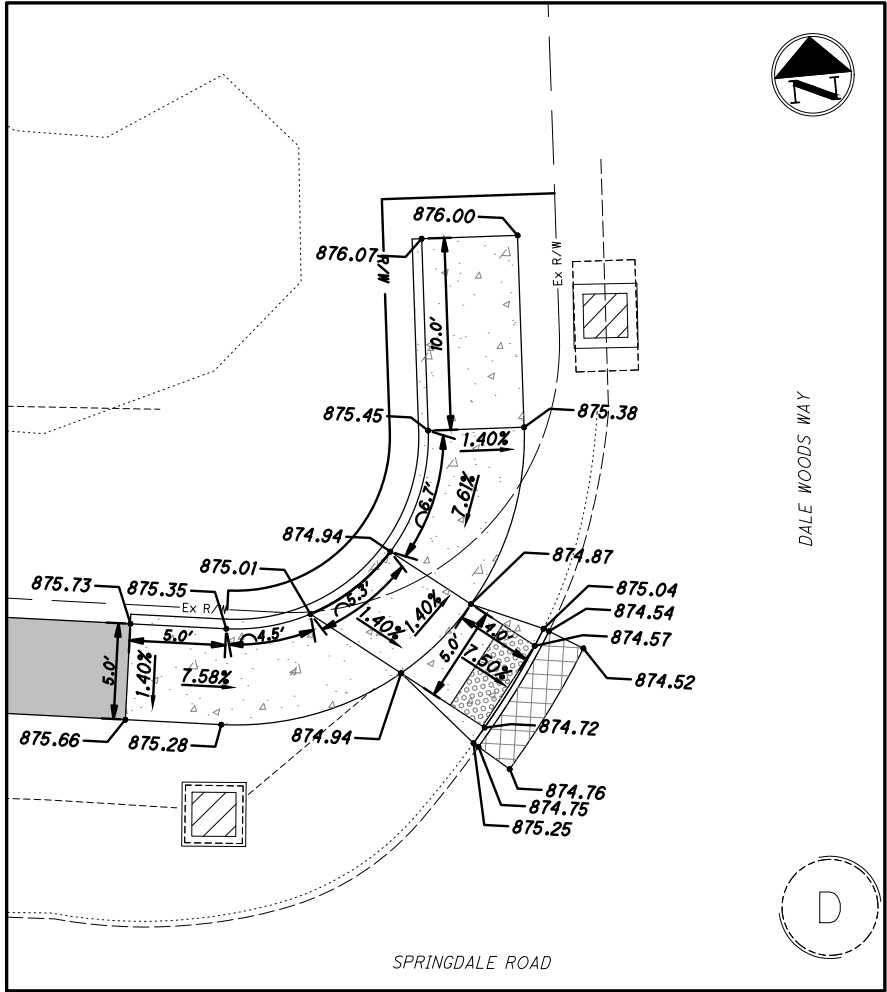


CURB RAMP DETAILS



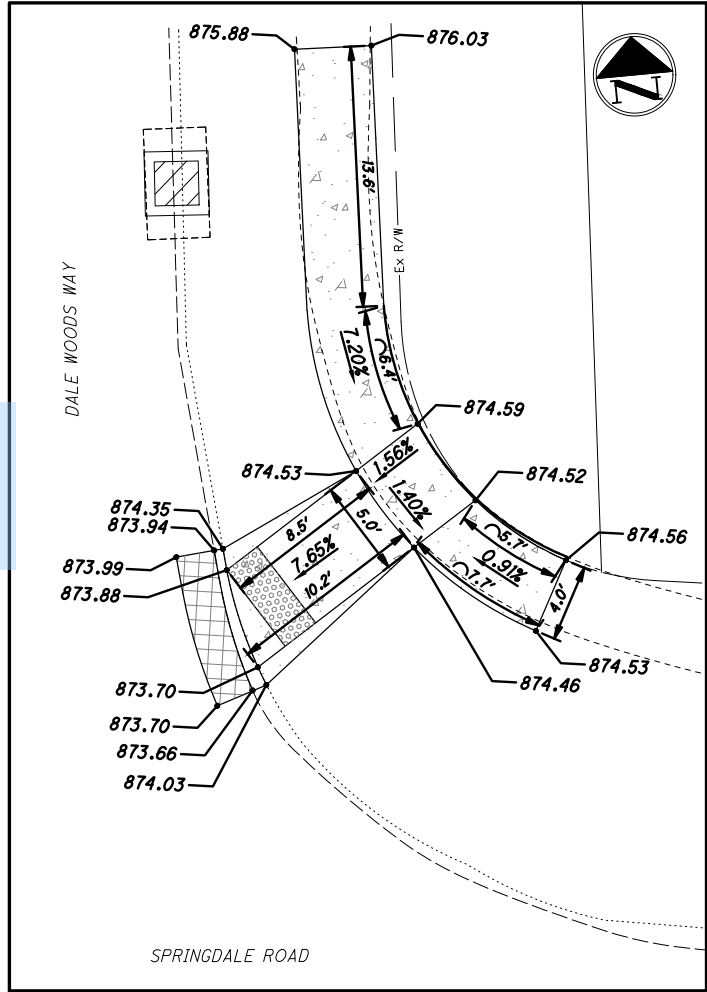


CURB RAMP #7 & #8  
WEST SIDE OF SPRINGDALE RD. AT NEWBERRY ACRES DR.

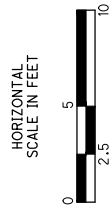


CURB RAMP #9  
NW CORNER OF SPRINGDALE RD. AND DALE WOODS WAY

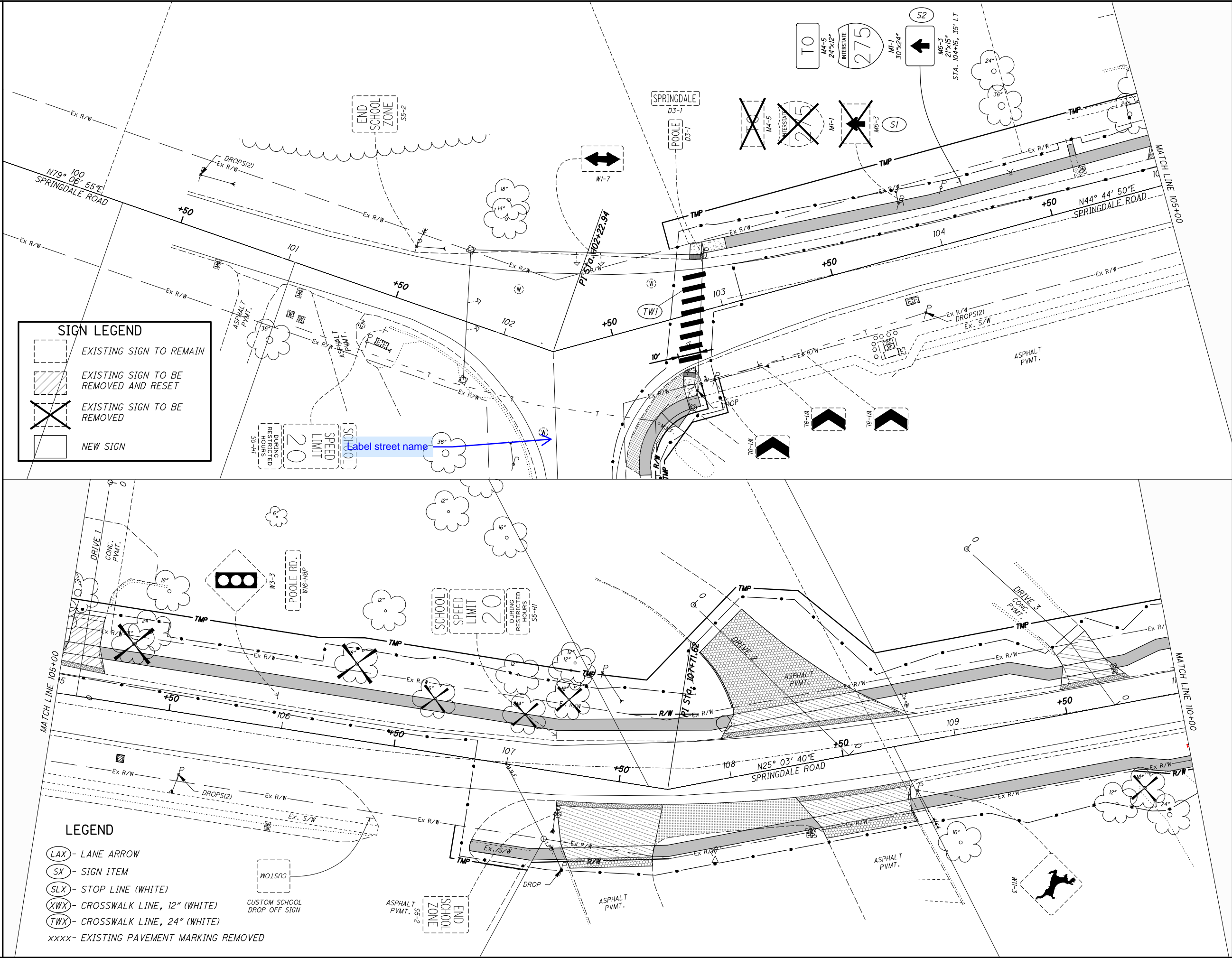
See previous  
comments on sheet  
21.

