

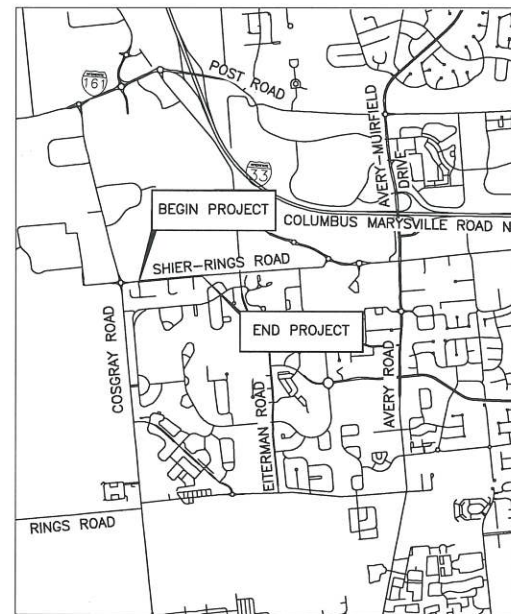
SHIER RINGS ROAD SHARED USE PATH

(COSGRAY ROAD TO
EITERMAN ROAD)
23-008-CIP



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LOCATION MAP

P.O.B. LATITUDE : 39°55'36" N LONGITUDE : 82°49'01" W

SCALE IN MILES



Portion to be Improved:



PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A 1782' ASPHALT SHARED USE PATH ALONG THE SOUTH SIDE OF SHIER-RINGS ROAD, CONNECTING WITH THE EXISTING SHARED USE PATH APPROXIMATELY 225' EAST OF SHIER LANE. THIS PROJECT WILL ALSO HANDLE THE ASSOCIATED DRAINAGE AND RECONSTRUCTION OF DRIVE CROSSINGS.

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT AND DOES NOT CONSTITUTE ASSURANCE TO OPERATE AS INTENDED. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL CIVIL ENGINEER PREPARING THE PLANS.

APPROVED:

Paul A. Hammersmith 3.16.2026
 DIRECTOR OF ENGINEERING/CITY ENGINEER
 CITY OF DUBLIN, OHIO
 PAUL A. HAMMERSMITH, P.E.

Eric Richter 3/17/2026
 WASHINGTON TOWNSHIP ADMINISTRATOR
 ERIC RICHTER



PLAN PREPARED BY:

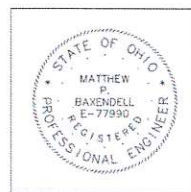


Matthew Baxendell

REGISTERED ENGINEER

3/13/2026

DATE



ENGINEERS SEAL

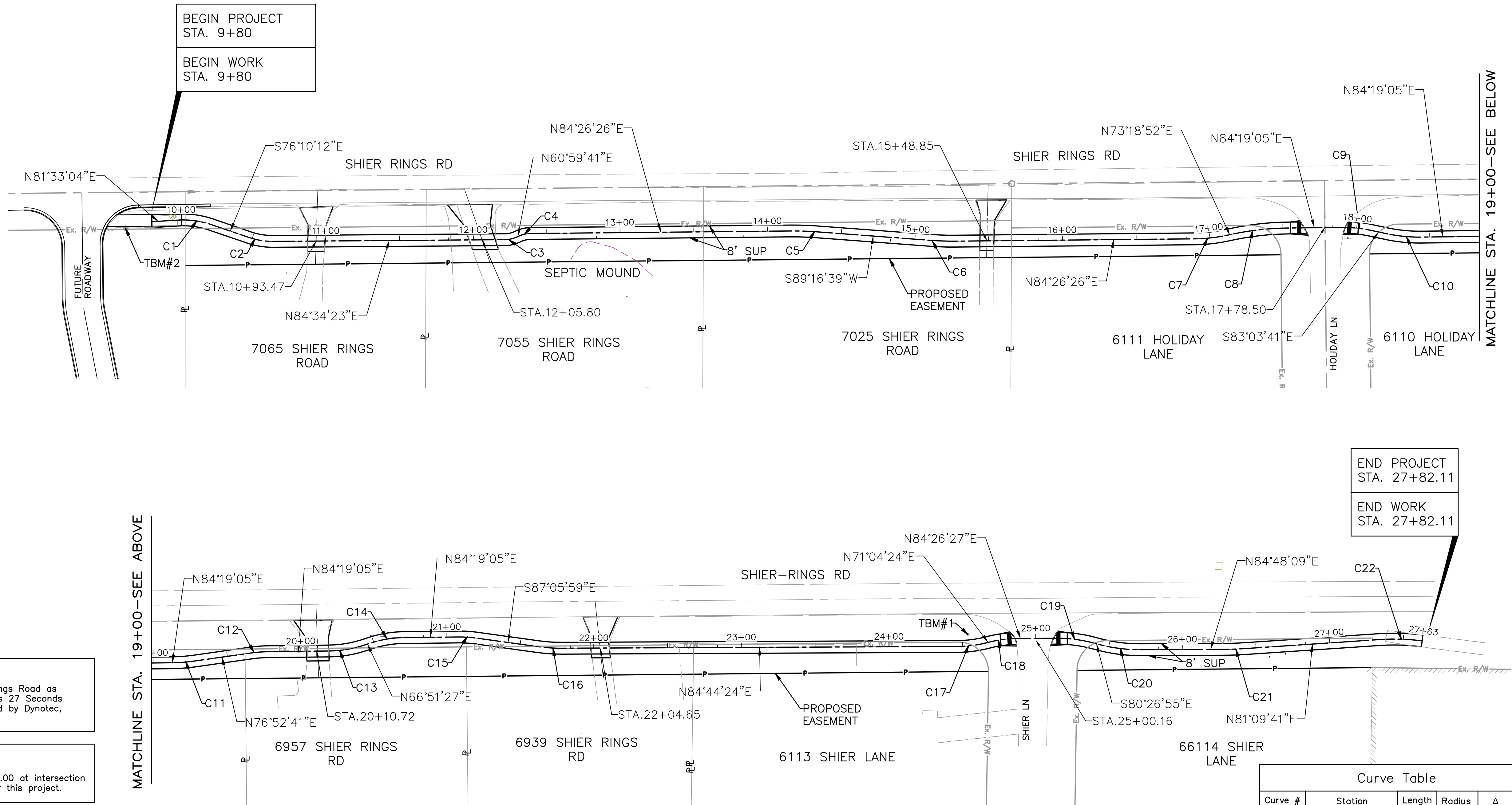
STANDARD CONSTRUCTION DRAWINGS

CITY OF DUBLIN		CITY OF DUBLIN		CITY OF COLUMBUS		ODOT		SUPPLEMENTAL SPECIFICATIONS	
MD-01	08/01/2024			1500	09/15/2015	BP-3.1	01/19/2024	SECTION 100	DUBLIN
MD-04	08/01/2024	ST-02	01/01/2020	1550	09/15/2015				
RD-05	08/01/2024	ST-03	01/01/2020	AA-S130	09/12/2022				
RD-06	08/01/2024	ST-04	01/01/2020	AA-S133A	01/03/2025				
RD-07	08/01/2024	ST-05	01/01/2020	AA-S174	07/09/2012				
				AA-S102	12/06/2013				
PD-02	08/01/2024			AA-S104	08/08/2024				
PD-03	08/01/2024								
PD-08	08/01/2024								

DESIGNED
WCB
CHECKED
MLB

TITLE SHEET

SHIER RINGS ROAD SHARED USE PATH



BASIS OF BEARINGS
 Bearings are based on the centerline of Shier Rings Road as having a bearing of North 84 Degrees 26 Minutes 27 Seconds East as determined from a GPS survey performed by Dynotec, Inc. in May, 2023.

BASIS OF STATIONING
 Shier Rings Road centerline station set = 100+00.00 at intersection with centerline of Cosgray Road as established for this project.

HORIZONTAL CONTROL

Horizontal control is based on the Ohio state plane coordinate system, NAD 1983 (NSRS 2007), Ohio south zone, established by a GPS observation performed by Dynotec, Inc in May 2023. All coordinates are in US Survey Feet Units and are in grid.

NO.	NORTHING (GROUND)	EASTING (GROUND)	ELEVATION	DESCRIPTION
1	N 763239.9	E 1776319	948.09	FCGS5534 RESET
100	N 763265.7	E 1776773	940.00	IPINS
101	N 763385.2	E 1777655	938.50	IPINS
102	N 763442.8	E 1778596	939.75	IPINS

All "PIN SET" are 5/8-inch diameter rebar with a red plastic cap inscribed with a "+".

Bronze disk in concrete monument at the centerline of the right-of-way intersection of Cosgray Road and Shier Rings Rd, inside the roundabout, on an old P/L west, 2 feet south of a witness post, flush with the ground. Monument is on the south line of VMS 6748. Original monument FCGS 5534 replaced a found railroad spike 2 inches deep.

BENCHMARKS		
NO.	ELEVATION	DESCRIPTION
10000	940.79	TBM 1 - N 763440.8 & E 1778637
10002	940.77	TBM 2 - N 763265.8 & E 1776836

Point Table			
Point #	Station	Northing (Ground)	Easting (Ground)
1	9+82.44	763271.78	1776853.76
PC1	10+00.00	763274.36	1776871.13
PT1	10+23.33	763273.27	1776894.29
PC2	10+50.07	763266.88	1776920.25
PT2	10+66.99	763265.66	1776937.05
PC3	12+23.79	763280.49	1777093.15
PT3	12+31.98	763282.91	1777100.91
PC4	12+33.73	763283.76	1777102.44
PT4	12+41.92	763286.17	1777110.20
PC5	14+18.32	763303.26	1777285.78
PT5	14+35.21	763304.19	1777302.63
PC6	15+13.19	763305.17	1777380.61
PT6	15+30.07	763306.09	1777397.46
PC7	16+92.28	763321.81	1777558.91
PT7	17+13.25	763325.85	1777579.45

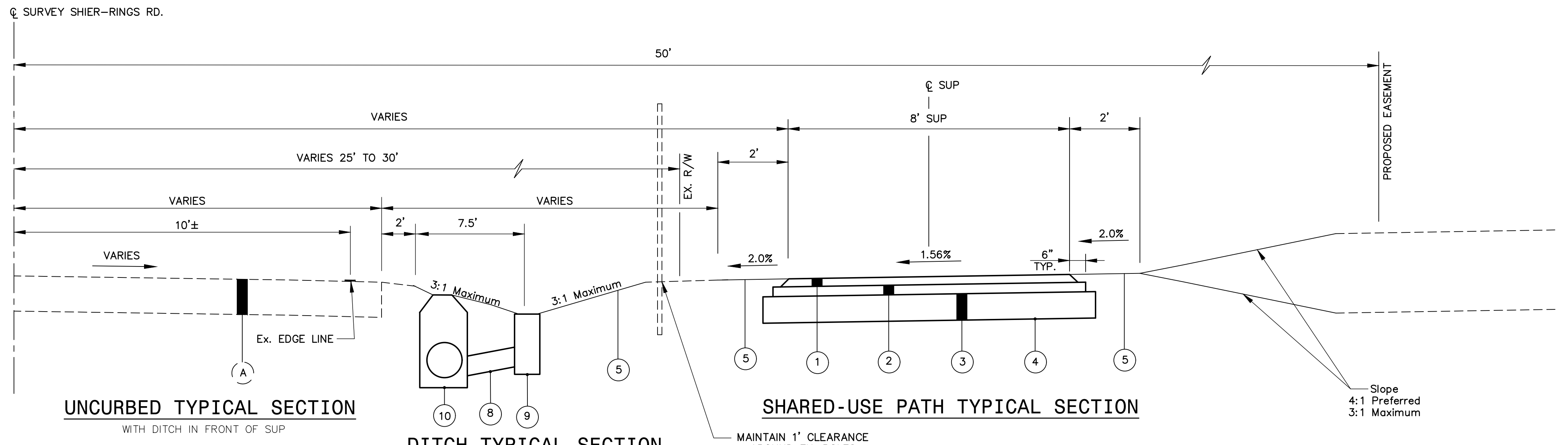
Point Table			
Point #	Station	Northing (Ground)	Easting (Ground)
PC8	17+18.86	763327.46	1777584.82
PT8	17+55.73	763334.60	1777620.94
PC9	17+91.73	763338.16	1777656.76
PT9	18+12.00	763337.94	1777676.98
PC10	18+23.05	763336.60	1777687.96
PT10	18+46.84	763336.34	1777711.70
PC11	19+15.43	763343.13	1777779.96
PT11	19+29.46	763345.42	1777793.78
PC12	19+68.29	763354.24	1777831.60
PT12	19+80.24	763356.19	1777843.38
PC13	20+21.54	763360.28	1777884.48
PT13	20+45.92	763366.32	1777908.00
PC14	20+50.31	763368.05	1777912.04
PT14	20+73.17	763373.72	1777934.09
PC15	21+09.47	763377.31	1777970.21

Point Table			
Point #	Station	Northing (Ground)	Easting (Ground)
PT15	21+23.25	763377.64	1777983.97
PC16	21+65.02	763375.53	1778025.69
PT16	21+80.40	763375.85	1778041.05
PC17	24+49.28	763400.50	1778308.81
PT17	24+68.37	763404.49	1778327.42
PC18	24+71.41	763405.47	1778330.30
PT18	24+88.91	763409.18	1778347.36
PC19	25+15.98	763411.80	1778374.31
PT19	25+41.30	763410.92	1778399.54
PC20	25+46.58	763410.04	1778404.75
PT20	25+73.35	763409.03	1778431.43
PC21	26+29.34	763414.10	1778487.19
PT21	26+45.49	763416.07	1778503.21
PC22	27+36.06	763429.99	1778592.71
2	27+65.25	763431.65	1778621.80

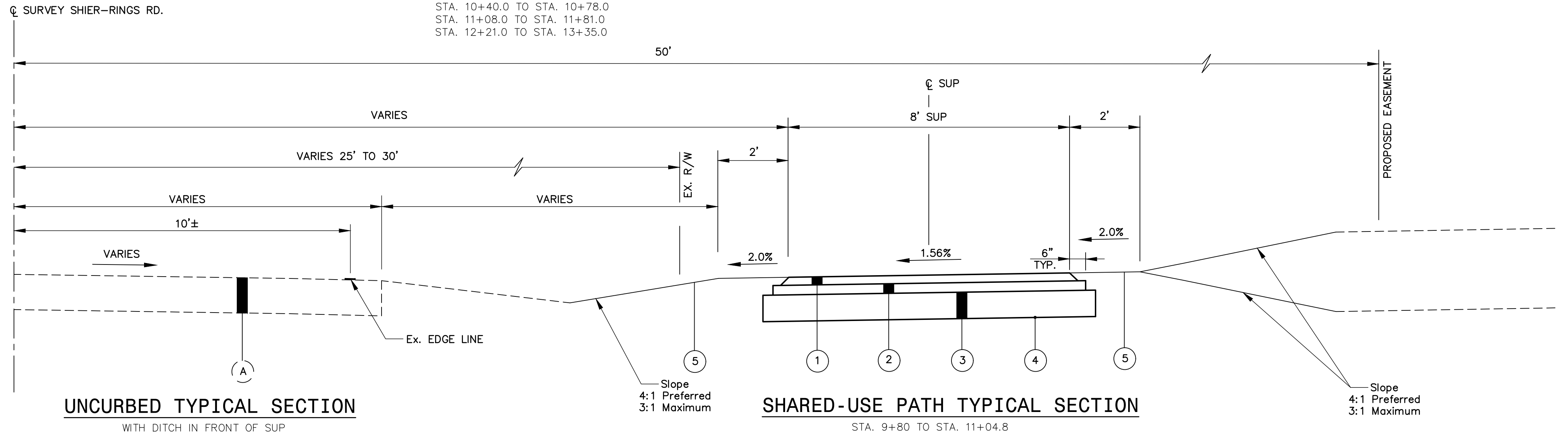
Curve Table					
Curve #	Station	Length	Radius	Δ	T
C1	10+00.00	23.33	60.00	22.28	11.81
C2	10+50.07	16.92	50.00	19.39	8.54
C3	12+23.79	8.18	20.00	23.45	4.15
C4	12+33.73	8.18	20.00	23.45	4.15
C5	14+18.32	16.88	200.00	4.84	8.45
C6	15+13.19	16.88	200.00	4.84	8.45
C7	16+92.28	20.97	108.00	11.13	10.52
C8	17+18.86	36.87	192.00	11.00	18.49
C9	17+91.73	20.26	92.00	12.62	10.17
C10	18+23.05	23.79	108.00	12.62	11.94
C11	19+15.43	14.02	108.00	7.44	7.02
C12	19+68.29	11.95	92.00	7.44	5.98
C13	20+21.54	24.38	80.00	17.46	12.29
C14	20+50.31	22.86	75.00	17.46	11.52
C15	21+09.47	13.78	92.00	8.58	6.90
C16	21+65.02	15.38	108.00	8.16	7.70
C17	24+49.28	19.08	80.00	13.67	9.59
C18	24+71.41	17.50	75.00	13.37	8.79
C19	25+15.98	25.32	96.00	15.11	12.73
C20	25+46.58	26.77	104.00	14.75	13.46
C21	26+29.34	16.14	254.00	3.64	8.07
C22	27+36.06	29.19	150.00	11.15	14.64

SHEET LEGEND

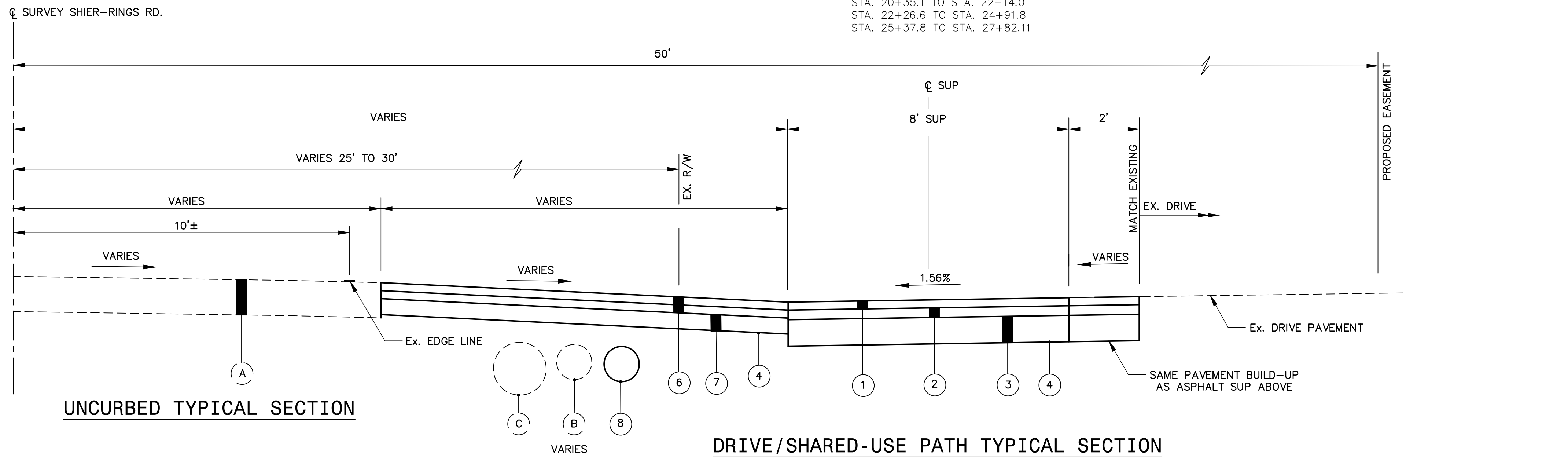
- ① ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (MEDIUM TRAFFIC), PG64-22
- ② ITEM 301 - 3" ASPHALT CONCRETE BASE
- ③ ITEM 304 - 6" AGGREGATE BASE
- ④ ITEM 204 - SUBGRADE COMPACTION
- ⑤ ITEM 659 - SEEDING AND MULCHING
- ⑥ ITEM 452 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE I (448 DRIVEWAYS) PG64-22
PLACE IN TWO (2) 1-1/2" LIFTS, WITH FINAL LIFT MATCHING FINAL GRADE OF SUP
- ⑦ ITEM 304 - 6" AGGREGATE BASE OR NO. 57 STONE
- ⑧ ITEM 901 - STORM PIPE, WITH TYPE 1 BEDDING
- ⑨ ITEM 604 - STORM CATCH BASIN
- ⑩ ITEM 604 - STORM MANHOLE
- (A) EXISTING PAVEMENT
- (B) EXISTING 12" CONCRETE PIPE (TBR)
- (C) EXISTING 18" STORM PIPE



DITCH TYPICAL SECTION
 STA. 10+40.0 TO STA. 10+78.0
 STA. 11+08.0 TO STA. 11+81.0
 STA. 12+21.0 TO STA. 13+35.0



STA. 9+80 TO STA. 11+04.8
 STA. 11+16.4 TO STA. 12+13.7
 STA. 12+31.5 TO STA. 15+60.2
 STA. 15+69.6 TO STA. 17+71.1
 STA. 18+17.7 TO STA. 20+20.1
 STA. 20+35.1 TO STA. 22+14.0
 STA. 22+26.6 TO STA. 24+91.8
 STA. 25+37.8 TO STA. 27+82.11



NOTE: MATCH EXISTING ELEVATIONS FOR EXISTING DRIVES UNLESS OTHERWISE NOTED

* - EXISTING 12" CONCRETE PIPE, PROPOSED 12" STORM
 ** - PROPOSED 12" STORM
 *** - EXISTING 18" STORM PIPE

HORIZONTAL SCALE: N.T.S.
 DESIGNED: WCB
 CHECKED: MLE

TYPICAL SECTIONS

SHIER RINGS ROAD SHARED USE PATH

GENERAL

CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION, AND ANY SUPPLEMENTS THERETO, ALONG WITH CITY OF DUBLIN GENERAL CONDITIONS, DIVISION 100 SHALL GOVERN CONSTRUCTION ITEMS UNLESS OTHERWISE NOTED. ITEM NUMBERS LISTED REFER TO CITY OF COLUMBUS ITEM NUMBERS UNLESS OTHERWISE NOTED.

THE CONTRACTOR INTENDING TO SUBMIT A BID FOR THIS PROJECT SHALL BE PRE-QUALIFIED WITH THE OHIO DEPARTMENT OF TRANSPORTATION IN ACCORDANCE WITH SECTION 102 OF THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND CHAPTER 5525 OF THE OHIO REVISED CODE CONCERNING CONSTRUCTION CONTRACTS.

ALL ITEMS OF WORK CALLED OUT FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR WITH THE COST TO BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.

IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO PROVIDE AND REQUIRE A COMPLETED PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM THE CONTRACT DOCUMENTS WHICH ARE CLEARLY NECESSARY FOR COMPLETION OF THE WORK AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK, THOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE CONTRACT DOCUMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, SUCH INCIDENTAL ITEMS AS SAW CUTTING AND REMOVAL AND/OR RELOCATION OF SIGNS, SPRINKLERS, OR OTHER MISCELLANEOUS ITEMS.

THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION THAT ARE NOT SPECIFIED HEREIN. THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR SAFETY ON THE WORK SITE, OR FOR FAILURE BY THE CONTRACTOR TO PERFORM WORK ACCORDING TO CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL NOTIFY THE CITY OF DUBLIN DIVISION OF ENGINEERING IN WRITING AT LEAST 14 DAYS PRIOR TO BEGINNING CONSTRUCTION.

THE CITY IS RESPONSIBLE FOR OBTAINING AND PROVIDING TO THE CONTRACTOR ALL NECESSARY PERMITS.

ANY MODIFICATION TO THE WORK SHOWN ON DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER, CITY OF DUBLIN.

THE CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITY TO PUBLIC RIGHT-OF-WAY AND AREAS DEFINED AS PERMANENT AND/OR TEMPORARY CONSTRUCTION EASEMENTS, UNLESS OTHERWISE AUTHORIZED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES, AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATIONS. RESETING OF MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER.

PROPERTY BOUNDARIES, INCLUDING PROPERTY LINES AND ROAD RIGHT-OF-WAY, ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND ARE NOT NECESSARILY COMPLETE OR CORRECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINISHED WORK CONFORMING TO THE LINES, GRADES, ELEVATIONS, AND DIMENSIONS CALLED FOR ON THE DRAWINGS AND TYPICAL SECTIONS. PAYMENT FOR CONSTRUCTION LAYOUT SHALL BE MADE AT LUMP SUM PRICE BID FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 623 - CONSTRUCTION LAYOUT STAKES 1 LUMP

NON-RUBBER Tired VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.

THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION.

ALL NON-PAVEMENT AREAS DISTURBED WITHIN THE DESIGNATED EASEMENTS, RIGHTS-OF-WAY, AND LIMITS OF DISTURBANCE AS SHOWN, SHALL BE SEEDED AND STRAWED IN ACCORDANCE WITH ITEM 659 - SEEDING AND MULCHING, AS PER PLAN.

ALL AREAS DISTURBED OUTSIDE THESE LIMITS SHALL BE SEEDED AND STRAWED AT THE CONTRACTOR'S EXPENSE.

TREE TRIMMING WITHIN THE CONSTRUCTION ZONE IS TO BE COMPLETED BY A CERTIFIED ARBORIST. AT THE COMPLETION OF THE PROJECT, THE ARBORIST IS TO RETURN AND TRIM ANY BROKEN BRANCHES AS NEEDED.

TRACKING OR SPILLING MUD, DIRT, OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED ACCORDING TO SECTION 97.38 OF THE DUBLIN CODE OF ORDINANCES. ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE CITY. IF THE CONTRACTOR FAILS TO REMOVE SAID MUD, DIRT, DEBRIS, OR SPILLAGE, THE CITY RESERVES THE RIGHT TO REMOVE THESE MATERIALS AND CLEAN AFFECTED AREAS, THE COST OF WHICH SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ALL SIGNS, LANDSCAPING, STRUCTURES, OR OTHER APPURTENANCES WITHIN RIGHT-OF-WAY DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ALL FIELD TILE BROKEN OR ENCOUNTERED DURING EXCAVATION SHALL BE REPLACED OR REPAIRED AND CONNECTED TO THE PUBLIC STORM SEWER SYSTEM AS DIRECTED BY THE CITY ENGINEER. THE COST OF THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ALL TRENCHES WITHIN PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED ACCORDING TO THE APPROVED CONSTRUCTION DRAWINGS OR SECURELY PLATED DURING NONWORKING HOURS. TRENCHES OUTSIDE THESE AREAS SHALL BE BACKFILLED OR SHALL BE PROTECTED BY APPROVED TEMPORARY FENCING OR BARRICADES DURING NONWORKING HOURS. CLEAN UP SHALL FOLLOW CLOSELY BEHIND THE TRENCHING OPERATION.

UNLESS INDICATED OTHERWISE ON THE PLAN DETAILS, BACKFILL WITHIN A 1:1 INFLUENCE LINE OF EXISTING STRUCTURES (HOUSES, GARAGES, ETC.) OR PUBLIC INFRASTRUCTURE (PAVEMENT, CURBS, SIDEWALKS, SHARED US PATHS, ETC.) SHALL BE ITEM 304 COMPACTED GRANULAR BACKFILL ACCORDING TO THE ITEM 912 OF THE STANDARD SPECIFICATIONS OR LOW STRENGTH MORTAR BACKFILL, TYPE 2 ACCORDING TO ITEM 613. ITEM 911 OF THE STANDARD SPECIFICATIONS SHALL BE USED ELSEWHERE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF THE TRENCHES WITHIN THE RIGHT-OF-WAY AND PUBLIC EASEMENTS FOR A PERIOD OF ONE YEAR FROM THE FINAL ACCEPTANCE OF THE WORK, AND SHALL MAKE ANY NECESSARY REPAIRS AT NO COST TO THE CITY.

PUBLIC ACCESS MANAGEMENT

THE CONTRACTOR SHALL PROVIDE 10' STEEL PLATES TO EACH DRIVEWAY TO MAINTAIN VEHICULAR ACCESS. DRIVEWAY REPAIRS TO BE PERFORMED WITHIN 3 DAYS OF PLATES BEING REMOVED. THE COST OF THESE PLATES SHALL BE INCLUDED IN THE COST FOR MOBILIZATION.

CONCRETE PIPE ENCASEMENT

ALL 12" STORM SEWER SHALL HAVE 4" OF FULL CONCRETE ENCASEMENT WHERE COVER FROM THE FINISHED GRADE TO PIPE CROWN IS LESS THAN 12". IN A MID-RUN END OF ENCASEMENT, ENCASEMENT SHALL BE TAPERED OVER 24" RATHER THAN ENDED ABRUPTLY WHILE CONTINUING UNIFORM HAUNCH SUPPORT. ENCASEMENT CONCRETE SHALL BE CLASS COC 6, 4000 PSI, AIR-ENTRAINED. PROVIDE TYPE 2 BEDDING OR CLSM HAUNCH SUPPORT UNDER ALL ENCASED PIPE. WHERE PIPE JOINTS FALL WITHIN ENCASEMENT AREAS, WRAP PIPE BARREL AT JOINT WITH 8 MIL POLYETHYLENE OR ROOFING FELT BOND BREAKER AND PROVIDE A 1" ISOLATION GAP IN ENCASEMENT CENTERED ON THE JOINT. SEAL GAP WITH FLEXIBLE BITUMINOUS MASTIC AFTER CURE. CONTRACTOR TO SUBMIT MATERIAL SPECIFICATIONS FOR APPROVAL. BACKFILL ABOVE ENCASEMENT WITH PULVERIZED TOPSOIL. CONSTRUCTION TRAFFIC DIRECTLY OVER ENCASED AREAS SHALL NOT BE ALLOWED UNTIL ENCASEMENT CONCRETE HAS REACHED 80% DESIGN STRENGTH. CCTV INSPECTION OF ENCASED STORM SEWER TO BE PERFORMED AFTER INSTALLATION AND PRIOR TO ACCEPTANCE. ALL COSTS ASSOCIATED WITH ENCASEMENT TO BE INCLUDED IN THE LINE ITEM FOR IT, AND PAID BY LINEAR FOOT. TOTAL LENGTH OF FOR ALL ENCASEMENT SECTIONS: 306 LF.

