

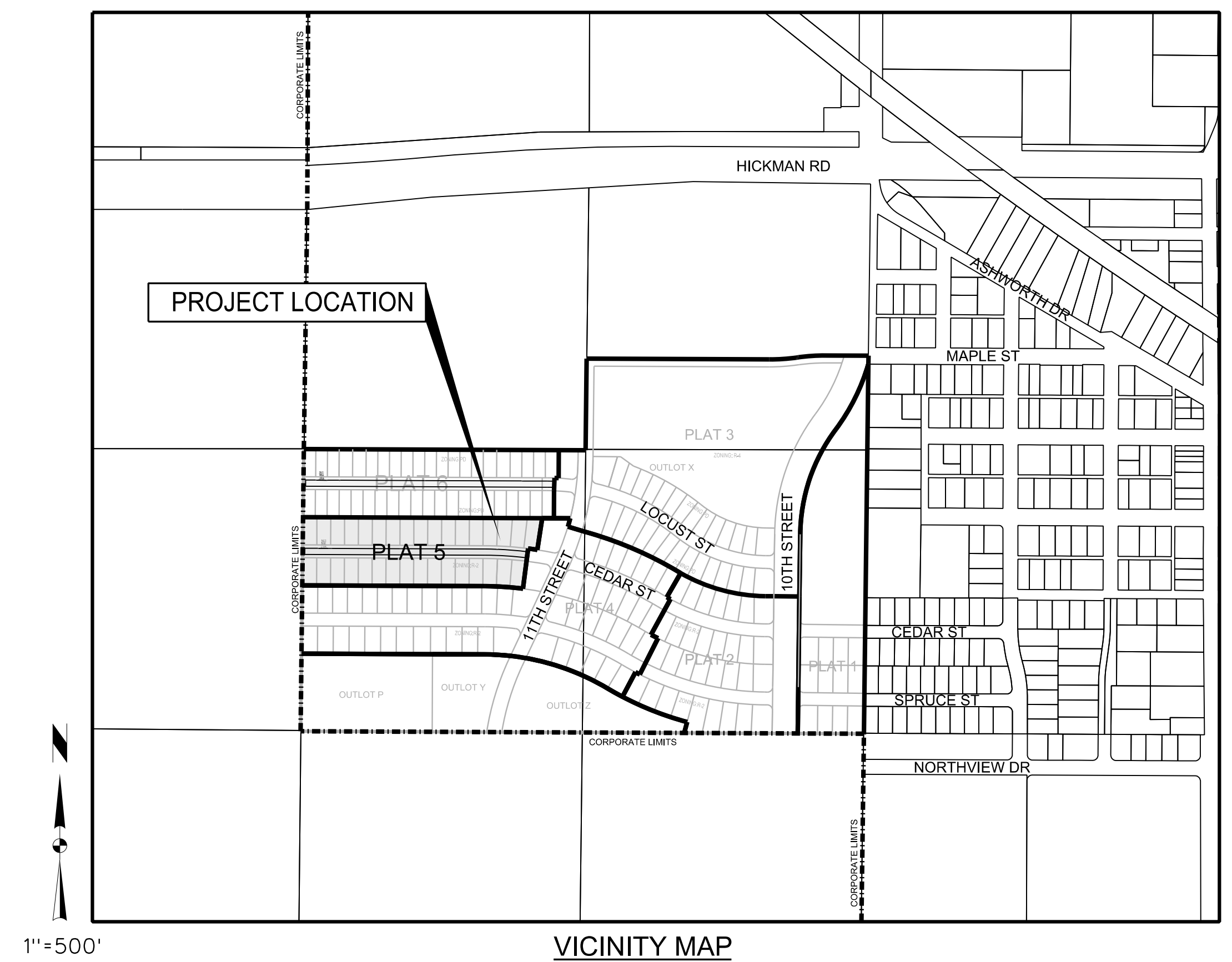
# CONSTRUCTION DOCUMENTS

## FOR

# SPRING CREST PLAT 5

## SINGLE FAMILY RESIDENTIAL DEVELOPMENT

## CITY OF WAUKEE, DALLAS COUNTY, IOWA



**OWNER/DEVELOPER**  
 SPRING CREST PARTNERS LLC  
 9550 HICKMAN RD, SUITE 100  
 CLIVE, IA 50325  
 CONTACT: NICK HALFILL  
 PHONE: 515-986-5994

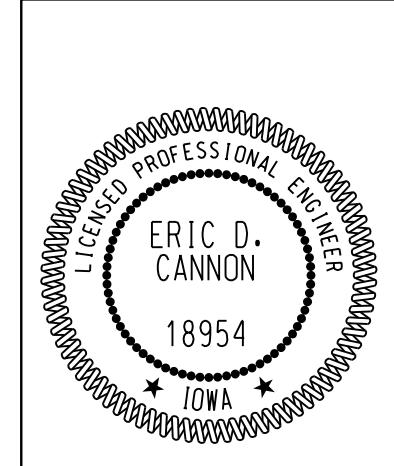
**ENGINEER/PROJECT MANAGER**  
 SNYDER & ASSOCIATES INC  
 2727 SNYDER BLVD  
 ANKENY, IA 50023  
 CONTACT: ERIC CANNON  
 PHONE: 515-964-2020

### INDEX OF SHEETS

1. TITLE SHEET
2. PROJECT INFORMATION
3. HYDRANT COVERAGE PLAN
4. OVERALL SITE GRADING PLAN
5. DETAILED GRADING PLAN
6. EROSION AND SEDIMENT CONTROL PLAN
7. SANITARY SEWER AND WATER MAIN PLAN AND PROFILE
8. PAVEMENT AND STORM SEWER PLAN AND PROFILE
9. STORM SEWER PLAN AND PROFILE
10. TURN AROUND DETAIL
11. MISCELLANEOUS DETAILS

### RECORD DRAWINGS

THESE PLANS HAVE BEEN REVISED AFTER CONSTRUCTION TO CONFORM WITH INFORMATION FURNISHED BY THE CONTRACTOR AND CONSTRUCTION REVIEWER AND TO REFLECT MEASUREMENTS MADE FOR THE PREPARATION OF FINAL ESTIMATES OF QUANTITIES.



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.

*Eric D. Cannon* 09/01/2020 Date  
 Eric D. Cannon, P.E.  
 License Number 18954  
 My License Renewal Date is December 31, 2019  
 Pages or sheets covered by this seal:  
 Sheets 1-11

MARK	REVISION	DATE	BY
4	REVISED AS PER ASBUILT INFORMATION	07/01/20	JDP
3	REVISED AS PER CITY COMMENTS	02/05/19	JWM
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1	REVISED AS PER CITY COMMENTS	12/18/18	JWM

Engineer: KMM Checked By: EDC Scale: 1"=500'  
 Technician: JWM Date: 11/21/18 Field Bk: Pg:  
 Project No: 118.0675 Sheet 1 of 11

**SPRING CREST PLAT 5**

**TITLE SHEET**

**WAUKEE, IA**

**SNYDER & ASSOCIATES, INC.**

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



LEGEND

Features

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

Existing

- 93.0
93
OC(x)
FO(x)
E(x)
OE(x)
4" G(x)
4" HPG(x)
8" W(x)
8" S(x)
DUCT(x)

Proposed

- 93.0
93
C
OC
FO
E
OE
4" G
4" HPG
8" W
8" S
DUCT

(x) Denotes the survey quality service level for utilities

Sanitary Manhole



Storm Sewer with Size



Storm Manhole



Single Storm Sewer Intake



Double Storm Sewer Intake



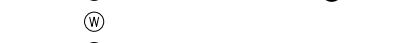
Fire Hydrant



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



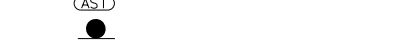
Communication Manhole



Communication Handhole



Fiber Optic Manhole



Fiber Optic Handhole



Gas Valve



Gas Manhole



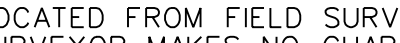
Gas Apparatus



Fence Post or Guard Post



Underground Storage Tank



Above Ground Storage Tank



Sign



Satellite Dish



Mailbox



Soil Boring



UTILITY CONTACT INFORMATION

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

- G1-GAS CITY OF WAUKEE
W1-WATER TIM ROYER
S-SANITARY SEWER 515-978-7920
E1-ELECTRIC MIDAMERICAN ENERGY
OE1-OVERHEAD ELECTRIC CRAIG RANFELD
C1-COMMUNICATION MEDIACOM COMMUNICATIONS
C2-COMMUNICATION CENTURYLINK
CLEAR PER MAP UNITE PRIVATE NETWORKS
CLEAR PER MAP NORTHERN NATURAL GAS COMPANY
CLEAR PER MAP XENIA RURAL WATER DISTRICT
NO RESPONSE CONSOLIDATED COMMUNICATIONS

GENERAL NOTES

- A. NOTIFY UTILITY PROVIDERS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH UTILITY PROVIDERS AS NECESSARY DURING CONSTRUCTION.
B. CONSTRUCTION OF ALL STREET AND UTILITY IMPROVEMENTS SHALL CONFORM TO THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, 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).
E. NOTIFY OWNER, ENGINEER AND CITY OF WAUKEE AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
F. CONSTRUCT MANHOLES AND APPURTENANCES AS WORK PROGRESSES.
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.
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, SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN.
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.
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 PSIOR GREATER.
R. A PRECONSTRUCTION MEETING 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 CONSTRUCTION DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
U. 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.
V. ALL SANITARY SEWER AND STORM SEWER SHALL BE CLEANED AND TELEVISED PRIOR TO PAVING.
W. ALL CONNECTIONS TO EXISTING SANITARY MANHOLES SHALL BE CORE DRILLED WITH A LINK SEAL.
X. PLACE 3/4" EXPANSION JOINT BETWEEN ALL PCC PAVEMENT/SIDEWALKS AND BUILDINGS.
Y. AS-BUILTS SHALL BE PROVIDED TO THE WAUKEE ENGINEERING DEPARTMENT INCLUDING ALL UTILITIES AND AS-BUILT GRADES FOR DRAINAGE SWALES, OVERFLOWS, ACCESSIBLE RAMPS AND DETENTION FACILITIES.
Z. ALL UTILITIES SHALL BE CONSTRUCTED TO THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND ALL UTILITIES SHALL BE TESTED TO CITY STANDARDS.
AA. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING CONCRETE SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.
BB. CONTRACTOR IS RESPONSIBLE TO PROVIDE SUBMITTALS OF ALL CONSTRUCTION MATERIALS TO THE WAUKEE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
CC. ALL NEW AND RELOCATED HYDRANTS ARE TO HAVE 4" STORZ FITTINGS.
DD. CONTRACTOR TO INSTALL REAR YARD SUBDRAIN AS PART OF THE PLAT IMPROVEMENTS.
EE. THE INDIVIDUAL HOME OWNERS SHALL BE RESPONSIBLE FOR THE OWNERSHIP AND MAINTENANCE OF SUBDRAIN CONTAINED WITHIN THE INDIVIDUAL LOTS.

Table with 2 columns: Item, Quantity. Title: PLAT 5 WATER MAIN QUANTITIES. Rows include 8" PVC MAIN (1053 LF.), 8" VALVE (2 EA.), HYDRANT ASSEMBLY (3 EA.), TEMPORARY BLOWOFF HYDRANT (1 EA.), CONNECT TO EXISTING (1 EA.), 1" WATER SERVICE (33 EA.).

Table with 2 columns: Item, Quantity. Title: PLAT 5 STORM SEWER QUANTITIES. Rows include SW-501 INTAKE (1 EA.), SW-503 INTAKE (1 EA.), SW-505 INTAKE (2 EA.), SW-506 INTAKE (2 EA.), MANHOLES SW-401(48") (2 EA.), 4" PVC PERFORATED SUBDRAIN (1030 LF.), 8" PVC PERFORATED SUBDRAIN (880 LF.), SUBDRAIN CLEANOUT TYPE A-1 (3 EA.), SUBDRAIN OUTLET STRUCTURE (6 EA.), 8" PVC PERFORATED SUMPDRN (258 LF.), 15" RCP (410 LF.), 18" RCP (262 LF.), 24" RCP (188 LF.), 24" HDPE (201 LF.), 30" NYLOPLAST DRAIN BASIN W DOMED GRATE (1 EA.), 1.5" SUMP SERVICE (33 EA.).

Table with 2 columns: Item, Quantity. Title: PLAT 5 SANITARY SEWER QUANTITIES. Rows include 8" TRUSS PIPE (949 LF.), MANHOLES SW-301 (3 EA.), CONNECT TO EXISTING (1 EA.), 4" SANITARY SERVICE (33 EA.).

Table with 2 columns: Item, Quantity. Title: PLAT 5 PAVEMENT QUANTITIES. Rows include 7" PCC (CEDAR ST) (3365 SY.), 12" SUBGRADE PREP (3725 SY.), GRIND CURB FOR TURN AROUND (50 LF.), GRANULAR TURN AROUND (100 SY.), 4" PCC SIDEWALK, MAIL BOX PAD (40 SY.), 4'x4' MAILBOX PAD (3 EA.), TYPE 4, OM4-2 ROADWAY MARKER BARRICADE (5 EA.).

ZONING

EXISTING: R-2

BULK REGULATIONS AND SETBACKS

R-2 MINIMUM LOT WIDTH 65 FEET FRONT YARD 30 FEET SIDE YARD 7 FEET REAR YARD 30 FEET MINIMUM LOT 10,000SF 2 FAMILY MINIMUM LOT 8,000SF SINGLE FAMILY

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

UTILITY QUALITY SERVICE LEVELS

QUALITY LEVELS OF UTILITIES ARE SHOWN IN THE PARENTHESES WITH THE UTILITY TYPE AND WHEN APPLICABLE, SIZE. THE QUALITY LEVELS ARE BASED ON THE CI/ ASCE 38-02 STANDARD.

QUALITY LEVEL (D) INFORMATION IS DERIVED FROM EXISTING UTILITY RECORDS OR ORAL RECOLLECTIONS.

QUALITY LEVEL (C) INFORMATION IS OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION WITH QUALITY D INFORMATION.

QUALITY LEVEL (B) INFORMATION IS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

QUALITY LEVEL (A) IS HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES OBTAINED BY ACTUAL EXPOSURE OR VERIFICATION OF PREVIOUSLY EXPOSED SUBSURFACE UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.

