



101 NE Harvey Street, Grimes, Iowa 50111 | P: 515.986.3036 | F: 515.986.3846

This meeting of the Grimes Planning and Zoning Commission was called to order Tuesday January 7, 2020 at 5:30 P.M. at Grimes City Hall.

Roll Call: Present: Scott Almeida, Courtney Strut-Todd, Craig Patterson, Amy Montford, Jill Altringer

Staff: Alex Pfaltzgraff, Rachel Greving

Absent: Danielle Smid

A. GENERAL AGENDA ITEMS

1. MOTION TO APPOINT SCOTT ALMEIDA TO CHAIR

Motion by Montford, Second by Patterson, to appoint Scott Almeida to Chair

Roll Call: Ayes-All; Nays-0 Motion passes: 4-0

2. MOTION TO APPOINT CRAIG PATTERSON TO VICE CHAIR

Motion by Strutt-Todd, Second by Montford, to appoint Craig Patterson to Vice Chair

Roll Call: Ayes-All; Nays-0 Motion passes: 4-0

3. APPROVAL OF THE AGENDA

Motion by Strutt-Todd, Second by Patterson, to approve the agenda

Roll Call: Ayes-All; Nays-0 Motion passes: 4-0

4. APPROVAL OF THE MINUTES

Motion by Patterson, Second by Strutt-Todd, to approve the minutes from the December 3, 2019 meeting

Roll call: Ayes-All; Nays-0 Motion passes: 4-0

B. PUBLIC AGENDA ITEMS

Project # 20-1003: Project Viking Site Plan

There is currently only one approved development project within plat, which is the temple being built directly east of the subject site. The tenant has not been named yet. Outdoor storage is intended, and all building requirements have been met. There are no landscaping requirements, but screening and trees are in the plans as well as an ornamental steel fence. All other components of the site are compliant, and staff offered a recommendation of approval. The Commission discussed their concerns with the outdoor storage. A representative of the proposal explained that there would be a 6 foot fence, sixty percent of the building will be office space, and according to the zoning of the lot, the outdoor storage could be stacked as high as 30 feet. The representative asked that the Commission give the tenant the flexibility to utilize the space as what is it zoned without more restrictions.

Motion by Strutt-Todd, Second by Patterson to approve Project Viking Site Plan

Roll Call: Aye-All Nay-0 **Motion Passes 4-0**

Project # 20-1004: Destination Market Plat 3 Site Plan

This project involves the re-platting of two different sized lots. The site plan includes a wet basin to the north and screening as well. The larger lot contains a building with a rooftop area, a drive thru, and architecture including different levels to the roofing and it is over fifty percent glass. The smaller building to the west included glass, glazing, stone, and masonry in the architecture. Staff was overall pleased with the architecture of both buildings.

Motion by Strutt-Todd, Second by Montford to approve Destination Market Plat 3 Site Plan

Roll Call: Aye-All Nay-0 **Motion Passes 4-0**

Project # 20-1007: 44 West Preliminary Plat & Project #20-1006: 44 West Site Plan

Nicole Neal of Civil Design Advantage represented this project. The plat is currently zoned commercial, and a special use permit was granted in 2018. The site plan shows two access points and sidewalks throughout the site. The commercial section of the site plan is only in a conceptual stage of planning. There is a proposed retention on the north side of the site (130 feet to the residential plat) to screen.

Pfaltzgraff explained some of the history of this particular plat. The original vision for this subdivision represented this particular section to be all commercial. As other parts of the original plan changed, this too changed visions by the developers. Pfaltzgraff also noted many of the changes that had been made to the site plan since it was last seen in 2018. There are more landscaping overall, and the basin is lined with trees. The architecture intended for the townhomes include vertical siding, many levels, all requirements were met, and front porches were incorporated on the side facing Brookside Drive. Some issues included the only two entrances are both from Brookside, and the grade of the land would also be challenging to work with since the grade transitions in the middle of the site.

Montford mentioned that from a resident's point of view the layout of the plans work well having the commercial section where it is and sized the way it is on the plans.

Motion by Montford, Second by Strutt-Todd to approve 44 West Preliminary Plat & Site Plan

Roll Call: Aye-All Nay-0 **Motion Passes 4-0**

C. PUBLIC FORUM – None

D. REPORTS

- 1. Department Update** – There will be four to five projects coming to the board next month. Some new projects are Heritage Town Center, Heritage Park, a new Metro Waste Facility,

and a new daycare. A new planner will be starting next Monday. Grading has been moving along on Hope Commercial; the department has not received plans from Hy-Vee yet. The Jordan Well has been drilled. The new library is in a schematic design stage right now. Southwest County Line Road now has water and sewer to the new school. Applications have also come in for a few annexations.

2. **Council Liaison Update – A new council liaison should be appointed by the next planning and zoning meeting.**
3. **Old Business – N/A**
4. **New Business –** Concerns about the lighting on the new Raccoon Valley Bank were brought up. It started out with only one color of lighting. Now it changes all the time.
5. Next meeting February 4, 2020

Meeting is adjourned at 7:19 p.m.

Signature



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

December 5, 2019

January 21, 2020

Civil Design Advantage

Attn: Doug Mandernach

3405 SE Crossroads Drive, Suite G

Grimes, IA 50111

RE: Destination Market Plat 4

Dear Mr. Mandernach:

The Development Services Department is in receipt of a proposed Site Plan for Destination Market Plat 4. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

- ~~1. Note that this is not a true preliminary plat. Details for utilities, grading and easements will need to be provided for a true review.~~

Sheet 1

- ~~2. Please remove Site Plan from the title.~~
- ~~3. Please note that addresses will be provided with the Final Plat.~~

Sheet 3

- ~~4. Please show all proposed streets, utilities, grading, easements, etc.~~
- ~~5. Staff questions if the owner intends to stock the pond. If so, please refer to updated IDNR standards for urban fishing.~~
6. Please darken the property lines.
7. Please provide ingress/egress easements over the site and common areas.

Sheet 4

8. Please show the construction entrance
9. Please show the staging area
10. Please show the PCC washout station
11. Please indicate seeding types.
12. Please indicate if the temporary standpipe has an open or closed top

SWPM

13. Please provide Tc calculations, flow paths, slopes, etc..
14. Please provide Spillway calculations and location.
15. Please consider providing sediment forebays for inflow locations.
16. The submitted plan shows that the proposed pond could generally provide storm water management for 15.12 acres developed at 85% impervious. The plan does not show how offsite areas would be routed to the regional pond. A preliminary plat would need to be completed to approve a SWMP for the site. The proposed outlet should not be sized for the 15 acres. There is no guarantee that offsite development will be ultimately routed to the proposed pond. More planning is required for an approved SWMP.

SWPPP

17. It is expected the SWPPP narrative for Destination Market will be utilized for Plat 4. Because that narrative was drafted before G.P. #2 was re-issued on 3.01.2018, the narrative needs to be updated and re-submitted.
18. Please submit a signed Grimes SWPPP Development Certification

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: December 11, 2019

(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: TBD at the Grimes City Hall

COUNCIL MEETING: TBD at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

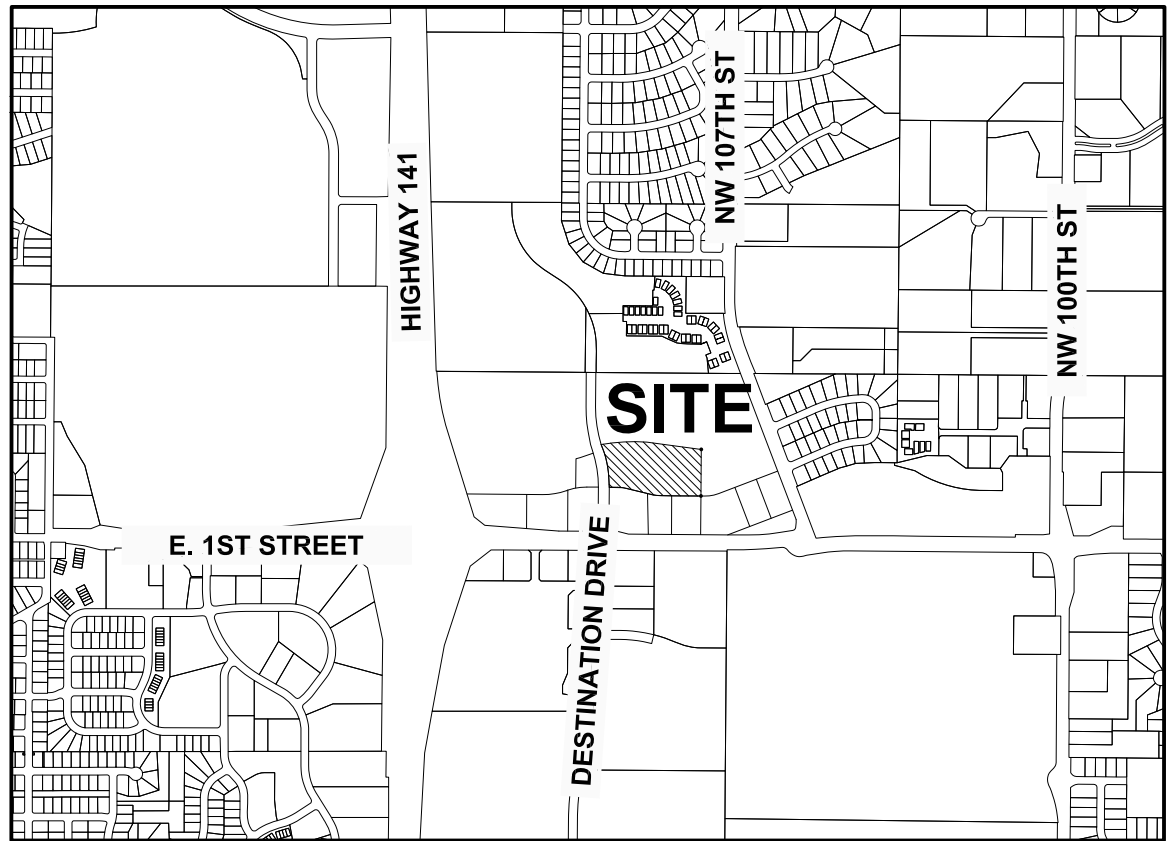
A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff", is positioned above the printed name.

Alex Pfaltzgraff
Development Services Director

PRELIMINARY PLAT FOR:
DESTINATION MARKET PLAT 4

VICINITY MAP

NOT TO SCALE



GRIMES, IOWA

APPLICANT

DESTINATION MARKET LLC
3737 WOODLAND AVENUE
CONTACT: MARK HANRAHAN
EMAIL: MHANRAHAN@OWACA.COM
PH: (515) 512-1022

ENGINEER

CIVIL DESIGN ADVANTAGE
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
CONTACT: DOUG MANDERNACH
EMAIL: DOUGM@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC
3405 SE CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
CONTACT: CHARLIE MCGLOTHLEN
EMAIL: CHARLIEM@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

OWNER

TOP TRACT CORP
7085 NW 100 ST.
JOHNSTON, IA 50131
CONTACT: KAY THIELEKE

BENCHMARKS

- GRIMES CITY BM#H6N-001 ARROWHEAD ON HYDRANT 300'± EAST OF INT. OF E. 1ST AND SE DESTINATION DR. ON NORTH SIDE OF 1ST STREET. ELEVATION=991.26
- GRIMES CITY BM#H6N-002 ARROWHEAD ON HYDRANT 600'± EAST OF INT. OF E. 1ST AND SE DESTINATION DR. ON NORTH SIDE OF 1ST STREET. ELEVATION=991.95

SUBMITTAL DATES

FIRST SUBMITTAL: 11/22/2019
SECOND SUBMITTAL: 12/30/2019

LEGAL DESCRIPTION

A PART OF OUTLOT 'Z', DESTINATION MARKET PLAT 2, AN OFFICIAL PLAT IN THE CITY OF GRIMES, POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1, SAID DESTINATION MARKET PLAT 2; THENCE NORTHERLY ALONG THE WESTERLY LINE OF SAID OUTLOT 'Z' AND A CURVE CONCAVE WESTERLY WHOSE RADIUS IS 967.50 FEET, WHOSE ARC LENGTH IS 250.57 FEET AND WHOSE CHORD BEARS NORTH 07°22'44" WEST, 249.87 FEET; THENCE NORTH 20°16'17" WEST CONTINUING ALONG SAID WESTERLY LINE, 70.51 FEET; THENCE NORTH 71°15'43" EAST, 112.08 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 600.00 FEET, WHOSE ARC LENGTH IS 348.04 FEET AND WHOSE CHORD BEARS NORTH 87°52'46" EAST, 343.18 FEET; THENCE SOUTH 75°30'11" EAST, 182.55 FEET; THENCE EASTERLY ALONG A CURVE CONCAVE NORTHERLY WHOSE RADIUS IS 600.00 FEET, WHOSE ARC LENGTH IS 153.36 FEET AND WHOSE CHORD BEARS SOUTH 82°49'31" EAST, 152.94 FEET; THENCE SOUTH 00°19'29" WEST, 366.64 FEET TO THE SOUTHERLY LINE OF SAID OUTLOT 'Z'; THENCE NORTH 89°36'37" WEST ALONG SAID SOUTHERLY LINE, A DISTANCE OF 315.69 FEET; THENCE WESTERLY CONTINUING ALONG SAID SOUTHERLY LINE AND A CURVE CONCAVE NORTHERLY WHOSE RADIUS IS 300.00 FEET, WHOSE ARC LENGTH IS 66.70 FEET AND WHOSE CHORD BEARS NORTH 83°14'28" WEST, 66.56 FEET; THENCE NORTH 76°12'14" WEST CONTINUING ALONG SAID SOUTHERLY LINE, 210.47 FEET; THENCE WESTERLY CONTINUING ALONG SAID SOUTHERLY LINE AND A CURVE CONCAVE SOUTHERLY WHOSE RADIUS IS 290.00 FEET, WHOSE ARC LENGTH IS 68.68 FEET AND WHOSE CHORD BEARS NORTH 82°59'20" WEST, 68.52 FEET; THENCE NORTH 89°46'25" WEST CONTINUING ALONG SAID SOUTHERLY LINE, 64.77 FEET TO THE POINT OF BEGINNING AND CONTAINING 6.65 ACRES (289,667 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

ZONING

C-2 GENERAL AND HIGHWAY SERVICE
COMMERCIAL DISTRICT

PROPERTY IS WITHIN THE TRANSPORTATION OVERLAY DISTRICT

PROJECT SITE ADDRESS

TO BE PROVIDED WITH THE FINAL PLAT

BULK REGULATIONS

MIN. FRONT YARD SETBACK = 25'
MIN. SIDE YARD SETBACK = NONE REQUIRED, EXCEPT WHEN ADJOINING ANY "R" DISTRICT OR STREET

MIN. REAR YARD SETBACK = 25 FEET; HOWEVER, FOR EVERY FOOT THE FRONT YARD IS INCREASED OVER 25 FEET, THE REAR YARD MAY BE DECREASED IN DIRECT PROPORTION THERETO, BUT IN NO CASE SHALL THE REAR YARD BE LESS THAN 10 FEET

MAX. HEIGHT = 45'
MAX. # OF STORIES = 3 STORIES

DEVELOPMENT SUMMARY

LOT 1:

AREA: 2.41 ACRES (104,767 SF)

LOT 2:

AREA: 2.15 ACRES (93,790 SF)

OUTLOT Z:

AREA: 2.09 ACRES (91,111 SF)

IMPERVIOUS DATA:
8' TRAIL: 8,431 SF 9.25%

CONSTRUCTION SCHEDULE

ANTICIPATED START DATE = SPRING 2020
ANTICIPATED FINISH DATE = SUMMER 2020

GRIMES, IOWA

INDEX OF SHEETS

NO.	DESCRIPTION
1	COVER SHEET
2	TOPO/DEMO PLAN
3	DIMENSION & GRADING PLAN
4	UTILITY PLAN
5	EROSION AND SEDIMENT CONTROL PLAN



UTILITY WARNING

ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.



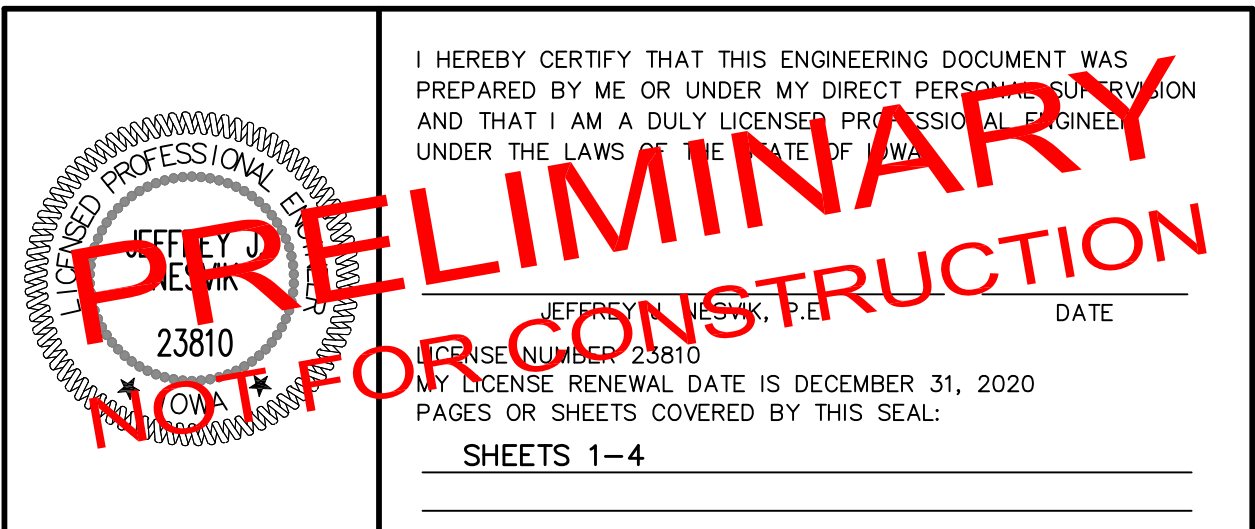
GENERAL LEGEND

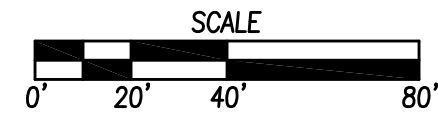
PROPOSED	EXISTING
PROPERTY BOUNDARY	SANITARY MANHOLE
SECTION LINE	WATER VALVE BOX
CENTER LINE	FIRE HYDRANT
RIGHT OF WAY	WATER CURB STOP
BUILDING SETBACK	WELL
PERMANENT EASEMENT	STORM SEWER MANHOLE
TEMPORARY EASEMENT	STORM SEWER SINGLE INTAKE
TYPE SW-501 STORM INTAKE	STORM SEWER DOUBLE INTAKE
TYPE SW-502 STORM INTAKE	FLARED END SECTION
TYPE SW-503 STORM INTAKE	DECIDUOUS TREE
TYPE SW-505 STORM INTAKE	CONIFEROUS TREE
TYPE SW-506 STORM INTAKE	DECIDUOUS SHRUB
TYPE SW-512 STORM INTAKE	CONIFEROUS SHRUB
TYPE SW-513 STORM INTAKE	ELECTRIC POWER POLE
TYPE SW-401 STORM MANHOLE	GUY ANCHOR
TYPE SW-402 STORM MANHOLE	STREET LIGHT
FLARED END SECTION	POWER POLE W/ TRANSFORMER
TYPE SW-301 SANITARY MANHOLE	UTILITY POLE W/ LIGHT
STORM/SANITARY CLEANOUT	ELECTRIC BOX
WATER VALVE	ELECTRIC TRANSFORMER
FIRE HYDRANT ASSEMBLY	ELECTRIC MANHOLE OR VAULT
SIGN	TRAFFIC SIGN
DETECTABLE WARNING PANEL	TELEPHONE JUNCTION BOX
WATER CURB STOP	TELEPHONE MANHOLE/VAULT
SANITARY SEWER	TELEPHONE POLE
SANITARY SERVICE	GAS VALVE BOX
STORM SEWER	CABLE TV JUNCTION BOX
STORM SERVICE	CABLE TV MANHOLE/VAULT
WATERMAIN WITH SIZE	MAIL BOX
WATER SERVICE	BENCHMARK
SAWCUT (FULL DEPTH)	SOIL BORING
SILT FENCE	UNDERGROUND TV CABLE
USE AS CONSTRUCTED	GAS MAIN
MINIMUM PROTECTION ELEVATION	FIBER OPTIC
	UNDERGROUND TELEPHONE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	FIELD TILE
	SANITARY SEWER W/ SIZE
	STORM SEWER W/ SIZE
	WATER MAIN W/ SIZE

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF GRIMES GRADING PERMIT. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

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

THE 2019 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.





DEMOLITION NOTES

1. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER OR ENGINEER AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
2. PRIOR TO DEMOLITION, CONTRACTOR SHALL NOTIFY IN WRITING (48 HRS NOTICE) THE FOLLOWING:
 - A. CITY
 - B. APPROPRIATE UTILITY COMPANIES
 - C. OWNER
 - D. CIVIL DESIGN ADVANTAGE
 - E. ARCHITECT
3. DO NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE REMOVAL OR ABANDONMENT OF ALL UTILITIES WITH THE APPROPRIATE UTILITY SUPPLIER AND RESPECTIVE AGENCIES.
4. PROTECT EXISTING UTILITIES THAT ARE TO REMAIN. THE LOCATIONS OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
5. BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DRY DENSITY AND MOISTURE RANGE OF OPTIMUM MOISTURE TO 4% ABOVE OPTIMUM MOISTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE BACKFILL TO BE EMPLOYED BY THE OWNER. IN THE EVENT OF A TEST FAILURE, ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
6. FIELD VERIFY EXISTING GRADES AND LOCATION OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PILING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE CONTRACTOR AND OWNER OF ANY DISCREPANCIES.
7. DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ALLOWED IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT. ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OF OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
8. CONSTRUCTION LIMITS SHALL BE CONFINED TO THE SITE BOUNDARY AS NOTED. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.

1. ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY R.O.W. OR LANE CLOSURES.
2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
4. THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
5. SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
6. THE CONTRACTOR SHALL NEITHER REMOVE NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
7. ALL SIGNING AND LANE STRIPING WILL NEED TO COMPLY WITH MUTCD. MAINTENANCE AND REPLACEMENT OF THE SIGNING AND STRIPING WILL BE THE RESPONSIBILITY OF THE APPLICANT.

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

ENGINEER: JUN	PM: DAM
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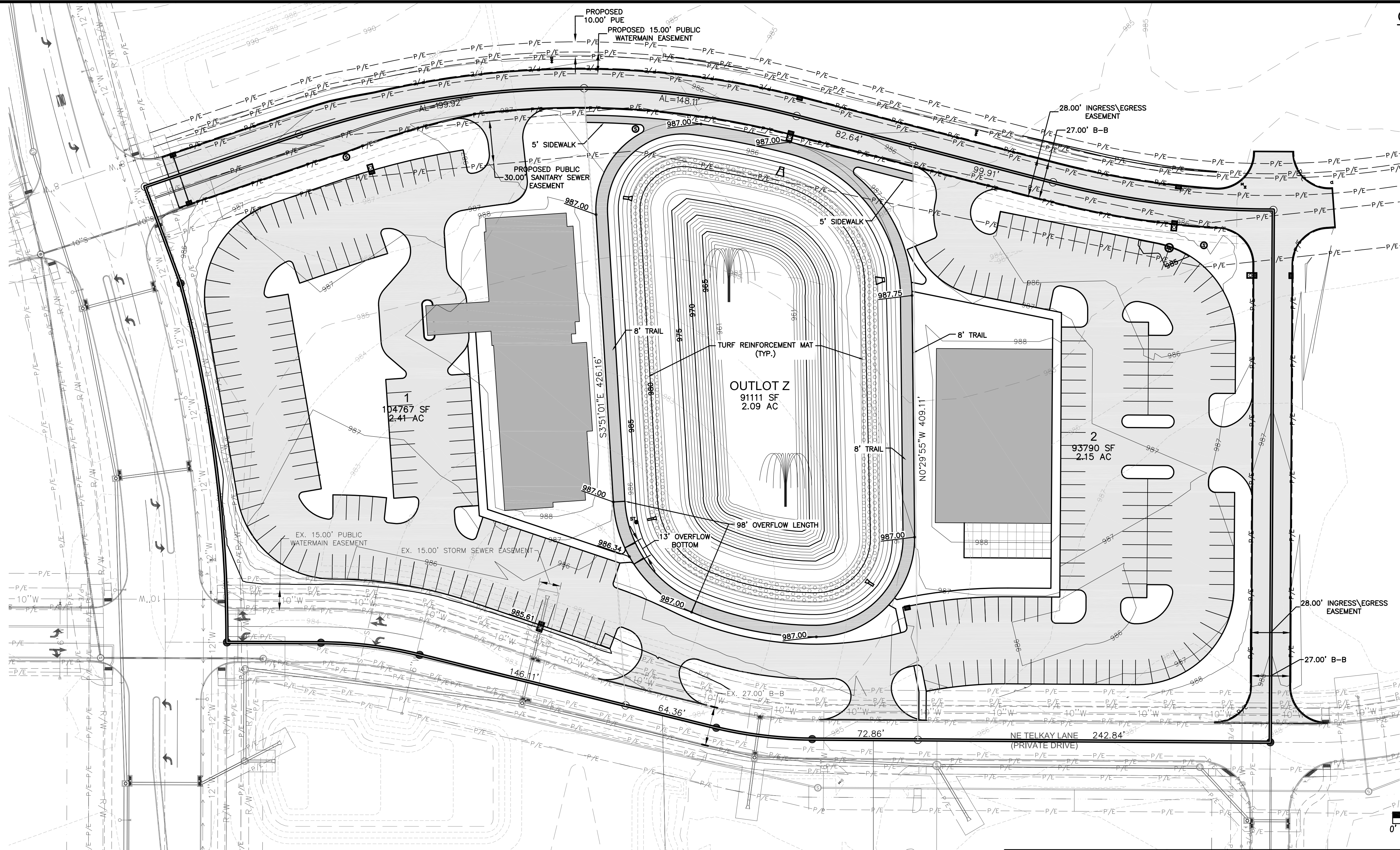
DESTINATION MARKET PLAT 4

TOPOGRAPHIC SURVEY AND DEMOLITION PLAN

GRIMES, IOWA

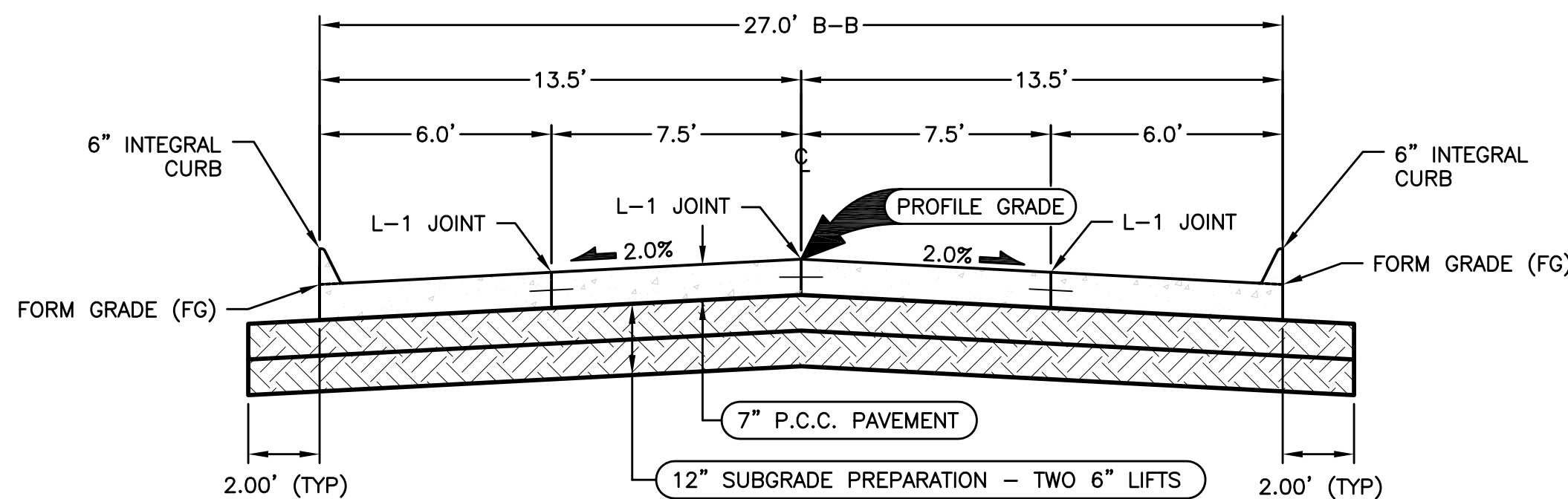
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DRAWN BY: JJS
CHECKED BY: JJS

COMMENT:
END

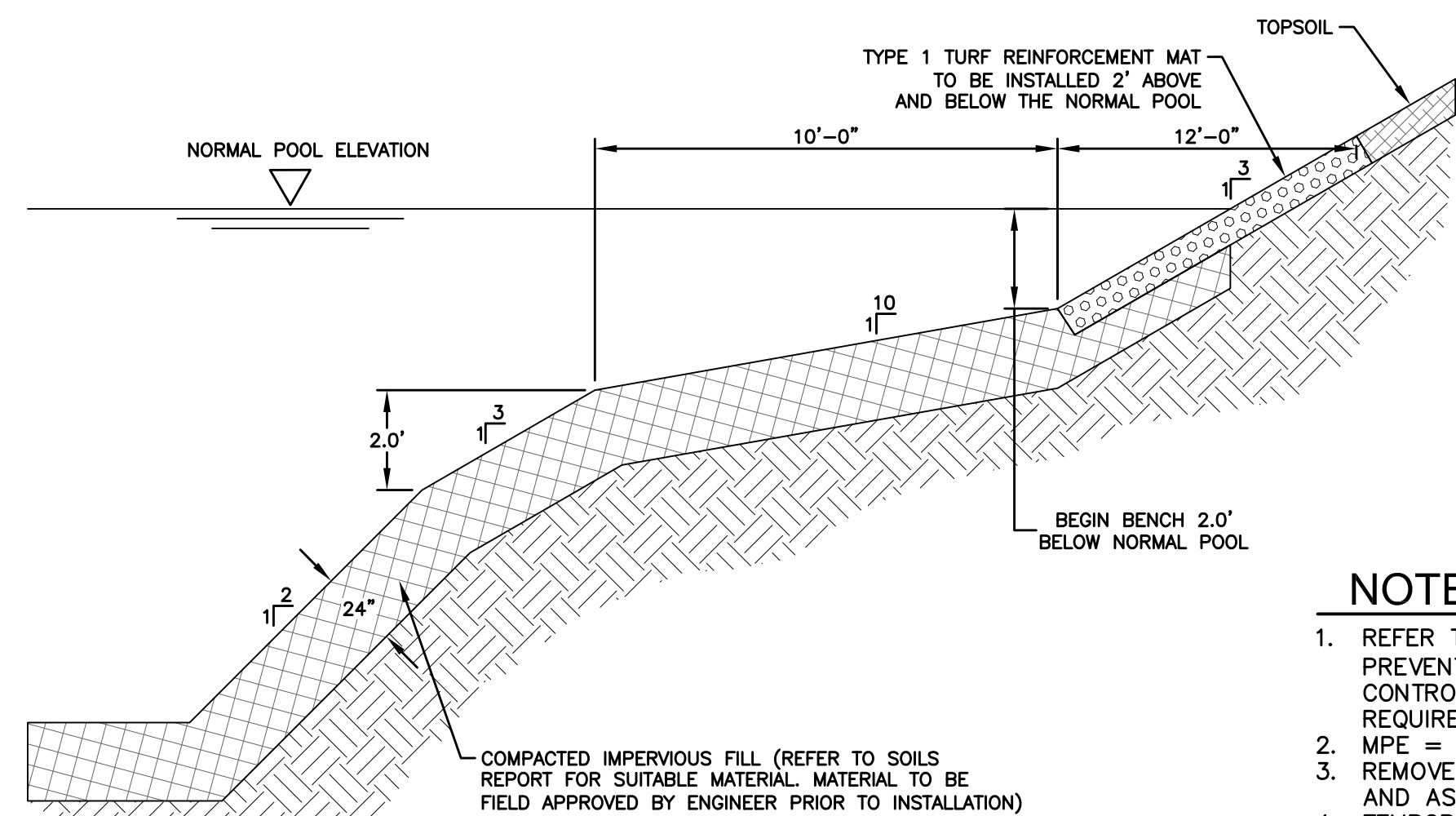


GRADING NOTES

1. PRIOR TO ANY GRADING, A COPY OF THE NPDES PERMIT SHALL BE PROVIDED TO THE CITY'S BUILDING DIVISION.
2. CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL. THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPREAD AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
3. EXCAVATION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE.
4. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
5. ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP OF FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE TOWARD DETENTION FACILITY.
7. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
9. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
10. FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
11. SIDEWALKS:
MAINTAIN 1% MINIMUM AND 5% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 2.0% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW CUT JOINTS AS SOON AS CONCRETE HAS SET. SAW CUTS TO BE 1/8" TO 1/4" WIDE. DEPTH: LONGITUDINAL 1/3, TRANSVERSE 1/4.
12. THE GRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM (IF APPLICABLE), AND THE INSTALLATION OF THE ORIFICE PLATE (IF APPLICABLE) SHALL BE COMPLETED AND FUNCTIONAL PRIOR TO ANY INCREASE IN IMPERVIOUS SURFACES WITHIN THE SITE OR THE PREVIOUSLY MENTIONED ITEMS SHALL BE GRADED/ INSTALLED AS SOON AS PRACTICAL.



TYPICAL SECTION - 27' B-B



TYPICAL POND DETAIL
NOT TO SCALE

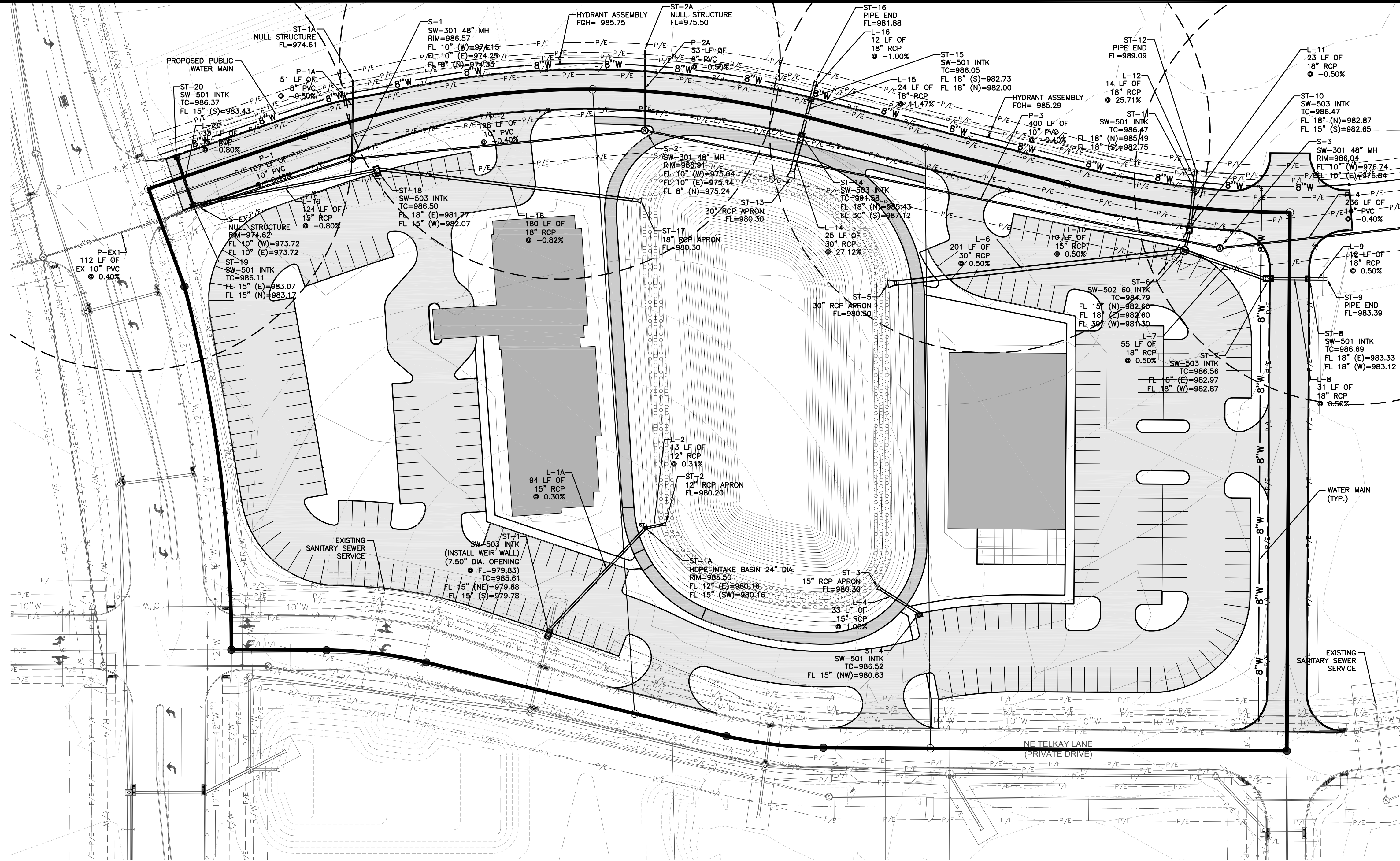
NOTES

1. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR EROSION CONTROLS AND POLLUTION PREVENTION REQUIREMENTS.
2. MPE = MINIMUM PROTECTION ELEVATION.
3. REMOVE ALL FENCE WITHIN GRADING LIMITS AND AS LABELED ON THE GRADING PLAN.
4. TEMPORARY SEED ALL DISTURBED AREAS ACCORDING TO NPDES PERMIT REQUIREMENTS. INSTALL PERMANENT SEEDING AS NOTED ON PLAN.

DATE		12/30/19	
REVISIONS		11/22/19	
3405 S.E. CROSSROADS DRIVE, SUITE G GRIMES, IOWA 50111 PHONE: (515) 369-4400 FAX: (515) 369-4410		ENGINEER: JJN PM: DAM	
3		5	
1910.516			

DESTINATION MARKET PLAT 4
DIMENSION & GRADING PLAN
GRIMES, IOWA

CIVIL DESIGN ADVANTAGE



UTILITY NOTES

1. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
3. BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE MOST RECENT EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS. MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATERMAINS.
4. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES.
5. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES.
6. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
7. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
8. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
9. PRIVATE UTILITIES TO BE INSTALLED PER THE CITY'S STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2012 UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS.
10. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES.
11. CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SILT FENCE AT ALL PERMANENT STORM SEWER INTAKES.

4

DESTINATION MARKET PLAT 4

5

1910.516

UTILITY PLAN

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

ENGINEER: JJN

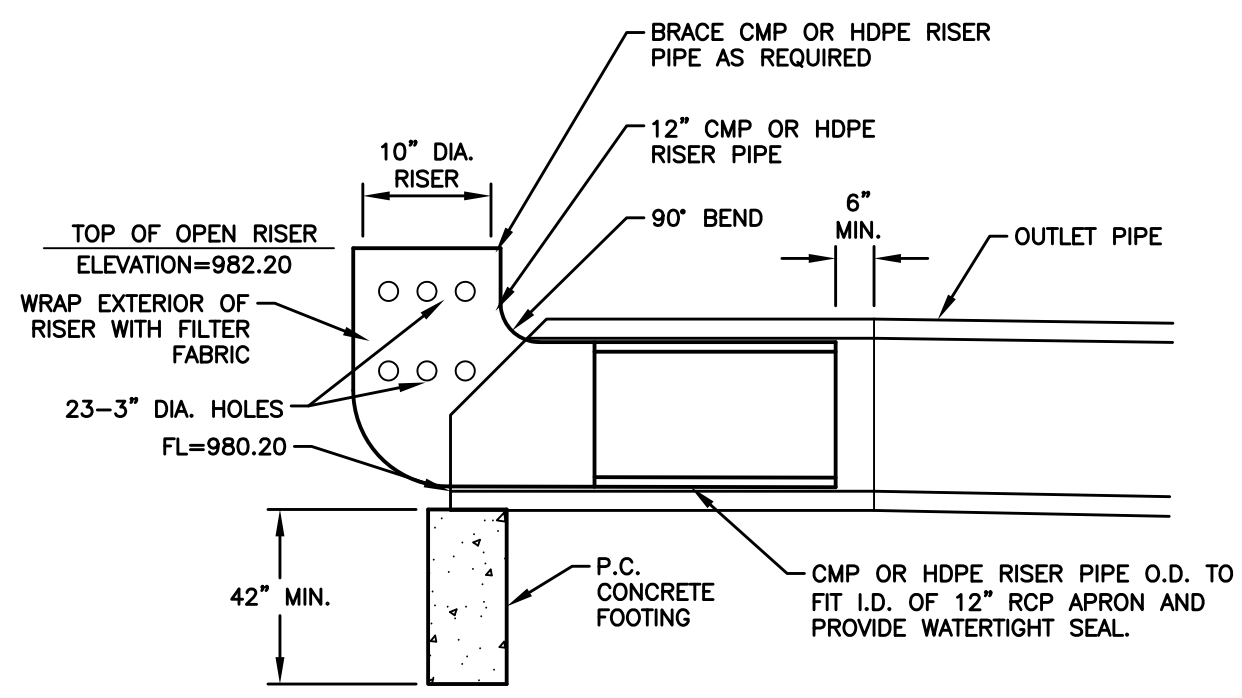
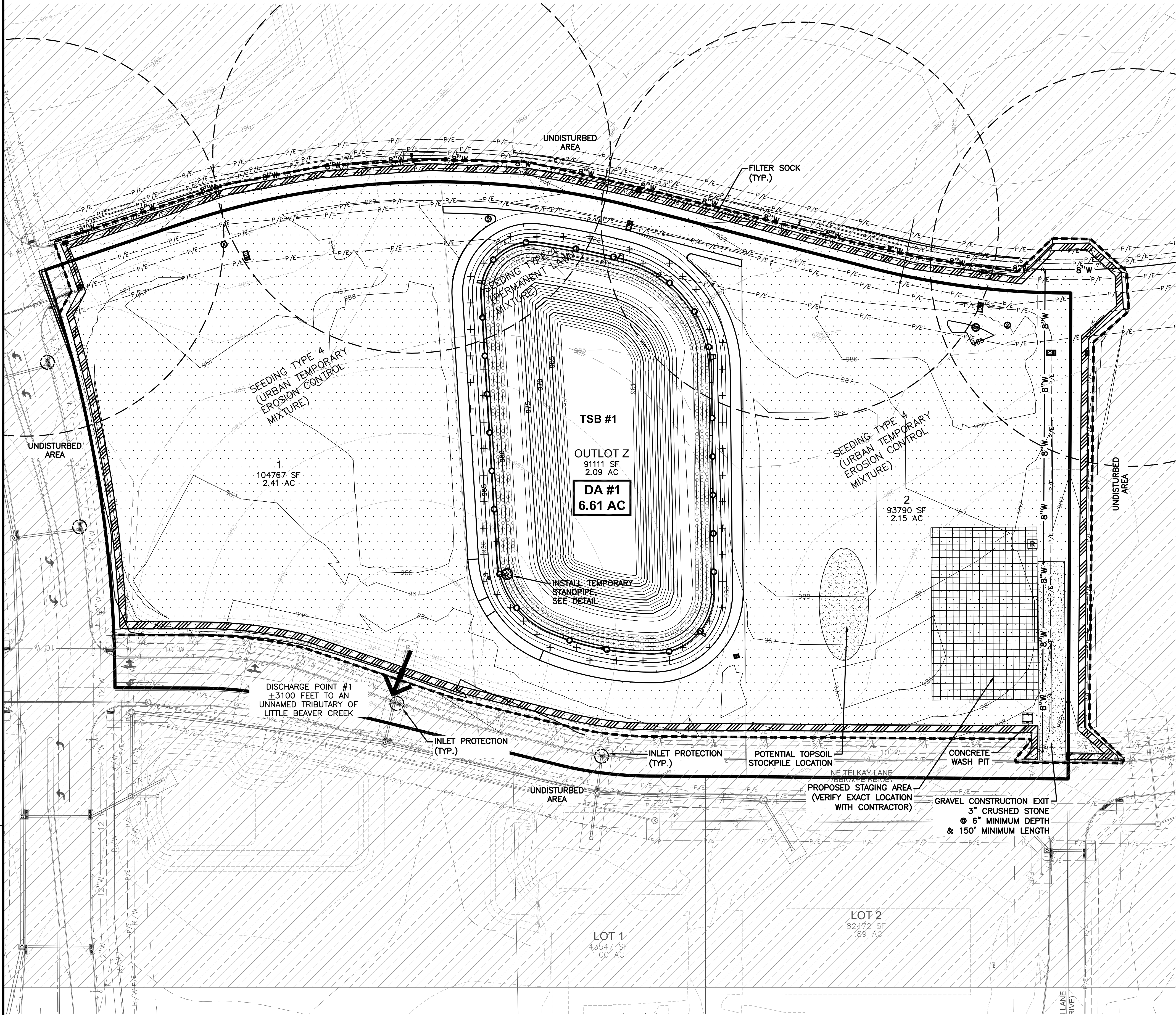
PM: DAM

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

REVISIONS

DATE	REVISIONS
12/30/19	11/22/19

2ND SUBMITTAL
1ST SUBMITTAL



TEMPORARY STAND PIPE DETAIL
NOT TO SCALE

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	FILTER SOCK	LF	2,297
2	SEEDING, FERTILIZING, AND MULCHING	AC	5.57
3	INLET PROTECTION DEVICES	EA	4
4	CONCRETE WASHOUT PIT	EA	1
5	12" PVC TEMPORARY STANDPIPE	EA	1

DISCHARGE POINT SUMMARY

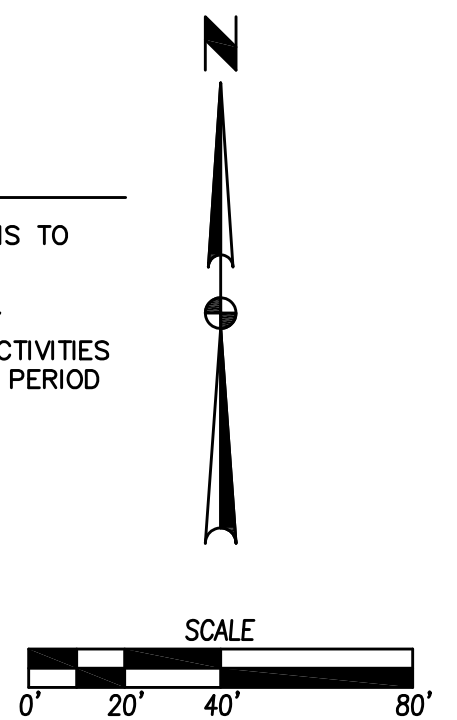
DISCHARGE POINT #1 TO UNNAMED TRIBUTARY OF LITTLE BEAVER CREEK ±3100 FT	
TOTAL AREA DISTURBED TO DISCHARGE POINT	6.61 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	23,796 CU FT
VOLUME PROVIDED IN FILTER SOCK (2,297 LF @ 2.0 CU FT/LF OF SOCK)	4,594 CU FT
VOLUME PROVIDED IN TSB	163,897 CU FT
TOTAL VOLUME PROVIDED	168,491 CU FT

SWPPP LEGEND

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

NOTES:

- IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
- DISTURBED AREAS SHALL BE TEMPORARILY SEEDING OR MULCHING IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.



Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: January 7, 2020
RE: Destination Market Plat 4 – Preliminary Plat

GENERAL INFORMATION:

Applicant:

Doug Mandernach, Civil Design Advantage

Requested Action

Preliminary Plat

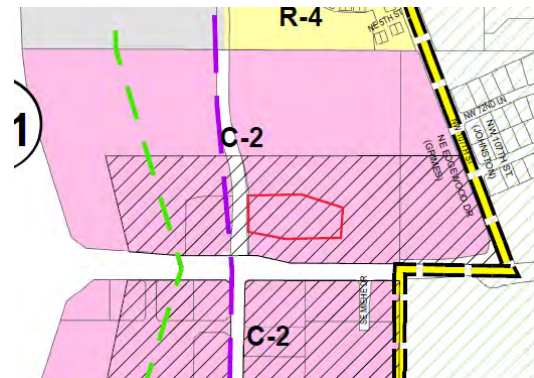
Location

NE Telkay Ln.

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	General Commercial	C-2
North	Vacant	General Commercial	C-2
South	Commercial District	General Commercial	C-2
East	Vacant	General Commercial	C-2
West	Vacant	General Commercial	C-2

BACKGROUND:

The applicant is requesting approval of a preliminary plat, which will allow for the future subdivision of the property. The proposed preliminary plat will provide for 2 development lots, and 1 outlot. The outlot is intended to provide space for the regional detention pond.

ANALYSIS:

A conceptual layout is shown for the preliminary plat. Access to the development will be from existing NE Telkay Lane, as well as the future extended NE Platinum Dr and future unnamed roadway to the north.

Access has been coordinated with the development to the south, to ensure traffic networks are linked.

Pedestrian access is shown from the private driveways, as well as around the proposed pond.

At this time, the applicant will only be constructing the pond. Future improvements, including utilities, site layouts and roadways will be considered at a later date. The pond will include fountains and is being designed for fish habitat.

STAFF RECOMMENDATION:

Staff would recommend approval of the preliminary plat for Destination Market Plat 4, subject to any remaining staff comments.

CITY OF GRIMES

Alex Pfaltzgraff
Development Services Director



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

~~January 6, 2020~~

January 21, 2020

Snyder & Associates

Attn: Jason Ledden

2727 S.W. Snyder Blvd

Ankeny, IA 50023

RE: KinderCare

Dear Mr. Ledden:

The Development Services Department is in receipt of a proposed Site Plan for KinderCare. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

1. Please provide a geo-tech report for the site. **No geo tech was submitted.**
2. **Please provide Heritage Review Committee approval.**
3. ~~Note that sheet C300 is missing.~~

Sheet C101

4. Please revise the utility contact information from City of Johnston to City of Grimes.
Contact still refers to Johnston.
5. ~~Please note under property description that the property is subject to Plat review, and note the new final plat name; Heritage at Grimes Commercial Plat 3, Lot 3.~~
6. ~~Please revise the Zoning to R-4, Heritage PUD.~~
7. ~~Please identify the proposed occupancy of the daycare.~~
8. ~~Please revise the setbacks per the Heritage PUD (FY = 20', SY = 0')~~
9. ~~Please update the general notes (attached)~~

10. Please include the required vs provided open space figures. **Required open space is 25%. Staff questions what was called open space.**

Sheet C200

- ~~11. Please include the removals and/or relocates on the existing conditions page.~~
12. **Staff questions if grinding the curb is adequate in this case, or if it should be saw cut and removed.**

Sheet C400

13. Please provide the off-site temporary grading easement documents. **Provide when available.**
- ~~14. Please show a public sidewalk easement along the frontage of NE Gateway Drive where the sidewalk comes onto private property.~~
- ~~15. Please provide a radius there the new pavement extends from the existing driveway. The turn should not be terminated with a 90 degree.~~
- ~~16. Staff would suggest moving the accessible stalls west to be closer to the main entrance.~~
- ~~17. Please adjust note J to require the turnaround to be paved.~~
- ~~18. Please indicate the cladding on the retaining and note that it should match the principal building.~~

Sheet C500

- ~~19. Several areas with overlapping text. Please fix.~~
20. **Reconcile Structures ST-2a and ST-10. Details and site plan do not match. Are these structures nyloplast, or concrete? Reconcile Structures ST-2a and ST-10. Details have not been fixed. Inverts do not match, and pipe materials and sizes don't match site plan and Stormtech sheets.**
- ~~21. Is there a subdrain for the building? Where are the downspouts connecting to the storm sewer?~~

- ~~22. Staff would suggest shifting the western parking lot light to the east approximately 40 feet. This will allow it to remain within the corresponding island should the driveway ever be shared.~~
- ~~23. Staff would suggest shifting the eastern parking lot light to the west approximately 17 feet. This will allow it to remain within the corresponding island should the driveway ever be shared and position it better outside of the radii.~~
24. Please identify the location of the FDC. Note that it must be accessible with a clear and open path (no parking stall in front. It must also be within 100-feet of a hydrant. **FDC is not remote, and has parking in front of it. Please revise.**
- ~~25. Please add restrained joint fittings to note 1. B.~~
- ~~26. Please verify water service size; plan view shows 2" and note 1. C. says 1 1/2" note material as cooper.~~
- 27. Please note that the building will need to be outfitted with a fire suppression system. As such, please show the required 6" fire service into the building.**
28. Please use 6" PVC SDR 23.5 service for commercial building services. **Revise to 6"**
- ~~29. The tap to the existing sanitary is to be completed utilizing a Romac Saddle or approved equal. Note that the existing main is to be tested and video inspected at the tap location~~
- ~~30. Under plan note 4.C. if a pipe section is needed after removal of the FES it is to be same size and material as existing.~~
- ~~31. Please label all pipe materials on proposed storm sewer lines.~~
- 32. Pipe P-5B slope should be 0.6% as shown being required on SWMP.**
- 33. ST-5B needs invert for 8" HDPE**
- 34. Please relocate the hydrants into the islands to provide better access.**

Sheet C600

- ~~35. Please adjust the existing FES so that it is not in the side slope.~~

Sheet C700

36. Please revise all landscaping minimums to reflect Heritage PUD requirements. This applies to both open space and street frontage requirements. **Update to reflect the minimum 25% open space. Note that there are street frontage tree requirements.**

Open Space Trees

- 10 overstory
- 5 understory
- 3 evergreen
- 28 shrubs

Street Frontage (141)

- 3 overstory
- 6 understory
- 14 shrubs

Street Frontage (Gateway)

- 3 overstory
- 6 understory
- 14 shrubs

37. Tree and shrub species are to be consistent with Heritage PUD requirements. **See above.**

~~38. Islands shall be landscaped.~~

~~39. Please include landscaping as a method of screening for the ground mounted mechanical units.~~

Sheet C800

~~40. Please provide the pole and canvas color for the shade structure.~~

Lighting

41. Please revise the parking lot fixture to meet the Heritage PUD requirements. **Please resubmit photometrics with revised pole/fixture.**

~~42. Staff questions if any wall pack lights are to be provided. Note that facade lighting along the street frontages is encouraged.~~

Architecture

- ~~43. Please revise the elevation directions to be accurate.~~
44. Please provide material calculations for the principal vs trim elements. **Please revise plans as the Heritage PUD requires that 75% of the wall areas be clad in primary materials.**
- ~~45. Please add dormers to the north elevation (south).~~
- ~~46. Please consider increasing the architectural detailing along the elevation that faces HWY 141. Additional glazing, or a more pronounced dormer would be helpful.~~

SWPPP

47. Page 4: What is the actual site area (1.28, 1.31, 1.48 acres, something else)?
48. Page 5: Stopped reviewing at page 5. The report is not complete.

SWMP

49. Page 2: Report now says 1.28 acres and SWPPP says 1.48 acres. Additionally, not all of the proposed construction lies on lot 7 (1.28 acres). Please address and fix in all applicable areas of the report.
50. Page 4: Total site area adds up to 1.31 acres?
51. Page 5: P-2A shows pipe material as RCP on plans; P-9B is 8" on plan; P-10 is HDPE on plans, not RCP; and P-5D comment should say "CO 3+4 to ST-5B", not "ST-5A".
52. Page 9 and 13: Details for 3" orifice invert do not match plans. Please rectify.
53. Sheet 3 of Stormtech Sheets: 6" ADS Pipe should be 4". As shown on site plan.
54. Sheet 4 of Stormtech Sheets: Drawing does not match site plan. Make sure eastern inlet structure lies within low spot of grading plan.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: January 27, 2020
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: February 4, 2020 at 5:30 at the Grimes City Hall

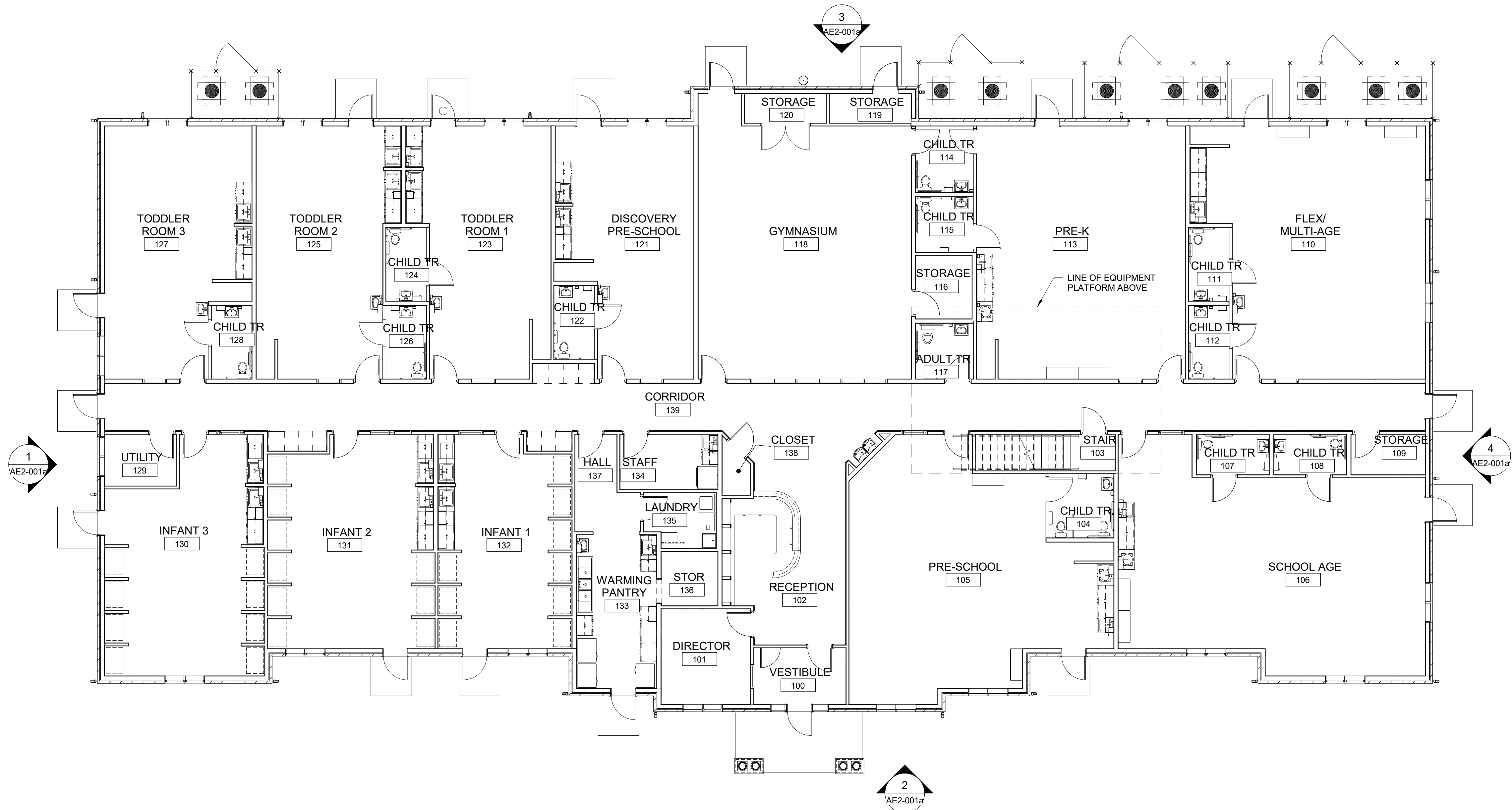
COUNCIL MEETING: February 25, 2020 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

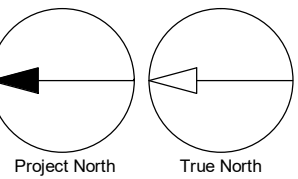
A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff", is positioned above the printed name.

Alex Pfaltzgraff
Development Services Director



1 FIRST FLOOR PLAN
AE1-200 SCALE: 1/8" = 1'-0"

- PRIMARY ELEMENTS (68%)
- BRICK
 - CMU BLOCK
 - FENESTRATIONS
- TRIM ELEMENTS (32%)
- LIMESTONE ACCENTS
 - METAL TRIM
 - VINYL SIDING



CLIENT

EIGHT

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Troy, MI, 48064

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ISSUES

No.	DESCRIPTION	DATE
A	SITE PLAN APPROVAL	2020-11-11
B	SITE PLAN APPROVAL REV01	2020-01-13

CONSULTANTS

WSP USA BUILDINGS INC.
600 WEST CHICAGO AVENUE
SUITE 650
CHICAGO, ILLINOIS 60654
TEL +1312.274.2400
www.wsp.com

SEAL

PROJECT

KINDERCARE LEARNING CENTER

GRIMES, IA

PROJECT NO:

122888

DRAWN BY:

C.GREER

CHECKED BY:

E.SHELINE

PROJECT MGR:

M.STOCK

APPROVED BY:

L.SMIGLIANI

SCALE:

As Indicated

DATE:

2020-01-13

SHEET TITLE

FIRST FLOOR PLAN

SHEET NUMBER

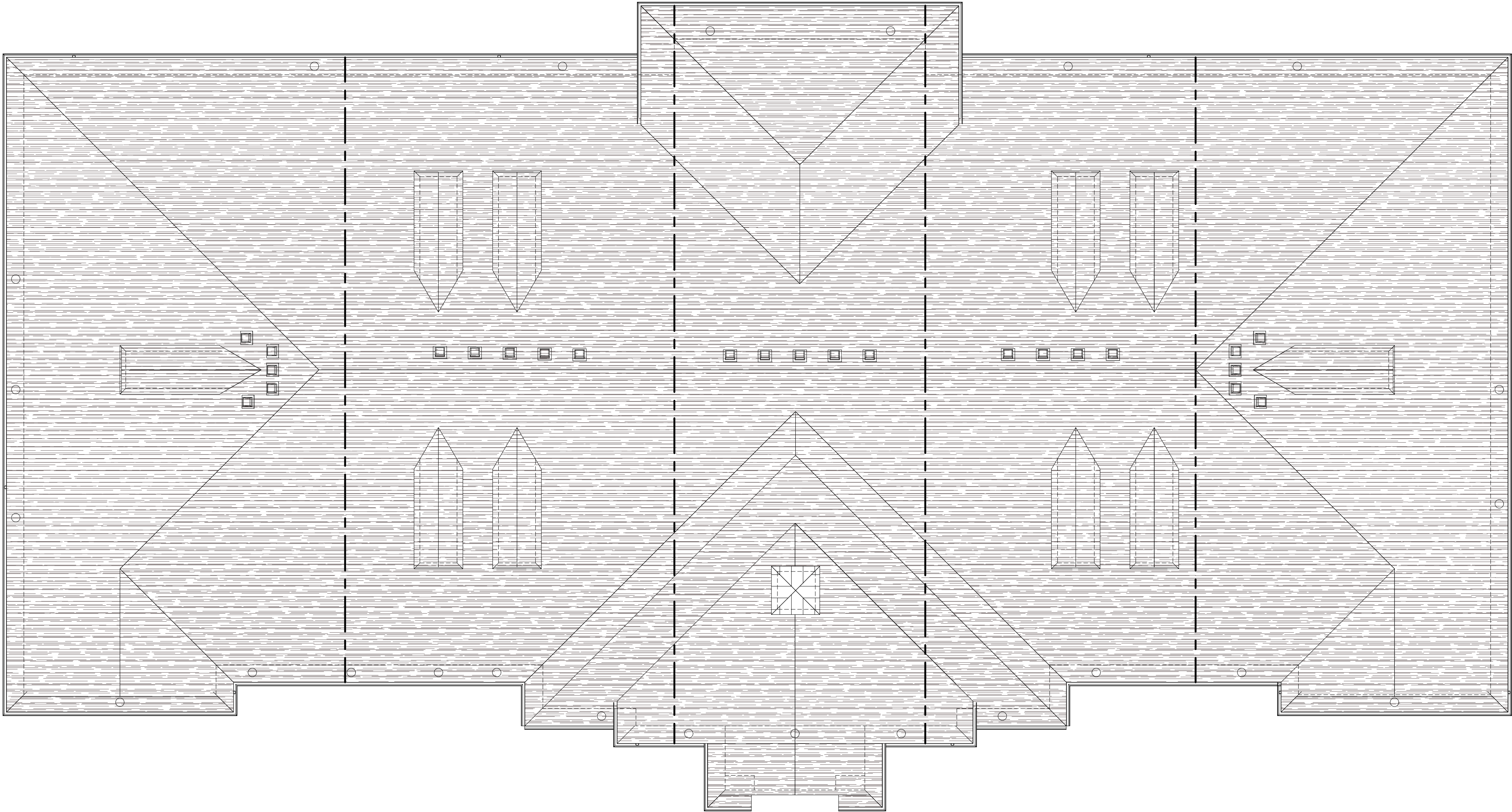
AE1-100a

ISSUE

B

NOT FOR CONSTRUCTION





1 ROOF PLAN
SCALE: 1/8" = 1'-0"

ROOF PLAN NOTES

LOCATE ALL PLUMBING STACKS NEAR ROOF PLANE.
VERIFY THAT NO VENTS ARE VISIBLE FROM THE STREET.

PROVIDE PREFINISHED METAL DRIP EDGE AT ALL ROOF EAVES AND RAKES.

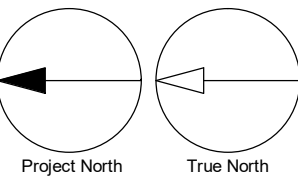
PROVIDE PREFINISHED 6" METAL GUTTERS AND DOWNSPOUTS - COORDINATE DOWNSPOUT LOCATIONS WITH OWNER & CIVIL ENGINEER IN FIELD.

PROVIDE SELF-ADHERED ROOFING UNDERLAYMENT (GRACE ICE & WATER SHIELD OR APPROVED EQUAL) AT ALL EAVES AND VALLEYS 30" PAST THE INTERIOR OF THE EXTERIOR WALL AND UP EACH VALLEY SIDE 18" MINIMUM.

PROVIDE SELF-ADHERED ROOFING UNDERLAYMENT (GRACE ICE & WATER SHIELD OR APPROVED EQUAL) AT ALL DORMERS, TYPICAL.

SADDLE SHALL BE SINGLE PLY 60 MIL EPDM WITH PREFINISHED METAL EDGE FLASHING WITH DRIP EDGE. INSTALL IN STRICT COMPLIANCE WITH MANUFACTURER'S INSTALLATION SPECIFICATION. MINIMUM SLOPE TO BE 1/4" PER FOOT.

PAINT ALL ROOF PENETRATIONS TO MATCH ROOF.



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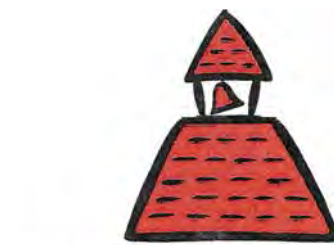


CONSULTANTS



WSP USA BUILDINGS INC.
600 WEST CHICAGO AVENUE
SUITE 650
CHICAGO, ILLINOIS 60654
TEL +1312.274.2400
www.wsp.com

SEAL



KinderCare
EDUCATION

PROJECT
KINDERCARE LEARNING
CENTER

GRIMES, IA

PROJECT NO:
122888

DRAWN BY:
C.GREER

CHECKED BY:
E.SHELINE

PROJECT MGR:
M.STOCK

APPROVED BY:
L.SMIGLIANI

SCALE:
As indicated

DATE:
2020-01-13

SHEET TITLE

ROOF PLAN

SHEET NUMBER

AE1-300a

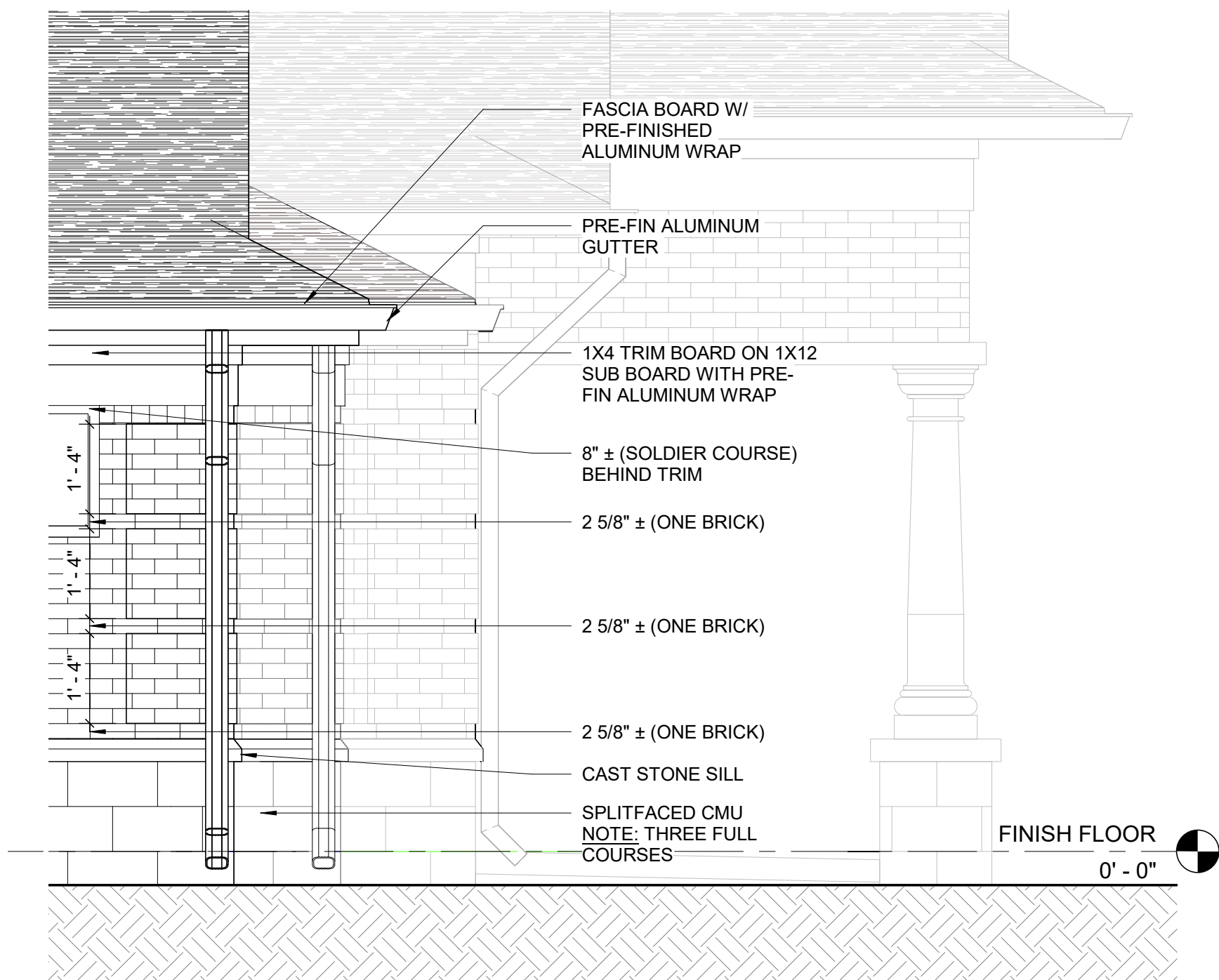
ISSUE

B

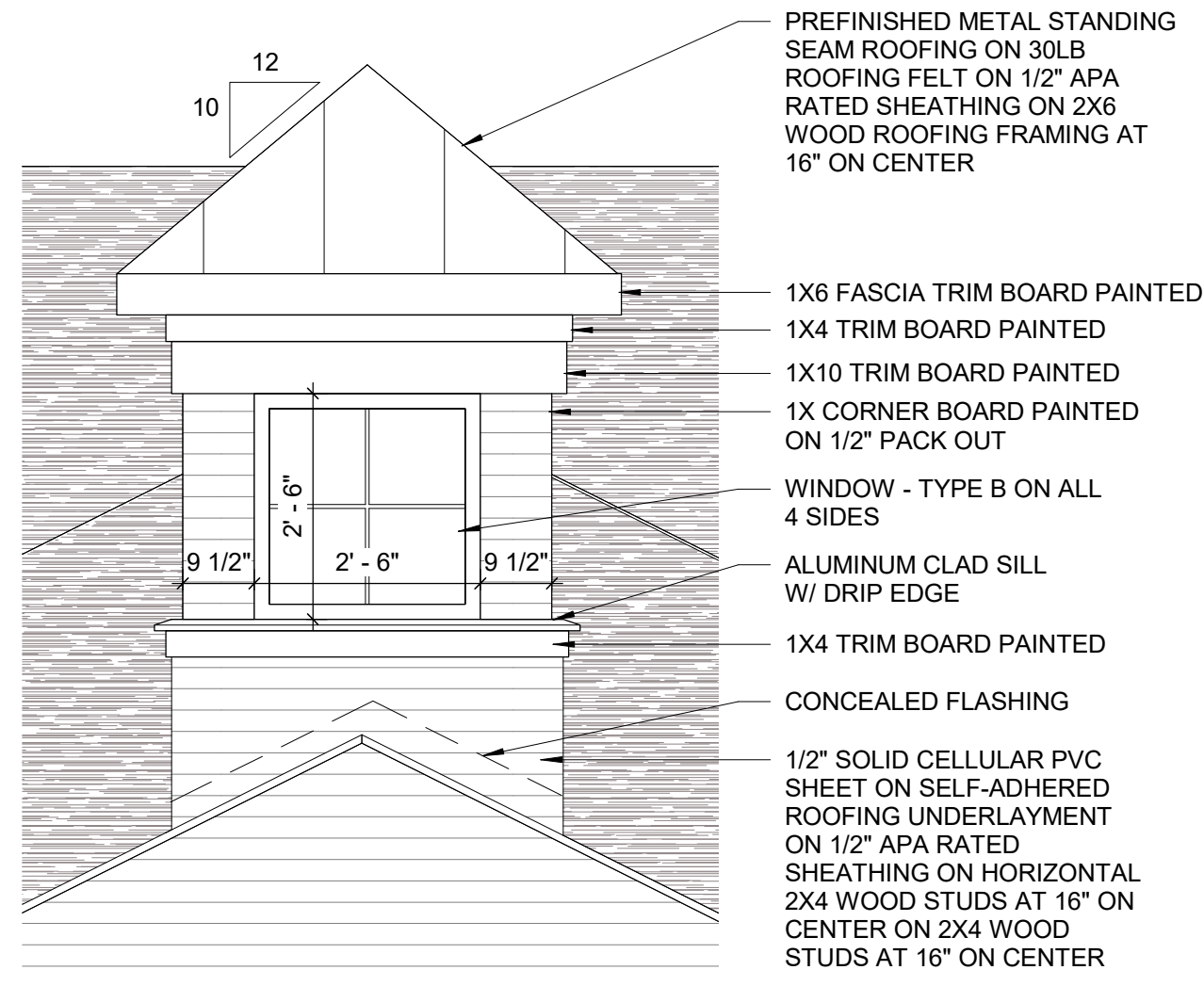
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1/8" = 1'-0"

SCALE CHECK
1/8" = 1'-0"



6 ELEVATION DETAIL - QUION
SCALE: 1/2" = 1'-0"



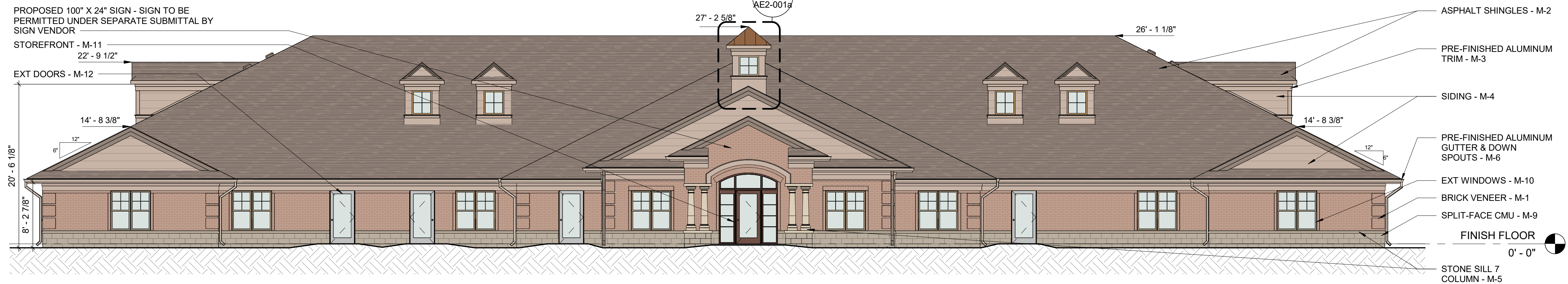
5 ELEVATION DETAIL - CUPOLA
SCALE: 1/2" = 1'-0"

EXTERIOR ELEVATION MATERIALS

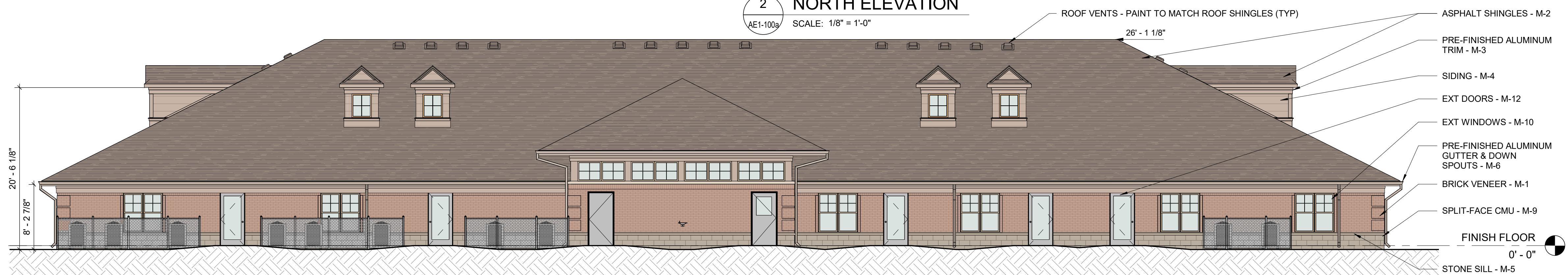
SYMBOL	ITEM	MANUFACTURER	MODEL	COLOR / FINISH	REMARKS
M-1	BRICK	BRAMPTON BRICK	CROSSROADS SERIES	JASPER	IF BRICK IS NOT READILY AVAILABLE PROVIDE OPTIONS FOR OWNER TO APPROVE
M-2	ASPHALT SHINGLES	GAF ROOFING	TIMBERLINE HD - LIFETIME SHINGLES	WEATHERED WOOD	
M-3	BREAK METAL TRIM	QUALITY EDGE	TRULINE EMBOSSED TRIM COIL	807 CLAY	
M-4	VINYL SIDING	GEORGIA PACIFIC	FOREST RIDGE 5" SIDING	MIST	
M-5	SILLS & COLUMNS	ESCHELON MASONRY	CORDOVA STONE	LIMESTONE, GROUNDFACE	
M-6	PRE-FIN ALUM GUTTER	PLY-GEM MASTIC	5" K-STYLE SEAMLESS GUTTER	PEBBLESTONE CLAY	HISTORICALLY 5" K-STYLE GUTTERS
M-8	STANDING SEAM METAL ROOF	McELROY METAL	INSTALOC STANDING SEAM SYSTEM, STYLE - PLANK PROFILE	COPPER PENNY METALLIC	
M-9	SPLIT FACE CMU	ESCHELON MASONRY	MESASTONE	COUNTY GRAY	IF CMU IS NOT READILY AVAILABLE PROVIDE OPTIONS FOR OWNER TO APPROVE
M-10	WINDOW FRAME	JELD-WEN	VARIES - REFER TO WINDOW TYPES	DESERT SAND	VINYL SINGLE HUNG
M-11	STOREFRONT	-	-	DARK BRONZE ALUMINUM	
M-12	EXTERIOR DOORS	SHERWIN WILLIAMS	-		HM DOOR, SW 701 GRAY SCREEN - HIGH GLOSS HM FRAME, PAINT - TIMELY SC103 BLACK

NOTE:
- TYPICAL DORMERS M-4 SIDING, PAINT TRIM SW9172 TO MATCH.
- CUPOLA TO BE PAINTED CLAY & DESERT SAND, PAINT SW9117 TO MATCH M-3.

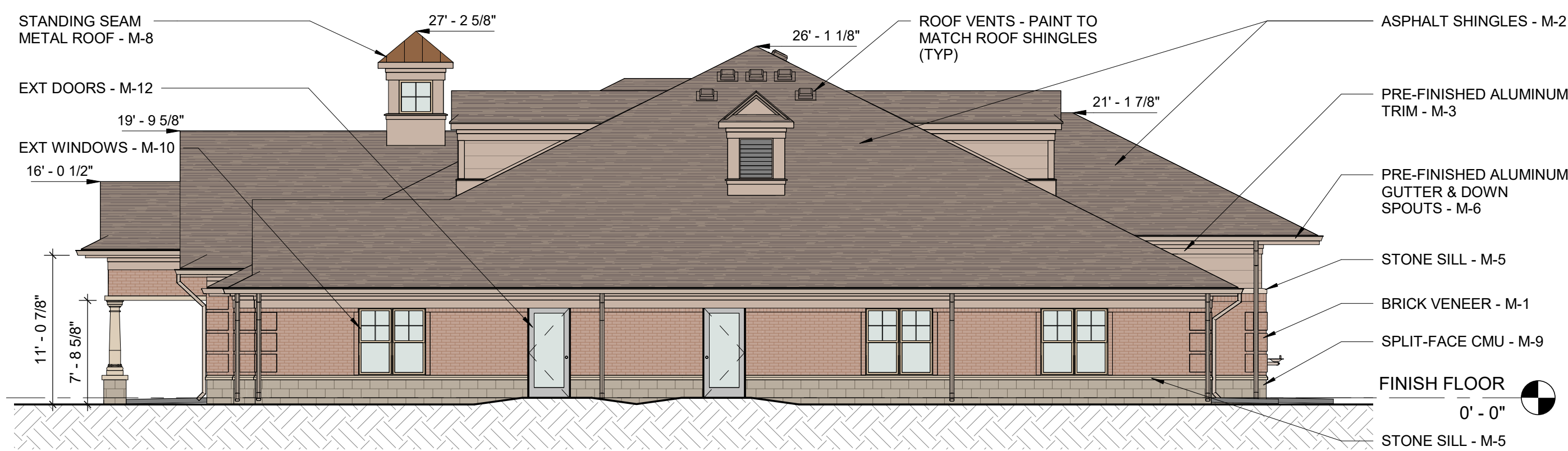
- PRIMARY ELEMENTS (68%)**
- BRICK
 - CMU BLOCK
 - FENESTRATIONS
- TRIM ELEMENTS (32%)**
- LIMESTONE ACCENTS
 - METAL TRIM
 - VINYL SIDING



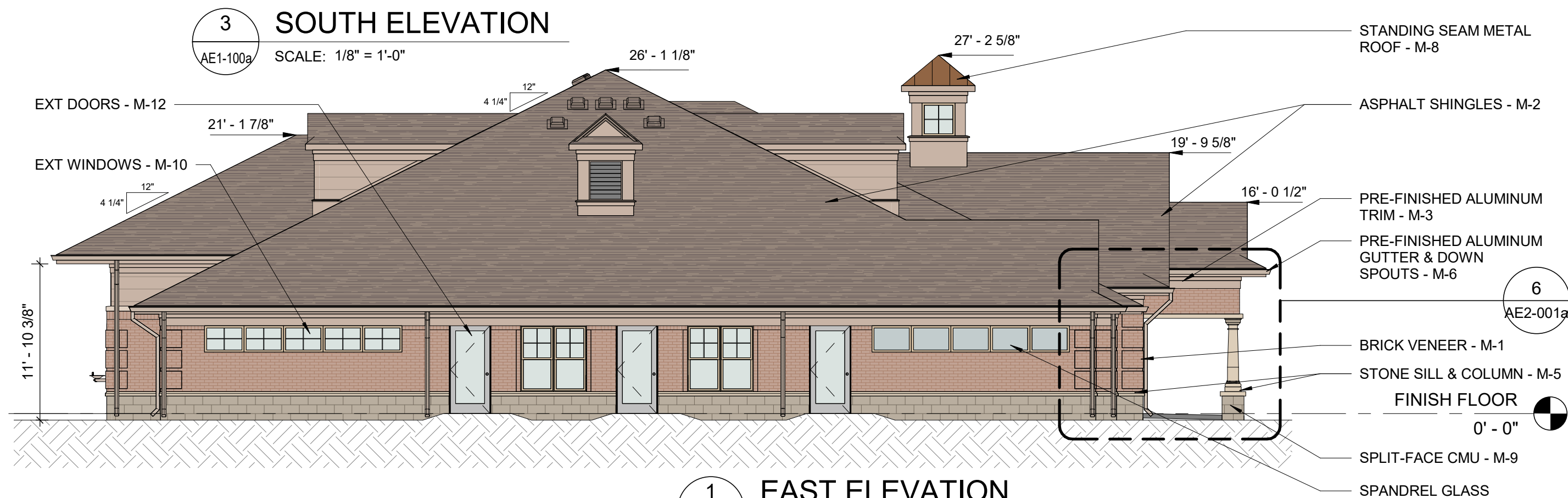
2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION
SCALE: 1/8" = 1'-0"



1 EAST ELEVATION
SCALE: 1/8" = 1'-0"

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NOT FOR CONSTRUCTION



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wsp WSP USA BUILDINGS INC.
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www.wsp.com

SEAL

SCALE



PROJECT
KINDERCARE LEARNING CENTER

GRIMES, IA

PROJECT NO:
122888

DRAWN BY:
C.GREER

CHECKED BY:
E.SHELINE

PROJECT MGR:
M.STOCK

APPROVED BY:
L.SMIGLIANI

SCALE:
As indicated

DATE:
2020-01-13

SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER
AE2-001a

ISSUE
B

Heritage Review Committee

DATE: 27 January 2020

SUBJECT: Kindercare



REVIEW COMMENTS:

The Heritage Review Committee received plan submittals for architectural elements and site planning on January 22, 2021. Below are comments from the Review Committee that the committee would like to see addressed prior to approval at the City Council.

1. Architectural Elevations

- The overall aesthetic is in keeping with the architectural standards of the PUD. Recommend working with City Staff to confirm total percentages of materials, but no changes are requested to the building plans as submitted

2. Photometric / Lighting

- The proposed fixtures are not allowed for parking lot lighting within Heritage. Review PUD requirements, update Lighting Plan as needed, and resubmit for additional review.

3. Site Plan

- There are no bike racks or benches provided on the site. Consider adding both to the public areas at the front of the building.
- Recommend substituting a hardier material than cedar for the gates on the trash enclosure.
- Per the PUD, no more than 12 parking stalls are allowed in a continuous row. Adjust islands to meet this requirement.
-

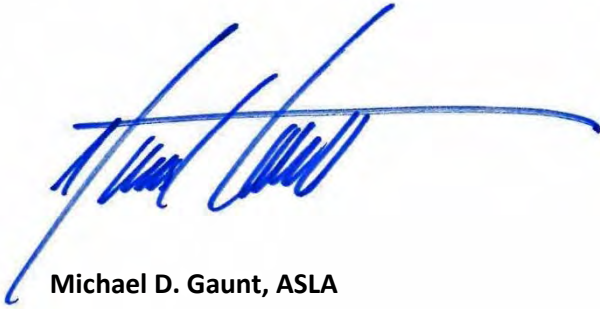
4. Landscape Plan: L1

- Calculations indicate 10% required open space. The PUD requires 25% open space when calculating the required number of plants for the site. Update calculations and add trees/shrubs as necessary.
- Replace proposed Fine Line Buckthorn with a different plant. Buckthorn is a highly invasive species in the Midwest. The intent of the PUD is to use more native or native-derived nursery varieties. Recommend an upright arborvitae such as "Emerald" or similar.

- o The general intent of the Heritage PUD is to focus on native plants as the majority plant material for the site. Review the 'Recommended Plant Species' lists in the PUD when considering plant material.
- o Per PUD, each parking lot island of the size proposed must have 1 overstory tree. Replace the proposed Ivory Silk Lilacs with an overstory tree.
- o Add note to the landscape sheet that no substitutions will be allowed without the approval of the City of Grimes.

This review is done as a general review of the project as it relates to the PUD and is intended as a supplemental to the City of Grimes Engineer review of the submittal documents.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read 'Michael D. Gaunt', with a long horizontal flourish extending to the right.

Michael D. Gaunt, ASLA
Heritage Review Committee

SITE PLAN

FOR

KINDER CARE- GRIMES

1101 NE GATEWAY DR

CITY OF GRIMES, POLK COUNTY, IOWA

OWNER

HERITAGE 141, LLC

6205 MILLS CIVIC PARKWAY SUITE 201

WEST DES MOINES, IA 50266-5354

CONTACT: ANDREW LARSON

PHONE: (515) 964-5229

APPLICANT

EIGAT

3221 W BIG BEAVER RD, SUITE 111

TROY, MI 48084

CONTACT: JON SZUTARSKI

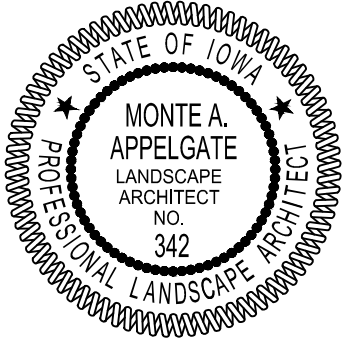
PHONE: (248) 817-1691



VICINITY MAP

INDEX OF SHEETS

C101	PROJECT INFORMATION
C200	EXISTING CONDITIONS & DEMOLITION PLAN
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C500	UTILITY PLAN
C600	GRADING AND EROSION CONTROL PLAN
C700	PLANTING PLAN
C800	SITE DETAILS
C801	SITE DETAILS
C900	PHOTOMETRIC PLAN
AE1-100A	FIRST FLOOR PLAN (BY OTHERS)
AE1-300A	ROOF PLAN (BY OTHERS)
AE2-001A	EXTERIOR ELEVATIONS (BY OTHERS)

	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, ASLA	Date
	License Number 342	
	Pages or sheets covered by this seal: SHEET C700	

	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.	
	Jason A. Ledden, P.E.	Date
	License Number 24117	
	My License Renewal Date is December 31, 2020	
	Pages or sheets covered by this seal: SHEETS C101 - C600	

KINDER CARE-GRIMES

TITLE SHEET

GRIMES, IOWA

SNYDER & ASSOCIATES, INC. |

2727 S.W. SNYDER BLVD
ANKENY, IOWA 50023
515-984-2020 | www.snyder-associates.com



Project No: 119.0929.01

Sheet C100

		AS PER CITY COMMENTS	1-27-2020	LJW	
2		AS PER CITY COMMENTS	1-13-2020	LJM	
1		REVISION	DATE	BY	
	MARK	Engineer: LJW	Checked By: JAL	Scale: 1" = 250'	
		Technician: LJW	Date: 12-20-2019	T-R-S: TTN-RRW-SS	
					Project No: 119.0929.01
					Sheet C100

LEGEND

FEATURES

Spot Elevation	EXISTING x93.0	PROPOSED x93.0
Contour Elevation	60	60
Fence (Barbed, Field, Hog)		
Fence (Chain Link)		
Fence (Wood)		
Fence (Silt)		
Tree Line		
Tree Stump		
Deciduous Tree \ \ Shrub		
Coniferous Tree \ \ Shrub		
Communication		
Overhead Communication	DOT (*)	
Fiber Optic	DOT (*)	
Underground Electric	FOI (*)	
Overhead Electric	UEI (*)	
Gas Main with Size	OEI (*)	
High Pressure Gas Main with Size	1"GI (*)	
Water Main with Size	4"HPGI (*)	
Sanitary Sewer with Size	8"WI (*)	
Duct Bank	8"SI (*)	
Test Hole Location for SUE w/ID		

(*) Denotes the survey quality service level for utilities

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

UTILITY WARNING

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

UTILITY QUALITY SERVICE LEVELS

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

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

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

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

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

UTILITY CONTACT INFORMATION

C1-COMMUNICATION	CENTURYLINK Tom Sturmer 720-578-8090 thomas.sturmer@centurylink.com	FO1-FIBER OPTIC	MI-FIBER Jack Jones 515-897-9192 jack@grm.net
W-WATER MAIN	CITY OF GRIMES Andrew Wood 515-822-2320 awood@uswatercorp.net	CLEAR PER EMAIL	BLACK HILLS ENERGY GRIMES Mike Broshous 515-987-8971 mike.broshous@blackhillscorp.com
UE-UNDERGROUND ELECTRIC	MID AMERICAN ENERGY Craig Ranfeld 515-252-6632 MECDSDMDesign.Locates@midamerican.com		
NO MAPS RECEIVED	MEDIACOM COMMUNICATIONS CORP Paul May 515-246-2252 pmay@mediacomcc.com		

GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS.
- A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT CITY OF GRIMES ENGINEERING DEPT. (515.986.4050).
- ALL PERMITS (IDNR, SWP, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS OF ALL IMPROVEMENTS AS PER CITY STANDARD PROCEDURES.
- TYPICAL BUILDING SERVICE LAYOUT TO REFLECT THE CITY'S SERVICE ORDER FROM LEFT TO RIGHT FACING THE LOT, SANITARY, WATER, SUMP
- A KNOX BOX IS REQUIRED BY THE FIRE DEPARTMENT AND SHALL BE OBTAINED AT CITY HALL.
- ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHT-OF-WAYS.
- PROVIDE A 4-YEAR MAINTENANCE BOND FOR ALL PUBLIC IMPROVEMENTS.
- NOTIFY UTILITY PROVIDERS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH UTILITY PROVIDERS AS NECESSARY DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION, AND DEPTH OF ALL UTILITIES. PROTECT ALL UTILITY LINES AND STRUCTURES NOT SHOWN FOR REMOVAL OR MODIFICATION. ANY DAMAGES TO UTILITY ITEMS NOT SHOWN FOR REMOVAL OR MODIFICATION SHALL BE REPAIRED TO THE UTILITY OWNER'S SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.
- CONSTRUCTION OF ALL STREET AND UTILITY IMPROVEMENTS SHALL CONFORM TO THE 2020 SUDAS STANDARD SPECIFICATIONS AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS AND THE SOILS REPORTS PREPARED BY OTHERS.
- LENGTH OF UTILITIES SHOWN ON PLANS ARE DIMENSIONED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
- ALL TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). WHEN CONSTRUCTION ACTIVITIES OBSTRUCT PORTIONS OF THE ROADWAY, FLAGGERS SHALL BE PROVIDED. FLAGGERS SHALL CONFORM TO THE MUTCD IN APPEARANCE, EQUIPMENT AND ACTIONS.
- NOTIFY OWNER, ENGINEER AND THE CITY OF GRIMES AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
- CONSTRUCT MANHOLES AND APPURTENANCES AS WORK PROGRESSES. BACKFILL WITH SUITABLE MATERIAL AND COMPACT TO 95% MAXIMUM DENSITY.
- IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
- ALL FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED AND NOTED ACCORDINGLY ON THE AS-BUILT DOCUMENTS.
- DIMENSIONS, BUILDING LOCATION, UTILITIES AND GRADING OF THIS SITE ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN. DEVIATIONS MAY BE NECESSARY IN THE FIELD. ANY SUCH CHANGES OR CONFLICTS BETWEEN THIS PLAN AND FIELD CONDITIONS ARE TO BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT VERIFICATION OF ALL SITE IMPROVEMENTS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO LOAD AND TRANSPORT ALL MATERIALS CONSIDERED TO BE UNDESIRABLE TO BE INCORPORATED INTO THE PROJECT TO AN APPROVED OFF-SITE WASTE SITE.
- CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES, MINIMUM 8" DEPTH IN THE CITY RIGHT-OF-WAY AND EASEMENTS.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES IN A TIMELY MANNER.
- THE ADJUSTMENT OF ANY EXISTING UTILITY APPURTENANCES TO FINAL GRADE IS CONSIDERED INCIDENTAL TO THE SITE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION CONTROL MEASURES AS NECESSARY. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING ANY EXISTING EROSION CONTROL MEASURES ON SITE AT THE TIME OF CONSTRUCTION. GRADING AND SOIL EROSION CONTROL CODE REQUIREMENTS SHALL BE MET BY CONTRACTOR. A GRADING PERMIT IS REQUIRED FOR THIS PROJECT.
- CONTRACTOR TO COORDINATE NATURAL GAS, ELECTRICAL, TELEPHONE AND ANY OTHER FRANCHISE UTILITY SERVICES WITH UTILITY SERVICE PROVIDER, THE CITY OF GRIMES, AND THE OWNER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN MINIMUM 18" VERTICAL AND HORIZONTAL CLEARANCE BETWEEN UTILITIES. CONTRACTOR TO COORDINATE UTILITY ROUTING TO BUILDING AND VERIFY CONNECTION LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION.
- NO GROUND DISTURBING ACTIVITY WILL BE ALLOWED PRIOR TO ISSUANCE OF AN NPDES GENERAL PERMIT NO. 2, SWPPP AND CITY GRADING PERMIT.
- HANDICAPPED ACCESS STALLS SHALL BE SIGNED "NO PARKING" OR OTHERWISE STRIPED TO INDICATE "NO PARKING".
- CONTACT THE CITY OF GRIMES PUBLIC WORKS DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO MAKING CONNECTIONS TO PUBLIC UTILITIES.

PROPERTY DESCRIPTION

LOT 7 AND THE THE SOUTH 20.00 FEET OF LOT 6, HERITAGE AT GRIMES COMMERCIAL PLAT 2, AN OFFICIAL PLAT IN THE CITY OF GRIMES, POLK COUNTY, IOWA.

SUBJECT TO ROAD RIGHTS-OF-WAY AND EASEMENTS, COVENANTS AND RESTRICTIONS OF RECORD.

PROPERTY ADDRESS

1101 NE GATEWAY DR
CITY OF GRIMES, POLK COUNTY, IOWA

ZONING

R-4: HERITAGE PUD

BULK REGULATIONS

FRONT YARD SETBACK = 20'
REAR YARD SETBACK = 15'
SIDE YARD SETBACK = 0'

PARKING REQUIREMENTS

3 SPACE PER 1000 SF OF GROSS FLOOR AREA
11,990 SF / 1000 SFx 3 SPACES = 36 SPACES REQUIRED
10 EMPLOYEES = 10 SPACES REQUIRED
1 SPACE PER EMPLOYEE ON MAX SHIFT = TOTAL 46 SPACES REQUIRED
46 SPACES PROVIDED
(INCLUDING 2 ACCESSIBLE STALLS)

CONTROL POINTS

		IOWA REGIONAL COORDINATE SYSTEM ZONE 8 (AMES-DES MOINES) NAD83(2011)(EPOCH 2010.00) IARTN DERIVED - US SURVEY FEET
CP1	N=7527360.09 E=18483472.94 Z=958.69 CUT 'X' ON BACK OF CURB, WEST SIDE OF NE GATEWAY DR ACROSS FROM HYDRANT, NW CORNER OF SITE. (AS SHOWN ON SURVEY)	
CP2	N=7527068.26 E=18483554.92 Z=959.73 CUT 'X' ON BACK OF CURB, WEST SIDE OF NE GATEWAY DR ACROSS FROM 1ST PP NORTH OF N DRIVE TO RACCOON VALLEY BANK. (AS SHOWN ON SURVEY)	
CP3	N=7527080.76 E=18484066.15 Z=967.84 1/2" REBAR W/ RPC AT TOE OF DITCH, WEST SIDE OF HWY 141 ±30' EAST OF FIBER OPTIC POST, SE CORNER OF SITE. (AS SHOWN ON SURVEY)	
CP4	N=7527333.63 E=18484080.33 Z=970.14 1/2" REBAR, W/ RPC HALFWAY UP BANK OF DITCH, WEST SIDE OF HWY 141 IN LINE WITH "BE PREPARED TO STOP" SIGNS, NE CORNER OF SITE. (AS SHOWN ON SURVEY)	

BENCHMARKS

	NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 - GEOID12A) IARTN DERIVED - US SURVEY FEET
	ELEV=961.36 BURY BOLT ON HYDRANT AT EAST SIDE NE GATEWAY DR ± 20' N OF 1ST PP N OF N DRIVE TO RACCOON VALLEY BANK. (AS SHOWN ON SURVEY)
BM2	ELEV=962.79 BURY BOLT ON HYDRANT AT EAST SIDE OF SOUTH DRIVE TO CASEY'S @ 90° BEND IN ROAD. (AS SHOWN ON SURVEY)



POLLUTION PREVENTION NOTES

A. POLLUTION PREVENTION AND EROSION PROTECTION

- CODE COMPLIANCE: THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL POTENTIAL POLLUTION AND SOIL EROSION CONTROL REQUIREMENTS OF THE IOWA CODE, THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) NPDES PERMIT, THE U.S. CLEAN WATER ACT AND ANY LOCAL ORDINANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT AGAINST EROSION AND POLLUTION FROM THIS PROJECT SITE AND ALL OFF-SITE BORROW OR DEPOSIT AREAS DURING PERFORMANCE OR AS A RESULT OF PERFORMANCE.
- DAMAGE CLAIMS: THE CONTRACTOR WILL HOLD THE OWNER AND ARCHITECT / ENGINEER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGES TO ADJOINING PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES INCURRED TO OWNER. FURTHER, IF THE CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH SEDIMENTATION OR DEBRIS WHICH COMES ONTO ADJOINING PUBLIC OR PRIVATE PROPERTY, THE OWNER MAY, BUT NEED NOT, REMOVE SUCH ITEMS AND DEDUCT THE COST THEREOF FROM AMOUNTS DUE TO THE CONTRACTOR.

B. STORM WATER DISCHARGE PERMIT

- THIS PROJECT REQUIRES COVERAGE UNDER THE NPDES GENERAL PERMIT NO. 2 FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDNR, AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLIANCE WITH AND FULFILLMENT OF ALL REQUIREMENTS OF THE NPDES GENERAL PERMIT NO. 2 AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- ALL DOCUMENTS RELATED TO THE STORM WATER DISCHARGE PERMIT, INCLUDING, BUT NOT LIMITED TO, THE NOTICE OF INTENT, PROOF OF PUBLICATIONS, DISCHARGE AUTHORIZATION LETTER, CURRENT SWPPP, SITE INSPECTION LOG, AND OTHER ITEMS, SHALL BE KEPT ON SITE AT ALL TIMES AND MUST BE PRESENTED TO ANY JURISDICTIONAL AGENCIES UPON REQUEST. FAILURE TO COMPLY WITH THE NPDES PERMIT REQUIREMENTS IS A VIOLATION OF THE CLEAN WATER ACT AND THE CODE OF IOWA.
- A "NOTICE OF DISCONTINUATION" MUST BE FILED WITH THE IDNR UPON FINAL STABILIZATION OF THE DISTURBED SITE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES. ALL PLANS, INSPECTION REPORTS, AND OTHER DOCUMENTS MUST BE RETAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION. THE CONTRACTOR SHALL RETAIN A RECORD COPY AND PROVIDE THE ORIGINAL DOCUMENTS TO THE OWNER UPON PROJECT ACCEPTANCE AND/OR SUBMITTAL OF THE NOTICE OF DISCONTINUATION.

C. POLLUTION PREVENTION PLAN

- THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS A SEPARATE DOCUMENT IN ADDITION TO THESE PLAN DRAWINGS. THE CONTRACTOR SHOULD REFER TO THE SWPPP FOR ADDITIONAL REQUIREMENTS AND MODIFICATIONS TO THE POLLUTION PREVENTION PLAN MADE DURING CONSTRUCTION.
- THE SWPPP ILLUSTRATES GENERAL MEASURES AND BEST MANAGEMENT PRACTICES (BMP) FOR COMPLIANCE WITH THE PROJECT'S NPDES PERMIT COVERAGE. ALL BMP'S AND EROSION CONTROL MEASURES REQUIRED AS A RESULT OF CONSTRUCTION ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, NOTE AND IMPLEMENT. ADDITIONAL BMP'S FROM THOSE SHOWN ON THE PLAN MAY BE REQUIRED.
- THE SWPPP AND SITE MAP SHOULD BE EXPEDITIOUSLY REVISED TO REFLECT CONSTRUCTION PROGRESS AND CHANGES AT THE PROJECT SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL PERMIT AND SWPPP, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING BMP'S UNLESS INFEASIBLE OR NOT APPLICABLE:
 - UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN DISCHARGING FROM BASINS, PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS, DIRECT STORM WATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORM WATER INFILTRATION, AND MINIMIZE SOIL COMPACTION.
 - INSTALL PERIMETER AND FINAL SEDIMENT CONTROL MEASURES SUCH AS SILT BARRIERS, DITCH CHECKS, DIVERSION BERMS, OR SEDIMENTATION BASINS DOWNSTREAM OF SOIL DISTURBING ACTIVITIES PRIOR TO SITE CLEARING AND GRADING OPERATIONS.
 - PRESERVE EXISTING VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION AND LIMIT TO A MINIMUM THE TOTAL AREA DISTURBED BY CONSTRUCTION OPERATIONS AT ANY TIME.
 - MAINTAIN ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IN WORKING ORDER, INCLUDING CLEANING, REPAIRING, REPLACEMENT, AND SEDIMENT REMOVAL THROUGHOUT THE PERMIT PERIOD. CLEAN OR REPLACE SILT CONTROL DEVICES WHEN THE MEASURES HAVE LOST 50% OF THEIR ORIGINAL CAPACITY.
 - INSPECT THE PROJECT AREA AND CONTROL DEVICES (BY QUALIFIED PERSONNEL ASSIGNED BY THE CONTRACTOR) EVERY SEVEN CALENDAR DAYS. RECORD THE FINDINGS OF THESE INSPECTIONS AND ANY RESULTING ACTIONS IN THE SWPPP WITH A COPY SUBMITTED WEEKLY TO THE OWNER OR ENGINEER DURING CONSTRUCTION. REVISE THE SWPPP AND IMPLEMENT ANY RECOMMENDED MEASURES WITHIN 7 DAYS.
 - PREVENT ACCUMULATION OF EARTH AND DEBRIS FROM CONSTRUCTION ACTIVITIES ON ADJOINING PUBLIC OR PRIVATE PROPERTIES, INCLUDING STREETS, DRIVEWAYS, SIDEWALKS, DRAINAGEWAYS, OR UNDERGROUND SEWERS. REMOVE ANY ACCUMULATION OF EARTH OR DEBRIS IMMEDIATELY AND TAKE REMEDIAL ACTIONS FOR FUTURE PREVENTION.
 - INSTALL NECESSARY CONTROL MEASURES SUCH AS SILT BARRIERS, EROSION CONTROL MATS, MULCH, DITCH CHECKS OR RIPRAP AS SOON AS AREAS REACH THEIR FINAL GRADES AND AS CONSTRUCTION OPERATIONS PROGRESS TO ENSURE CONTINUOUS RUNOFF CONTROL. PROVIDE INLET AND OUTLET CONTROL MEASURES AS SOON AS STORM SEWERS ARE INSTALLED.
 - RESPREAD A MINIMUM OF 6 INCHES OF TOPSOIL (INCLUDING TOPSOIL FOUND IN SOD) ON ALL DISTURBED AREAS, EXCEPT WHERE PAVEMENT, BUILDINGS OR OTHER IMPROVEMENTS ARE LOCATED.
 - STABILIZE UNDEVELOPED, DISTURBED AREAS WITH MULCH, TEMPORARY SEED MIX, PERMANENT SEED MIX, SOD, OR PAVEMENT IMMEDIATELY AS SOON AS POSSIBLE UPON COMPLETION OR DELAY OF GRADING OPERATIONS. INITIATE STABILIZATION MEASURES IMMEDIATELY AFTER CONSTRUCTION ACTIVITY IS FINALLY COMPLETED OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WHICH WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
 - COORDINATE LOCATIONS OF STAGING AREAS WITH THE OWNER AND RECORD IN THE SWPPP. UNLESS NOTED OTHERWISE, STAGING AREAS SHOULD CONTAIN THE FOLLOWING: JOB TRAILERS, FUELING / VEHICLE MAINTENANCE AREA, TEMPORARY SANITARY FACILITIES, MATERIALS STORAGE, AND CONCRETE WASHOUT FACILITY. CONTROL RUNOFF FROM STAGING AREAS WITH DIVERSION BERMS AND/OR SILT BARRIERS AND DIRECT TO A SEDIMENT BASIN OR OTHER CONTROL DEVICE WHERE POSSIBLE. CONCRETE WASHOUT MUST BE CONTAINED ONSITE.
 - REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND SITE WASTE PRIOR TO FILING OF THE "NOTICE OF DISCONTINUATION".

KINDER CARE-GRIMES

PROJECT INFORMATION

GRIMES, IOWA

SNYDER & ASSOCIATES, INC. I



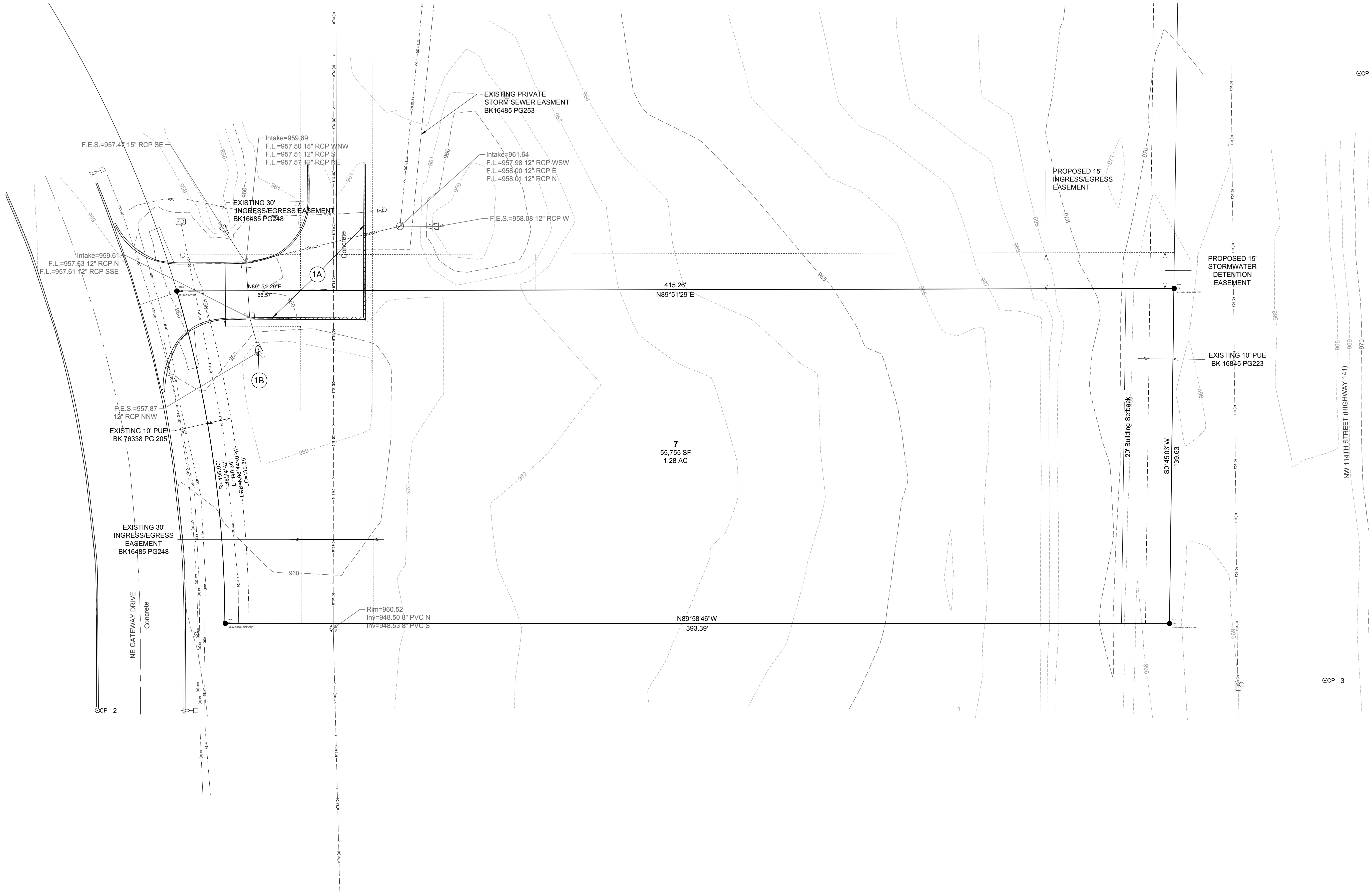
Project No: 119.0929.01

Sheet C101

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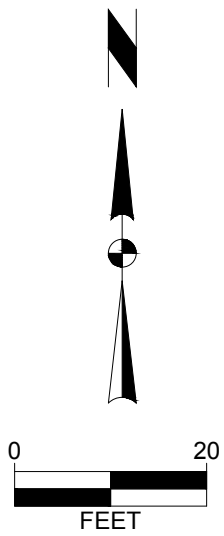
Project No: 119.0929.01

Sheet C101



DEMOLITION PLAN NOTES

- DEMOLITION:
 - GRIND CURB AND CONNECT TO EXISTING PAVEMENT WITH SUDAS TYPE A CONCRETE DRIVEWAY.
 - REMOVE EXISTING FES AND 9 LF OF 12" RCP AND CONNECT TO STORM SEWER W/ CONCRETE COLLAR. IF A PIPE SECTION IS NEEDED TO COMPLETE CONNECTION, IT SHALL MATCH EXISTING PIPE SIZE.

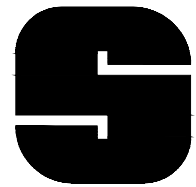


KINDER CARE-GRIMES

EXISTING CONDITIONS & DEMOLITION PLAN

GRIMES, IOWA

SNYDER & ASSOCIATES, INC. I



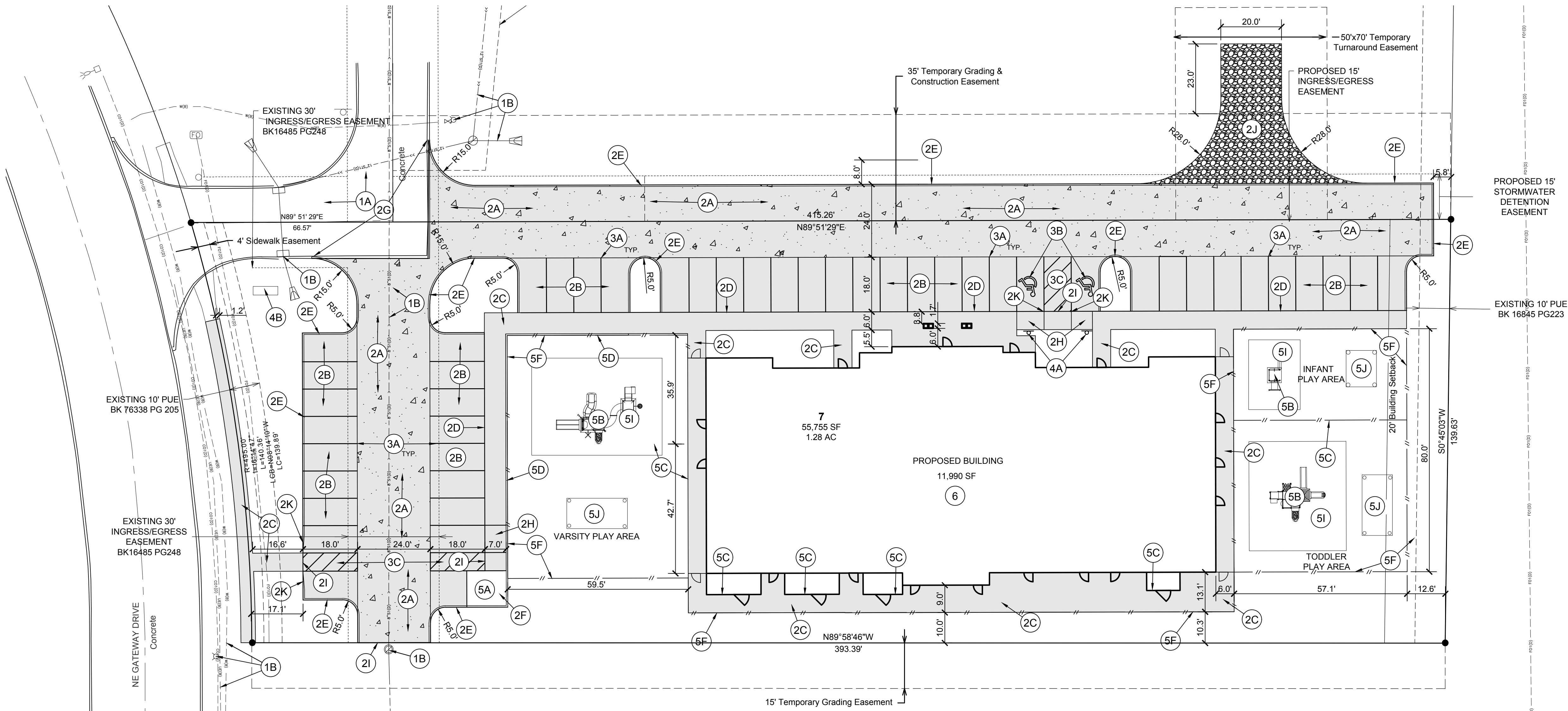
SNYDER
& ASSOCIATES

Project No: 119.0929.01

Sheet C200

2	AS PER CITY COMMENTS	1-27-2020	LMW		
1	AS PER CITY COMMENTS	1-13-2020	LMJ		
MARK	REVISION	DATE	BY		
Engineer: LMW	Checked By: JAL	Scale: 1" = 20'			
Technician: LMJ	Date: 12-20-2019	T-R-S: TTN-RRW-SS			
Project No: 119.0929.01			Sheet C200		

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DIMENSION PLAN NOTES

1. EXISTING FEATURES, PROTECT THE FOLLOWING:

- A. PAVEMENTS TO REMAIN.
- B. PROTECT EXISTING UTILITIES, NOT SCHEDULED FOR DEMOLITION.

2. PAVEMENTS, PROVIDE THE FOLLOWING:

- A. 6" DEPTH PCC DRIVES ON 4" GRANULAR SUBBASE ON 12" SUBGRADE PREPARATION COMPACTED TO 95% STANDARD PROCTOR.
- B. 5" DEPTH PCC PARKING ON 4" GRANULAR SUBBASE ON 12" SUBGRADE PREPARATION COMPACTED TO 95% STANDARD PROCTOR.
- C. 4" DEPTH PCC STANDARD SIDEWALK WITH 6" DEPTH SUBGRADE PREPARATION COMPACTED TO 95% STANDARD PROCTOR.
- D. 4" DEPTH PCC INTEGRAL SIDEWALK WITH 6" DEPTH SUBGRADE PREPARATION COMPACTED TO 95% STANDARD PROCTOR.
- E. STANDARD CURB.
- F. 7" DEPTH PCC TRASH ENCLOSURE ON 4" GRANULAR SUBBASE ON 12" SUBGRADE PREPARATION COMPACTED TO 95% STANDARD PROCTOR.
- G. GRIND CURB AND CONNECT TO EXISTING PAVEMENT WITH SUDAS TYPE A CONCRETE DRIVEWAY.
- H. PEDESTRIAN RAMP, MAXIMUM SLOPE OF 8.33%.
- I. NO CURB.
- J. 6" DEPTH TEMPORARY GRANULAR TURNAROUND.
- K. TAPER TO NO CURB.

3. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:

- A. 4" WIDE PAINTED PARKING STALL LINES.
- B. PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL.
- C. ACCESSIBLE AISLE, 45" STRIPING AT 3' ON CENTER SPACING WHERE SHOWN.

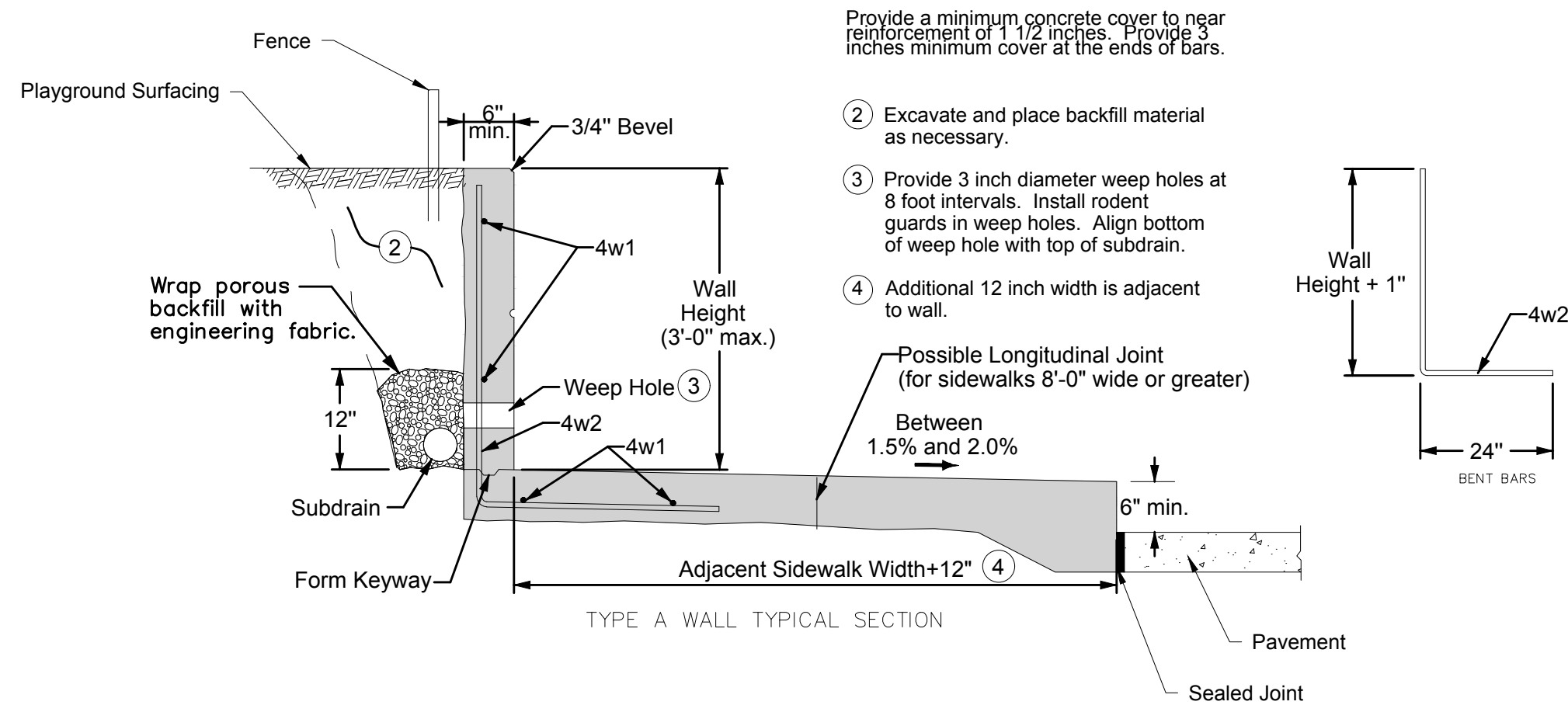
4. SIGNS, PROVIDE THE FOLLOWING:

- A. PROVIDE POST MOUNTED VAN ACCESSIBLE PARKING SIGNAGE AS PER ICC SECTION A117.1-09 SECTION 502.7 AND ADAAG REQUIREMENTS. SIGN SHALL BE AT LEAST 60 INCHES ABOVE THE FINISHED PARKING SURFACE.
- B. MONUMENT SIGN. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.

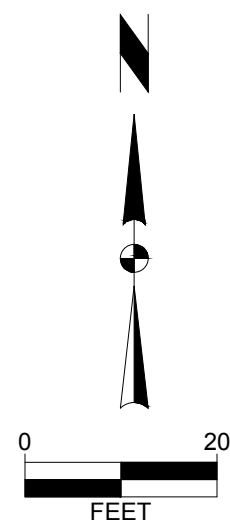
5. SITE AMENITIES, PROVIDE THE FOLLOWING:

- A. TRASH ENCLOSURE. REFER TO TRASH ENCLOSURE DETAIL ON ARCHITECTURAL PLANS FOR DETAILS.
- B. PLAYGROUND STRUCTURE BY OTHERS.
- C. PLAYGROUND FENCE, 4' HEIGHT MONT-PLUS MAJESTIC BY AMERISTAR.
- D. COMBINED RETAINING WALL SIDEWALK WALL. WALL TO BE STAMPED CONCRETE TO MATCH BUILDING MATERIALS, TO BE SELECTED BY OWNER. SEE DETAIL 1/C400
- E. PLAYGROUND GATE, 4' HEIGHT MONT-PLUS MAJESTIC BY AMERISTAR.
- F. PLAYGROUND FENCE, 6' HEIGHT MONT-PLUS MAJESTIV BY AMERISTAR.
- G. PLAYGROUND GATE, 6' HEIGHT MONT-PLUS MAJESTIV BY AMERISTAR.
- H. PLAYGROUND SURFACING GB-043-PLA 50 BY SOUTHWEST GREENS.
- I. GRANULAR MATERIAL, CONCRETE SLAB AND PAD PER PLAYGROUND DETAIL.
- J. SUNSHADE BLUE WITH BLACK POLES. REFER TO PLAYGROUND DETAIL SHEET.

6. PROPOSED BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.



1
C300 COMBINED RETAINING WALL - SIDEWALK
NO SCALE



KINDER CARE-GRIMES

SITE PLAN

GRIMES, IOWA

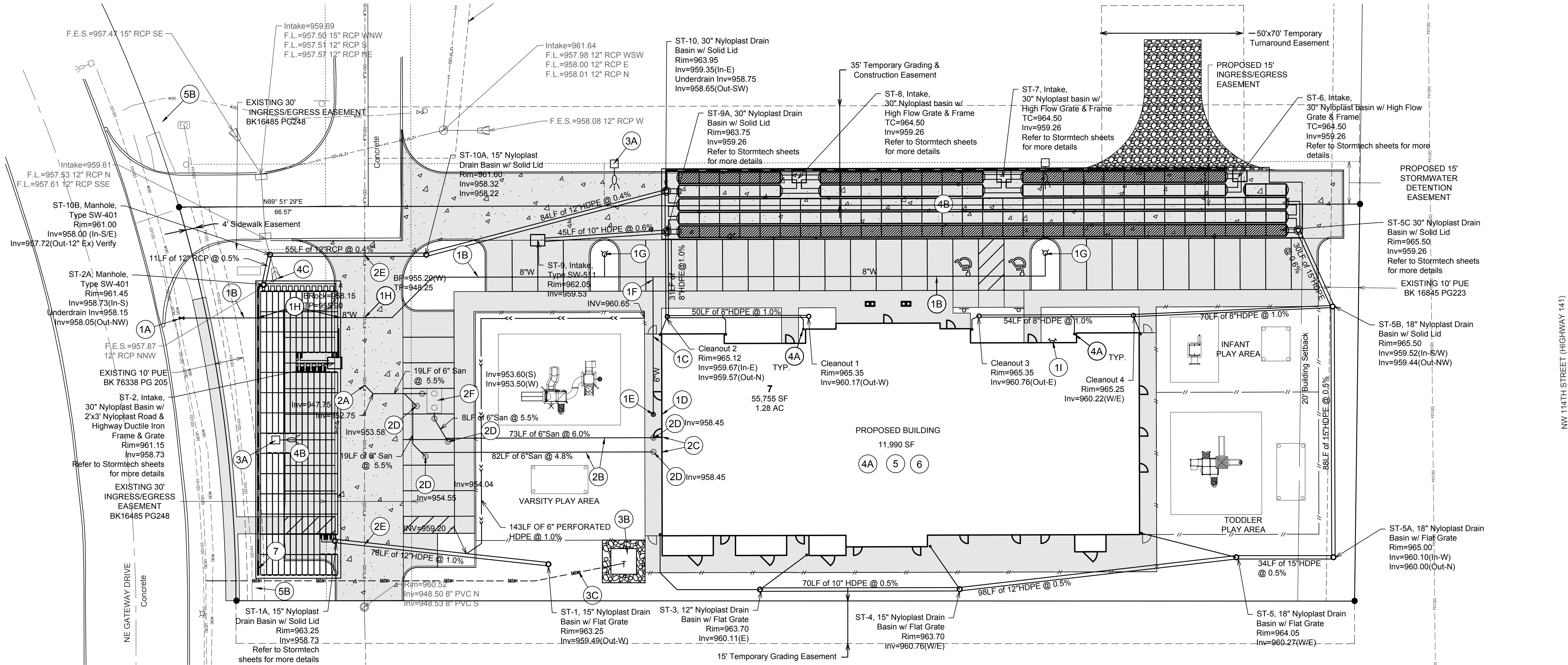
SNYDER & ASSOCIATES, INC. |

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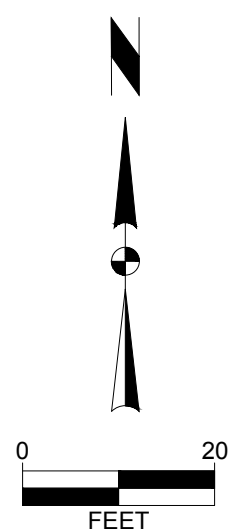
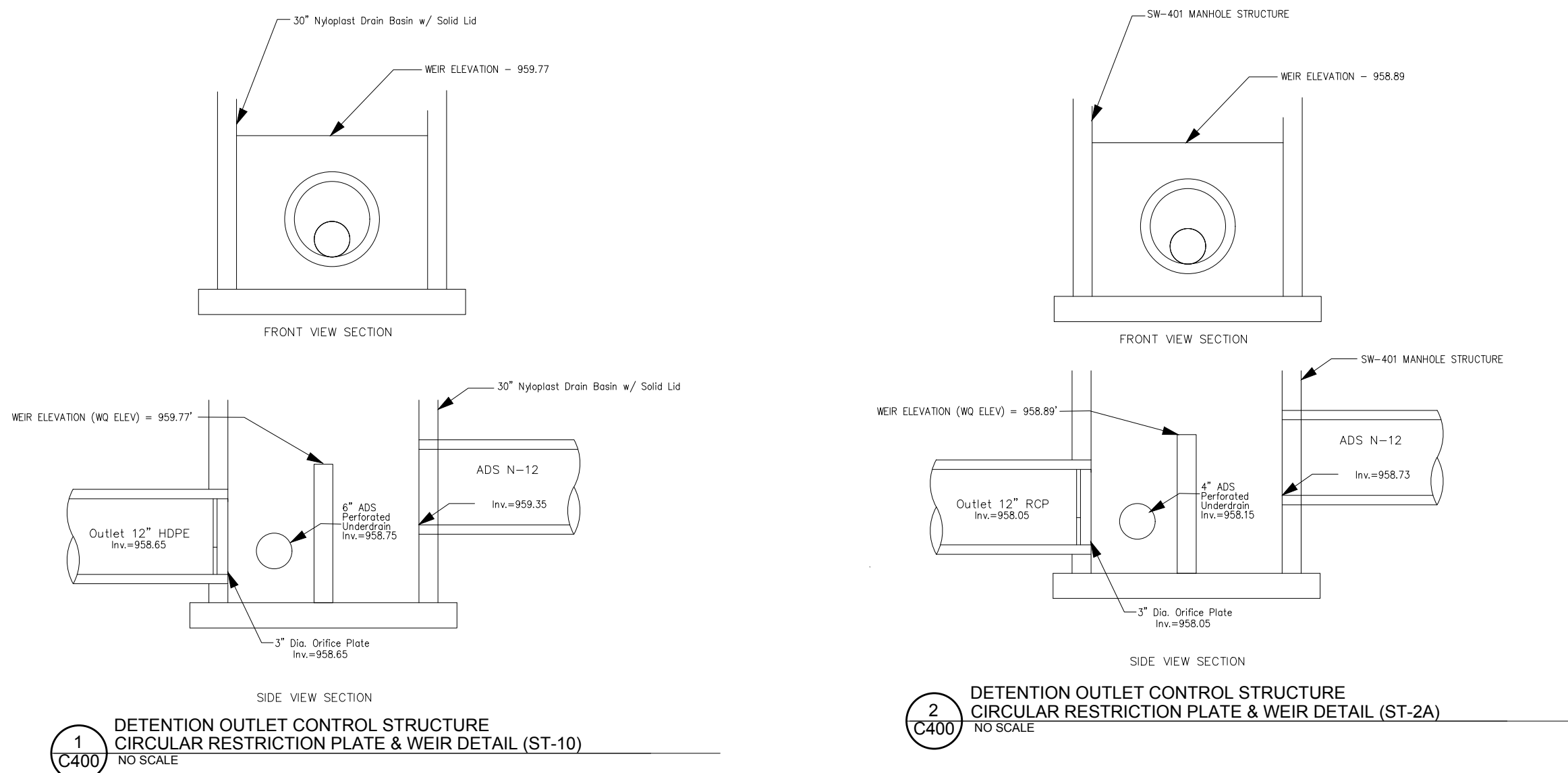
Project No: 119.0929.01

Sheet C400



UTILITY PLAN NOTES

- WATER SERVICES, PROVIDE THE FOLLOWING AS PER CITY OF GRIMES STANDARDS:
 - CONNECT TO EXISTING WATER MAIN W/ TAPPING SLEEVE & VALVE. CONTRACTOR TO VERIFY EXISTING WATER MAIN SIZE AND LOCATION PRIOR TO CONSTRUCTION.
 - 8" WATER SERVICE AT 5.5' MINIMUM BURY WITH RESTRAINED JOINT FITTINGS, BENDS, AND THRUST BLOCKS AS NECESSARY.
 - 6" WATER SERVICE AT 5.5' MINIMUM BURY WITH RESTRAINED JOINT FITTINGS, BENDS, AND THRUST BLOCKS AS NECESSARY.
 - CONNECT TO PROPOSED BUILDING SERVICE. COORDINATE WITH PLUMBING PLANS FOR EXACT SIZE AND LOCATION PRIOR TO CONSTRUCTION.
 - CURB STOP. ENCASE CURB STOP IN CONCRETE IF NOT LOCATED IN SIDEWALK.
 - 8"x8" TEE WITH 1-1/2" REDUCER.
 - HYDRANT ASSEMBLY.
 - CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN MINIMUM 18" VERTICAL AND HORIZONTAL CLEARANCE BETWEEN UTILITIES. CONTRACTOR TO COORDINATE UTILITY ROUTING TO BUILDING AND VERIFY CONNECTION LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION.
 - BUILDING MOUNTED FIRE DEPARTMENT CONNECTION. SEE BUILDING AND MECHANICAL PLANS FOR DETAILS.
- SANITARY SEWER SERVICES, PROVIDE THE FOLLOWING AS PER CITY OF GRIMES STANDARDS:
 - CONNECT TO EXISTING SANITARY SEWER AT 1% MINIMUM SLOPE WITH MANUFACTURED WYE AND ROMAC SADDLE OR APPROVED EQUAL. VIDEO INSPECT MAIN AFTER TAP IS COMPLETED PER CITY REQUIREMENTS. UTILIZE RISER AS NECESSARY. VERIFY ELEVATION PRIOR TO CONSTRUCTION.
 - 6" PVC SDR 23.5 SANITARY SEWER SERVICE.
 - CONNECT TO PROPOSED BUILDING SERVICE. COORDINATE LOCATION AND ELEVATION WITH PLUMBING PLANS.
 - CLEANOUT.
 - CRITICAL CROSSING.
 - 1,000 GALLON GREASE INTERCEPTOR. REFER TO MECHANICAL PLANS FOR DETAILS.
- SITE ELECTRICAL, CONTRACTOR TO COORDINATE WITH THE FRANCHISE UTILITY ALL ASPECTS OF ELECTRICAL SERVICE, PROVIDE THE FOLLOWING:
 - SITE LIGHTING. COORDINATE WITH SITE LIGHTING PLAN PRIOR TO CONSTRUCTION.
 - TRANSFORMER AND PAD. COORDINATE WITH MID AMERICAN ENERGY PRIOR TO CONSTRUCTION.
 - ELECTRICAL SERVICE.
- STORM SEWER, PROVIDE THE FOLLOWING AS PER CITY OF GRIMES STANDARDS:
 - BUILDING DOWNSPOUTS. COORDINATE EXACT LOCATIONS WITH ARCHITECTURAL AND MECHANICAL PLANS. CONNECT DOWNSPOUTS TO STORM SEWER WHERE SHOWN.
 - UNDERGROUND DETENTION SYSTEM. REFER TO STORMTECH SHEETS FOR MORE DETAILS.
 - REMOVE EXISTING FES AND CONNECT TO STORM SEWER W/ CONCRETE COLLAR. IF A PIPE SECTION IS NEEDED TO COMPLETE CONNECTION, IT SHALL MATCH EXISTING PIPE SIZE.
- GAS SERVICE. COORDINATE WITH MID AMERICAN ENERGY PRIOR TO CONSTRUCTION.
 - PROPOSED GAS METER LOCATION. VERIFY WITH MECHANICAL PLANS PRIOR TO CONSTRUCTION.
 - COORDINATE GAS SERVICE WITH MIDAMERICAN ENERGY PRIOR TO CONSTRUCTION.
- CONTRACTOR TO COORDINATE ALL TELEPHONE, COMMUNICATION, CABLE AND OTHER UTILITIES WITH FRANCHISE UTILITY OWNERS PRIOR TO CONSTRUCTION.
- COORDINATE LOCATION OF UNDERGROUND DETENTION WITH EXISTING FIBER OPTIC LINE.



KINDER CARE-GRIMES

UTILITY PLAN

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GRIMES, IOWA

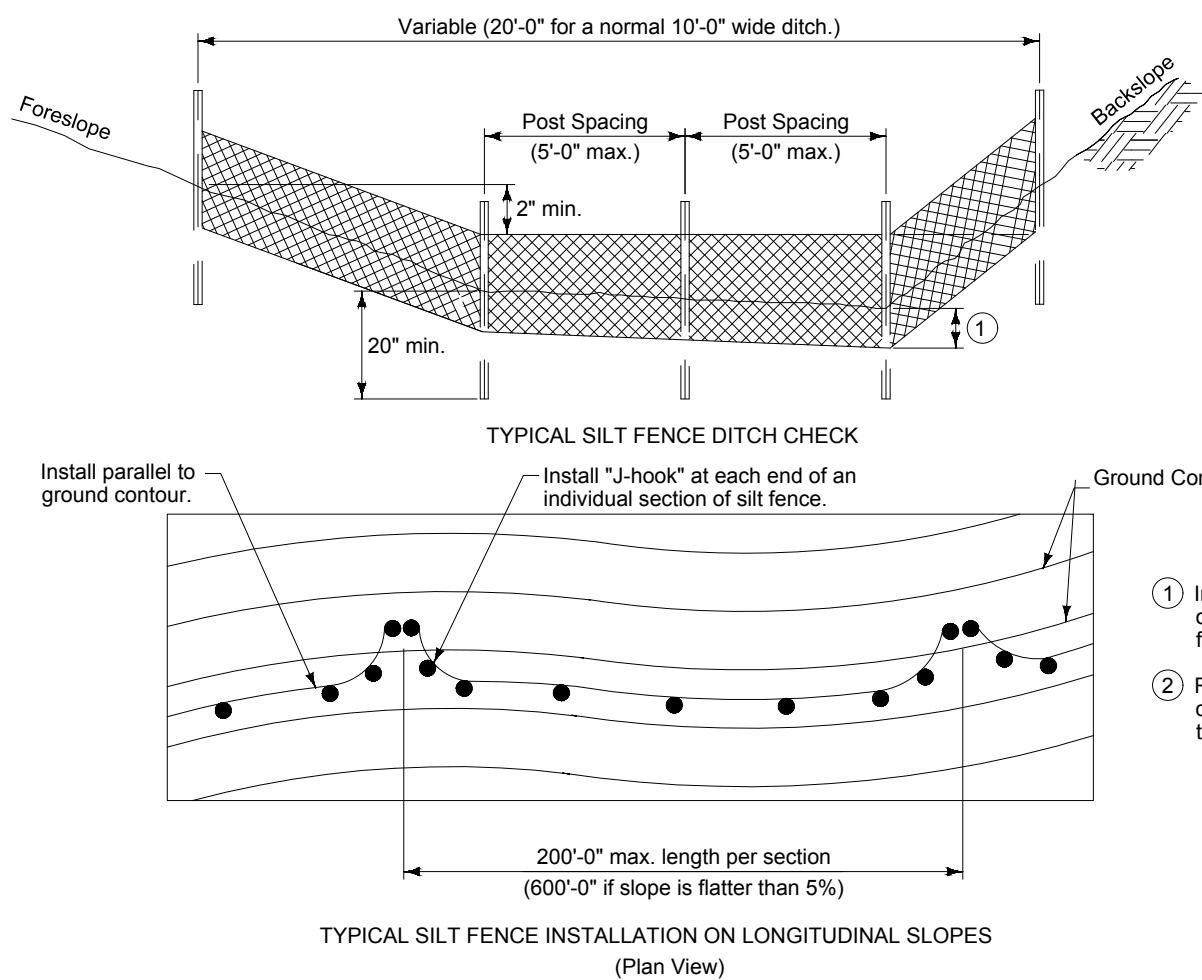
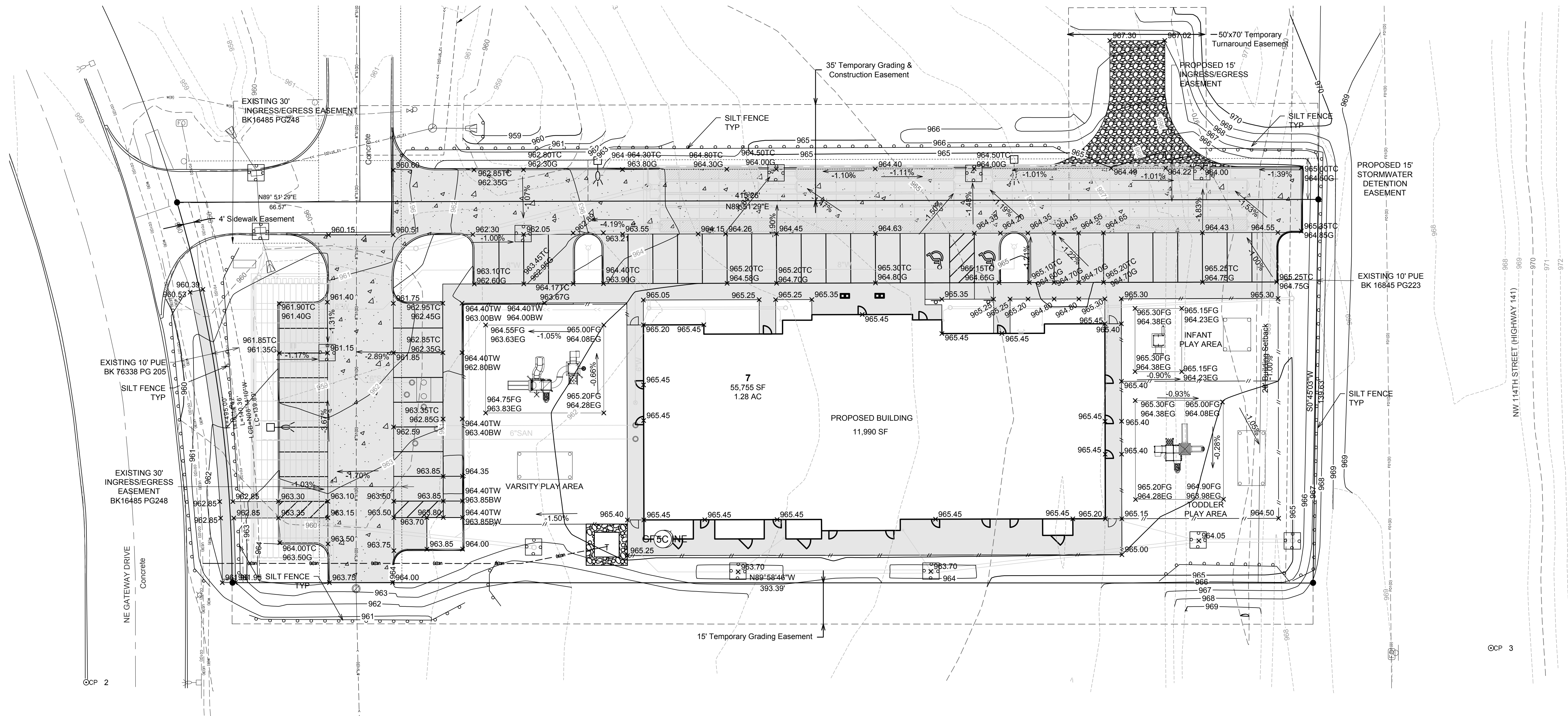
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ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

MARK	ENGINEER	LMW	DATE	REVISION	BY	DATE	COMMENTS
1	LMW	JAL	12-20-2019	1	JAL	1-13-2020	AS PER CITY COMMENTS
2	LMW	JAL	12-20-2019	2	JAL	1-27-2020	AS PER CITY COMMENTS

Scale: 1" = 20'

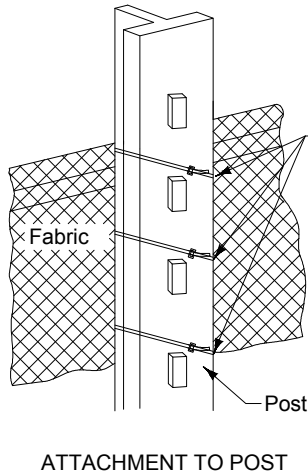
Project No: 119.0929.01

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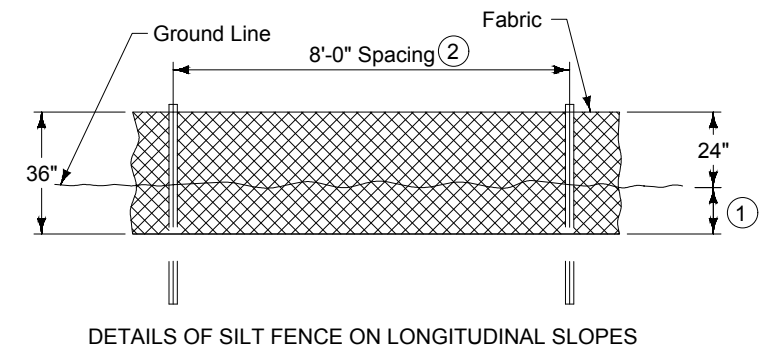


SILT FENCE

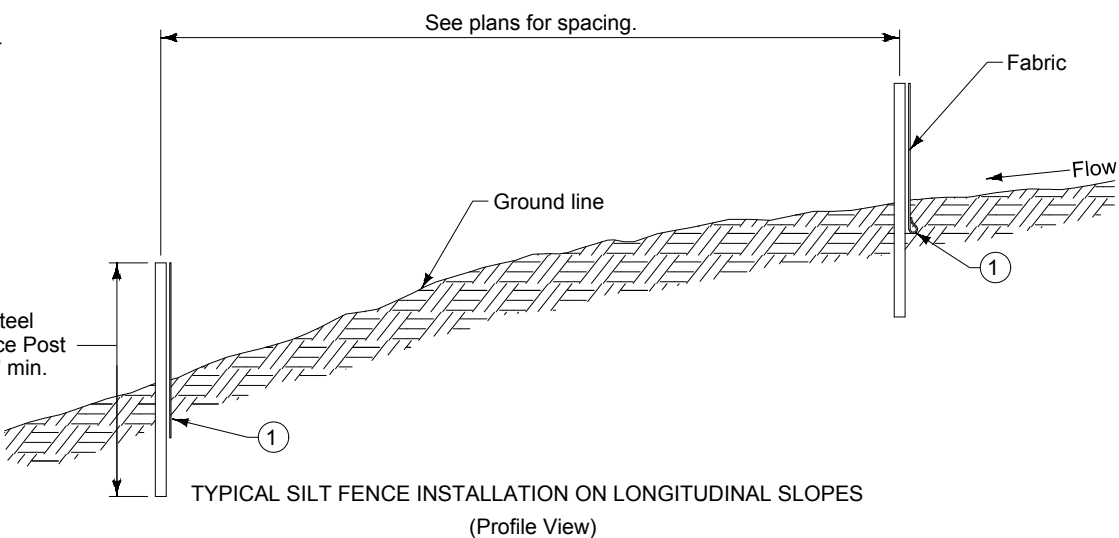
- Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).
- Reduce post spacing to 5'-0" at water concentration areas, or as required to adequately support fence.



ATTACHMENT TO POST



DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES



TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES (Profile View)

GRADING NOTES

- CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 6" DEPTH TO FINISH GRADES.
- ANY EXCESS CUT TO BE SPREAD ON SITE AS DIRECTED BY ENGINEER DURING CONSTRUCTION. PLACE TOPSOIL OVER ALL AREAS DISTURBED.
- ALL DRAINAGE SWALES AND SLOPES 5 TO 1 OR GREATER TO BE SEEDED USING COMMERCIALY AVAILABLE EROSION CONTROL SEED. MIXTURE APPLIED AT RATE RECOMMENDED BY SUPPLIER.
- EROSION CONTROL: SEED THE SITE AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE SILT FENCE AND MAINTAIN IN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
- PROVIDE BELOW GRADE INLET PROTECTION IN PAVED AREAS FOLLOWING PAVING OPERATIONS.

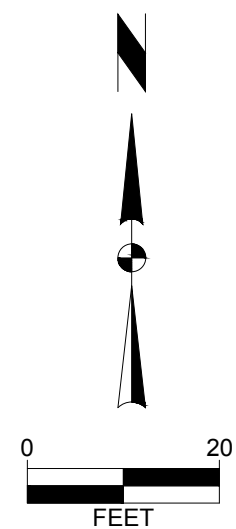
QUANTITIES

SEEDING AND MULCHING	1.28 AC.
SILT FENCE	850 LF.
BELOW GRADE INLET PROTECTION	11 EA.

BENCHMARKS

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

- BM1 ELEV=961.36
BURY BOLT ON HYDRANT AT EAST SIDE NE GATEWAY DR ± 20' N OF 1ST PP N OF N DRIVE TO RACCOON VALLEY BANK. (AS SHOWN ON SURVEY)
- BM2 ELEV=962.79
BURY BOLT ON HYDRANT AT EAST SIDE OF SOUTH DRIVE TO CASEY'S @ 90° BEND IN ROAD. (AS SHOWN ON SURVEY)



KINDER CARE-GRIMES

GRADING AND EROSION CONTROL PLAN

GRIMES, IOWA

SNYDER & ASSOCIATES, INC.

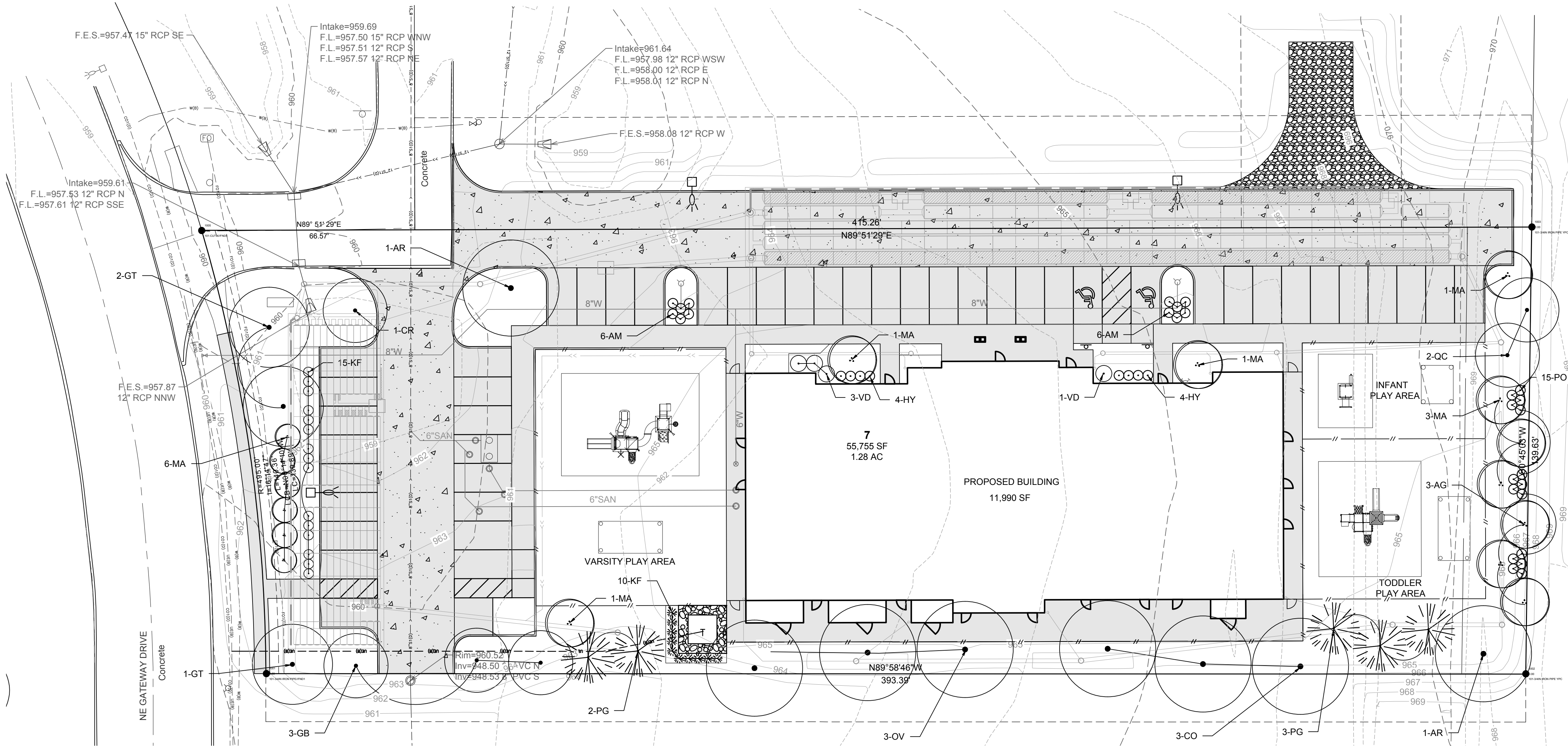
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Project No: 119.0929.01

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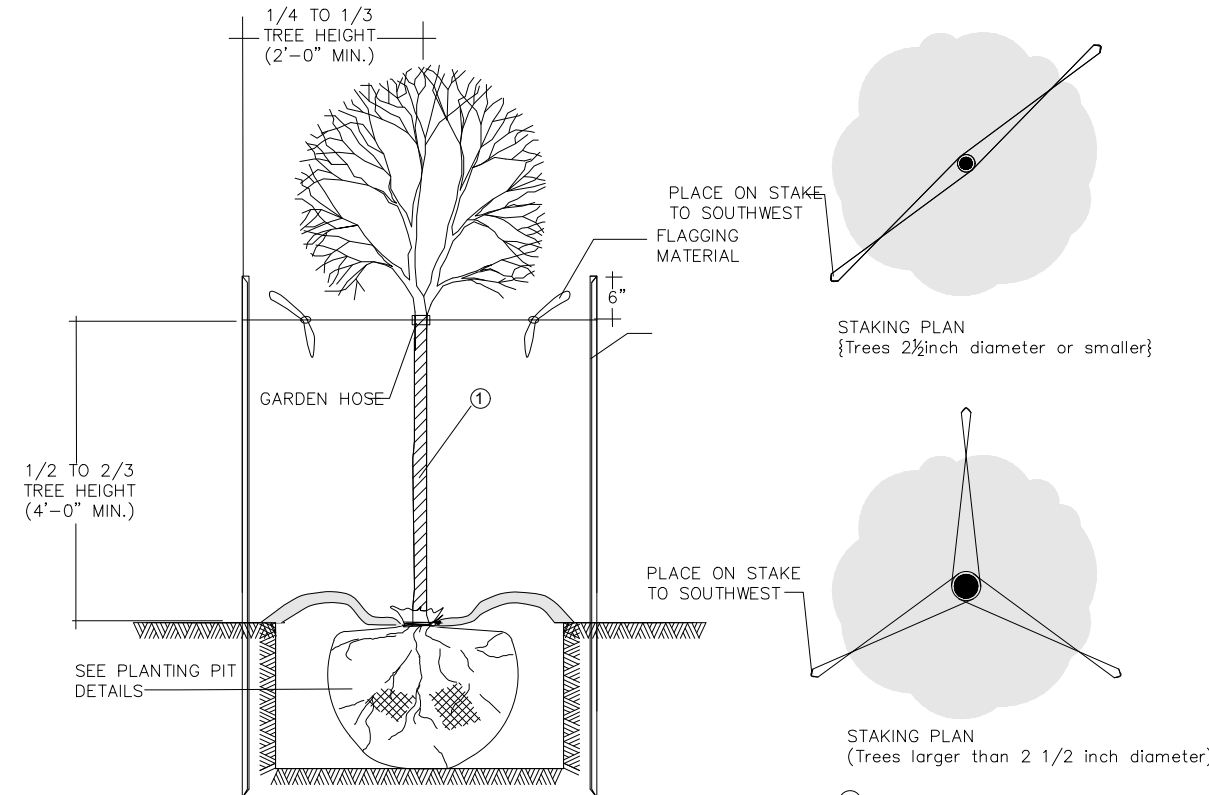
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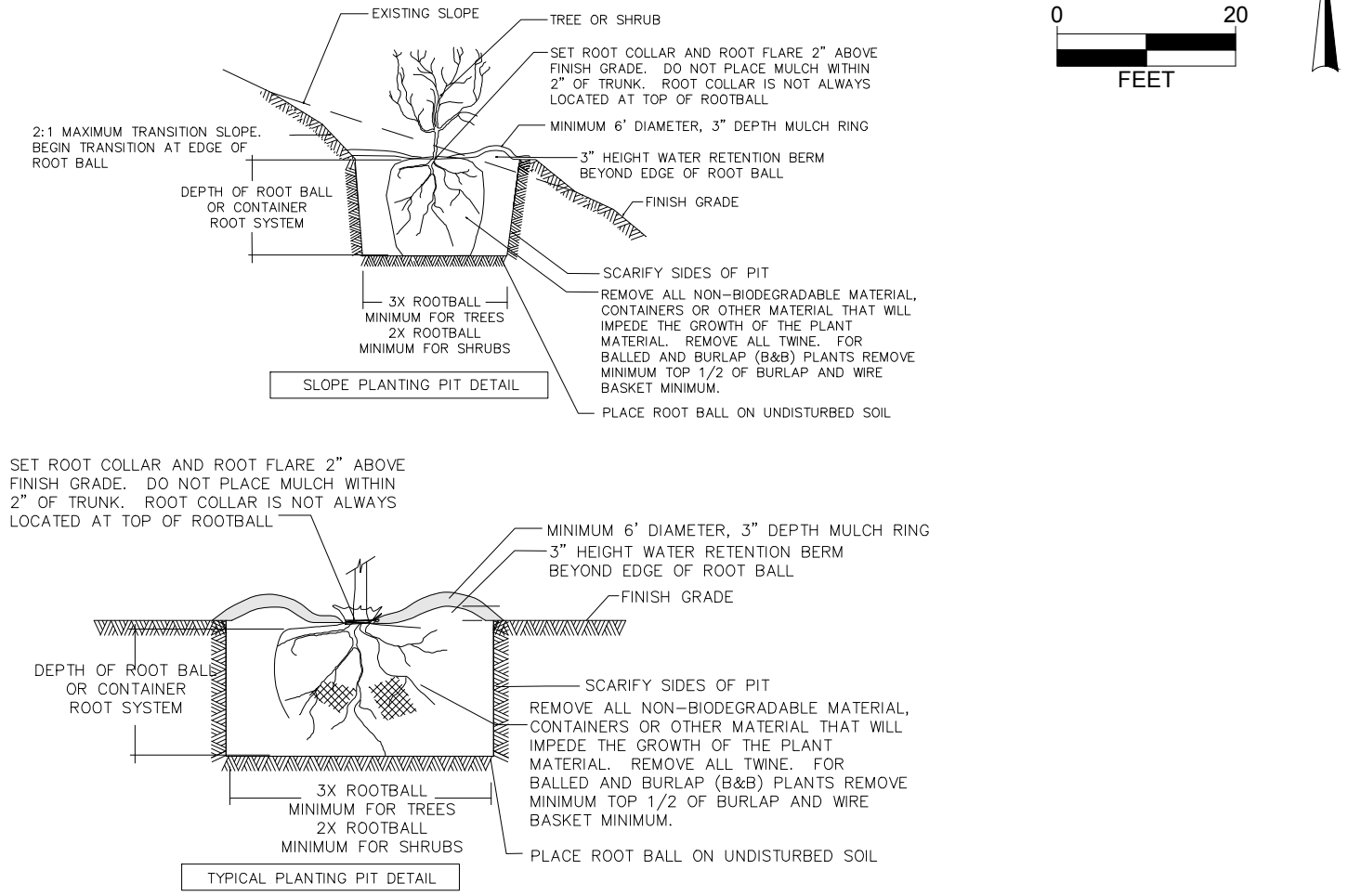
PLANT SCHEDULE

	KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
TREES	AR	2	Acer rubrum 'October Glory'	OCTOBER GLORY RED MAPLE	1 1/2" CAL.	B&B
	AG	3	Amelanchier x grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	8' HT.	B&B, TREE FORM
	CO	3	Celtis occidentalis 'Prairie Pride'	PRAIRIE PRIDE HACKBERRY	1 1/2" CAL.	B&B
	CR	1	Crataegus crusgalli var. inermis	THORNELESS COCKSPUR HAWTHORN	8' HT.	B&B
	GB	3	Ginkgo biloba 'Princeton Sentry'	PRINCETON SENTRY GINKGO	1 1/2" CAL.	B&B (MALE ONLY)
	GT	3	Gleditsia triacanthos f. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	1 1/2" CAL.	B&B
	MA	6	Malus 'Marilee'	MARILEE CRABAPPLE	8' HT.	B&B
	OV	3	Ostrya virginiana	IRONWOOD	1 1/2" CAL.	B&B
	PG	5	Picea glauca densata	BLACK HILLS SPRUCE	8' HT.	B&B
	QC	2	Quercus 'Crimschmidt'	CRIMSON SPIRE OAK	1 1/2" CAL.	B&B
SHRUBS	AM	12	Aronia melanocarpa 'Morton'	IROQUOIS BEAUTY CHOKEBERRY	18" HT.	CONT. (3' O.C.)
	HY	8	Hydrangea macrophylla 'Twist and Shout'	TWIST AND SHOUT HYDRANGEA	24" HT.	CONT. (3' O.C.)
	PO	15	Physocarpus opulifolius 'Little Devil'	LITTLE DEVIL NINEBARK	18" HT.	CONT. (3' O.C.)
	SS	15	Sorbaria sorbifolia 'Sem'	SEM FALSE SPIREA	18" HT.	CONT. (3' O.C.)
	VD	4	Viburnum dentatum 'Christom'	BLUE MUFFIN VIBURNUM	4' HT.	CONT. (5' O.C.)
GRASSES	KF	10	Calamagrostis x acutiflora 'Karl Foerster'	FOERSTER FEATHER REED GRASS	2 GAL.	SEE PLAN

NOTE: QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO VERIFY PLANT MATERIAL PRIOR TO BIDDING. IN THE CASE OF A DISCREPANCY, THE PLAN QUANTITY SHALL GOVERN.



1 DECIDUOUS TREE STAKING DETAIL
C500 NO SCALE



2 PLANTING PIT DETAILS
C500 NO SCALE

PLANTING PLAN GENERAL NOTES

- A. UTILITY WARNING:
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- B. 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. PROVIDE 3-INCH DEPTH SHREDDED HARDWOOD MULCH IN PLANT BED AREAS AS INDICATED ON PLAN AND PROVIDE A MIN 3-FOOT PERIMETER RING AROUND ALL TREES. PROVIDE VERTICAL CUT NATURAL EDGE TO A DEPTH OF 4-INCHES.
- F. PROVIDE 2-INCH RIVER GRAVEL PLACED TO A DEPTH OF 4-INCHES WITH WEED BARRIER FABRIC UNDERLAYMENT IN PLANT BED AREAS SHOWN ON PLAN.
- G. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH TYPE 1 SUDAS PERMANENT LAWN SEED MIX, UNLESS NOTED OTHERWISE.
- H. PROVIDE DETENTION BASIN SEED MIX AS PROVIDED BY PRAIRIE MOON NURSERY. WWW.PRAIRIEMOON.COM, 32115 PRAIRIE LANE, WINONA, MN 55987, OR APPROVED EQUAL. SEEDING RATE: 11.48 LBS/ACRE. INSTALL AS PER SUDAS SPECIFICATIONS 9010 SEEDING.
- PROVIDE REGREEN, Tricium aestivum, SHORT-LIVED STERILE PERENNIAL WHEAT/WHEAT GRASS HYBRID OR APPROVED EQUAL. APPLY AT 30 LBS/ACRE
- I. PROVIDE MECHANICALLY BONDED FIBER MATRIX(MBFM) IMMEDIATELY FOLLOWING SEED APPLICATION ON ALL AREAS SEEDED WITH A SLOPE OF 6:1 OR GREATER. ACCEPTABLE PRODUCTS AND MANUFACTURERS:

PROFILE PRODUCTS LLC., 750 LAKE COOK ROAD - SUITE 400
BUFFALO GROVE, IL 60089
TEL: A.A: 1-800-368-1180
WWW.PROFILEPRODUCTS.COM OR APPROVED EQUAL.

PLANTING PLAN REQUIREMENTS

LANDSCAPE REQUIREMENTS AND CALCULATIONS:
(AS PER CITY OF GRIMES SITE PLAN OPEN SPACE AND LANDSCAPING REQUIREMENTS FOR THE HERITAGE PUD)

OPEN SPACE REQUIREMENTS:
55,755 SF (1.28 AC.) OVERALL PROPERTY X 25% MIN. OPEN SPACE = 13,939 SF OPEN SPACE REQUIRED
TOTAL HARD SURFACE (DRIVES, PARKING, PLAYGROUNDS AND BUILDINGS)= 37,390 SF = 32.9% TOTAL OPEN SPACE PROVIDED

HERITAGE PUD OPEN SPACE REQUIREMENTS:
2 OVERSTORY TREES, 1 UNDERSTORY TREE, 1 EVERGREEN TREE, AND 6 SHRUBS PER 3,000 SF OF REQUIRED OPEN SPACE
13,939 SF / 3,000 SF = 4.64 PLANT UNITS REQUIRED
4.64 X 2 OVERSTORY TREES = 9.28 OVERSTORY TREES REQUIRED (10 PROVIDED)
4.64 X 1 UNDERSTORY TREE = 4.64 UNDERSTORY TREES REQUIRED (5 PROVIDED)
4.64 X 1 EVERGREEN TREE = 4.64 EVERGREEN TREES REQUIRED (6 PROVIDED)
4.64 X 6 SHRUBS = 27.84 SHRUBS REQUIRED (34 PROVIDED)

HERITAGE PUD STREET FRONTAGE REQUIREMENTS:
1 OVERSTORY TREE, 2 UNDERSTORY TREES, AND 5 SHRUBS PER 50 LF OF STREET FRONTAGE

NE GATEWAY DRIVE:
140 LF / 50 LF = 2.8 PLANT UNITS REQUIRED
2.8 X 1 OVERSTORY TREE = 2.8 OVERSTORY TREES REQUIRED (3 PROVIDED)
2.8 X 2 UNDERSTORY TREES = 5.6 UNDERSTORY TREES REQUIRED (6 PROVIDED)
2.8 X 5 SHRUBS = 14 SHRUBS REQUIRED (15 PROVIDED)

HIGHWAY 141:
140 LF / 50 LF = 2.8 PLANT UNITS REQUIRED
2.8 X 1 OVERSTORY TREE = 2.8 OVERSTORY TREES REQUIRED (3 PROVIDED)
2.8 X 2 UNDERSTORY TREES = 5.6 UNDERSTORY TREES REQUIRED (6 PROVIDED)
2.8 X 5 SHRUBS = 14 SHRUBS REQUIRED (15 PROVIDED)

1-27-2020LMW
1-13-2020LJM
DATE
BY

AS PER CITY COMMENTS
REVISION
Engineer: LMW
Checked By: JAL
Technician: LJM
Date: 12-20-2019
1-R-RS: TTN-RRW-SS

Scale: 1" = 20'

Project No: 119.0929.01

Sheet C700

GRIMES, IOWA

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

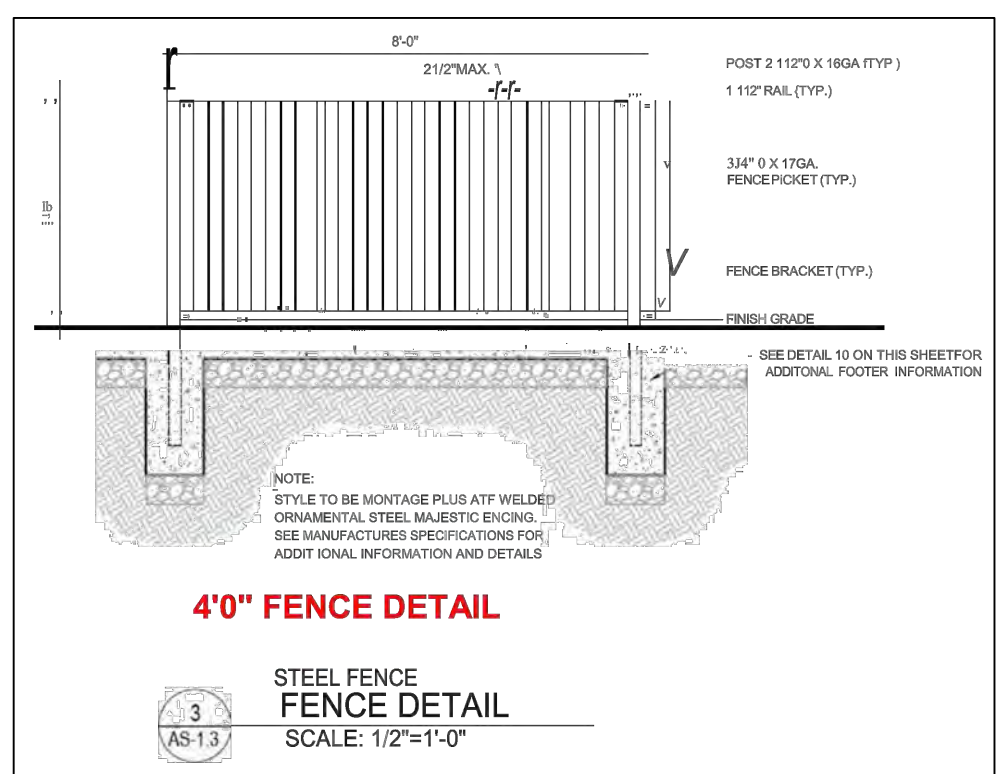
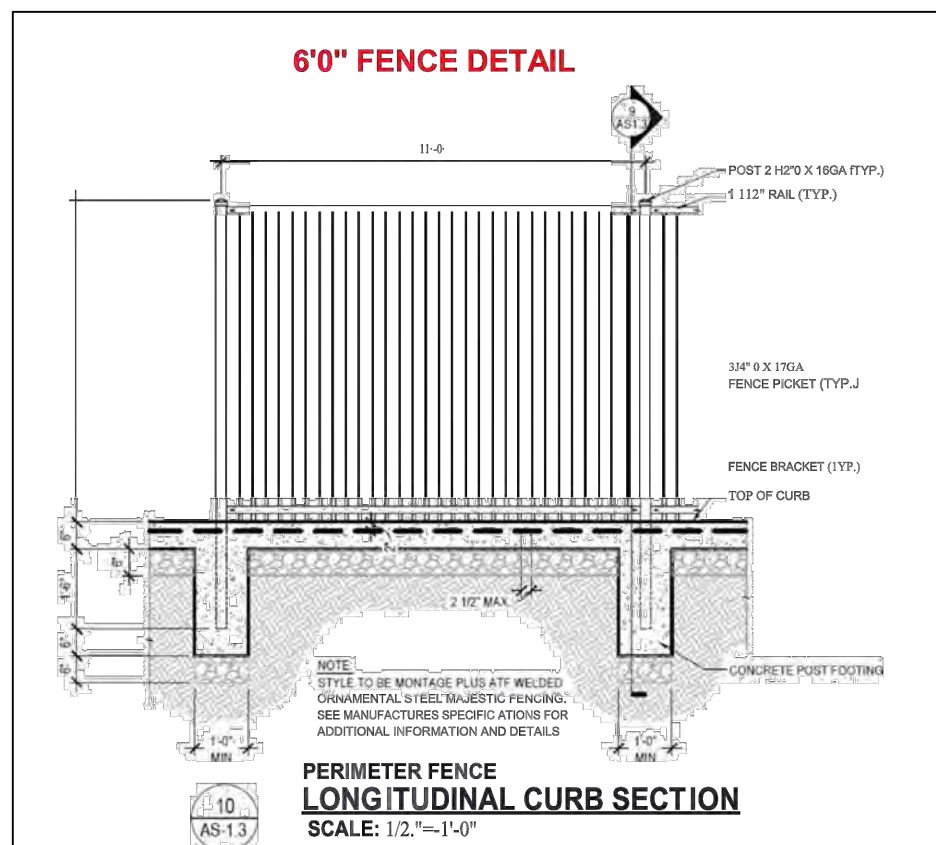
KINDER CARE-GRIMES

PLANTING PLAN

SNYDER & ASSOCIATES, INC. I

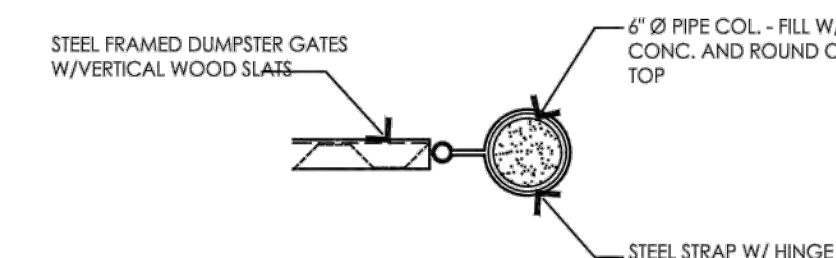
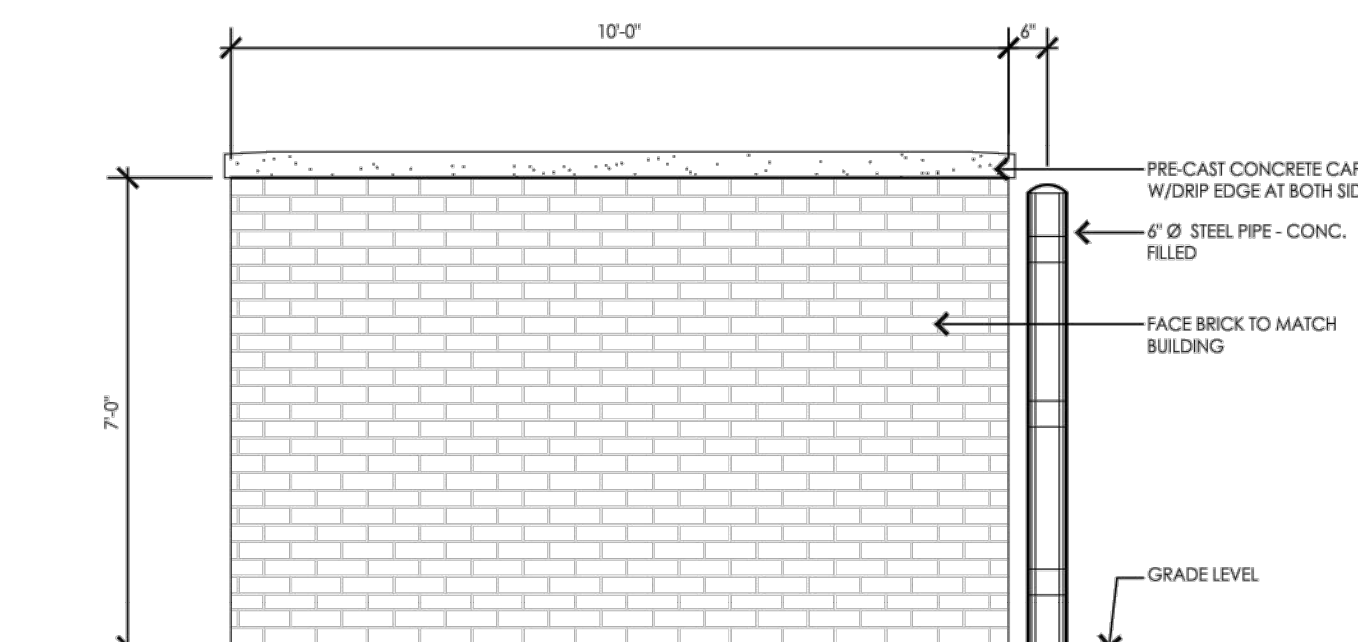
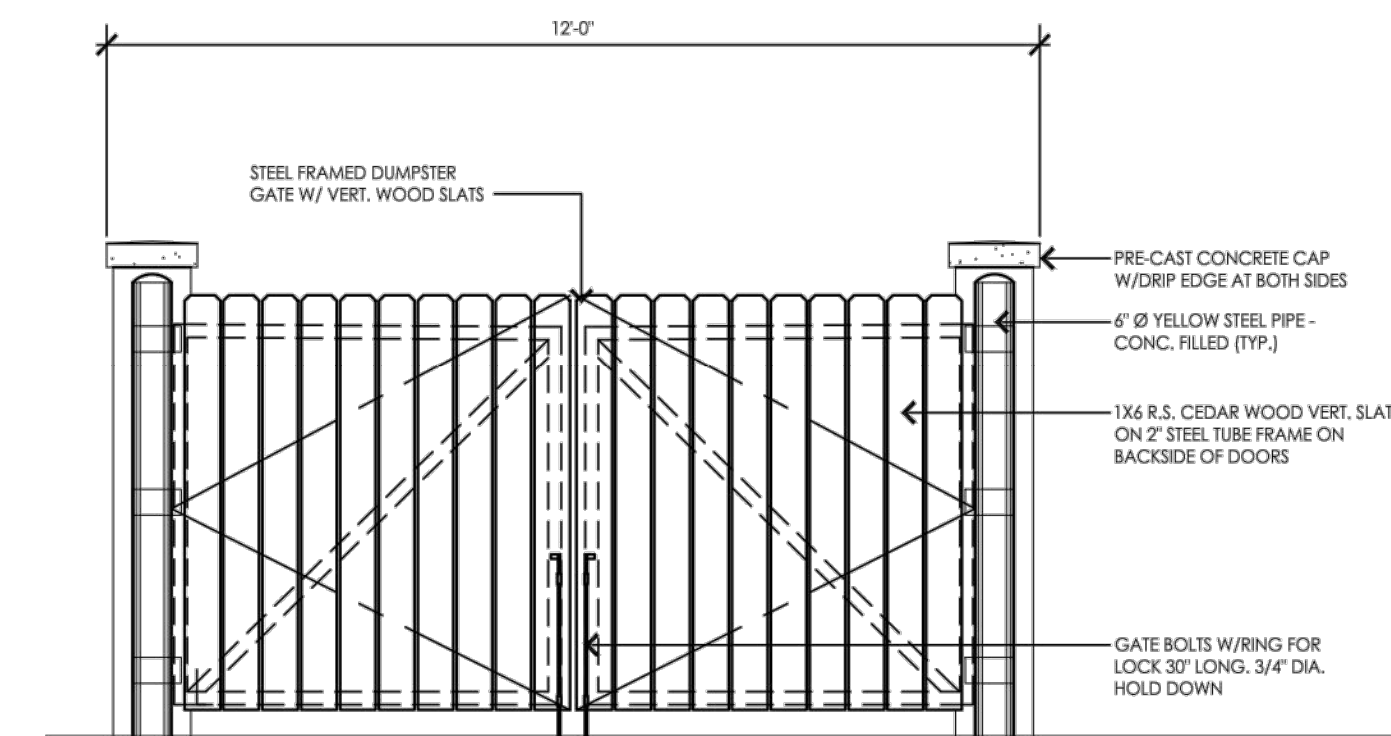
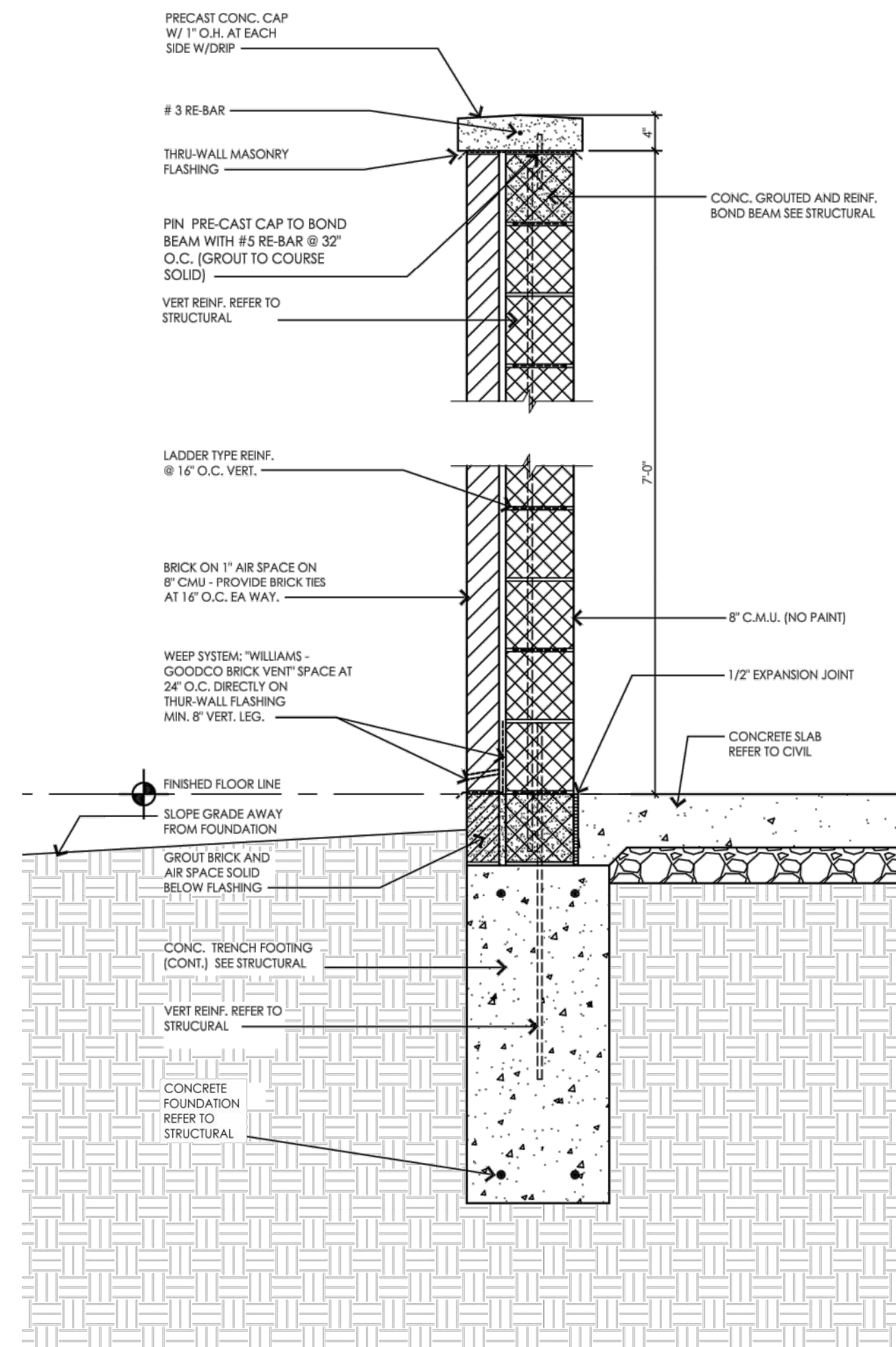
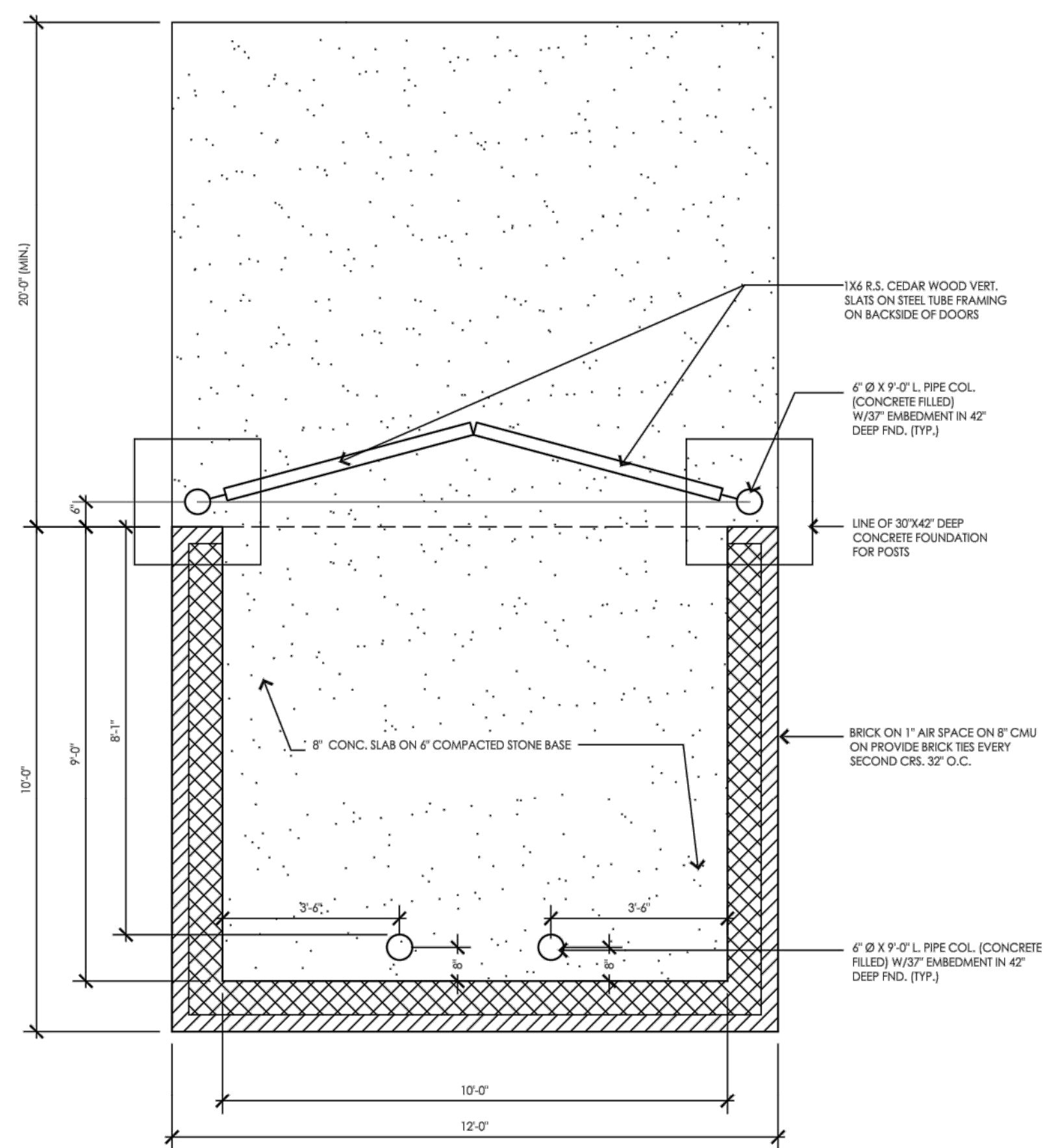
Project No: 119.0929.01

Sheet C700



1. CONCRETE WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE SPECIFICATION FOR STRUCTURAL CONCRETE (301) AND AASHTO/PCI DESIGN CONSTRUCTION CODE FOR BRIDGES (508). ALL CONCRETE SPECIFICATIONS, SHALL BE AS FOLLOWS:
 - 28 DAY STRENGTH: 2500 PSI
 - SLUMP: 3"
 - PORTLAND CEMENT SHALL CONFORM TO C-150
 - AGGREGATE SHALL CONFORM TO ASTM C-33
2. ALL REINFORCEMENT STEEL SHALL CONFORM TO ASTM A616 GRADING 60 AND SHALL BE DETAILING AND FABRICATED AND PLACED IN ACCORDANCE WITH THE LATEST ACI SPECIFICATION FOR STRUCTURAL CONCRETE ACI 301, ACI 309, ACI 308.1 AND CRS MANUAL OF STANDARD PRACTICE.
3. ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM A-1554 GRADE 55 (GALVANIZED).
4. ALL NON-SHARP CORNERS SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 2500 PSI, AND SHALL COMPLY WITH THE REQUIREMENTS OF ACI 301, ASTM C689, ASTM C1107, WHEN APPLICABLE.
5. SLOPE MATERIALS FOR FOOTING ANALYSIS: TABLE 1808.2, CLASS 5.

Sheet C800



GENERAL NOTES:
1. ALL EXTERIOR MATERIALS TO MATCH BUILDING
IF THERE IS NO BRICK TO MATCH - MATCH MASONRY
2. ADHERE TO ALL LOCAL ORDINANCES AND DESIGN
REQUIREMENTS. NOTIFY ARCHITECT OF ANY
DISCREPANCIES.

INTERPLAN
ARCHITECTURE
ENGINEERING
INTERIOR DESIGN
PROJECT MANAGEMENT

AA 003420
CA 8660

604 COURTLAND STREET
SUITE 100
ORLANDO, FLORIDA 32804
PH 407.645.5008
FX 407.629.9124

SEAL:
THIS DOCUMENT IS "NOT FOR CONSTRUCTION"
UNLESS THE ARCHITECT OR ENGINEER'S
SIGNATURE AND SEAL APPEAR BELOW.

NO	DATE	REMARK
REVISIONS		



**RAINBOW CHILD
CARE CENTER**
KKA-L PROTOTYPE
MAIN STREET
CITY, STATE

PROJECT NO: TBD
DATE: Value

T.102

SITE DETAILS

CHECKED: ValueDRAWN: Value

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KINDER CARE-GRIMES

SITE DETAILS

SNYDER & ASSOCIATES, INC.

GRIMES, IOWA

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ANKENY, IOWA 50023
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Sheet C801

Project No: 119.0929.01

Sheet C801

Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: February 4, 2019
RE: Kinder Care – Site Plan

GENERAL INFORMATION:

Applicant:	Jason Ledden
Requested Action	Site Plan
Location	1101 NE Gateway Dr

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	Mixed Use 1	R-4
North	Vacant	Mixed Use 1	R-4
South	Commercial 2	Mixed Use 1	R-4
East	Agricultural	Mixed Use 1/Public Facility	A-1
West	Residential	Medium Density Residential	R-4

BACKGROUND:

The applicant is requesting approval of the site plan for Kinder Care which consists of one building at approximately 11,900 square feet.

The property is located within the Heritage at Grimes PUD.

ANALYSIS:*Building/Elevations:*

The building is proposed to be principally constructed of brick veneer and concrete block with siding used as accents. The building also includes a cupola, dormers, and columns at the entrance for added visual interest.

Site Layout:

The site has one access point from NE Gateway Drive and two stubs for future cross access to the property to the north and one stub to the south.

Outdoor play areas are provided on the east and west side of the building. Details for the play areas are shown on the plan set. The design calls for a commercial grade playground. Ornamental fencing is shown surrounding the play areas.

Parking is provided along the front of the building and to the west.

The dumpster is located in the southeast corner of the parking lot on the west side of the building. The dumpster enclosure is proposed to be constructed out of brick to match the principal building.

There is one pedestrian connection from NE Gateway Drive to the building.

Site lighting is proposed for the development. Fixtures consistent with the Heritage PUD will be provided for the site.

Parking:

There is no specific parking calculation for daycare within the City zoning regulations. Staff has evaluated parking requirements for daycare facilities in other surrounding cities and determined that 46 spaces, as provided, is reasonable.

Landscaping/Streetscape:

The site is required to follow the landscape requirements as set out by the Heritage at Grimes PUD. As proposed, the site will provide the required number and types of plantings.

Utilities:

Sanitary sewer access is provided from an existing 8" sewer running along the north side of the site. A new public 6" sewer will be constructed to the west of the building. A grease interceptor is provided for the kitchen.

Water is provided from an existing 8" main within the NE Gateway Drive ROW. A new public 8" water main will be constructed along the front of the building. The building is proposed to be fitted with a fire suppression system, therefore the appropriate FDC and fire hydrant spacing is shown.

Storm water detention is being handled via underground detention basin.

STAFF RECOMMENDATION:

Staff would recommend approval of the site plan for Kinder Care Site Plan, subject to any remaining staff comments and the Heritage Review Committee letter.

CITY OF GRIMES



Alex Pfaltzgraff
Development Services Director



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

~~January 6, 2020~~

January 21, 2020

ISG

Attn: Eric Gjersvik
508 E. Locust
Des Moines, IA 50309

RE: Metro Waste Material Recovery Facility

Dear Mr. Gjersvik:

The Development Services Department is in receipt of a proposed Site Plan for the Metro Waster Material Recovery Facility. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

- ~~1. Please include an operational analysis that addresses how and when truck traffic will navigate the site. There are many doors/points of access that are unclear as it relates to the operation of the site.~~
- ~~2. Please provide truck turning movements for the site.~~
3. Please provide a geo-tech report for the site. **Please provide when available.**
4. Please provide a project schedule. **Please provide when available.**
5. Please provide a permit from NF Southern for work in the railroad ROW. **Please provide when available.**

Sheet C0-10

- ~~6. Please update the setback requirements to meet the standards outlined in Chapter 165A.~~
- ~~7. Please note the required number of van accessible stalls.~~
- ~~8. Please note the provided address will be 4185 SE Beisser Drive~~

Sheet C0-11

~~9. Please update the Grimes Standard Notes (attached)~~

~~10. Under construction notes:~~

- ~~• Change Waukee to Grimes~~
- ~~• Change Public Work to Engineering Department~~

Sheet C0-21

~~11. In the Typical Gate Valve & Box Installation, change Des Moines to Grimes and under Notes: Add nut extension if valve is over 6' dp.~~

12. OUTLET STRUCTURE detail – show pipes on either side of the outlet structure as RCP.

Sheet C0-22

~~13. Please clean up the notes around detail C to be legible.~~

Sheet C1-30

14. SUDAS Design 7D-1 requires temporary sediment basins for drainage areas larger than 10 acres. Add language and design that provides for a temporary sediment basin early in the construction sequence. Provides language for maintenance prior to project acceptance.

15. Change “notice of termination” to “Notice of Discontinuation” under the FINAL STABILIZATION paragraph.

16. Add Temporary Sediment Basin under MAINTENANCE SCHEDULE.

Sheet C3-10

17. Please update the building footprint on all sheets to reflect the provided elevations. The south façade appears to have an above grade platform that is not represented on the plans. The original provided elevations noted an elevated platform adjacent to the southern dock doors. It is no longer shown and can be redacted.

~~18. Please note that the future rail, is not part of this approval.~~

19. Note that recycled asphalt is not permitted for the access lane around the building.
Staff would be willing to explore a geo-grid “green” pavement option, provided it can support the loads of the fire apparatus. **Please provide a detail for the HMA pavement, and all other pavements.**

~~20. Please modify where the recycled asphalt and pavement meet. A paved approach and radii should be provided before transitioning into the fire lane.~~

~~21. Please note that staff does not desire to use concrete flumes as low flow provisions within basins. Please revise to 2% fall or 1% with an underdrain.~~

Sheet C3-20

~~22. Please provide larger detail plans for the utilities.~~

~~23. Please note that the Hazardous Waste Drop Off building will need to be fit with a fire suppression system. As such, please provide a FDC that has clear access with no obstructions (parking, landscaping, etc)~~

~~24. Ensure that a hydrant is provided within 100 feet of all FDC's~~

~~25. Depending on the operations internal to the building, there may need to be a sand/oil separator provided within the building.~~

~~26. Provide flowline elevations at existing MH connection on sanitary sewer.~~

~~27. The sanitary service line will need to be air tested prior to connection into building.~~

~~28. Note that all internal utilities will be private.~~

29. Please verify that the proposed 6” watermain will provide adequate with fire suppression in the building. **Staff will work with our water operator to provide flow analysis.**

~~30. A valve will need to be added at the connection to existing to allow separation of mains for installation and testing.~~

~~31. Please move the proposed valve on the north side of tee to the south branch and add a valve on the east branch.~~

- ~~32. Separate the fire suppression line and domestic service outside the building and provide a valve/curbstop on each 5' outside the building.~~
- ~~33. Provide dimension, size and amount of proposed rip rap at storm outlet.~~
- ~~34. Verify all critical crossing have required separation.~~

Sheet C3-22

- ~~35. Provide a schedule for watermain and water fixtures.~~
- ~~36. In the Sanitary Sewer Pipe Schedule change pipe class to SDR 23.5 for 6".~~
- ~~37. Provide a detail for the clean outs proposed in the Sanitary Sewer Structure Schedule. Provide 2 45°'s or a wye at turns, no tee's or 90°'s.~~
- ~~38. Basin outlet structure A-4 is shown on Page 4 as HDPE and all structures are shown as RCP in the structure schedule on Page 17. Please rectify.~~
- ~~39. All on site storm pipe is shown on pipe schedule as RCP and on pipe sizing calculations as HDPE. Please rectify.~~

Sheet C3-40

- 40. Dimensions, size, and amount of proposed rip rap at outlet is still not clear. Please rectify.
- 41. A-4 Invert elevation. Verify 972.75' vs. 973.75'.

Sheet C4-10

- 42. Please ensure all swale bottoms or conveyance channels are at 2% fall or 1% with an underdrain. The swale on the south side of the site is still less than 2% and has no subdrain.
- ~~43. Please show pond overtop elevation and protect the emergency overtop area.~~

Sheet C5-20

- 44. It appears that there are many conflicts with landscaping in swale bottoms. Please revise to ensure all landscaping is out of the swale bottom and conveyance elevation. If room does not allow, please ensure plant species are tolerant for wet conditions, ie: no spruce. **It appears there are still conflicts. Please relocate all trees that are in swale bottoms.**
- ~~45. Please revise the berm planting to incorporate a variety of species, as well as revise the planting layout to stagger the plantings along the top and side slopes.~~
- ~~46. Please revise the plantings near the NE corner of the building that in conflict with the intake.~~
- ~~47. Please revise the plantings that in conflict with utility lines and fire hydrants.~~
- ~~48. Please show utility line work (water, sanitary, storm) in half tone on sheets C5-21 and C5-22~~

Sheet C5-22

- ~~49. There appears to be an erroneous Future Phase note and leader on this sheet.~~

Sheet C6-10

- 50. Please provide manufacture cut sheets for all fixtures.
- 51. Staff questions if any building wall packs will be provided.
- 52. Please note that the corridor standards require up lighting of the façade. **While your response may expose a technical issue, staff would still push for façade lighting as a way to help address the aesthetics of the building from HWY 141.**
- 53. In addition to the up lighting, staff questions if any decorative lighting can/should be provided within the upper tier of the building. **Response noted.**

SWMP

- 54. Page 11: For Table 2.2, verify the proposed culvert peak flows for all three storm events compared to their corresponding hydrographs. The hydrographs are dated 12-30-2019.**

55. Page 60 and other repeated pages: Per SUDAS Design 2B-3, sheet flow should not exceed 100-ft. Please rectify TOC for all sheet flow exceeding 100-ft. Please updated impacted hydrographs and impacted infrastructure.
56. Page 104 and other repeated pages: Address the following items for 1.25" WQv pond summary:
- a. Verify length, slope, and outlet elevation of 18" Round Culvert.
 - b. Show cumulative storage of 31,513 cubic feet over the routing time.
 - c. Show peak discharge when peak elev = 974.24' occurs.
57. Pages 104, 113, 122, 131 and other repeated pages: Invert is shown at both 974.00' and 973.75' for Pond 1P. Identical pond 37P on pages 142, 153, and 164 show the invert at 973.75'. Seems like the discharges for 1P and 37P should be the same. Some of the weir characteristics, dates on the documents, etc. are also different. Please rectify said differences.
58. Page 113 and associated pages: The City is OK to use the 1-year, 24-hour storm as the Channel Protection Volume (CPv). The 2-year, 24-hour storm is not necessary for the report. Compute the CPv per ISWMM Chapter 3 procedures and demonstrate the basin stores the CPv. Report the peak elevation and discharge associated with the CPv.
59. Page 170: Appendix F and associated pages (pipe and culvert sizing): Update/revise once the other changes are made.

Elevations

- ~~60. Please provide elevations for the hazardous waste building and scale house.~~
- ~~61. Please provide a detail for the opaque metal panel.~~
- ~~62. Please provide a detail for the bi-fold doors.~~
- ~~63. Staff questions what the horizontal paneling to the page right of the admin portion of the building (white panel) is.~~
- ~~64. Staff would like to see the corner elements enhanced, particularly on the south side of the building but preferred on both north and south. This could include a bump up on the corners and returns~~
- ~~65. Please note the location of all roof top mechanical units, and provide screening. Based upon the elevation, parapet screening may not be sufficient.~~

66. Please provide isometric views with next submittal

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: January 28, 2020
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: February 4, 2020 at 5:30 at the Grimes City Hall

COUNCIL MEETING: February 28, 2020 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,



Alex Pfaltzgraff
Development Services Director



BI-FOLD AND HYDRAULIC DOORS. DESIGNED FOR YOU. BUILT TO LAST.

BI-FOLD DOORS

Wind and other environmental factors can be brutal on extremely large doors. Midland Bi-Fold Doors are built sturdy to withstand the most tenacious elements. All of our bi-fold doors are made with heavy-gauge steel tubing and a unique truss design that provides superior wind loading performance.

Tough as nails with no-hassle, worry-free operation every time and over time.

Farm Tested. Engineer Approved. High-strength structural steel is jig welded to ensure straight lines, while the 3-inch deep vertical frame members provide maximum strength, even in the strongest winds.



Maximize Space. Bi-fold doors are designed so you can use the full height and width of your building's opening. As equipment continues to become larger, rest assured your door will easily accommodate it.

Simplicity. The standard single latch means you'll never forget to unlatch one side of your door again. An optional automatic latch system allows you to open the door even from the comfort of your vehicle.

Speed. An optional nylon strap system allows for even faster opening. The 3-inch nylon straps wrap over themselves, resulting in a faster lift.

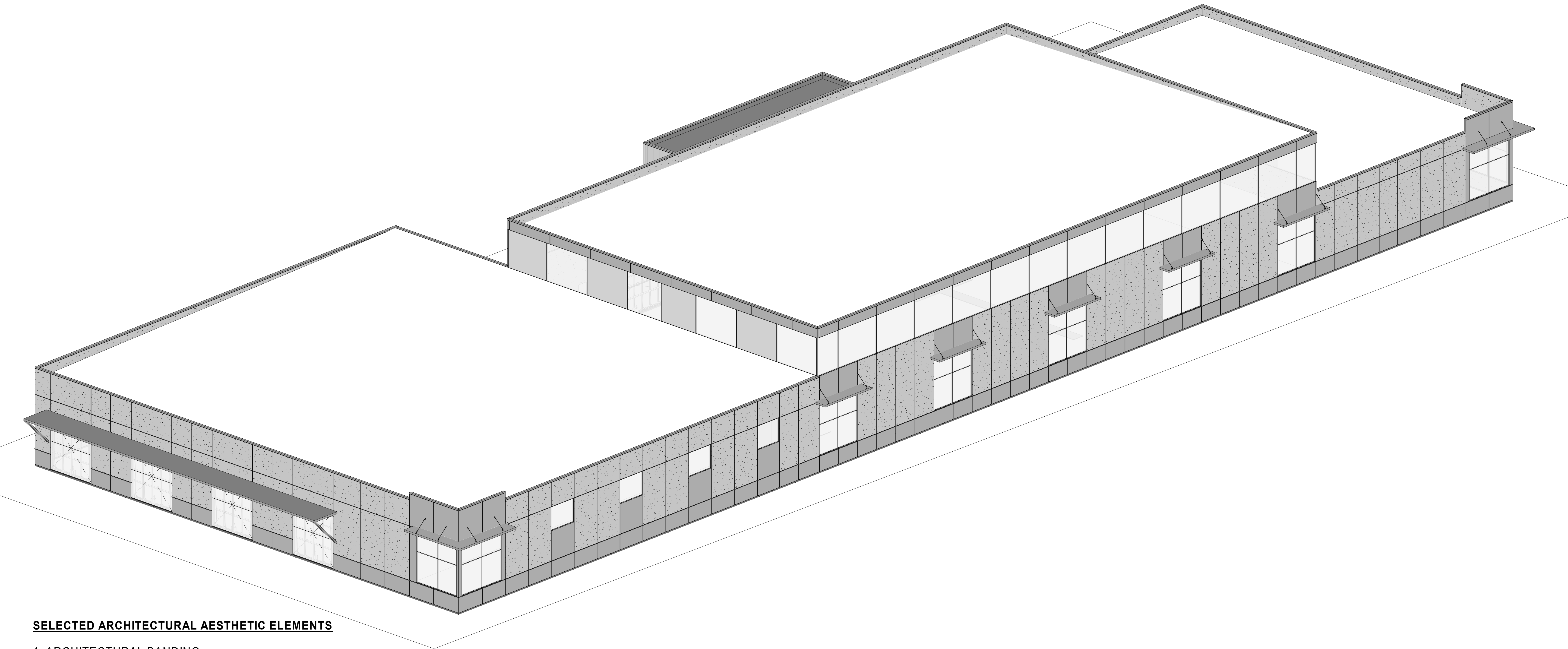
Hinges. Cold-formed steel hinges are welded to the frame to enhance durability. The hinges use 5/8-inch and 3/4-inch cold rolled hinge pins.

Customized. We'll match your new building colors or replicate the existing building for a seamless look. Choose custom colors for your door and trim.

Weathertight Seals. Two-ply cloth-inserted rubber between the doorframe and sheeting provides a weather-tight seal at the bottom of every door. All insulated doors feature dual seals.



Safety. We design standard bottom operator drive units with a 5 to 1 safety factor and use power sources ranging from 1.5 to 4 horsepower. We only use cable larger than 1/4-inch and strategically attach it with no pulleys so there is less wear and tear.



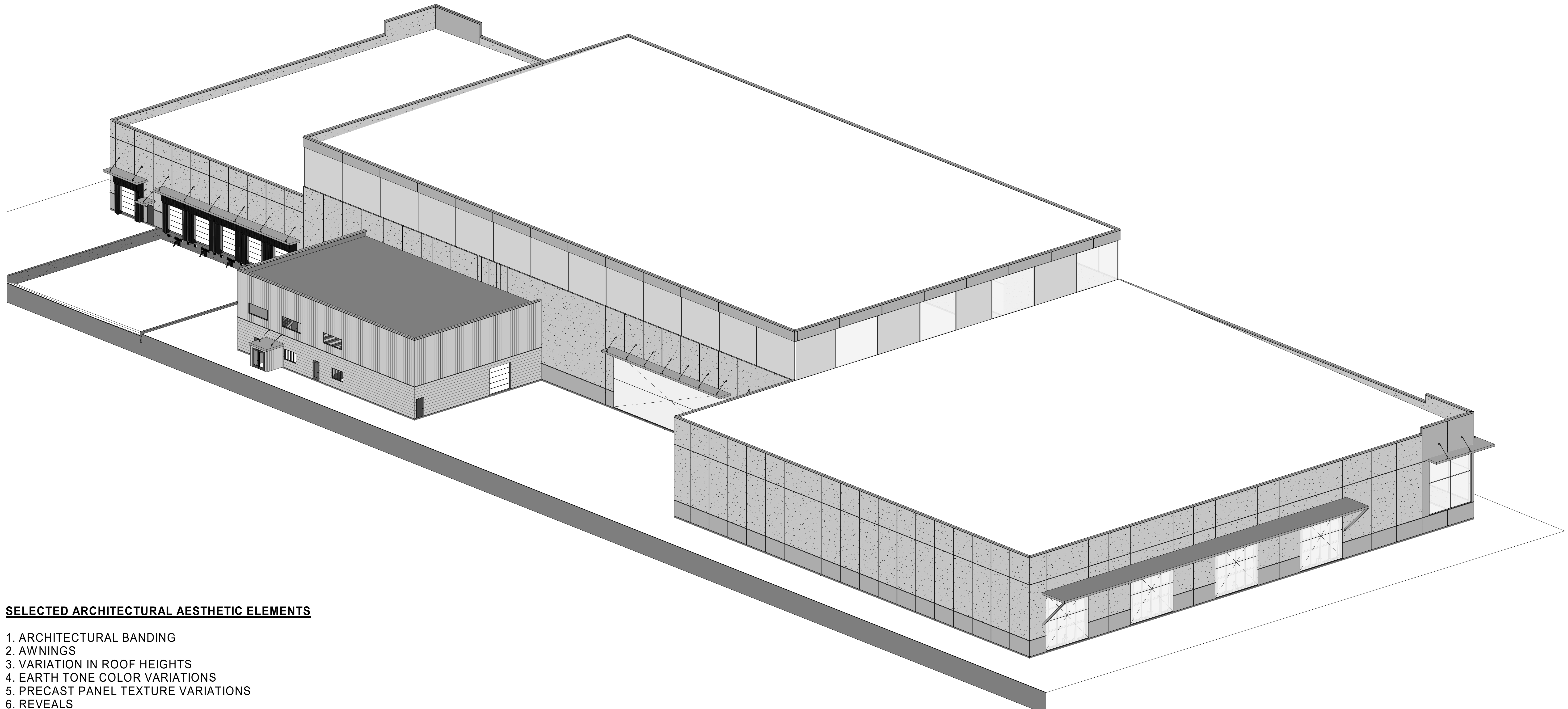
SELECTED ARCHITECTURAL AESTHETIC ELEMENTS

1. ARCHITECTURAL BANDING
2. AWNINGS
3. VARIATION IN ROOF HEIGHTS
4. EARTH TONE COLOR VARIATIONS
5. PRECAST PANEL TEXTURE VARIATIONS
6. REVEALS

** HEIGHT OF CENTER PORTION OF BUILDING MAY BE REDUCED AS THE PROCESSING EQUIPMENT IS DEVELOPED AND STRUCTURAL SIZING IS DETERMINED*

** EAST AND SOUTH WALL ARE DESIGNED TO MEET HWY 141 GLAZING PERCENTAGE REQUIREMENT OF 30%*





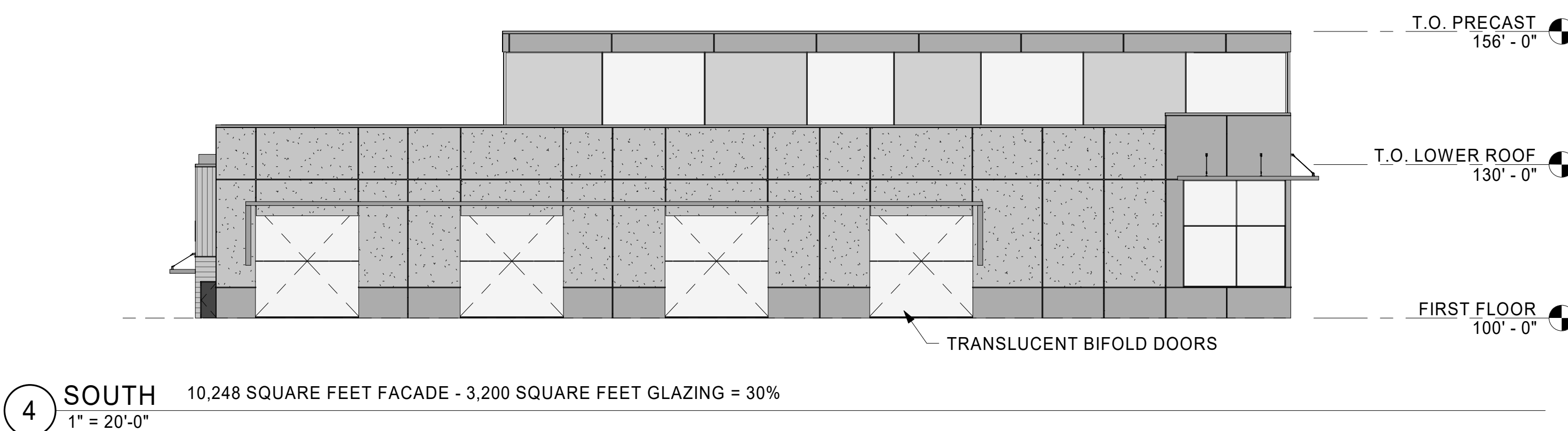
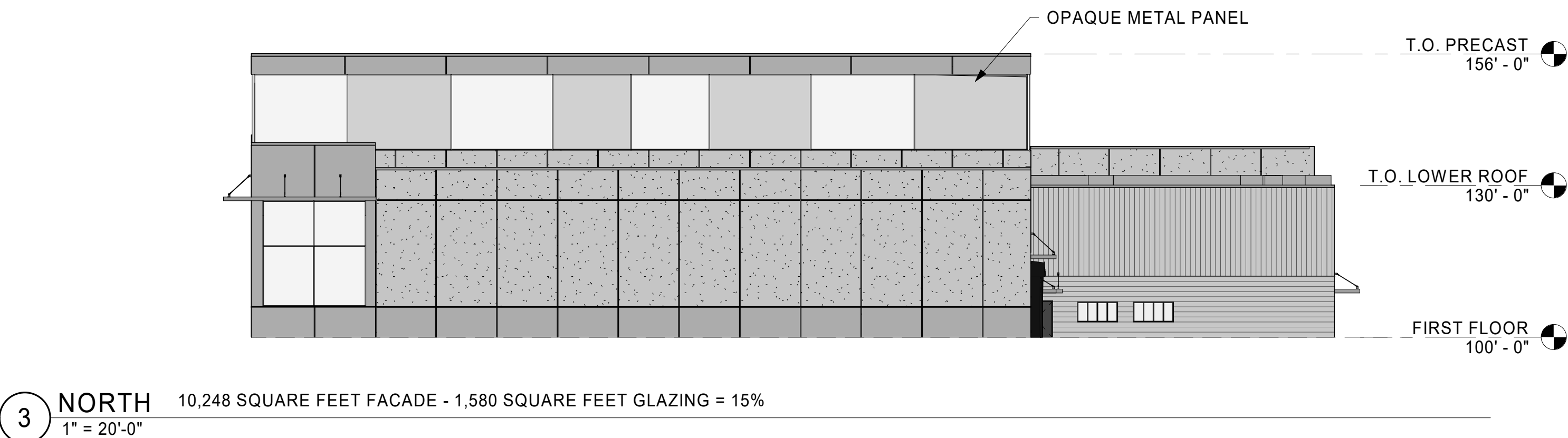
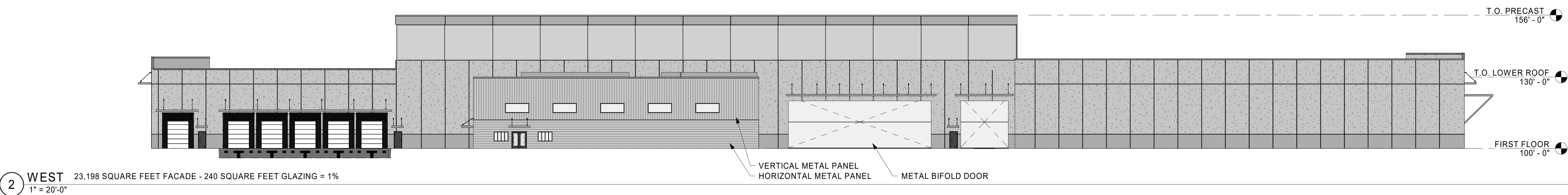
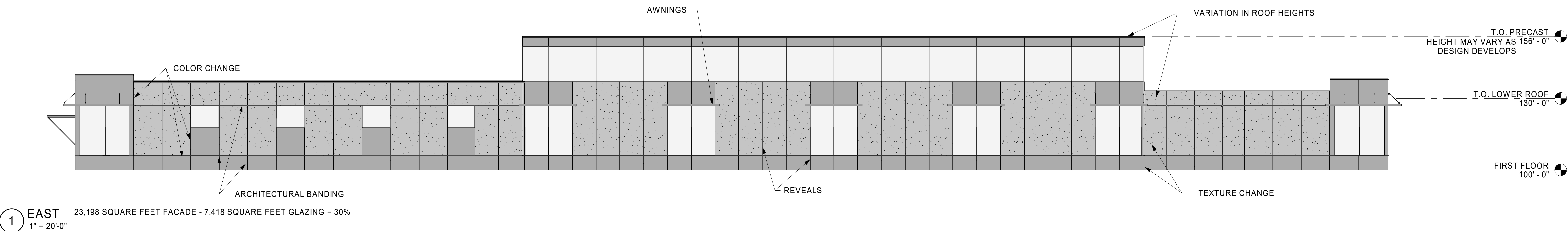
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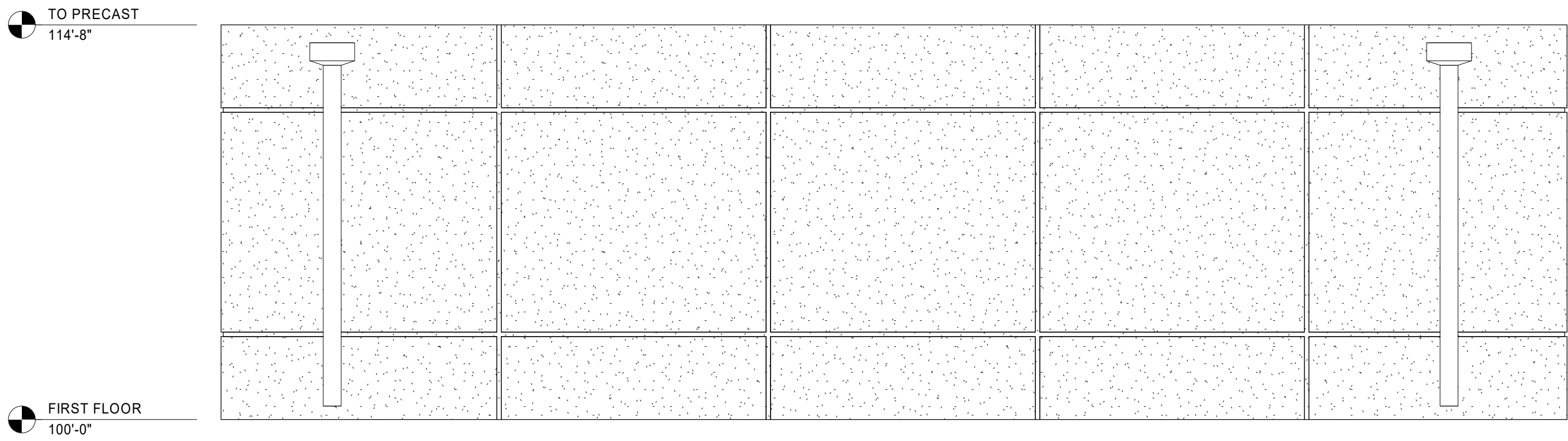
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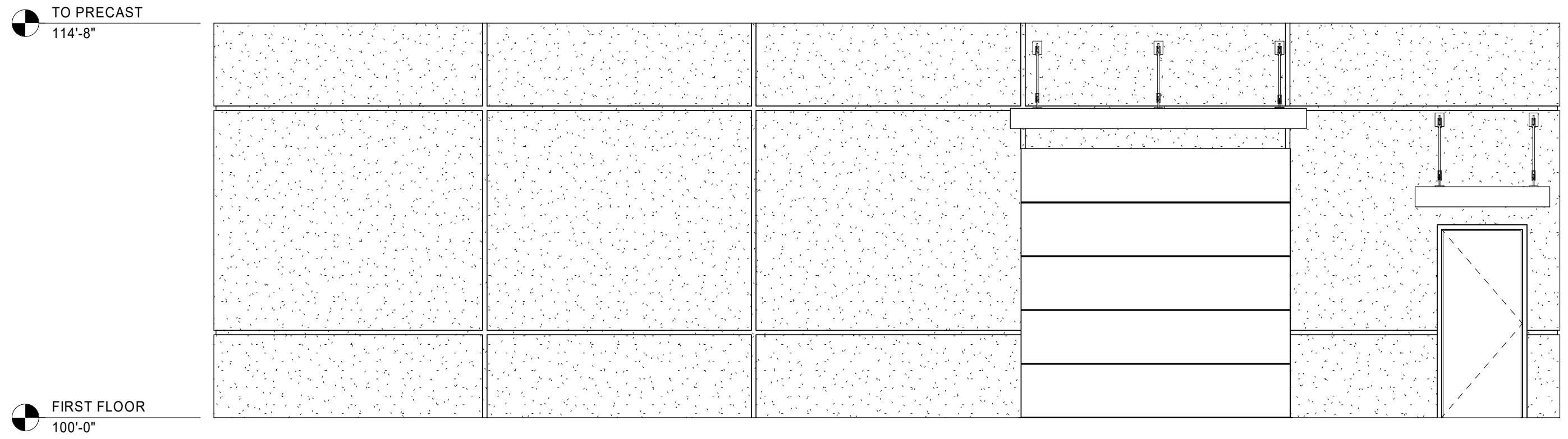






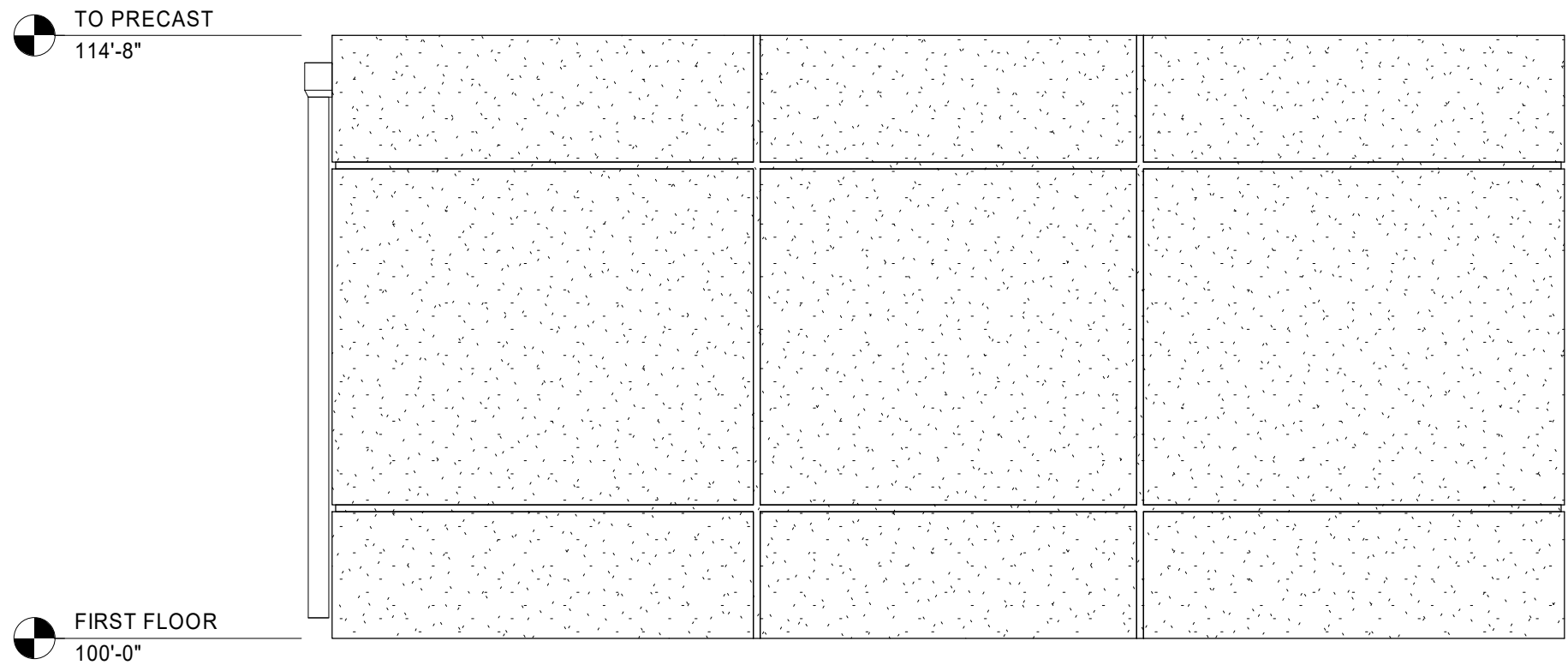
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1/4" = 1'-0"



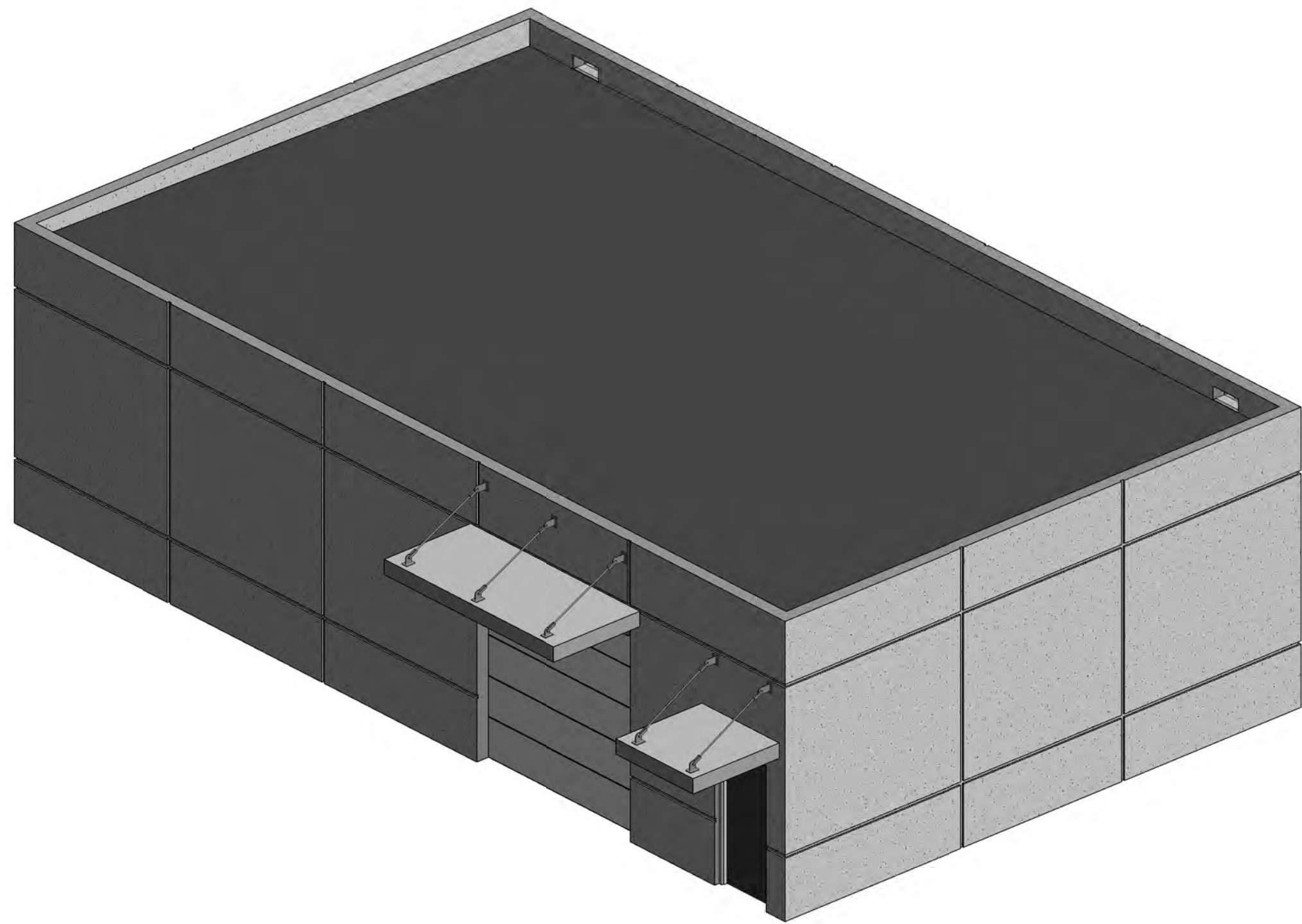
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1/4" = 1'-0"



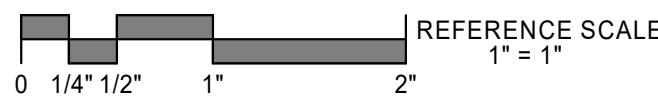
3 EXTERIOR ELEVATION - SOUTH (HAZARDOUS WASTE BUILDING)

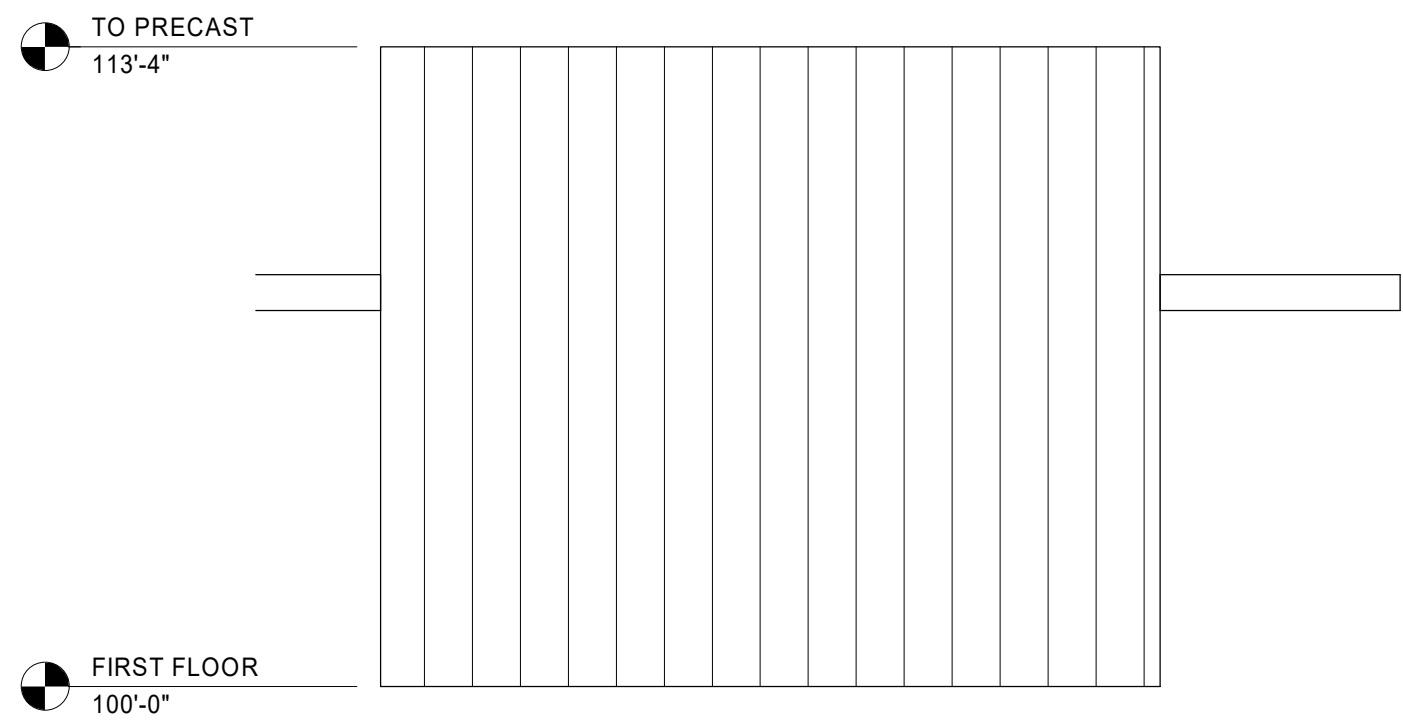
1/4" = 1'-0"



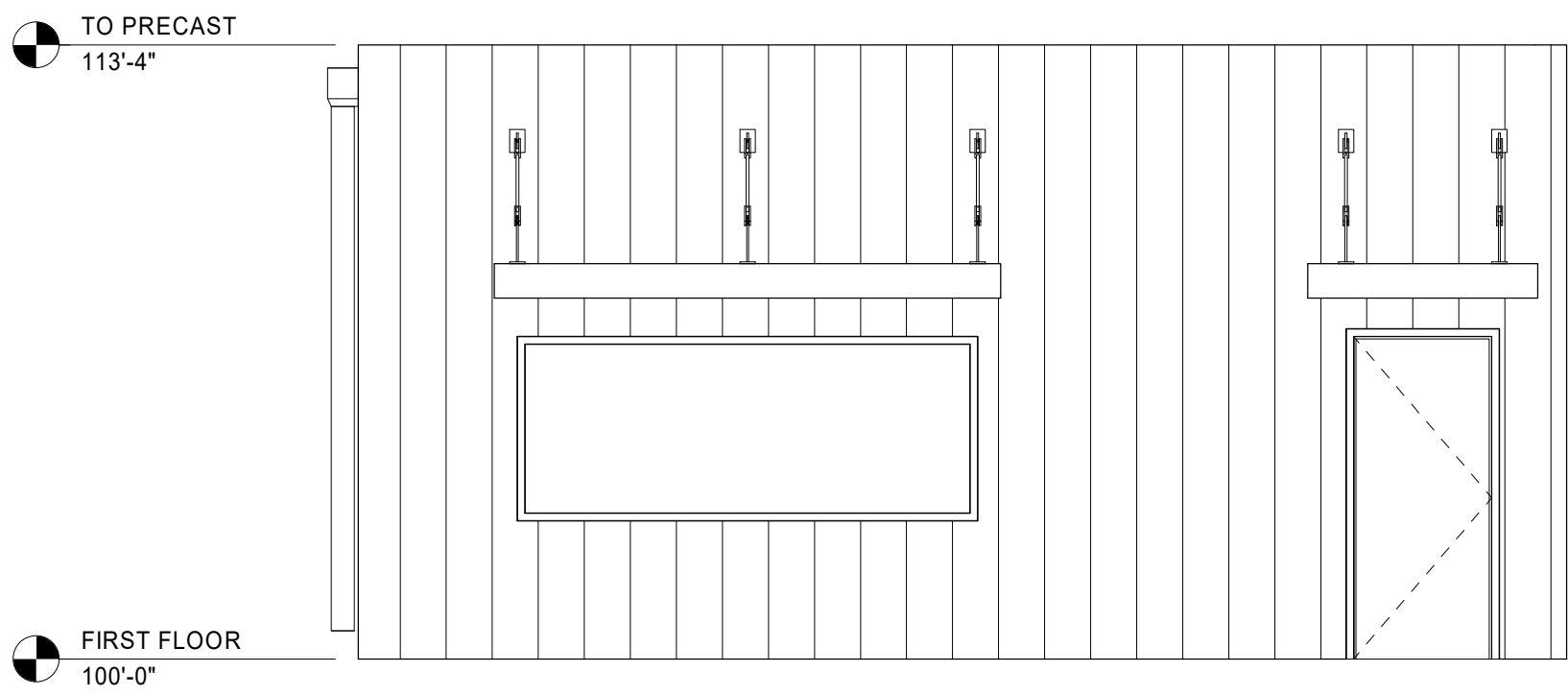
4 EXTERIOR ELEVATION - WEST (HAZARDOUS WASTE BUILDING)

1/4" = 1'-0"

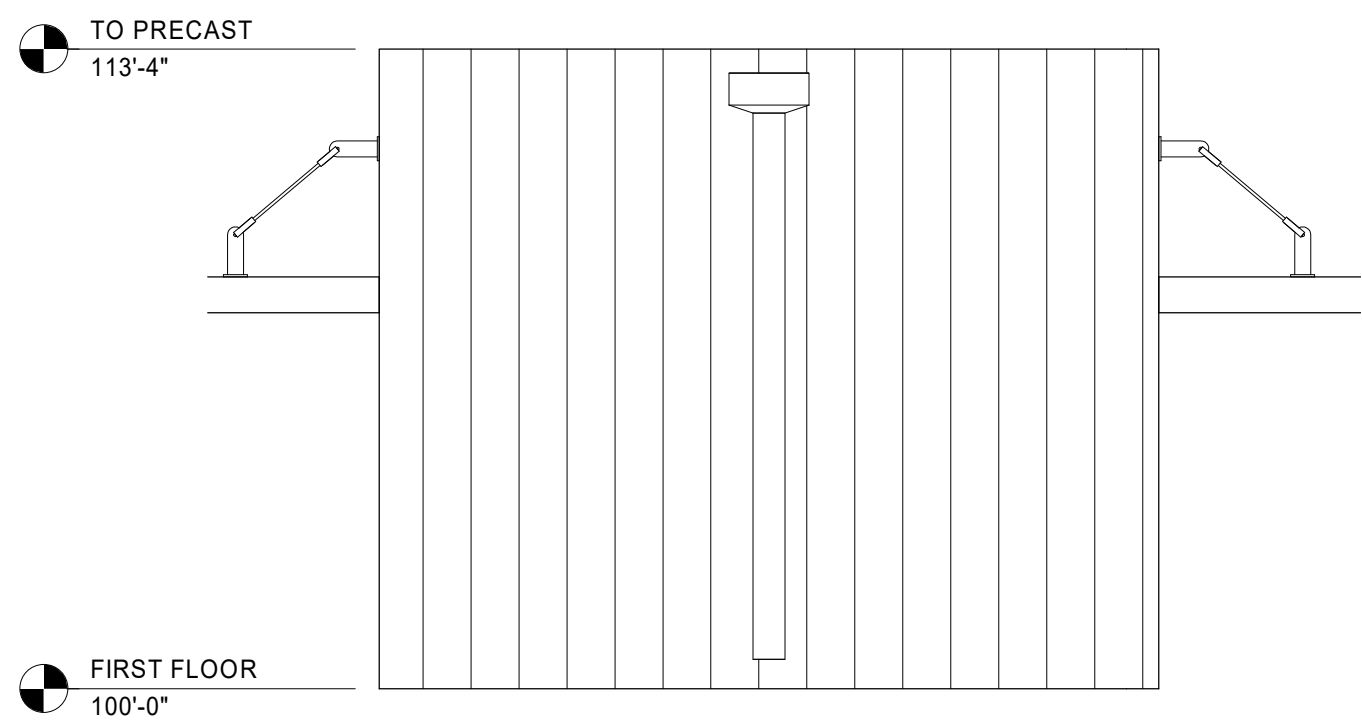




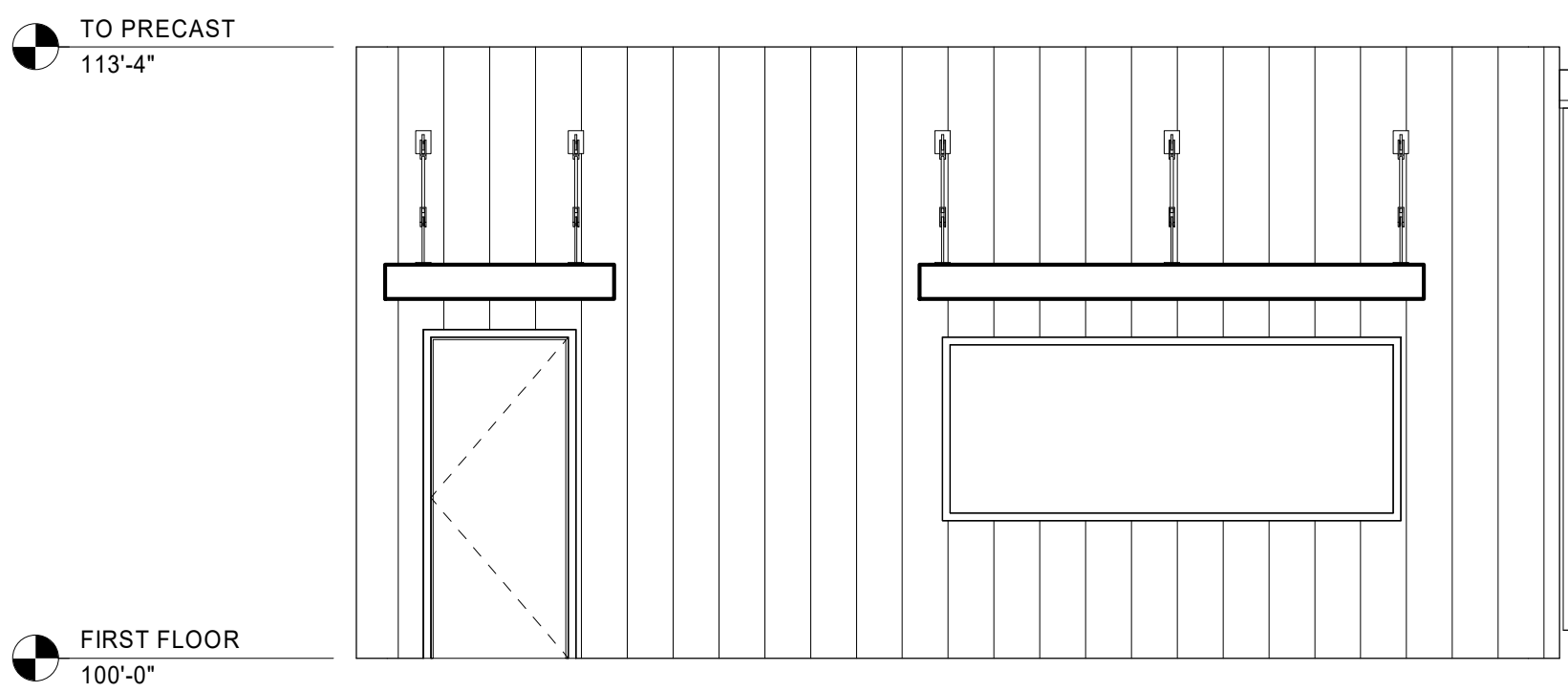
1 EXTERIOR ELEVATION - NORTH (SCALE BUILDING)
1/4" = 1'-0"



2 EXTERIOR ELEVATION - EAST (SCALE BUILDING)
1/4" = 1'-0"



3 EXTERIOR ELEVATION - SOUTH (SCALE BUILDING)
1/4" = 1'-0"



4 EXTERIOR ELEVATION - WEST (SCALE BUILDING)
1/4" = 1'-0"

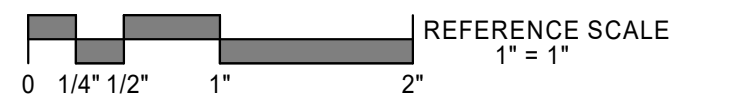
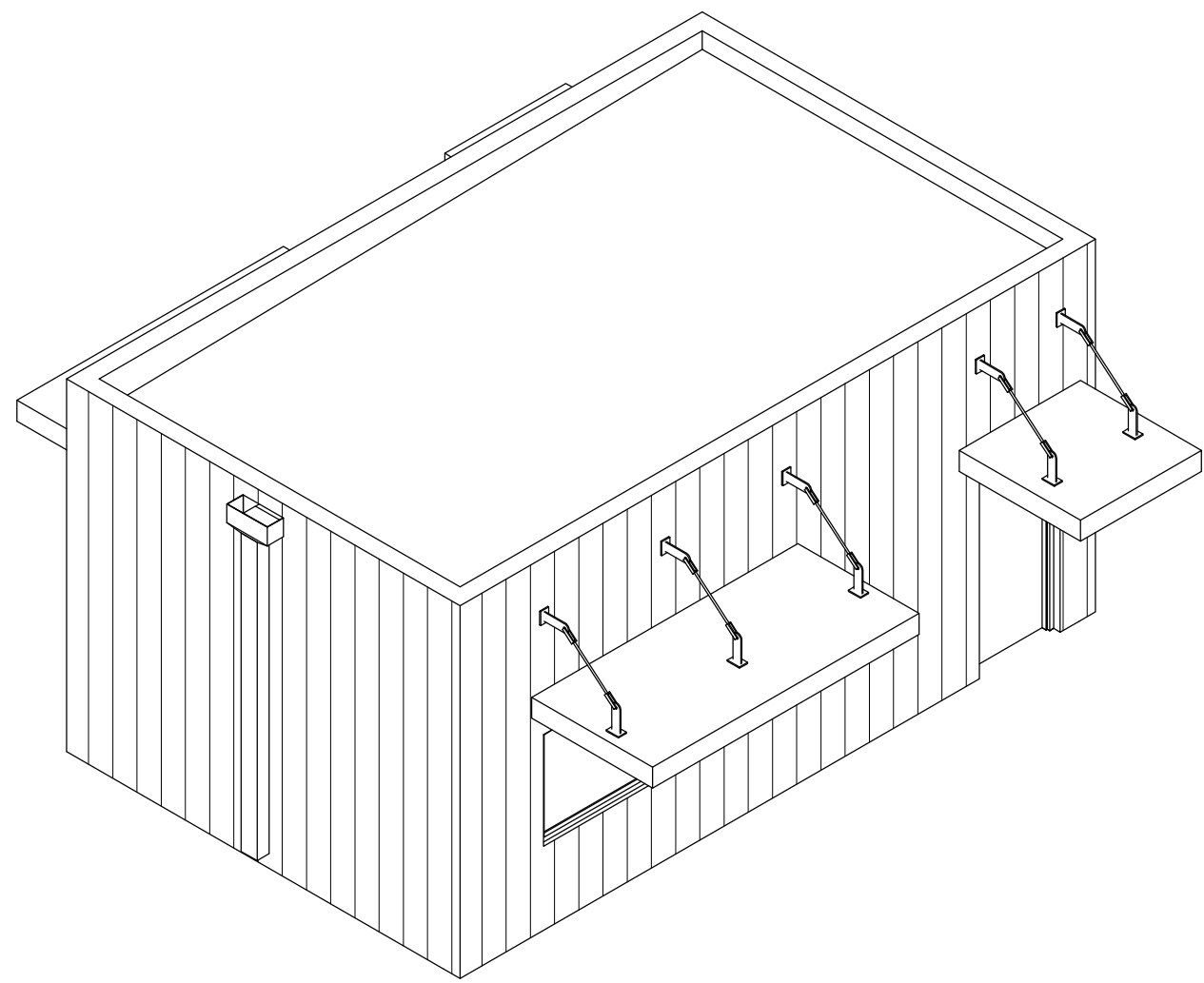




photo: Chuck Choi

KALWALL[®]

high performance translucent building systems

FACADES

Wall Systems

Unitized Curtain Walls

Window Replacements



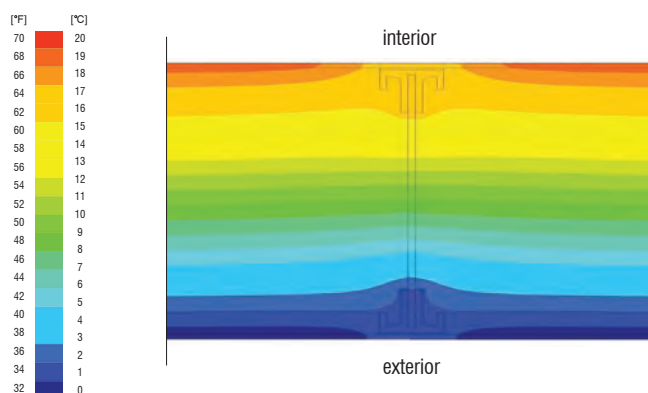
photo: Halkin|Mason Photography

University Heights Charter School | Newark, NJ USA | KSS Architects (above)

Thermal Break Technology

For any high performance building envelope to perform optimally, careful consideration must be given to specify adequate levels of thermal insulation, minimize air infiltration, provide sufficient solar control, and eliminate thermal bridging to the greatest extent possible. To address potential thermal bridges, which can produce localized areas of higher heat transfer, Kalwall systems employ proprietary thermal break technologies for both the Kalwall panel and the Clamp-tite™ fastening system. The diagram on the right shows a thermal gradient, generated using THERM 7 software, to illustrate the effectiveness of the 2-3/4" (70 mm) Kalwall panel's thermally broken grid core.

