CONSTRUCTION PLANS FOR:

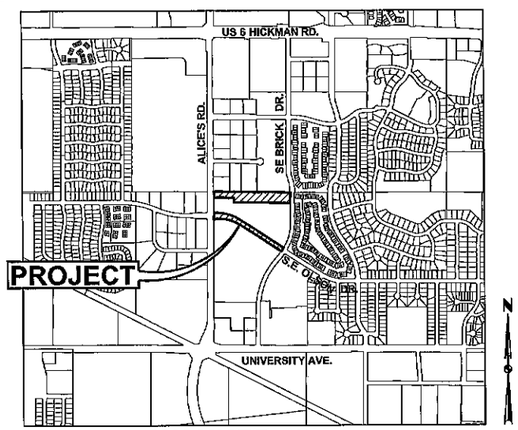
AUTUMN RIDGE PLAT 1

WAUKEE, IOWA

APPROVED
APPROVED BY Waukee City Council
DATE 2-2-2015
SIGNED [signature]

VICINITY MAP

NOT TO SCALE



WAUKEE, IOWA

INDEX OF SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS AND DETAILS
3	QUANTITIES AND REFERENCE NOTES
4	SHEET INDEX, HYDRANT COVERAGE, SERVICE INSTALLATION & SIDEWALK PLAN
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GENERAL LEGEND

PROPOSED		EXISTING	
SECTION LINE		SANITARY MANHOLE	
CENTER LINE		WATER VALVE BOX	
RIGHT OF WAY	R/W	FIRE HYDRANT	
PERMANENT EASEMENT	P/E	WATER CURB STOP	
TEMPORARY EASEMENT	T/E	WELL	WELL
TYPE SW-501 STORM INTAKE		STORM SEWER MANHOLE	
TYPE SW-503 STORM INTAKE		STORM SEWER SINGLE INTAKE	
TYPE SW-505 STORM INTAKE		STORM SEWER DOUBLE INTAKE	
TYPE SW-506 STORM INTAKE		FLARED END SECTION	
TYPE SW-513 STORM INTAKE		DECIDUOUS TREE	
TYPE SW-401 STORM MANHOLE		CONIFEROUS TREE	
TYPE SW-402 STORM MANHOLE		DECIDUOUS SHRUB	
TYPE SW-301 SANITARY MANHOLE		CONIFEROUS SHRUB	
STORM/SANITARY CLEANOUT		ELECTRIC POWER POLE	
WATER VALVE		GUY ANCHOR	
FIRE HYDRANT ASSEMBLY		STREET LIGHT	
SIGN		POWER POLE W/ TRANSFORMER	
DETECTABLE WARNING PANEL		UTILITY POLE W/ LIGHT	
WATER CURB STOP		ELECTRIC BOX	
STORM SEWER STRUCTURE NO.	ST-10	ELECTRIC TRANSFORMER	
STORM SEWER PIPE NO.	L-10	ELECTRIC MANHOLE OR VAULT	
SANITARY SEWER STRUCTURE NO.	S-10	TRAFFIC SIGN	
SANITARY SEWER PIPE NO.	P-10	TELEPHONE JUNCTION BOX	
SANITARY SEWER WITH SIZE	8"S	TELEPHONE MANHOLE/VAULT	
SANITARY SERVICE	S	TELEPHONE POLE	
STORM SEWER		GAS VALVE BOX	
STORM SERVICE	ST	CABLE TV JUNCTION BOX	
WATERMAIN WITH SIZE	8"W	CABLE TV MANHOLE/VAULT	
WATER SERVICE	W	MAIL BOX	
SAWCUT (FULL DEPTH)		BENCHMARK	
SILT FENCE		SOIL BORING	
USE AS CONSTRUCTED	(UAC)	UNDERGROUND TV CABLE	TV
MINIMUM PROTECTION ELEVATION	MPE	GAS MAIN	G
TOP OF PROPOSED GROUND	TG	FIBER OPTIC	FO
		UNDERGROUND TELEPHONE	T
		OVERHEAD ELECTRIC	OE
		UNDERGROUND ELECTRIC	E
		FIELD TILE	TILE
		SANITARY SEWER W/ SIZE	8"S
		STORM SEWER W/ SIZE	15" RCP
		WATER MAIN W/ SIZE	8"W

OWNER / APPLICANT

CENTENNIAL DEVELOPMENT L.C.
C/O KIMBERLEY DEVELOPEMENT CORPORATION
2785 N. ANKENY BLVD, SUITE 22
ANKENY, IOWA 50023

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

BENCHMARKS

BM#1 BURY BOLT ON HYDRANT @ SE CORNER OF SE OLSON DR. & SE BRICK DR.
ELEVATION=1049.35

BM#2 TAGGED BURY BOT ON HYDRANT @ NW CORNER OF SE LAUREL & SE LEGACY
ELEVATION=1036.49

BM#3 BURY BOLT ON HYDRANT @ NE CORNER OF ALICES RD & FRONTIER AVE.
ELEVATION=1045.36

UTILITY NOTE

THE 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. A REQUEST WAS MADE TO IOWA ONE CALL FOR THE UTILITIES TO LOCATE THEIR UTILITIES IN THE FIELD.

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.

SUBMITTAL DATES

FIRST SUBMITTAL:	09/09/2014
SECOND SUBMITTAL:	10/24/2014
THIRD SUBMITTAL:	11/11/2014
FOURTH SUBMITTAL:	12/11/2014
FIFTH SUBMITTAL:	12/30/2014
FINAL SUBMITTAL:	02/06/2015

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR. SUITE G GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 1402.069

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.

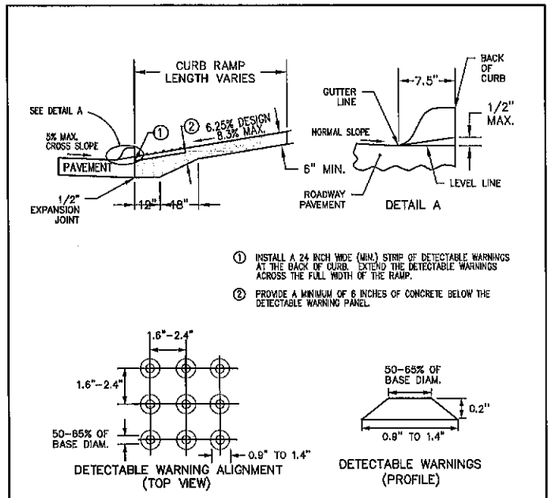
THE 2014 EDITION OF SUDAS STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

LICENSED PROFESSIONAL ENGINEER
ERIN K. OLLENDIKE
16926
IOWA

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 2-6-15
ERIN K. OLLENDIKE, P.E. DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2015
PAGES OR SHEETS COVERED BY THIS SEAL:
SHEETS 1–15



DETECTABLE WARNING DETAIL

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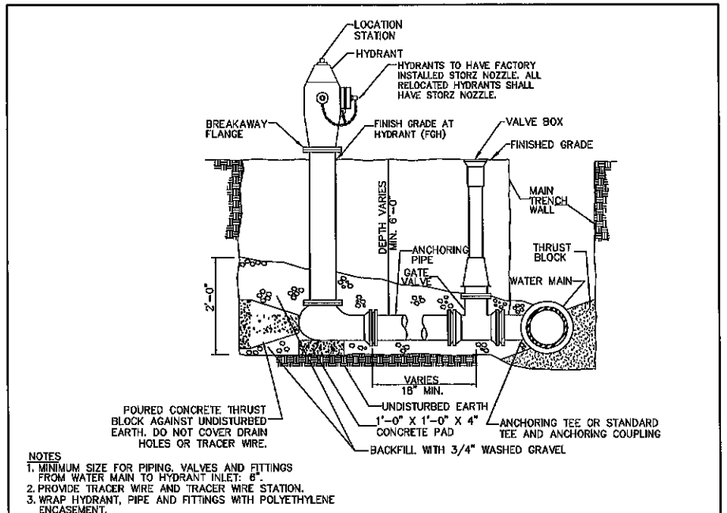
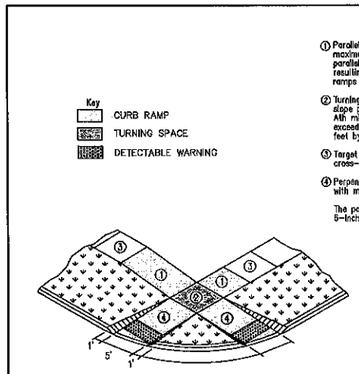


NOTES
1. MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
2. PROVIDE TRACER WIRE AND TRACER WIRE STATION.
3. WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT.

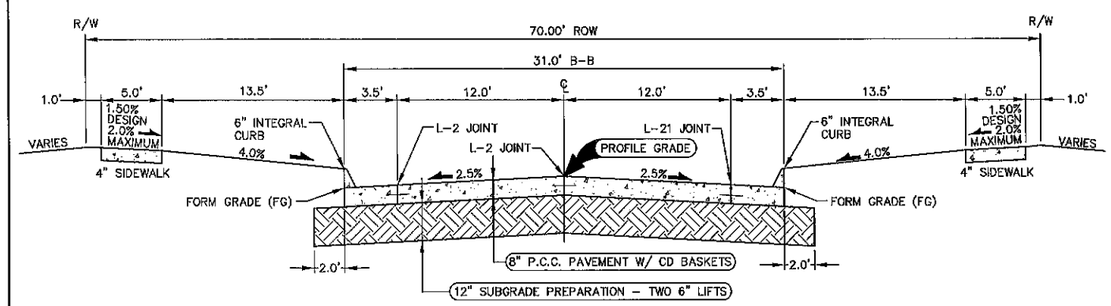
HYDRANT ASSEMBLY DETAIL

NOT TO SCALE



CURB RAMPS OUTSIDE OF INTERSECTION RADIUS

NOT TO SCALE

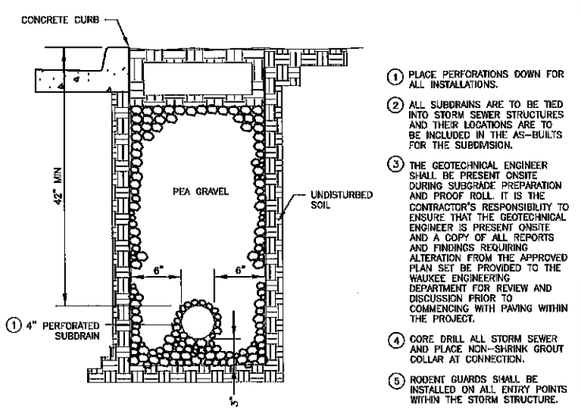


NOTES:
1. PREPARE SUBGRADE IN 2 - 6" LIFTS.
2. MAXIMUM CD JOINT SPACING IS 15'.

TYPICAL SECTION - 31' B/B P.C.C. ROADWAY WITH 70' ROW

NOT TO SCALE

S.E. OLSON DRIVE (STA 4+53.97 TO STA 14+31.03)



1 PLACE PERFORATIONS DOWN FOR ALL INSTALLATIONS.

2 ALL SUBDRAINS ARE TO BE TIED INTO STORM SEWER STRUCTURES AND THEIR LOCATIONS ARE TO BE INCLUDED IN THE AS-BUILTS FOR THE SUBDIVISION.

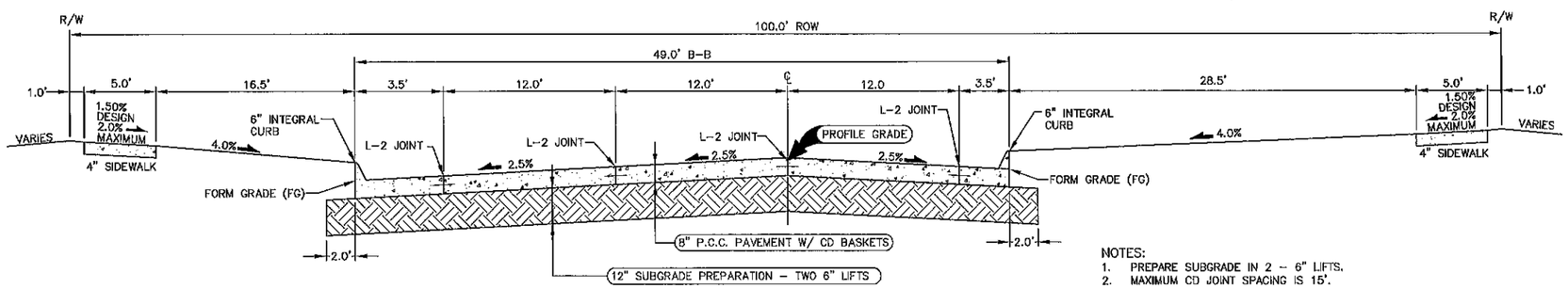
3 THE GEOTECHNICAL ENGINEER SHALL BE PRESENT ONSITE DURING SUBGRADE PREPARATION AND PROOF ROLL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE GEOTECHNICAL ENGINEER IS PRESENT ONSITE AND A COPY OF ALL REPORTS AND FINDINGS REQUIRING ALTERATION FROM THE APPROVED PLAN SET BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT FOR REVIEW AND DISCUSSION PRIOR TO COMMENCING WITH PAVING WITHIN THE PROJECT.

