

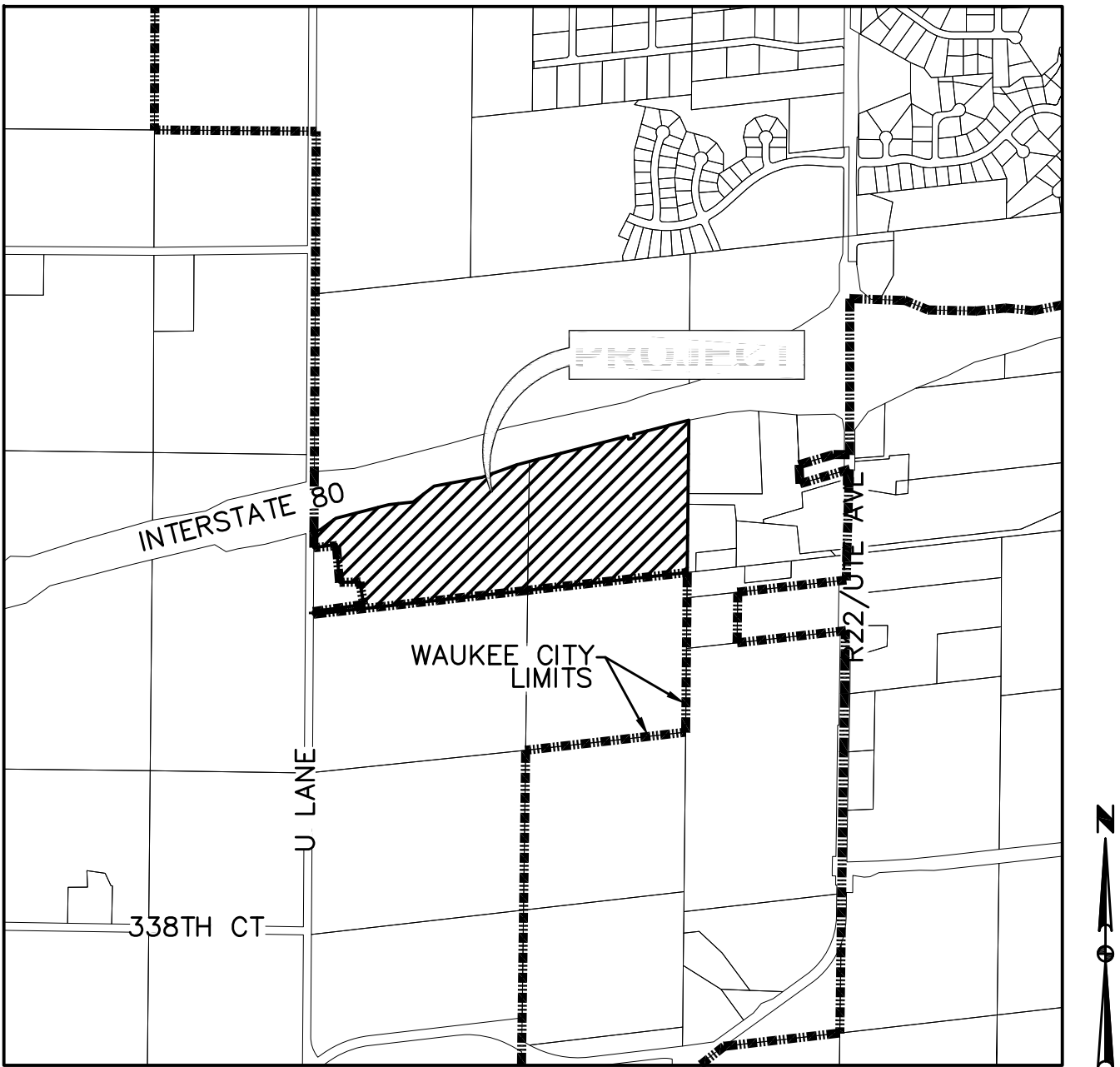
CONSTRUCTION PLANS FOR:

I-80 WEST INDUSTRIAL PARK PLAT 2

WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

OWNER / DEVELOPER

117 LAND COMPANY, LLC
9550 HICKMAN ROAD, SUITE 101
CLIVE, IA 50325

ENGINEER/ SURVEYOR

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

DATE OF SURVEY

FEBRUARY 27, 2017

BENCHMARKS

WAUKEE CITY BM#G120, ALUMINUM ROD W/CAP
EAST SIDE OF U PACE, 150 FEET +/- SOUTH OF
300TH STREET.
ELEVATION=1011.76

SUBMITTAL DATES

FIRST SUBMITTAL:	09/19/2017
SECOND SUBMITTAL:	10/20/2017
THIRD SUBMITTAL:	11/21/2017
FOURTH SUBMITTAL:	12/22/2017
FINAL SUBMITTAL:	01/27/2018
AS-BUILT SUBMITTAL:	11/12/2018

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. DETENTION FOR LOTS 1-5 WILL BE PROVIDED IN A REGIONAL DETENTION POND LOCATED WITHIN LOTS 4 AND 5.

ZONING

M-1 - LIGHT INDUSTRIAL DISTRICT

BULK REGULATIONS

- M-1
- 30 FT FRONT YARD SETBACK
 - 30 FT REAR YARD SETBACK
 - 25 FT SIDEYARD SETBACK WHEN ADJACENT TO 'R' OR 'C-1' DISTRICT, OTHERWISE 0'
 - MAXIMUM OF 3 STORIES

UTILITY WARNING

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 AND REFERENCE NOTES
5	HYDRANT COVERAGE PLAN
6-7	GRADING PLAN
8-9	EROSION & SEDIMENT CONTROL PLAN
10-15	STORM AND SANITARY SEWER PLAN AND PROFILE
16-18	WATERMAIN PLAN AND PROFILE

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.



1-800-292-8989

www.iowaonecall.com



CIVIL DESIGN ADVANTAGE

3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111

PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 1707.374

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)
MINIMUM PROTECTION ELEVATION	MPE
TOP OF PROPOSED GROUND	TG
MINIMUM OPENING ELEVATION	MOE
MINIMUM GRADE AT 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	

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 2018 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

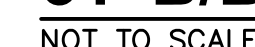
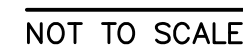
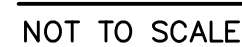
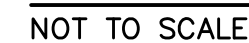
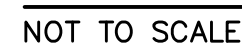
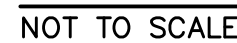


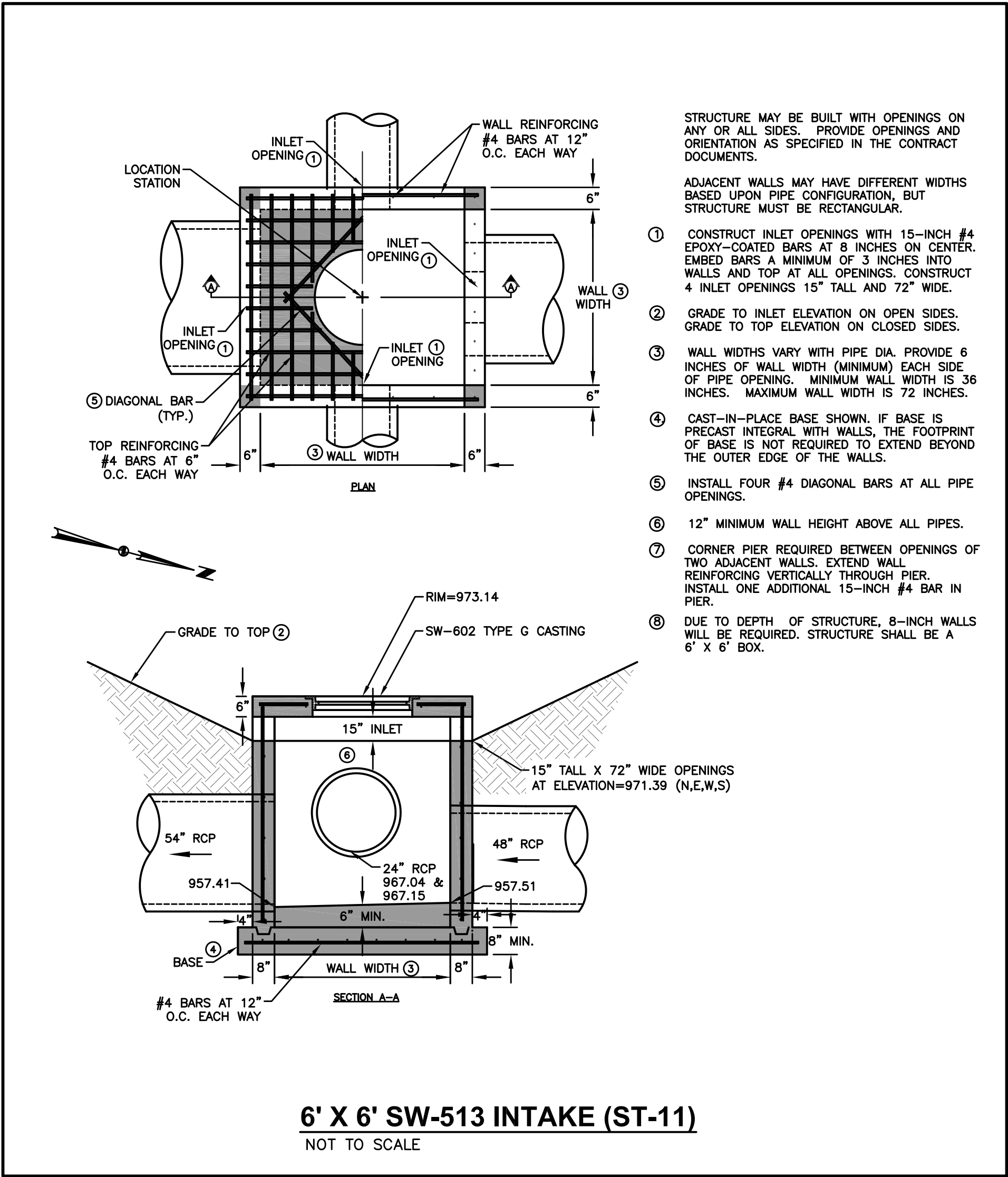
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

ERIN K. OLLENDIKE, P.E. DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2019
PAGES OR SHEETS COVERED BY THIS SEAL:

1-18





REVISIONS		DATE
AS-BUILTS	11/12/18	
REVISED FINAL SUBMITTAL	01/27/18	
FINAL SUBMITTAL	12/22/17	
FOURTH SUBMITTAL	11/21/17	
THIRD SUBMITTAL	10/20/17	
SECOND SUBMITTAL		

3405 S.E. CROSSROADS DRIVE, SUITE G GRIMES, IOWA 50111 PHONE: (515) 369-4400 FAX: (515) 369-4410	ENGINEER: EKO EI: GH
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I-80 WEST INDUSTRIAL PARK PLAT 2	DETAILS
3	19
1707.374	

FILE: H:\2017\1707374\DWG\1707374-004-BET-148.DWG
PLOTED BY: TONY POLONIKO DATE: 6/25/2020 7:48 AM
COMMENT:
END

ESTIMATED PROJECT QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT QUANTITY	
1	COMBINED CLEARING AND GRUBBING	AC	63.56
2	STRIPPING, SALVAGING AND SPREAD TOPSOIL	LS	1
3	CLASS 10 EXCAVATION	LS	1
4	SUBGRADE PREPARATION	SY	5,627
5	SANITARY SEWER GRAVITY MAIN, 8" DIA	LF	1754
6	SANITARY SEWER SERVICE STUB, 6" DIA	EA	3
7	SUBDRAIN, 6" PERFORATED PVC	LF	1,637
8	STORM SEWER, 15" RCP	LF	293
9	STORM SEWER, 24" RCP	LF	192
10	STORM SEWER, 30" RCP	LF	413
11	STORM SEWER, 36" RCP	LF	620
12	STORM SEWER, 42" RCP	LF	50
13	STORM SEWER, 48" RCP	LF	507
14	STORM SEWER, 54" RCP	LF	246
15	STORM SEWER, 24" RCP APRON W/ APRON GUARD	EA	4
16	STORM SEWER, 30" RCP APRON W/ APRON GUARD	EA	2
17	STORM SEWER, 42" RCP APRON W/FOOTING & APRON GUARD	EA	2
18	STORM SEWER, 48" RCP APRON W/FOOTING & APRON GUARD	EA	7
19	STORM SEWER, 54" RCP APRON W/FOOTING & APRON GUARD	EA	1
20	WATER MAIN, 12" DIA	LF	1,443
21	WATER SERVICE STUB, 6" DIA	EA	5
22	VALVE, 6" DIA	EA	5
23	VALVE, 12" DIA	EA	4
24	FIRE HYDRANT ASSEMBLY	EA	5
25	TEMPORARY FIRE HYDRANT ASSEMBLY	EA	5
26	TEMPORARY FIRE HYDRANT ASSEMBLY (RELOCATED)	EA	1
27	MANHOLE, SW-301, 48" (SANITARY SEWER)	EA	5
28	SANITARY SEWER CLEANOUT	EA	2
29	MANHOLE, SW-401, 60" (STORM SEWER)	EA	1
30	MANHOLE, SW-401, 96" (STORM SEWER)	EA	3
31	STORM SEWER CLEANOUT	EA	2
32	INTAKE, SW-501	EA	4
33	INTAKE, SW-503	EA	4
34	INTAKE, SW-505	EA	2
35	INTAKE, SW-513	EA	1
36	PAVEMENT, 8" P.C.C. WITH CD BASKETS	SY	4,984
37	SEEDING, FERTILIZING, AND MULCHING	AC	62.53
38	TRAFFIC CONTROL	LS	1
39	EROSION CONTROL	LS	1
40	ROCK OUTLET PROTECTION, CLASS 'E' RIP RAP	TON	310
41	SILTING BASIN, CLASS 'E' RIP RAP	LS	1
42	8-INCH CIRCULAR TURNAROUND	SY	563
43	PERMANENT ROAD CLOSURE SIGNS URBAN, SI-182 (RELOCATED)	EA	5
44	PAVEMENT, 7" P.C.C. DRIVEWAY	SY	82

GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND TO THE 2017 EDITION OF SUDAS STANDARD SPECIFICATIONS. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IF ANY DISCREPANCIES.
- 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.
- 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.
- 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.
- THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN ALL SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT. INCLUDING STAGING OF CONSTRUCTION DETAILS.
- 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.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY (48 HRS NOTICE) THE FOLLOWING:
 - CITY OF WAUKEE ENGINEERING DEPARTMENT
 - APPROPRIATE UTILITY COMPANIES
 - OWNER
 - CIVIL DESIGN ADVANTAGE* 48 HOUR NOTICE SHALL BE GIVEN TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO WEEKEND AND HOLIDAY WORK.
- PRIOR TO CONSTRUCTION, THE PROJECT MANAGER SHALL CONTACT THE WAUKEE ENGINEERING DEPARTMENT AND SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO THE ANTICIPATED START OF CONSTRUCTION.
- SPECIAL CARE SHALL BE TAKEN WHEN FORMING AT INTERSECTIONS SO THE PROFILES SHOWN ON THE PLANS AND THE ELEVATIONS SHOWN ON THE INTERSECTION DETAILS ARE OBTAINED. SHORT LENGTHS OF FORMS OR FLEXIBLE FORMS MAY BE NECESSARY AT THESE LOCATIONS.

