

PAINTED WOODS WEST AS-BUILT CONSTRUCTION PLANS

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OWNER:
PAINTED WOODS DEVELOPMENT LC
ATTN: BILL KIMBERLY
2785 N ANKENY BLVD SUITE 22
ANKENY, IA 50023

DEVELOPER:
KIMBERLY DEVELOPMENT
ATTN: BILL KIMBERLY
2785 N ANKENY BLVD SUITE 22
ANKENY, IA 50023
PH: (515) 963-8335

ENGINEER/SURVEYOR:
BISHOP ENGINEERING
ATTN: DAVID BENTZ
3501 104TH ST
URBANDALE, IA 50322
PH: (515) 276-0467

PROPOSED ZONING:
R-2: ONE AND TWO FAMILY RESIDENTIAL DISTRICT
BULK REGULATIONS:
MINIMUM LOT SIZE: 9,500 SF
MINIMUM LOT WIDTH: 70'
FRONT YARD SETBACK: 30'
REAR YARD SETBACK: 30'
TOTAL SIDE YARD SETBACK: 15' (7' MIN PER SIDE)

DISTURBED AREA:
TOTAL DISTURBED AREA = 70 ACRES MORE OR LESS
(SEE GRADING PLAN)

BENCHMARKS:
ARROW ON HYDRANT LOCATED AT THE DEAD END OF
COTTONWOOD DRIVE
ELEVATION = 993.18 (USGS DATUM)

ABBREVIATIONS:

AC ACRES
ASPH ASPHALT
BK BOOK
CONC CONCRETE
D DEEDED DISTANCE
EX EXISTING
ENCL ENCLOSURE
FF FINISHED FLOOR
FL FLOW LINE
FRAC FRACTIONAL
M MEASURED DISTANCE
MH MANHOLE
OPC ORANGE PLASTIC CAP
P PLATTED DISTANCE
PG PAGE
POB POINT OF BEGINNING
POC POINT OF COMMENCEMENT
PRI PREVIOUSLY RECORDED AS
PUE PUBLIC UTILITY EASEMENT
ROW RIGHT OF WAY
SF SQUARE FEET
SAN SANITARY
TYP TYPICAL
YPC YELLOW PLASTIC CAP
N NORTH
S SOUTH
E EAST
W WEST



UTILITY NOTE:

THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS AND ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS OF ALL UTILITIES MUST BE ASCERTAINED IN THE FIELD. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

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GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH CITY OF WAUKEE STANDARD SPECIFICATIONS. THE CITY OF WAUKEE MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK AND AT LEAST 48 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.
- IN EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
- ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- BISHOP ENGINEERING SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
- THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE FOR PERFORMANCE OF WORK ITEMS. THIS SCHEDULE SHALL BE PROVIDED BY THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN UNTIL A SCHEDULE HAS BEEN SUBMITTED AND ACCEPTED. THE CONTRACTOR SHALL THEN PERFORM WORK TO CONFORM TO THE ACCEPTED SCHEDULE.
- LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNERS REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF WAUKEE.
- GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
- THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROJECT MANAGER CONTACT INFORMATION TO THE CITY OF WAUKEE AFTER BID LETTING.
- ANY PROPOSED CHANGES TO THE APPROVED PLAN SET DURING CONSTRUCTION MUST RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT AND DESIGN ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT RECEIVED WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING WAUKEE ENGINEERING DEPARTMENT AT LEAST 1 WEEK PRIOR TO ANY PLANNED WORK TO SCHEDULE A PRE-CONSTRUCTION MEETING.
- ANY ESTABLISHED LAWNS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH SOD AND BE WATERED FOR A PERIOD OF 1 YEAR. SAID WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S SPECIFICATION SHEETS FOR ALL MATERIALS BEING USED IN THE CONSTRUCTION OF THE IMPROVEMENTS TO THE WAUKEE ENGINEERING DEPARTMENT.

PAVING NOTES:

- THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SEEDED IN ACCORDANCE WITH CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
- SUBGRADE PREPARATION AND PAVEMENTS WILL BE CONSTRUCTED FOLLOWING RECOMMENDATIONS IN THE SOILS REPORT. APPROVED SOILS ENGINEER MUST SIGN OFF ON SUBBASE PRIOR TO ANY PAVEMENT BEING PLACED.
- SEE DETAILS FOR ALL PAVEMENT THICKNESS.
- ALL PEDESTRIAN WALKWAYS THAT UNLOAD INTO A VEHICLES TRAVELED PATH MUST HAVE A D.A. DETECTABLE WARNING PANEL(S) AS PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
- ALL WALKS, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND PROWAG REQUIREMENTS. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./ PROWAG REQUIREMENTS THE A.D.A./ PROWAG REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL A.D.A. & PROWAG CODES ARE MET.

UTILITY NOTES:

- QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- ALL EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE. ANY AND ALL FIELD TILES ENCOUNTERED SHALL BE INCLUDED ON THE AS-BUILT PLANS.
- ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD. ALL APRONS SHALL HAVE A 10-FOOT CLAY WATER STOP.
- ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
- SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2%. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATERMAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.
- MANDREL AND PRESSURE TESTS SHALL BE REQUIRED FOR ALL PROPOSED SANITARY LINES AND MANHOLES SHALL BE VACUUM TESTED.
- CLEANING AND TELEVISION OF THE SANITARY AND STORM SEWER SYSTEMS SHALL BE COMPLETED PRIOR TO PAVING UNLESS OTHERWISE APPROVED BY JURISDICTION.
- WATERMANS SHALL BE C-900. SIZE OF WATERMAIN AS SHOWN ON PLANS.
- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN CONSTRUCTION.
- PROPOSED WATERMAIN SHALL BE PRESSURE TESTED, BACTERIA TESTED AND CHLORINATED. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF WAUKEE.
- TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
- ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF WAUKEE WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- THE MINIMUM HYDRANT LEAD SHALL BE 3.5 FEET.
- FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE, HYDRANT AND A STORZ FITTING, INCLUDING ANY RELOCATED HYDRANTS. ANY HYDRANT EXTENSIONS DUE TO EXTRA DEPTH SHALL BE CONSIDERED INCIDENTAL.
- ANY AND ALL BENDS SHALL BE CONSIDERED INCIDENTAL.
- ALL UTILITIES SHALL BE TESTED TO ANY AND ALL CITY STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE TIE-IN OF ALL EXISTING UTILITIES WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- ALL STRUCTURES CALLED OUT AS "MODIFIED" SHALL BE ENGINEERED BY PRECASTER TO ENSURE STRUCTURAL STABILITY. MODIFICATIONS TO STANDARD STRUCTURES SHALL BE CONSIDERED INCIDENTAL.
- ALL STRUCTURES SIZES CALLED OUT ON PLANS ARE INSIDE WALL DIMENSIONS.

SOILS REPORT NOTES:

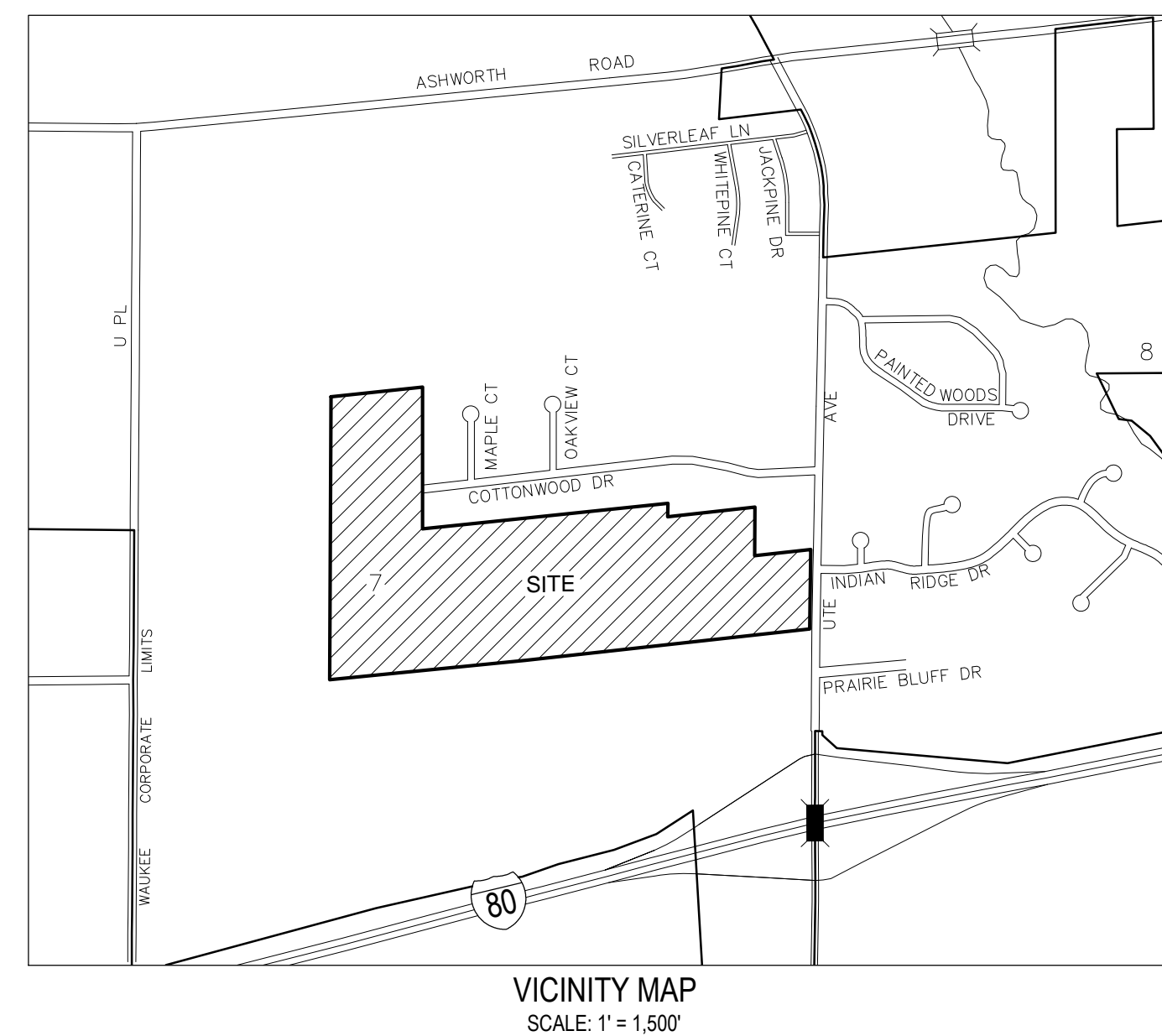
- REFERENCE SOILS REPORT AND ALL ADDENDUMS PREPARED BY CONSTRUCTION MATERIALS TESTING FOR ADDITIONAL SOILS INFORMATION INCLUDING, BUT NOT LIMITED TO, SUBGRADE INFORMATION, PAVEMENT THICKNESS RECOMMENDATIONS, TESTING REQUIREMENTS, AND ANY POSSIBLE OVER EXCAVATION DUE TO POOR SOILS.

ESTIMATED PROJECT QUANTITIES

ITEM #	ITEM DESCRIPTION	QUANTITY	UNIT
1	CLEARING AND GRUBBING	1	LS
2	DEMOLITION	1	LS
3	STRIPPING AND RE-SPREAD TOPSOIL, ON SITE	56,500	CY
4	CLASS 10 EXCAVATION	1	LS
5	SUBGRADE PREPARATION	16,355	SY
6	SANITARY SEWER GRAVITY MAIN, 8"	4,682	LF
7	SANITARY SEWER SERVICE STUB, 4"	50	EA
8	STORM SEWER, 15" RCP	2,490	LF
9	STORM SEWER, 18" RCP	1,044	LF
10	STORM SEWER, 24" RCP	1,094	LF
11	STORM SEWER, 36" RCP	461	LF
12	STORM SEWER SERVICE STUB, 4"	50	EA
13	RCP PIPE APRON W/ FOOTING & TRASH GUARD, 15"	7	EA
14	RCP PIPE APRON W/ FOOTING & TRASH GUARD, 24"	2	EA
15	RCP PIPE APRON W/ FOOTING & TRASH GUARD, 36"	5	EA
16	INSERT-A-TEE, 15"	1	EA
17	ANTI-SEEP COLLAR, PCC	2	EA
18	WATER MAIN, TRENCHED, 8"	2,337	LF
19	WATER MAIN, TRENCHED, 12"	1,991	LF
20	WATER SERVICE STUB, 1"	50	EA
21	VALVE, 8"	6	EA
22	VALVE, 12"	6	EA
23	TAPPING SLEEVE & VALVE, 12"x12"	1	EA
24	TEE, 12"x8"	2	EA
25	CROSS, 12"x8"	1	EA
26	FIRE HYDRANT ASSEMBLY	18	EA
27	SW-301 MANHOLE, 48" (SANITARY SEWER)	21	EA
28	SW-303 MANHOLE, 48" (SANITARY SEWER)	1	EA
29	DROP CONNECTION (SANITARY SEWER)	1	EA
30	SW-401 MANHOLE, 48" (STORM SEWER)	12	EA
31	SW-401 MANHOLE, 60" (STORM SEWER)	2	EA
32	SW-401 MANHOLE, 72" (STORM SEWER)	1	EA
33	SW-402 MANHOLE, 4x4' (STORM SEWER)	2	EA
34	SW-501 INTAKE	8	EA
35	SW-503 INTAKE	7	EA
36	SW-503 INTAKE, MODIFIED	1	EA
37	SW-505 INTAKE	12	EA
38	SW-506 INTAKE	6	EA
39	SW-513 INTAKE, 4x4'	1	EA
40	PAVEMENT, 8" PCC W/ CD BASKETS	8,465	SY
41	PAVEMENT, 7" PCC	6,025	SY
42	PAVEMENT, 6" PCC DRIVEWAY	40	SY
43	PAVEMENT, 5" PCC TRAILSIDEWALK	1,500	SY
44	PAVEMENT, 8" PCC MAILBOX PAD	11	SY
45	PAVEMENT, 5" PCC MAILBOX WALKWAY	9	SY
46	DETECTABLE WARNING PANELS	235	SF
47	TEMPORARY ROCK TURNAROUND	1,600	SF
48	TYPE 1 SEEDING	3.40	AC
49	TYPE 2 SEEDING	0.65	AC
50	TYPE 3 SEEDING	0.70	AC
51	TYPE 4 SEEDING	66	AC
52	RIP RAP, CLASS D	2,400	TONS
53	FLOW TRANSITION MAT	3	EA
54	TURF REINFORCEMENT MAT, TYPE 1	336	SF
55	ROLLED EROSION CONTROL PRODUCT, TYPE 2.D	14,600	SY
56	EROSION CONTROL	1	LS
57	ROCK CHECK DAM	1	LS
58	TEMPORARY 15" CMP	94	LF
59	ANTI-SEEP COLLAR, CMP	4	EA
60	15" CMP STANDPIPE	2	EA
61	PERMANENT ROAD CLOSURE, URBAN, SI-182	2	EA
62	TRAFFIC CONTROL	1	LS
63	TESTING	1	LS

AS-BUILT DRAWINGS

AS-BUILT PLANS ARE COMPLETED FROM SURVEYED RIM AND INVERT/FLOWLINE ELEVATIONS COMBINED WITH INFORMATION FROM THE CONTRACTOR. BISHOP ENGINEERING SHALL NOT BE HELD LIABLE FOR ANY CHANGES TO STRUCTURES SINCE THE DATE OF FIELD WORK OR CHANGES TO THE AS-BUILT DRAWINGS WITHOUT WRITTEN KNOWLEDGE. FURTHER SURVEY WORK AND FIELD VERIFICATION IS RECOMMENDED FOR ANY WORK TYING INTO AS-BUILT UTILITIES.



UTILITY CONFLICT NOTES:

- UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
- CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS THAT ARE EITHER CALLED OUT ON THE PLANS OR THAT CAN BE SEEN ON THE PLANS BETWEEN AND EXISTING UTILITY AND PROPOSED CONSTRUCTION.
- CONTRACTOR SHALL USE O-RING GASKETS FOR STORM SEWER AND WATER MAIN CROSSINGS IF SEPARATION IS 18 INCHES OR LESS.

WETLAND NOTES:

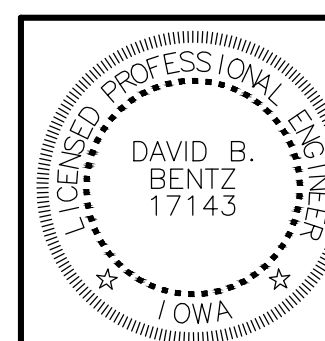
- A WETLAND INVESTIGATION REPORT WAS PREPARED BY IMPACT7G, INC (PROJECT #2014240.2). SAID REPORT DID NOT FIND ANY POTENTIAL WETLAND AREAS LOCATED WITHIN THE SUBJECT PROPERTY.
- THE WETLAND INVESTIGATION REPORT WAS SUBMITTED TO THE ARMY CORPS OF ENGINEERS. AFTER REVIEW, THE ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT FOUND THAT THE PROPOSED PROJECT DOES NOT REQUIRE A DEPARTMENT OF THE ARMY SECTION 404 PERMIT.

AS-BUILT NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INVOLVED WITH AS-BUILTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING BISHOP ENGINEERING WITH AS-BUILTS OF ALL UTILITIES, INCLUDING THE DEPTH AND LOCATION OF SERVICES.
- CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING BISHOP ENGINEERING WITH A PROFESSIONALLY CERTIFIED AS-BUILT GRADING PLAN UPON COMPLETION OF ALL PROPOSED IMPROVEMENTS, INCLUDING ALL GRADING ACTIVITY.
- BISHOP ENGINEERING SHALL PROVIDE ALL SAID AS-BUILTS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT, AS PROVIDED BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT TOPO OF DETENTION POND & DETENTION POND STORM SEWER. CONTRACTOR SHALL CONTACT BISHOP ENGINEERING (DAVID BENTZ AT 515-276-0467) TO PERFORM SAID AS-BUILT SURVEY. IF DETENTION PONDS HAVE BEEN GRADED INCORRECTLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT AS-BUILT TOPO SURVEYS UNTIL ISSUES HAVE BEEN RECTIFIED. CONTRACTOR SHALL HAVE ANY AND ALL DETENTION PONDS SURVEYED PRIOR TO SEEDING.

LEGEND:

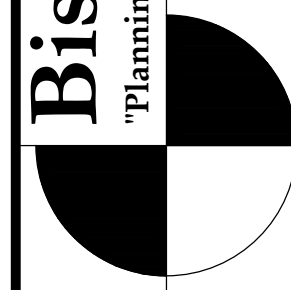
- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- UE — UNDERGROUND ELECTRIC
- OE — OVERHEAD ELECTRIC
- TELE — TELEPHONE LINE
- FIO — FIBER OPTIC
- CATV — CABLE TV
- ⊙ STORM MANHOLE
- ⊠ CURB INTAKE
- ⊙ SURFACE INTAKE
- ⊠ FLARED END SECTION
- ⊙ SANITARY MANHOLE
- ⊙ CLEANOUT
- ⊙ FIRE HYDRANT
- ⊙ SPRINKLER
- ⊙ IRRIGATION CONTROL VALVE
- ⊙ WATER MANHOLE
- ⊙ WELL
- ⊙ WATER VALVE
- ⊙ WATER SHUT OFF
- ⊙ YARD HYDRANT
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC RISER
- ⊙ ELECTRIC VAULT
- ⊙ POWER POLE
- ⊙ TRANSFORMER POLE
- ⊙ LIGHT POLE
- ⊙ ELECTRIC JUNCTION BOX
- ⊙ ELECTRIC PANEL
- ⊙ TRANSFORMER
- ⊙ GROUND LIGHT
- ⊙ GUY WIRE
- ⊙ ELECTRIC HANDHOLE
- ⊙ GAS METER
- ⊙ GAS VALVE
- ⊙ AIR CONDITIONING UNIT
- ⊙ TELEPHONE RISER
- ⊙ TELEPHONE VAULT
- ⊙ TELEPHONE MANHOLE
- ⊙ TRAFFIC SIGNAL MANHOLE
- ⊙ FIBER OPTIC RISER
- ⊙ FIBER OPTIC FAULT
- ⊙ CABLE TV RISER
- SIGN
- ⊙ DENOTES NUMBER OF PARKING STALLS
- PROPERTY CORNER - FOUND AS NOTED
- PROPERTY CORNER - PLACED 3/4" IRON PIPE WITH YELLOW PLASTIC CAP ID #14775
- ⊙ SECTION CORNER - FOUND AS NOTED



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNED: DAVID B. BENTZ, PE, 17143 DATE: _____
 LICENSE RENEWAL DATE: DEC. 31, 2015 C0.1 - C9.2
 PAGES OR SHEETS COVERED BY THIS SEAL: _____

Bishop Engineering
"Planning Your Successful Development"



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Phone: (515) 276-0467 Fax: (515) 276-0217

Established 1959
Civil Engineering & Land Surveying

PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

COVER SHEET

REFERENCE NUMBER:

DRAWN BY:
JMR

CHECKED BY:
DB

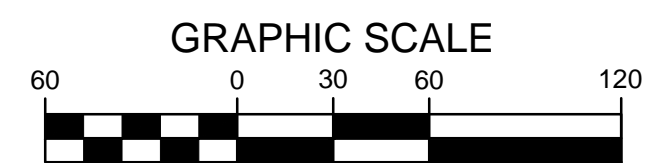
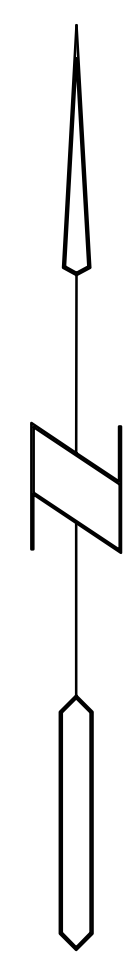
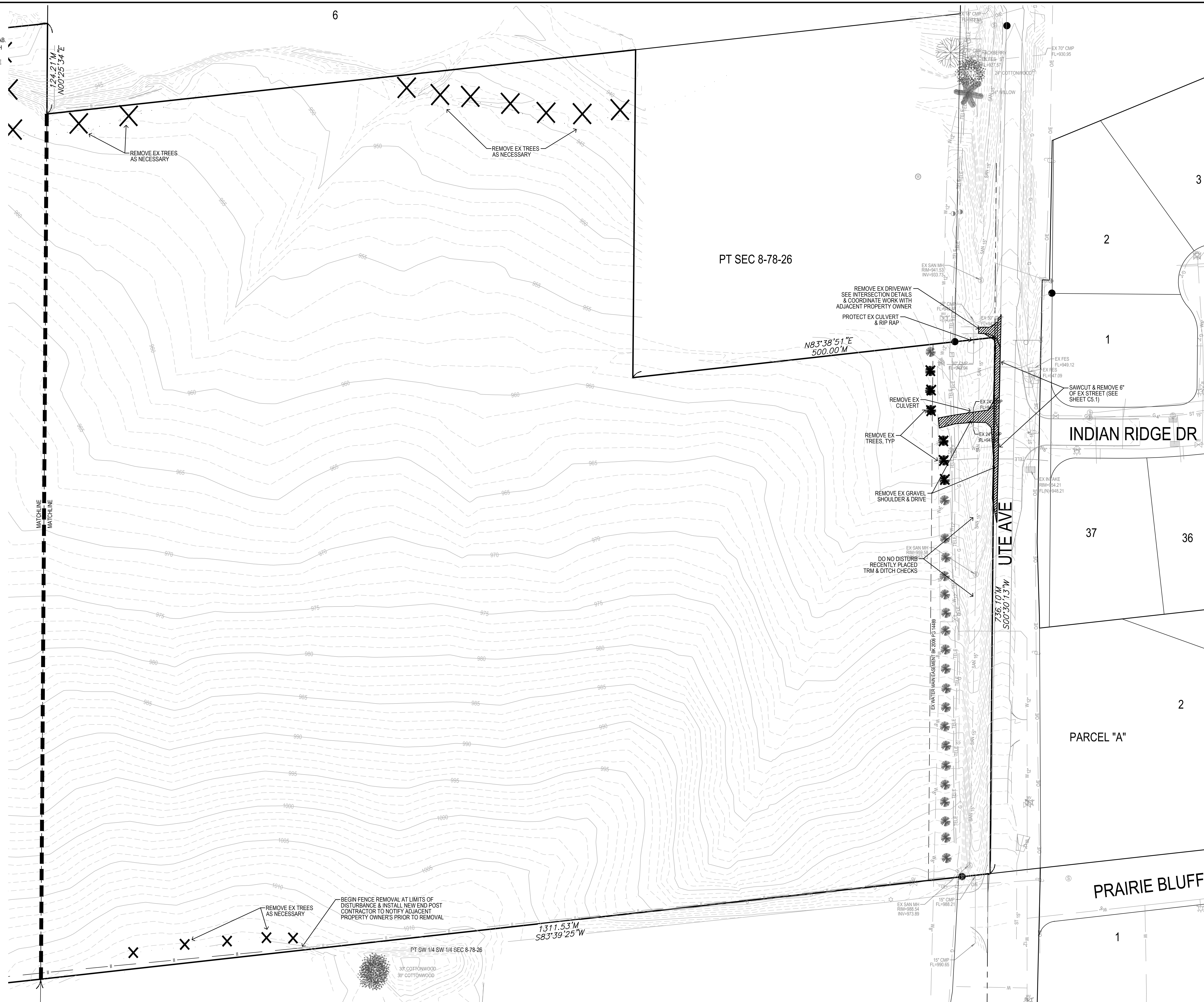
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8/12/14 3RD CITY SET
9/19/14 4TH CITY SET
10/7/14 5TH CITY SET
10/22/14 BID SET
10/16/15 AS-BUILT SET

PROJECT NUMBER:
130444

SHEET NUMBER:

C0.1

- DEMO NOTES:**
1. SAWCUT & REMOVE ALL PAVEMENT TO FULL DEPTH OF SLAB
 2. PROTECT ALL TREES NOT CALLED OUT FOR REMOVAL WITH ORANGE CONSTRUCTION FENCE AT THE DRIP LINE
 3. PAVEMENT STRIPING CALLED OUT FOR REMOVAL SHALL BE SANDBLASTED. NO GRINDING WILL BE ALLOWED.
 4. DISPOSE OF DEMOLISHED MATERIAL OFF SITE IN A LEGAL MANNER. DISPOSAL OF ANY AND ALL MATERIAL SHALL BE CONSIDERED INCIDENTAL TO DEMOLITION.



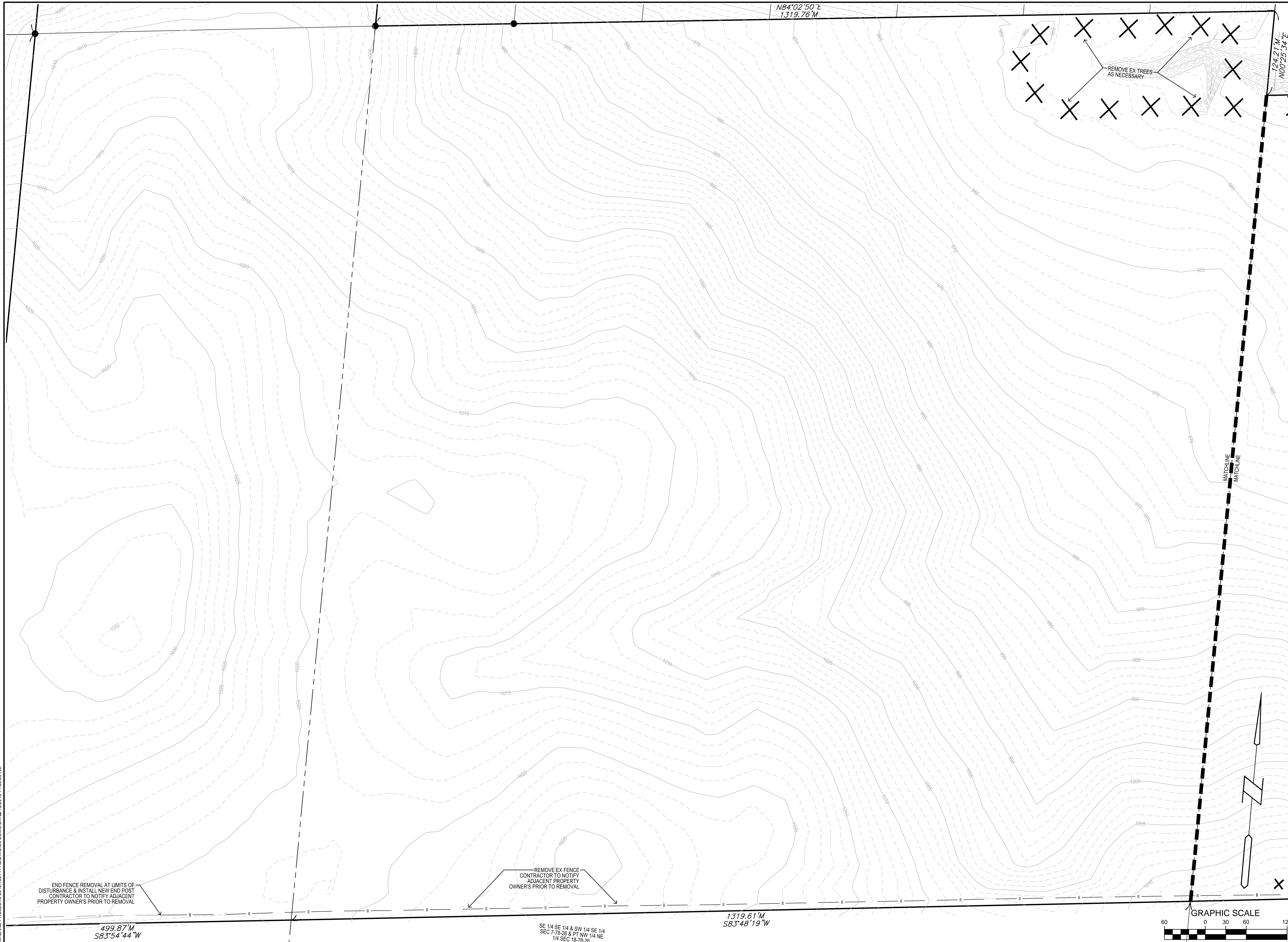
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 Civil Engineering & Land Surveying Established 1959

**PAINTED WOODS WEST PLAT 1
 WAUKEE, IOWA
 DEMO PLAN**

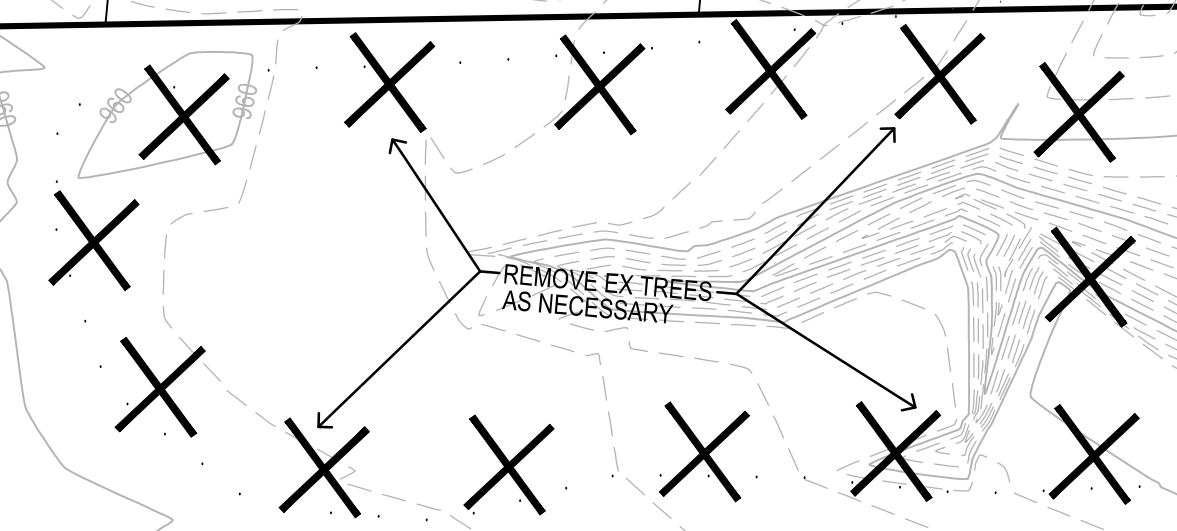
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CHECKED BY:	DB
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PROJECT NUMBER:	130444
SHEET NUMBER:	C0.2

MILAND PROJECTS 2013/130444 ABDWGC0 DEMO DWG 16/20/15 11:36:59 AM



N84°02'50"E
1319.76'M

124.21 M
N00°25'34"E



MATCHLINE
MATCHLINE

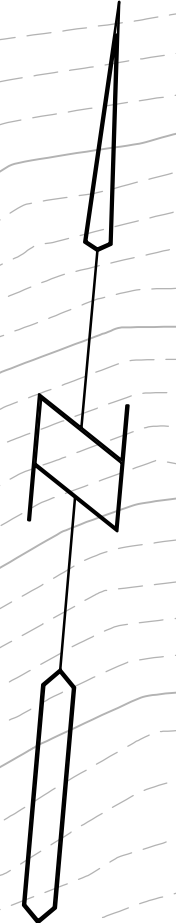
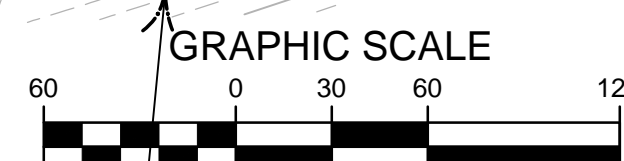
END FENCE REMOVAL AT LIMITS OF
DISTURBANCE & INSTALL NEW END POST
CONTRACTOR TO NOTIFY ADJACENT
PROPERTY OWNER'S PRIOR TO REMOVAL

REMOVE EX FENCE
CONTRACTOR TO NOTIFY
ADJACENT PROPERTY
OWNER'S PRIOR TO REMOVAL

499.87'M
S83°54'44"W

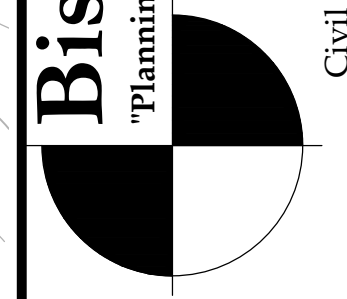
SE 1/4 SE 1/4 & SW 1/4 SE 1/4
SEC 7-18-26 & PT NW 1/4 NE
1/4 SEC 18-78-26

1319.61'M
S83°48'19"W



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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

DEMO PLAN

REFERENCE NUMBER:

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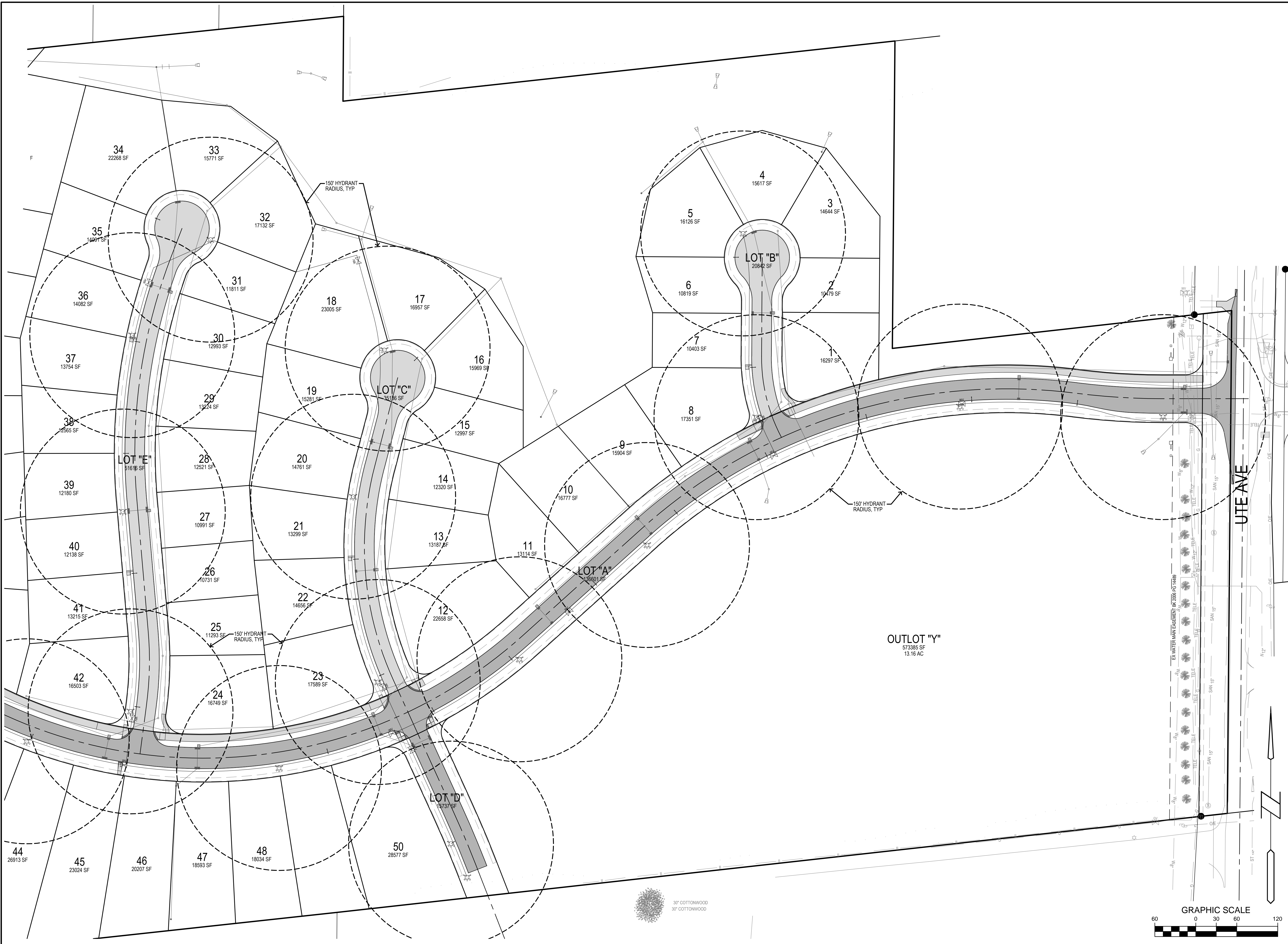
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10/22/14 BID SET
10/16/15 AS-BUILT SET

PROJECT NUMBER:
130444

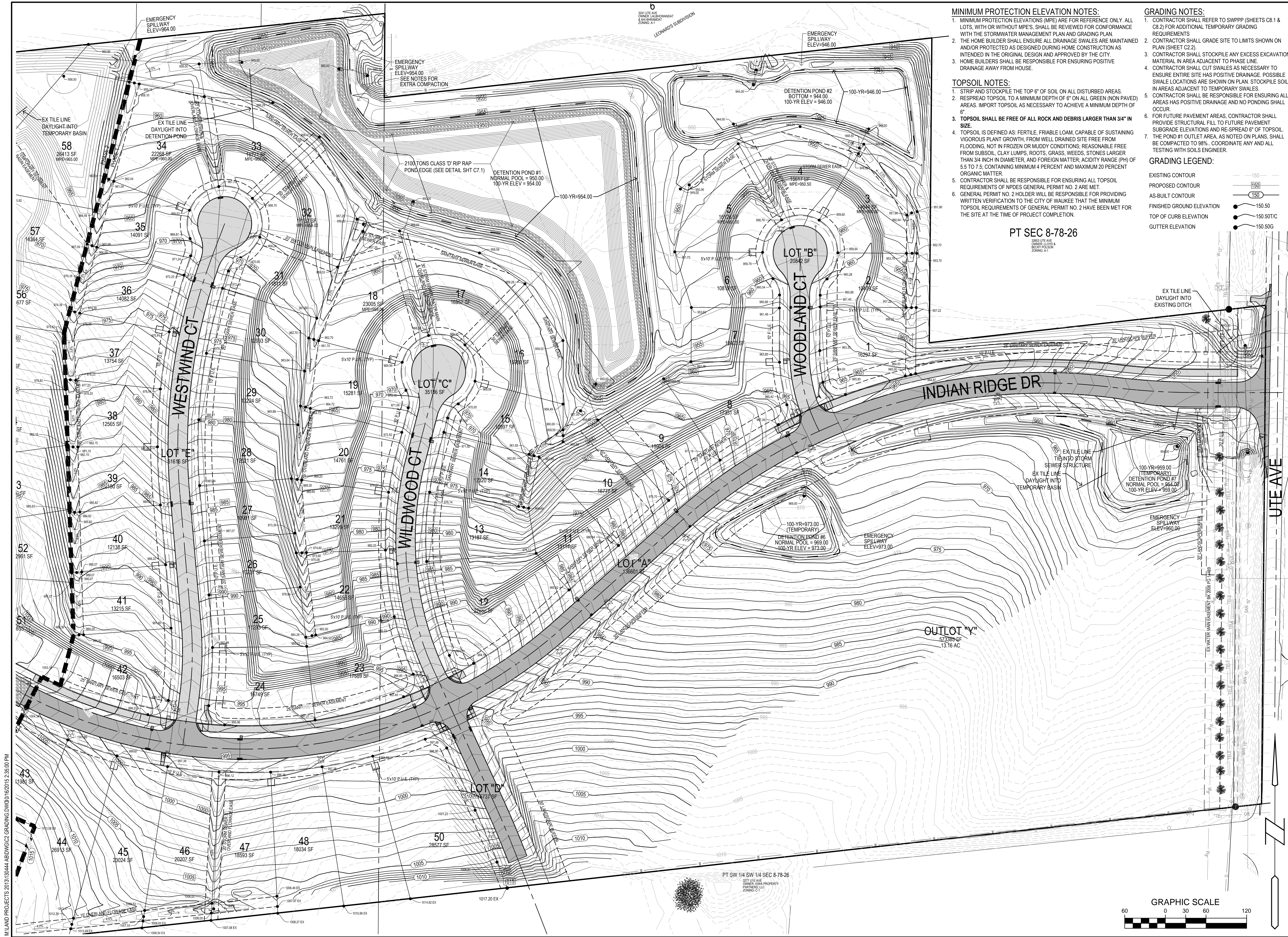
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MILAND PROJECTS 2013\130444 ABD\WG1 HYDRANT COVERAGE.DWG 16/2015 11:37:37 AM



PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA
HYDRANT COVERAGE

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PROJECT NUMBER:	130444
SHEET NUMBER:	C1.1



- MINIMUM PROTECTION ELEVATION NOTES:**
1. MINIMUM PROTECTION ELEVATIONS (MPE) ARE FOR REFERENCE ONLY. ALL LOTS, WITH OR WITHOUT MPE'S, SHALL BE REVIEWED FOR CONFORMANCE WITH THE STORMWATER MANAGEMENT PLAN AND GRADING PLAN.
 2. THE HOME BUILDER SHALL ENSURE ALL DRAINAGE SWALES ARE MAINTAINED AND/OR PROTECTED AS DESIGNED DURING HOME CONSTRUCTION AS INTENDED IN THE ORIGINAL DESIGN AND APPROVED BY THE CITY.
 3. HOME BUILDERS SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE AWAY FROM HOUSE.
- TOPSOIL NOTES:**
1. STRIP AND STOCKPILE THE TOP 6" OF SOIL ON ALL DISTURBED AREAS.
 2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 6" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
 3. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
 4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5, CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
 6. GENERAL PERMIT NO. 2 HOLDER WILL BE RESPONSIBLE FOR PROVIDING WRITTEN VERIFICATION TO THE CITY OF WAUKEE THAT THE MINIMUM TOPSOIL REQUIREMENTS OF GENERAL PERMIT NO. 2 HAVE BEEN MET FOR THE SITE AT THE TIME OF PROJECT COMPLETION.
- GRADING NOTES:**
1. CONTRACTOR SHALL REFER TO SWPPP (SHEETS C8.1 & C8.2) FOR ADDITIONAL TEMPORARY GRADING REQUIREMENTS.
 2. CONTRACTOR SHALL GRADE SITE TO LIMITS SHOWN ON PLAN (SHEET C2.2).
 3. CONTRACTOR SHALL STOCKPILE ANY EXCESS EXCAVATION MATERIAL IN AREA ADJACENT TO PHASE LINE.
 4. CONTRACTOR SHALL CUT SWALES AS NECESSARY TO ENSURE ENTIRE SITE HAS POSITIVE DRAINAGE. POSSIBLE SWALE LOCATIONS ARE SHOWN ON PLAN. STOCKPILE SOIL IN AREAS ADJACENT TO TEMPORARY SWALES.
 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL AREAS HAS POSITIVE DRAINAGE AND NO PONDING SHALL OCCUR.
 6. FOR FUTURE PAVEMENT AREAS, CONTRACTOR SHALL PROVIDE STRUCTURAL FILL TO FUTURE PAVEMENT SUBGRADE ELEVATIONS AND RE-SPREAD 6" OF TOPSOIL.
 7. THE POND #1 OUTLET AREA, AS NOTED ON PLANS, SHALL BE COMPACTED TO 98%. COORDINATE ANY AND ALL TESTING WITH SOILS ENGINEER.
- GRADING LEGEND:**
- EXISTING CONTOUR: 150
 - PROPOSED CONTOUR: 150
 - AS-BUILT CONTOUR: 150
 - FINISHED GROUND ELEVATION: 150.50
 - TOP OF CURB ELEVATION: 150.50TC
 - GUTTER ELEVATION: 150.50G

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WAUKEE, IOWA
GRADING PLAN

REFERENCE NUMBER:	
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PROJECT NUMBER:	130444
SHEET NUMBER:	C2.1

MILAND PROJECTS 2013.130444 ABDWGC2 GRADING DWG 01/06/2015 2:35:00 PM

PT SW 1/4 SW 1/4 SEC 8-78-26
 377 WIFE AVE
 OWNER: OWB PROPERTY PARTNERS LLC
 ZONING: A-1

MILAND PROJECTS 2013\130444 ABDWGC2 GRADING DWG\016\2016 2:35:13 PM

FUTURE DETENTION NOTES:
1. DETENTION FOR THE PARK GROUND (LOT "Y") AND THE ASSOCIATED TRIBUTARY AREA SHALL BE ADDRESSED AT THE TIME OF PARK DEVELOPMENT OR AS PART OF FUTURE PLATS TO THE WEST.