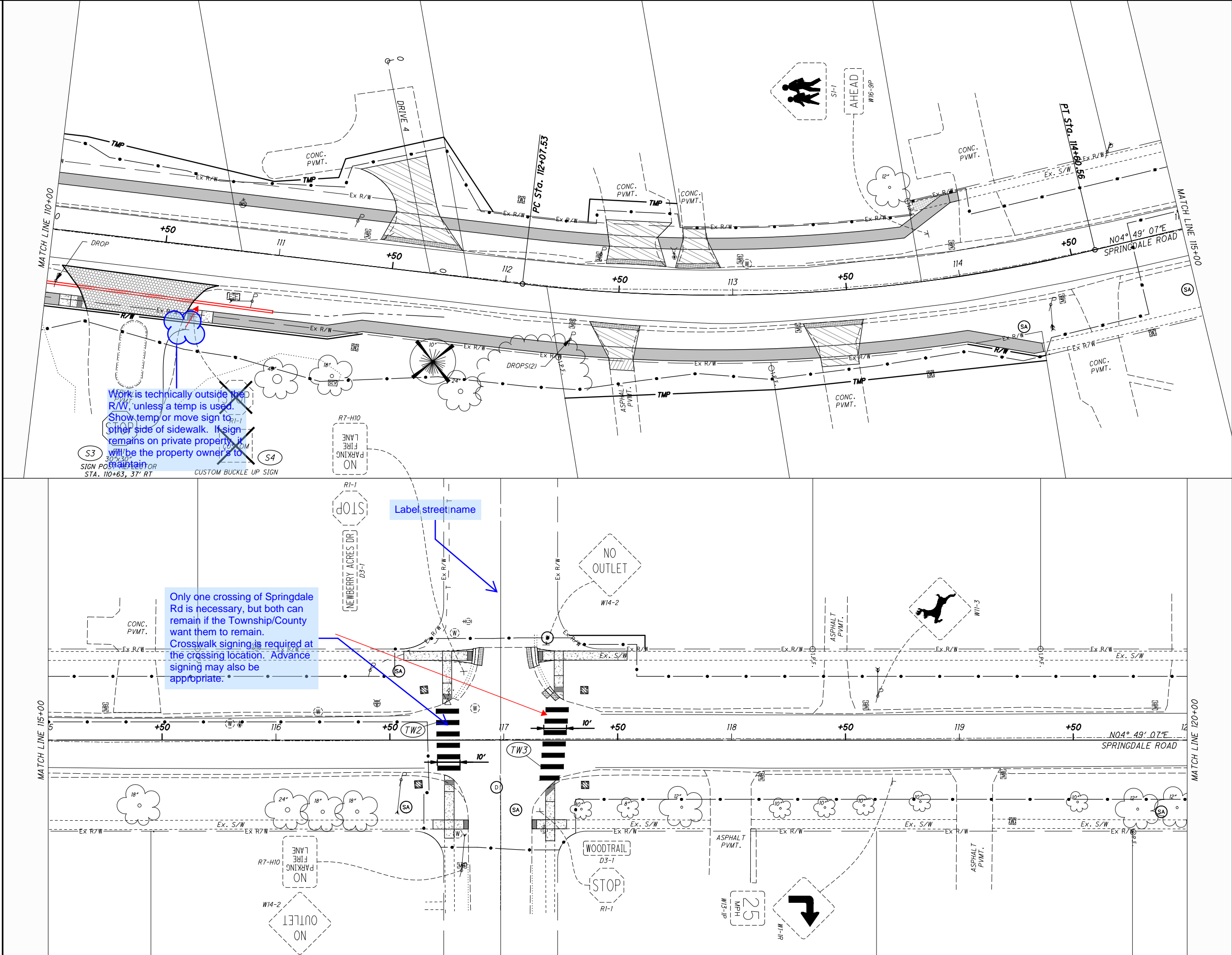


CURB RAMP #10  
NE CORNER OF SPRINGDALE RD. AND DALE WOODS WAY



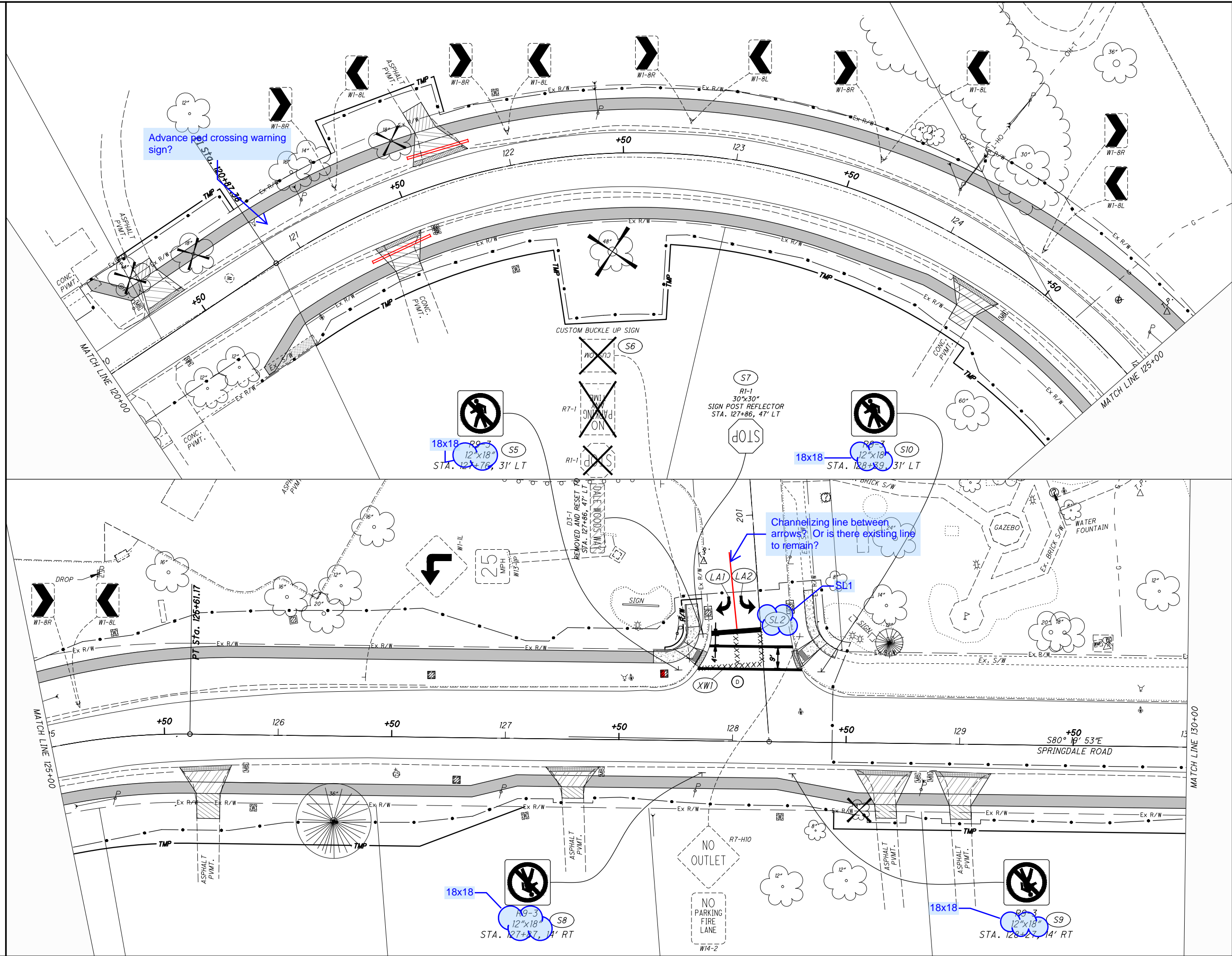
CURB RAMP DETAILS

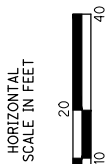
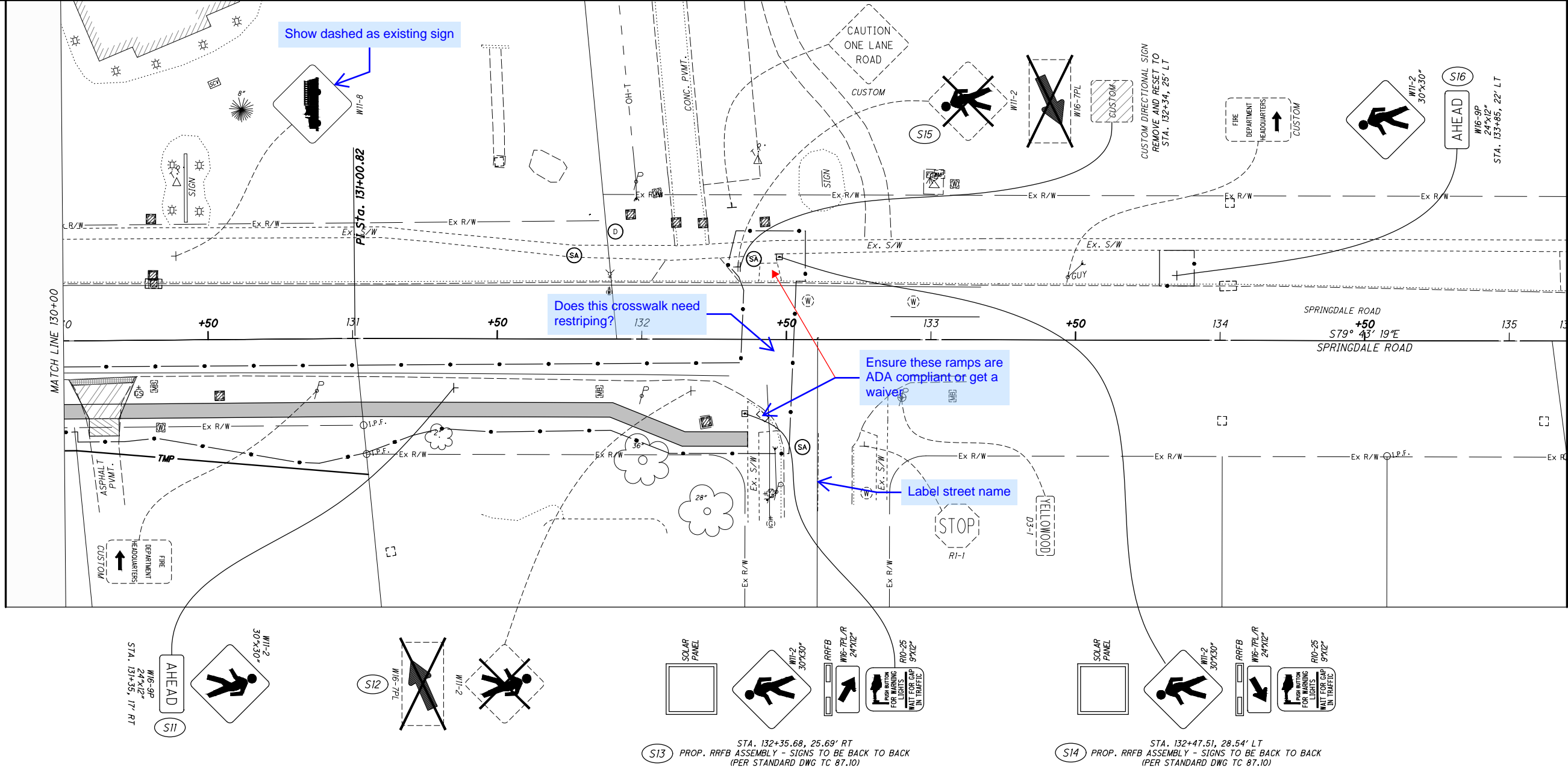




TRAFFIC CONTROL PLAN - SPRINGDALE ROAD  
STA. 110+00 to STA. 120+00







TRAFFIC CONTROL PLAN - SPRINGDALE ROAD  
STA. 130+00 to STA. 135+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

IJW

REVIEWER

BAW 7-23-2025

PROJECT ID

120861

SHEET

P.49

TOTAL

53



ODOT STANDARD CONSTRUCTION DRAWINGS

DRAWINGS IN THESE PLANS SHALL BE CONSIDERED AS REFERENCE TO ITEMS 625, 632, 633, 725, 730, 732 AND 733 RESPECTIVELY.

ALL MATERIALS MUST BE IN COMPLIANCE WITH CONTRACT SPECIFICATIONS UNLESS OTHERWISE APPROVED BY ODOT, TOWNSHIP, AND THE COUNTY. ALL WORK AND MATERIALS NOT SPECIFICALLY REFERENCED IN THE CONTRACT SHALL MEET OR EXCEED THE REQUIREMENTS OF:

OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS (2023)

THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (2012)

WORK INSPECTION

THE CONTRACTOR SHALL PROVIDE ODOT AND HAMILTON COUNTY WITH 72 HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS) 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:

a. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.

GROUNDING AND BONDING (CONTINUED)

b. 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.

c. 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.

d. 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.

e. 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 #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	EQUIP. GROUND	EQUIP. GROUND
5	ORANGE	YELLOW BALL	#2 DW/FDW
6	BLUE	GREEN ARROW	#2 WALK
7	WH/BL STRIPE	YELLOW ARROW	NOT USED

6. POWER SERVICE 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.

a. 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.

b. 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.

MAINTENANCE OF TRAFFIC SIGNAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING TRAFFIC SIGNAL DURING CONSTRUCTION. ANY TEMPORARY ADJUSTMENTS, TEMPORARY POLES, ETC. THAT MAY BE NEEDED SHALL BE INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC. THE ITEMS DESCRIBED ABOVE AND ALL NECESSARY WORK/MATERIALS ASSOCIATED WITH THE TEMPORARY SIGNAL SUPPORTS REQUIRED TO MAINTAIN A FULLY OPERATIONAL SIGNALIZED INTERSECTION SHALL BE INCIDENTAL TO ITEM 614, MAINTAINING TRAFFIC AND HAS BEEN INCLUDED IN THE LUMP SUM BID PRICE.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND ODOT SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE TOWNSHIP AND ODOT WITH THE SIGNAL BACK TO SERVICE WITHIN TWO HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY AND ODOT WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR’S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE COUNTY AND ODOT MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO ODOT, OR THE COUNTY POLICE SERVICES AND MAINTENANCE SERVICES BY ODOT FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE COUNTY, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 7 TO 9 AM AND 4 TO 6 PM, ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY “STOP” SIGNS.