ESTIMATE REFERENCE INFORMATION

Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.

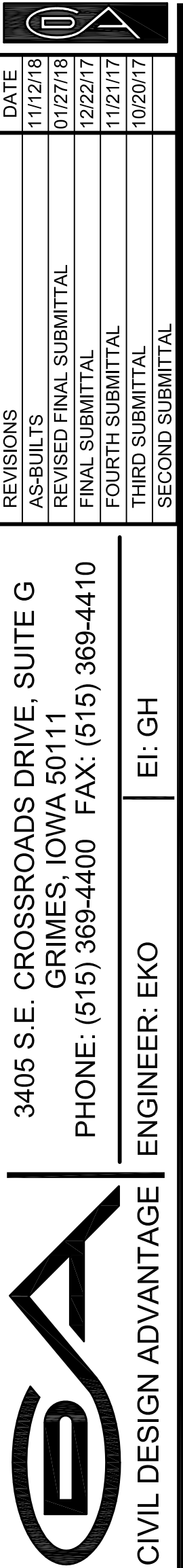
ITEM NO.	DESCRIPTION
	THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2018 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.
	ALL REFERENCES TO SECTIONS AND FIGURES ARE TO THE SUDAS STANDARD SPECIFICATIONS. CITY OF WAUKEE STANDARD DETAILS SHALL GOVERN IF ANY DISCREPANCIES.
1	CLEAR AND GRUB ALL AREAS AFFECTED BY GRADING OPERATIONS. THE CONTRACTOR SHALL FIELD VERIFY CLEARING AND GRUBBING NEEDS PRIOR TO BIDDING. INCLUDES REMOVAL OF ANY EXISTING FIELD FENCE. ALL MATERIAL THAT IS REMOVED FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. INCLUDED REMOVAL OF EXISTING CROPS FOR CONSTRUCTION OF TEMPORARY ACCESS. DO NOT DISTURB CROPS OUTSIDE OF THE PROJECT LIMITS.
2	STRIP, SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN. TOPSOIL TO BE RESPREAD SHALL BE FREE OF ROCK AND DEBRIS AND BE SUITABLE FOR THE GROWTH OF GRASS. COORDINATE LOCATION OF STOCKPILE WITH OWNER.
3	EXCAVATION INCLUDES ALL WORK NECESSARY TO ACHIEVE PROPER GRADES AS SHOWN IN THE PLANS. NO PAYMENT FOR OVERHAUL SHALL BE ALLOWED.
4	REFER TO SHEET 2 FOR TYPICAL LOCATIONS AND THICKNESS.
5	SANITARY SEWER FOR 8" SHALL BE PVC TRUSS PIPE. ANY CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 3010.101 AND 3010.103 FOR PIPE EMBEDMENT DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. EXISTING SANITARY SEWER WILL NEED TO BE RETESTED AFTER SADDLE WYE INSTALLATION.
6, 21	REFER TO SHEET 2 FOR TYPICAL DETAIL SECTION. ALL SERVICES TO BE MARKED WITH A PAINTED STEEL POST.
7-14	REFER TO FIGURE 3010.102 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. CONNECTIONS TO EXISTING STORM SEWER PIPE AND STRUCTURES SHALL BE CONSIDERED INCIDENTAL. WRAP ALL PIPE JOINTS IN ENGINEERING FABRIC. CLEAN AND TELEWISE STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVISION REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVISION SHALL BE CONSIDERED INCIDENTAL. IF STORM SEWER CROSSES ABOVE A WATER MAIN OR CROSSES LESS THAN 18 INCHES BELOW A WATER MAIN THEN STORM SEWER SHALL BE CONSTRUCTED OF REINFORCED CONCRETE WITH A FLEXIBLE O-RING GASKET JOINT RATED AT 13 PSI OR GREATER. O-RING GASKET JOINTS SHALL BE INSTALLED ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER TO THE SEWER IS AT LEAST TEN FEET.
15-19	THE LAST THREE SECTIONS AND APRON SHALL BE CONNECTED WITH PIPE CONNECTORS. REFER TO FIG. 4030.221 - RCP APRON SECTION FOOTING FOR FOOTING CONSTRUCTION DETAILS. APRON GUARD REQUIRED ON ALL APRONS. RCP APRON FOOTING, PIPE APRON GUARD AND PIPE CONNECTORS TO BE CONSIDERED INCIDENTAL. INSTALL CLAY WATERSTOPS AT ALL RCP APRONS, MIN. 3' LONG.
20-21	REFER TO FIG. 3010.101 AND FIG. 3010.104 FOR TRENCH BEDDING AND BACKFILL ZONE DETAILS. GRANULAR PIPE BEDDING SHALL BE CONSIDERED INCIDENTAL. REFER TO FIG. 5010.101 FOR THRUST BLOCK DETAILS. REFER TO FIG. 5010.102 FOR TRACER SYSTEM DETAILS. ALL FITTINGS, POLYETHYLENE WRAP, THRUST BLOCKS, AND TRACER WIRE SYSTEM SHALL BE CONSIDERED INCIDENTAL.
24-26	REFER TO FIG. 5020.201 - FIRE HYDRANT ASSEMBLY FOR FIRE HYDRANT CONSTRUCTION DETAILS. INCLUDES ANCHORING TEE, ANCHORING ELBOW, GATE VALVE, VALVE BOX, ANCHORING PIPE, ANCHORING COUPLING, ELBOWS, STORZ FITTINGS, POLYETHYLENE WRAP, THRUST BLOCK AND TRACER WIRE SYSTEM AND FIRE HYDRANT.
27	REFER TO FIG. 6010.301 - CIRCULAR SANITARY SEWER MANHOLE (SW-301) FOR CONSTRUCTION DETAILS. CASTINGS IN PAVEMENT SHALL BE TYPE B RING AND COVER. WHEN CASTINGS ARE NOT IN PAVEMENT, INSTALL MANHOLE CONE SECTION, MANHOLE STEPS, AND RING/COVER CASTING SUCH THAT SEPARATION IS MAINTAINED BETWEEN MANHOLE COVERS AND PAVED AREAS (BACK OF CURB, SIDEWALK PAVEMENT, SIDEWALK APPROACHES/RAMPS). ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.

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
29-30	REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.
31	REFER TO FIG. 4040.232 - SUBDRAIN CLEANOUTS FOR CONSTRUCTION DETAILS.
32-34	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".
32	REFER TO FIG 6010.501 - SINGLE GRATE INTAKE (SW-501) FOR CONSTRUCTION DETAILS.
33	REFER TO FIG 6010.503 - SINGLE GRATE INTAKE WITH MANHOLE (SW-503) FOR CONSTRUCTION DETAILS.
34	REFER TO FIG 6010.505 - DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS.
35	REFER TO SHEET 14 FOR LOCATION AND SHEET 3 CONSTRUCTION DETAILS.
36	REFER TO FIG. 7010.101 - JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM CD AND C JOINT SPACING IS 15 FEET.
37	THE SITE SEEDING SHALL CONFORM TO THE SPECIFICATION FOR TYPE (1) PERMANENT LAWN MIXTURE AND TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE. <u>SEEDING QUANTITIES</u> -TYPE 1 PERMANENT LAWN MIXTURE = 1.30 AC (PUBLIC ROW) -TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 65.00 AC
38	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.
39	REFER TO SHEETS 8 AND 9 OF THE CONSTRUCTION DRAWINGS FOR EROSION AND SEDIMENT CONTROLS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS. <u>EROSION CONTROL QUANTITIES</u> - 1 CONCRETE WASH PIT - 17,248 LF OF SILT FENCE - 66.30 ACRES OF SEEDING, FERTILIZING AND MULCHING. - 10 INLET PROTECTION DEVICES - 4 36" HDPE OR CMP TEMPORARY STANDPIPE
40	INSTALL ENGINEERING FABRIC UNDER ALL RIP-RAP. ENGINEERING FABRIC SHALL BE CONSIDERED INCIDENTAL.
41	REFER TO DETAIL ON SHEET 9 AND SHEET 8 FOR LOCATION.
42	8-INCH TURNAROUND SHALL BE 4-INCHES OF 3-INCH ROCK AND 4-INCHES OF GRANULAR SURFACING. REFER TO SHEET 5 FOR LOCATION OF TEMPORARY TURNAROUND.
43	REFER TO PLAN AND PROFILE SHEETS FOR LOCATION. REFER TO IDOT STANDARD ROAD PLAN SI-182 FOR CONSTRUCTION DETAILS. EACH LOCATION CONSISTS OF FIVE SIGNS WITH POSTS PER SI-182.
44	REFER TO SHEET 13 AND 18 FOR LOCATION.

- IN THE EVENT OF A DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES, THE DETAILED PLANS SHALL GOVERN.
- 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.
- 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
- THE CONTRACTOR SHALL SUBMIT A LIST OF CONSTRUCTION MATERIALS TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- 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 PLAN SET IS TO BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.
- THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISIONING ALL STORM AND SANITARY SEWERS. ALL CLEANING AND TELEVISIONING SHALL BE APPROVED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT 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. A COPY OF THE VIDEO IS TO BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT AS WELL. ALL SANITARY MANHOLES SHALL BE VACUUM TESTED.
- ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE 4" STORZ FITTINGS.
- ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
- ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
- ALL MANHOLES SHALL HAVE A MINIMUM OF 1 - 4" ADJUSTING RING TO ALLOW FOR FUTURE ADJUSTMENT SHOULD THE STRUCTURE END UP IN A DRIVEWAY.



CIVIL DESIGN ADVANTAGE

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: EKO

DATE
11/12/18
01/27/18
12/22/17
11/21/17
10/20/17

REVISIONS
AS-BUILTS
REVISED FINAL SUBMITTAL
FINAL SUBMITTAL
FOURTH SUBMITTAL
THIRD SUBMITTAL
SECOND SUBMITTAL

I-80 WEST INDUSTRIAL PARK PLAT 2

QUANTITIES AND REFERENCE NOTES

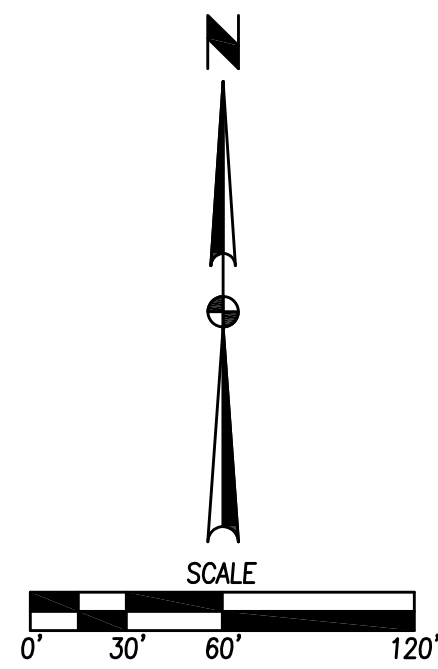
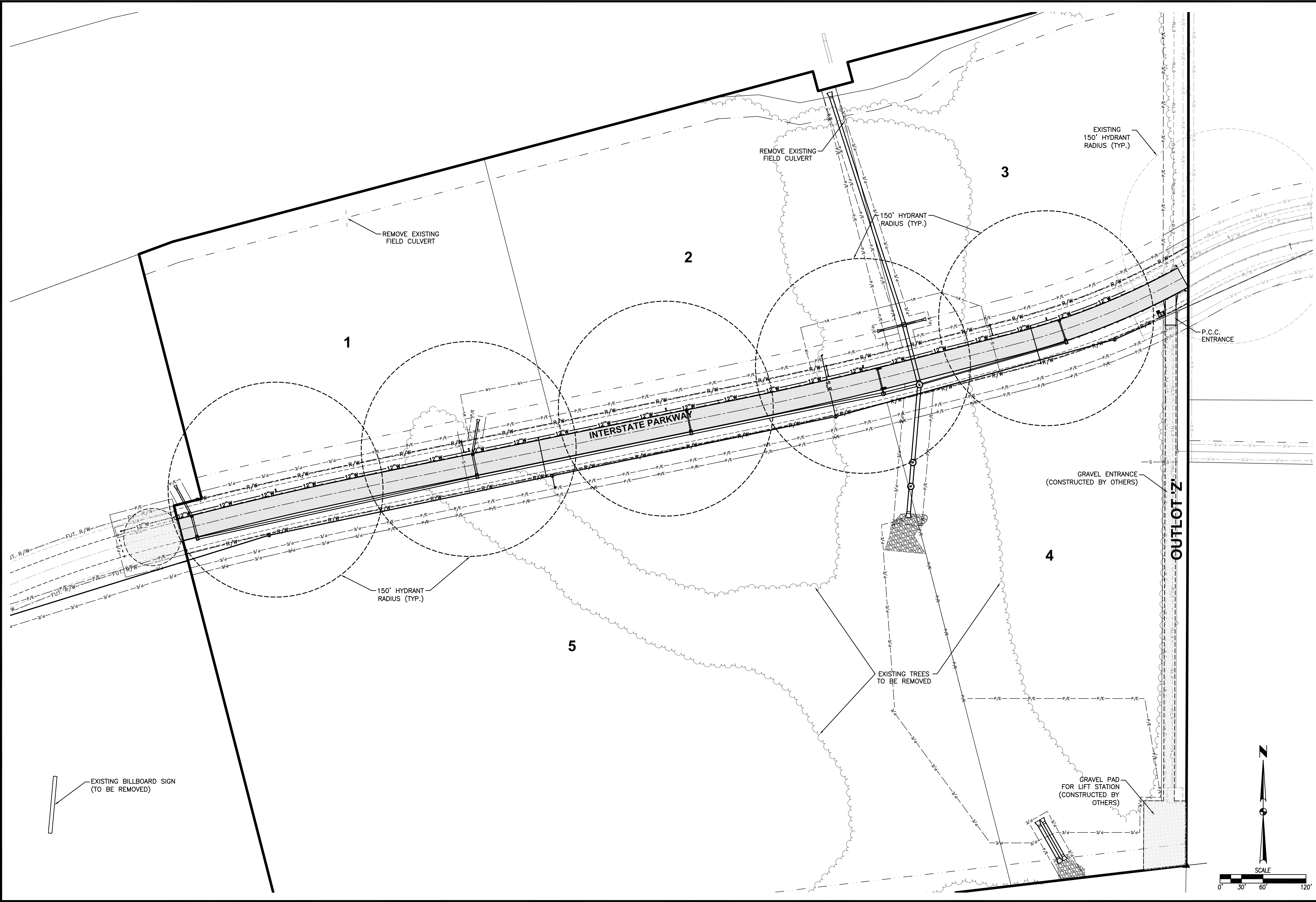
WAUKEE, IOWA

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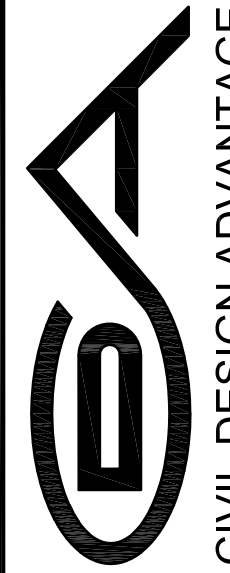
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PLOTTER: HP DesignJet 2400C PLOTTED BY: ERIN POLLENBERG TECH



