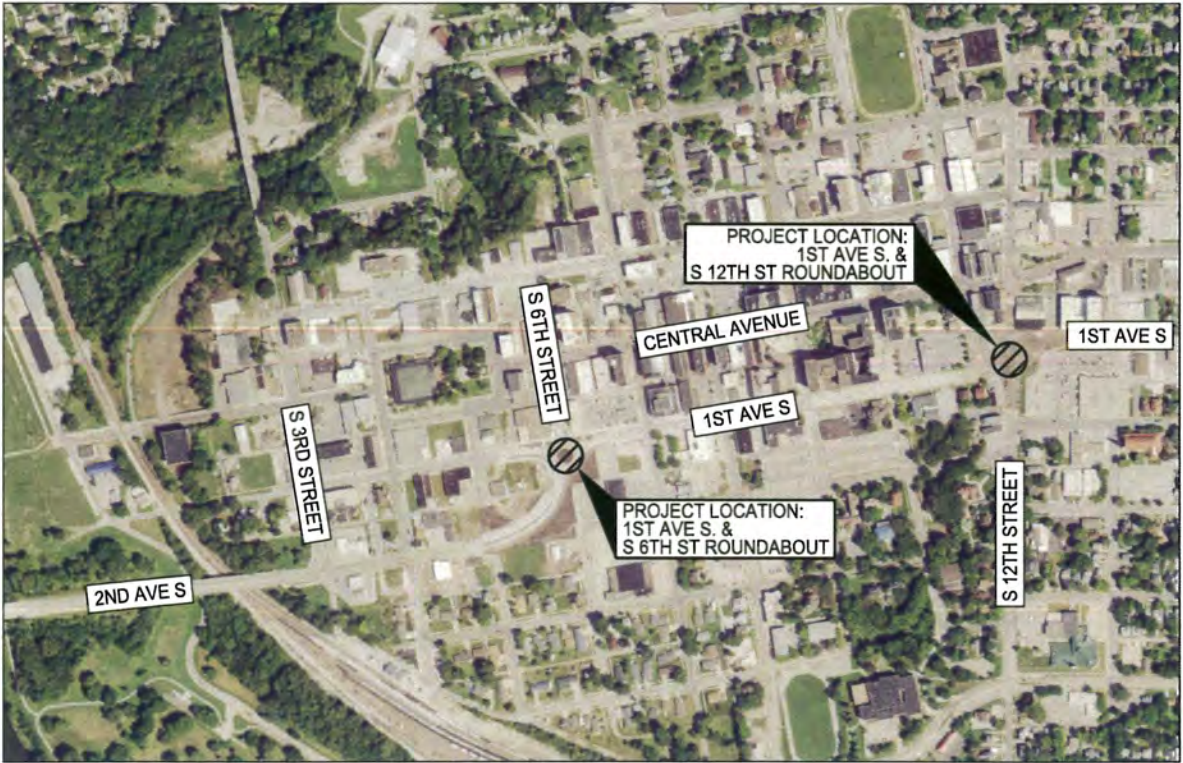


CONSTRUCTION DOCUMENTS  
FOR  
**FORT DODGE**  
**GATEWAY IMPROVEMENTS - PHASE 1**  
FORT DODGE, IOWA

THE 2017 STATEWIDE URBAN DESIGN STANDARDS AND STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, CITY OF FORT DODGE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.

OWNER/DEVELOPER

CITY OF FORT DODGE  
819 1ST AVE SOUTH  
FORT DODGE, IOWA 50501



VICINITY MAP



INDEX OF SHEETS

- 1 TITLE SHEET
- 2 GENERAL NOTES
- 3-4 EX. CONDITIONS & DEMO PLANS
- 5-6 LAYOUT AND DIMENSION PLANS
- 7-8 UTILITY PLANS
- 9-10 GRADING & EROSION CONTROL PLANS
- 11-12 PLANTING PLANS - BY OWNER
- 13-14 IRRIGATION PLANS
- 15 S. 6TH STREET AND S. 12TH STREET DETAILS
- 16 S. 12TH STREET CLOCK TOWER BASE AND SEAT WALL DETAILS
- 17 STRUCTURAL NOTES & EROSION CONTROL DETAILS
- A1-A11 CLOCK TOWER DETAIL PLANS

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.

*John W. Haldean* 2/27/17  
John W. Haldean, P.E. Date

License Number 15808  
My License Renewal Date is December 31, 2018  
Pages or sheets covered by this seal:  
SHEETS 1-10: 17

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.

*Timothy J. Monson*  
TIMOTHY J. MONSON, P.E. IOWA REG. NO. 12103  
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2018  
PAGES OR SHEETS COVERED BY THIS SEAL:  
SHEETS 15-16

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.

*Monte A. Appelgate* 2/27/17  
Monte A. Appelgate, ASLA Date

License Number 342  
Pages or sheets covered by this seal:  
SHEETS 11-14

FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

TITLE SHEET

FORT DODGE, IA

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



Project No: 1110404A

Sheet 1 of 17

2	REVISED PER CITY COMMENTS	02/17/17	KSB
1	REVISED PER CITY COMMENTS	01/19/16	LFC
MARK	REVISION	DATE	BY
Engineer:	JWH	Checked By:	MAA
Technician:	KSB	Date:	02-20-17
Scale:		Field Bk:	1"= 400'
Project No:	1110404A	Sheet	1 of 17



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LEGEND

Features	Existing	Proposed
Spot Elevation	93.0	93.0
Contour Elevation	93	93
Fence (Barbed, Field, Hog)	-x-x-	-x-x-
Fence (Chain Link)	-x-x-	-x-x-
Fence (Wood)	-x-x-	-x-x-
Fence (Silt)	-x-x-	-x-x-
Tree Line	-x-x-	-x-x-
Tree Stump	-x-x-	-x-x-
Deciduous Tree or Shrub	-x-x-	-x-x-
Coniferous Tree or Shrub	-x-x-	-x-x-
Communication	-(x)-	-(x)-
Overhead Communication	-(x)-	-(x)-
Fiber Optic	-(x)-	-(x)-
Underground Electric	-(x)-	-(x)-
Overhead Electric	-(x)-	-(x)-
Gas Main with Size	-(x)-	-(x)-
High Pressure Gas Main with Size	-(x)-	-(x)-
Water Main with Size	-(x)-	-(x)-
Sanitary Sewer with Size	-(x)-	-(x)-
Duct Bank	-(x)-	-(x)-
Test Hole Location for SUE w/ID	Ø1	Ø1

(x) Denotes the survey quality service level for utilities

Sanitary Manhole	Ø	Ø
Storm Sewer with Size	12" ST	12" ST
Storm Manhole	Ø	Ø
Single Storm Sewer Intake	Ø	Ø
Double Storm Sewer Intake	Ø	Ø
Fire Hydrant	Ø	Ø
Fire Hydrant on Building	Ø	Ø
Water Main Valve	Ø	Ø
Water Service Valve	Ø	Ø
Well	Ø	Ø
Utility Pole	Ø	Ø
Guy Anchor	Ø	Ø
Utility Pole with Light	Ø	Ø
Utility Pole with Transformer	Ø	Ø
Street Light	Ø	Ø
Yard Light	Ø	Ø
Electric Box	Ø	Ø
Electric Transformer	Ø	Ø
Traffic Sign	Ø	Ø
Communication Pedestal	Ø	Ø
Communication Manhole	Ø	Ø
Communication Handhole	Ø	Ø
Fiber Optic Manhole	Ø	Ø
Fiber Optic Handhole	Ø	Ø
Gas Valve	Ø	Ø
Gas Manhole	Ø	Ø
Gas Apparatus	Ø	Ø
Fence Post or Guard Post	Ø	Ø
Underground Storage Tank	Ø	Ø
Above Ground Storage Tank	Ø	Ø
Sign	Ø	Ø
Satellite Dish	Ø	Ø
Mailbox	Ø	Ø
Soil Boring	Ø	Ø

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 C/ 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.

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 CONTACT INFORMATION

C	FRONTIER COMMUNICATIONS OF IOWA TRENT FLOCKHART 622 1ST AVE NORTH FORT DODGE, IA 50501 515-573-1268 TRENT.FLOCKHART@FTR.COM	OE E	MID AMERICAN ENERGY BECKY FLURER 637 SOUTH 22ND ST FORT DODGE, IOWA 50501 515-574-5051 BJFLURER@MIDAMERICAN.COM	CITY OF FORT DODGE STEVE MATTHE 819 1ST AVE SOUTH FORT DODGE, IOWA 50501 515-570-7397 SMATTHE@FORTDODGEIOWA.ORG
C2	MEDIA COM MIKE LAWLER 1225 2ND AVE SOUTH FORT DODGE, IA 50501 MLAWLER@MEDIACOMCC.COM	F02	MCI/VERIZON STEVE BONCZKOWSKI 2400 NORTH GLENVILLE DR RICHARDSON, TX 75082 630-395-6701 STEPHEN.BONCZKOWSKI@VERIZON.COM	
S	CITY OF FORT DODGE TONY TROTTER 819 1ST AVE SOUTH FORT DODGE, IA 50501 515-576-3601 TTROTTER@FORTDODGEIOWA.ORG	F02	AUREON TECHNOLOGY (Formerly INS) JEFF KLOCKO 515-830-0445 JEFF.KLOCKO@AUREON.COM	
W W1	CITY OF FORT DODGE TONY TROTTER 819 1ST AVE SOUTH FORT DODGE, IA 50501 515-576-3601 TTROTTER@FORTDODGEIOWA.ORG		PAETEC NETWORK ANDY EASTMAN 3630 109TH ST URBANDALE, IA 50322 515-790-6195 ANDREW.EASTMAN@MCLEODUSA.COM	

LEGEND

Survey	Found	Set
Section Corner	▲	△
1/2" Rebar, Cap # 11579 (Unless Otherwise Noted)	■	○
ROW Marker	■	■
ROW Rail	■	■
Control Point	○	○
Bench Mark	○	○
Platted Distance	P	P
Measured Bearing & Distance	M	M
Recorded As	R	R
Deed Distance	D	D
Calculated Distance	C	C
Minimum Protection Elevation	MPE	MPE
Centerline	---	---
Section Line	---	---
1/4 Section Line	---	---
1/4 1/4 Section Line	---	---
Easement Line	---	---

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 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.
- B. NOTIFY UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES AND AVOIDING DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- C. WHERE UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY FURTHER CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERE TO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY OR DAMAGE CAUSED BY SUCH WORK. THE CONTRACTOR SHALL MAKE REPAIRS TO ANY UTILITY DAMAGED TO THE UTILITY PROVIDERS SPECIFICATIONS.
- D. CONSTRUCTION OF ALL SITE IMPROVEMENTS SHALL CONFORM TO THE 2015 & 2016 STATE WIDE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS) AND THE PROJECT SPECIAL PROVISIONS.
- E. ALL DIMENSIONS ARE TO STRUCTURE FACE, BACK OF CURB OR TO PROPERTY LINE UNLESS OTHERWISE NOTED.
- F. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING FEATURES ON SITE (SIGNS, DRIVES, CURBS, SIDEWALKS, PLANT MATERIAL, LIGHTS, BUILDINGS, ETC.) NOT DESIGNATED FOR DEMOLITION DURING CONSTRUCTION. PROTECT EXISTING DRIVEWAYS AND STREET SURFACING UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR TO REPAIR ANY DAMAGES WITHOUT ADDITIONAL COMPENSATION. REMOVE THE EXISTING PAVEMENT AREAS TO THE NEAREST JOINT OR AS DIRECTED BY THE ENGINEER.
- G. EXERCISE EXTREME CARE WHEN PERFORMING ANY OF THE NECESSARY SAWCUTTING OPERATIONS FOR THE REMOVAL OF THE EXISTING PAVEMENT. PROTECT THE ADJACENT BUILDINGS AND UTILITIES UNLESS NOTED OTHERWISE. CONTRACTOR TO REPAIR ANY DAMAGES WITHOUT ADDITIONAL COMPENSATION. REMOVE THE EXISTING PAVEMENT AREAS TO THE NEAREST JOINT OR AS DIRECTED BY THE ENGINEER.
- H. TRAFFIC CONTROL ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR THE STREETS AND HIGHWAYS AS ADOPTED BY THE IOWA DEPARTMENT OF TRANSPORTATION PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 13.
- I. ALL FIELD TILES AND SUBDRAIN ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED AND NOTED ACCORDINGLY ON THE AS-BUILT DOCUMENTS.
- J. THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER THE NPDES PERMIT NO. 2. FOR STORMWATER DISCHARGE PROVIDE AND MAINTAIN EROSION CONTROL MEASURES NECESSARY TO PROTECT AGAINST SILTATION, EROSION, AND DUST POLLUTION ON PROJECT SITE AND ANY OFF-SITE DEPOSIT AREA USED FOR THIS PROJECT. COMPLY WITH SOIL EROSION CONTROLS OF THE IOWA CODE AND LOCAL ORDINANCES. INSTALL SILTATION DEVICES TO PREVENT SEDIMENT FROM ENTERING DRAINAGE STRUCTURES AND/OR FACILITIES.
- K. DO NOT RESTRICT DRAINAGE CHANNELS AND PROTECT ALL EXISTING DRAINAGE STRUCTURES UNLESS OTHERWISE NOTED. CONTRACTOR IS FULLY LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR THE HANDLING OF STORM WATER FLOW DURING CONSTRUCTION.
- L. CONTRACTOR SHALL PROVIDE OFF-SITE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (POSTS, POLES, WIRE, CABLE, STEEL, ETC.) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT AS APPROVED BY THE OWNER AND ENGINEER. NO PAYMENT FOR DISPOSAL FEES OR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO DISPOSAL SITES. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. HAULING AND DISPOSAL OF EXCESS EXCAVATION IS INCIDENTAL TO EARTHWORK ACTIVITIES. ANY ADDITIONAL EXCAVATION REQUIRED FOR LIMITED RE-SHAPING OF ADJACENT AREAS TO PROVIDE FOR DRAINAGE IS CONSIDERED INCIDENTAL TO THE PROJECT.
- M. THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION ACTIVITIES TO THE CONSTRUCTION LIMITS SHOWN UNLESS OTHERWISE AUTHORIZED BY THE OWNER IN WRITING. CONTRACTOR TO COORDINATE SITE ACCESS, CONSTRUCTION STAGING, AND STORAGE OF MATERIALS AND EQUIPMENT ON THE PROJECT SITE WITH OWNER.
- N. CONTRACTOR SHALL BE RESPONSIBLE FOR MATERIALS AND EQUIPMENT DURING NON-WORKING HOURS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK VEHICLES OR STORE EQUIPMENT AND MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY, UNLESS APPROVED IN WRITING BY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
- O. ALL HOLES RESULTING FROM OPERATIONS OF THE CONTRACTOR, INCLUDING REMOVAL OF POSTS, UTILITY POLES, OR FOUNDATION STRUCTURES SHALL BE FILLED AND CONSOLIDATED TO FINISHED GRADE AS APPROVED BY THE ENGINEER TO PREVENT FUTURE SETTLEMENT. THE VOIDS SHALL BE FILLED AS SOON AS PRACTICAL, PREFERABLY THE DAY CREATED AND NO LATER THAN THE FOLLOWING DAY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER BID ITEMS IN PROJECT.
- P. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING DIRT AND DEBRIS DEPOSITED BY CONSTRUCTION ACTIVITY OFF STREETS, DRIVEWAYS, AND SIDEWALKS IN A TIMELY MANNER.
- Q. MATERIAL TESTING SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIALS REQUIRED FOR LABORATORY TESTS IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
- R. ALL EXISTING PUBLIC UTILITY APPURTENANCES LOCATED WITHIN CONSTRUCTION LIMITS SHALL BE ADJUSTED TO FINISHED GRADE BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- S. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OR RE-ESTABLISHMENT OF SURVEY MONUMENTS (PROPERTY PINS AND SECTION CORNERS) WHICH ARE DESTROYED DUE TO CARELESSNESS. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF NEED TO RELOCATE AND PRESERVE MONUMENTS DUE TO THE PROPOSED IMPROVEMENTS.
- T. 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 ENGINEER PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT VERIFICATION OF ALL SITE IMPROVEMENTS PRIOR TO CONSTRUCTION.
- U. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETED.
- V. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ANY SALVAGEABLE EXISTING SITE AMENITIES OR MATERIALS. IF DIRECTED, THE CONTRACTOR SHALL DELIVER THESE ITEMS TO THE OWNER AT A LOCATION DESIGNATED BY THE OWNER'S REPRESENTATIVE. DISPOSE OF NON-SALVAGEABLE ITEMS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- W. LENGTH OF UTILITIES SHOWN PLANS ARE DIMENSIONED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE. BACKFILL WITH SUITABLE MATERIAL AND COMPACT AS SPECIFIED.
- X. CONTRACTOR TO COORDINATE ANY AND ALL STREET CLOSURES WITH THE FORT DODGE POLICE AND FIRE DEPARTMENTS, THE CONSTRUCTION MANAGER, AND THE CITY OF FORT DODGE PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE THE CITY OF FORT DODGE AND THE FORT DODGE FIRE DEPARTMENT WITH A TENTATIVE STREET CLOSURE SCHEDULE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE BOTH ENTITIES A MINIMUM 72 HOUR NOTICE PRIOR TO ANY STREET OR LANE CLOSURE.
- Y. CONTRACTOR IS RESPONSIBLE FOR INSPECTING THE SITE OF THE PROPOSED WORK PRIOR TO BIDDING OR PROVIDING A PROPOSAL FOR SERVICES. CONTRACTOR TO SATISFY HIMSELF/HERSELF OF THE EXISTING CONDITIONS AND ALL WORK NECESSARY FOR COMPLETION OF THE PROPOSED CONSTRUCTION.
- Z. CONTRACTOR TO COORDINATE WITH OWNER AND OTHER CONTRACTORS PERFORMING WORK ON SITE TO KEEP WORK SCHEDULED COMPLETION DATES AGREED UPON WITH OWNER.

FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

GENERAL NOTES

SNYDER & ASSOCIATES, INC. I



Project No: 1110404A

Sheet 2 of 17

FORT DODGE, IA

GENERAL NOTES

SNYDER & ASSOCIATES, INC. I

GENERAL NOTES

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GENERAL NOTES

FORT DODGE, IA

GENERAL NOTES

 SIDEWALK REMOVAL

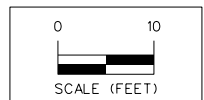
3. WORK INSIDE S 6TH STREET ROUNDABOUT:  
A. REFER TO STANDRAD ROAD PLAN TC-202.  
B. SIGNS SHOULD BE APPROX. 500' FROM END OF MEDIAN NOSES.  
C. USE 20-ft SPACES FOR CHANNELIZERS.

Sheet 3 of 17

☐ SOD REMOVAL

3. WORK INSIDE S 12TH STREET ROUNDABOUT:  
A. REFER TO STANDRAD ROAD PLAN TC-202.  
B. SIGNS SHOULD BE APPROX. 500' FROM END OF MEDIAN NOSES.  
C. USE 20-ft SPACES FOR CHANNELIZERS.

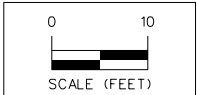
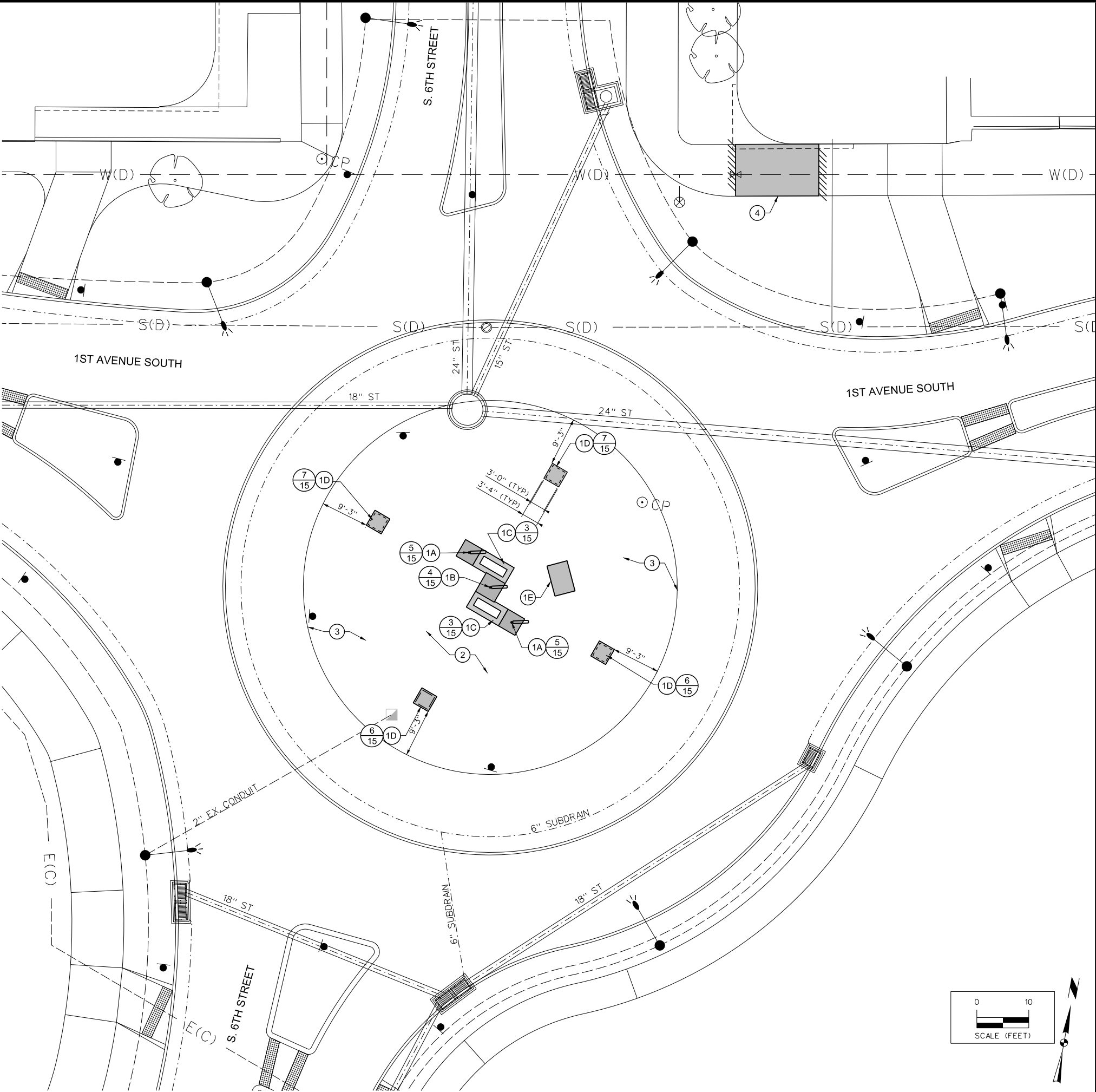
- TRAFFIC SIGN
- ✕ DRUM
- CHANNELIZING DEVICE



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DIMENSION PLAN CONSTRUCTION NOTES

1. SITE AMENITIES, PROVIDE THE FOLLOWING:  
A. 15" H X 3" W BANNER ON 6" DIA POST WITH 4" HT. BANNER COLUMN AND 5" DIA SUPPORT POST. SEE DETAILS AND ENLARGEMENT PLAN ON SHEET 15. BANNER AND 6" DIA POST TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO COORDINATE DELIVERY OF BANNER AND POST WITH CITY PRIOR TO CONSTRUCTION.  
B. 15" H X 3" W BANNER ON 6" DIA POST WITH 5'-2" HT. BANNER COLUMN AND 5" DIA SUPPORT POST. SEE DETAILS AND ENLARGEMENT PLAN ON SHEET 15. BANNER AND 6" DIA POST TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO COORDINATE DELIVERY OF BANNER AND POST WITH CITY PRIOR TO CONSTRUCTION.  
C. 3'-4" HT. PLANTER. SEE DETAIL 3 ON SHEET 15.  
D. COLUMN - HEIGHT VARIES. SEE DETAILS 6 AND 7 ON SHEET 15.  
E. 4" PCC IRRIGATION PAD 3'x5'.  
2. PLANTING AREA. SEE SHEET 11 FOR PLANTING PLAN.  
3. SOD AREA. SEE SHEET 11 FOR LOCATION.  
4. 4" PCC SIDEWALK.



FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

S. 6TH STREET LAYOUT AND DIMENSION PLAN

FORT DODGE, IA

SNYDER & ASSOCIATES, INC.

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

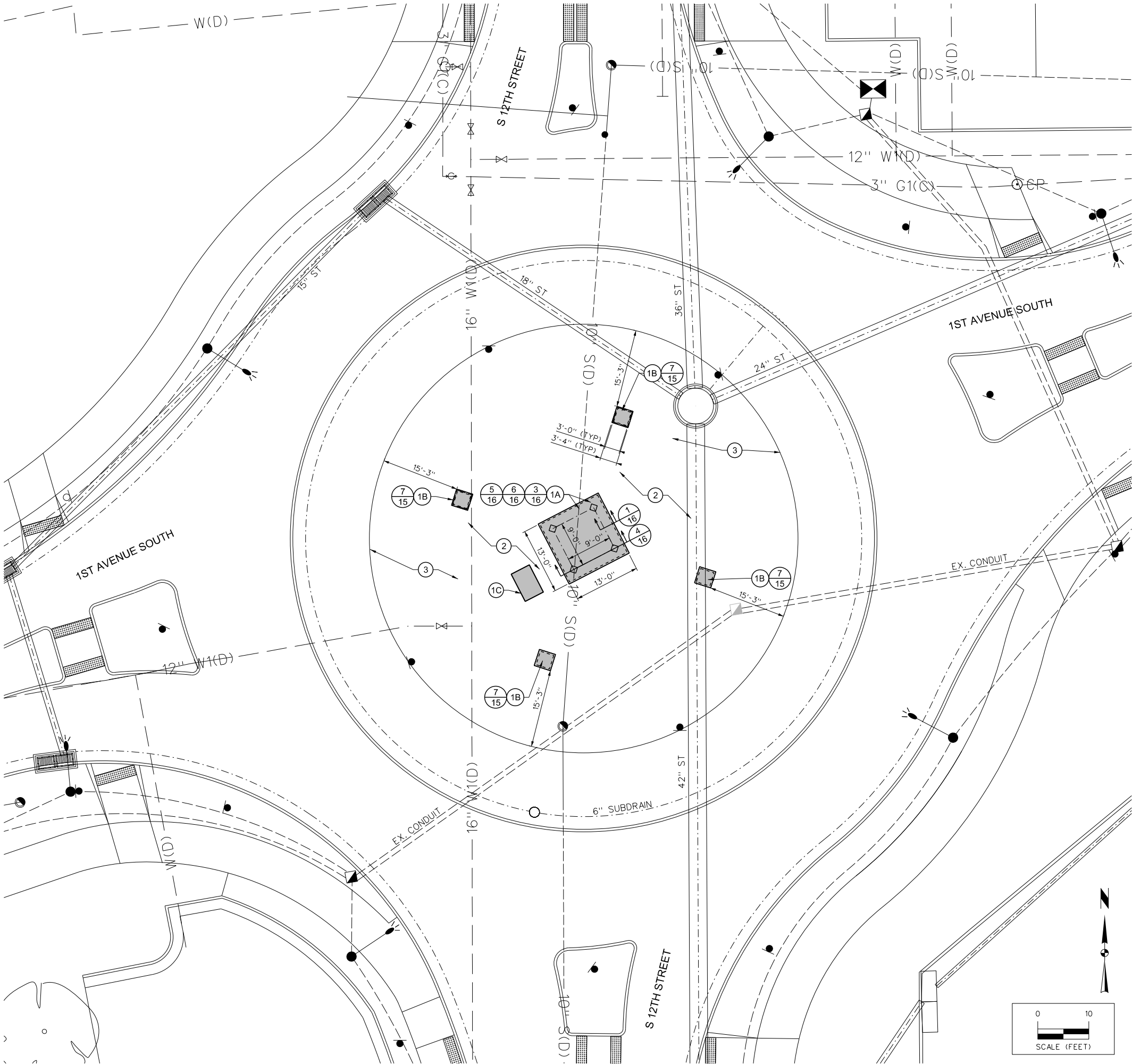
2	REVISED PER CITY COMMENTS	02/17/17	KSB
1	REVISED PER CITY COMMENTS	01/19/16	LFG
MARK	REVISION	DATE	BY
Engineer:	JWH	Checked By:	MAA
Technician:	KSB	Date:	02-20-17
Field Bk:		Scale:	1"= 10'
Project No:	1110404A	Sheet	5 of 17



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DIMENSION PLAN CONSTRUCTION NOTES

1. SITE AMENITIES, PROVIDE THE FOLLOWING:  
A. CLOCKTOWER WITH BRICK AND CAST STONE BASE. SEE DETAILS ON SHEET 16. CLOCK TOWER TO BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO COORDINATE DELIVERY OF CLOCK TOWER WITH CITY PRIOR TO CONSTRUCTION.  
B. COLUMNS. SEE DETAIL 7 ON SHEET 15.  
C. 4" PCC IRRIGATION PAD 3'x5'.  
2. PLANTING AREA. SEE SHEET 12 FOR PLANTING PLAN.  
3. SOD AREA. SEE SHEET 12 FOR LOCATION.



FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

S. 12TH STREET LAYOUT AND DIMENSION PLAN

FORT DODGE, IA



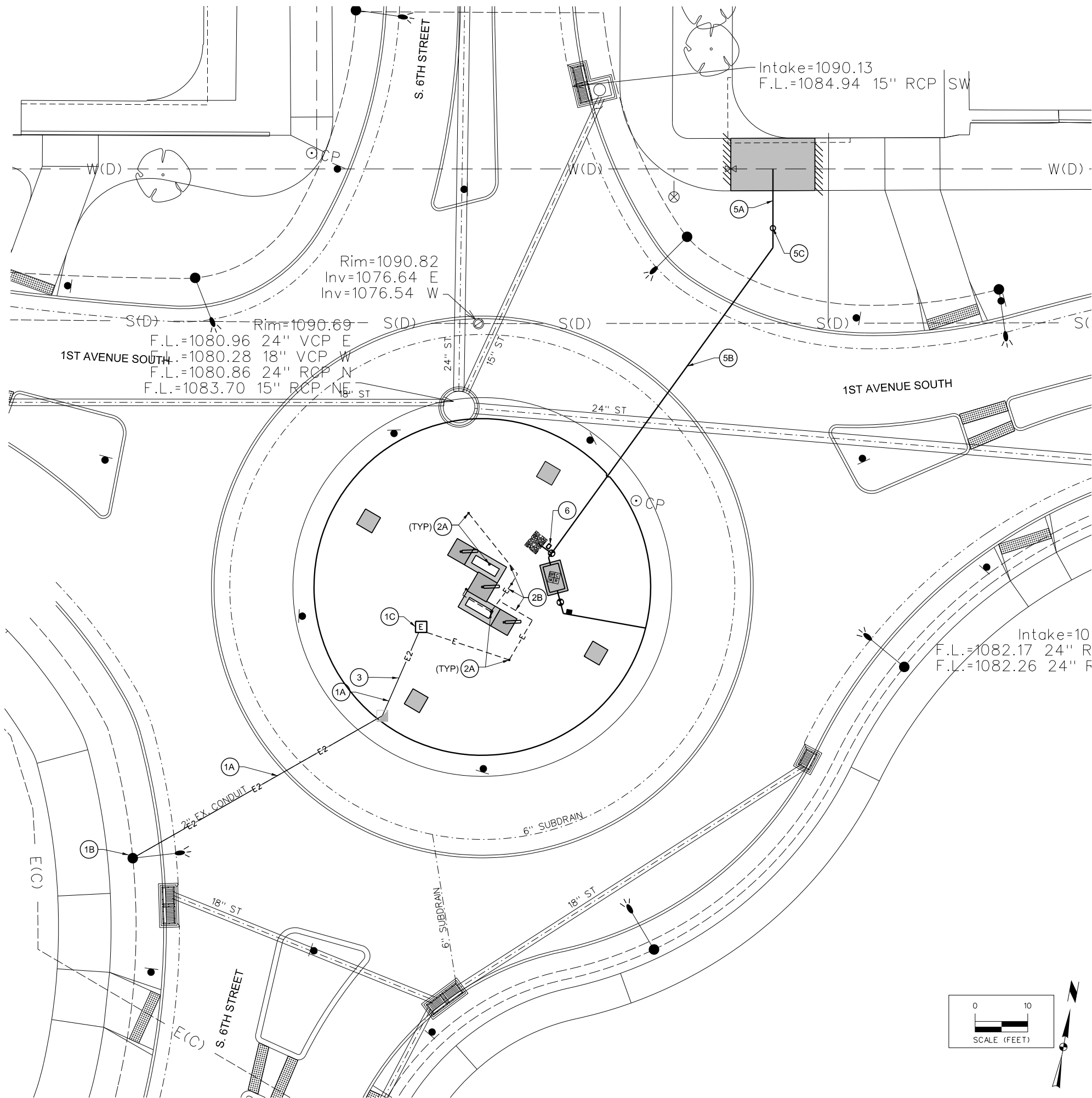
Project No: 1110404A

Sheet 6 of 17

REVISION	DATE	BY
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1. ELECTRICAL SERVICE, PROVIDE THE FOLLOWING:
  - A. PROVIDE 2" ELECTRICAL SERVICE FROM EXISTING HANDHOLE TO PROPOSED HANDHOLE.
  - B. CONTRACTOR TO COORDINATE WITH MIDAMERICAN AND THE CITY OF FORT DODGE ON METERING AND POWER SERVICE OF LIGHTING.
  - C. PROPOSED HANDHOLE FOR ELECTRICAL SERVICE AND CONDUIT TO BANNER COLUMNS AND PLANTERS.
2. LIGHTING, PROVIDE THE FOLLOWING:
  - A. DENALI POWERPIE II (MODEL #=DE-LD-X34 AS MANUFACTURED BY B-K LIGHTING, OR APPROVED EQUAL (2 TOTAL PER BANNER COLUMN)).  
COLOR: BLACK- SEE DETAIL 5 ON SHEET 15. CONTRACTOR TO COORDINATE EXISTING LOCATIONS OF LIGHTING WITH ENGINEER AND CITY.
  - B. 1" ELECTRICAL SERVICE FROM PROPOSED HANDHOLE TO DENALI POWERPIE II.
5. WATER SERVICE; PROVIDE THE FOLLOWING:
  - A. 1" WATER SERVICE LINE (MINIMUM 5.5' DEPTH). CONNECT TO EXISTING 12" WATER MAIN WITH TAPPING VALVE.
  - B. 1" BORED WATER SERVICE LINE.
  - C. CURB STOP
6. BID ALTERNATE FLUSH BOX HYDRANT.

— E2 — 2" ELECTRICAL SERVICE FROM POWER SOURCE TO PROPOSED HANDHOLE (BASE BID)  
 - - - E - - - 1" ELECTRICAL SERVICE FROM PROPOSED HANDHOLE TO DENALI POWERPIPE II FIXTURES (BASE BID)

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# FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

## S. 6TH STREET UTILITY PLAN

**FORT DODGE, IA**

**SNYDER & ASSOCIATES, INC.**

2727 S.W. SNYDER BLVD.  
ANKENY, IOWA 50023  
515-964-2020 | [www.snyder-associates.com](http://www.snyder-associates.com)

Project No: 1110404A

Sheet 7 of 17



Project No: 1110404A

Sheet 7 of 17

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UTILITY PLAN CONSTRUCTION NOTES

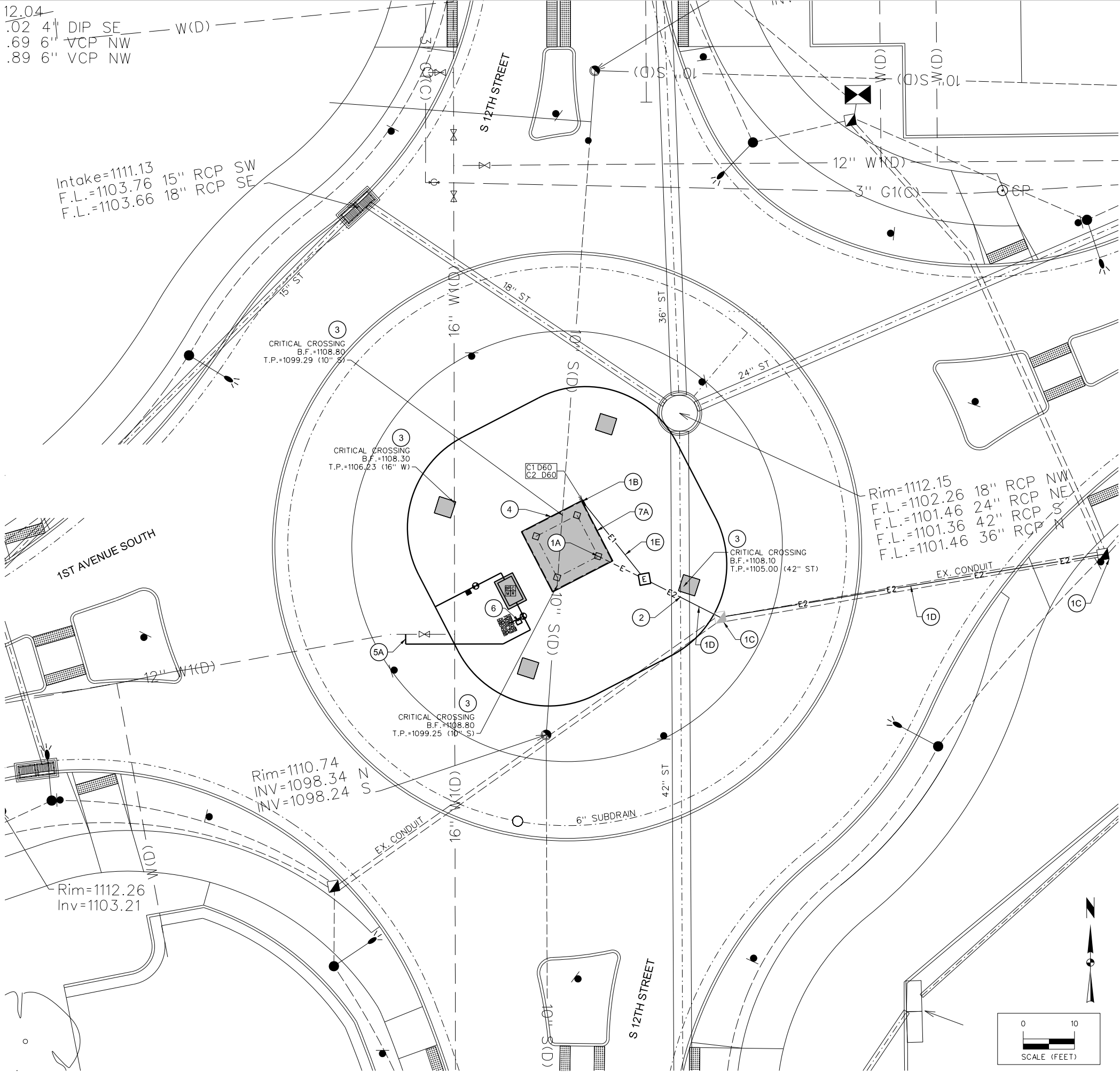
- ELECTRICAL SERVICE, PROVIDE THE FOLLOWING:
  - PROVIDE 1" ELECTRICAL SERVICE FROM PROPOSED HANDHOLE TO EAST POST OF CLOCK TOWER. CONTRACTOR TO CONNECT POWER SOURCE TO CLOCK TOWER UPON ERECTION OF CLOCK TOWER.
  - PROVIDE 1/2" CONDUIT FOR STRANDS 24v OUTDOOR TUBE LIGHTING, ON UNDERSIDE OF CAPSTONE ON BRICK BASE OF CLOCK TOWER, AS MANUFACTURED BY TUBE LIGHTING PRODUCTS, OR APPROVED EQUAL. SEE DETAILS 2, 4 AND 5 ON SHEET 16.
  - CONTRACTOR TO COORDINATE WITH MIDAMERICAN AND THE CITY OF FORT DODGE ON METERING AND POWER SOURCE FOR LIGHTING.
  - PROVIDE 2" ELECTRICAL SERVICE FROM EXISTING HANDHOLE TO PROPOSED HANDHOLE.
  - PROVIDE 1" CONDUIT FROM PROPOSED HANDHOLE TO JUNCTION BOX.
- UTILITY CROSSING, CONTRACTOR TO VERIFY AND MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN UTILITY LINES AT ALL CROSSINGS. CONFIRM EXACT LOCATION AND DEPTH OF EXISTING UTILITIES AT CROSSING POINTS PRIOR TO INSTALLATION OF UTILITIES. REPORT ANY POTENTIAL CONFLICTS TO THE ENGINEER IMMEDIATELY. IF A CONFLICT OCCURS IN THE FIELD WITH AN EXISTING UTILITY LINE, THE CONTRACTOR IS RESPONSIBLE FOR MITIGATING SUCH SITUATION BY LOWERING OR RAISING THE CONFLICTING NON-GRAVITY FLOW UTILITY AS NECESSARY TO MAINTAIN SEPARATION.
- CONTRACTOR TO EXERCISE EXTREME CARE WHILE DIGGING FOOTINGS WITHIN PROXIMITY TO EXISTING 16" WATERMAIN, EXISTING 10" SANITARY, AND EXISTING 42" STORM SEWER.
- LOCAL REPRESENTING ORGANIZATION FOR LED LIGHTING:  
CONTACT: ADAM CINK  
NRG SALES  
5485 NE 17TH STREET, SUITE A  
DES MOINES, IA 50313  
PHONE (515) 528-8201 EMAIL: acink@nrgsales.com
- WATER SERVICE, PROVIDE THE FOLLOWING:
  - 1" WATER SERVICE LINE (MINIMUM 5.5' DEPTH), CONNECT TO EXISTING 12" WATER MAIN WITH TAPPING VALVE.
- BID ALTERNATE FLUSH BOX HYDRANT.
- LIGHTING, PROVIDE THE FOLLOWING:
  - STRANDS 24v OUTDOOR TUBE LIGHTING, AS MANUFACTURED BY TUBE LIGHTING PRODUCTS, OR APPROVED EQUAL, ON UNDERSIDE OF CAPSTONE ON BRICK BASE OF CLOCK TOWER. CONTRACTOR TO ADHERE TUBE LIGHTING AND TRACK ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, AND RECOMMENDATIONS. CONTRACTOR TO APPLY APPROVED REFLECTIVE LATEX BASED PAINT ALONG ENTIRE LENGTH OF 45" CHAMFER ON UNDERSIDE OF CAPSTONE. SEE DETAILS ON SHEET 16.

LED JUNCTION BOX AND LIGHTING SCHEDULE

KEY	DESCRIPTION	NOTES
C1 D60	STRANDS 24v OUTDOOR TUBE LIGHTING	CLOCKTOWER BASE (2 SIDES)
C2 D60	STRANDS 24v OUTDOOR TUBE LIGHTING	CLOCKTOWER BASE (2 SIDES)

LINESTYLE LEGEND

- STRANDS 24v OUTDOOR TUBE LED LIGHTING LOCATION (ALTERNATE #1 & #2)
- E2 --- 2" ELECTRICAL SERVICE FROM POWER SOURCE TO PROPOSED HANDHOLD (BASE BID)
- E1 --- 1" CONDUIT FROM PROPOSED HANDHOLD TO JUNCTION BOX (BASE BID)
- ..... 1/2" CONDUIT FROM JUNCTION BOXES TO LED LIGHTING (BASE BID)
- E --- 1" ELECTRICAL SERVICE FROM PROPOSED HANDHOLE TO EAST POST OF CLOCK TOWER (BASE BID)



FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

S. 12TH STREET UTILITY PLAN

FORT DODGE, IA

SNYDER & ASSOCIATES, INC.

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



Project No: 1110404A

Sheet 8 of 17

MARK	REVISION	DATE	BY	Scale:	Field Bk:	Pg:
2	REVISED PER CITY COMMENTS	02/17/17	KSB	1"=10'		
1	REVISED PER CITY COMMENTS	07/19/16	LFG			
Engineer:	JWH	Checked By:	MAA			
Technician:	KSB	Date:	02-20-17			
Project No:	1110404A					
						Sheet 8 of 17





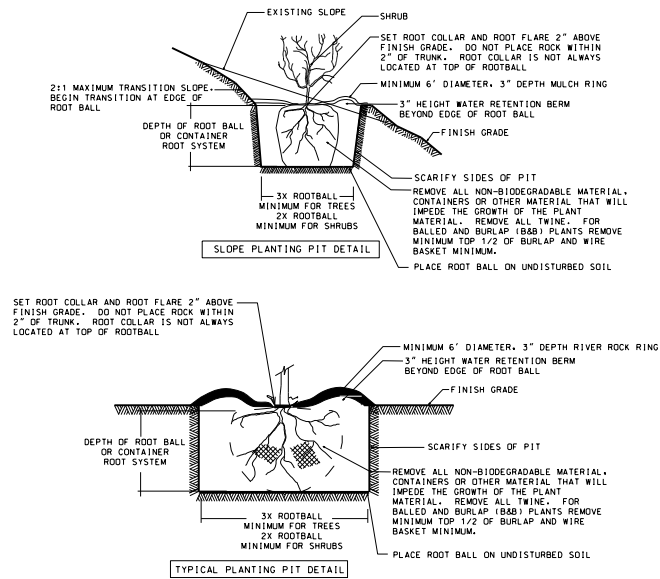


## PLANTING PLAN GENERAL NOTES - BY OWNER

- 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. 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 CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- C. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- D. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
- E. ROCK MULCH: PROVIDE COMMERCIAL LANDSCAPE FABRIC AND PLACE 3" DEPTH, 2" CLEAN RIVER ROCK IN MASS PLANTING BEDS, AND IN ALL AREAS INDICATED ON PLAN.
- F. SOD ALL AREAS DISTURBED BY CONSTRUCTION AND NOT CALLED OUT FOR IMPROVEMENTS. CONTRACTOR TO PROVIDE TURF MAINTENANCE PLAN FOR APPROVAL TO ENGINEER PRIOR TO SOD INSTALLATION.
- G. CONTRACTOR IS RESPONSIBLE FOR PLANTS AWAITING INSTALLATION AND SHALL PROTECT THEM FROM INJURY. REFER TO IDOT SECTION 2610.03E FOR APPROVED PLANTING DATES.
- H. CONTRACTOR TO APPLY PREEN IN ALL PLANT BEDS BASED ON MANUFACTURERS RECOMMENDED APPLICATION RATES.

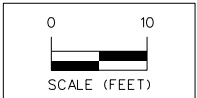
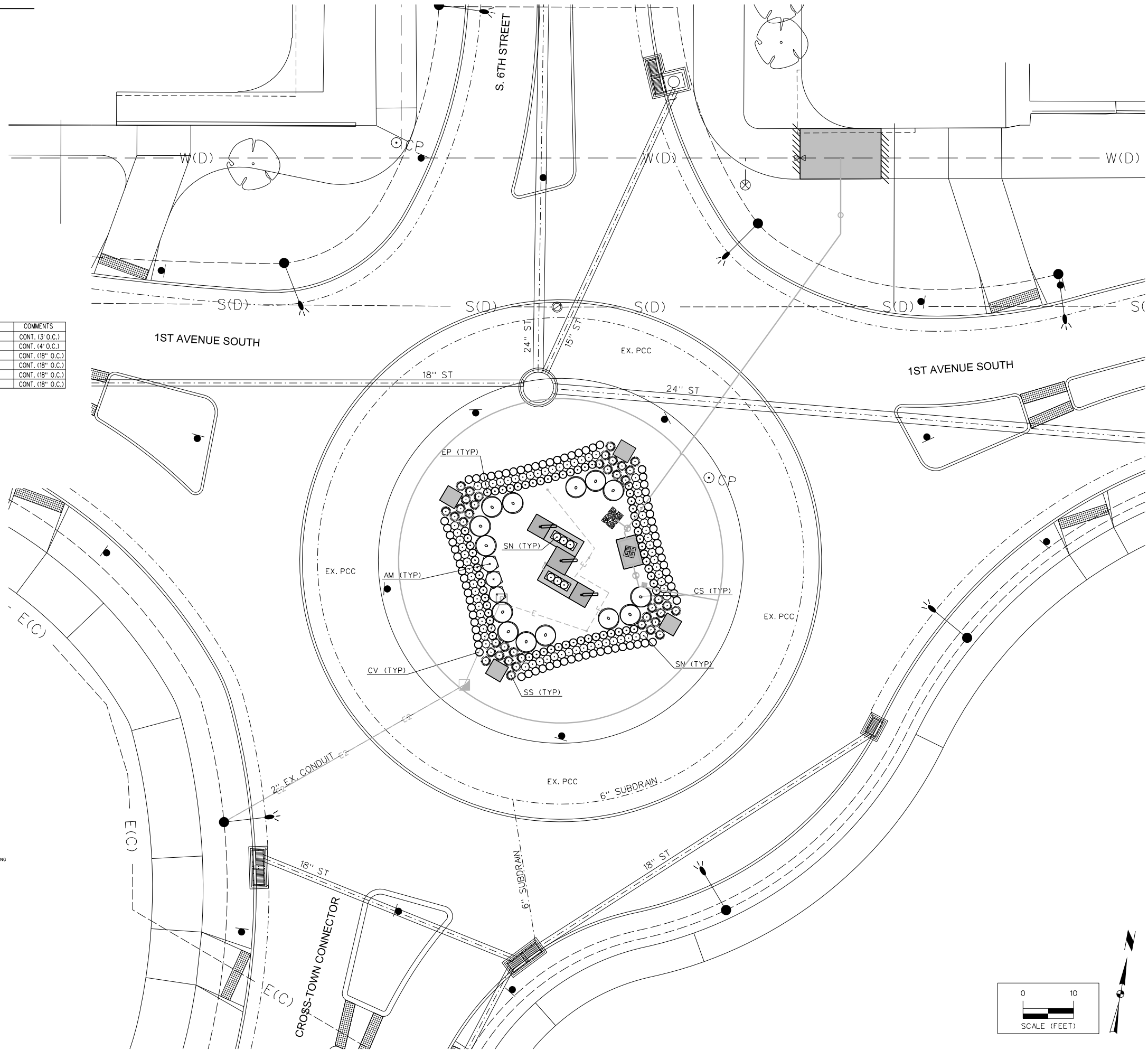
PLANT SCHEDULE - BY OWNER

KEY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
AM	<i>Aronia melanocarpa</i> 'Marlon'	IRROUL'S BEAUTY BLACK CHOKEBERRY	18" Ht.	CONT. (3' O.C.)
CS	<i>Cornus sanguinea</i> 'Cata'	ARCTIC SUN DOGWOOD	18" Ht.	CONT. (4' O.C.)
CV	<i>Coreopsis verticillata</i> 'Zagreb'	ZAGREB COREOPSIS	12" Ht.	CONT. (18" O.C.)
EP	<i>Echinacea purpurea</i>	PURPLE CONEFLOWER	18" Ht.	CONT. (18" O.C.)
SN	<i>Salvia nemorosa</i> 'Caradonna'	CARADONNA SALVIA	12" Ht.	CONT. (18" O.C.)
SS	<i>Schizachyrium scoparium</i> 'MinnBlue'	BLUE HEAVEN LITTLE BLUESTEM	18" Ht.	CONT. (18" O.C.)



## 1 PLANTING PIT DETAILS - BY OWNER

11 NO SCALE



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PLANTING PLAN GENERAL NOTES - BY OWNER

- 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. 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.
- C. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- D. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
- E. ROCK MULCH: PROVIDE COMMERCIAL LANDSCAPE FABRIC AND PLACE 3" DEPTH, 2" CLEAN RIVER ROCK IN MASS PLANTING BEDS, AND IN ALL AREAS INDICATED ON PLAN.
- F. SOD ALL AREAS DISTURBED BY CONSTRUCTION AND NOT CALLED OUT FOR IMPROVEMENTS. CONTRACTOR TO PROVIDE TURF MAINTENANCE PLAN FOR APPROVAL BY ENGINEER PRIOR TO SOD INSTALLATION.
- G. CONTRACTOR IS RESPONSIBLE FOR PLANTS AWAITING INSTALLATION AND SHALL PROTECT THEM FROM INJURY. REFER TO IDOT SECTION 2610.03E FOR APPROVED PLANTING DATES.
- H. CONTRACTOR TO APPLY PREEN IN ALL PLANT BEDS BASED ON MANUFACTURERS RECOMMENDED APPLICATION RATES.

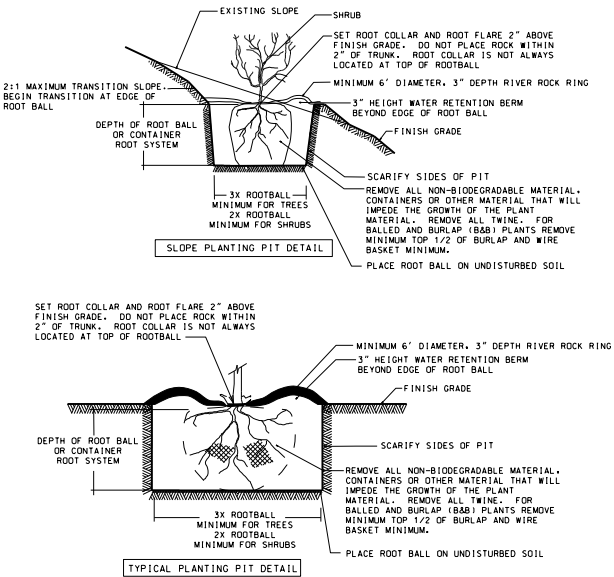
PLANT SCHEDULE - BY OWNER

SHRUBS	KEY BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
AM	<i>Aronia melanocarpa</i> 'Marion'	IROQUOIS BEAUTY BLACK CHOKEBERRY	24" HI.	CONT. (3' O.C.)
CV	<i>Coreopsis verticillata</i> 'Zagreb'	ZAGREB COREOPSIS	12" HI.	CONT. (18" O.C.)
CS	<i>Cornus sanguinea</i> 'Cata'	ARCTIC SUN DOGWOOD	18" HI.	CONT. (4' O.C.)
EC	<i>Echinacea purpurea</i>	PURPLE CONEFLOWER	18" HI.	CONT. (18" O.C.)
SN	<i>Salvia nemorosa</i> 'Caradonna'	CARADONNA SALVIA	12" HI.	CONT. (18" O.C.)
SS	<i>Schizachyrium scoparium</i> 'MiniBlueA'	BLUE HEAVEN LITTLE BLUESTEM	24" HI.	CONT. (18" O.C.)

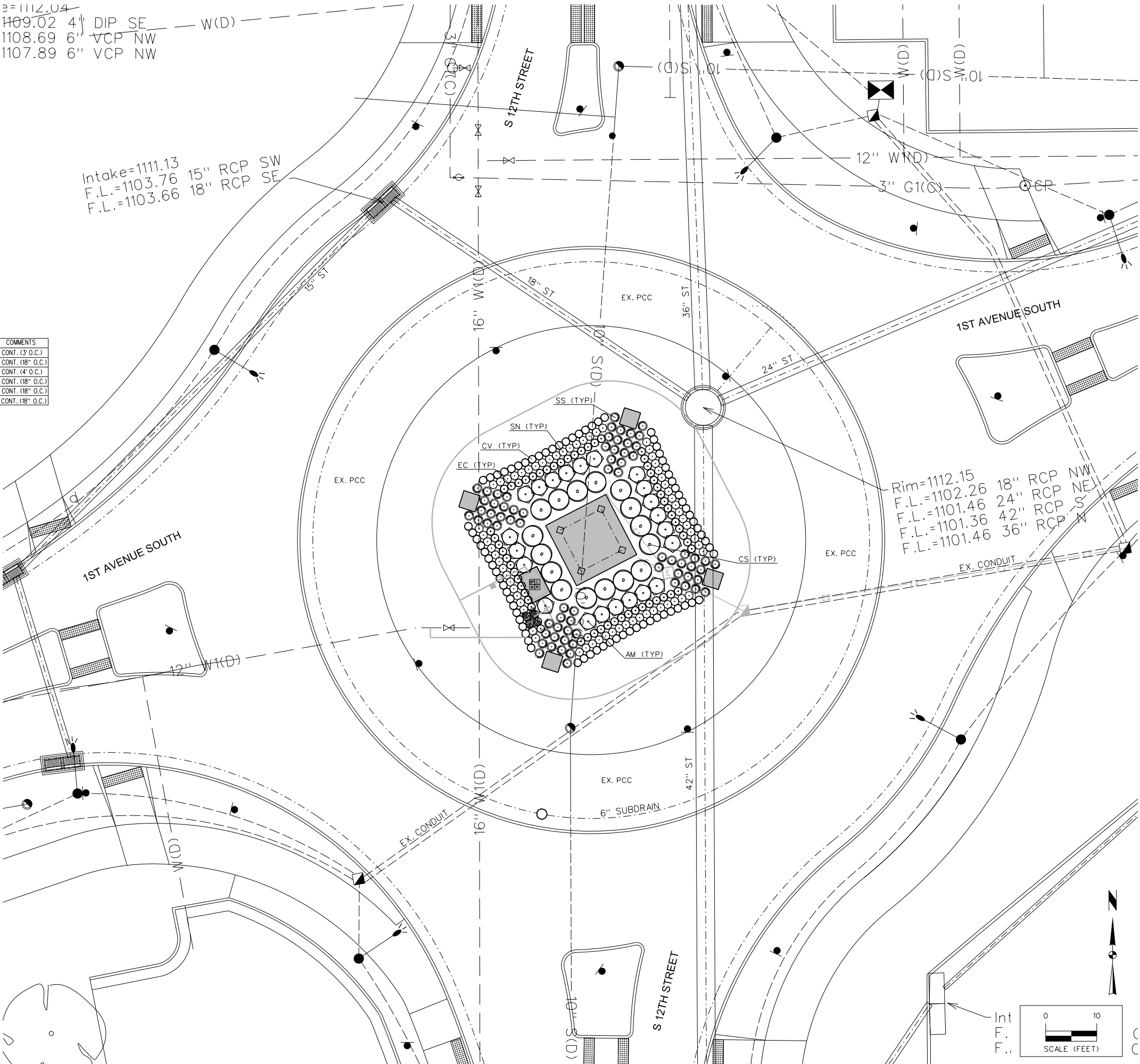
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1109.02 4" DIP SE  
1108.69 6" VCP NW  
1107.89 6" VCP NW

Intake=1111.13  
F.L.=1103.76 15" RCP SW  
F.L.=1103.66 18" RCP SE

Rim=1112.15  
F.L.=1102.26 18" RCP NW  
F.L.=1101.46 24" RCP NE  
F.L.=1101.36 42" RCP S  
F.L.=1101.46 36" RCP W



1 PLANTING PIT DETAILS - BY OWNER  
12 NO SCALE



FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

S. 12TH STREET PLANTING PLAN - BY OWNER

FORT DODGE, IA

SNYDER & ASSOCIATES, INC.

