

PRELIMINARY PLAT

WAUKEE CROSSING PLAT 4

WAUKEE, IOWA

WAUKEE CROSSING LLC, 611 MONTICELLO DRIVE, BURLINGTON, IA 52601

PROPERTY OWNER:

MIKE PIERSON
WAUKEE CROSSINGS, LLC
611 MONTICELLO DR
BURLINGTON, IA 52601
314-512-0125
MIKE.PIERSON@PIERSONCORP.COM

DEVELOPER:

MIKE PIERSON
WAUKEE CROSSINGS, LLC
611 MONTICELLO DR
BURLINGTON, IA 52601
314-512-0125
MIKE.PIERSON@PIERSONCORP.COM

PROJECT MANAGER:

ED ARF
CIVIL ENGINEERING CONSULTANTS
2400 86TH STREET, #12
DES MOINES, IOWA 50322
515-276-4884
ARF@CECLAC.COM

ZONING/LAND USE:

C-1: COMMUNITY AND HIGHWAY SERVICE
COMMERCIAL DISTRICT

IMPERVIOUS AREA

ON SITE AREA: 0 ACRES

WATER NOTES

- FOLLOW WAUKEE STANDARD SPECIFICATIONS FOR PIPE MATERIALS, FIRE HYDRANTS, CURB STOPS, VALVES AND INSTALLATION.
- CONTRACTOR SHALL PROTECT AND BACKFILL AROUND ALL UTILITIES AND STRUCTURES. BACKFILL SHALL BE IN ACCORDANCE WITH WAUKEE STANDARD SPECIFICATIONS.
- HYDRANTS, MANHOLE COVERS AND VALVE BOXES SHALL BE SET TO CONFORM TO FINISHED PAVEMENT ELEVATIONS.
- HYDRANTS SHALL BE SET NOT MORE THAN 4 FEET FROM CENTER OF WATER MAIN UNO.
- AN APPROVED SADDLE SHALL BE USED FOR ALL WATER SERVICE TAPS.
- ALL SERVICE LINES SHALL BE TESTED WITH WATER MAIN.
- WHERE SEWERS CROSS OVER OR LESS THAN 18-INCHES BELOW WATER MAIN:
 - FOR STORM SEWERS FLEXIBLE O-RING-GASKET JOINTS RATED AT 13 PSI OR GREATER SHALL BE UTILIZED UNTIL NORMAL DISTANCE FROM SEWER TO WATER MAIN IS AT LEAST 10'.
 - ONE FULL LENGTH OF WATER MAIN SHALL BE LOCATED SO BOTH JOINTS AREA AS FAR AS POSSIBLE FROM SEWER.
 - SEWER MUST BE ADEQUATELY SUPPORTED.
 - LOW PERMEABLE SOIL SHALL BE USED FOR BACKFILL WITHIN 10' OF POINT OF CROSSING.
- ALL HYDRANTS SHALL HAVE 5" STORZ FITTINGS INCLUDING ANY RELOCATED HYDRANTS.
- ALL STORM SEWER CROSSING ABOVE WATER MAIN WILL NEED TO INSTALL O-RING JOINT PIPE FOR 20' CENTERED OVER WATER MAIN. SEWER CROSSINGS MAY ALSO FOLLOW IDNR WATER SUPPLY ENGINEERING SECTION ALTERNATIVE SOLUTIONS TO MEETING REQUIREMENTS FOUND IN SUBPARAGRAPH 567 IAC 43.3(2) "A" (3).

SANITARY NOTES

- CASTING TYPES ARE FROM SUDAS SPECS.
- CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE DRILLED AND USE LINK SEAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT LOCATIONS OF ALL SANITARY SEWER SERVICES & PROVIDING INFORMATION TO ENGINEER.
- CONTRACTOR SHALL CLEAN SANITARY SEWER AT PROJECT COMPLETION.
- ALL MANHOLES AND MANHOLE CASTINGS MUST BE ROTATED AS REQUIRED TO AVOID MANHOLE CONFLICTS WITH SIDEWALKS.
- ALL SANITARY MANHOLES SHALL BE VACUUM TESTED.
- ONE WEEK PRIOR TO SANITARY SEWER CONSTRUCTION, CONTRACTOR SHALL NOTIFY CITY OF WAUKEE.
- PIPE MATERIALS PER WAUKEE STANDARD SPECIFICATIONS.

STORM NOTES

- PROVIDE A 3' WIDE CLAY WATER STOP, APRON GUARDS & CONCRETE FOOTINGS ON ALL FLARED END SECTIONS. CONTRACTOR SHALL THE LAST THREE PIPE JOINTS AT FLARED END SECTION.
- ALL STORM SEWER ARE TO BE CLEANED AND TELEVIEWED UPON COMPLETION.
- PAVEMENT REINFORCEMENT IS REQUIRED WHERE EARTH COVER OVER STORM SEWERS IS LESS THAN 2 FEET.

POND & OUTLET STRUCTURE MAINTENANCE PLAN FROM ISMM SECTION 9.11 PG. 44

ACTIVITY	SCHEDULE
INSPECT STORM INLETS, OUTLETS FOR DEBRIS, LOOK FOR SIGNS OF SEDIMENT ACCUMULATION, FLOW CHANNELIZATION, EROSION DAMAGE, LOCAL STREAMBANK INSTABILITY. CHECK THE OUTFALL FOR SIGNS OF SURFACE EROSION, SEEPAGE, OR TUNNELING ALONG OUTFALL PIPE.	AT LEAST ANNUALLY AND AFTER RAIN EVENTS OF 1.25" OR LARGER
CLEAN AND REMOVE DEBRIS FROM INLET AND OUTLET STRUCTURE.	AT LEAST THREE TIMES ANNUALLY
MONITOR VEGETATION AND PERFORM REPLACEMENT PLANTING AS NECESSARY.	ANNUALLY (AFTER SHORT-TERM ESTABLISHMENT PERIOD)
- EXAMINE STABILITY OF THE SAFETY BENCH AND SHORELINE EDGE - INSPECT FOR INVASIVE VEGETATION AND REMOVE WHERE POSSIBLE - INSPECT FOR DAMAGE TO THE EMBANKMENT AND INLET/OUTLET STRUCTURES; REPAIR AS NECESSARY - NOTE ANY SIGNS OF HYDROCARBON BUILD-UP AND REMOVE ACCORDINGLY	ANNUAL INSPECTION
REPAIR UNDERCUT OR ERODED AREAS.	WHEN OBSERVED
HARVEST WETLAND PLANTS THAT HAVE BEEN "CHOKED OUT" BY SEDIMENT ACCUMULATION.	ANNUALLY
REMOVE SEDIMENT WHEN TOTAL POOL VOLUME HAS BECOME REDUCED SIGNIFICANTLY (~25%), WHEN PLANTS ALONG POND EDGE ARE "CHOKED" WITH SEDIMENT OR THE POND BECOMES EUTROPHIC (ESTIMATED TIME: EVERY 10-20 YEARS).	AS NEEDED; WHEN APPROXIMATELY 25% OF THE TOTAL POOL VOLUME HAS BEEN LOST, OR AS NOTED

LEGAL DESCRIPTION

OUTLOT 'Z' IN WAUKEE CROSSING PLAT 1, AN OFFICIAL PLAT RECORDED IN BOOK 2020, PAGE 1336 AT THE DALLAS COUNTY RECORDER'S OFFICE, CITY OF WAUKEE, DALLAS COUNTY, IOWA AND CONTAINING 1.48 ACRES MORE OR LESS.