DRAINAGE

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES STORM SEWER, DRAIN, AND DITCH FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PUT INTO SERVICES. THE FLOW OF ALL STORM SEWER, DRAINS, AND OTHER WATERCOURSES ENCOUNTERED AND DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION SATISFACTORY TO THE CITY ENGINEER. PAYMENT FOR THIS SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

WHERE THE WORK CALLS FOR RELOCATION OF EXISTING DITCHES OR STORM SEWER, THE CONTRACTOR SHALL REESTABLISH THE OUTLETS OF ALL PRIVATE DRAINS ENCOUNTERED; SUCH AS DOWNSPOUTS, FOUNDATION DRAINS, CATCH BASINS, YARD DRAINS, ETC., INTO THE NEAREST NEW DITCH OR STORM SEWER AS APPROVED BY THE ENGINEER. THE COST FOR REESTABLISHING PRIVATE DRAIN OUTLETS SHALL BE INCLUDED IN THE VARIOUS STORM SEWER ITEMS.

EXISTING STORM SEWER LOCATED WITHIN THE WORK LIMITS THAT IS TO REMAIN IN SERVICES HAS BEEN MARKED ON THE PLANS "TO REMAIN OR "DO NOT DISTURB". THE CONTRACTOR SHALL PROTECT THESE SEWERS AND THEIR ASSOCIATED STRUCTURES FROM DAMAGE DURING CONSTRUCTION. ALL OTHER EXISTING STORM SEWER PIPE, CATCH BASINS, AND INLETS LOCATED WITHIN THE CONSTRUCTION LIMITS NOT DESIGNATED TO REMAIN SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE APPLICABLE ITEM EXISTING HEADWALLS SHALL BE REMOVED AND DISPOSED OF AS INDICATED WITH NO SEPARATE PAYMENT.

ALL PRECAST CONCRETE PRODUCTS SHALL BE INSPECTED AT THE LOCATION OF MANUFACTURER. APPROVED PRECAST CONCRETE PRODUCTS WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT INSPECTION HAS BEEN PERFORMED BY THE CITY OF COLUMBUS. PRECAST CONCRETE PRODUCTS WITHOUT PROOF OF INSPECTION SHALL NOT BE APPROVED FOR INSTALLATION. THE COST OF INSPECTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.

REVIEW OF DRAINAGE FACILITIES

WHERE PLANS CALL FOR 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 FOR BOTH LINE AND GRADE PRIOR TO START OF PIPE LAYING.

CROSSING AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS CALL FOR 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 FOR BOTH LINE AND GRADE PRIOR TO START OF PIPE LAYING.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT OR EXISTING APPURTENANCE TO BE CONNECTED DIFFERS FROM THE PLAN ELEVATION, THE CITY 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 A PROPOSED CONDUIT WILL CONFLICT WITH AN EXISTING SEWER OR UNDERGROUND UTILITY WHEN CONSTRUCTED AS SHOWN ON THE PLAN, THE CITY ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION ON ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE CONFLICT.

PAYMENT FOR DETERMINATION OF LINE AND GRADE OF EXISTING UTILITIES AS REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT CONTRACT ITEMS.

STORM SEWER

GRANULAR BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL ACCORDING TO ITEM 912 OF THE STANDARD SPECIFICATIONS OR LOW STRENGTH MORTAR BACKFILL ACCORDING TO ITEM 613, TYPE 2 OF THE STANDARD SPECIFICATIONS AS DIRECTED BY THE CITY ENGINEER.

ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION C76, WALL B, CLASS IV FOR PIPE DIAMETERS 12 INCHES TO 15 INCHES, CLASS III FOR 18 INCHES TO 24 INCH PIPES, AND 27 INCHES AND LARGER PIPE SHALL BE CLASS II, UNLESS OTHERWISE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.

STORM INLETS OR CATCH BASINS SHALL BE CHANNELIZED AND LIDS SHALL INCLUDE CITY OF DUBLIN LOGO AND ALL CATCH BASIN GRATES SHALL INCLUDED ENGRAVED LETTERING: "DUMP NO WASTE; DRAINS TO RIVER."

ALL EXISTING CATCH BASINS TO REMAIN IN SERVICE SHALL HAVE THEIR GRATES REPLACED WITH EJ 5110 M3, BICYCLE-SAFE GRATE. ALL NEW CATCH BASINS SHALL ALSO HAVE BICYCLE-SAFE GRATES.

EROSION AND SEDIMENT CONTROL

A SEDIMENT AND EROSION CONTROL PLAN MUST BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL IF A SEDIMENT AND EROSION CONTROL PLAN HAS NOT ALREADY BEEN INCLUDED WITH THE APPROVED CONSTRUCTION DRAWINGS. THIS PLAN MUST BE MADE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE DESIGN OF EROSION CONTROL SYSTEMS SHALL FOLLOW THE REQUIREMENTS OF OHIO EPA, ITEM 207 OF CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND THE CITY ENGINEER.

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN

SEEDING AND MULCHING TO BE PER COLUMBUS C&MS ITEM 659, CLASS 1 EXCEPT FOR THE SEED SPECIFICATION AS FOLLOWS:

GRASS SEED MUST BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH THE A.O.S.A "JOURNAL OF SEED TECHNOLOGY" RULES FOR TESTING SEED FOR PURITY AND GERMINATION TOLERANCES.

SEED SPECIES SHALL BE AS FOLLOWS, WITH NOT LESS THAN 90 PERCENT GERMINATION, NOT LESS THAN 98 PERCENT PURE SEED, AND NOT MORE THAN 0.5 PERCENT WEED SEED.

SUN AND PARTIAL SHADE MIXTURE PROPORTIONED BY WEIGHT AS FOLLOWS:

- 1) 50 PERCENT KENTUCKY BLUEGRASS (POA PRATENSIS, MINIMUM OF TWO "IMPROVED" CULTIVARS.)
- 2) 50 PERCENT PERENNIAL RYEGRASS (LOIUM PERENNE).

THE FOLLOWING QUANTITIES ARE INCLUDED FOR SEEDING AND MULCHING:

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN	3287 S.Y.
ITEM 659 - REPAIR SEEDING AND MULCHING	165 S.Y.
ITEM 659 - COMMERCIAL FERTILIZER	0.3 TONS
ITEM 659 - WATER	9 MGAL

SAW CUTTING IS INCLUDED

THE COST OF SAW CUTTING FOR THE REMOVAL OF PAVEMENT, CURB, WALKS, ETC. SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE ITEM 202 WORK. SAW CUTTING IS REQUIRED TO PROVIDE SMOOTH, STRAIGHT EDGES FOR REMOVAL PURPOSES.

ITEM 604 - INSPECTION WELL, AS PER PLAN

EACH EXISTING INSPECTION WELL ENCOUNTERED ALONG THIS PROJECT SHALL BE RELOCATED TO THE LOCATION CALLED OUT IN THE PLANS. THE CONTRACTOR SHALL INSTALL A NEW INSPECTION WELL FOR EACH LOCATION AND INSTALL 6" PVC CONDUIT AS NECESSARY TO COMPLETE ALL CONNECTIONS AS SHOWN IN THE PLANS AND IN CITY OF COLUMBUS STANDARD DRAWING AA-S174. PAYMENT SHALL BE PER LOCATION AND SHALL INCLUDE THE REMOVAL OF ANY EXISTING BOX AND UNNEEDED PIPE AND INSTALLATION OF THE NEW INSPECTION WELL AND ALL PIPE NEEDED TO COMPLETE THE DRAINAGE CONNECTION.

PAYMENT SHALL BE FOR: ITEM 604 - INSPECTION WELL, AS PER PLAN 5 EACH

UTILITIES

UTILITIES KNOWN TO BE LOCATED WITHIN THE LIMITS OF THIS PROJECT ARE LISTED BELOW WITH CONTACT INFORMATION:

AMERICAN ELECTRIC POWER
700 MORRISON ROAD
GAHANNA, OHIO 43230
TEL: 740-647-2080
RELMATTHEWS@AEP.COM
CONTACT: ROBERT MATTHEWS

COLUMBIA GAS
3550 JOHNNY APPLESEED CT.
COLUMBUS, OHIO 43231
TEL: 614-370-1906
RCALDWELL@NISOURCE.COM
CONTACT: ROB CALDWELL

CITY OF DUBLIN
DIVISION OF ENGINEERING
6555 SHIER-RINGS ROAD
DUBLIN, OHIO 43016
TEL: 614-410-4740

ZAYO GROUP
251 NEILSTON STREET
COLUMBUS, OHIO 43215
TEL: 765-341-1199
WAYLON.HIGGINS@ZAYO.COM
ZAYO.RELO.OHIO@ZAYO.COM
CONTACT: WAYLON HIGGINS

AT&T
111 N. 4TH STREET
COLUMBUS, OHIO 43215
TEL: 614-477-9261
CE2383@ATT.COM
CONTACT: CHRIS EICHORN

DUBLINK-TEAM FISHEL
1600 WALCUTT ROAD
COLUMBUS, OHIO 43228
TEL: 614-921-8546
SJPUTKA@TEAMFISHEL.COM
CFNINFO@COLUMBUSFIBER.NET
CONTACT: SAM PUTKA

CHARTER/SPECTRUM
3760 INTERCHANGE ROAD
COLUMBUS, OHIO 43204
TEL: 614-496-2851
FRANK.HARRIS@CHARTER.COM
DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM
CONTACT: FRANK HARRIS

CROWN CASTLE FIBER
2 EASTON OVAL - SUITE 425
COLUMBUS, OHIO 43219
TEL: 614-230-5765
CONTACT: JOE PEPPER

ALTA FIBER
201 E. 4TH ST.
CINCINNATI, OHIO 45201
BLDG: 121-900
BRADLEY.KEARNS@ALTA FIBER.COM
JITRENCH@ALTA FIBER.COM
TEL: 513-417-5206
CONTACT: BRAD KEARNS

THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO OHIO UTILITIES PROTECTION SERVICE (TELEPHONE NUMBER 800-362-2764), PRODUCER'S UNDERGROUND PROTECTION SERVICE (TELEPHONE NUMBER 614-587-0486), AND TO OWNERS OF UNDERGROUND UTILITIES THAT ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE. NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS BEFORE START OF CONSTRUCTION.

THE IDENTITY AND LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF DUBLIN, CITY ENGINEER, AND THE DESIGN PROFESSIONAL ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR DEPTHS OF UNDERGROUND FACILITIES SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF THE SAME AND FOR ANY RESULTING CONTINGENT DAMAGE.

LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES, WHETHER SHOWN OR NOT SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION, AND SHALL MAKE ADJUSTMENTS IN ELEVATIONS AS DIRECTED BY THE ENGINEER TO PROVIDE SUFFICIENT CLEARANCE BETWEEN THE PROPOSED IMPROVEMENTS AND EXISTING UTILITIES.

WHEN UNKNOWN OR INCORRECTLY LOCATED UNDERGROUND UTILITIES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE CITY ENGINEER.

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE PROXIMITY OF EXISTING AND/OR RELOCATED UTILITY FACILITIES. COSTS TO EXPOSE CONDUIT SHALL BE INCLUDED IN THE ITEMS OF WORK AFFECTED. THE CONTRACTOR IS REMINDED TO KEEP THEIR OUPS TICKET UPDATED ACCORDING TO INDUSTRY PRACTICES.

AERIAL UTILITY COORDINATION

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY LINES. CONTRACTOR SHALL CONTACT AND COORDINATE DIRECTLY WITH THE UTILITY COMPANIES DIRECTED AS NEEDED DURING CONSTRUCTION AND SHALL MAINTAIN APPROPRIATE OSHA AND NESC CLEARANCES, INCLUDING AND NECESSARY ENGINEERING CONTROLS.

SUBGRADE

THE CONTRACTOR SHALL DEFINE THE LIMITS OF ANY WEAK SOILS ENCOUNTERED BY PROOF ROLLING. WHERE SOFT SUBGRADE IS ENCOUNTERED IN CUTS, DUE TO NO FAULT OF THE CONTRACTOR, AND SATISFACTORY COMPACTION CANNOT BE OBTAINED, THE UNSTABLE MATERIAL SHALL BE REMOVED AND REPLACED PER CMSC 204.04. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED AS AN ALLOWANCE FOR BIDDING PURPOSES. THESE ITEMS SHALL ONLY BE USED "AS DIRECTED" BY THE ENGINEER.

ITEM 204 - EXCAVATION OF SUBGRADE	5 CY
ITEM 204 - GRANULAR EMBANKMENT, NO. 2 STONE	5 CY

**ITEM 203 - EXCAVATION, AS PER PLAN
ITEM 203 - EMBANKMENT, AS PER PLAN**

THE EXCAVATION OF ASPHALT PAVEMENT, GRAVEL BASE, ASPHALT CURB, TOPSOIL OR UNSUITABLE MATERIALS NOT OTHERWISE ITEMIZED ON THIS PROJECT ARE INCLUDED WITHIN ITEM 203 - EXCAVATION, AS PER PLAN QUANTITIES FOR PAYMENT. ALL MATERIAL EXCAVATED FOR CONSTRUCTION INCLUDING TOPSOIL AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF UNLESS OTHERWISE APPROVED BY THE CITY.

ALL SOIL STOCKPILES INCLUDING TRENCH EXCAVATION STOCKPILES, SHALL BE PROTECTED FROM EROSION.

ALL MATERIAL TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NE EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOOD PLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.

THE FOLLOWING QUANTITIES ARE PROVIDED TO ADDRESS EARTHWORK.

ITEM 203 - EXCAVATION, AS PER PLAN	943 CY
ITEM 203 - EMBANKMENT, AS PER PLAN	115 CY

PAVEMENT

PAVEMENTS SHALL BE CUT IN NEAT, STRAIGHT LINES TO THE FULL DEPTH OF PAVEMENT, OR AS REQUIRED BY THE CITY ENGINEER.

BUTT JOINTS BETWEEN EXISTING AND NEW PAVEMENT SHALL BE MADE IN ACCORDANCE WITH ODOT STD. CONSTRUCTION DRAWING BP-3.1.

THE CONTRACTOR SHALL NOT USE ANY RECLAIMED MATERIALS IN ITEM 304 - 6" AGGREGATE BASE.

ITEM 304 - AGGREGATE BASE

THE CONTRACTOR SHALL NOT USE ANY RECLAIMED MATERIALS IN ITEM 304 FOR PAVEMENT AREAS AND TRENCH BACKFILL. ITEM 304 SHALL BE CRUSHED CARBONATE STONE. CRUSHED GRAVEL, ACBFS, STEEL SLAG, AND SAND SHALL NOT BE PERMITTED.

TIE-IN PROCEDURE FOR STA 19+34

THE CONNECTION FOR THE PROPOSED CATCH BASIN AND 12" STORM SEWER AT STA. 19+34 WITH AN EXISTING MANHOLE SHALL BE CORE DRILLED, SIZED TO THE NEW PIPE AND GROUTED WITH NON-SHRINK GROUT OR HYDRAULIC CEMENT. PAYMENT FOR THIS SHALL BE INCLUDED IN THE RELEVANT LINE ITEMS.

GENERAL NOTES

SHIER RINGS ROAD SHARED USE PATH

ITEM 516 - PREFORMED EXPANSION JOINT FILLER (PEJF)

IN ALL LOCATIONS WHERE CONCRETE JOINTS REQUIRE A PREFORMED EXPANSION JOINT FILLER, THE CONTRACTOR SHALL USE A PEJF THAT IS MADE OF A RECYCLED PLASTIC/RUBBER MATERIAL. OTHER TYPES OF PEJF SHALL NOT BE ALLOWED ON THIS PROJECT.

TREE PRESERVATION AND SITE CLEARING

ALL TREES WITHIN THE CONSTRUCTION AREA NOT DESIGNATED FOR REMOVAL, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE PRESERVED WITHOUT TREES TO BE PRESERVED SHALL BE PROTECTED WITH HIGH VISIBILITY TREE PROTECTION FENCING PRIOR TO CONSTRUCTION. THE CITY RESERVES THE RIGHT TO DIRECT THE CONTRACTOR TO INSTALL ADDITIONAL FENCING IN AREAS WHERE TREES COULD BE DAMAGED DURING CONSTRUCTION.

ROUNDING

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

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION 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.

WORKING HOURS

THE CONTRACTOR IS PERMITTED TO WORK BETWEEN 7:00 AM AND 7:00 PM, MONDAY THROUGH SATURDAY. ANY WORK WHICH REQUIRES A LANE RESTRICTION WILL BE IN ACCORDANCE WITH ITEM 614 - MAINTENANCE OF TRAFFIC, AS PER PLAN. PERMISSION TO WORK ON SUNDAYS AND HOLIDAYS MUST BE REQUESTED IN WRITING AND APPROVED BY THE CITY ENGINEER.

CONSTRUCTION NOISE

THE CONTRACTOR'S CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED SO AS TO ELIMINATE ALL UNNECESSARY NOISE, DUST, AND ODORS. THE USE OF OIL OR OTHER MATERIALS FOR DUST CONTROL, WHICH MAY CAUSE TRACKING, IS PROHIBITED.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK SHOWN, LABELED, OR LISTED AS "CONTINGENCY" OR REFERENCED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER", UNLESS AUTHORIZED BY THE ENGINEER, OR A REPRESENTATIVE OF THE CITY OF DUBLIN.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 1 HR

ITEM 661 - LANDSCAPING

THIS ITEM CONSISTS OF FURNISHING AND PLANTING MULTIPLE SPECIES OF TREES WITHIN THE PROJECT EXTENTS AND SHALL INCLUDE THE FOLLOWING:

A DECIDUOUS AND CONIFEROUS TREE, CALIPER IN SIZE PER PLAN, ACCORDING TO THE REQUIREMENTS OF 661 AND THE DETAIL BELOW. SPECIES OF TREE IS TO BE APPROVED BY THE CITY. THE LOCATION OF THE PROPOSED TREES SHALL BE UNDER THE DIRECTION OF THE CITY OF DUBLIN.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK NOTED ABOVE.

- ITEM 661 - DECIDUOUS TREE, 3" CALIPER, AS PER PLAN 9 EACH
- ITEM 661 - CATALPA PURPUREA, 2" CALIPER, AS PER PLAN 2 EACH
- ITEM 661 - THUJA GREEN GIANT ARBORVITAE, AS PER PLAN 22 EACH
(6 FT MIN. HEIGHT AT PLANTING)
- ITEM 661 - KETELEERI JUNIPERS, AS PER PLAN 5 EACH
(6 FT MIN. HEIGHT AT PLANTING)
- ITEM 661 - HYDRANGEA BUSHES, AS PER PLAN 4 EACH

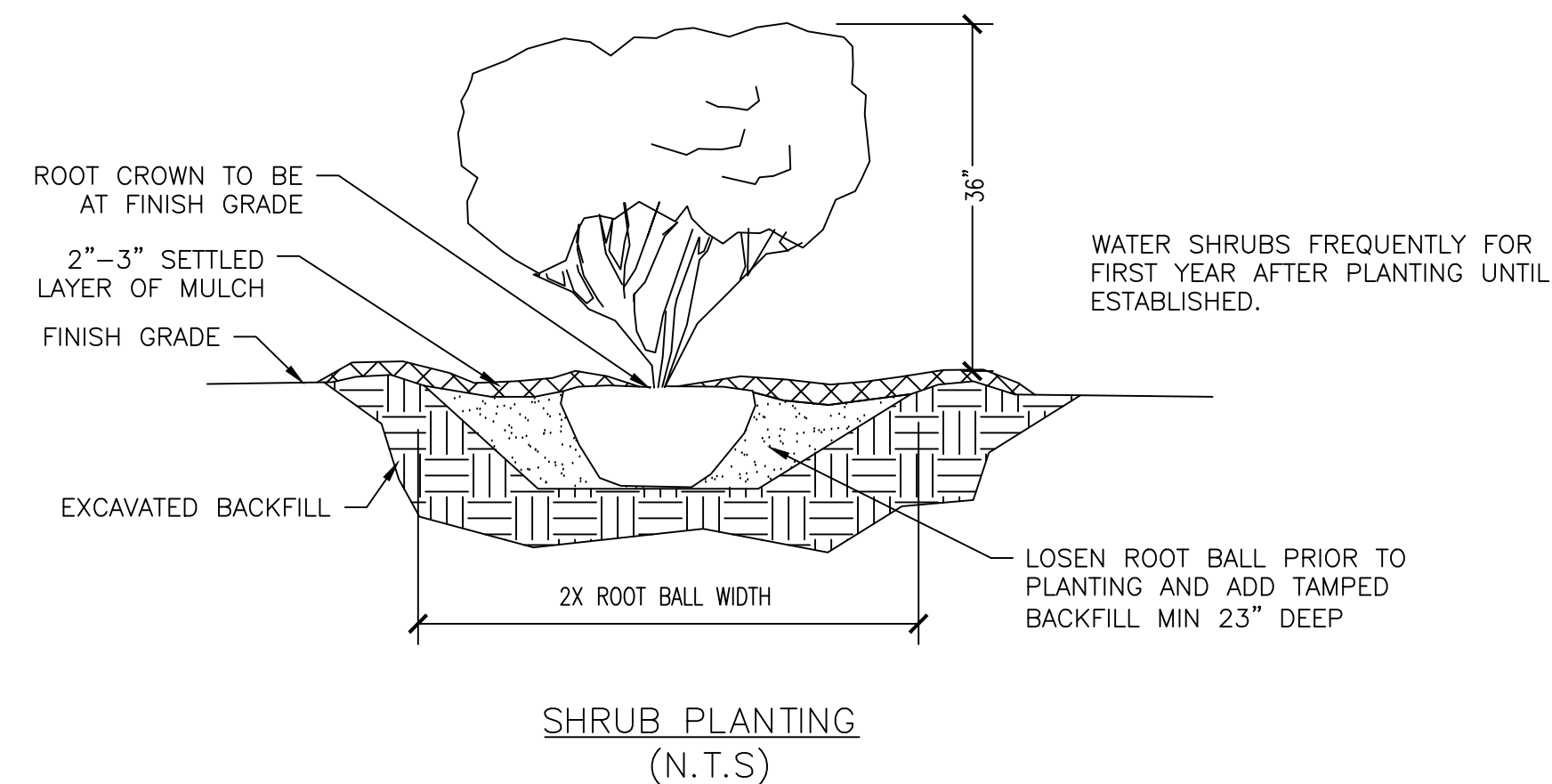
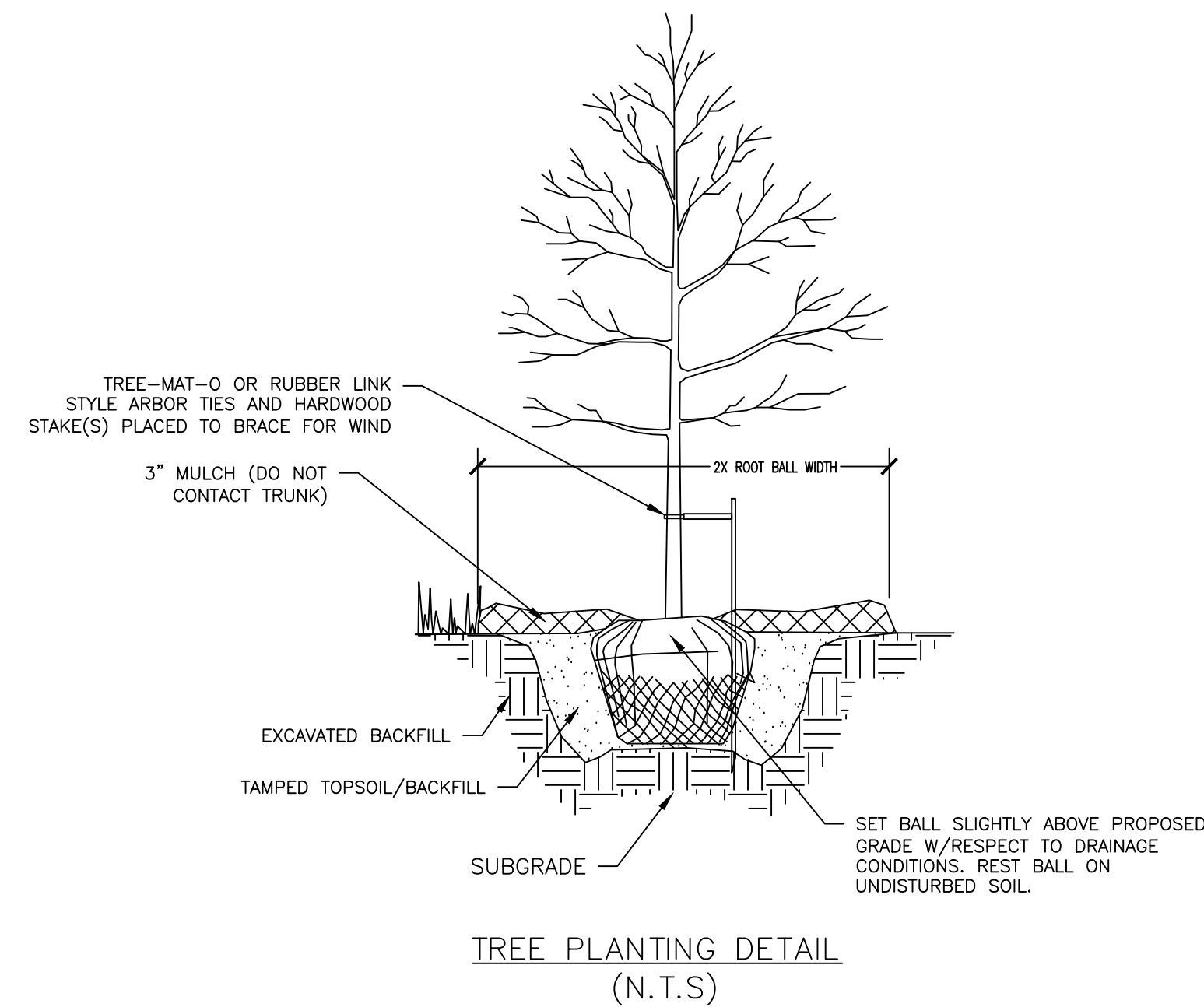
ITEM 653 - 4" TOPSOIL FURNISHED AND PLACED, AS PER PLAN

A MINIMUM 4 INCHES OF PULVERIZED TOPSOIL SHALL BE PLACED IN ALL AREAS TO BE SEEDED. PRIOR TO PLACING TOPSOIL IN CUT AREAS, THE EARTH SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PLACE 4 INCHES OF TOPSOIL. THE COST OF EXCAVATION AND DISPOSAL OF SURPLUS MATERIALS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE VARIOUS CONTRACT ITEMS.

TOPSOIL SHALL BE REMOVED AND WASTED OR UTILIZED IN NON-LOAD BEARING FILLS IN ACCORDANCE WITH THE SPECIFICATIONS. NO EXTRA COMPENSATION SHALL BE PAID FOR THE REMOVAL OF EXCESS TOPSOIL AS REQUIRED TO OBTAIN A SUITABLE SUBGRADE. PAYMENT FOR TOPSOIL REMOVAL IS INCLUDED IN ITEM 203 -EXCAVATION, AS PER PLAN.

ALL TOPSOIL MATERIALS AND FINAL AREA OF SUBGRADE PREPARATION SHALL BE FREE FROM ROCK AND OTHER FOREIGN MATERIAL OF 1/2" OR GREATER IN ANY DIMENSION. TOPSOIL REMOVED ON SITE CAN BE REUSED FOR ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN, IF SUITABLE AS APPROVED BY THE ENGINEER.

QUANTITY FOR ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN 365 C.Y.