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

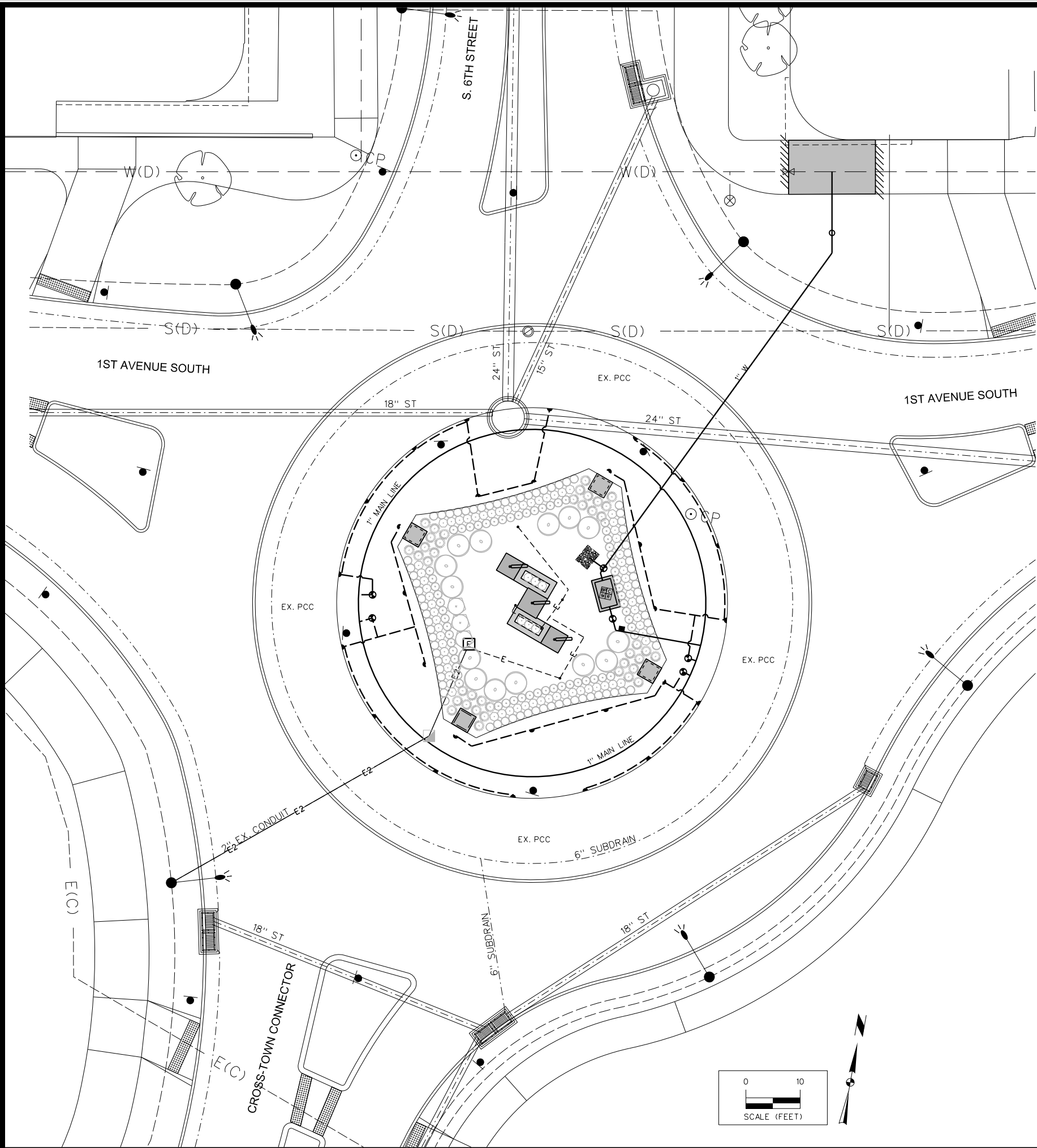


Project No: 1110404A  
Sheet 12 of 17

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LEGEND		
	3/4" QUICK COUPLER VALVE W/BOX	
	CONTROLLER	TORO TMC-SERIES (4 STATION UNIT)
	BACKFLOW PREVENTER	WILKINS 950 XL2 1"
	WATER METER	1" BADGER E SERIES
	WIRELESS RAIN SWITCH	TORO TWRS WIRELESS RAIN SENSOR
	ELECTRIC VALVE	TORO 250 SERIES VALVE
	FULL TURN SPRAY HEAD	TORO SERIES 570 ZXF SPRAY HEAD
	HALF TURN SPRAY HEAD	TORO SERIES 570 ZXF SPRAY HEAD
	ISOLATION VALVE WITH VALVE BOX	NIBCO 1" VALVE
	4" SLEEVE (200 LB)	SCHEDULE 40 PVC
	IRRIGATION LATERAL LINE	SEE SPECIFICATIONS
	1" MAINLINE WITH TRACER WIRE	1" PVC (200 LB) MAINLINE, METALLIC TAPE, ZONE CONTROL WIRING

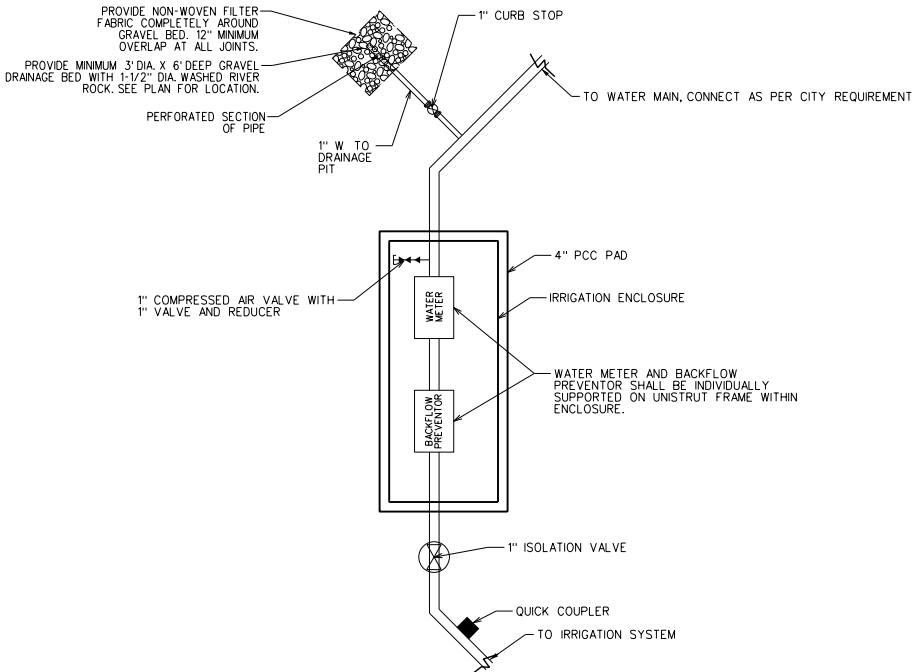
IRRIGATION PLAN SHOWS SCHEMATIC LAYOUT OF IRRIGATION COMPONENTS. CONTRACTOR TO FIELD ADJUST DESIGN OF SYSTEM AS CONDITIONS WARRANT.

#### IRRIGATION GENERAL NOTES

- SEE SPECIFICATIONS FOR IRRIGATION REQUIREMENTS.
- THE COORDINATION OF THE INSTALLATION OF PVC SLEEVES FOR ROUTING IRRIGATION UNDER PAVEMENTS SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.
- ALL PRODUCTS SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS AND RECOMMENDATIONS.
- FLOW RATES THROUGH PIPING SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS.
- ALL IRRIGATED AREAS MUST BE COVERED BY HEAD TO HEAD COVERAGE.
- CONTRACTOR TO ADJUST SYSTEM SO THAT NO IRRIGATION SPRAYS OVER OR ONTO ANY PAVED AREAS.
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- IRRIGATION SYSTEM TO HAVE THE CAPACITY TO OPERATE TWO ZONES AT ONCE.

#### IRRIGATION CONSTRUCTION NOTES

- CONTRACTOR TO PROVIDE AND INSTALL QUICK COUPLER VALVES IN LOCATIONS SHOWN ON PLAN.
- CONTRACTOR TO PROVIDE AND INSTALL IRRIGATION HEADS IN CONFIGURATION SHOWN ON PLAN.
- PROVIDE ISOLATION VALVE WITH VALVE BOX IN LOCATIONS SHOWN.
- THRUST BLOCKS TO BE PROVIDED AT ALL CHANGE OF DIRECTION IN THE 1" MAINLINE.
- CONTRACTOR TO PROVIDE AND INSTALL ELECTRONIC CONTROL VALVES IN CONFIGURATION SHOWN ON PLAN.
- PROVIDE METALLIC TAPE ABOVE IRRIGATION MAINLINE FOR LOCATING PURPOSES.



## FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

### S. 6TH STREET IRRIGATION PLAN

FORT DODGE, IA

**SNYDER & ASSOCIATES, INC.**

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



Project No: 1110404A

Sheet 13 of 17

Project No: 1110404A

Sheet 13 of 17

FORT DODGE, IA

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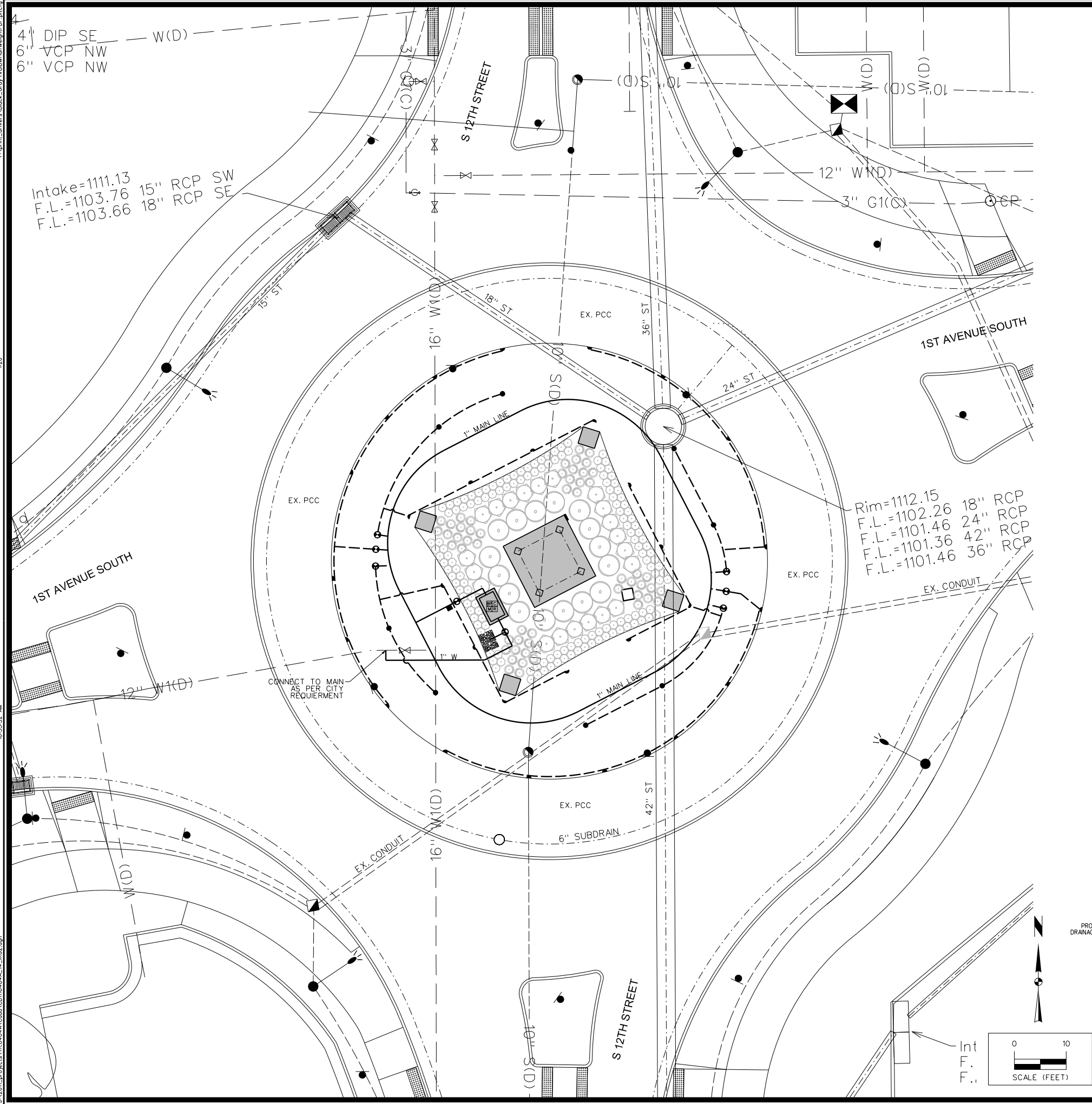
Project No: 1110404A

Sheet 13 of 17

Project No: 1110404A

Sheet 13 of 17

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LEGEND		
	3/4" QUICK COUPLER VALVE W/BOX	
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	WATER METER	1" BADGER E SERIES
	WIRELESS RAIN SWITCH	TORO TWRS WIRELESS RAIN SENSOR
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	HALF TURN SPRAY HEAD	TORO SERIES 570 ZXF SPRAY HEAD
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	IRRIGATION LATERAL LINE	SEE SPECIFICATIONS
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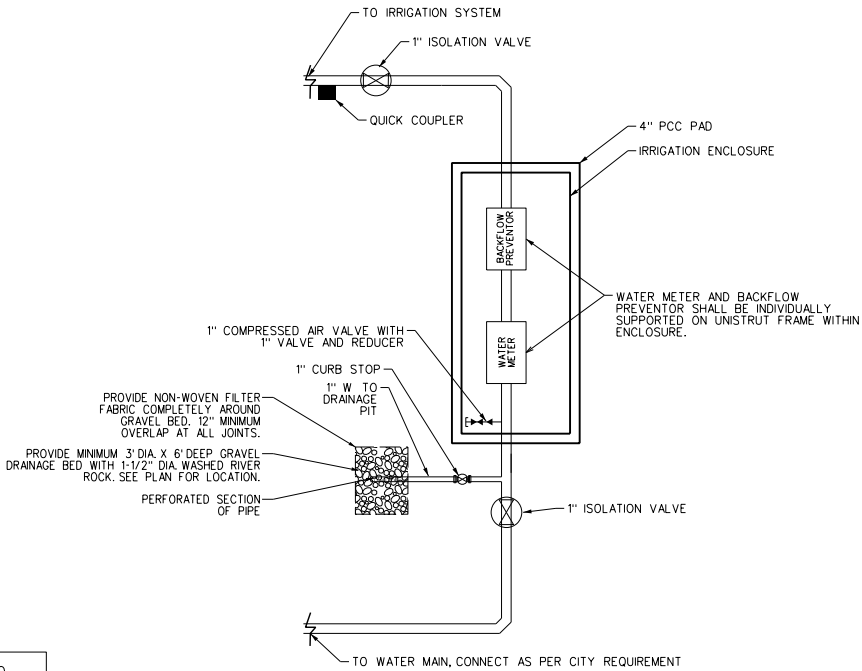
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FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

S. 12TH STREET IRRIGATION PLAN

FORT DODGE, IA

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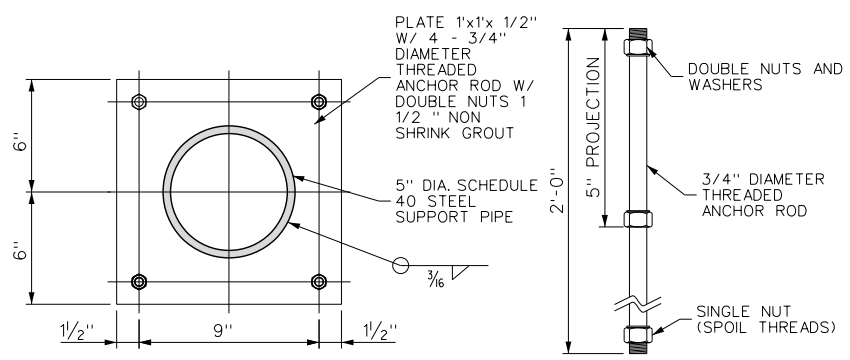


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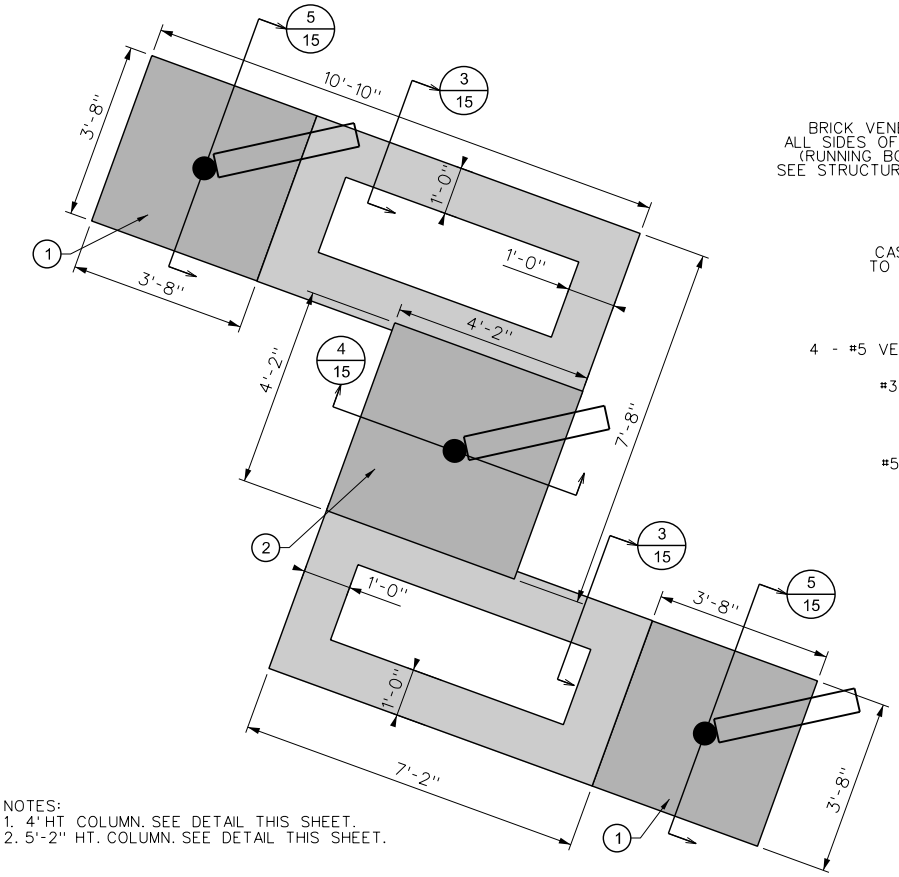
Sheet 14 of 17

REVISION		DATE	BY	SCALE	FIELD Bk.	Pg.
2	REVISED PER CITY COMMENTS	02/17/17	KSB	1"=5'		
1	REVISED PER CITY COMMENTS	07/19/16	LFG			
MARK		REVISION	DATE	BY	SCALE	FIELD Bk.
Engineer:		JWH	Checked By:	MAA	Scale:	1"=5'
Technician:		KSB	Date:	02-20-17	Field Bk.	Pg.
Project No:		1110404A	Sheet 14 of 17			

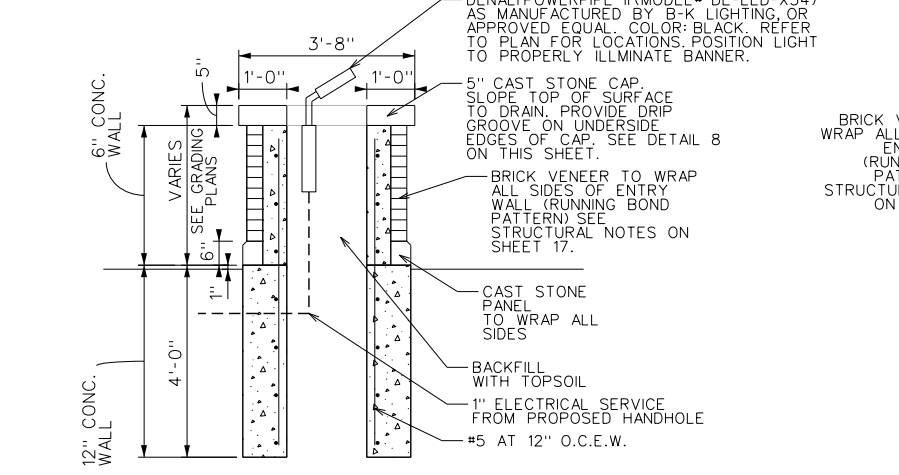
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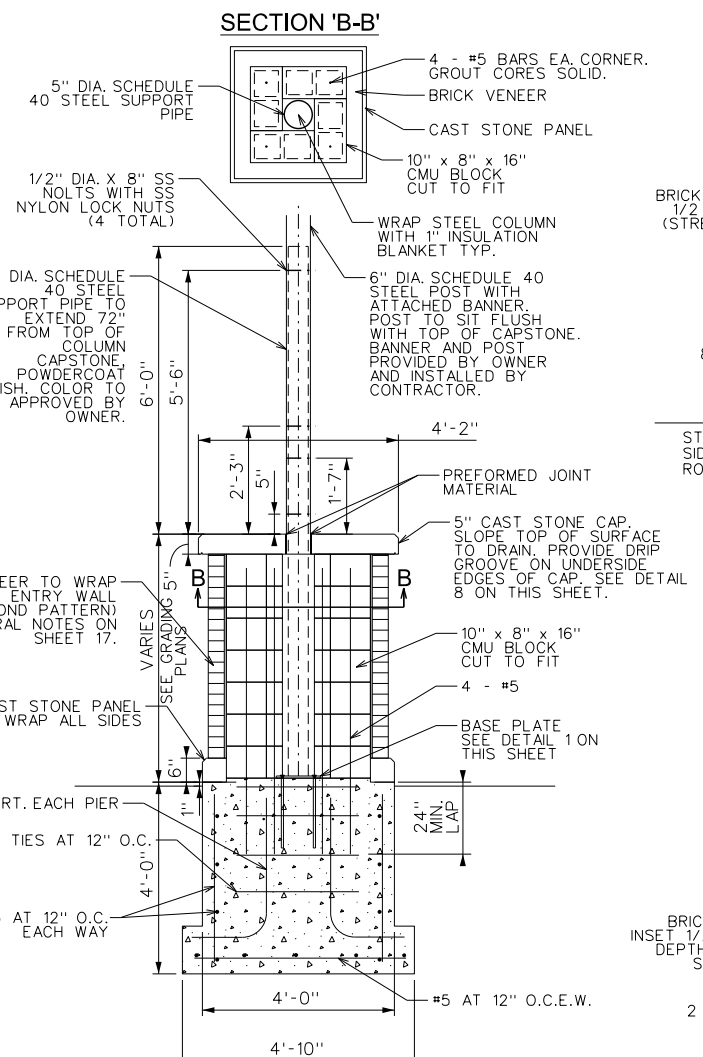
1 BANNER POLE BASE PLATE AND ANCHOR BOLT DETAIL  
15 NO SCALE



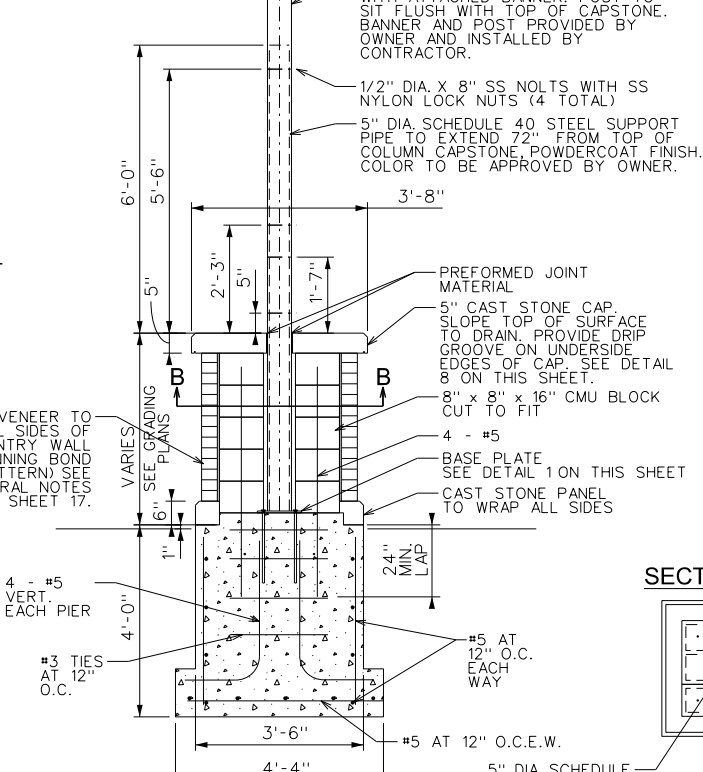
2 BANNER COLUMNS AND PLANTERS ENLARGEMENT PLAN  
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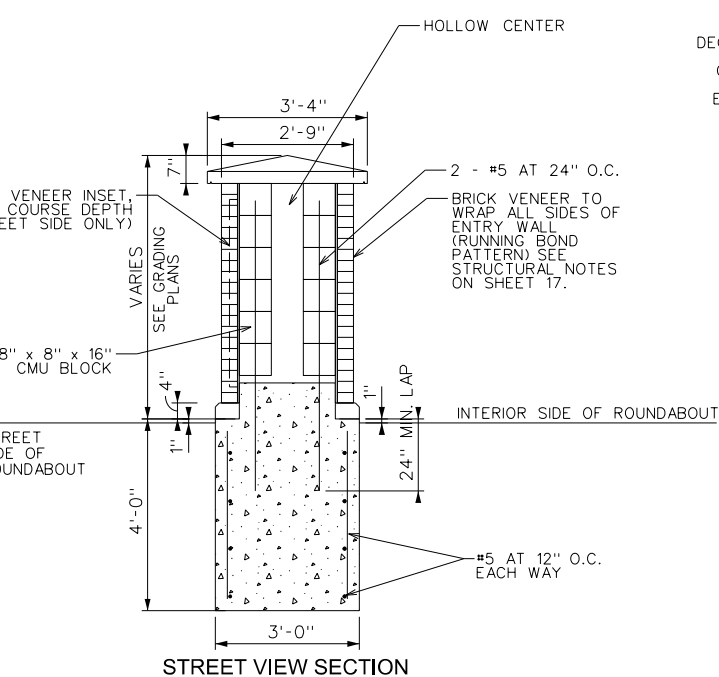
3 PLANTER DETAIL  
15 1/2"=1'-0"



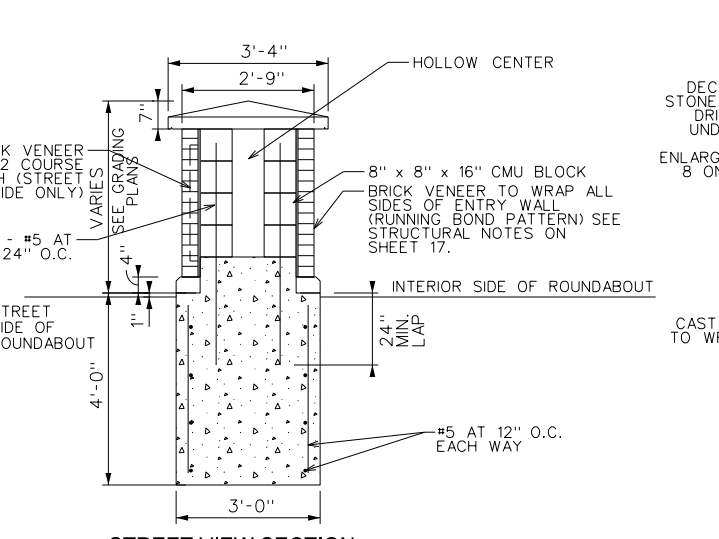
4 5'-2" HT. BANNER COLUMN DETAIL  
15 1/2"=1'-0"



