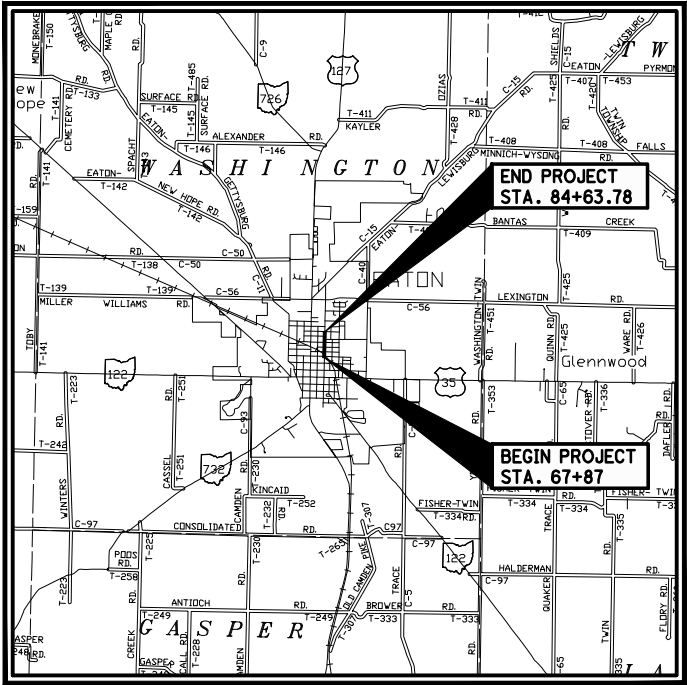
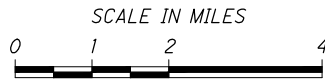




LOCATION MAP

LATITUDE: N 39°-45'-01" LONGITUDE: W 84°-37'-59"



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

DESIGN DESIGNATION

CURRENT ADT (2026) ----- 3,642
DESIGN YEAR ADT (2046) ----- 4,330
DESIGN HOURLY VOLUME (2046) ----- 476
DIRECTIONAL DISTRIBUTION ----- 55%
TRUCKS (24 HOUR B&C) ----- 3%
DESIGN SPEED ----- 35 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


Before You Dig

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

PLAN PREPARED BY:



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



SIGNED: _____
DATE: _____

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

PRE-MR 112 0.99 N MAPLE PH 2

CITY OF EATON
PREBLE COUNTY

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FEDERAL PROJECT NO.
E230629

RAILROAD INVOLVEMENT
NORFOLK SOUTHERN

PROJECT DESCRIPTION

RECONSTRUCTION OF NORTH MAPLE STREET INCLUDING
REPLACEMENT OF CURB, STORM SEWER SYSTEM, AND
SIDEWALKS FROM E. HIGH STREET TO MECHANIC STREET.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	3.37 ACRES
ESTIMATED CONTRACTOR E.D.A.:	0.1 ACRES
NOTICE OF INTENT E.D.A.:	3.47 ACRES

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE
MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO
TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE
PROVIDE AS INDICATED ON SHEETS 7-8.

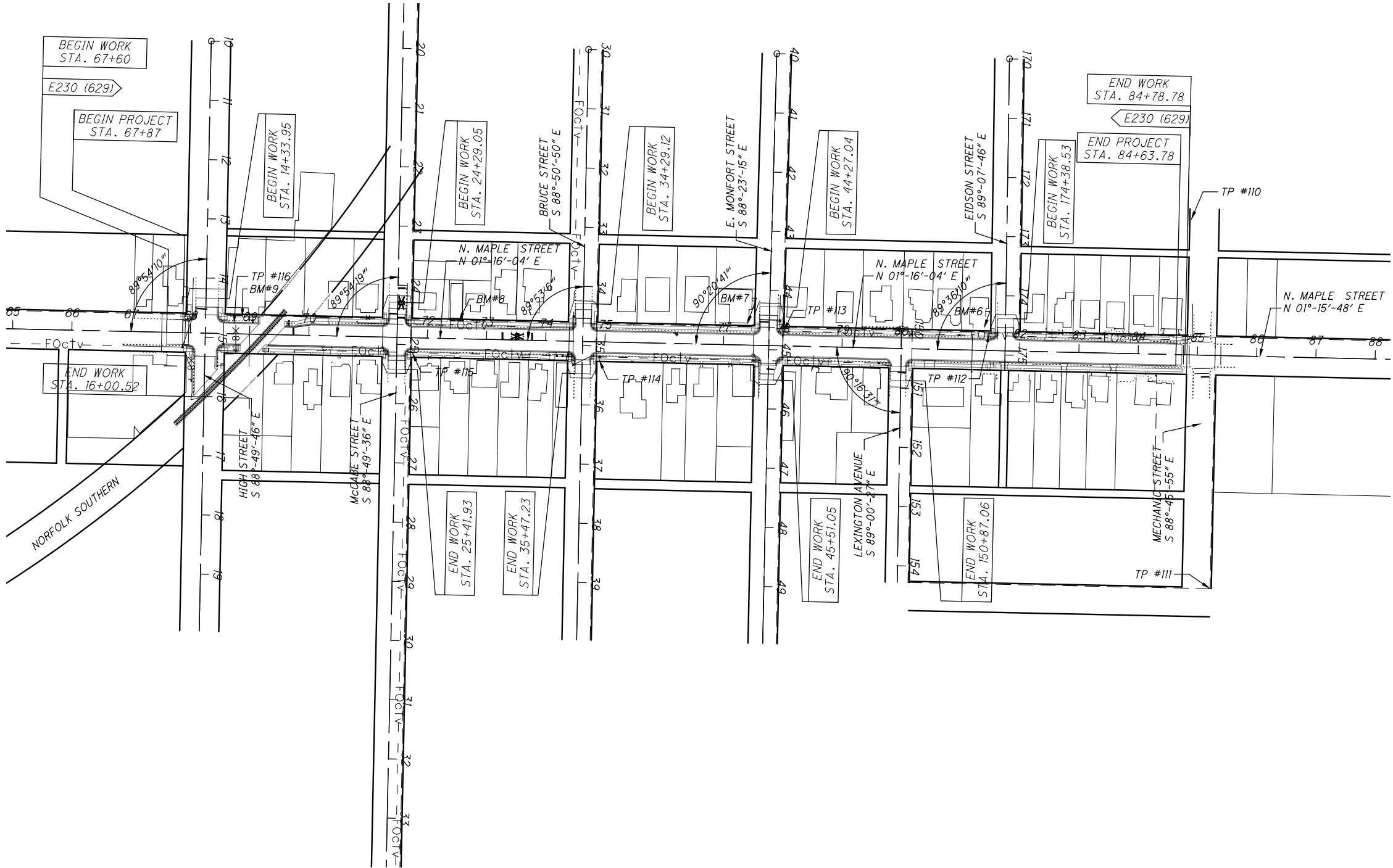

Douglas A. Gruver, P.E.
DISTRICT 08 DEPUTY DIRECTOR


Pamela Boratyn
Director, Department of Transportation

OHIO DEPARTMENT OF TRANSPORTATION STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	01-19-24	F-1.1	07-19-13	MT-97.10	04-19-19			800	01-17-25		
BP-4.1	07-19-13			MT-101.60	01-17-25			832	07-19-24		
BP-5.1	01-17-25			MT-101.90	07-17-20			878	01-21-22		
BP-7.1	01-17-25	RM-1.1	01-20-23	MT-105.10	01-17-20			895	04-18-14		
		RM-2.1	07-19-13					916	07-19-24		
								995	07-17-15		
CB-2-2B	07-19-24			TC-41.20	10-18-13						
				TC-41.30	04-21-23						
MH-3	07-19-24			TC-41.40	10-18-13					PROPOSAL NOTES	
				TC-42.20	10-18-13						
				TC-52.10	10-18-13					PNI51	07-19-24
DM-1.1	01-17-25			TC-52.20	01-15-21						
DM-1.2	01-17-25			TC-71.10	04-21-23						
DM-3.1	01-18-13			TC-74.10	07-21-23						
DM-4.2	04-20-12										
DM-4.4	01-15-16										

TITLE SHEET

DESIGN AGENCY	
CHOICE ONE ENGINEERING	
DESIGNER	BHB
REVIEWER	
NNS 06-19-2025	
PROJECT ID	118523
SHEET	TOTAL
P:1	79



HORIZONTAL CONTROL:

TRAVERSE POINT #116
N=643802.6981
E=1368862.5714
STA. 68+59.69, 21.81' LT

TRAVERSE POINT #115
N=644117.9288
E=1368918.5195
STA. 71+76.08, 27.15' RT

TRAVERSE POINT #114
N=644433.1208
E=136830.3445
STA. 74+91.46, 31.99' RT

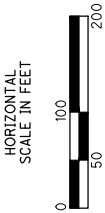
TRAVERSE POINT #113
N=644745.2684
E=1368877.9634
STA. 78+02.37, 27.28' LT

TRAVERSE POINT #112
N=645090.7639
E=1368885.6600
8953.309
STA. 81+47.95, 27.23' LT

TRAVERSE POINT #111
N=645463.481
E=1369315.163
STA. 85+30.06, 393.92' RT

TRAVERSE POINT #110
N=645433.075
E=1368689.934
STA. 84+85.87, 230.48' LT

BENCHMARK #6	ELEV. 1044.86
NORTHEAST CORNER OF PORCH AT HOUSE 723 MAPLE ST., SW CORNER OF EDISON ST. AND MAPLE ST, STA. 81+41 LT	
BENCHMARK #7	ELEV. 1045.28
NE CORNER OF PORCH HOUSE 615 MAPLE ST., SW CORNER OF E. MONFORT ST AND MAPLE ST., STA. 77+40 LT	
BENCHMARK #8	ELEV. 1040.74
NORTHEAST CORNER OF TOP STEP OF HOUSE 507 MAPLE ST., STA. 72+55 LT	
BENCHMARK #9	ELEV. 1042.95
NORTHEAST CORNER OF TOP STEP OF HOMETOWN FURNITURE. STA. 68+82 LT	



SCHEMATIC PLAN

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

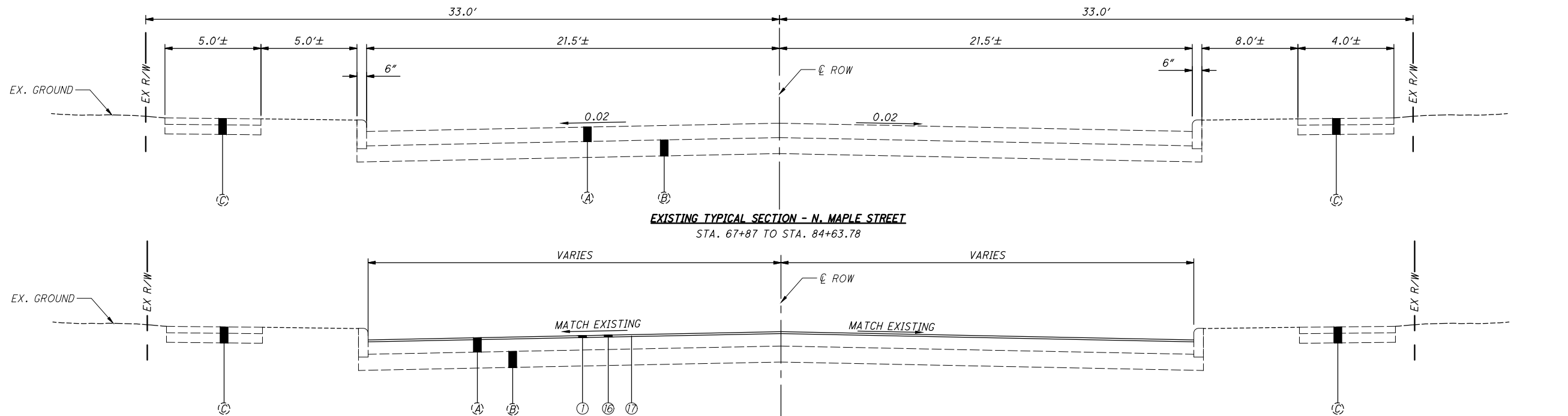
NNS 06-19-2025

PROJECT ID

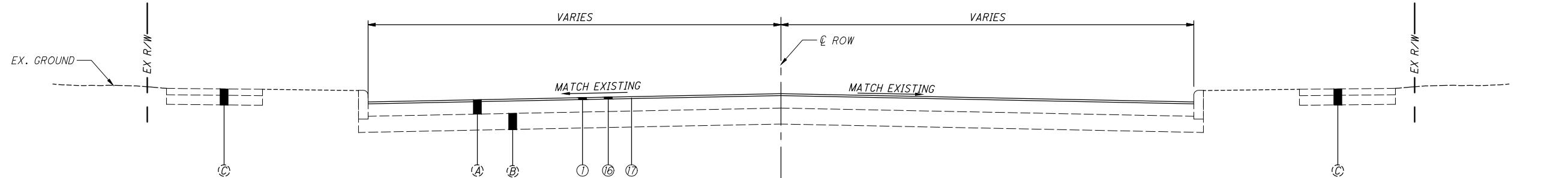
118523

SHEET

P:2 TOTAL
79

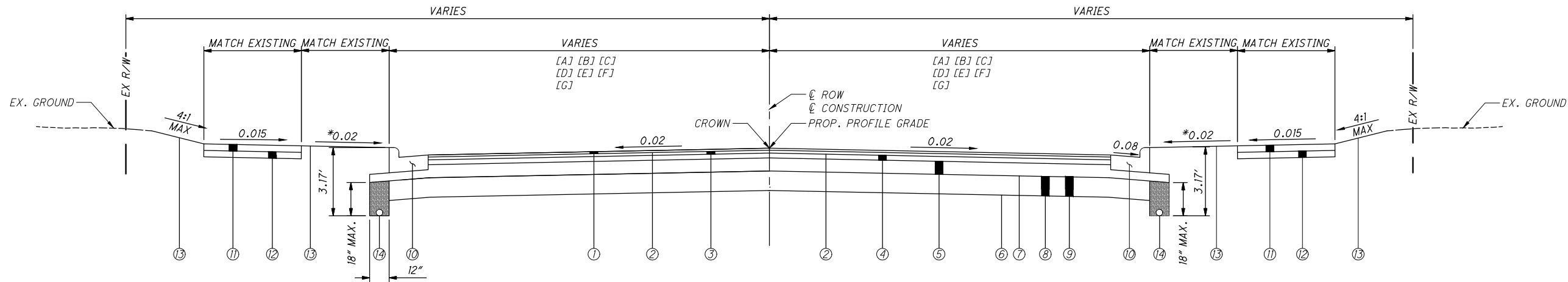


EXISTING TYPICAL SECTION - N. MAPLE STREET
STA. 67+87 TO STA. 84+63.78



GRIND AND OVERLAY TYPICAL SECTION (ALL STREET TIE-INS)

MAPLE STREET STA. 67+60 TO 67+87
HIGH STREET STA. 14+33.95 TO 14+48.95
McCABE STREET STA. 24+29.05 TO 24+49.05
BRUCE STREET STA. 34+29.12 TO 34+53.81
E. MONFORT STREET STA. 44+27.04 TO 44.49
LEXINGTON AVENUE STA. 150+63.50 TO 150+87.06
MAPLE STREET STA. 84+63.78 TO STA. 84+73.78
HIGH STREET STA. 15+32.18 TO 16+00.52
McCABE STREET STA. 25+20.25 TO 25+41.93
BRUCE STREET STA. 35+32.23 TO 35+47.23
E. MONFORT STREET STA. 45+26.05 TO 45+51.05
EIDSON STREET STA. 174+38.57 TO 174+62.64



TYPICAL SECTION - SIDE STREETS

*UNLESS OTHERWISE SHOWN IN CROSS SECTIONS

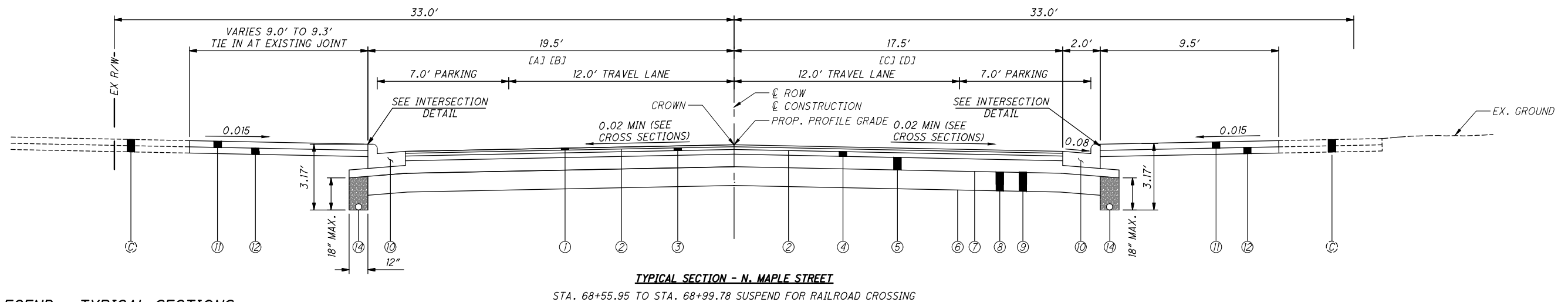
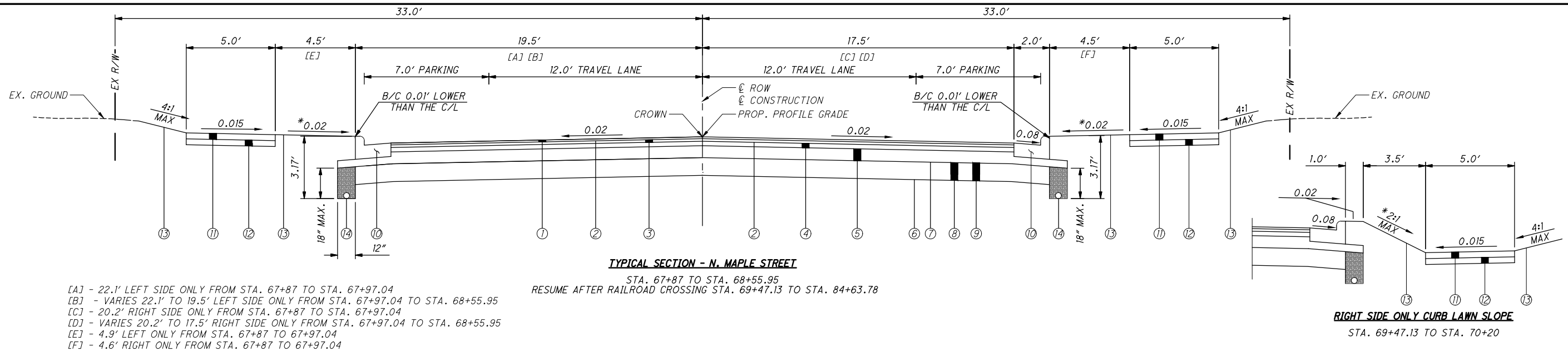
NOTE: CITY MAY ADJUST CURB LAWN AND SIDEWALK GRADE IN FIELD TO FIT INTO EXISTING SERVICE WALKS.

[A] - HIGH STREET STA. 14+48.95 TO STA. 14+93.04, 21.3' LT, 17.3' RT, STA. 14+93.04 TO STA. 15+32.18, 21.0' LT, 18.6' RT
[B] - McCABE STREET STA. 24+49.05 TO STA. 24+88.07, 14.6' LT, 14.8' RT, STA. 24+88.07 TO STA. 25+20.25, 14.0' LT, 14.6' RT
[C] - BRUCE STREET STA. 34+53.81 TO STA. 34+92.95, 14.3' LT, 13.4' RT, STA. 34+92.95 TO STA. 35+32.23, 14.3' LT, 13.3' RT
[D] - E. MONFORT STREET STA. 44+49 TO STA. 44+93.02, 14.3' LT, 16.5' RT, STA. 44+93.02 TO STA. 45+26.05, 14.3' LT, 14.2' RT
[E] - LEXINGTON AVENUE STA. 150+33.04 TO STA. 150+63.5, 9.0' LT, 16.8' RT
[F] - EIDSON STREET STA. 174+62.64 TO STA. 174+92.83, 14.1' LT, 13.9' RT

EXISTING PAVEMENT COMPOSITION

BORING	STATION	OFFSET	THICKNESS (IN)			
			ASPHALT SURFACE	CONCRETE BASE	AGG. SUBBASE	TOTAL
B-001-0-23	68+75	17' LT	6.0	-	6.0	12.0
B-002-0-23	72+72	13' RT	6.0	-	6.0	12.0
B-003-0-23	76+37	18' LT	6.0	-	6.0	12.0
B-004-0-23	80+37	18' LT	6.0	-	6.0	12.0
B-005-0-23	84+69	16' RT	6.0	-	6.0	12.0
AVERAGE			6.0	-	6.0	12.0
MINIMUM			6.0	-	6.0	12.0
MAXIMUM			6.0	-	6.0	12.0

SEE SHEET 4 FOR PAVEMENT COMPOSITION LEGEND

**LEGEND - TYPICAL SECTIONS**

- ① - ITEM 441 - 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
- ② - ITEM 407 - NON-TRACKING TACK COAT, 0.06 GAL/SY
- ③ - ITEM 441 - 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- ④ - ITEM 301 - 3" ASPHALT CONCRETE BASE, PG64-22, (449)
- ⑤ - ITEM 304 - 8" AGGREGATE BASE
- ⑥ - ITEM 204 - GEOTEXTILE FABRIC
- ⑦ - ITEM 204 - PROOF ROLLING
- ⑧ - ITEM 204 - EXCAVATION OF SUBGRADE, 12" DEPTH
- ⑨ - ITEM 204 - 12" GRANULAR MATERIAL, TYPE C
- ⑩ - ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN
- ⑪ - ITEM 608 - 4" CONCRETE WALK, AS PER PLAN
- ⑫ - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- ⑬ - ITEM 659 - SEEDING AND MULCHING, CLASS 1
- ⑭ - ITEM 605 - 4" BASE PIPE UNDERDRAIN
- ⑮ - ITEM 254 - 1-1/4" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
- ⑯ - ITEM 407 - NON-TRACKING TACK COAT, 0.09 GAL/SY

- Ⓐ - EXISTING ASPHALT PAVEMENT, 6"±
- Ⓑ - EXISTING AGGREGATE BASE, 6"±
- Ⓒ - EXISTING CONCRETE WALK (TBR)

HATCH LEGEND FOR PLANS

- PAVEMENT PLANING AND RESURFACING**
- ① - ITEM 254 - 1-1/4" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
 - ② - ITEM 407 - NON-TRACKING TACK COAT (0.09 GAL/SY)
 - ③ - ITEM 441 - 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22
- FULL DEPTH PAVEMENT**
- ④ - SEE TYPICAL SECTION COMPOSITION
- RESIDENTIAL CONCRETE DRIVEWAYS**
- ⑤ - ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC 1P, AS PER PLAN
 - ⑥ - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- COMMERCIAL CONCRETE DRIVEWAY**
- ⑦ - ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC 1P, AS PER PLAN
 - ⑧ - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- ASPHALT DRIVEWAYS**
- ⑨ - ITEM 441 - 1-1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (DRIVEWAYS)
 - ⑩ - ITEM 407 - NON-TRACKING TACK COAT (0.06 GAL/SY)
 - ⑪ - ITEM 441 - 2-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449) (DRIVEWAYS)
 - ⑫ - ITEM 304 - 8" AGGREGATE BASE
- PROPOSED CURB RAMP**
- ⑬ - ITEM 608 - CURB RAMP, AS PER PLAN
 - ⑭ - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- SIDEWALK**
- ⑮ - ITEM 608 - 4" CONCRETE WALK, AS PER PLAN ON
 - ⑯ - ITEM 411 - 3" STABILIZED CRUSHED AGGREGATE
- PAVEMENT REMOVED AND NOT REPLACED**
- ⑰ - ITEM 202 - PAVEMENT REMOVED
 - ⑱ - ITEM 653 - 12" TOPSOIL FURNISHED AND PLACED
- ABBREVIATION LEGEND FOR PLANS**
- (RTG) - RECONSTRUCT TO GRADE
 - (TBR) - TO BE REMOVED
 - (TBA) - TO BE ABANDONED
 - (TBRLBO) - TO BE RELOCATED BY OTHERS
 - Ⓜ - WATER METER TO BE RELOCATED/ADJUSTED
 - ✕ - TREE, STUMP, BUSH REMOVED

MODIFICATIONS

ANY MODIFICATIONS TO THE SPECIFICATIONS OR CHANGES TO THE WORK AS SHOWN ON THE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ENGINEER.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC. 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 (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION.

NON-MEMBERS MUST BE CALLED DIRECTLY.

UTILITY OWNERSHIP

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

STREETS, WATER, SANITARY AND STORM SEWER
CITY OF EATON
328 N. MAPLE STREET
EATON, OHIO 45320
SUPERINTENDENT OF PUBLIC WORKS
ATTN: CHRIS DENLINGER 937-456-7157
STREET SUPERVISOR
ATTN: DANIEL GRAY 937-456-4360

ELECTRIC - AES OHIO
1900 DRYDEN ROAD
DAYTON, OHIO 45439
ATTN: BHAVYA KATTA 937-331-4025

LIGHTING - MIAMI VALLEY LIGHTING
1065 WOODMAN DRIVE
DAYTON, OHIO 45432
ATTN: STEVEN GALYO 937-259-7191
ROBYN LIVESAY 937-259-7192

GAS - CENTERPOINT ENERGY
6500 CYLO ROAD
DAYTON, OHIO 45429
ATTN: PUBLIC IMPROVEMENTS PROJECT COORDINATOR 937.440.1965
DISTRIBUTION - RUSTY STUMPF 937-440-1806
TRANSMISSION - JEFF DONNELLY 812-491-5558

TELEPHONE - BRIGHTSPEED
803 12TH STREET
GREENVILLE, OHIO 45331
ATTN: DUSTIN DEBO 419-685-3492
DUSTIN.X.DEBO@BRIGHTSPEED.COM

CABLE - CHARTER COMMUNICATIONS
3691 TURNER ROAD
DAYTON, OHIO 45415
ATTN: BRYAN NUSE 937-396-8369
BRYAN.NUSE@CHARTER.COM

FIBER - INDEPENDENTS FIBER NETWORK
1720 WILLIPIE STREET
WAPAKONETA, OHIO 45895
SARAH EMANS 419-905-6941
OSP@ CNITEAM.COM; SEMANS@CNITEAM.COM

FIBER - OMNI FIBER
4680 PARKWAY DRIVE, STE 450
MASON, OHIO 45040
ATTN: MARK JOHNSON
MARK.JOHNSON@OMNIFIBER.COM
CITYPROJECTS@OMNIFIBER.COM

CLEARING AND GRUBBING

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

SIZES NO.	TREES NO.	STUMPS	TOTAL
18"	16	1	17
30"	6	0	6
48"	2	0	2
60"	0	0	0

MUD

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

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND BEFORE FINAL ACCEPTANCE BY THE ENGINEER, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWER THAT MAY BE AFFECTED BY THE WORK AND ARE TO REMAIN IN SERVICE. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE ENGINEER.

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 ENGINEER.

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.

DRAINAGE DISCHARGE CONTINUANCE

FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT OR SWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER OR THE VILLAGE.

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN ACCORDANCE WITH SCD DM-3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING, OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611 - INSPECTION WELL.

FURNISH A DRILLED HOLE OR A CURB SECTION WITH A HOLE WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING, OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611 - CONDUIT, MISC TYPE - FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611 - CONDUIT, MISC - FOR DRAINAGE DISCHARGE CONTINUANCE.

DOCUMENTATION

THE CONTRACTOR SHALL FURNISH WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE VILLAGE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE RIGHT OF WAY, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611 - CONDUIT, MISC, TYPE - FOR DRAINAGE DISCHARGE CONTINUANCE.

CONDUIT MATERIAL TYPES

THE FOLLOWING CONDUIT MATERIAL TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, AND 707.52 SDR35.

PAY ITEMS

EACH OF THE PAY ITEMS LISTED BELOW FOR CONDUIT MISCELLANEOUS TYPE B, C, E, AND F FOR DRAINAGE DISCHARGE CONTINUANCE INCLUDE CONDUIT SIZES 2 TO 10 INCH. THERE IS NO COST DIFFERENTIATION FOR SIZE IN THESE PAY ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE DRAINAGE DISCHARGE CONTINUANCE:

ITEM 611 - INSPECTION WELL	1 EACH
ITEM 611 - CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	20 FT
ITEM 611 - CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	20 FT
ITEM 611 - CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	20 FT
ITEM 611 - CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	20 FT
ITEM 202 - REMOVAL MISC.: CONDUIT	25 FT

CONSTRUCTION NOISE

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

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.

PROPERTY POINTS AND SURVEY MONUMENTS

CARE SHALL BE TAKEN BY THE CONTRACTOR TO SAFEGUARD ANY PROPERTY POINTS OR OTHER SURVEY REFERENCE MARKS ENCOUNTERED DURING CONSTRUCTION OF THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT HIS EXPENSE, TO RESET ANY PROPERTY POINT OR SURVEY MONUMENT WHICH IS DISTURBED AS A RESULT OF CONSTRUCTION OF THIS PROJECT. THE PROPERTY POINTS AND SURVEY MONUMENTS SHALL BE RESET UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL SURVEYOR.

PAYMENT FOR THIS ITEM SHALL BE INCIDENTAL TO THE OTHER ITEMS PAID FOR IN THIS PROJECT.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:	
659, TOPSOIL	271 CU. YD.
659, SEEDING AND MULCHING, CLASS 1	2435 SQ. YD.
659, REPAIR SEEDING AND MULCHING	123 SQ. YD.
659, COMMERCIAL FERTILIZER	0.34 TON
659, LIME	0.51 ACRE
659, WATER	8 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.

NONRUBBER TIRE VEHICLES

NO NONRUBBER TIRE VEHICLES SHALL BE MOVED ON CITY STREETS. EXCEPTIONS MAY BE GRANTED BY THE ENGINEER 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 NONRUBBER TIRE VEHICLES ON STREETS OR DRIVEWAYS TO AVOID MARKING OR DAMAGING THE PAVEMENT. PROTECTION OF THE PAVEMENT FROM DAMAGE RESULTING FROM THE TRACKS OF NONRUBBER 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.

CLEAN WATER CONNECTIONS

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

POST CONSTRUCTION STORM WATER TREATMENT

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

MANUFACTURED WATER QUALITY STRUCTURE

THIS PLAN UTILIZES MANUFACTURED WATER QUALITY STRUCTURES FOR WATER QUALITY TREATMENT. AREAS ARE SHOWN IN THE PLANS FOR PLACEMENT OF AN OFF-LINE SYSTEM. PAYMENT FOR THESE DEVICES IS MADE AT THE CONTRACT UNIT PRICE FOR ITEM 895, MANUFACTURED WATER QUALITY STRUCTURE, TYPE 2.

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.

CONCRETE FIBERS

ALL CURB, DRIVEWAYS, WALKS, AND CURB RAMPS SHALL HAVE 3 LBS. OF 2.25" IN LENGTH FIBRILLATED MACROFIBERS PER CUBIC YARD. CONTRACTOR SHALL CONTACT THE FIBER MANUFACTURER'S SUPPLIER 48 HOURS PRIOR TO ORDERING THE FIRST BATCH OF CONCRETE FOR APPROPRIATE MIXING AND FINISHING PROCEDURES. FIBER REPRESENTATIVE SHALL BE ON SITE FOR THE FIRST POUR.

THE FOLLOWING PAY ITEMS WILL INCLUDE CONCRETE FIBERS:

- ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT, CLASS QC-IP, AS PER PLAN
- ITEM 608 - 4" CONCRETE WALK, AS PER PLAN
- ITEM 608 - CURB RAMP, AS PER PLAN
- ITEM 608 - CONCRETE STEPS, TYPE B, AS PER PLAN
- ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN
- ITEM 609 - CURBING, TYPE 6, AS PER PLAN

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 109 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: TRAVERSE MAG NAIL
VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18
HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (CORS 2011 ADJUSTMENT)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE - SOUTH ZONE
COMBINED SCALE FACTOR: 1.0000881612
ORIGIN OF COORDINATE SYSTEM: 0,0

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

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

ITEM 202 REMOVAL MISC.: ABANDONED GAS LINE

IF THE EXISTING ABANDONED GAS LINE MAIN IS DEEMED NEEDING REMOVED DURING CONSTRUCTION IT SHALL BE PAID FOR UNDER THIS ITEM. ONLY THE MAIN WILL BE PAID FOR REMOVAL, ANY SERVICE BRANCH NEEDING REMOVED WILL BE INCIDENTAL TO EXCAVATION OF SUBGRADE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS FOR THE WORK NOTED ABOVE:

ITEM 611 REMOVAL MISC.: ABANDONED GAS LINE.....1500 FT



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P:5

TOTAL

79

ITEM 204 PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE PLAN SHEET NO 3 AND 4 FOR ADDITIONAL INFORMATION.

ITEM 204 PROOF ROLLING5 HOURS.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE SURFACE COURSE WITHIN FIVE (5) CALENDAR DAYS. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID FOR THE RESPECTIVE ITEMS. A DISINCENTIVE IN THE AMOUNT OF \$1,800 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC BEYOND THE SPECIFIED TIME LIMIT.

ITEM 611 CONDUIT, MISC.: SANITARY SEWER LATERAL REPAIR

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 611, PIPE CULVERTS, SEWERS AND DRAINS, EXCEPT AS HEREIN MODIFIED.

THE SANITARY LATERAL SHALL BE PAID FOR BY THE HORIZONTAL FOOT INSTALLED. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR VERTICAL SECTIONS OF PIPE INSTALLED.

IN REPAIR SITUATIONS, TO AVOID CONFLICTS WITH THE PROPOSED CONSTRUCTION, THE SANITARY SEWER LATERAL SHALL BE REPLACED AS INDICATED IN THE PLANS. THIS WORK SHALL CONSIST OF EXCAVATION, STRUCTURAL BEDDING, INSTALLATION OF THE SANITARY SEWER LATERAL (INCLUDING ALL FITTINGS, BENDS, ETC.), STRUCTURAL BACKFILL, COMPACTION, AND FERNCO COUPLING (TO TIE INTO EXISTING). TESTING OF THE LATERAL WILL BE WAIVED.

EACH SANITARY LATERALS SHALL BE INSTALLED PER THE DETAIL SHOWN IN THE PLANS ON SHEET 70.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE SANITARY SEWER IN SERVICE DURING THE INSTALLATION. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ON THE PROCEDURE THE CONTRACTOR WILL USE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS FOR THE WORK NOTED ABOVE:

ITEM 611 6" CONDUIT, TYPE B SANITARY LATERAL, 707.45 (SDR-26).....30 FT
ITEM 611 CONDUIT, MISC.: 4" SANITARY SEWER LATERAL REPAIR...50 FT
ITEM 611 CONDUIT, MISC.: 6" SANITARY SEWER LATERAL REPAIR...50 FT
ITEM 202 PIPE REMOVED, 24" AND UNDER.....130 FT

THE ABOVE ARE ESTIMATED QUANTITIES, BUT THIS ITEM COULD BE NON-PERFORMED IF DEEMED UNNECESSARY OR EXCEED THE ESTIMATED QUANTITY.

PAYMENT OF ITEM 611, CONDUIT, MISC.: SANITARY SEWER LATERAL REPAIR, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE, MEASURED HORIZONTALLY, AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 623 MONUMENT, MISC.: REID STONE

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 623 CONSTRUCTION LAYOUT STAKES, AND SURVEY MONUMENTS, EXCEPT AS HEREIN MODIFIED.

THERE ARE 3 REID STONE MONUMENTS ALONG THE PROJECT, ONE AT STA. 77+92 LT, 80+15 LT AND STA. 81+90 LT. THE CONTRACTOR SHALL HAND DIG AROUND THESE IN ORDER TO NOT DISTURB DURING CONSTRUCTION. HOWEVER, IF THE PROJECT ENGINEER AND CONTRACTOR DEEM THAT THE REID STONE MUST BE DISTURBED, THE CONTRACTOR SHALL HIRE A PROFESSIONAL SURVEYOR TO RESET THE REID STONE AT THE CORRECT LOCATION AND ELEVATION FOLLOWING 623.05 IN THE ODOT C&MS. THE INSTALLATION OF A NEW MONUMENT BOX WILL BE UNDER A SEPARATE PAY ITEM.

PAYMENT FOR ITEM 623 MONUMENT, MISC.: REID STONE, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT, REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 623 CONSTRUCTION LAYOUT STAKES, EXCEPT AS HEREIN MODIFIED.

THE VERTICAL CONTROL IS LISTED ON THE PLANS WITH THE BENCHMARKS. TRAVERSE POINTS ARE SHOWN ON SHEET 2. THE BEARINGS ARE LISTED FOR THE CENTERLINE OF CONSTRUCTION.

PAYMENT FOR ITEM 623 CONSTRUCTION LAYOUT STAKES, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT LUMP SUM BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT, REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 638 WATER WORKS, MISC.: WATER MAIN RELOCATED

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED.

THIS ITEM OF WORK SHALL INCLUDE THE RELOCATION OF THE EXISTING WATER MAIN TO AVOID CONFLICTS WITH THE PROPOSED CONSTRUCTION. THE ADJUSTMENT TO THE WATER MAIN SHALL BE DONE PER CITY STANDARDS. ITEMS INCLUDED IN THE WATER MAIN RELOCATION SHALL BE, EXCAVATION, CUTTING OF EXISTING WATER MAIN MECHANICAL JOINT RESTRAINTS, DUCTILE IRON BEND FITTINGS, DUCTILE IRON SOLID SLEEVE FITTINGS, TRACER WIRE MODIFICATIONS, WATER MAIN, AND PIPE BACKFILL (SEE PROVIDED DETAIL IN PLANS). THIS ITEM SHALL ONLY BE PERFORMED WITH PRIOR APPROVAL FROM THE CITY. THE RELOCATED WATER MAIN SHALL BE AWWA PVC C-900 DR-18, OR AN APPROVED ALTERNATIVE. PAYMENT SHALL BE ON A PER RE-CONNECTION BASIS AS WELL AS THE FOOTAGE OF WATER MAIN THAT IS RELOCATED. RE-CONNECTING THE WATER MAIN ON BOTH ENDS OF THE RELOCATION WILL COUNT AS ONE RE-CONNECTION IN THE BID QUANTITIES.

PAYMENT FOR ITEM 638 WATER WORKS, MISC.: WATER MAIN RELOCATED, FOR ALL OPERATION DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE AND EACH PRICE AND SHALL INCLUDE ALL MATERIAL, LABOR, TESTING, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM SPECIAL: CONSULTANT FOR CONCRETE QUALITY CONTROL AND TESTING

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 PROCEDURE 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 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 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.

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.

NORFOLK SOUTHERN RAILWAY COMPANY GENERAL NOTES:

ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "PUBLIC PROJECT MANUAL".

PRIOR TO COMMENCING WORK, THE CONTRACTOR MUST REQUEST FROM THE RAILROAD AND FOLLOW THE LATEST VERSION OF THE "SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS".

ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO NS PIPE AND WIRE FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, AND FIBER OPTICS PROJECTS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE SEVEN (7) DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED FOR THE CONTRACTOR. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, THE LINE SHALL BE POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION BY THE CONTRACTOR AND PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

THE PROPOSED PROJECT WILL NOT CHANGE THE QUANTITY AND/OR CHARACTER OF FLOW ON THE RAILWAY'S RIGHT-OF-WAY OR IN THE DITCHES AND DRAINAGE STRUCTURES.



CHOICE ONE ENGINEERING

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REVIEWER

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TOTAL

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ITEM 614 - MAINTAINING TRAFFIC

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.

FOR MAINTENANCE OF LOCAL, BUSINESS, AND EMERGENCY VEHICLE TRAFFIC PURPOSES, LOCAL TRAFFIC MUST BE MAINTAINED AT ALL TIMES. MINIMUM LANE WIDTHS OF 10 FEET SHALL BE PROVIDED AT ALL TIMES, ALONG WITH ADEQUATE RADII AT INTERSECTIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

NOTICES OF THE DETOURS WILL BE POSTED IN THE LOCAL MEDIA PRIOR TO THE ROAD CLOSURES AND EMERGENCY SERVICES WILL ALSO BE NOTIFIED. THE DETOUR WILL BE FOR THE DURATION OF THE PROJECT. ACCESS FOR LOCAL TRAFFIC WILL BE PROVIDED AT ALL TIMES DURING THE ROAD CLOSURES.

AT LEAST ONE LANE OF TRAFFIC WILL NEED TO BE MAINTAINED AT ALL TIMES ON LEXINGTON ROAD VIA FLAGGERS WHEN THE STORM MAIN IS CROSSING THE STREET AT THE INTERSECTION OF N. MAPLE STREET AND LEXINGTON ROAD.

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.

TRENCH FOR WIDENING

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

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. 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.

THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY BACKFILL MATERIAL USED IN THE CLOSING OF THE OPEN TRENCH.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR DUST CONTROL PURPOSES:

ITEM 616 - WATER 10 M.GAL

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 CITY OF EATON 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, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO OFFICE OF COMMUNICATIONS
RAMP &	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
ROAD	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES & < 2 WEEKS		2 BUSINESS DAYS PRIOR TO CLOSURE
RESTRICTIONS		

START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES N/A 14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. (AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.)

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP &	> 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
ROAD	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. FOR ADDITIONAL INFO CALL ODOT DISTRICT 8 @ 513-933-6600.

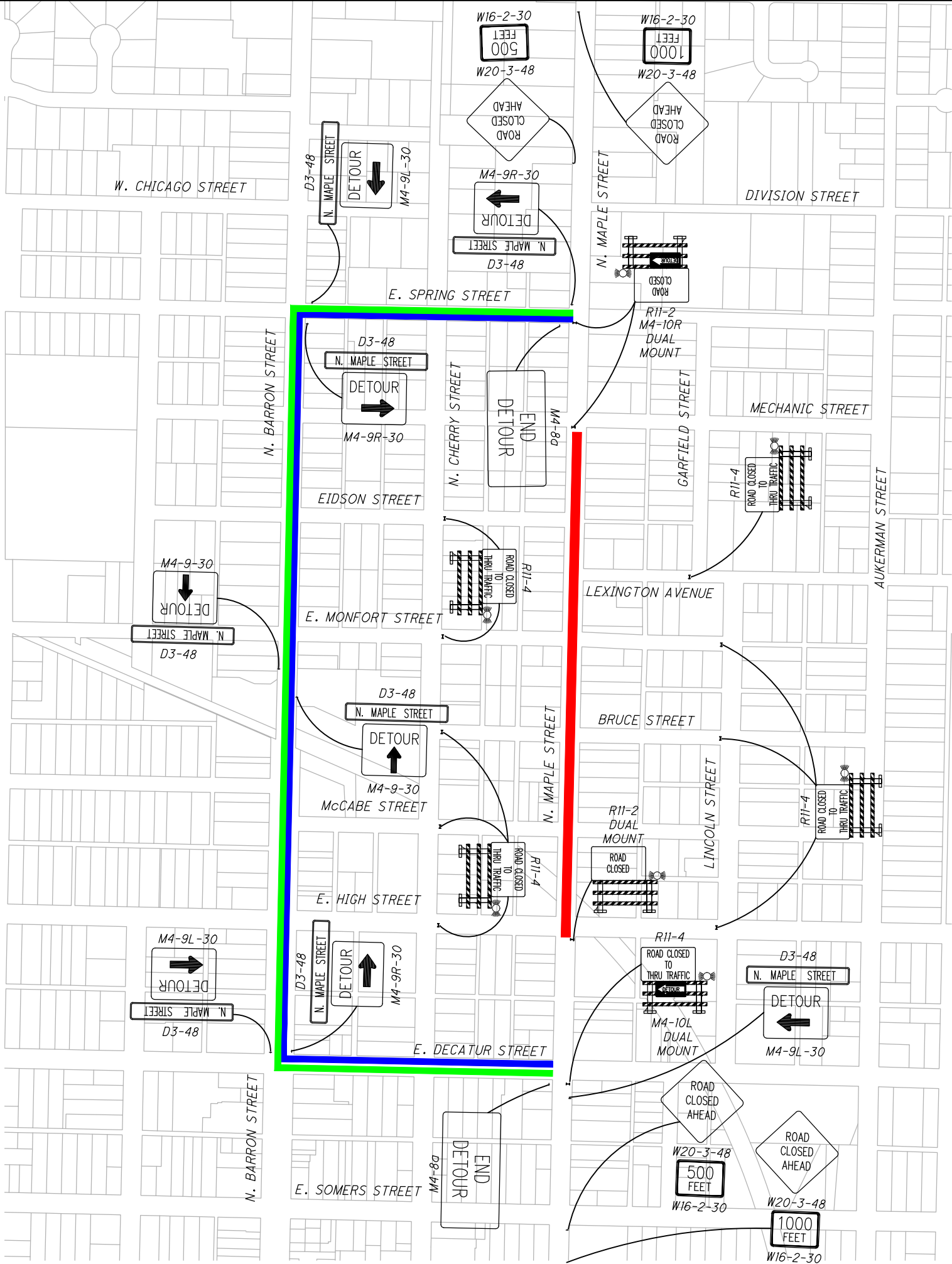
PRIVATE DRIVE MAINTENANCE

ACCESS TO DRIVEWAYS DURING OVERNIGHT AND WEEKEND HOURS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. TEMPORARY ACCESS SHALL BE PROVIDED TO ALL DRIVEWAYS WITH A CHANGE IN ELEVATION BETWEEN DRIVEWAY TO TEMPORARY DRIVE NOT EXCEEDING 1.5".



CHOICE ONE ENGINEERING

DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P:7	79



NOTE:

ALL SIGNS ARE TO BE ACQUIRED, INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR UNDER THE LUMP SUM BID PRICE FOR ITEM 614 - DETOUR SIGNING, AS PER PLAN.

VEHICULAR DETOUR:

NORTHBOUND MAPLE STREET: TURN LEFT ONTO E. DECATUR STREET AND TRAVEL WEST. AT THE INTERSECTION OF N. BARRON STREET, TURN RIGHT TO HEAD NORTH ON N. BARRON STREET TO E. SPRING STREET INTERSECTION. TURN RIGHT TO HEAD EAST ON E. SPRING STREET.

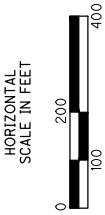
SOUTHBOUND MAPLE STREET: TURN RIGHT ONTO E. SPRING STREET AND TRAVEL WEST. AT THE INTERSECTION OF N. BARRON STREET, TURN LEFT TO HEAD SOUTH ON N. BARRON STREET TO E. DECATUR STREET INTERSECTION. TURN LEFT TO HEAD EAST ON E. DECATUR STREET.

LEGEND:

- DESIGNATED NORTHBOUND LOCAL DETOUR ROUTE
- DESIGNATED SOUTHBOUND LOCAL DETOUR ROUTE
- DESIGNATED ROADWAY CLOSURE (NO TRAFFIC)

- MAINTENANCE OF TRAFFIC DETOUR SIGNAGE
- TYPE III BARRICADES AND DETOUR SIGNAGE

PAYMENT FOR ALL OF THE WORK REQUIRED BY THE CONTRACTOR FOR TRAFFIC CONTROL NOTED ON THIS SHEET INCLUDING PROVIDING, ERECTING, MAINTAINING, AND REMOVING ALL FLASHERS, SIGNS, BARRICADES, SUPPORTS, AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 DETOUR SIGNING, AS PER PLAN. (THE CONTRACTOR SHALL INSTALL ADVANCE WARNING SIGNS PER STANDARD DRAWING MT-101.60.)



