

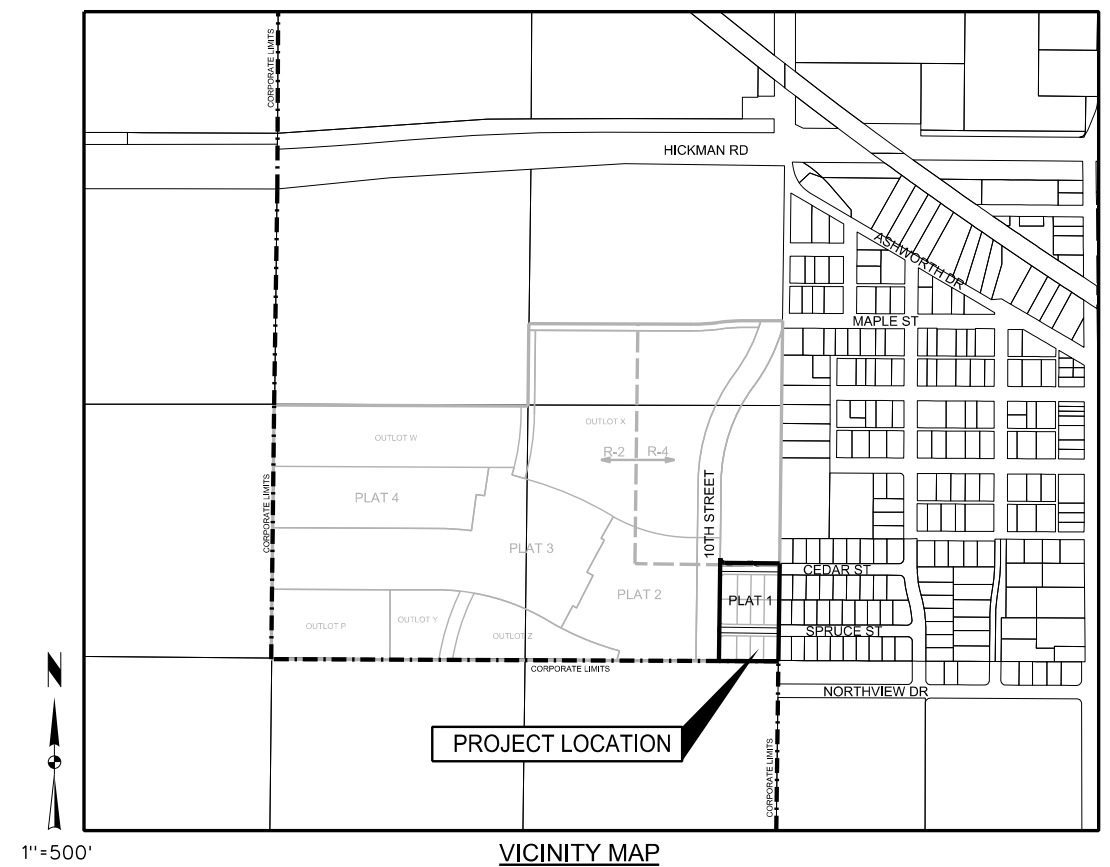
# CONSTRUCTION DOCUMENTS

## FOR

# SPRING CREST PLAT 1

## SINGLE FAMILY RESIDENTIAL DEVELOPMENT

### CITY OF WAUKEE, DALLAS COUNTY, IOWA



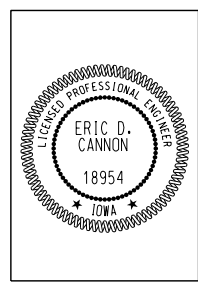
**OWNER/DEVELOPER**  
 SPRING CREST PARTNERS LLC  
 9550 HICKMAN RD, SUITE 100  
 CLIVE, IA 50325  
 CONTACT: NICK HALFHILL  
 PHONE: 515-986-5994

**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 GRADE PLAN
6. EROSION AND SEDIMENT CONTROL PLAN
7. SANITARY SEWER AND WATER MAIN PLAN AND PROFILE
- 8-10. PAVEMENT AND STORM SEWER PLAN AND PROFILE
11. STORM SEWER PLAN AND PROFILE
12. INTERSECTION DETAILS
- 13-14. MISCELLANEOUS DETAILS
15. LANDSCAPE PLAN

**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, P.E. Date \_\_\_\_\_  
 License Number 18954  
 My License Renewal Date is December 31, 2017  
 Pages or sheets covered by this seal:  
 Sheets 1-14

**SPRING CREST PLAT 1**

**TITLE SHEET**

**SNYDER & ASSOCIATES, INC. I**

**WAUKEE, IA**

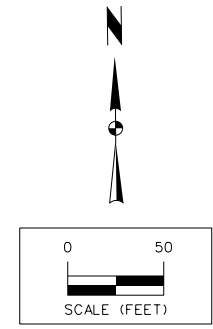
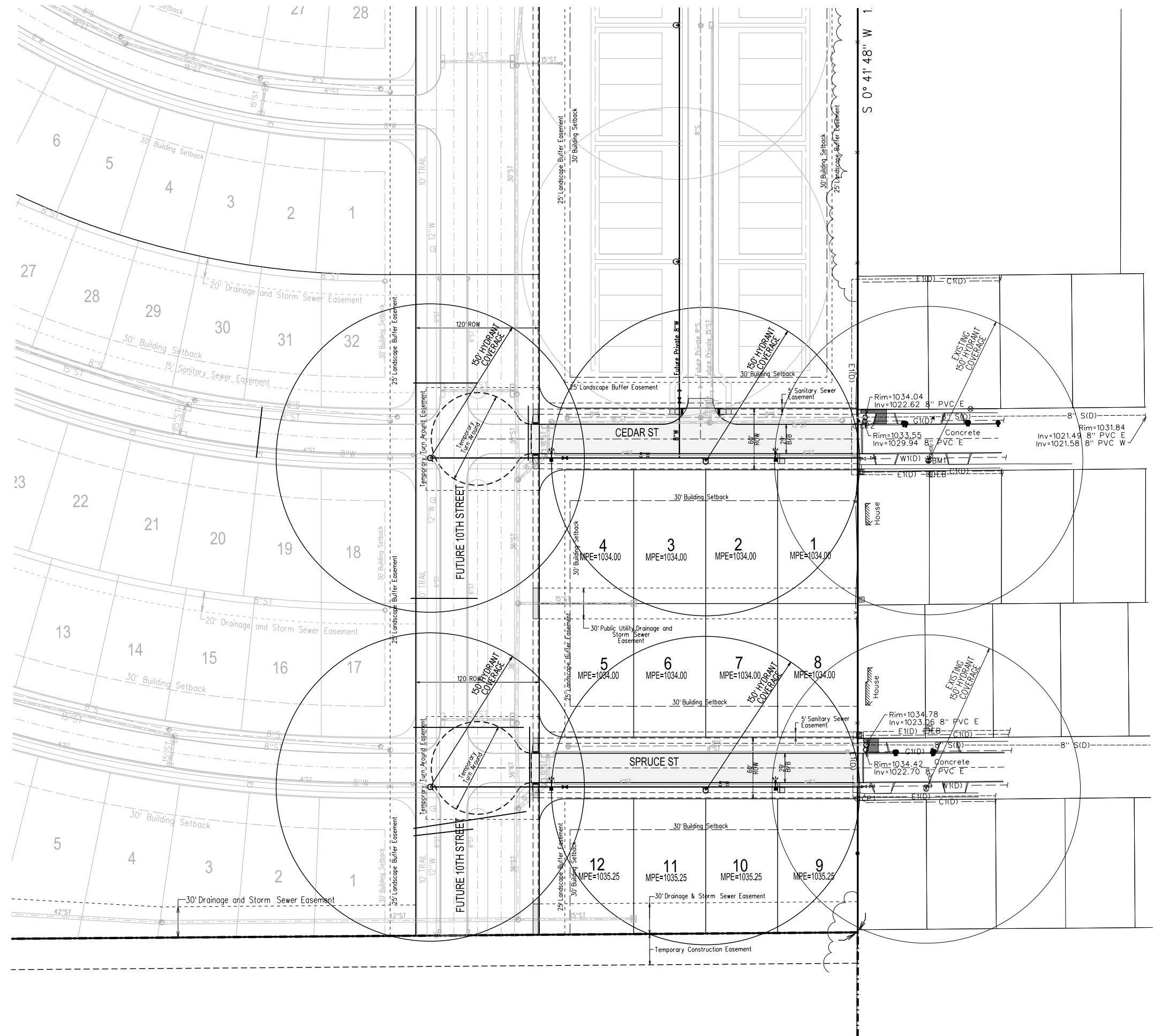
2727 S.W. SNYDER BLVD.  
 ANKENY, IOWA 50023  
 515-964-2020 | www.snyder-associates.com