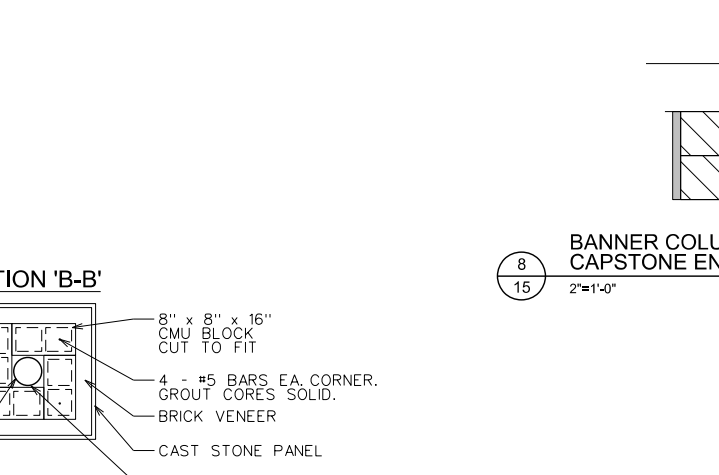
5 4' HT. BANNER COLUMN DETAIL  
15 1/2"=1'-0"



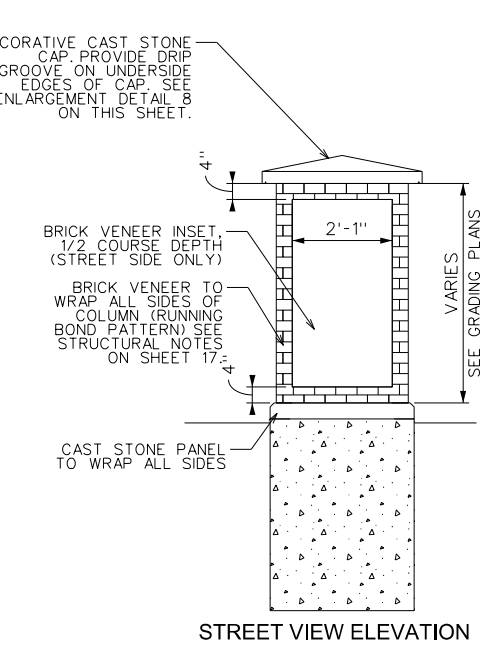
6 COLUMN SECTION AND ELEVATION (6TH ST ROUNDABOUT: SOUTH AND EAST COLUMN)  
15 1/2"=1'-0"



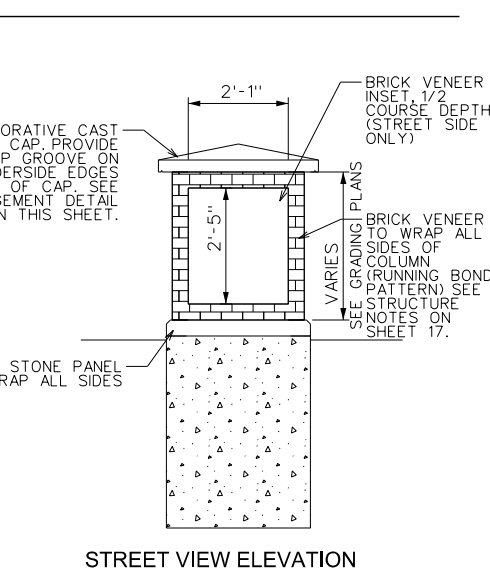
7 COLUMN SECTION AND ELEVATION (12TH ST ROUNDABOUT & 6TH ST ROUNDABOUT: NORTH AND WEST COLUMNS)  
15 1/2"=1'-0"



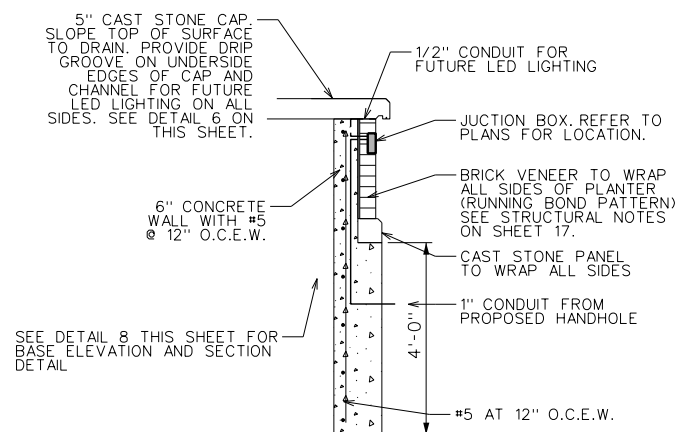
8 BANNER COLUMN & PLANTER CAPSTONE ENLARGEMENT  
15 2"=1'-0"



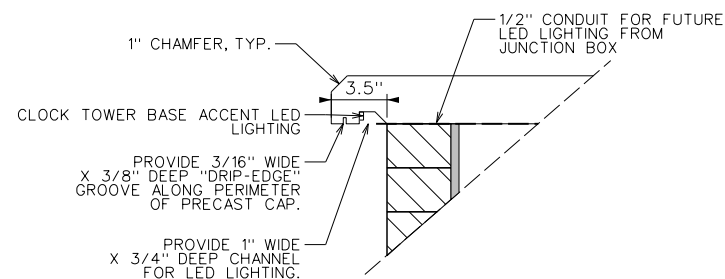
STREET VIEW ELEVATION



STREET VIEW ELEVATION



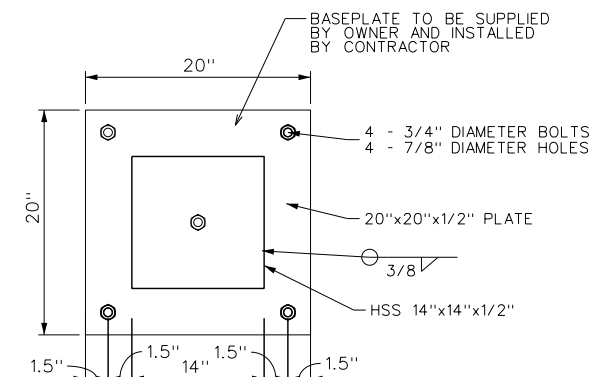
1 6" CONCRETE WALL CLOCK TOWER BASE SECTION  
16 NO SCALE



2  
16

CLOCK TOWER BASE CAPSTONE ENLARGEMENT DETAIL

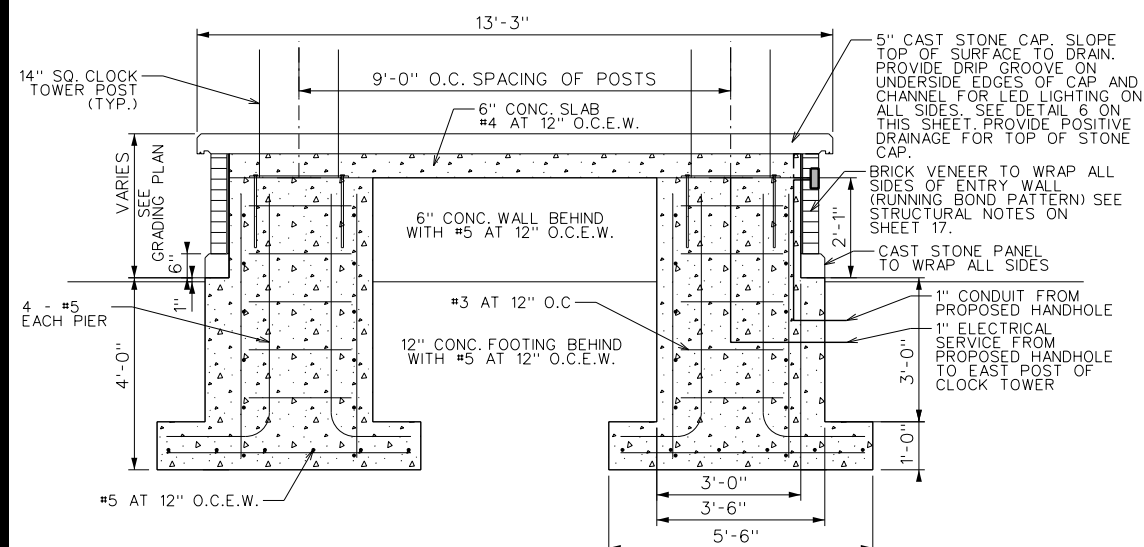
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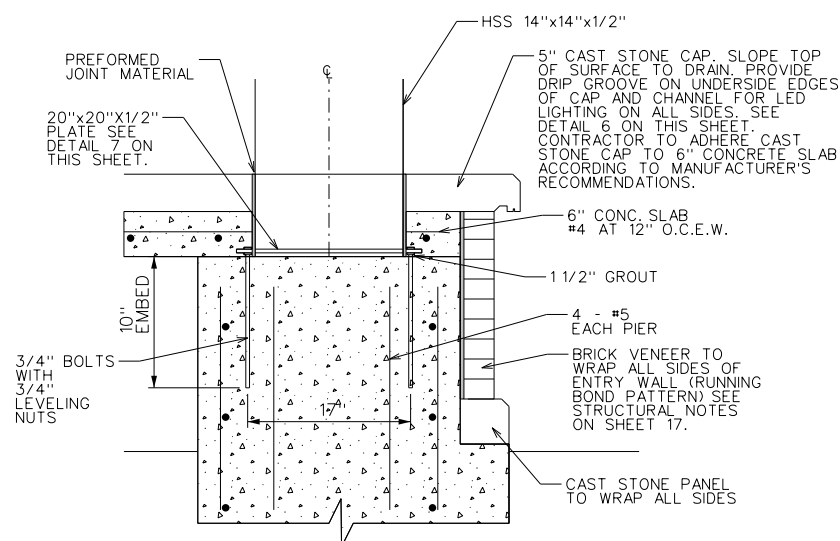
3  
16

CLOCK TOWER BASEPLATE PLAN

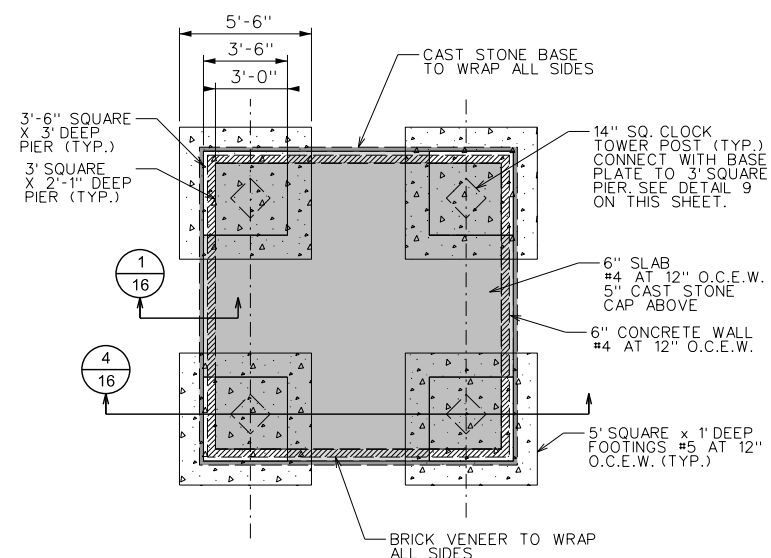
NO SCALE



4 CLOCK TOWER BASE ELEVATION AND SECTION  
16 1/2" = 1'-0"



5 CLOCK TOWER BASEPLATE CONNECTION DETAIL  
16 NO SCALE



 **CLOCK TOWER FOOTING PLAN**  
NO SCALE

[illegible]

# FORT DODGE GATEWAY IMPROVEMENTS - PHASE 1

**S. 12TH STREET CLOCK TOWER, BASE, AND SEAT WALL DETAILS**

**SNYDER & ASSOCIATES, INC.**

2727 S.W. SNYDER BLVD.  
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515-964-2020 | [www.snyder-associates.com](http://www.snyder-associates.com)

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**SNYDER**  
& ASSOCIATES

Project No: 1110404A

Sheet 16 of 17







JOB NUMBER:5278  
JOB NAME: FORT DODGE TOWN CENTER  
JOB LOCATION: FORT DODGE, IA

REVISION: \_\_\_\_\_

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## TABLE OF CONTENTS

- 1.0 Cover Sheet
- 2.0 Elevation
- 3.0 Anchor Bolt Layout
- 4.0 Frame Layout
- 5.0- 5.1 Frame Connections
- 6.0 Multi Rib Roof Layout
- 7.0- 7.3 Roof Connections

## DESIGN LOADS

CODE: 2012 INTERNATIONAL BUILDING CODE

TOTAL DEAD: 48.06 P.S.F.  
FRAME DEAD: 45.06 P.S.F.  
ROOF DEAD: 1.20 P.S.F.  
COLLATERAL DEAD: 1.80 P.S.F.  
ROOF LIVE LOAD: 18.00 P.S.F.  
GROUND SNOW LOAD: 30.00 P.S.F.  
ROOF SNOW LOAD: 25.20 P.S.F.  
WIND SPEED: 115.00 M.P.H.  
EXPOSURE: C  
SEISMIC USE GROUP: I  
SEISMIC SITE CLASS: D  
SEISMIC DESIGN CATEGORY: B  
SEISMIC ANALYSIS: SIMPLIFIED

## NOTES

**MATERIALS**  
TUBE STEEL (HSS HOLLOW STRUCTURAL SECTION) (ASTM DESIGNATION)  
WIDE FLANGE SECTIONS A- 500 GRADE B  
STRUCTURAL STEEL PLATE A- 992  
ROOF PANELS (STEEL) A- 36  
ANCHOR BOLTS A- 446  
CONNECTION BOLTS F1554 GRADE 36  
A- 325

ALL WELDING CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED. ALL WELDING IS PERFORMED BY AWS CERTIFIED WELDERS.

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO THE MATERIALS SUPPLIED BY ICON SHELTER SYSTEMS INC. AND IS NOT INTENDED AS THE SEAL OF THE ENGINEER OF RECORD FOR THE ENTIRE PROJECT.

DUE TO STANDARDIZED FABRICATION PARTS SHOWN MAY BE UPGRADED. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

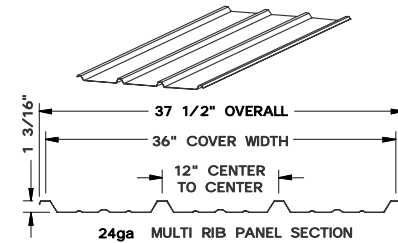
ICON SHELTER SYSTEMS INC. RECOMMENDS THAT THE PRIMARY FRAMING INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM OF FIVE (5) YEARS OF DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

**HIGH STRENGTH BOLTING**  
ALL HIGH STRENGTH BOLTS ARE A-325 BOLTS WITH HEAVY HEX NUTS. THE BOLTS ARE TO BE INSTALLED UTILIZING THE "SPECIFICATION FOR STRUCTURAL JOINTS ASTM A325 OR A490 BOLTS" (12/31/2009) AS PREPARED BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) FOR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC). THE BOLTS SHALL BE INSTALLED AS **SNUG TIGHTENED** WHICH IS DEFINED AS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE PLIES INTO FIRM CONTACT, WHICH IS THE CONDITION WHEN THE PLANES OF CONTACT BETWEEN TWO PLIES ARE SOLIDLY SEATED AGAINST EACH OTHER, BUT NOT NECESSARILY IN CONTINUOUS CONTACT WITH UTILIZATION OF THE SNUG TIGHTENING METHOD, NO WASHERS ARE REQUIRED.  
ALL CONNECTIONS ARE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO INSURE PROPER TIGHTNESS.

PROPER ERECTION OF THE FRAMING MEMBERS REQUIRES THE MAIN COLUMNS TO BE PLUMB & SQUARE. COLUMNS, RAFTER, AND TIE BEAM CONNECTIONS MUST BE TIGHTENED BEFORE INSTALLING THE PURLINS. PURLINS MUST BE PARALLEL TO THE TIE BEAMS AND EAVE BEAMS.

## ROOF



Cover Sheet

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ANGEL

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5278

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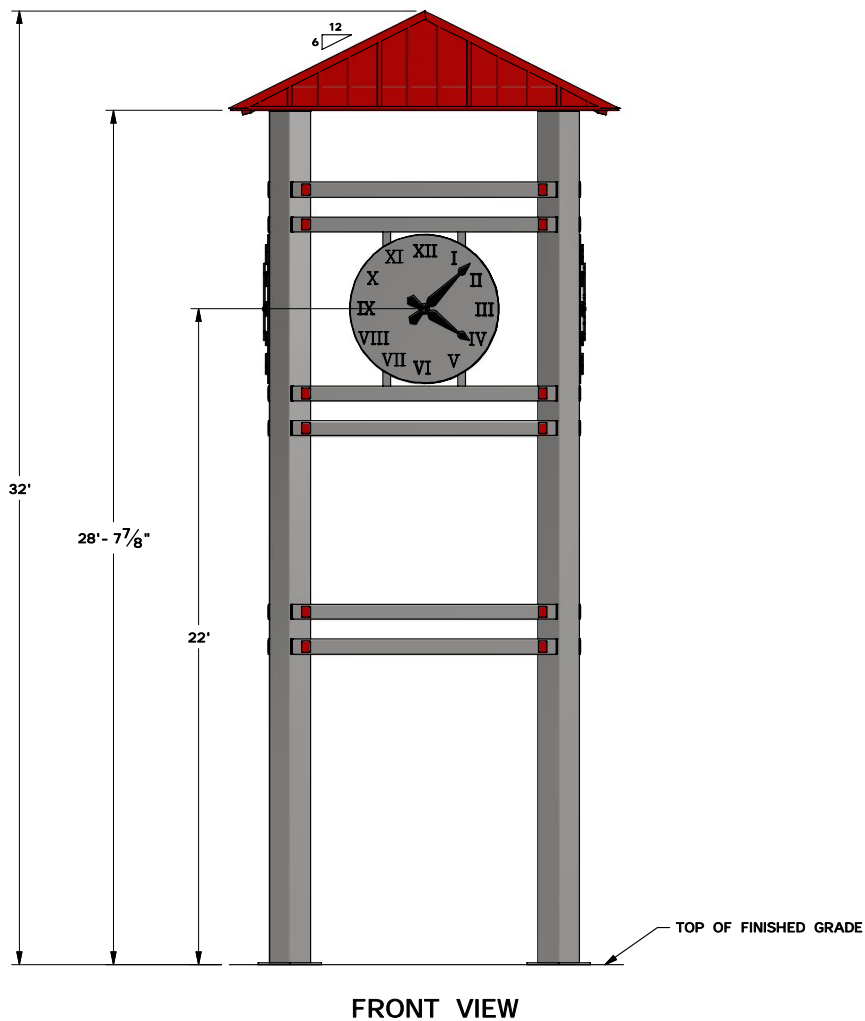
FORT DODGE  
TOWN CENTER  
FORT DODGE, IA

SHEET

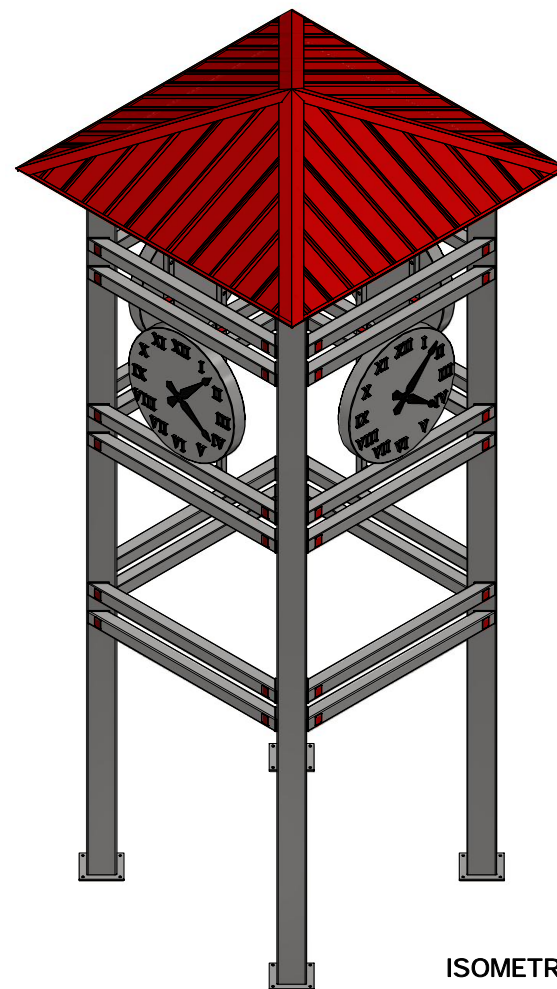
A1

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FRONT VIEW



ISOMETRIC VIEW

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Elevation

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BUILDING TYPE:

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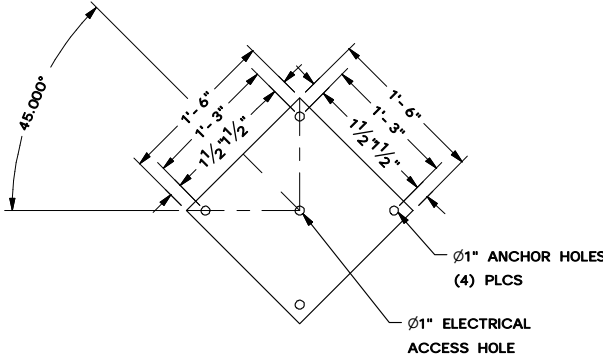
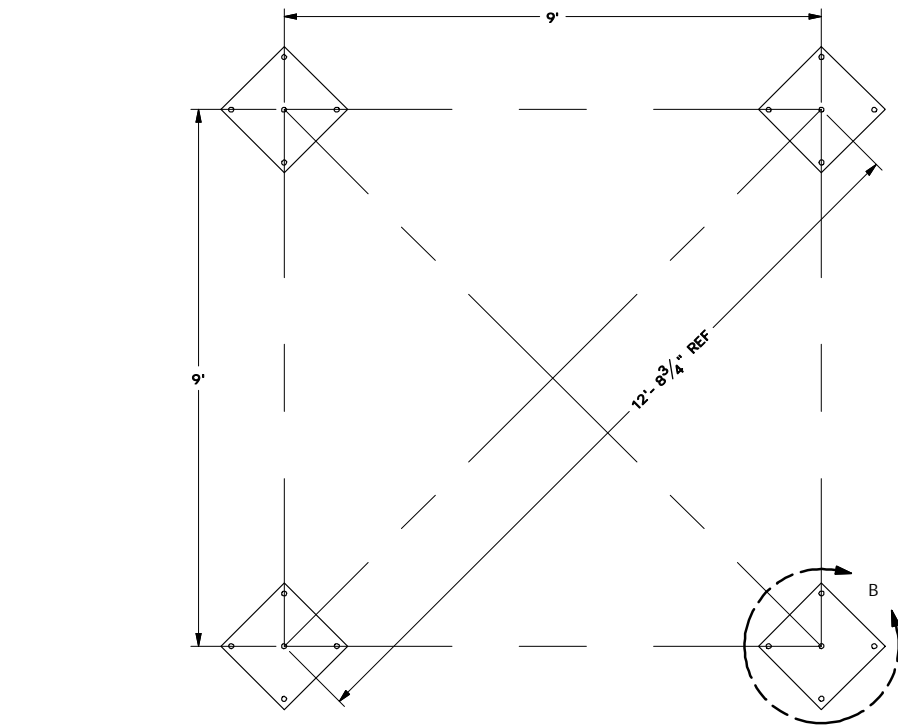
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NOTE: REFER TO FOOTING DETAILS  
ON PAGE 21 OF THE CONSTRUCTION  
PLANS.  
FOOTING DESIGN NOT BY ICON



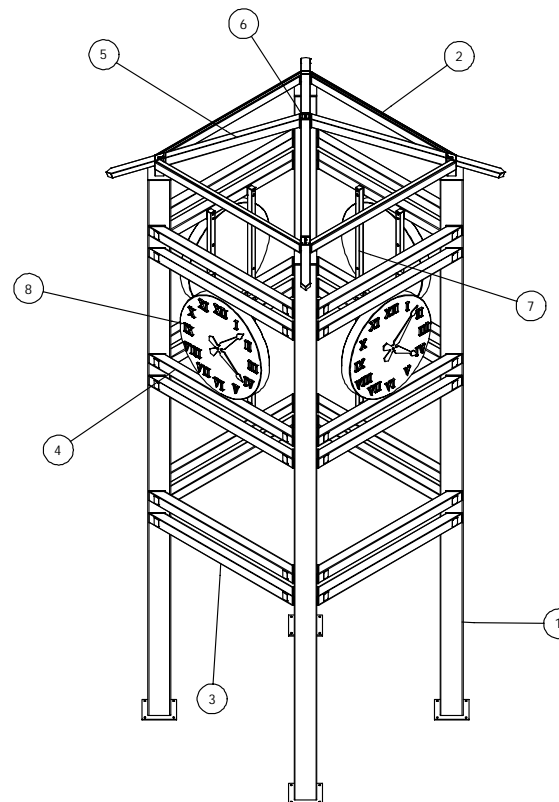
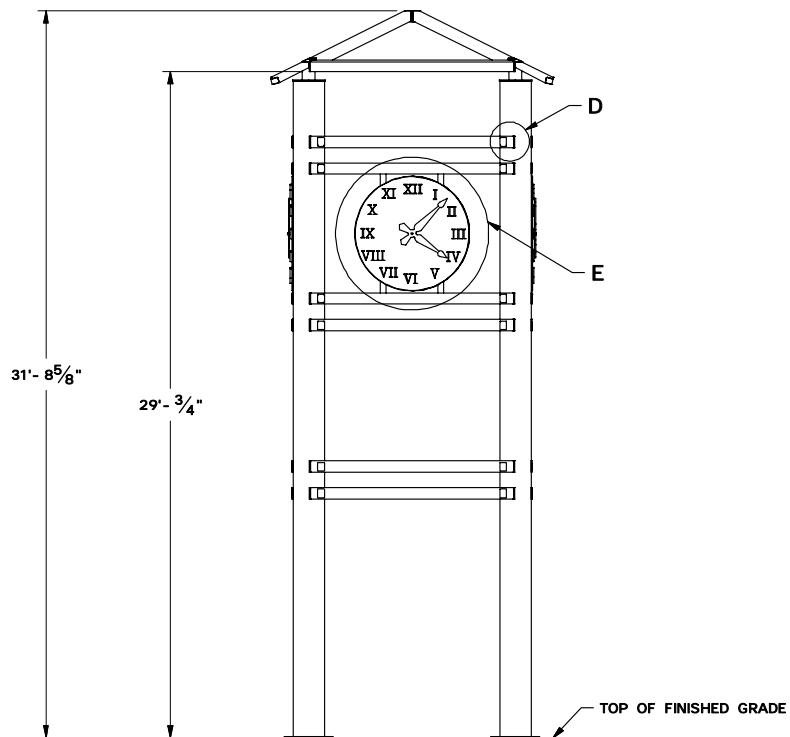
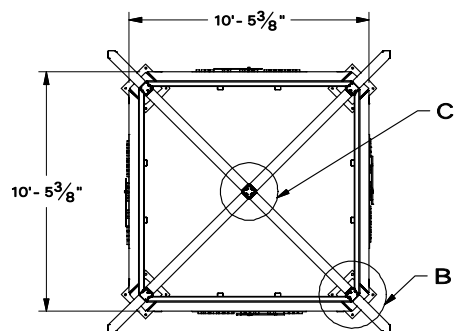
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Anchor Bolt Layout

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SHEET  
**A3**





ITEM	QTY	PART NUMBER	DESCRIPTION	STOCK	LENGTH
1	4		COLUMN ASSY	HSS12X12X0.25	
2	4		TIE BEAM 1	HSS5X3X0.125	
3	16		TIE BEAM 2	HSS6X6X0.1875	
4	8		TIE BEAM 3	HSS6X6X0.1875	
5	4		RAFTER	HSS5X5X0.125	
6	1		COMPRESSION TUBE	HSS5X5X0.5	
7	8		CLOCK SUPPORT	HSS3X3X0.125	
8	4		CLOCK	LUMCHRON CLOCK	

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## Frame Layout

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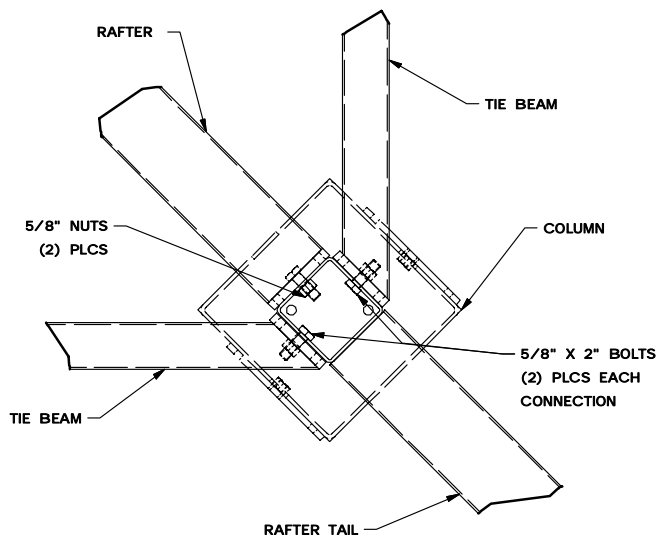
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**A4**