DESIGNED
WCB
CHECKED
MLB

GENERAL NOTES

SHIER RINGS ROAD SHARED USE PATH

EXISTING SYMBOLS

- FIRE HYDRANT
- WATER VALVE
- WATER REDUCER
- SANITARY MANHOLE
- COMBINATION MANHOLE
- SANITARY STRUCTURE NUMBER
- STORM MANHOLE
- GRATED STM MANHOLE
- CURB INLET MANHOLE
- CURB & GUTTER INLET
- CATCH BASIN
- STORM STRUCTURE NUMBER
- GAS VALVE
- GAS METER
- PULLBOX
- TRAFFIC PULL BOX
- SIGNAL CONTROLLER
- RAILROAD TRACKS
- VARIOUS UTILITY BOX
- UTILITY POLE
- LIGHT POLE
- SIGNAL POLE
- SIGNAL PEDESTAL SUPPORT
- MAILBOX
- SIGNS
- SOIL BORING
- GUY ANCHOR
- PARKING METER
- DOUBLE PARKING METER
- BENCHMARK/TEMPORARY BENCHMARK
- IRON PIN FOUND
- IRON PIPE FOUND
- MAG NAIL FOUND
- MONUMENT BOX FOUND
- RAILROAD SPIKE FOUND
- STUMP
- BUSH

PROPOSED SYMBOLS

- RELOC. FIRE HYDRANT
- WATER REDUCER
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SANITARY STRUCTURE NUMBER
- STORM MANHOLE
- STORM CLEANOUT
- CURB INLET
- CATCH BASIN
- STORM STRUCTURE NUMBER
- GAS VALVE
- DETECTABLE WARNING
- PULLBOX
- QUANTITY BUBBLE
- LIGHT POLE
- SIGNAL POLE
- SIGNAL PEDESTAL SUPPORT
- TRAFFIC PULL BOX
- SIGNAL CONTROLLER
- SIGNAL POWER METER CABINET
- GUY ANCHOR
- PARKING METER
- DOUBLE PARKING METER
- UTILITY POLE
- BENCHMARK/TEMPORARY BENCHMARK SET
- I.R.S. IRON PIN SET
- I.R.S. IRON PIPE SET
- M.N.S. MAG NAIL SET
- MONUMENT BOX SET
- RAILROAD SPIKE SET

ABBREVIATIONS

- | | | |
|---------------------------------------|---|---------------------------------------|
| ADA ___ AMERICANS WITH DISABILITY ACT | GM ___ GAS MAIN | RP ___ RECORD PLAN |
| AEP ___ AMERICAN ELECTRIC POWER | GRND ___ GROUND | RR ___ RAILROAD |
| ASPH ___ ASPHALT | X" GS ___ 1" GAS SERVICE | RT ___ RIGHT |
| AVE ___ AVENUE | GV ___ GAS VALVE | SAN ___ SANITARY SEWER |
| BH ___ BULK HEAD | HORZ ___ HORIZONTAL | SCP ___ SITE COMPLIANCE PLAN |
| BLVD ___ BOULEVARD | HP ___ HIGH POINT | SF ___ SQUARE FEET |
| BM ___ BENCH MARK | HR ___ HOUR | SGNL ___ SIGNAL |
| BT ___ BOTH | HW ___ HEADWALL | SHLD ___ SHOULDER |
| CATV ___ CABLE TELEVISION | IN ___ INSTRUMENT NUMBER | SPEC ___ SPECIAL |
| CB ___ CATCH BASIN | INV ___ INVERT | X" SS ___ 6" SANITARY SERVICE |
| CXXXXX ___ CC PLAN | IRRG ___ IRRIGATION | ST ___ STREET |
| CL ___ CENTERLINE | LAT ___ LATERAL | STA ___ STATION |
| CI ___ CURB INLET | LBS ___ POUNDS | STM ___ STORM SEWER |
| CIMH ___ CURB INLET MANHOLE | LF ___ LINEAR FEET | SY ___ SQUARE YARDS |
| CkFT ___ CIRCUIT FEET | LN ___ LANE | TBM ___ TEMPORARY BENCH MARK |
| CNTRL ___ CONTROLLER | LP ___ LOW POINT | TC ___ TOP OF CASTING |
| CO ___ CLEANOUT | LS ___ LUMP SUM | TDC ___ TOP OF DROP CURB |
| COC ___ CITY OF COLUMBUS | LT ___ LEFT | TELE ___ TELEPHONE |
| COL GAS ___ COLUMBIA GAS | MB ___ MAILBOX | TEMP ___ TEMPORARY |
| COMB ___ COMBINED | MGAL ___ 1000 GALLONS | TOC ___ TOP OF CURB |
| COMM ___ COMMUNICATION | MH ___ MANHOLE | TRAF ___ TRAFFIC |
| CONC ___ CONCRETE | MOD ___ MODIFIED | TYP ___ TYPICAL |
| CONST ___ CONSTRUCTION | NF ___ NOT FOUND | UD ___ UNDERDRAIN |
| CT ___ COURT | NTS ___ NOT TO SCALE | UG ___ UNDERGROUND |
| CY ___ CUBIC YARDS | OFF ___ OFFSET | UGE ___ UNDERGROUND ELECTRIC |
| DB ___ DUCT BANK | OH ___ OVERHEAD | UTIL ___ UTILITY |
| DEFL ___ DEFLECTION | OHC ___ OVERHEAD COMM | VC ___ VERTICAL CURVE |
| DI ___ DUCTILE IRON | OHD ___ OVERHEAD DOOR | VERT ___ VERTICAL |
| DOP ___ DIVISION OF POWER | OHE ___ OVERHEAD ELECTRIC | WM ___ WATER MAIN |
| DOT ___ DEPARTMENT OF TECHNOLOGY | OUPS ___ OHIO UTILITY PROTECTION SERVICES | WS ___ WATER SERVICE |
| DW ___ DEWATERING | PL ___ PROPERTY LINE | X" WS ___ 1" WATER SERVICE |
| XXXX-E ___ E PLAN | PB ___ PULL BOX | WSB ___ WATER SERVICE BOX |
| EA ___ EACH | PC ___ POINT OF CURVATURE | WSP ___ WATER SERVICE PLAN |
| ELEC ___ ELECTRIC | PE ___ PEDESTRIAN | WV ___ WATER VALVE |
| ELIPT ___ ELLIPTICAL | PKWY ___ PARKWAY | (ATG) ___ ADJUST TO GRADE |
| EOP ___ EDGE OF PAVEMENT | PROP ___ PROPOSED | (APP) ___ AS PER PLAN |
| ESMT ___ EASEMENT | PT ___ POINT OF TANGENCY | (DND) ___ DO NOT DISTURB |
| EW ___ ENDWALL | PVI ___ POINT OF VERTICAL INTERSECT | (FIP) ___ FILL IN PLACE |
| EX ___ EXISTING | PVMT ___ PAVEMENT | (PA) ___ PREVIOUSLY ABANDONED |
| FDC ___ FIRE DEPARTMENT CONNECTION | R ___ RADIUS | (R&B) ___ REMOVE AND REBUILD |
| FDN ___ FOUNDATION | R/W ___ RIGHT-OF-WAY | (R&R) ___ REMOVE AND RESET |
| FFE ___ FINISHED FLOOR ELEVATION | RCC ___ ROLLER COMPACTED CONCRETE | (RELOC) ___ RELOCATE |
| FH ___ FIRE HYDRANT | RCP ___ ROCK CHANNEL PROTECTION | (RTG) ___ RECONSTRUCT TO GRADE |
| FO ___ FIBER OPTIC | RCP ___ REINFORCED CONCRETE PIPE | (TBA) ___ TO BE ABANDONED |
| GAL ___ GALLON | RD ___ ROAD | (TBR) ___ TO BE REMOVED |
| GB ___ GRADE BREAK | X" RD ___ 6" ROOF DRAIN | (TBRL) ___ TO BE RELOCATED |
| | | (TBRs) ___ TO BE REMOVED AND SALVAGED |

EXISTING CONDITIONS LINETYPES

PROPOSED LAYOUT LINETYPES

- | | | |
|-----------------------------------|---|---|
| CENTERLINE SURVEY/CONSTRUCTION | --- | --- |
| EDGE OF PAVEMENT | --- | --- |
| CURB | --- | --- |
| SIDEWALK/DRIVEWAY/SUP | --- | --- |
| FENCE | -X-X-X- | -X-X-X- |
| GUARDRAIL | -o-o-o- | -o-o-o- |
| RIGHT OF WAY | -Ex R/W- -Ex R/W- | -R/W- |
| UTILITY EASEMENT | -Ex U- -Ex U- -Ex U- | -U- |
| PERMANENT EASEMENT | -Ex P- -Ex P- -Ex P- | -P- |
| CHANNEL EASEMENT | -Ex CH- -Ex CH- | -CH- |
| HIGHWAY EASEMENT | -Ex SH- -Ex SH- | -SH- |
| L/A HIGHWAY EASEMENT | -Ex L/A-R/W- -Ex L/A-R/W- | -L/A-R/W- |
| SEWER EASEMENT | -Ex S- -Ex S- -Ex S- | -S- |
| DITCH FLOW LINE | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| WATER | -W- -W- -W- -W- | -W- -W- -W- -W- |
| WATER ≥ 24" | -WS- -WS- -WS- -WS- | -WS- -WS- -WS- -WS- |
| WATER SERVICE | -WS- -WS- -WS- -WS- | -WS- -WS- -WS- -WS- |
| SANITARY | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| SANITARY ≥ 24" | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| STORM | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| STORM ≥ 24" | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| COMBINATION STORM & SEWER | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| COMBINATION STORM & SEWER ≥ 24" | -<->->-<->->-<->->-<->->- | -<->->-<->->-<->->-<->->- |
| GAS | -GM- -GM- -GM- -GM- | -GM- -GM- -GM- -GM- |
| COMMUNICATION | -C- -C- -C- -C- | -C- -C- -C- -C- |
| OVERHEAD COMMUNICATION | -OHC- -OHC- -OHC- -OHC- | -OHC- -OHC- -OHC- -OHC- |
| COMMUNICATION DUCT BANK | -CDB- -CDB- -CDB- -CDB- | -CDB- -CDB- -CDB- -CDB- |
| COMMUNICATION DUCT BANK ≥ 24" | -CDB- -CDB- -CDB- -CDB- | -CDB- -CDB- -CDB- -CDB- |
| ELECTRIC | -E- -E- -E- -E- | -E- -E- -E- -E- |
| OVERHEAD ELECTRIC | -OHE- -OHE- -OHE- -OHE- | -OHE- -OHE- -OHE- -OHE- |
| OVERHEAD ELECTRIC & COMMUNICATION | -OHE-OHC- -OHE-OHC- -OHE-OHC- -OHE-OHC- | -OHE-OHC- -OHE-OHC- -OHE-OHC- -OHE-OHC- |
| ELECTRIC DUCT BANK | -EDB- -EDB- -EDB- -EDB- | -EDB- -EDB- -EDB- -EDB- |
| ELECTRIC DUCT BANK ≥ 24" | -EDB- -EDB- -EDB- -EDB- | -EDB- -EDB- -EDB- -EDB- |
| CABLE TV | -CATV- -CATV- -CATV- -CATV- | -CATV- -CATV- -CATV- -CATV- |
| FIBER OPTIC | -FO- -FO- -FO- -FO- | -FO- -FO- -FO- -FO- |
| LIGHTING | -L- -L- -L- -L- | -L- -L- -L- -L- |
| OVERHEAD LIGHTING | -OHL- -OHL- -OHL- -OHL- | -OHL- -OHL- -OHL- -OHL- |
| TRAFFIC | -TR- -TR- -TR- -TR- | -TR- -TR- -TR- -TR- |
| TRAFFIC DUCT BANK | -TRDB- -TRDB- -TRDB- -TRDB- | -TRDB- -TRDB- -TRDB- -TRDB- |
| TRAFFIC DUCT BANK ≥ 24" | -TRDB- -TRDB- -TRDB- -TRDB- | -TRDB- -TRDB- -TRDB- -TRDB- |
| TRAFFIC INTERCONNECT | -INT- -INT- -INT- -INT- | -INT- -INT- -INT- -INT- |
| IRRIGATION | -IRR- -IRR- -IRR- -IRR- | -IRR- -IRR- -IRR- -IRR- |
| LANDSCAPE BED | | |
| PROPERTY LINE/LOT LINE | -P- -P- -P- -P- | -P- -P- -P- -P- |
| CORP LINE | //// | //// |
| TEMP CONSTRUCTION EASEMENT | -TMP- -TMP- -TMP- -TMP- | -TMP- -TMP- -TMP- -TMP- |
| CONSTRUCTION LIMITS | - - - - - | - - - - - |

DESIGNED
WCB
CHECKED
MLB

LEGEND

SHIER RINGS ROAD SHARED USE PATH

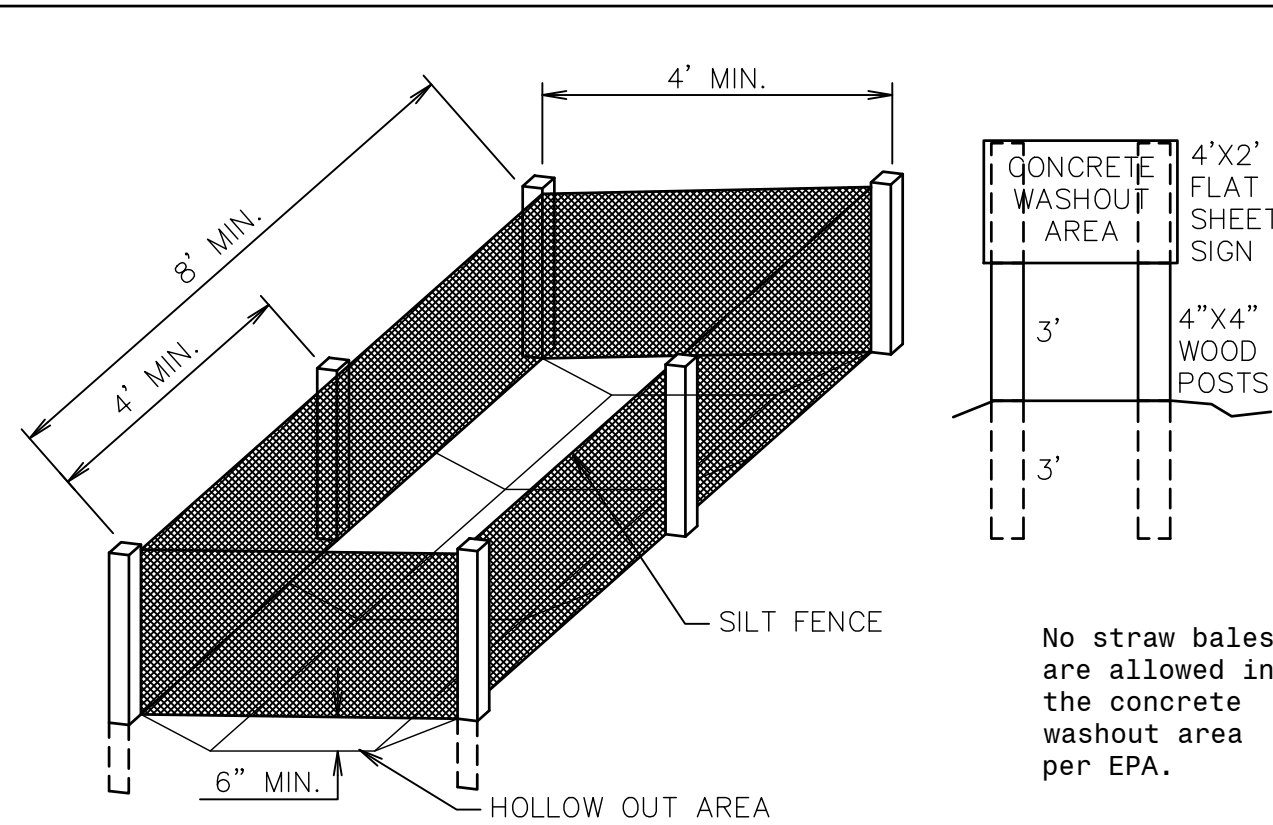
GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	QUANTITY
ROADWAY			
201	CLEARING AND GRUBBING	LUMP	1
201	TREE REMOVED, 12"	EA	6
201	TREE REMOVED, 18"	EA	5
201	TREE REMOVED, 24"	EA	5
201	TREE REMOVED, 30" OR GREATER	EA	2
202	FENCE REMOVED	FT	156
202	PIPE REMOVED, 24" AND UNDER	FT	234
202	DRIVE REMOVED	SY	265
202	MAILBOX REMOVED AND REPLACED	EA	1
202	CATCH BASIN REMOVED	EA	4
203	EXCAVATION, AS PER PLAN	CY	943
203	EMBANKMENT, AS PER PLAN	CY	115
204	SUBGRADE COMPACTION	SY	1640
204	PROOF ROLLING	HR	1
204	EXCAVATION OF SUBGRADE	CY	5
204	GRANULAR EMBANKMENT, NO. 2 STONE	CY	5
608	8" CONCRETE WALK	SF	302
608	DETECTABLE WARNING	SF	64
PAVEMENT			
301	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	130
304	AGGREGATE BASE	CY	290
441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	65
441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	CY	16
EROSION CONTROL			
207	INLET PROTECTION	EA	13
207	DESIGNATED CONCRETE WASHOUT AREA	EA	2
207	FILTER FENCE	LF	1685
653	TOPSOIL, FURNISHED AND PLACED, AS PER PLAN	CY	365
659	SEEDING AND MULCHING, AS PER PLAN	SY	3500
659	REPAIR SEEDING AND MULCHING	SY	165
659	COMMERCIAL FERTILIZER	TONS	0.3
659	WATER	MGAL	9
661	DECIDUOUS TREE, 3" CALIPER, AS PER PLAN	EA	9
661	CATALPA PURPUREA, 2" CALIPER, AS PER PLAN	EA	2
661	THUJA GREEN GIANT ARBORVITAE, AS PER PLAN	EA	22
661	KETELEERI JUNIPERS, AS PER PLAN	EA	5
661	HYDRANGEA BUSHES, AS PER PLAN	EA	4
DRAINAGE			
604	CATCH BASIN, AA-S130	EA	1
604	CATCH BASIN, AA-S133A	EA	10
604	MANHOLE TYPE "C", AA-S102	EA	5
604	MANHOLE TYPE "E", AA-S104	EA	2
604	INSPECTION WELL, AS PER PLAN	EA	5
901	8 INCH STORM PIPE, WITH TYPE 1 BEDDING	FT	13
901	12 INCH STORM PIPE, WITH TYPE 1 BEDDING	FT	445
901	15 INCH STORM PIPE, WITH TYPE 1 BEDDING	FT	243
910	PLAIN CONCRETE ENCASEMENT OF 12" DIAMETER PIPE	LF	6
TRAFFIC CONTROL			
630	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	EA	3
630	REMOVAL OF GROUND MOUNTED SUPPORT AND DISPOSAL	EA	1
630	2.5 INCH STREET NAME SIGN SUPPORT	EA	1
MISC.			
614	MAINTAINING TRAFFIC, AS PER PLAN	LUMP	1
614	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	MONTH	4
614	LAW ENFORCEMENT OFFICER WITH PATROL CAR, AS PER PLAN	HOURS	80
623	CONSTRUCTION LAYOUT STAKES	LUMP	1
624	MOBILIZATION	LUMP	1

DESIGNED
WCB
CHECKED
MLB

GENERAL SUMMARY

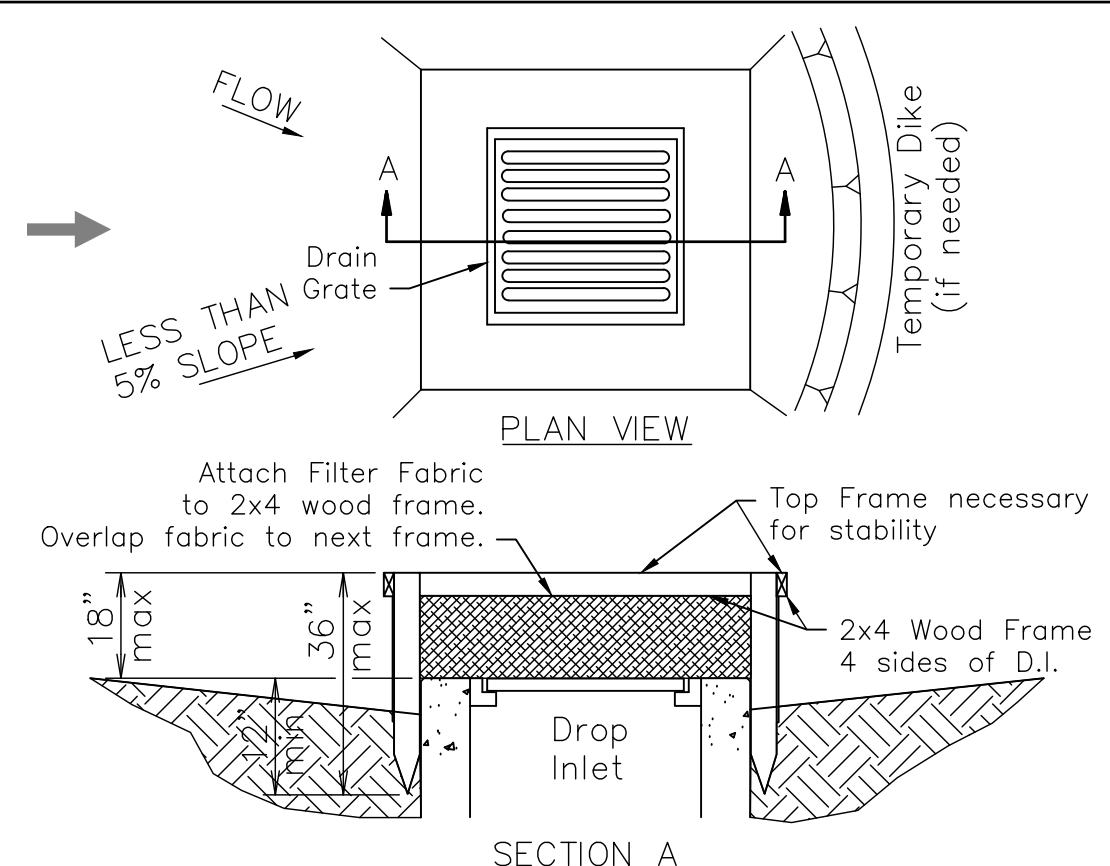
SHIER RINGS ROAD SHARED USE PATH



CONCRETE WASHOUT AREA

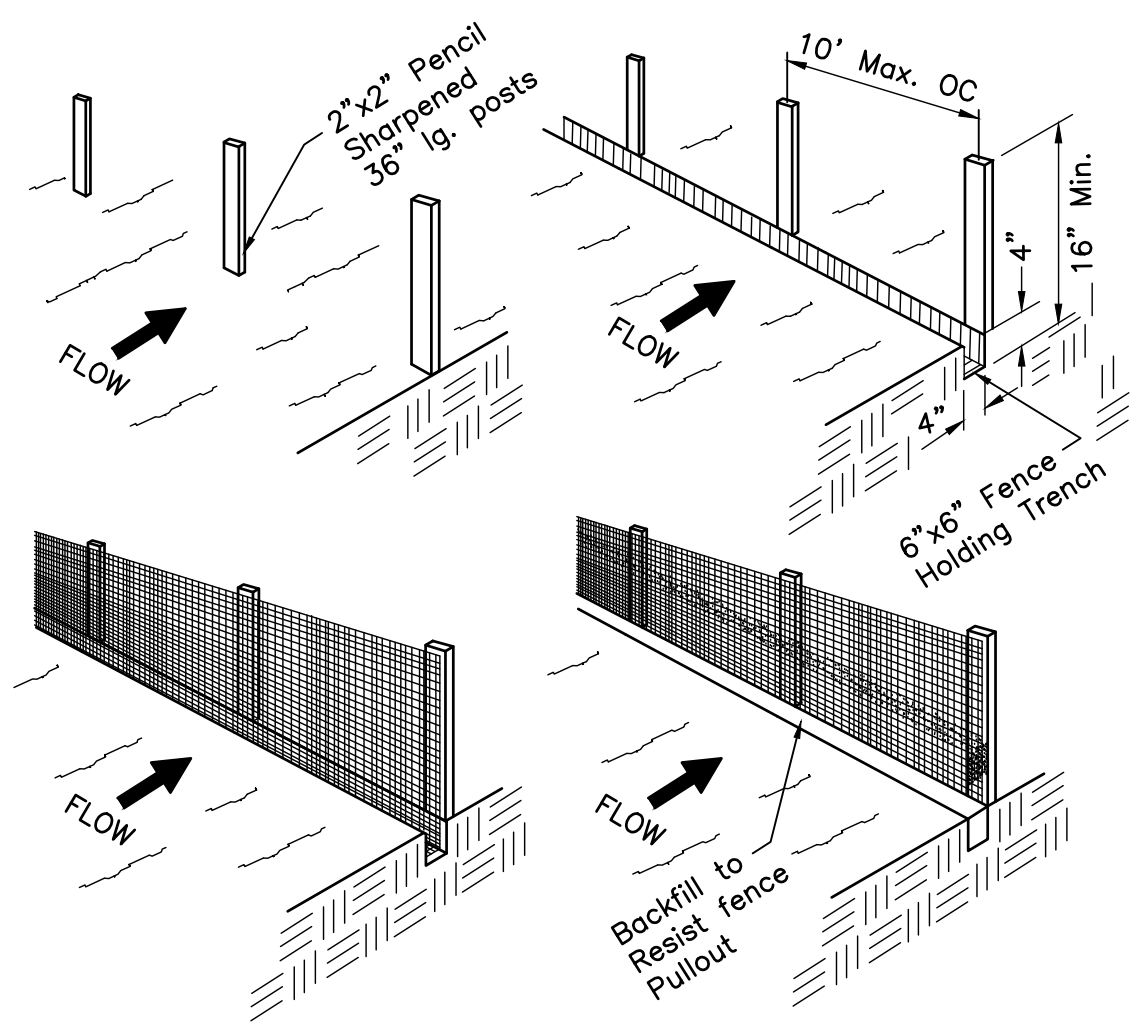
- NOTES:**
1. Concrete trucks shall utilize areas to washout trucks. Wash water shall not overtop the perimeter barriers. Accumulated wash water and concrete shall be removed and properly disposed of when the level of the retained material reaches half-way up the side of the silt fence. The cost associated with excavating, installation of the silt fence, maintaining and removing the concrete washout area shall be included in the bid item for the project.
 2. Silt fence shall be entrenched, backfilled and compacted per the silt fence detail. Fence shall be supported by stakes every four feet.
 3. The washout area shall be installed on level ground and the area marked with a highly visible sign. If it is not feasible to install on level ground, the area shall be protected with a secondary sediment barrier.

The exact location of the concrete washout(s) may be field located by the project engineer/site contact.



- Notes:**
1. Drop inlet Sediment Barriers are to be used for small, nearly level drainage areas. (Less Than 5%).
 2. Use 2" x 4" wood or equivalent metal stakes, 3' minimum length.
 3. Install 2" x 4" wood top frame to insure stability.
 4. The top of the frame (ponding height) must be well below the ground elevation downslope to prevent runoff from by-passing the inlet. A temporary dike may be necessary on the downslope side of the structure.
- For Structures - 1 - 10

**ALTERNATE CATCH BASIN INLET PROTECTION:
SILT FENCE DROP INLET PROTECTION**



FILTER FABRIC FENCE DETAIL

SCALE: NONE

Material Properties

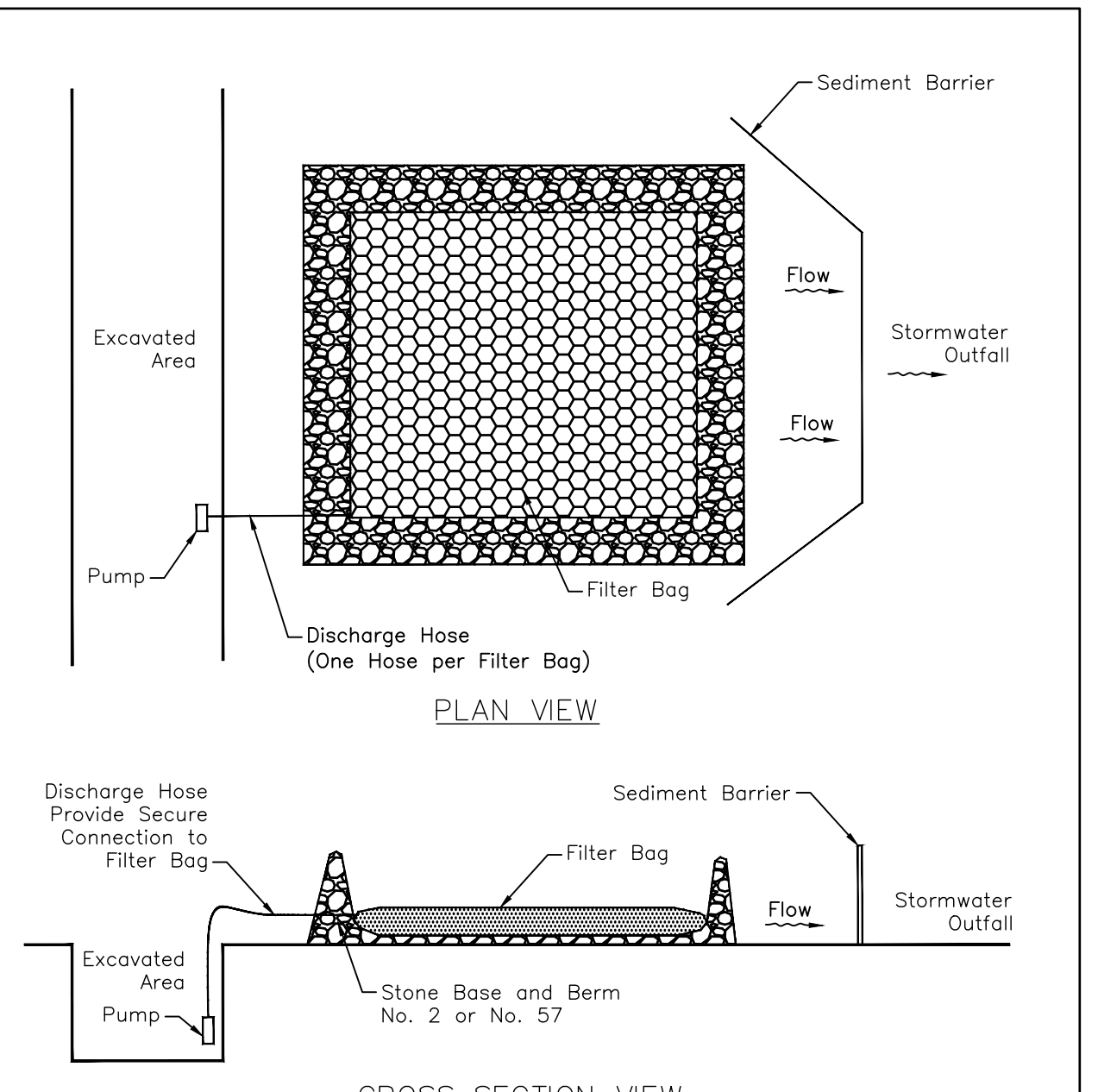
1. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum of a 6 inch overlap, and securely sealed. At a minimum, filter fabric shall meet the guidelines set forth by the Ohio EPA Rainwater and Land Development Manual.
2. Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 16-inches). Wood posts will be a minimum of 3/2" long.
3. A trench shall be excavated approximately 6-inches wide and 6 inches deep along the line of posts and upslope from the barrier.
4. The standard strength filter fabric shall be stapled or wired to the fence, and 8-inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36-inches above the original ground surface.
5. The fabric shall not be stapled to existing trees.
6. The trench shall be backfilled and soil compacted over the filter fabric.
7. Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.
8. Silt fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
9. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.

Maintenance

1. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.
2. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
3. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

Notes

1. The use of straw wattles has proven to be a versatile and effective ESC BMP, especially in residential settings. Straw wattles may be substituted for silt fence in linear installation. Straw wattles or compost filter socks have to be a minimum of 12 inches in diameter now (OEPA).
2. For minimum criteria for the Silt Fence Fabric, reference the Ohio EPA Rainwater and Land Development Manual.