5	REVISED PER AS-BUILT SURVEY	12/19/17	AJD
4	REVISED AS PER CITY COMMENTS	08/03/17	JMM
3	REVISED AS PER CITY COMMENTS	08/01/17	JMM
2	REVISED AS PER CITY COMMENTS	07/28/17	JMM
1	REVISED AS PER CITY COMMENTS	07/07/17	JMM
MARK		REVISION	DATE BY
Engineer:	KMM	Checked By:	EDC
Technician:	JMM	Date:	06/20/07
Field Bk:		Scale:	1"=500'
Project No:	116.0697	Field Bk:	
		Sheet	1 of 15

T:\Users\jmm\Projects\116.0697\Cons\116.0697\_15h.dgn  
 1/8/2019 1:55:00 PM  
 Snyder 11600  
 V:\UserLibrary\CAD\Standards\WorkSpace\Standard.dwg  
 V:\UserLibrary\CAD\Standards\Printing\Print\_Driver\Black\_Gray\_VisibilityWeight.dwg  
 Y:\Users\jmm\Projects\116.0697\Cons\116.0697\_15h.dgn



T:\ANSEN Projects\116.0697\Cons\48\_CDD1\_1160697\_HYD.dwg 1/8/2019 1:55:03 PM Snyder 1100  
 Y:\snp\gote.tbl  
 V:\snp\Library\CADDStandards\Worksheets\Standard\Printing\Print\_Drivers\Black\_Gray\_VisibilityWeightPlot.ctb  
 12/19/17 AD 5 REVISOR PER AS-BUILT SURVEY



# SPRING CREST PLAT 1

## HYDRANT COVERAGE PLAN

**SNYDER & ASSOCIATES, INC.**



Project No: 116.0697

Sheet 3 of 15

WAUKEE, IA

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

MARK	REVISION	DATE	BY
4	REVISED AS PER CITY COMMENTS	08/03/17	JWM
3	REVISED AS PER CITY COMMENTS	08/01/17	JWM
2	REVISED AS PER CITY COMMENTS	07/28/17	JWM
1	REVISED AS PER CITY COMMENTS	07/07/17	JWM

Engineer:	KMM	Checked By:	EDC
Technician:	JWM	Date:	06/20/07
Project No:	116.0697	Field Bk:	
		Scale:	1" = 50'
		Field Bk:	
		Sheet	3 of 15

J:\Projects\116.0697\116.0697-CD04-1160697 - GRA.dgn 1/8/2019 1:55:05 PM Snyder 1160  
 V:\UserLibrary\CADStandards\WorkSpace\Standard.dwg\Printing\Print\_Drivers\Brics\_Splines\Gray\Brics\BricsPlotPLOT.dwg  
 V:\UserLibrary\CADStandards\WorkSpace\Standard.dwg\Printing\Print\_Drivers\Brics\_Splines\Gray\Brics\BricsPlotPLOT.dwg

**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.

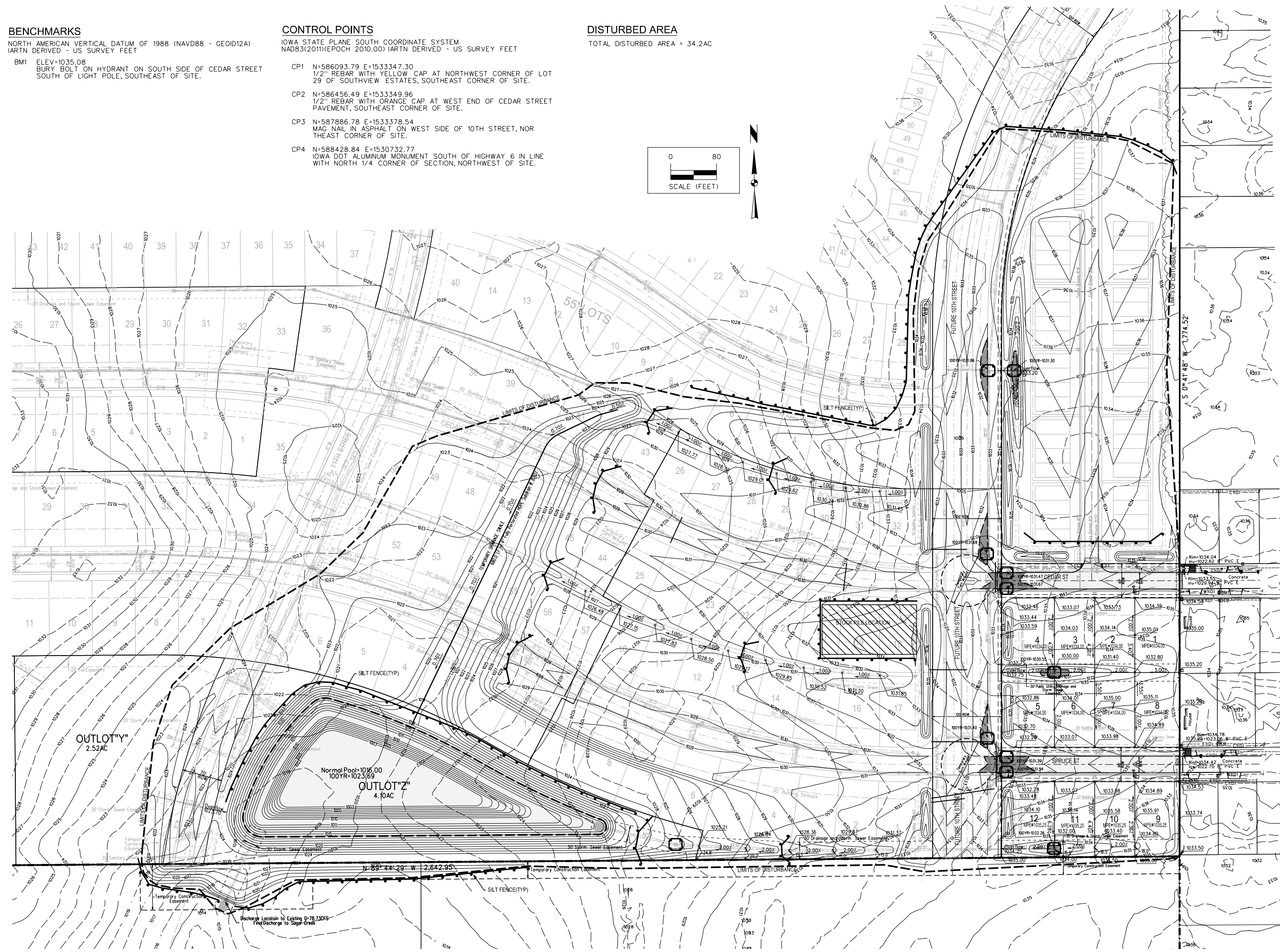
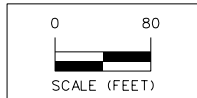
**CONTROL POINTS**

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  
MAC NAIL IN ASPHALT ON WEST SIDE OF 10TH STREET, NOR  
THEAST 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.