Thermal Gradient Analysis: 0.14 "U" (0.79 W/m²K) panel



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800 258 9777 | KALWALL.COM | +1 603 627 3861

Wall Systems

Translucent Wall Systems offer many budget-friendly, elegant side lighting solutions. From single story applications to mid-rise construction, Kalwall Wall Systems transform sunlight into glare-free daylight to enhance any space.

Standard Wall Systems

For certain climate zones and building types, non thermally-broken Wall Systems provide sufficient envelope performance that is both cost effective and meets energy codes.

Standard, aluminum interlocking I-beam panel grid core

Standard aluminum Clamp-tite™ fastening system

U-factors range from 0.53 - 0.18 (3.01 to 1.02 W/m²K)

Solar Heat Gain Coefficients (SHGC) from 0.65 to 0.10

Visible Light Transmission (VLT) values from 3% to 50%

STANDARD SYSTEM | BACK FASTENED SYSTEM | CONCEALED FASTENERS | KALCURVE | 1-9/16" SYSTEM



Thermally Broken Wall Systems

For more demanding climate zones and building types, Thermally-Broken Wall Systems provide enhanced envelope performance to meet or exceed the toughest energy codes.

Thermally-broken, interlocking I-beam panel grid core

Thermally-broken aluminum Clamp-tite™ fastening system

U-factors range from 0.23 - 0.05 (1.31 to 0.28 W/m²K)

Solar Heat Gain Coefficients (SHGC) from 0.28 to 0.10

Visible Light Transmission (VLT) values from 3% to 50%

THERMAL BREAK+STRUT SYSTEM | BACK FASTENED SYSTEM | CONCEALED FASTENERS | KALWALL 100

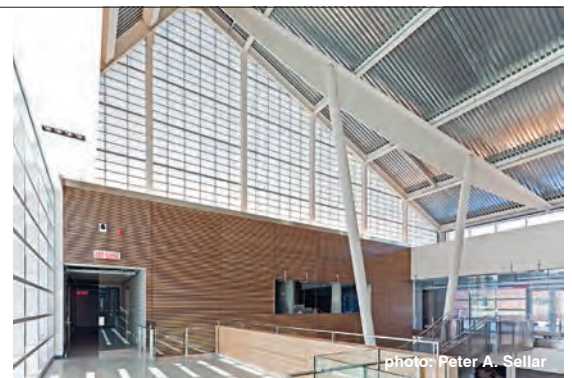


photo: Peter A. Sellar

Specialty Applications

Kalwall offers many product configurations for projects that require special performance criteria to protect from extreme weather events and manage human safety+security

Class A fire ratings available for Wall Systems and Unitized Curtain Walls

Windborne debris protection - tested and certified up to large missile D

Blast resistant systems meet DOD UFC 4-010-01 anti-terrorism force protection

Factory Mutual certified systems: Class I exterior wall FM 4881 & FM 4411

Factory Mutual explosion venting / pressure release systems: FM 4440

WINDBORNE DEBRIS PROTECTION | EXPLOSION VENTING | ANTI-TERRORISM FORCE PROTECTION | FM CLASS I



Sports Hall | Bussy-Saint-Georges, France | Marc Duplantier Architectes (below)



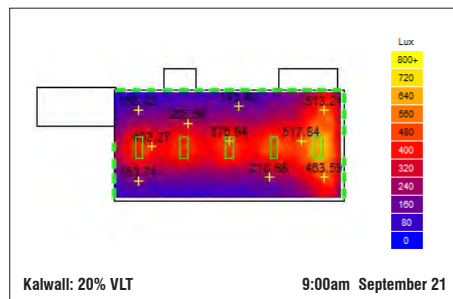
Please visit KALWALL.COM for all wall system specifications, CAD details, BIM families & performance charts online



photo: Mark Herboth

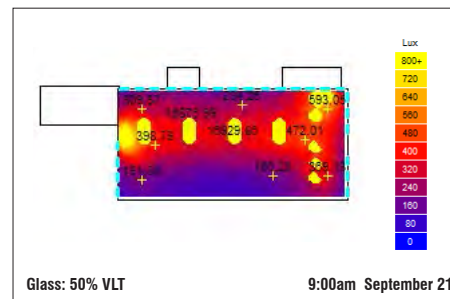
RDU International Airport Terminal | Raleigh-Durham, NC | Clark Nexsen Architects (above)

Daylight Modeling Studies: a complimentary service to optimize your daylighting design



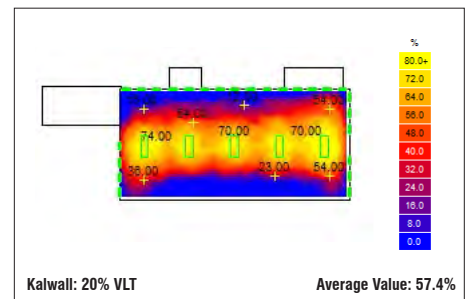
Radiance Illumination

Provides a “snapshot” of daylight levels at a given point in time. Typically, simulations are made to study light levels at the Fall and Spring Equinoxes during the early morning, at solar noon, and late in the afternoon on both sunny and overcast skies anywhere in the world.



Glare Pattern Analysis

Helps to identify potential problem areas where glare is a concern such as offices, classrooms, athletic facilities and other spaces where visual acuity is critical. These studies are especially useful when designers and specifiers call for a mix of translucent and vision glazing (glass).



Daylight Autonomy

Gives average daylight values and shows what percentage of the time the space can operate at the target light level with daylight alone. sDA (spatial daylight autonomy) and ASE (annual sunlight exposure) are all available for LEED® documentation for daylighting credits.

Unitized Curtain Walls

Unitized Curtain Walls can do everything Wall Systems can but, with the added benefits offered by factory unitization. In addition to translucent wall panels, designers can integrate fixed and operable windows, opaque panels and fixed louvers. From single-story window walls to multi-story curtain walls, Kalwall Unitized Curtain Walls provide modular daylighting solutions that balance aesthetics, performance, and cost.



Factory Unitization

Large panel units, up to 5' x 35', are assembled and glazed at the factory. They can incorporate both translucent panels, fixed and operable vision glazing, as well as opaque panels and fixed louvers to provide superior fit, especially when compared to systems assembled in the field.



Rapid Installation

Once delivered to the site, these large units can be installed rapidly in order to save both time and money. This approach also allows the building to be enclosed in a fraction of the time compared to conventional curtain wall systems allowing interior work to commence much earlier.



Superior Performance

Once in service, unitized curtain walls offer higher levels of performance over the full lifetime of the system without sacrificing design flexibility. Perhaps, that is why architects, contractors, and owners alike can all reap the benefits without compromising their project goals.

Tintern Middle School | Melbourne, Australia | Architectus (below)

photo: Brendan Finn



Please visit KALWALL.COM for all unitized curtain wall specifications, CAD details, BIM families & performance charts



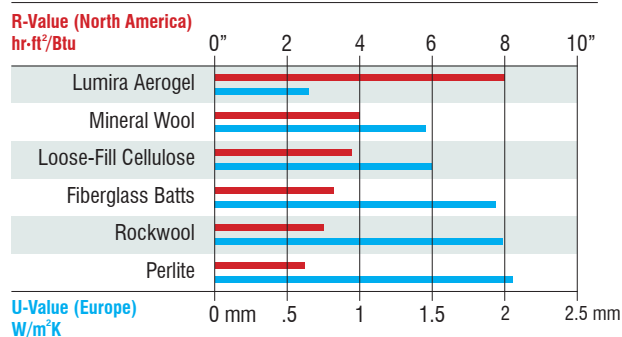
photo: Peter Aaron | OTTO

Yale Sculpture Building | New Haven, CT | Kieran Timberlake Architects | Double Skin Facade System with Schuco® and Kalwall+Lumira (above)

Kalwall+Lumira® Aerogel

Aerogel is among the lightest and most effective insulating materials in the world. Cabot's Lumira aerogel is a solid which consists largely of air (>90%) contained in a structure with pore sizes less than the mean free path of air molecules, which severely inhibits heat transfer through the material, enabling world class performance. Cabot produces Lumira aerogel at its state-of-the-art manufacturing facility located near Frankfurt, Germany, where it began commercial production in 2003. Kalwall was the first company to offer Lumira aerogel in partnership with Cabot in its 2-3/4" (70 mm) translucent daylighting panel. Center of panel U-values of 0.05 (0.28 W/m²k)

Thermal Insulation: values per inch (25 mm) of material tested



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Window Replacements

Retrofits and Energy Upgrades with Kalwall Window Replacements result in dramatic savings by stopping heat loss and reducing electric light usage by offering glare free-usable diffuse daylight, eliminating the need for shades, and decreasing solar heat gain. Our high performance systems are very competitively priced, virtually maintenance free, and offer increased security compared to typical glass retrofits, for both increased impact resistance and vandalism.



Window Replacement Systems

Kalwall Window Replacements offer budget-friendly fenestration options that deliver glare-free daylighting while simultaneously increasing energy performance and decreasing maintenance requirements. Delivered in unitized formats, specifiers can combine translucent and vision glazing to provide diffuse daylight, views and ventilation. Perfect for deep energy retrofit (DER) & renovations, these systems can be installed in existing rough openings rapidly, minimizing disruption to building occupants.

Graffiti and vandal resistant face sheets including high impact options

Highly insulated to reduce heating+cooling costs from HVAC systems

Various head, sill & jamb detail options for retrofits in existing R.O.s

Much lower maintenance requirements compared to conventional glazing

Windborne debris protection - tested and certified up to large missile D

HC-2000 Windows

Kalwall manufactures its HC-2000 Windows for commercial and industrial applications where both budget and performance are primary drivers. HC-2000 windows have been engineered and tested to ensure reliability.

HC-2000 available: fixed, project-in, project-out (max sizes vary)

HC-2000: AAMA/ANSI Performance Class: PI-AW50, PO-HC55, F-AW80

E-Series Windows

Kalwall manufactures its E-Series Windows for architectural applications where performance and craftsmanship are paramount. E-Series windows are engineered and tested for the most demanding applications.

E-Series available: fixed, project-in, project-out (max sizes vary)

E-Series: AAMA/ANSI Performance Class: PI-AW60, PO-AW70, F-AW80

E-Series Large Missile Impact: Design pressure 80 PSF (3.83kPa) tested and certified to TAS 201, TAS 202, TAS 203, ASTM E1886 & ASTM E1996

STANDARD SYSTEM | THERMAL BREAK+STRUT SYSTEM | CONCEALED FASTENERS



Before Window Replacement

Old, energy-inefficient single-pane glazing



During Window Replacement

Replacement system installed in existing R.O.s

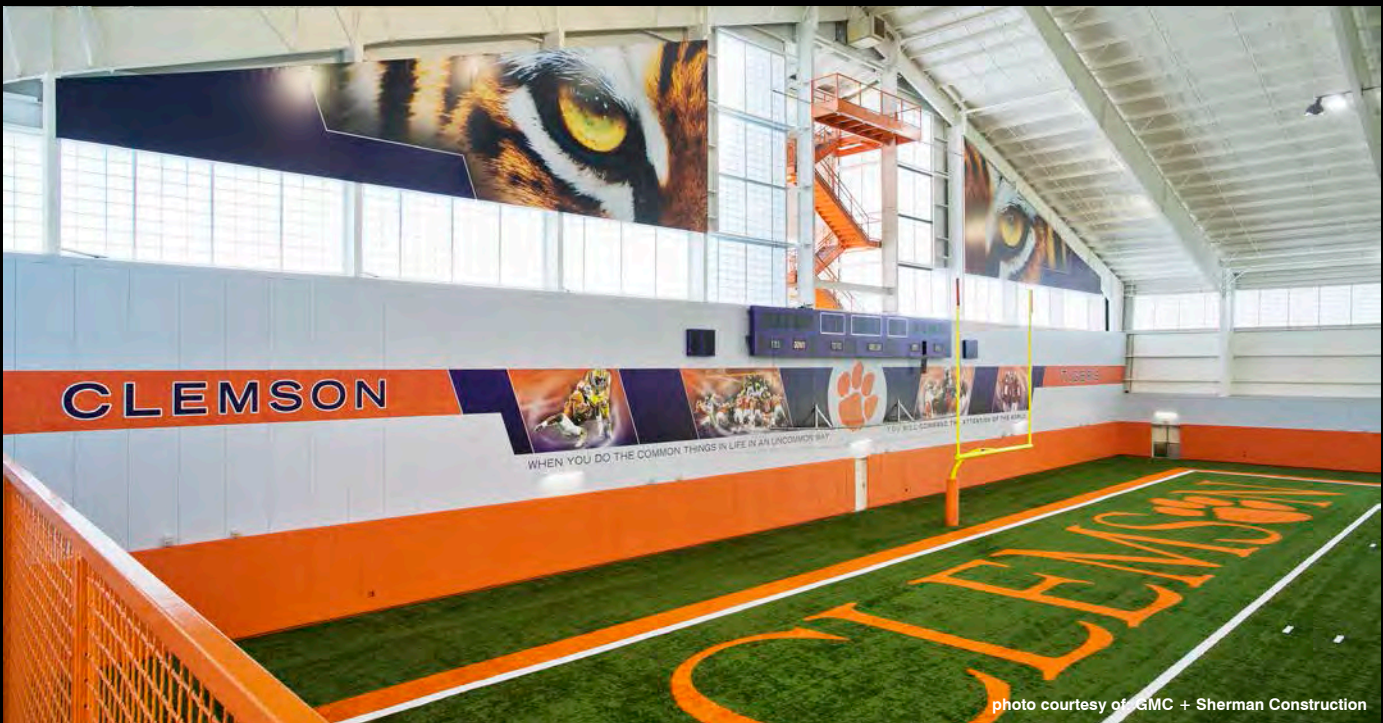


After Window Replacement

New, energy-efficient Kalwall system in service.

Please visit KALWALL.COM for all window replacement specifications, CAD details, BIM families & performance charts

Experience the world's most advanced daylighting systems



Indoor Football Practice Facility, Clemson University | Clemson, SC | Infinity Architecture



Kalwall Corporation is continually engaged in research to improve our products. Therefore, the material in this brochure is descriptive in nature and does not constitute a warranty, either express or implied. Please contact us for a copy of the warranty that is given with the sale of our products. Kalwall, Kalcurve, Skyroof, and Geo-Roof are registered trademarks. Verti-Kal, Clamp-tite, and Museum-Quality Daylighting are trademarks of the Kalwall Corporation. Clearspan is a trademark of Structures Unlimited, Inc. Lumira is a registered trademark of Cabot Corporation. 9 | 10 | 16 ©2016 Kalwall Corporation

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1111 CANDIA ROAD, MANCHESTER NH 03105 USA | 800 258 9777 | +1 603 627 3861



PRODUCT OVERVIEW



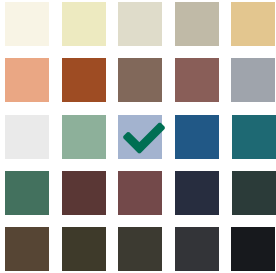
mapes
ARCHITECTURAL PANELS

www.mapespanels.com

WHY MAPES PANELS?

CHOOSE FROM MANY FINISHES

Kynar, Anodized Aluminum, Baked Enamel, Spandrel Glass, Porcelain on Steel



APPLICATIONS

- Spandrel Glass
- Curtain Wall
- Window Replacement
- Schools/Hospitals
- Transoms
- Thermal Retrofit
- Accent Panels

MAPES HISTORY

Mapes Industries has manufactured high quality commercial architectural products since 1952 and is committed to providing the same high quality product and service that has become the foundation of past success.

PANEL CUSTOMIZATION

Easily customize Mapes panels to fit your building project requirements. All panels are made to order and custom colors are available.

INCREASED R-VALUE

Mapes panels can achieve R-Values of up to R=27 and are available with any architectural finish, making them the smart panel solution for your next project.

Panels to match the Kalwall brand in color and pattern.

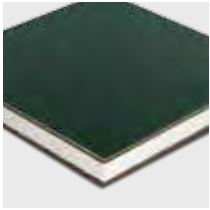


Amanda Stout Elementary School in Reading, Pennsylvania



Bow Creek Recreational Center in Virginia Beach, Virginia

PANEL SOLUTIONS



MAPES-R

Laminated glazing infill that improves energy efficiency, abuse resistance and design flexibility.

- For use in all major window and curtainwall systems

mapespanels.com/mapes-r

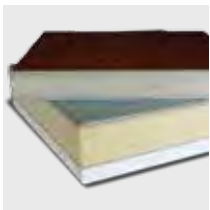


MAPES-R+

Energy efficient Rabbet Edge panels that fit into any 1/4" or 1" glazing pocket. Increase R-Value by 100%-200%.

- Retrofit applications

mapespanels.com/mapes-r-plus



MAPESTOP

Fire resistant infill panels designed to meet local code requirements.

- Class A rated
- 15-30 minute fire rated

mapespanels.com/mapestop

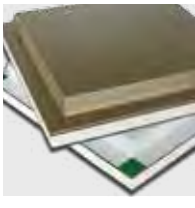


MAPESOUND

Panels designed to improve the acoustical performance of window and curtainwall systems.

- STC up to 55
- Available in all architectural finishes

mapespanels.com/mapesound

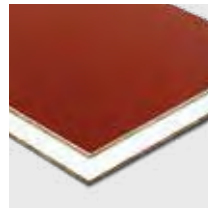


MAPESHAPE

Formed edge panels improve energy efficiency and design options.

- Flush with frame glazing option
- Butt glazing

mapespanels.com/mapeshape

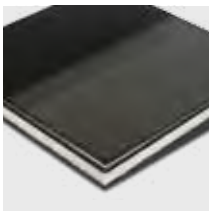


MAPESHIELD

Impact resistant infill panels designed for coastal or high security areas.

- Large and small missile impact rated
- Explosion and bullet-resistant glazing

mapespanels.com/mapeshield



MAPESPAN

Spandrel glass laminated into a unitized panel with an interior finish.

- Single source factory laminated
- Reduces field labor and fabrication

mapespanels.com/mapespan

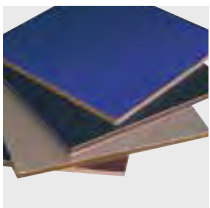


CORELITE

Laminated infill panels with corrugated high density polyethylene substrates.

- Water resistant substrates
- Light weight

mapespanels.com/corelite

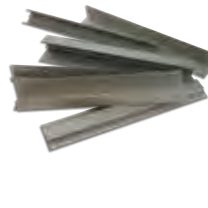


VENEER / GLAZING

Panels designed to replace standard glass for all glazing infill.

- Abuse resistant / unbreakable
- Fascia, soffit, wall facing applications

mapespanels.com/veneer-glazing



MOLDINGS

1/4" and 1" moldings.

- Veneer applications



SELECTION GUIDE

Consult the “Spec Builder” at mapespanels.com/spec-builder for complete details.

SKINS	THICKNESS	TEXTURE		STANDARD COLORS	CUSTOM COLORS	AVAILABLE WIDTHS		FINISH WARRANTY
		EMBOSSSED	SMOOTH			48"	60"	
Porcelain on Steel	0.014		•	8	•	•	•	20
Standard Kynar	0.032	•	•	18		•		20
Custom Kynar	0.036 - 0.125	•	•		•	•	•	10
Spandrel Glass	0.25		•	8	•	•	•	5
Colorlume E	0.012	•		6		•	•	5
Colorlume S	0.022		•	2		•	•	5
.025 Clear Anodized (Coil)	0.025		•	1		•		n/a
.025 Bronze Anodized (Coil)	0.025		•	1		•		n/a
Class 1 Anodized	0.036 - 0.125	•	•		•	•	•	5

SUBSTRATES						LAMINATION WARRANTY
1/8" Hardboard	0.125	MOST ECONOMICAL	•	•	•	25
3/16" Hardboard	0.187	MOST ECONOMICAL	•	•		25
1/2" Gypsum	0.5	FIRE RESISTANT	•	•		25
Cement Board	4mm	WATER/IMPACT RESISTANT	•	•		25
Corelite (H.D.P.E.)	4mm	WATER RESISTANT	•	•	•	10
Solid Plastic (SPS)	0.125 & 0.187	WATER/IMPACT RESISTANT	•	•	•	5

CORES	
2# Density Polystyrene	most cost effective per R-Value (4.74 - 20.31 R-Value)
Isocyanurate	most insulation per inch (6.41 - 27.79 R-Value)
Micore	Class A Fire Rated (3.05 - 15.50 R-Value)



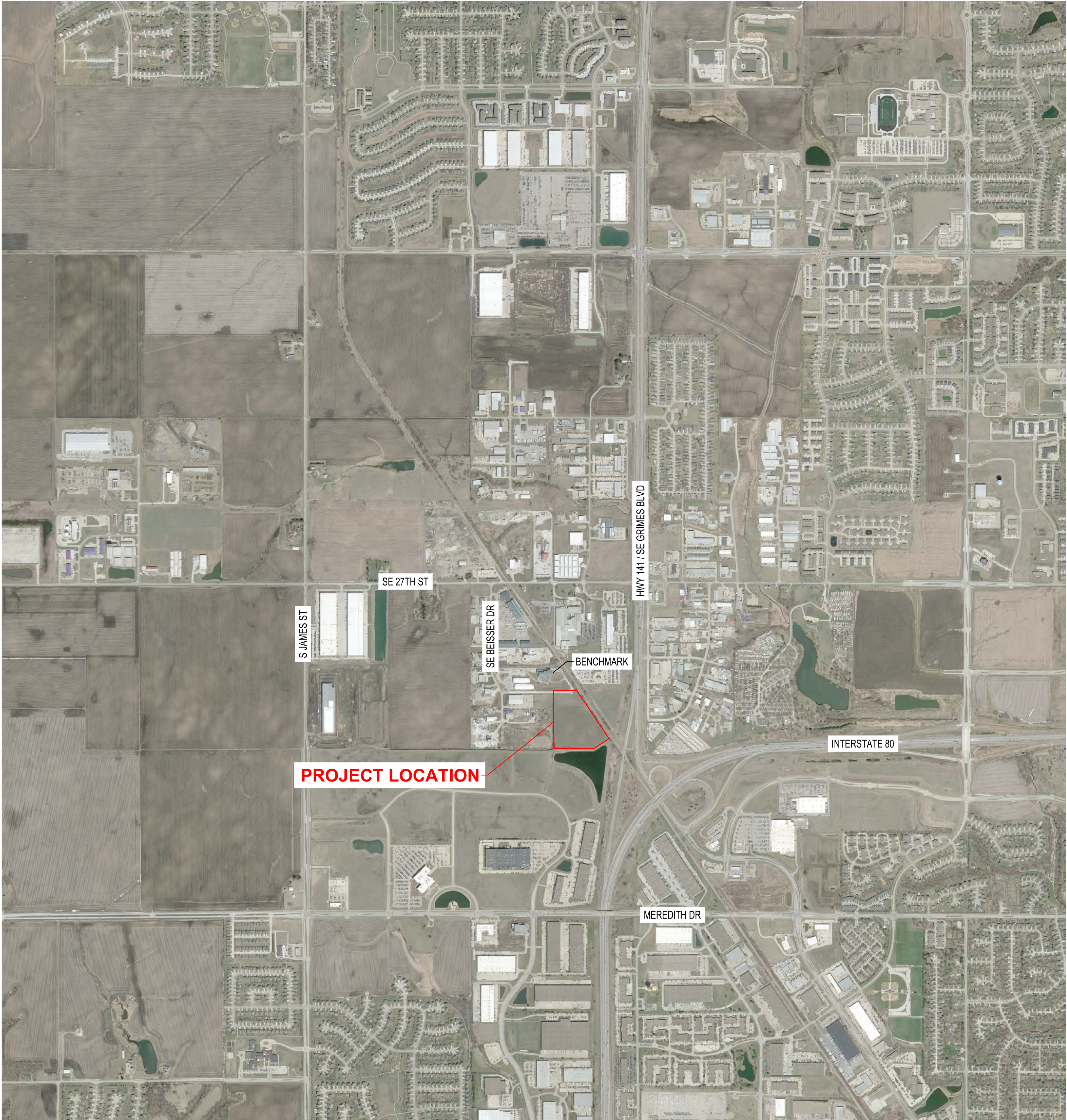
mapes
ARCHITECTURAL PANELS

Mapes Panels, LLC

2929 Cornhusker Hwy / Lincoln, NE 68504

800-228-2391 / 800-737-6756 fax / panels@mapes.com

www.mapespanels.com

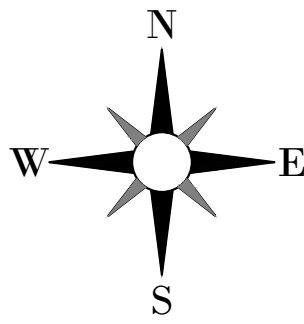
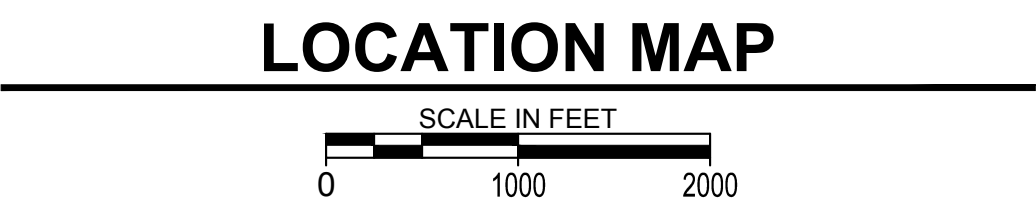


CITY OF
GRIMES, IA

PROJECT MANAGER:
ISG - KIRK MOE
508 EAST LOCUST
DES MOINES, IA 50309

PHONE: 515-243-9143

PROPERTY OWNER/APPLICANT:
METRO WASTE AUTHORITY
300 EAST LOCUST ST, SUITE 100
DES MOINES, IA 50309
CONTACT: MICHAEL MCCOY
PHONE: 515-244-0021



B.M. ELEVATION=984.58
TOP NUT FIRE HYDRANT
N: 7511776.8830
E: 18482683.0650

PROJECT ADDRESS / LOCATION:

4185 SE BEISSER DRIVE
GRIMES, IOWA 50111

SECTION 17 / TOWNSHIP 79 / RANGE 25

WEBSTER TWP
GRIMES, IOWA

SITE SUMMARY			
ZONING:	M-3 (HEAVY INDUSTRIAL DISTRICT), ZONE 1 (HWY 141 800 FT OVERLAY)		
SITE/LOT AREA:	605,048 SQ. FT / 13.89 AC.		
IMPERVIOUS AREA:	310,482 SQ. FT / 7.13 AC. (51%)		
GREENSPACE PROVIDED:	294,566 SQ. FT / 6.76 AC. (49%) (20% REQUIRED)		
BUILDING FFE:	983.00		
PARKING REQUIREMENTS (PER CITY CODE)			
TYPE	UNIT / AREA	STALLS REQUIRED	STALLS PROVIDED
WAREHOUSE	2000 SF	53	89
OFFICE	50% GFA (9'X20')	29	
ADA STALLS	76-100	4 (1 VAN ACCESSIBLE)	
TOTAL:		82 (4 ADA)	89 (4 ADA)
SETBACKS			
		BUILDING	
FRONT YARD	30 FT		
SIDE YARD	-		
REAR YARD	40 FT EXCEPT WHEN ADJACENT TO RAILROAD		
BUILDING SETBACK (CITY OF GRIMES CODE OF ORDINANCES)			
100 FT	ADJACENT TO HIGHWAY 141 RIGHT-OF-WAY		
25 FT	PUBLIC STREET RIGHT-OF-WAY OR PUBLIC STREET EASEMENT		
100 FT	GREATER THAN 45 FT IN HEIGHT - PUBLIC STREET RIGHT-OF-WAY, PUBLIC STREET EASEMENT, OR PARCEL BOUNDARY		

CIVIL SHEET INDEX	
C0-10	SITE DATA
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C0-20	SITE DETAILS
C0-21	SITE DETAILS
C0-22	SITE DETAILS
C0-23	SITE DETAILS
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C1-11	INITIAL GRADING EROSION CONTROL PLAN
C1-20	PROPOSED EROSION CONTROL PLAN
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C1-32	EROSION CONTROL DETAILS
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C4-13	DETAILED GRADING PLAN
C4-14	DETAILED GRADING PLAN
C4-15	DETAILED GRADING PLAN
C5-10	RESTORATION PLAN
C5-20	PLANTING PLAN
C5-21	PLANTING PLAN (NORTH)
C5-22	PLANTING PLAN (SOUTH)
C5-30	PLANTING NOTES AND DETAILS
C6-10	PHOTOMETRIC PLAN

LEGEND	
EXISTING	
---	CITY LIMITS
---	SECTION LINE
---	QUARTER SECTION LINE
---	RIGHT OF WAY LINE
---	PROPERTY / LOTLINE
---	EASEMENT LINE
---	ACCESS CONTROL
---	WATER EDGE
---	WETLAND BOUNDARY
---	WETLAND / MARSH
---	FENCE LINE
---	CULVERT
---	STORM SEWER
---	SANITARY SEWER
---	SANITARY SEWER FORCEMAIN
---	WATER
---	GAS
---	OVERHEAD ELECTRIC
---	UNDERGROUND ELECTRIC
---	UNDERGROUND TELEPHONE
---	UTV
---	OVERHEAD UTILITY
---	UNDERGROUND UTILITY
---	UNDERGROUND FIBER OPTIC
---	CONTOUR (MAJOR)
---	CONTOUR (MINOR)
---	DECIDUOUS TREE
---	CONIFEROUS TREE
---	TREE LINE
---	MANHOLE/STRUCTURE
---	CATCH BASIN
---	HYDRANT
---	VALVE
---	CURB STOP
---	POWER POLE
---	UTILITY PEDESTAL / CABINET
PROPOSED	
---	LOT LINE
---	RIGHT OF WAY
---	EASEMENT
---	CULVERT
---	PERFORATED UNDERDRAIN
---	STORM SEWER
---	STORM SEWER (PIPE WIDTH)
---	SANITARY SEWER
---	SANITARY SEWER (PIPE WIDTH)
---	WATER
---	GAS
---	OVERHEAD ELECTRIC
---	UNDERGROUND ELECTRIC
---	UNDERGROUND TV
---	CONTOUR
---	MANHOLE
---	CATCH BASIN
---	HYDRANT
---	VALVE

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "IOWA ONE CALL" FOR UTILITY LOCATIONS, MINIMUM 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-292-8989).



NOTE:
THE CLARITY OF THESE PLANS DEPEND UPON COLOR COPIES. IF THIS TEXT DOES NOT APPEAR IN COLOR, THIS IS NOT AN ORIGINAL PLAN SET AND MAY RESULT IN MISINTERPRETATION.

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PROJECT

METRO WASTE
AUTHORITY

MRF FACILITY

GRIMES

IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C0-DATA
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

SITE DATA

SHEET

C0-10

PRELIMINARY NOT FOR CONSTRUCTION

CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
2. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS. WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT / ENGINEER.
3. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
4. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
5. THE CITY OF GRIMES STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND CURRENT EDITION OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SHALL APPLY TO CONSTRUCTION WORK ON THE PROJECT. A FULL IOWA SUDAS SPECIFICATIONS MANUAL CAN BE FOUND ONLINE FOR FREE AT WWW.IOWASUDAS.COM.
6. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT / ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
7. THE WORK TO BE ACCOMPLISHED FOR THE CONSTRUCTION OF THIS PROJECT WILL OCCUR ON OWNER'S PROPERTY. THE CONTRACTOR SHOULD CONFINE OPERATIONS, PEOPLE, AND EQUIPMENT TO THE OWNER'S PROPERTY.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT TO BE INCORPORATED IN THE WORK INVOLVED IN THE PROJECT (UNSUITABLE EXCAVATION, WASTE PIPE, ETC.).
9. PUBLIC UTILITY FIXTURES ARE EXISTING WITHIN THE CONSTRUCTION AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THESE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR ANY NECESSARY MODIFICATION OF SERVICES. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AND PREPARING AREAS DISTURBED BY CONTRACTOR'S OPERATIONS FOR SEEDING. ALL DEBRIS GREATER THAN GOLF BALL SIZE SHALL BE REMOVED AND AREA SHALL BE RAKED SMOOTH. CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE OF THE OWNER'S PROPERTY DURING OPERATIONS AND SHALL MAKE A REASONABLE EFFORT TO NOT DISTURB AREAS GREATER THEN NECESSARY DURING CONSTRUCTION. AREAS OF NONGERMINATION WILL BE RESEED AND REFERTILIZED BY THE CONTRACTOR. COST IS TO BE CONSIDERED INCIDENTAL.
11. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL NECESSARY TRAFFIC CONTROL SIGNS, DEVICES, ETC., AND TO PLACE, MAINTAIN, AND REMOVE SAME AS CONSTRUCTION COMMENCES AND IS COMPLETED IN ACCORDANCE WITH THE CURRENT EDITION OF THE IOWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS. FAILURE TO COMPLY WITH THIS PORTION OF THE SPECIFICATIONS WILL RESULT IN SUSPENSION OF WORK UNTIL THE SITUATION IS CORRECTED. A REDUCTION IN THE LUMP SUM TO BE PAID WILL BE MADE FOR EXCESSIVE NONCOMPLIANCE WITH REQUIRED TRAFFIC CONTROL. NO WORK SHALL COMMENCE IN ANY GIVEN AREA UNTIL APPROPRIATE TRAFFIC CONTROL IS IN PLACE.
12. THE CONTRACTOR SHALL NOT DISTURB GRASSED AREAS AND TREES OUTSIDE THE CONSTRUCTION LIMITS. TREES AND BUSHES SHALL BE RETAINED AS POSSIBLE. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREA(S) WILL BE SUBJECT TO APPROVAL OF THE ENGINEER.
13. ALL EXISTING TREES AND BUSHES SHALL BE MAINTAINED AND PROTECTED UNLESS NOTED OTHERWISE. AREAS OF HAND FORMING MAY BE REQUIRED TO PROTECT TRESS.
14. THE CONSTRUCTION OPERATIONS ARE TO TAKE PLACE IN A COMMERCIAL AREA. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS INCLUDED IN THE SPECIFICATIONS IN REGARD TO POSITIVE DUST CONTROL DURING ALL OPERATIONS TO INCLUDE REMOVAL, CLEAN UP, ETC.
15. CONTRACTOR SHALL PROVIDE BARRICADES AND SIGNS IDENTIFYING VEHICLES AND OBSTACLES IN THE DRIVEN ROADWAYS.
16. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS, NOTIFY ARCHITECT / ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRED INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
17. EXISTING STORM SEWERS, SANITARY SEWERS, AND WATER MAINS ARE LOCATED BASED ON CITY RECORDS AND ACTUAL LOCATIONS MAY VARY GREATLY FROM THAT SHOWN. THE LOCATIONS AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF ISG. NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS, AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
18. CONTRACTOR SHALL REPLACE AND REPAIR ALL EXISTING STORM SEWERS THAT ARE ENCOUNTERED DURING CONSTRUCTION IN ACCORDANCE WITH THE SPECIFICATION. CONTRACTOR SHALL USE 2000D RCP WITH FLEXIBLE O-RING GASKET JOINTS, PLACE PIPES SO JOINTS ARE NOT DIRECTLY OVER WATER MAIN, AND RECONNECT TO EXISTING STORM SEWER WITH REINFORCED FERNCO COUPLING.
19. PROPOSED WATER DISTRIBUTION LINE SHALL BE INSTALLED WITH A MINIMUM OF FIVE AND ONE-HALF (5.5') OF COVER. IN LOCATIONS WITH A SEPARATION DISTANCE OF LESS THAN TEN FEET (10') FROM SANITARY SEWER OR STORM SEWER, THE SANITARY SEWER OR STORM SEWER SHALL BE INSTALLED EIGHTEEN INCHES (18") BELOW THE BOTTOM OF THE WATER MAIN AND SHALL BE PLACED IN A SEPARATE TRENCH AT A MINIMUM HORIZONTAL SEPARATION OF THREE FEET PER SUDAS SPECIFICATIONS.
20. AT ALL SANITARY SEWER AND WATER MAIN CROSSOVER, MAINTAIN A MINIMUM OF 18" SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF SEWER. PLACE ONE FULL LENGTH OF WATER PIPE, LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM SEWER. USE LOW PERMEABILITY SOIL FOR BACKFILL WITHIN 10' OF CROSSOVER.
21. THRUST BLOCKS SHALL BE POURED CONCRETE, INSTALLED BEHIND ALL BENDS, TEES AND DEAD ENDS IN ACCORDANCE WITH SPECIFICATIONS.
22. GRANULAR BEDDING IS REQUIRED FOR ANY TYPE OF PIPE USED AND SHALL BE AS SPECIFIED.
23. A NEAT VERTICAL EDGE WILL BE REQUIRED FOR ALL JOINTS BETWEEN THE NEW PAVEMENT SURFACE AND EXISTING PAVING AS SHOWN IN THE PLANS. SAW CUTTING OR OTHER TECHNIQUES MAY BE USED TO PROVIDE THIS EDGE. COST OF THE SAW CUT IS TO BE CONSIDERED INCIDENTAL. ADDITIONAL REMOVAL AND REPLACEMENT DUE TO THE CONTRACTOR'S OPERATION WILL BE MEASURED SEPARATELY BUT WILL BE THE CONTRACTOR'S RESPONSIBILITY.
24. ANY DEWATERING NECESSARY FOR CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO INDIVIDUAL CONSTRUCTION ITEM. PLEASE REFER TO SUBSURFACE EXPLORATION REPORT FOR ANTICIPATED SITE CONDITIONS. REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT GUARANTEE CONDITIONS TO BE EXPERIENCED.
25. THE CONTRACTOR SHALL INSPECT AND VERIFY SOIL CONDITIONS AS NECESSARY IN ORDER TO DETERMINE THE TYPE OF CONSTRUCTION TO EMPLOY. NATURAL AND/OR MANMADE OBSTRUCTIONS MAY BE ENCOUNTERED IN THE SOIL. THESE CONTRACT DOCUMENTS DO NOT WARRANT THE NATURE OR CONDITIONS OF THE SOILS, AND DO NOT WARRANT THAT NATURAL OR MANMADE OBSTRUCTIONS WILL NOT BE ENCOUNTERED, NOR GUARANTEE THE EXTENT TO WHICH ROCKS, BOULDERS, OR OTHER OBSTRUCTIONS, REGARDLESS OF SIZE, MAY BE ENCOUNTERED DURING BORING OPERATIONS. THE CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR ANY NATURAL OR MANMADE OBSTRUCTIONS ENCOUNTERED DURING TRENCHLESS CONSTRUCTION.
26. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT / ENGINEER BEFORE PROCEEDING WITH THE WORK.
27. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED, AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT / ENGINEER BEFORE PROCEEDING WITH THE WORK.

28. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
29. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF ISG. NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OF VARIATIONS FROM PLAN.
30. THIS SITE WILL HAVE SAWCUTTING AND/OR CONCRETE GRINDING, SO PROTECTION OF STORM SEWERS AND DRAINAGE WAYS WILL NEED TO BE PROTECTED FROM SLURRY FROM THE CONCRETE OPERATION TO DISCHARGE OFFSITE.
31. THE CONTRACTOR IS TO CONTACT "IOWA ONE CALL" FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO EXCAVATION / CONSTRUCTIONS (1-800-292-8989).
32. ANY PROPOSED CHANGES TO THE PLAN SET SHALL BE APPROVED IN WRITING BY THE CITY OF GRIMES DEVELOPMENT SERVICES DEPARTMENT.
33. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE CITY OF GRIMES DEVELOPMENT SERVICES DEPARTMENT.
34. ALL UTILITIES ARE TO BE CONSTRUCTED TO THE CITY OF GRIMES STANDARDS.
35. ALL UTILITIES ARE TO BE TESTED TO CITY OF GRIMES STANDARDS, AND THE CITY IS TO WITNESS ALL TESTING.
36. COORDINATE ALL TIE-INS TO EXISTING UTILITIES WITH CITY OF GRIMES ENGINEERING DEPARTMENT.
37. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED AS SOON AS CONSTRUCTION COMMENCES. THE FIRE APPARATUS ROAD SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 503.2 AND SHALL EXTEND TO WITHIN 100-FEET OF THE EXTERIOR WALLS OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING.
38. CONTRACTOR TO SCHEDULE A PRECONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO COMMENCING CONSTRUCTION.
39. CONTRACTOR IS REQUIRED TO NOTIFY THE CITY OF GRIMES ENGINEERING DEPARTMENT OF ANY PLANNED WEEKEND OR HOLIDAY WORK AT LEAST 48 HOURS PRIOR TO PLANNED WORK.

CITY OF GRIMES STANDARD NOTES FOR SITE PLANS.

1. GENERAL NOTES:

- | | |
|----|---|
| A. | ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS. |
| B. | A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT CITY OF GRIMES ENGINEERING DEPT. (515.986.4050). |
| C. | ALL PERMITS (IDNR, SWP, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION. |
| D. | THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS OF ALL IMPROVEMENTS AS PER CITY STANDARD PROCEDURES. |
| E. | TYPICAL BUILDING SERVICE LAYOUT TO REFLECT THE CITY'S SERVICE ORDER FROM LEFT TO RIGHT FACING THE LOT, SANITARY, WATER, SUMP |
| F. | A KNOX BOX IS REQUIRED BY THE FIRE DEPARTMENT AND SHALL BE OBTAINED AT CITY HALL. |
| G. | ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHT-OF-WAYS. |
| H. | PROVIDE A 4-YEAR MAINTENANCE BOND FOR ALL PUBLIC IMPROVEMENTS |

2. SANITARY SEWER NOTES:

- | | |
|----|--|
| A. | THE CONTRACTOR IS REQUIRED TO PLACE A TEMPORARY PLUG IN THE EXISTING DOWNSTREAM SANITARY SEWER MANHOLE PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL BE REMOVED FOLLOWING APPROVAL OF CONSTRUCTION BY THE CITY OF GRIMES. |
| B. | SANITARY GRAVITY PIPE MATERIAL SHALL BE PVC SDR 26 OR TRUSS (8" TO 15"). |
| C. | SANITARY GRAVITY SERVICE PIPE MATERIAL SHALL BE PVC SDR 23.5 (4" TO 6"). |
| D. | ALL SANITARY SEWER MANHOLES SHALL HAVE STEPS. |
| E. | ALL SANITARY SEWER MANHOLES CASTINGS SHALL BE SEALED WITH HEAT SHRINK SLEEVES. |
| F. | ALL SANITARY SEWER MANHOLE CASTINGS LOCATED WITHIN PAVEMENT SHALL BE TYPE B:PCC W/ADJUSTING MECHANISM. |
| G. | SANITARY SEWER TESTING, CLEANING & TELEVISION SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISIONING. |

3. WATER MAIN NOTES:

- A. ALL FIRE HYDRANTS SHALL BE AMERICAN FLOW CONTROL-WATEROUS PACER WB-67-250, MUELLER SUPER CENTURION 250 (3-WAY A-423), OR CLOW MEDALLION F-2545. ALL HYDRANTS SHALL HAVE THE FOLLOWING: 6" MJ SHOE, 2-1/2" HOSE NOZZLE, 4-1/2" STEAMER NOZZLE, NST THREADS, PENTAGON OPERATING NUT, CHAIN ON CAP, OPEN LEFT, 5-1/2' BURY, AND FACTORY PAINTED RED. THE MINIMUM SPOOL PIPE LENGTH FROM AUXILIARY VALVE TO HYDRANT SHOE SHALL BE 2.0'.
- B. ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- C. A TRACER WIRE RECEPTACLE SHALL BE INSTALLED AT EACH HYDRANT, AA MANUFACTURING TRACER WIRE RECEPTACLE MODEL TW-18-2.
- D. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
- E. WATER SERVICE SHALL BE 1-INCH MINIMUM TYPE K COPPER.
- F. PROPOSED WATER MAIN SHALL BE PRESSURE TESTED AND CHLORINATED BY THE DEVELOPER. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES. THE BACTERIA TEST AND SUBMITTAL OF TEST TO LAB SHALL BE DONE BY THE DEVELOPER AND RESULTS PROVIDED TO THE CITY OF GRIMES ENGINEERING DEPT. AND BY FAX TO US WATER AT 515-986-7300. IF THE TEST DOES NOT PASS, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ALL THE WATER USED TO REPEAT THE TEST.
- G. ALL WATERMAIN FITTINGS TO BE RESTRAINED JOINT, MEGA-LUG OR APPROVED EQUAL.

4. STORM SEWER NOTES:

- A. ALL STORM SEWER IN THE ROW SHALL BE RCP, UNLESS OTHERWISE APPROVED BY THE CITY.
- B. ALL FLARED END SECTIONS SHALL HAVE FOOTINGS AND APRON GRATES. THE LAST 3 PIPE SECTIONS AND THE FLARED END SECTION ON ALL CULVERTS SHALL BE TIED. ALL STORM SEWER JOINTS SHALL BE WRAPPED WITH ENGINEERING FABRIC.
- C. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY FIELD TILE DAMAGED DURING CONSTRUCTION. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES.
- D. STORM SEWER CLEANING & TELEVISION SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISION.
- E. USE O RING GASKETS ON STORM SEWERS CROSSING OVER WATERMAIN PER IDNR REQUIREMENT.

LAST UPDATED: 12.26.2019



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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES		IOWA
REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C0-DATA
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

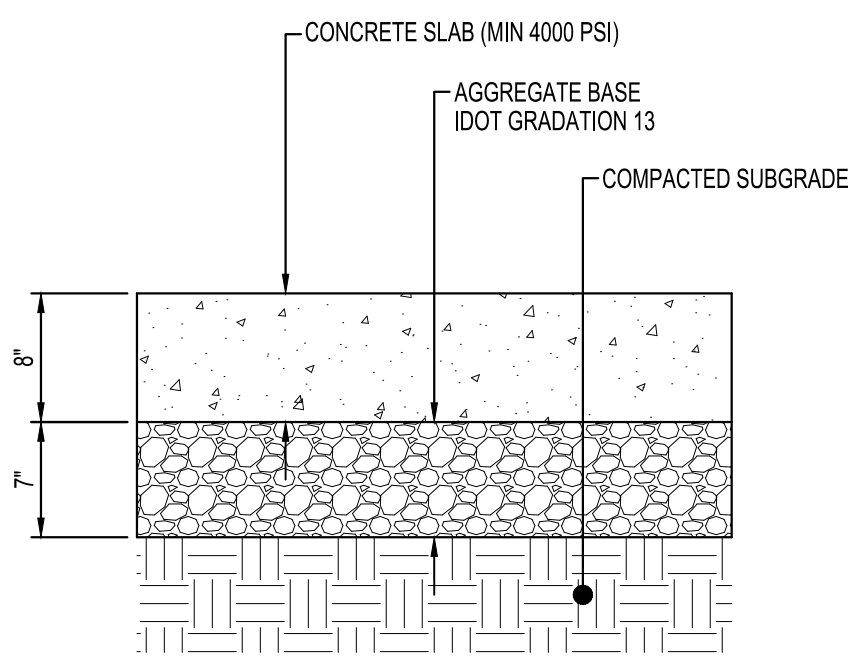
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GENERAL SITE NOTES

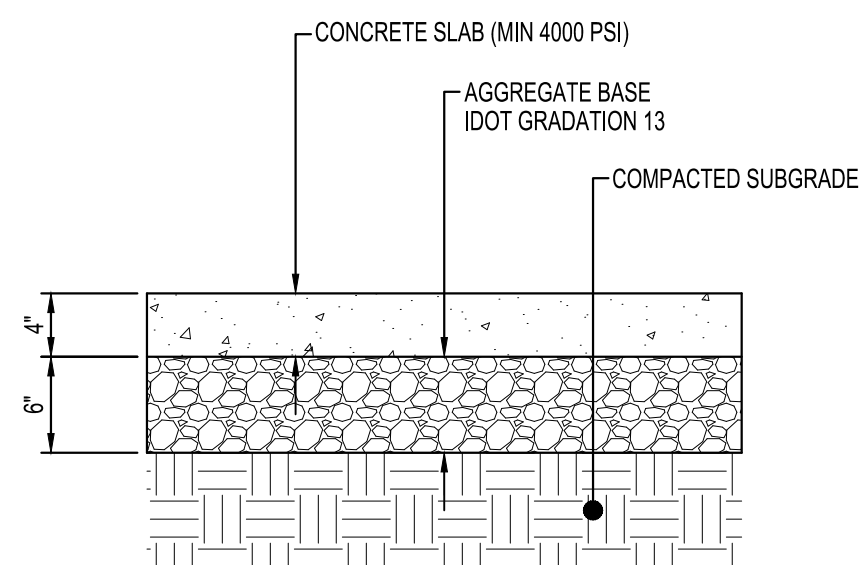
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C0-11

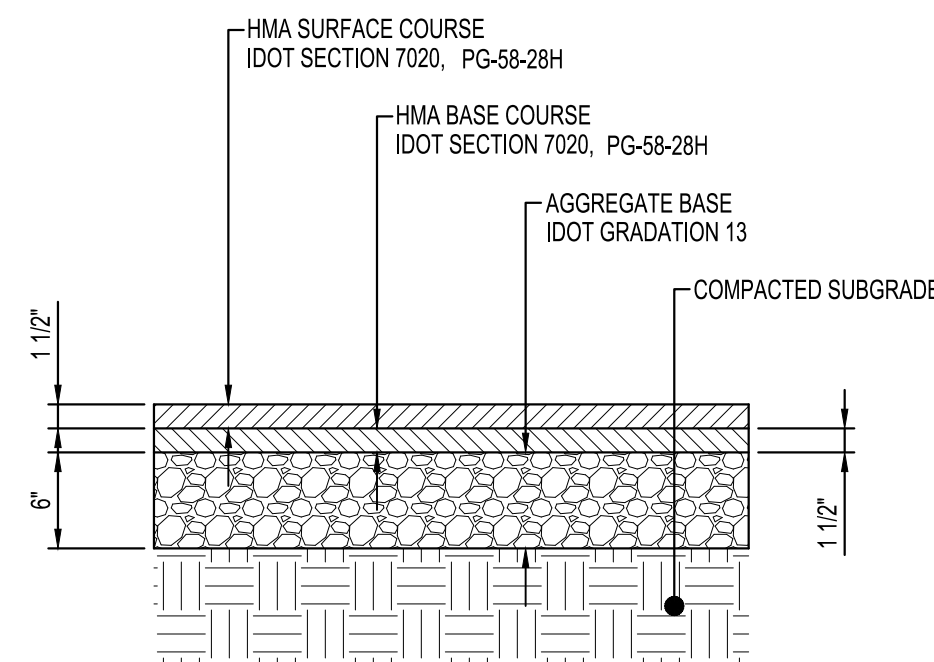
PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION



HEAVY DUTY
CONCRETE PAVEMENT
NTS ST125

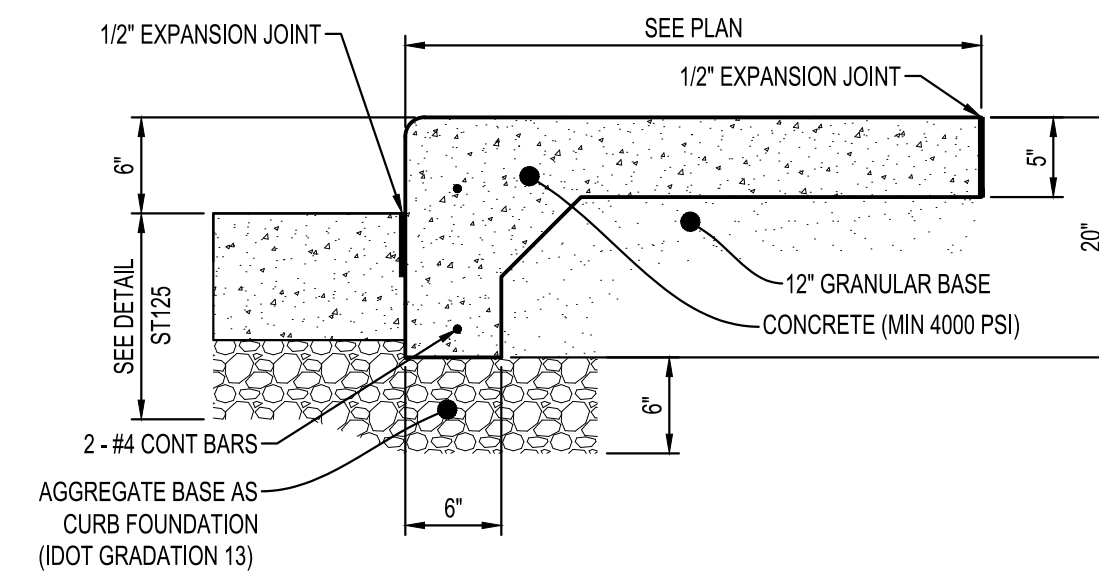


CONCRETE WALK
NTS ST160

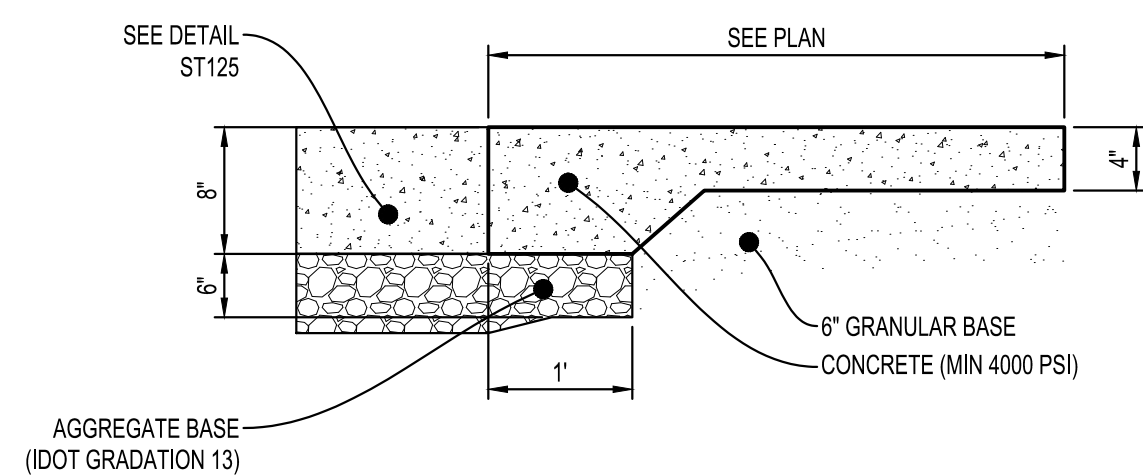


NOTES:
1/2 INCH MIX
MINIMUM OF 1/2 INCH 75% CRUSHED TYPE "A" AGGREGATE

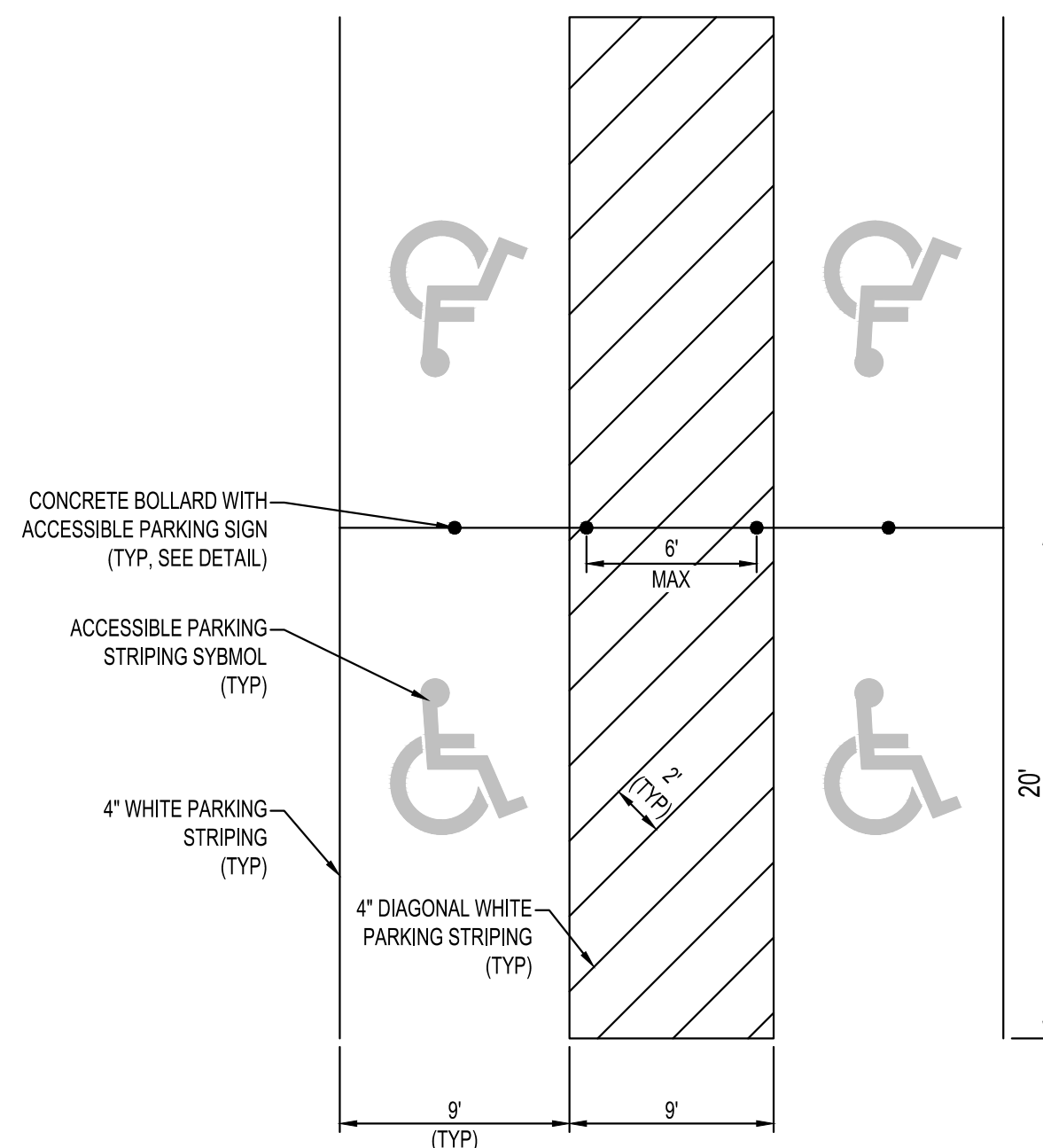
HMA PAVEMENT
NTS ST110



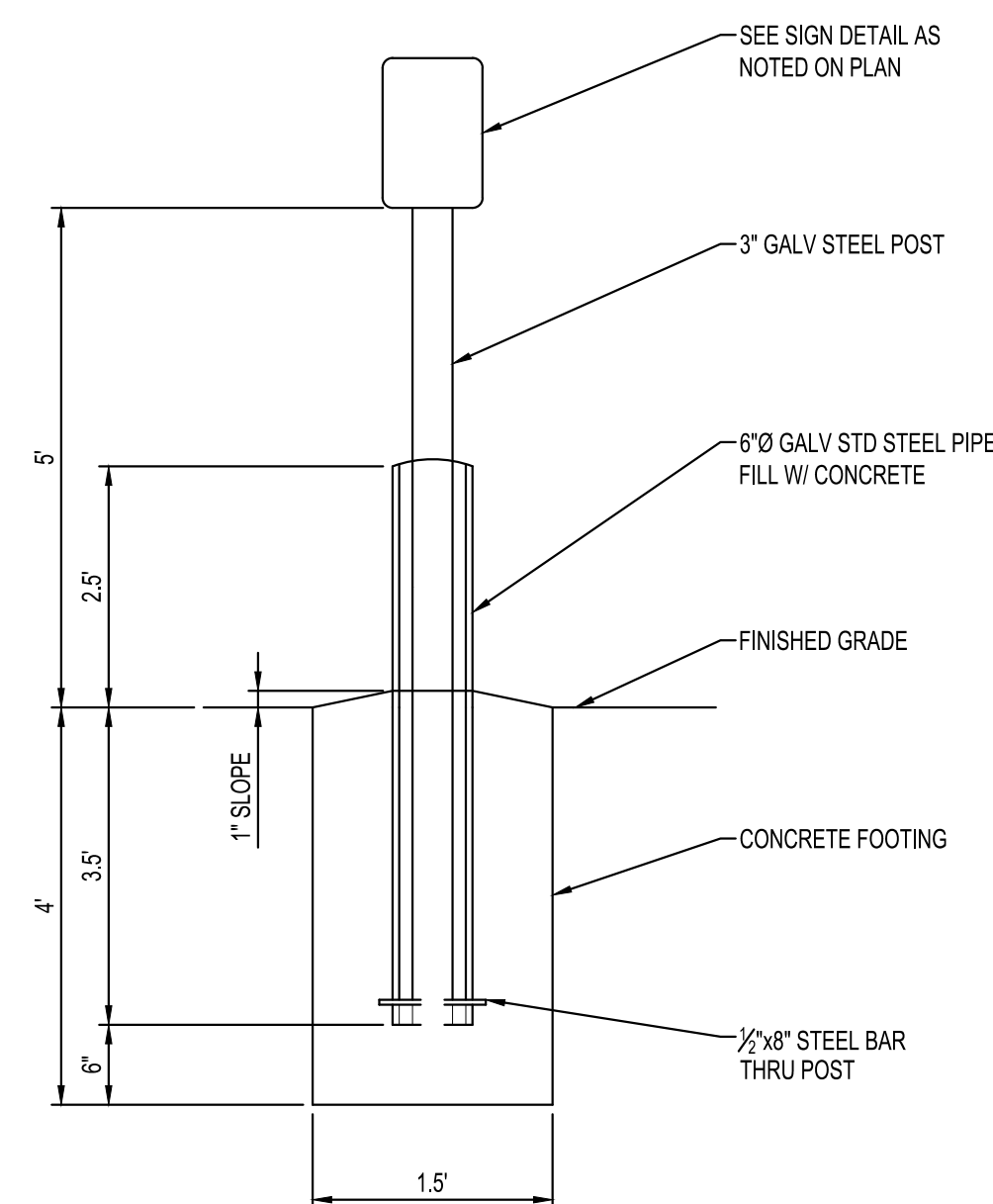
TURN DOWN
CONCRETE WALK
NTS ST170



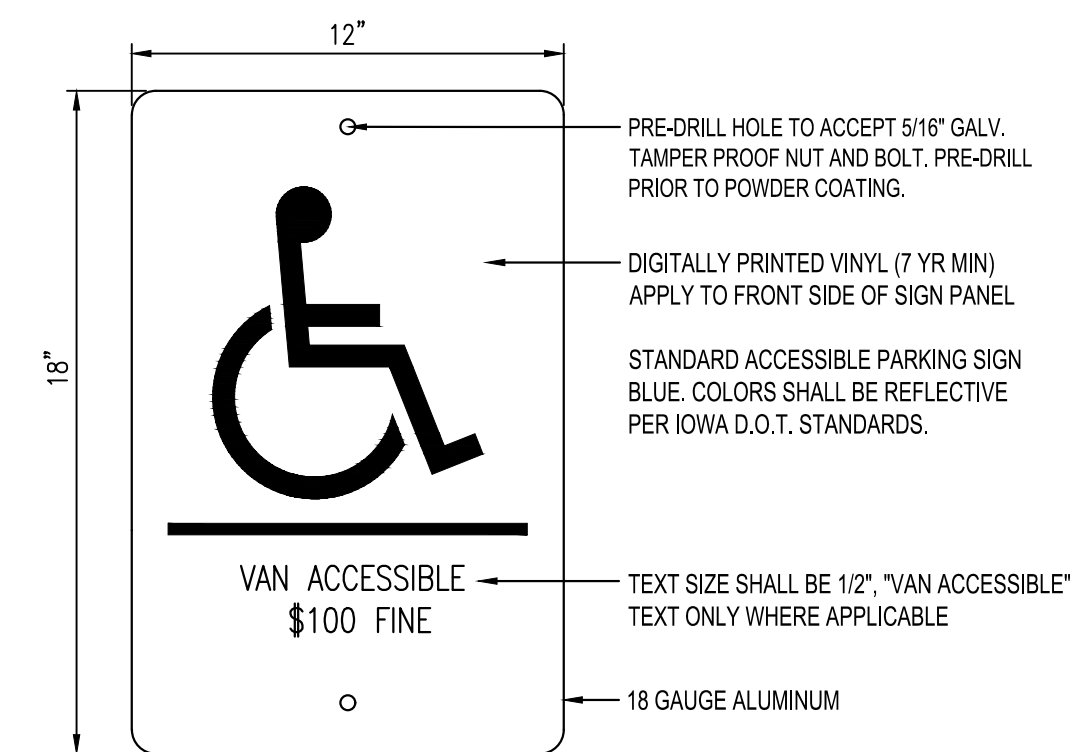
FLUSH
CONCRETE WALK
NTS ST175



ACCESSIBLE PARKING AREA
NTS PM304



TYPE 2
SIGN POST
NTS PM202



ACCESSIBLE PARKING SIGN
NTS



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FILE NAME	23010 CO-DETAILS
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

C0-20



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**METRO WASTE
AUTHORITY
MRF FACILITY**

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01/28/20	CITY SUBMITTAL #3	ARA

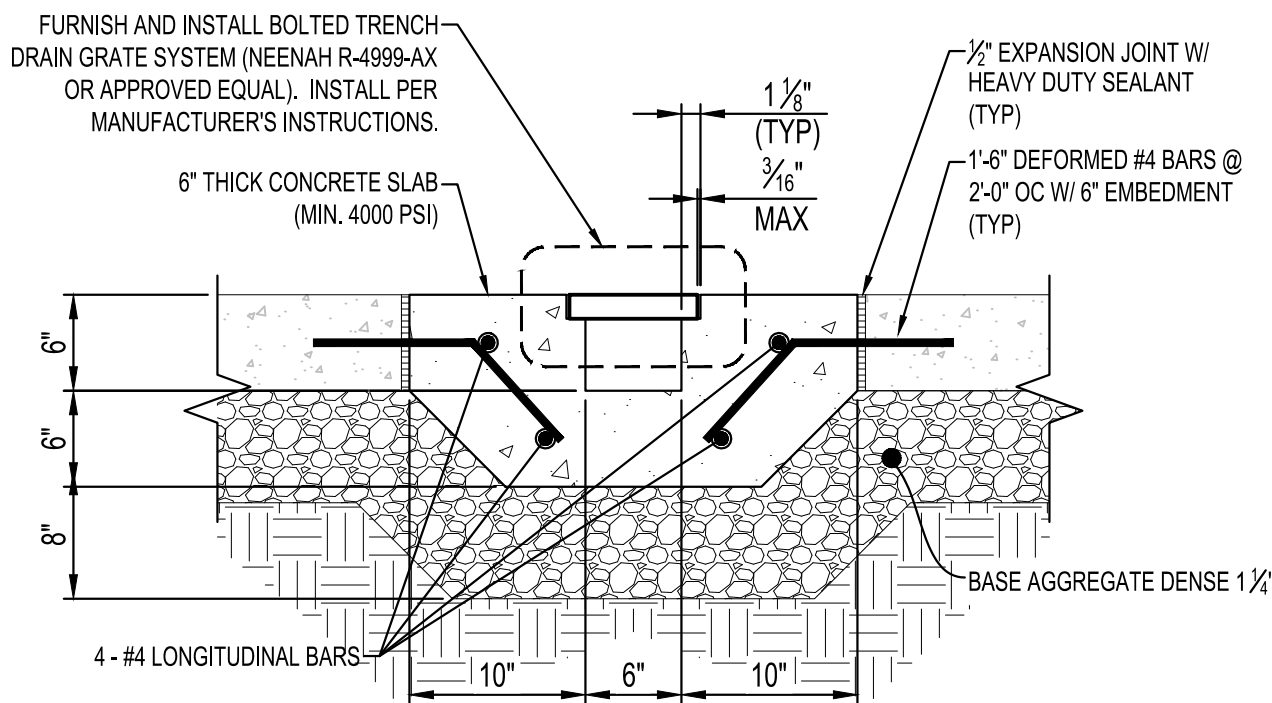
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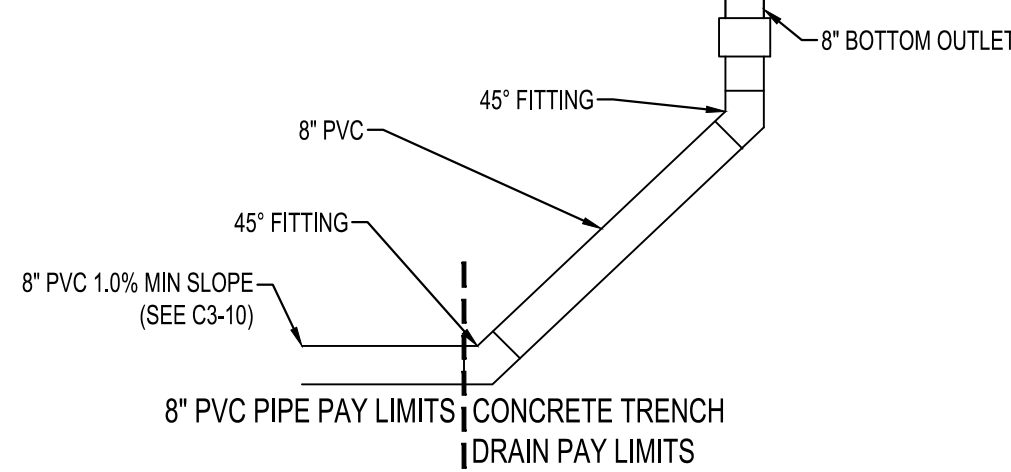
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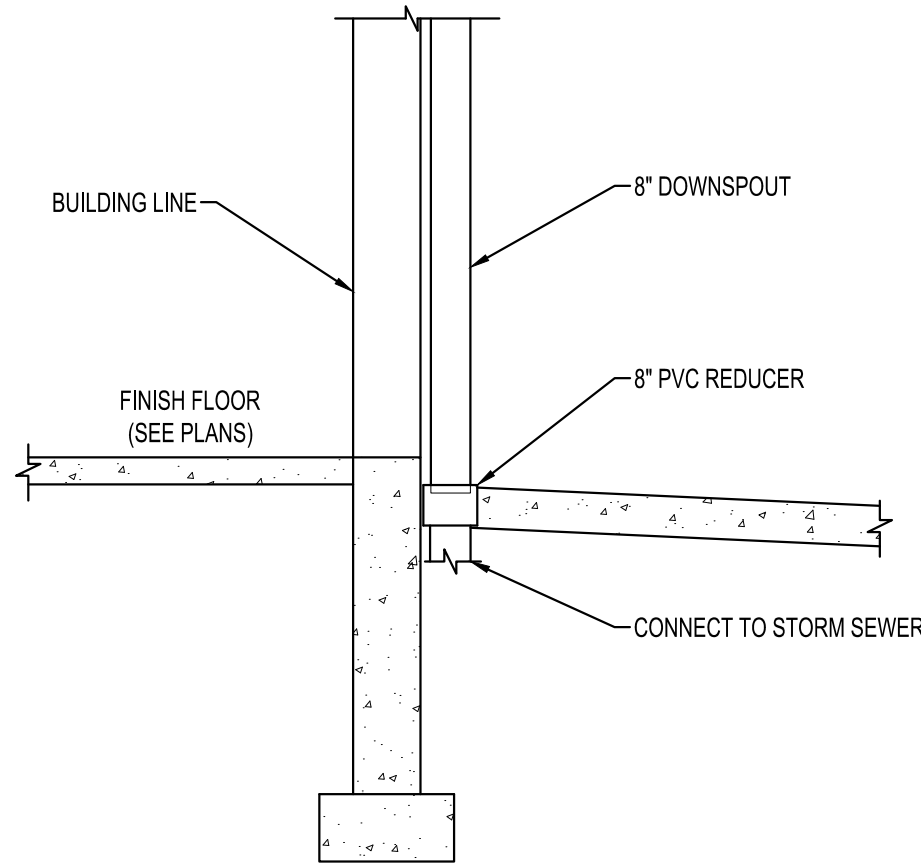
SECTION VIEW

SEE GRADING PLAN
FOR TOP ELEVATION



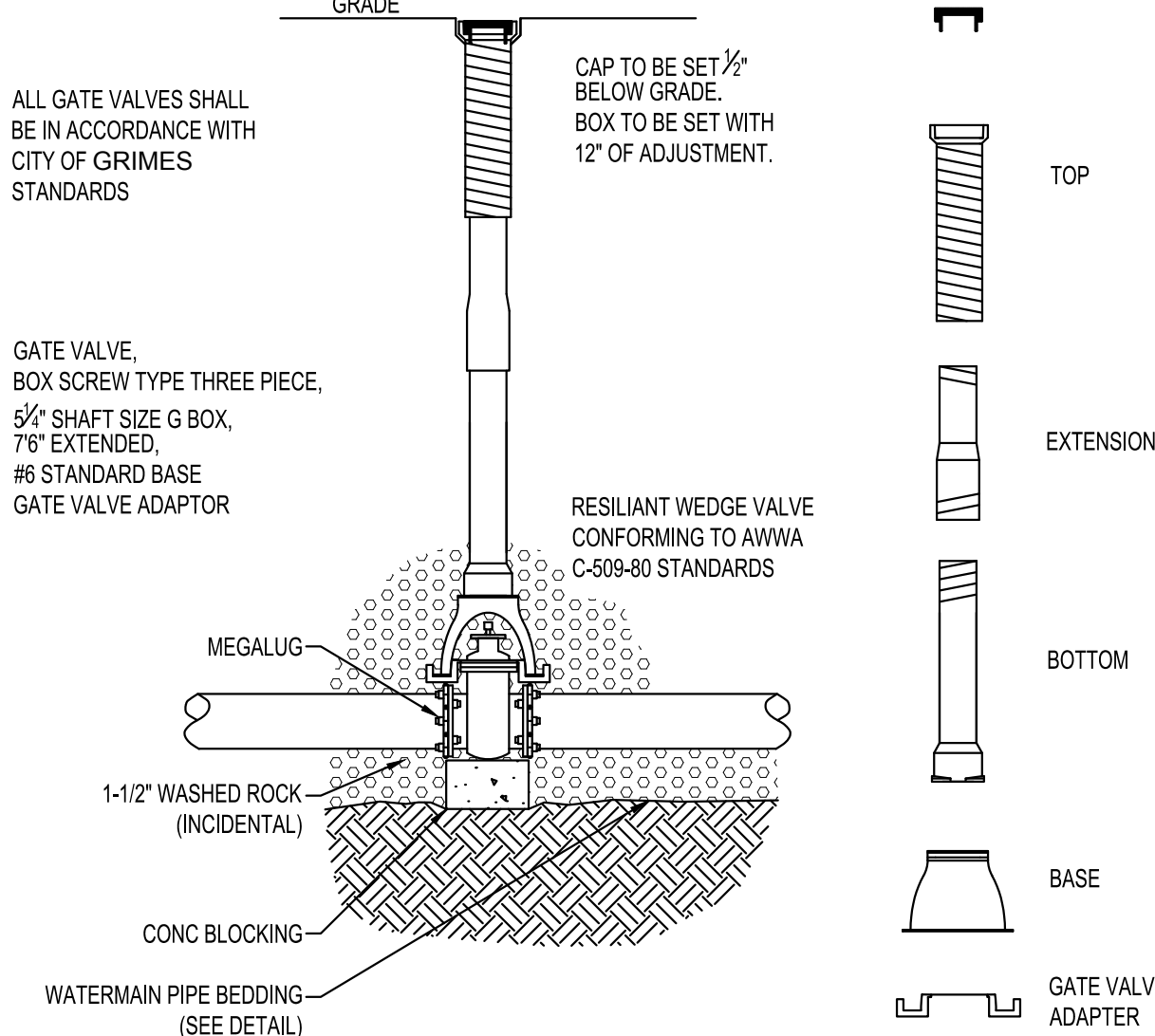
CONCRETE TRENCH DRAIN

NTS SD551



VERTICAL RAIN LEADER

NTS SD400

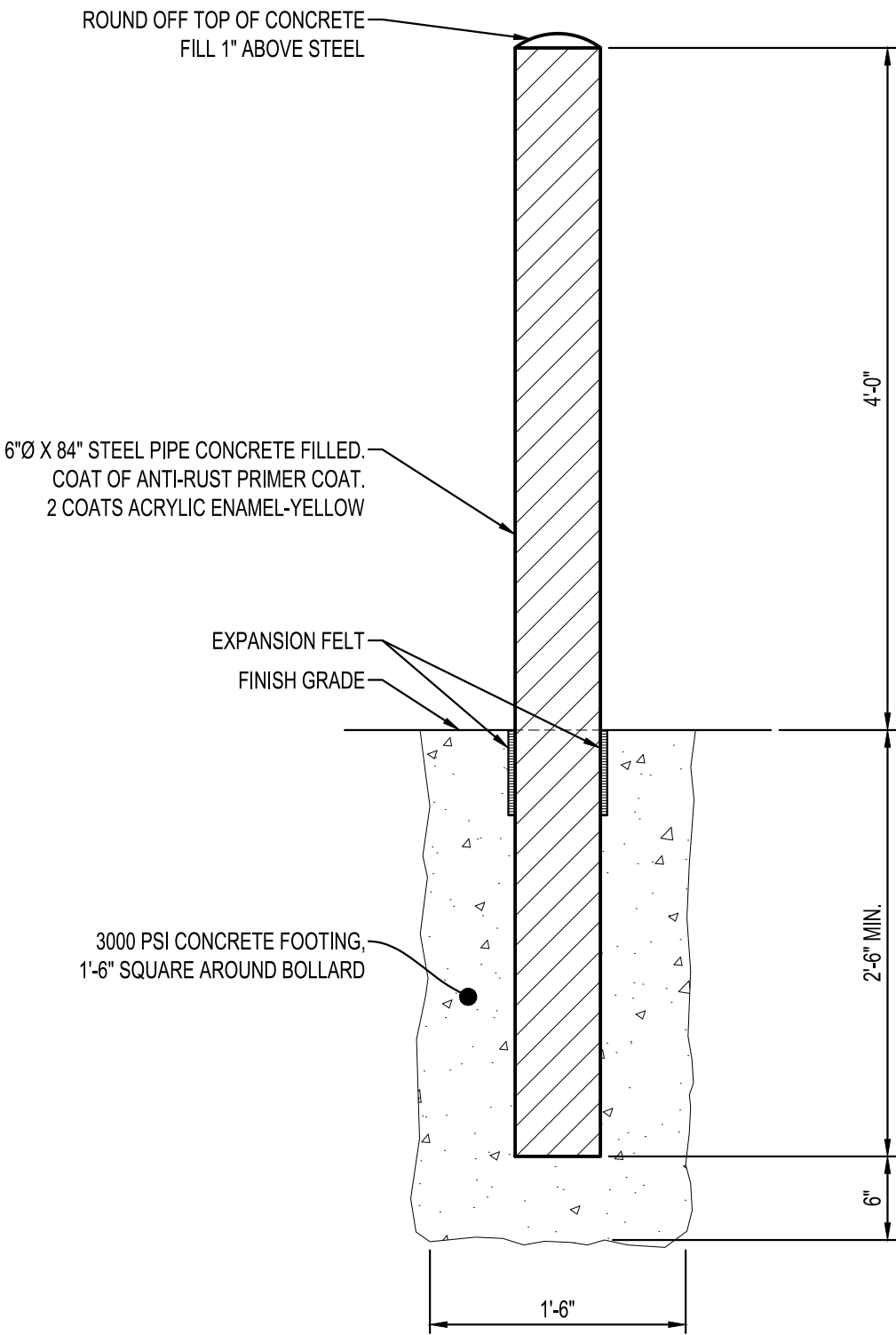


NOTES:

INSTALL TOP NUT EXTENDER TO 7" DEPTH ON ALL VALVES WITH OVER-DEPTH
ADD NUT EXTENSION IF VALVE IS OVER 6" DEEP

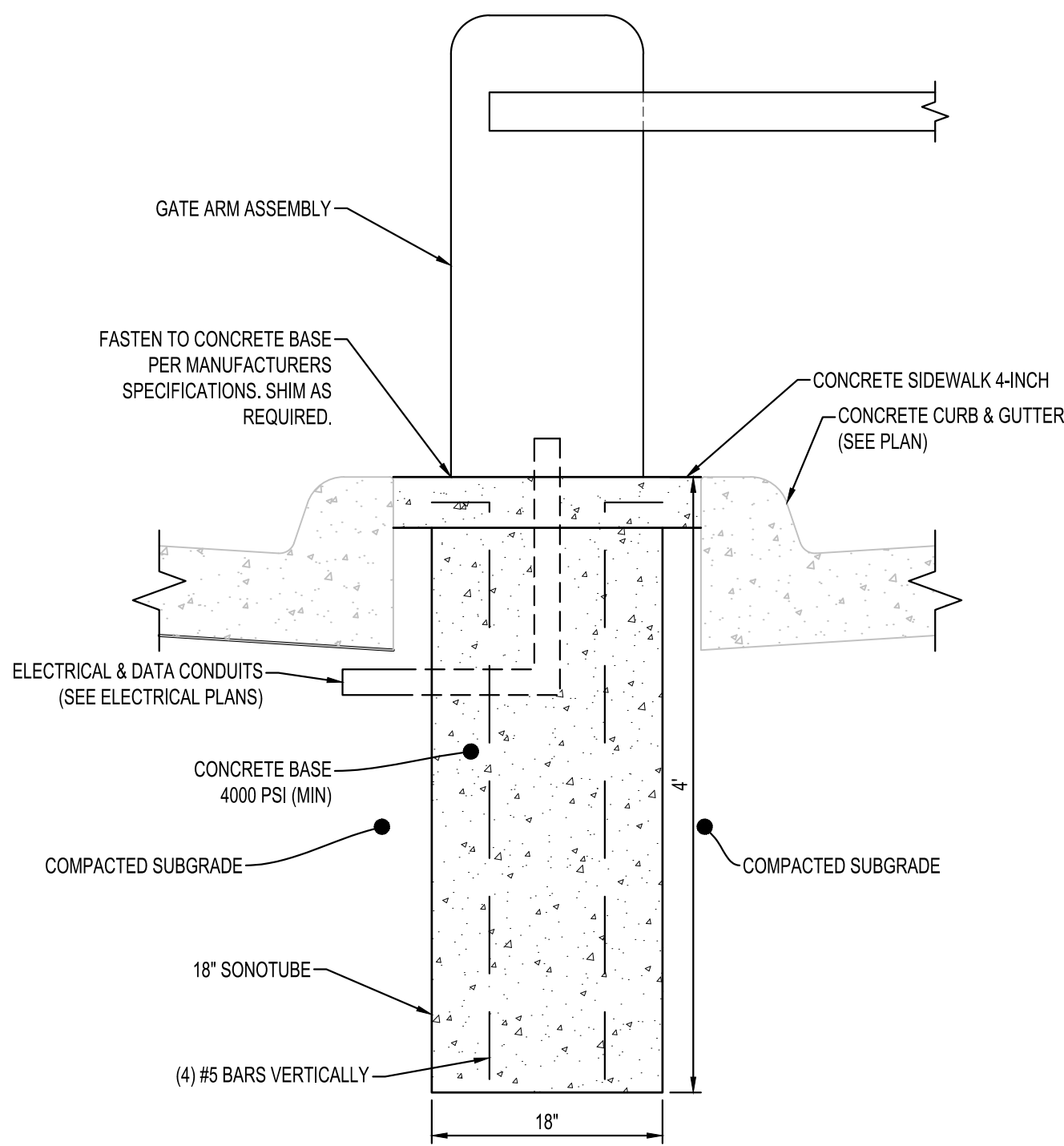
TYPICAL
GATE VALVE & BOX INSTALLATION

NTS WM200



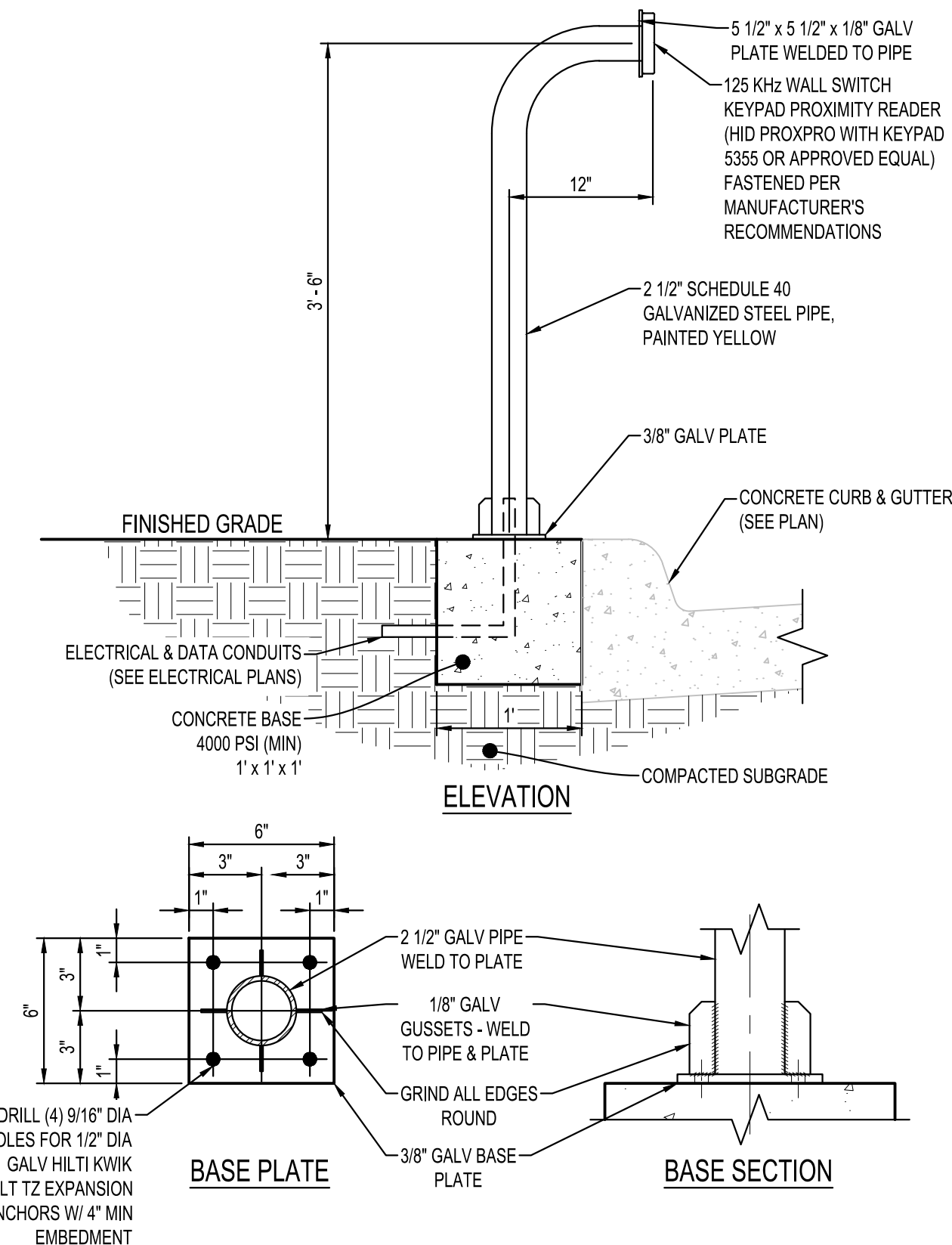
CONCRETE EMBEDDED
PIPE BOLLARD

NTS LD100



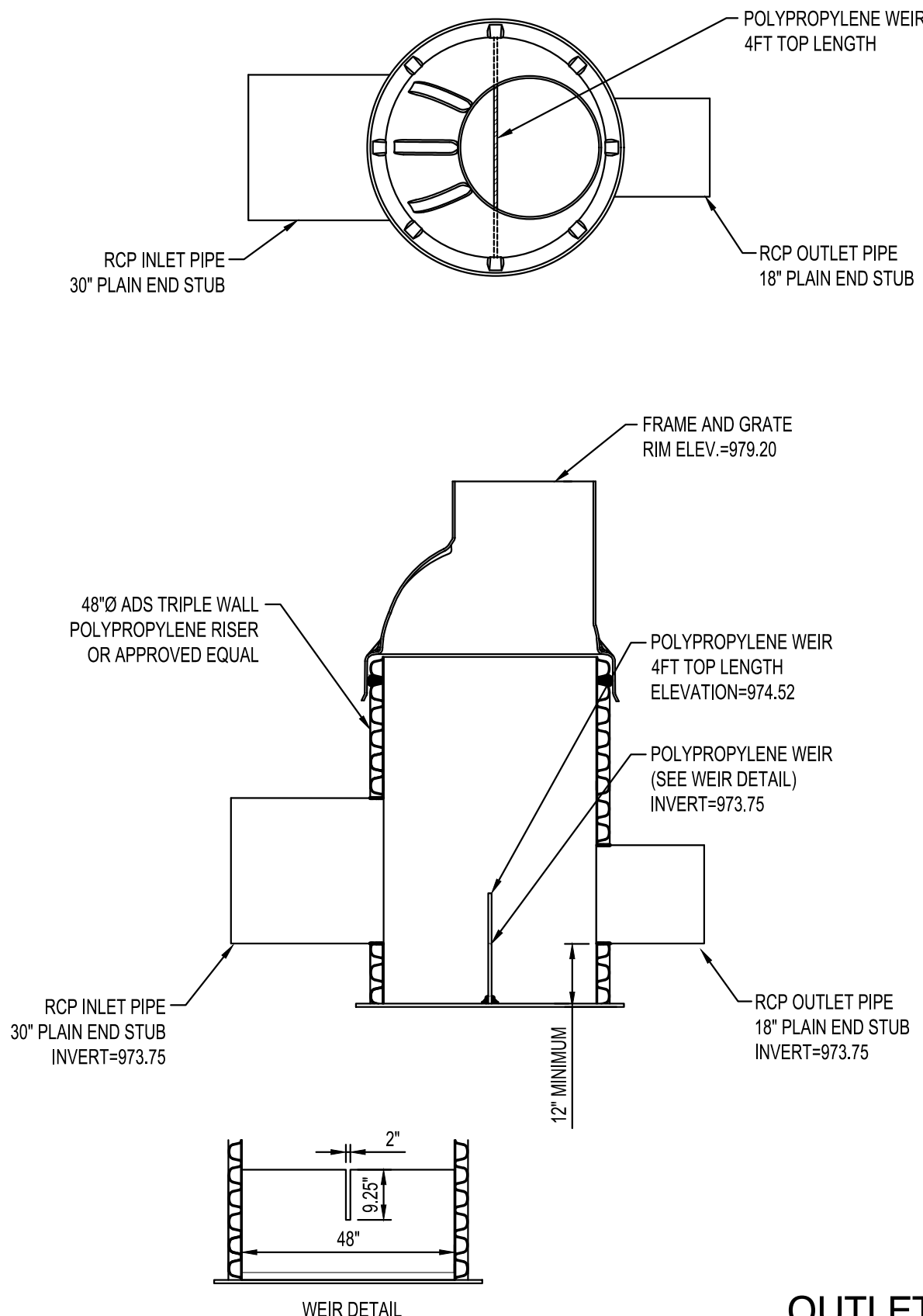
GATE ARM ASSEMBLY

NTS



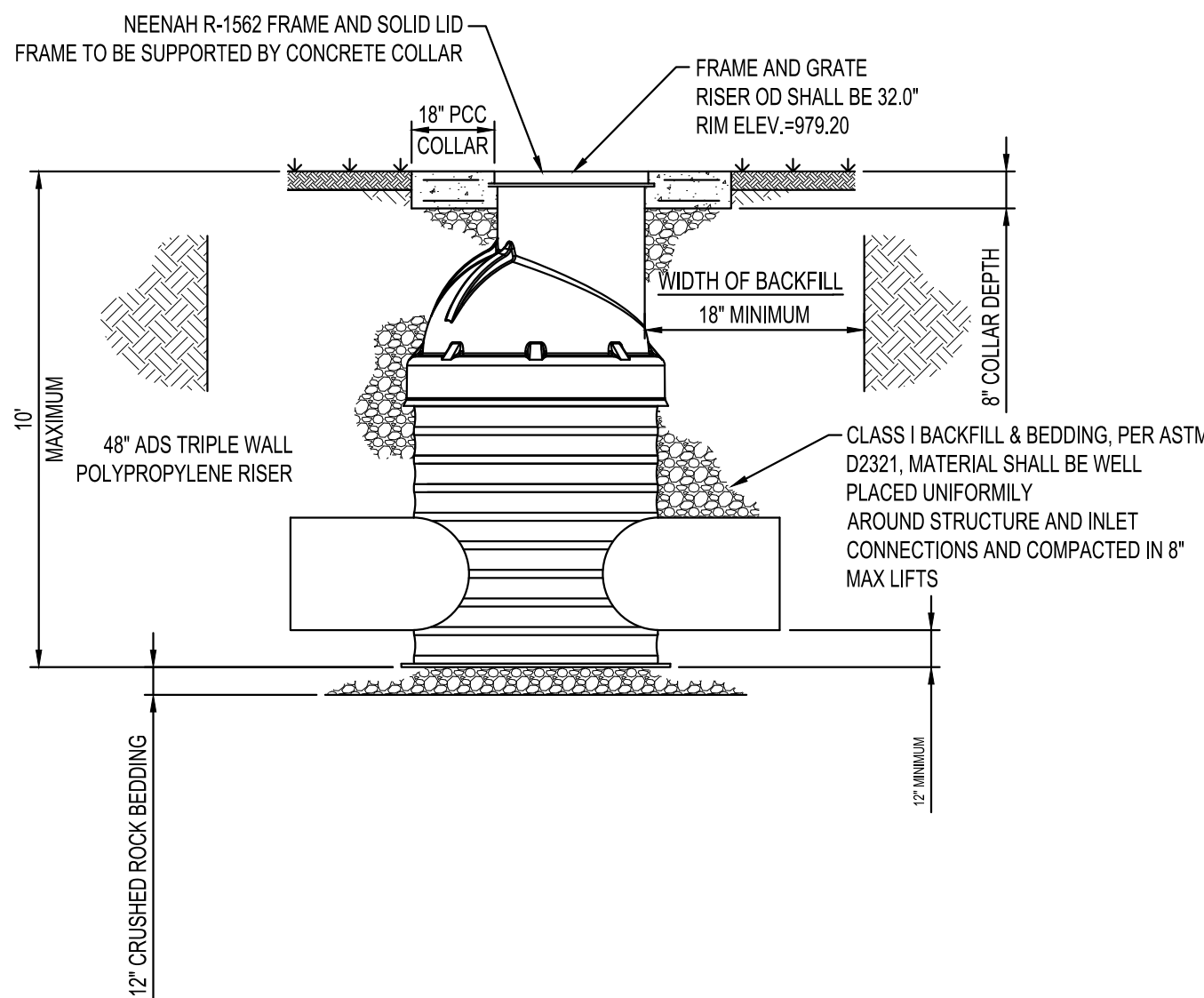
HID READER

NTS



OUTLET STRUCTURE

NTS





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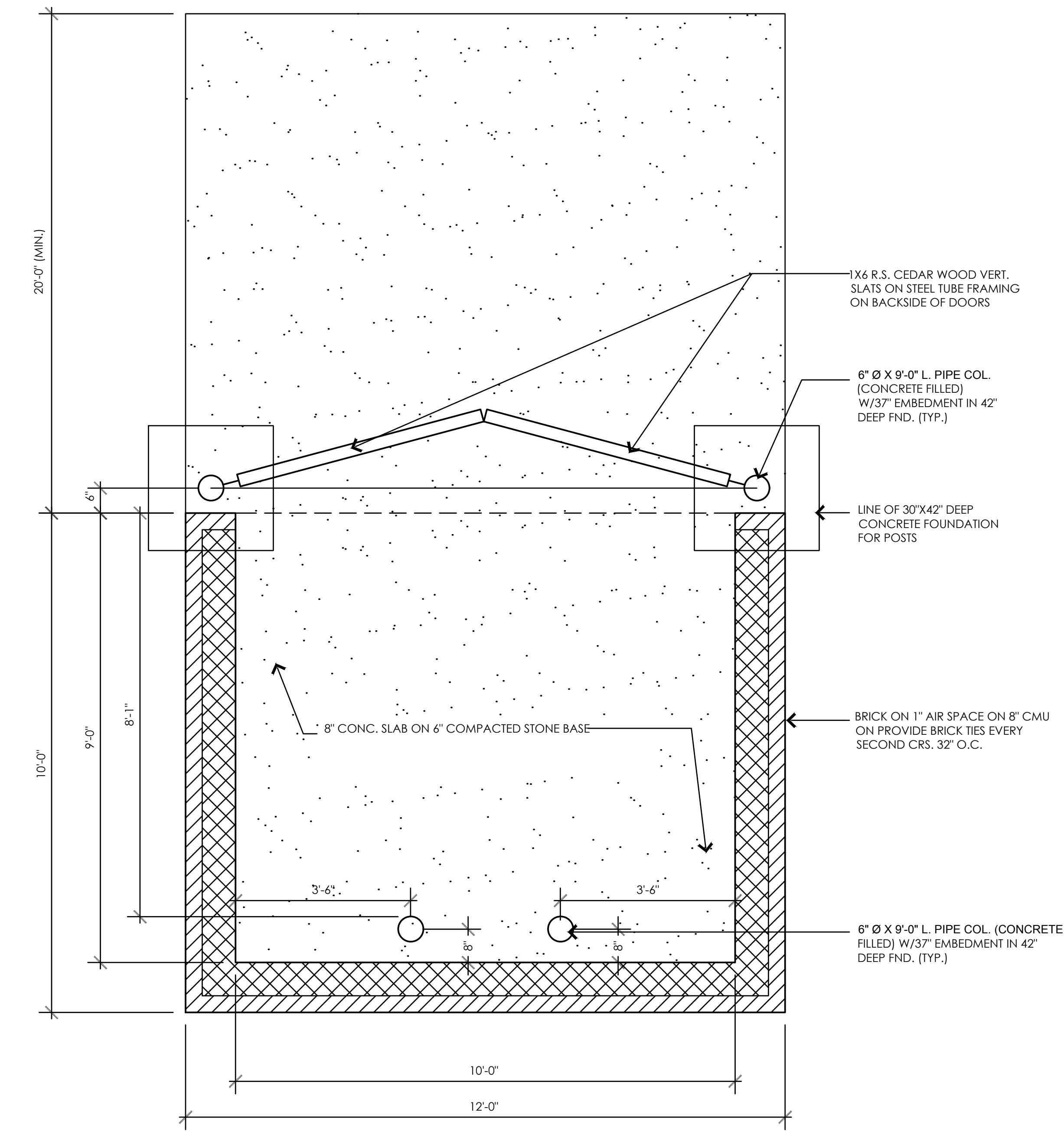
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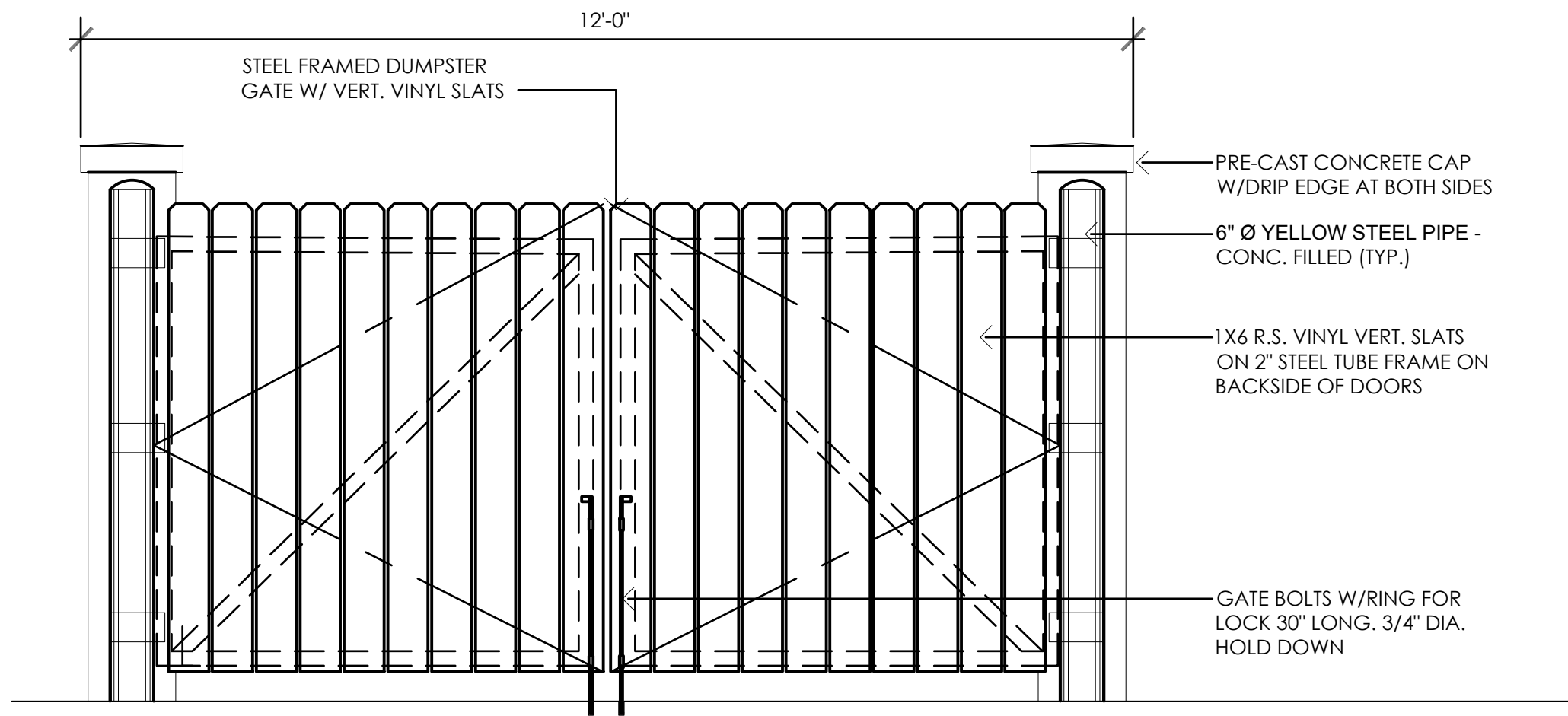
SITE DETAILS

SHEET

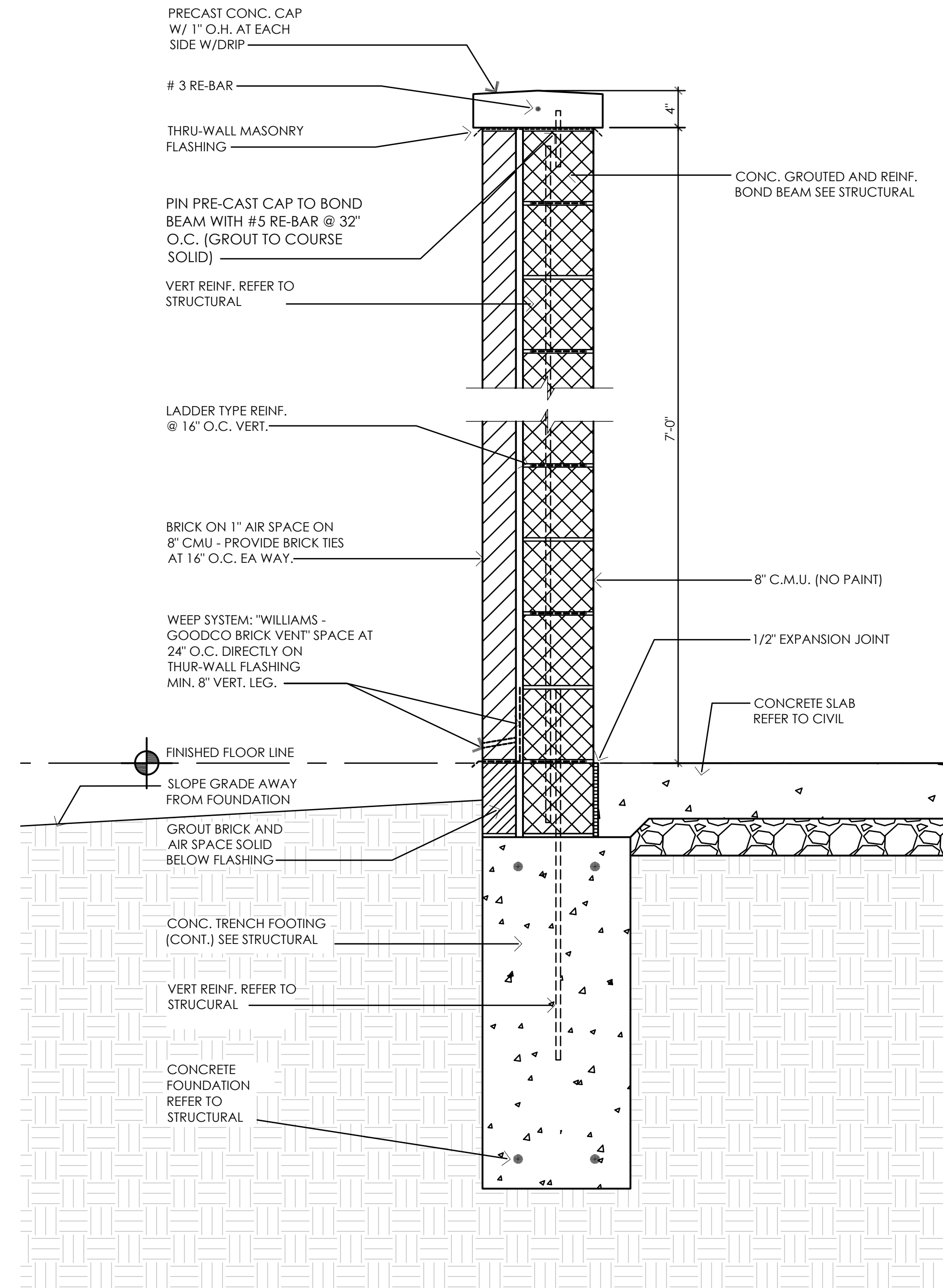
C0-22



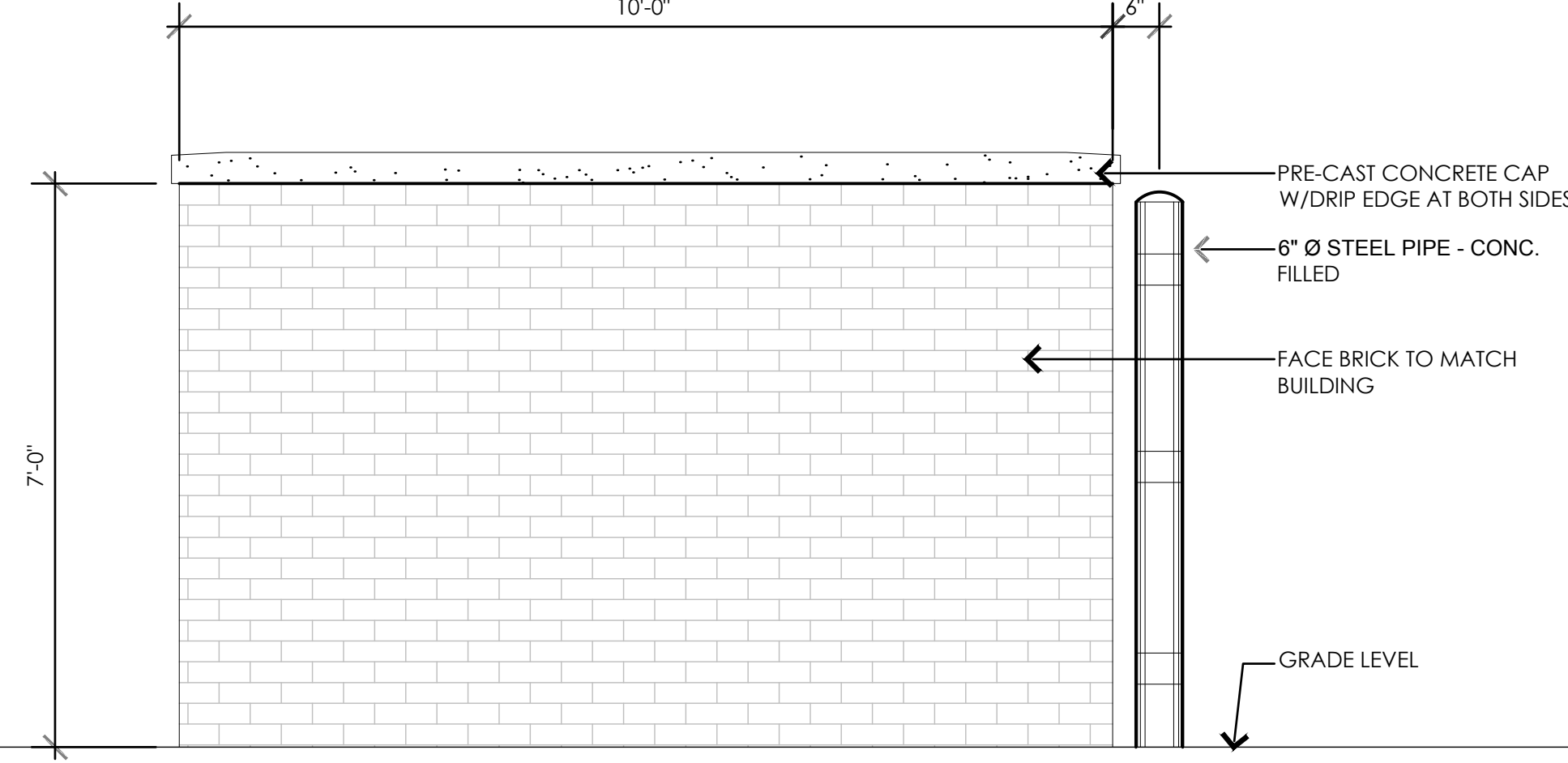
A Trash Enclosure Plan
Scale: 1/2" = 1'-0"



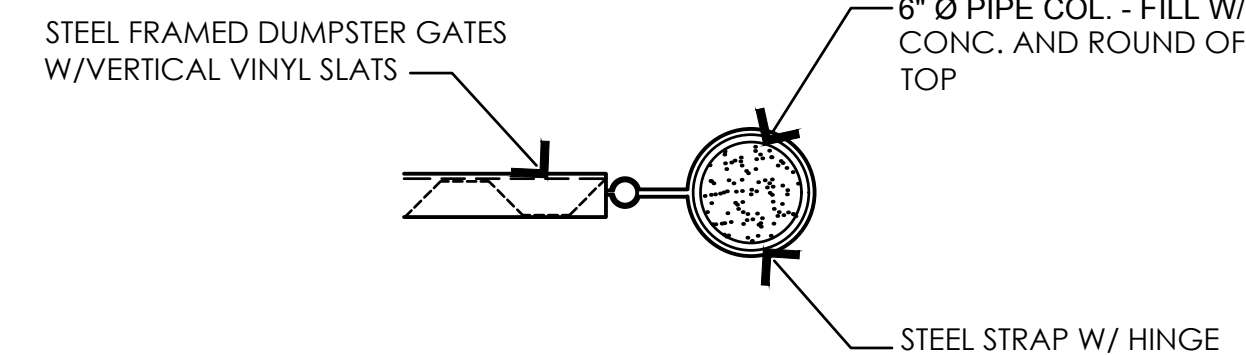
C Trash Enclosure Front Elevation
Scale: 1/2" = 1'-0"



B Section Thru Trash Enclosure
Scale: 1" = 1'-0"



D Trash Enclosure Side Elevation
Scale: 1/2" = 1'-0"



E Bollard Detail
Scale: 1 1/2" = 1'-0"

GENERAL NOTES:
1. ALL EXTERIOR MATERIALS TO MATCH BUILDING IF THERE IS NO BRICK TO MATCH - MATCH MASONRY
2. ADHERE TO ALL LOCAL ORDINANCES AND DESIGN REQUIREMENTS. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

PRELIMINARY NOT FOR CONSTRUCTION



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PROJECT

METRO WASTE
AUTHORITY
MRF FACILITY

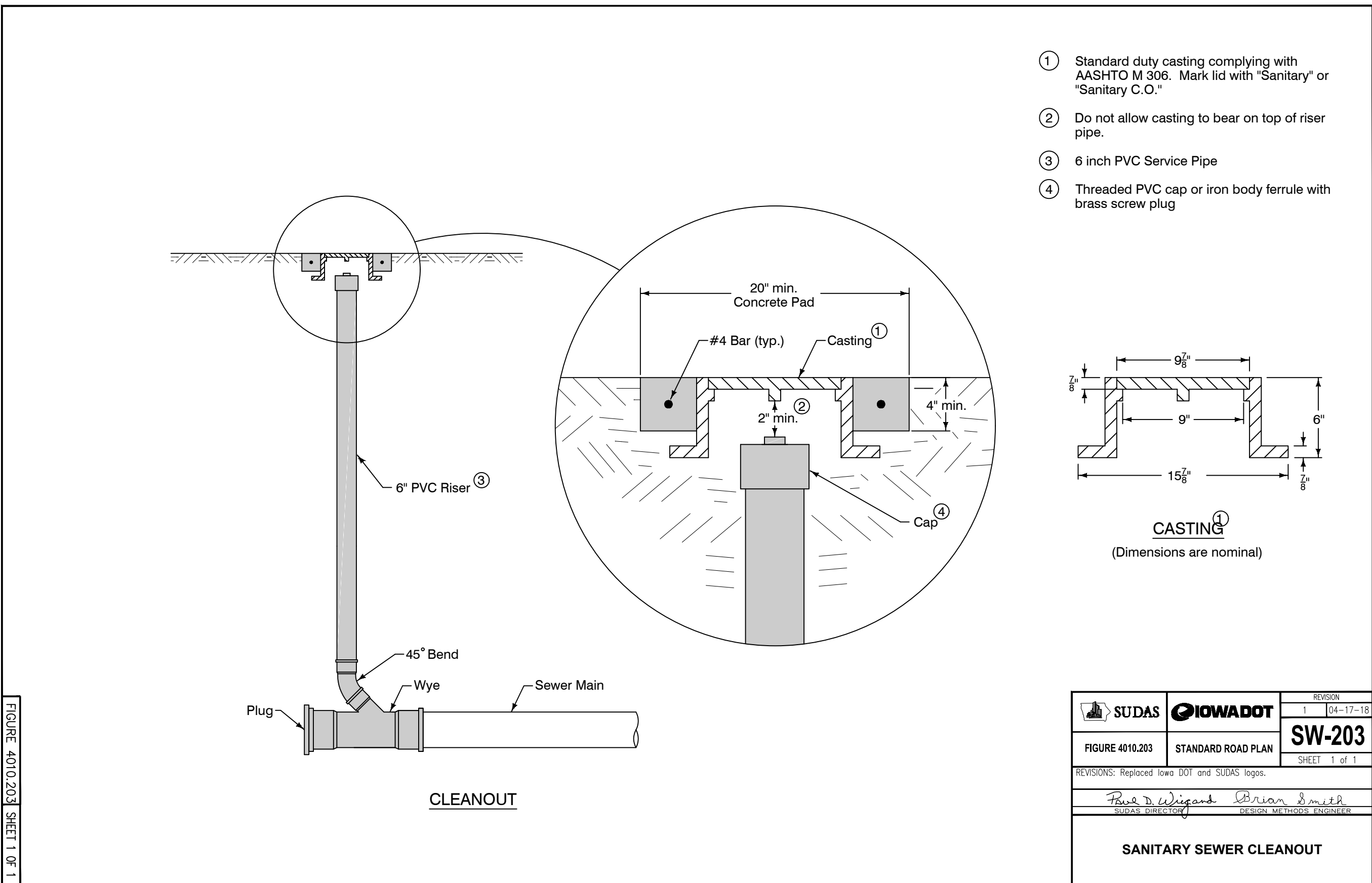
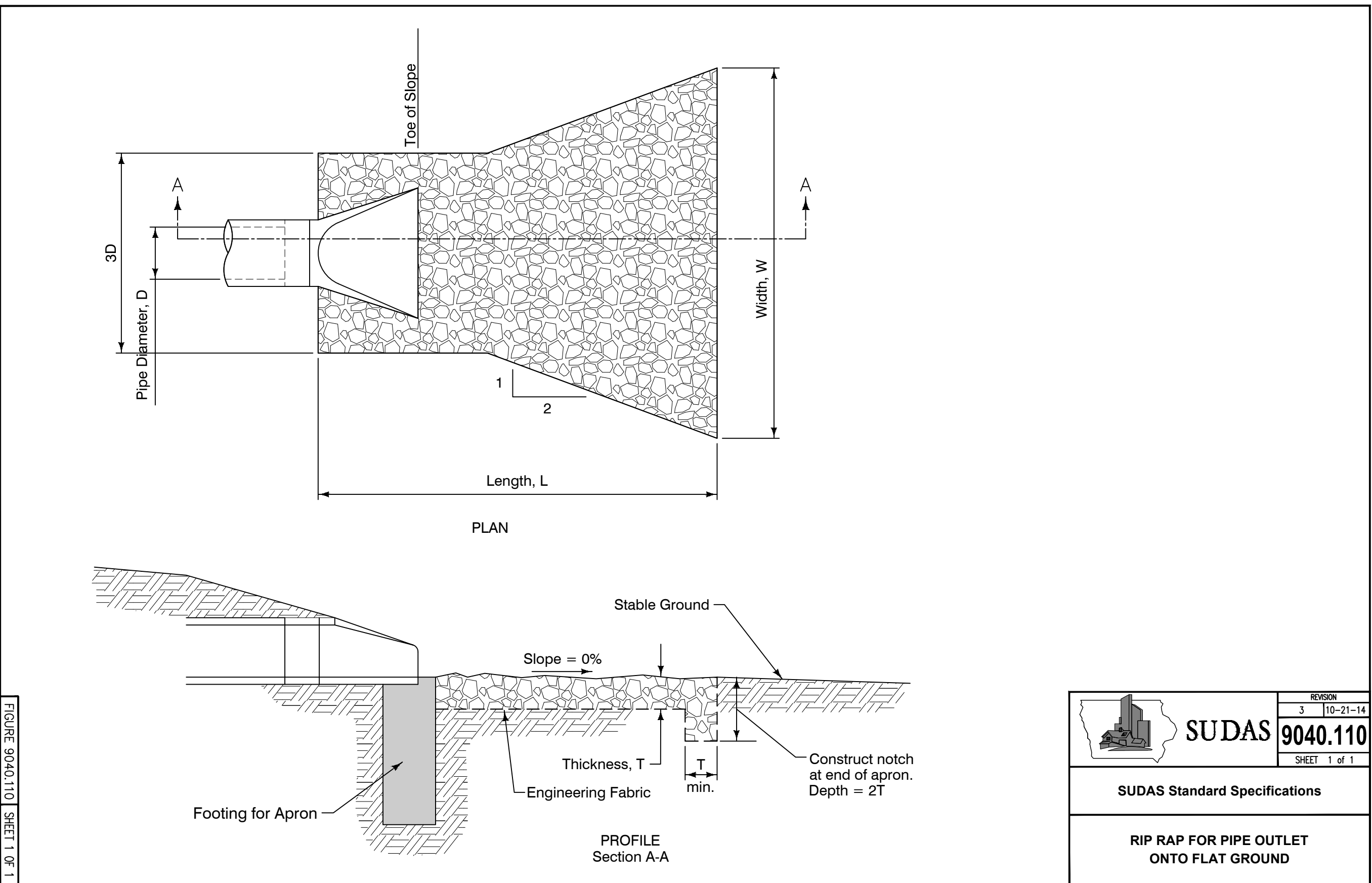
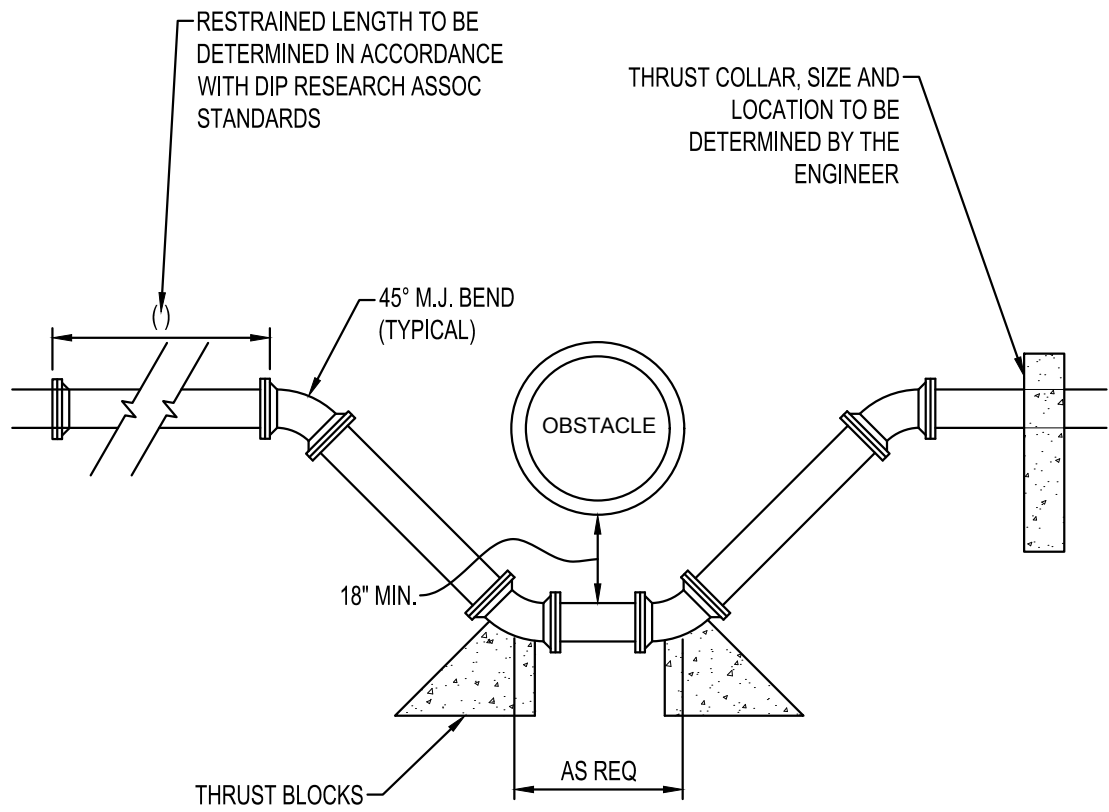
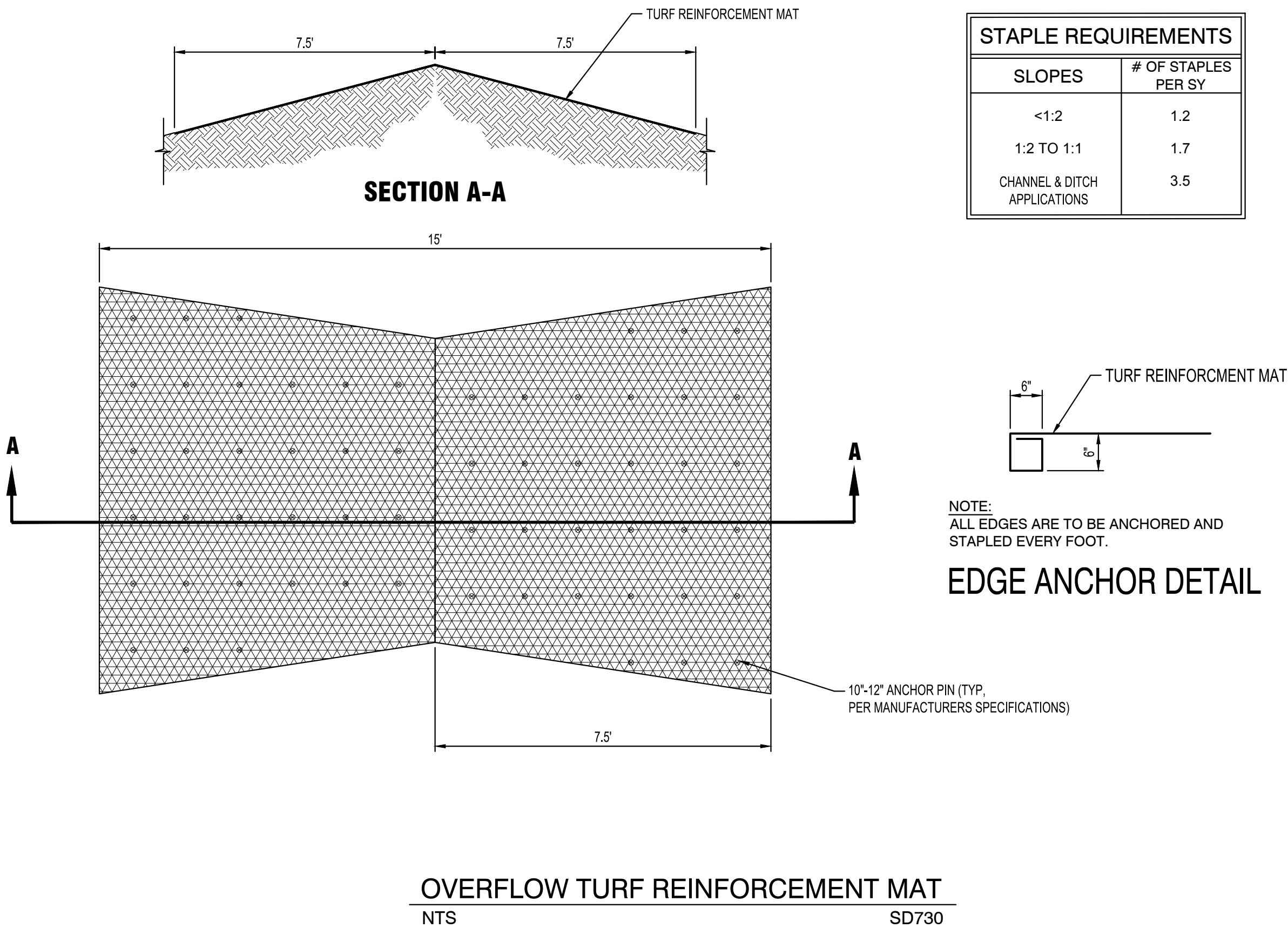
GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 CO-DETAILS
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

SITE DETAILS

SHEET
C0-23





EROSION CONTROL LEGEND			
SYMBOL	DESCRIPTION	UNITS	QUANTITY
SF	SILT FENCE, PREASSEMBLED	LF	3,130
	EXISTING STORM DRAIN INLET PROTECTION	EACH	1
	STABILIZED CONSTRUCTION EXIT	EACH	2
	CONCRETE WASHOUT AREA	EA	1
	EXISTING DRAINAGE ARROW		
101	EXISTING CONTOUR (MINOR INTERVAL)		
100	EXISTING CONTOUR (MAJOR INTERVAL)		
101	PROPOSED CONTOUR (MINOR INTERVAL)		
100	PROPOSED CONTOUR (MAJOR INTERVAL)		
QUANTITIES ARE FOR INFORMATIONAL PURPOSES TO MEET THE REQUIREMENTS OF THE CONSTRUCTION STORMWATER PERMIT. NO GUARANTEE IS MADE TO THE ACTUAL QUANTITIES REQUIRED.			
THE QUANTITIES SHOWN ARE TOTAL FOR THE ENTIRE PROJECT NOT SPECIFIC TO THIS SHEET.			
SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT			
NOTE: EROSION CONTROL PLAN COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS EROSION CONTROL PLAN INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.			

