

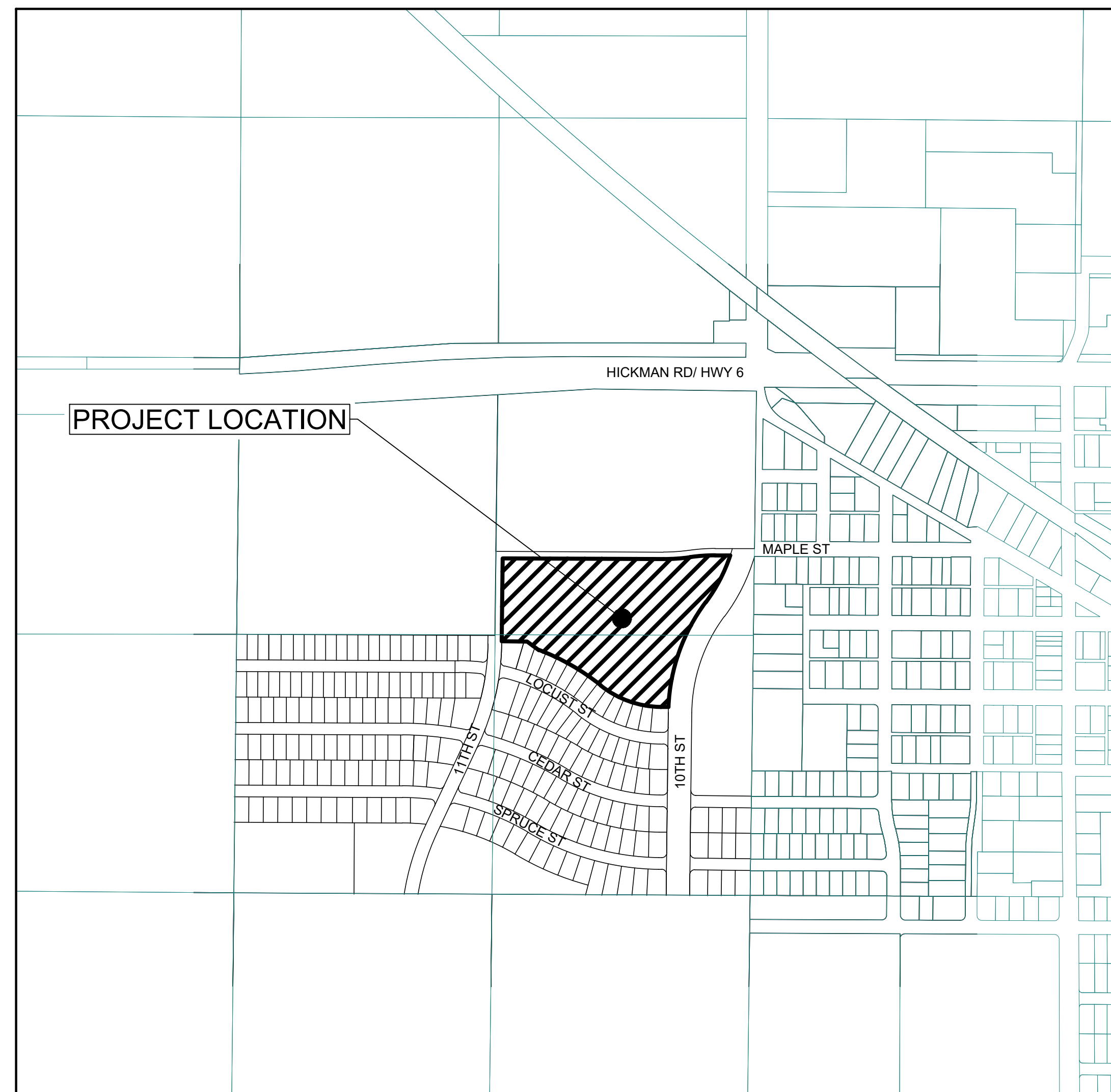
SITE PLAN

FOR

SPRING CREST TOWNHOMES PLAT 3

MULTI-FAMILY RESIDENTIAL DEVELOPMENT

CITY OF WAUKEE, DALLAS COUNTY, IOWA



NOT TO SCALE

VICINITY MAP

OWNER/DEVELOPER/APPLICANT

SPRINGCREST TOWNHOMES WAUKEE 2, LLC
 15920 HICKMAN RD STE 330-400
 CLIVE, IA 50325
 CONTACT: CASEY SHELTON
 PHONE: (515) 499-6194

ENGINEER

SNYDER & ASSOCIATES
 2727 SW SNYDER BLVD.
 ANKENY, IOWA 50023
 CONTACT: KOREY MARSH
 PHONE: (515) 964-2020

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I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Professional Landscape Architect under the laws of the State of Iowa.

Clay R. Schneckloth, PLA Date

License Number 512

Pages or sheets covered by this seal:
C500-C501

License Expires: June 30, 2025

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.

Korey M. Marsh, P.E. Date

License Number P25347

My License Renewal Date is December 31, 2024

Pages or sheets covered by this seal:
C100-C407

SPRING CREST TOWNHOMES PLAT 3

TITLE SHEET

SNYDER & ASSOCIATES, INC.

WAUKEE, IA

2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

Project No: 123.1406.01

Sheet C100

11	AS PER CITY COMMENTS	LJM	02-05-24	BY
10	AS PER CITY COMMENTS	LJM	01-26-24	BY
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8	AS PER CITY COMMENTS	LJM	12-28-23	BY
MARK REVISION				
Engineer: KMM		Checked By: KMM	Scale: 1"=1"	
Technician: LJM		Date: 11-23-2021	T-R-S: TTN-RRW-SS	
Project No: 123.1406.01				Sheet C100

LEGEND

FEATURES

- Section Corner
1/2" Rebar, Cap # 11579
(Unless Otherwise Noted)
ROW Marker
ROW Rail
Control Point
Bench Mark
Platted Distance
Measured Bearing & Distance
Recorded As
Deed Distance
Calculated Distance
Minimum Protection Elevation
Centerline
Section Line
1/4 Section Line
1/4 1/4 Section Line
Easement Line

FOUND

- Spot Elevation
Contour Elevation
Fence (Barbed, Field, Hog)
Fence (Chain Link)
Fence (Wood)
Fence (Silt)
Tree Line
Tree Stump
Deciduous Tree \\ Shrub
Coniferous Tree \\ Shrub

SET

- Sanitary Manhole
Storm Sewer with Size
Storm Manhole
Single Storm Sewer Intake
Double Storm Sewer Intake
Fire Hydrant
Fire Hydrant on Building
Water Main Valve
Water Service Valve
Well
Utility Pole
Guy Anchor
Utility Pole with Light
Utility Pole with Transformer
Street Light
Yard Light
Electric Box
Electric Transformer
Traffic Sign
Communication Pedestal
Communication Manhole
Communication Handhole
Fiber Optic Manhole
Fiber Optic Handhole
Gas Valve
Gas Manhole
Gas Apparatus
Fence Post or Guard Post
Underground Storage Tank
Above Ground Storage Tank
Sign
Satellite Dish
Mailbox
Sprinkler Head
Irrigation Control Valve

FEATURES

- Spot Elevation
Contour Elevation
Fence (Barbed, Field, Hog)
Fence (Chain Link)
Fence (Wood)
Fence (Silt)
Tree Line
Tree Stump
Deciduous Tree \\ Shrub
Coniferous Tree \\ Shrub
Communication
Overhead Communication
Fiber Optic
Underground Electric
Overhead Electric
Gas Main with Size
High Pressure Gas Main with Size
Water Main with Size
Sanitary Sewer with Size
Duct Bank
Test Hole Location for SUE w/ID

EXISTING

- Spot Elevation
Contour Elevation
Fence (Barbed, Field, Hog)
Fence (Chain Link)
Fence (Wood)
Fence (Silt)
Tree Line
Tree Stump
Deciduous Tree \\ Shrub
Coniferous Tree \\ Shrub
Communication
Overhead Communication
Fiber Optic
Underground Electric
Overhead Electric
Gas Main with Size
High Pressure Gas Main with Size
Water Main with Size
Sanitary Sewer with Size
Duct Bank
Test Hole Location for SUE w/ID

PROPOSED

- Spot Elevation
Contour Elevation
Fence (Barbed, Field, Hog)
Fence (Chain Link)
Fence (Wood)
Fence (Silt)
Tree Line
Tree Stump
Deciduous Tree \\ Shrub
Coniferous Tree \\ Shrub
Communication
Overhead Communication
Fiber Optic
Underground Electric
Overhead Electric
Gas Main with Size
High Pressure Gas Main with Size
Water Main with Size
Sanitary Sewer with Size
Duct Bank
Test Hole Location for SUE w/ID

(* Denotes the survey quality service level for utilities

PROPERTY DESCRIPTION

LOTS 12-116 AND OUTLOT X OF SPRING CREST TOWNHOMES PLAT 2 AS FILED IN THE DALLAS COUNTY RECORDER'S OFFICE ALL BEING IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA.

PARKING REQUIREMENTS

TOWNHOMES:
PARKING REQUIRED:
2 STALL PER UNIT PLUS 1 STALL PER 5 UNITS
116 UNITS X 2 STALLS = 232 STALLS
116 UNITS / 5 = 23 STALLS
TOTAL STALL REQUIRED = 255 STALLS

PARKING PROVIDED:
GARAGE STALL = 116 STALLS (1 PER UNIT)
DRIVEWAY STALL = 116 STALLS (1 PER UNIT)
OPEN STALL = 24 STALLS
TOTAL STALLS PROVIDED = 256 STALLS
(INCLUDING 1 HANDICAP ACCESSIBLE STALL)

BULK REGULATIONS

DENSITY = 12 DWELLING UNITS/ACRE MAXIMUM
MINIMUM FLOOR AREA = 800 SQUARE FEET PER UNIT
LOT WIDTH = 20 FEET PER UNIT, 75 FEET OVERALL
SIDE YARD = 15 FEET BETWEEN PRINCIPLE BUILDINGS
REAR YARD = 30 FEET
NUMBER OF STORIES = MINIMUM 2, MAXIMUM 3
NUMBER OF CONNECTED UNITS = MINIMUM 2, MAXIMUM 6.
MINIMUM OPEN SPACE = 20%

OPEN SPACE REQUIREMENTS

MINIMUM OF 20% OPEN SPACE REQUIRED
TOTAL AREA 600,337SF
MIN OPEN SPACE REQUIRED 120,068SF (20.0%)
OPEN SPACE PROVIDED 280,135SF (48.3%)

BENCHMARKS

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 - GEOID12A)
IARTN DERIVED - US SURVEY FEET

BM1 ELEV=1035.08
BURY BOLT ON HYDRANT ON SOUTH SIDE OF CEDAR STREET SOUTH OF LIGHT POLE, SOUTHEAST OF SITE.

CONTROL POINTS

IOWA STATE PLANE SOUTH COORDINATE SYSTEM
NAD83(2011) (EPOCH 2010.00) IARTN DERIVED - US SURVEY FEET

- CP1 N=586093.79 E=1533347.30
1/2" REBAR WITH YELLOW CAP AT NORTHWEST CORNER OF LOT 29 OF SOUTHVIEW ESTATES, SOUTHEAST CORNER OF SITE.
CP2 N=586456.49 E=1533349.96
1/2" REBAR WITH ORANGE CAP AT WEST END OF CEDAR STREET PAVEMENT, SOUTHEAST CORNER OF SITE.
CP3 N=587886.78 E=1533378.54
MAG NAIL IN ASPHALT ON WEST SIDE OF 10TH STREET, NORTHEAST CORNER OF SITE.
CP4 N=588428.84 E=1530732.77 IOWA DOT ALUMINUM MONUMENT SOUTH OF HIGHWAY 6 IN LINE WITH NORTH 1/4 CORNER OF SECTION, NORTHWEST OF

UTILITY CONTACT INFORMATION

UTILITY CONTACT FOR MAPPING INFORMATION SHOWN AS RECEIVED FROM THE IOWA ONE CALL DESIGN REQUEST SYSTEM, TICKET NUMBER 551604197.

Table with utility contact information including G1-GAS, W1-WATER, S-SANITARY SEWER, ST-STORM SEWER, E1-ELECTRIC, OE1-OVERHEAD ELECTRIC, C1-COMMUNICATION, C2-COMMUNICATION, CLEAR PER MAP, and NO RESPONSE.

GENERAL USE

TOWNHOMES

ZONING

R-4 - ROW DWELLING AND TOWNHOME DISTRICT

PROJECT TIMELINE

CONSTRUCTION START: COMPLETED
EARTHWORK: COMPLETED
UTILITIES: COMPLETED
PAVING: COMPLETED
BUILDING CONSTRUCTION: SPRING 2024

GENERAL NOTES

- A. NOTIFY UTILITY PROVIDERS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH UTILITY PROVIDERS AS NECESSARY DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION, AND DEPTH OF ALL UTILITIES. PROTECT ALL UTILITY LINES AND STRUCTURES NOT SHOWN FOR REMOVAL OR MODIFICATION. ANY DAMAGES TO UTILITY ITEMS NOT SHOWN FOR REMOVAL OR MODIFICATION SHALL BE REPAIRED TO THE UTILITY OWNER'S SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.
B. CONSTRUCTION OF ALL STREET AND UTILITY IMPROVEMENTS SHALL CONFORM TO THE CURRENT WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, 2024 STATEWIDE URBAN DESIGN AND SPECIFICATIONS AND THE SOILS REPORTS PREPARED BY OTHERS.
C. LENGTH OF UTILITIES SHOWN ON PLANS ARE DIMENSIONED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
D. ALL TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). WHEN CONSTRUCTION ACTIVITIES OBSTRUCT PORTIONS OF THE ROADWAY, FLAGGERS SHALL BE PROVIDED. FLAGGERS SHALL CONFORM TO THE MUTCD IN APPEARANCE, EQUIPMENT AND ACTIONS. THE CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE AT LEAST ONE WEEK PRIOR TO ANY ANTICIPATED LANE CLOSURE.
E. NOTIFY OWNER, ENGINEER, CITY OF WAUKEE AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL ALSO NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.
F. CONSTRUCT MANHOLES AND APPURTENANCES AS WORK PROGRESSES. BACKFILL WITH SUITABLE MATERIAL AND COMPACT TO 95% MAXIMUM DENSITY.
G. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
H. ALL FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED OR REPAIRED AND NOTED ACCORDINGLY ON THE AS-BUILT DOCUMENTS.
I. DIMENSIONS, BUILDING LOCATION, UTILITIES AND GRADING OF THIS SITE ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN. DEVIATIONS MAY BE NECESSARY IN THE FIELD. ANY SUCH CHANGES OR CONFLICTS BETWEEN THIS PLAN AND FIELD CONDITIONS ARE TO BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT VERIFICATION OF ALL SITE IMPROVEMENTS PRIOR TO CONSTRUCTION. CONTACT CITY OF WAUKEE FOR APPROVAL OF ANY CHANGES AND THAT ANY CHANGES COMPLETED WITHOUT APPROVAL ARE SUBJECT TO REMOVAL IN ORDER TO MEET THE CITY OF WAUKEE STANDARDS.
J. CONTRACTOR TO LOAD AND TRANSPORT ALL MATERIALS CONSIDERED TO BE UNDESIRABLE TO BE INCORPORATED INTO THE PROJECT TO AN APPROVED OFF-SITE WASTE SITE.
K. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MEET SUDAS SPECIFICATION SECTION 2010 FOR TOPSOIL.
L. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.
M. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
N. THE ADJUSTMENT OF ANY EXISTING UTILITY APPURTENANCES TO FINAL GRADE IS CONSIDERED INCIDENTAL TO THE SITE WORK.
O. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING ANY EXISTING EROSION CONTROL MEASURES ON SITE AT THE TIME OF CONSTRUCTION. GRADING AND SOIL EROSION CONTROL CODE REQUIREMENTS SHALL BE MET BY CONTRACTOR. A COSESCO PERMIT IS REQUIRED FOR THIS PROJECT.
P. CONTRACTOR TO COORDINATE NATURAL GAS, ELECTRICAL, TELEPHONE AND ANY OTHER FRANCHISE UTILITY SERVICES WITH UTILITY SERVICE PROVIDER, CITY OF WAUKEE, AND THE OWNER PRIOR TO CONSTRUCTION.
Q. IF STORM SEWER CROSSES ABOVE WATER MAIN OR CROSSES LESS THAN 18" BELOW A WATER MAIN THEN STORM SEWER SHALL BE CONSTRUCTED OF REINFORCED CONCRETE WITH A FLEXIBLE O-RING GASKET 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 MAIN TO THE STORM SEWER IS AT LEAST TEN FEET.
R. A PRE-CONSTRUCTION MEETING WITH THE CITY OF WAUKEE WILL BE REQUIRED A MINIMUM OF ONE WEEK PRIOR TO CONSTRUCTION ACTIVITIES BEGINNING.
S. ALL STAKING SHALL BE DONE UNDER THE DIRECTION OF A LICENSED ENGINEER OR LAND SURVEYOR INCLUDING PEDESTRIAN FACILITIES.
T. ANY CHANGES PROPOSED TO THE DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE COMMUNITY DEVELOPMENT PRIOR TO CONSTRUCTION.
U. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE CITY OF WAUKEE.
V. ALL SANITARY SEWER AND STORM SEWER SHALL BE CLEANED AND TELEVISED PRIOR TO PAVING. THE CITY OF WAUKEE SHALL WITNESS ALL CLEANING AND TELEVISION. COPIES OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
W. ALL CONNECTIONS TO EXISTING SANITARY MANHOLES SHALL BE CORE DRILL WITH A LINK SEAL.
X. PLACE 3/4" EXPANSION JOINT BETWEEN ALL PCC PAVEMENT/SIDEWALKS AND BUILDINGS. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALKS AND PCC PAVEMENT. THE PCC RAMP JOINT LOCATED AT THE BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SEALED.
Y. AS-BUILTS SHALL BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT INCLUDING ALL PUBLIC ACCESSIBLE RAMPS, DETENTION FACILITIES AND DETENTION OVERTFLOW GRADES. THE CONTRACTOR SHALL PROVIDE INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION ON THE RECORD AS-BUILT DRAWINGS.
Z. ALL UTILITIES INCLUDING PRIVATE UTILITIES SHALL BE CONSTRUCTED TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND ALL UTILITIES SHALL BE TESTED TO CITY STANDARDS. THE CITY SHALL WITNESS ALL TESTING.
AA. CONTRACTOR SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING CONCRETE SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.
BB. CONTRACTOR SHALL COORDINATE ALL TIE-IN TO UTILITIES WITH THE CITY OF WAUKEE PUBLIC WORKS DEPARTMENT AND CITY OF WAUKEE PUBLIC WORKS SHALL WITNESS ALL TIE-INS.
CC. ALL FIRE HYDRANTS TO HAVE 5 INCH STORZ FITTINGS.
DD. CONTRACTOR IS RESPONSIBLE TO OBTAIN WRITTEN APPROVAL FOR ANY PLAN CHANGES DURING CONSTRUCTION FROM THE COMMUNITY DEVELOPMENT DEPARTMENT. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES THAT HAVE NOT RECEIVED WRITTEN APPROVAL FROM THE COMMUNITY DEVELOPMENT DEPARTMENT.
EE. DAISY LANE AND KINLEY DRIVE ARE TO BE PRIVATELY OWNED AND MAINTAINED.

