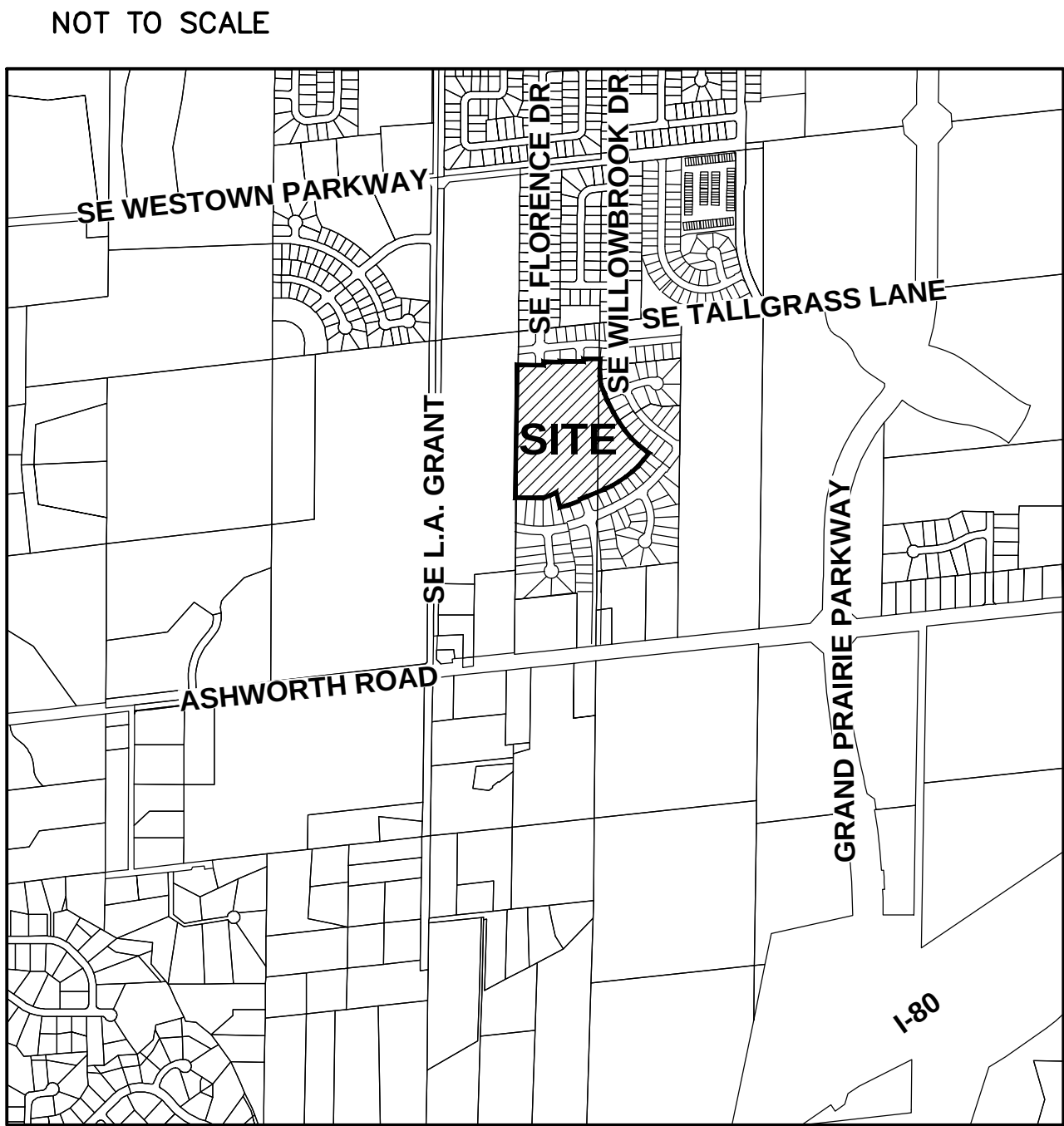


CONSTRUCTION PLANS FOR:

KETTLESTONE RIDGE PLAT 8

WAUKEE, IOWA

VICINITY MAP



WAUKEE, IOWA

OWNER/DEVELOPER

JERRY'S HOMES
CONTACT: ADAM GRUBB
3900 WESTOWN PARKWAY, SUITE 100
WEST DES MOINES, IA 50266
PH: (515) 727-0356

ENGINEER

CIVIL DESIGN ADVANTAGE
CONTACT: ERIN OLLENDIKE
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PH. (515) 369-4400
FX. (515) 369-4410

SURVEYOR

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
CONTACT: CHARLIE MCGLOTHLEN
EMAIL: CHARLIE@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

ZONING

R-2 ONE AND TWO FAMILY RESIDENTIAL DISTRICT

BULK REGULATIONS

R-2
FRONT YARD: 30 FEET
SIDE YARD: A TOTAL OF 15 FEET; ONE SIDE
MAY BE REDUCED TO NOT LESS
THAN 7 FEET
REAR YARD: 30 FEET

SUBMITTAL DATES

FIRST SUBMITTAL: 06/15/2021
SECOND SUBMITTAL: 06/29/2021
THIRD SUBMITTAL: 07/27/2021
FINAL SUBMITTAL: 08/18/2021
AS-BUILT SUBMITTAL: 07/12/2023

BENCHMARKS

BM#1 DALLAS CO G120
ELEVATION=1011.76

BM#2 BURY BOLT ON HYDRANT SE FLORENCE DR
& DEAD END.
ELEVATION=1037.32

NOTES

1. ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
2. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
3. THE RESULTS OF THE GEOTECHNICAL REPORT ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. THE CONSTRUCTION DRAWINGS ARE SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.

DEVELOPMENT SUMMARY:

TOTAL AREA OF SITE = 20.22 ACRES
(880,758 SF)

UTILITY NOTE

ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

INDEX OF SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2-3	TYPICAL SECTIONS AND DETAILS
4	QUANTITIES, GENERAL NOTES AND BID ITEM REFERENCE NOTES
5	HYDRANT COVERAGE PLAN
6-7	GRADING PLAN
8-9	EROSION AND SEDIMENT CONTROL PLAN
10-16	STORM & SANITARY SEWER PLAN AND PROFILE
17-22	WATER MAIN PLAN AND PROFILE
23-24	INTERSECTION DETAILS

AS-BUILT DRAWINGS

AS-BUILT PLANS ARE BASED ON SURVEYED INVERT ELEVATIONS AND INFORMATION SUPPLIED BY THE CONTRACTOR. CIVIL DESIGN ADVANTAGE TAKES NO RESPONSIBILITY FOR UNAUTHORIZED CHANGES TO THE PLANS WITHOUT CITY/OWNER KNOWLEDGE. FIELD VERIFICATION OF UTILITIES OR OTHER PLAN ELEMENTS IS ALWAYS RECOMMENDED.

LEGAL DESCRIPTION

THAT PART OF THE EAST HALF OF THE WEST HALF OF THE SOUTHWEST QUARTER AND THE WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER, ALL IN SECTION 4, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA. LYING SOUTH OF KETTLESTONE RIDGE PLAT 1, AN OFFICIAL PLAT AND LYING WEST OF KETTLESTONE RIDGE PLAT 2, AN OFFICIAL PLAT AND LYING WEST OF KETTLESTONE RIDGE PLAT 3, AN OFFICIAL PLAT AND LYING NORTH OF KETTLESTONE RIDGE PLAT 5, AN OFFICIAL PLAT AND LYING NORTH OF KETTLESTONE RIDGE PLAT 7, AN OFFICIAL PLAT AND CONTAINING 20.22 ACRES (880,758 SQUARE FEET). PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

GENERAL LEGEND

PROPOSED

SECTION LINE	-----
CENTER LINE	-----
RIGHT OF WAY	-----R/W-----
PERMANENT EASEMENT	-----P/E-----
TEMPORARY EASEMENT	-----T/E-----
TYPE SW-501 STORM INTAKE	
TYPE SW-503 STORM INTAKE	
TYPE SW-505 STORM INTAKE	
TYPE SW-506 STORM INTAKE	
TYPE SW-513 STORM INTAKE	
TYPE SW-401 STORM MANHOLE	
TYPE SW-402 STORM MANHOLE	
TYPE SW-301 SANITARY MANHOLE	
STORM/SANITARY CLEANOUT	
WATER VALVE	
FIRE HYDRANT ASSEMBLY	
SIGN	
DETECTABLE WARNING PANEL	
WATER CURB STOP	
STORM SEWER STRUCTURE NO.	
STORM SEWER PIPE NO.	
SANITARY SEWER STRUCTURE NO.	
SANITARY SEWER PIPE NO.	
SANITARY SEWER WITH SIZE	
SANITARY SERVICE	
STORM SEWER	
STORM SERVICE	
WATERMAIN WITH SIZE	
WATER SERVICE	
SAWCUT (FULL DEPTH)	
SILT FENCE	
USE AS CONSTRUCTED	(UAC)
TOP OF PROPOSED GROUND	TG
MINIMUM OPENING ELEVATION	MOE
MINIMUM GRADE AT EXPOSED STRUCTURE	MGS

EXISTING

SANITARY MANHOLE	
WATER VALVE BOX	
FIRE HYDRANT	
WATER CURB STOP	
WELL	
STORM SEWER MANHOLE	
STORM SEWER SINGLE INTAKE	
STORM SEWER DOUBLE INTAKE	
FLARED END SECTION	
DECIDUOUS TREE	
CONIFEROUS TREE	
DECIDUOUS SHRUB	
CONIFEROUS SHRUB	
ELECTRIC POWER POLE	
GUY ANCHOR	
STREET LIGHT	
POWER POLE W/ TRANSFORMER	
UTILITY POLE W/ LIGHT	
ELECTRIC BOX	
ELECTRIC TRANSFORMER	
ELECTRIC MANHOLE OR VAULT	
TRAFFIC SIGN	
TELEPHONE JUNCTION BOX	
TELEPHONE MANHOLE/VAULT	
TELEPHONE POLE	
GAS VALVE BOX	
CABLE TV JUNCTION BOX	
CABLE TV MANHOLE/VAULT	
MAIL BOX	
BENCHMARK	
SOIL BORING	
UNDERGROUND TV CABLE	
GAS MAIN	
FIBER OPTIC	
UNDERGROUND TELEPHONE	
OVERHEAD ELECTRIC	
UNDERGROUND ELECTRIC	
FIELD TILE	
SANITARY SEWER W/ SIZE	
STORM SEWER W/ SIZE	
WATER MAIN W/ SIZE	

REFER TO THE KETTLESTONE RIDGE GEOTECHNICAL REPORT PREPARED BY GEOTECH, INC. (PN 02.15174.00) DATED AUGUST 20, 2015 FOR GEOTECHNICAL REQUIREMENTS.

THIS PROJECT REQUIRES AN IOWA NPDES PERMIT #2. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS.

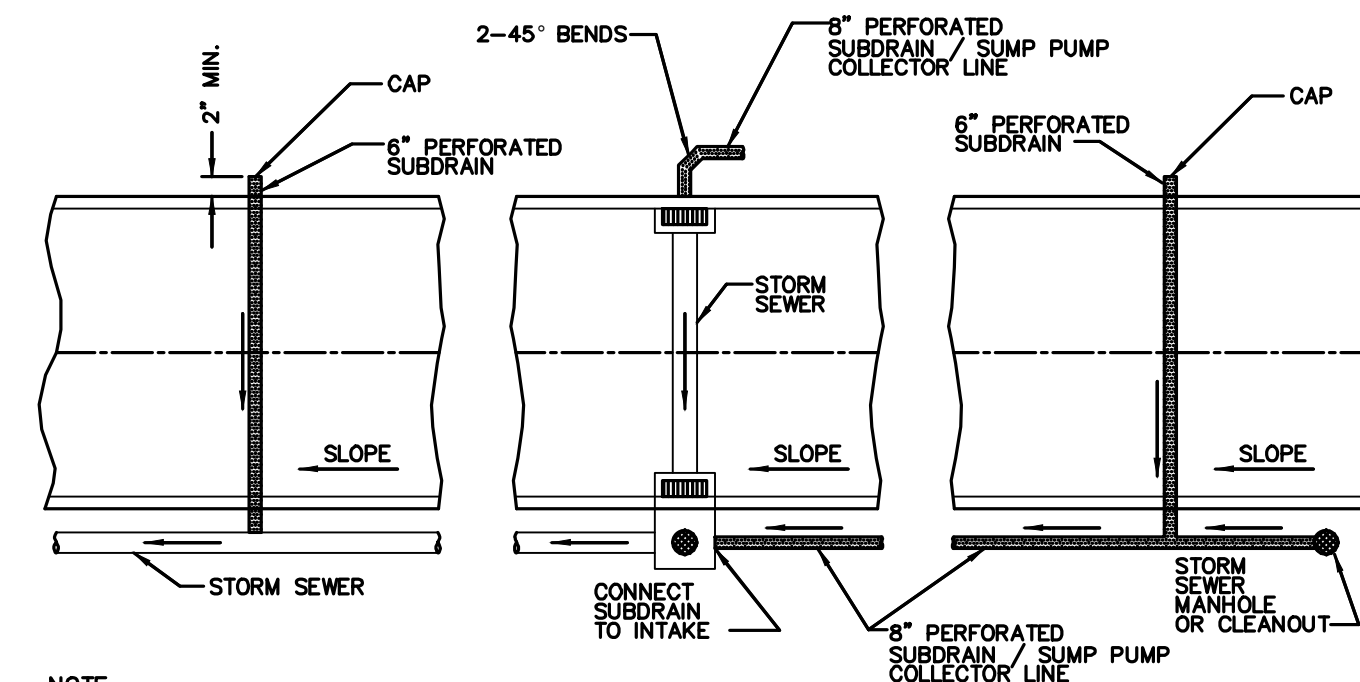
THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2021 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE, URBANDALE, IOWA 50322
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 2104.321

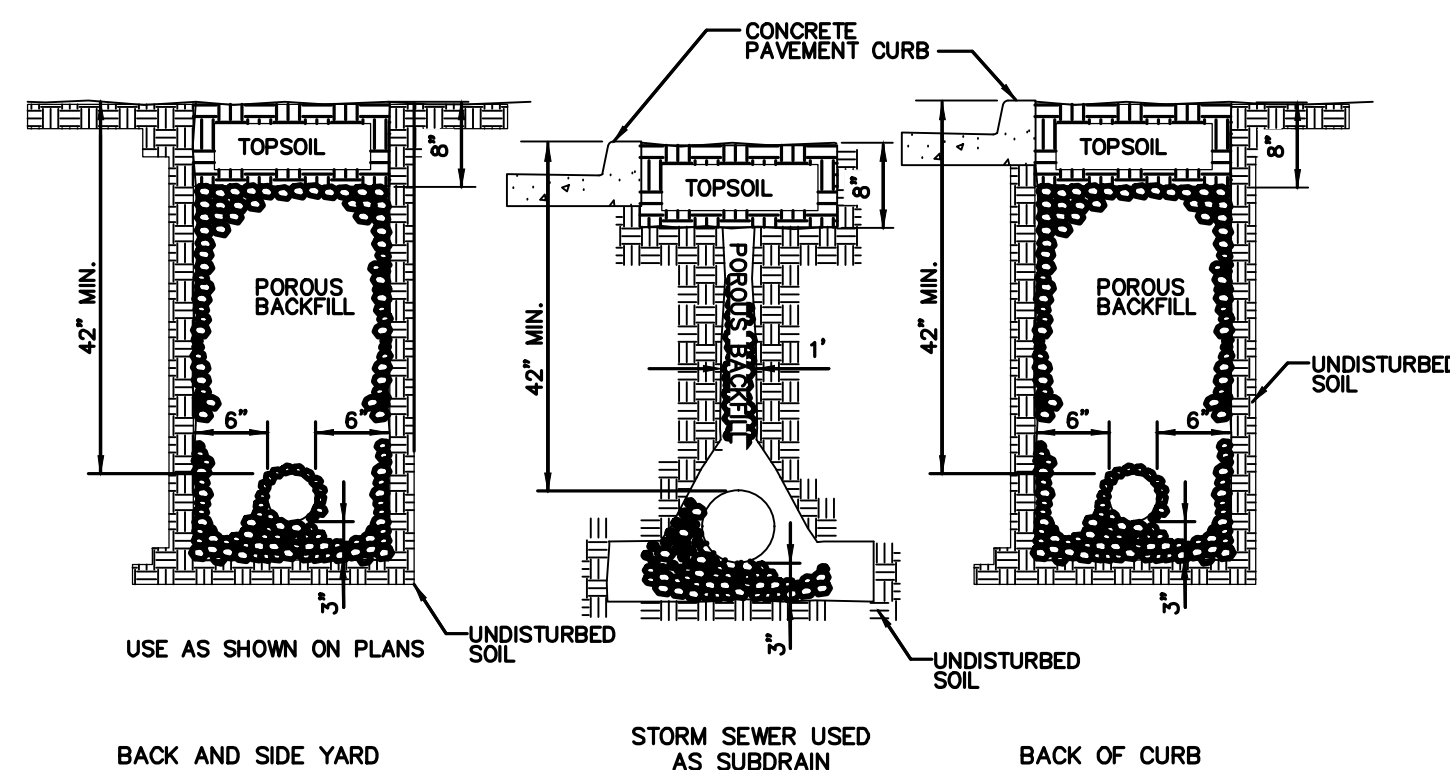
IOWA ONE CALL
1-800-292-8989 |
www.iowaonecall.com

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.

ERIN K. OLLENDIKE, P.E. DATE
LICENSE NUMBER 16926
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL SHEETS



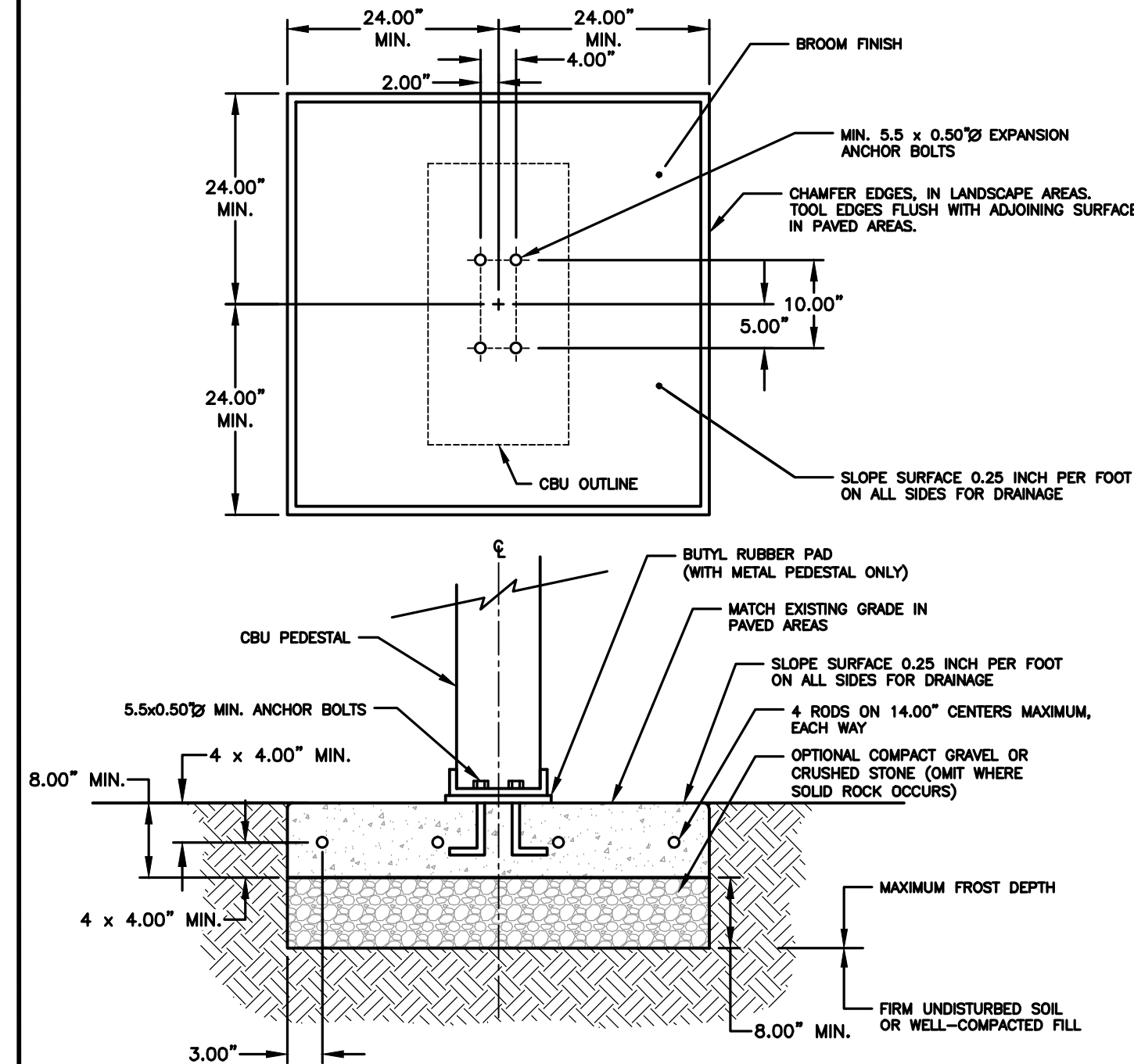
NOTE
CORE DRILL ALL STORM SEWER AND PLACE
NON-SHRINK GROUT COLLAR AT CONNECTION



NOTES

1. SLOPE SUBDRAINS TO DRAIN.
2. 6" BACK OF CURB SUBDRAINS AND ALL BACK AND SIDE YARD SUBDRAINS;USE PEA GRAVEL FOR POROUS BACKFILL.
3. DIRECT PERCOLATIONS DOWN FOR SUBDRAINS AND UP FOR SUMP PUMP COLLECTOR LINES.