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

5 RODENT GUARDS SHALL BE INSTALLED ON ALL ENTRY POINTS WITHIN THE STORM STRUCTURE.

4" PERFORATED SUBDRAIN

NOT TO SCALE



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

TYPICAL SECTION - 49' B/B P.C.C. ROADWAY WITH 100' ROW

NOT TO SCALE

S.E. OLSON DRIVE (STA STA 1+11.83 TO STA 4+53.97)

REVISIONS	DATE
FINAL SUBMITTAL	02/06/15
FIFTH SUBMITTAL	12/30/14
FOURTH SUBMITTAL	12/11/14
THIRD SUBMITTAL	11/11/14
SECOND SUBMITTAL	10/24/14
FIRST SUBMITTAL	09/09/14

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

AUTUMN RIDGE PLAT 1
TYPICAL SECTIONS AND DETAILS
WAUKEE, IOWA

FILE: N:\2014\1402069\CMP\1402069-2014-SEC-PLAT.DWG
PLOT DATE: 1/29/15
PLOTTED BY: FRANK OLDHOME
COMMENT: BNG
DATE PLOTTED: 2/7/2015 5:03 PM
TECH:

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	COMBINED CLEARING AND GRUBBING	AC	3.55
2	STRIPPING, SALVAGING AND SPREAD TOPSOIL	LS	1
3	EXCAVATION, CLASS 10	LS	1
4	SUBGRADE PREPARATION, ROADWAY, 12 IN.	SY	6230
5	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8 IN.	LF	1492
6	SANITARY SEWER GRAVITY MAIN, TRENCHLESS, PVC, 8 IN.	LF	136
7	STORM SEWER, TRENCHED, 4 IN. PERFORATED SUBDRAIN	LF	1897
8	STORM SEWER, TRENCHED, RCP, 15 IN.	LF	368
9	STORM SEWER, TRENCHED, RCP, 18 IN.	LF	161
10	STORM SEWER, TRENCHED, RCP, 24 IN.	LF	373
11	STORM SEWER, TRENCHED, RCP, 36 IN.	LF	83
12	STORM SEWER, TRENCHED, RCP, 42 IN.	LF	33
13	PIPE APRON W/ APRON GUARD AND FOOTING, RCP, 15 IN.	EA	3
14	PIPE APRON W/ APRON GUARD AND FOOTING, RCP, 18 IN.	EA	2
15	WATER MAIN, TRENCHED, PVC, 8 IN.	LF	1593
16	TAPPING VALVE ASSEMBLY, 12 IN. DIA X 8 IN. DIA	EA	2
17	VALVE, GATE, 8 IN.	EA	6
18	FIRE HYDRANT ASSEMBLY	EA	6
19	TEMPORARY BLOW OFF HYDRANT	EA	5
20	MANHOLE, TYPE SW-301, 48 IN. DIA. (SANITARY SEWER)	EA	7
21	MANHOLE, TYPE SW-401, 48 IN. DIA. (STORM SEWER)	EA	4
22	MANHOLE, TYPE SW-401, 84 IN. DIA. (STORM SEWER)	EA	1
23	STORM SEWER CLEANOUT	EA	1
24	INTAKE, TYPE SW-501, SINGLE GRATE INTAKE	EA	1
25	INTAKE, TYPE SW-503, SINGLE GRATE INTAKE WITH MANHOLE	EA	1
26	INTAKE, TYPE SW-505, DOUBLE GRATE INTAKE	EA	1
27	INTAKE, TYPE SW-506, DOUBLE GRATE INTAKE WITH MANHOLE	EA	1
28	PAVEMENT, PCC, 7 IN.	SY	728
29	PAVEMENT, PCC, 8 IN. WITH CD BASKETS	SY	4892
30	SIDEWALK, PCC, 6 IN.	SY	104
31	SIDEWALK, PCC, 4 IN.	SY	1097
32	DETECTABLE WARNING PANELS	SF	100
33	CONVENTIONAL SEEDING, FERTILIZING AND MULCHING	AC	2.10
34	TRAFFIC CONTROL	LS	1
35	EROSION CONTROL	LS	1
36	PAVEMENT, PCC, 7 IN. (REMOVE AND REPLACE)	SY	70
37	PAVEMENT MARKINGS	LS	1
38	LOWER 12-IN WATER	LS	1

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 2014 EDITION OF SUDAS STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS 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 STORM SEWER AND FIELD FENCE. ALL MATERIAL THAT IS REMOVED FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. INCLUDES REMOVAL OF EXISTING CROPS FOR CONSTRUCTION OF TEMPORARY ACCESS. DO NOT DISTURB CROPS OUTSIDE OF THE PROJECT LIMITS.
2	STRIP, SALVAGE AND RE-SPREAD THE TOP 6 INCHES OF TOPSOIL. RESPREAD TOPSOIL WITHIN THE RIGHT OF WAY, ON BACKSLOPES AND IN DEVELOPED AREAS A MINIMUM OF 6 INCHES THICK. RESPREAD TOPSOIL IN AREAS THAT ARE FARMED A MINIMUM OF 12 INCHES THICK. 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. 4" TOPSOIL QUANTITY = 3,100 CY
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.
5-6	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. TRENCHLESS SANITARY SEWER UNDER ROADWAYS SHOULD BE INSTALLED PER SUDAS 3020 PART 2.01B AND RESTRAINED JOINT PIPE SHALL BE USED. NO CASING PIPE.
5-12	REFER TO FIGURE 3010.101, 3010.102 AND 3010.103 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 TELEVISE SANITARY AND STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVISING REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVISING SHALL BE CONSIDERED INCIDENTAL. ALL STORM SEWER PIPE THAT CROSSES OVER WATERMAIN SHALL HAVE O-RING GASKETS INSTALLED. ALL 8-INCH PERFORATED PIPE SHALL BE BACKFILLED WITH PEA ROCK.
13-14	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.
15-19	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.
18-19	REFER TO DETAIL ON SHEET 2 AND 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.
20	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.
21-22	REFER TO FIG. 6010.401 - CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS.
23	REFER TO FIG. 4040.232 - SUBDRAIN CLEANOUTS FOR CONSTRUCTION DETAILS.

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
24-27	REFER TO FIG. 6010.514 - BOXOUTS FOR GRATE INTAKES. REFER TO FIG. 6010.503 - 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".
24	REFER TO FIG 6010.501 - SINGLE GRATE INTAKE (SW-501) FOR CONSTRUCTION DETAILS.
25	REFER TO FIG 6010.503 - SINGLE GRATE INTAKE WITH MANHOLE (SW-503) FOR CONSTRUCTION DETAILS.
26	REFER TO FIG 6010.505 - DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS.
27	REFER TO FIG 6010.506 - DOUBLE GRATE INTAKE WITH MANHOLE (SW-506) FOR CONSTRUCTION DETAILS.
28-29	REFER TO FIG. 7010.101 - JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM CD JOINT SPACING IS 15 FEET.
30-31	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 ARMOR TILE, ADA SOLUTIONS OR APPROVED EQUAL, BRICK RED IN COLOR. ACCESSIBLE CURB RAMPS INCLUDING TURNING SPACES SHALL BE 6" THICK P.C.C. GRINDING OF P.C.C. CURBS FOR THE CONSTRUCTION OF CURB RAMPS SHALL BE INCIDENTAL O THIS ITEM. REFER TO SHEET 9 FOR LOCATIONS.
33	SUDAS TYPE 1 PERMANENT LAWN MIXTURE SEED SHALL BE USED WITHIN THE PROPOSED RIGHT-OF-WAY ON S.E. OLSON DRIVE IN ADDITION TO THE DISTURBED AREAS ASSOCIATED WITH SANITARY SEWER INSTALLATION. THE REMAINDER OF SITE SHALL CONFORM TO THE SPECIFICATION FOR TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE. SEEDING QUANTITIES -TYPE 1 PERMANENT LAWN MIXTURE = 2.10 AC -TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 0.00 AC
34	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. TRAFFIC ON SE BRICK DRIVE AND SE ALICE'S ROAD WILL NEED TO BE MAINTAINED ON ALL EXISTING LANES DURING CONSTRUCTION.
35	REFER TO THE SITE PLANS FOR AUTUMN RIDGE APARTMENTS FOR EROSION AND SEDIMENT CONTROLS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS.
36	REFER TO SHEET 10 FOR LOCATION. ANY EXISTING YARDS THAT ARE DISTURBED DURING INSTALLATION OF SANITARY SEWER ALONG SE FRONTIER AVENUE ARE TO BE SODDED AND MAINTAINED PER WAUKEE STANDARD SPECIFICATIONS.
37	ALL PAVEMENT MARKINGS SHALL BE DURABLE.
38	REFER TO SHEET 10 FOR LOCATION. CONTRACTOR SHALL VERIFY ELEVATION PRIOR TO CONSTRUCTION TO DETERMINE IF LOWERING IS NECESSARY.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2014 EDITION OF SUDAS STANDARD SPECIFICATIONS AND TO CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
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.
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 DETAILS.
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.
8. 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.
9. 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.
10. TO OBTAIN THE CORRECT FORM GRADES AT LOW POINTS WHERE INTAKES ARE LOCATED, THE CONTRACTOR MUST EXERCISE ADDITIONAL CARE WHEN PAVING FULL WIDTH PAVEMENTS. THIS MAY REQUIRE POURING ONE HALF OF THE PAVEMENT AT A TIME OR OTHER METHODS APPROVED BY THE ENGINEER.
11. THE CONTRACTOR MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR THE CITY, TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY. THIS WILL BE INCIDENTAL TO THE BID ITEM TRAFFIC CONTROL. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ROAD BARRICADES AT END OF EXISTING PAVEMENTS UNTIL THE PROJECT IS ACCEPTED.
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. THE GENERAL PERMIT #2 HOLDER SHALL SUBMIT WRITTEN VERIFICATION THAT A MINIMUM TOPSOIL DEPTH OF 6" WAS SPREAD ACROSS ALL LOTS AND RIGHT-OF-WAYS WITHIN THE PLAT.
29. A GEOTECHNICAL ENGINEER SHALL BE ONSITE DURING CONSTRUCTION AND FOR PROOF ROLL TO INSPECT SOILS.
30. THE CONTRACTOR SHALL COORDINATE ALL EXISTING PUBLIC UTILITY CONNECTIONS WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
31. 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.
32. 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.
33. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AND TELEVISING ALL STORM AND SANITARY SEWERS. ALL CLEANING AND TELEVISING SHALL BE APPROVED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT PRIOR TO PAVING. A COPY OF THE VIDEOS SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
34. ALL FIRE HYDRANTS INCLUDING ANY RELOCATED HYDRANTS SHALL HAVE STORZ FITTINGS.
35. ALL PROPOSED PEDESTRIAN CROSSINGS SHALL BE INSTALLED AS PART OF THE PLAT IMPROVEMENTS.
36. ALL CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE A LINK SEAL.
37. ANY EXISTING ESTABLISHED YARDS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE SODDED AND MAINTAINED PER WAUKEE STANDARD SPECIFICATIONS.

