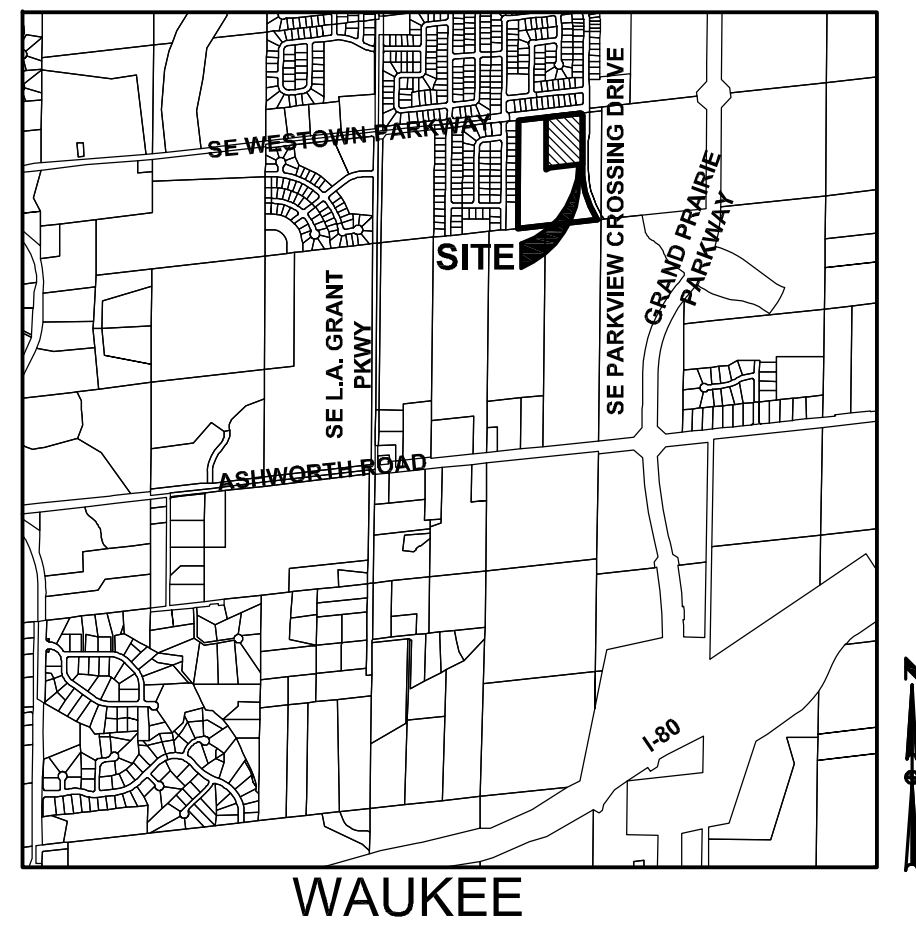


SITE PLAN FOR: KETTLESTONE HEIGHTS PLAT 2 WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE



OWNER

TRIPLE T DEVELOPMENT LLC
CONTACT: TOBY TORTENSON
33082 UTE AVENUE
WAUKEE, IA 50263

DEVELOPER

ELEMENT 119
CONTACT: BRAD STANBROUGH
10888 HICKMAN ROAD, SUITE 3A
CLIVE, IA 50325

ENGINEER/SURVEYOR

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

DATE OF SURVEY

JANUARY 30, 2017

ZONING

PLANNED DEVELOPMENT (PD) WITH UNDERLYING ZONING OF K-MF-ROW KETTLESTONE MULTI-FAMILY ROWHOUSE DISTRICT

CONSTRUCTION SCHEDULE

START FALL 2017
FINISH SPRING 2019

BENCHMARKS

DALLAS COUNTY GPS MONUMENT G120 @ SE CORNER OF U PLACE AND 300TH STREET.
ELEVATION=1011.79

BURY BOLT ON HYDRANT @ NW CORNER OF WESTOWN PARKWAY & PARKVIEW CROSSING.
ELEVATION=1130.23

BURY BOLT ON HYDRANT @ NE CORNER OF WESTOWN PARKWAY & WILLOW BROOKE.
ELEVATION=1011.80

SUBMITTAL DATES

FIRST SUBMITTAL	08/22/2017
SECOND SUBMITTAL	09/12/2017
THIRD SUBMITTAL	10/03/2017

NOTES

- ANY CHANGES PROPOSED TO THE CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- 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.

PLAT DESCRIPTION

OUTLOT "W", KETTLESTONE HEIGHTS PLAT 1, AN OFFICIAL PLAT IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA, AND CONTAINING 6.43 ACRES (279,984 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

DEVELOPMENT SUMMARY:

AREA: 6.43 ACRES (279,984 SF)

BULK REGULATIONS:

FRONT YARD	= 15 FT
REAR YARD	= 30 FT
SIDE YARD	= 5 FT
LOT AREA	= NO MINIMUM
LOT WIDTH	= NO MINIMUM
MIN BUILDING HEIGHT	= 2 STORIES
MAX BUILDING HEIGHT	= 3 STORIES
MIN FLOOR AREA	= 800 SF / UNIT

TOTAL UNITS = 90

OPEN SPACE REQUIRED = 20%
OPEN SPACE PROVIDED = 31%

PARKING:

REQUIRED:
2 SPACES / UNIT (1 SPACE ENCLOSED)

TOTAL REQUIRED = 180 SPACES

PROVIDED: = 378 SPACES

APPROXIMATE BUILDING AREA:

GARAGE	= 441 SF
FIRST FLOOR	= 553 SF
SECOND FLOOR	= 894 SF

BUILDING HEIGHT: = 27 FT

INDEX OF SHEETS

NO.	DESCRIPTION
1	COVER SHEET
2	DETAILS
3	DIMENSION PLAN
4-7	GRADING AND UTILITY PLAN
8	EROSION AND SEDIMENT CONTROL PLAN
9	LANDSCAPE PLAN

GENERAL LEGEND

PROPOSED

PROJECT BOUNDARY	---
LOT LINE	---
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]
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	[Symbol]
MAIL BOX PAD	[Symbol]
DOWNSPOUT LOCATION	[Symbol]
MINIMUM PROTECTION ELEVATION	[Symbol]
ELECTRICAL TRANSFORMER	[Symbol]
CONDENSER UNITS	[Symbol]

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]
ROOF DRAIN/ DOWNSPOUT	[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]

REFER TO KETTLESTONE HEIGHTS PLAT 1 CONSTRUCTION DRAWINGS FOR DETAILS ON UTILITIES, PUBLIC SIDEWALK AND PAVING. REFER TO KETTLESTONE HEIGHTS PLAT 1 SWPPP FOR DETAILS ON EROSION CONTROL.

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

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.

CD
CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DR. SUITE G, GRIMES, IOWA 50111
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 1708.418

THE 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.

ALL CONSTRUCTION MATERIALS, DUMPSTERS, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC R.O.W.

THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2017 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING 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 WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING REQUIREMENTS.

PRELIMINARY
NOT FOR CONSTRUCTION

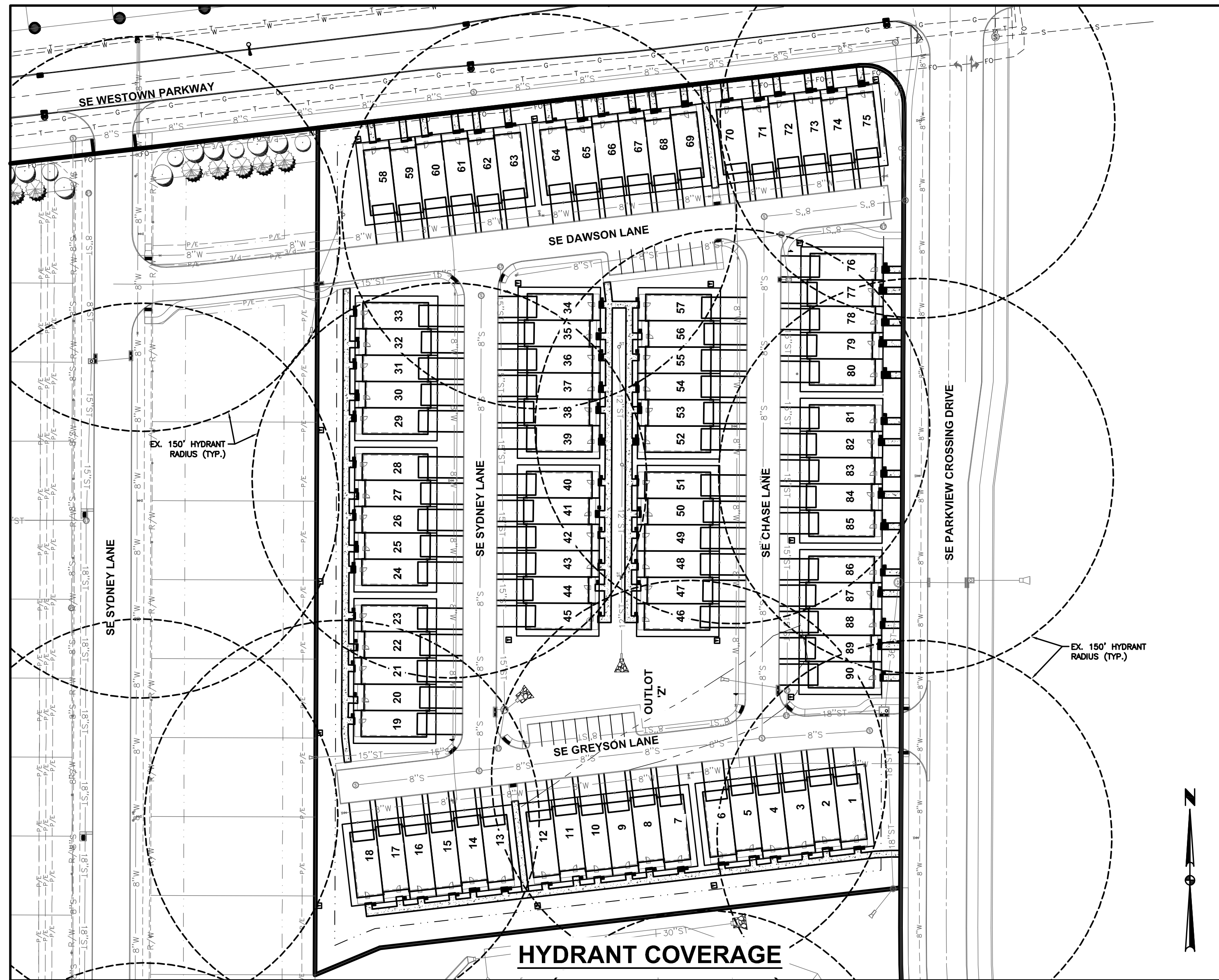
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

ERIN K. OLLENDIKE, P.E. DATE _____
16926
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2017
PAGES OR SHEETS COVERED BY THIS SEAL: _____
SHEETS 1-7