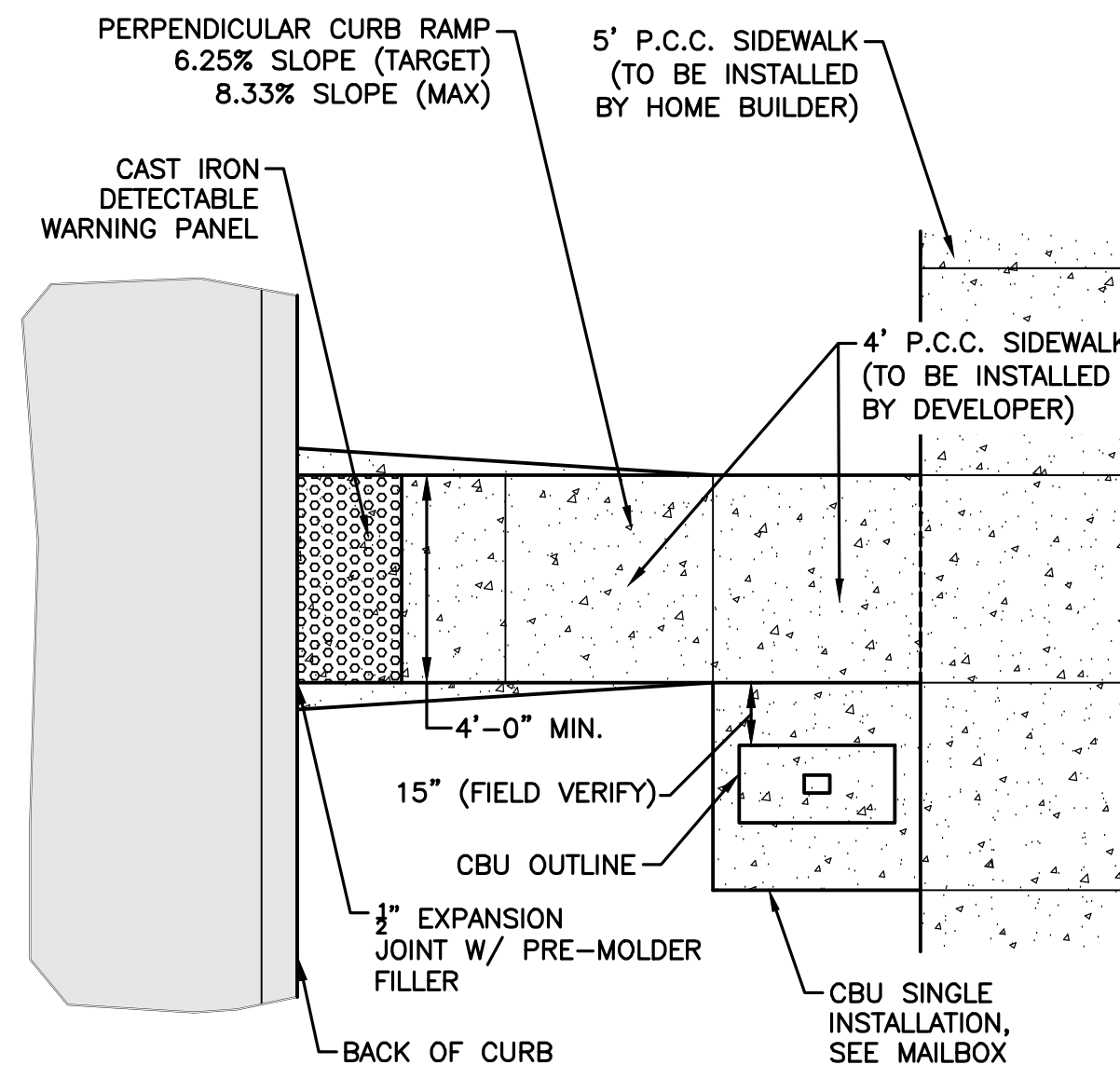
6" PERFORATED SUBDRAIN



- NOTES:**
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. ENTRAINMENT AND BE PLACED WITH A 3'-5" - 4'-0" SLUMP IN ACCORDANCE WITH ACI 301
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
3. ANCHORING BOLTS SHALL BE EQUIVALENT TO THAT PROVIDED FOR THE CONCRETE.
4. A. HILTI KWIK BOLT (WWW.HILTI.COM) 1/2" DIAMETER X 5-1/2" OVERALL LENGTH, GALVANIZED, CATALOG #00043-696 KIB 11 1/2-SI, STAINLESS STEEL: CATALOG #000-454-774. ENSURE THAT CONCRETE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4".
5. B. ITW RAMSEY REDHEAD TRUBOLT (WWW.RAMSEY-REDHEAD.COM) GALVANIZED, 1/2" DIAMETER X 7" OVERALL LENGTH, CATALOG #MS-12706. ENSURE THAT MIN. EMBEDMENT IS CONCRETE IS AT LEAST 4-1/8".
6. C. RAIL (W.WED) 1/2" DIAMETER X 7" OVERALL LENGTH, CATALOG NUMBER: 17784. ENSURE THAT MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4".

MAILBOX CLUSTER PAD DETAIL

NOT TO SCALE

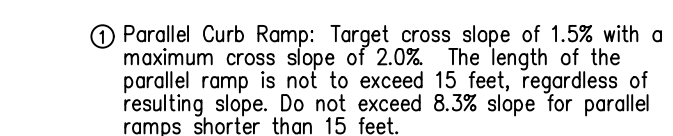


INSTALLATION NOTE:

1. MAILBOX PADS TO BE INSTALLED WITH THE PLAT IMPROVEMENTS.
2. CLUSTER MAILBOX TO BE LOCATED ON THE NO PARKING/STREET LIGHT SIDE OF STREET.
3. DO NOT LOCATE AT INTERSECTION.
4. LOCATE NEAR SHARED PROPERTY LINE PER APPROVED PLAN.
5. DETERMINE SIDEWALK SIDE OF MAILBOX PAD ELEVATION ASSUMING CONSTANT 4% SLOPE FROM BACK OF CURB TO SIDEWALK SIDE OF MAILBOX PAD. RESULTING SLOPE FROM BACK OF CURB TO STREET SIDE OF MAILBOX PAD WILL BE GREATER THAN 4%. FOR EXAMPLE, FOR A 29' WIDE PAVEMENT WITH A 60' WIDE R.O.W. AND A 2% MAILBOX PAD CROSS SLOPE, THE RESULTING SLOPE FROM THE BACK OF CURB TO THE STREET SIDE OF MAILBOX PAD IS 6.2%.

MAILBOX PAD DETAIL

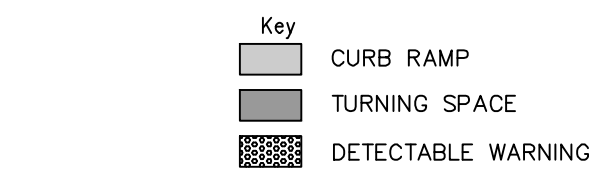
NOT TO SCALE



- ② **Turning Space:** Target slope of 1.5% with a maximum slope perpendicular to the travel directions of 2.0%. At mid-block crossings, cross slope of landing may exceed 2.0% to match the roadway grade. Minimum 5 feet by 5 feet.

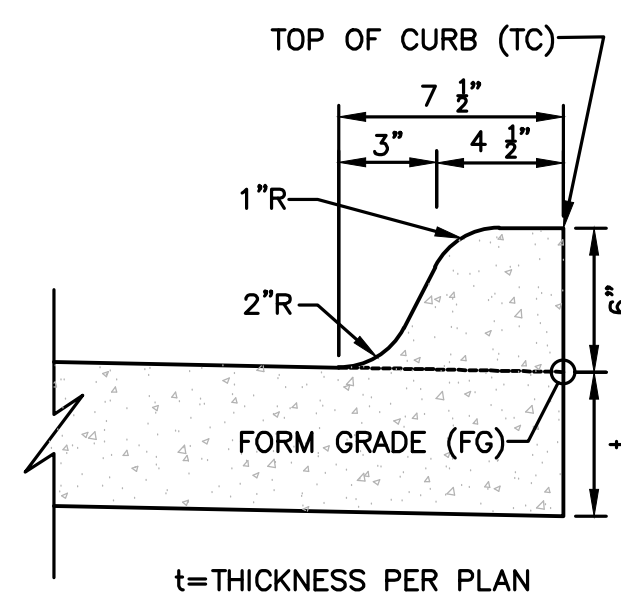
- ③ Target cross-slope of 1.5% with a maximum cross-slope of 2.0%
- ④ Perpendicular curb ramp: Target running slope of 6.25% with maximum running slope of 8.3%

The minimum pavement depth for ramps and landings shall be 6-inches.



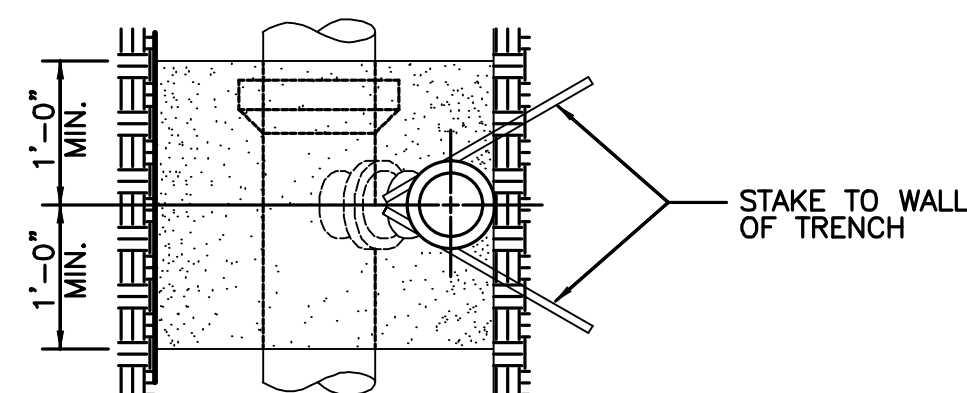
CURB RAMP FOR CLASS B OR C SIDEWALKS

NOT TO SCALE ONE = ONE CENTIMETER

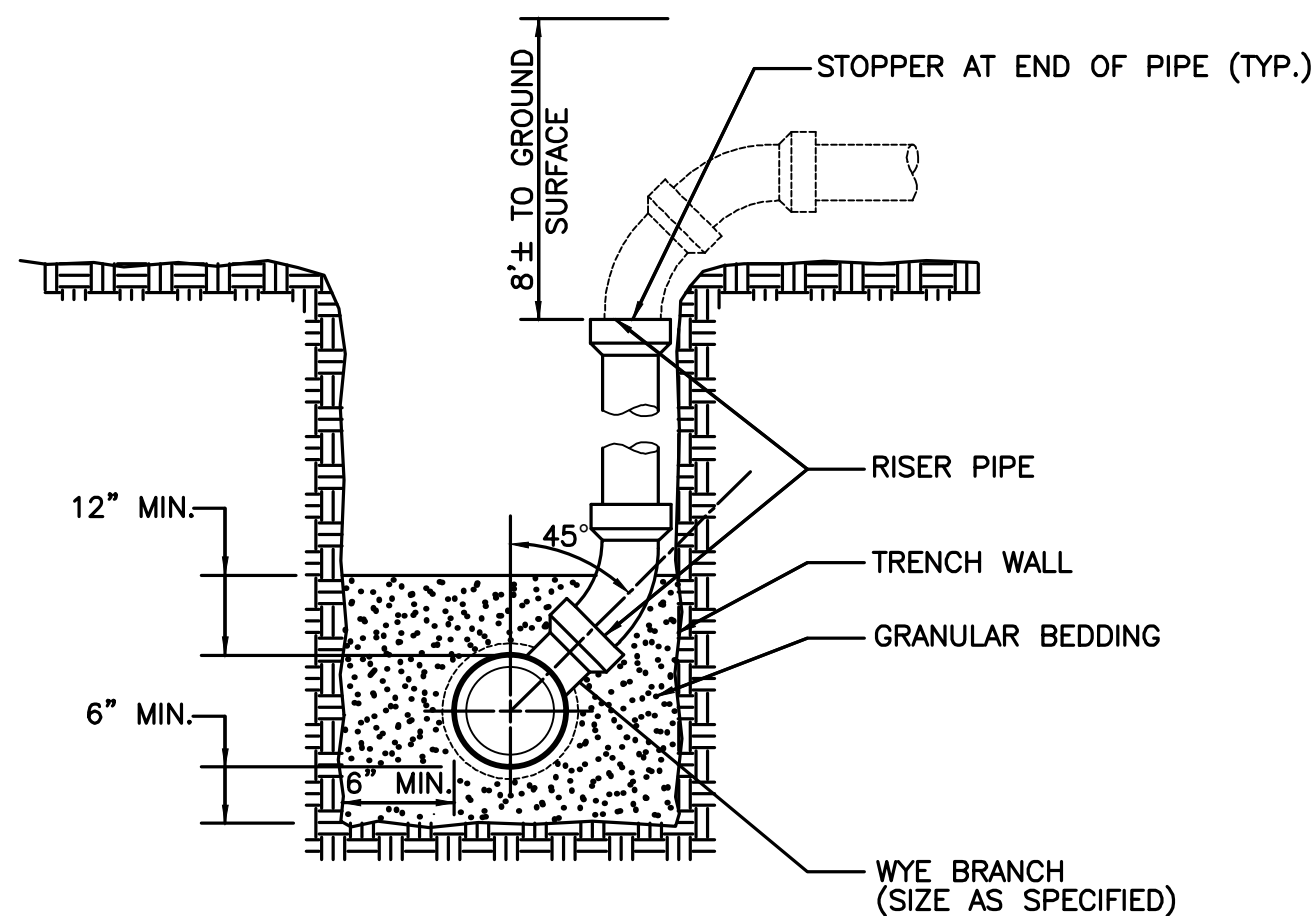


INTEGRAL 6" STANDARD SPOT ELEVATION REFERENCE DETAIL

NOT TO SCALE



PLAN



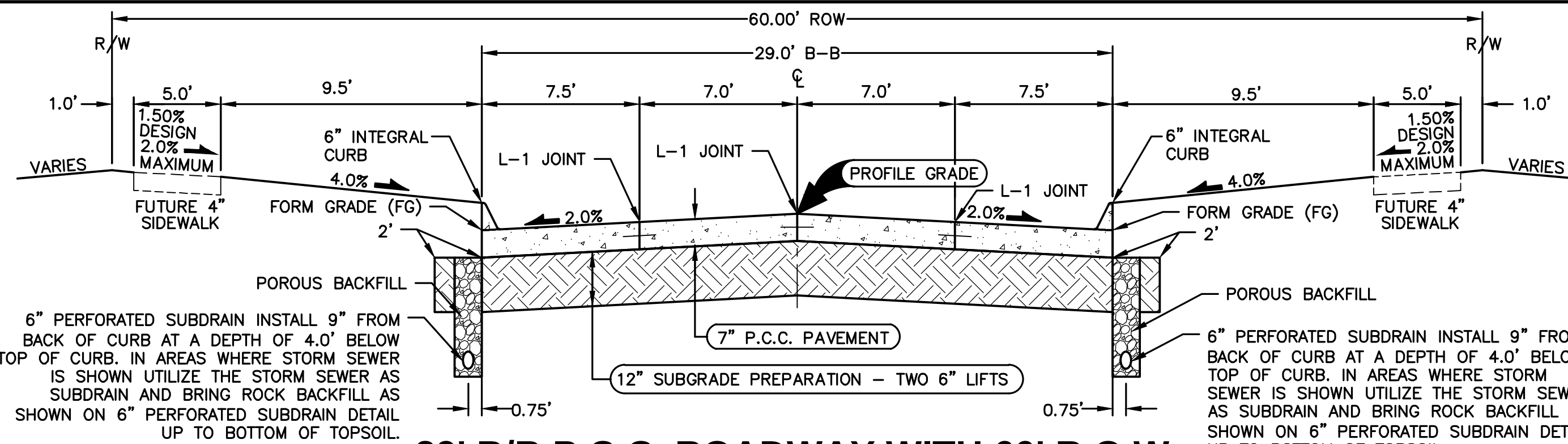
SECTION

- ## NOTES

1. INSTALL RISER TO BEAR FIRMLY AGAINST UNDISTURBED WALL OF TRENCH. STAKE RISER PIPE IN PLACE PRIOR TO BACK-FILLING TO PREVENT MOVEMENT OF PIPE
2. NOTCH WALL OF TRENCH TO RECEIVE PIPE WHERE POSSIBLE.

SANITARY SEWER SERVICE RISER

NOT TO SCALE

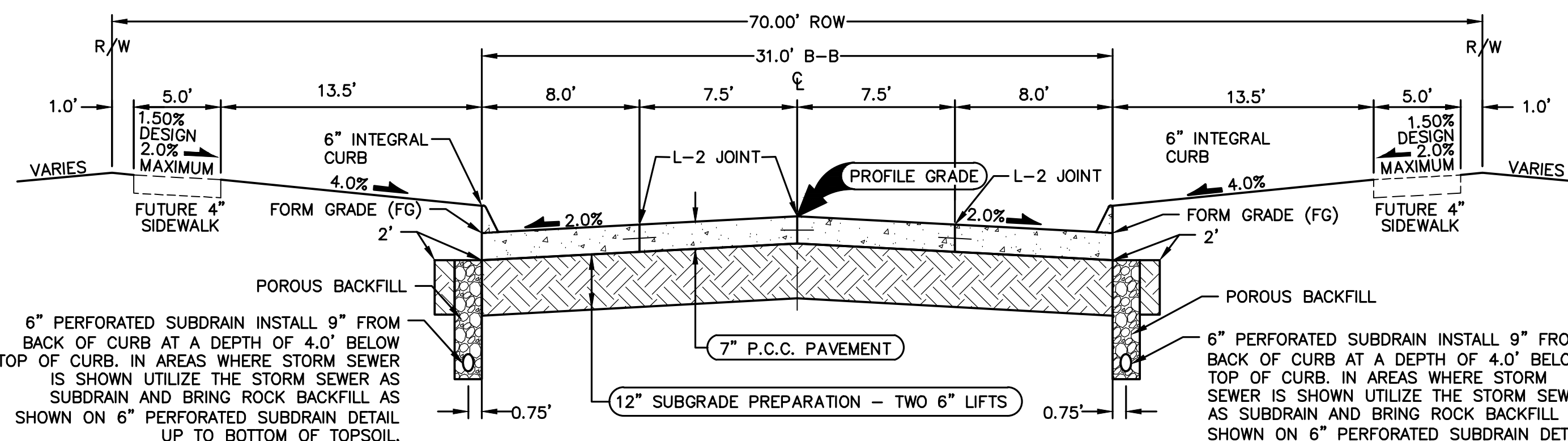


29' B/B P.C.C. ROADWAY WITH 60' R.O.W.

NOT TO SCALE

SE KETTLERIDGE LANE, SE RED FERN LANE

- NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
 2. MAXIMUM C JOINT SPACING IS 15'.

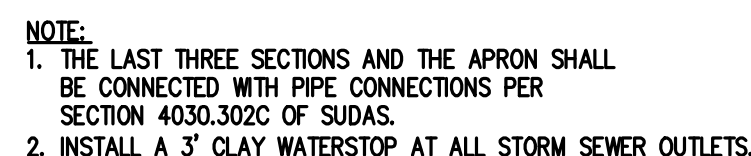
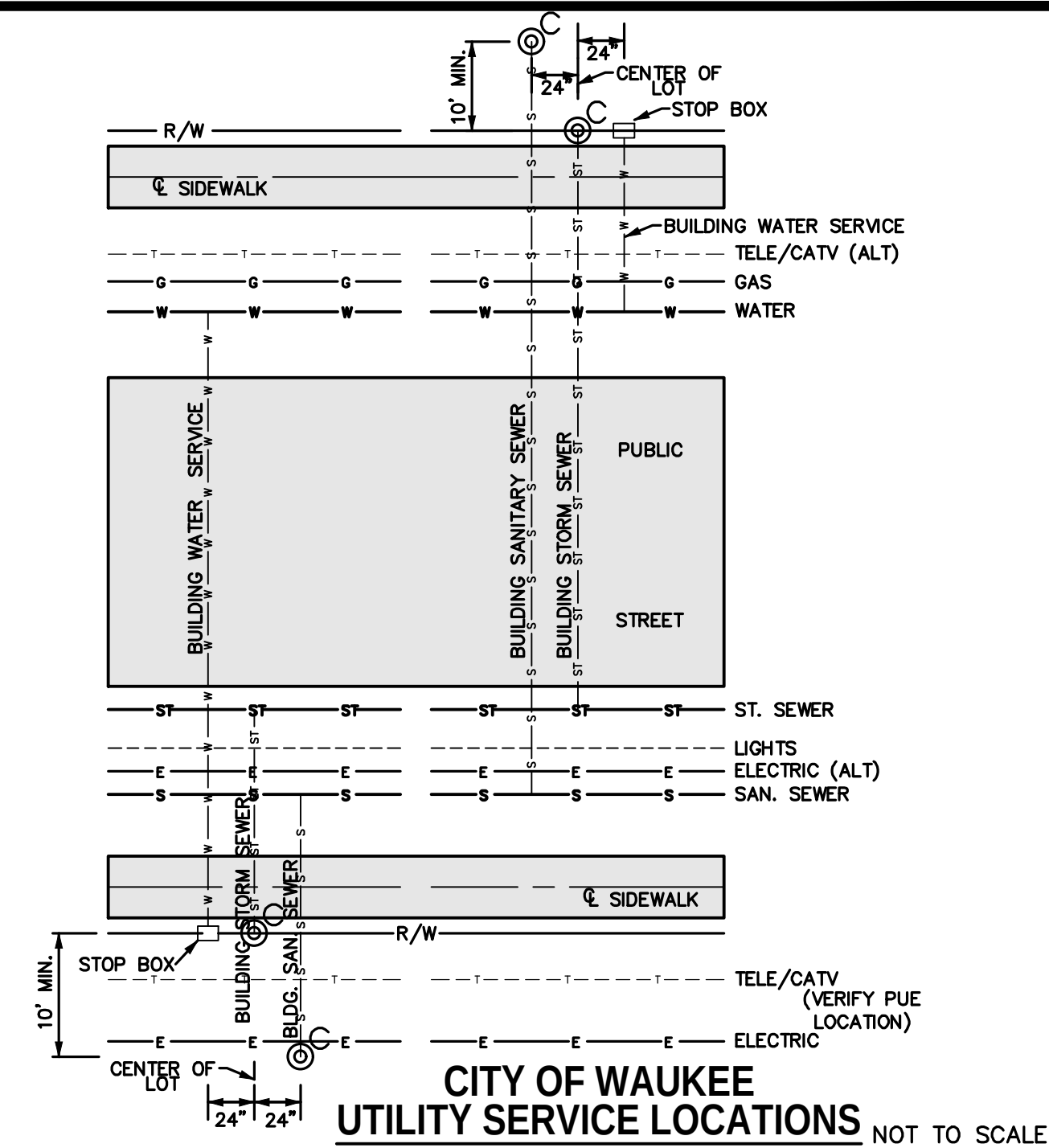
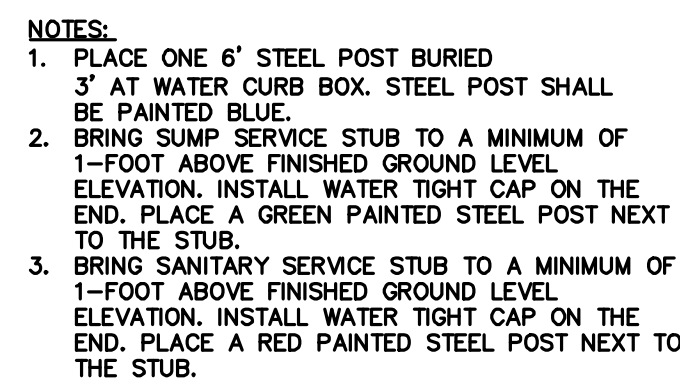


- NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
 2. MAXIMUM CD JOINT SPACING IS 15'.