I-80 WEST INDUSTRIAL PARK PLAT 2
HYDRANT COVERAGE PLAN

5/19
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WAUKEE, IOWA

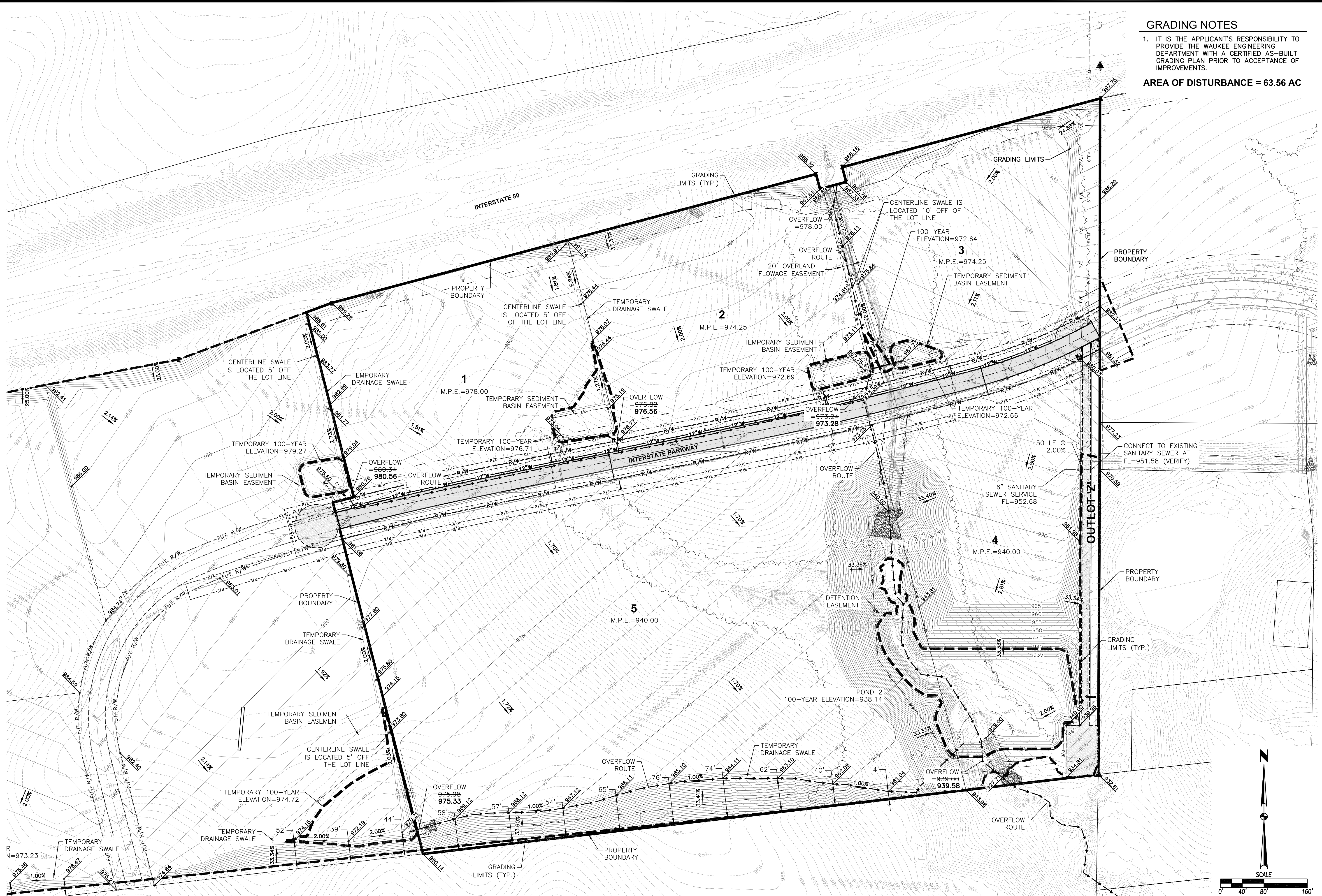
ENGINEER: EKO

EI: GH

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

REVISIONS	DATE
AS-BUILTS	11/12/18
REVISED FINAL SUBMITTAL	01/27/18
FINAL SUBMITTAL	12/22/17
FOURTH SUBMITTAL	11/21/17
THIRD SUBMITTAL	10/20/17
SECOND SUBMITTAL	

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DRAWN BY: EKO



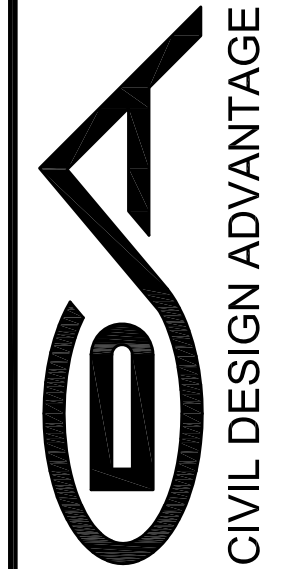
GRADING NOTES

1. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE THE WAUKEE ENGINEERING DEPARTMENT WITH A CERTIFIED AS-BUILT GRADING PLAN PRIOR TO ACCEPTANCE OF IMPROVEMENTS.

AREA OF DISTURBANCE = 63.56 AC

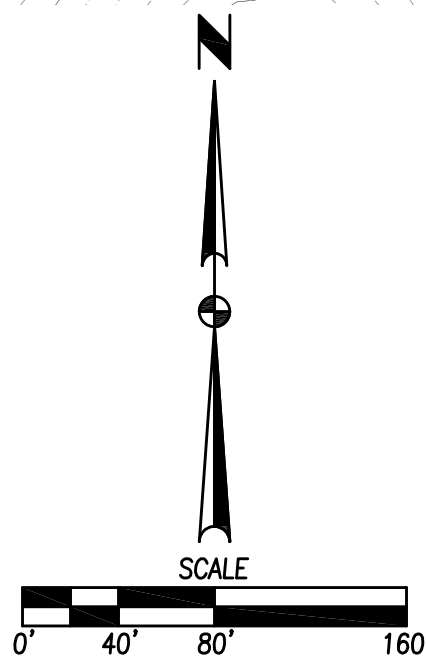
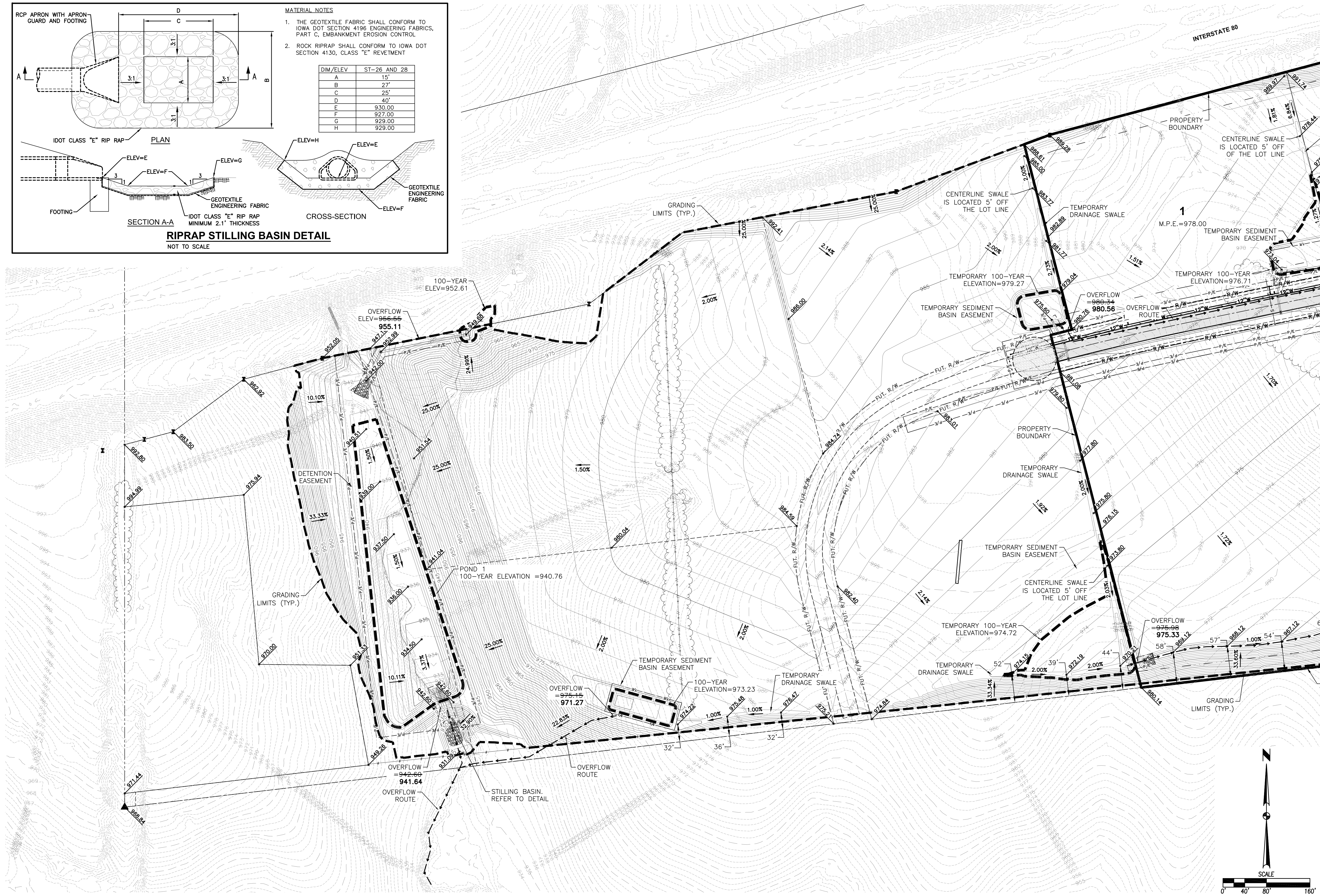
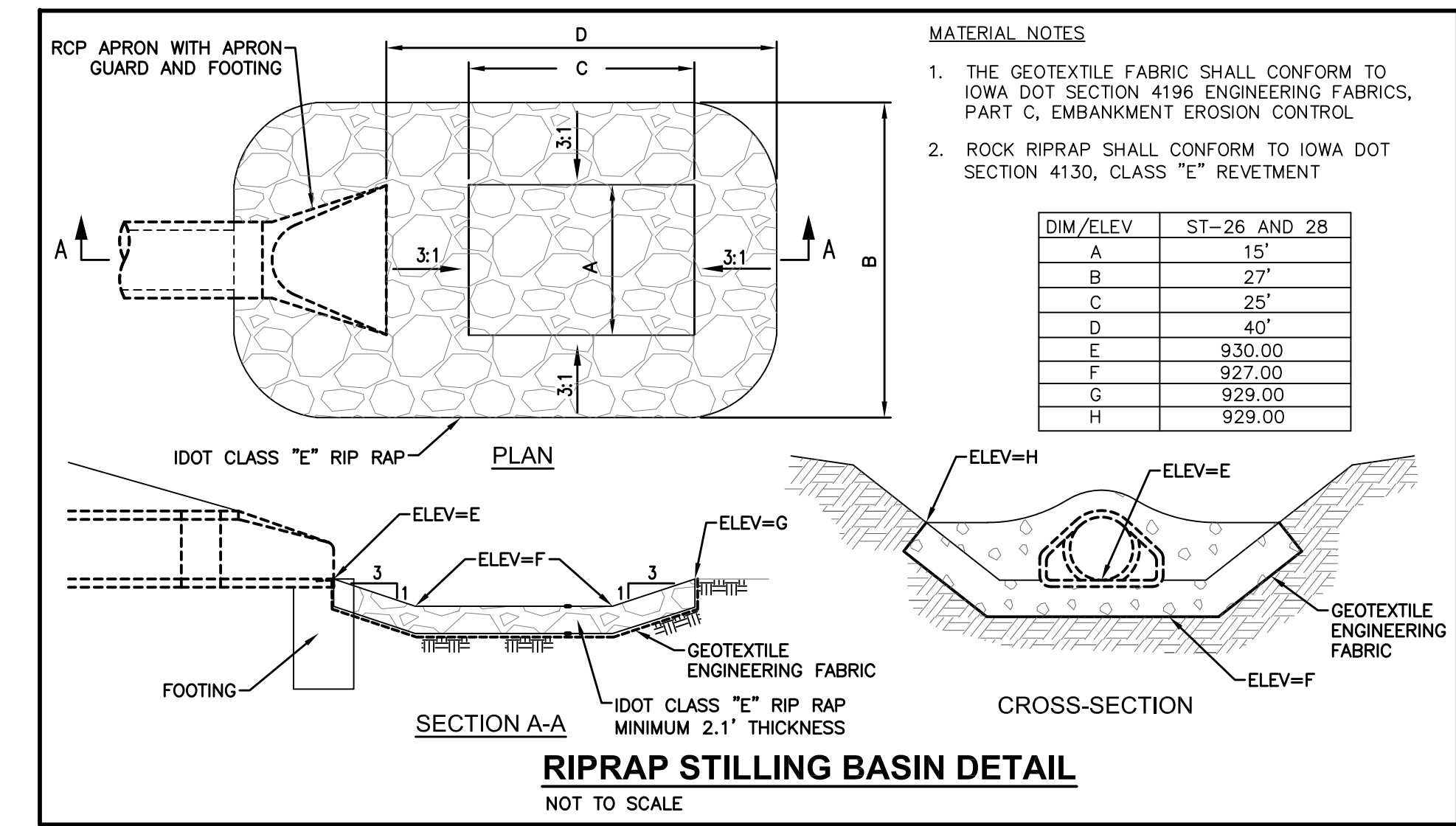
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AS-BUILT	11/12/18
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FINAL SUBMITTAL	12/22/17
FOURTH SUBMITTAL	11/21/17
THIRD SUBMITTAL	10/20/17
SECOND SUBMITTAL	