MAINTENANCE OF TRAFFIC SIGNAL (CONT.)

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;

2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;

3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;

4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;

5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE COUNTY WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN (GENERIC) (ALTERNATE #1)

IN ADDITION TO THE REQUIREMENTS OF ODOT SPECIFICATIONS 632, 732, SCD TC-83.10, OMUTCD, AND PROWAG, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. THE PUSHBUTTON ASSEMBLY SHALL BE YELLOW.

2. THE PUSHBUTTON SHALL SOUND A PERCUSSIVE TONE/SPEECH MESSAGE WHEN ACTUATED. SOME EXAMPLES OF THE SPEECH MESSAGES ARE LISTED BELOW. THE CONTRACTOR SHALL HAVE ODOT, TOWNSHIP, AND COUNTY APPROVE THE MESSAGES AND DECIBELS (DB) LEVELS OF EACH BUTTON.

- “WAIT, TO CROSS SPRINGDALE AT POOLE.”

- “SPRINGDALE. WALK SIGN IS ON TO CROSS SPRINGDALE.”

3. THE CONTRACTOR SHALL PROVIDE ANY MISCELLANEOUS WIRE/ELECTRICAL EQUIPEMENT, CONNECTIONS, MATERIAL, CONDUIT RISERS, WEATHERHEAD, ETC. TO MAKE A FULLY OPERATIONAL ACCESSIBLE PEDESTRIAN PUSHBUTTON THAT IS COMPATIBLE WITH THE EXISTING CABINET. THIS WORK SHALL BE INCIDENTAL TO ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON.

PAYMENT FOR ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN (GENERIC) (ALTERNATE #1), FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT BID PRICE PER EACH AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BMW

REVIEWER

AJH 7-23-2025

PROJECT ID

120861

SHEET

TOTAL

P.50

53



ITEM 632 ACCESSIBLE PEDESTRIAN  
PUSHBUTTON, AS PER PLAN (POLARA)  
(ALTERNATE#2)

IN ADDITION TO THE REQUIREMENTS OF ODOT SPECIFICATIONS 632, 732,  
SCD TC-83.10, ODOTCD, AND PROWAG, THE FOLLOWING REQUIREMENTS  
SHALL APPLY:

1. THE PUSHBUTTON ASSEMBLY SHALL BE YELLOW AND MANUFACTURED BY  
POLARA.
2. THE PUSHBUTTON SHALL SOUND A PERCUSSIVE TONE/SPEECH MESSAGE  
WHEN ACTUATED. SOME EXAMPLES OF THE SPEECH MESSAGES ARE  
LISTED BELOW. THE CONTRACTOR SHALL HAVE ODOT, TOWNSHIP, AND  
COUNTY APPROVE THE MESSAGES AND DECIBELS (DB) LEVELS OF EACH  
BUTTON.

- "WAIT, TO CROSS SPRINGDALE AT POOLE."
- "SPRINGDALE. WALK SIGN IS ON TO CROSS SPRINGDALE."

3. THE CONTRACTOR SHALL PROVIDE ANY MISCELLANEOUS  
WIRE/ELECTRICAL EQUIPEMENT, CONNECTIONS, MATERIAL, CONDUIT  
RISERS, WEATHERHEAD, ETC. TO MAKE A FULLY OPERATIONAL  
ACCESSIBLE PEDESTRIAN PUSHBUTTON THAT IS COMPATIBLE WITH THE  
EXISTING CABINET. THIS WORK SHALL BE INCIDENTAL TO ITEM 632  
ACCESSIBLE PEDESTRIAN PUSHBUTTON.

PAYMENT FOR ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER  
PLAN (POLARA) (ALTERNATE#2), FOR ALL OPERATIONS DESCRIBED ABOVE  
SHALL BE AT THE CONTRACT BID PRICE PER EACH AND SHALL INCLUDE  
ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS  
ITEM OF WORK.

ITEM 633 CONTROLLER ITEM, MISC.:  
REPROGRAM CONTROLLER CABINET

IN ADDITION TO THE REQUIREMENTS OF ODOT CMS 633 AND 733, THE  
CONTROLLER CABINET SHALL BE REWIRED AND REPROGRAMMED TO  
ACCOMMODATE THE NEW SIGNAL UPGRADES.