POLLUTION PREVENTION NOTES

- A. POLLUTION PREVENTION AND EROSION PROTECTION
1. CODE COMPLIANCE: THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL POTENTIAL POLLUTION AND SOIL EROSION CONTROL REQUIREMENTS OF THE IOWA CODE, THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) NPDES PERMIT, THE U.S. CLEAN WATER ACT AND ANY LOCAL ORDINANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT AGAINST EROSION AND POLLUTION FROM THIS PROJECT SITE AND ALL OFF-SITE BORROW OR DEPOSIT AREAS DURING PERFORMANCE OR AS A RESULT OF PERFORMANCE.
2. DAMAGE CLAIMS: THE CONTRACTOR WILL HOLD THE OWNER AND ARCHITECT / ENGINEER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGES TO ADJOINING PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES INCURRED TO OWNER. FURTHER, IF THE CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH SEDIMENTATION OR DEBRIS WHICH COMES ONTO ADJOINING PUBLIC OR PRIVATE PROPERTY, THE OWNER MAY, BUT NEED NOT, REMOVE SUCH ITEMS AND DEDUCT THE COST THEREOF FROM AMOUNTS DUE TO THE CONTRACTOR.
B. STORM WATER DISCHARGE PERMIT
1. THIS PROJECT REQUIRES COVERAGE UNDER THE NPDES GENERAL PERMIT NO. 2 FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDNR, AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA), THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLIANCE WITH AND FULFILLMENT OF ALL REQUIREMENTS OF THE NPDES GENERAL PERMIT NO. 2 AS SPECIFIED IN THE CONTRACT DOCUMENTS.
2. ALL DOCUMENTS RELATED TO THE STORM WATER DISCHARGE PERMIT, INCLUDING, BUT NOT LIMITED TO, THE NOTICE OF INTENT, PROOF OF PUBLICATIONS, DISCHARGE AUTHORIZATION LETTER, CURRENT SWPPP, SITE INSPECTION LOG, AND OTHER ITEMS, SHALL BE KEPT ON SITE AT ALL TIMES AND MUST BE PRESENTED TO ANY JURISDICTIONAL AGENCIES UPON REQUEST. FAILURE TO COMPLY WITH THE NPDES PERMIT REQUIREMENTS IS A VIOLATION OF THE CLEAN WATER ACT AND THE CODE OF IOWA.
3. A "NOTICE OF DISCONTINUATION" MUST BE FILED WITH THE IDNR UPON FINAL STABILIZATION OF THE DISTURBED SITE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES. ALL PLANS, INSPECTION REPORTS, AND OTHER DOCUMENTS MUST BE RETAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION. THE CONTRACTOR SHALL RETAIN A RECORD COPY AND PROVIDE THE ORIGINAL DOCUMENTS TO THE OWNER UPON PROJECT ACCEPTANCE AND/OR SUBMITTAL OF THE NOTICE OF DISCONTINUATION.
C. POLLUTION PREVENTION PLAN
1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS A SEPARATE DOCUMENT IN ADDITION TO THESE PLAN DRAWINGS. THE CONTRACTOR SHOULD REFER TO THE SWPPP FOR ADDITIONAL REQUIREMENTS AND MODIFICATIONS TO THE POLLUTION PREVENTION PLAN MADE DURING CONSTRUCTION.
2. THE SWPPP ILLUSTRATES GENERAL MEASURES AND BEST MANAGEMENT PRACTICES (BMP) FOR COMPLIANCE WITH THE PROJECT'S NPDES PERMIT COVERAGE. ALL BMP'S AND EROSION CONTROL MEASURES REQUIRED AS A RESULT OF CONSTRUCTION ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, NOTE AND IMPLEMENT. ADDITIONAL BMP'S FROM THOSE SHOWN ON THE PLAN MAY BE REQUIRED.
3. THE SWPPP AND SITE MAP SHOULD BE EXPEDITIOUSLY REVISED TO REFLECT CONSTRUCTION PROGRESS AND CHANGES AT THE PROJECT SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL PERMIT AND SWPPP, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING BMP'S UNLESS INFEASIBLE OR NOT APPLICABLE:
a. UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN DISCHARGING FROM BASINS, PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS, DIRECT STORM WATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORM WATER INFILTRATION, AND MINIMIZE SOIL COMPACTION.
b. INSTALL PERIMETER AND FINAL SEDIMENT CONTROL MEASURES SUCH AS SILT BARRIERS, DITCH CHECKS, DIVERSION BERMS, OR SEDIMENTATION BASINS DOWNSTREAM OF SOIL DISTURBING ACTIVITIES PRIOR TO SITE CLEARING AND GRADING OPERATIONS.
c. PRESERVE EXISTING VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION AND LIMIT TO A MINIMUM THE TOTAL AREA DISTURBED BY CONSTRUCTION OPERATIONS AT ANY TIME.
d. MAINTAIN ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IN WORKING ORDER, INCLUDING CLEANING, REPAIRING, REPLACEMENT, AND SEDIMENT REMOVAL THROUGHOUT THE PERMIT PERIOD. CLEAN OR REPLACE SILT CONTROL DEVICES WHEN THE MEASURES HAVE LOST 50% OF THEIR ORIGINAL CAPACITY.
e. INSPECT THE PROJECT AREA AND CONTROL DEVICES (BY QUALIFIED PERSONNEL ASSIGNED BY THE CONTRACTOR) EVERY SEVEN CALENDAR DAYS. RECORD THE FINDINGS OF THESE INSPECTIONS AND ANY RESULTING ACTIONS IN THE SWPPP WITH A COPY SUBMITTED WEEKLY TO THE OWNER OR ENGINEER DURING CONSTRUCTION. REVISE THE SWPPP AND IMPLEMENT ANY RECOMMENDED MEASURES WITHIN 7 DAYS.
f. PREVENT ACCUMULATION OF EARTH AND DEBRIS FROM CONSTRUCTION ACTIVITIES ON ADJOINING PUBLIC OR PRIVATE PROPERTIES, INCLUDING STREETS, DRIVEWAYS, SIDEWALKS, DRAINAGEWAYS, OR UNDERGROUND SEWERS. REMOVE ANY ACCUMULATION OF EARTH OR DEBRIS IMMEDIATELY AND TAKE REMEDIAL ACTIONS FOR FUTURE PREVENTION.
g. INSTALL NECESSARY CONTROL MEASURES SUCH AS SILT BARRIERS, EROSION CONTROL MATS, MULCH, DITCH CHECKS OR RIPRAP AS SOON AS AREAS REACH THEIR FINAL GRADES AND AS CONSTRUCTION OPERATIONS PROGRESS TO ENSURE CONTINUOUS RUNOFF CONTROL. PROVIDE INLET AND OUTLET CONTROL MEASURES AS SOON AS STORM SEWERS ARE INSTALLED.
h. RESPREAD A MINIMUM OF 8 INCHES OF TOPSOIL (INCLUDING TOPSOIL FOUND IN SOD) ON ALL DISTURBED AREAS, EXCEPT WHERE PAVEMENT, BUILDINGS OR OTHER IMPROVEMENTS ARE LOCATED.
i. STABILIZE UNDEVELOPED, DISTURBED AREAS WITH MULCH, TEMPORARY SEED MIX, PERMANENT SEED MIX, SOD, OR PAVEMENT IMMEDIATELY AS SOON AS POSSIBLE UPON COMPLETION OR DELAY OF GRADING OPERATIONS. INITIATE STABILIZATION MEASURES IMMEDIATELY AFTER CONSTRUCTION ACTIVITY IS FINALLY COMPLETED OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WHICH WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
j. COORDINATE LOCATIONS OF STAGING AREAS WITH THE OWNER AND RECORD IN THE SWPPP, UNLESS NOTED OTHERWISE. STAGING AREAS SHOULD CONTAIN THE FOLLOWING: JOB TRAILERS, FUELING / VEHICLE MAINTENANCE AREA, TEMPORARY SANITARY FACILITIES, MATERIALS STORAGE, AND CONCRETE WASHOUT FACILITY. CONTROL RUNOFF FROM STAGING AREAS WITH DIVERSION BERMS AND/OR SILT BARRIERS AND DIRECT TO A SEDIMENT BASIN OR OTHER CONTROL DEVICE WHERE POSSIBLE. CONCRETE WASHOUT MUST BE CONTAINED ONSITE.
k. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND SITE WASTE PRIOR TO FILING OF THE "NOTICE OF DISCONTINUATION".

Table with project information including AS PER CITY COMMENTS, REVISION, and Scale: 1"=1'.

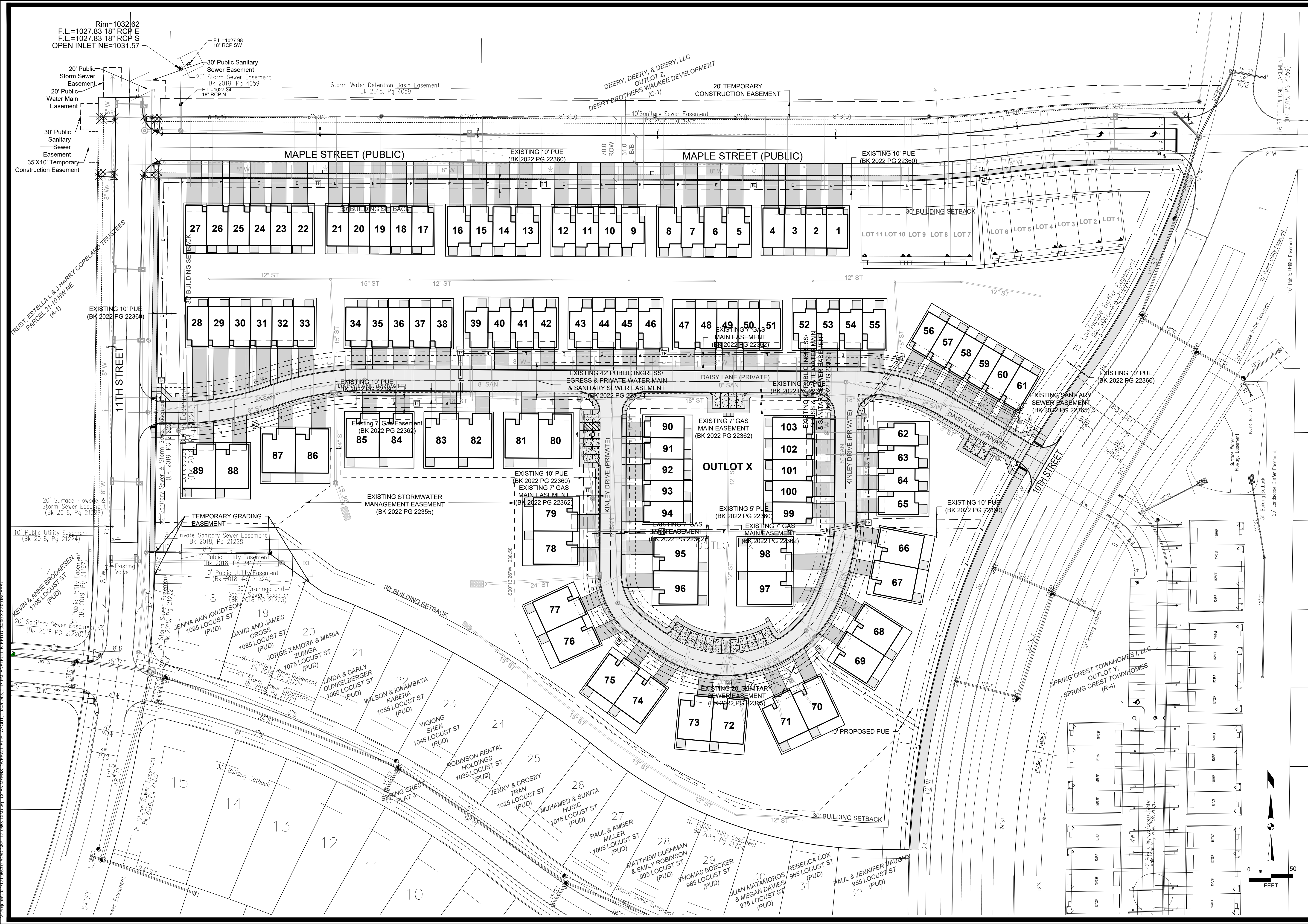
WAUKEE, IA
PROJECT INFORMATION

2727 S.W. SNYDER BLVD
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515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES, INC.



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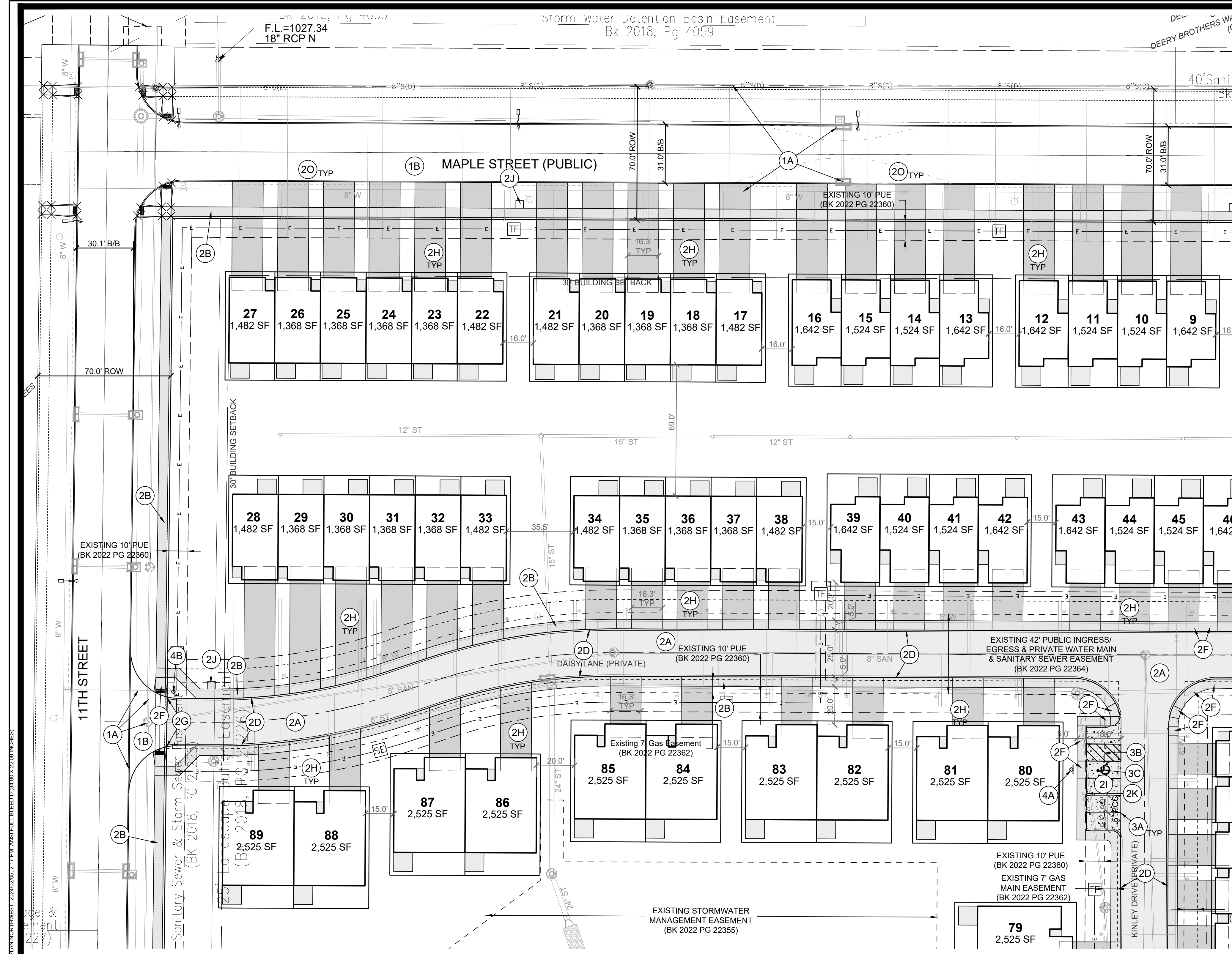
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Project No: 123.1406.01
 Checked By: KMM
 Engineer: KMM
 Technician: LJM
 Date: 11-23-2021
 Scale: 1"=50'
 T-R-S: TTN-RRW-SS