UTILITY CONTACTS

SANITARY SEWER - WAUKEE PUBLIC WORKS DEPARTMENT (515-418-1420)
WATER MAIN - WAUKEE PUBLIC WORKS DEPARTMENT (515-418-1420)
STORM SEWER - WAUKEE PUBLIC WORKS DEPARTMENT (515-418-1420)
NATURAL GAS UTILITY - CITY OF WAUKEE (515-418-1420)
ELECTRIC - MID AMERICAN ENERGY (515-252-6541)

CONSTRUCTION SCHEDULE

START CONSTRUCTION: JULY 2022
FINISH CONSTRUCTION: SEPTEMBER 2023

BENCHMARK

BURY BOLT IN HYDRANT LOCATED SOUTH OF NW VENTURE DRIVE, SE OF YMCA BUILDING
NORTHING 589154.36 EASTING 1538314.92

ELEVATION-----1019.20



VICINITY SKETCH

GENERAL NOTES:

- CONTRACTOR SHALL ARRANGE FOR TESTING AND INSPECTION AND NOTIFY THE FOLLOWING AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION:
 - CITY OF WAUKEE - ENGINEERING DEPARTMENT
 - WAUKEE CROSSING LLC
 - CIVIL ENGINEERING CONSULTANTS, INC. PHONE: 515.276.4884
 - IOWA ONE-CALL
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LEASES NEEDED TO CONSTRUCT THIS PROJECT.
- THE LOCATION OF EXISTING FACILITIES AND APPURTENANCES SHOWN ON THIS PLAN ARE BASED ON AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING TO DETERMINE EXACT FACILITIES LOCATIONS. CIVIL ENGINEERING CONSULTANTS, INC. DOES NOT GUARANTEE THE LOCATION OF EXISTING FACILITIES AS SHOWN, OR THAT ALL EXISTING FACILITIES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL PUBLIC AND PRIVATE UTILITY PROVIDERS SERVING THIS AREA, AND IOWA ONE CALL, TO DETERMINE THE EXTENT AND PRECISE LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION BEGINS.
- THE CONTRACTOR SHALL PROTECT EXISTING ON-SITE FACILITIES FROM DAMAGE RESULTING FROM THE CONTRACTOR'S WORK. IF DAMAGE, BREAKAGE, INTERRUPTION OF SERVICE, ETC. OF EXISTING FACILITIES DOES OCCUR THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE UTILITY'S OWNER.
- THE CONTRACTOR SHALL RECONNECT ALL FIELD TILE INTERCEPTED DURING CONSTRUCTION AND RECORD LOCATION FOR AS-BUILT PLANS.
- CIVIL ENGINEERING CONSULTANTS, INC. IS NOT A GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL PROTECT AND BACK FILL AROUND UNDERGROUND UTILITIES. BACK FILL SHALL BE IN 6-INCH LIFTS, COMPACTED TO 95% STANDARD PROCTOR DENSITY, OR AS PRESCRIBED IN GEOTECHNICAL REPORT, WHICHEVER IS MORE STRINGENT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR INSPECTIONS AS NEEDED.
- ALL PROPOSED CHANGES TO THE PLAN SET DURING CONSTRUCTION SHALL RECEIVE WRITTEN APPROVAL FROM THE CITY OF WAUKEE ENGINEERING DEPARTMENT AND THE CONTRACTOR IS RESPONSIBLE FOR ALL CHANGES THAT HAVE NOT BEEN GRANTED APPROVAL.
- CONTRACTOR SHALL NOTIFY CITY OF WAUKEE ENGINEERING DEPARTMENT 48-HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ON HOLIDAY OR WEEKEND.
- ALL CONSTRUCTION STAKING SHALL BE PERFORMED UNDER DIRECT SUPERVISION OF LICENSED ENGINEER OR LAND SURVEYOR.
- ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON PLANS SHALL RELIEVE CONTRACTOR FROM COMPLYING WITH ALL APPLICABLE SAFETY REGULATIONS.
- IF DISCREPANCY EXISTS BETWEEN DETAILED PLANS AND QUANTITIES, PLANS SHALL GOVERN.
- SIDEWALKS AND PEDESTRIAN RAMPS ARE TO BE DESIGNED AND INSTALLED PER LATEST PROWAG AND ADA REQUIREMENTS. CURB RAMPS ARE TO BE STAKED OUT BY ENGINEER.
- ALL TEMPORARY TRAFFIC CONTROLS MUST BE IN CONFORMANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 2020 WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2022 EDITION OF SUDAS SHALL APPLY TO THIS PROJECT.
- THE CONTRACTOR IS REQUIRED TO SET UP A PRE CONSTRUCTION MEET WITH THE CITY OF WAUKEE PUBLIC WORKS DEPARTMENT ONE WEEK PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- PRIVATE STORM SEWER WILL BE THE RESPONSIBILITY OF THE WAUKEE CROSSING ASSOCIATION.
- A BLANKET INGRESS/EGRESS ACCESS AGREEMENT SHALL BE ESTABLISHED TO FACILITATE VEHICULAR AND PEDESTRIAN TRAFFIC TO HICKMAN ROAD, NW 2ND STREET AND NW VENTURE DRIVE AS DESIGNATED BY THE CITY OF WAUKEE.

NPDES/SWPPP

- THE OWNER AND/OR CONTRACTOR ARE REQUIRED TO OBTAIN A NPDES PERMIT AND FOLLOW THE REQUIREMENTS OF THE ASSOCIATED STORM WATER POLLUTION PREVENTION PLAN PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- THE OWNER AND/OR CONTRACTOR ARE REQUIRED TO OBTAIN A CITY OF WAUKEE COSESCO PERMIT.
- CONTRACTOR SHALL CONDUCT CLEAN-UP, SURFACE RESTORATION, AND SURFACE REPLACEMENT ACTIVITIES AS CONSTRUCTION PROGRESSES. ALL DEBRIS SPILLED ON R.O.W. OR ADJACENT PROPERTY SHALL BE PICKED UP BY CONTRACTOR AT END OF EACH DAY AND PRIOR TO ANY RAIN EVENT.

GRADING NOTES

- STRIP TOPSOIL FROM ALL AREAS WHICH ARE TO RECEIVE STRUCTURAL FILL.
- ALL AREAS TO RECEIVE FILL TO BE BENCHED.
- PREPARE BOTTOM OF BENCH FOR FILL BY DISCING TO A DEPTH OF 6-INCHES.
- ALL SITE GRADING FILL SHALL BE COMPACTED TO A DENSITY THAT IS NOT LESS THAN 95% STANDARD PROCTOR. THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL MATCH URBAN STANDARD SPECIFICATIONS.
- MAINTAIN ALL CUT AND FILL AREAS FOR SURFACE DRAINAGE AT ALL TIMES.
- FINAL GRADES WITHIN PAVED AREAS SHALL BE WITHIN 0.1' OF PLAN GRADE, ALL OTHER AREAS TO BE WITHIN 0.1' OF PLAN GRADE.
- STRIP TOPSOIL AND RESPREAD, (8" MINIMUM)
- ADDITIONAL SILT FENCING MAY BE REQUIRED BY THE CITY AFTER FIELD INSPECTION.
- TEMPORARY SEDIMENTATION BASINS ARE ONLY USED UNTIL LOTS ARE DEVELOPED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF GENERAL PERMIT #2 ARE MET.
- BACKFILL TO TOP OF ALL CURBS.
- ANY CONFLICTS BETWEEN THESE DRAWINGS AND GEOTECHNICAL REPORT, CONTACT ENGINEER.
- POUNDS REQUIRE AS-BUILTS AFTER GRADING AND STORM SEWER INSTALLATION. ADJUSTMENTS MAY BE NECESSARY IF AS-BUILT VOLUMES DO NOT MEET OR EXCEED DESIGN VOLUMES.

GENERAL LEGEND

---	EXISTING	---	PROPOSED
---	LOT LINE	---	PLAT BOUNDARY
○	SANITARY/STORM MANHOLE	---	SECTION LINE
⊕	WATER VALVE	---	LOT LINE
⊕	FIRE HYDRANT	---	CENTERLINE
⊕	STORM SEWER SINGLE INTAKE	---	EASEMENT LINE
⊕	STORM SEWER DOUBLE INTAKE	---	FLARED END SECTION
⊕	STORM SEWER ROUND INTAKE	---	DRAIN BASIN OR SEDIMENT RISER
⊕	FLARED END SECTION	---	DRAIN BASIN WITH SOLID GRATE
⊕	DECIDUOUS TREE	---	WATER VALVE
⊕	CONIFEROUS TREE	---	FIRE HYDRANT ASSEMBLY
⊕	SHRUB	---	BLOW-OFF HYDRANT
⊕	POWER POLE	---	SCOUR STOP MAT
⊕	STREET LIGHT	---	TURF REINFORCEMENT MAT
⊕	GUY ANCHOR	---	STORM SEWER WITH SIZE
⊕	ELECTRIC TRANSFORMER	---	WATER SEWER WITH SIZE
⊕	GAS METER	---	WATER SERVICE
⊕	TELEPHONE RISER	---	PROPOSED CONTOUR
⊕	SIGN	---	SILT FENCE
---	UNDERGROUND TELEVISION	---	ADDRESS
---	UNDERGROUND ELECTRIC	---	RIPRAP
---	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. BUILDING SETBACK LINE	---	
---	P.U.E. PUBLIC UTILITY EASEMENT	---	
---	M.O.E. MINIMUM OPENING ELEVATION	---	

CERTIFICATION

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.