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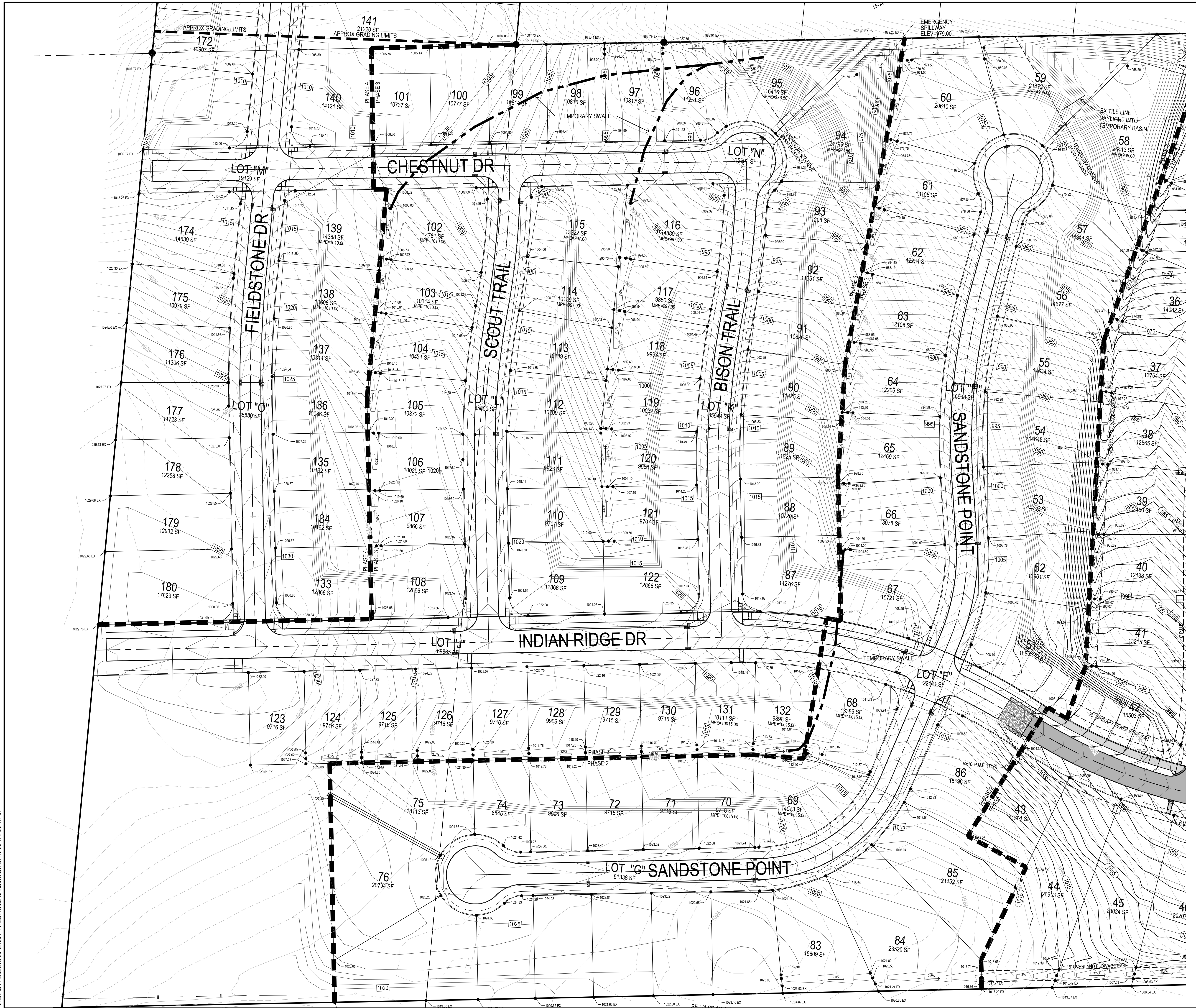
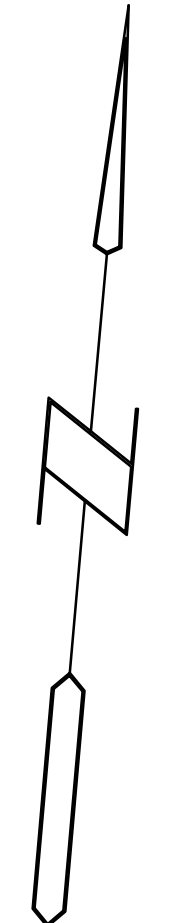
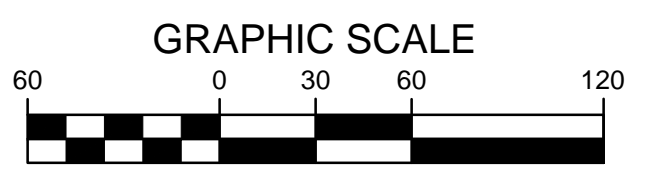
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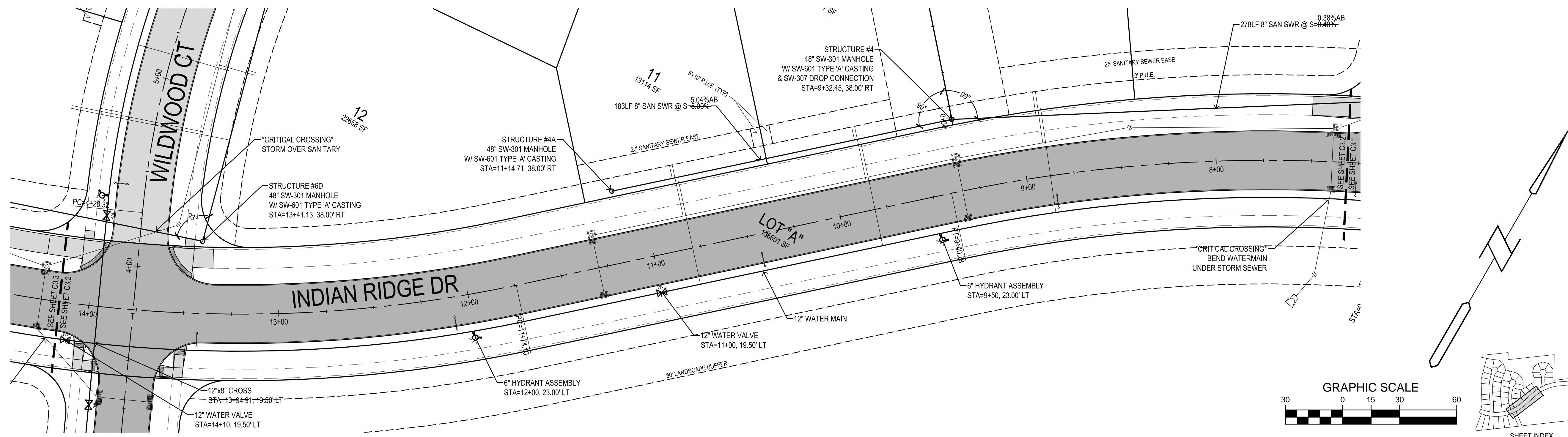
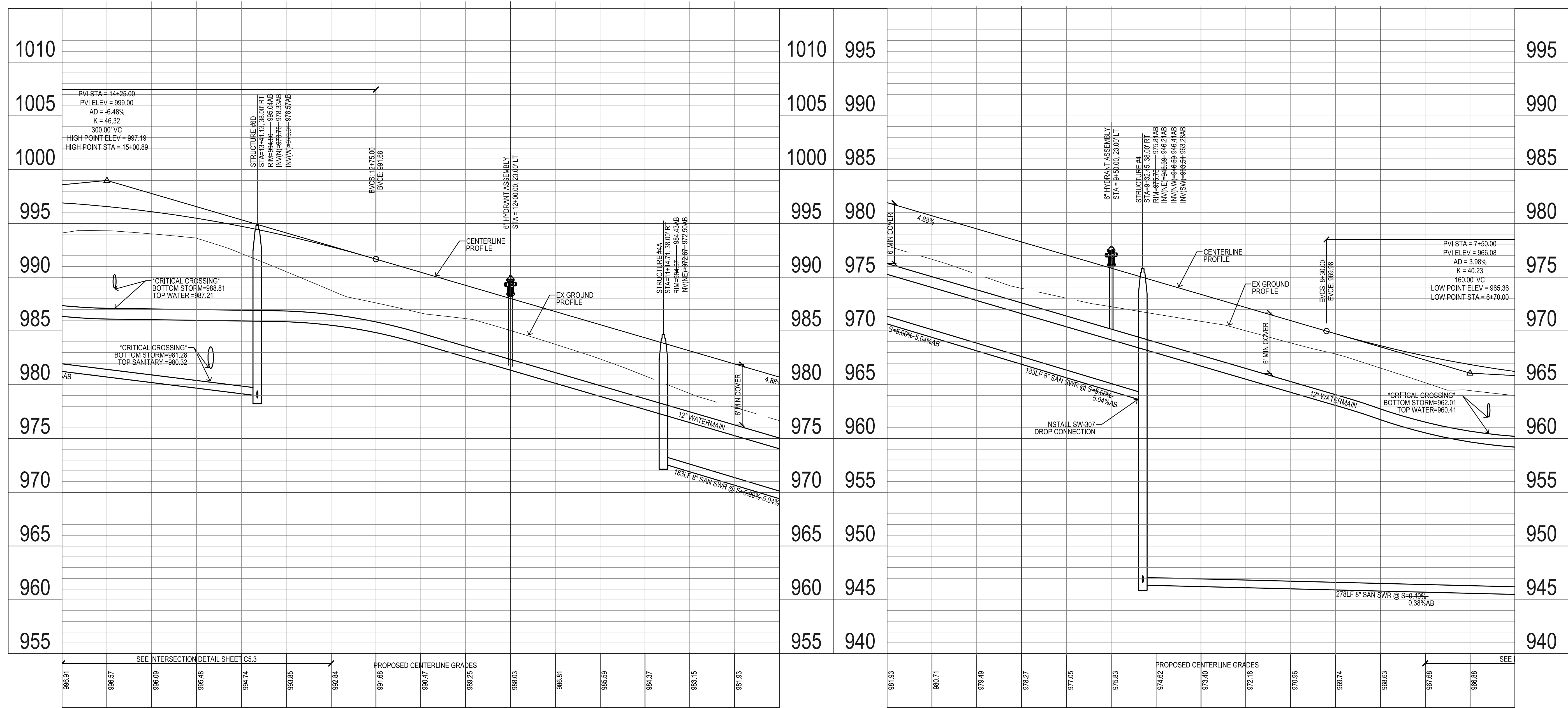
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WAUKEE, IOWA

GRADING PLAN

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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

SANITARY & WATER MAIN

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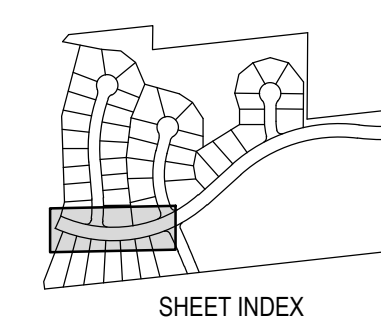
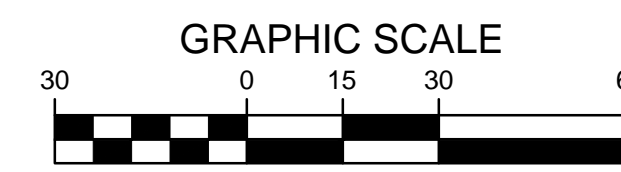
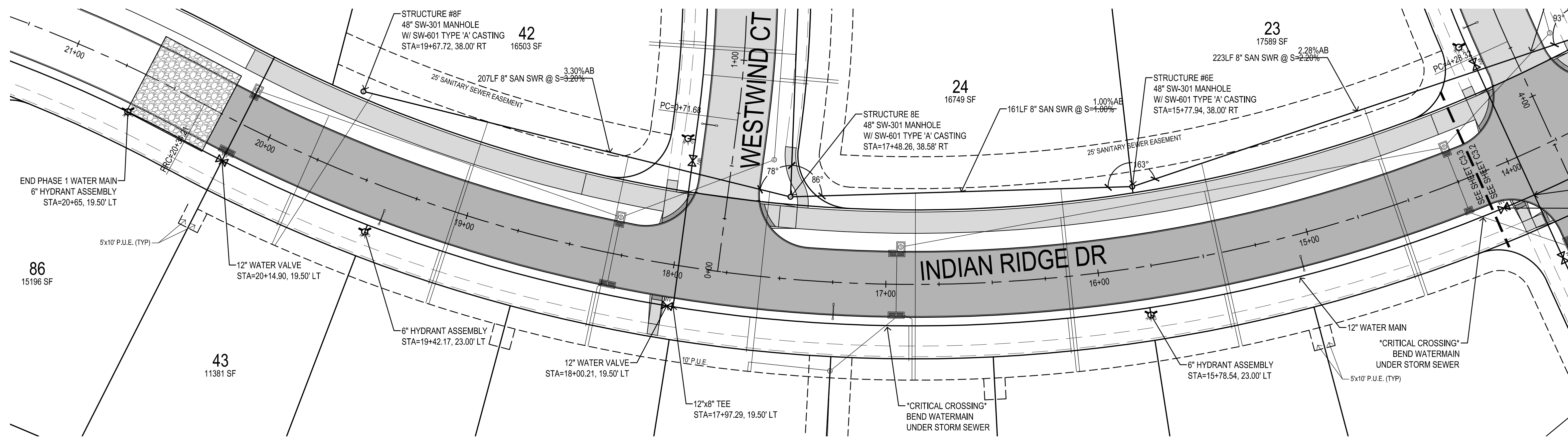
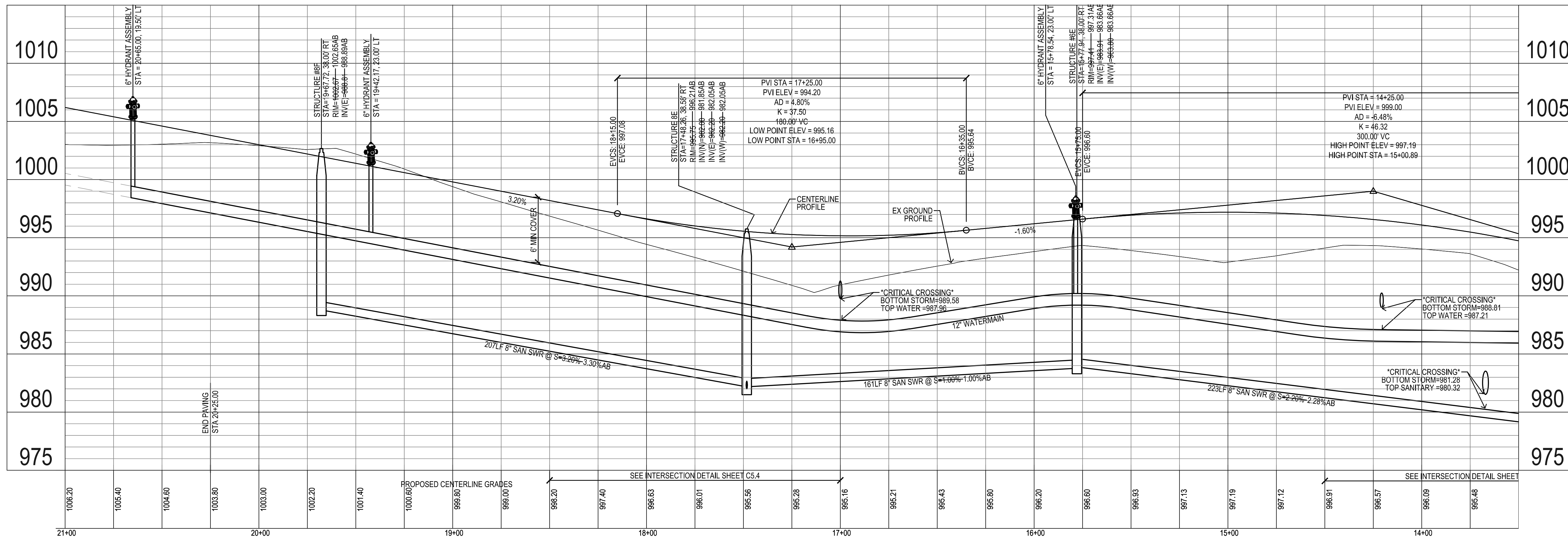
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10/16/15 AS-BUILT SET

PROJECT NUMBER:
130444

SHEET NUMBER:
C3.2

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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

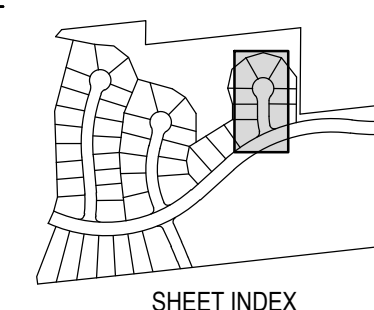
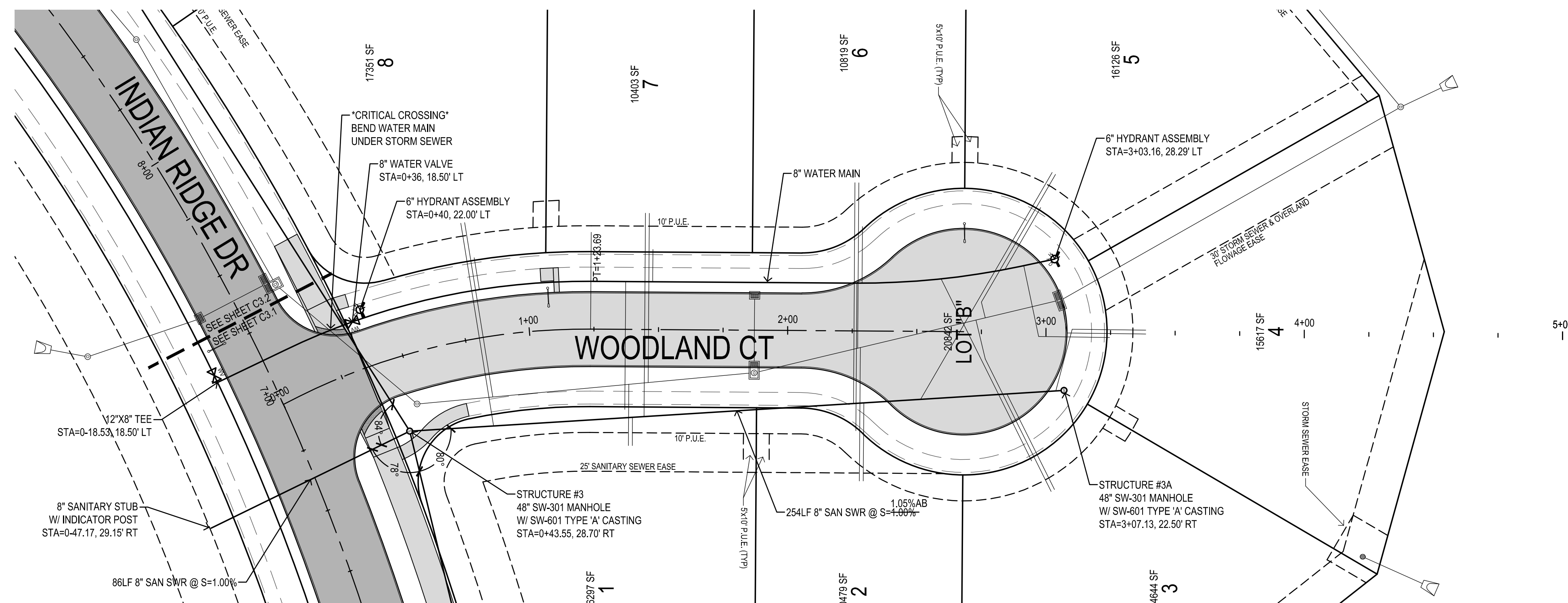
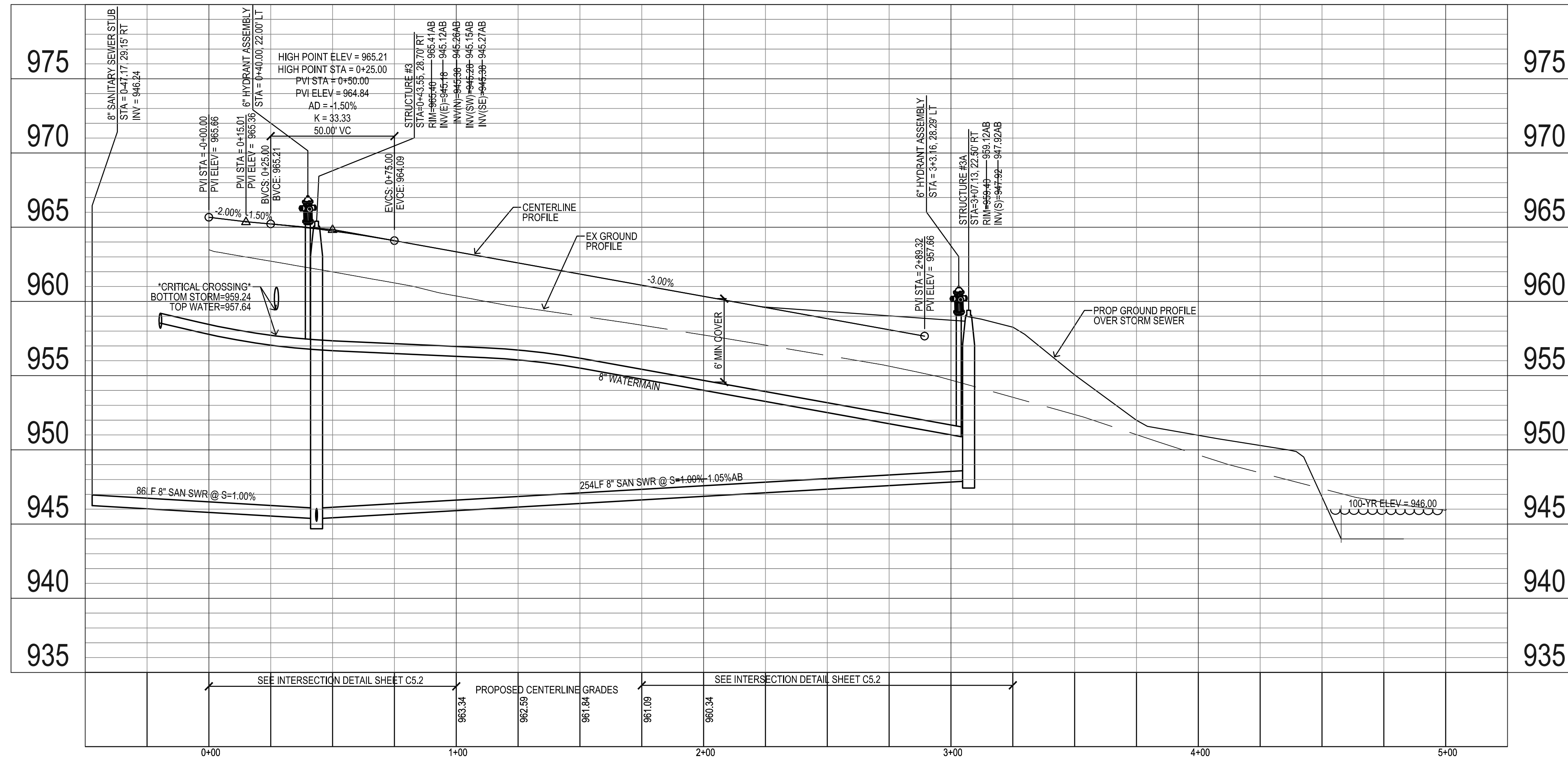
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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

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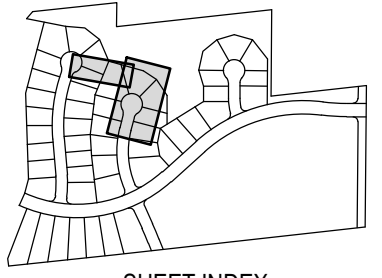
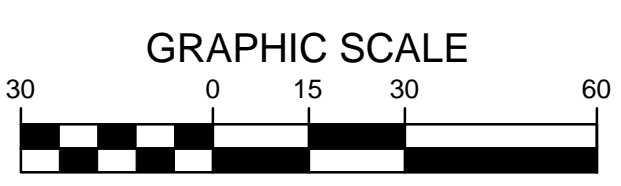
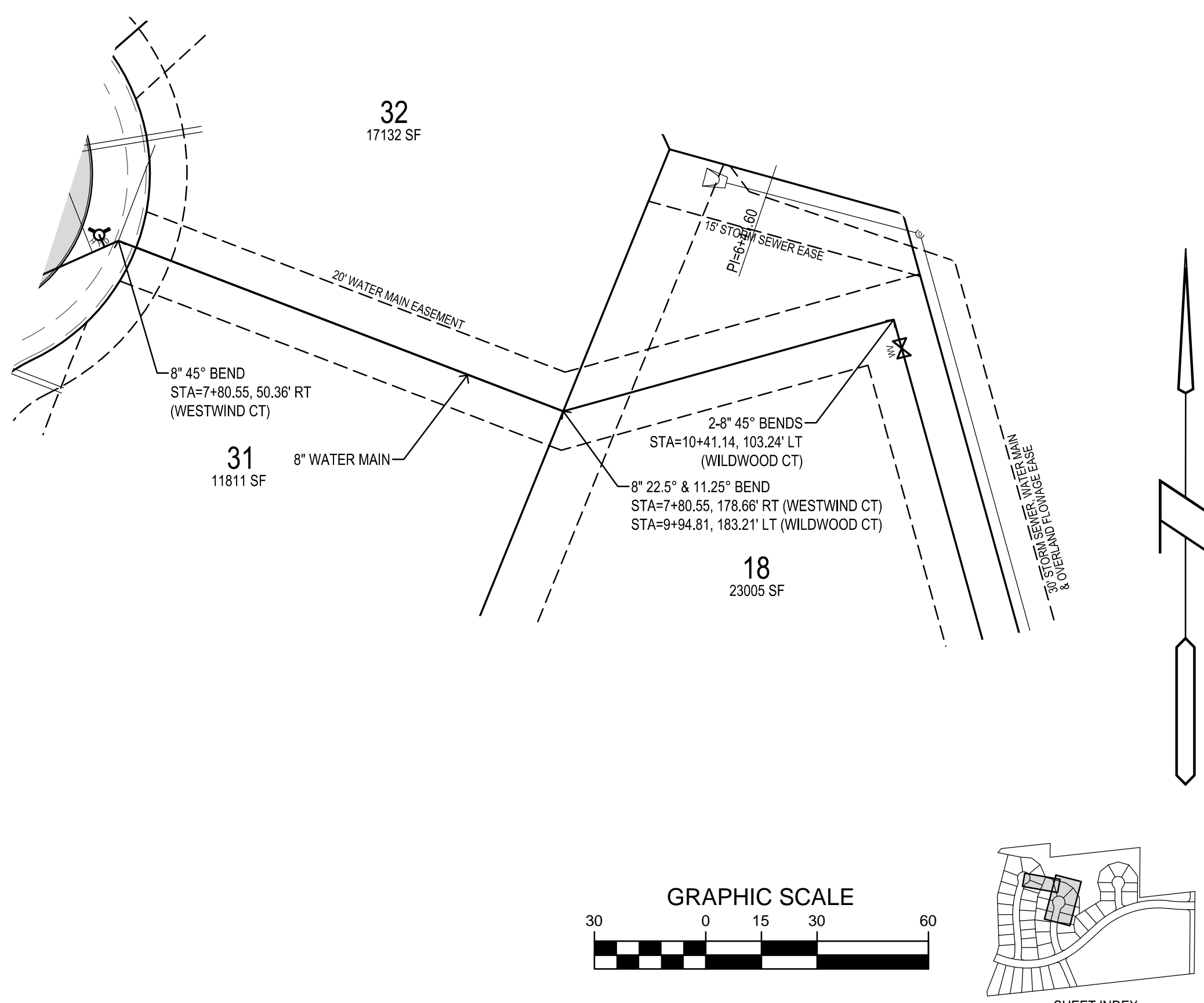
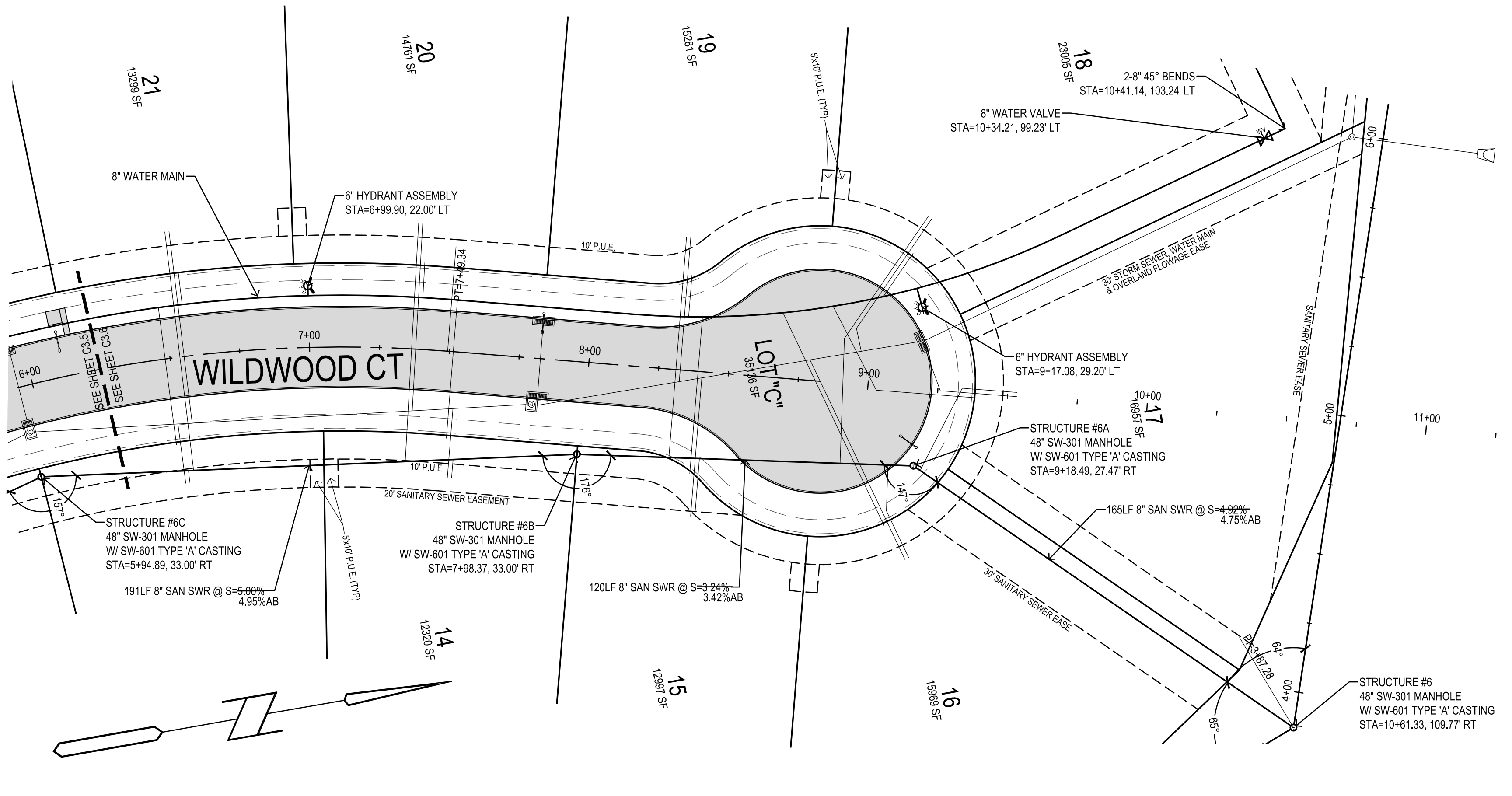
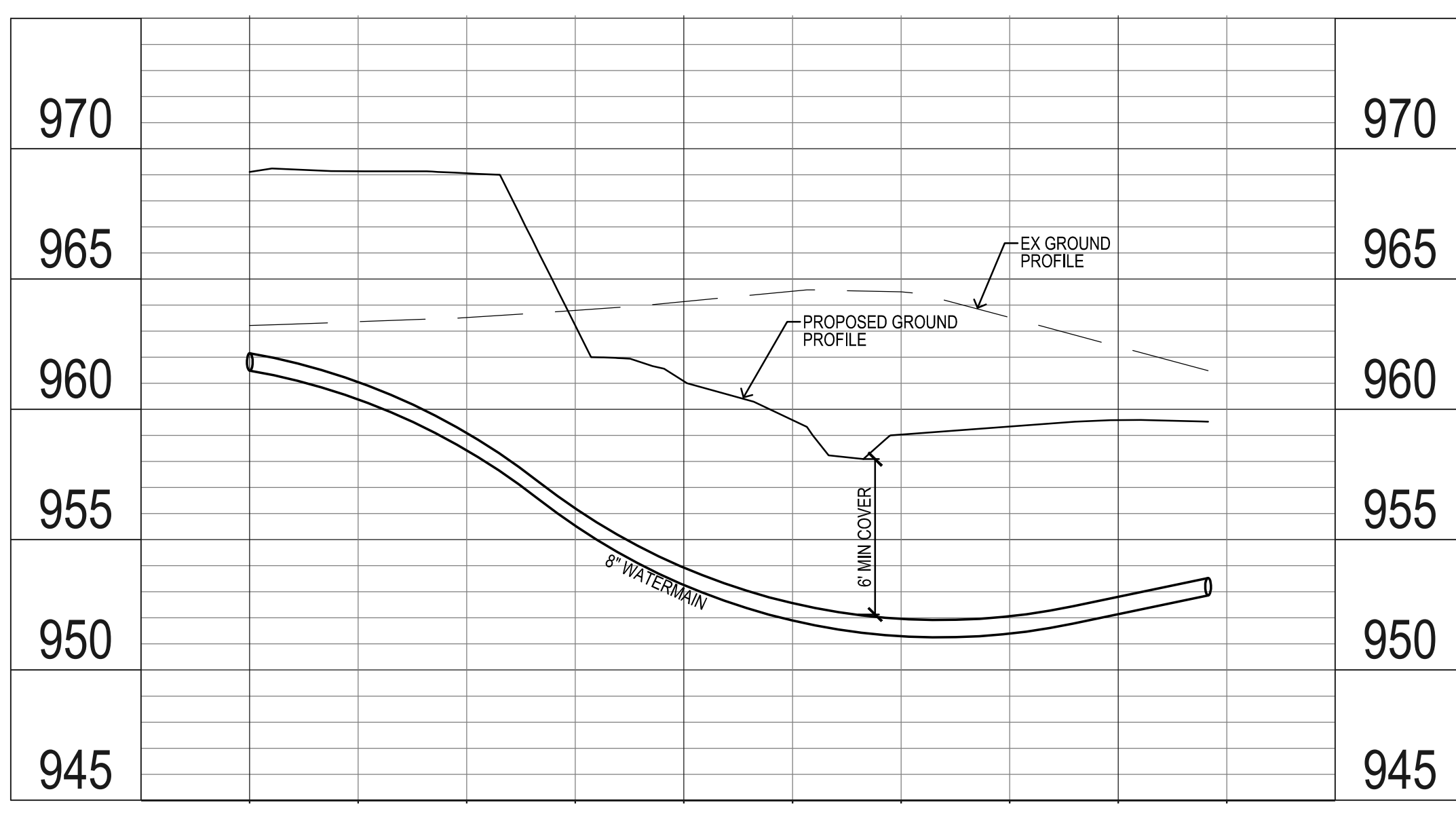
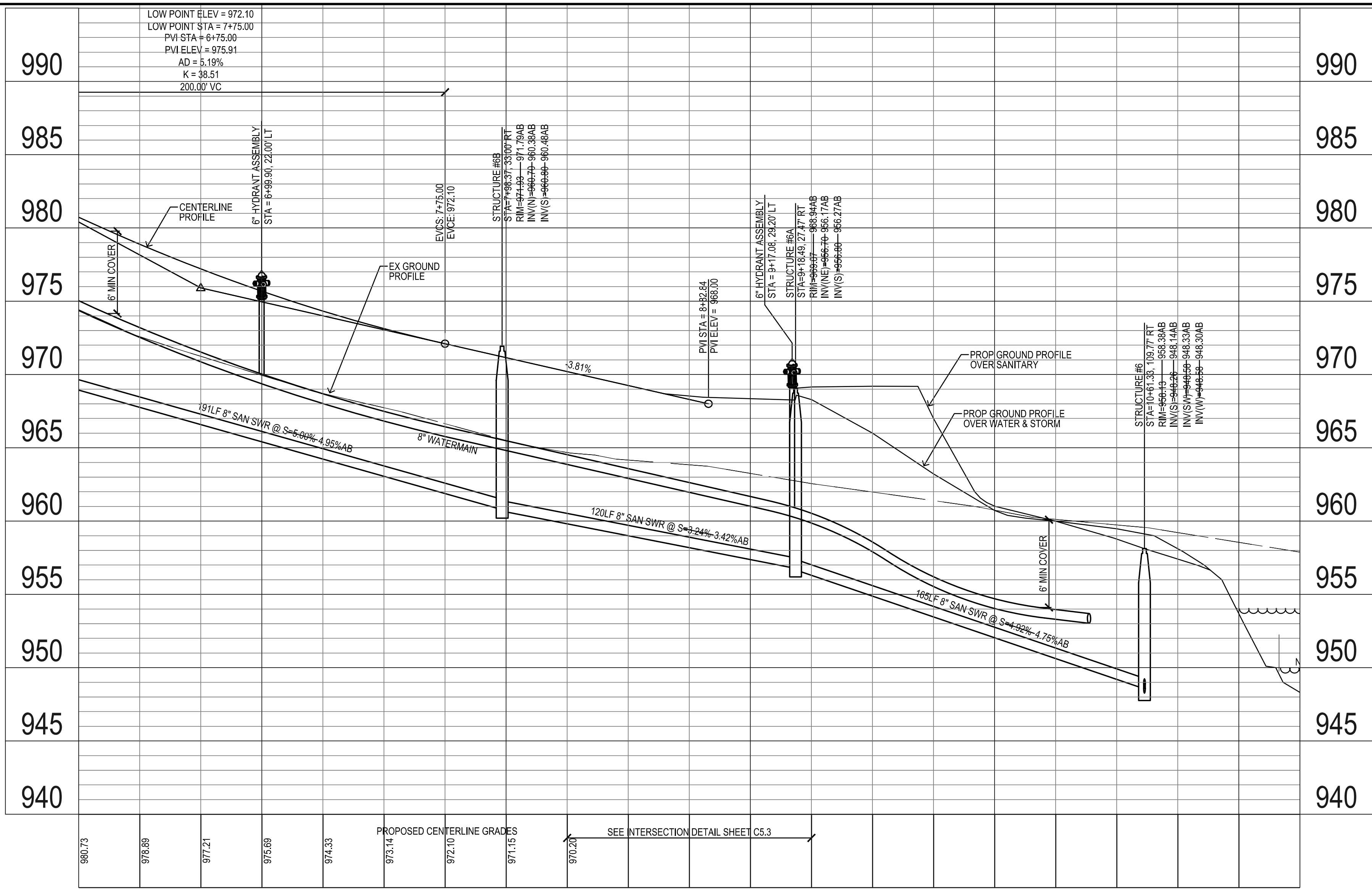
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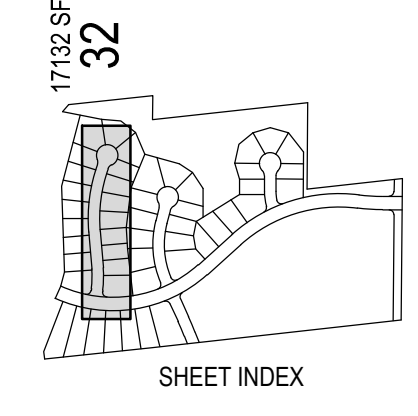
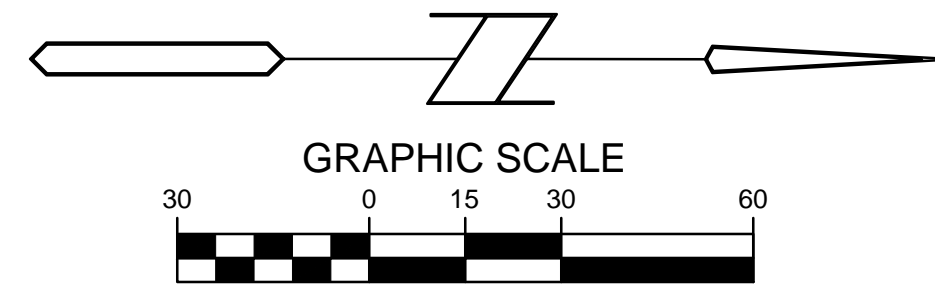
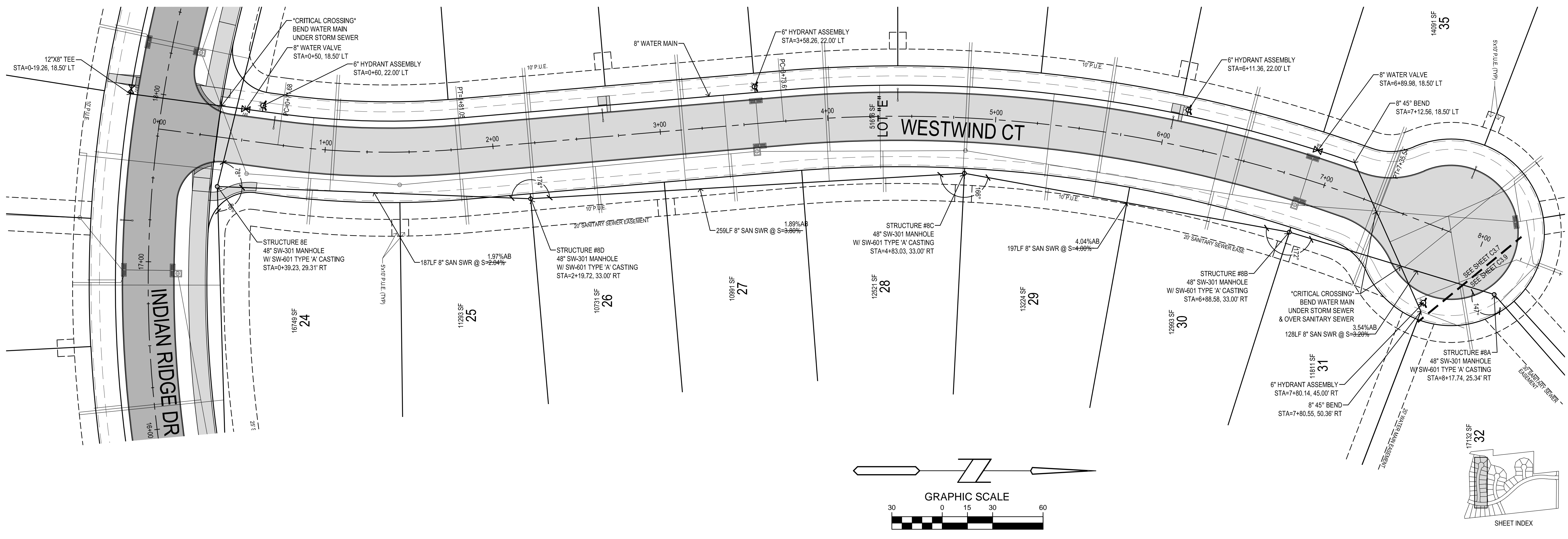
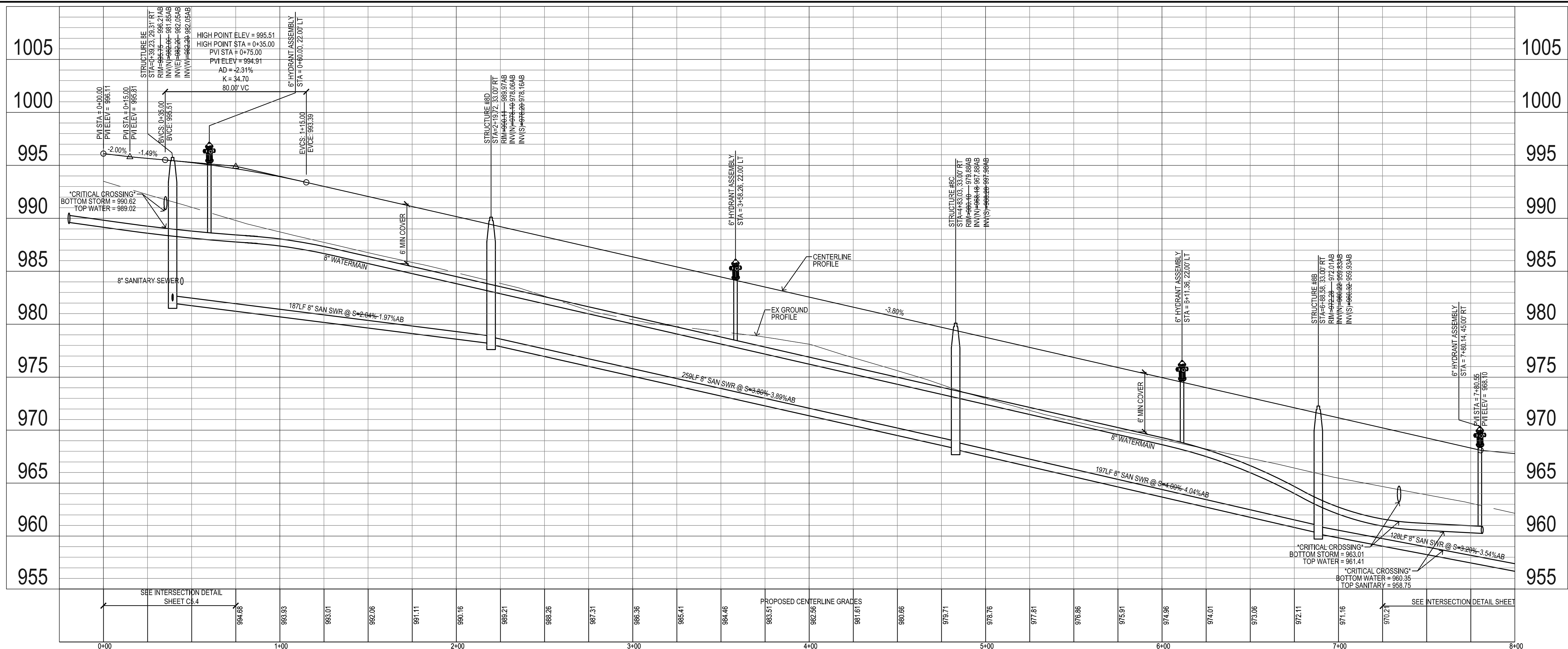
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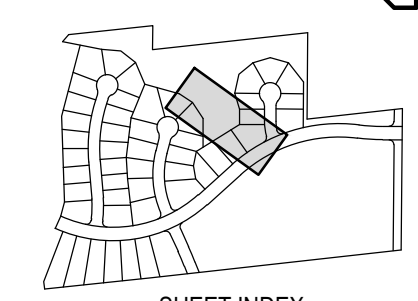
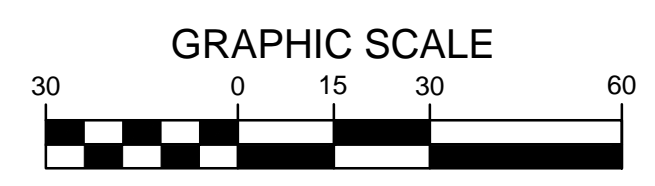
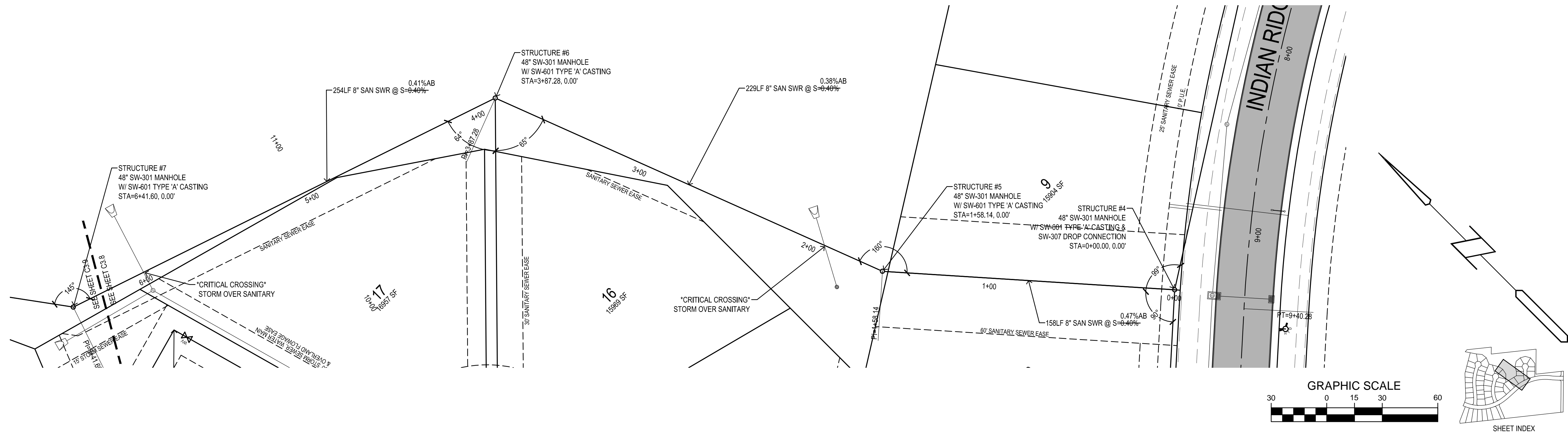
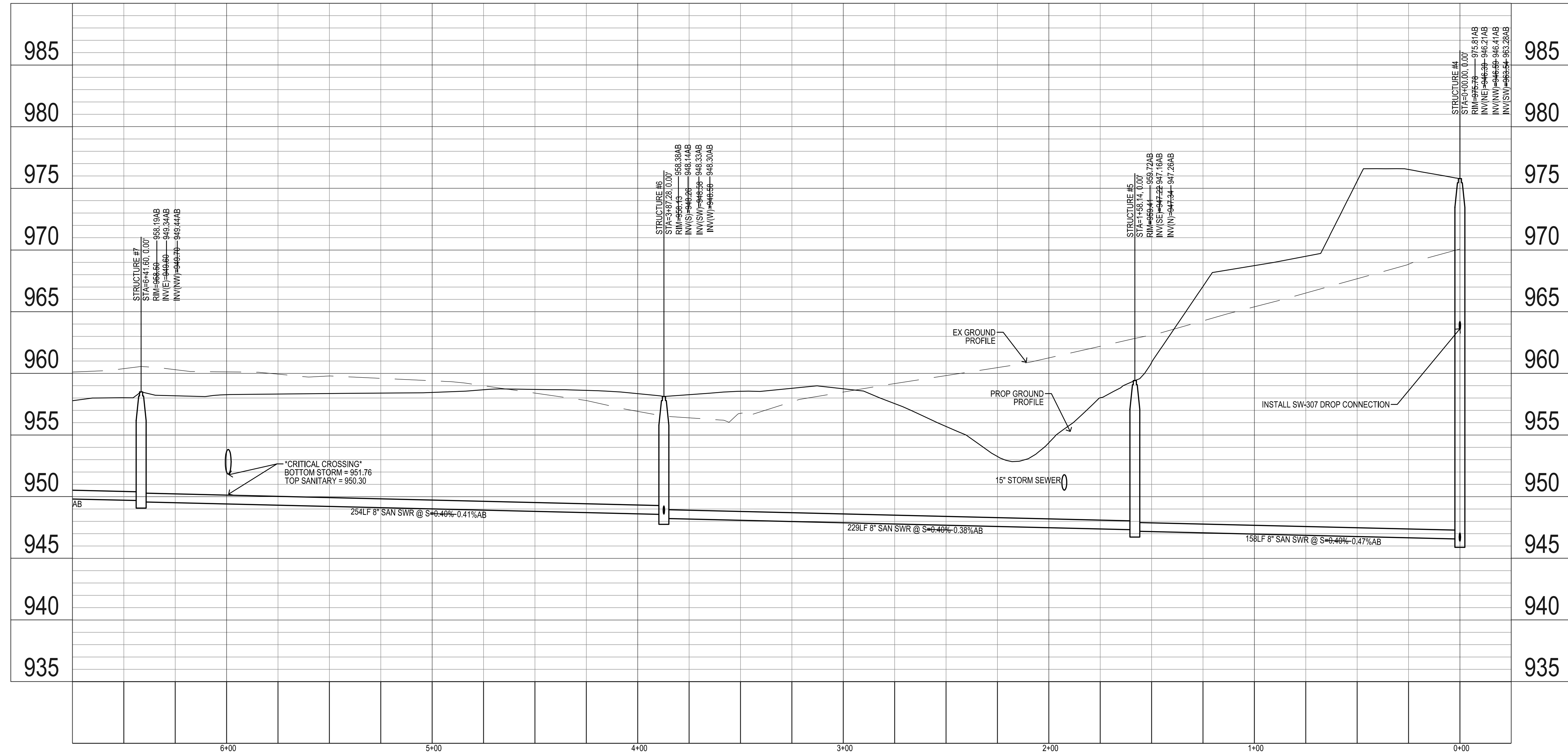
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WAUKEE, IOWA
SANITARY & WATER MAIN

