

CONSTRUCTION PLANS FOR:

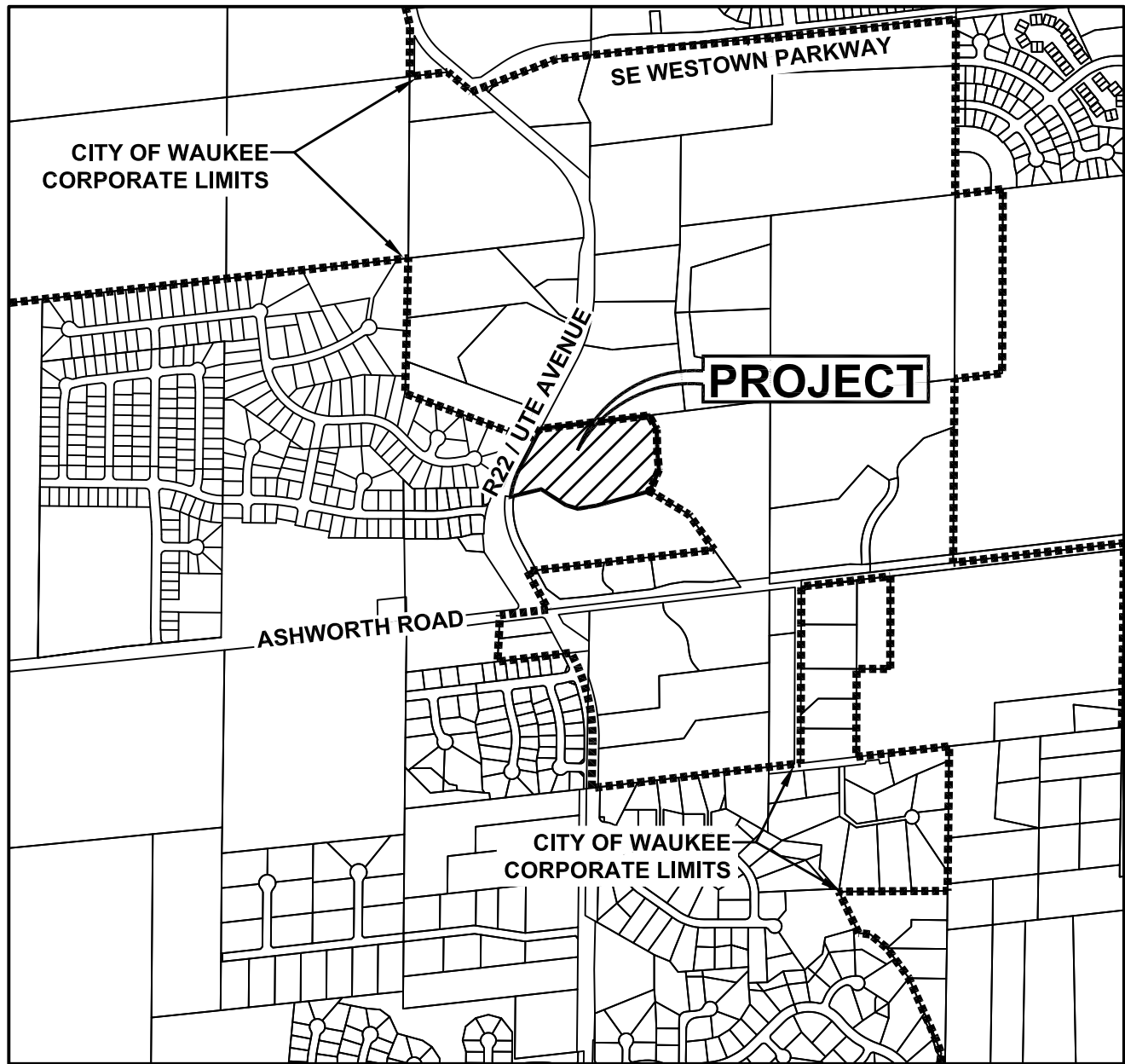
EL DORADO HILLS PLAT 1

WAUKEE, IOWA



VICINITY MAP

NOT TO SCALE



OWNER / APPLICANT

EL DORADO HILLS, LLC
CONTACT: BRAD STANBROUGH
10888 HICKMAN ROAD, SUITE 3A
CLIVE, IA 50325

ENGINEER / SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC
CONTACT: JARED MURRAY
3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PH: 515-369-4400

ZONING

PROPOSED: R-1 SINGLE FAMILY RESIDENTIAL DISTRICT

BENCHMARKS

SET BENCHMARK:
BURY BOLT ON HYDRANT AT THE
NORTHWEST CORNER OF DAYBREAK DRIVE
AND CRESCENT DRIVE
ELEVATION=1023.95

BENCHMARK CONTROL POINT 70220
(SHOT#5064)
CAPPED REBAR ON THE EAST BOUNDARY
LINE 35 FEET SOUTH OF DAYBREAK DRIVE
ELEVATION=1019.51

BENCHMARK CONTROL POINT 70214
(SHOT#5058)
CAPPED 1/2" REBAR ON EAST BOUNDARY
LINE 500 FEET +/- NORTH OF DAYBREAK
DRIVE
ELEVATION=1028.95

COUNTY BENCHMARK G121:
EAST SIDE OF R16 0.1 MILES SOUTH OF
300TH STREET
ELEVATION=1032.82

SUBMITTALS

FIRST SUBMITTAL:	07/23/2019
SECOND SUBMITTAL:	08/06/2019
THIRD SUBMITTAL:	08/19/2019
FOURTH SUBMITTAL:	08/29/2019
FINAL SUBMITTAL:	09/10/2019
REVISED FINAL SUBMITTAL:	02/25/2020
REVISED FINAL SUBMITTAL:	04/16/2020

DEVELOPMENT SUMMARY:

TOTAL PLAT AREA = 12.88 AC (561,149 SF)

BULK REGULATIONS:

R-1 SINGLE FAMILY RESIDENTIAL DISTRICT ZONING REGULATIONS SHALL APPLY TO THIS AREA:

- PRINCIPAL PERMITTED USES FOR THIS AREA SHALL INCLUDE SINGLE FAMILY DWELLINGS.
- MINIMUM LOT AREA: 10,000 SQUARE FEET FOR EVERY DWELLING PLUS ITS ACCESSORY BUILDING WHERE PUBLIC SEWER FACILITIES ARE NOT AVAILABLE, NOT LESS THAN 20,000 SQUARE FEET.
- MINIMUM FLOOR AREA: 1,050 SQUARE FEET FOR SINGLE STORY DWELLING. IF BUILDING IS TWO OR MORE STORIES, MINIMUM SQUARE FOOTAGE SHALL BE 1,400 SQUARE FEET WITH A MINIMUM FIRST FLOOR SQUARE FOOTAGE OF 700 SQUARE FEET. IF A BUILDING IS SPLIT LEVEL, EACH LEVEL SHALL BE A MINIMUM 400 SQUARE FEET. IF A BUILDING IS A SPLIT FOYER, THE SQUARE FOOTAGE SHALL BE A MINIMUM OF 1,050 SQUARE FEET PER STORY.
- LOT WIDTH: 80 FEET; 100 FEET WHERE PUBLIC SEWER IS NOT AVAILABLE - CORNERS LOTS SHALL BE 10 FEET WIDER.
- FRONT YARD: 30 FEET; WHEN FRONTING ON THE RIGHT-OF-WAY OF A STREET, THE FRONT YARD SHALL BE MEASURED FROM THE PROPOSED RIGHT-OF-WAY LINE.
- SIDE YARD: A TOTAL OF 15 FEET; ONE SIDE MAY BE REDUCED TO NOT LESS THAN 7 FEET; 15 FEET FOR ANY OTHER PRINCIPAL BUILDING
- REAR YARD: DWELLING - 30 FEET ANY OTHER PRINCIPAL BUILDING - 40 FEET

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.

NOTES

- ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE DEVELOPMENT SERVICES DEPARTMENT.
- 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.

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	GRADING PLAN
7	EROSION AND SEDIMENT CONTROL PLAN
8-11	STORM & SANITARY SEWER PLAN AND PROFILE
12	WATERMAIN PLAN AND PROFILE
13-14	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

LOT 1, TANGLEWOODS ACRES, AN OFFICIAL PLAT IN DALLAS COUNTY, IOWA.

AND

A PART OF LOT 3, TANGLEWOODS ACRES PLAT 2, AN OFFICIAL PLAT IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 3; THENCE NORTH 75°45'09" EAST ALONG THE NORTHERLY LINE OF SAID LOT 3, A DISTANCE OF 203.16 FEET; THENCE SOUTH 57°51'10" EAST CONTINUING ALONG SAID NORTHERLY LINE, 213.14 FEET; THENCE SOUTH 73°50'31" EAST CONTINUING ALONG SAID NORTHERLY LINE, 89.94 FEET; THENCE NORTH 79°12'11" WEST, 472.11 FEET TO THE POINT OF BEGINNING.

CONTAINING 12.88 ACRES (561,149 SQUARE FEET).



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	[Symbol]
TYPE SW-503 STORM INTAKE	[Symbol]
TYPE SW-505 STORM INTAKE	[Symbol]
TYPE SW-506 STORM INTAKE	[Symbol]
TYPE SW-513 STORM INTAKE	[Symbol]
TYPE SW-401 STORM MANHOLE	[Symbol]
TYPE SW-402 STORM MANHOLE	[Symbol]
TYPE SW-301 SANITARY MANHOLE	[Symbol]
STORM/SANITARY CLEANOUT	[Symbol]
WATER VALVE	[Symbol]
FIRE HYDRANT ASSEMBLY	[Symbol]
SIGN	[Symbol]
DETECTABLE WARNING PANEL	[Symbol]
WATER CURB STOP	[Symbol]
STORM SEWER STRUCTURE NO.	[Symbol]
STORM SEWER PIPE NO.	[Symbol]
SANITARY SEWER STRUCTURE NO.	[Symbol]
SANITARY SEWER PIPE NO.	[Symbol]
SANITARY SEWER WITH SIZE	[Symbol]
SANITARY SERVICE	[Symbol]
STORM SEWER	[Symbol]
STORM SERVICE	[Symbol]
WATERMAIN WITH SIZE	[Symbol]
WATER SERVICE	[Symbol]
SAWCUT (FULL DEPTH)	[Symbol]
SILT FENCE	[Symbol]
USE AS CONSTRUCTED	(UAC)
TOP OF PROPOSED GROUND	TG
MINIMUM OPENING ELEVATION	MOE
MINIMUM GRADE AT STRUCTURE	MGS

EXISTING

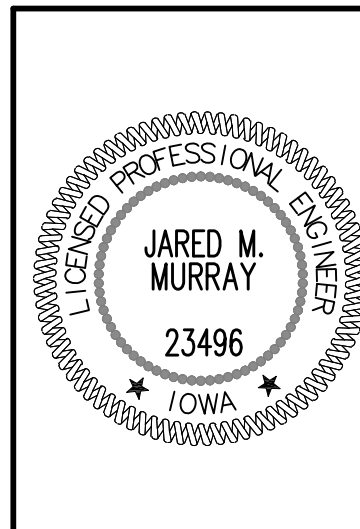
SANITARY MANHOLE	[Symbol]
WATER VALVE BOX	[Symbol]
FIRE HYDRANT	[Symbol]
WATER CURB STOP	[Symbol]
WELL	[Symbol]
STORM SEWER MANHOLE	[Symbol]
STORM SEWER SINGLE INTAKE	[Symbol]
STORM SEWER DOUBLE INTAKE	[Symbol]
FLARED END SECTION	[Symbol]
DECIDUOUS TREE	[Symbol]
CONIFEROUS TREE	[Symbol]
DECIDUOUS SHRUB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

ALL CONSTRUCTION SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND THE SOILS REPORT PREPARED BY CONSTRUCTION MATERIALS TESTING (CMT) (PN 1902068EDE) DATED 09/09/2019.

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



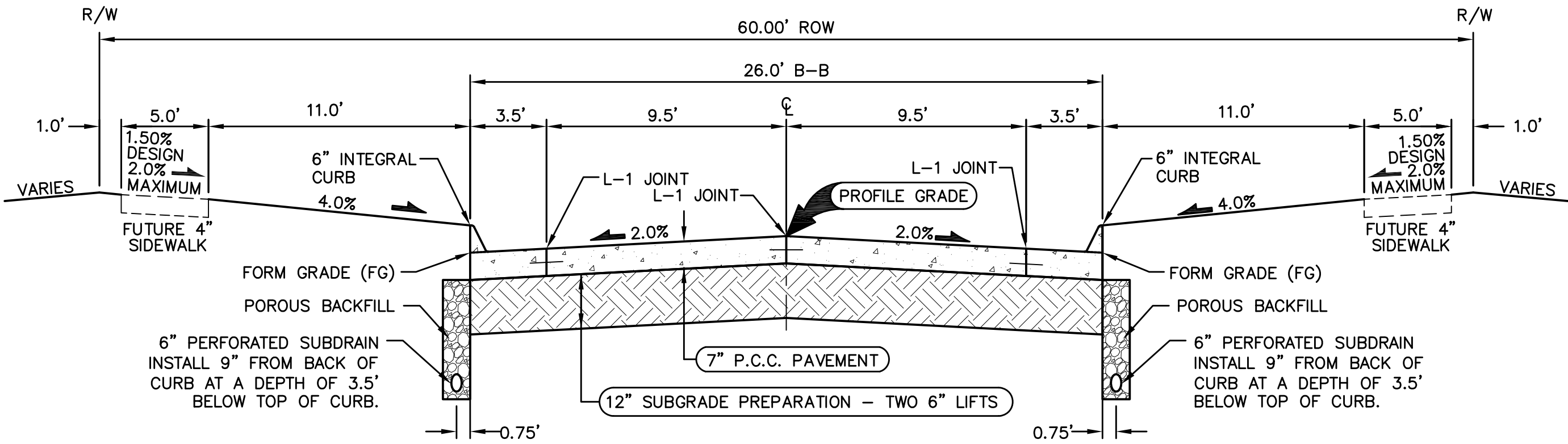
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Jared Murray
JARED M. MURRAY, P.E.

