SITE PLAN FOR:

RJ LAWN & LANDSCAPE EXPANSION

655 INTERSTATE PARKWAY
WAUKEE, IOWA

VICINITY MAP

NOT TO SCALE

APPLICANT/OWNER

RJ LAWN & LANDSCAPE
CONTACT: RYAN MCCARTHY
655 INTERSTATE PKWY
WAUKEE, IOWA 50263
PH: (515) 987-4394

ENGINEER/SURVEYOR

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
CONTACT: KEITH WEGGEN
EMAIL: KEITHW@CDA-ENG.COM
PH. (515) 369-4400
FX. (515) 369-4410

DATE OF SURVEY

MARCH 2022

CONSTRUCTION SCHEDULE

ANTICIPATED START DATE = 12/01/2024
ANTICIPATED FINISH DATE = 12/01/2025

SUBMITTAL DATES

SITE SUBMITTAL #1:	09/24/2024
SITE SUBMITTAL #2:	10/23/2024
SITE SUBMITTAL #3:	11/08/2024

LEGAL DESCRIPTION

LOT 5 IN I-80 WEST INDUSTRIAL PARK, PLAT 1, AN OFFICIAL PLAT IN THE CITY OF WAUKEE, DALLAS COUNTY, IA.

ZONING

EXISTING: M-1 LIGHT COMMERCIAL

BULK REGULATIONS

SETBACKS
FRONT YARD: 30 FT
REAR YARD: 30 FT
SIDE YARD: 40 FT WHEN ADJ. TO "C-1" DIST.

LAND USE

EXISTING: PROFESSIONAL OFFICE/WAREHOUSE SPACE

PROPOSED: STORAGE WAREHOUSE

DEVELOPMENT SUMMARY

IMPERVIOUS AREA
PROPOSED:
BUILDING: 19,777 SF
PAVEMENT: 23,600 SF
43,377 SF

BUILDING SUMMARY
EXISTING:
PROFESSIONAL OFFICE: 4,950 SF
WAREHOUSE: 10,560 SF
PROPOSED:
STORAGE (18 UNITS): 19,777 SF

PARKING REQUIRED
EXISTING: 26 SPACES
PROFESSIONAL OFFICE:
3 SPACES/1,000 SF GFA
WAREHOUSE:
1 SPACE/1,000 SF GFA
PROPOSED: 2 SPACES
STORAGE:
1 SPACE/20,000 SF GFA

PARKING PROVIDED
EXISTING: 44 SPACES
PROPOSED: 17 SPACES

1 LANDSCAPE ISLAND/15 PARKING SPACES

INDEX OF SHEETS

GENERAL LEGEND

PROPOSED

PROPERTY LINE
PERMANENT EASEMENT — P/E —
TYPE SW-501 STORM INTAKE
TYPE SW-502 STORM INTAKE
TYPE SW-506 STORM INTAKE
TYPE SW-513 STORM INTAKE
TYPE SW-401 STORM MANHOLE
TYPE SW-402 STORM MANHOLE
DETECTABLE WARNING PANEL
STORM SEWER
SAWCUT (FULL DEPTH)
SILT FENCE
SPOT ELEVATION XXXX.XX

EXISTING

SANITARY MANHOLE
WATER VALVE BOX
FIRE HYDRANT
WATER CURB STOP
WELL
STORM SEWER MANHOLE
STORM SEWER SINGLE INTAKE
STORM SEWER DOUBLE INTAKE
FLARED END SECTION
ROOF DRAIN/ DOWNSPOUT
DECIDUOUS TREE
CONIFEROUS TREE
DECIDUOUS SHRUB
CONIFEROUS SHRUB
ELECTRIC POWER POLE
GUY ANCHOR
STREET LIGHT
POWER POLE W/ TRANSFORMER
UTILITY POLE W/ LIGHT
ELECTRIC BOX
ELECTRIC TRANSFORMER
ELECTRIC MANHOLE OR VAULT
TRAFFIC SIGN
TELEPHONE JUNCTION BOX
TELEPHONE MANHOLE/VAULT
TELEPHONE POLE
GAS VALVE BOX
CABLE TV JUNCTION BOX
CABLE TV MANHOLE/VAULT
MAIL BOX
BENCHMARK
SOIL BORING
UNDERGROUND TV CABLE — TV —
GAS MAIN — G —
FIBER OPTIC — FO —
UNDERGROUND TELEPHONE — T —
OVERHEAD ELECTRIC — OE —
UNDERGROUND ELECTRIC — E —
FIELD TILE — TILE —
SANITARY SEWER W/ SIZE — 8"S —
STORM SEWER W/ SIZE — 15" RCP —
WATER MAIN W/ SIZE — 8"W —

THE MOST RECENT EDITION OF THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2024 EDITION OF SUDAS STANDARD SPECIFICATIONS SHALL APPLY TO ALL WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING REQUIREMENTS.

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2. 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.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS. THE WAUKEE STANDARD SPECIFICATIONS SHALL GOVERN IN THE EVENT OF CONTRASTING REQUIREMENTS.

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE, URBANDALE, IOWA 50322
PH: (515) 369-4400 Fax: (515) 369-4410
PROJECT NO. 2103.226

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

UTILITY WARNING

THE 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. A REQUEST WAS MADE TO IOWA ONE CALL FOR THE UTILITY PROVIDERS TO LOCATE THEIR UTILITIES IN THE FIELD.

PROFESSIONAL LANDSCAPE ARCHITECT
KEITH D. WEGGEN
00442
IOWA

PRELIMINARY
NOT FOR CONSTRUCTION

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.

KEITH D. WEGGEN, ASLA — DATE

MY LICENSE RENEWAL DATE IS JUNE 30, 2026
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL SHEETS

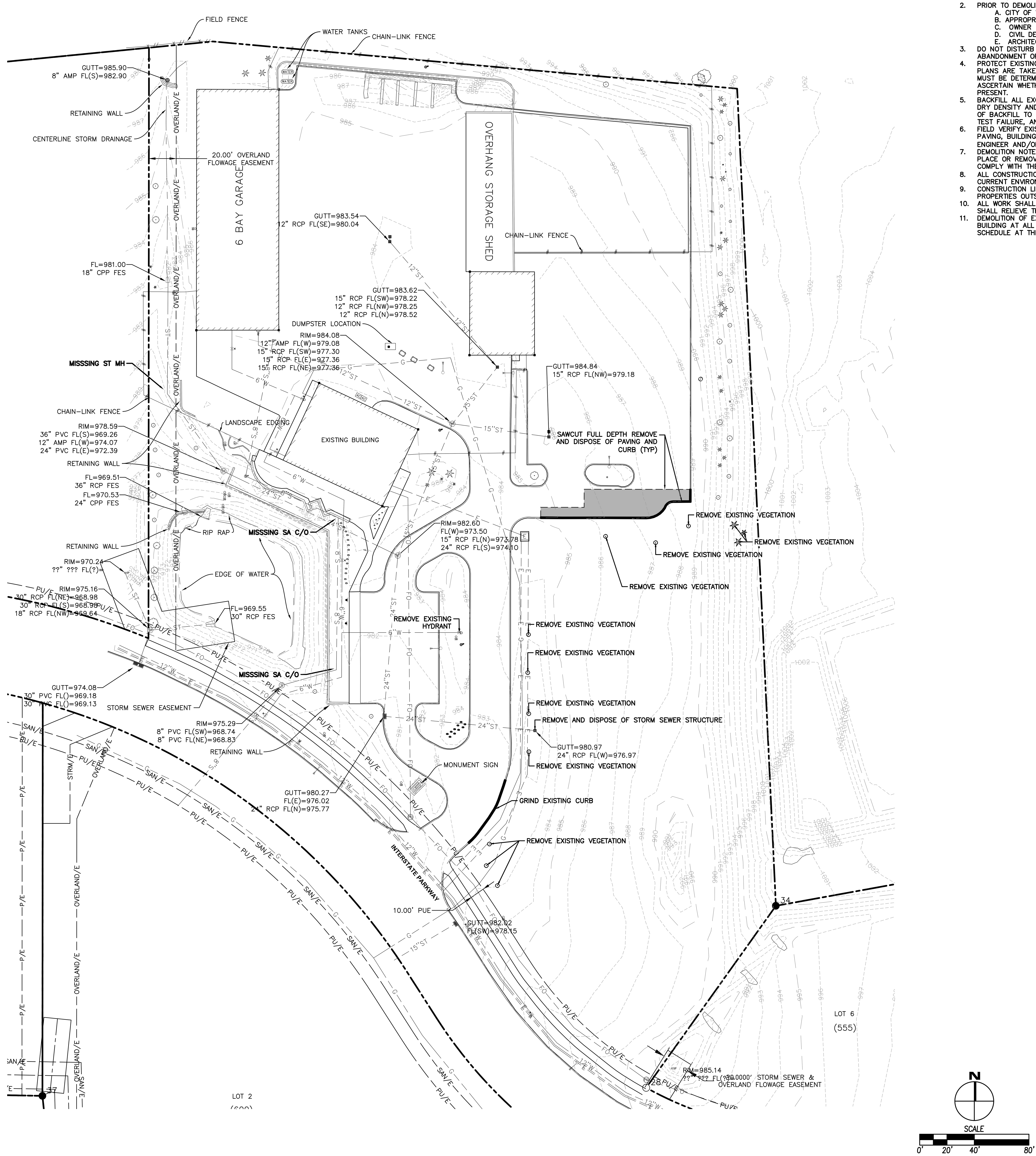
DATE | REVISIONS
09/24/2024 | SUBMITTAL #1
10/23/2024 | SUBMITTAL #2

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410

CIVIL DESIGN ADVANTAGE
ENGINEER:
DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION
COVER SHEET
655 INTERSTATE PARKWAY
WAUKEE, IOWA

DATE: 11/08/2024
SHEET NUMBER: C0.1
2103.226



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 OF WAUKEE
   - 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 REGULATORY 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. TESTING OF BACKFILL TO BE BY A GEOTECHNICAL ENGINEER 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, PAVING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE ENGINEER AND/OR OWNER OF ANY DISCREPANCIES.
7. DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
8. ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OF OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
9. 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.
11. DEMOLITION OF EXISTING PAVEMENT SHALL BE STAGED SO THAT ACCESS IS MAINTAINED AROUND THE BUILDING AT ALL TIMES FOR EMERGENCY VEHICLES. THE CONTRACTOR SHALL PROVIDE A PLAN AND SCHEDULE AT THE TIME OF THE PRECONSTRUCTION MEETING.