WAUKEE, IA
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 515-964-2020 | www.snyder-associates.com

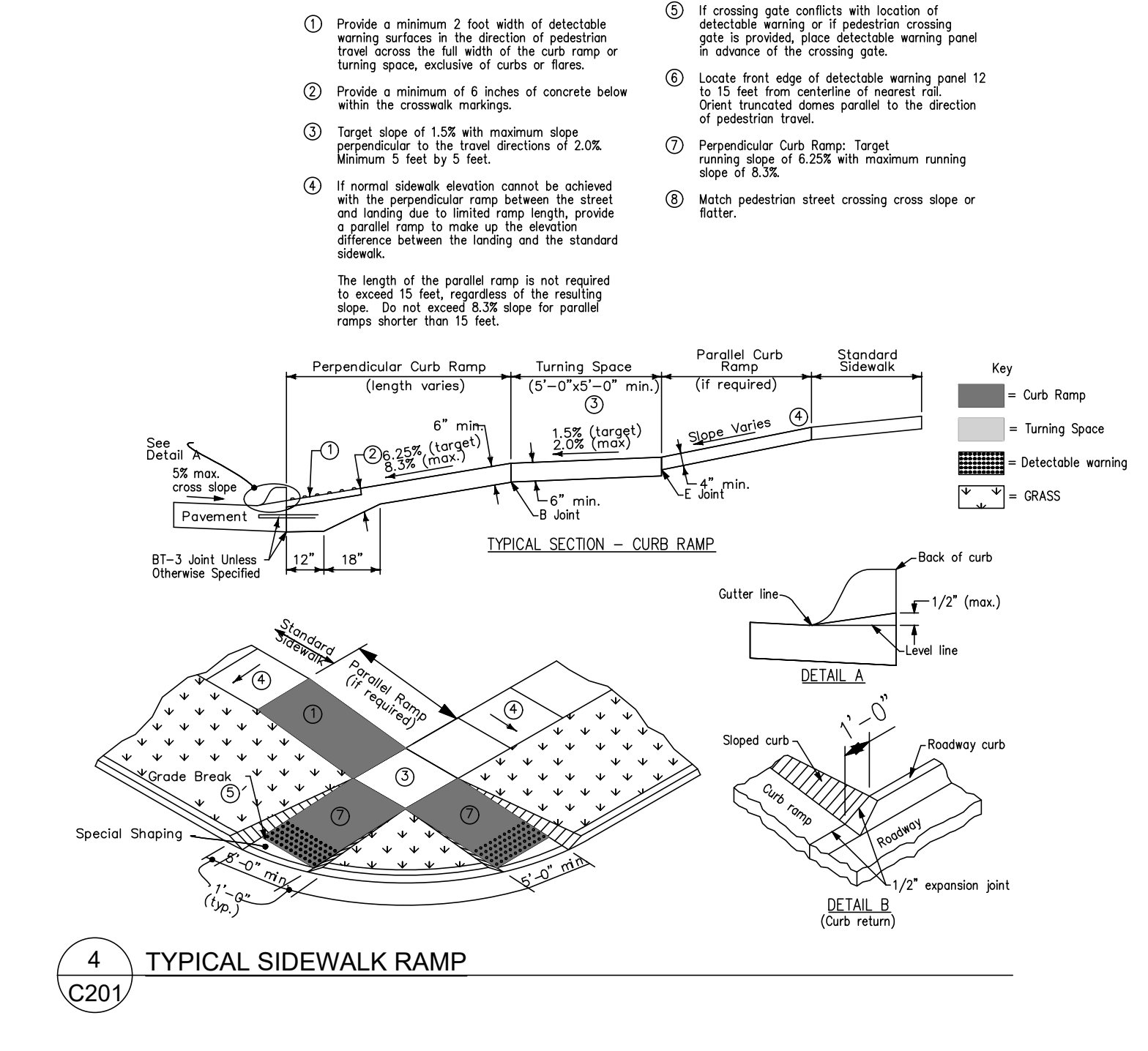
SNYDER & ASSOCIATES

Project No: 123.1406.01
 Sheet C200



DIMENSION PLAN CONSTRUCTION NOTES

- PROTECT THE FOLLOWING SITE FEATURES:
 - EXISTING UTILITY. ADJUST AS NECESSARY TO ALLOW FOR CONSTRUCTION. VERIFY LOCATION, ELEVATION AND MINIMUM COVER REQUIREMENTS PRIOR TO CONSTRUCTION.
 - EXISTING PAVEMENT.
- PAVEMENTS, PROVIDE THE FOLLOWING:
 - 6" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 4" MINIMUM DEPTH PCC SIDEWALK ON 6" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 6" PCC STANDARD CURB.
 - 3" PCC ROLL CURB.
 - 6" DEPTH PCC TRAIL.
 - PEDESTRIAN RAMP WITH MAXIMUM SLOPE OF 8.33%. PROVIDE DETECTABLE WARNING PANELS WHERE SHOWN.
 - CONNECT TO EXISTING PCC PAVEMENT. DOWEL WITH #5 BARS EVERY 30". SAW CUT FULL DEPTH. MATCH EXISTING ELEVATIONS. COORDINATE WITH NW 10TH STREET CONTRACTOR TO ENSURE A CURB DROP IS LEFT FOR A SUDAS TYPE A CONNECTION.
 - 5" PCC DRIVEWAY
 - 5" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 8" PCC, 4'x4' CLUSTER MAIL BOX PAD. SEE DETAIL ON THIS SHEET.
 - INTEGRAL CURB AND 4" PCC SIDEWALK.
 - 8" DEPTH PCC ENTRANCE APPROACH ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - SUDAS TYPE A CONNECTION TO BE CONSTRUCTED AS PER STANDARD SPECIFICATIONS.
 - REMOVE AND DISPOSE EXISTING LANDING AREA. CONSTRUCT NEW 6" DEPTH PCC PEDESTRIAN LANDING AREA WITH 2% MINIMUM CROSS SLOPE. PROVIDE RADIUS DETECTABLE WARNING PANELS WHERE SHOWN.
 - GRIND CURB AS NECESSARY FOR DRIVEWAY INSTALLATION.
- PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
 - PAINTED PARKING STALL LINE, 4" WIDE, PAINTED YELLOW.
 - PAINTED 45° STRIPING AT 3' O.C.
 - PAINTED STATE OF IOWA APPROVED DISABLED SYMBOL. AS PER ADAAG REQUIREMENTS.
- SIGNAGE PROVIDE THE FOLLOWING:
 - BLUE SIGN WITH DISABLED SYMBOL READING "PARKING ONLY" AND "\$200 FINE FOR IMPROPER USE" AS PER ADAAG STANDARDS. SECURE SIGN TO 2" SQUARE STEEL CHANNEL POST WITH ENAMEL FINISH IN 12" DIAMETER CONCRETE FOOTING. ALSO ADD SIGN READING "VAN ACCESSIBLE".
 - STOP SIGN. CONTRACTOR TO INSTALL.



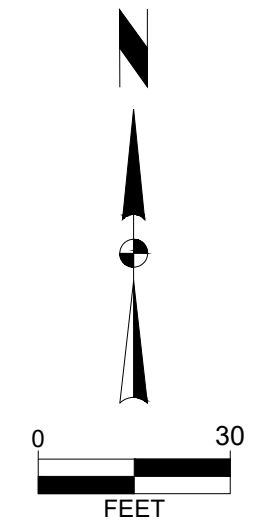
1 3" ROLL CURB
C201 NOT TO SCALE

2 CLUSTER MAILBOX PAD DETAIL
C201 NOT TO SCALE

3 PCC STANDARD CURB
C201 NOT TO SCALE

5 INTEGRAL SIDEWALK & CURB DETAIL
C201 NOT TO SCALE

- NOTES:
- Cluster Mailbox to be located on the no parking/street light side of street.
 - Do not locate at intersection.
 - Locate near shared property line per approved plan.



SPRING CREST TOWNHOMES PLAT 3

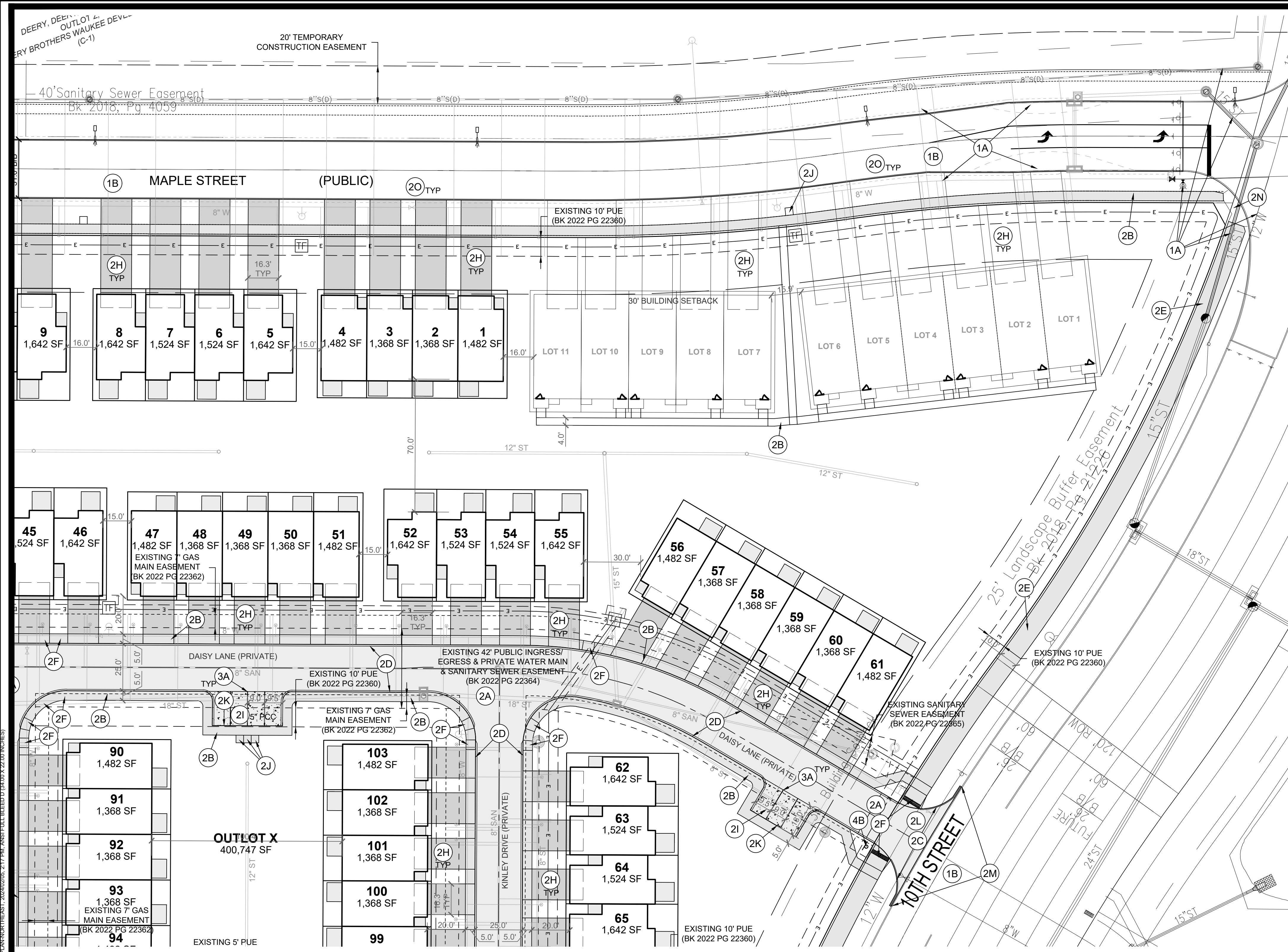
DIMENSION PLAN-NORTHWEST

SNYDER & ASSOCIATES, INC.



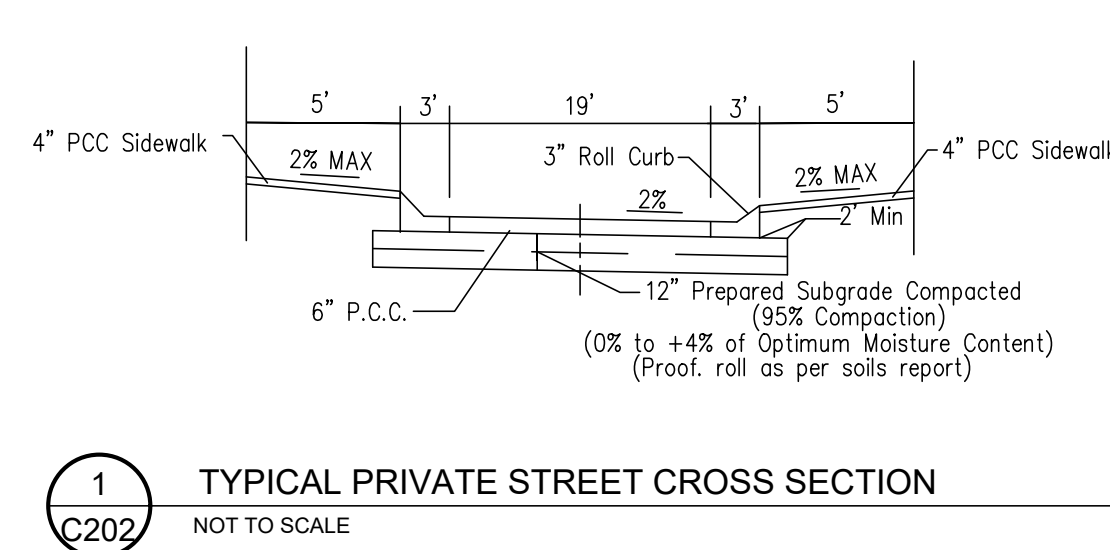
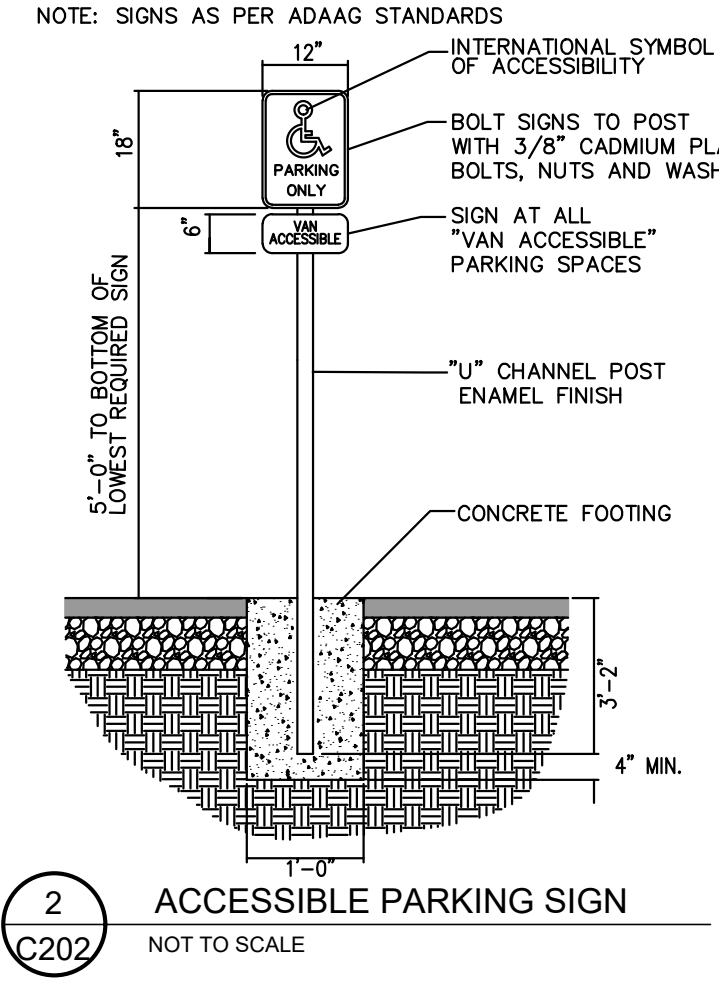
AS PER CITY COMMENTS	02-05-24	LJM	BY
AS PER CITY COMMENTS	01-26-24	LJM	DATE
AS PER CITY COMMENTS	01-15-24	LJM	REVISION
AS PER CITY COMMENTS	12-28-23	LJM	MARK
Checked By: KMM	Scale: 1"=30'	Engineer: KMM	By
Date: 11-23-2021	T-R-R: TTN-RRW-SS	Technician: LJM	Sheet C201
Project No: 123.1406.01			

WAUKEE, IA
2727 S.W. SNYDER BLVD
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

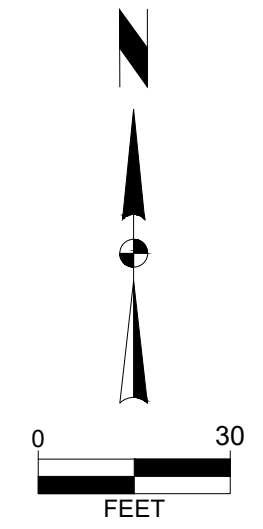


DIMENSION PLAN CONSTRUCTION NOTES

- PROTECT THE FOLLOWING SITE FEATURES:
 - EXISTING UTILITY. ADJUST AS NECESSARY TO ALLOW FOR CONSTRUCTION. VERIFY LOCATION, ELEVATION AND MINIMUM COVER REQUIREMENTS PRIOR TO CONSTRUCTION.
 - EXISTING PAVEMENT.
- PAVEMENTS, PROVIDE THE FOLLOWING:
 - 6" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 4" MINIMUM DEPTH PCC SIDEWALK ON 6" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 6" PCC STANDARD CURB.
 - 3" PCC ROLL CURB.
 - 6" DEPTH PCC TRAIL.
 - PEDESTRIAN RAMP WITH MAXIMUM SLOPE OF 8.33%. PROVIDE DETECTABLE WARNING PANELS WHERE SHOWN.
 - CONNECT TO EXISTING PCC PAVEMENT. DOWEL WITH #5 BARS EVERY 30". SAW CUT FULL DEPTH. MATCH EXISTING ELEVATIONS. COORDINATE WITH NW 10TH STREET CONTRACTOR TO ENSURE A CURB DROP IS LEFT FOR A SUDAS TYPE A CONNECTION.
 - 5" PCC DRIVEWAY.
 - 5" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - 8" PCC, 4'x4' CLUSTER MAIL BOX PAD. SEE DETAIL ON THIS SHEET.
 - INTEGRAL CURB AND 4" PCC SIDEWALK.
 - 8" DEPTH PCC ENTRANCE APPROACH ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - SUDAS TYPE A CONNECTION TO BE CONSTRUCTED AS PER STANDARD SPECIFICATIONS.
 - REMOVE AND DISPOSE EXISTING LANDING AREA. CONSTRUCT NEW 6" DEPTH PCC PEDESTRIAN LANDING AREA WITH 2% MINIMUM CROSS SLOPE. PROVIDE RADIUS DETECTABLE WARNING PANELS WHERE SHOWN.
 - GRIND CURB AS NECESSARY FOR DRIVEWAY INSTALLATION.
- PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
 - PAINTED PARKING STALL LINE, 4" WIDE, PAINTED YELLOW.
 - PAINTED 45° STRIPING AT 3' O.C.
 - PAINTED STATE OF IOWA APPROVED DISABLED SYMBOL. AS PER ADAAG REQUIREMENTS.
- SIGNAGE PROVIDE THE FOLLOWING:
 - BLUE SIGN WITH DISABLED SYMBOL READING "PARKING ONLY" AND "\$200 FINE FOR IMPROPER USE" AS PER ADAAG STANDARDS. SECURE SIGN TO 2" SQUARE STEEL CHANNEL POST WITH ENAMEL FINISH IN A 12" DIAMETER CONCRETE FOOTING. ALSO ADD SIGN READING "VAN ACCESSIBLE".
 - STOP SIGN. CONTRACTOR TO INSTALL.