11/09/2020
DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021
PAGES OR SHEETS COVERED BY THIS SEAL:

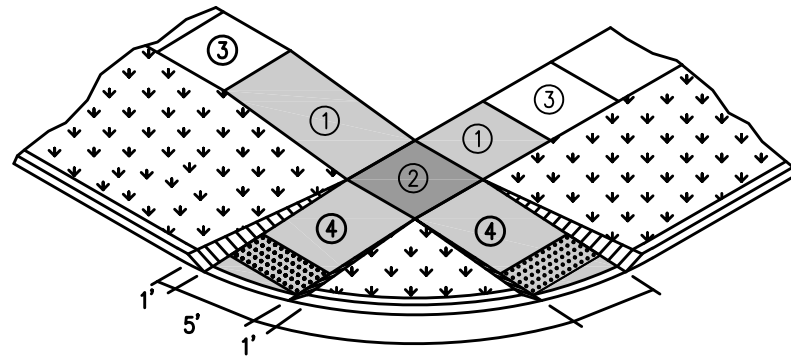
1-14



26' B/B P.C.C. ROADWAY WITH 60' R.O.W.
NOT TO SCALE
EL DORADO COURT

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

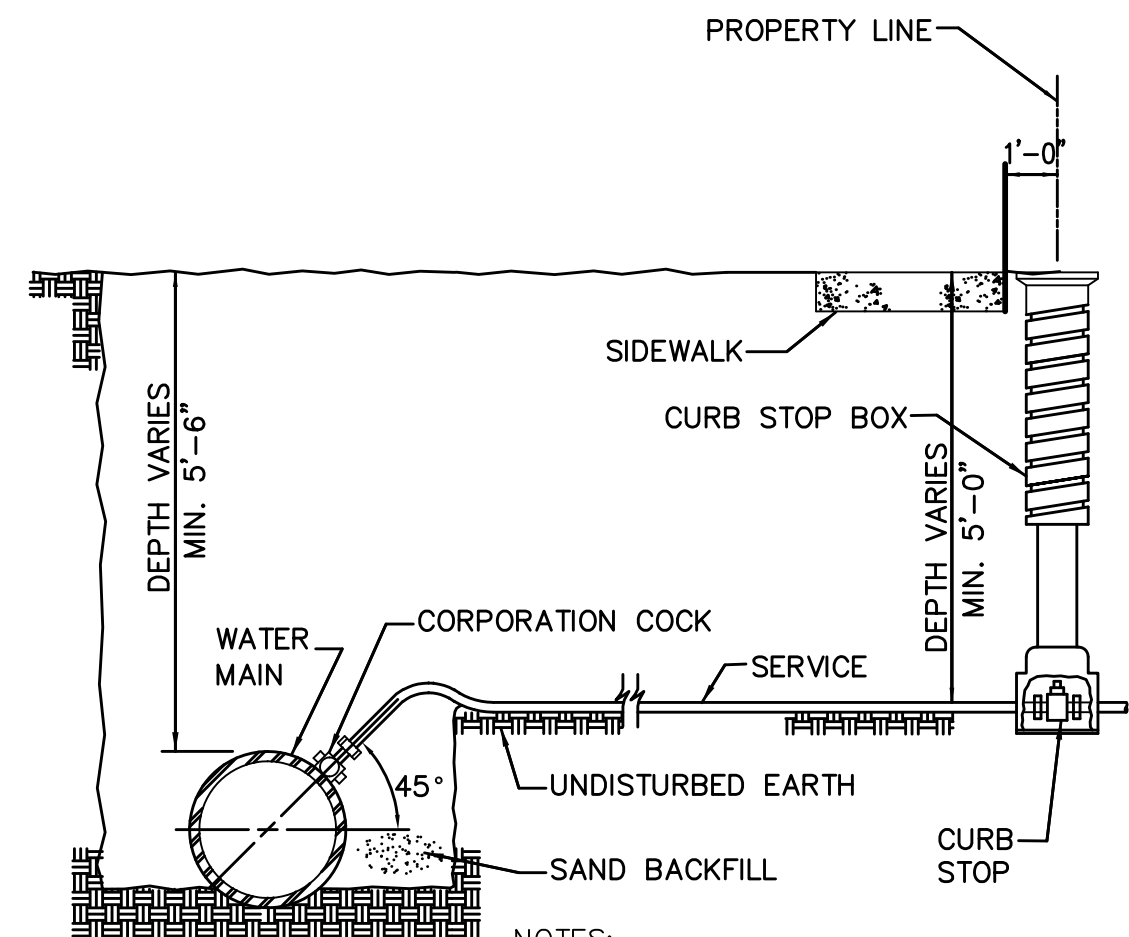
- Key
CURB RAMP
TURNING SPACE
DETECTABLE WARNING



- ① Parallel Curb Ramp: Target cross slope of 1.5% with a maximum cross slope of 2.0%. The length of the parallel ramp is not to exceed 15 feet, regardless of resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
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%.

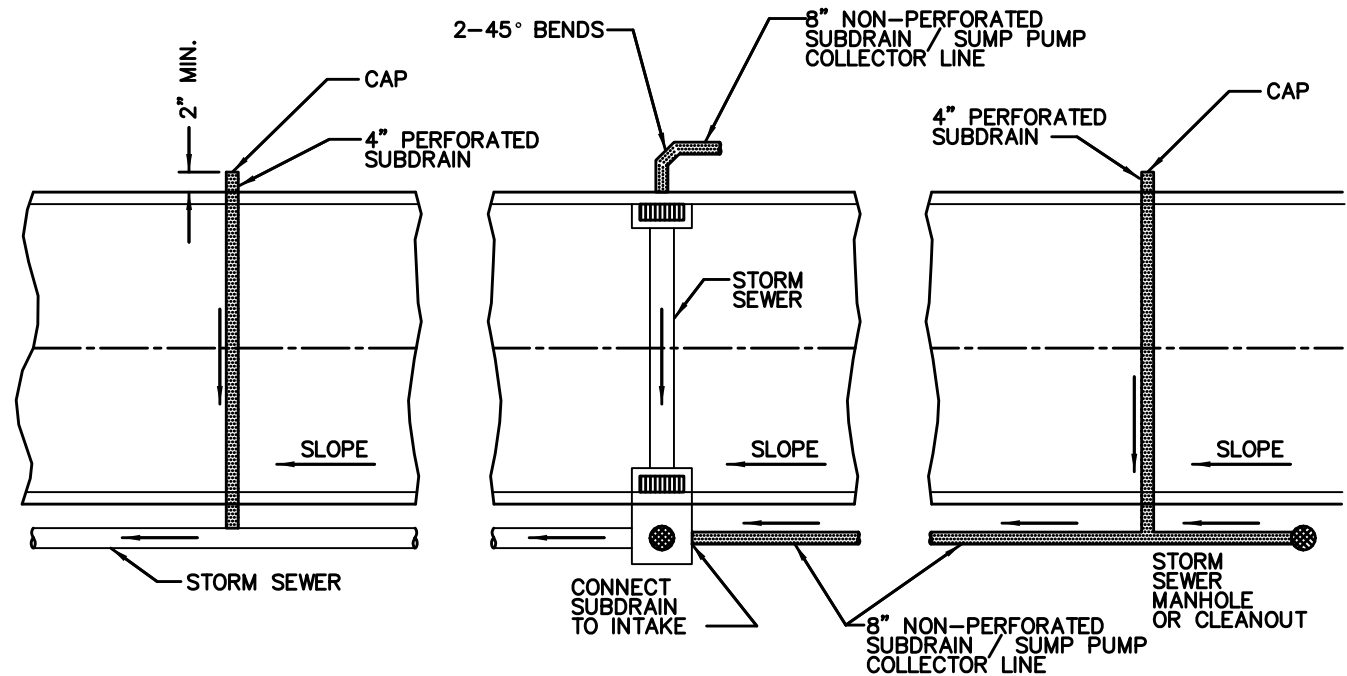
The minimum pavement depth for ramps and landings shall be 6-inches.

CURB RAMP FOR CLASS B OR C SIDEWALKS
NOT TO SCALE

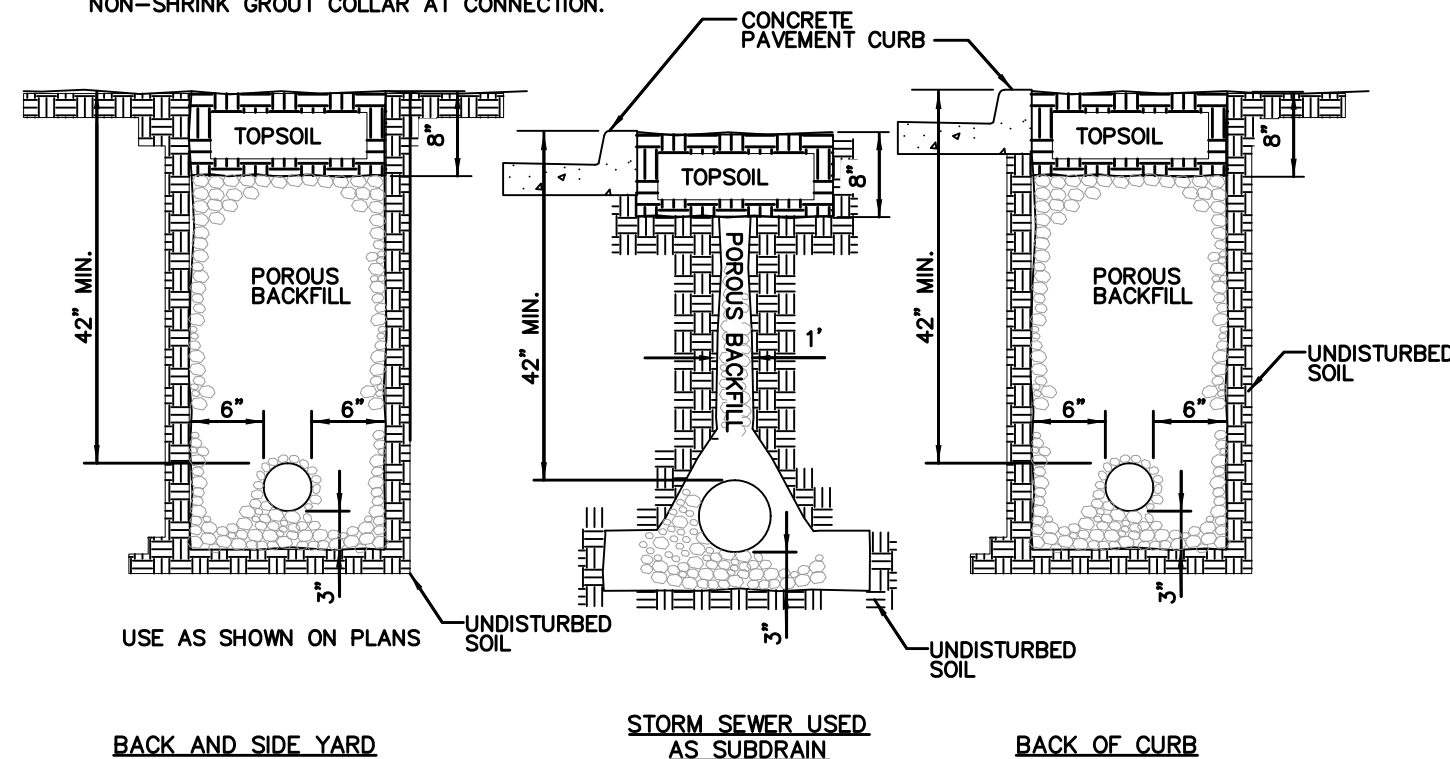


- NOTES:
1. TERMINATE CURB STOP BOX ROD 1'-6" BELOW FINISHED GRADE.

WATER SERVICE CONNECTION
NOT TO SCALE

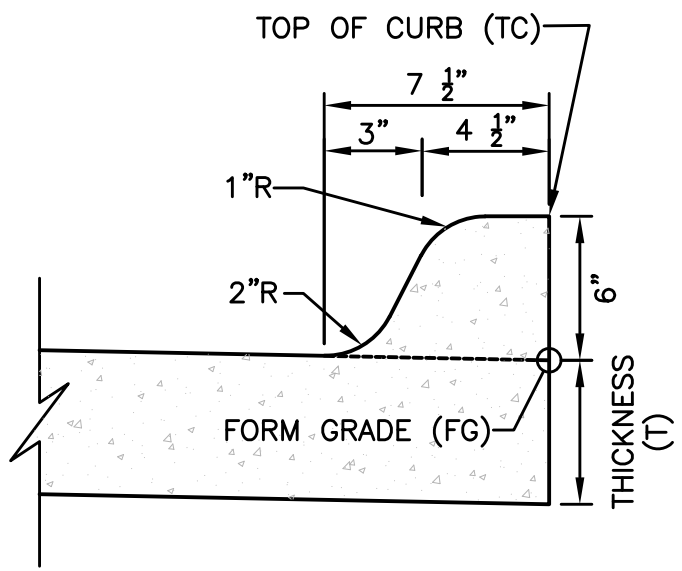


NOTE
CORE DRILL ALL STORM SEWER AND PLACE NON-SHRINK GROUT COLLAR AT CONNECTION.



- NOTES:
1. SLOPE SUBDRAINS TO DRAIN.
2. 4" AND 6" BACK OF CURB SUBDRAINS AND ALL BACK AND SIDE YARD SUBDRAINS; USE PEA GRAVEL FOR POROUS BACKFILL.