31' B/B P.C.C. ROADWAY WITH 70' R.O.W.

NOT TO SCALE

SE FLORENCE DRIVE



NOTES:

1. D=DIFFERENCE IN ELEVATION BETWEEN FLARED END INVERT AND DRAINAGE WAY CHANNEL FLOW LINE 300' TO 400' DOWNSTREAM FROM FLARED END MINIMUM D=42"
2. INSTALL 3" WIDE CLAY WATERSTOP AT FLARED END SECTION JOINT.
3. TRASH GUARDS ARE NOT ALLOWED ON PIPES 48" OR LARGER.

REINFORCING BAR LIST

D	W	Mark	Size	Length	Count	D	W	Mark	Size	Length	Count
12"	2'-4"	4f1	4	2'-8"	3	48"	7'-10"	4f1	4	7'-6"	3
		4f2	4	3'-8"	2			4f2	4	3'-8"	3
		4f1	4	2'-6"	3			4f2	4	8'-1"	3
15"	2'-10"	4f2	4	3'-8"	2	54"	8'-5"	4f2	4	3'-8"	6
		4f1	4	3'-1"	3			4f1	4	8'-7"	3
18"	3'-5"	4f2	4	3'-8"	3	60"	8'-11"	4f2	4	3'-8"	6
		4f1	4	4'-2"	3			4f1	4	8'-7"	3
24"	4'-6"	4f2	4	3'-8"	3	66"	8'-11"	4f2	4	3'-8"	6
		4f1	4	5'-3"	3			4f1	4	9'-8"	3
30"	5'-7"	4f2	4	3'-8"	4	72"	10'-0"	4f2	4	3'-8"	7
		4f1	4	6'-4"	3			4f1	4	10'-3"	7
36"	6'-8"	4f2	4	3'-8"	5	78"	10'-7"	4f2	4	3'-8"	7
		4f1	4	6'-11"	3			4f1	4	10'-9"	3
42"	7'-3"	4f2	4	3'-8"	5	84"	11'-1"	4f2	4	7'-8"	8

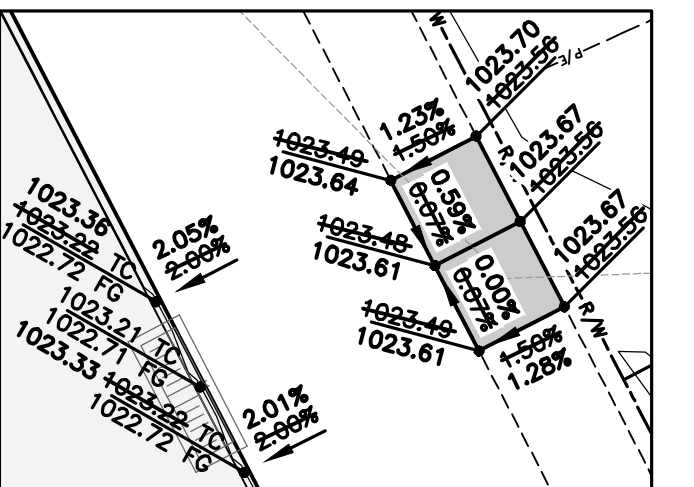
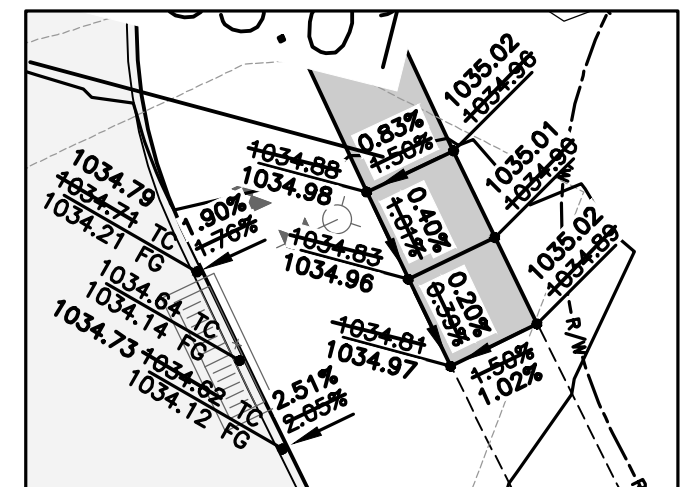
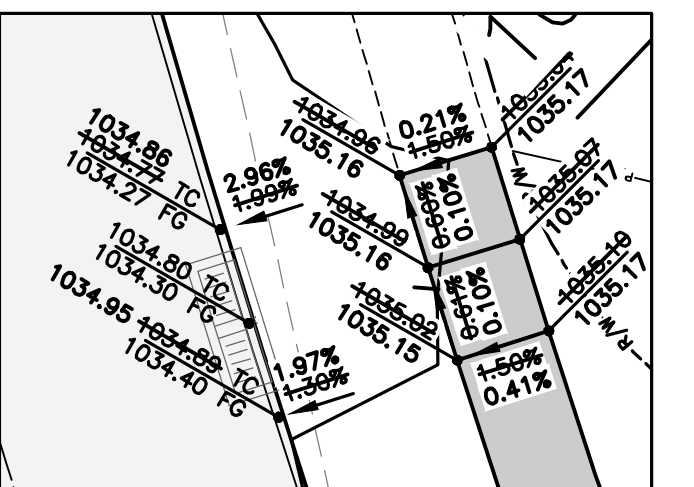
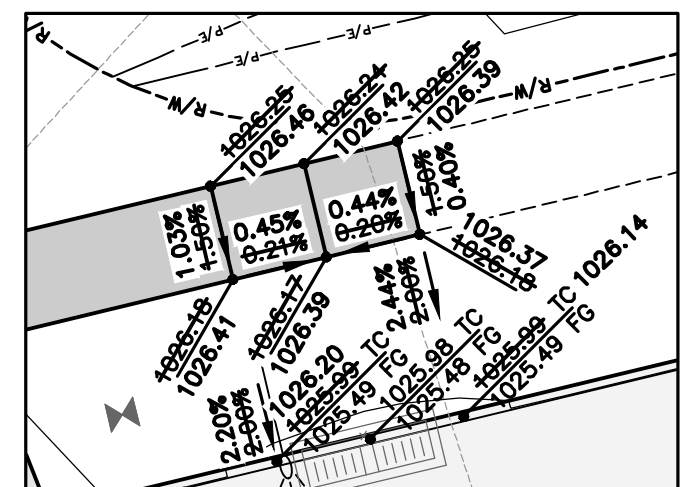
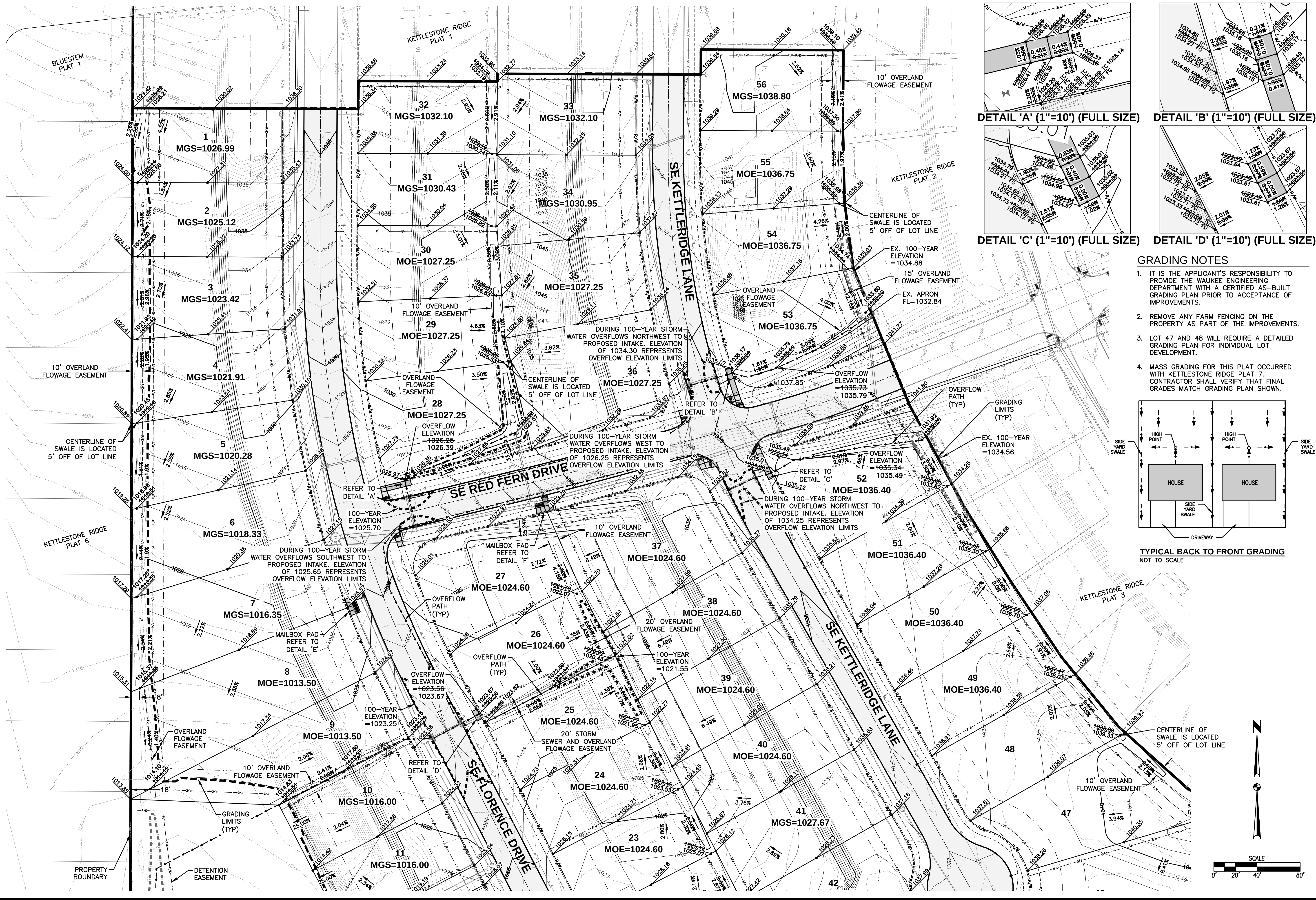
ESTIMATE REFERENCE INFORMATION	
Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.	
ITEM NO.	DESCRIPTION
27-30	REFER TO FIG. 6010.514 - BOXOUTS FOR GRATE INTAKES. REFER TO FIG. 6010.603 - CASTINGS FOR GRATE INTAKES FOR TYPE R GRATE DETAILS AND FIG. 6010.602 - CASTINGS FOR STORM SEWER MANHOLES FOR TYPE E CASTING DETAILS. THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR INTAKE CASTINGS IS 6". THE MAXIMUM HEIGHT OF ADJUSTING RINGS ALLOWED FOR MANHOLE CASTINGS IS 12".
27	REFER TO FIG. 6010.501 - SINGLE GRATE INTAKE (SW-501) FOR CONSTRUCTION DETAILS.
28	REFER TO FIG. 6010.503 - SINGLE GRATE INTAKE WITH MANHOLE (SW-503) FOR CONSTRUCTION DETAILS.
29	REFER TO FIG. 6010.505 - DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS
30	REFER TO FIG. 6010.506 - DOUBLE GRATE INTAKE WITH MANHOLE (SW-506) FOR CONSTRUCTION DETAILS.
31	REFER TO SHEET 3 FOR DETAILS.
32	REFER TO FIG. 7010.101 - JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM C JOINT SPACING IS 15 FEET.
33	REFER TO FIG. 7030.204 - GENERAL SIDEWALK AND ACCESSIBLE RAMP DETAILS AND FIG. 7030.208 - CURB RAMPS WITHIN INTERSECTION RADIUS FOR CLASS B OR C SIDEWALK FOR CONSTRUCTION DETAILS. DETECTABLE WARNING PANELS TO BE CAST IRON WITH A NATURAL FINISH. ACCESSIBLE CURB RAMPS INCLUDING TURNING SPACES SHALL BE 6" THICK P.C.C.
35	REFER TO SHEET 4 FOR CONSTRUCTION DETAILS. ALL TRUNCATED DOMES SHALL BE CAST IRON WITH A NATURAL FINISH COLOR.
36	THE SITE SEEDING SHALL CONFORM TO THE SPECIFICATION FOR TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE. SEEDING QUANTITIES -TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 15.83 AC
37	ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED. THE MESSAGE BOARD WILL BE REQUIRED AT LEAST 1 WEEK IN ADVANCE OF ANY LANE CLOSURES.
38	REFER TO SHEETS 8 AND 9 FOR EROSION AND SEDIMENT CONTROLS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS.
39	REFER TO SANITARY AND STORM SEWER PLAN AND PROFILE SHEETS FOR LOCATIONS.
40	REFER TO SHEET 2 FOR CONSTRUCTION DETAILS. MAILBOX PADS ARE LOCATED BETWEEN LOTS 7/8 AND 27/37.
41	REFER TO SANITARY AND STORM SEWER PLAN AND PROFILE SHEETS FOR LOCATIONS.

GENERAL NOTES

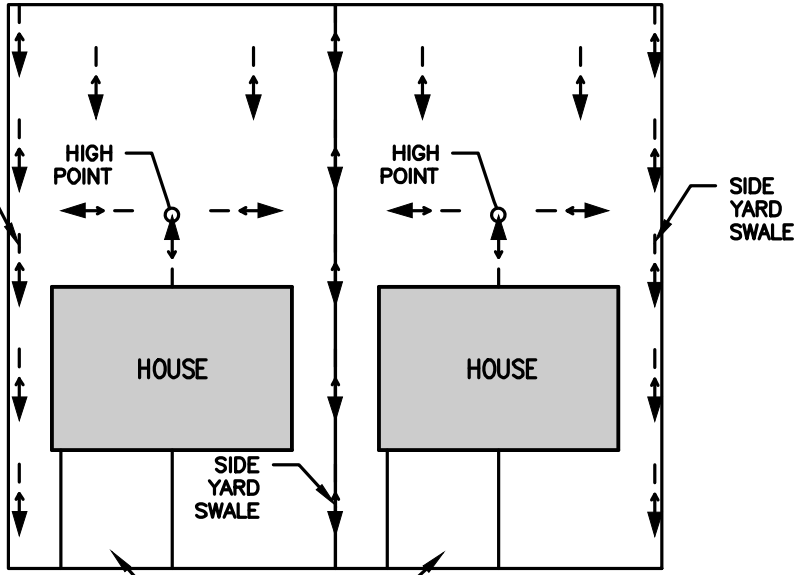
1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND TO THE 2021 EDITION OF SUDAS STANDARD SPECIFICATIONS. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IF ANY DISCREPANCIES.
2. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
3. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING HIS EQUIPMENT ON THE PAVEMENT OR SIDEWALK. PAVEMENT REPLACEMENT SHALL COMPLY WITH THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DEVICES.
6. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE PROPOSED AND EXISTING RIGHT OF WAY, CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HRS NOTICE) THE FOLLOWING:
- A. CITY OF WAUKEE ENGINEERING DEPARTMENT
 - B. APPROPRIATE UTILITY COMPANIES
 - C. OWNER
 - D. CIVIL DESIGN ADVANTAGE
- * 48 HOUR NOTICE SHALL BE GIVEN TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO WEEKEND AND HOLIDAY WORK.
12. PLAN AND PROFILE SHEETS INCLUDED IN THE PROJECT ARE FOR THE PURPOSE OF ALIGNMENT, LOCATION AND SPECIFIC DIRECTIONS FOR WORK TO BE PERFORMED UNDER THIS CONTRACT. IRRELEVANT DATA ON THESE SHEETS IS NOT TO BE CONSIDERED A PART OF THIS CONTRACT.
13. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
14. THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH AND COMPLY WITH OSHA STANDARDS. NOTHING WITHIN THESE PLANS SHALL RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.
15. ALL MATERIAL TESTING SHALL BE CONSIDERED INCIDENTAL TO OTHER CONSTRUCTION.
16. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
17. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
18. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
19. SIDEWALKS, ACCESSIBLE CURB RAMPS AND SIDEWALK RAMPS INCLUDING RAISED TRUNCATED DOME AND DETECTABLE WARNINGS AND WARNING PANELS SHALL BE DESIGNED AND INSTALLED TO THE LATEST P.R.O.W.A.G. AND A.D.A. REQUIREMENTS.
20. PLACE 3/4" EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDINGS. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C PAVEMENT. THE PCC RAMP JOINT LOCATED AT THE BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SEALED.
21. REMOVE DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY AND BEFORE RAIN EVENTS.
22. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE R.O.W.
23. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
24. IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.

25. ALL FIELD TILES ENCOUNTERED SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE. LOCATIONS SHALL BE PROVIDED TO THE ENGINEER FOR NOTATION ON AS-BUILTS.
26. ALL CONSTRUCTION STAKING TO BE COMPLETED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR. ALL CURB DROPS AND SIDEWALK/SHARED USE PATH SHALL ALSO BE STAKED UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR
27. THE CONTRACTOR SHALL SUBMIT A LIST OF CONSTRUCTION MATERIALS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
28. A GEOTECHNICAL ENGINEER SHALL BE ONSITE DURING CONSTRUCTION AND FOR PROOF ROLLING TO INSPECT SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE GEOTECHNICAL ENGINEER IS PRESENT. A COPY OF ALL REPORTS AND FINDINGS REQUIRING ALTERATION FROM THE APPROVED PLANT SET IS TO BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.
29. THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
30. ALL TESTING SHALL BE COMPLETED ACCORDING TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE WAUKEE ENGINEERING DEPARTMENT SHALL BE PRESENT TO WITNESS ALL TESTING.
31. AS-BUILTS SHALL BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT INCLUDING ALL UTILITIES AND AS-BUILT GRADES FOR DRAINAGE SWALES, OVERFLOWS, ACCESSIBLE RAMPS AND DETENTION FACILITIES. THE CONTRACTOR SHALL PROVIDE INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION ON THE RECORD AS-BUILT DRAWINGS.
32. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISIONING ALL STORM AND SANITARY SEWERS. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS AND APPROVE ALL CLEANING AND TELEVISIONING PRIOR TO PAVING. A COPY OF THE VIDEOS AND A HARD COPY OF THE INSPECTION REPORT SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT. ALL SANITARY SEWER MANHOLES ARE TO BE VACUUM TESTED.
33. ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE 5-INCH STORZ FITTINGS.
34. ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
35. ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
36. ANY FIELD FENCE LOCATED WITHIN THE PROPERTY IS TO BE REMOVED.
37. ALL EXISTING AND PROPOSED MANHOLES SHALL HAVE A MINIMUM OF 1 - 4" ADJUSTING RING TO ALLOW FOR FUTURE ADJUSTMENT SHOULD THE STRUCTURE END UP IN A DRIVEWAY.
38. THE RESULTS OF THE GEOTECHNICAL EXPLORATION ARE TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT AND THE PLAN IS SUBJECT TO ANY CHANGES REQUIRED BY THE REPORT.
39. THIS SITE WILL HAVE SAWCUTTING AND CONCRETE GRINDING SO PROTECTION OF STORM SEWERS AND DRAINAGE WAYS FROM SLURRY WILL NEED TO OCCUR FOR ALL OFFSITE DISCHARGE.