DETOUR PLAN

DESIGN AGENCY	
CHOICE ONE ENGINEERING	
DESIGNER	BHB
REVIEWER	NNS 06-19-2025
PROJECT ID	118523
SHEET	TOTAL
P.8	79

DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.9	79

DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.10	79

DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.11	79

RIVEWAY SUBSUMMARIES

DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.13	79

SHEET NO.	REFERENCE NO.	STATION RANGE				TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202	202			204	204	204	254	301	304		407		441	441	609	609			
												PAVEMENT REMOVED	CURB REMOVED			EXCAVATION OF SUBGRADE	GRANULAR MATERIAL, TYPE C	GEOTEXTILE FABRIC	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	ASPHALT CONCRETE BASE, PG64-22, (449)	AGGREGATE BASE		NON-TRACKING TACK COAT		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	CURB, TYPE 6, AS PER PLAN			
												SY	FT			CY	CY	SY	SY	CY	CY		GAL		CY	CY	FT	FT			
21	P-1	67+60.00	TO	67+87.00		LT/RT					125.95		13.00						125.95						4.37			13.00			
21	P-2	67+87.00	TO	68+25.21		LT					128.95	133.99	41.93			47.76	47.76	143.28		10.75	31.84		15.47		4.48	6.27		41.93			
21	P-3	67+87.00	TO	68+25.21		RT					123.77	123.22	34.34			45.00	45.00	134.96		10.31	30.00		14.85		4.30	6.02	33.41				
21	P-4	68+08.57	TO	68+45.69		LT					62.56								62.56					5.63		2.17					
21	P-5	68+08.43	TO	68+47.00		RT					174.30	5.72				1.91	1.91	5.72	174.30	0.48	2.53		16.38		6.25	0.28	17.00				
21	P-6	68+25.21	TO	68+99.78		LT					219.95	252.90	88.55			83.57	83.57	250.07		18.33	55.57		26.39		7.64	10.69	92.25				
21	P-7	68+25.21	TO	68+99.78		RT					179.01	199.04	41.46			66.00	66.00	198.01		14.92	44.00		21.48		6.22	8.70	57.00				
21/22	P-8	69+47.13	TO	71+48.97		LT					411.52	474.58	164.44			158.33	158.33	474.97		34.29	105.55		48.38		14.29	20.00	190.34				
21/22	P-9	69+31.94	TO	71+48.97		RT					431.16	536.70	117.64			162.53	162.53	502.60		35.93	111.69		51.74		14.98	20.96	214.31				
22	P-10	71+34.61	TO	71+62.92		LT					62.89	31.47	20.00					31.47	31.42	2.62	6.99		6.60		2.18	1.53		20.00			
22	P-11	71+34.89	TO	71+63.02		RT					67.06	20.56	14.00			6.85	6.85	20.56		1.74	4.63		2.91		2.33	1.01		14.00			
22	P-12	71+48.97	TO	74+62.21		LT					672.56	791.41	316.64			260.00	260.00	780.14	46.49	56.05	173.36		50.70		23.36	32.69	322.74				
22	P-13	71+48.97	TO	74+62.21		RT					651.73	815.96	294.40			251.00	251.00	252.73		54.31	167.27		78.20		22.64	31.68	303.00				
22	P-14	74+48.94	TO	74+76.03		LT					73.83	43.80	28.00			14.60	14.60	43.80	30.00	3.65	9.73		7.96		2.56	2.13		28.00			
22	P-15	74+50.78	TO	74+76.21		RT					63.89	21.60	18.00			7.20	7.20	21.60	42.29	1.80	4.80		6.40		2.22	1.05	18.00				
22/23	P-16	74+62.21	TO	77+76.42		LT					689.51	814.34	318.50			266.00	266.00	798.10		57.46	177.36		82.28		23.95	33.52	325.78				
22/23	P-17	74+62.21	TO	77+76.42		RT					656.66	827.23	298.09			252.40	252.40	757.22		54.72	168.27		78.80		22.81	31.92	301.67				
23	P-18	77+60.17	TO	77+90.51		LT					73.38	28.89	15.00			7.20	7.20	23.09	50.29	1.82	5.13		7.30		2.55	1.12		15.00			
23	P-19	77+62.79	TO	77+85.67		RT					67.64	42.13				14.04	14.04	42.13	25.51	3.57	9.36		7.35		2.35	2.05					
23	P-20	77+76.42	TO	80+00.00		LT					473.71	561.95	228.23			183.61	183.61	550.82		39.48	122.40		56.84		16.45	23.03	231.33				
23	P-21	77+76.42	TO	80+00.00		RT					484.30	601.75	182.68			184.61	184.61	554.01		40.36	129.78		58.10		16.82	23.54	209.13				
23	P-22	79+82.95	TO	80+08.70		RT					68.78	25.82	18.00			8.61	8.61	25.82	42.96	2.15	5.74		6.96		2.39	1.26		18.00			
23/24	P-23	80+00.00	TO	81+75.34		LT					360.83	430.38	163.41			138.87	138.87	416.60		30.07	92.58		43.30		12.53	17.54	167.30				
23/24	P-24	80+00.00	TO	81+75.34		RT					353.87	420.48	145.12			137.50	137.50	412.51		29.49	91.67		42.46		12.29	17.20	175.93				
24	P-25	81+61.31	TO	81+88.32		LT					72.43	27.38	12.00			9.13	9.13	27.38	45.05	2.28	6.08		7.41		2.52	1.33		17.00			
24	P-26	81+75.34	TO	84+63.78		LT					581.32	691.85	232.61			225.38	225.38	676.13		48.44	150.25		69.76		20.19	28.26	284.42				
24	P-27	81+75.34	TO	84+63.78		RT					560.68	666.32	225.60			218.99	218.99	656.99		46.72	146.00		67.28		19.47	27.25	288.32				
24	P-28	84+63.78	TO	84+73.77		LT/RT					38.76								38.87				3.49		1.35						
											SUBTOTALS				8589.47	3031.64			2751.09	2751.09	7800.71	715.69	601.74	1852.58		895.76		275.66	351.03	3231.93	166.93
											TOTALS CARRIED TO GENERAL SUMMARY				8590	3032			2752	2752	7801	716	602	1853		896		276	352	3232	167

PAVEMENT CALCULATIONS SUBSUMMARIES

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REF NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630	630	630	630	630	630	630	630	
							GROUND MOUNTED SUPPORT. NO. 3 POST FT	STREET NAME SIGN SUPPORT. NO. 3 POST FT	SIGN. FLAT SHEET SF	SIGN. DOUBLE FACED STREET NAME EACH	SIGN POST REFLECTOR EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL EACH	
S1	74	N. MAPLE STREET	67+89	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S2	74	N. MAPLE STREET	68+06	LT	D3-1 D3-1							1	1		
S3	74	HIGH STREET	14+55	RT	R1-1-30 D3-1 D3-1	30"x30"		15	6.25		1	1			
S4	74	HIGH STREET	14+55	RT	R1-1-30					1		1	1		
S5	74	HIGH STREET	15+29	LT	R1-1-30	30"x30"	13		6.25		1	1	1		
S6	74	HIGH STREET	15+29	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S7	74	N. MAPLE STREET	68+62	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S8	74	N. MAPLE STREET	71+23	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S9	74	N. MAPLE STREET	71+26	RT	D3-1 D3-1							1	1		
S10	74	MCCABE STREET	24+51	RT	R1-1-30							1	1		
S11	74	MCCABE STREET	24+51	RT	R1-1-30	30"x30"		13	6.25		1				
S12	74	MCCABE STREET	25+24	LT	R1-1-30							1	1		
S13	74	MCCABE STREET	25+24	LT	R1-1-30 D3-1 D3-1	30"x30"		15	6.25		1				
S14	74	N. MAPLE STREET	71+78	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S15	74	N. MAPLE STREET	73+50	LT	W10-1-36	24"x24"	13		4						
S16	74	N. MAPLE STREET	73+50	LT	W10-1-36	24"x24"						1	1		
S17	74	N. MAPLE STREET	74+20	RT	R7-1-12	12"x18"								1	
S18	74	N. MAPLE STREET	74+36	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S19	74	N. MAPLE STREET	74+46	RT	D3-1 D3-1							1	1		
S20	74	BRUCE STREET	35+45	RT	R7-108-12	12"x18"						1	1		
S21	74	BRUCE STREET	34+55	RT	R-1-30	30"x30"	13		6.25		1				
S22	74	BRUCE STREET	34+55	RT	R-1-30							1	1		
S23	74	N. MAPLE STREET	74+91	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S24	74	BRUCE STREET	35+29	LT	R1-1-30 D3-1 D3-1	30"x30"		15	6.25		1				
S25	74	BRUCE STREET	35+29	LT	R1-1-30							1	1		
S26	74	N. MAPLE STREET	75+09	RT	R2-1-24							1	1		
S27	74	N. MAPLE STREET	75+67	RT	R2-1-24	24"x30"	13		5						
S28	75	N. MAPLE STREET	77+48	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S29	75	MONFORT STREET	44+58	RT	R5-1-30 R6-1R-36	30"x30" 36"x12"	14		6.25 3						
S30	75	MONFORT STREET	44+58	RT	R5-1-30							1	1		
S31	75	MONFORT STREET	44+50	RT	R1-1-30							1	1		
S32	75	MONFORT STREET	44+50	RT	R1-1-30	30"x30"	13		6.25		1				
S33	75	MONFORT STREET	44+55	LT	R5-1-30	30"x30"	14		6.25						
S34	75	MONFORT STREET	44+55	LT	R6-1L-36	36"x12"			3						
S35	75	MONFORT STREET	45+27	LT	R5-1-30 R1-1-30 D3-1 D3-1							1	1		
S36	75	MONFORT STREET	45+27	LT	R1-1-30 D3-1 D3-1	30"x30"		15	6.25		1				
S37	75	N. MAPLE STREET	78+05	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S38	75	LEXINGTON AVENUE	150+70	LT	R1-1-30							1	1		
S39	75	LEXINGTON AVENUE	150+70	LT	R1-1-30 D3-1 D3-1	30"x30"		15	6.25		1				
S40	75	N. MAPLE STREET	80+20	RT	D3-1 D3-1							1	1		
S41	75	N. MAPLE STREET	80+22	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S42	75	N. MAPLE STREET	80+20	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S43	75	N. MAPLE STREET	81+40	RT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S44	75	N. MAPLE STREET	81+47	LT	W11-2 W16-7P	30"x30" 21"x15"	14		6.25 2.19		1				
S45	75	EDISON STREET	174+59	RT	R6-2R R6-2L D3-1 D3-1							1	1		
S46	75	EDISON STREET	174+59	RT	D3-1 D3-1			13.5		1					
TOTALS CARRIED TO GENERAL SUMMARY							261	102	186	12	21	28	19	1	

REF NO.	SHEET NO.	STATION TO STATION	644	644	644	644	644	
			CENTER LINE MILE	STOP LINE FT	CROSSWALK LINE. 12" FT	CROSSWALK LINE. 24" FT	RAILROAD SYMBOL MARKING EACH	
CL1	74-75	67+59.6 TO 84+74.8	0.32					
SL1	74	14+54.51 (HIGH STREET)		15				
SL2	74	15+30.02 (HIGH STREET)		19				
SL3	74	68+69.29		12				
SL4	74	24+52.56 (MCCABE STREET)		13				
SL5	74	25+23.58 (MCCABE STREET)		12				
SL6	74	35+26.46 (BRUCE STREET)		12				
SL7	74	34+57.43 (BRUCE STREET)		11				
SL8	74	45+28.53 (MONFORT STREET)		12				
SL9	74	44+57.53 (MONFORT STREET)		27				
SL10	74	150+68.51 (LEXINGTON AVE.)		11				
XW1	74	67+97.05				56		
XW2	74	15+21 (HIGH STREET)			75			
XW3	74	14+65 (HIGH STREET)			73			
XW4	74	68+55.05				56		
XW5	74	71+28.29				56		
XW6	74	24+61 (MCCABE STREET)			54			
XW7	74	71+70.12				56		
XW8	74	25+15 (MCCABE STREET)			54			
XW9	74	74+42.00				56		
XW10	74	34+67 (BRUCE STREET)			52			
XW11	74	74+83.75				56		
XW12	74	35+20 (BRUCE STREET)			51			
XW13	75	77+56.68				56		
XW14	75	44+67 (MONFORT STREET)			58			
XW15	75	77+98.22				56		
XW16	75	45+20 (MONFORT STREET)			53			
XW17	75	150+59 (LEXINGTON AVE.)			51			
XW18	75	80+15.86				56		
XW19	75	81+53.52				56		
XW20	75	74+67 (EDISON STREET)			52			
RR1	74	24+29.95 (MCCABE STREET)					1	
RR2	74	69+73.79 TO 73+51.68					1	
TOTALS CARRIED TO GENERAL SUMMARY			0.32	144	573	560	2	

DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.16	79

DRAINAGE SUBSUMMARIES	
DESIGN AGENCY  CHOICE ONE ENGINEERING	
DESIGNER BHB	
REVIEWER NNS 06-19-2025	
PROJECT ID 118523	
SHEET P.17	TOTAL 79

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	CENTERLINE	202	202		611	611	611	611					623		638	638	638	638	638		638	638	638	638	638	
						MANHOLE REMOVED	VALVE BOX REMOVED		MANHOLE RECONSTRUCTED TO GRADE (SANITARY)	MANHOLE, NO. 3 (SANITARY)	8" CONDUIT, TYPE B , 707.45 (SDR-35)	6" CONDUIT, TYPE B , 707.45 (SDR-35)					MONUMENT, MISC.: REID STONE		3/4" POLYETHYLENE SERVICE BRANCH	6" WATER MAIN POLYVINYL CHLORIDE PIPE AND FITTINGS, AWWA C900, DR18	6" GATE VALVE AND VALVE BOX	6" X 6" TAPPING SLEEVE, VALVE AND VALVE BOX 6" WATER MAIN RECONNECTED	6" FIRE HYDRANT		VALVE BOX ADJUSTED TO GRADE	SERVICE BOX ADJUSTED TO GRADE	METER AND CHAMBER REMOVED AND RESET	WATER WORK, MISC.: 6" WATER MAIN RECONNECTED	WATER WORK, MISC.: 6" WATER MAIN RELOCATED	
						EACH	EACH		EACH	EACH	FT	FT					EACH		FT	FT	EACH	EACH	EACH		EACH	EACH	EACH	EACH	FT	
SS1	60	68+26.16		LT	MAPLE				1																					
SS2	60	70+30.00	TO	71+49.00	LT/RT	MAPLE				1	119																			
SS3	60	71+49.10		LT/RT	MAPLE					1		10																		
SS4	60	71+49.10		RT	MAPLE				1																					
SS5	60	71+49.00	TO	73+40.00	LT/RT	MAPLE				1	191																			
SS6	60	74+63.05		LT/RT	MAPLE					1		17																		
SS7	60/61	74+63.05	TO	76+89.90	LT/RT	MAPLE				1	227																			
SS8	61	77+78.84		LT/RT	MAPLE				1																					
SS9	61	79+83.01	TO	79+88.14	LT	MAPLE	1			1		5																		
SS10	61	81+75.03		LT	MAPLE				1																					
S1	23	77+99.12		LT	MAPLE											1														
S2	23	80+18.05		LT	MAPLE											1														
S3	24	81+97.88		LT	MAPLE											1														
W1	60	68+37.77		RT	MAPLE																									
W2	60	69+69.00		RT	MAPLE														10						1					
W3	60	70+08.00		RT	MAPLE																									
W4	60	70+41.00		RT	MAPLE															7			1	1						
W5	60	70+70.00		LT	MAPLE																									
W6	60	70+78.00		LT	MAPLE																									
W7	60	70+79.00		RT	MAPLE																									
W8	60	71+07.03	TO	71+52.03	RT	MAPLE																								
W9	60	71+60.68		RT	MAPLE																									
W10	60	71+64.17		RT	MAPLE																				1					
W11	60	71+68.54	TO	71+98.54	RT	MAPLE																								
W12	60	72+13.00		RT	MAPLE																									
W13	60	72+18.00		LT	MAPLE																									
W14	60	72+30.00		RT	MAPLE																									
W15	60	72+44.00		LT	MAPLE																									
W16	60	72+95.00		LT	MAPLE																									
W17	60	73+19.00		RT	MAPLE																									
W18	60	73+32.00		RT	MAPLE																									
W19	60	73+46.00		LT	MAPLE																									
W20	60	73+81.00		RT	MAPLE																									
W21	60	74+19.00		RT	MAPLE																									
W22	60	74+60.59		RT	MAPLE																									
W23	60	74+70.42		LT	MAPLE																									
W24	60	74+72.81		RT	MAPLE																									
W25	60	75+03.00		RT	MAPLE																									
W26	60	74+75.08	TO	75+05.08	RT	MAPLE																								
W27	60	75+70.00		RT	MAPLE																									
W28	61	76+14.94		LT	MAPLE																									
W29	61	76+28.32		LT	MAPLE																									

MISCELLANEOUS SUBSUMMARIES

REF NO.	SHEET NO.	STATION TO STATION	ROAD	CENTERLINE	202	202	607		611			611							638	638								638		
					PIPE REMOVED, 24" AND UNDER	VALVE BOX REMOVED	FENCE, MISC. 4' CHAIN LINK, BLACK, Z GATE		6" CONDUIT, TYPE B SANITARY LATERAL, 707.45 (SDR-26)			DRAINAGE STRUCTURE, MISC. SANITARY CLEANOUT									3/4" POLYETHYLENE SERVICE BRANCH	FIRE HYDRANT REMOVED								METER AND CHAMBER REMOVED AND RESET
					FT	EACH	EACH		FT			EACH						FT	EACH								EACH			
W58	61	84+02.00	MAPLE	LT														34									1			
W59	61	84+26.00	MAPLE	RT														16									1			
SL1	60	70+36.00	MAPLE	LT					25			1																		
SL2	60	72+61.00	MAPLE	LT					25			1																		
SL3	60	72+63.00	MAPLE	RT					25			1																		
SL4	60	72+80.00	MAPLE	LT					25			1																		
SL5	60	73+14.00	MAPLE	LT					25			1																		
SL6	60	73+17.00	MAPLE	RT					25			1																		
SL7	60	73+36.00	MAPLE	RT					25			1																		
SL8	61	76+26.00	MAPLE	RT					25			1																		
SL9	61	76+82.00	MAPLE	RT					25			1																		
F1	21	68+99.00	MAPLE	LT			1																							
F2	21	69+05.00	MAPLE	LT			1																							
F3	21	69+32.00	MAPLE	RT			1																							
R1	60	70+01.60	MAPLE	RT		1													1											
R2	60	71+49.00	MAPLE	LT	161																									
R3	60	71+49.00	MAPLE	RT	186																									
R4	60/61	74+63.00	MAPLE	RT	274																									
R5	60	74+96.30	MAPLE	RT		1													1											
R6	61	80+22.30	MAPLE	RT		1													1											
TOTALS CARRIED TO GENERAL SUMMARY						621	3	3		225		9						50	3								2			

MISCELLANEOUS SUBSUMMARIES

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

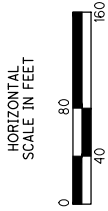
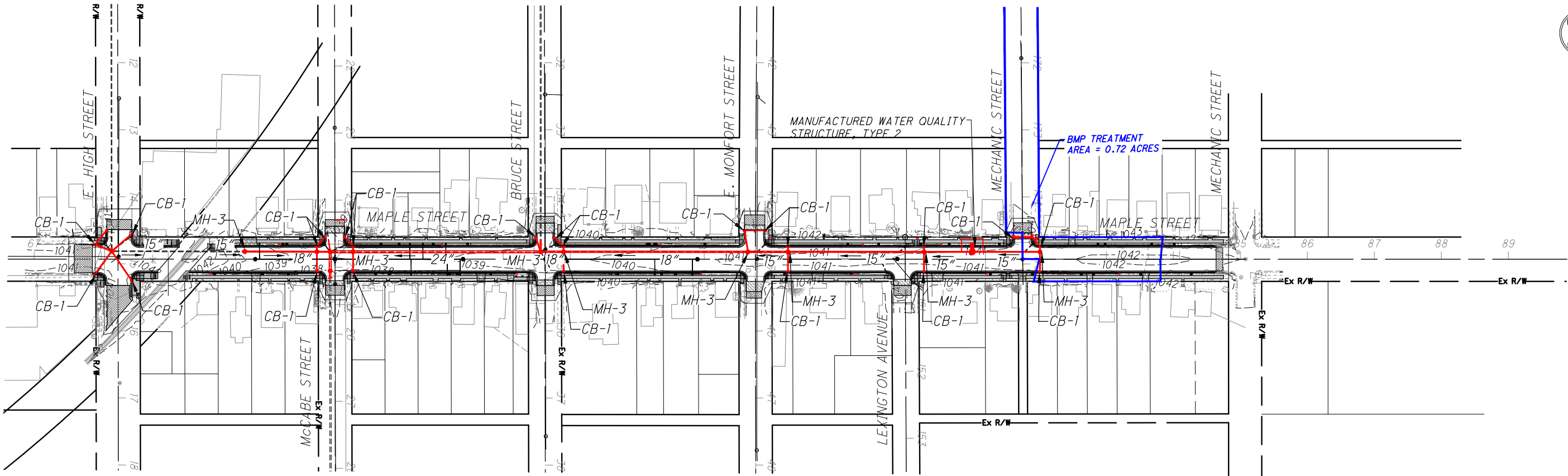
118523

SHEET

P.19

TOTAL

79



PROJECT SITE PLAN

PROJECT DESCRIPTION

RECONSTRUCTION OF NORTH MAPLE STREET INCLUDING REPLACEMENT OF CURB, STORM SEWER SYSTEM, AND SIDEWALKS FROM E. HIGH STREET TO MECHANIC STREET.

USGS EATON SOUTH QUADRANGLE
LATITUDE: N 39°45'01.2 LONGITUDE: W 84°37'59.3

PROJECT DATA:

PROJECT AREA = 4.14 ACRES
PROJECT EARTH DISTURBED AREA = 3.37 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.10 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = 3.47 ACRES
IMPERVIOUS AREA FOR PRE-CONSTRUCTION SITE = 2.6 ACRES
IMPERVIOUS AREA FOR POST-CONSTRUCTION SITE = 2.3 ACRES
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE = 0.6
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE = 0.5
POST CONSTRUCTION BMP: MANUFACTURED SYSTEM
MAINTAINED BY: CITY OF EATON
IMMEDIATE RECEIVING WATERS: CITY STORM SEWER
SUBSEQUENT RECEIVING WATERS: SEVEN MILE CREEK

BMP TYPE	LATITUDE	LONGITUDE	STA. BEGIN	STA. END	CREDIT
MANUFACTURED TYPE 2 WQS	39°45'01.2"	-84°37'59.3"	81+75	83+80	0.72 ACRES
TREATMENT PROVIDED					0.72 ACRES
TREATMENT REQUIRED					0.67 ACRES

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.20

TOTAL

79

HATCH LEGEND FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

(RTG) - RECONSTRUCT TO GRADE

(TBR) - TO BE REMOVED

(TBA) - TO BE ABANDONED

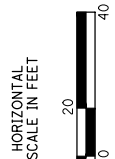
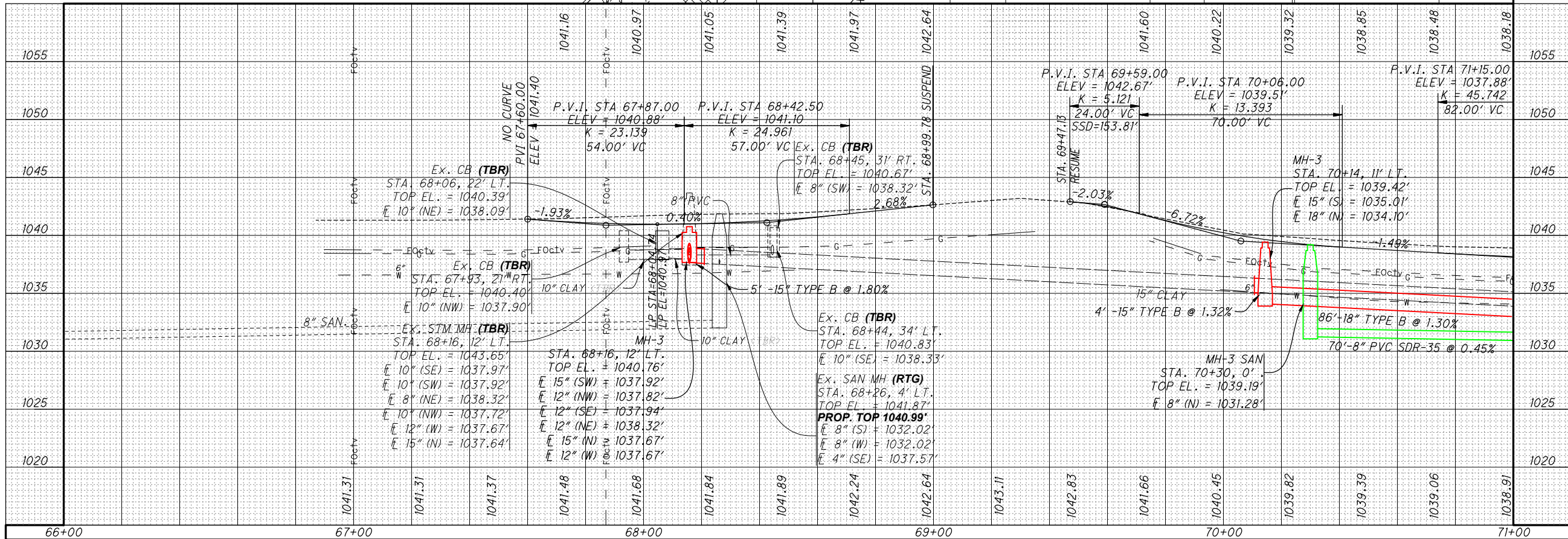
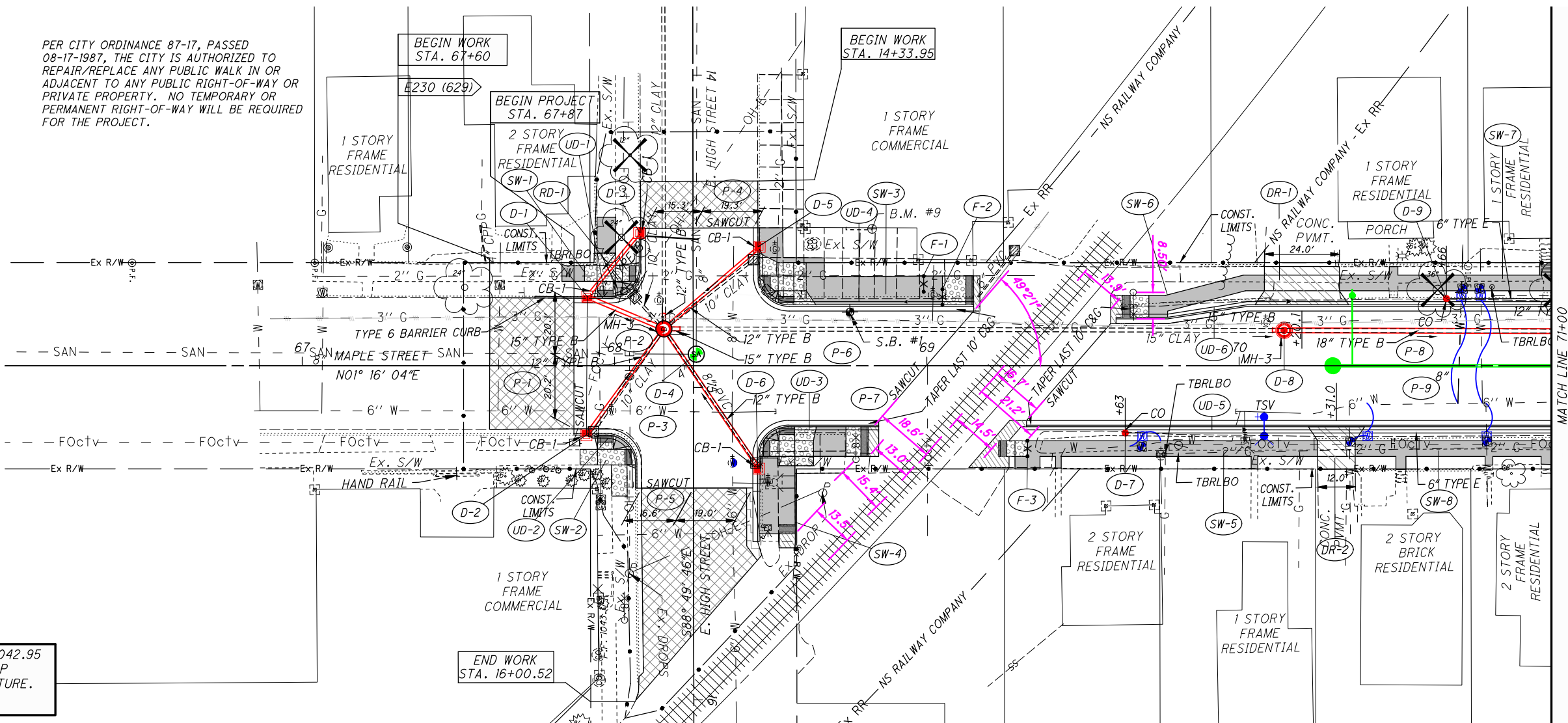
(TBRLBO) - TO BE RELOCATED BY OTHERS

- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED

- ITEM 623 MONUMENT, MISC.: REID STONE

BENCHMARK #9 ELEV. 1042.95
NORTHEAST CORNER OF TOP
STEP OF HOMETOWN FURNITURE.
STA. 68+82 LT

PER CITY ORDINANCE 87-17, PASSED 08-17-1987, THE CITY IS AUTHORIZED TO REPAIR/REPLACE ANY PUBLIC WALK IN OR ADJACENT TO ANY PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. NO TEMPORARY OR PERMANENT RIGHT-OF-WAY WILL BE REQUIRED FOR THE PROJECT.



PLAN AND PROFILE - N. MAPLE STREET STA. 66+00 to STA. 71+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET TOTAL

P.21 79

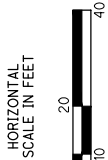
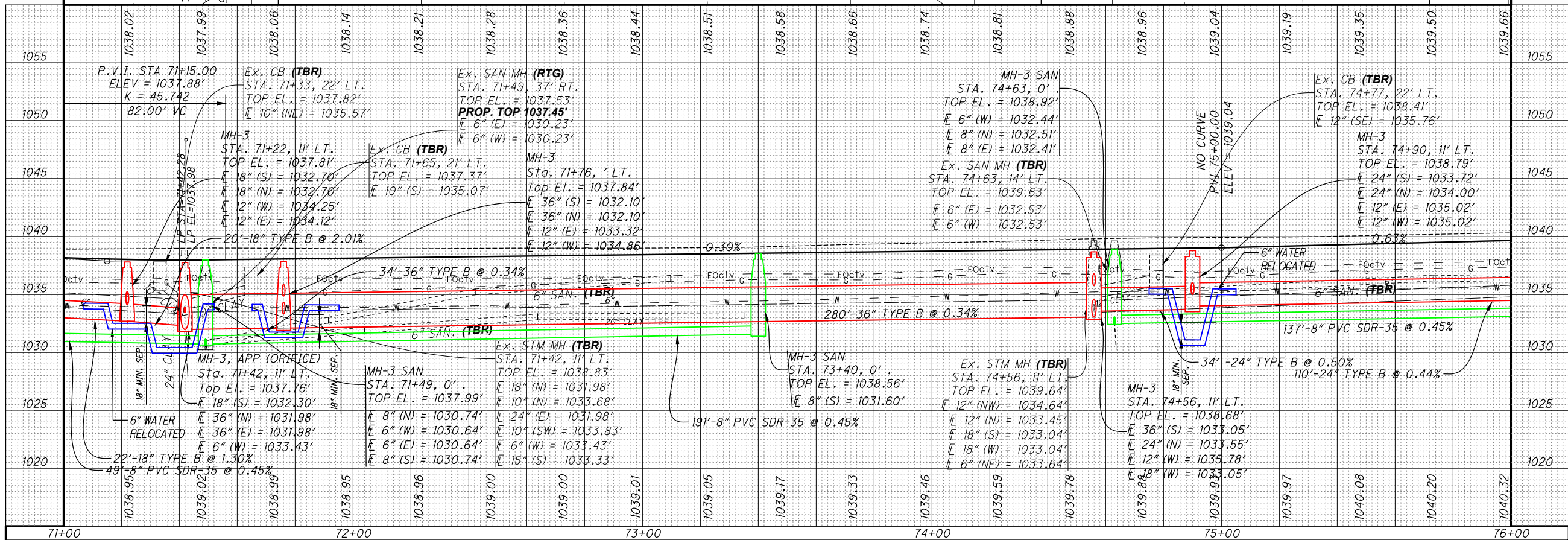
HATCH LEGEND FOR PLANS

	PAVEMENT PLANING AND RESURFACING
	FULL DEPTH PAVEMENT
	RESIDENTIAL CONCRETE DRIVEWAYS
	ASPHALT DRIVEWAYS
	PROPOSED CURB RAMP
	SIDEWALK
	PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
(TBA) - TO BE ABANDONED
(TBRLBO) - TO BE RELOCATED BY OTHERS
(RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
 - TREE, STUMP, BUSH REMOVED
 - ITEM 623 MONUMENT, MISC.: REID STONE

BENCHMARK #8 ELEV. 1040.74
NORTHEAST CORNER OF TOP STEP
OF HOUSE 507 N. MAPLE ST.,
STA. 72+55 LT

PER CITY ORDINANCE 87-17, PASSED
08-17-1987, THE CITY IS AUTHORIZED TO
REPAIR/REPLACE ANY PUBLIC WALK IN OR
ADJACENT TO ANY PUBLIC RIGHT-OF-WAY OR
PRIVATE PROPERTY. NO TEMPORARY OR
PERMANENT RIGHT-OF-WAY WILL BE REQUIRED
FOR THE PROJECT.



PLAN AND PROFILE - N. MAPLE STREET STA. 71+00 to STA. 76+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.22

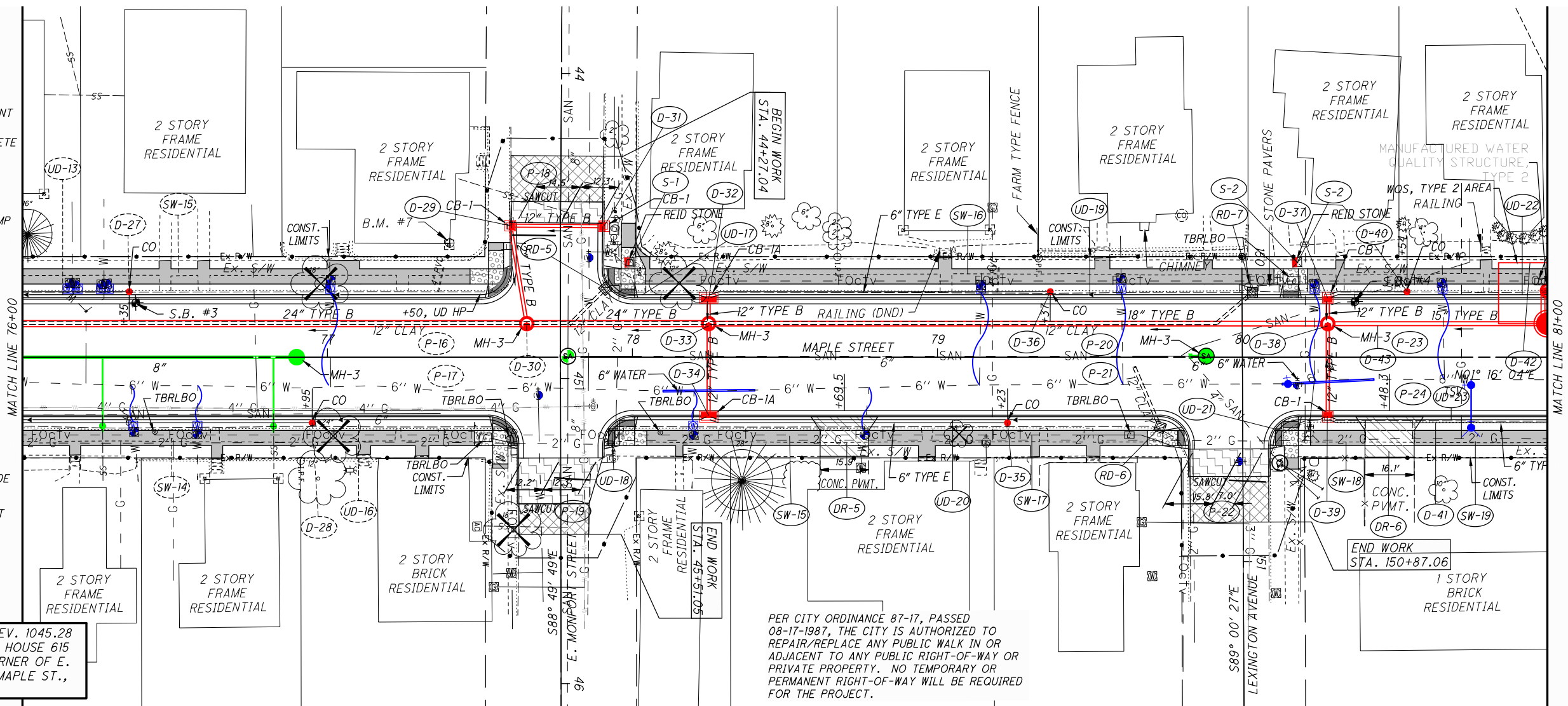
TOTAL
79

HATCH LEGEND FOR PLANS

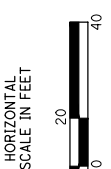
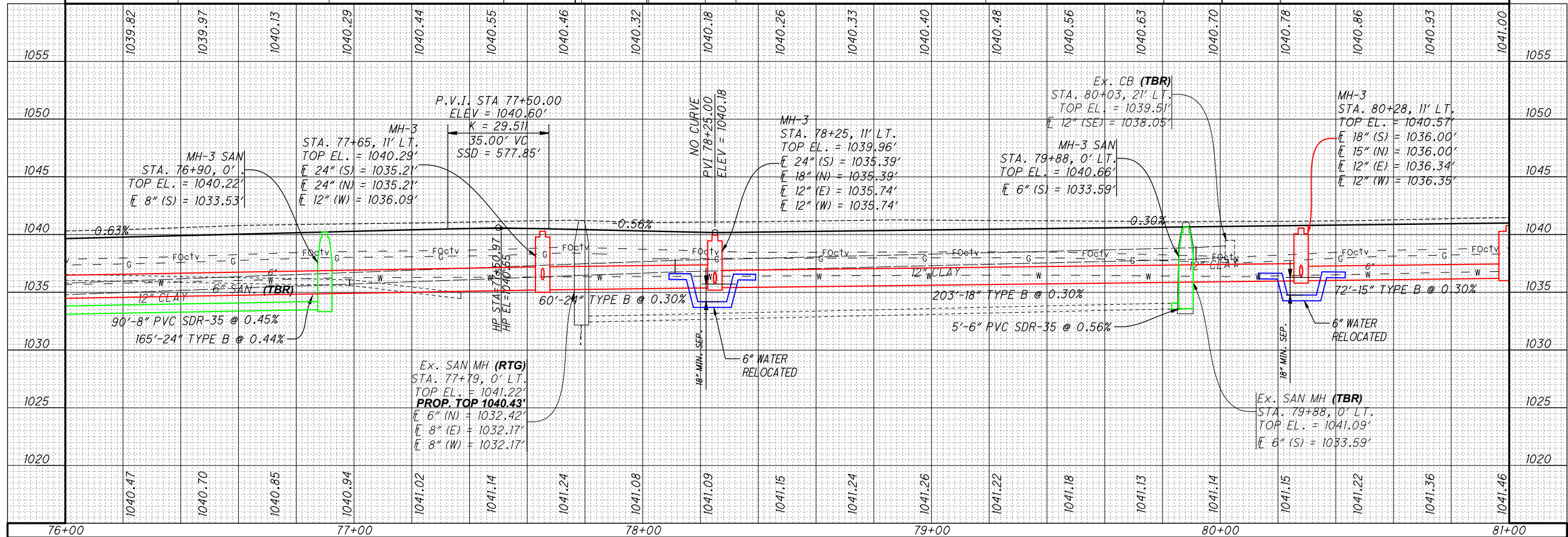
	PAVEMENT PLANING AND RESURFACING
	FULL DEPTH PAVEMENT
	RESIDENTIAL CONCRETE DRIVEWAYS
	ASPHALT DRIVEWAYS
	PROPOSED CURB RAMP
	SIDEWALK
	PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
(TBA) - TO BE ABANDONED
(TBRLBO) - TO BE RELOCATED BY OTHERS
(RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
 - TREE, STUMP, BUSH REMOVED
 - ITEM 623 MONUMENT, MISC.: REID STONE

BENCHMARK #7 ELEV. 1045.28
NE CORNER OF PORCH HOUSE 615
N. MAPLE ST., SW CORNER OF E.
MONFORT ST AND N. MAPLE ST.,
STA. 77+40 LT



PER CITY ORDINANCE 87-17, PASSED 08-17-1987, THE CITY IS AUTHORIZED TO REPAIR/REPLACE ANY PUBLIC WALK IN OR ADJACENT TO ANY PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. NO TEMPORARY OR PERMANENT RIGHT-OF-WAY WILL BE REQUIRED FOR THE PROJECT.



PLAN AND PROFILE - N. MAPLE STREET STA. 76+00 to STA. 81+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET TOTAL

P.23 79

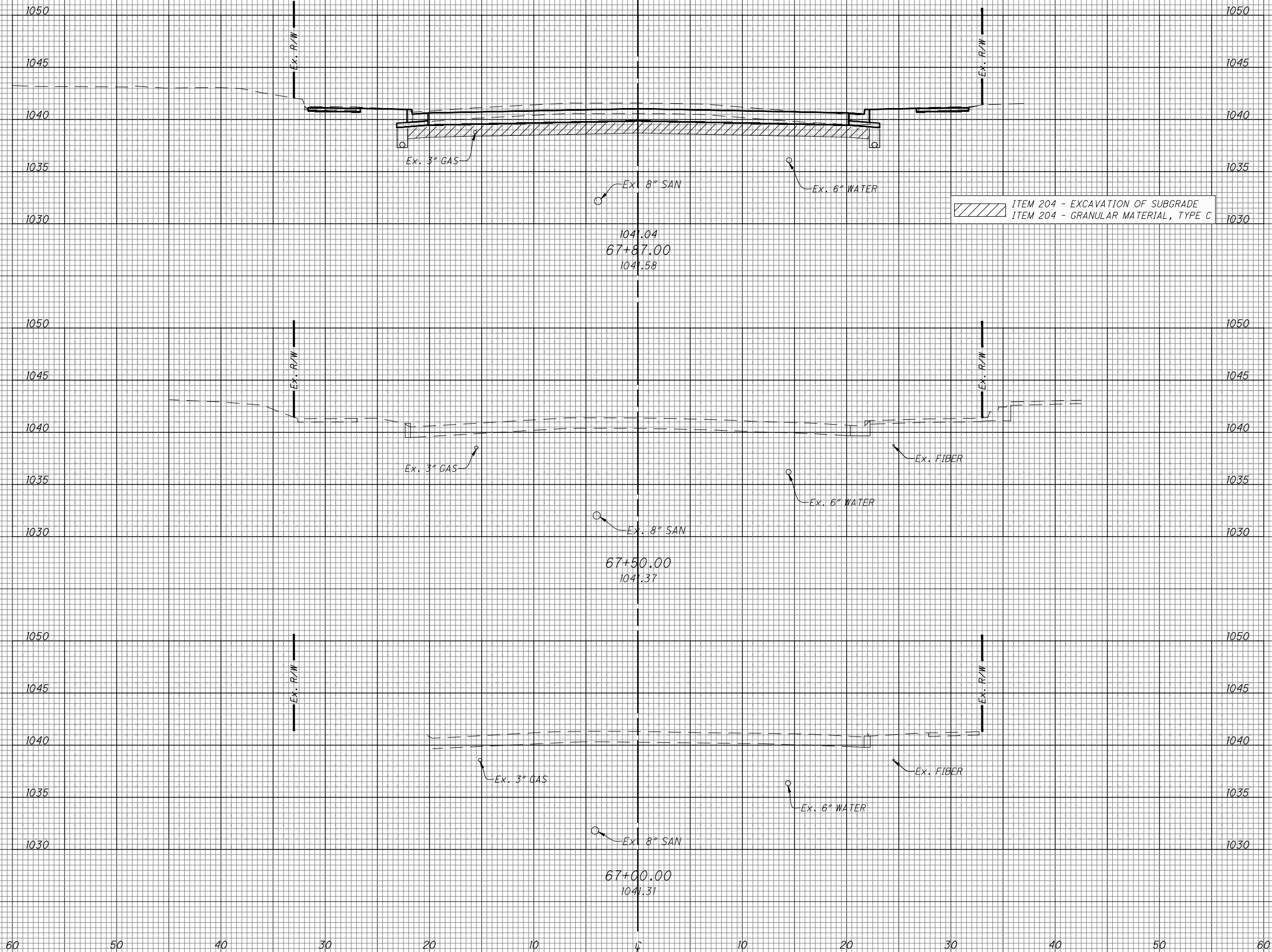
PER CITY ORDINANCE 87-17, PASSED
08-17-1987, THE CITY IS AUTHORIZED TO
REPAIR/REPLACE ANY PUBLIC WALK IN OR
ADJACENT TO ANY PUBLIC RIGHT-OF-WAY OR
PRIVATE PROPERTY. NO TEMPORARY OR
PERMANENT RIGHT-OF-WAY WILL BE REQUIRED
FOR THE PROJECT.

[illegible]

SEEDING
END SO.
WIDTH YDS.