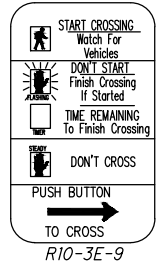
THE CONTRACTOR IS RESPONSIBLE FOR REPROGRAMMING, ETC. TO GET  
THE SIGNAL RUNNING.

Reprogramming per these plans

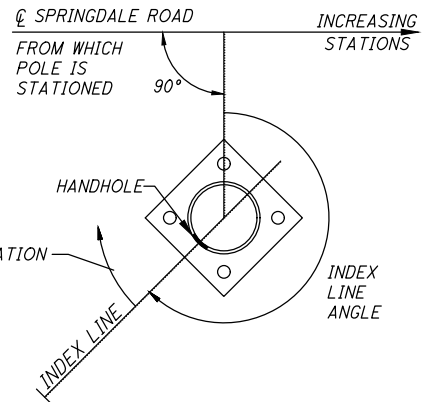
PAYMENT FOR ITEM 633 CONTROLLER ITEM, MISC.: REPROGRAM  
CONTROLLER CABINET, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL  
BE AT THE CONTRACT BID PRICE PER EACH AND SHALL INCLUDE ALL  
LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM  
OF WORK.



## PEDESTRIAN SIGNS



PEDESTRIAN/STRAIN POLE ORIENTATION DETAIL



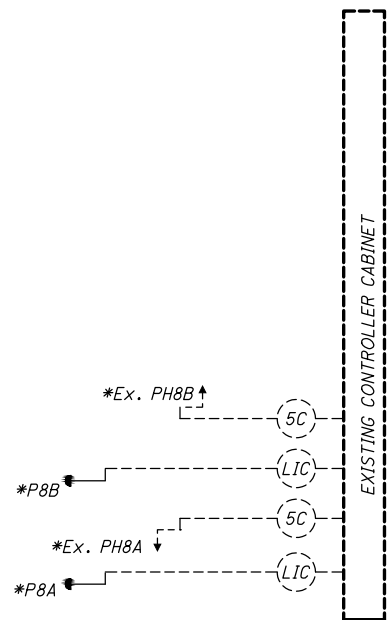
PLAN DETAILS FOR EXISTING POLES

EX. STRAIN POLE NO.	EX. WOOD POLE NO.	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE			
			PEDESTRIAN PUSHBUTTONS	PEDESTRIAN SIGNALS	CONTROLLER CABINET	
EX. SP-1	-	0	-	-	-	-
EX. SP-2	-	0	-	-	-	-
-	EX. SP-3	0	110	EXISTING	-	-
-	EX. SP-4	0	290	EXISTING	EXISTING	-

*\*CONTRACTOR SHALL UTILIZE THE EXISTING WIRING AND PROVIDE ALL MISCELLANEOUS WIRING/EQUIPMENT TO COMPLETE A FULLY OPERATIONAL AUDIBLE PEDESTRIAN SIGNAL.*

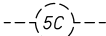
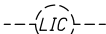




LEGEND (PLAN SHEET)

	EXISTING	PROP
TRAFFIC SIGNAL, 3 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN SIGNAL		
PEDESTRIAN PUSHBUTTON		
CONTROLLER CABINET (336)		
DO NOT DISTURB		(DND)
TO BE REMOVED		(TBR)



WIRING DIAGRAM

LEGEND (WIRING DIAGRAM)

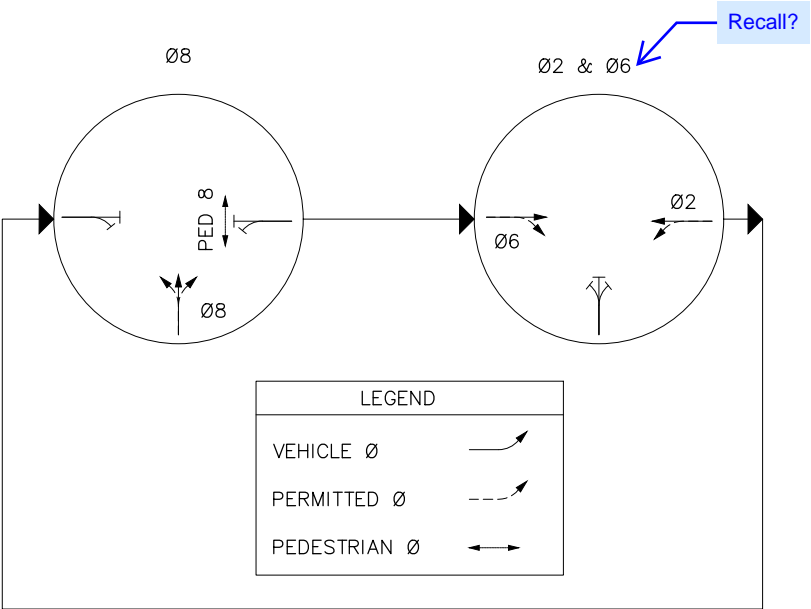
	<i>SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG</i>
	<i>2 CONDUCTOR, NO. 14 AWG (LEAD-IN CABLE)</i>
	<i>SIGNAL SUPPORT POLE NO. 1</i>
	<i>EX. PEDESTRIAN PUSHBUTTON</i>
	<i>EX. PEDESTRIAN SIGNAL HEAD</i>
	<i>PEDESTRIAN PUSH BUTTON</i>

SIGNAL TIMING CHART


INTERSECTION: SPRINGDALE ROAD AND POOLE ROAD									
MAINTAINING AGENCY: HAMILTON COUNTY									
<u>START UP</u>  START IN: FLASH TIME FOR FLASH, ALL RED: 10 SEC FIRST PHASE(S): 2 & 6 COLOR DISPLAYED: GREEN		DUAL ENTRY: ON		PHASES: 2 + 6				4 + 8	
		REST IN RED:		RING 1: -		RING 2: -		-	
		OVERLAP				A	B	C	D
		PHASES				-	-	-	-
INTERVAL OR FEATURE		CONTROLLER MOVEMENT BRIDGE STREET NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		-	Wb	-	-	-	Eb	-	Nb
MINIMUM GREEN (INITIAL) (SEC.)		-	15	-	-	-	15	-	7
ADDED INITIAL (SEC./ACTUATION)		-	-	-	-	-	-	-	-
MAXIMUM INITIAL (SEC.)		-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)		-	1.0	-	-	-	1.0	-	1.0
TIME BEFORE REDUCTION (SEC.)		-	-	-	-	-	-	-	-
MINIMUM GAP (SEC.)		-	-	-	-	-	-	-	-
TIME TO REDUCE (SEC.)		-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)		-	40	-	-	-	40	-	35
MAXIMUM GREEN II (SEC.)		-	-	-	-	-	-	-	-
YELLOW CHANGE (SEC.)		-	4.5	-	-	-	4.5	-	4.0
ALL RED CLEARANCE (SEC.)		-	1.5	-	-	-	1.5	-	1.0
DELAYED GREEN (LPI) (SEC.)		-	-	-	-	-	-	-	-
*FLASHING YELLOW ARROW DELAY (SEC.)		-	-	-	-	-	-	-	-
WALK (SEC.)		-	-	-	-	-	-	-	7
PEDESTRIAN CLEARANCE (SEC.)		-	-	-	-	-	-	-	11
RECALL	MAXIMUM (ON/OFF)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	MINIMUM (ON/OFF)	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
	PEDESTRIAN (ON/OFF)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
MEMORY (ON/OFF)		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

NOTE: COUNTDOWN PEDESTRIAN SIGNALS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4E-2.

-EXISTING VEHICULAR SIGNAL TIMINGS WERE NOT MODIFIED IN THESE PLANS AND SHALL REMAIN AS THEY ARE IN THE CONTROLLER. THE CONTRACTOR SHALL ADD THE PEDESTRIAN PHASES WITH THE APPROPRIATING SIGNAL TIMING INTO THE CONTROLLER AS DETAILED IN THE TABLE ABOVE.



FIELD WIRING HOOK-UP CHART

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH	SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH	
				PEDESTRIAN MOVEMENTS				
					WALK	Ø8 PED/LS 12 G	OFF	
					DW	Ø8 PED/LS 12 R		
LS = LOAD SWITCH								



GENERAL PROVISIONS

The Contractor is advised that there are several changes to the most recent edition of the City of Cincinnati Supplement dated January 1, 2023. These General Provisions include these changes. The Supplement and a Summary of Changes can be purchased or downloaded from the City's website: <http://www.cincinnati-oh.gov/dote/assets/File/2023%20CITY%20SUPPLEMENT-FINAL.pdf>

Water main items are to be constructed in accordance with the provisions of the State of Ohio, Department of Transportation, Construction and Material Specifications, dated January 1, 2023, and modified by the City of Cincinnati Supplement to said State of Ohio Specifications, effective January 1, 2023, and any supplements or changes thereto. Copies of the State specifications are on file at the Office of Contract Sales of the State of Ohio, Department of Transportation, 25 South Front Street, Columbus, Ohio, and at the offices of the City Engineer of Cincinnati, Ohio. Submittal of a bid for this project implies that the Contractor has taken all provisions of the Supplement into account.