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

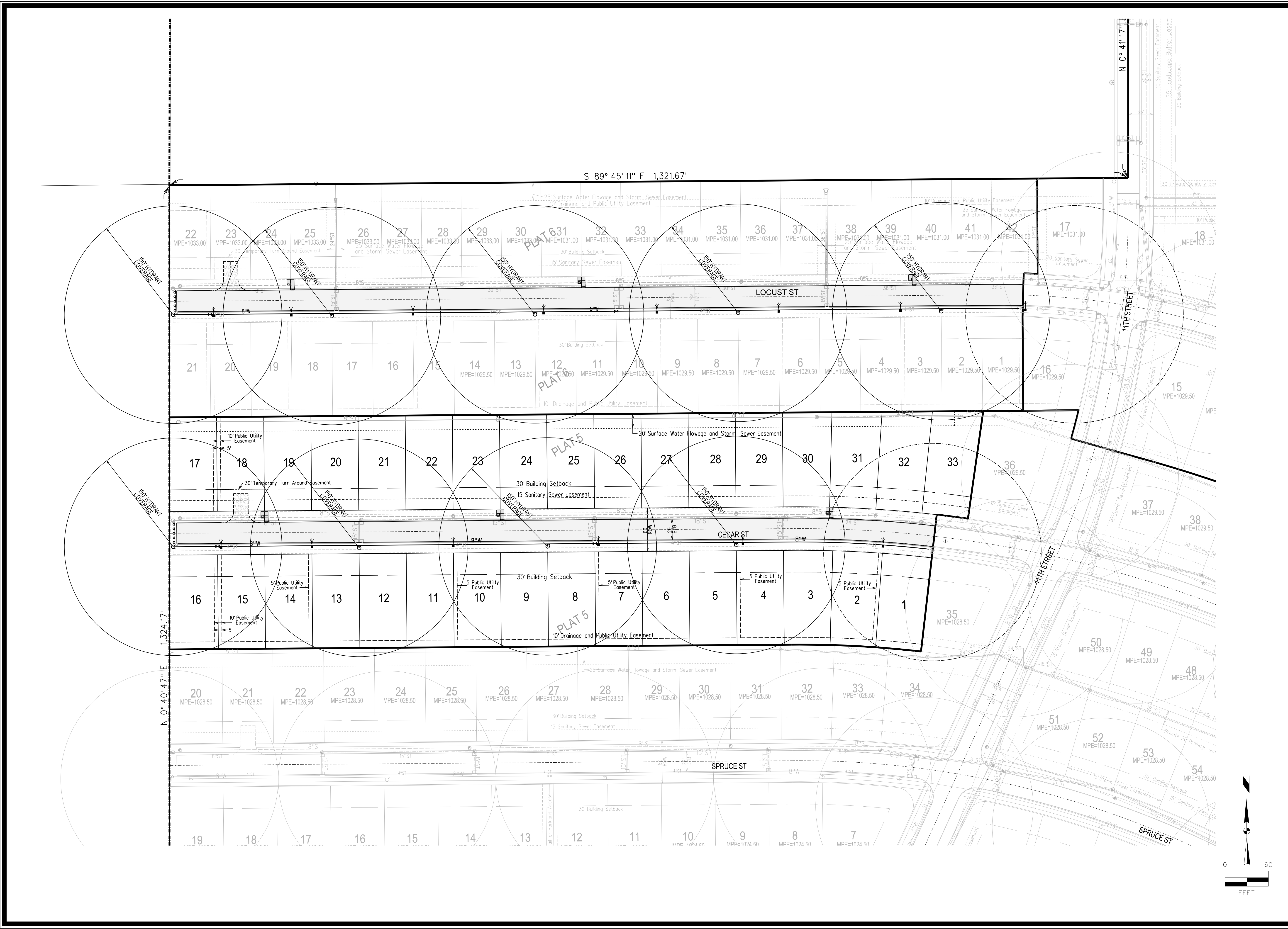
- CP1 N=586093.79 E=1533347.30 1/2" REBAR WITH YELLOW CAP AT NORTHWEST CORNER OF LOT 29 OF SOUTHVIEW ESTATES, SOUTHEAST CORNER OF SITE.
CP2 N=586456.49 E=1533349.96 1/2" REBAR WITH ORANGE CAP AT WEST END OF CEDAR STREET PAVEMENT, SOUTHEAST CORNER OF SITE.
CP3 N=587886.78 E=1533378.54 MAG NAIL IN ASPHALT ON WEST SIDE OF 10TH STREET, NORTH EAST 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 SITE.



Project information including date (11/21/18), scale (1"=1'), and sheet number (2 of 11).

Project information for SNYDER & ASSOCIATES, INC. including address (2727 S.W. SNYDER BLVD., ANKENY, IOWA 50023) and website (www.snyder-associates.com).

Snyder & Associates logo and project information (Project No: 118.0675, Sheet 2 of 11).



MARK	REVISION	DATE	BY
4	REVISED AS PER ASBUILT INFORMATION	07/01/20	JDP
3	REVISED AS PER CITY COMMENTS	02/05/19	JWM
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Engineer: KMM  
Checked By: EDC  
Scale: 1"=60'  
Technician: JWM  
Date: 11/21/18  
Field Bk: Pg:  
Project No: 118.0675  
Sheet 3 of 11

**SPRING CREST PLAT 5**  
**HYDRANT COVERAGE PLAN**

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

**WAUKEE, IA**

**SNYDER & ASSOCIATES**

Project No: 118.0675  
Sheet 3 of 11

**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

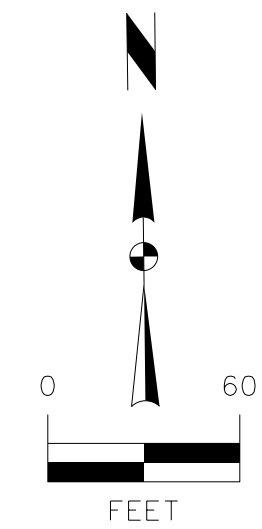
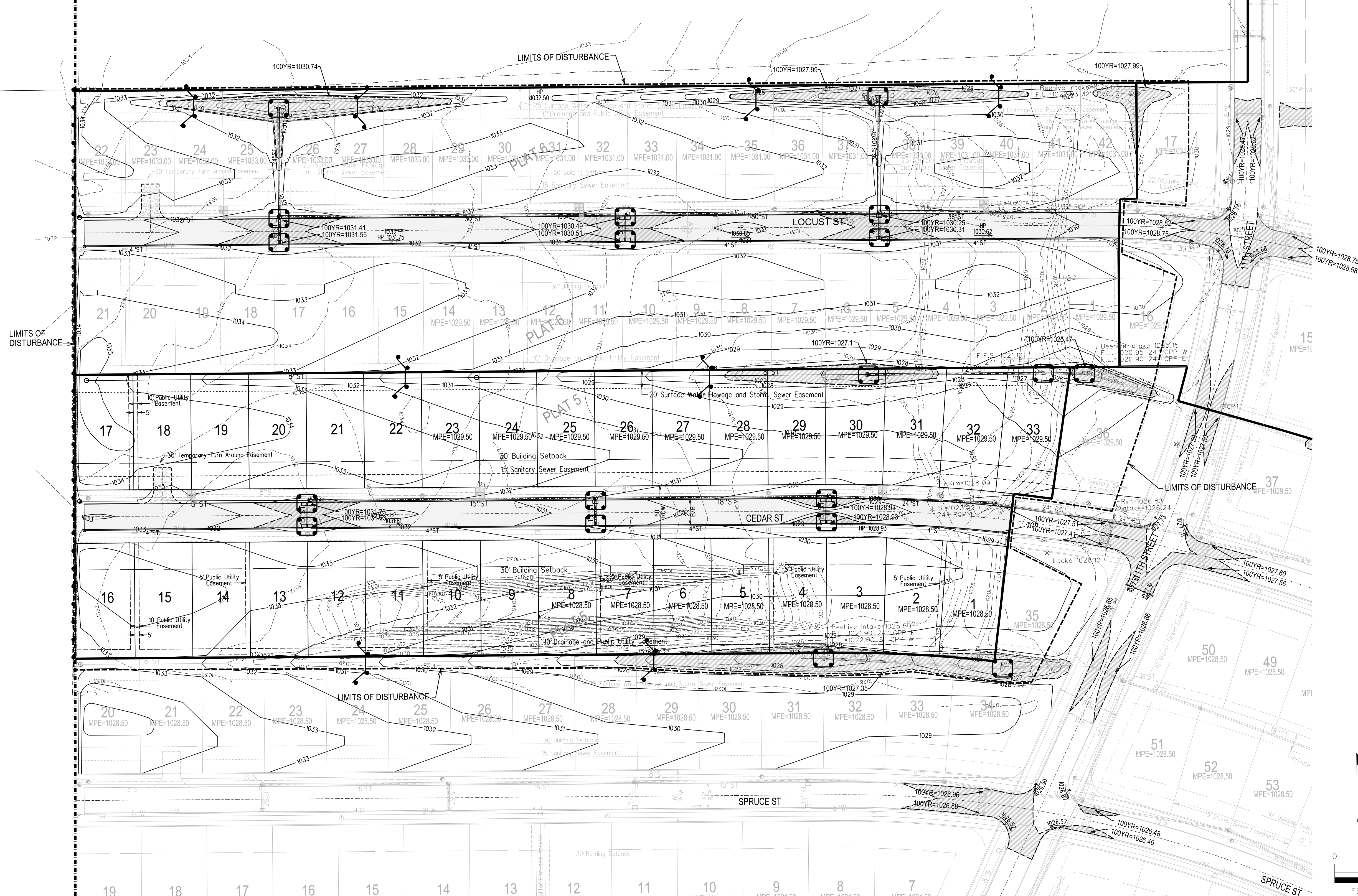
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- CP4 N=588428.84 E=1530732.77  
IOWA DOT ALUMINUM MONUMENT SOUTH OF HIGHWAY 6 IN LINE WITH NORTH 1/4 CORNER OF SECTION, NORTHWEST OF SITE.

**DISTURBED AREA**

TOTAL DISTURBED AREA = 8.85 AC (PLAT 5)

**NOTES**

LOTS THAT DO NOT HAVE AN MPE WILL BE REQUIRED TO HAVE A DETAILED GRADING PLAN SUBMITTED WITH THE BUILDING PERMIT.



**SPRING CREST PLAT 5**

**OVERALL GRADING PLAN**



Project No: 118.0675

Sheet 4 of 11

WAUKEE, IA

**SNYDER & ASSOCIATES, INC.**

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

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Engineer: KMM	Checked By: EDC	Date: 11/21/18	Scale: 1"=60'
Technician: JWM	Field Bk:	Date: 11/21/18	Field Bk:
Project No:	118.0675	Sheet 4 of 11	

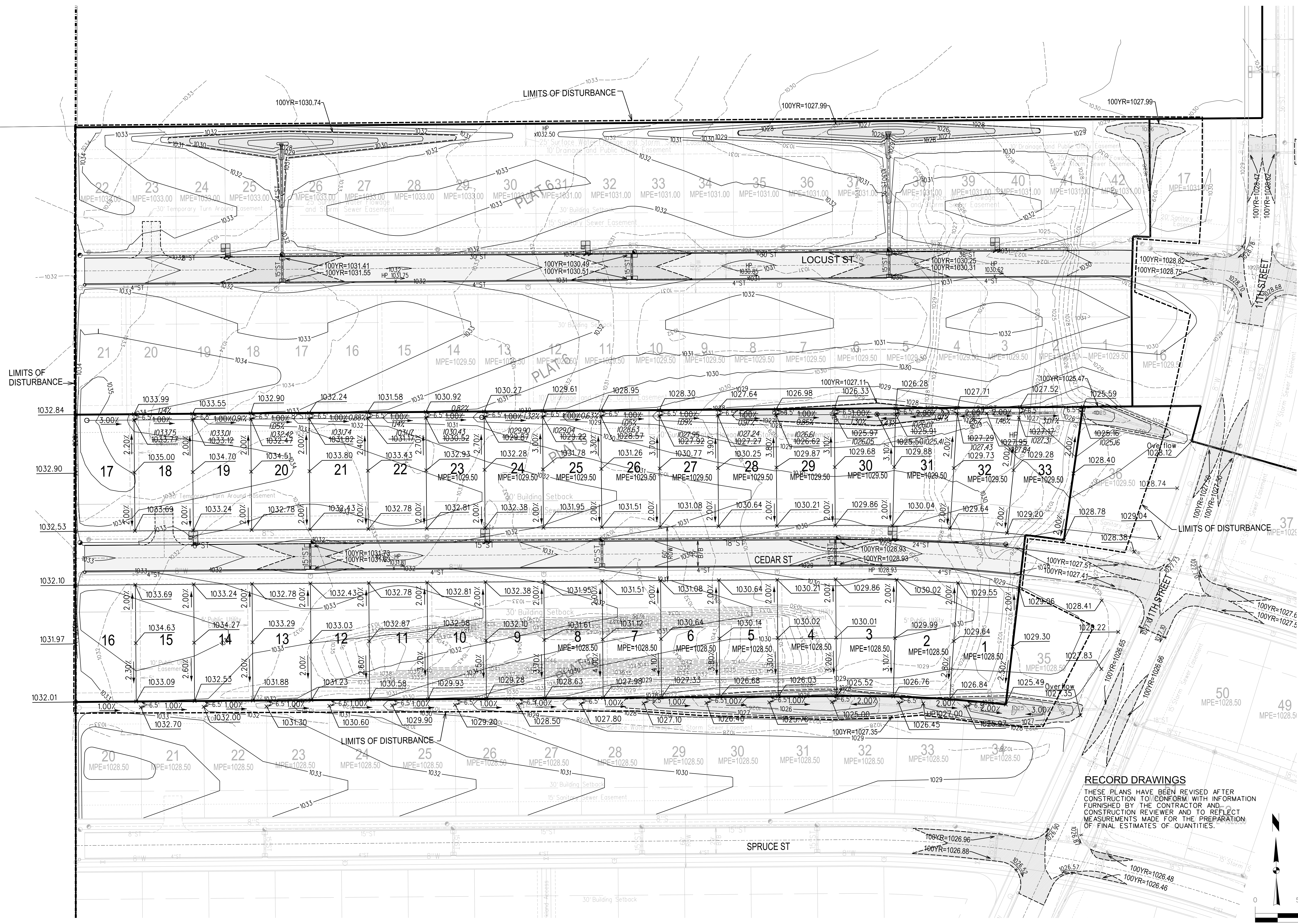
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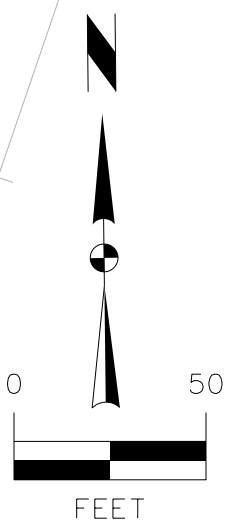
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**RECORD DRAWINGS**  
THESE PLANS HAVE BEEN REVISED AFTER CONSTRUCTION TO CONFORM WITH INFORMATION FURNISHED BY THE CONTRACTOR AND CONSTRUCTION REVIEWER AND TO REFLECT MEASUREMENTS MADE FOR THE PREPARATION OF FINAL ESTIMATES OF QUANTITIES.