PRELIMINARY

CODY T. WEAVER, IOWA LIC. NO. 25085 DATE
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022
PAGES OR SHEETS COVERED BY THIS SEAL:

PRELIMINARY
(NOT APPROVED)



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

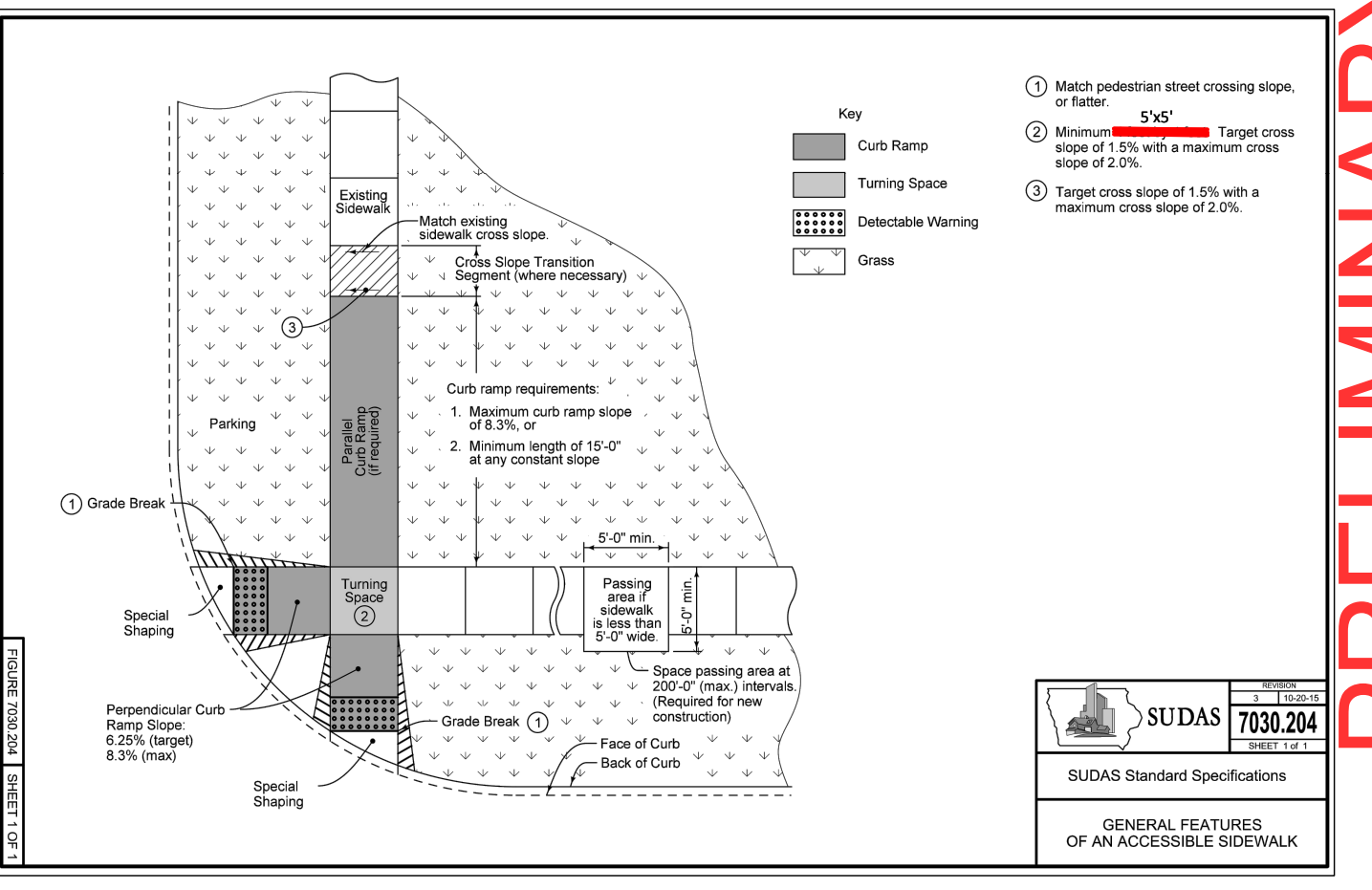
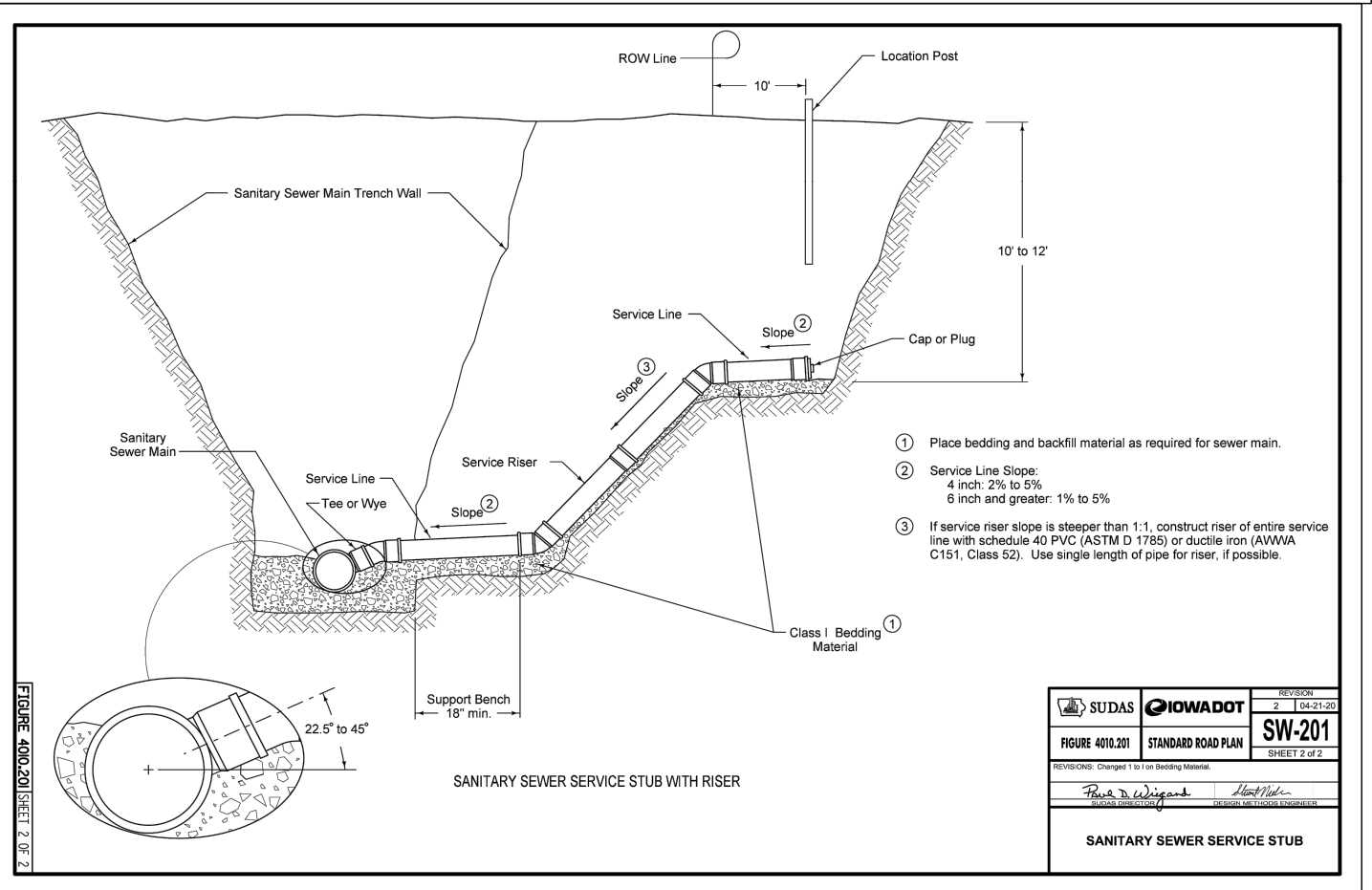