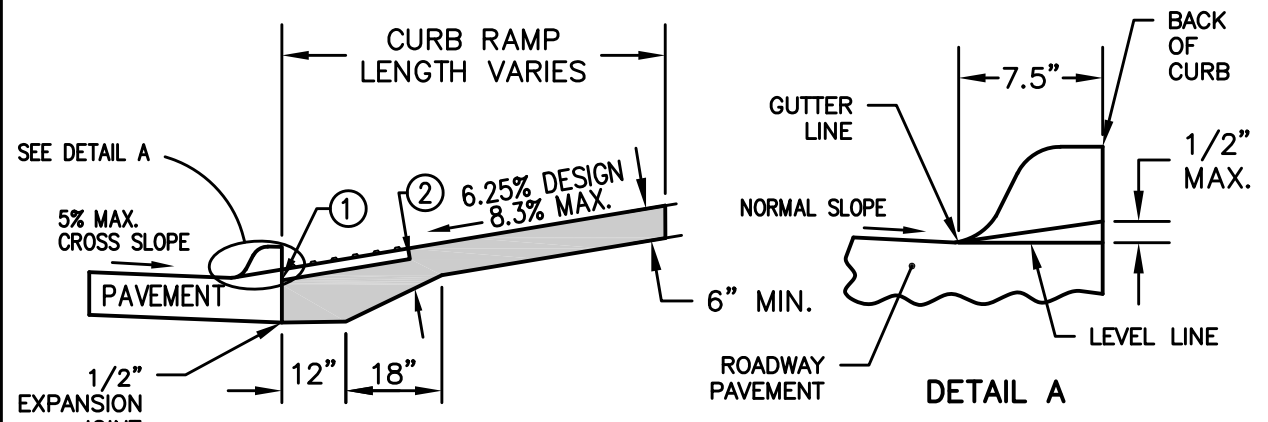
6" PERFORATED SUBDRAIN
NOT TO SCALE



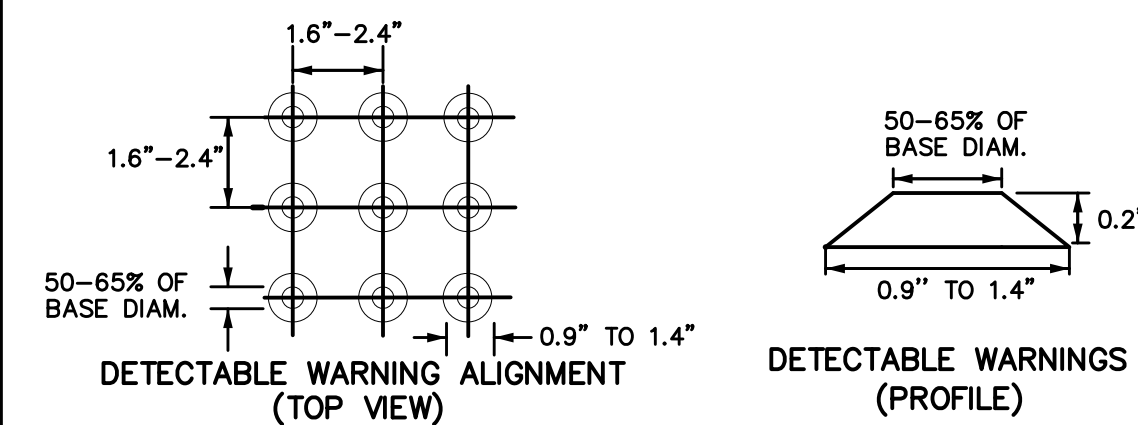
INTEGRAL 6" STANDARD SPOT ELEVATION REFERENCE DETAIL
NOT TO SCALE

- NOTES:
1. PLACE ONE 6" STEEL POST BURIED 3' AT WATER CURB BOX.
2. PLACE ONE 6" GREEN STEEL POST BURIED 3' TO LOCATE STORM SERVICE.
3. PLACE ONE 6" RED STEEL POST BURIED 3' TO LOCATE SANITARY SERVICE.

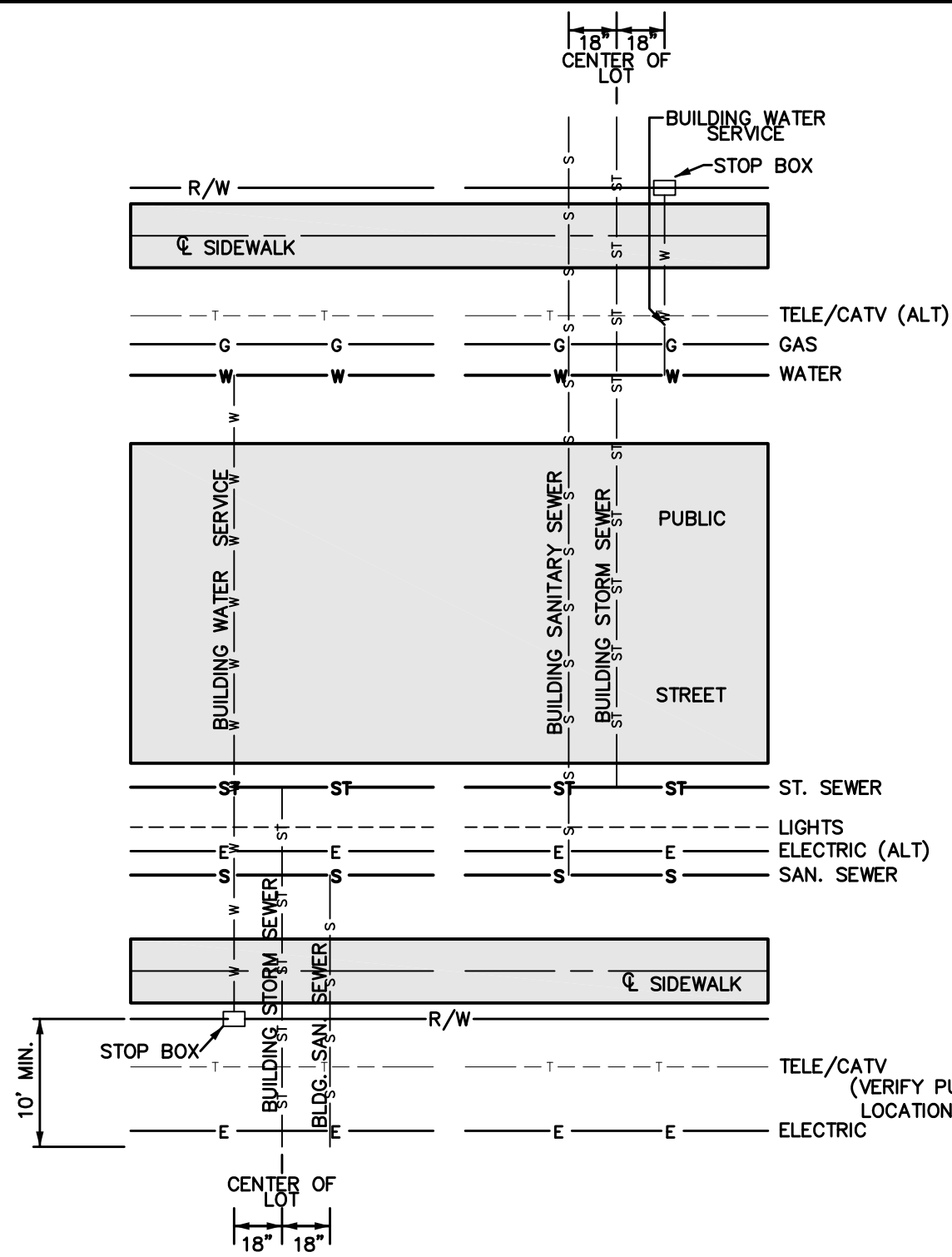
SERVICE LOCATION DETAIL
NOT TO SCALE



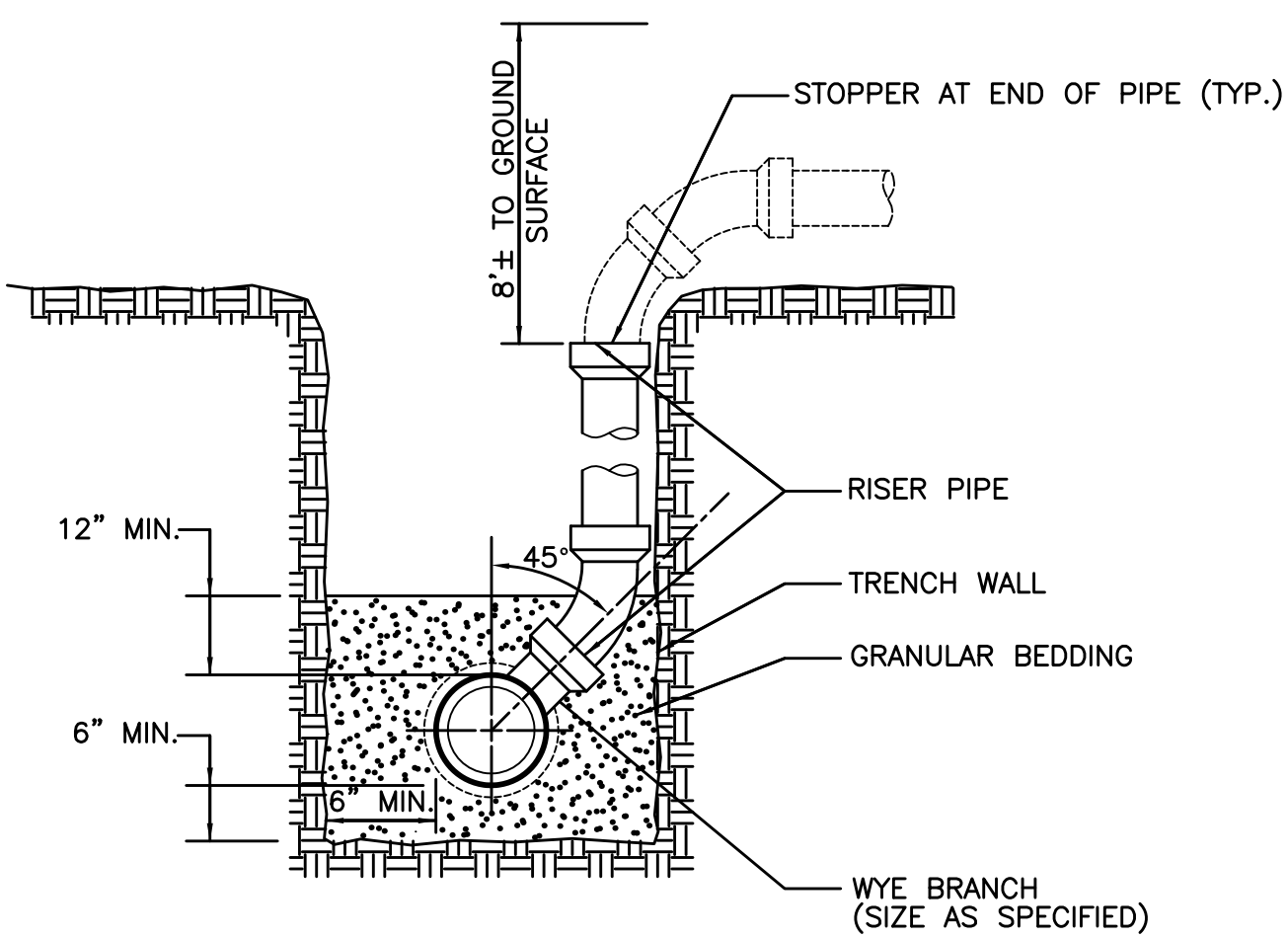
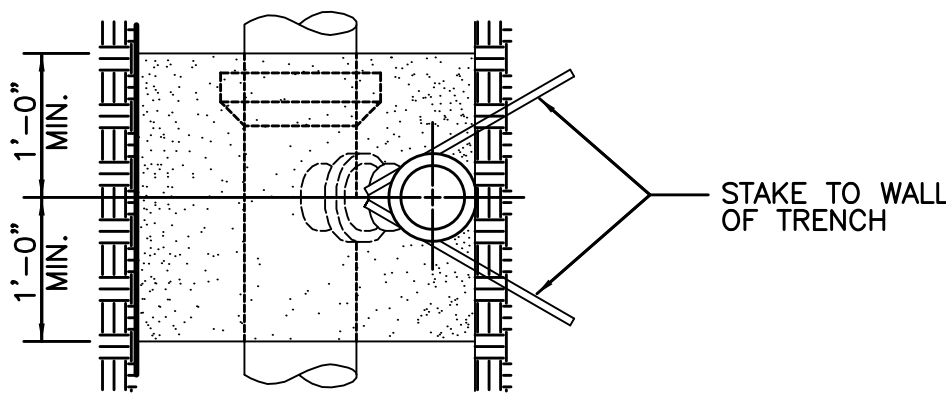
- ① INSTALL A 24 INCH WIDE (MIN.) STRIP OF DETECTABLE WARNINGS AT THE BACK OF CURB. EXTEND THE DETECTABLE WARNINGS ACROSS THE FULL WIDTH OF THE RAMP.
② PROVIDE A MINIMUM OF 6 INCHES OF CONCRETE BELOW THE DETECTABLE WARNING PANEL.