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Field Bk: Pg.  
Project No: 118.0675  
Sheet No: 5 of 11

# SPRING CREST PLAT 5

## DETAILED GRADING PLAN

WAUKEE, IA

# SNYDER & ASSOCIATES, INC.



Project No: 118.0675  
Sheet 5 of 11

**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, AND ALL LOCAL ORDINANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS 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/HOMEOWNER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGE TO ANY PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES INCURRED TO OBTAIN A COURT ORDER, IF THE CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH, SEDIMENTATION OR DEBRIS WHICH COMES ONTO ADJACENT 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 IOWA DEPARTMENT OF ENVIRONMENTAL PROTECTION AGENCY (DEPA). 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 (BMPs) FOR COMPLIANCE WITH THE PROJECT'S NPDES PERMIT COVERAGE. ALL BMPs AND EROSION CONTROL MEASURES REQUIRED AS A RESULT OF CONSTRUCTION ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, NOTE, AND IMPLEMENT ADDITIONAL BMPs 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 BMPs UNLESS INFEASIBLE OR NOT APPLICABLE:
  - i. PREVENT ACCUMULATION OF EARTH AND DEBRIS FROM CONSTRUCTION ACTIVITIES ON ADJACENT 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.
  - ii. 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 ALL CONTROL DEVICES WHEN THE MEASURES HAVE LOST 50% OF THEIR ORIGINAL CAPACITY.
  - iii. 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.
  - iv. PREVENT ACCUMULATION OF EARTH AND DEBRIS FROM CONSTRUCTION ACTIVITIES ON ADJACENT 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.
  - v. 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.
  - vi. RESPREAD A MINIMUM OF 8 INCHES OF TOPSOIL (INCLUDING TOPSOIL FOUND IN SED) ON ALL DISTURBED AREAS EXCEPT WHERE PAVEMENT, BUILDINGS OR OTHER IMPROVEMENTS ARE LOCATED.
  - vii. STABILIZE UNDEVELOPED DISTURBED AREAS WITH MULCH, TEMPORARY SEED MIX PERMANENT SEED MIX OR PAVEMENT IMMEDIATELY AS SOON AS POSSIBLE UPON COMPLETION OF 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.
  - viii. 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 BEAMS, SLOTTED CURBS, BARRIERS AND DIRECT TO A SEDIMENT BASIN OR OTHER CONTROL DEVICE WHERE POSSIBLE. CONCRETE WASHOUT MUST BE CONTAINED ON-SITE.
  - ix. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND SITE WASTE PRIOR TO FILING OF THE "NOTICE OF DISCONTINUATION".

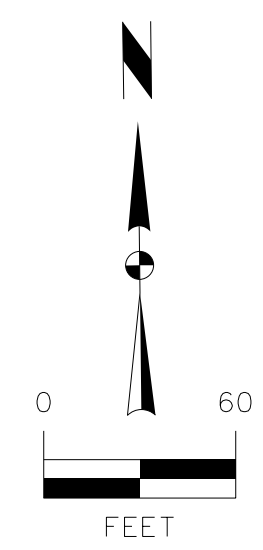
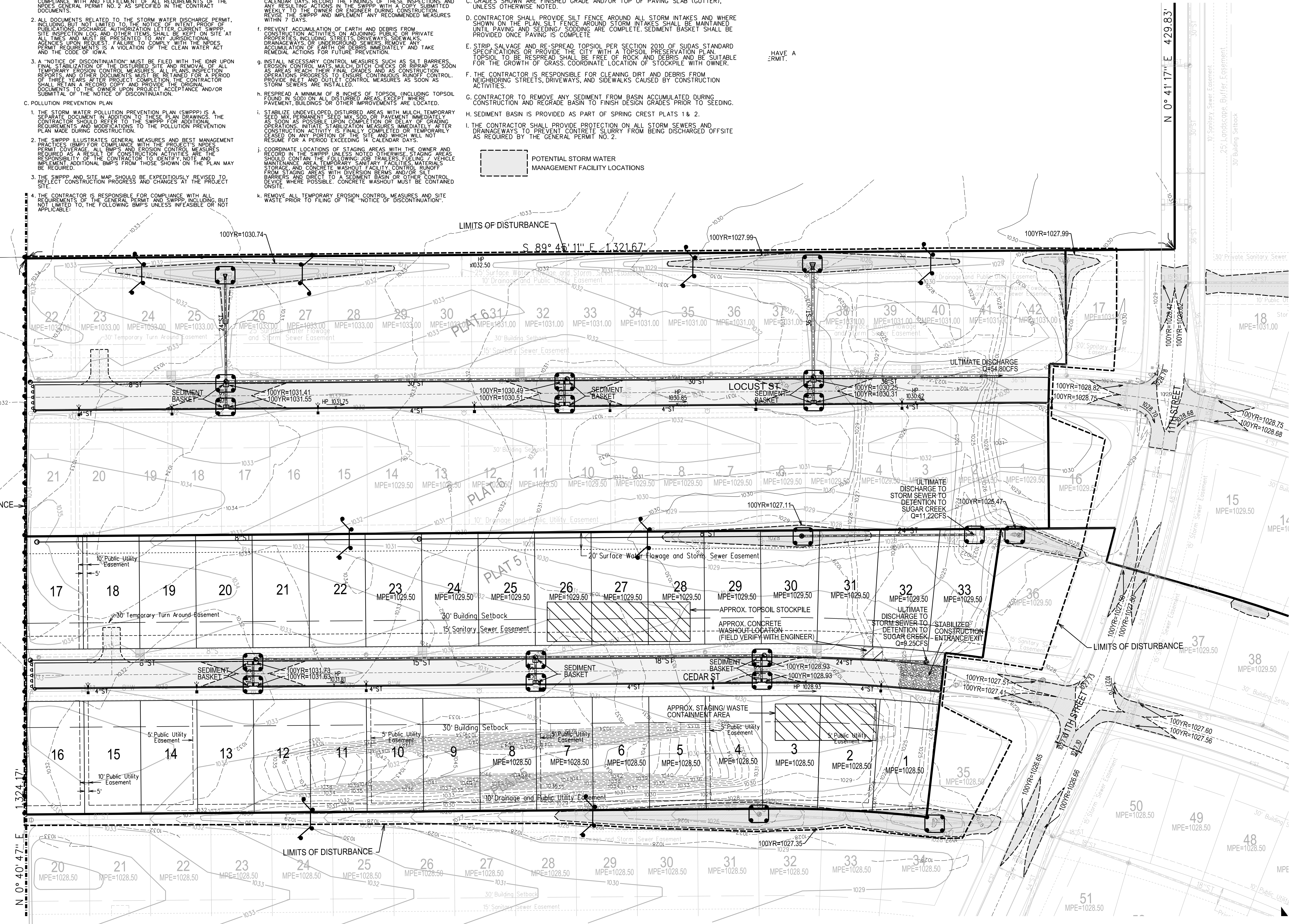
**STORMWATER MANAGEMENT QUANTITIES**

SILT FENCE	2350 LF
SEDIMENT BASKET	6 EA (Plot 5)
TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE (ENTIRE SITE)	18.0 AC

**GRADING PLAN GENERAL NOTES**

- A. 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.
- B. PROTECT EXISTING UTILITIES FROM CONSTRUCTION DAMAGE. ANY DAMAGE THAT OCCURS SHALL BE REPAIRED BY THE CONTRACTOR TO THE OWNERS SPECIFICATIONS WITHOUT ADDITIONAL COMPENSATION.
- C. GRADES SHOWN ARE FINISHED GRADE AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.
- D. CONTRACTOR SHALL PROVIDE SILT FENCE AROUND ALL STORM INTAKES AND WHERE SHOWN ON THE PLAN. SILT FENCE AROUND STORM INTAKES SHALL BE MAINTAINED UNTIL PAVING AND SEEDING/SODDING ARE COMPLETE. SEDIMENT BASKET SHALL BE PROVIDED ONCE PAVING IS COMPLETE.
- E. STRIP SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF IUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN. TOPSOIL TO BE RE-SPREAD SHALL BE FREE OF ROCK AND DEBRIS AND BE SUITABLE FOR THE GROWTH OF GRASS. COORDINATE LOCATION OF STOCKPILE WITH OWNER.
- F. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.
- G. CONTRACTOR TO REMOVE ANY SEDIMENT FROM BASIN ACCUMULATED DURING CONSTRUCTION AND REGRADE BASIN TO FINISH DESIGN GRADES PRIOR TO SEEDING.
- H. SEDIMENT BASIN IS PROVIDED AS PART OF SPRING CREST PLATS 1 & 2.
- I. THE CONTRACTOR SHALL PROVIDE PROTECTION ON ALL STORM SEWERS AND DRAINAGEWAYS TO PREVENT CONCRETE SLURRY FROM BEING DISCHARGED OFFSITE AS REQUIRED BY THE GENERAL PERMIT NO. 2.

POTENTIAL STORM WATER MANAGEMENT FACILITY LOCATIONS



**SPRING CREST PLAT 5**

**EROSION AND SEDIMENT CONTROL PLAN**

**SNYDER & ASSOCIATES, INC.**



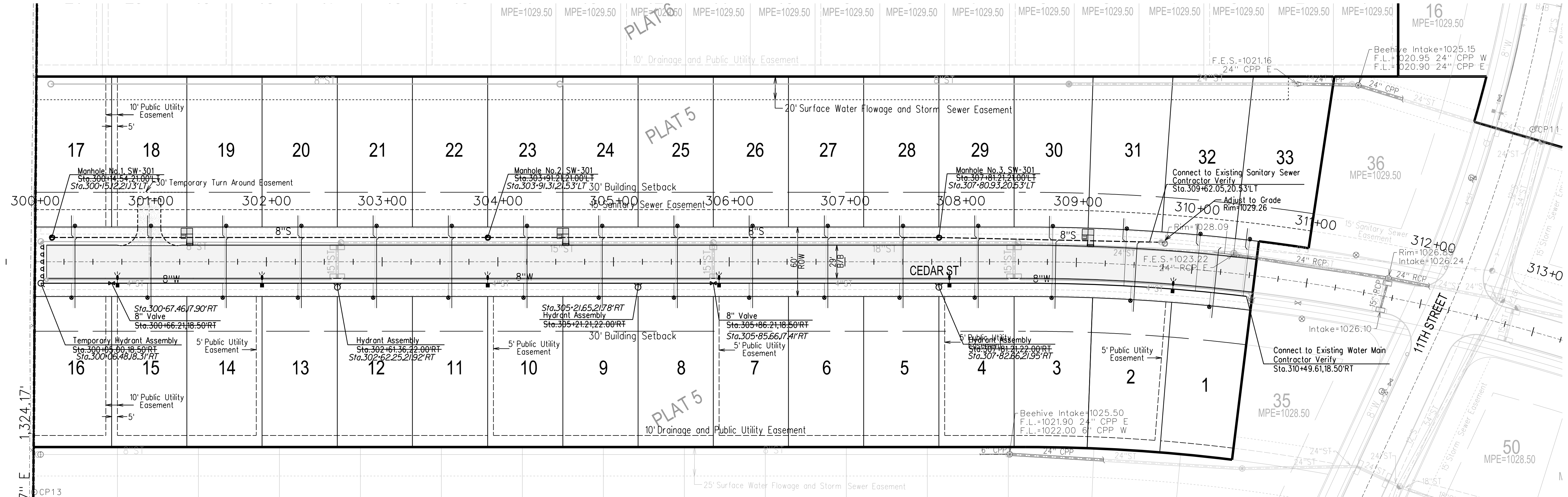
Project No: 118.0675

Sheet 6 of 11

**WAUKEE, IA**

2727 S.W. SNYDER BLVD.  
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Engineer: KMM		Checked By: EDC	Scale: 1"=60'	
Technician: JMM		Date: 11/21/18	Field Bk:	
Project No: 118.0675		Sheet 6 of 11		



**BENCHMARKS**

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

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

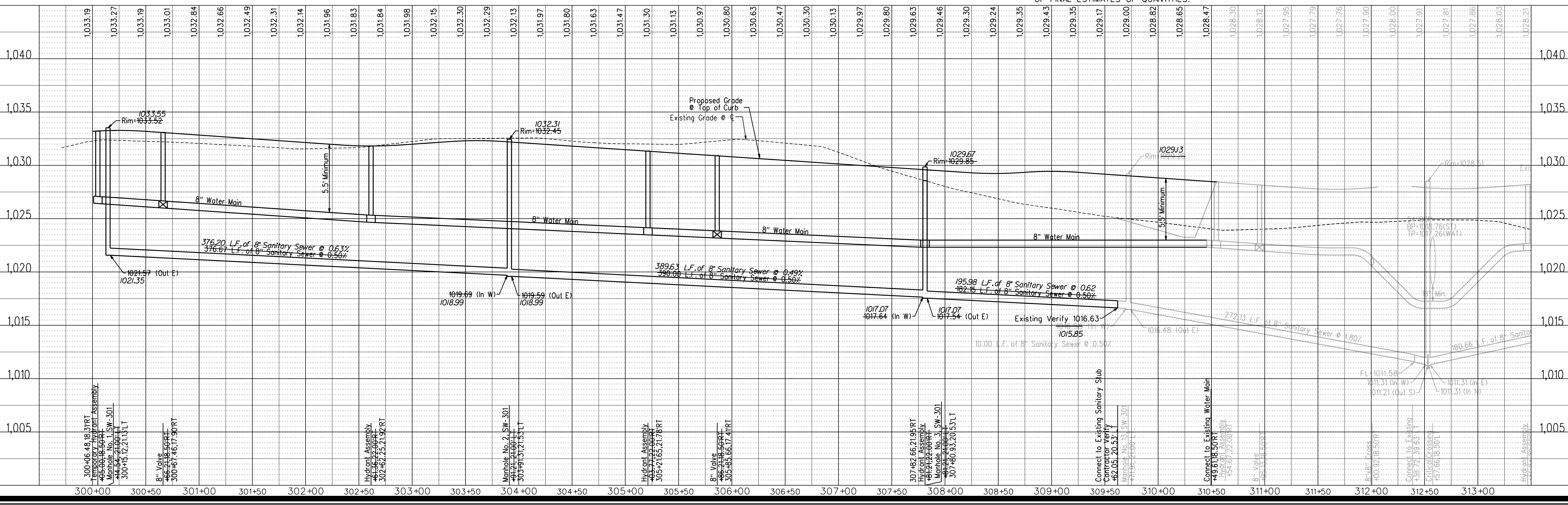
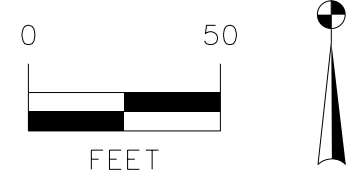
**NOTES**