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

REVISIONS	DATE
FINAL SUBMITTAL	02/26/15
FIFTH SUBMITTAL	12/30/14
FOURTH SUBMITTAL	12/11/14
THIRD SUBMITTAL	11/11/14
SECOND SUBMITTAL	10/24/14
FIRST SUBMITTAL	09/09/14

AUTUMN RIDGE PLAT 1

QUANTITIES AND REFERENCE NOTES

WAUKEE, IOWA

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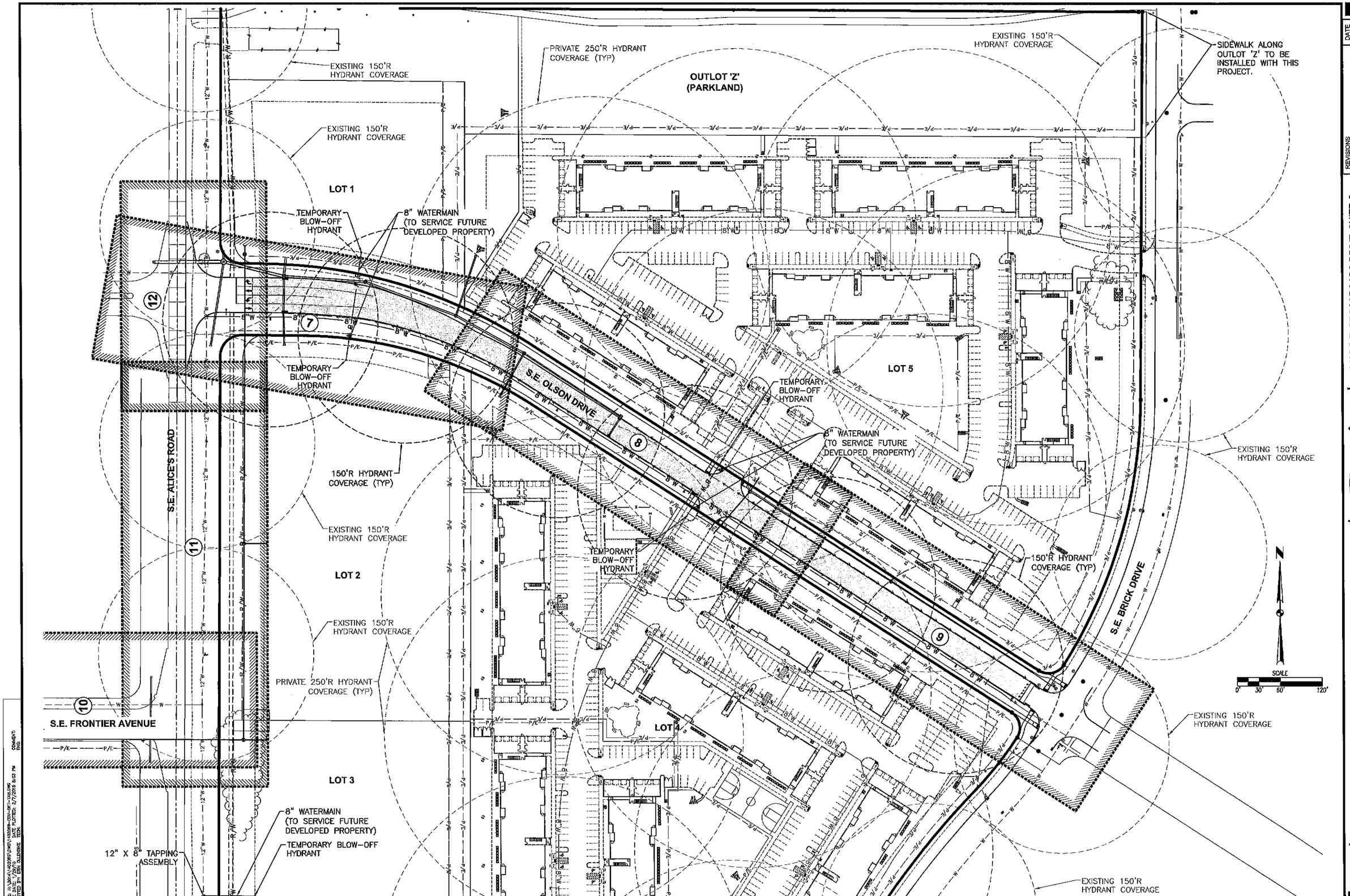
FILE DATE: 1/29/15 DATE PLOTTED: 2/7/2015 5:03 PM COMMENTS:
PLOTTED BY: ERIN OLDENDIEK TEOK ENG



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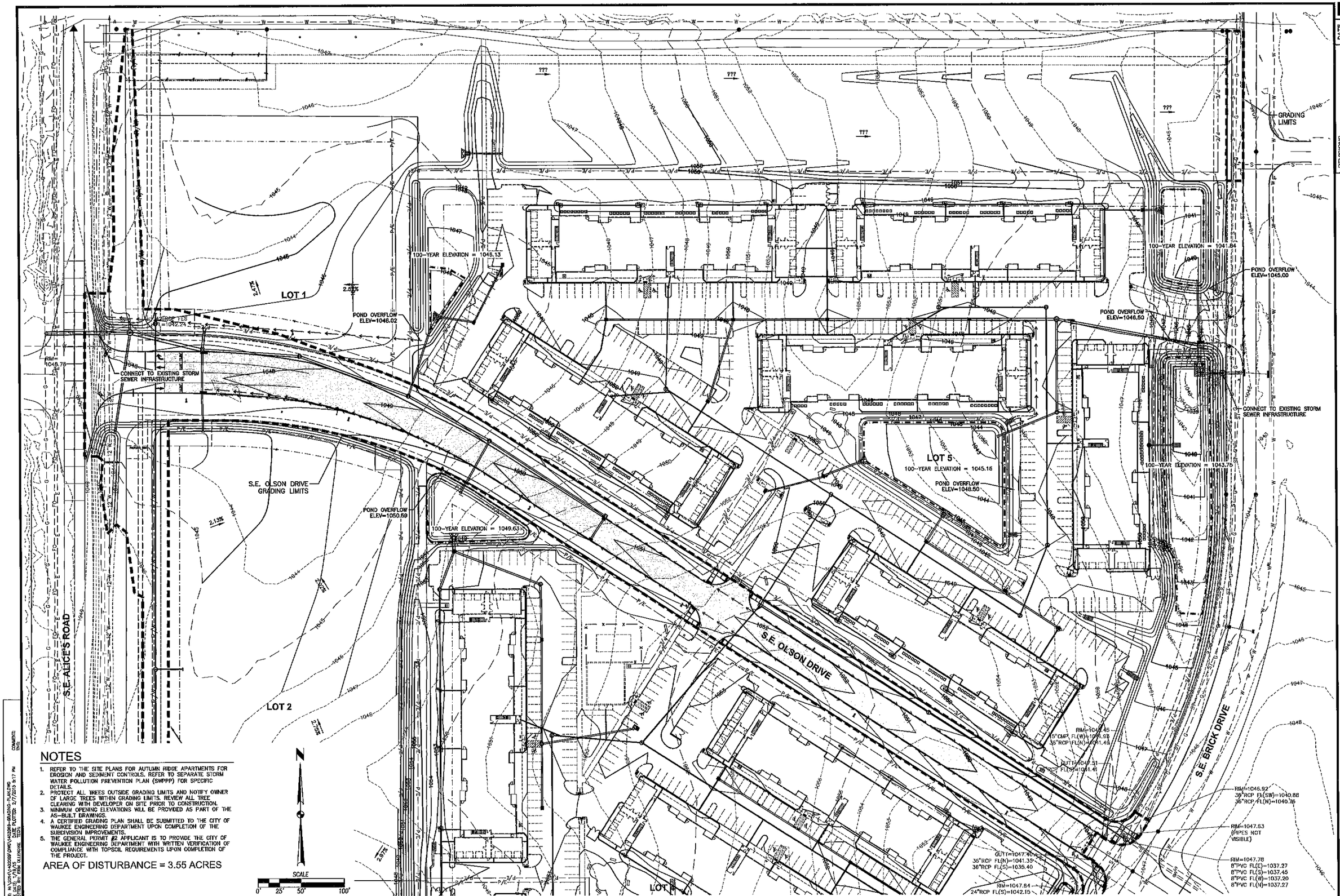
AUTUMN RIDGE PLAT 1

SHEET INDEX, HYDRANT COVERAGE, SERVICE INSTALLATION & SIDEWALK PLAN

WAUKEE, IOWA



NOTES

1. REFER TO THE SITE PLANS FOR AUTUMN RIDGE APARTMENTS FOR EROSION AND SEDIMENT CONTROLS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS.
2. PROTECT ALL TREES OUTSIDE GRADING LIMITS AND NOTIFY OWNER OF LARGE TREES WITHIN GRADING LIMITS. REVIEW ALL TREE CLEARING WITH DEVELOPER ON SITE PRIOR TO CONSTRUCTION.
3. MINIMUM OPENING ELEVATIONS WILL BE PROVIDED AS PART OF THE AS-BUILT DRAWINGS.
4. A CERTIFIED GRADING PLAN SHALL BE SUBMITTED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT UPON COMPLETION OF THE SUBDIVISION IMPROVEMENTS.
5. THE GENERAL PERMIT #2 APPLICANT IS TO PROVIDE THE CITY OF WAUKEE ENGINEERING DEPARTMENT WITH WRITTEN VERIFICATION OF COMPLIANCE WITH TOPSOIL REQUIREMENTS UPON COMPLETION OF THE PROJECT.

AREA OF DISTURBANCE = 3.55 ACRES

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PLOTTED BY: ERIK KLEINSKE COMMENT: TEST INC.

REVISIONS	DATE
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PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: EKO
El: JJN
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AUTUMN RIDGE PLAT 1
GRADING PLAN

WAUKEE, IOWA

5/15

1402.069

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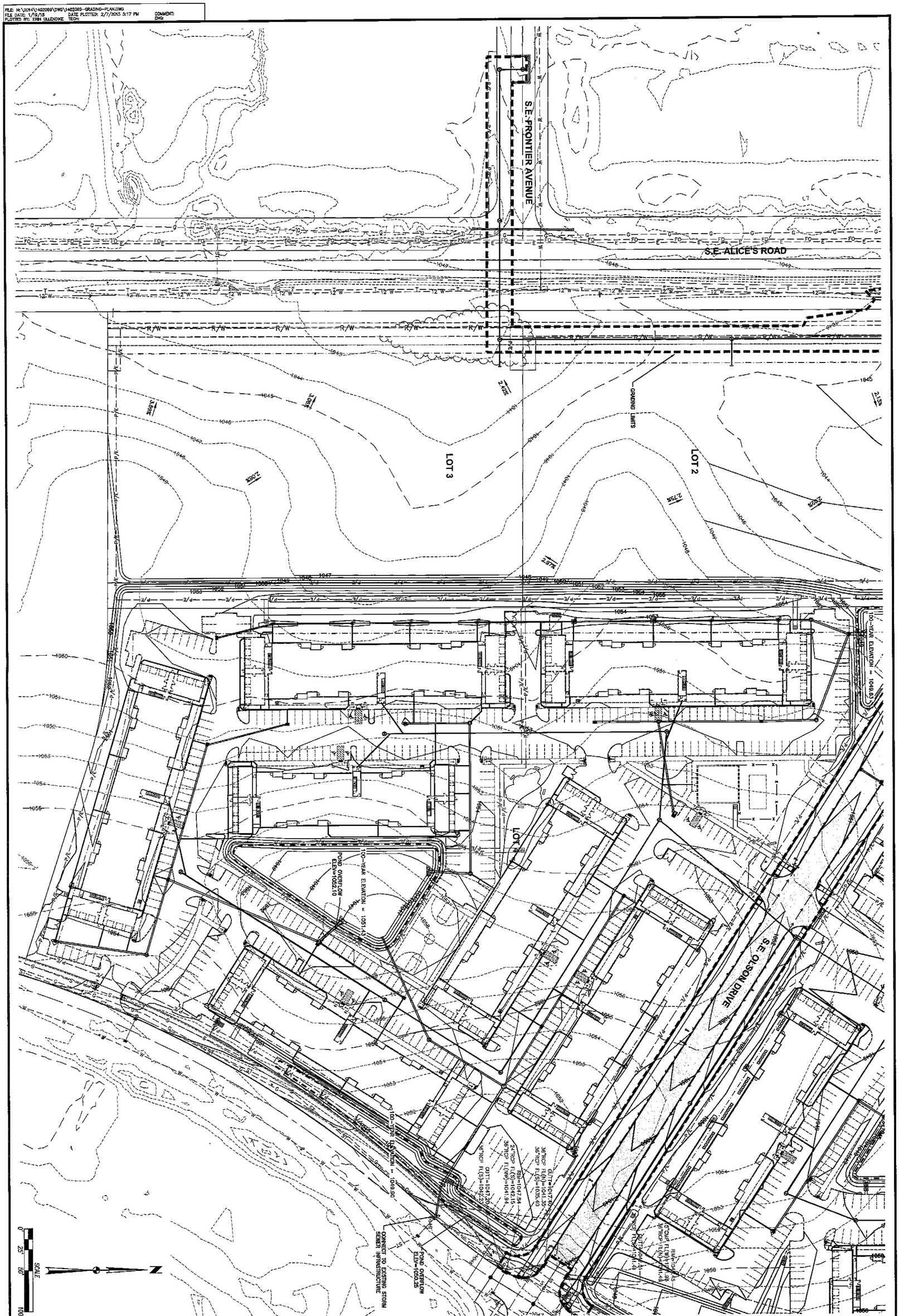

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1402.069

AUTUMN RIDGE PLAT 1

GRADING PLAN

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

3405 S.E. CROSSROADS DRIVE, SUITE G
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REFER TO SHEETS 13 AND 14 FOR INTERSECTION DETAILS.