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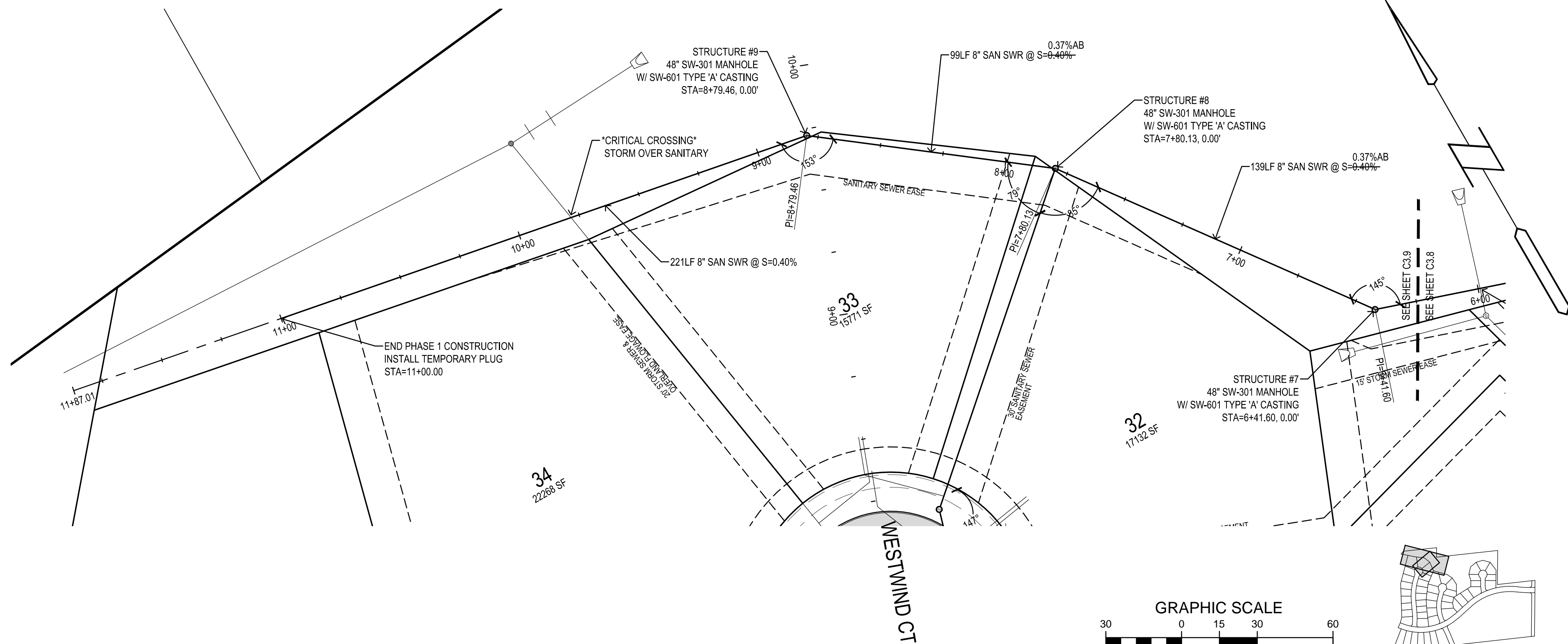
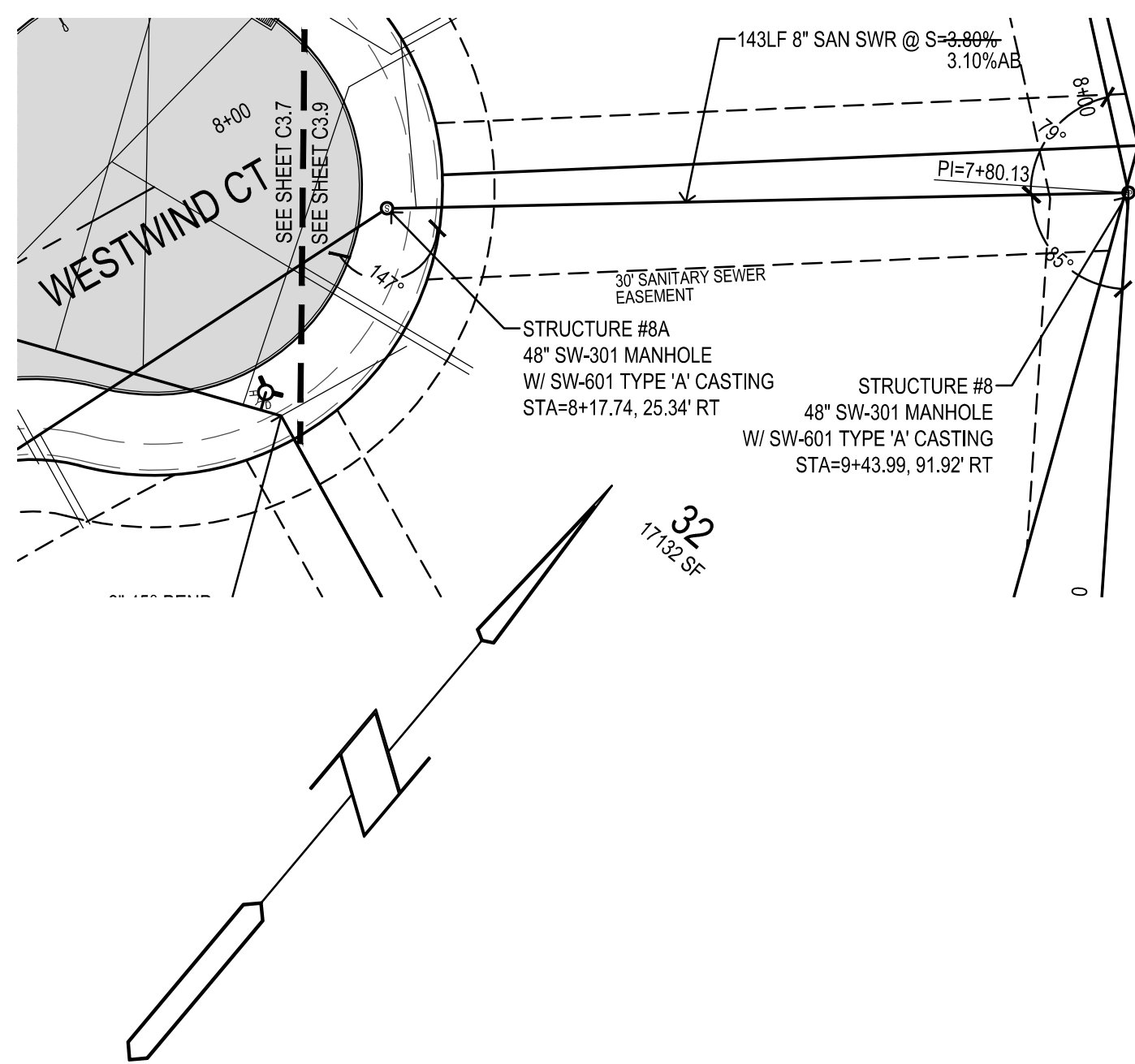
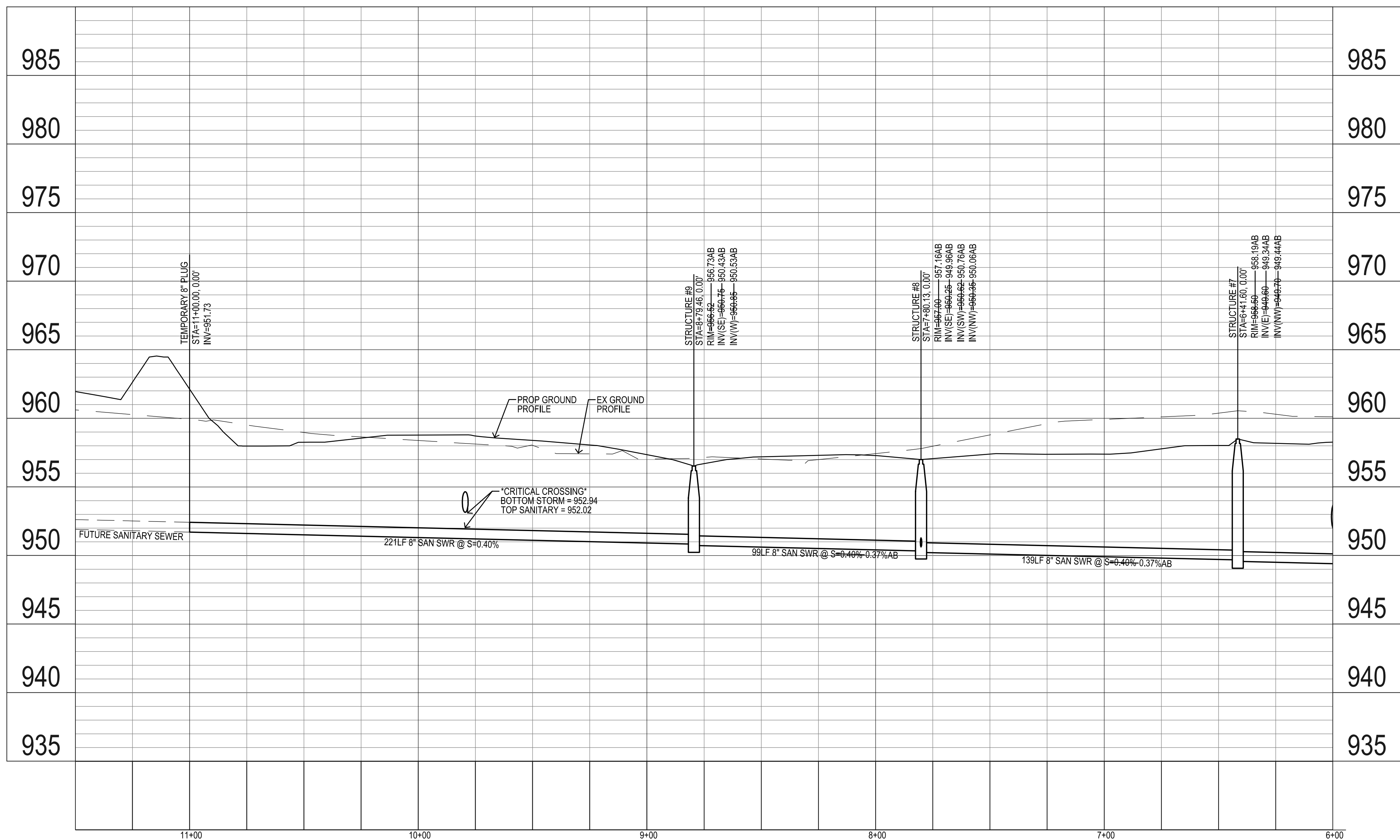
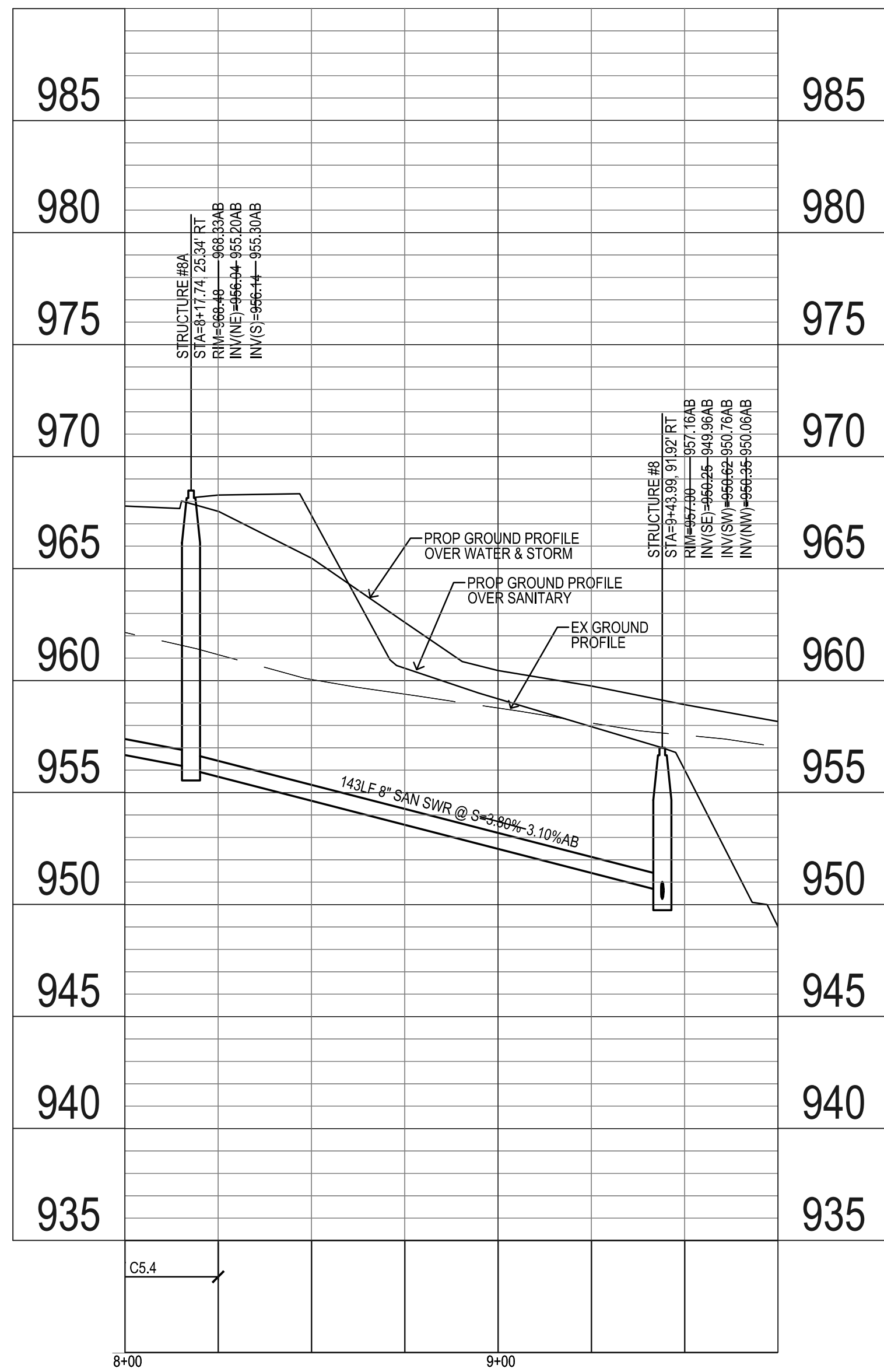
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WAUKEE, IOWA**

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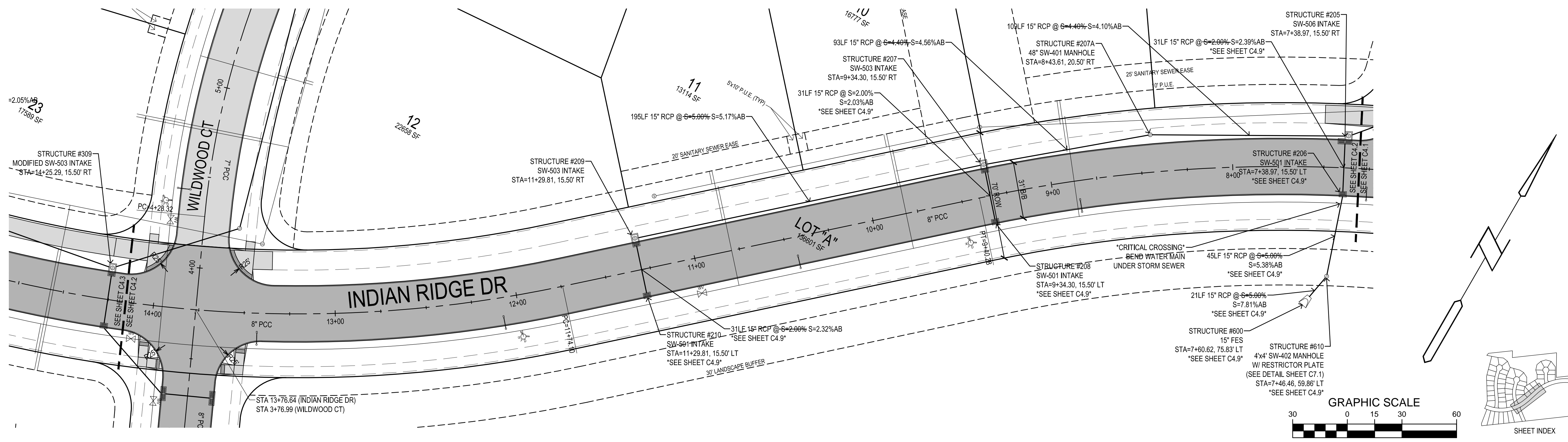
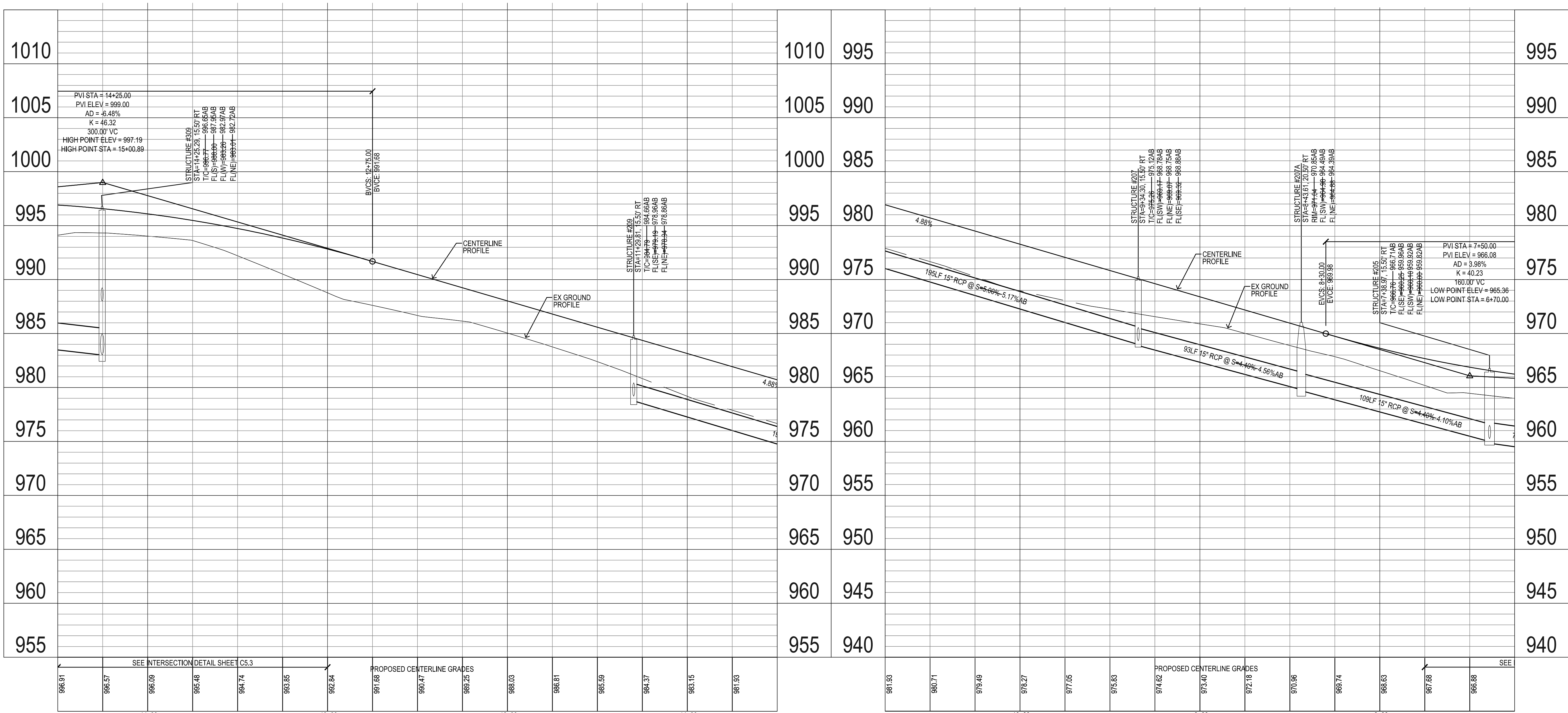
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PROJECT NUMBER:	130444
SHEET NUMBER:	C3.8

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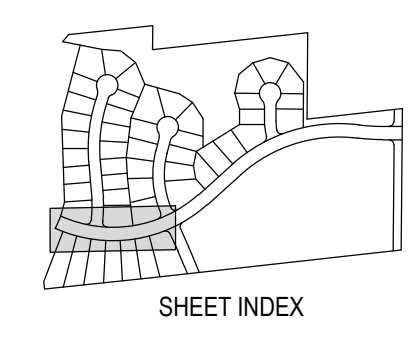
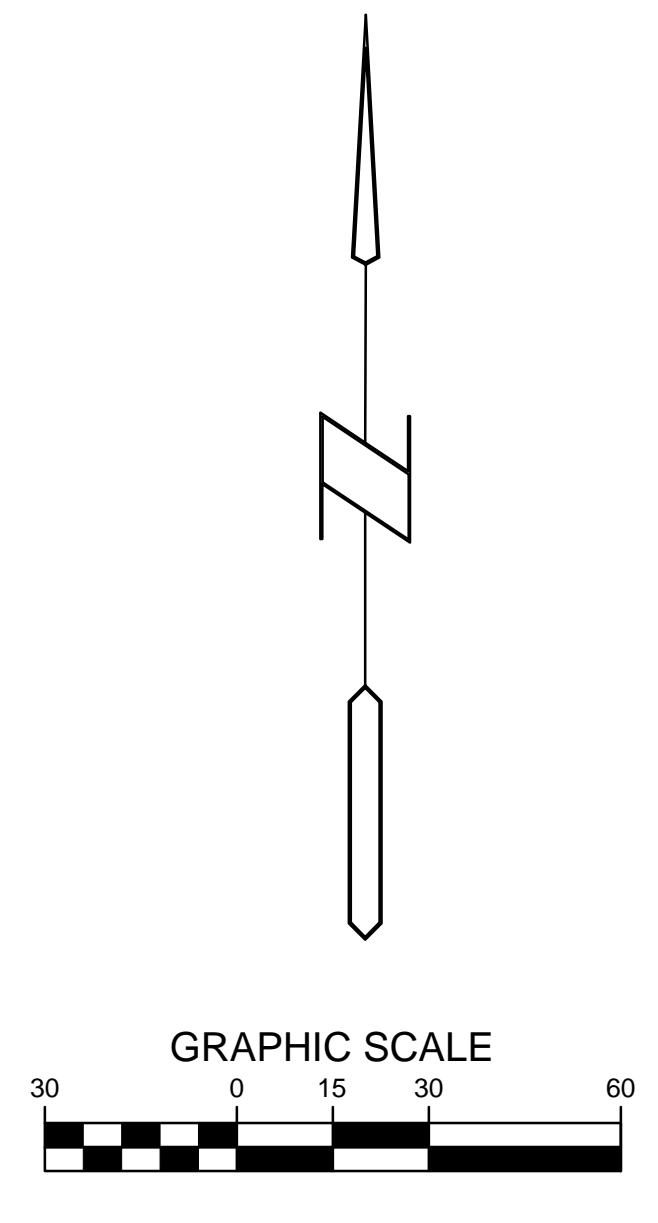
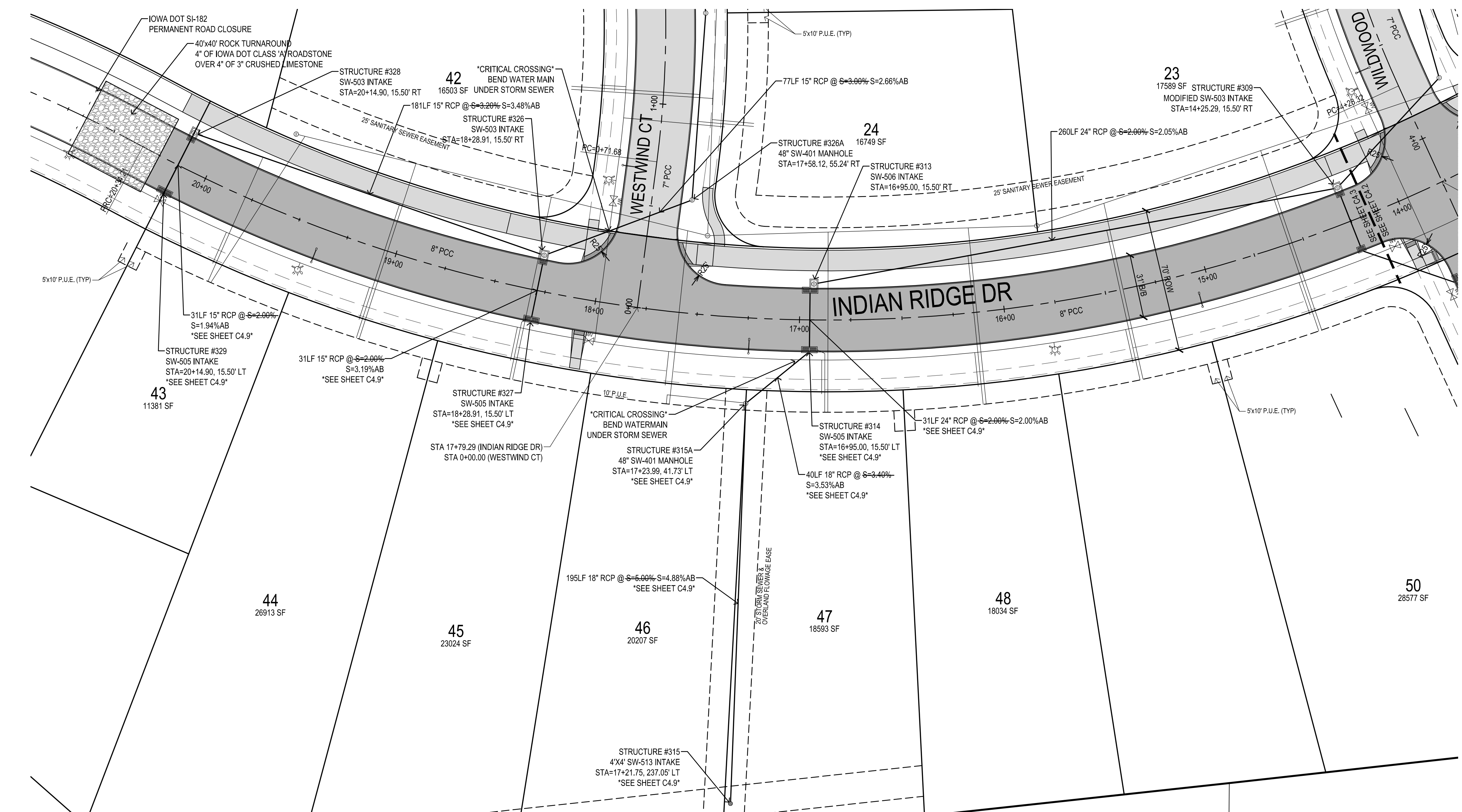
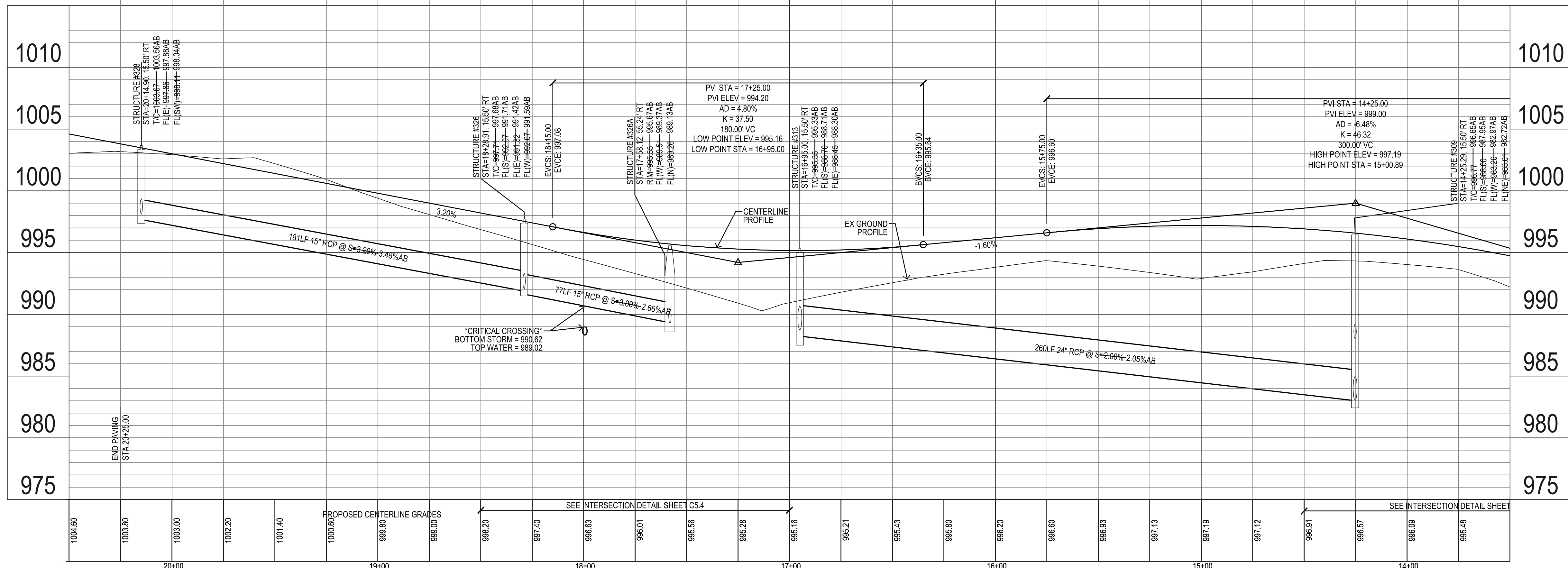
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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA
STORM & PAVING

REFERENCE NUMBER:	
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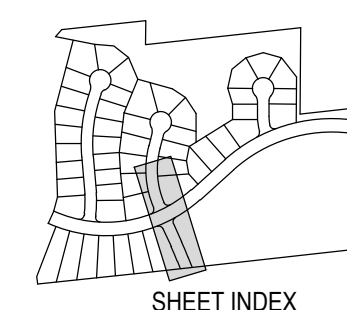
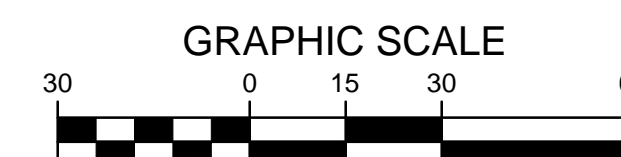
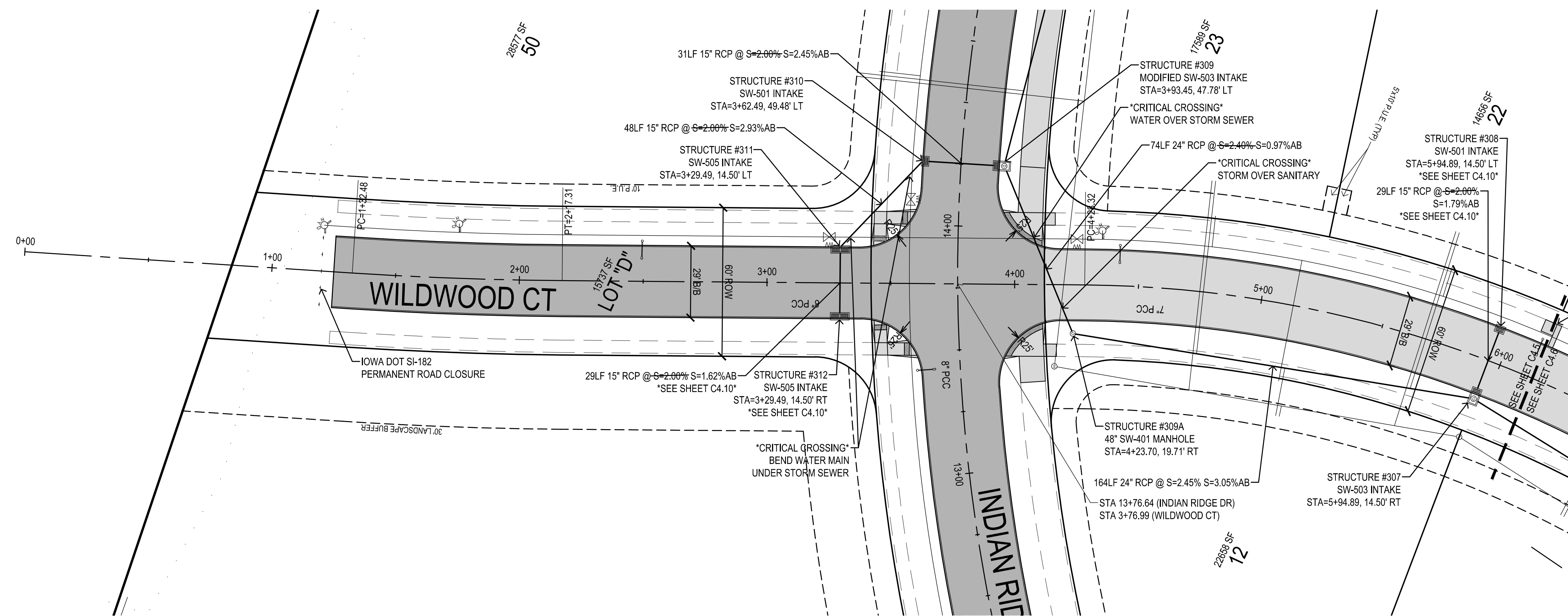
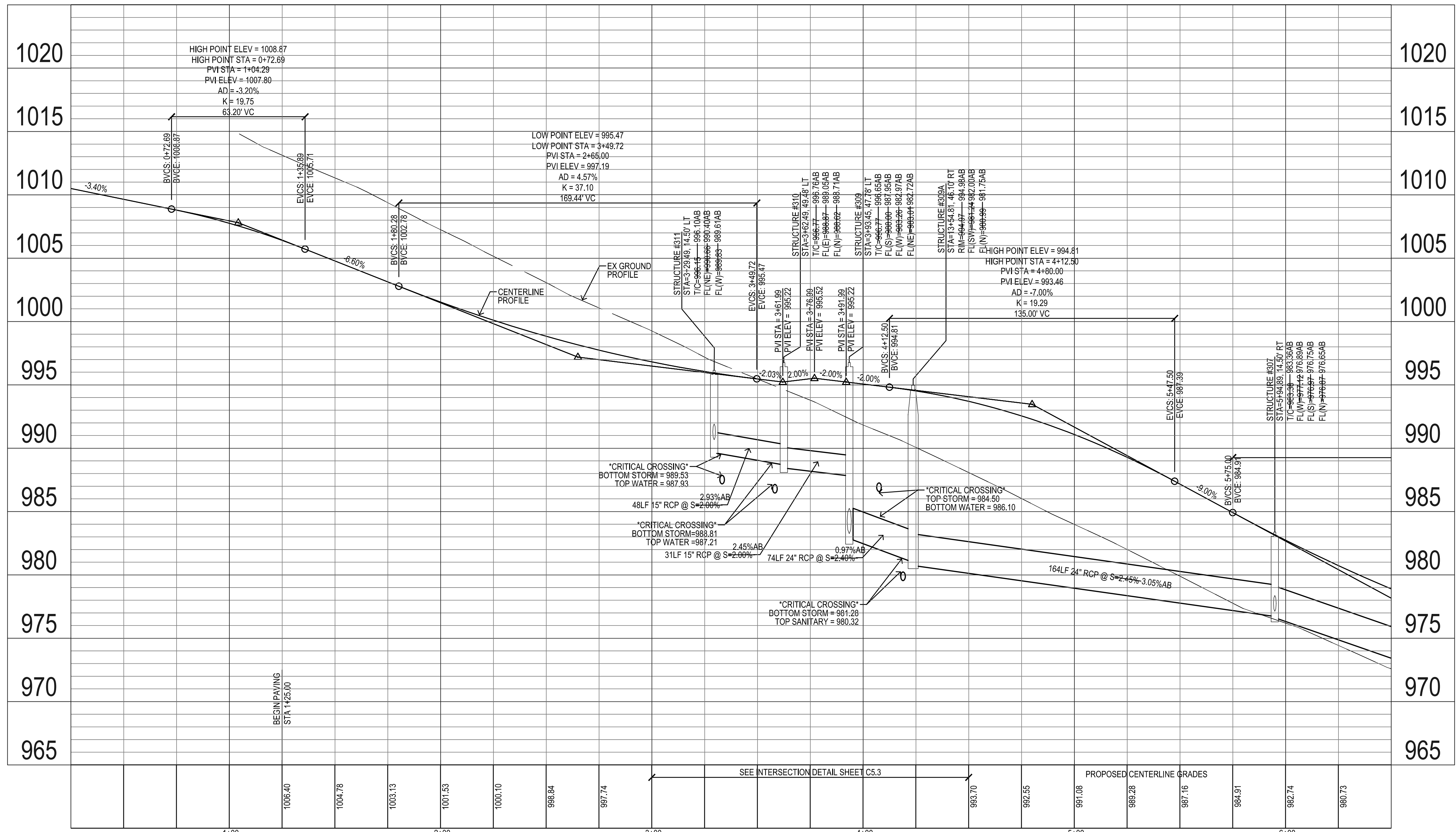


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WAUKEE, IOWA
STORM & PAVING

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WAUKEE, IOWA

STORM & PAVING

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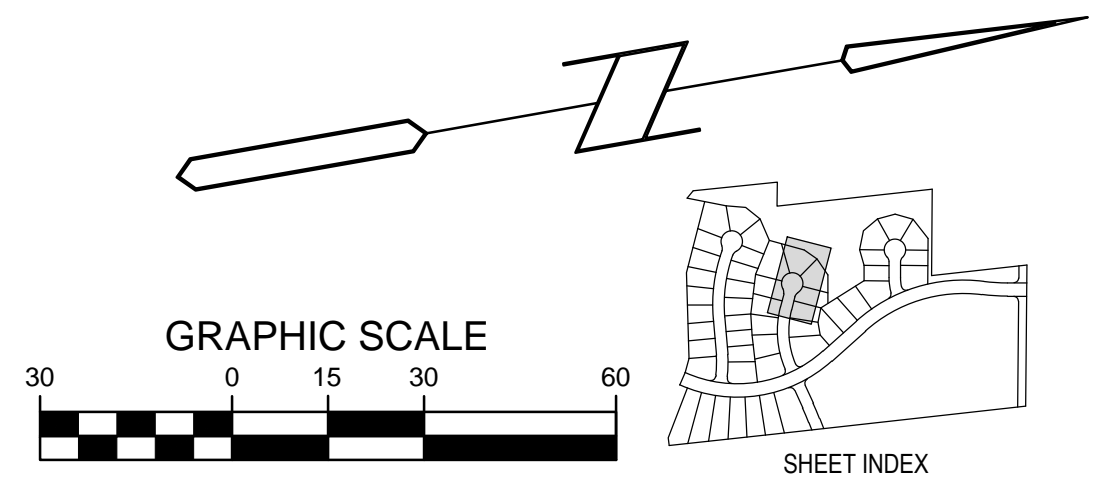
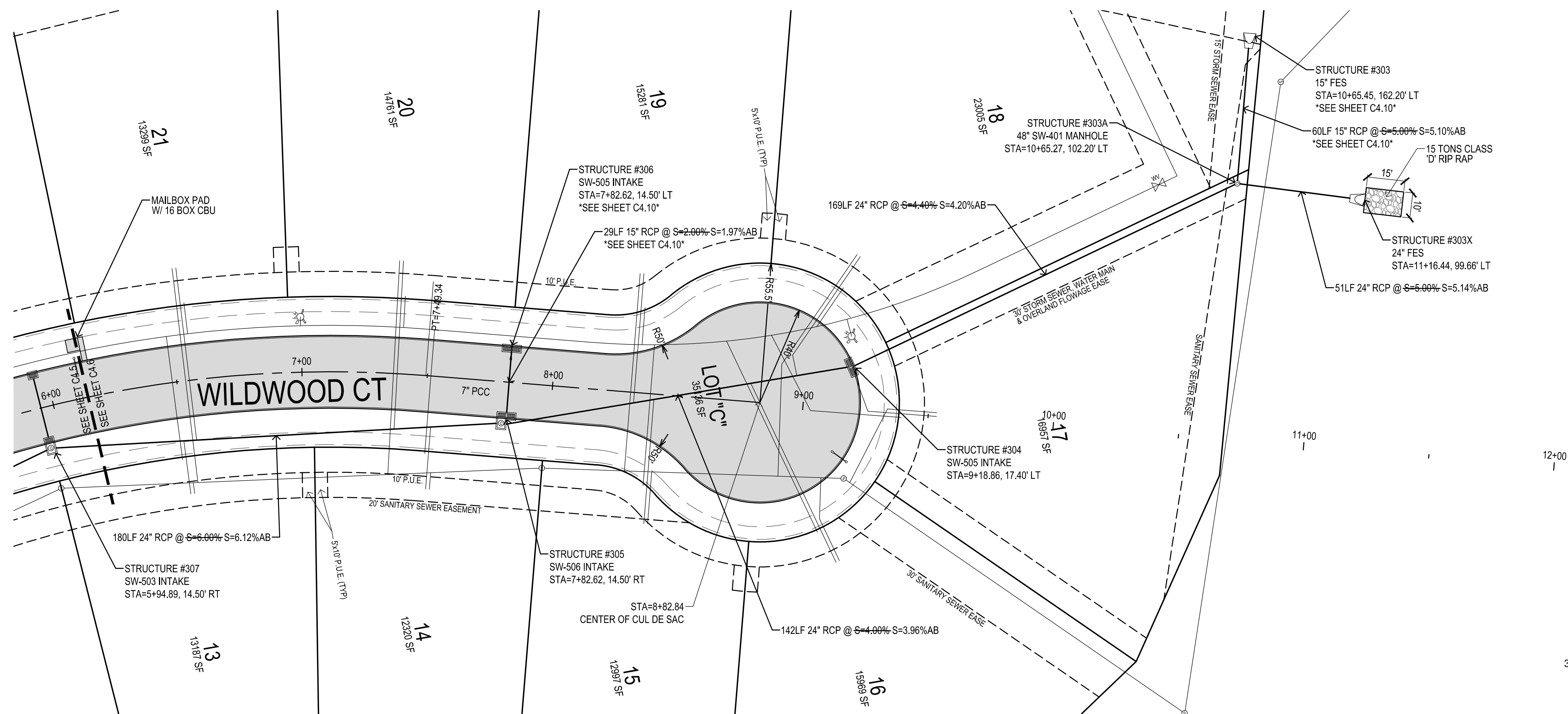
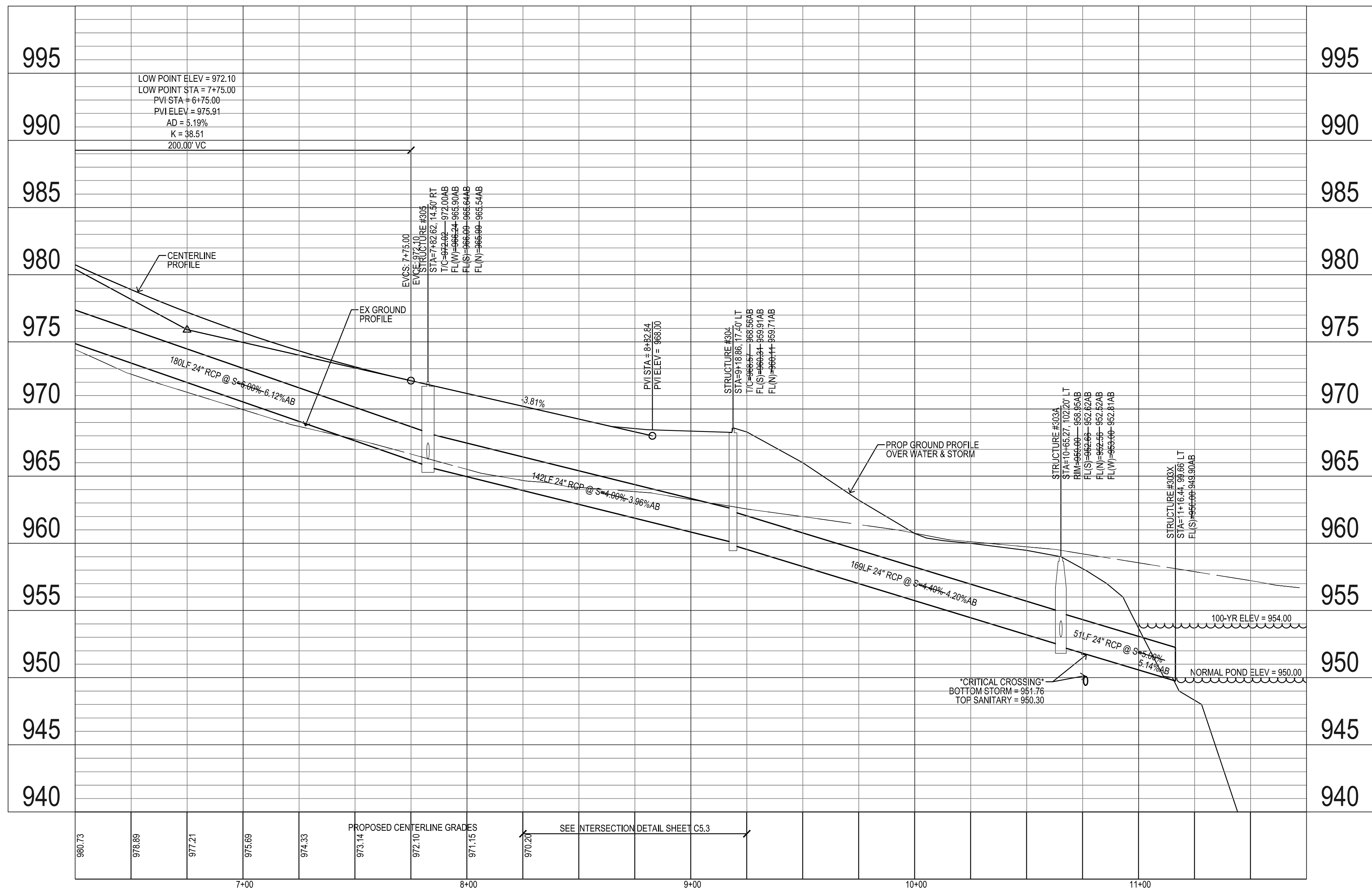
PROJECT NUMBER:
130444

SHEET NUMBER:
C4.5

Bishop Engineering
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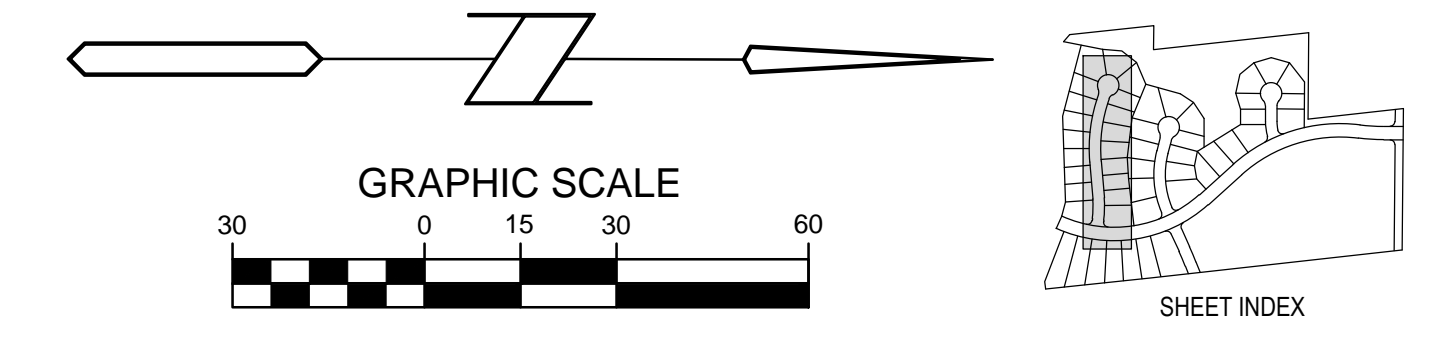
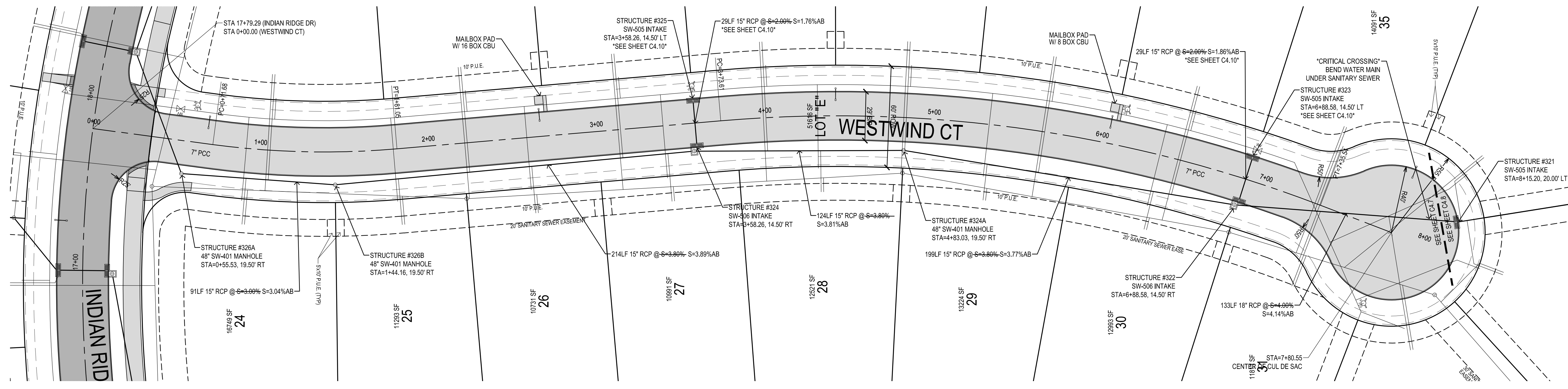
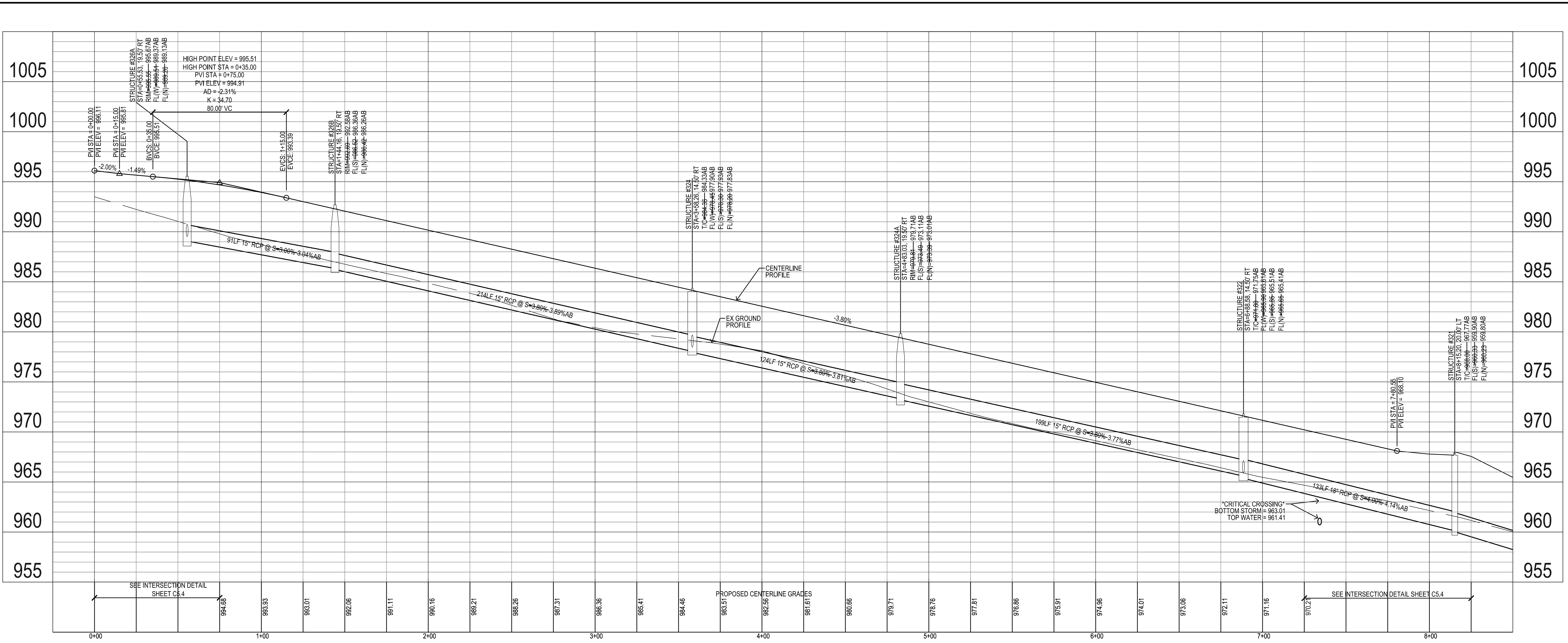
3501 104th Street
Des Moines, Iowa 50322-3825
Phone: (515)276-0467 Fax: (515)276-0217
Civil Engineering & Land Surveying Established 1959