10

21



END AREA
CUT FILL

VOLUME
CUT FILL

41 0

28 0

CROSS SECTIONS - N. MAPLE STREET
STA. 67+00 TO STA. 67+87

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

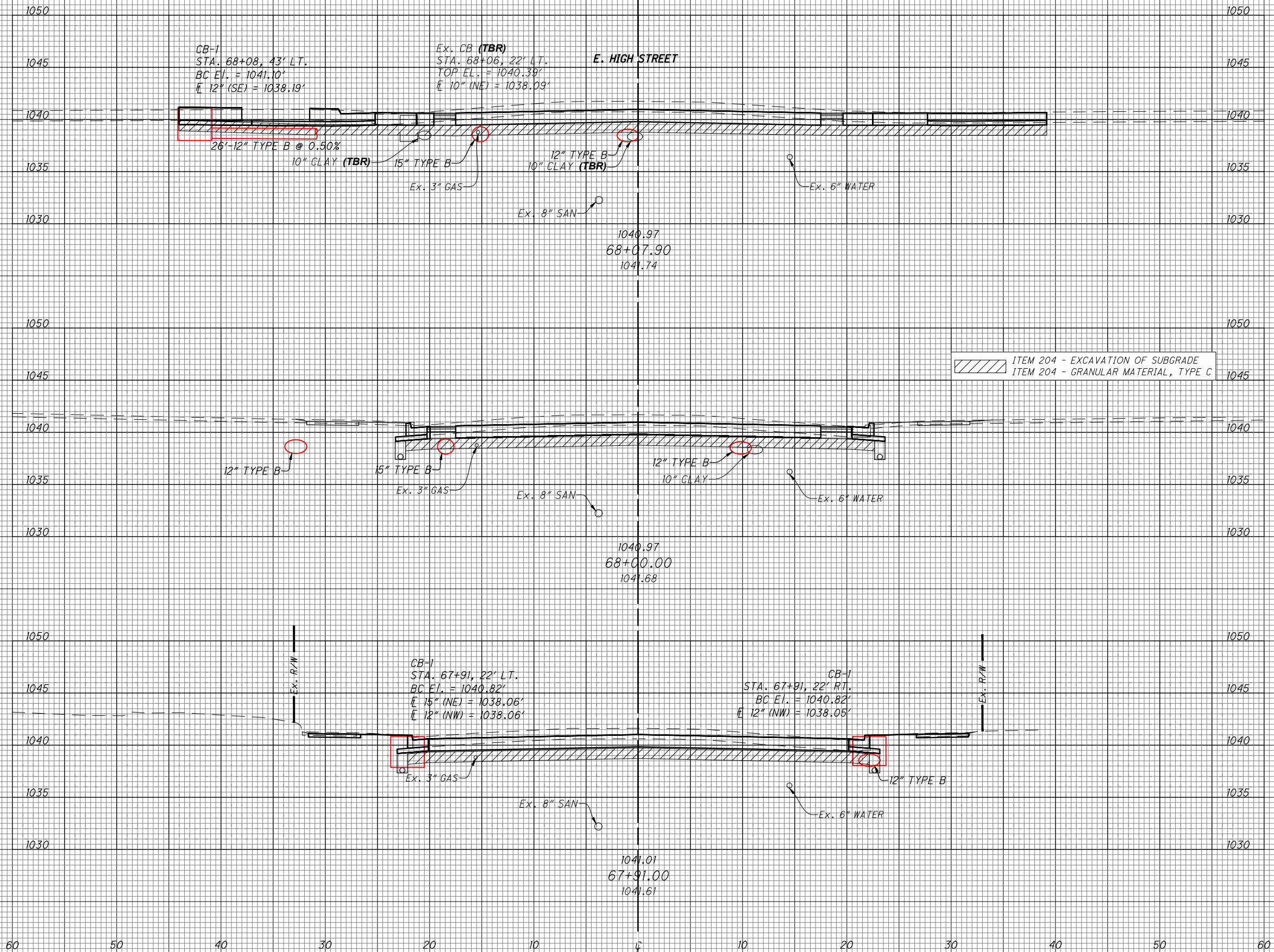
SHEET

P.25

TOTAL

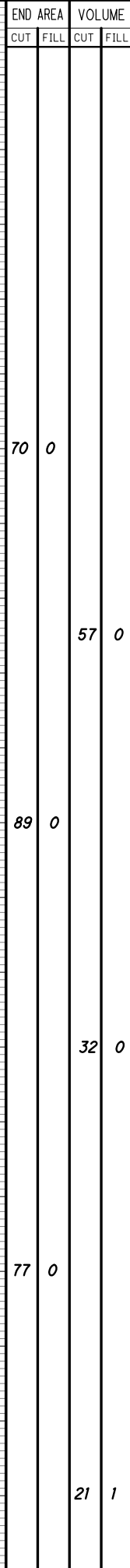
79

SEEDING	
END	SQ.
WIDTH	YDS.

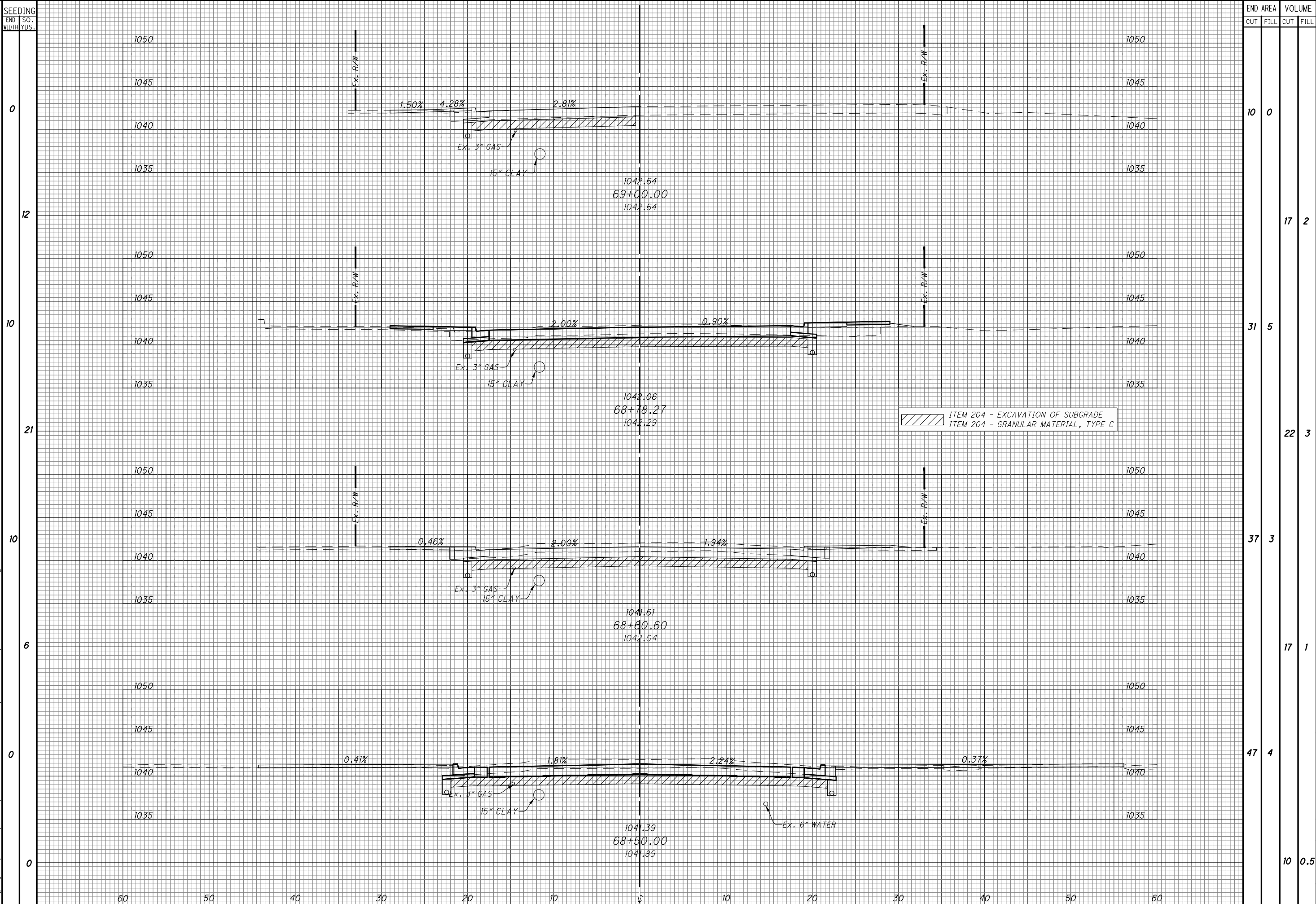


END AREA		VOLUME	
CUT	FILL	CUT	FILL
67	5		
		17	1
49	0.5		
		17	0
50	0		
		7	0

**CROSS SECTIONS - N. MAPLE STREET
STA. 67+91 TO STA. 68+07.90**

4

DESIGN AGENCY  CHOICE ONE ENGINEERING	
DESIGNER BHB	
REVIEWER NNS 06-19-2023	
PROJECT ID 118523	
SHEET P.27	TOTAL 79



CROSS SECTIONS - N. MAPLE STREET
STA. 68+50 TO STA. 69+00

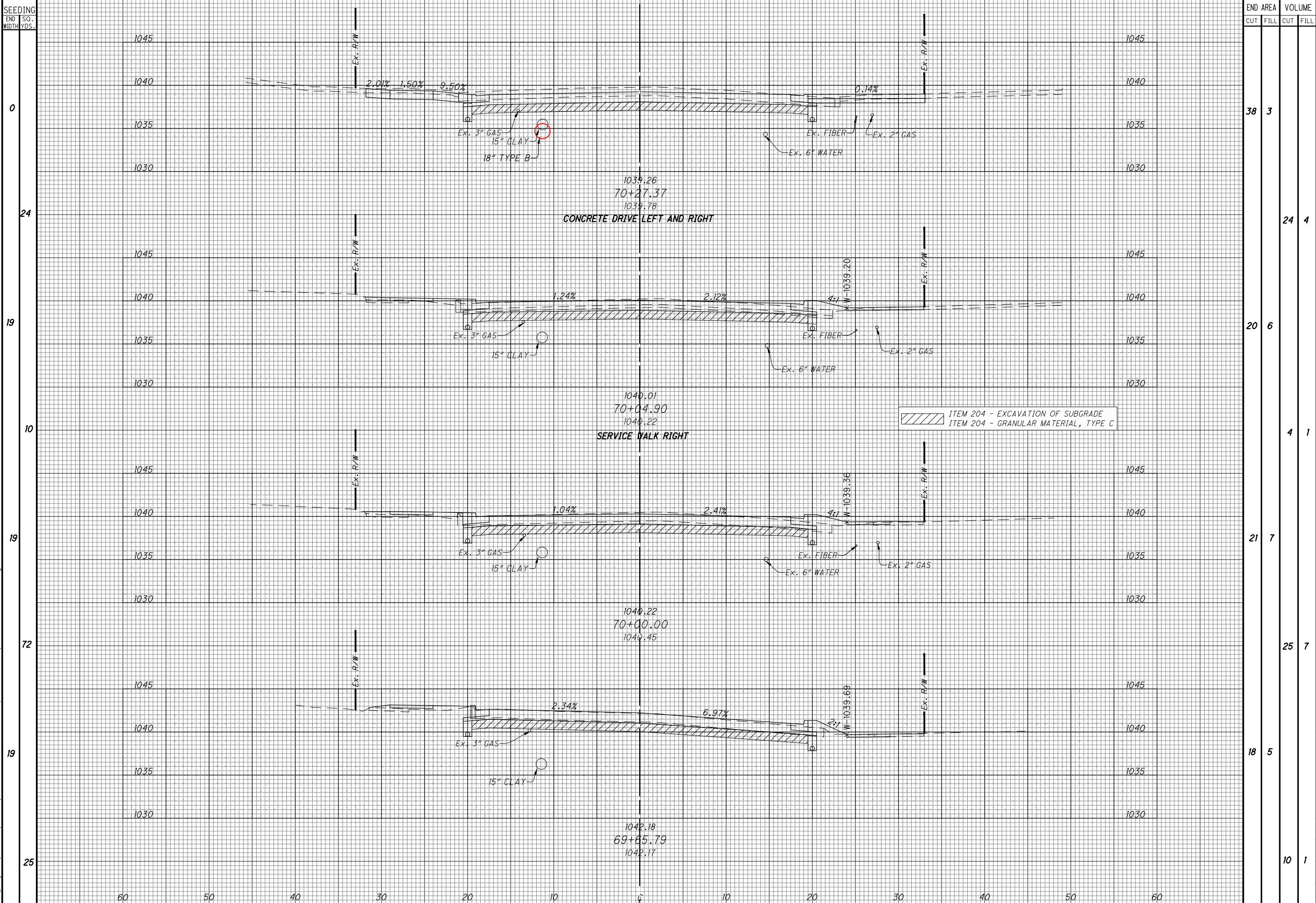
DESIGN AGENCY

CHOICE ONE ENGINEERING
DESIGNER
BHB
REVIEWER
NNS 06-19-2025
PROJECT ID
118523
SHEET
P.28
TOTAL
79

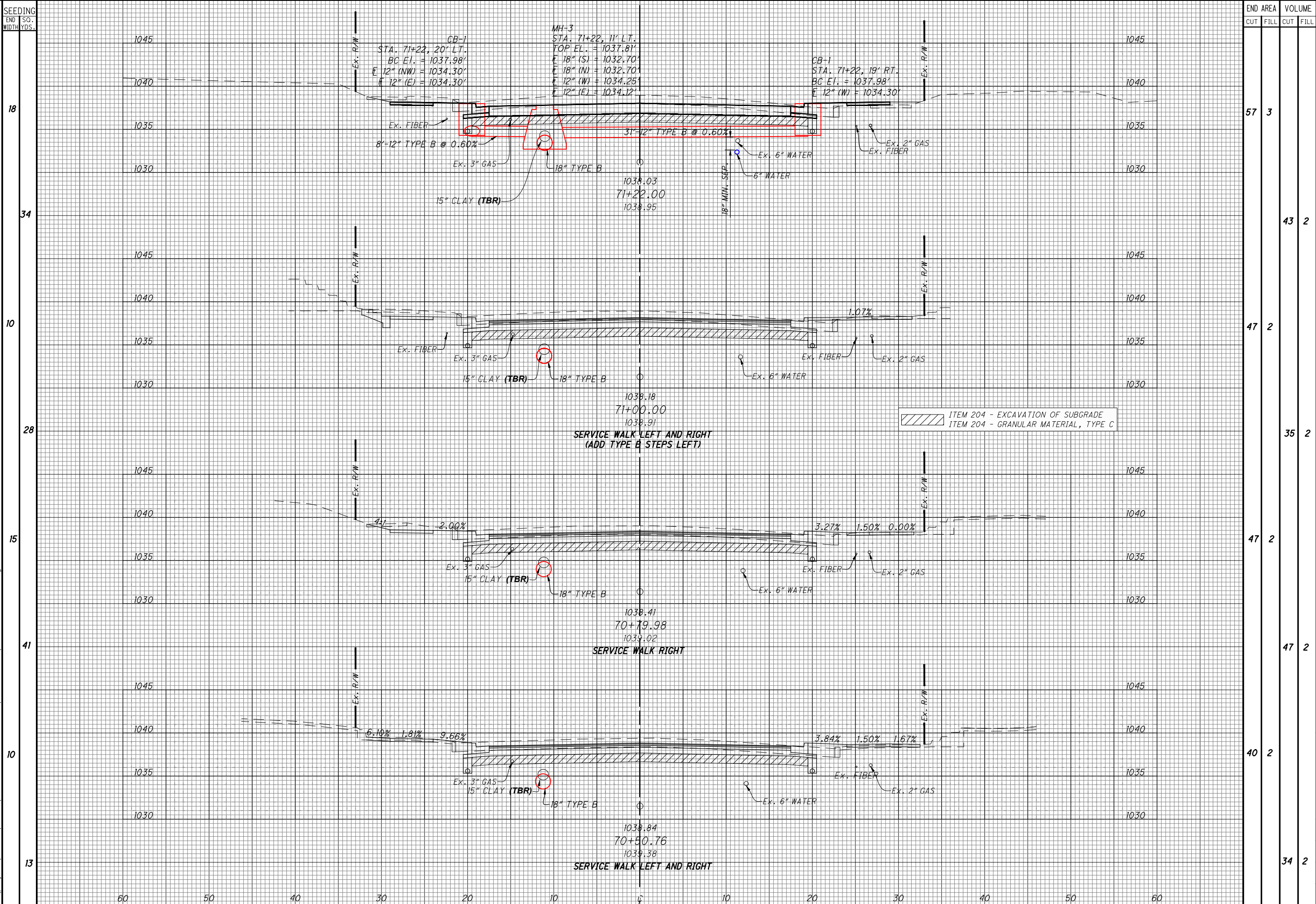
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DESIGN AGENCY	
	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	TOTAL
P.29	79



CROSS SECTIONS - N. MAPLE STREET
STA. 69+65+79 TO STA. 70+27.37



CROSS SECTIONS - N. MAPLE STREET
STA. 70+50.76 TO STA. 71+22

SEEDING
END SO.
WIDTH YDS.

10

8

0

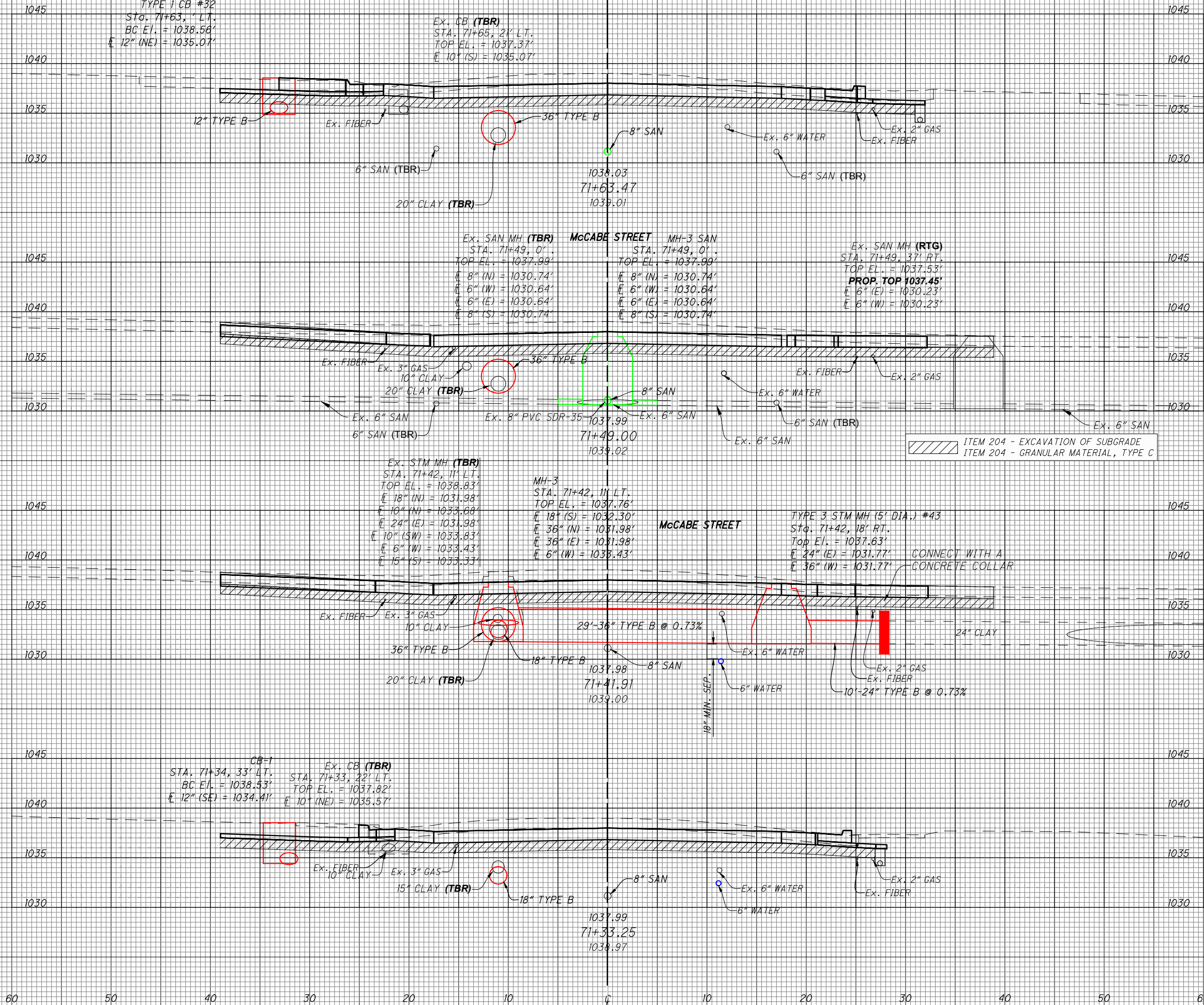
0

0

5

10

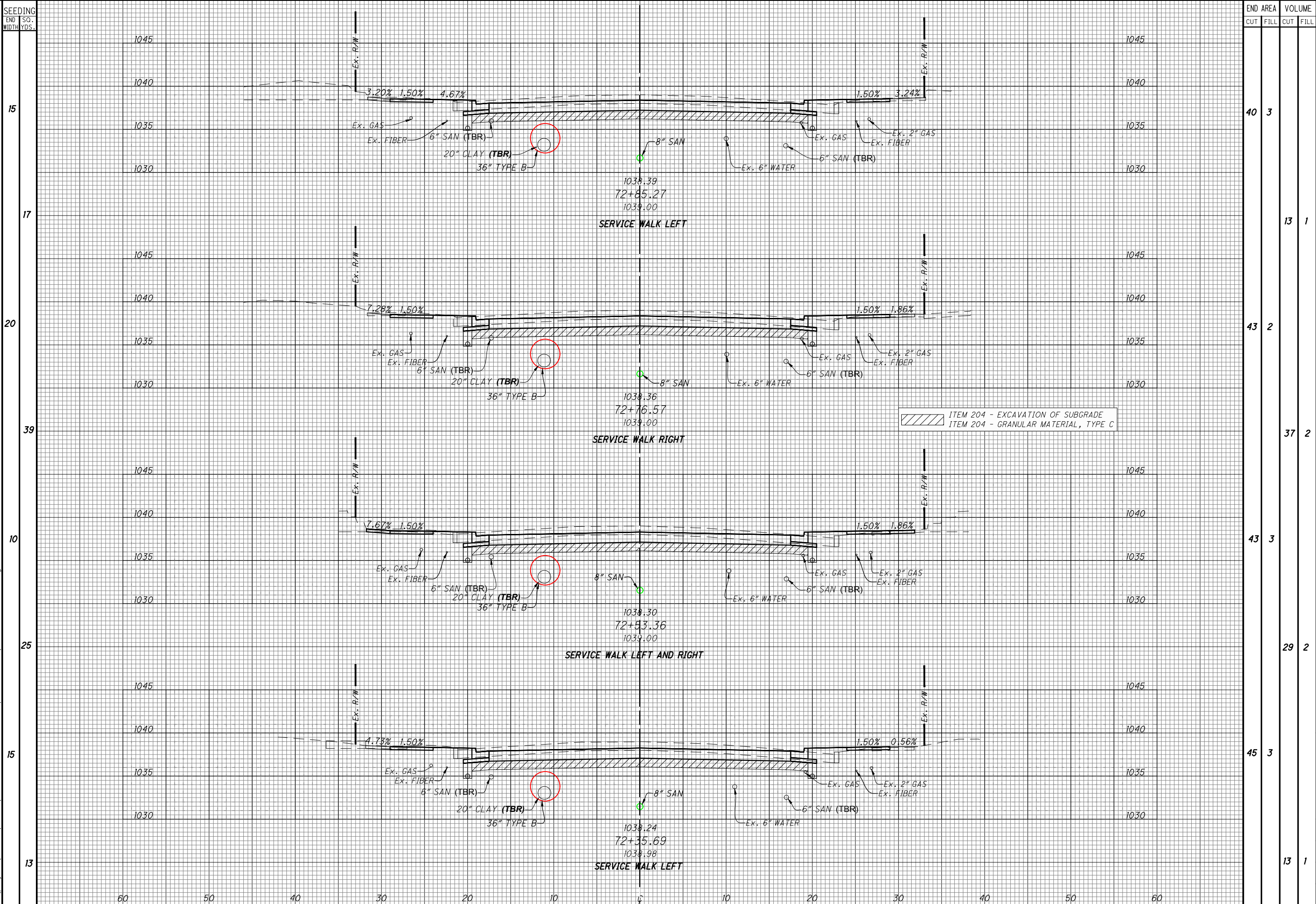
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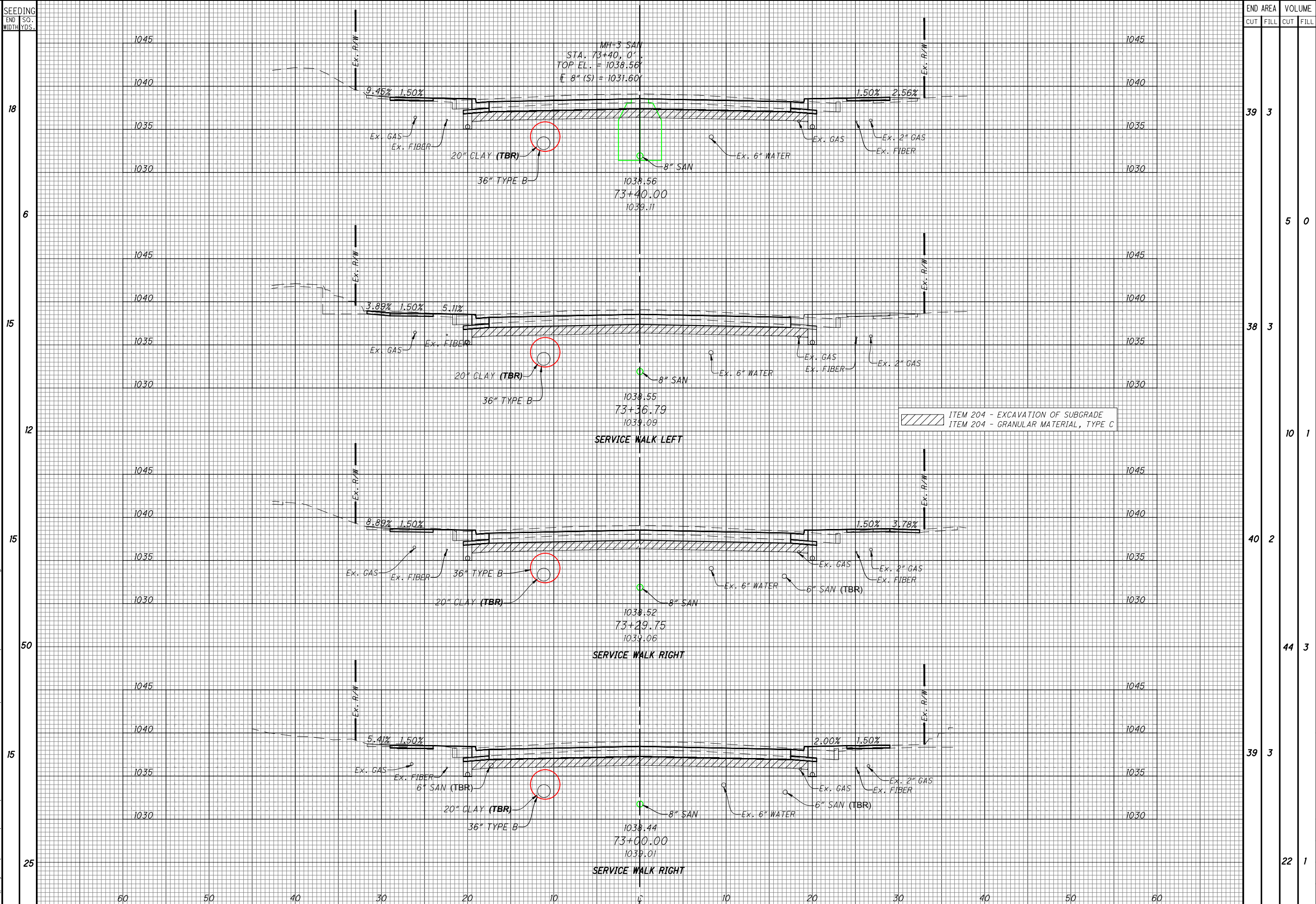
END AREA		VOLUME	
CUT	FILL	CUT	FILL
57	1	39	0.5
88	0	22	0
81	0	22	0
59	4	24	1

CROSS SECTIONS - N. MAPLE STREET
STA. 71+33.25 TO STA. 71+63.47

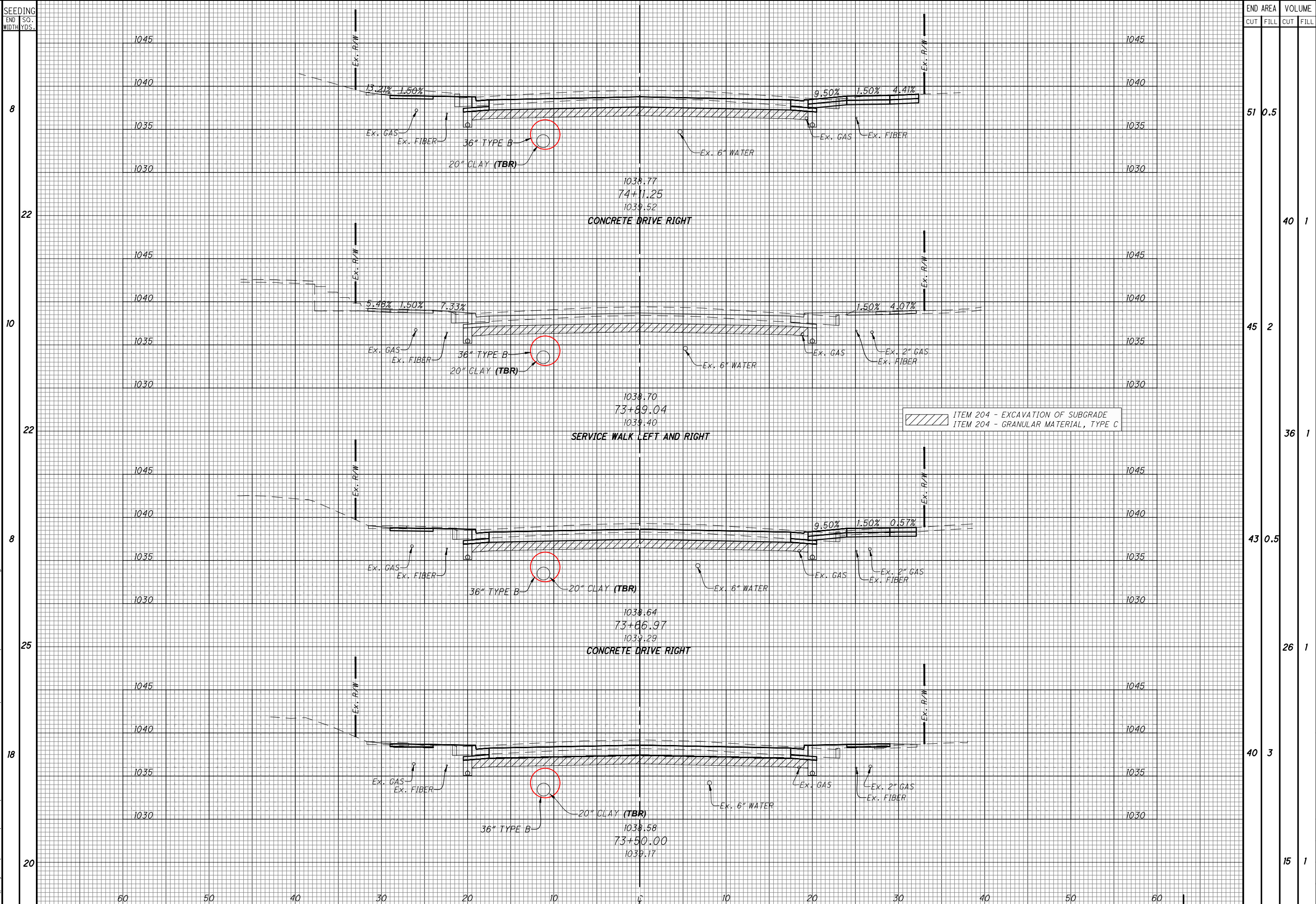
**CROSS SECTIONS - N. MAPLE STREET
STA. 71+76 TO STA. 72+28.06**



CROSS SECTIONS - N. MAPLE STREET
STA. 72+35.69 TO STA. 72+85.27



CROSS SECTIONS - N. MAPLE STREET
STA. 73+00 TO STA. 73+40



CROSS SECTIONS - N. MAPLE STREET
STA. 73+50 TO STA. 74+11.25

DESIGN AGENCY  CHOICE ONE ENGINEERING	
DESIGNER BHB	
REVIEWER NNS 06-19-2025	
PROJECT ID 118523	
SHEET P.37	TOTAL 79

CROSS SECTIONS - N. MAPLE STREET STA. 74+76.41 TO STA. 75+46.05	
DESIGN AGENCY  CHOICE ONE ENGINEERING	
DESIGNER BHB	
REVIEWER NNS 06-19-2025	
PROJECT ID 118523	
SHEET P.38	TOTAL 79

SEEDING
END SO.
WIDTH YDS.

18

51

13

44

20

29

20

74

1045

1040

1035

1030

1045

1040

1035

1030

1045

1040

1035

1030

1045

1040

1035

1030

60

50

40

30

20

10

0

10

20

30

40

50

60

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

Ex. R/W

6.32% 1.50% 7.33%

12" CLAY (TBR)
24" TYPE B

Ex. GAS

Ex. 6" WATER

6" SAN (TBR)

Ex. 2" GAS
Ex. FIBER

1039.95
76+46.74
1040.67

SERVICE WALK LEFT

17.02% 1.50%

12" CLAY (TBR)
24" TYPE B

Ex. GAS

Ex. 6" WATER

6" SAN (TBR)

Ex. 2" GAS
Ex. FIBER

1039.77
76+17.17
1040.40

SERVICE WALK RIGHT

6.30% 1.50% 8.00%

12" CLAY (TBR)
24" TYPE B

8" SAN

Ex. 6" WATER

Ex. GAS

6" SAN (TBR)

Ex. 2" GAS
Ex. FIBER

1039.62
75+93.38
1040.29

SERVICE WALK LEFT

7.61% 1.50% 8.00%

12" CLAY (TBR)
24" TYPE B

8" SAN

Ex. 6" WATER

Ex. GAS

6" SAN (TBR)

Ex. 2" GAS
Ex. FIBER

1039.54
75+80.18
1040.22

SERVICE WALK LEFT

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR MATERIAL, TYPE C

1045

1040

1035

1030

1045

1040

1035

1030

1045

1040

1035

1030

1045

1040

1035

1030

END AREA
CUT FILL

48 2

51 2

45 2

39 2

43 2

21 1

44 2

57 2

CROSS SECTIONS - N. MAPLE STREET
STA. 75+80.18 TO STA. 76+46.74

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

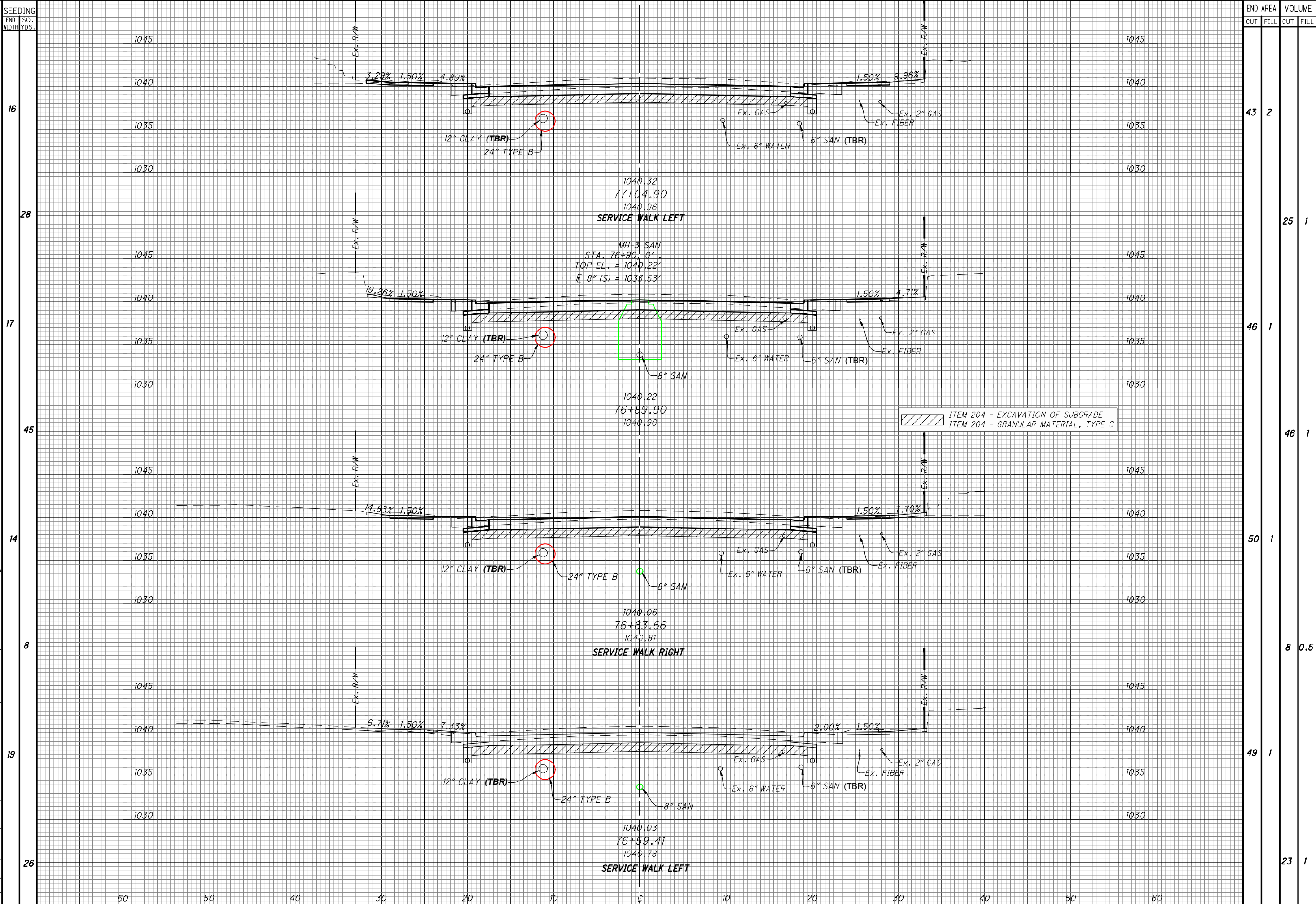
NNS 06-19-2025

PROJECT ID

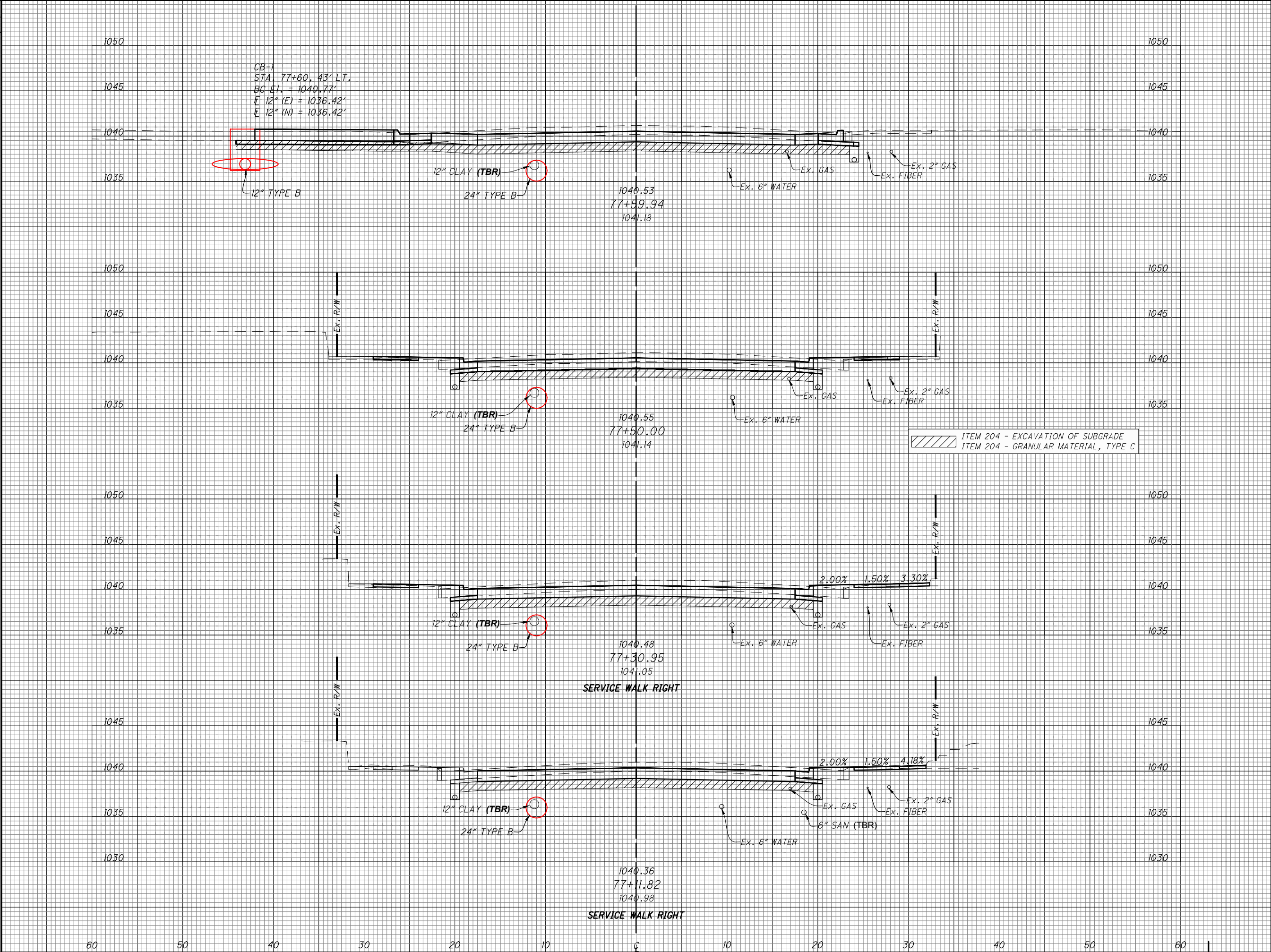
118523

SHEET TOTAL

P.39 79



SEEDING	END SO. WIDTH	SO. YDS.
13		
23		
19		
34		
13		
28		
13		
6		



END AREA		VOLUME	
CUT	FILL	CUT	FILL
49	4	17	1
41	2	29	3
39	3	29	1
42	2	11	0.5

CROSS SECTIONS - N. MAPLE STREET
STA. 77+11.82 TO STA. 77+59.94

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.41

TOTAL

79

SEEDING
END SO.
WIDTH YDS.

14

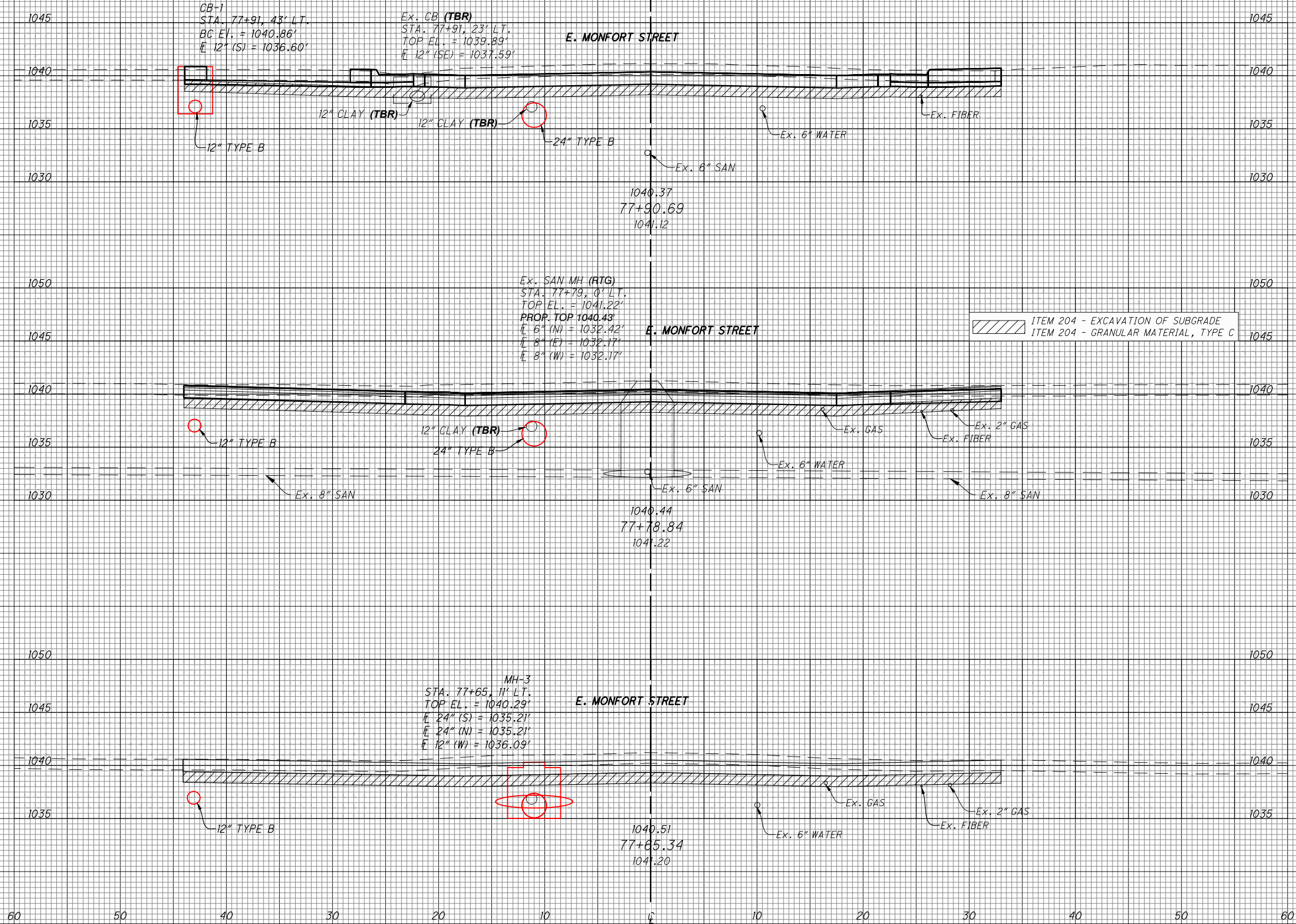
9

0

0

0

4



END AREA
CUT FILL

VOLUME
CUT FILL

80 0

36 0

85 0

39 0

69 0

12 0.5

CROSS SECTIONS - N. MAPLE STREET
STA. 77+65.34 TO STA. 77+90.69

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.42

TOTAL

79

SEEDING
END SO.
WIDTH YDS.

19

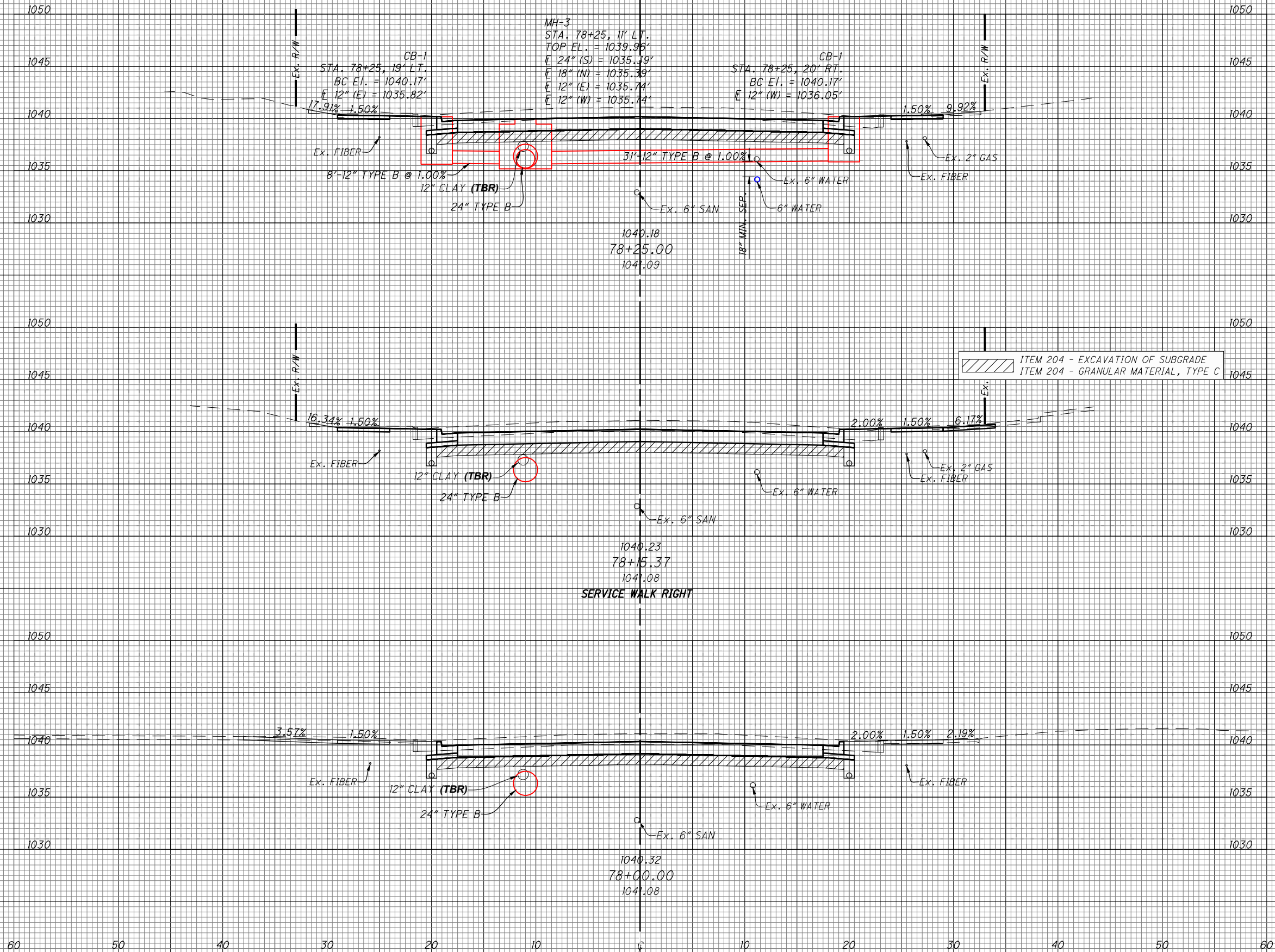
18

14

29

20

18



END AREA		VOLUME	
CUT	FILL	CUT	FILL
60	0.5	21	0.5
57	0.5	31	0.5
54	0	23	0

CROSS SECTIONS - N. MAPLE STREET
STA. 78+00 TO STA. 78+25

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.43

TOTAL

79

SEEDING
END SO.
WIDTH YDS.