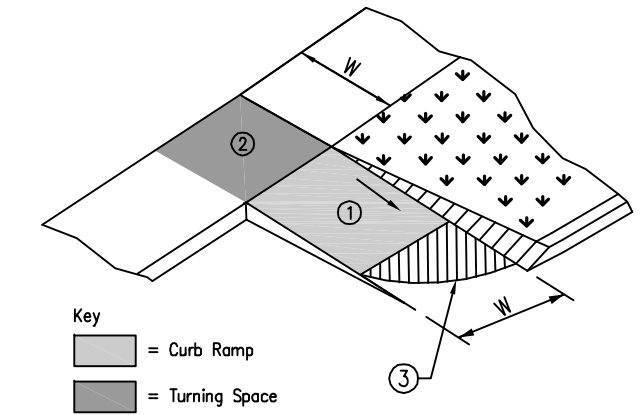
FILE: IA_1708418_V01A1708418_V01A1708418_SITELING PLOTTED BY: ERIN OLLENDIKE DATE: 11/29/2017 12:15 PM

KETTLESTONE HEIGHTS PLAT 2

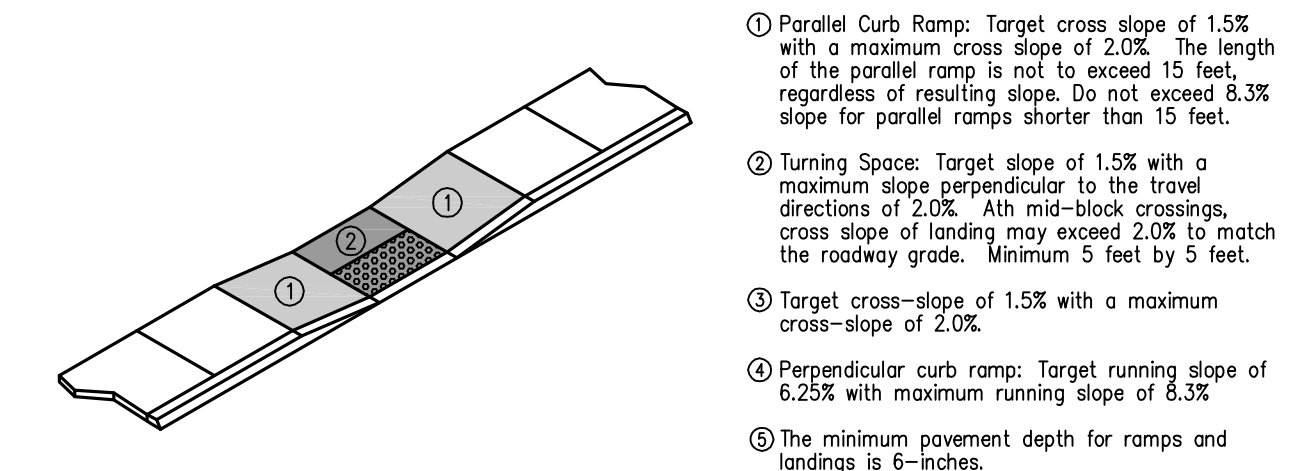
LOT #	ADDRESS
1	780 SE GREYSON LANE
2	770 SE GREYSON LANE
3	760 SE GREYSON LANE
4	750 SE GREYSON LANE
5	740 SE GREYSON LANE
6	730 SE GREYSON LANE
7	710 SE GREYSON LANE
8	700 SE GREYSON LANE
9	690 SE GREYSON LANE
10	680 SE GREYSON LANE
11	670 SE GREYSON LANE
12	660 SE GREYSON LANE
13	640 SE GREYSON LANE
14	630 SE GREYSON LANE
15	620 SE GREYSON LANE
16	610 SE GREYSON LANE
17	600 SE GREYSON LANE
18	590 SE GREYSON LANE
19	2370 SE SYDNEY LANE
20	2368 SE SYDNEY LANE
21	2366 SE SYDNEY LANE
22	2364 SE SYDNEY LANE
23	2362 SE SYDNEY LANE
24	2340 SE SYDNEY LANE
25	2338 SE SYDNEY LANE
26	2336 SE SYDNEY LANE
27	2334 SE SYDNEY LANE
28	2332 SE SYDNEY LANE
29	2310 SE SYDNEY LANE
30	2308 SE SYDNEY LANE
31	2306 SE SYDNEY LANE
32	2304 SE SYDNEY LANE
33	2302 SE SYDNEY LANE
34	2301 SE SYDNEY LANE
35	2303 SE SYDNEY LANE
36	2305 SE SYDNEY LANE
37	2307 SE SYDNEY LANE
38	2309 SE SYDNEY LANE
39	2311 SE SYDNEY LANE
40	2331 SE SYDNEY LANE
41	2333 SE SYDNEY LANE
42	2335 SE SYDNEY LANE
43	2337 SE SYDNEY LANE
44	2339 SE SYDNEY LANE
45	2341 SE SYDNEY LANE
46	2342 SE CHAYSE LANE
47	2340 SE CHAYSE LANE
48	2338 SE CHAYSE LANE
49	2336 SE CHAYSE LANE
50	2334 SE CHAYSE LANE
51	2332 SE CHAYSE LANE
52	2330 SE CHAYSE LANE
53	2328 SE CHAYSE LANE
54	2306 SE CHAYSE LANE
55	2304 SE CHAYSE LANE
56	2302 SE CHAYSE LANE
57	2302 SE CHAYSE LANE
58	600 SE WESTOWN PARKWAY
59	610 SE WESTOWN PARKWAY
60	620 SE WESTOWN PARKWAY
61	630 SE WESTOWN PARKWAY
62	640 SE WESTOWN PARKWAY
63	650 SE WESTOWN PARKWAY
64	670 SE WESTOWN PARKWAY
65	680 SE WESTOWN PARKWAY
66	690 SE WESTOWN PARKWAY
67	700 SE WESTOWN PARKWAY
68	710 SE WESTOWN PARKWAY
69	720 SE WESTOWN PARKWAY
70	740 SE WESTOWN PARKWAY
71	750 SE WESTOWN PARKWAY
72	760 SE WESTOWN PARKWAY
73	770 SE WESTOWN PARKWAY
74	780 SE WESTOWN PARKWAY
75	790 SE WESTOWN PARKWAY
76	2300 SE PARKVIEW CROSSING DRIVE
77	2302 SE PARKVIEW CROSSING DRIVE
78	2304 SE PARKVIEW CROSSING DRIVE
79	2306 SE PARKVIEW CROSSING DRIVE
80	2308 SE PARKVIEW CROSSING DRIVE
81	2322 SE PARKVIEW CROSSING DRIVE
82	2324 SE PARKVIEW CROSSING DRIVE
83	2326 SE PARKVIEW CROSSING DRIVE
84	2328 SE PARKVIEW CROSSING DRIVE
85	2330 SE PARKVIEW CROSSING DRIVE
86	2338 SE PARKVIEW CROSSING DRIVE
87	2342 SE PARKVIEW CROSSING DRIVE
88	2344 SE PARKVIEW CROSSING DRIVE
89	2346 SE PARKVIEW CROSSING DRIVE
90	2348 SE PARKVIEW CROSSING DRIVE



- Perpendicular Curb Ramp: Target running slope of 6.25% with a maximum running slope of 8.3%.
- 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. Min. 5'x3'.
- Provide an area of special shaping at the bottom of the ramp to provide a smooth transition to the gutterline. 2% maximum slope in any direction.
- The minimum pavement depth for ramps and landings shall be 6-inches.