DETECTABLE WARNING DETAIL
NOT TO SCALE

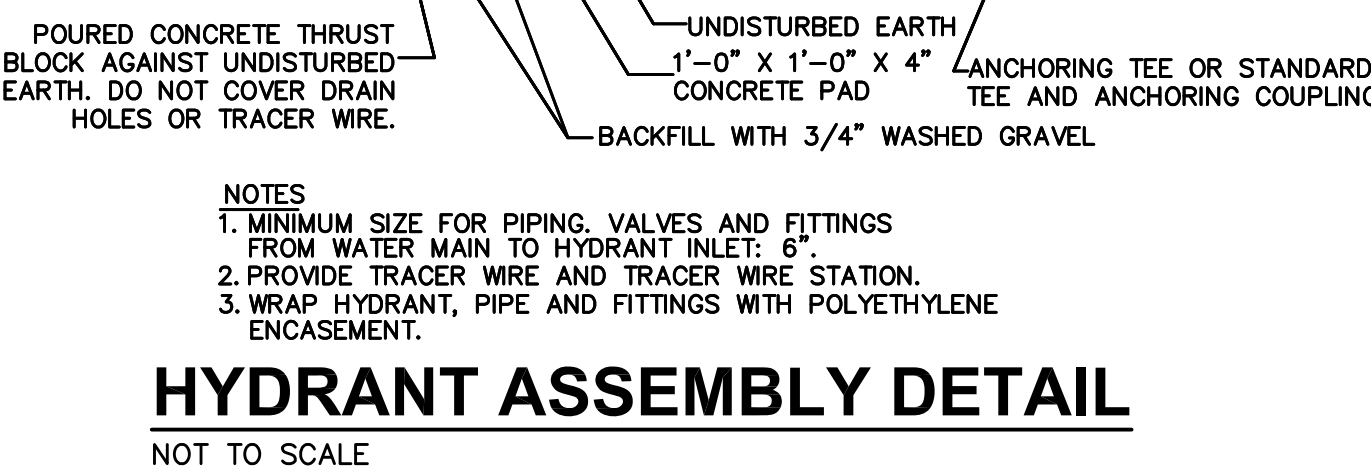


CITY OF WAUKEE UTILITY SERVICE LOCATIONS
NOT TO SCALE



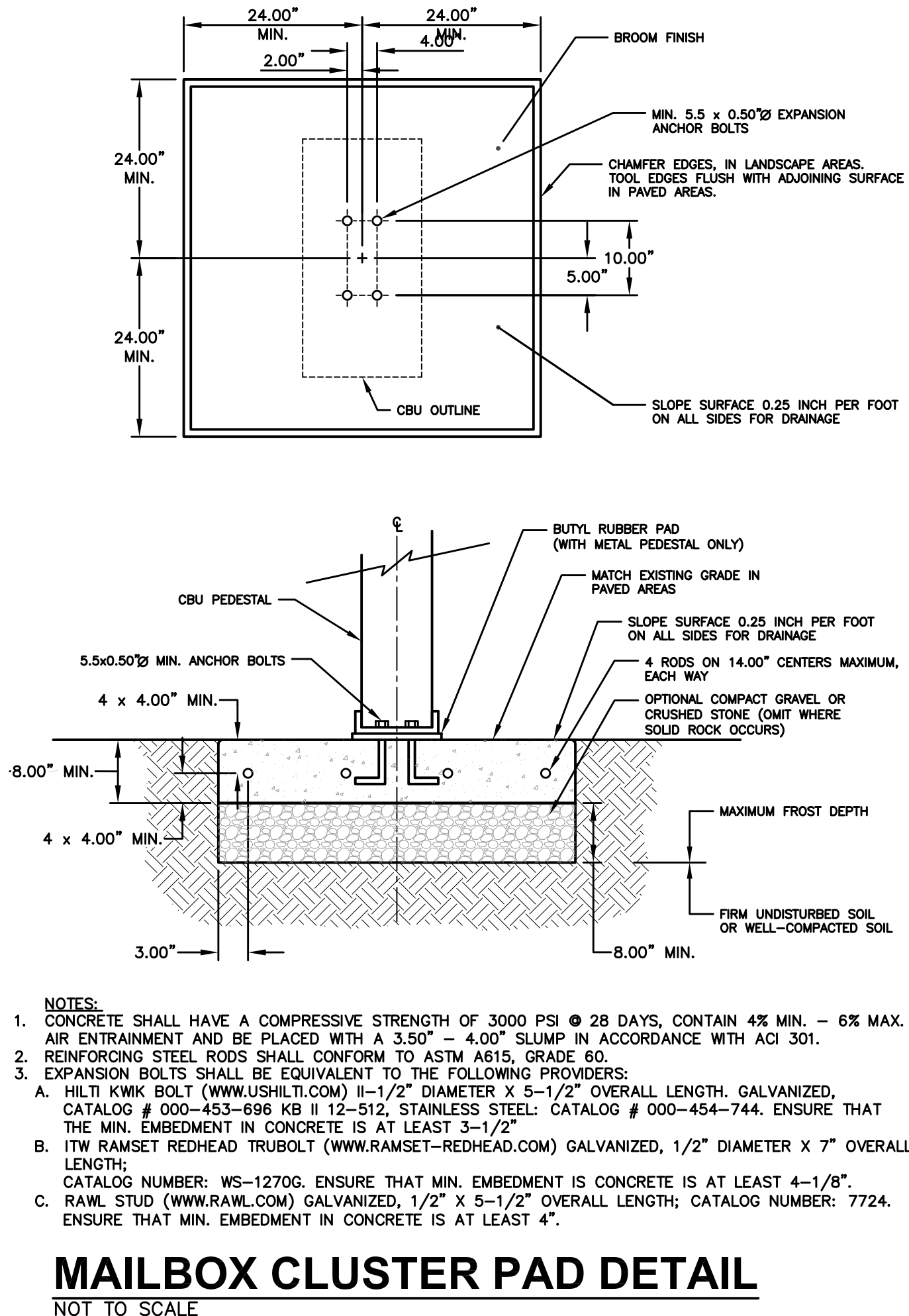
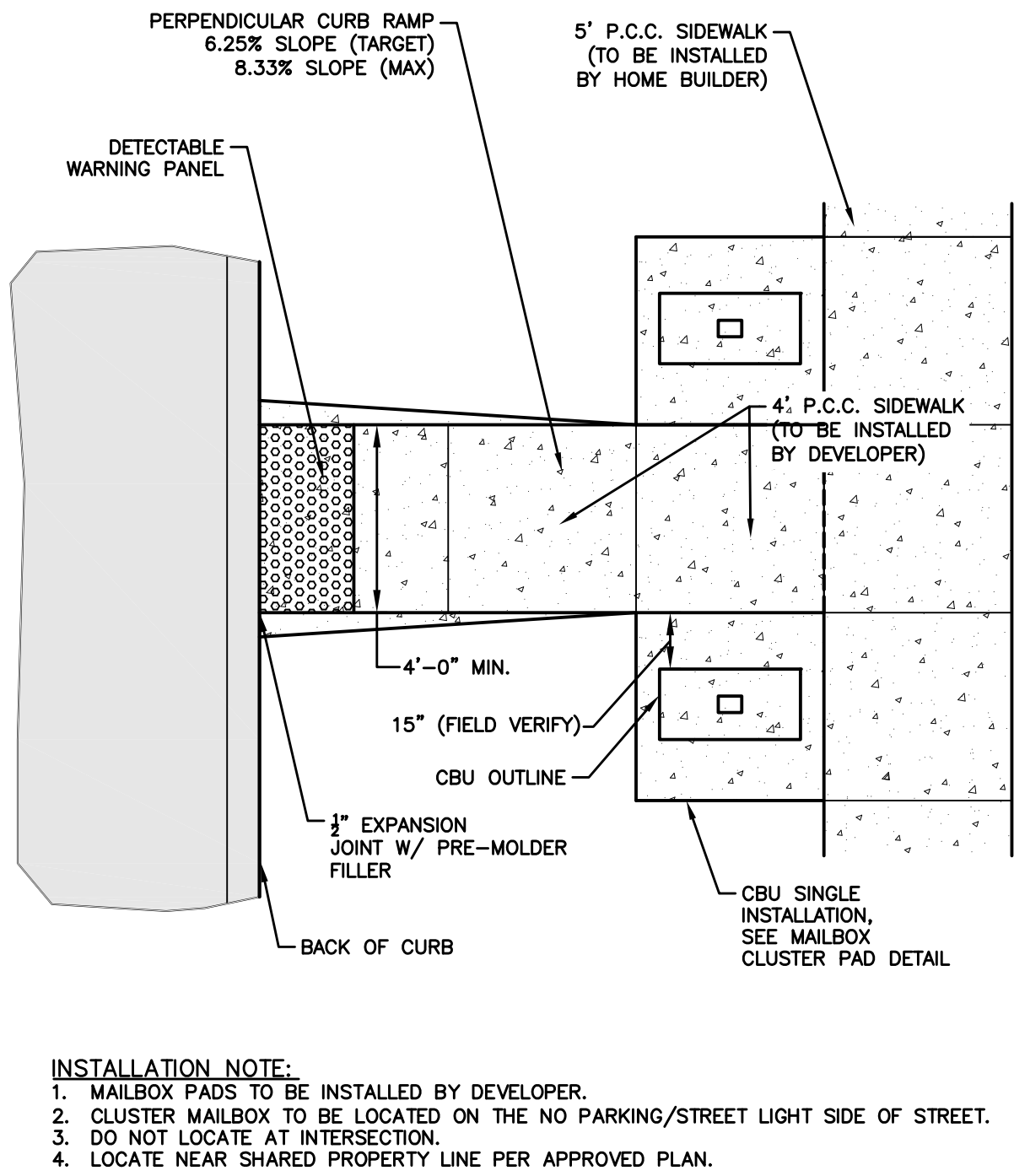
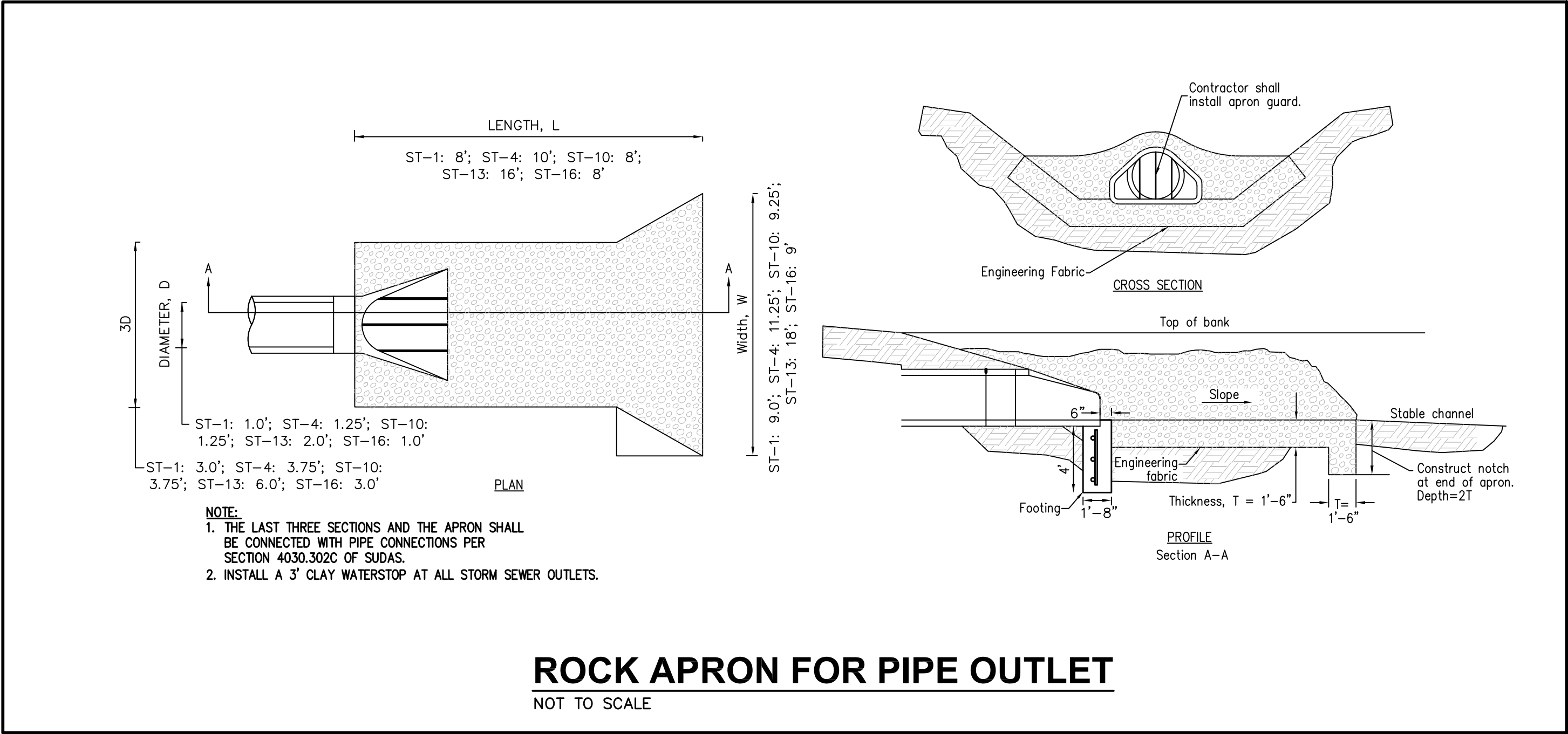
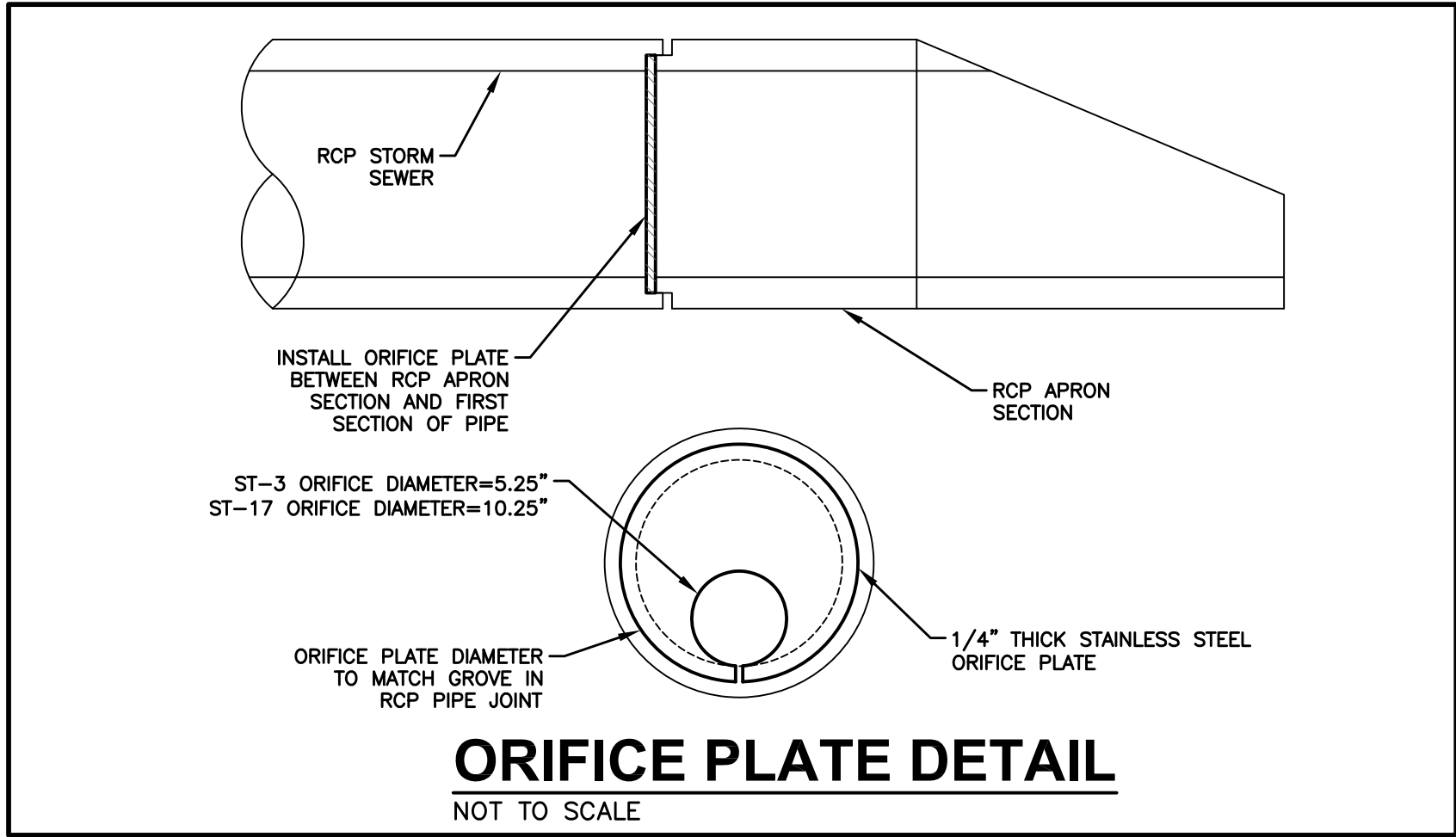
- NOTES:
1. INSTALL RISER TO BEAR FIRMLY AGAINST UNDISTURBED WALL OF TRENCH. STAKE RISER PIPE IN PLACE PRIOR TO BACK-FILLING TO PREVENT MOVEMENT OF PIPE.
2. NOTCH WALL OF TRENCH TO RECEIVE PIPE WHERE POSSIBLE.