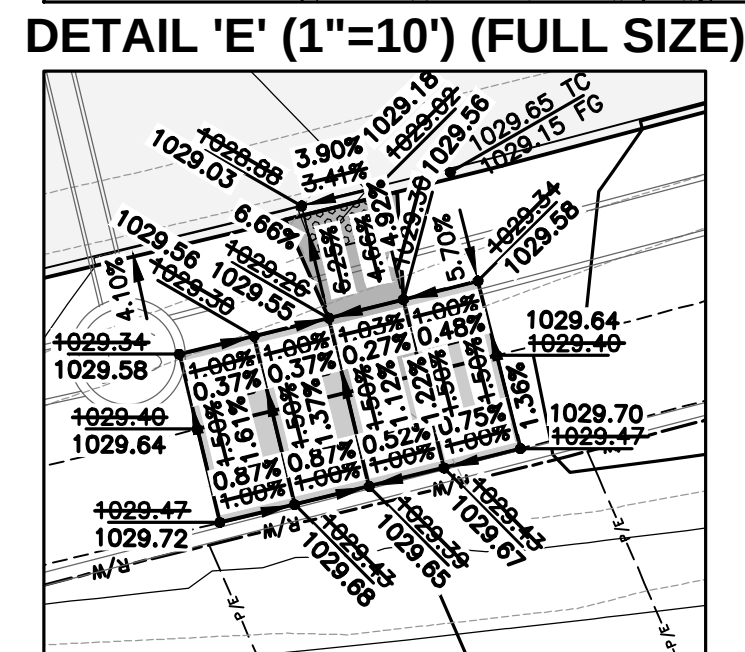
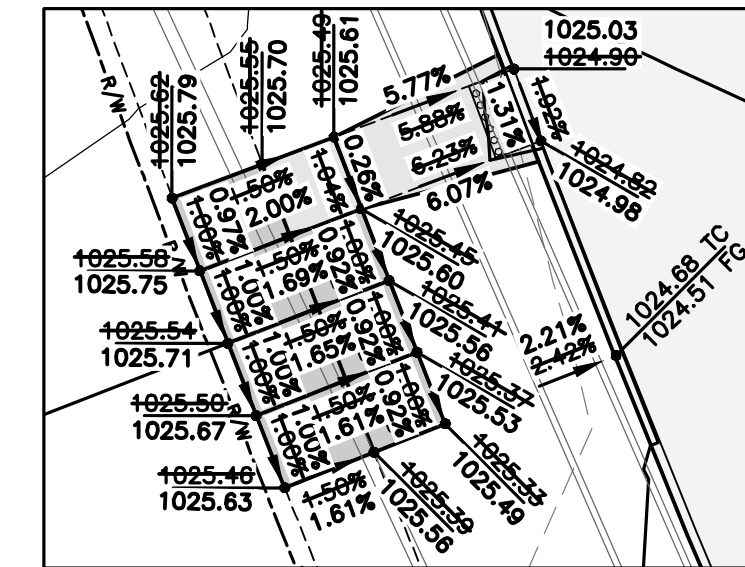
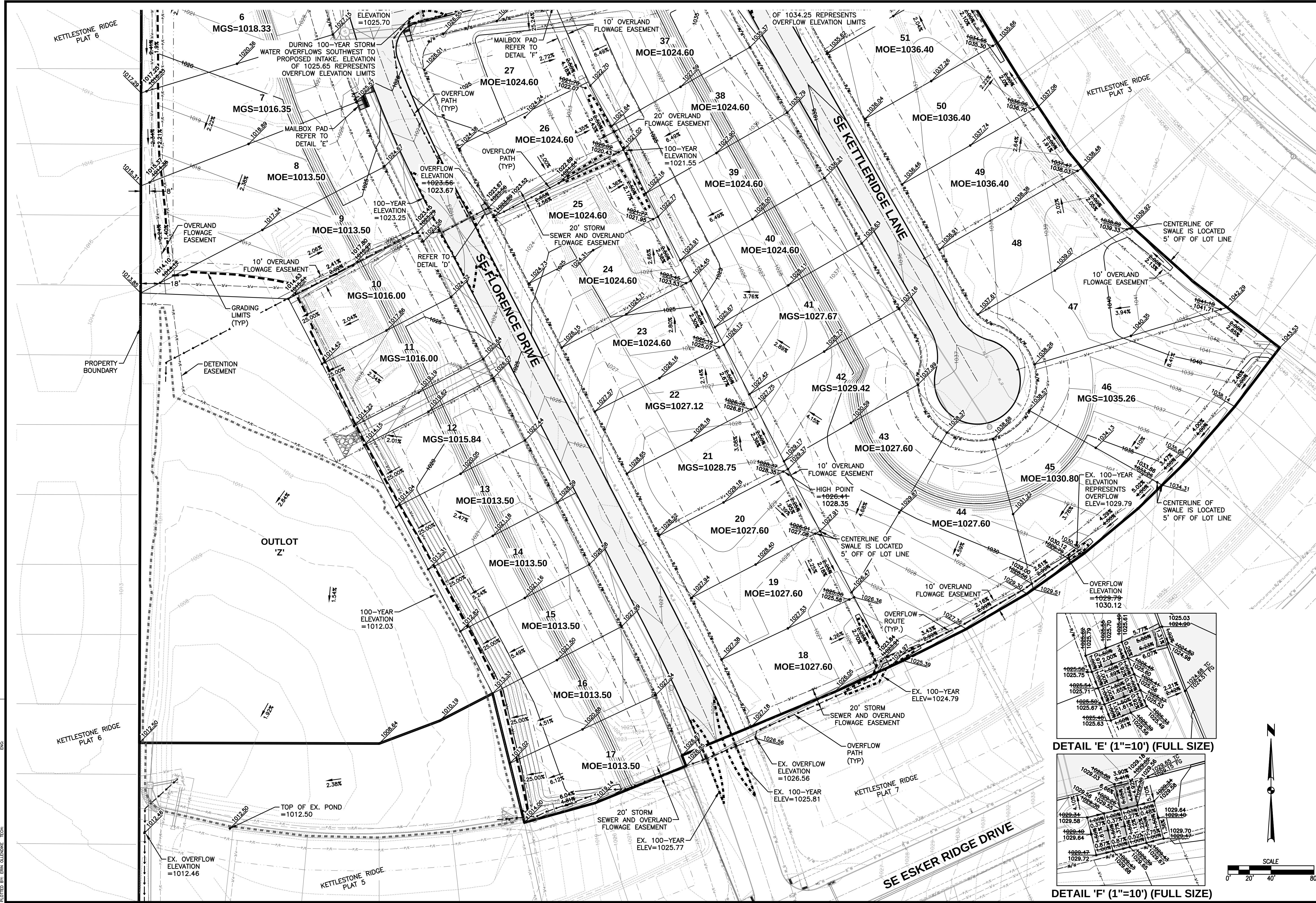


- GRADING NOTES**
- IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE THE WAUKEE ENGINEERING DEPARTMENT WITH A CERTIFIED AS-BUILT GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.
 - REMOVE ANY FARM FENCING ON THE PROPERTY AS PART OF THE IMPROVEMENTS.
 - LOT 47 AND 48 WILL REQUIRE A DETAILED GRADING PLAN FOR INDIVIDUAL LOT DEVELOPMENT.
 - MASS GRADING FOR THIS PLAT OCCURRED WITH KETTLESTONE RIDGE PLAT 7. CONTRACTOR SHALL VERIFY THAT FINAL GRADES MATCH GRADING PLAN SHOWN.



TYPICAL BACK TO FRONT GRADING
NOT TO SCALE

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CHECKED BY: ERM/DAVIDSON
DATE: 7/17/2023 10:14 AM



DATE		REVISIONS	
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08/18/2021	FINAL SUBMITTAL		
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06/15/2021	FIRST SUBMITTAL		

4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO EI: GH/JWM TECH: BDH

CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

KETTLESTONE RIDGE PLAT 8
GRADING PLAN

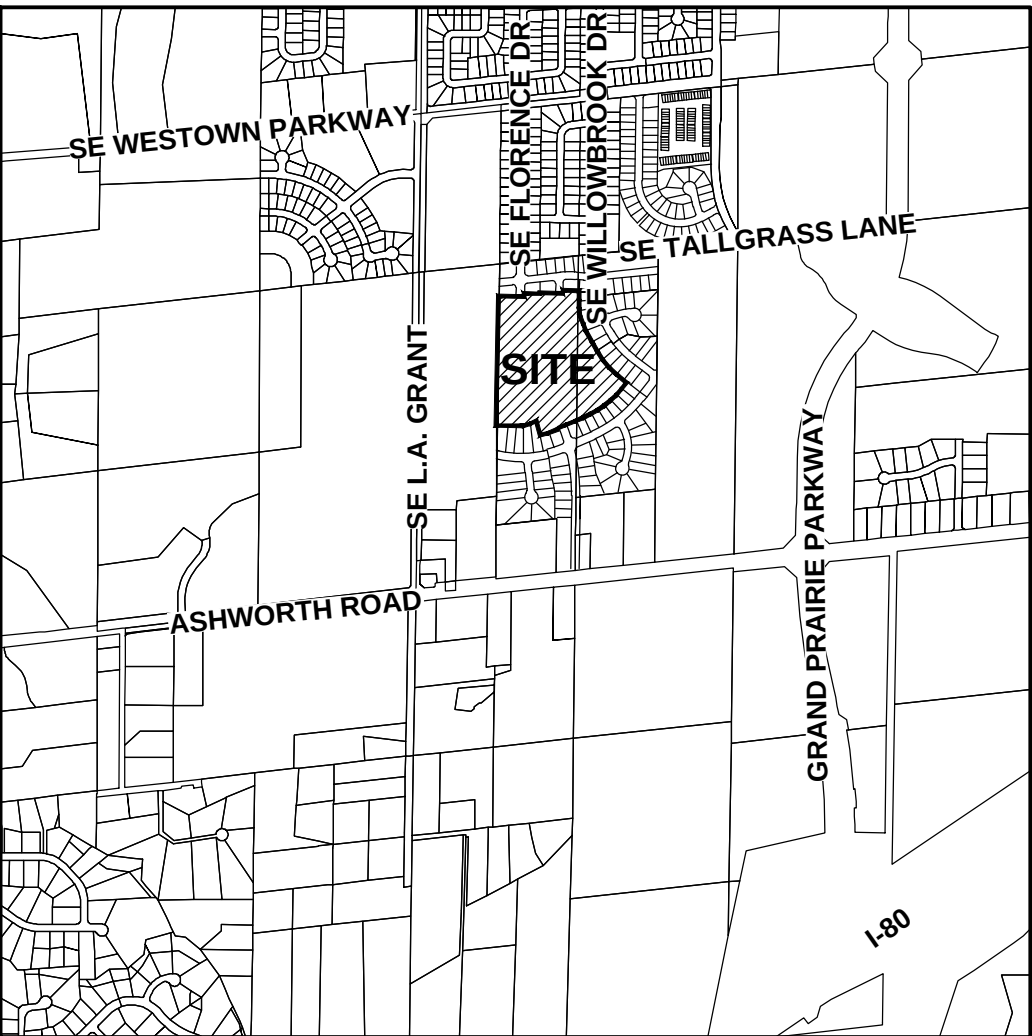
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KETTLESTONE RIDGE PLAT 8

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,950
2	DITCH CHECKS	LF	1,188
3	SEEDING, FERTILIZING, AND MULCHING	AC	15.83
4	INLET PROTECTION DEVICES	EA	14
5	CONCRETE WASHOUT PIT	EA	1

DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 +1,400 FEET TO AN UNNAMED TRIBUTARY OF SUGAR CREEK

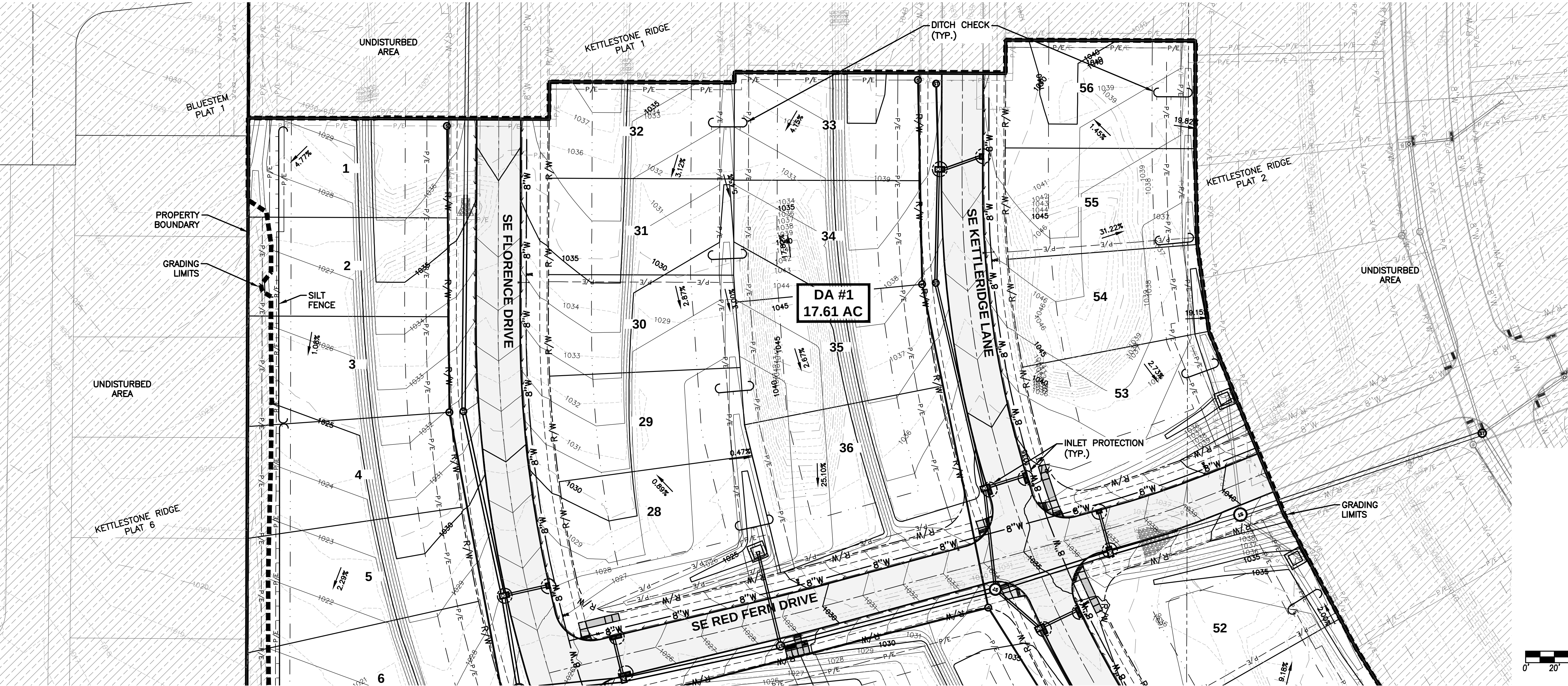
TOTAL AREA DISTURBED TO DISCHARGE POINT	17.61 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	63,410 CU FT
VOLUME PROVIDED IN SILT FENCE (1950 LF @ 10 CU FT/LF OF FENCE)	19,500 CU FT
VOLUME PROVIDED IN DITCH CHECK (1188 LF @ 15 CU FT/LF)	17,820 CU FT
VOLUME PROVIDED IN EXISTING PLAT 5 TSB	28,721 CU FT
TOTAL VOLUME PROVIDED	66,041 CU FT

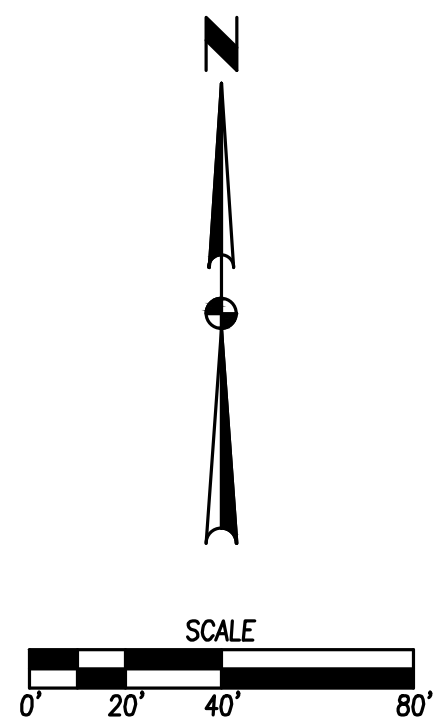
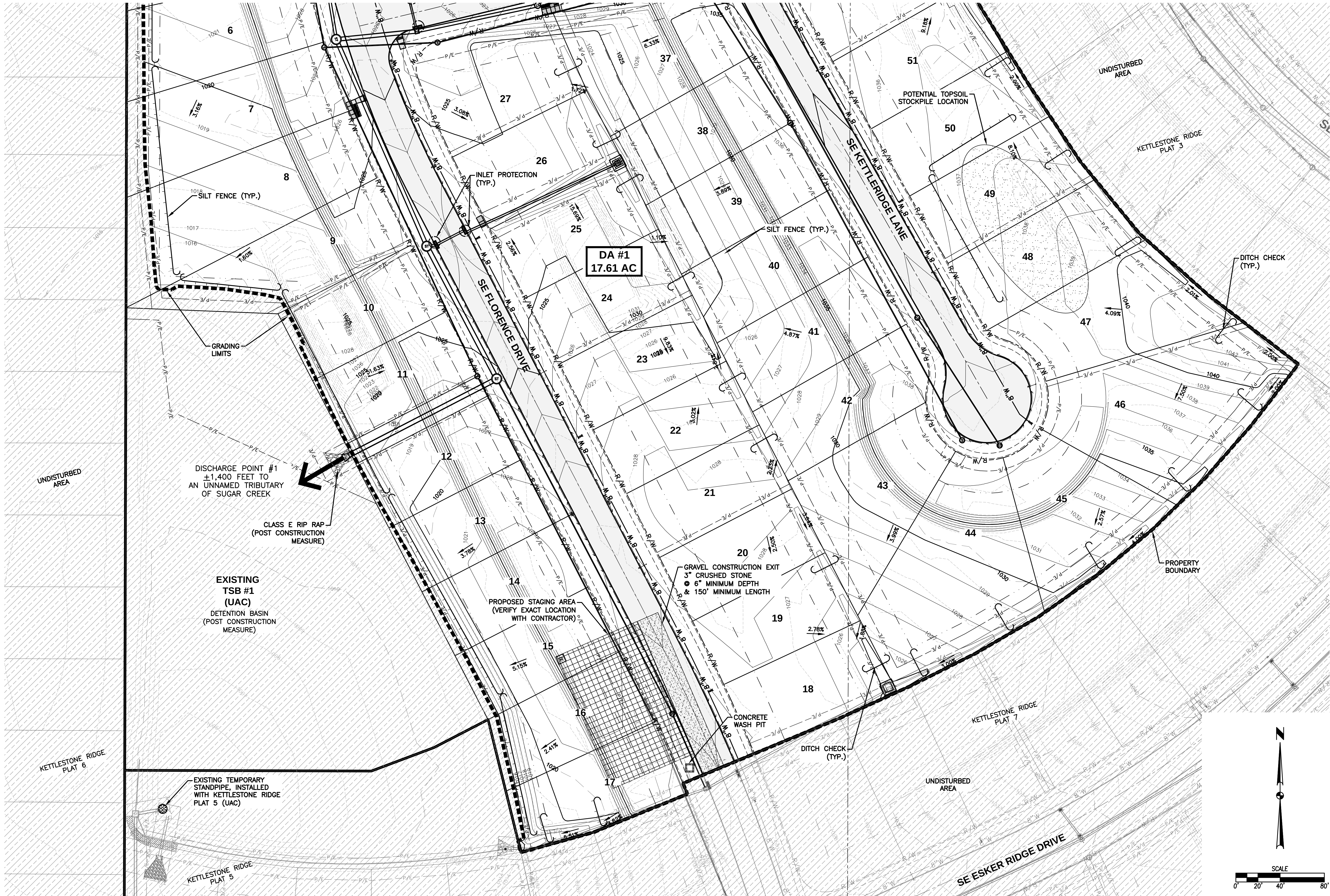
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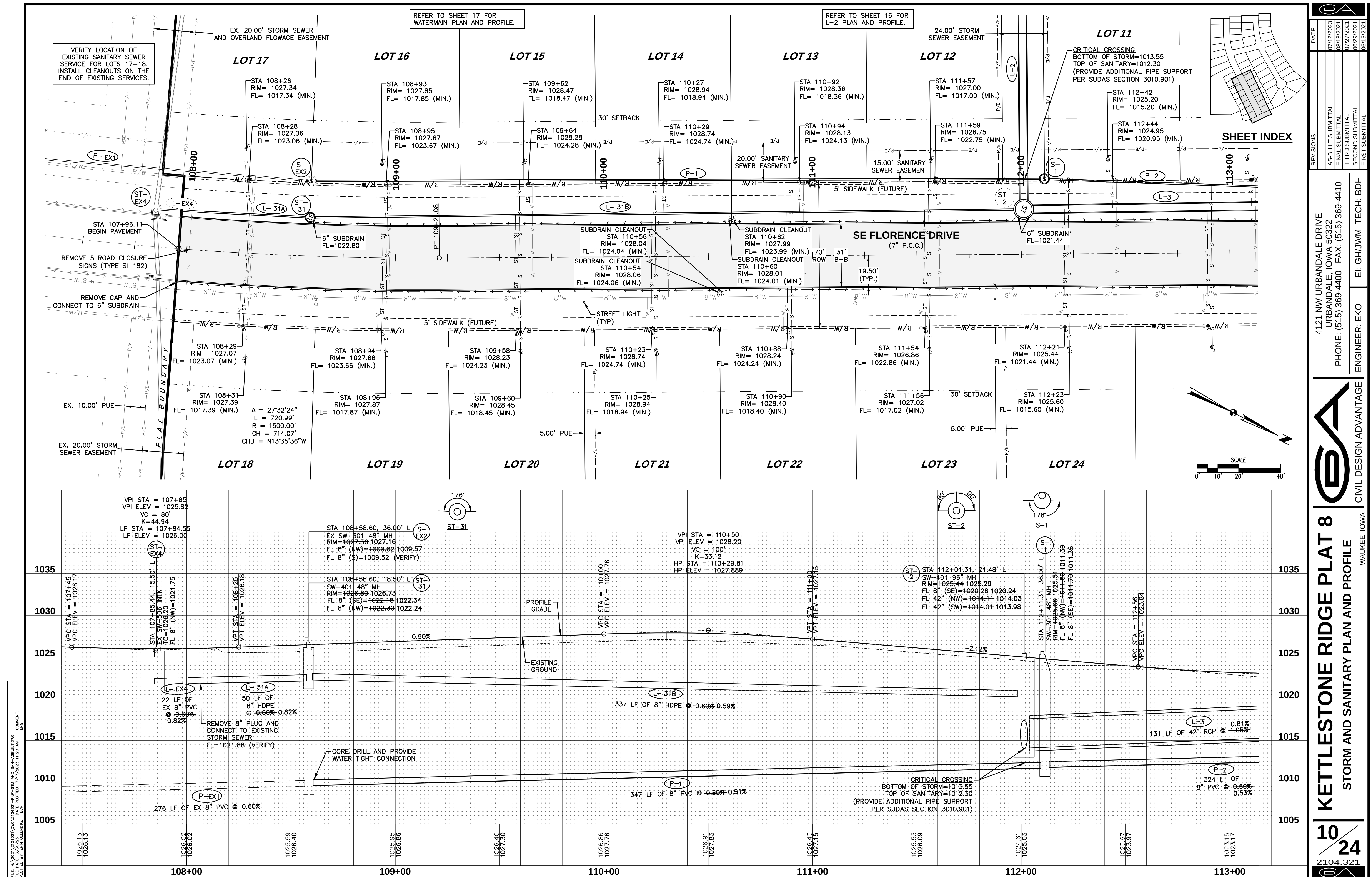
DRAINAGE ARROW		UNDISTURBED AREA	
GRADING LIMITS		RIP-RAP	
FILTER SOCK		GRAVEL ENTRANCE	
SILT FENCE		STAGING AREA	
DITCH CHECK		CONCRETE WASHOUT PIT	
INLET PROTECTION		TEMPORARY SEDIMENT BASIN	
PORTABLE RESTROOM			
TEMPORARY STANDPIPE			

NOTES:

- IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
- DISTURBED AREAS SHALL BE TEMPORARILY SEEDED OR MULCHED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
- STORM SEWERS AND DRAINAGE WAYS SHALL BE PROTECTED FROM CONCRETE SLURRY PRODUCED BY SAWCUTTING AND CONCRETE GRINDING.
- SHOULD A TEMPORARY SEED MIX BE REQUIRED IT SHALL CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENTS AND SHALL BE A SUDAS TYPE 4 TEMPORARY SEED MIX.