- NOTES
- SUBGRADE SHALL CONSIST OF A FIRM UNWEAVING CLAY (C OR CH) OR CLASS "A" ROADSTONE BASE.
 - CONCRETE WILL HAVE THE MIX DESIGN AS SHOWN FOR STREET PAVEMENT IN THE CONSTRUCTION. PLACE TOPSOIL OVER ALL AREAS DISTURBED.
 - FINISH SHALL CONFORM TO STANDARD SPECIFICATIONS FOR SIDEWALKS AND PROVIDE FINAL BROWN FINISH.
 - CURING AS SPECIFIED FOR CONCRETE PAVEMENT IN THE STANDARD SPECIFICATIONS.
 - REBAR SHALL BE NON-EPOXY COATED STEEL AS PER THE STANDARD SPECIFICATIONS.



AS PER CITY COMMENTS	02-05-24	LJM	BY	DATE	REVISION
AS PER CITY COMMENTS	01-26-24	LJM			
AS PER CITY COMMENTS	01-15-24	LJM			
AS PER CITY COMMENTS	12-28-23	LJM			

Engineer: KMM
Checked By: KMM
Scale: 1"=30'
T-R-S: TTN-RRW-SS
Date: 11-23-2021

Project No: 123.1406.01
Sheet C202

SPRING CREST TOWNHOMES PLAT 3

DIMENSION PLAN-NORTHEAST

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 123.1406.01
Sheet C202



DIMENSION PLAN CONSTRUCTION NOTES

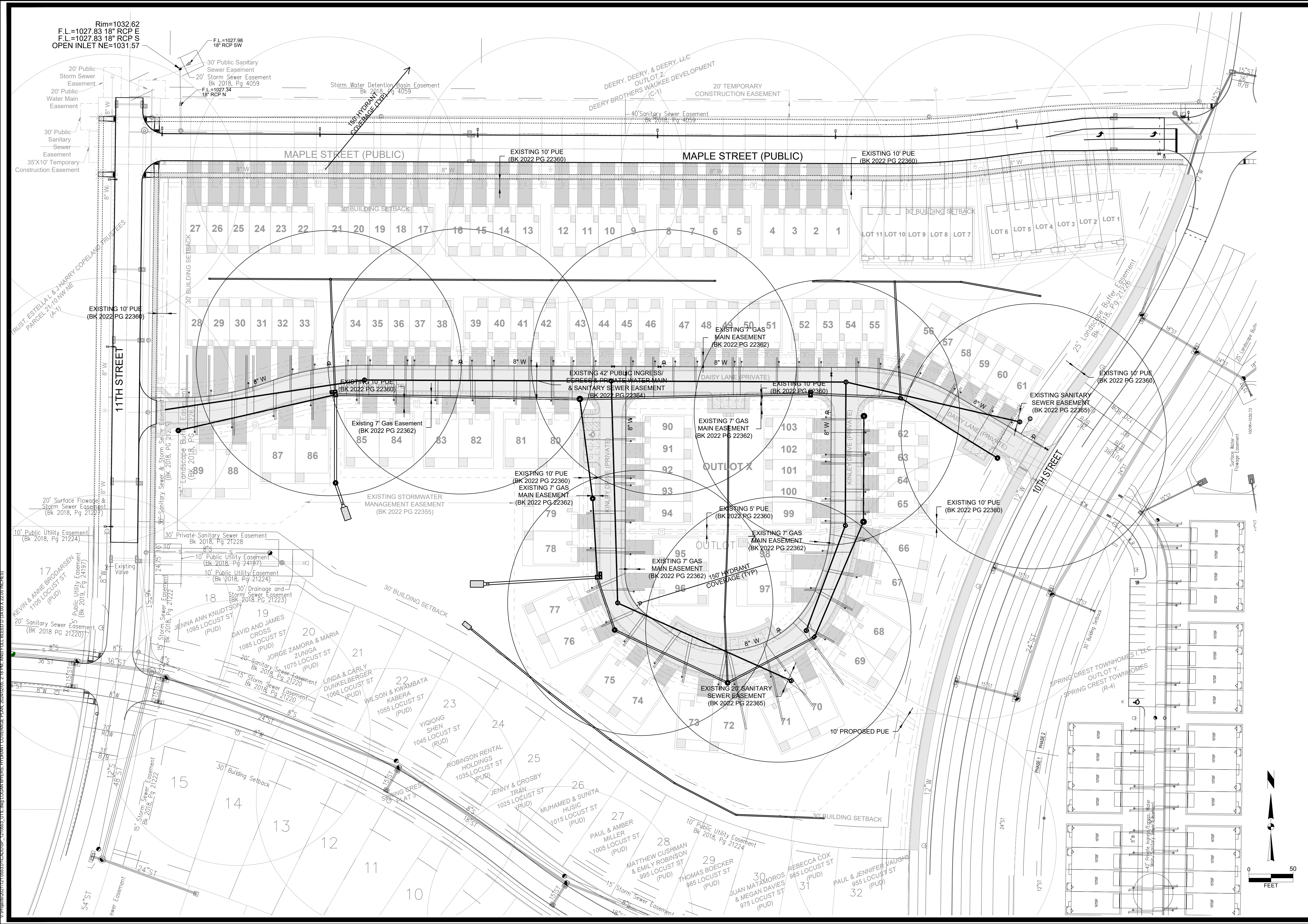
1. PROTECT THE FOLLOWING SITE FEATURES:
 - A. EXISTING UTILITY. ADJUST AS NECESSARY TO ALLOW FOR CONSTRUCTION. VERIFY LOCATION, ELEVATION AND MINIMUM COVER REQUIREMENTS PRIOR TO CONSTRUCTION.
 - B. EXISTING PAVEMENT.
2. PAVEMENTS, PROVIDE THE FOLLOWING:
 - A. 6" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - B. 4" MINIMUM DEPTH PCC SIDEWALK ON 6" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - C. 6" PCC STANDARD CURB.
 - D. 3" PCC ROLL CURB.
 - E. 6" DEPTH PCC TRAIL.
 - F. PEDESTRIAN RAMP WITH MAXIMUM SLOPE OF 8.33%. PROVIDE DETECTABLE WARNING PANELS WHERE SHOWN.
 - G. CONNECT TO EXISTING PCC PAVEMENT, DOWEL WITH #5 BARS EVERY 30". SAW CUT FULL DEPTH. MATCH EXISTING ELEVATIONS. COORDINATE WITH NW 10TH STREET CONTRACTOR TO ENSURE A CURB DROP IS LEFT FOR A SUDAS TYPE A CONNECTION.
 - H. 5" PCC DRIVEWAY
 - I. 5" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - J. 8" PCC, 4'X4' CLUSTER MAIL BOX PAD. SEE DETAIL ON THIS SHEET.
 - K. INTEGRAL CURB AND 4" PCC SIDEWALK.
 - L. 8" DEPTH PCC ENTRANCE APPROACH ON 12" DEPTH PREPARED SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - M. SUDAS TYPE A CONNECTION TO BE CONSTRUCTED AS PER STANDARD SPECIFICATIONS.
 - N. REMOVE AND DISPOSE EXISTING LANDING AREA. CONSTRUCT NEW 6" DEPTH PCC PEDESTRIAN LANDING AREA WITH 2% MINIMUM CROSS SLOPE. PROVIDE RADIUS DETECTABLE WARNING PANELS WHERE SHOWN.
 - O. GRIND CURB AS NECESSARY FOR DRIVEWAY INSTALLATION.
3. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
 - A. PAINTED PARKING STALL LINE, 4" WIDE, PAINTED YELLOW.
 - B. PAINTED 45° STRIPING AT 3' O.C.
 - C. PAINTED STATE OF IOWA APPROVED DISABLED SYMBOL. AS PER ADAAG REQUIREMENTS.
4. SIGNAGE PROVIDE THE FOLLOWING:
 - A. BLUE SIGN WITH DISABLED SYMBOL READING "PARKING ONLY" AND "\$200 FINE FOR IMPROPER USE" AS PER ADAAG STANDARDS. SECURE SIGN TO 2" SQUARE STEEL CHANNEL POST WITH ENAMEL FINISH IN A 12" DIAMETER CONCRETE FOOTING. ALSO ADD SIGN READING "VAN ACCESSIBLE".
 - B. STOP SIGN. CONTRACTOR TO INSTALL.

NO.	DATE	REVISION	BY
11	02-05-24	AS PER CITY COMMENTS	LJM
10	01-26-24	AS PER CITY COMMENTS	LJM
9	01-15-24	AS PER CITY COMMENTS	LJM
8	12-28-23	AS PER CITY COMMENTS	LJM

Project No: 123.1406.01
 Scale: 1" = 30'
 Checked By: KMM
 Engineer: KMM
 Date: 11-23-2021
 Technician: LJM
 T-R-S: TTN-RRW-SS

SPRING CREST TOWNHOMES PLAT 3
 DIMENSION PLAN-SOUTH
SNYDER & ASSOCIATES, INC.
 WAUKEE, IA
 2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

Project No: 123.1406.01
 Sheet C203



Rim=1032.62
 F.L.=1027.83 18" RCP E
 F.L.=1027.83 18" RCP S
 OPEN INLET NE=1031.57

F.L.=1027.98
 18" RCP SW

F.L.=1027.34
 18" RCP N

NO.	DATE	BY	REVISION
11	02-05-24	LJM	AS PER CITY COMMENTS
10	01-26-24	LJM	AS PER CITY COMMENTS
9	01-15-24	LJM	AS PER CITY COMMENTS
8	12-28-23	LJM	AS PER CITY COMMENTS

Engineer: KMM
 Checked By: KMM
 Technician: LJM
 Scale: 1"=50'
 Date: 11-23-2021
 T-R-S: TTN-RRW-SS
 Project No: 123.1406.01
 Sheet C300

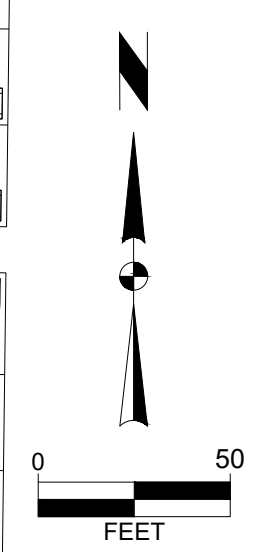
SPRING CREST TOWNHOMES PLAT 3

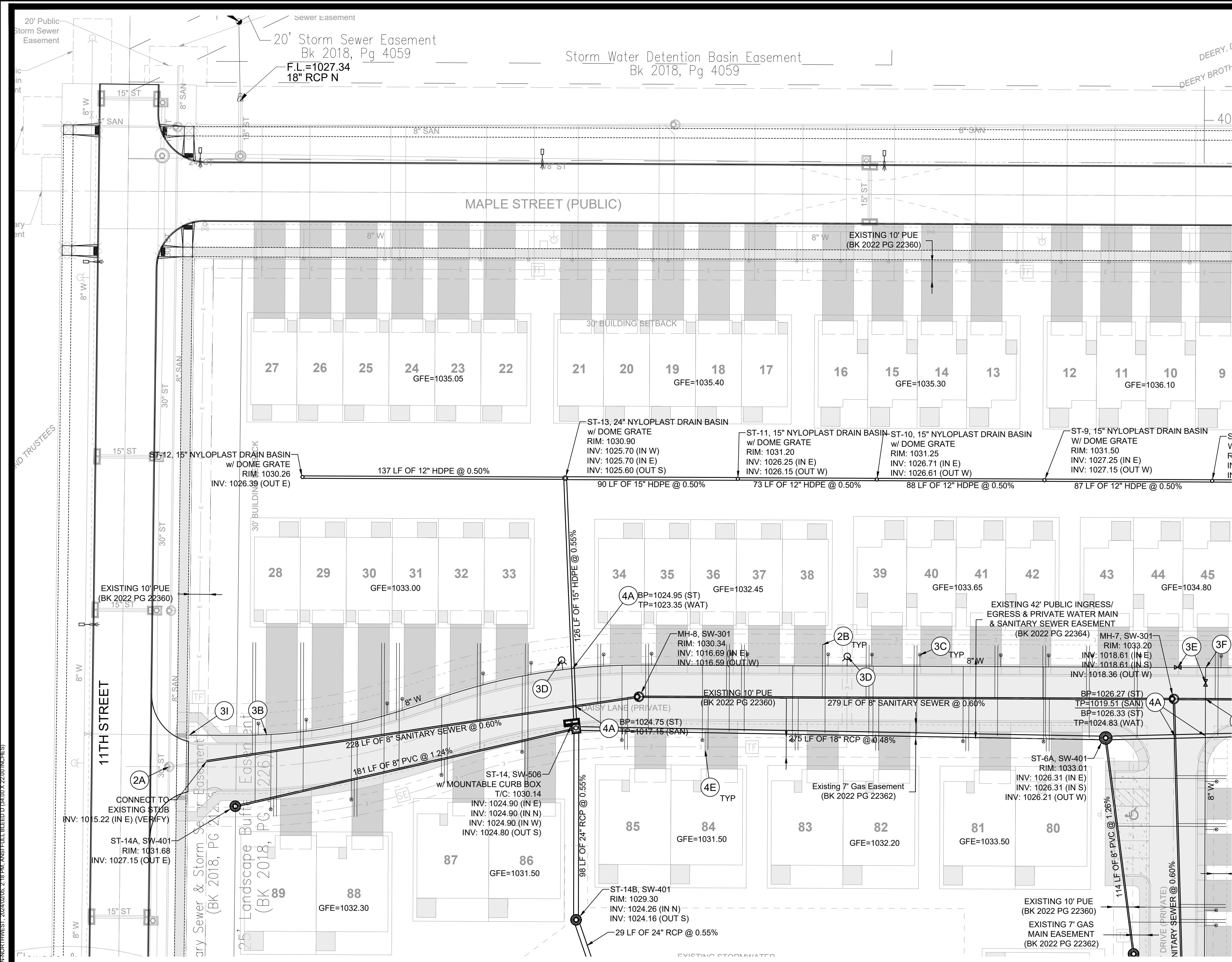
HYDRANT COVERAGE PLAN

SNYDER & ASSOCIATES, INC.