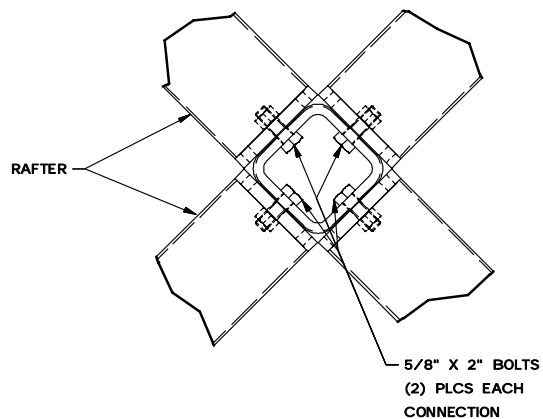
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TIE BEAM & RAFTER CONNECTIONS  
@ COLUMN

DETAIL B



RAFTER CONNECTIONS  
@ COMPRESSION TUBE

DETAIL C

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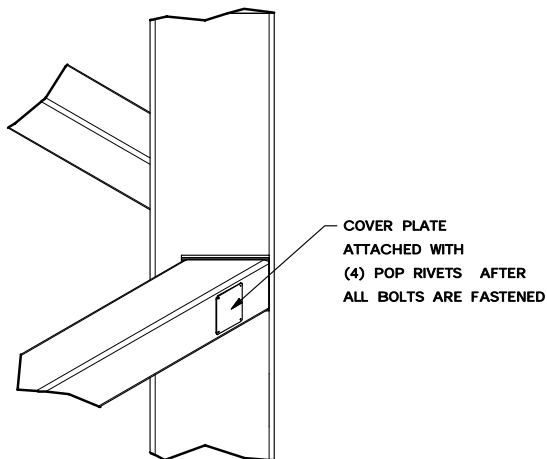
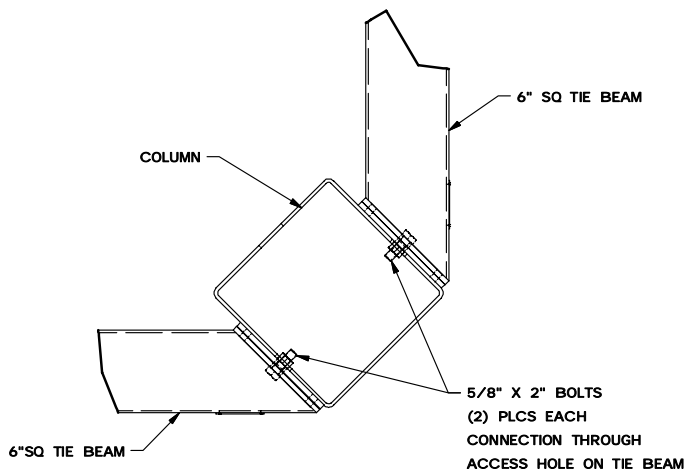
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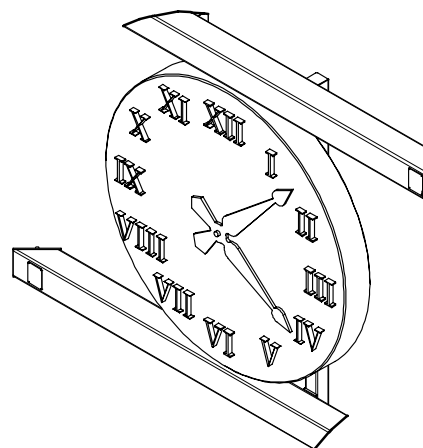
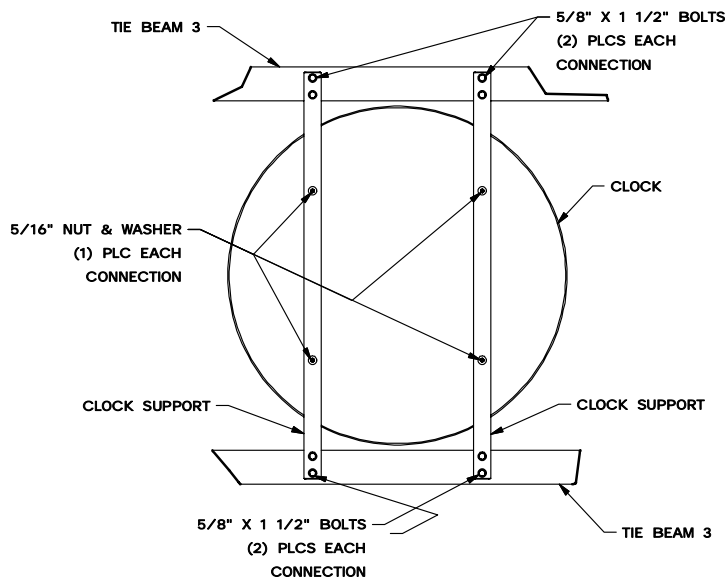
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6" TIE BEAM CONNECTION  
@ COLUMN

DETAIL D



CLOCK & CLOCK SUPPORT CONNECTIONS  
@ TIE BEAMS

DETAIL E

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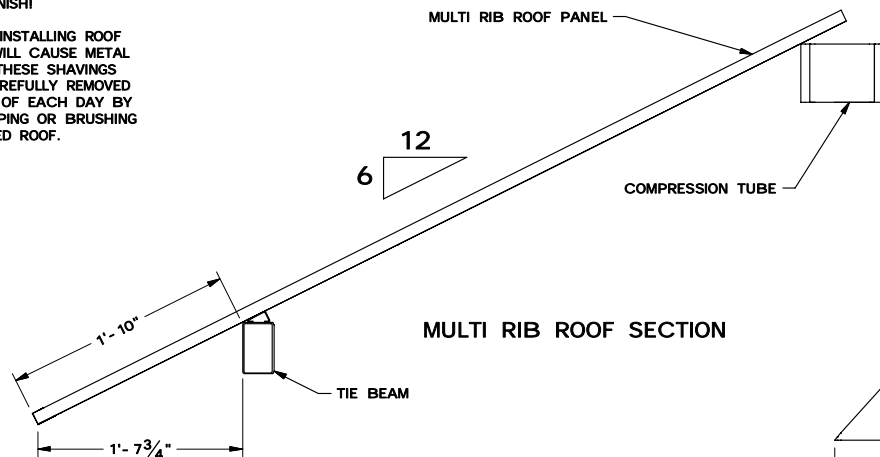
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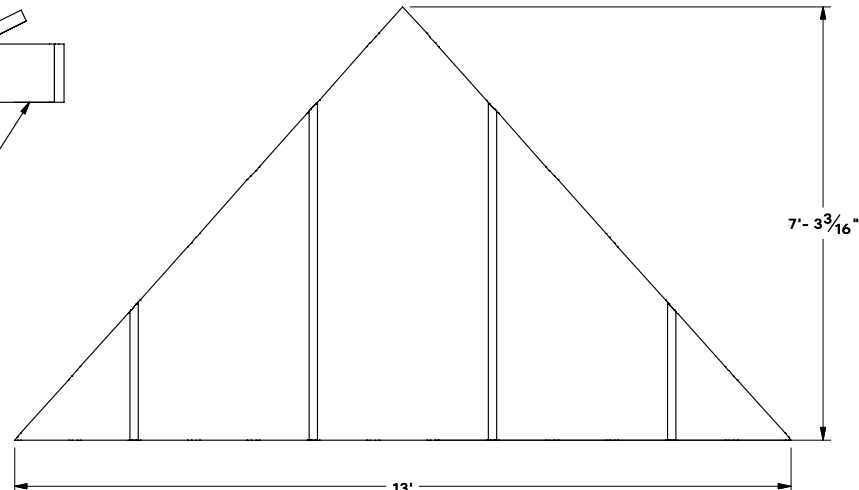


ATTENTION INSTALLERS:  
METAL SHAVINGS LEFT ON ROOF  
WILL QUICKLY RUST AND STAIN  
THE ROOF FINISH!

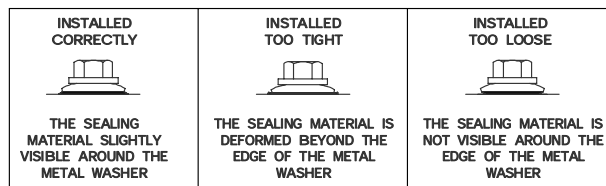
DRILLING OR INSTALLING ROOF  
FASTENERS WILL CAUSE METAL  
SHAVINGS. THESE SHAVINGS  
**MUST** BE CAREFULLY REMOVED  
AT THE END OF EACH DAY BY  
EITHER SWEEPING OR BRUSHING  
THE INSTALLED ROOF.



MULTI RIB ROOF SECTION



MULTI RIB ROOF LAYOUT



THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE METAL ROOFING SYSTEM. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. CHANGES TO THE DETAILS MAY BE REQUIRED DUE TO FIELD CONDITIONS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL INSTALLATION INSTRUCTION MATERIAL BEFORE STARTING WORK.

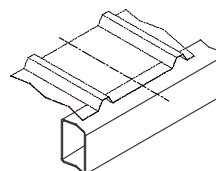
THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

ERECTORS SHALL BE RESPONSIBLE TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

FOR THE BEST APPEARANCE ALL TRIM AND FLASHING SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ALL EXPOSED FASTENERS EQUALLY SPACED.

SOME FIELD CUTTING AND/OR FITTING OF PANELS, TRIM AND FLASHING IS TO BE EXPECTED BY THE ERECTOR. MINOR FIELD CORRECTIONS ARE PART OF NORMAL ERECTION WORK.

THE INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN AND WORKMANSHIP SHALL MEET THE BEST INDUSTRY STANDARDS.



**STEPS FOR PROPER PANEL INSTALLATION:**

1. MARK THE CENTER OF THE TIE BEAM AND COMPRESSION RING (OR PURLIN ON MULTI TIER BUILDINGS).
2. FIND ONE OF THE LONGEST PANELS.
3. CENTER THAT PANEL ALONG THE CENTER LINE OF THE FRAME.  
(SEE ROOF LAYOUT FOR THE CORRECT RIB TO CENTER)
4. INSTALL REMAINING PANELS WORKING OUT TOWARDS THE CORNERS.
5. INSTALL ALL ROOF SECTIONS USING THIS METHOD.

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Multi Rib Roof Layout

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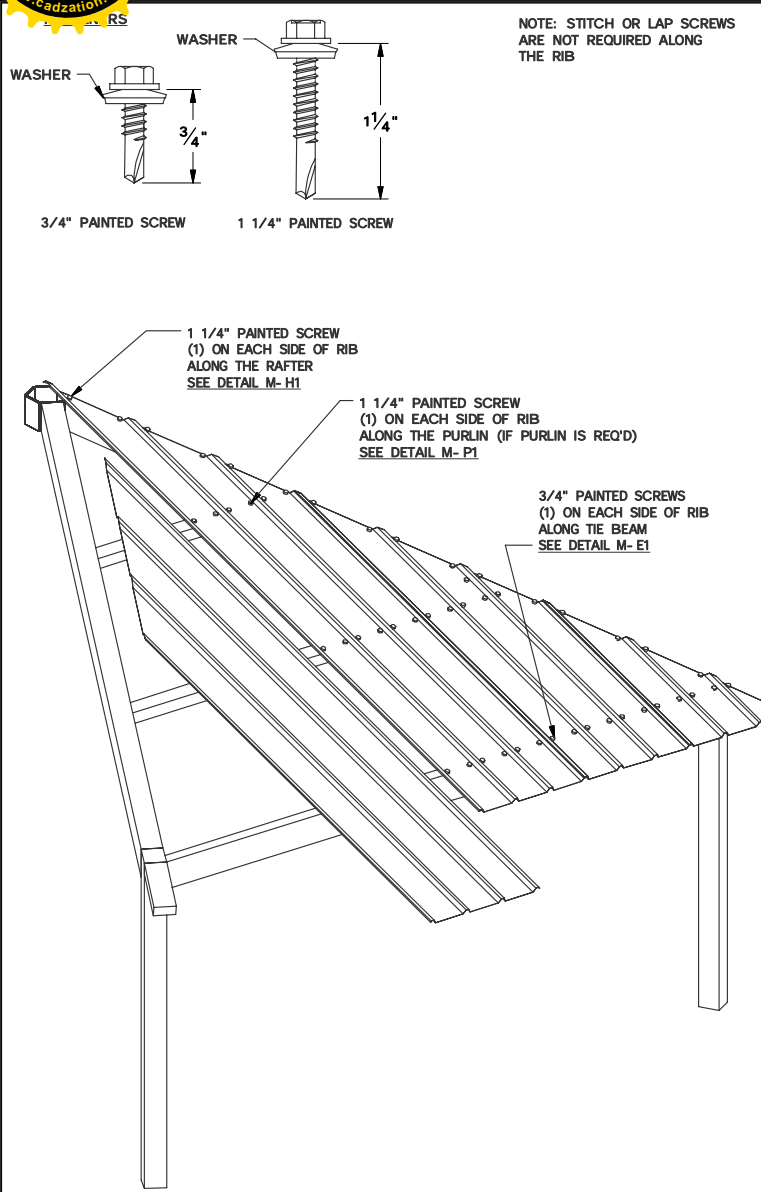
FORT DODGE  
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SHEET

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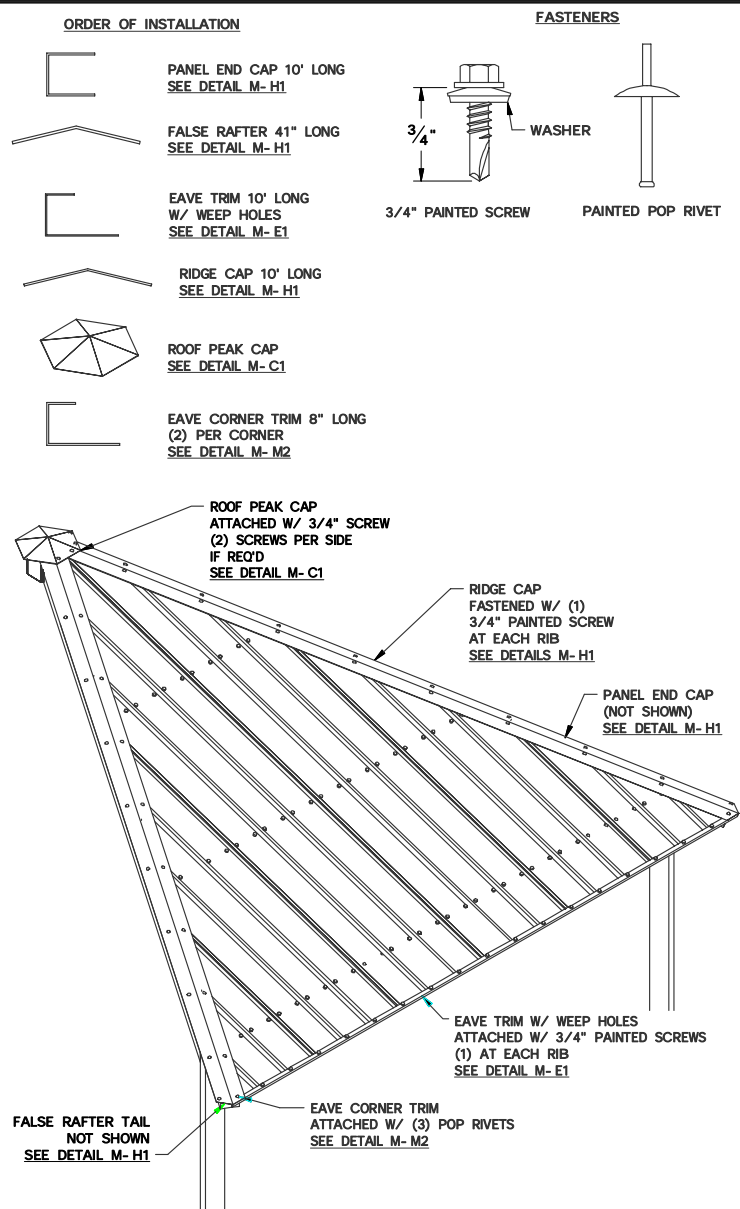
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METAL ROOF PANEL INSTALLATION

ROOF



TRIM INSTALLATION

TRIM

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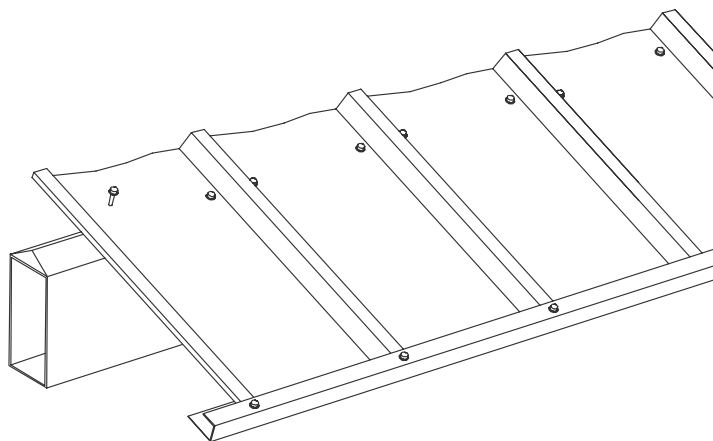
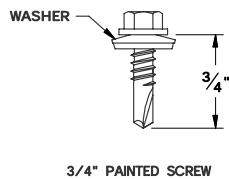
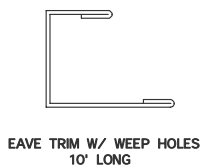
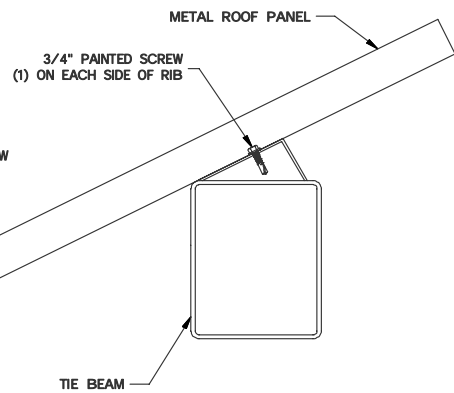
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METAL ROOF EAVE CONNECTION DETAIL

M- E1

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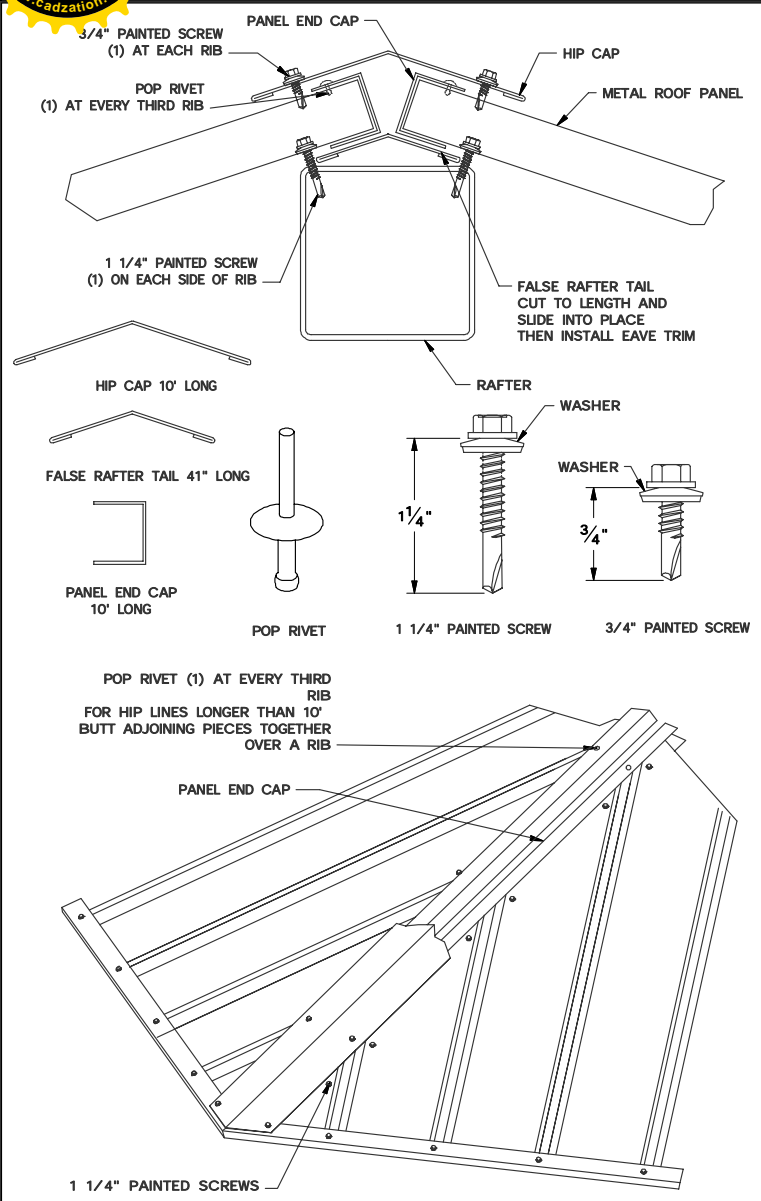
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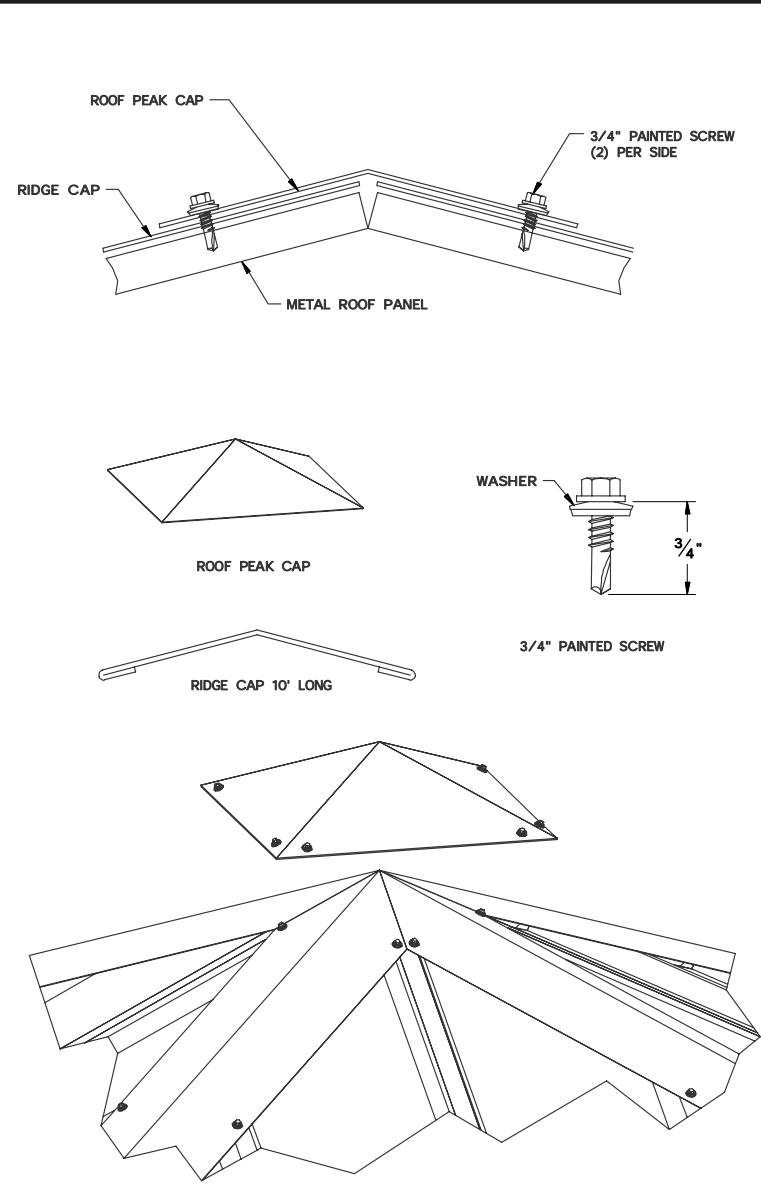
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METAL ROOF HIP CONNECTION DETAIL

M- H1



PEAK CAP CONNECTION DETAIL

M- C1

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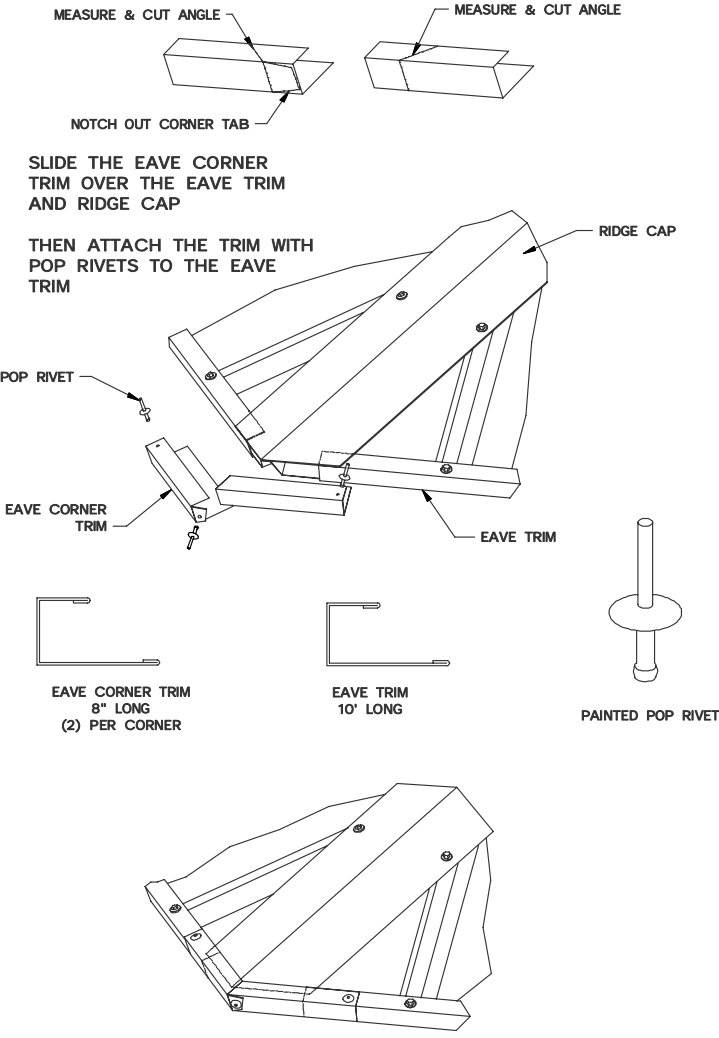
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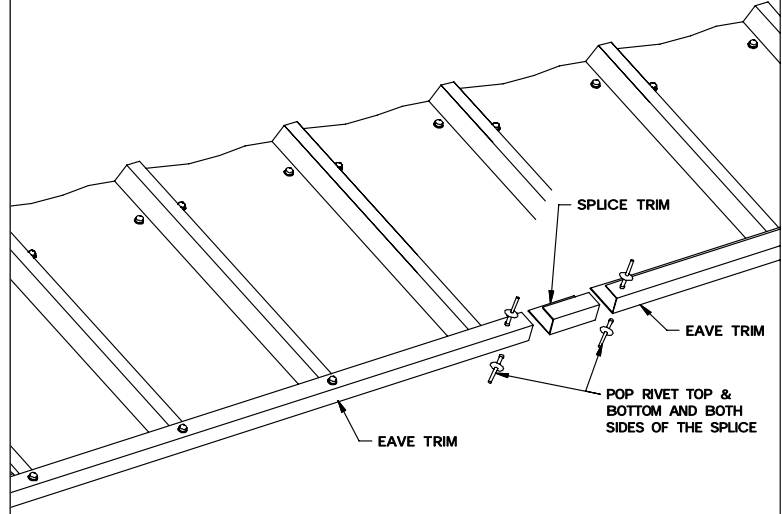
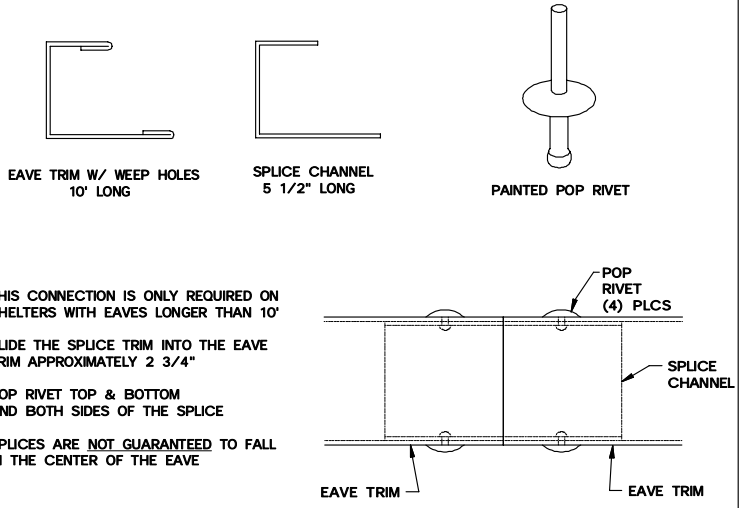
CUT A MITER AND CORNER TAB ON (1) OF THE EAVE CORNER PIECES

CUT AN OPTIONAL MITER ON THE SECOND EAVE CORNER



METAL ROOF EAVE CORNER CONNECTION DETAIL

M- M2



METAL ROOF EAVE SPLICE CONNECTION DETAIL

M- S1

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616.396.0919  
800.748.0985  
616.396.0944 EX

# Roof Connections

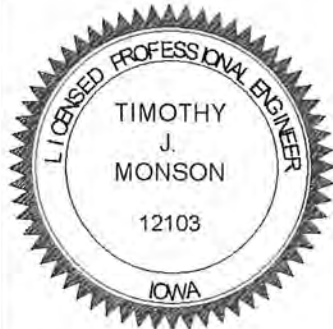
DRAWN BY:
ANGEL
DATE:
2/20/2017
JOB NO.:
5278
REVISION:
BUILDING TYPE:
TH13M- P6
PROJECT NAME:
FORT DODGE TOWN CENTER FORT DODGE, IA

SHEET  
**A11**




**CITY OF FORT DODGE  
GATEWAY IMPROVEMENTS – PHASE 1  
Project No. 111.0404.01A**

Prepared by:  
SNYDER & ASSOCIATES, INC.  
2727 SW Snyder Blvd.  
Ankeny, Iowa 50023  
(515) 964-2020



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

  
TIMOTHY J. MONSON, P.E.