KETTLESTONE RIDGE PLAT 8

STORM AND SANITARY PLAN AND PROFILE

WAUKEE, IOWA



2104.321

10/24



CIVIL DESIGN ADVANTAGE



4121 NW URBANDALE DRIVE

URBANDALE, IOWA 50322

PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: EKO

EI: GH/JWM TECH: BDH

DATE

07/12/2023

07/13/2023

07/15/2023

07/27/2023

08/29/2023

09/19/2023

AS-BUILT SUBMITTAL

FINAL SUBMITTAL

FIRST SUBMITTAL

SECOND SUBMITTAL

FIRST SUBMITTAL

REVISIONS

DATE

07/12/2023

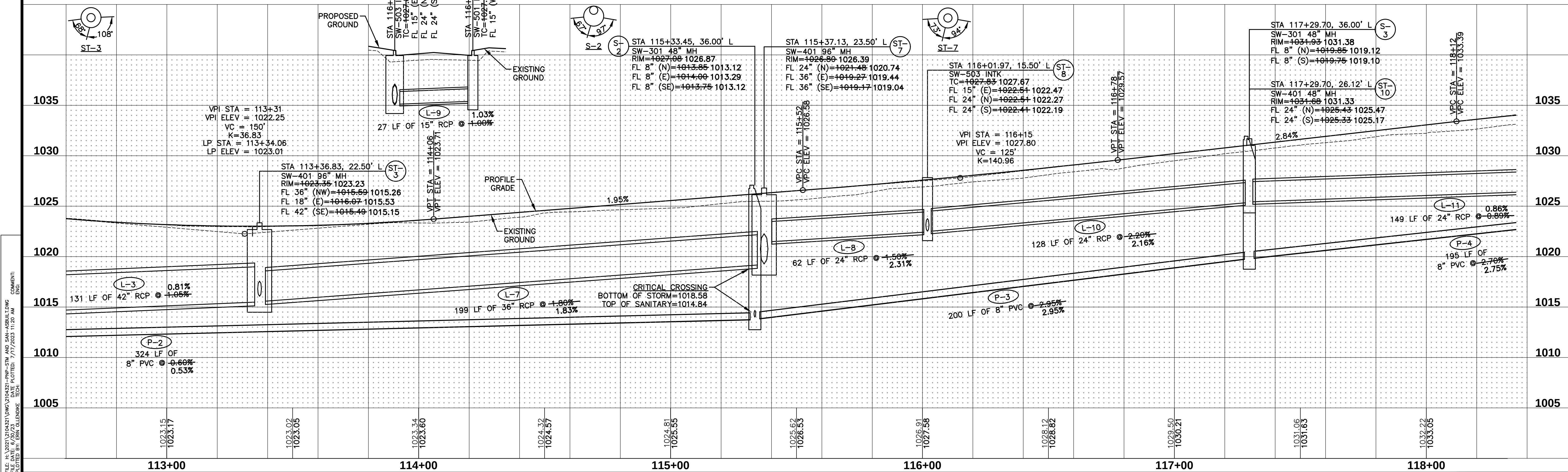
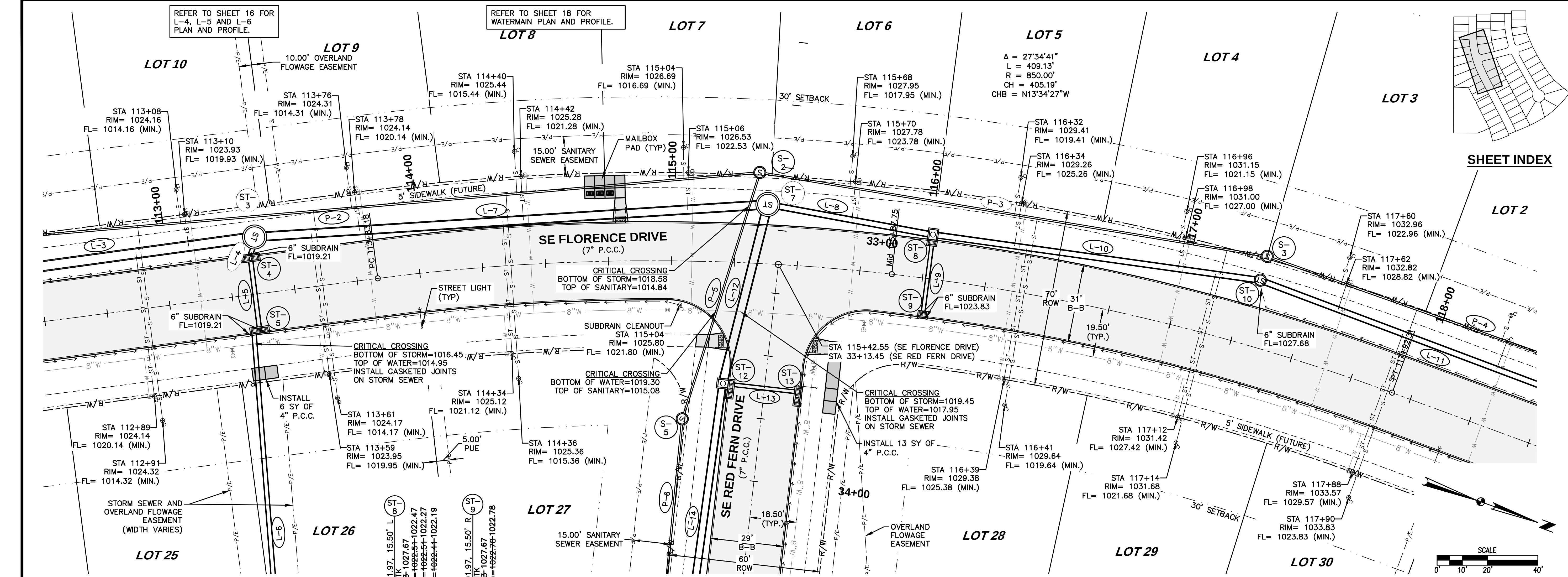
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08/29/2023

09/19/2023



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CHECKED BY: EKO

11 KETTLESTONE RIDGE PLAT 8

24

2104.321

STORM AND SANITARY PLAN AND PROFILE

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

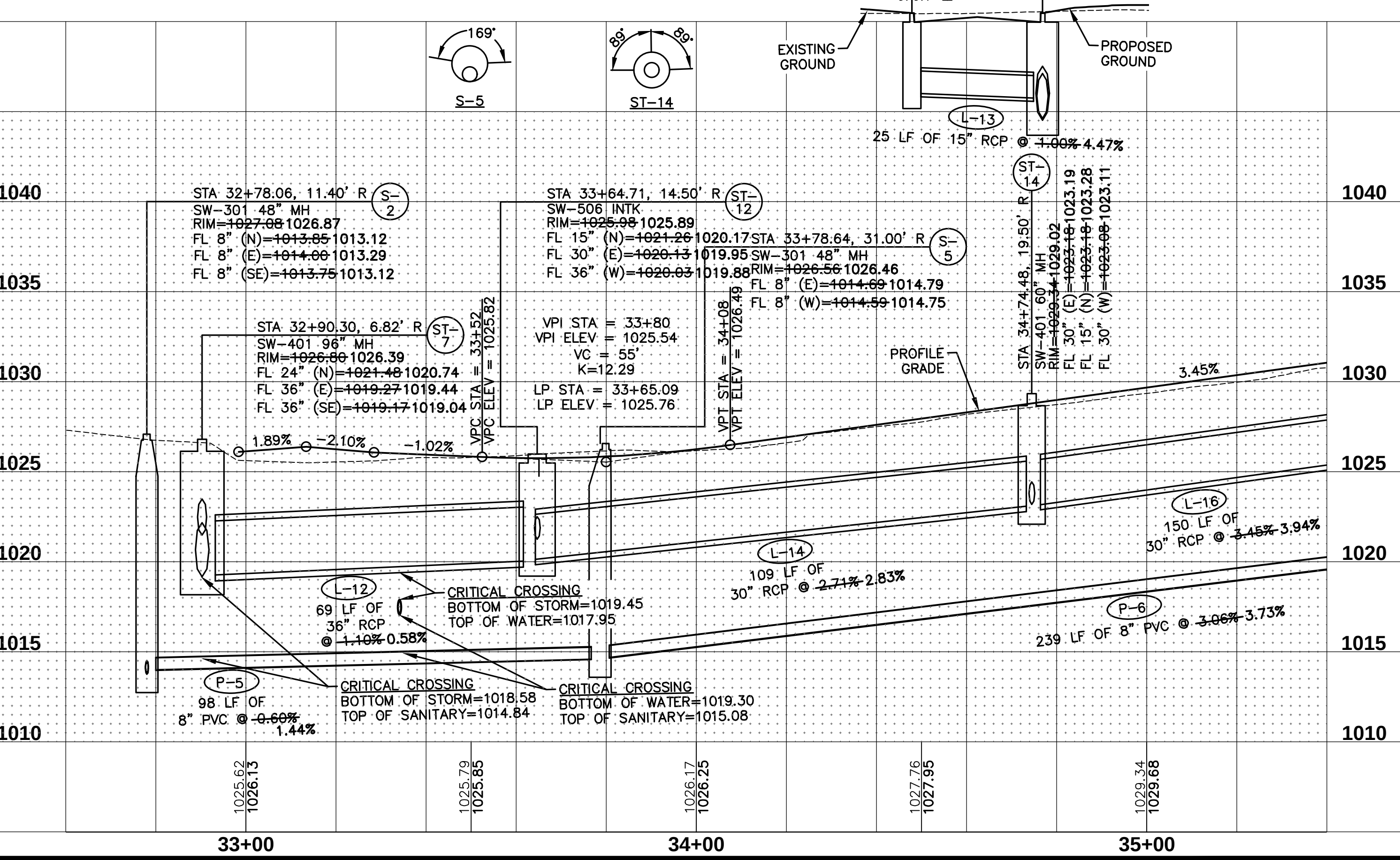
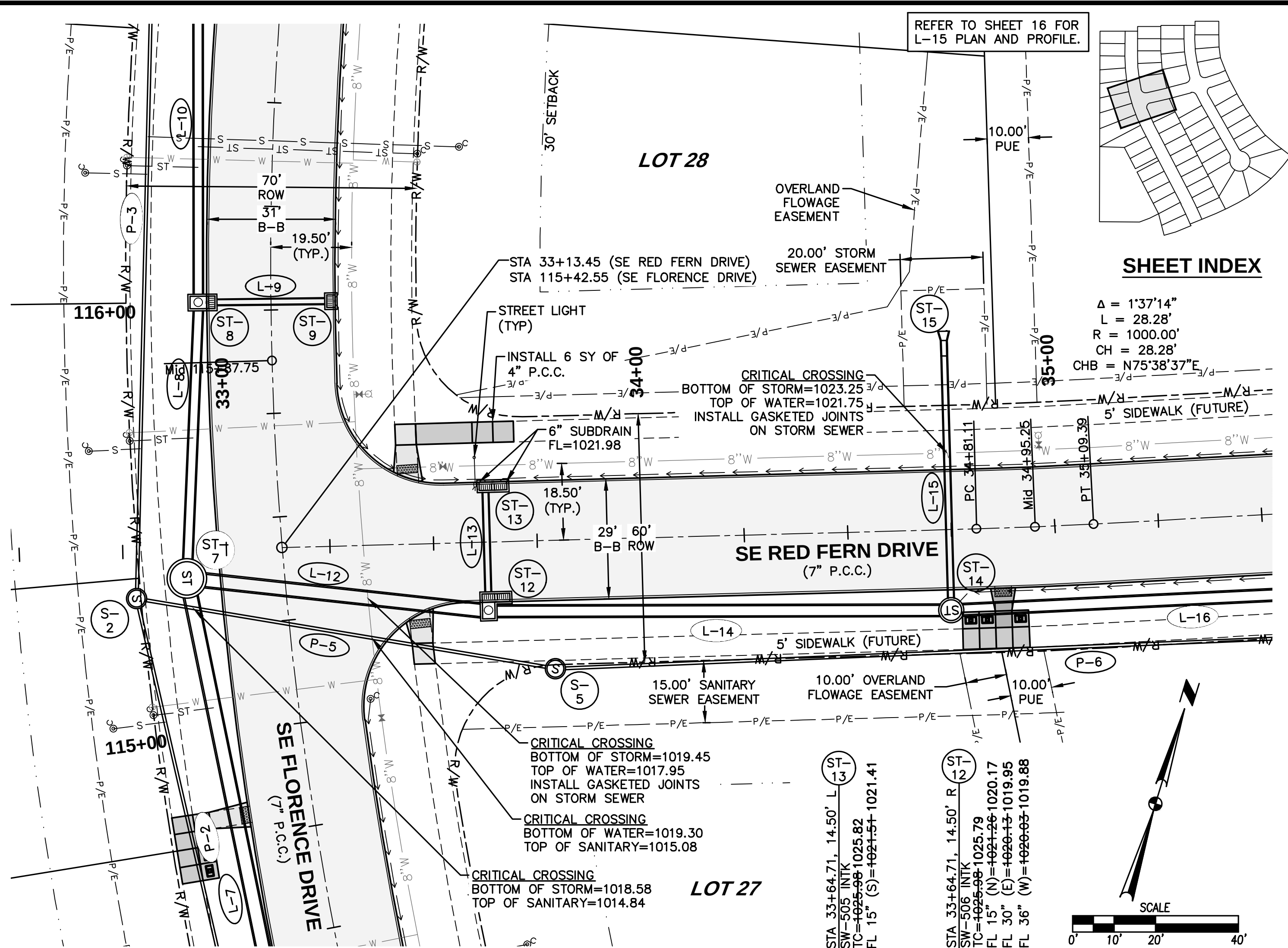
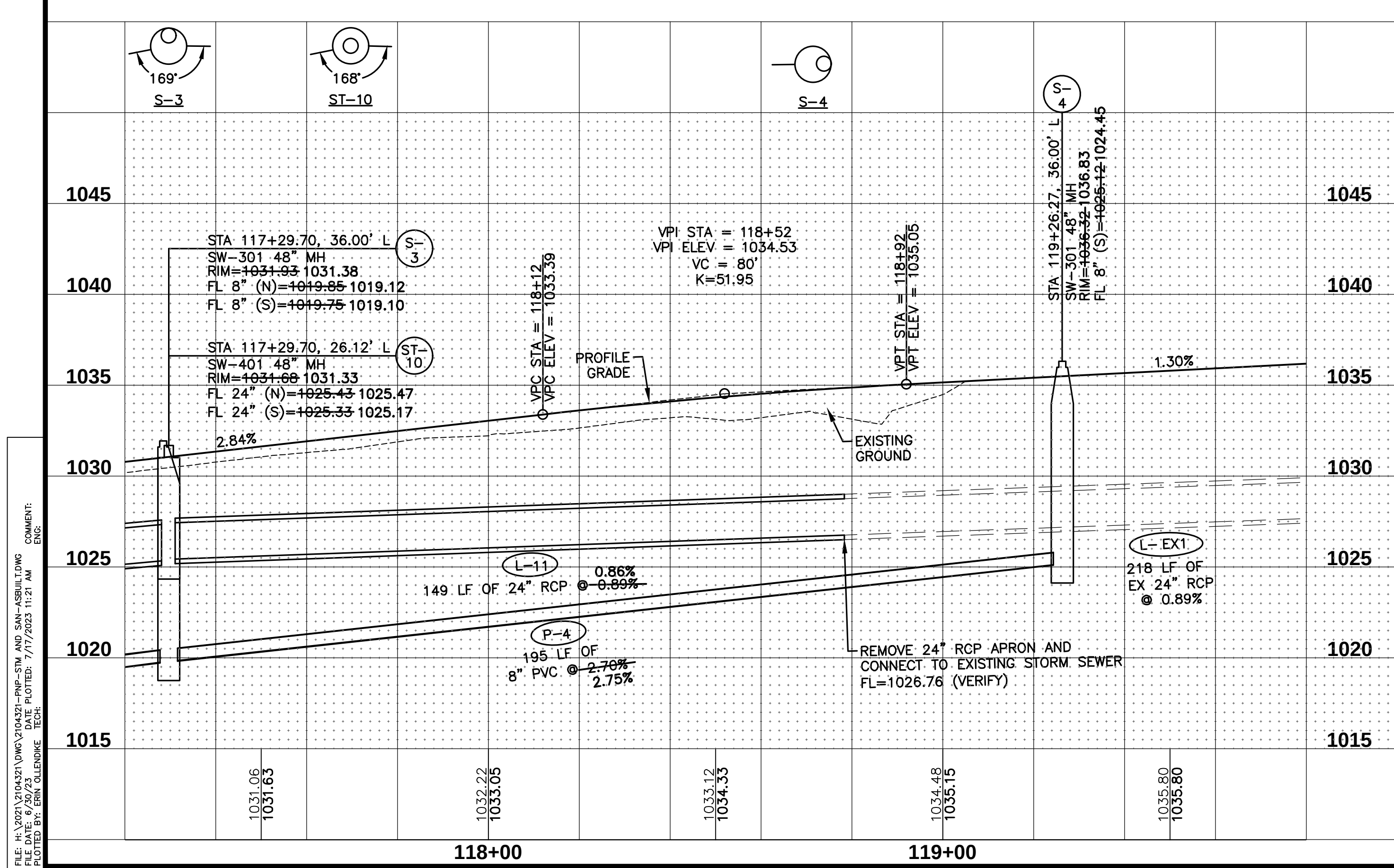
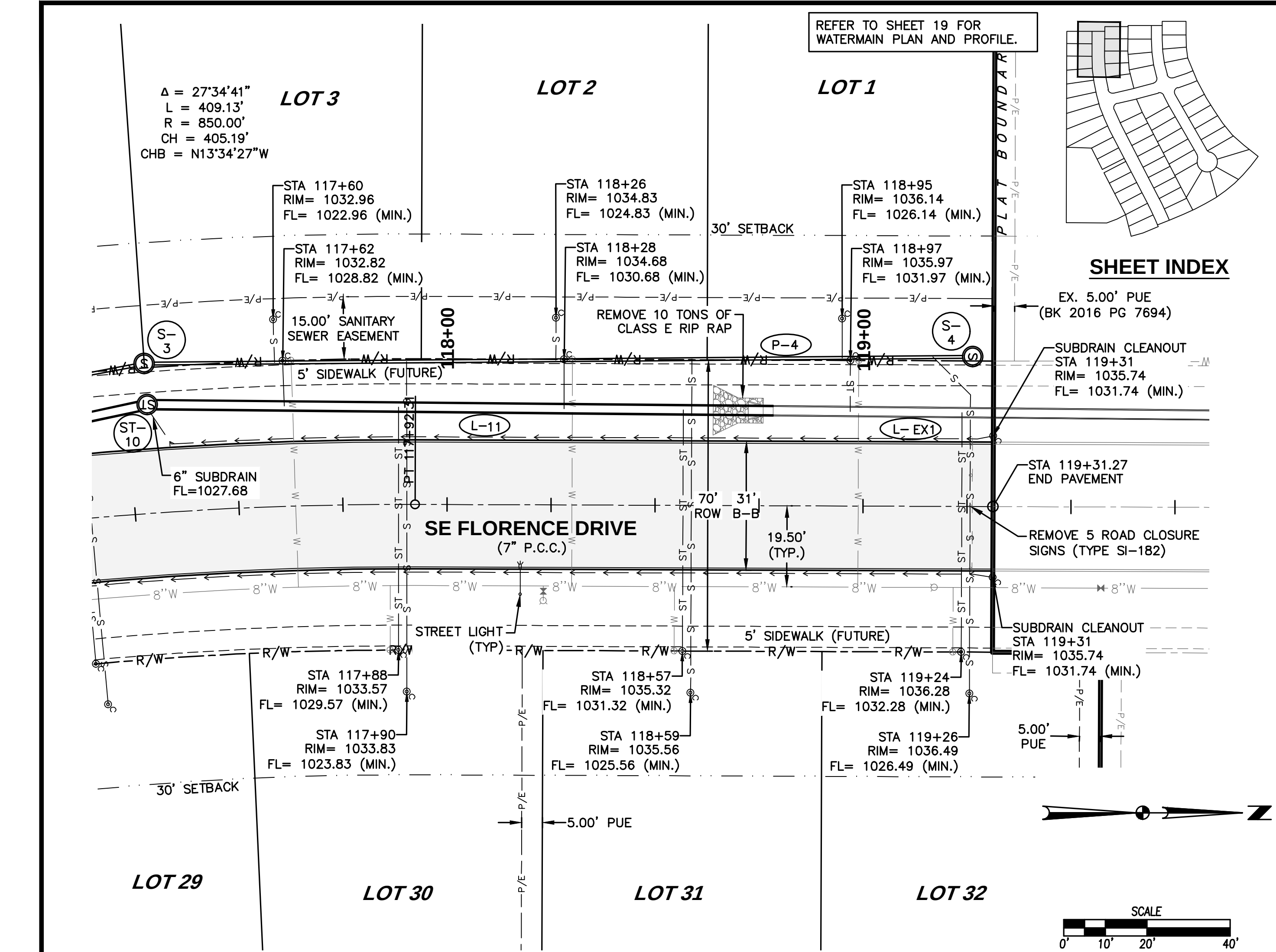
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TECH: BDH