SANITARY SEWER SERVICE RISER
NOT TO SCALE



- 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 ENCASUREMENT.

HYDRANT ASSEMBLY DETAIL
NOT TO SCALE



[illegible]

GENERAL NOTES

3. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND TO THE CURRENT 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 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.

ESTIMATE REFERENCE INFORMATION	
Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.	
	DESCRIPTION
	THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE CURRENT 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. AREA SHOWN FOR REFERENCE ONLY.
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.
5-13	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 TELEVIEW SANITARY AND STORM SEWER PRIOR TO PAVING AND PROVIDE TELEVIEWING REPORT TO CITY IN HARD COPY AND DISC FORMAT. TELEVIEWING SHALL BE CONSIDERED INCIDENTAL. ALL STORM SEWER PIPE THAT CROSSES OVER WATERMAIN SHALL HAVE O-RING GASKETS 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 10 FEET.
6,13,15	REFER TO DETAILS ON SHEETS 2 AND PLAN AND PROFILE SHEETS FOR LOCATION AND DEPTH. STORM SEWER SERVICES TYING INTO EXISTING RCP PIPE ARE TO BE CORE DRILLED.
14-16	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.
17	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.
18	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.
19	REFER TO FIG. 6010.401 – CIRCULAR STORM SEWER MANHOLE (SW-401) FOR CONSTRUCTION DETAILS. MANHOLE INSIDE DIAMETERS GREATER THAN 48" SHALL BE CONSIDERED INCIDENTAL.
20-21	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".

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. THE TEMPORARY WARNING DEVICES ARE TO 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 P.C.C. RAMP JOINT LOCATED AT THE BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SEALED.
21. REMOVE DEBRIS SPILLED IN 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.

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
20	REFER TO FIG. 6010.505 – DOUBLE GRATE INTAKE (SW-505) FOR CONSTRUCTION DETAILS.
21	REFER TO FIG. 6010.506 – DOUBLE GRATE INTAKE WITH MANHOLE (SW-506) FOR CONSTRUCTION DETAILS.
22	REFER TO FIG. 6010.513 – OPEN-SIDED AREA INTAKE (SW-513) FOR CONSTRUCTION DETAILS
23-24	REFER TO FIG. 7010.101 – JOINTS (PV-101) FOR JOINT DETAILS. MAXIMUM C JOINT SPACING IS 15 FEET.
25	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.
26	REFER TO SHEET 2 FOR CONSTRUCTION DETAILS.
27	THE SITE SEEDING SHALL CONFORM TO THE SPECIFICATION FOR TYPE (4) URBAN TEMPORARY EROSION CONTROL SEED MIXTURE. <u>SEEDING QUANTITIES</u> –TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE = 4.27 AC
28	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.
29	REFER TO SHEETS 6 OF THE CONSTRUCTION DRAWINGS FOR EROSION AND SEDIMENT CONTROLS AND GRADING OF TEMPORARY SEDIMENT BASINS. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR SPECIFIC DETAILS.
30	REFER TO SHEET 4 FOR CONSTRUCTION DETAILS. MAILBOX PADS ARE LOCATED BETWEEN LOTS 8 AND 9.
31	INSTALL ENGINEERING FABRIC UNDER ALL RIP RAP. ENGINEERING FABRIC SHALL BE CONSIDERED INCIDENTAL. REFER TO STORM AND SANITARY SEWER PLAN AND PROFILE SHEETS FOR LOCATIONS.
32	REFER TO SHEET 5 FOR LOCATION.

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 PLAN 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 TELEVISION ALL STORM AND SANITARY SEWERS. THE CITY OF WAUKEE ENGINEERING DEPARTMENT SHALL WITNESS AND APPROVE ALL CLEANING AND TELEVISION 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 4-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. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT BEFORE UTE AVENUE ROADWAY CLOSURE. USE OF A VARIABLE MESSAGE BOARD OR SPECIAL SIGNAGE WILL BE REQUIRED POSTING THE CLOSURE START AND END TIME. THIS LANE CLOSURE WILL ONLY BE ALLOWED FROM 9:00 A.M. TO 3:00 P.M. DAILY.



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EL DORADO HILLS PLAT 1

QUANTITIES, GENERAL NOTES AND BID ITEM REFERENCE NOTES



WAUKEE, IOWA

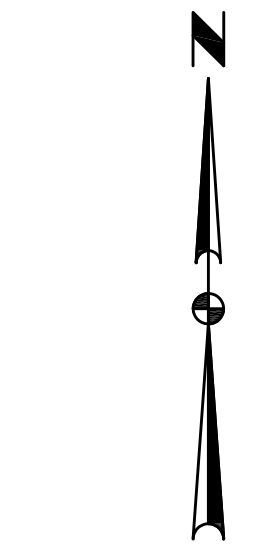
3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: JMM
EI: JWM

REVISONS	DATE
REVISED FINAL SUBMITTAL	04/16/20
REVISED FINAL SUBMITTAL	02/25/20
FINAL SUBMITTAL	09/10/19
FOURTH SUBMITTAL	08/29/19
THIRD SUBMITTAL	08/19/19
SECOND SUBMITTAL	08/06/19

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 = 4.78 AC



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EL DORADO HILLS PLAT 1

EROSION AND SEDIMENT CONTROL PLAN

WAUKEE, IOWA

CIVIL DESIGN ADVANTAGE

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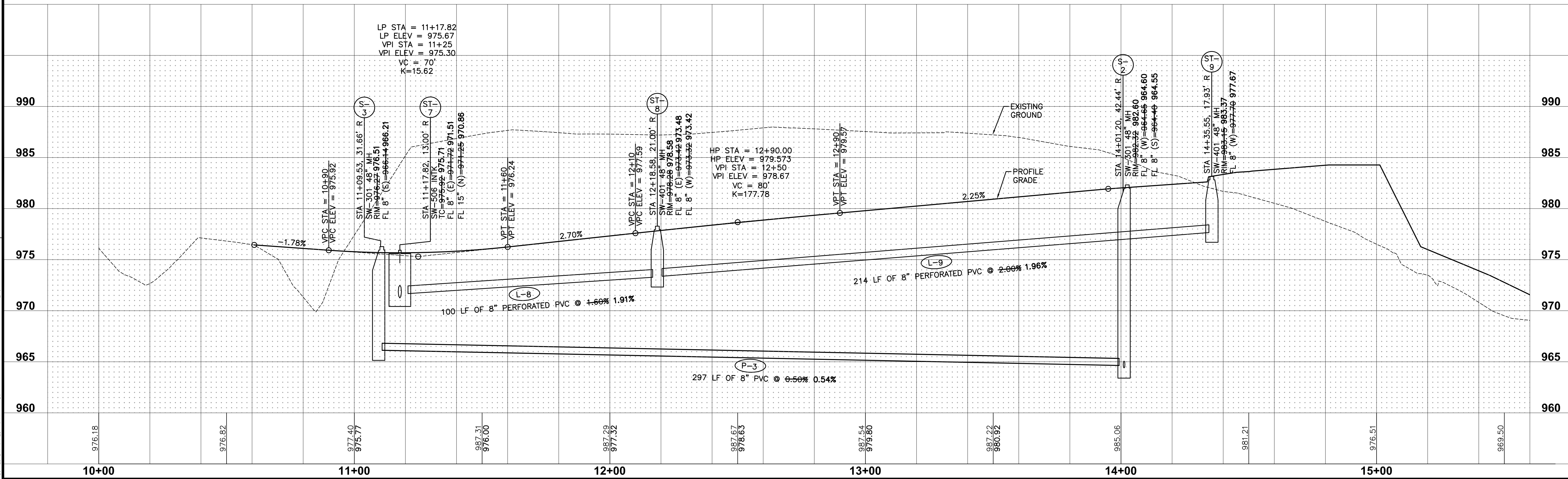
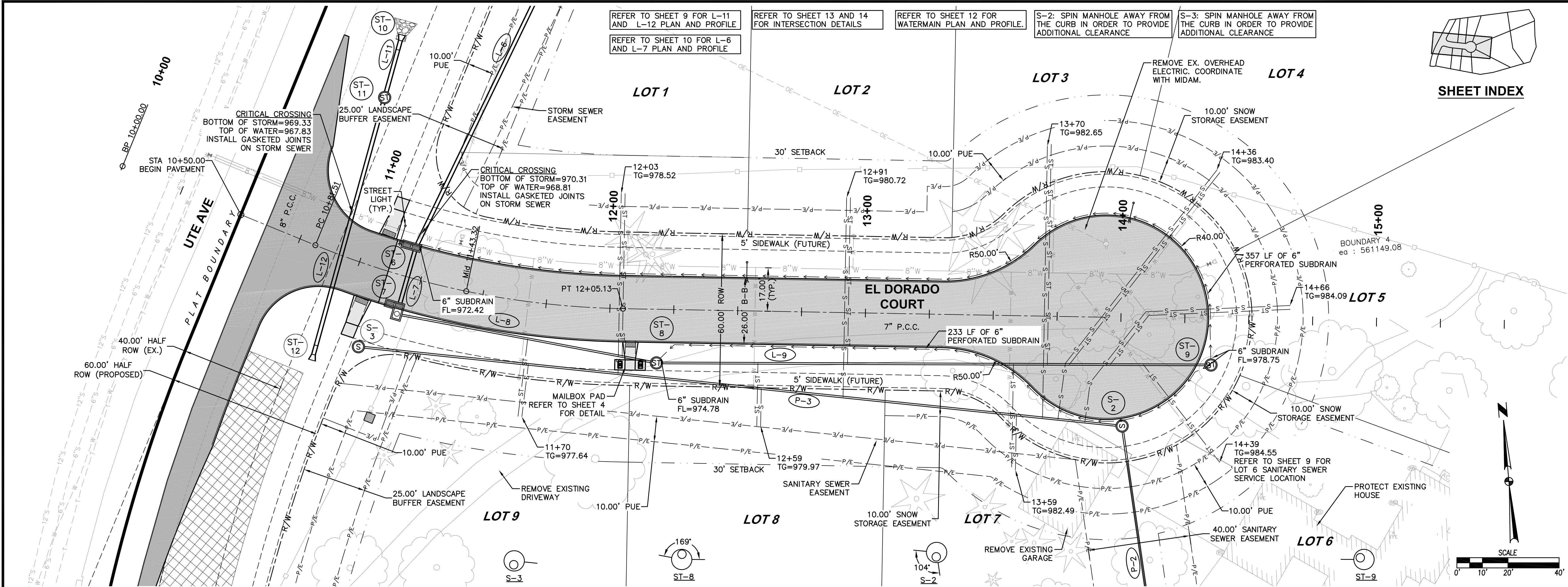
ENGINEER: JMM

EI: JWM

REVISIONS	DATE
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REVISED FINAL SUBMITTAL	02/25/20
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FOURTH SUBMITTAL	08/29/19
THIRD SUBMITTAL	08/19/19
SECOND SUBMITTAL	08/06/19

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CHECKED BY: JMM



DATE
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02/25/20
09/10/19
08/29/19
08/19/19
08/06/19