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
EI: GH



WAUKEE, IOWA

I-80 WEST INDUSTRIAL PARK PLAT 2 GRADING PLAN

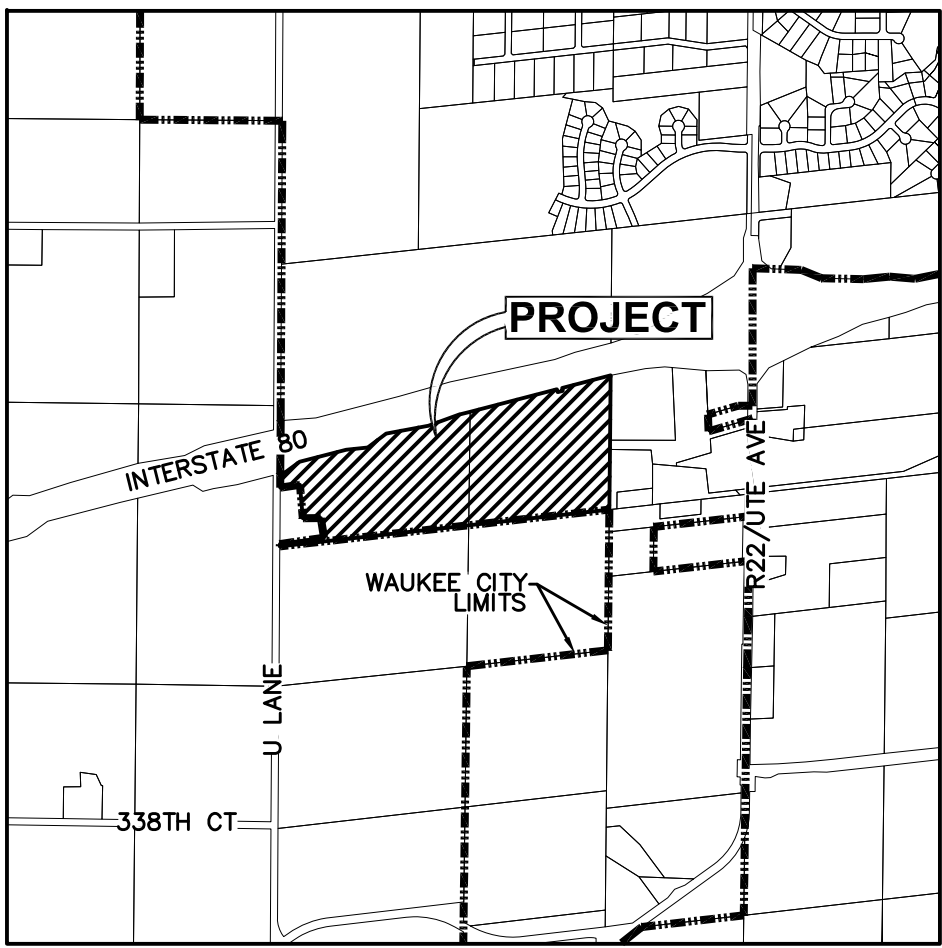


I-80 WEST INDUSTRIAL PARK PLAT 2

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	17,248
2	SEEDING, FERTILIZING, AND MULCHING	AC	62.53
3	INLET PROTECTION DEVICES	EA	10
4	CONCRETE WASHOUT PIT	EA	1
5	36" PVC TEMPORARY STANDPIPE	EA	4

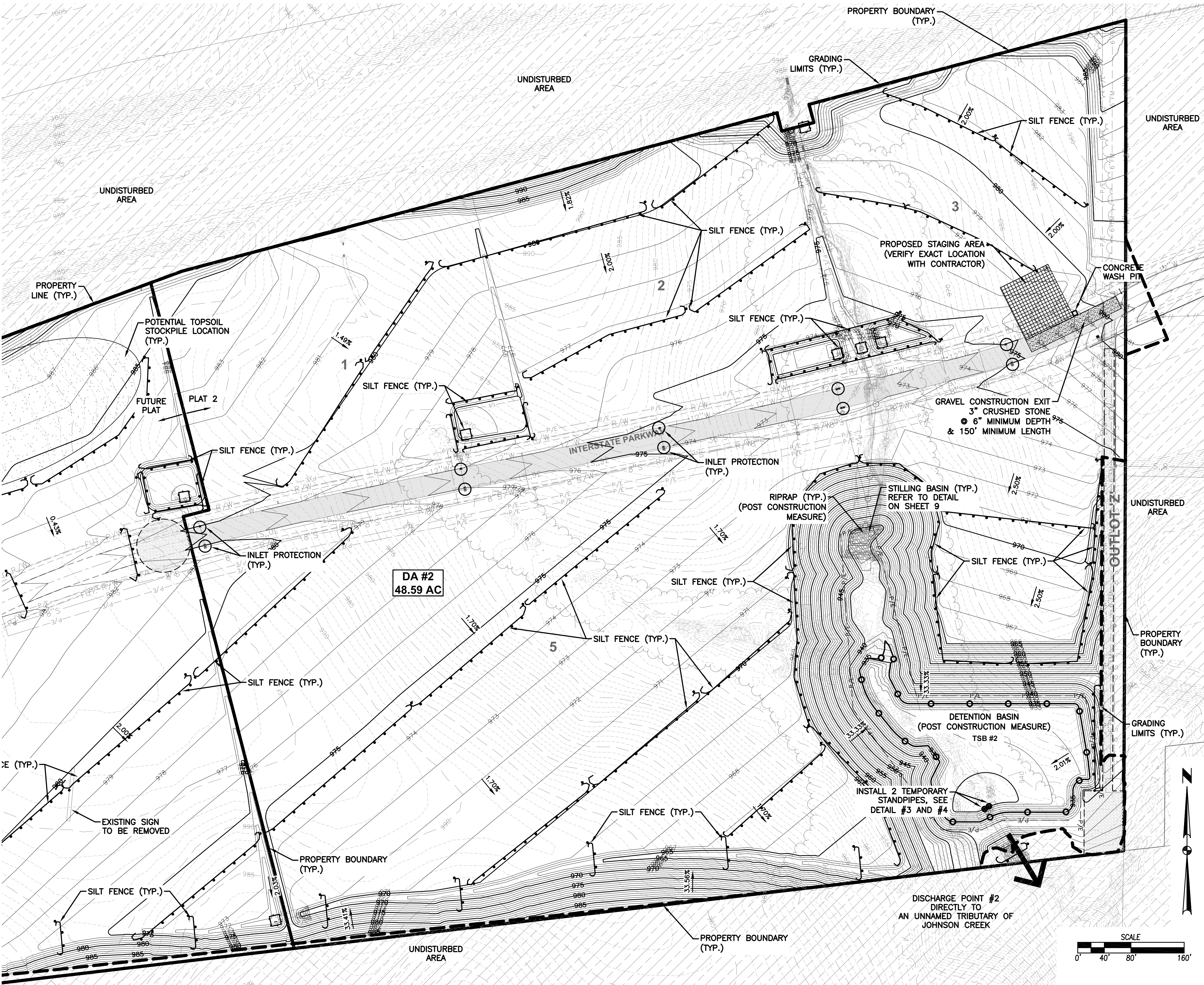
DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 DIRECTLY TO AN UNNAMED TRIBUTARY OF JOHNSON CREEK
TOTAL AREA DISTURBED TO DISCHARGE POINT 18.74 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT) 67,464 CU FT
VOLUME PROVIDED IN SILT FENCE (6,880 LF @ 4.5 CU FT/LF OF FENCE) 30,060 CU FT
VOLUME PROVIDED IN TSB #1 77,540 CU FT
TOTAL VOLUME PROVIDED 107,600 CU FT

DISCHARGE POINT #2 DIRECTLY TO AN UNNAMED TRIBUTARY OF JOHNSON CREEK
TOTAL AREA DISTURBED TO DISCHARGE POINT 48.59 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT) 174,924 CU FT
VOLUME PROVIDED IN SILT FENCE (10,568 LF @ 4.5 CU FT/LF OF FENCE) 47,556 CU FT
VOLUME PROVIDED IN TSB #2 156,157 CU FT
TOTAL VOLUME PROVIDED 203,713 CU FT

SWPPP LEGEND

DRAINAGE ARROW	X.XX %	AREA TO BE SEEDED
GRADING LIMITS	---	STRAW MAT
FILTER SOCK	---	UNDISTURBED AREA
SILT FENCE	---	RIPRAP
DITCH CHECK	---	GRAVEL ENTRANCE
INLET PROTECTION	---	STAGING AREA
PORTABLE RESTROOM	R	TEMPORARY SEDIMENT BASIN
TEMPORARY STANDPIPE	---	
CONCRETE WASHOUT PIT	---	



DATE
11/12/18
11/22/18
12/22/17
11/21/17
10/20/17

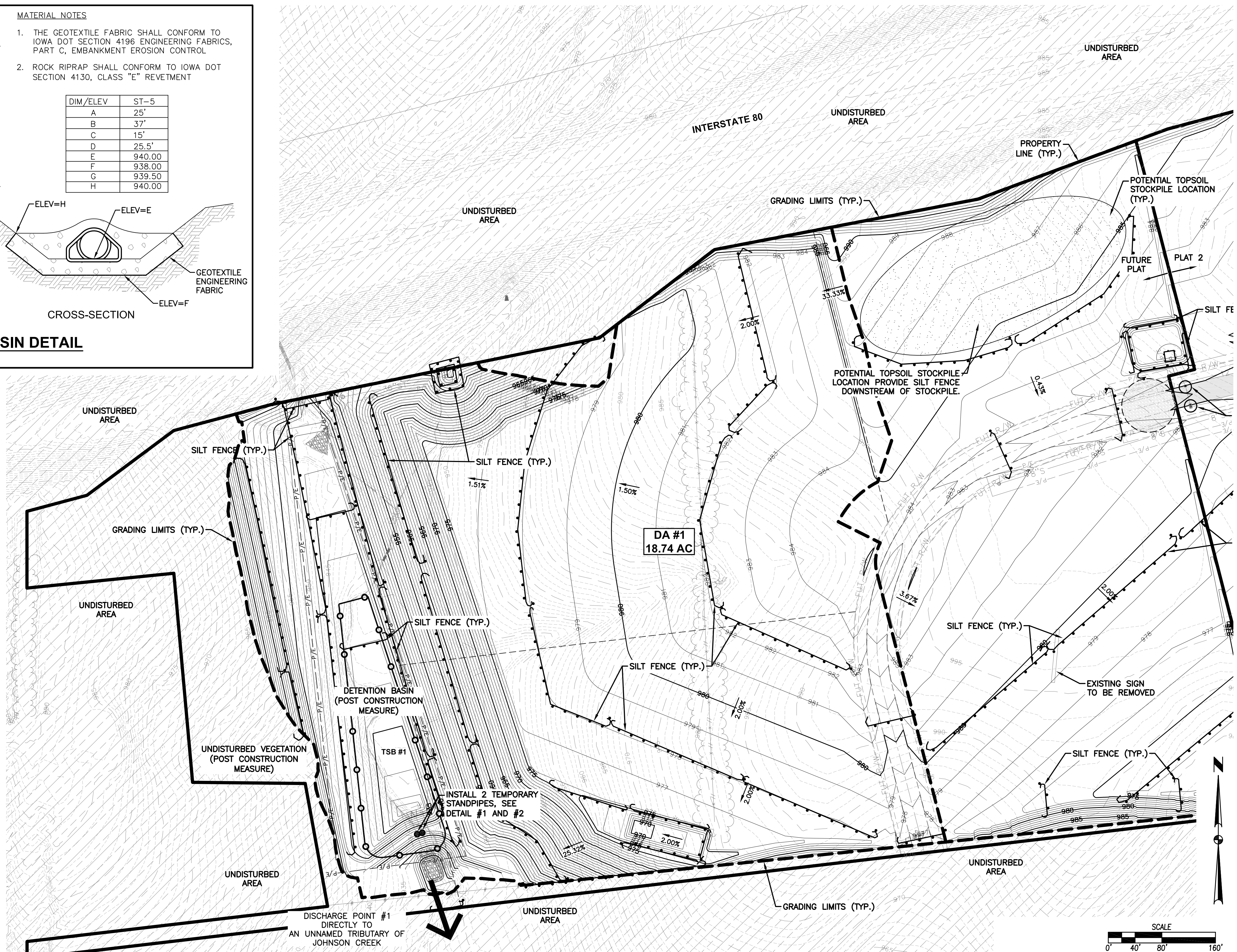
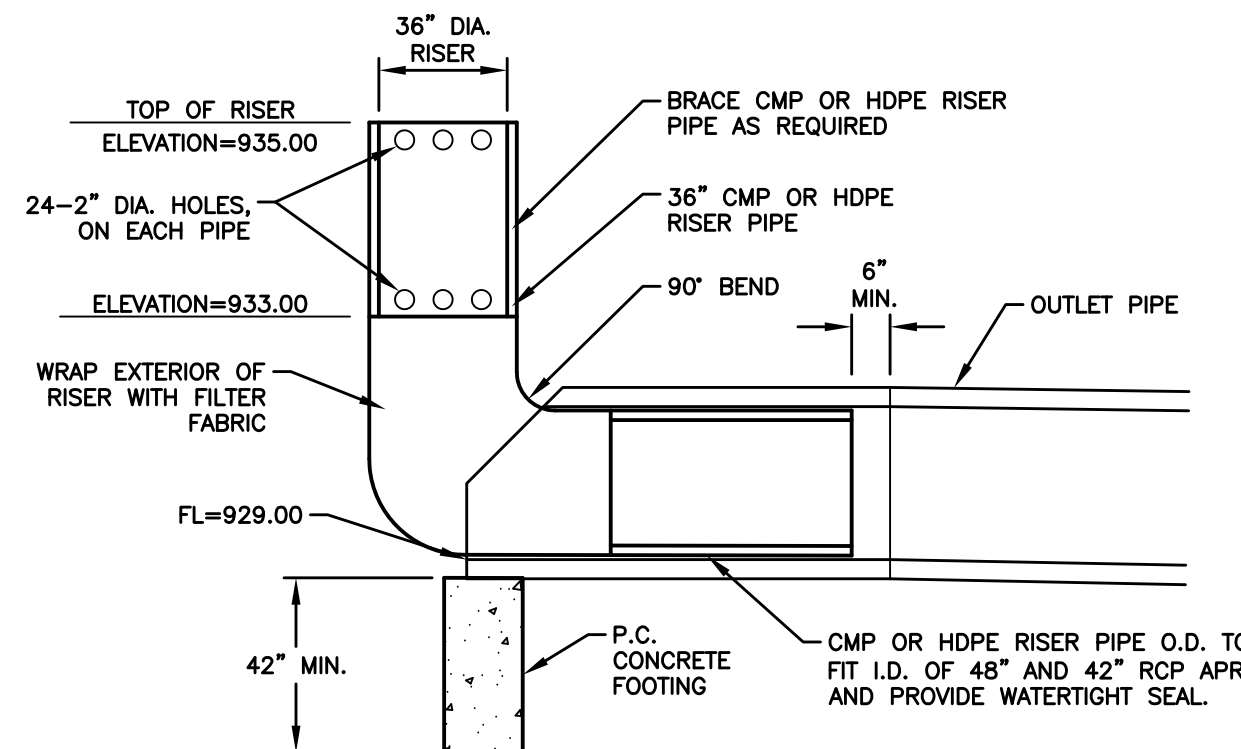
AS-BUILT
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FINAL SUBMITTAL
FOURTH SUBMITTAL
THIRD SUBMITTAL
SECOND SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G
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PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
EI: GH

CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

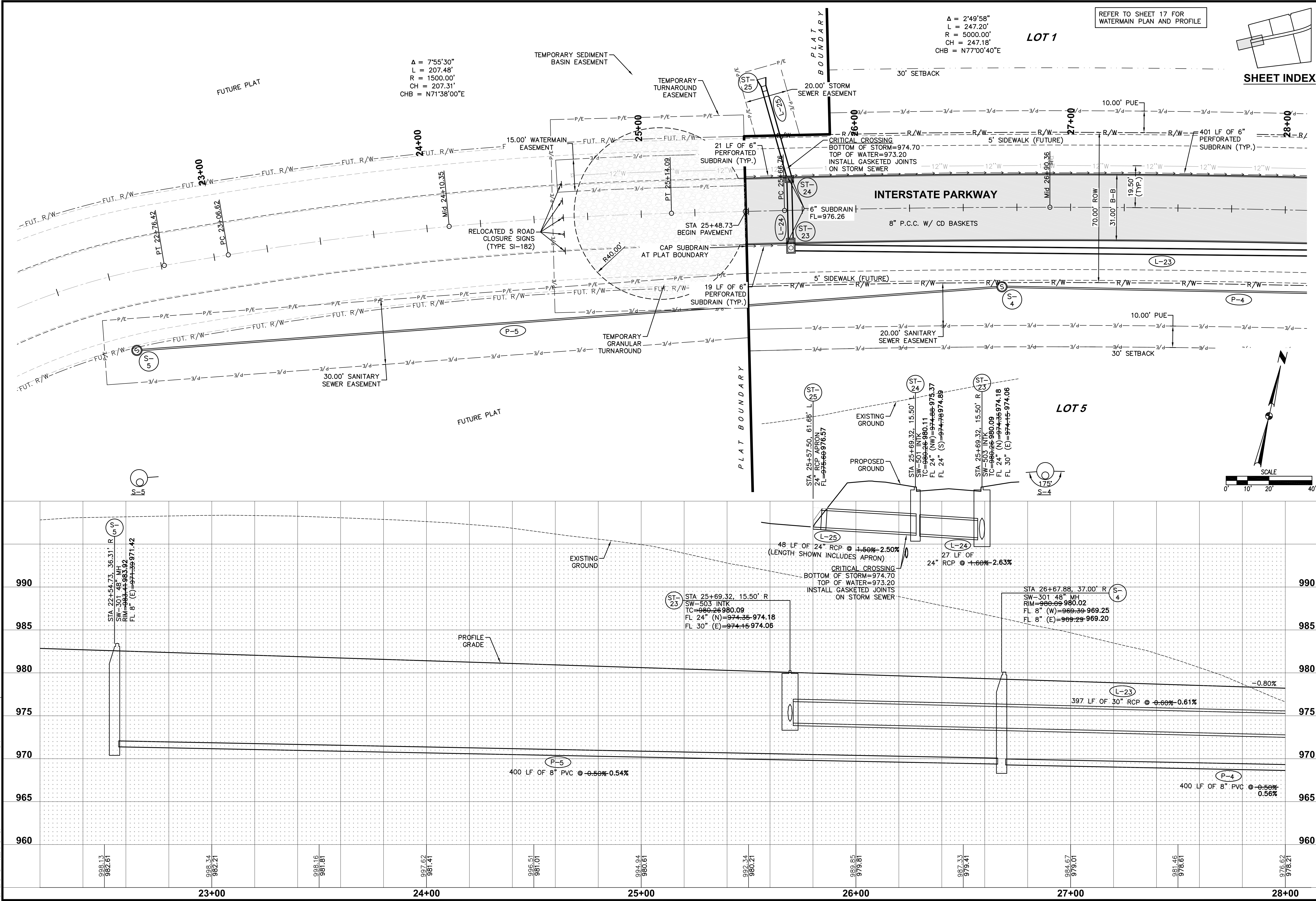
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EROSION AND SEDIMENT CONTROL PLAN



I-80 WEST INDUSTRIAL PARK PLAT 2
EROSION AND SEDIMENT CONTROL PLAN
WAUKEE, IOWA

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11/12/18
01/27/18
12/22/17
11/21/17
10/20/17

AS-BUILTS
REVISED FINAL SUBMITTAL
FINAL SUBMITTAL
FOURTH SUBMITTAL
THIRD SUBMITTAL
SECOND SUBMITTAL

REVISIONS

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
EII: GH

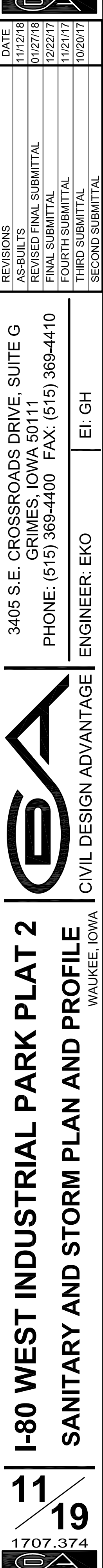
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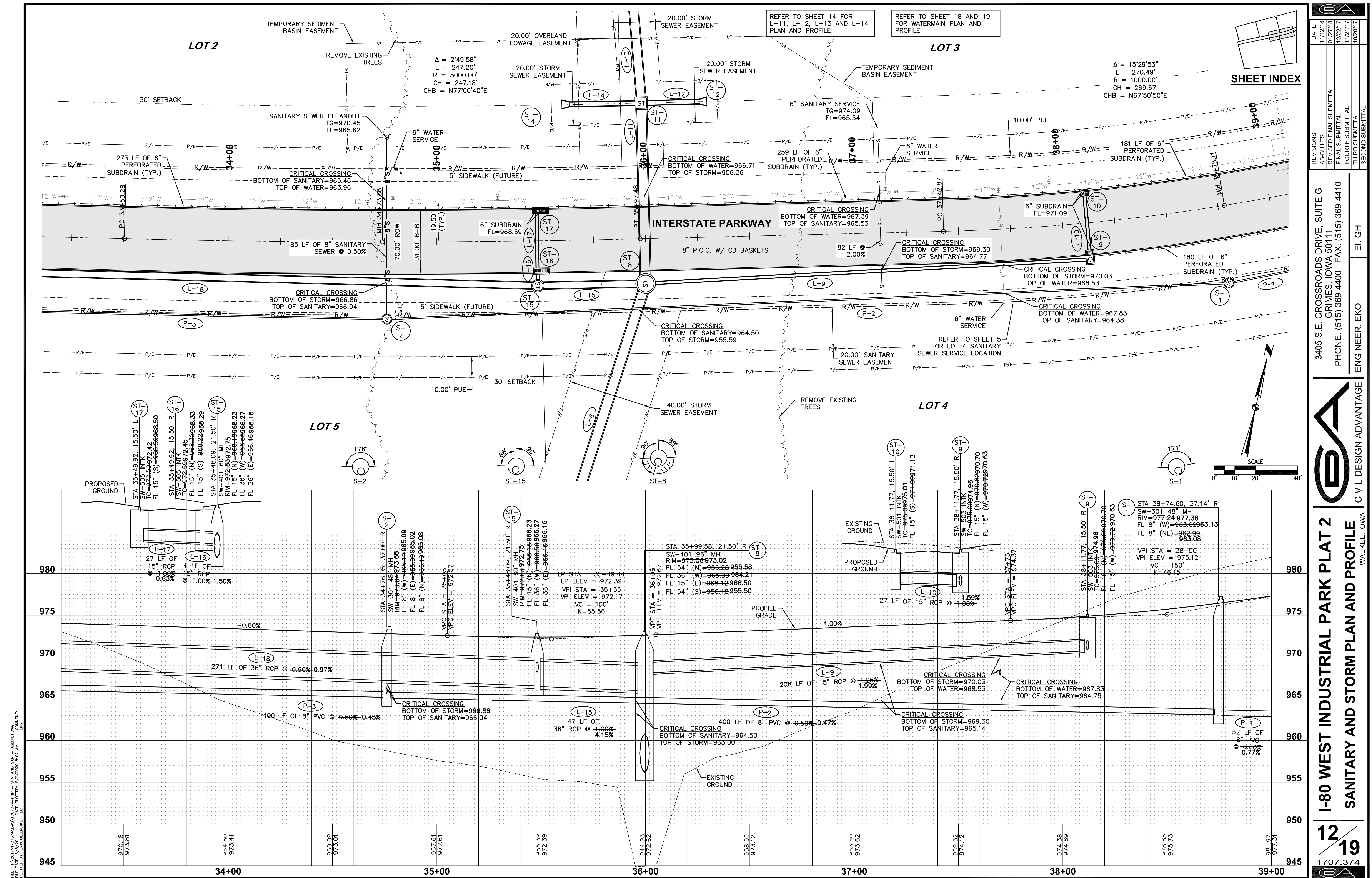
I-80 WEST INDUSTRIAL PARK PLAT 2
SANITARY AND STORM PLAN AND PROFILE
WAUKEE, IOWA