15

9

13

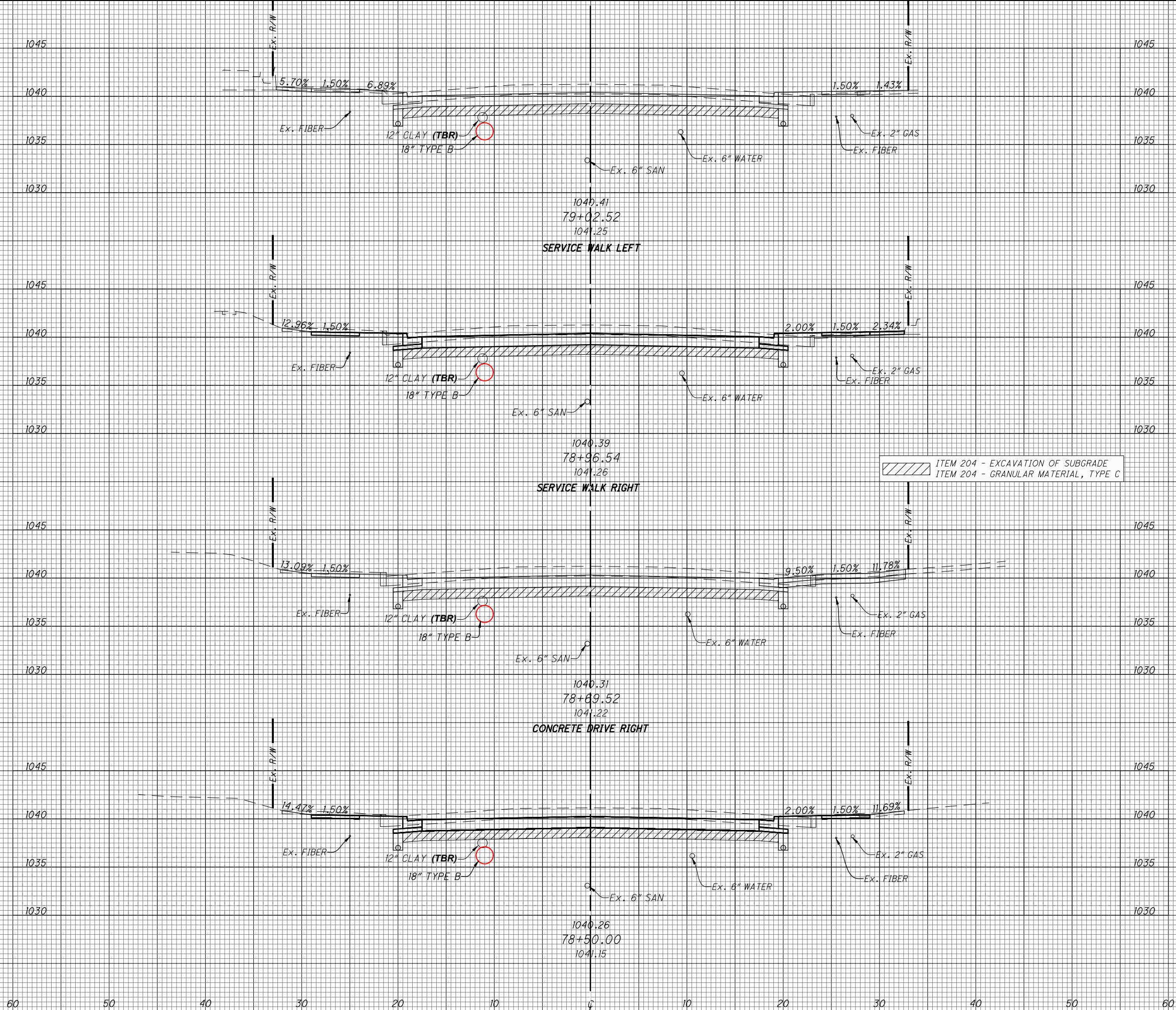
33

9

30

19

53



END AREA
CUT FILL

VOLUME
CUT FILL

51 2

12 0.5

53 2

55 1

57 0.5

41 0.5

57 0.5

54 0.5

CROSS SECTIONS - N. MAPLE STREET
STA. 78+50 TO STA. 79+02.52

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

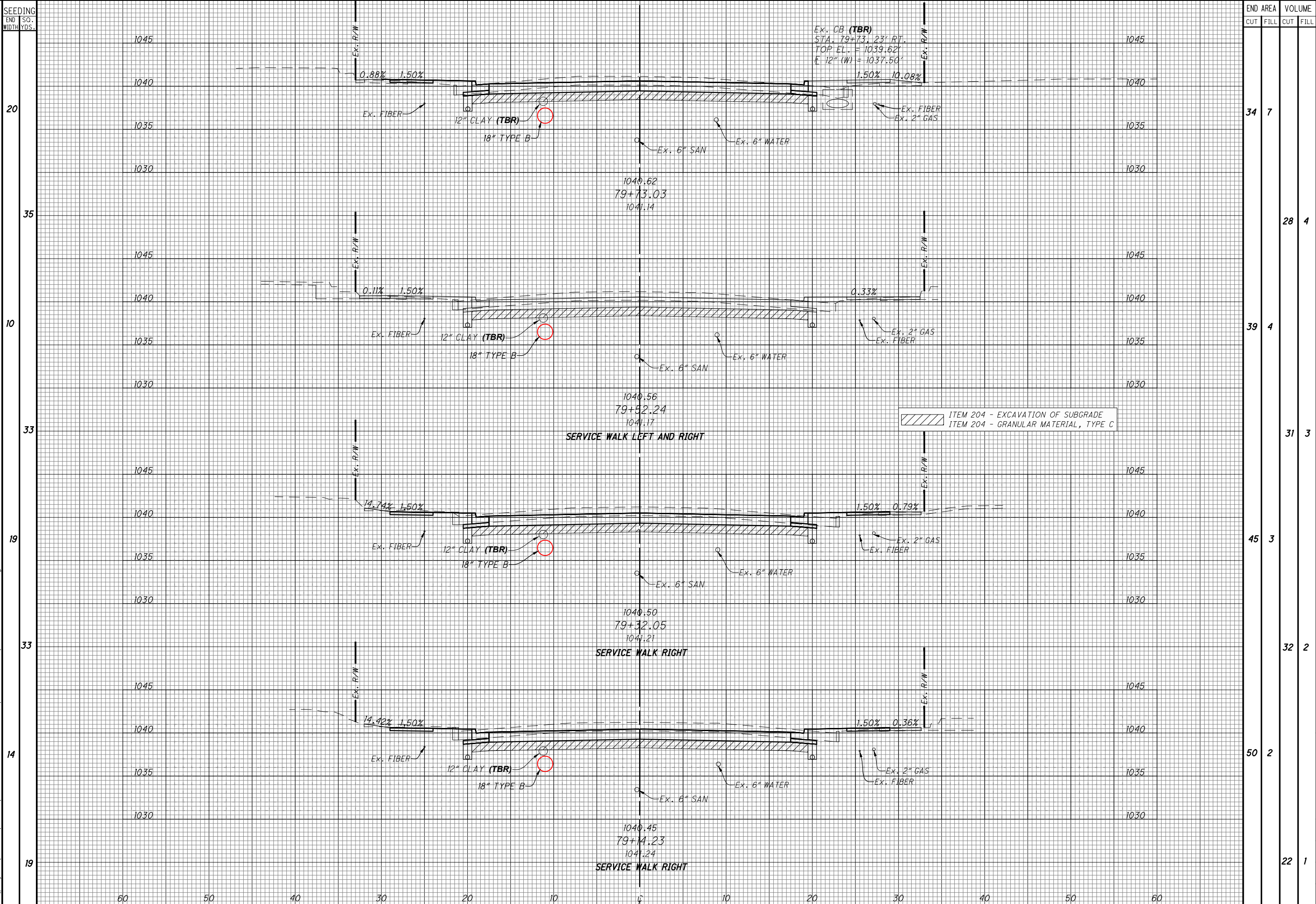
NNS 06-19-2025

PROJECT ID

118523

SHEET TOTAL

P.44 79



CROSS SECTIONS - N. MAPLE STREET
STA. 79+14.23 TO STA. 79+73.03

CROSS SECTIONS - N. MAPLE STREET

STA. 79+88.14 TO STA. 80+28

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P. 46

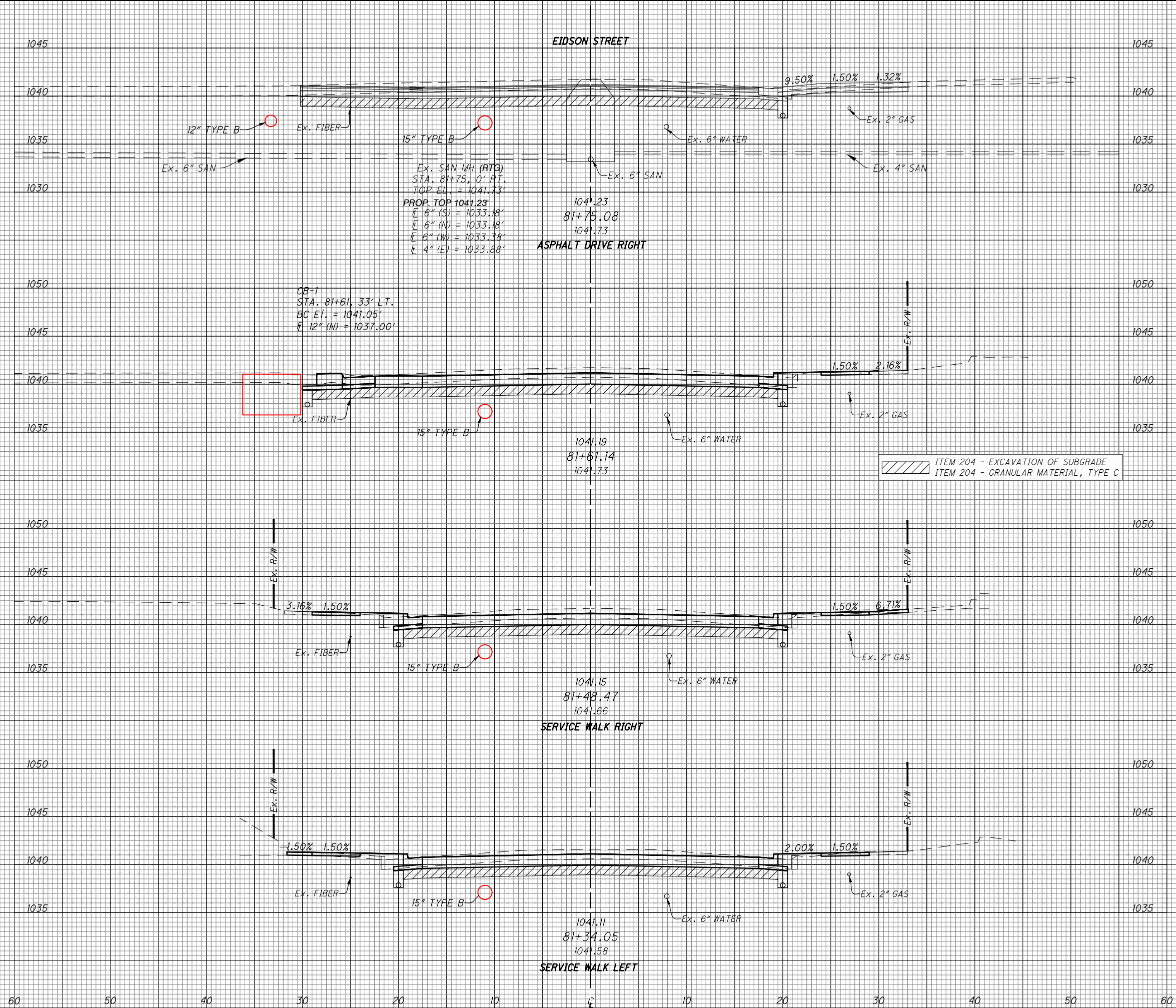
TOTAL

79

CROSS SECTIONS - N. MAPLE STREET STA. 80+32.03 TO STA. 81+00	
DESIGN AGENCY  CHOICE ONE ENGINEERING	
DESIGNER BHB	
REVIEWER NNS 06-19-2025	
PROJECT ID 118523	
SHEET	TOTAL
P.47	79

SEEDING
END SO.
WIDTH YDS.

0
8
10
17
14
23
15
64



END AREA		VOLUME	
CUT	FILL	CUT	FILL
47	0	23	0.5
44	1	19	1
36	2	19	2
34	3	41	5

CROSS SECTIONS - N. MAPLE STREET
STA. 81+34.05 TO STA. 81+75.08

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.48

TOTAL

79

SEEDING
END SO.
WIDTH YDS.

15

28

14

7

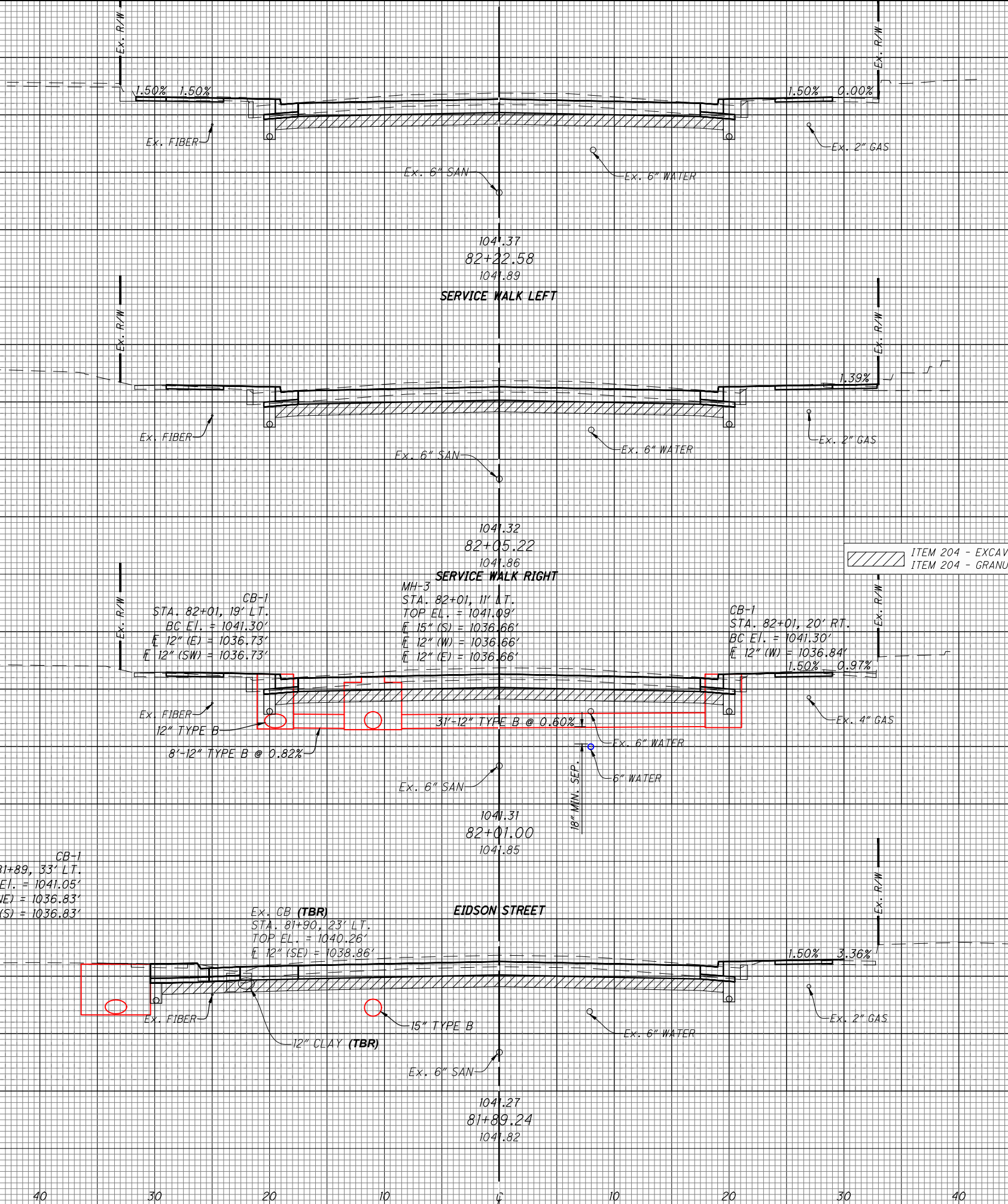
16

17

10

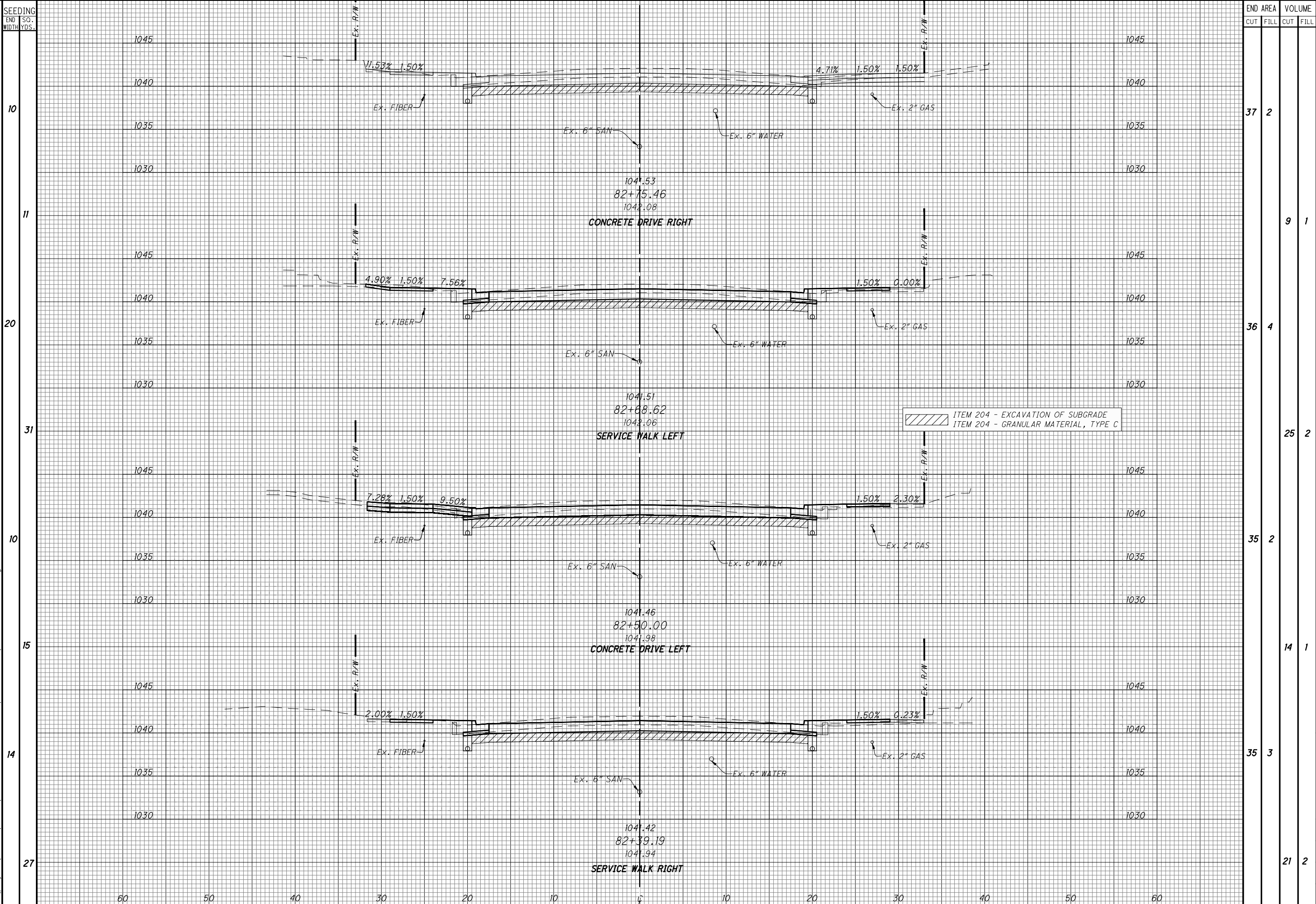
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1045
1040
1035
1030
1045
1040
1035
1030
1045
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1045
1040
1035
1030
1045
1040
1035
1030



END AREA		VOLUME	
CUT	FILL	CUT	FILL
35	3	23	2
36	3	6	0.5
36	3	16	1
38	1	22	0

CROSS SECTIONS - N. MAPLE STREET
STA. 81+89.24 TO STA. 82+22.58

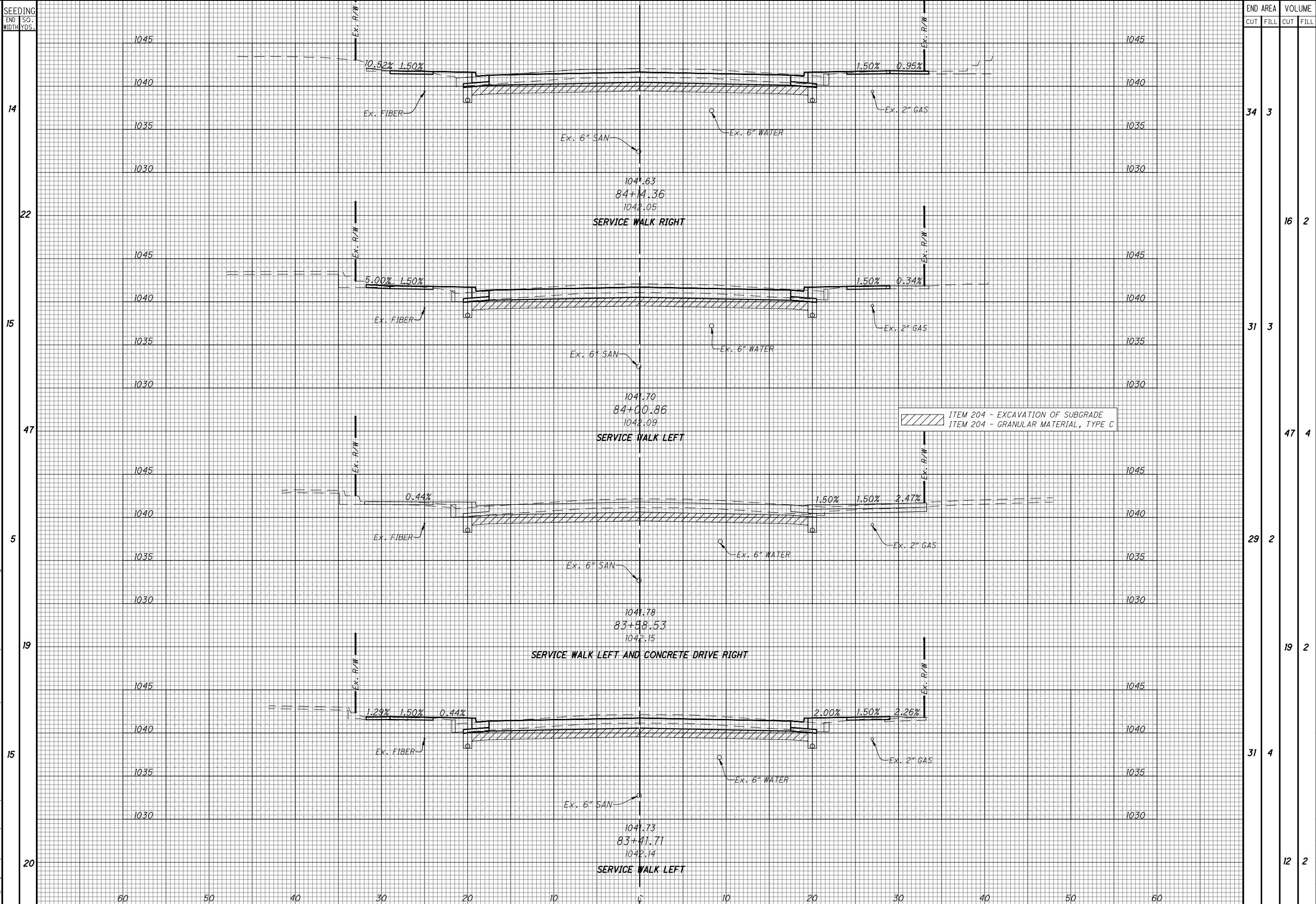


CROSS SECTIONS - N. MAPLE STREET
STA. 82+39.19 TO STA. 82+75.46

DESIGN AGENCY

CHOICE ONE ENGINEERING
DESIGNER
BHB
REVIEWER
NNS 06-19-2025
PROJECT ID
118523
SHEET
P.50
TOTAL
79

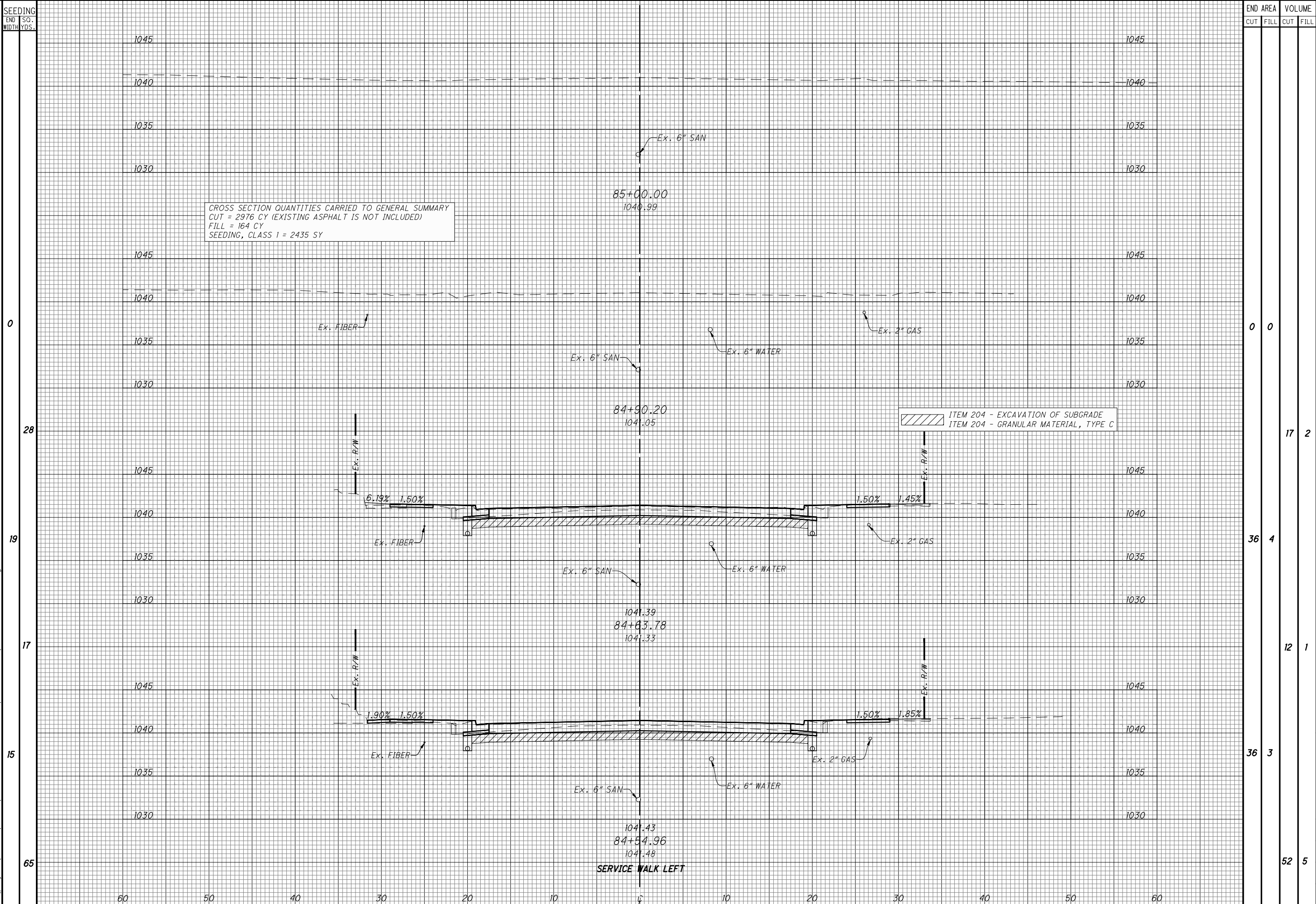
**CROSS SECTIONS - N. MAPLE STREET
STA. 83+00 TO STA. 83+31.28**



CROSS SECTIONS - N. MAPLE STREET
STA. 83+41.71 TO STA. 84+14.36

DESIGN AGENCY

CHOICE ONE ENGINEERING
DESIGNER
BHB
REVIEWER
NNS 06-19-2025
PROJECT ID
118523
SHEET TOTAL
P.52 79



CROSS SECTIONS - N. MAPLE STREET
STA. 84+54.96 TO STA. 85+00

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER
BHB

REVIEWER
NNS 06-19-2025

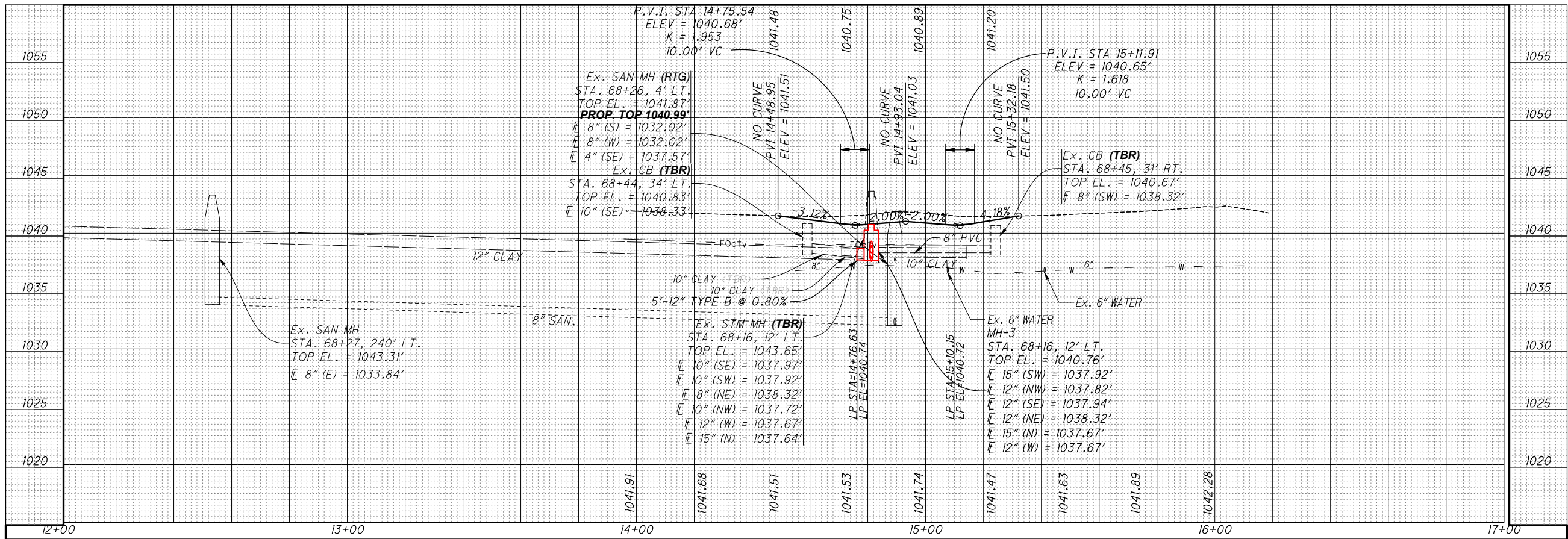
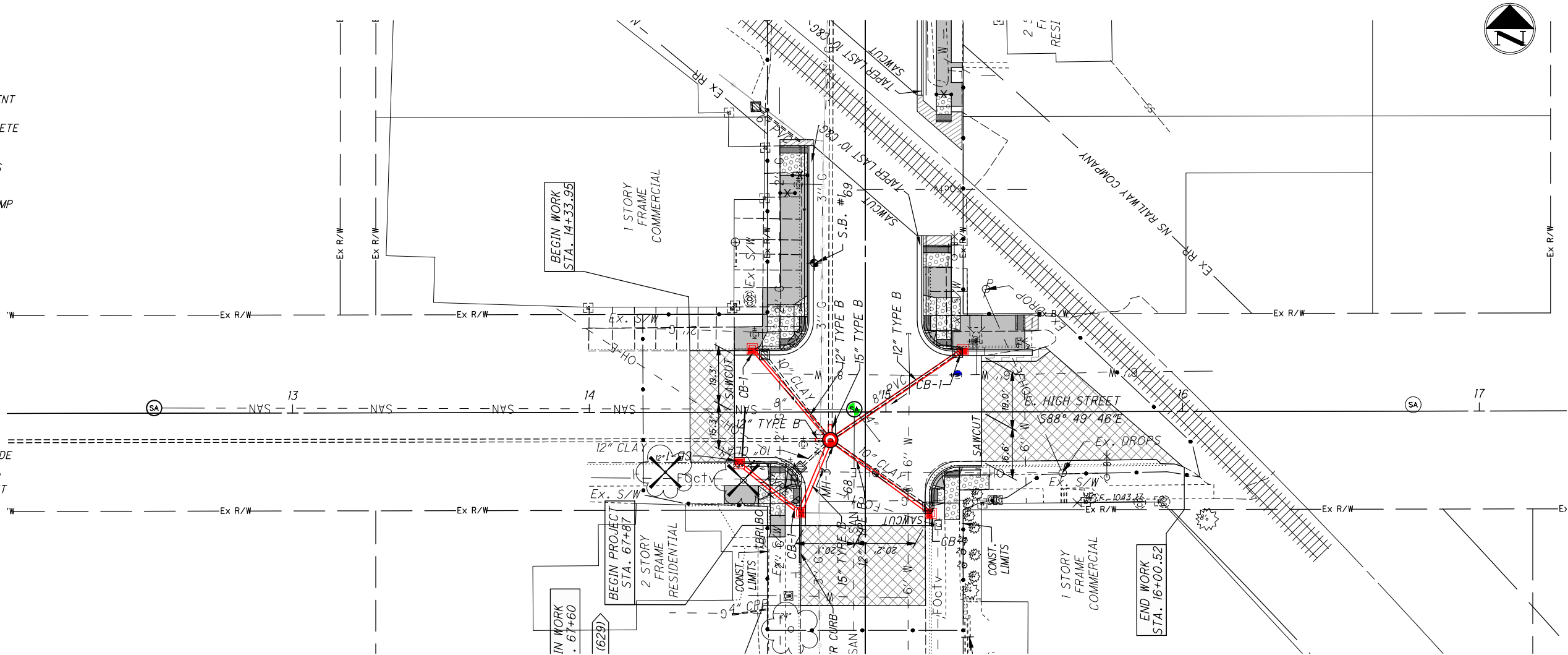
PROJECT ID
118523

SHEET TOTAL
P.53 79

HATCH LEGEND
FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
- (TBA) - TO BE ABANDONED
- (TBRLO) - TO BE RELOCATED BY OTHERS
- (RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED
- ITEM 623 MONUMENT, MISC.: REID STONE



PLAN AND PROFILE - E. HIGH STREET
STA. 12+00 to STA. 17+00



DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.54

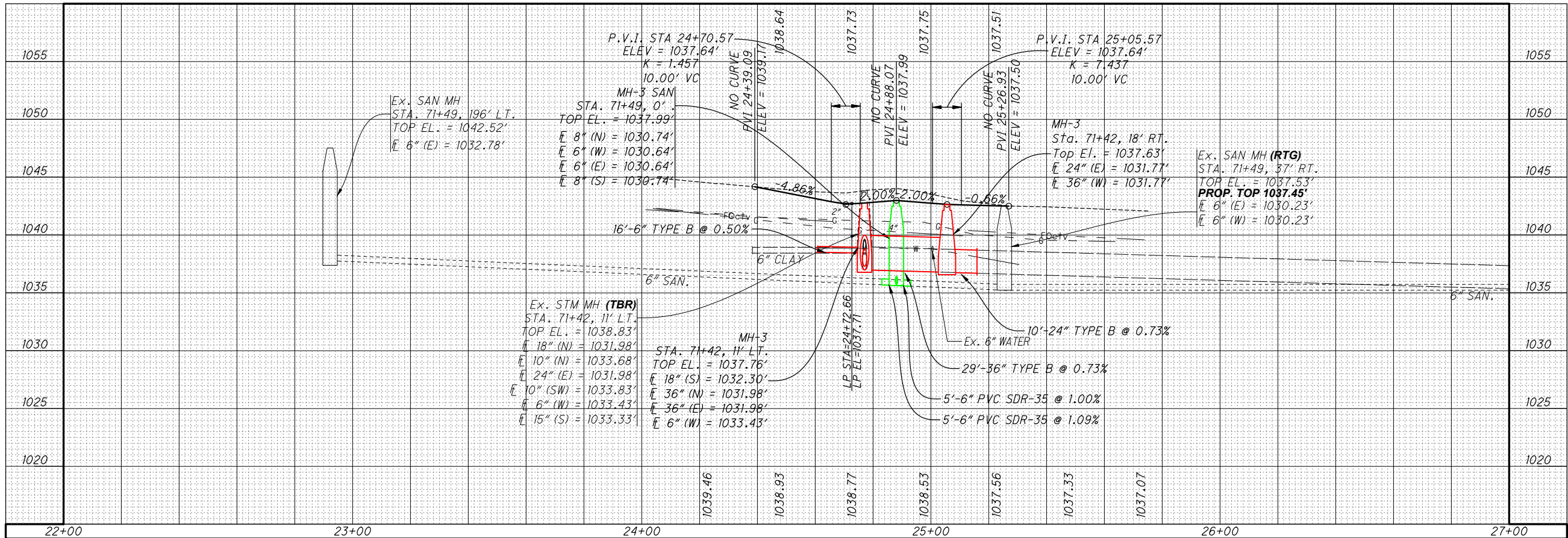
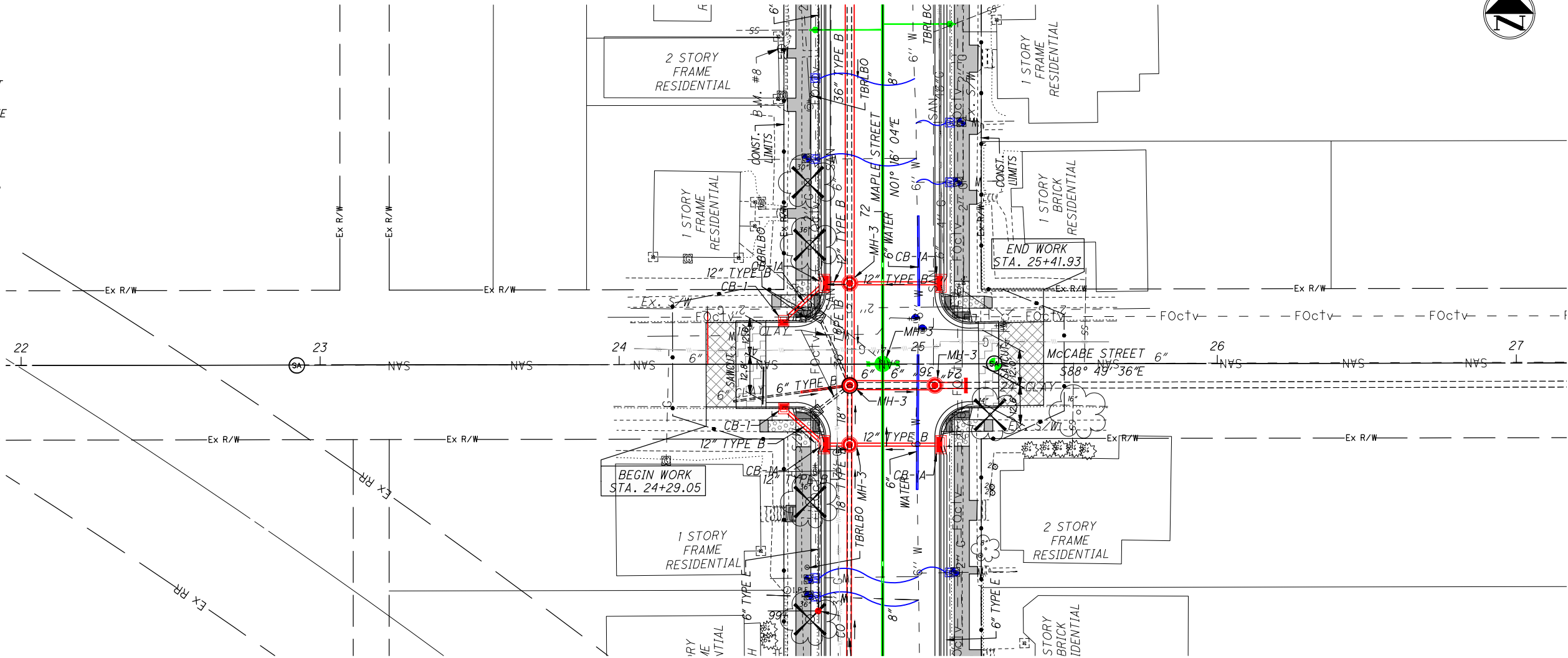
TOTAL

79

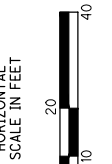
HATCH LEGEND
FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
- (TBA) - TO BE ABANDONED
- (TBRLBO) - TO BE RELOCATED BY OTHERS
- (RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED
- ITEM 623 MONUMENT, MISC.: REID STONE



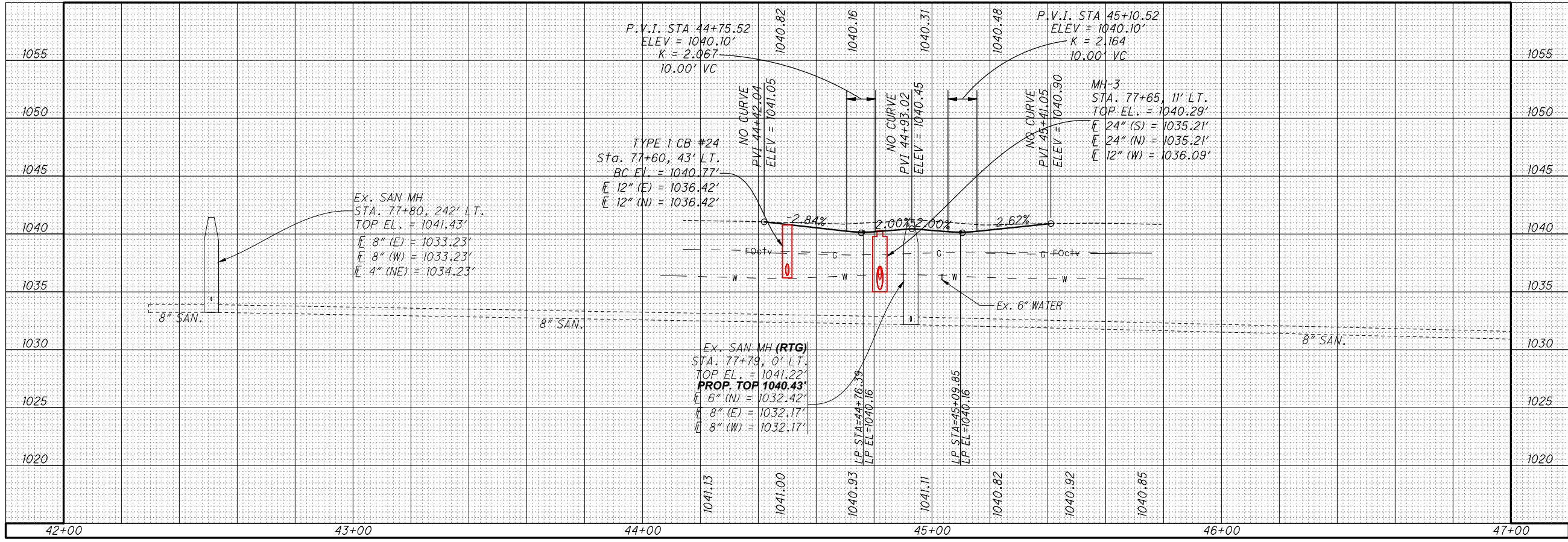
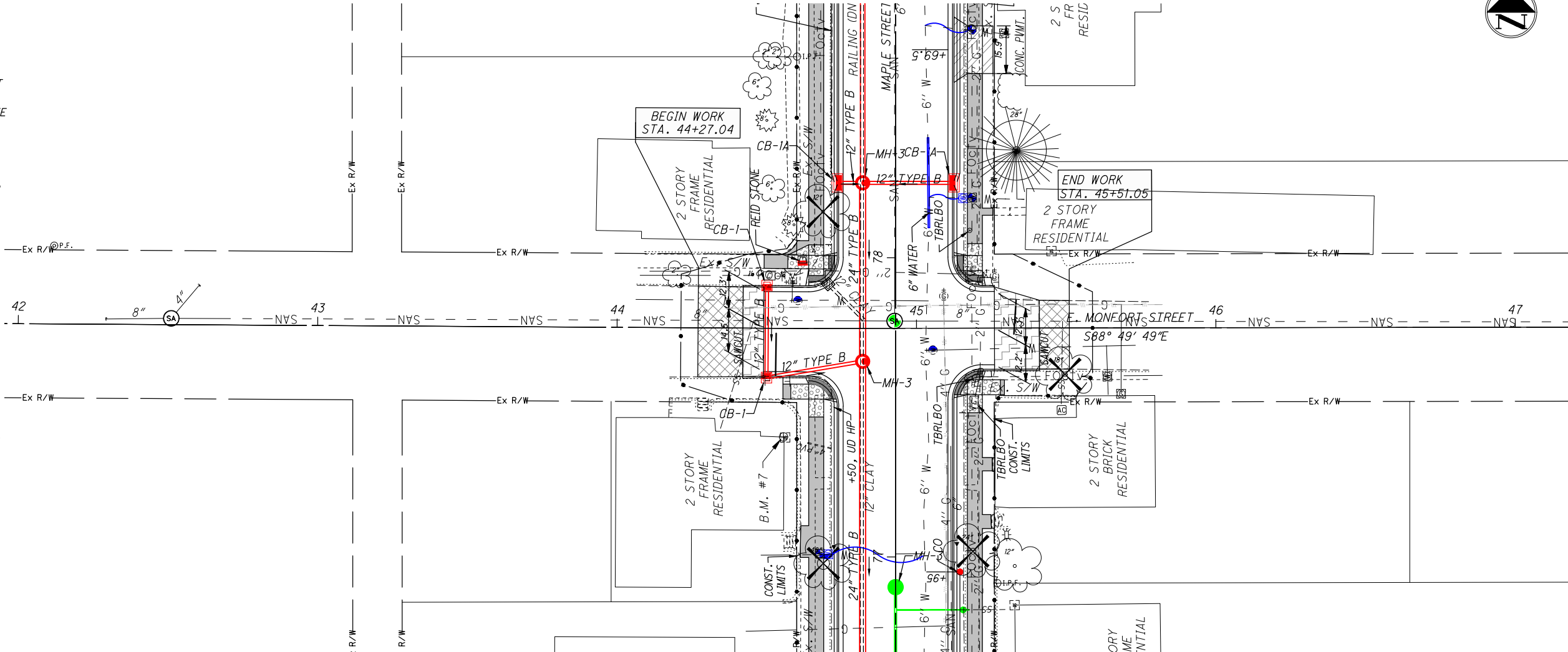
PLAN AND PROFILE - MCCABE STREET
STA. 22+00 to STA. 27+00