MILAND PROJECTS 2013/130444 ABDW/GC4 STORM & PAVING DWG/016/2015 2:46:55 PM

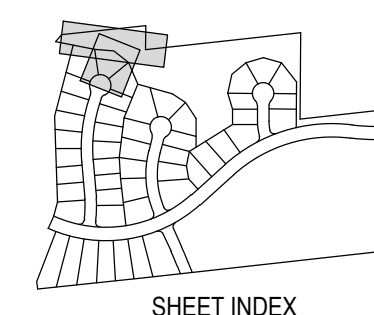
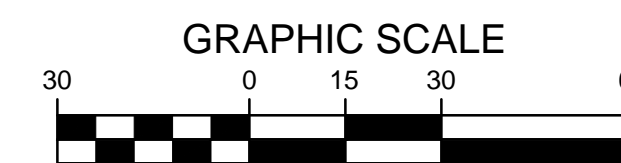
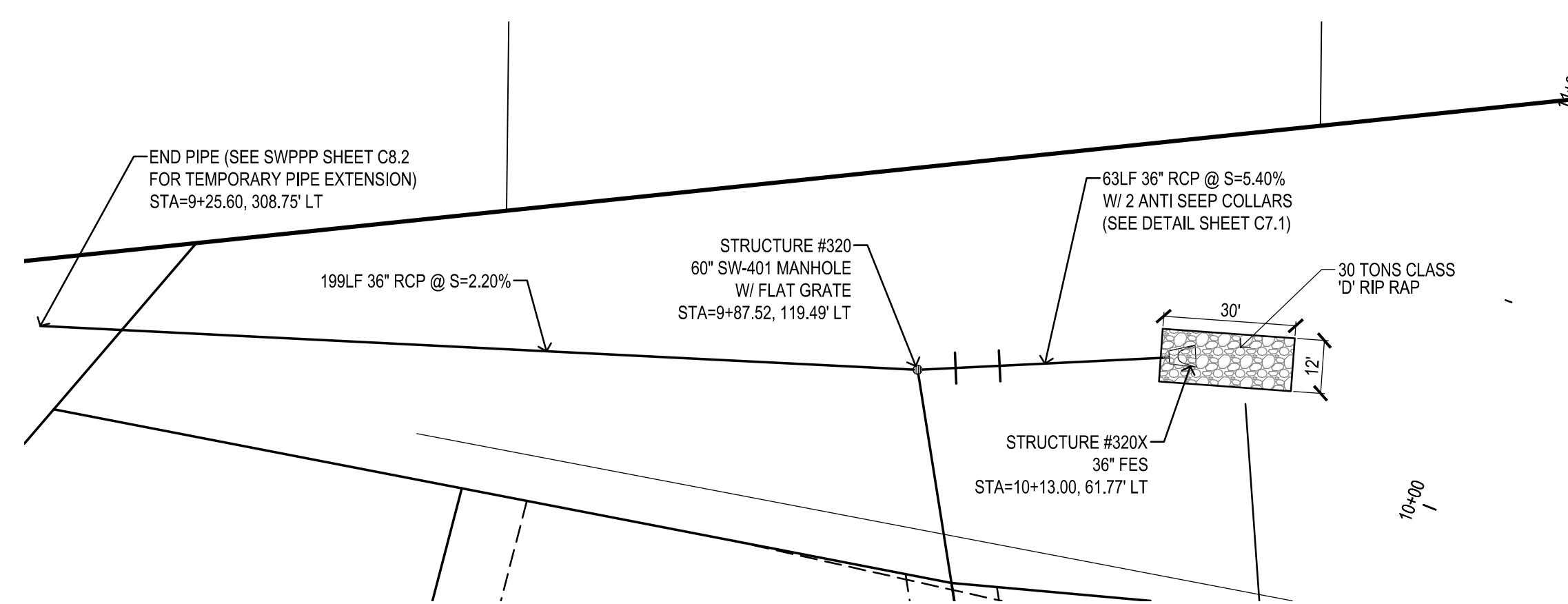
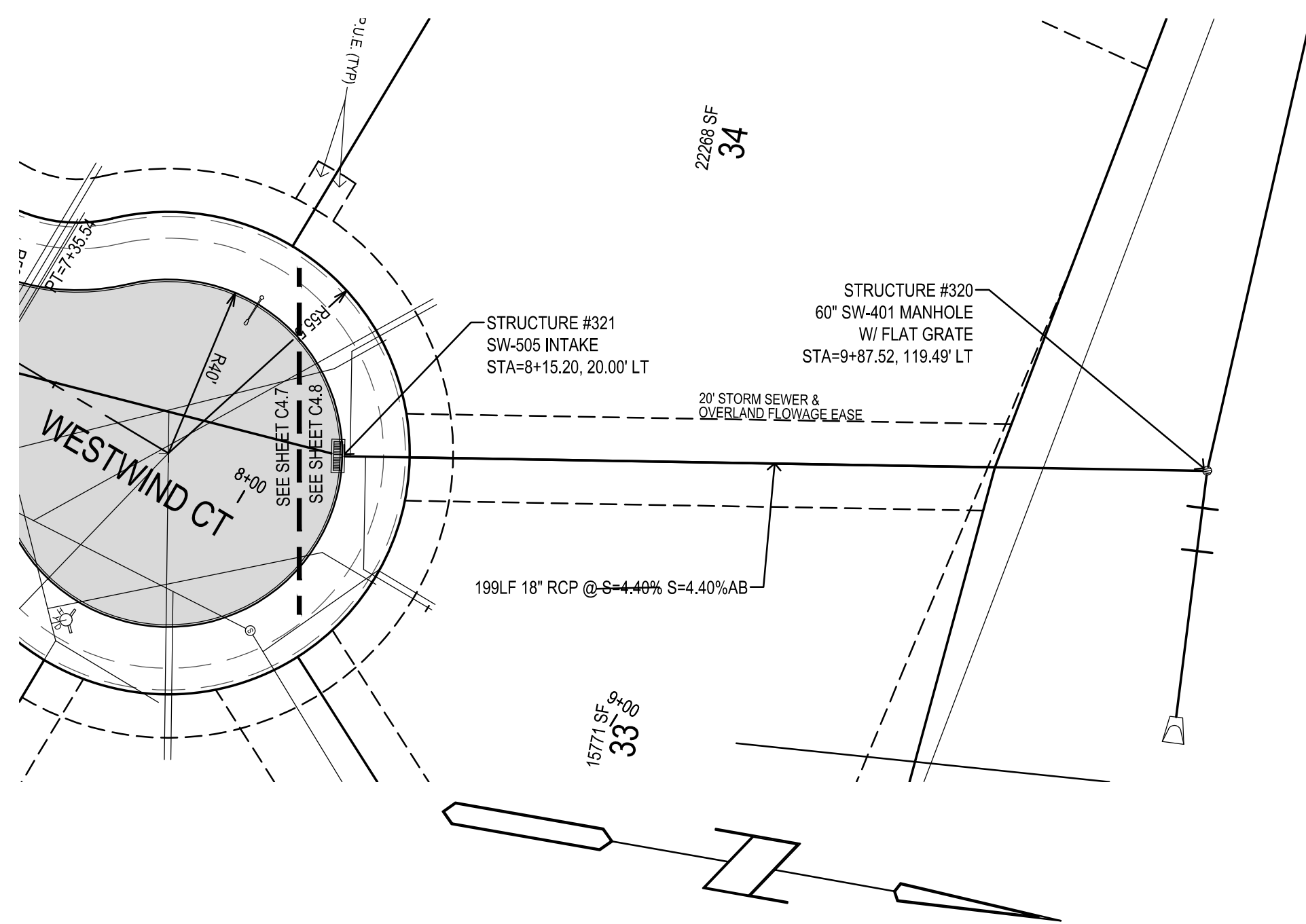
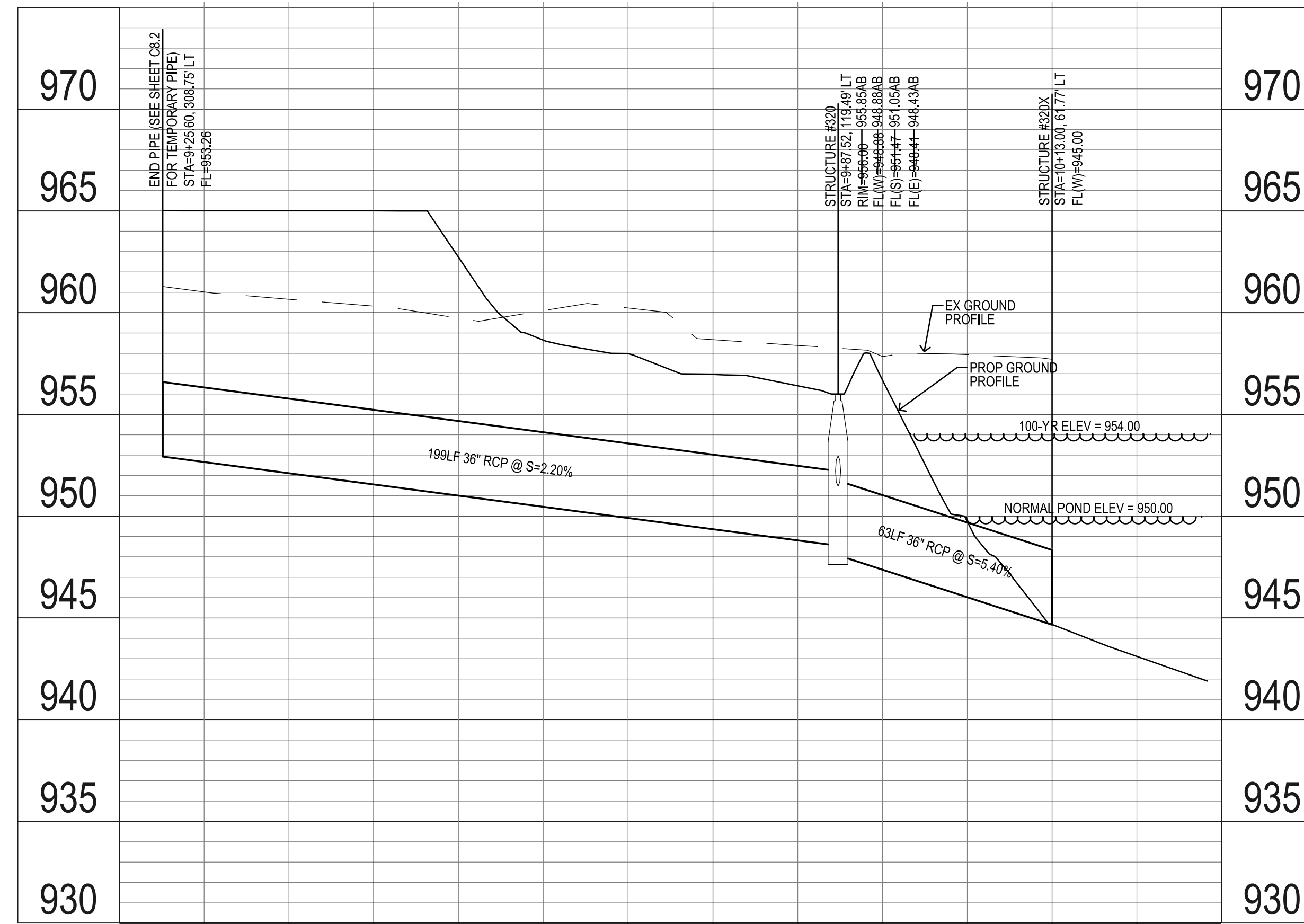
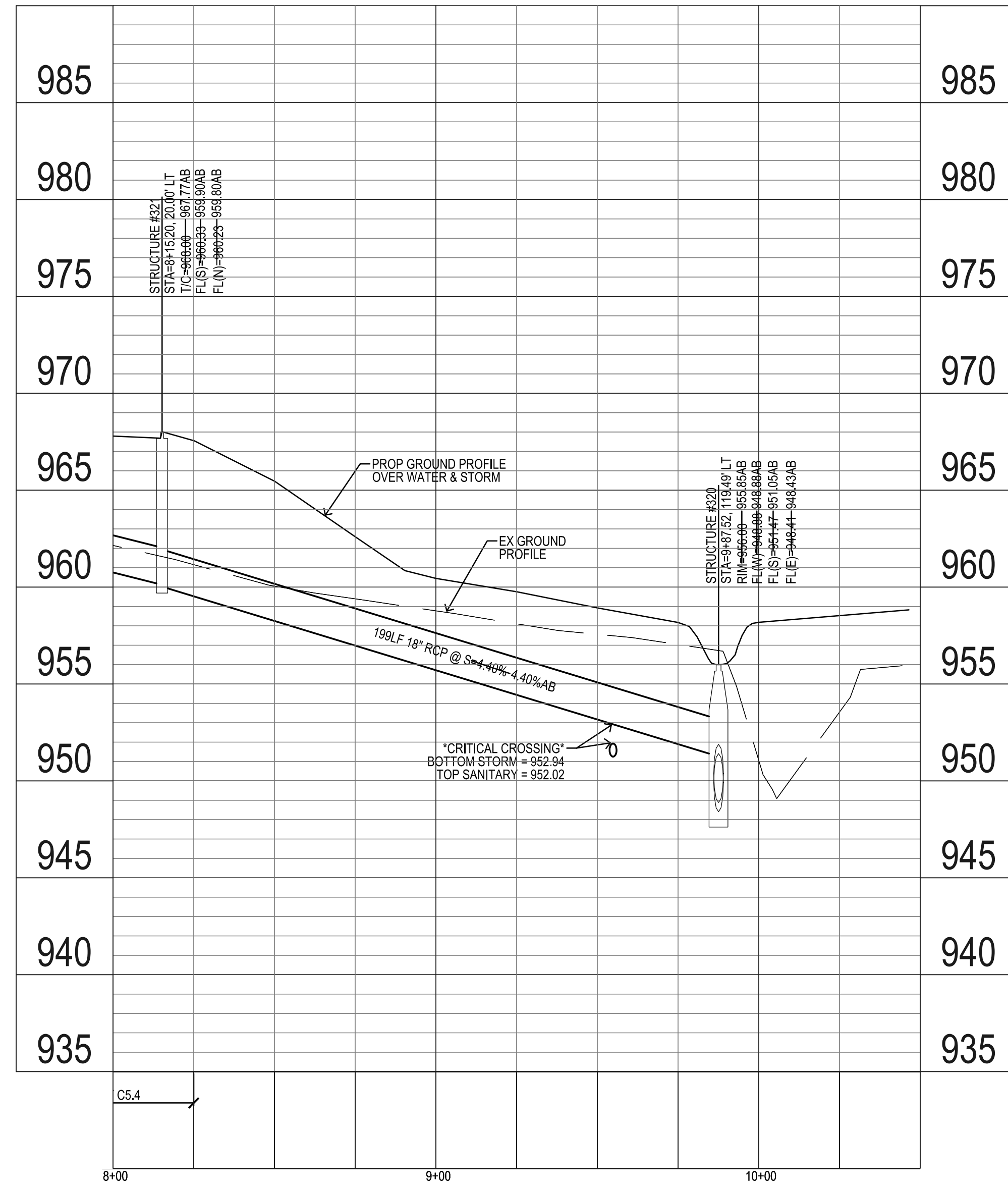


PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA
STORM & PAVING

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CHECKED BY:	DB
REVISION DATE:	7/15/14 1ST CITY SET 7/29/14 2ND CITY SET 8/12/14 3RD CITY SET 9/19/14 4TH CITY SET 10/7/14 5TH CITY SET 10/22/14 BID SET 10/16/15 AS-BUILT SET
PROJECT NUMBER:	130444
SHEET NUMBER:	C4.6



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SHEET NUMBER:	C4.7



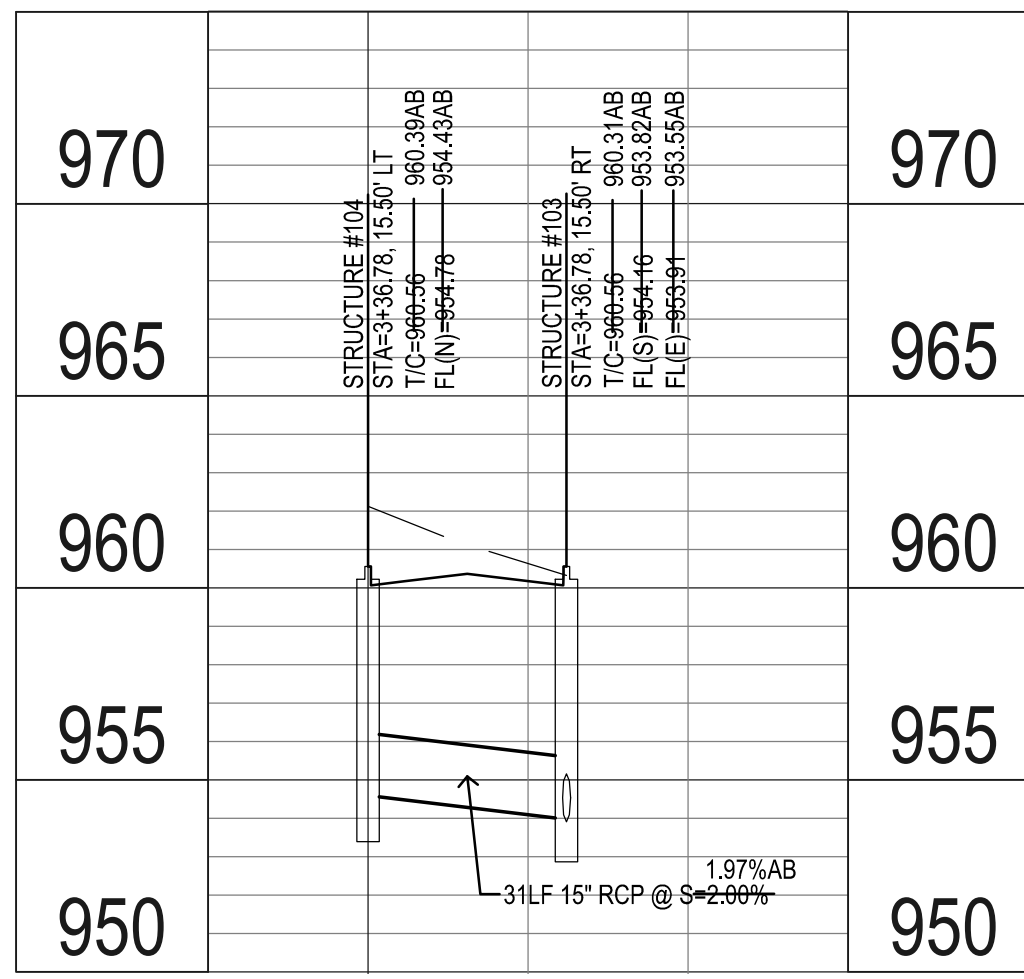
**PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA**

STORM & PAVING

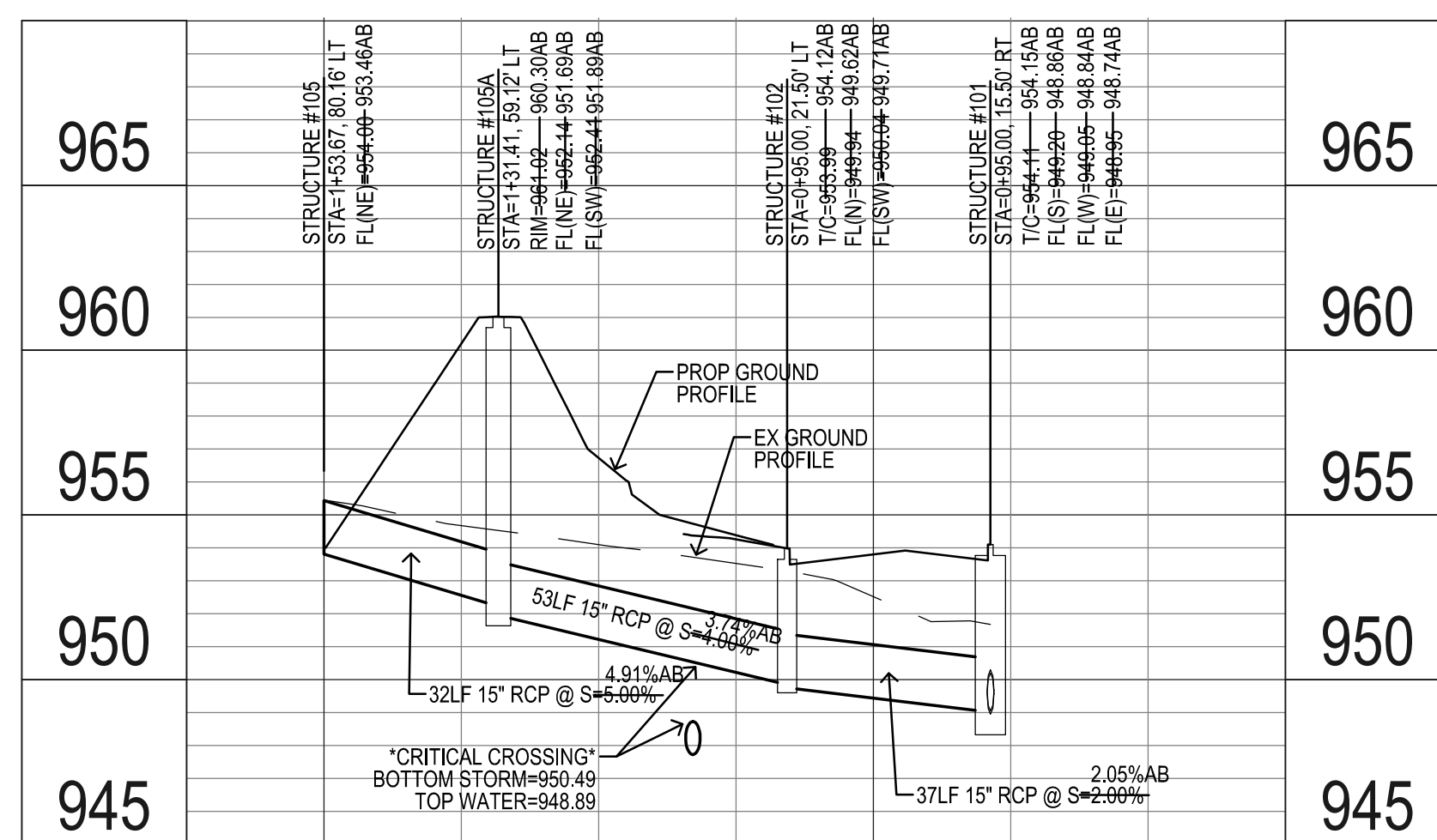
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PROJECT NUMBER:
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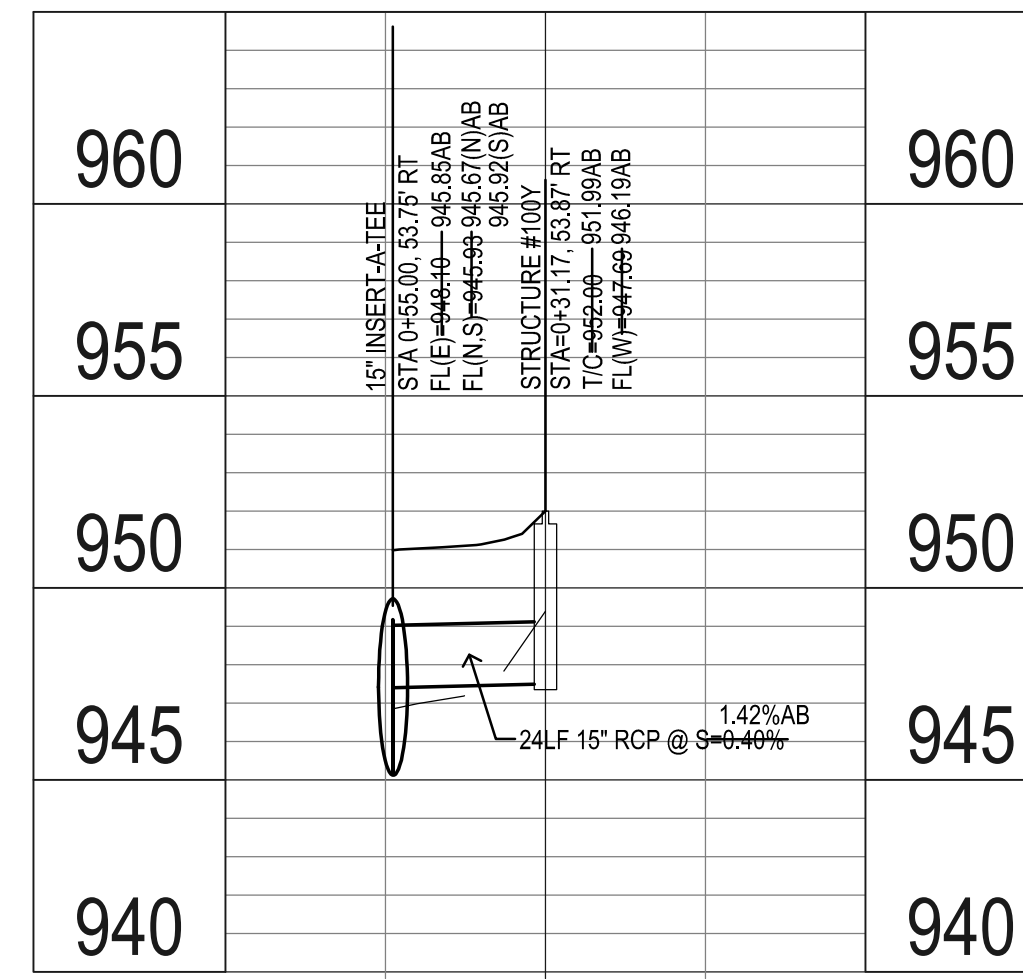
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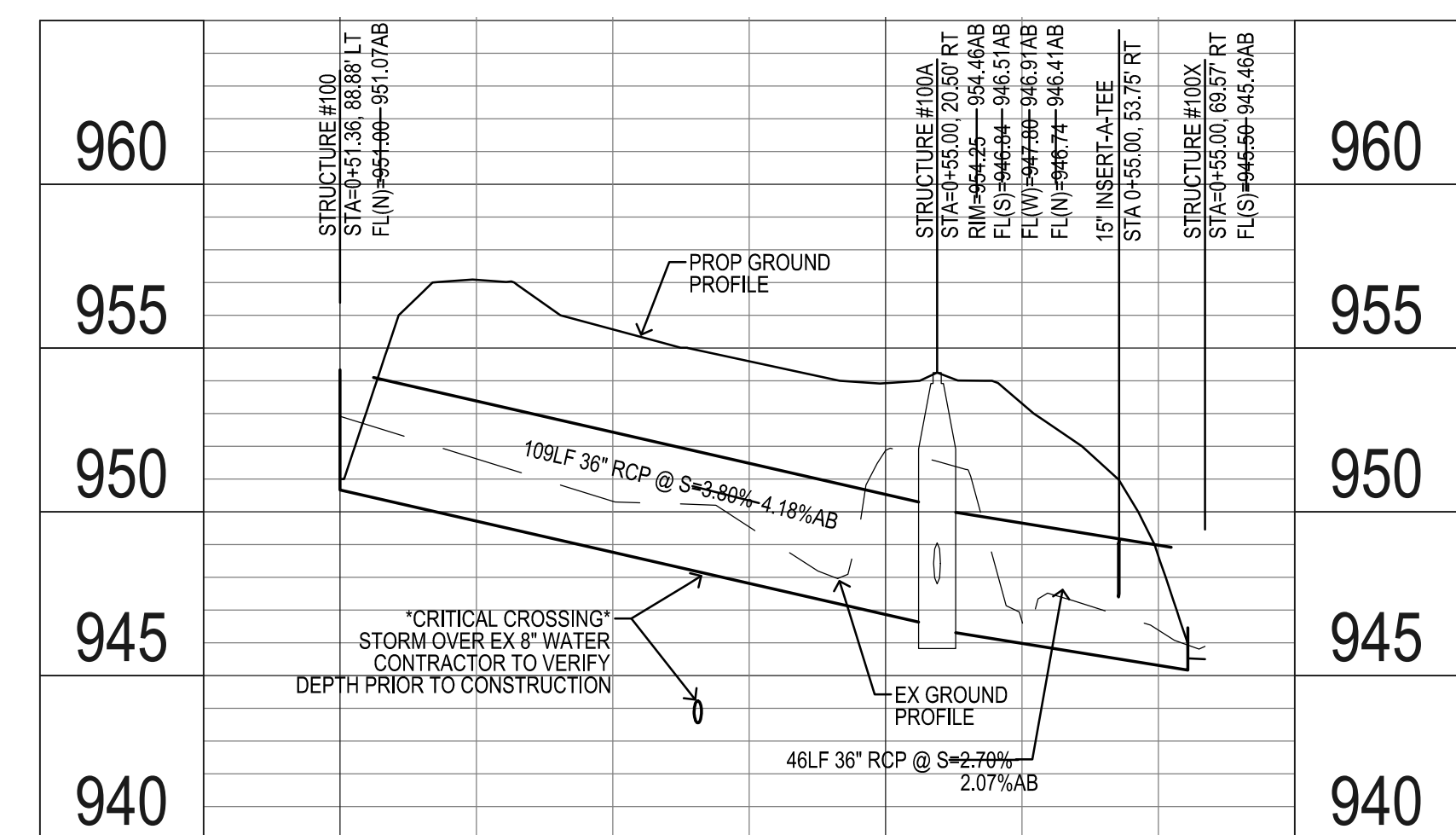
CROSS RUN DETAIL
STA 3+36.78 INDIAN RIDGE DR
SEE SHEET C4.1



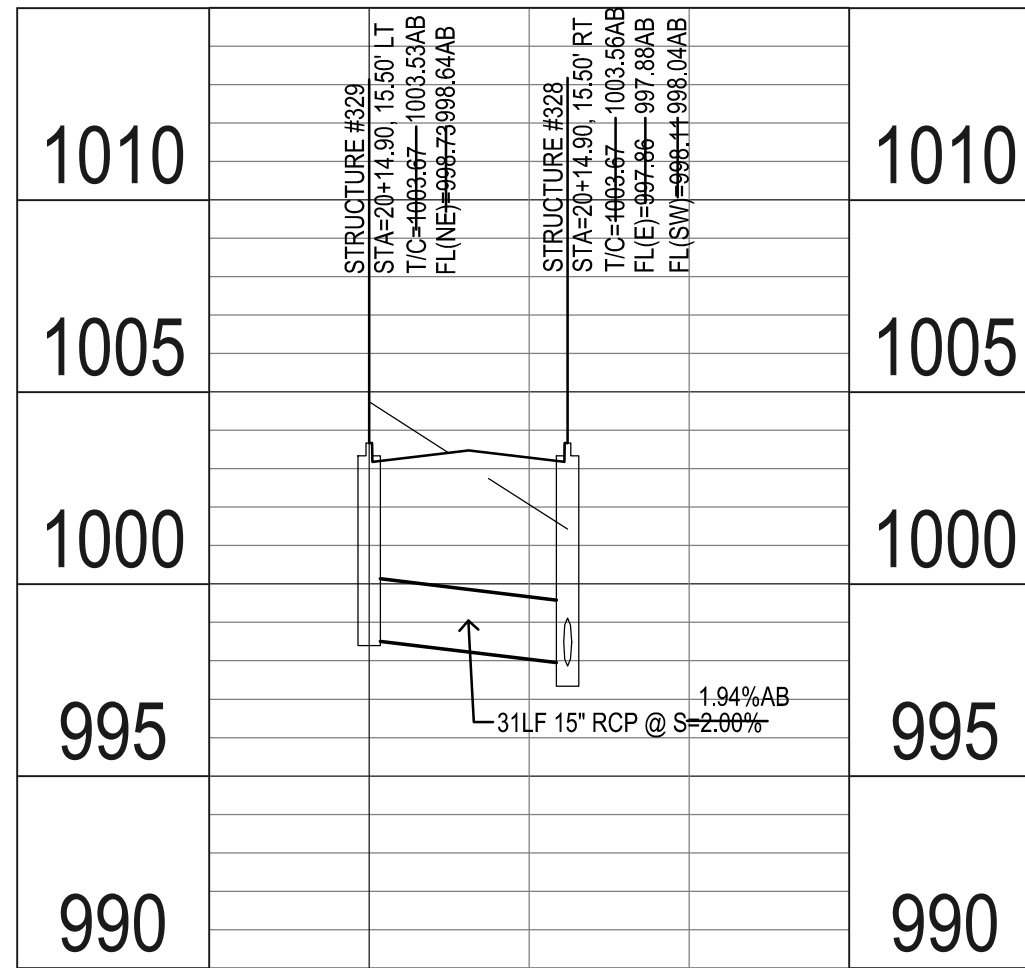
CROSS RUN DETAIL
STA 0+95.00 TO 1+53.67 INDIAN RIDGE DR
SEE SHEET C4.1



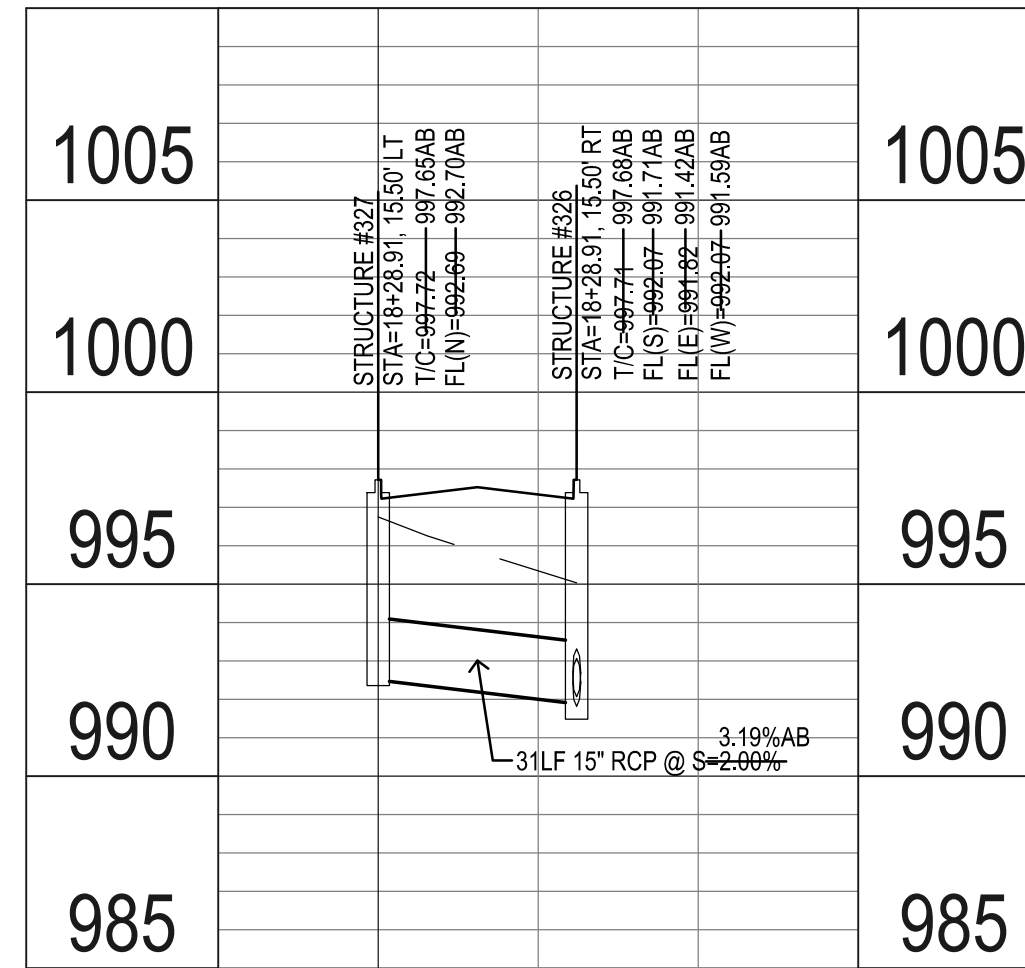
CROSS RUN DETAIL
RIGHT OF STA 0+31.17 TO 0+55.00 INDIAN RIDGE DR
SOUTH BOUND RIGHT TURN LANE
SEE SHEET C4.1



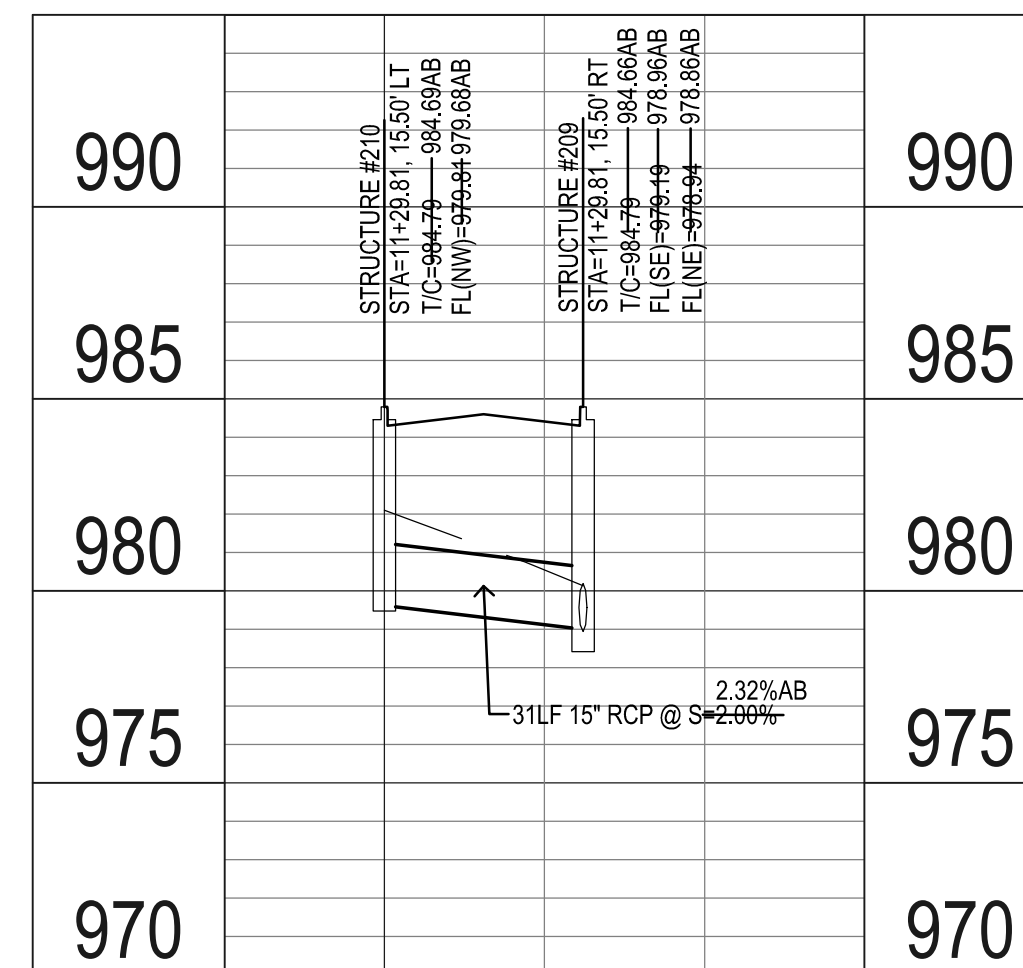
CROSS RUN DETAIL
STA 0+55.00 INDIAN RIDGE DR
SEE SHEET C4.1



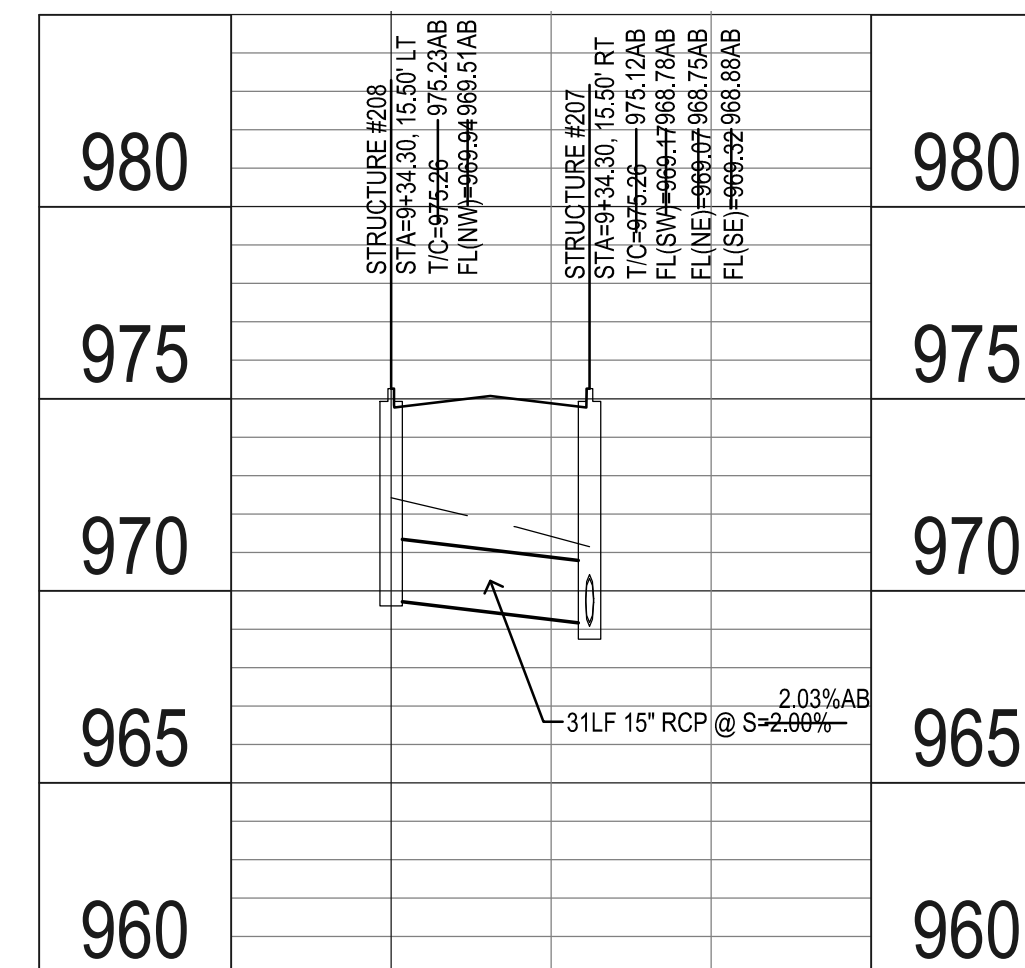
CROSS RUN DETAIL
STA 20+14.90 INDIAN RIDGE DR
SEE SHEET C4.3



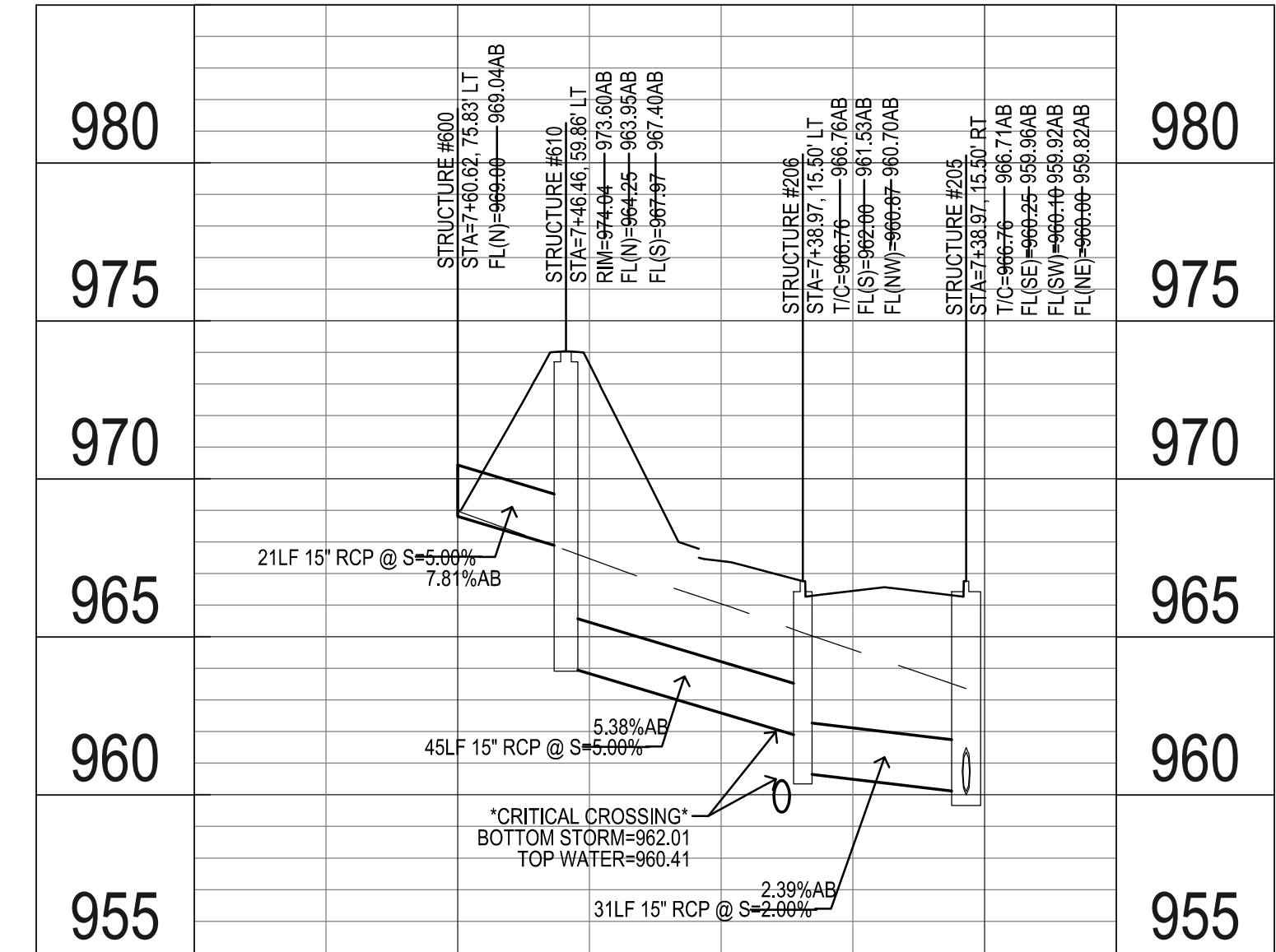
CROSS RUN DETAIL
STA 18+28.91 INDIAN RIDGE DR
SEE SHEET C4.3



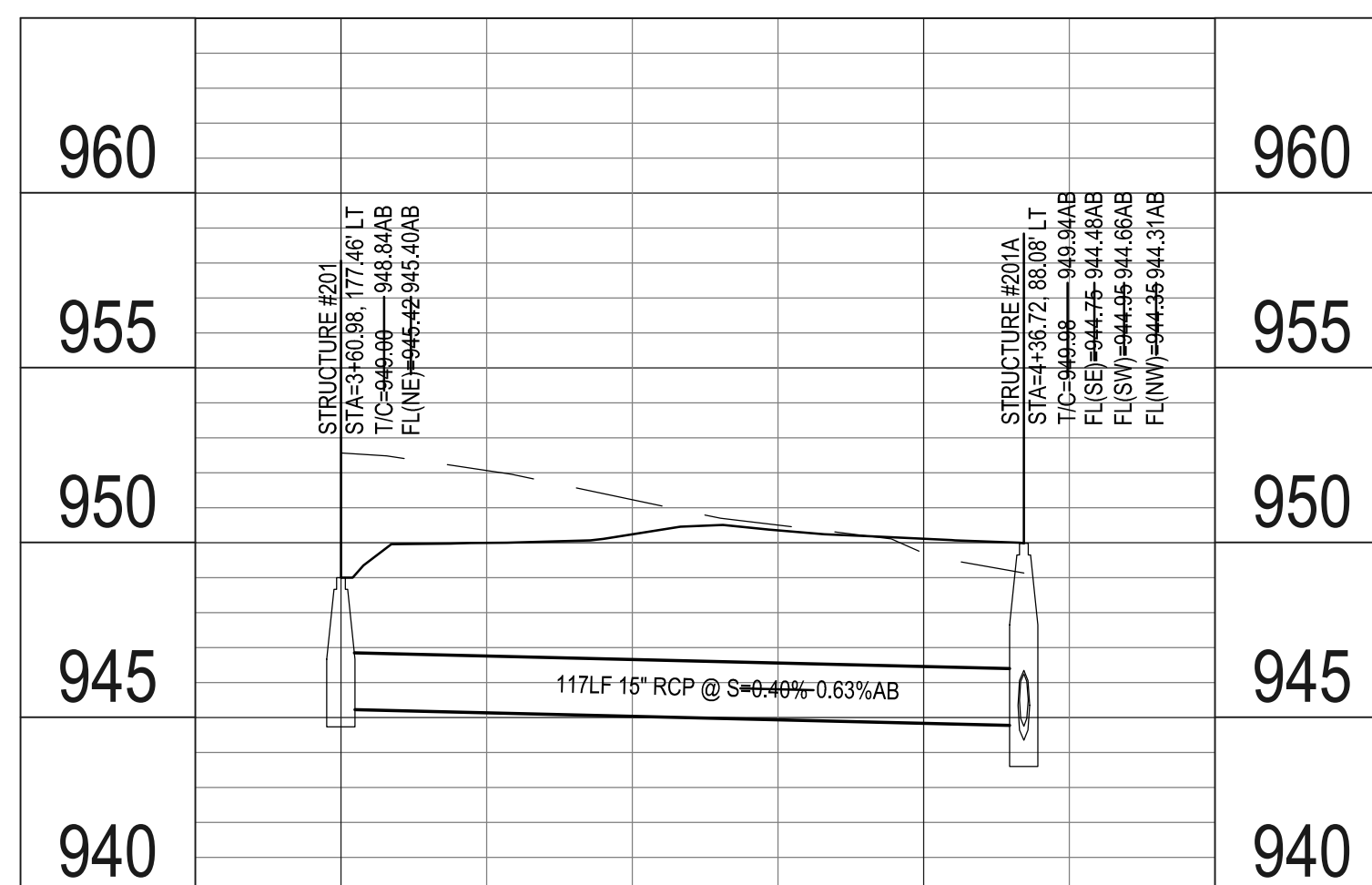
CROSS RUN DETAIL
STA 11+29.81 INDIAN RIDGE DR
SEE SHEET C4.2



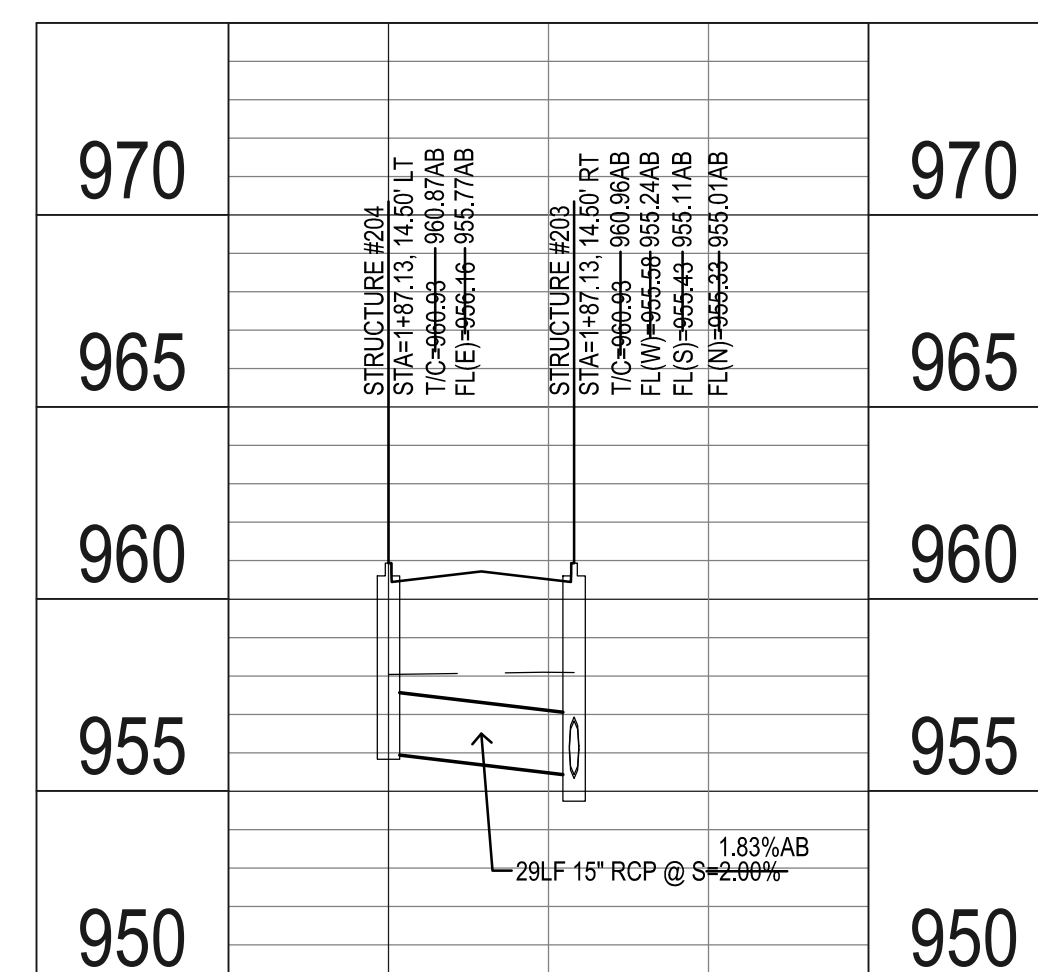
CROSS RUN DETAIL
STA 9+34.30 INDIAN RIDGE DR
SEE SHEET C4.2