REFER TO SHEET 10 FOR L-11 PLAN AND PROFILE.

LOT 1

LOT 2

LOT 5

S.E. OLSON DRIVE

S.E. ALICE'S ROAD

EXISTING 10.00' PUE BK. 2004, PG 16172

EXISTING 80'X30' STORM SEWER AND OVERLAND FLOWAGE EASEMENT BK 2004, PG 16175

EXISTING 30.00' OVERLAND FLOWAGE EASEMENT BK 2004, PG 16177

REMOVE TREE

42"RCP FES FL=1042.24 (REMOVE)

RIM=1048.78

CRITICAL CROSSING BOTTOM OF STORM=1041.83 TOP OF WATER=1040.33 (VERIFY)

CRITICAL CROSSING BOTTOM OF STORM=1042.17 TOP OF SANITARY=1041.27

STA 1+11.83 BEGIN PAVEMENT

CRITICAL CROSSING BOTTOM OF STORM=1043.02 TOP OF WATER=1041.52

STA 1+90.41, 24.50' RT CONNECT TO EXISTING 12" WATER MAIN W/ 12" X 8" TAPPING VALVE ASSMEBLY (CONTRACTOR TO VERIFY SIZE, LOCATION & DEPTH OF EXISTING WATER MAIN)

EXISTING 12" WATER MAIN (MAP LOCATION)

MAP LOCATION

CRITICAL CROSSING BOTTOM OF SAN=1040.25 TOP OF WATER=1038.75

STA 2+29.79, 28.00' RT HYDRANT ASSEMBLY FGH= 1048.42

EXISTING 25.00' SANITARY SEWER EASEMENT BK 2004, PG 16174

EXISTING 30.00' OVERLAND FLOWAGE EASEMENT BK 2004, PG 16177

EXISTING 10.00' PUE BK 2004, PG 16172

EXISTING 100'X30' STORM SEWER AND OVERLAND FLOWAGE EASEMENT BK 2004, PG 16175

CRITICAL CROSSING BOTTOM OF STORM=1043.43 TOP OF WATER=1041.93

STA 3+44.93, 75.14' LT HYDRANT ASSEMBLY FGH= 1046.56

STA 3+45.18, 60.14' LT 8" WATER VALVE RIM= 1046.86

30' SETBACK

10.00' PUE

5' SIDEWALK (FUTURE)

STA 3+70.03, 30.50' LT BEGIN TAPER

STA 3+63.26, 15.50' RT END TAPER

STORM SEWER ALONG SE OLSON DRIVE TO BE INSTALLED WITH OPEN JOINTS WRAPPED IN FILTER FABRIC.

STA 5+20.03, 15.50' LT END TAPER

5' SIDEWALK

7" P.C.C.

8" P.C.C.

487 LF OF 4" PERFORATED SUBDRAIN

4" PERFORATED SUBDRAIN FL=1044.15

STA 3+03.26, 18.50' RT BEGIN TAPER

CRITICAL CROSSING BOTTOM OF STORM=1044.71 TOP OF WATER=1042.59

CRITICAL CROSSING BOTTOM OF STORM=1043.32 TOP OF WATER=1041.82

STA 3+46.75, 22.31' RT 8" CROSS

STA 4+27.72, 24.41' RT HYDRANT ASSEMBLY FGH= 1049.41

STA 5+27.05, 19.83' RT 8" WATER VALVE RIM= 1049.82

STA 3+48.03, 76.20' RT HYDRANT ASSEMBLY FGH= 1045.11

STA 3+46.96, 31.92' RT 8" WATER VALVE RIM= 1049.17

20'x30' PRIVATE INGRESS/EGRESS EASEMENT

Δ = 32°25'10"
L = 367.79'
R = 650.00'
CH = 362.90'
CHB = S73°24'40"E

SCALE 0' 10' 20' 40'

ST-2 ST-9 ST-10

STA 1+64.38, 52.30' L SW-401 84" MH RIM=1048.01 FL 36" (E)=1042.36 FL 18" (N)=1042.86 FL 18" (S)=1042.86 FL 42" (W)=1042.26

STA 1+63.30, 67.90' L 18" RCP APRON W/ FOOTING AND APRON GUARD FL=1042.98

STA 1+46.56, 65.24' R 18" RCP APRON W/ FOOTING AND APRON GUARD FL=1043.34

12 LF OF 18" RCP @ 1.00% (LENGTH SHOWN INCLUDES APRON)

116 LF OF 18" RCP @ 0.50% (LENGTH SHOWN INCLUDES APRON)

CRITICAL CROSSING BOTTOM OF STORM=1043.02 TOP OF SANITARY=1041.52

LP STA. = 2+50.00
LP ELEV = 1047.94
VPI STA = 2+50
VPI ELEV = 1047.86
VC = 50'
K=41.67

STA 1+29.40, 51.96' L REMOVE APRON AND CONNECT TO EXISTING 42" RCP STORM SEWER FL=1042.17 (VERIFY)

TAPPING VALVE ASSEMBLY

-1.00%

-0.60%

83 LF OF 36" RCP @ 0.50%

6.0' MIN. COVER (TYP)

33 LF OF 42" RCP @ 0.27%

CRITICAL CROSSING BOTTOM OF STORM=1042.17 TOP OF SANITARY=1041.27 PROPOSED 8" SANITARY SEWER VERIFY DEPTH AND LOCATION PRIOR TO CONSTRUCTION

CRITICAL CROSSING BOTTOM OF SANITARY=1040.25 TOP OF WATER=1038.75

STA 2+50.14, 30.50' L SW-506 INTK TO=1047.69 FL 24" (E)=1043.18 FL 18" (S)=1042.98 FL 24" (N)=1043.08 FL 36" (W)=1042.78

STA 2+50.53, 58.08' L 24" PLUG FL=1043.28

24 LF OF 24" RCP @ 0.82%

45 LF OF 18" RCP @ 0.80%

STA 2+50, 18.50' R SW-506 INTK FL 15" (S)=1043.44 FL 18" (N)=1043.34

STA 2+50, 63.70' R 18" RCP APRON W/ FOOTING AND APRON GUARD FL=1043.97

45 LF OF 15" RCP @ 1.15% (LENGTH SHOWN INCLUDES APRON)

CRITICAL CROSSING BOTTOM OF STORM=1042.32 TOP OF SANITARY=1041.82

HYDRANT ASSEMBLY

PROFILE GRADE

STA 3+56.36, 35.50' L SW-401 48" MH RIM=1048.45 FL 24" (E)=1043.84 FL 24" (W)=1043.74

111 LF OF 24" RCP @ 0.50%

132 LF OF 24" RCP @ 0.50%

8" CROSS

8" WATER MAIN

EXISTING GROUND

STA 4+84.90, 25.83' L SW-401 48" MH RIM=1049.55 FL 24" (SE)=1044.60 FL 15" (N)=1044.60 FL 24" (W)=1044.60

8" VALVE

0.60%

106 LF OF 24" RCP @ 0.50%

1065 1060 1055 1050 1045 1040 1035

1048.61 1048.81 1048.99 1042.95 1048.46 1043.10 1048.16 1043.03 1047.94 1043.09 1048.16 1043.18 1048.46 1043.28 1048.76 1043.26 1049.06 1043.92 1049.36 1045.21 1049.65

0+00 1+00 2+00 3+00 4+00 5+00

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

EI: JJN

CIVIL DESIGN ADVANTAGE

AUTUMN RIDGE PLAT 1

PLAN AND PROFILE

WAUKEE, IOWA

1402.069

REFER TO SHEET 15 FOR INTERSECTION DETAILS.

LOT 5

30' SETBACK

STORM SEWER ALONG SE OLSON DRIVE TO BE INSTALLED WITH OPEN JOINTS WRAPPED IN FILTER FABRIC.

STA 9+01.40, 35.00' LT
8" WATER VALVE
RIM= 1051.77

STA 9+01.27, 50.00' LT
TEMPORARY BLOW-OFF HYDRANT
FGH= 1050.96

10.00' PUE

4" PERFORATED SUBDRAIN
FL=1048.81

5' SIDEWALK

ST-12 L-12 L-13 L-14 ST-14 L-15 ST-15 ST-16 P-2 S-2 S-3 P-3 P-4 ST-17

P.T. 5+01.53

S.E. OLSON DRIVE

4" PERFORATED SUBDRAIN
FL=1047.15

286 LF OF 4" PERFORATED SUBDRAIN

CRITICAL CROSSING
BOTTOM OF STORM=1047.90
TOP OF WATER=1045.47

STA 9+01.70, 19.44' RT
8" CROSS

STA 10+37.86, 17.17' RT
STORM CLEANOUT
RIM=1052.65
FL(NW)=1048.81
FL(SE)=1048.81

TIE 4" SUBDRAIN INTO PROPOSED 15" RCP
15" FL=1045.79
4" FL=1046.17

8" P.O.C.

19.50' 31.00' B-B 70.00' ROW

5' SIDEWALK

487 LF OF 4" PERFORATED SUBDRAIN

4" PERFORATED SUBDRAIN
FL=1047.15

286 LF OF 4" PERFORATED SUBDRAIN

CRITICAL CROSSING
BOTTOM OF STORM=1045.62
TOP OF WATER=1044.12

STA 6+70.37, 23.00' RT
HYDRANT ASSEMBLY
FGH= 1050.81

10.00' PUE

STA 8+80.33, 23.01' RT
HYDRANT ASSEMBLY
FGH= 1052.07

STA 9+01.89, 50.00' RT
TEMPORARY BLOW-OFF HYDRANT
FGH= 1053.17

STA 8+85.33, 19.51' RT
8" WATER VALVE
RIM= 1051.96

30' SETBACK

DETENTION AND OVERLAND FLOWAGE EASEMENT

STA 9+01.85, 35.00' RT
8" WATER VALVE
RIM= 1052.33

LOT 2

LOT 4

ST-12 90° 86°

S-2 90° 86°

SCALE 0' 10' 20' 40'

EXISTING GROUND

PROPOSED GROUND

STA 9+57.58, 27.00' L
SW-301 48" MH
RIM=1051.90
FL 8" (NE)=1039.94
FL 8" (SW)=1039.94
FL 8" (SE)=1039.84

STA 5+89.56, 19.50' L
SW-401 48" MH
RIM=1050.18
FL 15" (SE)=1045.23
FL 15" (SW)=1045.63
FL 24" (NW)=1046.13

STA 5+91.38, 50.36' R
15" RCP APRON
RIM=1047.50
FL 15" (NE)=1045.98

STA 7+50, 15.50' L
SW-503 INTK
TC=1050.99
FL 15" (SW)=1046.12
FL 15" (NW)=1046.02

STA 7+50, 15.50' R
SW-501 INTK
TC=1050.99
FL 15" (NE)=1046.39

STA 9+46.62, 50.00' R
8" STUB
FL=1040.24

8" STUB
FL=1040.02

STA 10+37.86, 17.17' RT
FL 4" PERFORATED SUBDRAIN (NW)=1048.81
FL 4" PERFORATED SUBDRAIN (SE)=1048.81
STORM CLEANOUT
RIM=1052.65