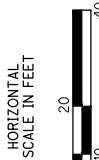
HATCH LEGEND
FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
- (TBA) - TO BE ABANDONED
- (TBRLBO) - TO BE RELOCATED BY OTHERS
- (RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED
- ITEM 623 MONUMENT, MISC.: REID STONE



PLAN AND PROFILE - E. MONFORT STREET
STA. 42+00 to STA. 47+00



DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.57

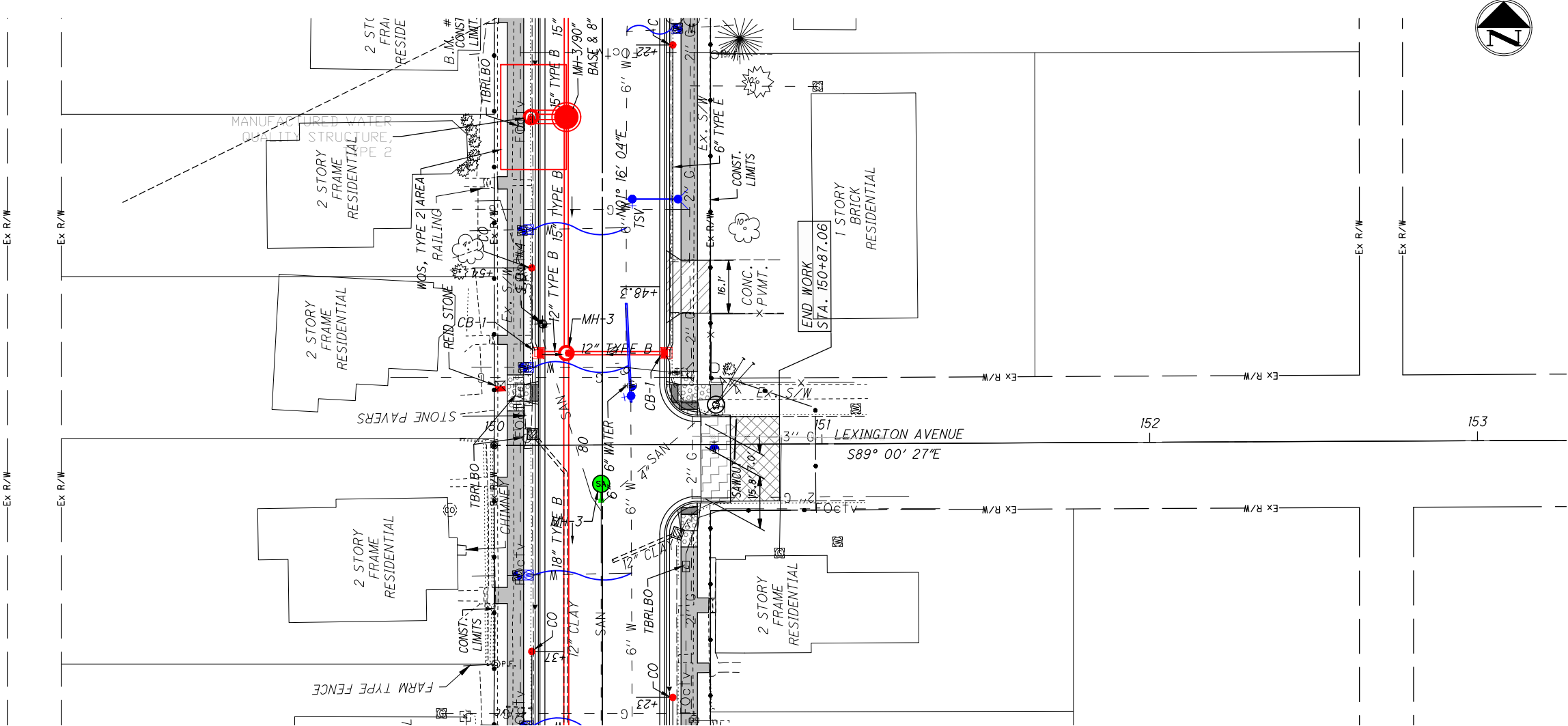
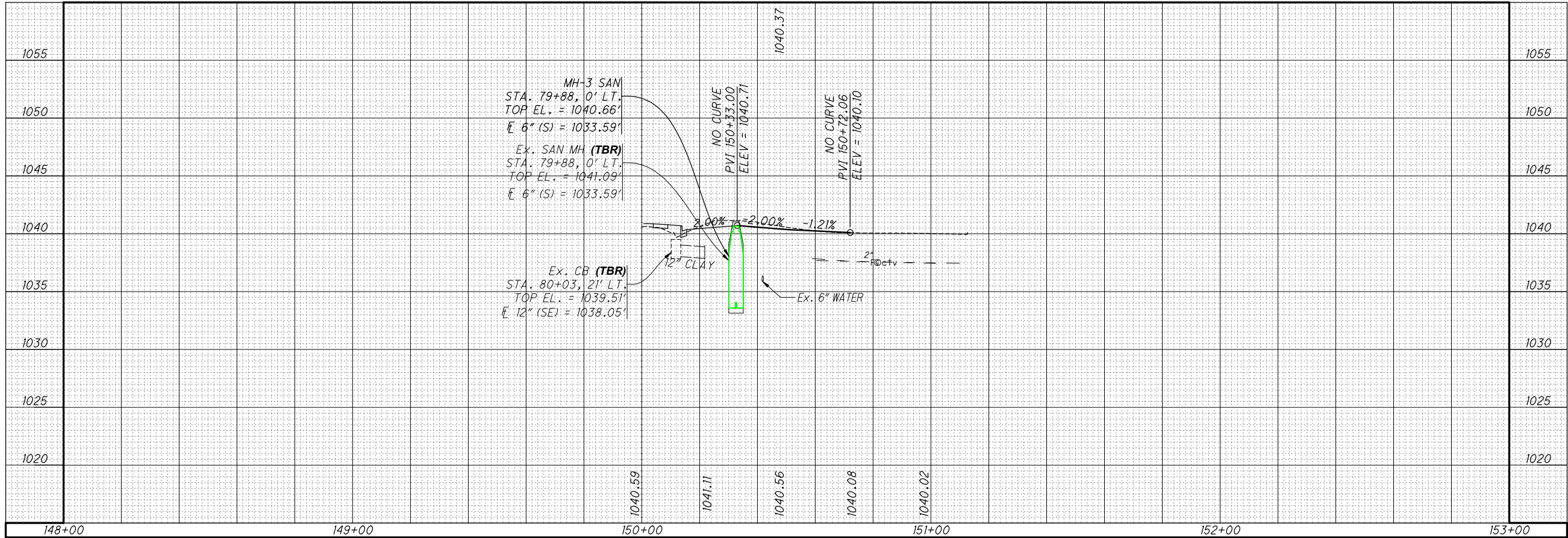
TOTAL

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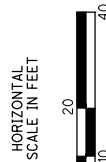
HATCH LEGEND
FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
- (TBA) - TO BE ABANDONED
- (TBR/LBO) - TO BE RELOCATED BY OTHERS
- (RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED
- ITEM 623 MONUMENT, MISC.: REID STONE



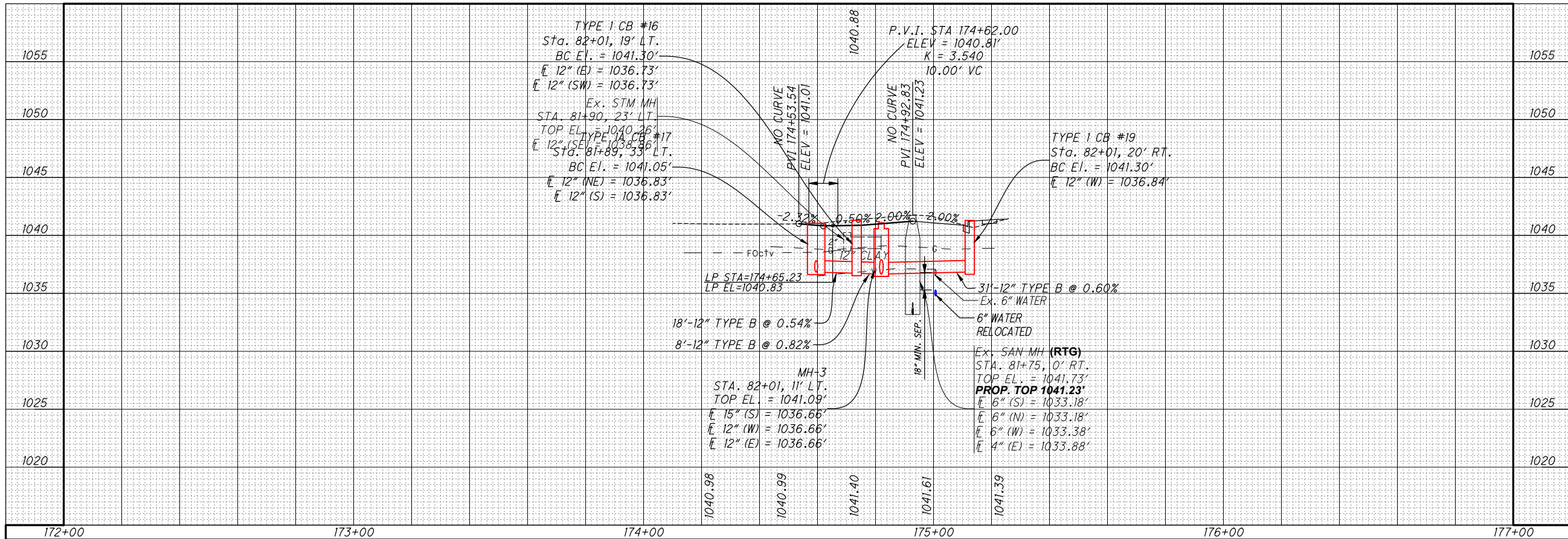
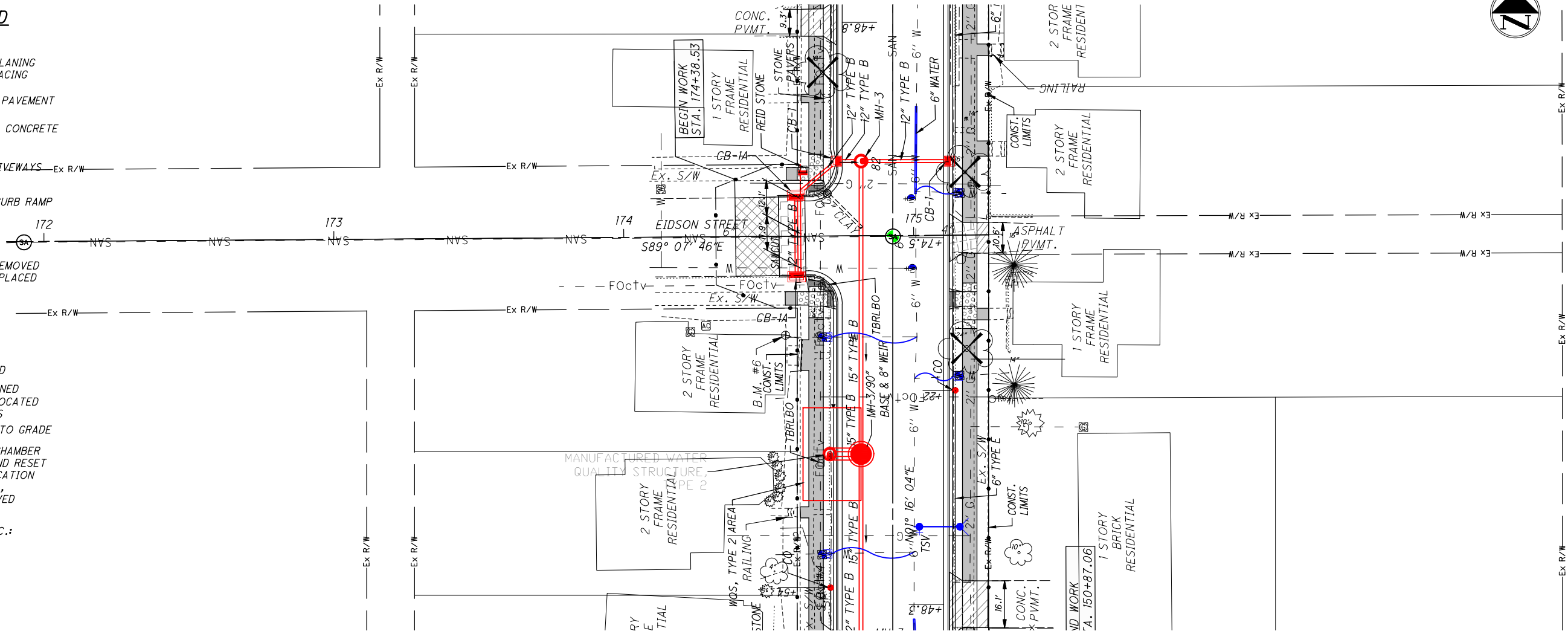
PLAN AND PROFILE - LEXINGTON AVENUE
STA. 150+00 to STA. 153+00



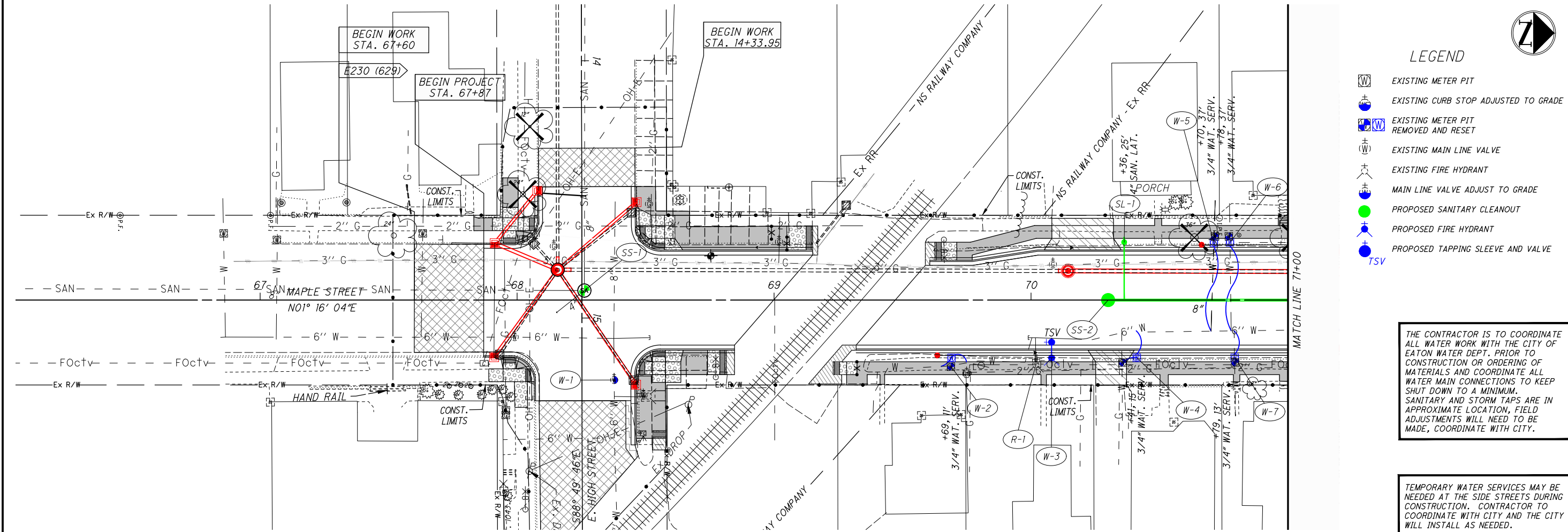
HATCH LEGEND
FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED

- (TBR) - TO BE REMOVED
- (TBA) - TO BE ABANDONED
- (TBRLBO) - TO BE RELOCATED BY OTHERS
- (RTG) - RECONSTRUCT TO GRADE
- METER AND CHAMBER REMOVED AND RESET TO NEW LOCATION
- TREE, STUMP, BUSH REMOVED
- ITEM 623 MONUMENT, MISC.: REID STONE



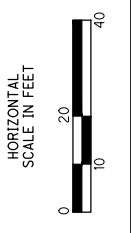
PLAN AND PROFILE - EIDSON STREET
STA. 172+00 to STA. 177+00



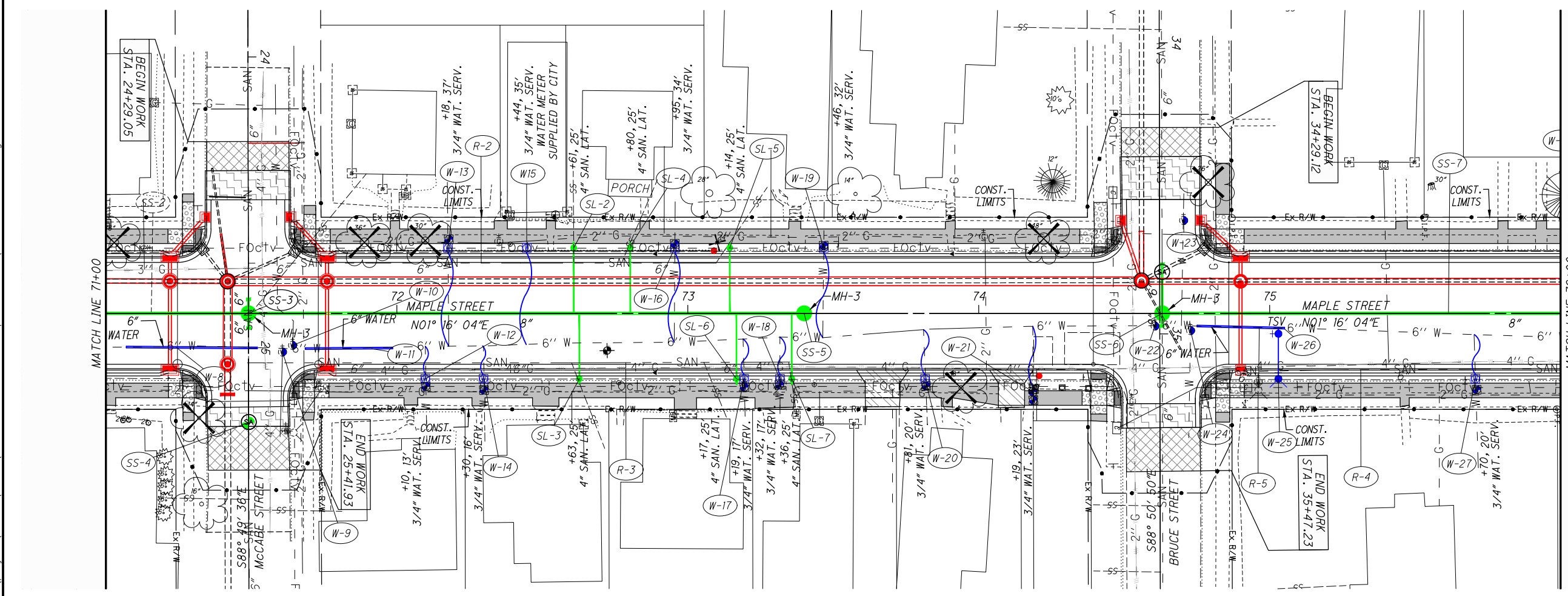
- LEGEND**
- EXISTING METER PIT
 - EXISTING CURB STOP ADJUSTED TO GRADE
 - EXISTING METER PIT REMOVED AND RESET
 - EXISTING MAIN LINE VALVE
 - EXISTING FIRE HYDRANT
 - MAIN LINE VALVE ADJUST TO GRADE
 - PROPOSED SANITARY CLEANOUT
 - PROPOSED FIRE HYDRANT
 - PROPOSED TAPPING SLEEVE AND VALVE

THE CONTRACTOR IS TO COORDINATE ALL WATER WORK WITH THE CITY OF EATON WATER DEPT. PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS AND COORDINATE ALL WATER MAIN CONNECTIONS TO KEEP SHUT DOWN TO A MINIMUM. SANITARY AND STORM TAPS ARE IN APPROXIMATE LOCATION, FIELD ADJUSTMENTS WILL NEED TO BE MADE, COORDINATE WITH CITY.

TEMPORARY WATER SERVICES MAY BE NEEDED AT THE SIDE STREETS DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH CITY AND THE CITY WILL INSTALL AS NEEDED.

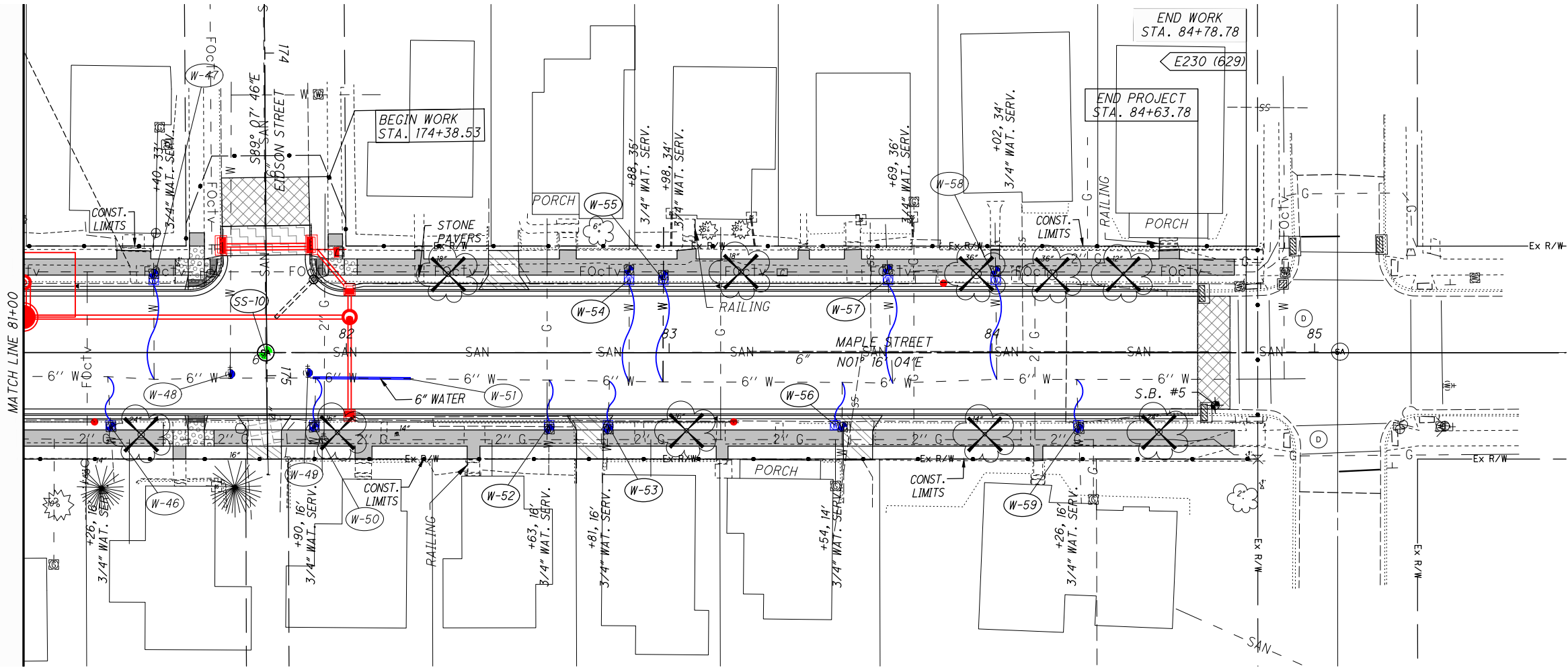


N. MAPLE STREET - WATER AND SANITARY SEWER SERVICES PLAN
STA. 66+00 to STA. 76+00



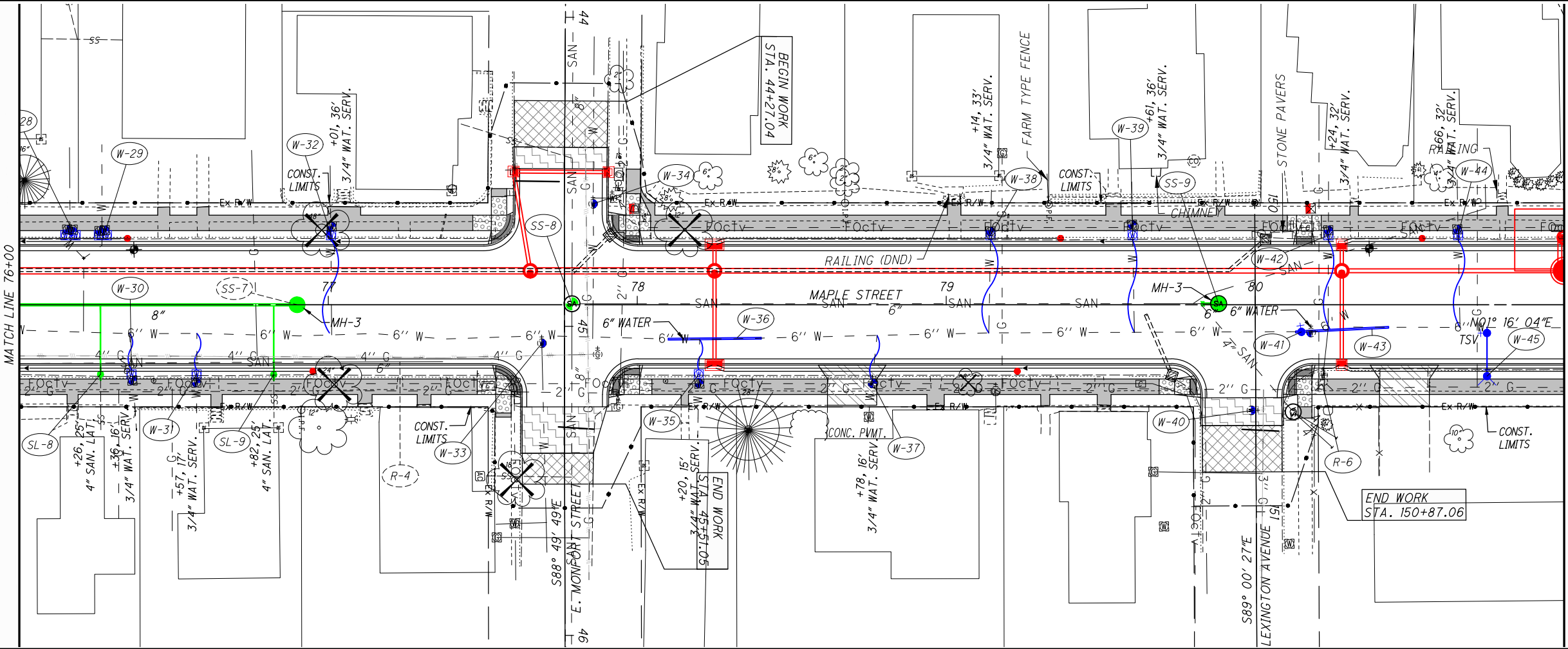
- HATCH LEGEND FOR PLANS**
- PAVEMENT PLANING AND RESURFACING
 - FULL DEPTH PAVEMENT
 - RESIDENTIAL CONCRETE DRIVEWAYS
 - ASPHALT DRIVEWAYS
 - PROPOSED CURB RAMP
 - SIDEWALK
 - PAVEMENT REMOVED AND NOT REPLACED

DESIGN AGENCY	
CHOICE ONE ENGINEERING	
DESIGNER	
BHB	
REVIEWER	
NNS 06-19-2025	
PROJECT ID	
118523	
SHEET	
P.60	TOTAL 79



**HATCH LEGEND
FOR PLANS**

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- SIDEWALK
- PAVEMENT REMOVED AND NOT REPLACED



LEGEND

- EXISTING METER PIT
- EXISTING CURB STOP ADJUSTED TO GRADE
- EXISTING METER PIT REMOVED AND RESET
- EXISTING MAIN LINE VALVE
- EXISTING FIRE HYDRANT
- MAIN LINE VALVE ADJUST TO GRADE
- PROPOSED SANITARY CLEANOUT
- PROPOSED FIRE HYDRANT
- PROPOSED TAPPING SLEEVE AND VALVE
- TSV

THE CONTRACTOR IS TO COORDINATE ALL WATER WORK WITH THE CITY OF EATON WATER DEPT. PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS AND COORDINATE ALL WATER MAIN CONNECTIONS TO KEEP SHUT DOWN TO A MINIMUM. SANITARY AND STORM TAPS ARE IN APPROXIMATE LOCATION, FIELD ADJUSTMENTS WILL NEED TO BE MADE, COORDINATE WITH CITY.

TEMPORARY WATER SERVICES MAY BE NEEDED AT THE SIDE STREETS DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH CITY AND THE CITY WILL INSTALL AS NEEDED.

N. MAPLE STREET - WATER AND SANITARY SEWER SERVICES PLAN

STA. 76+00 to STA. 86+00

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.61

TOTAL

79

HORIZONTAL
SCALE IN FEET





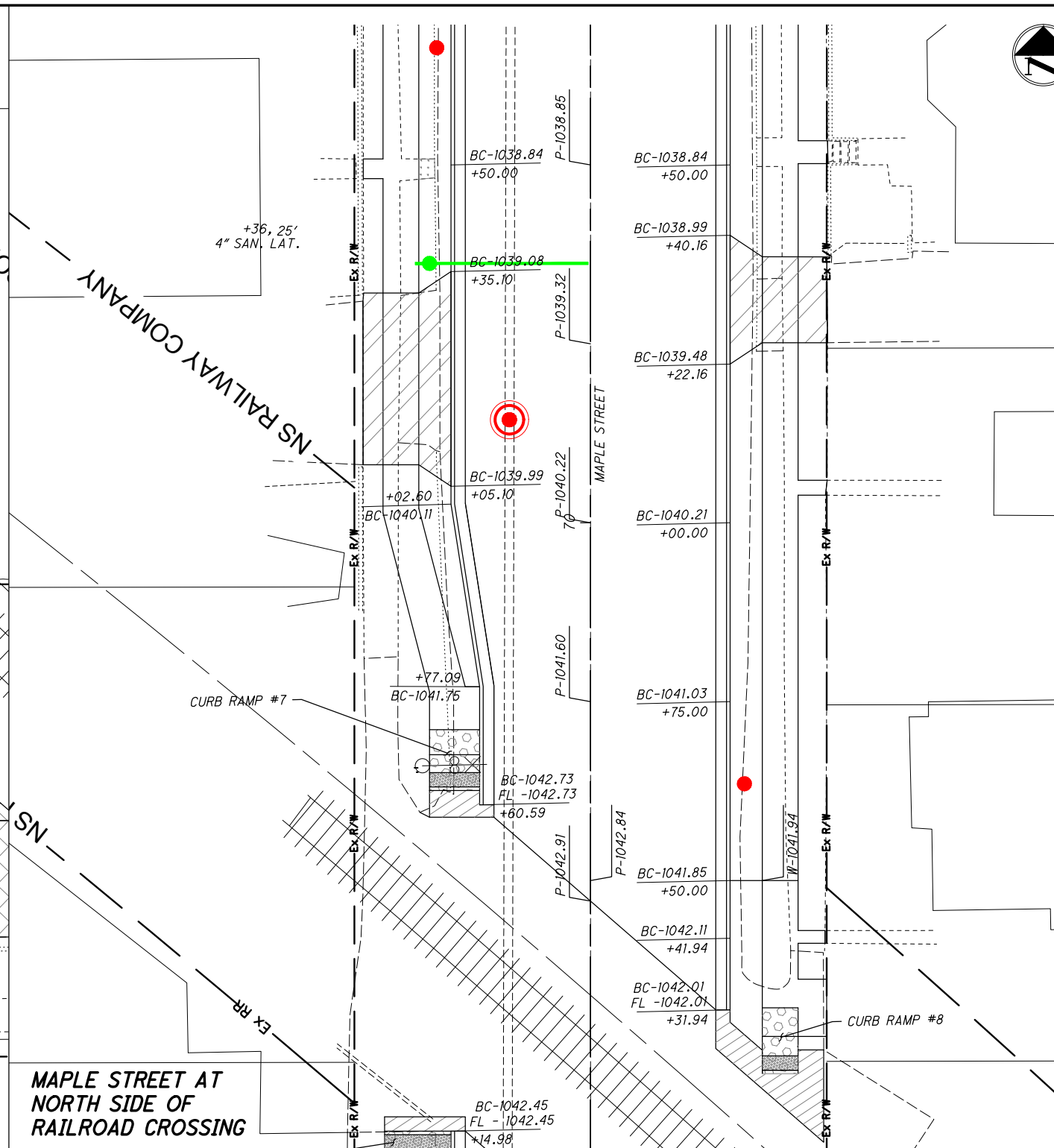
**MAPLE STREET AT
NORTH SIDE OF
RAILROAD CROSSING**

LEGEND (INTERSECTION DETAILS ONLY)

BC - BACK OF CURB ELEVATION
CB - BACK OF CURB ELEVATION AT CATCH BASIN
FL - PROPOSED FLOW LINE ELEVATION
P - PROPOSED PAVEMENT ELEVATION
EP - EXISTING PAVEMENT ELEVATION
EBC - EXISTING BACK OF CURB ELEVATION
EFL - EXISTING FLOW LINE ELEVATION

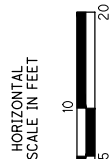
NOTE:

BACK OF CURB ELEVATION IS THE THEORETICAL
LINE AND GRADE BACK OF CURB ELEVATION
FOR THE PROPOSED CURB, TYPE 2, AS PER
PLAN. CONTRACTOR SHALL PROVIDE OPENINGS
FOR CURB RAMPS AND DRIVEWAYS. THE
CONTRACTOR SHALL ALSO ADJUST CURB FOR
END CURB SEGMENTS ACCORDING TO STANDARD
DRAWINGS BP-4.1 AND BP-7.1. END CURBS
SHALL TAPER FROM CURB HEIGHT TO 0" OR
MATCH INTO EXISTING CURB HEIGHT IN 1.0'.



HATCH LEGEND
FOR PLANS

	PAVEMENT PLANING AND RESURFACING
	FULL DEPTH PAVEMENT
	RESIDENTIAL CONCRETE DRIVEWAYS
	ASPHALT DRIVEWAYS
	PROPOSED CURB RAMP
	PAVEMENT REMOVED AND NOT REPLACED



DESIGN AGENCY



CHOICE ONE ENGINEER

DESIGNER

BHB

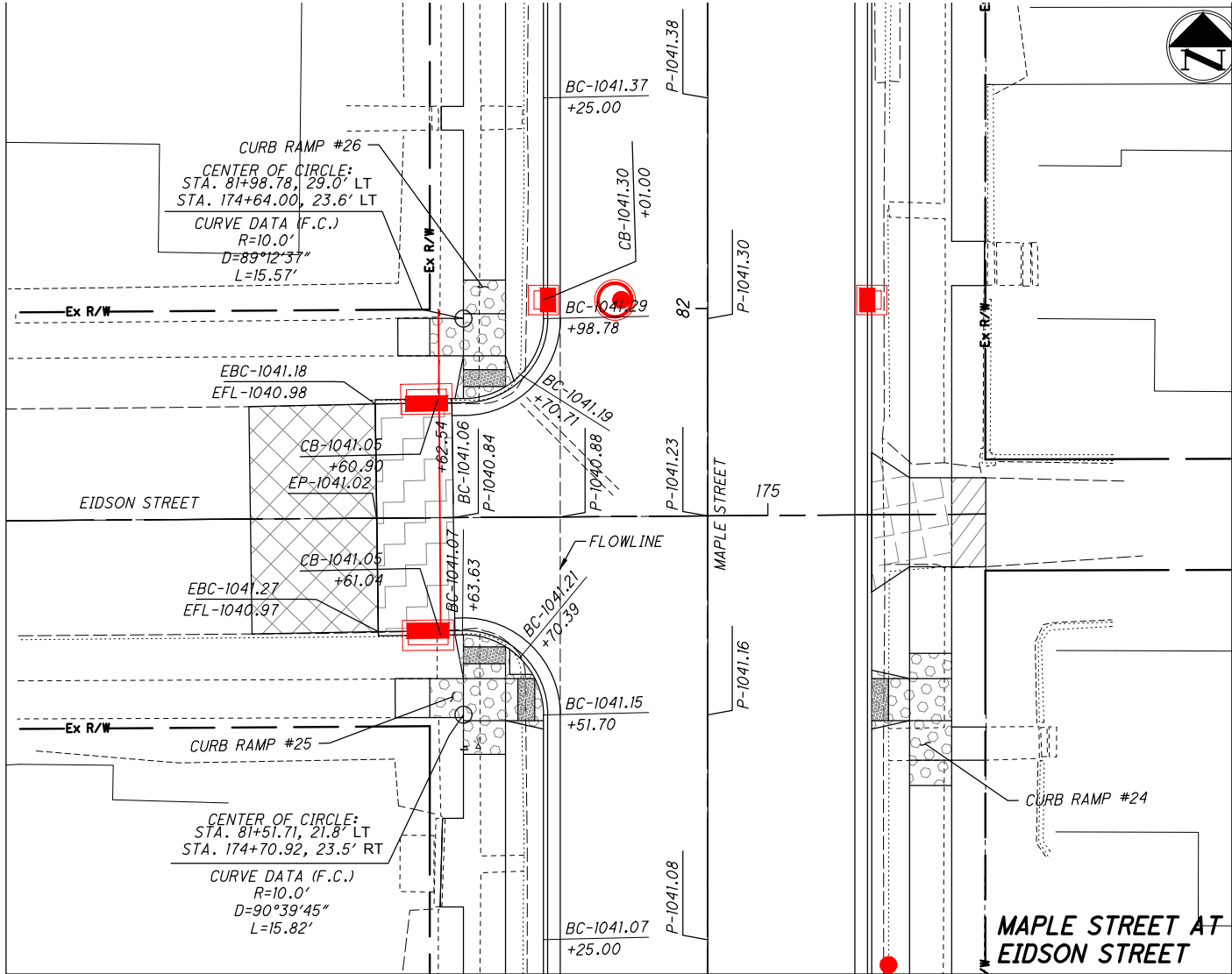
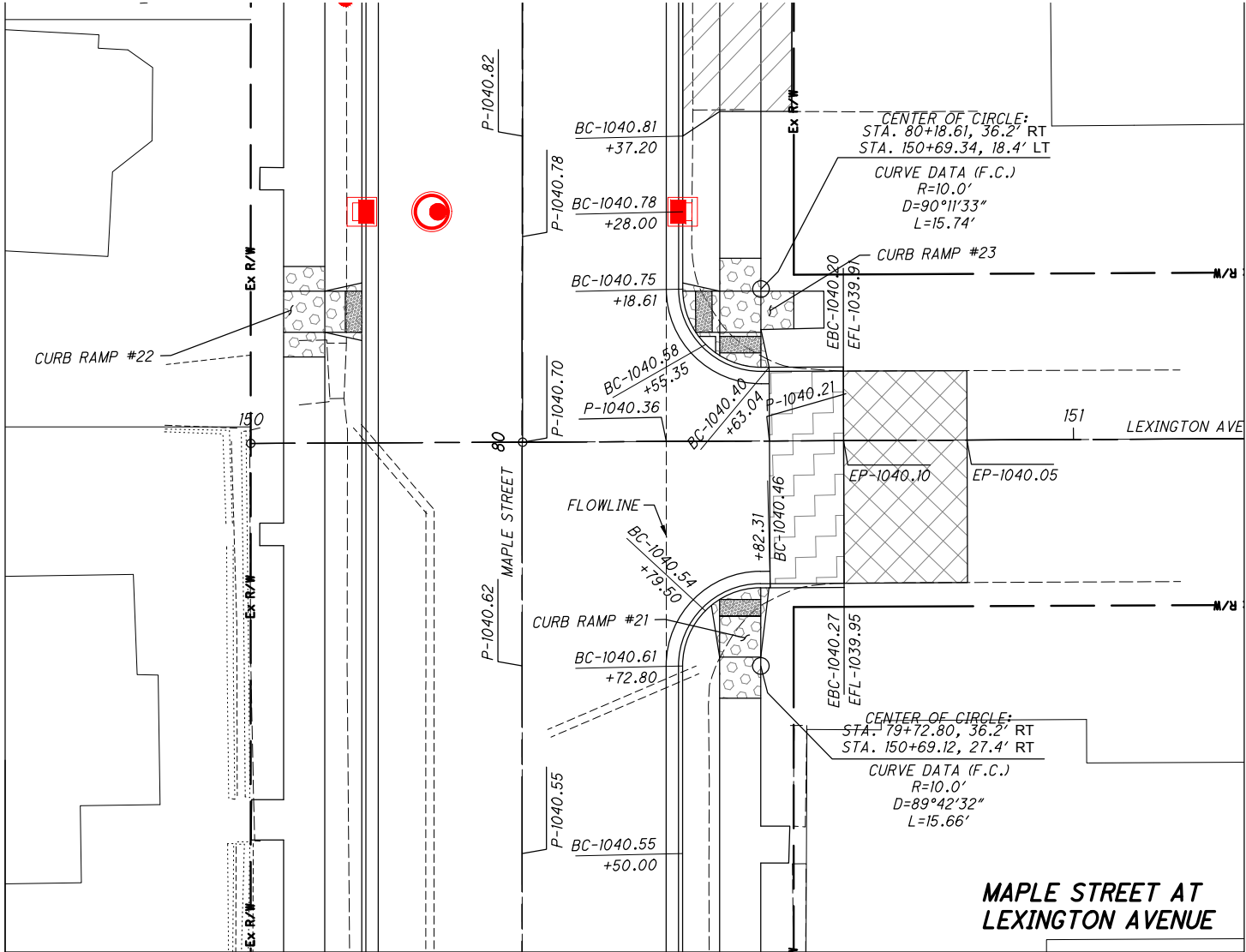
REVIEWER
 NAME OF 10 20

PROJECT ID

118523

SHEET	TOTAL
1	1

1.05	75
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LEGEND (INTERSECTION DETAILS ONLY)

BC - BACK OF CURB ELEVATION
CB - BACK OF CURB ELEVATION AT CATCH BASIN
FL - PROPOSED FLOW LINE ELEVATION
P - PROPOSED PAVEMENT ELEVATION
EP - EXISTING PAVEMENT ELEVATION
EBC - EXISTING BACK OF CURB ELEVATION
EFL - EXISTING FLOW LINE ELEVATION

NOTE:

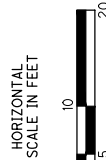
BACK OF CURB ELEVATION IS THE THEORETICAL LINE AND GRADE BACK OF CURB ELEVATION FOR THE PROPOSED CURB, TYPE 2, AS PER PLAN. CONTRACTOR SHALL PROVIDE OPENINGS FOR CURB RAMPS AND DRIVEWAYS. THE CONTRACTOR SHALL ALSO ADJUST CURB FOR END CURB SEGMENTS ACCORDING TO STANDARD DRAWINGS BP-4.1 AND BP-7.1. END CURBS SHALL TAPER FROM CURB HEIGHT TO 0" OR MATCH INTO EXISTING CURB HEIGHT IN 1.0'.

HATCH LEGEND FOR PLANS

- PAVEMENT PLANING AND RESURFACING
- FULL DEPTH PAVEMENT
- RESIDENTIAL CONCRETE DRIVEWAYS
- ASPHALT DRIVEWAYS
- PROPOSED CURB RAMP
- PAVEMENT REMOVED AND NOT REPLACED

NOTE:

GUTTER PLATE THRU THE CURB RAMPS SHALL HAVE A MAXIMUM GRADE OF 0.03. THE FLOW LINE WILL STAY CONSISTENT AND THE LIP OF GUTTER WILL DROP TO MAKE THE GRADE WORK. ALSO NOTE THE TOP OF CURB WILL BE FLUSH WITH GUTTER PLATE THRU THE FULL DEPRESSED AREA IN THE CURB RAMP.



INTERSECTIONS DETAILS

DESIGN AGENCY



CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.64

TOTAL

79

TYPE C2 CURB RAMP #1
SE CORNER OF MAPLE ST. AND HIGH ST.

TYPE C2 CURB RAMP #2
SW CORNER OF MAPLE ST. AND HIGH ST.

COMBINATION TYPE C1, C2 & B1 CURB RAMP #3
NE CORNER OF MAPLE ST. AND HIGH ST.

COMBINATION TYPE C1 & C2 CURB RAMP #4
NW CORNER OF MAPLE ST. AND HIGH ST.

TYPE B1 CURB RAMP #5
SW CORNER MAPLE ST. AND RAILROAD

TYPE B1 CURB RAMP #6
SE CORNER MAPLE ST. AT RAILROAD

CURB RAMP #7
NW CORNER OF MAPLE ST. AND RAILROAD

CURB RAMP #8
NE CORNER OF MAPLE ST. AND RAILROAD

COMBINATION TYPE C2 & B1 CURB RAMP #9
SE CORNER OF MAPLE ST. AND McCABE ST.

COMBINATION TYPE C2 & B1 CURB RAMP #10
SW CORNER OF MAPLE ST. AND MCCABE ST.

COMBINATION TYPE C2 & B1 CURB RAMP #11
NE CORNER OF MAPLE ST. AND McCABE ST.

COMBINATION TYPE C2 & B1 CURB RAMP #12
NW CORNER OF MAPLE ST. AND McCABE ST.

TYPE C2 CURB RAMP #13
SE CORNER OF MAPLE ST. AND BRUCE ST.

COMBINATION TYPE C2 & B1 CURB RAMP #14
SW CORNER OF MAPLE ST. AND BRUCE ST.

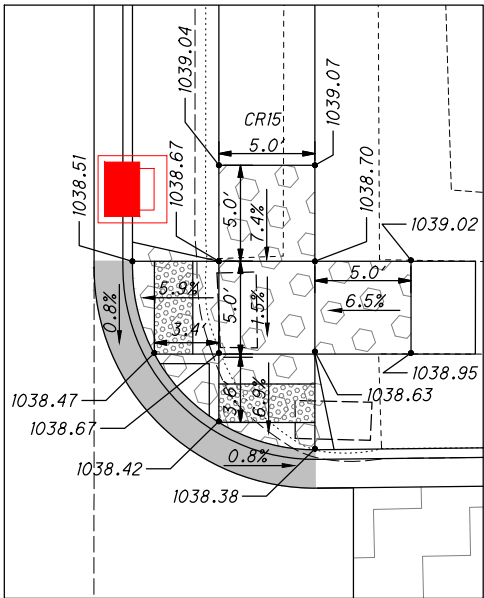
NOTE:

GUTTER PLATE THRU THE CURB RAMPS SHALL HAVE A MAXIMUM GRADE OF 0.03. THE FLOW LINE WILL STAY CONSISTENT AND THE LIP OF GUTTER WILL DROP TO MAKE THE GRADE WORK. ALSO NOTE THE TOP OF CURB WILL BE FLUSH WITH GUTTER PLATE THRU THE FULL DEPRESSED AREA IN THE CURB RAMP.