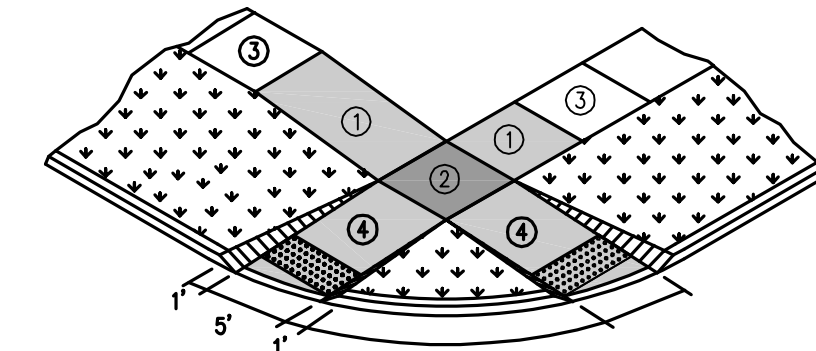


PERPENDICULAR CURB RAMP @ CLASS 'A' INTEGRAL CURB
NOT TO SCALE

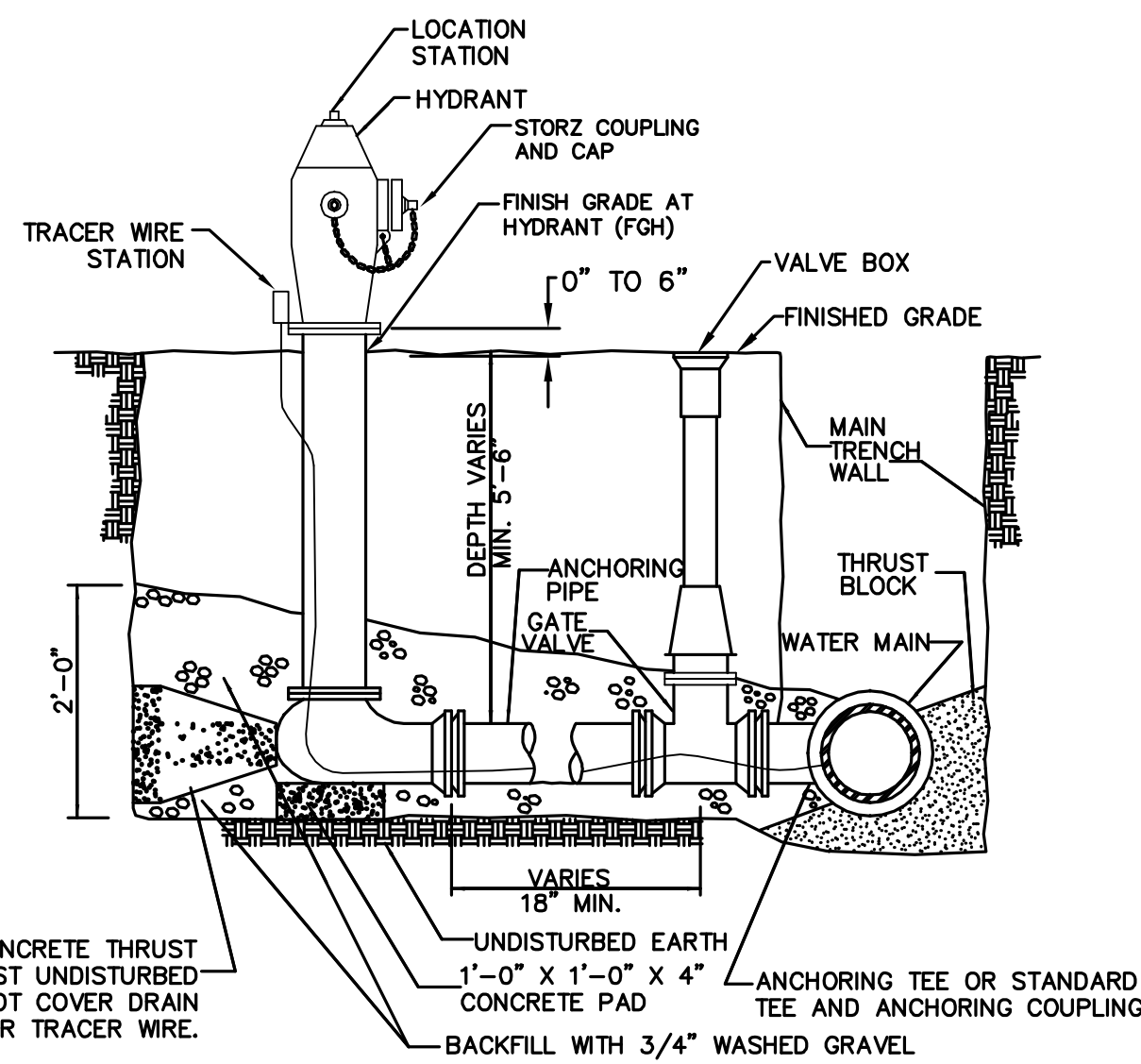


- Parallel Curb Ramp: Target cross slope of 1.5% with a maximum cross slope of 2.0%. The length of the parallel ramp is not to exceed 15 feet, regardless of resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- Turning Space: Target slope of 1.5% with a maximum slope perpendicular 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.
- Target cross-slope of 1.5% with a maximum cross-slope of 2.0%.
- Perpendicular curb ramp: Target running slope of 6.25% with maximum running slope of 8.3%.
- The minimum pavement depth for ramps and landings is 6-inches.

- Key
- Curb Ramp
 - Turning Space
 - Detectable Warning

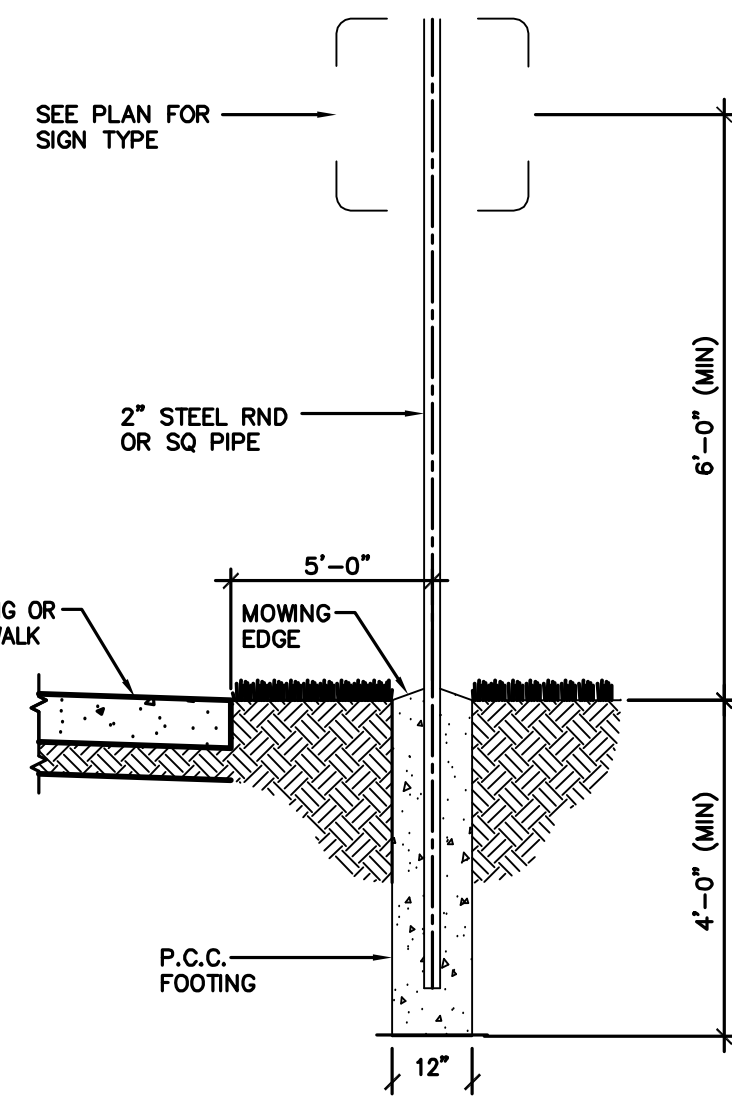


CURB RAMP OUTSIDE OF INTERSECTION RADIUS
NOT TO SCALE



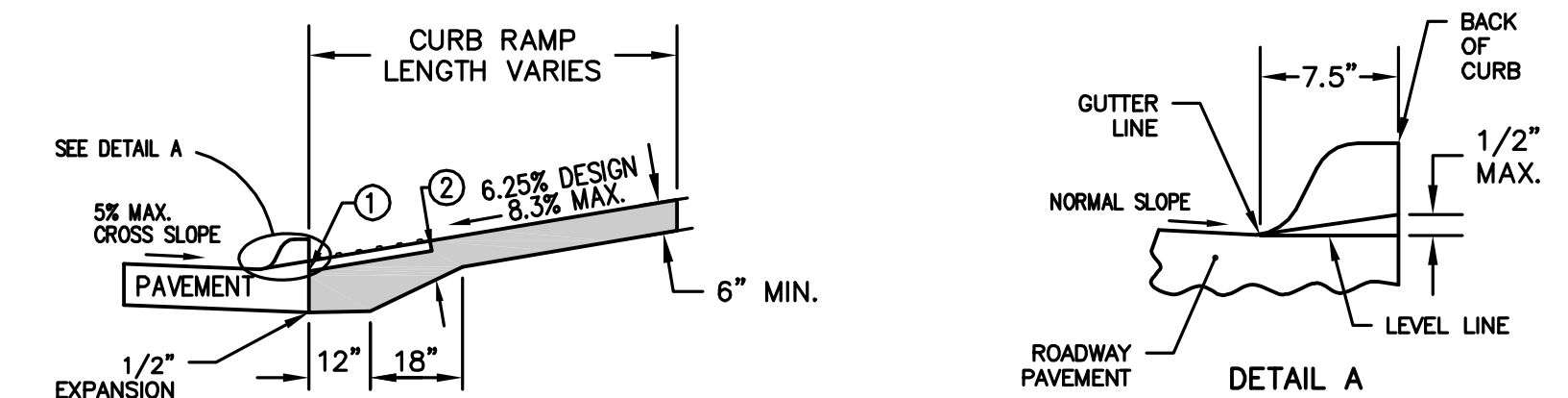
- NOTES
- MINIMUM SIZE FOR PIPING, VALVES AND FITTINGS FROM WATER MAIN TO HYDRANT INLET: 6".
 - PROVIDE TRACER WIRE AND TRACER WIRE STATION.
 - WRAP HYDRANT, PIPE AND FITTINGS WITH POLYETHYLENE ENCASMENT.

HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

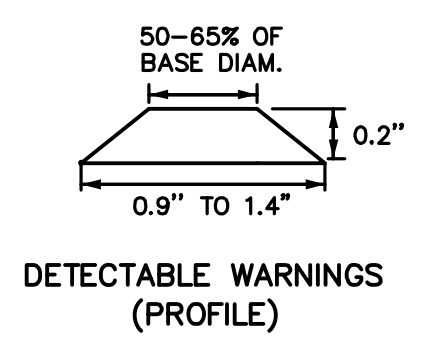
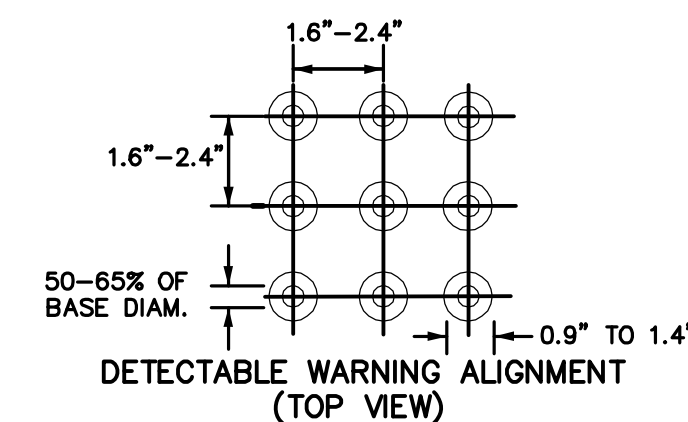


NOTE: THE CONTRACTOR WILL FURNISH ALL SIGN PANELS AND SHALL INSTALL SIGNS AND FURNISH ALL OTHER MATERIALS, INCLUDING, BUT NOT LIMITED TO, POSTS, FASTENERS, AND FOOTINGS.

TYPICAL SIGN POST
NOT TO SCALE



- 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.
- PROVIDE A MINIMUM OF 6 INCHES OF CONCRETE BELOW THE DETECTABLE WARNING PANEL.



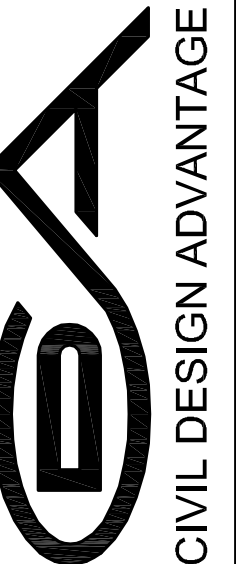
DETECTABLE WARNING DETAIL
NOT TO SCALE

REVISIONS	DATE
3RD SUBMITTAL	10/4/17
2ND SUBMITTAL	09/12/17
1ST SUBMITTAL	08/22/17

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

TECH:

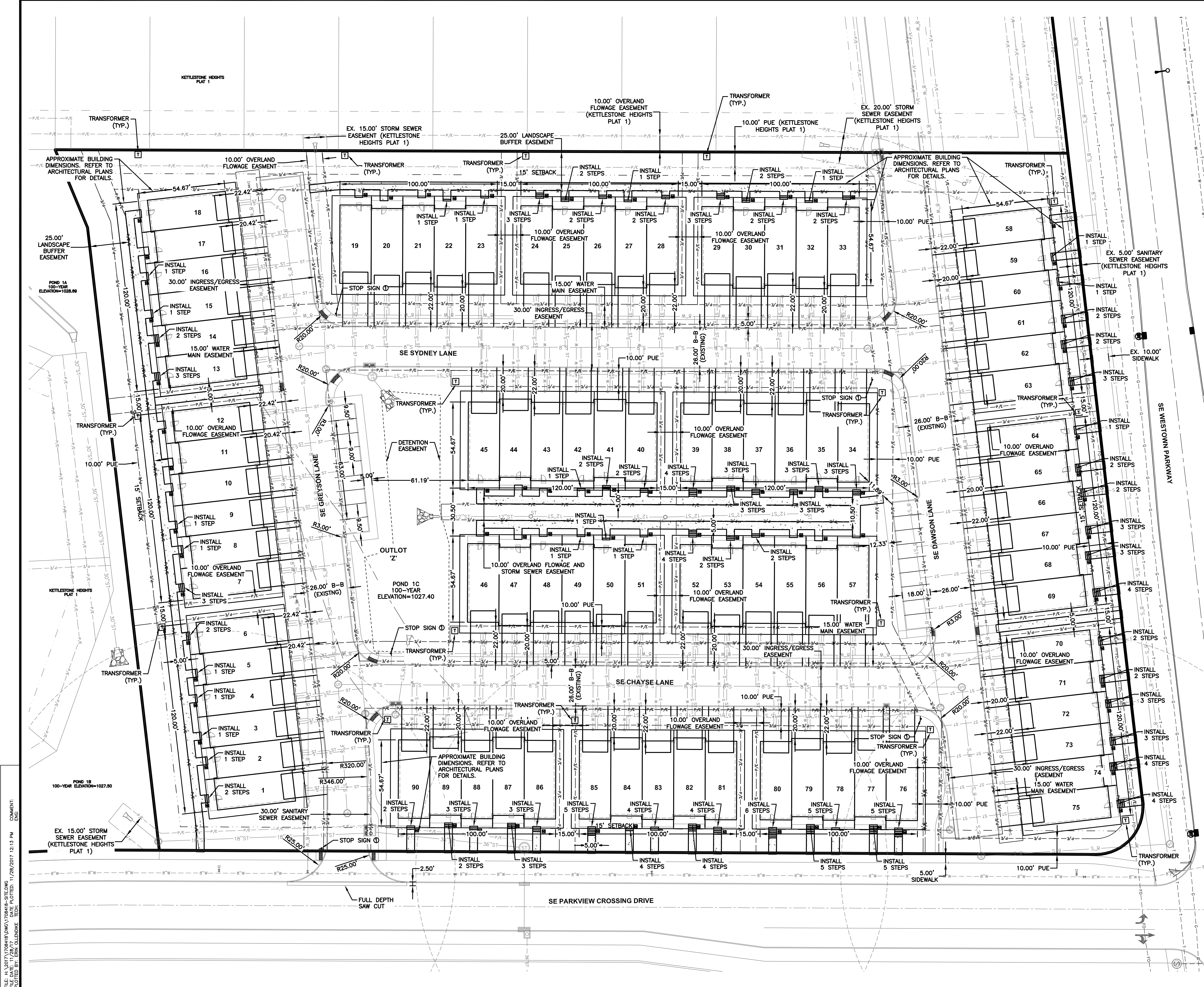
ENGINEER: EKO



WAUKEE, IOWA

KETTLESTONE HEIGHTS PLAT 2

DETAILS



GENERAL NOTES

1. ALL CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
3. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
4. 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.
5. ONE WEEK PRIOR TO CONSTRUCTION WITHIN CITY R.O.W. OR ANY CONNECTION TO PUBLIC UTILITIES CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
7. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
9. PLACE 3/4" INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING, PLACE 1/2" INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
10. REMOVE ALL DEBRIS AND MUD SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
11. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
12. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
13. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS, STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK. ANY PAVEMENT REPLACEMENT SHALL COMPLY WITH THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
15. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCES AT CERTAIN LOCATIONS WHERE PAVEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
16. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
17. ALL SCOUR STOP SHALL BE INSTALLED BY A CERTIFIED CONTRACTOR ACCORDING TO SCOUR STOP PRODUCT SPECIFICATIONS.
18. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACT BID.
19. MONUMENT SIGNS ARE TO BE REVIEWED AND APPROVED BY THE DEVELOPMENT SERVICES DEPARTMENT. MONUMENT SIGNS SHALL REQUIRE A SEPARATE BUILDING PERMIT FROM THE DEVELOPMENT SERVICES DEPARTMENT.
20. ALL STAKING, INCLUDING PEDESTRIAN FACILITIES, IS TO BE DONE UNDER THE DIRECTION OF A LICENSED ENGINEER OR SURVEYOR.
21. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT AT LEAST ONE WEEK PRIOR TO CONSTRUCTION ACTIVITIES COMMENCING.
22. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT 72 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.
23. AN AS-BUILT SITE PLAN ILLUSTRATING THE LOCATION AND DEPTHS OF SITE UTILITIES AND GRADES FOR DRAINAGE SWALES, DETENTION FACILITIES AND FEE'S SHALL BE PROVIDED IN PDF FORM AND HARD COPY UPON COMPLETION OF EACH PHASE OF DEVELOPMENT TO THE CITY OF WAUKEE'S DEVELOPMENT SERVICES DEPARTMENT.
24. THE CITY IS NOT RESPONSIBLE FOR PAVEMENT REPLACEMENT WITHIN THE EXISTING WATER MAIN EASEMENT IF PAVEMENT NEEDS TO BE REMOVED FOR MAINTENANCE OF THE WATER MAIN.

TRAFFIC CONTROL NOTES

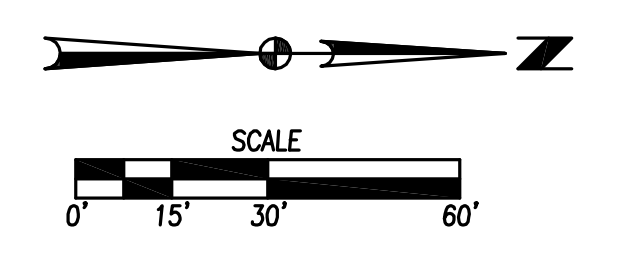
1. ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY R.O.W. OR LANE CLOSURES.
2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
3. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
4. THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
5. SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES. SIGNAGE AND TEMPORARY PEDESTRIAN ACCESS ROUTE THROUGH CONSTRUCTION AREA SHALL MEET THE REQUIREMENTS OF PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), SECTION R205 AND IOWA DOT DESIGN MANUAL, CHAPTER 12A-4.
6. THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
7. ALL SIGNING AND LANE STRIPING WILL NEED TO COMPLY WITH MUTCD. MAINTENANCE AND REPLACEMENT OF THE SIGNING AND STRIPING WILL BE THE RESPONSIBILITY OF THE APPLICANT.

SIGN LEGEND



*** NOTE ***
 THE BUILDING DIMENSIONS SHOWN ARE FOR REFERENCE PURPOSES ONLY. FINAL BUILDING TYPE IS SUBJECT TO CHANGE. ANY BUILDING DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.

T ELECTRICAL TRANSFORM LOCATION



FILE: H:\2017\170818\170818-8-STE.DWG
 PLOTTED BY: ERIC OLSEN
 DATE: 11/26/2017 12:13 PM
 PLOT SCALE: 1"=30'-0"