4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410

REVISIONS

DATE	DESCRIPTION
07/12/2023	AS-BUILT SUBMITTAL
09/18/2021	FINAL SUBMITTAL
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06/29/2021	SECOND SUBMITTAL
06/15/2021	FIRST SUBMITTAL



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12/24
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KETTLESTONE RIDGE PLAT 8
 STORM AND SANITARY PLAN AND PROFILE

4121 NW URBANDALE DRIVE
 URBANDALE, IOWA 50322
 PHONE: (515) 369-4400 FAX: (515) 369-4410

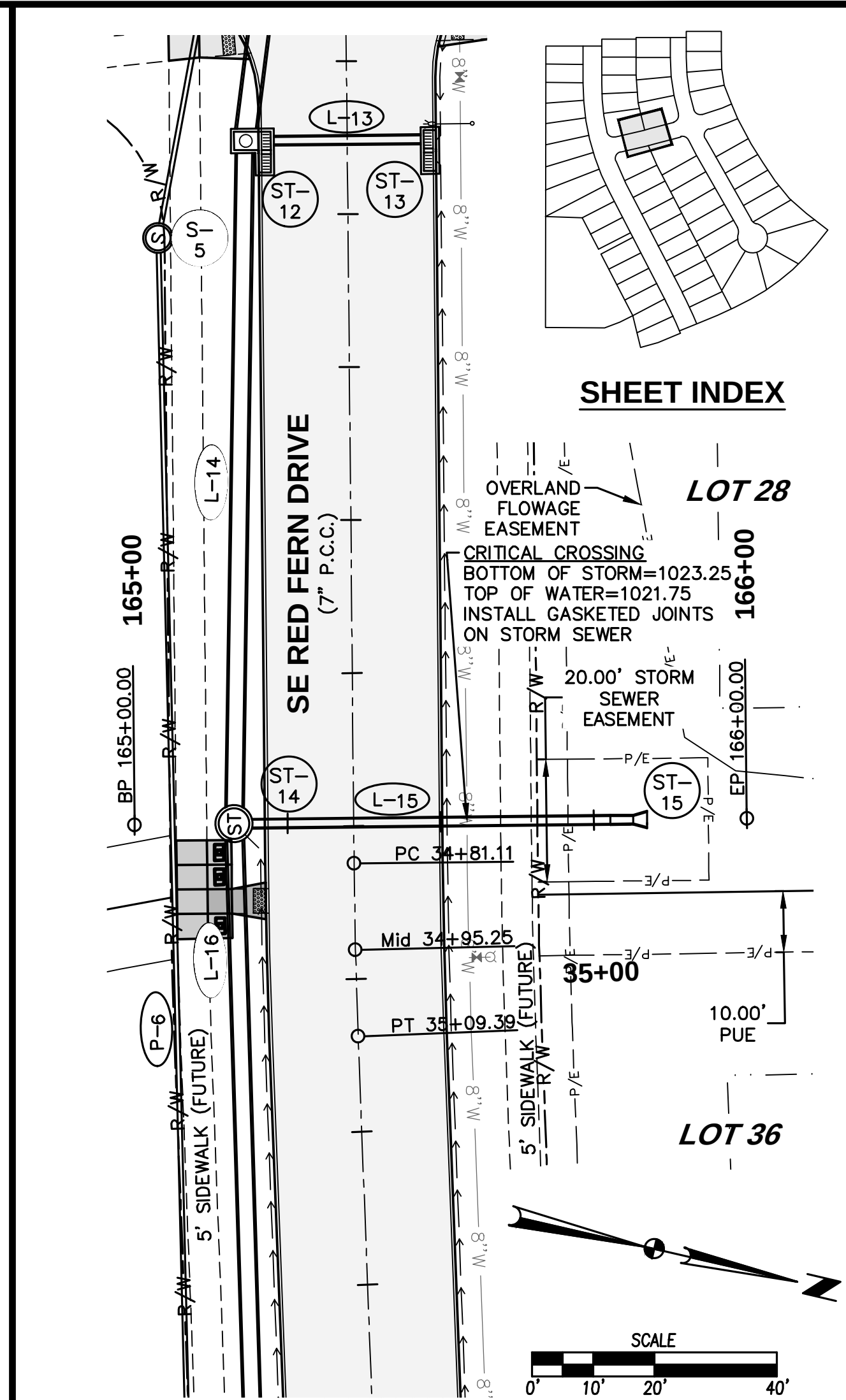
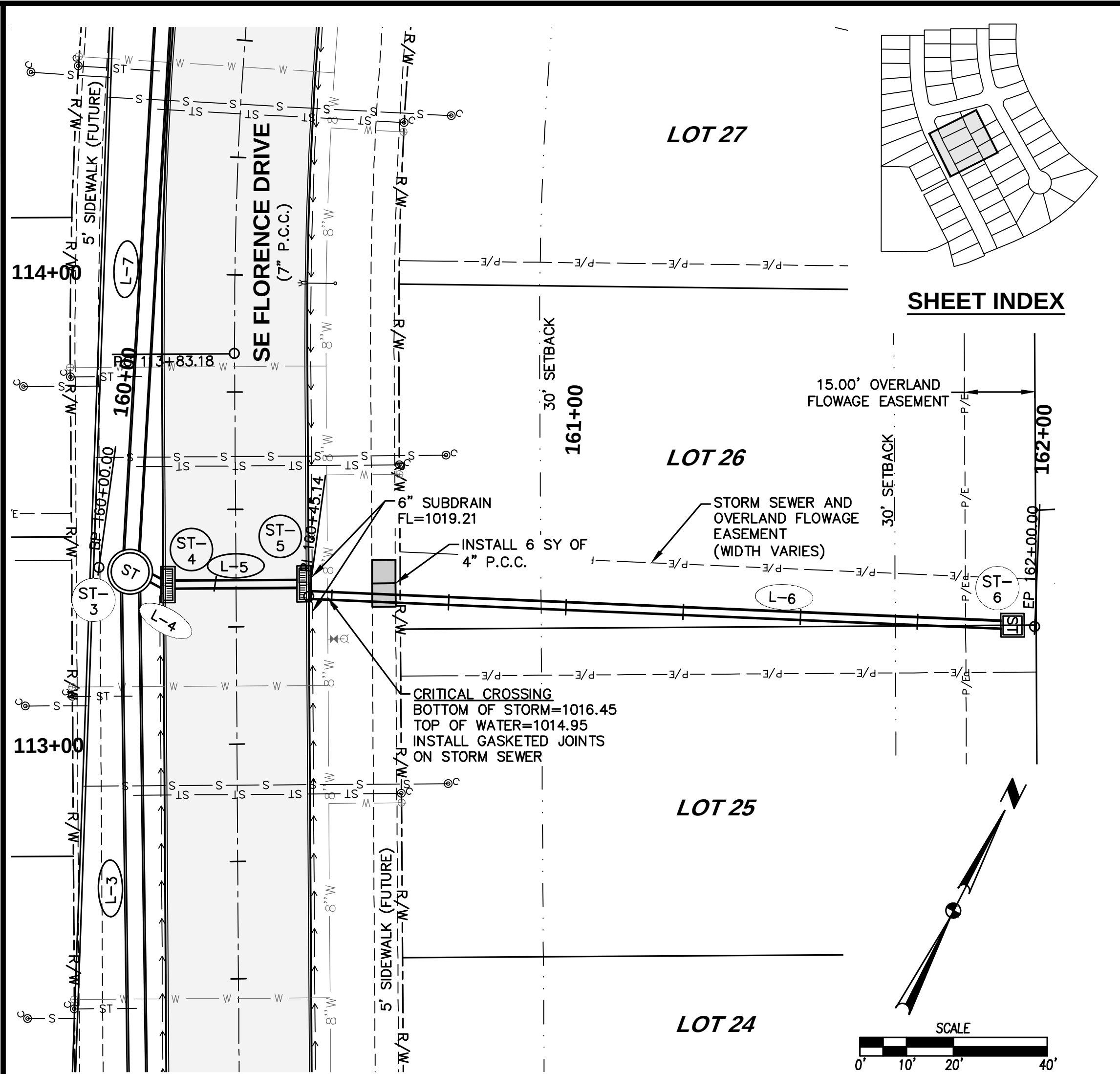
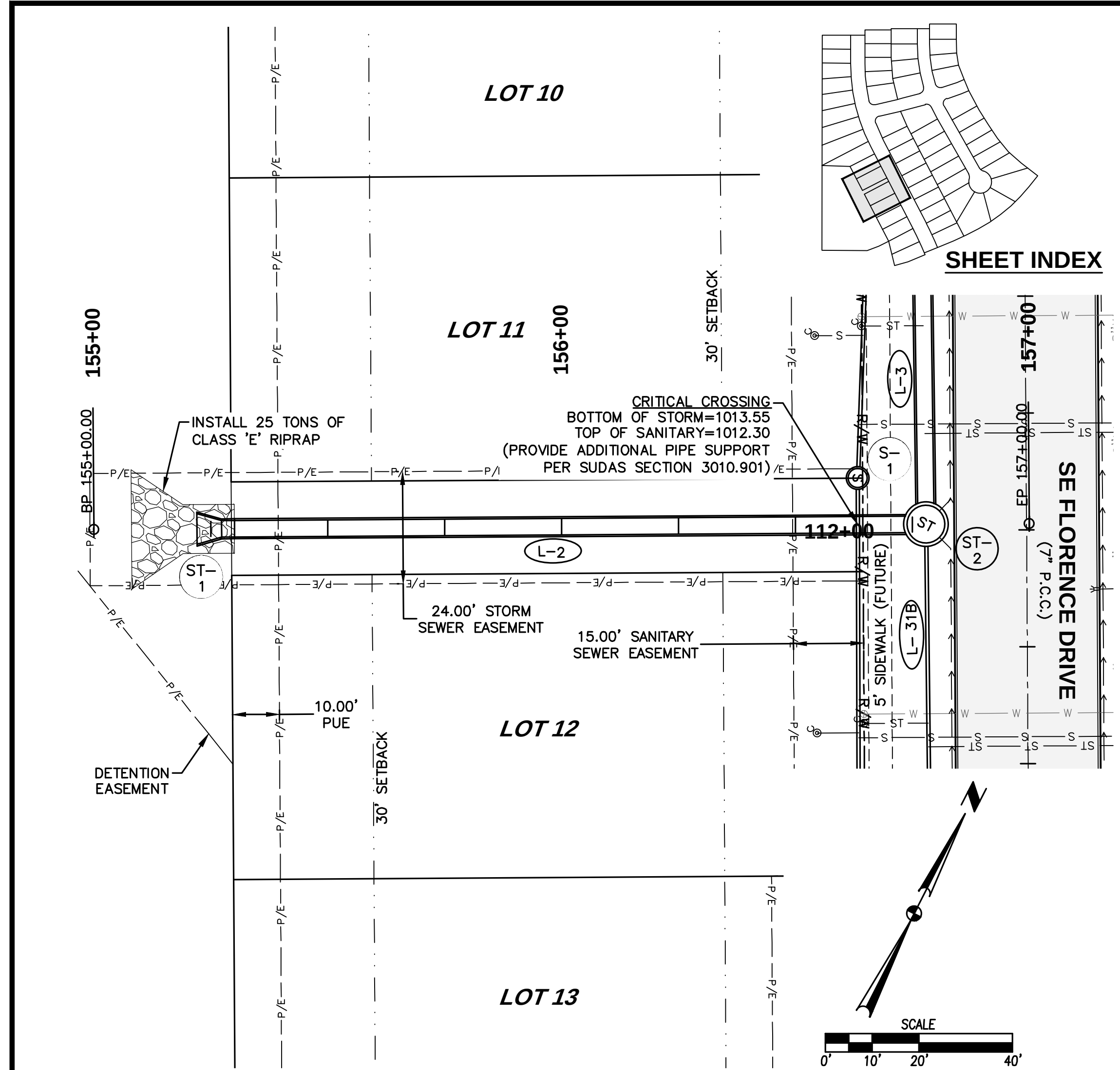
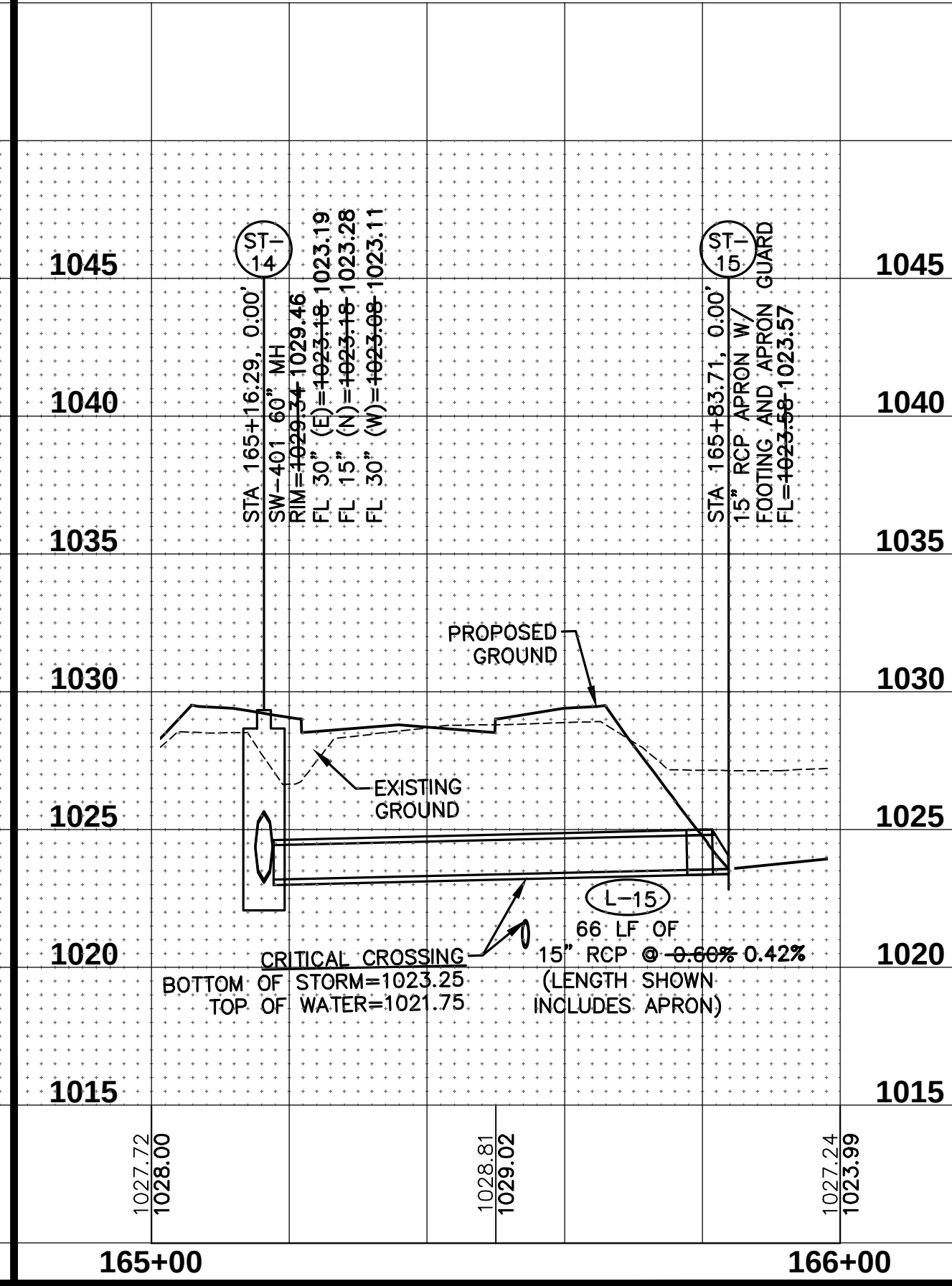
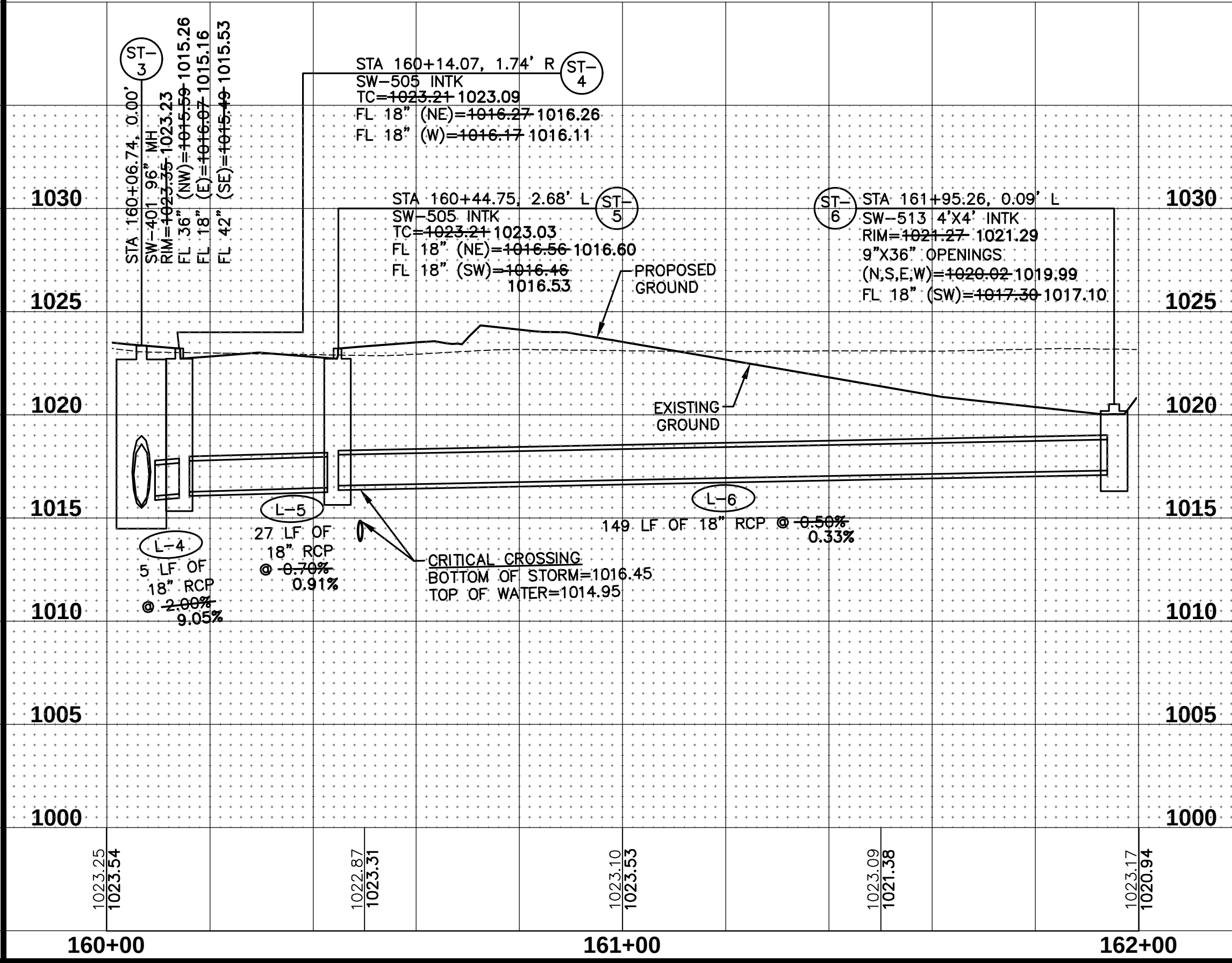
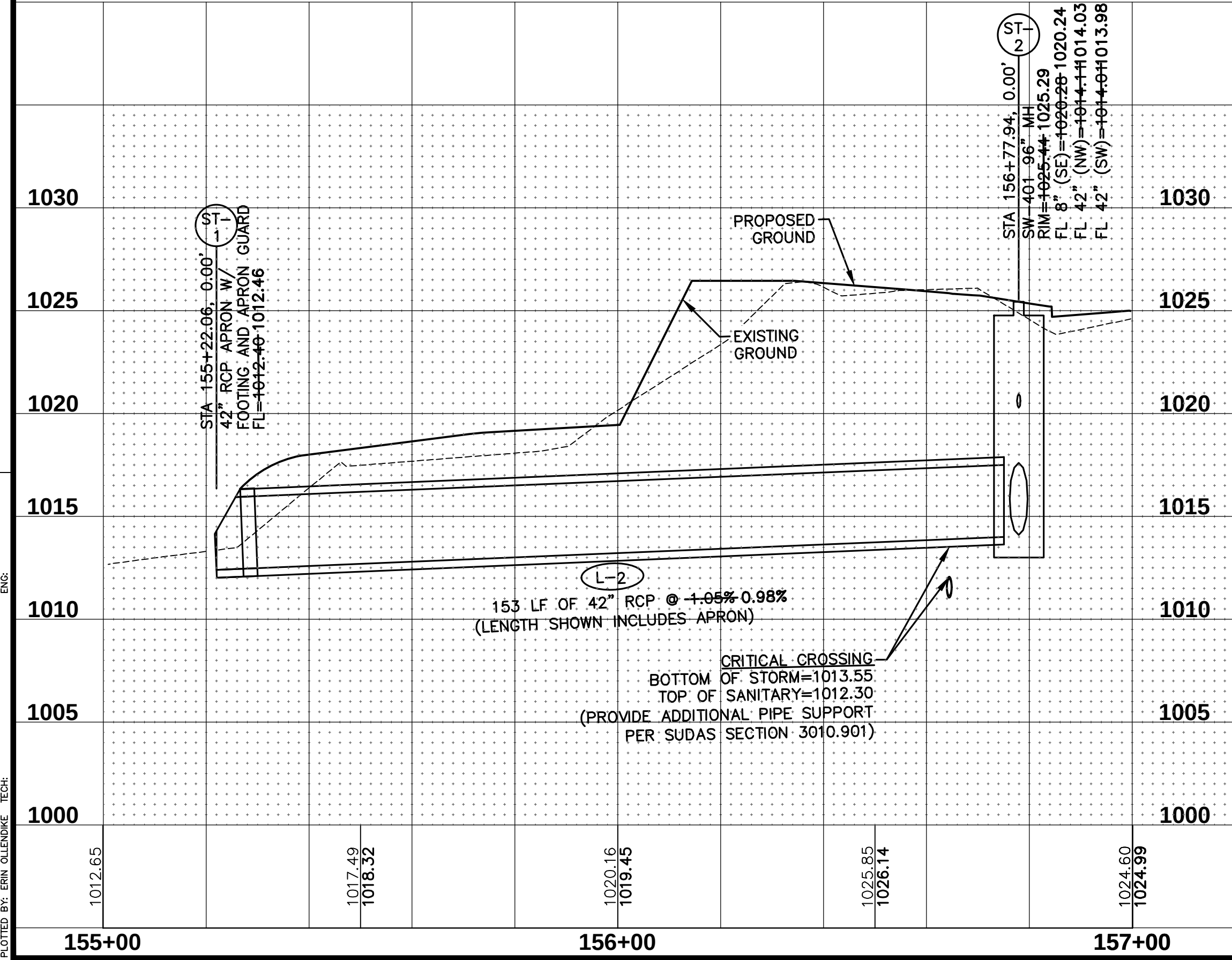
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TECH: BDH