DATE	REVISIONS
09/24/2024	SUBMITTAL #1
10/23/2024	SUBMITTAL #2

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410
CIVIL DESIGN ADVANTAGE

ENGINEER:

DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION

TOPOGRAPHIC SURVEY AND DEMOLITION PLAN

655 INTERSTATE PARKWAY

WAUKEE, IOWA

DATE: 11/08/2024

SHEET NUMBER: C1.1

2103.226

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PLOTTED BY: JOHN BECKER TECH: ENG:
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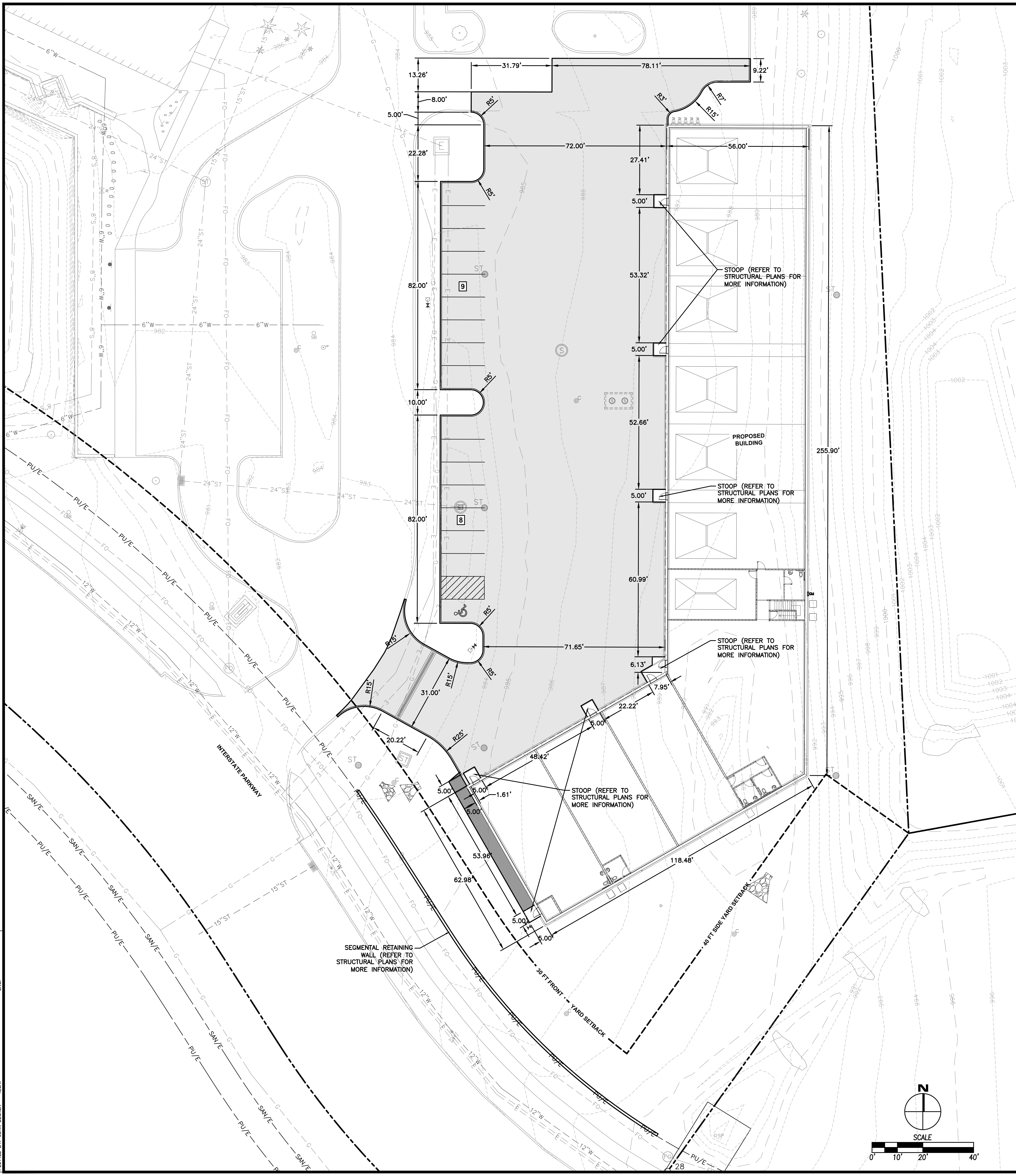

GENERAL NOTES

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:
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3. DO NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE REMOVAL OR ABANDONMENT OF ALL UTILITIES WITH THE APPROPRIATE UTILITY SUPPLIER AND REGULATORY 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. TESTING OF BACKFILL TO BE BY A GEOTECHNICAL ENGINEER 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, PAVING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE ENGINEER AND/OR OWNER OF ANY DISCREPANCIES.
7. DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
8. ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OF OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
9. 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.

PAVEMENT THICKNESS

1. STANDARD DUTY PAVING	6" P.C.C.	
2. SIDEWALK PAVING	4" P.C.C.	

REVISIONS	DATE
SUBMITTAL #1	09/24/2024
SUBMITTAL #2	10/23/2024

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ENGINEER:
DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION

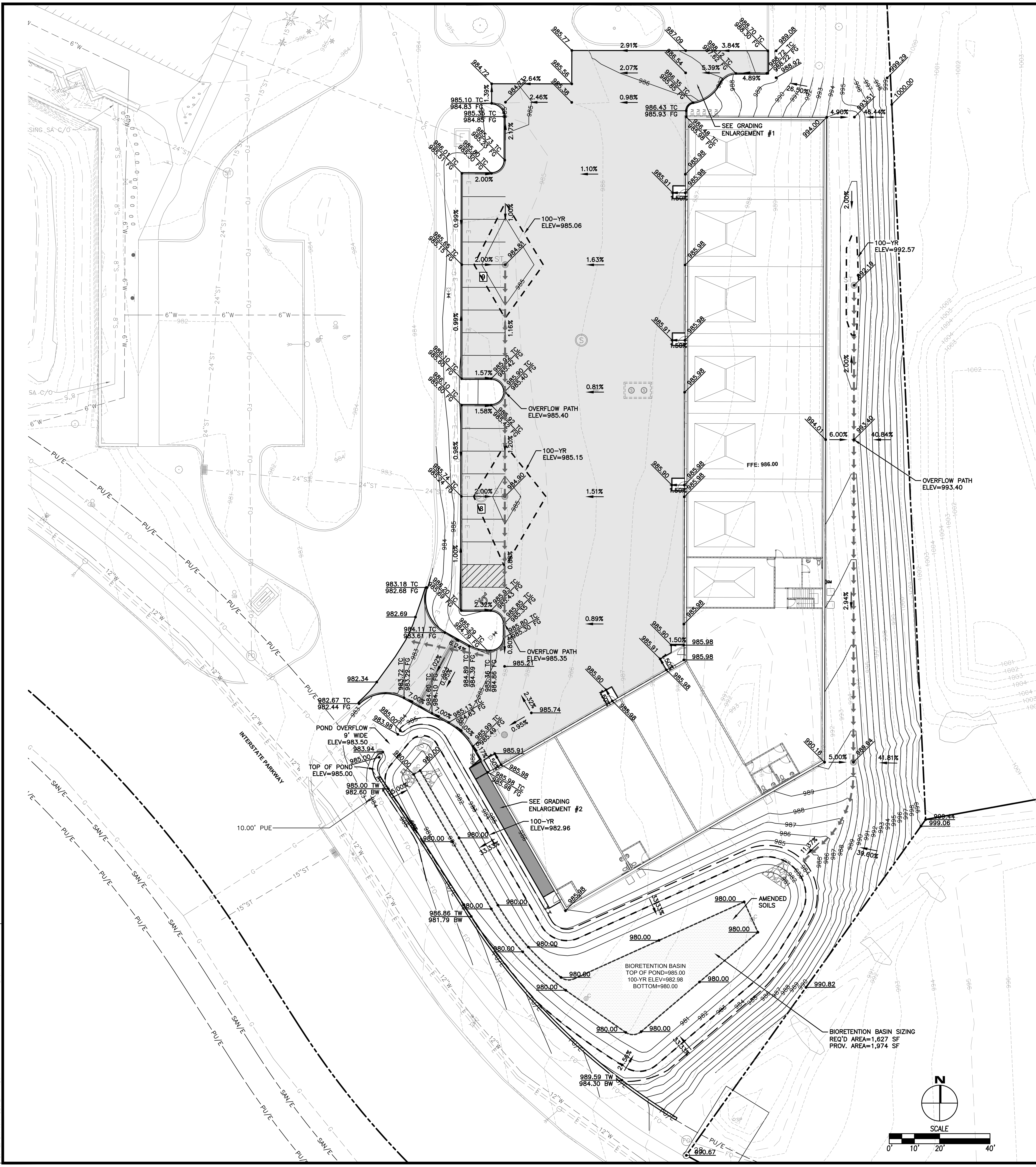
DIMENSION PLAN

655 INTERSTATE PARKWAY
WAUKEE, IOWA

DATE: 11/08/2024

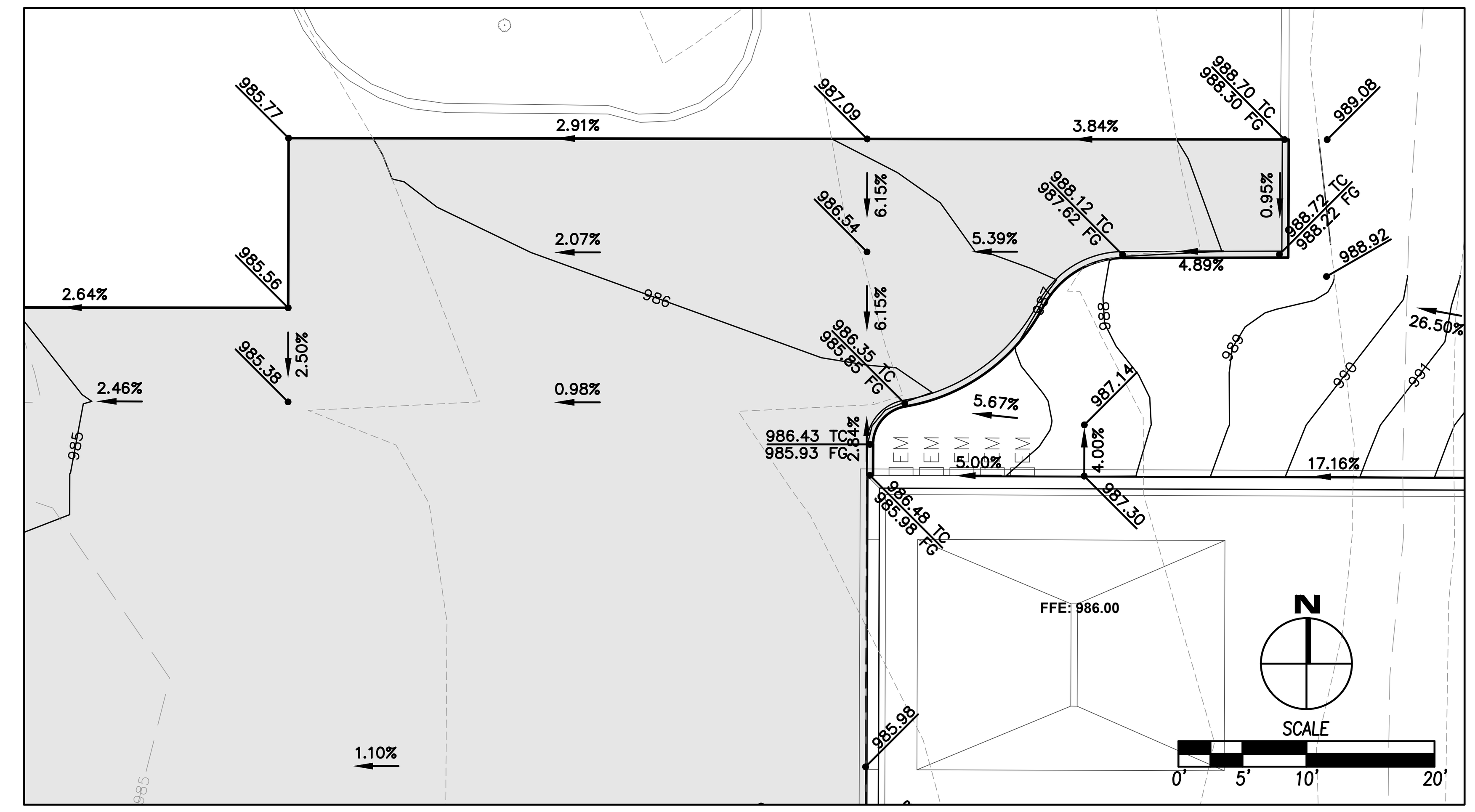
SHEET NUMBER: C2.1

2103.226

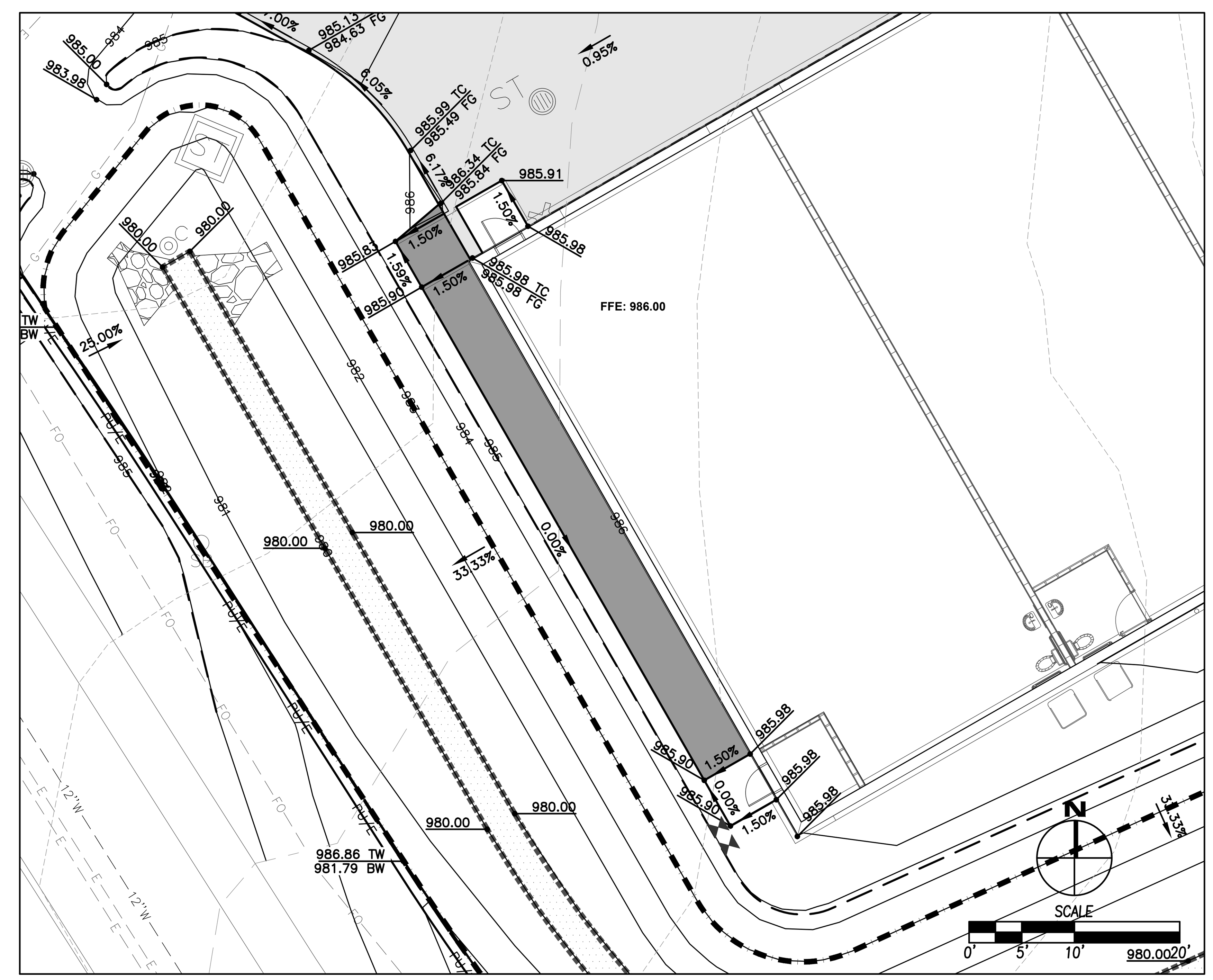


GRADING NOTES

1. THE COMPLETION AND APPROVAL OF THE COSESCO PERMIT SHALL BE PROVIDED TO THE CITY OF WAUKEE BUILDING DIVISION AND STORM WATER DEPARTMENT PRIOR TO ANY GRADING ACTIVITIES.
2. CONTRACTOR SHALL STRIP, SALVAGE AND RE-SPREAD TOPSOIL PER SECTION 2010 OF SUDAS STANDARD SPECIFICATIONS OR PROVIDE THE CITY WITH A TOPSOIL PRESERVATION PLAN. TOPSOIL TO BE RESPREAD SHALL BE FREE OF ROCK AND DEBRIS AND BE SUITABLE FOR THE GROWTH OF GRASS. COORDINATE LOCATION OF STOCKPILE WITH OWNER.
3. EXCAVATION SHALL BE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE 2024 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, 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 AWAY FROM BUILDINGS.
7. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
8. 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.
9. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
10. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
11. 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.
12. SIDEWALKS:
    MAINTAIN 0.8% 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 T/3, TRANSVERSE T/4.
13. THE GRADING OF THE DETENTION FACILITY, INSTALLATION OF THE STORM SEWER SYSTEM (IF APPLICABLE), INSTALLATION OF THE ORIFICE PLATE AND INSTALLATION OF THE TEMPORARY STAND PIPE 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 POSSIBLE.
14. A CERTIFIED AS-BUILT GRADING PLAN OF THE DETENTION BASIN AND DRAINAGE SWALES SHALL BE SUBMITTED TO THE CITY OF WAUKEE UPON COMPLETION OF THE SITE IMPROVEMENTS FOR EACH PHASE OF CONSTRUCTION PRIOR TO FINAL ACCEPTANCE.
15. CONSTRUCTION OPERATIONS SHALL PROTECT STORM SEWERS AND DRAINAGE WAYS FROM ALLOWING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.



GRADING ENLARGEMENT #1



GRADING ENLARGEMENT #2

REVISIONS	DATE
SUBMITTAL #1	09/24/2024
SUBMITTAL #2	10/23/2024

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ENGINEER:
DRAFTED:

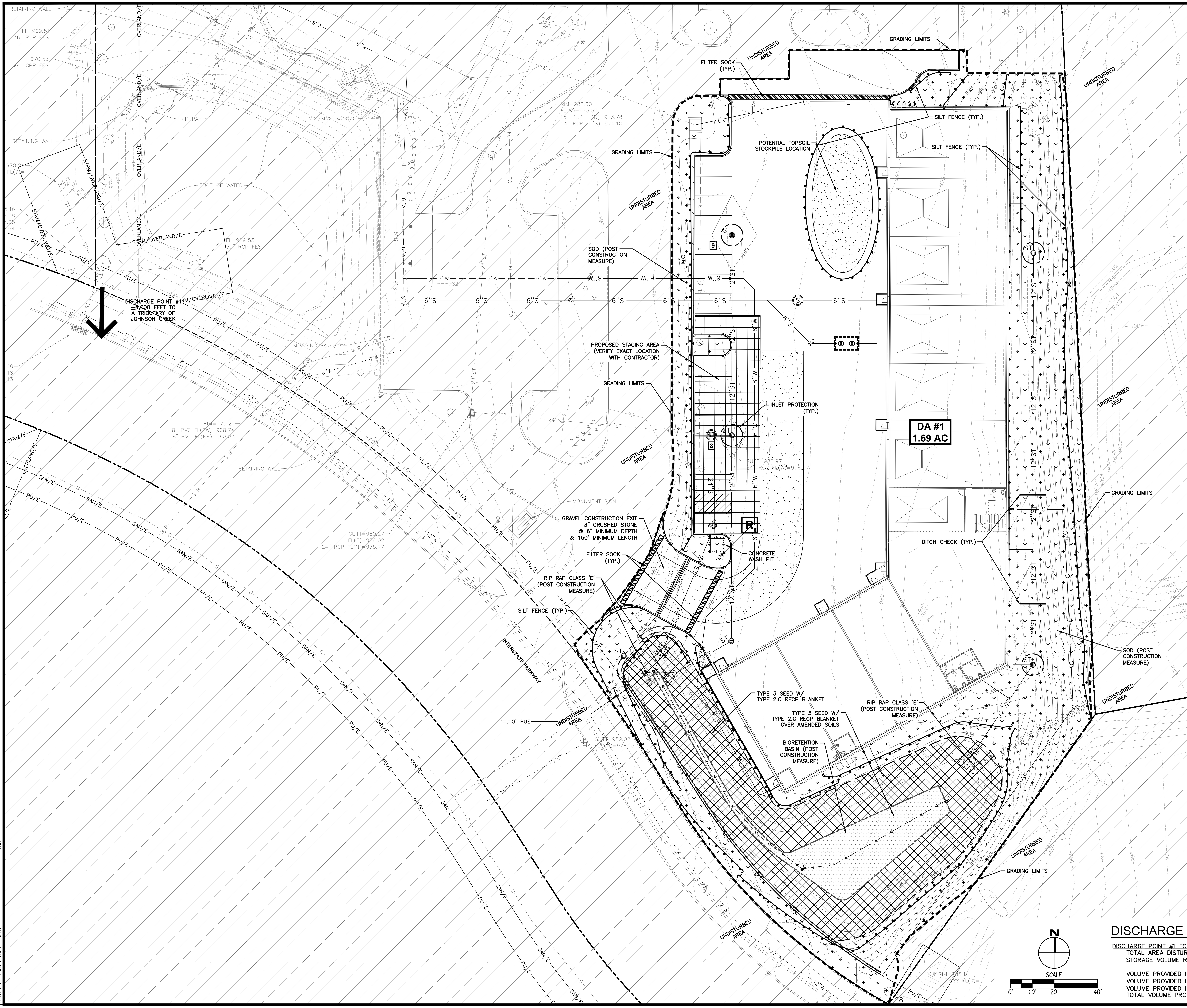
RJ LAWN & LANDSCAPE EXPANSION

GRADING PLAN

655 INTERSTATE PARKWAY
WAUKEE, IOWA

DATE:
11/08/2024

SHEET NUMBER:
C3.1
2103.226



SWPPP LEGEND

DRAINAGE ARROW	X.XX %
GRADING LIMITS	
FILTER SOCK	
SILT FENCE	
DITCH CHECK	
INLET PROTECTION	
PORTABLE RESTROOM	R
TEMPORARY STANDPIPE	
CONCRETE WASHOUT PIT	
AREA TO BE SODDED	
TYPE 3 SEED W/ TYPE 2.C RECP BLANKET	
TYPE 3 SEED W/ TYPE 2.C RECP BLANKET OVER AMENDED SOILS	
UNDISTURBED AREA	
RIP-RAP	
GRAVEL ENTRANCE	
STAGING AREA	

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,474
2	DITCH CHECK	LF	24
3	FILTER SOCK	LF	142
4	INLET PROTECTION DEVICES	EA	4
5	CONCRETE WASHOUT PIT	EA	1
6	TEMPORARY SEEDING (TYPE 4), FERTILIZING, AND MULCHING	AC	0.49
7	SOD	AC	0.49
8	TYPE 3 SEEDING W/ TYPE 2.C RECP	AC	0.21

NOTES:

1. IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
2. DISTURBED AREAS SHALL BE TEMPORARILY SEEDED OR MULCHED 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.
3. STORM SEWERS AND DRAINAGE WAYS SHALL BE PROTECTED FROM CONCRETE SLURRY PRODUCED BY SAWCUTTING AND CONCRETE GRINDING.
4. DEBRIS SPILLED ONTO THE STREET SHALL BE CLEANED UP BY THE END OF THE WORK DAY OR PRIOR TO A RAIN EVENT.
5. SHOULD A TEMPORARY SEED MIX BE REQUIRED TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENTS IT SHALL BE A SUDAS TYPE 4 TEMPORARY SEED MIX.

DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO AN UNNAMED TRIBUTARY OF JOHNSON CREEK ±4,000 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	1.69 ACRES
STORAGE VOLUME REQUIRED (1.69 ACRES*3600 CU FT)	6,084 CU FT
VOLUME PROVIDED IN SILT FENCE (1,474 LF @ 4.5 CU FT/LF OF FENCE)	6,633 CU FT
VOLUME PROVIDED IN DITCH CHECK (24 LF @ 4.5 CU FT/LF)	108 CU FT
VOLUME PROVIDED IN FILTER SOCK (142 LF @ 2.0 CU FT/LF OF SOCK)	284 CU FT
TOTAL VOLUME PROVIDED	7,025 CU FT

DATE	REVISIONS
09/24/2024	SUBMITTAL #1
10/23/2024	SUBMITTAL #2

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER:

DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION

EROSION & SEDIMENT CONTROL PLAN

655 INTERSTATE PARKWAY

WAUKEE, IOWA

DATE: 11/08/2024

SHEET NUMBER: C4.1

2103.226

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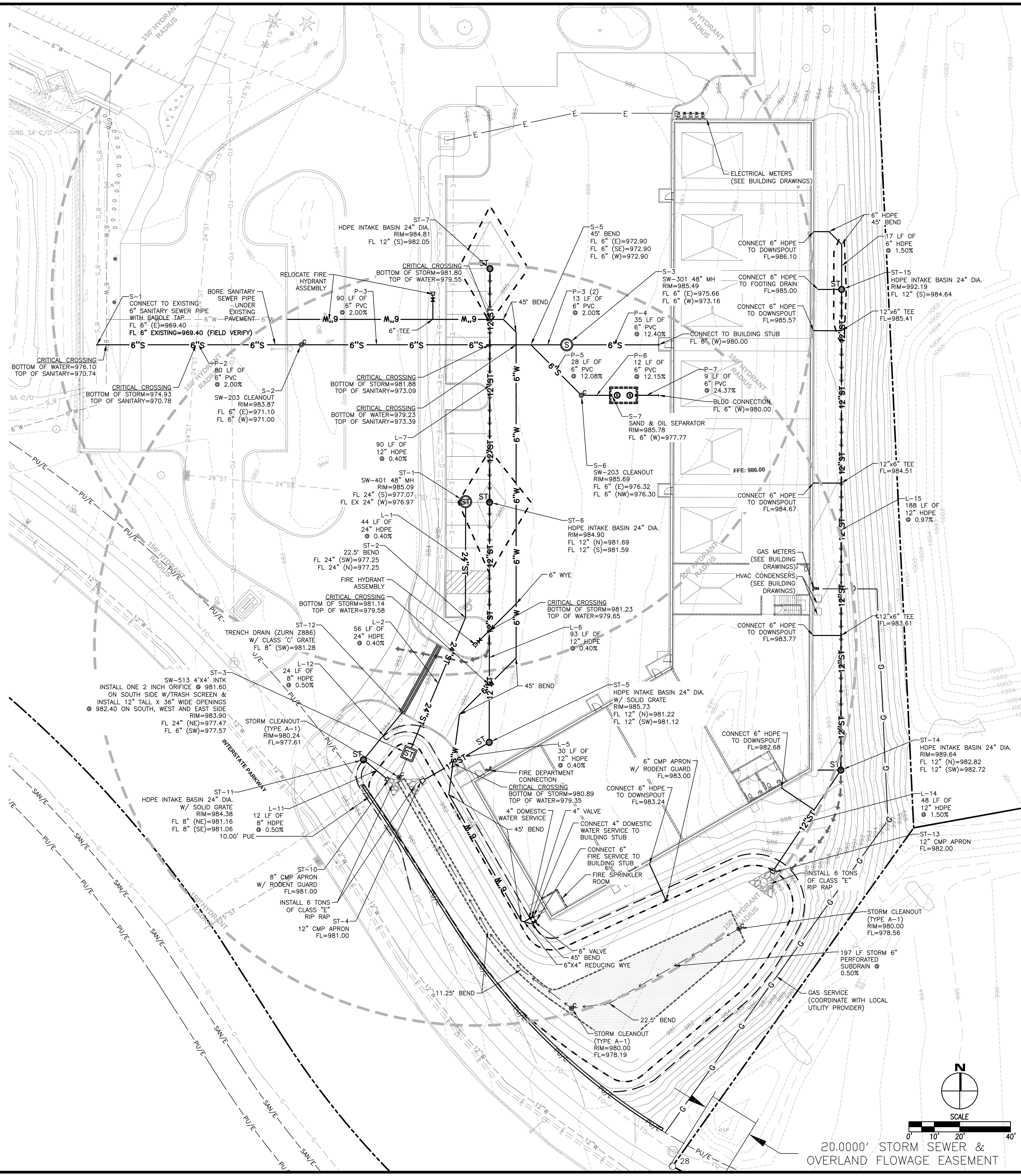

UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR UTILITY SERVICE SIZES AND EXACT LOCATIONS. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE 2024 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND THE CITY OF WAUKEE STANDARD SPECIFICATIONS. MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATERMAINS.
5. ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MEP PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
6. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES. INSTALL CHIMNEY SEALS ON ANY ADJUSTED MANHOLES. ALL PROPOSED SANITARY MANHOLES ARE TO UTILIZE A TYPE 'B' CASTING.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
8. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
9. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
10. 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 CONTRACTORS 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.
11. ALL WATERMAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH THE CITY OF WAUKEE STANDARD SPECIFICATIONS.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
13. PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE LATEST VERSION OF THE UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS. ALL APPLICABLE UTILITY COMPANIES SHALL BE CONTACTED 48 HOURS PRIOR TO ANY WORK BEING STARTED.
14. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES.
15. 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 SEDIMENT CONTROLS AT ALL PERMANENT STORM SEWER INLETS. DROP DOWN INLET PROTECTION IS REQUIRED FOR PUBLIC STREETS.
16. CONTRACTOR SHALL TEST AND INSPECT ALL PROPOSED STORM SEWER, WATERMAIN AND SANITARY SEWER. THE CITY OF WAUKEE ENGINEERING DEPARTMENT IS REQUIRED TO WITNESS TESTING. ALL TESTING SHALL BE COMPLETED MEETING CITY OF WAUKEE STANDARDS.
17. ALL UTILITY TIE-INS TO EXISTING PUBLIC UTILITIES SHOULD BE COORDINATED WITH THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
18. ALL PRIVATE AND PUBLIC SANITARY SEWER AND STORM SEWER PIPES SHALL BE CLEANED OUT AND TELEVISED PRIOR TO PAVING. ALL SANITARY MANHOLES SHALL BE VACUUMED TESTED. A HARD COPY OF THE REPORT AND VIDEO SHALL BE PROVIDED TO THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
19. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL BE CORE DRILLED AND A LINK SEAL SHALL BE USED FOR THE CONNECTION.
20. IT IS THE OWNER'S RESPONSIBILITY TO COORDINATE IRRIGATION AND METER PITS WITH THE WAUKEE PUBLIC WORKS DEPARTMENT.
21. ALL HYDRANTS SHALL HAVE 5" STORZ FITTINGS.
22. THERE WILL BE ONE MASTER WATER METER FOR THE BUILDING.
23. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED FOR EVERY FACILITY, BUILDING OR PORTION OF A BUILDING AS SOON AS CONSTRUCTION COMMENCES. THE FIRE APPARATUS ACCESS ROAD SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 503.2 OF INTERNATIONAL FIRE CODE AND THIS SECTION AND SHALL EXTEND TO WITHIN 100 FEET OF ALL PORTIONS OF THE FACILITY AND ALL PORTIONS OF THE EXTERIOR WALLS OF THE FIRST STORY OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY.
24. THE FIRE STANDPIPE SHALL BE OPERATIONAL TO PROVIDE FIRE PROTECTION DURING CONSTRUCTION ACTIVITIES ONCE FRAMING IS COMPLETED, PRIOR TO ROUGH-IN.
25. WATER MAIN SHALL BE TYPE C900.
26. WATER SERVICE FOR THE FIRE DEPARTMENT CONNECTION AND SPRINKLER SYSTEM WILL CONNECT INTO THE EXISTING BUILDING FROM PHASE 1.
27. NO GREASE INTERCEPTOR WILL BE REQUIRED FOR THIS PHASE OF CONSTRUCTION.

REVISIONS	DATE
SUBMITTAL #1	09/24/2024
SUBMITTAL #2	10/23/2024

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URBANDALE, IA 50322
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CIVIL DESIGN ADVANTAGE
ENGINEER:
DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION

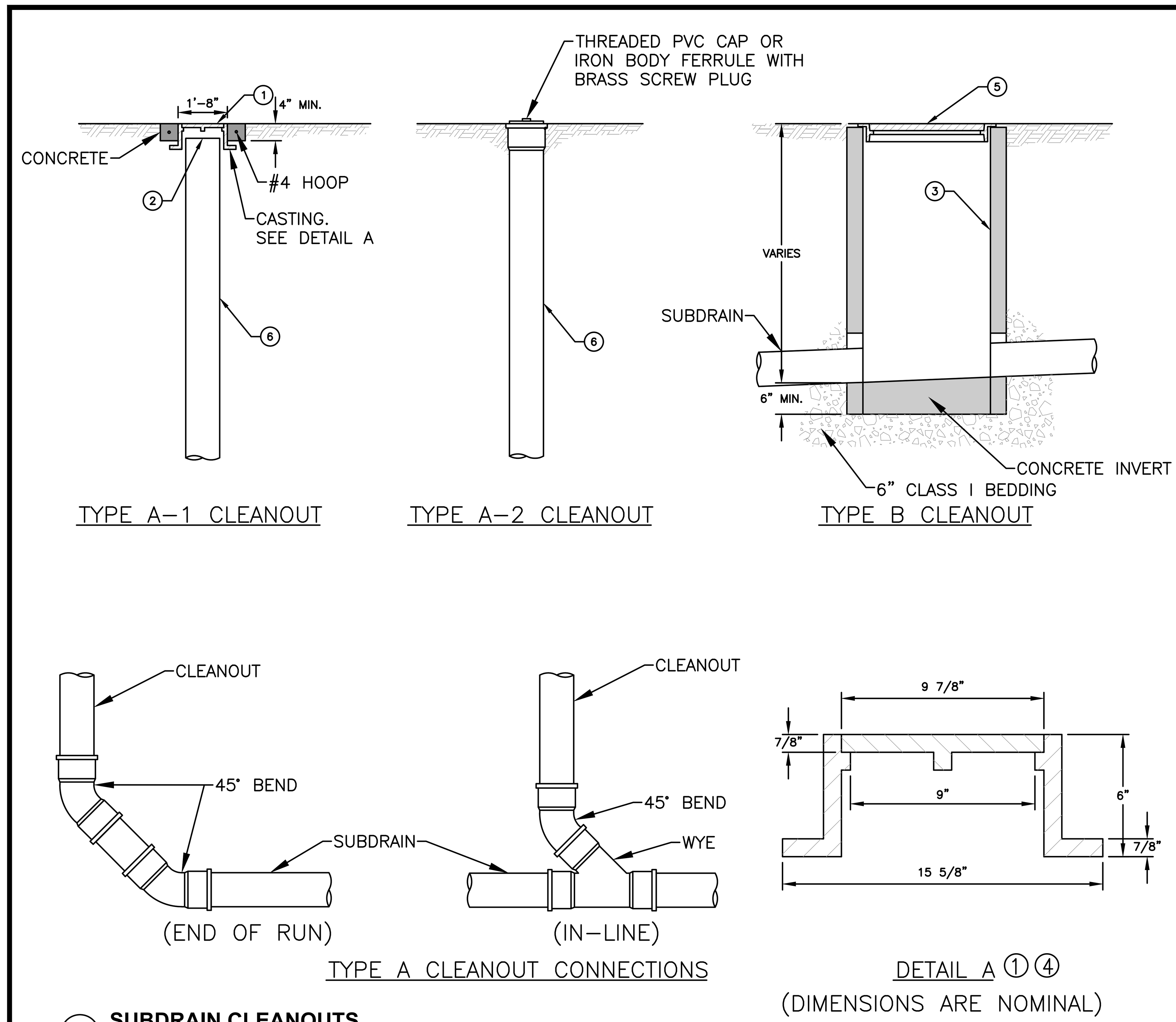
UTILITY PLAN

655 INTERSTATE PARKWAY
WAUKEE, IOWA

DATE: 11/08/2024

SHEET NUMBER: C5.1

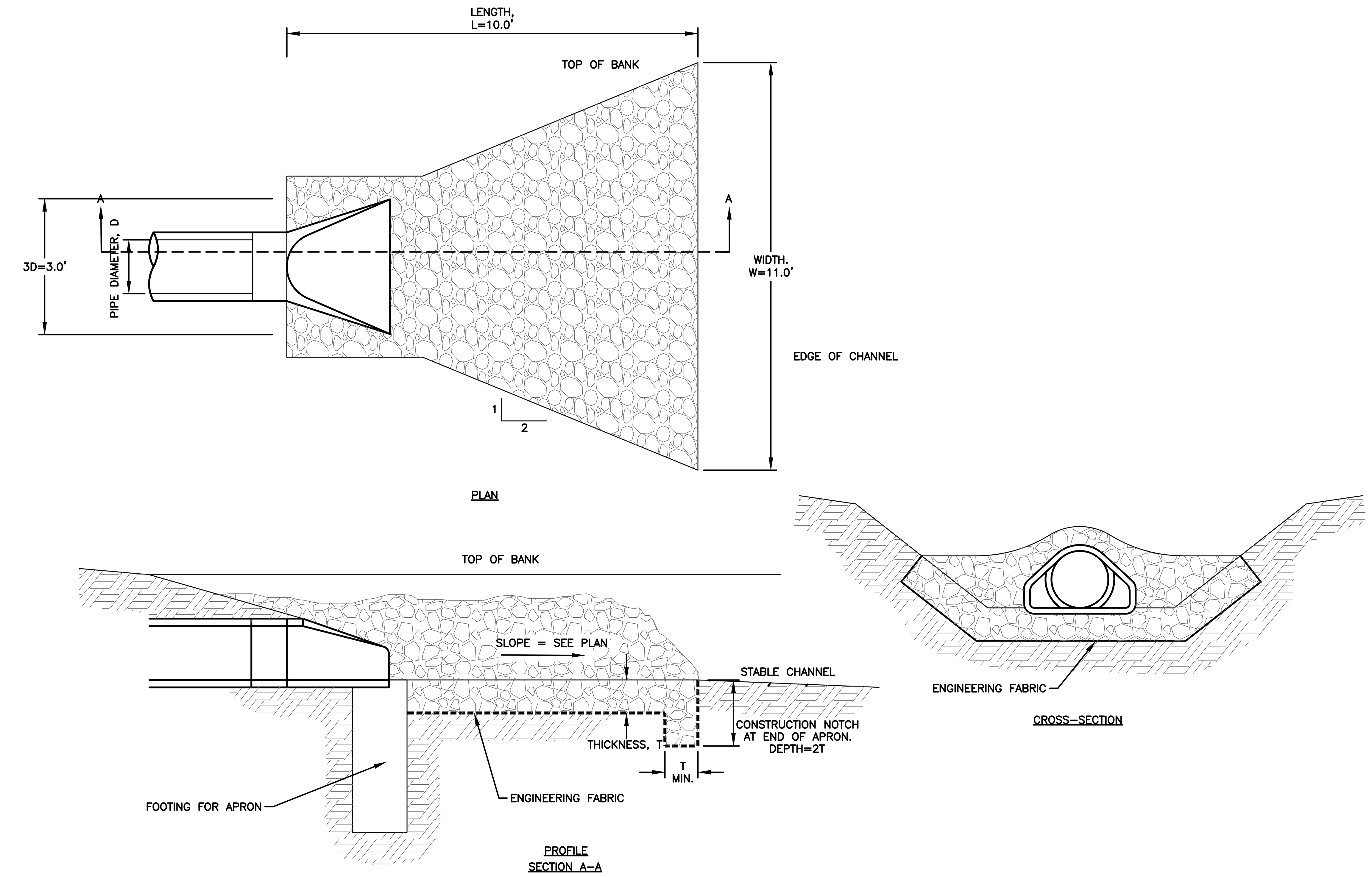
2103.226



USE IN NON-TRAFFIC AREAS.

1. LIGHT DUTY CASTING. LABEL LID WITH "STORM" OR "STORM C.O."
2. DO NOT ALLOW CASTING TO BEAR ON TOP OF RISER PIPE; PROVIDE 2 INCH CLEARANCE, MINIMUM.
3. A MANUFACTURED CLEANOUT MAY BE USED IN LIEU OF A TYPE B CLEANOUT, IF APPROVED BY THE ENGINEER.
4. DESIGN IS INTENDED FOR USE IN CONJUNCTION WITH 8 INCH PVC RISER PIPE. OTHER SIZED CAPS MAY BE USED WITH SMALLER PIPE AS APPROVED BY THE ENGINEER.
5. PROVIDE TYPE G CASTING, AS REQUIRED TO FIT PIPE SIZE.
6. PVC RISER PIPE; MATCH DIAMETER OF SUBDRAIN (8 INCHES MAXIMUM).