DATE	10/4/17
REVISIONS	09/12/17
3RD SUBMITTAL	08/22/17
2ND SUBMITTAL	
1ST SUBMITTAL	

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

TECH: ENGINEER: EKO

CIVIL DESIGN ADVANTAGE

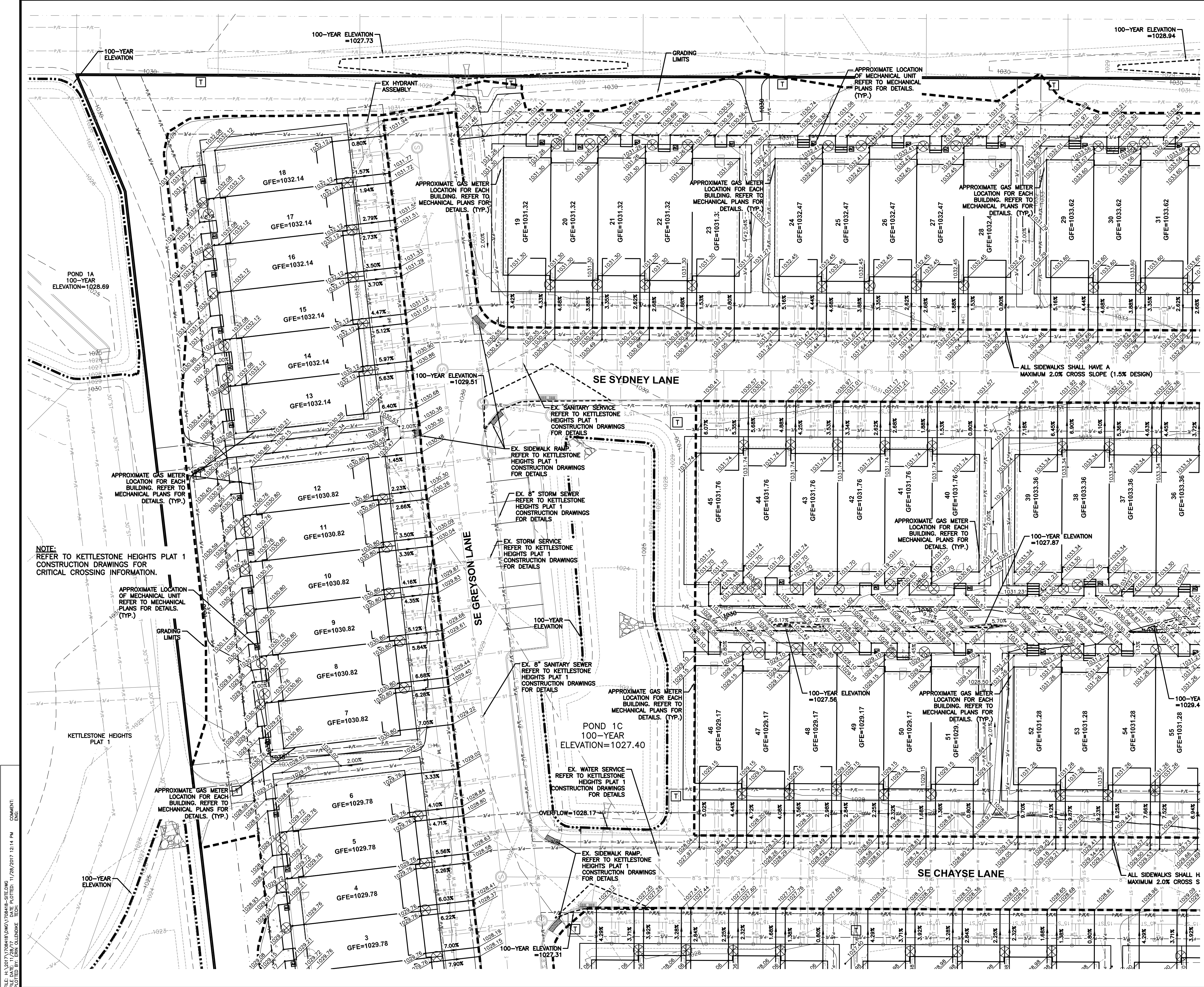
WAUKEE, IOWA

KETTLESTONE HEIGHTS PLAT 2

DIMENSION PLAN

3/9

1708.418



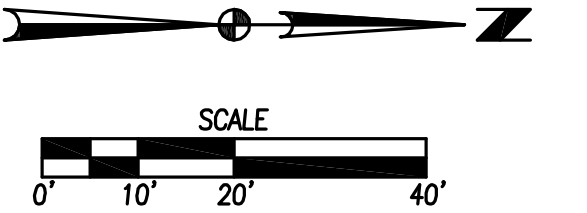
GRADING NOTES

1. THE COMPLETION AND APPROVAL OF THE COSSCO PERMIT SHALL BE PROVIDED TO THE CITY OF WAUKEE BUILDING DIVISION AND STORM WATER DEPARTMENT PRIOR TO ANY GRADING ACTIVITIES.
2. CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL. THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPAVED AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
3. EXCAVATION SHALL BE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS, IF APPLICABLE.
4. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
5. ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP OF FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
7. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
8. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAIL ROADS TO PREVENT THE SPREAD OF DUST.
10. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
11. FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
12. SIDEWALKS:
MAINTAIN 0.8% MINIMUM AND 5% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 2.0% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW CUT JOINTS AS SOON AS CONCRETE HAS SET. SAW CUTS TO BE 1/8" TO 1/4" WIDE; DEPTH: LONGITUDINAL T/3, TRANSVERSE T/4.
13. THE GRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM (IF APPLICABLE), INSTALLATION OF THE ORIFICE PLATE AND INSTALLATION OF THE TEMPORARY STAND PIPE SHALL BE COMPLETED AND FUNCTIONAL PRIOR TO ANY INCREASE IN IMPERVIOUS SURFACES WITHIN THE SITE OR THE PREVIOUSLY MENTIONED ITEMS SHALL BE GRADED/ INSTALLED AS SOON AS POSSIBLE.
14. A CERTIFIED AS-BUILT GRADING PLAN OF THE DRAINAGE SWALES SHALL BE SUBMITTED TO THE CITY OF WAUKEE UPON COMPLETION OF THE SITE IMPROVEMENTS FOR EACH PHASE OF CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
15. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.

UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR UTILITY SERVICE SIZES AND EXACT LOCATIONS. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. VERIFY ALL UTILITY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY OF WAUKEE STANDARD SPECIFICATIONS. MAINTAIN A MINIMUM OF 5.0' COVER OVER ALL WATERMAINS.
5. ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MEP PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
6. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES. INSTALL CHIMNEY SEALS ON ANY ADJUSTED MANHOLES. ALL PROPOSED SANITARY MANHOLES ARE TO UTILIZE A TYPE 'B' CASTING.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
8. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
9. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
10. 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 LOCATION MAY 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.
11. ALL WATER MAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
13. PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE LATEST VERSION OF THE UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS. ALL APPLICABLE UTILITY COMPANIES SHALL BE CONTACTED 48 HOURS PRIOR TO ANY WORK BEING STARTED.
14. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE DETENTION FACILITIES AND PRIVATE UTILITIES.
15. CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SEDIMENT CONTROLS AT ALL PERMANENT STORM SEWER INLETS. DROP DOWN INLET PROTECTION IS REQUIRED FOR PUBLIC STREETS.
16. CONTRACTOR SHALL TEST AND INSPECT ALL PROPOSED STORM SEWER, WATERMAIN AND SANITARY SEWER. THE CITY OF WAUKEE ENGINEERING DEPARTMENT IS REQUIRED TO WITNESS TESTING. ALL TESTING SHALL BE COMPLETED MEETING CITY OF WAUKEE STANDARDS.
17. ALL UTILITY TIE-INS TO EXISTING PUBLIC UTILITIES SHOULD BE COORDINATED WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
18. ALL PRIVATE AND PUBLIC SANITARY SEWER AND STORM SEWER PIPES SHALL BE CLEANED OUT AND TESTED PRIOR TO PAVING. ALL SANITARY MANHOLES SHALL BE VACUUM TESTED. A HARD COPY OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
19. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL BE CORE DRILLED AND A LINK SEAL SHALL BE USED FOR THE CONNECTION.
20. IT IS THE OWNER'S RESPONSIBILITY TO COORDINATE IRRIGATION AND METER FITTINGS WITH THE WAUKEE PUBLIC WORKS DEPARTMENT.
21. ALL HYDRANTS SHALL HAVE STORZ FITTINGS.
22. THE IRRIGATION CONTRACTOR SHALL WORK WITH THE CITY AND DEVELOPERS TO ESTABLISH A LOCATION FOR THE IRRIGATION METER PIT.

AREA OF DISTURBANCE = 4.61 AC
OPEN SPACE PROVIDED = 1.97 AC



COMMENT: 11/26/2017 12:14 PM
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 PLOTTED BY: ERN. OLENDIENE TECH

DATE	10/4/17	09/12/17	08/22/17
REVISIONS			
3RD SUBMITTAL			
2ND SUBMITTAL			
1ST SUBMITTAL			

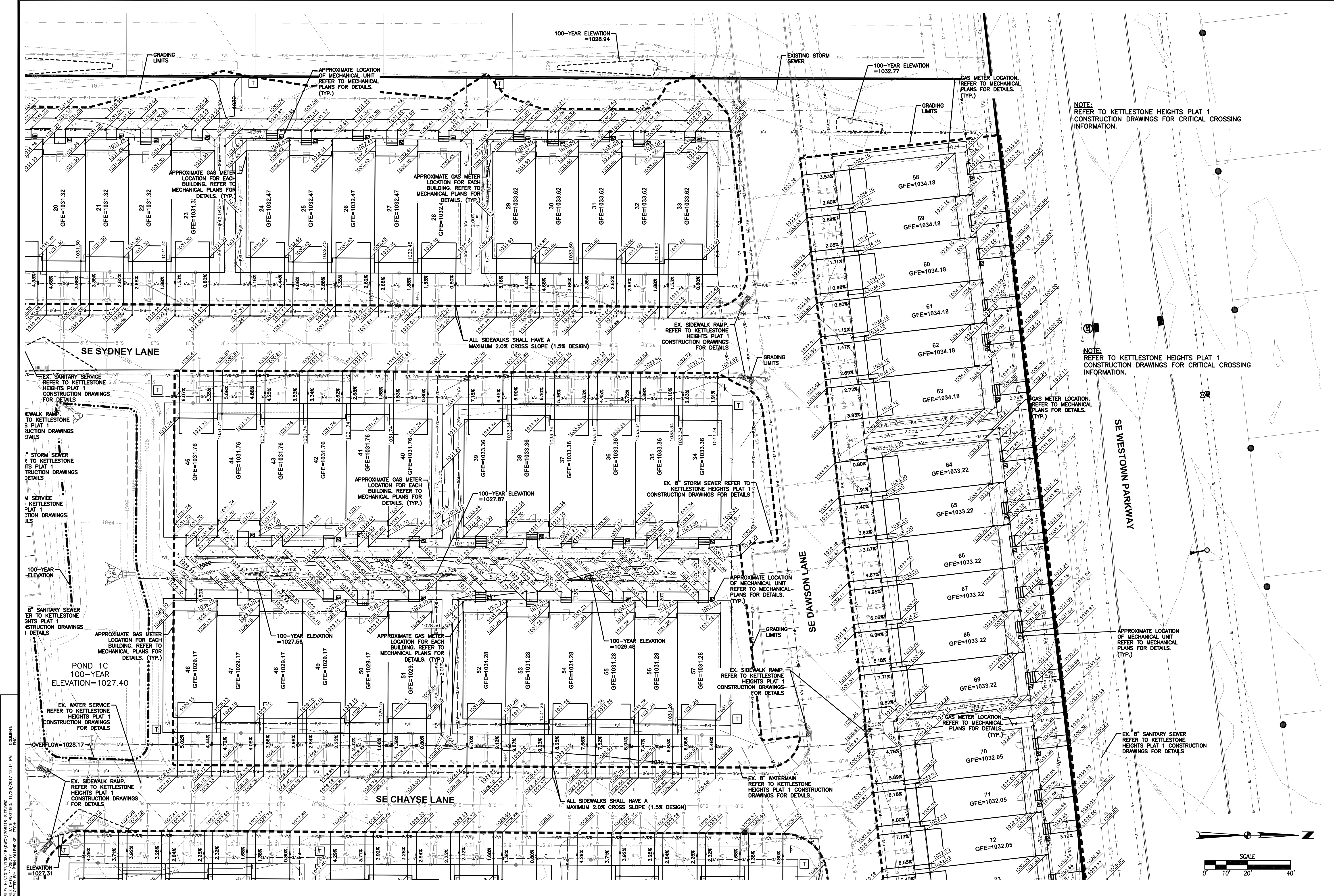
3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

TECH: ENGINEER: EKO

CIVIL DESIGN ADVANTAGE
WAUKEE, IOWA

4 KETTLESTONE HEIGHTS PLAT 2
GRADING AND UTILITY PLAN

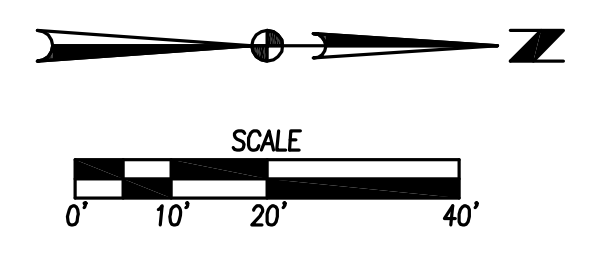
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NOTE: REFER TO KETTLESTONE HEIGHTS PLAT 1 CONSTRUCTION DRAWINGS FOR CRITICAL CROSSING INFORMATION.