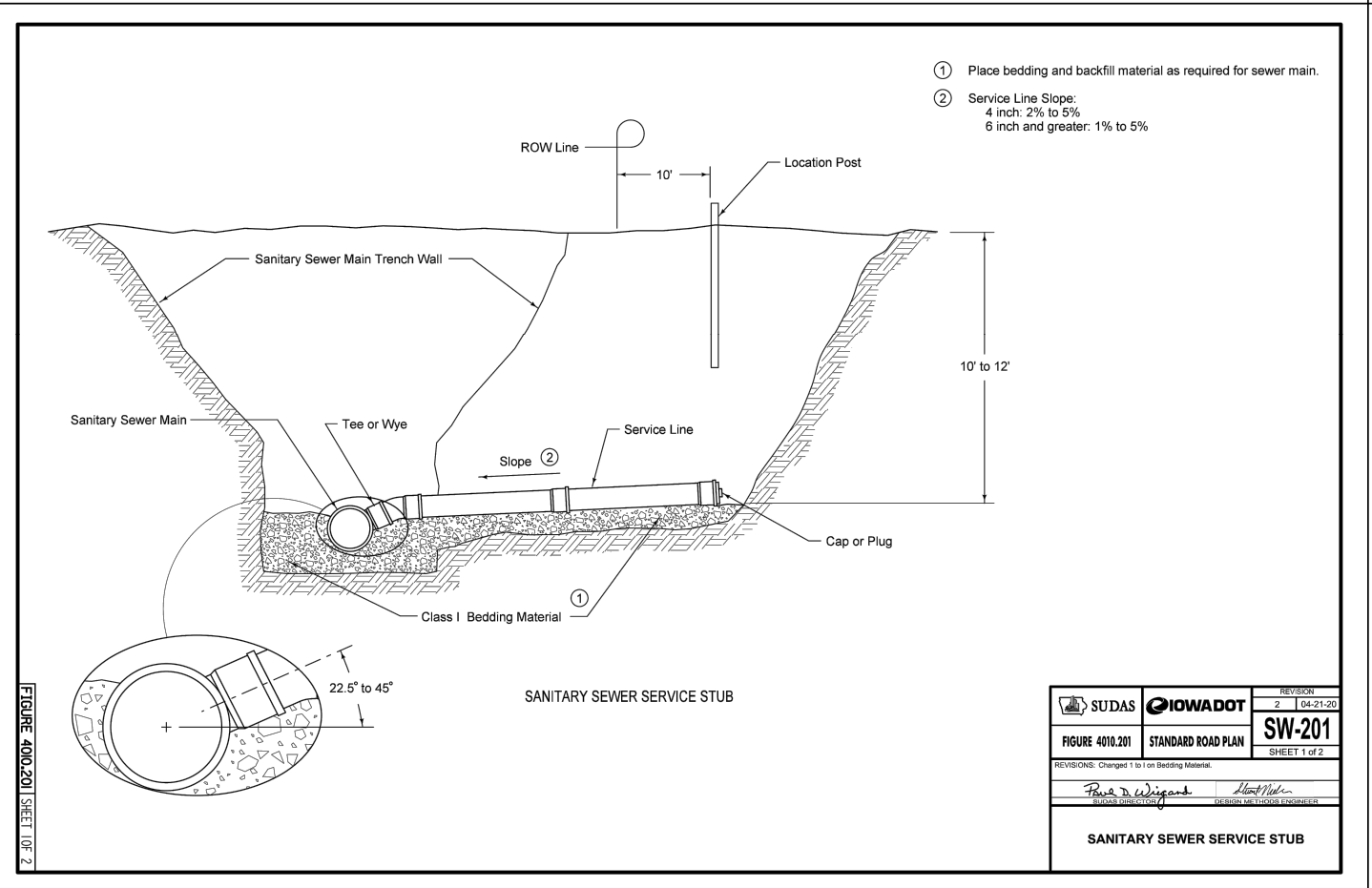
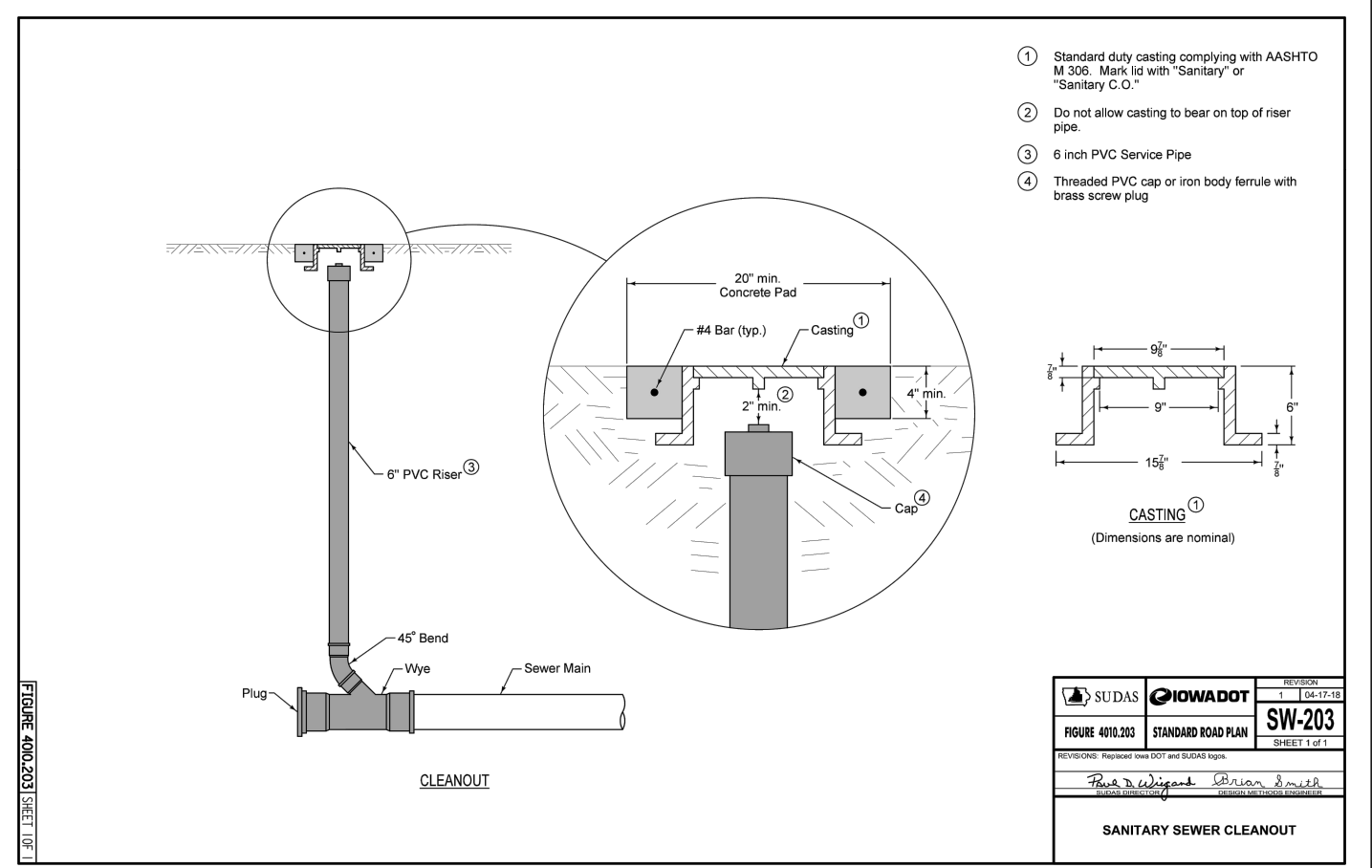
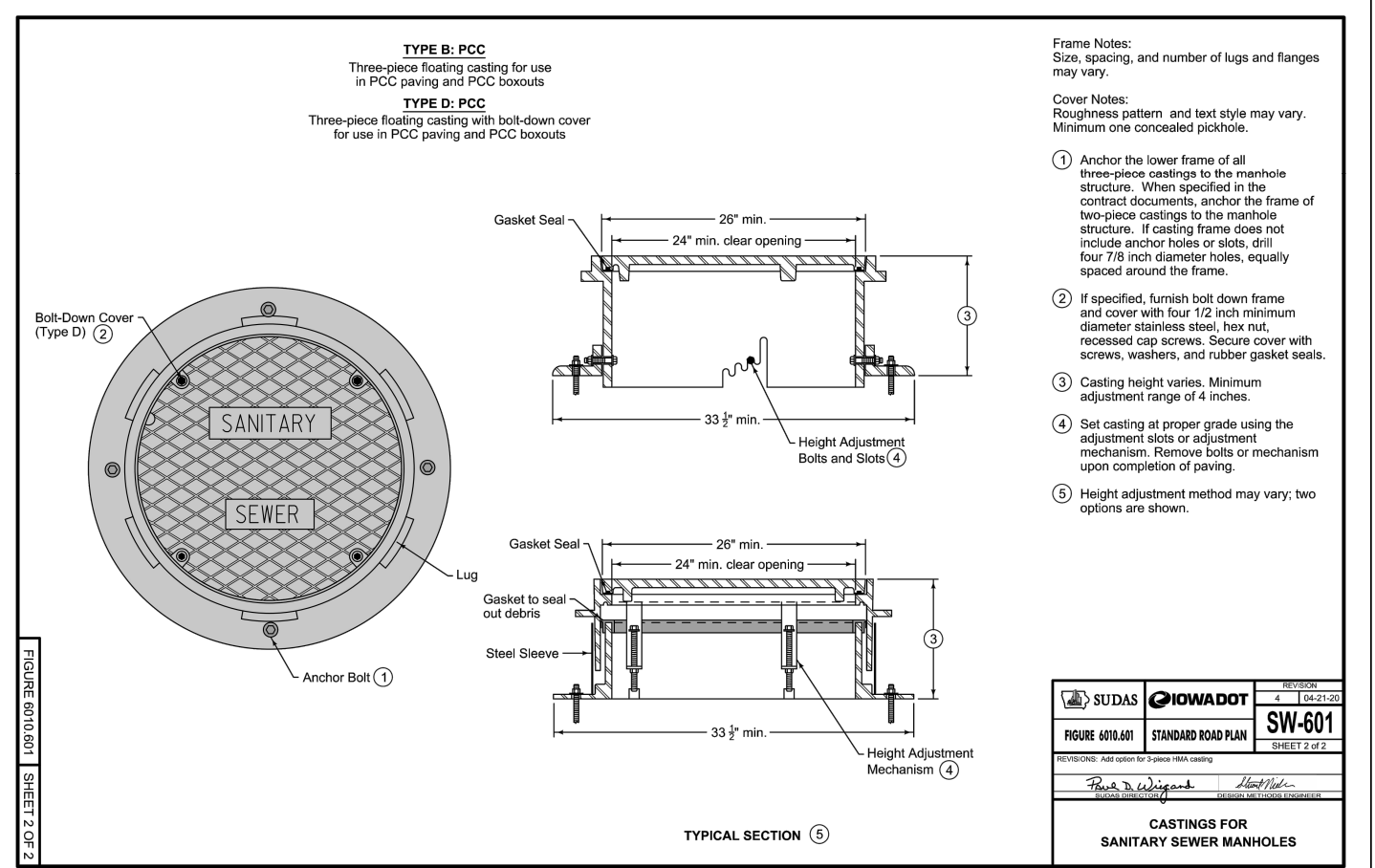