- CONSTRUCTION OF ALL STREET AND UTILITY IMPROVEMENTS SHALL CONFORM TO THE WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS AND THE SOILS REPORTS PREPARED BY OTHERS.
- ALL SERVICES ARE TO BE 18" APART AND LOCATED NEAR THE CENTER OF THE LOTS. ALL SERVICE STUBS SHALL BE STUBBED INTO THE LOT AS SHOWN. PLACE 6" STEEL POST BURIED 3 FEET AT END OF ALL SERVICES.
- ALL BACKFILL AND SUBGRADE SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR AND SHALL BE WITHIN A RANGE OF 0% TO +4% OF THE MATERIALS OPTIMUM MOISTURE CONTENT.
- RIM ELEVATIONS ARE SHOWN FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO ADJUST RIM AS NECESSARY TO MEET SPECIFIC CONSTRUCTION REQUIREMENTS.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED AND CONNECTED TO STORM SEWERS WHERE POSSIBLE. LOCATIONS AND DETAIL OF ANY CONNECTION MADE SHALL BE PROVIDED TO THE ENGINEER FOR NOTATION ON AS-BUILT DRAWINGS.
- CONTRACTOR TO INSTALL A STEEL POST AT THE END OF THE SERVICES. EXTEND TOP OF POST 3" MINIMUM ABOVE GROUND. PAINT POST RED FOR SANITARY SEWER SERVICES.
- A SPECIAL STRUCTURAL SUPPORT IS REQUIRED FOR ALL CROSSINGS BETWEEN 6" AND 18".
- CONTRACTOR TO VACUUM TEST ALL SANITARY SEWER MANHOLES.

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**RECORD DRAWINGS**

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**SPRING CREST PLAT 5**

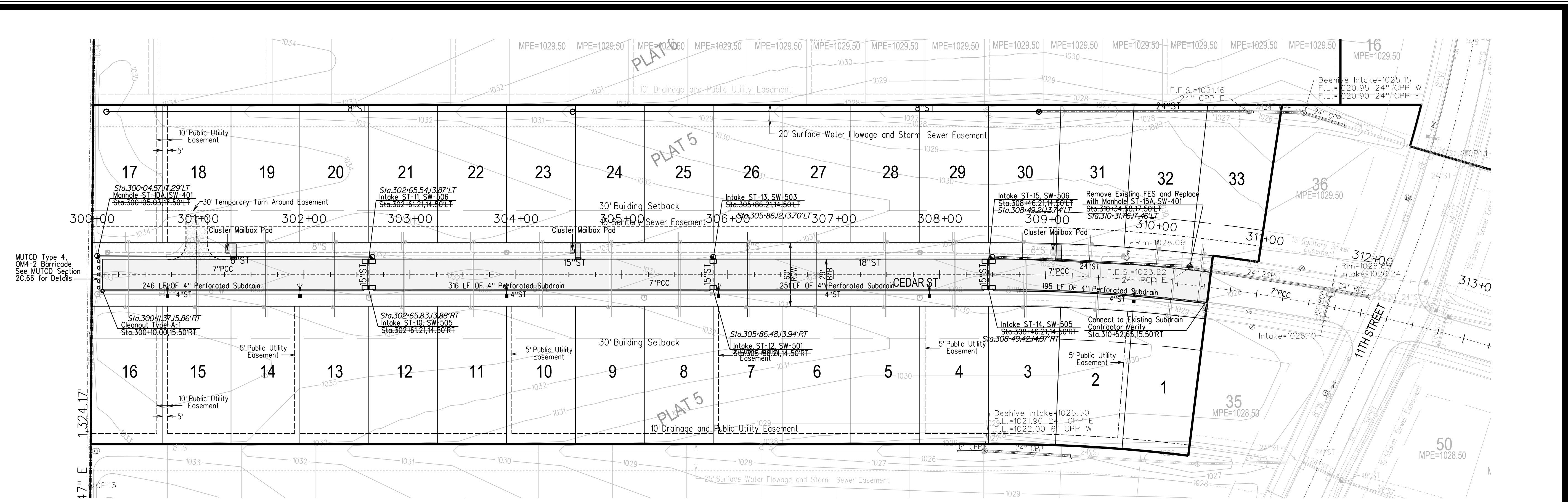
**SANITARY SEWER AND WATER MAIN PLAN AND PROFILE**

**SNYDER & ASSOCIATES, INC.**



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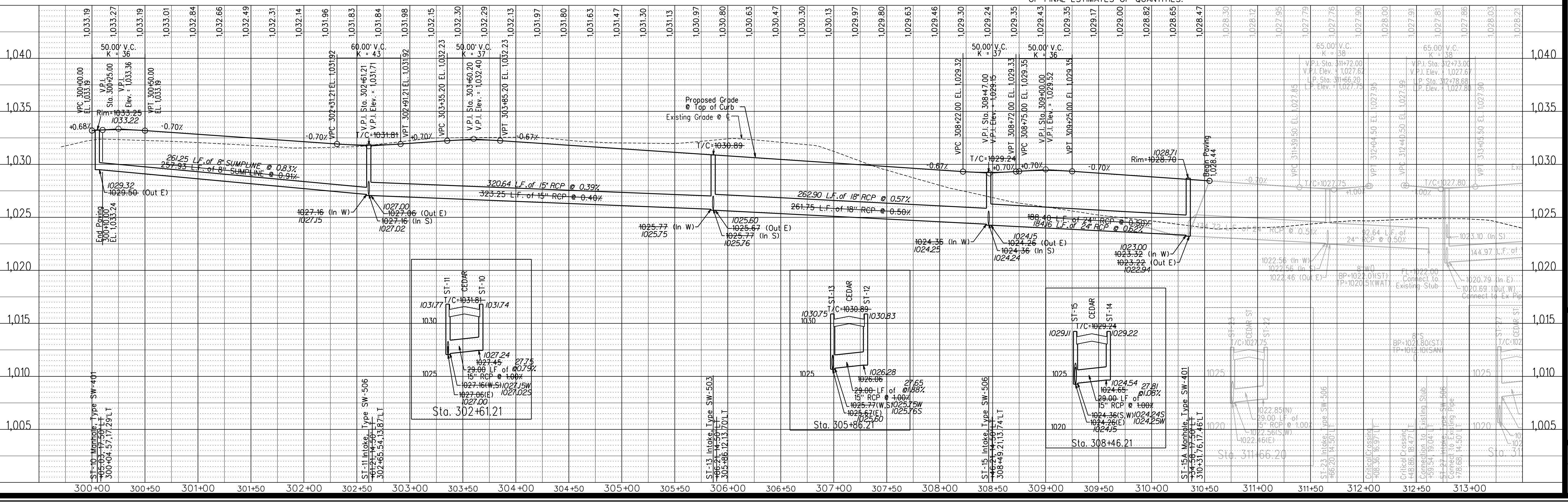
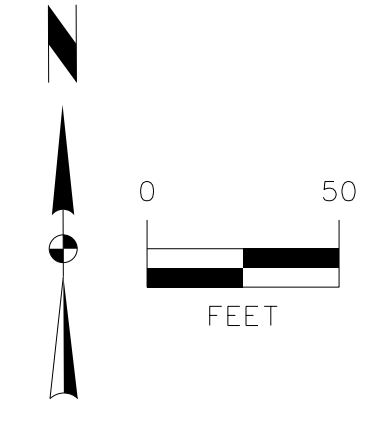
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Scale:	1"=50'	Field Bk:
Project No:	118.0675	Sheet
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**WAUKEE, IA**

**SPRING CREST PLAT 5**

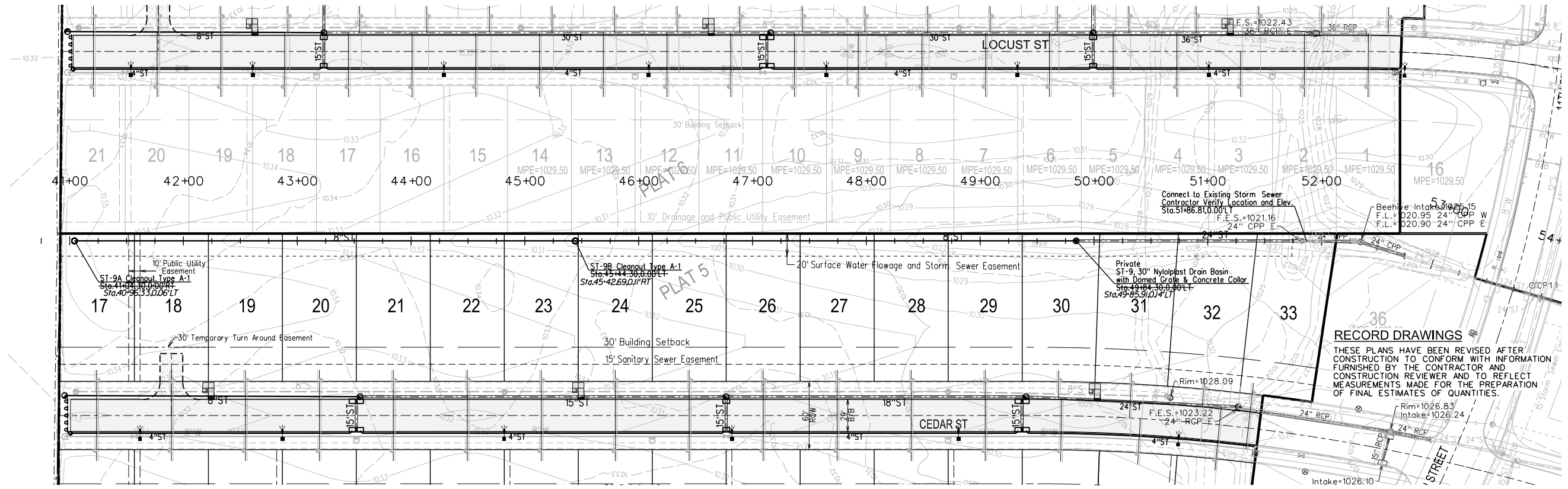
**PAVEMENT AND STORM SEWER PLAN AND PROFILE**

**SNYDER & ASSOCIATES, INC.**

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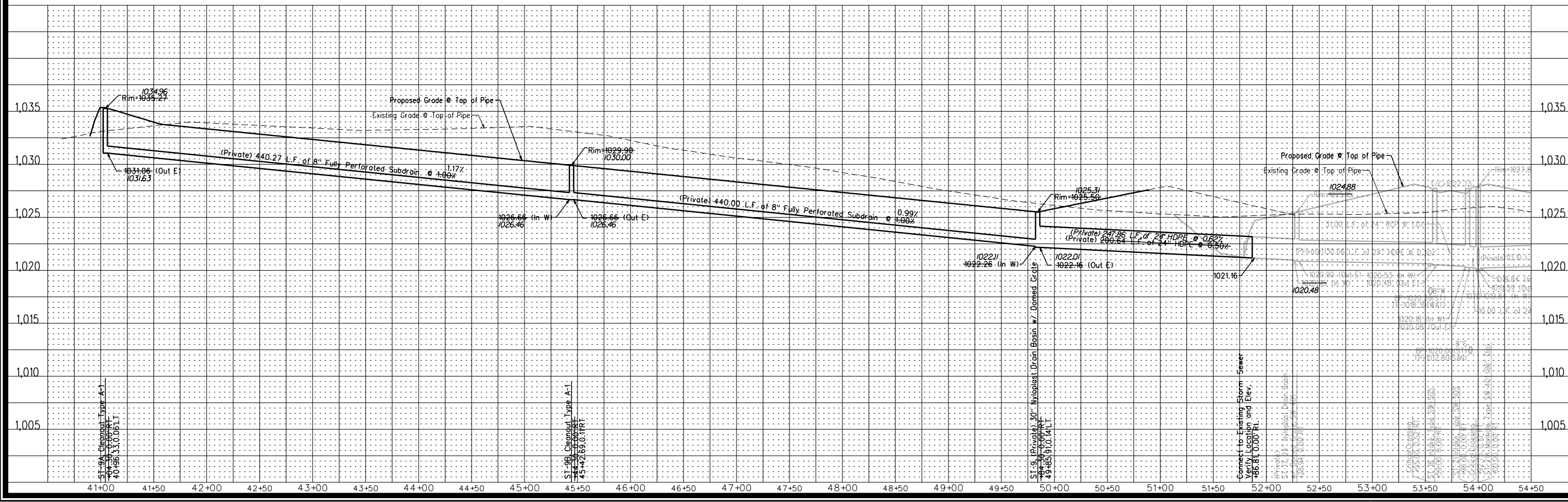
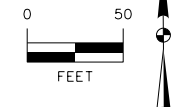
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Project No:	118.0675	Sheet	9 of 11