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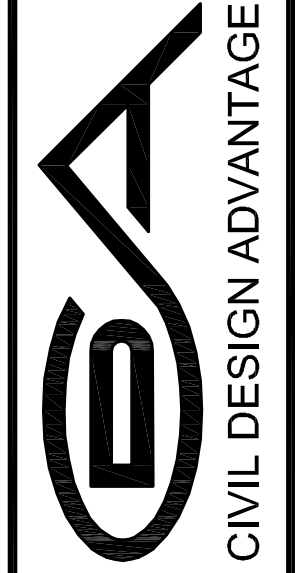
SE WESTOWN PARKWAY



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REVISIONS	DATE
3RD SUBMITTAL	10/4/17
2ND SUBMITTAL	09/12/17
1ST SUBMITTAL	08/22/17

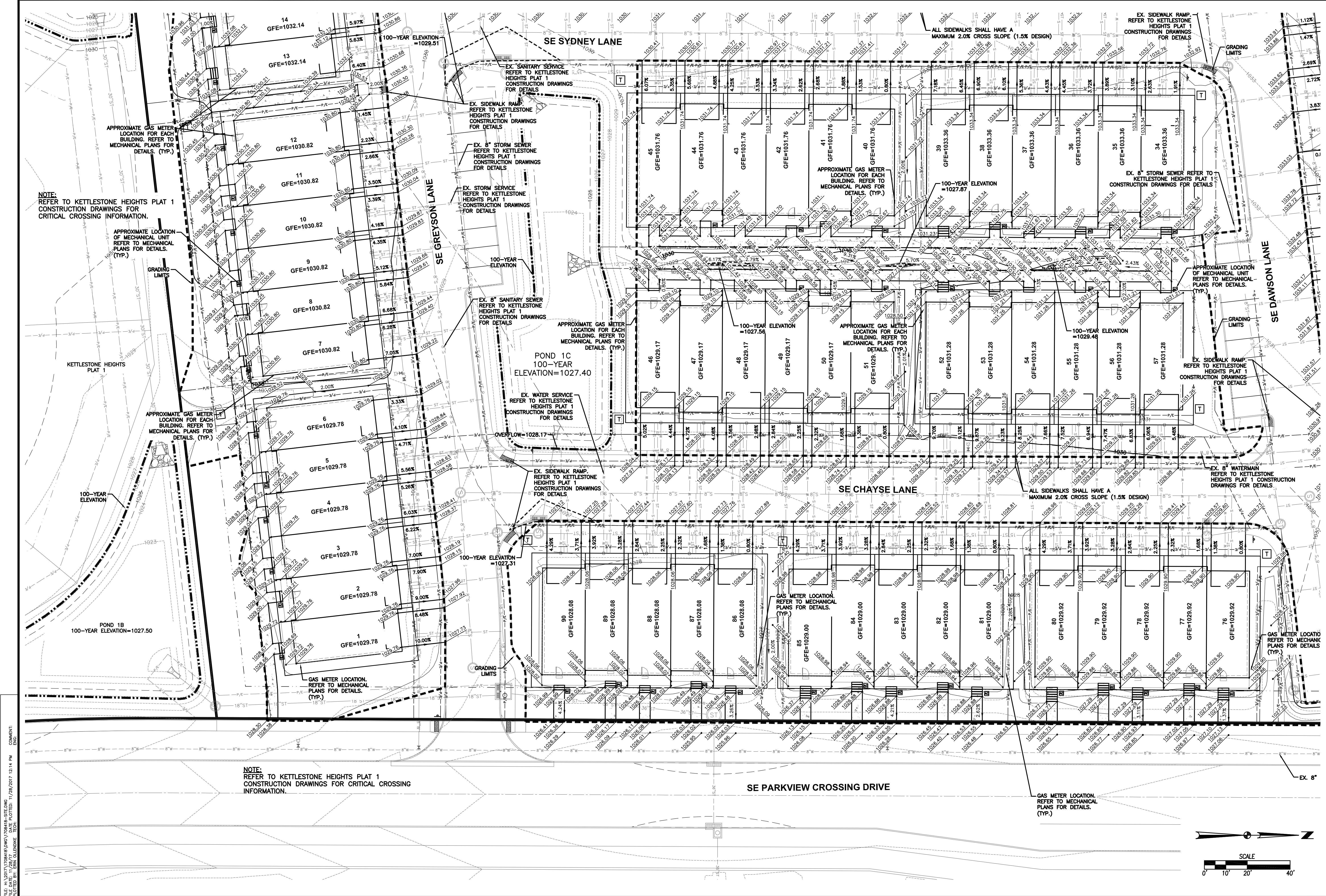
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 PHONE: (515) 369-4400 FAX: (515) 369-4410
 ENGINEER: EKO



WAUKEE, IOWA

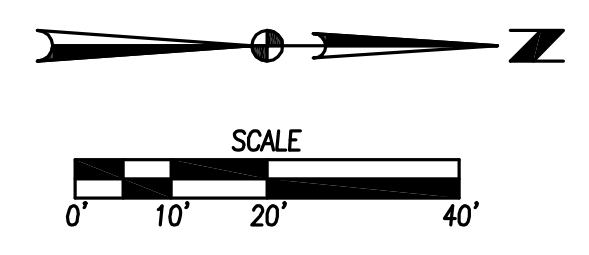
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GRADING AND UTILITY PLAN



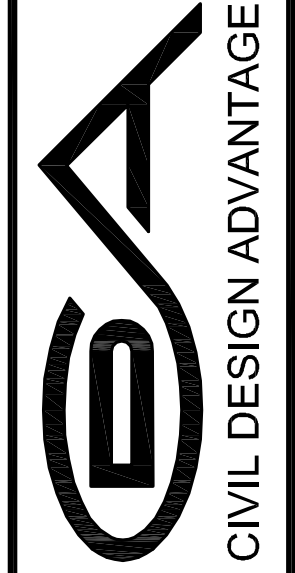
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 DATE: 11/26/2017 12:14 PM

NOTE:
 REFER TO KETTLESTONE HEIGHTS PLAT 1
 CONSTRUCTION DRAWINGS FOR CRITICAL CROSSING
 INFORMATION.



REVISIONS	DATE
3RD SUBMITTAL	10/4/17
2ND SUBMITTAL	09/12/17
1ST SUBMITTAL	08/22/17

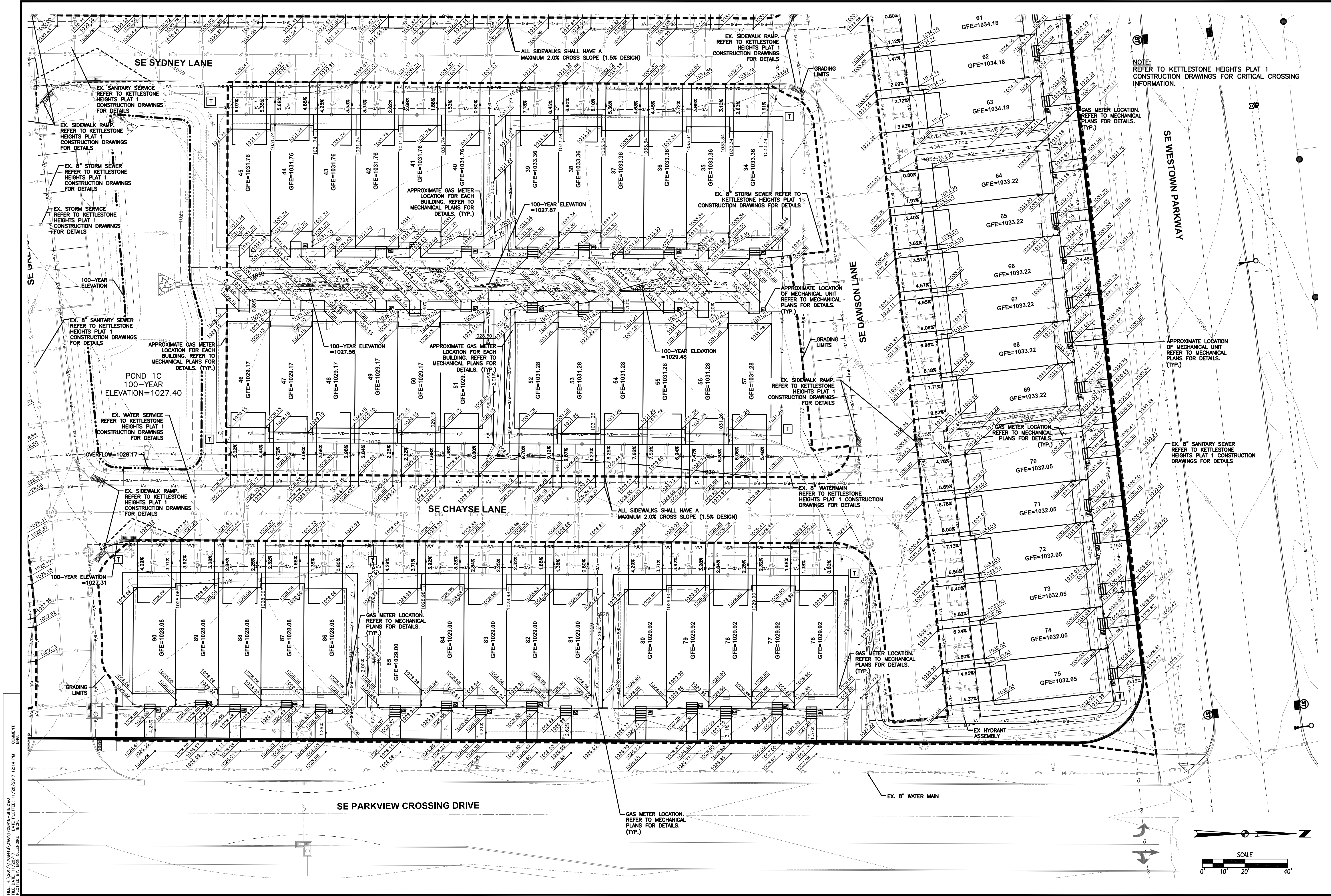
3405 S.E. CROSSROADS DRIVE, SUITE G
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WAUKEE, IOWA
 CIVIL DESIGN ADVANTAGE

ENGINEER: EKO
 TECH:



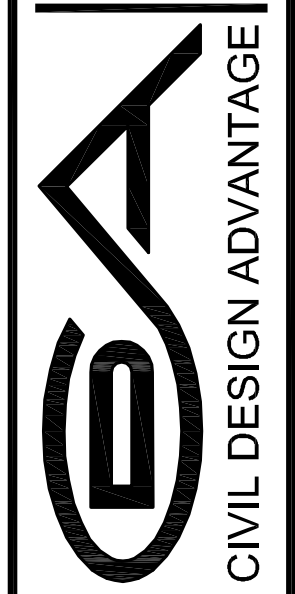


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NOTE: REFER TO KETTLESTONE HEIGHTS PLAT 1 CONSTRUCTION DRAWINGS FOR CRITICAL CROSSING INFORMATION.