The Greater Cincinnati Water Works (GCWW) understands that differing site conditions results in extra work/change orders to the project. Change orders on GCWW contracts will be done in strict accordance with Item 109.05 C of the State of Ohio Department of Transportation Construction and Material Specifications dated January 1, 2023 or most recent edition and as modified in this City of Cincinnati Supplement. GCWW limits the mark up on wages and fringe benefits as described in 109.05 C. 2, "Labor" to 30%. It is expressly understood that regardless of the nature of the claim, or change in scope of work, the Contractor is not entitled to compensation for loss of anticipated profit or production.

As defined in the City of Cincinnati Supplement, sections 107.07 and 107.071, the Contractor is required to submit, at the time of the pre-construction meeting, a Site Safety Plan. Furthermore, the Contractor shall have an authorized and competent safety representative assigned to the project site.

The Contractor is advised that he has certain responsibilities under Section 153.64 of The Ohio Revised Code. For all underground utilities, contact the Ohio Utilities Protection Service at 1-800-362-2764 (toll free) 48 hours in advance of work. The Contractor is advised that all utility information has been shown on the contract plans from information provided by the owner of each utility in compliance with Sec. 153.64 of the Ohio Revised Code. In cases where utility information is incorrect and it results in a change in the contract plans the Contractor shall first notify the owner of the utility to determine the necessary course of action. The Contractor shall submit any subsequent claims as a result of downtime or additional work to the owner of the conflicting utility. The GCWW will not accept claims for any utility other than those as a result of incorrect water main and related appurtenance information.

The Contractor must locate or "pot hole" all utilities within the alignment of the proposed main a minimum of 50 feet ahead of pipe laying. Test holes must be dug, or trench excavated, a minimum of 50 feet (15.2 m) in advance of pipe laying, to assure proper clearance between the water main and any utility crossing, or underground structure. All utilities and structures shall be suitably braced and supported. The Contractor shall understand that any obstructions encountered in the installation of the main, due to the failure of having 50 feet (15.2m) of trench excavated ahead of laying operations, may require removal and relaying of the pipe at the contractors expense. The GCWW will not accept a claim for different utility conditions encountered when test holes are not performed as required.

Item 1120, "Exploratory Excavation", shall not include excavations within the limits of the proposed trench as defined in 1101.04 and 1101.05. Test holes are required on all utilities within 50 feet of the last laid pipe. Test holes within the alignment of the proposed trench are included in the Contractor's unit bid for Item 1101. Locations to be explored will vary from areas within the roadway to areas outside of the roadway.

It is the nature of construction that unmarked utilities or utilities not shown on the plans may be encountered within the excavation for the proposed work. the contractor is responsible to identify and remove any abandoned utilities encountered in the excavation. unless otherwise noted on the plans, no extra payment will be made for up to 10" diameter, width or depth utilities, to the contractor for the identification and removal of the abandon utility. All costs shall be included in the contractor's unit price bid for the appropriate item 1101, "Laying ductile iron pipe and fittings".

Street pavement or sidewalk should not be disturbed for a distance of more than 200 Feet (61.0 m) ahead of the last laid pipe. Backfill shall be completed within 50 feet (15.2 m) of the last laid pipe. Temporary or permanent surface restoration must be installed within a distance of 200 feet (61.0 m) of the laid pipe, including those areas where main installations occur within a closed lane or closed street condition. Roadway plates may be used as a temporary measure for a period not to exceed 24 hours without the approval of the GCWW.

Any undermined pavement of more than 6 inches horizontal must be removed prior to starting trench backfill. If undermining of pavement occurs more than 1 foot, then pavement must be shored to protect traffic, or arrangements made for additional lane closures must be made. If problems continue to occur regarding trenching integrity, sheeting and bracing can be required by the City Engineer or the City Engineer's representative, at the contractor's expense. If any tunneling is necessary, adequate information shown in both plan and profile and tunneling procedures must be submitted to the City Engineer's Office prior to commencement of work.

The GCWW has made every effort to depict the pipe sewers and lateral information on the plans. The Contractor is advised that sewer laterals are shown in plan view only. The Contractor shall determine the elevation of the sewer laterals in advance of laying the water main at these crossings. If the sewer laterals require changing in order to avoid conflict with the water main, or if the Contractor encounters a pipe sewer or lateral in the excavation that was not shown on the plans and requires a change of grade or alignment due to the installation of the water main, the Contractor shall furnish all necessary labor, material, tools, and equipment required to change the grade or alignment of pipe sewers and laterals of various sizes, allowing installation of water mains and appurtenances as shown on the plans, or as directed by the GCWW Inspector. This work shall include all necessary excavation, backfill, and restoration. The Contractor will be compensated under Item 1123, "Changing Pipe Sewers 8 Inch and Under". When crossing sanitary and combination sewers, a vertical clearance of 18" must be maintained.

Notice of Confidentiality – Public Infrastructure Record

This Document is a Public Infrastructure Record of the City of Cincinnati and its Greater Cincinnati Water Works, and is not subject to the public disclosure requirements of the public records laws of the State of Ohio and federal government. This Document is being provided on the basis of your reported need, and shall be considered confidential. By accepting this Document, you agree that it will not be shared or otherwise disclosed to anyone other than persons who have a direct need to know for the sole purpose of carrying out the project for which this Document was obtained. Anyone receiving this Document is bound by the same confidentiality requirements and must take precautions to protect against its dissemination.

The failure to observe the confidentiality requirements of this Notice shall serve as the basis for the City of Cincinnati to immediately seek legal recourse, including the recovery of actual damages resulting from unauthorized access or disclosure of the Document.



The Contractor is advised that due to the alignment of the proposed water main, it may be necessary to install a temporary valve box over an existing chambered valve that must remain in service during the water main installation as directed by the GCWW Inspector. The chamber shall be abandoned, a valve box (furnished by the contractor) placed over the valve, and upon project completion, the valve box must be removed. The contractor will not receive additional compensation for this work, but should include the cost of this work in his unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

It is the Contractor's responsibility to provide adequate water supply for domestic and fire fighting purposes. In order to accomplish the water main connections with a minimum amount of inconvenience to the consumers, it may be necessary to do the work at other than normal working hours or as may be scheduled by the GCWW.

The Contractor is advised that the operating pressure of the existing water main within the limits of the subject project is approximately **44–76 P.S.I.**

In order to minimize the inconvenience of the consumers, the number of shutdowns required to do the proposed water main work shall be limited. Only one shutdown, limited to 8 hours, will be allowed during a 24 hour period.

All water service branches have a minimum cover of 3.0 feet.

The Contractor is advised that it shall be necessary to install temporary Plug/caps on the existing and proposed water mains in order to maintain service during testing and water main and branch connections. These temporary Plug shall be furnished by the contractor. He is responsible for their proper installation. The cost for this work shall be included in the Contractor's unit bid price for the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is required to excavate and expose the existing utilities and existing water mains along the line of the proposed water main and all proposed connection points to verify location, diameter, line and grade. Also, if the removal of the bulkhead or plug is required all excavation and temporary/permanent restoration shall be compensated under the Contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is advised that all C.J. Plug are to be restrained with a Field Lok Gasket and all M.J. caps are to be restrained using a M.J.R.G.. This includes temporary Plug and caps for testing purposes. When a temporary plug is used, the contractor is permitted to remove the plug by cutting the section of pipe containing the plug and using a solid sleeve at that point to complete the tie-in. In the event that a cap is used, the contractor shall remove the M.J.R.G. and cap before completing the tie-in.

The Contractor is advised that on any fire hydrant required to be relocated with this project, all bolt assemblies shall be replaced. The cost for this work shall be included in the unit bid price for Item 1113 "Relocating Existing Fire Hydrants". No part of any fire hydrant setting shall be installed closer than five feet to any driveway, inlet, utility pole or guy wire anchor.

Item 1111, "Water Works Valve Chambers", shall also cover the furnishing and installing of Precast Reinforced Concrete Chambers in accordance with O.D.O.T. Specification 706.13. All pertinent provisions of this item and GCWW Standard Drawing No. 104-1A shall apply. Precast chambers shall be used in all locations where space permits and as directed by the GCWW.

Air cocks may be necessary for the proper operation of the water system. The Air Release Assembly, which may not be shown on the drawing, will be furnished and installed by the Contractor per the detail on these plans, if required by the GCWW.

It shall be the Contractor's responsibility to arrange for the removal and replacement of any poles and guys necessary for the installation of the proposed water mains, and any cost connected thereto shall be at his expense.

All pipe and specials shall be in accordance with City of Cincinnati Specification 40-110-16.

All procured water main and appurtenance materials, other than those furnished through the GCWW must be properly certified; certified for GCWW Inspection: or already inspected by the GCWW. Pipe, fittings, valves and fire hydrants must be GCWW inspected and stamped materials.

The Contractor should be advised that all Fittings (Bends, Offset Bends, Tees, Crosses, Sleeves, Caps and Plug) supplied for this job may be either ANSI/AWWA C-110 Full-body Ductile Iron, Cement Lined Fittings or ANSI/AWWA C-153 Compact Ductile Iron, Fusion Bonded Epoxy Coated Fittings in accordance with City of Cincinnati, Department of Purchasing, Standard Specification No. 40-110-12 for Pipe and Fittings Water, Ductile Iron 3" to 60". All fittings are subject to inspection and approval by appropriate GCWW Inspection personnel. Minor pinholes and abrasions to epoxy coated valves and fittings are to be repaired using 3M Hot Melt Patch Compounds (H.M.P.C.) in the stick form. Repair procedures shall be in accordance with the General Application Steps identified for the H.M.P.C. All repairs to epoxy coated fittings are subject to inspection and approval by appropriate GCWW Inspection personnel.