DEWATERING FILTER BAG

Scale: Not to Scale

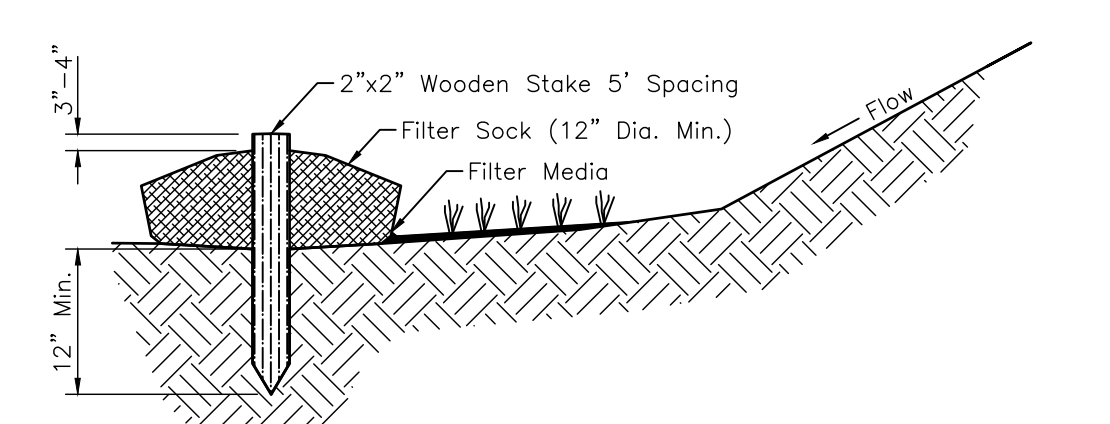
Installation:

The Contractor shall pump muddy water encountered within excavated areas into a filter fabric bag. The bag shall be placed within a level undisturbed area as far away from the stormwater outfall as possible. The bag shall be placed on top of an aggregate pad. Additionally, a perimeter aggregate berm shall be constructed around the bag. Perimeter controls such as compost filter socks or sediment fence shall be utilized along the downstream side of the bag. The perimeter controls shall be installed to ensure that the water flowing out of the bag does not flow around the ends of the controls. Upon completion, the bag shall be removed to an area away from the stormwater outfall and opened. The accumulated sediment shall be spread out to allow to dry and stabilized with vegetation. Filter bags shall be sized based upon the pumping inflow rate

Maintenance:

The filter bag shall be replaced when the bag is half filled with sediment.

The Contractor shall contact the project inspector/engineer for consultative services if dewatering activities overwhelm the filter bag and perimeter controls. A Special Waste Evaluation Requests Form (SWERF permit) is required for dewatering into the sanitary sewer system.



1. Materials - Compost used for filter socks shall be weed, pathogen and insect free of any refuse, contaminants or other materials toxic to plant growth. They shall be derived from a well-decomposed source of organic matter and consist of a practice ranging from 1/8" to 2".
2. Filter socks shall be 3 or 5 mil continuous, tubular, HDPE 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.

Installation:

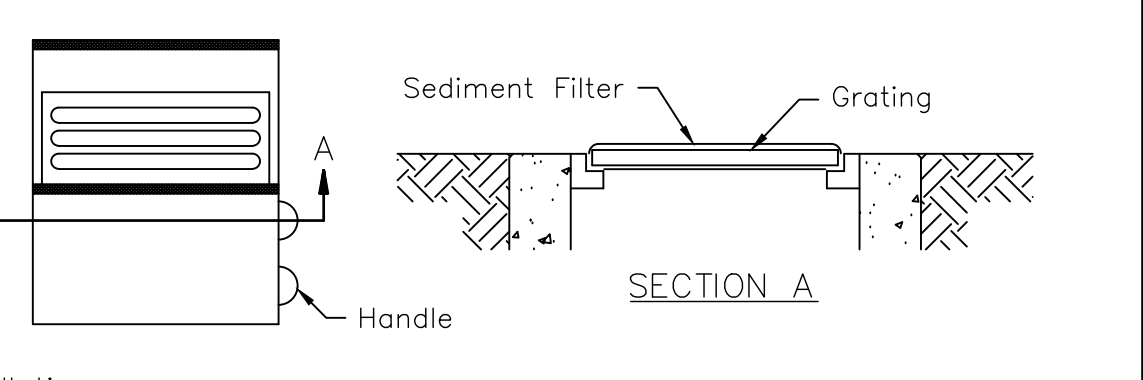
3. Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed midslope.
4. Upon installation of the filter sock, additional filter media (matching the media inside the sock) shall be placed on the upland side of the filter sock. Filter media shall extend halfway up the sock and slope at a maximum of 45 degrees to existing ground elevation.
5. Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.
6. Filter socks are not to be used in concentrated flow situations or in runoff channels.

Maintenance:

7. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional conditions at all times.
8. Remove sediments collected in the base of the filter socks when they reach 1/3 of the exposed height of the practice
9. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
10. Removal - Filter socks will be dispersed on the site when no longer required in such a way as to facilitate and not obstruct seedings.

SEDIMENT BARRIER - COMPOST FILTER SOCK

Scale: Not to Scale



CATCH BASIN SEDIMENT FILTER DETAIL

Scale: Not to Scale

- Installation:**
1. Stand grate on end. Place Catch Basin Protection Bag over grate. Roll grate over so that open end is up. Pull up slack. Tuck flap in. Be sure end of grate is completely covered by flap or Catch Basin Protection Bag will not fit properly. Holding handles, carefully place Catch Basin Protection Bag with grate inserted into catch basin frame so that red dot on the top of the Catch Basin Protection Bag is visible.
- Maintenance:**
1. With a stiff bristle broom or square point shovel, remove silt & other debris off surface after each event.

Note:

1. Dandy Bag, FryeFlow Systems Inlet Protection, FLEXSTORM Inlet Filter or approved equal are acceptable

PROHIBITED CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL NOT USE CONSTRUCTION PROCEDURES, ACTIVITIES, OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY. PROHIBITED CONSTRUCTION PROCEDURES, ACTIVITIES, OR OPERATIONS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

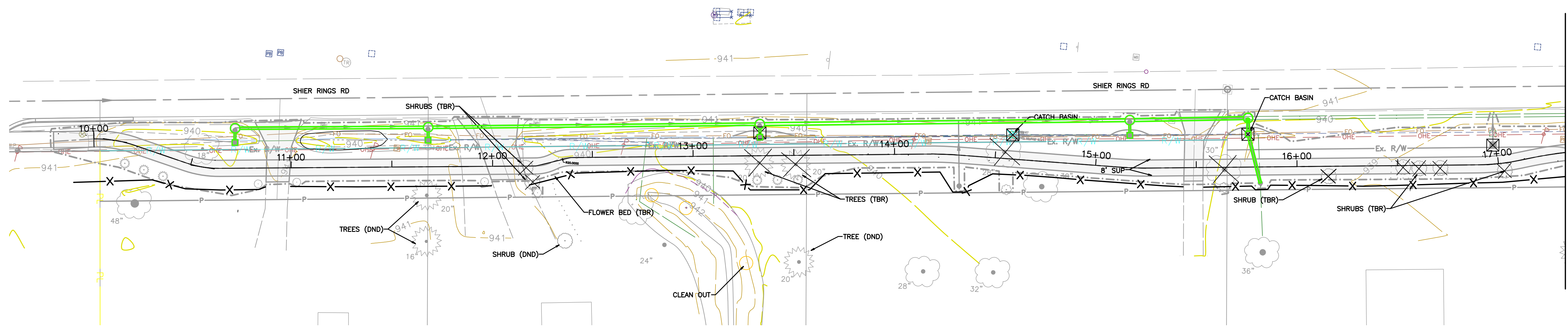
1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOOD PLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.
2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
3. PUMPING OF SEDIMENT LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM DRAINS.
4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE, AND/OR ANY HARMFUL WASTE, INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOWLINE OF A STREAM.
6. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
7. DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDORS, WETLANDS, OR WATER SURFACES.
8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
9. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY (PUBLIC OR PRIVATE) NOT PREVIOUSLY SPECIFIED BY THE CITY ENGINEER FOR SAID PURPOSES.

HORIZONTAL SCALE: N.T.S.

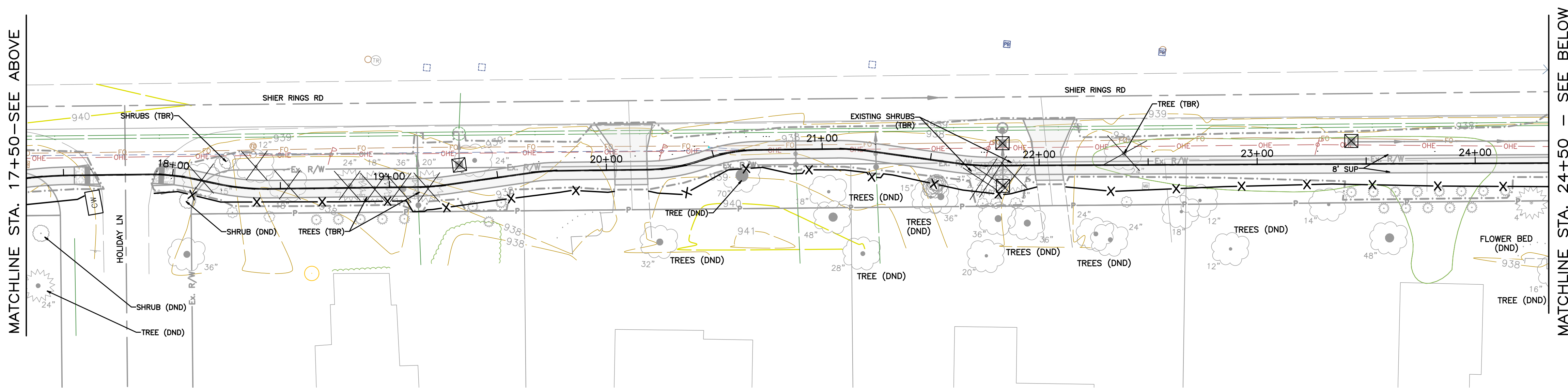
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EROSION CONTROL NOTES AND DETAILS

SHIER RINGS ROAD SHARED USE PATH

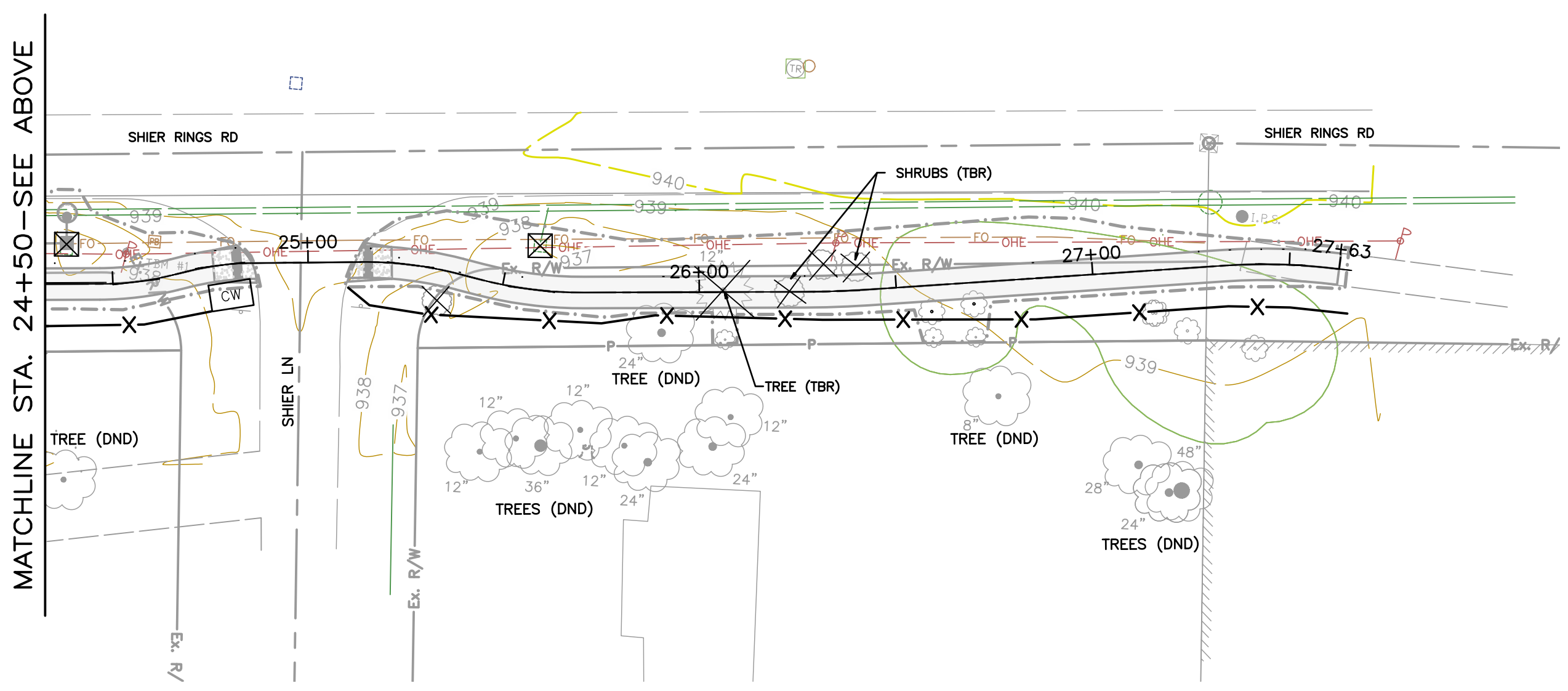


MATCHLINE STA. 17+50 - SEE BELOW






MATCHLINE STA. 17+50 - SEE ABOVE

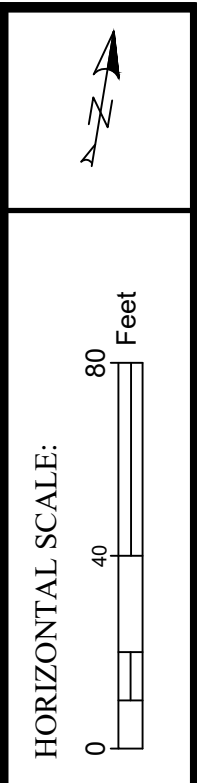
MATCHLINE STA. 24+50 - SEE BELOW



MATCHLINE STA. 24+50 - SEE ABOVE

LEGEND

-  FILTER FENCE PER DETAIL ON SHEET 8
-  INLET FILTER PER DETAIL ON SHEET 8
-  CONCRETE WASHOUT PER DETAIL ON SHEET 8



DESIGNED: WCB
CHECKED: M/LB

EROSION SEDIMENT CONTROL PLAN

SHIER RINGS ROAD SHARED USE PATH

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

A MINIMUM OF TWO-WAY, ONE LANE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON ALL PUBLIC AND PRIVATE ROADWAYS BY USE OF FLAGGING OPERATIONS PER COLUMBUS STANDARD DRAWING 1550.

THE CONTRACTOR SHALL NOTIFY THE CITY OF DUBLIN AT LEAST 14 DAYS IN ADVANCE OF ANY PLANNED LANE CLOSURES OR OTHER DISRUPTION OF TRAFFIC. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC.

THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN SIGNS AND SIGN SUPPORTS AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS ITEM 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.

ALL TRAFFIC CONTROL (TTC) DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS(CURRENT EDITION). COPIES ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF CONTRACTS, 1980 WEST BROAD STREET, COLUMBUS, OHIO 43223.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REINSTALLATION AND/OR REPLACEMENT OF ALL PERMANENT TRAFFIC CONTROL DEVICES DAMAGED OR REMOVED DURING THE CONSTRUCTION. PERMANENT TRAFFIC CONTROL THAT IS NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE REPLACED IMMEDIATELY. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED AND IMPROPERLY PLACED TRAFFIC CONTROL DEVICES.

THE CONTRACTOR SHALL PROVIDE A 24 HOUR CONTACT WHO WILL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC FOR THE DURATION OF THE PROJECT.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER AND THE CITY. MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES INCLUDING DRUMS, SIGNS, BARRICADES, SIGN BOARDS, DETOUR SIGNAGE, ETC., SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

STEADY-BURNING, TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN SUE AT NIGHT. ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NIGHTTIME AND NON-WORKING HOURS.

DROP OFF WITHIN THE WORK ZONE SHALL CONFORM TO THE REQUIREMENTS SET FORTH ON ODOT STANDARD CONSTRUCTION DRAWING MT-101.90

IF THE CITY ENGINEER DETERMINES THAT THE CONTRACTOR IS NOT PROVIDING PROPER PROVISIONS FOR TRAFFIC CONTROL, THE CITY ENGINEER SHALL ASSIGN UNIFORMED, OFF-DUTY POLICE OFFICERS TO THE PROJECT AT NO COST TO THE CITY.

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

PAYMENT

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ODOT C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL MAINTENANCE OF TRAFFIC ITEMS, INCLUDING FURNISHING, INSTALLATION AND MAINTENANCE OF BUT NOT LIMITED TO: ALTERNATE ROUTE SIGNAGE, FLASHING ARROWS PANELS, SIGNS, SIGN SUPPORTS, FLAGS, FLAGGERS, BARRICADES, NOTICE OF CLOSURE SIGNS, PORTABLE CONCRETE BARRIER, DRUMS, CONES CONSTRUCTION FENCING, TEMPORARY PAVEMENT MARKINGS, TRAFFIC COMPACTED SURFACE, MATERIALS AND LABOR FOR MAINTAINING ACCESS TO DRIVEWAYS, PROPERTY OWNER NOTIFICATION/COORDINATION AND DEVELOPMENT OF THE OPERATIONS SCHEDULE SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR MATERIAL, EQUIPMENT, AND INCIDENTALS TO COMPLETE THE WORK AS DETAILED IN THE PLANS, UNLESS SEPARATELY ITEMIZED IN THE PLANS, NO SEPARATE PAYMENT SHALL BE MADE.

CONSTRUCTION INITIATION

THE CONTRACTOR WILL NOTIFY THE CITY OF DUBLIN 14 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL IMMEDIATELY INFORM THE CITY OF DUBLIN OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION PROJECT. THE CITY ENGINEER WILL PROVIDE CLARIFICATION FOR ANY QUESTIONS ABOUT THE NOTIFICATION REQUIREMENT.

DRUM AND PCB REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE IN GOOD CONDITION AND MEET RETROREFLECTIVITY STANDARDS. PAYMENT FOR DRUMS AND PCB SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

SIGNS, BARRICADES AND VERTICAL PANELS

ALL CONSTRUCTION SIGNS, BARRICADES, VERTICAL PANELS, AND DRUMS SHALL CONFORM TO ODOT AND THE LATEST REVISION OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. ALL CONSTRUCTION SIGNAGE SHALL BE INSTALLED AND COVERED BEFORE CONSTRUCTION BEGINS, AFTER CONSTRUCTION SIGN INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER THREE WORKING DAYS BEFORE WORK BEGINS AND REQUEST AN INSPECTION OF ALL SIGNAGE. FACES OF CONSTRUCTION SIGNS AND REFLECTIVE SHEETING ON BARRICADES SHALL BE TYPE "H" (VIP). ALL ORANGE CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE. ALL SHEETING WILL BE TESTED FOR REFLECTIVITY PER ITEM 730.192. VERTICAL PANELS AND DRUM BANDS SHALL BE REFLECTORIZED WITH TYPE "G" (HIGH INTENSITY) SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19. ALL SIGNS AND BARRICADES, VERTICAL PANELS, AND DRUMS WILL BE LIKE NEW AND IN GOOD CONDITION IN CONFORMANCE WITH QUALITY GUIDELINES FOR TEMPORARY TRAFFIC CONTROL DEVICES AND FEATURES PUBLISHED BY ATSSA. MAINTENANCE OF ALL CONTRACTOR SUPPLIED SIGNS, BARRICADES, VERTICAL PANELS, AND DRUMS IS THE CONTRACTOR'S RESPONSIBILITY. IF THE CONTRACTOR FAILS TO CORRECT DEFICIENCIES WITH FOUR HOURS OF NOTIFICATION, THE CITY WILL CORRECT OR HIRE SOMEONE TO CORRECT THE DEFICIENCIES. THE CONTRACTOR WILL THEN BE BACK CHARGED PER COLUMBUS SPECIFICATION 614.14. IN THE CASE THAT BACK CHARGING THE CONTRACTOR IS NOT APPLICABLE, THE CITY WILL RESCIND AND WITHHOLD ALL PERMITS ISSUED TO THE CONTRACTOR TO WORK WITHIN CITY RIGHT-OF-WAY UNTIL THE ISSUE IS SETTLED. THESE PROVISIONS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ANY HIS LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF PUBLIC. ALL BARRICADES AT CLOSURES SHALL HAVE YELLOW TYPE "C" STEADY BURN LIGHTS. ALL BARRELS SIGNING SHALL BE EQUIPPED WITH TYPE "A" FLASHING LIGHTS AND (2) ORANGE FLAGS (24"X24"). LIGHTS ARE NOT REQUIRED ON SIGNS IN PLACE DURING DAYLIGHT HOURS. CONES ARE NOT APPROVED FOR USE AT NIGHT. DRUMS SHALL BE PLACED AS FOLLOWS: 40' C/C TANGENTS, 20' C/C ON TAPES, AND 8' C/C IN RADI.

PEDESTRIAN ACCESS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIANS THROUGH, AROUND, AND AWAY FROM THE CONSTRUCTION SITE. THE SAFETY OF PEDESTRIAN TRAFFIC SHALL BE CONSIDERED AT ALL TIMES IN THE PROVISION OF TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS AND NOTES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE LIGHTS, SIGNS, BARRICADES, AND OTHER WARNINGS TO PHYSICALLY SEPARATE THE PEDESTRIAN FROM HAZARDS INCIDENTAL TO THE CONSTRUCTION OPERATIONS SUCH AS OPEN EXCAVATIONS, ETC. AT ALL TIMES, THE PEDESTRIAN MOT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. IT IS RECOMMENDED THAT THE CONTRACTOR ELIMINATE PEDESTRIAN TRAFFIC WITHIN THE PROJECT SITE BY CLOSING PEDESTRIAN PATH. THIS SHALL BE DONE BY INSTALLING "PATH CLOSED" SIGNAGE AT THE BEGINNING, ENDING, AND INTERSECTIONS OF THE AFFECTED PATH. NO PEDESTRIAN DETOUR PROVIDED.

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

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOS SHOULD NOT BE USED WHERE THE ODOT INTENDS THAT FLAGGERS BE IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE ODOT, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS.

A. FOR LANE CLOSURES DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED, IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

B. DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED, THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES. THE CONTRACTOR SHALL UTILIZE ANY OF THE FOLLOWING LAW ENFORCEMENT AGENCIES: OHIO STATE HIGHWAY PATROL.

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR, AS PER PLAN 80 HOURS

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

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OR TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BEE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER, A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRE-CONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AT A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD, THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED, PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIN WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS, THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE CITY TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE CITY DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM THE MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRED THEIR USE. PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK:

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 4 SIGN MONTH.

EXISTING TRAFFIC SIGN MAINTENANCE

SPECIAL CARE SHALL BE TAKEN TO MAINTAIN EXISTING SIGNS DURING CONSTRUCTION. IF NECESSARY, THE CONTRACTOR SHALL RELOCATE SIGNS OUT OF THE WAY OF CONSTRUCTION. HOWEVER, THE SIGNS MUST BE PLACED TO PROVIDE EFFECTIVE TRAFFIC CONTROL AT ALL TIMES, IN ACCORDANCE WITH THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES. AFTER COMPLETION OF CONSTRUCTION ACTIVITIES ANY RELOCATED SIGNS SHALL BE MOVED BACK TO THEIR ORIGINAL LOCATION.

PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

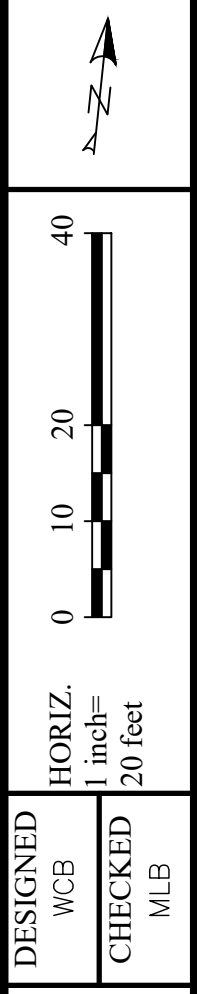
LOCAL ACCESS

INGRESS AND EGRESS ACCESS SHALL BE MAINTAINED AT ALL RESIDENTIAL PROPERTIES, DRIVEWAY CLOSURE MAY BE NECESSARY TO ENABLE WORK ON OR IN FRONT OF A DRIVE. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING OWNERS OR RESIDENTS IN WRITING AT LEAST 48 HOURS BUT NOT MORE THAN 72 HOURS PRIOR TO CLOSURE. THE ENGINEER SHALL BE GIVEN A LIST OF THE PERSONS THAT WERE GIVEN NOTICES WITH THE DATE OF NOTICE INCLUDED. CLOSURE IS PERMITTED ONLY DURING WORK HOURS AND ACCESS MUST BE RETURNED AT THE END OF EACH WORKING DAY. PROPERTIES WITH MULTIPLE DRIVES MAY HAVE ONE DRIVE CLOSED AT TIMES, WHILE WORK IS PERFORMED IN THE AREA OF THE CLOSED DRIVE. CLOSURES OF INDIVIDUAL DRIVES SHALL BE KEPT TO A MINIMUM TIME NEEDED FOR CONSTRUCTION ACTIVITIES.

DESIGNED
WCB
CHECKED
MLB

MAINTENANCE OF TRAFFIC
GENERAL NOTES

SHIER RINGS ROAD SHARED USE PATH



DESIGNED: WCB
 CHECKED: MLB

PLAN AND PROFILE
 STA. 10+00 TO 14+50

SHIER RINGS ROAD SHARED USE PATH

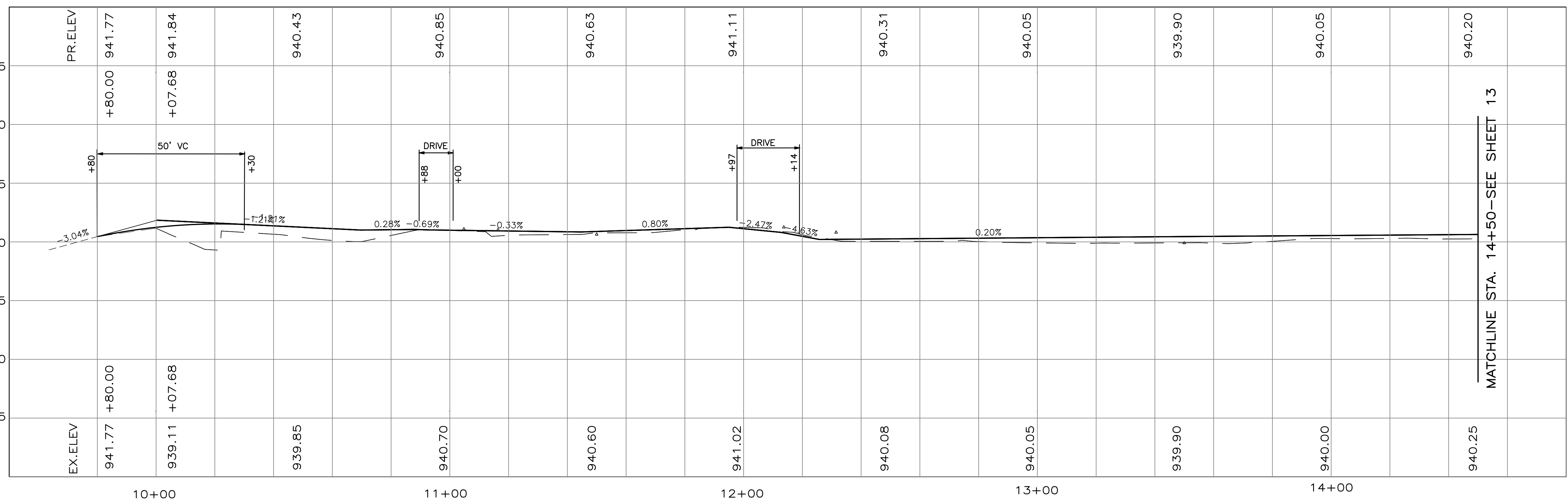
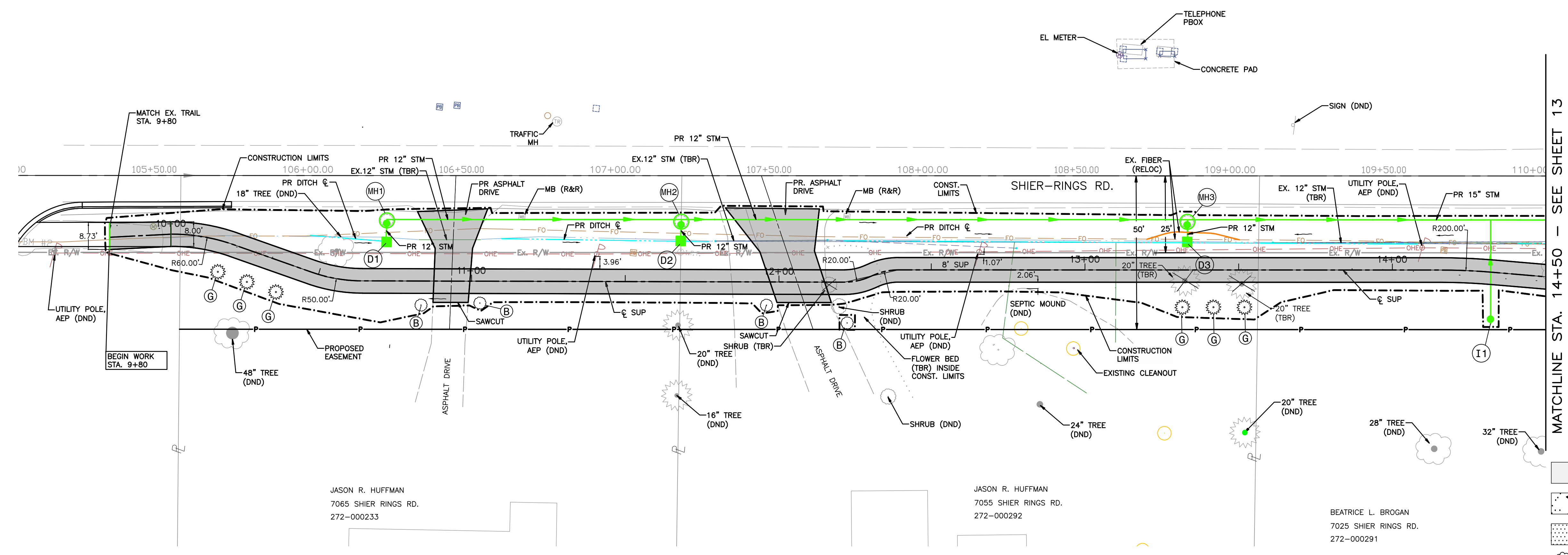
12
33