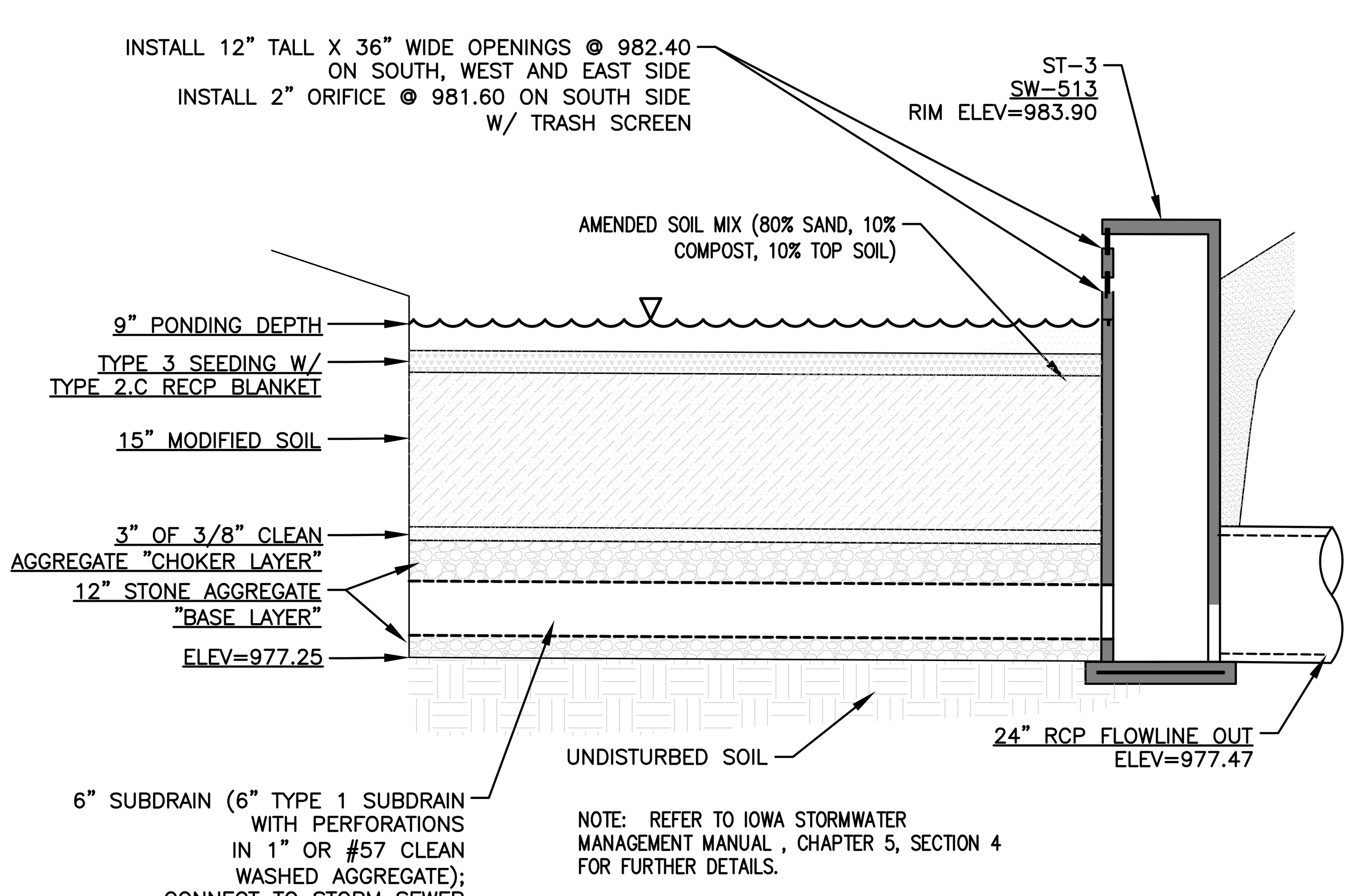
4 SUBDRAIN CLEANOUTS
NOT TO SCALE



2 RIP RAP INSTALLATION (ST-4, ST-10, ST-13)
NOT TO SCALE

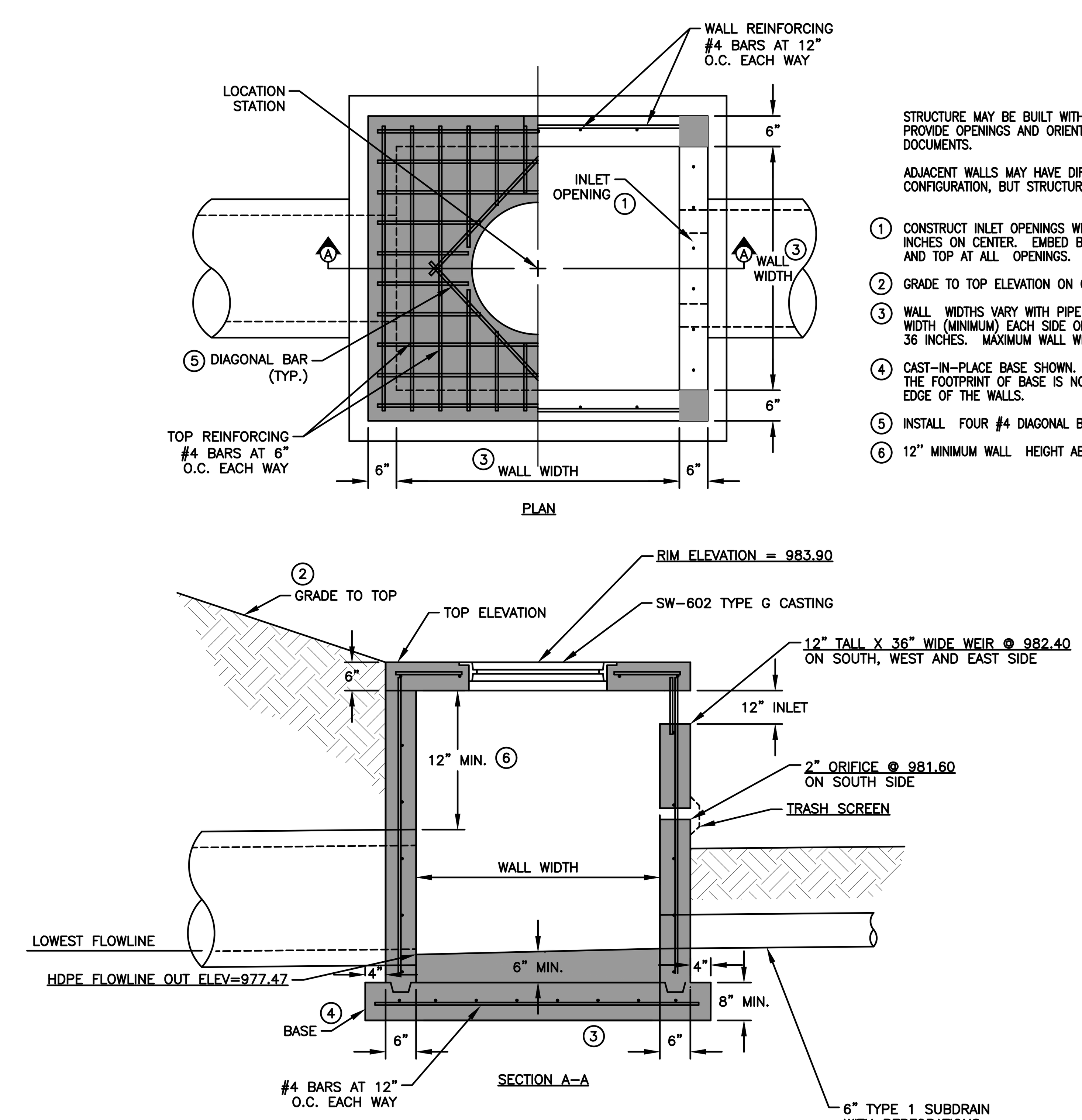
BIO-RETENTION CONSTRUCTION NOTES

1. CONTRACTOR SHALL INSTALL AND FINAL GRADE BIO-RETENTION AREA AFTER ALL DISTURBED AREAS ARE ESTABLISHED TO MINIMIZE THE AMOUNT OF SEDIMENT REACHING THE FILTER BED.
2. TYPE 3 SEED W/ TYPE 2.C RECP BLANKET SHALL BE INSTALLED WITHIN THE BIO-RETENTION AREA.
3. CLEAN OUT ANY SEDIMENT OR ORGANIC MATTER THAT ENTERS INTO THE BIO-RETENTION AREA THROUGHOUT THE LIFE OF THE BASIN TO ENSURE WATER CAN INFILTRATE THROUGH THE FILTER BED. IF WATER IS STANDING FOR MORE THAN 48 HOURS, MAINTENANCE WILL NEED TO BE COMPLETED.
4. ENSURE THAT THE BOTTOM OF THE BIO-RETENTION CELL IS FLAT TO ALLOW PROPER DISTRIBUTION OF THE WATER REQUIRING FILTRATION. REGRADE ANY AREAS THAT SETTLE OR BUILD UP SEDIMENT.



NOTE: REFER TO IOWA STORMWATER MANAGEMENT MANUAL , CHAPTER 5, SECTION 4 FOR FURTHER DETAILS.

3 BIORETENTION CELL SECTION VIEW
NOT TO SCALE



STRUCTURE MAY BE BUILT WITH OPENINGS ON ANY OR ALL SIDES. PROVIDE OPENINGS AND ORIENTATION AS SPECIFIED IN THE CONTRACT DOCUMENTS.

ADJACENT WALLS MAY HAVE DIFFERENT WIDTHS BASED UPON PIPE CONFIGURATION, BUT STRUCTURE MUST BE RECTANGULAR.

1. CONSTRUCT INLET OPENINGS WITH 15-INCH #4 EPOXY-COATED BARS AT 8 INCHES ON CENTER. EMBED BARS A MINIMUM OF 3 INCHES INTO WALLS AND TOP AT ALL OPENINGS.
2. GRADE TO TOP ELEVATION ON CLOSED SIDES.
3. WALL WIDTHS VARY WITH PIPE DIAMETER. PROVIDE 6 INCHES OF WALL WIDTH (MINIMUM) EACH SIDE OF PIPE OPENING. MINIMUM WALL WIDTH IS 36 INCHES. MAXIMUM WALL WIDTH IS 72 INCHES.
4. CAST-IN-PLACE BASE SHOWN. IF BASE IS PRECAST INTEGRAL WITH WALLS, THE FOOTPRINT OF BASE IS NOT REQUIRED TO EXTEND BEYOND THE OUTER EDGE OF THE WALLS.
5. INSTALL FOUR #4 DIAGONAL BARS AT ALL PIPE OPENINGS.
6. 12" MINIMUM WALL HEIGHT ABOVE ALL PIPES.

1 SW-513 INTAKE (ST-3)
NOT TO SCALE

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DETAILS

655 INTERSTATE PARKWAY
WAUKEE, IOWA

DATE: 11/08/2024

SHEET NUMBER: C6.1

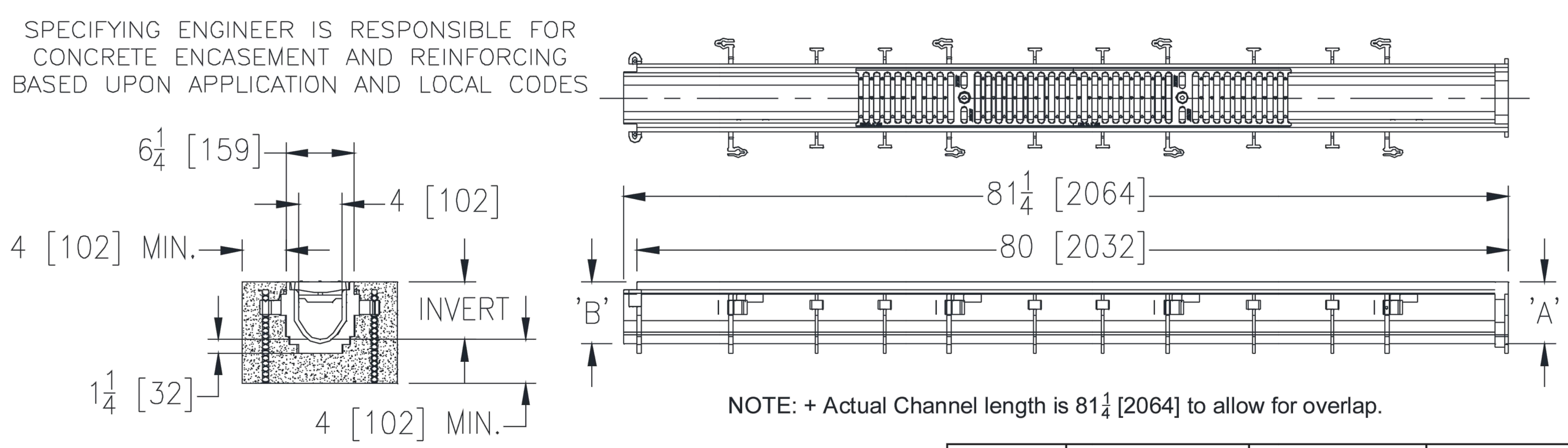
2103.226

ZURN® **Z886** **SPECIFICATION SHEET**

6-1/4 [159] WIDE REVEAL TRENCH DRAIN SYSTEM

TAG ________

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice



NOTE: + Actual Channel length is 81 1/4 [2064] to allow for overlap.

ENGINEERING SPECIFICATION: Zurn Z886 Channels are 80" [2032mm] long, 6-1/4" [159mm] wide reveal and have a 4" [102mm] throat. Modular channel sections are made of 0% water absorbent High Density Polyethylene (HDPE). Channels have a positive mechanical connection between channel sections that will not separate during the installation and mechanically lock into the concrete surround a minimum of every 10" [254mm]. Channels weigh less than 2.31 lbs. per linear foot [3.9 kg/m], have a smooth, 1-1/2" [38mm] radiused self cleaning bottom with a Manning's coefficient of .009 and .75% or neutral 0% built in slope. Channels have rebar clips standard to secure trench in its final location. Channels are provided with standard DGC grates that lock down with lockdown bars to the channel and is not intended for dynamic traffic loadings. Zurn 5-3/8" [137mm] wide reveal Ductile Iron Slotted Grate conforming to ASTM specification A536-84, Grade 80-55-06. Ductile Iron grate is rated class C per the DIN EN1433 top load classifications. Supplied in 20" [508mm] nominal lengths with 1/2" [13mm] wide slots, and 3/4" [19mm] bearing depth. Grate has an open area of 28.1 sq. in per ft. [60,308 sq. mm per meter].