REVISIONS
REVISED FINAL SUBMITTAL
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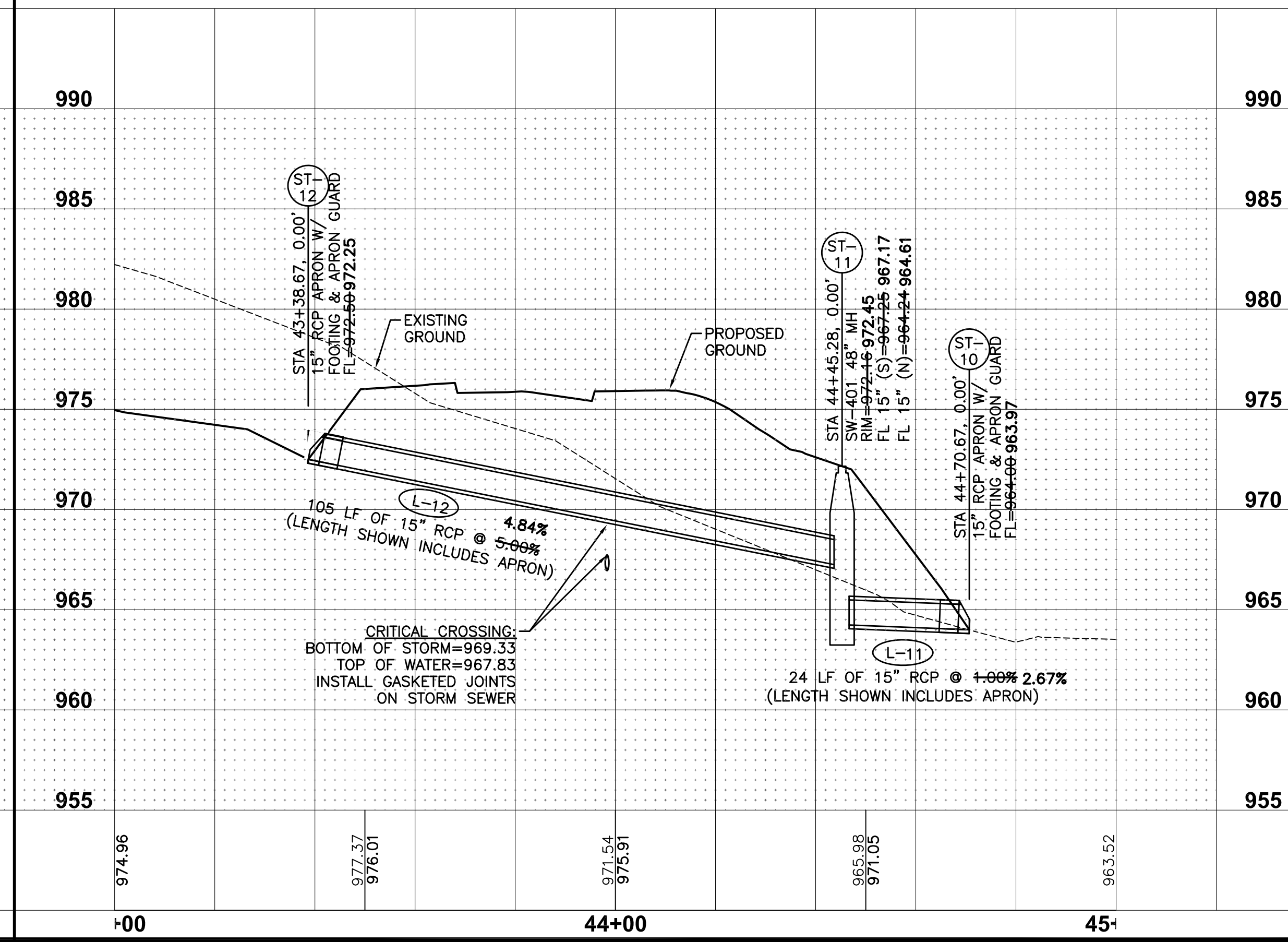
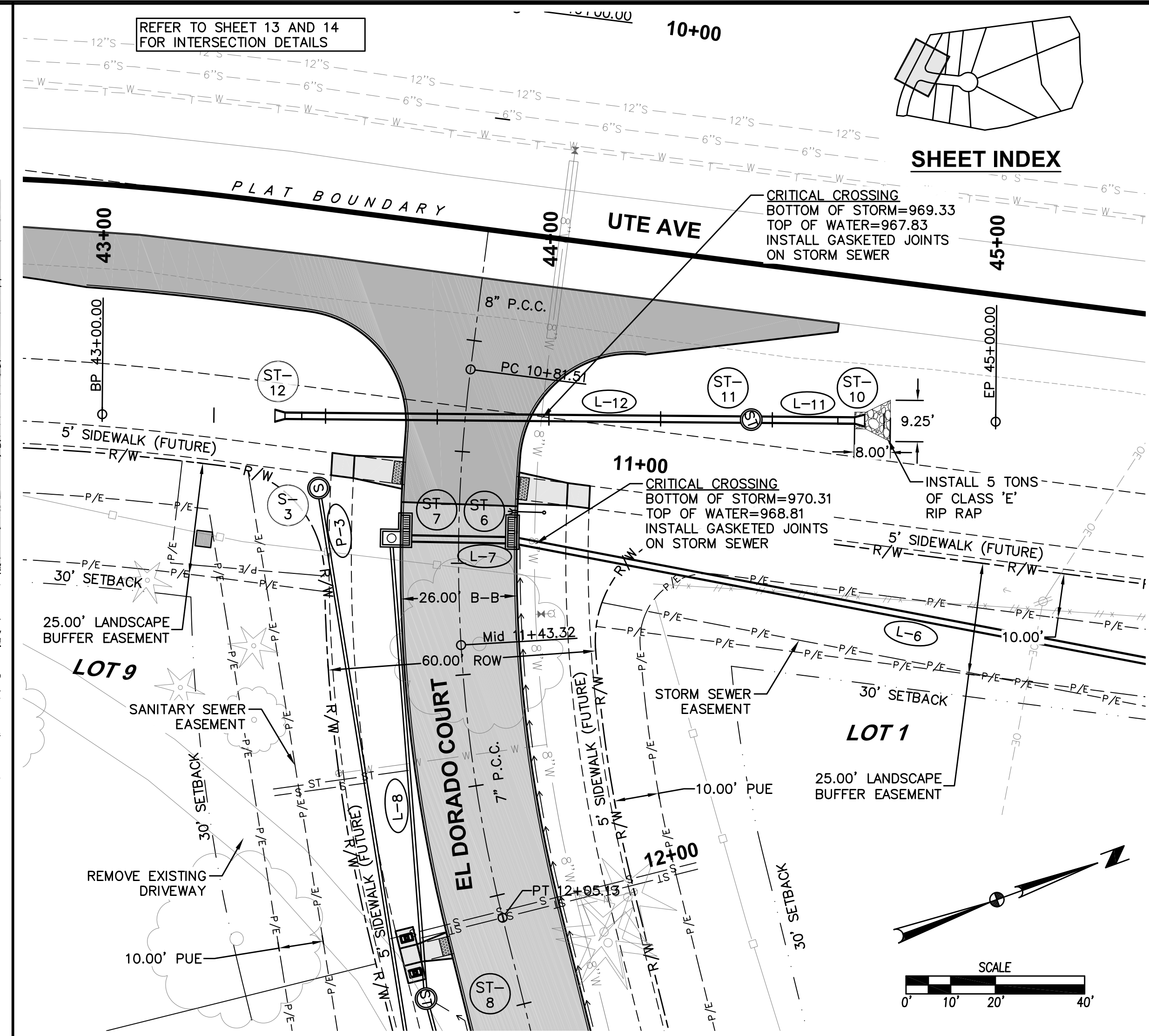
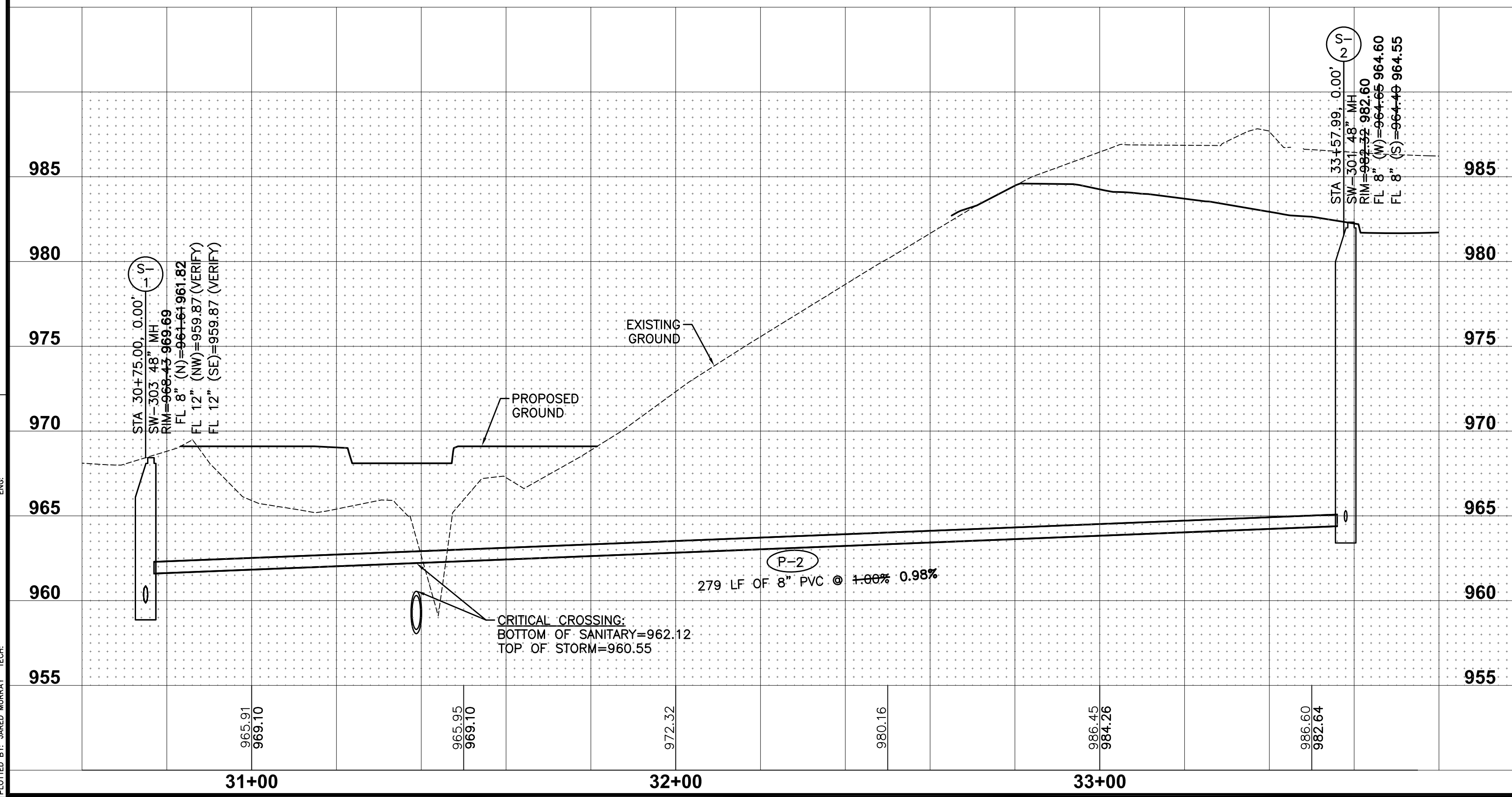
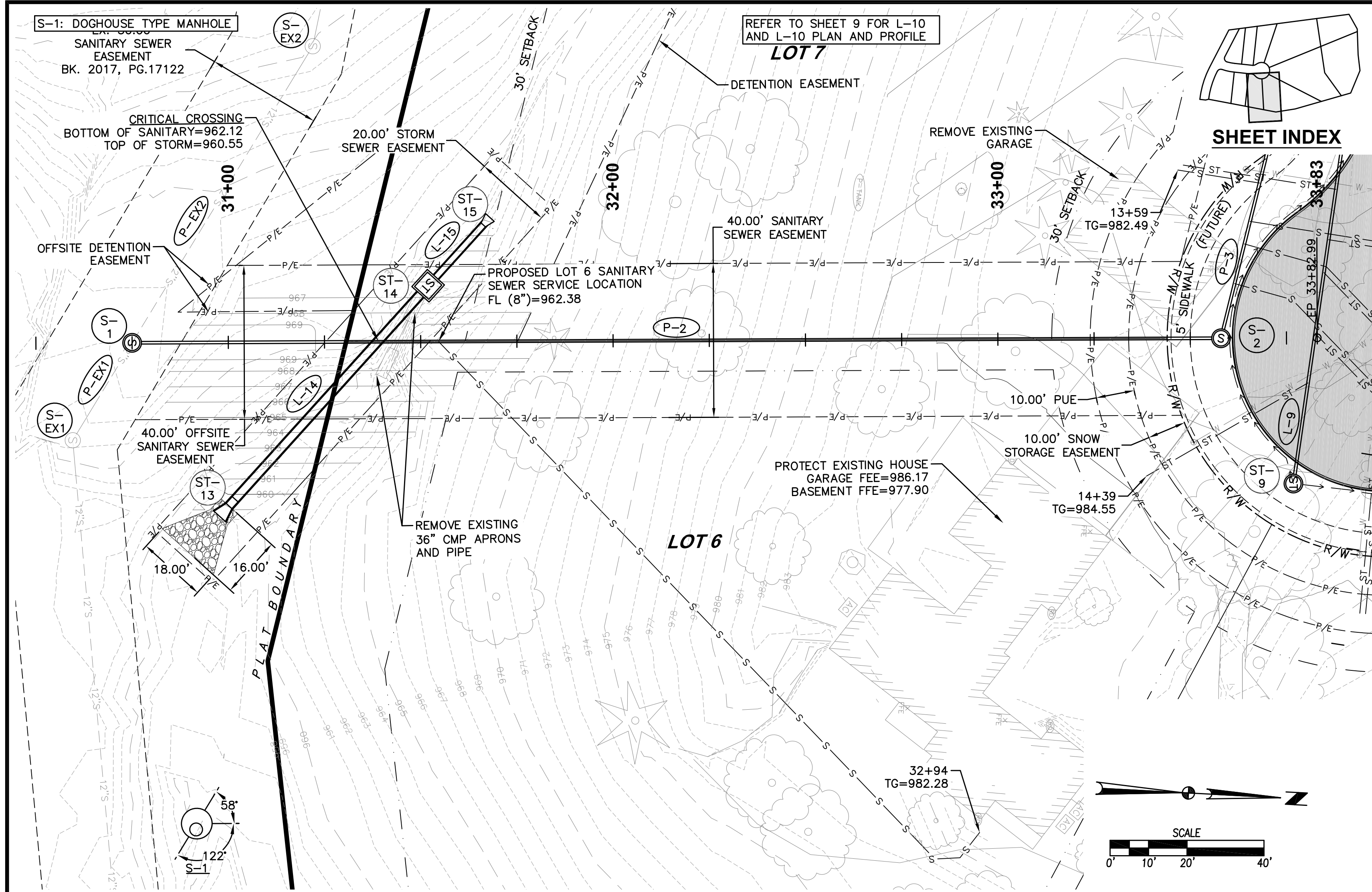
3405 S.E. CROSSROADS DRIVE, SUITE G
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Ei: JWM

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EL DORADO HILLS PLAT 1
STORM & SANITARY PLAN AND PROFILE
WAUKEE, IOWA