All rejected material, including pipe and fittings, shall be removed from the project site immediately.

The Contractor must maintain access to sidewalks at all times. Storage of any materials within the public Right of Way, including sidewalks, is not permitted unless approved by GCWW, the Project Engineer, or as indicated on the approved plans.

All copper tubing shall be type "K" of a standard nominal size: 3/4", 1", 1-1/2" and 2". All fittings will have copper flare type connections and shall be in accordance with City of Cincinnati Specification No. 40-113-05.

The contractor shall furnish the necessary certifications for branch material.

All proposed water mains will be hydrostatically tested for leakage in accordance with 1101.054,"Hydrostatic Test for Leakage", of the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor will be responsible for filling, flushing, and pressure testing new water mains, 20" or smaller. the contractor will provide all labor, material and equipment (including the necessary pumps to apply the pressure test). The Water Works will provide the necessary meter and gauge. All costs for this work shall be included in the contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings". Once the filling and pressure testing are completed, the Contractor will be responsible for flushing the proposed water main and the GCWW will be responsible for bacteria sampling. The GCWW will be responsible for filling, pressure testing and flushing new water mains greater than 20".

The Contractor is responsible for all pipe sewers disturbed in the completion of this project. In the event it becomes necessary to repair or replace existing pipe sewers, the Contractor must notify Sewer Maintenance, (513)244-1369, before proceeding with the work.

The Contractor is advised that his unit bid prices for the appropriate Item 1101, "Furnish & Install Pipe and Fittings", includes final restoration of all disturbed surfaces. The GCWW will not make full compensation under Item 1101 until final restoration is complete.

"All valve and air release box assemblies shall be domestically manufactured.

All box assemblies for 12--inch and smaller gate valves and 1--inch air releases shall be either Tyler Union Series 6850, Ej Series 8500, or Bingham & Taylor Series 4905, or GCWW approved equal. Box assemblies for these applications require a frost plug and "BOXLOK."

All box assemblies for 16--inch and above butterfly or gate valves and 2--inch air releases shall be Ej Series 460, or GCWW approved equal. Box assemblies for these applications require a frost plug.

All costs associated with adherence to these requirements shall be included in the Contractor's unit bid price for Item 1116 - Furnishing and Installing Valve Box Complete.

SUGGESTED BILL OF MATERIALS

FURNISHED BY CONTRACTOR

QTY	UNIT	DESCRIPTION
1	EACH	6" DUCTILE IRON PIPE, C.J., TH. CL. 55, 20' LENGTH
1	EACH	8" DUCTILE IRON PIPE, C.J., TH. CL. 55, 20' LENGTH
2	EACH	16" WIDE POLYETHYLINE TUBE, 16" WIDE X 20' LONG, 4 MIL CROSS LAMINATE
2	EACH	20" WIDE POLYETHYLINE TUBE, 20" WIDE X 20' LONG, 4 MIL CROSS LAMINATE
1	EACH	1 1/2" WIDE POLYETHYLINE TAPE WITH ADHESIVE (100' ROLL)
2	EACH	8" SOLID SLEEVE, D.P.
1	EACH	8" X 6" TEE, 2 M.J. X FLG.
1	EACH	6" VALVE, FLG, X M.J.
1	EACH	6" FLANGE TYTE RUBBER GASKET
1	EACH	VALVE BOX COMPLETE, IRON
1	EACH	VALVE BOX FROST PLUG
1	EACH	VALVE BOX BOXLOK (VALVE BOX ALIGNMENT DEVICE)
1	EACH	6" FH EXTENSION (6"LONG)
NOTE 1	2	6" MECHANICAL JOINT RESTRAIN GLAND (M.J.R.G.)
NOTE 4	2	8" MECHANICAL JOINT RESTRAIN GLAND (M.J.R.G.)
NOTE 4	4	8" MECHANICAL JOINT RESTRAIN GLAND (M.J.R.G.)

SERVICE BRANCH MATERIALS

FURNISHED BY CONTRACTOR

QTY	UNIT	DESCRIPTION
7	EACH	CURB BOX
2	EACH	ROADWAY BOX

FURNISHED BY COLERAIN TOWNSHIP

QTY	UNIT	DESCRIPTION
1	EACH	6" FIRE HYDRANT

\*\*\*Note: Contractor shall verify the size and material of each service branch at the property line prior to installing branch. Cost for this work to be included in Item 1126--Furnishing and Installing Copper Service Pipe w/ Aqua Shield".

The materials listed are only suggested for use during the water main and branch relocation work as proposed on the drawings. The contractor shall furnish additional material where needed. No allowance will be made for unused material nor will any extra payment be made for additional specials required to complete the water main work. Before ordering material the contractor is responsible for making his own field measurements and for field verifying the O.D. of existing water mains where sleeves and pipe couplings are involved.

Note 1:  
Valves furnished by the contractor shall be; American Resilient Wedge Gate Valve Series 2500, U.S. Pipe Metroseal Gate Valve, Kennedy Valve Ken Seal II Resilient Gate Valve, Clow F-6100 Series Resilient Wedge Gate Valve, Mueller 2360 Resilient Wedge Gate Valve.

Note 2:  
Low-Lead Brass Material Requirements:  
All components in contact with water shall be fabricated from Sebiloy II or Federalloy I-836 alloys or a material approved by the Engineer. All components that do not come in contact with water shall comply with the requirements of ASTM B 62 Copper Alloy Number. Coated or washed metals are not acceptable if their lead levels exceed .25% by weight prior to the coating or washing process. All service fittings and materials shall be certified as suitable for contact with drinking water by an accredited certification organization in accordance with ANSI/NSF Standard 61, Drinking Water Systems Components - Health Effects. All service fittings shall either be stamped or embossed with the letter "NL", to indicate "No-Lead", or marked to indicate that the product is manufactured from the low-lead alloys.

Note 3:  
Special Note on Service Pipe in Corrosive Soils:  
Service tubing is to be soft K Copper manufactured to the requirements of ASTM B88. Service tubing coating shall have NOVA Polyethylene LLDPE extrusion resin PP-0118-F coating to meet minimum of .026 mil thickness containing UV inhibitors. Service tubing shall have identification & traceability on both copper & plastic continuously line--marked with tube contents, ASTM specification, size, & descending footage. Unique lot number printed on both copper & plastic allowing product to be traced back to origin and time of manufacturing. Service tubing shall be Aqua Shield as manufactured by KAMCO Products Inc. or approved equal.

Note 4:  
Mechanical Joint Restrain Gland (MJRG):  
All mechanical joint restraint glands furnished by the contractor shall be any of the following:  
EBAA--Megalug  
TYLER/UNION--Tufgrip  
STAR--Stargrip  
FORD--Uni-Flange Series 1400

All products shall be domestically manufactured.

INDEX	
GENERAL PROVISIONS	.....1
SUGGESTED BILL OF MATERIALS	.....1
PLAN	.....2-4
RESTORATION DETAILS	.....3

SPRINGDALE RD. SIDEWALK

APPROVED: 

DS-0989 / MF-17068

Matthew S. Smith

GCWW SUPERVISING ENGINEER - DESIGN

05/29/25

DATE

OhioEPA

Ohio Environmental Protection Agency "Self-Certification" letter required prior to the start of construction.