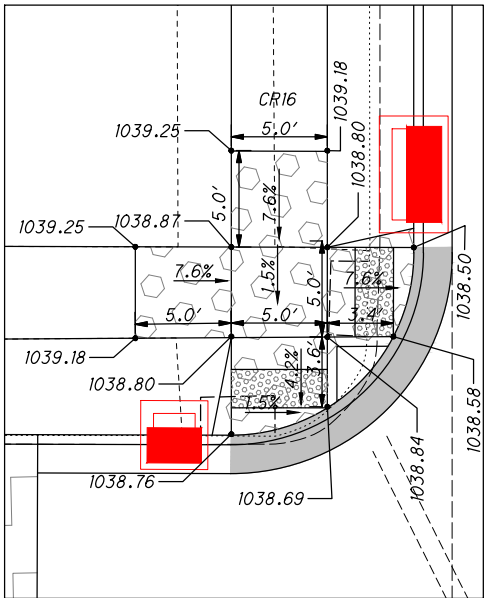


HORIZONTAL
SCALE IN FEET

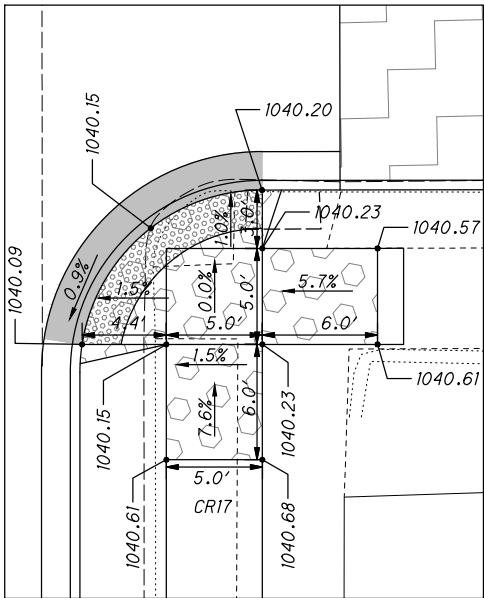
CURB RAMP DETAILS



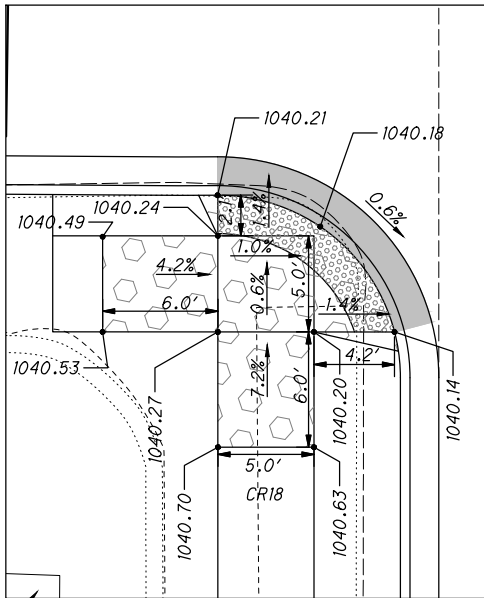
COMBINATION TYPE C2 & B1 CURB RAMP #15
NE CORNER MAPLE ST. AND BRUCE ST.



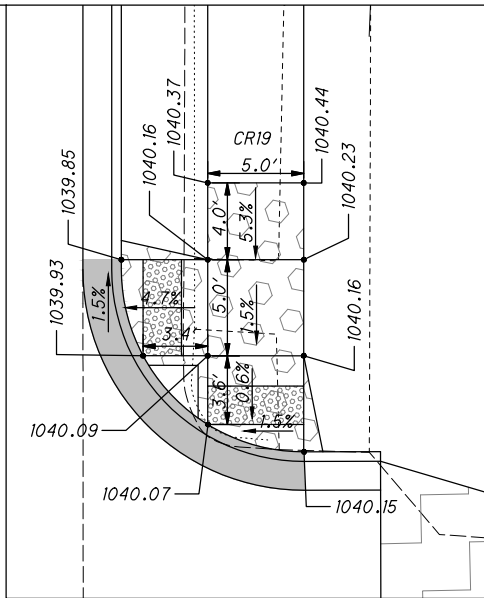
COMBINATION TYPE C2 & B1 CURB RAMP #16
NW CORNER OF MAPLE ST. AND BRUCE ST.



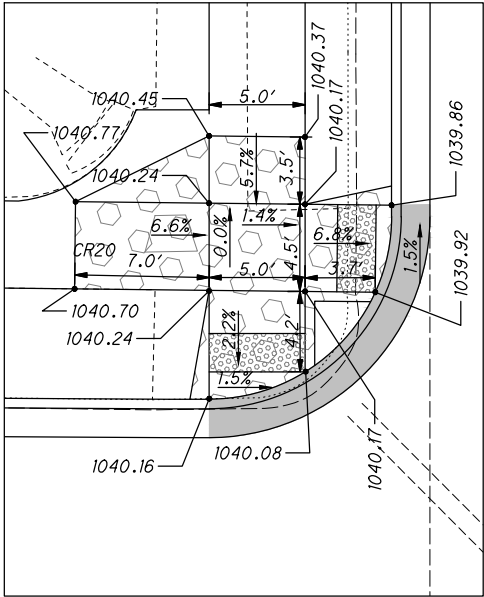
TYPE C2 CURB RAMP #17
SE CORNER OF MAPLE ST. AND E. MONFORT ST.



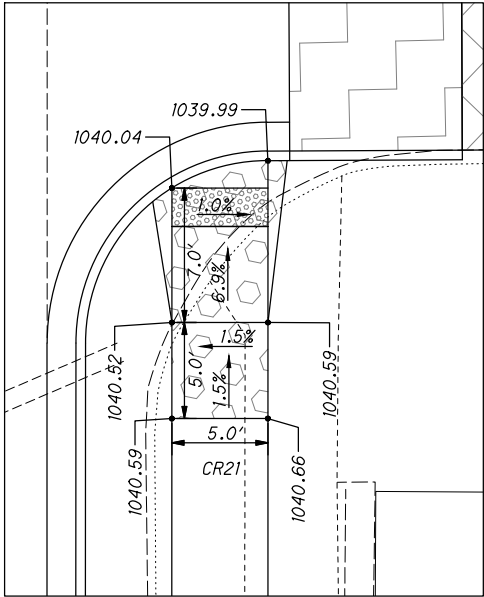
TYPE C2 CURB RAMP #18
SW CORNER OF MAPLE ST. AND E. MONFORT ST.



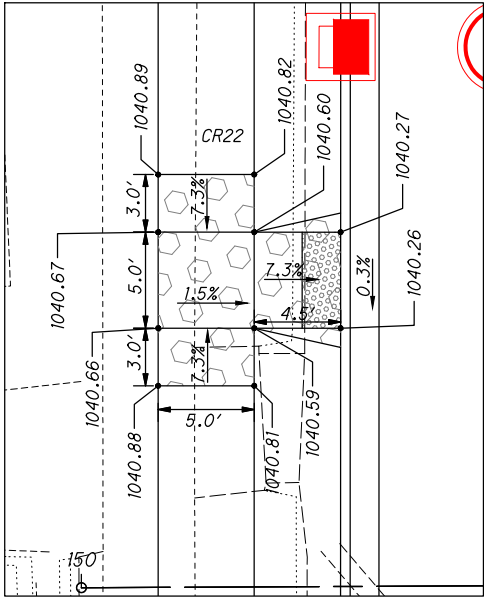
COMBINATION TYPE C2 & B1 CURB RAMP #19
NE CORNER OF MAPLE ST. AND E. MONFORT ST.



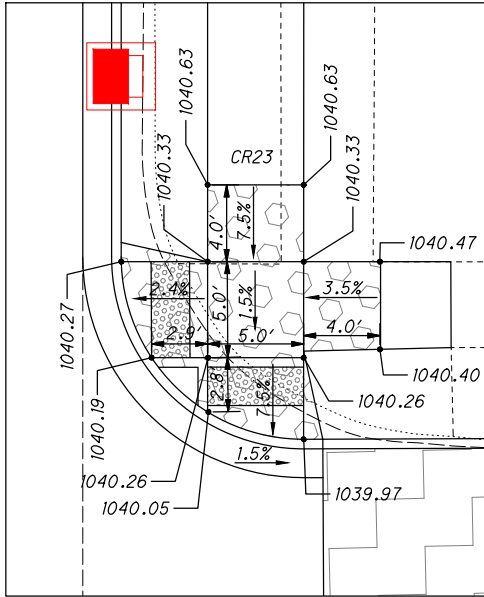
COMBINATION TYPE C2 & B1 CURB RAMP #20
NW CORNER MAPLE ST. AND E. MONFORT ST.



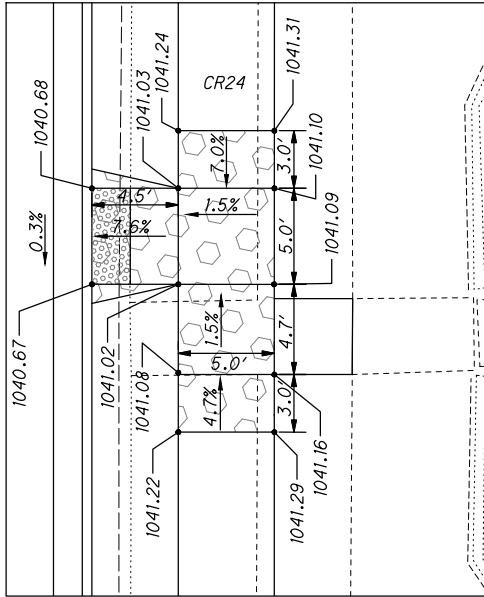
TYPE A2 CURB RAMP #21
SE CORNER MAPLE ST. AND LEXINGTON AVE.



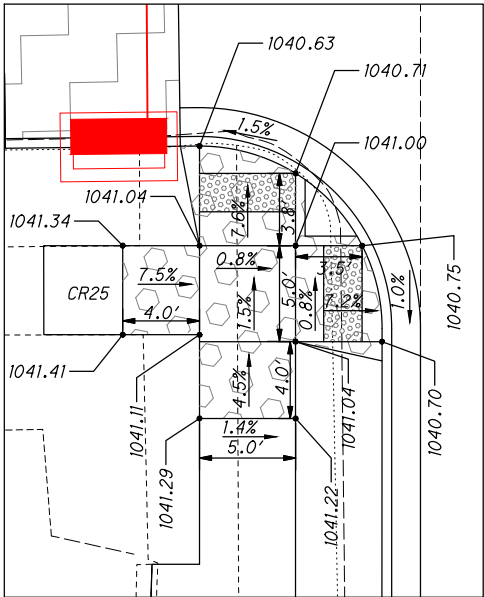
TYPE C2 CURB RAMP #22
NW CORNER OF MAPLE ST. AND LEXINGTON AVE.



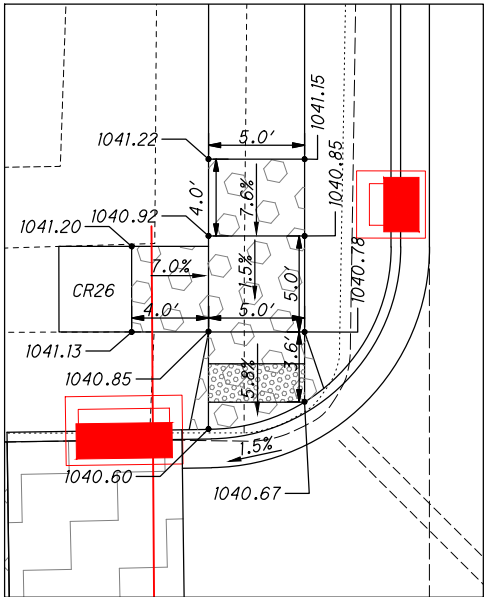
COMBINATION TYPE C2 & B1 CURB RAMP #23
NE CORNER OF MAPLE ST. AND LEXINGTON AVE.



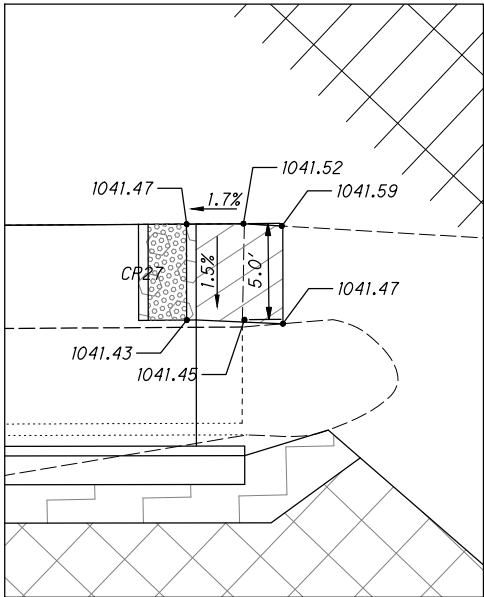
TYPE C2 CURB RAMP #24
SE CORNER OF MAPLE ST. AND EIDSON ST.



COMBINATION TYPE C2 & B1 CURB RAMP #25
SW CORNER OF MAPLE ST. AND EIDSON ST.



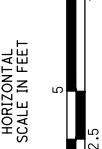
TYPE C2 CURB RAMP #26
NW CORNER OF MAPLE ST. AND EIDSON ST.



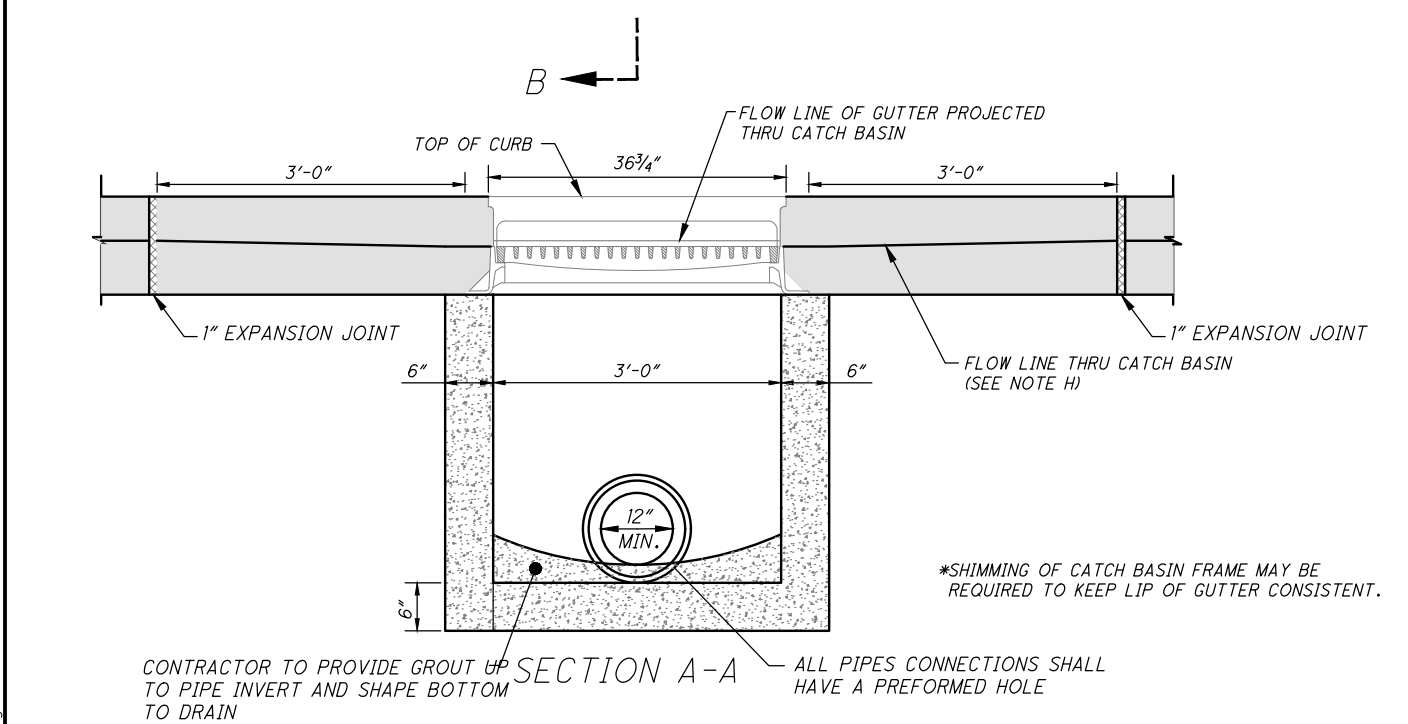
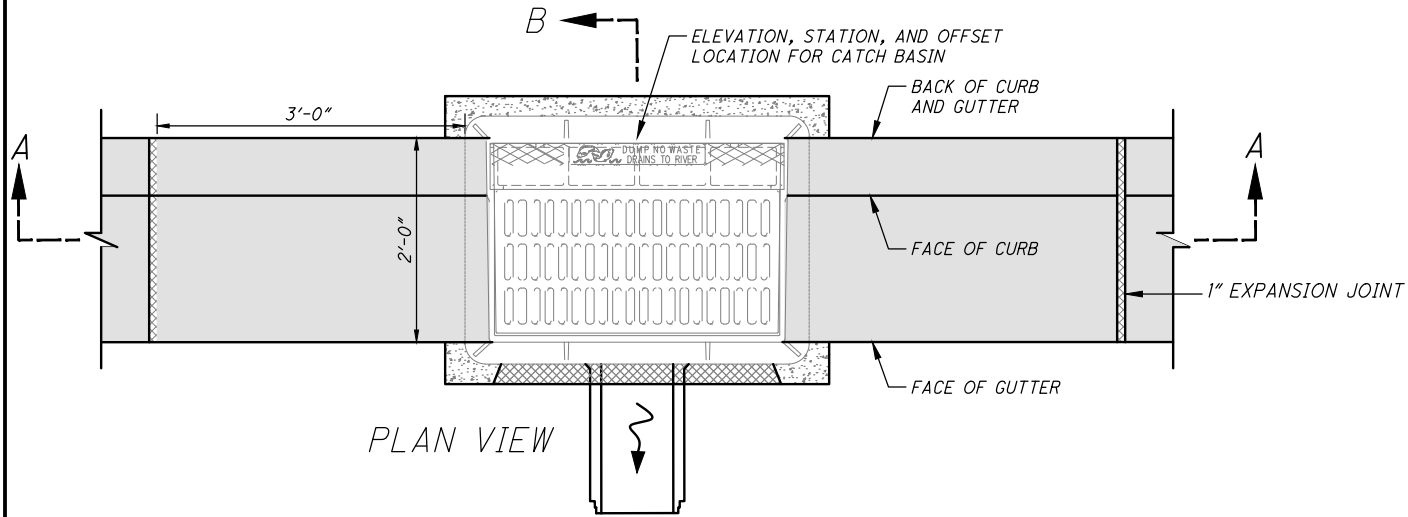
CURB RAMP #27
NW CORNER OF E. HIGH ST. AND RAILROAD



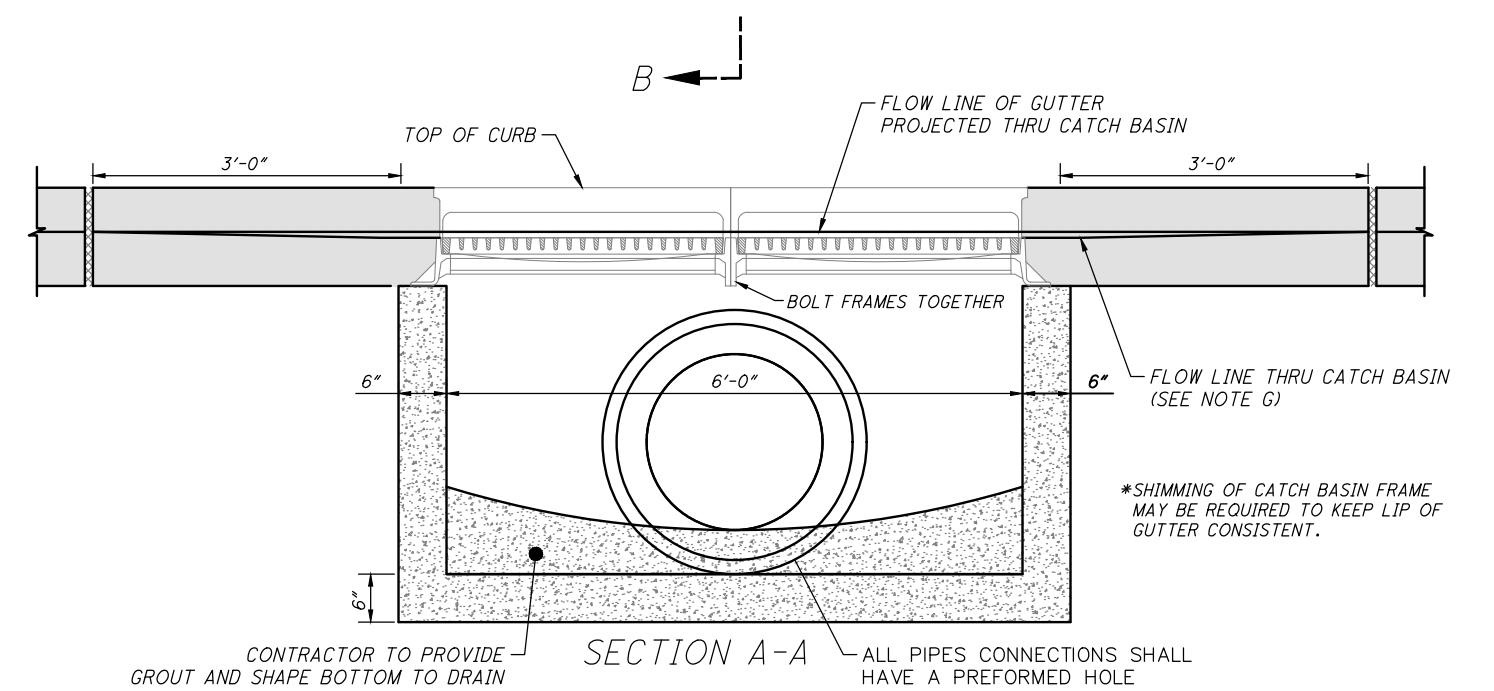
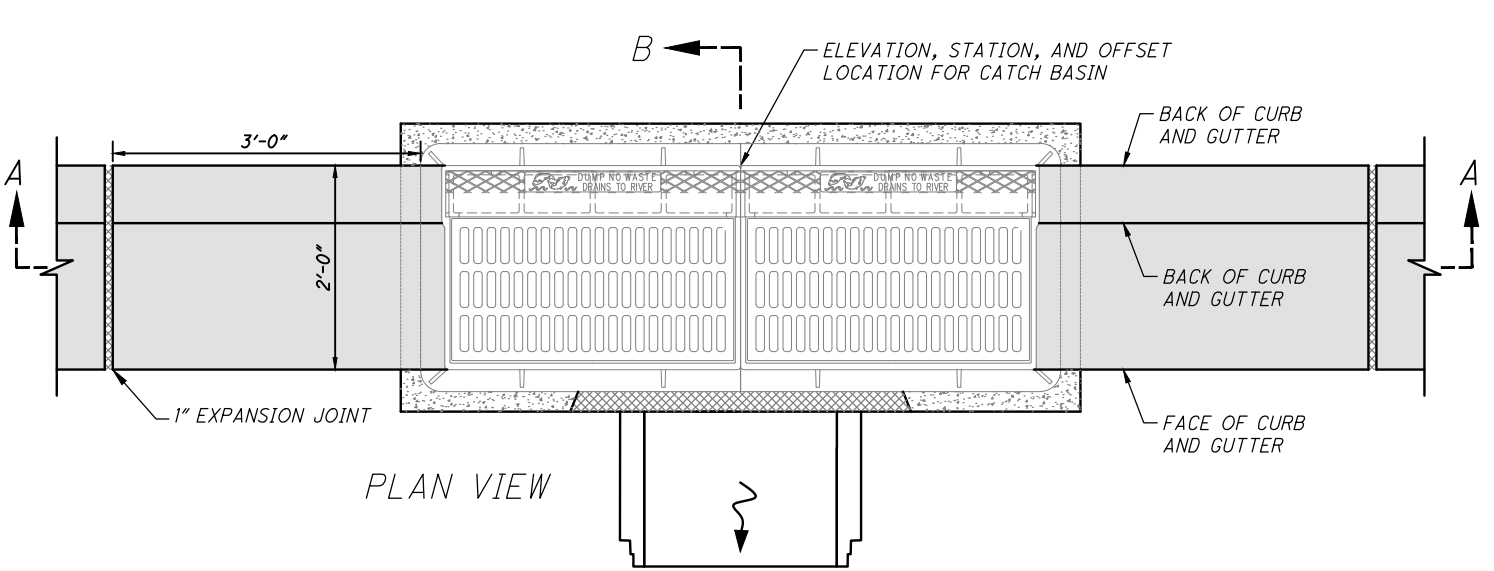
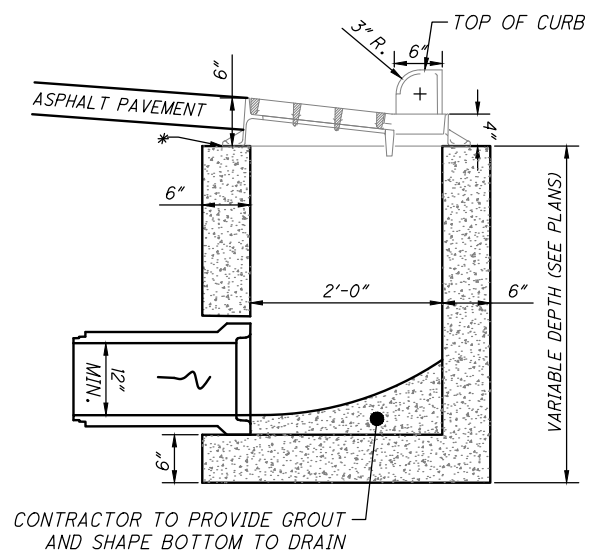
NOTE:
GUTTER PLATE THRU THE CURB RAMPS SHALL HAVE A MAXIMUM GRADE OF 0.03. THE FLOW LINE WILL STAY CONSISTENT AND THE LIP OF GUTTER WILL DROP TO MAKE THE GRADE WORK. ALSO NOTE THE TOP OF CURB WILL BE FLUSH WITH GUTTER PLATE THRU THE FULL DEPRESSED AREA IN THE CURB RAMP.



CURB RAMP DETAILS

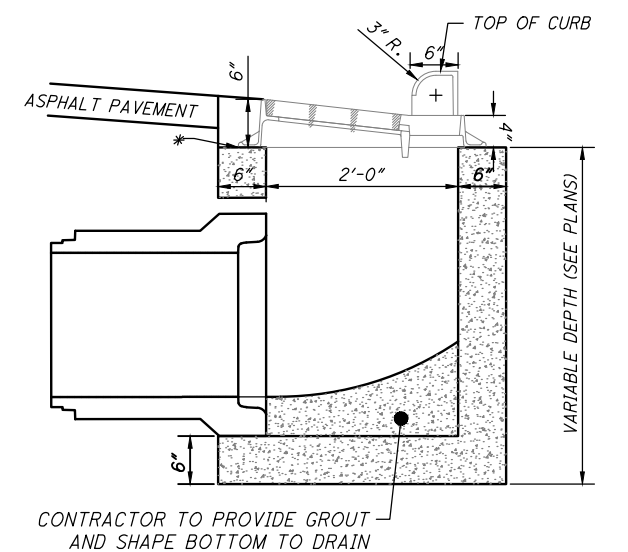


- NOTES**
- INLET FRAME SHALL BE NEENAH R-3067 OR EAST JORDAN IRON WORKS 7030Z1 OR EQUIVALENT.
 - CURB BOX/HOOD, FOR TYPE 2 COMBINATION CURB AND GUTTER, SHALL BE NEENAH R-3067 CURB BOX (3" RADIUS) OR EAST JORDAN IRON WORKS TYPE T4.
 - CATCH BASINS IN DRIVE APPROACHES (TO BE AVOIDED, IF POSSIBLE) SHALL BE PROVIDED WITH A CURB PLATE INSTEAD OF A CURB BOX (NEENAH R-3067 WITH CURB PLATE) OR EQUAL.
 - STANDARD GRATE SHALL BE NEENAH TYPE A, OR EQUIVALENT. ALL BAR EDGES TO BE ROUNDED 1/8" RADIUS.
 - CONCRETE, CAST-IN-PLACE, TO BE ODOT QC MISC. (CEMENT ONLY - NO POZZOLAN MATERIAL). PRECAST CONSTRUCTION IS PERMITTED AND CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13.
 - EXPANSION JOINTS SHALL BE PER ODOT 705.03, AASHTO M153, VINYL RUBBER MATERIAL MANUFACTURED BY RIGHT/POINTE, W.R. MEADOWS, OSCODA PLASTICS OR EQUAL AND BE INSTALLED AS INDICATED IN THE DETAIL.
 - PIPE TO INTRUDE INTO CATCH BASIN 1" MAXIMUM AND PIPE MUST BE CUT PARALLEL TO CATCH BASIN. USE NON-SHRINK GROUT AROUND PIPE TO SEAL BETWEEN PIPE AND CATCH BASIN.
 - DROP FLOW LINE 1/2" WITHIN THE 3'-0" BLOCK OUT OF COMBINED CURB AND GUTTER WHILE KEEPING LIP OF GUTTER CONSISTENT WITH TOP OF CURB.
 - ALL GRATES SHALL BE BICYCLE SAFE.



- NOTES**
- INLET FRAME SHALL BE EAST JORDAN IRON WORKS 7031Z1 (LH) AND (RH) OR NEENAH R-3295-2 OR EQUIVALENT.
 - CURB BOX/HOOD, FOR TYPE 2 COMBINATION CURB AND GUTTER, SHALL BE NEENAH (3" RADIUS) R-3067 OR EAST JORDAN IRON WORKS TYPE T4.
 - CURB BOX/HOOD FOR CATCH BASINS IN DRIVE APPROACHES (TO BE AVOIDED, IF POSSIBLE) SHALL BE EAST JORDAN IRON WORKS TYPE T3 OR NEENAH (R-3067-R FRAME) OR APPROVED EQUAL.
 - STANDARD GRATE SHALL BE EAST JORDAN IRON WORKS TYPE M5, NEENAH TYPE R, OR EQUIVALENT. ALL BAR EDGES TO BE ROUNDED 1/8" RADIUS.
 - CONCRETE, CAST-IN-PLACE, TO BE ODOT QC MISC. (CEMENT ONLY - NO POZZOLAN MATERIAL). PRECAST CONSTRUCTION PERMITTED AND CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13.
 - PIPE TO INTRUDE INTO CATCH BASIN 1" MAXIMUM AND PIPE MUST BE CUT PARALLEL TO CATCH BASIN. USE NON-SHRINK GROUT AROUND PIPE TO SEAL BETWEEN PIPE AND CATCH BASIN.
 - DROP FLOW LINE 1/2" WITHIN BLOCK OUT OF COMBINED CURB AND GUTTER WHILE KEEPING LIP OF GUTTER CONSISTENT WITH TOP OF CURB.
 - ALL GRATES SHALL BE BICYCLE SAFE.

TYPE 1A CATCH BASIN - DOUBLE WIDE
NTS

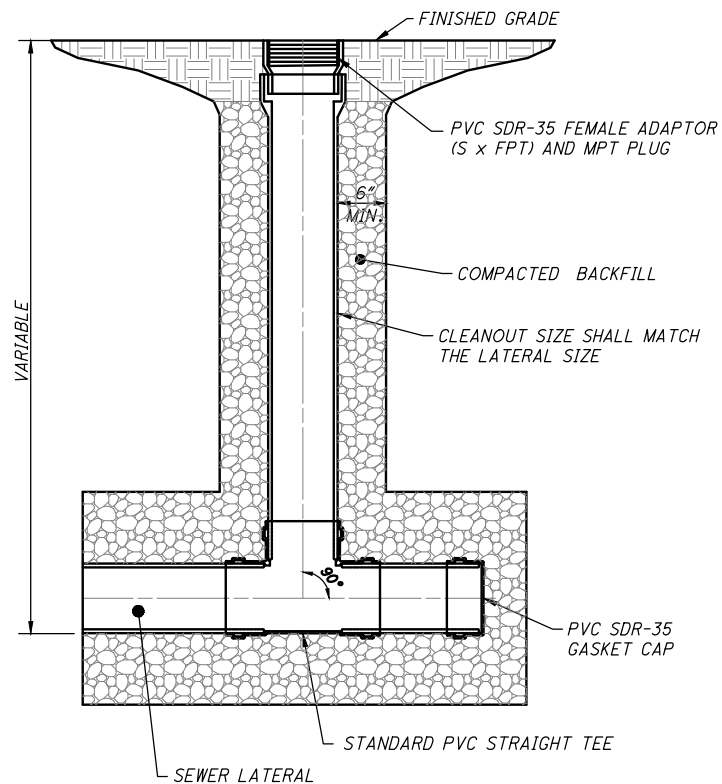


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CURB AND GUTTER NOTES

- A. CONCRETE AND WORK SHALL MEET THE REQUIREMENT SET FORTH IN ODOT ITEM 609 CURBING.
- B. CURBING SHALL HAVE CONTRACTION JOINTS EVERY 10'.
- C. MINIMUM OF 6" OF ODOT 304 SHALL BE PLACED UNDER CURBING.
- D. CURBING SHALL BE BACKFILLED IMMEDIATELY AFTER FORMS ARE REMOVED OR AS SOON AS PRACTICAL WHEN SLIP FORMING PRIOR TO OTHER CONSTRUCTION OPERATIONS.
- E. PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.
- F. APPLY WHITE PIGMENTED CURING COMPOUND ON ALL SURFACES INCLUDING BACK IMMEDIATELY AFTER FINISHING SURFACES. ANY OTHER METHOD OR TYPE OF CURING COMPOUND MUST BE PREAPPROVED.
- G. CONCRETE SHALL BE ODOT QC-1P.
- H. ALL UNDERGROUND UTILITY LATERALS SHALL BE MARKED IN THE TOP OF ALL CURB WHILE IT IS BEING POURED PER CITY OF EATON STANDARDS AND AS FOLLOWS: A 3" HIGH AND ENGRAVED 1/2" INTO THE CONCRETE:

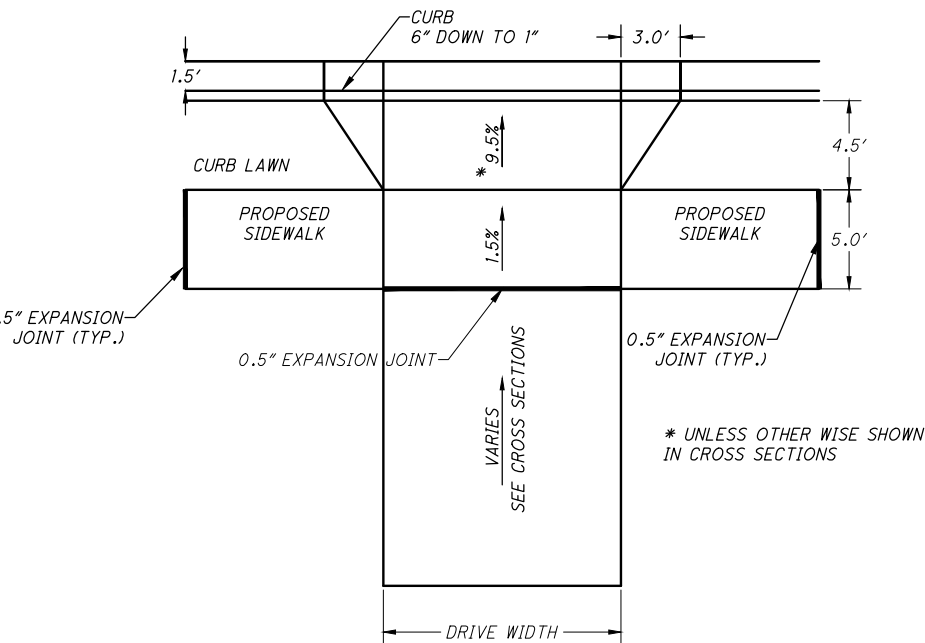
"W" - WATER SERVICE
 "SS" - SANITARY LATERAL
 "ST" - STORM LATERAL



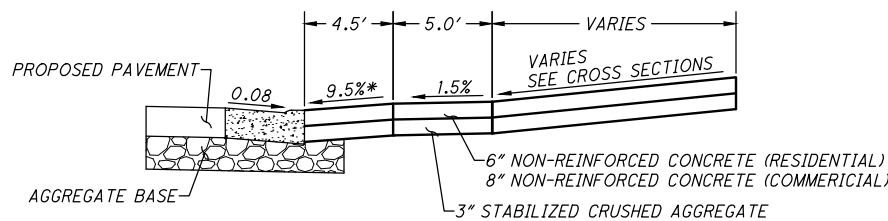
TO BE USED ON SEWER LATERALS LOCATED OUT OF PAVEMENT.

WHEN IN PAVEMENT CLEANOUT FRAME AND LID SHALL BE EQUAL OF NEENAH CATALOG NO. R-1976 OR EAST JORDAN IRON WORKS NO. V-1579, OR EQUAL. LID SHALL BE MARKED AS "STORM"

NOTE:
COST OF MATERIALS, LABOR, AND INSTALLATION OF THE ORIFICE PLATE SHALL
BE INCLUDED IN PAY ITEM 611 DRAINAGE STRUCTURE MISC.: CLEANOUT



TYPICAL DRIVE PLAN



TYPICAL DRIVE PROFILE

* DRIVE APRON SLOPE UNLESS OTHERWISE SHOWN ON CROSS SECTIONS

GENERAL DETAILS

HYDROSTATIC TEST

A. AFTER THE PIPE HAS BEEN LAID AND BACKFILLED, ALL NEWLY LAID PIPE OR VALVED SECTION SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE AND LEAKAGE TEST. ALL WATER MAINS MUST BE HYDROSTATICALLY TESTED (AWWA C-605). THE TESTS MUST BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE OWNER.

THE MINIMUM LEAKAGE TEST PRESSURE FOR ALL WATER MAIN SHALL BE 150 PSI, OR 1.5 TIMES THE ANTICIPATED AVERAGE STATIC PRESSURE, WHICHEVER IS GREATER. THE MINIMUM TEST PRESSURE SHALL BE HELD FOR A MINIMUM OF TWO (2) HOURS FOR ALL WATER MAIN. HYDROSTATIC PRESSURE SHALL BE APPLIED BY MEANS OF A PUMP TAKING WATER FROM AN AUXILIARY SUPPLY. ALL PIPING MUST BE PROPERLY FILLED AND FLUSHED TO DISPEL ALL AIR BEFORE THE TEST IS MADE USING POTABLE WATER.

B. HYDROSTATIC TESTING MUST BE PERFORMED ON ALL NEW WATER MAIN, WITH THE EXCEPTION OF CONNECTION POINTS, AS APPROVED BY THE OWNER.

C. LEAKAGE IS DEFINED AS THE QUANTITY OF WATER TO BE SUPPLIED INTO THE NEWLY LAID PIPE, OR ANY VALVED SECTION THEREOF, NECESSARY TO MAINTAIN THE SPECIFIED LEAKAGE TEST PRESSURE AFTER THE PIPE HAS BEEN FILLED WITH WATER AND THE AIR EXPELLED.

D. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE EXCEEDS THE LEAKAGE DETERMINED BY THE CHART BELOW:

PVC Where: L = length of pipe tested, in ft. $Q = \frac{L * D * \sqrt{P}}{148,000}$
D = pipe diameter, in inches
P = average test pressure
Q = allowable leakage per hour

During the hydrostatic test, a thorough examination of all piping, fittings, valves, hydrants, etc. shall be performed. Leaking joints shall be tightened and cracked or otherwise defective material shall be removed and replaced and the test shall be repeated until satisfactory results are obtained.

Below is a table which represents the allowable leakage in gallons per hour.

ALLOWABLE LEAKAGE PER 1000FT. OF PIPELINE (GALLONS PER HOUR)

AVG. TEST PRESSURE (PSI) BAR	NOMINAL PIPE DIAMETER- INCHES							
	3	4	6	8	10	12	14	16
450(31)	0.43	0.57	0.86	1.15	1.43	1.72	2.01	2.29
400(28)	0.41	0.54	0.81	1.08	1.35	1.62	1.89	2.16
350(24)	0.38	0.51	0.76	1.01	1.26	1.52	1.77	2.02
300(21)	0.35	0.47	0.70	0.94	1.17	1.40	1.64	1.87
275(19)	0.34	0.45	0.67	0.90	1.12	1.34	1.57	1.79
250(17)	0.32	0.43	0.64	0.85	1.07	1.28	1.50	1.71
225(16)	0.30	0.41	0.61	0.81	1.01	1.22	1.42	1.62
200(14)	0.29	0.38	0.57	0.76	0.96	1.15	1.34	1.53
175(12)	0.27	0.36	0.54	0.72	0.89	1.07	1.25	1.43
150(10)	0.25	0.33	0.50	0.66	0.83	0.99	1.16	1.32

DISINFECTION

A. DISINFECTION OR STERILIZATION OF NEW MAINS AND SERVICES, AS REQUIRED BY THE OEPA, SHALL BE COORDINATED THROUGH THE OWNER'S WATER SUPERINTENDENT REPRESENTATIVE. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REQUIRE STRICTER CHLORINE RESIDUAL REQUIREMENTS ON A CASE-BY-CASE BASIS.

B. MAINTAIN PIPES FREE OF DIRT AND FOREIGN MATTER DURING CONSTRUCTION BY DEWATERING TRENCH AND SEALING OPEN PIPE BARRELS. SWAB EACH LENGTH OF PIPE AS IT IS INSTALLED.

C. DISINFECTION TESTING SHALL BE PERFORMED PRIOR TO HYDROSTATIC TESTING. DISINFECTION SHALL BE COMPLETED IN ACCORDANCE WITH AWWA C-651. SAMPLE WATER AT EACH HYDRANT OR IF NO HYDRANT IS AVAILABLE, A SAMPLE TAP SHALL BE INSTALLED BY CONTRACTOR EVERY 1200 FT. ANALYZE SAMPLE USING ORTHOTOLIDINE REAGENT TO VERIFY FREE CHLORINE CONCENTRATION. MAINTAIN CONCENTRATION IN MAIN FOR 24 HOURS. SAMPLE HYDRANTS AT COMPLETION OF STERILIZATION VERIFYING MINIMUM CHLORINE RESIDUAL OF 20 MG PER LITER.

D. CONTRACTOR SHALL ACCOMMODATE FLUSHING AND SAMPLE LOCATIONS WITH THE OWNER.

E. THE CONTRACTOR SHALL DISINFECT ALL WATER MAIN AND WATER SERVICE LINES IN ACCORDANCE WITH AWWA C-651, LATEST REVISION. THE DISINFECTION MAY BE PERFORMED BY USING EITHER THE CONTINUOUS FEED METHOD OR THE TABLET METHOD.

F. THE PROCEDURES FOR DISINFECTION SHALL BE IN ACCORDANCE WITH AWWA C-651. THE OWNER SHALL APPROVE OF THE METHOD AND PROCEDURES USED.

G. PERFORM BACTERIOLOGICAL TESTING, PER AWWA C-651, FOLLOWING HYDROSTATIC TESTING. SAMPLE THE MAIN FROM HYDRANTS OR TEST TAP IN THE PROPOSED LINE. THE SAMPLE IS TO BE DELIVERED TO A STATE CERTIFIED LABORATORY. DELIVER COPIES OF THE LABORATORY REPORT TO THE OWNER IN THE EVENT OF DETECTION OF COLIFORM ORGANISM, REPEAT FLUSHINGS, STERILIZATION, AND SAMPLING OF MAINS UNTIL ACCEPTABLE TEST RESULTS ARE ACHIEVED ON TWO (2) CONSECUTIVE DAYS. THIS IS TO BE PERFORMED PRIOR TO TRANSFER OF SERVICES TO THE NEW MAIN.

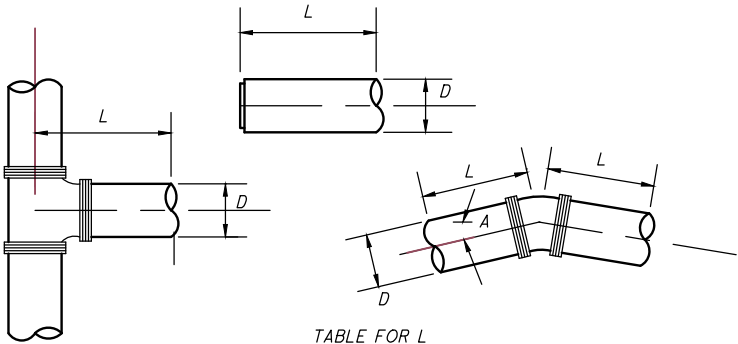
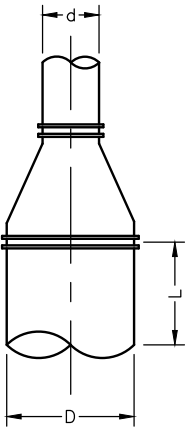


TABLE FOR L
REQUIRED LENGTH OF RESTRAINED JOINTS
D-DIAMETER OF PIPE

	4"	6"	8"	10"	12"	16"	20"	24"
11 1/4°	4	5	7	8	9	11	14	16
22 1/2°	7	10	13	15	18	23	27	32
45°	14	20	26	31	36	47	57	66
90°	34	47	62	74	87	112	136	160
TEE	34	47	62	74	87	112	136	160
END	34	47	62	74	87	112	136	160

*THE FITTING OR VALVE MUST BE RESTRAINED, AT MINIMUM, IN ALL CASES.

		REQUIRED LENGTH OF RESTRAINED JOINTS FOR REDUCERS("L")							
		DIAMETER OF SMALLER PIPE ("d")							
		4"	6"	8"	10"	12"	16"	20"	24"
DIAMETER OF LARGER PIPE ("D")	6"	21'							
	8"	38'	22'						
	10"	51'	39'	21'					
	12"	64'	54'	39'	22'				
	16"	88'	81'	70'	57'	41'			
	20"	111'	105'	96'	86'	73'	41'		
	24"	132'	127'	120'	111'	101'	75'	41'	

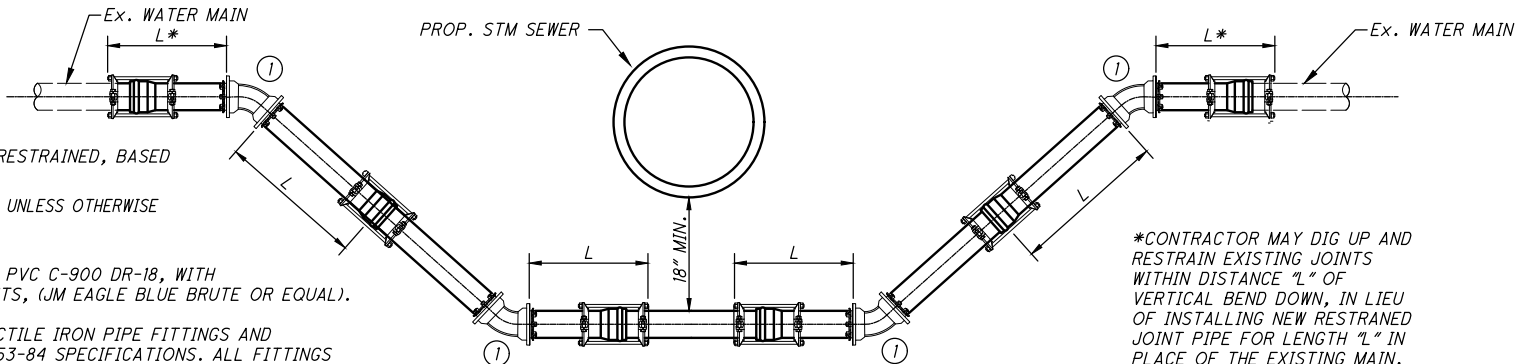


RESTRAINED JOINT REQUIREMENTS CALCULATED BASED ON THE FOLLOWING PARAMETERS:

- SOIL TYPE: GRANULAR BACKFILL/BEDDING
- SAFETY FACTOR: 1.5
- TRENCH TYPE: 4
- DEPTH OF BURY: 4'-6"
- TEST PRESSURE: 150 PSI

*ALL RESTRAINT CALCULATIONS FOR BENDS ARE BASED ON VERTICAL BENDS DOWNWARD.