Trench No.	'A' Shallow Inv.	'B' Deep Inv.	Flow (cfs)	Flow (gpm)	Flow (lps)
~~8601~~	~~3.50 [89]~~	~~4.10 [104]~~	~~0.21~~	~~93~~	~~6~~
~~8602~~	~~4.10 [104]~~	~~4.70 [119]~~	~~0.27~~	~~122~~	~~8~~
8603	4.70 [119]	5.30 [135]	0.34	152	10
~~8603N~~	~~5.30 [135]~~	~~5.30 [135]~~	~~-~~	~~-~~	~~-~~
8604	5.30 [135]	5.90 [150]	0.41	183	12
8605	5.90 [150]	6.50 [165]	0.48	214	13
8606	6.50 [165]	7.10 [180]	0.55	245	15
~~8606N~~	~~7.10 [180]~~	~~7.10 [180]~~	~~-~~	~~-~~	~~-~~
8607	7.10 [180]	7.70 [196]	0.62	276	17
~~8608~~	~~7.70 [196]~~	~~8.30 [211]~~	~~0.69~~	~~308~~	~~19~~
~~8609~~	~~8.30 [211]~~	~~8.90 [226]~~	~~0.76~~	~~339~~	~~21~~
~~8610~~	~~8.90 [226]~~	~~9.50 [241]~~	~~0.83~~	~~371~~	~~23~~
~~8611~~	~~9.50 [241]~~	~~10.10 [257]~~	~~0.90~~	~~403~~	~~25~~
~~8612~~	~~10.10 [257]~~	~~10.70 [272]~~	~~0.97~~	~~435~~	~~27~~
~~8612N~~	~~10.70 [272]~~	~~10.70 [272]~~	~~-~~	~~-~~	~~-~~
~~8613~~	~~10.70 [272]~~	~~11.30 [287]~~	~~1.04~~	~~467~~	~~29~~
~~8614~~	~~11.30 [287]~~	~~11.90 [302]~~	~~1.11~~	~~498~~	~~31~~
~~8615~~	~~11.90 [302]~~	~~12.50 [318]~~	~~1.18~~	~~530~~	~~33~~

PREFIX OPTIONS (Check/specify appropriate options)
____ Z Six-foot, Eight-inch High Density Polyethylene (HDPE)*

SUFFIX OPTIONS (Check/specify appropriate options)

Outlet Adapters Add/Each
____ -E1 Closed End Cap
____ -E2 2 [51] No-Hub End Outlet
____ -E3 3 [76] No-Hub End Outlet
____ -E4 4 [102] No-Hub End Outlet
____ -E6 6 [152] No-Hub End Outlet
____ -U2 2 [51] No-Hub Bottom Outlet
____ -U3 3 [76] No-Hub Bottom Outlet
____ -U4 4 [102] No-Hub Bottom Outlet
____ -U6 6 [152] No-Hub Bottom Outlet

Frame Options
____ -AVB Aluminum Veneer Bronze Anodized Frame
____ -SVF Type 304 Stainless Steel Top Veneer Frame
____ -SW Sidewall Extension - 9 [229] High
____ -SW2 Sidewall Extension - 18 [457] High

Grate Options (Load Classifications are per DIN EN1433)
____ -BDC Black Acid Resistant Epoxy Coated Ductile Grate - Class C
____ -BG Galvanized Ductile Iron Bar Grate - Class C
____ -DBG Ductile Iron Cast Bar Grate - Class C
____ -DC Ductile Iron Solid Cover - Class C
____ -DGC Ductile Iron Slotted Grate - Class C *
____ -GDC Galvanized Ductile Slotted Grate - Class C
____ -GG Fiberglass Grate - Class A
____ -GHPD Galvanized Heel-Proof Ductile Grate - Class B
____ -HPD Heel-Proof Ductile Slotted Grate - Class B
____ -HPP Heel-Proof Polyethylene Grate - Class A
____ -LD Longitudinal Ductile ADA Grate - Class B
____ -RFG Reinforced Galvanized Steel Slotted Grate - Class B
____ -RPG Reinforced Galvanized Perforated Grate - Class B
____ -RFGC Reinforced Slotted Galvanized Grate - Class C
____ -RFSC Reinforced Slotted Stainless Steel Grate - Class C
____ -RPGC Reinforced Perforated Galvanized Grate - Class C
____ -RPGR Reinforced Perforated Galvanized Reverse Punch Grate - Class B
____ -RPGRC Reinforced Galvanized Perforated Reverse Punch Anti-Slip Grate - Class C
____ -RPSC Reinforced Perforated Stainless Steel Grate - Class C
____ -RPSRC Reinforced Perforated Stainless Steel Reverse Punch Grate - Class C
____ -SWG-A Stainless Steel Wire Grate - Class A
____ -SWG-B Slip Resistant Stainless Steel Wire Grate - Class B
____ -BDD Bronze Diagonal Decorative Grate - Class A
____ -DCD Ductile Iron Circular Decorative Grate - Class C
____ -DDD Ductile Iron Diagonal Decorative Grate - Class A
____ -DOG Ductile Iron Decorative Grate - Class A
____ -DTW Ductile Iron Tidal Wave Grate - Class C
____ -GMG Galvanized Steel Mesh Grate - Class A
____ -HPB Heel-Proof Bronze Slotted Grate - Class A
____ -HPS Heel-Proof Stainless Steel Slotted Grate - Class A
____ -SCD Stainless Steel Circular Decorative Grate - Class B
____ -SDD Stainless Steel Diagonal Decorative Grate - Class B
____ -SMG Stainless Steel Steel Mesh Grate - Class A
____ -SOG Stainless Steel Decorative Grate - Class B

MADE in the U.S.A. (Load Classifications are per DIN EN1433)
____ -AWG Aluminum Wire Grate - Class A
____ -DGC-USA Ductile Iron Slotted Grate-Class C (Substitute DGE-USA)
____ -FG Fabricated Galvanized Steel Slotted Grate - Class A
____ -FS Fabricated Stainless Steel Slotted Grate - Class A
____ -GDC-USA Galvanized Ductile Slotted Grate - Class C
____ -PG Perforated Galvanized Steel Grate - Class A
____ -PGR Galvanized Perforated Reverse Punch Anti-Slip ADA Grate - Class A
____ -PPC Plastic Perforated Grate - Class C
____ -PS Perforated Stainless Steel Grate - Class A
____ -SC Fabricated Stainless Steel Solid Cover - Class A

Miscellaneous Options
____ -VP Vandal-Proof Lockdown
____ -JC Joint Connector

USA Miscellaneous Options
____ -DB Bottom Dome Strainer

Decorative Grate Options (Load Classifications are per DIN EN1433)
____ -BCD Bronze Circular Decorative Grate - Class A

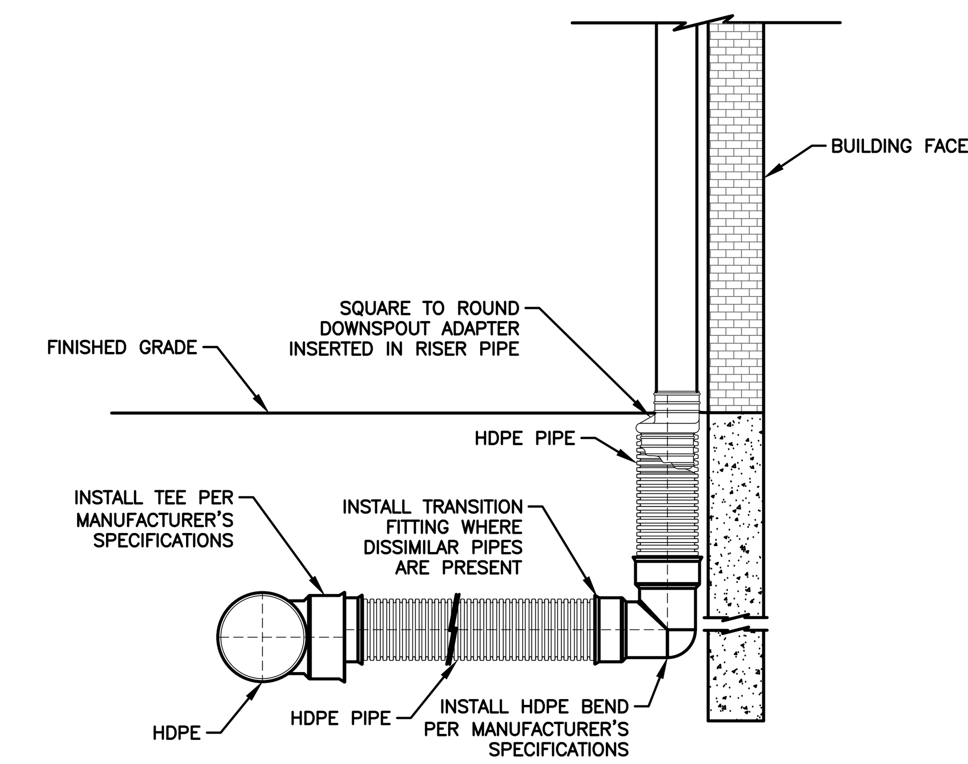
Decorative MADE in the U.S.A. (Load Classifications are per DIN EN1433
____ -BZ Bronze Decorative Grate - Class A
____ -NBZ Nickel Bronze Decorative Grate - Class A
____ -PSR Perforated Stainless Steel Raised Grate - Class A
____ -STWG Stainless Transverse Wire Grate - Class A

* Regularly furnished unless otherwise specified.

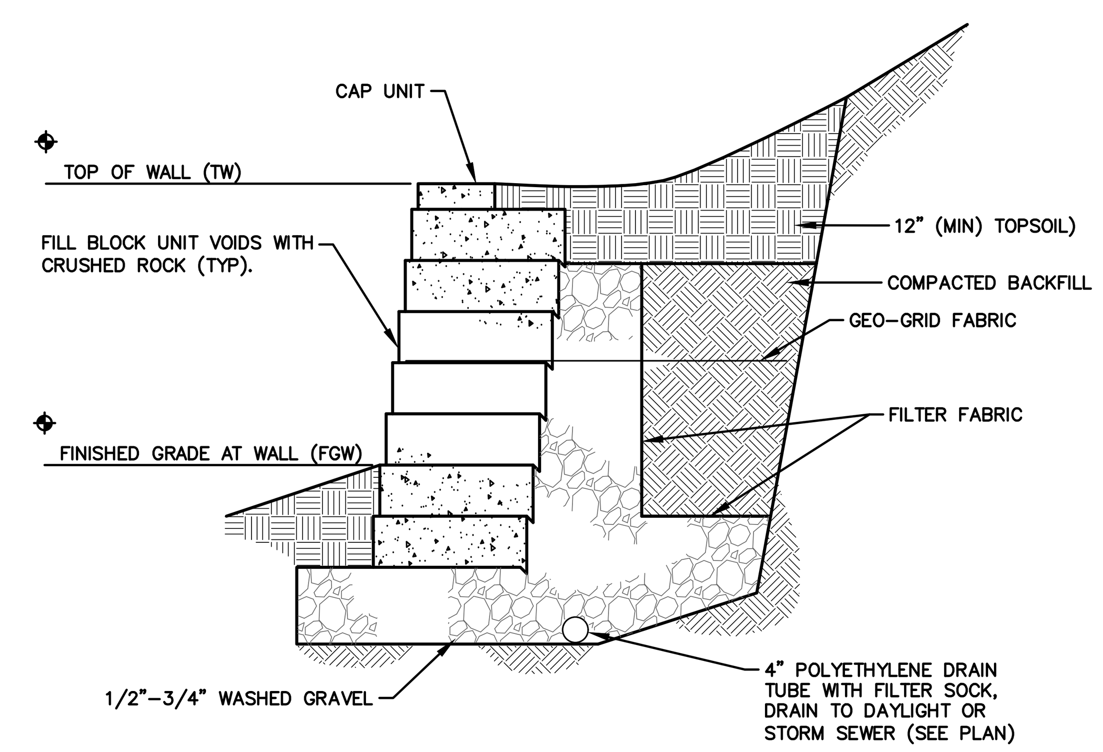
Zurn Industries, LLC | **Specification Drainage Operation**
1801 Pittsburgh Avenue, Erie, PA U.S.A. 16502 · Ph. 855-663-9876, Fax 814-454-7929
In Canada | **Zurn Industries Limited**
7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6 · Ph. 877-892-5216
www.zurn.com

Rev. AC
Date: 11/04/2019
C.N. No. 142150
Prod. | Dwg. No. Z886

3 **TRENCH DRAIN**
NOT TO SCALE



2 **DOWNSPOUT CONNECTIONS**
NOT TO SCALE



NOTE:
THIS DETAIL IS FOR GENERAL REFERENCE ONLY. CONTRACTOR TO SUBMIT FULL DESIGN DATA TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION AND ORDERING OF MATERIALS. WALL SHALL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF IOWA AND CONSTRUCTED IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S DESIGN.