☒ OEPA CERTIFICATION EXEMPT

☐ NON - EXEMPT

Matthew S. Smith

OEPA REVIEW

05/29/25

DATE

GREATER CINCINNATI  
WATER WORKS  
ENGINEERING DIVISION/ DESIGN SECTION  
3845 EASTERN AVENUE CINCINNATI OHIO 45226

SUGGESTED BILL OF MATERIAL  
G.C.W.W. SPECIAL PROVISIONS

DS-0989  
MF-17068

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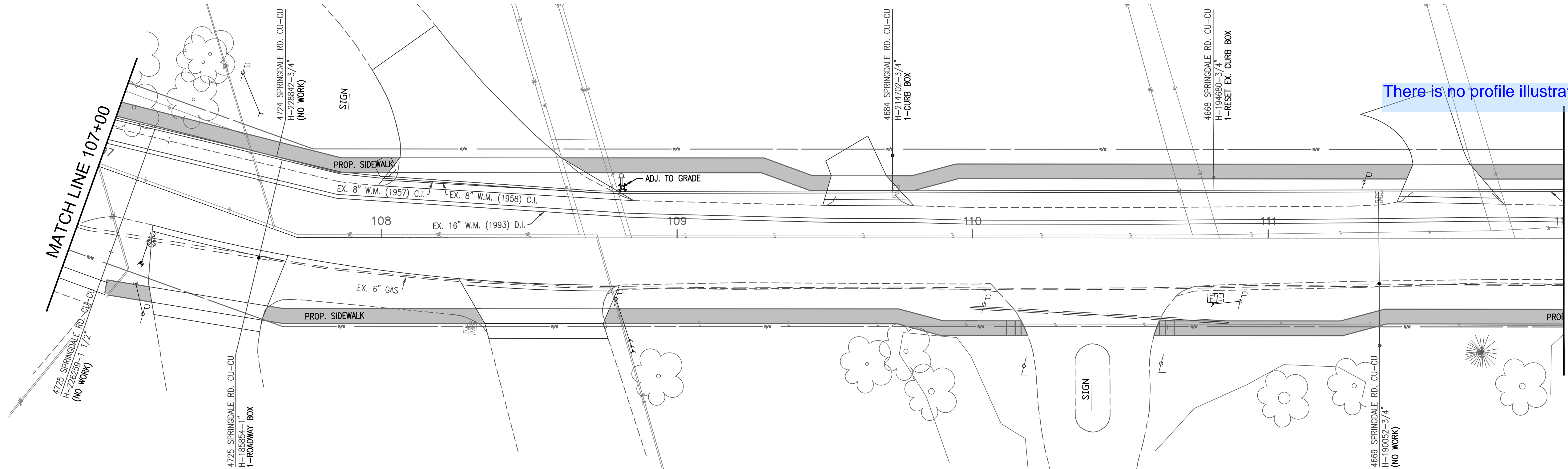
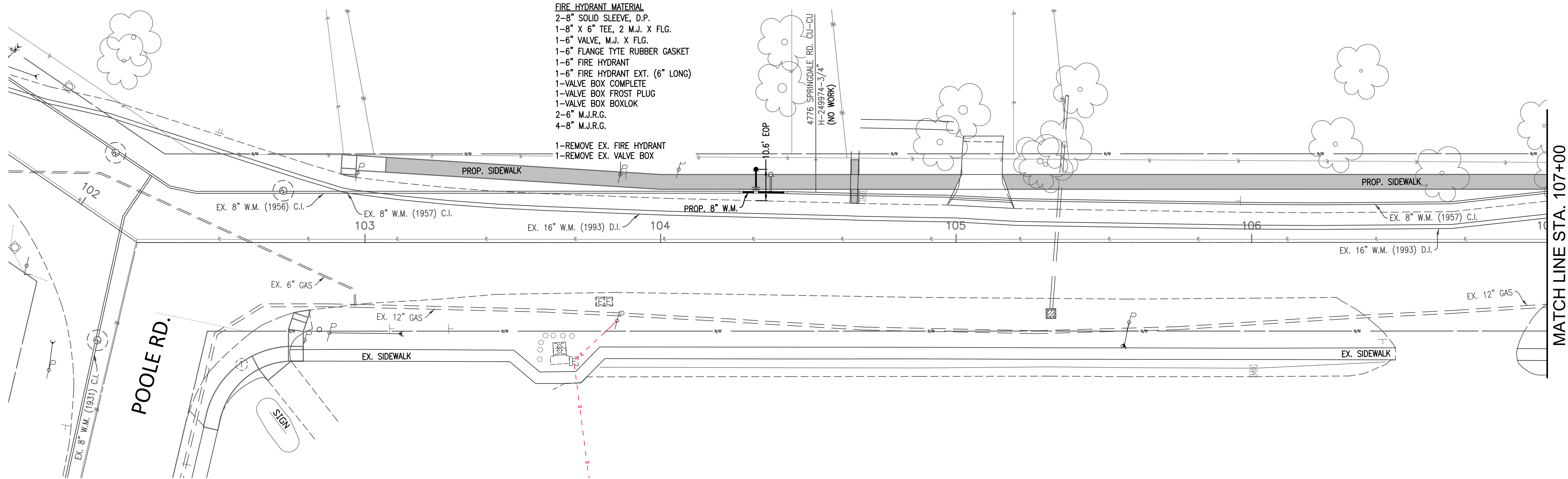
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REVISIONS			


SPRINGDALE RD. SIDEWALK



SPRINGDALE ROAD



There is no profile illustrated.

- FIRE HYDRANT MATERIAL**  
2-8" SOLID SLEEVE, D.P.  
1-8" X 6" TEE, 2 M.J. X FLG.  
1-6" VALVE, M.J. X FLG.  
1-6" FLANGE TYTE RUBBER GASKET  
1-6" FIRE HYDRANT  
1-6" FIRE HYDRANT EXT. (6" LONG)  
1-VALVE BOX COMPLETE  
1-VALVE BOX FROST PLUG  
1-VALVE BOX BOXLOK  
2-6" M.J.R.G.  
4-8" M.J.R.G.

- 1-REMOVE EX. FIRE HYDRANT  
1-REMOVE EX. VALVE BOX

**NOTICE OF CONFIDENTIALITY - PUBLIC INFRASTRUCTURE RECORD**

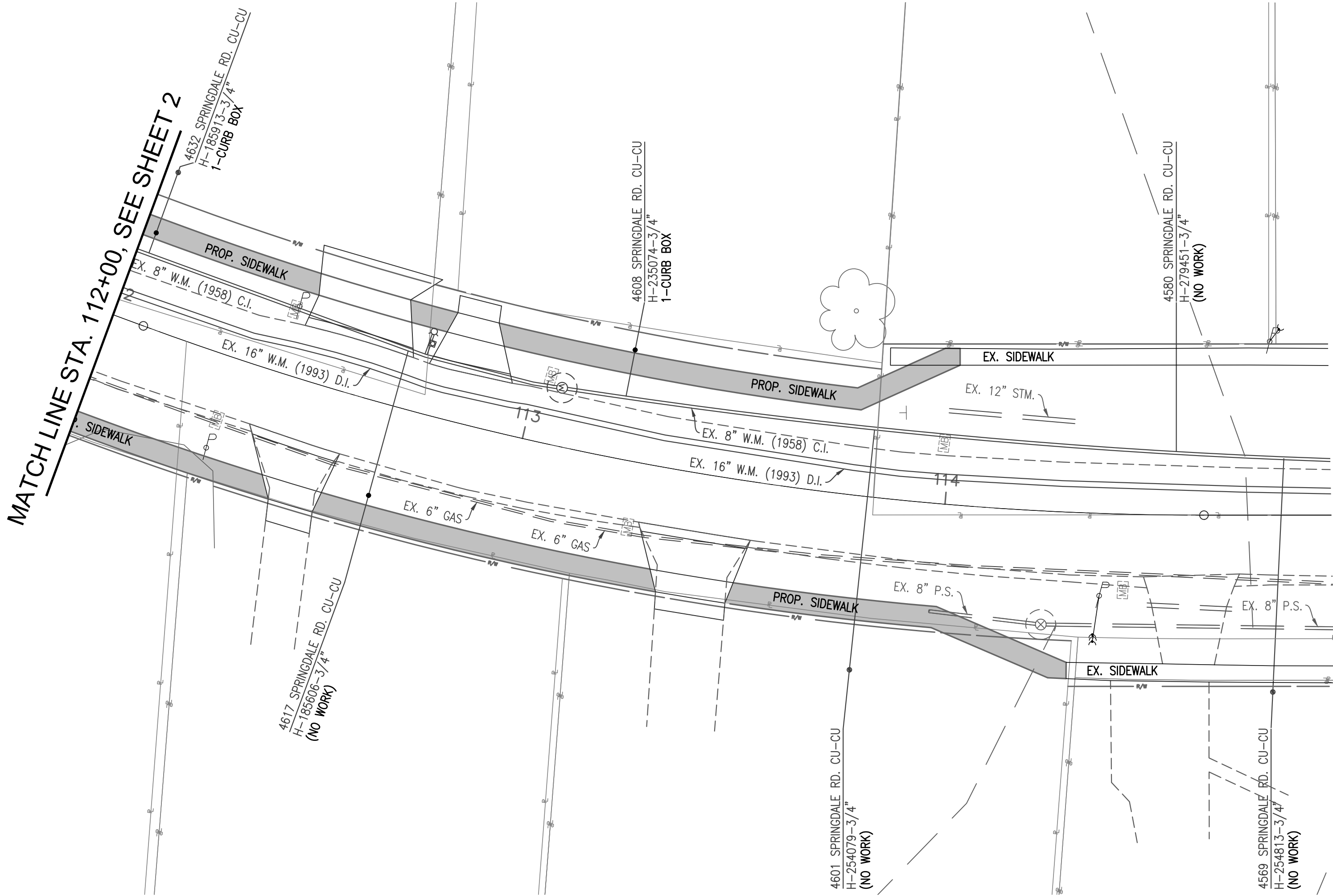
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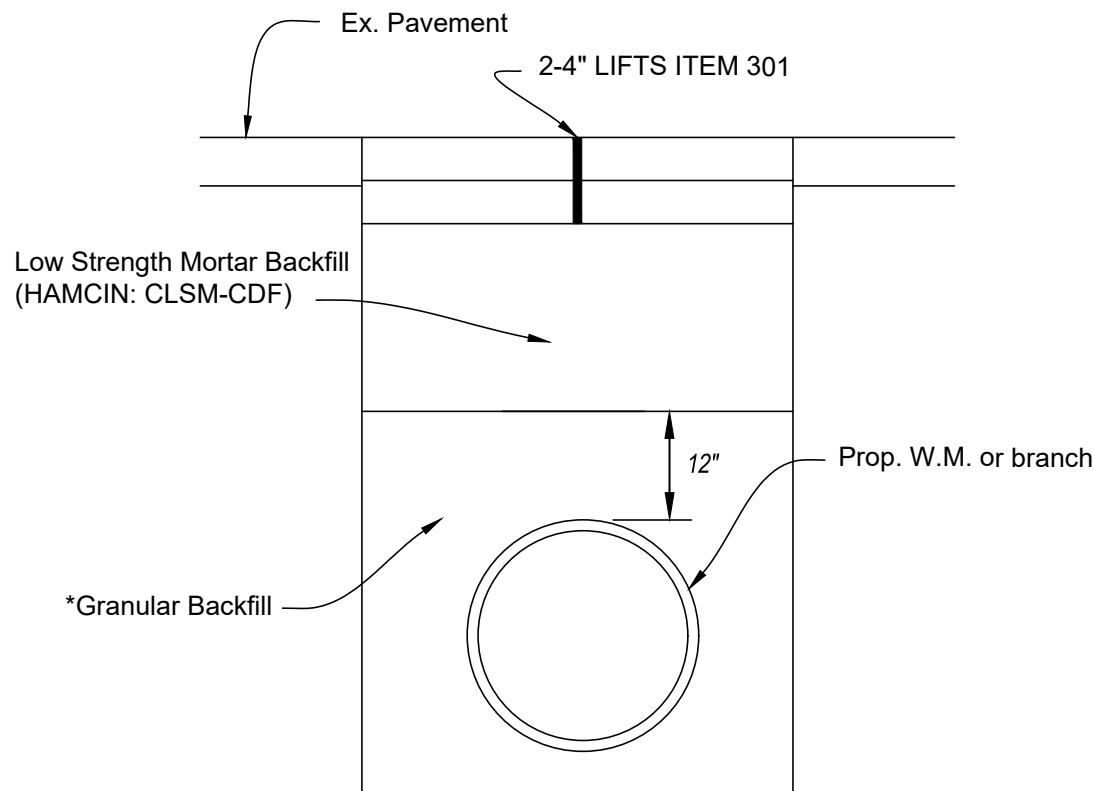
SPRINGDALE RD. SIDEWALK	DS-0989 MF-17068	2 4	SPRINGDALE ROAD PLAN AND PROFILE	 GREATER CINCINNATI WATER WORKS ENGINEERING DIVISION / DESIGN SECTION 3845 EASTERN AVENUE, CINCINNATI, OHIO 45226	REVISIONS	CALCULATED	HORIZONTAL AND VERTICAL SCALE IN FEET	
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SPRINGDALE ROAD