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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES IOWA

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01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO. 19-23010

FILE NAME 23010 C1-SWPPP

DRAWN BY CLF

DESIGNED BY ARA

REVIEWED BY EBG

ORIGINAL ISSUE DATE 01/28/20

CLIENT PROJECT NO. -

TITLE

PRE-CONSTRUCTION EROSION CONTROL PLAN

SHEET

C1-10

PRELIMINARY NOT FOR CONSTRUCTION



EROSION CONTROL LEGEND			
SYMBOL	DESCRIPTION	UNITS	QUANTITY
	RANDOM RIPRAP, CLASS D	CY	60
	SILT FENCE, PREASSEMBLED	LF	SEE C1-10
	EXISTING STORM DRAIN INLET PROTECTION	EACH	SEE C1-10
	PROPOSED STORM DRAIN INLET PROTECTION	EACH	21
	TRENCH DRAIN INLET PROTECTION	EACH	1
	SEDIMENT CONTROL LOG	LF	90
	STABILIZED CONSTRUCTION EXIT	EACH	SEE C1-10
	ROLLED EROSION CONTROL PRODUCT TYPE 2C	SY	11,700
	CONCRETE WASHOUT AREA	EA	SEE C1-10
	EXISTING DRAINAGE ARROW		
	PROPOSED DRAINAGE ARROW		
	EXISTING CONTOUR (MINOR INTERVAL)		
	EXISTING CONTOUR (MAJOR INTERVAL)		
	PROPOSED CONTOUR (MINOR INTERVAL)		
	PROPOSED CONTOUR (MAJOR INTERVAL)		

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SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT

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PROJECT NO. 19-23010

FILE NAME 23010 C1-SWPPP

DRAWN BY CLF

DESIGNED BY ARA

REVIEWED BY EBG

ORIGINAL ISSUE DATE 01/28/20

CLIENT PROJECT NO. -

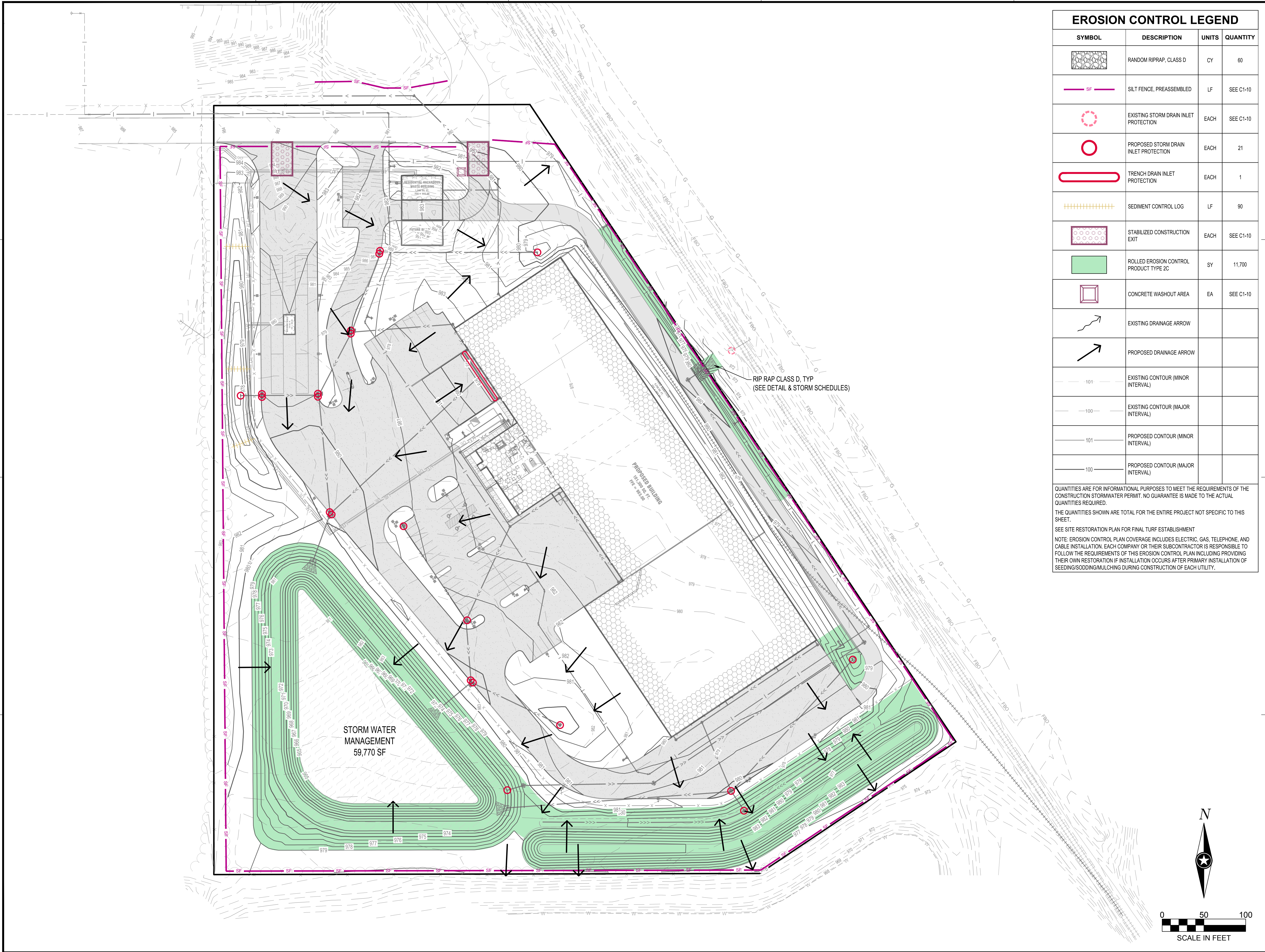
TITLE

INITIAL GRADING EROSION CONTROL PLAN

SHEET

C1-11

PRELIMINARY NOT FOR CONSTRUCTION



EROSION CONTROL LEGEND			
SYMBOL	DESCRIPTION	UNITS	QUANTITY
	RANDOM RIPRAP, CLASS D	CY	60
	SILT FENCE, PREASSEMBLED	LF	SEE C1-10
	EXISTING STORM DRAIN INLET PROTECTION	EACH	SEE C1-10
	PROPOSED STORM DRAIN INLET PROTECTION	EACH	21
	TRENCH DRAIN INLET PROTECTION	EACH	1
	SEDIMENT CONTROL LOG	LF	90
	STABILIZED CONSTRUCTION EXIT	EACH	SEE C1-10
	ROLLED EROSION CONTROL PRODUCT TYPE 2C	SY	11,700
	CONCRETE WASHOUT AREA	EA	SEE C1-10
	EXISTING DRAINAGE ARROW		
	PROPOSED DRAINAGE ARROW		
	EXISTING CONTOUR (MINOR INTERVAL)		
	EXISTING CONTOUR (MAJOR INTERVAL)		
	PROPOSED CONTOUR (MINOR INTERVAL)		
	PROPOSED CONTOUR (MAJOR INTERVAL)		

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SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT

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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES IOWA

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01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C1-SWPPP
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

PROPOSED EROSION CONTROL PLAN

SHEET

C1-20

PRELIMINARY NOT FOR CONSTRUCTION

CONSTRUCTION ACTIVITY NOTES:

EROSION PREVENTION:

Construction of silt fence and all other erosion control measures shall be complete before other construction activity occurs.

Use phased construction wherever practical and establish turf as soon as possible to minimize sediment transport.

Turf establishment or temporary seeding or mulching of all exposed soil not being actively worked should be immediately initiated once earth disturbing activities have ceased.
Temporary cover during construction is incidental.

Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water.

Stabilization of disturbed areas must be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.

SEDIMENT CONTROL PRACTICES:

Construction of silt fence and all other erosion control measures shall be complete prior to land disturbing activities occur.

Inlet erosion protection shall be installed and maintained until turf has been established.

The contractor shall be responsible to control erosion from leaving the construction zone. All eroded material that leaves the construction zone shall be collected by the contractor and returned to the site at the contractor's expense.

All streets must be swept at the end of each working day and prior to a rain event.
Silt fence or other effective erosion control measures must be installed around the perimeter of any soil stockpiles, including temporary stockpiles. Stockpiles cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.

Perimeter control shall be installed along the back of curb immediately following curb installation at all locations with positive drainage to parking lot and/or streets, and shall remain until stabilization is achieved. This shall be accomplished through the use of silt fence, biorolls, Rock logs, or other methods approved by the Engineer.

CONSTRUCTION ACTIVITIES & SCHEDULING

ACTIVITY	SCHEDULE
Install all BMP's needed and associated with the Grading Phase such as stabilized construction entrances, silt basins, riser pipes, outlet pipes silt traps, silt fence, diversions, terraces, temporary berms, and etcetera. Proceed with stripping of existing vegetation and grading in accordance with the grading plan, while disturbing no more than necessary.	Prior to any stripping of existing vegetation or grading. After Installing all BMP's needed and associated with the Grading Phase. Furthermore, INSPECTOR approval must be obtained before the start of any stripping of existing vegetation or grading.
Proceed with infrastructure installation.	Infrastructure installation must occur prior to any building construction.
Implement the installation of Temporary Seeding, Permanent Seeding, and/or Mulching.	Stabilization of disturbed areas must be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
Proceed with removal of BMP's.	BMP's may not be removed until each impacted drainage basin has been fully developed. Full development shall mean installation of pavement, buildings, and utilities, landscaping, and fully established permanent seeding. Furthermore, INSPECTOR approval must be obtained before the removal of any BMP's.

CONSTRUCTION ACTIVITY NOTES:

DEWATERING AND BASIN DRAINING:

Dewater sediment-laden water to sedimentation basins if possible, or use other BMP's to prevent erosion and remove sediment when discharging to surface waters. Use appropriate energy dissipation measures on all discharges.

Dewatering practices cannot cause nuisance conditions, erosion or in receiving channels or inundation of wetlands resulting in adverse impacts.

POLLUTION PREVENTION:

All solid waste collected from the construction site must be disposed in accordance with all applicable regulations.

All hazardous materials (oil, gasoline, fuel, paint, etc) must be properly stored to prevent spills, leaks or other discharge, storage areas shall provide secondary containment and a hazardous materials spill kit. Storage and disposal of hazardous waste must be in compliance with all applicable regulations.

Equipment maintenance areas must be limited to a defined area of the site. All runoff containing any hazardous material must be properly collected and disposed. No engine degreasing shall be allowed on site.

The contractor is responsible for monitoring air pollution and ensuring it does not exceed levels set by local, state, or federal regulations. This includes dust created by work being performed on the site. Air pollution and dust control correction is considered incidental to the unit bid prices for which work is being performed. Additional dust control measures may be required by the Engineer.

Concrete washout onsite: All liquid waste generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. The liquid waste must not contact the ground, and there must not be runoff from the concrete washout operations or areas. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities. Protect storm sewers and drainage ways from allowing concrete slurry from concrete operations to discharge offsite.

INSPECTION AND MAINTENANCE:

The Permittees must routinely inspect the construction site once every seven (7) days during active construction.

All inspections performed during construction must be recorded and records retained with the SWPPP.

Contractor is responsible for keeping a record of all rainfall information & erosion control maintenance until final establishment of turf.

All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches ½ of the height of the fence.

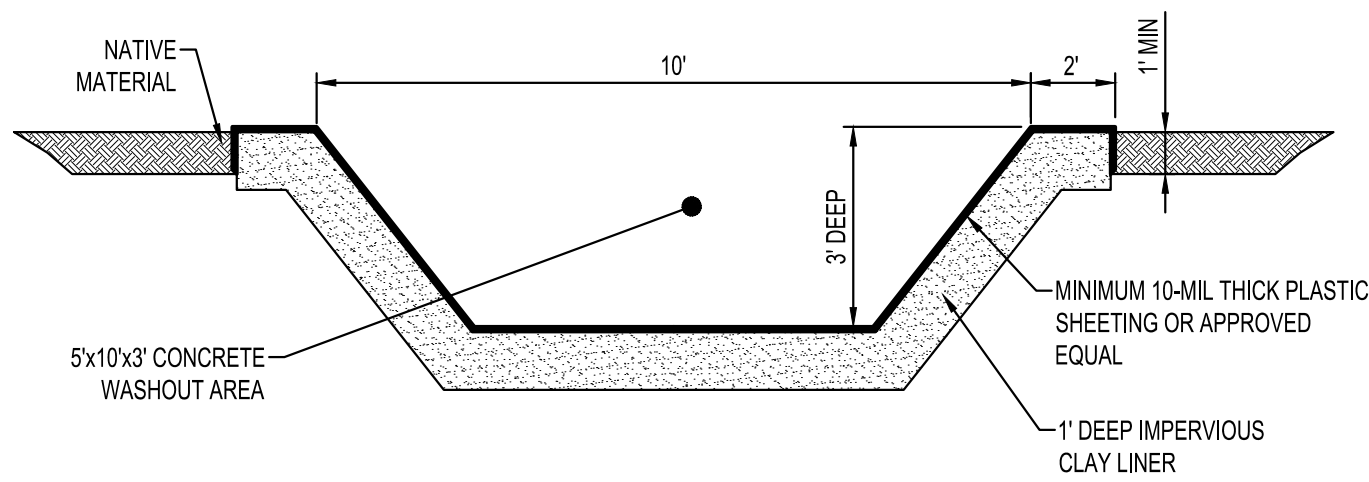
Erosion control, and other BMP's must be replaced, repaired, or supplemented when they reach 50% design load.

FINAL STABILIZATION:

The Permittees must ensure final stabilization of the site. The Permittees must submit a Notice of Discontinuation within 30 days after final stabilization is complete or control has been passed to another owner.

All temporary erosion control measures and BMP's must be removed as part of the final site stabilization.

The storm water permit further defines final stabilization and its requirements.



NOTES:

CONTRACTOR SHALL INSTALL A SIGN INDICATING THE CONCRETE WASHOUT AREA.

CONTRACTOR SHALL MAINTAIN WASHOUT AREA TO REMOVE MATERIALS BEYOND 75% CAPACITY.

WASHOUT AREA SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES OR BODIES OF WATER.

CONTRACTOR SHALL INSPECT WASHOUT AREA AS NECESSARY TO PREVENT LEAKS AND OVER TOPPING.

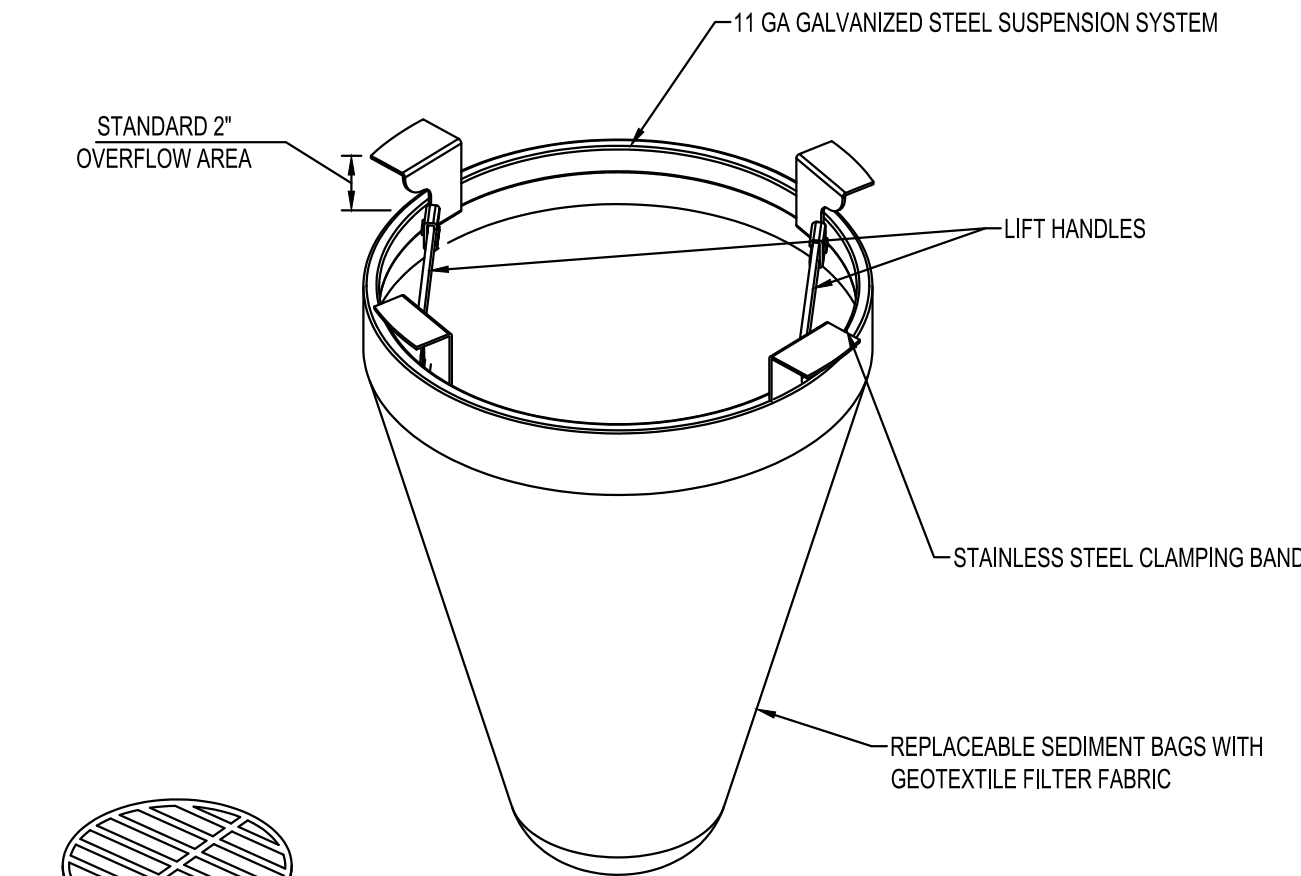
WASHOUT AREA SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

CONCRETE WASHOUT
NTS EC500

MAINTENANCE SCHEDULE

The following Maintenance Schedule has been provided. The INSPECTOR must perform the inspections. The OPERATOR/CONTRACTOR must perform all needed maintenance. Furthermore, all erosion control feature requiring maintenance may not be listed below. The OPERATOR/CONTRACTOR and INSPECTOR must perform their respective duties on all BMP's that are not listed below as well.

- Construction Entrance** - The entrance shall be maintained in a condition which will prevent tracking or flow of sediment onto public rights-of-way. This may require periodic top dressing with additional stone or the washing and reworking of existing stone as conditions demand and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or materials dropped, washed or tracked onto roadways will not be permitted under any circumstances.
- Wattles** - The maintenance measures are as follows: (2.1) wattles shall be inspected weekly; (2.2) close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales; (2.3) necessary repairs to barriers or replacement of wattles shall be accomplished promptly; (2.4) sediment deposits shall be removed after each rainfall, they must be removed when the level of deposition reaches approximately one-half the height of the wattle; and (2.5) any sediment deposits remaining in place after the wattle is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- Silt Fence** - The maintenance measures are as follows; (3.1) silt fences shall be inspected weekly, any required repairs shall be made immediately; (3.2) close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting; (3.3) should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly; (3.4) sediment deposits must be removed when the level of deposition reaches approximately one-half the height of the barrier; and (3.5) any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- Temporary Sediment Basin** - Temporary Sediment Basin shall be constructed at the beginning of grading operations to provide the required sediment storage. Maintenance and cleanout frequencies for sediment basins depend greatly on the amount of precipitation and sediment load arriving at the basin. During inspections, the embankment should be reviewed for signs of seepage, settlement, or slumping. These problems should be repaired immediately. Sediment should be removed from the basin when it accumulates to one-half of the wet storage volume. During sediment cleanout, trash should be removed from the basin, and the dewatering device and riser pipe should be checked and cleared of any accumulated debris.
- Storm Drain Inlet Protection** - The maintenance measures are as follows: (4.1) structures shall be inspected weekly and repairs made as necessary and (4.2) structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.
- Temporary Seeding** - Areas which fail to establish vegetative cover adequate to prevent rill erosion will be re-seeded as soon as such areas are identified.
- Permanent Seeding** - The maintenance measures are as follows: (10.1) in general, a stand of vegetation cannot be determined to be fully established until it has been maintained for one full year after planning; (10.2) new seedlings shall be supplied with adequate moisture, supply water as needed, especially late in the season, in abnormally hot or dry conditions, or on adverse sites, water applications shall be controlled to prevent excessive runoff; (10.3) inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season, if possible; [10.3.a] if stand is inadequate for erosion control, over seed and fertilize using half of the rates originally specified; [10.3.b] if stand is 60% damaged, re-establish following seedbed and seeding recommendations; [10.3.c] if stand has less than 40% cover, re-evaluate choice of plant materials and quantities of lime and fertilizer, the soil must be tested to determine if acidity or nutrient imbalances are responsible, re-establish the stand following seedbed and seeding recommendations.
- Street Cleaning / Sweeping** - The maintenance measures are as follows: (13.1) evaluate access points daily for sediment tracking; (13.2) when tracked or spilled sediment is found on paved surfaces, it will be removed daily, during times of heavy track-out, such as during rains, cleaning may be done several times throughout the day; (13.3) all streets shall be swept at the end of each working day and prior to a rain event; (13.4) unknown spills or objects will not be mixed with the sediment; and (13.5) if sediment is mixed with other pollutants, it will be disposed of properly at an authorized landfill.



NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT
WWW.INLETFILTERS.COM

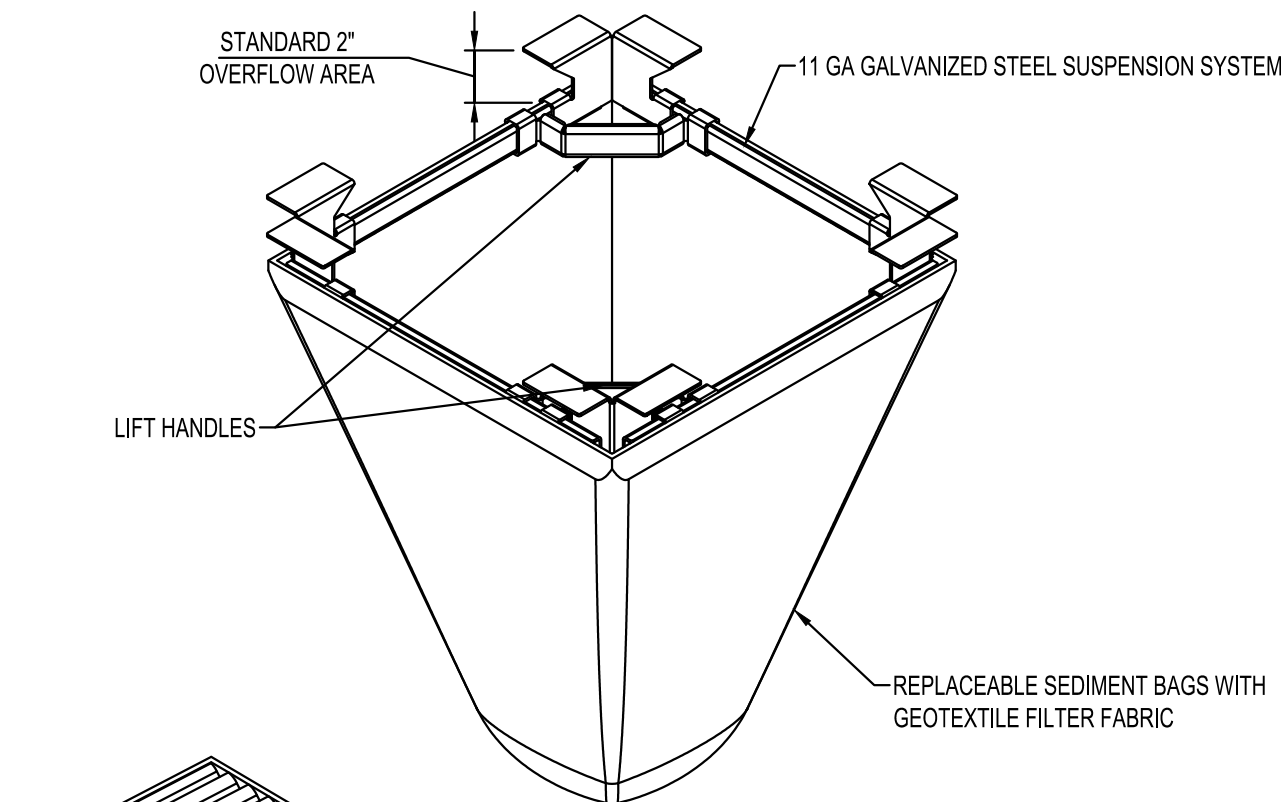
INSTALLATION:

REMOVE GRATE
DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
REPLACE GRATE

MATERIALS:

FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT
SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME;
STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

ROUND FILTER
INLET PROTECTION
NTS EC210



NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT
WWW.INLETFILTERS.COM

INSTALLATION:

REMOVE GRATE
DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
REPLACE GRATE

MATERIALS:

FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT
SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME;
STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

RECTANGULAR FILTER
INLET PROTECTION
NTS EC211

ISG

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PROJECT

METRO WASTE
AUTHORITY

MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
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01/13/20	CITY SUBMITTAL #2	ARA
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PROJECT NO.	19-23010
FILE NAME	23010 CO-DETAILS
DRAWN BY	CLF
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REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
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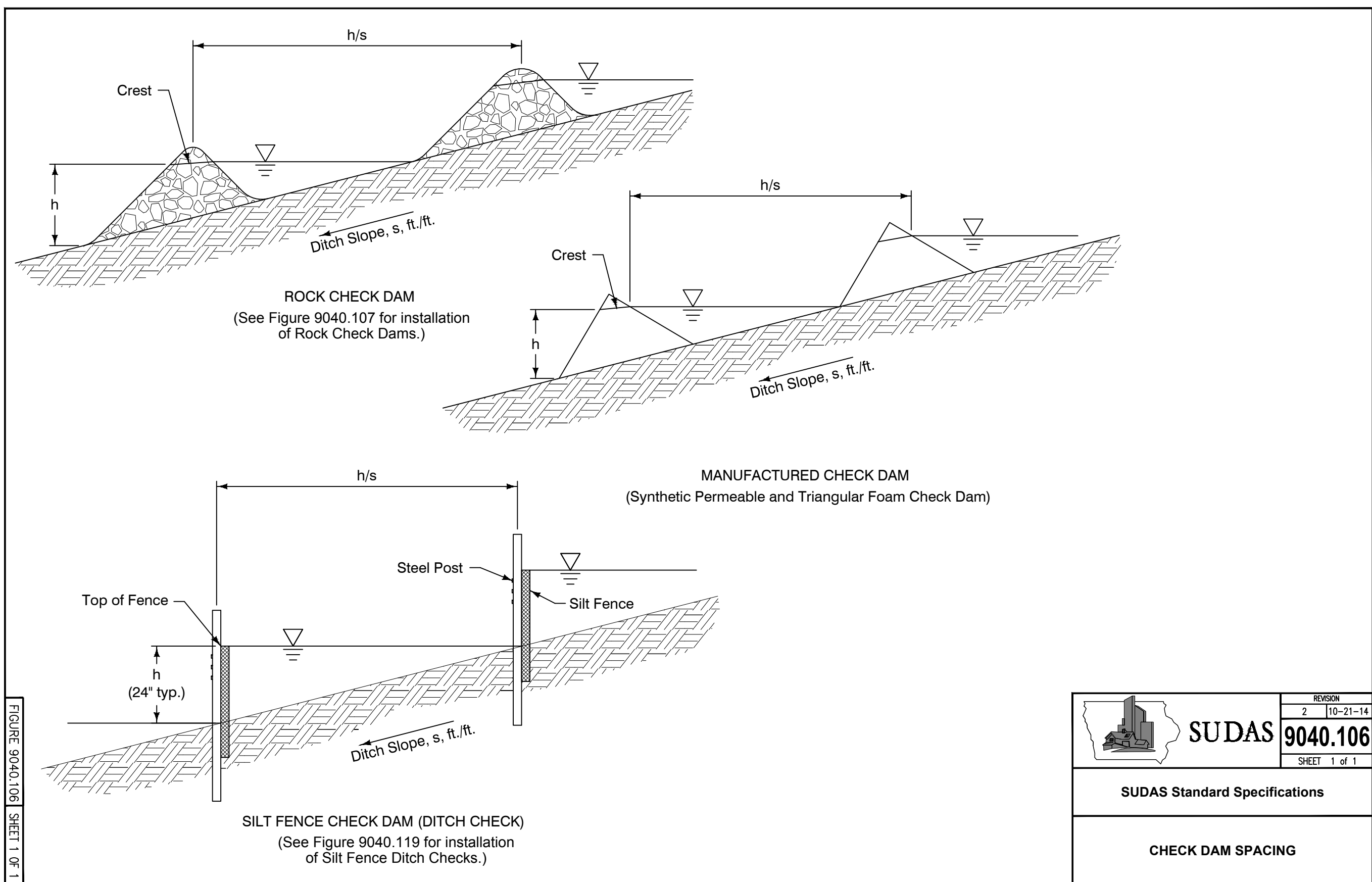
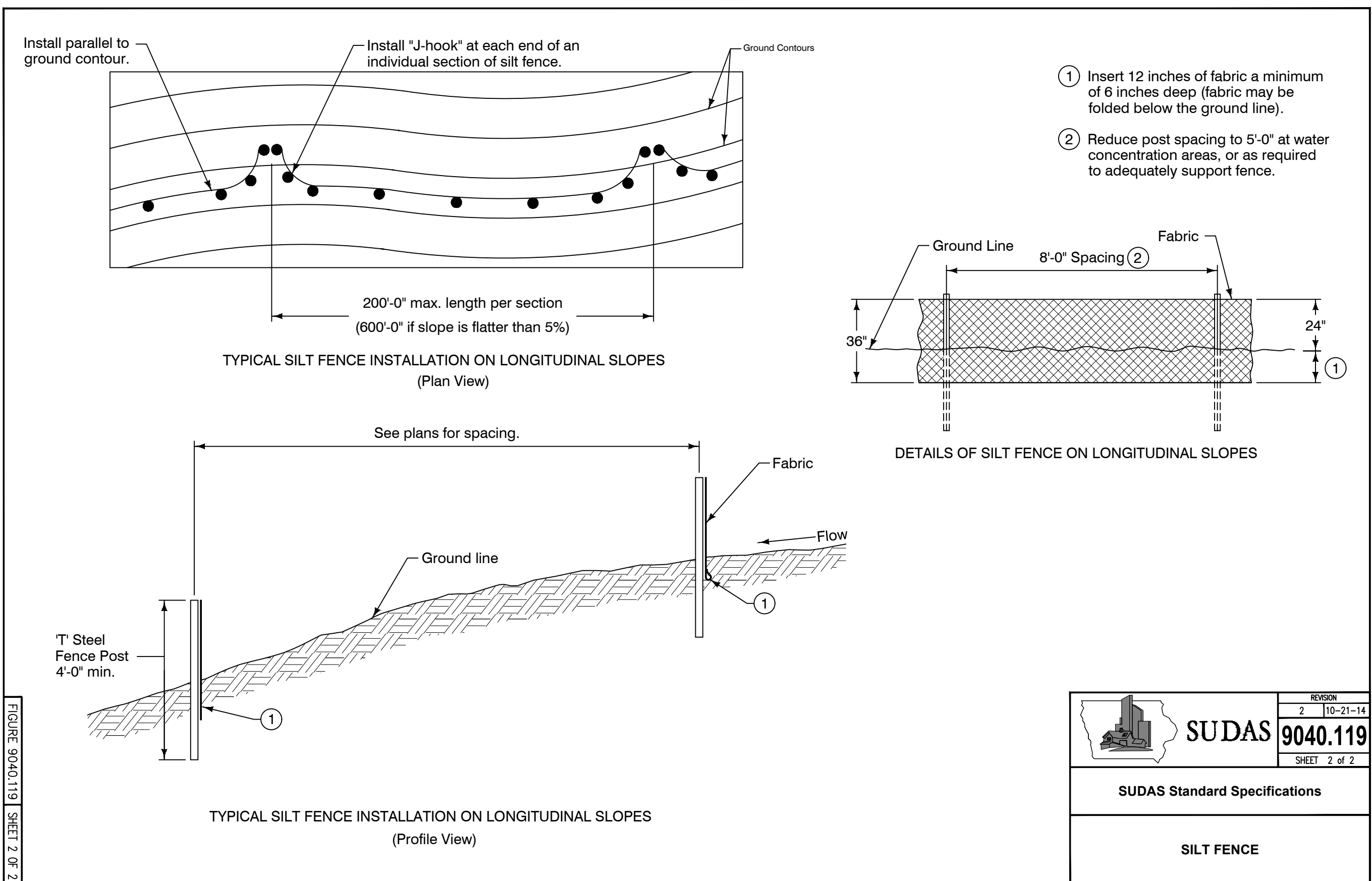
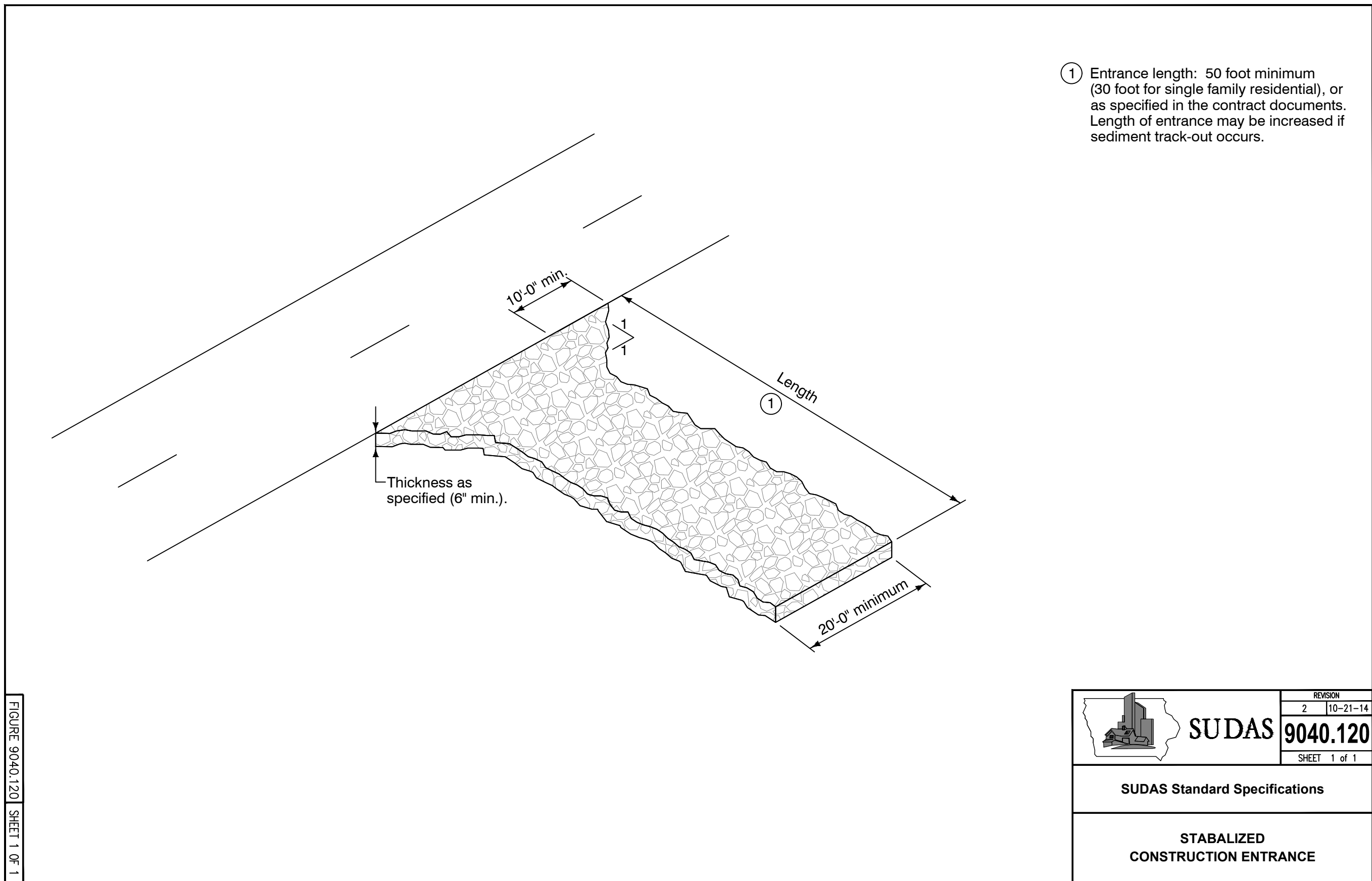
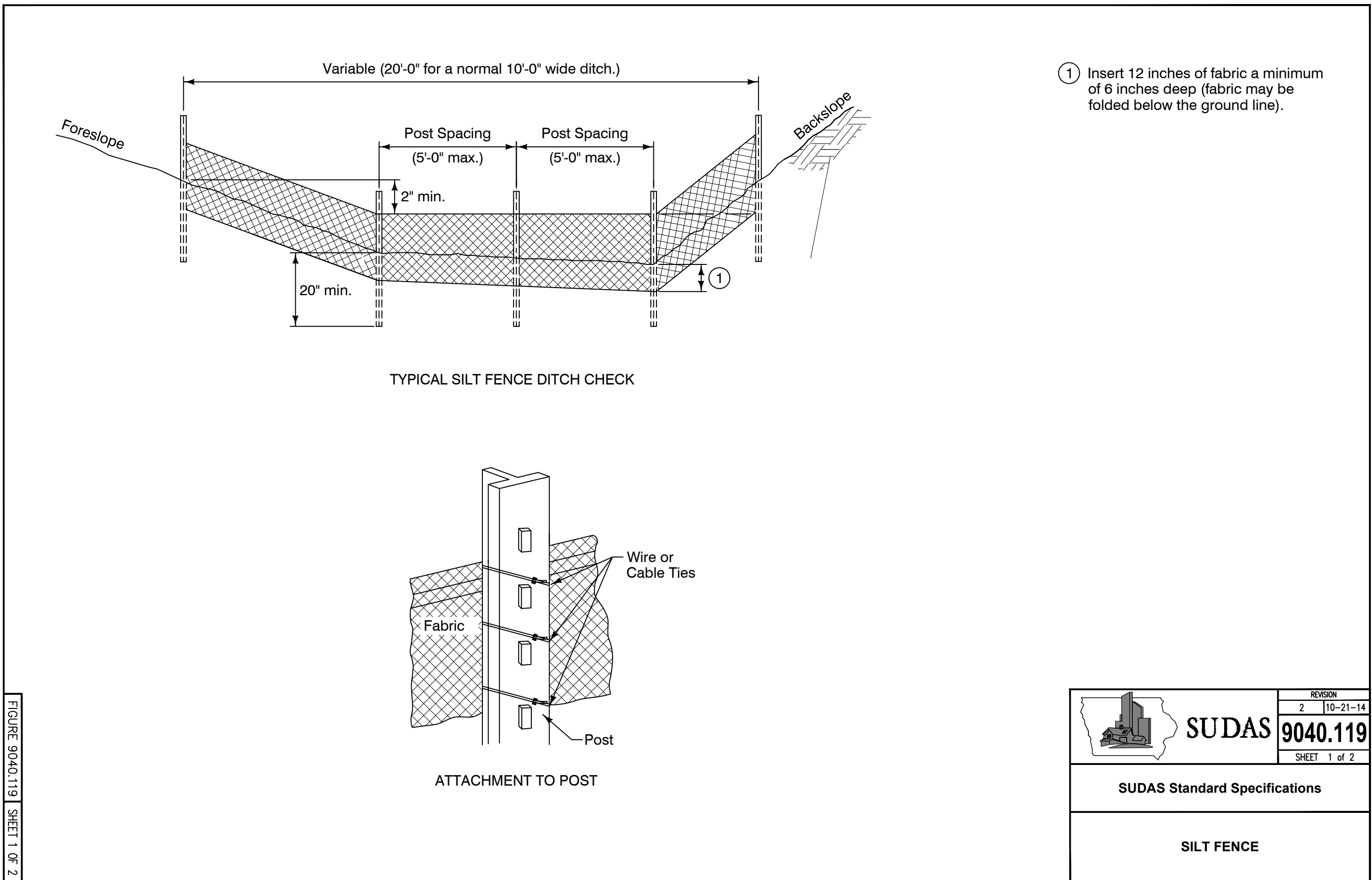
TITLE

EROSION
CONTROL NOTES
& DETAILS

SHEET

C1-30

PRELIMINARY NOT FOR CONSTRUCTION



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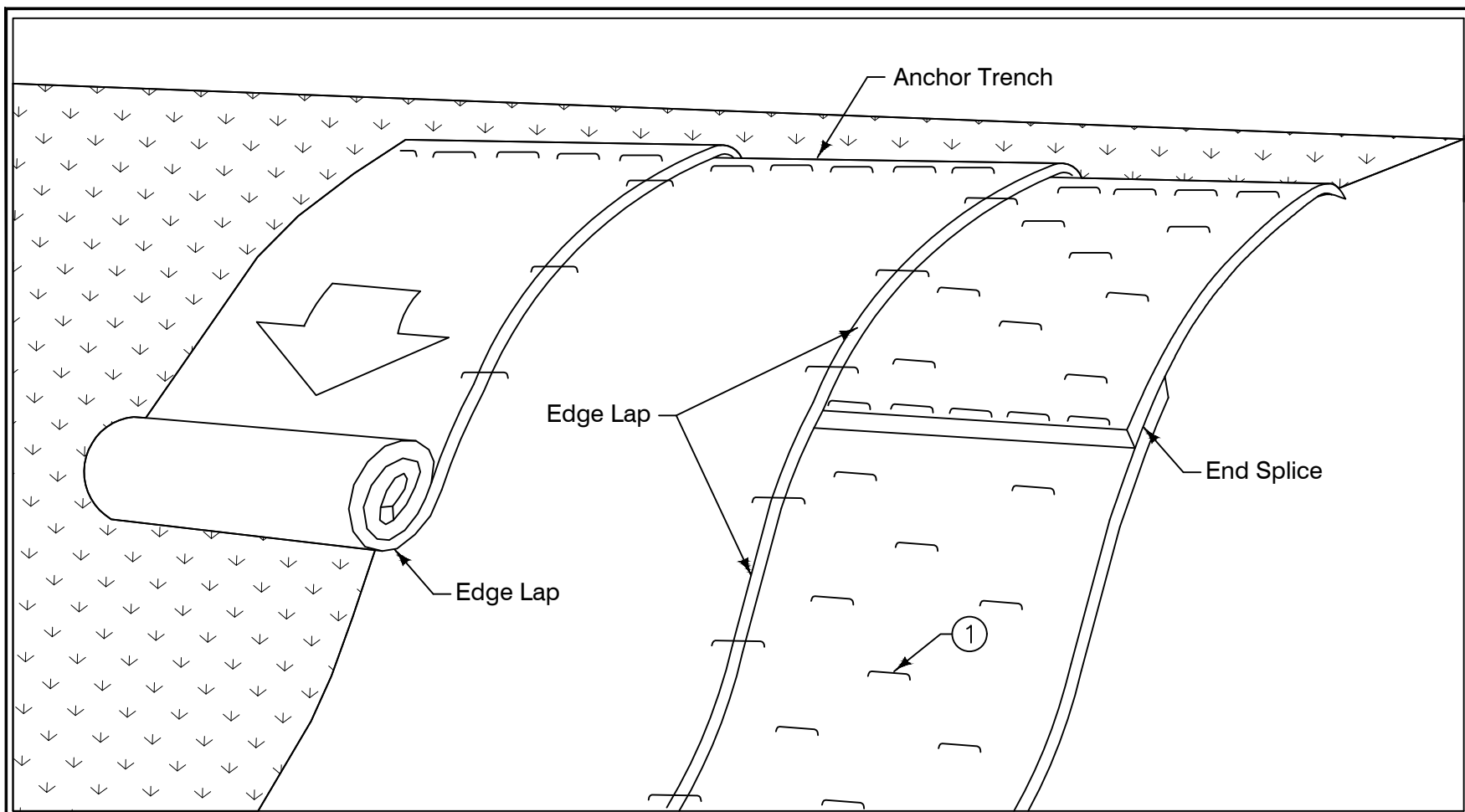
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EROSION CONTROL DETAILS

SHEET

C1-31



① Secure blanket to ground according to manufacturer's recommended anchoring pattern and minimum shown in Table 1.

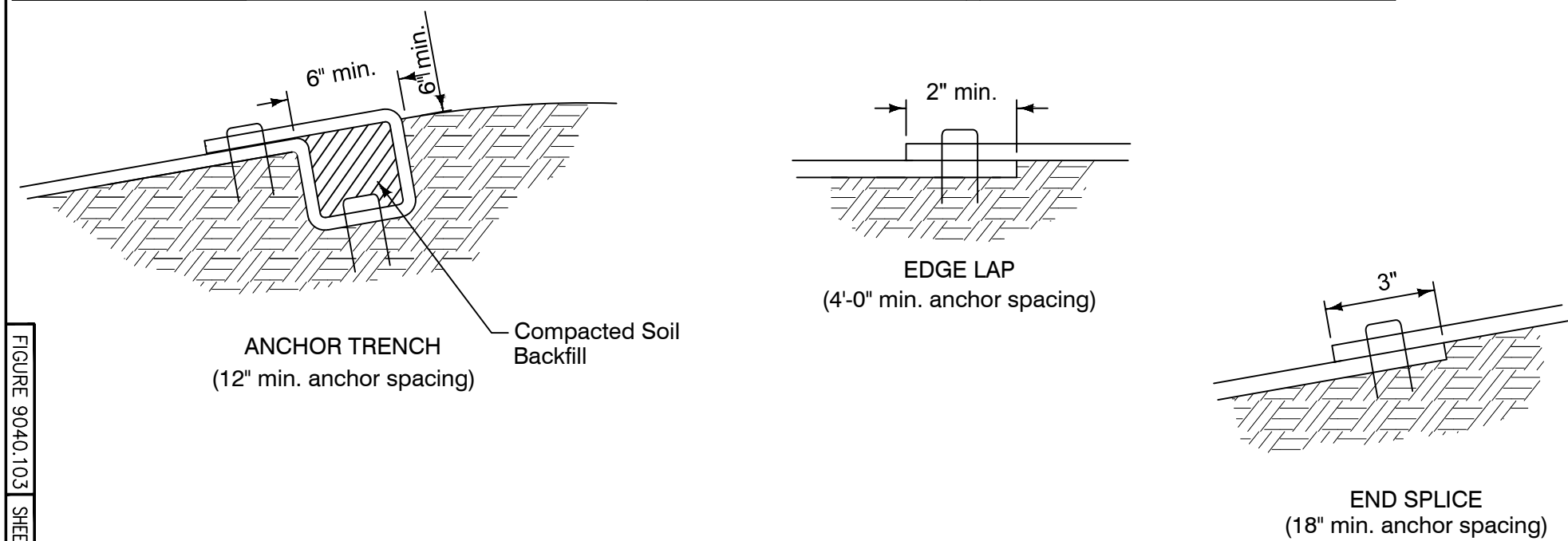
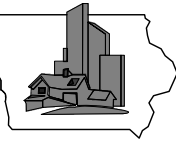


TABLE 1	
Max. slope	Min. anchors
≤ 3:1	1.5/yd ²
2:1	2/yd ²
1:1	2.5/yd ²

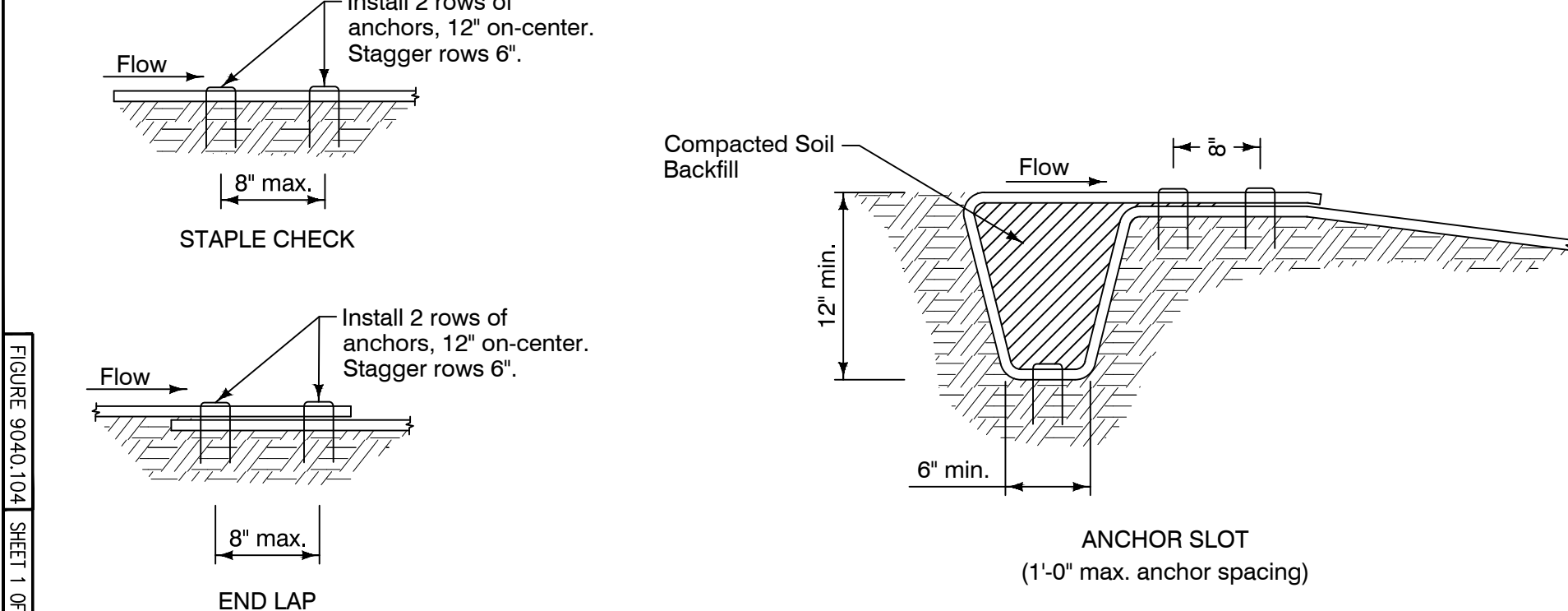
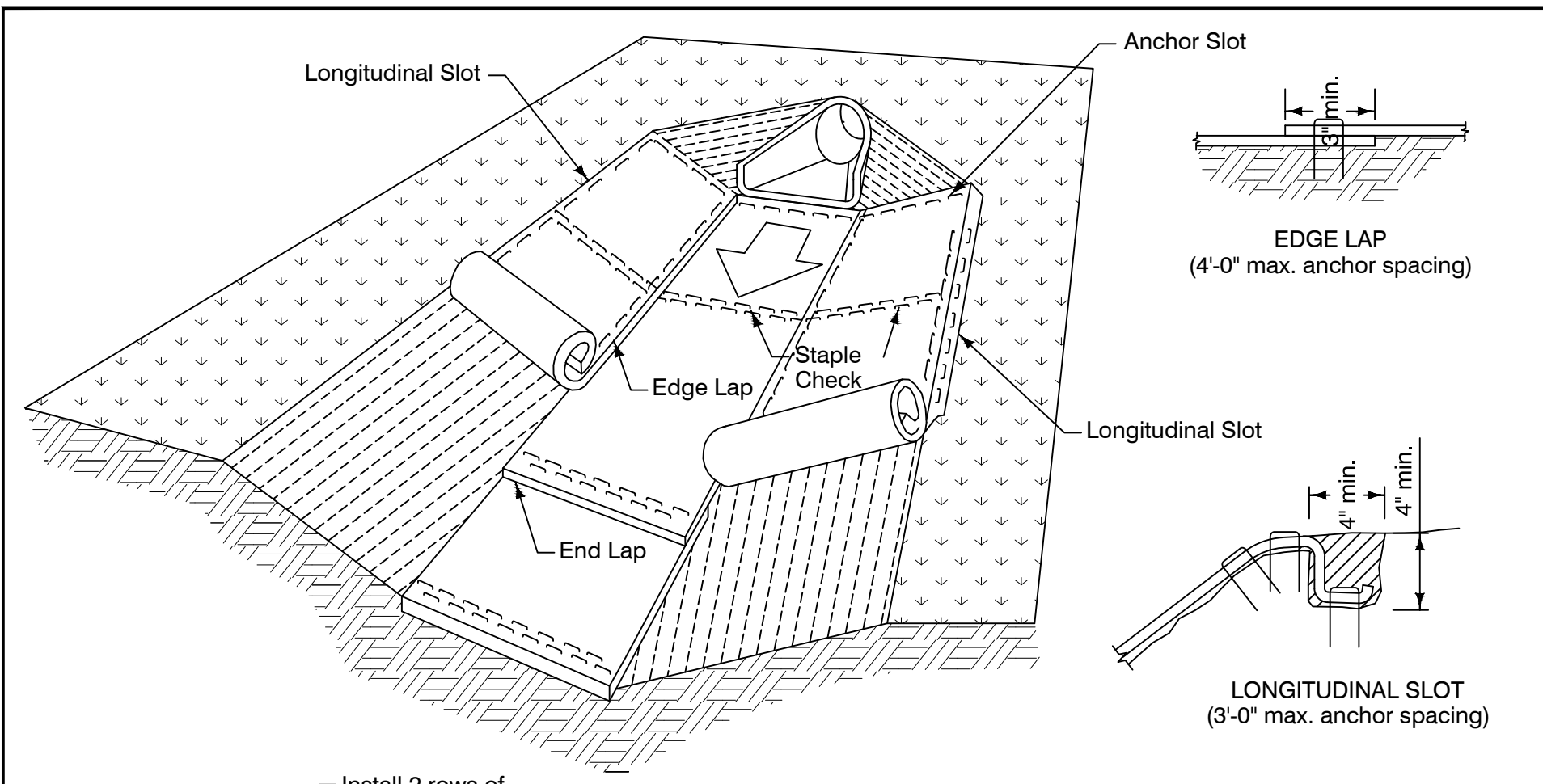
**SUDAS**

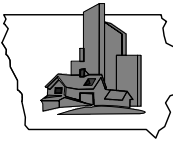
REVISION
2 10-21-14
SHEET 1 of 1

9040.103

SUDAS Standard Specifications

ROLLED EROSION CONTROL
PRODUCT (RECP)
INSTALLATION ON SLOPES



**SUDAS**

REVISION
2 10-21-14
SHEET 1 of 1

9040.104

SUDAS Standard Specifications

ROLLED EROSION CONTROL
PRODUCT (RECP)
INSTALLATION IN CHANNEL

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PROJECT

METRO WASTE AUTHORITY MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

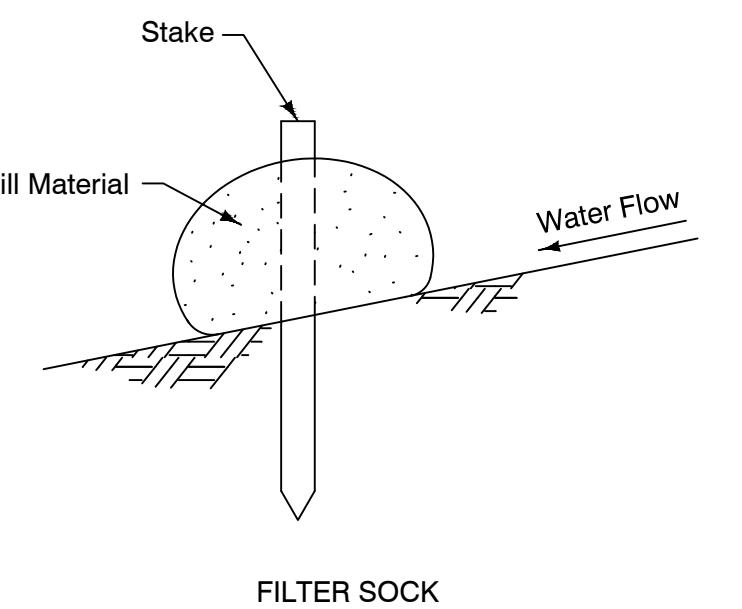
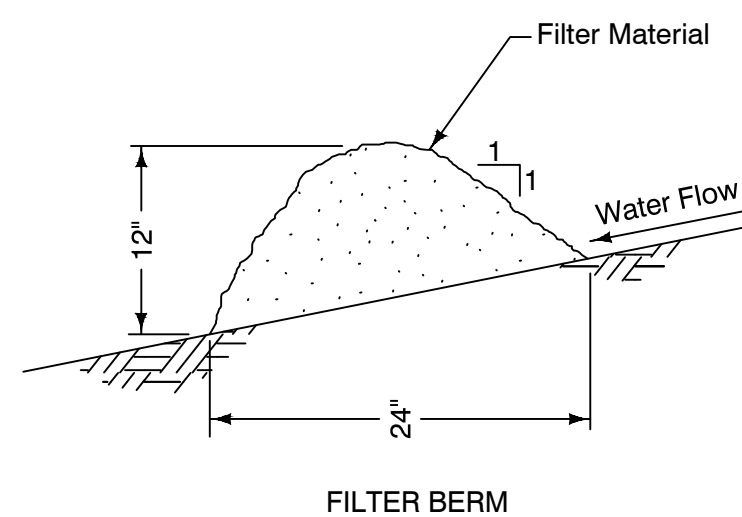
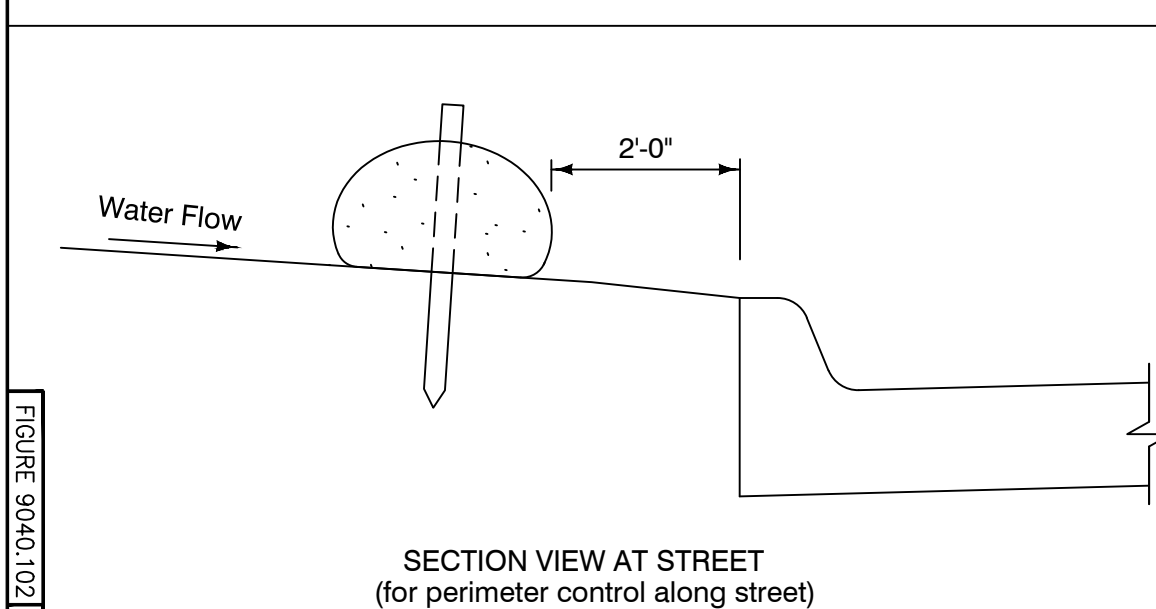
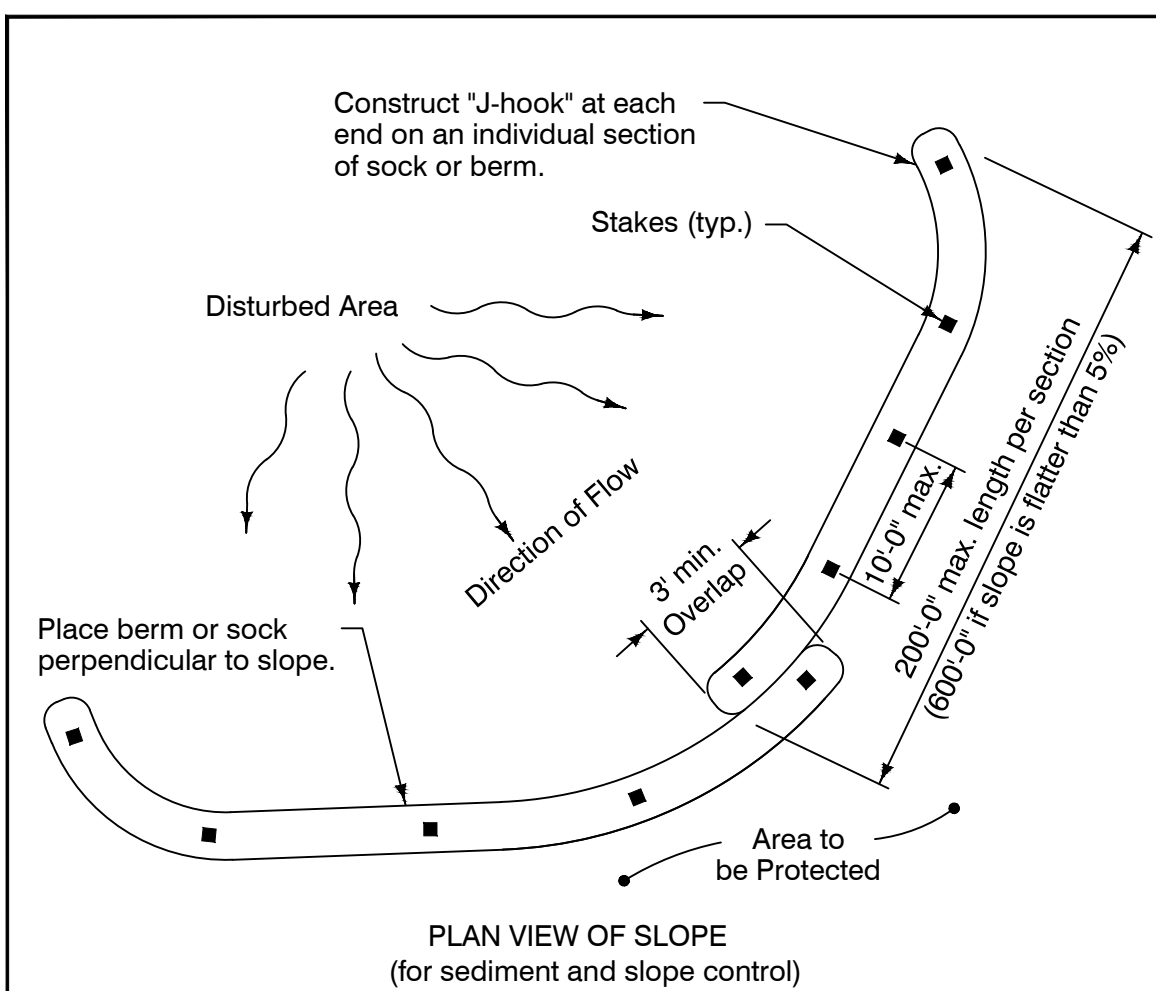
PROJECT NO.	19-23010
FILE NAME	23010 CO-DETAILS
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

EROSION CONTROL DETAILS

SHEET

C1-32



TYPICAL PLACEMENT OF BERM OR SOCK

Berm shown is typical for slopes flatter than 3:1. For steeper slopes, increase berm size as directed by the Engineer.

Place berm in uncompacted windrow perpendicular to the slope at locations specified in the contract documents.

Filter sock diameter as specified in the contract documents.

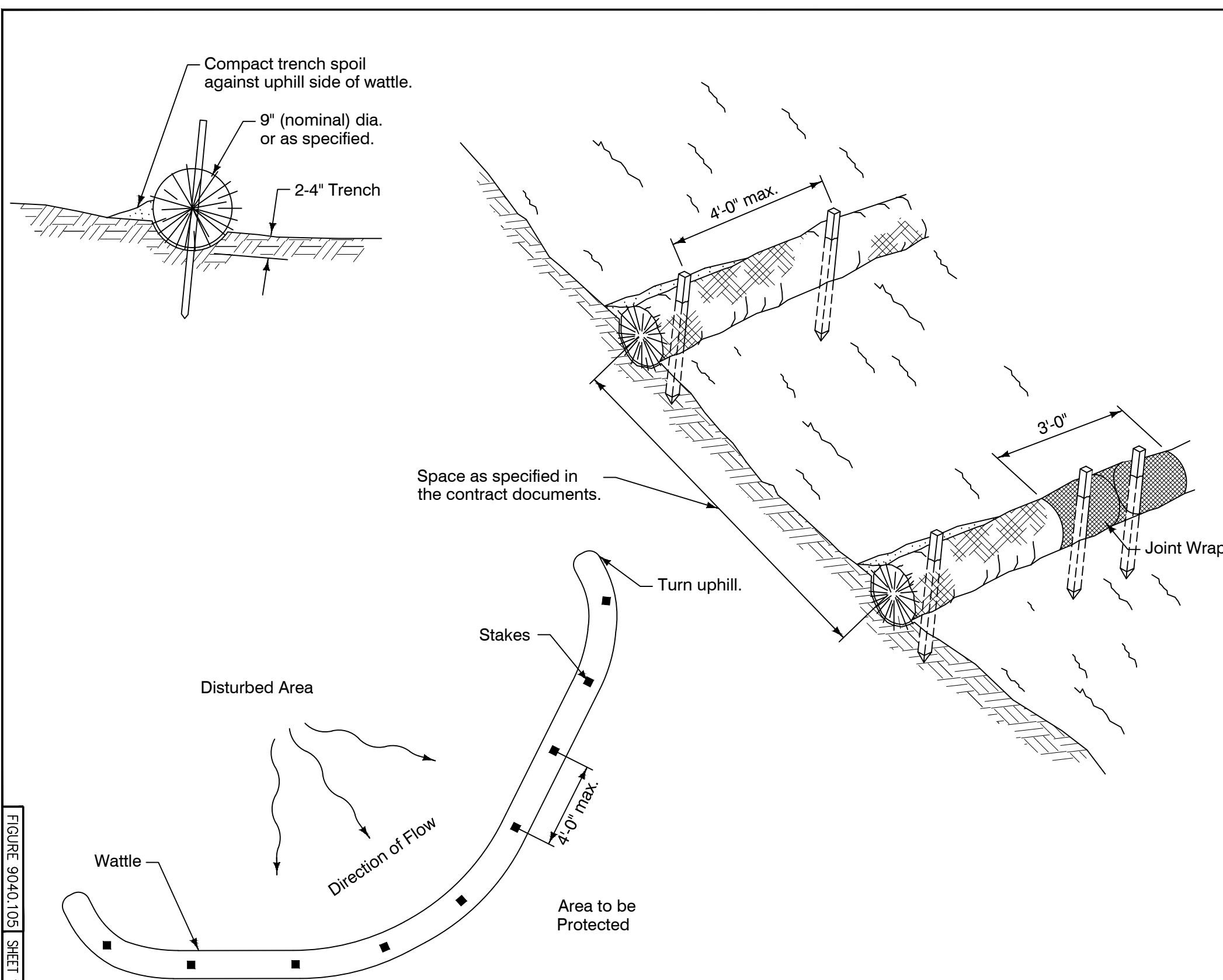
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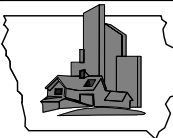
REVISION
4 10-17-17
SHEET 1 of 1

9040.102

SUDAS Standard Specifications

FILTER BERM AND FILTER SOCK



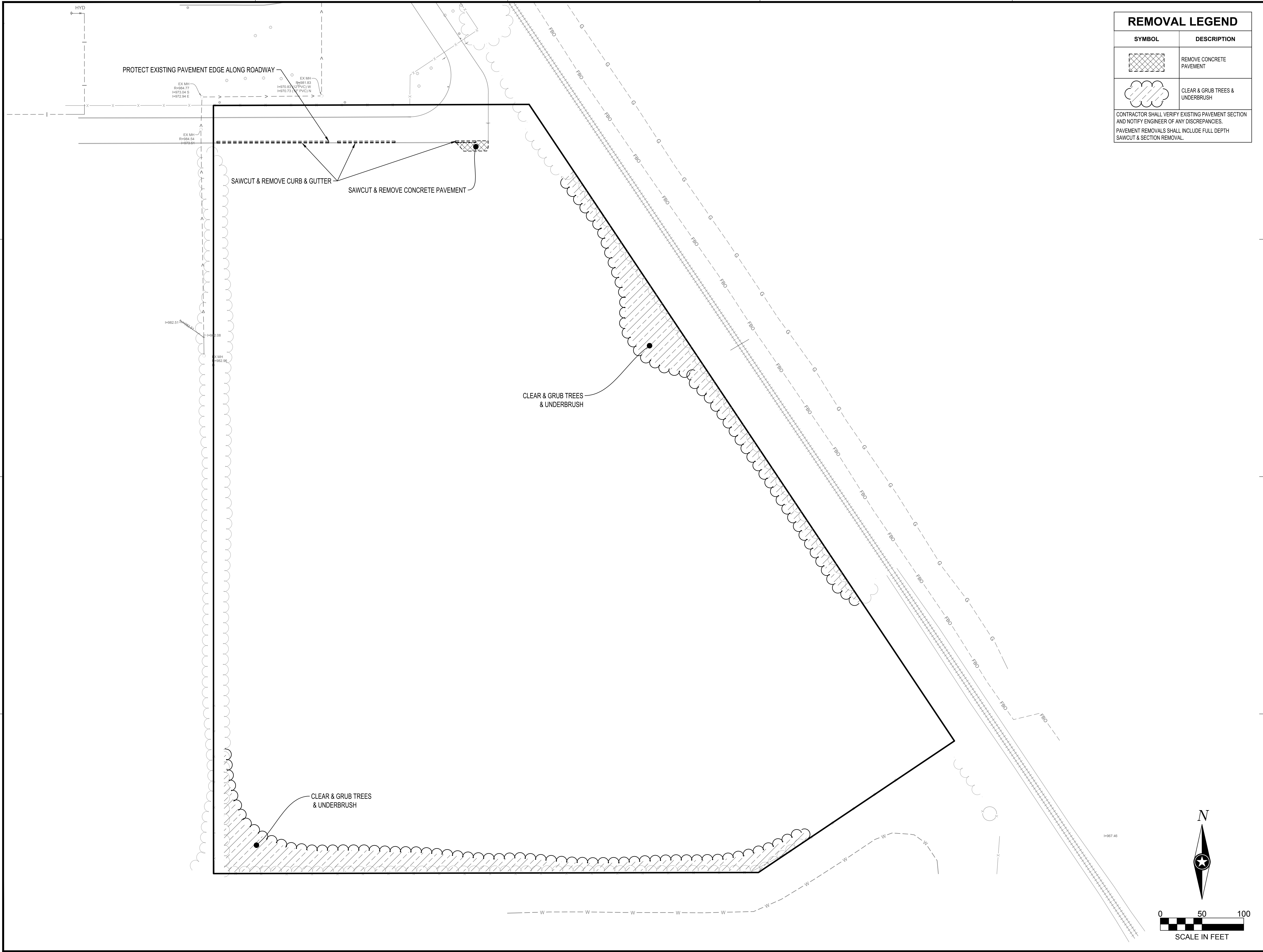
**SUDAS**

REVISION
2 10-21-14
SHEET 1 of 1

9040.105

SUDAS Standard Specifications

WATTLE



REMOVAL LEGEND

SYMBOL	DESCRIPTION
	REMOVE CONCRETE PAVEMENT
	CLEAR & GRUB TREES & UNDERBRUSH

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT & SECTION REMOVAL.

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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

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DATE	DESCRIPTION	BY
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01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C2-EXIST
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

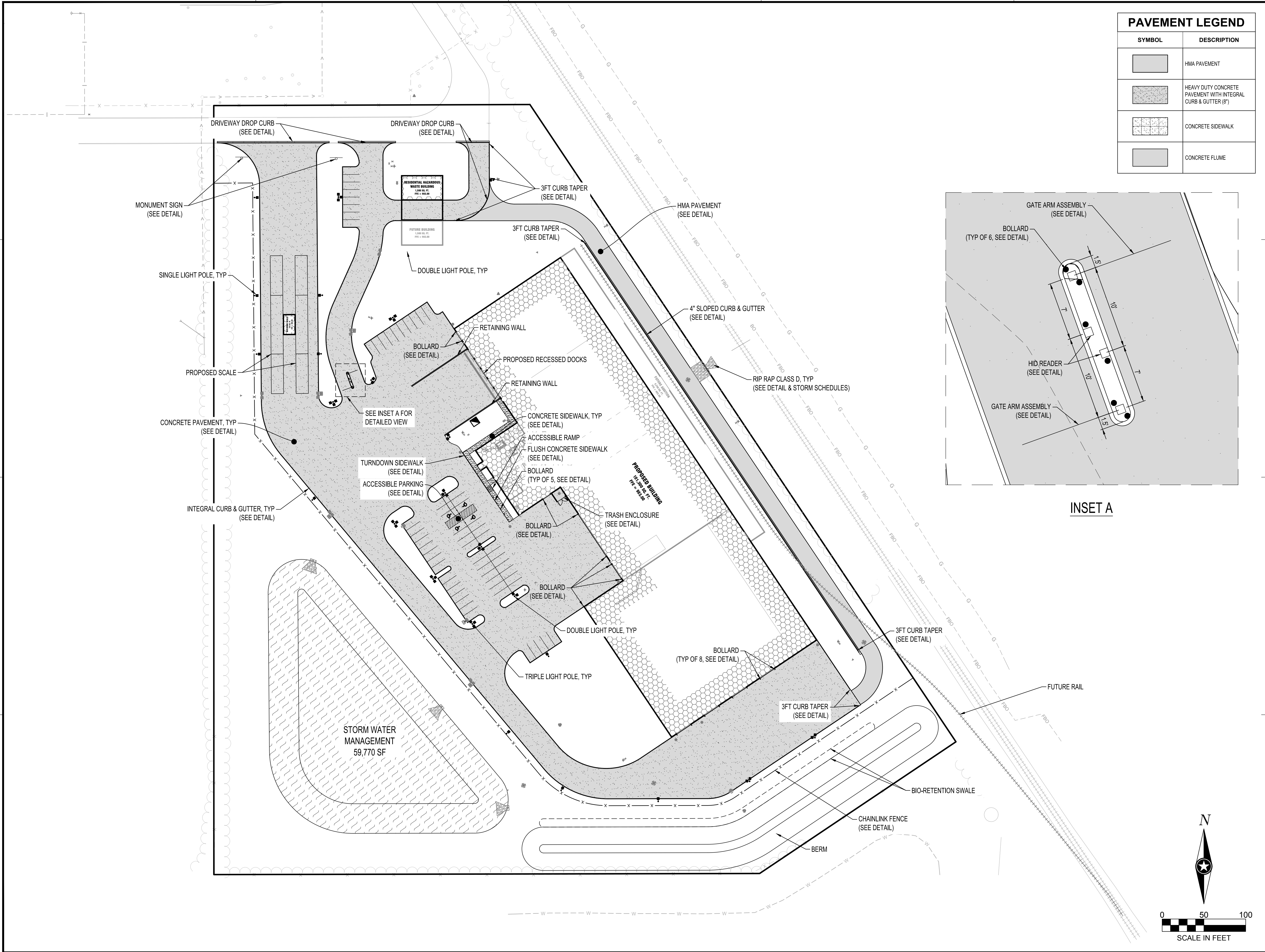
TITLE

EXISTING SITE & REMOVALS PLAN

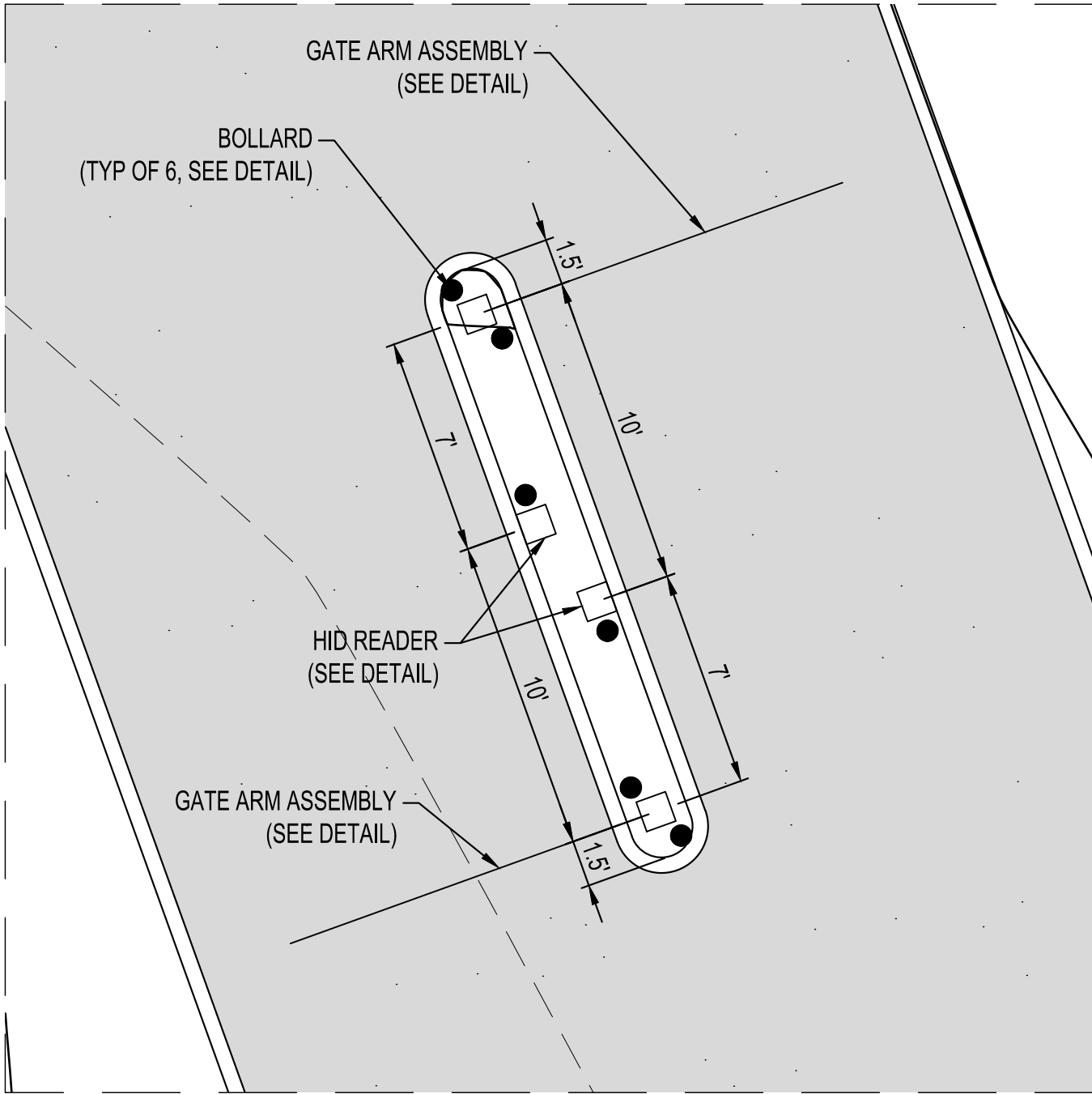
SHEET

C2-10

PRELIMINARY NOT FOR CONSTRUCTION



PAVEMENT LEGEND	
SYMBOL	DESCRIPTION
	HMA PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT WITH INTEGRAL CURB & GUTTER (8")
	CONCRETE SIDEWALK
	CONCRETE FLUME



INSET A



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**METRO WASTE
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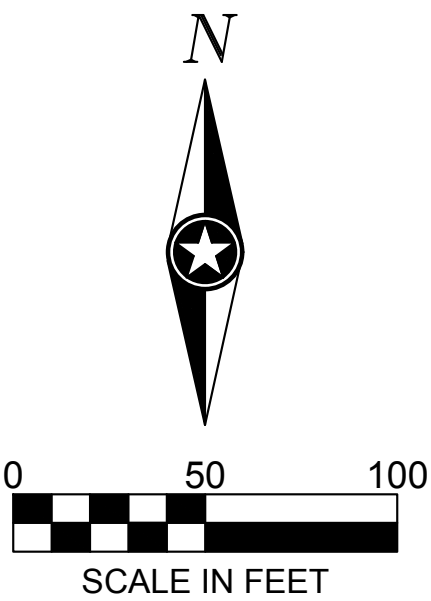
PROJECT NO.	19-23010
FILE NAME	23010 C3-SITE
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

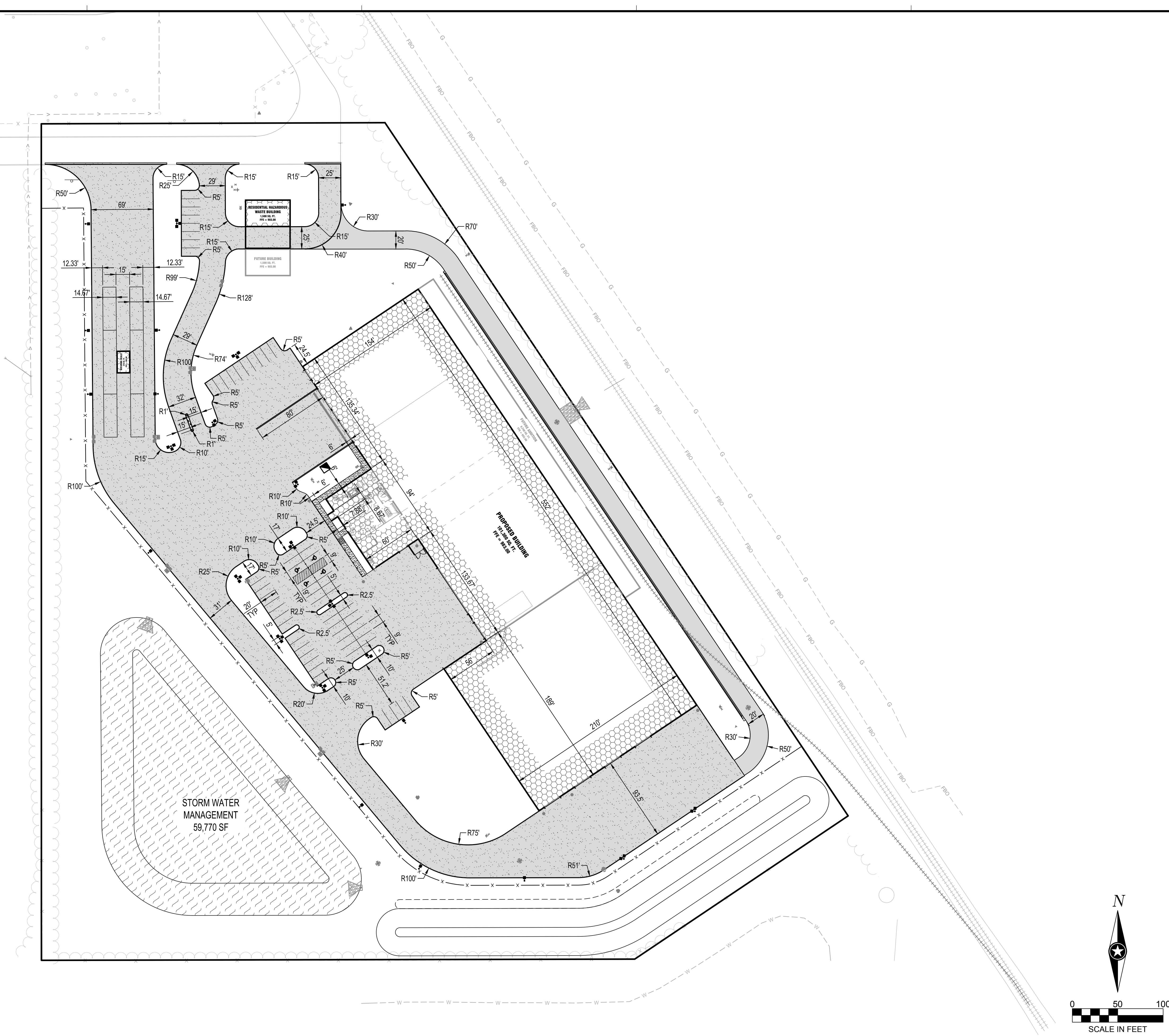
SITE PLAN

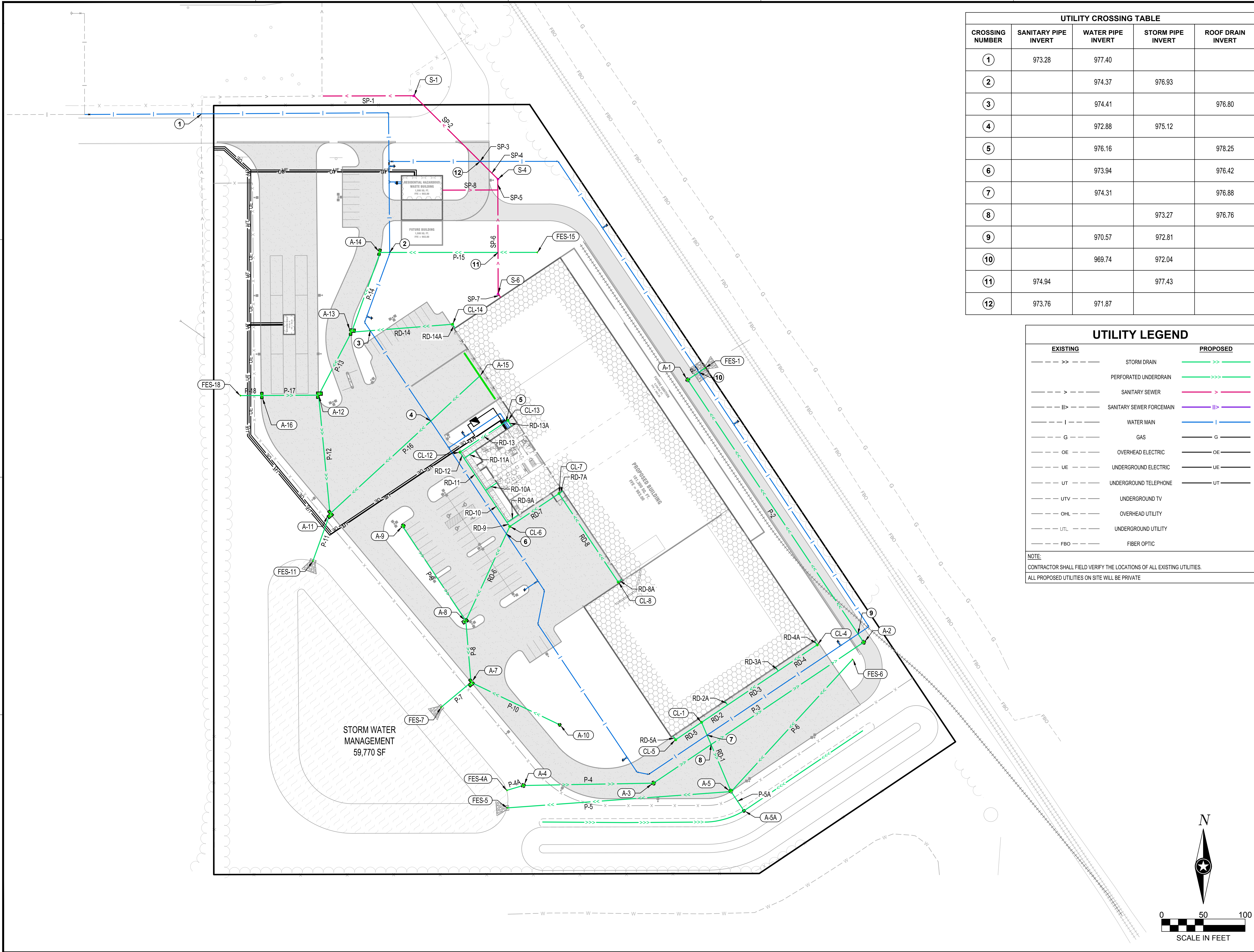
SHEET

C3-10



PRELIMINARY NOT FOR CONSTRUCTION





UTILITY CROSSING TABLE				
CROSSING NUMBER	SANITARY PIPE INVERT	WATER PIPE INVERT	STORM PIPE INVERT	ROOF DRAIN INVERT
1	973.28	977.40		
2		974.37	976.93	
3		974.41		976.80
4		972.88	975.12	
5		976.16		978.25
6		973.94		976.42
7		974.31		976.88
8			973.27	976.76
9		970.57	972.81	
10		969.74	972.04	
11	974.94		977.43	
12	973.76	971.87		

UTILITY LEGEND	
EXISTING	PROPOSED
-- >> --	STORM DRAIN
-- > --	PERFORATED UNDERDRAIN
-- II> --	SANITARY SEWER
-- I --	SANITARY SEWER FORCEMAIN
-- G --	WATER MAIN
-- OE --	GAS
-- UE --	OVERHEAD ELECTRIC
-- UT --	UNDERGROUND ELECTRIC
-- UTV --	UNDERGROUND TELEPHONE
-- OHL --	UNDERGROUND TV
-- UTL --	OVERHEAD UTILITY
-- FBO --	UNDERGROUND UTILITY
	FIBER OPTIC
NOTE: CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES. ALL PROPOSED UTILITIES ON SITE WILL BE PRIVATE	



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**METRO WASTE
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MRF FACILITY

GRIMES IOWA

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DATE	DESCRIPTION	BY
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01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C3-UTILITY
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

**OVERALL UTILITY
PLAN**

SHEET

C3-20

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GRIMES IOWA

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PROJECT NO.	19-23010
FILE NAME	23010 C3-UTILITY
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

**DETAILED UTILITY
PLAN**

SHEET

C3-21

CORE DRILL & CONNECT 6" SANITARY SERVICE TO EXISTING
SANITARY MANHOLE WITH WATERTIGHT PIPE BOOT CONNECTION
INV=971.54

SP-1

S-1
R=979.83
I=972.64

1 - CONNECTION TO EXISTING WATER TEE
1 - 6" GATE VALVE & BOX

422 LF OF 6" WATERMAIN

WATERMAIN CONSTRUCTION AROUND OBSTACLES
(SEE DETAIL)
2,045 LF OF 6" WATERMAIN LOOP

1 - 6"x6" TEE
1 - 6" GATE VALVE & BOX
1 - 6" GATE VALVE & BOX
1 - HYDRANT ASSEMBLY

RESIDENTIAL HAZARDOUS
WASTE BUILDING
1,500 SQ. FT.
FFE = 983.00

14 LF OF 6" FIRE SUPPRESSION SERVICE
8 LF OF 2" WATER SERVICE
1 - 6" GATE VALVE & BOX

WATER, GAS, ELECTRIC, AND FIBER TO WITHIN 5FT OF BUILDING,
CONNECTION TO BUILDING BY MECHANICAL CONTRACTOR

1-SANITARY SERVICE TO WITHIN 5FT OF BUILDING
CONNECTION TO BUILDING BY MECHANICAL CONTRACTOR

FUTURE BUILDING
1,500 SQ. FT.
FFE = 983.00

A-14
R=981.77
I=976.88

FES-15
I=977.62

S-6
R=981.38
I=975.42

1-SANITARY SERVICE TO WITHIN 5FT OF BUILDING
CONNECTION TO BUILDING BY MECHANICAL CONTRACTOR

CL-14
R=983.45
I=977.79

A-15
R=978.90
I=975.52

A-13
R=981.26
I=975.87

A-12
R=981.44
I=975.02

A-16
R=981.47
I=976.30

FES-18
I=976.77



0 20 40
SCALE IN FEET

UTILITY LEGEND

EXISTING	PROPOSED
--- >> ---	--- >> ---
--- > ---	--- > ---
--- II> ---	--- II> ---
--- I ---	--- I ---
--- G ---	--- G ---
--- OE ---	--- OE ---
--- UE ---	--- UE ---
--- UT ---	--- UT ---
--- UTV ---	--- UTV ---
--- OHL ---	--- OHL ---
--- UTL ---	--- UTL ---
--- FBO ---	--- FBO ---

NOTE:
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ALL PROPOSED UTILITIES ON SITE WILL BE PRIVATE

UTILITY CROSSING TABLE

CROSSING NUMBER	SANITARY PIPE INVERT	WATER PIPE INVERT	STORM PIPE INVERT	ROOF DRAIN INVERT
①	973.28	977.40		
②		974.37	976.93	
③		974.41		976.80
④		972.88	975.12	
⑤		976.16		978.25
⑥		973.94		976.42
⑦		974.31		976.88
⑧			973.27	976.76
⑨		970.57	972.81	
⑩		969.74	972.04	
⑪	974.94		977.43	
⑫	973.76	971.87		



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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
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01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C3-UTILITY
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

**DETAILED UTILITY
PLAN**

SHEET

C3-22

PRELIMINARY NOT FOR CONSTRUCTION

UTILITY LEGEND

EXISTING

PROPOSED

>>

STORM DRAIN

>>

>

PERFORATED UNDERDRAIN

>

II>

SANITARY SEWER

II>

I

SANITARY SEWER FORCEMAIN

I

G

GAS

G

OE

OVERHEAD ELECTRIC

OE

UE

UNDERGROUND ELECTRIC

UE

UT

UNDERGROUND TELEPHONE

UT

UTV

UNDERGROUND TV

UTV

OHL

OVERHEAD UTILITY

OHL

UTL

UNDERGROUND UTILITY

UTL

FBO

FIBER OPTIC

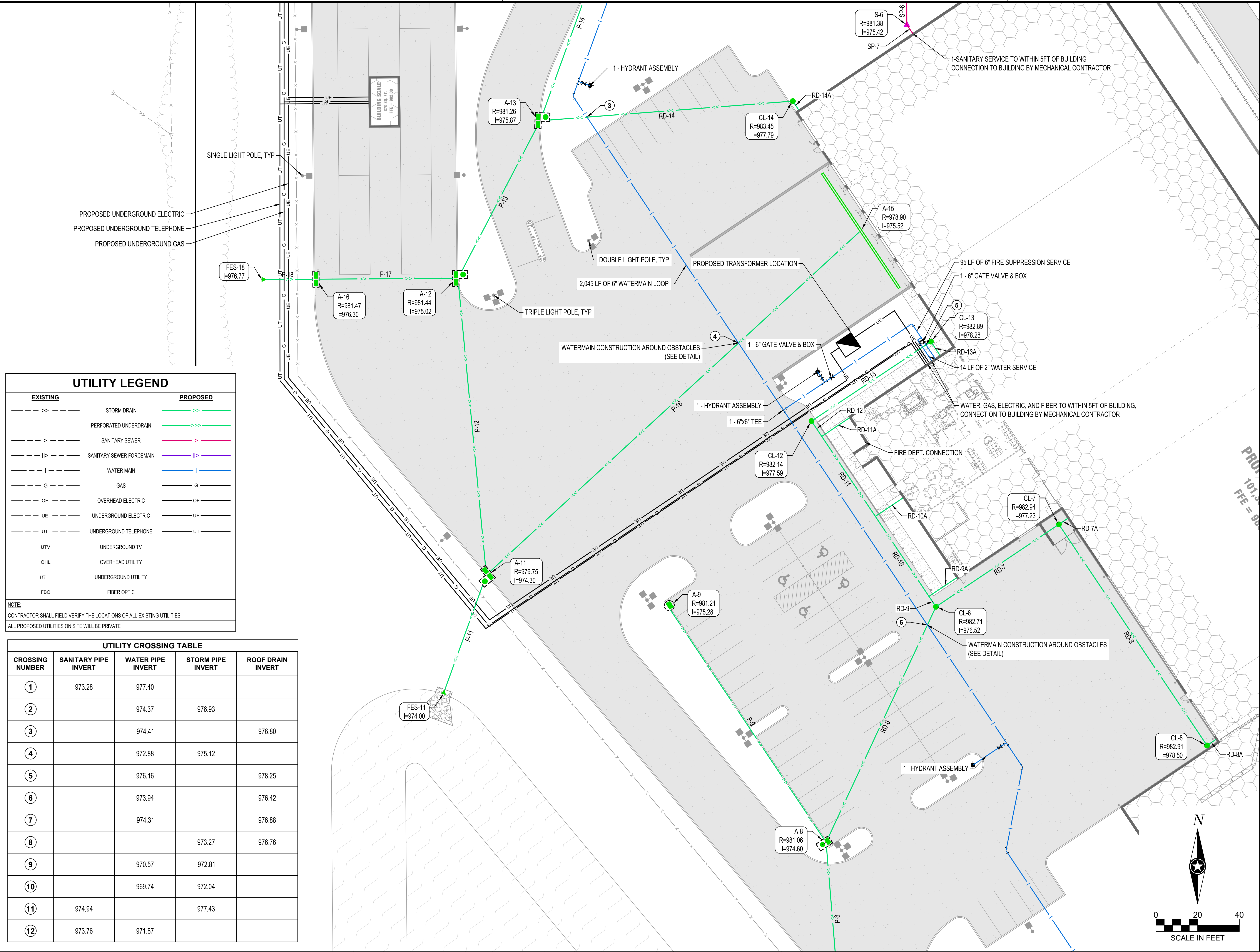
FBO

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UTILITY CROSSING TABLE				
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**METRO WASTE
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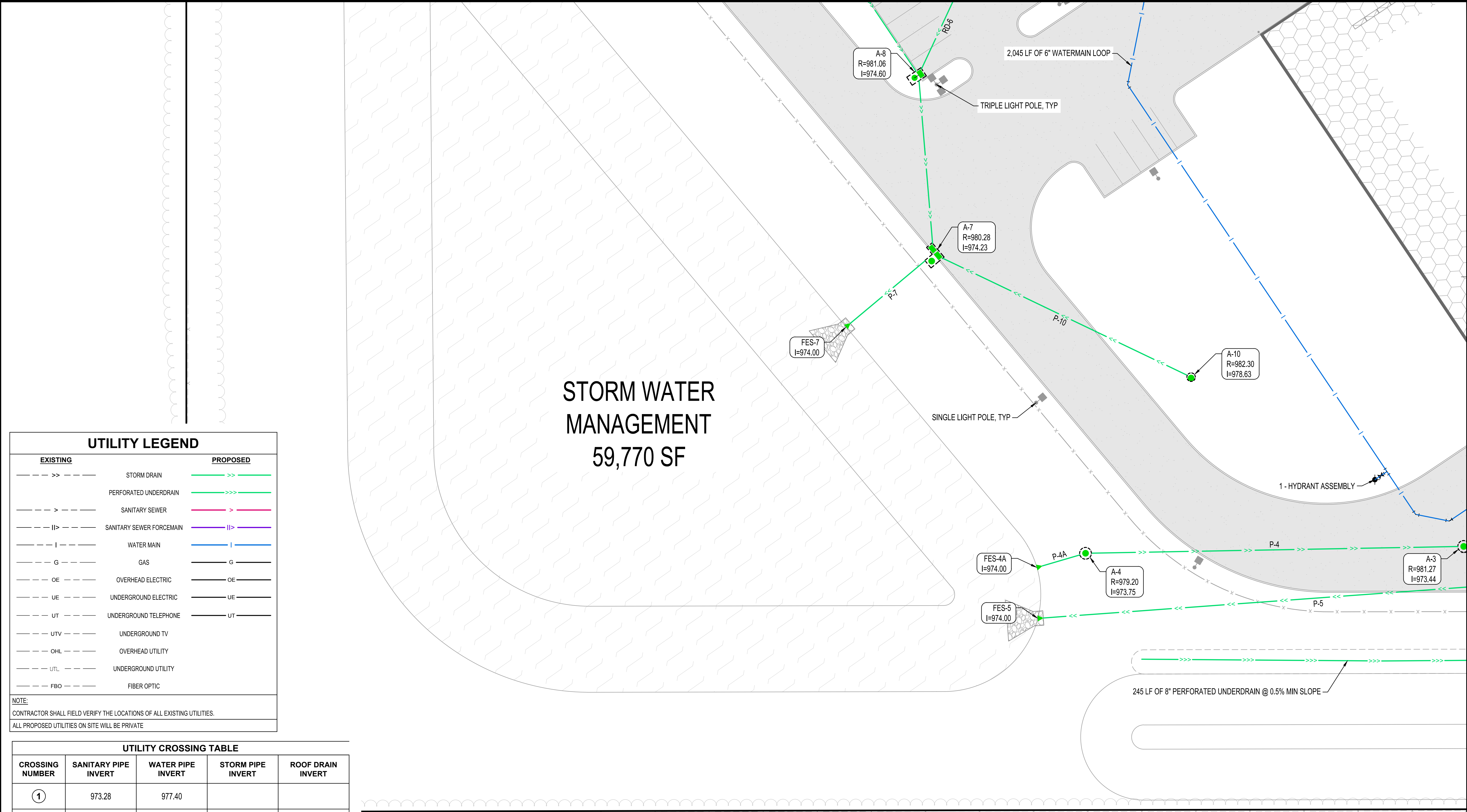
GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
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PROJECT NO.	19-23010
FILE NAME	23010 C3-UTILITY
DRAWN BY	CLF
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ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE
**DETAILED UTILITY
PLAN**

SHEET
C3-23



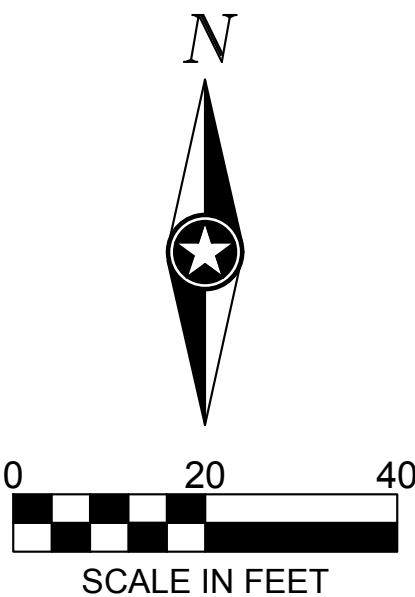
UTILITY LEGEND

EXISTING		PROPOSED
---	>>---	STORM DRAIN
---	>>>---	PERFORATED UNDERDRAIN
---	>---	SANITARY SEWER
---	II>---	SANITARY SEWER FORCEMAIN
---	I---	WATER MAIN
---	G---	GAS
---	OE---	OVERHEAD ELECTRIC
---	UE---	UNDERGROUND ELECTRIC
---	UT---	UNDERGROUND TELEPHONE
---	UTV---	UNDERGROUND TV
---	OHL---	OVERHEAD UTILITY
---	UTL---	UNDERGROUND UTILITY
---	FBO---	FIBER OPTIC

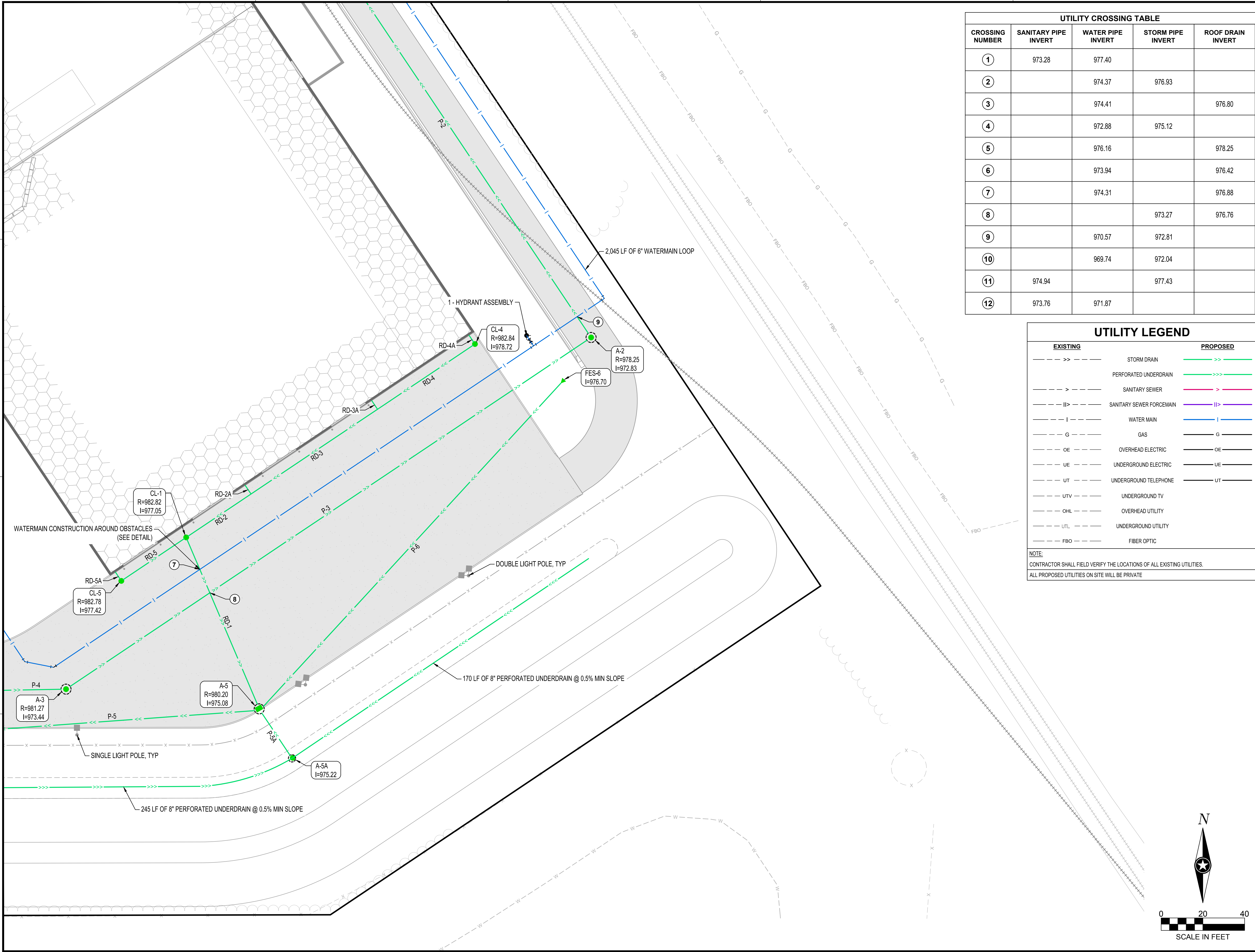
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⑧			973.27	976.76
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⑪	974.94		977.43	
⑫	973.76	971.87		

UTILITY LEGEND		
EXISTING		PROPOSED
---	>>---	STORM DRAIN
---	>>>---	PERFORATED UNDERDRAIN
---	>---	SANITARY SEWER
---	>---	SANITARY SEWER FORCEMAIN
---	---	WATER MAIN
---	G---	GAS
---	OE---	OVERHEAD ELECTRIC
---	UE---	UNDERGROUND ELECTRIC
---	UT---	UNDERGROUND TELEPHONE
---	UTV---	UNDERGROUND TV
---	OHL---	OVERHEAD UTILITY
---	UTL---	UNDERGROUND UTILITY
---	FBO---	FIBER OPTIC
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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
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01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
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DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

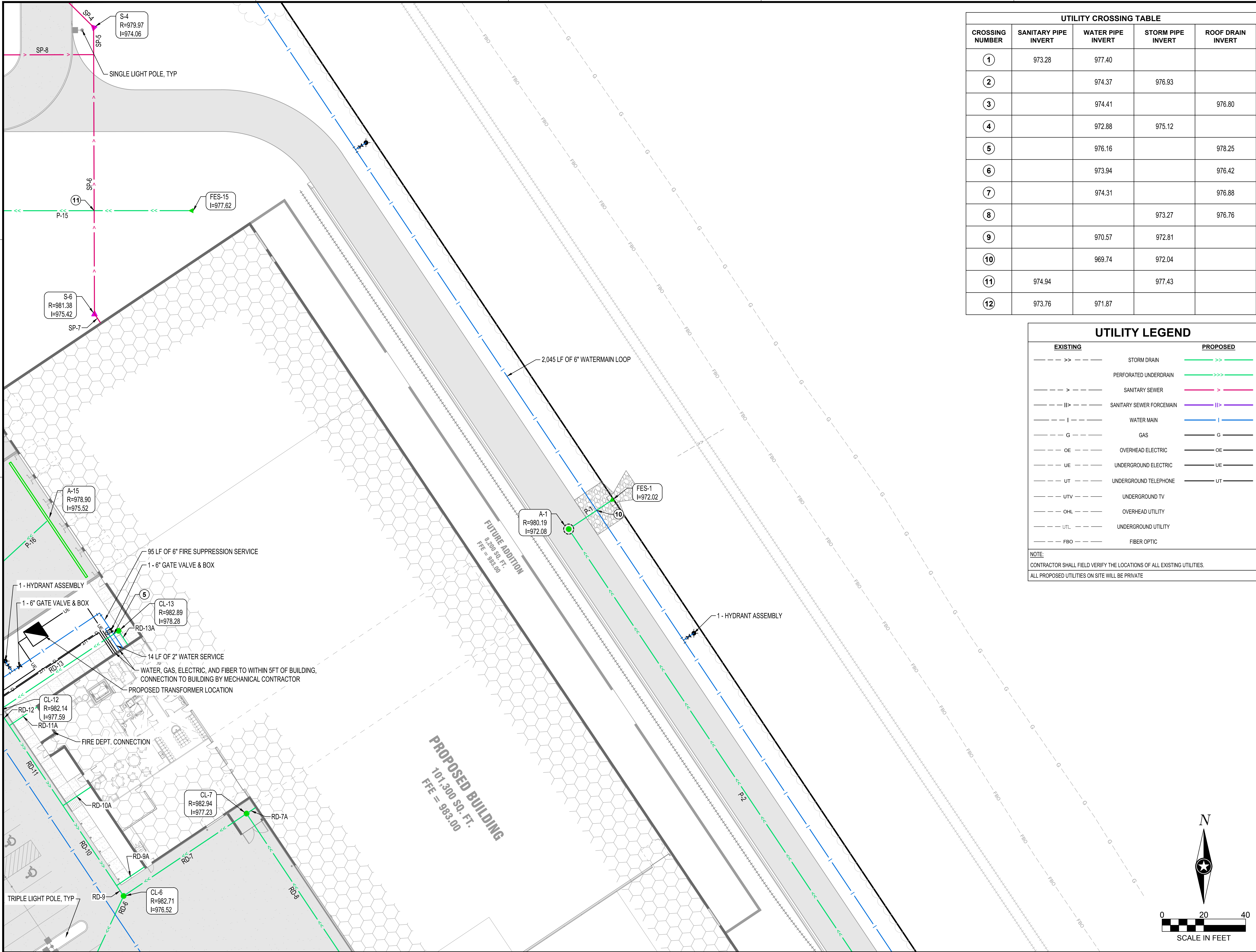
TITLE

**DETAILED UTILITY
PLAN**

SHEET

C3-24

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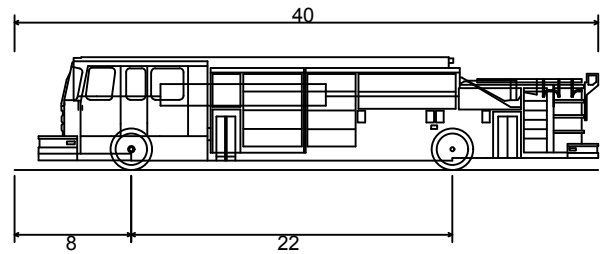
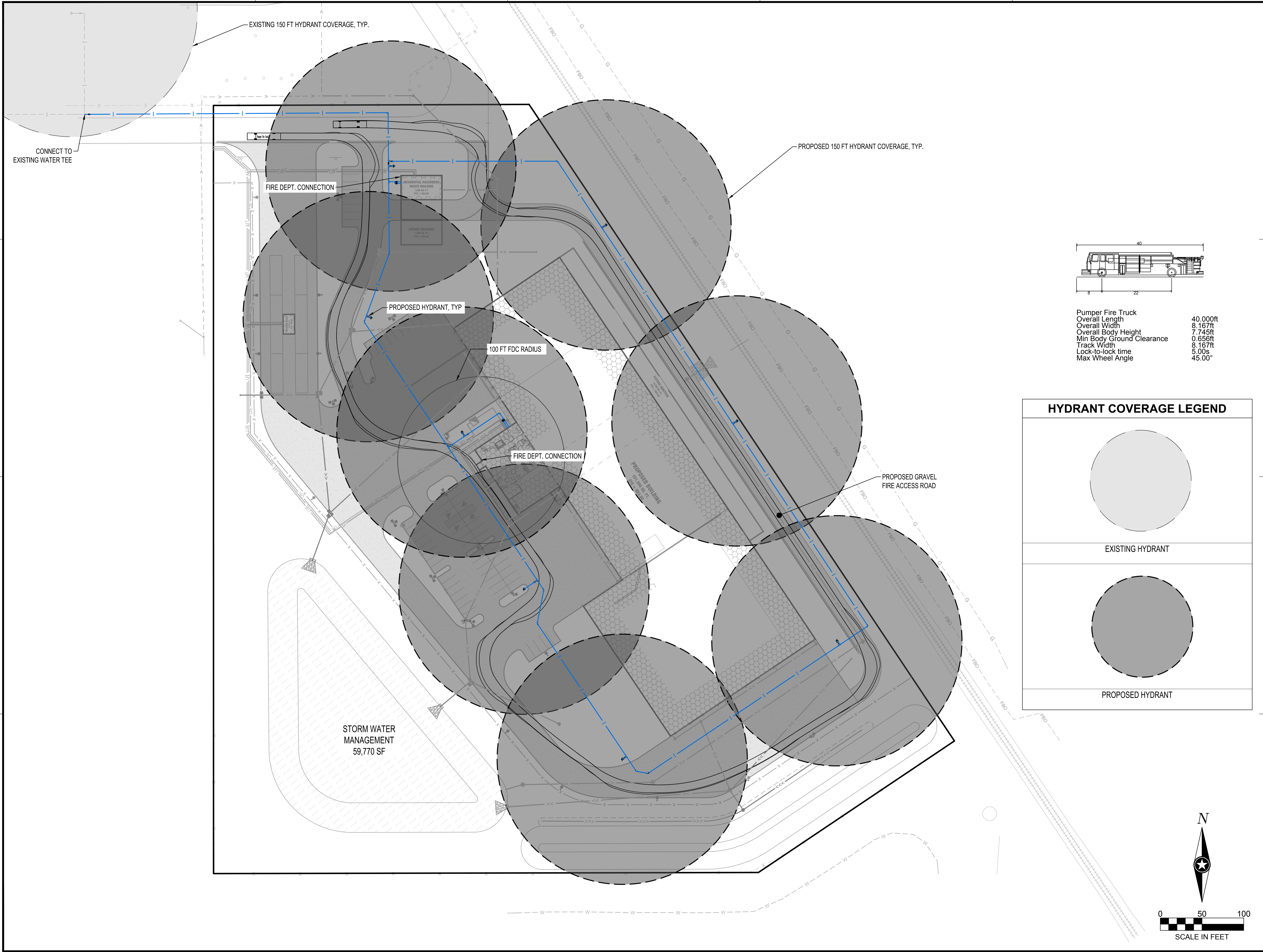
TITLE

DETAILED UTILITY PLAN

SHEET

C3-25

PRELIMINARY NOT FOR CONSTRUCTION



Pumper Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 7.745ft
Min Body Ground Clearance 0.656ft
Track Width 8.167ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°

HYDRANT COVERAGE LEGEND

EXISTING HYDRANT

PROPOSED HYDRANT

NOTE:
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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C3-UTILITY
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

**HYDRANT
COVERAGE PLAN**

SHEET

C3-30



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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES		IOWA
REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010				
FILE NAME	23010 C3-UTILITY				
DRAWN BY	CLF				
DESIGNED BY	ARA				
REVIEWED BY	EBG				
ORIGINAL ISSUE DATE	01/28/20				
CLIENT PROJECT NO.	-				

TITLE					
UTILITY SCHEDULES					

SHEET
C3-40

STORM DRAIN APRON SCHEDULE				
APRON NO.	APRON SIZE (in)	APRON MATERIAL	INVERT ELEVATION	PIPE NO.
FES-1	18	RC	972.02	P-1
FES-4A	30	RC	974.00	P-4A
FES-5	24	RC	974.00	P-5
FES-6	15	RC	976.70	P-6
FES-7	24	RC	974.00	P-7
FES-11	30	RC	974.00	P-11
FES-15	15	RC	977.62	P-15
FES-18	15	RC	976.77	P-18

STORM DRAIN APRON RIPRAP SCHEDULE					
APRON NO.	RIPRAP CLASS	RIPRAP LENGTH	RIPRAP DEPTH	RIPRAP WIDTH	RIPRAP AMOUNT
FES-1	CLASS D	15 FT	18 INCHES	13.5 FT	10 TON
FES-5	CLASS D	15 FT	18 INCHES	15 FT	15 TON
FES-7	CLASS D	15 FT	18 INCHES	15 FT	15 TON
FES-11	CLASS D	15 FT	18 INCHES	16.5 FT	20 FT

SEE DETAIL SHEET C0-23 FOR DETERMINING DIMENSIONS.