Project No: 123.1406.01
 Sheet C300



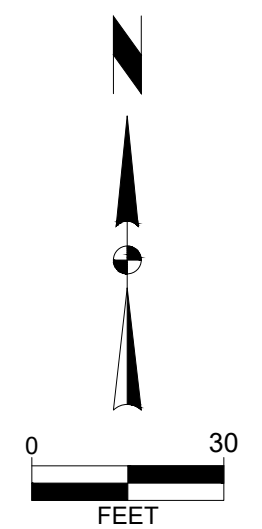
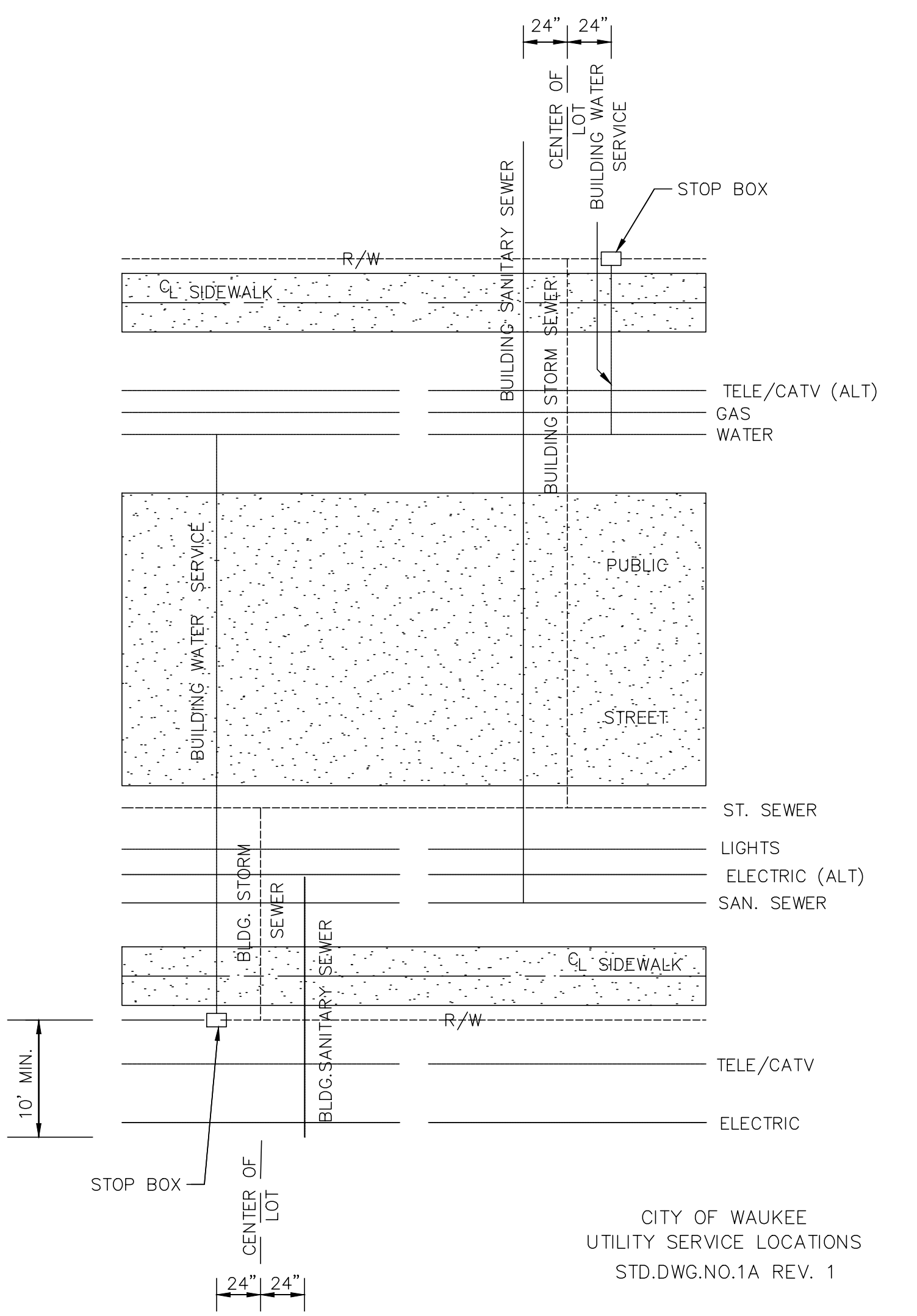


UTILITY PLAN CONSTRUCTION NOTES

- EXISTING FEATURES. PROTECT THE FOLLOWING:
 - EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIATED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.
- PRIVATE SANITARY SEWER SERVICE.
 - SANITARY SEWER TO BE CONSTRUCTED IN PLAT 2 PUBLIC IMPROVEMENTS. CONNECT TO EXISTING STUB.
 - 4" SANITARY SEWER SERVICE LINE (PVC SDR 23.50) AT MINIMUM 2.0%.
 - INSTALL SANITARY SEWER MAIN PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. MAIN SHALL BE PVC, TRUSS PIPE.
- PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER CITY OF WAUKEE STANDARDS.
 - CONNECTION TO EXISTING 12" WATER MAIN WITH TAPPING VALVE AND SLEEVE. VERIFY LOCATION AND ELEVATION.
 - 8" WATER LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
 - 1" WATER SERVICE WITH CURB STOP. INSTALL WATER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. SERVICE SHALL BE TYPE "K" SEAMLESS, SOFT ANNEALED COPPER WATER TUBE.
 - HYDRANT ASSEMBLY WITH 5-INCH STORZ FITTINGS.
 - 8" VALVE.
 - 8" TEE.
 - 8" x 8" CROSS.
 - IRRIGATION METER PIT. METER PIT SHALL BE LOCATED WITHIN A MANHOLE.
 - REMOVE AND RELOCATE TEMPORARY HYDRANT. CONNECT TO EXISTING WATER MAIN.
- PROVIDE PRIVATE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS AS PER CITY OF WAUKEE STANDARDS.
 - CRITICAL CROSSING. CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION. PROVIDE GASKETED STORM SEWER WITHIN 10' OF WATER MAIN.
 - ALL STORM SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE FLARED END SECTION.
 - ALL FOOTINGS FOR STORM SEWER STRUCTURES SHALL BE A MINIMUM 42 INCHES BELOW FINISHED GRADE. CONCRETE FILLET INSIDE INTAKES AS NECESSARY TO FLOW LINES.
 - ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
 - 4" STORM SEWER SERVICE LINE. INSTALL STORM SEWER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METERS, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.

GENERAL CONSTRUCTION NOTES

- NOTIFY THE CITY OF WAUKEE AT LEAST 48 HRS PRIOR TO CONNECTING TO ANY PUBLIC UTILITY.
- ALL UTILITIES SHALL BE TESTED TO THE CITY OF WAUKEE STANDARD SPECIFICATION FOR PUBLIC IMPROVEMENTS AND ANY TESTING OR TIE-INS SHALL BE WITNESSED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- ALL SANITARY SEWER AND STORM SEWER SHALL BE CLEANED AND TELEVIEWED PRIOR TO PAVING. THE CITY OF WAUKEE SHALL WITNESS ALL CLEANING AND TELEVIEWING. COPIES OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
- ALL SANITARY MANHOLES TO BE VACUUM TESTED.
- ALL WATERMAIN SHALL BE PRESSURE AND BACTERIA TESTED AND DECHLORINATED.
- ALL UTILITIES ARE PRIVATE OTHER THAN UTILITIES THAT ARE LABELED "PUBLIC".



CITY OF WAUKEE UTILITY SERVICE LOCATIONS

NO.	DATE	BY	REVISION
11	02-05-24	LJM	AS PER CITY COMMENTS
10	01-26-24	LJM	AS PER CITY COMMENTS
9	01-15-24	LJM	AS PER CITY COMMENTS
8	12-28-23	LJM	AS PER CITY COMMENTS

Engineer: KMM
 Checked By: KMM
 Technician: LJM
 Scale: 1"=30'
 Date: 11-23-2021
 T-R-S: TTN-RRW-SS

WAUKEE, IA

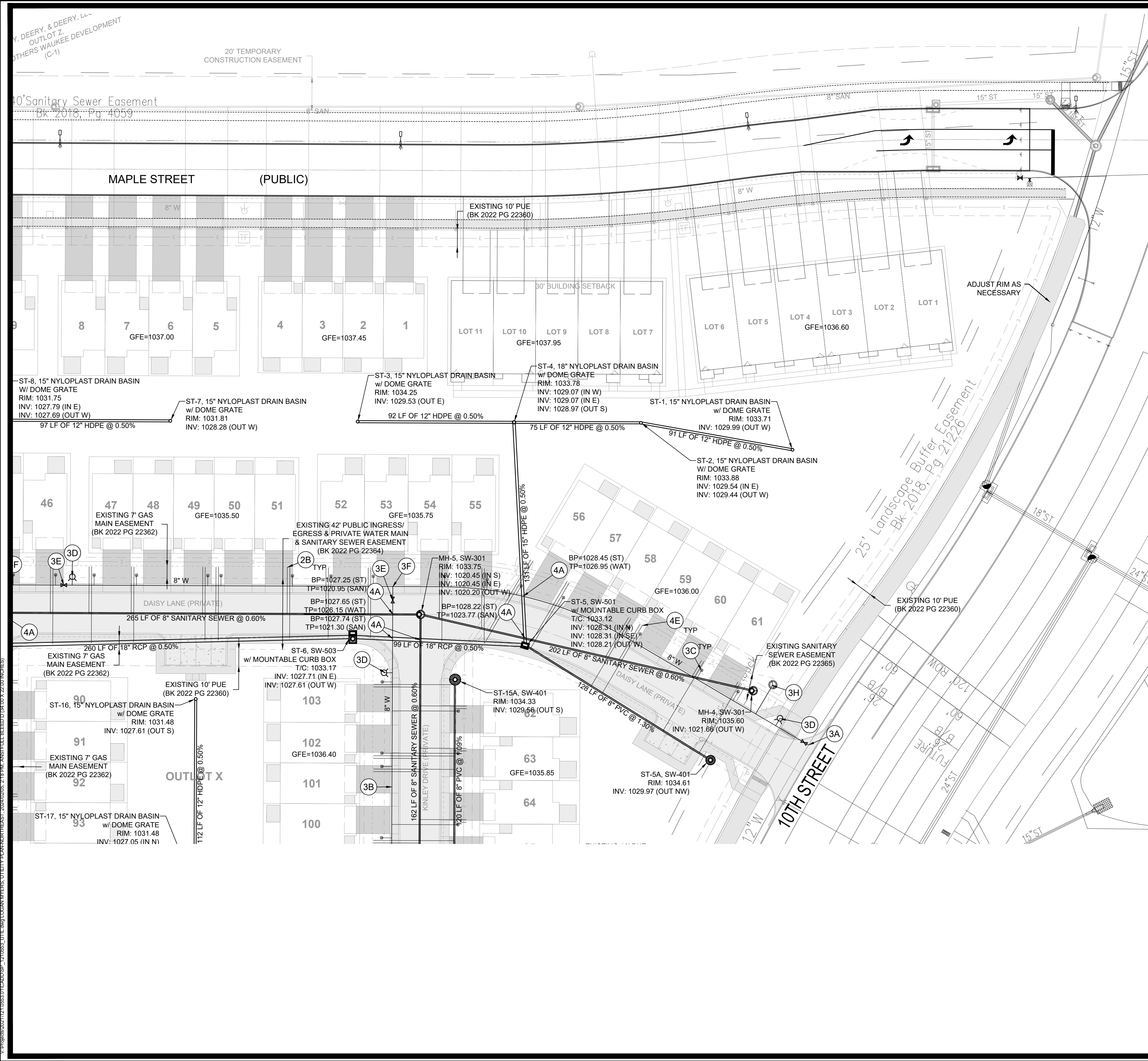
SPRING CREST TOWNHOMES PLAT 3

UTILITY PLAN-NORTHWEST

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

Project No: 123.1406.01
 Sheet C301



UTILITY PLAN CONSTRUCTION NOTES

- EXISTING FEATURES. PROTECT THE FOLLOWING:
 - EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIATED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.
- PRIVATE SANITARY SEWER SERVICE.
 - SANITARY SEWER TO BE CONSTRUCTED IN PLAT 2 PUBLIC IMPROVEMENTS. CONNECT TO EXISTING STUB.
 - 4" SANITARY SEWER SERVICE LINE (PVC SDR 23.50) AT MINIMUM 2.0%.
 - INSTALL SANITARY SEWER MAIN PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. MAIN SHALL BE PVC, TRUSS PIPE.
- PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER CITY OF WAUKEE STANDARDS.
 - CONNECTION TO EXISTING 12" WATER MAIN WITH TAPPING VALVE AND SLEEVE. VERIFY LOCATION AND ELEVATION.
 - 8" WATER LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
 - 1" WATER SERVICE WITH CURB STOP. INSTALL WATER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. SERVICE SHALL BE TYPE "K" SEAMLESS, SOFT ANNEALED COPPER WATER TUBE.
 - HYDRANT ASSEMBLY WITH 5-INCH STORZ FITTINGS.
 - 8" VALVE.
 - 8" TEE.
 - 8" x 8" CROSS.
 - IRRIGATION METER PIT. METER PIT SHALL BE LOCATED WITHIN A MANHOLE.
 - REMOVE AND RELOCATE TEMPORARY HYDRANT. CONNECT TO EXISTING WATER MAIN.
- PROVIDE PRIVATE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS AS PER CITY OF WAUKEE STANDARDS.
 - CRITICAL CROSSING. CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION. PROVIDE GASKETED STORM SEWER WITHIN 10' OF WATER MAIN.
 - ALL STORM SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE FLARED END SECTION.
 - ALL FOOTINGS FOR STORM SEWER STRUCTURES SHALL BE A MINIMUM 42 INCHES BELOW FINISHED GRADE. CONCRETE FILLET INSIDE INTAKES AS NECESSARY TO FLOW LINES.
 - ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
 - 4" STORM SEWER SERVICE LINE. INSTALL STORM SEWER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING METERS, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.

GENERAL CONSTRUCTION NOTES

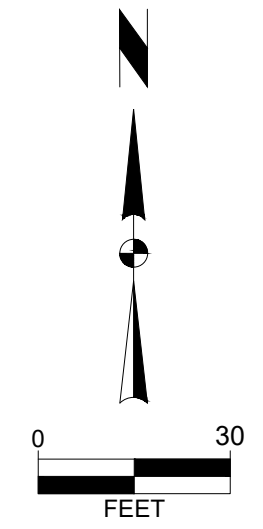
- NOTIFY THE CITY OF WAUKEE AT LEAST 48 HRS PRIOR TO CONNECTING TO ANY PUBLIC UTILITY.
- ALL UTILITIES SHALL BE TESTED TO THE CITY OF WAUKEE STANDARD SPECIFICATION FOR PUBLIC IMPROVEMENTS AND ANY TESTING OR TIE-INS SHALL BE WITNESSED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- ALL SANITARY SEWER AND STORM SEWER SHALL BE CLEANED AND TELEVISED PRIOR TO PAVING. THE CITY OF WAUKEE SHALL WITNESS ALL CLEANING AND TELEVISION. COPIES OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
- ALL SANITARY MANHOLES TO BE VACUUM TESTED.
- ALL WATERMAIN SHALL BE PRESSURE AND BACTERIA TESTED AND DECHLORINATED.
- ALL UTILITIES ARE PRIVATE OTHER THAN UTILITIES THAT ARE LABELED "PUBLIC".

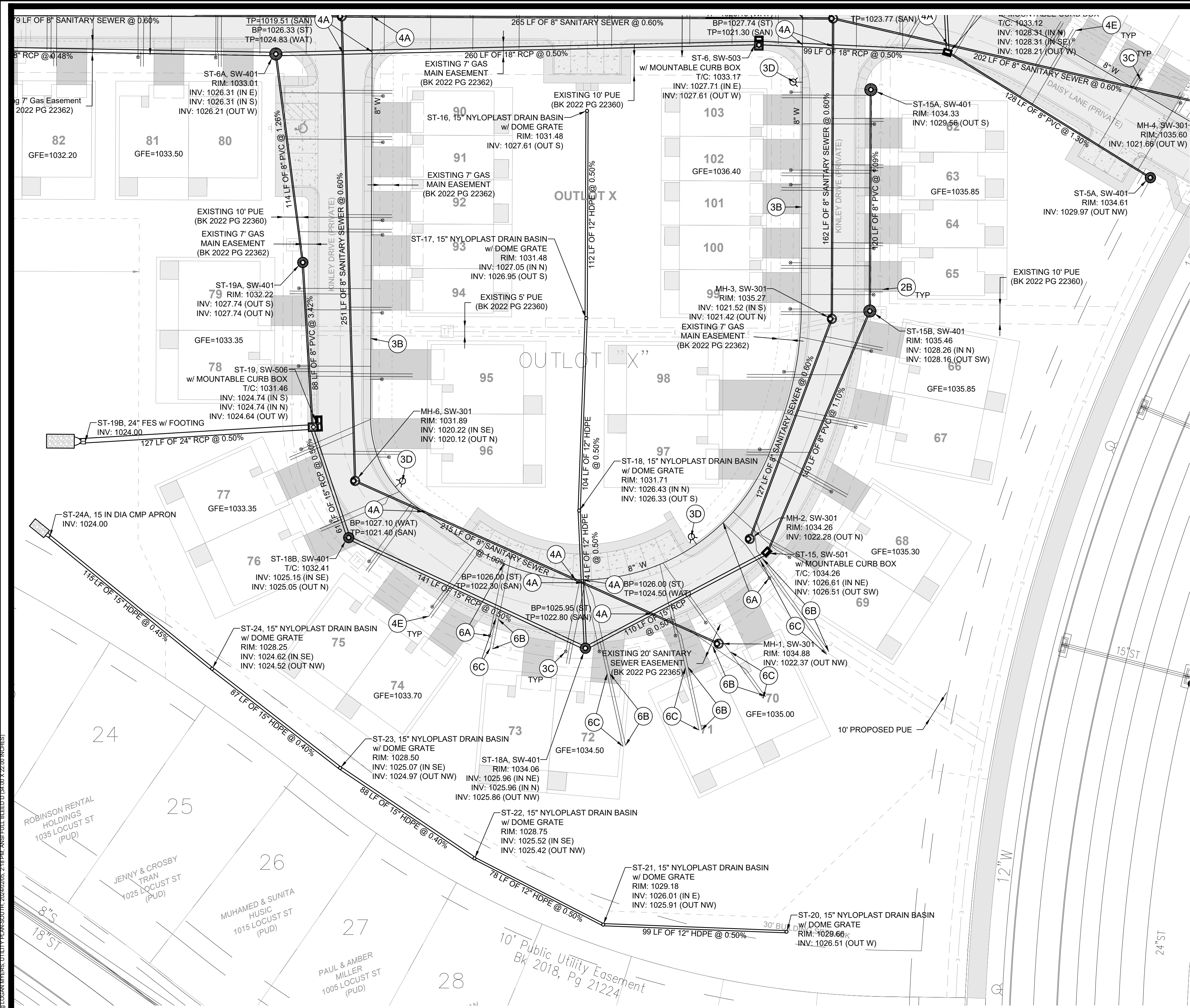
11	AS PER CITY COMMENTS	02-05-24	LJM
10	AS PER CITY COMMENTS	01-26-24	LJM
9	AS PER CITY COMMENTS	01-15-24	LJM
8	AS PER CITY COMMENTS	12-28-23	LJM
MARK	REVISION	DATE	BY
Engineer: KMM	Checked By: KMM	Scale: 1"=30'	
Technician: LJM	Date: 11-23-2021	T-R-S: TTN-RRW-SS	
Project No: 123.1406.01			Sheet C302