STANDARD WATER MAIN TRENCH INSTALLATION DETAIL  
(TEMPORARY RESTORATION)



\*\*PERMANENT RESTORATION SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AND/OR PROJECT PLAN TYPICAL SECTIONS.

IN AREAS WHERE THE PAVEMENT, BASE AND/OR SUB-BASE IS TO BE REPLACED AS PART OF THE ROADWAY CONTRACT, THE COST FOR PERMANENT PAVEMENT RESTORATION SHALL BE INCLUDED UNDER THE APPROPRIATE PAVEMENT BID ITEMS. COST FOR TEMPORARY PAVEMENT RESTORATION IN THESE AREAS SHALL BE INCLUDED IN THE CONTRACTOR'S APPROPRIATE UNIT BID PRICE FOR ITEM 1101 OR ITEM 1126.

UNLESS OTHERWISE NOTED ON THE PLANS, AREAS WHERE THE EXISTING PAVEMENT, BASE AND/OR SUB-BASE ARE NOT TO BE DISTURBED, THE COST FOR TEMPORARY AND PERMANENT PAVEMENT RESTORATION SHALL BE INCLUDED IN THE CONTRACTOR'S APPROPRIATE UNIT BID PRICE FOR ITEM 1101 OR ITEM 1126.

\*BACKFILL OF THE WATER MAIN AND BRANCH TRENCH SHALL BE DONE IN ACCORDANCE WITH G.C.W.W. SPECIFICATIONS. ALL WATER MAINS AND BRANCHES INSTALLED OUTSIDE OF THE PAVEMENT AREA SHALL UTILIZE GRANULAR BACKFILL IN LIEU OF THE CONTROL DENSITY FILL. ALL COSTS FOR BACKFILL SHALL BE INCLUDED UNDER ITEM 1101 OR ITEM 1126.

CONTROLLED DENSITY FILL MUST MEET BOTH HAMCIN: CLSM-CDF PERFORMANCE SPECIFICATION AND O.D.O.T. SPECIFICATION. ALL FLOWABLE FILL PRODUCTS SHALL MEET THE REQUIREMENTS OF THE CURRENT HAMCIN CLSM-CDF BACKFILL SPECIFICATION (DATED MARCH 2015). COPIES OF THE HAMCIN CLSM-CDF BACKFILL SPECIFICATION ARE MADE AVAILABLE AT THE GCWW ENGINEERING OFFICES AT 4747 SPRING GROVE AVENUE, CINCINNATI DEPARTMENT OF TRANSPORTATION & ENGINEERING AT 801 PLUM STREET, OR THEIR WEBSITE: [HTTP://WWW.CINCINNATI-OH.GOV/DOTE/MANUALS-PERMITS-SUPPLEMENTS/](http://www.cincinnati-oh.gov/dote/manuals-permits-supplements/). ALSO, THE CONTRACTOR SHALL SUBMIT, PRIOR TO THE START OF CONSTRUCCION, THE NECESSARY DOCUMENTATION FOR REVIEW AND APPROVAL BY THE GCWW.

PLEASE NOTE THAT THE G.C.W.W. REQUIREMENT IS IN ADDITION TO HAMCIN SPECIFICATIONS FOR FLOWABLE FILL PRODUCTS. A COPY OF THE G.C.W.W. REQUIREMENT IS AVAILABLE AT THE G.C.W.W. ENGINEERING OFFICE LOCATED AT 4747 SPRING GROVE AVENUE. CONTACT THE SUPERVISOR OF INSPECTION AT 591-7870.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT THE NECESSARY CONTROLLED DENSITY FILL COMPLIANCE DOCUMENTATION FOR REVIEW AND APPROVAL BY THE G.C.W.W.

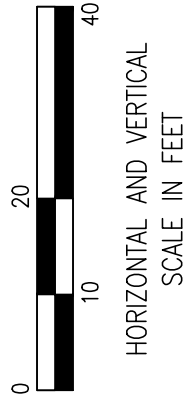
GCWW NOTE:  
ALL FIELD LAYOUT OF WATER MAIN PIPE AND SPECIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED BY A LICENSED SURVEYOR.

There is no profile illustrated.

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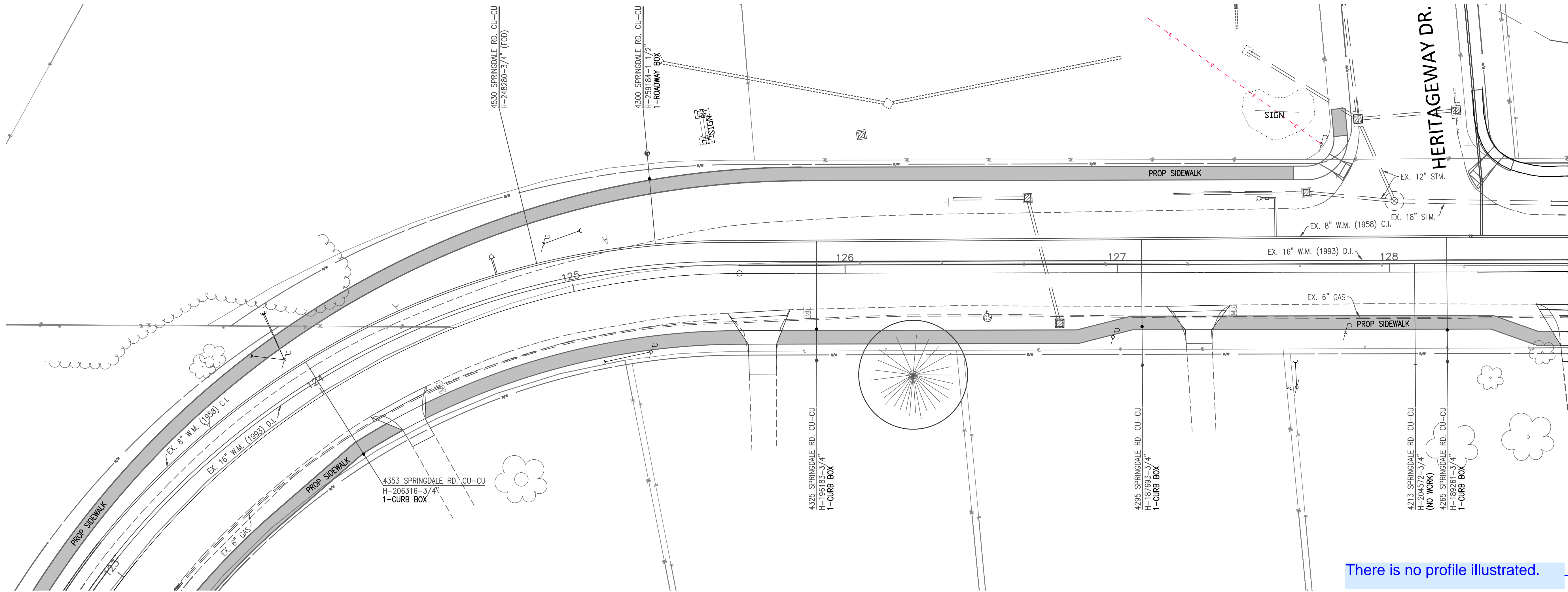


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REVISIONS		



SPRINGDALE ROAD



There is no profile illustrated.

SPRINGDALE ROAD  
PLAN AND PROFILE

DS-0989  
MF-17068

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SPRINGDALE RD. SIDEWALK



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