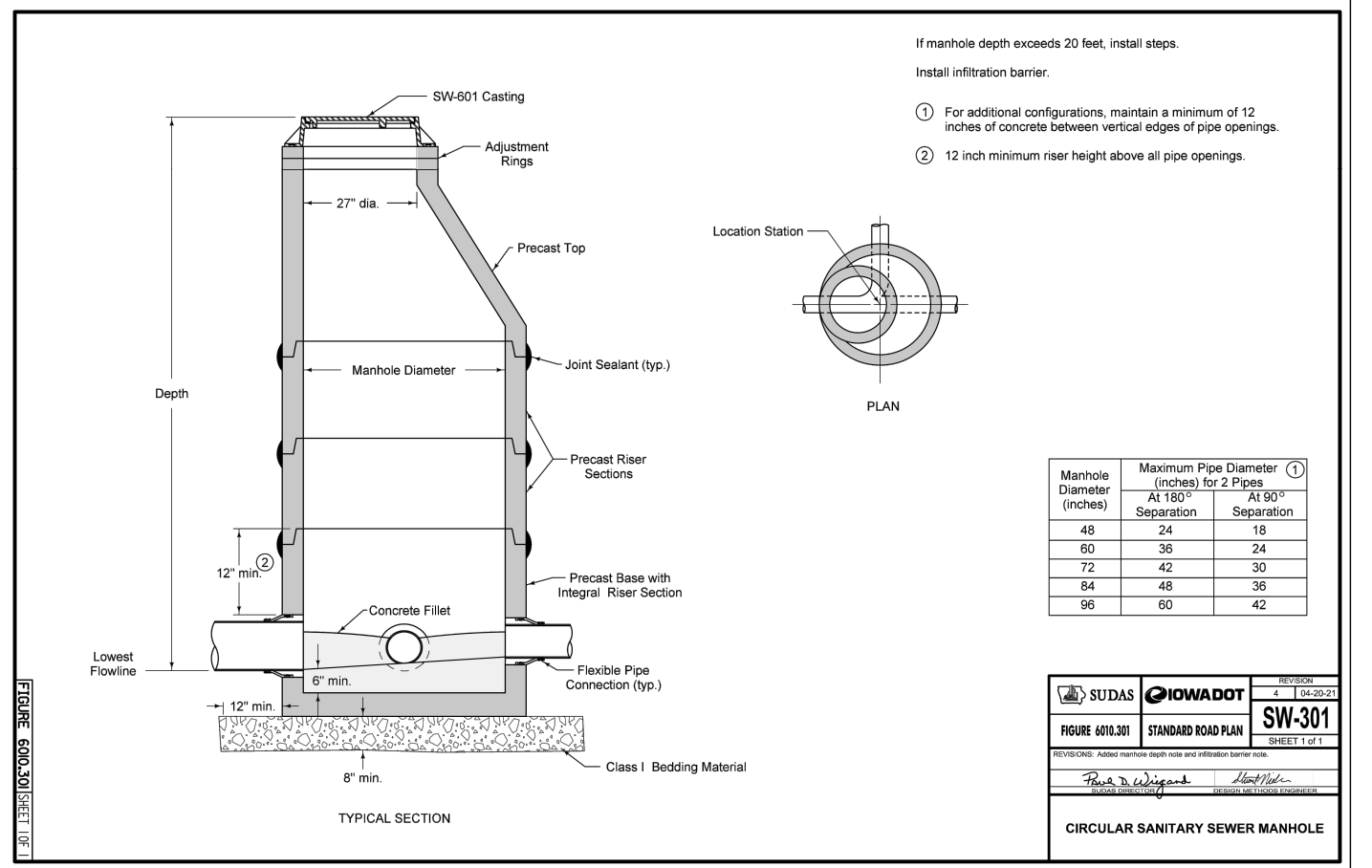
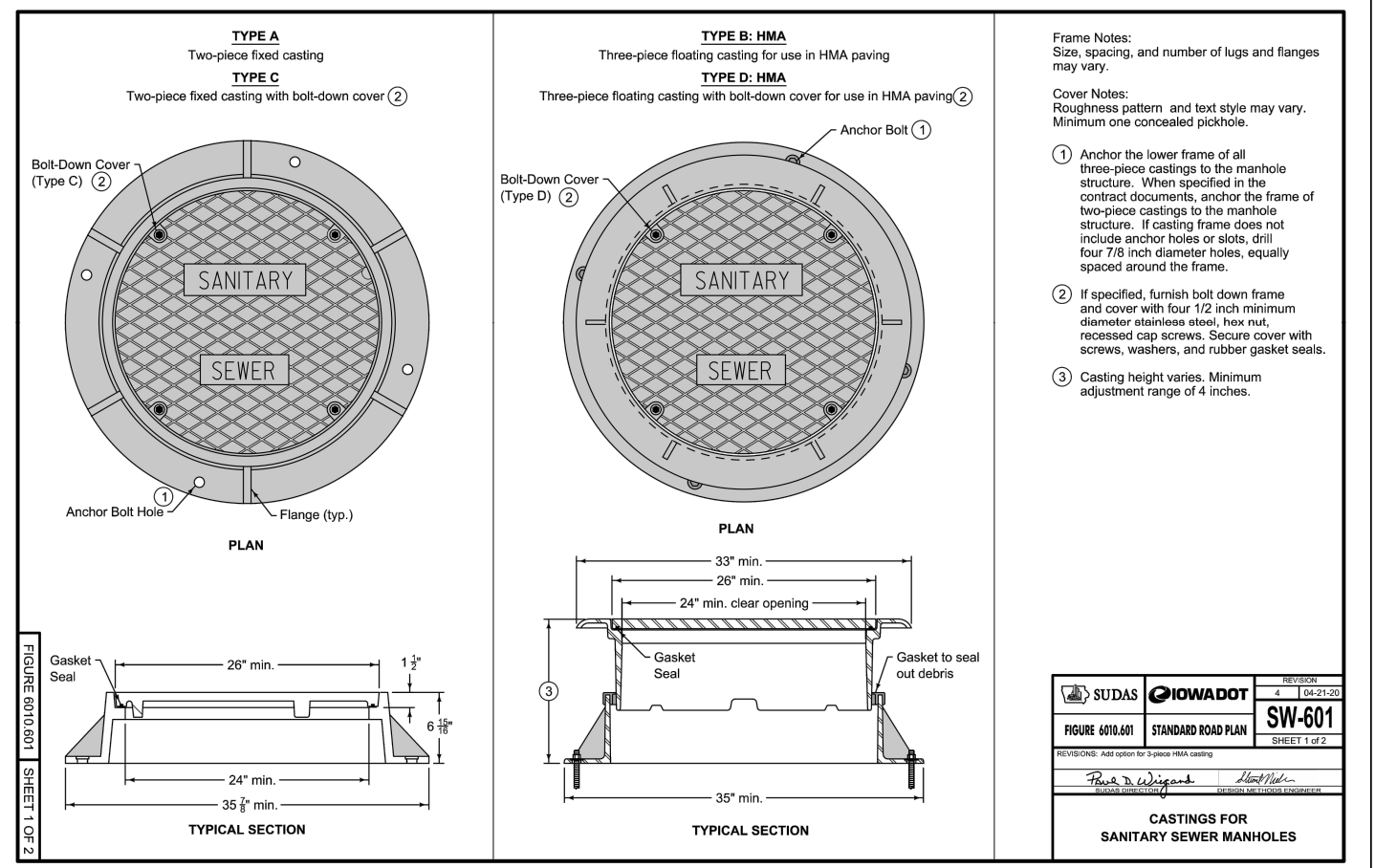
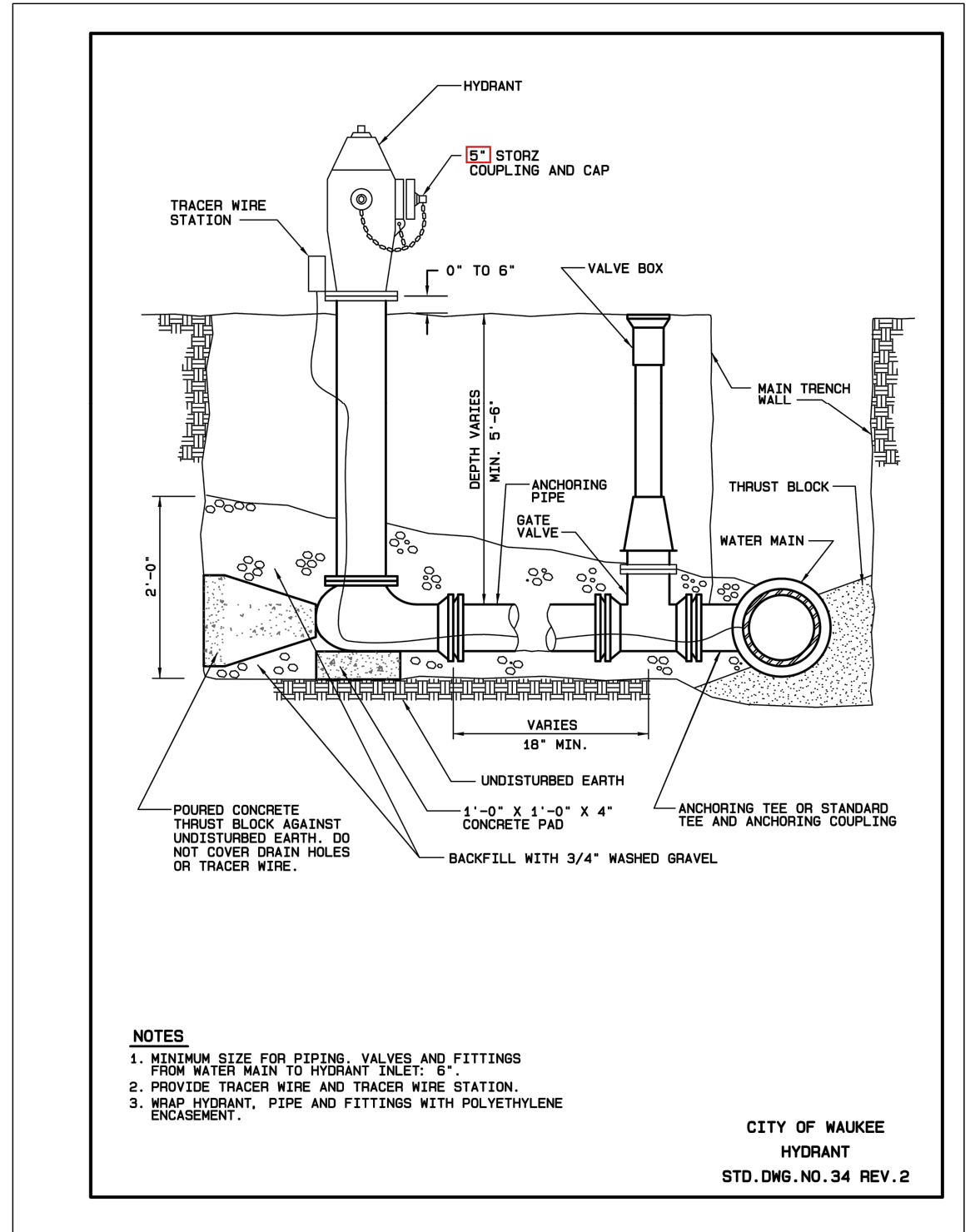
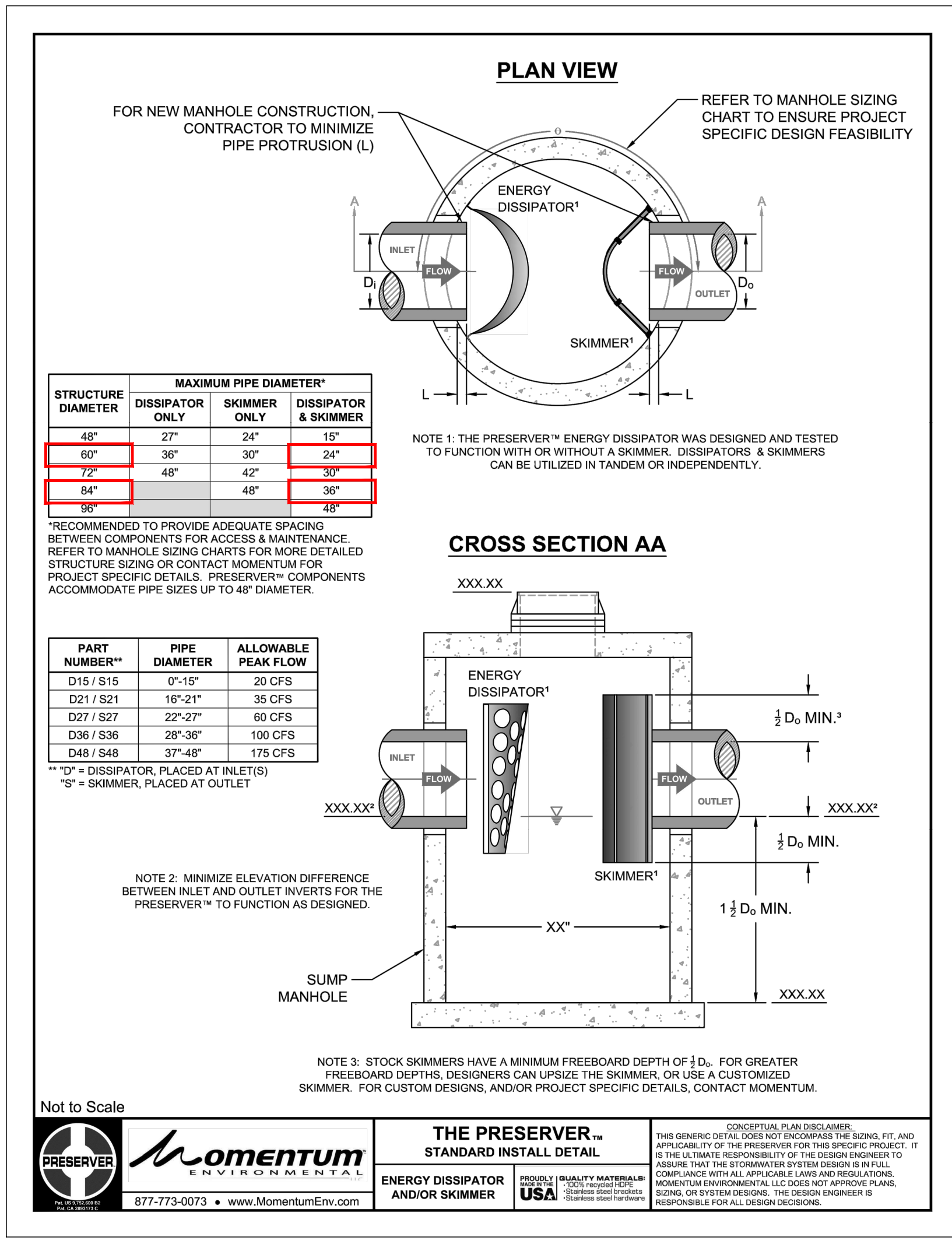