IOWA REG. NO. 12103


MY LICENSE RENEWAL DATE IS DECEMBER 31, 2018

PAGES OR SHEETS COVERED BY THIS SEAL:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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.

  
John W. Haldeman, P.E.

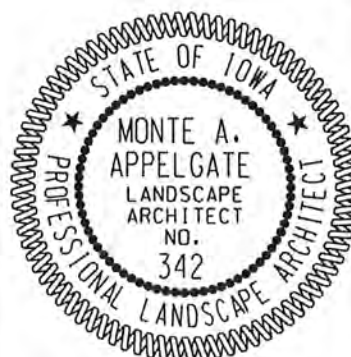
02/27/17  
Date

License Number 15808

My License Renewal Date is December 31, 2018

Bidding Information and Contract Documents, Special Provisions

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



License Expires:  
June 30, 2018

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.

  
Monte Appelgate, PLA

2/27/17  
Date

License Number 342

Appendices

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GATEWAY IMPROVEMENTS – PHASE 1  
FORT DODGE, IOWA  
S&A PROJECT NO. 111.0404.01A

**The following documents are a part of this contract:**

**BIDDING INFORMATION AND CONTRACT DOCUMENTS**

	<u>Pages</u>
Notice of Public Hearing .....	NPH – 1
Notice to Bidders .....	NTB – 1 to NTB – 2
Instruction to Bidders .....	ITB – 1 to ITB – 3
Proposal .....	P – 1 to P – 7
Bid Bond .....	BB – 1 to BB – 2
Contract .....	C – 1 to C – 6
Performance, Payment and Maintenance Bond .....	PM – 1 to PM – 4
Notice to Proceed .....	NP – 1

**SPECIAL PROVISIONS**

Part 1 – General Requirements.....	SP1 – 1 to SP1 – 9
Part 2 – Special Construction.....	SP2 – 1 to SP2 – 8

**APPENDICES**

Section 32 84 00 Irrigation System.....	32 84 00 – 1 to 32 84 00 – 13
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**Specifications:**

The Iowa Statewide Urban Standard Specifications for Public Improvements, 2017 Edition, referred to in the plans and specifications as SUDAS, shall apply to construction work on this project, except as modified in the plans and special provisions.

## BIDDING INFORMATION AND CONTRACT DOCUMENTS

**NOTICE OF PUBLIC HEARING**  
**CITY OF FORT DODGE**  
**GATEWAY IMPROVEMENTS – PHASE 1**

NOTICE OF PUBLIC HEARING ON PROPOSED PLANS, SPECIFICATIONS, FORM OF CONTRACT AND ESTIMATE OF COST FOR THE GATEWAY IMPROVEMENTS – PHASE 1 FOR THE CITY OF FORT DODGE, IOWA.

PUBLIC NOTICE IS HEREBY GIVEN that a public hearing will be held by the City of Fort Dodge at its meeting at 6:00 p.m., March 27, 2017, in said Council Chambers of the Municipal Building, 819 1st Avenue South, Fort Dodge, IA whereat said Council will resolve to adopt plans, specifications, form of contract and estimate of cost for the construction of the GATEWAY IMPROVEMENTS – PHASE 1 PROJECT, and, at the time, date and place specified above, or at such time, date and place as then may be fixed, to act upon proposals and enter into contract for the construction of said improvements.

The GATEWAY IMPROVEMENTS – PHASE 1 PROJECT includes all materials, equipment, transportation and labor necessary to complete the improvements. The project includes roundabout columns, decorative banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

At said hearing, the City Council will consider the proposed plans, specifications, form of contract and estimate of cost for said project, the same now being on file in the office of the City Clerk, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said Council will also receive and consider any comments/objections to said plans, specifications and form of contract or to the estimated cost of said improvements made by any interested party.

This Notice is given by authority of the City of Fort Dodge on this \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
Jeff Nemmers, City Clerk

Published in the \_\_\_\_\_ on \_\_\_\_\_, 2017.



**NOTICE TO BIDDERS**  
**CITY OF FORT DODGE**  
**GATEWAY IMPROVEMENTS – PHASE 1**

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising the improvements as stated below must be filed before 10:00 a.m., March 20, 2017, in the office of the City Clerk, Municipal Building, 819 1st Avenue South, Fort Dodge, IA 50501.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 10:00 a.m., March 20, 2017, in the Council Chambers of the Municipal Building, for consideration by the Fort Dodge City Council at its meeting on March 27, 2017. The City of Fort Dodge reserves the right to reject any and all bids.

Pre-Bid Conference. A pre-bid conference will be held at 10:00 a.m. on Tuesday, March 14, 2017, at the Municipal Building of the City of Fort Dodge, 819 1<sup>st</sup> Avenue South, Fort Dodge, IA 50501. Potential bidders are strongly encouraged to attend. Representatives of the Owner and the Engineer will be present to discuss the Project. Owner will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

Time for Commencement and Completion of Work.

Project Completion

The work under the contract shall be fully completed within **twenty-five (25) working days**. The Notice to Proceed is anticipated to be issued prior to May 15, 2017. Working days will be charged once construction begins. Liquidated damages of Five Hundred Dollars (\$500.00) per calendar day will be assessed for work not completed within the designated timelines for full completion of the project.

Bid Security. Each bidder shall accompany its bid with bid security as security that the successful bidder will enter into a contract for the work bid upon and will furnish after the award of contract a corporate surety bond, in form acceptable to the City, for the faithful performance of the contract, in an amount equal to one hundred percent of the amount of the contract. The bidder's security shall be in the amount fixed in the Instruction to Bidders and shall be in the form of a cashier's check, a certified check, or a bank money order drawn on a FDIC insured bank in Iowa or on a FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States; or a bid bond on the form provided in the contract documents with corporate surety satisfactory to the Jurisdiction. The bid shall contain no condition except as provided in the specifications.

Contract Documents. The contract documents are on file with the City Engineer and may be examined at the Municipal Building, 819 1st Avenue South, Fort Dodge, IA. Hard copies of the project documents may be obtained from Snyder & Associates, Inc. 2727 SW Snyder Blvd, Ankeny, Iowa 50023 and at 911 Central Avenue, Fort Dodge, Iowa 50501 for a refundable deposit of \$25. Electronic contract documents are available by clicking on the "Bids" tab at [www.snyder-associates.com](http://www.snyder-associates.com) and choosing the Fort Dodge Gateway Improvements – Phase 1 on the left. Downloads are free, but require the user to register for a free membership. Project information, engineer's cost opinion, plan holder information, and electronic documents are available at no cost at this website.

Iowa Preference. By virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes.

Sales Tax Exemption. A sales tax exemption certificate will be available for all materials purchased for incorporation in the project.

Public Hearing on Proposed Contract Documents and Estimated Costs for Improvements. A public hearing will be held by the City of Fort Dodge on the proposed contract documents (plans, specifications and form of contract) and estimated cost for the improvements at its meeting at 6:00 p.m., March 27, 2017, in said Council Chambers of the Municipal Building, 819 1st Avenue South, Fort Dodge, IA.

General Nature of Public Improvements. The work includes all materials, equipment, transportation and labor necessary to complete the improvements. The project includes roundabout columns, decorative banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

This Notice is given by authority of the City of Fort Dodge.

---

Jeff Nemmers

Bid Date March 20, 2017  
Time 10:00 a.m.

### **INSTRUCTIONS TO BIDDERS**

Project Name Fort Dodge Gateway Improvements – Phase 1  
Fort Dodge, Iowa

S&A Project No. 111.0404.01A

The work comprising the above referenced project shall be constructed in accordance with the 2017 edition of the Statewide Urban Design and Specifications (SUDAS), and as further modified by supplemental specifications and special provisions included in the contract documents. The terms used in the contract revision of the documents are defined in said Standard Specifications. The City of Fort Dodge is the Contracting Authority on this project and shall hereinafter be referred to as the "Jurisdiction". Before submitting your bid, please review the requirements of Division One, General Provisions and Covenants, in particular the sections regarding proposal requirements, bonding, contract execution and insurance requirements. Please be certain that all documents have been completed properly, and submit them to the Fort Dodge City Clerk, Municipal Building, 819 1st Avenue South, Fort Dodge, IA 50501

#### **I. BID SECURITY**

The bid security must be in the minimum amount of 10% of the total bid. Bid security shall be in the form of a cashier's check, a certified check, or a bank money order drawn on a FDIC insured bank in Iowa or drawn on a FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States; or a bid bond executed by a corporation authorized to contract as a surety in Iowa or satisfactory to the Jurisdiction. The bid bond must be submitted on the enclosed bid bond form as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink; facsimile (fax) of any signature on the bid bond is not acceptable. Bid security other than said bid bond shall be made payable to the City of Fort Dodge, Iowa. "Miscellaneous Bank Checks", and personal checks, as well as "Money Orders" and "Traveler's Checks" issued by persons, firms or corporations licensed under Chapter 533B of the Iowa Code, are not acceptable bid security.

#### **II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER**

- A. The proposal shall be sealed in an envelope, properly identified as the Proposal with the project title and the name and address of the bidder, and deposited with the Jurisdiction at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see that its proposal is delivered to the Jurisdiction prior to the time for opening bids, along with the appropriate bid security sealed in the separate envelope identified as Bid Security and attached to the outside of the bid proposal envelope. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered.
- B. The following documents shall be completed, signed and returned in the Proposal envelope. The bid cannot be read if any of these documents are omitted from the Proposal envelope.

- 1. PROPOSAL – Complete each of the following parts:

- Part B – Acknowledgment of Addenda, if any have been issued;
- Part C – Bid Items, Quantities and Prices;
- Part F – Identity of Subcontractors;

The following documents, which are proposal attachments, must be completed and attached:

<u>ITEM NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>
1.	Part C – Bid Schedule
2.	Part F – Identity of Subcontractors

- Part G – Identity of Bidder;

Sign the proposal; and have the signature notarized. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted.

The following documents must be submitted as printed. No alterations, additions, or deletions are permitted. If the Bidder notes a requirement in the contract documents which the Bidder believes will require a conditioned or unsolicited alternate bid, the Bidder must immediately notify the Jurisdictional Engineer in writing. The Jurisdictional Engineer will issue any necessary interpretation by an addendum.

### III. PROSECUTION AND PROGRESS OF THE WORK

- A. The Work is located in the City of Fort Dodge. Work on Sundays or legal holidays require approval of the City.
- B. Allowable working hours are between sunrise and sunset.
- C. Project Completion

The work under the contract shall be fully completed within **twenty-five (25) working days**. The Notice to Proceed is anticipated to be issued prior to May 15, 2017. Working days will be charged once construction begins. Liquidated damages of Five Hundred Dollars (\$500.00) per calendar day will be assessed for work not completed within the designated timelines for full completion of the project.

### IV. SUBLETTING

- A. The Contractor shall perform, with its own organization and forces, work amounting in no less than 20% of the total contract cost.

### V. TAXES

- A. The City will issue a sales tax exemption certificate to the Contractor for all materials purchased on the project. The City will issue the appropriate exemption certificates and authorization letters to the Contractor and all subcontractors completing work on the project. Tax exemption certificates are applicable only for the specific project for which the tax exemption certificate is issued.

- B. The Contractor shall provide a listing to the City identifying all appropriate subcontractors qualified for use of the tax exemption certificate. The Contractor and subcontractors may make copies of the certificate and provide to each supplier providing construction material a copy of the tax exemption certificate.

## VI. ELECTRONIC DOCUMENTS AND FILES AVAILABILITY

- A. Electronic contract documents are available by clicking on the “Bids” tab at [www.snyder-associates.com](http://www.snyder-associates.com) and choosing the Fort Dodge Gateway Improvements – Phase 1 Project on the left. Downloads are free, but require the user to register for a free membership. Project information, engineer’s cost opinion, and planholder information is available at no cost at this website.
- B. Digital files of the proposed project in Microstation V8i format will be made available to the Contractor awarded the project upon completion and receipt of the “Snyder & Associates Electronic Media Transfer Agreement”. Available digital files include proposed features and 3-D contours of the proposed grading.



TO: The Honorable Mayor and  
Members of the City Council  
City of Fort Dodge, Iowa

## **PROPOSAL**

### **PROPOSAL: PART A – SCOPE**

The City of Fort Dodge, hereinafter called the “Jurisdiction”, has need of a qualified contractor to complete the work comprising the below referenced improvements. The undersigned Bidder hereby proposes to complete the work comprising the below referenced improvements as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Engineer, at the prices hereinafter provided in Part C of the Proposal, for the following described improvements:

### **FORT DODGE GATEWAY IMPROVEMENTS – PHASE 1**

General Nature of Public Improvements. The work includes all materials, equipment, transportation and labor necessary to complete the improvements. The project includes roundabout columns, decorative banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

### **PROPOSAL: PART B – ACKNOWLEDGEMENT OF ADDENDA**

The Bidder hereby acknowledges that all addenda become a part of the contract documents when issued, and that each such addendum has been received and utilized in the preparation of this bid. The Bidder hereby acknowledges receipt of the following addenda by inserting the number of each addendum in the blanks below:

ADDENDUM NUMBER \_\_\_\_\_ ADDENDUM NUMBER \_\_\_\_\_  
ADDENDUM NUMBER \_\_\_\_\_ ADDENDUM NUMBER \_\_\_\_\_

and certifies that said addenda were utilized in the preparation of this bid.

### **PROPOSAL: PART C – BID ITEMS, QUANTITIES AND PRICES**

UNIT BID PRICE CONTRACTS: The Bidder must provide the Unit Bid Prices and Total Bid Price on the Proposal Attachment labeled "BID SCHEDULE". In case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment are approximate only, but are considered sufficiently adequate for the purpose of comparing bids. The Total Base Bid shall be used only for comparison of bids. The Total Bid shall be used for determining the sufficiency of the bid security.

**PROPOSAL: PART D – GENERAL**

The Bidder hereby acknowledges that the Jurisdiction, in advertising for public bids for this project reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive bidder to be based on comparison of the total base bid; and
3. Make such alterations in the documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Jurisdiction, provide proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code, and furnish a performance, maintenance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or to furnish said bond; and
3. Project Completion

The work under the contract shall be fully completed within **twenty-five (25) working days**. The Notice to Proceed is anticipated to be issued prior to May 15, 2017. Working days will be charged once construction begins. Liquidated damages of Five Hundred Dollars (\$500.00) per calendar day will be assessed for work not completed within the designated timelines for full completion of the project.

**PROPOSAL: PART E – NON-COLLUSION AFFIDAVIT**

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and
3. That no part of the bid price received by the Bidder was or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder

whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and

4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to submit a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought, by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other bidder, and that all statements in this proposal are true; and
5. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

**PROPOSAL: PART F – ADDITIONAL REQUIREMENTS**

The Bidder hereby agrees to comply with the additional requirements listed below, which are included in this proposal:

<u>ITEM NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>
1.	Part C – Bid Schedule
2.	Part F – Identity of Subcontractors
3.	

(CON'T - PROPOSAL)

S&A Project No. 111.0404.01A

**PROPOSAL: PART G – IDENTITY OF BIDDER**

The Bidder shall indicate whether the bid is  
Submitted by a/an:

- ☐ Individual,  
Sole Proprietorship
- ☐ Partnership
- ☐ Corporation
- ☐ Joint-venture: all parties must join-in and  
execute all documents
- ☐ Other

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
Signature

By \_\_\_\_\_  
Name (Print/Type)

\_\_\_\_\_  
Title

The Bidder shall enter its Public Registration  
Number \_\_\_\_ - \_\_\_\_ issued  
By the Iowa Commissioner of Labor Pursuant  
Section 91C.5 of the Iowa Code.

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
Telephone Number

In the event the above signature is not that of the  
company's owner, president, CEO, etc., provide the Chief  
Official's Name and Title below.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

**NOTE: The signature on this proposal must be an original signature in ink; copies or facsimile  
of any signature will not be accepted.**

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public in and for

State of \_\_\_\_\_

County of \_\_\_\_\_

My commission expires \_\_\_\_\_.

**PROPOSAL ATTACHMENT: PART C – BID ITEMS, QUANTITIES AND PRICES**

This is a UNIT PRICE Contract. The bidder must provide the Unit Bid Prices and Bid Total; in case of discrepancy, the Unit Bid Price governs. The quantities shown on the Bid Schedule are approximate only, but are considered sufficiently adequate for the purpose of comparing bids. The Base Bid Total plus any Add Alternates shall be used for determining the sufficiency of bid security.

No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
1	Schedule A: S. 6 <sup>th</sup> Street Roundabout				
Base Bid					
1.1	Earthwork	LS	1	\$	\$
1.2	Masonry Banner Bases, Support Posts, Planter Boxes and Footings	LS	1	\$	\$
1.3	Banner Lighting	LS	1	\$	\$
1.4	Masonry Columns and Footings	LS	1	\$	\$
1.5	PCC Sidewalk, 4"	SY	18	\$	\$
1.6	Water Service Pipe, Trenchless, 1", Type K Copper	LF	87	\$	\$
1.7	Irrigation System - 6th Street Roundabout	LS	1	\$	\$
1.8	Silt Fence	LF	174	\$	\$
1.9	Silt Fence, Removal of Device	LF	174	\$	\$
1.10	Traffic Control	LS	1	\$	\$
1.11	Mobilization	LS	1	\$	\$
Schedule A: Base Bid Total					\$
Deduct Alternate A: Deduct Irrigation System, Add Flush Yard Hydrant					
	Deduct Item 1.7 Irrigation System – 6 <sup>th</sup> Street Roundabout	LS	-1	\$	\$
	Add Flush Box Hydrant	EA	1	\$	\$
Total Deduct Alternate A					\$
2	Schedule B: S. 12 <sup>th</sup> Street Roundabout				
Base Bid					
2.1	Earthwork	LS	1	\$	\$
2.2	3' Height Masonry Clock Tower Base and Footings	LS	1	\$	\$
2.3	4' Height Masonry Columns and Footings	LS	1	\$	\$
2.4	32' Height Clock Tower with Four Illuminated Clock Faces (Install Only)	LS	1	\$	\$
2.5	LED Accent Lighting for Perimeter of Clock Tower Base	LS	1	\$	\$
2.6	Irrigation System - 12th Street Roundabout	LS	1	\$	\$
2.7	Water Service, 1”, Type K Copper	LF	30	\$	\$
2.8	Silt Fence	LF	211	\$	\$
2.9	Silt Fence, Removal of Device	LF	211	\$	\$



No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
2.10	Traffic Control	LS	1	\$	\$
2.11	Mobilization	LS	1	\$	\$
<b>Schedule B: Base Bid Total</b>					<b>\$</b>
Deduct Alternate B: Deduct Irrigation System, Add Flush Yard Hydrant					
	Deduct Item 2.5 Irrigation System – 12 <sup>th</sup> Street Roundabout	LS	-1	\$	\$
	Add Flush Box Hydrant	EA	1	\$	\$
Total Deduct Alternate B					\$
<b>Base Bid Total (Schedule 'A' + 'B') =</b>					<b>\$</b>

**PROPOSAL: PART F – ADDITIONAL REQUIREMENTS**  
**ITEM 2 – IDENTITY OF SUBCONTRACTORS**

In all instances in which the bidder intends to assign, sublet, or subcontract any portion of the work exceeding \$25,000, the Bidder shall mark the appropriate box and shall provide a description of the work to be done by each subcontractor or assignee, the amount of each subcontract or the value of the work to be assigned, and the identity of each subcontractor or assignee below. The Bidder certifies that said subcontractors or assignees shall be utilized on this project, if acceptable to the City of Fort Dodge. If the Bidder does not intend to utilize any subcontractors or assignees, or if each subcontract or assignment is less than \$25,000; the Bidder shall so indicate by marking the appropriate box below. The Bidder need not identify material suppliers or manufacturers who do not provide labor at the worksite to incorporate such material or manufactured goods into the improvement.

The Bidder shall indicate the proposed use of subcontractors by completing the following:

☐

**The Bidder does not intend to utilize any subcontractors or assignees**, or the value of each subcontract or assignment is less than \$25,000. The Bidder shall so indicate by marking the box at the left.

☐

**The Bidder intends to utilize subcontractors or assignees**, and the value of the subcontract or assignment is \$25,000 or greater. The Bidder shall so indicate by marking the box at the left and shall report below only those subcontracts or assignments with a value of \$25,000 or greater by providing a description of the work to be done by each subcontractor or assignee, the amount of each subcontract or the value of the work to be assigned, and the identity of each subcontractor or assignee in the space provided below. The Bidder certifies that said subcontractors or assignees shall be utilized on this project as stated below, if acceptable to the City of Fort Dodge. The Bidder need not identify material suppliers or manufacturers who do not provide labor at the worksite to incorporate such material or manufactured goods into the improvement.

<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>SUBCONTRACTOR IDENTITY</u> <u>(name, address, including zip)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The Bidder may attach additional contact sheets, if necessary.

## **BID BOND**

KNOW ALL BY THESE PRESENTS:

That we, \_\_\_\_\_, as Principal, and  
\_\_\_\_\_, as Surety, are held and

Firmly bound unto \_\_\_\_\_ the City of Fort Dodge, Iowa As  
Obligee, (hereinafter referred to as "the Jurisdiction"), in the penal sum of \_\_\_\_\_

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_) , lawful money of the  
United States, for which payment said Principal and Surety bind themselves, their heirs, executors,  
administrators, successors, and assigns jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the Jurisdiction  
a certain proposal, in a separate envelope, and hereby made a part hereof, to enter into a contract in  
writing, for the following described improvements;

### **FORT DODGE GATEWAY IMPROVEMENTS – PHASE 1**

General Nature of Public Improvements. The work includes all materials, equipment, transportation  
and labor necessary to complete the improvements. The project includes roundabout columns, decorative  
banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup>  
Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock  
tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

The Surety hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way  
impaired or affected by any extension of the time within which the Jurisdiction may accept such bid or  
execute such Contract; and said Surety does hereby waive notice of any such extension.

In the event that any actions or proceedings are initiated with respect to this bond, the parties agree that  
the venue thereof shall be Webster County, State of Iowa. If legal action is required by the Jurisdiction  
against the Surety or Principal to enforce the provisions of the bond or to collect the monetary obligation  
incurring to the benefit of the Jurisdiction, the Surety or Principal agrees to pay the Jurisdiction all  
damages, costs, and attorney fees incurred by enforcing any of the provisions of this bond. All rights,  
powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in  
addition to all rights, powers and remedies given to the Jurisdiction, by law. The Jurisdiction may  
proceed against Surety for any amount guaranteed hereunder whether action is brought against Principal  
or whether Principal is joined in any such action or actions or not.

NOW, THEREFORE, if said proposal by the Principal be accepted, and the Principal shall enter into a  
contract with Jurisdiction in accordance with the terms of such proposal, including the provision of  
insurance and of a bond as may be specified in the contract documents, with good and sufficient surety  
for the faithful performance of such contract, for the prompt payment of labor and material furnished in  
the prosecution thereof, and for the maintenance of said improvements as may be required therein, then  
this obligation shall become null and void; otherwise, the Principal shall pay to the Jurisdiction the full  
amount of the bid bond, together with court costs, attorney's fees, and any other expense of recovery.

(CONT. BID BOND)

S&A Project No. 111.0404.01A

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

SURETY:

PRINCIPAL:

	_____ Surety Company		_____ Bidder
BY	_____ Signature Attorney-in-Fact/Officer	By	_____ Signature
	_____ Name of Attorney-in-Fact/Officer		_____ Name (Print/Type)
	_____ Company Name		_____ Title
	_____ Company Address		_____ Address
	_____ City, State, Zip Code		_____ City, State, Zip Code
	_____ Company Telephone Number		_____ Telephone Number

NOTE: All signatures on this bid bond must be original signatures in ink; copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal

**CONTRACT**

THIS CONTRACT, made and entered into at Fort Dodge, Iowa this \_\_\_\_\_ day of \_\_\_\_\_, 2017, by and between the City of Fort Dodge by its Mayor upon order of its City Council hereinafter Called the "Jurisdiction", and \_\_\_\_\_ Hereinafter called the "Contractor".

**WITNESSETH:**

The Contractor hereby agrees to complete the work comprising the below referenced improvements as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Administrator. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the 2017 edition of the Iowa Statewide Urban Specifications for Public Improvements (SUDAS), and as further modified by supplemental specifications and special provisions included in the contract documents, and the Contract Attachment which is attached hereto. The Contractor further agrees to complete the work in strict accordance with said contract documents, and guarantee the work as required by law, for the time required in said contract documents, after its acceptance by the Jurisdiction.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: "Bid Items, Quantities and Prices", which were proposed by the Contractor in its proposal submitted in accordance with the Notice to Bidders and Notice of Public Hearing for the following described improvements:

**FORT DODGE GATEWAY IMPROVEMENTS – PHASE 1**

General Nature of Public Improvements. The work includes all materials, equipment, transportation and labor necessary to complete the improvements. The project includes roundabout columns, decorative banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_) which amount shall constitute the required amount of the performance, payment, and maintenance bond. The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written Notice to Proceed by the Jurisdiction.

The work under the contract shall be fully completed within **twenty-five (25) working days**. The Notice to Proceed is anticipated to be issued prior to May 15, 2017. Working days will be charged once construction begins. Liquidated damages of Five Hundred Dollars (\$500.00) per calendar day will be assessed for work not completed within the designated timelines for full completion of the project.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

## JURISDICTION

## CONTRACTOR:

By \_\_\_\_\_  
Mayor

\_\_\_\_\_  
Contractor

(Seal)  
ATTEST:

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
City Manager

\_\_\_\_\_  
Title

## FORM APPROVED BY:

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Attorney for Jurisdiction

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
Telephone

## CONTRACTOR PUBLIC REGISTRATION INFORMATION to be provided by:

1. All Contractors: The Contractor shall enter its Public Registration Number \_\_\_\_ - \_\_\_\_ issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code.
2. Out-of-State Contractors:
  - A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
  - B. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Jurisdictional Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information, contact the Iowa Secretary of State Office at 515-281-5204.

NOTE: All signatures on this contract must be original signatures in ink; copies or facsimile of any signature will not be accepted.

#### CORPORATE ACKNOWLEDGMENT

State of \_\_\_\_\_)  
 \_\_\_\_\_) SS  
 \_\_\_\_\_ County)

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of \_\_\_\_\_, personally appeared \_\_\_\_\_ and \_\_\_\_\_, to me known, who, being by me duly sworn, did say that they are the \_\_\_\_\_, and \_\_\_\_\_, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that \_\_\_\_\_ and \_\_\_\_\_ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

\_\_\_\_\_  
 Notary Public in and for the State of \_\_\_\_\_  
 My commission expires \_\_\_\_\_

#### INDIVIDUAL ACKNOWLEDGEMENT

State of \_\_\_\_\_)  
 \_\_\_\_\_) SS  
 \_\_\_\_\_ County)

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of \_\_\_\_\_, personally appeared \_\_\_\_\_ and \_\_\_\_\_, to me known, who, being by me duly sworn, did say that they are the \_\_\_\_\_, and \_\_\_\_\_, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that \_\_\_\_\_ and \_\_\_\_\_ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

\_\_\_\_\_  
 Notary Public in and for the State of \_\_\_\_\_  
 My commission expires \_\_\_\_\_



## LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

State of \_\_\_\_\_ )  
 ) SS  
\_\_\_\_\_ County)

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of \_\_\_\_\_, personally appeared \_\_\_\_\_ and \_\_\_\_\_, to me known, who, being by me duly sworn, did say that they are the \_\_\_\_\_, and \_\_\_\_\_, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that \_\_\_\_\_ and \_\_\_\_\_ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

Notary Public in and for the State of \_\_\_\_\_  
My commission expires \_\_\_\_\_

## BID ITEMS, QUANTITIES AND PRICES

This Contract is award and executed for completion of the work specified in the Contract Documents for the bid prices tabulated below as proposed by the Contractor in its Proposal submitted in accordance with the Notice to Bidders and Notice of Public Hearing. All quantities are subject to revision by the Jurisdiction. Quantity changes that amount to twenty percent (20%) or less of the amount bid shall not affect the unit bid price.