NOTE:
 FOR LINETYPE LEGEND SEE SHEET 6

- (MH1) MH TYPE "C", AA-S102
 STA. 10+72, 20.0' LT.
 OUTLET TO STRUCTURE MH2
- (MH2) MH TYPE "C", AA-S102
 STA. 11+68, 20.2' LT.
 OUTLET TO STRUCTURE MH3
- (MH3) MH TYPE "C", AA-S102
 STA. 13+34, 13.6' LT.
 OUTLET TO STRUCTURE MH4
- (D1) CB, AA-S133A
 STA. 10+72, 12.8' LT.
 OUTLET TO MH1
- (D2) CB, AA-S133A
 STA. 11+68, 13.1' LT.
 OUTLET TO MH2
- (D3) CB, AA-S133A
 STA. 13+34, 6.5' LT.
 OUTLET TO MH3
- (I1) INSPECTION WELL
 STA. 14+48, 9.5' RT.
 OUTLET TO PROPOSED 12" STORM

LEGEND

- SHARED USE PATH
- ITEM 608 - 8" CONCRETE WALK (RAMPS)
- ITEM 499 - 6" COC 6 CONCRETE (SUP & DRIVES)
- ITEM 608 - DETECTABLE WARNING
- ITEM 651 - DECIDUOUS TREE, 3"
- ITEM 651 - CATALPA PURPUREA, 2"
- ITEM 651 - THUJA GREEN GIANT ARBORVITAE (6' MIN. HEIGHT AT PLANTING)
- ITEM 651 - HYDRANGEA BUSHES



MATCHLINE STA. 14+50 - SEE SHEET 13

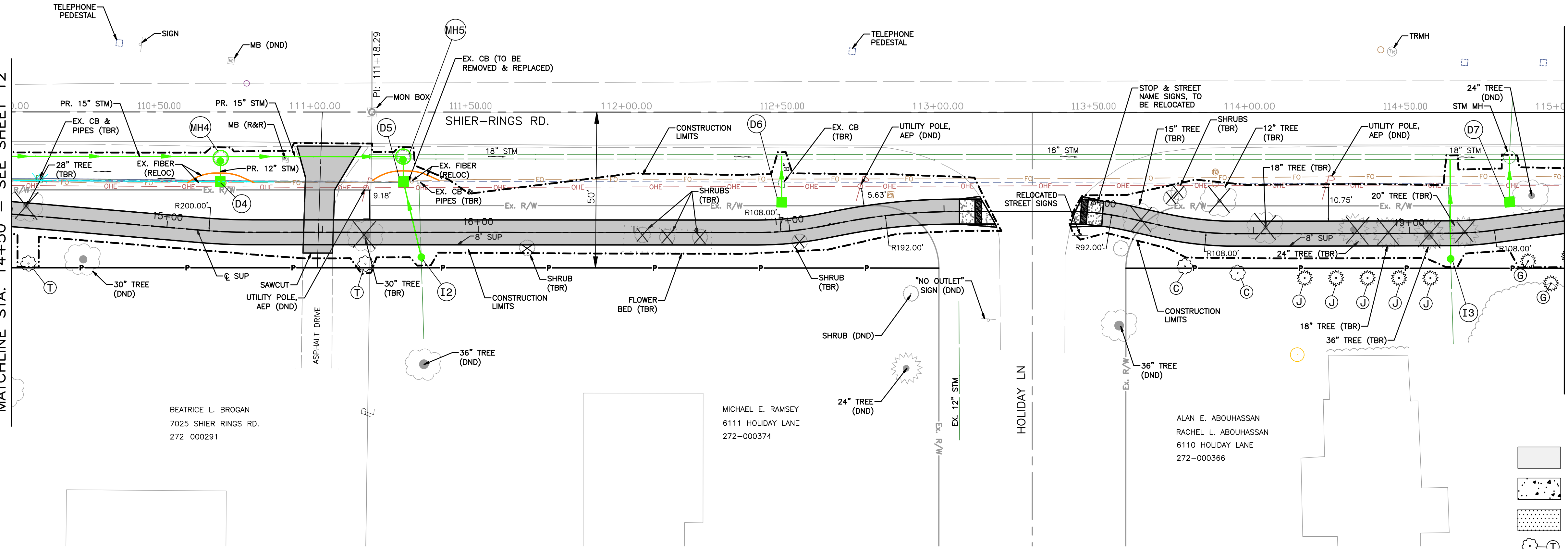
JASON R. HUFFMAN
 7065 SHIER RINGS RD.
 272-000233

JASON R. HUFFMAN
 7055 SHIER RINGS RD.
 272-000292

BEATRICE L. BROGAN
 7025 SHIER RINGS RD.
 272-000291

MATCHLINE STA. 14+50 - SEE SHEET 12

MATCHLINE STA. 19+50 - SEE SHEET 14



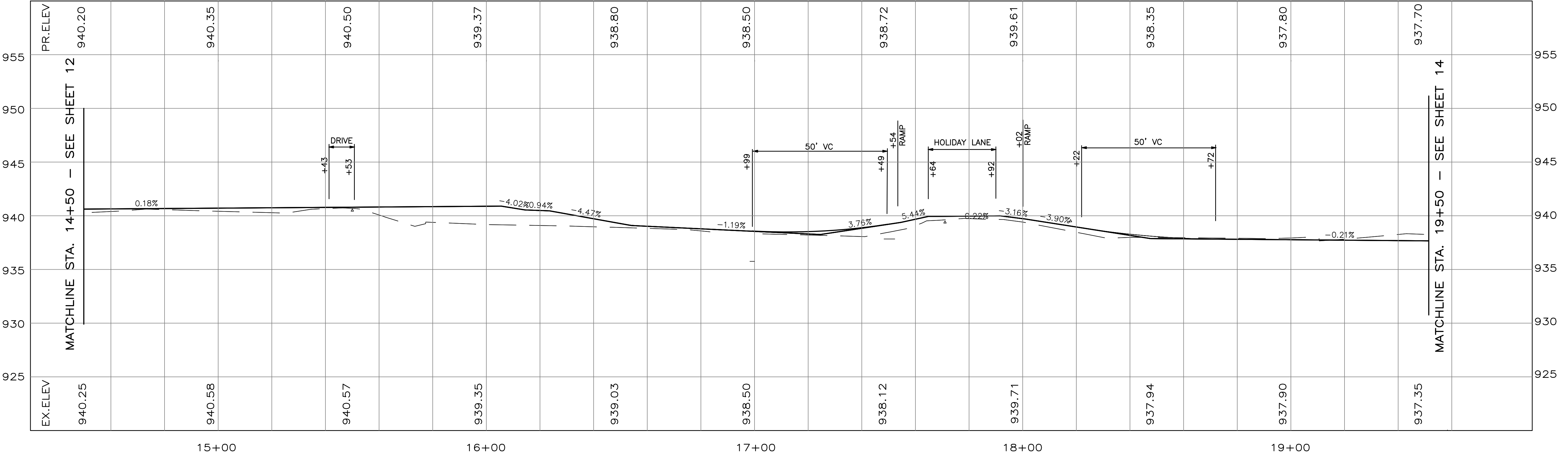
BEATRICE L. BROGAN
7025 SHIER RINGS RD.
272-000291

MICHAEL E. RAMSEY
6111 HOLIDAY LANE
272-000374

ALAN E. ABOUHASSAN
RACHEL L. ABOUHASSAN
6110 HOLIDAY LANE
272-000366

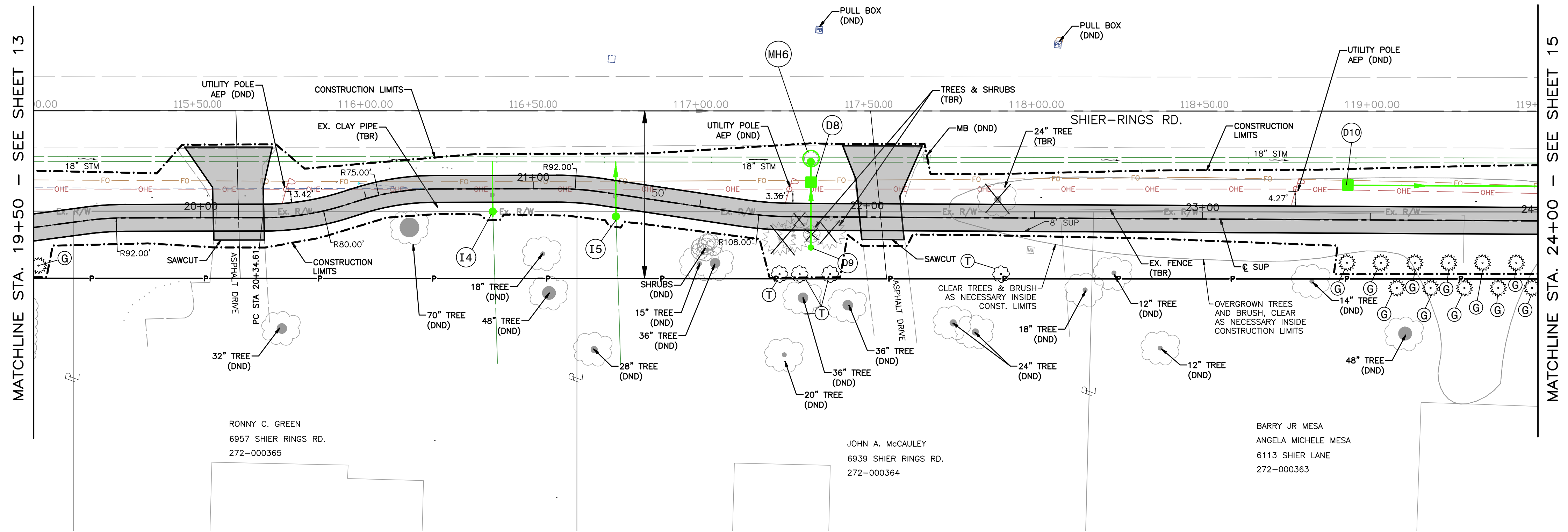
- (MH4) MH TYPE "C", AA-S102
STA. 15+17, 24' LT.
OUTLET TO MH5
- (MH5) MH TYPE "C", AA-S102
STA. 15+77, 24' LT.
OUTLET TO EXISTING 18" STORM
- (D4) CB, AA-S133A
STA. 15+77, 16' LT.
OUTLET TO MH4
- (D5) CB, AA-S133A
STA. 15+77, 16' LT.
OUTLET TO MH5
- (D6) ICB, AA-S133A
STA. 17+15, 9' LT.
OUTLET TO MH6
- (D7) CB, AA-S133A
STA. 19+48, 8.3' LT.
OUTLET TO EXISTING MH
- (I2) INSPECTION WELL
STA. 15+98, 8' RT.
OUTLET TO D5
- (I3) INSPECTION WELL
STA. 19+29, 8.5' RT.
OUTLET TO EXISTING 18" STORM

- LEGEND**
- [Pattern] SHARED USE PATH
 - [Pattern] ITEM 608 - 8" CONCRETE WALK (RAMPS)
 - [Pattern] ITEM 499 - 6" COC 6 CONCRETE (SUP & DRIVES)
 - [Pattern] ITEM 608 - DETECTABLE WARNING
 - (T) ITEM 651 - DECIDUOUS TREE, 3"
 - (C) ITEM 651 - CATALPA PURPUREA, 2"
 - (J) ITEM 651 - KETELEERI JUNIPERS (6' MIN. HEIGHT AT PLANTING)
 - (B) ITEM 651 - HYDRANGEA BUSHES



MATCHLINE STA. 14+50 - SEE SHEET 12

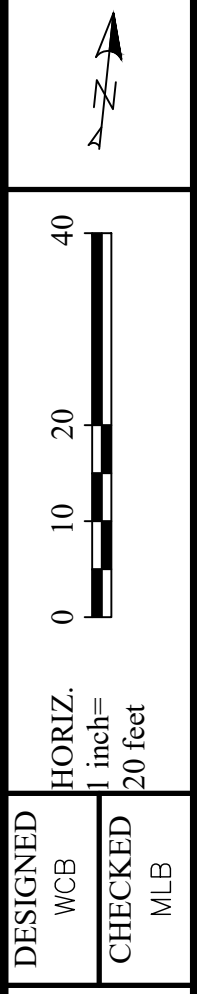
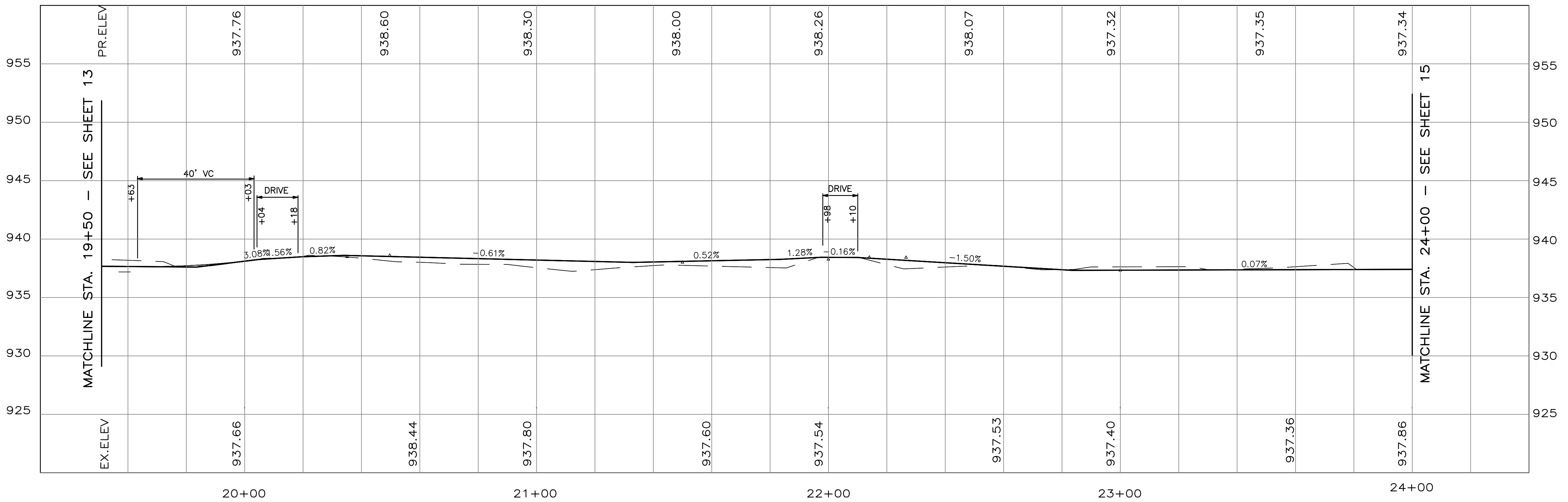
MATCHLINE STA. 19+50 - SEE SHEET 14



- MH6 MH TYPE "E", AA-S104
STA. 21+83, 10.2' LT.
OUTLET TO EXISTING 18" STORM
- D8 CB, AA-S133A
STA. 21+83, 10.2' LT.
OUTLET TO MH6
- D9 ICB, AA-S130
STA. 21+83, 9.8' RT.
OUTLET TO STRUCTURE D8
- D10 CB, AA-S133A
STA. 23+43, 10' LT.
OUTLET TO D11
- I4 INSPECTION WELL
STA. 21+04, 7' RT.
OUTLET TO EXISTING 18" STORM
- I5 INSPECTION WELL
STA. 21+41, 7' RT.
OUTLET TO EXISTING 18" STORM

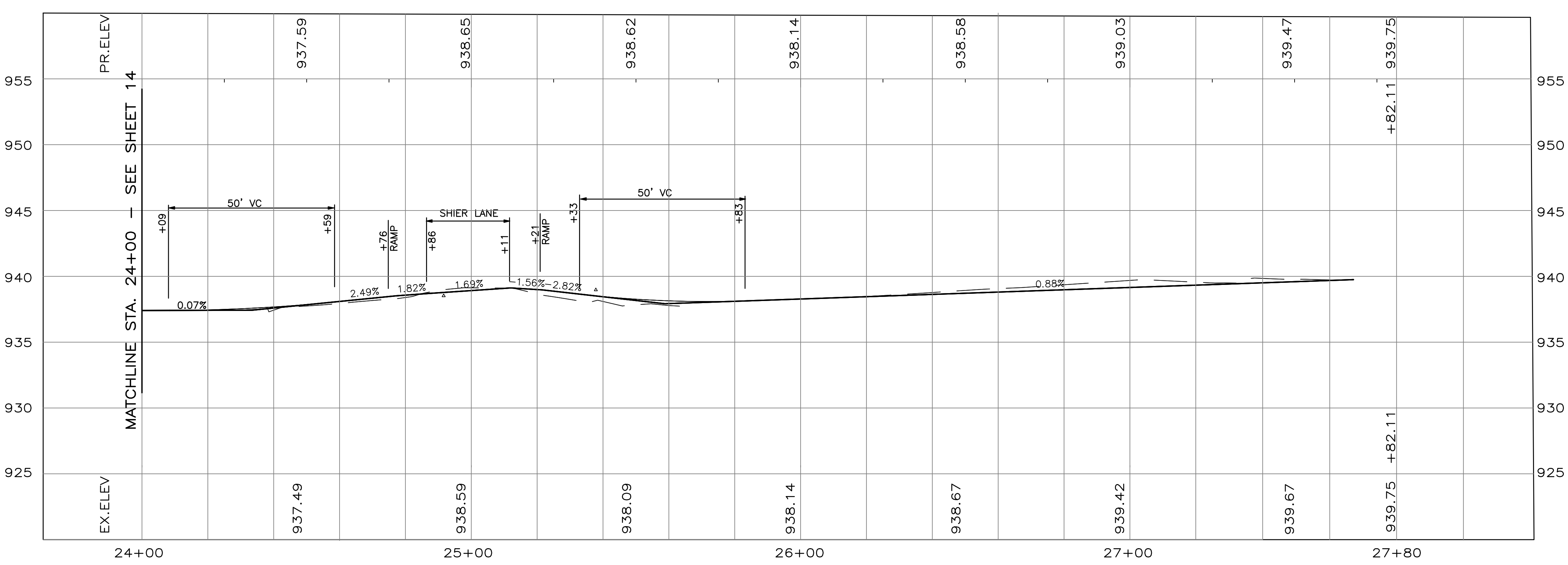
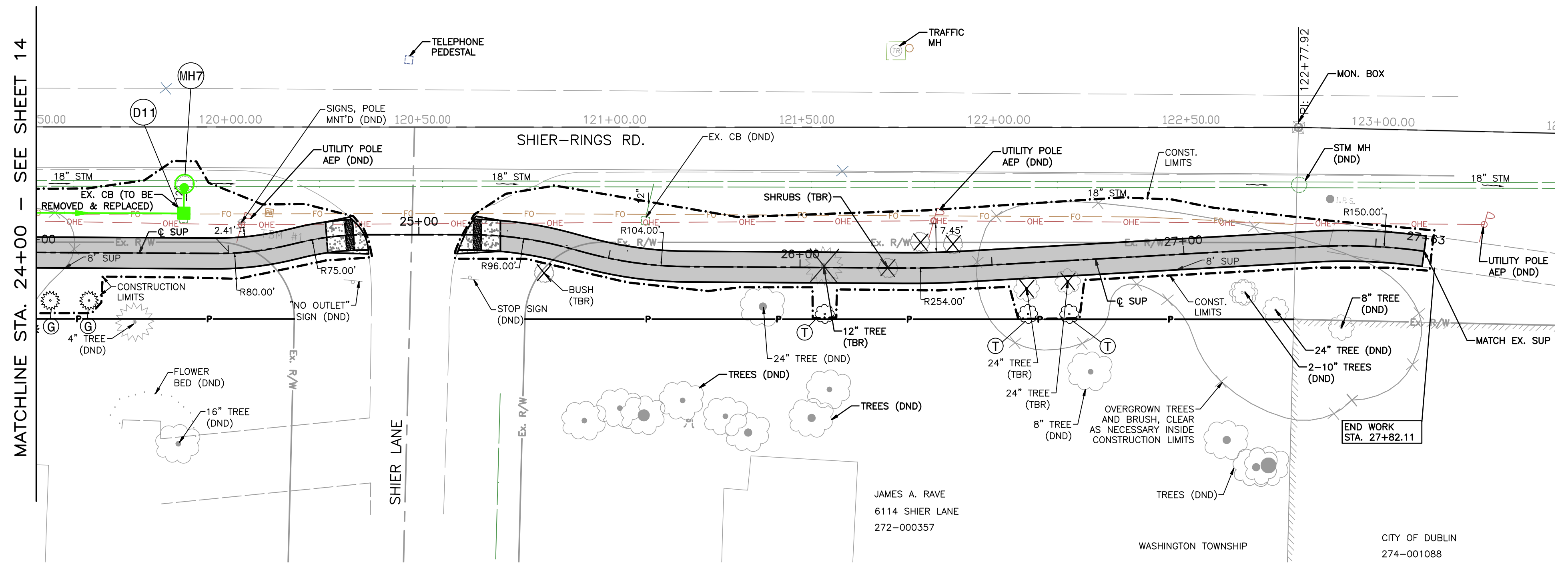
LEGEND

- SHARED USE PATH
- ITEM 608 - 8" CONCRETE WALK (RAMPS)
- ITEM 499 - 6" COC 6 CONCRETE (SUP & DRIVES)
- ITEM 608 - DETECTABLE WARNING
- ITEM 651 - DECIDUOUS TREE, 3"
- ITEM 651 - CATALPA PURPUREA, 2"
- ITEM 651 - THUJA GREEN GIANT ARBORVITAE (6' MIN. HEIGHT AT PLANTING)
- ITEM 651 - HYDRANGEA BUSHES

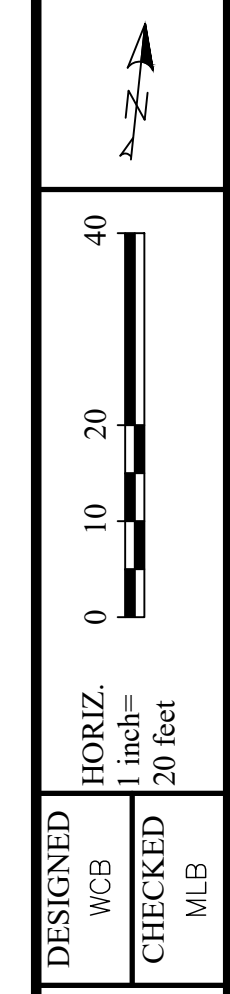


DESIGNED: WCB
CHECKED: MJB
HORIZ. SCALE: 1 inch = 20 feet

PLAN AND PROFILE
SHIER RINGS ROAD SHARED USE PATH
STA. 19+50 TO 24+00

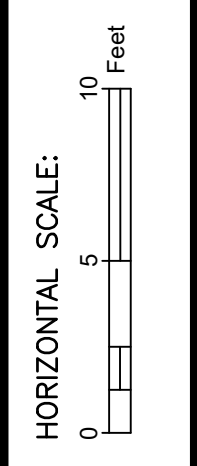
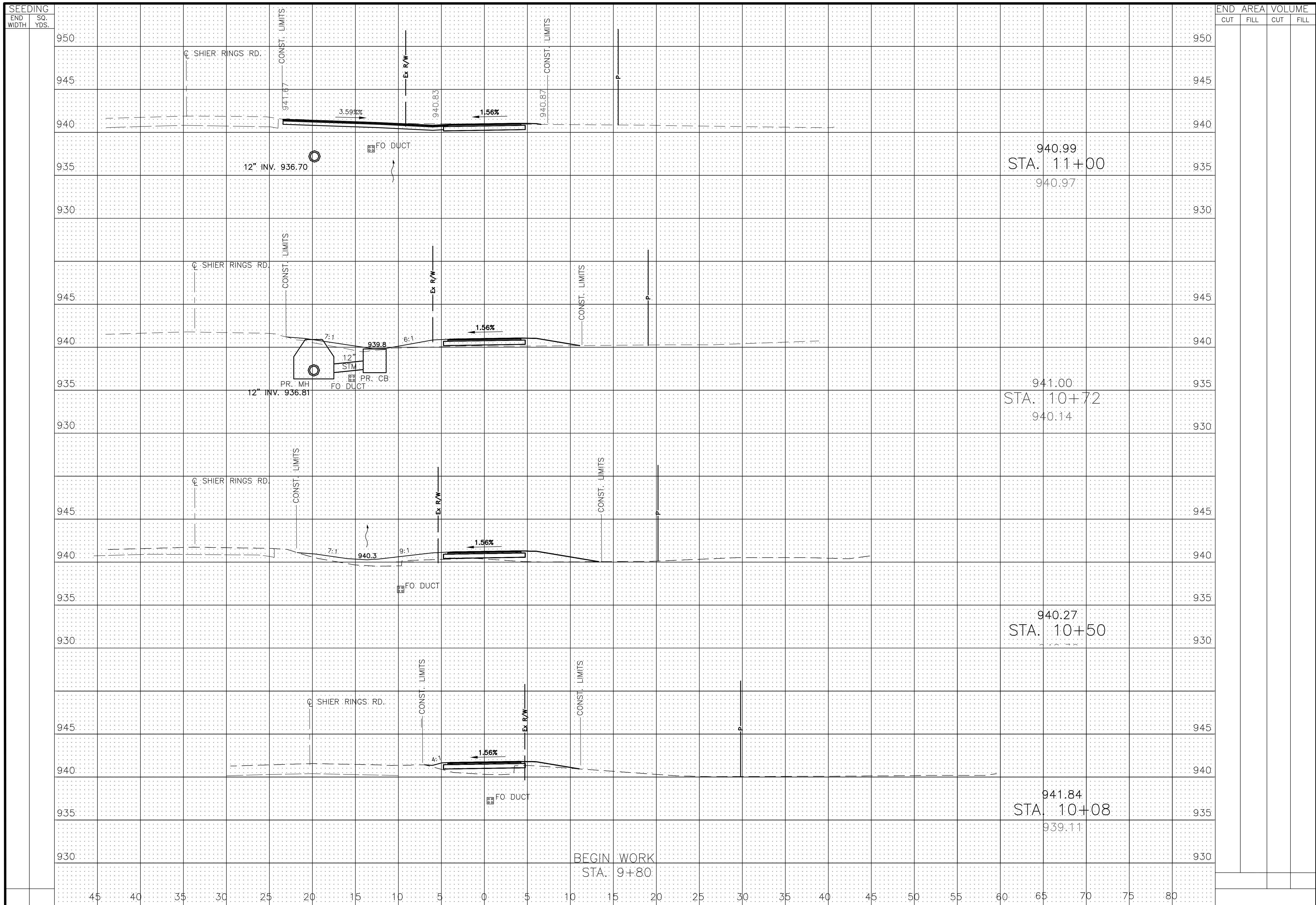


- MH7** MH TYPE "E", AA-S104
STA. 24+38, 18.2' LT.
OUTLET TO EXISTING 18" STORM
 - D11** CB, AA-S133A
STA. 24+38, 10' LT.
OUTLET TO MH7
- LEGEND**
- SHARED USE PATH
 - ITEM 608 - 8" CONCRETE WALK (RAMPS)
 - ITEM 499 - 6" COC 6 CONCRETE (SUP & DRIVES)
 - ITEM 608 - DETECTABLE WARNING
 - ITEM 651 - DECIDUOUS TREE, 3"
 - ITEM 651 - CATALPA PURPUREA, 2"
 - ITEM 651 - THUJA GREEN GIANT ARBORVITAE (6' MIN. HEIGHT AT PLANTING)
 - ITEM 651 - HYDRANGEA BUSHES