**WAUKEE, IA**

**SPRING CREST PLAT 5**

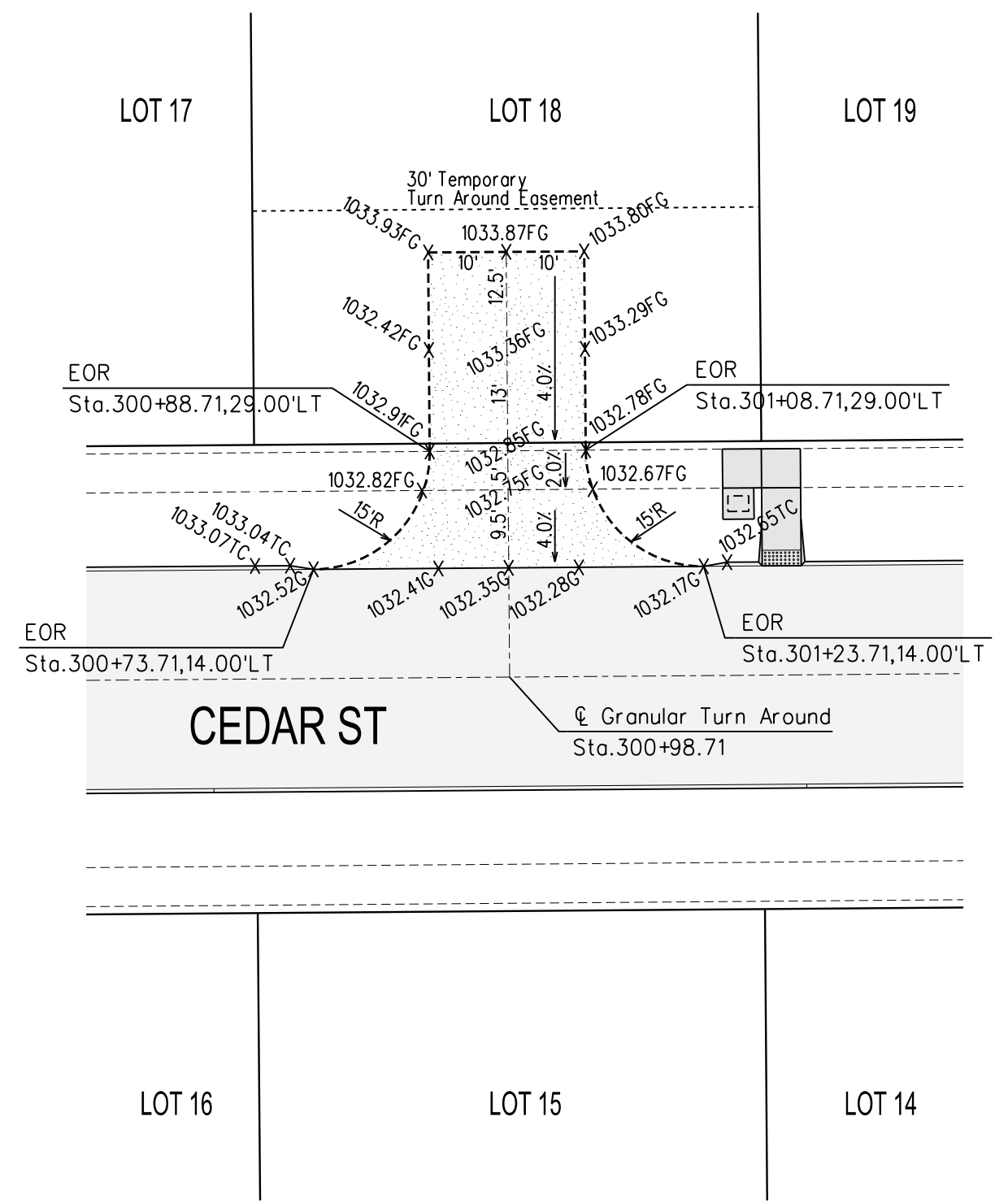
**STORM SEWER PLAN AND PROFILE**

**SNYDER & ASSOCIATES, INC.**

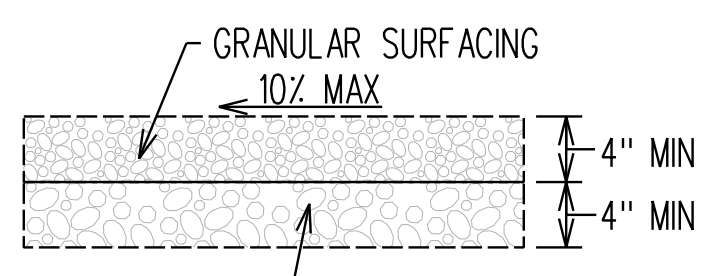
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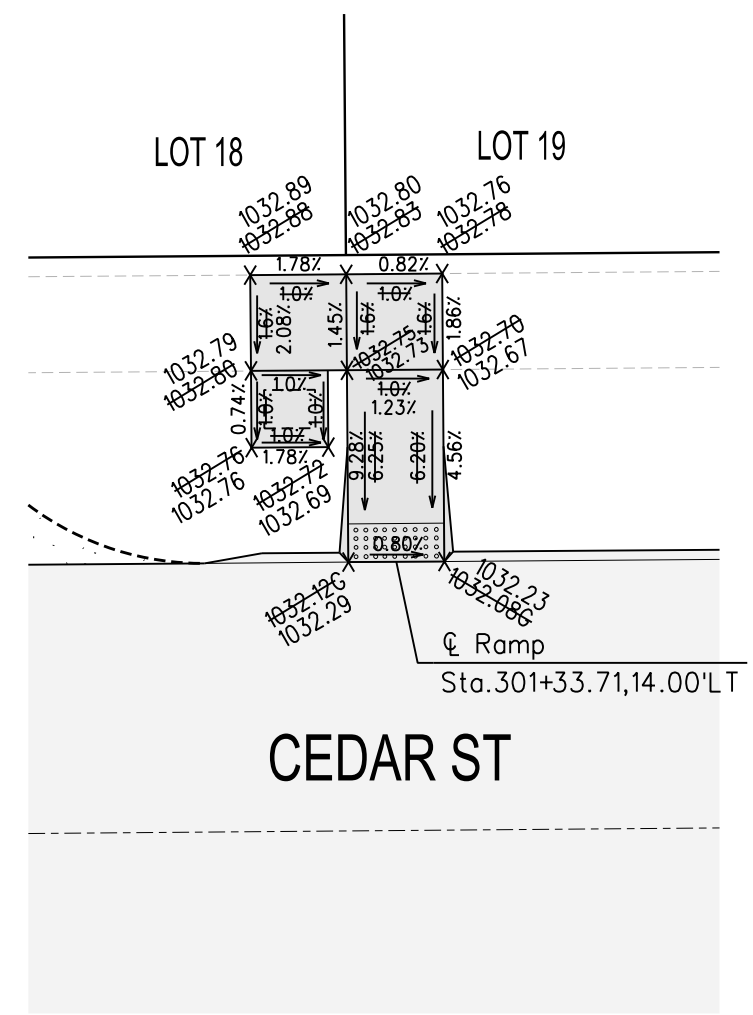
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 Sheet 9 of 11



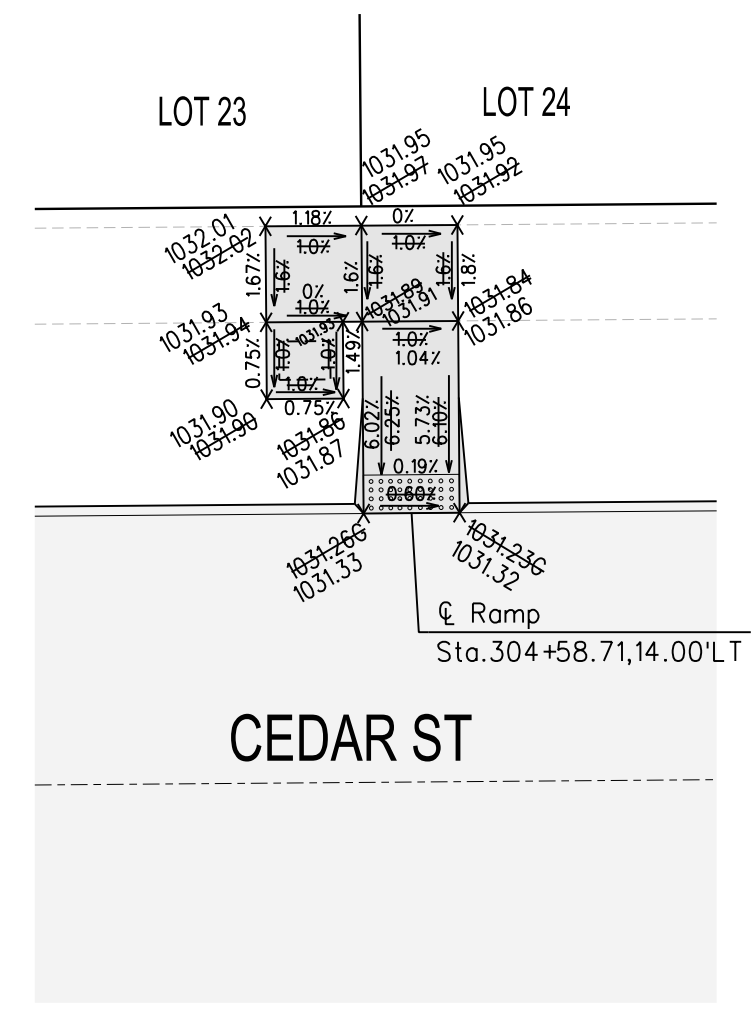
PLAT 5, CEDAR ST  
GRANULAR TURN AROUND DETAIL



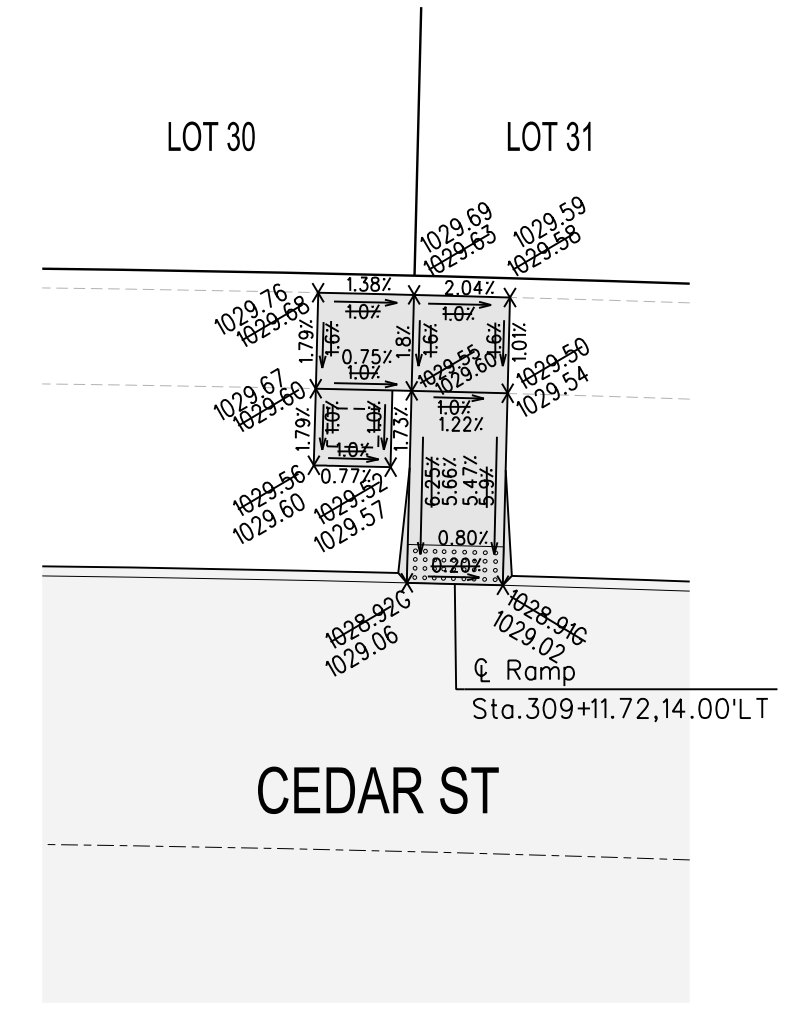
PLAT 5, CEDAR ST  
GRANULAR TURN AROUND SURFACE DETAIL



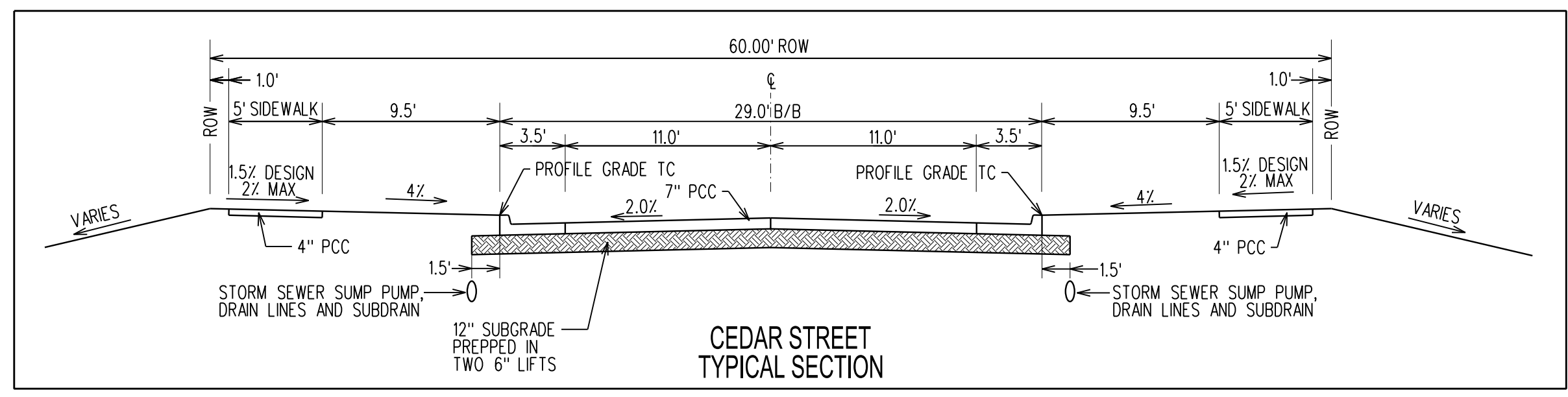
MAIL BOX PAD AND ACCESSIBLE RAMP  
1"=10'