WATERMAIN FITTING SCHEDULE		
TYPE	SIZE	WEIGHT (lbs)
BEND	6"x90"	41
TEE	6"x6"	66
TEE	6"x6"	66
TEE	6"x6"	66
BEND	6"x22.5"	31
BEND	6"x45"	36
TEE	6"x6"	66
TEE	6"x6"	66
TEE	6"x6"	66
BEND	6"x90"	41
TEE	6"x6"	66
TEE	6"x6"	66
BEND	6"x90"	41
TEE	6"x6"	66
TEE	6"x6"	66
BEND	6"x45"	36
BEND	6"x45"	36
BEND	6"x45"	36
BEND	6"x45"	36

HYDRANT & VALVE SCHEDULE		
TYPE	SIZE	NOTES
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
GV & BOX	6"	6in Gate Valve
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"
HYDRANT	5"x 5'-6"	Hydrant 5'-6"

WATERMAIN SCHEDULE		
PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
C900	5	6
C900	57	6
C900	2	6
C900	2	6
C900	3	6
C900	18	6
C900	8	6
C900	85	6
C900	80	6
C900	2	6
C900	3	6
C900	7	6
C900	134	6
C900	23	6
C900	2	6
C900	3	6
C900	3	6
C900	45	6
C900	9	6
C900	116	6
C900	3	6
C900	15	6

WATERMAIN SCHEDULE		
PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
C900	76	6
C900	40	6
C900	2	6
C900	3	6
C900	291	6
C900	2	6
C900	3	6
C900	72	6
C900	2	6
C900	3	6
C900	95	6
C900	33	6
C900	138	6
C900	72	6
C900	85	6
C900	13	6
C900	40	6
C900	191	6
C900	2	6
C900	3	6
C900	20	6
C900	13	6

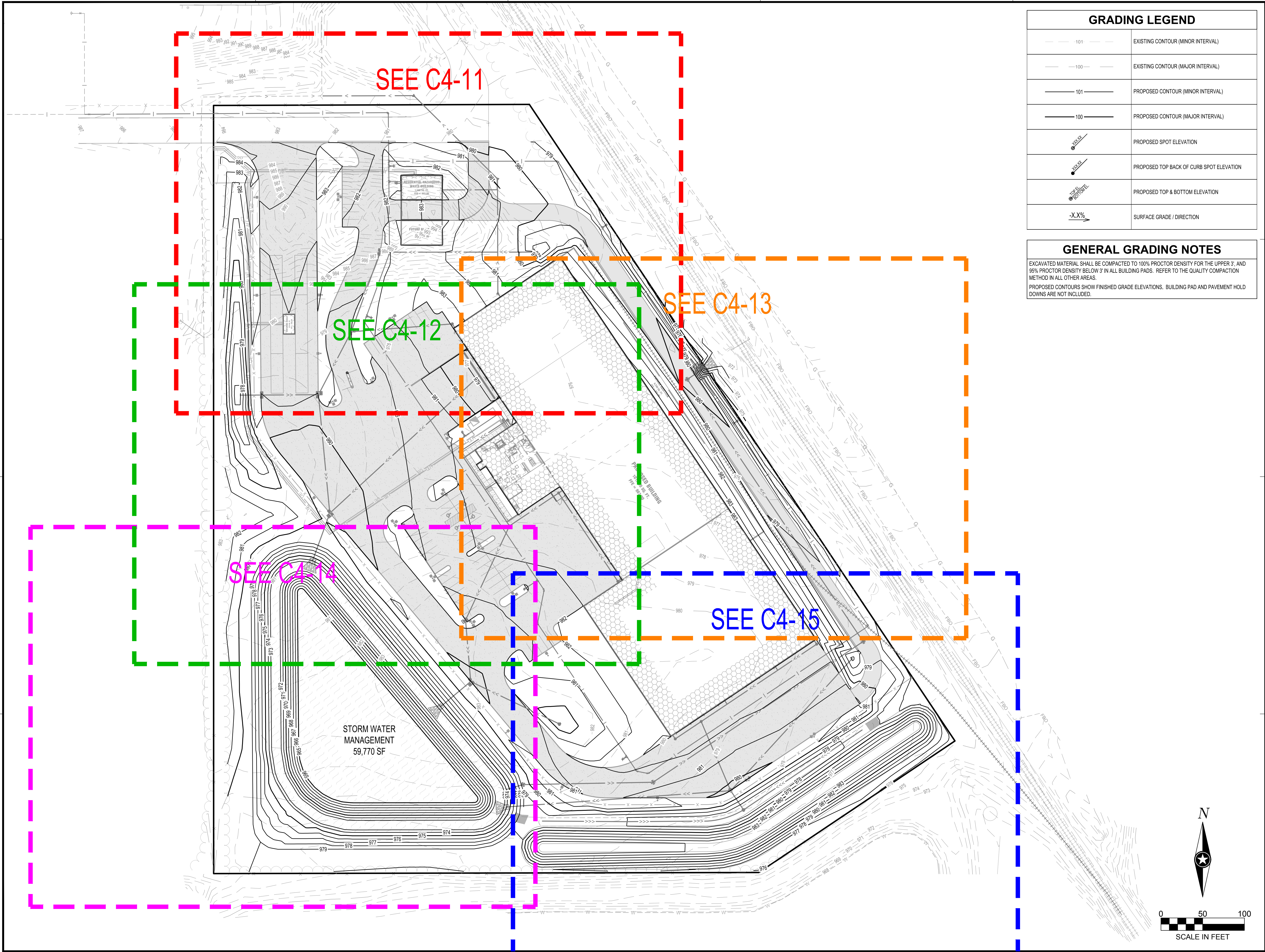
WATERMAIN SCHEDULE		
PIPE TYPE	** PIPE LENGTH (FT)	PIPE SIZE (IN)
C900	5	6
C900	5	6
C900	5	6
C900	152	6
C900	204	6
C900	97	6
C900	5	6
C900	5	6
C900	5	6
C900	10	6
C900	5	6
C900	31	6
C900	5	6
C900	5	6
C900	5	6
C900	5	6
C900	153	6
C900	2	6
C900	3	6
C900	5	6
C900	5	6
C900	5	6

STORM DRAIN PIPE SCHEDULE								
PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
P-1	A-1	972.08	FES-1	972.02	18	RCP	0.20%	26
P-2	A-2	972.83	A-1	972.08	18	RCP	0.20%	378
P-3	A-3	973.44	A-2	972.83	18	RCP	0.20%	303
P-4	A-4	973.75	A-3	973.44	18	RCP	0.20%	156
P-4A	FES-4A	974.00	A-4	973.75	30	RCP	1.20%	21
P-5	A-5	975.08	FES-5	974.00	24	RCP	0.40%	269
P-5A	A-5A	975.22	A-5	975.08	15	RCP	0.50%	28
P-6	FES-6	976.70	A-5	975.18	15	RCP	0.71%	215
P-7	A-7	974.24	FES-7	974.00	24	RCP	0.50%	47
P-8	A-8	974.60	A-7	974.23	24	RCP	0.50%	74
P-9	A-9	975.28	A-8	974.60	15	RCP	0.50%	136
P-10	A-10	978.63	A-7	979.78	15	RCP	0.97%	118
P-11	A-11	974.30	FES-11	974.00	30	RCP	0.50%	61
P-12	A-12	975.02	A-11	974.30	24	RCP	0.50%	143
P-13	A-13	975.87	A-12	975.02	18	RCP	1.00%	85
P-14	A-14	976.88	A-13	975.87	15	RCP	1.00%	101
P-15	FES-15	977.62	A-14	976.88	15	RCP	0.39%	188
P-16	A-15	975.52	A-11	974.30	15	RCP	0.50%	244
P-17	A-18	976.30	A-12	975.02	15	RCP	1.86%	69
P-18	FES-18	976.77	A-16	976.30	15	RCP	1.86%	25

ROOF DRAIN PIPE SCHEDULE								
PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE GRADE	PIPE LENGTH (FT)
RD-1	CL-1	977.05	A-5	976.15	15	HDPE	1.00%	90
RD-2	15" TEE	977.42	CL-1	977.05	15	HDPE	1.00%	37
RD-2A	PRO BLD	977.47	15" TEE	977.42	15	HDPE	1.00%	5
RD-3	15" TEE	978.15	15" TEE	977.42	15	HDPE	1.00%	73
RD-3A	PRO BLD	978.20	15" TEE	978.15	15	HDPE	1.00%	5
RD-4	CL-4	978.72	15" TEE	978.15	15	HDPE	1.00%	56
RD-4A	PRO BLD	978.77	CL-4	978.72	15	HDPE	1.00%	5
RD-5	CL-5	977.42	CL-1	977.05	15	HDPE	1.00%	37
RD-5A	PRO BLD	977.15	CL-5	977.42	15	HDPE	5.44%	5
RD-6	CL-6	976.52	A-8	975.28	15	HDPE	1.00%	124
RD-7	CL-7	977.23	CL-6	976.52	15	HDPE	1.00%	71
RD-7A	PRO BLD	977.28	CL-7	977.23	15	HDPE	1.00%	5
RD-8	CL-8	978.50	CL-7	977.23	15	HDPE	1.00%	127
RD-8A	PRO BLD	978.55	CL-8	978.50	15	HDPE	1.00%	5
RD-9	15" TEE	976.58	CL-6	976.52	15	HDPE	1.00%	6
RD-9A	PRO BLD	976.74	15" TEE	976.58	15	HDPE	1.00%	16
RD-10	15" TEE	977.04	15" TEE	976.58	15	HDPE	1.00%	46
RD-10A	PRO BLD	977.20	15" TEE	977.04	15	HDPE	1.00%	16
RD-11	15" TEE	977.50	15" TEE	977.04	15	HDPE	1.00%	46
RD-11A	PRO BLD	977.66	15" TEE	977.50	15	HDPE	1.00%	16
RD-12	CL-12	977.59	15" TEE	977.50	15	HDPE	1.00%	9
RD-13	CL-13	978.28	CL-12	977.59	15	HDPE	1.00%	69
RD-13A	PRO BLD	978.36	CL-13	978.28	15	HDPE	1.00%	8
RD-14	CL-14	977.79	A-13	976.57	15	HDPE	1.00%	121
RD-14A	PRO BLD	977.84	CL-14	977.79	15	HDPE	1.00%	5

SANITARY SEWER PIPE SCHEDULE									
PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-1	S-1	972.64	EX MH	971.54	6"	PVC	SDR-23.5	1.00%	110
SP-2	SAN PIPE	973.66	S-1	972.64	6"	PVC	SDR-23.5	1.00%	102
SP-3	SAN PIPE	973.86	SAN PIPE	973.66	6"	PVC	C900	1.00%	20
SP-4	S-4	974.06	SAN PIPE	973.86	6"	PVC	SDR-23.5	1.00%	20
SP-5	6" WYE	974.19	S-4	974.06	6"	PVC	SDR-23.5	1.00%	13
SP-6	S-6	975.43	6" WYE	974.19	6"	PVC	SDR-23.5	1.00%	124
SP-7	PRO BLD	975.47	S-6	975.42	6"	PVC	SDR-23.5	1.00%	5
SP-8	PRO BLD	974.85	6" WYE	974.19	6"	PVC	SDR-23.5	1.00%	66

STORM DRAIN SCHEDULE							
STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (In)	STRUCTURE MATERIAL	CASTING	* TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
A-1	SW-401	48 Ø	RC	TYPE E	980.19	972.08	P-1
A-2	SW-401	48 Ø	RC	TYPE E	978.25	972.83	P-2
A-3	SW-401	48 Ø	RC	TYPE E	981.27	973.44	P-3
A-4	OUTLET STRUCTURE	48 Ø	PP	TYPE E	979.20	973.75	P-4
A-5	SW-401	48 Ø	RC	TYPE R	980.20	975.08	P-5
A-5A	SW-512	48 Ø	RC	TYPE 3B	977.75	975.22	P-5A
A-7	SW-506	36 x 72	RC	TYPE R	980.28	974.23	P-7
A-8	SW-503	48 Ø	RC	TYPE R	981.06	974.60	P-8
A-9	SW-401	48 Ø	RC	TYPE R	981.21	975.28	P-9
A-10	SW-512	48 Ø	RC	TYPE 3A	982.30	978.63	P-10
A-11	SW-506	80 x 24	RC	TYPE R	979.75	974.30	P-11
A-12	SW-506	60 Ø	RC	TYPE R	981.44	975.02	P-12
A-13	SW-506	48 Ø	RC	TYPE R	981.26	975.87	P-13
A-14	SW-505	48 Ø	RC	TYPE R	981.77	976.88	P-14
A-15	TRENCH DRAIN	12 Ø	PVC	SEE DETAIL	978.90	975.52	P-16
A-16	SW-505	48 Ø	RC	TYPE R	981.47	976.30	P-17



GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP & BOTTOM ELEVATION
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES	
EXCAVATED MATERIAL SHALL BE COMPACTED TO 100% PROCTOR DENSITY FOR THE UPPER 3', AND 95% PROCTOR DENSITY BELOW 3' IN ALL BUILDING PADS. REFER TO THE QUALITY COMPACTION METHOD IN ALL OTHER AREAS.	
PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED.	

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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES	IOWA	
REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C4-GRADE
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

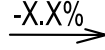
OVERALL GRADING PLAN

SHEET

C4-10

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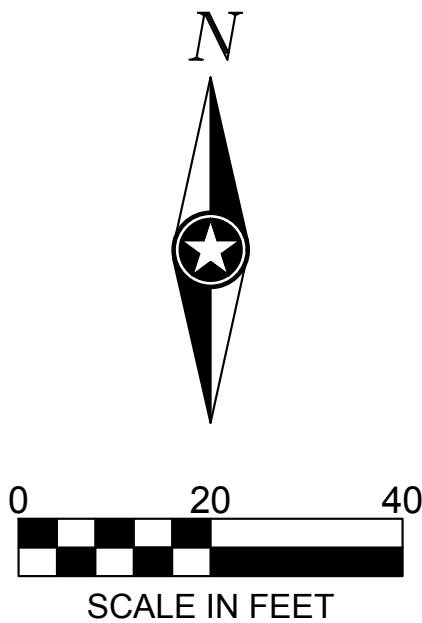


GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP & BOTTOM ELEVATION
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

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PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED.



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METRO WASTE AUTHORITY

MRF FACILITY

GRIMES

IOWA

REVISION SCHEDULE		
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01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO. 19-23010

FILE NAME	23010 C4-GRADE
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DRAWN BY C

DESIGNED BY A

REVIEWED BY EBG

ORIGINAL ISSUE DATE 01/01/2010

TITLE

DETAILED GRADING PLAN

SHEET

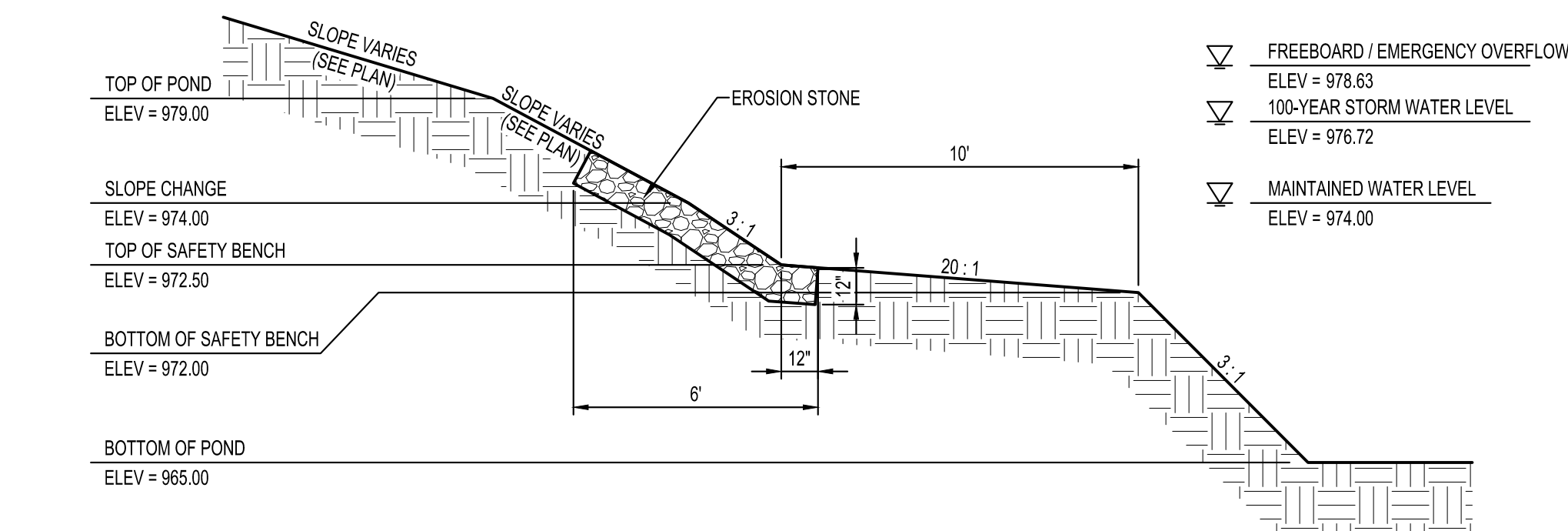
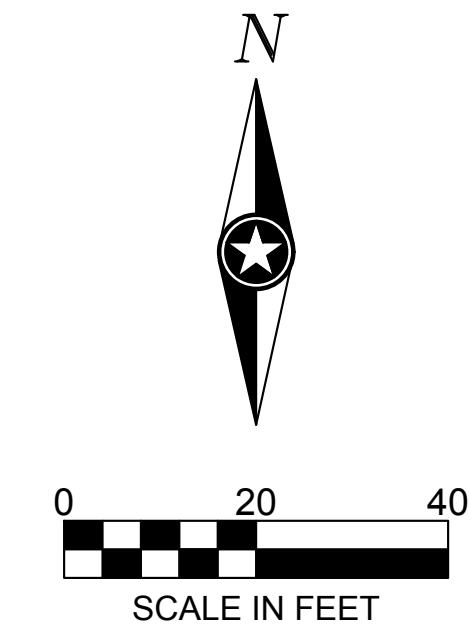
C4-12



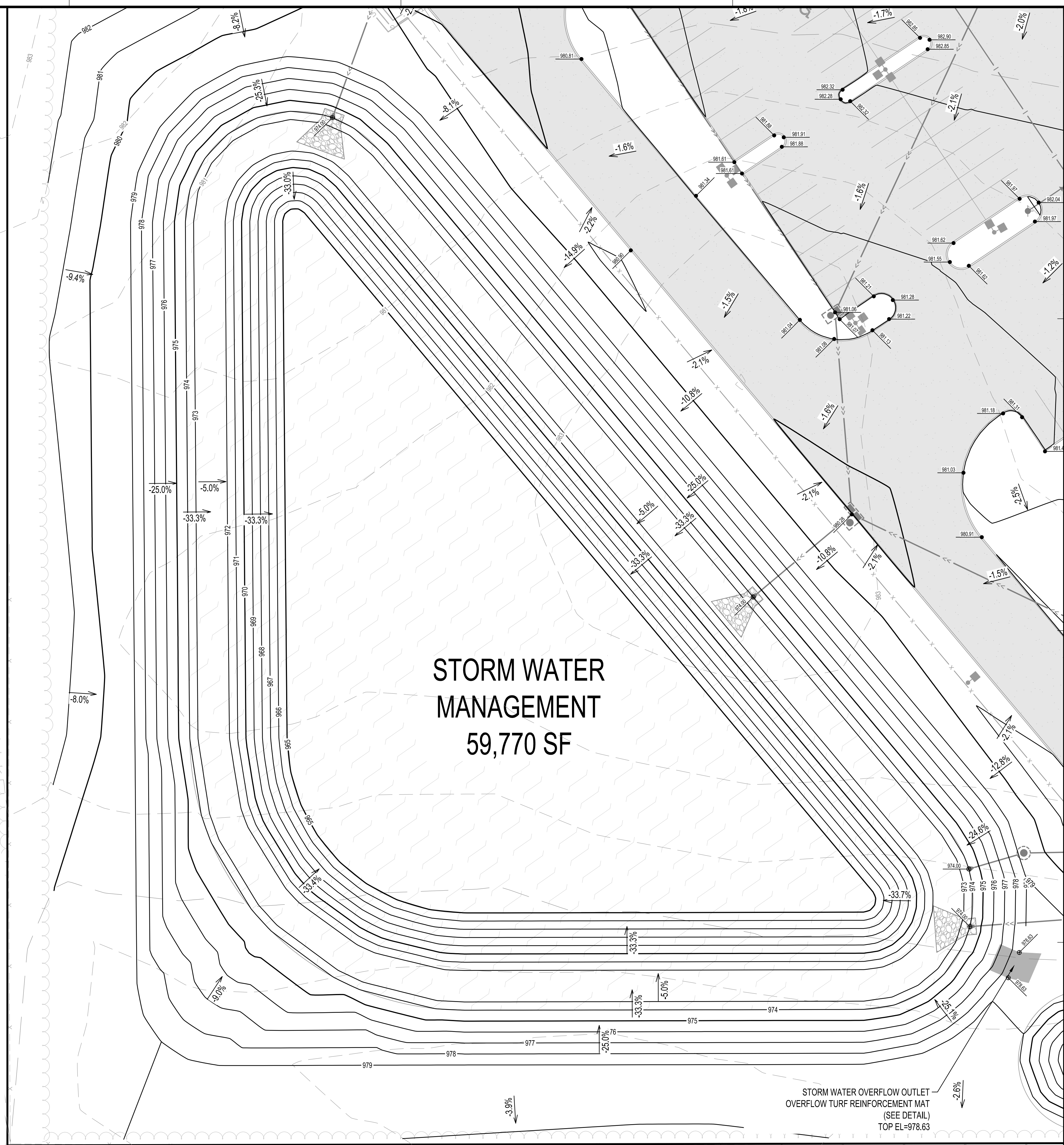
PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION

GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP & BOTTOM ELEVATION
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES	
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WET STORMWATER BASIN CROSS SECTION



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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES	IOWA
--------	------

[illegible]

PROJECT NO.	19-23010
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FILE NAME	23010 C4-GRADE
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DRAWN BY

DESIGNED BY

REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20

CLIENT PROJECT NO.

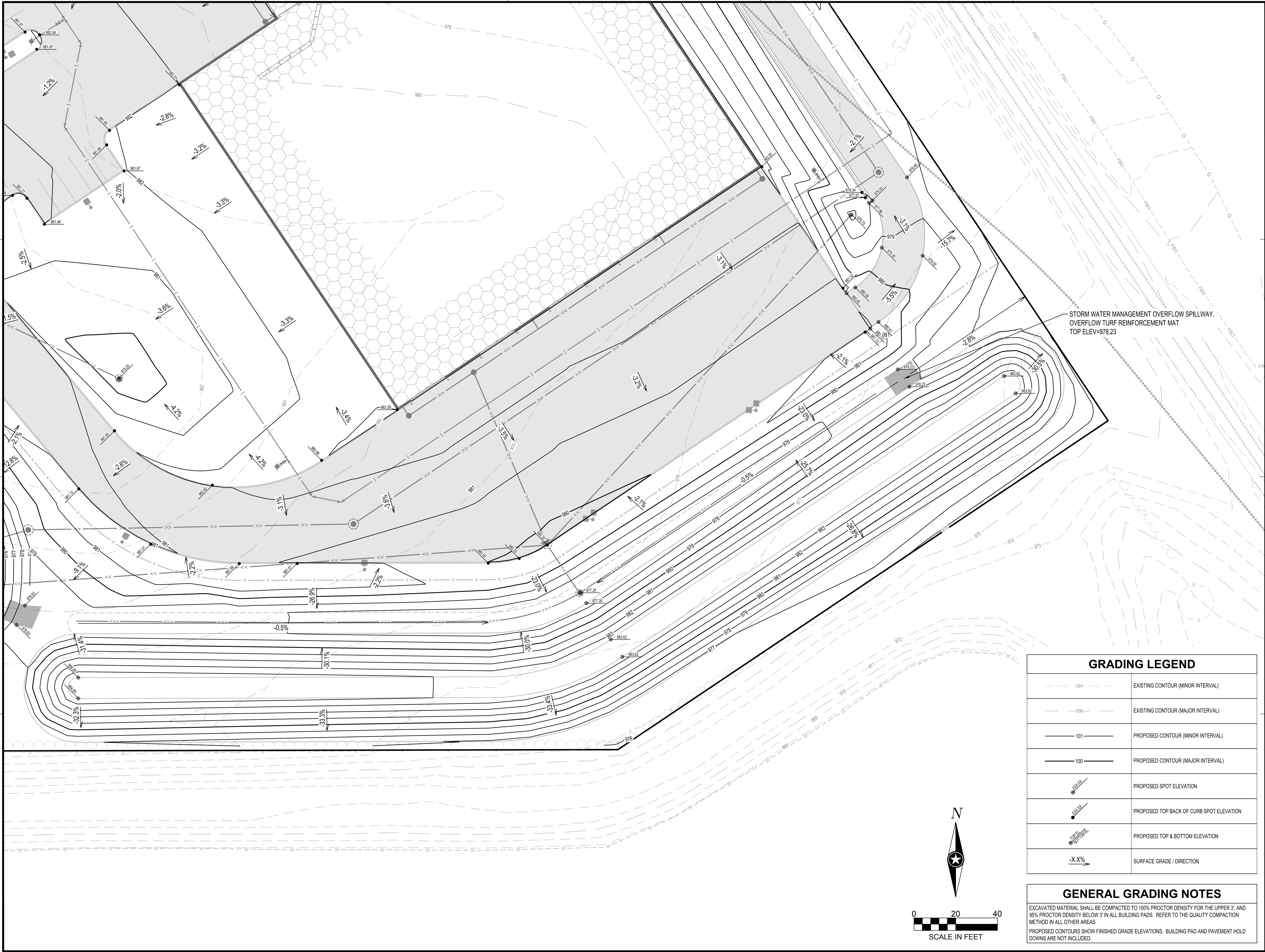
TITLE

DETAILED GRADING PLAN

SHEET

C4-14

PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION



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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES IOWA

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01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO. 19-23010

FILE NAME 23010 C4-GRADE

DRAWN BY CLF

DESIGNED BY ARA

REVIEWED BY EBG

ORIGINAL ISSUE DATE 01/28/20

CLIENT PROJECT NO. -

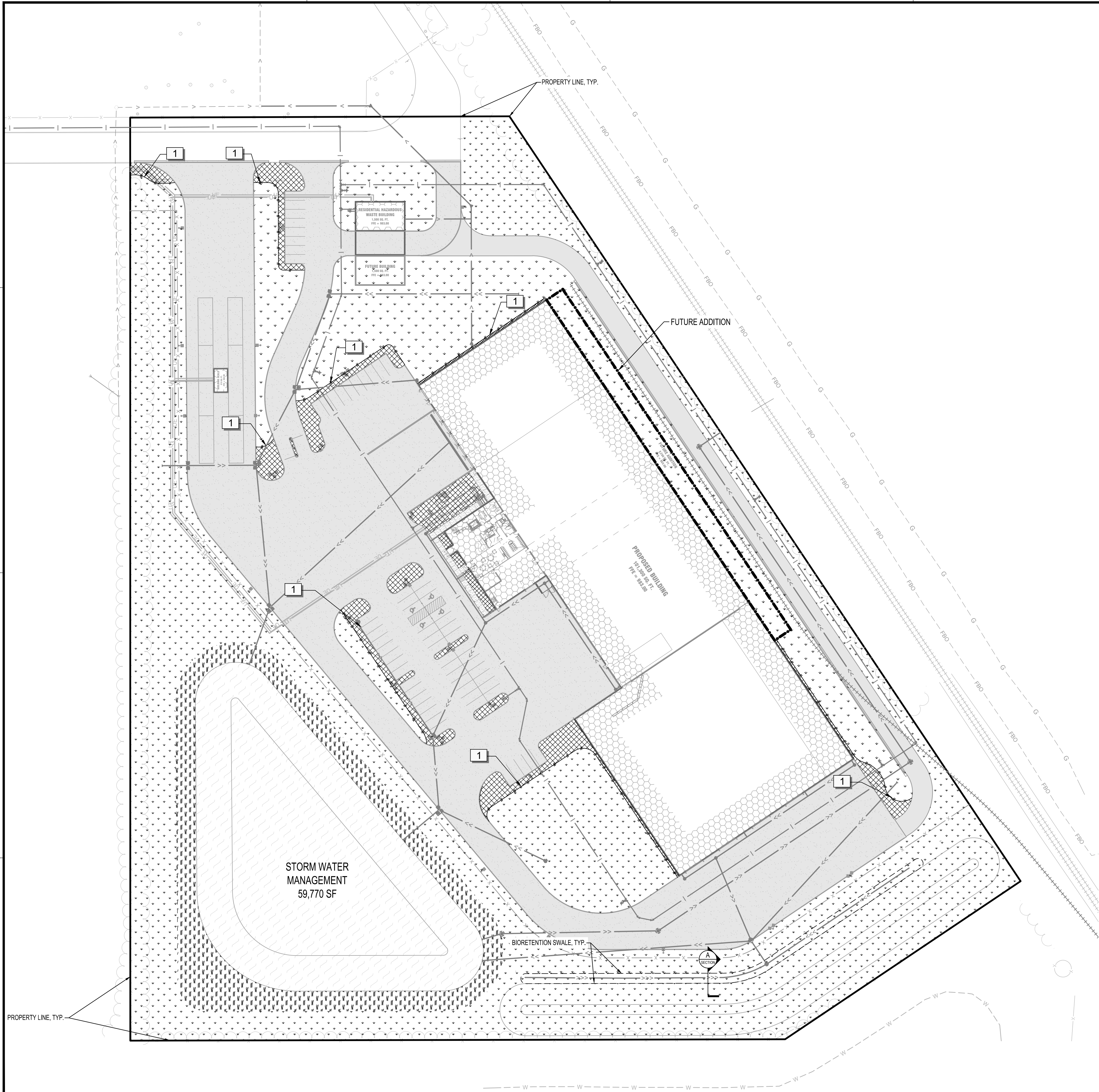
TITLE

DETAILED GRADING PLAN

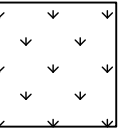
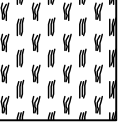
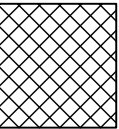
SHEET

C4-15

PRELIMINARY NOT FOR CONSTRUCTION



GROUND COVER SCHEDULE

GROUND COVERS	QTY	COMMON / BOTANICAL NAME	SIZE
	216,199 sf	SOD BLUEGRASS SOD	SOD
	29,495 sf	SEED SUDAS WETLAND SEED MIX	SEED
STONE	QTY	COMMON / BOTANICAL NAME	SIZE
	14,081 sf	ROCK MULCH 2" CLEAN RIVER ROCK	2"

REFERENCE NOTES SCHEDULE

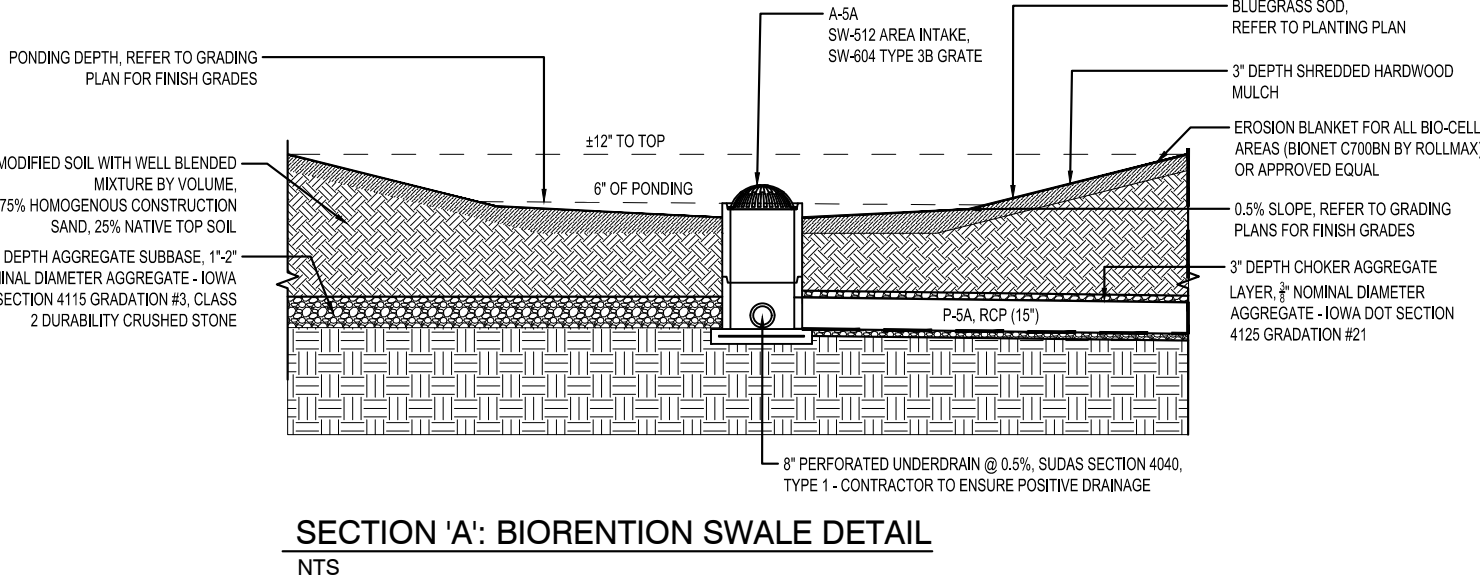
SYMBOL	DESCRIPTION	QTY
	STEEL EDGING	1,161 lf

TEMPORARY EROSION CONTROL & STABILIZATION NOTE

TEMPORARY STABILIZATION MEASURES, INCLUDING EROSION CONTROL FENCE, INLET PROTECTION, ETC. MUST BE MAINTAINED UNTIL FINAL SEEDING AND STABILIZATION MEASURES ARE IN PLACE AND APPROVED BY THE OWNER'S REPRESENTATIVE. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR ADDITIONAL INFORMATION.

RESTORATION NOTE:

ALL AREAS DISTURBED BY UTILITY INSTALLATION AND CONSTRUCTION SHALL BE SODDED AS SPECIFIED.



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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES			IOWA
REVISION SCHEDULE			
DATE	DESCRIPTION	BY	
12/31/19	CITY SUBMITTAL #1	ARA	
01/13/20	CITY SUBMITTAL #2	ARA	
01/28/20	CITY SUBMITTAL #3	ARA	

PROJECT NO.	19-23010
FILE NAME	23010 C5-LANDSCAPE
DRAWN BY	CLF
DESIGNED BY	ARA
REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

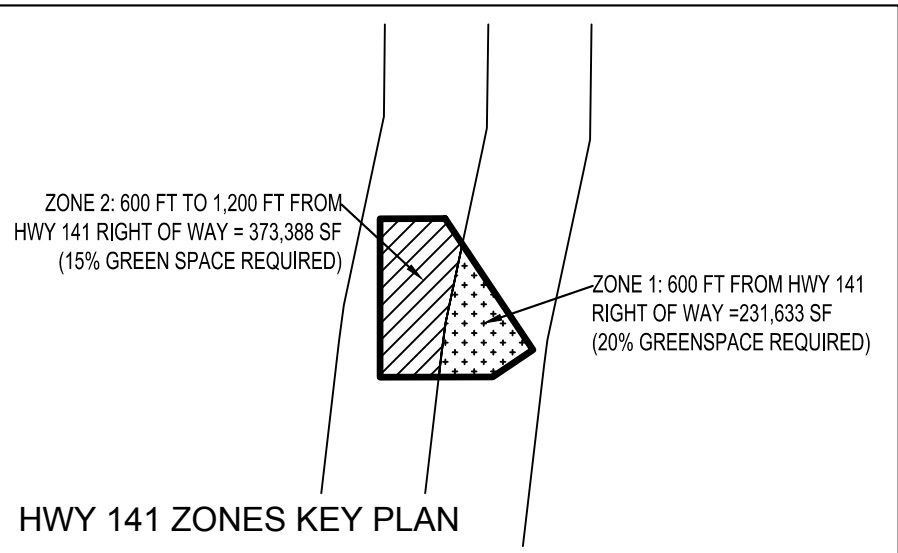
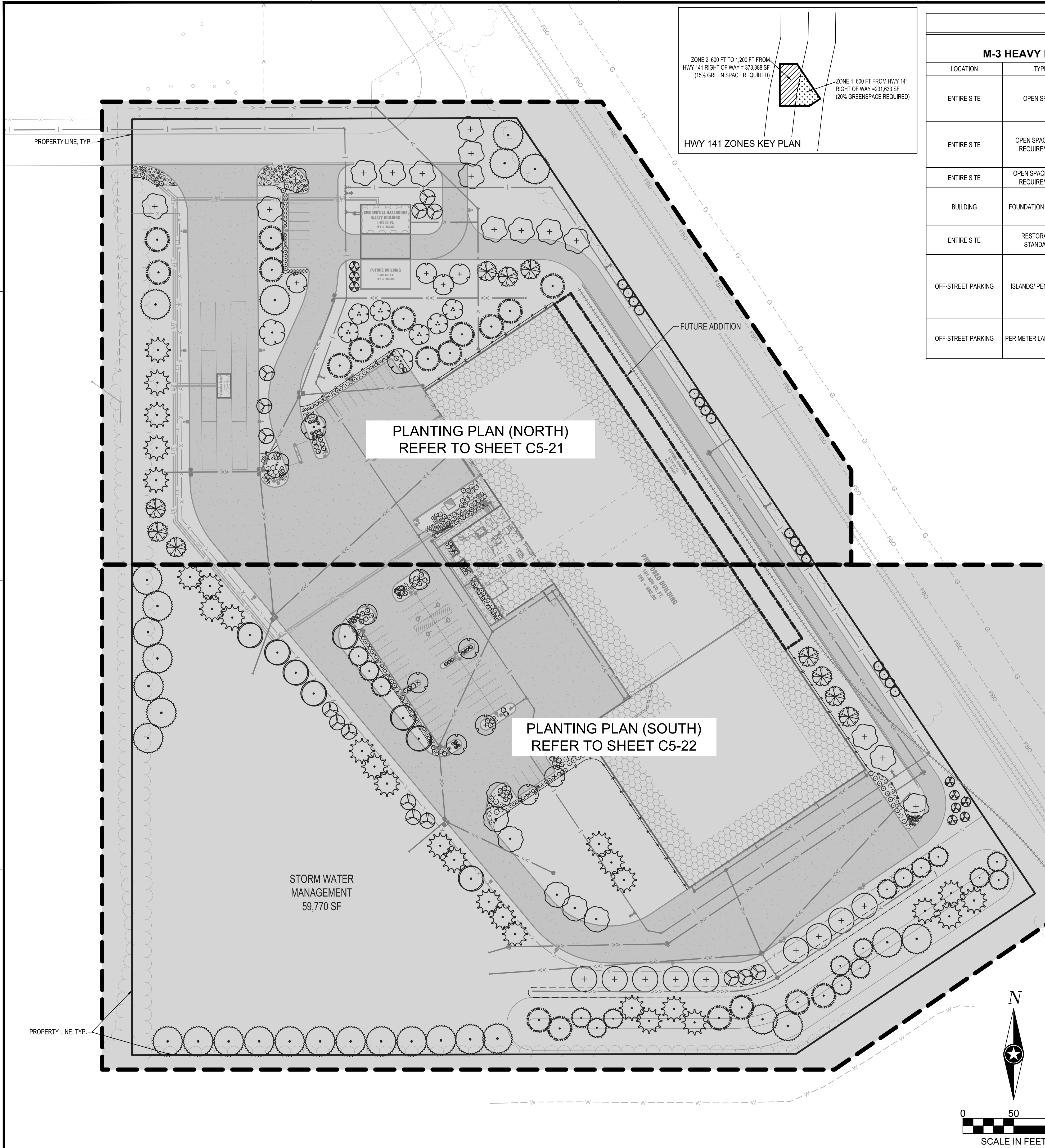
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**RESTORATION
PLAN**

SHEET

C5-10

PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION



LANDSCAPE REQUIREMENTS					
AS REQUIRED IN GRIMES, IOWA ZONING CODE					
M-3 HEAVY INDUSTRIAL DISTRICT, HWY 141 MIXED-USE DEVELOPMENT CORRIDOR DISTRICT					
LOCATION	TYPE		CODE	REQUIRED	PROVIDED
ENTIRE SITE	OPEN SPACE	165A.19	MINIMUM OPEN SPACE REQUIRED = ZONE 1 = 20% ZONE 2 = 15%	ZONE 1 = 231,633 SF X 20% = 46,327 SF ZONE 2 = 373,388 X 15% = 56,008 SF TOTAL ZONE 1 + ZONE 2 = 102,335 SF	294,539 SF OR 49%
ENTIRE SITE	OPEN SPACE TREE REQUIREMENTS	165A.16 (9A)	MINIMUM 2 TREES PER 1,000 SF REQUIRED OPEN SPACE 50% MUST BE 2 INCH CALIPER, REMAINING 50% MUST BE 8-10 FT HEIGHT WITH A 1.5 INCH CALIPER. THE TREES SHALL BE BALL & BURLAP STOCK. EVERGREEN MINIMUM HEIGHT 6 FT. AND MAY BE COUNTED TOWARDS 2-INCH CALIPER FOR REQUIREMENT.	102,335 SF / 1,000 = 102.3 MULTIPLIER 2 X 102.3 = 205 TREES (103 REQUIRE 2" CALIPER OR EVERGREEN)	205 TOTAL TREES 142 OR 89% = 2" CALIPER OR EVERGREEN
ENTIRE SITE	OPEN SPACE SHRUB REQUIREMENTS	165A.16 (9B)	1 SHRUB PER 500 SF REQUIRED OPEN SPACE	102,335 SF / 500 = 205 SHRUBS	345 SHRUBS
BUILDING	FOUNDATION PLANTING	165A.16 (9C)	LANDSCAPING AROUND BUILDINGS SHALL CONSIST OF A VARIETY OF PLANTS, SHRUBS, FLOWERS. PLANTS SHALL BE PLACED ALONG BUILDING FACES NEAR ENTRANCES INTO THE BUILDING AT A MINIMUM SPACING OF 1 FT APART ONCE PLANT FULLY MATURED.	FOUNDATION PLANTING	SHRUBS AND FLOWERING PERENNIALS PROVIDED AT BUILDING
ENTIRE SITE	RESTORATION STANDARDS	165A.16 (9F)	SOD SHALL BE EMPLOYED WHEN GRASS IS USED AS A GROUNDCOVER IN ZONE 1. NATIVE SEEDING, IN LIEU OF SOD, MAY BE UTILIZED IN STORMWATER MANAGEMENT AREAS	SOD, NATIVE SEED FOR STORMWATER AREA	SOD, NATIVE SEED FOR STORMWATER AREA
OFF-STREET PARKING	ISLANDS/ PENINSULAS	165A.16 (1)	1 LANDSCAPE ISLAND OR MEDIAN FOR EVERY 12 PARKING SPACES AND A MINIMUM OF 60 SF IN AREA. LANDSCAPED ISLANDS MAY BE GROUPED OR COMBINED TO MEET REQUIREMENTS PROVIDED THE TOTAL SQUARE FOOTAGE OF ANY SINGLE GROUPING DOES NOT EXCEED 120 SF. THE USE OF ORNAMENTAL SHRUBS AND CONIFEROUS TREES SHALL BE ENCOURAGED. THE GROUND COVER OF THE ISLAND SHALL CONSIST OF GRASS AND/OR SHRUBS, EXCLUDING PAVING.	66 PARKING STALLS / 12 = 6 LANDSCAPE ISLANDS	6 LANDSCAPE ISLANDS/PENINSULAS PROVIDED ALL 60 SF OR GREATER IN AREA. SHRUBS AND GRASSES PROVIDED IN ALL LANDSCAPE ISLANDS.
OFF-STREET PARKING	PERIMETER LANDSCAPING	165A.14	PARKING LOTS SHOULD BE EFFECTIVELY LANDSCAPED WITH TREES AND SHRUBS TO REDUCE THE VISUAL IMPACT OF GLARE FROM HEADLIGHTS AND PARKING LOT LIGHTS AND THE VIEW FROM PUBLIC RIGHT-OF-WAY AND ADJOINING PROPERTIES.	PARKING PERIMETER SCREENING	SHRUBS AND TREES PROVIDED IN ALL PARKING LOT AREAS FOR SCREENING

OVERALL PLANT SCHEDULE*

EVERGREEN TREE	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
BB	16	Baby Blue Eyes Spruce / Picea pungens 'Baby Blue Eyes'	6' HT MIN	B & B	
BS	17	Black Hills Spruce / Picea glauca densata	6' HT MIN	B & B	
CB	28	Colorado Blue Spruce / Picea pungens glauca	6' HT MIN	B & B	
CF	28	Concolor Fir / Abies concolor	6' HT MIN	B & B	
EP	20	Eastern White Pine / Pinus strobus	6' HT MIN	B & B	
OVERSTORY TREE	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
AG	9	Autumn Gold Ginkgo / Ginkgo biloba 'Autumn Gold'	1.5" CAL	B & B	10' HT MIN
HB	4	Hackberry / Celtis occidentalis	2" CAL	B & B	12' HT MIN
RB-M	6	River Birch (Multi-Trunk) / Betula nigra	10' HT MIN	B & B	Multi-trunk
RL	6	Redmond American Linden / Tilia americana 'Redmond'	1.5" CAL	B & B	10' HT MIN
SH	12	Street Keeper Honeylocust / Gleditsia triacanthos 'Draves'	2" CAL	B & B	12' HT MIN
SM	8	Legacy Sugar Maple / Acer saccharum 'Legacy'	1.5" CAL	B & B	10' HT MIN
SO	16	Swamp White Oak / Quercus bicolor	2" CAL	B & B	12' HT MIN
UNDERSTORY TREE	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
DP	10	Dakota Pinnacle Asian White Birch / Betula platyphylla 'Fargo' TM	1.5" Cal.	B & B	10' HT MIN
JL	15	Japanese Tree Lilac 'Ivory Silk' / Syringa reticulata 'Ivory Silk'	1.5" Cal.	B & B	10' HT MIN
SC	10	Spring Snow Crabapple / Malus x 'Spring Snow'	1.5" Cal.	B & B	10' HT MIN
ORNAMENTAL GRASSES	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
KF	19	Feather Reed Grass / Calamagrostis x acutiflora 'Karl Foerster'	1 GAL	CONT	18" HT MIN
PD	19	Prairie Dropseed / Sporobolus heterolepis 'Tara'	1 GAL	CONT	12" HT MIN
SG	42	Switch Grass / Panicum virgatum 'Shenandoah'	1 GAL	CONT	18" HT MIN
PERENNIALS	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
BE	40	Black-eyed Susan / Rudbeckia fulgida 'Goldstrum'	1 GAL	CONT	12" HT MIN
CM	32	Catmint / Nepeta racemosa 'Walker's Low'	1 GAL	CONT	12" HT MIN
DL	34	Stella de Oro Daylily / Hemerocallis x 'Stella de Oro'	1 GAL	CONT	12" HT MIN
SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	ROOT	NOTE
AH	37	Annabelle Smooth Hydrangea / Hydrangea arborescens 'Annabelle'	5 GAL	CONT	24" HT MIN
AM	46	Black Chokeberry / Aronia melanocarpa	5 GAL	CONT	24" HT MIN
BL	12	Birchleaf Spirea / Spiraea betulifolia	3 GAL	CONT	24" HT MIN
BW	42	Wintergreen Boxwood / Buxus microphylla 'Wintergreen'	5 GAL	CONT	24" HT MIN
CA	40	Arctic Fire Dogwood / Cornus sericea 'Arctic Fire'	5 GAL	CONT	24" HT MIN
GL	44	Gro-Low Fragrant Sumac / Rhus aromatica 'Gro-Low'	5 GAL	CONT	24" HT MIN
JB	18	Buffalo Juniper / Juniperus sabina 'Buffalo'	5 GAL	CONT	12" HT MIN
JG	49	Sea Green Juniper / Juniperus chinensis 'Sea Green'	5 GAL	CONT	24" HT MIN
RS	25	Russian Sage / Perovskia x 'Longin'	3 GAL	CONT	36" HT MIN
TT	29	Tauton Yew / Taxus x media 'Tauntonii'	3 GAL	CONT	

* NOTE: OVERALL PLANT SCHEDULE INCLUDES ALL PLANT QUANTITIES FOR BOTH ENLARGED NORTH AND SOUTH PLANTING PLANS FOUND ON SHEETS C5-21 AND C5-22. QUANTITIES PROVIDED IN THE OVERALL PLANT SCHEDULE ARE FOR VERIFICATION THAT LANDSCAPE QUANTITIES MEET ZONING REQUIREMENTS, AND ARE NOT IN ADDITION TO QUANTITIES SHOWN ON C5-21 AND C5-22.



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PROJECT

METRO WASTE AUTHORITY

MRF FACILITY

GRIMES			IOWA
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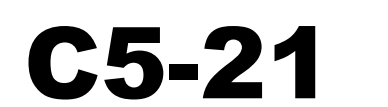
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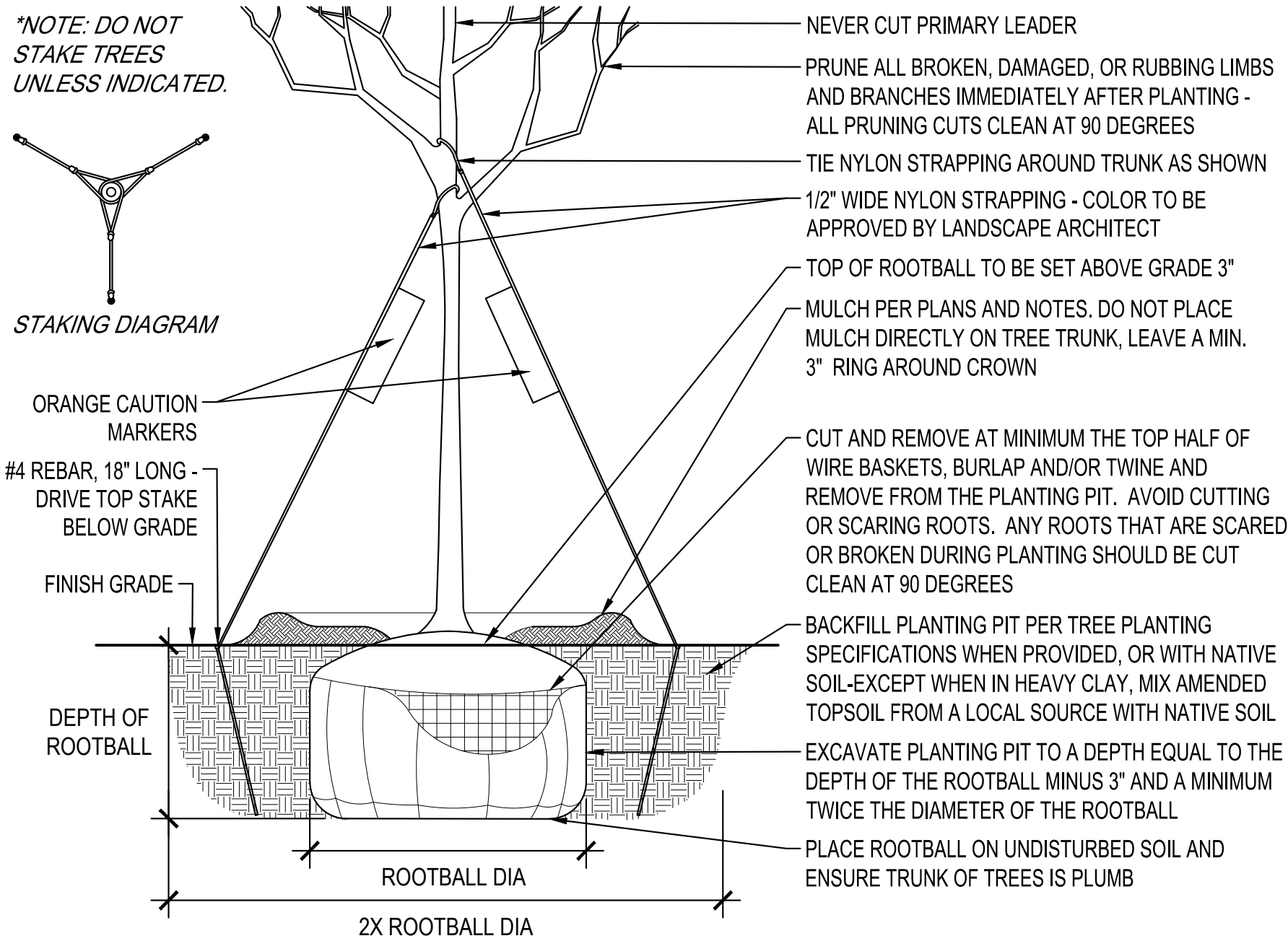
PLANTING PLAN

SHEET

C5-20

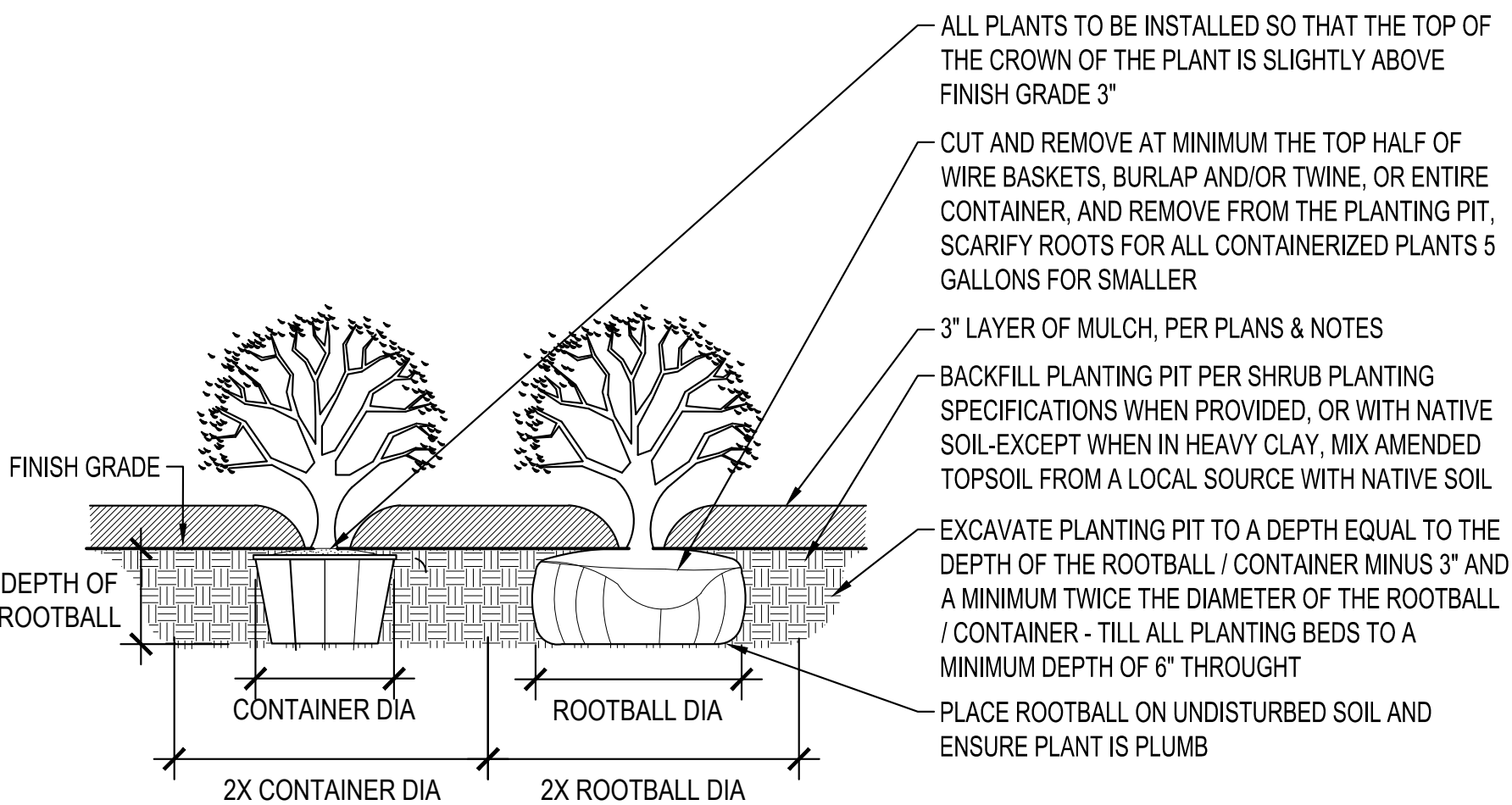
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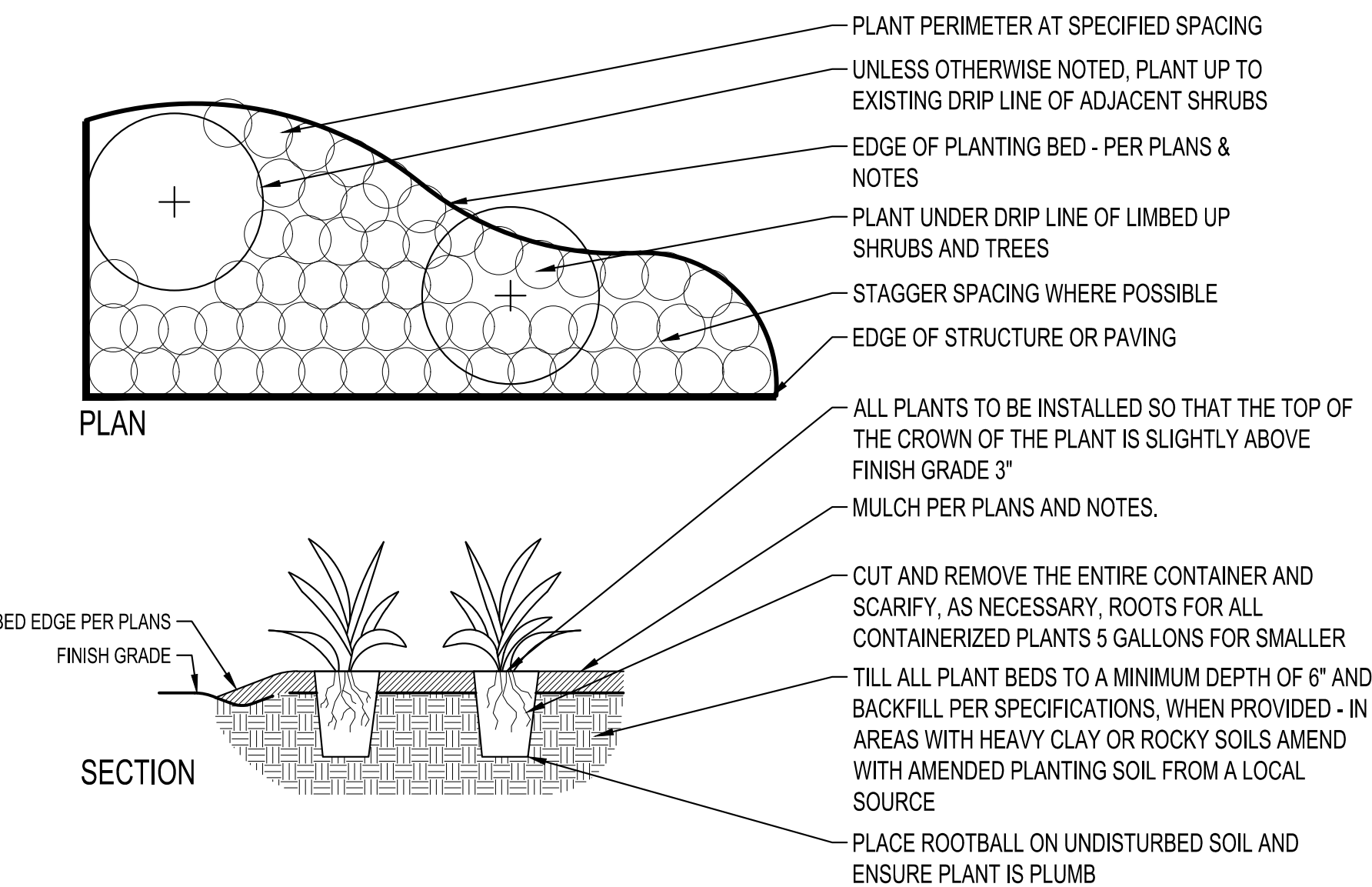
DECIDUOUS TREE PLANTING DETAIL

SCALE: 1" = 1'-0"



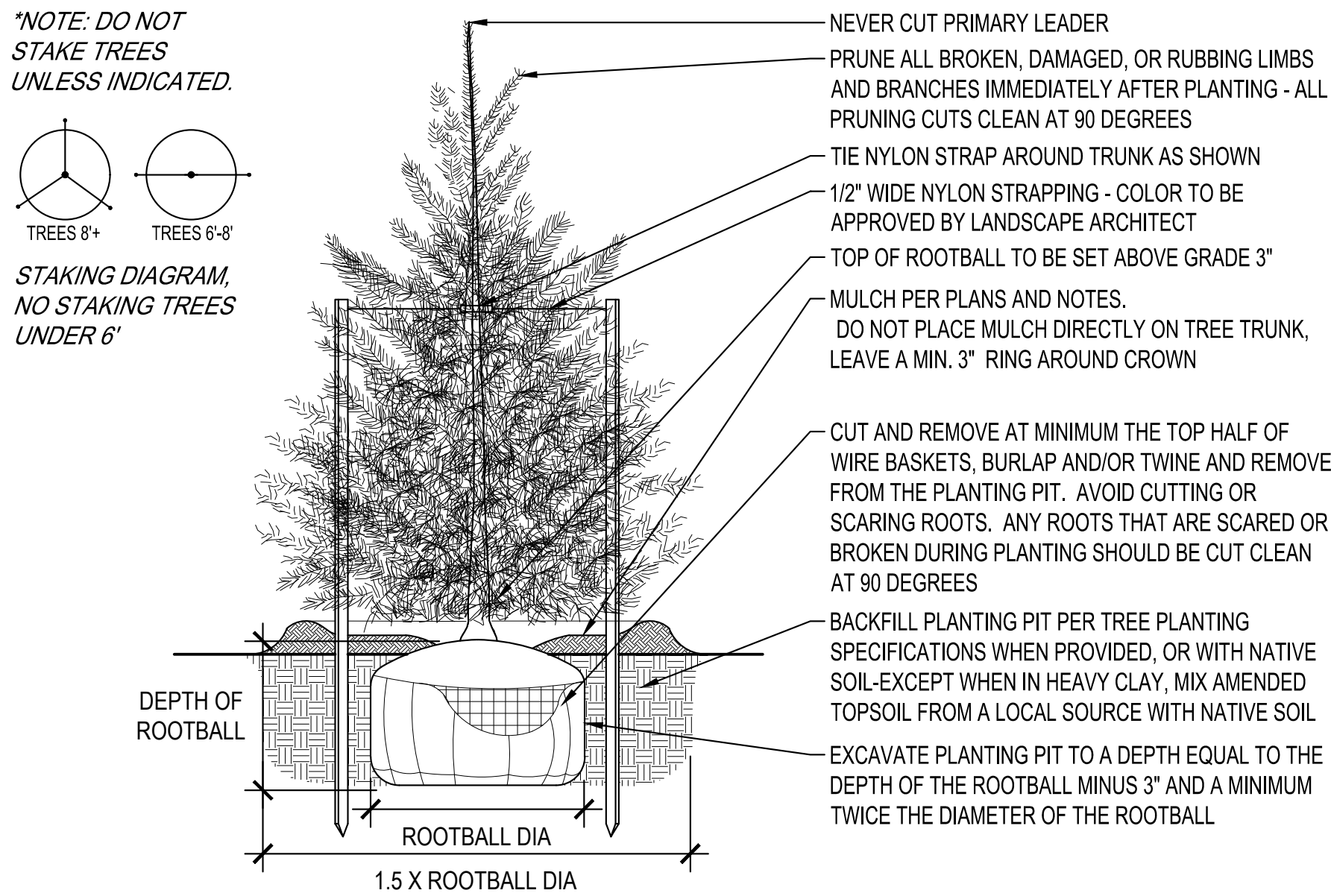
SHRUB PLANTING DETAIL

SCALE: 1" = 1'-0"



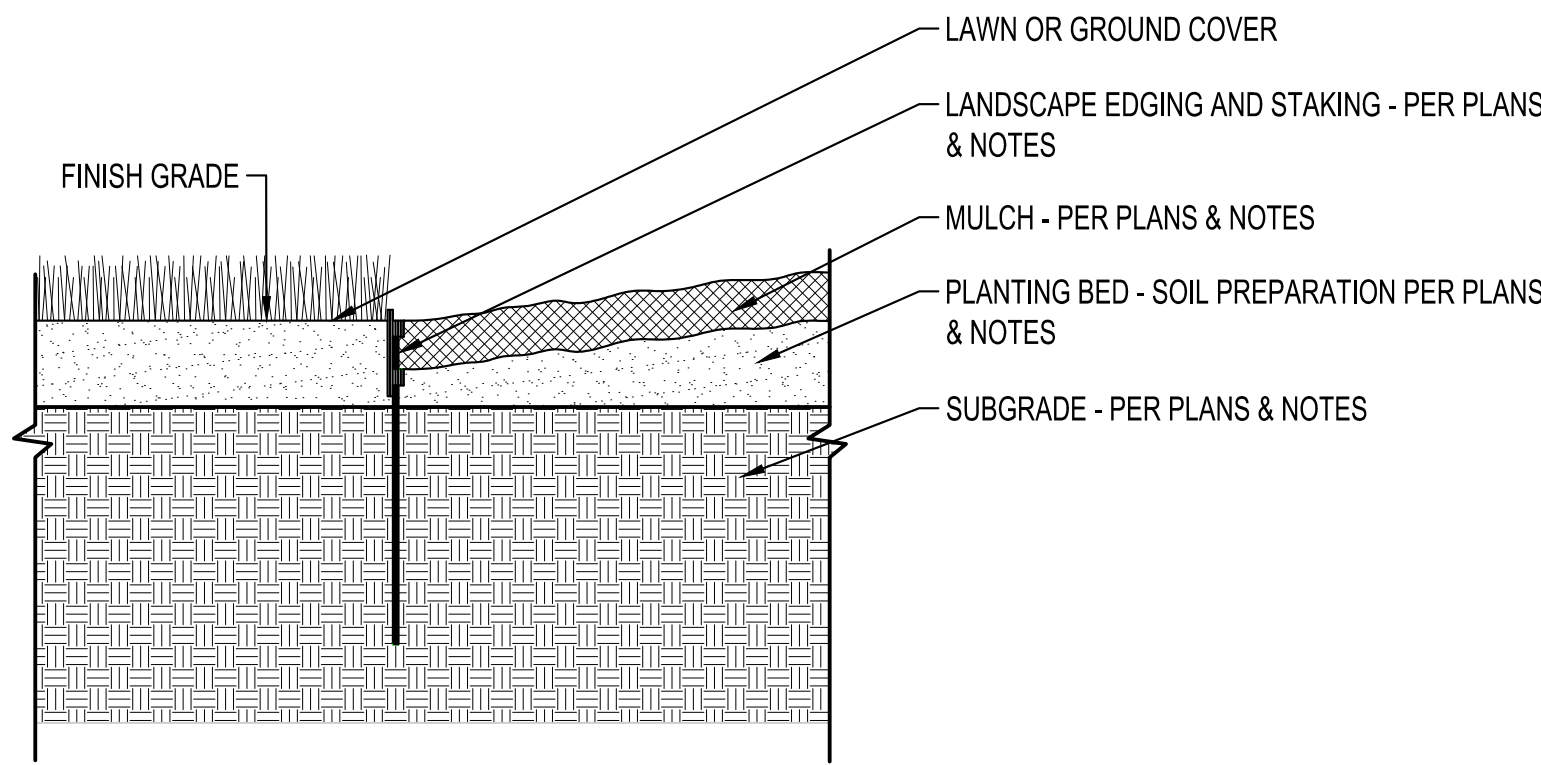
PERENNIAL PLANTING DETAIL

SCALE: 1" = 1'-0"



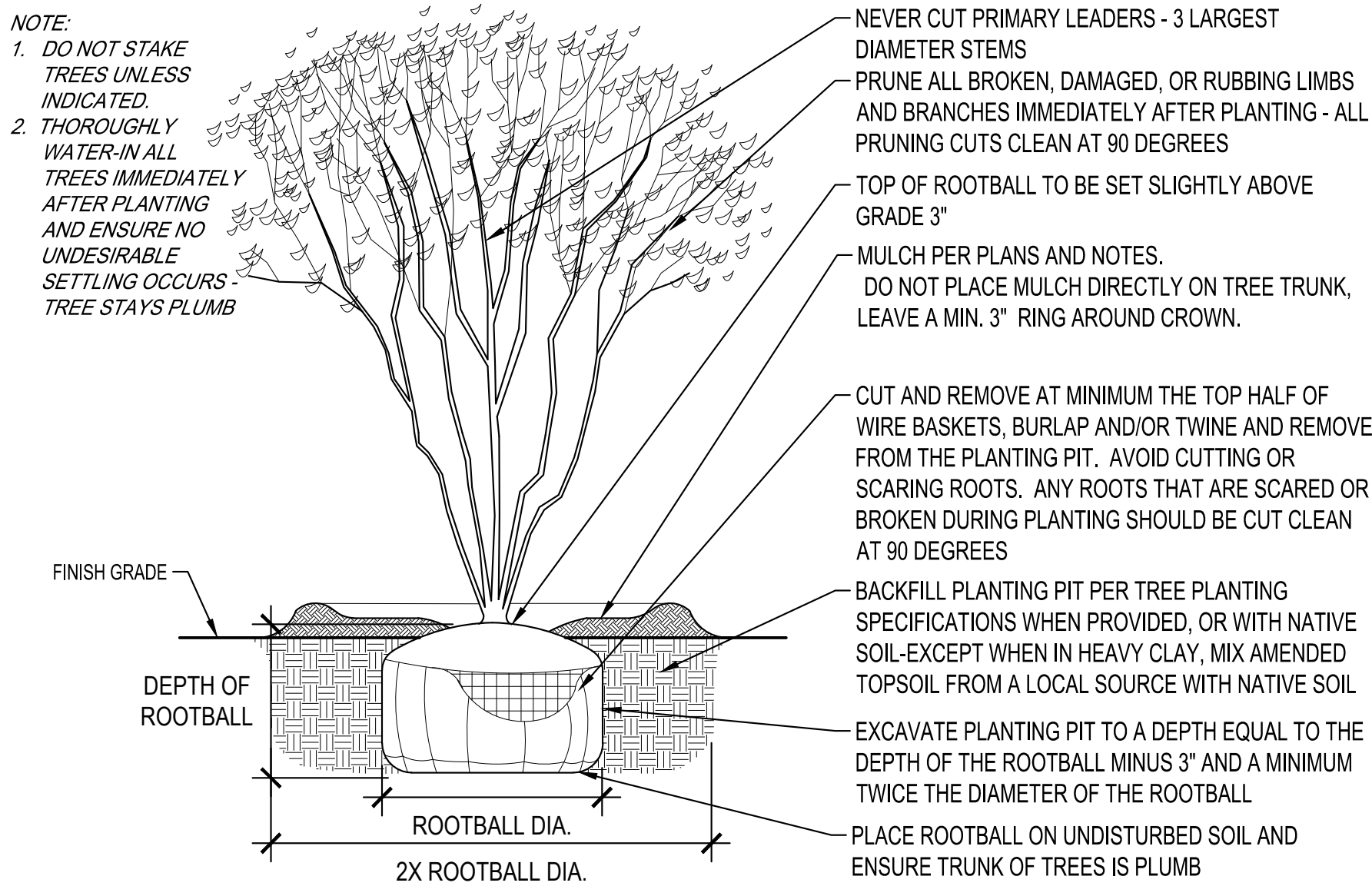
CONIFER / EVERGREEN TREE PLANTING DETAIL

SCALE: 1" = 1'-0"



LANDSCAPE EDGING DETAIL

SCALE: 1" = 1'-0"



MULTI STEM PLANTING

SCALE: 1" = 1'-0"

GENERAL PLANTING NOTES

- COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED LANDSCAPE ELEMENTS (FENCE, FOOTINGS, TREE ROOTBALLS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONTINUING WORK.
- SAVE AND PROTECT ALL EXISTING TREES NOT NOTED TO BE REMOVED.
- REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
- LAWN AREAS SHALL HAVE 8 INCHES MINIMUM DEPTH OF TOPSOIL. TOPSOIL SHALL BE COMPACTED TO 85% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
- REFER TO PLANTING DETAILS PLAN FOR AMENDED SOIL DEPTH IN PLANTING BEDS AND SURROUNDING TREES.
- FIELD STAKE PLANTINGS ACCORDING TO PLAN. OWNER'S REPRESENTATIVE SHALL APPROVE ALL PLANT LOCATIONS PRIOR TO INSTALLATION. OWNER RESERVES THE RIGHT TO REVISE PLANTING LAYOUT AT TIME OF INSTALLATION.
- ALL PLANT MATERIALS SHALL BE TRUE TO THEIR SCIENTIFIC NAME AND SIZE AS INDICATED IN THE PLANT SCHEDULE.
- IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE SCHEDULE, THE PLANTING PLAN SHALL GOVERN.
- OWNER RESERVES THE RIGHT TO REVISE QUANTITIES TO SUIT BUDGET LIMITATIONS. CONTRACTOR'S UNIT BID PRICES SHALL PREVAIL FOR ANY CHANGES IN QUANTITIES.
- ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL FROM THE CITY OF GRIME'S ZONING ADMINISTRATOR, OWNER'S REPRESENTATIVE, AND OWNER.
- OWNER MAY NOT REVISE QUANTITIES BELOW THE MINIMUM REQUIREMENTS.
- ALL PLANT MATERIALS MUST CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK (A.N.S.I.), LATEST EDITION PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON D.C. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO A.N.S.I.
- ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN A LIVE AND HEALTHY GROWING CONDITION FOR ONE FULL GROWING SEASON (ONE YEAR) AFTER FINAL PROJECT ACCEPTANCE OR SHALL BE REPLACED FREE OF CHARGE WITH THE SAME GRADE AND SPECIES. ALL TREES SHALL HAVE A STRONG CENTRAL LEADER.
- CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO OPERATIONS. ANY AREAS THAT ARE DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- PLANTING BED EDGING - USE 1/8" x 4" STEEL EDGING IN ALL AREAS WHERE PLANTING BED MEETS LAWN AREAS OR WHERE INDICATED. USE 12" STEEL SPIKES AS INSTRUCTED BY MANUFACTURER.
- PROVIDE ROCK MULCH, 2-INCH CLEAN RIVER ROCK WITH LANDSCAPE FABRIC, IN ALL PLANTING BEDS TO A 3-INCH MINIMUM DEPTH.
- PROVIDE SHREDDED HARDWOOD MULCH, NATURAL COLOR, SURROUNDING ALL PROPOSED TREES TO A 4-INCH MINIMUM DEPTH AS SHOWN IN TREE PLANTING DETAIL. DO NOT USE AN UNDERLAYMENT SUCH AS PLASTIC SHEET OR LANDSCAPE FABRIC. IF LOCATED WITHIN A ROCK MULCHED PLANT BED, SUBSTITUTE THIS MULCH WITH THE MULCH CALLED FOR WITHIN THAT PLANT BED. APPLY PRE-EMERGENT TO ALL PLANTING BEDS PRIOR TO MULCHING.
- SOD SECTIONS SHALL BE STAKED IN PLACE WITH BIODEGRADABLE SOD STAKES WHEN SLOPE IS STEEPER THAN 5:1 OR WHEN CONDITIONS REQUIRE.
- ALL PLANTS AND TURF TO BE IRRIGATED WITH A PERMANENT, UNDERGROUND IRRIGATION SYSTEM.
- INDICATED QUANTITIES ARE ESTIMATES AND SHOULD BE CONFIRMED BY THE CONTRACTOR/BIDDER.



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PROJECT

**METRO WASTE
AUTHORITY**

MRF FACILITY

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C5-LANDSCAPE
DRAWN BY	CLF
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REVIEWED BY	EBG
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

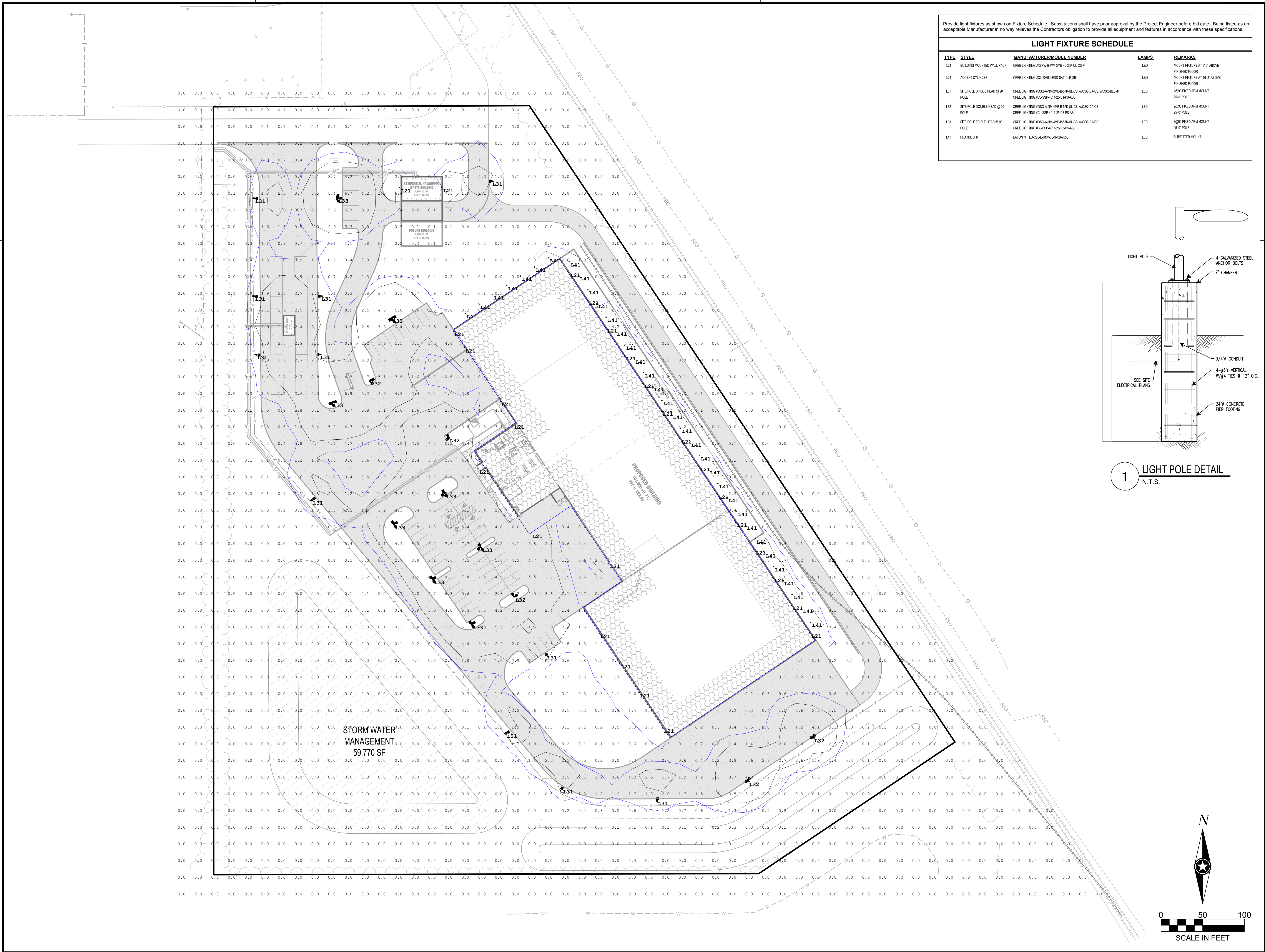
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**PLANTING NOTES
AND DETAILS**

SHEET

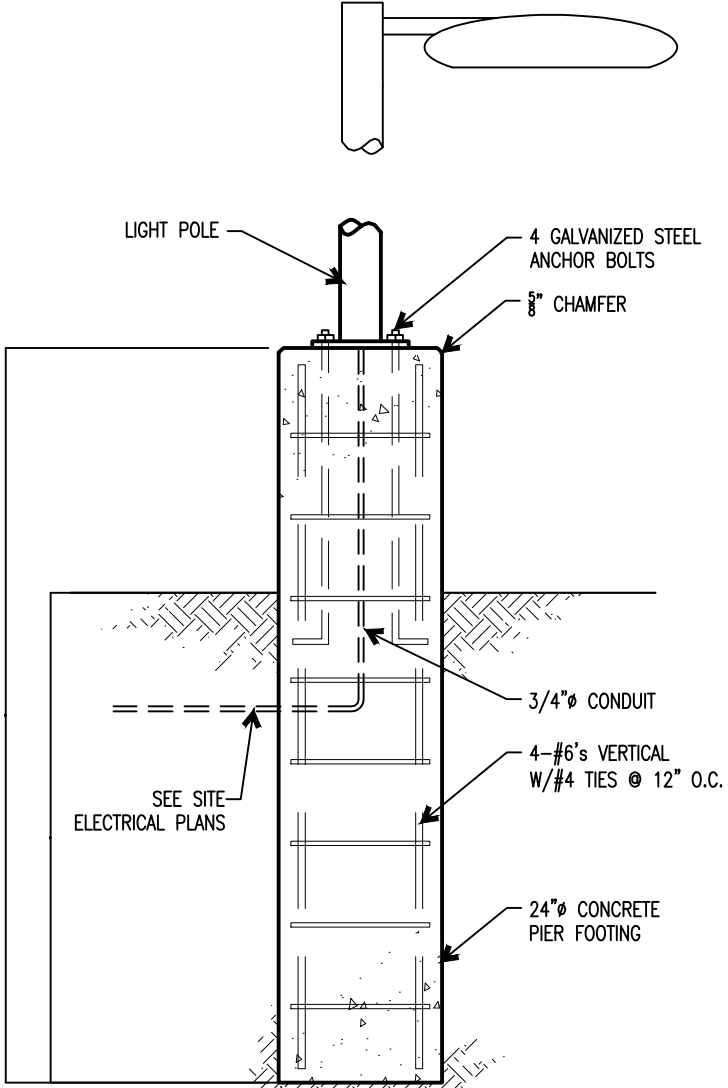
C5-30

PRELIMINARY NOT FOR CONSTRUCTION



Provide light fixtures as shown on Fixture Schedule. Substitutions shall have prior approval by the Project Engineer before bid date. Being listed as an acceptable Manufacturer in no way relieves the Contractors obligation to provide all equipment and features in accordance with these specifications.

LIGHT FIXTURE SCHEDULE				
TYPE	STYLE	MANUFACTURER/MODEL NUMBER	LAMPS	REMARKS
L21	BUILDING MOUNTED WALL PACK	CREE LIGHTING K35P16-WA-3NE-4L-30K-L-CSP	LED	ARMOUNT FIXTURE AT 8'4" ABOVE FINISHED FLOOR
L24	ACCENT CYLINDER	CREE LIGHTING KCL203ALEDD-SAT-CL-RB	LED	ARMOUNT FIXTURE AT 16'2" ABOVE FINISHED FLOOR
L31	SITE POLE SINGLE HEAD @ 90 POLE	CREE LIGHTING K50Q-AAA-M2E-6-5YK-L-CS, WQSD-04-CS, WQSD-04-SMF CREE LIGHTING KCL-SSP-4011-25-D1-P8-ABL	LED	18'90" FIXED ARM MOUNT 25'-0" POLE
L32	SITE POLE DOUBLE HEAD @ 90 POLE	CREE LIGHTING K50Q-AAA-M2E-6-5YK-L-CS, WQSD-04-CS CREE LIGHTING KCL-SSP-4011-25-D3-P8-ABL	LED	28'90" FIXED ARM MOUNT 25'-0" POLE
L33	SITE POLE TRIPLE HEAD @ 90 POLE	CREE LIGHTING K50Q-AAA-M2E-6-5YK-L-CS, WQSD-04-CS CREE LIGHTING KCL-SSP-4011-25-D3-P8-ABL	LED	38'90" FIXED ARM MOUNT 25'-0" POLE
L41	FLOODLIGHT	EATON NFLED-C25-E-UNV-46-S-CB-7000	LED	SUPPITTER MOUNT



1 LIGHT POLE DETAIL
N.T.S.



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PROJECT

**METRO WASTE
AUTHORITY
MRF FACILITY**

GRIMES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY
12/31/19	CITY SUBMITTAL #1	ARA
01/13/20	CITY SUBMITTAL #2	ARA
01/28/20	CITY SUBMITTAL #3	ARA

PROJECT NO.	19-23010
FILE NAME	23010 C6-LIGHTING
DRAWN BY	----
DESIGNED BY	----
REVIEWED BY	----
ORIGINAL ISSUE DATE	01/28/20
CLIENT PROJECT NO.	-

TITLE

**PHOTOMETRIC
PLAN**

SHEET

C6-10

PRELIMINARY NOT FOR CONSTRUCTION

Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: February 4, 2020
RE: Metro Waste Facility – Site Plan

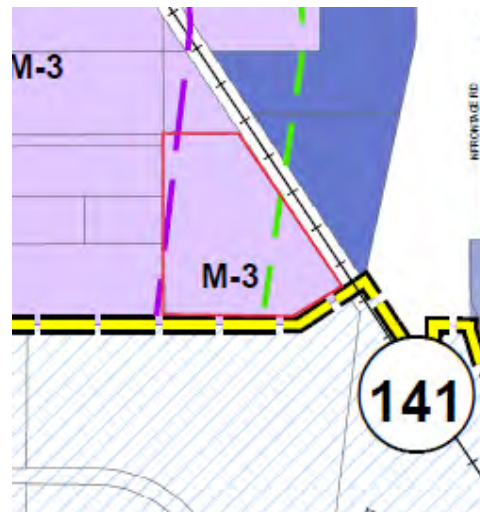
GENERAL INFORMATION:

Applicant:	Metro Waste Authority
Requested Action	Site Plan
Location	4185 SE Beisser Drive

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	General Industrial	M-3
North	Heavy Industrial	General Industrial	M-3
South	City Limits	General Industrial	M-3
East	Light Industrial	Light Industrial	M-2
West	Heavy Industrial	General Industrial	M-3

BACKGROUND:

The applicant, is requesting approval of a site plan, which will allow for the construction of a Material Recovery Facility, to be operated by Metro Waste Authority. A Material Recovery Facility receives, separate sand prepares bulk recycles materials for marketing and distribution to end users and manufactures.

Metro Waste currently operates a transfer station directly north-west of the subject site.

The property is located with Zone 1 and Zone 2 of the HWY 141 Corridor Overlay.

ANALYSIS:

Building/Elevations:

The building is proposed to be principally constructed out of pre-cast concrete, opaque metal paneling (example included) and glazing. Due to the pre-cast construction, a minimum of 30% glazing is required for the elevations that face the public ROW. This has been accommodated on the east/north elevations that are oriented towards HWY 141.

The 5 minimum factors as required by the overlay are provided with architectural banding, awnings variations in roof height, color variations (all earth tone), panel texture variations, and reveals.

The applicant has also provided enhanced corner elements for the façade that orients towards HWY 141.

There are a number of overhead doors on the site due to the dependence on the transit of materials, however all doors are provided in a format that adds to the overall architecture of the building, and are screened with beaming and landscaping. Examples of the overhead doors are included in your packet.

There is also a scale house and residential hazardous waste drop off-building proposed on the site. Those elevations are also included in your packet for review. Staff does not object to the design.

The lower portions of the building are proposed to be 35-feet in height, and the upper middle portion of the building is proposed at 56-feet in height. This is permitted by the Zoning District.

Staff has also analyzed the perspective of the vehicular traffic from the proposed flyover, as it views this development. The proposed elevation of the north bound ramp, when adjacent to the subject site, is shown to be 1003. The ground elevation of the proposed MRF is at 983, which will equate to top of wall elevations of 1018 and 1039 on the building. The ramp is also decreasing a rate of 4%, so given the downward transition, and elevation considerations, staff does not feel that there will be a negative view point from the flyover.

There are a number of future building additions shown on the plans. Note that these will need to come back for further review as a site plan amendment.

Architectural up lighting on the south-east façade is shown in accordance with the HWY 141 Corridor Overlay.

Site Layout:

The site is proposed to have 2 points of access. All access points are from the existing private driveway that services the. The western access is primarily for the inbound and outbound truck traffic. Truck circulation has been reviewed and found to present no issues. The eastern access points will allow for staff, visitors and residents to access the site. Parking is providing near and adjacent to these areas.

A fire access lane is provided on the east side of the building. This is proposed as hard surface with no curb and gutter.

A trash enclosure is provided near the center part of the west façade.

The applicant is showing a future rail spur into the site. At this time, they are not certain that rail access will provide a benefit, but did want to conceptually show the improvements. While this is not part of the approval today, the applicant did want to lay the groundwork for it in the future.

Parking:

Based upon the square footage of the building, and its respective uses (office, warehouse) a total of 82 parking spaces are required.

As proposed, the site will provide a total of 89 parking spaces.

Landscaping/Streetscape:

The site is required to provide a minimum of 20% open space. As proposed, the site provides a total of 49% open space.

The minimum landscaping requirements have been met per the HWY 141 Corridor Overlay District. A combination of overstory, ornamental, evergreen and shrubs are planted throughout out the site.

Utilities:

Sanitary sewer access is provided from an existing 8" sewer running along the north side of the site. A new 4" service will be brought into the building. A sand/oil separator may be necessary internal to the building, but confirmation will be made during the building permit review process.

Water is provided from an existing 8" main west of the site. A new 6" service will be brought into the site to provide fire and domestic service to the building. Fire hydrants are adequately spaced throughout the site in accordance with the Fire Code.

Storm water detention is handled with a wet bottom pond at the south-west corner of the site. The pond will be private and not maintained by the City.

STAFF RECOMMENDATION:

Staff would recommend approval of the site plan for Metro Waste MRF Site Plan, subject to any remaining staff comments.

CITY OF GRIMES



Alex Pfaltzgraff
Development Services Director



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PROJECT

**METRO WASTE
MRF FACILITY**

DES MOINES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

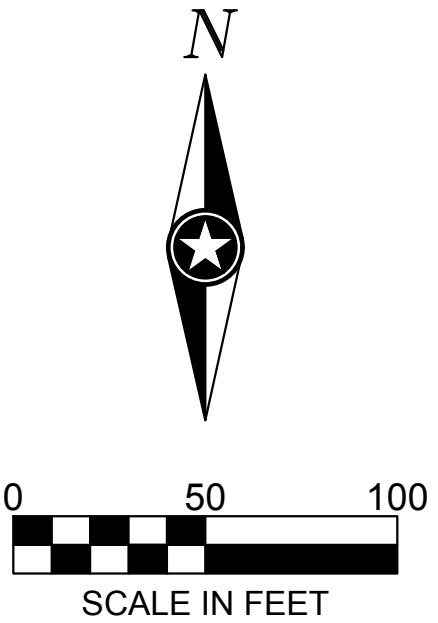
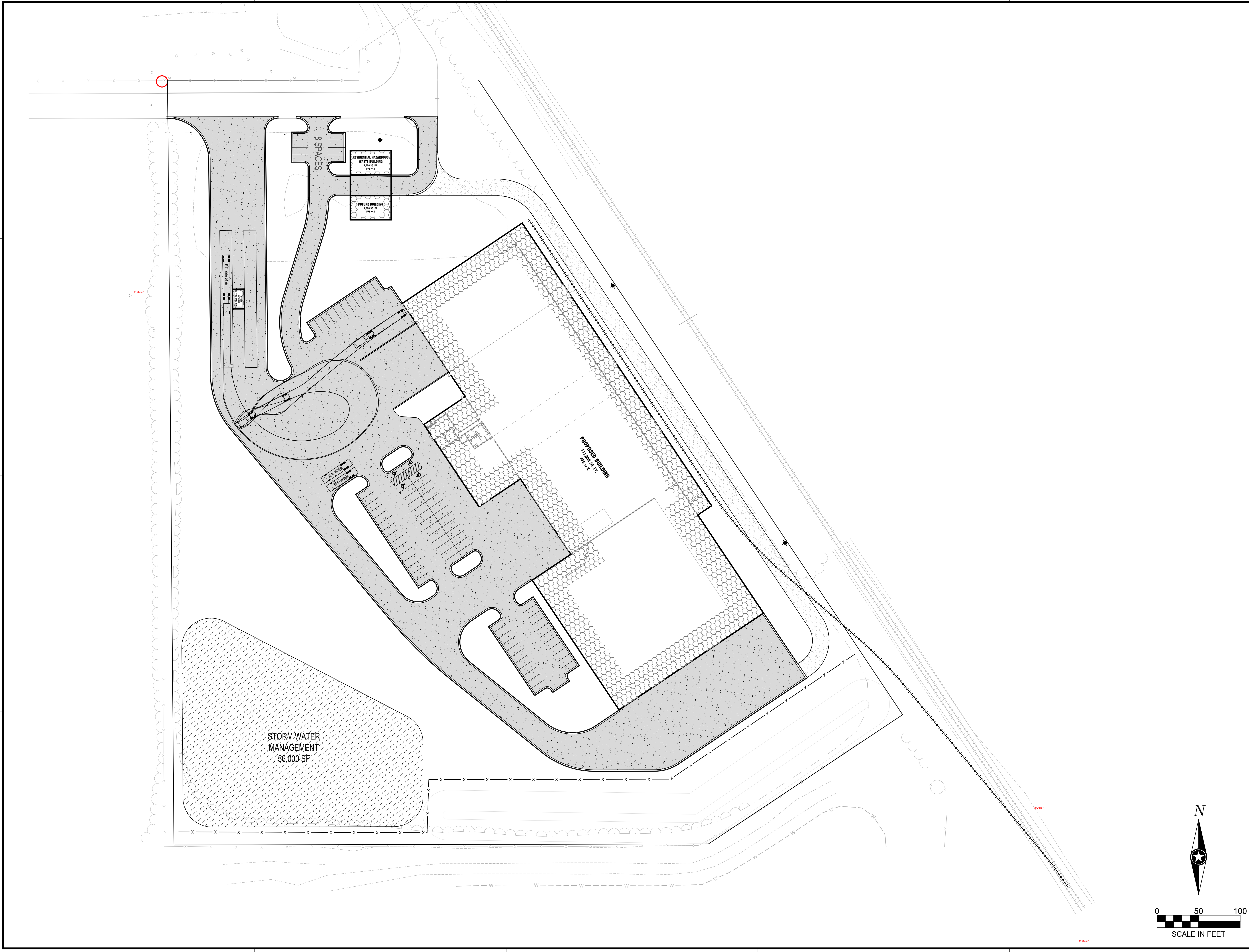
PROJECT NO.	23010
FILE NAME	23010 TURNING MOVEMENT
DRAWN BY	---
DESIGNED BY	---
REVIEWED BY	---
ORIGINAL ISSUE DATE	--/--
CLIENT PROJECT NO.	-

TITLE

**Turning Movement
North Door**

SHEET

1





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PROJECT

**METRO WASTE
MRF FACILITY**

DES MOINES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

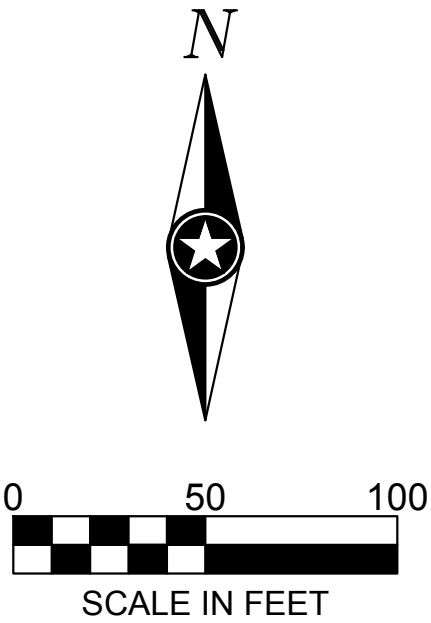
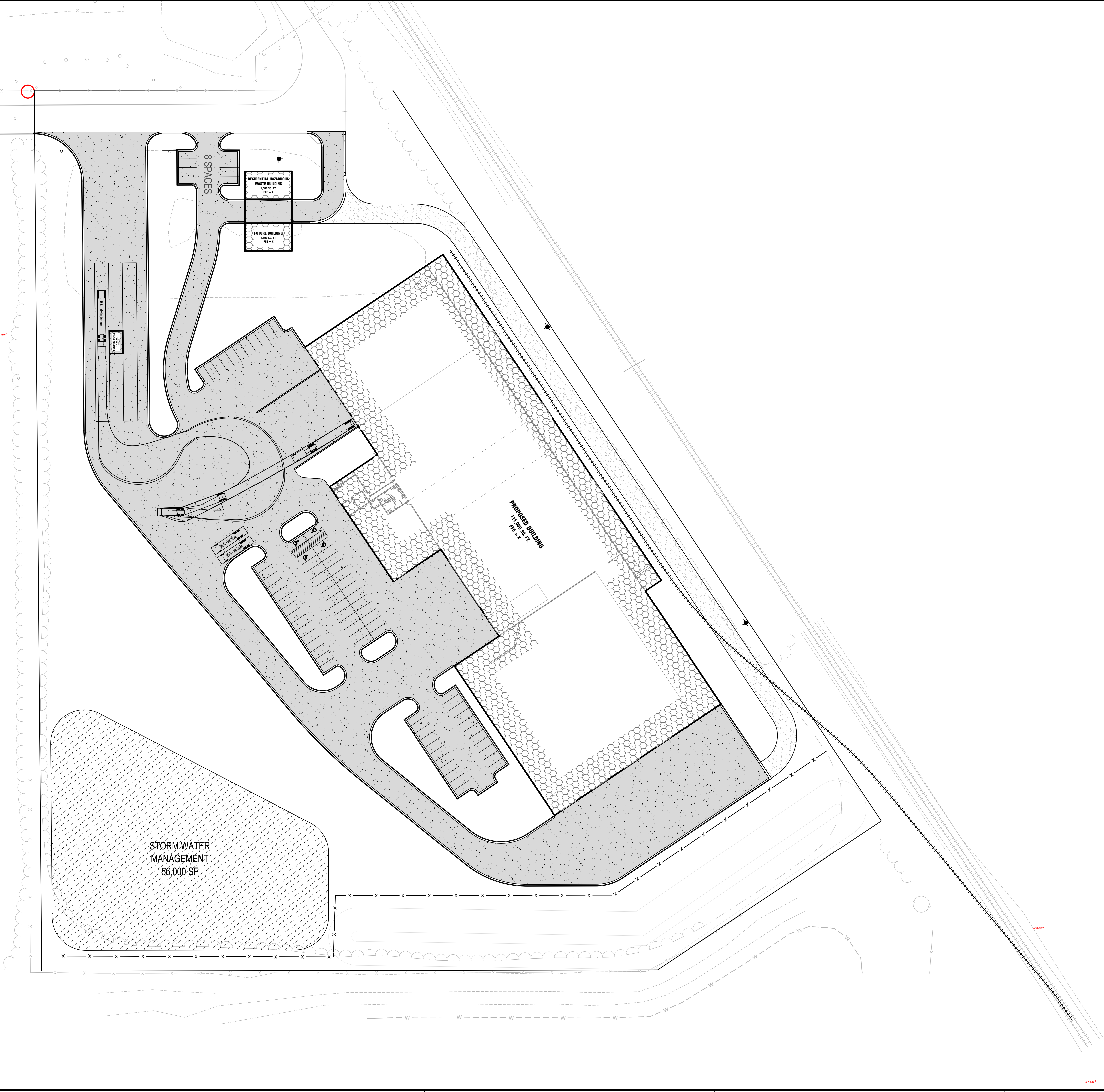
PROJECT NO.	23010
FILE NAME	23010 TURNING MOVEMENT
DRAWN BY	---
DESIGNED BY	---
REVIEWED BY	---
ORIGINAL ISSUE DATE	--/--
CLIENT PROJECT NO.	-

TITLE

**Turning Movement
Docks**

SHEET

2





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PROJECT

**METRO WASTE
MRF FACILITY**

DES MOINES IOWA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

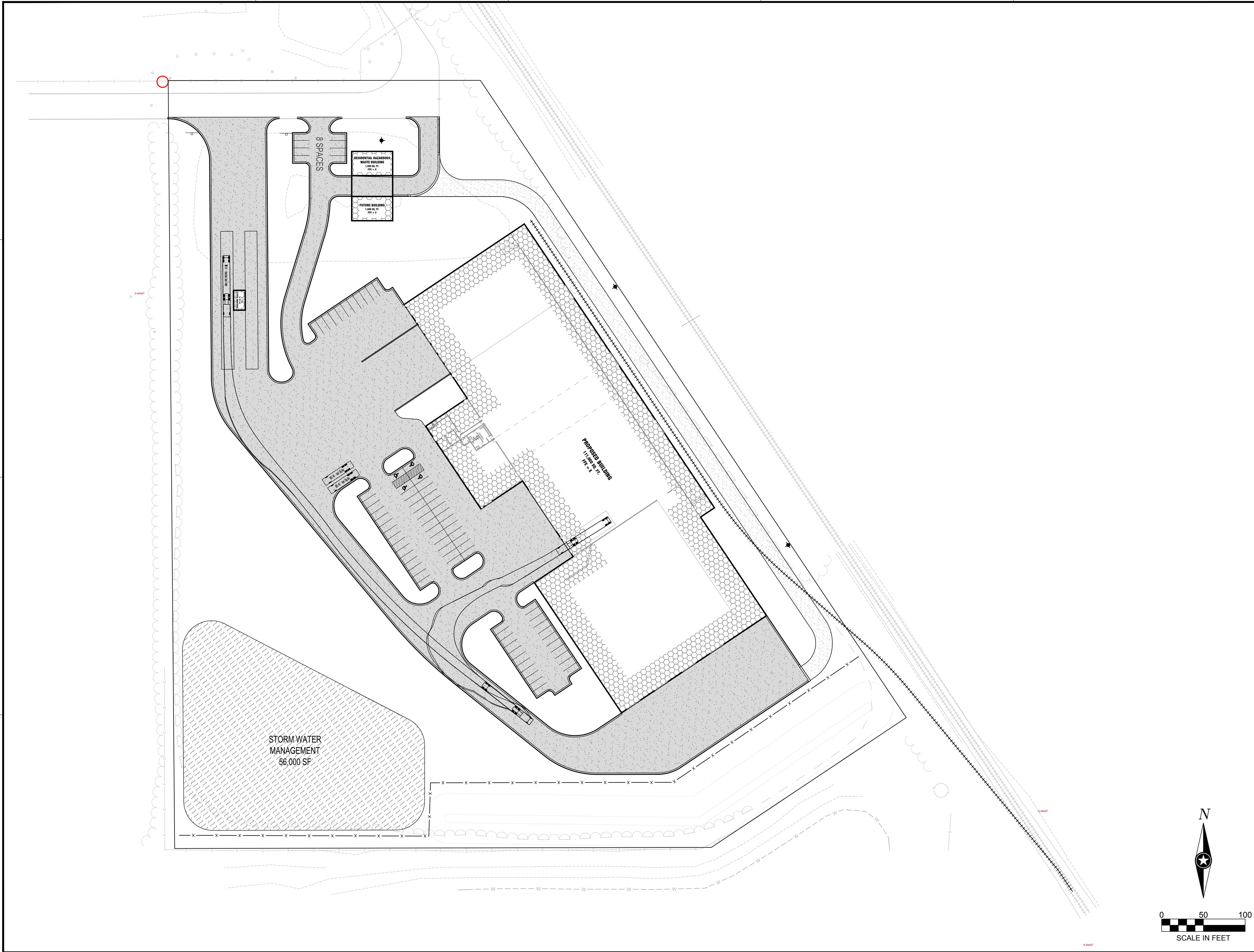
PROJECT NO.	23010
FILE NAME	23010 TURNING MOVEMENT
DRAWN BY	---
DESIGNED BY	---
REVIEWED BY	---
ORIGINAL ISSUE DATE	--/--
CLIENT PROJECT NO.	-

TITLE

**Turning Movement
South Door**

SHEET

3





Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

~~January 6, 2020~~

January 21, 2020

Civil Engineering Consultants

Attn: Ed Arp

2400 86th Street, Unit 12

Urbandale, IA 50322

RE: Composites One

Dear Project Contact:

The Development Services Department is in receipt of a proposed Site Plan Amendment for Composites One. Based on the review of the provided submittal materials, staff have the following comments:

General Comments/Sheet 1:

- ~~1. Please update the standard city notes per attached.~~
2. Please provide a geo-tech report for review. **Please provide when available.**
- ~~3. Please update the proposed building square footage to include the existing.~~
- ~~4. Please update the paving area to include the existing.~~
5. Please provide an existing conditions and removals sheet. **Please identify if the curb is being cut our ground. If cut, please take to the nearest joint line.**
- ~~6. Staff questions if any additional site light is proposed. If so, please provide a photometric plan and manufacture cut sheets.~~
- ~~7. Please provide a landscape sheet for the site. Plantings shall be provided in accordance with the HWY 141 Corridor requirements (Section 165A)~~
- ~~8. Please provide a detail sheet for gates, fences, ada stalls, ada stall signage, utilities, etc.~~
- ~~9. Under Paving Note 1. Change City Hall to City of Grimes Development Services 515-986-4050.~~

10. Under the General Notes;

- ~~Change call info to City of Grimes Development Services 515-986-4050 (delete Peoples Service and Fox Engineering).~~
- ~~Change City Hall to City of Grimes Development Services 515-986-4050.~~
- ~~Remove reference to tracer on storm sewer services.~~

11. Under Water Main Notes

- ~~The bacteria testing and blowing off of the chlorine will be done by the contractor and observed by the City.~~
- ~~Tracer wire box to be AA Manufacturing Tracer Wire Receptacle Model TW-18-2~~

Sheet 2

12. Please consider an alternative to the curb openings with erosion stone. If depth is an issue, consider utilizing a rain guardian. **Please respond.**

~~13. Please label the drive width on the north side of the site.~~

~~14. Please provide a detail for the gates.~~

~~15. Staff questions what the linework running down the existing north side of the building and across the new drive is.~~

~~16. Please dimension the new parking stalls.~~

17. Staff questions if a new transformer is needed for the addition. If so, please provide location and screen. **Please respond.**

~~18. Please show existing overland flowage easement.~~

~~19. Approach in ROW to be 8" thick PCC and connection to be SUDAS Type A with B joint.~~

~~20. Please provide a fence detail.~~

21. Staff questions how garage will be handled. Please provide a dumpster enclosure if handed externally. **Staff does not see the enclosure. Please provide location and detail.**

22. Please provide for sidewalk along the SE Gateway frontage. Include a pedestrian connection into the site.

Sheet 3

23. Please provide a temporary grading easement from the property to the north, or shift grading activity to be contained on the subject property. **Staff questions if there is a stray line on the adjoining property.**
24. Please provide for the basin overflow elevation and location. **With the required sidewalk along SE Gateway, staff questions if this area is adequately graded.**
25. Please provide an alternative to the revetment mat. A mowable reinforced spillway is preferred.
26. Please direct water toward intake #2 with a designed spillway.
27. The spillway elevation = 946.00' does not provide 1-ft. of freeboard. Please rectify.