HP STA = 10+35.68
HP ELEV = 1052.463
VP STA = 10+50
VP ELEV = 1052.66
VC = 100'
K=56.13

69 LF OF 15" RCP @ 0.50%
(LENGTH SHOWN INCLUDES APRON)

CRITICAL CROSSING
BOTTOM OF STORM=1045.62
TOP OF WATER=1044.12

27 LF OF 15" RCP @ 1.00%

8" VALVE

HYDRANT ASSEMBLY

EXISTING GROUND

76 LF OF 8" PVC @ 0.40%

21 LF OF 8" PVC @ 0.40%

VPC STA = 10+00
VPC ELEV = 1052.36

0.60%

106 LF OF 24" RCP @ 0.50%

158 LF OF 15" RCP @ 0.50%

6.0' MIN. COVER (TYP)

PROFILE GRADE

8" CROSS

8" WATER MAIN

229 LF OF 8" PVC @ 0.40%

1065 1060 1055 1050 1045 1040 1035

1043.92 1049.36 | 1045.21 1049.68 | 1046.81 1049.96 | 1048.42 1050.28 | 1049.80 1050.56 | 1051.15 1050.86 | 1052.14 1051.16 | 1052.92 1051.46 | 1053.88 1051.76 | 1055.18 1052.06 | 1055.88 1052.36 | 1055.84 1052.44

5+00 6+00 7+00 8+00 9+00 10+00

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EI: JJN

ENGINEER: EKO

CIVIL DESIGN ADVANTAGE

AUTUMN RIDGE PLAT 1

PLAN AND PROFILE

WAUKEE, IOWA

1402.069

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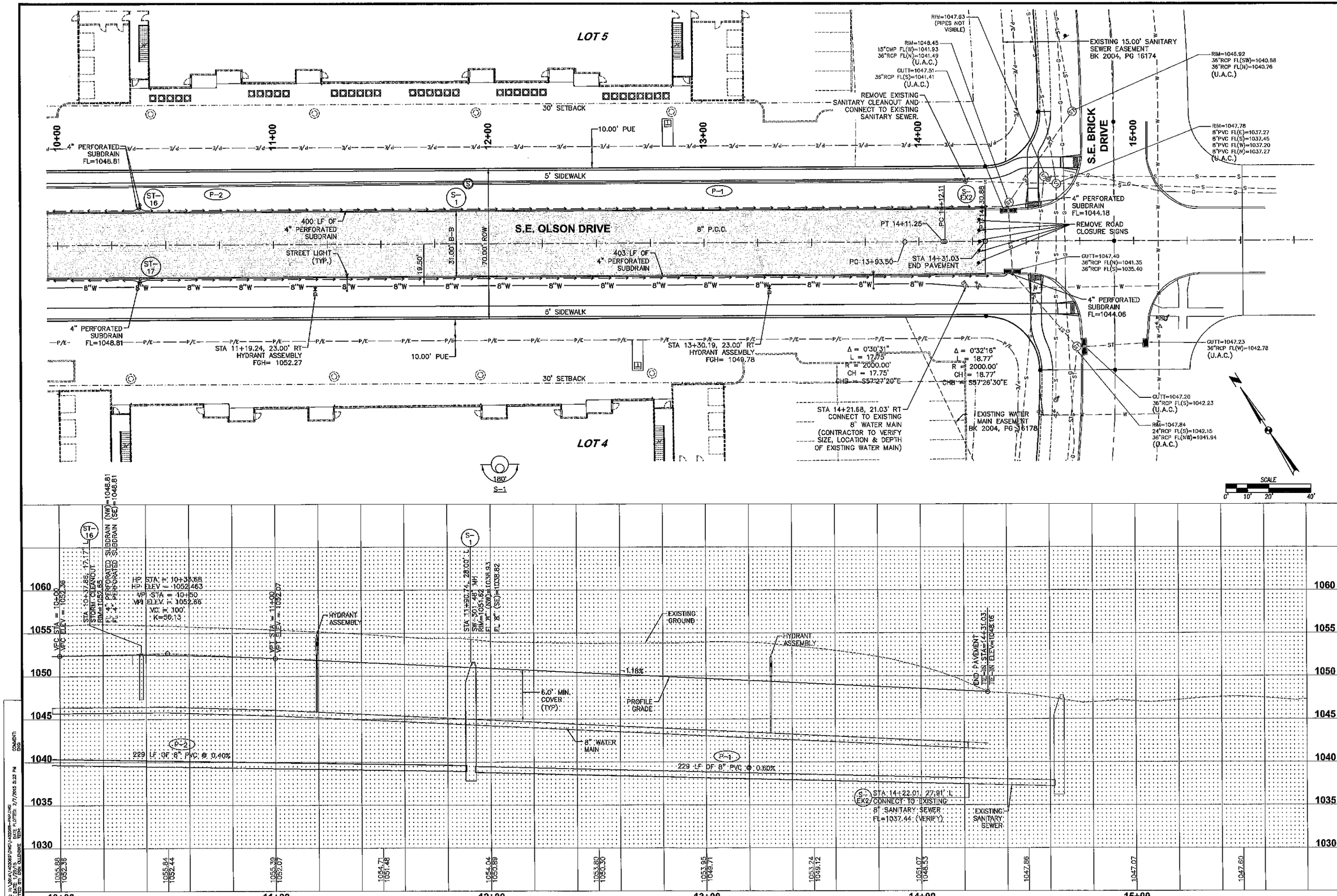
DATE PLOTTED: 2/7/2015 5:22 PM
COMMAND: ENZ



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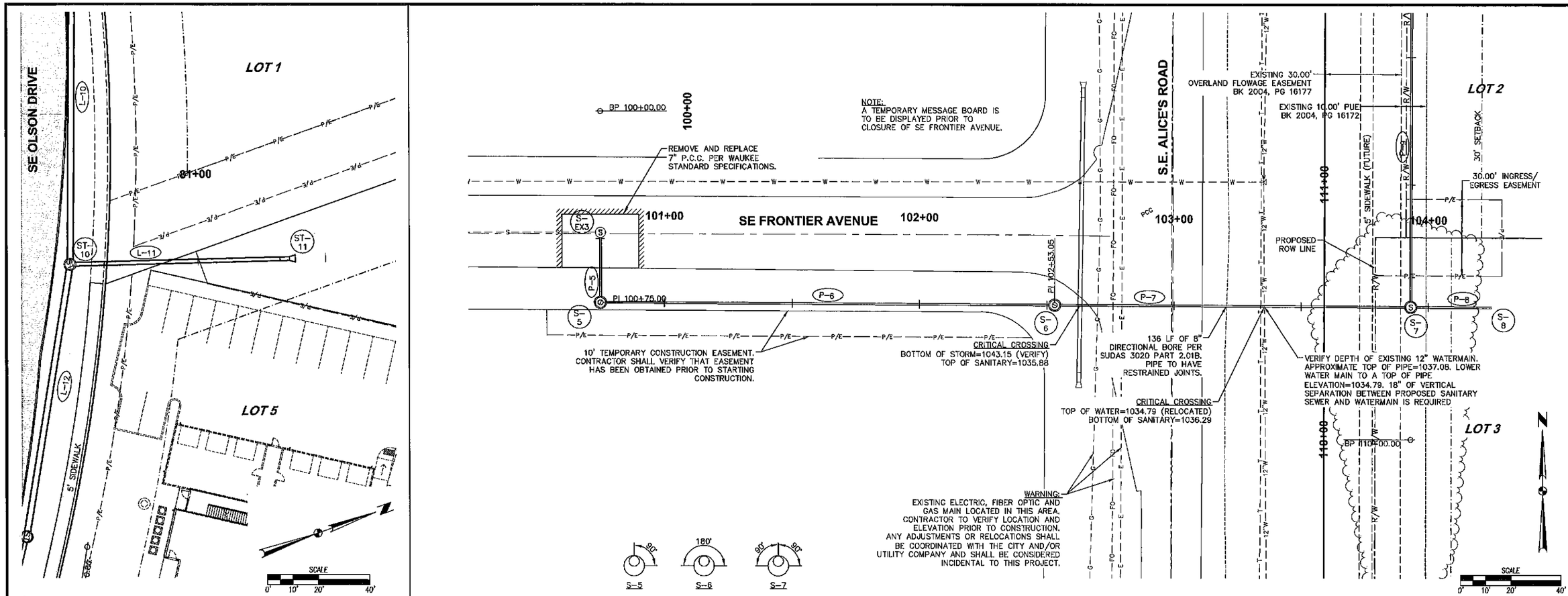
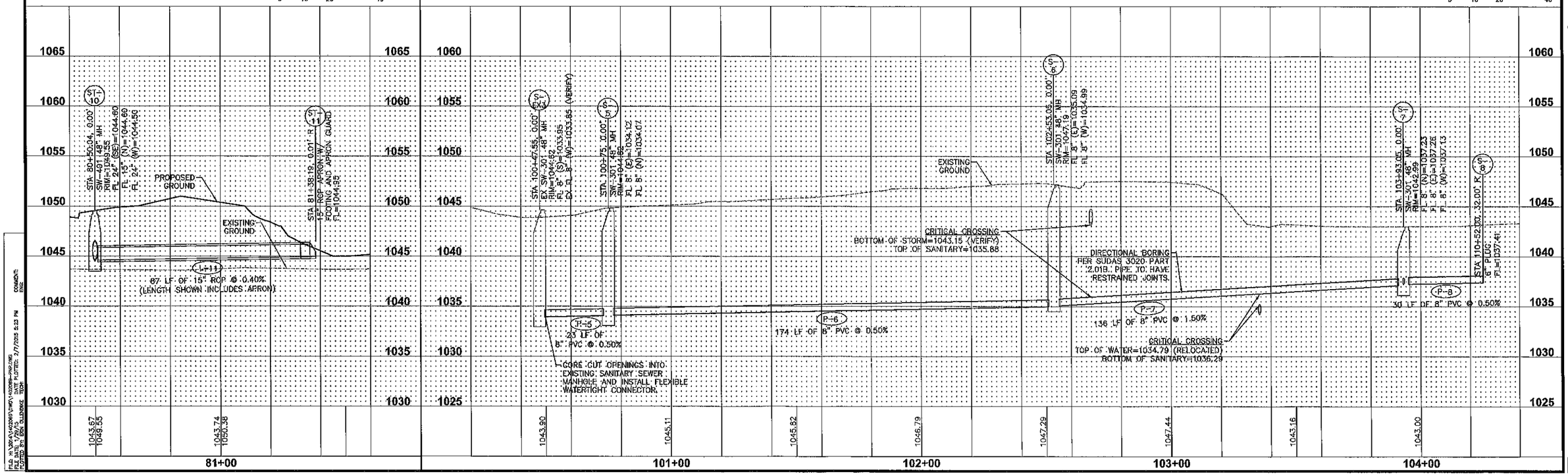
AUTUMN RIDGE PLAT 1
PLAN AND PROFILE





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EI: JJN
ENGINEER: EKO
CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