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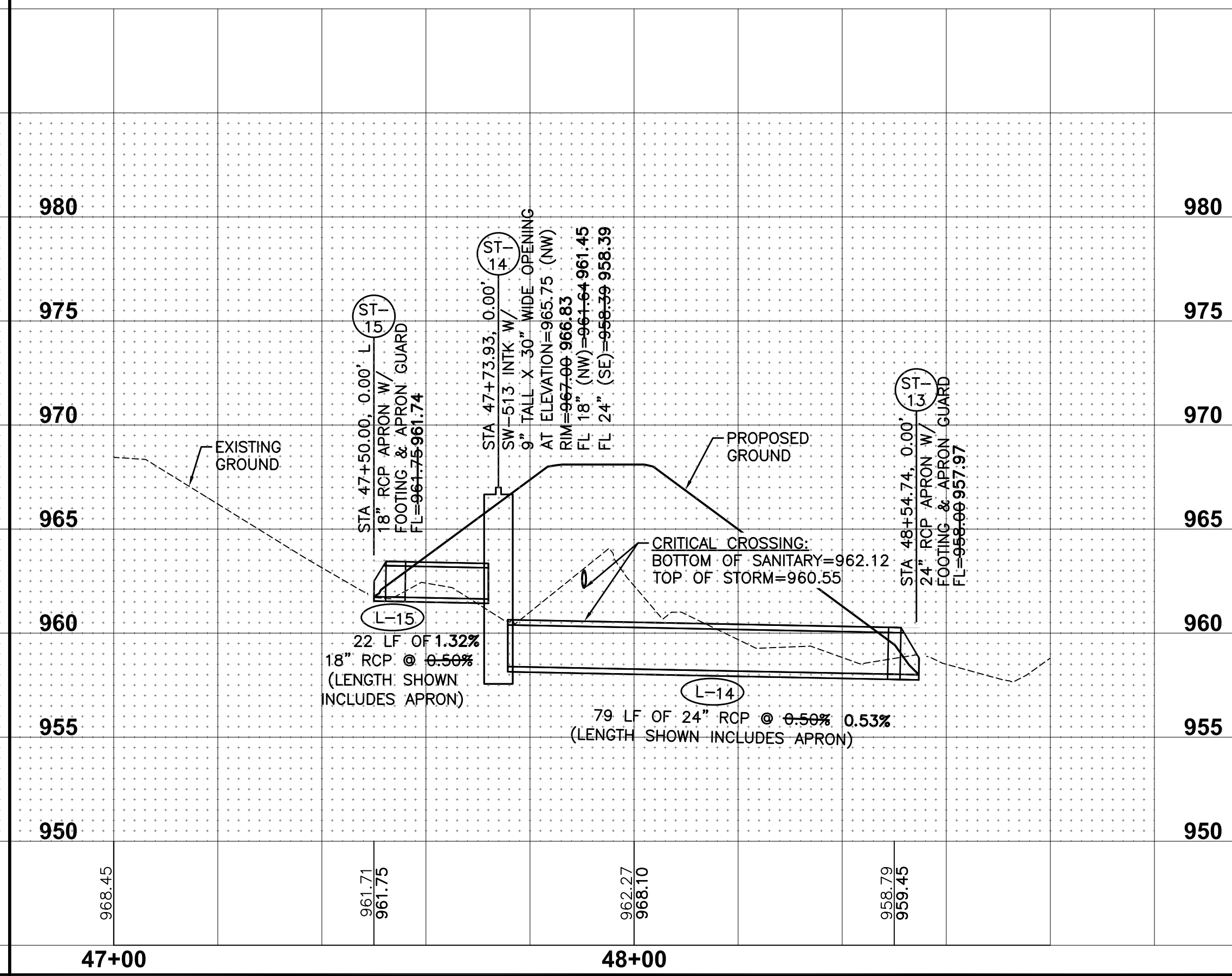
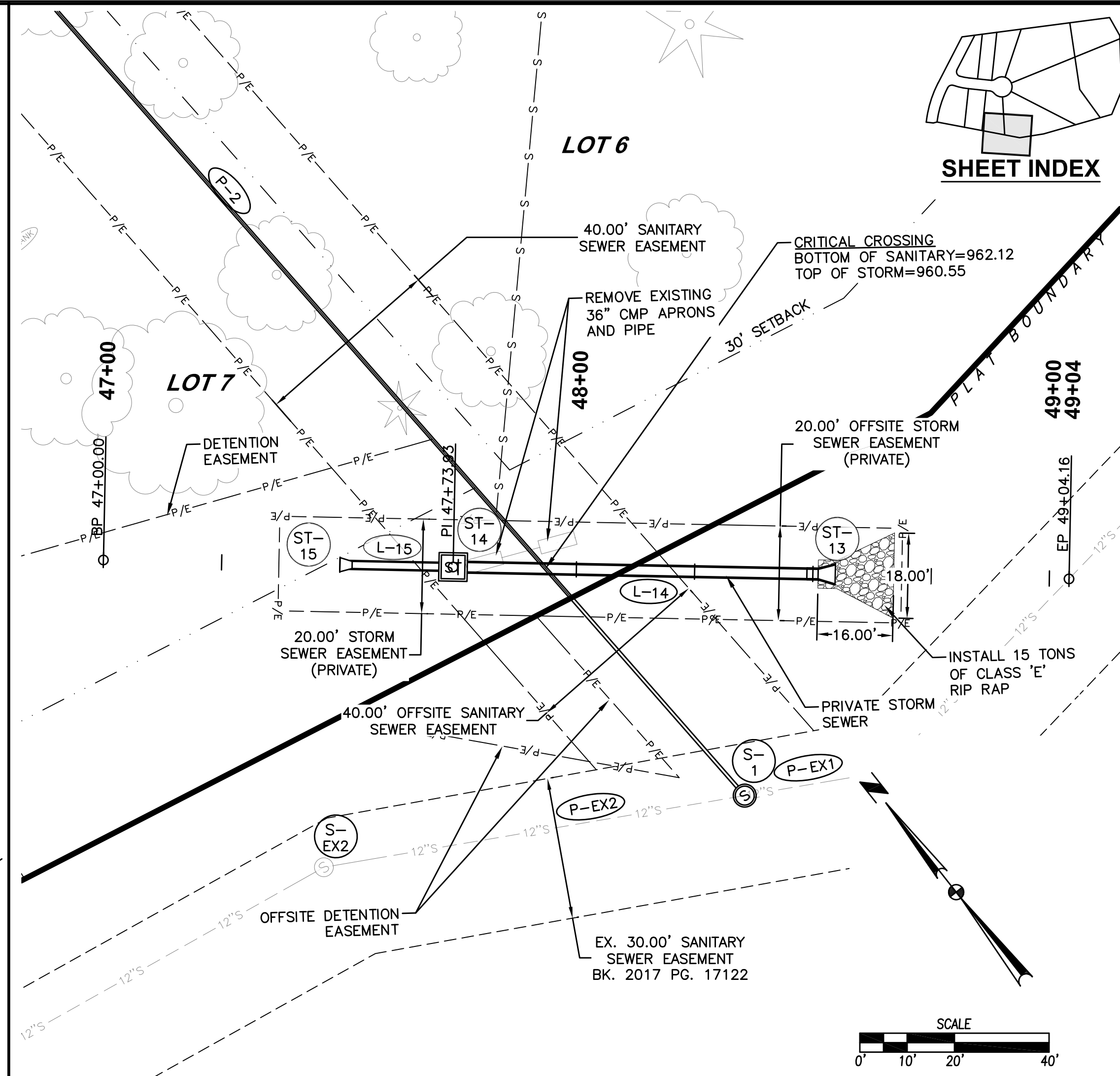
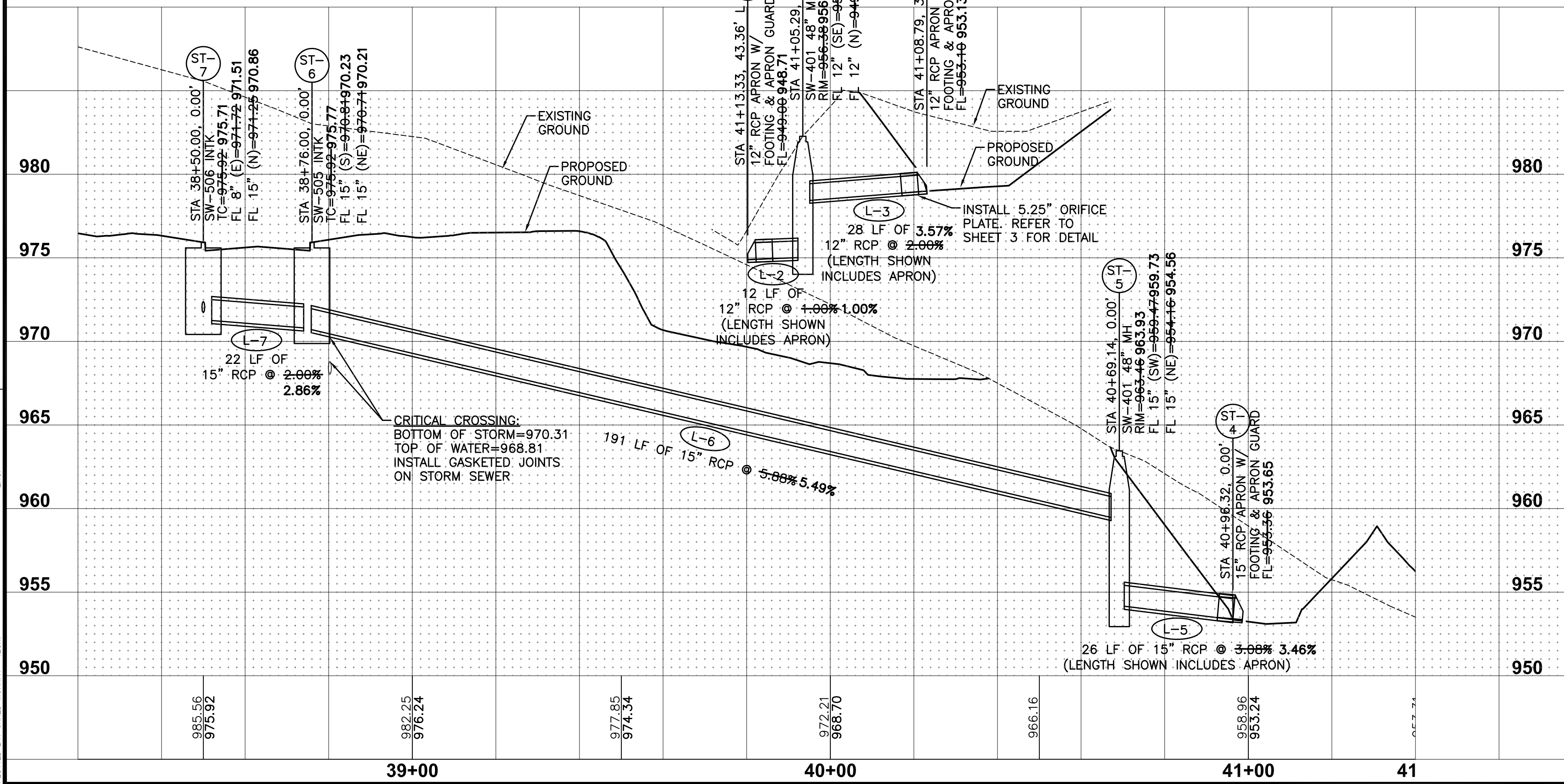
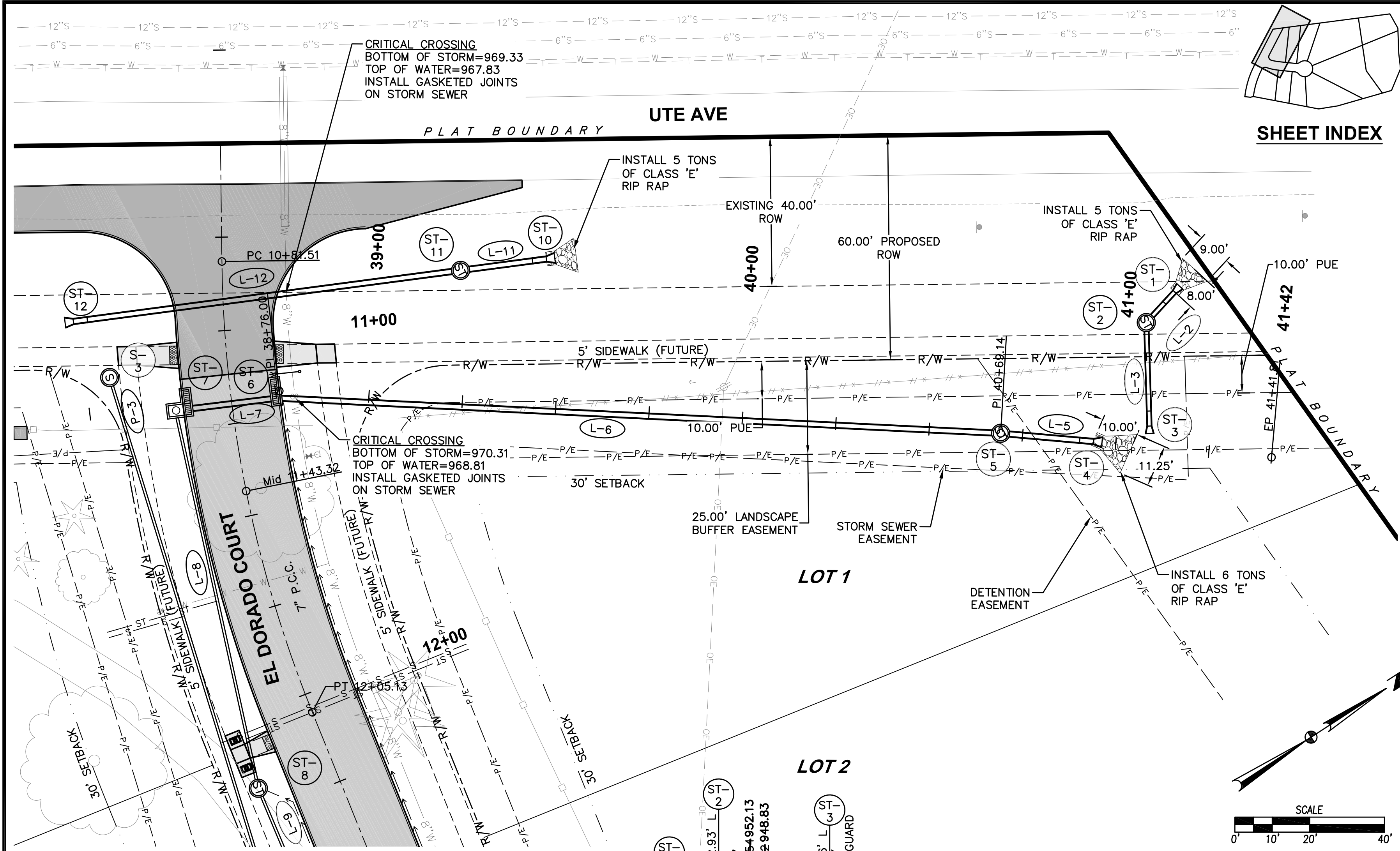
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ENGINEER: JMM