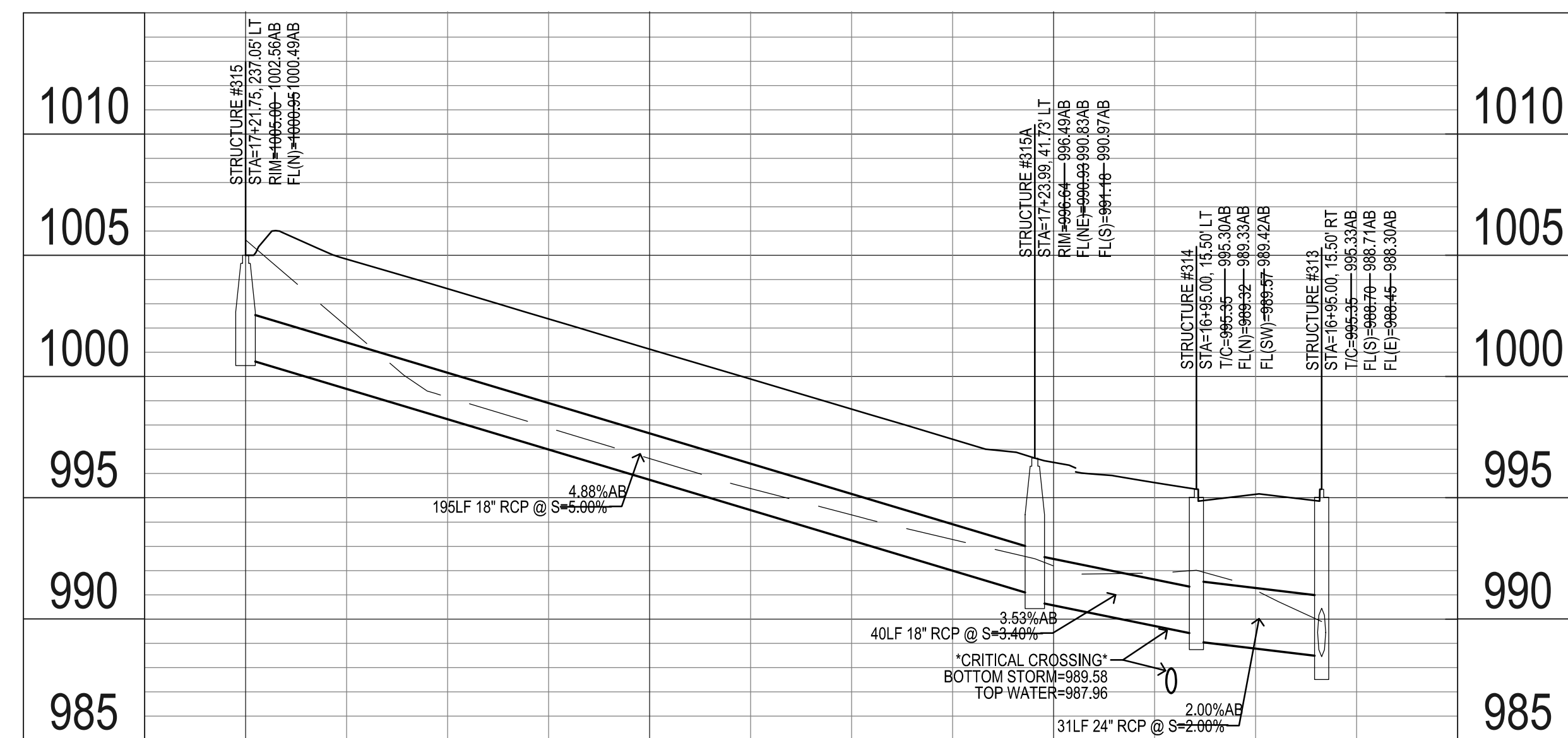
CROSS RUN DETAIL
STA 7+38.97 INDIAN RIDGE DR
SEE SHEET C4.2



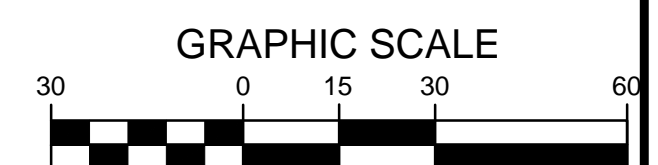
CROSS RUN DETAIL
LEFT OF STA 3+60.98 TO 4+36.72 WOODLAND CT
SEE SHEET C4.4



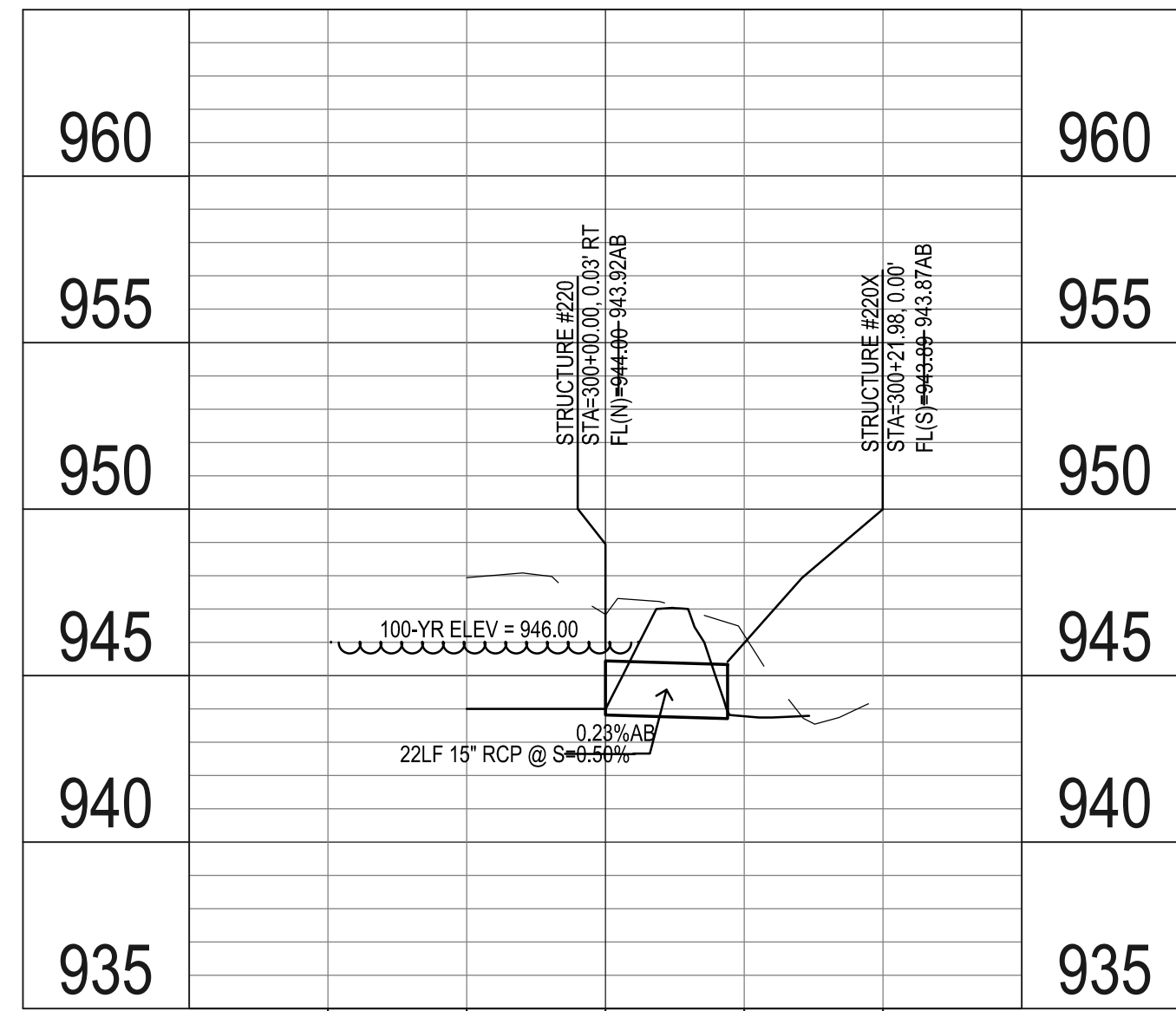
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STA 1+87.13 WOODLAND CT
SEE SHEET C4.4



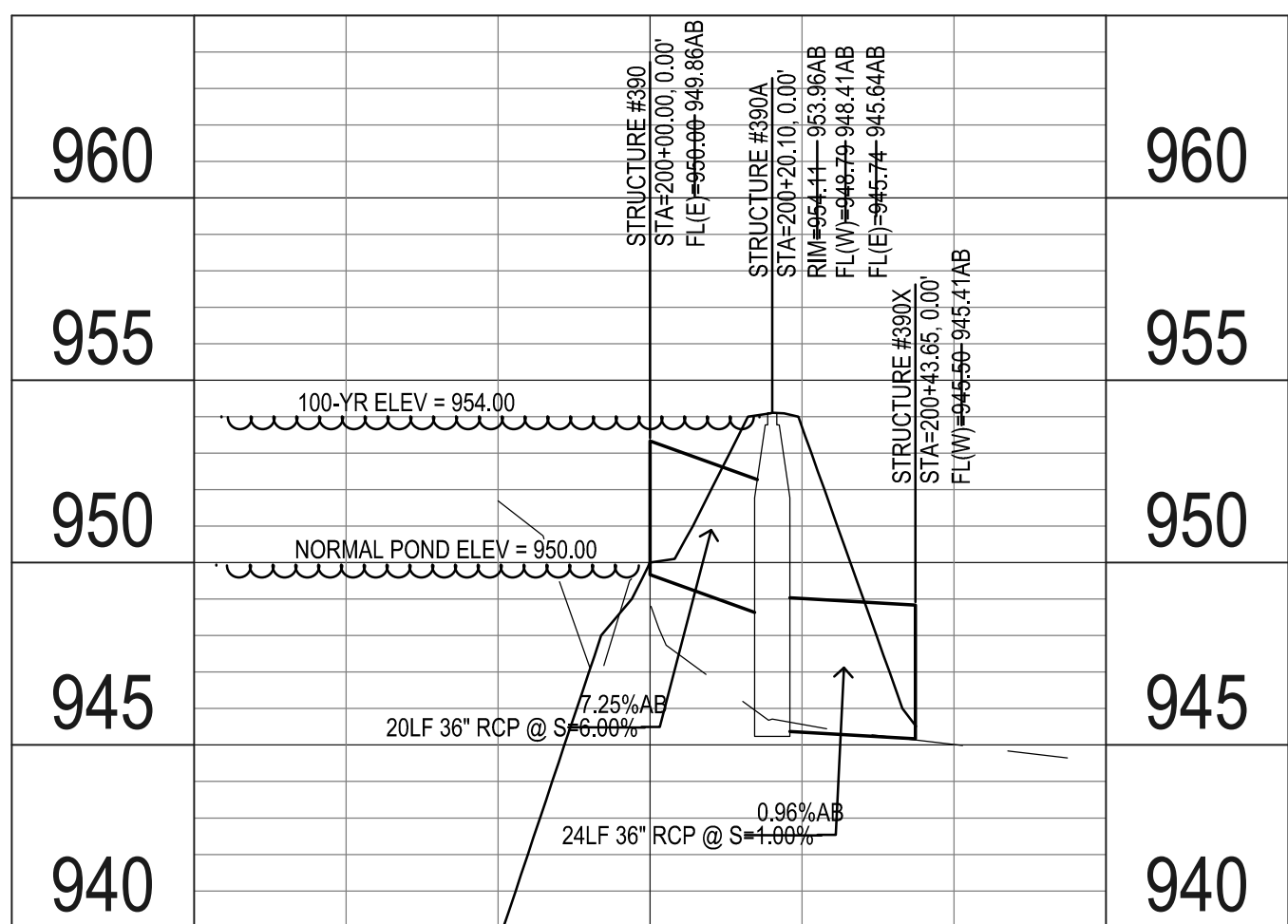
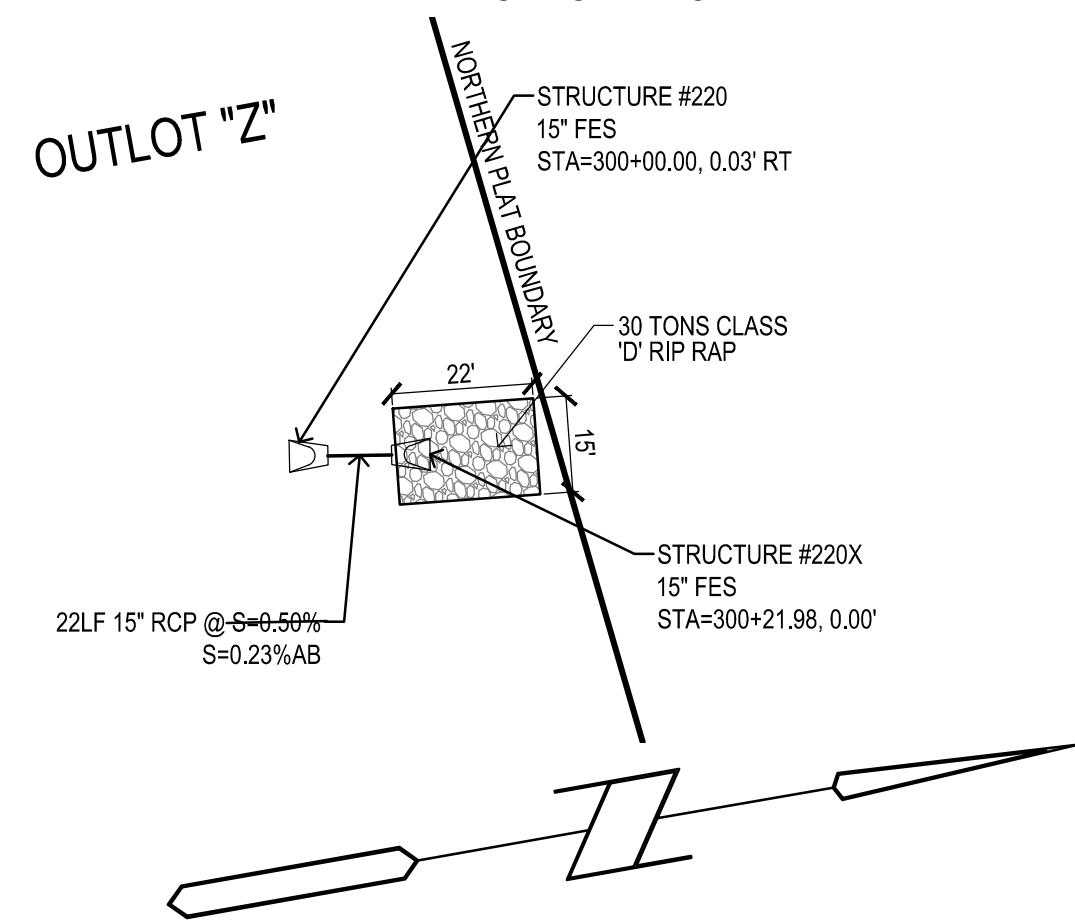
CROSS RUN DETAIL
STA 16+95.00 TO 17+21.75 INDIAN RIDGE DR
LOT 45/46 SIDE LINE
SEE SHEET C4.3



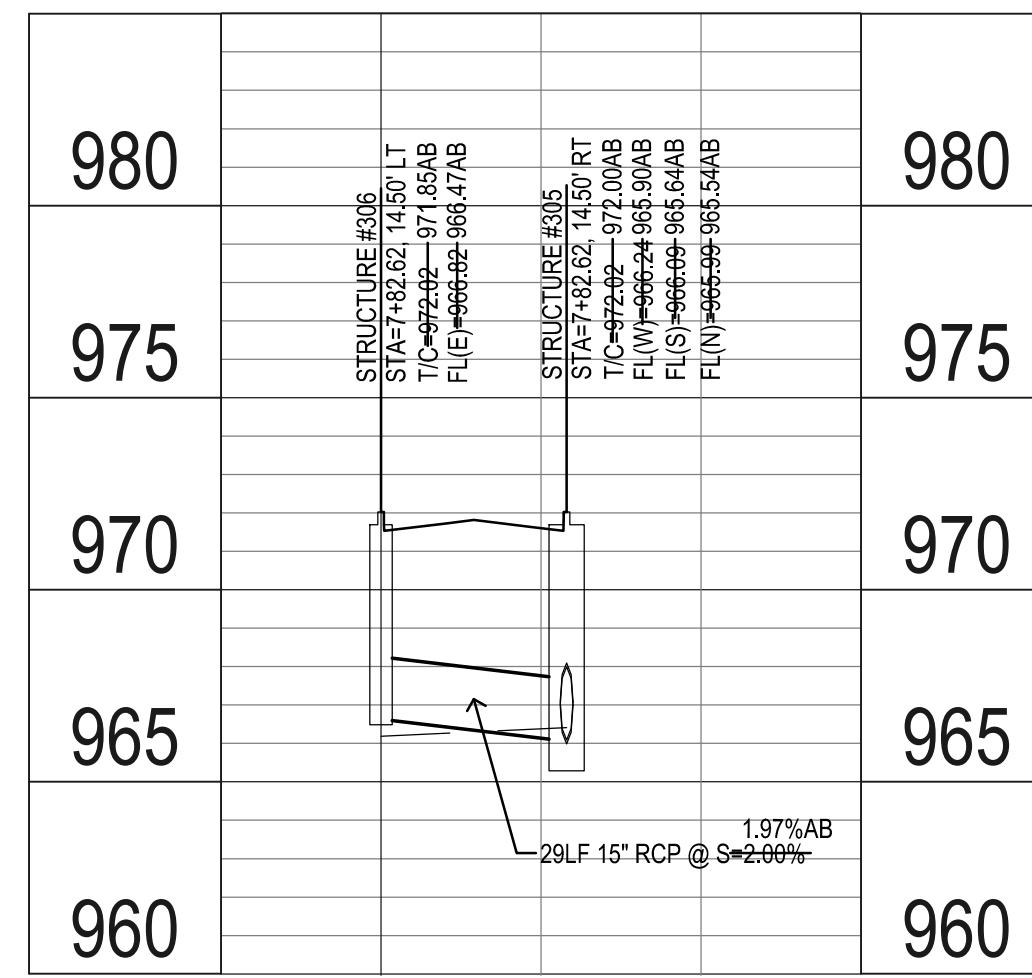
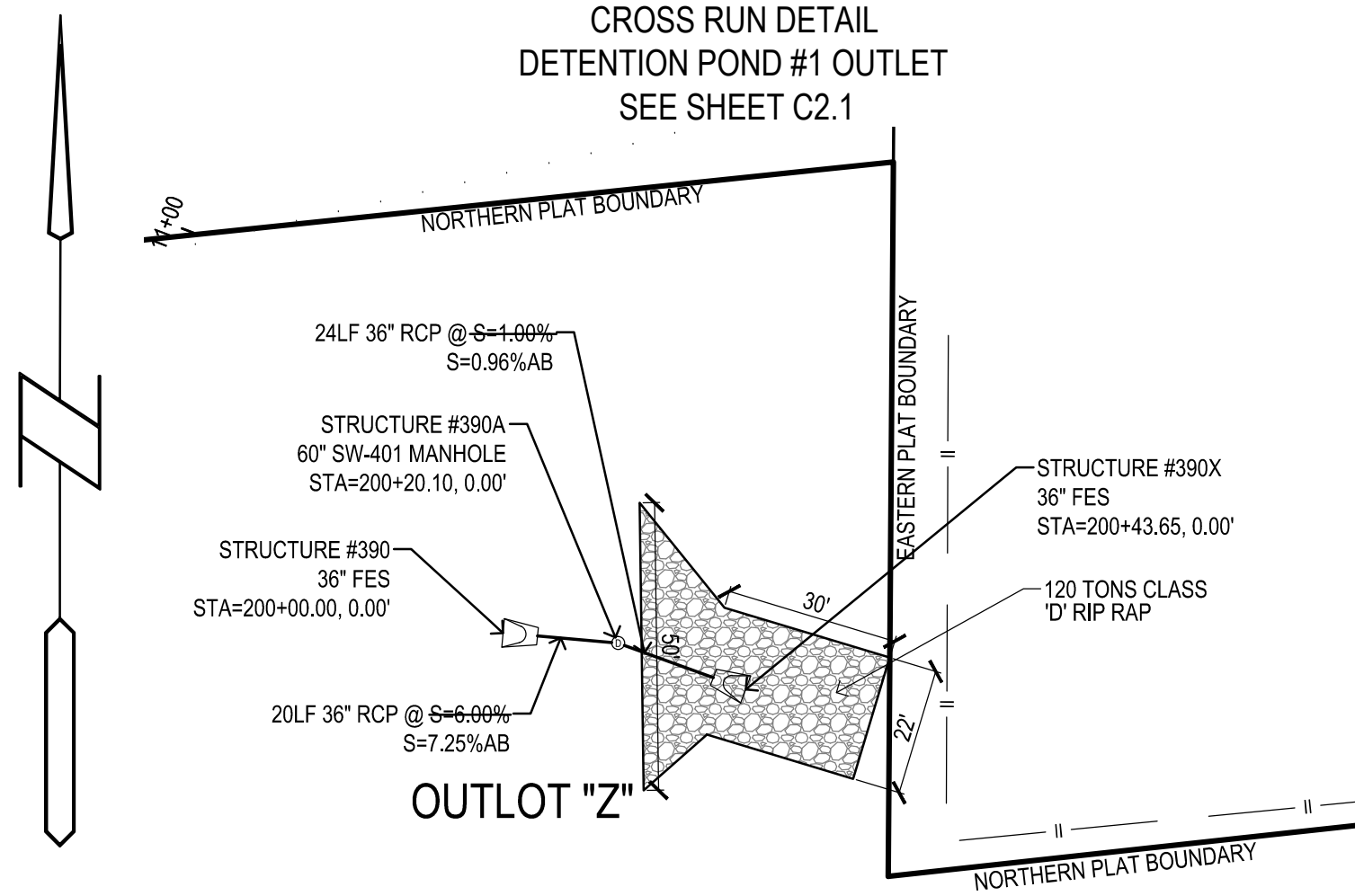
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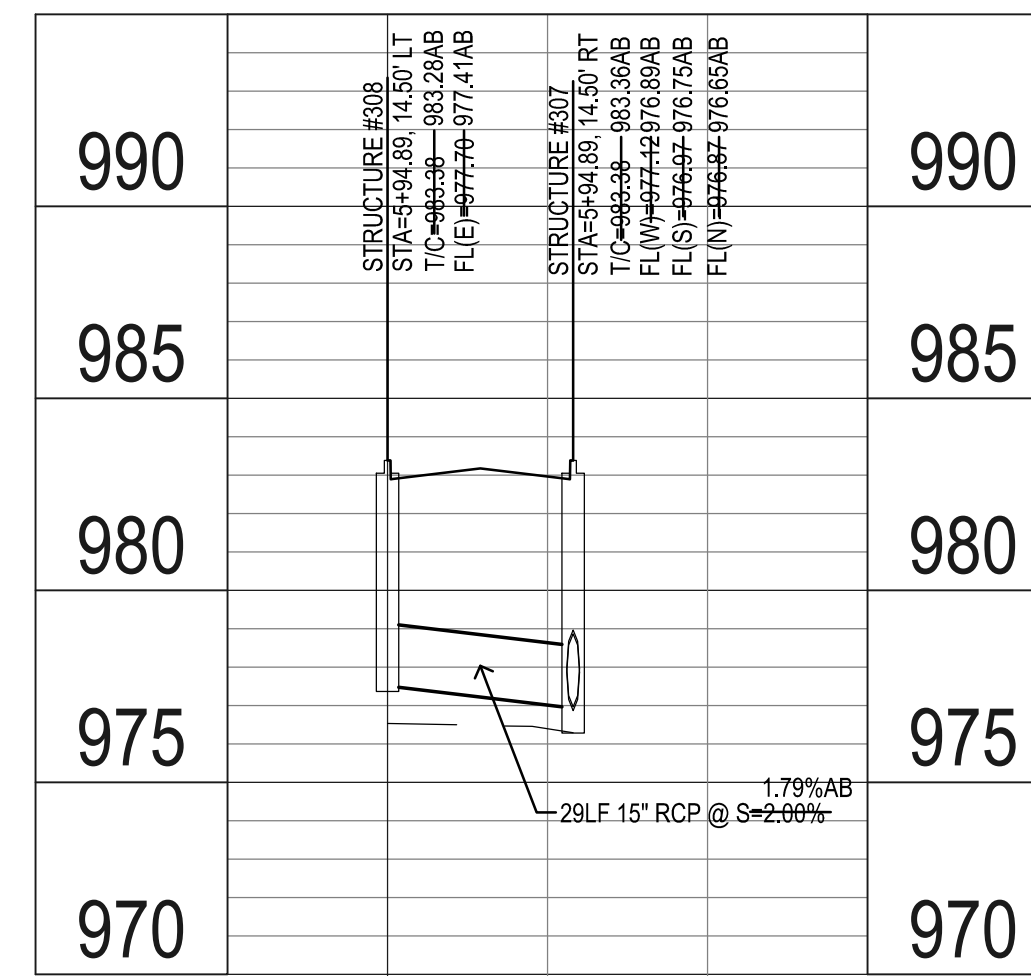
CROSS RUN DETAIL
DETENTION POND #2 OUTLET
SEE SHEET C4.4



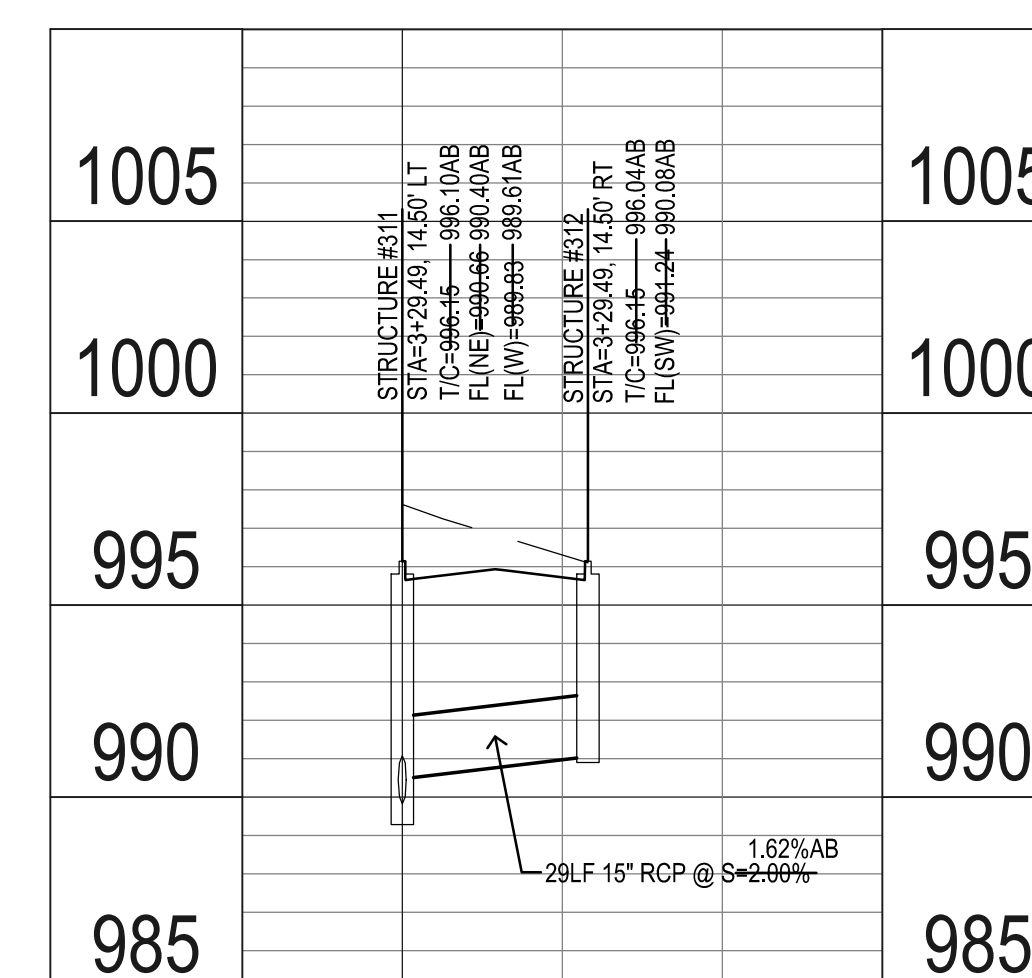
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DETENTION POND #1 OUTLET
SEE SHEET C2.1



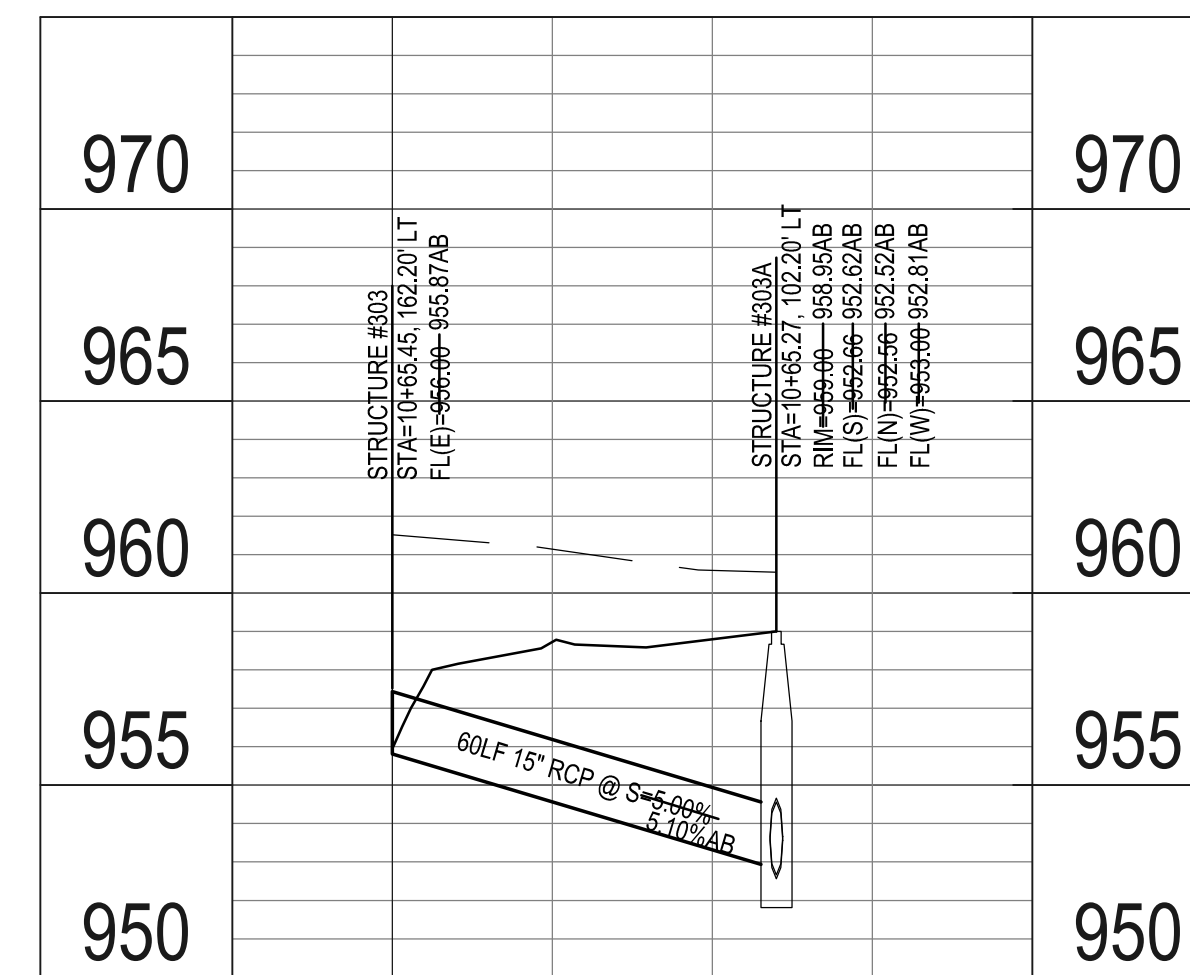
CROSS RUN DETAIL
STA 7+82.62 WILDWOOD CT
SEE SHEET C4.6



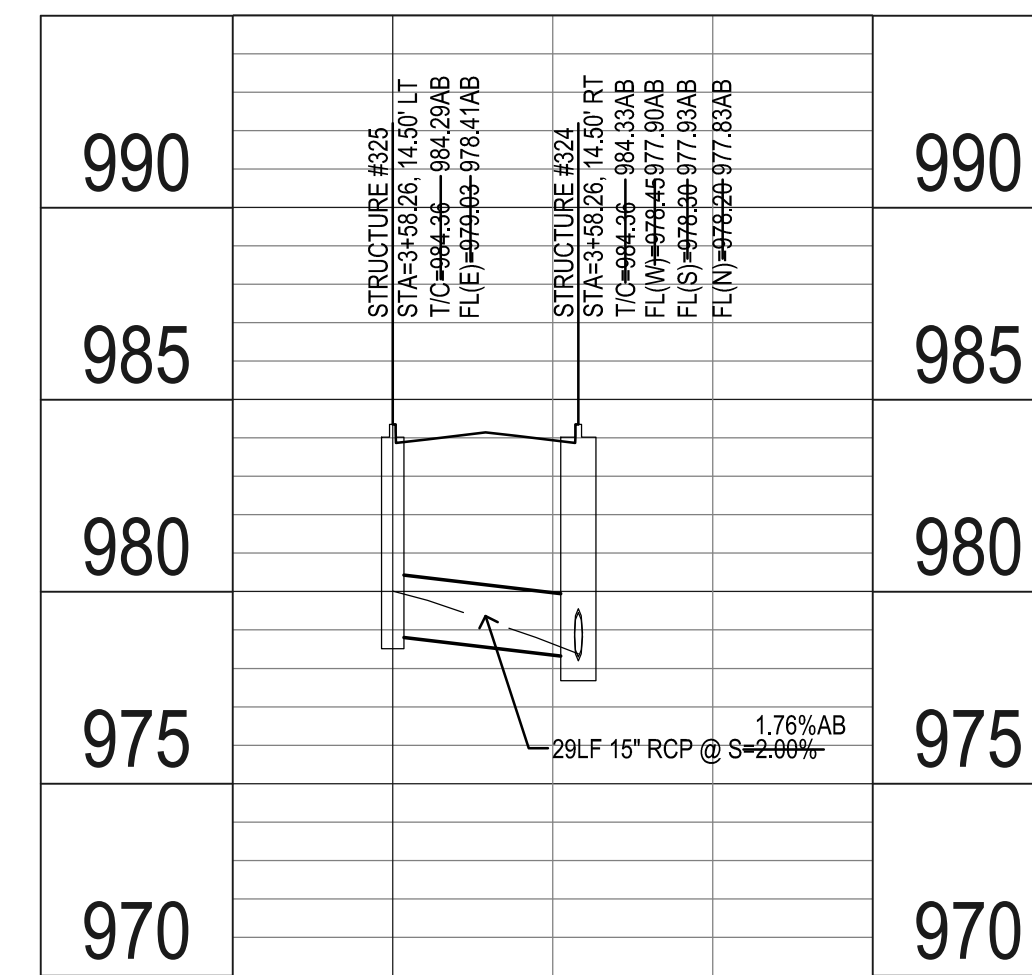
CROSS RUN DETAIL
STA 5+94.89 WILDWOOD CT
SEE SHEET C4.5



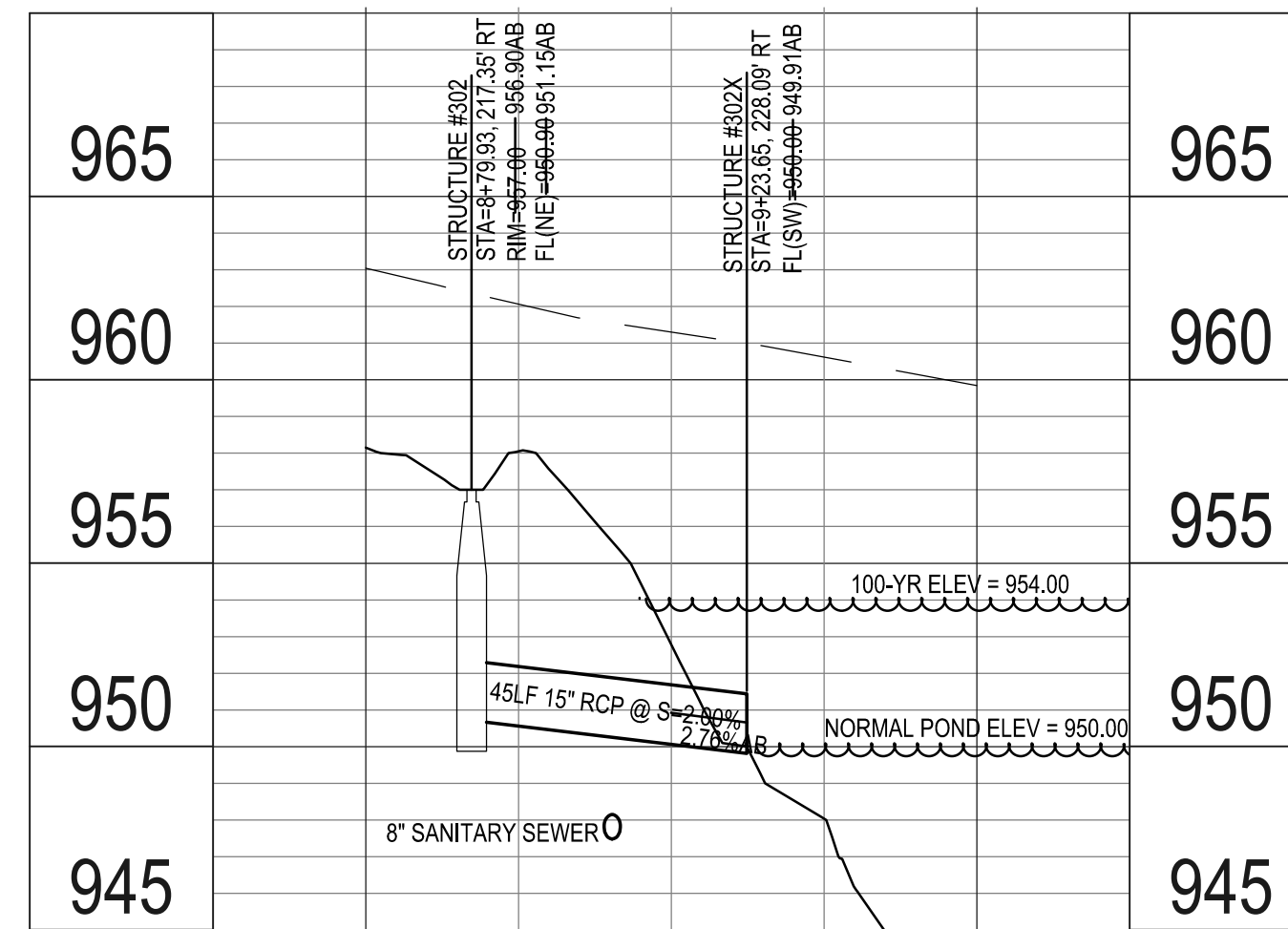
CROSS RUN DETAIL
STA 3+29.49 WILDWOOD CT
SEE SHEET C4.5



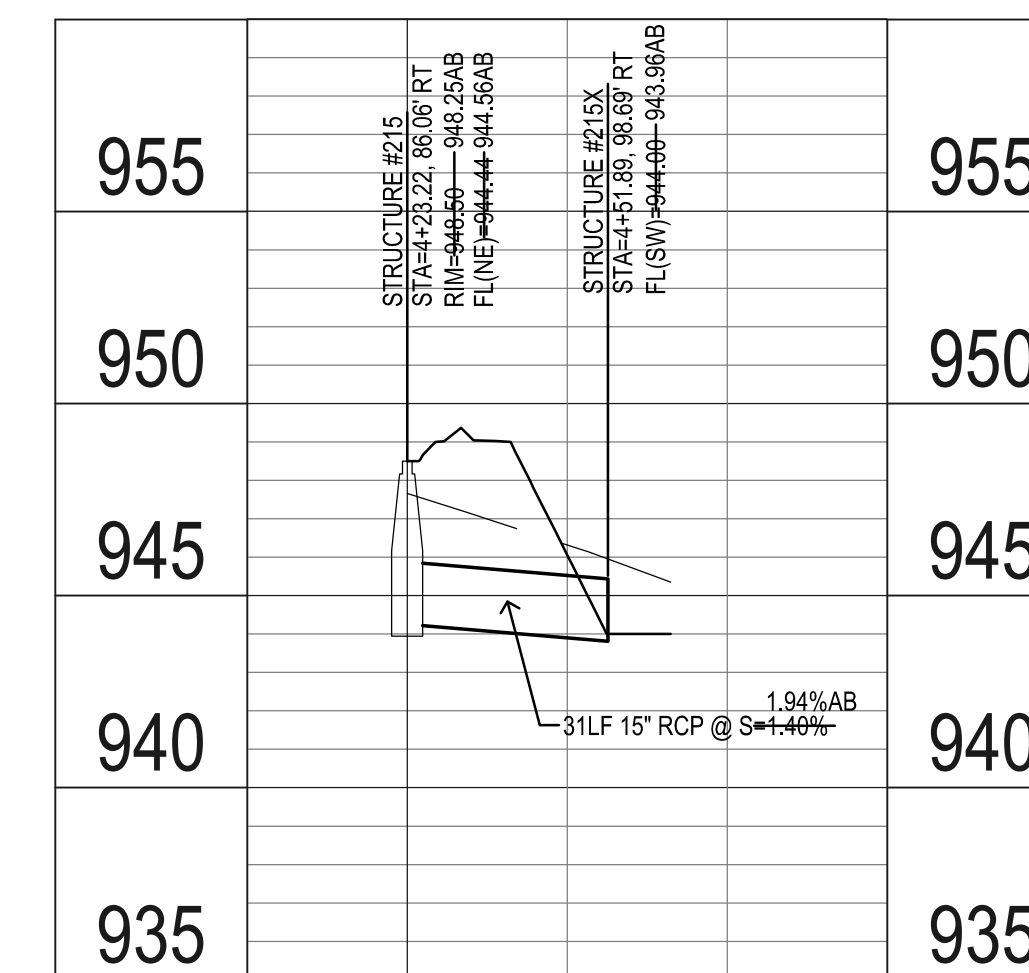
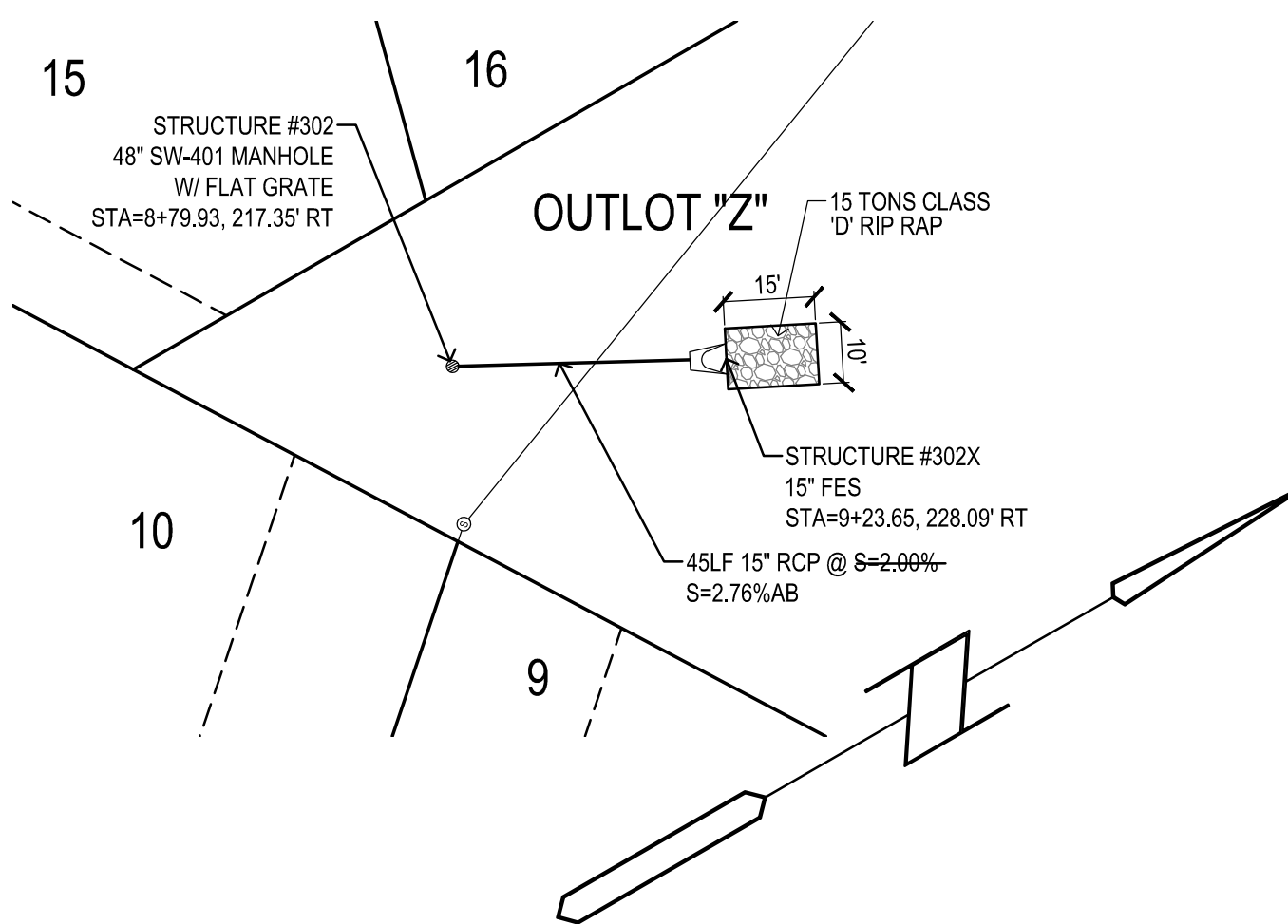
CROSS RUN DETAIL
STA 10+65.27 TO 10+65.45 WILDWOOD CT
SEE SHEET C4.6



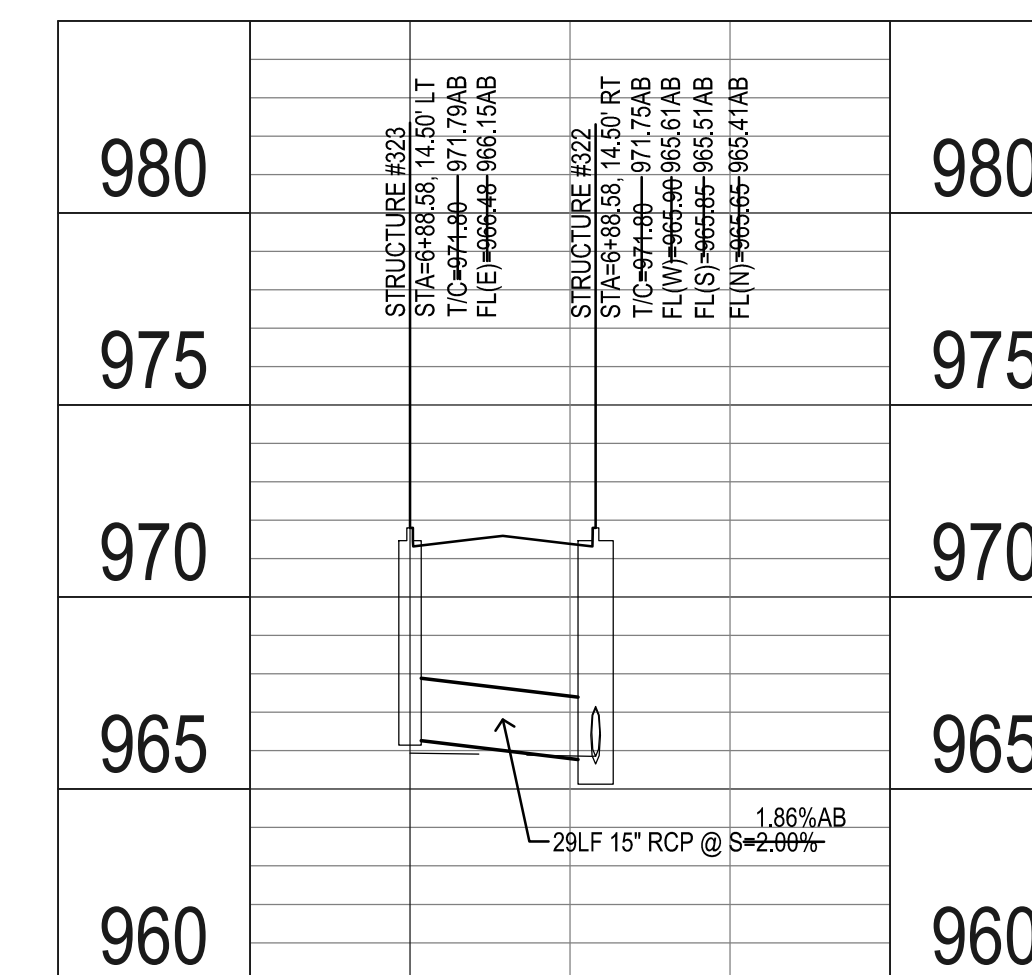
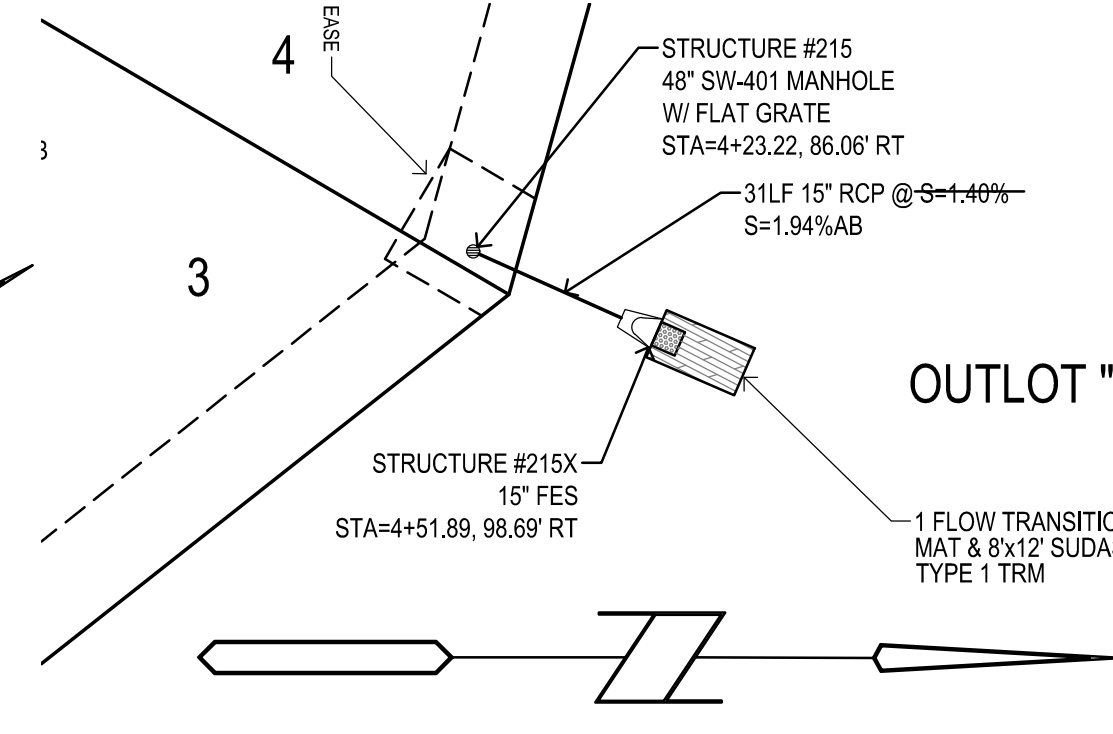
CROSS RUN DETAIL
STA 3+58.26 WESTWIND CT
SEE SHEET C4.7