PLAN AND PROFILE
 STA. 24+00 TO 27+82

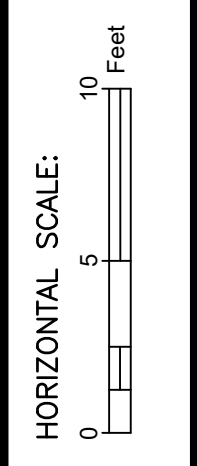
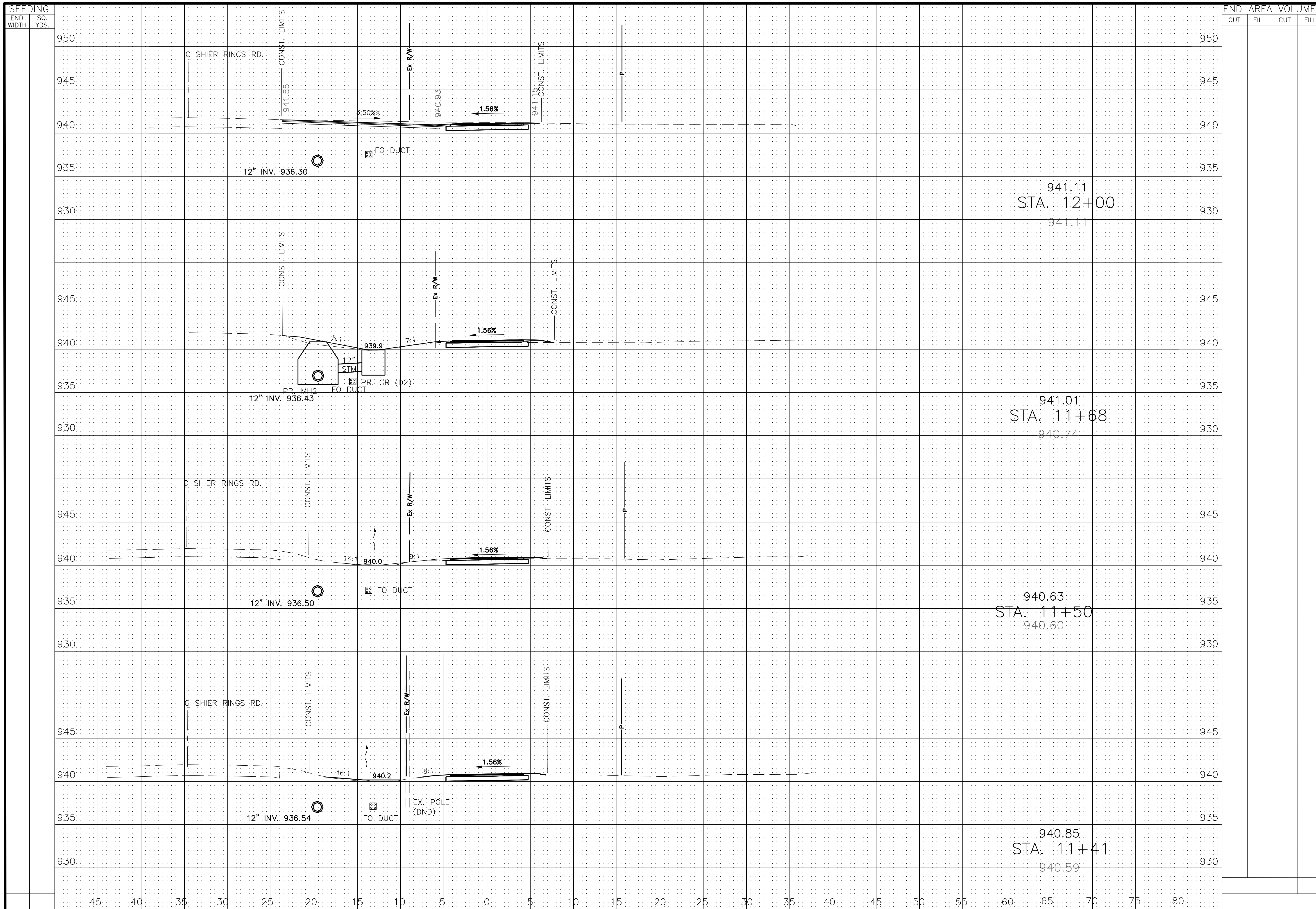
SHIER RINGS ROAD SHARED USE PATH



DESIGNED WCB
CHECKED MLB

SHIER RINGS ROAD - CROSS SECTIONS
STA. 10+00 TO STA. 11+00

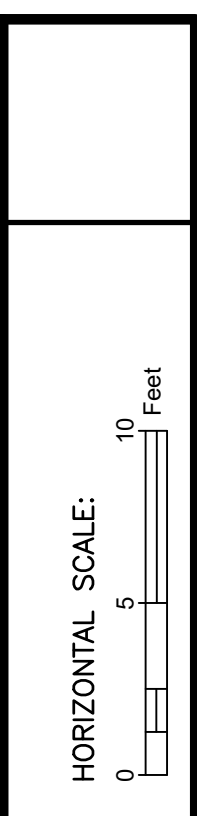
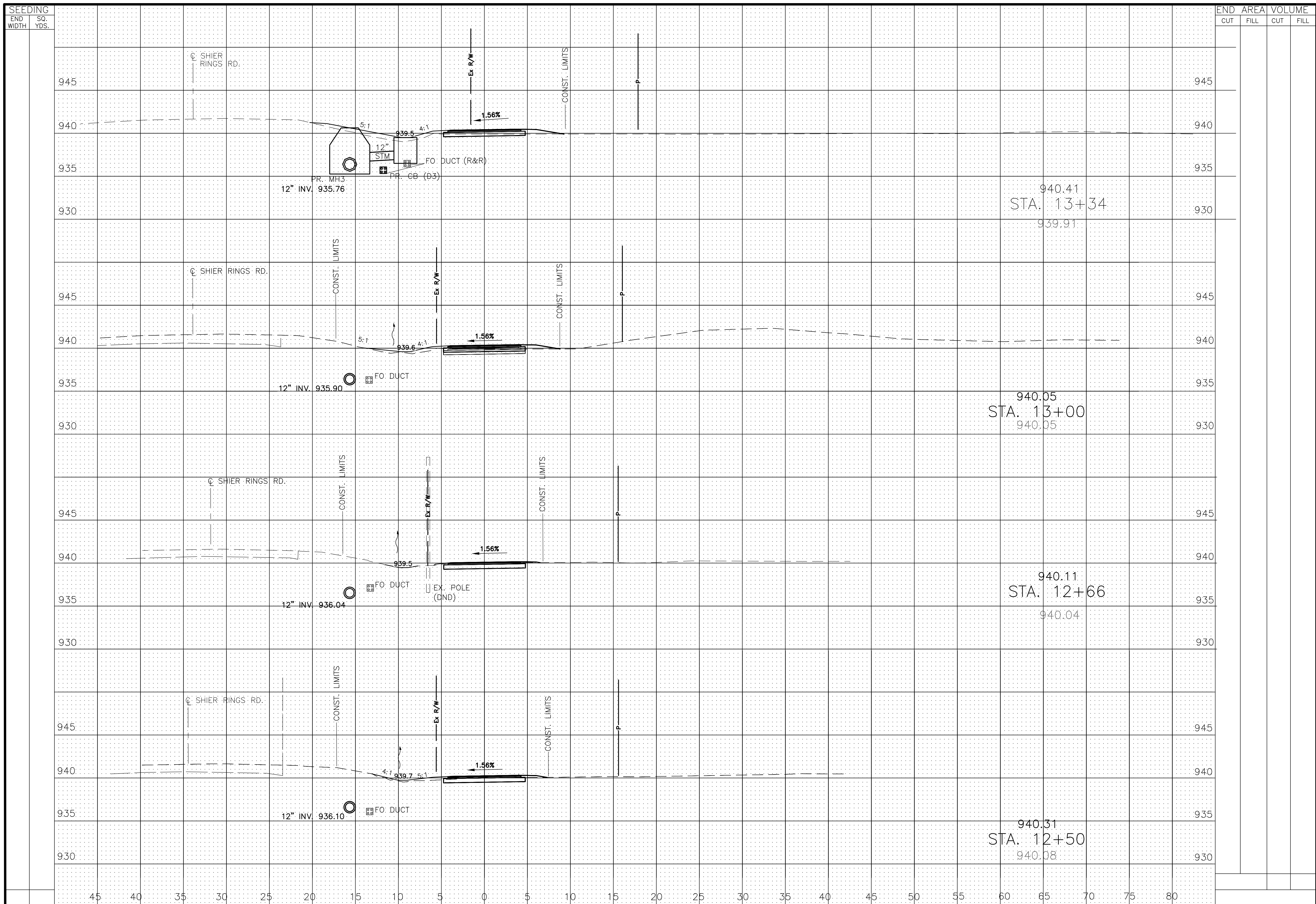
SHIER RINGS ROAD SHARED USE PATH



DESIGNED WCB
CHECKED MLB

SHIER RINGS ROAD - CROSS SECTIONS
STA. 11+40 TO STA. 12+00

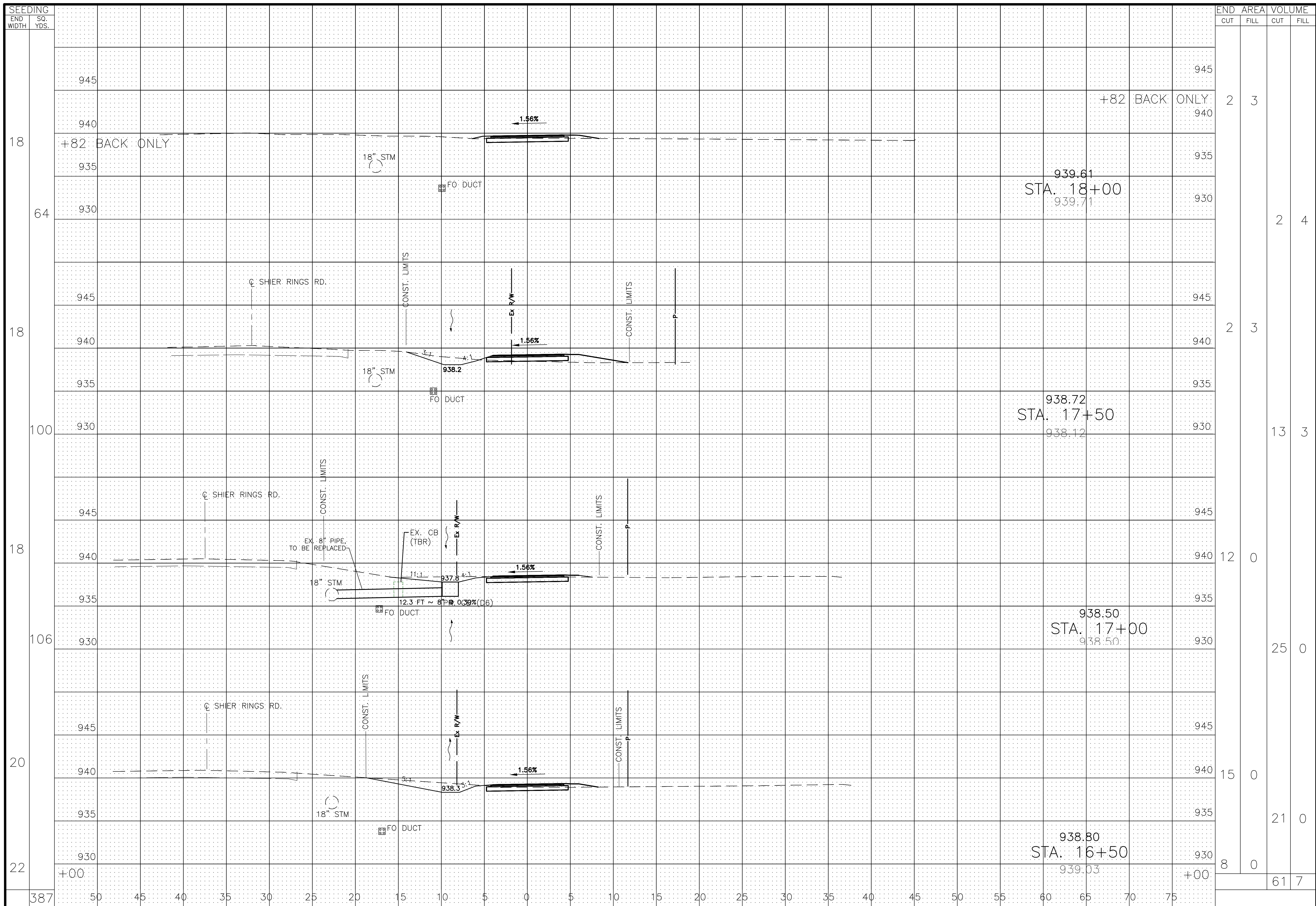
SHIER RINGS ROAD SHARED USE PATH



DESIGNED: WCB
CHECKED: MLB

SHIER RINGS ROAD - CROSS SECTIONS
STA. 12+50 TO STA. 13+33

SHIER RINGS ROAD SHARED USE PATH



SEEDING END WIDTH	SQ. YDS.	END AREA		VOLUME	
		CUT	FILL	CUT	FILL
18	945				
	940				
	935				
64	930			2	4
18	945				
	940				
	935				
100	930			13	3
18	945				
	940				
	935				
106	930			25	0
20	945				
	940				
	935				
22	930			15	0
	+00			8	0
387	50	45	40	35	30
	25	20	15	10	5
	0	5	10	15	20
	25	30	35	40	45
	50	55	60	65	70
	75				
				61	7

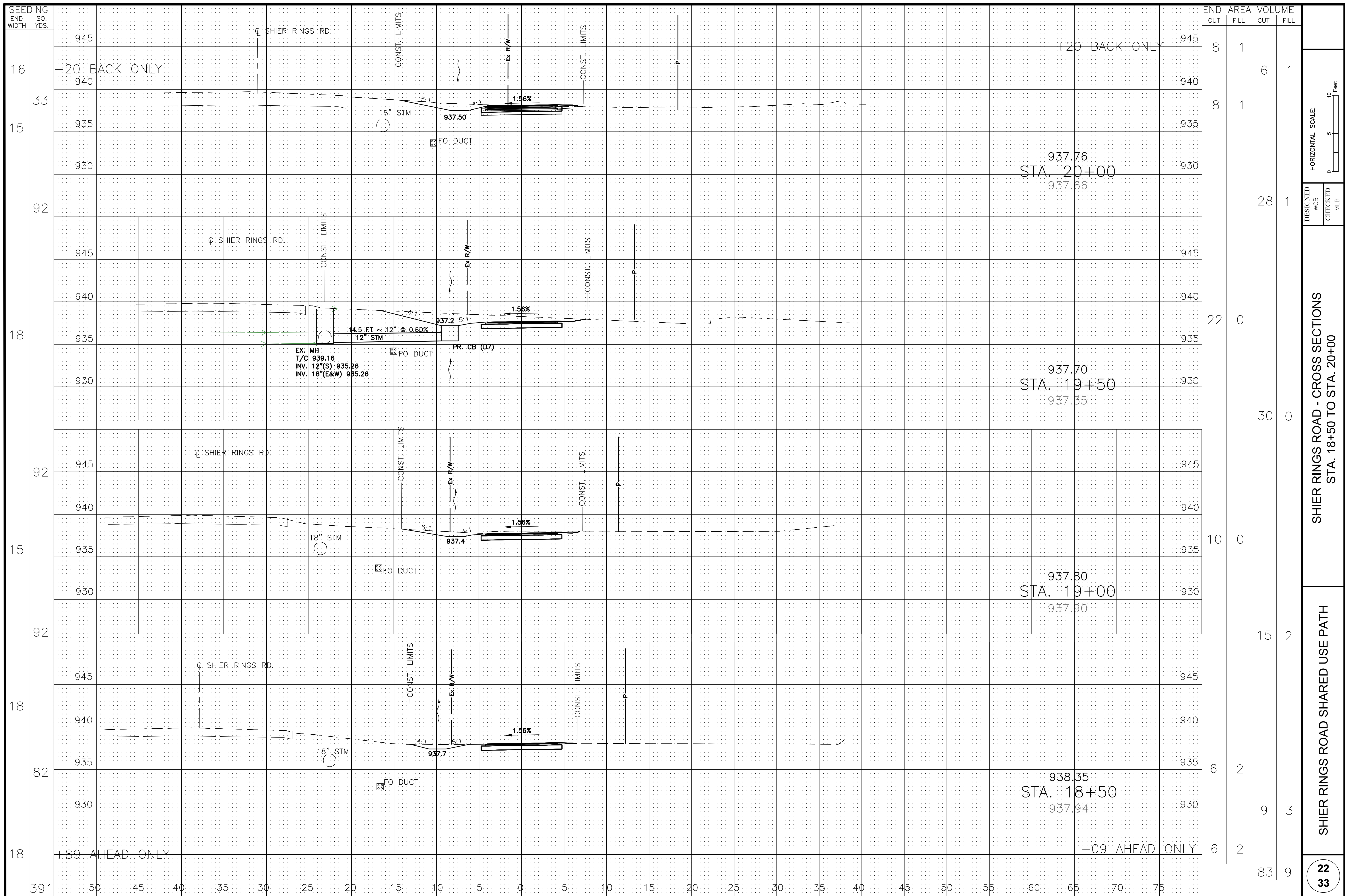
**SHIER RINGS ROAD - CROSS SECTIONS
STA. 16+50 TO STA. 18+00**

SHIER RINGS ROAD SHARED USE PATH

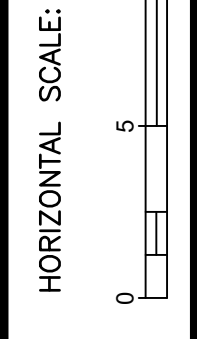
DESIGNED: WCB
CHECKED: M/LB

HORIZONTAL SCALE: 1" = 10' Feet

21
33



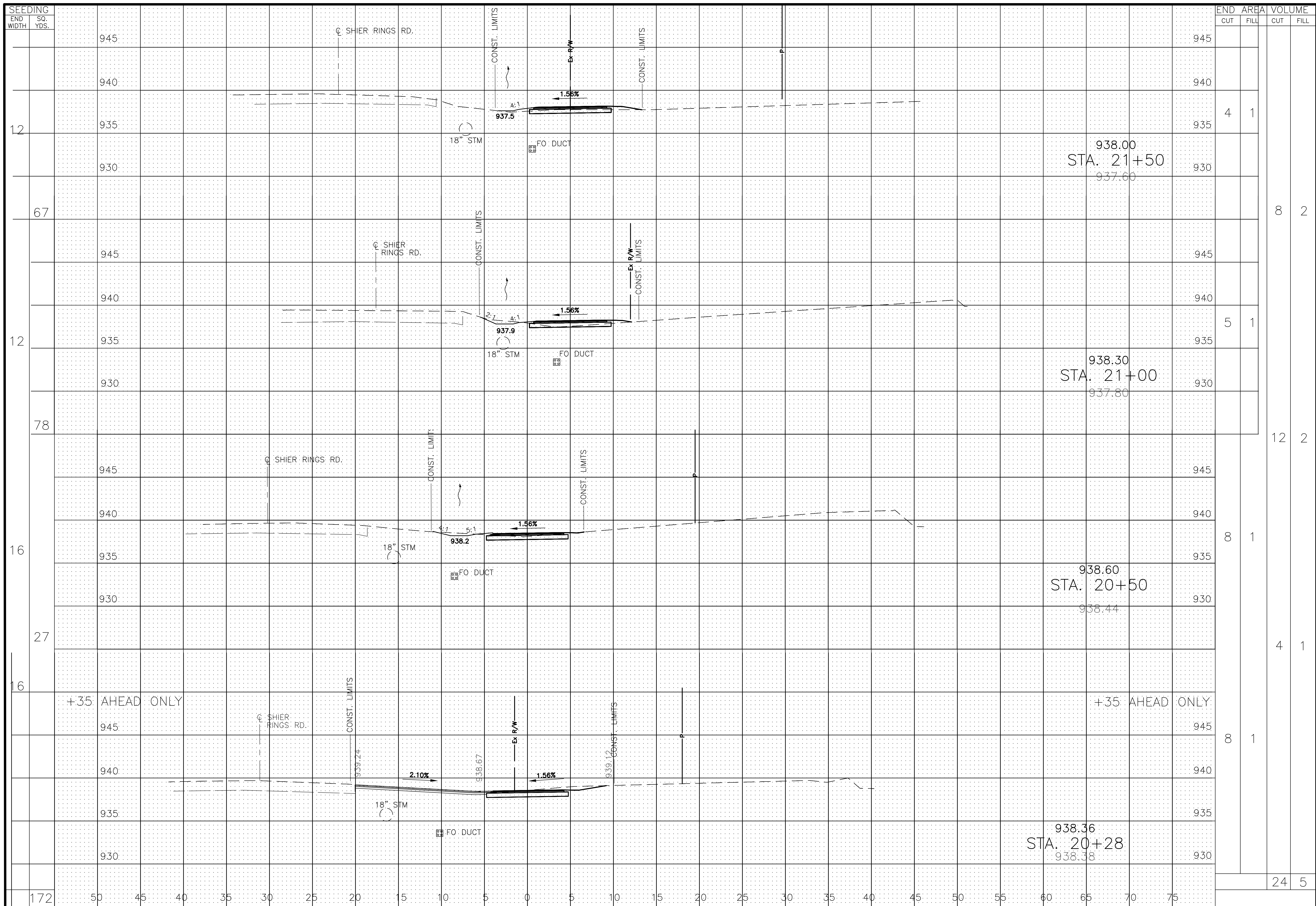
END STA.	AREA		VOLUME	
	CUT	FILL	CUT	FILL
945	8	1		
940			6	1
935	8	1		
930				
925			28	1
920				
915				
910				
905				
900				
895				
890				
885				
880				
875				
870				
865				
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DESIGNED: WCB
CHECKED: M/LB

SHIER RINGS ROAD - CROSS SECTIONS
STA. 18+50 TO STA. 20+00

SHIER RINGS ROAD SHARED USE PATH



STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
935	4	1		
930				
945			8	2
940				
935	5	1		
930				
945			12	2
940				
935	8	1		
930				
945			4	1
940				
935				
930				
945			8	1
940				
935				
930				
945			24	5
940				
935				
930				

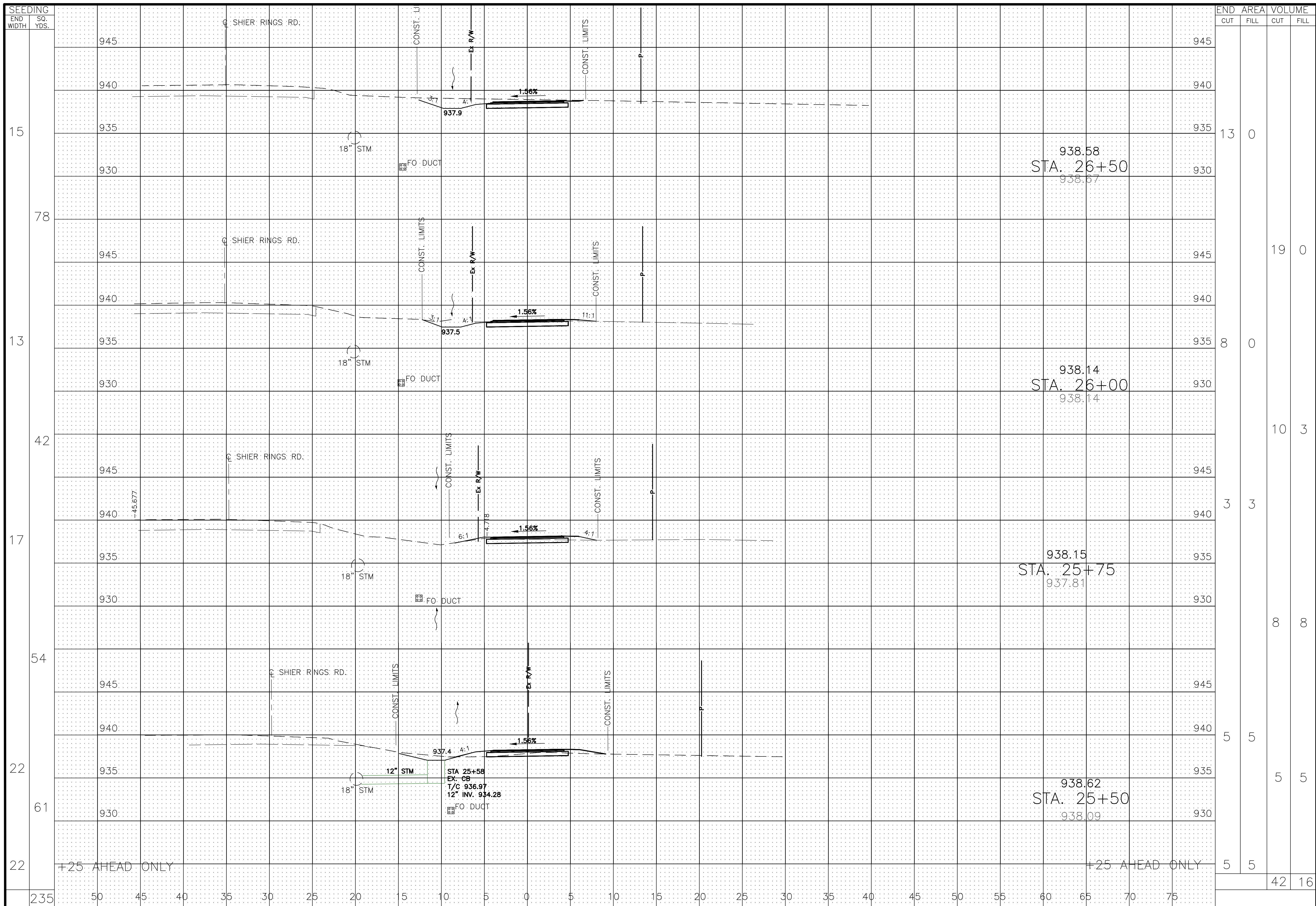
SHIER RINGS ROAD - CROSS SECTIONS
STA. 20+27.90 TO STA. 21+50