Sheet 4

- ~~28. Add a note to relocate the existing hydrant and auxiliary valve in the proposed driveway and cap the lead at the tee.~~
- ~~29. Add a note to remove existing hydrant on the south side of the building to extend the watermain. Verify with hydrant coverage if the hydrant is eliminated or relocated.~~
30. A valve will need to be installed at the connection to the existing main to separate the new main for testing. Other options may be to utilize a tapping sleeve and valve or to verify and utilize the existing service shown 100' south of proposed driveway. **Please respond.**
- ~~31. The original site plan called for an 8x6x6x6 cross at the SE corner of building, this will need to be verified if an 8" main is proposed.~~
- ~~32. Add a note to Intake #2 to remove existing FES.~~
- ~~33. Add a note to remove existing FES at 12" storm extension on the north side of existing building.~~
- ~~34. Add diameter to proposed area intake #3.~~
- ~~35. Provide type of material to proposed 12" roof drain collector on the north side of proposed addition.~~

36. Label the existing 6" subdrain in the bottom of the basin. Will this need to be protected during grading and will it need to be extended when basin grading is completed? **Revise label to reflect storm. It is shown as sanitary. Staff questions if it needs to be 6"**
37. **An additional hydrant is necessary along the north side of the site. See attached.**
38. **The hydrant at the SW corner of the building needs to be shifted west, so provide coverage along the west side of the building. See attached.**
39. **Verify that the relocated hydrant is still within 100-feet of the FDC.**
40. **Will the 4" PVC connection (from perforated riser to 15-inch RCP orifice plate) handle 100-year storm discharges ($Q_{100} = 2.14$ cfs)?**

Architecture

41. ~~Staff appreciates the applicant's attention to the glazing requirements within the corridor~~
42. Please provide architectural uplighting per 165A. **Please provide.**

SWPPP

43. Submit a SWPPP book for review. **Please provide.**

SWMP

44. **Place existing drainage map back into SWMP (1st submittal page 21).**
45. **The stage/storage table on page 49 suggests the elev = 945.01' should store the WQv, but the hydrograph on page 48 should show a more detail max elevation and max storage. Please develop a hydrograph that demonstrates a max storage = 16,509 cubic feet and max discharge = 0.38 cfs.**
46. **The perforated riser holes are 1-5/8" ϕ on pages 7 and 49 but 1-1/2" on SP page 5. Pipe spacing of 3-3/8" (SP page 5) also does not make sense. Configuration of riser pipe on page 7 does not match SP page 5 or orifice information on page 49. Please reconcile.**
47. **Page 8 – $V_s/V_r = .642$ is correct, but q_o/q_i ratio = 0.06 is shown wrong. Ratio is 0.03.**

48. Page 8 – develop and print the hydrograph for the 1-year, 24-hour storm to establish correct max weir elevation (945.70' shown) and max storage volume = 17,773 cubic feet.
49. Page 9 – first and second paragraphs: strike two occurrences of “and within 24 hours of a 0.5” or greater rain event.” GP #2 only requires an inspection every 7 calendar days.
50. Page 9 – first paragraph: change the word “above” to “below” in the sentence “...with wetland species in accordance with the site plan *above* the 24 hour storm storage elevation”.
51. Page 9 – third paragraph: strike the first sentence and replace it with “Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.” This is language from GP #2 regarding the old standard of 21 calendar days.
52. Page 11 – For HGL calcs, slot drain at 0.28% slope should end at proposed MH#1. Please rectify with proper slopes and lengths.
53. Page 11 – For HGL calcs, add the existing pipe (~0.60%) from proposed MH#1 to EX#3.
54. Page 11 – Verify 10-ft. of 12-inch PVC pipe from roof drain (NE corner of proposed building) is 1%. Fall is 0.30-ft. in 10-ft.
55. Page 11: Drainage areas SLOTTED DRAIN, INTAKE 2, RD1, AND RD2 must use current SUDAS standards for rainfall intensity. For 10 minute TOC, these are 5.08, 5.92, and 9.15 inches per hour for the 5, 10, and 100 year storms.
56. Page 14: show drainage area EX RD. Show green and hard acreages in drainage areas SLOTTED DRAIN and INTAKE 2. No calculations are shown for the composite “C” value.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: January 28, 2020
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: February 4, 2020 at 5:30 at the Grimes City Hall

COUNCIL MEETING:

February 28, 2020 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff". The signature is fluid and cursive, with the first name "Alex" written in a smaller, more compact script than the last name "Pfaltzgraff".

Alex Pfaltzgraff
Development Services Director



MAT. LABEL	MATERIAL DESCRIPTION MATERIAL SPECIFICATION INFORMATION
CANOPY-1	PREFINISHED METAL CANOPY: HORIZONTAL STRIATIONS, BRONZE
CFWALL-1	EXPOSED EXTERIOR FOUNDATION WALL: RUBBED SMOOTH, PAINTED TO MATCH PRECAST-1
CMU-1	CONCRETE MASONRY UNITS: SMOOTH, PAINTED TO MATCH PRECAST-1
COPING-1	PREFINISHED METAL COPING: BRONZE
CAST-ORETE-1	CAST IN PLACE REINFORCED CONCRETE: SMOOTH w/ REVEALS TO MATCH PRECAST, PAINTED OFF-WHITE
PRECAST-1	INSULATED CONCRETE PRECAST PANEL: (Load Bearing) SMOOTH w/ MAX. DEEP V REVEALS, PAINTED OFF-WHITE
ROOF-1	MEMBRANE ROOF: FULLY ADHERED WHITE
SF-1	T.B. ALUMINUM STOREFRONT FRAMING: CLEAR ANODIZED FINISH BRONZE ANODIZED TO MATCH COPING/CANOPY.
SP-1	OPAQUE SPANDREL GLASS: COLOR TO MATCH VIS-1 GLASS
VIS-1	1" INSULATED VISION GLASS: BRONZE TINT w/ LOW E COATING

H. METAL MAN DOORS & FRAMES: PAINTED TO MATCH PREFINISHED METAL COLOR.
OVERHEAD PANEL DOORS: METAL PRE-FINISHED WHITE W/ CLEAR VIEWING WINDOWS.
LOUVERS: METAL PRE-FINISHED WHITE TO MATCH ADJACENT PRECAST PANEL COLOR.
LIGHT FIXTURES: PRE-FINISHED MEDIUM BRONZE HOUSINGS.
BOLLARDS: CONCRETE FILLED STEEL BOLLARDS PAINTED SAFETY YELLOW.

COMPOSITES ONE ADDITION

STANTINE-GATEWAY PROPERTIES LLC, 330 N WABASH RD STE 3200

SITE PLAN

GENERAL LEGEND	
PROPOSED	
-----	PLAT BOUNDARY
-----	SECTION LINE
-----	LOT LINE
-----	CENTERLINE
-----	EASEMENT LINE
-----	FLARED END SECTION
-----	DRAIN BASIN OR SEDIMENT RISER
-----	DRAIN BASIN WITH SOLID GRATE
-----	WATER VALVE
-----	FIRE HYDRANT ASSEMBLY
-----	BLOW-OFF HYDRANT
-----	SCOUR STOP MAT
-----	TURF REINFORCEMENT MAT
-----	STORM SEWER WITH SIZE
-----	WATER SEWER WITH SIZE
-----	WATER SERVICE
-----	PROPOSED CONTOUR
-----	SILT FENCE
-----	ADDRESS
-----	RIPRAP
EXISTING	
-----	LOT LINE
-----	SANITARY/STORM MANHOLE
-----	WATER VALVE
-----	FIRE HYDRANT
-----	STORM SEWER SINGLE INTAKE
-----	STORM SEWER DOUBLE INTAKE
-----	STORM SEWER ROUND INTAKE
-----	FLARED END SECTION
-----	DECIDUOUS TREE
-----	CONIFEROUS TREE
-----	SHRUB
-----	POWER POLE
-----	STREET LIGHT
-----	GUY ANCHOR
-----	ELECTRIC TRANSFORMER
-----	GAS METER
-----	TELEPHONE RISER
-----	SIGN
-----	UNDERGROUND TELEVISION
-----	UNDERGROUND ELECTRIC
-----	UNDERGROUND GAS
-----	UNDERGROUND FIBER OPTIC
-----	UNDERGROUND TELEPHONE
-----	OVERHEAD ELECTRIC
-----	SANITARY SEWER WITH SIZE
-----	STORM SEWER WITH SIZE
-----	WATER MAIN WITH SIZE
-----	EXISTING CONTOUR
-----	TREELINE
-----	B.S.L.
-----	P.U.E.
-----	M.O.E.



VICINITY SKETCH

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	DEMOLITION PLAN
3	DIMENSION PLAN
4	GRADING PLAN
5	UTILITY PLAN
6	LANDSCAPE PLAN

PAVING NOTES

- ALL PAVING WITHIN THE CITY RIGHT-OF-WAY (DRIVEWAY APPROACHES AND SIDEWALKS) SHALL REQUIRE OBSERVATION BY THE CITY. CONTACT CITY OF GRIMES DEVELOPMENT SERVICES (515-486-4050) TO SCHEDULE OBSERVATION SERVICES.

PLANTING NOTES

- ALL SITEWORK, SODDING AND LANDSCAPING SHALL BE IN ACCORDANCE WITH SDAS SPECIFICATIONS INCLUDING ALL APPLICABLE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS.
- ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-1990)
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
- THE CONTRACTOR SHALL REMOVE THE TREE STAKES ONE YEAR AFTER INSTALLATION.
- NO PLANT MATERIAL SHALL BE SUBSTITUTED WITHOUT AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
- ALL TREES AND SHRUBS SHALL BE MULCHED WITH AT LEAST 3" SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT ALL UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER OF THE UTILITY.
- ONE WEEK PRIOR TO INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT.
- THE CONTRACTOR SHALL STAKE LOCATION OF PLANTS FOR LANDSCAPE ARCHITECT'S APPROVAL BEFORE DIGGING HOLES.
- ALL DECIDUOUS TREES SHALL BE PLANTED AT LEAST 5' FROM R.O.W. AND CONIFEROUS TREES AT LEAST 10' FROM R.O.W.
- ALL DISTURBED AREAS SHALL BE SODDED/SEEDED AS NOTED ON THE LANDSCAPE PLAN.
- THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE GROUND COVER AND ENSURE THAT ADEQUATE VEGETATIVE COVER IS PRESERVED
- ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED PER PLAN.
- PER ZONING CODE, ONE OVERSTORY TREE PER 50 LF OF PARKING ALONG PUBLIC ROW SHALL BE REQUIRED. 91 LF OF PARKING REQUIRES 2 OVERSTORY TREES TO BE PLANTED.

OWNER

STANTINE-GATEWAY PROPERTIES LLC
BDO USA LLP
PROPERTY TAX SERVICES
330 N WABASH RD STE 3200
CHICAGO, IL 60611-3586

LAND USE

OFFICE / WAREHOUSE

BUILDING SETBACKS

(SUBJECT PROPERTY & ADJOINING PARCELS)
30' FRONT YARD
40' REAR YARD
25' SIDE YARD REQUIRED ONLY WHEN ADJACENT TO 'R' DISTRICT OR STREET R.O.W.

SITE AREAS

BUILDING	EXISTING	40,090 SF (17%)	
	PROPOSED	36,000 SF (15%)	
	PROPOSED FUTURE	4,050 SF (1%)	
TOTAL BUILDING		80,140 SF (33%)	

PAVING			
	EXISTING	23,521 SF (10%)	
	PROPOSED	50,862 SF (22%)	
	PROPOSED FUTURE	1,230 SF (3%)	
TOTAL PAVING		75,613 SF (35%)	

GREEN SPACE			
TOTAL	EXISTING	84,802 SF (32%)	
	PROPOSED	24,060 SF (10%)	
TOTAL		108,862 SF (42%)	

GREEN SPACE REQUIRED 10%
REQUIRED: 24,060 SF
PROVIDED: 84,802 SF

LEGAL DESCRIPTION

LOTS 1 AND 8, INTERSTATE GATEWAY BUSINESS PARK, AN OFFICIAL PLAT, RECORDED IN BOOK 8514, PAGE 438 POLK COUNTY RECORDER'S OFFICE, CITY OF GRIMES, POLK COUNTY, IOWA.
PARCEL CONTAINS 5.530 ACRES MORE OR LESS.

1. Sanitary Sewer Notes:

- The Contractor is required to place a temporary plug in the existing downstream sanitary sewer manhole prior to the start of construction. The plug shall be removed following approval of construction by the City of Grimes.
- Sanitary gravity pipe material shall be PVC SDR 26 or Truss (8A to 15A).
- Sanitary gravity service pipe material shall be PVC SDR 23.5 (4A to 6A).
- All sanitary sewer manholes shall have steps.
- All sanitary sewer manholes castings shall be sealed with Heat Shrink Sleeves.
- All sanitary sewer manhole castings located within pavement shall be Type B-PCC W/Adjusting Mechanism.
- Sanitary Sewer testing, cleaning & televising shall be completed prior to paving. The sewer system shall be flushed with water prior to televising.

1. Water Main Notes:

- All fire hydrants shall be American Flow Control-Waterous Pacer WB-67-250, Mueller Super Centurion 250 (3-way A-423), or Glow Medallion F-2545. All hydrants shall have the following: 6A MJ Shoe, 2-1/2A Hose Nozzle, 4-1/2A Steamer Nozzle, NST Threads, Pentagon Operating Nut, Chain on cap, open left, 5-1/2" bury, and factory painted red. The minimum spool pipe length from auxiliary valve to hydrant shoe shall be 2.0'.
- All hydrants will immediately be covered with a black plastic bag (or equivalent) once the hydrant is installed. The City of Grimes will notify the Contractor when the bags can be removed.
- A tracer wire receptacle shall be installed at each hydrant, AA Manufacturing Tracer Wire Receptacle Model TN-18-2.
- All valves shall be resilient wedge gate valves.
- Water service shall be 1-inch minimum type K copper.
- Proposed Water Main shall be pressure tested and chlorinated by the Developer. The filling of the water main shall be done by the City of Grimes. The Bacteria test and submittal of test to lab shall be done by the Developer and results provided to the City of Grimes Engineering Dept. and by FAX to US Water at 515-486-7300. If the test does not pass, the Contractor will be required to pay for all the water used to repeat the test.
- All watermain fittings to be restrained joint, Mega-lug or approved equal.

1. Storm Sewer Notes:

- All storm sewer in the ROW shall be RCP, unless otherwise approved by the City.
- All flared end sections shall have footings and apron grates. The last 3 pipe sections and the flared end section on all culverts shall be tied. All storm sewer joints shall be wrapped with engineering fabric.
- The Contractor is responsible for repairing any field tile damaged during construction. The tile should be directed to public storm sewer if possible. The Contractor shall record the elevation and location of all tiles.
- Storm Sewer cleaning & televising shall be completed prior to paving. The sewer system shall be flushed with water prior to televising.
- Use O ring gaskets on storm sewers crossing over watermain per IDNR requirement.

1. General Notes:

- the City of Grimes must be notified by all contractors 48 hours prior to commencing work, call City of Grimes Development Services (515-486-4050).
- All work involving the sanitary sewer and water departments shall be scheduled through City of Grimes Development Services (515-486-4050).
- All work shall be done in accordance with the current version of the Iowa Statewide Urban Design and Specifications for Public Improvements on the date of approval and the City of Grimes Supplemental Specifications.
- All utility contractors and/or owners shall be responsible to provide the City of Grimes with as-built drawings of all improvements.
- Tracer wire shall be added to all water main. a grounding rod shall be placed as per the Urban Specifications.
- The contractor is required to take due precautionary measures to protect the utilities or structures at the site. It shall be the contractors responsibility to notify the owners of utilities or structures concerned before starting work. The contractor shall notify the proper utility immediately upon breaking or damage to any utility line or appurtenances, or the interruption of their service. If existing utility lines are encountered that conflict in location with new construction, the contractor shall notify the engineer so that the conflict may be resolved.
- Civil engineering consultants, Inc., is not a geotechnical engineer and recommends that this set of plans be reviewed by a geotechnical engineer and a geotechnical
- A preconstruction meeting is required prior to the start of construction. The Contractor shall be responsible to coordinate this meeting. Contact City of Grimes Engineering Dept. (515-486-4050).
- All permits (IDNR, SWP, IDOT, Army Corp., etc.) shall be obtained prior to the start of construction.
- The Developer and/or Contractor shall be responsible to provide the City of Grimes with Record Drawings of all improvements as per City standard procedures.
- Typical Building Service Layout to reflect the City's service order from Left to right facing the lot, Sanitary, Water, Sump.
- A Knox box is required by the fire department and shall be obtained at City Hall.
- All site lighting shall not spill onto adjacent properties or right-of-ways.
- Provide a 4-year maintenance bond for all public improvements

Civil Engineering Consultants, Inc.

2400 86th Street, Unit 12, Des Moines, Iowa 50322
515.276.4884, mail@cecinc.com



DATE:	3rd SUB. 01-28-2020
	2ND SUB. 01-13-2020
	1ST SUB. 12/28/2019
DATE OF SURVEY:	NOV. 05, 2019
DESIGNED BY:	ARP
DRAWN BY:	

PRELIMINARY

COMPOSITES ONE ADDITION
3450 SE GATEWAY DRIVE, GRIMES IA 50111

COVER

SHEET

OF 6

A-2026

DATE:	3rd SUB. 01-28-2020
	2ND SUB. 01-13-2020
	1ST SUB. 12/23/2019
DATE OF SURVEY:	NOV. 05, 2019
DRAWN BY:	ARP

PRELIMINARY

COMPOSITES ONE ADDITION
33450 SE GATEWAY DRIVE, GRIMES IA 50111

DEMOLITION PLAN

SHEET
2
OF 6

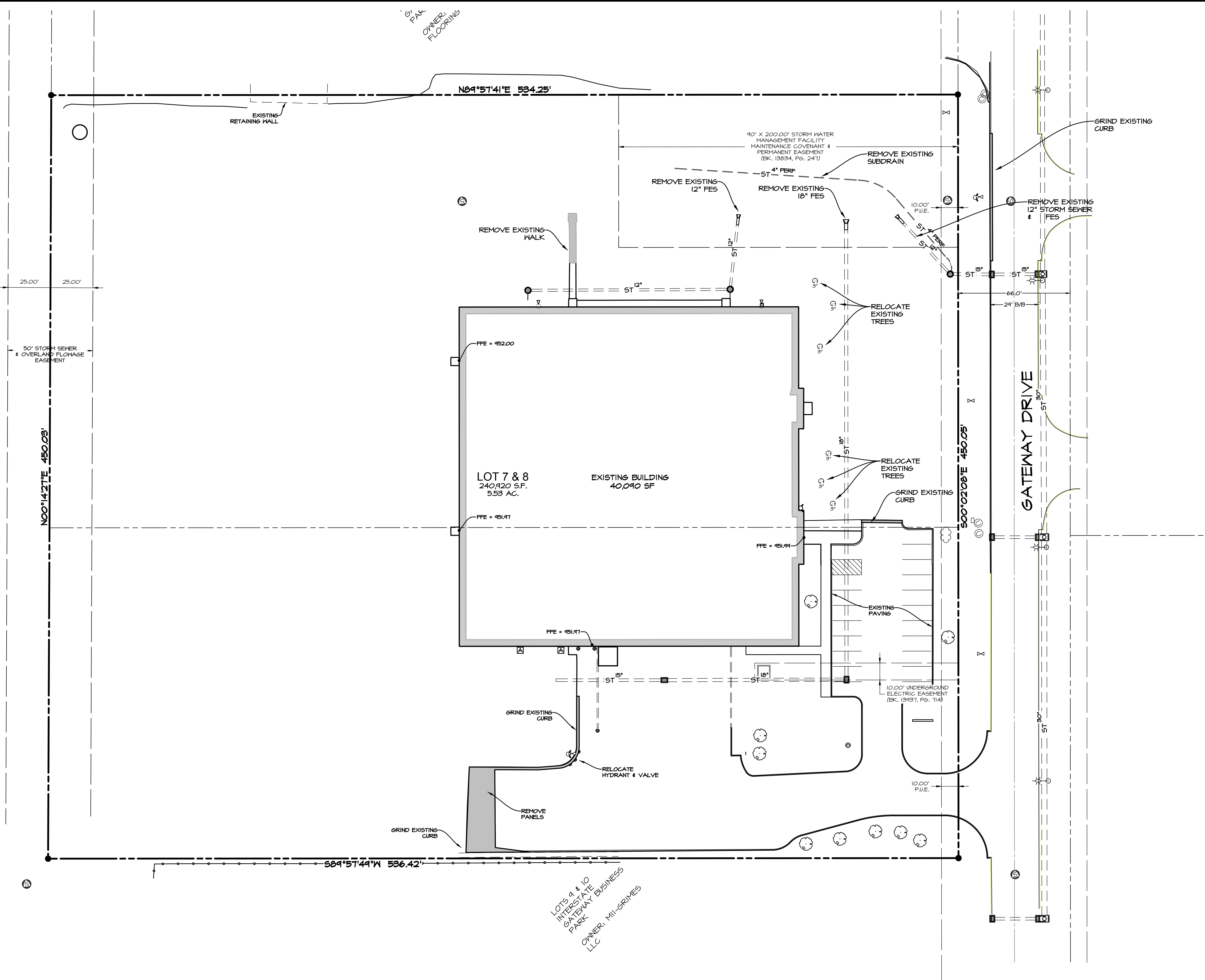
A-2026



SCALE: 1"=30'



A horizontal scale bar with alternating black and white segments. The segments are labeled 0', 10', 20', 30', and 60' from left to right. The total length of the bar represents 60 feet.



PARCEL B BOOK
13039 PAGE 475
OWNER: READY MIX
PROPERTIES LLC

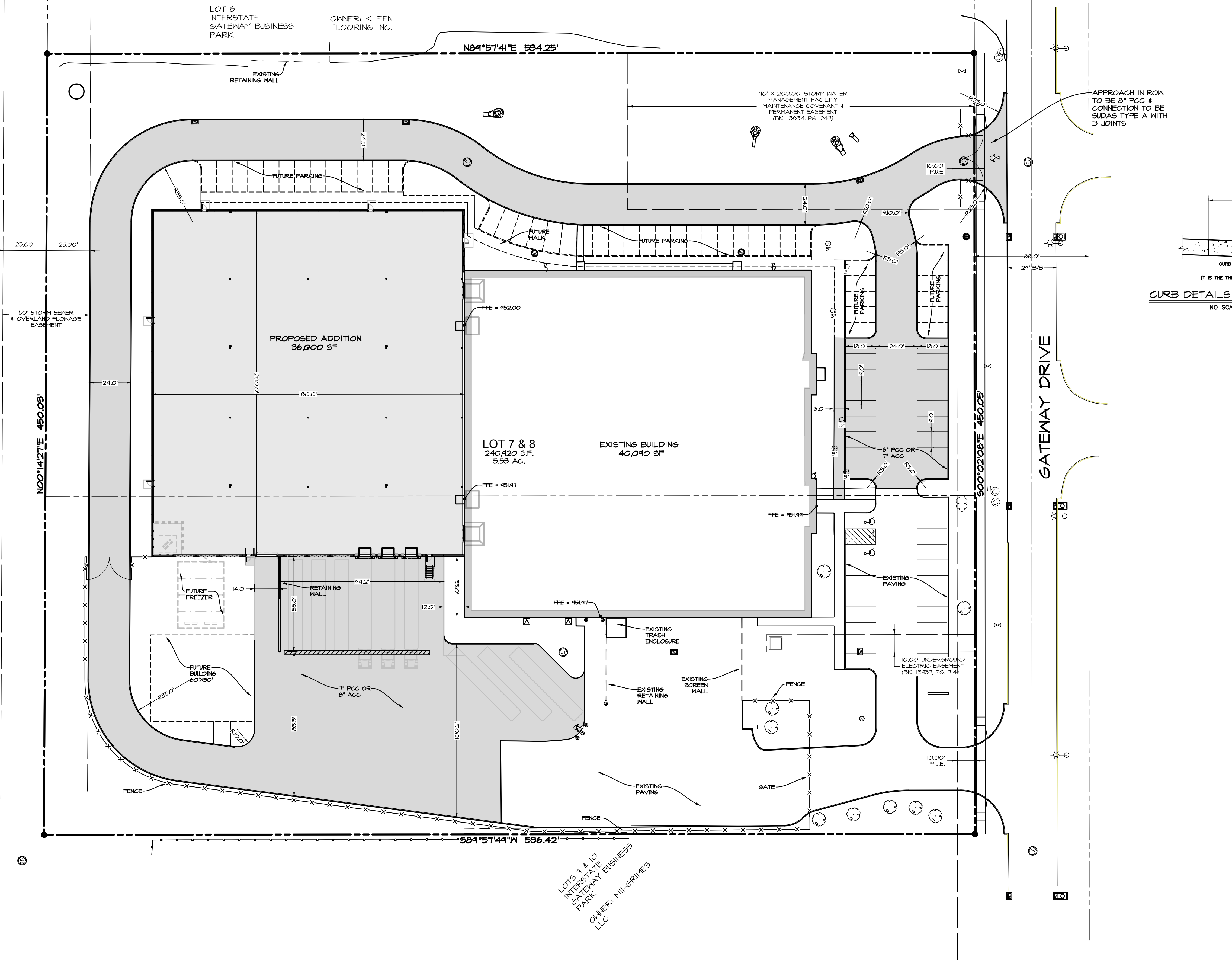
PARCEL A BOOK
13039 PAGE 472
OWNER: READY MIX
PROPERTIES LLC

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PARCEL A BOOK
13034 PAGE 412
OWNER: READY MIX
PROPERTIES LLC

PARCEL B BOOK
13034 PAGE 415
OWNER: READY MIX
PROPERTIES LLC

50.00' STORM WATER
MANAGEMENT FACILITY
MAINTENANCE COVENANT &
PERMANENT EASEMENT
(BK. 13834, PG. 241)



SCALE: 1"=30'

0' 10' 20' 30' 60'



PRELIMINARY

COMPOSITES ONE ADDITION
3450 SE GATEWAY DRIVE, GRIMES IA 50111

DIMENSION PLAN

SHEET
OF 6

A-2026

DATE:

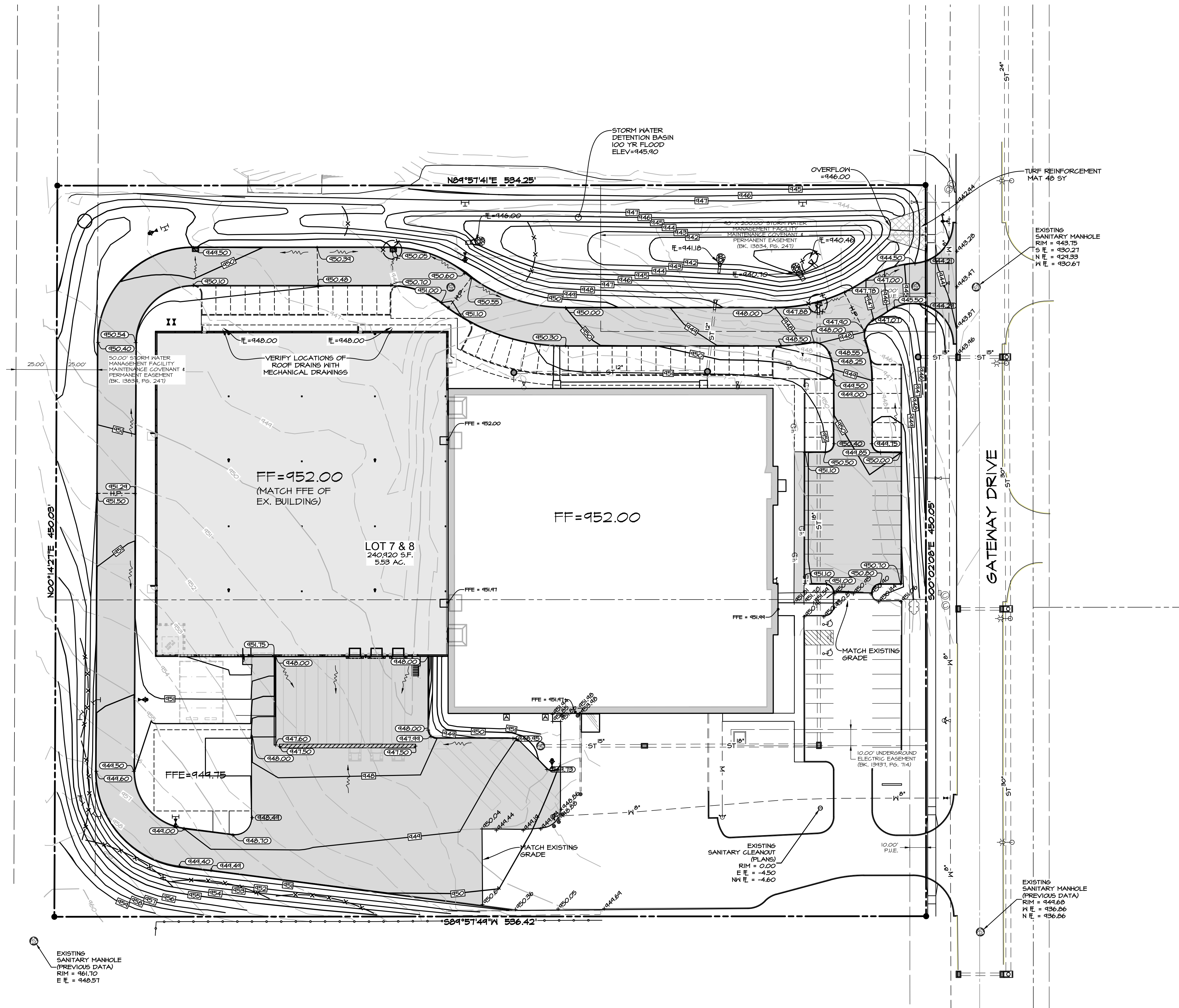
3rd SUB. 01-28-2020
2ND SUB. 01-13-2020
1ST SUB. 12/23/2019
DATE OF SURVEY: NOV. 05, 2019
DESIGNED BY: ARP
DRAWN BY:



Civil Engineering Consultants, Inc.

2400 86th Street, Unit 12, Des Moines, Iowa 50322
515.276.4884 mail@cecinc.com

Q:\A-FILES\A-2026\A-2026_CED Drawings\Construction Documents\Site Plan\A-2026 (6) (GED).dwg, 1/26/2023 3:46:05 PM, mmmgwp, 11



SCALE: 1"=30'



PRELIMINARY

COMPOSITES ONE ADDITION
3450 SE GATEWAY DRIVE, GRIMES IA 50111

GRADING PLAN

SHEET

4
OF 6

A-2026

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/23/2019

DATE OF SURVEY:

NOV. 05, 2019

DESIGNED BY:

ARP

DRAWN BY:

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/23/2019

DATE OF SURVEY:

NOV. 05, 2019

DESIGNED BY:

ARP

DRAWN BY:

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/23/2019

DATE OF SURVEY:

NOV. 05, 2019

DESIGNED BY:

ARP

DRAWN BY:

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/23/2019

DATE OF SURVEY:

NOV. 05, 2019

DESIGNED BY:

ARP

DRAWN BY:

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/23/2019

DATE OF SURVEY:

NOV. 05, 2019

DESIGNED BY:

ARP

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3rd SUB. 01-28-2020

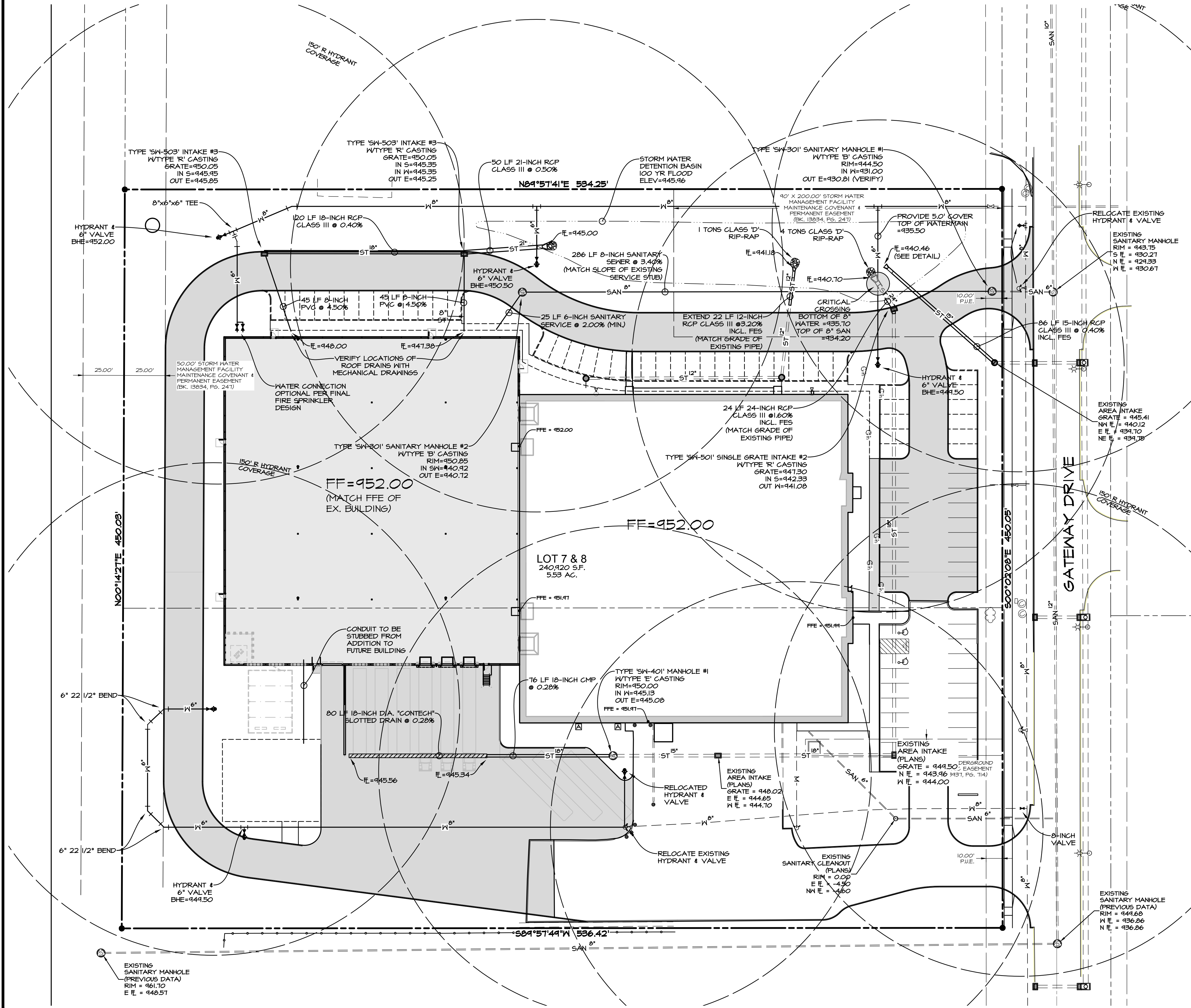
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1ST SUB. 12/23/2019

DATE OF SURVEY:

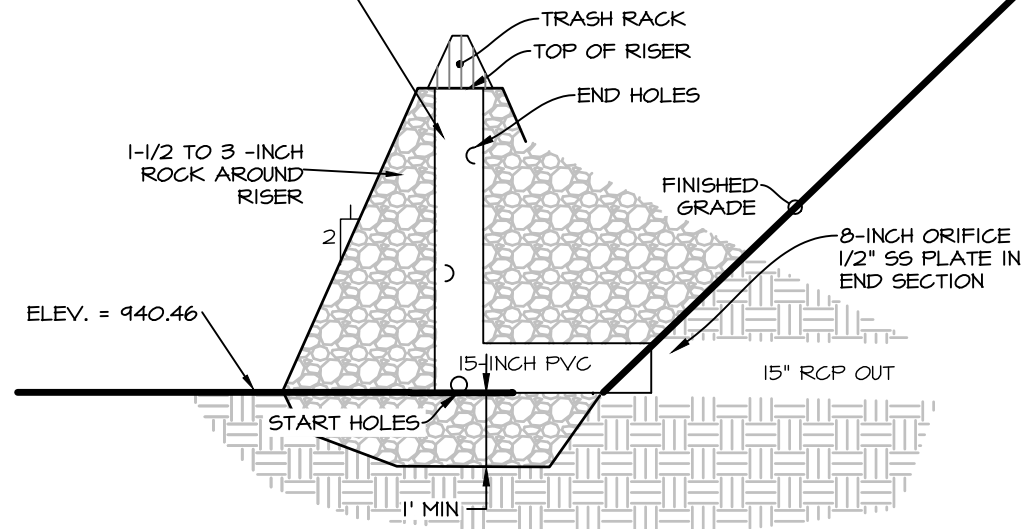
NOV. 05, 2019

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POND	ELEVATION	VOLUME
100 YR STORM	945.96	
WATER QUALITY - MG	945.01	16,504 C.F.
CHANNEL PROTECTION	945.10	11,178 C.F.

- 8-INCH ORIFICE @ FES
- 15-INCH DIA. PERFORATED PIPE WITH ONE(1) COLUMN OF 3 EA. 1 1/2" (1.5") DIA. HOLES @ 1/4" (0.25") O.C.
- START HOLES = 940.46
- END HOLES = 945.01
- TOP OF RISER = 945.10



POND RISER DETAIL
NO SCALE

SCALE: 1"=30'



PRELIMINARY

COMPOSITES ONE ADDITION
3450 SE GATEWAY DRIVE, GRIMES IA 50111

UTILITY PLAN

SHEET
5
OF 6

A-2026

DATE:

3rd SUB. 01-28-2020

2ND SUB. 01-13-2020

1ST SUB. 12/28/2019

NOV. 05, 2019

ARP

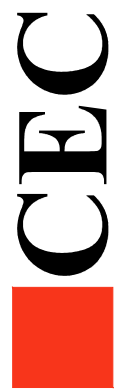
DATE OF SURVEY:

DESIGNED BY:

DRAWN BY:

Civil Engineering Consultants, Inc.

2400 86th Street, Unit 12, Des Moines, Iowa 50322
515.276.4884 mail@cecinc.com

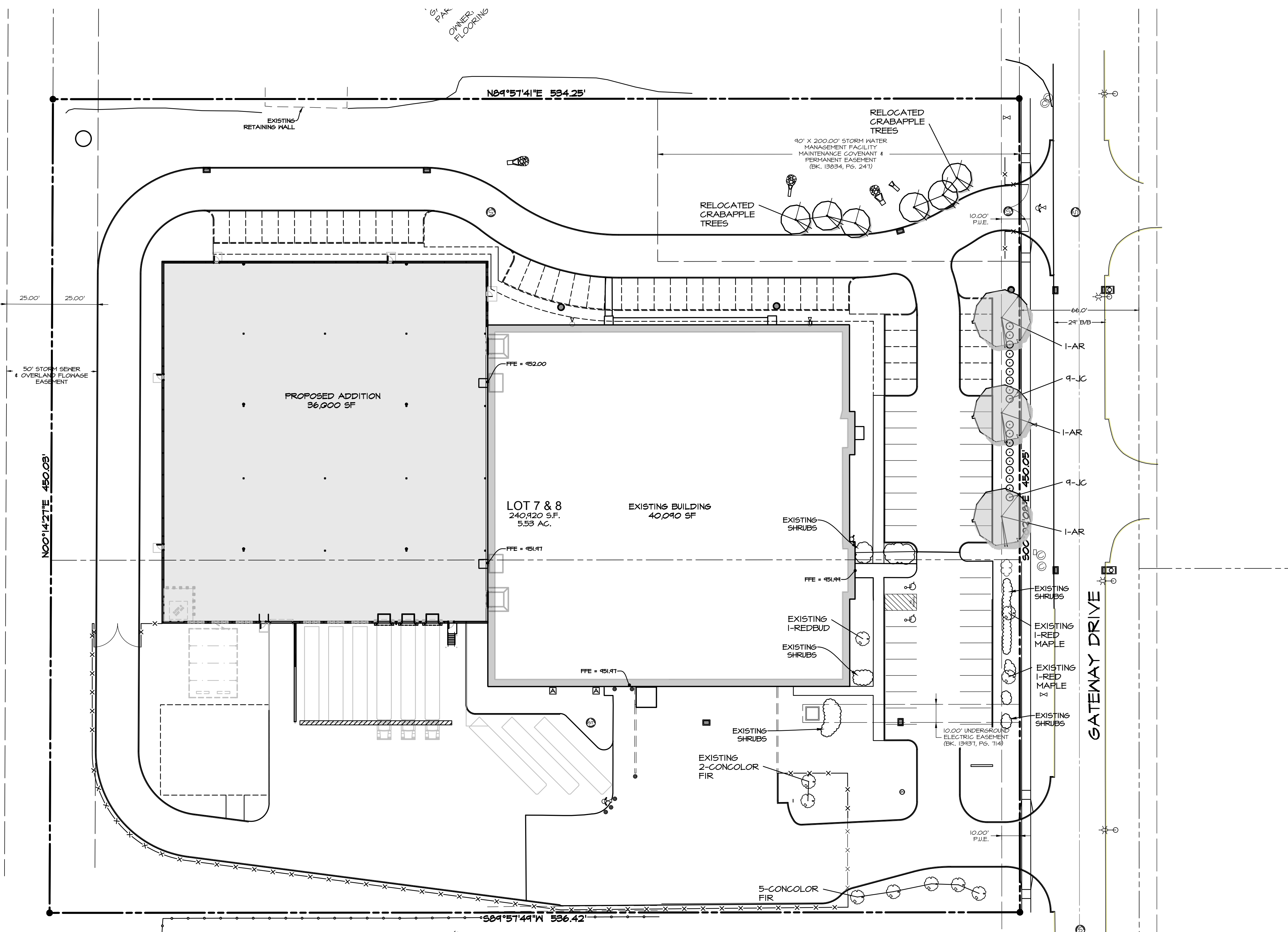


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PARCEL B BOOK
15034 PAGE 475
OWNER: READY MIX
PROPERTIES LLC

PARCEL A BOOK
15034 PAGE 472
OWNER: READY MIX
PROPERTIES LLC

50.00' STORM WATER
MANAGEMENT FACILITY
MAINTENANCE COVENANT &
PERMANENT EASEMENT
(BK. 19834, PG. 247)



PERIMETER LAND. REQUIREMENTS

EXISTING
REQUIRED: 1 TREES/50 LF
99/50 = 2 TREES
3 FEET TALL HEDGE
PROVIDED: 2 TREES
4 HEDGE PLANTINGS

PROPOSED
REQUIRED: 1 TREES/50 LF
145/50 = 3 TREES
3 FEET TALL HEDGE
PROVIDED: 3 TREES
4 HEDGE PLANTINGS

LANDSCAPING REQUIREMENTS (PROVIDED WITH ORIGINAL SITE PLAN)

REQUIRED: 2 TREES/3000 SF
24090 SF/3000 = 8
16 TREES
1 SHRUB/1000 SF
24090 SF/1000 = 24
24 SHRUBS

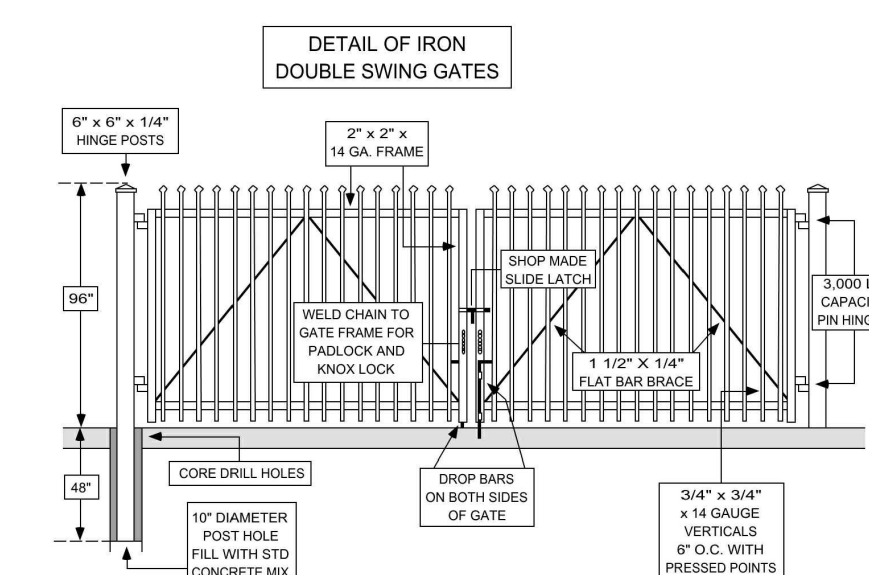
PROPOSED: 20 TREES TOTAL
67 SHRUBS

LANDSCAPING SCHEDULE

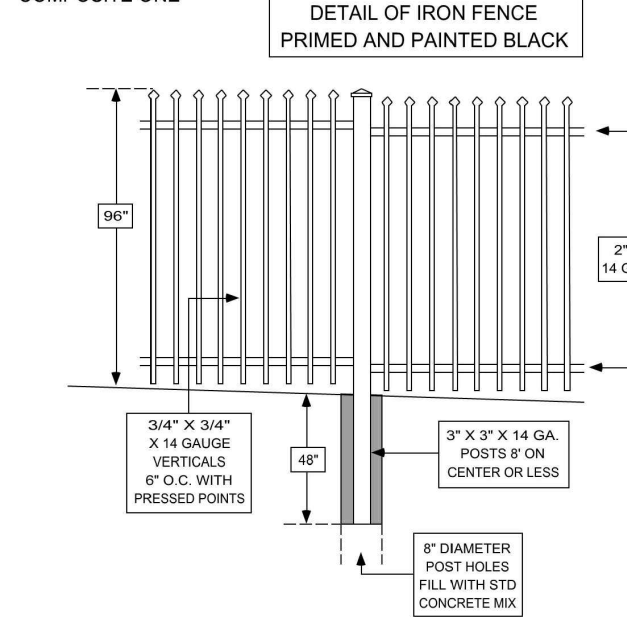
KEY	QUAN	BOTANICAL/COMMON NAME	SIZE	CONDITION	REMARKS
AR	3	Acer rubrum RED MAPLE	2" Cal.	TS/B#B	SEE PLAN
JC	18	Juniperus chinensis "Mint Julep" MINT JULEP JUNIPER	#2	Cont.	SEE PLAN

LOTS 9 & 10
INTERSTATE
PARK
OWNER: MIL-GRIMES
LLC

COMPOSITE ONE



COMPOSITE ONE



PRELIMINARY

COMPOSITES ONE ADDITION
3450 SE GATEWAY DRIVE, GRIMES IA 50111

LANDSCAPE PLAN

SHEET

OF 6

A-2026

DATE:

3rd SUB. 01-28-2020
2ND SUB. 01-13-2020
1ST SUB. 12/23/2019
DATE OF SURVEY: NOV. 05, 2019
DESIGNED BY: ARP
DRAWN BY:



CEC

Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12, Des Moines, Iowa 50322
515.276.4884, mail@cecinc.com

SCALE: 1"=30'



Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: February 4, 2020
RE: Composites One Addition – Site Plan Amendment

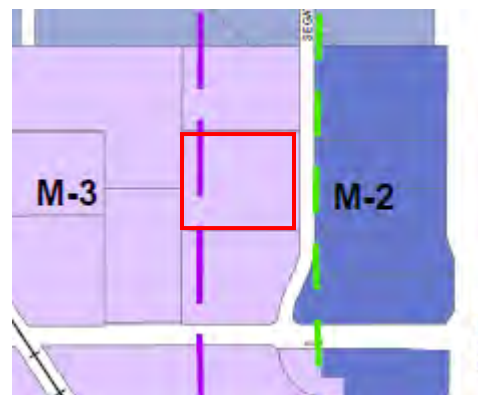
GENERAL INFORMATION:

Applicant:	Stantine – Gateway Properties LLC
Requested Action	Site Plan Amendment
Location	3450 SE Gateway Drive

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Industrial	General Industrial	M-3
North	Industrial	Business Park	M-3
South	Industrial	General Industrial	M-3
East	Commercial/Vacant	Light Industrial	M-2
West	Industrial	General Industrial	M-3

BACKGROUND:

The applicant is requesting approval of a site plan amendment, which will allow for the construction of an addition to the existing building. The proposed addition consists of 36,000 square feet. The site plan also reserves area for another future expansion of 4,050 square feet. In total, the building additions will increase the square footage from 40,090 square feet to 80,140 square feet.

The property is located within Zone 2 of the HWY 141 Corridor Overlay District.

ANALYSIS:*Building/Elevations:*

The elevations on the existing building will be continued to the building addition, which consists of precast walls, windows, and wall pack lighting. On the front elevation, another store front will be added on the north side of the building for added visual appeal and variation. The additional store front entry and glazing will increase the glazing along the front façade to the minimum 20% as required by the overlay district.

Site Layout:

There is one existing driveway on SE Gateway Drive near the southern property line. As part of the addition, another driveway is proposed off of SE Gateway Drive near the northern property line and will line up with the existing driveway for the Canoyer Garden Center on the east side of SE Gateway Drive.

The addition is located in the rear of the existing building. An internal road loops around the building to control truck traffic for loading and unloading. The loading area is proposed to be closed off with an 8' iron fence and gates. The road will also provide fire access in the event of an emergency.

The existing parking lot will be expanded to the north to accommodate the addition. There is additional space on site for future parking along the north side of the building should there be a need for more parking.

Parking:

The ordinance requires a total of 1 space per every 2,000 square feet of gross floor area. Based upon the total proposed square footage, a total of 38 spaces is required.

The site demonstrates that 38 spaces are provided. As noted previously, additional parking is shown if needed in the future.

Landscaping/Streetscape:

The site is required to provide a minimum of 10% open space. As proposed, the site will provide 32%.

While there are no minimum landscaping requirements in this zoning district, the ordinance does require that trees and shrubs be planted within the open spaces and parking lot islands. As shown, the existing landscape strip along SE Gateway Drive has been extended to the north along the proposed parking lot addition.

Utilities:

Sanitary sewer access is provided from an existing 12" sewer running along SE Gateway Drive.

Water is provided from an existing 8" main within the site and will be extended to support the building addition. The addition is proposed to be fitted with a fire suppression system, therefore the appropriate FDC and fire hydrant spacing is shown.

Storm water detention is being handled via one on-site detention basin.

STAFF RECOMMENDATION:

Staff would recommend approval of the site plan for Composites One Site Plan Amendment, subject to any remaining staff comments.

CITY OF GRIMES



Alex Pfaltzgraff
Development Services Director



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

January 7, 2020

January 21, 2020

Confluence

Attn: Devon Bloesch

525 17th Street

Des Moines, IA 50309

RE: Heritage at Grimes Town Center Phase 1

Dear Mr. Bloesch:

The Development Services Department is in receipt of a proposed Site Plan for the Heritage at Grimes Town Center Phase 1. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

1. Please provide a geo-tech report for the site **Please provide a summary sheet that concludes the report and its findings.**
2. ~~Please include Grimes Standard Notes (attached).~~
3. Please provide the Heritage Review Committee approval letter. **Please submit when available. A copy will be needed prior to P&Z.**
4. ~~Please remove all landscaping from sheets other than landscaping.~~
5. ~~Please ensure that the street labels are visible on all sheets (extended and detail)~~
6. Please provide a draft utility provision plan for the site (sanitary and water) **Please submit when available.**
7. Water and sewer are anticipated to be public. As such, please prepare separate water and sewer construction drawings for review. Plan and profile will be necessary. Please submit DNR water and sewer permits. **Please submit when available.**
8. Easements will be necessary for the following: **Please submit when available.**
 - Ingress/egress

- Public Water
- Public Sewer
- Private Storm Sewer
- Electric and Telecom

Cover Sheet

- ~~9. Please provide Civil and Architecture stamps for the sheets, and notate which sheets the stamps covers.~~
10. Please provide the required vs provided open space as a percentage and separate for phase 1. **Please provide as a percentage on Phase 1.**
- ~~11. Please relocate the landscaping requirements to the planting sheets and separate for Phase 1.~~
- ~~12. Please separate the Phase 1 parking requirements.~~
- ~~13. Please revise the Zoning to R-4: Planned Unit Development “Heritage PUD”~~
- ~~14. Please remove proposed rezoning as no change in zoning is being requested.~~
- ~~15. Please revise existing land use to vacant.~~
- ~~16. Please revise the proposed land use to Mixed Use — 2~~
17. Please provide the building footprint area. **Please revise to building footprint.**

L0.2

- ~~18. Please include any proposed removals or demolition on this page.~~

L1.0

- ~~19. Please increase the line weight around Phase 1 to better identify.~~
- ~~20. Please coordinate the parking counts on this sheet with the cover sheet. There appears to be a minor discrepancy in the figures.~~

L1.1

- ~~21. Please ensure all sidewalks that are adjacent to parking areas are 6 feet in width. Sidewalks with appear to vary and should be standardized.~~
- ~~22. Please provide a detail for Layout Keynote E.~~
- ~~23. Staff questions where Layout Keynote F is provided on the site.~~
- ~~24. Please note the location of all accessible stall signage and provide detail.~~
25. Please label the width of the sidewalk NE of the building under Keynote B. **Please adjust to 5 feet.**
- ~~26. Staff questions if any bike parking is proposed within the site. Note that the Heritage PUD calls out a specific style.~~
- ~~27. Staff questions if any garbage containers (pedestrian scale) are to be provided within the site. Note that the Heritage PUD calls out a specific style.~~
- ~~28. Staff questions if the drive-through has a canopy, and the line work shown is the canopy base. If so, please show linework for the roof structure.~~
29. Please provide the location of all ground mounted mechanical units, or note that they will be roof mounted. Note that roof mounted will required screening. **Provide when available.**
30. Please provide for the location of all transformers. Note that appropriate screening will be required. **Please provide location. Staff cannot find it on the plans.**
- ~~31. Please provide a detail for the dumpster enclosure. Note that the dumpster should be constructed out of materials similar to the principal building and provide steel framed gates and clad with maintenance free materials.~~

L1.2

- ~~32. Please show the proposed park grading on the extended sheet.~~
- ~~33. Please remove all proposed buildings and roads, and only show the to be constructed improvements.~~

L1.3

- ~~34. Please identify the proposed finished floor elevation of the building.~~

- ~~35. Please provide a detail sheet for all pedestrian ramps and crossings internal to the sheet.~~
- ~~36. Please provide an addition note that indicates if the two existing pedestrian crossings are greater than 2%, that they will be brought into compliance.~~
- 37. Staff questions if the swale on the west side of the site should be shifted north or south, so that the future storm sewer will not be under the island. **Staff is concerned about the future phasing of the project, particularly with the FES out letting under the island. This comment may go away with the future utility information previously requested.**
- ~~38. Please provide elevations at the back of walk when adjacent to the buildings.~~

L1.4

- ~~39. It appears that there is missing line work for the water and sewer systems, particular along the west side of the building.~~
- 40. Please note the location of the FDC. Ensure that the FDC has a clear path and is not obstructed by landscaping, parking spaces, or any other structure. Minimum clear path is 60". **This will need to be submitted for review. Locating of the FDC is critical. Parking is not permitted in front of FDC's.**
- 41. Please ensure that a hydrant is within 100-feet of the FDC. **Will review when FDC location is submitted.**
- 42. It appears that there are many conflicts with landscaping and hydrants. Please revise to ensure that there is a minimum of 5-feet clear space around the hydrant. **It does not appear that this was resolved. Please revise.**
- 43. Please note the service size to the building, and note that only 1 City water meter will be provided. Additional private sub-meters can be purchased and installed, however only 1 meter will be recognized by the City. **Note that the domestic can be branched off the fire service. This may help reduce service line cost.**
- ~~44. Please show a sewer stub for the adjoining property to the west, unless it is assumed that the sewer service will come from the west.~~
- ~~45. Please show all roof drain connections (assumed underground)~~
- ~~46. Please show a great interceptor and sewer routing.~~

- ~~47. Please provide a drain detail for the tree grate areas.~~
48. Please provide 18" of separation between water main and storm sewer crossings. **Not all critical crossings were adjusted. Please revise.**
- ~~49. How is STR 8A connecting to the existing pipe network? Please provide existing invert elevation and location of connection.~~
- ~~50. Pipes 8 and 9 need labels for size, length, and slope.~~
- ~~51. STR 8A is missing pipe invert to the south.~~
- ~~52. Proposed intakes 8 and 8A have the same elevations.~~
- ~~53. Does the existing sanitary sewer stub on the north side of the property need to be extended?~~
54. Double check all pipe lengths and slopes. 15" RCP on the west side of the building has a slope of 11.1%. **Provide when available.**
- ~~55. Verify intake type callouts are correct (501 curb, 511 area).~~
- 56. Make sure all text is legible. STR 7 and 10 are difficult to read.-Make sure all text is legible. STR 10 is difficult to read.**
- ~~57. Please provide invert elevations on existing storm manhole on northeast side of the building.~~
- ~~58. Add a note to verify location/size/material at the connection points for sanitary stub and storm stub.~~
59. Specify what type of storm clean out is proposed. **Please provide detail.**
60. Verify the existing storm MH at the SW corner of Heritage and 19th can accommodate an additional connection. **Please provide notes on separation between pipes.**
- ~~61. At the north watermain connection the valve south of the hydrant can be eliminated as there is a valve 40' north.~~
- ~~62. On the watermain near STR 7 show which direction the third leg of the 8x8 tee runs (W or S), move one of the proposed valves near the tee to that leg and provide a temporary blowoff hydrant at the end of the leg.~~

63. Separate the domestic and fire on the water service outside the building and put a valve/curb stop on each. **See comment 43**
64. ~~At the 8x8 tee north of STR 2, move the proposed valve from the east leg to the south leg of tee.~~
65. ~~Label proposed sanitary sewer service size, grade, material.~~
66. ~~Provide a temporary clean out on the end of the sanitary stub south from MH near service. Label pipe length.~~
67. **How is P-9 connecting to existing storm sewer? Proposed RCP is 15", note on existing RCP says 21", and label on pipe says 12". Please verify correct size and slope of existing RCP.**
68. **Please provide invert elevations on existing storm manhole on northeast side of the building.**

L1.5

69. ~~Please provide erosion protection at the end of the 21-inch outlet pipe, until vegetation gets established.~~
70. ~~Please provide stabilization practice for temporary swale and possible stockpile location on west side of project.~~
71. **Please provide stabilization practice for temporary swale and possible stockpile location on west side of project.**

L2.1

72. ~~Staff questions the tree grates that are in line with the pedestrian sidewalk. While it is understood that adequate room has been provided on the north side of walkway, the position still feels a bit awkward. Consider moving the tree grates north to the protected patio area.~~
73. ~~Please show utility linework on this sheet.~~
74. ~~Please relocate all plant materials that are in conflict with a hydrant (5-foot clear zone).~~

L3.0

75. Staff questions if any wall pack or other decorative building lighting is proposed. If so, please provide manufacture cut sheets and note locations on plans. **Please provide when available.**

L4.0

- ~~76. Staff questions where detail 03 is provided (pavers)~~
- ~~77. Staff questions where detail 12 is provided (bench). Note that the Heritage PUD calls out a bench type if being utilized.~~

L4.2

- ~~78. Staff questions where detail 06 is being used.~~

SWPPP

79. Submit a SWPPP for review. **Please submit for review.**

SWMP

- 80. Page 8: ST-8 and 9 are SW-501 structures on site plan. Please verify.**
- 81. Page 9: Pipes 5 and 11 are RCP on site plan. Please verify.**
- 82. Page 9: P-9 has a slope of 8.4% on site plan. Please verify.**

Architecture

- ~~83. Staff questions if a stone/masonry wainscoting should be provided for the areas where the architectural metal paneling meets the grade. This would help to incorporate the materials predominantly shown on the south elevation on the training facility area.~~
- ~~84. Please provide material call outs within a table with color and manufacture.~~
- ~~85. Please provide color renderings of the product in both profile and isometric views.~~
- 86. Please provide material calculations for each side. Note that 75% of the wall areas must be clad in primary materials. See Heritage PUD for primary material requirements.**

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: January 28, 2020
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: February 4, 2020 at 5:30 at the Grimes City Hall

COUNCIL MEETING: February 28, 2020 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff", is written over a light gray rectangular background.

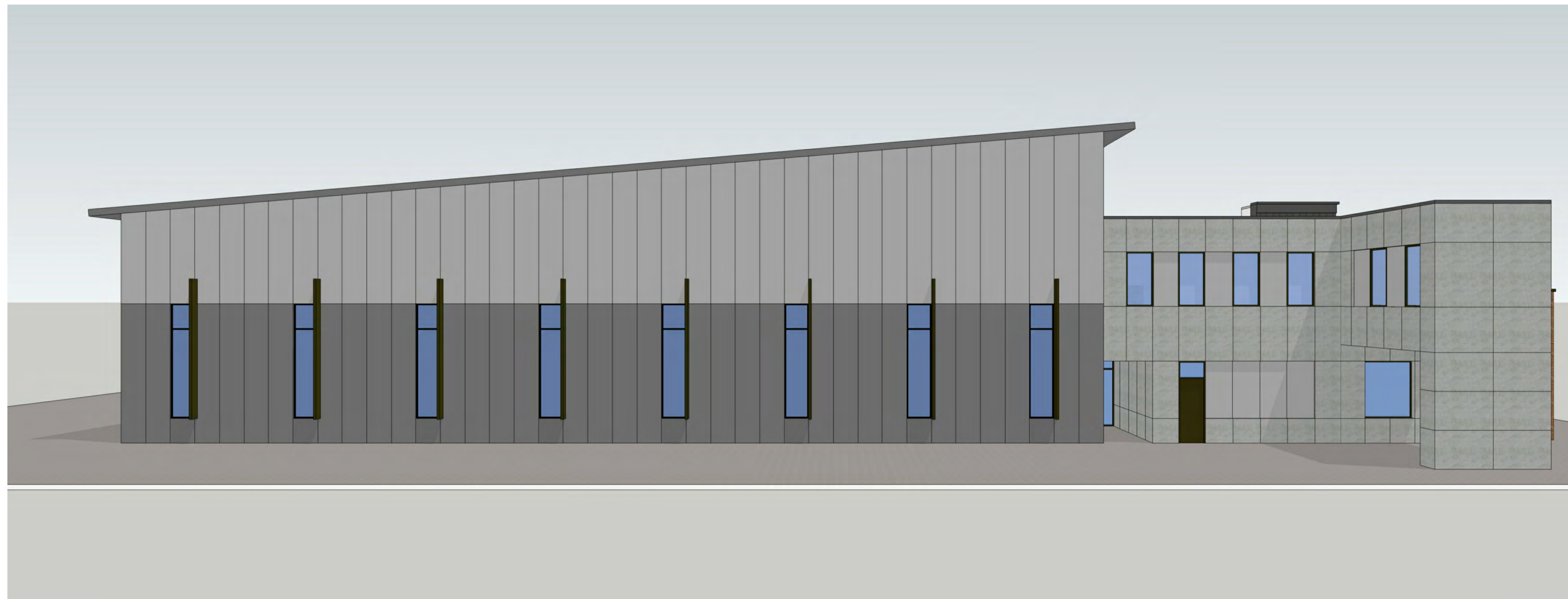
Alex Pfaltzgraff
Development Services Director



6 AERIAL PERSPECTIVE
NOT TO SCALE



5 PERSPECTIVE LOOKING NW
NOT TO SCALE



2 WEST ELEVATION
NOT TO SCALE



3 NORTH ELEVATION
NOT TO SCALE



2 EAST ELEVATION
NOT TO SCALE



1 SOUTH ELEVATION
NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

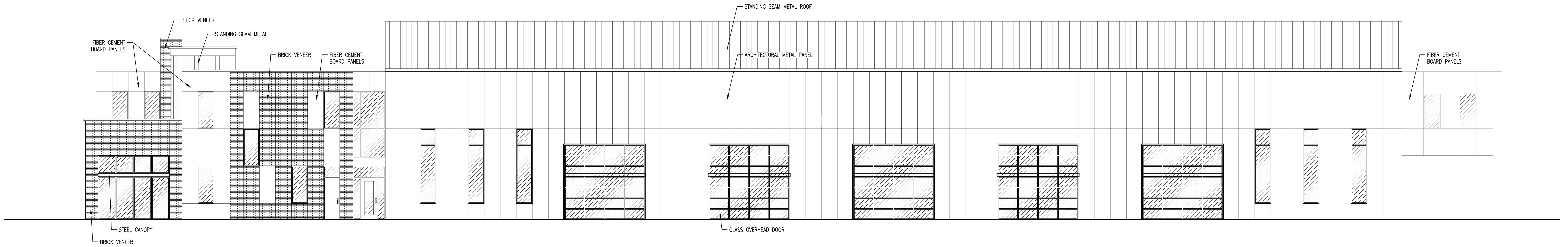
PRINT DATE:
DECEMBER 3, 2019
SHEET NAME:
ELEVATIONS

HERITAGE TOWN CENTER
HERITAGE TOWN CENTER
GRIMES, IA 50111
CONCEPTUAL
PLANNING

STUDIO MELE
1312 LOCUST STREET, SUITE 100Z
DES MOINES, IOWA 50309

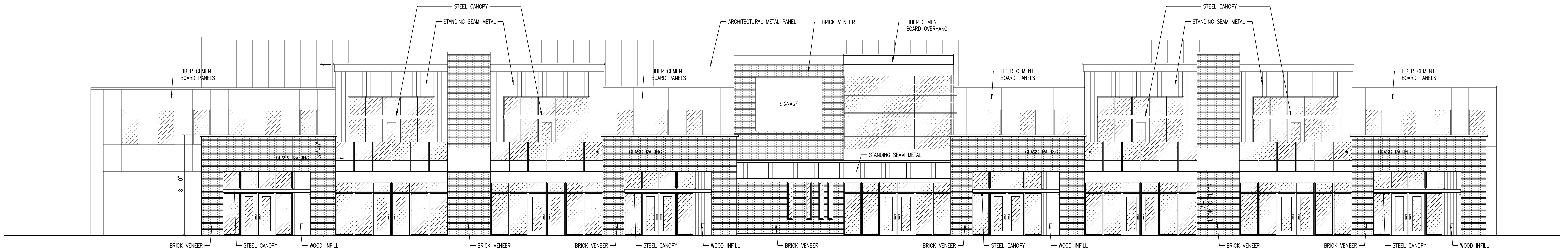
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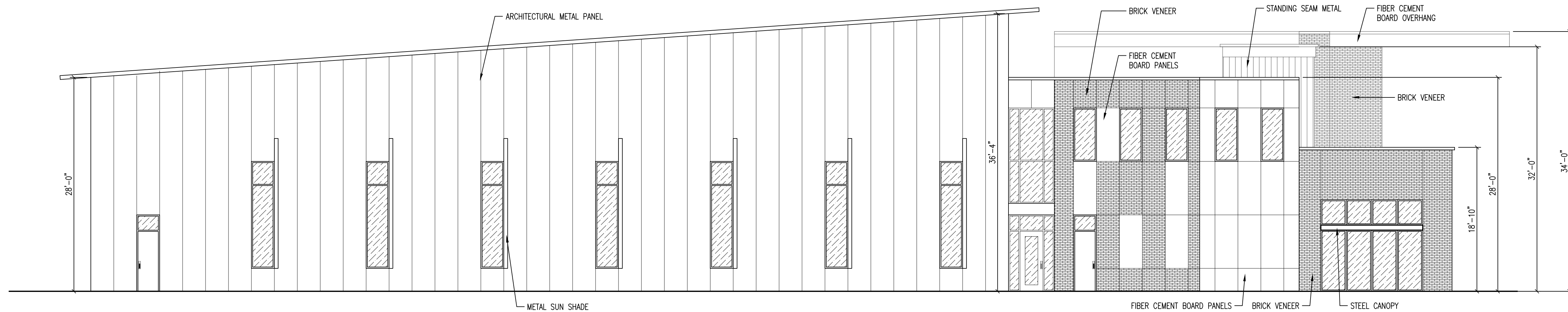


2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATION MATERIAL BREAKDOWN		
NORTH ELEVATION:		
MATERIAL	AREA	PERCENT OF FACADE
ARCHITECTURAL METAL PANEL (PRIMARY):	3,930 SF	51%
BRICK VENEER (PRIMARY):	704 SF	9%
STANDING SEAM METAL PANEL CONC. FASTENER (PRIMARY):	67 SF	1%
STOREFRONT GLAZING SYSTEM (PRIMARY):	1,810 SF	24%
FIBER CEMENT BOARD PANEL (SECONDARY):	1,168 SF	15%
TOTAL	7,679 SF	
PRIMARY MATERIALS:		85%
SECONDARY MATERIALS:		15%
SOUTH ELEVATION:		
MATERIAL	AREA	PERCENT OF FACADE
ARCHITECTURAL METAL PANEL (PRIMARY):	1,048 SF	12%
BRICK VENEER (PRIMARY):	1,951 SF	23%
STANDING SEAM METAL PANEL CONC. FASTENER (PRIMARY):	983 SF	11.5%
STOREFRONT GLAZING SYSTEM (PRIMARY):	2,793 SF	32.5%
GLASS RAILING SYSTEM (PRIMARY):	462 SF	5%
STEEL PLANTER (PRIMARY):	70 SF	1%
FIBER CEMENT BOARD PANEL (SECONDARY):	1,149 SF	13%
WOOD PANELS (SECONDARY):	160 SF	2%
TOTAL	8,616 SF	
PRIMARY MATERIALS:		85%
SECONDARY MATERIALS:		15%

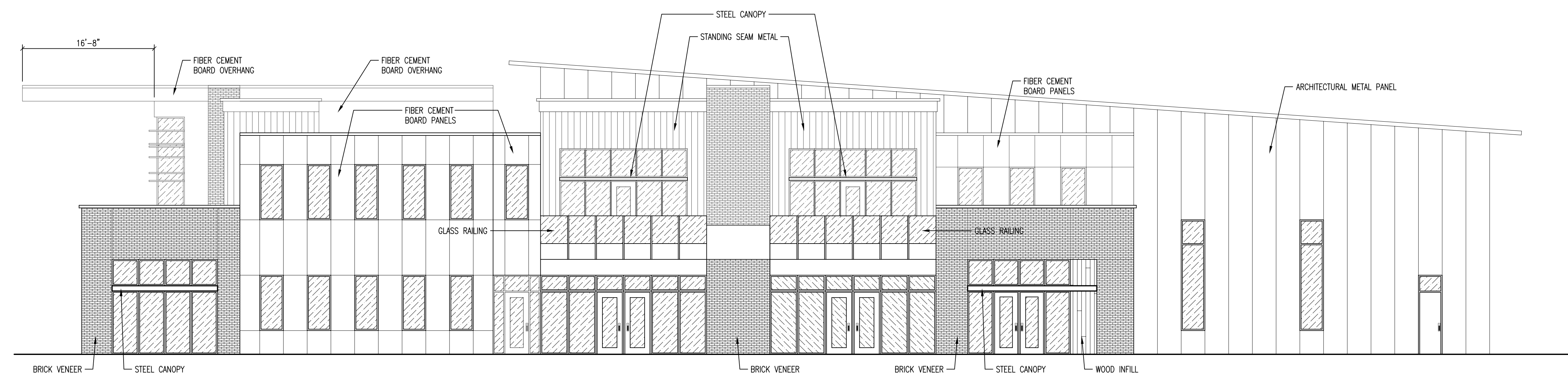


1 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 WEST ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATION MATERIAL BREAKDOWN		
WEST ELEVATION:		
MATERIAL	AREA	PERCENT OF FACADE
ARCHITECTURAL METAL PANEL (PRIMARY):	3,830 SF	66%
BRICK VENEER (PRIMARY):	608 SF	10%
STANDING SEAM METAL PANEL CONC. FASTENER (PRIMARY):	67 SF	1%
STOREFRONT GLAZING SYSTEM (PRIMARY):	676 SF	12%
FIBER CEMENT BOARD PANEL (SECONDARY):	610 SF	11%
TOTAL	5,791 SF	
PRIMARY MATERIALS:		89%
SECONDARY MATERIALS:		11%
EAST ELEVATION:		
MATERIAL	AREA	PERCENT OF FACADE
ARCHITECTURAL METAL PANEL (PRIMARY):	1,415 SF	25%
BRICK VENEER (PRIMARY):	744 SF	13%
STANDING SEAM METAL PANEL CONC. FASTENER (PRIMARY):	622 SF	11%
STOREFRONT GLAZING SYSTEM (PRIMARY):	1,442 SF	25%
GLASS RAILING SYSTEM (PRIMARY):	230 SF	4%
STEEL PLANTER (PRIMARY):	35 SF	1%
FIBER CEMENT BOARD PANEL (SECONDARY):	1,157 SF	20%
WOOD PANELS (SECONDARY):	40 SF	1%
TOTAL	5,685 SF	
PRIMARY MATERIALS:		79%
SECONDARY MATERIALS:		21%



1 EAST ELEVATION
SCALE: 1/8" = 1'-0"

PROJECT: **Heritage Town Center**
 Grimes, IA 50111

A. Building Product Supplier/Rep Contact:

- Pre-Manufactured Metal Building (Architectural Sandwich Panels)
 - Metl-Span: ACE Construction 986-4479, 4305 SE Grimes Blvd.
- Masonry
 - Glen-Gery Brick: Jeff Patterson 205-8729, jeff.patterson@glengery.com
- Fiber Cement Panels (Minerit HD)
 - American Fiber Cement: 800-688-8677, www.americanfibercement.com
- Standing Seam Metal
 - J-Wall ACM Panels: SGH Jeff Heinen 226-1155 jheinen@sghconcepts.com
- Aluminum-Framed Entrances and Glass Railing
 - Manko Window Systems: Steve Hoyt 288-7427 shoyt@mankowindows.com
 - Two Rivers Glass: Steve Fenney 222-4860

Heritage Review Committee

DATE: 27 January 2020
SUBJECT: Heritage Town Center



REVIEW COMMENTS:

The Heritage Review Committee has reviewed the plan submittals for architectural elements and site planning related to the Heritage Town Center project. Below are comments from the Review Committee that the committee would like to see addressed prior to approval at the City Council.

1. Architectural Elevations
 - o Overall, the Review Committee supports the aesthetic of the proposed building. Proposed materials, colors, and styling are generally in keeping with the intent of the standards of the PUD.
2. Photometric / Lighting
 - o The proposed lighting fixture deviates from the specific fixture as called out in the PUD, but is in keeping with the style. Verify lighting temperature of 3000K for all fixtures. Once approved, this fixture will be the only fixture used throughout the Town Center area of the development.
3. Site Furnishings
 - o All proposed site furnishings are in keeping with the PUD and are recommended for approval.
4. Landscape Plan
 - o Generally, the landscape open space plan is acceptable for species and quantities. The only caution from the Review Committee is the long-term viability and maintenance plan required to keep the landscaping fresh and attractive.

This review is done as a general review of the project as it relates to the PUD and is intended as a supplemental to the City of Grimes Engineer review of the submittal documents.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read 'Michael D. Gaunt', is written over a horizontal line.

Michael D. Gaunt, ASLA
Heritage Review Committee

HERITAGE AT GRIMES

MIKKELSEN PROPERTY

1220 NE STATION XING

GRIMES / IA

CONFLUENCE PROJECT NO: 19306

CONFLUENCE

DRAWING INDEX

SHEET NUMBER	SHEET TITLE
L0.0	COVER
L0.1	CITY STANDARD NOTES
L0.2	CONSTRUCTION SCHEDULE
L0.3	EXISTING CONDITIONS
L1.0	LAYOUT PLAN
L1.1	PHASE 1 LAYOUT PLAN
C1.0	EXTENDED GRADING PLAN
C1.1	PHASE 1 GRADING PLAN
C1.2	PHASE 1 UTILITIES PLAN
C1.3	SWPPP
L2.0	PLANTING PLAN
L2.1	PLANTING PLAN PHASE 1
L3.0	SITE FURNISHING PLAN
L4.0	PHOTOMETRIC PLAN
L5.0	DETAILS
L5.1	DETAILS
L5.2	PLANTING DETAILS
L5.3	PLANTING DETAILS

SYMBOLS AND ABBREVIATIONS

-----	PROPERTY LINE
—W—	WATER MAIN
—SAN—	SANITARY SEWER
—ST—	STORM SEWER
—OE—	OVERHEAD ELECTRIC
—UE—	UNDERGROUND ELECTRIC
—	CENTERLINE
—FO—	FIBER OPTIC LINE
—G—	GAS LINE
-----	EASEMENT LINE
—X—	SILT FENCE
②	PROPOSED INDEX CONTOUR
①	PROPOSED CONTOUR
-----	EXISTING INDEX CONTOUR
-----	EXISTING CONTOUR
C-#	HORIZONTAL CURVE
CLL	CONTRACT LIMIT LINE
CLR	CLEARANCE
DIA	DIAMETER
EJ	EXPANSION JOINT
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FL	FLOW LINE
HP	HIGH POINT
LP	LOW POINT
MFR	MANUFACTURER
N.I.C.	NOT IN CONTRACT
PVC	P.V.C. PIPE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RIM	RIM ELEVATION
⊕	FIRE HYDRANT
⊕	WATER VALVE
⊕	TEE CONNECTION
⊕	LIGHT POLE, SINGLE FIXTURE
⊕	LIGHT POLE, DOUBLE FIXTURE
⊕	SPOT ELEVATION
⊕	HORIZONTAL CONTROL POINTS
⊕	KEY NOTE
⊕	SURFACE DRAINAGE
⊕	STORM MANHOLE
⊕	SANITARY MANHOLE
⊕	CLEANOUT
⊕	STORM SEWER CURB INTAKE
⊕	STORM SEWER AREA INTAKE
⊕	HANDICAP PARKING STALL

ENTIRE SITE SUMMARY

TOTAL SITE AREA: 605,777 S.F. (13.91 AC)
OPEN SPACE REQUIRED: 121,155 S.F. (20%) (2.78 AC)
OPEN SPACE PROVIDED (INCLUDES PARK): 189,028 S.F. (31.2%) (4.34 AC)
BUILDING AREA: 175,645 S.F. (29%) (4.03 AC)

PHASE 1 SITE SUMMARY

TOTAL SITE AREA: 105,693 S.F. (2.43 AC)
OPEN SPACE PROVIDED: 19,960 S.F. (18.9%) (0.46 AC)
BUILDING AREA: 36,435 S.F.

PARKING REQUIREMENTS

PARKING SPACES REQUIRED: 172
HANDICAP REQUIRED: 5
PARKING SPACES PROVIDED: 180
HANDICAP PROVIDED: 5



PROPERTY DESCRIPTION:

OUTLOT "X" OF HERITAGE AT GRIMES PLAT 5, AN OFFICIAL PLAT, POLK COUNTY IOWA..

OWNER: MIKKELSEN PROPERTY
HERITAGE AT GRIMES, LLC.
3100 SE GRIMES BLVD. SUITE 400
CONTACT: SCOTT & AMBER MIKKELSEN

ZONING AND LAND USE

EXISTING ZONING: R-4 PLANNED UNIT DEVELOPMENT
'HERITAGE PUD'
EXISTING LAND USE: VACANT
PROPOSED LAND USE: MIXED USE-2

LEGAL DESCRIPTION

OUTLOT "X" IN HERITAGE AT GRIMES PLAT 5, AN OFFICIAL PLAT, AS RECORDED IN BOOK 16732, PAGE 386, GRIMES, POLK COUNTY, IOWA.

SAID TRACT OF LAND BEING SUBJECT TO AND TOGETHER WITH ANY AND ALL EASEMENTS OF RECORD.

SAID LOTS AND PARCELS CONTAINING 13.90 ACRES (605,688 SF) MORE OR LESS.

BENCHMARK:

CITY BENCHMARK G5M-005: BURY BOLT ON FIRE HYDRANT LOCATED ON THE EAST SIDE OF NORTH JAMES ST BY THE NW CORNER OF LOT ADDRESS 1605. ELEVATION = 924.41 (USGS DATUM)

CITY BENCHMARK G6A-001: ARROWHEAD ON FIREHYDRANT LOCATED AT THE NE CORNER OF THE NE 13TH ST & N JAMES ST INTERSECTION. ELEVATION = 930.66 (USGS DATUM)

TOTAL SITE PARKING CALCULATIONS

OFFICE : 88,542 S.F. / 1000 X 3 = 265.62 SPACES
RETAIL : 49,303 S.F. / 1000 X 4 = 197.21 SPACES
TRAINING CENTER : 22,800 S.F. / 1000 X 4 = 91.2 SPACES
TOTAL = 554.04 SPACES REQ.

ESTIMATED NUMBER OF EMPLOYEES

OFFICE : 88,542 S.F. / 225 S.F. = 393.52 PEOPLE
RETAIL : 49,303 S.F. / 400 S.F. = 123.26 PEOPLE
TRAINING CENTER : 22,800 S.F. / 3,000 S.F. = 7.6 PEOPLE
TOTAL = 524.38 PEOPLE

TOTAL PARKING REQUIREMENTS

PARKING SPACES REQUIRED: 554 (SPACES / SF OF G.F.A.)
HANDICAP REQUIRED: 12

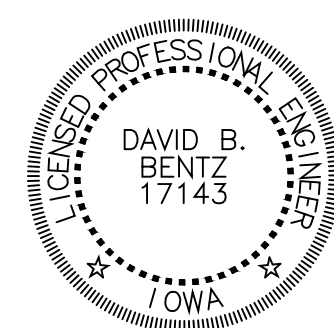
TOTAL PROVIDED PARKING

EXISTING STREET PARKING : 128
EXISTING ADJACENT PARKING : 34
NEW PARALLEL PARKING : 28
NEW HEAD-IN PARKING : 378

HANDICAP PROVIDED: 12
PARKING SPACE PROVIDED **TOTAL**: 568

CIVIL ENGINEER

BISHOP ENGINEERING
3501 104TH ST
URBANDALE, IA 50322
PHONE: 515.276.0467
CONTACT: DAVID BENTZ

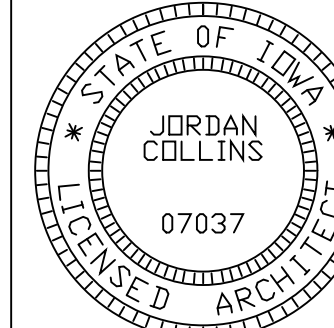


I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNED: PRELIMINARY DATE: 01/13/2020
DAVID B. BENTZ, PE, 17143
LICENSE RENEWAL DATE: DEC. 31, 2021
PAGES OR SHEETS COVERED BY THIS SEAL: ALL "C" SHEETS

ARCHITECT

STUDIO MELEE
1312 LOCUST STREET, SUITE 1002
DES MOINES, IA 50309
PHONE: 515.276.0467
CONTACT: JORDAN COLLINS



I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE.

JORDAN COLLINS
PRINTED OR TYPED NAME
PRELIMINARY 01/13/2020
SIGNATURE & DATE
JUNE 30, 2020
REGISTRATION EXPIRES & DATE ISSUED
"G", "A.D.", & "A" DRAWINGS
PAGES OR SHEETS COVERED BY THIS SEAL

VICINITY SKETCH



ISSUED FOR
SITE PLAN
APPLICATION

NOT FOR
CONSTRUCTION

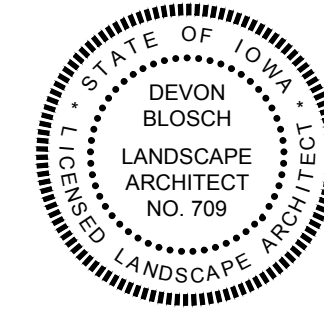
DATE OF
PREPARATION:
01/28/2020

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LANDSCAPE ARCHITECT

CONFLUENCE
525 17TH STREET
DES MOINES, IOWA 50309
PHONE: 515.288.4875
CONTACT: DEVON BLOSCH



I HEREBY CERTIFY THAT THE PORTION OF THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY PERSONAL SUPERVISION, AND THAT I AM A DULY REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

PRELIMINARY 01/13/2020
DEVON BLOSCH IOWA REGISTRATION #709 DATE
MY REGISTRATION DATE IS FEBRUARY 27, 2018.
MY REGISTRATION EXPIRATION DATE IS JUNE 30, 2021
SHEETS COVERED BY THIS SEAL: ALL "L" SHEETS

Drawing: \\conf-dm-free1\dataadm\Project\2019\19306_Heritage at Grimes_Cds\19306_WORKING\AUTOCAD\SHEET\SL0.0_COVER.dwg
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- a. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS.
- b. A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT CITY OF GRIMES ENGINEERING DEPT.
- c. ALL PERMITS (IDNR, SWP, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- d. THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS OF ALL IMPROVEMENTS AS PER CITY STANDARD PROCEDURES.
- e. TYPICAL BUILDING SERVICE LAYOUT TO REFLECT THE CITY'S SERVICE ORDER FROM LEFT TO RIGHT FACING THE LOT, SANITARY, WATER, SUMP
- f. A KNOX BOX IS REQUIRED BY THE FIRE DEPARTMENT AND SHALL BE OBTAINED AT CITY HALL.
- g. ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHT-OF-WAYS.
- h. PROVIDE A 4-YEAR MAINTENANCE BOND FOR ALL PUBLIC IMPROVEMENTS

- a. THE CONTRACTOR IS REQUIRED TO PLACE A TEMPORARY PLUG IN THE EXISTING DOWNSTREAM SANITARY SEWER MANHOLE PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL BE REMOVED FOLLOWING APPROVAL OF CONSTRUCTION BY THE CITY OF GRIMES.
- b. SANITARY GRAVITY PIPE MATERIAL SHALL BE PVC SDR 26 OR TRUSS (8" TO 15").
- c. SANITARY GRAVITY SERVICE PIPE MATERIAL SHALL BE PVC SDR 23.5 (4" TO 6").
- d. ALL SANITARY SEWER MANHOLES SHALL HAVE STEPS.
- e. ALL SANITARY SEWER MANHOLES CASTINGS SHALL BE SEALED WITH HEAT SHRINK SLEEVES.
- f. ALL SANITARY SEWER MANHOLE CASTINGS LOCATED WITHIN PAVEMENT SHALL BE TYPE B:PCC W/ADJUSTING MECHANISM.
- g. SANITARY SEWER TESTING, CLEANING & TELEVISION SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISIONING.

- a. ALL FIRE HYDRANTS SHALL BE AMERICAN FLOW CONTROL-WATEROUS PACER WB-67-250, MUELLER SUPER CENTURION 250 (3-WAY A-423), OR CLOW MEDALLION F-2545. ALL HYDRANTS SHALL HAVE THE FOLLOWING: 6" MJ SHOE, 2-1/2" HOSE NOZZLE, 4-1/2" STEAMER NOZZLE, NST THREADS, PENTAGON OPERATING NUT, CHAIN ON CAP, OPEN LEFT, 5-1/2' BURY, AND FACTORY PAINTED RED. THE MINIMUM SPOOL PIPE LENGTH FROM AUXILIARY VALVE TO HYDRANT SHOE SHALL BE 2.0'.
- b. ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- c. A TRACER WIRE RECEPTACLE SHALL BE INSTALLED AT EACH HYDRANT, AA MANUFACTURING TRACER WIRE RECEPTACLE MODEL TW-18-2.
- d. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
- e. WATER SERVICE SHALL BE 1-INCH MINIMUM TYPE K COPPER.
- f. PROPOSED WATER MAIN SHALL BE PRESSURE TESTED AND CHLORINATED BY THE DEVELOPER. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES. THE BACTERIA TEST AND SUBMITTAL OF TEST TO LAB SHALL BE DONE BY THE DEVELOPER AND RESULTS PROVIDED TO THE CITY OF GRIMES ENGINEERING DEPT. AND BY FAX TO US WATER AT 515-986-7300. IF THE TEST DOES NOT PASS, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ALL THE WATER USED TO REPEAT THE TEST.
- g. ALL WATERMAIN FITTINGS TO BE RESTRAINED JOINT, MEGA-LUG OR APPROVED EQUAL.

- a. ALL STORM SEWER IN THE ROW SHALL BE RCP, UNLESS OTHERWISE APPROVED BY THE CITY.
- b. ALL FLARED END SECTIONS SHALL HAVE FOOTINGS AND APRON GRATES. THE LAST 3 PIPE SECTIONS AND THE FLARED END SECTION ON ALL CULVERTS SHALL BE TIED. ALL STORM SEWER JOINTS SHALL BE WRAPPED WITH ENGINEERING FABRIC.
- c. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY FIELD TILE DAMAGED DURING CONSTRUCTION. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES.
- d. STORM SEWER CLEANING & TELEVISION SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISIONING.
- e. USE O RING GASKETS ON STORM SEWERS CROSSING OVER WATERMAIN PER IDNR REQUIREMENT.

- a. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS.
- b. PROVIDE GEOTECHNICAL EXPLORATION AND REPORT FOR ALL PROPOSED STREET, SANITARY AND STORM SEWER AND WATER MAIN PROJECTS IN ACCORDANCE WITH THE SUDAS DESIGN MANUAL; SUBMIT WRITTEN REPORT AND TEST RESULTS TO CITY FOR REVIEW.
- c. A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT CITY OF GRIMES ENGINEERING DEPT. (515.986.4050).
- d. ALL PERMITS (IDNR, SWPP, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- e. THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS OF ALL IMPROVEMENTS AS PER CITY STANDARD PROCEDURES.
- f. TYPICAL BUILDING LAYOUT TO REFLECT THE CITY'S SERVICE ORDER FROM LEFT TO RIGHT FACING THE LOT, SANITARY, WATER, SUMP. MARK ENDS OF SERVICES WITH STEEL FENCE POST AND PAINT GREEN FOR SANITARY, BLUE FOR WATER, AND WHITE FOR STORM.
- g. ALL SERVICES LOCATIONS ARE TO BE STAMPED INT THE CURB WITH LETTER IRONS AS PER CITY STANDARD PROCEDURES.
- h. PROVIDE A 4-YEAR MAINTENANCE BOND FOR ALL PUBLIC IMPROVEMENTS.

- a. THE CONTRACTOR IS REQUIRED TO PLACE A TEMPORARY PLUG IN THE EXISTING DOWNSTREAM SANITARY SEWER MANHOLE PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL BE REMOVED FOLLOWING APPROVAL OF CONSTRUCTION BY THE CITY OF GRIMES.
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- c. SANITARY GRAVITY SERVICE PIPE MATERIAL SHALL BE PVC SDR 23.5 (4" TO 6").
- d. ALL SANITARY SEWER MANHOLES SHALL HAVE STEPS.
- e. ALL SANITARY SEWER MANHOLES CASTINGS SHALL BE SEALED WITH HEAT SHRINK SLEEVES.
- f. ALL MANHOLES SHALL BE EXTERIOR COATED WITH BITUMINOUS WATERPROOFING.
- g. ALL SANITARY SEWER MANHOLE CASTINGS LOCATED WITHIN PAVEMENT SHALL BE TYPE B:PCC W/ADJUSTING MECHANISM.
- h. SANITARY SEWER CLEANING & TELEVISION SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISIONING.

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- d. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
- e. WATER SERVICE SHALL BE 1-INCH MINIMUM TYPE K COPPER. CURB STOP TO BE LOCATED AT ROW LINE.
- f. PROPOSED WATER MAIN SHALL BE PRESSURE TESTED AND CHLORINATED BY THE DEVELOPER. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES. THE BACTERIA TEST AND SUBMITTAL OF TEST TO LAB SHALL BE DONE BY THE DEVELOPER AND RESULTS PROVIDED TO THE CITY OF GRIMES ENGINEERING DEPT. AND BY FAX TO US WATER AT 515-986-7300. IF THE TEST DOES NOT PASS, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ALL THE WATER USED TO REPEAT THE TEST.
- g. ALL WATERMAIN FITTINGS TO BE RESTRAINED JOINT, MEGA-LUG OR APPROVED EQUAL.

- a. ALL STORM SEWER IN THE ROW SHALL BE RCP, UNLESS OTHERWISE APPROVED BY THE CITY.
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- e. USE O RING GASKETS ON STORM SEWERS CROSSING OVER WATERMAIN PER IDNR REQUIREMENT.

- a. ALL SIGNAGE SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF GRIMES. THE CITY WILL BILL THE DEVELOPER FOR THE COSTS ASSOCIATED WITH THE SIGNAGE.
- b. THE HEIGHT OF SIGNS SHALL BE 7-FEET FROM THE BASE OF THE SIGN TO THE GROUND.
- c. ALL SIGNS SHALL BE NOT LESS THAN 1.5' FROM EDGE OF SIGN TO BACK OF CURB.
- d. STOP SIGNS SHALL BE AS PER MUTCD R1-1 TYPE, 30"x30".
- e. NO PARKING SIGNS SHALL BE AS PER MUTCD R8-3 TYPE, 12"x12". IF POSSIBLE, PLEASE MOUNT THE NO PARKING SIGNS TO LIGHT POLES (1ST PREFERENCE).
- f. ALL SPEED LIMIT SIGNS SHALL BE AS PER MUTCD R2-1 (25 MPH), 24"x30".
- g. ALL STREET NAME SIGNS SHALL BE WHITE ON BLACK ON A 6" BLANK WITH 4" LETTERS (LOCALS) OR 8" BLANK WITH 6" LETTERS (COLLECTORS/ARTERIALS) AND SHALL BE DIRECTLY FASTENED TO SQUARE TUBE POSTS. EACH SIGN POST SHALL HAVE FOUR (4) STREET SIGNS THAT SHALL BE CONNECTED TO POST BY RIVETING THE SIGNS BACK TO BACK ON OPPOSITE SIDES OF THE SQUARE TUBE POST. THE BACK TO BACK ENDS OF STREET NAME SIGNS SHALL BE CONNECTED WITH CIRCULAR STABILIZERS.
- h. ALL SIGN POSTS SHALL BE TELES PAR 2"x2" SQUARE TUBE POWDER COATED BLACK GALVANIZED STEEL (14-GAUGE MIN.) WITH 7/16" KNOCK-OUT STYLE PERFORATIONS THAT ARE PRE-PUNCHED.
- i. ROAD CLOSED SIGNS SHALL BE AS PER IDOT ROAD STANDARD SI-182.
- j. ALL SIGNS SHALL BE HIGH INTENSITY PRISMATIC.

LANDSCAPE ARCHITECT
CONFLUENCE
525 17TH STREET
DES MOINES, IOWA 50309
515.288.4875
CONTACT: DEVON BLOSCH

ARCHITECT
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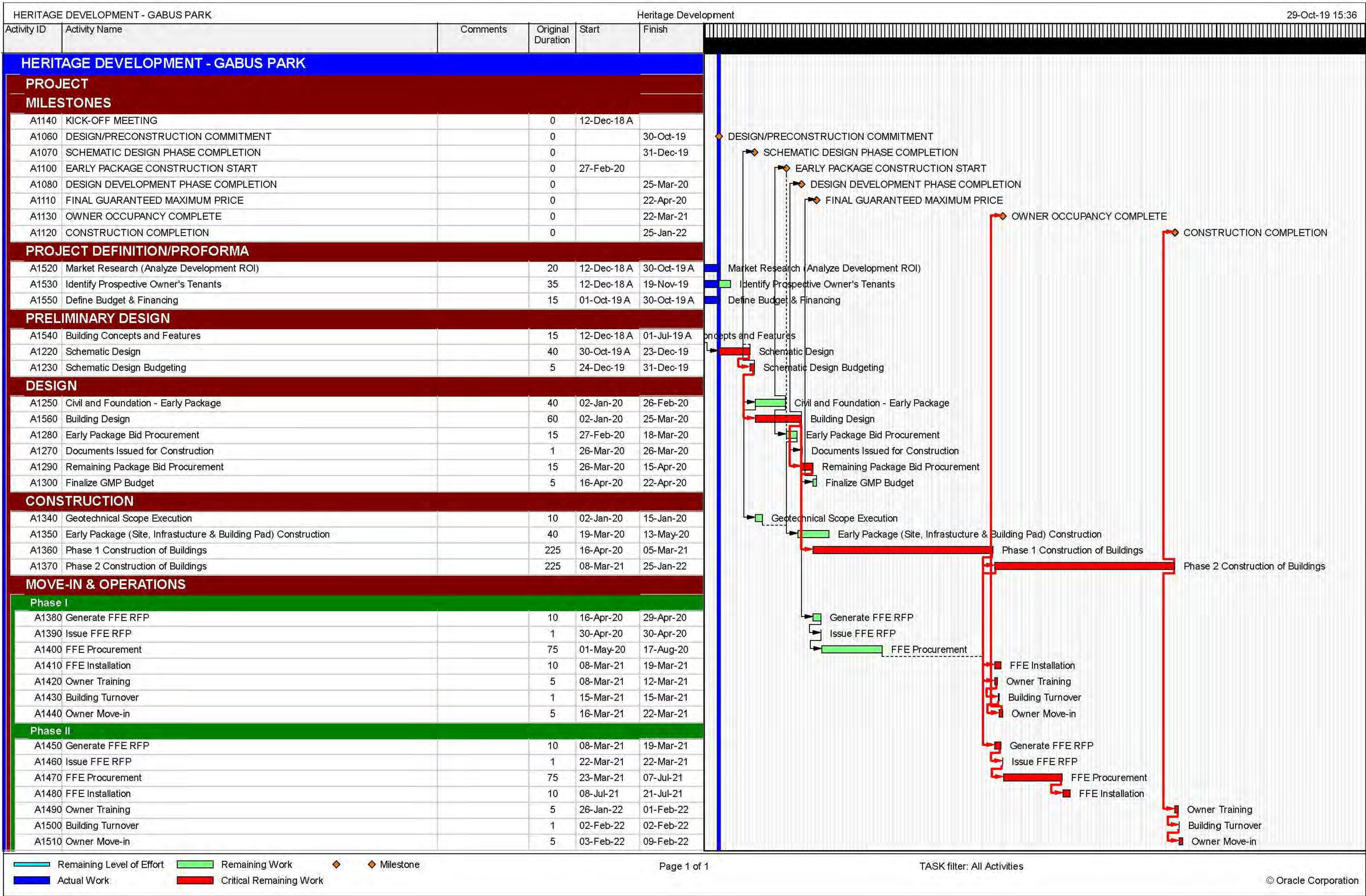
HERITAGE AT GRIMES
MIKKELSEN PROPERTY
GRIMES / IA

REVISION SCHEDULE		
ISSUE	DATE	DESCRIPTION
01	01/28/2020	SITE PLAN APPLICATION

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CONSTRUCTION
SCHEDULE

CONFLUENCE PROJECT NO: 19306

L0.2

PREPARED BY:
FORMATION GROUP
CONTACT: BEN HAYES, MBA

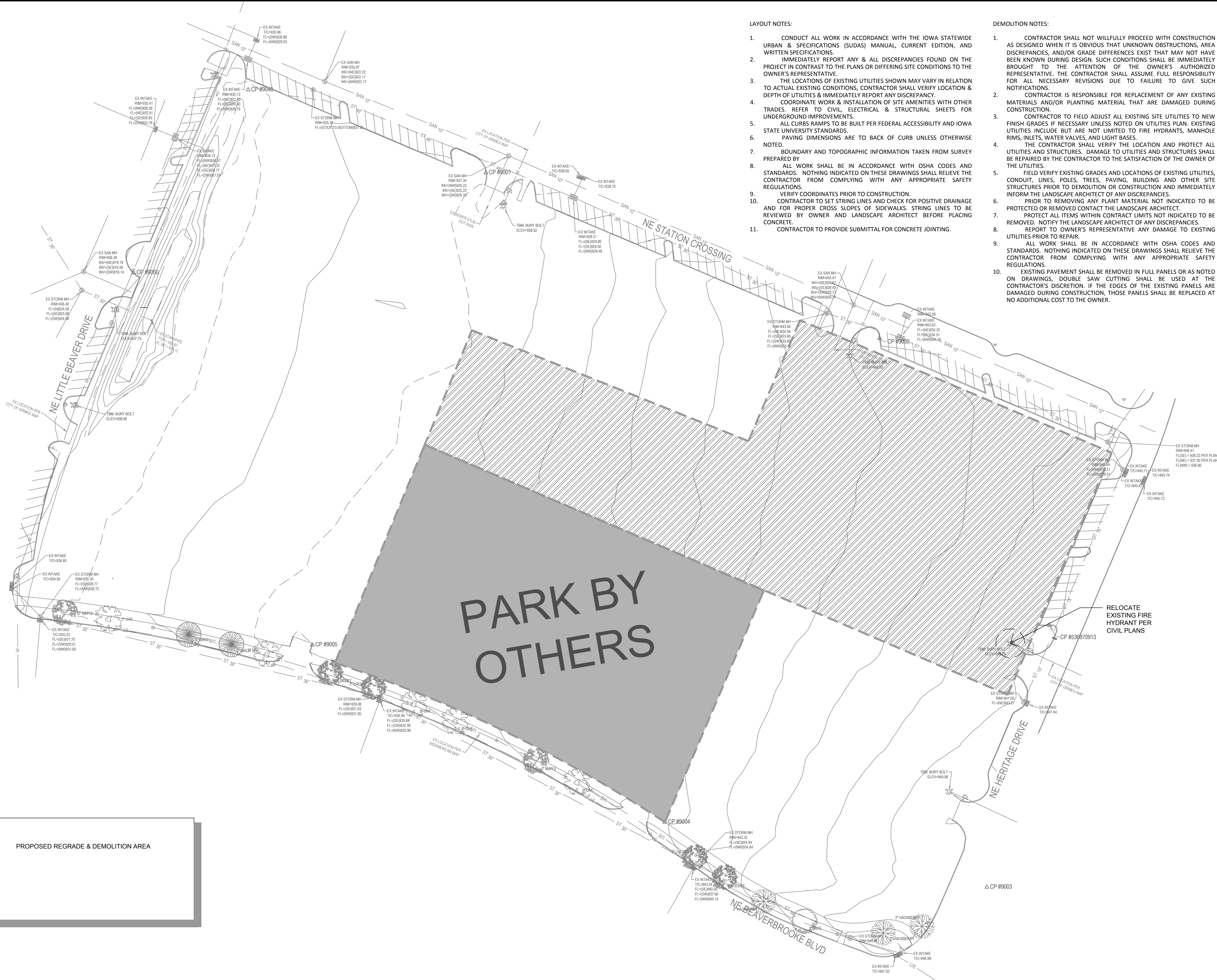
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01

EXISTING CONDITIONS

LEGEND

PROPOSED REGRADE & DEMOLITION AREA



LAYOUT NOTES:

- CONDUCT ALL WORK IN ACCORDANCE WITH THE IOWA STATEWIDE URBAN & SPECIFICATIONS (SUDAS) MANUAL, CURRENT EDITION, AND WRITTEN SPECIFICATIONS.
- IMMEDIATELY REPORT ANY & ALL DISCREPANCIES FOUND ON THE PROJECT IN CONTRAST TO THE PLANS OR DIFFERING SITE CONDITIONS TO THE OWNER'S REPRESENTATIVE.
- THE LOCATIONS OF EXISTING UTILITIES SHOWN MAY VARY IN RELATION TO ACTUAL EXISTING CONDITIONS, CONTRACTOR SHALL VERIFY LOCATION & DEPTH OF UTILITIES & IMMEDIATELY REPORT ANY DISCREPANCY.
- COORDINATE WORK & INSTALLATION OF SITE AMENITIES WITH OTHER TRADES. REFER TO CIVIL, ELECTRICAL & STRUCTURAL SHEETS FOR UNDERGROUND IMPROVEMENTS.
- ALL CURBS RAMP TO BE BUILT PER FEDERAL ACCESSIBILITY AND IOWA STATE UNIVERSITY STANDARDS.
- PAVING DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY PREPARED BY
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- VERIFY COORDINATES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO SET STRING LINES AND CHECK FOR POSITIVE DRAINAGE AND FOR PROPER CROSS SLOPES OF SIDEWALKS. STRING LINES TO BE REVIEWED BY OWNER AND LANDSCAPE ARCHITECT BEFORE PLACING CONCRETE.
- CONTRACTOR TO PROVIDE SUBMITTAL FOR CONCRETE JOINTING.

DEMOLITION NOTES:

- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES, AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS AND/OR PLANTING MATERIAL THAT ARE DAMAGED DURING CONSTRUCTION.
- CONTRACTOR TO FIELD ADJUST ALL EXISTING SITE UTILITIES TO NEW FINISH GRADES IF NECESSARY UNLESS NOTED ON UTILITIES PLAN. EXISTING UTILITIES INCLUDE BUT ARE NOT LIMITED TO FIRE HYDRANTS, MANHOLE RIMS, INLETS, WATER VALVES, AND LIGHT BASES.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT ALL UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER OF THE UTILITIES.
- FIELD VERIFY EXISTING GRADES AND LOCATIONS OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE STRUCTURES PRIOR TO DEMOLITION OR CONSTRUCTION AND IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- PRIOR TO REMOVING ANY PLANT MATERIAL NOT INDICATED TO BE PROTECTED OR REMOVED CONTACT THE LANDSCAPE ARCHITECT.
- PROTECT ALL ITEMS WITHIN CONTRACT LIMITS NOT INDICATED TO BE REMOVED. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- REPORT TO OWNER'S REPRESENTATIVE ANY DAMAGE TO EXISTING UTILITIES PRIOR TO REPAIR.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- EXISTING PAVEMENT SHALL BE REMOVED IN FULL PANELS OR AS NOTED ON DRAWINGS. DOUBLE SAW CUTTING SHALL BE USED AT THE CONTRACTOR'S DISCRETION. IF THE EDGES OF THE EXISTING PANELS ARE DAMAGED DURING CONSTRUCTION, THOSE PANELS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

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HERITAGE AT GRIMES
MIKKELSEN PROPERTY
GRIMES / IA

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EXISTING
CONDITIONS

CONFLUENCE PROJECT NO.: 19306

L0.3

SCALE: 1"=50'
0' 12.5' 25' 50' 100'

HERITAGE AT GRIMES
MIKKELSEN PROPERTY
GRIMES / IA

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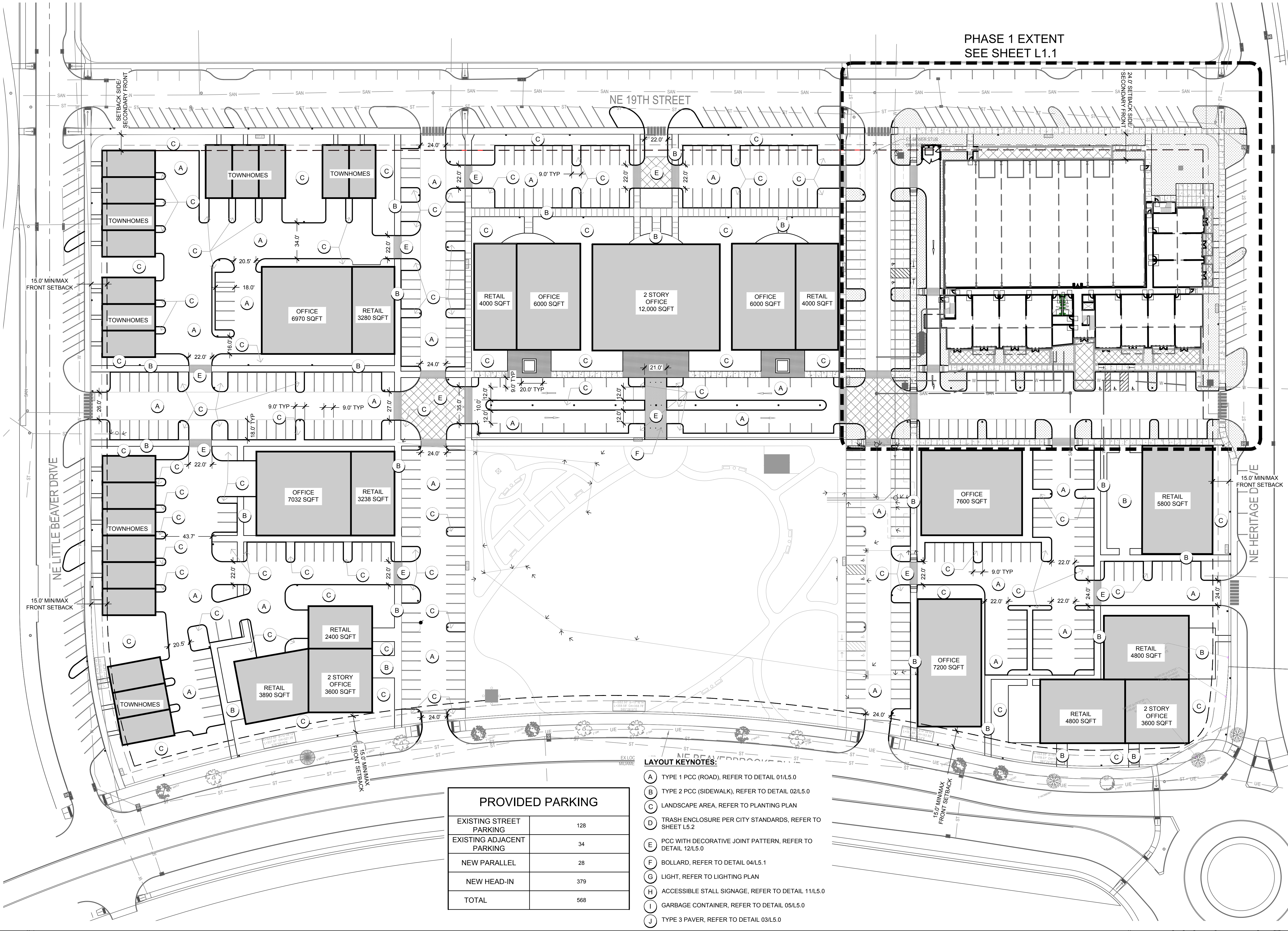
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LAYOUT PLAN

CONFLUENCE PROJECT NO: 19306

L1.0

PHASE 1 EXTENT
SEE SHEET L1.1

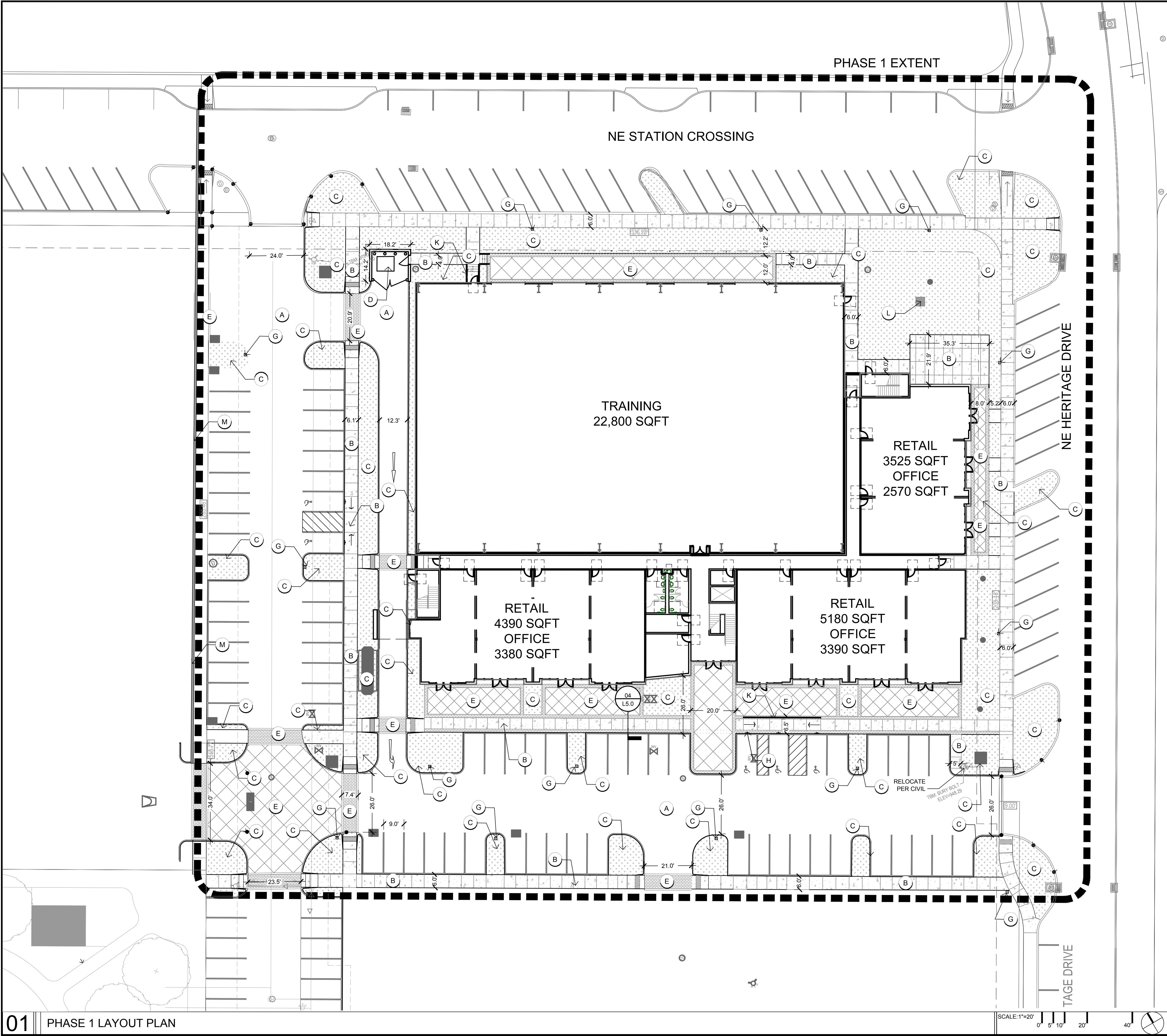


PROVIDED PARKING	
EXISTING STREET PARKING	128
EXISTING ADJACENT PARKING	34
NEW PARALLEL	28
NEW HEAD-IN	379
TOTAL	568

LAYOUT KEYNOTES:

- (A) TYPE 1 PCC (ROAD), REFER TO DETAIL 01/L5.0
- (B) TYPE 2 PCC (SIDEWALK), REFER TO DETAIL 02/L5.0
- (C) LANDSCAPE AREA, REFER TO PLANTING PLAN
- (D) TRASH ENCLOSURE PER CITY STANDARDS, REFER TO SHEET L5.2
- (E) PCC WITH DECORATIVE JOINT PATTERN, REFER TO DETAIL 12/L5.0
- (F) BOLLARD, REFER TO DETAIL 04/L5.1
- (G) LIGHT, REFER TO LIGHTING PLAN
- (H) ACCESSIBLE STALL SIGNAGE, REFER TO DETAIL 11/L5.0
- (I) GARBAGE CONTAINER, REFER TO DETAIL 05/L5.0
- (J) TYPE 3 PAVER, REFER TO DETAIL 03/L5.0

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- LAYOUT NOTES:**
1. ALL CURBS RAMPS TO BE BUILT AS PER FEDERAL ACCESSIBILITY STANDARDS.
 2. PAVING DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 3. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY ARE PREPARED BY BISHOP ENGINEERING
 4. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
 5. VERIFY COORDINATES PRIOR TO CONSTRUCTION.
 6. CONTRACTOR TO SUPPLY AND INSTALL ALL NECESSARY SLEEVES UNDER PAVING AND WALKS.
 7. PROPOSED SIGNAGE TO MEET CITY CODES FOR GROUND SIGNS.