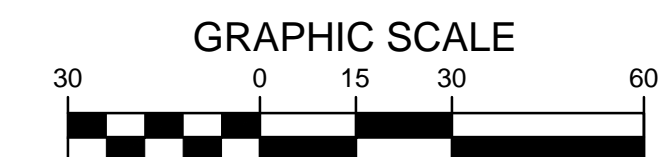
CROSS RUN DETAIL
LOT 10/15 BACKYARD DRAIN
SEE SHEET C2.1



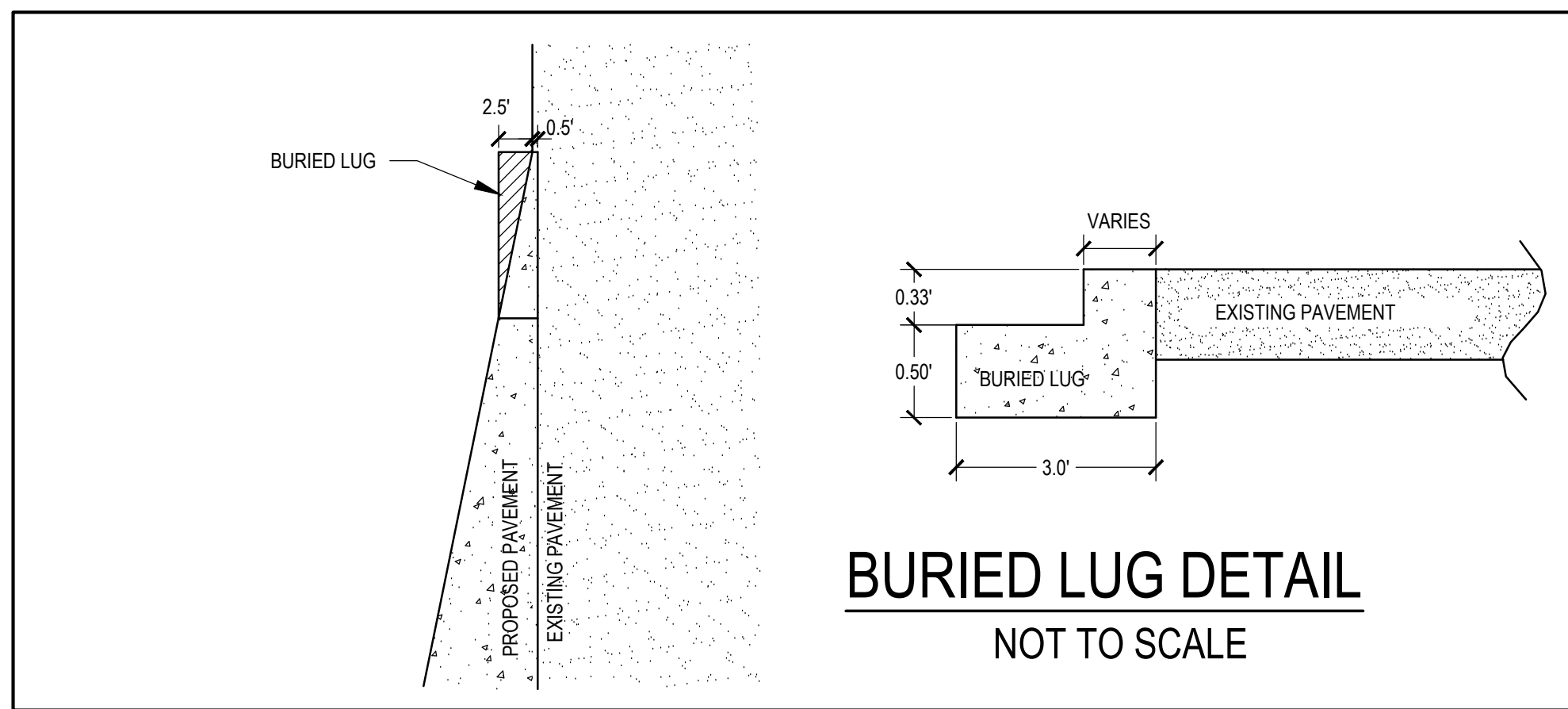
CROSS RUN DETAIL
LOT 3/4 BACKYARD DRAIN
SEE SHEET C4.4



CROSS RUN DETAIL
STA 6+88.58 WESTWIND CT
SEE SHEET C4.7

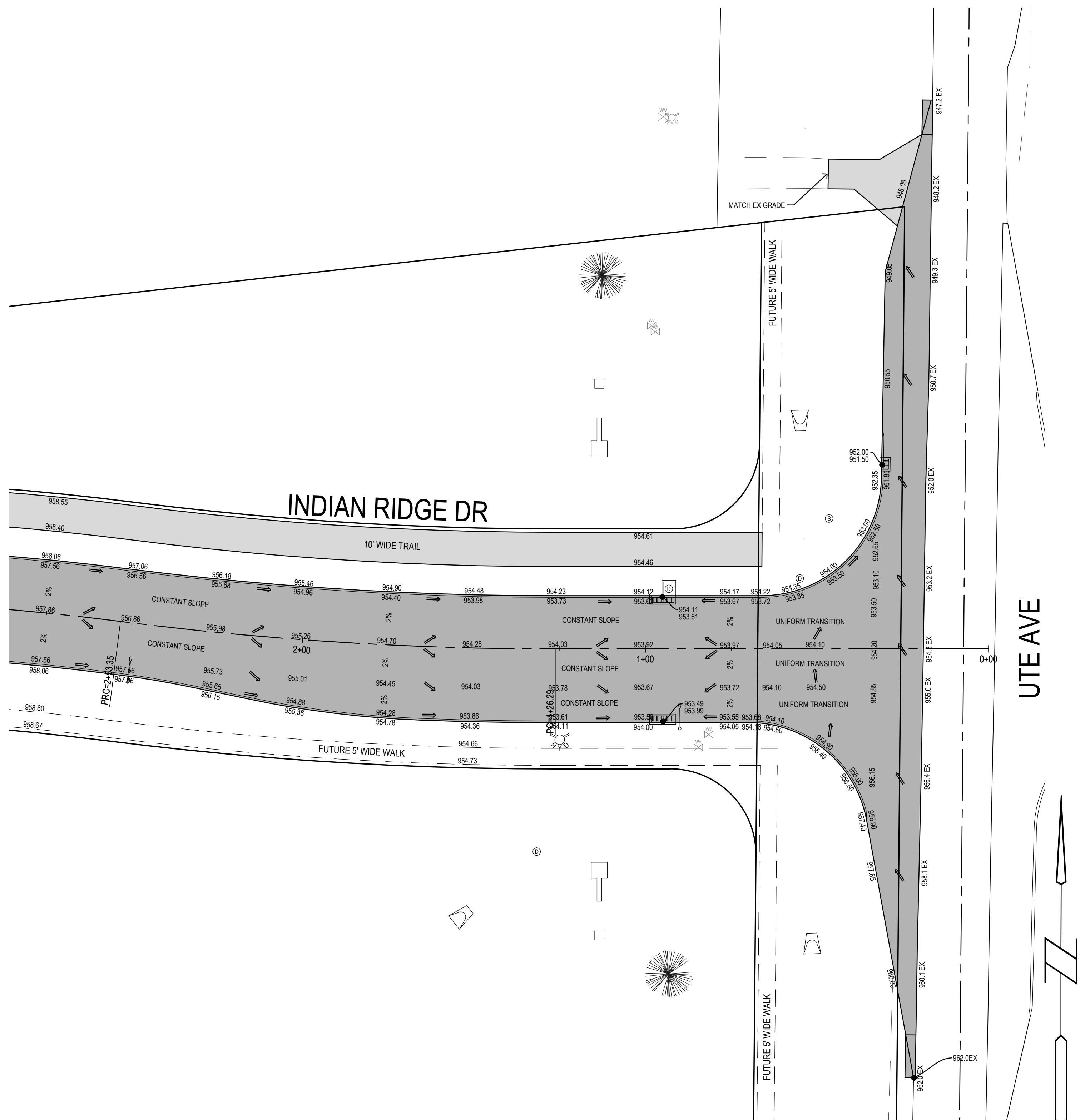
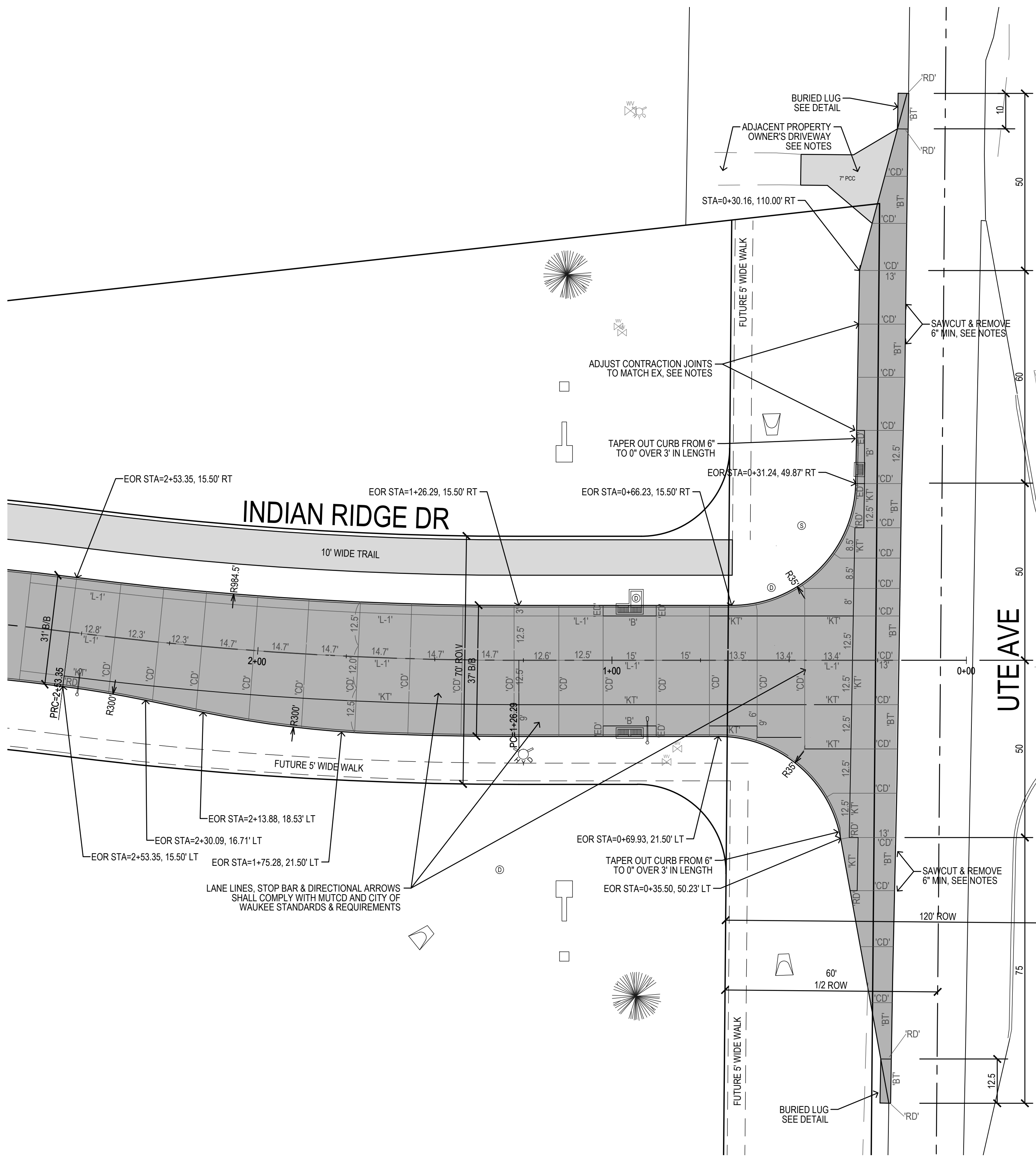


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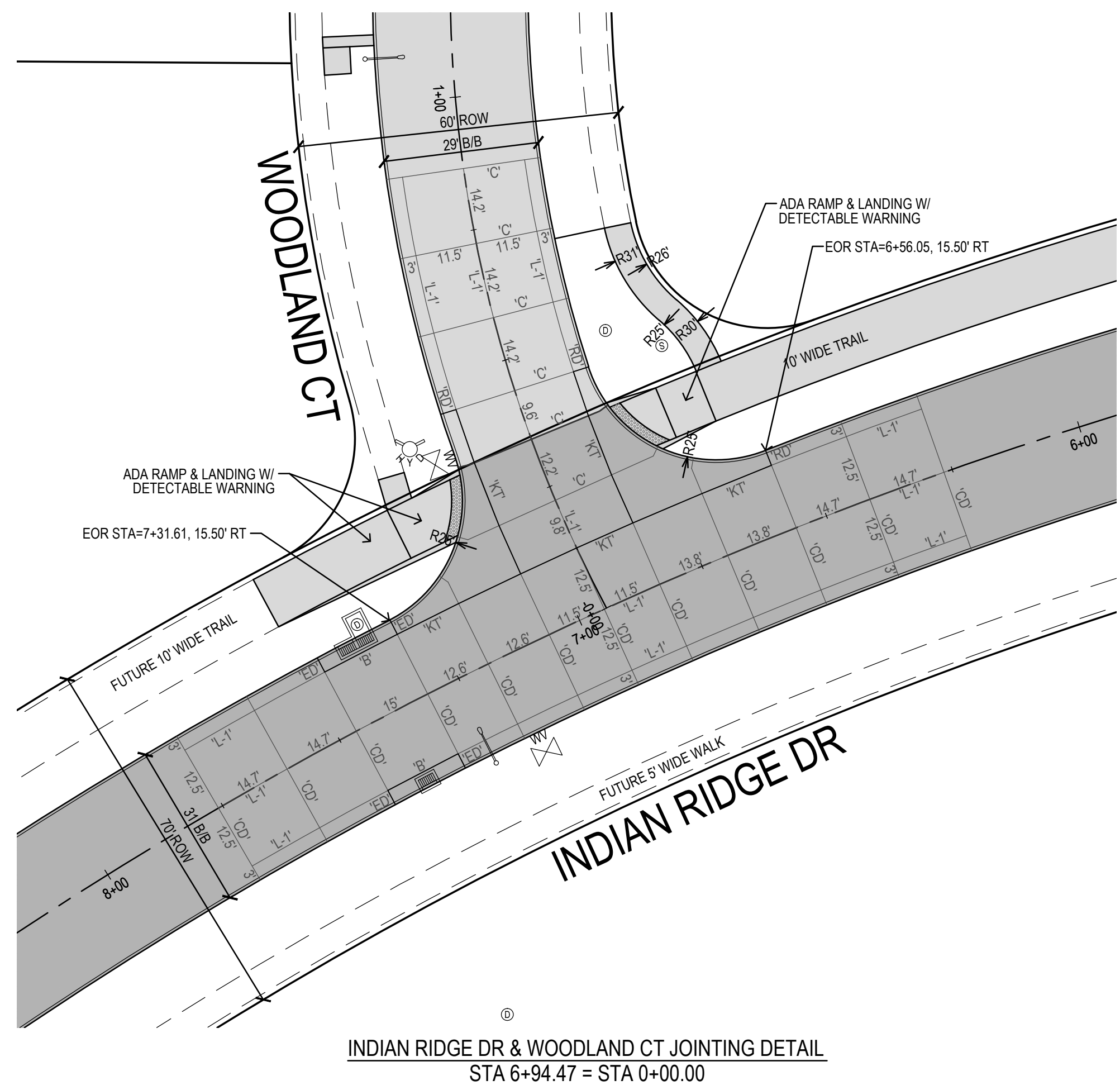


GENERAL NOTES:

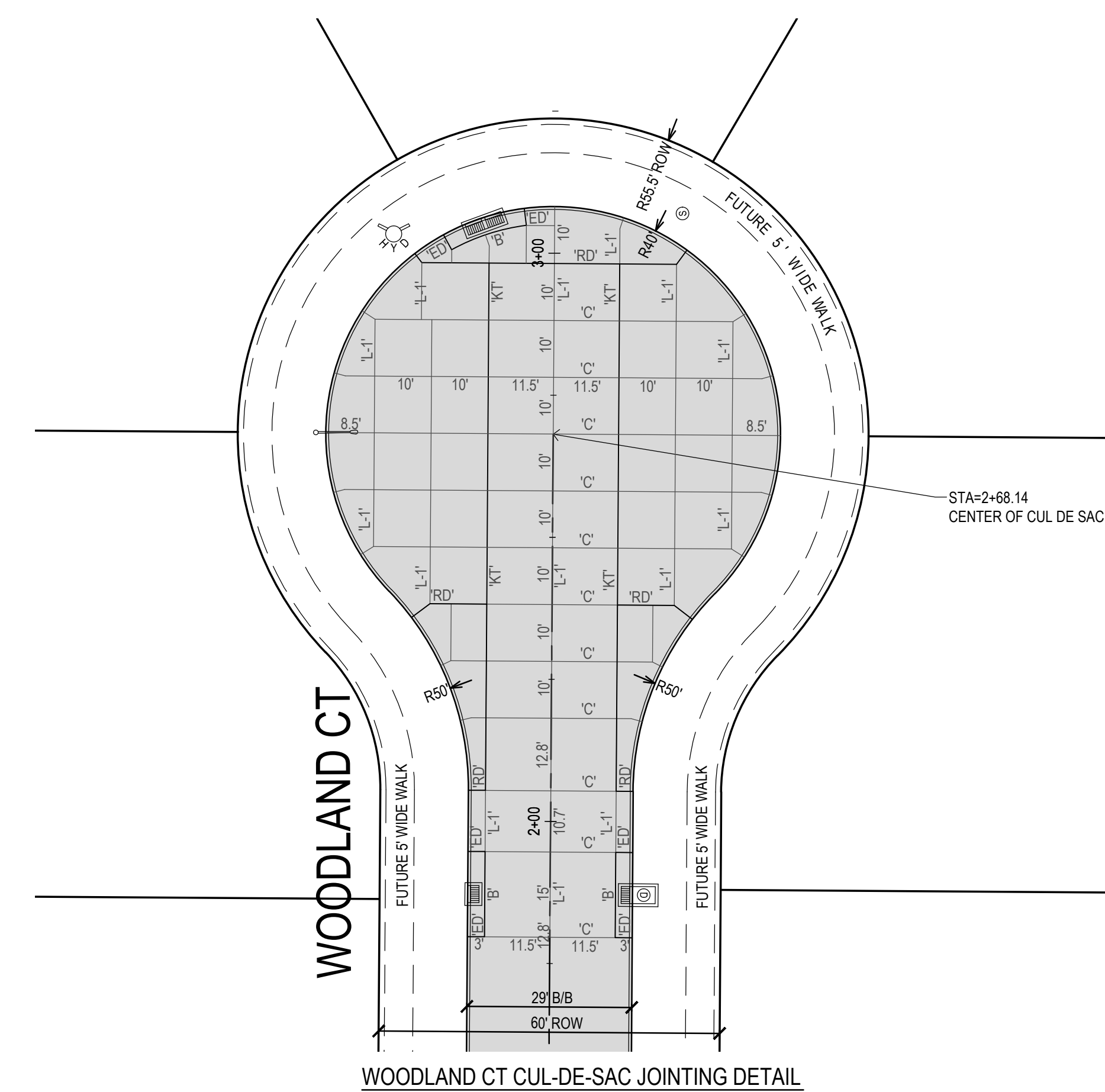
1. FIELD VERIFY EXISTING PAVEMENT GRADES & ADJUST PROPOSED EDGE OF SLAB GRADES ALONG UTE AVENUE PAVING AS NECESSARY.
2. SAWCUT & REMOVE TO FULL DEPTH A MINIMUM OF 6" OF THE EXISTING PAVEMENT TO FULL DEPTH OF SLAB TO PROVIDE FOR A CLEAN EDGE AGAINST WHICH TO BEGIN PAVING.
3. CONTRACTION JOINTS IN NEW SLAB SHALL BE ADJUSTED AS NECESSARY TO MATCH THE LOCATION OF THE JOINTS IN THE EXISTING SLAB. INCREASE JOINT INTERVAL AS NECESSARY. SPACING SHALL NOT EXCEED 20 FEET.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ADJACENT PROPERTY OWNERS AT ALL TIMES. CONTRACTOR SHALL DEVELOP & COORDINATE ACCESS PLAN WITH ADJACENT AFFECTED PROPERTY OWNERS AND SUBMIT TO THE CITY FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
5. CONTRACTOR SHALL INSTALL 6" PCC IN THE PORTION OF THE EXISTING DRIVEWAY THAT IS DISTURBED BY CONSTRUCTION ACTIVITY. REPLACED DRIVEWAY SHALL MATCH GRADE ON NEW PAVEMENT ON UTE AVENUE & SHALL HAVE POSITIVE DRAINAGE.
6. DETECTABLE WARNING PANELS SHALL EXTEND A MINIMUM OF 2 FEET IN THE DIRECTION OF PEDESTRIAN TRAVEL AND SHALL BE CONTINUOUS, EXTENDING THE FULL WIDTH OF THE CURB RAMP OR PEDESTRIAN ACCESS ROUTE.



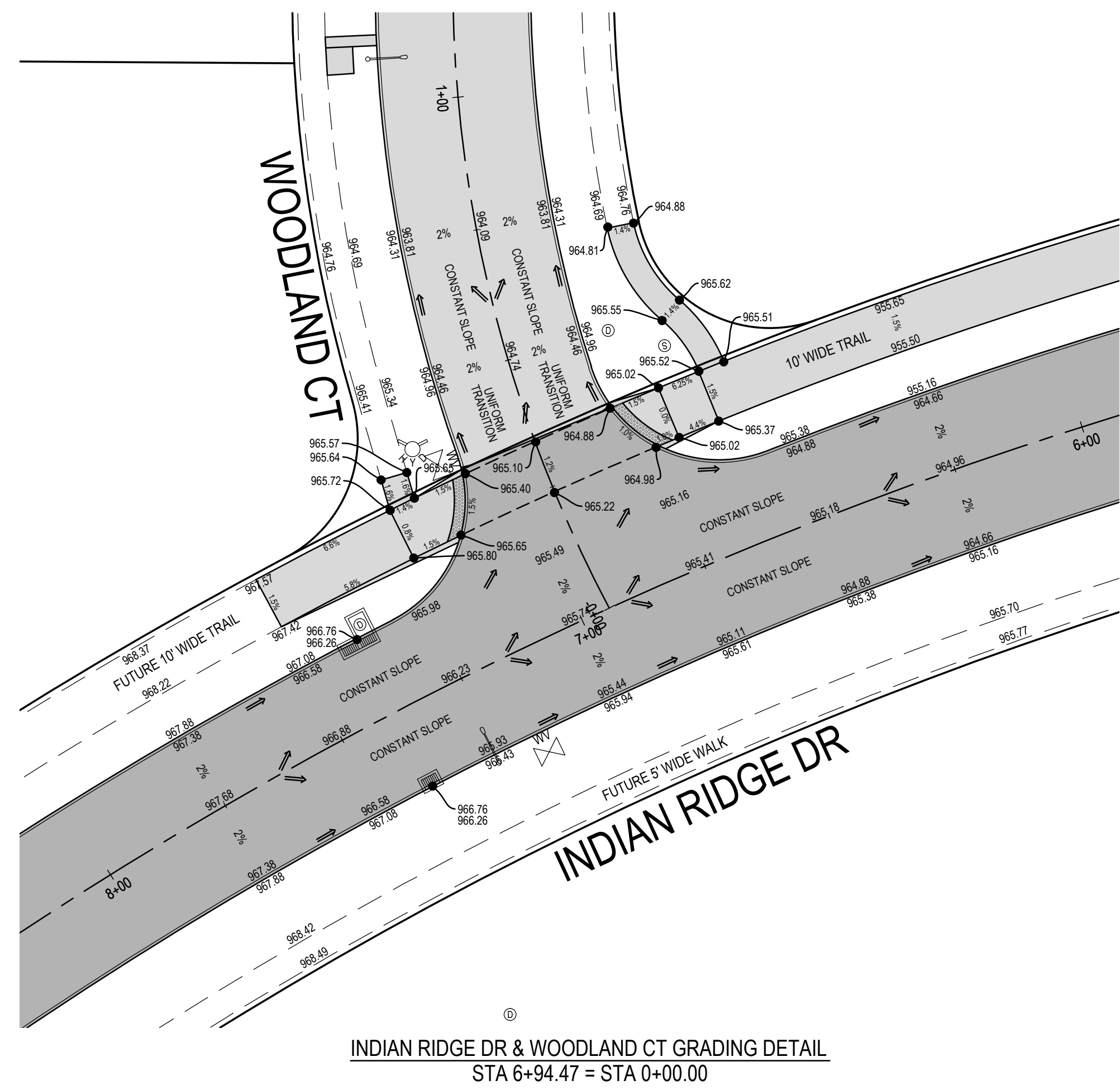
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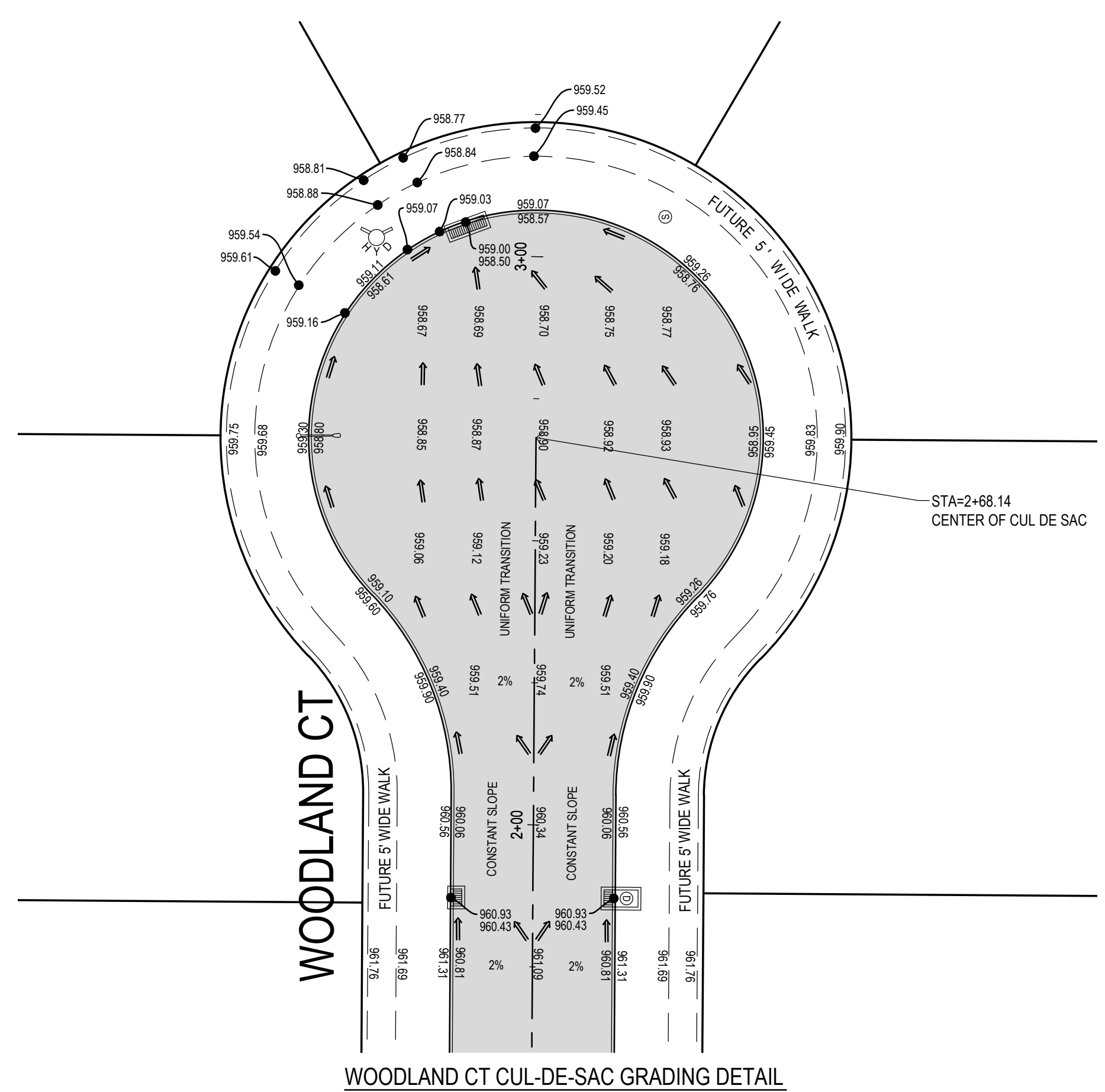
INDIAN RIDGE DR & WOODLAND CT JOINTING DETAIL
STA 6+94.47 = STA 0+00.00



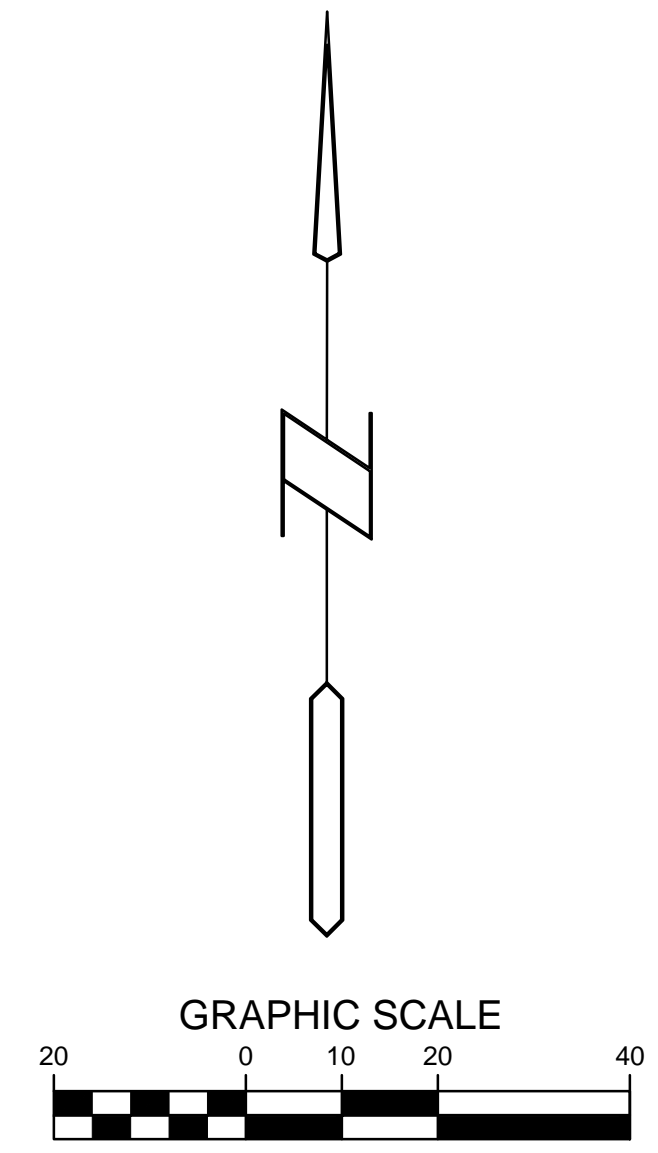
WOODLAND CT CUL-DE-SAC JOINTING DETAIL



INDIAN RIDGE DR & WOODLAND CT GRADING DETAIL
STA 6+94.47 = STA 0+00.00



WOODLAND CT CUL-DE-SAC GRADING DETAIL



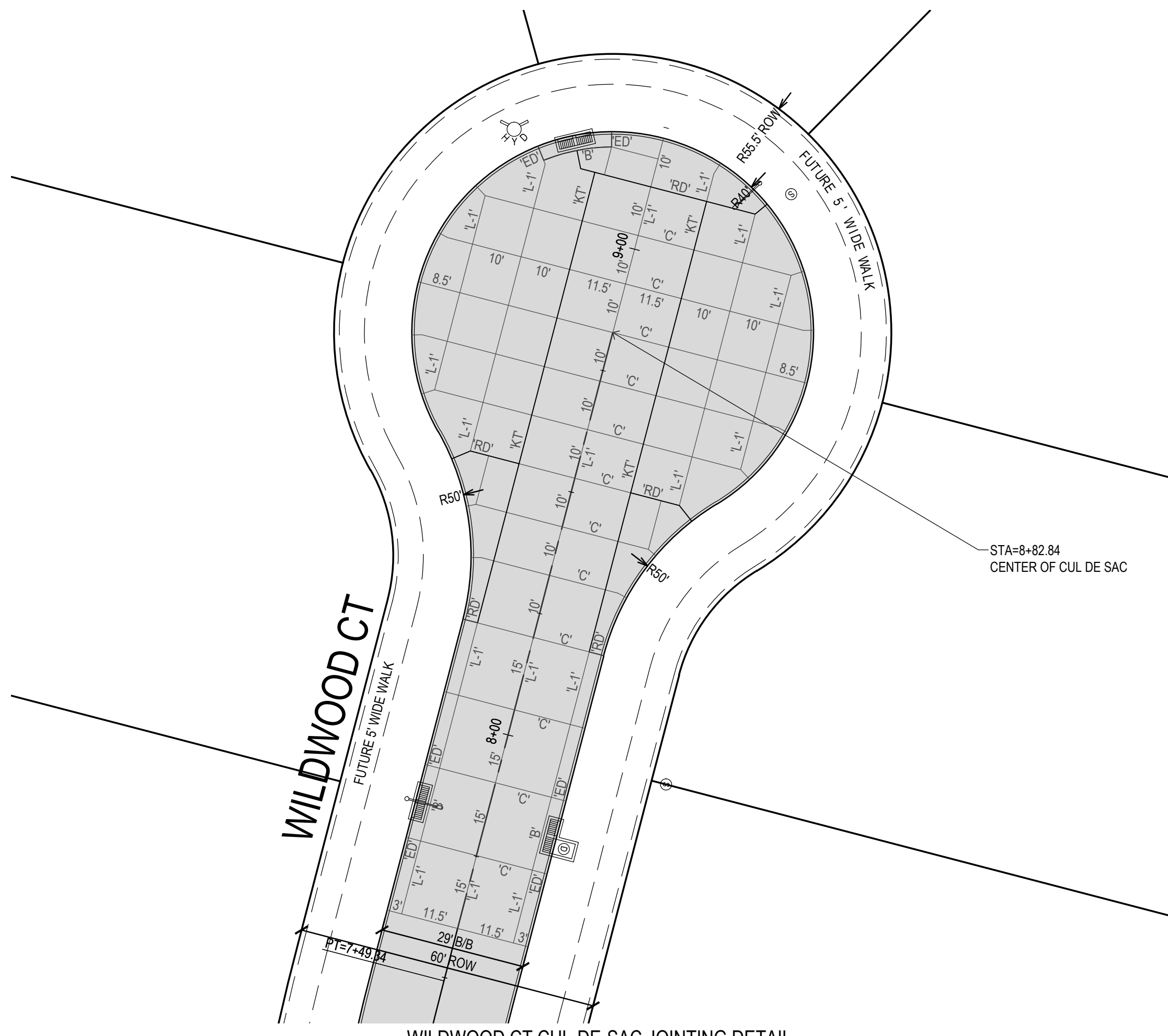
PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

INTERSECTION DETAILS

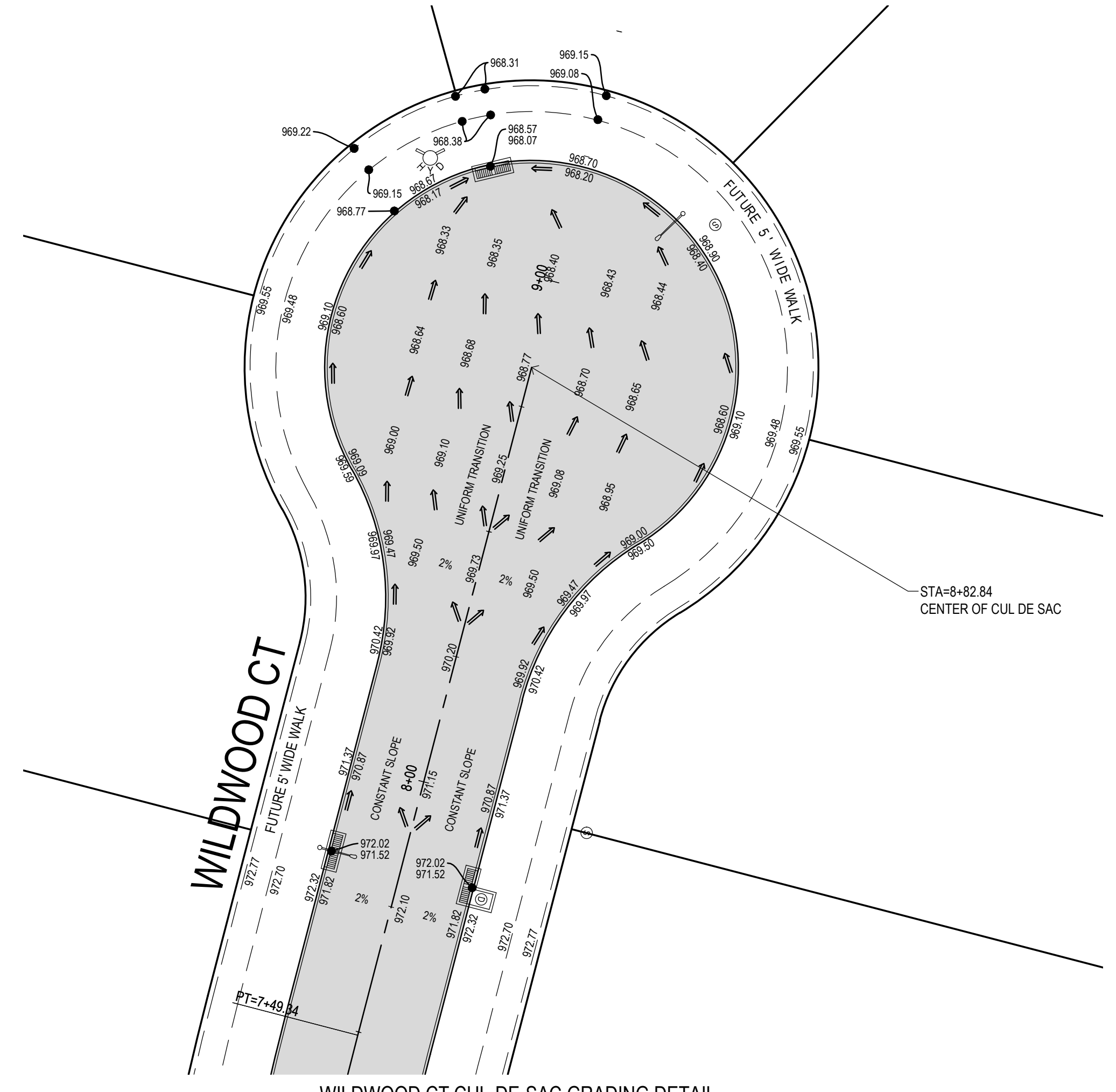
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PROJECT NUMBER:	130444
SHEET NUMBER:	C5.2

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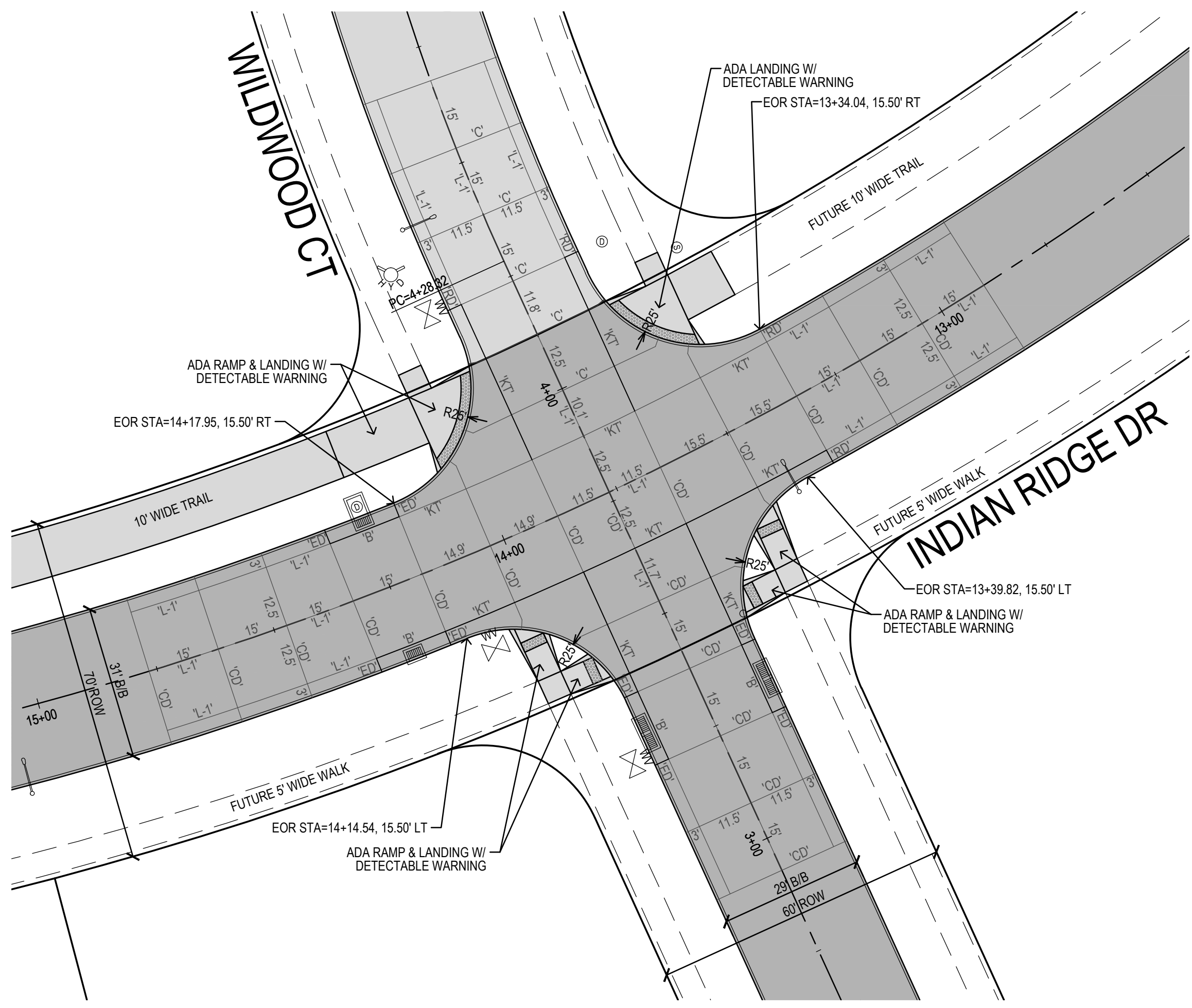
3501 104th Street
Des Moines, Iowa 50322-3825
Phone: (515)276-0467 Fax: (515)276-0217
Civil Engineering & Land Surveying Established 1959