CIVIL DESIGN ADVANTAGE
 WAUKEE, IOWA

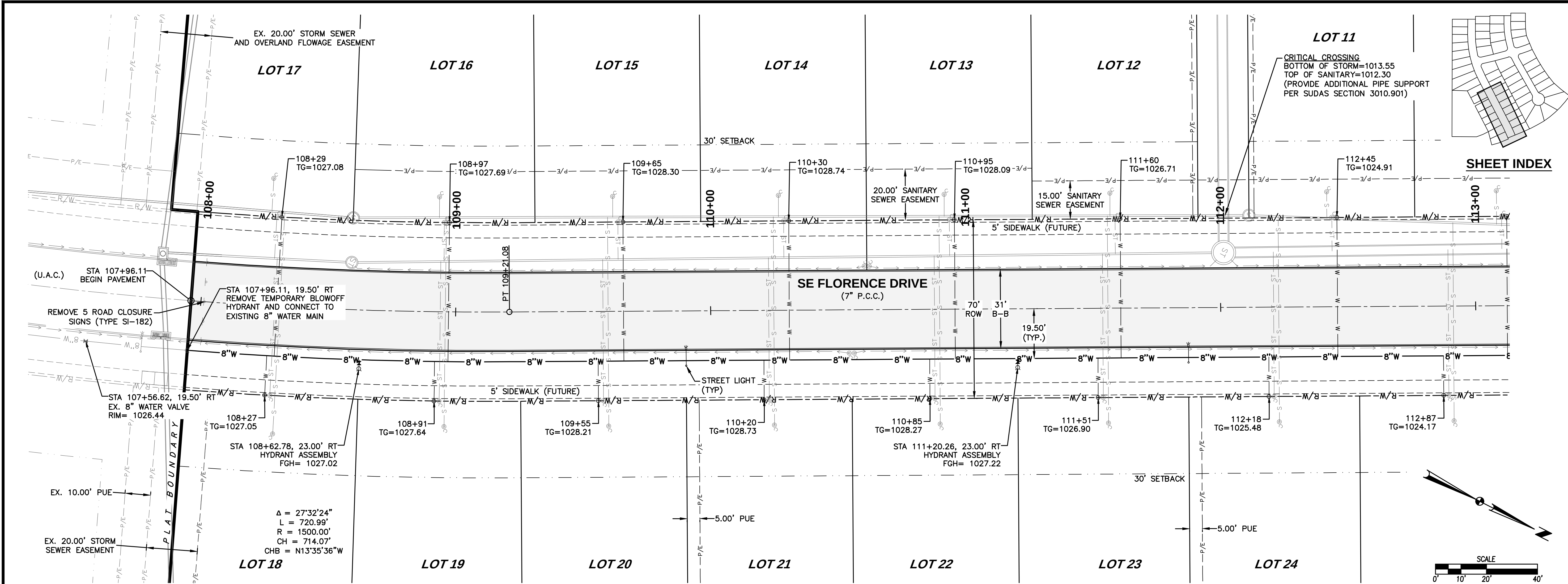
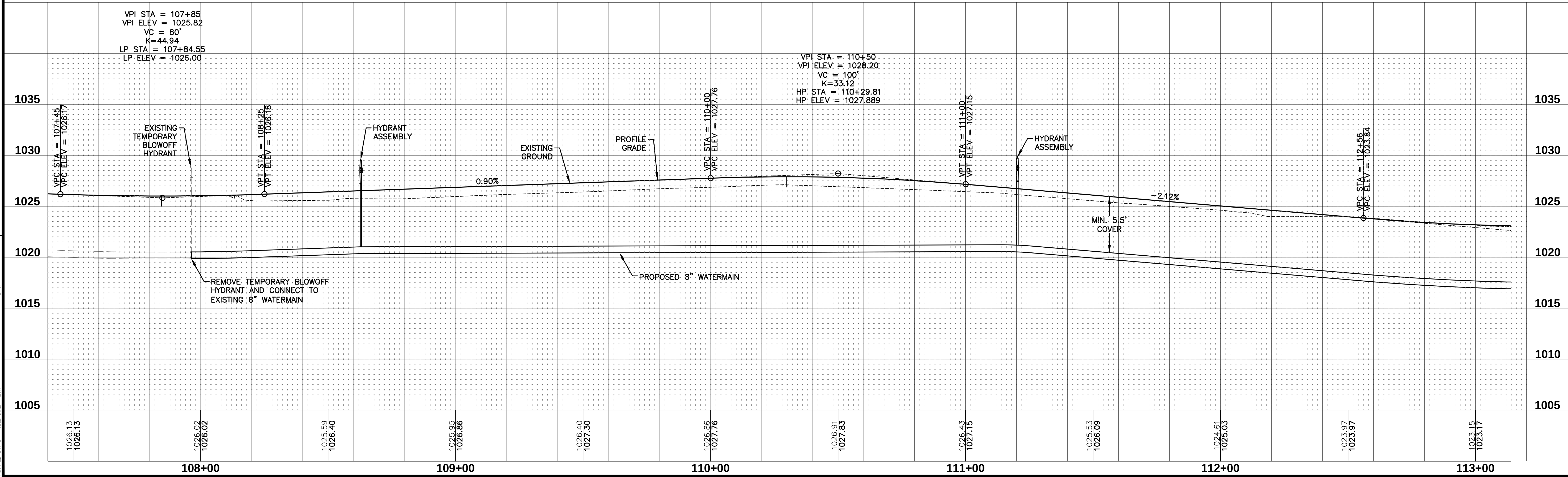
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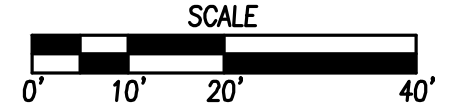
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SHEET INDEX



DATE

07/12/2023

AS-BUILT SUBMITTAL

08/18/2023

FINAL SUBMITTAL

07/27/2021

THIRD SUBMITTAL

06/29/2021

FIRST SUBMITTAL

06/15/2021

REVISIONS

4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: EKO

TECH: BDH

EA

CIVIL DESIGN ADVANTAGE

WATERMAIN PLAN AND PROFILE

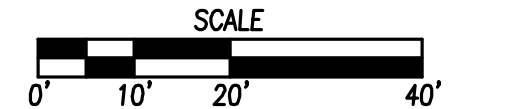
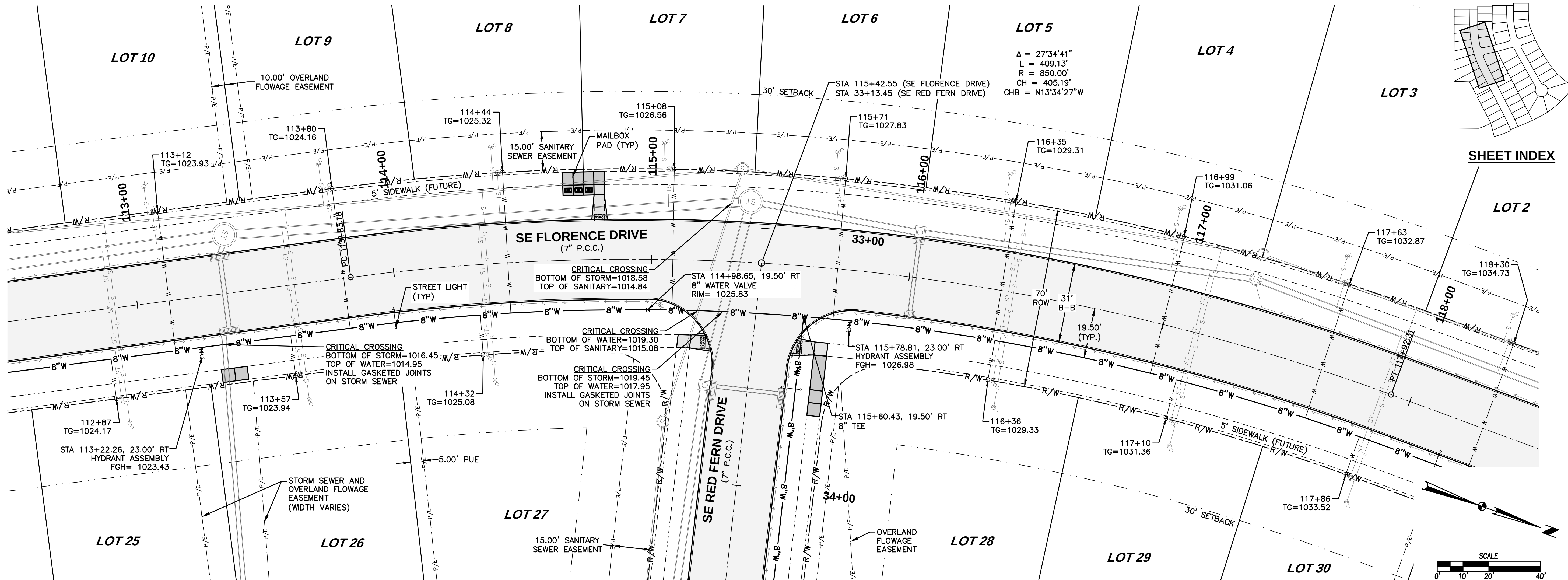
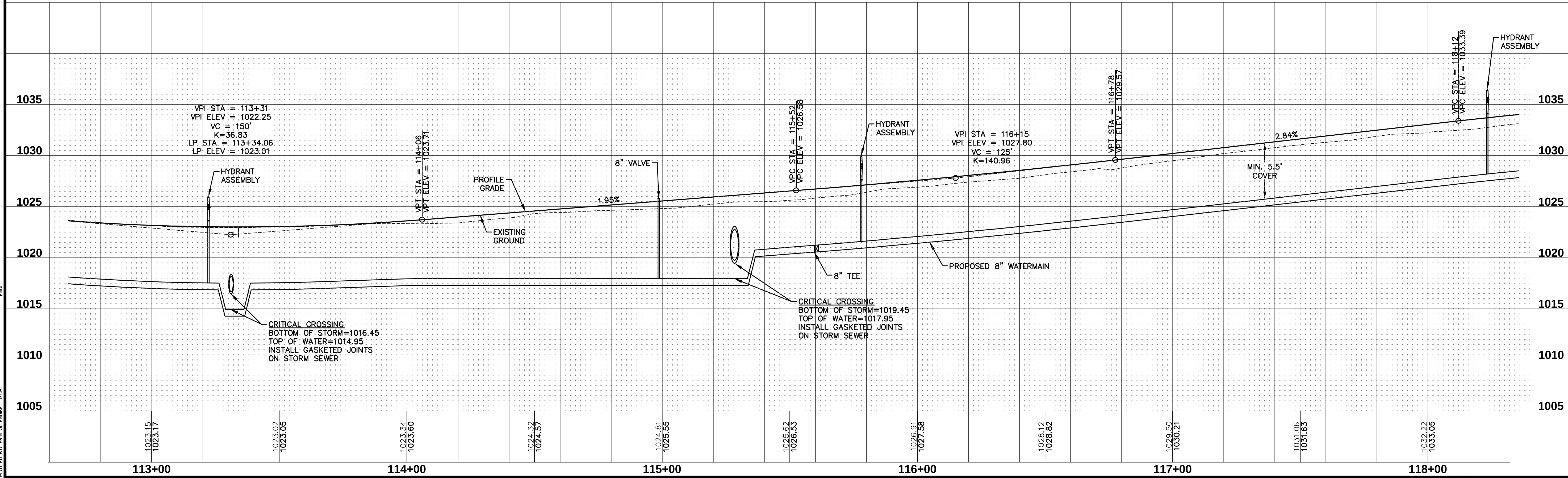
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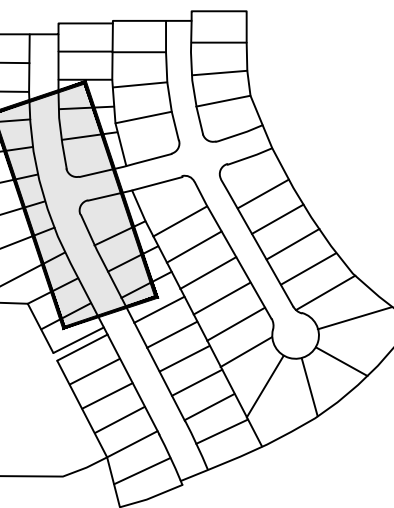
WAUKEE, IOWA

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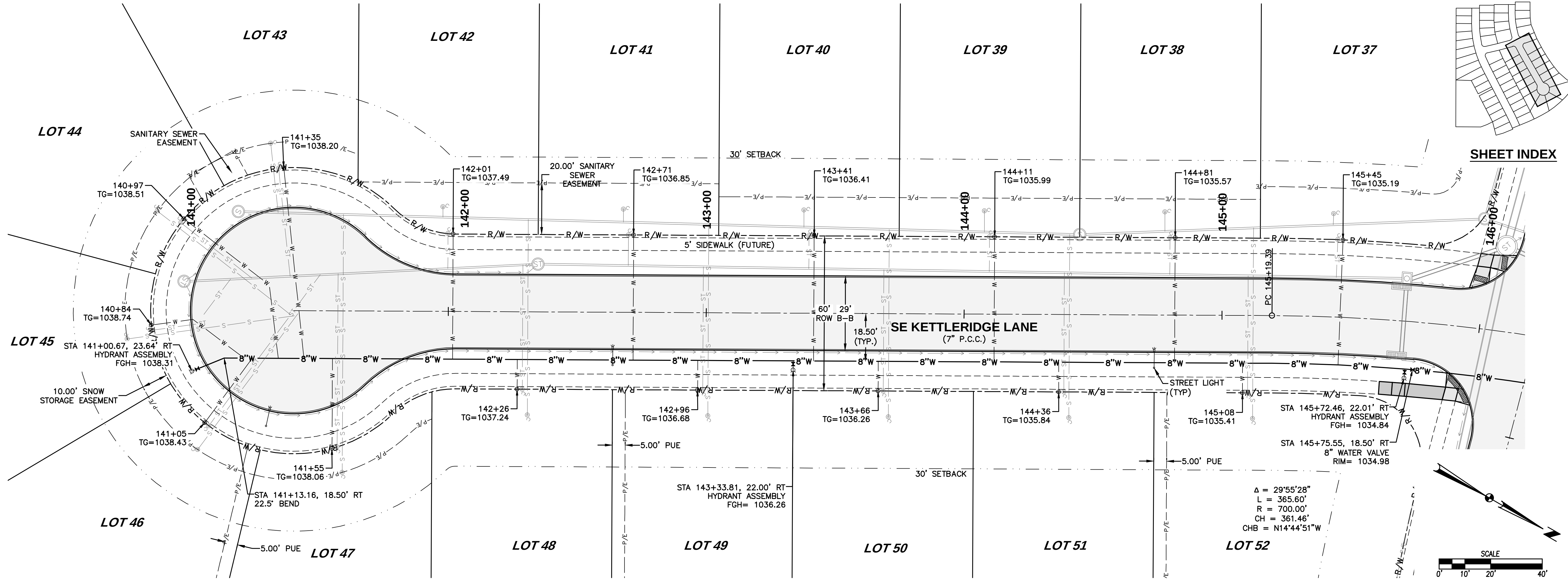


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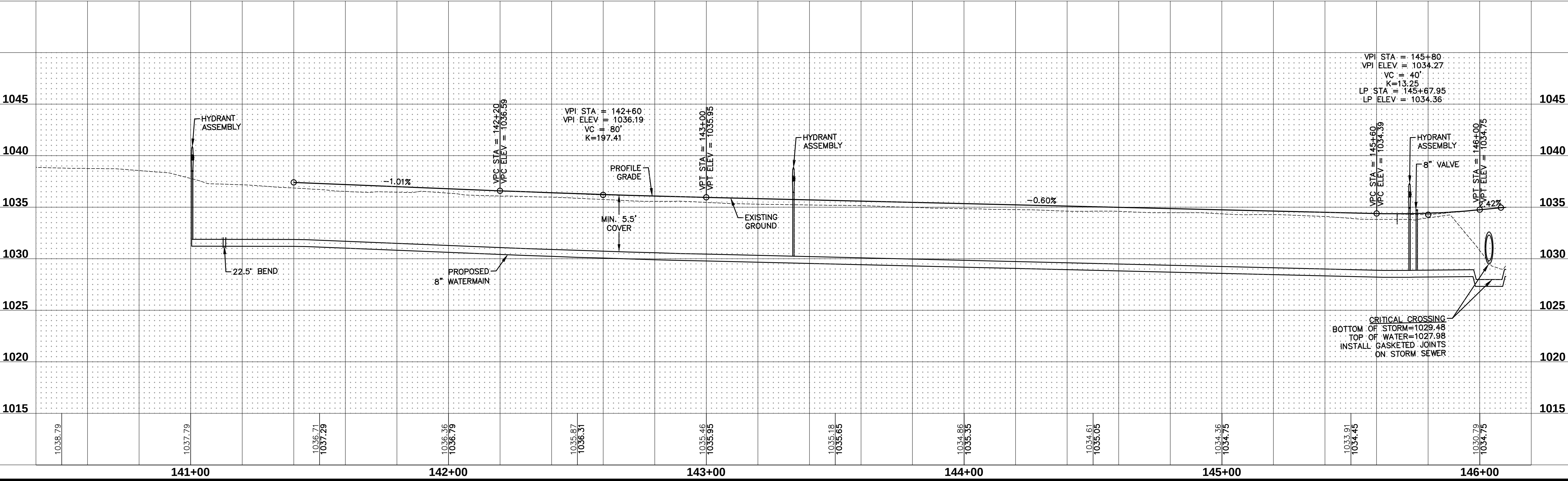
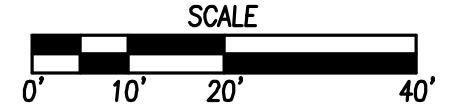




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SHEET INDEX



DATE

07/12/2023

AS-BUILT SUBMITTAL

08/18/2023

FINAL SUBMITTAL

07/27/2021

THIRD SUBMITTAL

06/29/2021

FIRST SUBMITTAL

06/15/2021

REVISIONS

4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO EI: GH/JWM TECH: BDH

CIVIL DESIGN ADVANTAGE

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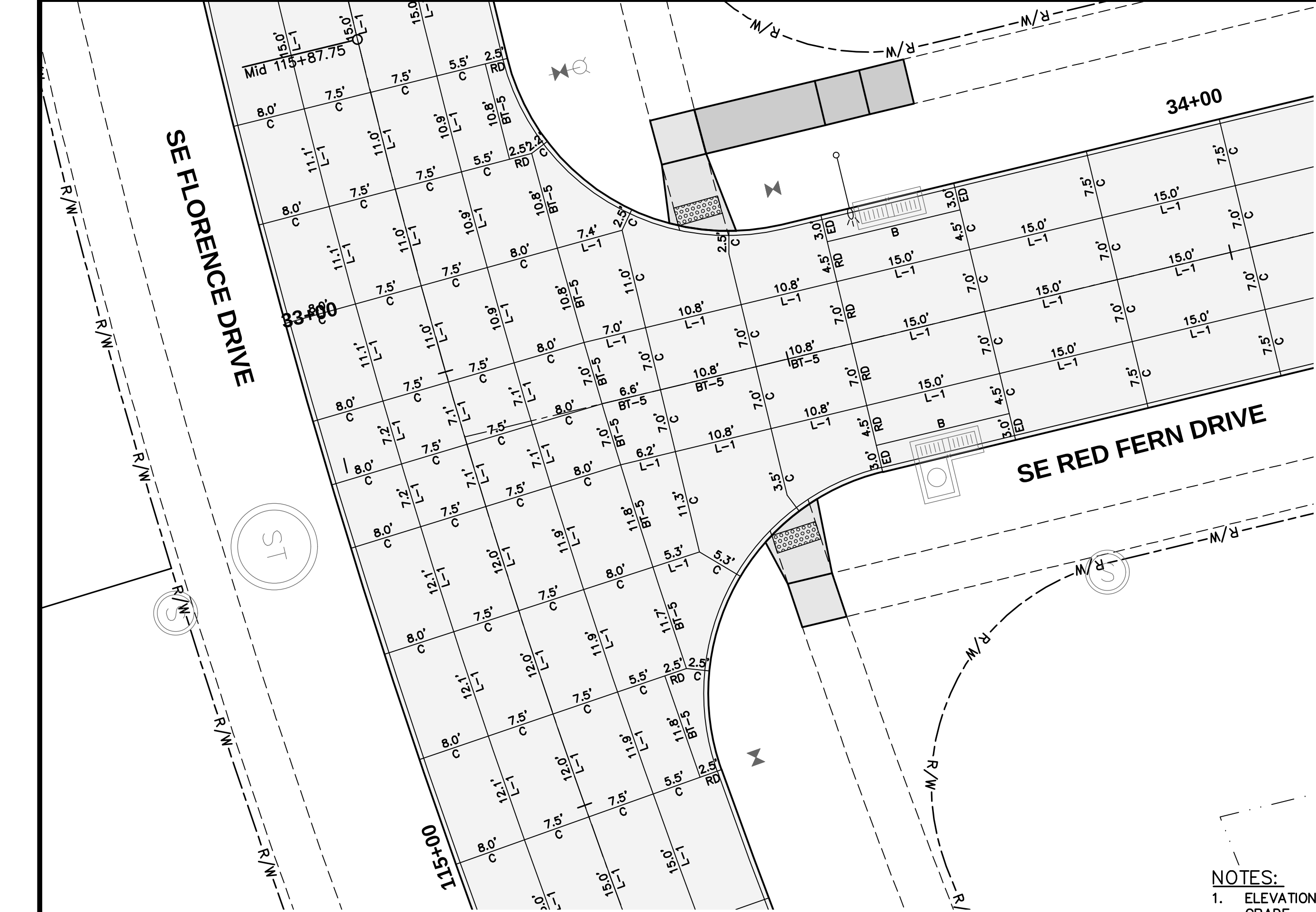
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KETTLERIDGE PLAT 8