- LAYOUT KEYNOTES:**
- (A) TYPE 1 PCC (ROAD), REFER TO DETAIL 01/L5.0
 - (B) TYPE 2 PCC (SIDEWALK), REFER TO DETAIL 02/L5.0
 - (C) LANDSCAPE AREA, REFER TO PLANTING PLAN
 - (D) TRASH ENCLOSURE PER CITY STANDARDS, REFER TO SHEET L5.2
 - (E) PCC WITH DECORATIVE JOINT PATTERN, REFER TO DETAIL 12/L5.0
 - (F) BOLLARD, REFER TO DETAIL 04/L5.1
 - (G) LIGHT, REFER TO LIGHTING PLAN
 - (H) ACCESSIBLE STALL SIGNAGE, REFER TO DETAIL 11/L5.0
 - (I) GARBAGE CONTAINER, REFER TO DETAIL 05/L5.0
 - (J) TYPE 3 PAVER, REFER TO DETAIL 03/L5.0
 - (K) HAND RAILS
 - (L) TRANSFORMER
 - (M) BEAM CURB, REFER TO DETAIL XX/

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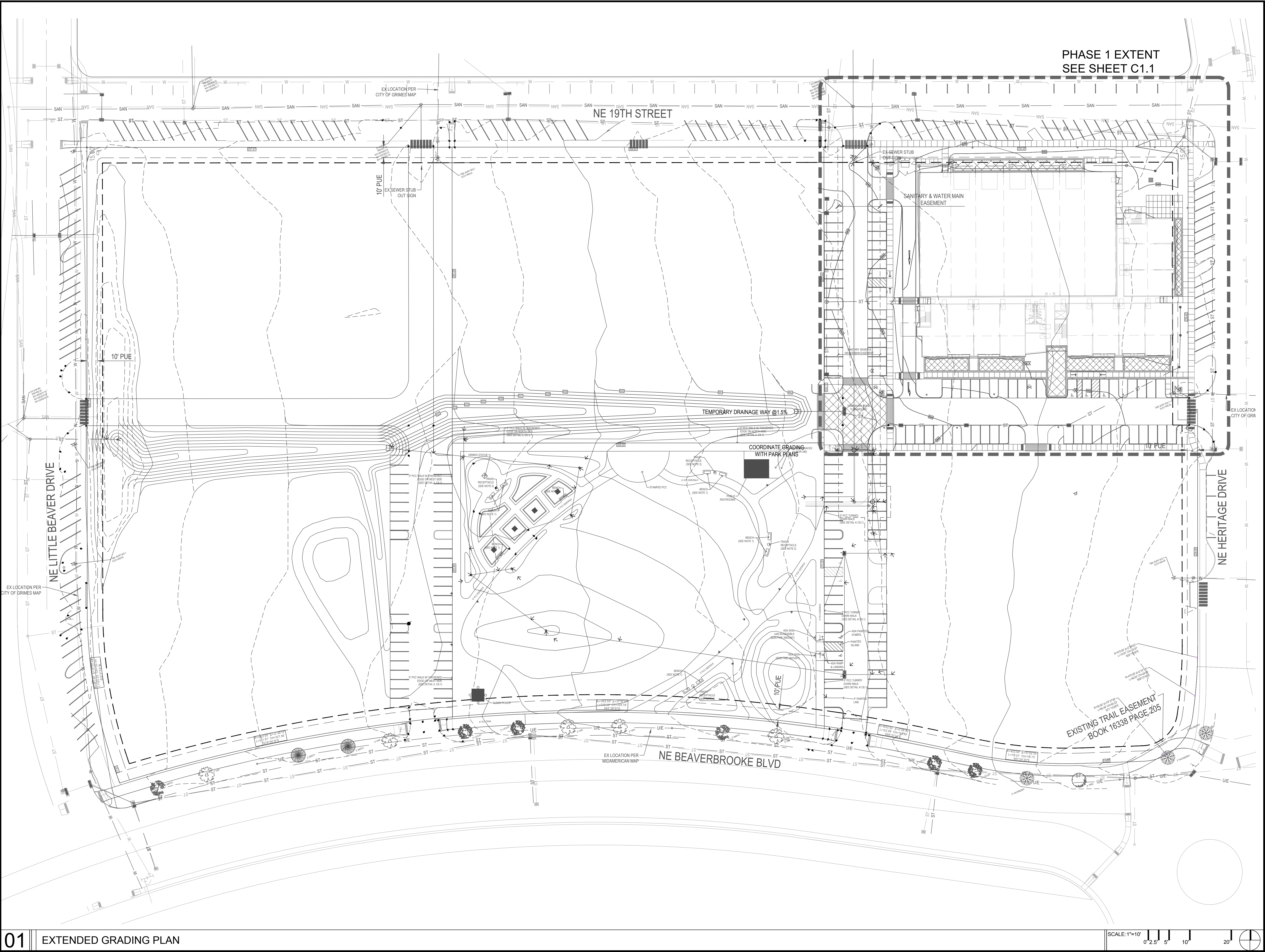
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PHASE 1 LAYOUT PLAN

CONFLUENCE PROJECT NO: 19306

L1.1

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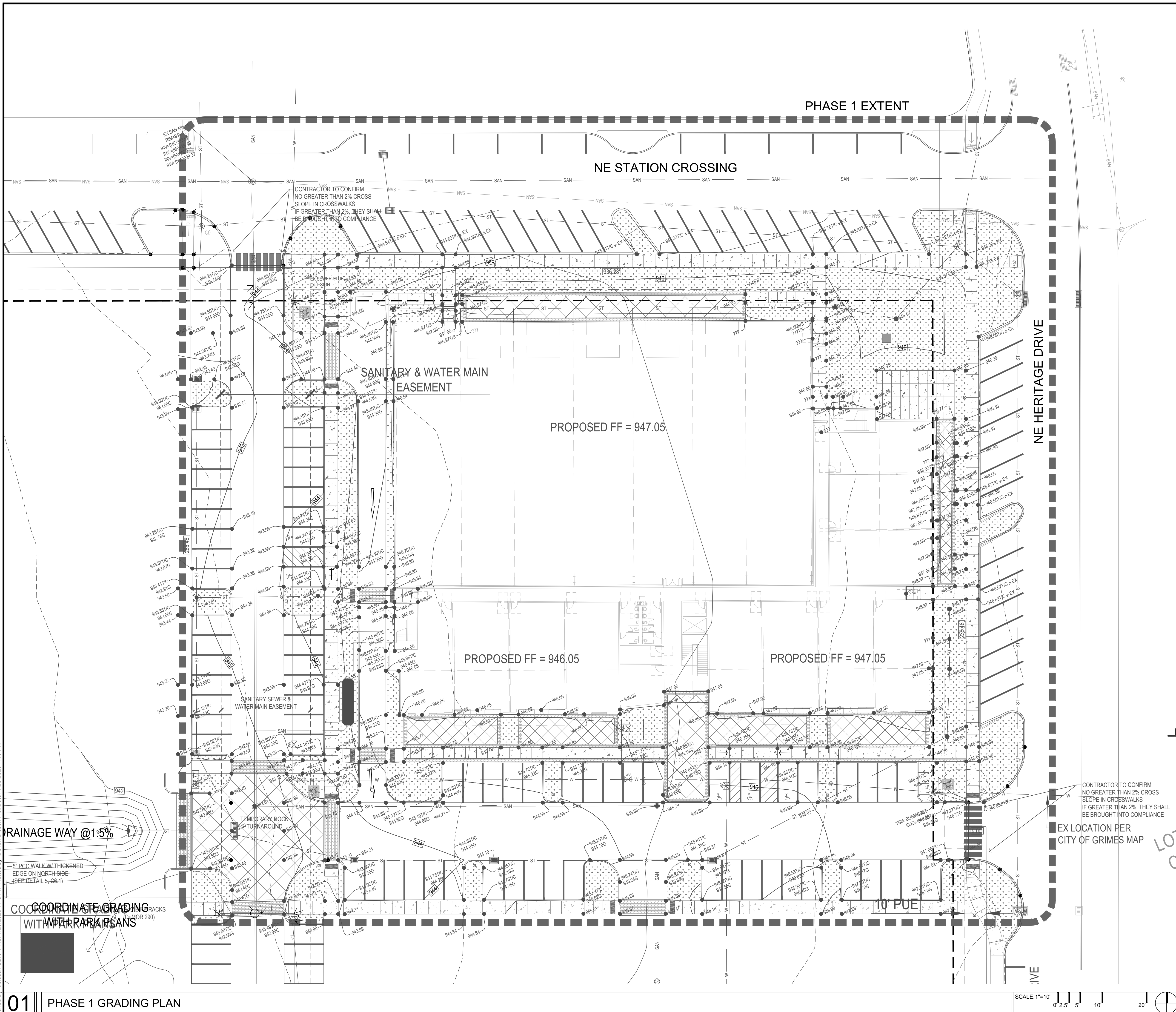
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EXTENDED GRADING
PLAN

CONFLUENCE PROJECT NO: 19306

C1.0

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GRADING NOTES

- ALL SPOT ELEVATIONS ARE AT THE TOP OF FINISHED SURFACES. SPOT ELEVATIONS SHOWN IN PARKING ARE AT THE BOTTOM OF CURB. ADD 8" TO COMPUTE TOP OF CURB ELEVATION.
- PRIOR TO ANY SITE EXCAVATION, THE CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER AND/ OR LANDSCAPE ARCHITECT, AND CONSULT WITH OWNER'S REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- INSTALL SILT FENCE AT PERMANENT STORM SEWER INLETS AND SOD ALL SLOPES FOR EROSION CONTROL. SILT FENCE SHALL BE MAINTAINED UNTIL ESTABLISHMENT OF PERMANENT GROUND COVER OR EROSION CONTROL MEASURE.
- SEE SPECS FOR MINIMUM DEPTH OF TOPSOIL FOR ALL LAWN AREAS AND PLANTING BEDS.
- ALL DEBRIS SPILLED ON THE R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
- BACK FILL TO TOP OF CURB
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR POSITIVE SURFACE DRAINAGE IN ALL AREAS, UNLESS OTHERWISE NOTED. ALL NEWLY GRADED GROUND SURFACES SHALL BE FINISHED TO UNIFORM GRADES AND SLOPED IN SUCH A MANNER TO BE FREE OF DEPRESSIONS THAT CAUSE AREAS OF STANDING WATER. THE CONTRACTOR SHALL REPORT ANY CONFLICTS WITH THIS REQUIREMENT TO THE LANDSCAPE ARCHITECT FOR RESOLUTION PRIOR TO FINAL GRADING OPERATIONS.
- WHERE PROPOSED GRADES MEET EXISTING, BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN THE NEW WORK AND EXISTING WORK. PONDING AT JOINTS WILL NOT BE ACCEPTED.
- CONTRACTOR RESPONSIBLE FOR ALL PRIVATE LOCATES NOT COVERED BY THE IOWA ONE CALL SYSTEM.

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PHASE 1 GRADING PLAN

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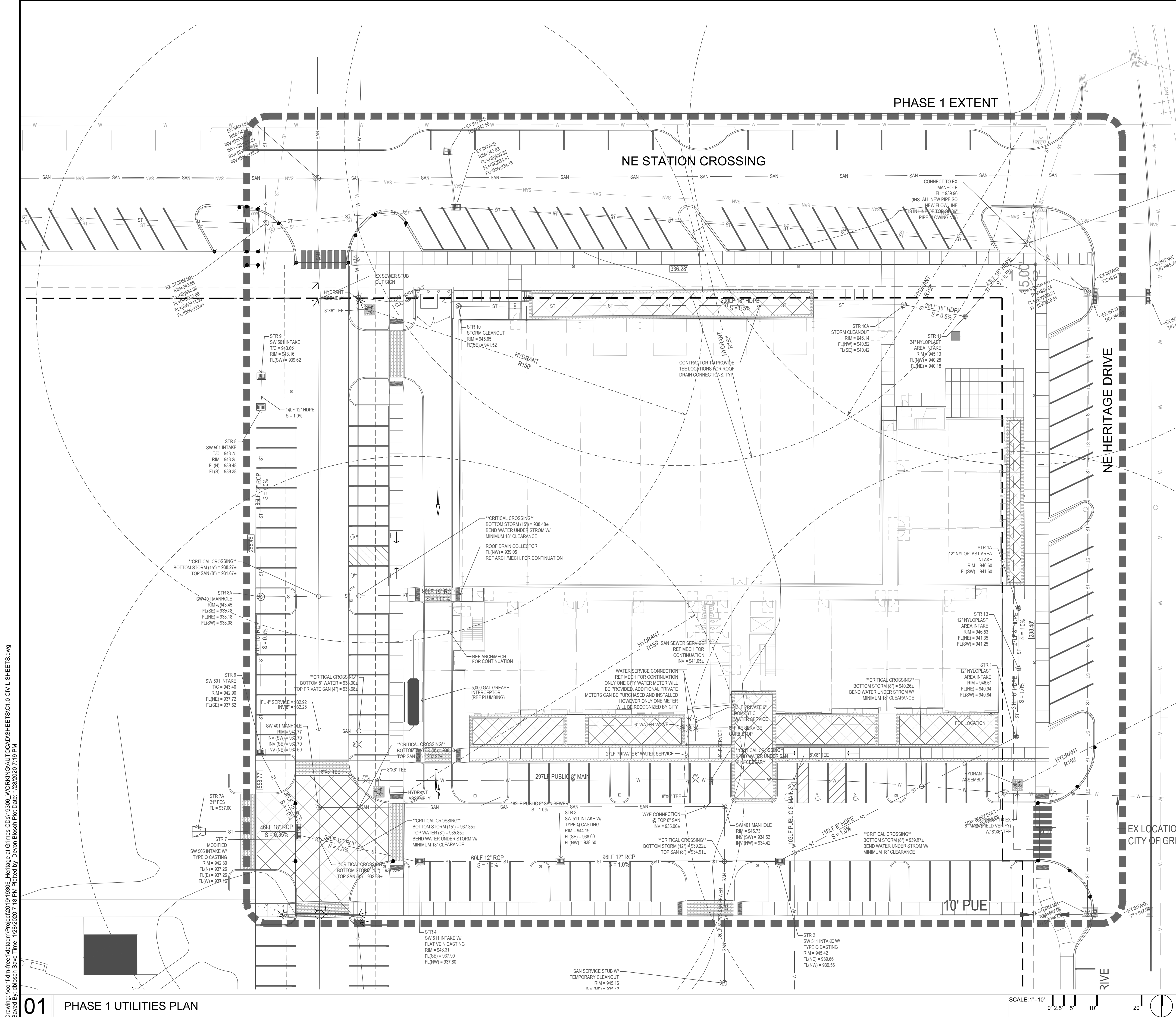
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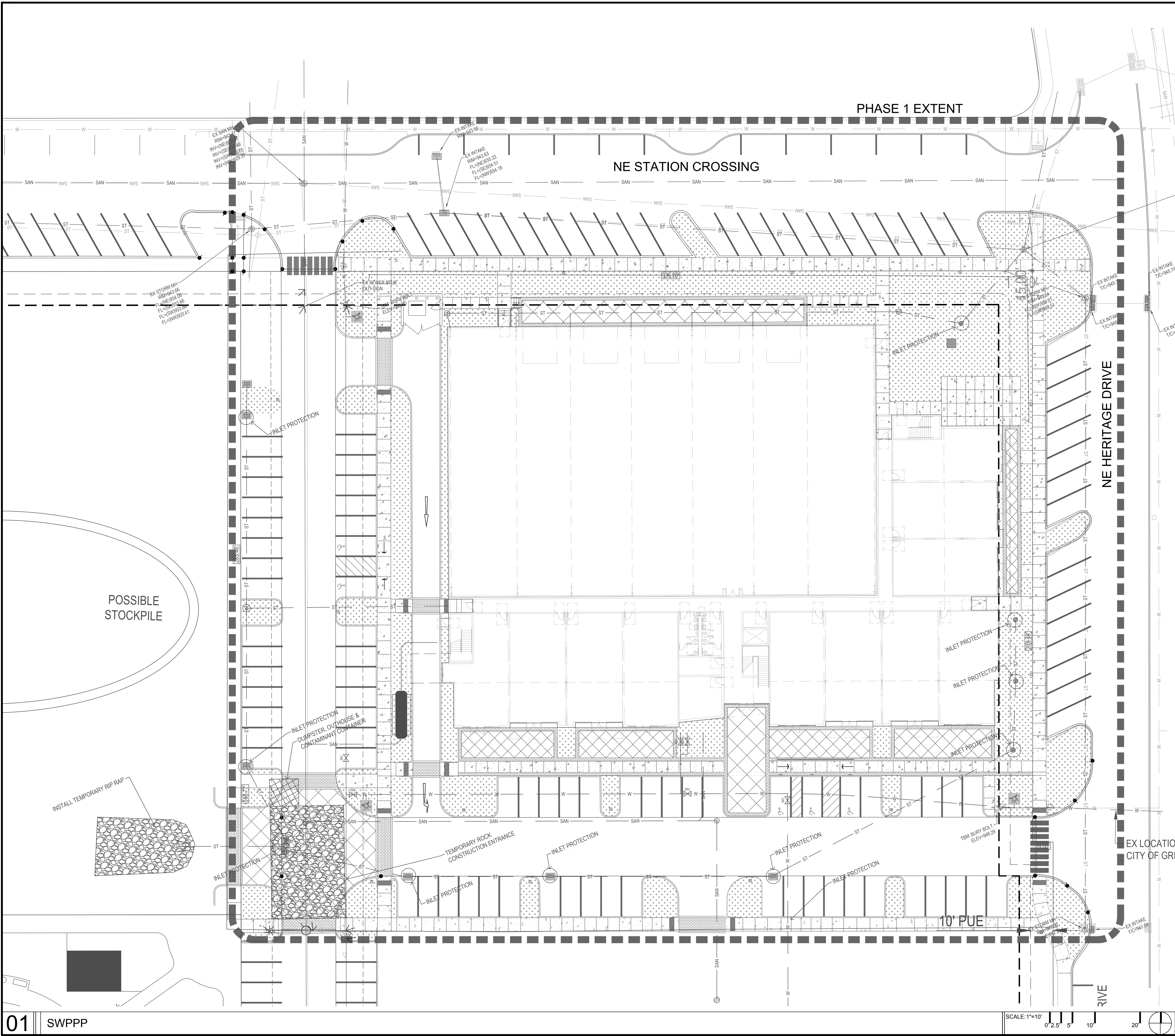
PHASE 1 UTILITIES PLAN

CONFLUENCE PROJECT NO: 19306

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SWPPP

CONFLUENCE PROJECT NO: 19306

C1.3

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PLANT SCHEDULE						
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING & REMARKS
OVERSTORY TREES						
AR	2	Acer 'Gingerbread'	GINGERBREAD PAPERBARK MAPLE	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
GB	1	Ginkgo biloba 'Autumn Gold'	MAIDENHAIR TREE	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
GD	2	Gymnocladus dioica	KENTUCKY COFFEE TREE	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
LT	3	Liriodendron tulipifera	TULIP TREE	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
NS	2	Nyssa sylvatica	BLACK GUM	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
QB	3	Quercus bicolor 'Bonnie & Mike'	SWAMP WHITE OAK	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
QM	3	Quercus muhlenbergii	CHINKAPII OAK	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
QR	3	Quercus rubra	NORTHERN RED OAK	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
UA	4	Ulmus americana 'Princeton'	PRINCETON AMERICAN ELM	2.5" CAL, 8' HT	B&B	SINGLE TRUNK
UNDERSTORY TREES						
AA	2	Amelanchier grandiflora 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICE BERRY	1.5" CAL	B&B	TREE FORM
CC	2	Cercis canadensis	EASTERN REDBUD	1.5" CAL	B&B	
CH	2	Chamaecyparis obtusa 'Nana Gracilis'	HINKOKI CYPRESS	1.5" CAL	B&B	
CA	2	Cornus alternifolia	PAGODA DOGWOOD	1.5" CAL	B&B	
VL	4	Viburnum lentago	NANNYBERRY VIBURNUM	1.5" CAL	B&B	TREE FORM
EVERGREEN TREES						
AC	2	Abies concolor	WHITE FIR	8' HT	B&B	AS SHOWN ON PLAN
PP	2	Picea pungens	COLORADO SPRUCE	8' HT	B&B	AS SHOWN ON PLAN
PS	3	Pinus strobus	EASTERN WHITE PINE	8' HT	B&B	AS SHOWN ON PLAN
PM	2	Pseudotsuga menziesii	DOUGLAS FIR	8' HT	B&B	AS SHOWN ON PLAN
DECIDUOUS SHRUBS						
AE	8	Aronia melanocarpa var. elata	BLACK CHOKEBERRY	#5	CONT.	3'-0" O.C.
CD	4	Callicarpa dichotoma 'Issai'	BEAUTYBERRY	#5	CONT.	3'-0" O.C.
CF	6	Clethra alnifolia	SWEET PEPPERBUSH	#5	CONT.	3'-0" O.C.
RD	6	Cornus stolonifera 'Arctic Fire'	RED-TWIG DOGWOOD	#5	CONT.	3'-0" O.C.
BF	6	Forsythia x intermedia 'Cordjau'	BORDER FORSYTHIA	#5	CONT.	3'-0" O.C.
IV	6	Ilex verticillata 'Jim Dandy'	WINTERBERRY	#5	CONT.	3'-0" O.C.
PH	5	Physocarpus opulifolius 'Center Glow'	NINEBARK	#5	CONT.	3'-0" O.C.
SA	3	Symphoricarpos alba	SNOWBERRY	#5	CONT.	3'-0" O.C.
SP	4	Syringa meyeri 'palbin'	DWARF KOREAN LILAC	#5	CONT.	3'-0" O.C.
SV	8	Syringa patula 'Miss Kim'	MISS KIM LILAC	#5	CONT.	3'-0" O.C.
VC	6	Viburnum carlesii	KOREANSPICE VIBURNUM	#5	CONT.	3'-0" O.C.
VB	6	Viburnum dentatum 'Christom'-Blue Muffin	ARROWWOOD VIBURNUM	#5	CONT.	3'-0" O.C.
EVERGREEN SHRUBS						
BM	10	Buxus microphylla var. japonica	JAPANESE BOXWOOD	#5	CONT.	3'-0" O.C.
BX	5	Buxus sempervirens 'Wintergreen'	BOXWOOD	#5	CONT.	3'-0" O.C.
FA	6	Chamaecyparis pisifera 'Filifera Aurea'	JAPANESE FALSECYPRESS	#5	CONT.	3'-0" O.C.
RH	6	Rhododendron	RHODODENDRON	#5	CONT.	3'-0" O.C.
RG	6	Rhododendron 'Girard's Fuchsia'	EVERGREEN AZALEA	#5	CONT.	3'-0" O.C.
PERENNIALS						
.	65	Asarum canadense	WILD GINGER	#1	CONT.	1'-6" TRI. SPACING
CR	153	Coreopsis verticillata 'moonbeam'	THREADLEAF COREOPSIS	#1	CONT.	1'-6" TRI. SPACING
CL	158	Corydalis lutea	CORYDALIS	#1	CONT.	1'-6" TRI. SPACING
EP	275	Echinacea purpurea	PURPLE CONEFLOWER	#1	CONT.	1'-6" TRI. SPACING
HS	235	Heuchera sanguinea	CORAL BELLS	#1	CONT.	1'-6" TRI. SPACING
HE	93	Hyacinthoides hispanica 'Excelsior'	SPANISH BLUEBELL	#1	CONT.	1'-6" TRI. SPACING
LH	30	Lavandula angustifolia 'Hidcote'	ENGLISH LAVENDER	#1	CONT.	1'-6" TRI. SPACING
PH	30	Phlox pilosa	PRAIRIE PHLOX	#1	CONT.	1'-6" TRI. SPACING
BS	30	Rudbeckia hirta	BLACK-EYED SUSAN	#1	CONT.	1'-6" TRI. SPACING
GRASSES						
BC	30	Bouteloua curtipendula	SIDEOATS GRAMA	#1	CONT.	2'-0" O.C.
FR	30	Calamagrostis x acutiflora 'Karl Foerster'	FEATHER REED GRASS	#1	CONT.	2'-0" O.C.
MS	30	Miscanthus sinensis 'Sarabande'	EULALIA	#1	CONT.	2'-0" O.C.
FG	30	Pennisetum alopecuroides 'Hameln'	FOUNTAIN GRASS	#1	CONT.	2'-0" O.C.
CD	30	Carex albicans	WHITE-TINGED SEDGE	#1	CONT.	2'-0" O.C.
CI	30	Carex 'Ice Dance'	SEDGE	#1	CONT.	2'-0" O.C.
CM	30	Carex morrowii 'Variegata'	JAPANESE GRASS SEDGE	#1	CONT.	2'-0" O.C.
GROUNDCOVERS						
AU	10	Arctostaphylos uva-ursi 'Massachusetts'	BEARBERRY	4"	CONT.	12" O.C.
PT	10	Pachysandra terminalis 'Variegata'	JAPANESE SPURGE	4"	CONT.	12" O.C.
PY	10	Pycnanthemum multicaum	SHORT-TOOTHED MOUNTAIN MINT	4"	CONT.	12" O.C.
TY	10	Thymus serpyllum 'Elfin'	ELFIN CREEPING THYME	4"	CONT.	12" O.C.

PLANTING REQUIREMENTS (ENTIRE SITE)

OPEN SPACE: 121,155 SQFT (2.78 AC)
OVERSTORY TREES REQUIRED: 81 (2 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
OVERSTORY TREES PROVIDED: 124
UNDERSTORY TREES REQUIRED: 41(1 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
UNDERSTORY TREES PROVIDED: 59

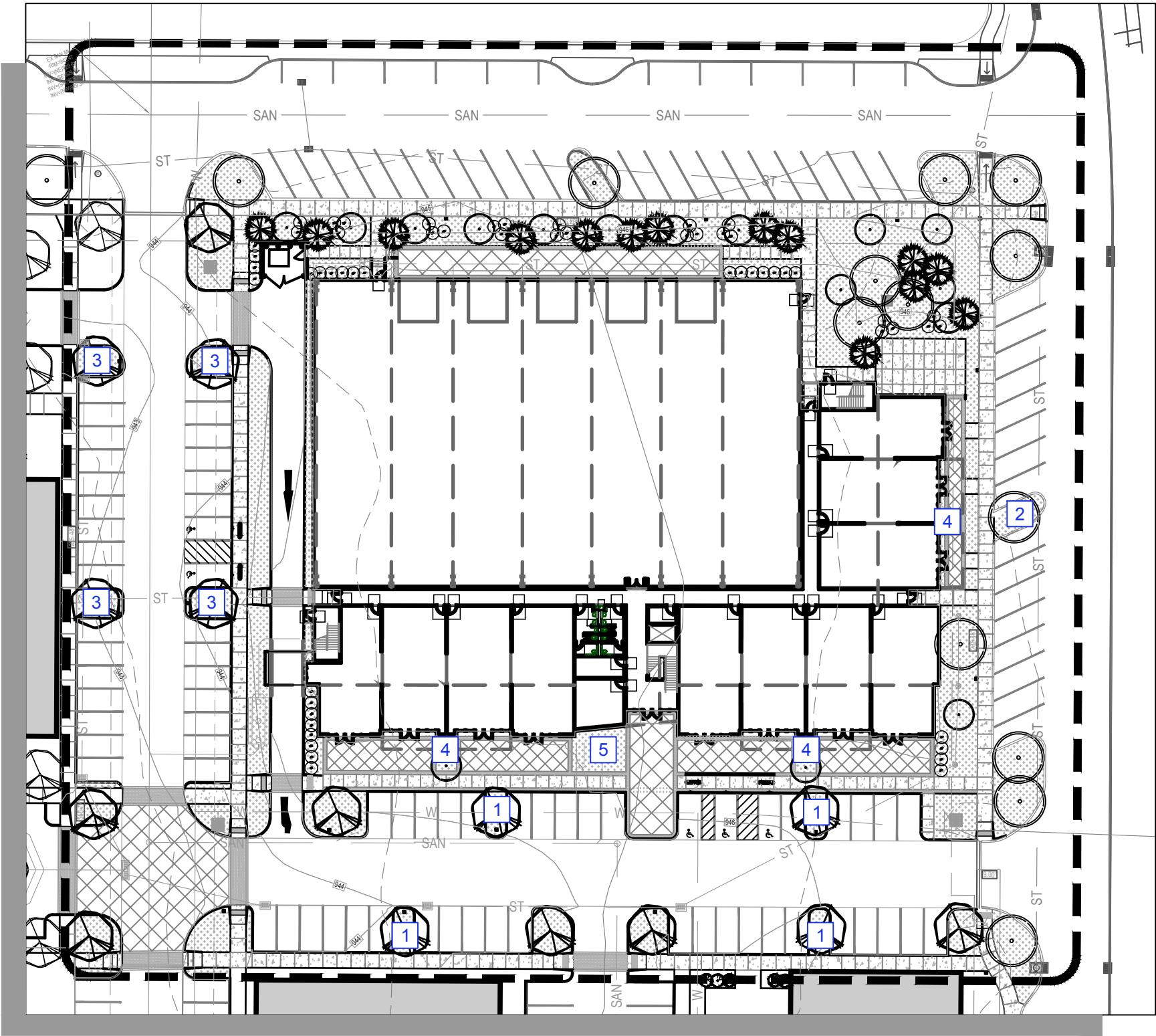
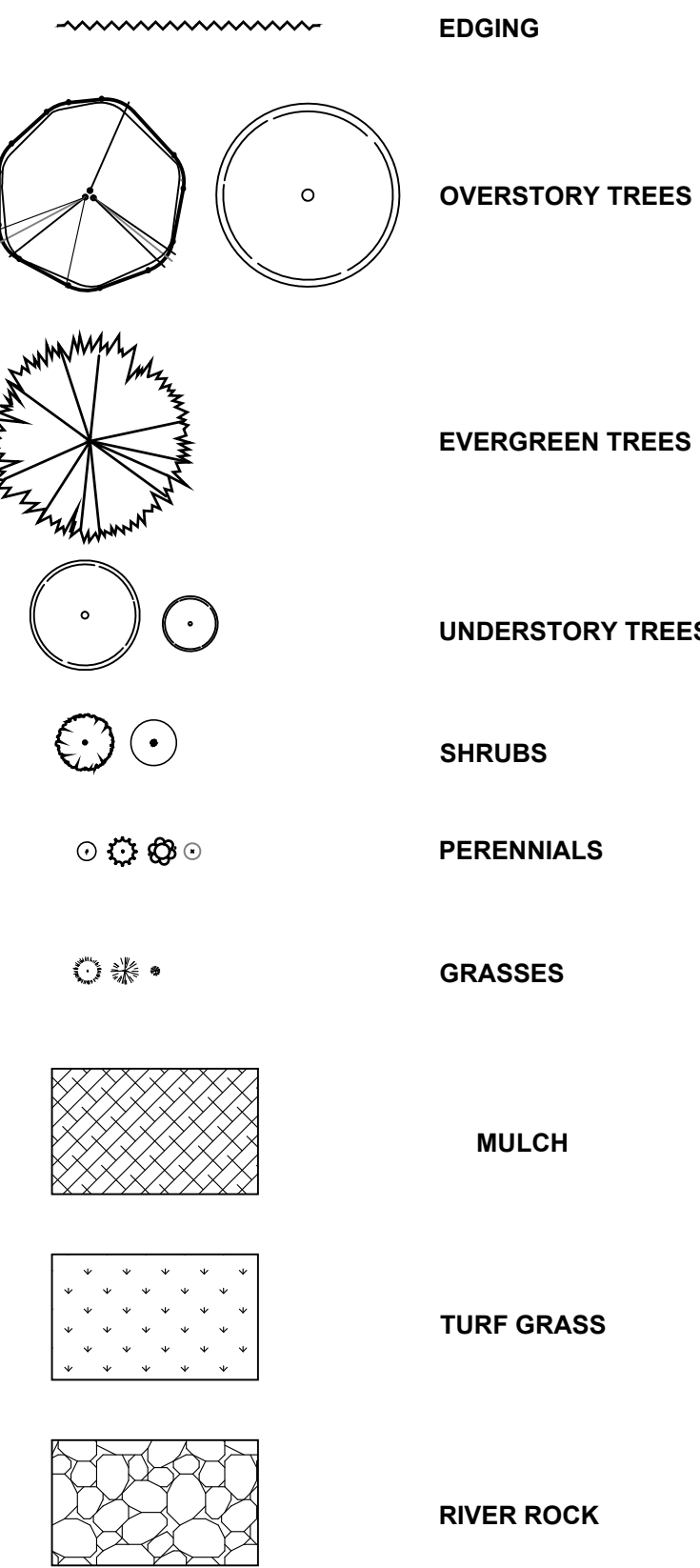
EVERGREEN TREES REQUIRED: 21 (1 PER 6,000 S.F. OF REQUIRED OPEN SPACE)
EVERGREEN TREES PROVIDED: 24
SHRUBS REQUIRED: 242 (6 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
SHRUBS PROVIDED: 245

PHASE 1 PLANTING
TOTAL SITE AREA: 105,693 S.F. (2.43 AC)
OPEN SPACE: 19,960 S.F. (18.9%) (0.46 AC)
PLANTING REQUIREMENTS

OVERSTORY TREES REQUIRED: 14 (2 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
OVERSTORY TREES PROVIDED: 31
UNDERSTORY TREES REQUIRED: 7 (1 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
UNDERSTORY TREES PROVIDED: 16

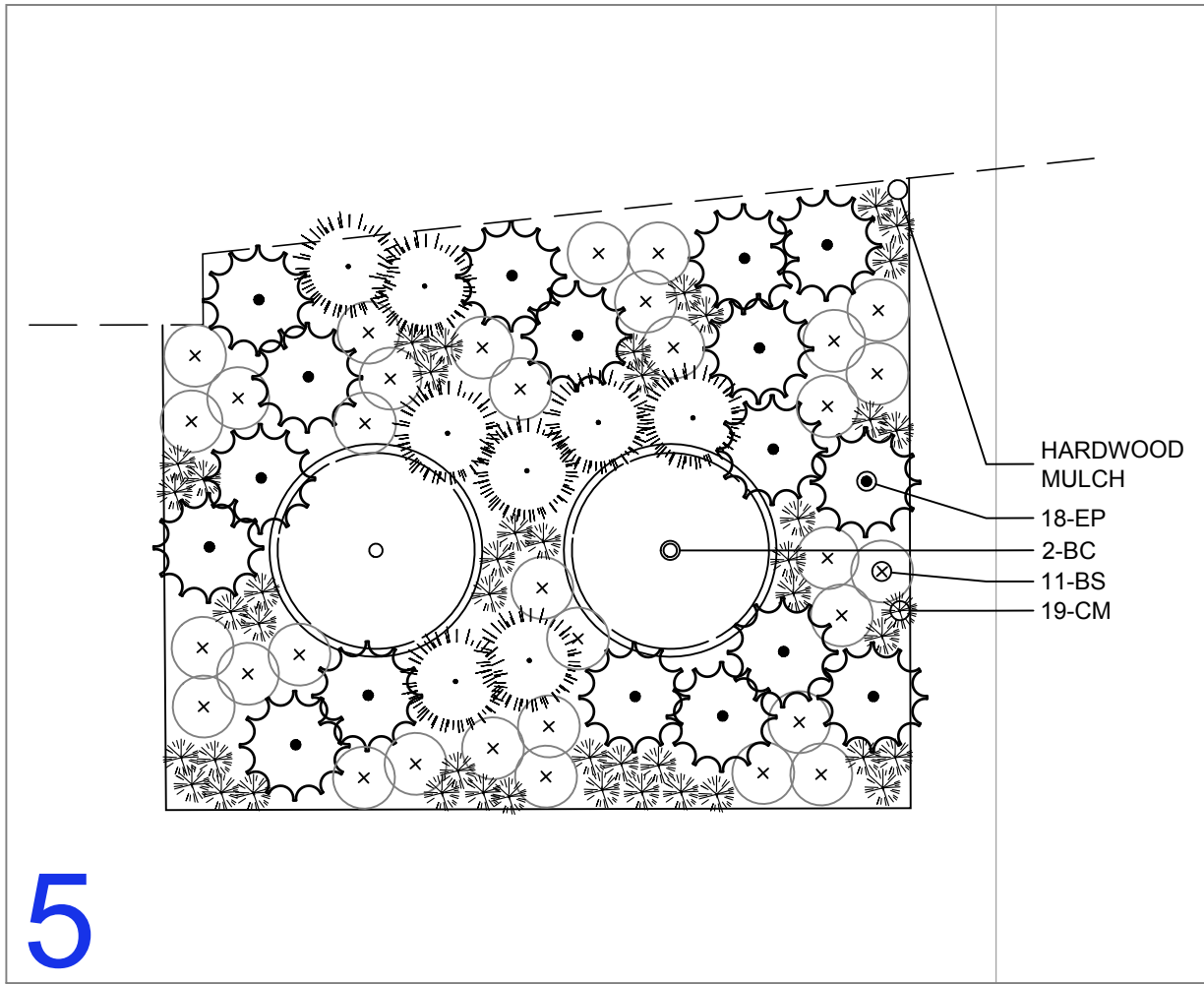
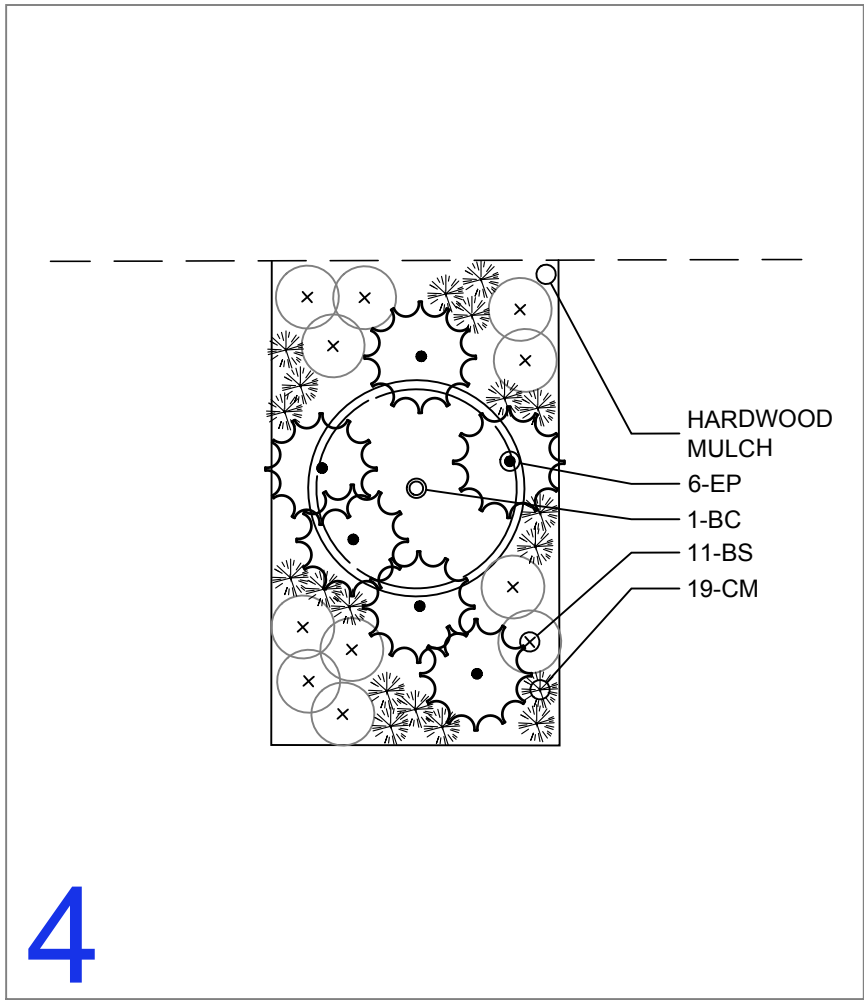
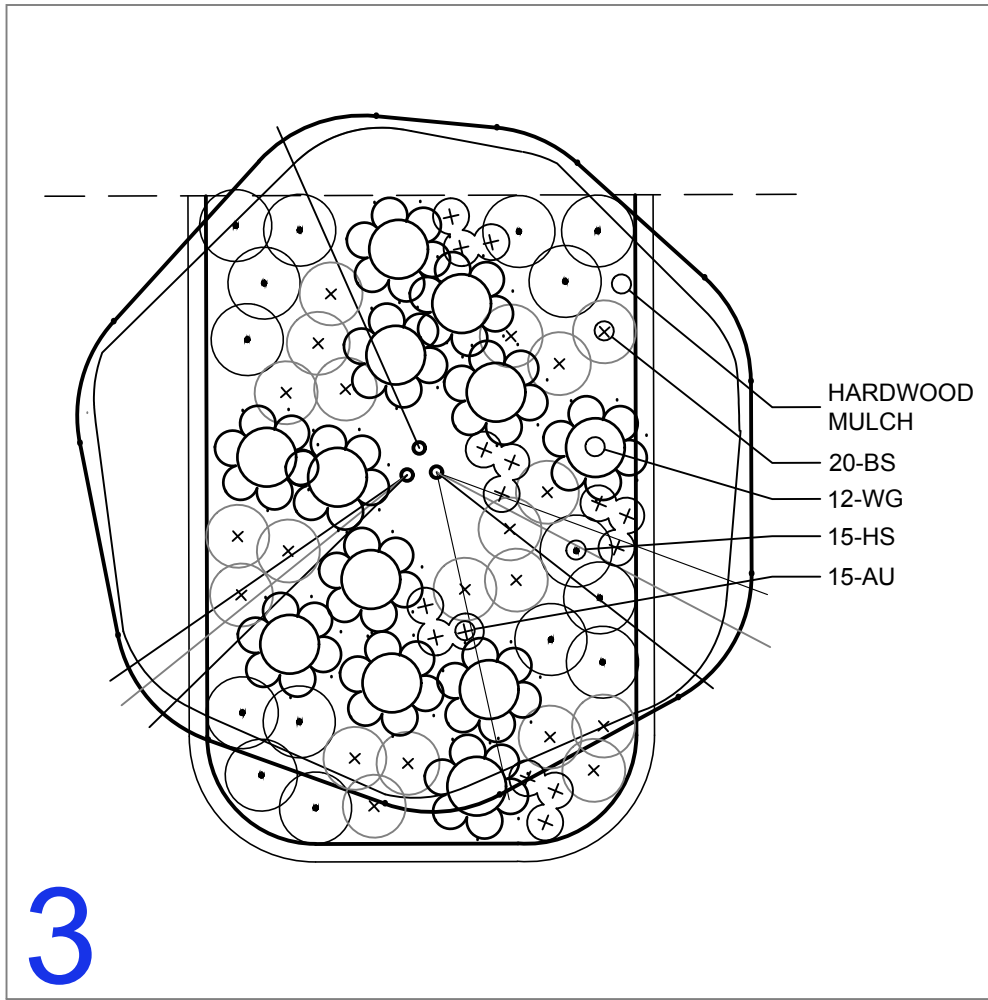
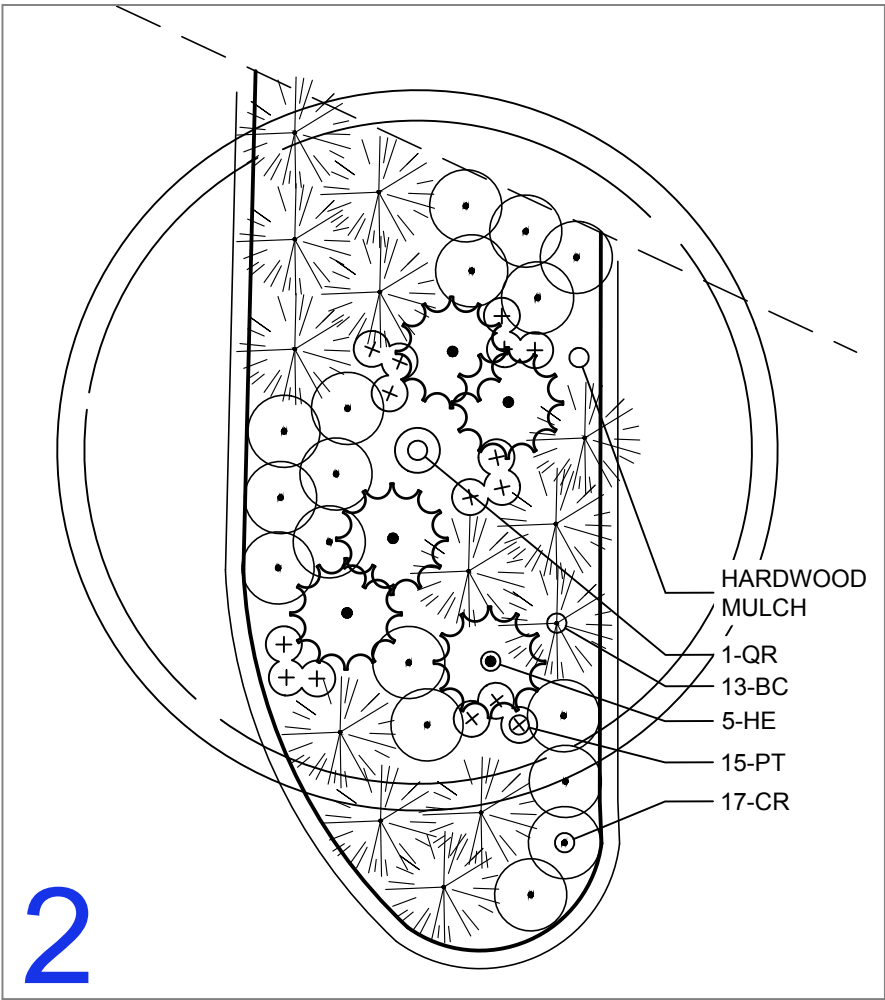
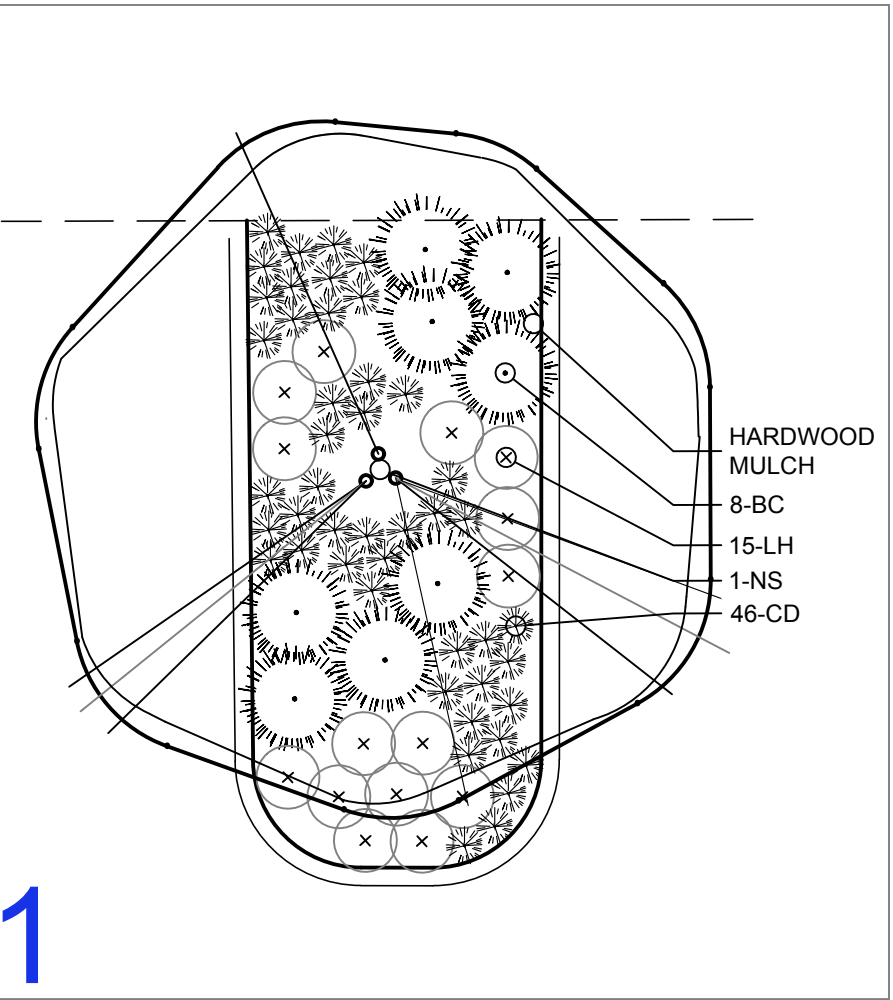
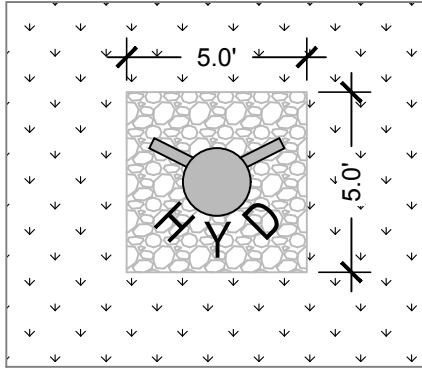
EVERGREEN TREES REQUIRED: 4 (1 PER 6,000 S.F. OF REQUIRED OPEN SPACE)
EVERGREEN TREES PROVIDED: 14

SHRUBS REQUIRED: 40 (6 PER 3,000 S.F. OF REQUIRED OPEN SPACE)
SHRUBS PROVIDED: 55



PLANTING NOTES:

- SOD ALL AREAS WITHIN CONTRACT LIMITS, NOT COVERED BY PAVING, BUILDINGS, OR PLANTING BEDS, UNLESS OTHERWISE NOTED.
- PLANT QUANTITIES ARE FOR INFORMATION ONLY; DRAWING SHALL PREVAIL IF CONFLICT OCCURS.
- NOTIFY LANDSCAPE ARCHITECT AFTER STAKING IS COMPLETED AND BEFORE PLANT PITS ARE EXCAVATED.
- CONTRACTOR SHALL PLACE SHREDDED BARK MULCH AROUND ALL TREES AND IN ALL PLANTING BEDS TO A DEPTH OF 3".
- KIND, SIZE AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK, ANSI 280-1992, OR MOST RECENT EDITION.
- THE CONTRACTOR SHALL REPORT SUBSURFACE SOIL OR DRAINAGE PROBLEMS TO THE LANDSCAPE ARCHITECT.
- THE CONTRACTOR SHALL SHOW PROOF OF PROCUREMENT, SOURCES, QUANTITIES AND VARIETIES FOR ALL SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, AND ANNUALS WITHIN 21 DAYS FOLLOWING THE AWARD OF CONTRACT. TIMELY PROCUREMENT OF ALL PLANT MATERIAL IS ESSENTIAL TO THE SUCCESSFUL COMPLETION AND INITIAL ACCEPTANCE OF THE PROJECT.
- SUBSTITUTIONS SHALL ONLY BE ALLOWED WHEN THE CONTRACTOR HAS EXHAUSTED ALL SOURCES FOR THE SPECIFIED MATERIAL, AND HAS PROVEN THAT THE SPECIFIED MATERIAL IS NOT AVAILABLE. THE CONTRACTOR MUST PROVIDE NAME AND VARIETY OF SUBSTITUTION TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO TAGGING OR PLANTING. SUBSTITUTIONS SHALL BE NEAREST EQUIVALENT SIZE OF VARIETY OF PLANT HAVING SAME ESSENTIAL CHARACTERISTICS.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN, SOUND, HEALTHY, VIGOROUS AND FREE FROM INSECTS, DISEASE AND INJURIES, WITH HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES. SIZES SHALL BE EQUAL TO OR EXCEEDING SIZES INDICATED ON THE PLANT LIST. THE CONTRACTOR SHALL SUPPLY PLANTS IN QUANTITY AS SHOWN ON THE DRAWINGS.
- STAKE OR PLACE ALL PLANTS IN FIELD AS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT FOR APPROVAL BY THE OWNER PRIOR TO PLANTING.
- FIRE HYDRANTS SHALL HAVE A 5 FOOT X 5 FOOT SQUARE AREA OF CRUSHED RED BRICK FOR EASE OF ACCESS.



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HERITAGE AT GRIMES
MIKKELSEN PROPERTY
GRIMES / IA

REVISION SCHEDULE		
ISSUE	DATE	DESCRIPTION
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PLANTING PLAN

CONFLUENCE PROJECT NO: 19306

L2.0

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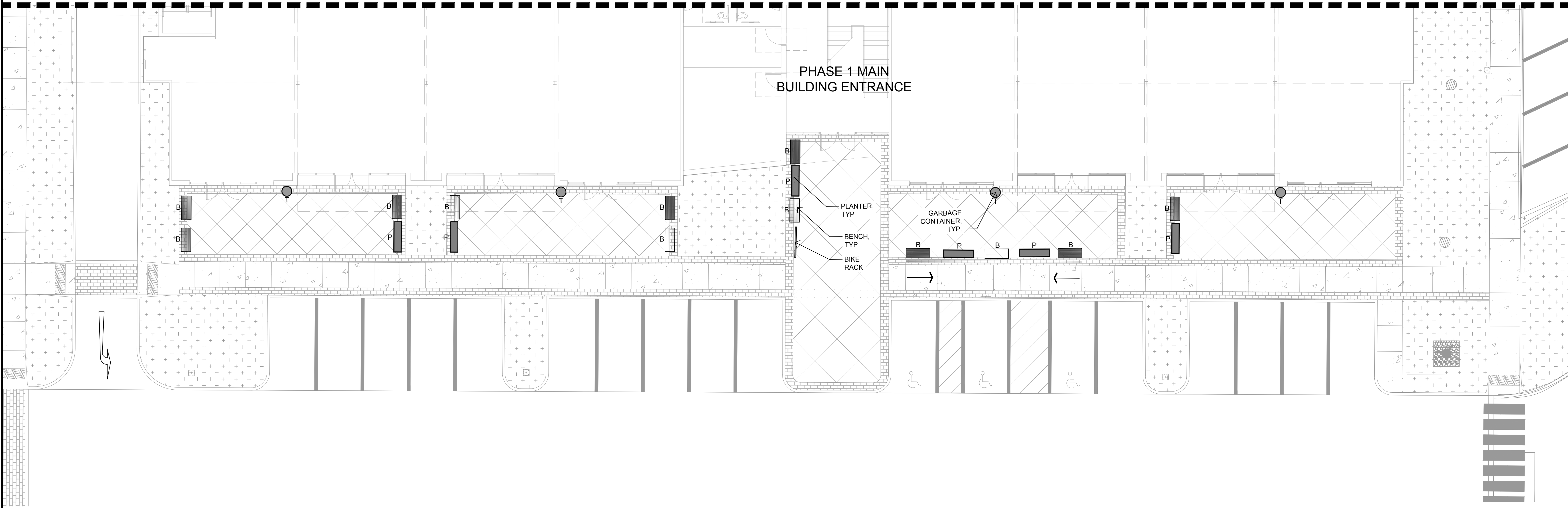
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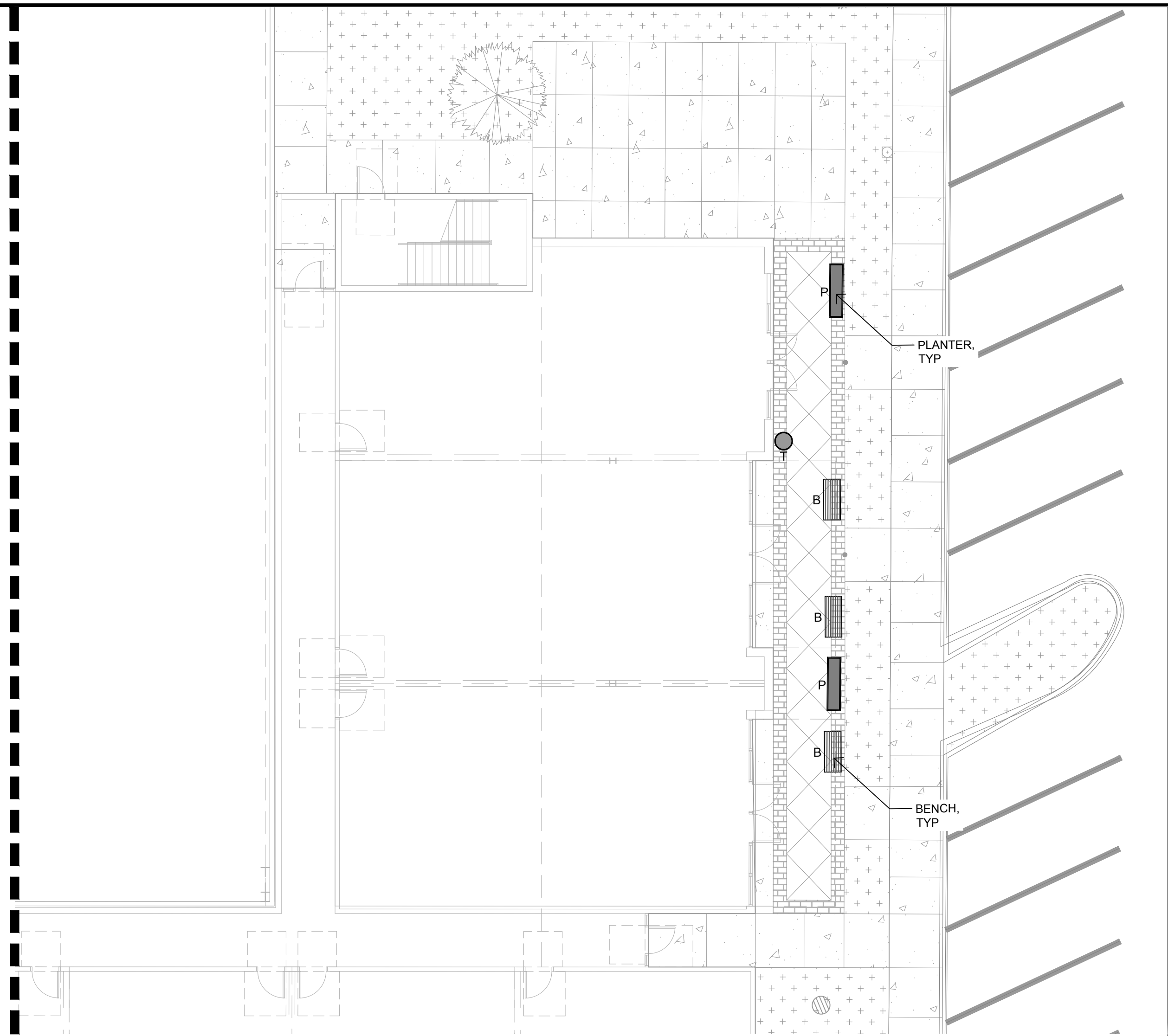
L2.1

- [illegible]

Drawing: \\conf-dm-free1\dataadm\Projects\2019\19306_Heritage at Grimes CDA\19306_WORKING\AUTOCAD\SHEETS\3.0 SITE FURNISHING PLAN.dwg
Saved By: dblosch Save Time: 1/28/2020 6:32 PM Plotted by: Devon Blosch Plot Date: 1/28/2020 7:20 PM



02 SITE FURNISHING PLAN - SOUTH



01 SITE FURNISHING PLAN - EAST

CONFLUENCE

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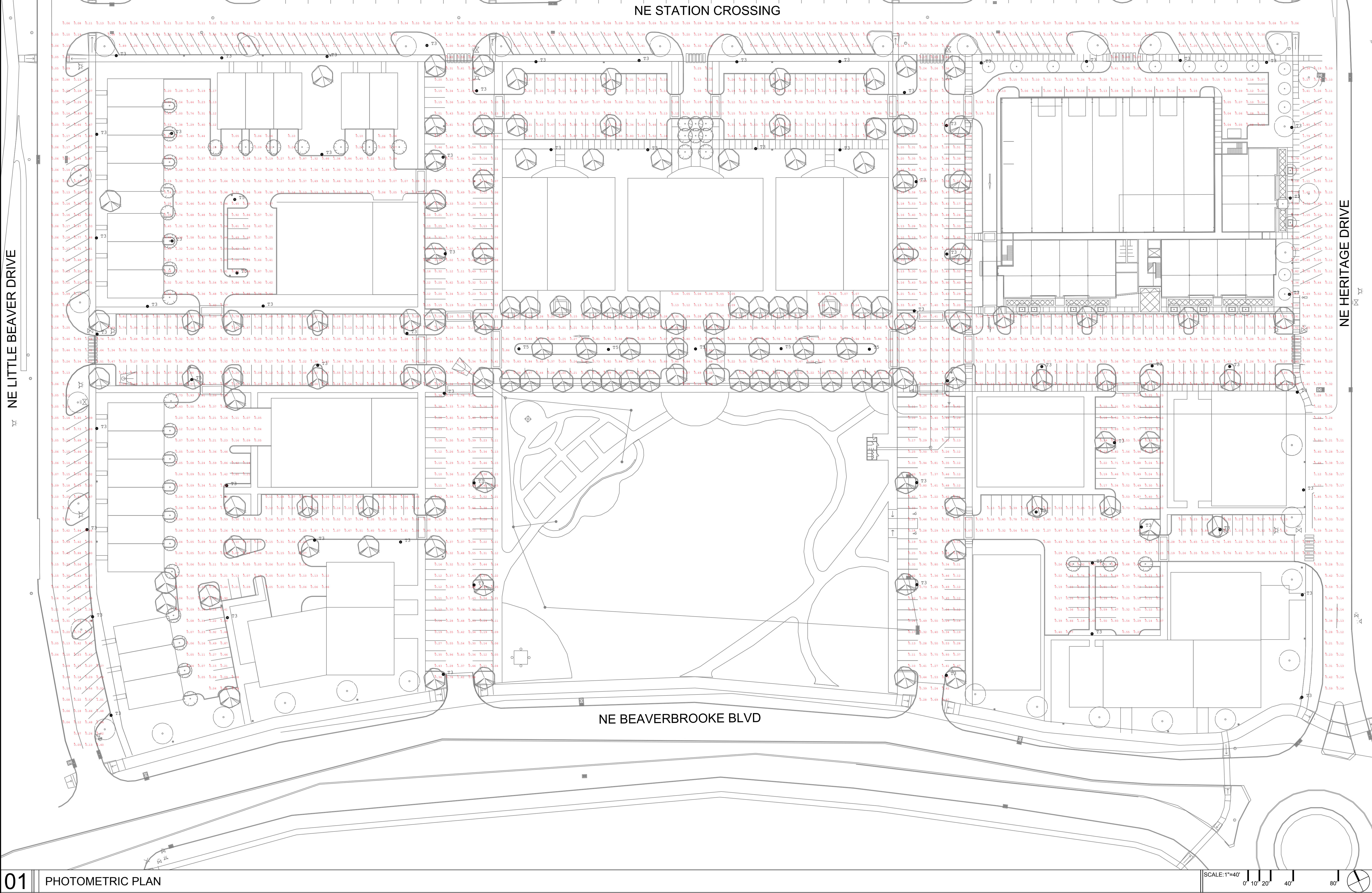
SITE FURNISHING PLAN

CONFLUENCE PROJECT NO: 19306

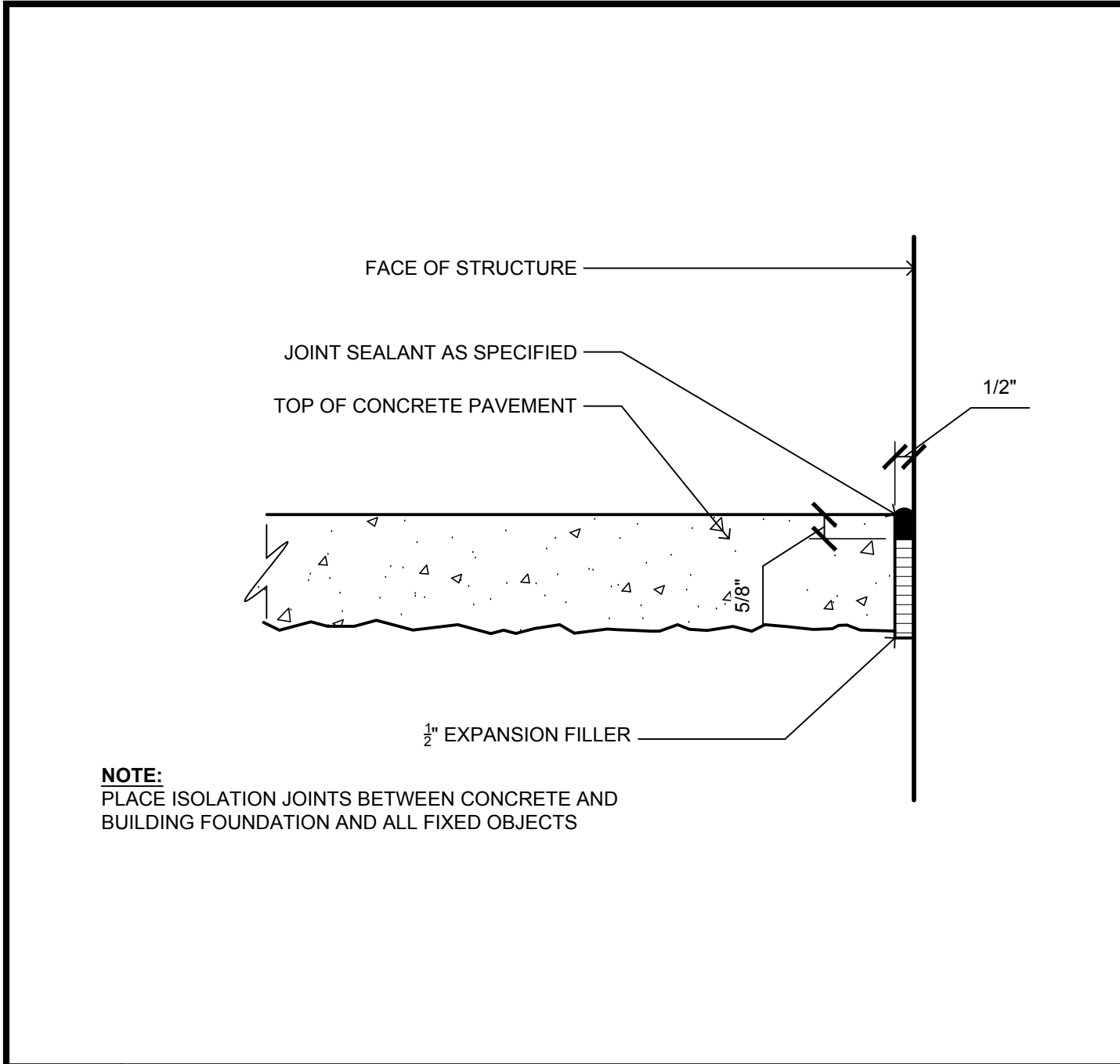
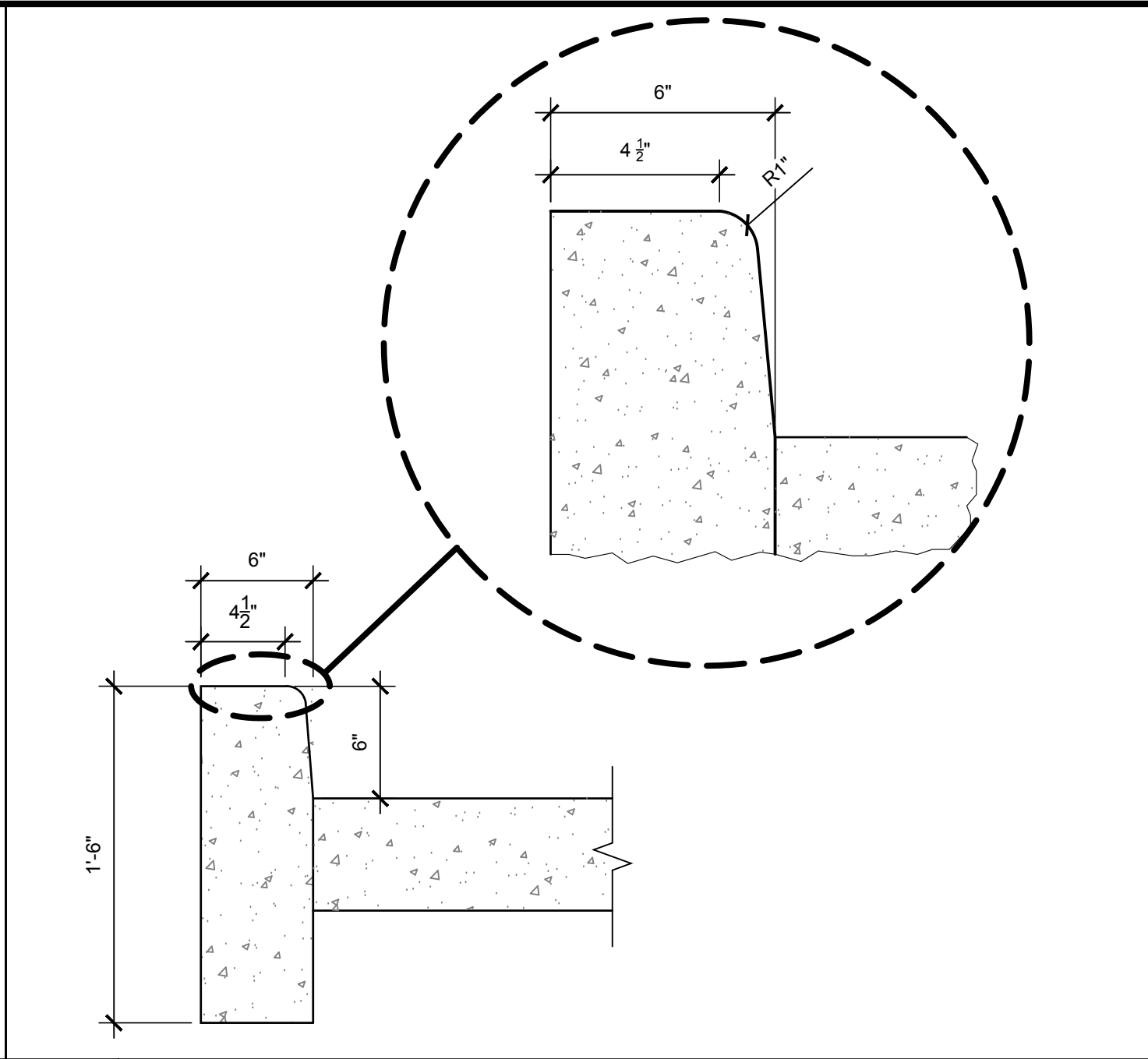
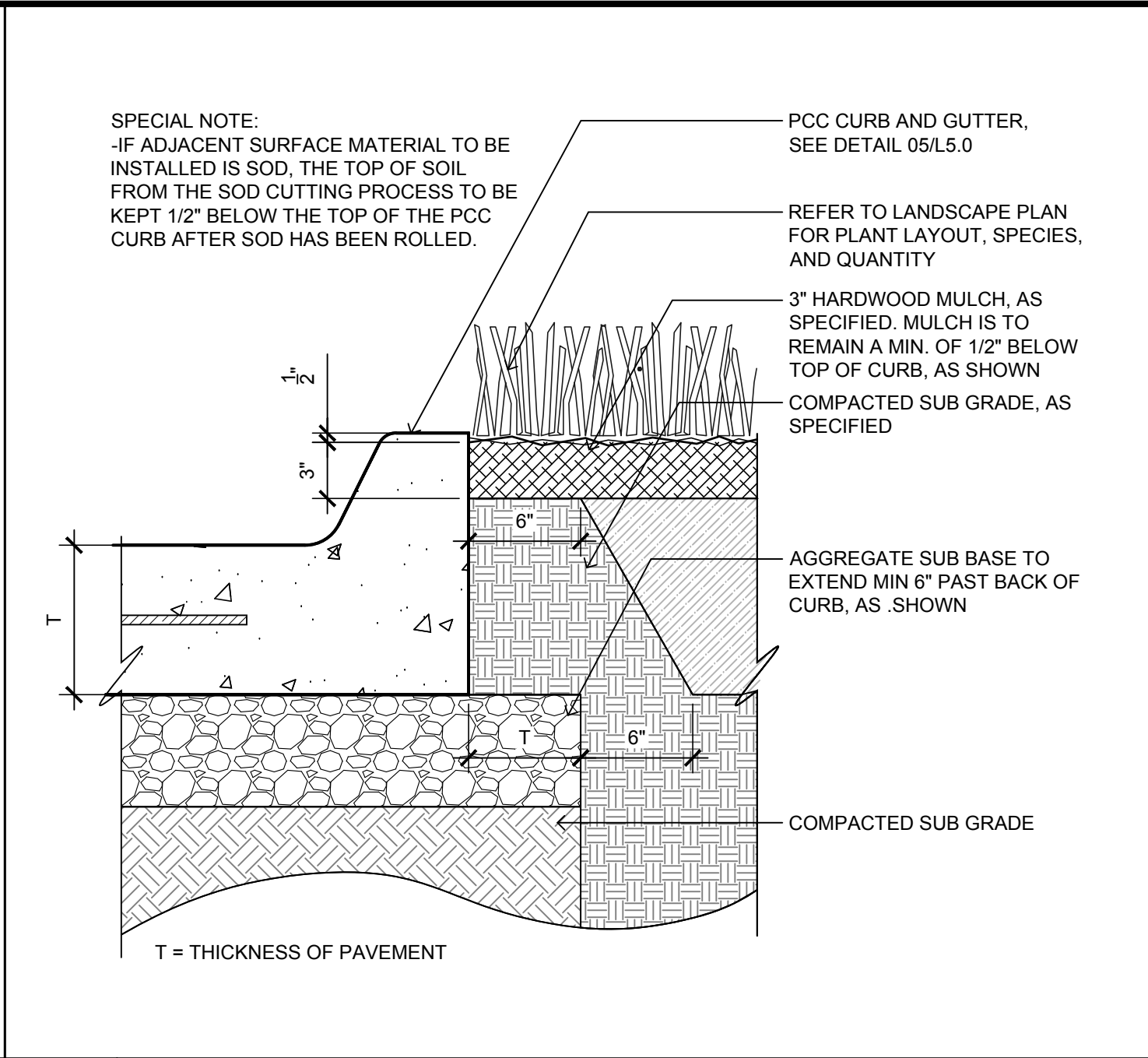
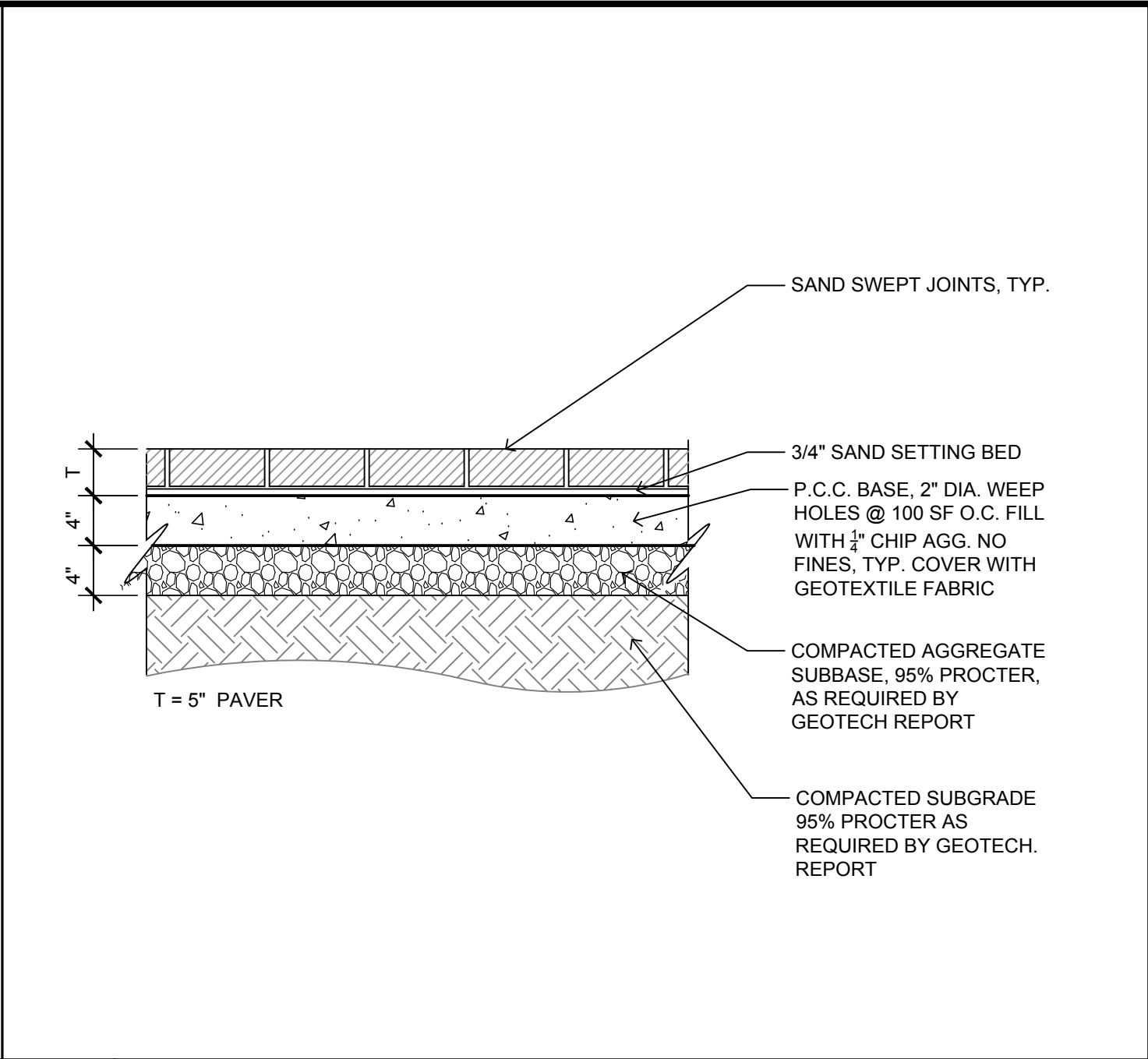
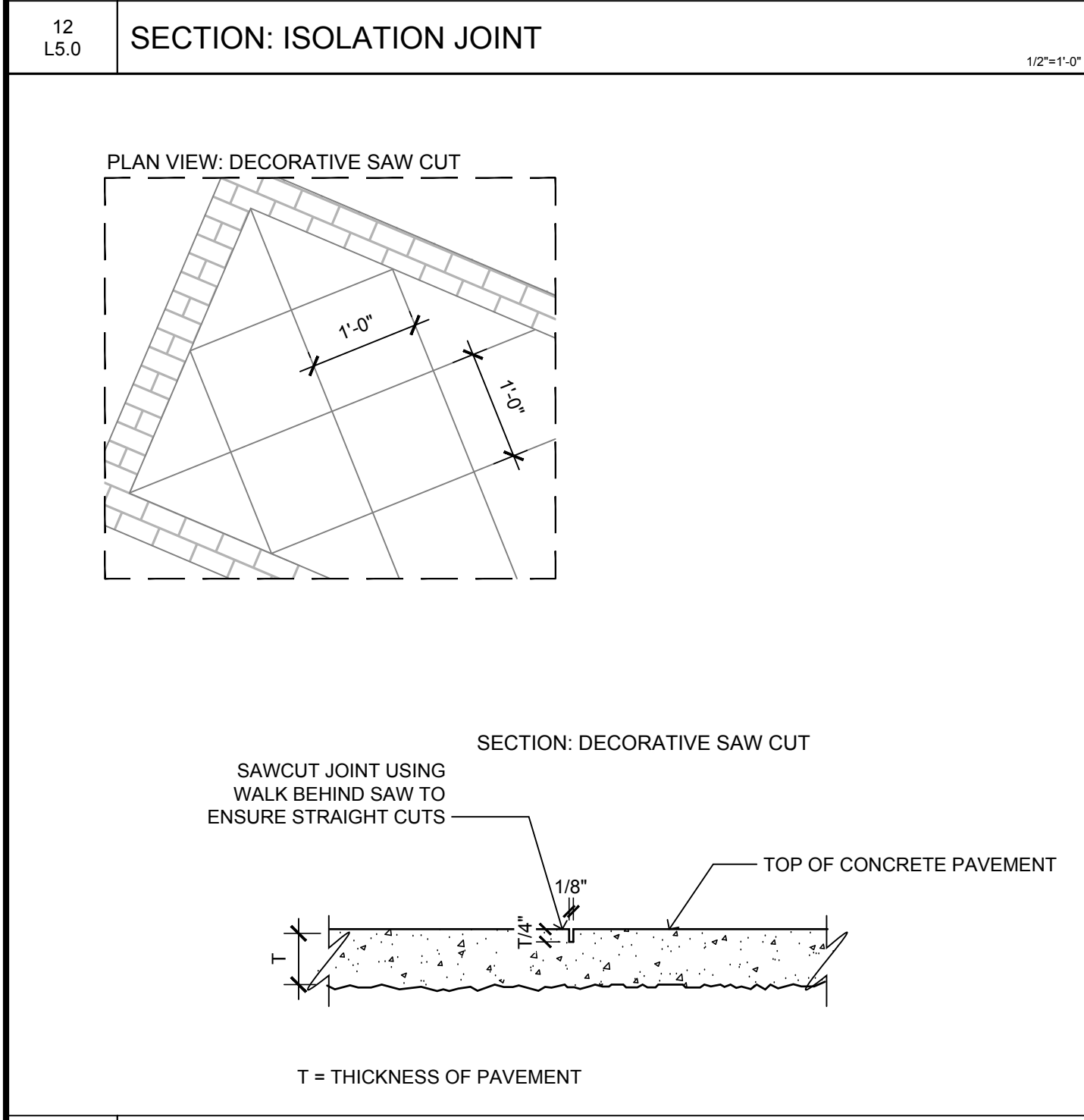
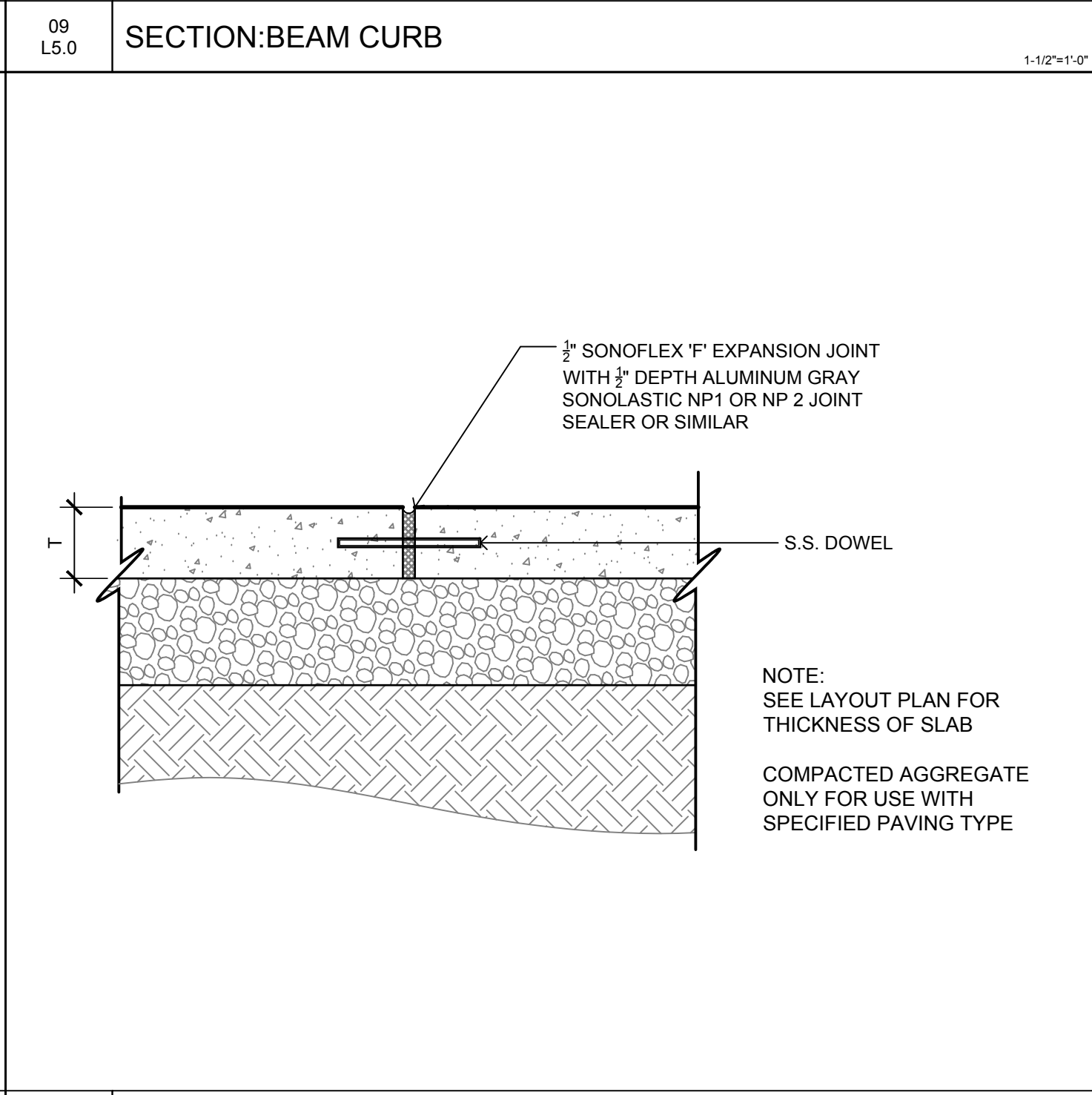
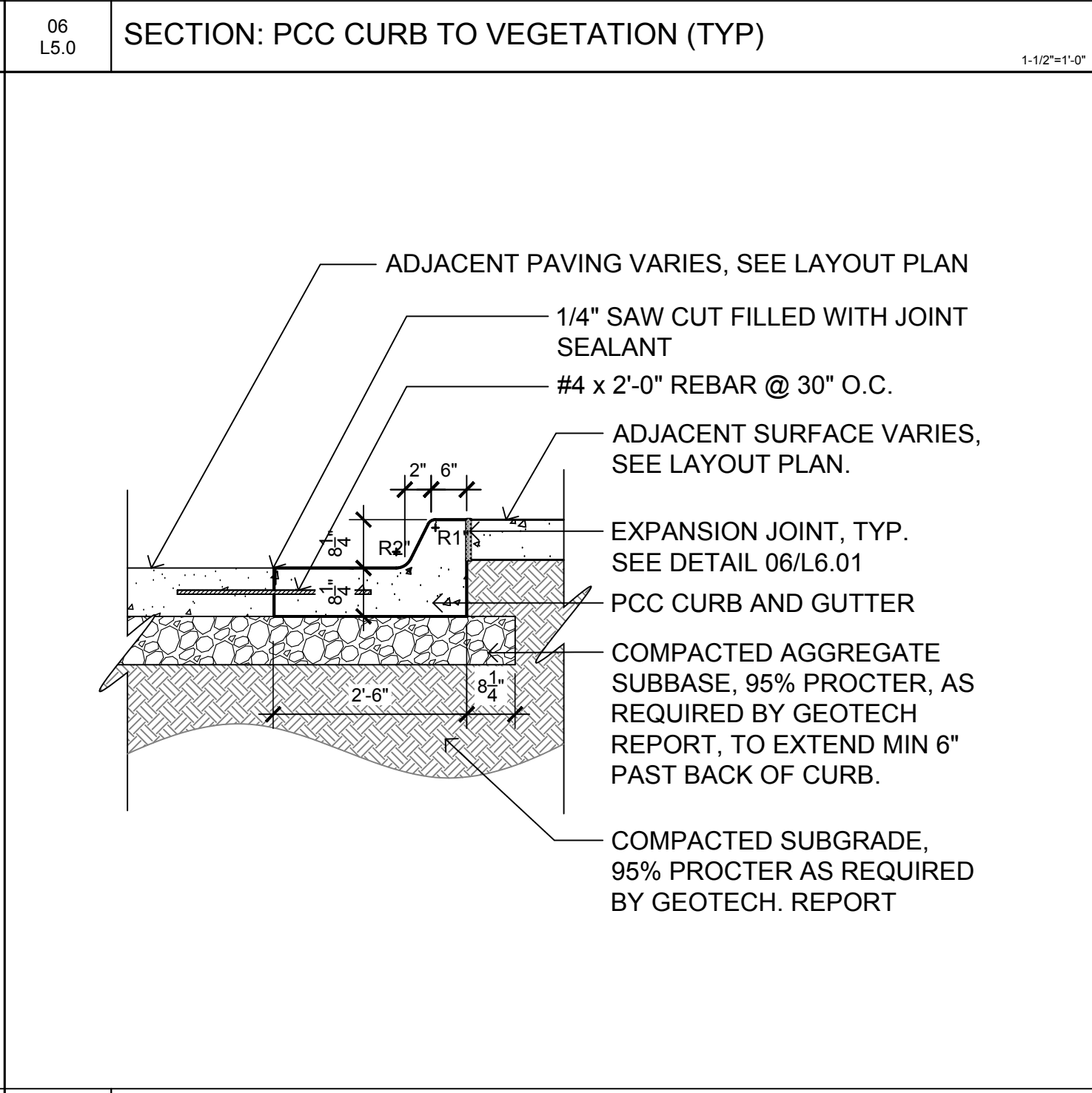
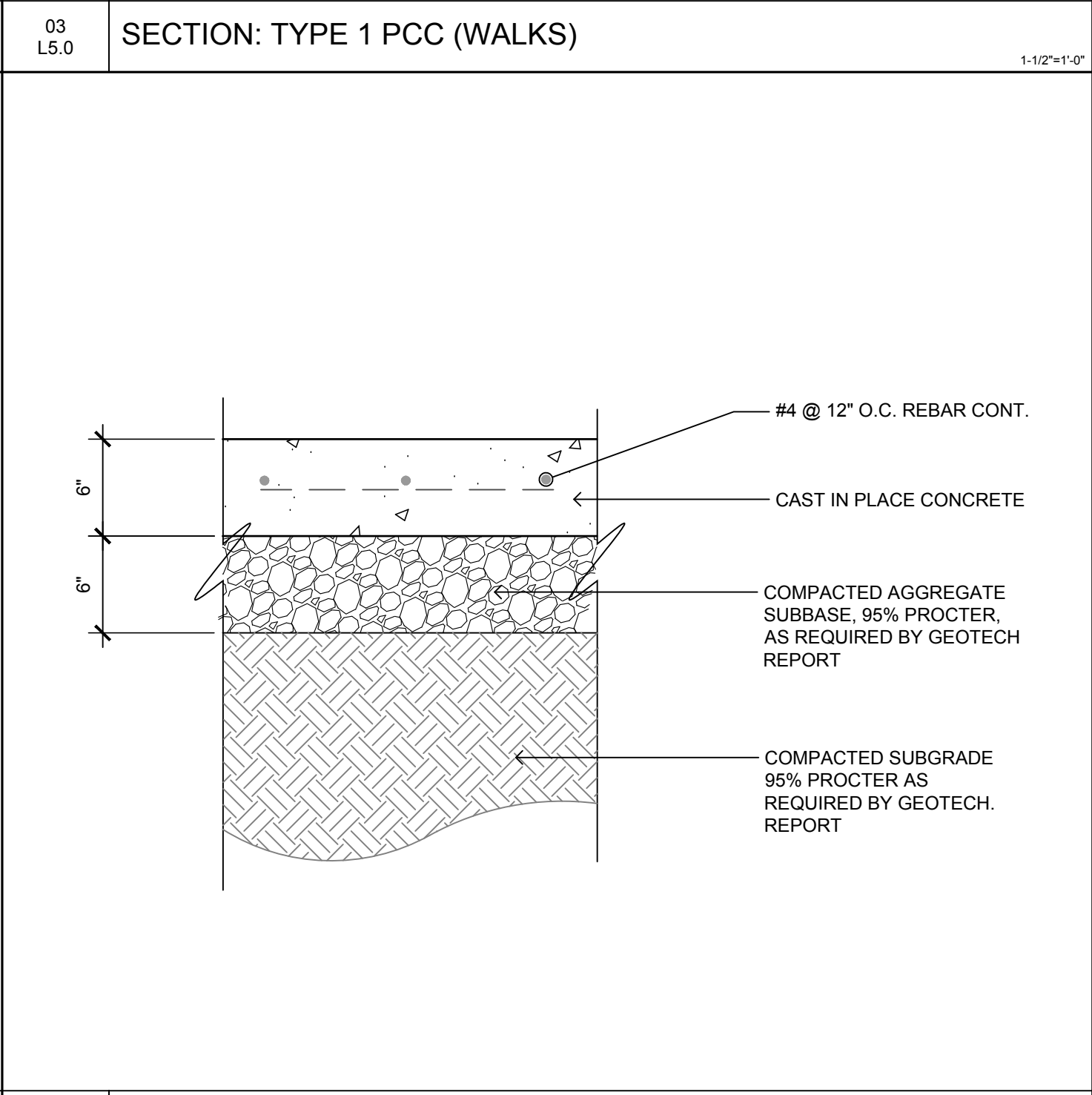
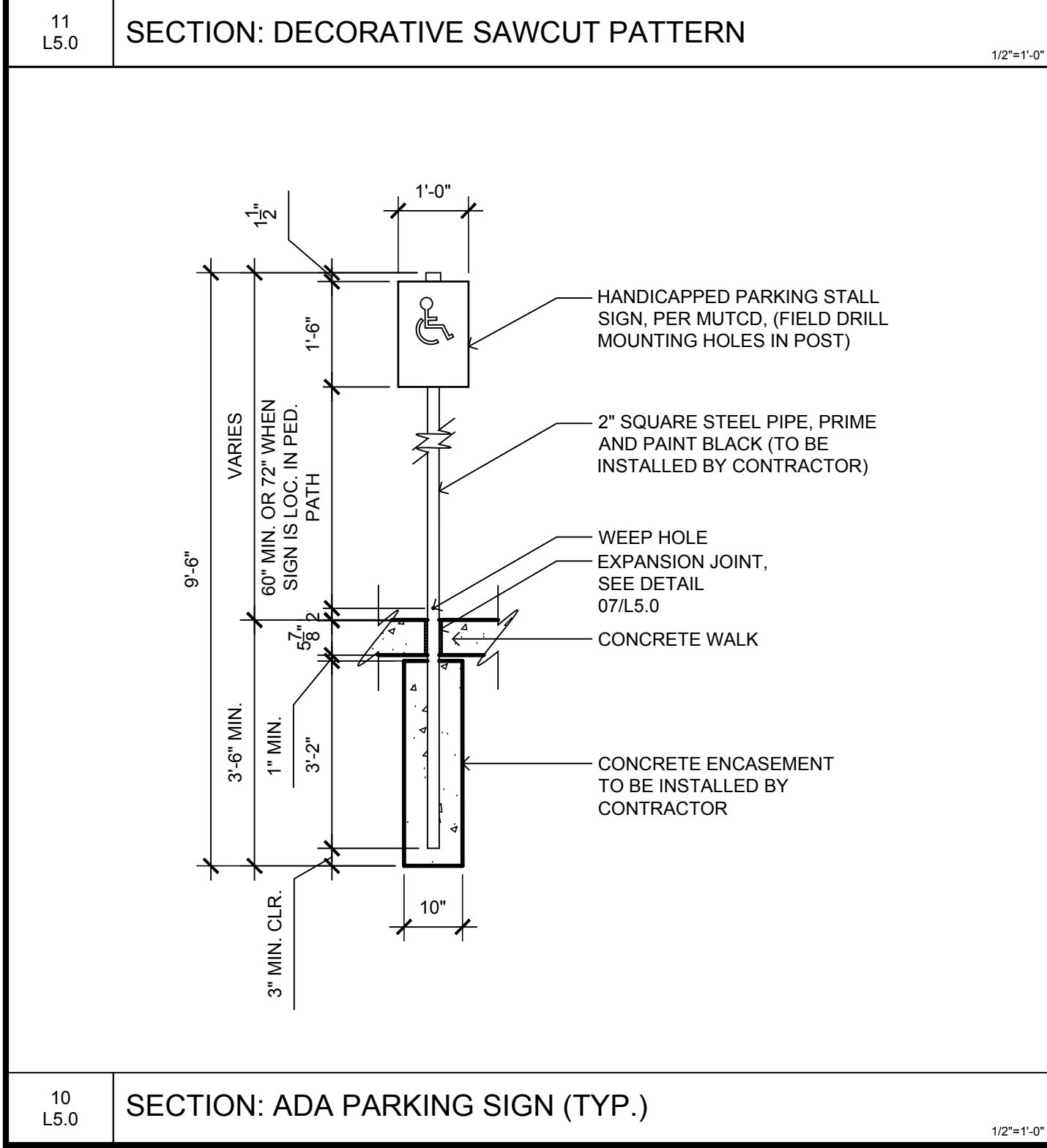
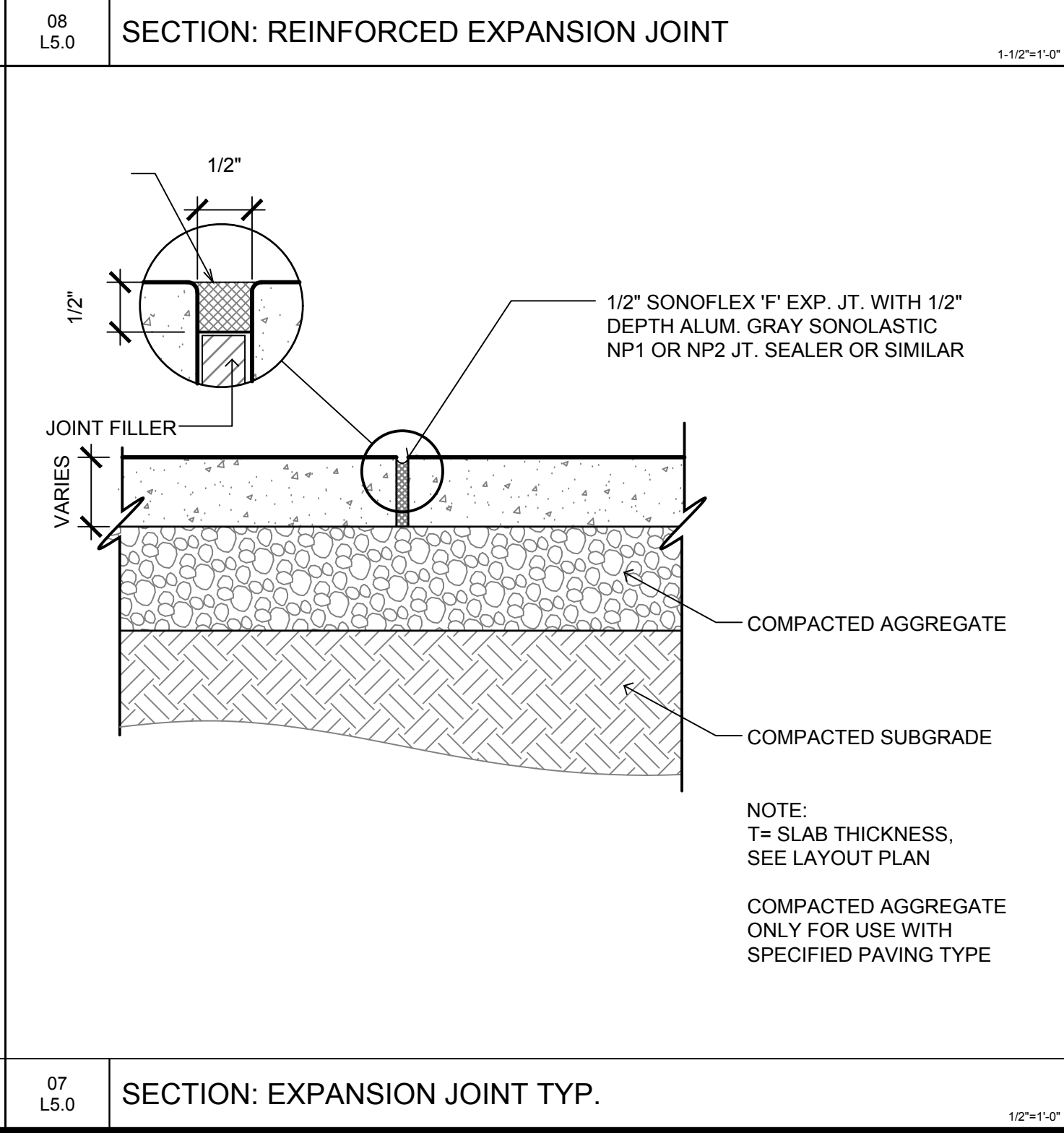
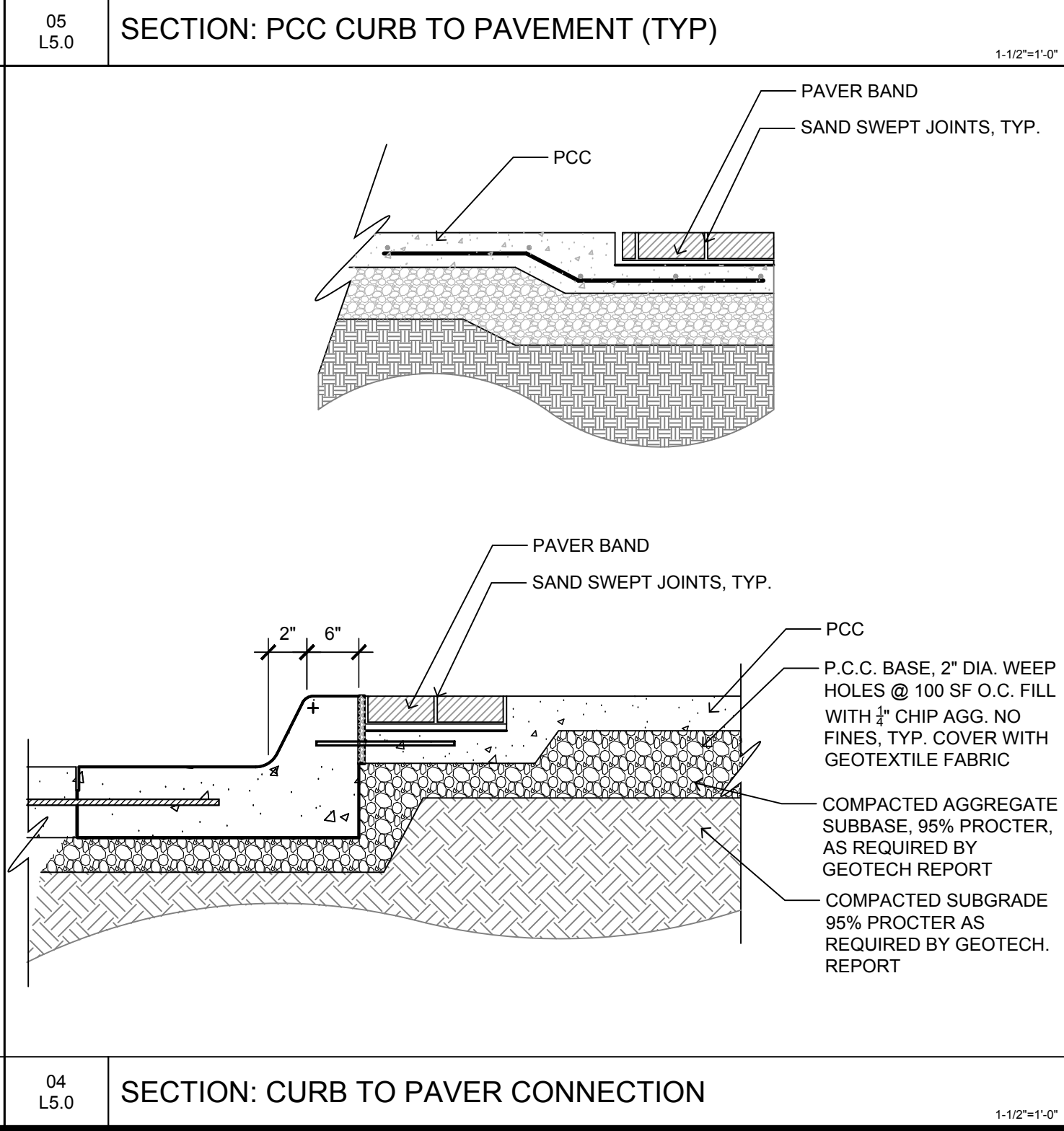
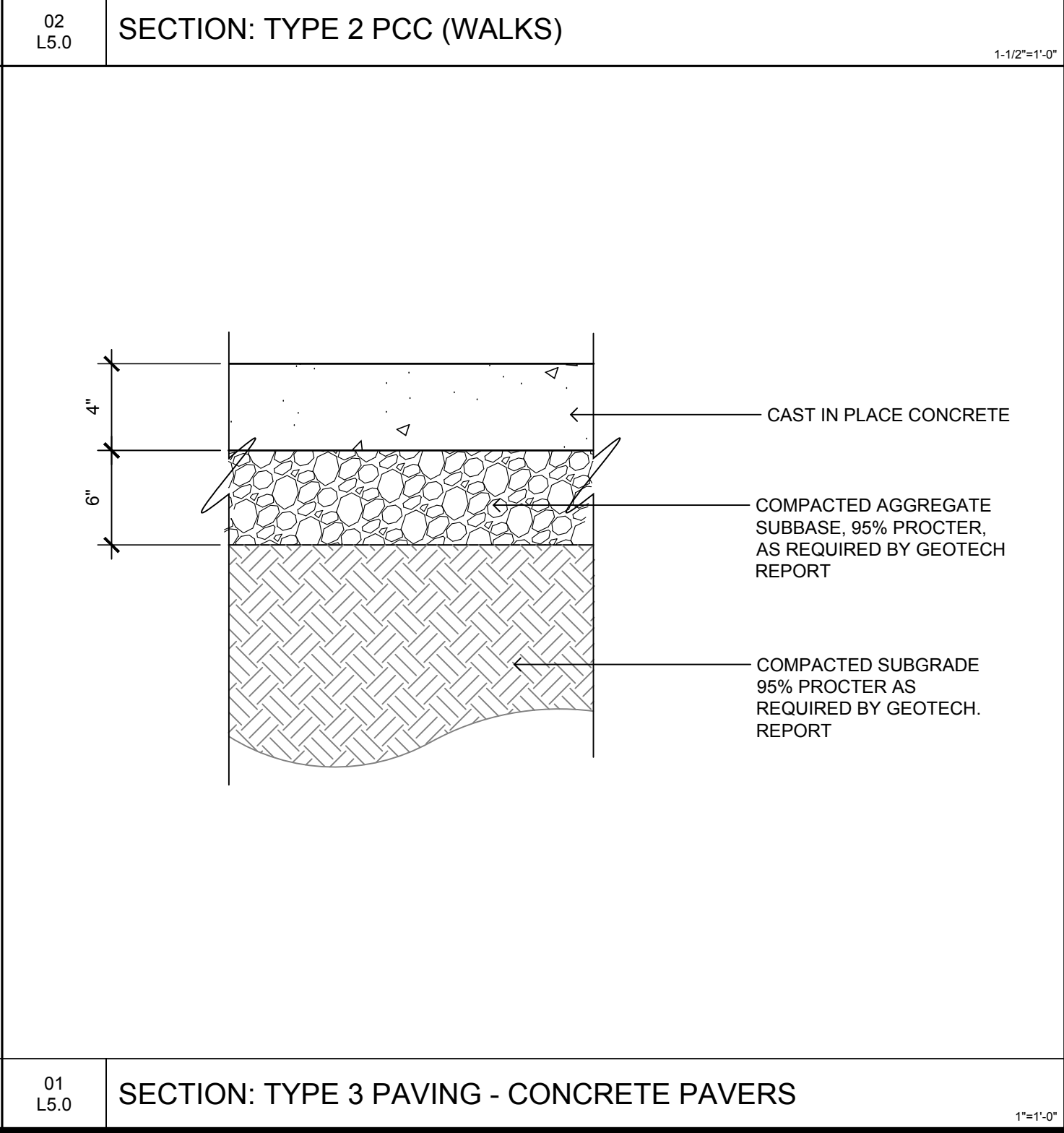
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Luminaire Schedule									
Symbol	Qty	Label	Arrangement	LLF	Description			Tag	Lum. Watts
○	65	T5	SINGLE	0.950	FT-8AS9SLRLED-12L40T3-MDL008 (16' POLE)			18' MH	26.5
○	9	T5	SINGLE	0.950	FT-8AS9SLRLED-12L40T3-MDL008 (16' POLE)			18' MH	26.5



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 12 L5.0 SECTION: ISOLATION JOINT 1-1/2"x1'-0"		 09 L5.0 SECTION: BEAM CURB 1-1/2"x1'-0"		 06 L5.0 SECTION: PCC CURB TO VEGETATION (TYP) 1-1/2"x1'-0"		 03 L5.0 SECTION: TYPE 1 PCC (WALKS) 1-1/2"x1'-0"	
 11 L5.0 SECTION: DECORATIVE SAWCUT PATTERN 1-1/2"x1'-0"		 08 L5.0 SECTION: REINFORCED EXPANSION JOINT 1-1/2"x1'-0"		 05 L5.0 SECTION: PCC CURB TO PAVEMENT (TYP) 1-1/2"x1'-0"		 02 L5.0 SECTION: TYPE 2 PCC (WALKS) 1-1/2"x1'-0"	
 10 L5.0 SECTION: ADA PARKING SIGN (TYP.) 1-1/2"x1'-0"		 07 L5.0 SECTION: EXPANSION JOINT TYP. 1-1/2"x1'-0"		 04 L5.0 SECTION: CURB TO PAVER CONNECTION 1-1/2"x1'-0"		 01 L5.0 SECTION: TYPE 3 PAVING - CONCRETE PAVERS 1"x1'-0"	

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MIKKELSEN PROPERTY

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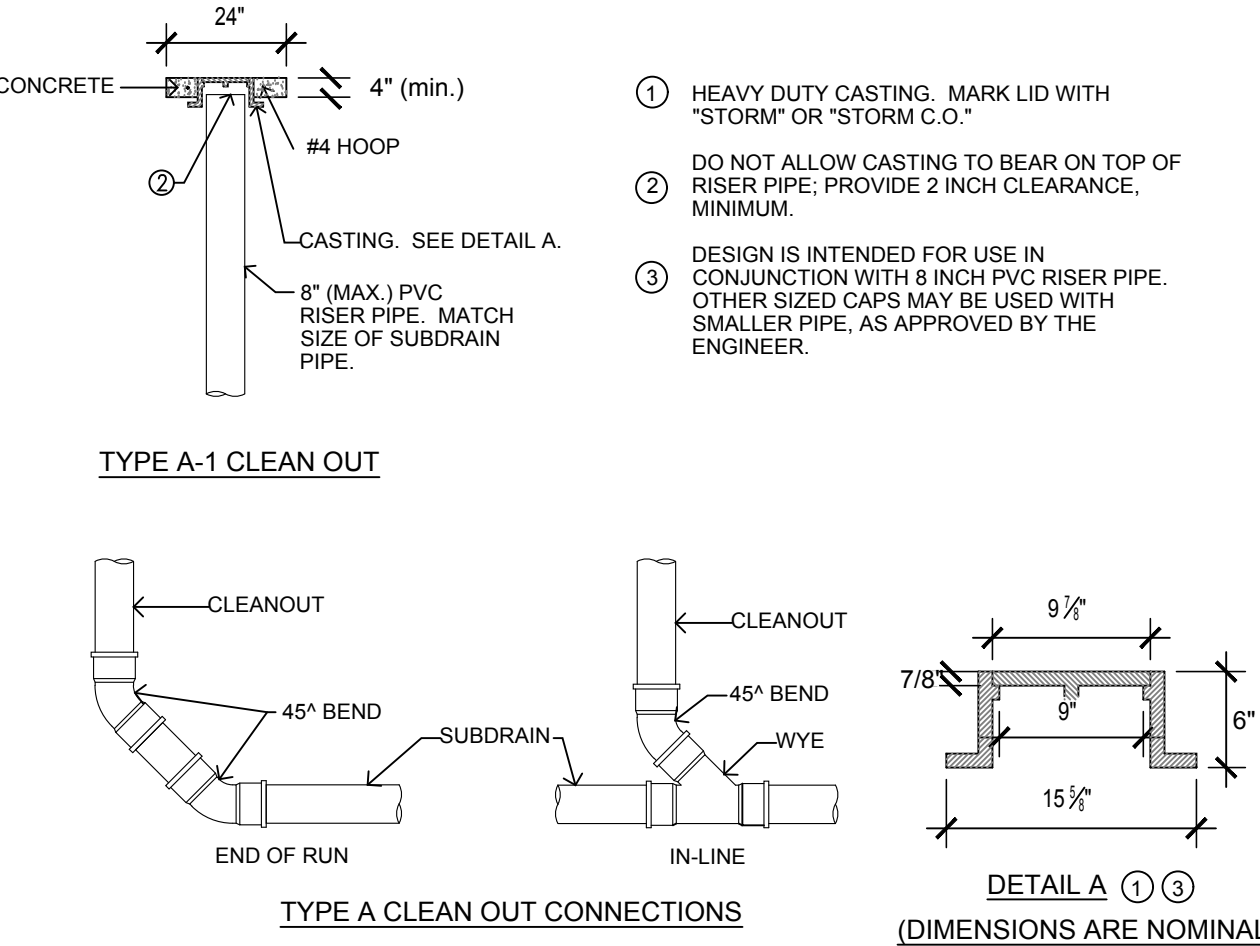
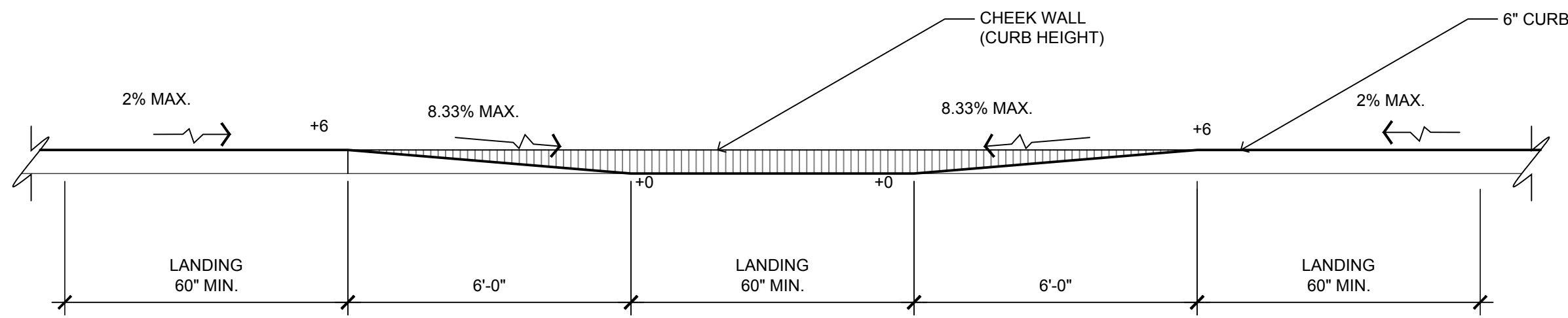
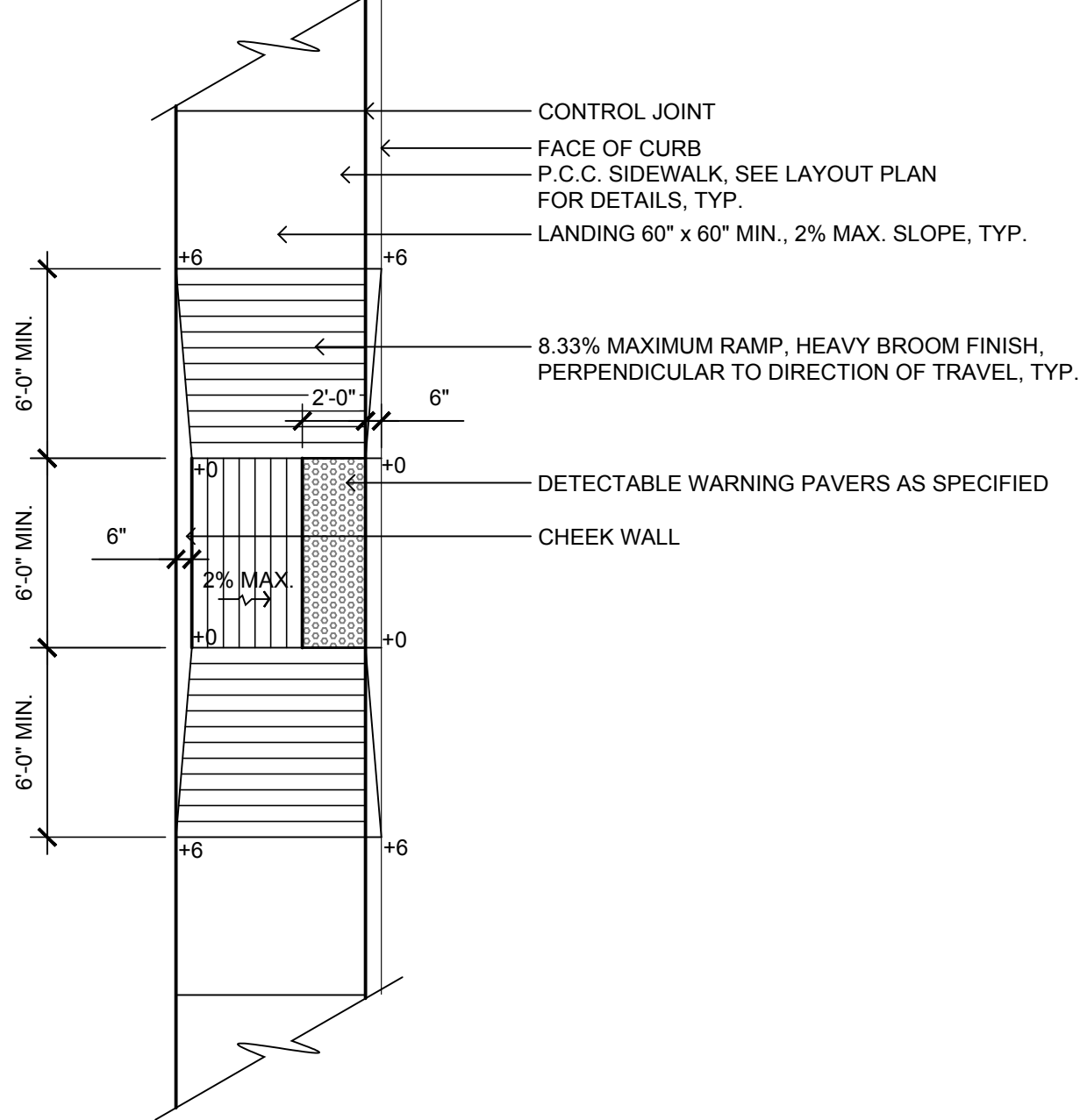
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DETAILS

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 TYPE A-1 CLEAN OUT TYPE A CLEAN OUT CONNECTIONS DETAIL A ① ③ (DIMENSIONS ARE NOMINAL)		 SECTION: PARALLEL RAMP		 PARALLEL RAMP	
11 L5.1	NOT IN USE	06 L5.1	SECTION: PARALLEL RAMP	03 L5.1	PARALLEL RAMP