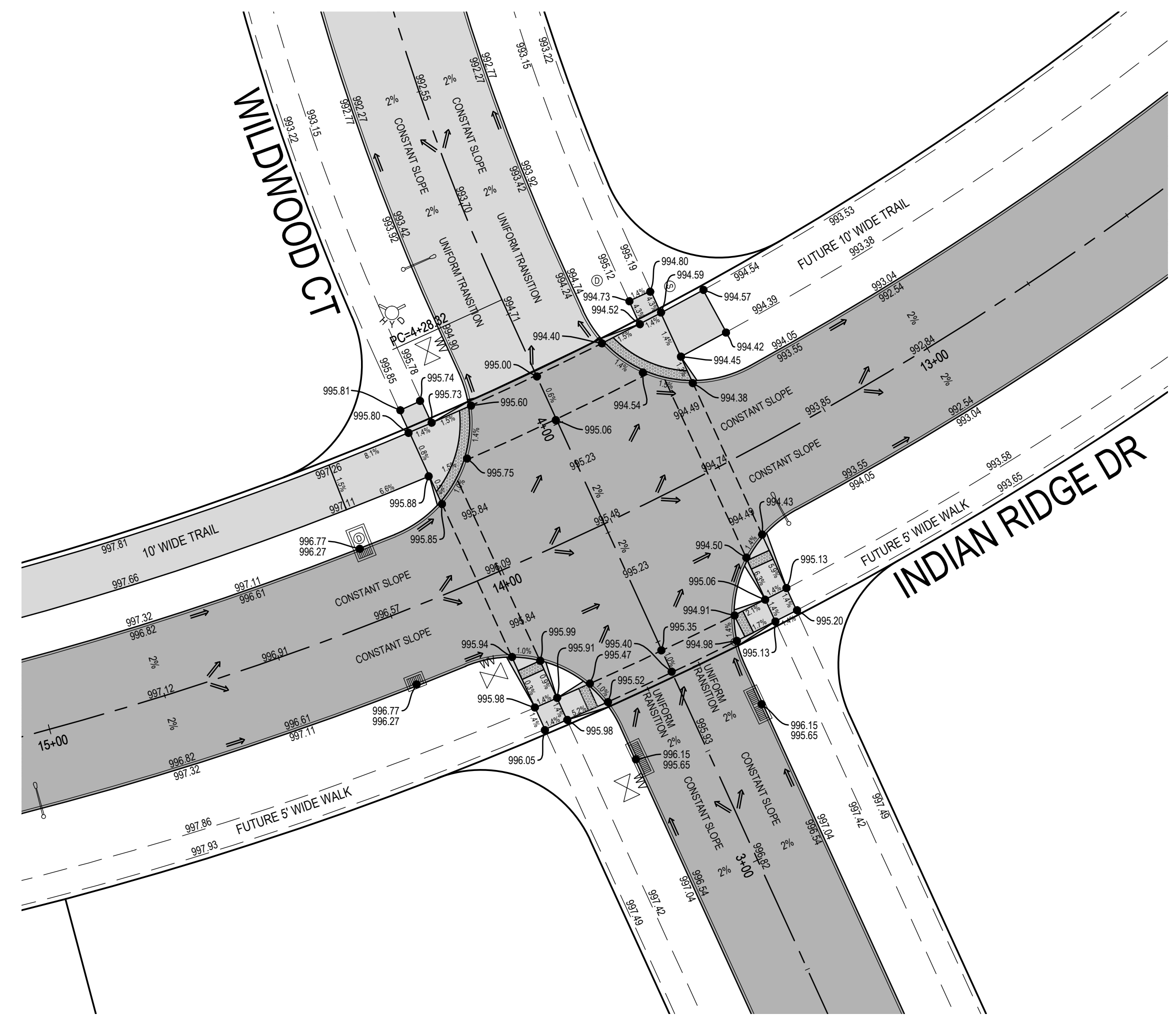
WILDWOOD CT CUL-DE-SAC JOINTING DETAIL



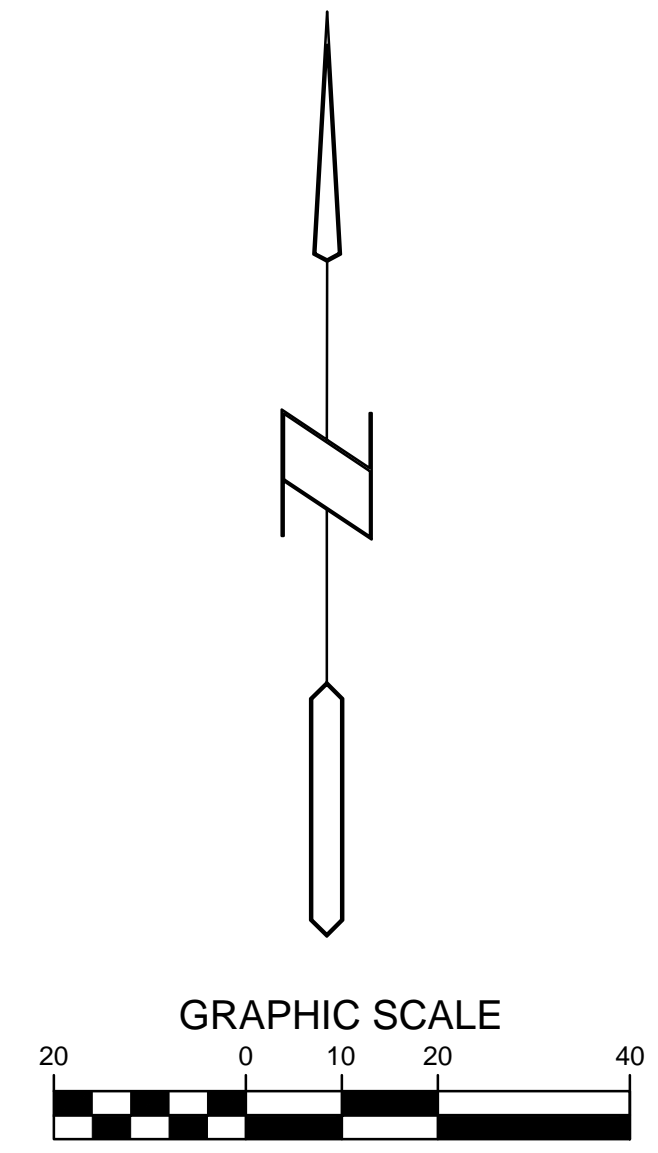
WILDWOOD CT CUL-DE-SAC GRADING DETAIL



INDIAN RIDGE DR & WILDWOOD CT JOINTING DETAIL
STA 13+76.64 = STA 3+76.99

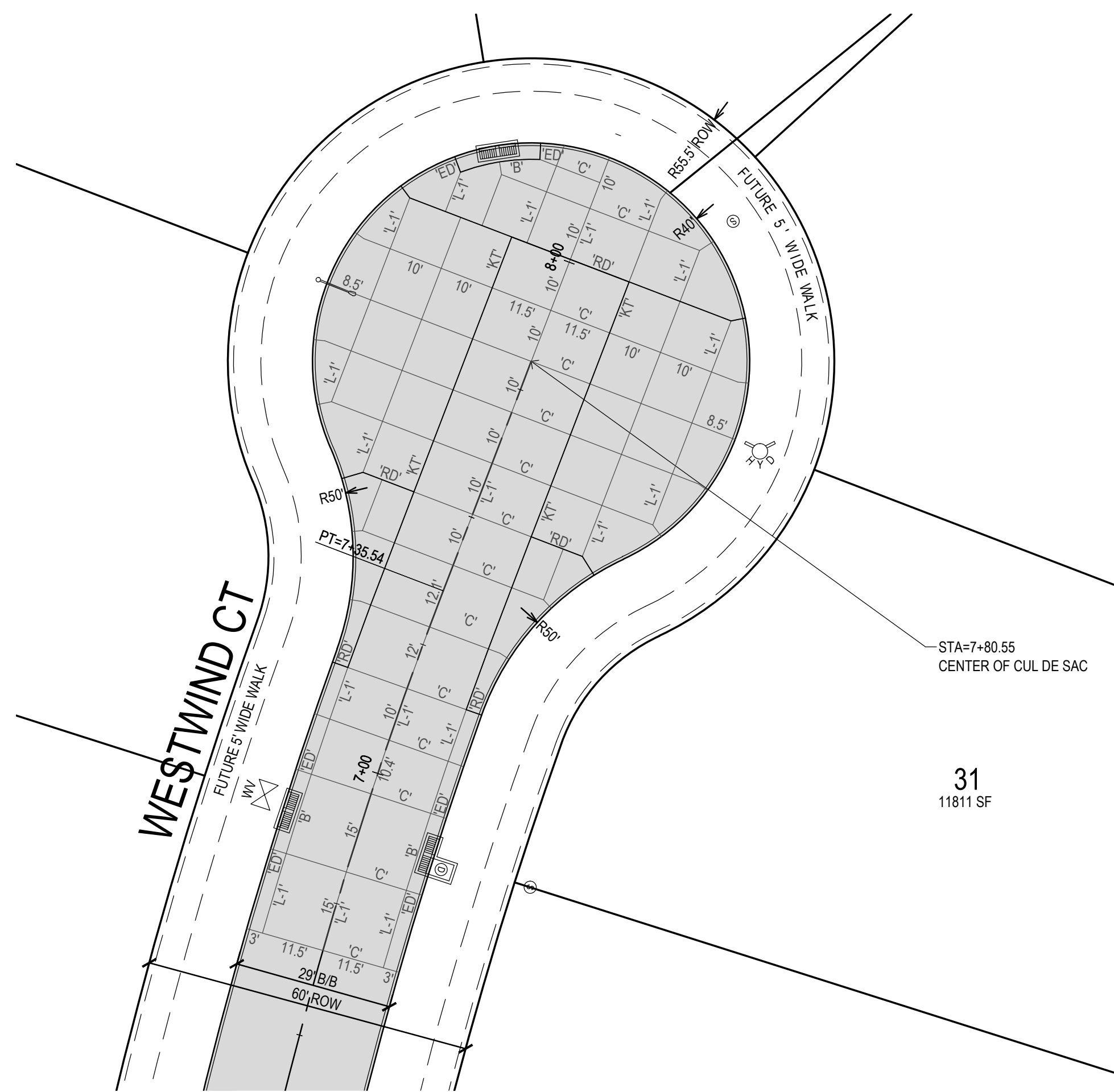


INDIAN RIDGE DR & WILDWOOD CT GRADING DETAIL
STA 13+76.64 = STA 3+76.99

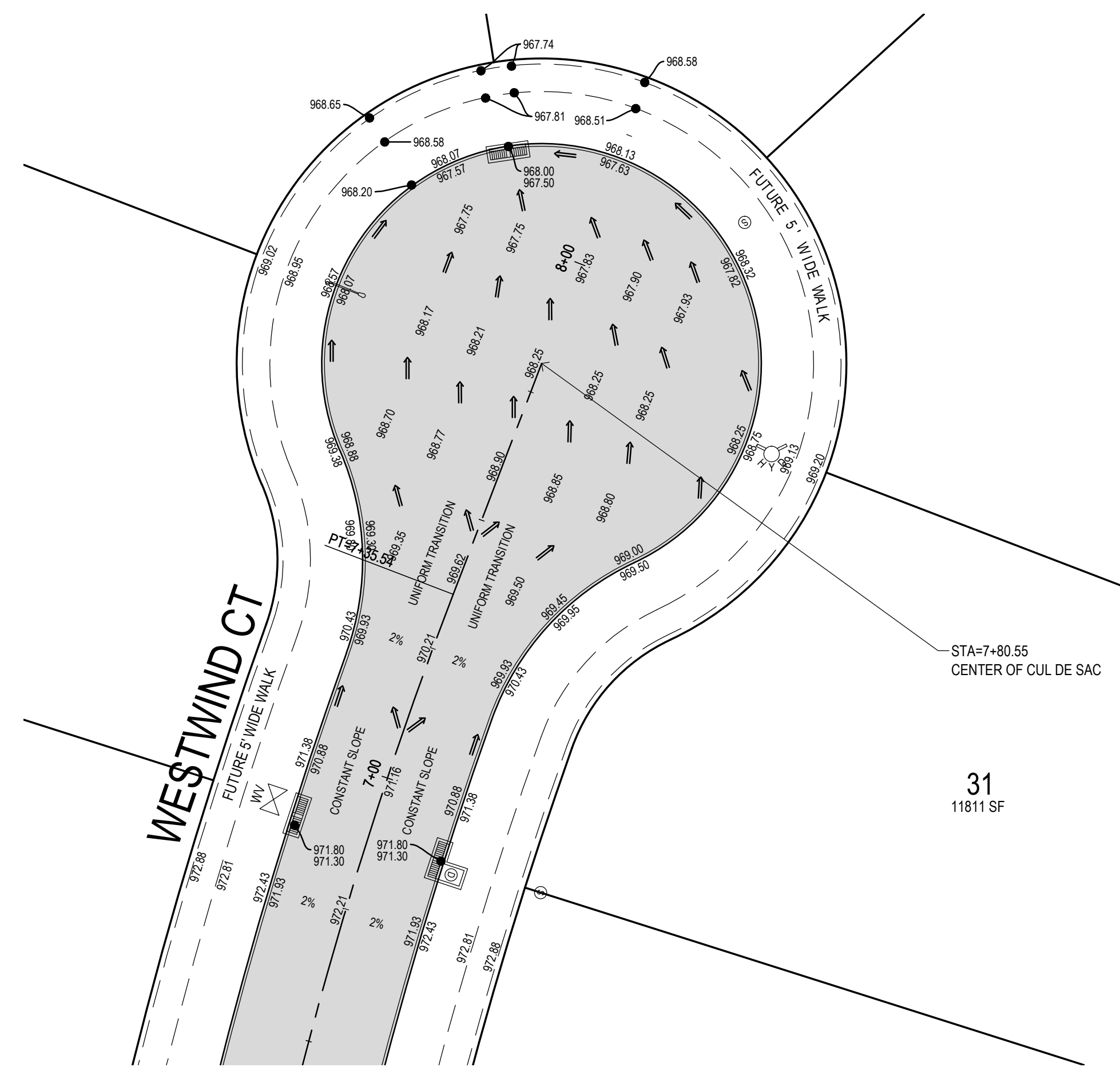


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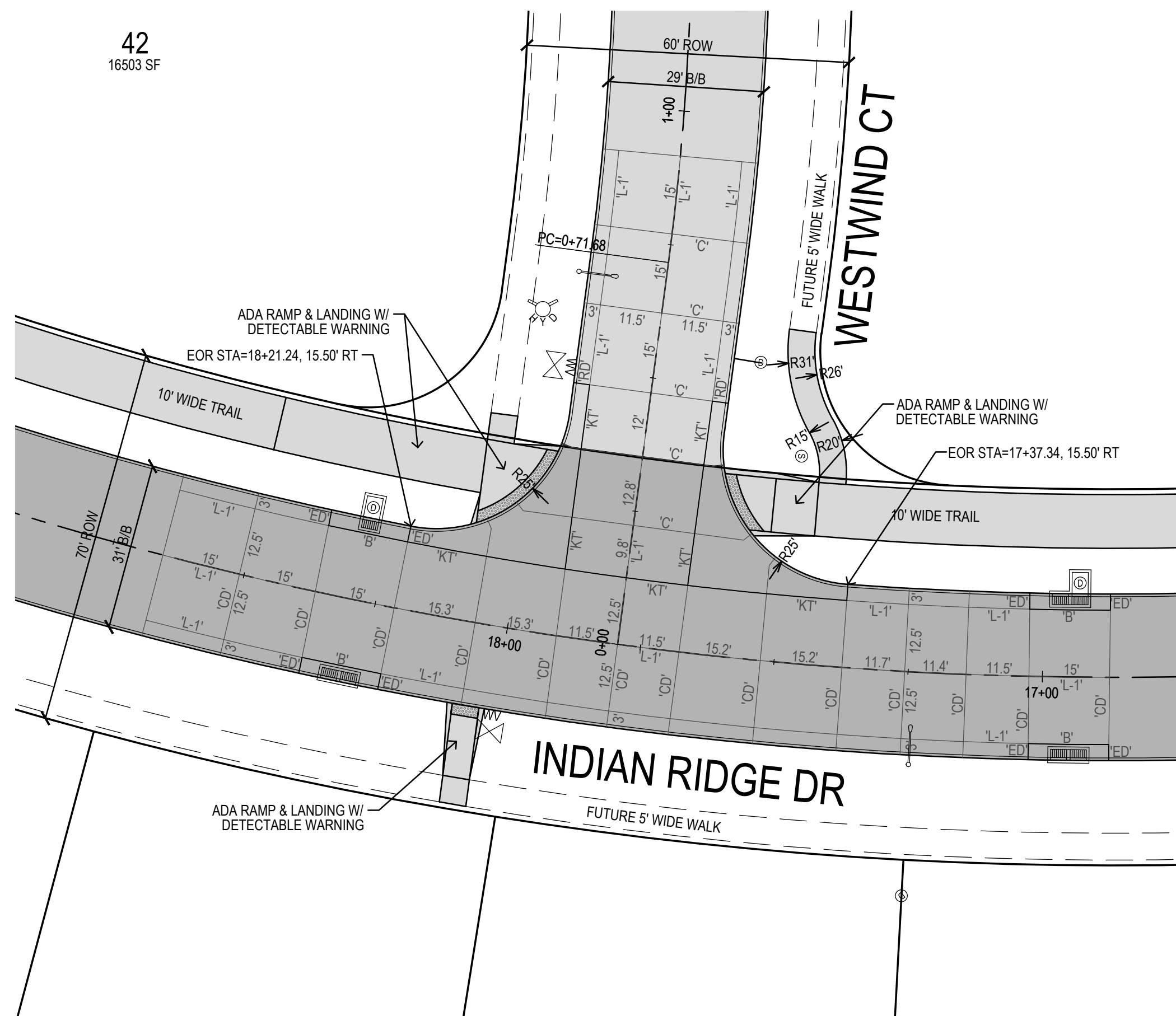
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SHEET NUMBER:	C5.3



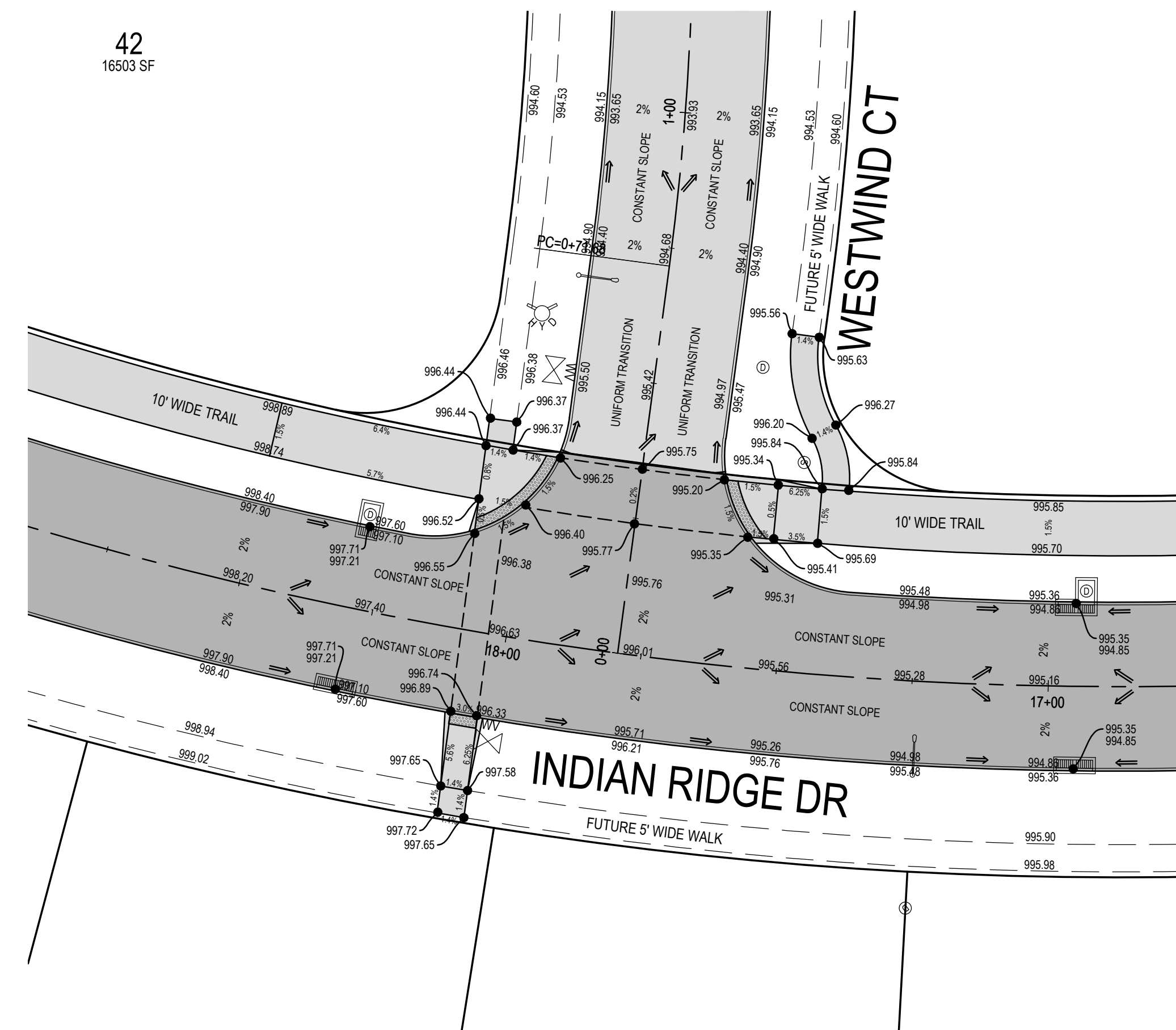
WESTWIND CT CUL-DE-SAC JOINTING DETAIL



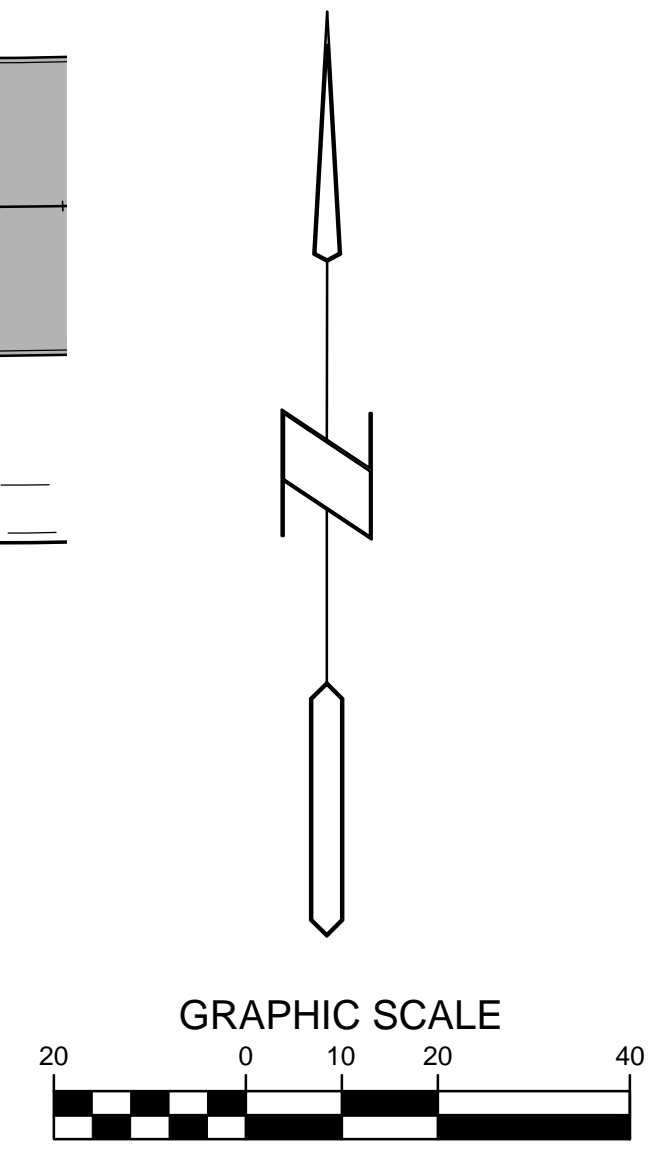
WESTWIND CT CUL-DE-SAC GRADING DETAIL



INDIAN RIDGE DR & WESTWIND CT JOINTING DETAIL
STA 17+79.29 = STA 0+00.00



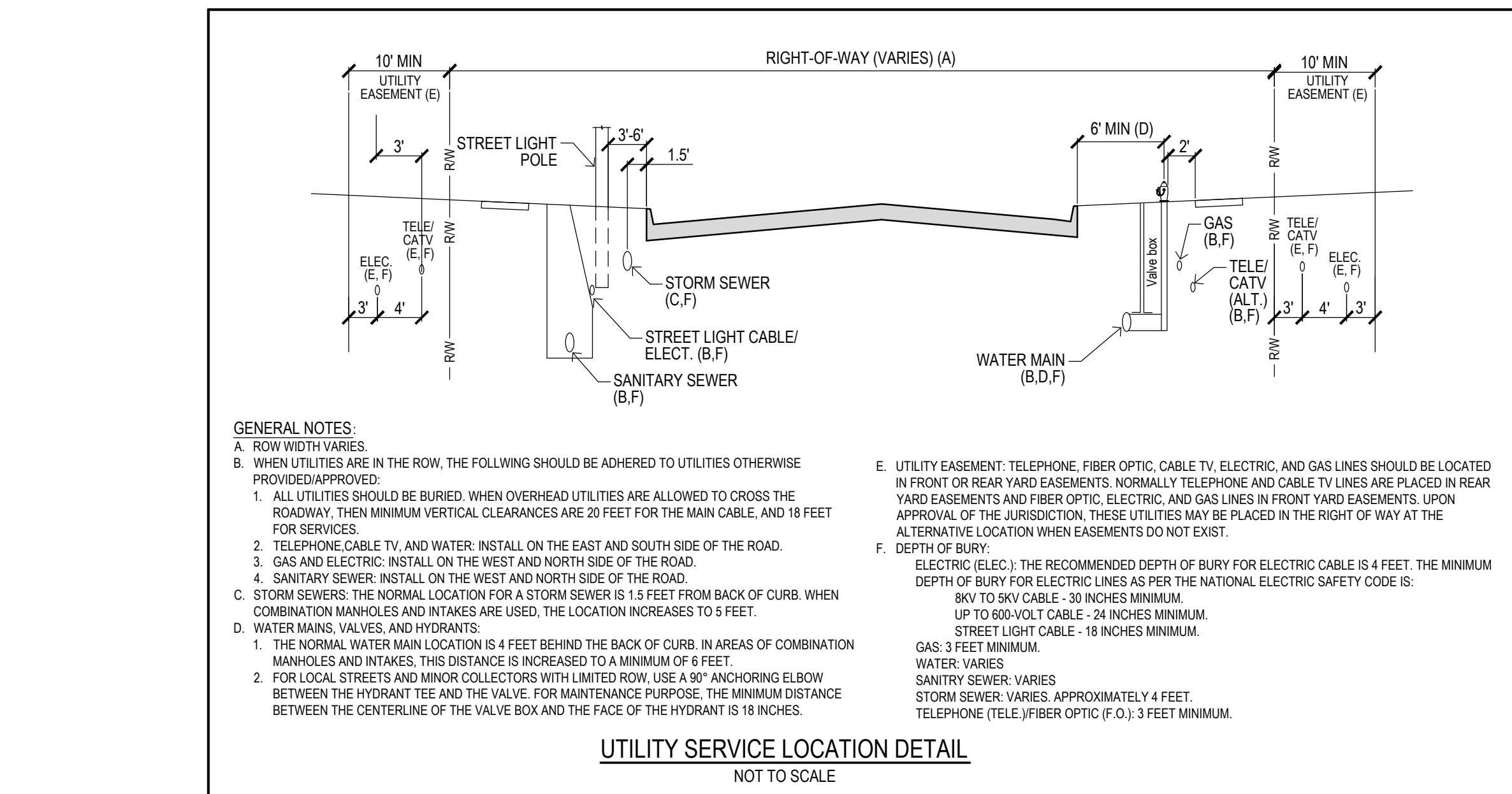
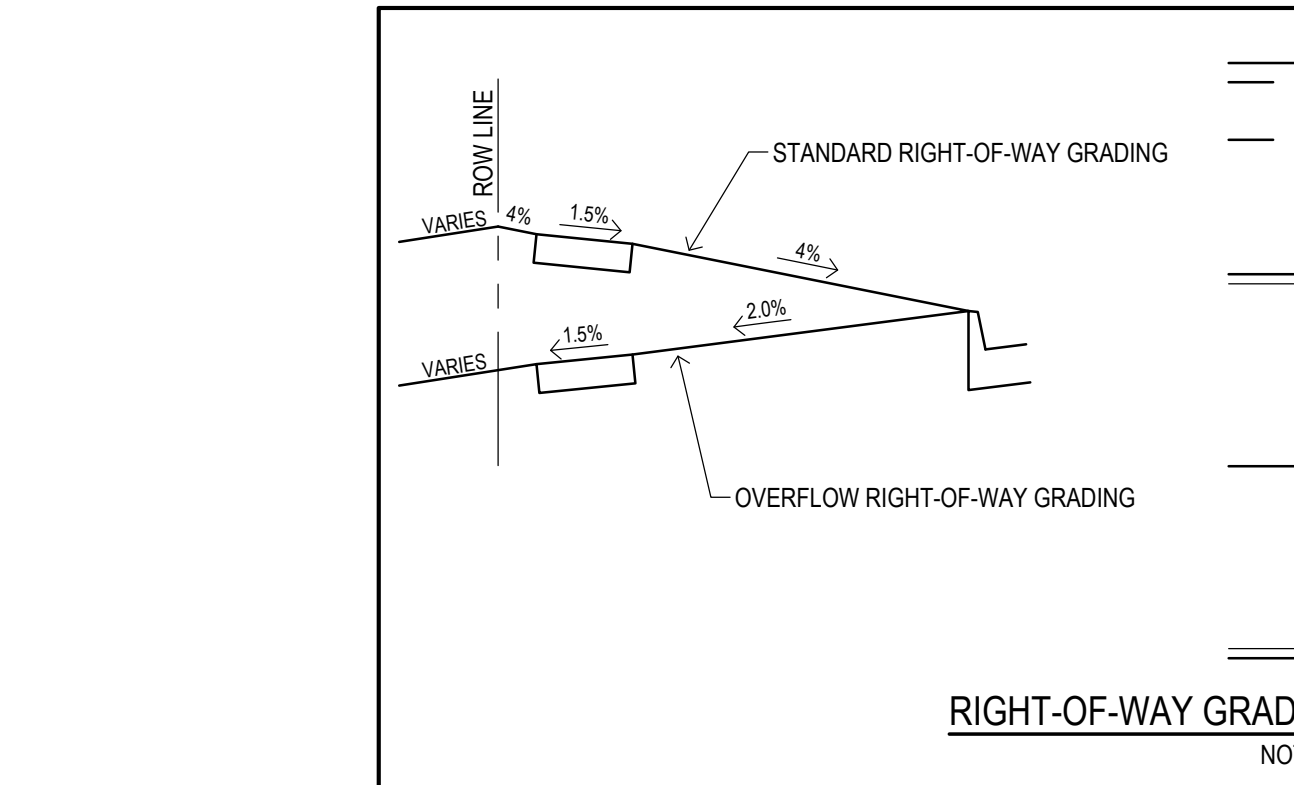
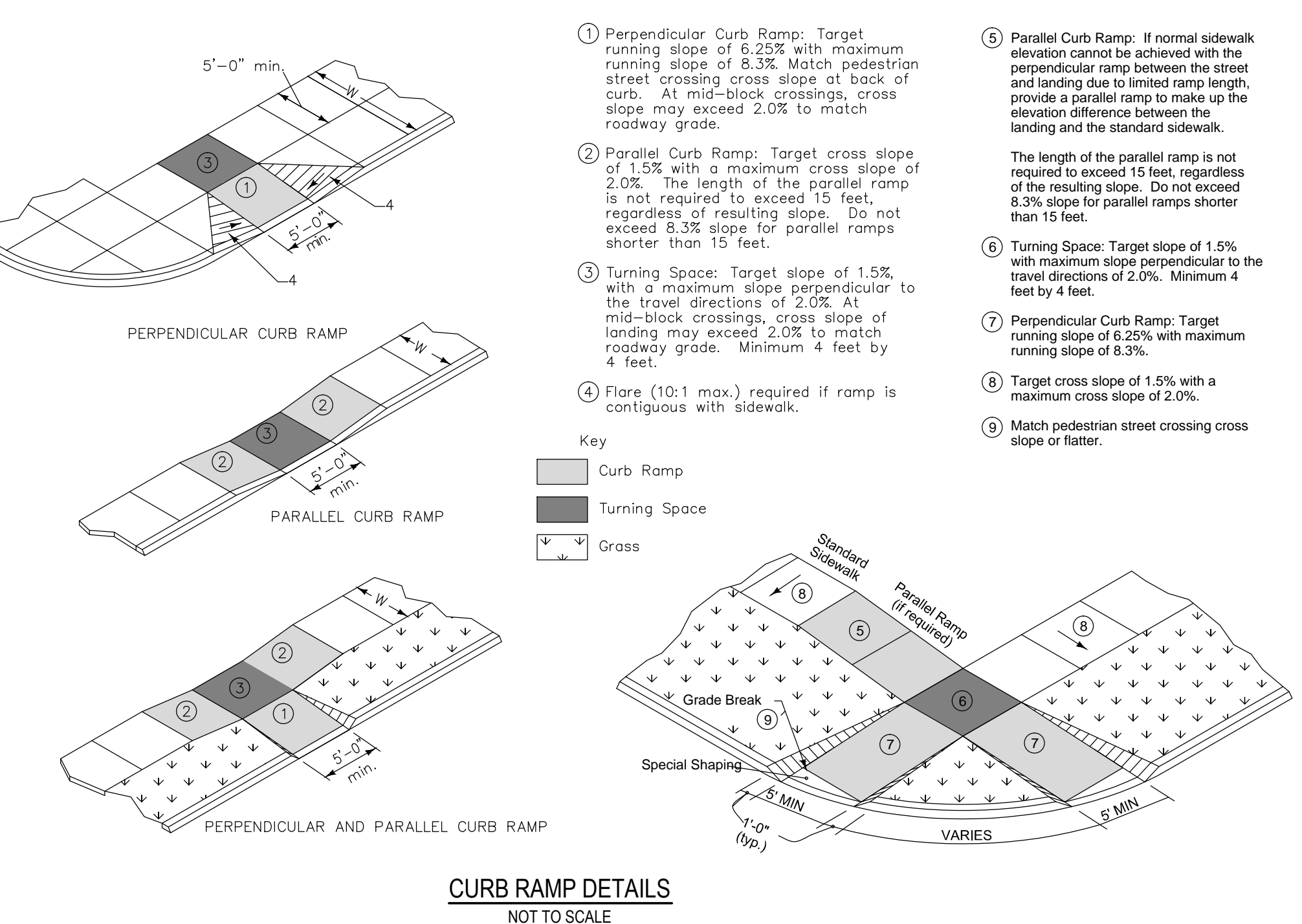
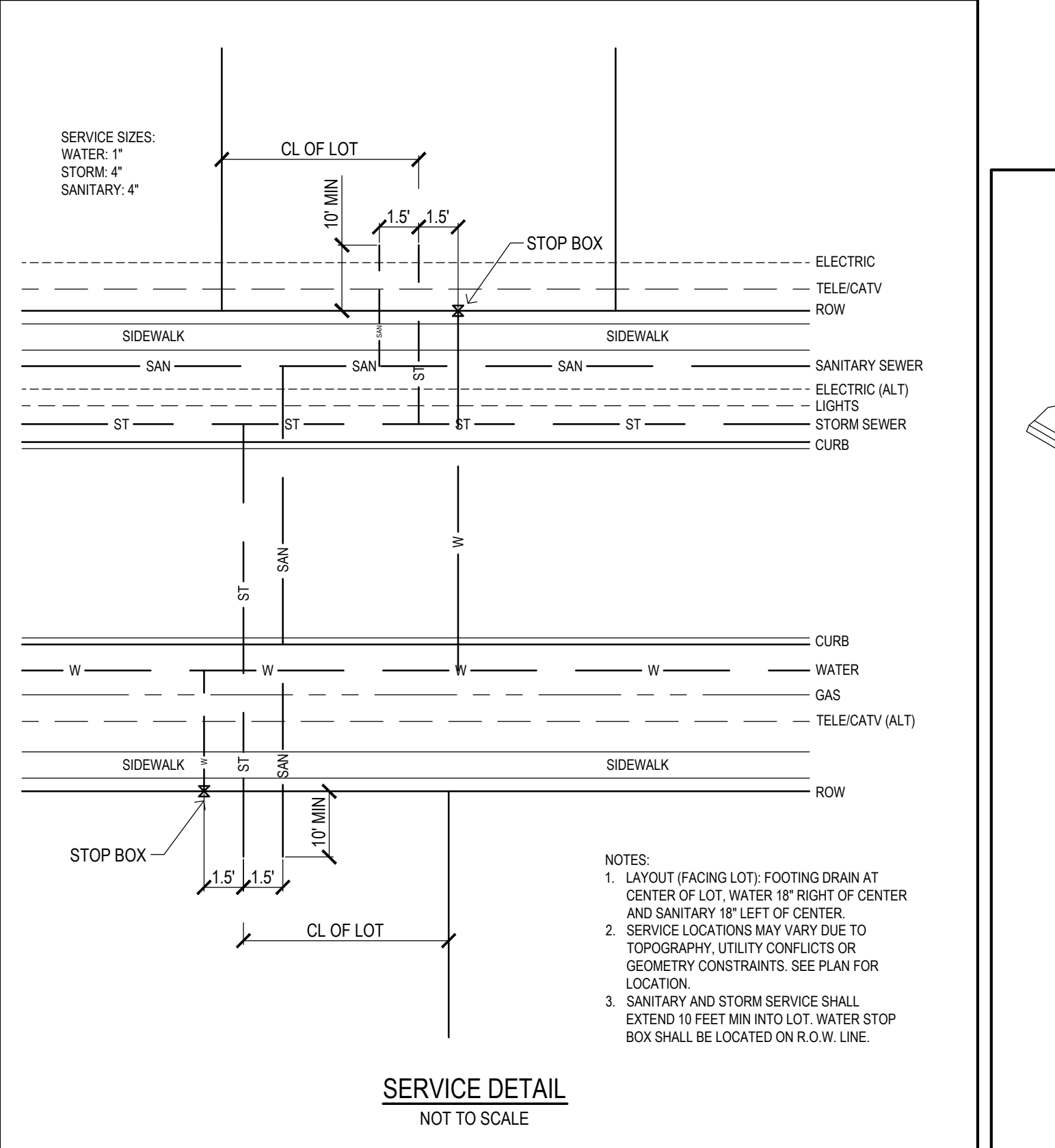
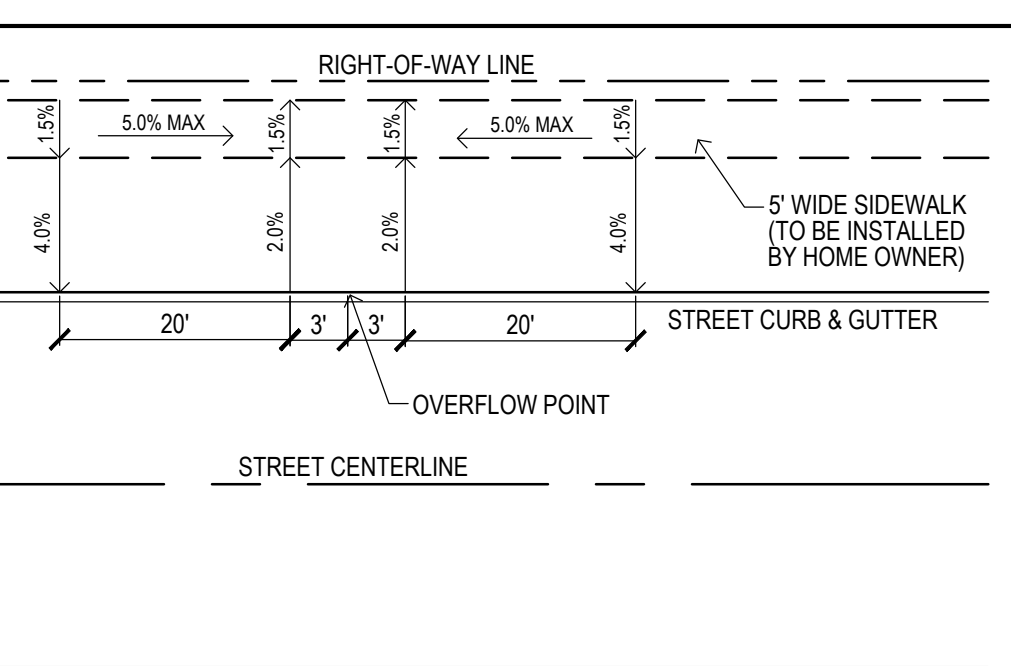
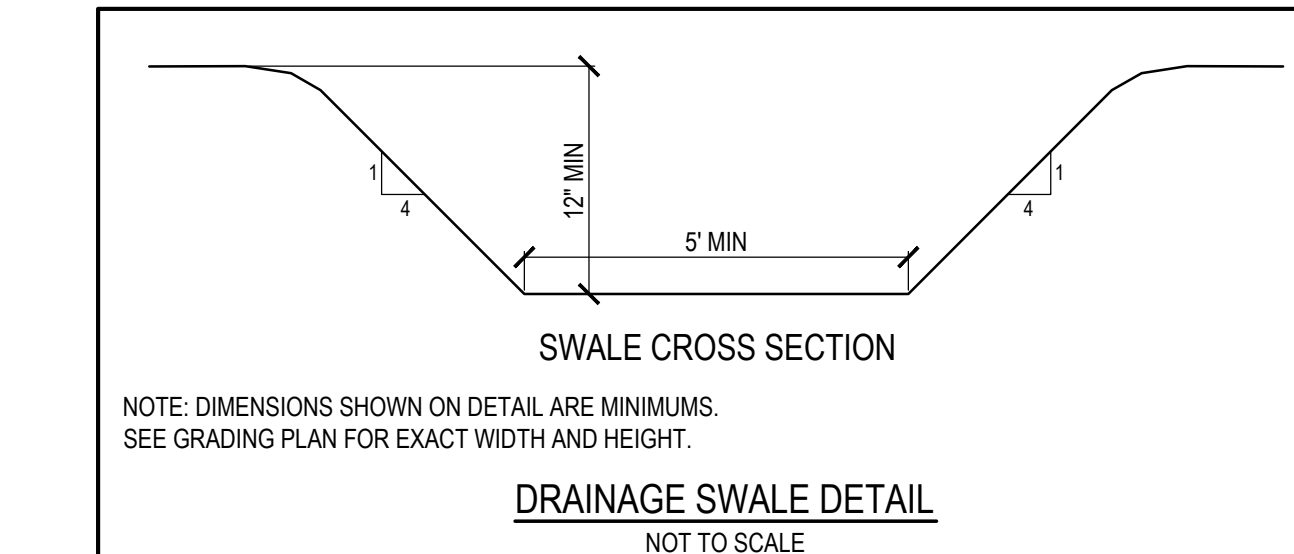
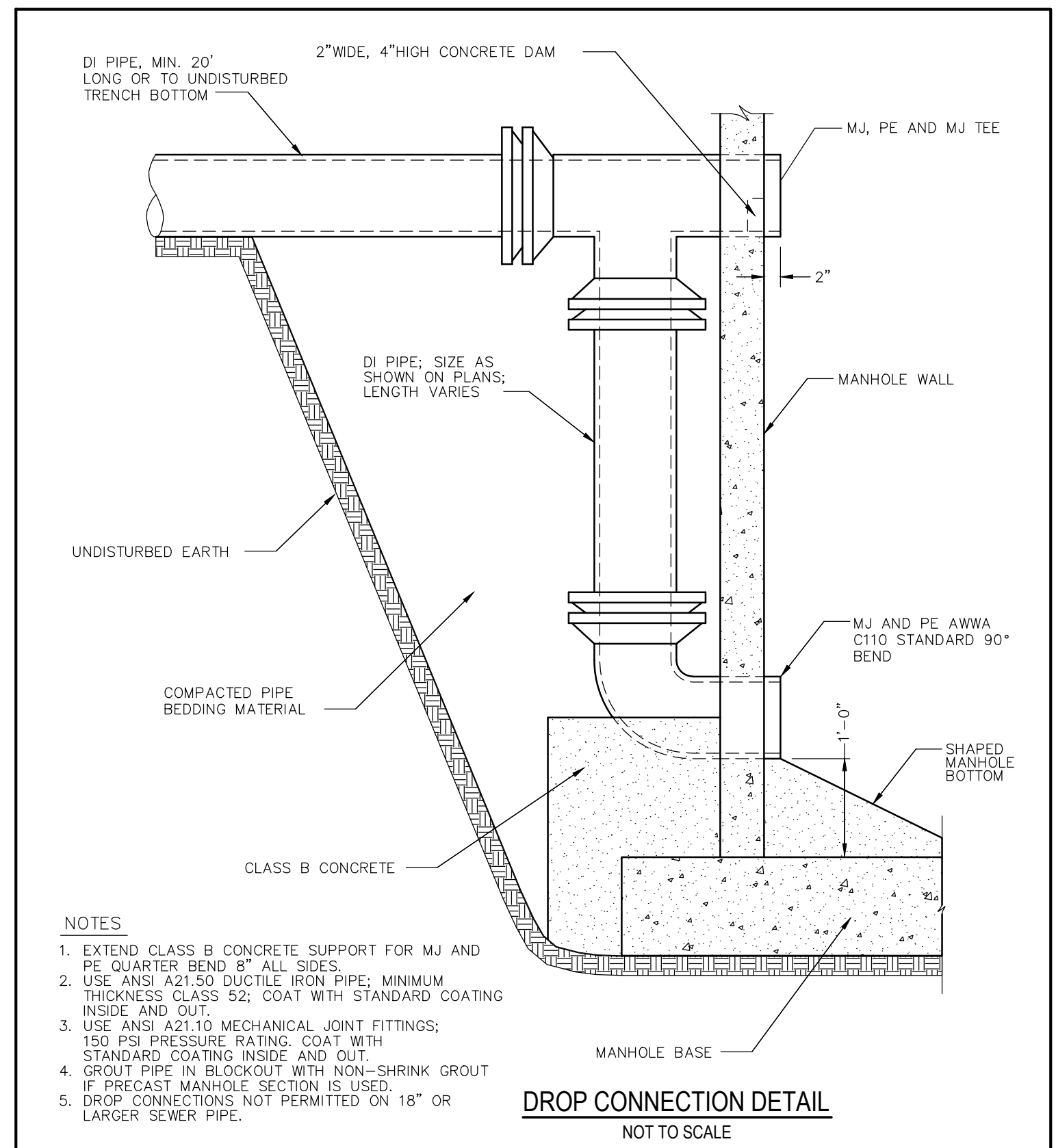
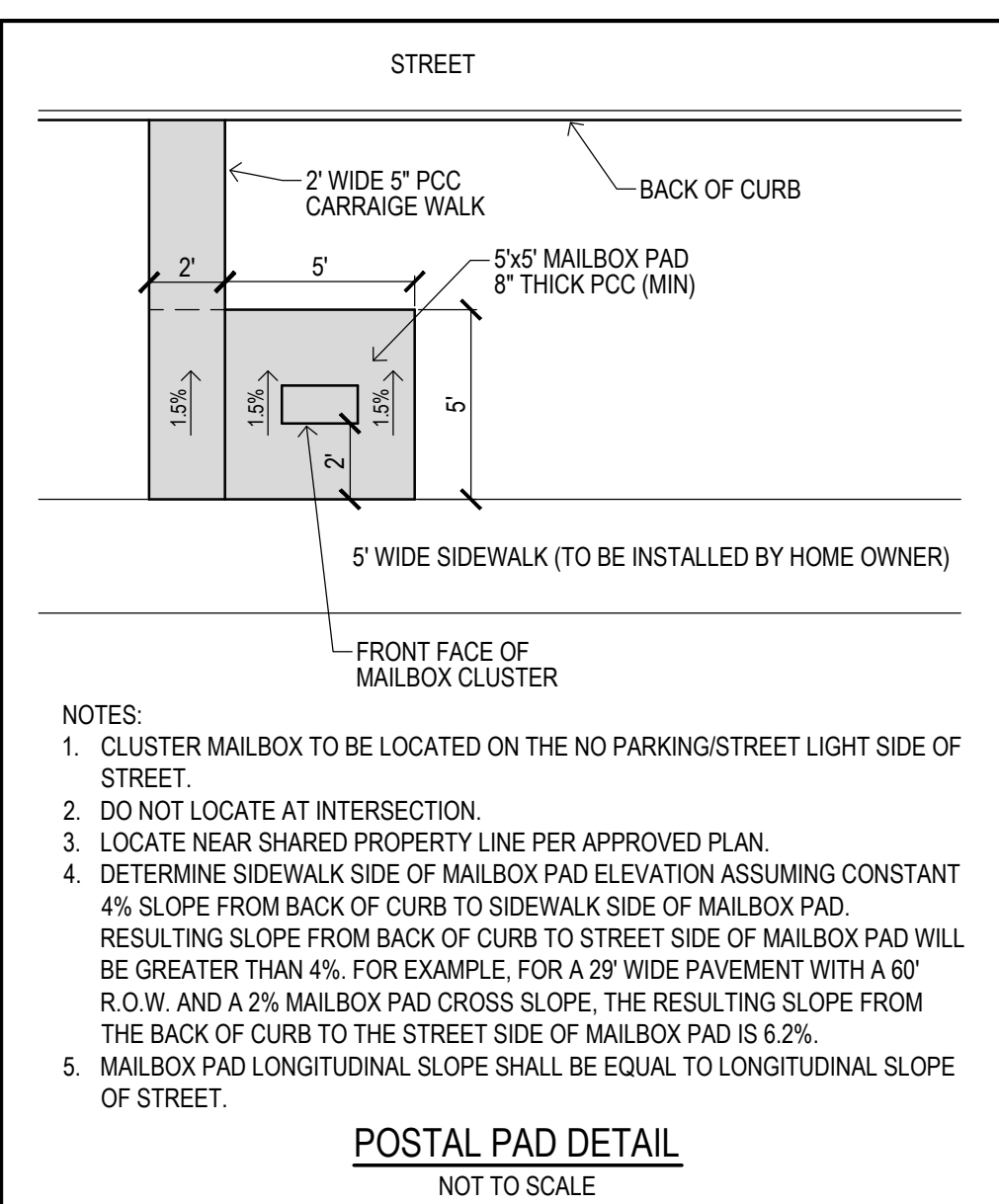
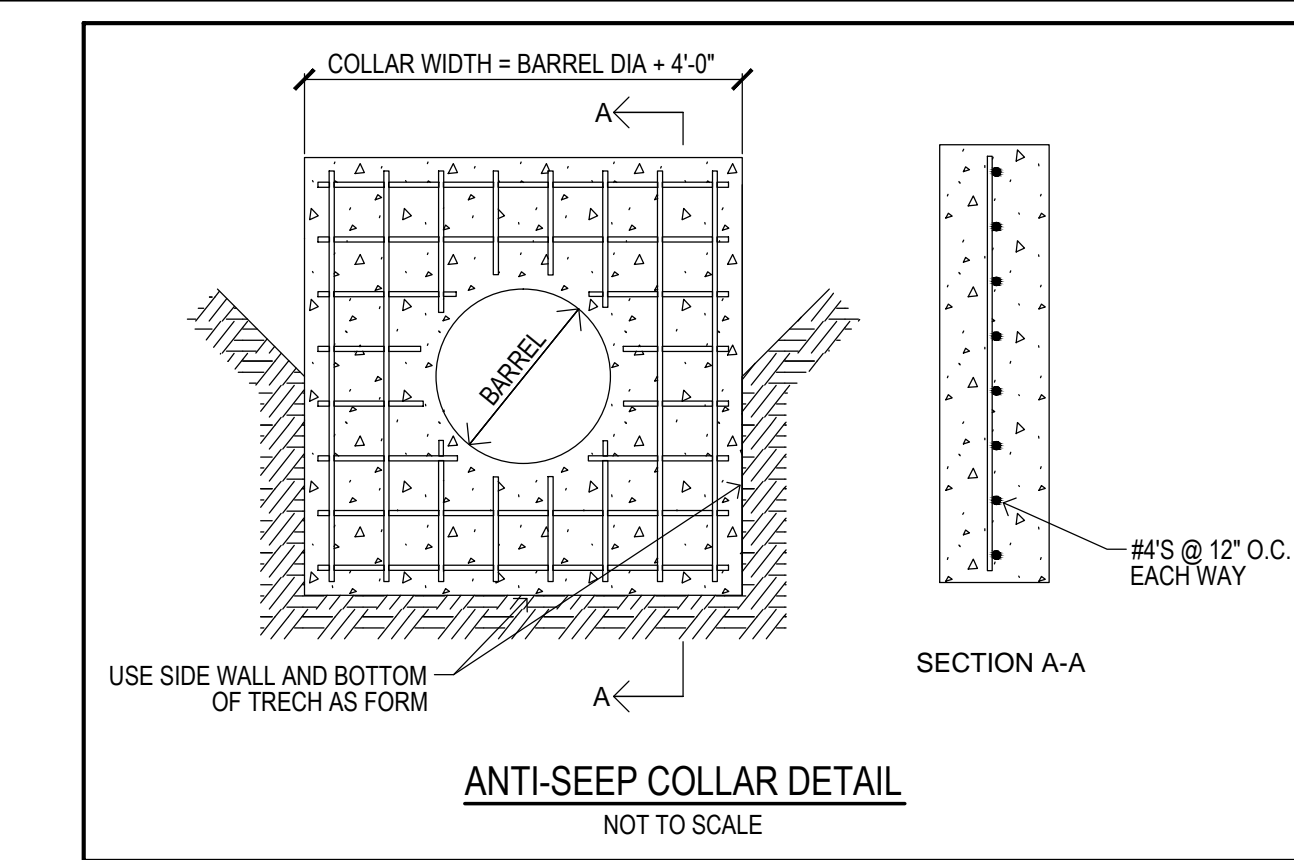
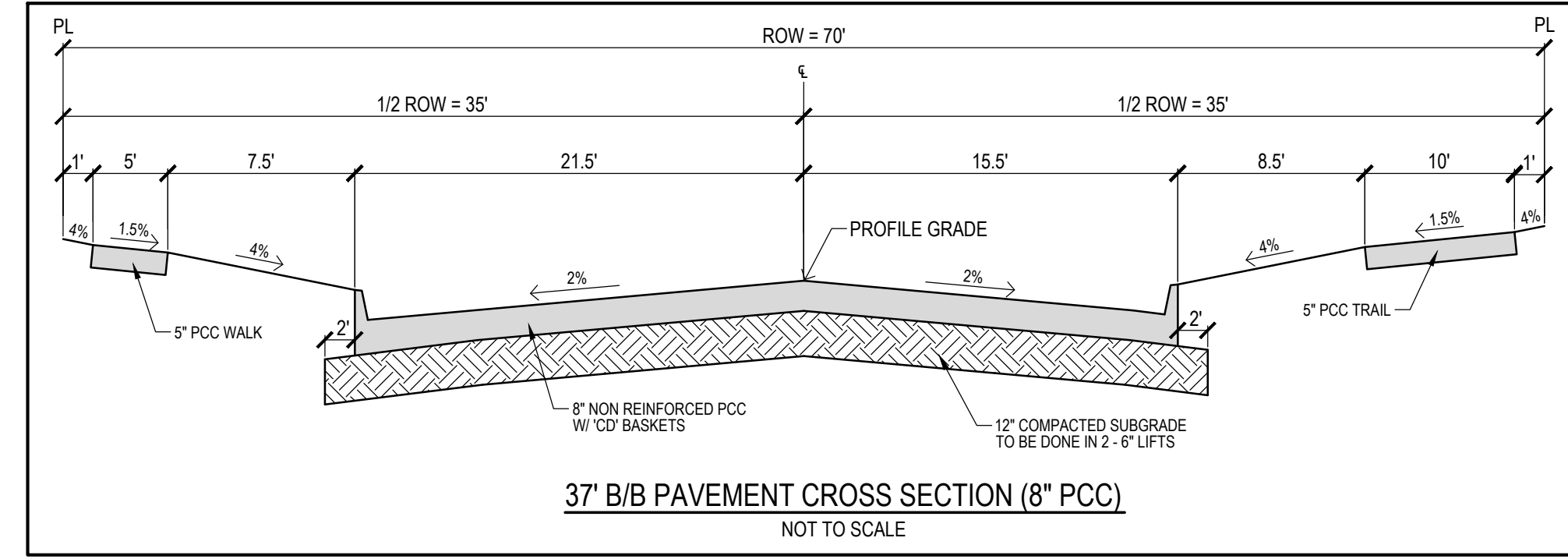
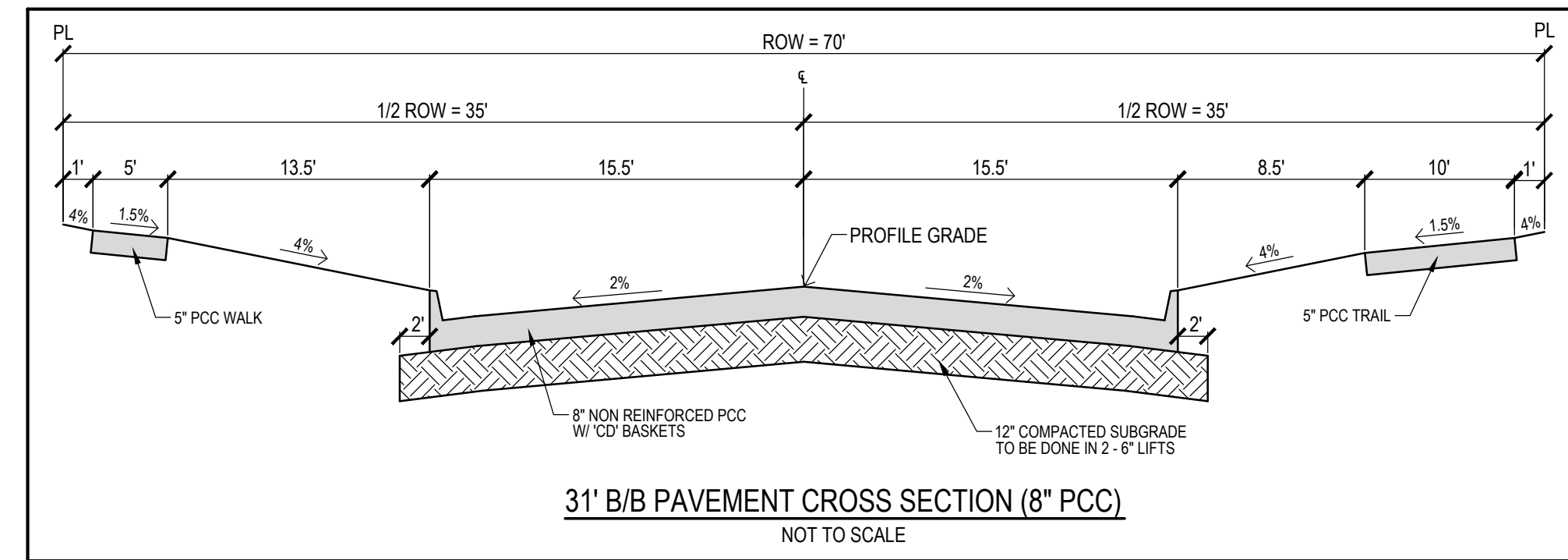
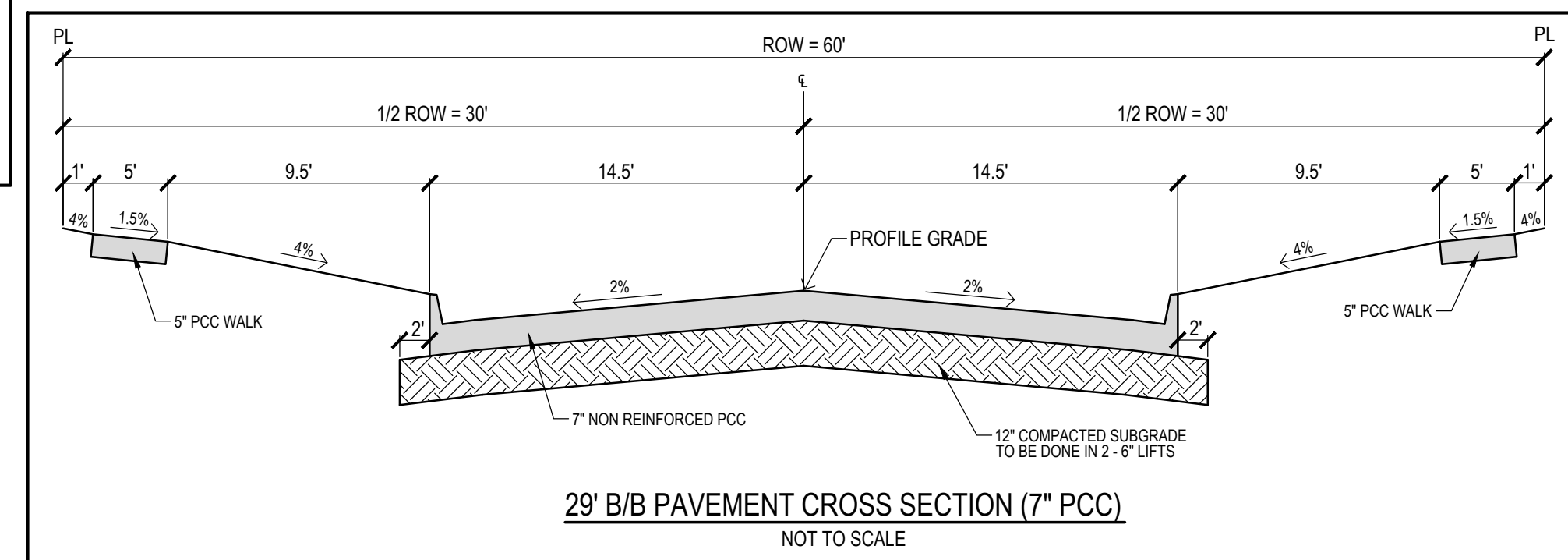
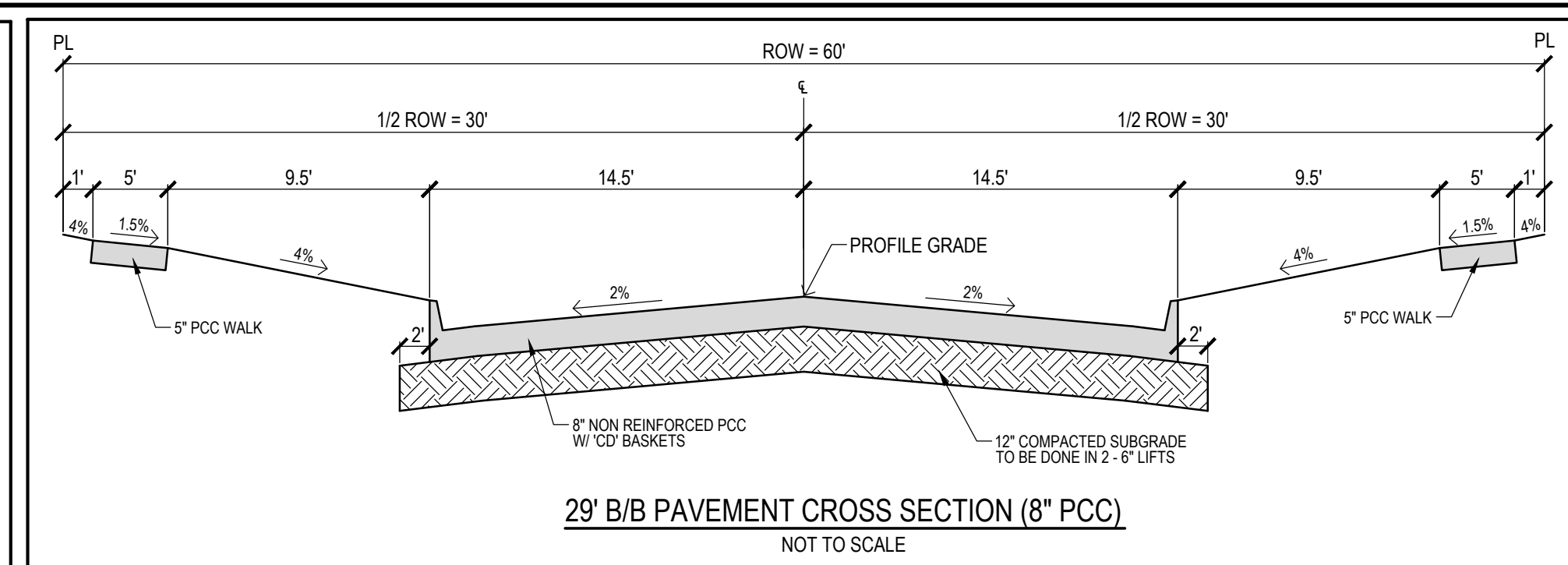
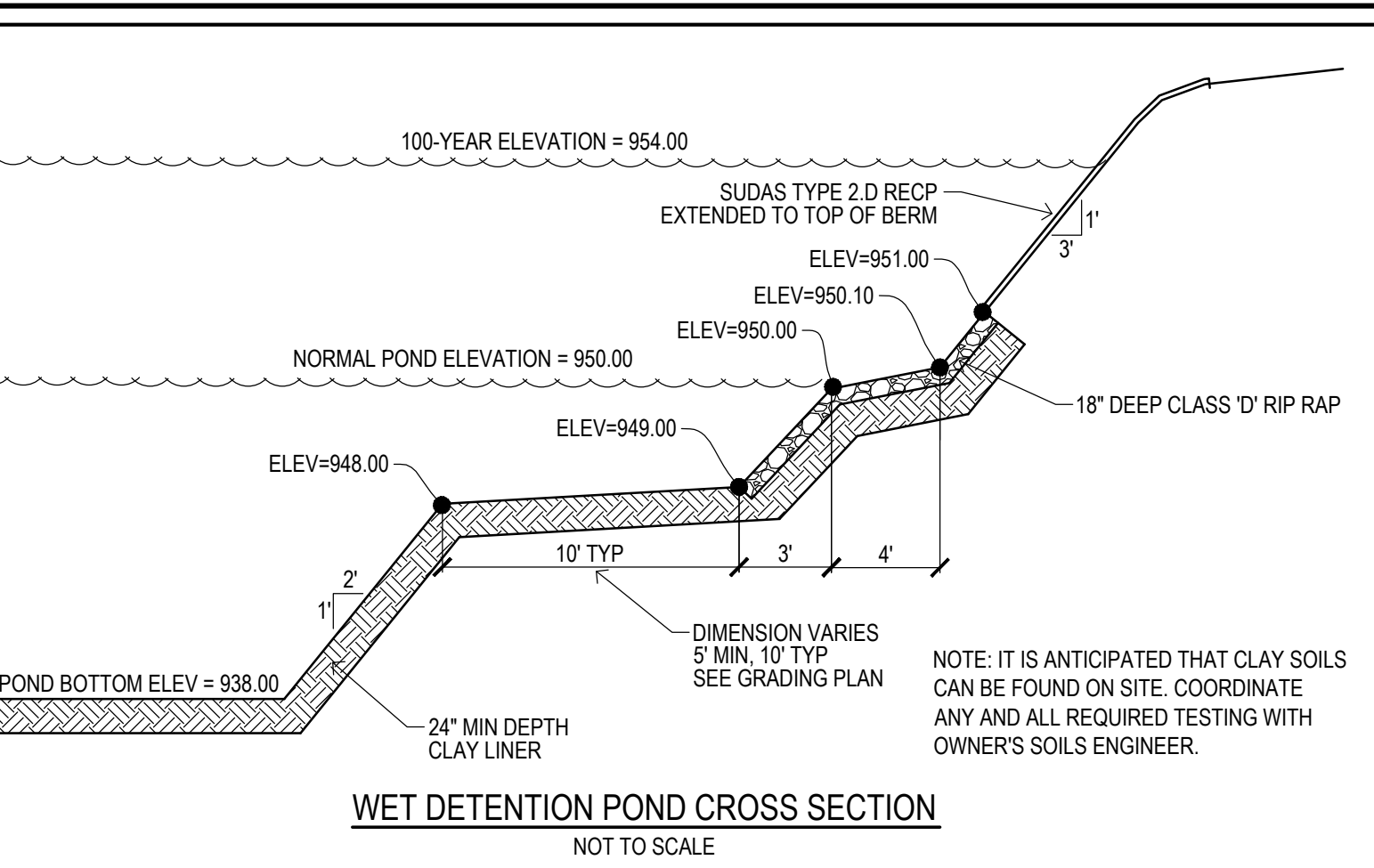
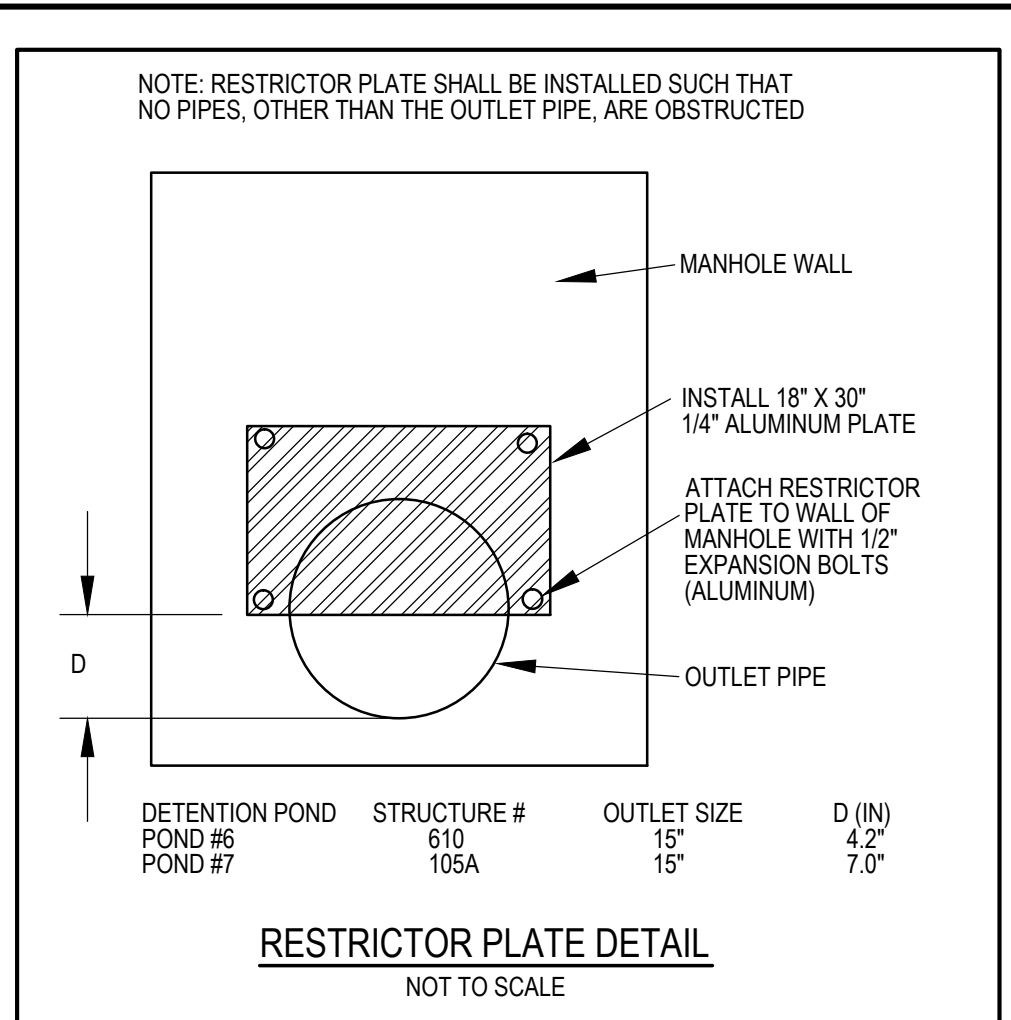
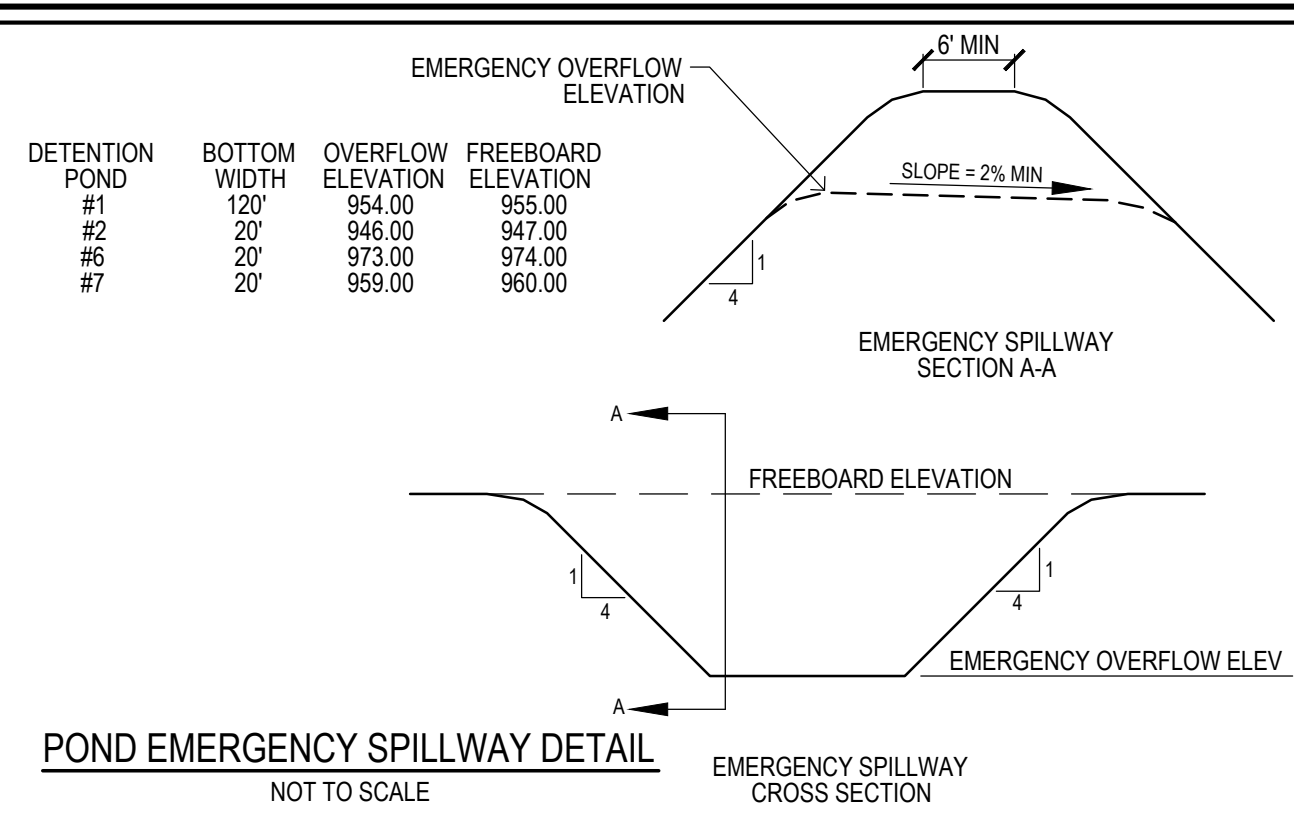
INDIAN RIDGE DR & WESTWIND CT GRADING DETAIL
STA 17+79.29 = STA 0+00.00