WATERMAIN PLAN AND PROFILE

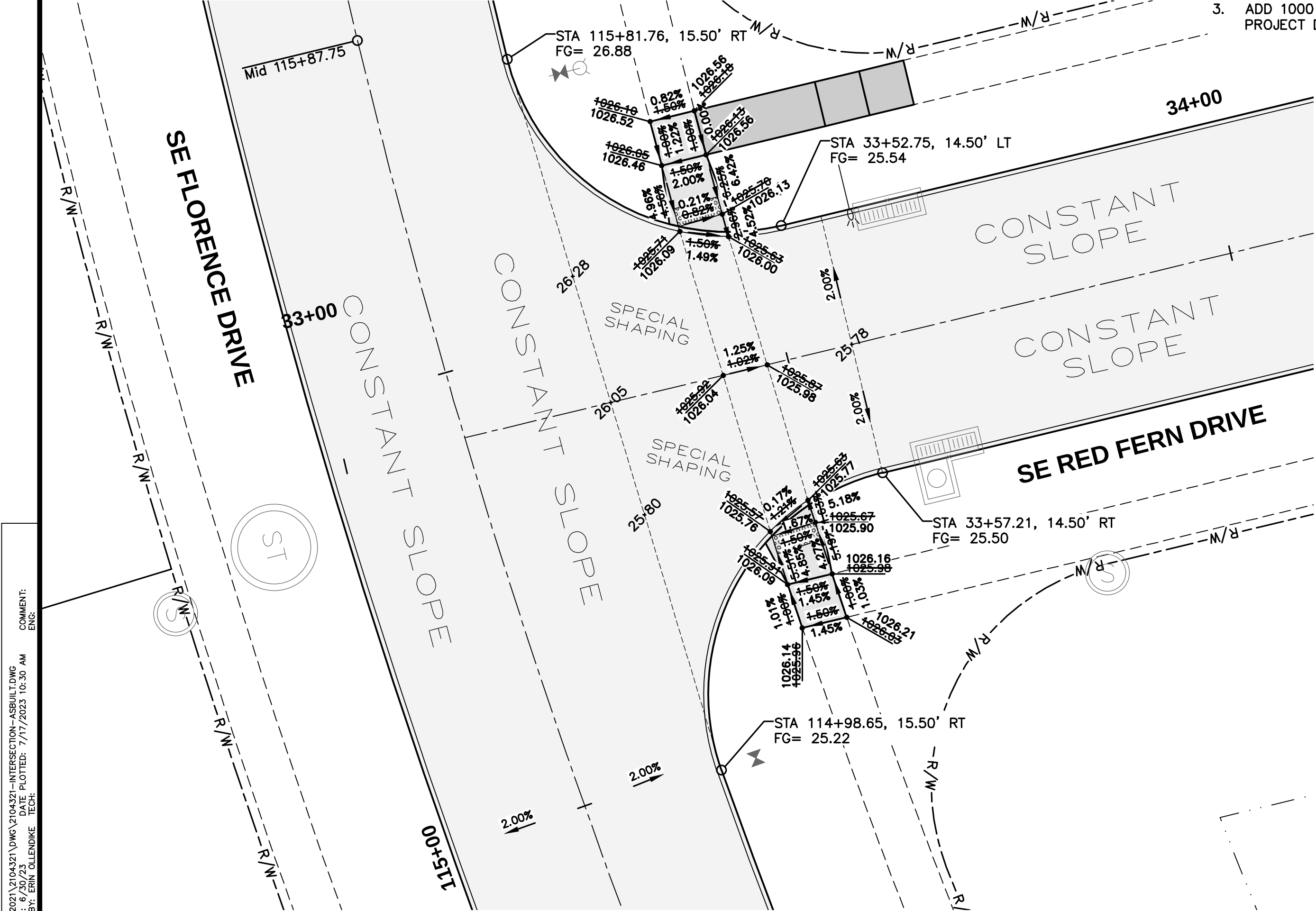
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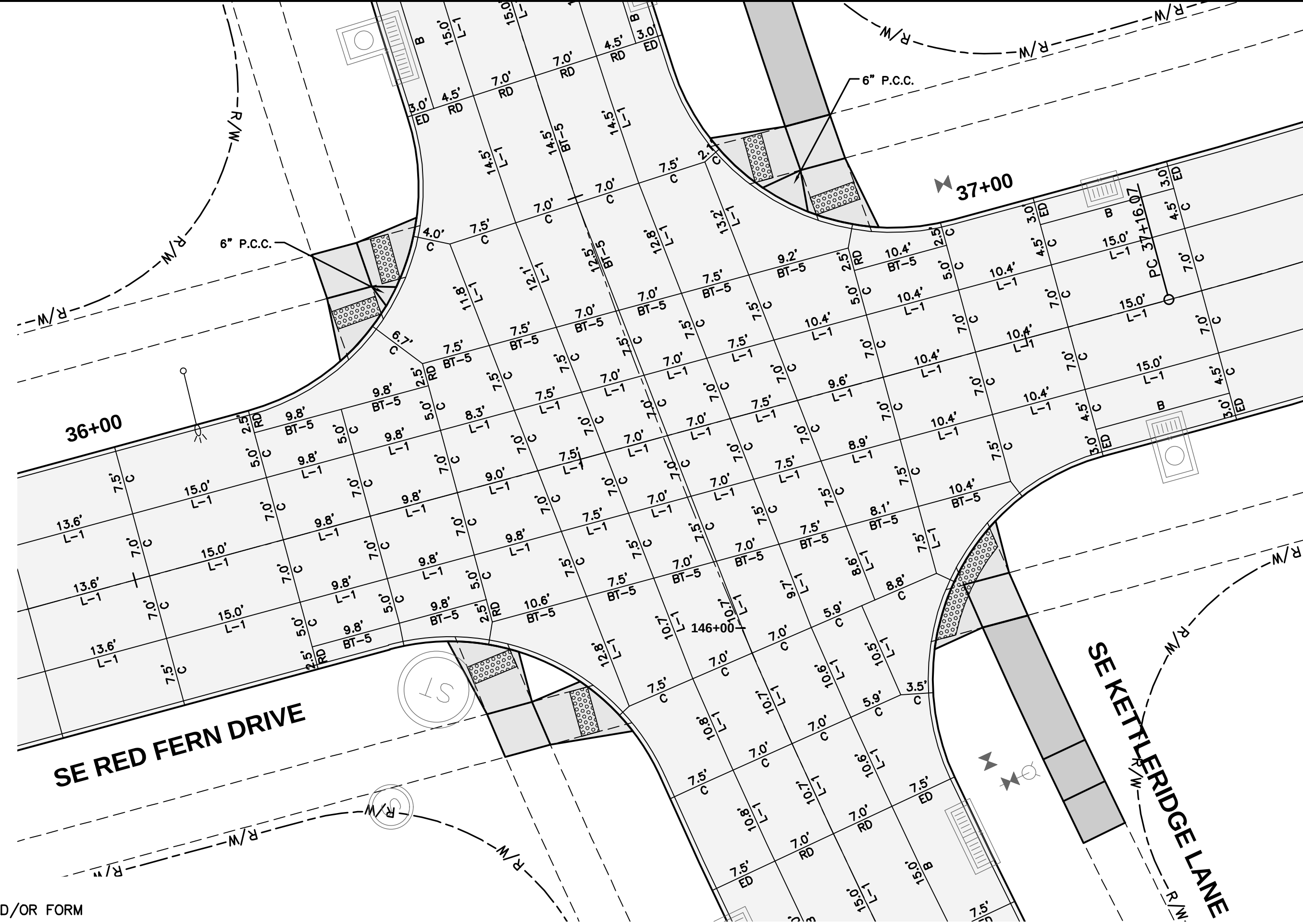


JOINTING LAYOUT

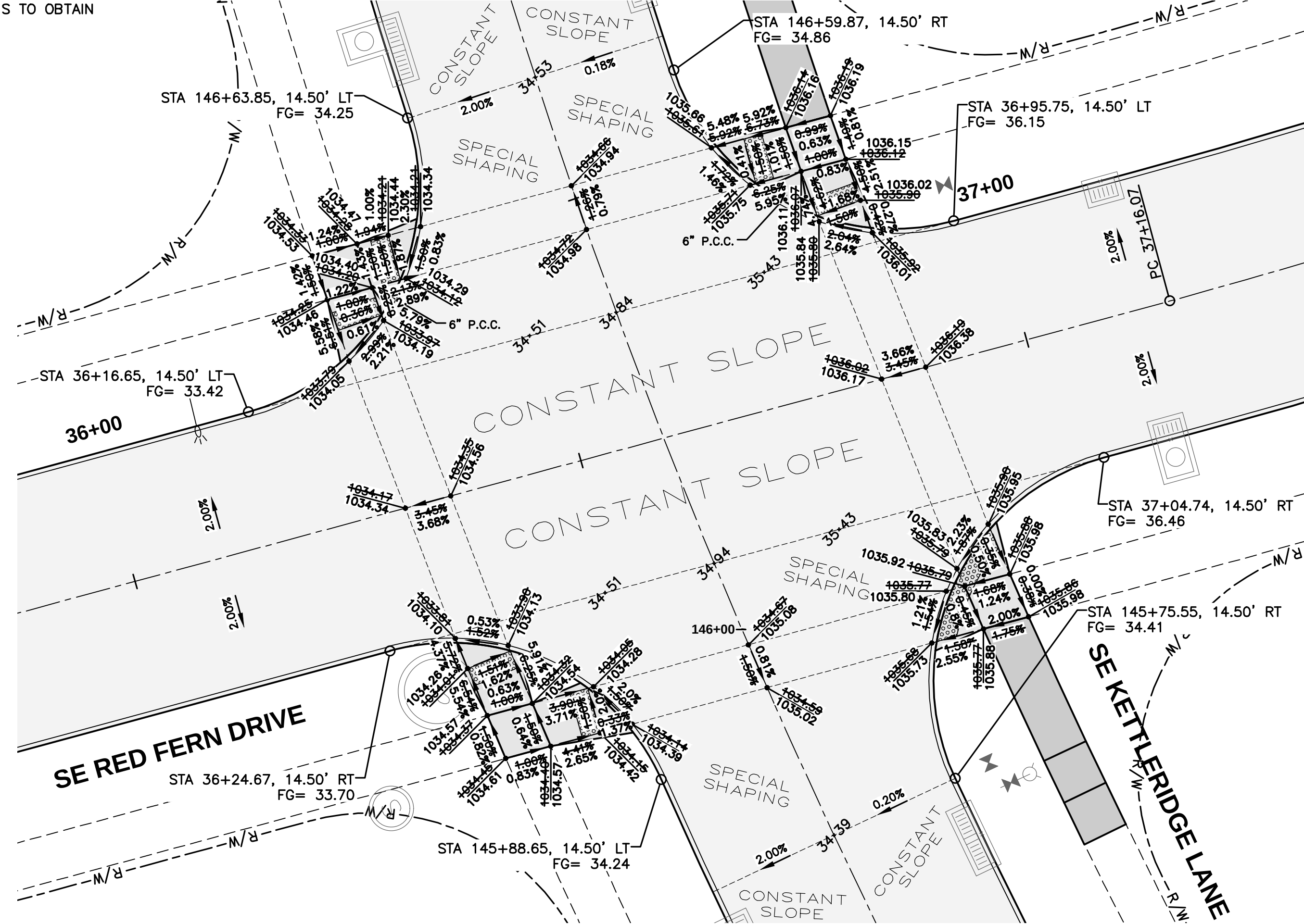
- NOTES:
1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
 2. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
 3. ADD 1000 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.



GEOMETRICS AND STAKING LAYOUT



JOINTING LAYOUT



GEOMETRICS AND STAKING LAYOUT

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PHONE: (515) 369-4400 FAX: (515) 369-4410
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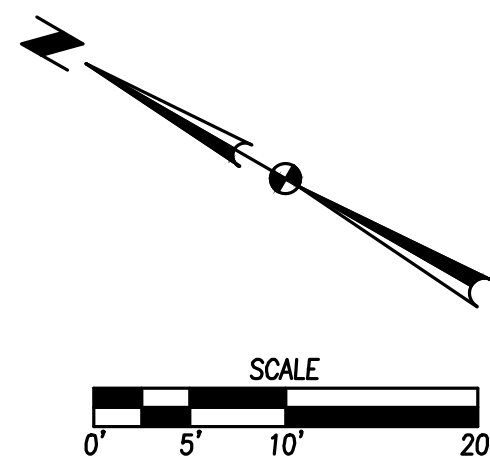
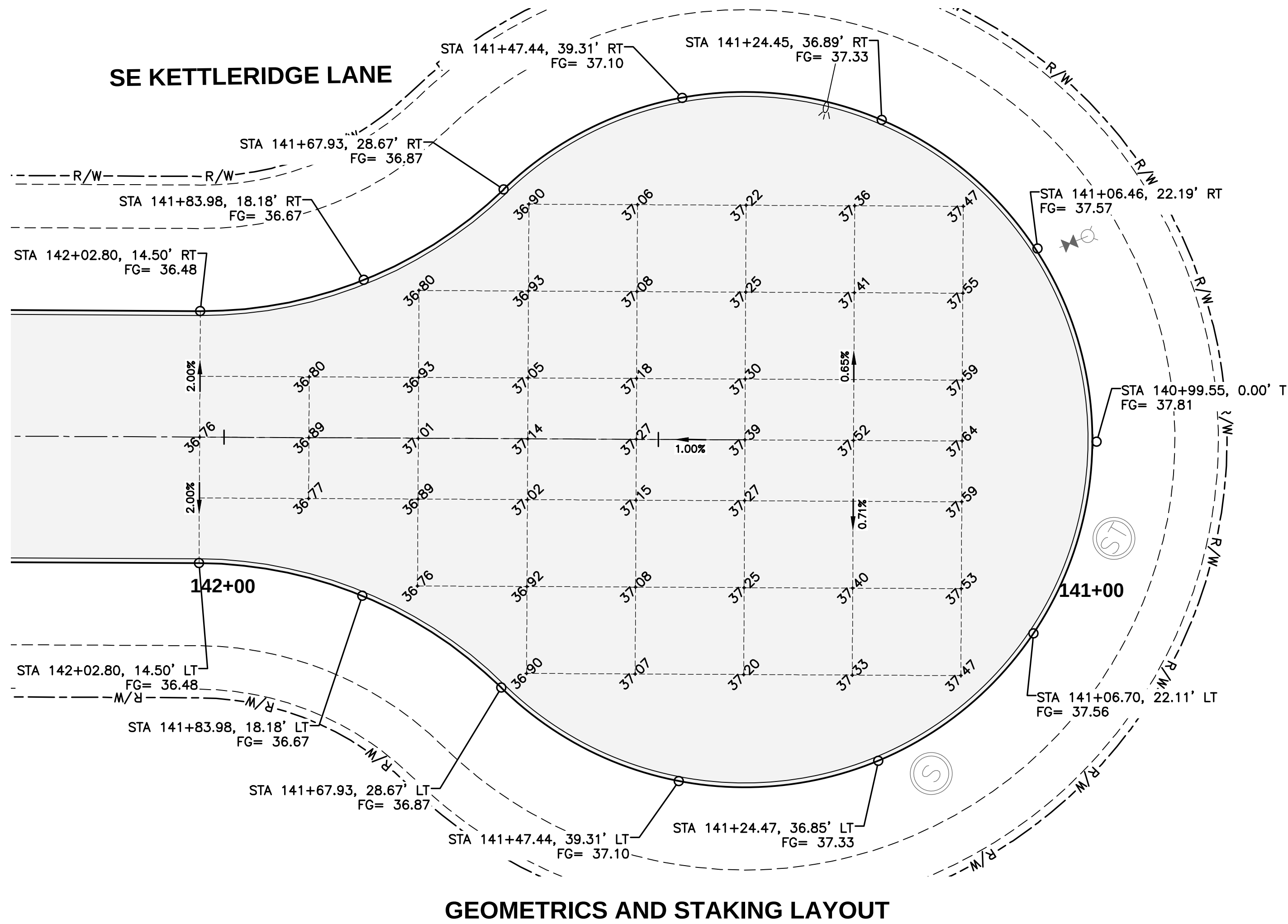
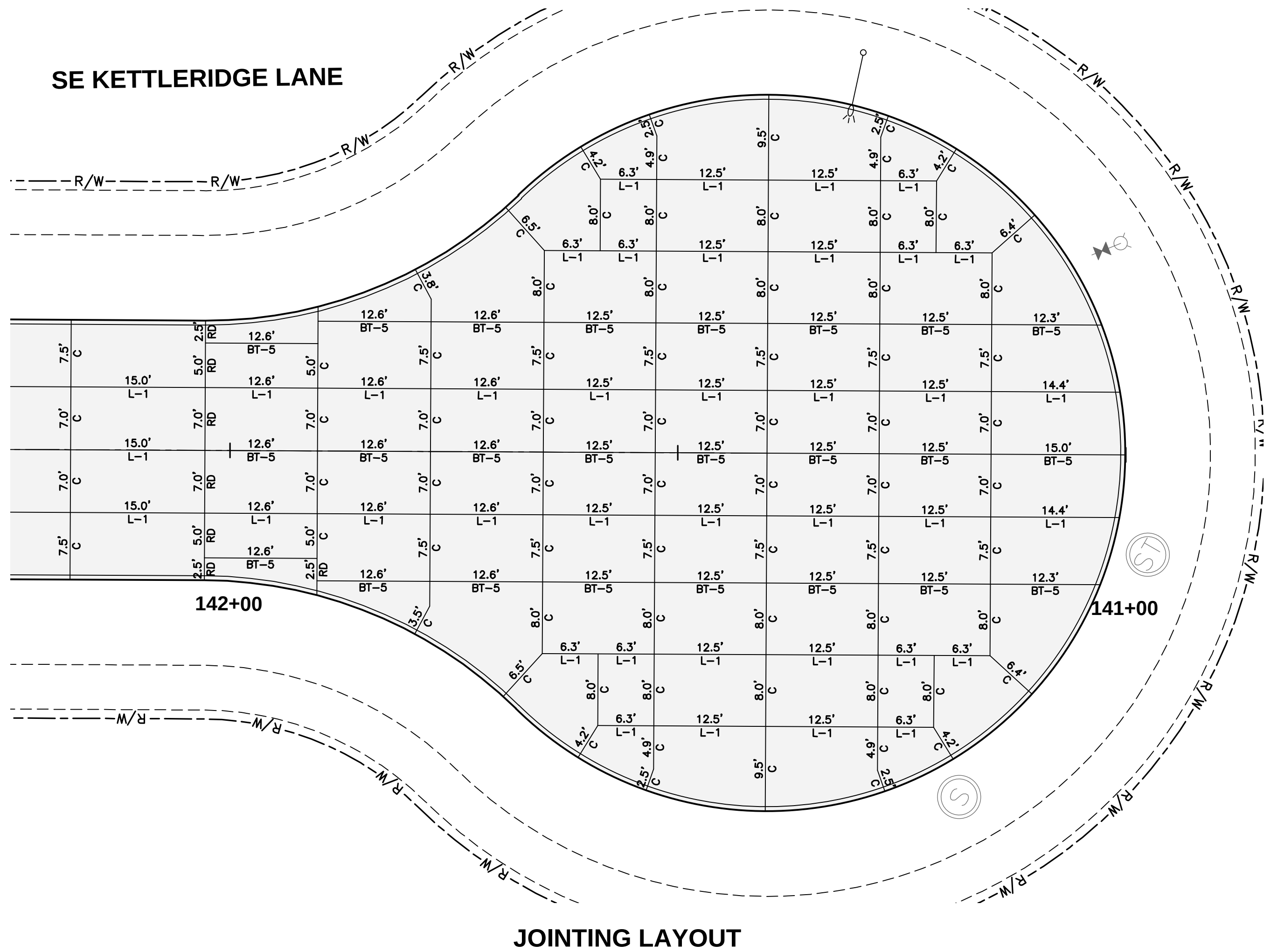
CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

KETTLESTONE RIDGE PLAT 8
INTERSECTION DETAILS

23/24
2104.321

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NOTES:

1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
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