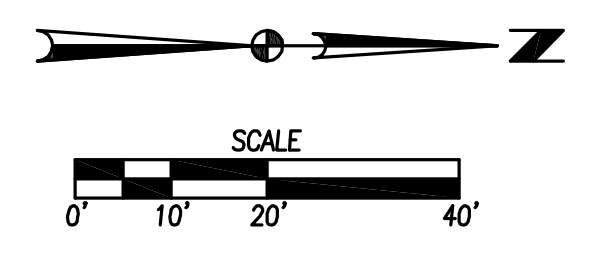
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1ST SUBMITTAL	08/22/17

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CIVIL DESIGN ADVANTAGE
 WAUKEE, IOWA

7 KETTLESTONE HEIGHTS PLAT 2
 GRADING AND UTILITY PLAN
9
 1708.418

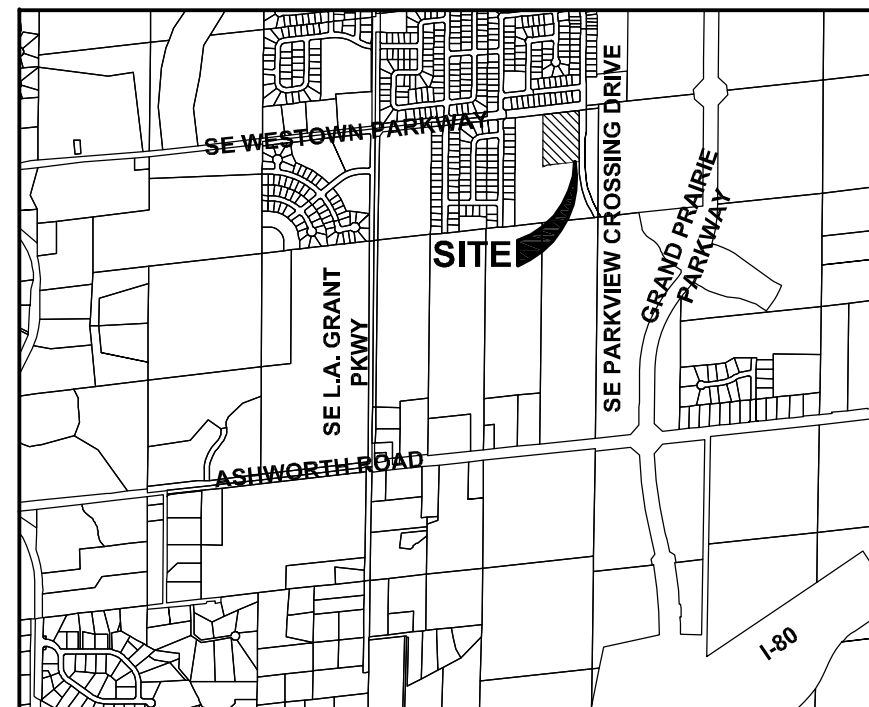


KETTLESTONE HEIGHTS PLAT 2

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

NOT TO SCALE



WAUKEE

STABILIZATION QUANTITIES

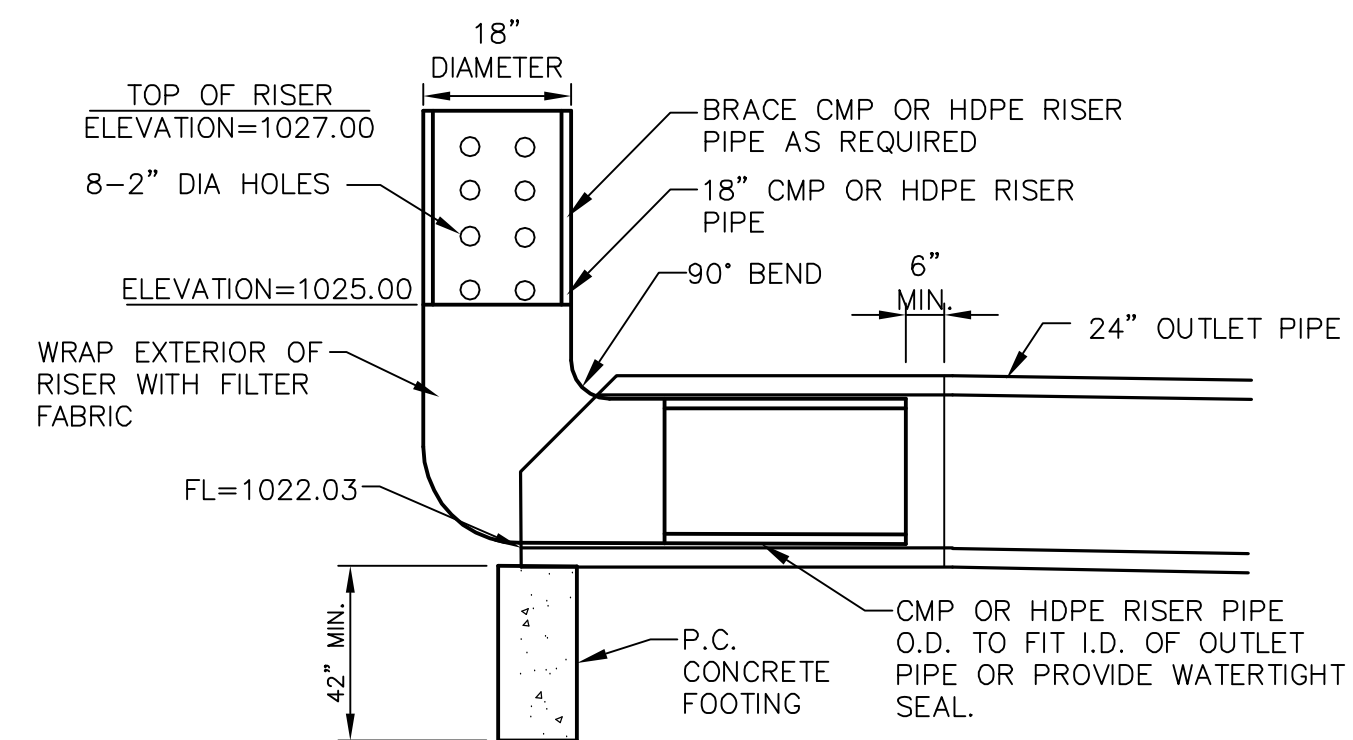
ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	2,284
2	SEEDING, FERTILIZING, AND MULCHING	AC	1.38
3	INLET PROTECTION DEVICES	EA	5
4	CONCRETE WASHOUT PIT	EA	1
5	EXISTING 18" PVC TEMPORARY STANDPIPE	EA	1

DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO FOX CREEK ±700 FT	4.61 ACRES
TOTAL AREA DISTURBED TO DISCHARGE POINT	16,596 CU FT
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	
VOLUME PROVIDED IN SILT FENCE (2,284 LF @ 4.5 CU FT/LF OF FENCE)	10,278 CU FT
VOLUME PROVIDED IN EXISTING TSB #1	19,004 CU FT
TOTAL VOLUME PROVIDED	29,282 CU FT

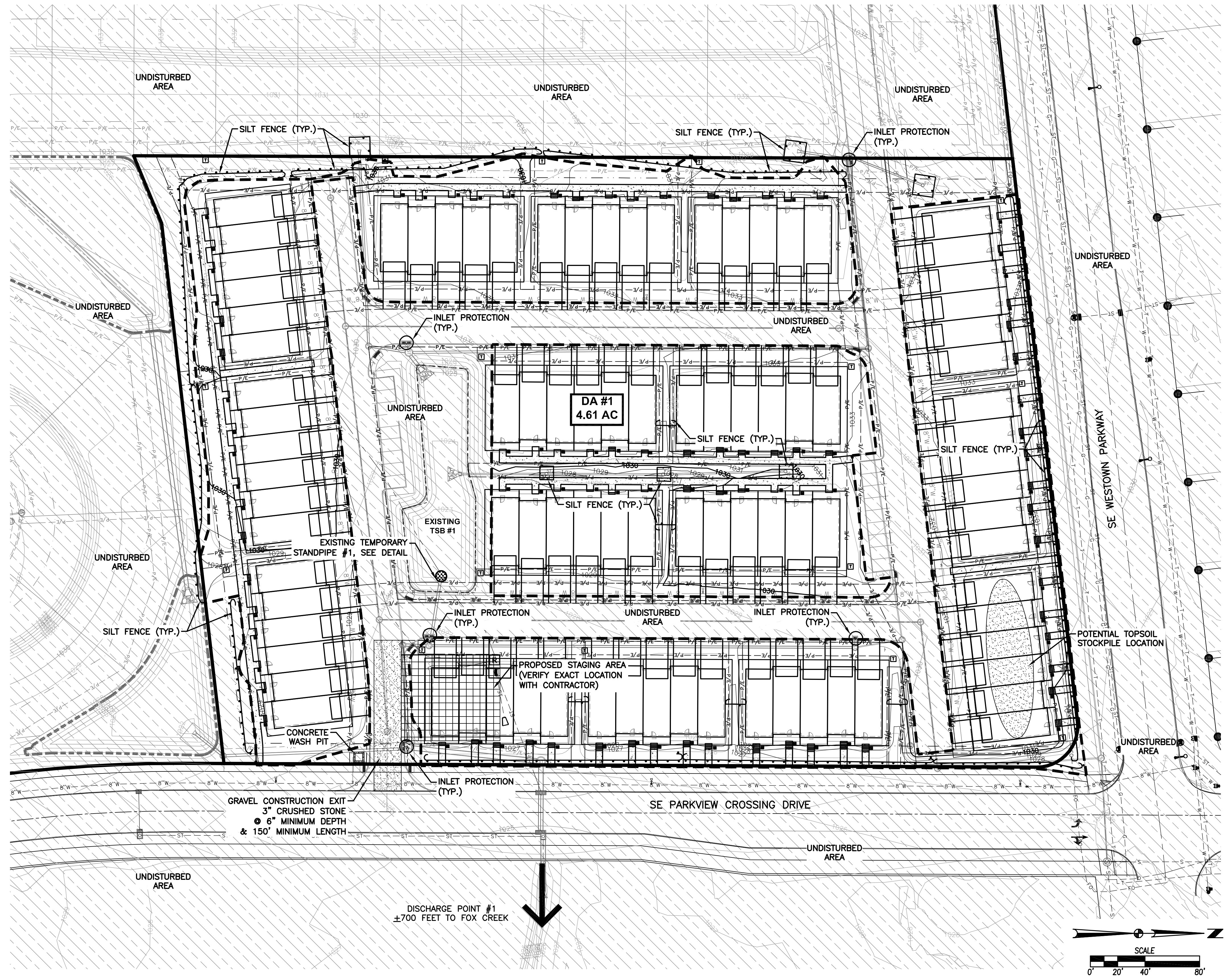
EXISTING TEMPORARY STAND PIPE DETAIL #1

NOT TO SCALE



SWPPP LEGEND

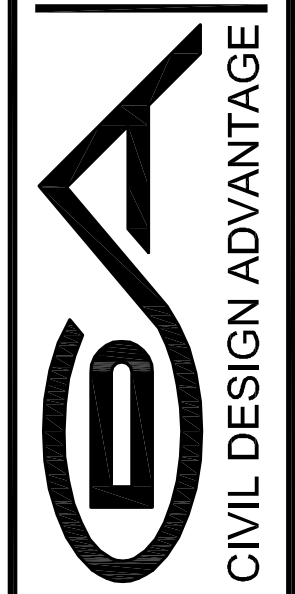
DRAINAGE ARROW	X.XX %	UNDISTURBED AREA	
GRADING LIMITS	---	RIP-RAP	
SILT FENCE	---	GRAVEL ENTRANCE	
INLET PROTECTION		STAGING AREA	
PORTABLE RESTROOM		TEMPORARY SEDIMENT BASIN	
TEMPORARY STANDPIPE			
CONCRETE WASHOUT PIT			