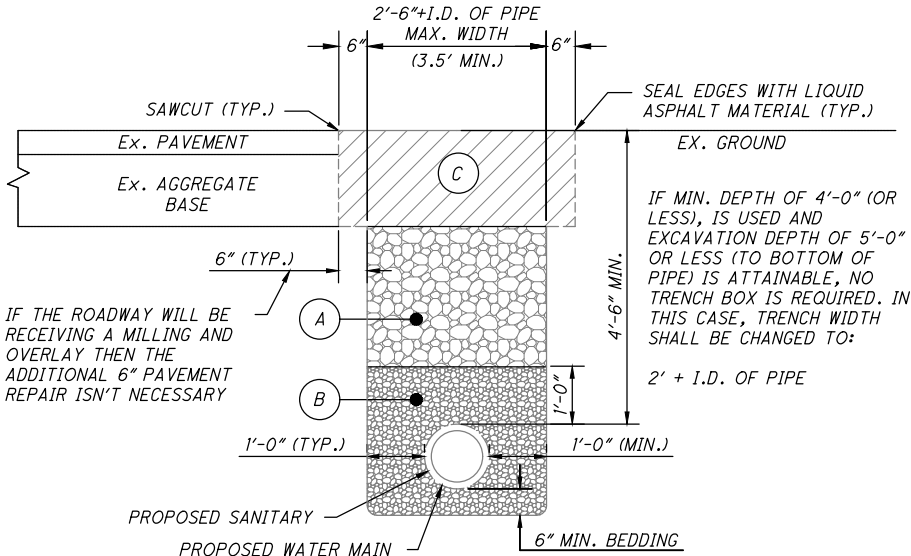
REQUIRED LENGTH OF RESTRAINED JOINTS FOR WATER MAINS



NOTES

- WATER MAIN SHALL BE AWWA PVC C-900 DR-18, WITH ELASTOMETRIC SEALING JOINTS, (JM EAGLE BLUE BRUTE OR EQUAL).
- ALL FITTINGS SHALL BE DUCTILE IRON PIPE FITTINGS AND MEET ANSI/AWWA C-153/A21.53-84 SPECIFICATIONS. ALL FITTINGS AND PIPE JOINTS SHALL BE RESTRAINED USING EITHER A MECHANICAL JOINT FOLLOWER GLAND AND PIPE JOINT RESTRAINT HARNESS BY EBAA OR EQUAL. CONNECTION TO EXISTING MAIN SHALL USE ROMAC ALPHA CONNECTOR (RESTRAINED).

C. CONTRACTOR SHALL HAVE CITY DO A FINAL INSPECTION OF THE CONNECTIONS TO INSURE NO LEAKAGE PRIOR TO BACKFILLING.



WATER MAIN TRENCH DETAIL

TRENCH DETAIL NOTES

A. ALL TRENCH EDGES NOT UNDER OR WITHIN 5' OF PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, STONE AREA OR WALKS CAN BE COMPACTED EXISTING NATIVE MATERIAL IN 12" MAXIMUM LIFTS OR AS APPROVED BY THE OWNER. NO MATERIAL SHALL BE USED FOR BACKFILLING THAT CONTAINS STONE, ROCKS, ETC., GREATER THAN 4" DIAMETER.

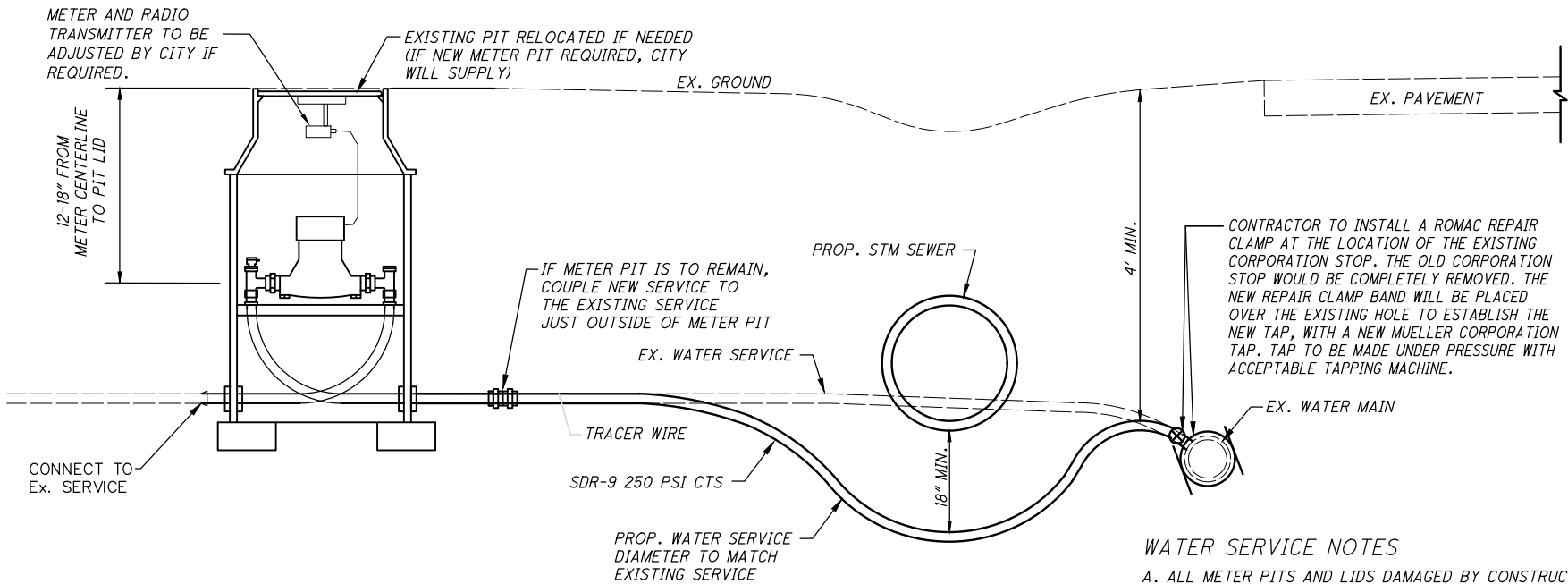
ALL TRENCH EDGES UNDER OR WITHIN 5' OF PROPOSED OR EXISTING PAVEMENT, CURB, DRIVEWAYS, ALLEYS, OR GRAVEL AREAS SHALL BE GRANULAR BACKFILL MATERIAL, ODOT 703.11, TYPE 1 (ODOT 304) OR ODOT 703.11, TYPE 3 (#57 OR #67 STONE). GRANULAR BACKFILL OF 95% OF ASTM D698 STANDARD PROCTOR CURVE MAY BE REQUIRED TO BE PERFORMED BY A COMMERCIAL TESTING LAB SATISFACTORY TO THE OWNER.

B. STRUCTURAL BEDDING SHALL BE NATURAL CRUSHED STONE OR GRAVEL, ODOT 703.11 TYPE 3 (#57 OR #67 STONE) (NO LIMESTONE).

C. OFF-PAVEMENT AREAS SHALL BE PROVIDED WITH A MINIMUM OF 6" OF TOPSOIL OVER THE COMPACTED MATERIAL AND THEN SEEDED AND MULCHED PER ODOT ITEM 659.

IN-PAVEMENT AREAS SHALL CONSIST OF THE FOLLOWING:
SEE TYPICAL SECTION.

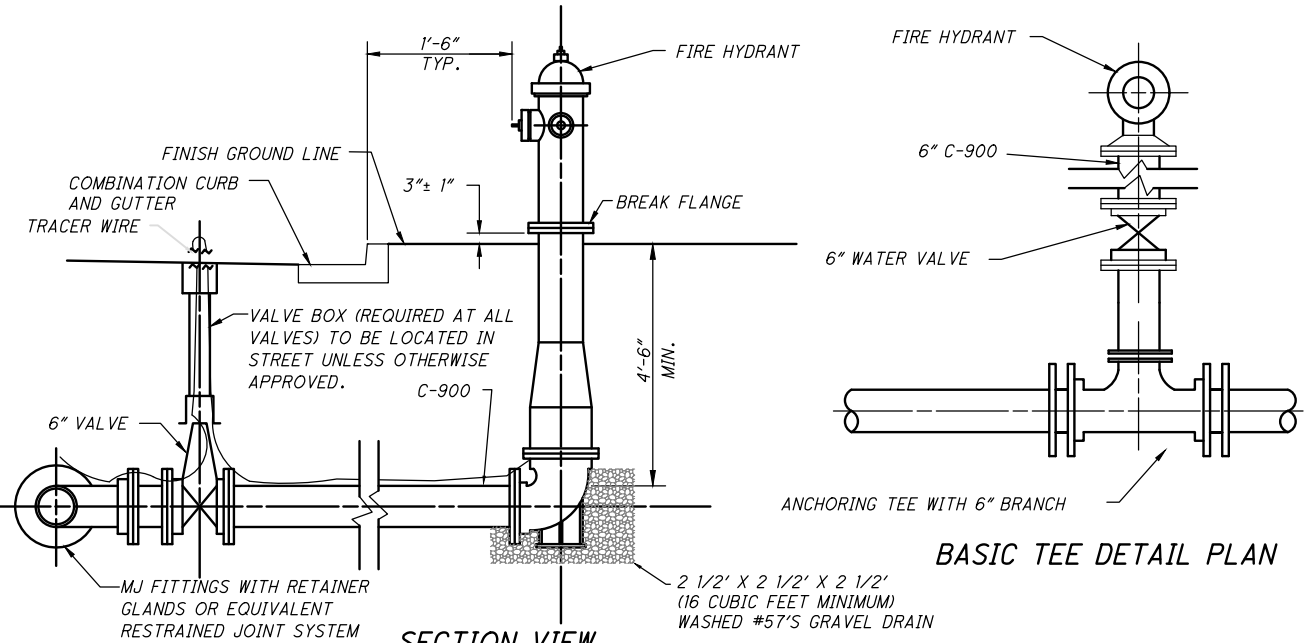
WHERE THE EXISTING PAVEMENT IS THICKER, THE CITY SHALL INCREASE THE COURSE THICKNESS TO MATCH EXISTING.



WATER SERVICE REPLACEMENT DETAIL

WATER SERVICE NOTES

- A. ALL METER PITS AND LIDS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED.
- B. ALL COUPLERS SHALL HAVE COMPRESSION JOINTS.



BASIC TEE DETAIL PLAN

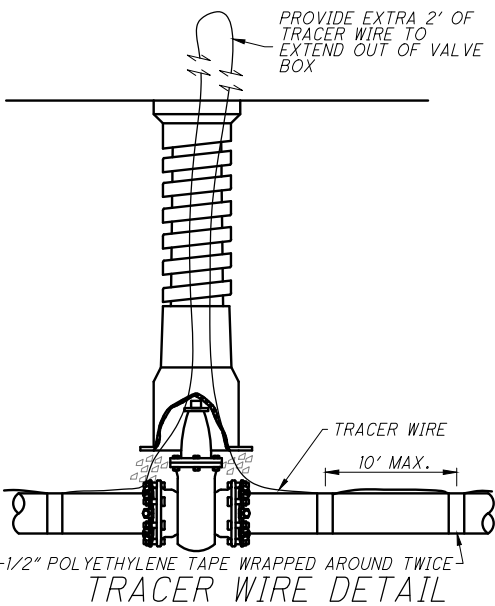
SECTION VIEW

NOTES

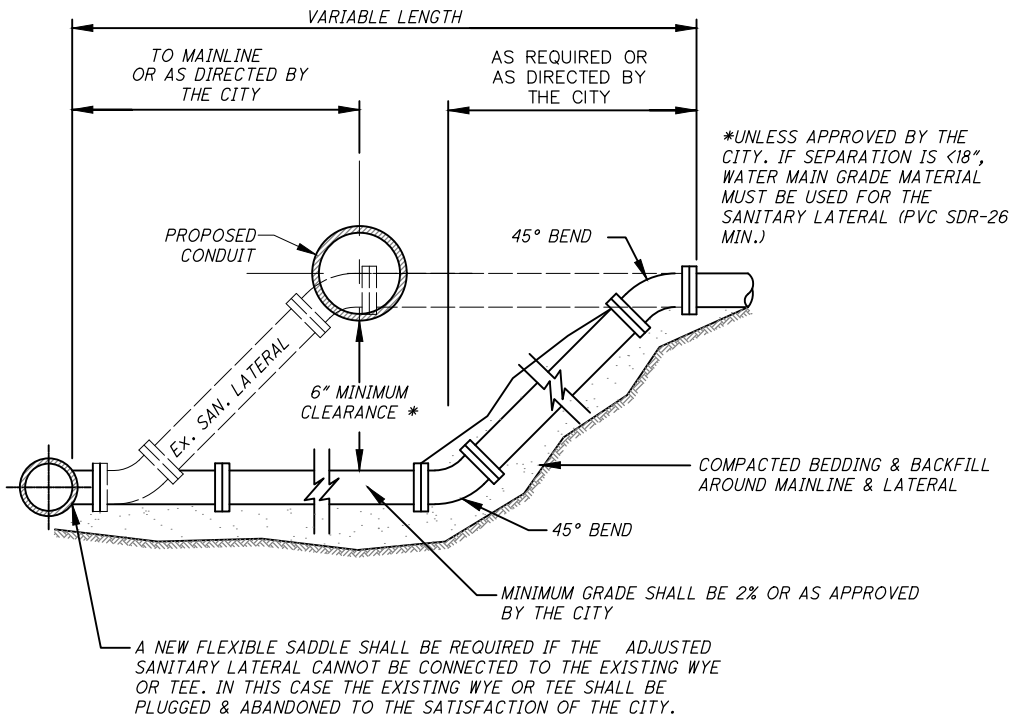
- A. FIRE HYDRANTS - MUELLER CENTURION 250; TWO 2-1/2" HOSE NOZZLE WITH NATIONAL STANDARD THREAD CONNECTIONS; ONE 4" I.D. (4-1/2" O.D.) WITH 5" STORTZ PUMPER NOZZLE NOT NATIONAL STANDARD THREADS; CONFORMING TO AWWA; CW (OPEN RIGHT) TO OPEN; SELF-DRAINING; BREAK FLANGES 3" ABOVE GRADE.
- B. FIRE HYDRANT BASES - HYDRANT INLET SHALL BE DESIGNED FOR MULTI-PURPOSE MATERIAL USE WITH A WIDE RANGE OF PIPE OUTSIDE DIAMETERS (O.D.), INLET SHALL INCORPORATE A MECHANICAL DESIGN REQUIRING THE USE OF ONLY ONE TYPE 304 STAINLESS STEEL FASTENER; RESTRAINT ACCESSORIES SHALL BE FACTORY INSTALLED AND ALL HYDRANT INLETS SHALL BE ALPHA DESIGN FURNISHED BY AMERICAN FLOW CONTROL.
- C. GATE VALVES SHALL BE AWWA C-509, RESILIENT WEDGE, NONRISING STEM, MECHANICAL JOINT, 150 PSI WORKING PRESSURE, CCW (OPEN LEFT) TO OPEN WITH ARROW INDICATING OPEN DIRECTION, MUELLER UNLESS OTHERWISE APPROVED BY THE ENGINEER. VALVE SHALL BE PLACED AS CLOSE TO THE WATER MAIN AS POSSIBLE.
- D. VALVE BOXES SHALL BE 3-PIECE, ADJUSTABLE 36" TO 48", 5.25" DIAMETER NOMINAL, ADJUSTABLE SCREW TYPE, COVER MARKED "WATER".
- E. ALL FITTINGS TO BE RESTRAINED AND AWWA C-153 DUCTILE IRON, COMPACT.
- F. FIRE HYDRANT OPEN RIGHT BY TURING IN A CLOCKWISE DIRECTION AND ALL VALVES OPEN LEFT BY TURNING IN A COUNTER-CLOCKWISE DIRECTION.
- G. CONTRACTOR TO FACE HYDRANT AS REQUIRED BY THE CITY.
- H. HYDRANT BODY SHALL BE YELLOW
- I. 1' MINIMUM ANCHOR PIPE ON TEE FOR NEW WATER MAINS.

TRACER WIRE NOTES:

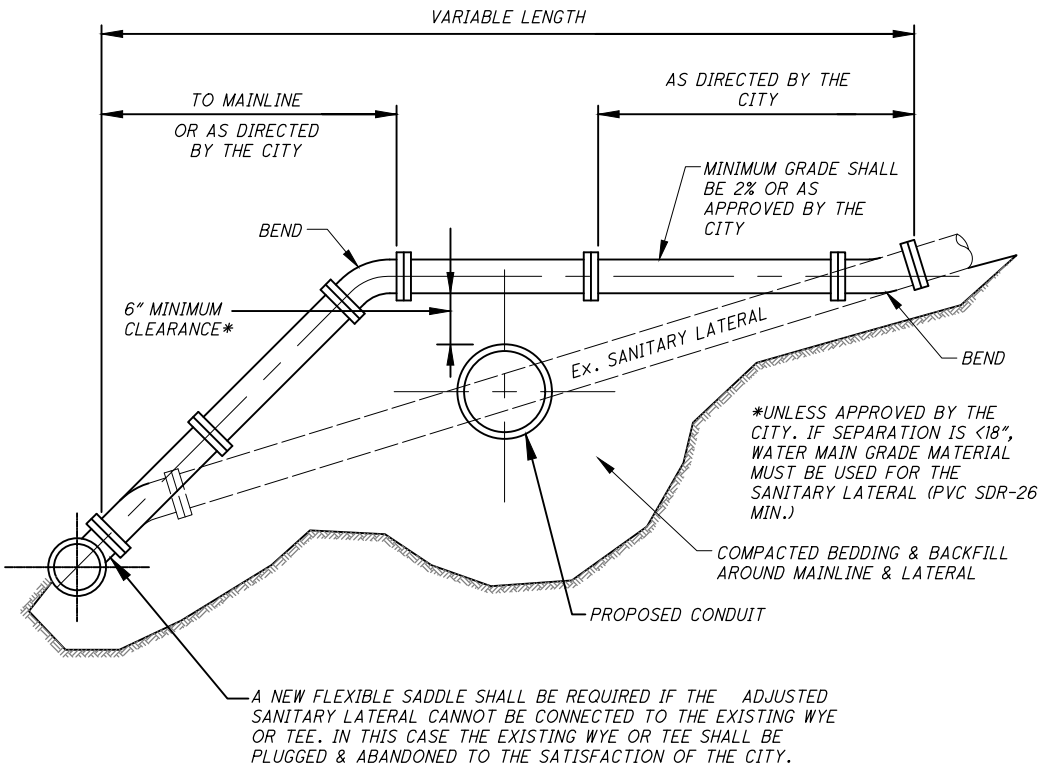
- A. FOR OPEN CUT CONSTRUCTION TRACER WIRE SHALL BE STEEL CORE COPPER CLAD REINFORCED WIRE #12 AWG OR STAINLESS STEEL #12 AWG WITH 30 MIL HIGH DENSITY POLYETHYLENE COATING. TRACER WIRE SHALL BE BLUE FOR WATER. TRACER WIRE SHALL HAVE A MINIMUM 450 LBS. TENSILE BREAK LOAD.
- FOR DIRECTIONAL DRILL CONSTRUCTION TRACER WIRE SHALL BE COPPERHEAD SOLOSHOT REINFORCED TRACER WIRE MANUFACTURED BY COPPERHEAD INDUSTRIES, LLC. BLUE FOR WATER, OR APPROVED EQUAL BY TRIDENT SOLUTIONS. DUAL TRACER WIRE SHALL HAVE A MINIMUM 1150 LBS BREAK LOAD.
- B. TRACER WIRE MUST BE RUN ON TOP OF THE PIPE CONTINUOUSLY FOR THE FULL LENGTH OF THE PIPE.
- C. TRACER WIRE WILL BE INSTALLED ON ALL NEW INSTALLATION AND WILL COME TO THE SURFACE AT EVERY VALVE CHAMBER, VALVE BOX CURB BOX AND FIRE HYDRANT.
- D. WHEN TRACER WIRE MUST BE SPLICED, USE ONLY AN APPROVED SPLICE KIT FILLED WITH MOISTURE DISPLACEMENT SILICONE FOR CORROSION RESISTANT PROTECTION. 3-WAY WIRE CONNECTIONS FROM MAIN TO HYDRANT, VALVE BOX OR VAULT WILL BE MADE ONLY WITH APPROVED DIRECT BURY CONNECTOR WITH MOISTURE DISPLACEMENT SILICONE FILLED CAP FOR CORROSION RESISTANT PROTECTION.
- E. ALL MATERIAL, LABOR, EQUIPMENT NEEDED FOR THE INSTALLATION OF THE TRACER WIRE SHALL BE INCIDENTAL TO WATER MAIN INSTALLATION.
- F. THE CONTRACTOR SHALL SCHEDULE A CONDUCTIVITY/LOCATE TEST UPON COMPLETION. THE TEST WILL BE CONDUCTED BY THE OWNER, WITH THE CONTRACTOR PRESENT.
- G. ALL DEAD ENDS SHALL BE GROUNDED WITH A MAGNESIUM GROUND ROD.



TRACER WIRE DETAIL



REPLACEMENT BELOW PROPOSED CONDUIT



REPLACEMENT ABOVE PROPOSED CONDUIT

SANITARY LATERAL ADJUSTMENT DETAIL

FOR CONDUIT IN CONFLICT WITH LATERAL ELEVATION.

NOTES

A. NO WORK SHALL BE APPROVED OR ACCEPTED BY THE CITY UNLESS 2 WORKING DAYS NOTICE OF COMMENCING WORK IS GIVEN TO THE CITY.

B. ROOF DRAINS, FOUNDATION DRAINS, SUMP PUMPS, AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

C. WHEN A SEWER IS TO BE EXTENDED AT THE DOWNSTREAM MANHOLE OR FIRST MANHOLE IN THE NEW LINE, IT SHALL BE PLUGGED BEFORE CONSTRUCTION BEGINS. IF THE SEWER IS SMALLER OR EQUAL TO 12" DIAMETER, IT SHALL BE PLUGGED BY PLACING A POLYETHYLENE BAG APPROXIMATELY 6" INTO THE SEWER PIPE. SIZES LARGER THAN 12" WILL BE PLUGGED BY OTHER APPROVED METHODS. NO PLUGS SHALL BE REMOVED UNTIL CONSTRUCTION IS COMPLETED AND SOIL IS STABILIZED AND THEN ONLY AS DIRECTED BY THE CITY.

D. WHEN A NEW CASTING OR OTHER PUBLIC PROPERTY IS ABANDONED IT REMAINS CITY PROPERTY, UNLESS OTHERWISE DIRECTED.

E. NEW SEWERS OR ANY SEWER THAT IS RELOCATED OR RESIZED MUST HAVE EPA PLAN APPROVAL PRIOR TO CONSTRUCTION.

F. THE ENDS OF ALL SERVICE LINES OR TEES SHALL BE ACCURATELY LOCATED, MAPPED, AND GIVEN TO THE CITY WITHIN 15 DAYS OF INSTALLATION.

G. IN THE DEMOLITION OF AN EXISTING BUILDING, ALL ABANDONED SEWER LATERALS SHALL BE COORDINATED WITH THE CITY AND CAPPED AT THE OWNER'S EXPENSE.

H. WHEN ABANDONING THE SERVICE LATERAL AT THE MAIN LINE, FIRST REMOVE THE WYE AND THEN USE (2) NON SHEAR FERNO COUPLINGS W/ STAINLESS STEEL BANDS, AND PIECE OF PIPE MATCHING EX. PIPE TYPE AND THICKNESS, TO FILL VOID.

PIPE

A. ALL MAINLINE PIPE AND FITTINGS SHALL BE PVC SDR-35 UNLESS OTHERWISE APPROVED BY THE CITY. MINIMUM DIAMETER OF PIPE SHALL BE 8".

B. DUCTILE IRON PIPE WILL BE USED IN STREAM CROSSINGS AND WHERE MAXIMUM SEPARATION CANNOT BE MAINTAINED OR WHEN DEPTH OF SEWER EXCEEDS 25 FEET.

C. ALL JOINTS SHALL BE OF THE BELL AND SPIGOT TYPE, THE BELLS BEING FORMED INTEGRALLY WITH THE PIPE. THE BELL SHALL CONTAIN A FACTORY INSTALLED ELASTOMETRIC GASKET IN ACCORDANCE WITH ASTM D3212 OR ANSI A21.11/AWWA C111 AND IS POSITIVELY RETAINED. NO SOLVENT CEMENT JOINTS WILL BE PERMITTED IN FIELD CONSTRUCTION EXCEPT AS SPECIFICALLY AUTHORIZED BY THE CITY.

FLEXIBLE PIPES	MATERIAL SPECIFICATIONS	ACCEPTABLE DEPTH TO INVERT
POLYVINYL CHLORIDE	ASTM D-3034	SDR-35(≤15FT) SDR-26(>15FT)
DUCTILE IRON	ANSI A-21.51 & AWWA C-151	ALL

1. SDR = OUTSIDE DIAMETER DIVIDED BY WALL THICKNESS.

2. THE SPECIFICATIONS ABOVE SHALL BE THOSE MOST RECENTLY ADOPTED BY THE APPROPRIATE STANDARDS SETTING ORGANIZATIONS.

3. LOCATOR WIRE SHALL BE REQUIRED TO BE INSTALLED ON FORCEMAIN SANITARY SEWERS.

TESTING REQUIREMENTS

A. BEFORE ANY SEWER LINE IS PLACED INTO SERVICE OR ACCEPTED BY THE CITY, IT SHALL BE SUBJECTED TO AND PASS LOW PRESSURE AIR TEST. EACH RUN BETWEEN MANHOLES, WITH ALL SERVICE LATERALS STUBBED INTO PROPERTY LINES, SHALL BE TESTED BEFORE BEING ACCEPTED. THE CONTRACTOR OR DEVELOPER SHALL FURNISH ALL EQUIPMENT AND MATERIAL NECESSARY TO CONDUCT THIS TEST. THE TRENCH SHALL BE COMPLETELY BACKFILLED BEFORE TESTING.

B. BEFORE FINAL ACCEPTANCE BY THE CITY AND BEFORE ANY SERVICE LINE IS PUT INTO USE, ALL SANITARY SEWERS AND MANHOLES SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER BY USE OF A SEWER-JET OR EQUAL, TYPE OF EQUIPMENT BY THE CONTRACTOR. SEWER-JET PROCEDURE MUST BE PERFORMED BEFORE CONTRACTOR T.V. TESTS THE PIPE.

C. THE CITY RESERVES THE RIGHT TO A FINAL TELEVISION AT THE CONTRACTOR'S EXPENSE IF DEFICIENCIES OR IRREGULARITIES ARE NOTED DURING CONSTRUCTION.

IN THIS CASE, THE CITY WILL NOT PASS OR ACCEPT THE SANITARY SEWER FOR FINAL PAYMENT WITHOUT HAVING A PASSING VIDEO AND LOG OF THE SANITARY SEWER TELEVISION FOLLOWING THE STANDARDS PREVIOUSLY DESCRIBED.

EXCAVATION AND PIPE LAYING

A. THE LAYING OF THE PIPE SHALL COMMENCE AT THE LOWEST POINT, WITH THE BELL END LAID UPGRADE. THE PIPE SHALL BE CENTERED IN THE TRENCH AND ALL PIPE SHALL BE LAID WITH ENDS ABUTTING AND TRUE TO LINE AND GRADE.

B. LASER SHALL BE USED INSIDE THE PIPE WHENEVER POSSIBLE UNLESS OTHERWISE APPROVED.



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MISCELLANEOUS SANITARY SEWER NOTES 1

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TESTING REQUIREMENTS CONTINUED

ALL SEWER LINES ARE TO BE FLUSHED AND CLEANED OUT PRIOR TO TESTING.

LOW PRESSURE AIR TEST

A. AFTER BACKFILLING, THE AIR TEST SHALL BE CONDUCTED BETWEEN TWO CONSECUTIVE MANHOLES. ALL PIPE OUTLETS MUST BE PLUGGED IN THE SECTION BEING TESTED WITH SUITABLE TEST PLUGS. ONE OF THE PLUGS USED AT A MANHOLE MUST BE TAPPED AND EQUIPPED FOR AN AIR INLET CONNECTION FOR FILLING THE LINE FROM THE AIR COMPRESSOR. AIR SHALL BE SUPPLIED SLOWLY TO THE TEST SECTION UNTIL THE INTERNAL PRESSURE REACHES APPROXIMATELY 4 PSI. IF THE PIPE IS BELOW EXISTING GROUNDWATER LEVEL, THE INTERNAL PRESSURE SHALL BE INCREASED BY THE AVERAGE BACK PRESSURE OF ANY GROUNDWATER THAT MAY BE OVER THE PIPE, BUT IN NO CASE SHOULD THE INTERNAL PRESSURE EVER EXCEED 5 PSI.

B. AT LEAST 2 MINUTES SHALL BE ALLOWED FOR THE AIR PRESSURE TO STABILIZE. WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE 3.5 PSI, THE AIR SUPPLY SHALL BE DISCONNECTED AND TIMING SHALL BEGIN WITH A STOP WATCH. THE STOP WATCH SHALL BE ALLOWED TO RUN UNTIL THE PRESSURE HAS DROPPED 1.0 PSI. IF THE TIME SHOWN ON THE STOP WATCH IS GREATER THAN THE SPECIFIED MINIMUM TIME, THE SECTION SHALL BE CONSIDERED TO HAVE PASSED THE TEST. TIME MAY BE INTERPOLATED FROM THE FIGURES LISTED BELOW.

MANHOLE VACUUM TEST

ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED BY THE CONTRACTOR USING THE FOLLOWING PROCEDURES FROM ASTM C-1244.

A. PREPARATION OF THE MANHOLE

1. ALL LIFT HOLES SHALL BE PLUGGED.

2. ALL PIPES ENTERING THE MANHOLE SHALL BE TEMPORARILY PLUGGED TAKING CARE TO SECURELY BRACE THE PIPES AND PLUGS TO PREVENT THEM FROM BEING DRAWN INTO THE MANHOLE.

B. PROCEDURE

1. THE FIRST HEAD SHALL BE PLACED AT THE TOP OF THE MANHOLE IN THE CASTING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. A VACUUM OF 10" OF MERCURY (4.9 PSI) SHALL BE DRAWN ON THE MANHOLE, THE VALVE ON THE VACUUM LINE OF THE TEST HEAD CLOSED, AND THE VACUUM PUMP SHUT OFF. THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9" OF MERCURY (4.4 PSI).

3. THE MANHOLE SHALL PASS IF THE TIME FOR THE VACUUM READING TO DROP FROM 10" OF MERCURY (4.9 PSI) TO 9" OF MERCURY (4.4 PSI) MEETS OR EXCEEDS THE VALUES INDICATED ON THE TABLE.

4. IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE BY AN APPROVED METHOD. THE MANHOLE SHALL THEN BE RETESTED UNTIL A SATISFACTORY TEST IS OBTAINED.

DIAMETER, INCHES

DEPTH (FT.)	48	60	72
	TIME, SECONDS		
8 OR LESS	20	26	33
10	25	33	41
12	30	39	49
14	35	46	57
16	40	52	67
18	45	59	73
20	50	65	81
22	55	72	89
24	59	78	97
26	64	85	105
28	69	91	113
30	74	98	121

MINIMUM TEST TIMES FOR VARIOUS MANHOLE DIAMETERS

DEFLECTION TEST

A. DEFLECTION TESTS SHALL BE PERFORMED BY THE CONTRACTOR ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.

B. NO PIPE SHALL EXCEED A DEFLECTION OF 5% IF DEFLECTION EXCEEDS 5%, REPLACEMENT OR CORRECTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF APPROVING AGENCY.

C. THE RIGID BALL OR MANDREL USED FOR THE DEFLECTION TEST SHALL HAVE A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE DEPENDING ON WHICH IS MANUFACTURED. THE PIPE SHALL BE MEASURED IN COMPLIANCE WITH ASTM D-2122 STANDARD TEST METHOD OF DETERMINING DIMENSIONS OF THERMOPLASTIC PIPE AND FITTINGS. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.



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MISCELLANEOUS SANITARY SEWER NOTES 2

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SEWER TELEVISION STANDARDS

A. ALL SEWER TELEVISION CONTRACTORS SHALL BE CERTIFIED BY NASSCO FOR PIPELINE ASSESSMENT AND CERTIFICATION. SANITARY TELEVISION WORK SHALL COMPLY WITH NASSCO STANDARDS.

B. ANY SEWER JETTING OR OTHER CLEANING ASSOCIATED WITH A PASSING RECORDING IS THE RESPONSIBILITY OF THE CONTRACTOR.

C. ALL TELEVISION WORK SHALL BE DONE IN COLOR WITH THE PROPER AMOUNT OF ILLUMINATION TO CLEARLY SHOW THE ENTIRE PIPE DIAMETER.

D. THE CAMERA SHALL BE OF THE PAN AND TILT TYPE.

E. THE TELEVISION CONTRACTOR SHALL USE A CD-ROM OR DATA DVD TO PROVIDE THE ENTIRE RECORDING PROCESS IN EITHER MPEG II OR MPEG IV FORMAT.

F. AT THE START OF THE RECORDING PROCESS, THE VIDEO SHALL RECORD THE FOLLOWING:

a. DATE/TIME

b. OPERATOR AND COMPANY NAME

c. SEWER PROJECT NAME

d. ADDRESS OR INTERSECTION OF MANHOLE WORKING ON

e. DIRECTION ON TELEVISION

f. FOOTAGE COUNTER

G. THE VIDEO MUST SHOW THE COUNTER RECORDING THROUGHOUT THE RECORDING PROCESS.

H. THE VIDEO SHALL SHOW THE CLOCK POSITION AND DISTANCE FROM THE MANHOLE FOR EACH LATERAL. THE CONTRACTOR SHALL ALSO SUPPLY A WRITTEN COPY OF ALL LATERAL LOCATIONS.

I. THE OPERATOR SHALL PAN EACH SEWER JOINT AND NOTE ANY DEFICIENCIES ON THE VIDEO.

J. THE OPERATOR SHALL PAN AND TILT EACH LATERAL AND SHALL POSITION THE CAMERA TO LOOK UP EACH LATERAL CONNECTION.

K. AT NO TIME SHALL THE OPERATOR ALLOW THE CAMERA HEAD TO BE SUBMERGED.

L. THE OPERATOR SHALL NOTE ANY DEFICIENCIES ON THE MAIN SCREEN.

SEWER TELEVISION PROCEDURES FOR SEWER RECONSTRUCTION PROJECTS

A. BEFORE COMMENCEMENT OF THE CLEANING PROCESS, THE CONTRACTOR SHALL NOTIFY ADJACENT AND AFFECTED PROPERTY OWNERS BY GOING DOOR-TO-DOOR AND NOTIFYING THEM OF THE POSSIBILITY OF SEWER BACKUP DURING THE CLEANING PROCESS.

B. THE SANITARY SEWER SHALL BE COMPLETELY CLEANED AND FREE OF DEBRIS USING A HIGH PRESSURE JET RODDER.

C. ALL DEBRIS SHALL BE VACUUMED OUT OF THE SEWER MAIN.

D. ONCE CLEANING HAS BEEN COMPLETED, THE CONTRACTOR SHALL BAG THE UPSTREAM MANHOLE AND PUMP THE SEWAGE FLOW DOWNSTREAM AND SHALL MAINTAIN PUMPING DURING THE TELEVISION PROCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SEWER FLOODING AS A RESULT OF THEIR ACTIVITIES.

E. AFTER THE PUMP BYPASS HAS BEEN ESTABLISHED, THE CONTRACTOR SHALL RUN CLEAR WATER IN THE RECONSTRUCTED SEWER MAIN TO FILL ANY POTENTIAL BELLIES IN THE LINE. THE CONTRACTOR SHALL CALCULATE THE VOLUME GALLON CAPACITY OF THE SEWER MAIN AND SHALL USE THAT MUCH WATER TO FILL POTENTIAL BELLIES/DIPS.

F. THE CONTRACTOR MAY RENT A WATER HYDRANT METER FROM THE CITY TO PERFORM THIS TASK.

G. THE CONTRACTOR SHALL TELEVIEW THE SEWER FOLLOWING THE TELEVISION STANDARDS.

SEWER TELEVISION PROCEDURES FOR NEW SEWER CONSTRUCTION

A. THE SANITARY SEWER SHALL BE COMPLETELY CLEAN AND FREE OF DEBRIS USING A HIGH PRESSURE JET RODDER CAPABLE OF SCOURING THE PIPE WALLS.

B. ALL DEBRIS SHALL BE VACUUMED OUT OF THE SEWER MAIN.

C. ONCE CLEANING HAS BEEN COMPLETED, THE CONTRACTOR SHALL RUN CLEAR WATER IN THE NEW SEWER MAIN TO FILL ANY POTENTIAL BELLIES IN THE LINE. THE CONTRACTOR SHALL CALCULATE THE VOLUME GALLON CAPACITY OF THE SEWER MAIN AND SHALL USE THAT MUCH WATER TO FILL POTENTIAL BELLIES/DIPS.

D. THE CONTRACTOR MAY RENT A WATER HYDRANT METER FROM THE CITY TO PERFORM THIS TASK.

E. THE CONTRACTOR SHALL MAKE SURE THAT THERE IS NO FLOW EMANATING UPSTREAM. IF SO, THE CONTRACTOR SHALL STOP THIS FLOW DURING THE TELEVISION.

F. THE CONTRACTOR SHALL TELEVIEW THE SEWER FOLLOWING THE TELEVISION STANDARDS.

STANDARDS FOR BELLIES/DIPS IN SEWER MAINS

SANITARY SEWERS SHALL BE DECLARED AS "NOT APPROVED" IF BELLIES/DIPS IN THE MAIN LINE EXCEEDS THE FOLLOWING CRITERIA:

SLOPE	PIPE SIZES						
	8"	10"	12"	15"	18"	24"	>27"
0.10%	2"	2.5"	3"	4"	4"	4"	4.5"
0.12%	2"	2.5"	3"	4"	4"	4"	5"
0.15%	2"	2.5"	3"	3.5"	3.5"	4"	4"
0.22%	2"	2.5"	3"	3"	3.5"	3.5"	4"
0.28%	2"	2"	2"	2"	2.5"	2.5"	3"
0.40%	2"	2"	2"	2"	2"	2.5"	2.5"
0.60%	1"	1"	1"	1"	1"	1"	1"
1.00%	0"	0"	0"	0"	0"	0"	0"

MAXIMUM ALLOWABLE BELLIES IN PIPE (INCHES)



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MISCELLANEOUS SANITARY SEWER NOTES 3

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NOTES

FRAME AND LID

A. LOCATE THE CENTERLINE OF MANHOLE COVERS OVER THE CENTERLINE OF THE MAIN SEWER WHENEVER POSSIBLE.

B. FINAL GRADING IS TO BE 1/4"-1/2" BELOW FINAL SURFACE OF IN PAVEMENT AREAS. OFF PAVEMENT AREAS SHALL BE 3" ABOVE EXISTING GROUND SURFACE.

C. SANITARY MANHOLE FRAMES AND COVERS SHALL BE EAST JORDAN IRON WORKS NO. 1600 OR NEENAH NO. 1767 FOR HEAVY TRAFFIC. LID SHALL BE SANITARY LETTERED, NON-VENTED, SELF-SEALING AND NON-BOLTED LIDS. NON VENTED LIDS ARE REQUIRED AT LOCATIONS THAT ARE SUBJECT TO INFLOW FROM SURFACE WATER.

D. (4) 3/4" DIA. STAINLESS STEEL ANCHOR BOLTS AND NUTS TO FASTEN MANHOLE FRAME TO MANHOLE CONE OR FLAT LID SECTION WHEN REQUIRED BY THE CITY.

E. PRECAST CONCRETE ADJUSTING RING 2" MIN. AND 12" MAX. THICKNESS. RINGS LESS THAN 2" SHALL BE A OF A COMPOSITE PLASTIC MATERIAL. NO WOOD SHIMS OR BRICKS ALLOWED.

F. CONSEAL CS-102 FLEXIBLE BUTYL RESIN SEALANT OR EQUIVALENT SHALL BE 3/8"X 1" MINIMUM STRIPS UNDER GRADE RINGS AND CASTING.

MANHOLE JOINTS

A. O-RING JOINT MUST MEET ASTM SPEC. 443. ALL JOINTS MUST BE KEPT AT A MINIMUM.

B. USE CRETEX OR EQUAL 9" WIDE JOINT WRAPS TO ALL JOINTS ON THE OUTSIDE OF THE MANHOLE.

STEPS

A. MANHOLE STEPS SHALL BE SECURELY INSTALLED INTO EACH MANHOLE SECTION, BY THE MANUFACTURER, PRIOR TO DELIVERY TO THE JOB SITE.

B. MANHOLE STEPS SHALL BE PF-1 STEP BY M.A. INDUSTRIES OR EQUIVALENT. STEPS SHALL BE INSTALLED IN ALL NEW MANHOLES TO ALLOW FOR ANCHORING FLOW METERING EQUIPMENT AND SAMPLING EQUIPMENT.

STRUCTURE

A. MATERIALS FOR BASES, RISERS, AND OTHER PRECAST SECTIONS, INCLUDING REINFORCEMENTS SHALL COMPLY WITH ASTM C-478.

B. MAXIMUM SANITARY MANHOLE SPACING SHALL BE 400'.

C. THE FLOW CHANNEL, THROUGH MANHOLES SHALL BE MADE TO CONFORM IN SHAPE, SLOPE AND SMOOTHNESS TO THAT OF THE SEWERS.

D. ODOT CLASS "QC" CONCRETE.

PIPE CONNECTIONS

A. PIPE CONNECTIONS SHALL HAVE A FLEXIBLE WATERTIGHT JOINT SEAL MEETING ASTM 923-79, A-LOK OR EQUIVALENT.

B. TO CONNECT INTO EXISTING MANHOLE, THE MANHOLE SHALL BE CORED AND AN A-LOK XP SERIES FLEXIBLE CONNECTOR OR EQUIVALENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. NON-SHRINK GROUT ALTERNATIVE MAY BE USED IN SPECIAL CIRCUMSTANCES WHEN PREVIOUSLY APPROVED BY CITY.

C. NO LATERALS SHALL PROTRUDE INTO THE INTERIOR MANHOLE.

D. CUT PIPE SHALL NOT EXTEND BEYOND THE INSIDE FACE OF THE MANHOLE WALL.

E. CONCRETE PLACED INSIDE THE MANHOLE SHALL NOT BE PLACED BETWEEN THE PIPE AND THE OPENING SO AS TO INTERFERE IN ANY WAY WITH THE FLEXIBILITY OF THE JOINT.

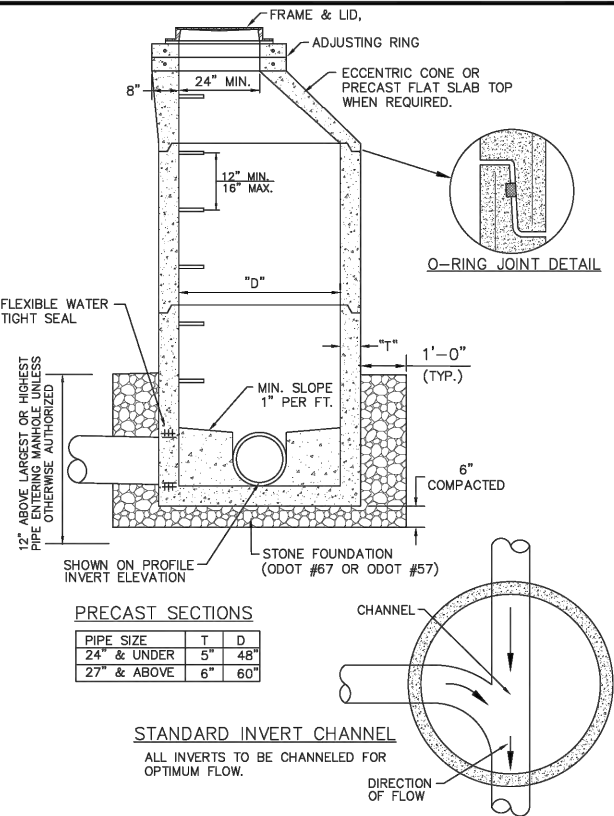


Diagram of a Type 3 Sanitary Manhole showing cross-section and invert channel details. Labels include: FRAME & LID, ADJUSTING RING, ECCENTRIC CONE OR PRECAST FLAT SLAB TOP WHEN REQUIRED, 24" MIN., 12" MIN. 16" MAX., "D", 1'-0" (TYP.), 6", COMPACTED, STONE FOUNDATION (ODOT #67 OR ODOT #57), SHOWN ON PROFILE INVERT ELEVATION, PRECAST SECTIONS table, STANDARD INVERT CHANNEL, ALL INVERTS TO BE CHanneled FOR OPTIMUM FLOW, DIRECTION OF FLOW, 12" ABOVE LARGEST OR LARGEST PIPE ENTERING MANHOLE UNLESS OTHERWISE AUTHORIZED, FLEXIBLE WATER TIGHT SEAL, MIN. SLOPE 1" PER FT., 8", 24" MIN., 12" MIN. 16" MAX., "D", 1'-0" (TYP.), 6", COMPACTED, STONE FOUNDATION (ODOT #67 OR ODOT #57), SHOWN ON PROFILE INVERT ELEVATION, PRECAST SECTIONS table, STANDARD INVERT CHANNEL, ALL INVERTS TO BE CHanneled FOR OPTIMUM FLOW, DIRECTION OF FLOW.