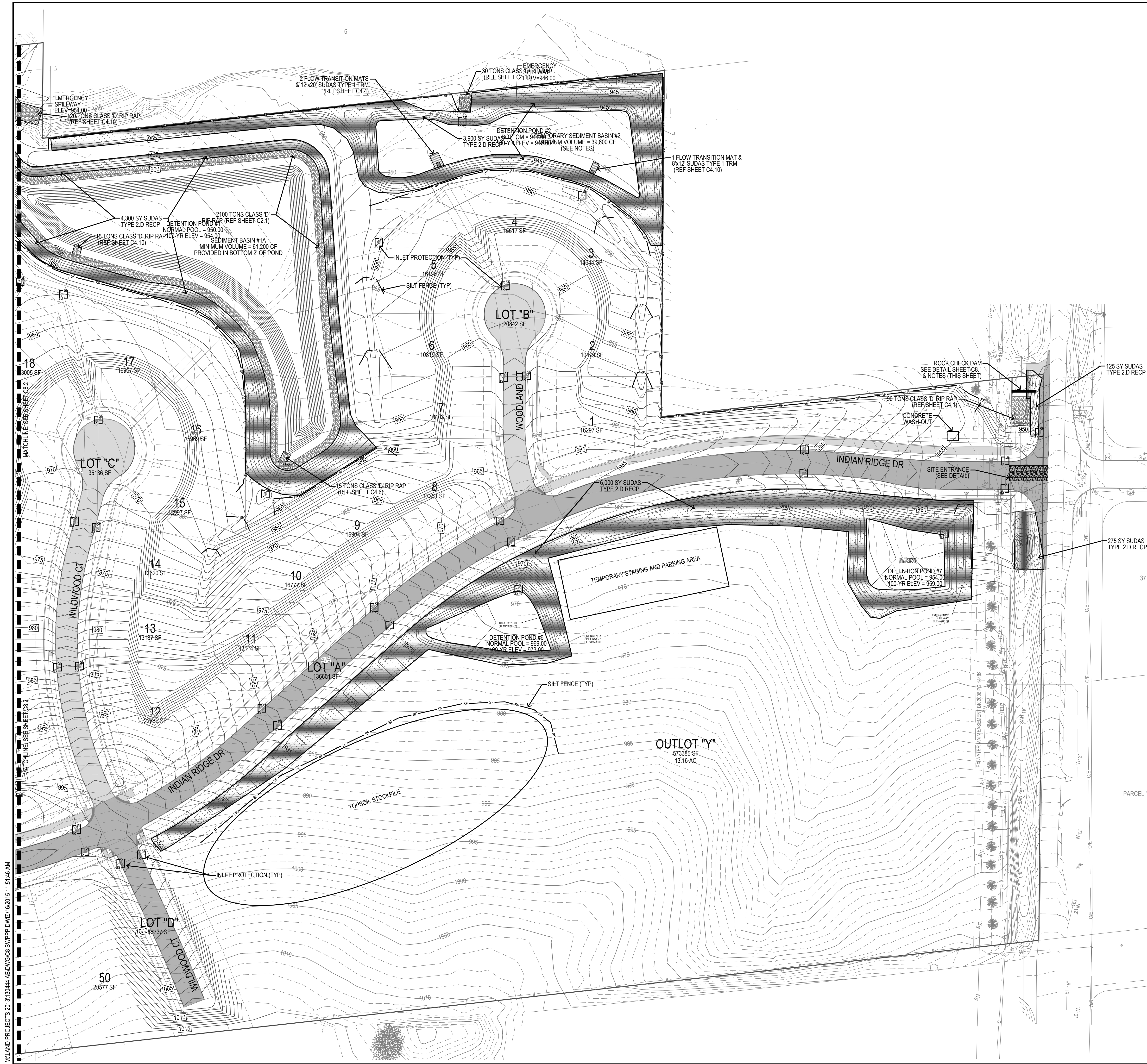
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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA
INTERSECTION DETAILS

REFERENCE NUMBER:	
DRAWN BY:	JMR
CHECKED BY:	DB
REVISION DATE:	7/15/14 1ST CITY SET 7/29/14 2ND CITY SET 8/12/14 3RD CITY SET 9/19/14 4TH CITY SET 10/7/14 5TH CITY SET 10/22/14 BID SET 10/16/15 AS-BUILT SET
PROJECT NUMBER:	130444
SHEET NUMBER:	C5.4



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SEDIMENT BASIN NOTES:

1. ALL DISTURBED AREA IN PROPOSED OUTLOT "X" SOUTH OF INDIAN RIDGE DR OUTSIDE OF TOPSOIL STOCKPILE MUST BE SEEDED AND STABILIZED OR RETURNED TO FARM GROUND IMMEDIATELY AFTER GRADING IS COMPLETE.
2. CONTRACTOR SHALL OVER-EXCAVATE ADDITIONAL 2 FEET IN DETENTION POND #2 (LOCATED NORTH OF PROPOSED LOTS 3-5) TO PROVIDE A MINIMUM SEDIMENT STORAGE VOLUME OF 39,600 CF.
3. AFTER FINAL STABILIZATION, AS DEFINED IN NPDES GENERAL PERMIT NO. 2, CONTRACTOR SHALL RE-GRADE DETENTION POND #2 TO PLAN GRADES AS SHOWN ON THE GRADING PLAN (SHEET C2.1 & C2.2), TO PERFORM SAID WORK, CONTRACTOR MAY PLACE EXCESS MATERIAL OR REMOVE MATERIAL FROM THE AREA NEAR THE TOPSOIL STOCKPILE. CONTRACTOR SHALL ENSURE ANY DISTURBED AREA FROM IMPORT OR BORROW ACTIVITY HAS MAXIMUM SLOPE OF 5:1 & BLENDS INTO SURROUNDING GRADES.

EROSION CONTROL NOTES:

1. SEE SUPPLEMENTAL DETAIL STORM WATER POLLUTION PLAN NARRATIVE FOR ALL EROSION CONTROL MEASURES, ADDITIONAL DETAILS AND NOTE. ADDITIONAL NOTES AND MEASURES IN NARRATIVE SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE ORIGINAL BID.
2. SWPPP PLAN AND NARRATIVE ARE CONSIDERED A LIVING DOCUMENT AND WILL NEED PERIODIC UPDATES AND ADJUSTMENTS AS NECESSARY DEPENDING ON SITE CONDITIONS TO ASSURE COMPLIANCE WITH NPDES GENERAL PERMIT NO. 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UPDATE THE SWPPP AND IMPLEMENT ANY AND ALL MEASURES NECESSARY TO COMPLY WITH SAID PERMIT NO. 2.
3. INSTALL PERIMETER SILT FENCE AS SHOWN ON PLANS PRIOR TO CONSTRUCTION.
4. INSTALL INTAKE PROTECTION WITH SILT FENCE IMMEDIATELY AFTER STORM SEWER CONSTRUCTION.
5. INSTALL FINISHED PAVING INLET PROTECTION INCLUDING BELOW GRADE IMMEDIATELY AFTER PAVING IS COMPLETED AROUND INTAKE. BELOW GRADE INLET PROTECTION SHALL BE MAINTAINED UNTIL FINAL STABILIZATION.
6. OTHER EROSION CONTROL TYPES MAY NOT BE SUBSTITUTED FOR SILT FENCE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A CONCRETE WASHOUT IN ACCORDANCE WITH NPDES GENERAL PERMIT NO. 2 DURING ALL CONCRETE WORK POSSIBLE LOCATION SHOWN ON PLAN.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING TEMPORARY RESTROOM FACILITIES. SANITARY WASTE SHALL BE DISPOSED OF PER ALL FEDERAL, STATE AND LOCAL REGULATIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET. SEE GRADING PLAN FOR ADDITIONAL TOPSOIL REQUIREMENTS.
10. CONTRACTOR SHALL STABILIZE ALL AREAS PER REQUIREMENTS OF NPDES GENERAL PERMIT #2. DISTURBED AREA SHALL BE SEED AS SHOWN ON LANDSCAPE PLAN.
11. CONTRACTOR SHALL INSTALL AND MAINTAIN BELOW GRADE INLET PROTECTION ON ALL PUBLIC STREETS ADJOINING THE PROJECT FOR THE DURATION OF SITE CONSTRUCTION.
12. ALL ROLLED EROSION CONTROL PRODUCTS (RECP) AND TURF REINFORCEMENT MAT (TRM) SHALL BE INSTALLED PER ALL MANUFACTURER'S RECOMMENDATIONS.

EROSION CONTROL REMOVAL NOTES:

1. AFTER FINAL STABILIZATION HAS OCCURRED, AS DEFINED IN NPDES GENERAL PERMIT NO. 2, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO: SILT FENCE, INLET PROTECTION, AND TEMPORARY STANDPIPES.
2. AFTER FINAL STABILIZATION HAS OCCURRED, CONTRACTOR SHALL REMOVE AND REPLACE ROCK CHECK DAM.

SEDIMENT BASIN SUMMARY:

SEDIMENT BASIN #1A:
 TOTAL DISTURBED AREA = 25.00 ACRES
 VOLUME REQUIRED (3,600 CF PER ACRE DISTURBED) = 90,000 CF
 VOLUME PROVIDED = 100,795 CF

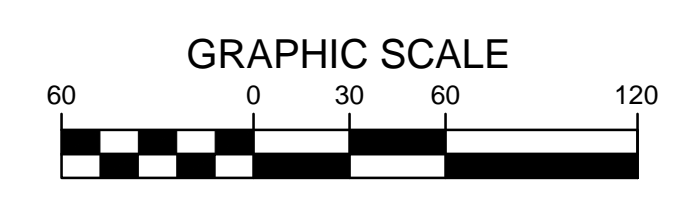
SEDIMENT BASIN #1B:
 TOTAL DISTURBED AREA = 15.00 ACRES
 VOLUME REQUIRED (3,600 CF PER ACRE DISTURBED) = 54,000 CF
 VOLUME PROVIDED = 58,635 CF

SEDIMENT BASIN #1C:
 TOTAL DISTURBED AREA = 15.00 ACRES
 VOLUME REQUIRED (3,600 CF PER ACRE DISTURBED) = 54,000 CF
 VOLUME PROVIDED = 56,650 CF

SEDIMENT BASIN #2:
 TOTAL DISTURBED AREA = 11.00 ACRES
 VOLUME REQUIRED (3,600 CF PER ACRE DISTURBED) = 39,600 CF
 VOLUME PROVIDED = 41,275 CF

GRADING LEGEND:

- EXISTING CONTOUR: --- 150 ---
- PROPOSED CONTOUR: --- 150 ---
- FINISHED GROUND ELEVATION: ● 150.50
- TOP OF CURB ELEVATION: ● 150.50/C
- GUTTER ELEVATION: ● 150.50G



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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA

SWPPP

REFERENCE NUMBER:	
DRAWN BY:	JMR
CHECKED BY:	DB
REVISION DATE:	7/15/14 1ST CITY SET 7/29/14 2ND CITY SET 8/12/14 3RD CITY SET 9/19/14 4TH CITY SET 10/7/14 5TH CITY SET 10/22/14 BID SET 10/16/15 AS-BUILT SET
PROJECT NUMBER:	130444
SHEET NUMBER:	C8.1

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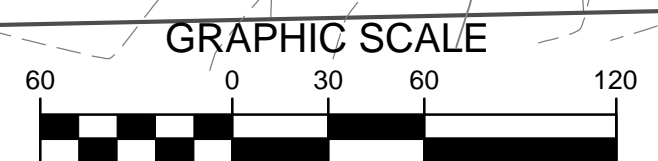
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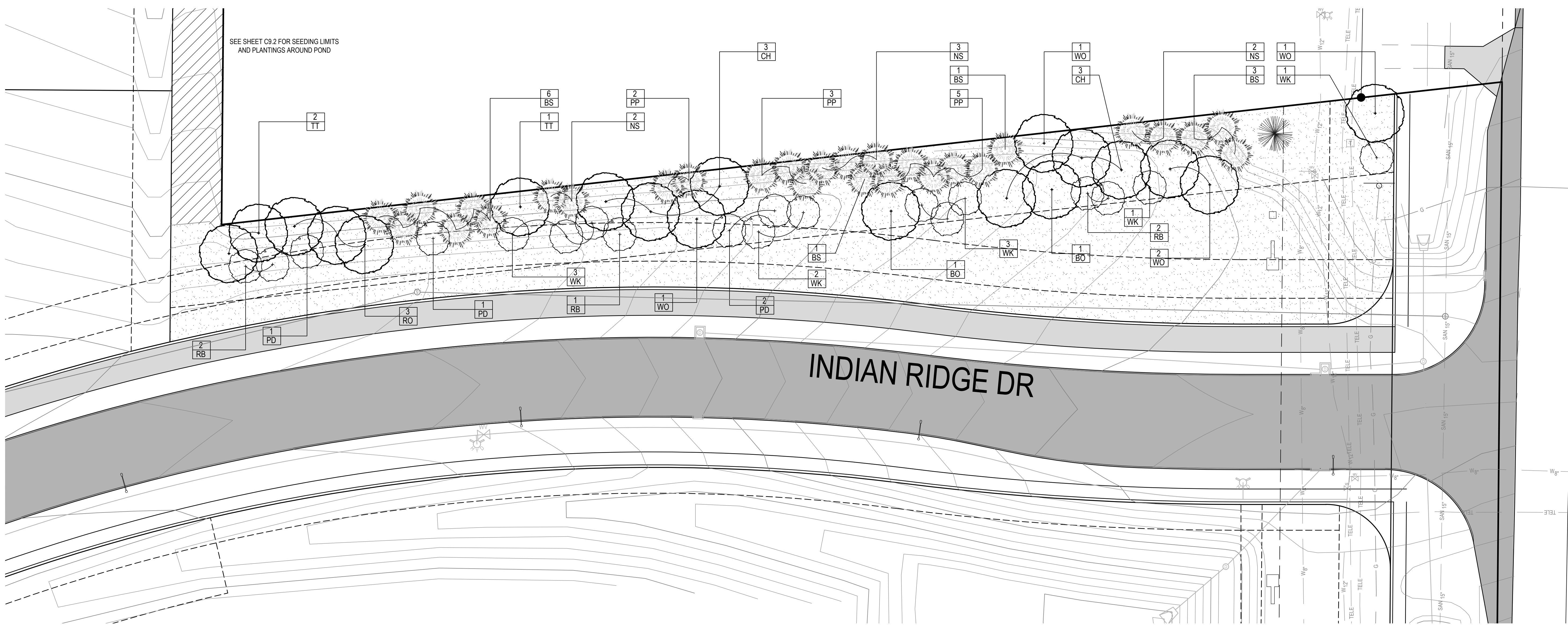


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PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA
SWPPP

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SHEET NUMBER:	C8.2



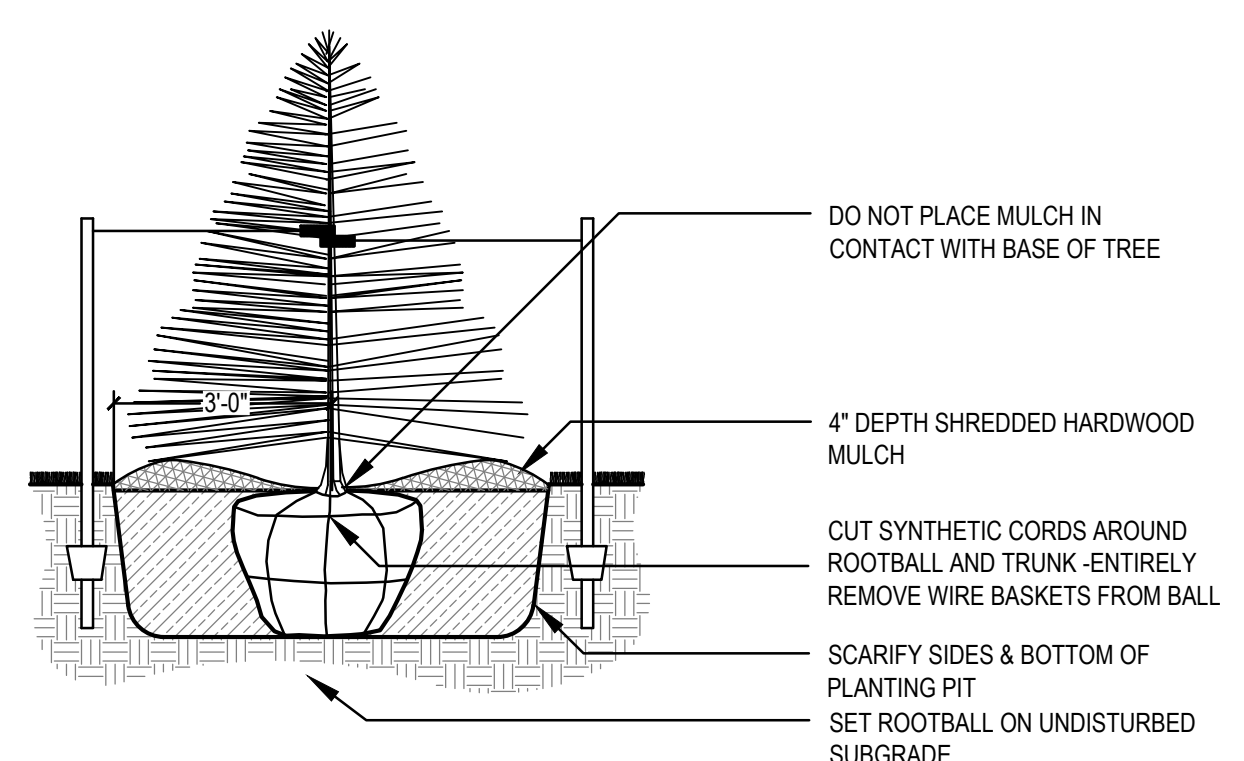


PLANTING SCHEDULE

CODE	QUAN	COMMON NAME	LATIN NAME	SIZE	ROOT	NOTES
CH	9	COMMON HACKBERRY	CELTIS OCCIDENTALIS	2.5" CAL	B&B	MATCHED SPECIMENS
TT	6	TULIP TREE	LIRIODENDRON TULIPIFERA	2.5" CAL	B&B	MATCHED SPECIMENS
WO	7	WHITE OAK	QUERCUS ALBA	2.5" CAL	B&B	MATCHED SPECIMENS
BO	4	BURR OAK	QUERCUS MACROCARPA	2.0" CAL	B&B	MATCHED SPECIMENS
RO	6	RED OAK	QUERCUS RUBRA	2.5" CAL	B&B	MATCHED SPECIMENS
SB	4	SERVICEBERRY	AMELANCHIER CANADENSIS	8" CLUMP	B&B	MATCHED SPECIMENS
RB	6	EASTERN REDBUD	CERCIS CANADENSIS	1.5" CAL	B&B	MATCHED SPECIMENS
WK	16	WINTER KING HAWTHORN	CRATAEGUS VIRIDIS 'WINTER KING'	1.5" CAL	B&B	MATCHED SPECIMENS
PD	9	PAGODA DOGWOOD	CORNUS ALTERNIFOLIA	1.5" CAL	B&B	MATCHED SPECIMENS
WP	6	WHITE PINE	PINUS STROBUS	6"	B&B	FULL FORM TO GROUND
NS	7	NORWAY SPRUCE	PICEA ABIES	6"	B&B	FULL FORM TO GROUND
BS	11	COLORADO BLUE SPRUCE	PICEA PUNGENS	6"	B&B	FULL FORM TO GROUND
PP	10	PONDEROSA PINE	PINUS PONDEROSA	6"	B&B	FULL FORM TO GROUND

LANDSCAPE NOTES:

- ALL SEEDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
- SEED ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SEE SHEET C9.2 FOR SEED LIMITS AND TYPES.
- PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
- ALL PLANT MATERIAL SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1 - 2004).
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF INSTALLATION.
- IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE IDENTIFICATION TAGS AND CORDS ON ALL PLANT MATERIAL PRIOR TO THE COMPLETION OF THE CONTRACT.
- CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH AROUND ALL TREES TO A DEPTH OF 3 INCHES, UNLESS NOTED.
- STAKE AND WRAP ALL DECIDUOUS TREES IMMEDIATELY AFTER PLANTING. STAKE ALL TREES ACCORDING TO THE STAKING DETAILS. CONTRACTOR SHALL ADJUST AND MAINTAIN GUYING TENSION THROUGHOUT THE PLANT ESTABLISHMENT PERIOD.
- THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
- NO LANDSCAPE MATERIAL SHALL BE SUBSTITUTED WITHOUT THE AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.



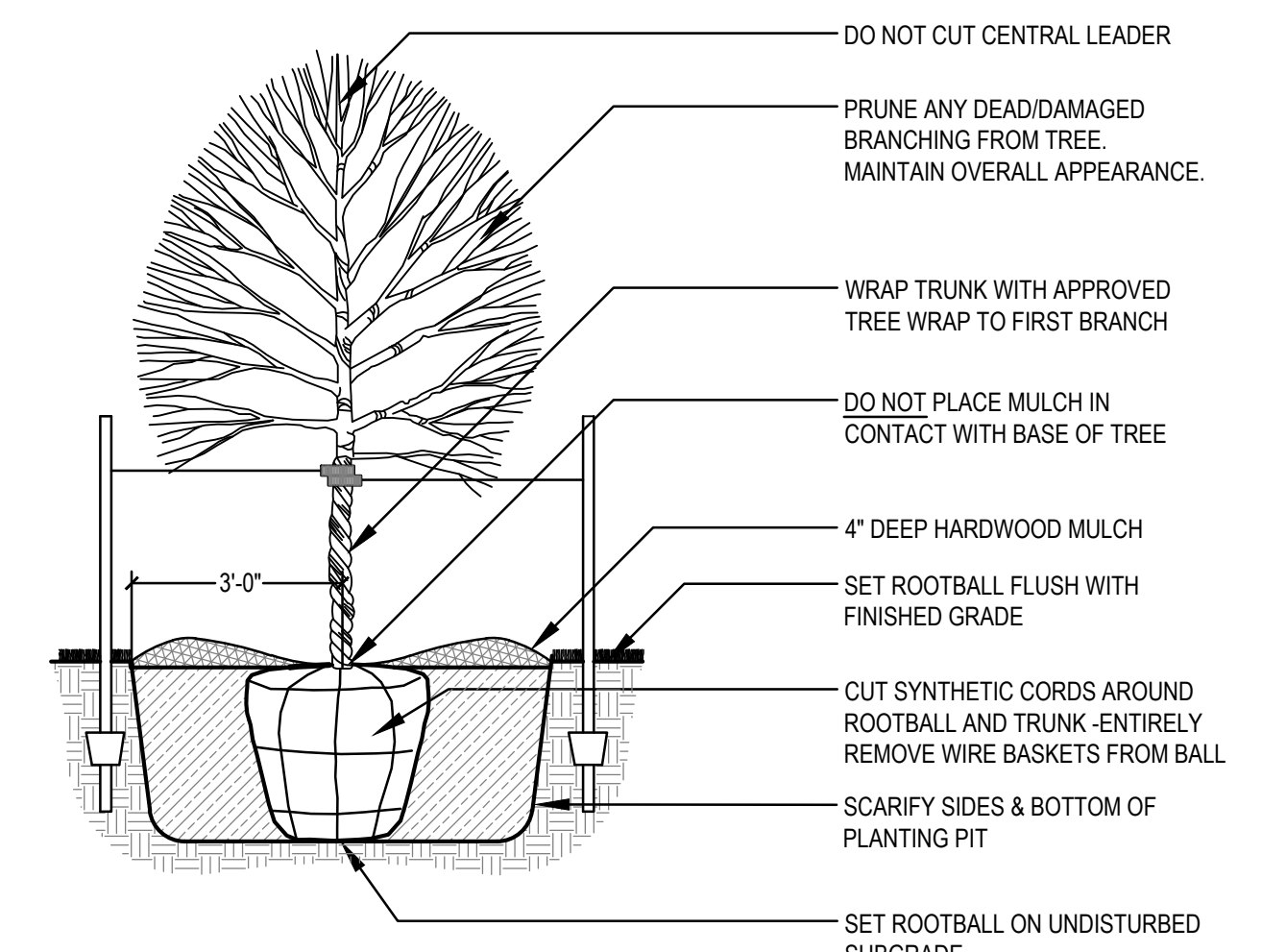
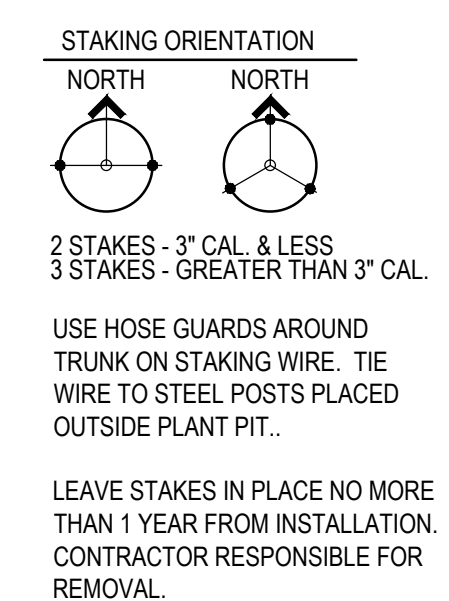
EVERGREEN TREE PLANTING (B&B)
SCALE: NOT TO SCALE

LANDSCAPE REQUIREMENTS (OPEN SPACE)

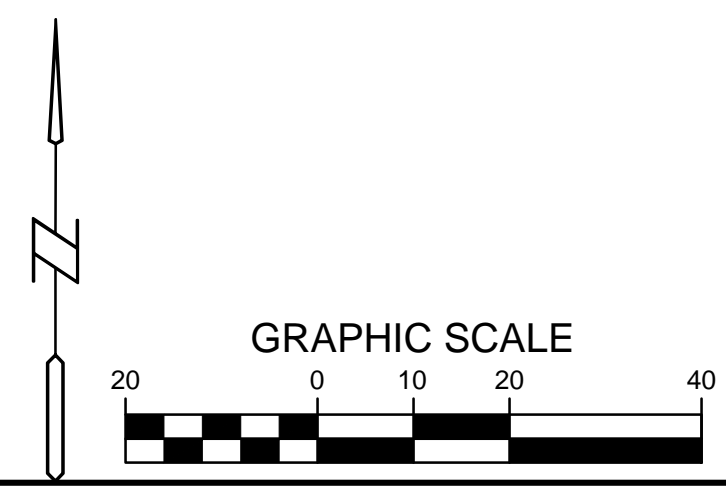
TOTAL OPEN SPACE FOR CALC. 301,333 SF
 TOTAL TREES REQUIRED (1 / 3000 SF) 101
 TOTAL TREES PROVIDED (INCLUDING BUFFER) 101

BUFFER REQUIREMENTS:

TOTAL LENGTH REQUIRED 458 LF
 TOTAL OVERSTORY TREES REQUIRED (2 PER 50 LF) 19
 TOTAL EVERGREEN TREES REQUIRED (3 PER 50 LF) 28
 TOTAL ORNAMENTAL TREES REQUIRED (2 PER 50 LF) 19



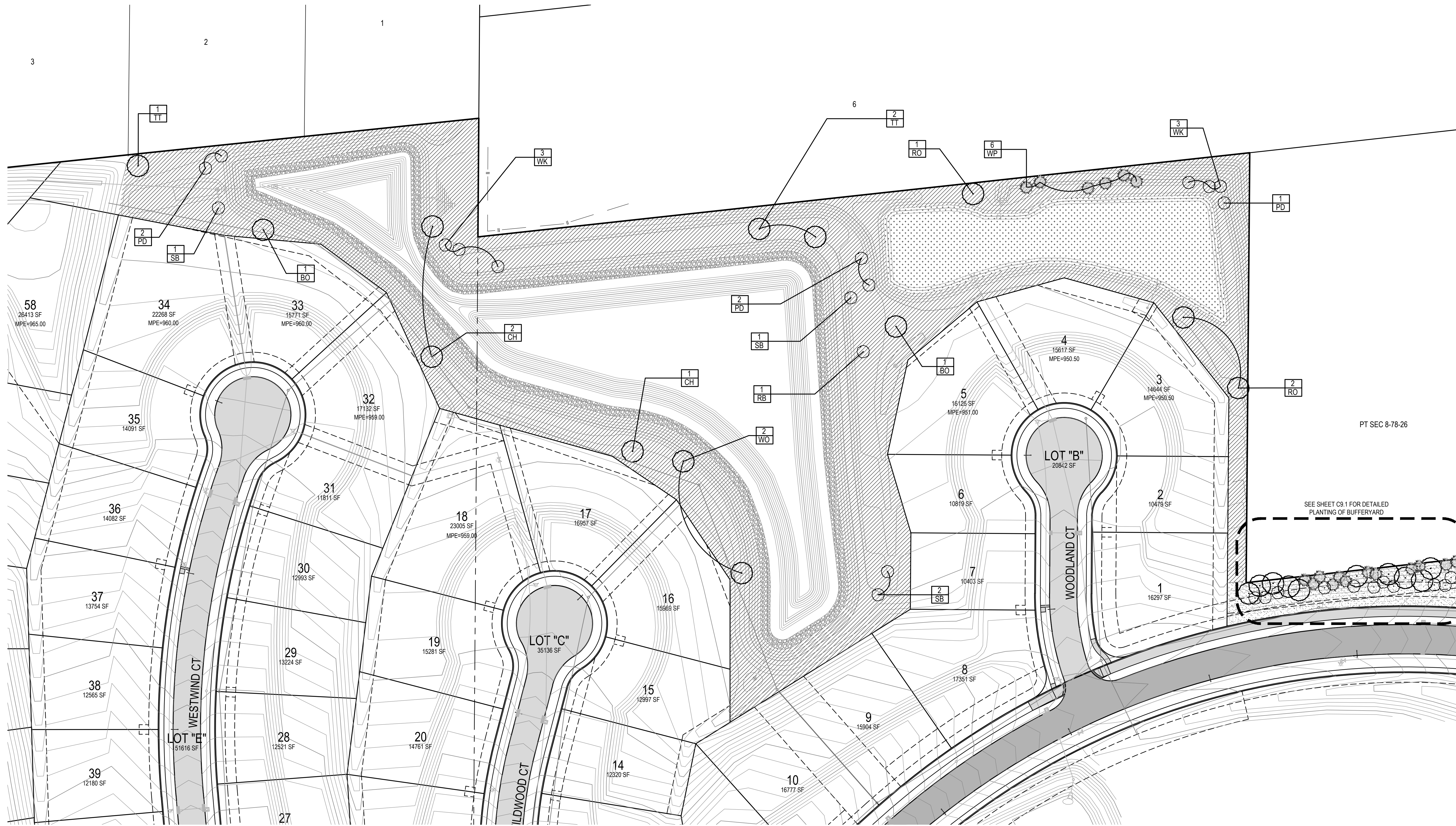
DECIDUOUS TREE PLANTING (TYP.)
SCALE: NOT TO SCALE



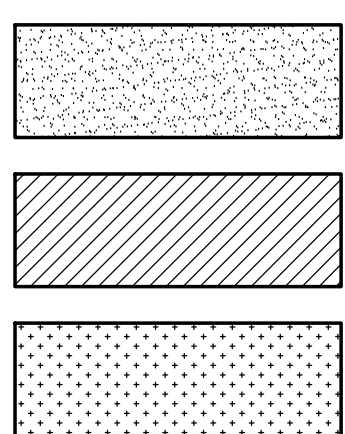
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PROJECT NUMBER:	130444
SHEET NUMBER:	C9.1

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SEEDING & HYDRAULIC MULCHING NOTES:



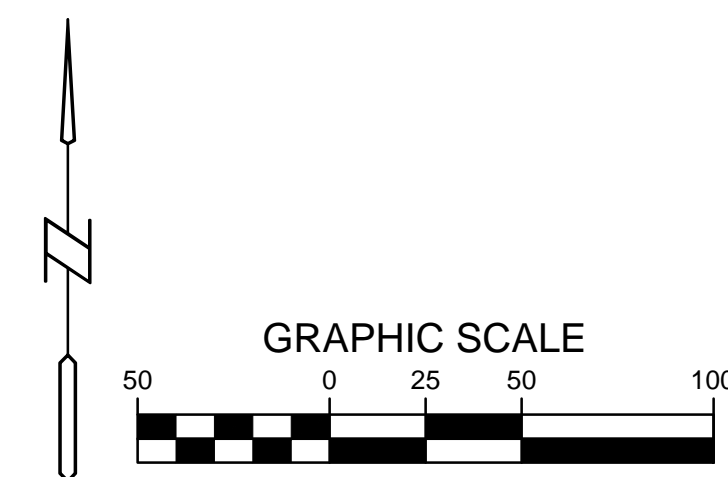
SEED - TYPE 1: PERMANENT LAWN MIXTURE. SEED MIX SHALL MEET SUDAS TYPE I URBAN LAWN MIX. SEEDING RATE AND FERTILIZATION BASED PER MANUFACTURERS RECOMMENDATIONS.

SEED - TYPE 2: PERMANENT NATIVE MIXTURE. USE UNITED SEEDS 'LOW GROW GRASS MIXTURE' OR APPROVED EQUAL. INSTALL SEED MIX PER SUDAS NATIVE GRASS AND WILDFLOWER SEEDING. SEEDING RATE AND FERTILIZATION PER MANUFACTURERS RECOMMENDATIONS.

SEED - TYPE 3: PERMANENT NATIVE MIXTURE. USE UNITED SEEDS 'FLOODPLAIN MIXTURE' OR APPROVED EQUAL. INSTALL SEED MIX PER SUDAS NATIVE GRASS AND WILDFLOWER SEEDING. SEEDING RATE AND FERTILIZATION PER MANUFACTURERS RECOMMENDATIONS.

SEED - TYPE 4: TEMPORARY URBAN EROSION CONTROL MIXTURE. SEED MIX SHALL MEET SUDAS TYPE 4 REQUIREMENTS. SEEDING RATE AND FERTILIZATION PER MANUFACTURERS RECOMMENDATIONS. TO BE APPLIED IN ALL REMAINING AREAS NOT RECEIVING TYPE 1, TYPE 2 OR TYPE 3 SEEDING.

HYDRAULIC MULCH: SEEDING TYPE 1 & 2 SHALL BE HYDRO-MULCHED. WOOD CELLULOSE HYDRAULIC MULCH WITH TACKIFIER SHALL BE APPLIED AT A RATE OF 2500LBS/ACRE (OR PER MANUFACTURER'S RECOMMENDATION).



**PAINTED WOODS WEST PLAT 1
WAUKEE, IOWA**

LANDSCAPE PLAN

REFERENCE NUMBER:	
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PROJECT NUMBER:	130444
SHEET NUMBER:	C9.2