**DISTURBED AREA**

TOTAL DISTURBED AREA = 34.2AC



5 REVISED PER AS-BUILT SURVEY 12/19/17 ADJ  
 4 REVISED AS PER CITY COMMENTS 08/03/17 JWM  
 3 REVISED AS PER CITY COMMENTS 08/01/17 JWM  
 2 REVISED AS PER CITY COMMENTS 07/28/17 JWM  
 1 REVISED AS PER CITY COMMENTS 07/07/17 JWM

MARK	REVISION	DATE	BY
Engineer:	KMM	Checked By:	EDC
Technician:	JWM	Date:	06/20/07
Field Bk:		Scale:	1" = 80'
Project No:	116.0697	Sheet	4 of 15

**SPRING CREST PLAT 1**

**OVERALL SITE GRADE PLAN**

**SNYDER & ASSOCIATES, INC.**

**WAUKEE, IA**

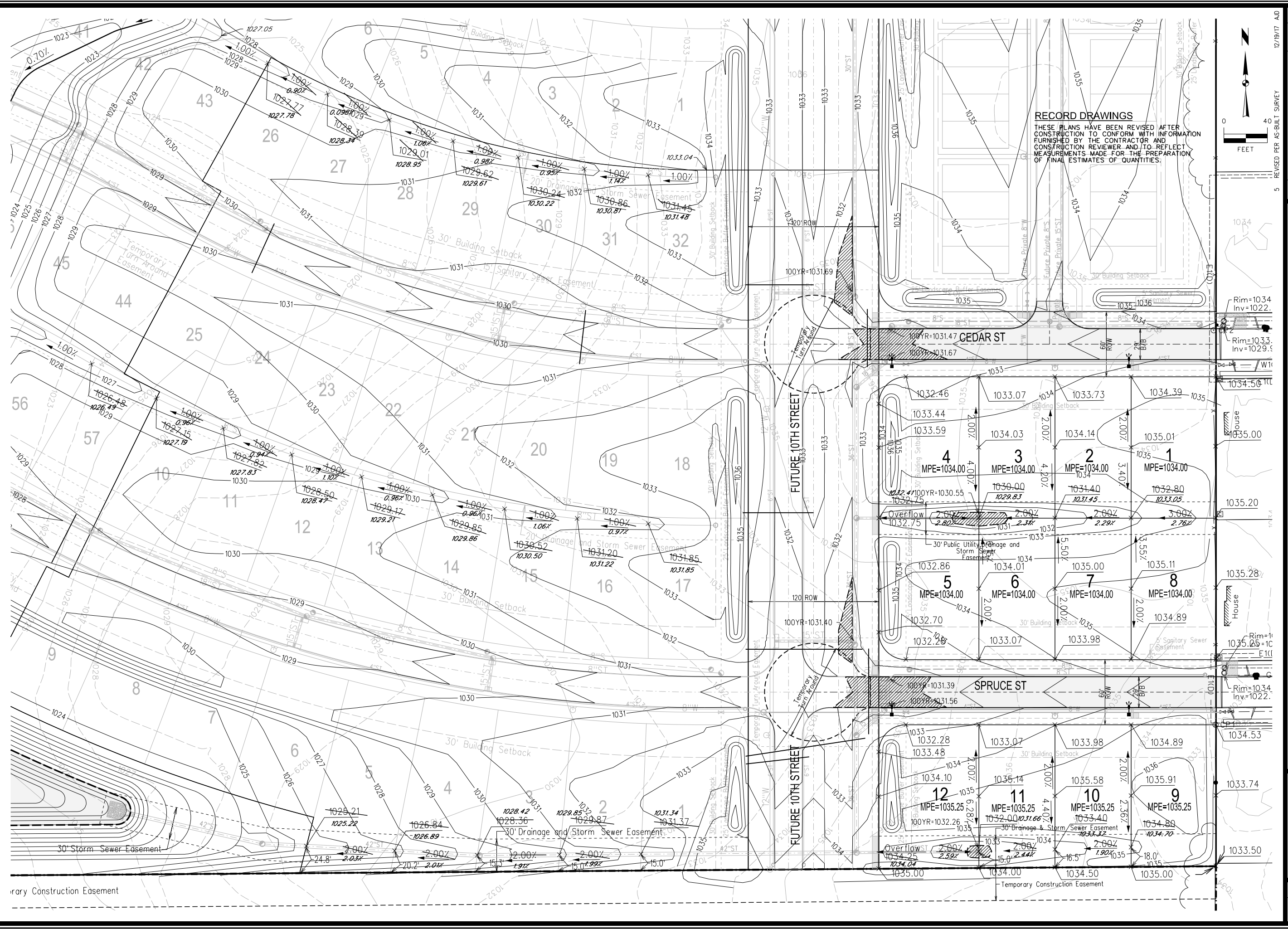
2727 S.W. SNYDER BLVD.  
ANKENY, IOWA 50023  
515-964-2020 | www.snyder-associates.com



Project No: 116.0697

Sheet 4 of 15

1/8/2019 1:55:06 PM  
 J:\Projects\116.0697\Drawings\116.0697 - GRA.dwg  
 T:\Users\jtanse\OneDrive\Documents\Projects\116.0697\Drawings\116.0697 - GRA.dwg  
 Snyder 180  
 V:\Library\CADDStandards\WorkSpace\Standard.dwg  
 Drivers\Black\_Cray\Yellow\Weight\Plot.ctb  
 V:\Users\jtanse\OneDrive\Documents\Projects\116.0697\Drawings\116.0697 - GRA.dwg  
 12/19/17 AD



**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.

**SPRING CREST PLAT 1**

**DETAILED GRADING PLAN**

**SNYDER & ASSOCIATES, INC.**



Project No: 116.0697  
 Sheet 5 of 15

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

MARK	REVISION	DATE	BY
4	REVISED AS PER CITY COMMENTS	08/03/17	JMM
3	REVISED AS PER CITY COMMENTS	08/01/17	JMM
2	REVISED AS PER CITY COMMENTS	07/28/17	JMM
1	REVISED AS PER CITY COMMENTS	07/07/17	JMM

Engineer: KMM  
 Checked By: EDC  
 Scale: 1" = 40'  
 Technician: JMM  
 Date: 06/20/07  
 Field Bk: 116.0697  
 Project No: 116.0697  
 Sheet 5 of 15

JANSEN  
J-2016 - Projects\116.0697\Cont'd - CD05 - 1160697 - ERO.dgn  
1/8/2019 1:55:07 PM  
Snyder  
1160  
V:\en\jg\1160697\Projects\116.0697\Cont'd - CD05 - 1160697 - ERO.dgn  
V:\en\jg\1160697\Projects\116.0697\Cont'd - CD05 - 1160697 - ERO.dgn

### POLLUTION PREVENTION NOTES

- A. POLLUTION PREVENTION AND EROSION PROTECTION
  - 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL POTENTIAL POLLUTION 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/HARBORER 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 PERMIT NO. 2 INCLUDING CREATING OR MAINTAINING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND POSSIBLY OBTAINING THE GENERAL PERMIT COVERAGE FROM THE IDNR.
  - 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 GRADE 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 4 INCHES OF TOPSOIL INCLUDING TOPSOIL FOUND IN SOIL 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, OR SOIL AS SOON AS PRACTICAL UPON COMPLETION OR DELAY OF GRADING OPERATIONS. INITIATE STABILIZATION MEASURES NO LATER THAN 14 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY HAS FINISHED OR IS PLANNED TO BE DELAYED MORE THAN 21 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 ON-SITE.
    - k. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND SITE WASTE PRIOR TO FILING OF THE "NOTICE OF DISCONTINUATION".