PIPE SIZE	T	D
24" & UNDER	5"	48"
27" & ABOVE	6"	60"

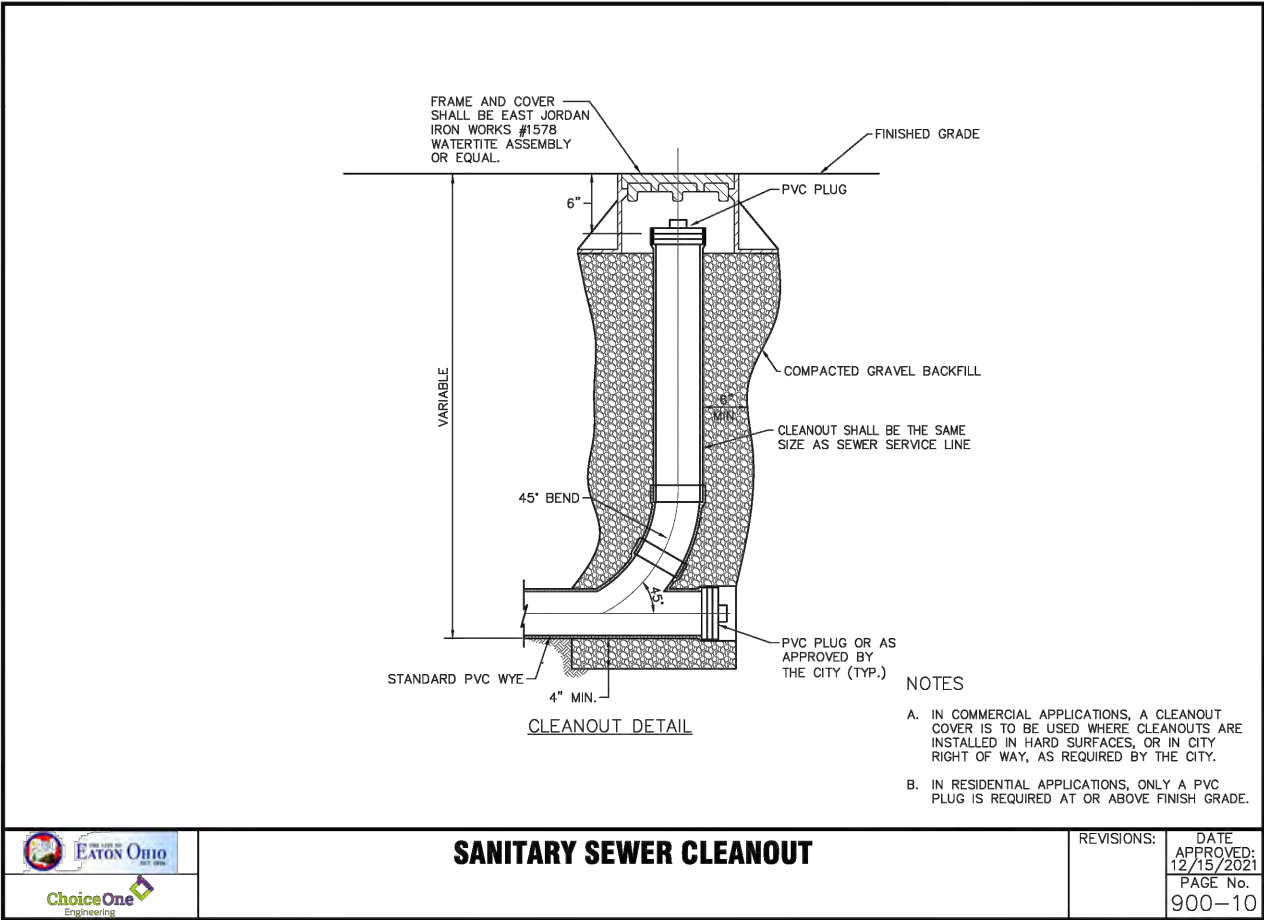
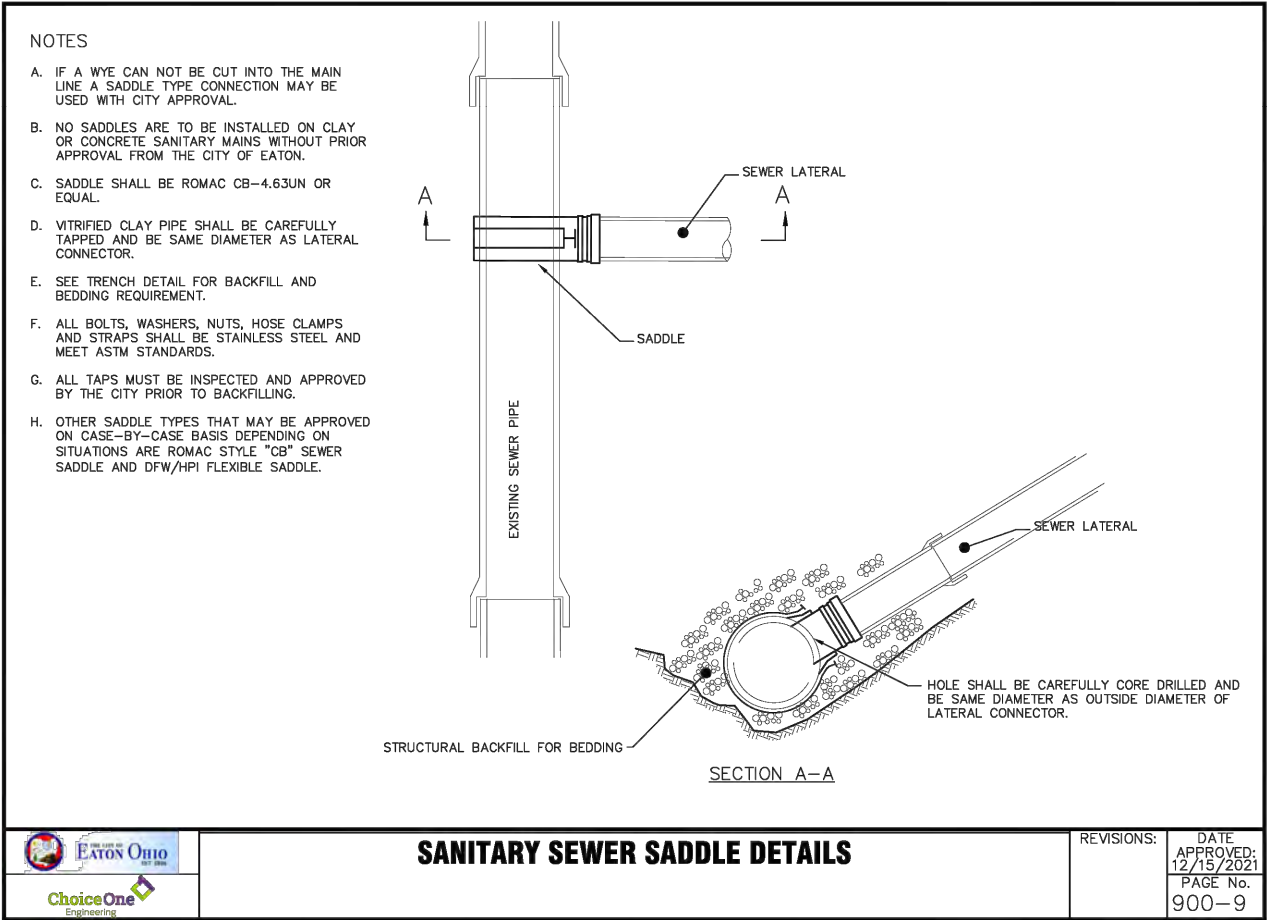
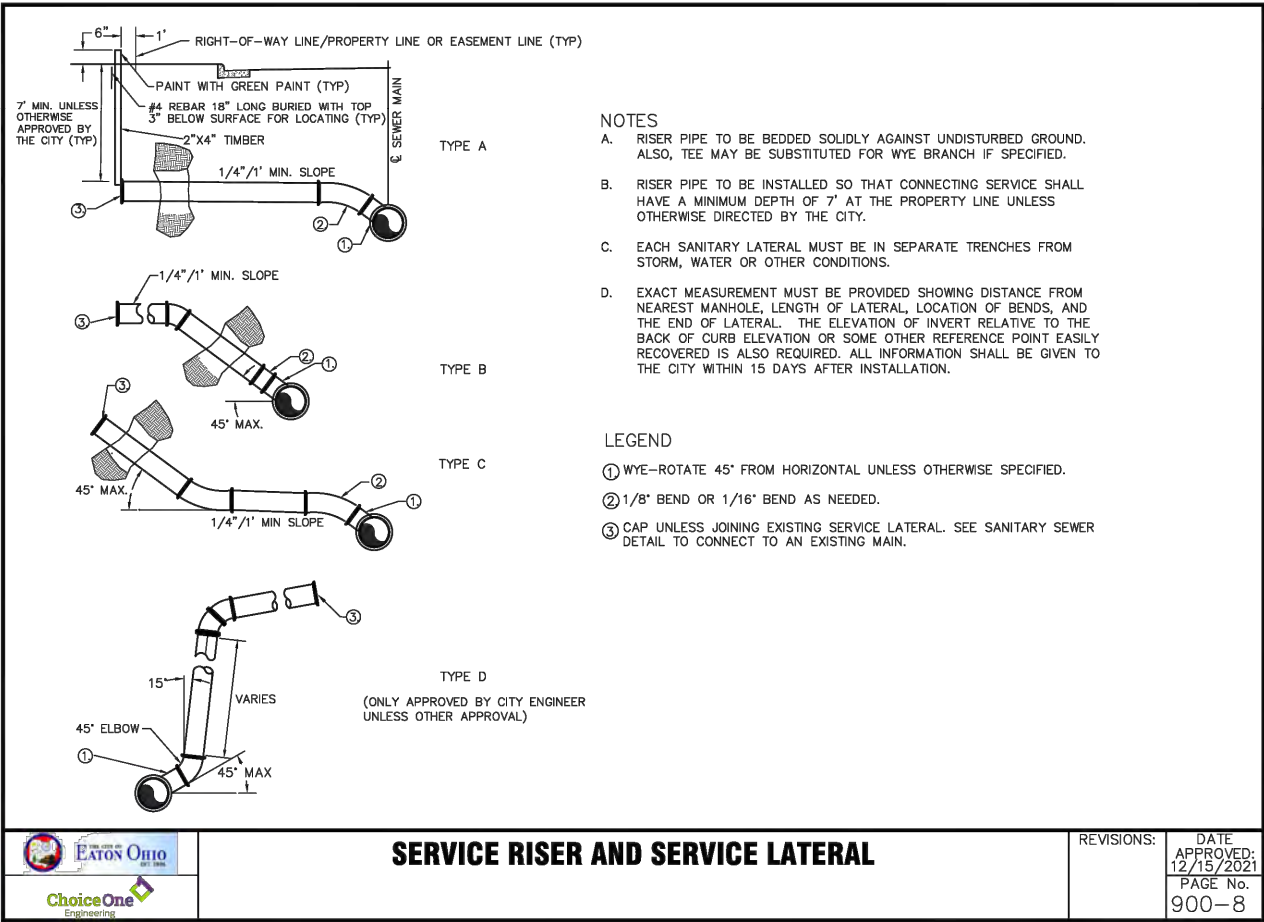
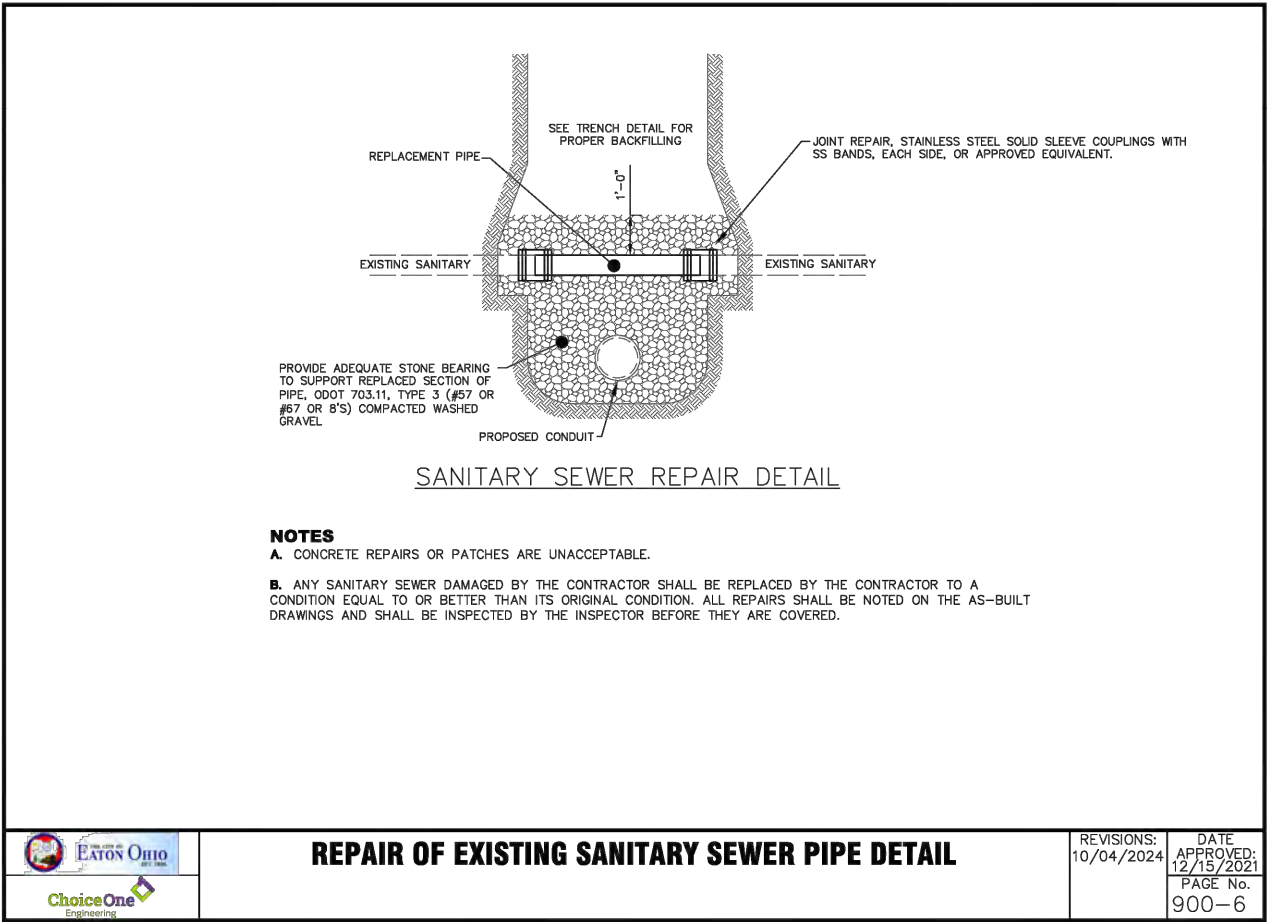


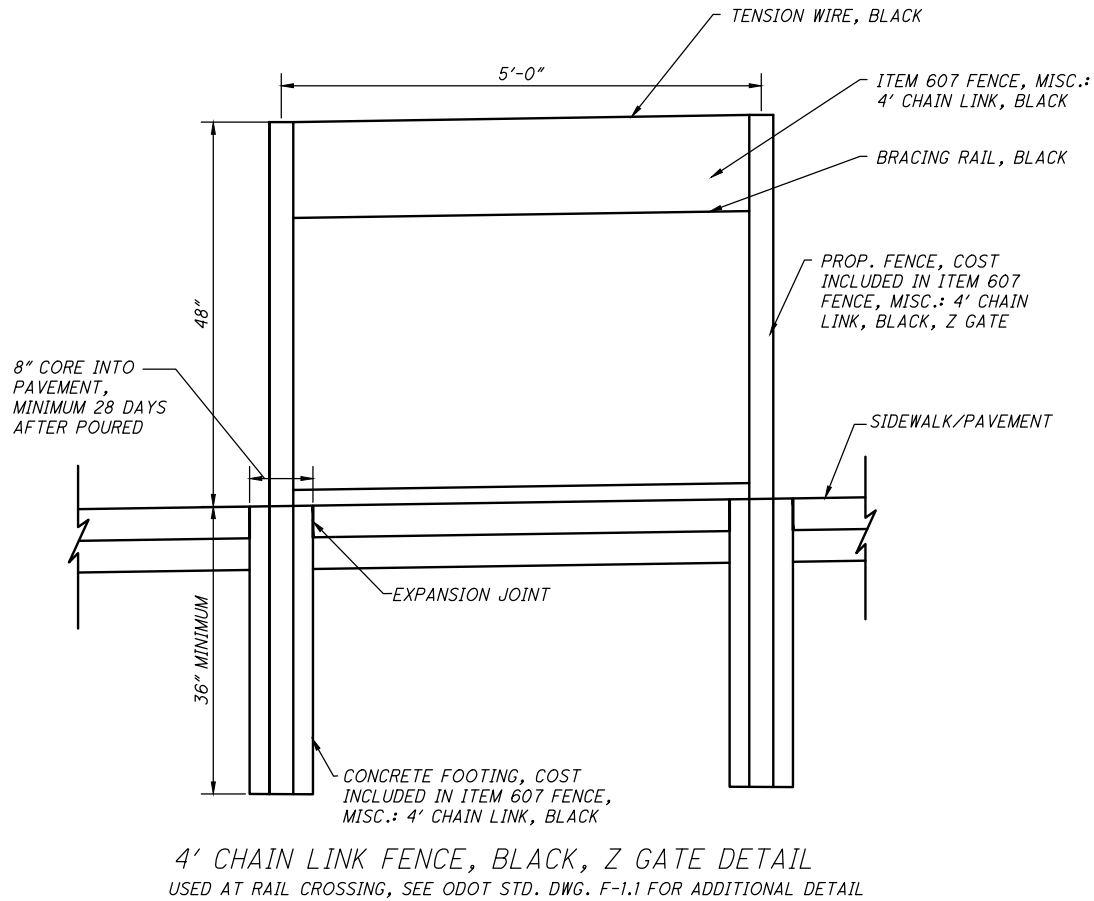
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TYPE 3 SANITARY MANHOLE

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ITEM 607 FENCE, MISC.: 4' CHAIN LINK, BLACK, Z GATE

THE ITEM OF WORK SHALL CONSIST OF THE WORK DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 607 FENCE, EXCEPT AS HEREIN MODIFIED.

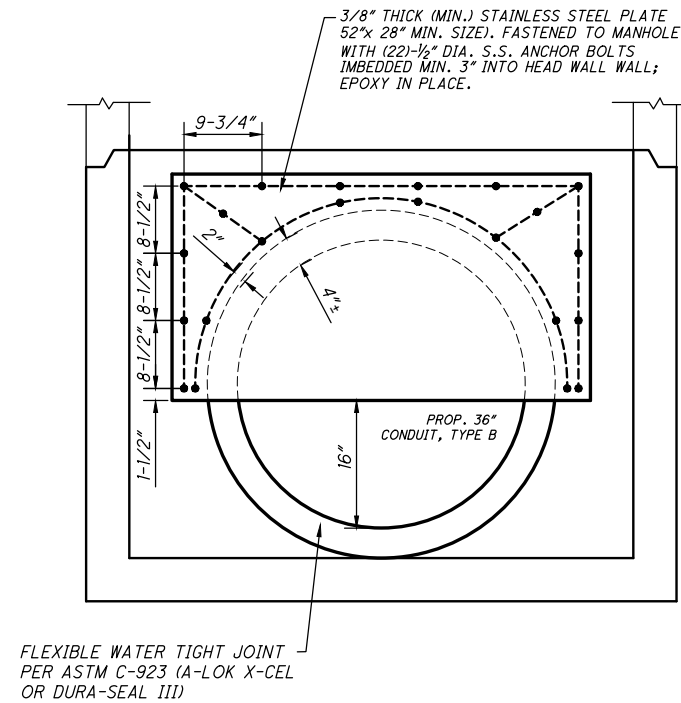
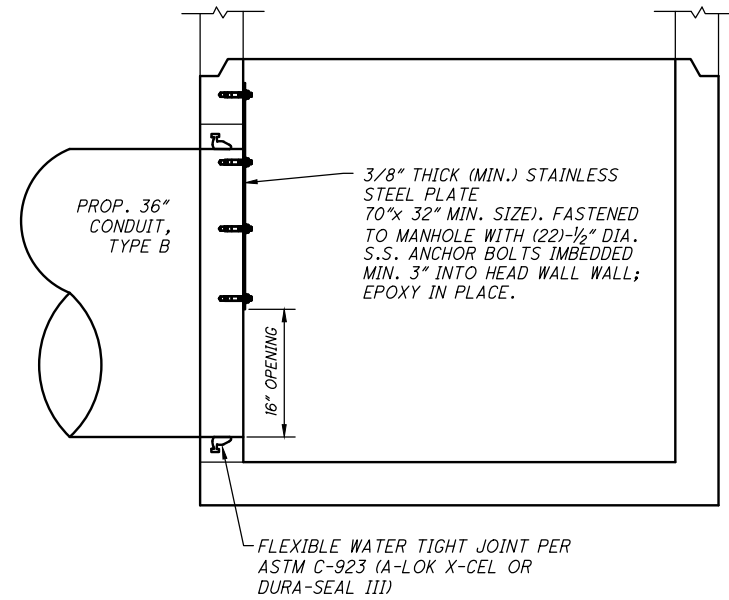
THIS WORK SHALL CONSIST OF INSTALLING CHAIN LINK FENCE. FENCING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL INSTALL THE FENCING AT THE LOCATIONS PROVIDED ON THE PLANS. THIS ITEM SHALL INCLUDE ALL MATERIALS NECESSARY FOR THE INSTALLATION OF THE CHAIN LINK FENCE (POST, BRACING, CHAIN LINK, RAILS, CAPS, LINT TOPS, SLEEVES, CLAMPS, HOG RINGS, LOCK, HARDWARE, ETC.). ALL FRAMEWORK, FITTINGS, FENCING, AND HARDWARE ARE TO BE MANUFACTURED WITH A ZINC COATING PRIOR TO THE APPLICATION OF ANY FINAL COATING. FINAL FINISH SHALL INCLUDE BLACK COLOR COATING WITH A MINIMUM OF 10 MIL. PVC POLYMER.

FENCE MATERIAL SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:
FABRIC: 1-3/4" 8 GA (9 GA CORE) CLASS 2B BLACK 4' HIGH
FUSED BONDED WIRE.
TERMINAL POSTS: 3" X 7' S.S. 40
TOP, MID, AND BOTTOM RAILS: 1-5/8" X 21' S.S. 40
ALL APPROPRIATE CAPS, LINE TOPS, SLEEVES, CLAMPS, HOG RINGS, BRACING RAIL, TENSION WIRE, AND MISC.
HARDWARE SHALL BE INCLUDED.

ALL POSTS ARE TO BE ON 5' CENTERS. CONTRACTOR TO CORE HOLES THRU CONCRETE OR ASPHALT, MINIMUM OF 28 DAYS AFTER THEIR PLACEMENT. ALL POSTS SHALL BE INSTALLED A MINIMUM OF 36" BELOW GRADE. PLACE JOINT FILLER (SONOLASTIC ULTRA, EUCOLASTIC I, OR EQUIVALENT) IN LIMESTONE COLOR TO THE BOTTOM OF THE CONCRETE SLAB OF PER MANUFACTURER INSTALLATION RECOMMENDATION AROUND FENCE POST. CONTRACTOR TO PLACE WHITE SILICA SAND ON TOP OF JOINT FILLER AFTER INITIAL SET.

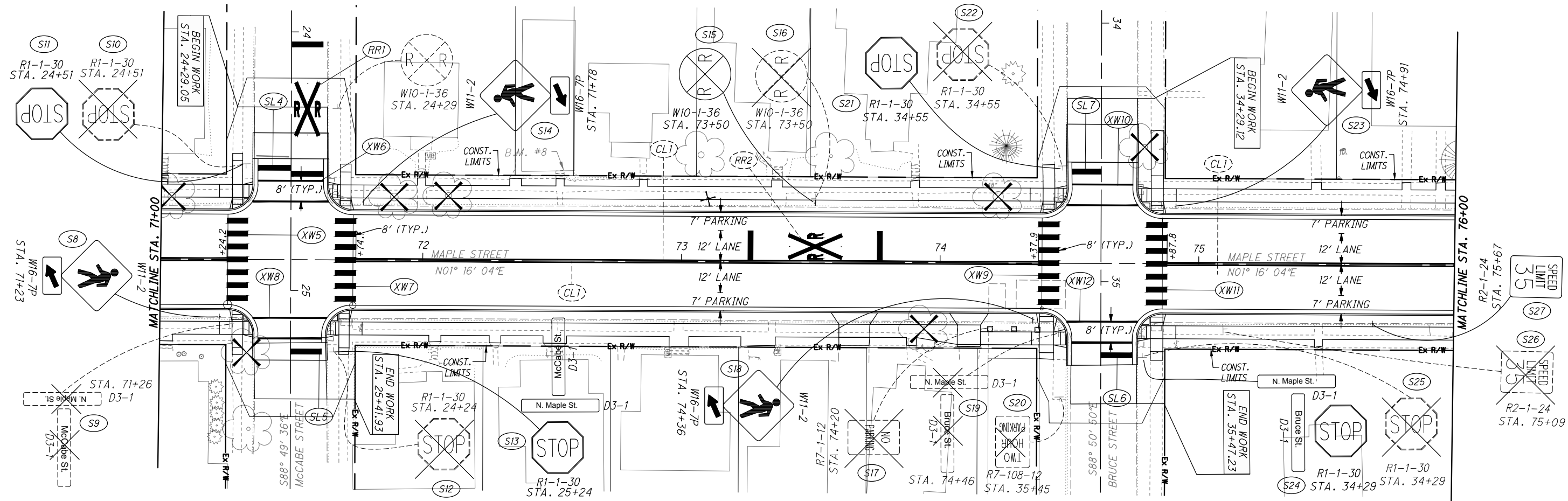
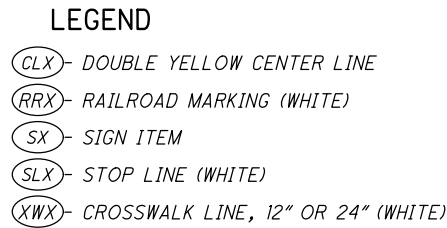
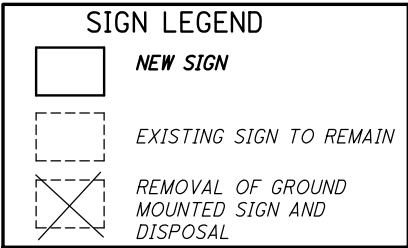
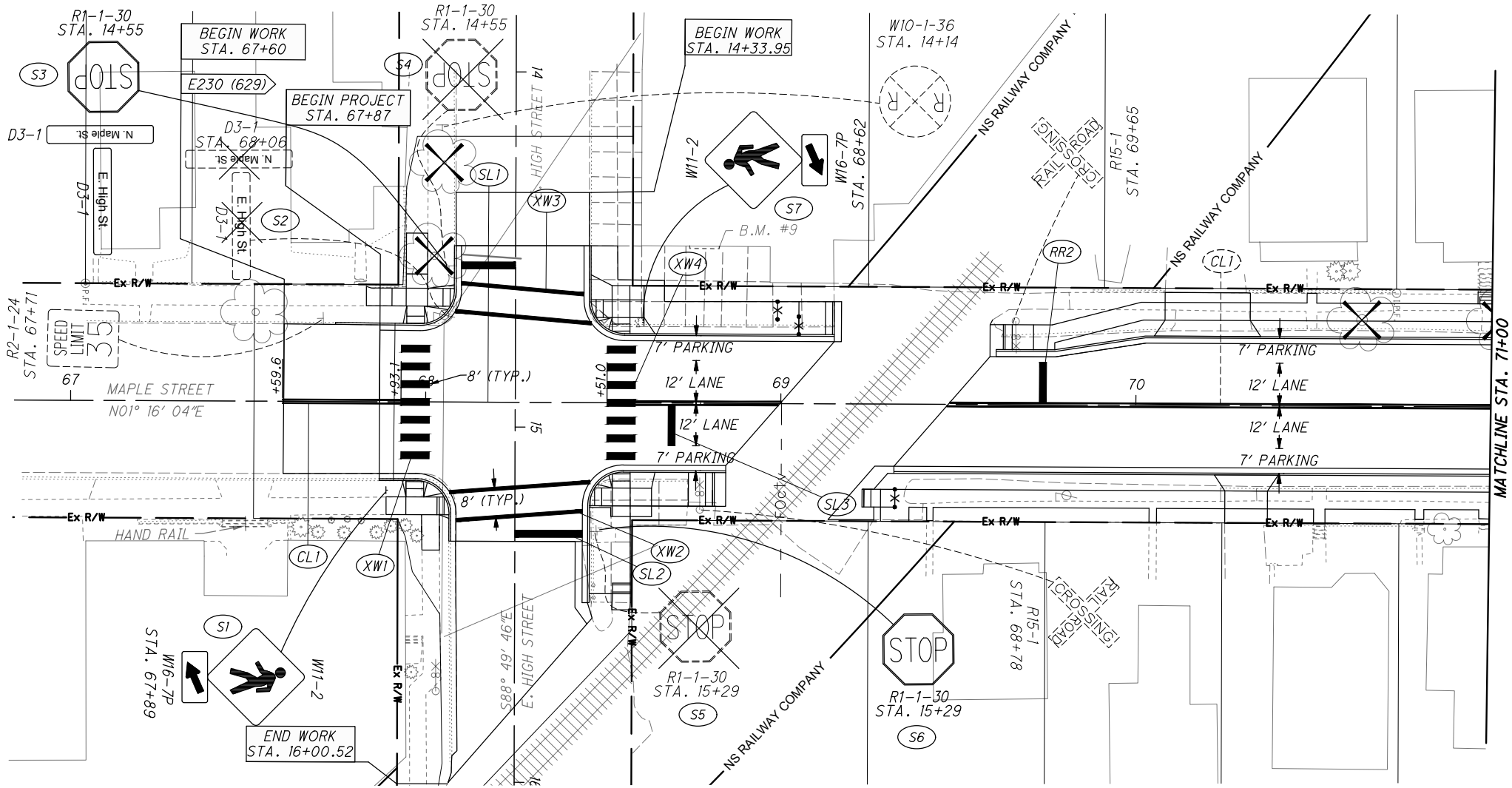
THE FENCE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ANY DAMAGE DONE TO THE SURFACE BY FENCE INSTALLERS. ANY SUCH DAMAGE SHALL BE REPAIRED AT THE FENCE CONTRACTOR'S EXPENSE.

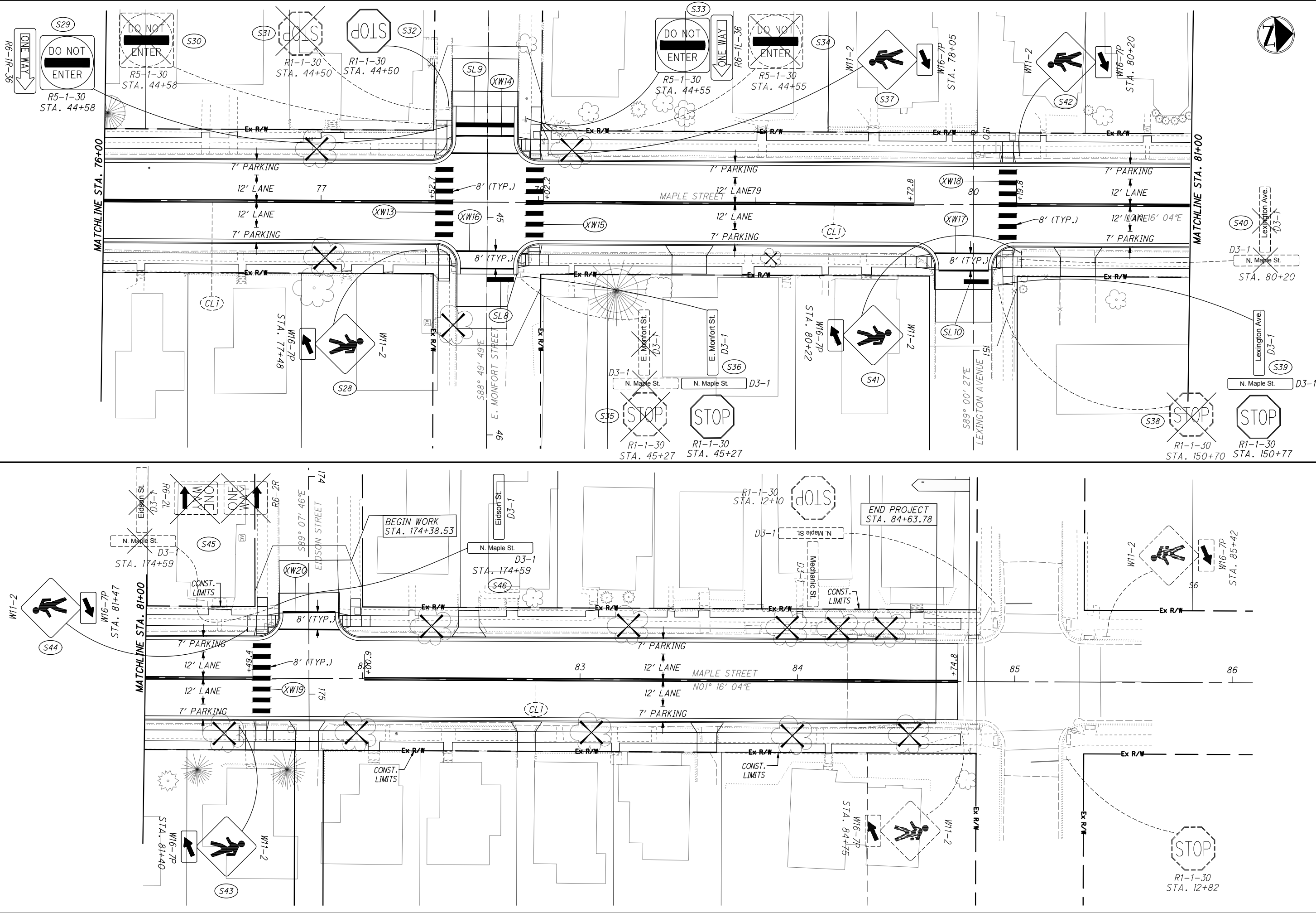
PAYMENT FOR ITEM 607 FENCE, MISC.: 4' CHAIN LINK, BLACK, Z GATE INCLUDING ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACTOR'S EACH BID AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.



No. 3 STORM MANHOLE AT STA. 71+41.90, 12' LT ORIFICE PLATE ON NORTH 36" PIPE ONLY

NOTE:
COST OF MATERIALS, LABOR, AND INSTALLATION OF THE ORIFICE PLATE SHALL BE INCLUDED IN PAY ITEM 611 MANHOLE, No. 3, AS PER PLAN (ORIFICE).





SIGN AND PAVEMENT MARKING PLAN
STA. 76+00 to STA. 86+00

HORIZONTAL
SCALE IN FEET

0 10 20 40

DESIGN AGENCY

CHOICE ONE ENGINEERING

DESIGNER

BHB

REVIEWER

NNS 06-19-2025

PROJECT ID

118523

SHEET

P.75

TOTAL

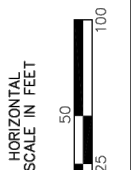
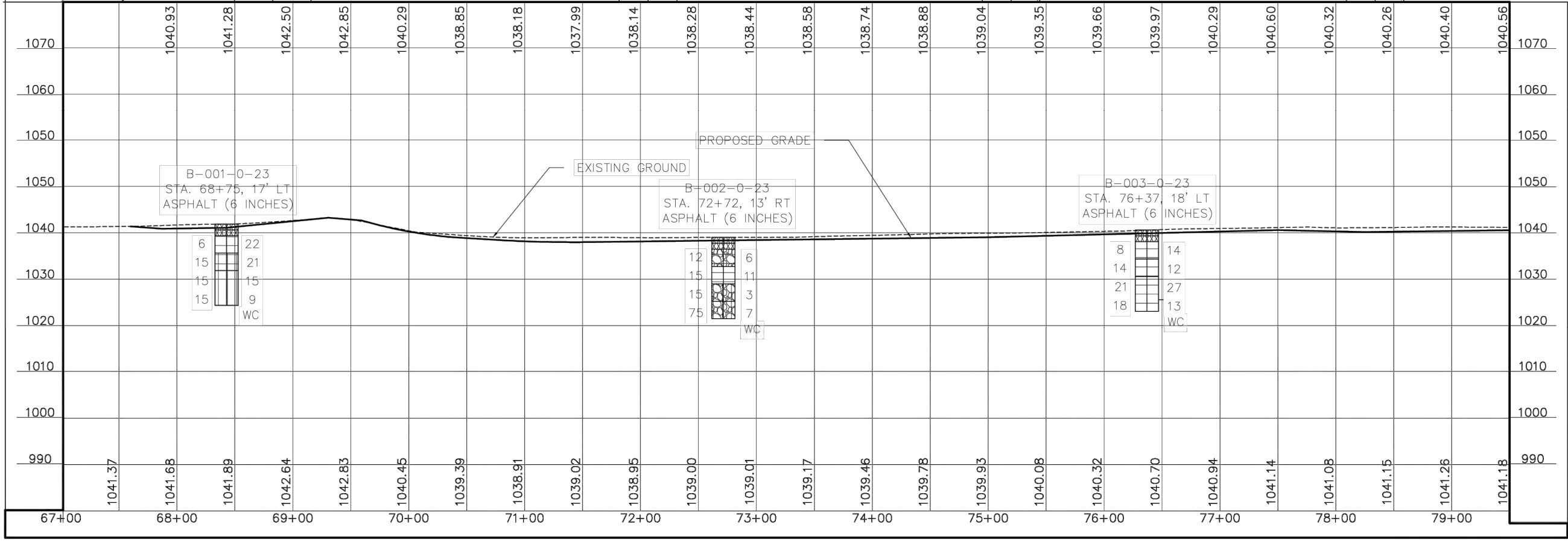
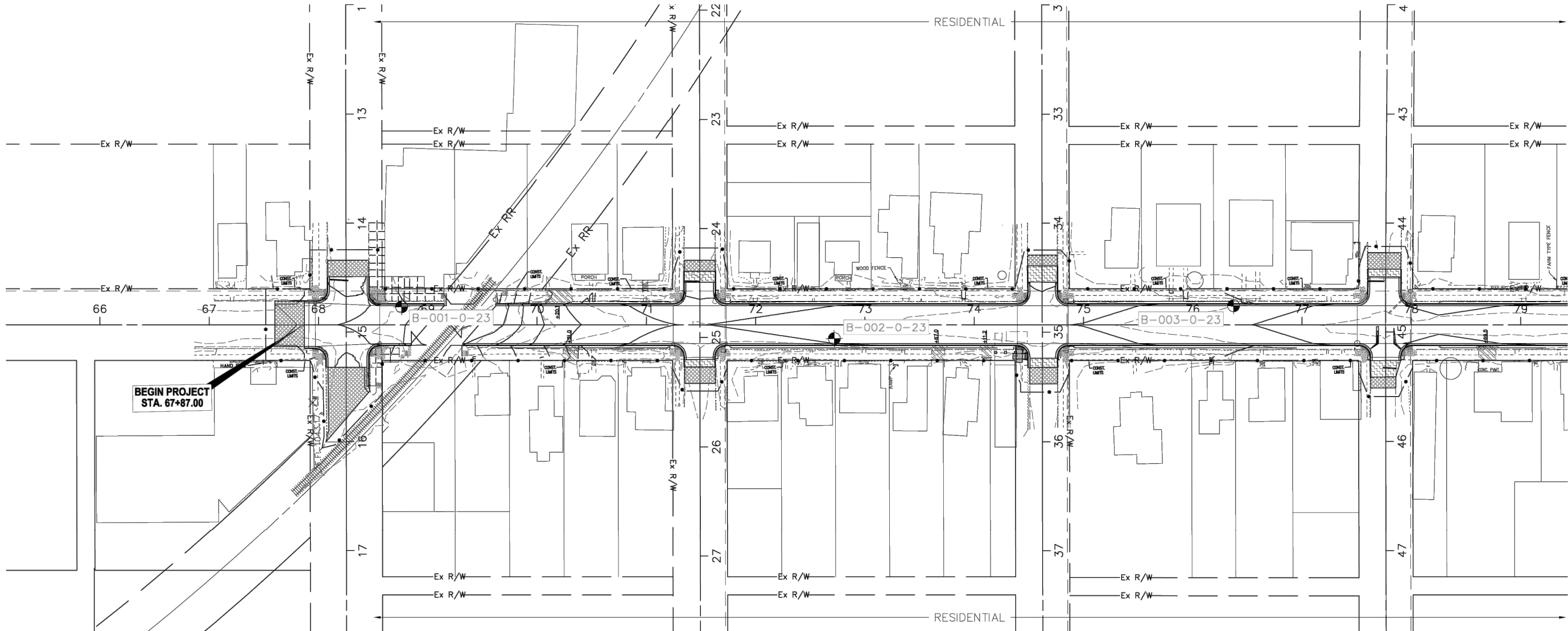
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12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE	CLAY



SUMMARY OF SOIL TEST DATA
N MAPLE ST, PID 118523, PRE-MR112-0.99

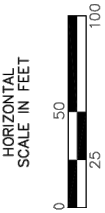
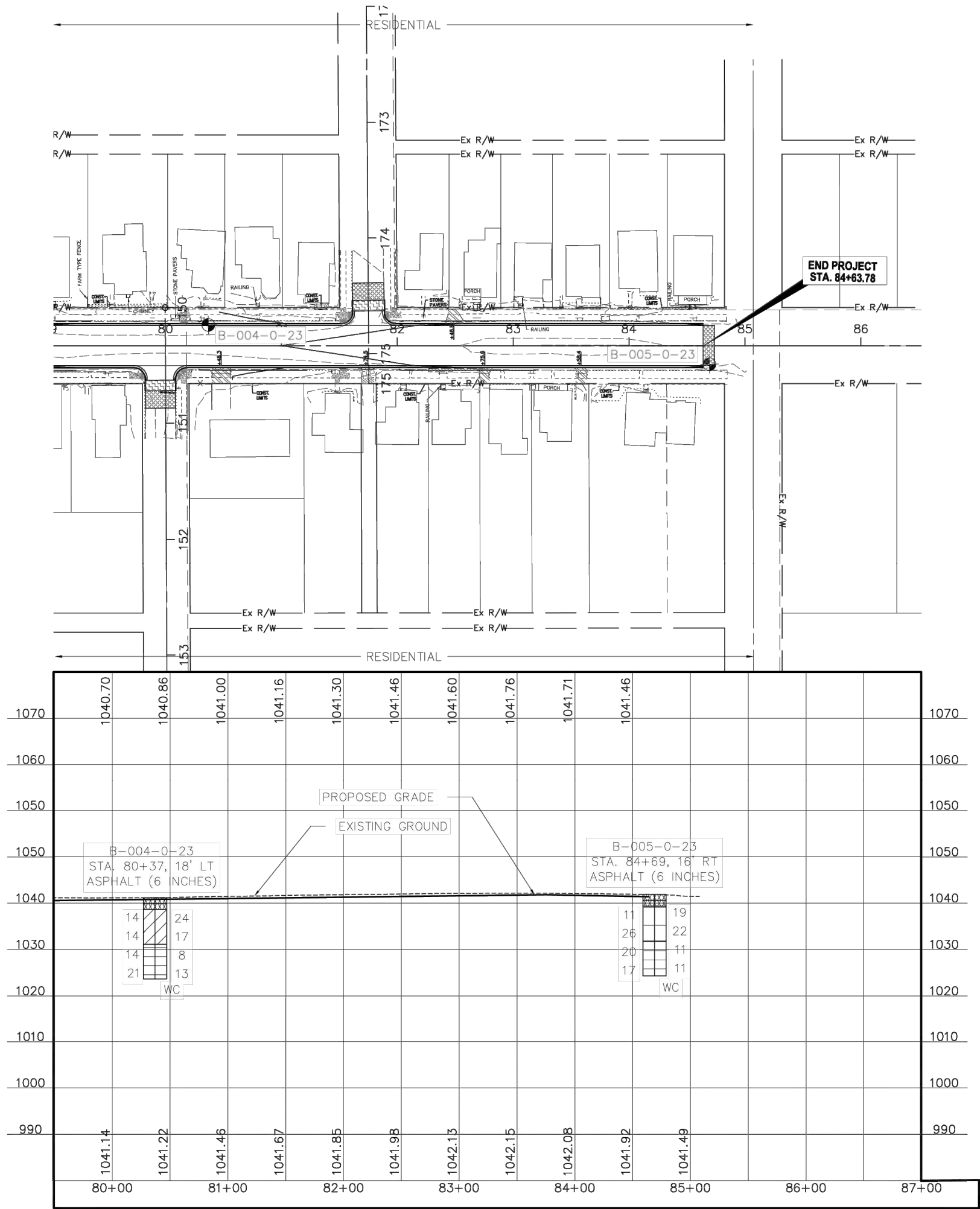
EXPLOR. ID	FROM	-	TO	SAMPLE ID	% N60	% REC	% tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO ₄				
B-001-0-23	1	-	2.5	SS-1	6	89	2.3	4	3	6	50	37	38	20	18	22	A-6b (11)	130				
OLIVE BROWN CLAY, TR GRAVEL,																						
STATION 68+75 , 17' LT.	2.5	-	4	SS-2	15	72	1.8	TR F.SAND								21	A-7-6 (VISUAL)		-			
LATITUDE 39.748078	4	-	5.5	SS-3	15	89	0.5	10	11	24	33	22	23	13	10	15	A-4a (4)		-			
LONGITUDE -84.633207	5.5	-	7	SS-4	15	83	-	SAME AS SS-3								9	A-4a (VISUAL)		-			
FILL - BROWN GRAVEL W/ SA, SI,																						
B-002-0-23	1	-	2.5	SS-1	12	89	-	CLAY								6	A-2-6 (VISUAL)		<100			
STATION 72+72 , 13' RT.	2.5	-	4	SS-2	15	72	-	12	12	26	30	20	18	12	6	11	A-4a (3)		-			
BROWN GRAVEL W/ SA AND SI, TR																						
LATITUDE 39.749102	4	-	5.5	SS-3	15	89	-	CLAY								3	A-2-4 (VISUAL)		-			
LONGITUDE -84.633115	5.5	-	7	SS-4	75	83	-	36	18	19	19	8	15	7	8	7	A-2-4 (0)		-			
FILL-BROWN SANDY SILT, TR																						
B-003-0-23	1	-	2.5	SS-1	8	44	2.5	GRAVEL, TR CLAY								14	A-4a (VISUAL)		100			
STATION 76+37 , 18' LT.	2.5	-	4	SS-2	14	67	1	20	13	21	28	18	19	11	8	12	A-4a (2)		-			
LATITUDE 39.11439	4	-	5.5	SS-3	21	11	0.5	SAME AS SS-4								27	A-4a (VISUAL)		-			
LONGITUDE -84.633122	5.5	-	7	SS-4	18	100	1	14	15	22	30	19	19	10	9	13	A-4a (3)		-			
FILL-BROWN SANDY SILT, TR																						
B-004-0-23	1	-	2.5	SS-1	14	89	1.5	SAME AS SS-2								24	A-6a (VISUAL)		110			
STATION 80+37 , 18' LT.	2.5	-	4	SS-2	14	72	2	8	9	24	32	27	27	12	15	17	A-6a (7)		-			
LATITUDE 39.114475	4	-	5.5	SS-3	14	89	0.5	SAME AS SS-4								8	A-4a (VISUAL)		-			
LONGITUDE -84.633174	5.5	-	7	SS-4	21	83	1	11	13	22	32	22	21	11	10	13	A-4a (4)		-			
FILL-BROWN SANDY SILT, TR																						
B-005-0-23	1	-	2.5	SS-1	11	78	1	6	9	21	38	26	30	14	16	19	A-6b (8)		110			
STATION 84+69 , 16' RT.	2.5	-	4	SS-2	26	72	1	SAME AS SS-1								22	A-6b (VISUAL)		-			
LATITUDE 39.752435	4	-	5.5	SS-3	20	100	2	12	13	24	34	17	18	11	7	11	A-4a (3)		-			
LONGITUDE -84.633099	5.5	-	7	SS-4	17	89	2.5	SAME AS SS-3								18	11	7	11	A-4a (VISUAL)		-



SOIL PROFILE - ROADWAY
STA. 67+87 to STA. 79+50



DESIGNER	DWM
REVIEWER	BCD
PROJECT ID	04-16-24
SHEET	118523
TOTAL	P.78



SOIL PROFILE - ROADWAY
STA. 79+50 to STA. 84+63.78

DESIGN AGENCY



DESIGNER

DWM

REVIEWER

BCD 04-16-24

PROJECT ID

118523

SHEET

P.79

TOTAL

79