DATE: 5TH SUB. 2022-08-17
4TH SUB. 2022-07-27
3RD SUB. 2022-06-30
2ND SUB. 2022-06-13
DATE OF SURVEY: JAN. 05, 2022
DESIGNED BY: JAG
DRAWN BY: LKH

PRELIMINARY
WAUKEE CROSSING PLAT 4
WAUKEE, IOWA
COVER

SHEET
OF 11

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Refer to SW-514 for boutout details.

- Cast-in-place base shown. If base is precast integral with bottom riser, the footprint of the base is not required to extend beyond the outer edge of the riser.
- For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- 12 inch minimum riser height above all pipes.

Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes	Minimum Separation (inches)
48	24	18
60	30	24
72	42	30
84	48	36
96	60	42

SW-401
CIRCULAR STORM SEWER MANHOLE

Refer to SW-514 for boutout details.

- Install four #4 diagonal bars at all pipe openings.
- SW-603 Type R Unless Type Q is specified in the contract documents.
- Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- 12 inch minimum wall height above all pipes.

Mark	Size	Location	Shape	Length	Count	Spacing
Aw1	4	Walls	1/2" x 1/2"	14	12	
Aw2	4	Long Walls	3/4"	Varies	12	
Aw3	4	Short Walls	Varies	12		
Aw4	4	Base	3/4"	4	10"	
Aw5	4	Base	3/4"	5	10"	

SW-501
SINGLE GRATE INTAKE

Refer to SW-514 for boutout details.

- SW-603 Type R unless Type Q is specified in the contract documents.
- Cast-in-place base shown. Base may be precast. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- 12 inch minimum riser height above all pipes.

Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes	Minimum Separation (inches)
48	24	18
60	30	24
72	42	30
84	48	36
96	60	42

SW-502
CIRCULAR SINGLE GRATE INTAKE

Refer to SW-514 for boutout details.

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

SW-503
SINGLE GRATE INTAKE WITH MANHOLE

Refer to SW-514 for boutout details.

- Install four #4 diagonal bars at manhole opening and at all pipe openings.

Mark	Size	Location	Shape	Length	Count	Spacing
Aw1	4	Top	1/2" x 1/2"	3-8"	12	
Aw2	4	Top	3/4"	4-2"	12	
Aw3	4	Base	Varies	4-2"	12	
Aw4	4	Short Walls	Varies	3-8"	12	
Aw5	4	Long Walls	Varies	6-8"	12	
Aw6	4	Walls	1/2" x 1/2"	18	Wall Height minus 4"	13"

SW-503
SINGLE GRATE INTAKE WITH MANHOLE

SW-604
CASTINGS FOR AREA INTAKES

SW-604
CASTINGS FOR AREA INTAKES

Refer to SW-514 for boutout details.

- Precast (where) or cast-in-place base. Precast if not in concrete with welded mesh on 4 inch centers (WWF 4" x 4"). Center mesh vertically with base.
- Cast-in-place. 8 inch thick non-reinforced concrete.
- 12 inch minimum riser height above all pipes.

INTAKE SIZE - CASE 1	Through Pipe Diameter, D1	Minimum Riser Diameter, D2
12"	18"	24"
15"	24"	24"
18"	24"	24"
21"	30"	30"
24"	30"	30"
27"	36"	36"

SW-512
CIRCULAR AREA INTAKE

Refer to SW-514 for boutout details.

- Minimum riser diameter is 18 inches.

INTAKE SIZE - CASE 2	Through Pipe Diameter, D1	Minimum Riser Diameter, D2
18"	18"	18"
21"	18"	18"
24"	24"	24"
27"	24"	24"
30"	30"	30"
36" or more	36"	36"

SW-512
CIRCULAR AREA INTAKE

SW-603
CASTINGS FOR GRATE INTAKES

SW-603
CASTINGS FOR GRATE INTAKES

Structure may be built with openings on any or all sides. Provide opening and orientation as specified in the contract documents.

Adjacent walls may have different widths based upon pipe configuration. See structure must be rectangular.

- 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.
- Grate to inlet elevation on open sides. Glade to top elevation on closed sides.
- Corner pier required between openings of two adjacent walls. Corner pier reinforcing vertically through pier. Install one additional 15 inch #4 bar in pier.
- Center pier required at center of any inlet opening with length of 6 feet or greater. Center pier reinforcing vertically through pier. Install one additional 15 inch #4 bar in pier.
- Wall widths vary with pipe diameter. Provide 6 inches of wall width (minimum) each side of pipe opening. Minimum wall width is 30 inches. Maximum wall width is 72 inches.
- Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- Install four #4 diagonal bars at all pipe openings.
- 12 inch minimum wall height above all pipes.

SW-513
OPEN-SIDED AREA INTAKE

SW-513
OPEN-SIDED AREA INTAKE

SW-513
OPEN-SIDED AREA INTAKE

4040 224
CONCRETE PIPE APRON GUARD

4040 232
SUBDRAIN CLEANOUTS

PRELIMINARY

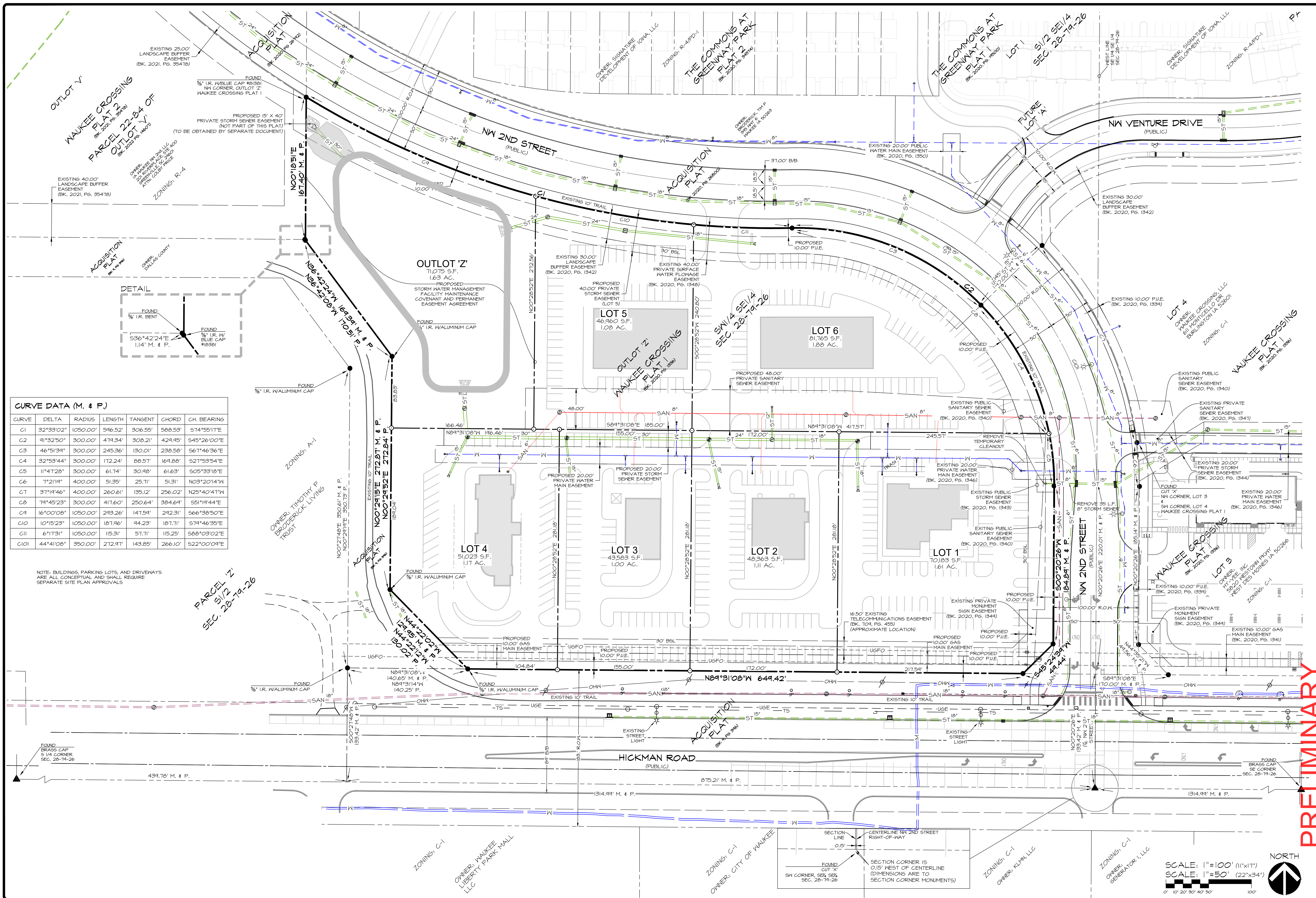
WAUKEE CROSSING FLAT 4
WAUKEE, IOWA
S.U.D.A.S. DETAILS 'B'

Civil Engineering Consultants, Inc.
2400 86th Street Unit 12 Des Moines, Iowa 50322
515.276.8884 mail@cecinc.com

CEC

DATE: 5TH SUB. 2022-08-17
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DATE OF SURVEY: JAN. 05, 2022
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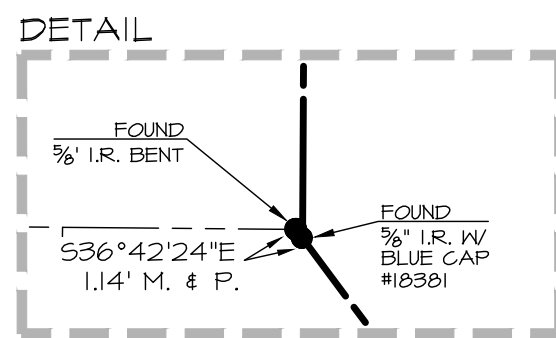
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CURVE DATA (M. & P.)