No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
1	Schedule A: S. 6 <sup>th</sup> Street Roundabout				
Base Bid					
1.1	Earthwork	LS	1	\$	\$
1.2	Masonry Banner Bases, Support Posts, Planter Boxes and Footings	LS	1	\$	\$
1.3	Banner Lighting	LS	1	\$	\$
1.4	Masonry Columns and Footings	LS	1	\$	\$
1.5	PCC Sidewalk, 4"	SY	18	\$	\$
1.6	Water Service Pipe, Trenchless, 1", Type K Copper	LF	87	\$	\$
1.7	Irrigation System - 6th Street Roundabout	LS	1	\$	\$
1.8	Silt Fence	LF	174	\$	\$
1.9	Silt Fence, Removal of Device	LF	174	\$	\$
1.10	Traffic Control	LS	1	\$	\$
1.11	Mobilization	LS	1	\$	\$
Schedule A: Base Bid Total					\$
Deduct Alternate A: Deduct Irrigation System, Add Flush Yard Hydrant					
	Deduct Item 1.7 Irrigation System – 6 <sup>th</sup> Street Roundabout	LS	-1	\$	\$
	Add Flush Box Hydrant	EA	1	\$	\$
Total Deduct Alternate A					\$
2	Schedule B: S. 12 <sup>th</sup> Street Roundabout				
Base Bid					
2.1	Earthwork	LS	1	\$	\$
2.2	3' Height Masonry Clock Tower Base and Footings	LS	1	\$	\$
2.3	4' Height Masonry Columns and Footings	LS	1	\$	\$
2.4	32' Height Clock Tower with Four Illuminated Clock Faces (Install Only)	LS	1	\$	\$
2.5	LED Accent Lighting for Perimeter of Clock Tower Base	LS	1	\$	\$
2.6	Irrigation System - 12th Street Roundabout	LS	1	\$	\$
2.7	Water Service, 1", Type K Copper	LF	30	\$	\$
2.8	Silt Fence	LF	211	\$	\$
2.9	Silt Fence, Removal of Device	LF	211	\$	\$

No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
2.10	Traffic Control	LS	1	\$	\$
2.11	Mobilization	LS	1	\$	\$
<b>Schedule B: Base Bid Total</b>					<b>\$</b>
Deduct Alternate B: Deduct Irrigation System, Add Flush Yard Hydrant					
	Deduct Item 2.5 Irrigation System – 12 <sup>th</sup> Street Roundabout	LS	-1	\$	\$
	Add Flush Box Hydrant	EA	1	\$	\$
Total Deduct Alternate B					\$
<b>Base Bid Total (Schedule 'A' + 'B') =</b>					<b>\$</b>

**PERFORMANCE, PAYMENT AND MAINTENANCE BOND**

KNOW ALL BY THESE PRESENTS:

That we, \_\_\_\_\_, as Principal (hereinafter the "Contractor" or "Principal") and \_\_\_\_\_, as Surety are held and firmly bound unto \_\_\_\_\_ The City of Fort Dodge \_\_\_\_\_, as Obligee (hereinafter referred to as "the Jurisdiction"), and to all persons who may be injured by any breach of any of the conditions of this Bond in the penal sum of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, legal representatives and assigns, jointly or severally, firmly by these presents.

The conditions of the above obligations are such that whereas said Contractor entered into a contract with the Jurisdiction, bearing date the \_\_\_\_\_ day of \_\_\_\_\_, 2017, hereinafter the "Contract" wherein said Contractor undertakes and agrees to construct the following described improvements:

**FORT DODGE GATEWAY IMPROVEMENTS – PHASE 1**

General Nature of Public Improvements The work includes all materials, equipment, transportation and labor necessary to complete the improvements. The project includes roundabout columns, decorative banners and poles (install only) on masonry bases, lighting, and irrigation at the South 6<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout; includes roundabout columns, clock tower masonry base and decorative clock tower (install only), lighting, and irrigation at the South 12<sup>th</sup> Street / 1<sup>st</sup> Avenue South roundabout.

and to faithfully perform all the terms and requirements of said Contract within the time therein specified, in a good and workmanlike manner, and in accordance with the Contract Documents.

It is expressly understood and agreed by the Contractor and Surety in this bond that the following provisions are a part of this Bond and are binding upon said Contractor and Surety, to-wit:

1. **PERFORMANCE:** The Contractor shall well and faithfully observe, perform, fulfill and abide by each and every covenant, condition and part of said Contract and Contract Documents, by reference made a part hereof, for the above referenced improvements, and shall indemnify and save harmless the Jurisdiction from all outlay and expense incurred by the Jurisdiction by reason of the Contractor's default of failure to perform as required. The Contractor shall also be responsible for the default or failure to perform as required under the Contract and Contract Documents by all its subcontractors, suppliers, agents, or employees furnishing materials or providing labor in the performance of the Contract.
2. **PAYMENT:** The Contractor and the Surety on this Bond are hereby agreed to pay all just claims submitted by persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the performance of the Contract on account of which this Bond is given, including but not limited to claims for all amounts due for labor, materials, lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used by the Contractor or any subcontractor, wherein the same are not satisfied out of the portion of the contract price which the Jurisdiction is required to retain until completion of the improvement, but the Contractor and

(CON'T – PERFORMANCE, PAYMENT AND MAINTENANCE BOND)

Surety shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portion of the contract price shall have been established as provided by law. The Contractor and Surety hereby bind themselves to the obligations and conditions set forth in Chapter 573, Code of Iowa, which by this reference is made a part hereof as though fully set out herein.

3. MAINTENANCE: The Contractor and the Surety on this Bond hereby agree, at their own expense:
  - A. To remedy any and all defects that may develop in or result from work to be performed under the Contract within the period two (2) years from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work;
  - B. To keep all work in continuous good repair; and
  - C. To pay the Jurisdiction's reasonable costs of monitoring and inspection to assure that any defects are remedied, and to repay the Jurisdiction all outlay and expense incurred as a result of Contractor's and Surety's failure to remedy any defect as required by this section.

Contractor's and Surety's agreement herein made extend to defects in workmanship or materials not discovered or known to the Jurisdiction at the time such work was accepted.

4. GENERAL: Every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:
  - A. To consent without notice to any extension of time to the Contractor in which to perform the Contract;
  - B. To consent without notice to any change in the Contract or Contract Documents, which thereby increases the total contract price and the penal sum of this bond, provided that all such changes do not, in the aggregate, involve an increase of more than twenty percent of the total contract price, and that this bond shall then be released as to such excess increase; and
  - C. To consent without notice that this Bond shall remain in full force and effect until the Contract is completed, whether completed within the specified contract period, within an extension thereof, or within a period of time after the contract period has elapsed and the liquidated damage penalty is being charged against the Contractor.

The Contractor and every Surety on the bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:

(CON'T – PERFORMANCE, PAYMENT AND MAINTENANCE BOND)

- D. That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.
- E. That as used herein, the phrase “all outlay and expense” is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the Jurisdiction including interest, benefits and overhead where applicable. Accordingly, “all outlay and expense” would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorneys fees (including overhead expenses of the Jurisdiction’s staff attorneys), and all costs and expenses of litigation as they are incurred by the Jurisdiction. It is intended the Contractor and Surety will defend and indemnify the Jurisdiction on all claims made against the Jurisdiction on account of Contractor’s failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the Jurisdiction will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.

In the event the Jurisdiction incurs any “outlay and expense” in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety’s obligation under this bond shall not exceed 125% of the penal sum of this bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Webster County, State of Iowa. If legal action is required by the Jurisdiction to enforce the provisions of this Bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Contractor and the Surety agree, jointly and severally, to pay the Jurisdiction all outlay and expense incurred therefor by the Jurisdiction. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to Surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether Contractor is joined in any such action or actions or not.

NOW THEREFORE, the condition of this obligation is such that if said Principal shall faithfully perform all the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a work, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

(CON'T – PERFORMANCE, PAYMENT AND MAINTENANCE BOND)

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

Witness our hands, in triplicate, this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

Surety Countersigned By:

**PRINCIPAL:**

\_\_\_\_\_  
Signature of Iowa Resident Commission Agent as  
Prescribed by Chapter 515.52-57, Iowa Code.  
(Require only if Attorney-in-Fact is not also an  
Iowa Resident Commission Agent).

\_\_\_\_\_  
Contractor

By: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Resident Commission Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company Name

**SURETY:**

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
Surety Company

\_\_\_\_\_  
City, State, Zip Code

By: \_\_\_\_\_

\_\_\_\_\_  
Signature Attorney-in-Fact

\_\_\_\_\_  
Company Telephone Number

\_\_\_\_\_  
Name of Attorney-in-Fact

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Company Address

**FORM APPROVED BY:**

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
Attorney for Jurisdiction

\_\_\_\_\_  
Company Telephone Number

NOTE: All signatures on this performance, payment & maintenance bond must be original signatures in ink; copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.



NOTICE TO PROCEED

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE: \_\_\_\_\_  
PROJECT: GATEWAY IMPROVEMENTS  
– PHASE 1  
FORT DODGE, IOWA  
PROJECT # 111.0404A

You are hereby notified to commence work in accordance with the Contract dated \_\_\_\_\_, and you are to begin construction by the start date of May 15, 2017, and late state date of August 1, 2016. After commencing construction you will have 25 calendar days to substantially complete the project.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
CITY OF FORT DODGE  
By \_\_\_\_\_  
Title Project Engineer  
Snyder and Associates, Inc.

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by \_\_\_\_\_ on this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

By: \_\_\_\_\_

Title: \_\_\_\_\_

## SPECIAL PROVISIONS

## SPECIAL PROVISIONS

### FOR

## PART 1 - GENERAL REQUIREMENTS

### INDEX

1.	DEFINITION AND INTENT	7.	SUBMITTALS
2.	WORK REQUIRED	8.	STANDARDS AND CODES
3.	CONTRACT PERIOD AND COMPLETION DATES	9.	MATERIALS TESTS
4.	SALVAGE OF MATERIALS AND EQUIPMENT	10.	FIELD TESTS
5.	PLANS AND SPECIFICATIONS	11.	MEASUREMENT AND PAYMENT
6.	CONSTRUCTION FACILITIES	12.	INCIDENTAL CONTRACT ITEMS

#### 1. DEFINITION AND INTENT

- A. The Technical Specifications that apply to the materials and construction practices for this project are defined as follows:

1. The 2017 edition of the Urban Standard Specifications for Public Improvements, except as modified by these Special Provisions.

#### 2. WORK REQUIRED

- A. Work under this contract includes all materials, equipment, transportation, traffic control and associated work for the construction of the Gateway Improvements – Phase 1 project as described in the Official Publication.
- B. This project consists of one contract for all work described.
- C. Schedule and coordinate the construction work to facilitate timely construction of the improvements.

#### 3. CONTRACT PERIOD AND COMPLETION DATES

- A. The Notice to Proceed is anticipated to be May 15, 2017, after a pre-construction meeting has been organized and performed by the Engineer.
- B. The work under the contract shall be fully completed within **twenty-five (25) working days**. The Notice to Proceed is anticipated to be issued prior to May 15, 2017. Working days will be charged once construction begins. Liquidated damages of Five Hundred Dollars (\$500.00) per calendar day will be assessed for work not completed within the designated timelines for full completion of the project.

4. SALVAGE OF MATERIALS AND EQUIPMENT

- A. The City of Fort Dodge retains first right of refusal for retaining any existing materials removed by the construction.
- B. The Contractor shall carefully remove, in a manner to prevent damage, all materials and equipment specified or indicated to be salvaged. The Contractor shall protect and coordinate location of delivery of items specified with Owner.
- C. Any items damaged in removal, storage, or handling through carelessness or improper procedures shall be replaced by the Contractor in kind with new items.

5. PLANS AND SPECIFICATIONS

- A. The City will furnish 5 sets of plans and specifications to the Contractor after award of the contract. The Contractor shall compensate the City for printing costs for additional copies required.
- B. Provide one set of plans and specifications for each foreman and superintendent in charge of each crew on the job.

6. CONSTRUCTION FACILITIES

- A. Provide telephone numbers where Contractor's representative can be reached during work days and on nights and weekends in event of emergency.
- B. Provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.
- C. Do not store construction equipment, employee's vehicles, or materials on streets open to traffic. Location for storage of equipment by Contractors is subject to approval of Engineer.
- D. The Contractor shall provide suitable storage facilities necessary for proper storage of materials and equipment.
- E. Provide fence, barricades, and/or workers to prevent access of unauthorized persons to site where work is in progress and to ensure the safety of the public when allowed on site. No trenches shall be left open over night and during non working hours.

7. SUBMITTALS

- A. Provide construction schedule showing dates of starting and completing various portions of work.

- B. Submit the following information for Engineer's review. Provide 3 copies or electronic submittal via email plus copies required by Contractor. This information shall be submitted to the Engineer at the preconstruction conference or at least 14 days prior to utilization of the particular item on this project.

1. Testing reports as outlined in Sections 8 through 11.
2. Manufacturer's data for materials that are to be permanently incorporated into the project.
3. Details of proposed methods of any special construction required.
4. Submit purchase orders and subcontracts without prices.
5. Such other information as the Engineer may request to ensure compliance with contract documents.

8. STANDARDS AND CODES

- A. Construct improvements with best present day construction practices and equipment.

- B. Conform with and test in accordance with applicable sections of the following standards and codes.

1. American Association of State Highway and Transportation Officials (AASHTO).
2. American Society for Testing and Materials (ASTM).
3. Iowa Department of Transportation Standard Specifications (Iowa DOT).
4. American National Standards Institute (ANSI).
5. American Water Works Association (AWWA).
6. American Welding Society (AWS).
7. Federal Specifications (FS).
8. Iowa Occupational Safety and Health Act of 1972 (IOSHA).
9. Manual of Accident Prevention in Construction by Associated General Contractors of America, Inc. (AGC).
10. SUDAS Standard Specification, 2016 edition.

11. Standards and Codes of the State of Iowa and the ordinances of the City of Fort Dodge, Iowa.
12. Other standards and codes which may be applicable to acceptable standards of the industry for equipment, materials and installation under the contract.

9. MATERIALS TESTS

- A. Material testing is to be provided and paid for by the Contractor and shall be completed by an independent testing laboratory retained by the Contractor and approved by the Engineer, except as specifically noted otherwise. Testing shall meet the requirements of the SUDAS Standard Specifications, 2017 Edition.
- B. Coordinate all material testing with the Engineer.
- C. Provide transportation of all samples to the laboratory.
- D. Do not ship materials to the project site until laboratory tests have been furnished showing compliance of materials with specifications.
- E. Provide gradation and materials certifications for all granular materials. Certify that sources of Portland Cement and aggregates are Iowa DOT approved.
- F. Certify that materials and equipment are manufactured with applicable specifications.
- G. Any materials not in compliance with these specifications will be ordered off the site(s) and compensation for transportation and/or materials will not be paid.
- H. Any special inspections shall be requested to and coordinated with the City's construction representative.

10. FIELD TESTS

- A. Field testing is incidental to construction and will be completed by an independent testing laboratory retained by the Contractor and approved by the Engineer. Testing shall meet the requirements of SUDAS.
- B. Coordinate all field testing with the Engineer.
- C. The Contractor is responsible for testing required in the SUDAS for construction relating to Divisions 2, 3, 6, 7 & 9 of said specifications.
  1. Testing frequency for subgrade preparation shall include one test for every 50 LF of sidewalks, one test for each banner planter, and one test for the clock tower base. See SUDAS Section 2010, 3.06 for additional information.

2. If test results do not meet those specified, the Contractor shall make necessary corrections and repeat testing to demonstrate compliance with the specifications. Contractor shall pay all costs for retesting.

## 11. MEASUREMENT AND PAYMENT

- A. Contract unit or lump sum prices are full compensation for furnishing all materials, equipment, tools, transportation and labor necessary to construct and complete each item of work as specified. No separate payment will be made for work included in this project except as set forth below. All other items of work are incidental to construction and are to be provided and paid for by the Contractor.

### **SCHEDULE A: S. 6<sup>TH</sup> STREET ROUNDABOUT**

#### **BASE BID CONTRACT ITEMS**

- A. Bid Item 1.1: Earthwork (LS)- Lump sum price includes excavation and placement of soil within the grading limits as shown on the plans. Includes excavating, transportation, placement of fill soils, compaction, moisture control, testing and associated work. Topsoil strip shall be to a 6" depth and topsoil respread shall be 6". In planting areas topsoil and underlying soil material strip shall be 24" and replace with only topsoil to depth of 24". Planting area limits are 1 foot outside of driplines of shrubs and perennial planting locations depicted on Sheets 11 and 12 of the plans. Bidders shall determine quantities and satisfy themselves for all conditions of earthwork requirements in the submittal bid. Measurement and payment based on the percent complete of earthwork as measured in the field.
- B. Bid Item 1.2: Masonry Banner Bases, Support Posts, Planter Boxes and Footings (LS) – Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install PCC footings, concrete masonry units, brick veneer, cast stone veneer, cast stone, reinforcing, steel posts, and associated work in accordance with the plans and specifications. Measurement and payment based on percentage complete of banner base as measured in the field. Refer to drawings for locations, elevations and details.
- C. Bid Item 1.3: Banner Lighting (LS) – Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install light fixtures, light bases, conduit, wiring, controls and associated work in accordance with the plans and specifications. See drawings for scope of work. Measurement and payment based on percentage complete of lighting as measured in the field.
- D. Bid Item 1.4: Masonry Columns and Footings (LS) – Lump sum price includes furnishing and installing all materials, equipment components and labor necessary to install PCC footings, concrete masonry units, brick veneer, cast stone veneer, cast stone, reinforcing, lighting controls, conduit, wiring, connect to power source



and associated work in accordance with the plans and specifications. Measurement and payment based on percentage complete of columns as measured in the field. Refer to drawings for locations, elevations and details.

- E. Bid Item 1.5: PCC Sidewalk, 4" (SY) – Measurement and payment is per SUDAS 7030 1.08E. Removals are incidental to the item. Refer to drawings for locations, elevations and details.
- F. Bid Item 1.6: Water Service Pipe, Trenchless, 1", Type K Copper (LF) – Measurement and payment is per SUDAS 5010 1.08E-1, by the lineal foot of water service line installed. Water service shall be installed using trenchless methods under roadway pavement. Includes corporation stop and box as incidental to the item.
- G. Bid Item 1.7: Irrigation System - 6<sup>th</sup> Street Roundabout (LS) – Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install a fully functioning irrigation system to water the turfgrass areas within the roundabout island. Includes connection to the water main, irrigation enclosure, installation of meter, backflow preventer and enclosure with PCC pad, installation of drain-off and isolation valves, installation of irrigation spray heads, control valves, sleeving and all associated work in accordance with the plans and specifications. The Irrigation Contractor is responsible for coordinating all sleeving and connections with the General Contractor to ensure correct sequence of work. Measurement and payment based on percentage of completed irrigation system as measured in the field.
- H. Bid Item 1.8: Silt Fence (LF)- Item shall be measured and paid in accordance with SUDAS Section 9040, 1.08N.1. Refer to plans for locations and details.
- I. Bid Item 1.9: Silt Fence, Removal of Device (LF)- Item shall be measured and paid in accordance with SUDAS Section 9040, 1.08N.3. Refer to plans for locations and details.
- J. Bid Item: 1.10: Traffic Control (LS)- Lump Sum price includes furnishing, erecting, operating, maintaining, cleaning, moving, and removing all traffic control devices as shown on the plans and as directed by the Engineer. Item also includes flaggers as required to protect workers and traveling public which shall be incidental to this item. Item includes temporary construction closures as indicated in the plans. All safety/construction fence is considered incidental to this item. Item includes all temporary signage. The item shall be measured and paid for at the lump sum contract price. The Engineer will make partial payments based on the estimate of the traffic control work completed. Refer to plans for detail TC-419 (modified).
- K. Bid Item: 1.11: Mobilization (LS)- Item shall be measured and paid in accordance with SUDAS Section 11,020, 1.08A.

## BID DEDUCT ALTERNATE A: 6<sup>th</sup> Street Roundabout

- L. Deduct Alternate A: Deduct Irrigation System, Add Flush Box Hydrant- The Contractor shall deduct the full scope and related compensation for Bid Item 1.7 “Irrigation System – 6<sup>th</sup> Street Roundabout”. Item includes full compensation for all furnishing and installing all materials, equipment, components and labor necessary to install Flush Box Hydrant complete in the roundabout at the location shown on the plans and as described in the Contract Documents. Materials shall be Total Eclipse Model #36, ¾” inlet, 5’-6” depth of bury or approved equal. Measurement and payment based on percentage complete as measured in the field.

## SCHEDULE B: S. 12<sup>TH</sup> STREET ROUNDABOUT

### BASE BID CONTRACT ITEMS

- M. Bid Item 2.1: Earthwork (LS) – Lump sum price includes excavation and placement of soil within the grading limits as shown on the plans. Includes excavating, transportation, placement of fill soils, compaction, moisture control, testing and associated work. Topsoil strip shall be to a 6” depth and topsoil respread shall be 6”. In planting areas topsoil and underlying soil material strip shall be 24” and replace with only topsoil to depth of 24”. Planting area limits are 1 foot outside of driplines of shrubs and perennial planting locations depicted on Sheets 11 and 12 of the plans. Bidders shall determine quantities and satisfy themselves for all conditions of earthwork requirements in the submittal bid. Measurement and payment based on the percent complete of earthwork as measured in the field.
- N. Bid Item 2.2: 3’ Height Masonry Clock Tower Base and Footings (LS) – Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install PCC footings, concrete masonry units, brick veneer, cast stone veneer, cast stone, reinforcing, lighting controls, conduit and associated work in accordance with the plans and specifications. Measurement and payment based on percentage complete of clock tower base as measured in the field. Refer to plans for locations, elevations and details.
- O. Bid Item 2.3: 4’ Height Masonry Columns and Footings (LS) - Lump sum price includes furnishing and installing all materials, equipment components and labor necessary to install PCC footings, concrete masonry units, brick veneer, cast stone veneer, cast stone, reinforcing, lighting controls, conduit, wiring, connect to power source and associated work in accordance with the plans and specifications. Measurement and payment based on percentage complete of columns as measured in the field. Refer to plans for locations, elevations and details.
- P. Bid Item 2.4: 32’ Height Clock Tower with Four Illuminated Clock Faces, Install Only (LS) – Lump sum price includes furnishing and installing all materials,

equipment, components and labor necessary to install clock structure, connection to power source and associated work in accordance with plans and specifications. Owner to provide clock tower with illuminated clock face for installation. See drawings for details. Measurement and payment based on percentage complete of clock tower installation as measured in the field.

- Q. Bid Item 2.5: LED Accent Lighting for Perimeter of Clock Tower Base (LS) - Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install LED accent lighting, lighting controls, connect to power and conduit all associated work in accordance with plans and specifications. Measurement and payment based on percentage complete as measured in the field.
- R. Bid Item 2.6: Irrigation System, 12<sup>th</sup> Street Roundabout (LS) – Lump sum price includes furnishing and installing all materials, equipment, components and labor necessary to install a fully functioning irrigation system to water the turfgrass areas within the roundabout island. Includes connection to the water main, irrigation enclosure, installation of meter, backflow preventer and enclosure with PCC pad, installation of drain-off and isolation valves, installation of irrigation spray heads, control valves, sleeving and all associated work in accordance with the plans and specifications. The Irrigation Contractor is responsible for coordinating all sleeving and connections with the General Contractor to ensure correct sequence of work. Measurement and payment based on percentage of completed irrigation system as measured in the field.
- S. Bid Item 2.7: Water Service, 1", Type K Copper (LF) – Measurement and payment is per SUDAS 5010 1.08E-1, by the lineal foot of water service line installed. Includes corporation stop and box as incidental to the item.
- T. Bid Item 2.8: Silt Fence (LF)- Item shall be measured and paid in accordance with SUDAS Section 9040, 1.08N.1. Refer to plans for locations and details.
- U. Bid Item 2.9: Silt Fence, Removal of Device (LF)- Item shall be measured and paid in accordance with SUDAS Section 9040, 1.08N.3. Refer to plans for locations.
- V. Bid Item: 2.10: Traffic Control (LS)- Lump Sum price includes furnishing, erecting, operating, maintaining, cleaning, moving, and removing all traffic control devices as shown on the plans and as directed by the Engineer. Item also includes flaggers as required to protect workers and traveling public which shall be incidental to this item. Item includes temporary construction closures as indicated in the plans. All safety/construction fence is considered incidental to this item. Item includes all temporary signage. The item shall be measured and paid for at the lump sum contract price. The Engineer will make partial payments based on the estimate of the traffic control work completed. Refer to plans for details.

- W. Bid Item: 2.11: Mobilization (LS) - Item shall be measured and paid in accordance with SUDAS Section 11,020, 1.08A.

BID DEDUCT ALTERNATE B: 12<sup>th</sup> Street Roundabout

- X. Deduct Alternate B: Deduct Irrigation System, Add Flush Box Hydrant - The Contractor shall deduct the full scope and related compensation for Bid Item 2.6 “Irrigation System – 12<sup>th</sup> Street Roundabout”. Item includes full compensation for all furnishing and installing all materials, equipment, components and labor necessary to install Flush Box Hydrant complete in the roundabout at the location shown on the plans and as described in the Contract Documents. Materials shall be Total Eclipse Model #36, ¾” inlet, 5’-6” depth of bury or approved equal. Measurement and payment based on percentage complete as measured in the field.

12. INCIDENTAL CONTRACT ITEMS

- A. The following list includes major items that are incidental to the project and will not be paid for as separate bid items. Other items may be designated as incidental under certain bid items.
- Dewatering and handling storm water flow during construction, other than described herein
  - Temporary sheeting and shoring
  - Excavation, verification and protection of existing utilities
  - Material & Field testing
  - Construction fencing
  - Pipe and structure bedding material
  - Maintaining postal, garbage & utility services to users
  - Coordination and cooperation with utility companies
  - Coordination and cooperation with affected property owners
  - Coordination and cooperation with the City of Fort Dodge
  - Temporary access ways
  - Handbill notification of lane closures & utility disruption to affected residents
  - Site cleanup/restoration
  - Monitoring weather conditions
  - Finish grading
  - Repair of field tiles, if encountered
  - Dust control measures
  - Construction staging & phasing
  - Full depth sawcutting of existing pavement
  - Working backfill to reduce moisture content
  - Fixture adjustment
  - Tapping of watermain for new water service connection.

## SPECIAL PROVISIONS

### FOR

## PART 2 - SPECIAL CONSTRUCTION

### INDEX

1.	GENERAL	10.	DEWATERING
2.	EXISTING UTILITIES	11.	TRAFFIC CONTROL
3.	PROJECT SUPERVISION	12.	REMOVALS
4.	COORDINATION WITH OTHERS	13.	TEMPORARY FENCES
5.	CONSTRUCTION LIMITS	14.	RESPONSIBILITY OF CONTRACTOR
6.	CONSTRUCTION SCHEDULE	15.	FLUSH BOX HYDRANT
7.	CONSTRUCTION PHASING	16.	SIDEWALK PAVEMENT SUBGRADE
8.	DISPOSAL	17.	CONSTRUCTION STAKING
9.	EROSION CONTROL		

#### 1. GENERAL

- A. Procedures outlined herein are not intended to fully cover all special construction procedures but are offered as an aid to the Contractor in planning work.
- B. Cooperate with the City of Fort Dodge and the Engineer to minimize inconvenience and to prevent delays in construction and interruption to continuous operation of utility services and site access.
- C. The Contractor is expected to provide adequate personnel and equipment to perform work within specified time of construction.
- D. Install and maintain orange safety fence around all open trenches or open structures when left unattended.
- E. Provide surface restoration and clean up as construction progresses.

#### 2. EXISTING UTILITIES

- A. Location of utility lines, mains, cables and appurtenances shown on plans are from information provided by utility companies and records of the City.
- B. Prior to construction, contact all utility companies and have all utility lines and services located. The Contractor is responsible for excavating and exposing underground utilities in order to confirm their locations ahead of the work.
- C. Contractor is solely responsible for damage to utilities or private or public property due to utility disruption.
- D. The Contractor shall notify utility company immediately if utility infrastructure is damaged during construction.