AUTUMN RIDGE PLAT 1
PLAN AND PROFILE

10/15

1402.069

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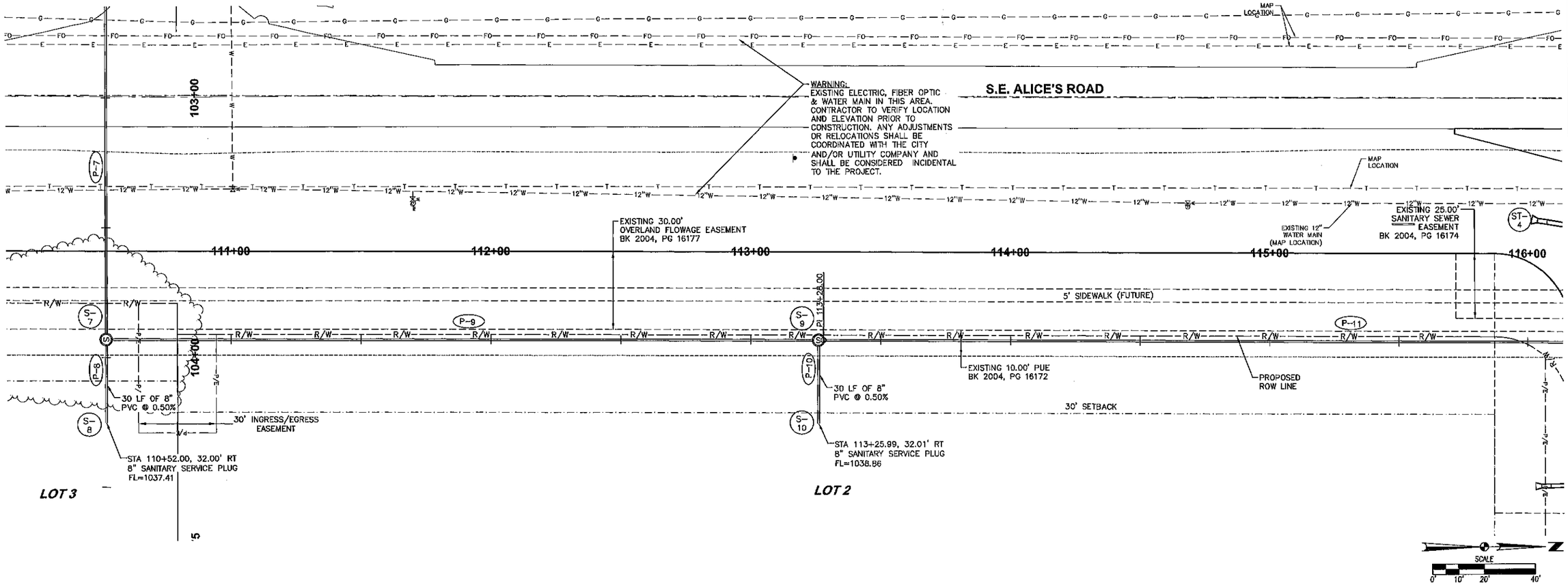

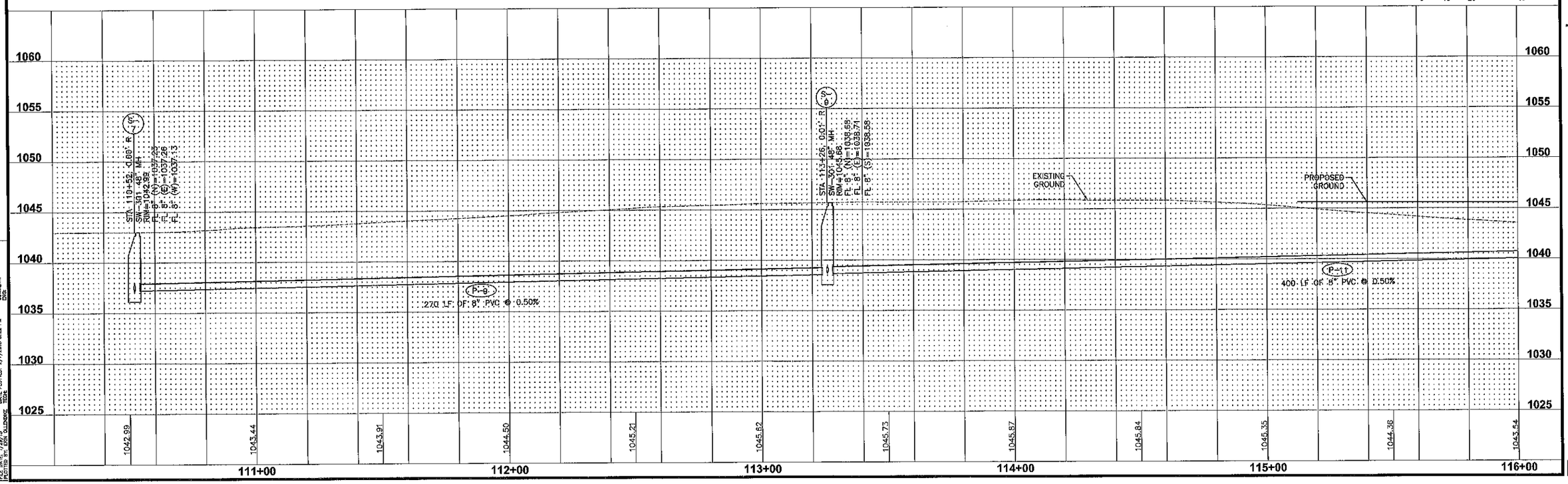

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AUTUMN RIDGE PLAT 1
PLAN AND PROFILE

11/15

1402.069

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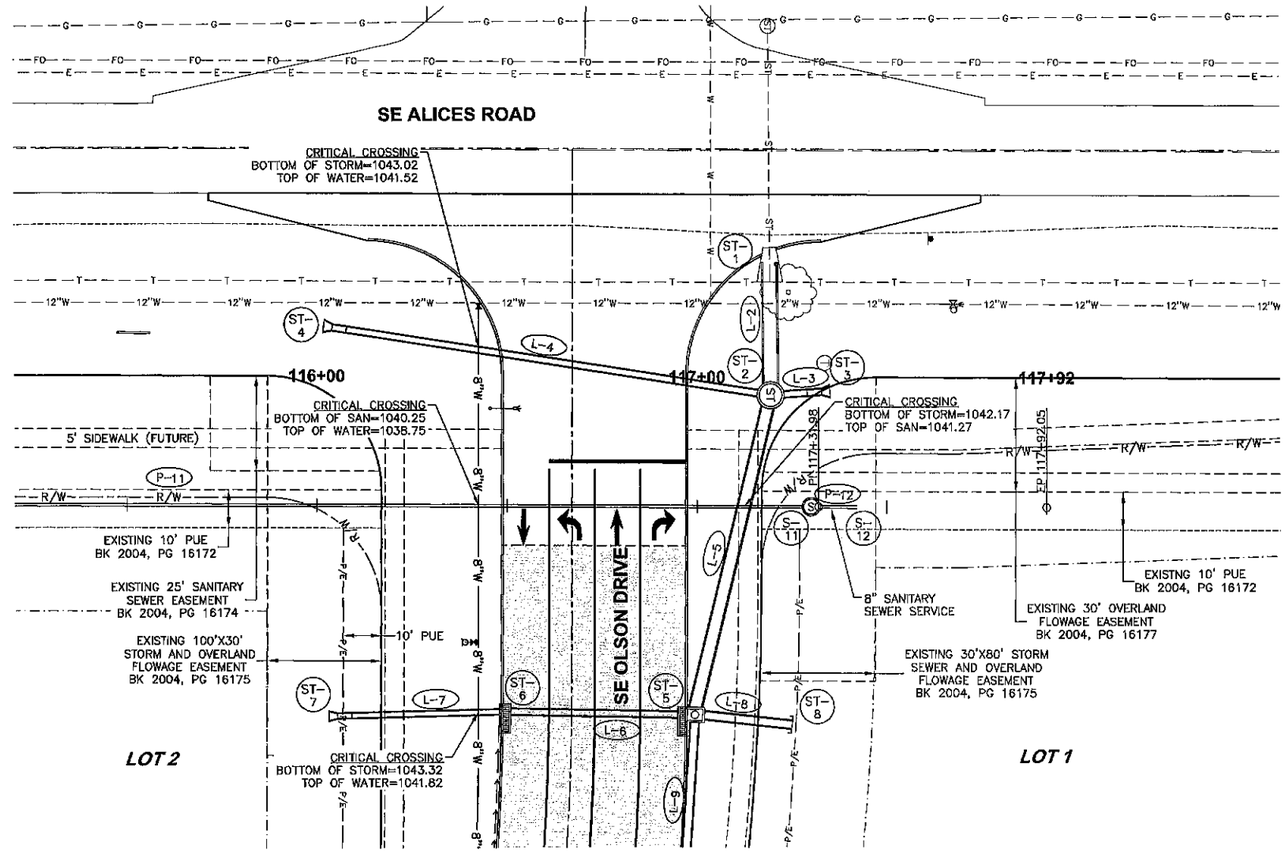