1 **SEGMENTAL RETAINING WALL**
NOT TO SCALE

REVISIONS	DATE
SUBMITTAL #1	09/24/2024
SUBMITTAL #2	10/23/2024

CIVIL DESIGN ADVANTAGE
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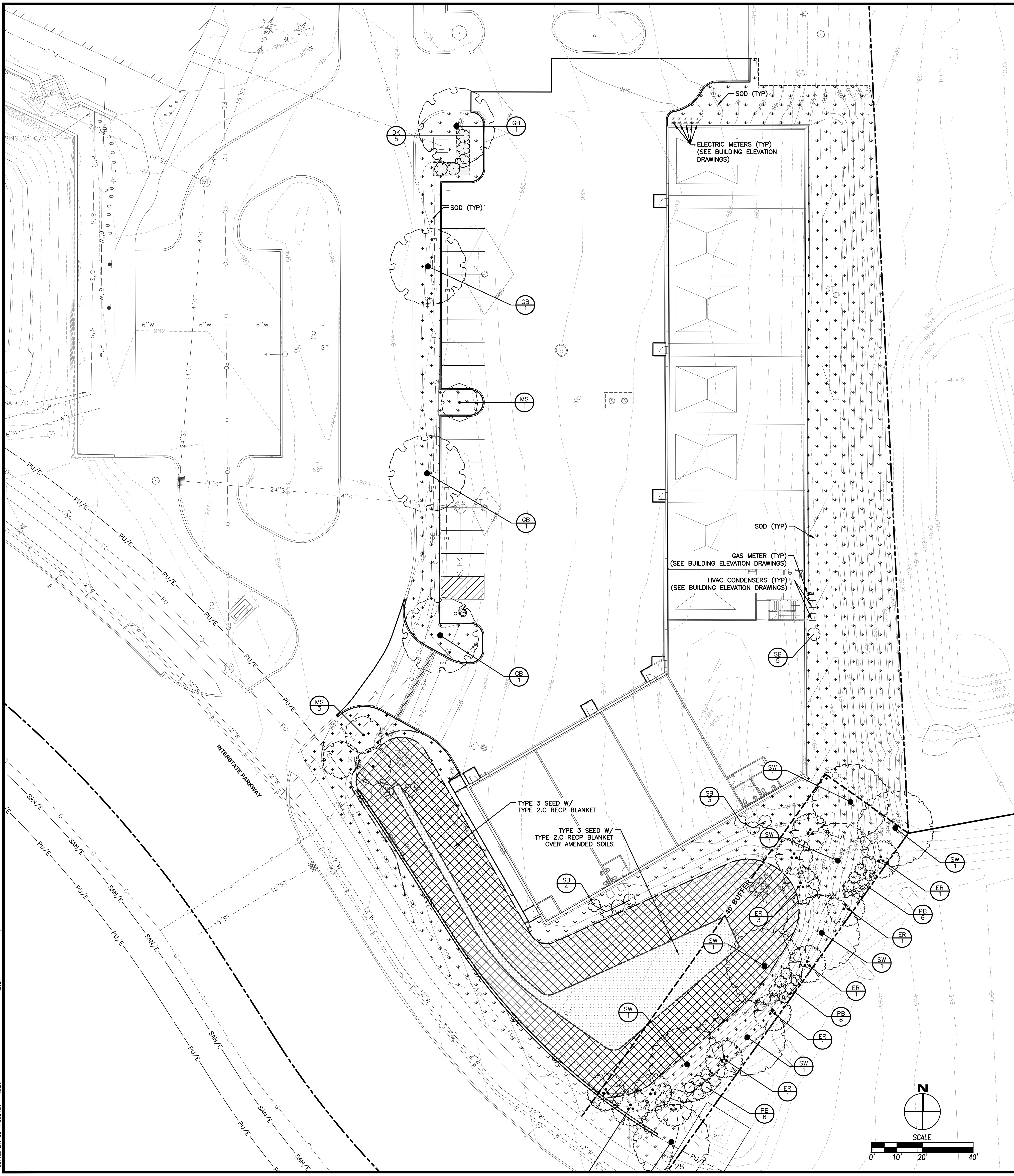
ENGINEER:
DRAFTED:

RJ LAWN & LANDSCAPE EXPANSION
655 INTERSTATE PARKWAY
WAUKEE, IOWA

DETAILS

DATE:
11/08/2024

SHEET NUMBER:
C6.2
2103.226



LANDSCAPE NOTES

1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE 2024 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND THE CITY OF WAUKEE STANDARD SPECIFICATIONS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, VOIDS AND OPEN SPACES, WITH WELL DEVELOPED BRANCH AND ROOT SYSTEMS; TRUE TO HEIGHT, SHAPE AND CHARACTER OF GROWTH OF THE SPECIES OR VARIETY.
5. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, IF REQ.)
6. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING IN ALL PLANTING BEDS PER MANUFACTURER'S RECOMMENDATIONS.
7. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES, SHRUBS AND IN ALL PLANTING BEDS TO A (MIN) DEPTH OF 3".
8. PLANT QUANTITIES ARE SHOWN FOR INFORMATION ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
9. ALL DEBRIS SPILLED IN THE PUBLIC R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
10. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
11. ALL DISTURBED AREAS SHALL BE SODDED INCLUDING THE RIGHT-OF-WAY.

LANDSCAPING REQUIREMENTS

OPEN SPACE
TOTAL SITE AREA: 6.02 ACRES (262,224 SF)

REQUIRED: 39,334 SF (15%)
PROVIDED: 92,623 SF (35%)

PARKING
50% OF LANDSCAPE ISLAND TREES MUST BE OVERSTORY.
ISLAND TREES COUNT TOWARD OPEN SPACE REQ.
FRONTAGE TREES COUNT TOWARD OPEN SPACE REQ.
DRIVEWAYS EXCLUDED
REQUIRED:
1 TREE/ISLAND — 3 TREES
1 TREE/40 LF FRONTAGE (170 LF) — 5 TREES

PROVIDED: 8 TREES

OPEN SPACE
50% MUST BE OVERSTORY
25% MUST BE EVERGREEN
REQUIRED:
1 TREE/1000 SF REQ. OPEN SPACE — 40 TREES
1 SHRUB/1000 SF REQ. OPEN SPACE — 40 SHRUBS
PROVIDED:
42 TREES
99 SHRUBS

BUFFERS & SCREENING
BUFFER LENGTH: 164'

REQUIRED:
2 OVERSTORY TREES/40' OF BUFFER: 8 OVERSTORY
4 EVERGREEN TREES/40' OF BUFFER: 16 EVERGREEN
3 ORNAMENTAL TREES/40' OF BUFFER: 12 ORNAMENTAL

PROVIDED:
OVERSTORY TREES: 8 TREES
EVERGREEN TREES: 18 TREES
ORNAMENTAL TREES: 12 TREES

BIO-RETENTION MAINTENANCE & OPERATION

THE FOLLOWING ACTIVITIES SHALL BE PERFORMED FOR MAINTENANCE PURPOSES:
1. CONTRACTOR SHALL INSTALL AND FINAL GRADE BIO-RETENTION AREA AFTER ALL DISTURBED AREAS ARE ESTABLISHED TO MINIMIZE THE AMOUNT OF SEDIMENT REACHING INTO THE FILTER BED.
2. THE BIO-RETENTION AREA SHALL BE SEEDED WITH TYPE 3 SEEDING.
3. CLEAN OUT ANY SEDIMENT OR ORGANIC MATTER THAT ENTERS INTO THE BIO-RETENTION AREA THROUGHOUT THE LIFE OF THE BASIN TO ENSURE WATER CAN INFILTRATE THROUGHOUT THE FILTER BED.
4. IF WATER IS STANDING FOR MORE THAN 48 HOURS, MAINTENANCE WILL NEED TO BE COMPLETED.
5. ENSURE THAT THE BOTTOM OF THE BIO-RETENTION CELL IS FLAT TO ALLOW PROPER DISTRIBUTION OF THE WATER REQUIRING FILTRATION.
6. REGRADE ANY AREAS THAT SETTLE OR BUILD UP SEDIMENT.
7. OWNER SHALL MAINTAIN THE BIO-RETENTION AREA PER THE MOST RECENT EDITION OF IOWA STORM WATER MANAGEMENT MANUAL (ISWMM) CHAPTER 5 SECTION 4 "BIORETENTION SYSTEMS."

BIO-RETENTION MAINTENANCE SCHEDULE

1. DURING THE FIRST YEAR, INSPECTION AND ASSOCIATED MAINTENANCE SHALL BE PERFORMED NO LESS THAN NINE TIMES BEGINNING APRIL 1ST AND CONTINUING THROUGH OCTOBER 1ST WITH NO MORE THAN 30 DAYS BETWEEN SUBSEQUENT INSPECTIONS AND MAINTENANCE ACTIVITIES.
2. DURING THE SECOND YEAR, AND ALL SUBSEQUENT YEARS, INSPECTION AND ASSOCIATED MAINTENANCE SHALL BE PERFORMED ONCE A MONTH BEGINNING APRIL 1ST AND CONTINUING THROUGH OCTOBER 1ST OR MORE FREQUENTLY IF NECESSARY TO CONTROL WEED GROWTH.

LEGEND

1. SOD
2. TYPE 3 SEED W/ TYPE 2.C RECP BLANKET
3. TYPE 3 SEED W/ TYPE 2.C RECP BLANKET OVER AMENDED SOILS

PLANTING SCHEDULE

CODE	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
EVERGREEN TREES				
PB	18	Bruns Serbian Spruce	Picea omorika 'Bruns'	B&B, 6' HEIGHT
ORNAMENTAL TREES				
ER	12	Eastern Redbud Multi-trunk	Cercis canadensis	B&B, 1.5" CALIPER
MS	4	Spring Snow Crabapple	Malus x 'Spring Snow'	B&B, 1.5" CALIPER
OVERSTORY TREES				
GB	4	Maidenhair Tree	Ginkgo biloba	B&B, 1.5" CALIPER
SW	8	Swamp White Oak	Quercus bicolor	B&B, 1.5" CALIPER
SHRUBS				
DK	5	Bloomerang Purple Lilac	Syringa x 'Penda' TM	5 GAL
SB	8	Sonic Bloom Red Weigela	Weigela florida 'Verweig 6' TM	5 GAL

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