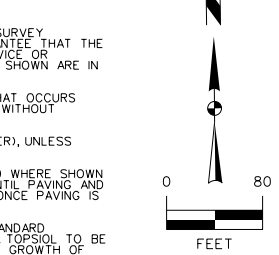
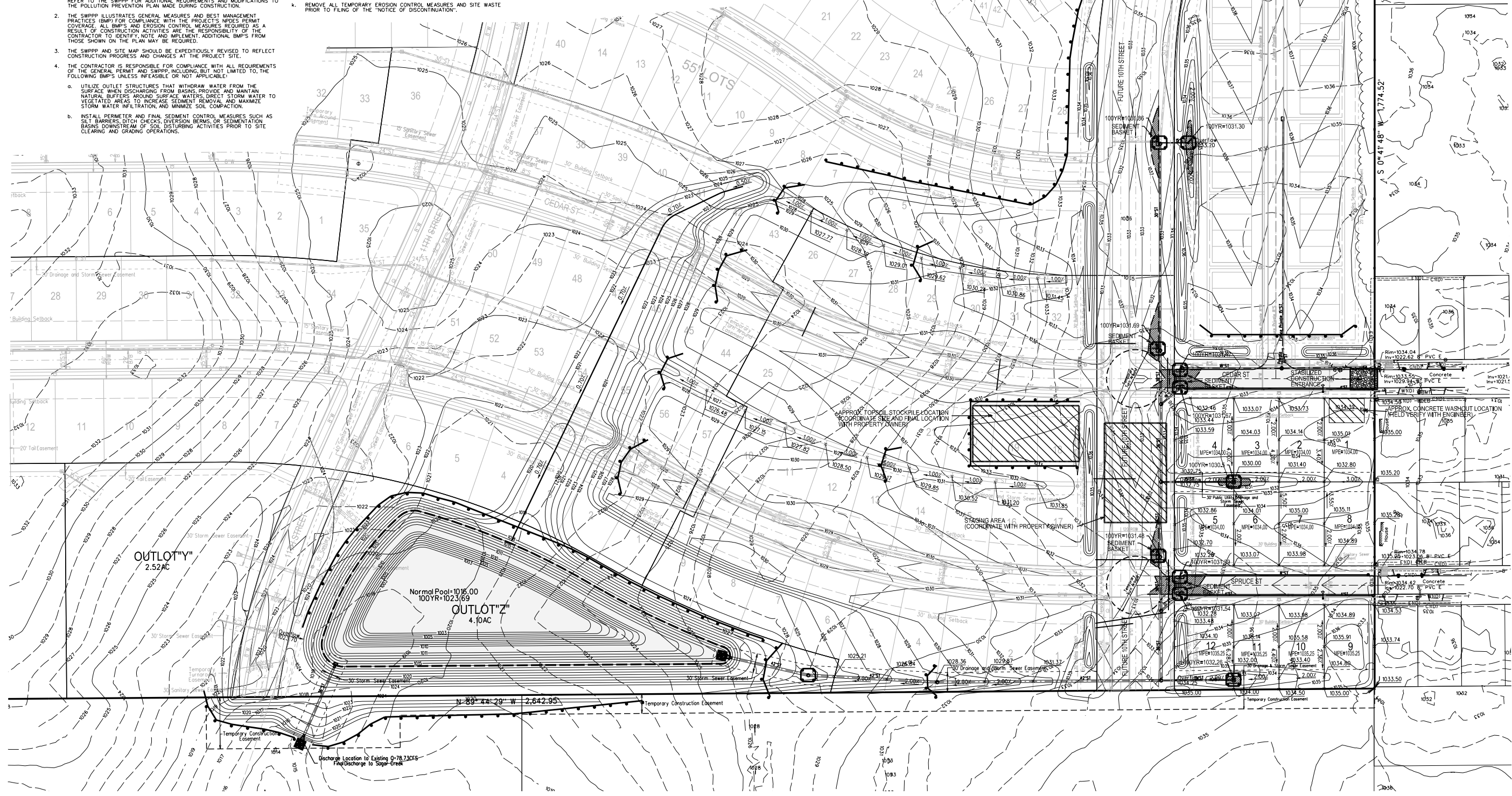
### STORMWATER MANAGEMENT QUANTITIES

SILT FENCE	4920 LF
SEDIMENT BASKETS	7 EA
FERTILIZING & MULCHING	34.2 AC
TYPE 4 URBAN TEMPORARY EROSION CONTROL MIXTURE (ENTIRE SITE)	34.2 AC

POTENTIAL STORM WATER MANAGEMENT FACILITY LOCATIONS

### 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 OWNER'S 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 BASKETS SHALL BE PROVIDED ONCE PAVING IS COMPLETE.
- E. STRIP SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SDAS 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.



MARK	REVISION	DATE	BY
4	REVISED AS PER CITY COMMENTS	08/03/17	JWM
3	REVISED AS PER CITY COMMENTS	08/01/17	JWM
2	REVISED AS PER CITY COMMENTS	07/28/17	JWM
1	REVISED AS PER CITY COMMENTS	07/07/17	JWM

Engineer: KMM  
Checked By: EDC  
Scale: 1" = 80'  
Field No: 116.0697  
Project No: 116.0697  
Sheet 6 of 15

**WAUKEE, IA**

**SNYDER & ASSOCIATES, INC.**

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

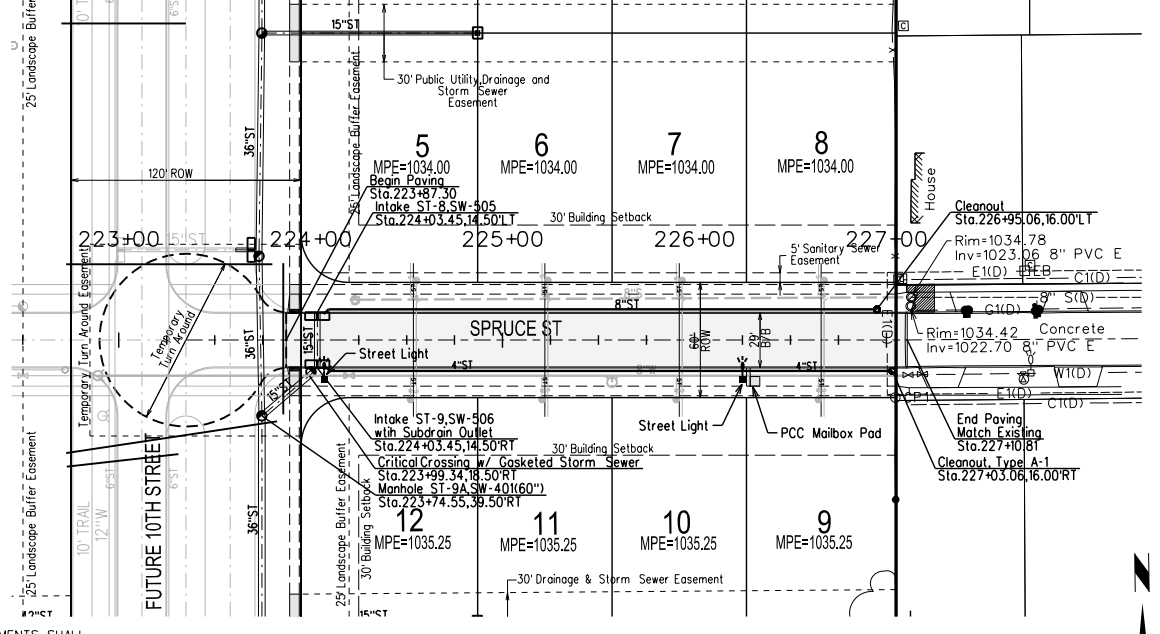
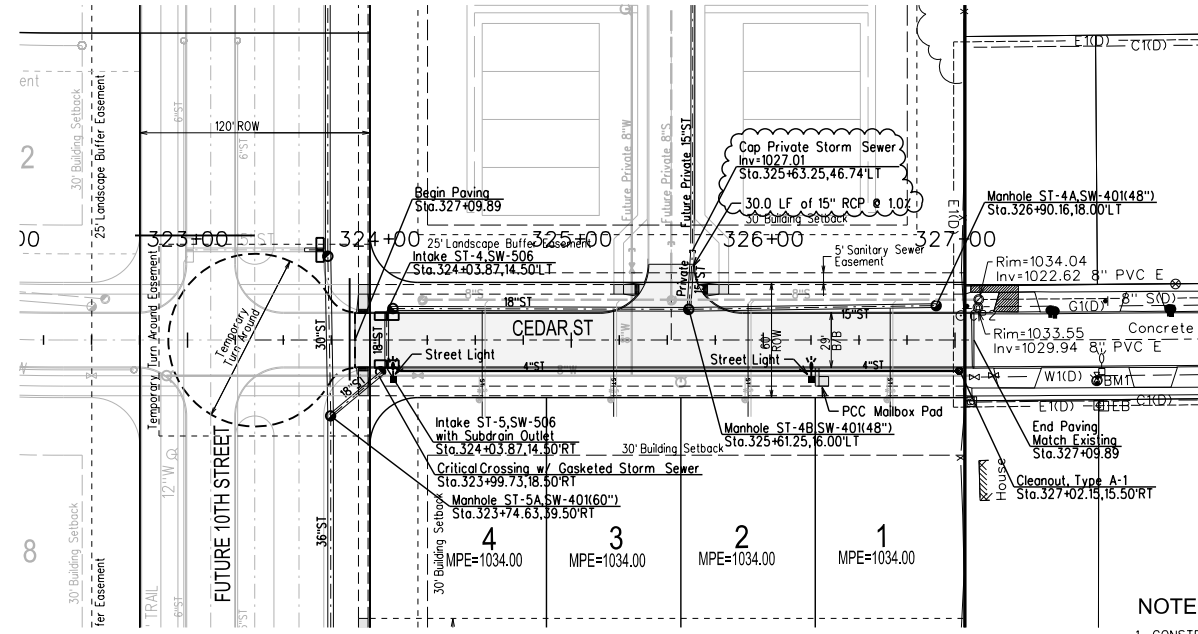
**SPRING CREST PLAT 1**