SPRING CREST TOWNHOMES PLAT 3
 UTILITY PLAN-NORTHEAST
SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

Project No: 123.1406.01
 Sheet C302





UTILITY PLAN CONSTRUCTION NOTES

- EXISTING FEATURES. PROTECT THE FOLLOWING:
 - EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIATED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.
- PRIVATE SANITARY SEWER SERVICE.
 - SANITARY SEWER TO BE CONSTRUCTED IN PLAT 2 PUBLIC IMPROVEMENTS. CONNECT TO EXISTING STUB.
 - 4" SANITARY SEWER SERVICE LINE (PVC SDR 23.50) AT MINIMUM 2.0%.
 - INSTALL SANITARY SEWER MAIN PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. MAIN SHALL BE PVC, TRUSS PIPE.
- PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER CITY OF WAUKEE STANDARDS.
 - LOCATION TO EXISTING 12" WATER MAIN WITH TAPPING VALVE AND SLEEVE. VERIFY LOCATION AND ELEVATION.
 - 8" WATER LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
 - 1" WATER SERVICE WITH CURB STOP. INSTALL WATER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS. SERVICE SHALL BE TYPE "K" SEAMLESS, SOFT ANNEALED COPPER WATER TUBE.
 - HYDRANT ASSEMBLY WITH 5-INCH STORZ FITTINGS.
 - 8" VALVE.
 - 8" TEE.
 - 8" x 8" CROSS.
 - IRRIGATION METER PIT. METER PIT SHALL BE LOCATED WITHIN A MANHOLE.
 - REMOVE AND RELOCATE TEMPORARY HYDRANT. CONNECT TO EXISTING WATER MAIN.
- PROVIDE PRIVATE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS AS PER CITY OF WAUKEE STANDARDS.
 - CRITICAL CROSSING. CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION. PROVIDE GASKETED STORM SEWER WITHIN 10' OF WATER MAIN.
 - ALL STORM SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE FLARED END SECTION.
 - ALL FOOTINGS FOR STORM SEWER STRUCTURES SHALL BE A MINIMUM 42 INCHES BELOW FINISHED GRADE. CONCRETE FILLET INSIDE INTAKES AS NECESSARY TO FLOW LINES..
 - ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
 - 4" STORM SEWER SERVICE LINE. INSTALL STORM SEWER SERVICE AS PER CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METERS, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.
- DEMOLITION OF SERVICES. CONTRACTOR TO VERIFY LOCATION OF SANITARY, STORM SEWER AND WATER SERVICES AND PROVIDE THE FOLLOWING IMPROVEMENTS:
 - REMOVE AND CAP WATER SERVICE AT MAIN. VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION.
 - REMOVE AND CAP SANITARY SEWER SERVICE TO LIMITS SHOWN. VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION.
 - REMOVE AND CAP STORM SEWER SERVICE TO LIMITS SHOWN. VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION.

GENERAL CONSTRUCTION NOTES

- NOTIFY THE CITY OF WAUKEE AT LEAST 48 HRS PRIOR TO CONNECTING TO ANY PUBLIC UTILITY.
- ALL UTILITIES SHALL BE TESTED TO THE CITY OF WAUKEE STANDARD SPECIFICATION FOR PUBLIC IMPROVEMENTS AND ANY TESTING OR TIE-INS SHALL BE WITNESSED BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
- ALL SANITARY SEWER AND STORM SEWER SHALL BE CLEANED AND TELEVISED PRIOR TO PAVING. THE CITY OF WAUKEE SHALL WITNESS ALL CLEANING AND TELEVISION. COPIES OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.
- ALL SANITARY MANHOLES TO BE VACUUM TESTED.
- ALL WATERMAIN SHALL BE PRESSURE AND BACTERIA TESTED AND DECHLORINATED.
- ALL UTILITIES ARE PRIVATE OTHER THAN UTILITIES THAT ARE LABELED "PUBLIC".

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11	AS PER CITY COMMENTS	02-05-24	LJM
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9	AS PER CITY COMMENTS	01-15-24	LJM
8	AS PER CITY COMMENTS	12-28-23	LJM

Engineer: KMM
 Checked By: KMM
 Technician: LJM
 Scale: 1" = 30'
 Date: 11-23-2021
 T-R-S: TTN-RRW-JSS
 Project No: 123.1406.01
 Sheet C303

WAUKEE, IA

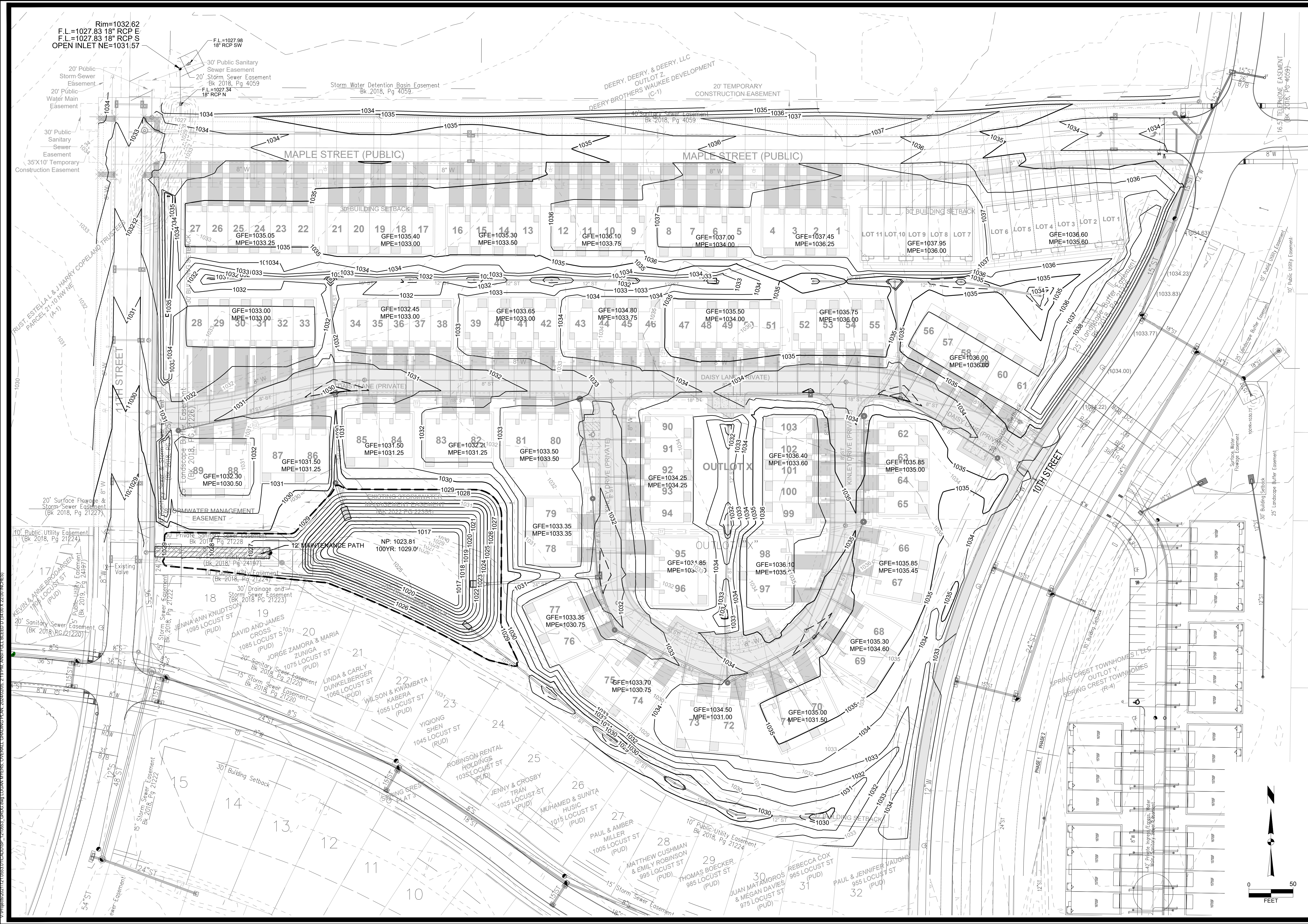
SPRING CREST TOWNHOMES PLAT 3

UTILITY PLAN-SOUTH

SNYDER & ASSOCIATES, INC.

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Project No: 123.1406.01
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Rim=1032.62
 F.L.=1027.83 18" RCP E
 F.L.=1027.83 18" RCP S
 OPEN INLET NE=1031.57

FL=1027.98
 18" RCP SW

20' Public Storm Sewer Easement
 20' Public Water Main Easement
 30' Public Sanitary Sewer Easement
 20' Storm Sewer Easement Bk 2018, Pg 4059
 F.L.=1027.34 18" RCP N

Storm Water Detention Basin Easement Bk 2018, Pg 4059

DEERY, DEERY, & DEERY, LLC
 OUTLOT Z
 DEERY BROTHERS WAUKEE DEVELOPMENT (C-1)

20' TEMPORARY CONSTRUCTION EASEMENT

16.5" TELEPHONE EASEMENT (Bk 2018, Pg 4659)

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WAUKEE, IA

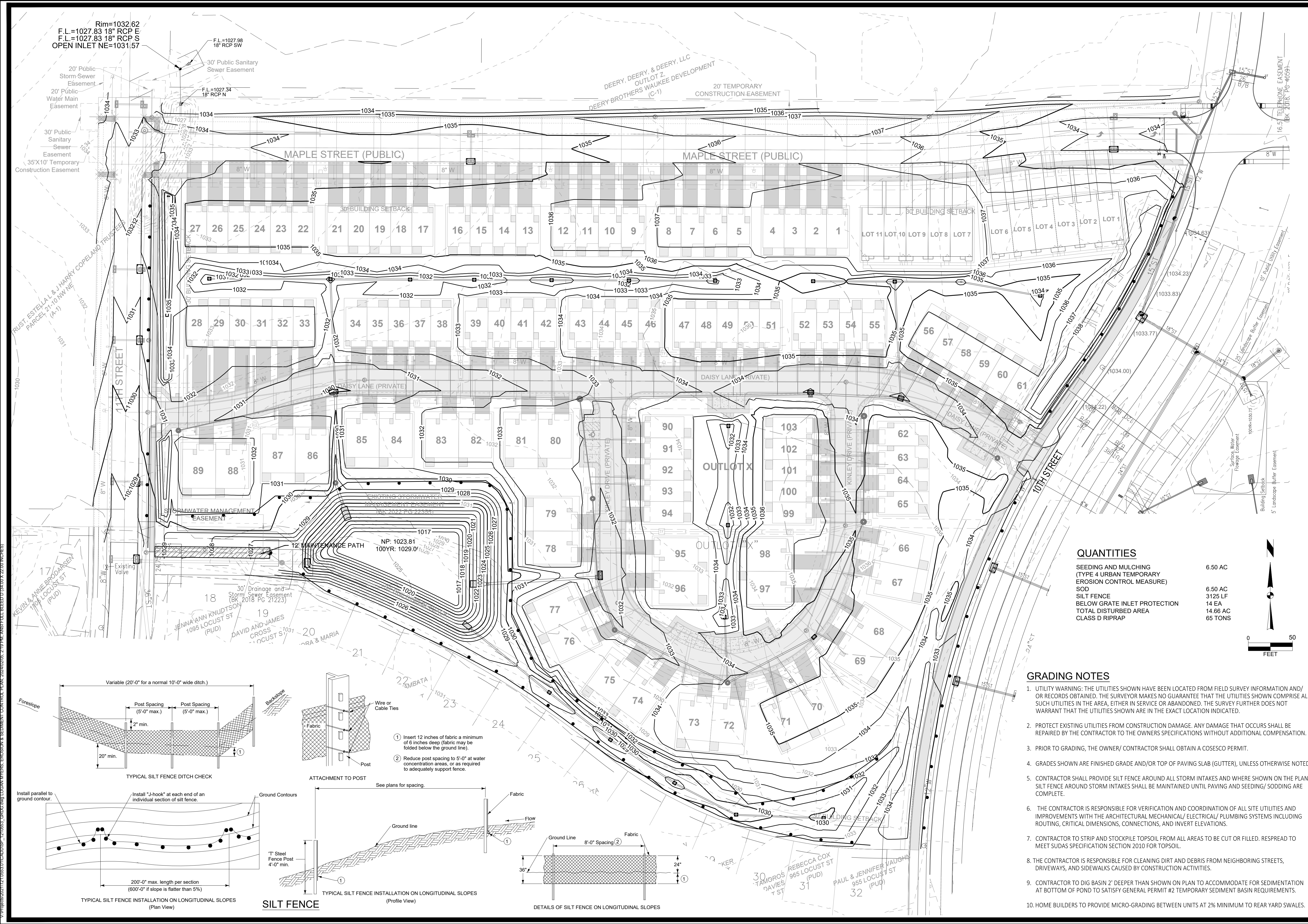
SNYDER & ASSOCIATES, INC.

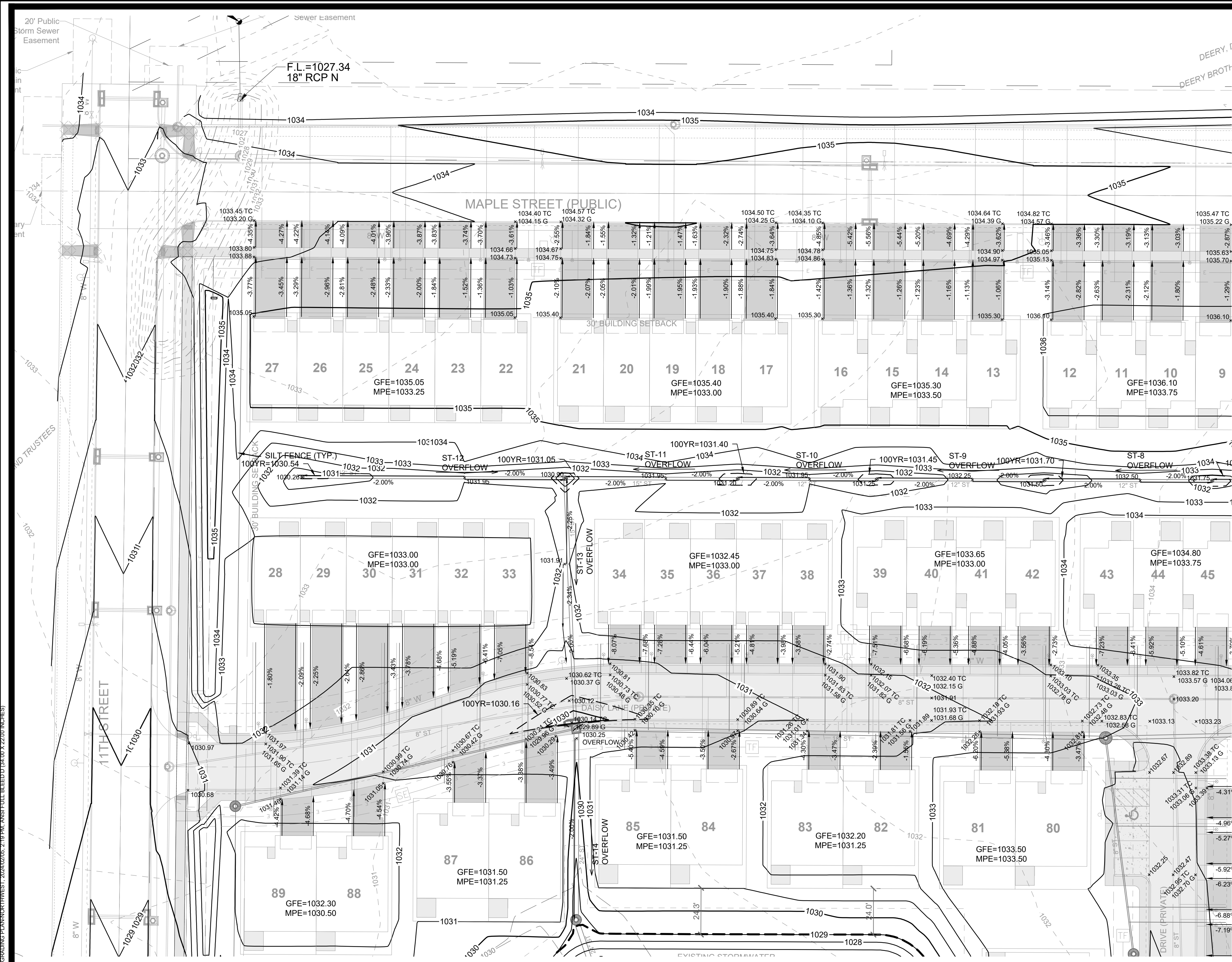
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Project No: 123.1406.01
 Sheet C400

SNYDER & ASSOCIATES

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 Sheet C400





GRADING NOTES

- UTILITY WARNING: THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- PROTECT EXISTING UTILITIES FROM CONSTRUCTION DAMAGE. ANY DAMAGE THAT OCCURS SHALL BE REPAIRED BY THE CONTRACTOR TO THE OWNERS SPECIFICATIONS WITHOUT ADDITIONAL COMPENSATION.
- PRIOR TO GRADING, THE OWNER/ CONTRACTOR SHALL OBTAIN A COSESCO PERMIT.
- GRADES SHOWN ARE FINISHED GRADE AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.
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- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND COORDINATION OF ALL SITE UTILITIES AND IMPROVEMENTS WITH THE ARCHITECTURAL MECHANICAL/ ELECTRICAL/ PLUMBING SYSTEMS INCLUDING ROUTING, CRITICAL DIMENSIONS, CONNECTIONS, AND INVERT ELEVATIONS.
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- CONTRACTOR TO DIG BASIN 2' DEEPER THAN SHOWN ON PLAN TO ACCOMMODATE FOR SEDIMENTATION AT BOTTOM OF POND TO SATISFY GENERAL PERMIT #2 TEMPORARY SEDIMENT BASIN REQUIREMENTS.
- HOME BUILDERS TO PROVIDE MICRO-GRADING BETWEEN UNITS AT 2% MINIMUM TO REAR YARD SWALES.