SHIER RINGS ROAD SHARED USE PATH

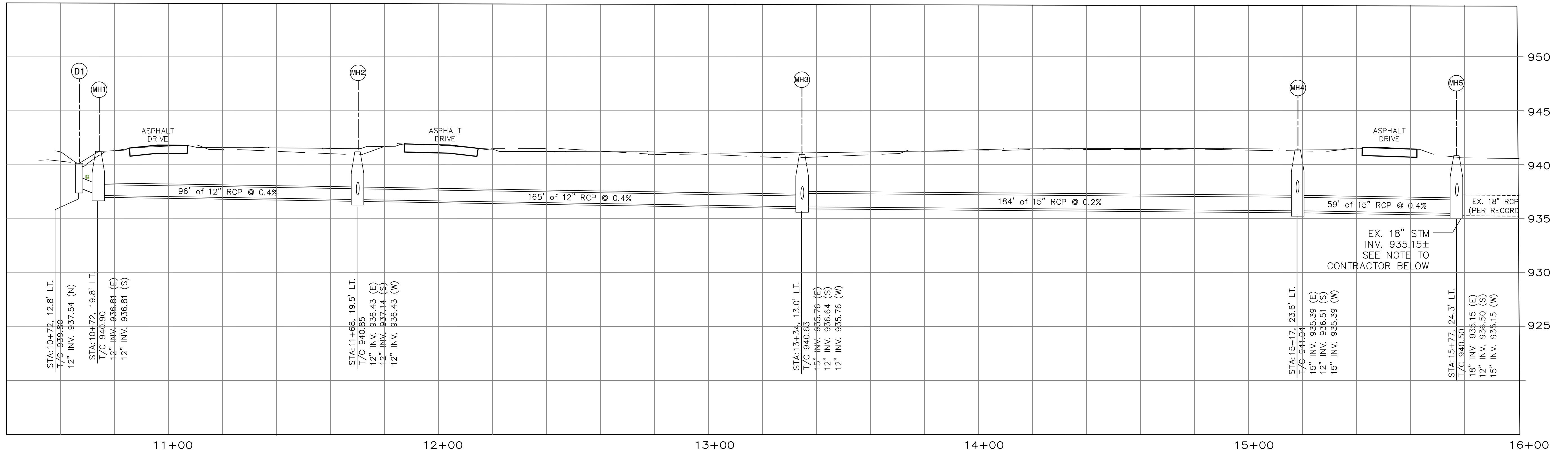
DESIGNED: WCB
CHECKED: MLB

HORIZONTAL SCALE: 1" = 10' Feet

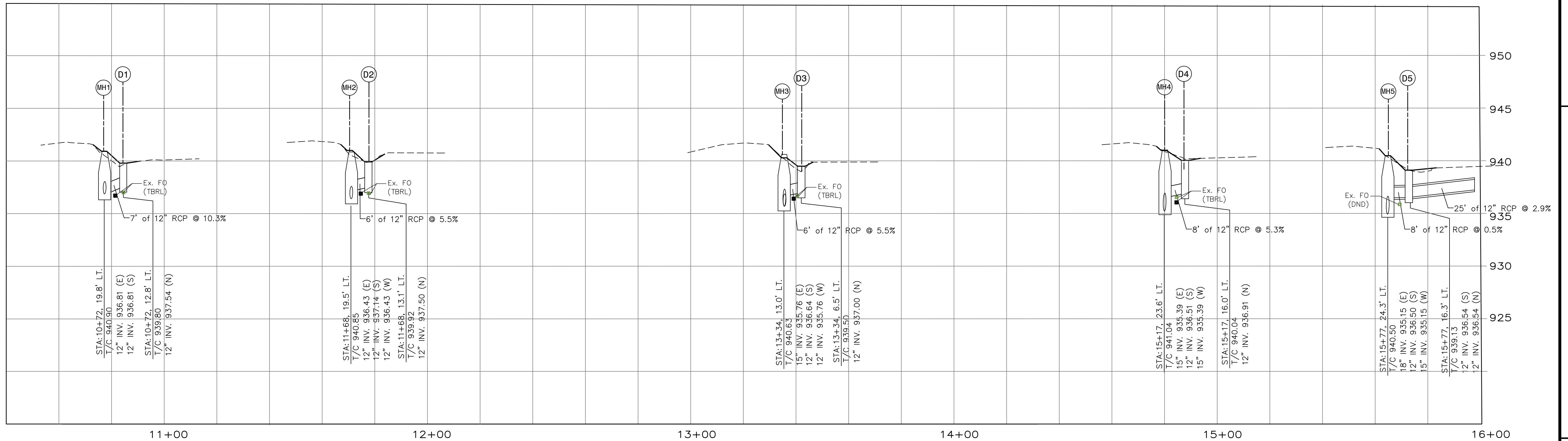
23
33



END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
945				
940				
935	13	0		
930				
945			19	0
940				
935	8	0		
930				
945			10	3
940	3	3		
935				
930			8	8
945				
940				
935	5	5		
930				
945				
940				
935	5	5		
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945	5	5		
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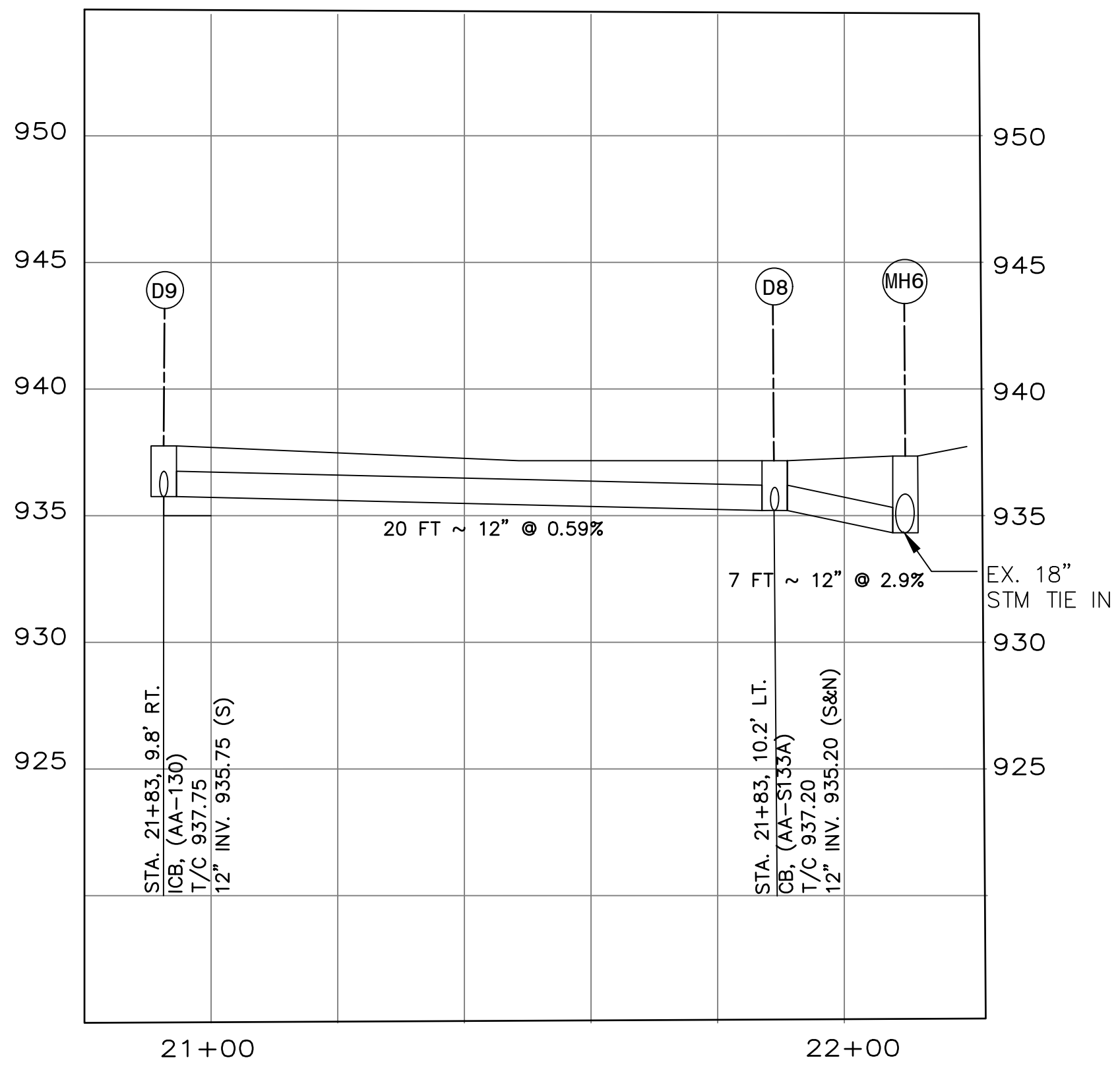
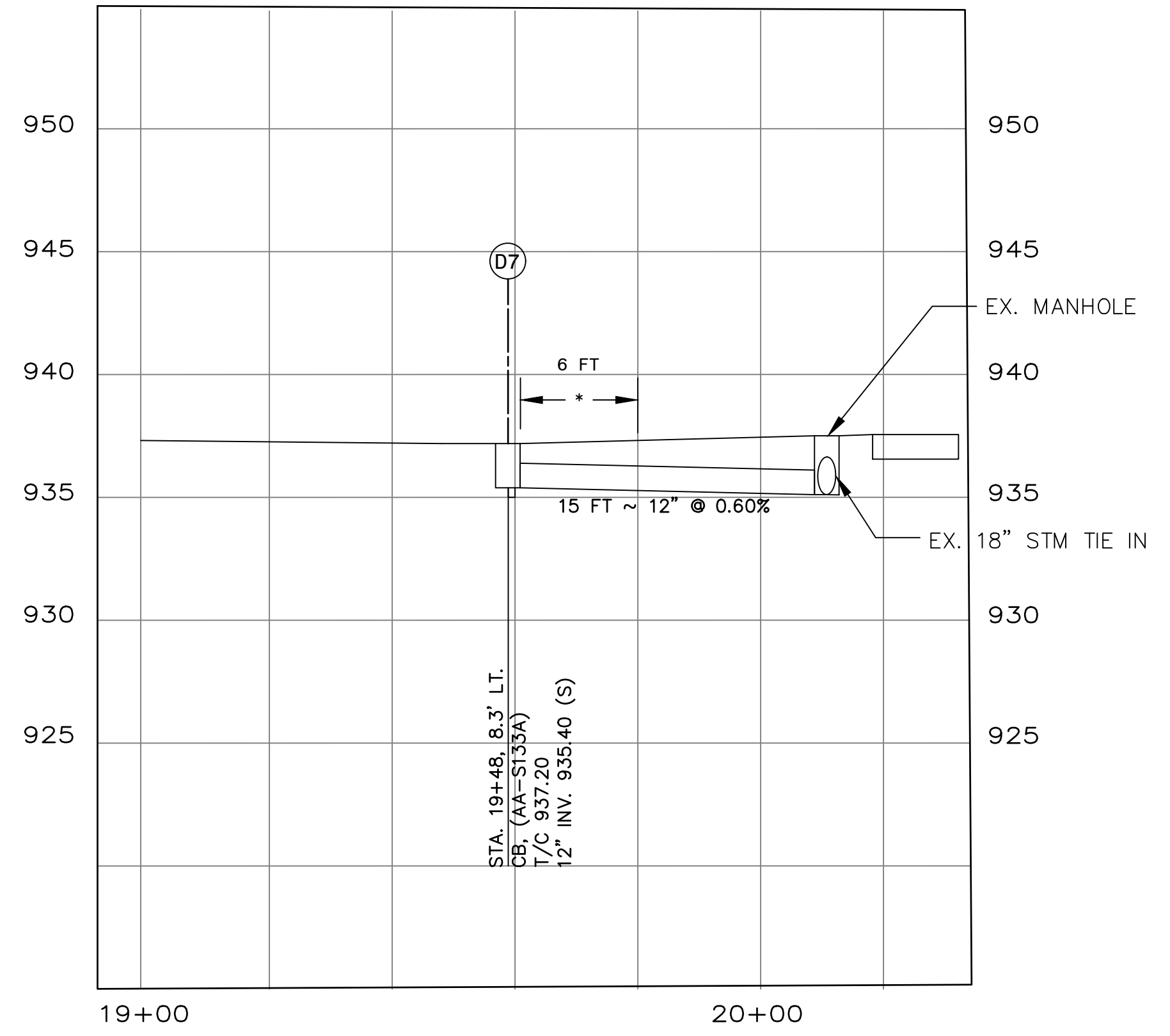
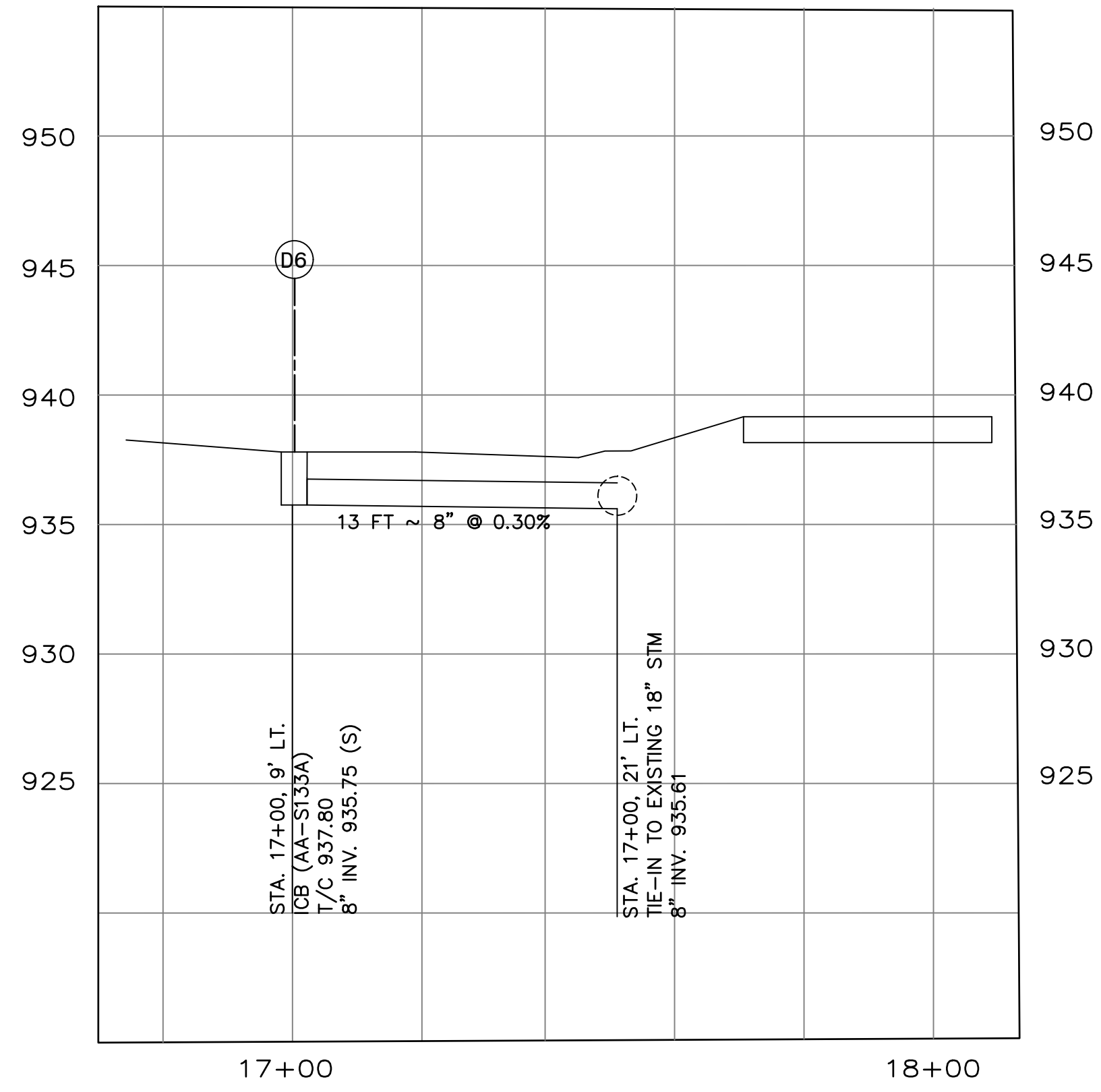
NOTE:
 CONTRACTOR TO FIELD VERIFY EXISTING
 18-INCH INVERT PRIOR TO CONSTRUCTION OR
 ORDERING ANY STORM STRUCTURES. NOTIFY
 ENGINEER OF ANY DISCREPANCY.



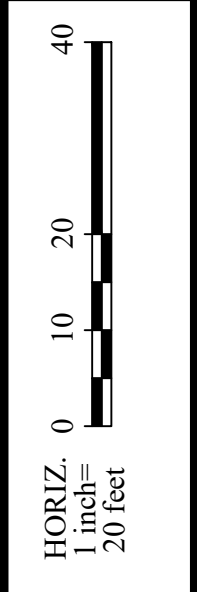
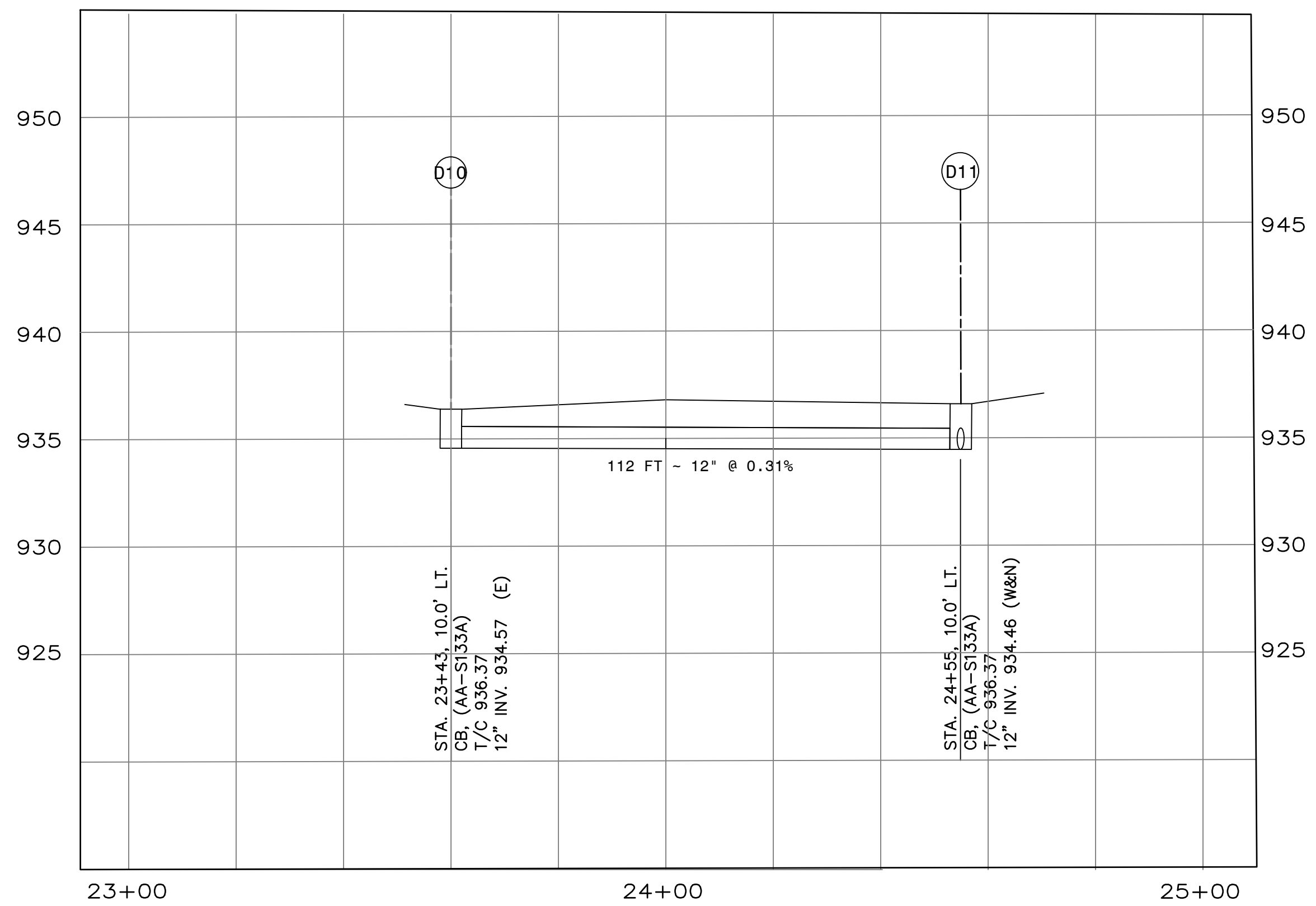
DESIGNED WCB
 CHECKED MLB

STORM SEWER PROFILES

SHIER RINGS ROAD SHARED USE PATH



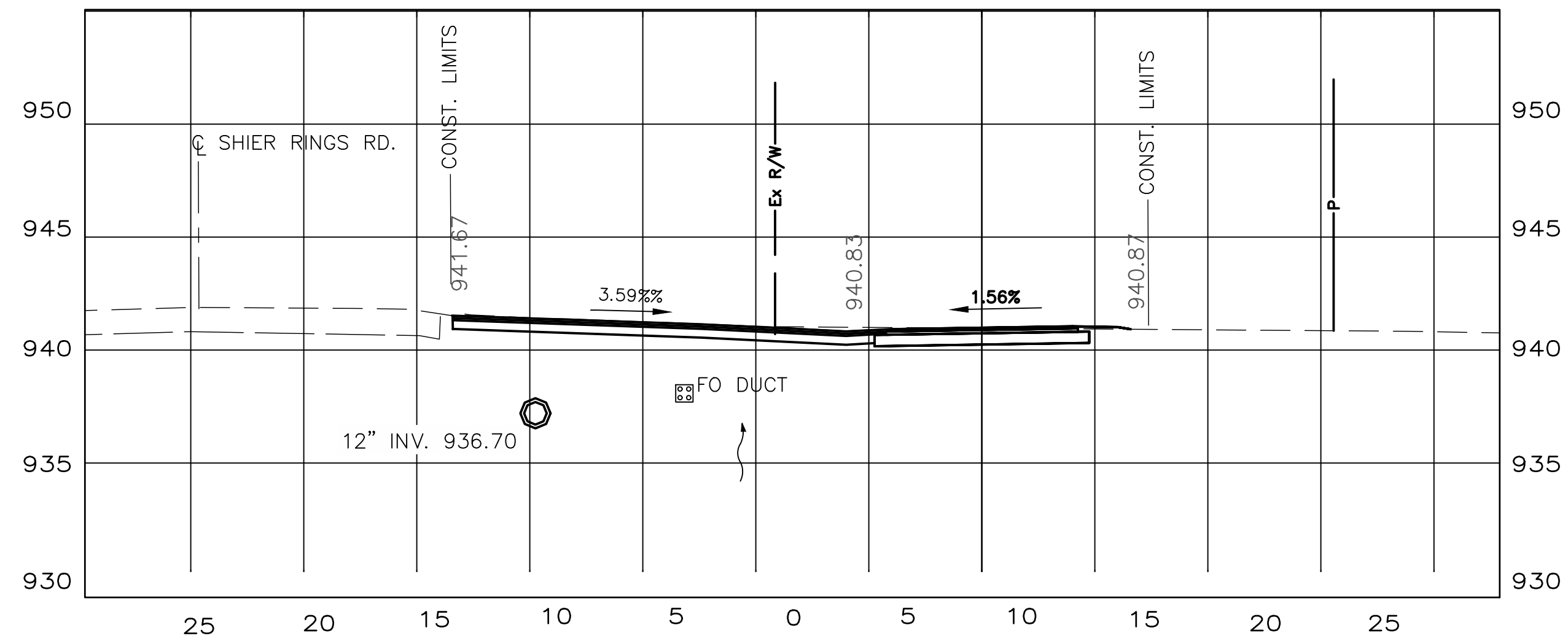
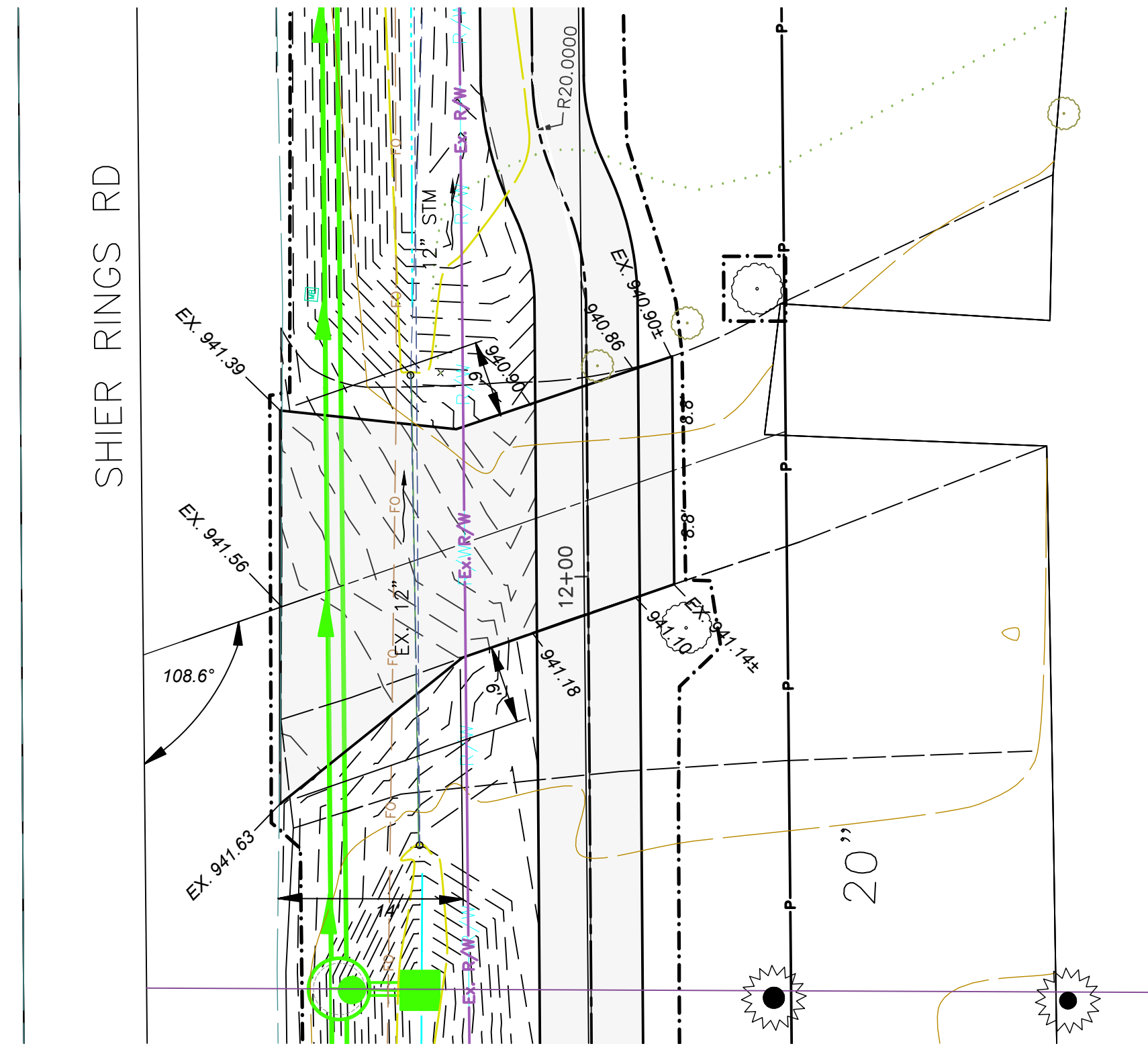
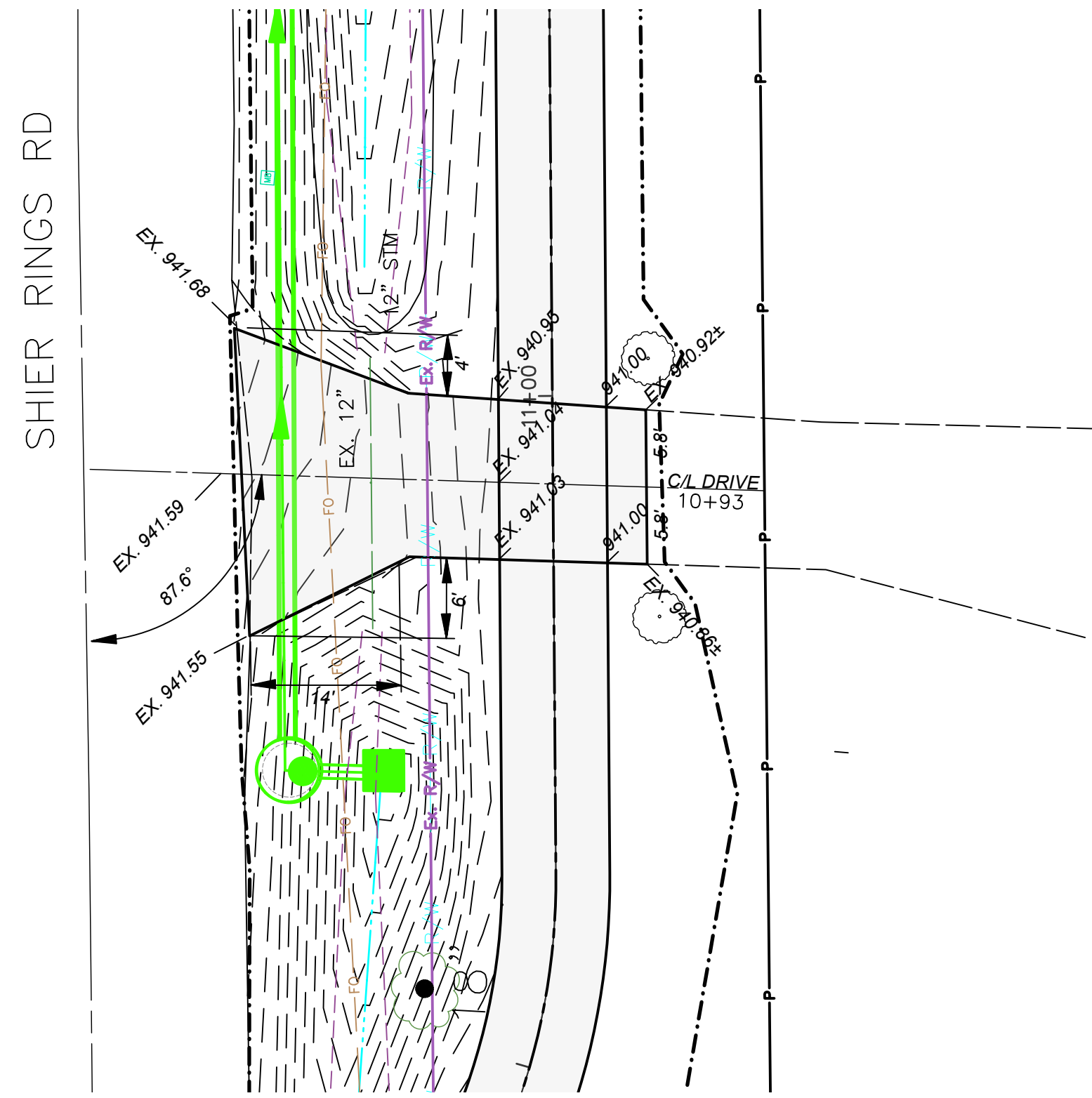
NOTE:
THE *** INDICATES SECTIONS
OF CONCRETE ENCASED PIPE,
SEE NOTE ON SHEET 4.