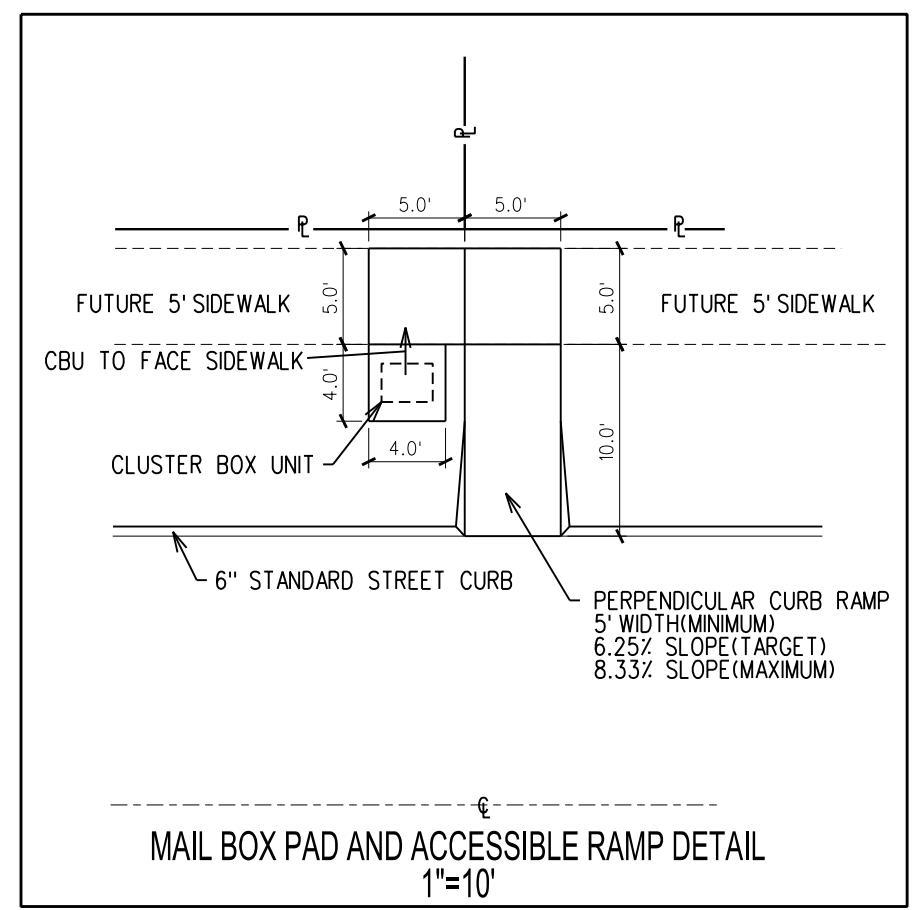
MAIL BOX PAD AND ACCESSIBLE RAMP  
1"=10'



MAIL BOX PAD AND ACCESSIBLE RAMP  
1"=10'

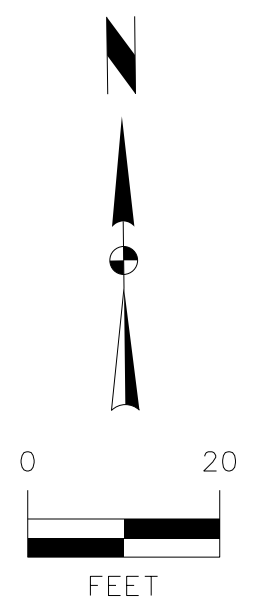


CEDAR STREET  
TYPICAL SECTION



MAIL BOX PAD AND ACCESSIBLE RAMP DETAIL  
1"=10'

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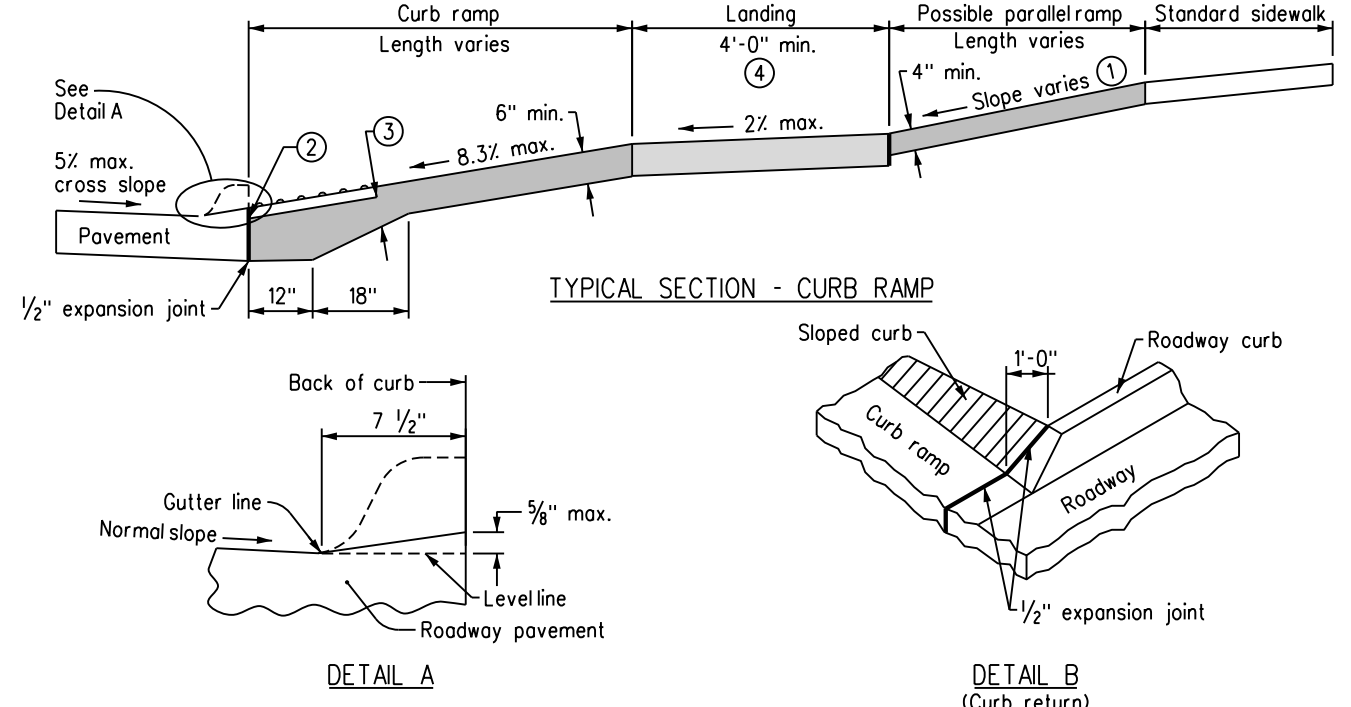
**SPRING CREST PLAT 5**  
**TURN AROUND DETAIL**  
**WAUKEE, IA**  
**SNYDER & ASSOCIATES, INC.**



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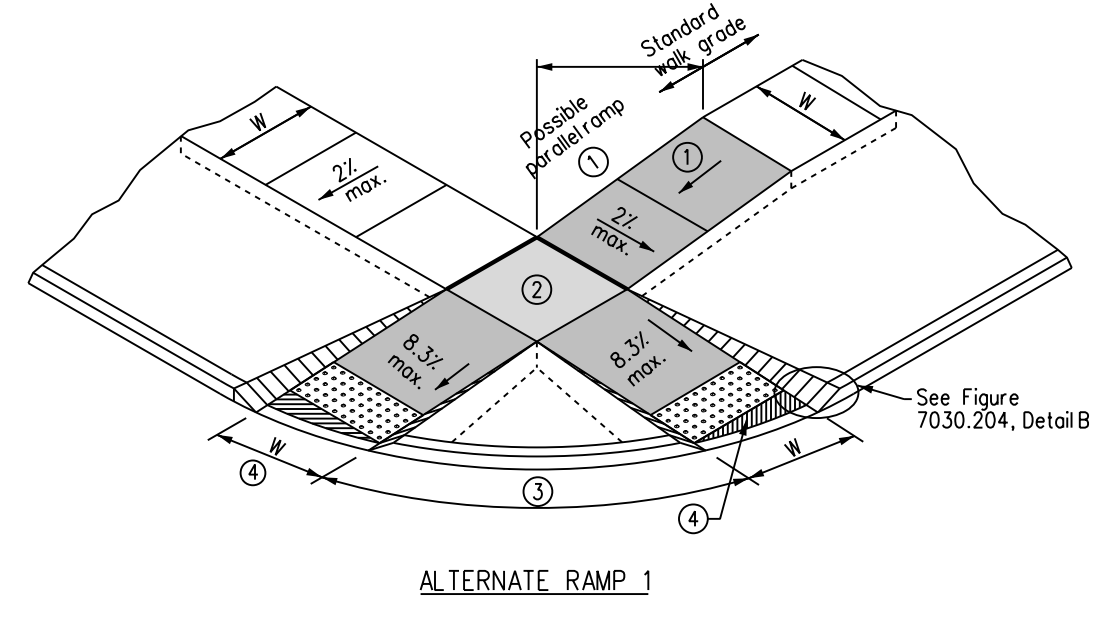
1 GENERAL SIDEWALK DETAILS

If crosswalks are marked, locate ramps, exclusive of flares, within the crosswalk markings.

- Parallel ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
- 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.
- Landing: Maximum slope of 2% in any direction.

Key

- Ramp
- Landing
- Detectable warning

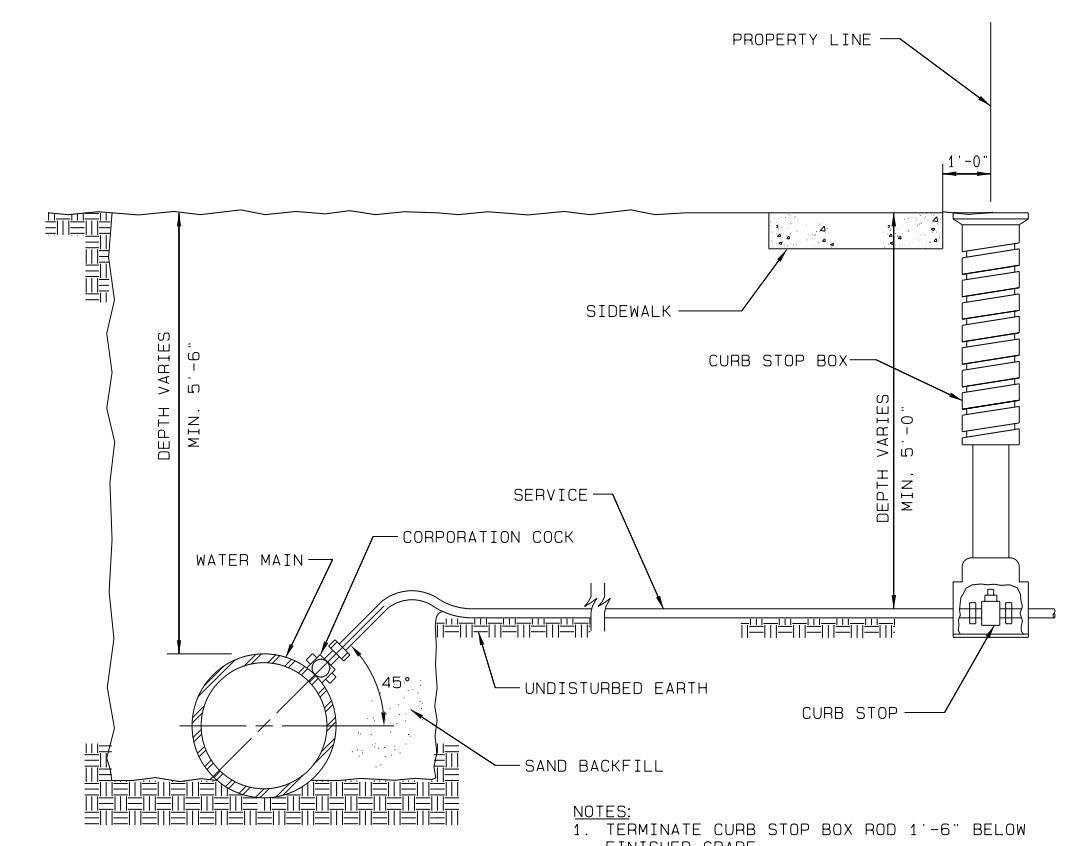


2 CURB RAMPS WITHIN INTERSECTION RADIUS FOR CLASS B OR C SIDEWALK

- Parallel ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
- Landing: Maximum slope of 2% in any direction.
- Island width: 5 foot minimum. If island is less than 5 feet, eliminate island and provide Alternate 2.
- Unless curb ramp is aligned perpendicular to the street radius, 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.

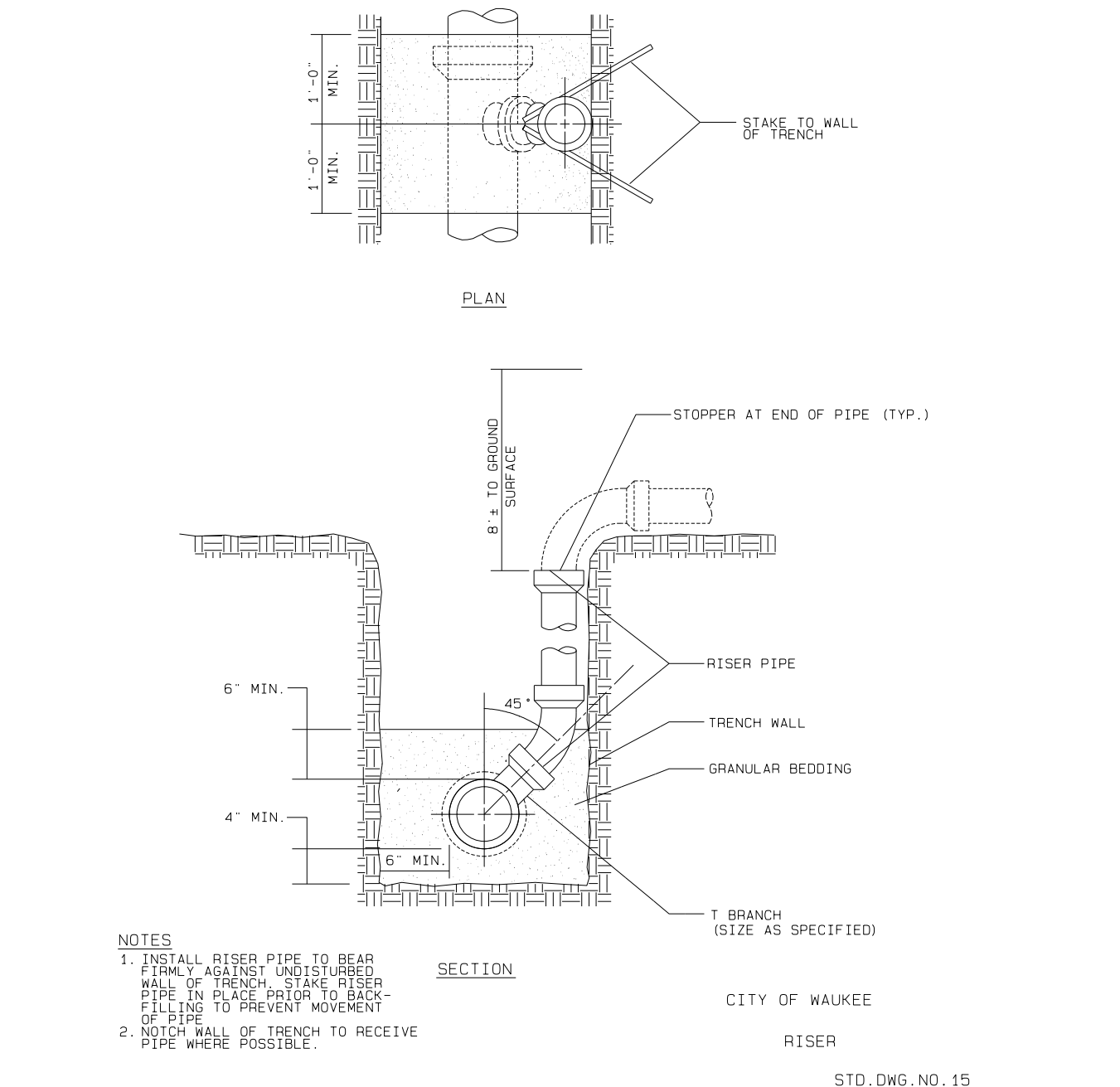
Key

- Sidewalk width as specified in the contract documents.
- Ramp
- Landing
- Detectable warning