**EROSION AND SEDIMENT CONTROL PLAN**

Project No: 116.0697  
Sheet 6 of 15



T:\Projects\116.0697\116.0697 - Pav.dgn 1/8/2019 1:55:10 PM 1100 Snyder



**BENCHMARKS**

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

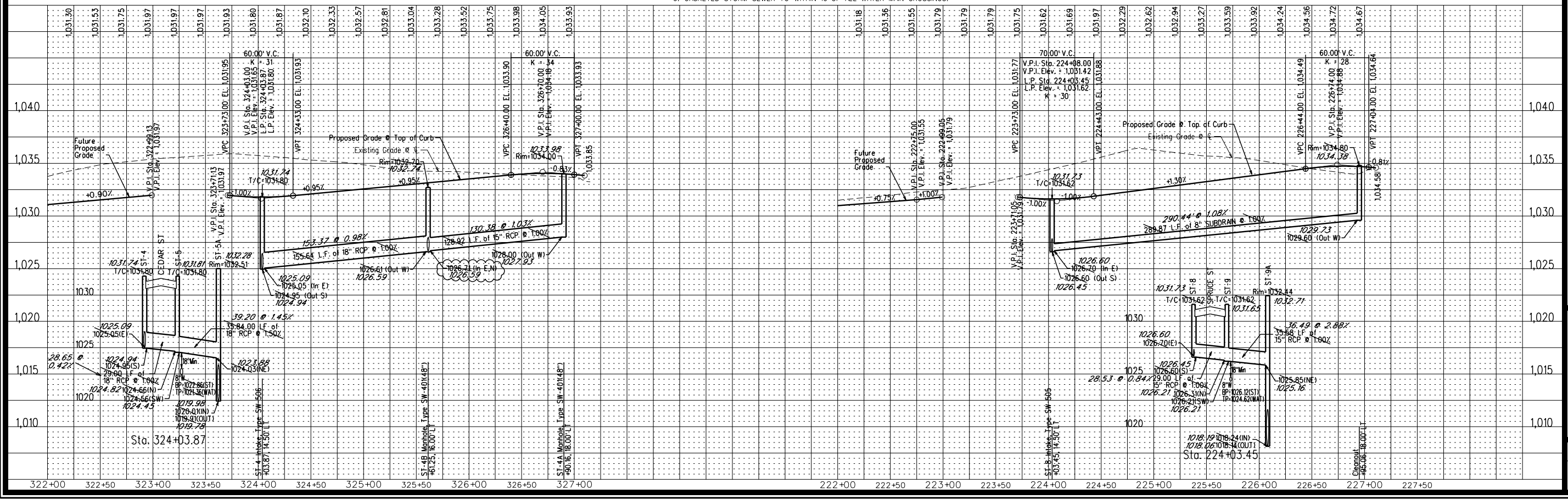
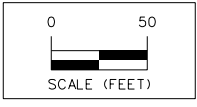
BM1 ELEV=1035.08  
 BURY BOLT ON HYDRANT ON SOUTH SIDE OF CEDAR STREET  
 SOUTH OF LIGHT POLE, SOUTHEAST OF SITE.

**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 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.
- A SPECIAL STRUCTURAL SUPPORT IS REQUIRED FOR ALL CROSSINGS BETWEEN 6" AND 18".
- GASKETED STORM SEWER TO WITHIN 10' OF ALL WATER MAIN CROSSINGS.

**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.



**CAUTION:**  
 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 SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFY LOCATION OF ALL UTILITIES BEFORE CONSTRUCTION.

5	REVISED PER AS-BUILT SURVEY	12/19/17	AD
4	REVISED AS PER CITY COMMENTS	08/03/17	JMM
3	REVISED AS PER CITY COMMENTS	08/01/17	JMM
2	REVISED AS PER CITY COMMENTS	07/28/17	JMM
1	REVISED AS PER CITY COMMENTS	07/07/17	JMM
MARK	REVISION	DATE	BY
Engineer:	KMM	Checked By:	EDC
Technician:	JMM	Date:	06/20/07
Field By:		Scale:	1" = 50'
Project No:	116.0697	Sheet	8 of 15

**SPRING CREST PLAT 1**

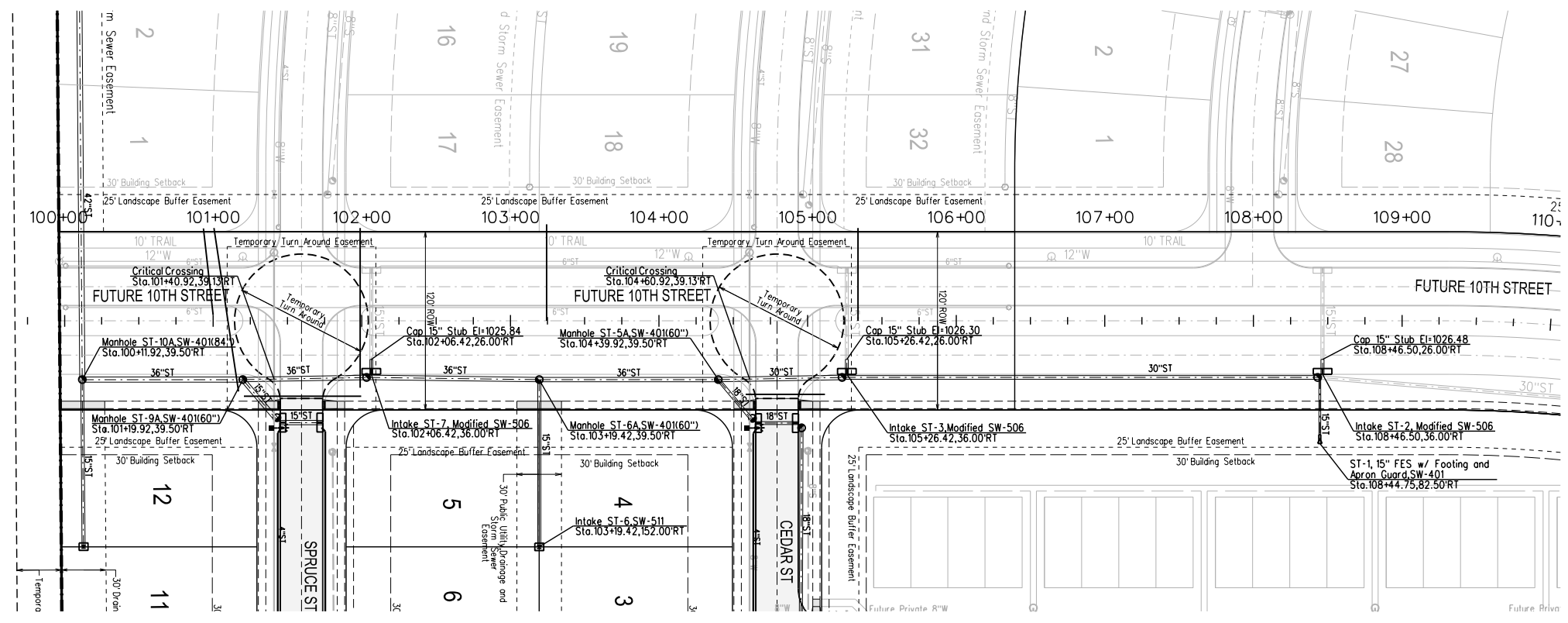
**PAVEMENT AND STORM SEWER PLAN AND PROFILE**