SPRING CREST TOWNHOMES PLAT 3

DETAILED GRADING-NORTHWEST

SNYDER & ASSOCIATES, INC.



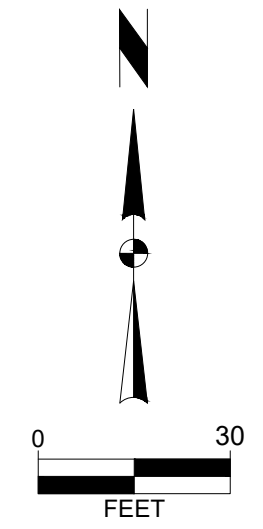
Project No: 123.1406.01
Sheet C402

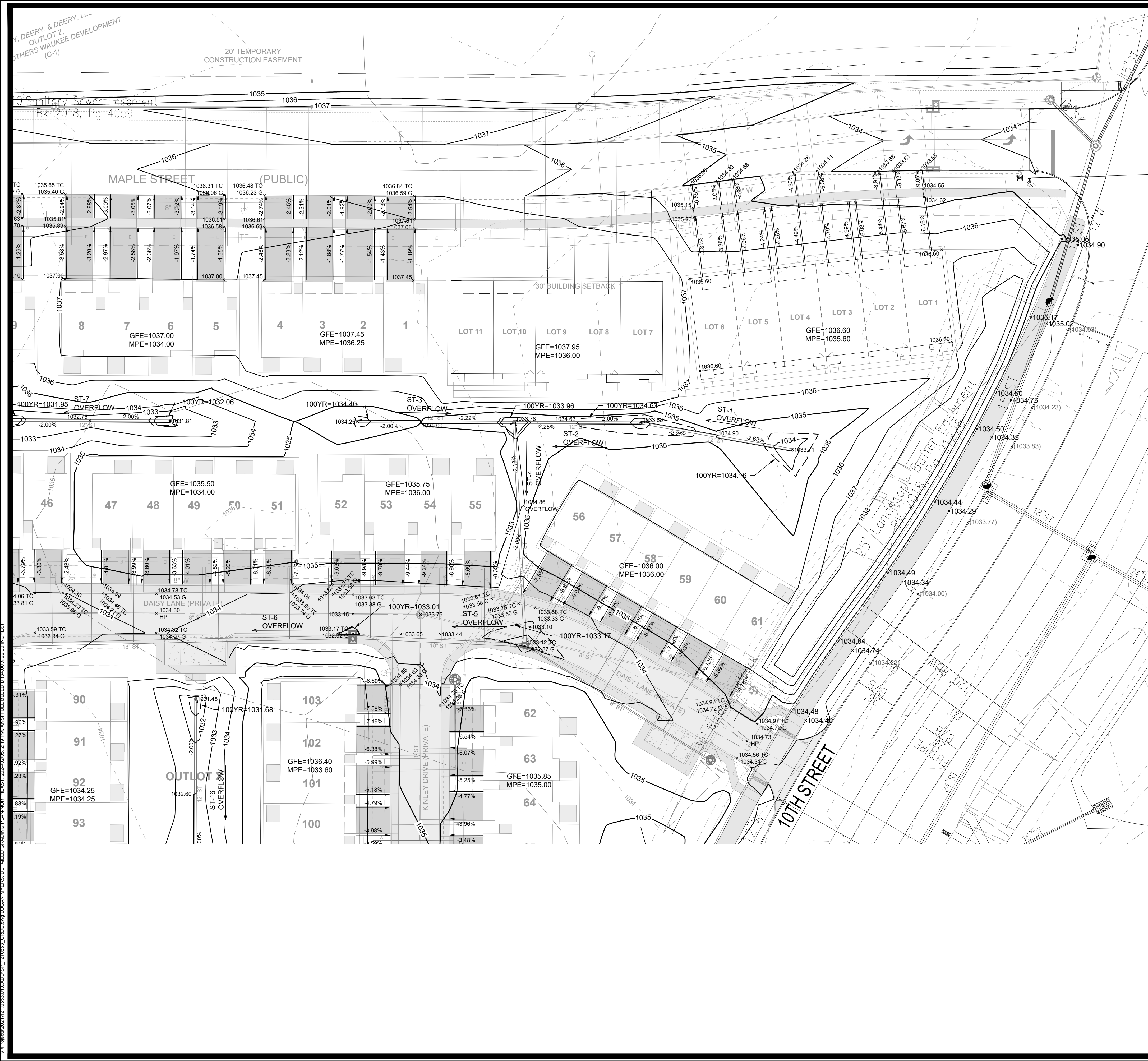
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Project No: 123.1406.01
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WAUKEE, IA
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	MARK	DATE	BY
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	Technician: LJM	Date: 11-23-2021	T-R-S: TTN-RRW-SS
			Project No: 123.1406.01
			Sheet C403

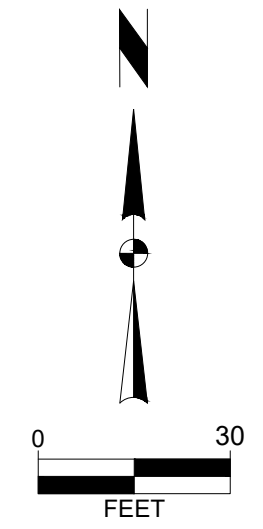
SPRING CREST TOWNHOMES PLAT 3

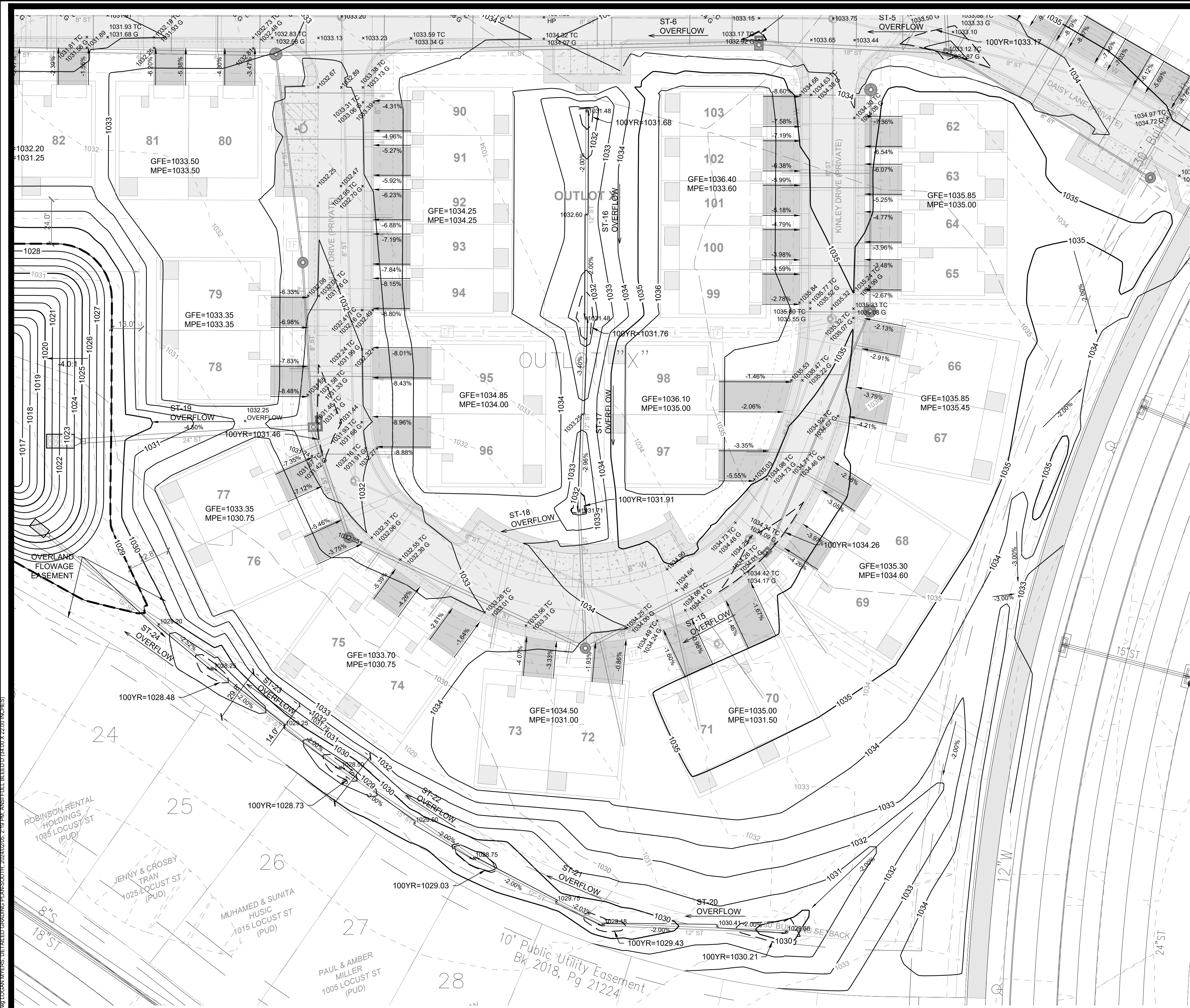
DETAILED GRADING-NORTHEAST

SNYDER & ASSOCIATES, INC.

WAUKEE, IA

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GRADING NOTES

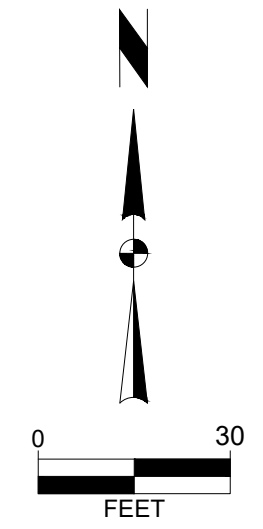
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 Sheet C404

SPRING CREST TOWNHOMES PLAT 3
DETAILED GRADING-SOUTH
SNYDER & ASSOCIATES, INC.
 WAUKEE, IA
 2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com

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Sheet C500

SPRING CREST TOWNHOMES PLAT 3
PLANTING PLAN
SNYDER & ASSOCIATES, INC.
 WAUKEE, IA
 2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-964-2020 | www.snyder-associates.com



OPEN SPACE PLANT SCHEDULE

QTY	KEY	BOTANICAL NAME	COMMON NAME	INSTALL SIZE	COMMENTS
CANOPY TREES					
14	AB	Acer rubrum 'Brandywine'	BRANDYWINE MAPLE	8' HT.	B&B
14	AS	Acer rubrum 'Sun Valley'	SUN VALLEY RED MAPLE	8' HT.	B&B
14	BN	Betula nigra	RIVER BIRCH	8' HT.	B&B
14	GB	Ginkgo biloba 'Autumn Gold'	AUTUMN GOLD GINKGO	8' HT.	B&B MALE ONLY
14	GT	Gleditsia triacanthos f. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	8' HT.	B&B
16	PA	Platanus acerifolia 'Morton Circle'	EXCLAMATION LONDON PLANETREE	8' HT.	B&B
13	QB	Quercus bicolor	SWAMP WHITE OAK	8' HT.	B&B
13	QP	Quercus macrocarpa 'JFS-KW3' PP22815	URBAN PINNACLE OAK	8' HT.	B&B
14	TA	Tilia americana 'Bailyard'	FRONTYARD LINDEN	8' HT.	B&B
15	UC	Ulmus carpinifolia x parvifolia 'Frontier'	FRONTIER ELM	8' HT.	B&B
EVERGREEN TREES					
7	AC	Abies concolor	WHITE FIR	6' HT.	B&B
8	PG	Picea glauca 'Densata'	BLACK HILLS WHITE SPRUCE	6' HT.	B&B
9	PS	Pinus strobus	EASTERN WHITE PINE	6' HT.	B&B
ORNAMENTAL TREES					
15	AM	Amelanchier x grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	6' HT.	B&B, MULTI-STEM
11	CR	Crataegus crus-galli var. inermis	THORNLESS COCKSPUR HAWTHORN	6' HT.	B&B
9	MJ	Malus 'Jarmir'	MARILEE CRABAPPLE	6' HT.	B&B
12	MP	Malus x 'Prairifire'	PRAIRIFIRE CRABAPPLE	6' HT.	B&B
11	PC	Pyrus calleryana	CHANTICLEER PEAR	6' HT.	B&B
9	SR	Syringa reticulata 'Ivory Silk'	IVORY SILK JAPANESE TREE LILAC	6' HT.	B&B

SOUTH BUFFER PLANT SCHEDULE

QTY	KEY	BOTANICAL NAME	COMMON NAME	INSTALL SIZE	COMMENTS
CANOPY TREES					
6	AS	Acer rubrum 'Sun Valley'	SUN VALLEY RED MAPLE	8' HT.	B&B, 1.5" CAL.
6	GT	Gleditsia triacanthos f. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	8' HT.	B&B, 1.5" CAL.
7	QB	Quercus bicolor	SWAMP WHITE OAK	8' HT.	B&B, 1.5" CAL.
EVERGREEN TREES					
14	AC	Abies concolor	WHITE FIR	6' HT.	B&B
12	PG	Picea glauca 'Densata'	BLACK HILLS WHITE SPRUCE	6' HT.	B&B
12	PS	Pinus strobus	EASTERN WHITE PINE	6' HT.	B&B
ORNAMENTAL TREES					
12	AM	Amelanchier x grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	6' HT.	B&B, MULTI-STEM
12	MP	Malus x 'Prairifire'	PRAIRIFIRE CRABAPPLE	6' HT.	B&B
14	SR	Syringa reticulata 'Ivory Silk'	IVORY SILK JAPANESE TREE LILAC	6' HT.	B&B

EAST BUFFER PLANT SCHEDULE

QTY	KEY	BOTANICAL NAME	COMMON NAME	INSTALL SIZE	COMMENTS
CANOPY TREES					
5	AS	Acer rubrum 'Sun Valley'	SUN VALLEY RED MAPLE	8' HT.	B&B
5	GT	Gleditsia triacanthos f. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	8' HT.	B&B
5	QB	Quercus bicolor	SWAMP WHITE OAK	8' HT.	B&B
EVERGREEN TREES					
8	AC	Abies concolor	WHITE FIR	6' HT.	B&B
10	PG	Picea glauca 'Densata'	BLACK HILLS WHITE SPRUCE	6' HT.	B&B
10	PS	Pinus strobus	EASTERN WHITE PINE	6' HT.	B&B
ORNAMENTAL TREES					
10	AM	Amelanchier x grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	6' HT.	B&B, MULTI-STEM
10	MP	Malus x 'Prairifire'	PRAIRIFIRE CRABAPPLE	6' HT.	B&B
8	SR	Syringa reticulata 'Ivory Silk'	IVORY SILK JAPANESE TREE LILAC	6' HT.	B&B

PLANTING PLAN CONSTRUCTION NOTES

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- NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF PROJECT ACCEPTANCE.
- PROVIDE 3-INCH DEPTH SHREDDED HARDWOOD MULCH ON ALL TREE PLANTINGS IN LAWN AREAS AND LAWN AREA PLANTING BEDS UNLESS OTHERWISE DIRECTED BY OWNER.
- ALL PLANTING BEDS TO RECEIVE 4 INCH DEPTH VERTICAL CUT EDGE, UNLESS OTHERWISE DIRECTED BY OWNER.
- SOD ALL AREAS DISTURBED BY CONSTRUCTION.
- ALL SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE DEVELOPMENT SERVICES DEPARTMENT.
- OVERSTORY TREES SHALL BE A MINIMUM OF 8 FEET IN HEIGHT, EVERGREEN TREES SHALL BE MINIMUM OF 6 FEET IN HEIGHT, AND ORNAMENTAL TREES SHALL BE A MINIMUM OF 6 FEET IN HEIGHT.
- NO RIVER ROCK WILL BE ALLOWED IN THE PUBLIC RIGHT-OF-WAY BETWEEN DRIVEWAYS; AREAS WILL NEED TO BE SODDED.

PLANTING PLAN REQUIREMENTS

(LANDSCAPE CALCULATIONS BASED ON CITY OF WAUKEE ZONING CODE REQUIREMENTS, PER CHAPTER 161).