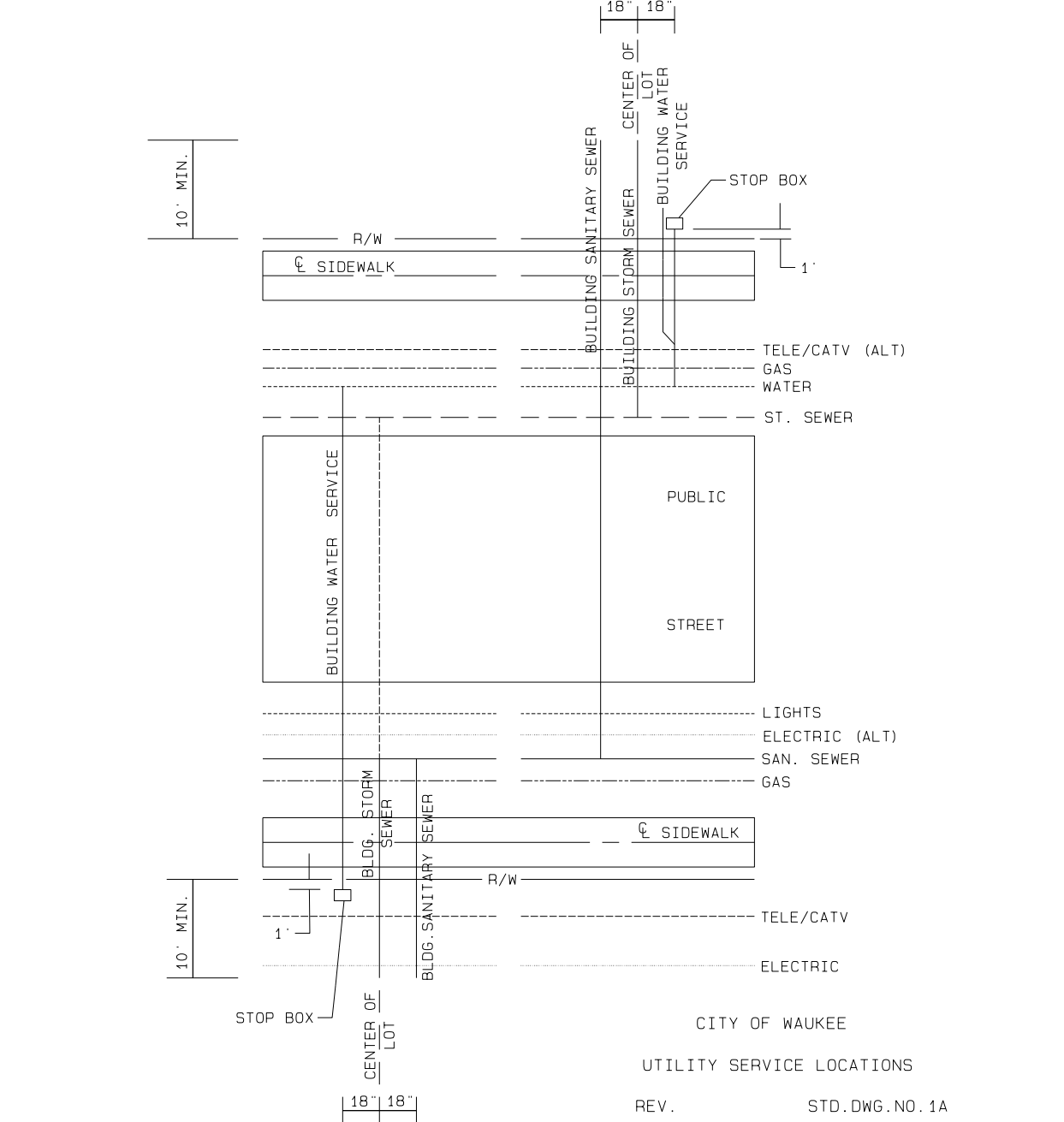


3 CITY OF WAUKEE WATER SERVICE CONNECTION

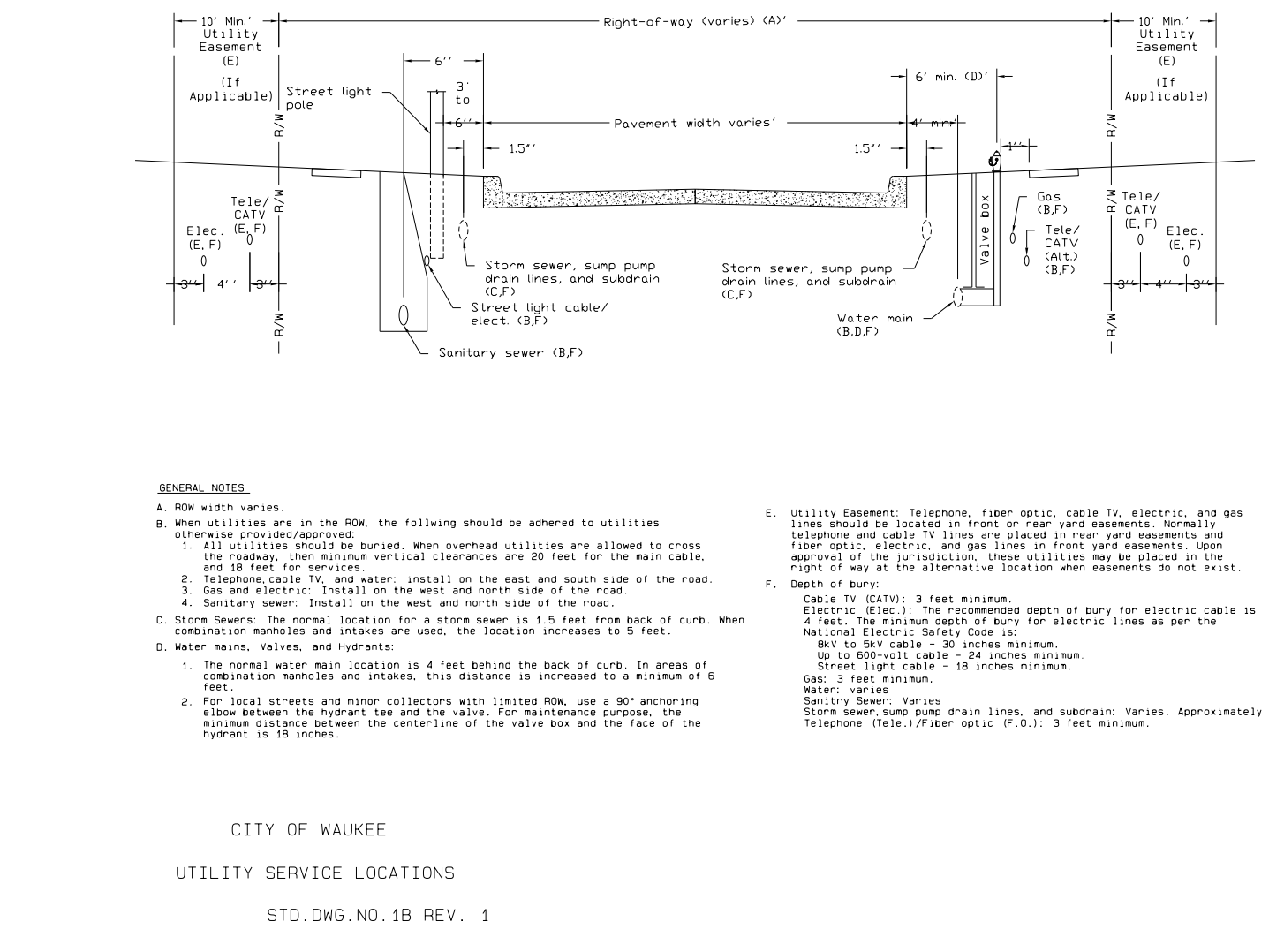
CITY OF WAUKEE  
SERVICE CONNECTION  
STD. DWG. NO. 32 REV. 1