CONFLUENCE

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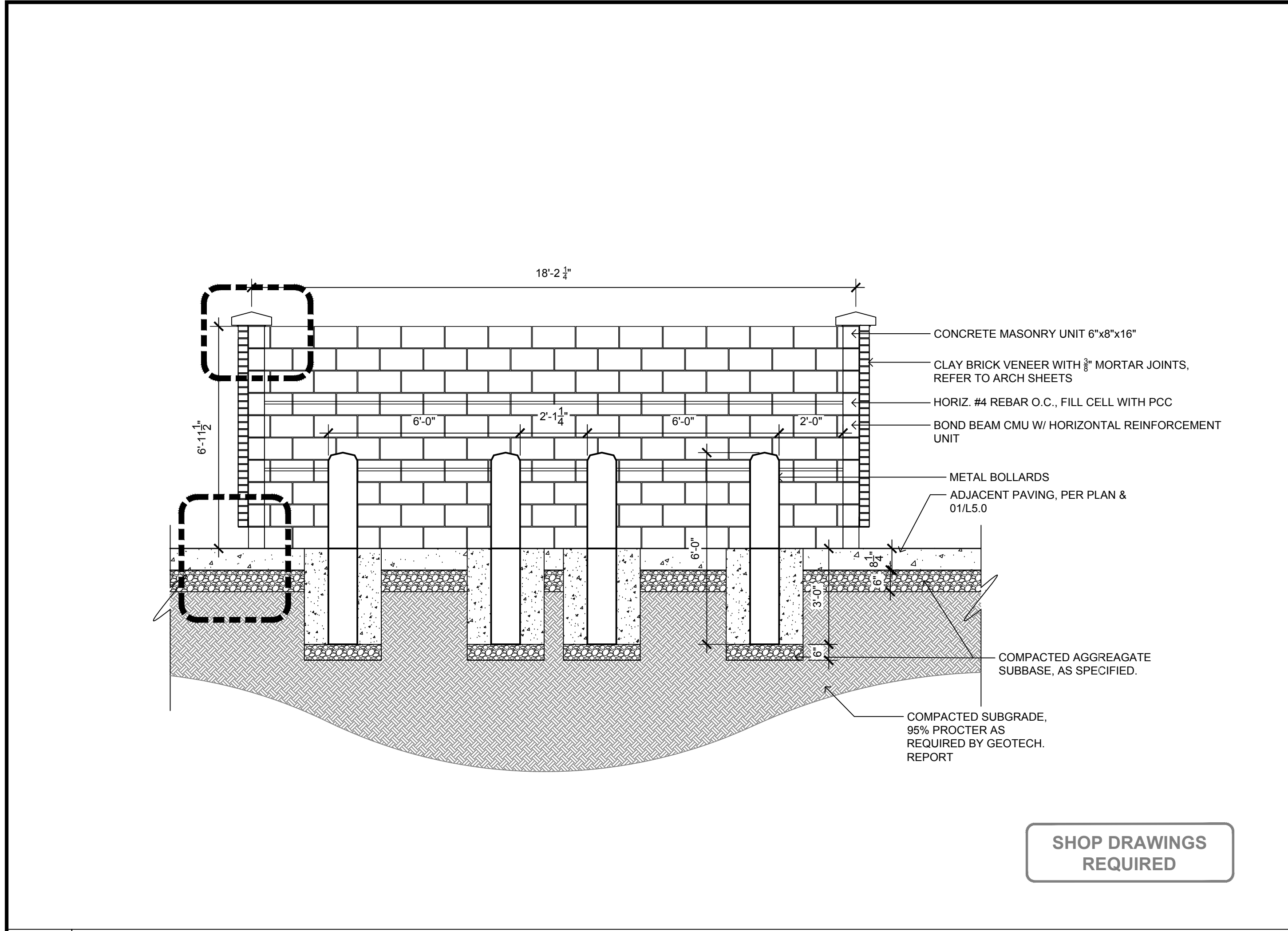
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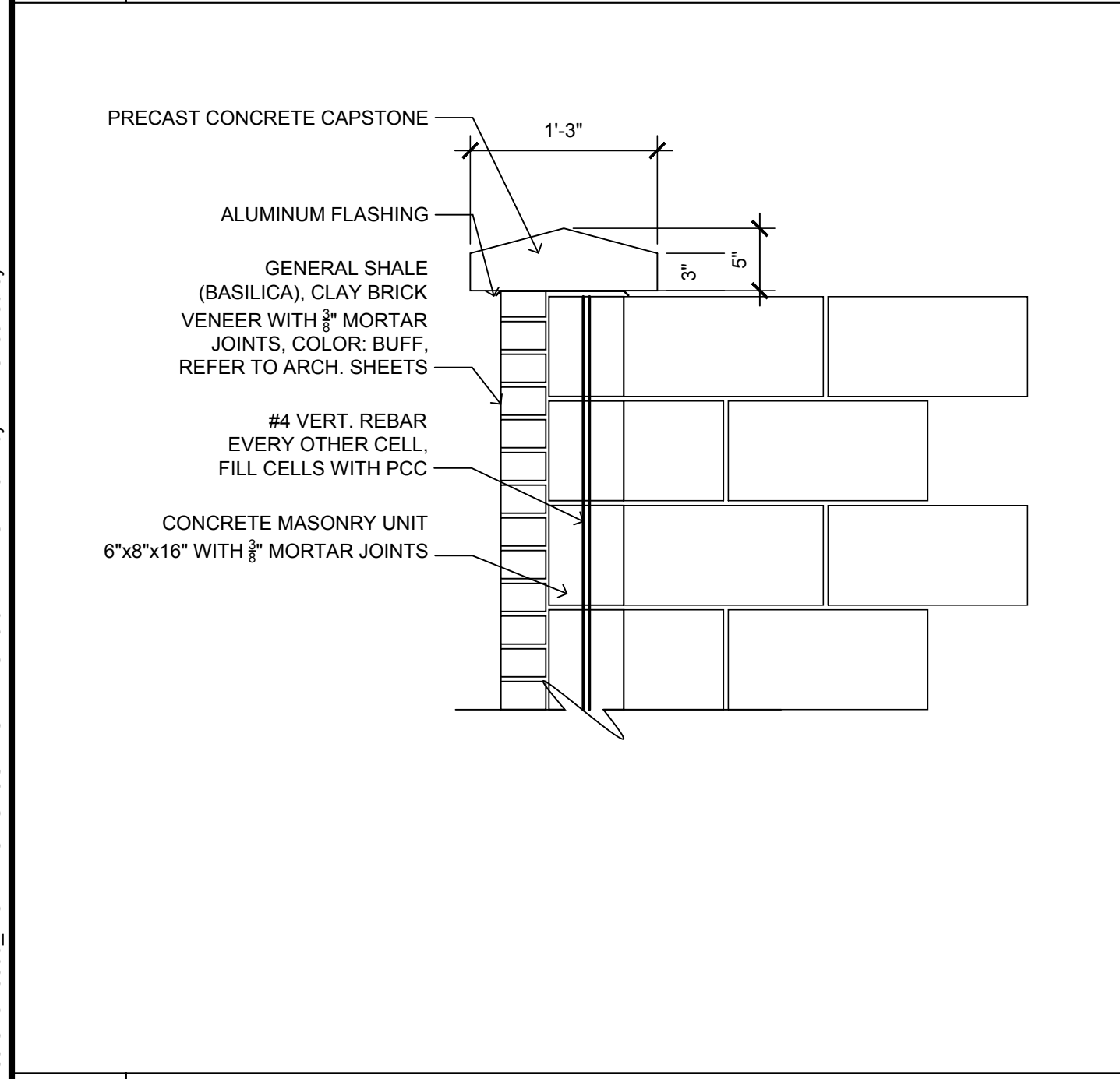
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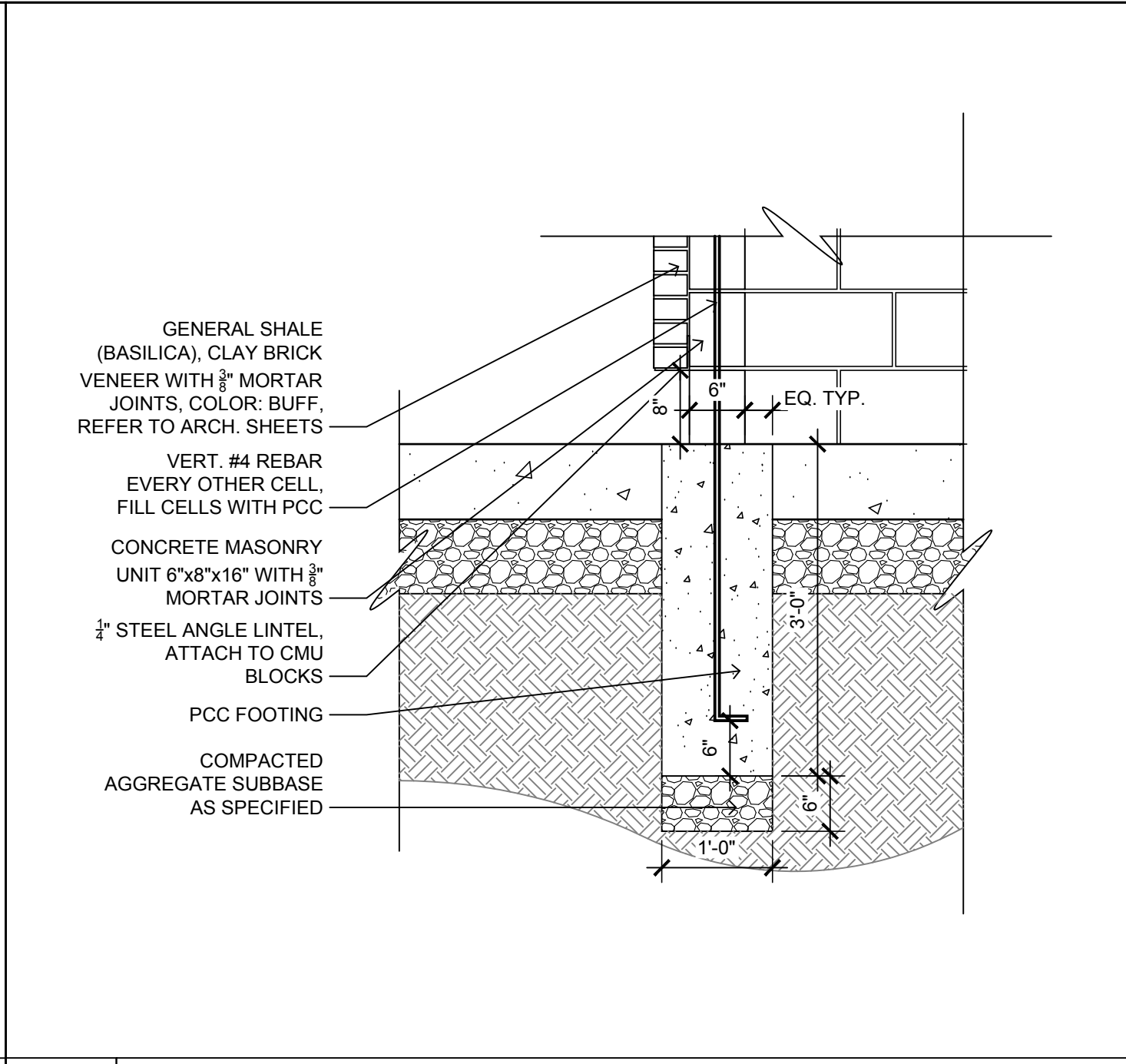
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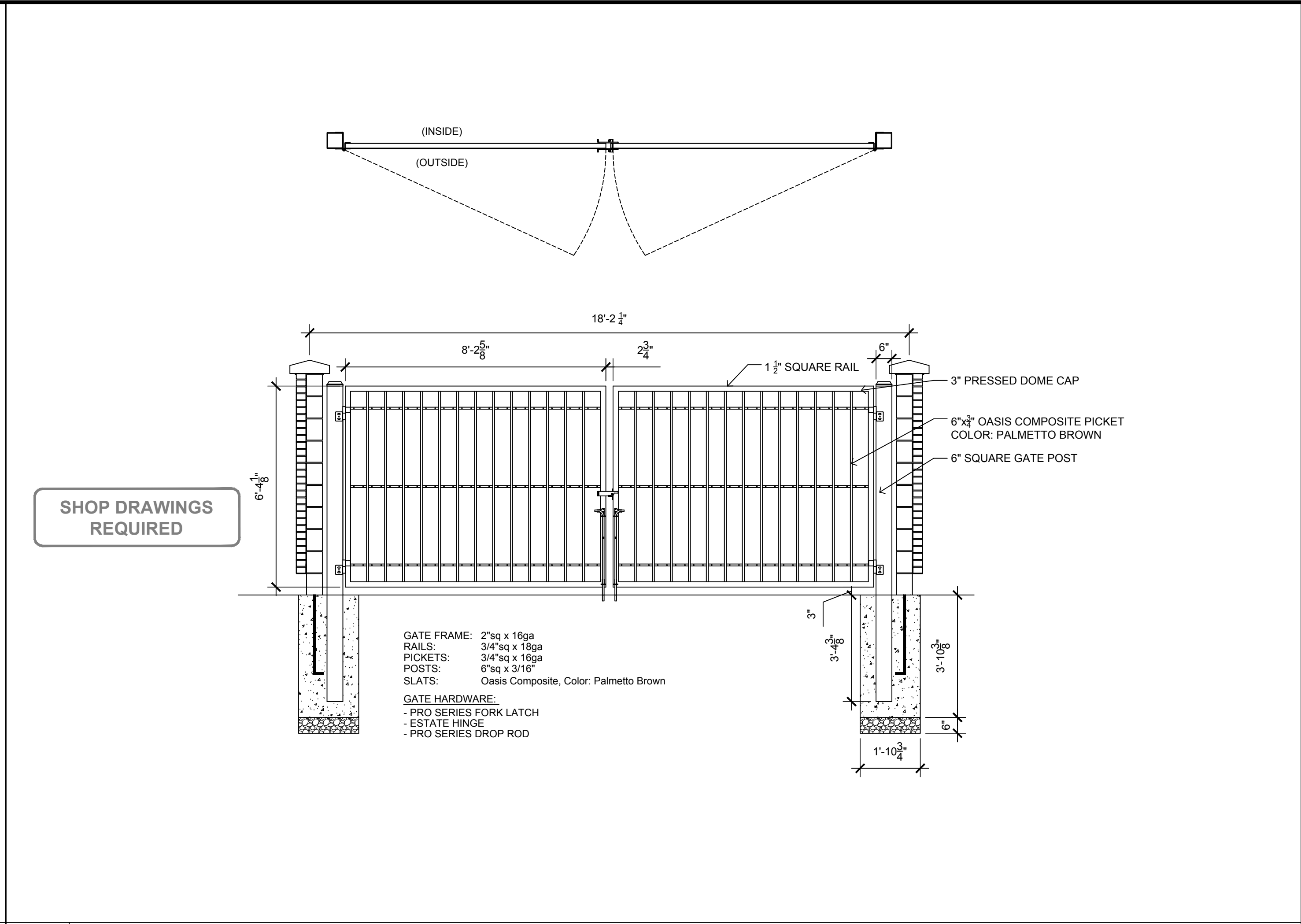
04 L5.2 ELEVATION: FORTRESS ESTATE FENCE GATE 8' PANEL 3/8"=1'-0"



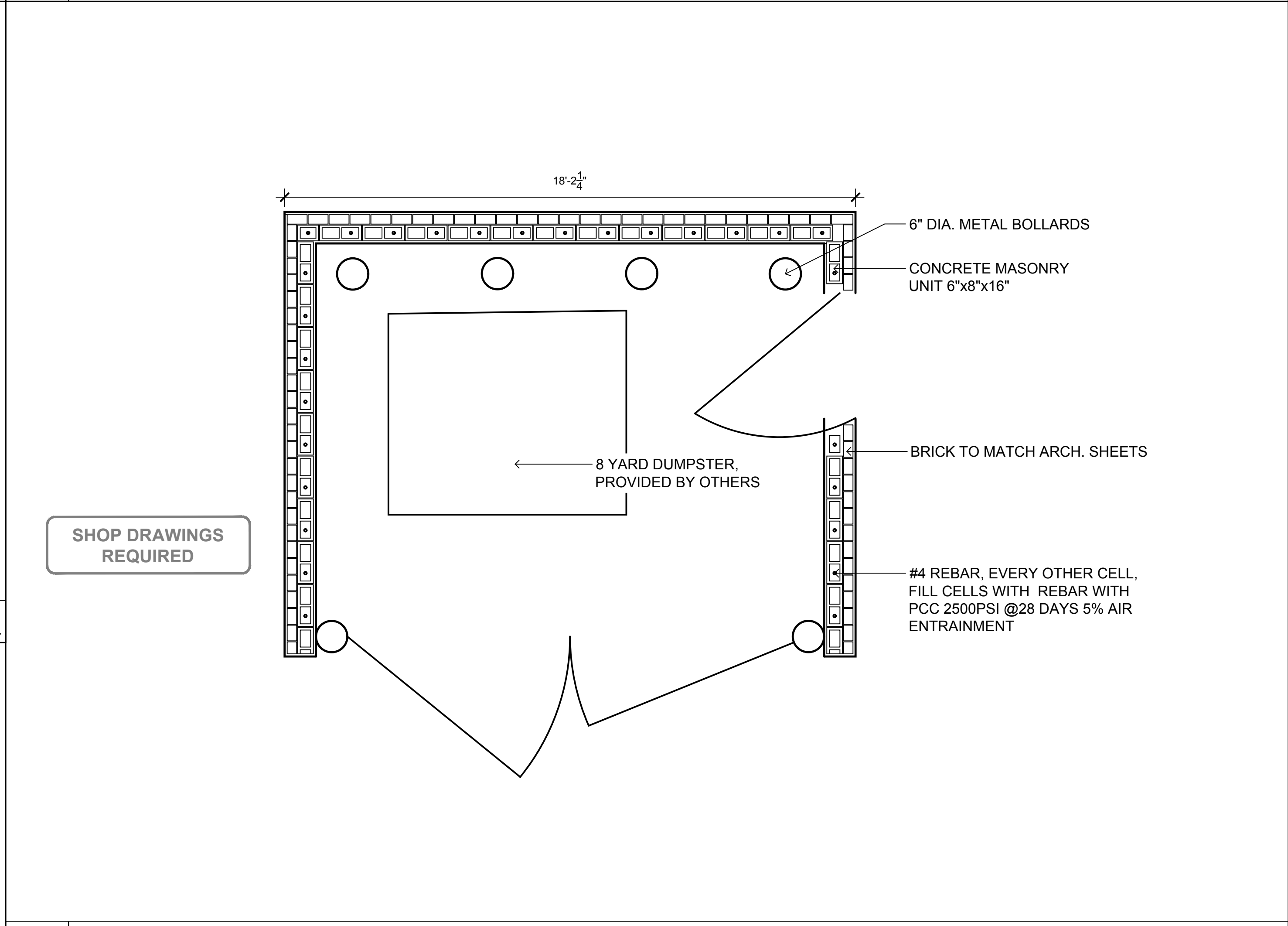
05 L5.2 SECTION: TRASH ENCLOSURE CAP 1"=1'-0"



03 L5.2 SECTION: CMU WALL FOOTING 3/4"=1'-0"



02 L5.2 PLAN: TRASH ENCLOSURE 3/8"=1'-0"



01 L5.2 ELEVATION: TRASH ENCLOSURE 3/8"=1'-0"

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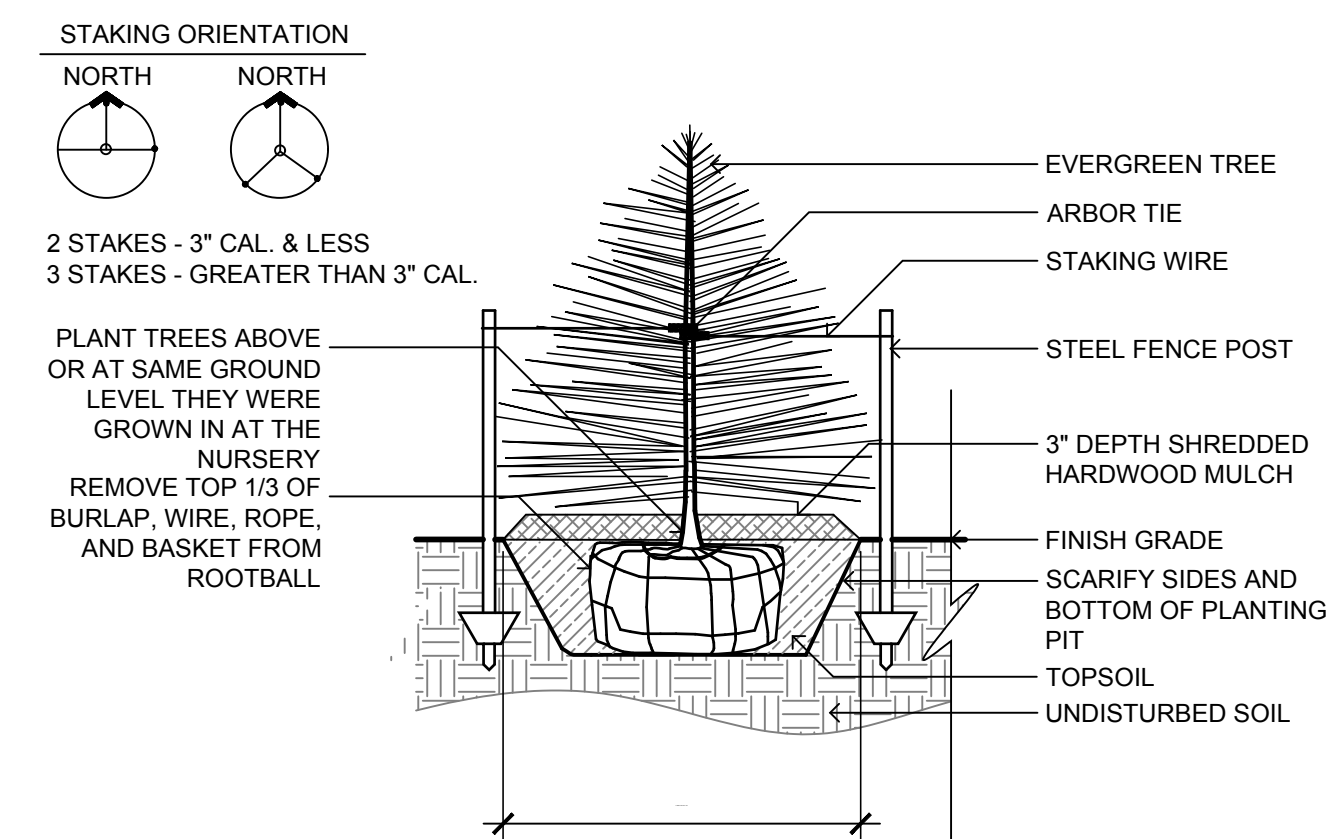
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CONFLUENCE PROJECT NO: 19306

L5.3



Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: February 4, 2020
RE: Project #20-1014: Heritage at Grimes Town Center
Site Plan

GENERAL INFORMATION:

Applicant:	Confluence
Requested Action	Site Plan
Location	1220 NE Station Xing

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	Mixed Use	R-4
North	Future Residential	Residential	R-4
South	Future Residential	Mixed Use	R-4
East	Future Residential	Residential	R-4
West	Future Residential	Mixed Use/Park	R-4

BACKGROUND:

The applicant, is requesting approval of a site plan, which will allow for the construction of a single, two story office/retail, totaling approximately 45,000 square feet. Within the building is also space reserved for 22,800 square feet of sports training. The layout indicates that this area will house a turf field for sports training.

The property is located within the Heritage at Grimes PUD.

It is important to note that this is the first phase of the town center. A conceptual rendering of the entire town center development is included in the site plan, however is not up for approval at this time.

ANALYSIS:*Building/Elevations:*

The building is proposed to be principally constructed stone, brick, architectural metal paneling and glazing. The Heritage PUD requires that a minimum 75% of the wall areas be provided with a primary material, with the remaining 25% to be permitted as trim or secondary materials.

All 4 elevations exceed the 75% primary wall covering requirement.

The building does provide for a drive-through on the west side of the building. A canopy is proposed to over the drive through window. The drive through provides adequate stacking capability and should not impact any adjoining driveway or public street.

There are overhead doors planned on the north side of the building, accessing the training center space. The intent of the doors is not to provide any level of service, but to open the space to the outdoors, and allow for flexible programing adjacent to the patio/gathering space.

Site Layout:

The site is proposed to have 3 points of access. Access from NE Station Crossing, NE Heritage Drive, and internal access from the town center is provided. These access points have been pre-planned and are constructed.

Parking is provided along all the south and west sides of the building, with on street parking provided on the north and east side.

There are a number of patio/gathering spaces provided throughout the site. Within these patio/gathering spaces a number of features are provided including benches, planters, trash receptacles, etc. These features are shown to be consistent with the Heritage PUD requirements.

A trash enclosure is provided NW corner of the site. The enclosure is proposed to be constructed out of masonry materials similar to the principal buildings.

Ample pedestrian connections are made into the site from both public streets as well as internal to the town center.

Parking:

Based upon the square footage of the building, and its respective uses (office, restaurant) a total of 172 parking spaces are required.

As proposed, the site will provide a total of 180 parking spaces.

These parking spaces will ultimately be programmed into the entire town center development parking needs, and help to potentially offset technical shortfalls on other phases.

Landscaping/Streetscape:

The site is required to provide a minimum of 20% open space. As proposed, the conceptual plan for the town center shows 31.2% open space. Note that a portion of this open space is allocated into the park, which is consistent with the Heritage PUD. We will continue to monitor the overall open space count as future phases develop.

The minimum landscaping requirements have been met per the Heritage PUD. A combination of overstory, ornamental, evergreen and shrubs are planted throughout out the site.

Utilities:

Sanitary sewer access is provided from an existing 8" sewer running along the north side of the site within the Station Crossing ROW. A grease interceptor is shown to accommodate any future food/restaurant uses. Appropriate stubs to the adjoining development sites are shown where needed.

Water is provided from an existing 8" main within the NE Station Crossing ROW, as well as the NE Heritage Drive ROW.

Storm water detention is handled regionally withing the larger pond to the west of this site.

Lighting is shown for the entire site, and is consistent with the Heritage PUD fixture style requirement.

STAFF RECOMMENDATION:

Staff would recommend approval of the site plan for Heritage at Grimes Town Center Phase 1 Site Plan, subject to any remaining staff comments.

CITY OF GRIMES

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff". The signature is fluid and cursive, with the first name "Alex" and last name "Pfaltzgraff" clearly distinguishable.

Alex Pfaltzgraff
Development Services Director



Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

July 25, 2019

Bishop Engineering

Attn: Max Eller

3501 104th Street

Des Moines, IA 50322-3825

RE: Heritage Park - Site Plan

Dear Mr. Eller:

The Development Services Department is in receipt of a proposed Site Plan for Heritage Park dated July 22, 2019. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

1. Park Name – Discussion is necessary regarding the name of the park. Will it be Gabus Park or Heritage Park?
2. Please submit off-site easements to be filed with the approval of the site plan for our review and comment (storm sewer, surface water flowage, water main, and sanitary sewer). Please provide an Ingress/Egress Easement on Lot 3 for the parking lot.
3. Lighting Plan – Please submit a lighting plan.
4. Restrooms – Please submit elevation plans (state materials, height, etc). Please note that the City will have several comments regarding the restroom facility for maintenance purposes (locks on door, lighting, type of interior fixtures & materials, baby changing station). Please submit interior architectural drawings for Staff review and comments.
5. Please consider providing a drinking fountain in the park or at the restrooms.

Sheet C1.1 – Overall Sheet

6. Please consider showing the proposed off-site easements on this sheet.

Sheet C1.2 – Layout Plan

7. Please provide a jointing plan for the sidewalk/trail.

Sheet C3.1 & C3.2– Grading Plan

8. Please provide spot elevations at each sidewalk intersection (turning pad) to confirm ADA requirements.
9. The storm sewer under NE Little Beaver is shown as a 36-inch. The record plans for Plat 5 state that this was a 30-inch RCP storm sewer with CMP standpipe. Please confirm the existing

pipe size. Please state that the CMP standpipe will be removed and/or cut to proposed finished grade. Please confirm that the intent is to utilize the plain end of the existing storms sewer pipe and not provide a flared end section and footing (temporary) or if you intent to utilize the existing standpipe.

Sheet C4.1 – Utility Plan

10. Please note that construction drawings include plan/profile for the water and sanitary sewer will be required.
11. Please move the water main notes along the right edge of the sheet (currently half cut off).
12. Please provide a Surface Water Flowage Easement (SWFE) and Storm Sewer Easement across Lot 1. Please provide an easement description and form for City Review.
13. Please dimension the Water & Sanitary Sewer easement across Lot 3. Please provide an easement description and form for City Review.
14. Staff recommends that an 8-inch sanitary sewer stub be provided from the new manhole east under the pavement to service Lot 3.
15. Please revise the connection of the 4-inch sanitary sewer service to a wye rather than direct connect to manhole.

Sheet C5.1 & C5.2 – Landscape Plan

16. Clock Tower: Please provide any cut sheet details of the clock tower. Please state how the clock tower will have lighting.
17. Sculptural Element: We assume that the sculpture has yet to be determined. Discussion is necessary regarding this approval process for the future sculpture.
18. Freestanding Wall: It appears that this is a “sitting wall” with no earth support on either side. Please provide this as a concrete poured in-place wall. Concerned about tipping and maintenance. Please provide a base/foundation detail for the wall.
19. Pavers Over Concrete Detail: This detail is shown on Sheet C4.1 and C5.1. Please show in one location:
 - a. Please provide detail on the type of paver (size, color, durability).
 - b. Please state the thickness of the sand (gradation), aggregate (gradation), and thickness of concrete base.
 - c. Please specify the type of geotextile fabric.
 - d. Please provide weep hole locations and dimensions.
20. Please provide an irrigation plan for review for the central lawn and NW corner of the site. Please provide an access control valve box with quick connect on the site. Preferably near the north central part of the park.
21. Electrical Power: Discussion is necessary if any electrical power will be provided to the park for special events.
22. Shrubs & Flowers: Discussion is necessary if shrubs and flowers are required plantings in the park.
23. Please remove all pines and replace with swamp oaks.

Sheet C6.1 – Details Sheet:

- 24. Please revise the Detail Reference numbers to match the Detail Sheet C6.1.
- 25. Turned Down Walk Detail: Please add rebar to the sidewalk (see DCG Middle School Site Plan Detail 5/C-601).

Building Elevations & Colored Rendering:

- 26. Please note that the Heritage Architectural Committee will need to review and approve of the restroom elevation plans and landscaping plan.
- 27. It is highly recommended that you bring building materials to P&Z for discussion.

Stormwater Management Plan

- 28. Staff has reviewed the SWMP. Please submit a signed copy.

Stormwater Pollution Prevention Plan

- 29. Please designate the type of stabilization for area outside the "park". Sheet C4.1 only designates stabilization inside the park. Landscape note 2 indicates all disturbed area is to be sodded. It is assumed the owner will want to stabilize the outlying area with something other than sod.
- 30. Please provide the SWPPP narrative.
- 31. Please provide the Grimes Grading SWPPP Certification.

Post Construction Stormwater Maintenance Agreement

- 32. A Post Construction Stormwater Maintenance Agreement will not be required for this development.

Lighting Plan

- 33. Please submit a lighting plan and lighting cut sheets for the park. Staff assumes that the standard ornamental lighting will be provided along the drive aisles. Staff would also like to see bollard lighting internal to the park, preferably near seating areas.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: **July 30, 2019 at 9:00 am**
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: August 6, 2019 at 5:30 at the Grimes City Hall

COUNCIL MEETING: August 13, 2019 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff", is written over a light gray rectangular background.

Alex Pfaltzgraff
Development Services Director



NORTHWEST



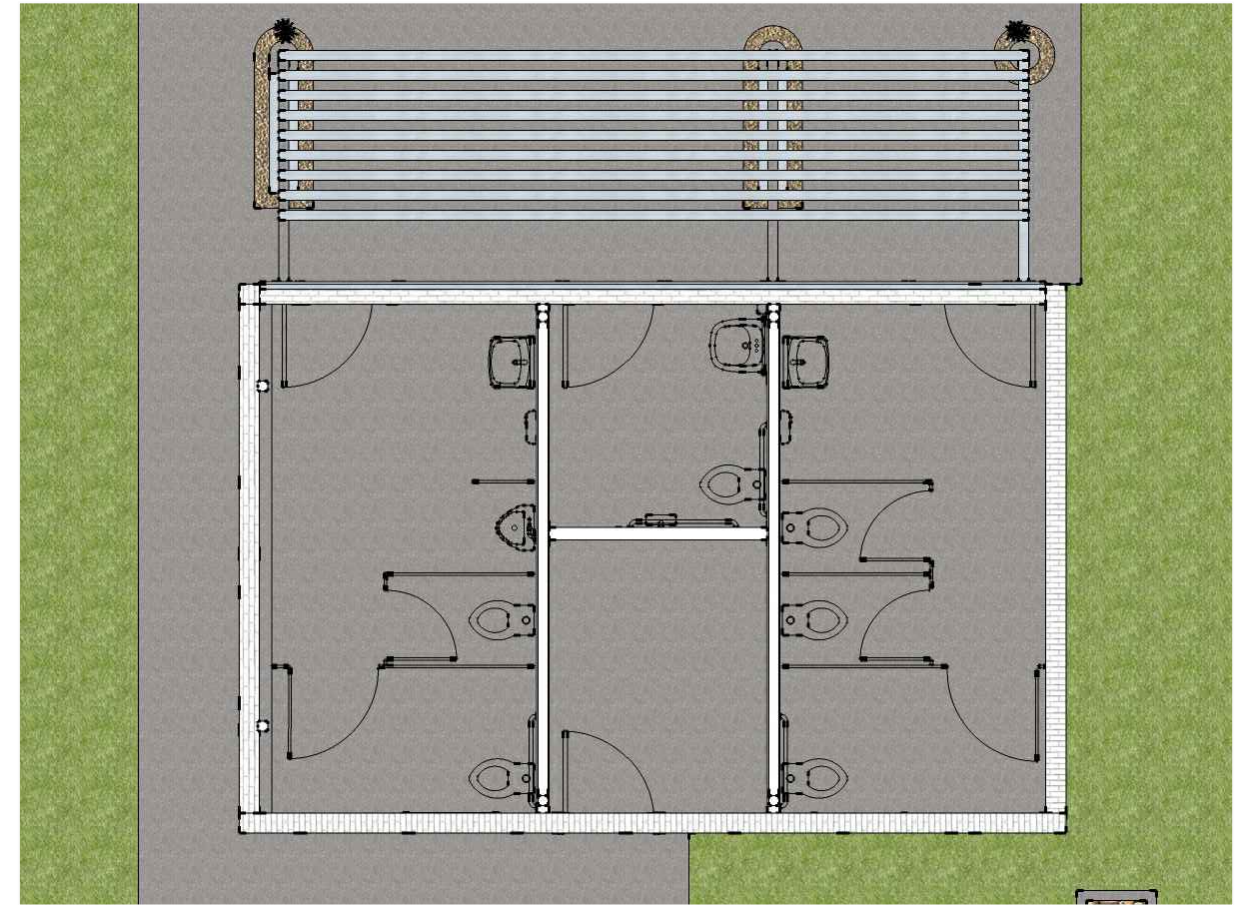
SOUTHWEST



NORTHEAST



NORTH



RESTROOM PLAN

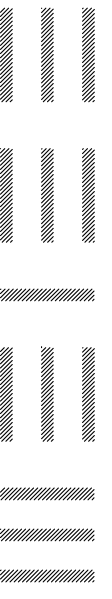
SCALE: 1/8" = 1'-0"

HERITAGE TOWN CENTER - PARK RESTROOMS

SITE PLAN

BISHOP ENGINEERING

STUDIO MELEE
1312 LOCUST ST, SUITE 100Z
DES MOINES, IOWA 50309





2

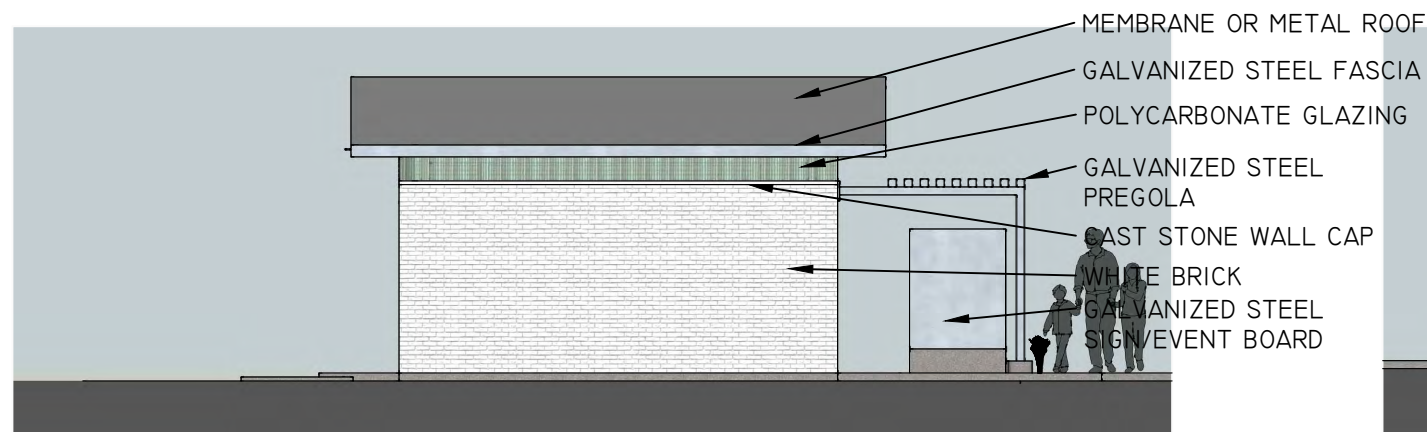
NORTH ELEVATION
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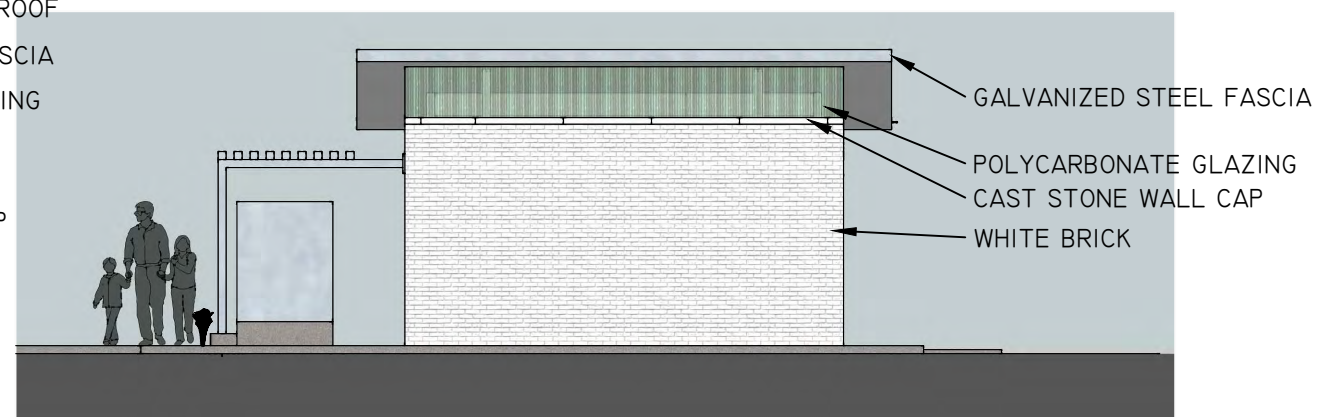
1

SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4

NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3

SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

HERITAGE PARK SITE PLAN

SHEET INDEX:

C0.1	COVER SHEET
C1.1	EXISTING SITE CONDITIONS
C2.1	OVERALL LAYOUT
C2.2	PARK LAYOUT
C2.3	TRAIL JOINTING PLAN
C3.1-C3.2	GRADING PLAN
C4.1	UTILITY PLAN
C5.1-C5.2	LANDSCAPE
C6.1	DETAIL SHEET
C7.1	SWPPP

PROPERTY DESCRIPTION:

LOT 4 HERITAGE TOWN CENTER, AN OFFICIAL PLAT OF GRIMES, POLK COUNTY, IOWA.

SAID TRACT OF LAND BEING SUBJECT TO AND TOGETHER WITH ANY AND ALL EASEMENTS OF RECORD.

SAID TRACT OF LAND CONTAINS 2.15 ACRES (93,862 SQUARE FEET) MORE OR LESS.

ADDRESS:

1055 NE BEAVERBROOKE BLVD
GRIMES, IOWA
50111

OWNER:

BEAVERBROOKE NORTH NO I LLC
POB 542016
OMAHA, NE 68154-8016

PREPARED FOR:

GREAT OUTDOORS FOUNDATION
ATTN: HANNAH INMAN, EXECUTIVE DIRECTOR
PO BOX 8071
DES MOINES, IA 50301
515-975-9990

ZONING:

PUD: PLANNED UNIT DEVELOPMENT
OUTLOT "X": TOWN CENTER

BUILDING SETBACKS
FRONT YARD = 15 FEET
SIDE YARD = 0 FEET
REAR YARYD = 0 FEET

PARKING PROVIDED:

24 STALLS PROVIDED (INCLUDING 1 HC AND 1 VAN ACCESSIBLE HC)

IMPERVIOUS SURFACE:

EXISTING: 0 SF
PROPOSED: 34,195 SF

BENCHMARK:

CITY BENCHMARK G5M-005: BURY BOLT ON FIRE HYDRANT LOCATED ON THE EAST SIDE OF NORTH JAMES STREET BY THE NW CORNER OF LOT ADDRESS 1605. ELEVATION = 924.41 (USGS DATUM)

CITY BENCHMARK CHISELED SQUARE IN NORTHWEST END OF REINFORCED CONCRETE BOX CULVERT FOR LITTLE CREEK AT JAMES STREET. ELEVATION = 926.60 (USGS DATUM)

CITY BENCHMARK ARROW ON FIRE HYDRANT LOCATED AT NORTHEAST CORNER OF N. 11TH STREET AND JAMES STREET. ELEVATION = 937.06 (USGS DATUM)

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH SUDAS STANDARD SPECIFICATIONS AND ANY AND ALL CITY/COUNTY SUPPLEMENTAL SPECIFICATIONS. THE CITY OF GRIMES MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK.
- IN EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
- ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- BISHOP ENGINEERING SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
- THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE FOR PERFORMANCE OF WORK ITEMS. THIS SCHEDULE SHALL BE PROVIDED BY THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN UNTIL A SCHEDULE HAS BEEN SUBMITTED AND ACCEPTED. THE CONTRACTOR SHALL THEN PERFORM WORK TO CONFORM TO THE ACCEPTED SCHEDULE.
- LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNERS REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF GRIMES.
- GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
- THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.

PAVING NOTES:

- THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SEEDED IN ACCORDANCE WITH CITY OF GRIMES STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
- SUBGRADE PREPARATION AND PAVEMENTS WILL BE CONSTRUCTED FOLLOWING RECOMMENDATIONS IN THE SOILS REPORT. APPROVED SOILS ENGINEER MUST SIGN OFF ON SUBASE PRIOR TO ANY PAVEMENT BEING PLACED.
- SEE DETAILS FOR ALL PAVEMENT THICKNESS.
- ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPS, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.

UTILITY NOTES:

- QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES.
- THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE.
- ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
- ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
- SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2%. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATERMAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.
- MANDREL AND PRESSURE TESTS SHALL BE REQUIRED FOR ALL PROPOSED SANITARY LINES. TELEVISION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED PRIOR TO PAVING UNLESS OTHERWISE APPROVED BY JURISDICTION.
- WATERMAINS SHALL BE C-900. SIZE OF WATERMAIN AS SHOWN ON PLANS.
- THRUST BLOCKS SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN CONSTRUCTION.
- PROPOSED WATERMAIN SHALL BE PRESSURE TESTED, BACTERIA TESTED AND CHLORINATED. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES.
- TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
- ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- THE MINIMUM HYDRANT LEAD SHALL BE 3.5 FEET.

UTILITY CONFLICT NOTES:

- UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
- CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS THAT ARE EITHER CALLED OUT ON THE PLANS OR THAT CAN BE SEEN ON THE PLANS BETWEEN AN EXISTING UTILITY AND PROPOSED CONSTRUCTION.
- CONTRACTOR SHALL USE O-RING GASKET JOINTS FOR STORM SEWER AND SANITARY SEWER AT CROSSINGS WITH WATER WHERE STORM OR SANITARY SEWER CROSSED OVER OR LESS THAN 18 INCHES BELOW WATER. O-RING GASKET JOINTS SHALL BE EXTENDED UNTIL WATER AND SEWER ARE AT LEAST 10 FEET APART. ALL O-RING GASKET JOINTS SHALL BE CONSIDERED INCIDENTAL TO BID. IF N-12 PIPE IS USED FOR STORM SEWER, CONTRACTOR SHALL USE WATER-TIGHT N-12 PIPE, CENTERED ON THE CROSSING.
- FOR ALL CRITICAL CROSSINGS WITH EXISTING UTILITIES, THE ELEVATION OF THE EXISTING UTILITY SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY BISHOP ENGINEERING PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS.

WETLAND NOTES:

- BISHOP ENGINEERING DOES NOT PERFORM WETLAND STUDIES OR WETLAND MITIGATION. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF ANY WETLANDS ARE LOCATED ON THE PROJECT SITE AND PERFORM ANY NECESSARY MITIGATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

IRRIGATION NOTES:

- IRRIGATION PLAN DONE BY OTHERS.
- GENERAL CONTRACTOR TO COORDINATE W/ IRRIGATION CONTRACTOR FOR INSTALLATION OF AN IRRIGATION SYSTEM.

STAKING NOTES:

- CONTRACTOR IS REQUIRED TO HAVE ALL STAKING DONE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR AND IN COORDINATION WITH THE PROJECT ENGINEER.
- CONTRACTOR IS REQUIRED TO HAVE ALL STAKING DONE DIRECTLY UNDER THE GENERAL CONTRACTOR BY A SINGLE COMPANY.
- STAKING DOES NOT RELIEVE CONTRACTOR OF ULTIMATE RESPONSIBILITY TO CONSTRUCT THE PROJECT PER PLAN.

PAVEMENT SAWCUT NOTES:

- CONTRACTOR TO PROVIDE SAWCUT JOINTING PLAN TO JOEL JACKSON, BISHOP ENGINEERING (515-276-0467 OR JJACKSON@BISHOPENGR.COM) PRIOR TO ANY CONCRETE PAVEMENT INSTALLATION.
- PAVEMENT MAY BE REQUIRED TO BE REMOVED AND REPLACED IF PLACED WITHOUT AN APPROVED PLAN.
- LONGITUDINAL JOINTS IN DRIVE LANES & THE OUTER MOST JOINT OF ALL PARKING AREAS SHALL BE SUDAS TYPE 'L-1' OR 'L-2' JOINTS AND HAVE STEEL. INTERIOR PARKING LOT JOINTS, OTHER THAN THE OUTER MOST JOINT, DO NOT NEED STEEL AND SHALL BE SUDAS TYPE 'B' OR TYPE 'K' JOINTS.
- ALL TRANSVERSE JOINTS SHALL BE SUDAS TYPE 'C' OR TYPE 'DW' JOINTS WITH STEEL IN THE CASE OF A DAY'S WORK JOINT.

EARTHWORK BALANCE NOTES:

- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY. CONTRACTOR RESPONSIBLE FOR MAKING THE SITE EARTHWORK BALANCE.
- THIS INCLUDES BUT IS NOT LIMITED TO TOPSOIL, POOR SOILS AND STRUCTURAL FILL NECESSARY TO MEET PROJECT PLANS AND SPECIFICATIONS.



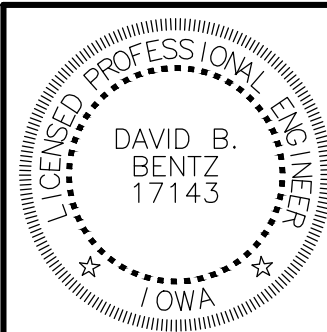
VICINITY MAP
SCALE: NO SCALE

LEGEND:

- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- U/E — UNDERGROUND ELECTRIC
- O/E — OVERHEAD ELECTRIC
- TELE — TELEPHONE LINE
- F/O — FIBER OPTIC
- CATV — CABLE TV
- Ⓢ — STORM MANHOLE
- Ⓜ — CURB INTAKE
- — SURFACE INTAKE
- Ⓜ — FLARED END SECTION
- Ⓢ — SANITARY MANHOLE
- Ⓢ — CLEANOUT
- Ⓢ — FIRE HYDRANT
- Ⓢ — SPRINKLER
- Ⓢ — IRRIGATION CONTROL VALVE
- Ⓢ — WATER MANHOLE
- Ⓢ — WELL
- Ⓢ — WATER VALVE
- Ⓢ — WATER SHUT OFF
- Ⓢ — YARD HYDRANT
- Ⓢ — ELECTRIC MANHOLE
- Ⓢ — ELECTRIC METER
- Ⓢ — ELECTRIC RISER
- Ⓢ — ELECTRIC VAULT
- Ⓢ — POWER POLE
- Ⓢ — TRANSFORMER POLE
- ☆ — LIGHT POLE
- Ⓢ — ELECTRIC JUNCTION BOX
- Ⓢ — ELECTRIC PANEL
- Ⓢ — TRANSFORMER
- Ⓢ — GROUND LIGHT
- Ⓢ — GUY WIRE
- Ⓢ — ELECTRIC HANDHOLE
- Ⓢ — GAS METER
- Ⓢ — GAS VALVE
- Ⓢ — AIR CONDITIONING UNIT
- Ⓢ — TELEPHONE RISER
- Ⓢ — TELEPHONE VAULT
- Ⓢ — TELEPHONE MANHOLE
- Ⓢ — TRAFFIC SIGNAL MANHOLE
- Ⓢ — FIBER OPTIC RISER
- Ⓢ — FIBER OPTIC FAULT
- Ⓢ — CABLE TV RISER
- Ⓢ — SIGN
- ⑦ — DENOTES NUMBER OF PARKING STALLS
- — PROPERTY CORNER - FOUND AS NOTED
- — PROPERTY CORNER- PLACED 3/4" IRON PIPE WITH YELLOW PLASTIC CAP ID #14775
- Ⓢ — SECTION CORNER - FOUND AS NOTED

ABBREVIATIONS:

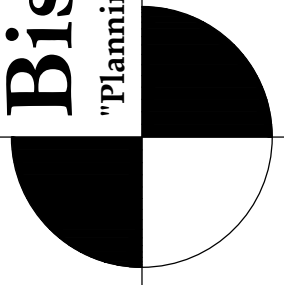
AC ACRES
ASPH ASPHALT
BK BOOK
CONC CONCRETE
D DEEDED DISTANCE
EX EXISTING
ENCL ENCLOSURE
FF FINISHED FLOOR
FL FLOW LINE
FRAC FRACTIONAL
M MEASURED DISTANCE
MH MANHOLE
OPC ORANGE PLASTIC CAP
P PLATTED DISTANCE
PG PAGE
POB POINT OF BEGINNING
POC POINT OF COMMENCEMENT
PRA PREVIOUSLY RECORDED AS
PUE PUBLIC UTILITY EASEMENT
ROW RIGHT OF WAY
RPC RED PLASTIC CAP
SF SQUARE FEET
SAN SANITARY
TYP TYPICAL
YPC YELLOW PLASTIC CAP
N NORTH
S SOUTH
E EAST
W WEST



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.

SIGNED: DAVID B. BENTZ, PE. 17143 DATE: _____
LICENSE RENEWAL DATE: DEC. 31, 2019
PAGES OR SHEETS COVERED BY THIS SEAL: _____

Bishop Engineering
"Planning Your Successful Development"



3501 104th Street
Des Moines, Iowa 50322-3825
Phone: (515)276-0467 Fax: (515)276-0217

Civil Engineering & Land Surveying

Established 1959

HERITAGE PARK
GRIMES, IOWA

COVER SHEET

REFERENCE NUMBER:

DRAWN BY:

MJE

CHECKED BY:

SVS

REVISION DATE:

06-12-2019 1ST CITY REV.
10-31-2019

PROJECT NUMBER:

120101-15

SHEET NUMBER:

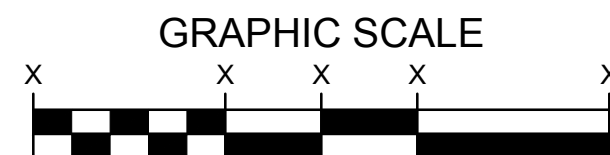
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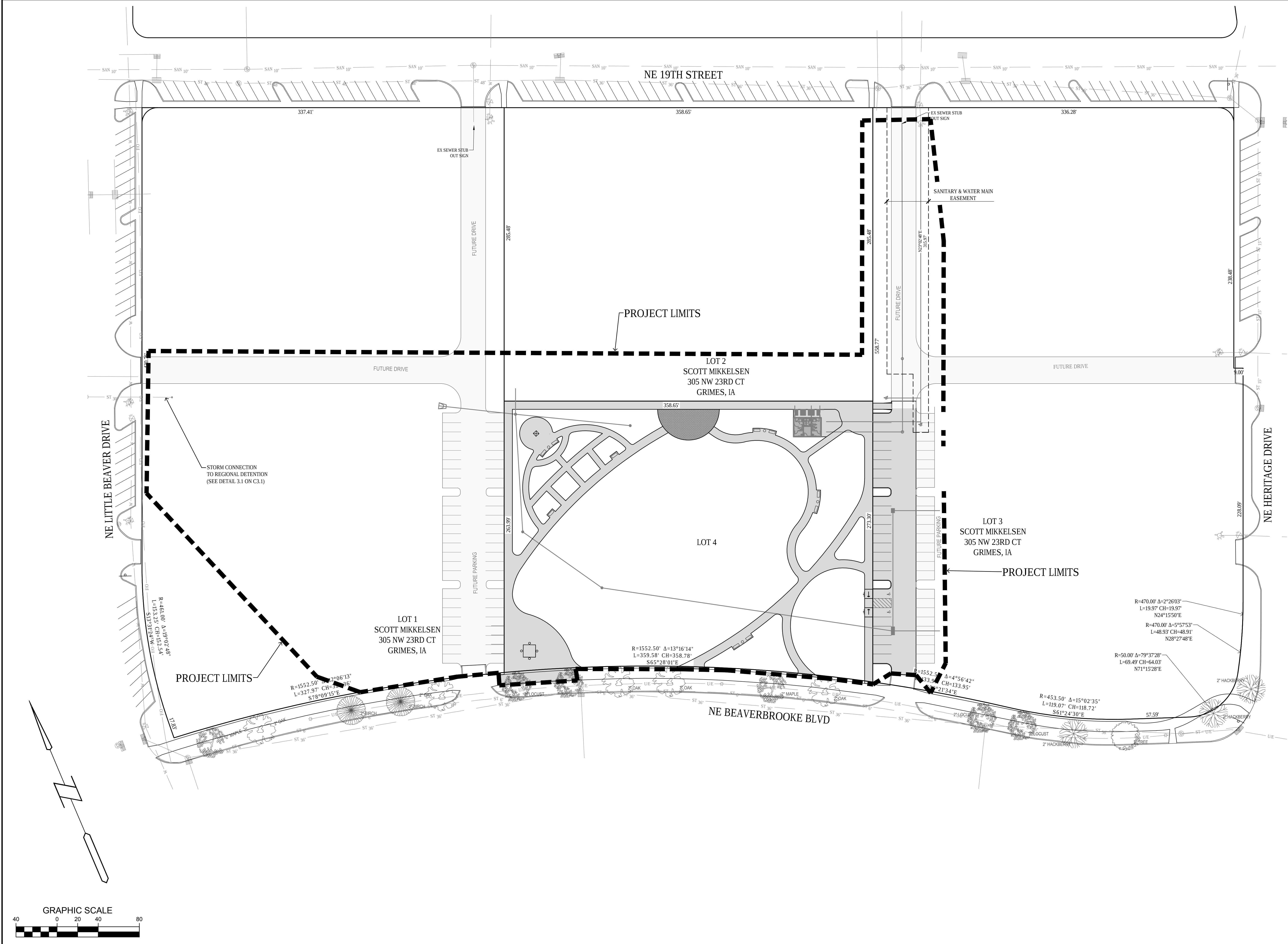


UTILITY NOTE:

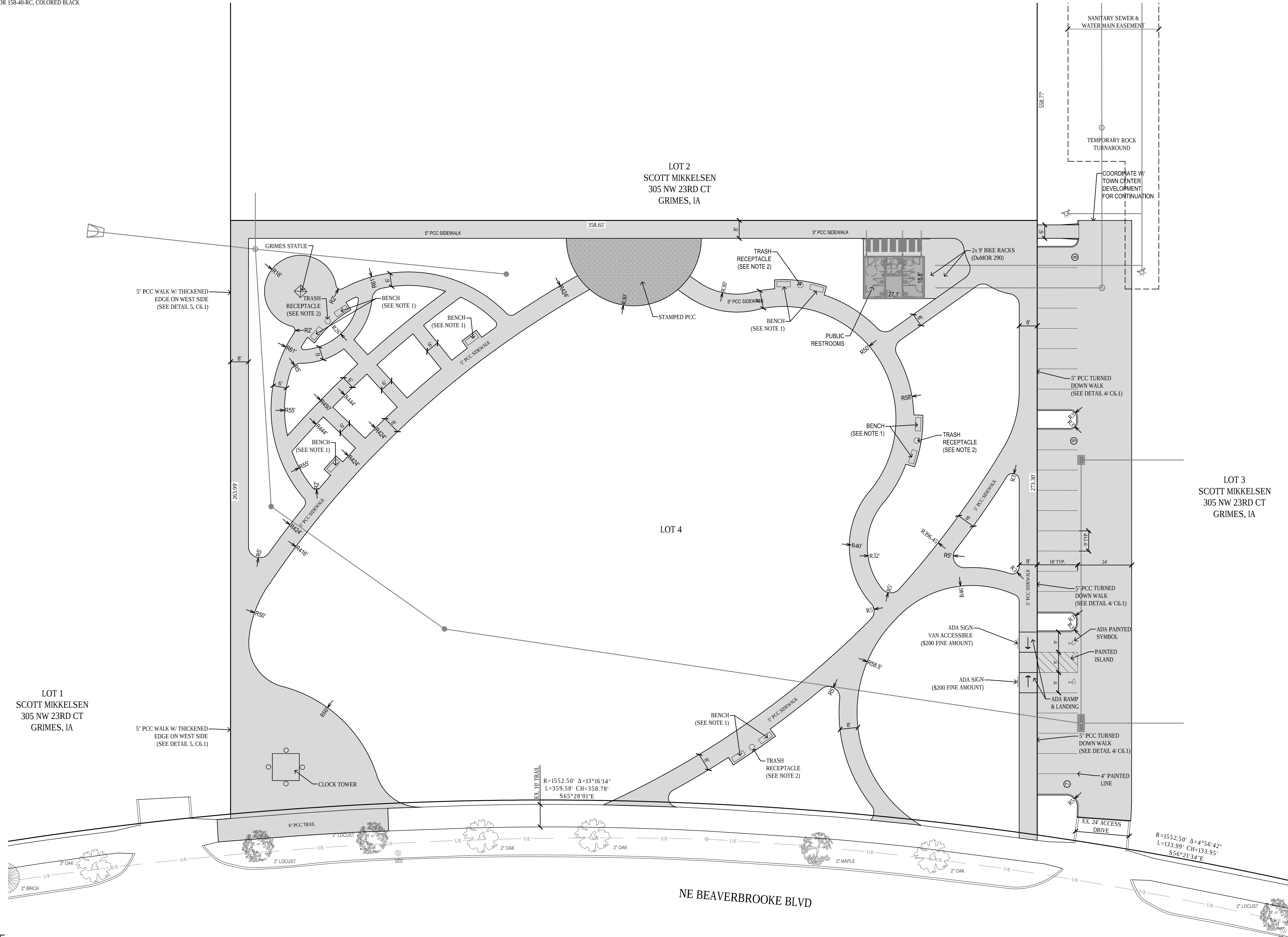
THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM THE FIELD SURVEY, EXISTING PUBLIC RECORDS, AND PLANS PROVIDED BY OTHERS. SURFACE UTILITY LOCATIONS HAVE BEEN FIELD LOCATED BY BISHOP ENGINEERING, UNLESS OTHERWISE NOTED. ALL UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE LOCATIONS ONLY. BISHOP ENGINEERING DOES NOT GUARANTEE THE UNDERGROUND LOCATION OF ANY UTILITIES SHOWN. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE THE LOCATION AND DEPTH OF ANY UNDERGROUND UTILITIES SHOWN AND IF ANY ADDITIONAL UTILITIES, OTHER THAN THOSE SHOWN ON THE PLANS, MAY BE PRESENT. A REQUEST WAS MADE TO IOWA ONE CALL FOR UTILITY PROVIDERS TO VERIFY, LOCATE, AND MARK THEIR UTILITIES IN THE FIELD.

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GENERAL NOTES:
1. ALL BENCHES 6' DuMOR 141, COLORED BLACK
2. ALL TRASH RECEPTACLES DuMOR 158-40-RC, COLORED BLACK



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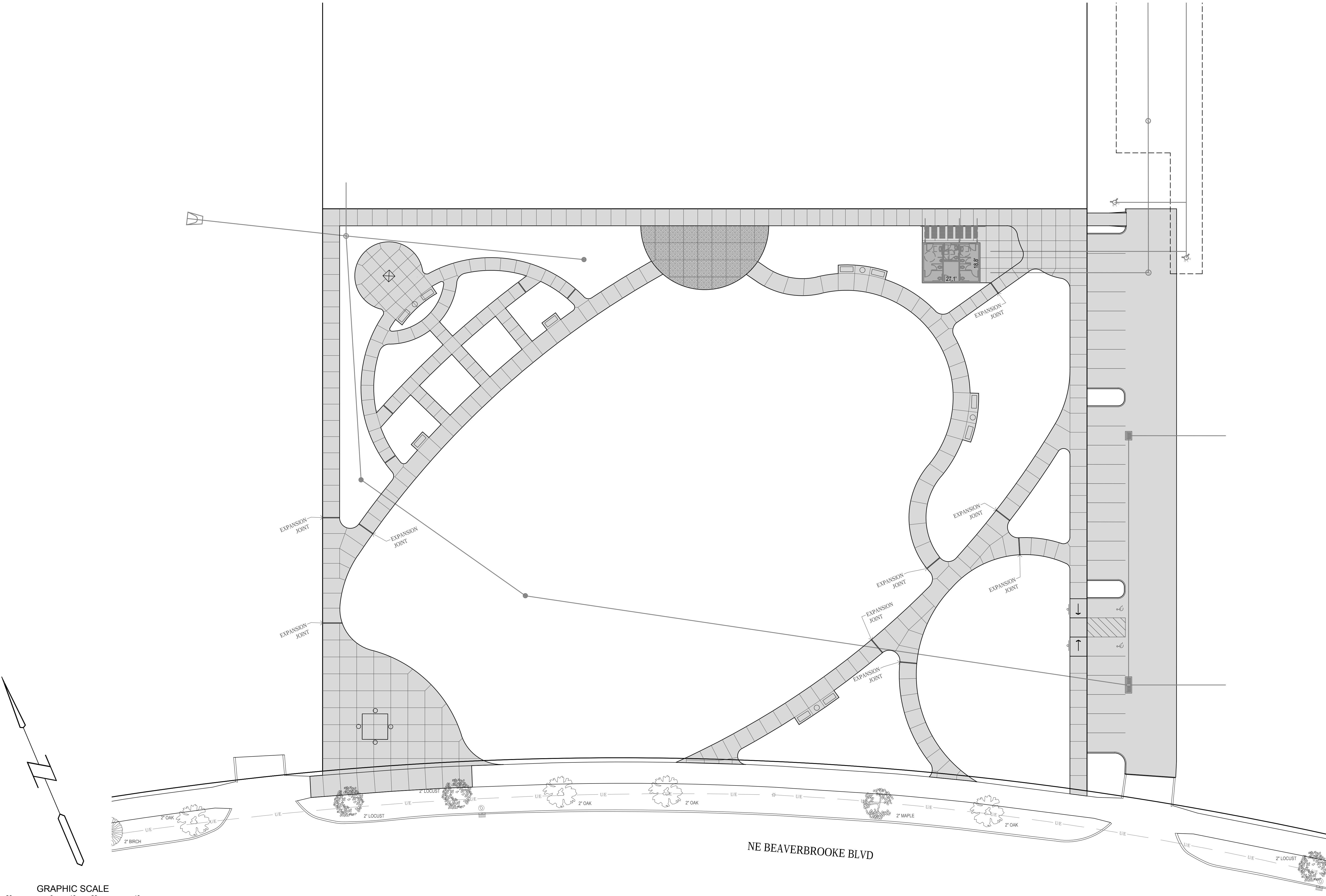
Civil Engineering & Land Surveying

Established 1959

HERITAGE PARK
GRIMES, IOWA

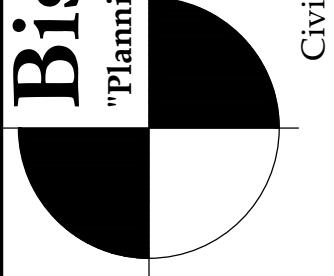
LAYOUT PLAN

REFERENCE NUMBER:
DRAWN BY: MJE
CHECKED BY: SVS
REVISION DATE: 06-12-2019 1ST CITY REV. 10-31-2019
PROJECT NUMBER: 120101-15
SHEET NUMBER: C2.2



HERITAGE PARK
GRIMES, IOWA

REFERENCE NUMBER:	
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PROJECT NUMBER:	120101-15
SHEET NUMBER:	C2.3



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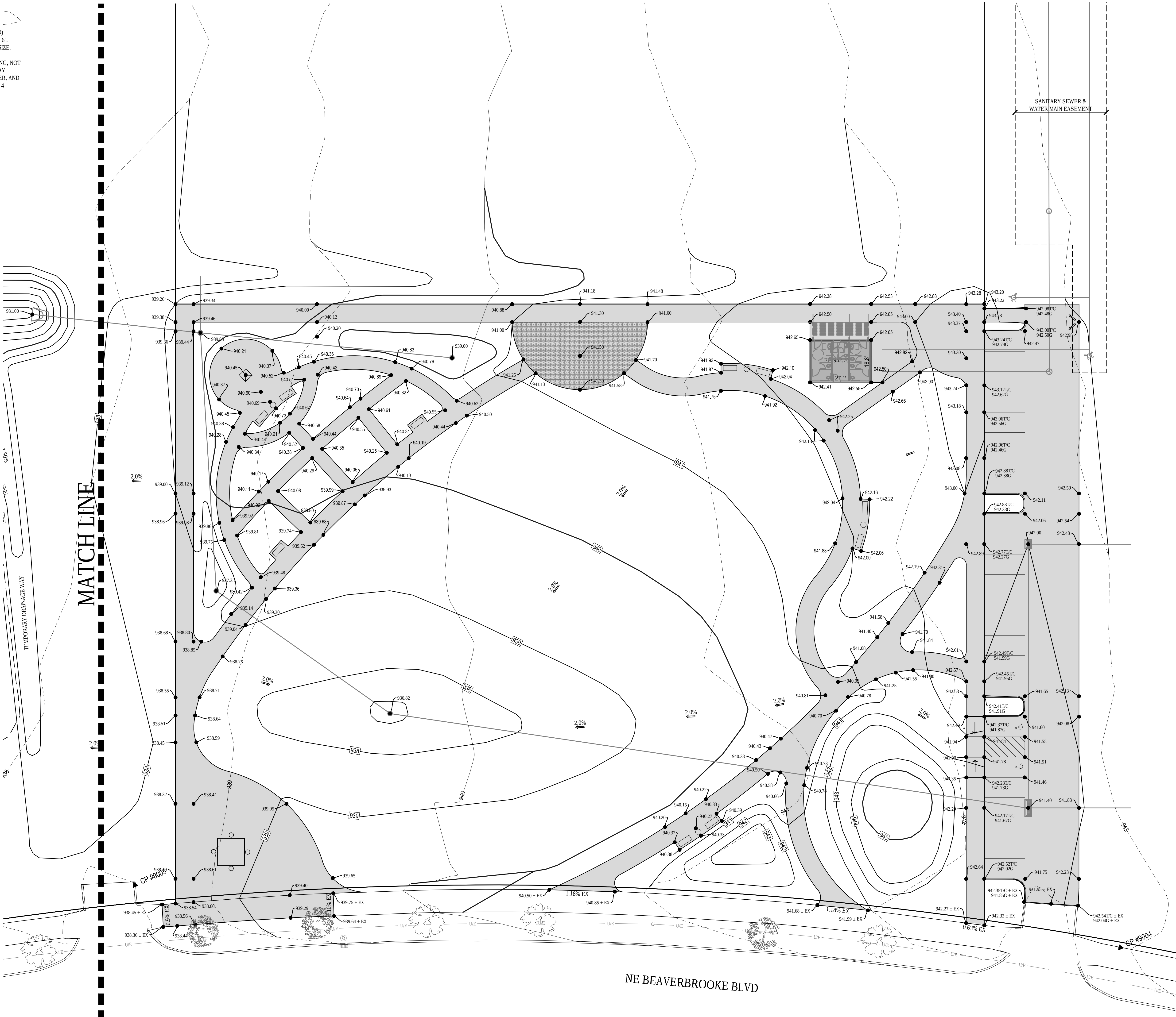
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- TOPSOIL NOTES:
1. STRIP AND STOCKPILE THE TOP 6" OF SOIL ON ALL DISTURBED AREAS.
 2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 6" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
 3. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
 4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.



- GRADING LEGEND:
- EXISTING CONTOUR — 150 —
 - PROPOSED CONTOUR — 150 —
 - FINISHED GROUND ELEVATION ● 150.50
 - TOP OF CURB ELEVATION ● 150.50T/C
 - GUTTER ELEVATION ● 150.50G
 - TOP OF WALL ELEVATION ● 150.50T/W
 - BOTTOM OF WALL ELEVATION ● 150.50B/W
 - EDGE OF WALK ELEVATION ● 150.50E/W
 - TOP OF STAIR ELEVATION ● 150.50T/S
 - BOTTOM OF STAIR ELEVATION ● 150.50B/S

NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.



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HERITAGE PARK
GRIMES, IOWA

GRADING PLAN

REFERENCE NUMBER:

DRAWN BY:

MJE

CHECKED BY:

SVS

REVISION DATE:

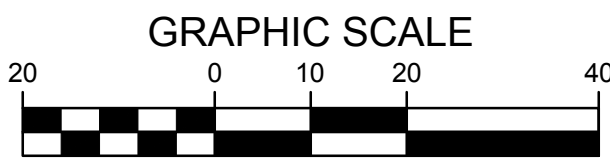
06-12-2019 1ST CITY REV.
10-31-2019

PROJECT NUMBER:

120101-15

SHEET NUMBER:

C3.1



1. STRIP AND STOCKPILE THE TOP 6" OF SOIL ON ALL DISTURBED AREAS.

2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 6" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6". TOPSOIL SHALL BE FERTILE, FRIABLE, LOOSE, FREE FROM STONES 3/4" IN SIZE.

3. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE, LOOSE, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LAYERS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER. ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT NITROGEN AND MAXIMUM 1 PERCENT PHOSPHORUS.

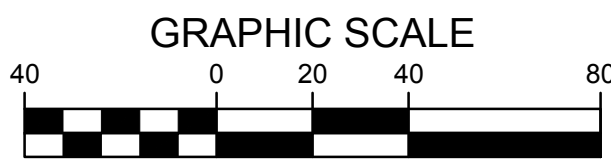
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.

EXISTING CONTOUR		150
PROPOSED CONTOUR		150
FINISHED GROUND ELEVATION		150.50
TOP OF CURB ELEVATION		150.50/C
GUTTER ELEVATION		150.50/G
TOP OF WALL ELEVATION		150.50/W
BOTTOM OF WALL ELEVATION		150.50/W
EDGE OF WALK ELEVATION		150.50/E
TOP OF STAIR ELEVATION		150.50/S
BOTTOM OF STAIR ELEVATION		150.50/S

NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED
GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.

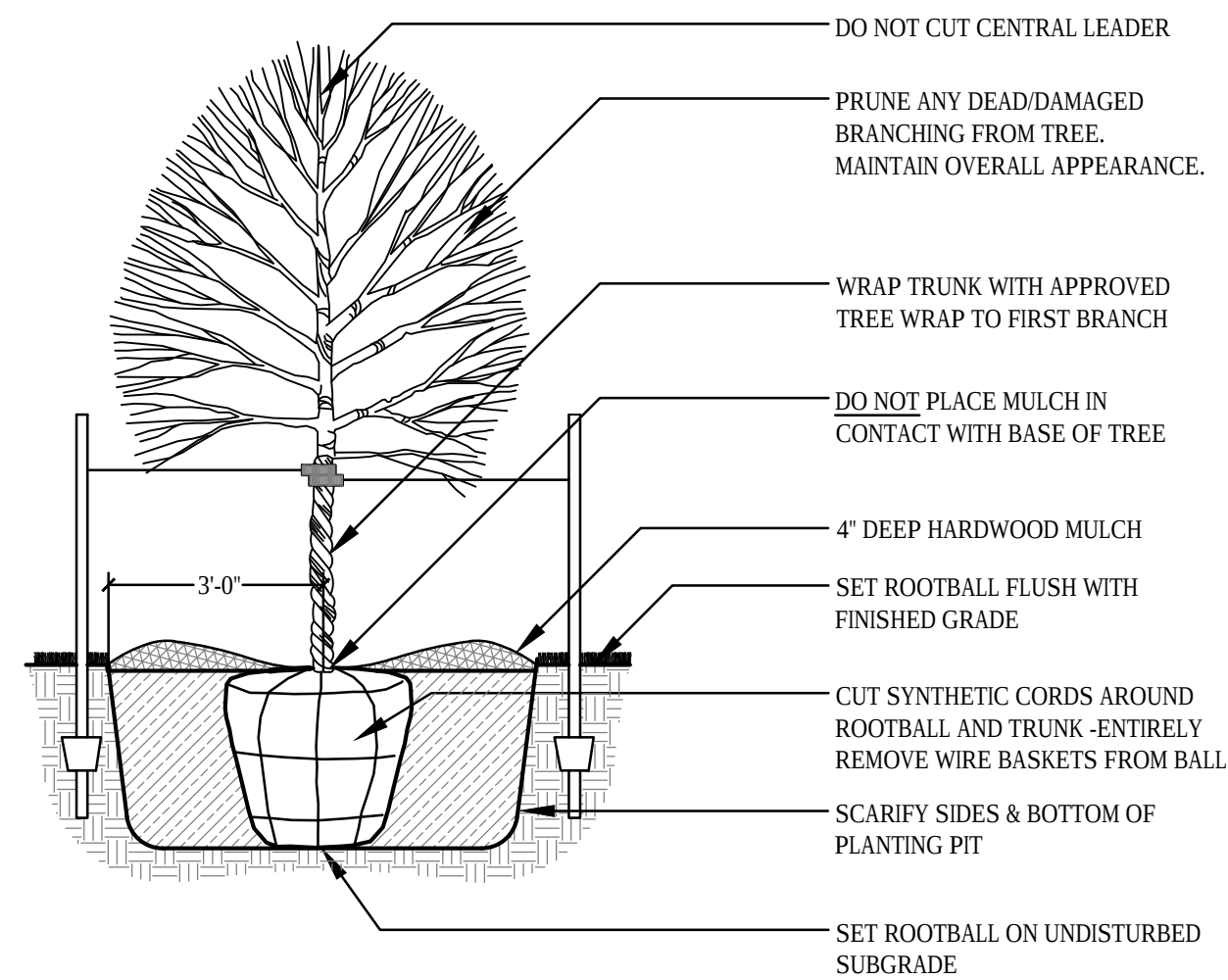
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HERITAGE PARK GRIMES, IOWA	
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SHEET NUMBER: C3.2	

1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5' OF COVER UNLESS NOTED OTHERWISE.
3. FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE AND HYDRANT.
4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
5. STORM SEWER CALLED OUT AS RCP MUST BE CLASS III RCP.
6. STORM SEWER CALLED OUT AS N-12 MAY BE EITHER N-12 OR CLASS III RCP.
7. FOR RCP PIPE, ASSOCIATED F.E.S. MUST BE RCP. FOR N-12 PIPE, ASSOCIATED F.E.S. SHALL BE CMP.
8. WATER AND SANITARY MAINS TO BE INSTALLED BY DEVELOPER OF HERITAGE TOWN CENTER.

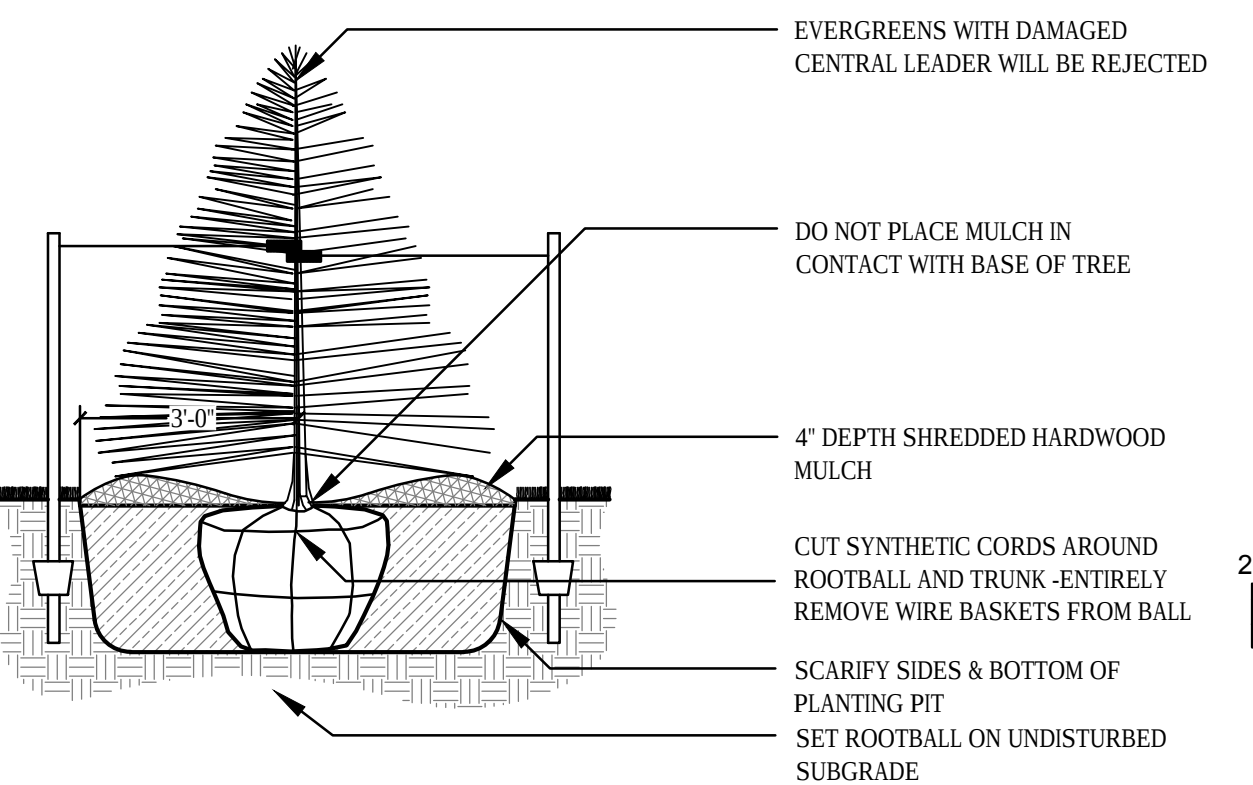


LANDSCAPE NOTES:

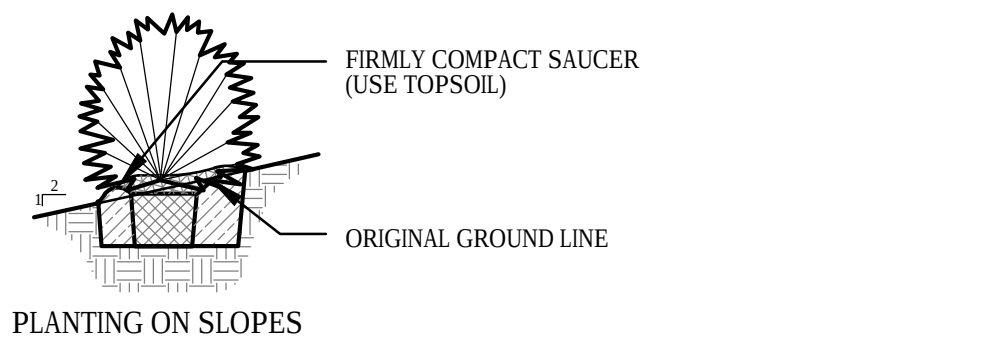
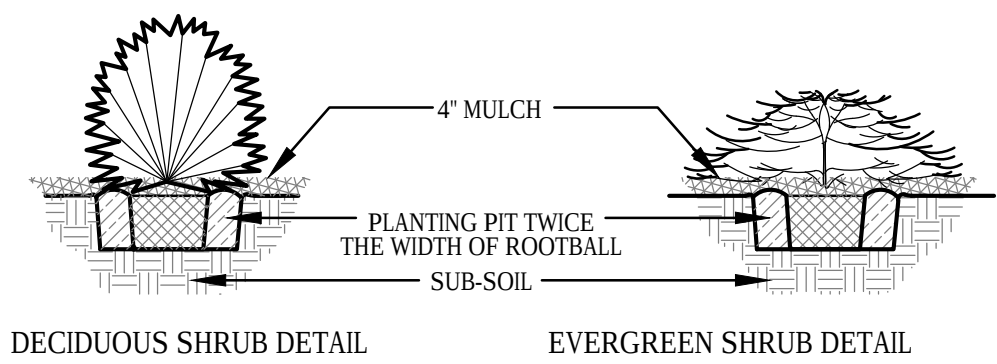
- ALL SODDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
- SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SOD LIMITS SHOWN ON PLAN ARE FOR REFERENCE ONLY. FINAL LIMITS MAY CHANGE BASED ON CONSTRUCTION ACTIVITIES.
- STAKE SOD ON ALL SLOPES 3 : 1 OR GREATER.
- PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
- ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE IDENTIFICATION TAGS AND CORDS ON ALL PLANT MATERIAL PRIOR TO THE COMPLETION OF THE CONTRACT. IDENTIFICATION TAGS MUST BE LEFT ON UNTIL AFTER ACCEPTANCE BY OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH AROUND ALL TREES, SHRUBS AND GROUND COVER BEDS TO A DEPTH OF 4 INCHES, UNLESS NOTED.
- STAKE AND WRAP ALL DECIDUOUS TREES IMMEDIATELY AFTER PLANTING. STAKE ALL TREES ACCORDING TO THE STAKING DETAILS. CONTRACTOR SHALL ADJUST AND MAINTAIN GUYING TENSION THROUGHOUT THE PLANT ESTABLISHMENT PERIOD.
- THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
- NO LANDSCAPE MATERIAL SHALL BE SUBSTITUTED WITHOUT THE AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.
- ALL SHRUB AND PERENNIAL PLANTING BEDS SHALL BE MULCHED WITH 4" THICK SHREDDED HARDWOOD MULCH.
- ALL SHRUB AND PERENNIAL PLANTING BEDS SHALL INCORPORATE TYPAR 3301 NONWOVEN LANDSCAPE FABRIC (OR SIMILAR) AND 3" THICK LAYER OF WASHED RIVER ROCK (1.5" NOMINAL SIZE).
- ALL BEDS TO RECEIVE GRANULAR PRE-EMERGENT WEED CONTROL BEFORE AND AFTER MULCH/ROCK IS INSTALLED.
- IRRIGATE ALL SOD AREAS: INCLUDE QUICK CONNECT AT NORTH CENTRAL PORTION OF THE PARK. CONTRACTOR TO SUBMIT IRRIGATION PLAN FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



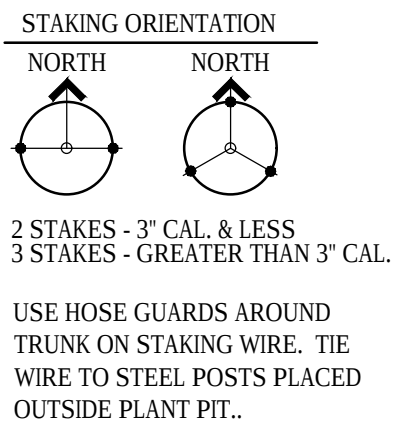
DECIDUOUS TREE PLANTING (TYP.)
SCALE: NOT TO SCALE



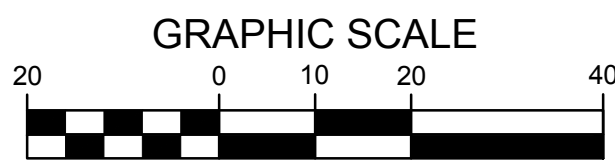
EVERGREEN TREE PLANTING (B&B)
SCALE: NOT TO SCALE



SHRUB PLANTING (TYP.)
SCALE: NOT TO SCALE



LEAVE STAKES IN PLACE NO MORE THAN 1 YEAR FROM INSTALLATION. CONTRACTOR RESPONSIBLE FOR REMOVAL.

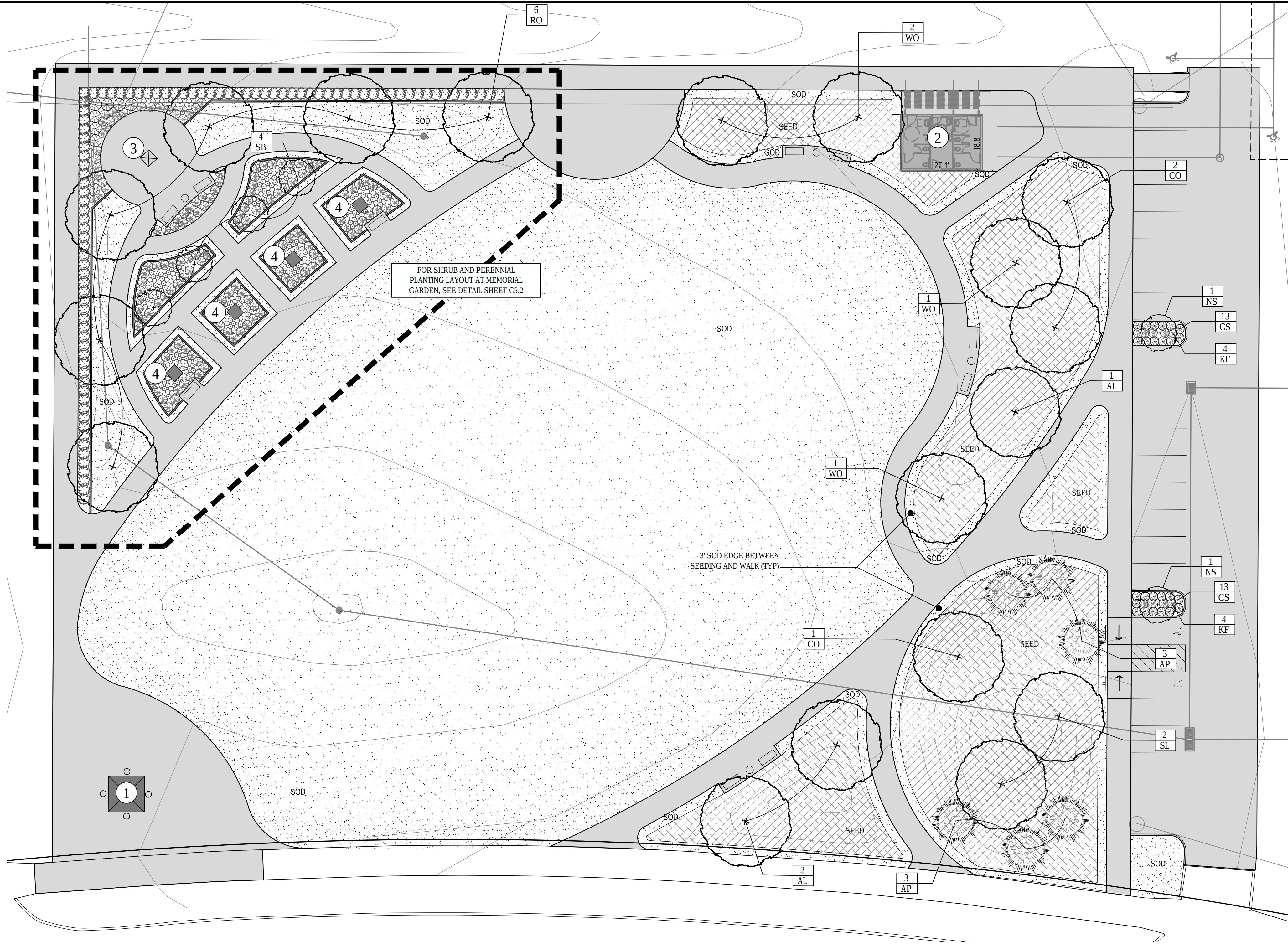


PLANTING SCHEDULE

CODE	QUAN	COMMON NAME	LATIN NAME	SIZE	ROOT	NOTES
TREES						
RO	6	RED OAK	QUERCUS RUBRA	2.5" CAL	B&B	MATCHED SPECIMENS
CO	3	CHINKAPIN OAK	QUERCUS MUhlenBERGII	2.5" CAL	B&B	MATCHED SPECIMENS
WO	4	WHITE OAK	QUERCUS ALBA	2.5" CAL	B&B	MATCHED SPECIMENS
AL	3	AMERICAN LINDEN	TILIA AMERICANA	2.5" CAL	B&B	MATCHED SPECIMENS
SL	2	SKYLINE HONEYLOCUST	GLEADIA TRICANTHOS INERMIS 'SKYLINE'	2.5" CAL	B&B	MATCHED SPECIMENS
SB	4	AUTUMN BRILLIANCE SERVICEBERRY	AMELANCHER X AUTUMN BRILLIANCE	1.5" CAL	B&B	MATCHED, SINGLE TRUNK SPECIMENS
NS	2	BLACK TULEPO	NYSSA SYLVATICA	1.5" CAL	B&B	MATCHED SPECIMENS
AP	6	AUSTRIAN PINE	PINUS NIGRA	6"	B&B	FULL FORM TO GROUND
SHRUBS						
CS	26	COOL SPLASH HONEYSUCKLE	DIERVILLA X 'COOL SPLASH'	#3	CONT	FULLY ROOTED IN CONTAINER
DY	92	DENSIFORMIS YEW	TAXUS X 'DENSIFORMIS'	#5	CONT	FULL FORM, MATCHED, FULLY ROOTED
LL	7	LITTLE LIME HYDRANGEA	HYDRANGEA PANICULATA 'JANE'	#5	CONT	FULLY ROOTED IN CONTAINER
GRASSES & PERENNIALS						
KF	24	KARL FOERSTER FEATHER REED GRASS	'CALAMAGROSTIS SCUTIFOLIA KARL FOERSTER'	#1	CONT	FULLY ROOTED IN CONTAINER
PD	145	PRAIRIE DROPSOED	SPOROBOLUS HETEROLEPSIS	#1	CONT	FULLY ROOTED IN CONTAINER
BE	122	BLACK EYED SUSAN	RUDEBECKIA HIRTA	#1	CONT	FULLY ROOTED IN CONTAINER
MN	72	MAY NIGHT SALVIA	SALVIA SYLVESTRIS 'MAY NIGHT'	#1	CONT	FULLY ROOTED IN CONTAINER
CB	76	CRYSTAL BLUE SALVIA	SALVIA NEMEROSA 'CRYSTAL BLUE'	#1	CONT	FULLY ROOTED IN CONTAINER

SOD: PROVIDE AND INSTALL SOD FROM LOCAL SUPPLIERS. AREAS TO BE SODDED MUST BE FREE OF ALL CONSTRUCTION DEBRIS AND ANY DIRT CLUMPS OVER 1" IN DIAMETER. THOROUGHLY WATER SOD UPON INSTALLATION. CONTRACTOR TO MAINTAIN WATERING UNTIL SOD IS ESTABLISHED (ROOTS KNITTED INTO SUBSURFACE)

SEED: SEED TYPE TO BE "LOW GROW GRASS MIXTURE" SUPPLIED BY UNITED SEEDS (OR APPROVED EQUAL). INSTALL SEED BY HYDROMULCHING AT A RATE OF 30 LBS PER ACRE. SEEDING DATES, SITE PREPARATION, SEEDING INSTALLATION, WATER REQUIREMENTS, FERTILIZING, AND MOWING PER UNITED SEEDS TECH BULLETIN FOR SEED TYPE.



CLOCK TOWER
SCALE: NOT TO SCALE

CLOCK TOWER BY 'THE VERDIN COMPANY'
- 30 FOOT OVERALL HEIGHT
- 4 FOOT CLOCK FACE ON ALL SIDES
- 1000 POUND BELL FOR HOUR STRIKES
- CONTROL BY 'SUPREME CARILLON' FOR MUSIC
- COLOR: BLACK
- INTERNALLY LIT CLOCK FACES

NUMBERED CALLOUTS

- CLOCK TOWER BY VERDIN COMPANY - FINAL CUSTOM DESIGN TO BE COMPLETED - MATCHES TOWER IN APPROVED HERITAGE PUD
- RESTROOM BUILDING WITH IRRIGATION CONTROL ROOM AND CLOCK TOWER CONTROLS. SEE ARCHITECTURAL SUBMITTALS.
- FUTURE SCULPTURAL ELEMENT
- OPEN AREAS FOR FUTURE SCULPTURAL ELEMENTS. INSTALL 4' X 4' CONCRETE PAD.

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HERITAGE PARK
GRIMES, IOWA

LANDSCAPE PLAN

REFERENCE NUMBER:

DRAWN BY:
MJE

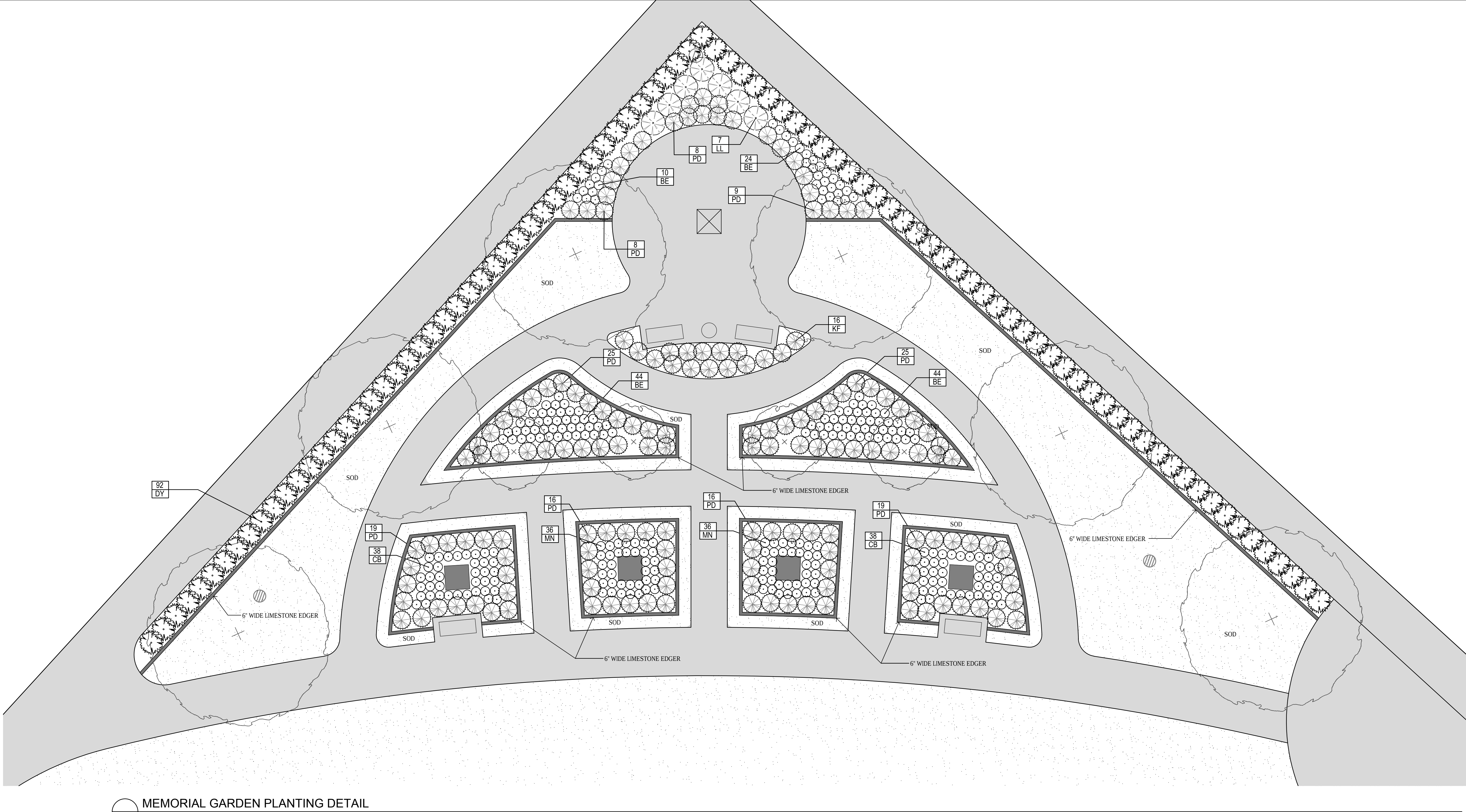
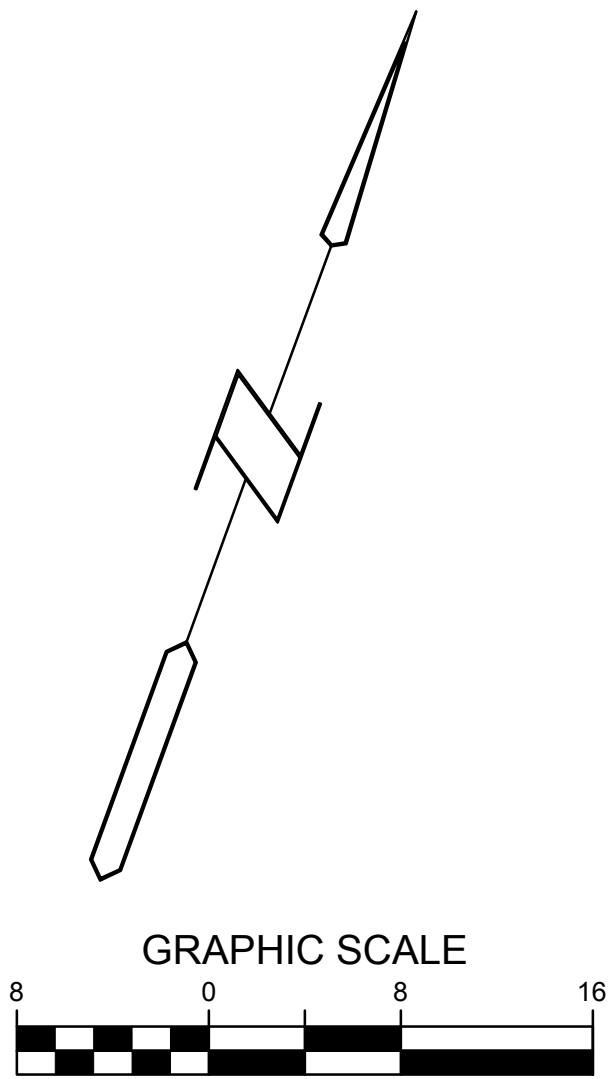
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SHEET NUMBER:

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MEMORIAL GARDEN PLANTING DETAIL

HERITAGE PARK
GRIMES, IOWA

LANDSCAPE PLAN

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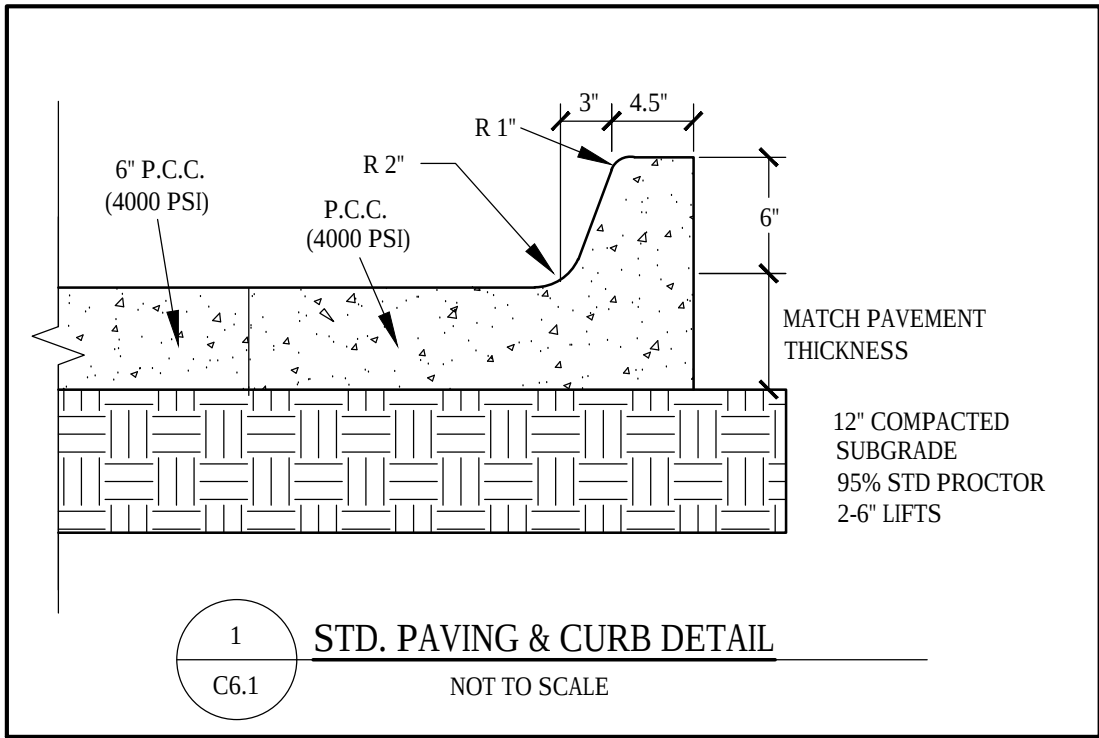
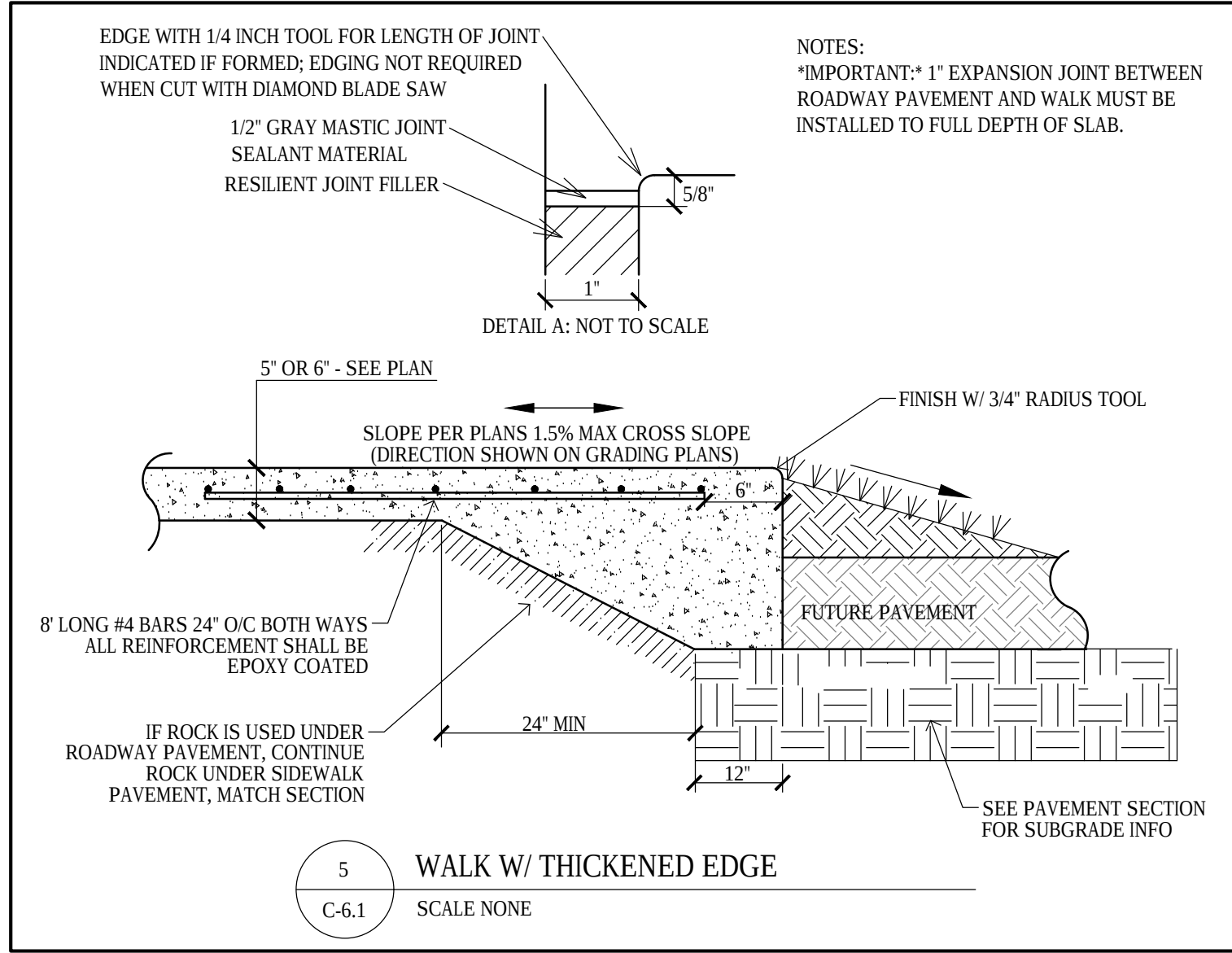
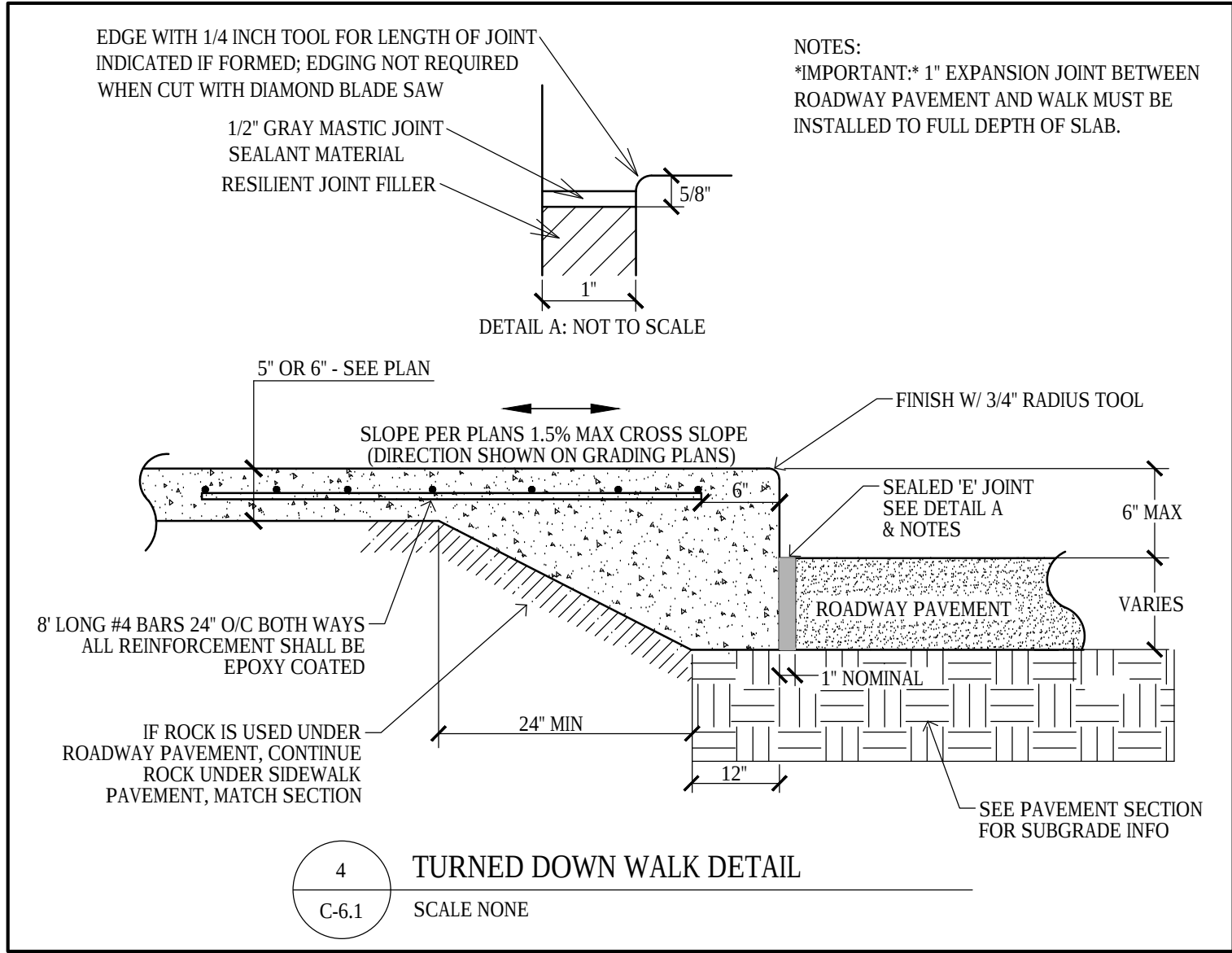
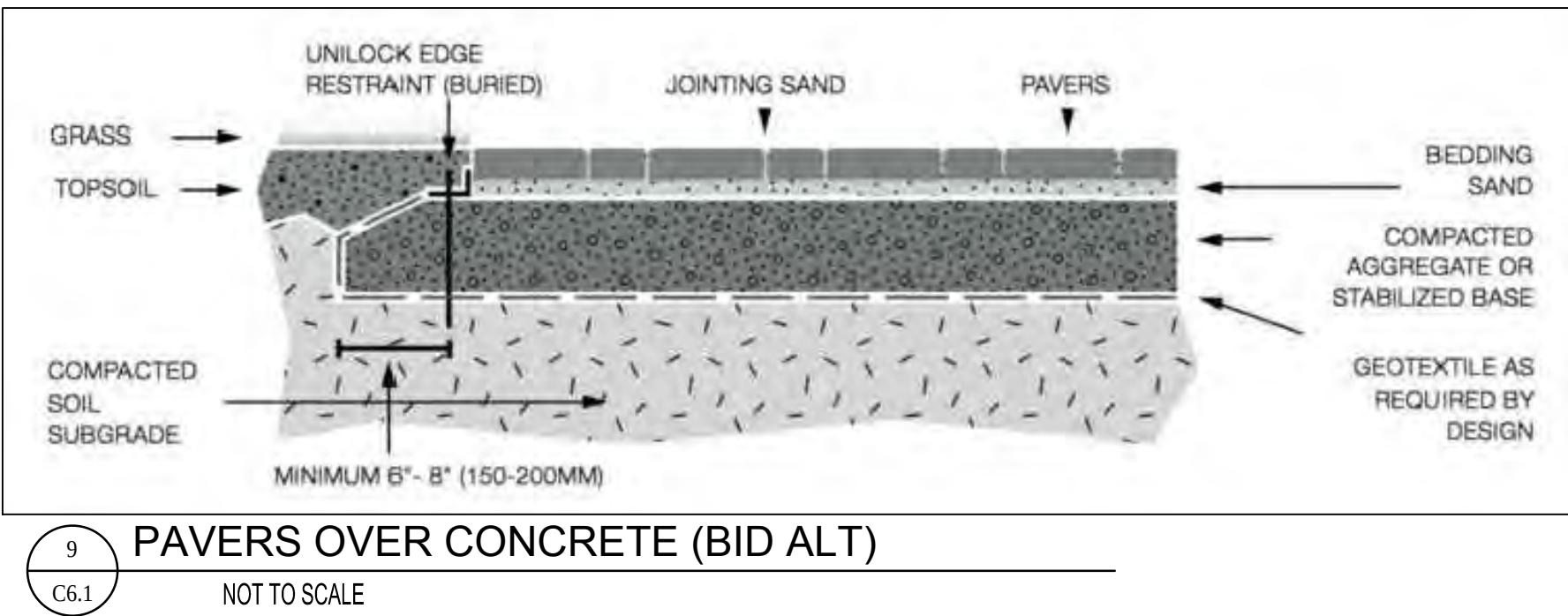
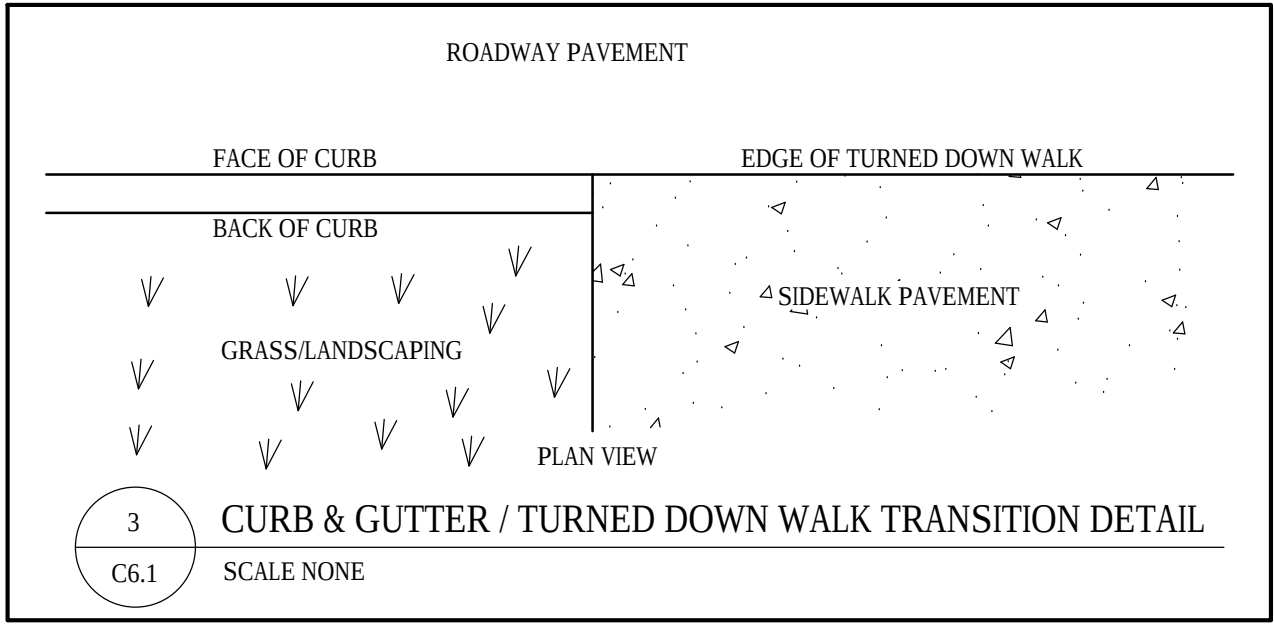
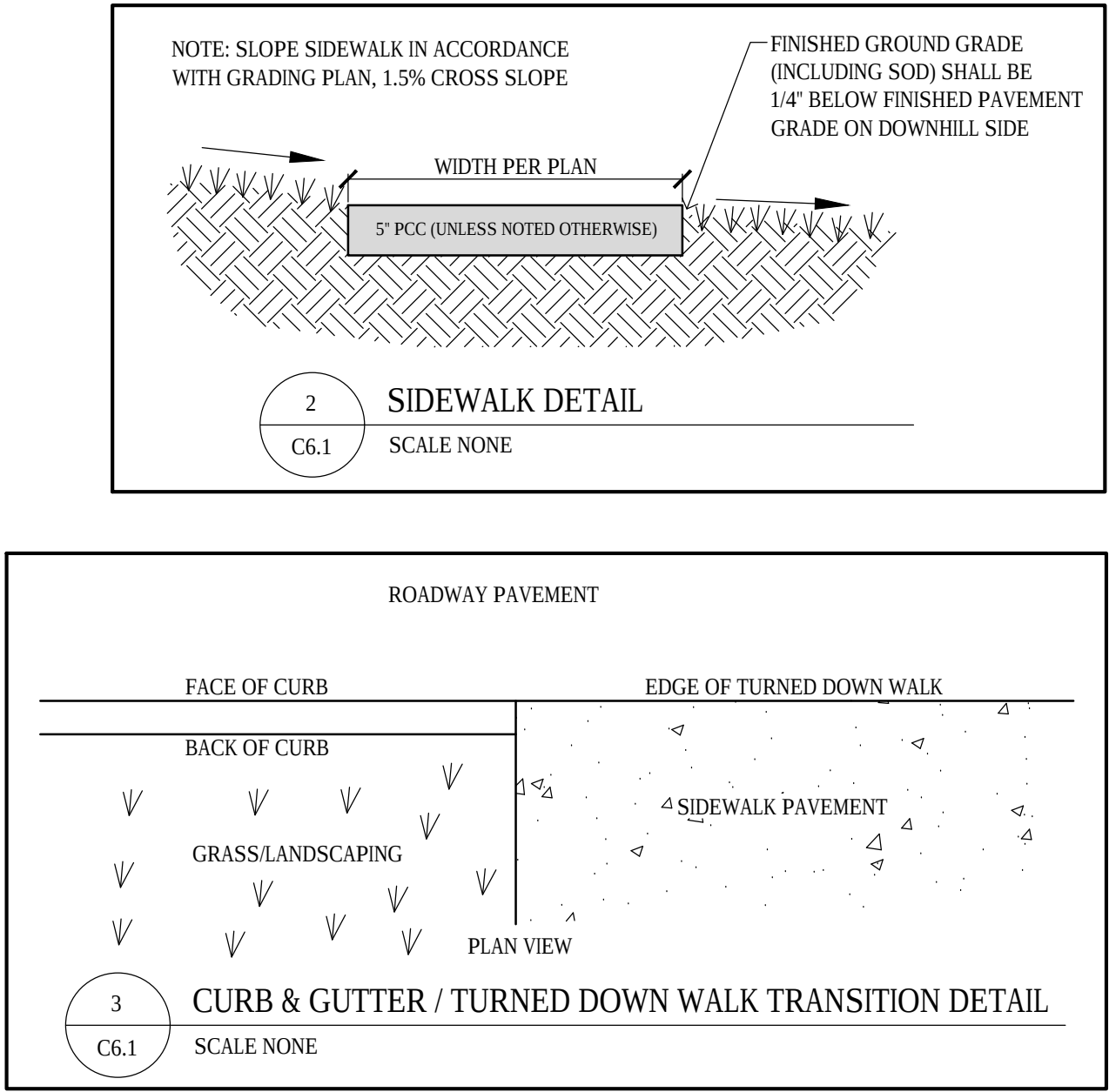
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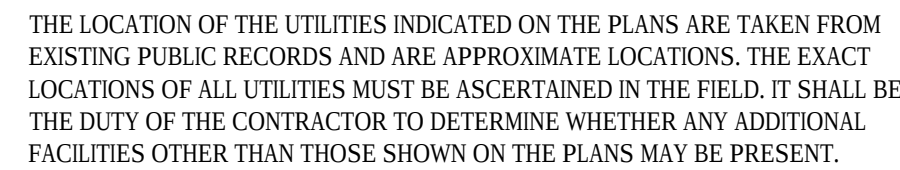
120101-15

SHEET NUMBER:

C5.2



C7.1



Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: February 4, 2020
RE: Heritage Park – Site Plan

GENERAL INFORMATION:

Applicant:	Great Outdoors Foundation
Requested Action	Site Plan
Location	1055 NE Beaverbrooke Blvd

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	Mixed Use 1	R-4
North	Vacant	Mixed Use 1	R-4
South	Residential	Medium Density Residential	R-4
East	Vacant	Mixed Use 1	R-4
West	Vacant	Mixed Use 1	R-4

BACKGROUND:

The applicant is requesting approval of the site plan for Heritage Park which consists of approximately 2.15 acres.

The park is located within the Heritage at Grimes PUD.

ANALYSIS:*Building/Elevations:*

The only building proposed to be on site is a restroom facility. The elevation is proposed to be primarily dark gray and white brick with polycarbonate glazing and a galvanized steel pergola.

Site Layout:

The site is composed of walking trails with benches and trash receptacles, a memorial garden, and a large open field in the center of the park. The site also includes a proposed clocktower along NE Beaverbrooke Blvd and a restroom facility and bike racks in the northeast corner of the park. The internal trails provide several connections to exterior sidewalks along the property lines, including the trail along NE Beaverbrooke Blvd.

On-street parking is provided along the eastern property line. Additional on-street parking is proposed to the north and west as part of the future development of the Heritage Town Center.

Parking:

There is no specific parking calculation for parks within the City zoning regulations. The Heritage Town Center as a whole is proposed to provide 568 total parking spaces, which is 14 spaces over the minimum requirement. Because of the extra proposed spaces and the multi-use nature of the Town Center, staff has determined that the 24 spaces provided for the park is sufficient.

In the interim, on street parking is provided along NE Station Crossing, NE Heritage Drive, and NE Little Beaver.

Landscaping/Streetscape:

The site is required to follow the landscape requirements as set out by the Heritage at Grimes PUD. However, there are no specific landscaping standards for recreation areas. Staff has determined the proposed landscaping to be appropriate for the site, and is consistent with the theme and intent of the original PUD.

Utilities:

Sanitary sewer access is provided from an existing 8" sewer stub near NE Station Crossing. A new public 4" sewer will be constructed to run south from NE Station Crossing to the restroom facility at the northeast corner of the property.

Water is provided from an existing 8" main near NE Station Crossing. A new public 8" water main will be constructed to connect to the restroom facility.

Storm water detention is being handled regionally within the pond to the west of this site. A temporary swale is shown as in interim conveyance method. Once the property to the west is developed, the storm sewer will be extended to NE Little Beaver Drive to carry the runoff from the park offsite.

STAFF RECOMMENDATION:

Staff would recommend approval of the site plan for Heritage Park Site Plan, subject to any remaining staff comments.

CITY OF GRIMES



Alex Pfaltzgraff
Development Services Director