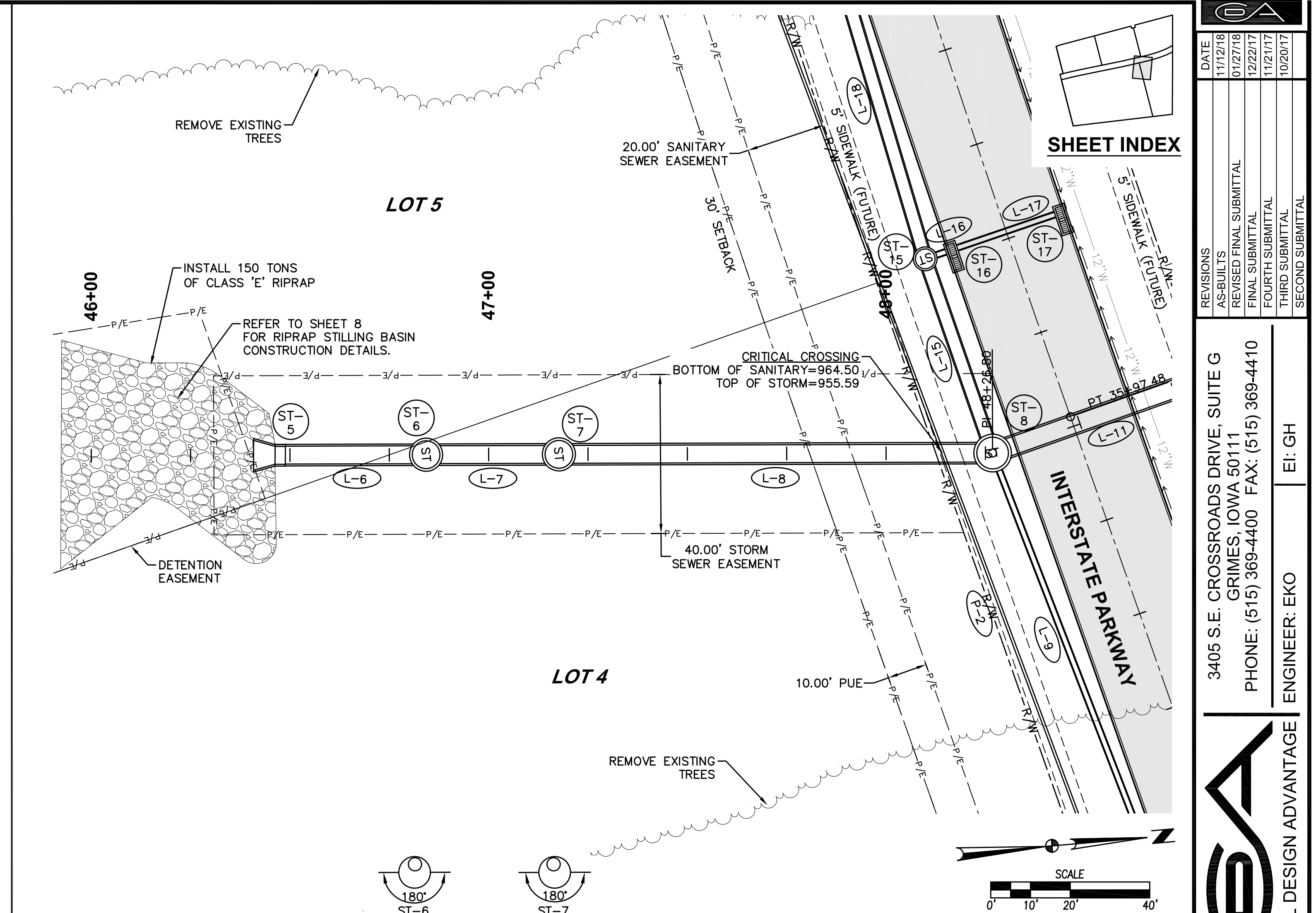
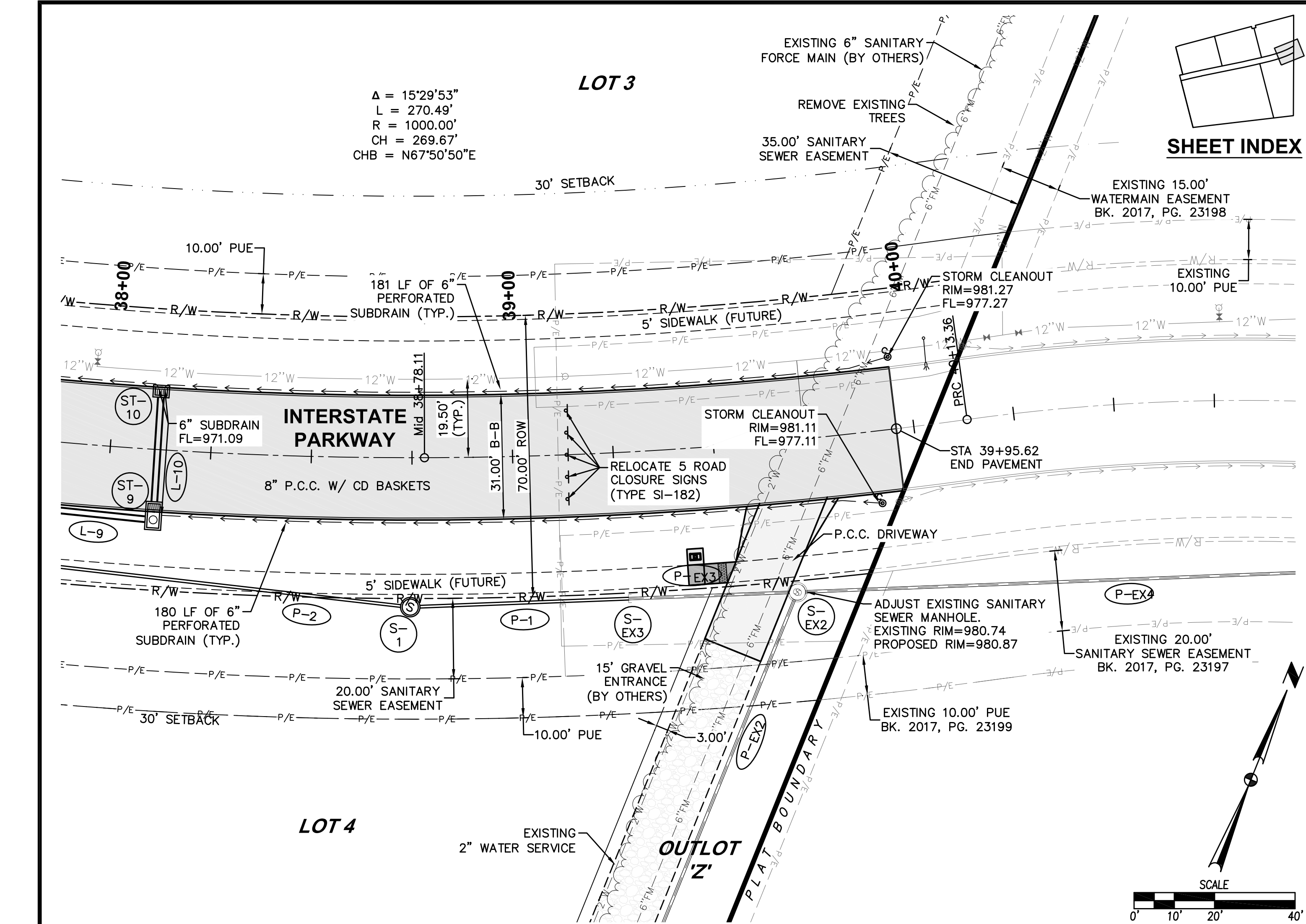
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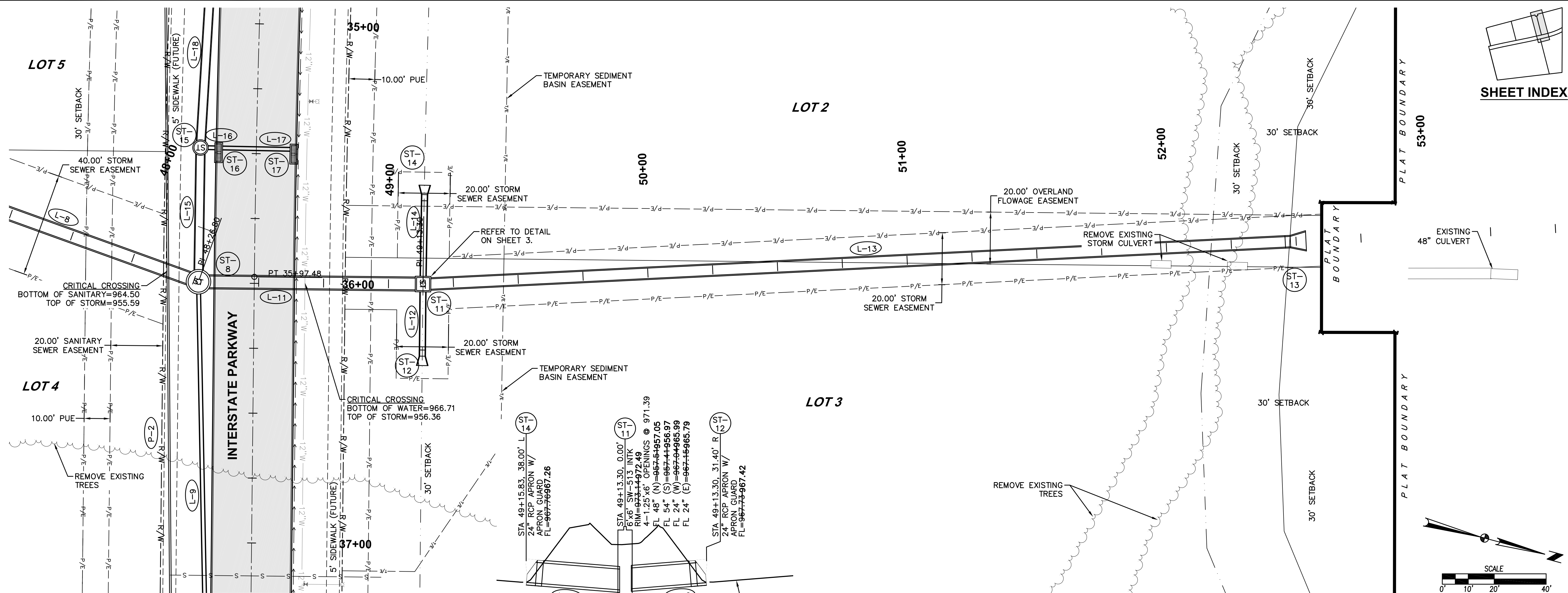
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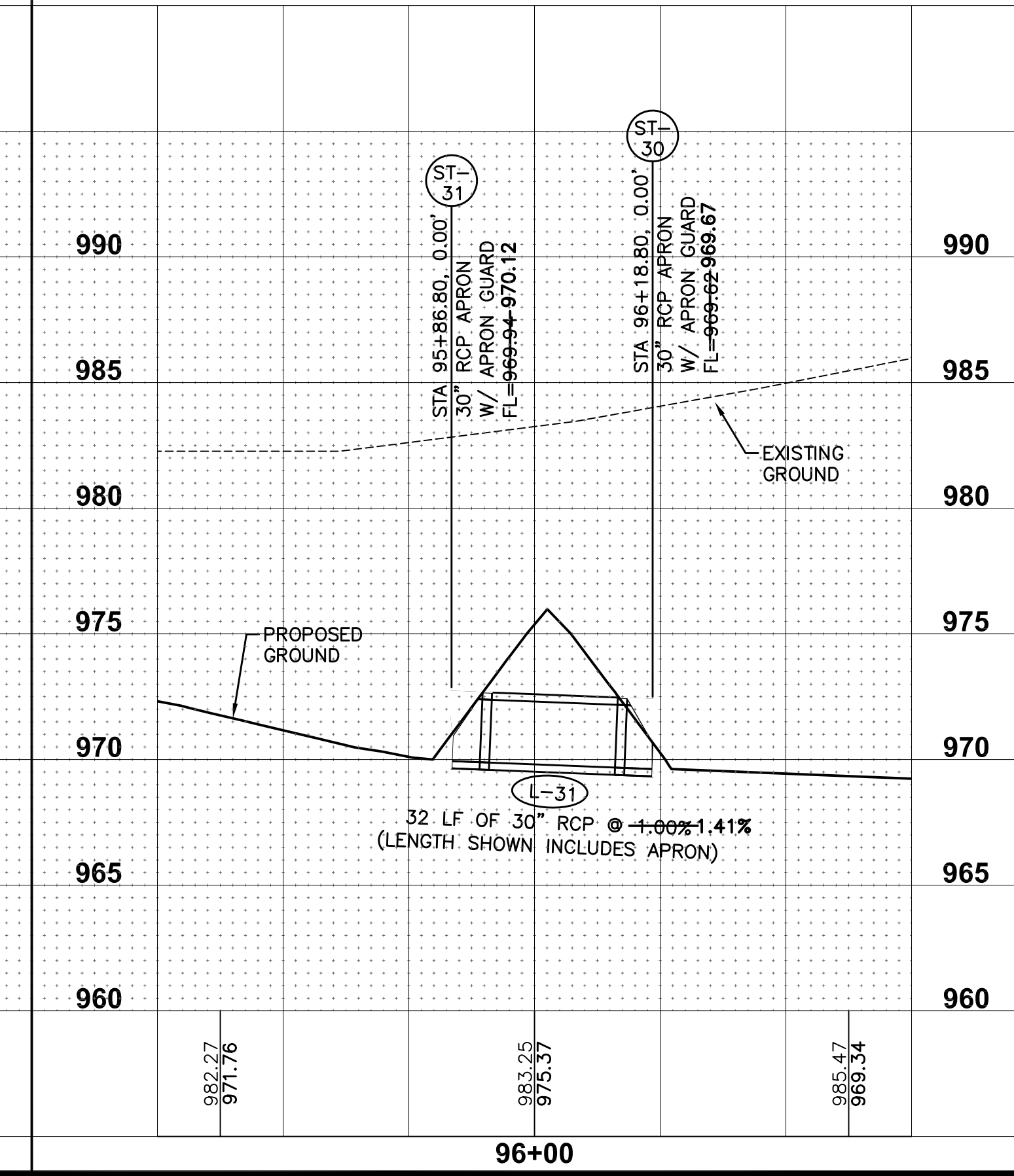
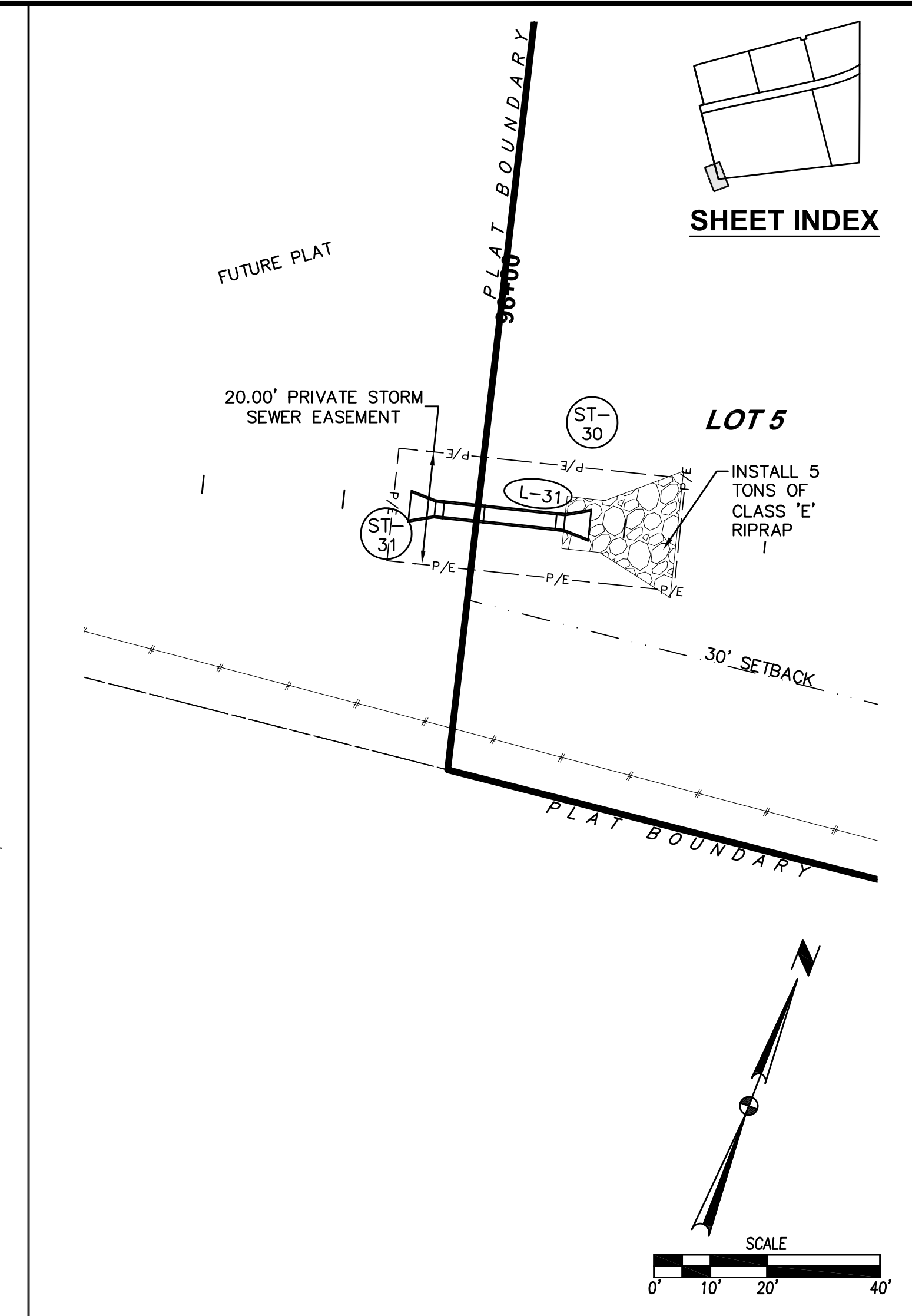
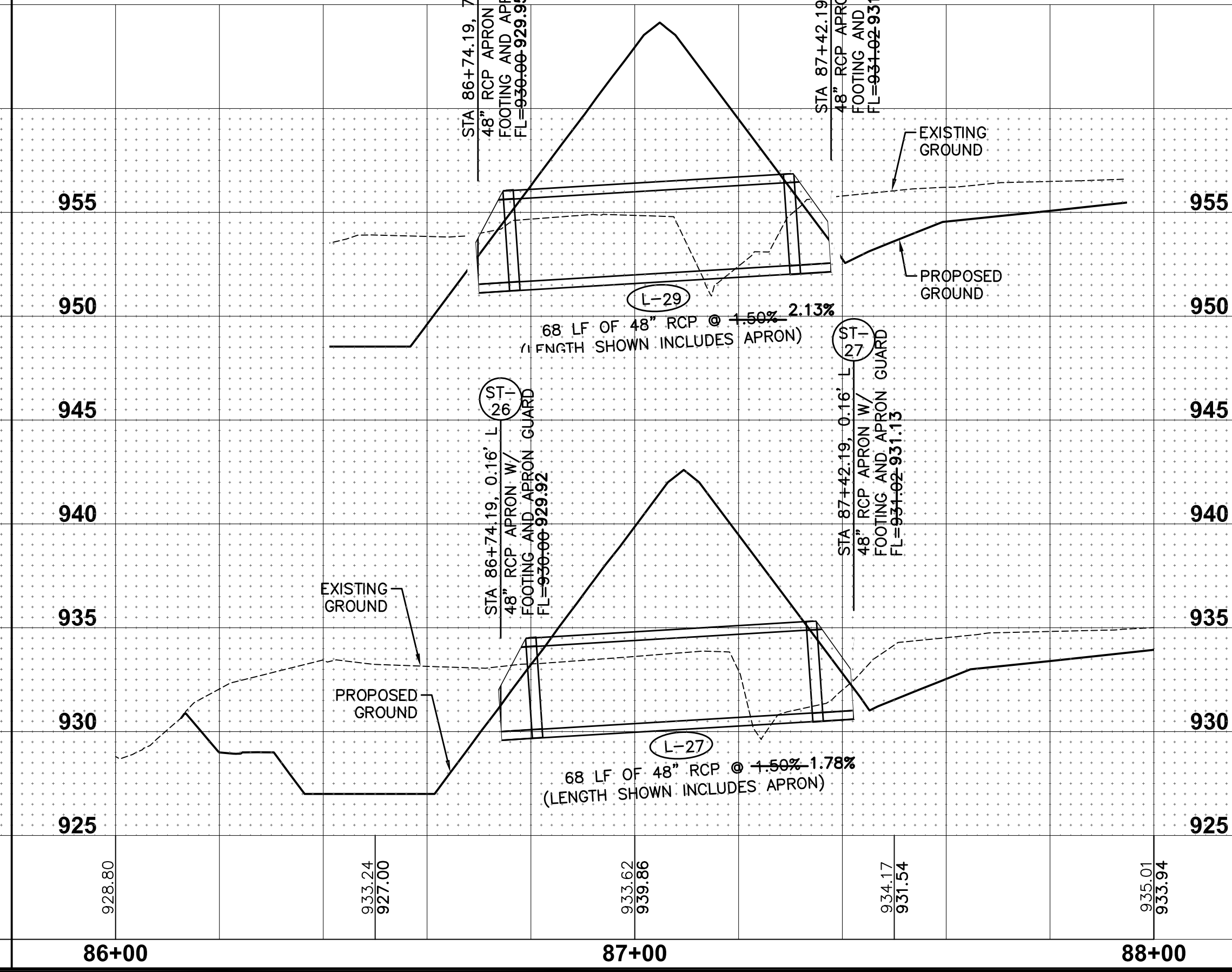
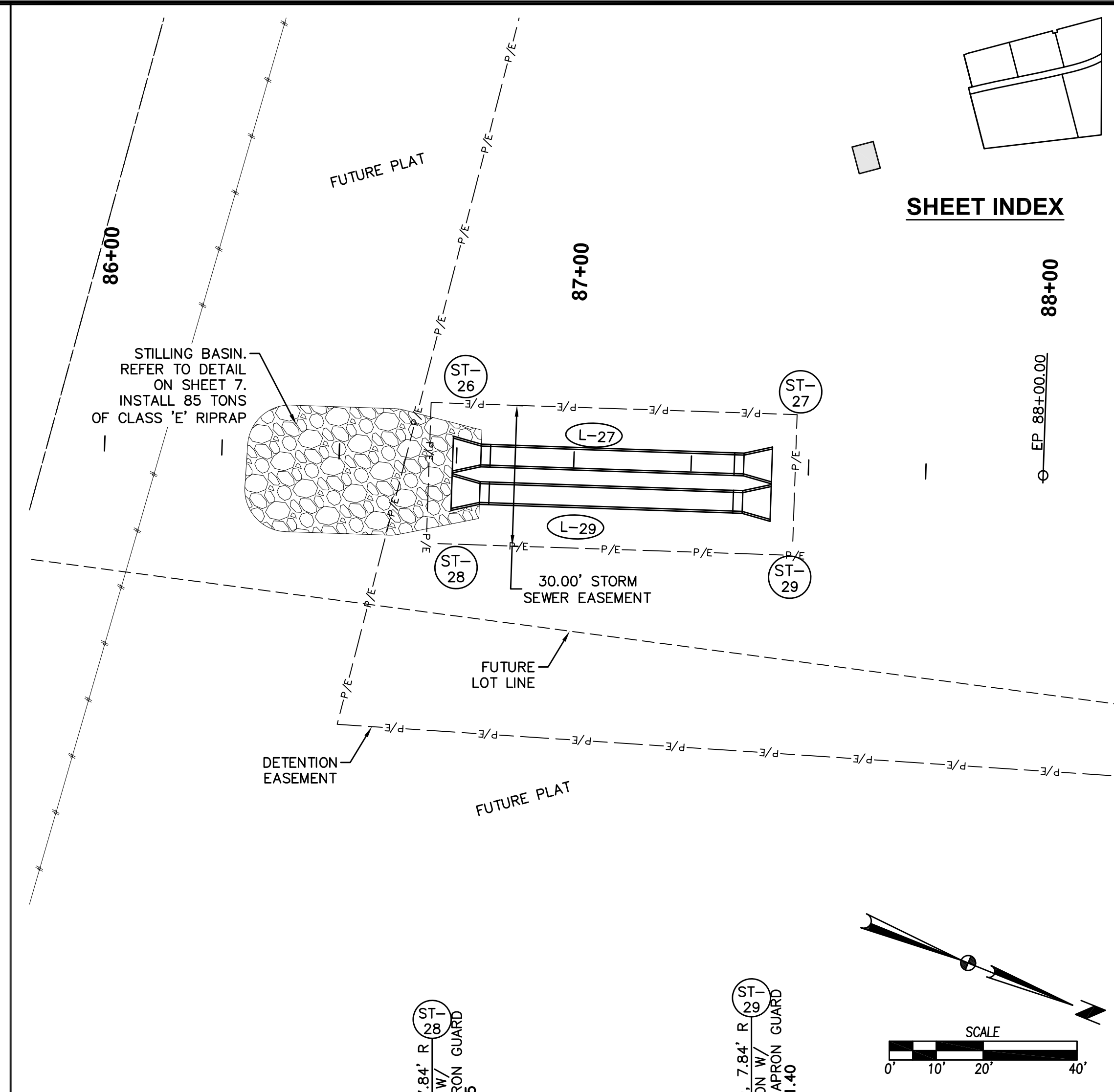