MINIMUM OF 20% OPEN SPACE REQUIRED
 TOTAL AREA 600,337 SF
 MIN OPEN SPACE REQUIRED 120,068 SF (20.0%)
 OPEN SPACE PROVIDED 290,135 SF (48.3%)

PLANTING REQUIREMENTS:

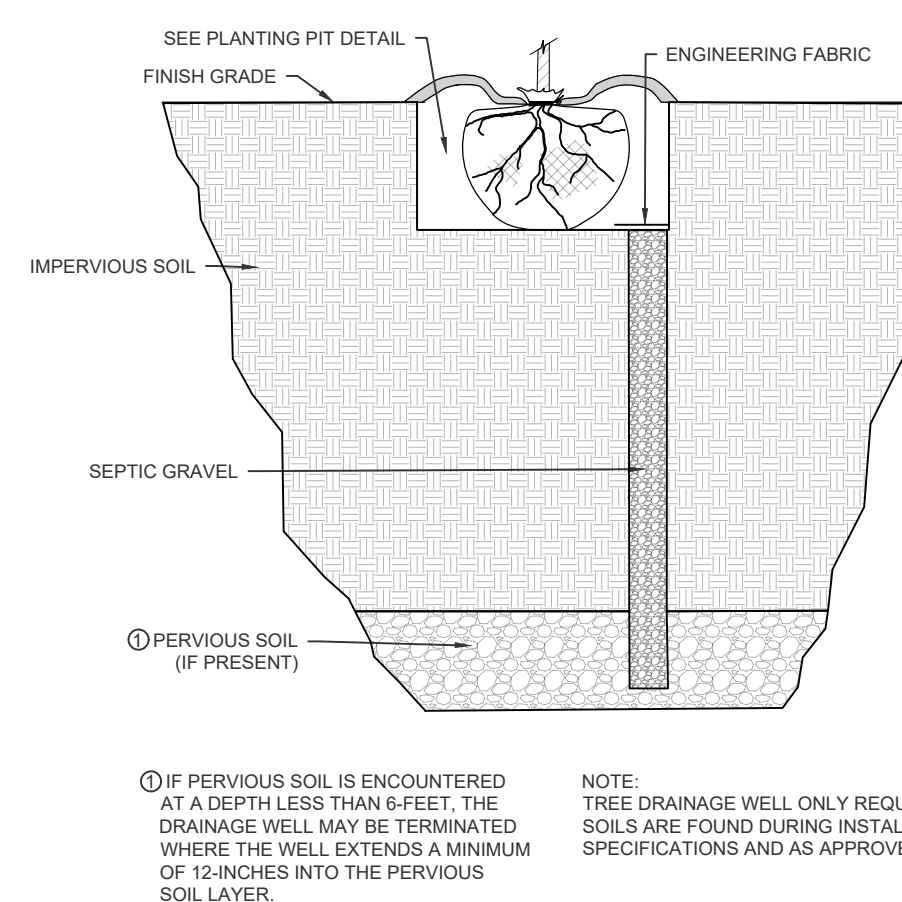
ZONED R-4 = 2 TREES PER DWELLING UNIT
 116 TOTAL DWELLING UNITS X 2 = 232 TREES REQUIRED (232 TREES PROVIDED)
 ----147 OVERSTORY TREES PROVIDED
 ----25 EVERGREEN TREES PROVIDED
 ----60 ORNAMENTAL TREES PROVIDED

BUFFER AND SCREENING REQUIREMENTS:

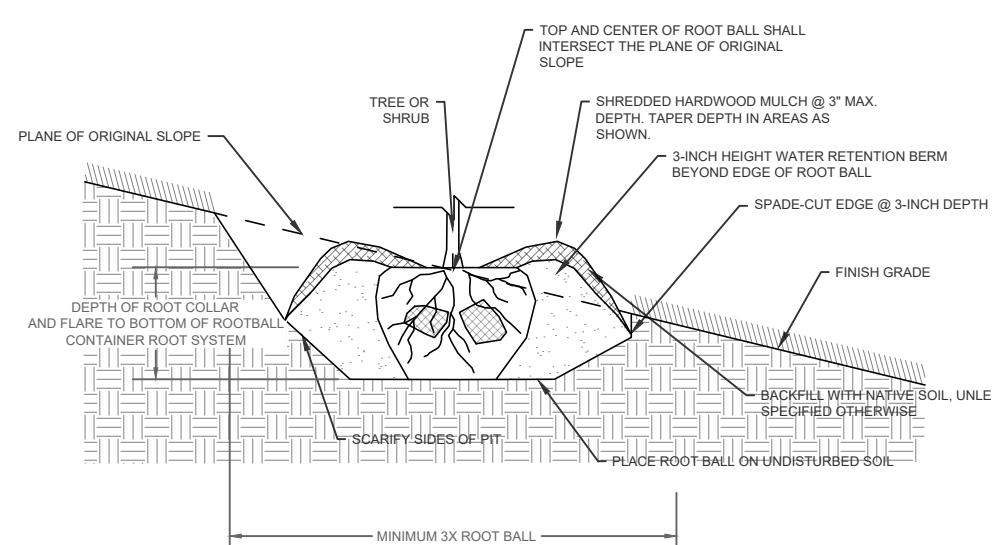
BUFFER SCREEN PROVIDED FOR R-4 TO EXISTING R-2 ON SOUTH BOUNDARIES. 25 FOOT BUFFER REQUIRES, PER 50 LINEAR FEET= ONE OVERSTORY TREE, TWO EVERGREEN TREES, AND TWO ORNAMENTAL TREES.

SOUTH BUFFER= 940 LF
 940 / 50 = 19 PLANT UNITS
 ----19 P.U. x 1 OVERSTORY TREE = 19 OVERSTORY TREES REQUIRED, 19 OVERSTORY TREES PROVIDED
 ----19 P.U. x 2 EVERGREEN TREES = 38 EVERGREEN TREES REQUIRED, 38 EVERGREEN TREES PROVIDED
 ----19 P.U. x 2 ORNAMENTAL TREES = 38 ORNAMENTAL TREES REQUIRED, 38 ORNAMENTAL TREES PROVIDED

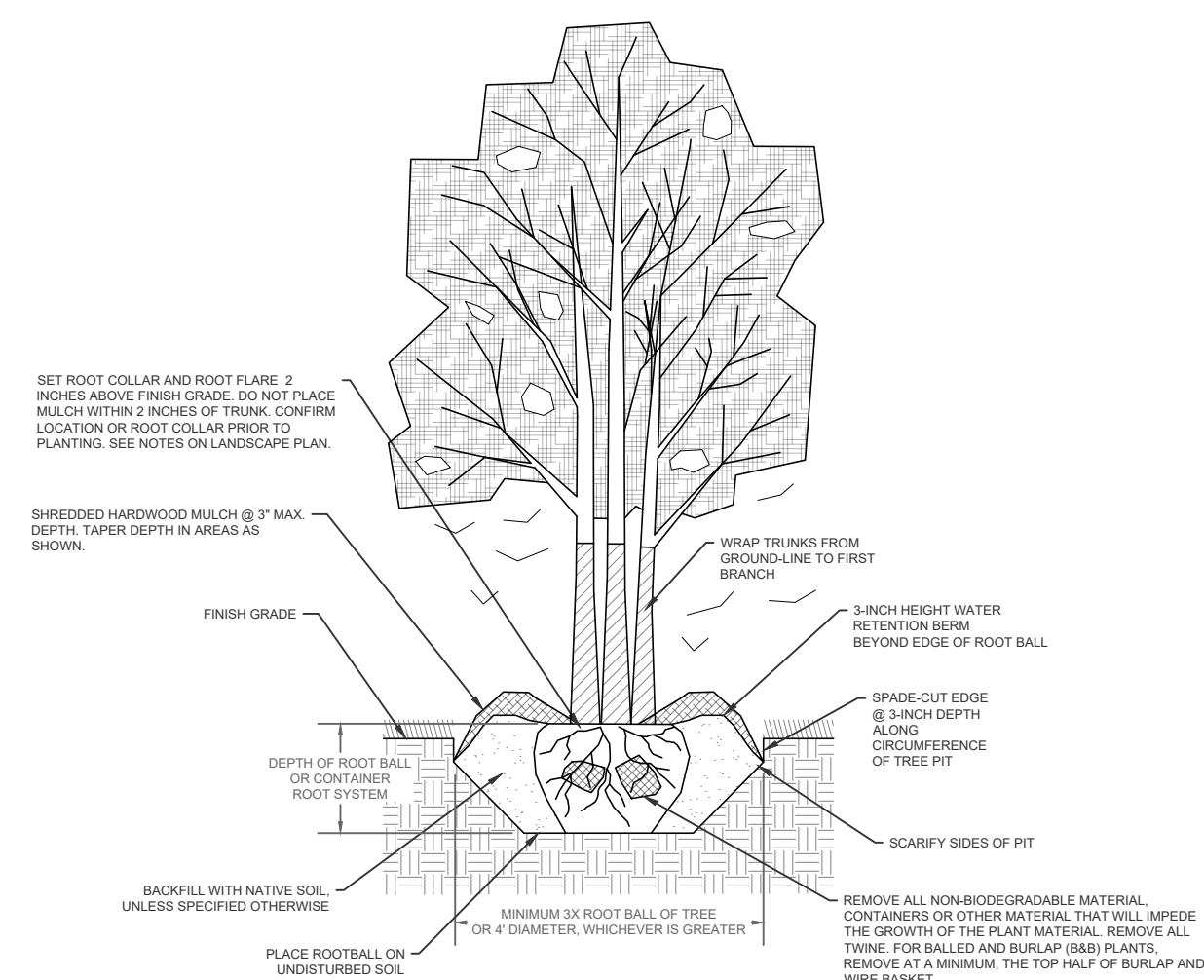
EAST BUFFER= 707 LF
 707 / 50 = 14.14 PLANT UNITS
 ----14.14 P.U. x 1 OVERSTORY TREE = 14.14 OVERSTORY TREES REQUIRED, 15 PROVIDED
 ----14.14 P.U. x 2 EVERGREEN TREES = 28.28 EVERGREEN TREES REQUIRED, 29 PROVIDED
 ----14.14 P.U. x 2 ORNAMENTAL TREES = 28.28 ORNAMENTAL TREES REQUIRED, 29 ORNAMENTAL TREES PROVIDED



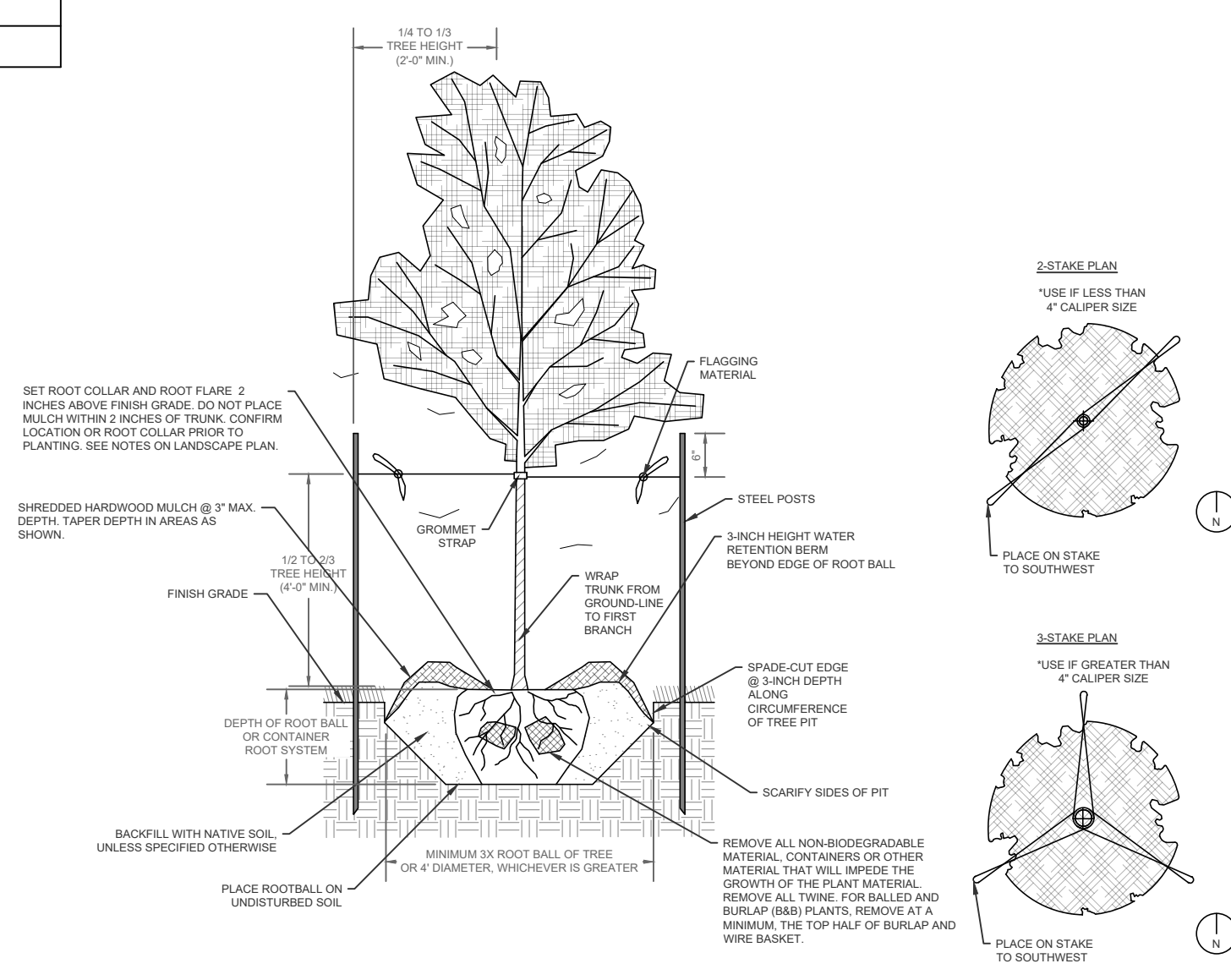
5 TREE DRAINAGE WELL DETAIL
NO SCALE



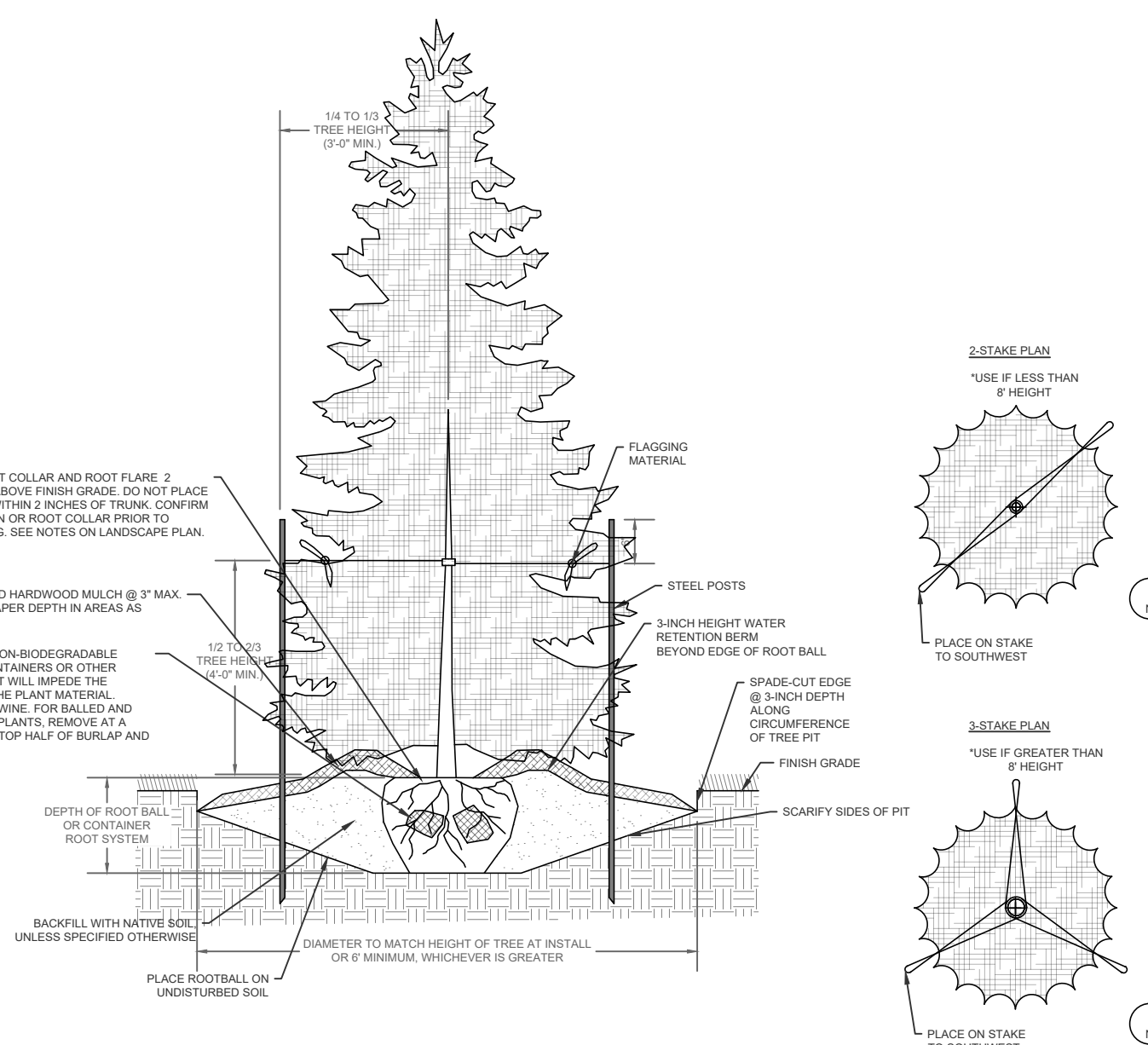
4 TYPICAL PLANTING PIT FOR SLOPES (>= 4:1)
NO SCALE



1 DECIDUOUS TREE MULTI-TRUNK PLANTING DETAIL
NO SCALE



2 DECIDUOUS TREE SINGLE-TRUNK PLANTING DETAIL
NO SCALE



3 CONIFEROUS TREE PLANTING DETAIL
NO SCALE