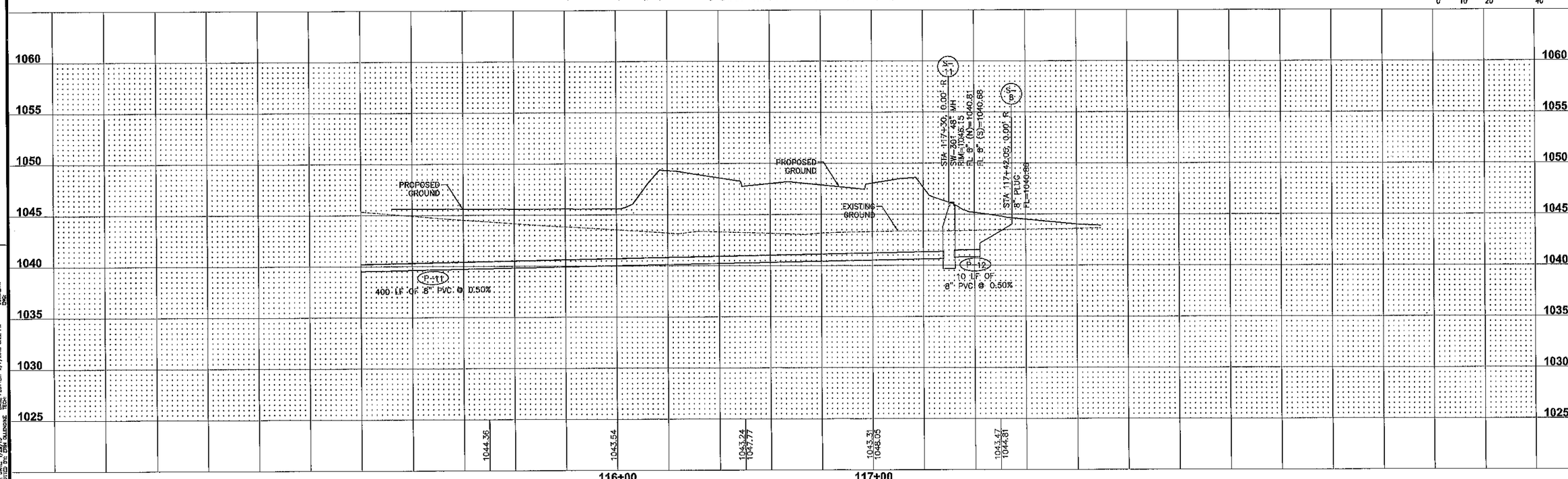

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PLAN AND PROFILE

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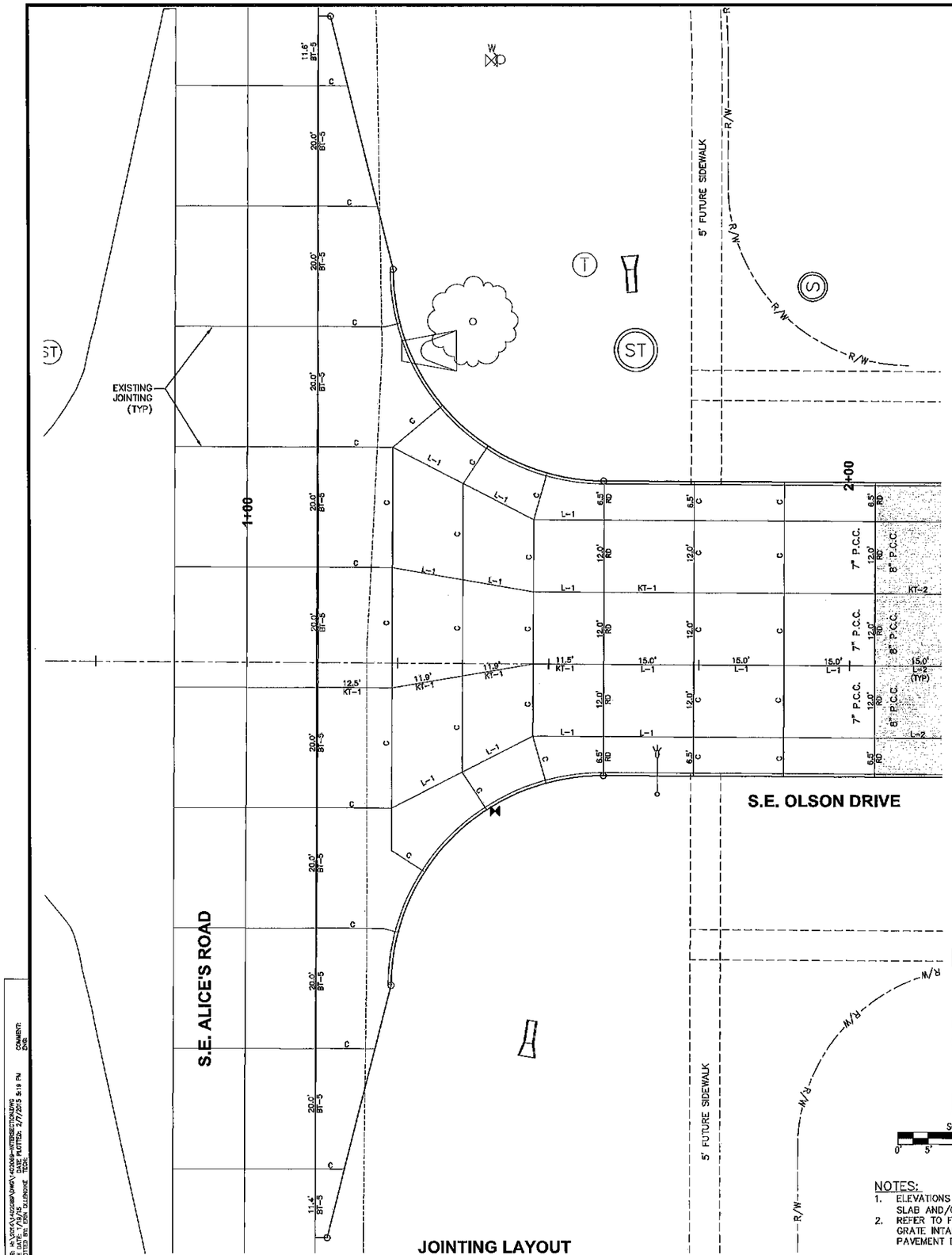
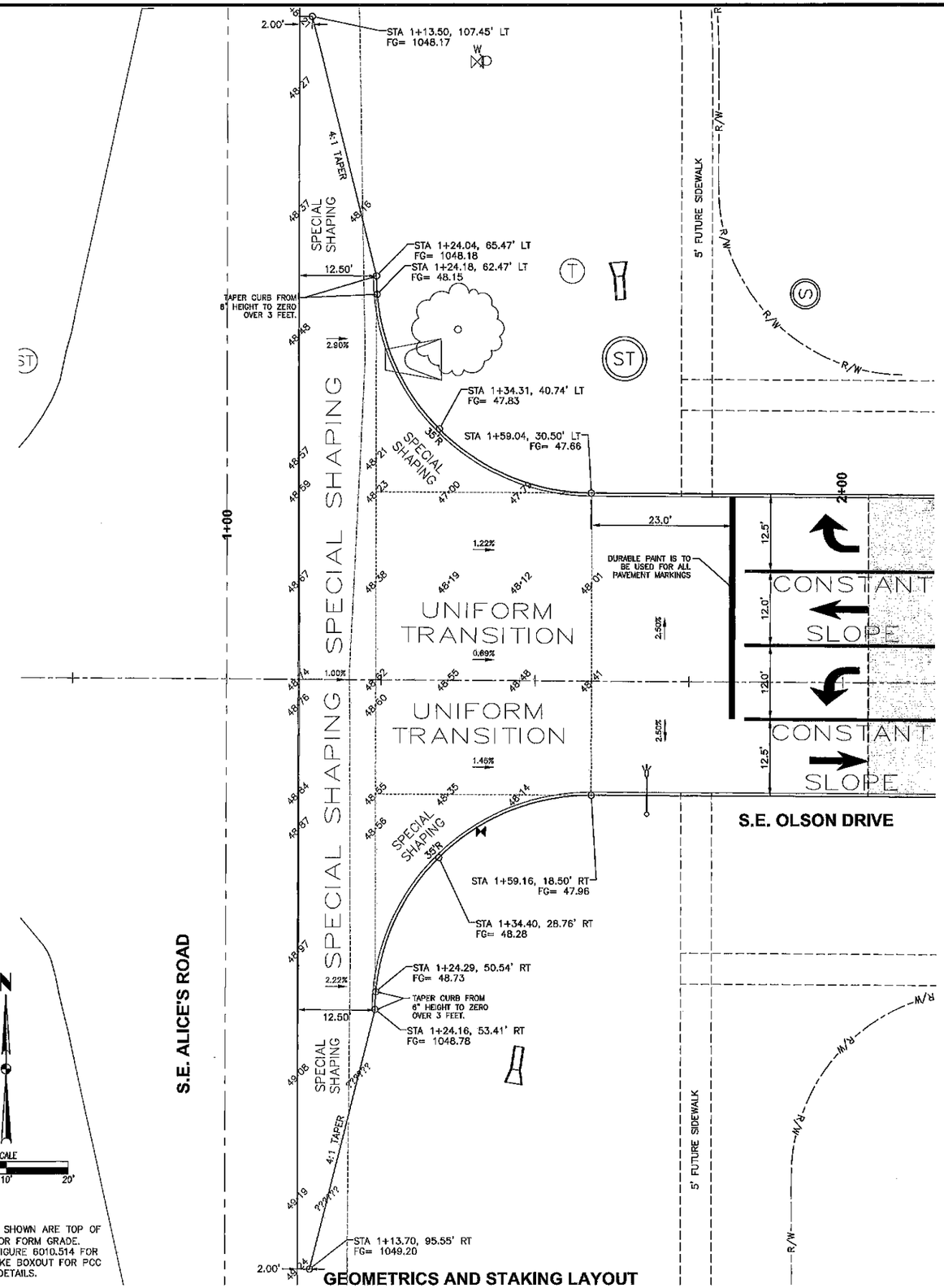


JOINTING LAYOUT

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.



GEOMETRICS AND STAKING LAYOUT

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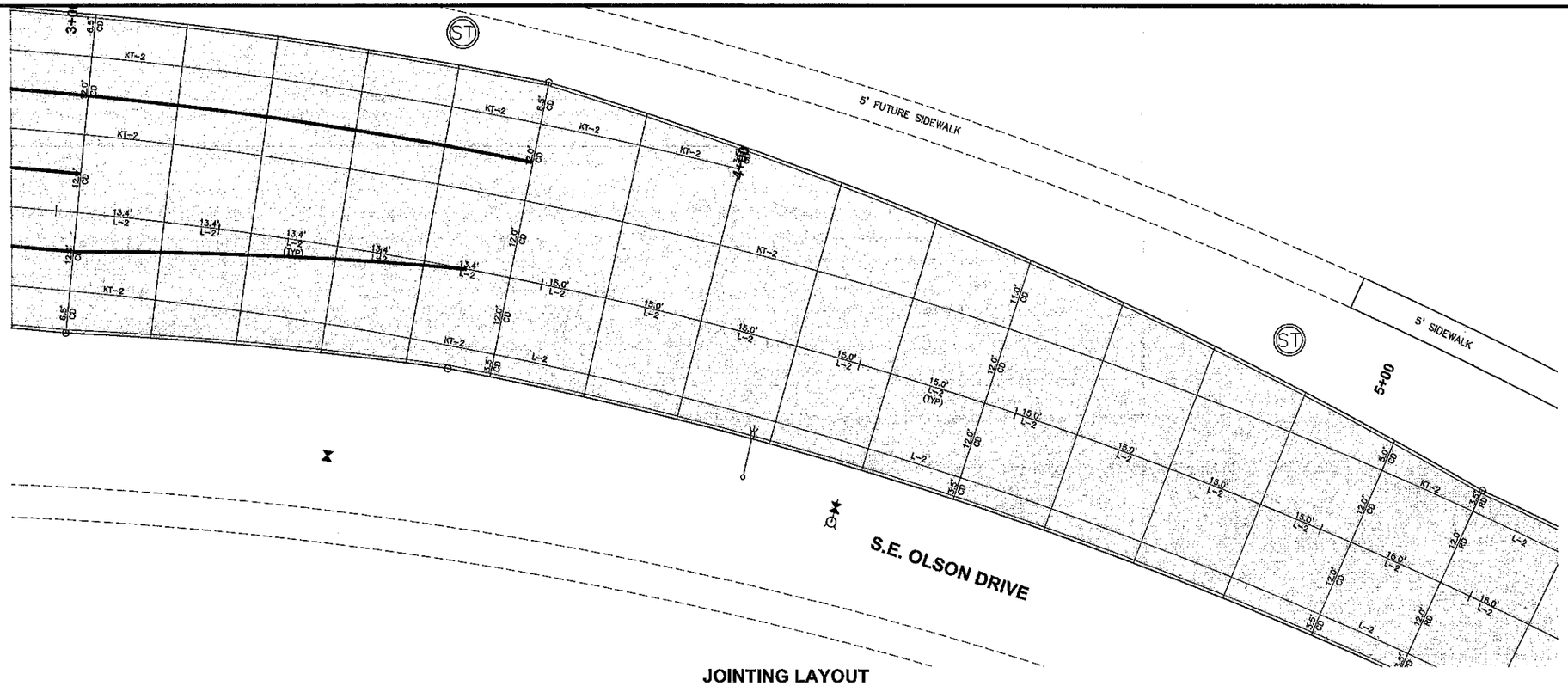
AUTUMN RIDGE PLAT 1
INTERSECTION DETAILS



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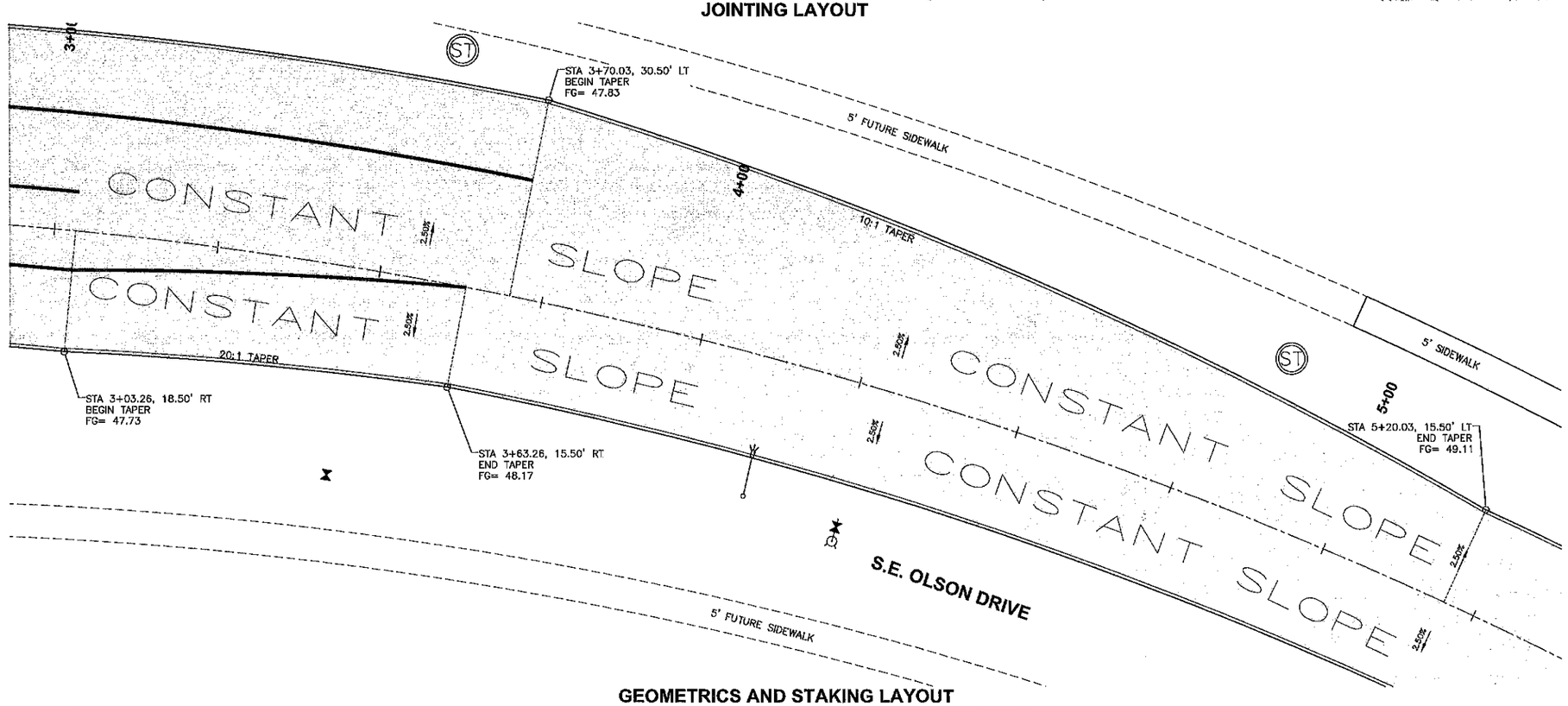