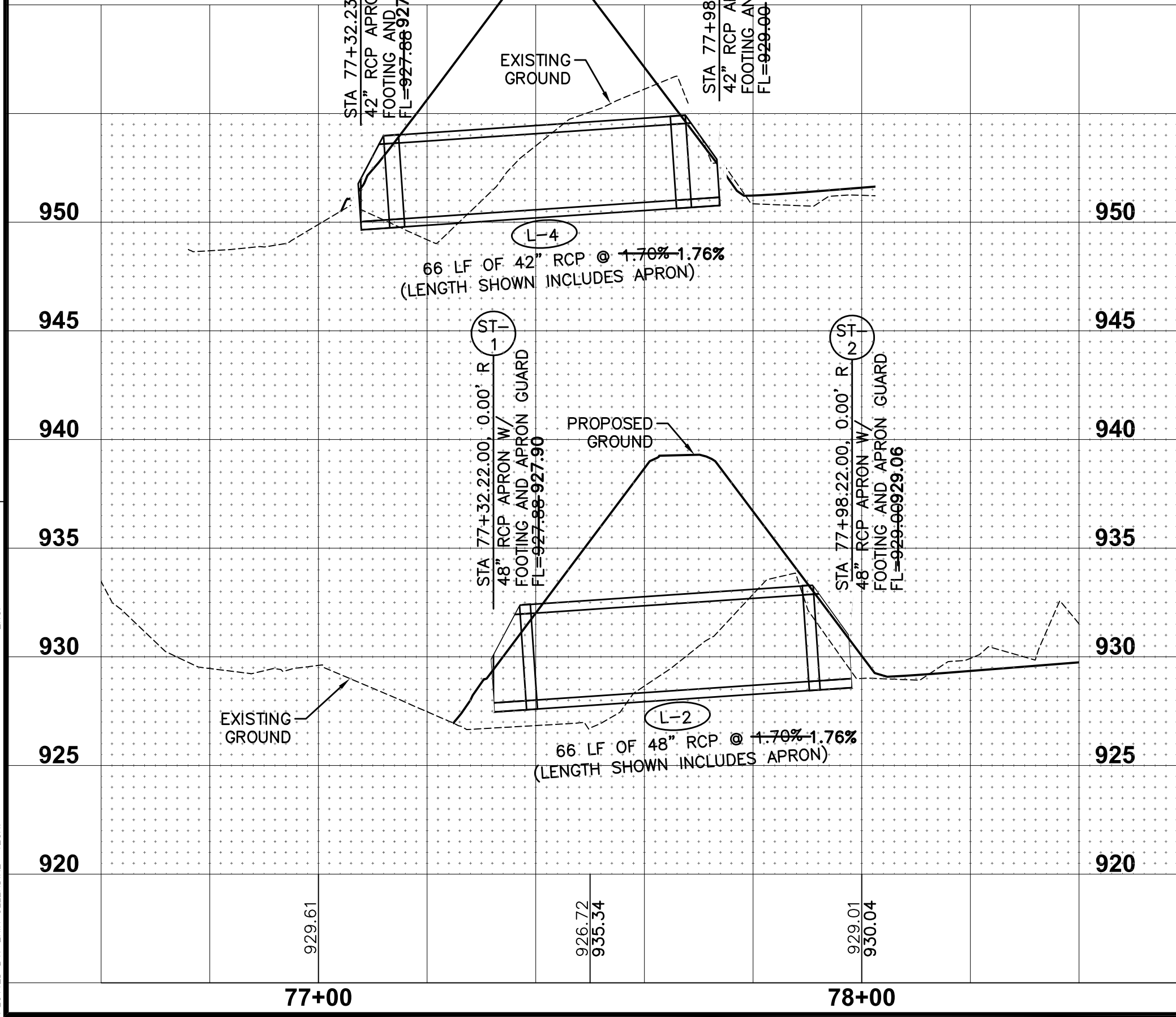
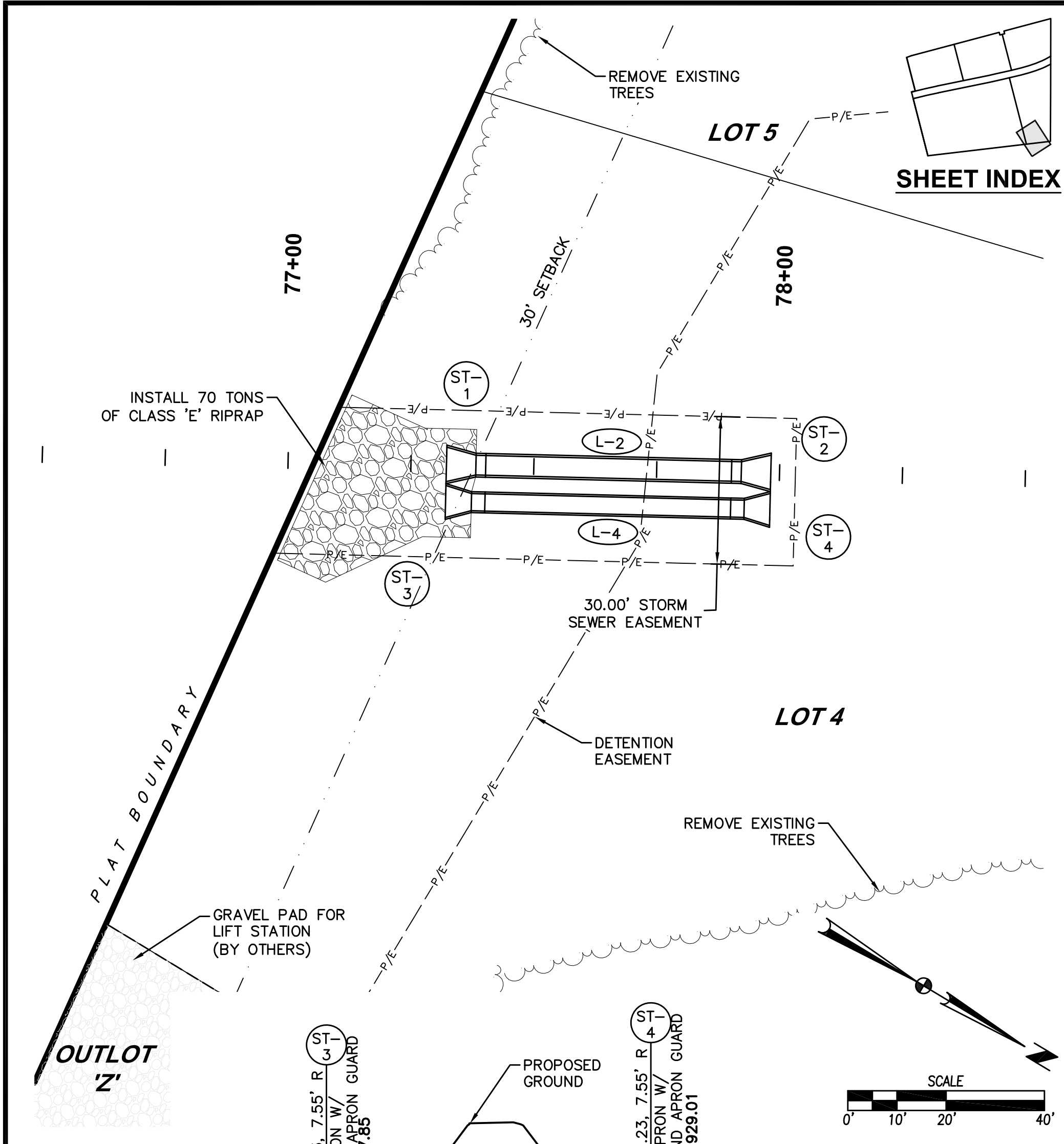
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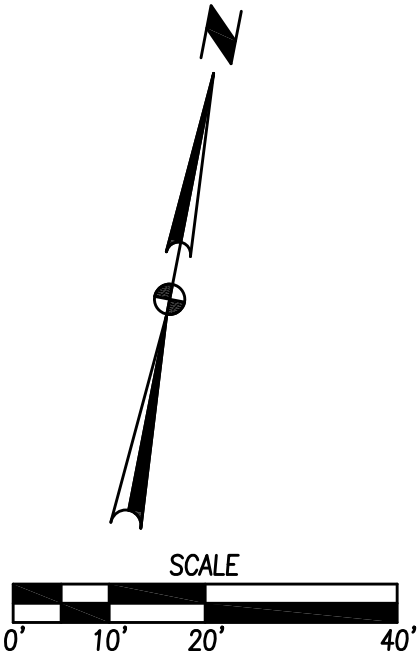
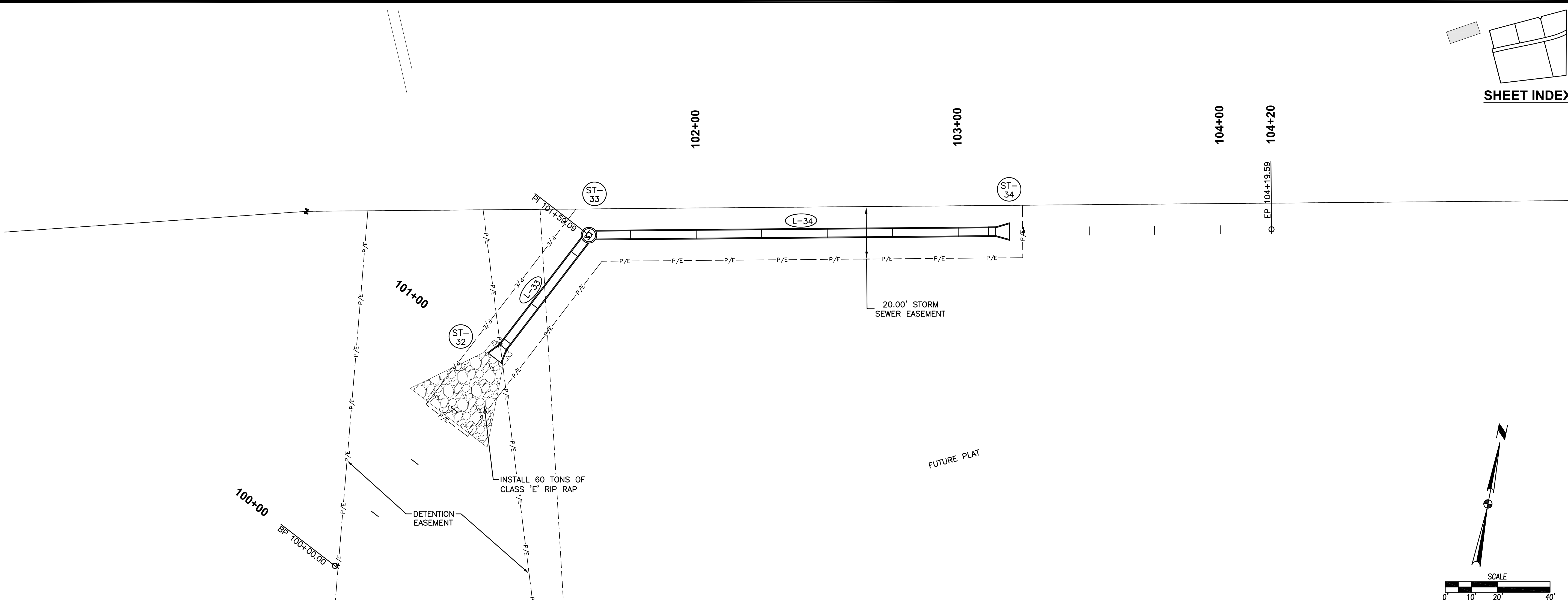
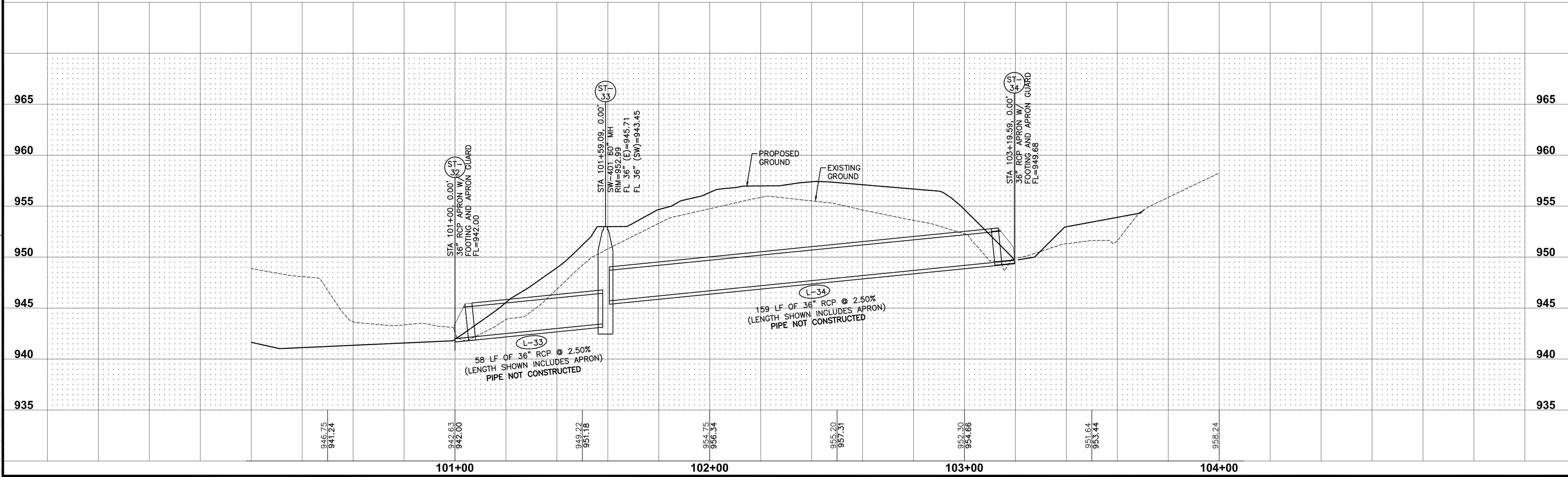
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DATE: 6/2/2020 7:44 AM
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PLOTTER: HP DesignJet T1200