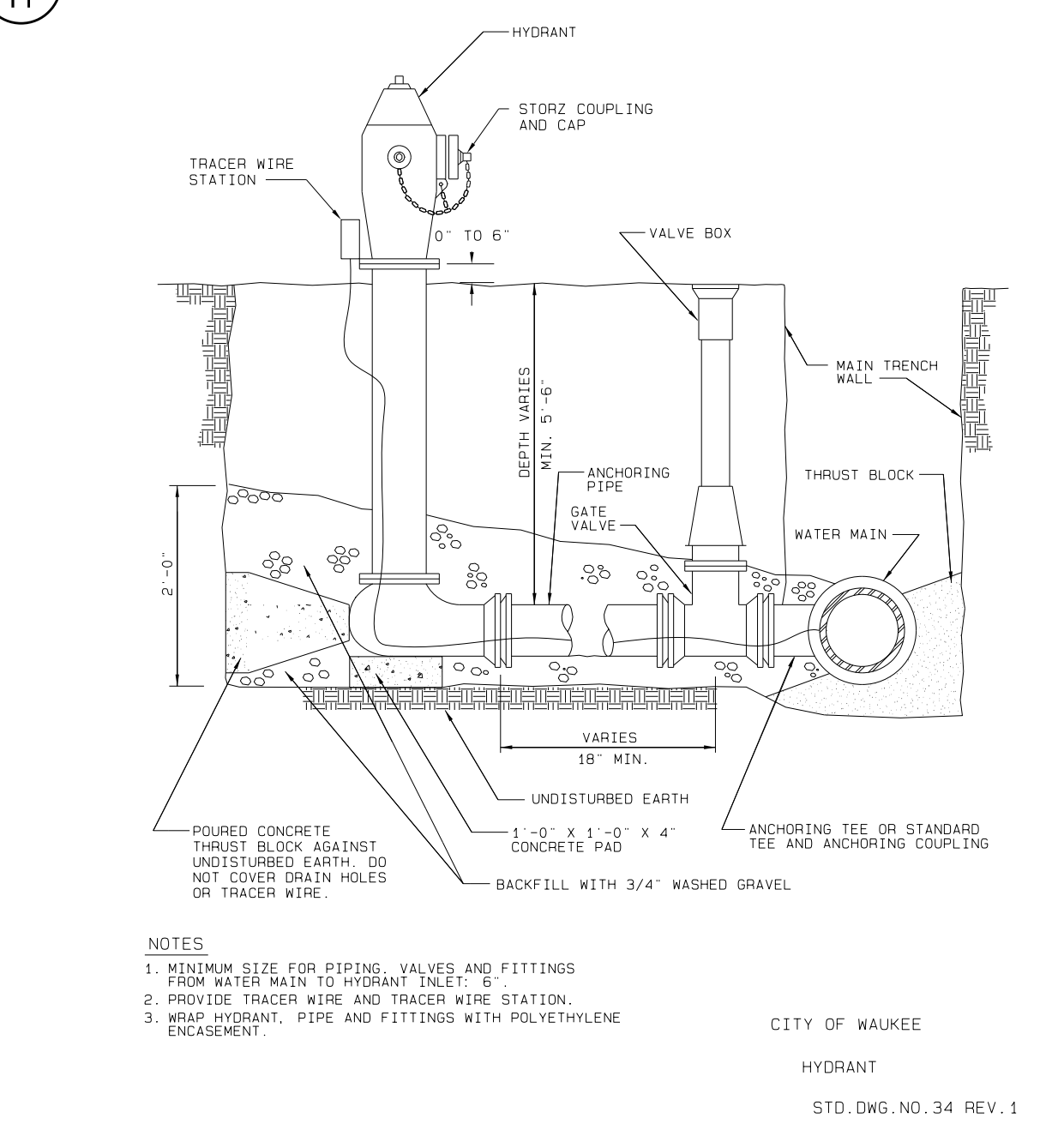
4 CITY OF WAUKEE RISER



5 CITY OF WAUKEE UTILITY SERVICE LOCATIONS

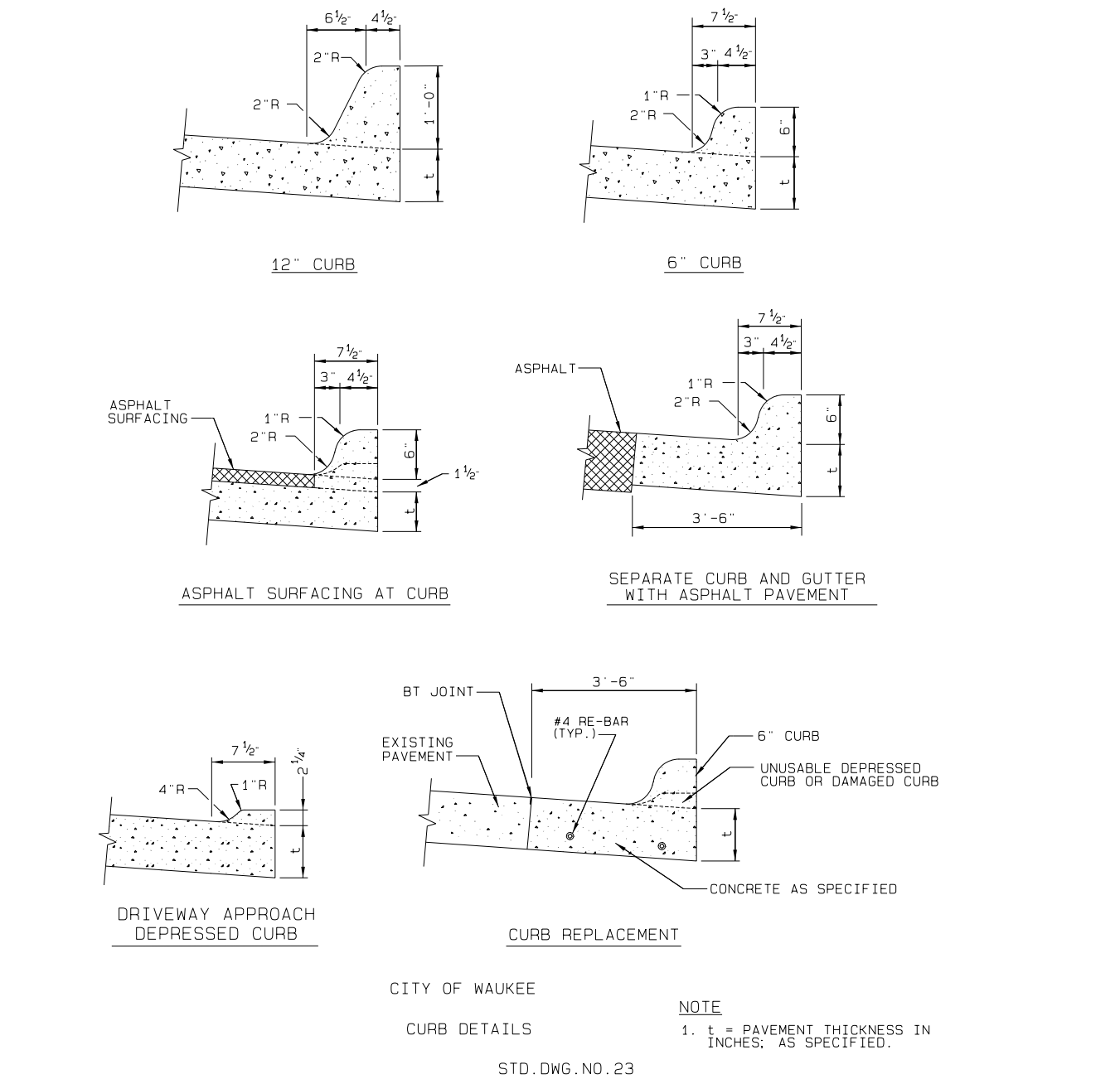


6 CITY OF WAUKEE UTILITY SERVICE LOCATIONS

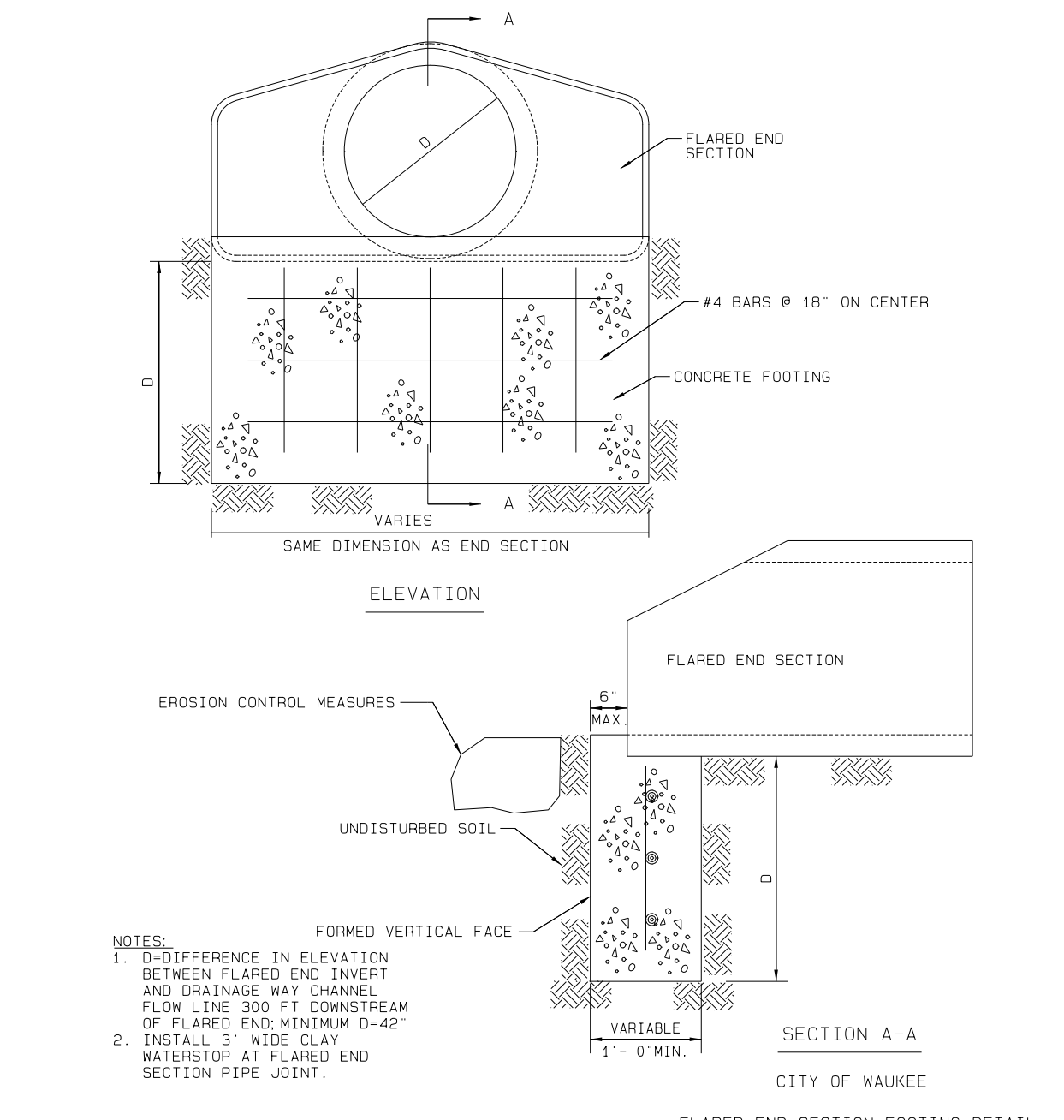


7 CITY OF WAUKEE HYDRANT

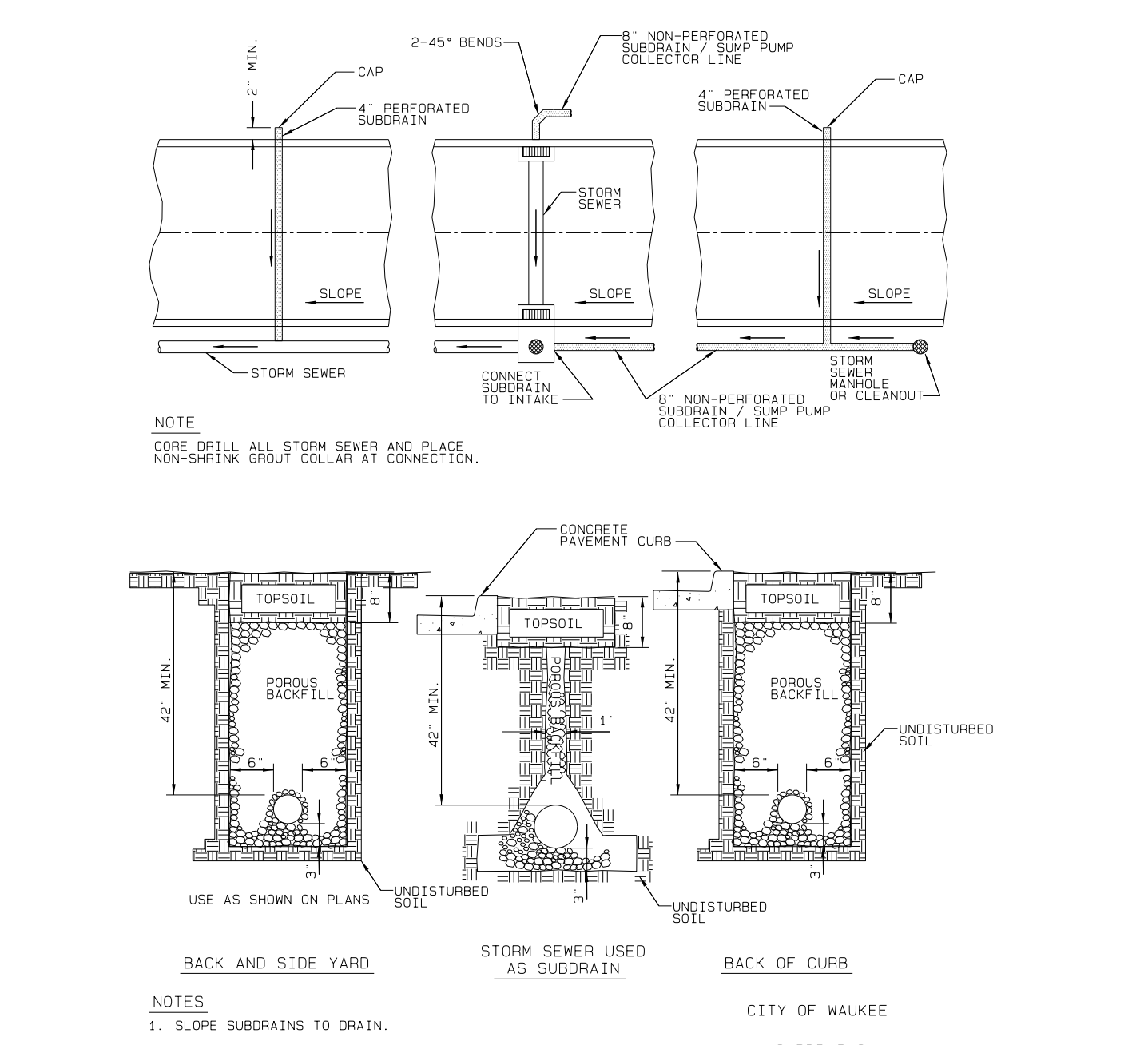
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HYDRANT  
STD. DWG. NO. 34 REV. 1



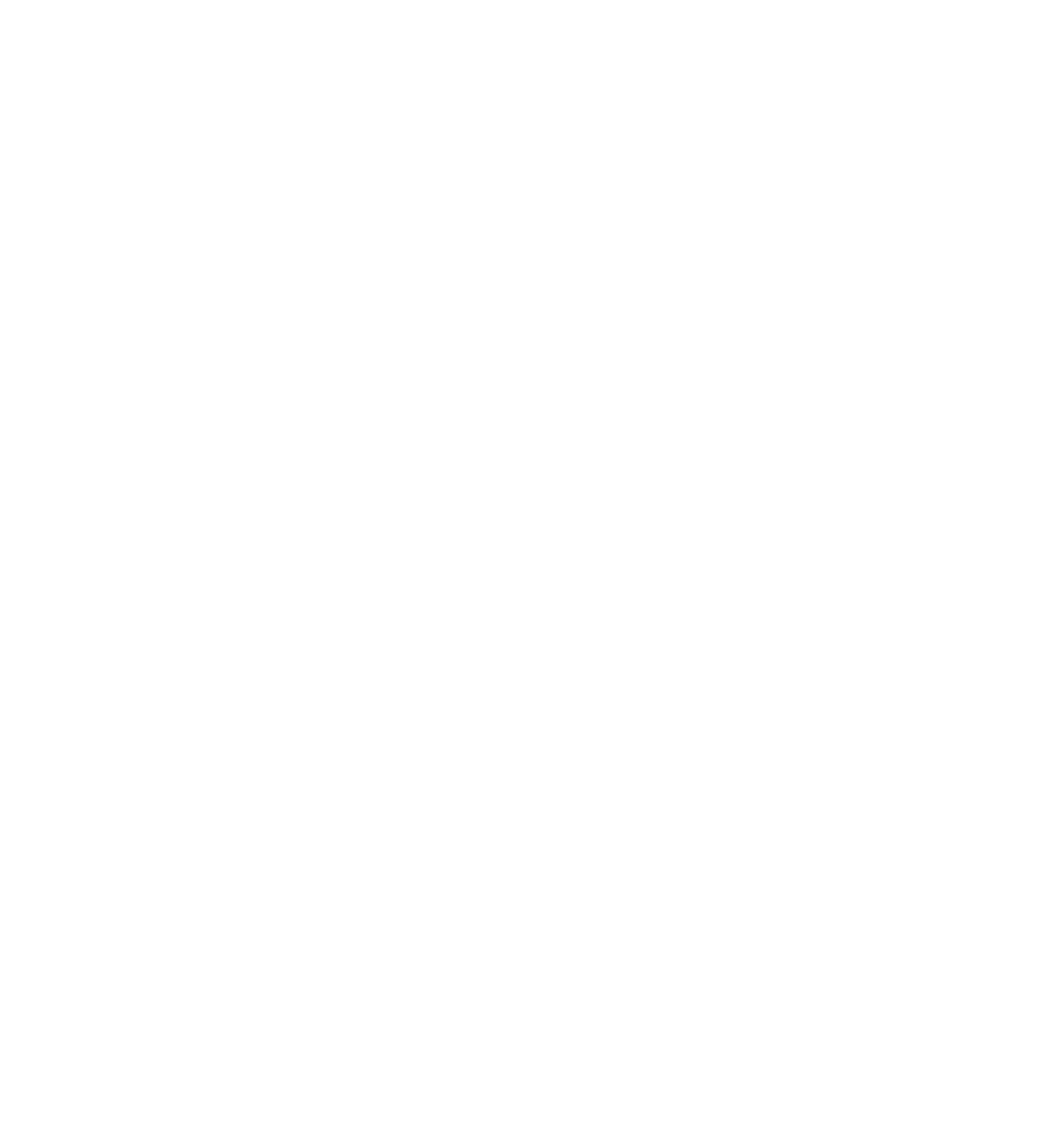
8 CITY OF WAUKEE CURB DETAILS



9 CITY OF WAUKEE FLARED END SECTION



10 CITY OF WAUKEE SUBDRAINS



11 CITY OF WAUKEE SUBDRAINS

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3	REVISED AS PER CITY COMMENTS	02/05/19 JWM
2	REVISED AS PER CITY COMMENTS	01/15/19 JWM
1	REVISED AS PER CITY COMMENTS	12/18/18 JWM
MARK	REVISION	DATE BY
	Engineer: KMM	Checked By: EDC
	Scale: 1"=20'	
	Field Bk: Pg:	
	Date: 11/21/18	
	Project No: 118.0675	
	Sheet 11 of 11	

**WAUKEE, IA**

**SPRING CREST PLAT 5**

**MISCELLANEOUS DETAILS**

**SNYDER & ASSOCIATES, INC.**

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ANKENY, IOWA 50023  
515-964-2020 | www.snyder-associates.com

**SNYDER & ASSOCIATES**

Project No: 118.0675

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