**SNYDER & ASSOCIATES, INC.**



Project No: 116.0697  
 Sheet 8 of 15

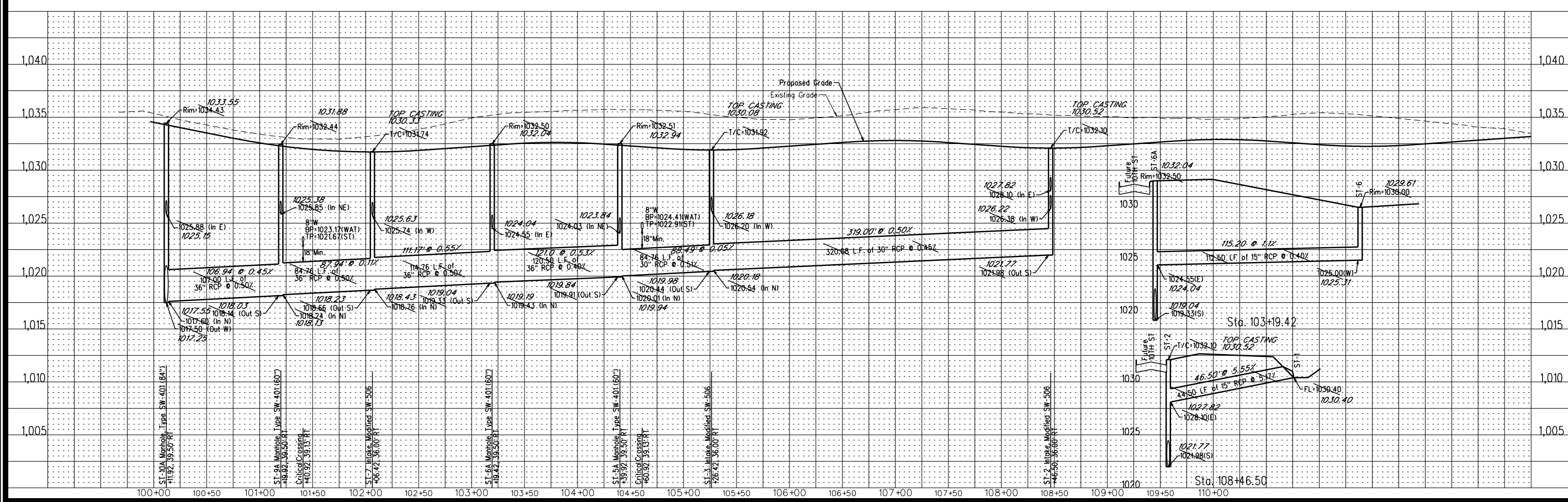
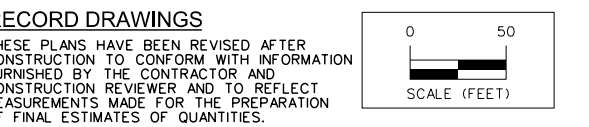
1/8/2019 1:55:11 PM  
 T:\ANSEN\J-206-Projects\116.067-Cons-AB-CD09-1160697-STW.dgn  
 Snyder 1100  
 V:\Users\jacob@snycorp.com\Documents\Standard\Printing\Print\_Drivers\Black\_Gray\_VisibilityWeightPDF.plt  
 V:\Users\jacob@snycorp.com\Documents\Standard\Printing\Print\_Drivers\Black\_Gray\_VisibilityWeightPDF.plt



**CAUTION:**  
 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 SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFY LOCATION OF ALL UTILITIES BEFORE CONSTRUCTION.

- 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 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.
  - A SPECIAL STRUCTURAL SUPPORT IS REQUIRED FOR ALL CROSSINGS BETWEEN 6" AND 18".
  - GASKETED STORM SEWER TO WITHIN 10' OF ALL WATER MAIN CROSSINGS.

**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.



5	REVISED PER AS-BUILT SURVEY	12/19/17	AJD
4	REVISED AS PER CITY COMMENTS	08/03/17	JWM
3	REVISED AS PER CITY COMMENTS	08/01/17	JWM
2	REVISED AS PER CITY COMMENTS	07/28/17	JWM
1	REVISED AS PER CITY COMMENTS	07/07/17	JWM
MARK	REVISION	DATE	BY
Engineer:	KMM	Checked By:	EDC
Technician:	JWM	Date:	06/20/07
Field Bk:		Scale:	1" = 50'
Project No:	116.0697	Sheet	9 of 15

**WAUKEE, IA**

**SNYDER & ASSOCIATES, INC.**

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

Project No: 116.0697  
 Sheet 9 of 15

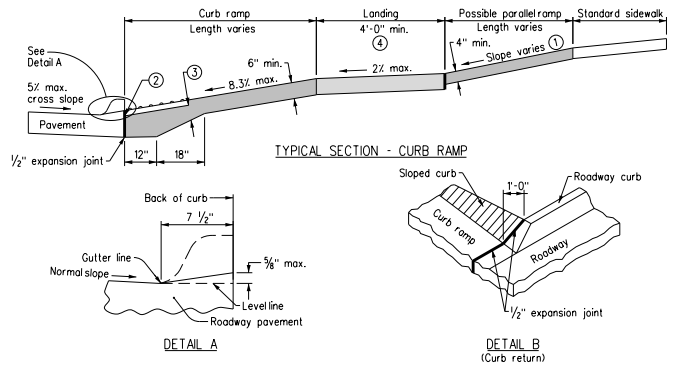






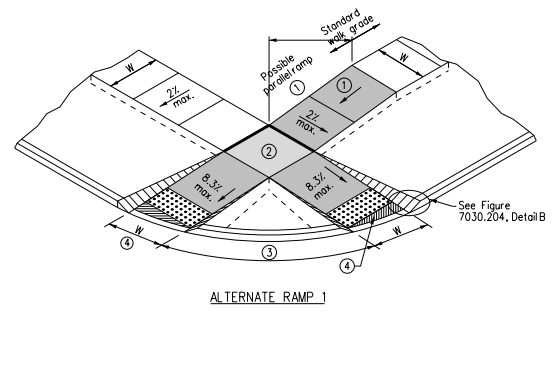
1/8/2019 1:55:14 PM  
TANSEN J-206-Projects\116.0697-Cons\48-CD13-1160697-DTL.dgn  
Snyder 1:00  
V:\UserLibrary\CADStandards\WorkSpace\Standard.dwg, WorkSpace\Standard.dwg, Printing\Print, Drivers\Black, Gray, Yellow\Weight\PDF.plt

### 1 GENERAL SIDEWALK DETAILS



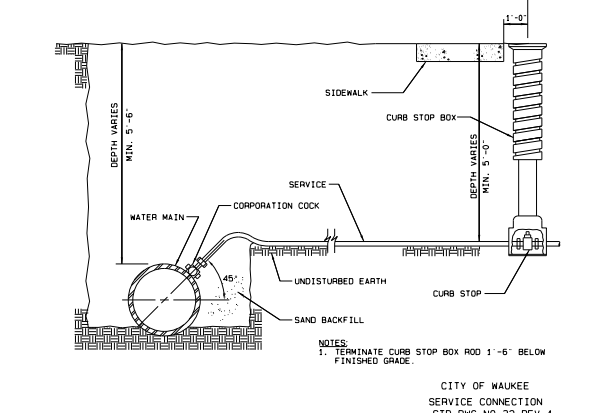
- If crosswalks are marked, locate ramps, exclusive of flares, within the crosswalk markings.
- Parallel ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference 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