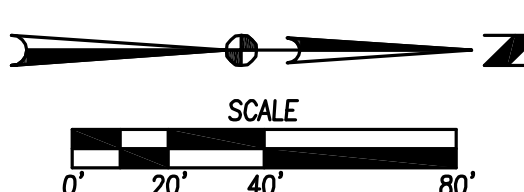
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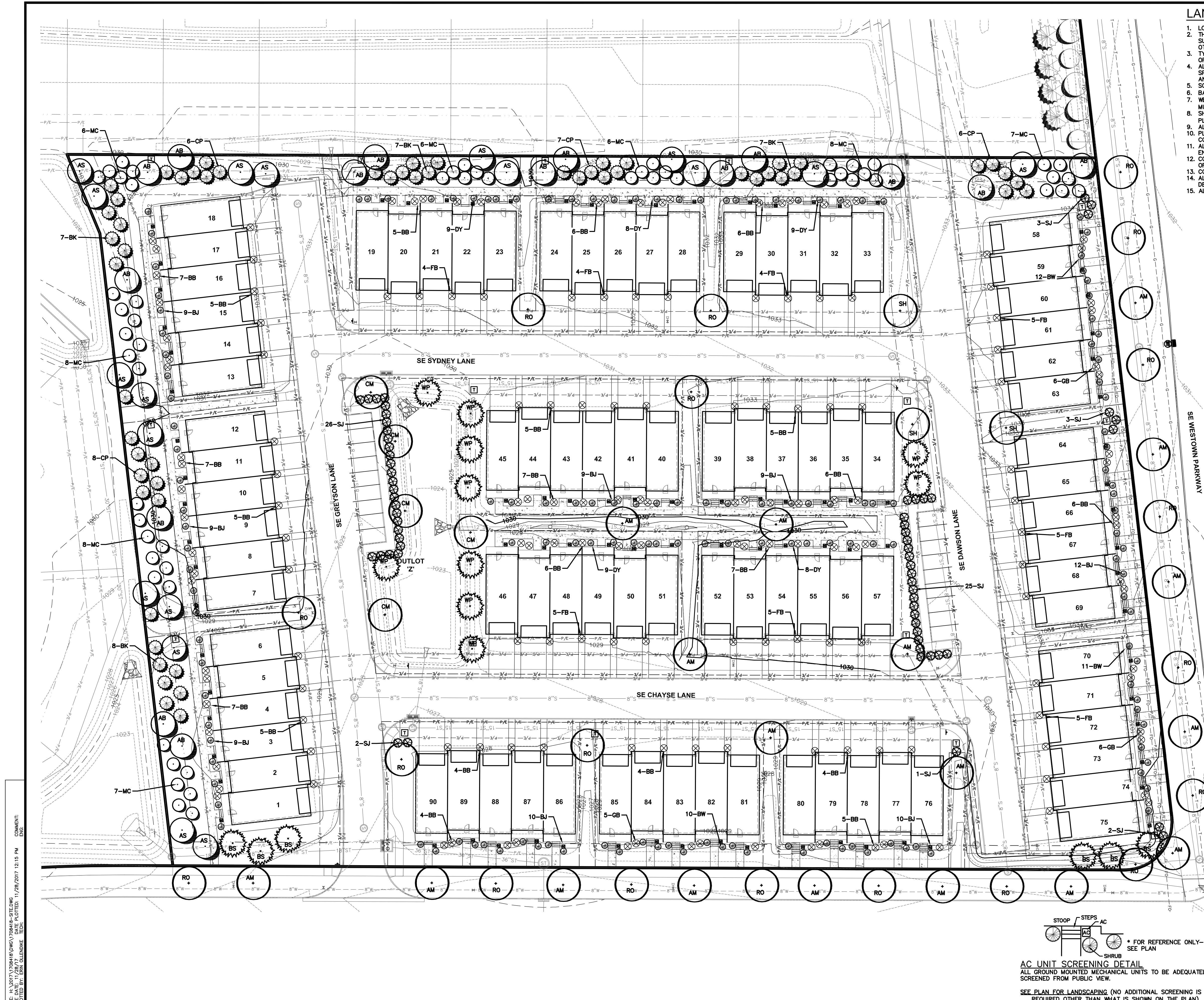
REVISIONS	DATE
3RD SUBMITTAL	10/4/17
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1ST SUBMITTAL	08/22/17

3405 S.E. CROSSROADS DRIVE, SUITE G
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 ENGINEER: EKO
 TECH:



KETTLESTONE HEIGHTS PLAT 2
 EROSION AND SEDIMENT CONTROL PLAN
 WAUKEE, IOWA
 1708.418





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 COMMENT: SCHEMATIC FOR PLANTING
 PLOTTED BY: ERIN OLSEN DATE: 11/29/2017 12:15 PM

LANDSCAPE NOTES

1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, VOIDS AND OPEN SPACES, WITH WELL DEVELOPED BRANCH AND ROOT SYSTEMS; TRUE TO HEIGHT, SHAPE AND CHARACTER OF GROWTH OF THE SPECIES OR VARIETY.
5. SOD ALL DISTURBED AREAS AS DIRECTED BY OWNER.
6. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, IF REQ.)
7. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING IN ALL PLANTING BEDS PER MANUFACTURER'S RECOMMENDATIONS.
8. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES, SHRUBS AND IN ALL PLANTING BEDS TO A (MIN) DEPTH OF 3".
9. ALL EDGING SHALL BE SPADE OUT EDGE.
10. PLANT QUANTITIES ARE SHOWN FOR REFERENCE ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
11. ALL DEBRIS SPILLED IN THE PUBLIC R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
12. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
13. CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN TO OWNER, IF REQUESTED, FOR APPROVAL.
14. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY WAUKEE DEVELOPMENT SERVICES DEPARTMENT.
15. ALL ELECTRICAL TRANSFORMERS ARE SCREENED FROM PUBLIC VIEW. SEE PLAN.

LANDSCAPE REQUIREMENTS

LOT AREA = 279,984 SF
 OPEN SPACE REQUIRED (20%) = 55,996 SF

1 TREE PER 1,000 SF OF REQUIRED OPEN SPACE.
 1 SHRUB PER 1,000 SF OF REQUIRED OPEN SPACE.

MINIMUM 50%	= OVERSTORY
MINIMUM 25%	= EVERGREEN

OVERSTORY TREES	= 8' MIN. HEIGHT
EVERGREEN TREES	= 6' MIN. HEIGHT
ORNAMENTAL TREES	= 6' MIN. HEIGHT

TREES REQUIRED:	56
TREES PROVIDED:	56

SHRUBS REQUIRED:	56
SHRUBS PROVIDED:	57

STREET TREES REQUIRED (NOT IN ADDITION TO OPEN SPACE TREE REQUIREMENT)

REQUIRED:	1 DECID. TREE/ 40 LF OF FRONTAGE (1,008'); 25 TREES
PROVIDED:	25 TREES

ALL STREET TREES SHALL BE A MINIMUM OF 12' IN HEIGHT.

PLANT SCHEDULE PLANT QUANTITIES ARE SHOWN FOR REFERENCE ONLY. THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.

CODE	QTY	OVERSTORY TREES	SIZE	COND
AM	19	AUTUMN BLAZE MAPLE	2"	CAL B&B
SH	3	SHADEMASTER HONEYLOCUST	2"	CAL B&B
RO	18	RED OAK	2"	CAL B&B
CM	4	CRIMSON KING MAPLE	2"	CAL B&B

CODE	QTY	EVERGREEN TREES	SIZE	COND
WP	10	EASTERN WHITE PINE	6"	HT. B&B
SS	6	COLORADO BLUE SPRUCE	6"	HT. B&B

CODE	QTY	SHRUBS	SIZE	COND
BB	118	LOWNOR BURNING BUSH	18"	HT. COINT
GB	13	GOLDEN BARBERY	18"	HT. COINT
BW	33	WINTERGREEN BOXWOOD	18"	HT. COINT
BJ	77	BUFFALO JUNIPER	3"	GAL. COINT
SJ	61	SEA GREEN JUNIPER	18"	HT. COINT
FB	37	FINE LINE BUCKTHORN	18"	HT. COINT
DY	43	DENSE YEW	18"	HT. COINT

25' BUFFER REQUIREMENT (644 LF WEST)

REQUIRED (PER 50 LF)
 1.5 OVERSTORY TREES: 20
 2.5 EVERGREEN TREES: 33
 2.5 ORNAMENTAL TREES: 33
 15 SHRUBS: 193

PROVIDED
 OVERSTORY TREES: 20
 EVERGREEN TREES: 33
 ORNAMENTAL TREES: 33
 SHRUBS: 193

25' BUFFER REQUIREMENT (452 LF SOUTH)

REQUIRED (PER 50 LF)
 1.5 OVERSTORY TREES: 14
 2.5 EVERGREEN TREES: 23
 2.5 ORNAMENTAL TREES: 23
 15 SHRUBS: 136

PROVIDED
 OVERSTORY TREES: 14
 EVERGREEN TREES: 23
 ORNAMENTAL TREES: 23
 SHRUBS: 136

BUFFER PLANT SCHEDULE

CODE	QTY	OVERSTORY TREES	SIZE	COND
AS	18	AUTUMN SPIRE MAPLE	8"	HT. B&B
AB	16	DAKOTA ASIAN PINACLE BIRCH/BETULA PLATYPHYLLA 'FARGO'	8"	HT. B&B

CODE	QTY	EVERGREEN TREES	SIZE	COND
CP	27	COLUMNAR WHITE PINE	6"	HT. B&B
BK	29	BAKERI SPRUCE	6"	HT. B&B

CODE	QTY	ORNAMENTAL TREES	SIZE	COND
MC	156	MODONNA CRAB	6"	HT. B&B

PLANT QUANTITIES ARE SHOWN FOR REFERENCE ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.

ELECTRICAL TRANSFORMER SCREENING DETAIL

ALL GROUND MOUNTED MECHANICAL UNITS TO BE ADEQUATELY SCREENED FROM PUBLIC VIEW.
 LOCATIONS AND QUANTITY OF ELECTRICAL UNITS SHALL BE DETERMINED BY UTILITY PROVIDER.
 ONLY MECHANICAL UNITS VISIBLE FROM PUBLIC STREETS SHALL BE SCREENED, IF NOT ALREADY SCREENED ON LANDSCAPE PLAN.
 SEE PLAN FOR LANDSCAPING (NO ADDITIONAL SCREENING IS REQUIRED OTHER THAN WHAT IS SHOWN ON THE PLAN)



DATE: 10/4/17
 3RD SUBMITTAL: 09/12/17
 2ND SUBMITTAL: 08/22/17

REVISIONS:

3405 S.E. CROSSROADS DRIVE, SUITE G
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TECH: ENGINEER: EKO

CIVIL DESIGN ADVANTAGE
 WAUKEE, IOWA

KETTLESTONE HEIGHTS PLAT 2
 LANDSCAPE PLAN

1708.418