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I-80 WEST INDUSTRIAL PARK PLAT 2
SANITARY AND STORM PLAN AND PROFILE
WAUKEE, IOWA

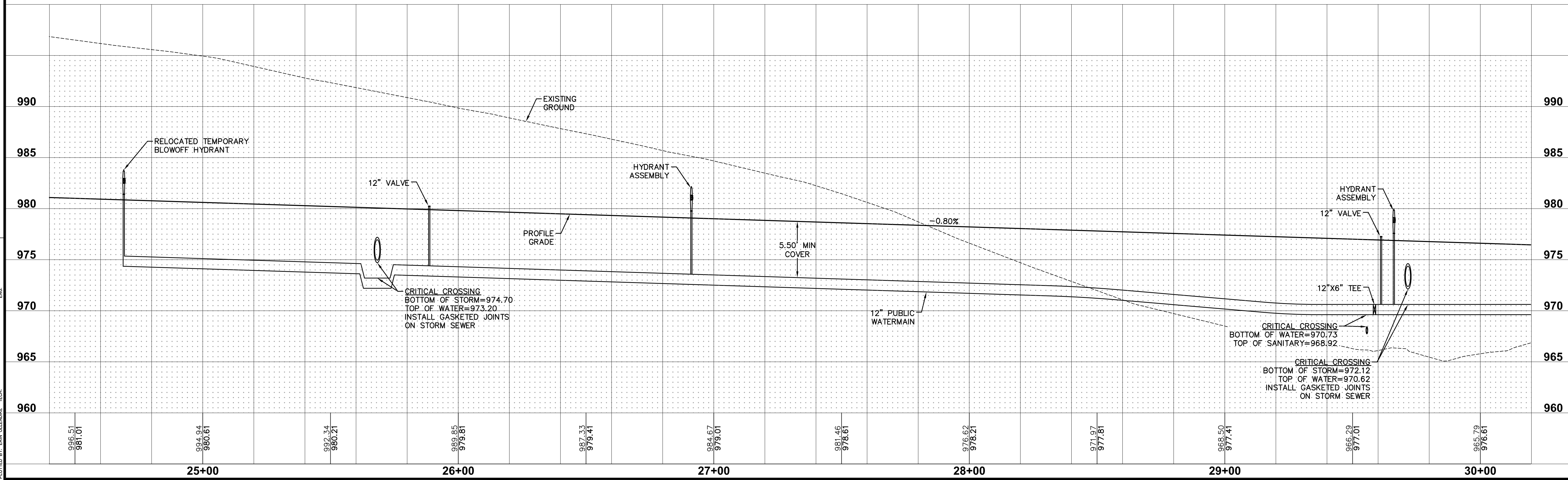
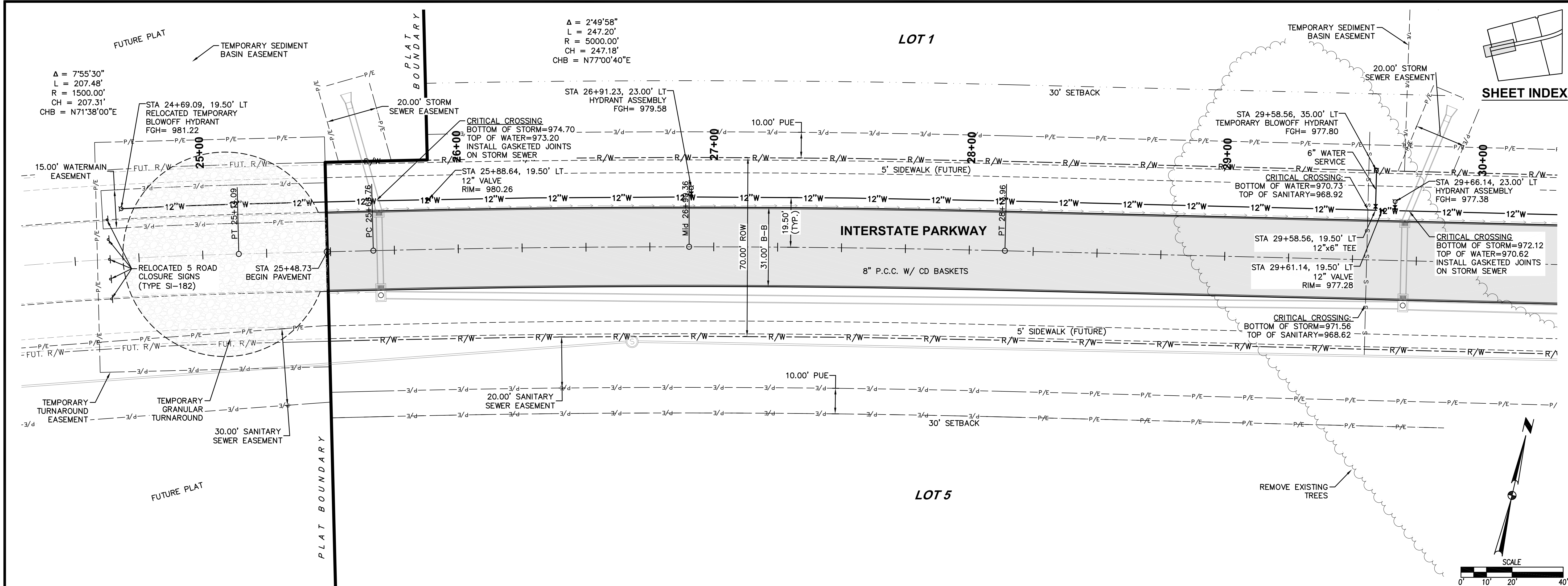
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REVISIONS	DATE
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REVISED FINAL SUBMITTAL	01/27/18
FINAL SUBMITTAL	12/22/17
FOURTH SUBMITTAL	11/21/17
THIRD SUBMITTAL	10/20/17
SECOND SUBMITTAL	

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
EI: GH

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DRAWN BY: ERL OLENDKE
CHECKED BY: ERL OLENDKE



17/19

1707.374

I-80 WEST INDUSTRIAL PARK PLAT 2

WATERMAIN PLAN AND PROFILE

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

ENGINEER: EKO

EI: GH

3405 S.E. CROSSROADS DRIVE, SUITE G GRIMES, IOWA 50111

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

DATE

11/12/18

AS-BUILT

REVISED FINAL SUBMITTAL

FINAL SUBMITTAL

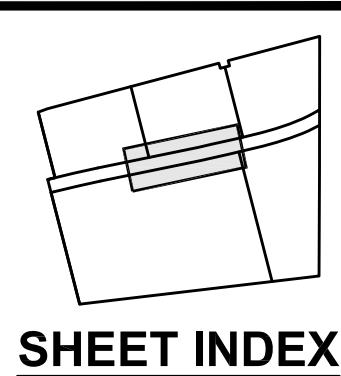
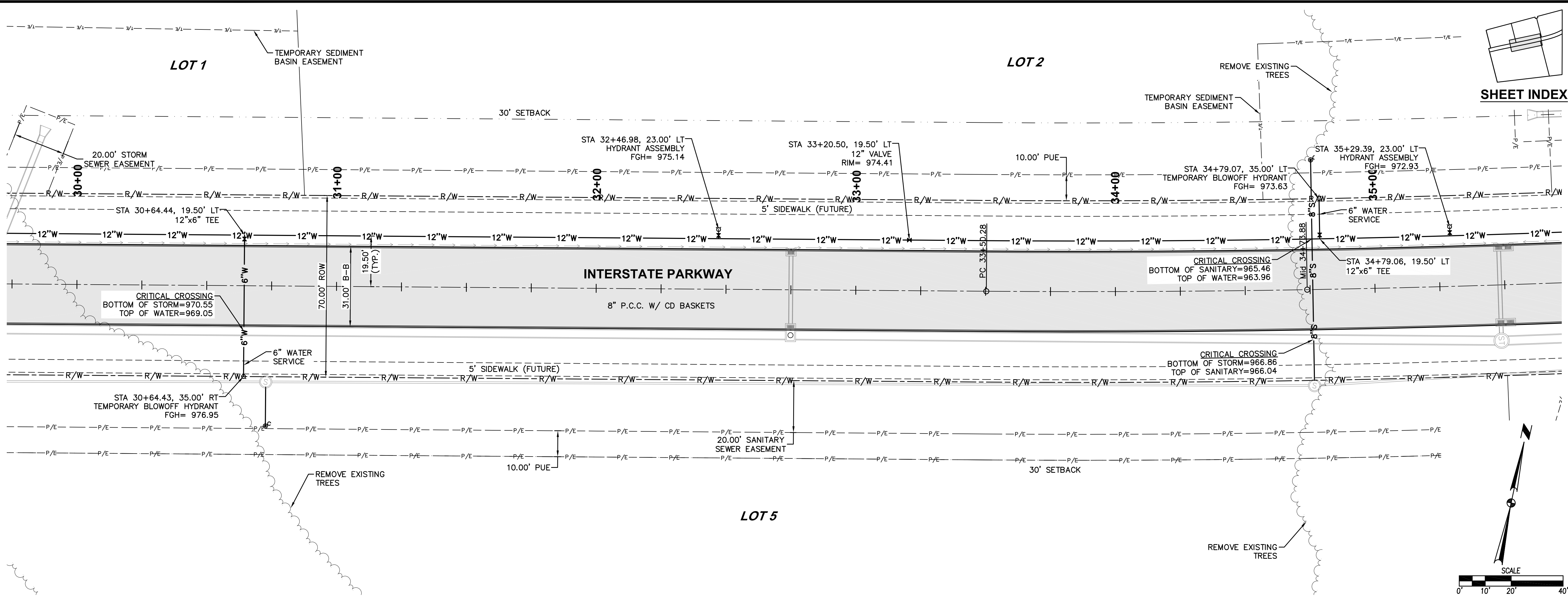
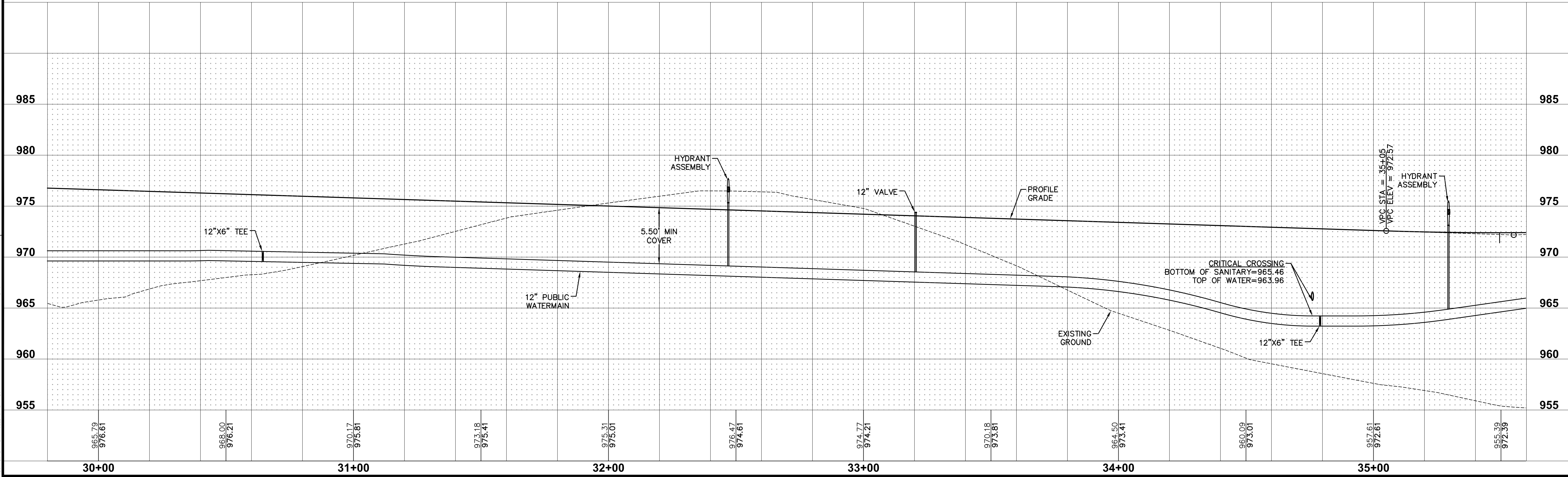
FOURTH SUBMITTAL

THIRD SUBMITTAL

SECOND SUBMITTAL

REVISIONS

FILE: H:\2017\170374\DWG\170374-IMP - WATERMAIN.DWG
DATE PLOTTED: 5/3/2020 7:51 AM
PLOTTER: HP PLOTTER
DRAWN BY: ERL OLENDKE
CHECKED BY: ERL OLENDKE



REVISIONS	
DATE	DESCRIPTION
11/12/18	AS-BUILTS
01/27/18	REVISED FINAL SUBMITTAL
12/22/17	FINAL SUBMITTAL
11/21/17	FOURTH SUBMITTAL
10/20/17	THIRD SUBMITTAL
	SECOND SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
E.I: GH

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1707.374

I-80 WEST INDUSTRIAL PARK PLAT 2
WATERMAIN PLAN AND PROFILE
WAUKEE, IOWA