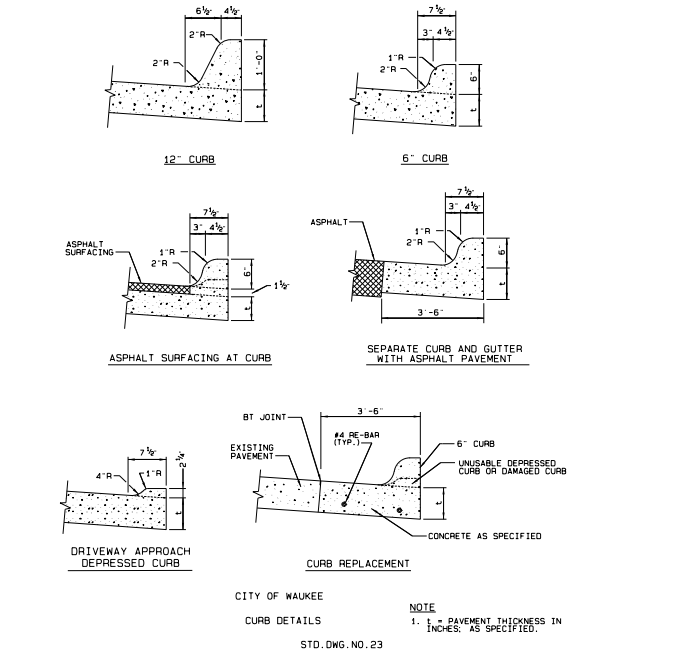


- Parallel ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
- Landing: Maximum slope of 2% in any direction.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

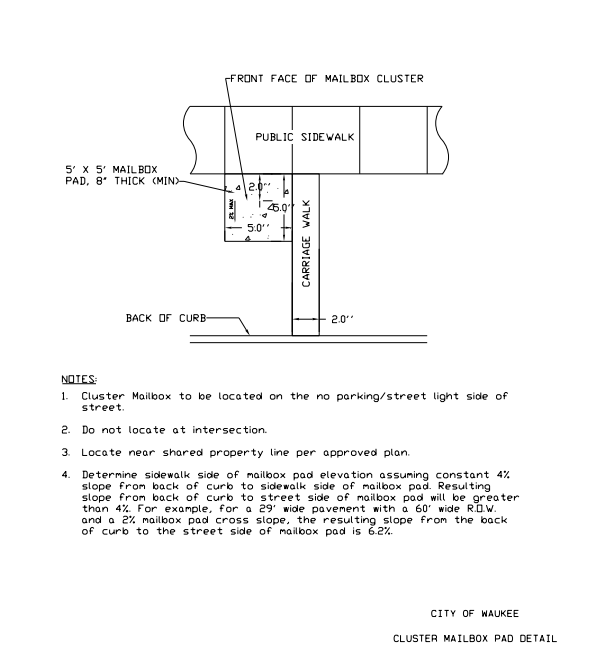
### 3 CITY OF WAUKEE WATER SERVICE CONNECTION



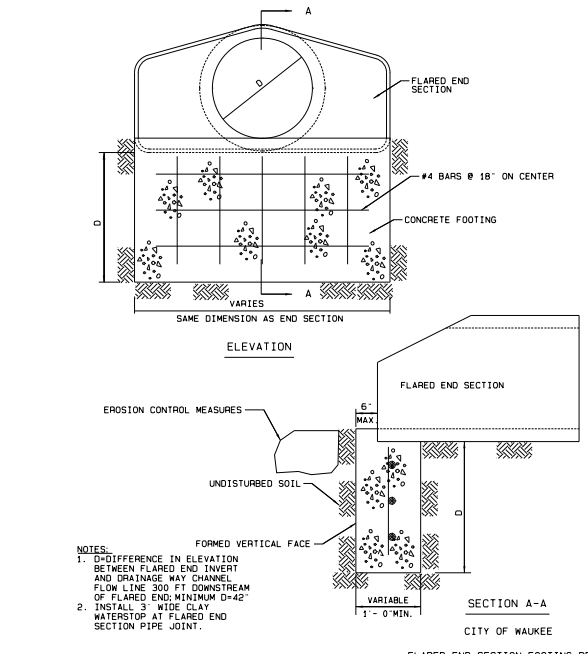
### 4 CITY OF WAUKEE RISER



### 5 CITY OF WAUKEE UTILITY SERVICE LOCATIONS



### 6 CITY OF WAUKEE UTILITY SERVICE LOCATIONS



### 8 CITY OF WAUKEE CURB DETAILS



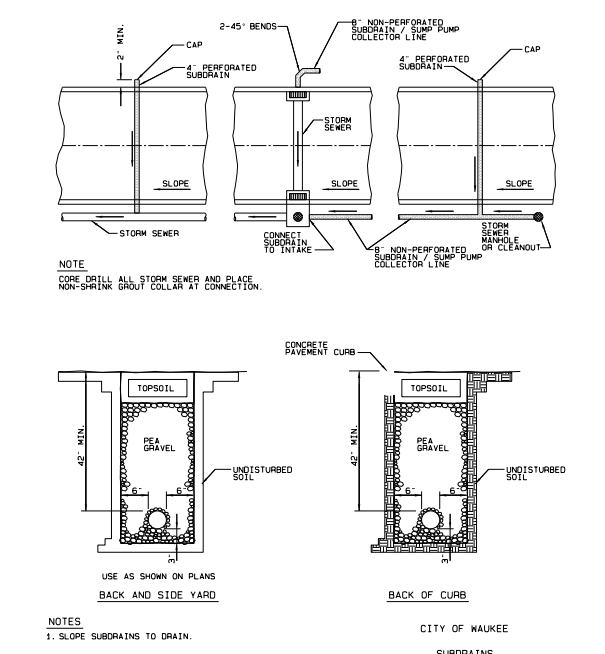
### 9 CITY OF WAUKEE CLUSTER MAILBOX PAD



### 10 CITY OF WAUKEE FLARED END SECTION



### 7 CITY OF WAUKEE HYDRANT



### 11 CITY OF WAUKEE SUBDRAINS



12/19/17 AD  
5 REVISED PER AS-BUILT SURVEY

4	REVISED AS PER CITY COMMENTS	08/03/17 JMW
3	REVISED AS PER CITY COMMENTS	08/01/17 JMW
2	REVISED AS PER CITY COMMENTS	07/28/17 JMW
1	REVISED AS PER CITY COMMENTS	07/07/17 JMW
MARK	REVISION	DATE BY
Engineer:	KMM	Checked By: EDC
Technician:	JMW	Date: 06/20/07
Scale:	1"=20'	Field Book:

Project No: 116.0697  
Sheet 13 of 15

## SPRING CREST PLAT 1

### MISCELLANEOUS DETAILS

# SNYDER & ASSOCIATES, INC.



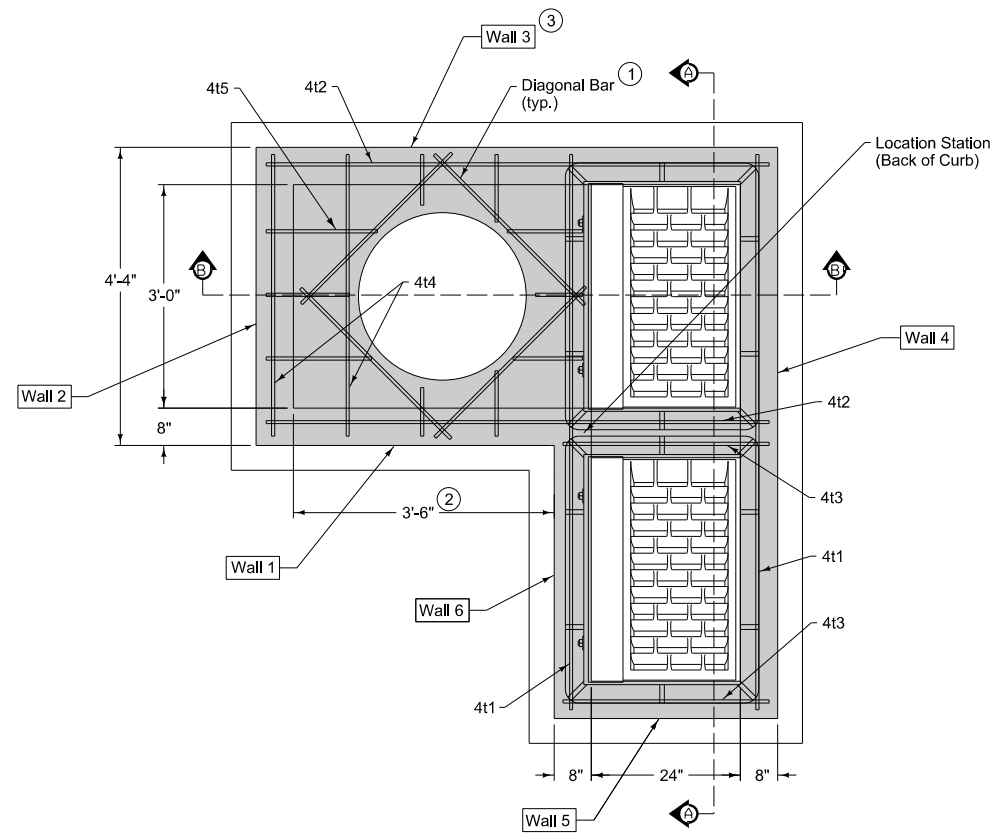
Project No: 116.0697

Sheet 13 of 15

WAUKEE, IA

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

1/8/2019 1:55:16 PM  
 J:\ANSEN\Projects\116.0697\Cons\48\_CD14\_1160697\_DTL.dgn  
 Snyder 11.00  
 V:\UserLibrary\CADStandards\WorksSpace\Standard\Printing\Print\_Drivers\Black\_Gray\_VisibilityWeight.dwt  
 Y:\open\061e.tbl

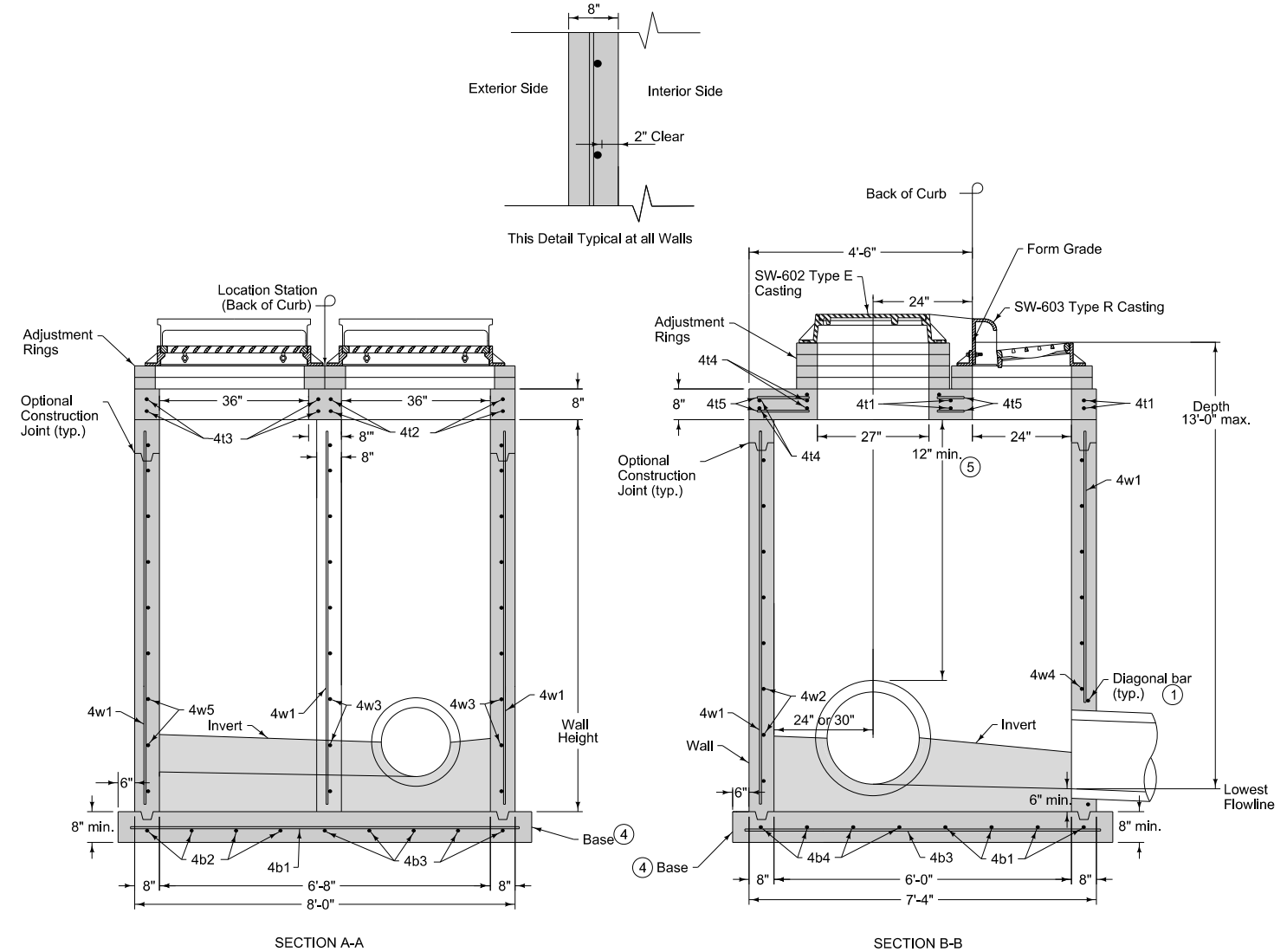


Maximum pipe diameters are set based on maximum structure depth of 6 feet-6 inches and the objective of placement of the centerline of the pipe on the centerline of the manhole opening for maintenance purposes.

Refer to SW-514 for boxout details.

Wall	Max. Dia.
1	30" (2)
2	24"
3	36" (3)
4	42"

- (1) Install four #4 diagonal bars at manhole opening and at all pipe openings.
- (2) If Wall 1 is widened to 4 feet, the maximum pipe diameter can be increased to 36 inches.
- (3) If Wall 1 is widened to 4 feet, the maximum pipe diameter in Wall 3 can be increased to 42 inches.



Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Top	—	4	7'-4"	See Detail
4t2	4	Top	—	4	6'-8"	See Detail
4t3	4	Top	—	4	2'-8"	See Detail
4t4	4	Top	—	8	3'-8"	12"
4t5	4	Top	—	6	4'-2"	12"
4b1	4	Base	—	4	7'-10"	12"
4b2	4	Base	—	4	3'-2"	12"
4b3	4	Base	—	5	7'-2"	12"
4b4	4	Base	—	4	4'-2"	12"
4w1	4	Walls	—	29	Wall Height minus 4"	12"
4w2	4	Wall 2	—	Varies	4'-0"	5"
4w3	4	Walls 1 and 3	—	Varies	7'-0"	5"
4w4	4	Wall 4	—	Varies	7'-8"	5"
4w5	4	Wall 5	—	Varies	3'-0"	5"
4w6	4	Wall 6	—	Varies	4'-2"	5"

- (1) Install four #4 diagonal bars at manhole opening and at all pipe openings.
- (4) Cast-in-place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.
- (5) 12 inch minimum wall height above all pipes.

5	REVISED PER AS-BUILT SURVEY	12/19/17	AJD
4	REVISED AS PER CITY COMMENTS	08/03/17	JWM
3	REVISED AS PER CITY COMMENTS	08/01/17	JWM
2	REVISED AS PER CITY COMMENTS	07/28/17	JWM
1	REVISED AS PER CITY COMMENTS	07/07/17	JWM
MARK	REVISION	DATE	BY
Engineer:	KMM	Checked By:	EDC
Technician:	JWM	Date:	06/20/07
Project No.:	116.0697	Field Bk.:	Page:
			Sheet 14 of 15

**SPRING CREST PLAT 1**

MODIFIED SW-506

**SNYDER & ASSOCIATES, INC.**