- E. With the exception of water and sewer lines, the City of Fort Dodge or appropriate utility companies will relocate utility infrastructure in direct conflict with line and grade of the work during construction. Support and protect all utilities that are not moved.
- F. Utility services are not generally shown on plans; protect and maintain services during construction. Notify City and affected property owners 48 hours prior to any planned utility service interruptions.
- G. Existing utilities shall remain in substantially continuous operation during construction. Select the order and methods of construction that will not interfere with the operation of the utility systems. Interrupt utility services only with approval of City and Engineer.
- H. No claims for additional compensation or time extensions will be allowed to the Contractor for interference or delay caused by utility companies.

### 3. PROJECT SUPERVISION

- A. The Prime Contractor shall be represented in person at the construction site at all times that construction operations are proceeding by a qualified superintendent or other designated, qualified representative capable of providing adequate supervision. The superintendent or representative must be duly authorized to receive and execute instructions, notices and written orders from the Engineer.
- B. Issues that arise during construction relating to traffic control, construction staging, property owner notifications, mail service, garbage service, access to residences or businesses, etc. are the responsibility of the Prime Contractor.
- C. Progress meetings shall be held with the Contractor, Engineer and Owner every one week at the project site(s) to review the updated project schedule and progress, coordinate activities, resolve conflicts and coordinate the construction work.

### 4. COORDINATION WITH OTHERS

- A. Cooperate and coordinate construction with the City of Fort Dodge, utility companies, affected property owners and other contractors working in vicinity of this project.
- B. It is the Contractor's responsibility to schedule and coordinate work to minimize construction delays and conflicts.

### 5. CONSTRUCTION LIMITS

- A. Confine the construction operations within the construction limits shown on the plans.

- B. Provide orange plastic mesh safety fence with a nominal height of 48". Support fence securely on driven posts in vertical position without sagging.

Materials: Iowa DOT Section 4188.03.

- C. Do not store equipment, vehicles or materials within the right-of-way of any streets open to traffic at any time.
- D. Areas disturbed outside of construction limits shall be restored at the Contractor's expense to the satisfaction of the Jurisdiction. Contractor shall protect trees, fences, sidewalks and landscaping within construction limits not marked for removal.

## 6. CONSTRUCTION SCHEDULE

- A. Contractor shall prepare a construction schedule showing dates of starting and completing each phase of construction within the project. Submit construction schedule at the preconstruction conference. The schedule may be revised due to weather conditions or scheduling by the City. The Contractor shall maintain a current construction schedule at all times.

## 7. CONSTRUCTION PHASING

- A. Prepare a construction phasing plan to cause as little inconvenience to adjacent property owners and the general public as possible.
- B. Any deviations from the access plan must be approved by the City and by the Engineer in writing. Any changes that reduce the disruption to the affected general public will certainly be considered.
- C. Include changes in access on the required construction schedule submittal.
- D. Vehicular access on adjacent roadways shall be maintained throughout construction.

## 8. DISPOSAL

- A. Remove from project site and dispose of trees, shrubs, vegetation, excess soil excavation, rubbish, concrete, granular materials and other materials encountered as shown on plans and as specified.
- B. Dispose of materials in accordance with applicable laws and ordinances. Disposal sites are subject to the review and approval of the Engineer.
  - 1. Burning of brush and other debris is not permitted. Contractor responsible for selecting disposal site.



2. Dispose of broken concrete, asphalt, granular material, rubble, excess or unsuitable excavated material. Contractor is responsible for selecting disposal site.
3. Cooperate with all applicable City, State and Federal agencies concerning disposal of materials.
4. The Owner has the first right to any excess materials from construction.

9. EROSION CONTROL

- A. Comply with Iowa Urban Standard Specifications for public improvements Section 9040 except as modified herein.
- B. Comply with soil erosion requirements of Iowa Code and local ordinances. Protect against erosion and dist pollution in the project areas and any off site deposit area used for the project.
- C. Protect adjoining property including public sanitary and storm sewer systems and streets from any damage resulting from movement of earth or other debris from project site. Repair any damage immediately.
- D. Prevent accumulation of earth or debris on adjoining public or private property from project site. Remove any accumulation of earth or debris immediately. Prevent repetition of any instance where earth or debris moves from project site to adjoining public or private property.
- E. Provide erosion control measures necessary to protect against siltation and erosion from the flow of storm water. Maintain continuous operation of the storm sewer system throughout the construction period.
- F. Use silt fence and other means at all drainage courses, swales and storm sewer system inlets and outlets to protect against siltation and erosion as shown in the construction drawings or directed by the Engineer.
- G. The Contractor will be fully liable for all damages to public and private property caused by their action or inaction in providing for handling of storm water flow during construction.
- H. The Contractor shall not wait until all grading operations are completed before commencing final surface restoration.

10. DEWATERING

- A. Do all construction work in dry conditions.
- B. Submit dewatering methods to the Engineer for review. Obtain the Engineer's approval on methods prior to construction.

- B. Groundwater levels are subject to variation. No additional compensation will be permitted due to high groundwater conditions.
- C. If excavation encounters only cohesive soils with no wet sand seams or layers, it may be possible to control water seepage by draining groundwater to temporary construction pumps and pumping it outside the perimeter of the excavation.
- D. Do not pump water from open excavation in sand and gravel below the natural ground water level.
- F. Maintain water levels 2 feet or more below the bottom of excavations in saturated cohesionless (sand and/or gravel) soils to prevent upward seepage, which could reduce subgrade support.
  - 1. Install dewatering system (well points or shallow wells) when working in cohesionless soils.
  - 2. Costs of installing and operating dewatering system are to be paid by the Contractor.
- G. Provide for handling surface water encountered during construction.
  - 1. Prevent surface water from flowing into excavation, remove water as it accumulates.
  - 1. Divert storm sewer flow around areas of construction.
  - 2. Do not use sanitary sewers for the disposal of trench water.
- H. Backfill pipe and structures prior to stopping dewatering operations. Do not lay pipe or construct concrete structures on excessively wet soils.
- I. Costs of handling both surface water and ground water are incidental.

## 11. TRAFFIC CONTROL

- A. Furnish, erect and maintain traffic control devices as specified in the construction drawings and directed by the Engineer.
- B. Provide traffic control devices in accordance with the Iowa DOT Supplemental Specification for Traffic Control No. 5055 and the latest edition of the Manual on Uniform Traffic control Devices (MUTCD).
- C. Adjustments to the traffic control or the addition of flaggers will be required if, in the opinion of the Engineer, undue traffic congestion occurs.
- D. Provide continuous access for police, fire and emergency vehicles.

- E. Do not store construction equipment or materials on street open to traffic.

## 12. REMOVALS

### A. Pavement Removal

1. Includes existing sidewalks and curb and gutter as shown in the construction drawings.
2. Pavement removal limits shall be marked in the field and approved by City and Engineer prior to removal.
3. Full-depth saw-cut the pavement at the removal limits.

### B. Miscellaneous Removals

1. Do not remove any items within the street right-of-way that are not specifically marked for removal on the construction drawings.

## 13. TEMPORARY FENCES

- A. Install temporary fencing around open excavations or material storage areas and as directed by Engineer to prevent access of unauthorized persons to construction areas.

- B. Provide orange plastic mesh safety fence with a nominal height of 48". Support fence securely on driven posts in vertical position without sagging.

1. Materials: Iowa DOT Section 4188.03.
2. Use unless required otherwise.

- C. Temporary fencing installed around open excavations or material storage areas is incidental to construction and will not be measured for payment.

- D. Remove temporary fencing upon completion of construction.

## 14. RESPONSIBILITY OF CONTRACTOR

- A. Supervision of the work.

- B. Protection of all property from injury or loss resulting from construction operations.

- C. Replace or repair objects sustaining any such damage, injury or loss to satisfaction of Owner and Engineer.

- D. Cooperate with Owner, Engineer and representatives of utilities in locating

underground utility lines and structures. Incorrect, inaccurate or inadequate information concerning location of utilities or structures shall not relieve the Contractor of responsibility for damage thereto caused by construction operations.

- E. Keep cleanup current with construction operations.
- F. Comply with all Federal, State of Iowa and City of Fort Dodge, Iowa laws and ordinances.

15. FLUSH BOX HYDRANT

- A. Install Flush Box Hydrant (Total Eclipse Model #36 or approved equal, 3/4" inlet, 5'-6" depth of bury) per manufacturer's recommendations.

16. SIDEWALK PAVEMENT SUBGRADE

- A. Sidewalk pavements shall be installed on native subgrade. Remove topsoil and compact native subgrade to 6" depth in two lifts as specified.
- B. Follow requirements of Pavement Subgrade Section 15 above.
- C. Proof roll compacted sidewalk bases according to SUDAS Section 2010.

17. CONSTRUCTION STAKING

- A. Construction survey will be provided by the Owner for construction of the project. The following staking items will be staked and are described for clarification of how work is to be performed for the Contractor. The Contractor shall be responsible for the preservation of stakes and marks. If in the opinion of the Engineer any of the survey stakes or marks have been carelessly or willfully destroyed or disturbed by the Contractor, the cost of replacing them will be charged to the Contractor. The Contractor's field representative will be informed of any re-staking as it is requested and re-staking charges will be invoiced at the Engineer's current hourly rates.

- B. REMOVALS AND PROJECT LIMITS

- 1. Staked by engineer at adequate intervals to facilitate said work. Contractor to protect control points during construction.

- C. SIDEWALKS

- 1. Stakes to be placed at 25' intervals on one side only and at points of importance.

- D. COLUMNS AND BASES

- 1. Stakes will be placed at points of importance.

2. Top of wall, bottom of wall and/or top of grade will be referenced if provided on plans.

E. DOCUMENTATION & RESPONSIBILITIES OF ENGINEER AND CONTRACTOR

1. Survey work documentation shall be a combination of digital and hard copy format and is the property of the Engineer.
2. Tie-ins with existing pavements and utilities shall be verified for correctness of alignment and elevation prior to construction staking. Any discrepancies discovered during this verification process will be brought to the attention of the Contractor for review and assistance with resolution prior to staking.
3. When survey work is done under traffic conditions, the traffic control shall be in place prior to commencement of survey work.
4. The Engineer will have a representative at the preconstruction conference to discuss construction staking.
5. The Owner and Engineer will not be responsible for delays due to lack of grade or line stakes unless the Contractor has given the Engineer a 24 hour written notice that such stakes will be needed and the Contractor's work is being conducted in a satisfactory manner and at the specified rate of progress.

## APPENDIX

## SECTION 32 84 00

### IRRIGATION SYSTEM

#### PART 1 - GENERAL

##### 1.1 SECTION INCLUDES

- A. The following irrigation system when fully completed shall water all areas as shown on the plans. It is the intent of the diagrammatic irrigation plan to install all products within the areas to be irrigated.
- B. Provide all design, labor, materials, equipment, and supervision required to construct the irrigation system including:
  - 1. Valves, mechanical and electrical;
  - 2. Controllers and wiring;
  - 3. Piping;
  - 4. Sprinkler heads;
  - 5. Meter;
  - 6. Backflow preventer
- C. Irrigation system shall be installed as a complete coordinated system. All system components shall be coordinated to provide a fully compatible functioning system.
- D. Irrigation system shall be installed with Toro equipment, including sprinkler heads, controllers, and valves, or approved equal.
- E. Provide and install irrigation controllers on separate circuit. Coordinate location with Owner, 120 VAC wiring by Electrical Contractor.
- F. Provide and install sleeves under walks and drives as required. Both piping and 24 VAC wiring sleeves shall be schedule 40 PVC. Size, depth, and location as required. It is the irrigation contractor's responsibility to coordinate sleeves with the general contractor to ensure proper placement prior to pavement operations.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. The Irrigation Contractor shall coordinate with the Owner to ensure adequate and timely irrigation of all areas to be irrigated.

##### 1.3 DELIVERY, HANDLING, AND STORAGE

- A. Materials shall be delivered to the site in accordance with manufacturer's recommendations for shipment and protection of materials.
- B. Handling of materials as recommended by manufacturer.

- C. Storage of all materials in locations designated and approved by Owner.

#### 1.4 CODES, INSPECTIONS, AND PERMITS

- A. The entire installation shall fully comply with all local and state laws and ordinances, and with all the established codes applicable thereto.
- B. The Contractor shall take out all required permits, arrange for all necessary inspections and shall pay any fees and expenses in conjunction with the same as a part of the work under this section.

#### 1.5 SITE DISTURBANCES

- A. Take precautions to ensure that equipment and vehicles do not disturb or damage existing site grading, walks, curbs, pavements, utilities, plants, and other existing items and elements on public and private property.
- B. Verify locations and depths of all underground utilities prior to commencing excavation.
- C. Repair and/or return to original condition any damage caused by Contractor's negligence at no cost to the Owner.

#### 1.6 JOB CONDITIONS

- A. Existing Utilities:
  - 1. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during this work.
  - 2. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in full operation. Repair damaged utilities to satisfaction of utility owner.
  - 3. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided.
  - 4. Provide minimum of 48-hour notice to the Owner and receive written notice to proceed before interrupting any utility.
  - 5. Demolish and complete remove from site existing underground utilities indicated to be removed after complete deactivation. Coordinate with utility companies for shut-off of services if lines are active.



B. Protection of Persons and Property:

1. Barricade open excavations occurring as part of this work and post warning lights.
2. Operate warning lights as recommended by authorities having jurisdiction.
3. Protect structures, utilities, sidewalks, pavements, curbs, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by this work.

1.7 GUARANTEE

- A. For a period of two (2) years from date of final acceptance of work performed under this Section, the Contractor shall promptly furnish and install any and all parts and equipment which prove defective in materials, workmanship, or installation at no additional cost to Owner.
- B. During the one (1) year guarantee period, the Contractor shall drain the irrigation system and winterize for the winter and shall put the irrigation system back into operation each spring at no additional cost to Owner.

1.8 SUBMITTALS

- A. Submit three (3) copies of manufacturer's technical data and specifications for all component parts of the underground sprinkler system. Include manufacturer's printed literature on operation and maintenance of operating system elements.
- B. Describe in detail, in the bid for this work, any proposed deviation or variance from the equipment or installation described herein.
- C. Result of service pressure test before beginning any design for the system.
- D. Submit to Owner three (3) copies of the installation drawings for underground irrigation system including plan layout of all components and details illustrating location and type of heads, valves, piping circuits, controls, and accessories.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All sprinklers, electric valves and controllers shall be manufactured by the Toro Company, 5825 Jasmine Street, Riverside, CA, or approved equal allowing like quality parts and installation of approved Irrigation systems. All approved equal substitutions are subject to review and approval by Engineer for equality to original equipment selections. The contractor shall submit all requests for approved equal substitutions to the engineer in writing, allowing a minimum 10 days review with the Engineer's

approvals also made in writing a minimum 5 days prior to the bid opening. Said equipment and other products are called out on the Irrigation Plans and or listed in the specifications below.

## 2.2 COPPER PIPING

- A. As per local codes.

## 2.3 P.V.C.

- A. Sizes 1" diameter and larger.
- B. Virgin, high impact, poly-vinyl chloride (P.V.C.) pipe, Schedule 1120-1220. Mainline piping: class 200, having a minimum of 200 psi working pressure rating. Lateral piping: class 200, having a minimum of 200 psi working pressure rating.
- C. Continuously and permanently marked with manufacturer's name, material, size, and schedule or type.
- D. Pipe: Conform to CS 207-60 or latest revision.
- E. Material: Conform to CS 256-63 or latest revision.

## 2.4 P.V.C. PIPE FITTINGS

- A. Schedule 40 P.V.C. solvent weld or belled fittings; saddles prohibited.
- B. Conform to ASTM D1784, ASTM D2466.

## 2.5 POLYETHYLENE PIPE

- A. Lateral lines, ½"-1" diameter
- B. High density polyethylene water pipe: (PE 3408, ASTM D-2239); black with blue stripe. Provide pipe homogeneous through out and free from visible cracks, holes, foreign material, blisters, wrinkles and dents.

## 2.6 SADDLE TEES

- A. Not allowed.

## 2.7 ELECTRICAL CONTROL VALVES

- A. Toro 250 Series Electric Control Valve Manufacturer's standard (see plan for locations).

1. Globe valves operated by low-power solenoid, normally closed, manual flow adjustment.
2. Group valves together in valve boxes as often as possible. See plans for locations.

## 2.8 CONTROL CABLE

- A. All electrical control and ground wire shall be "UF" direct burial.
- B. 14 ga. white common neutral; 14 ga. red control wire.
- C. A separate common neutral wire is required from controller along entire main line.
- D. Provide one spare control wire from controller along entire main line.
- E. No aluminum wire allowed.
- F. Wiring used for connecting automatic remote control valve to automatic controllers shall be type "UF", 600 volt, solid copper, single conductor wire with P.V.C. insulation and bear "UL" approval for direct underground burial feeder cable.
- G. Direct Bury Splice Kit: 3M DBY.

## 2.9 SPRINKLER HEADS

- A. Sprinkler heads: Manufacturer's standard unit designed to provide uniform coverage over entire designated area at available water pressure. Types as follows:
  1. Toro 570ZXF Series Pop-Up Spray
- B. Spacing of heads shall not exceed manufacturer's maximum recommendations. Head-to-head coverage is required.
- C. Matched precipitation will be required on all sprinklers operating on the same zone.
- D. Conform to manufacturer's specifications concerning diameter of throw and gallons at given pressures.

## 2.10 CONTROL EQUIPMENT

- A. Furnish low voltage system manufactured expressly for control of automatic circuit valves of underground irrigation systems. Provide unit(s) of capacity to suit number of circuits.
  1. TMC 424E Series, 4 station base controller.

- B. Transformer: To convert service voltage to control voltage of 24 volts.
- C. Circuit Control: Each circuit variable from approximately 5 to 60 minutes. Include switch for manual or automatic operation of each circuit.
- D. Timing Device: Adjustable, 24-hour and 7 or 14 day clocks to operate any time of day and skip any day in a 7 or 14 day period.
- E. Settings: solid state.
- F. Coordinate location of controller with Owner.
- G. No time lag between sections or stations.

#### 2.11 REDUCED PRESSURE BACKFLOW DEVICE

- A. To be furnished and installed by Contractor. Mount inside irrigation enclosure.
- B. Connection to backflow device shall be installed according to local codes and manufacturer's specifications, requirements and recommendations.
- C. Provide all piping, fittings and support equipment frame work and fasteners to provide required clearances. Provide steel supports and anchor to concrete slab to support device.
- D. Submit product information to Engineer for review prior to installation.
- E. Backflow preventer:

Wilkins 1" 950XL2 Reduced Pressure Backflow Assembly, as manufactured by WILKINS, 1747 Commerce Way, Paso Robles, CA 93446, (805) 238-7100.

#### 2.12 IRRIGATION METER

- A. To be furnished and installed by Contractor. Mount inside irrigation enclosure.
- B. Provide all piping, fittings and support equipment frame work and fasteners to provide required clearances. Provide steel supports and anchor to concrete slab to support device.
- C. Submit product information to Engineer for review prior to installation.
- D. Meter:

Badger E-Series 1" Water Meter as manufactured by Badger Meter, 4545 West Brown Deer Road, PO Box 245036, Milwaukee, WI 53224, (800) 876-3837.

### 2.13 QUICK COUPLING VALVES

- A. Located in intervals along all mainline pipe. Verify final locations with Owner. See plan for locations.
- B. Install quick coupling valve in 10" Valve Box.
- C. Provide matching quick coupler keys. One key for each 3 coupling valves.

### 2.14 ISOLATION GATE VALVES

- A. See plans for actual location and verify final locations with the Owner.
- B. Size valve to match line size.
- C. NIBCO Brass Ball S-FP-600A valve, or equal, as per manufacturer's specifications.
- D. Install isolation gate valves in 10" valve box in locations shown on plans.

### 2.15 VALVE BOX FOR ELECTRICAL CONTROL VALVES AND QUICK COUPLING VALVES

- A. All valve box locations to be approved by Owner prior to installation
- B. Single Valve Setup: 12" circular box.
- C. Multi-Valve Setup: Oversized box. Use manufacturer's recommended extension kits if required.
- D. Quick Coupling Valves: 12 " circular box

### 2.16 SLEEVES

- A. Coordinate with Owner as necessary for locations. Install schedule 40 PVC for sleeves to accommodate irrigation line and wiring.

### 2.17 SWING JOINTS

- A. LASCO 360 deg. Swing Joint Assembly as manufactured by Philips Industries or approved substitute.

### 2.18 IRRIGATION ENCLOSURE

- A. Contractor to provide irrigation enclosure to house and protect source components for the irrigation system.

- B. Mount enclosure to concrete pad as per manufacturer's requirements. Final location of irrigation source and enclosure to be approved by Owner prior to installation.
- C. Coordinate layout, spacing, sleeving and orientation of irrigation components, pipes, conduits and support frame work prior to installation. Install components to be housed in enclosure before ordering enclosure. The contractor is responsible for field-verifying all dimensions to ensure the enclosure will be sufficient to enclose all components.
- D. Mount irrigation controller inside enclosure. Ensure easy access to controller functions through the opening of a single door or panel.
- E. Enclosure: Provide a steel mesh-style enclosure mounted to PCC pad, lockable with padlock, dark green color, as per Gorilla Cages, Gorilla Manufacturing, 19525 Wied Road, Suite 102, Spring TX 77388, (281) 705-9701, or approved equal.

## PART 3 - EXECUTION

### 3.1 SYSTEM DESIGN

- A. Design Pressure: Verify static water pressure prior to bid. Submit to Engineer for review.
- B. Location of Heads: Locate heads as per manufacturer's recommendations. Make minor adjustments as necessary to avoid plantings and other obstructions. Irrigation system layout is diagrammatic. Exact locations of piping, sprinkler heads, valves, and other components shall be established by the Contractor in the field at time of installation and on the approved shop drawings.
- C. Minimum Water Coverage: Design to deliver the equivalent of 1.5" of rainfall per week. System total operating time not to exceed 6 hours per 24-hour day.
- D. Minor adjustments to system field layout will be permitted to clear existing fixed obstructions; final field layout shall be acceptable to the Owner based on the approved shop drawings.

### 3.2 TIMING

- A. Coordinate time schedule with Owner.

### 3.3 INSTALLATION

- A. Excavating and backfilling:
  - 1. Excavation shall include all materials encountered, except materials that cannot be excavated by normal mechanical means.

- a. Rock excavation: Submit a unit cost per foot of trench for rock excavation. Include in price additional backfill materials required to replace excavated rock.
  2. Excavate trenches of sufficient depth and width to permit proper handling and installation of pipe and fittings.
  3. If the pulling method is used, the pipe "plow" shall be a vibratory type. Starting and finishing holes for pipe pulling shall not exceed a 1'-0" by 3'-0" opening.
  4. Excavate to depths required to provide 2" depth of earth fill or sand bedding for piping when rock or other unsuitable bearing material is encountered.
  5. Fill to match adjacent grade elevations with approved earth fill material. Place and compact fill in layers not greater than 8" depth.
    - a. Provide approved earth fill or sand to a point 4" above the top of pipe.
    - b. Overfill with approved excavated or borrow fill materials free of lumps or rocks larger than 3" in any dimension. Level, compact and water settle. Should settlement occur, refill and re-sod as required.
  6. Except as indicated, install irrigation mains with a minimum cover of 18" based on finished grades. Install irrigation laterals with a minimum cover of 12" based on finished grades.
  7. Excavate trenches and install piping and fill during the same working day. Do not leave open trenches or partially filled trenches open overnight.
- B. Polyethylene Pipe (PE)
1. Install polyethylene pipe in accordance with manufacturer's installation instructions. Provide for thermal expansion and contraction.
  2. Where necessary saw cut polyethylene pipe, using a square-in sawing device to ensure a square cut. Remove burrs and shavings at cut ends prior to installation.
  3. Maintain pipe interiors free of dirt and debris. Close open ends of pipe by acceptable methods when pipe installation is not in progress and over all non-working hours.
- C. Sprinklers, fittings, valves, and accessories:
1. Install fittings, valves, sprinkler heads, risers, and accessories in accordance with manufacturer's instructions.
    - a. Provide concrete thrust blocks where required at fittings valves and all change of directions.
  2. Set sprinkler heads perpendicular to finish grades, except as otherwise indicated.
  3. Install rotors with manufactured o-ring swing joints.

4. Obtain Owner's review and acceptance of height for proposed sprinkler heads and valves prior to installation.
5. Locate sprinkler heads to assure proper coverage of indicated areas. Do not exceed sprinkler head spacing distances indicated.
6. Install gear-driven sprinklers on 360-degree swing joint assembly as per manufacturer's recommendation.
7. Install quick-coupling valves in 10" valve box on 360-degree swing joint assembly as per manufacturer's recommendation with stabilizer.
8. Install fittings and accessories as shown or required to complete the system.
9. Install controller:
  - a. Coordinate location with Owner.
  - b. Waterproof wire conduit to provide a complete, waterproof, permanent and neat job.
  - c. Ground controller in accordance with manufacturer's recommendations.
10. Install in-ground control valves in a valve access box as indicated.
11. Install valve access boxes on a suitable base of gravel to provide a level foundation at proper grade to provide drainage of the access box.
12. Seal threaded connections on pressure side of control valves as per manufacturer's recommendations.

D. Control wiring:

1. Install electric control cable in the piping trenches wherever possible. Place wire in trench adjacent to pipe. Install wire with slack to allow for thermal expansion and contraction. Expansion joints in wire shall be provided at 200-foot intervals by making 5-6 turns of the wire around a piece of 1/2" pipe instead of slack. Where necessary to run wire in a separate trench, provide a minimum cover of 12".
2. Provide sufficient slack at site connections at remote control valves in control boxes, and at all wire splices to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.
3. Connect each remote control valve to one station of a controller except as otherwise indicated.
4. Connect remote control valves to a common ground wire system independent of all other controllers. A separate common neutral wire is required for each controller.



5. Make wire connections to remote control electric valves and splices of wire in the field, using 3M DBY or 3M DBR Direct Bury Splice Kit (or approved equal).
  6. Provide tight joints to prevent leakage or water and corrosion build-up on the joint.
- E. Sleeves: Coordinate with Owner.
- F. Flushing, testing, and adjustment:
1. After sprinkler piping and risers/swing joints are installed and before sprinkler heads are installed, open control valves and flush out the system with full head of water.
  2. Perform system testing upon completion of each section. Make necessary repairs and re-test repaired sections as required.
  3. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
  4. Tighten nozzles on spray type sprinklers after installation. Adjust sprinkler adjusting screw on lateral line or circuit as required for proper radius. Interchange nozzles patterns as directed by the Owner to give best arc of coverage.
  5. Adjust all electric remote control valve flow control stems for system balance.
  6. Test and demonstrate the controller by operating appropriate day, hour, and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements and weather conditions.
- G. BORING:
1. Place irrigation pipe and wiring under existing concrete or asphalt surfaces by jacking, boring or hydraulic driving.
  2. Polyethylene pipe shall be used for the mainline material through boring sleeves to avoid joints within boring areas.
  3. Open cutting of existing concrete and asphalt surfaces to install sleeving is not permitted unless approved by Owner in writing.
  4. Where piping is shown under paved areas which are adjacent to turf areas, install the piping in the turf areas.

### 3.4 AS-BUILT DRAWING

- A. Furnish accurate reproducible Mylar "As-Built" drawings of all components. State the size, manufacturer, model number, part number, size, and exact location of each and every item furnished and installed by this Contractor. Final payment can be withheld until "as-built" has been provided to and approved the Owner.

- B. Contractor will furnish Owner with 2 bound copies of instruction sheets and parts lists covering all operating equipment.

### 3.5 SPARE PARTS

- A. Provide:
  - 1. One extra sprinkler head of each size and type.
  - 2. One extra valve of each size.
  - 3. One extra valve access box.
  - 4. One quick coupler valve key for each 3 quick coupler valves.

### 3.6 DISPOSAL OF WASTE MATERIAL

- A. Stockpile, haul from site, and legally dispose of waste materials, including unsuitable excavated materials, rock, trash, and debris.
- B. Maintain disposal route clear, clean and free of debris.
- C. Repair any damage resulting from irrigation system installation.

### 3.7 ACCEPTANCE

- A. Test and demonstrate to the Owner the satisfactory operation of the system free of leaks.
- B. Instruct the Owner's staff in the operation of the system, including adjustment of sprinklers, controller(s), valves, and pump controls.
- C. Upon acceptance, the Owner will assume operation of the system.

### 3.8 SPECIAL INSTRUCTIONS

- A. The Contractor shall coordinate and cooperate with the General Contractor, Mechanical/ Electrical Contractors, and all subcontractors, during the installation of this system.
- B. During the bidding period, the Contractor shall inform the Engineer and Owner of any system items or elements that are required for operation of the system specified herein, but installed and furnished by others.
- C. The Irrigation System must be in full operation by the time the new sod/seed/plantings are installed.

- D. It is the intent of the Owner to use moderate to heavy motorized lawn mowers to maintain the seed on this project. All sprinkler heads shall safely sustain these loads without failure.

END OF SECTION