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STORM & SANITARY PLAN AND PROFILE
WAUKEE, IOWA

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PLOT BY: JARED MURRAY



DATE	
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09/10/19	08/29/19
08/19/19	08/06/19

REVISIONS	
REVISED FINAL SUBMITTAL	REVISED FINAL SUBMITTAL
FINAL SUBMITTAL	FINAL SUBMITTAL
FOURTH SUBMITTAL	FOURTH SUBMITTAL
THIRD SUBMITTAL	THIRD SUBMITTAL
SECOND SUBMITTAL	SECOND SUBMITTAL

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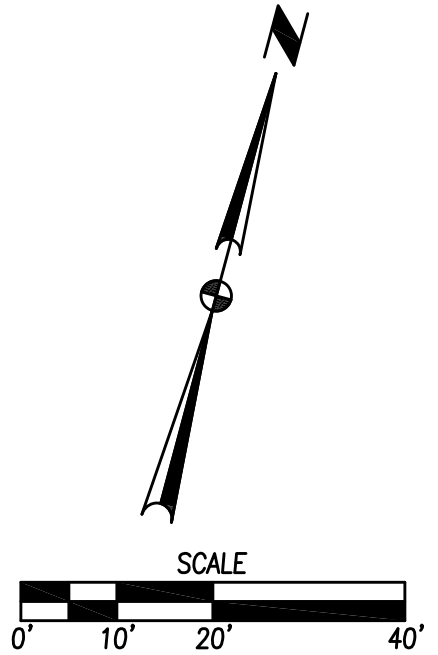
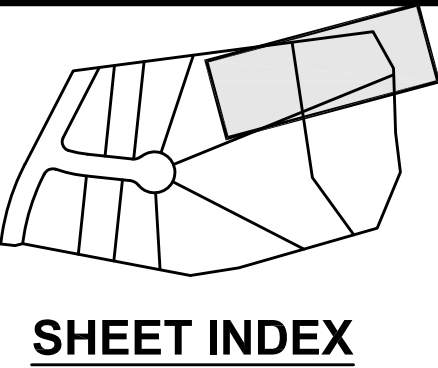
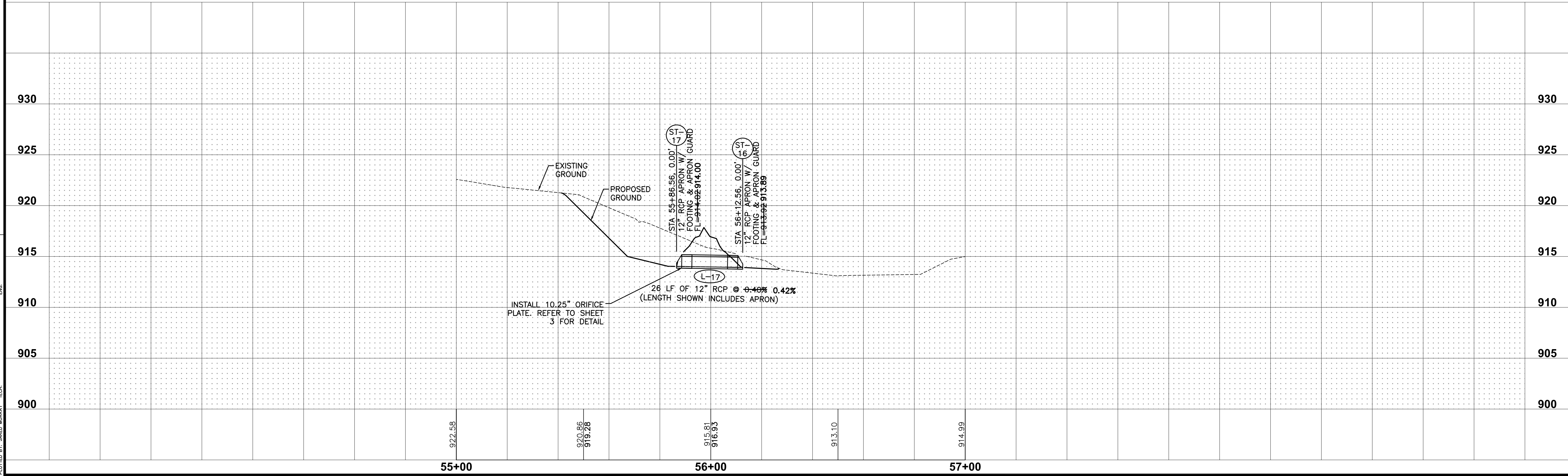
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Ei: JWM

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STORM & SANITARY PLAN AND PROFILE

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DATE	04/16/20
REVISED FINAL SUBMITTAL	02/25/20
REVISED FINAL SUBMITTAL	09/10/19
FINAL SUBMITTAL	08/29/19
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THIRD SUBMITTAL	08/06/19
SECOND SUBMITTAL	

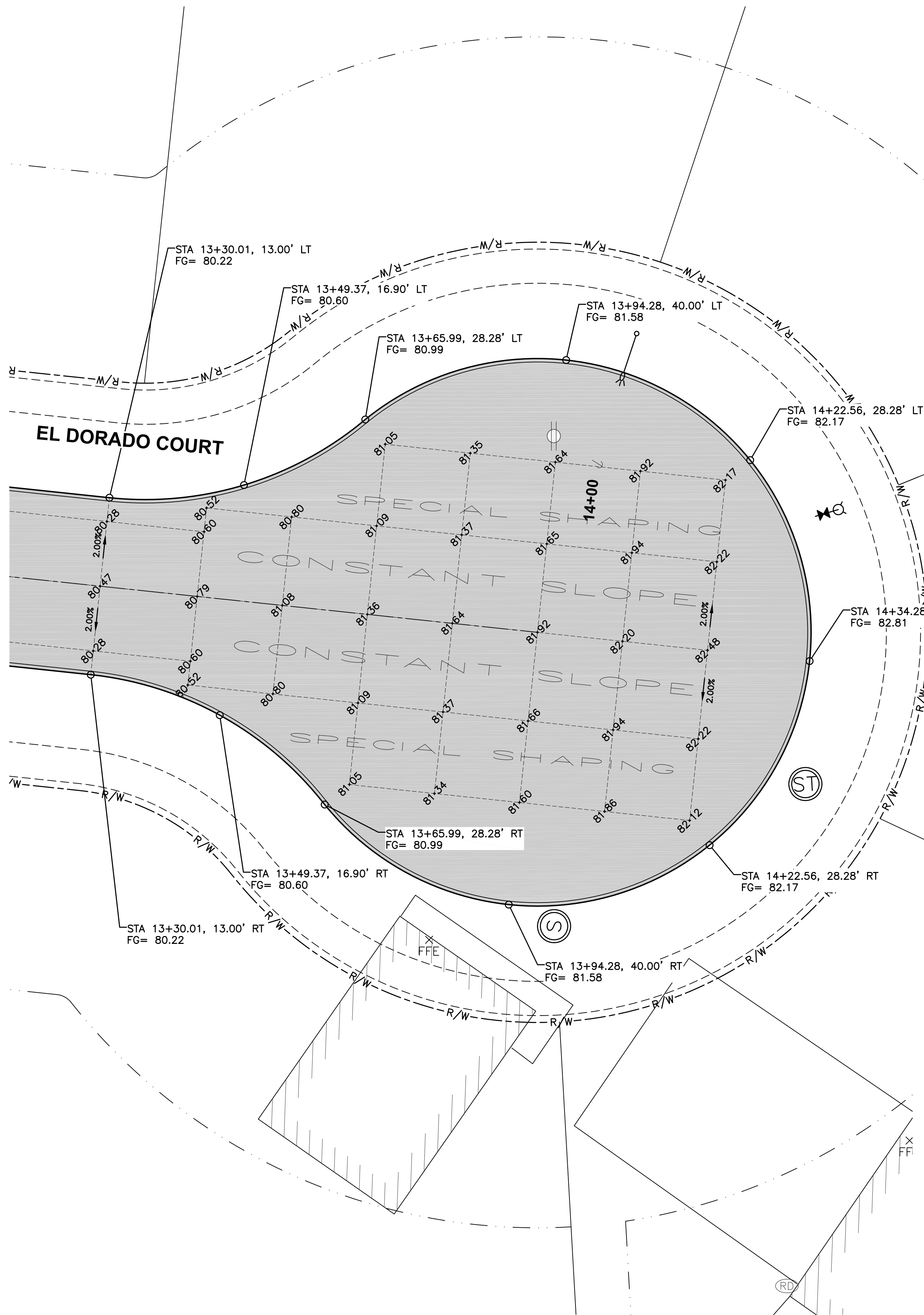
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ENGINEER: JMM	EI: JWM

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WAUKEE, IOWA

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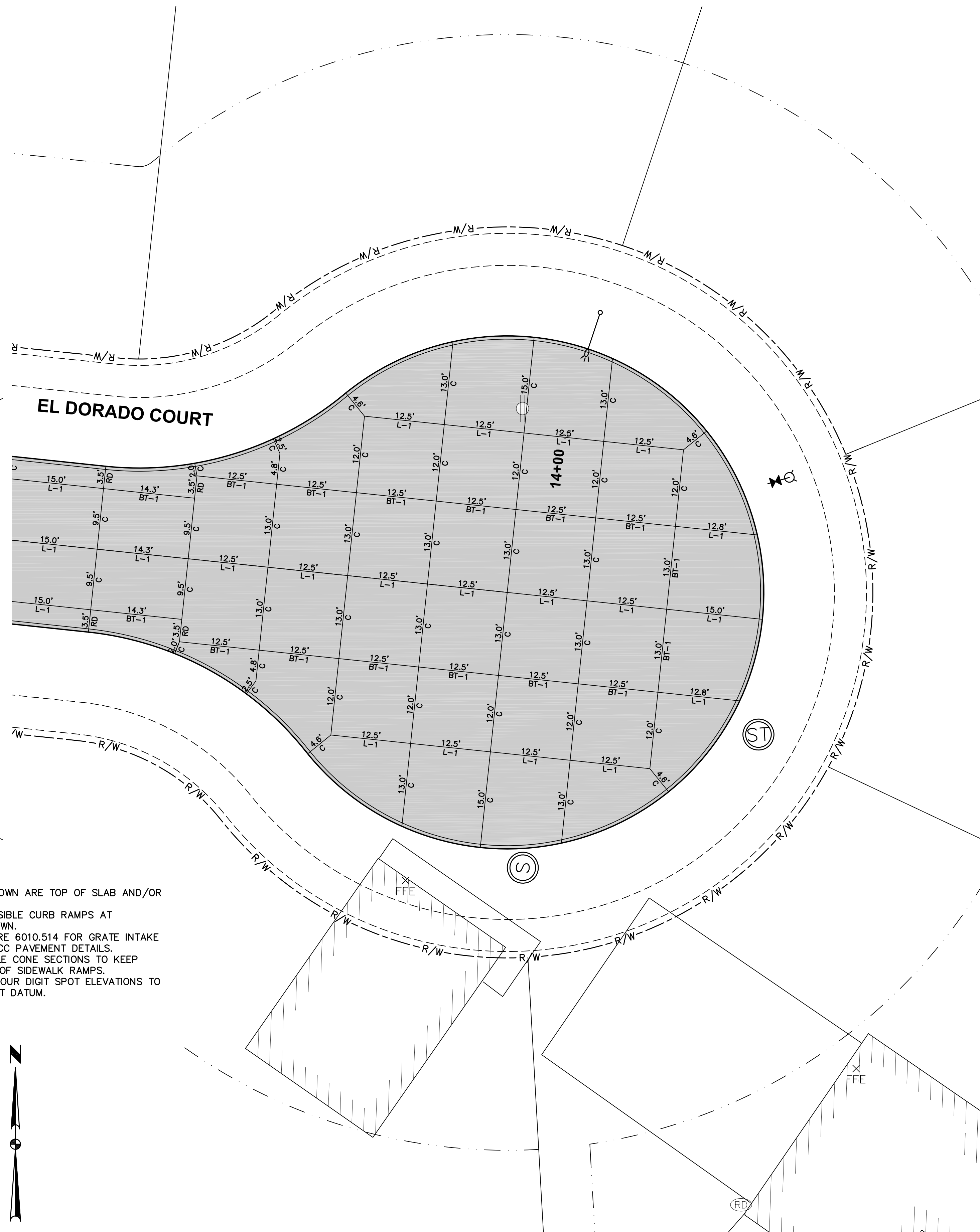
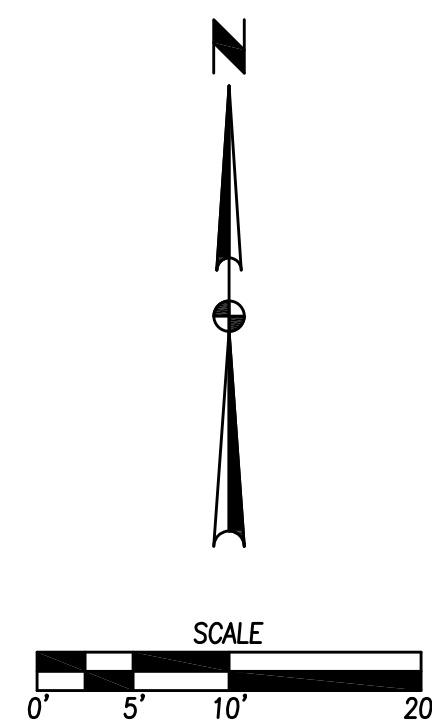
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GEOMETRICS AND STAKING LAYOUT

NOTES:

1. ELEVATIONS SHOWN ARE TOP OF SLAB AND/OR FORM GRADE.
2. INSTALL ACCESSIBLE CURB RAMPS AT LOCATIONS SHOWN.
3. REFER TO FIGURE 6010.514 FOR GRATE INTAKE BOXOUT FOR PCC PAVEMENT DETAILS.
4. ORIENT MANHOLE CONE SECTIONS TO KEEP CASTINGS OUT OF SIDEWALK RAMPS.
5. ADD 1000 TO FOUR DIGIT SPOT ELEVATIONS TO OBTAIN PROJECT DATUM.



JOINTING LAYOUT

DATE	
04/16/20	02/25/20
09/10/19	08/29/19
08/19/19	08/06/19

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