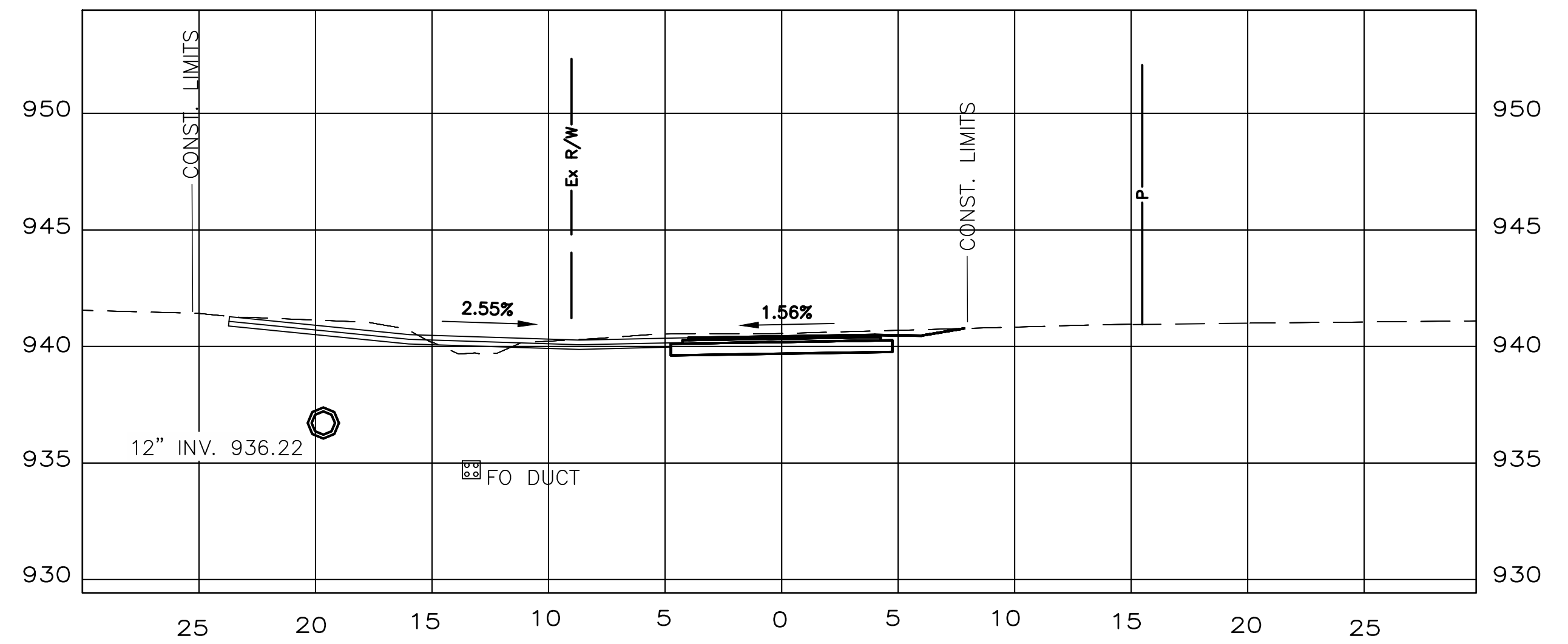
DESIGNED	WCB
CHECKED	MLB

STORM SEWER PROFILES

SHIER RINGS ROAD SHARED USE PATH



DRIVEWAY DETAIL—STA. 10+93
7065 SHIER RINGS RD

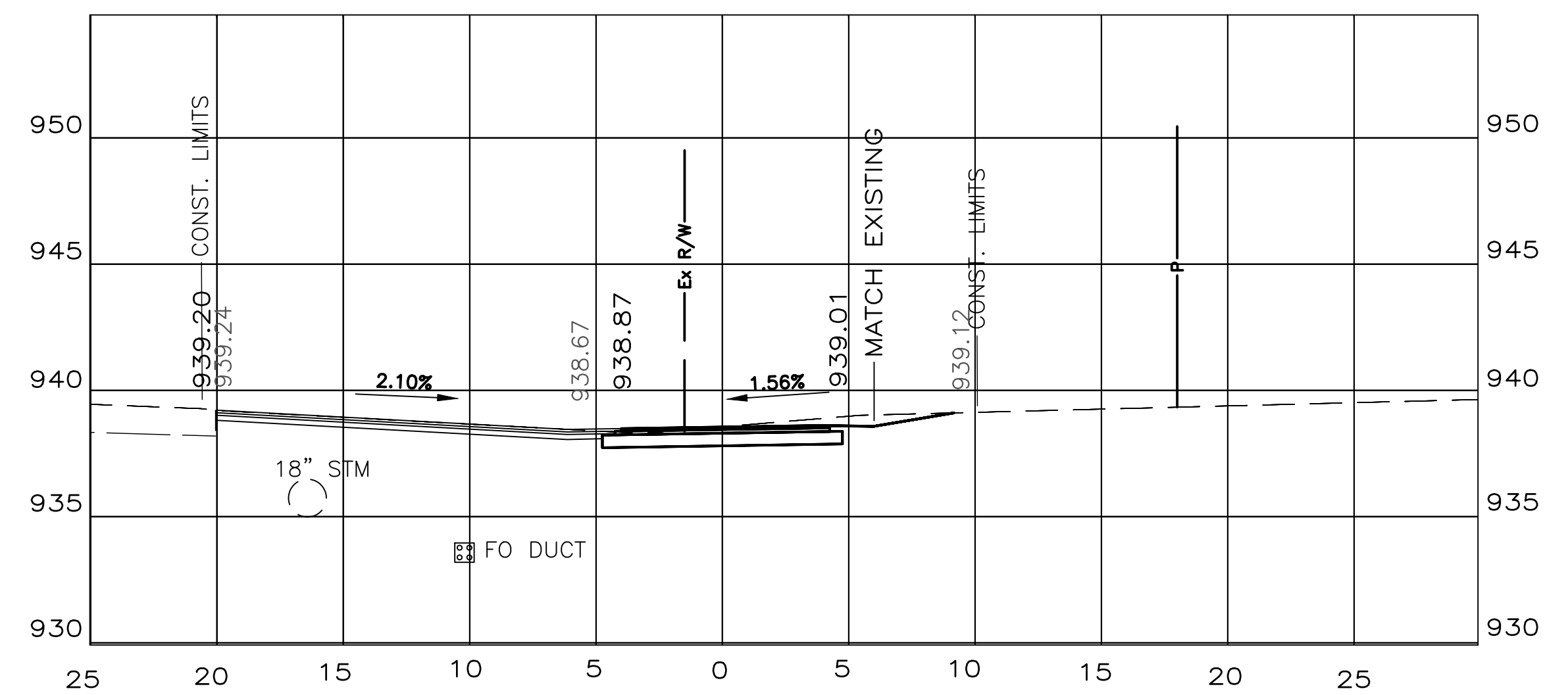
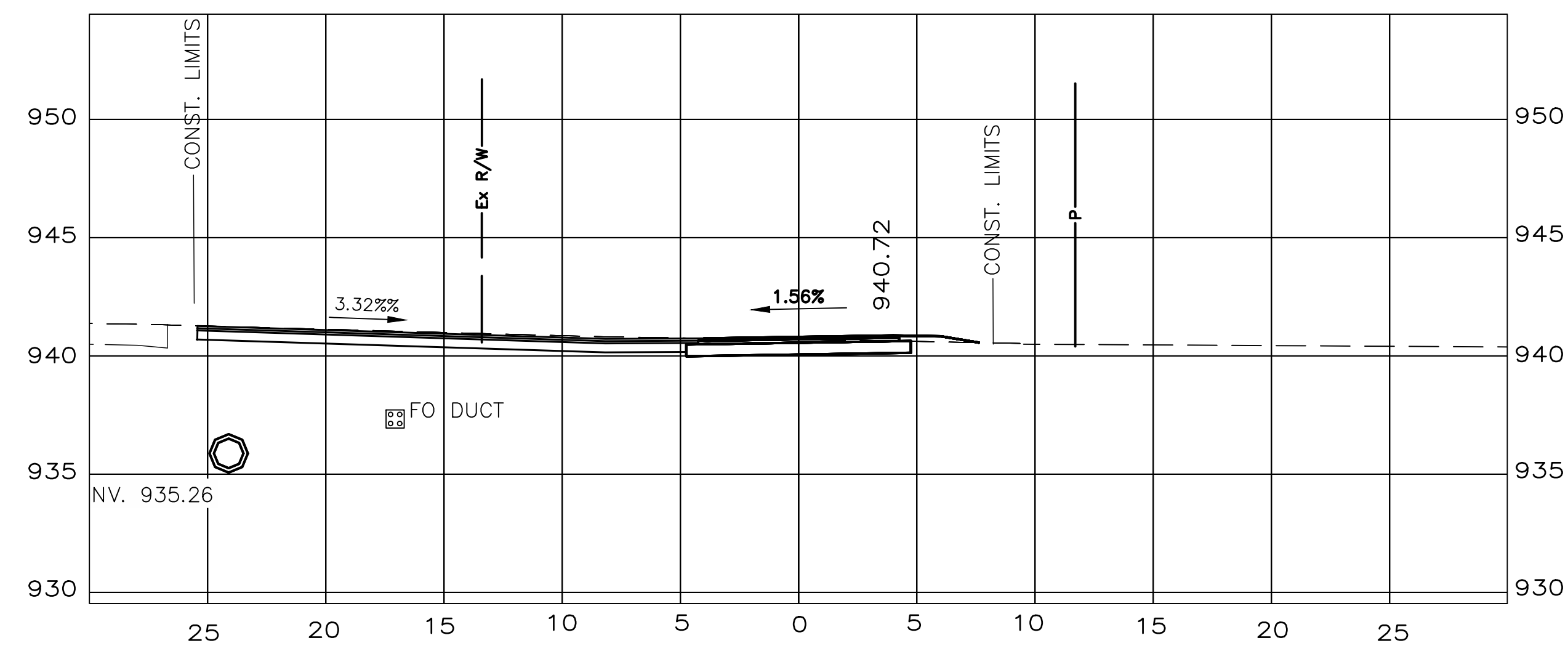
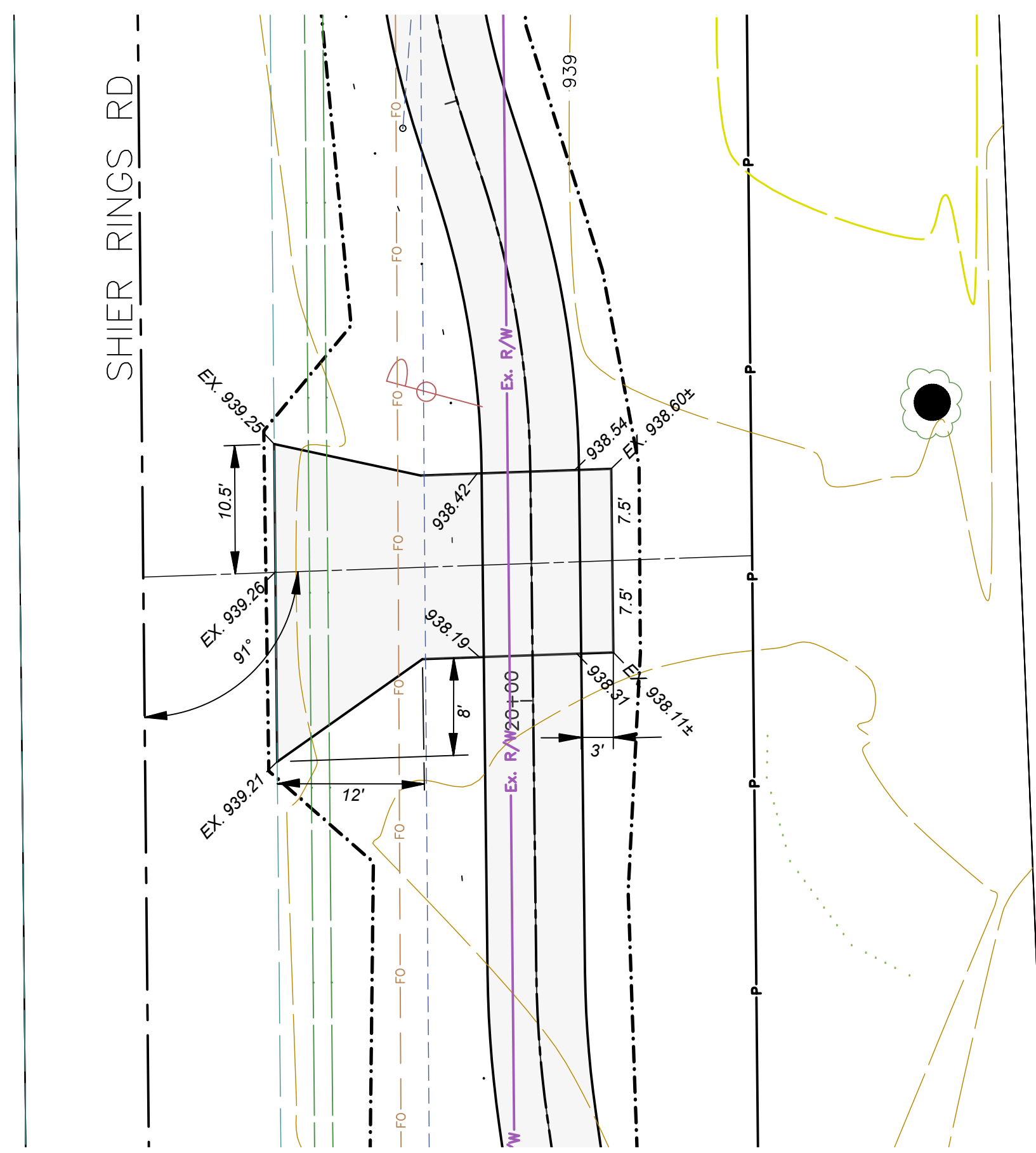
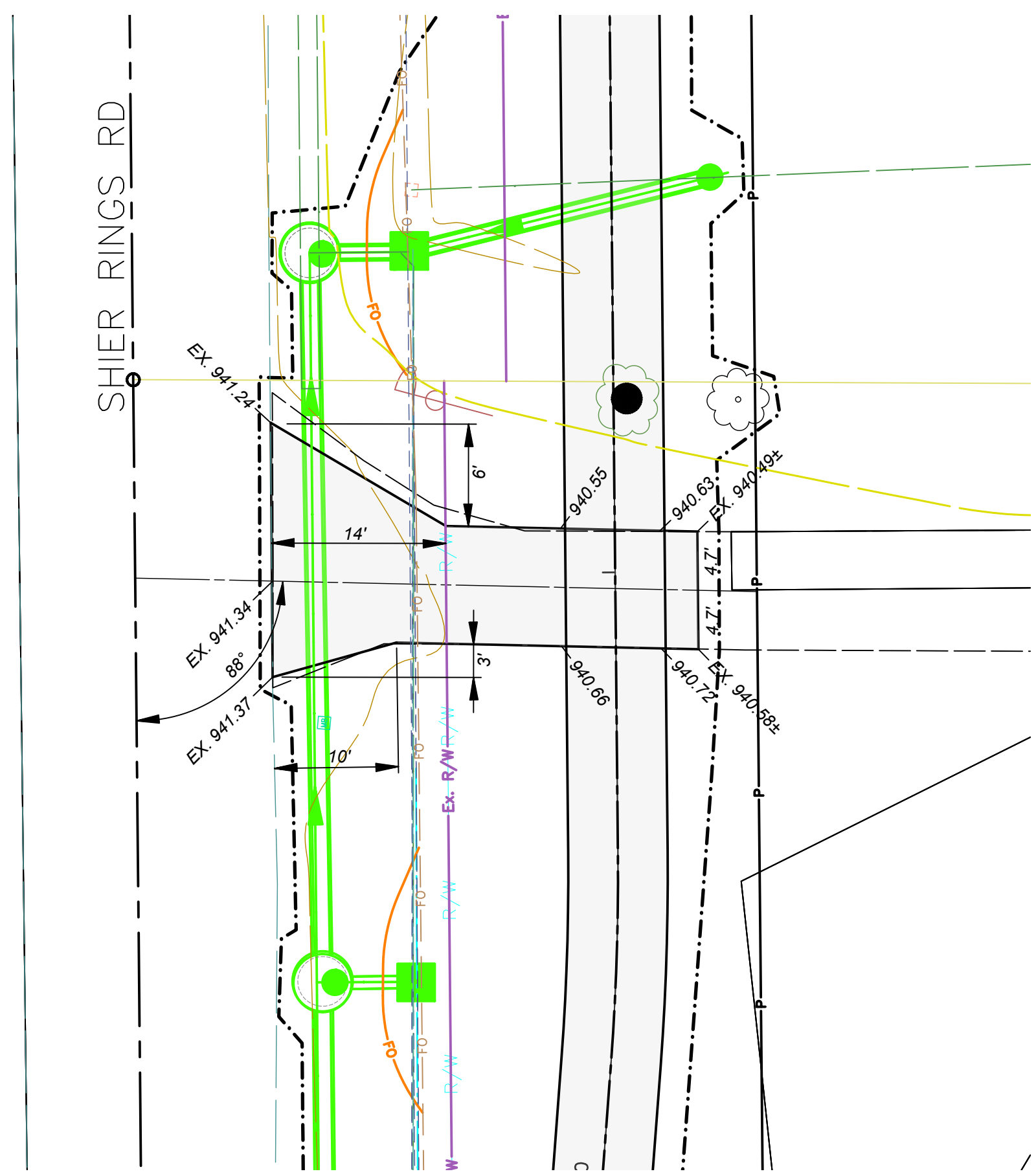


DRIVEWAY DETAIL—STA. 12+06
7055 SHIER RINGS RD

DESIGNED: WCB
CHECKED: MLB

DRIVE DETAILS
STA. 11+10.4 AND STA. 12+22.7

SHIER RINGS ROAD SHARED USE PATH



DRIVEWAY DETAIL—STA. 15+65.3
7025 SHIER RINGS RD

DRIVEWAY DETAIL—STA. 20+27.5
6957 SHIER RINGS RD

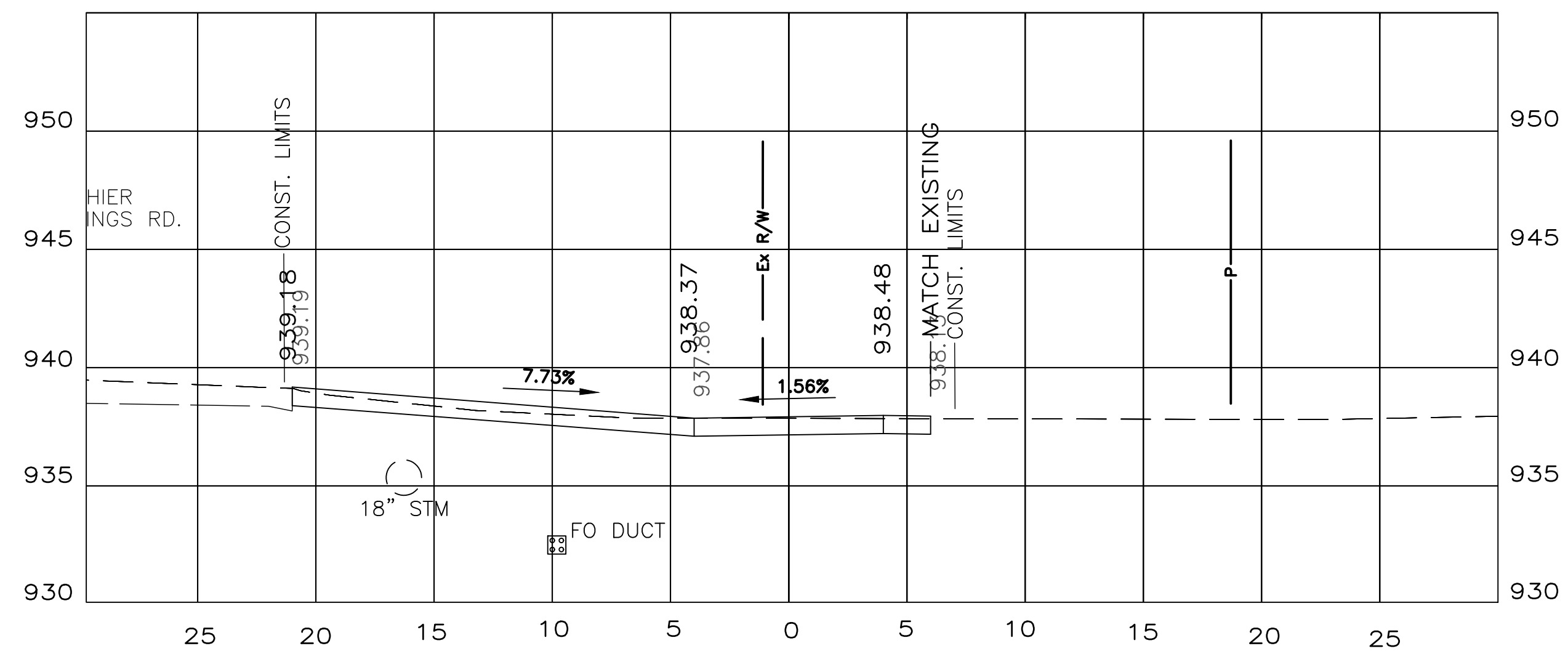
DESIGNED: WCB
CHECKED: MLB

HORIZ: 1"=10' feet
VERT: 1"=10' feet

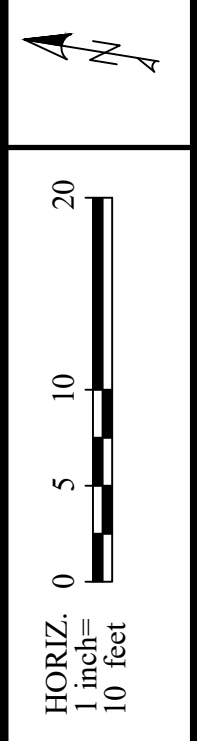
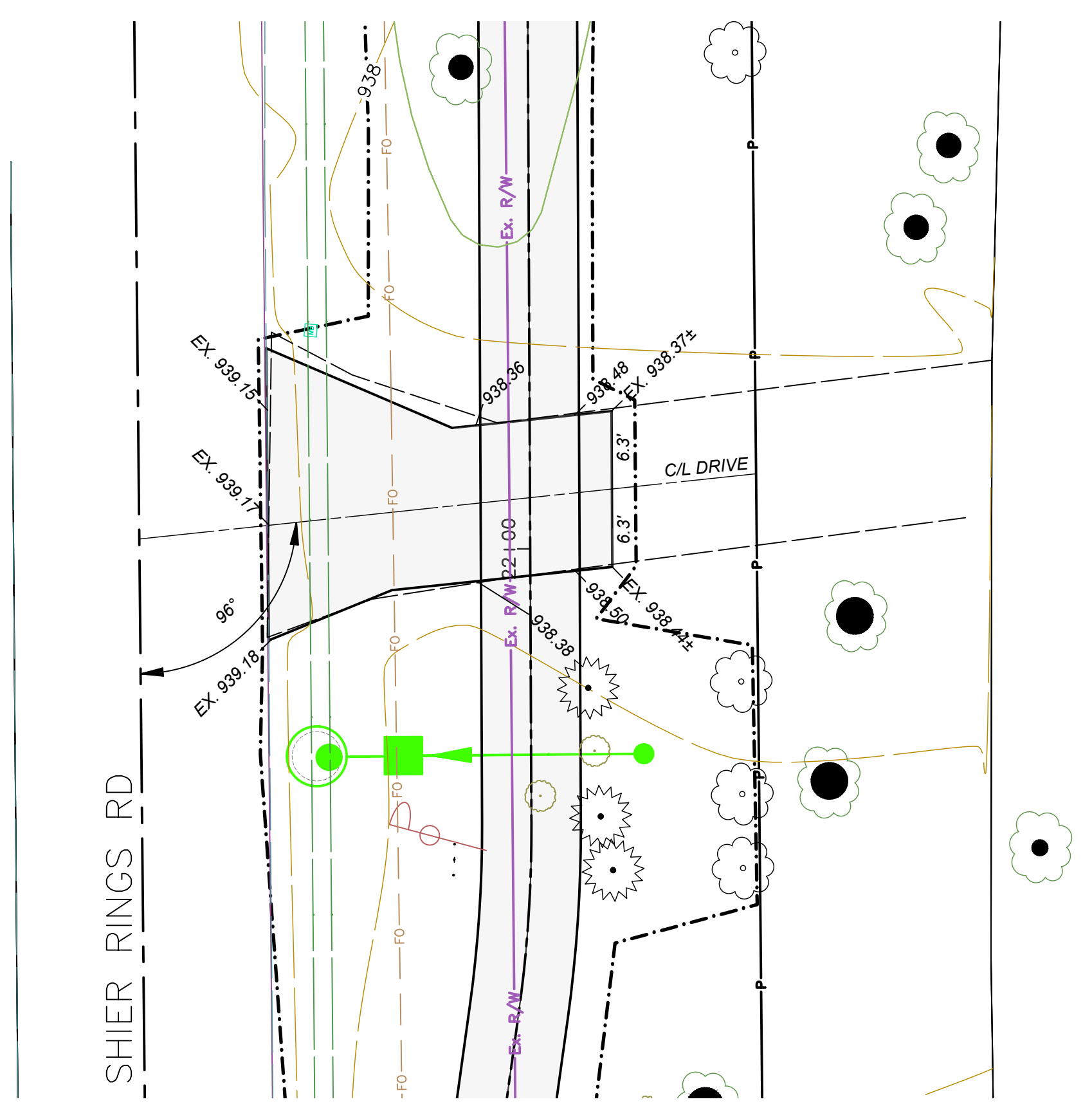
0 5 10 20

DRIVE DETAILS
STA. 15+65.3 AND STA. 20+27.5

SHIER RINGS ROAD SHARED USE PATH



DRIVEWAY DETAIL—STA. 22+20.2
6939 SHIER RINGS RD



DESIGNED	WCB
CHECKED	MLB

DRIVE DETAILS
STA. 22+20.2

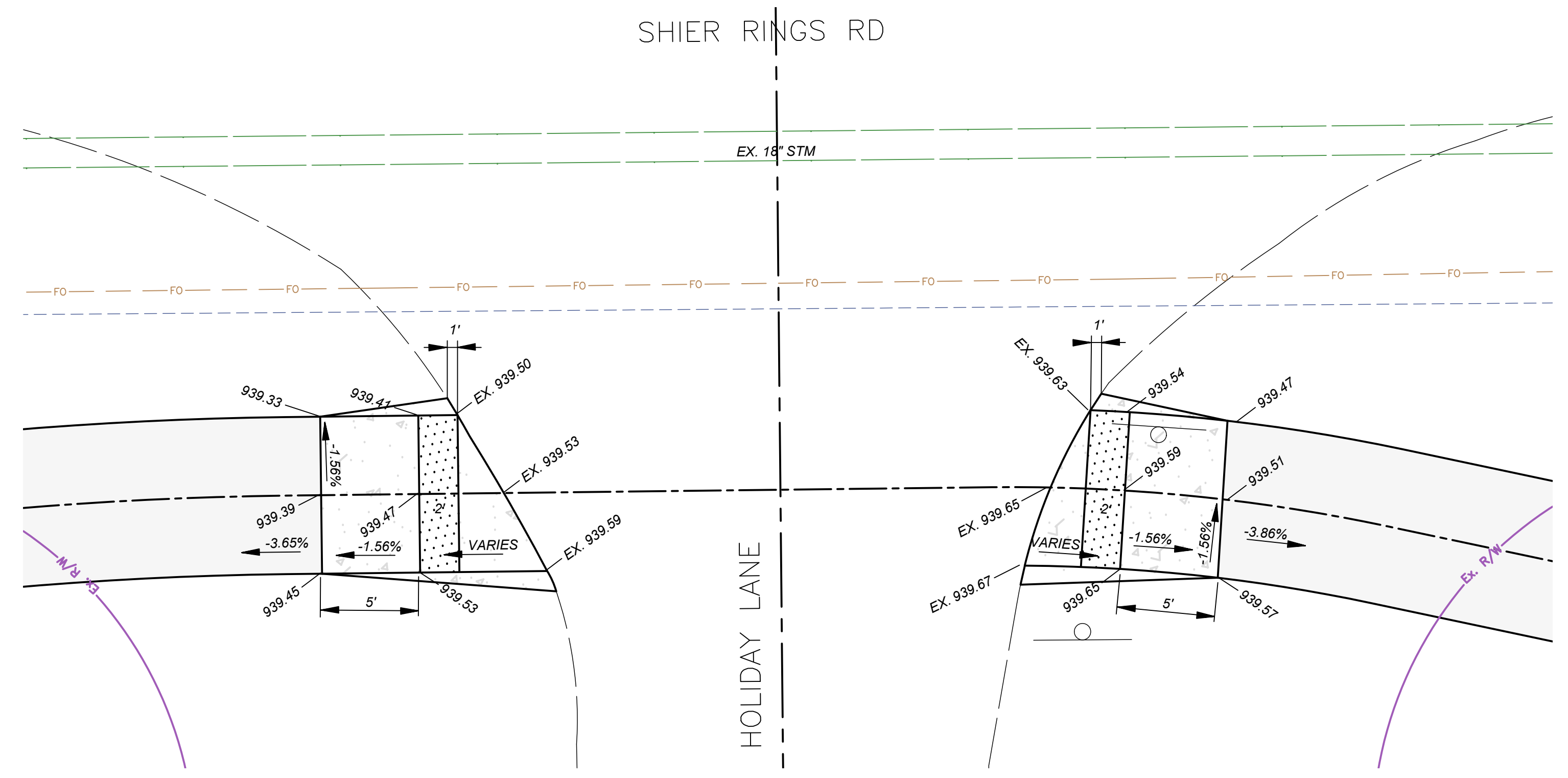
SHIER RINGS ROAD SHARED USE PATH



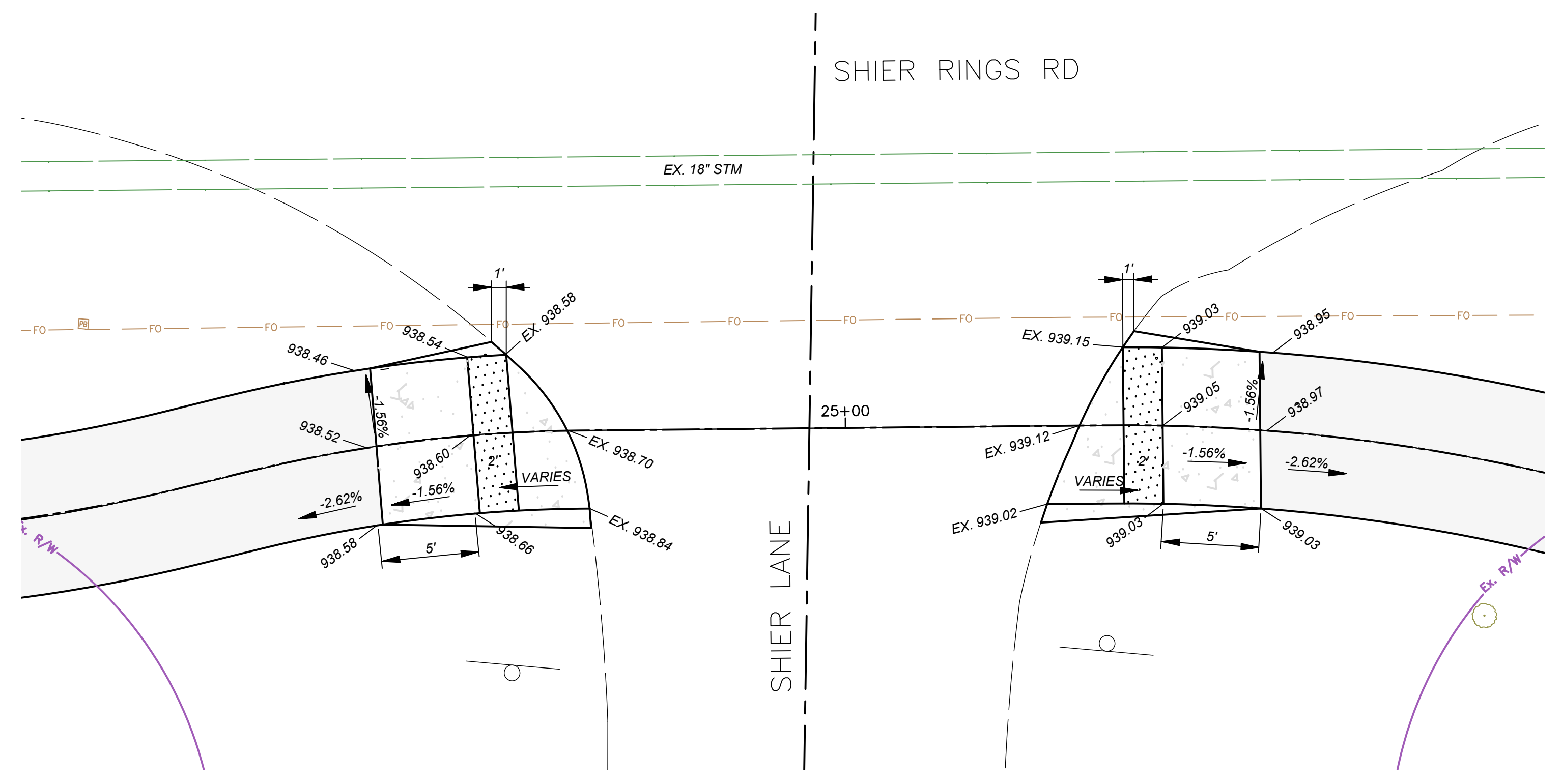
DESIGNED	WCB	CHECKED	MLB
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RAMP DETAILS
HOLIDAY LANE AND SHIER LANE INTERSECTIONS

SHIER RINGS ROAD SHARED USE PATH



RAMP DETAIL - HOLIDAY LANE



RAMP DETAIL - SHIER LANE