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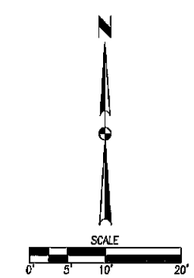

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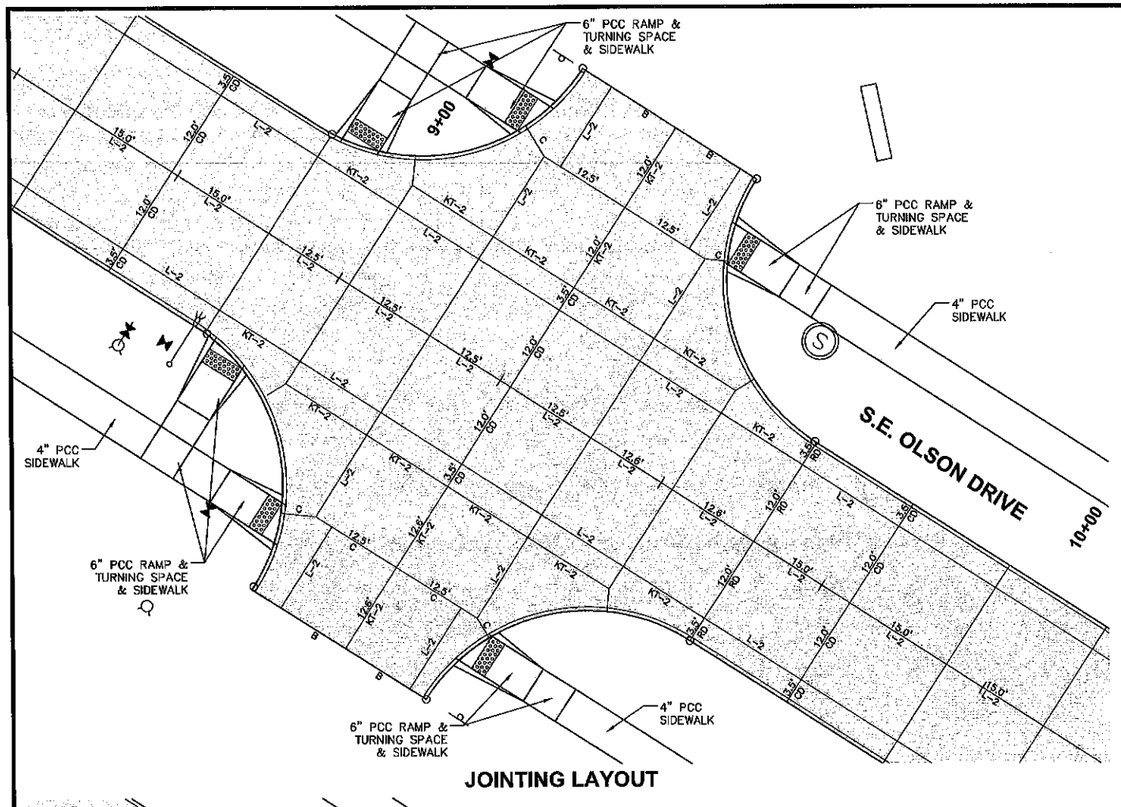

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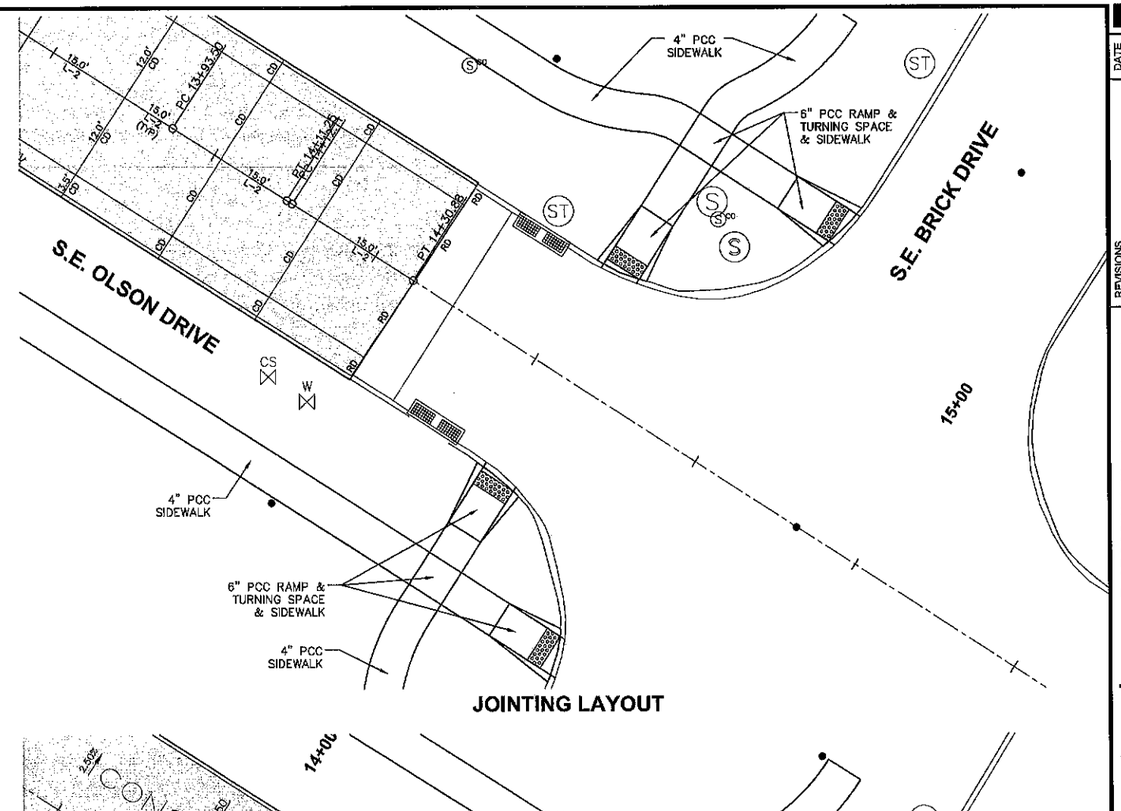

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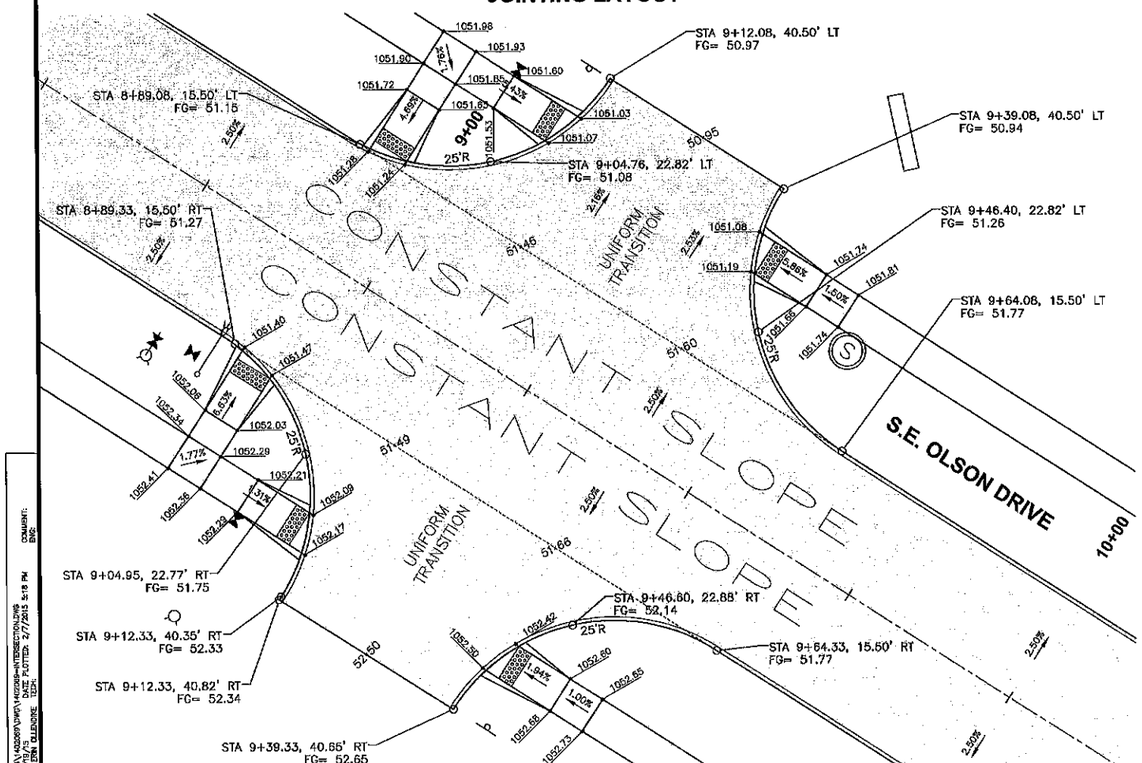

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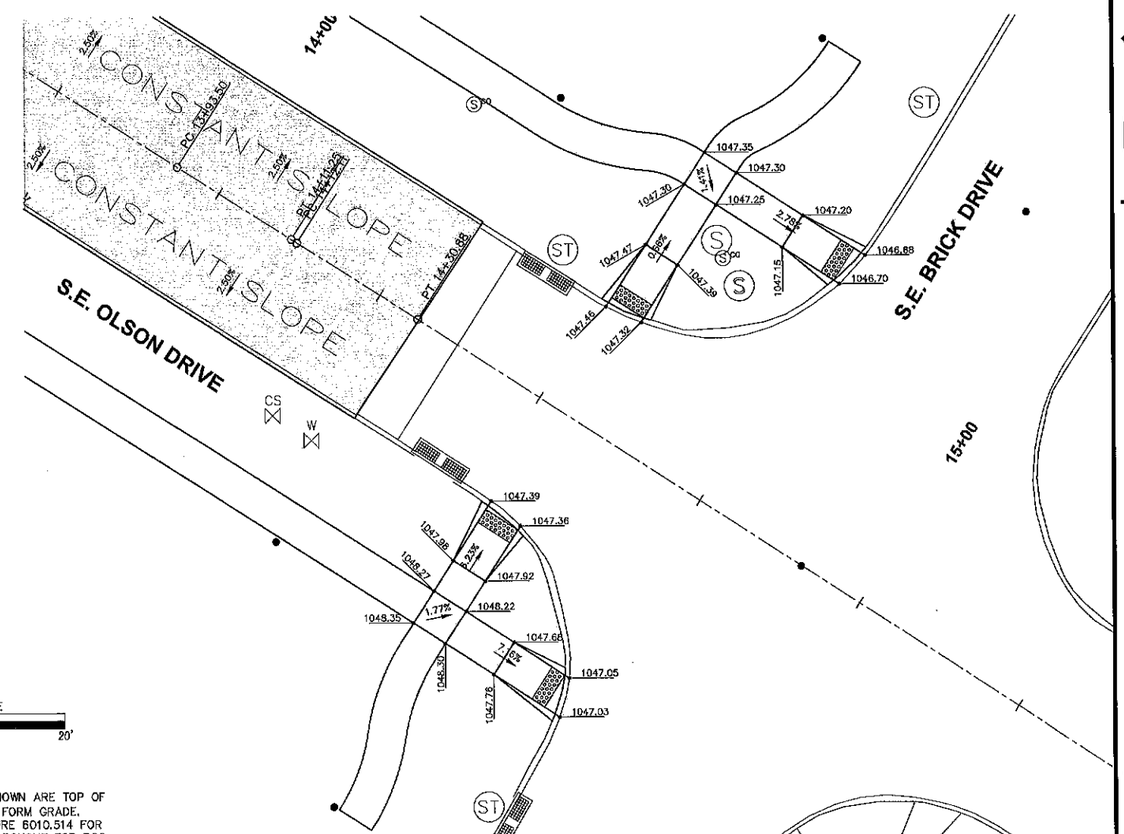

GEOMETRICS AND STAKING LAYOUT

SCALE 0' 5' 10' 20'

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15/15

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