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C1	32°33'02"	1050.00'	546.52'	306.55'	588.53'	S74°55'11"E
C2	91°32'50"	300.00'	474.34'	308.21'	424.95'	S45°26'00"E
C3	46°51'34"	300.00'	245.36'	130.01'	238.58'	S67°46'36"E
C4	32°53'44"	300.00'	172.24'	88.57'	164.88'	S27°53'54"E
C5	11°41'28"	300.00'	61.74'	30.98'	61.63'	S05°33'18"E
C6	7°21'19"	400.00'	51.35'	25.71'	51.31'	N03°20'14"W
C7	37°19'46"	400.00'	260.61'	135.12'	256.02'	N25°40'47"W
C8	19°45'23"	300.00'	417.60'	250.64'	384.64'	S51°19'44"E
C9	16°00'08"	1050.00'	293.26'	147.54'	292.31'	S66°38'50"E
C10	10°15'23"	1050.00'	187.96'	94.23'	187.71'	S79°46'35"E
C11	6°17'31"	1050.00'	115.31'	57.71'	115.25'	S88°03'02"E
C101	44°41'08"	350.00'	272.47'	143.85'	266.10'	S22°00'04"E

NOTE: BUILDINGS, PARKING LOTS, AND DRIVEWAYS ARE ALL CONCEPTUAL AND SHALL REQUIRE SEPARATE SITE PLAN APPROVALS



PRELIMINARY

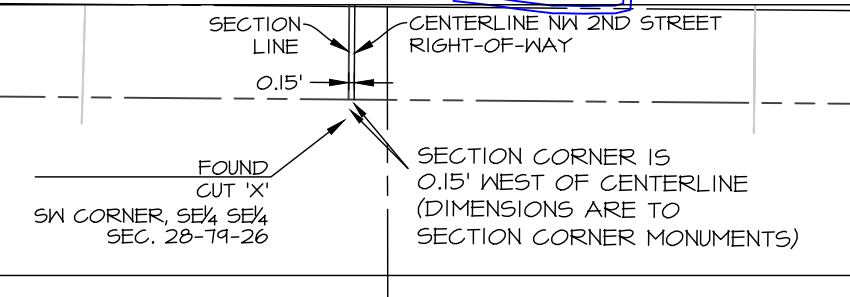
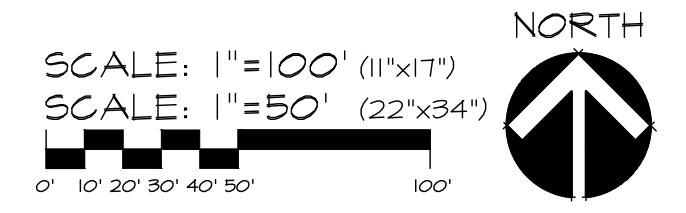
WAUKEE CROSSING PLAT 4
 WAUKEE, IOWA
DIMENSION PLAN

SHEET 4 OF 11
 A-2162

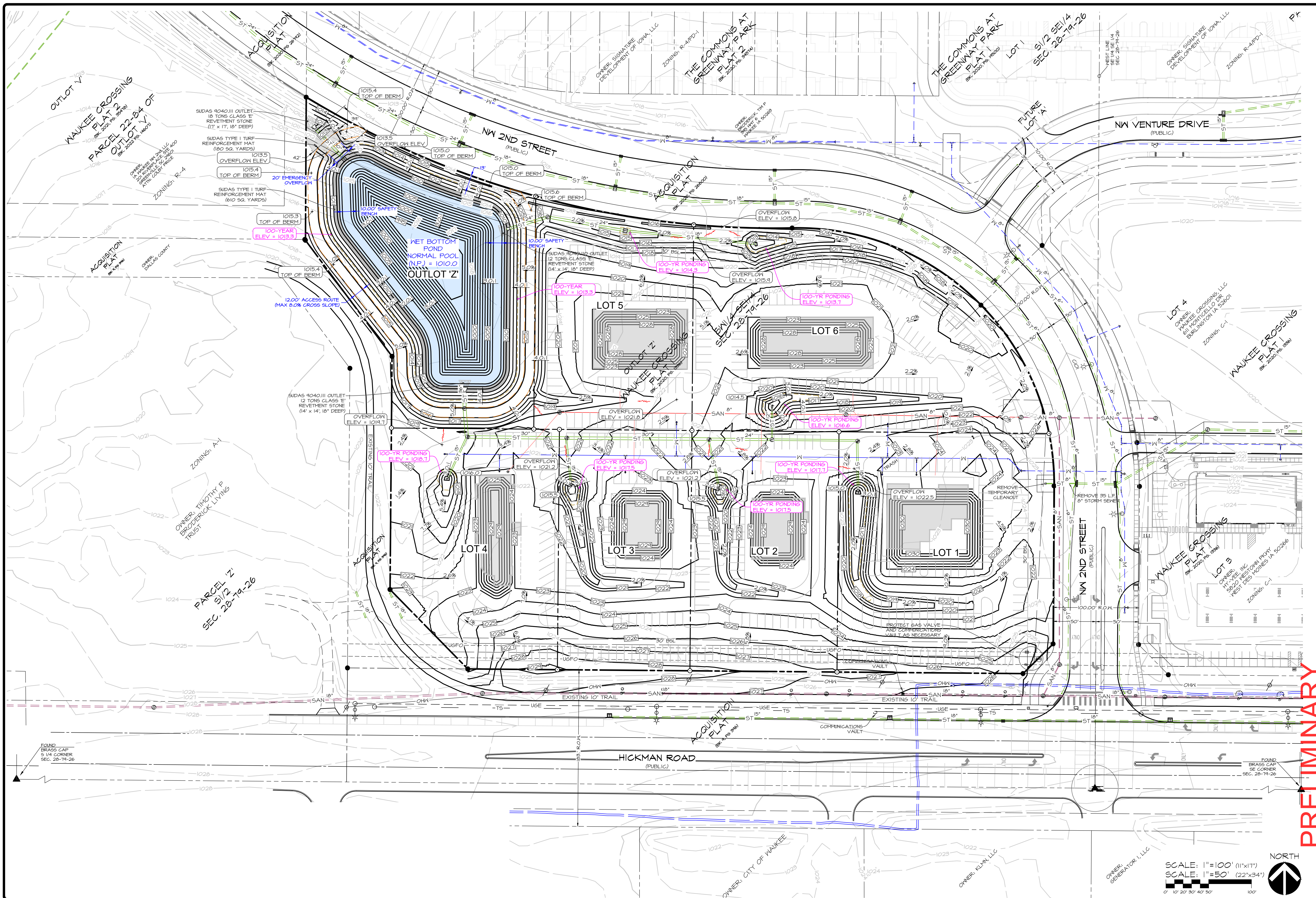
Civil Engineering Consultants, Inc.
 2400 86th Street Unit 12 Des Moines, Iowa 50322
 515.276.4884 mail@cecinc.com

CEC

DATE: 5TH SUB. 2022-08-17
 4TH SUB. 2022-07-27
 3RD SUB. 2022-06-30
 2ND SUB. 2022-06-13
 DATE OF SURVEY: JAN. 05, 2022
 DESIGNED BY: JAG
 DRAWN BY: LKH

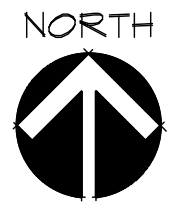


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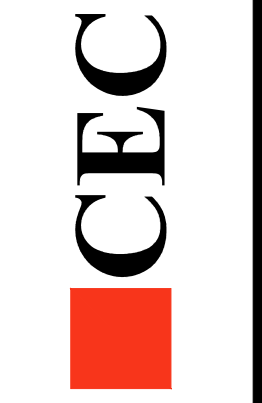
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DATE:	5TH SUB. 2022-09-17
	4TH SUB. 2022-07-27
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DATE OF SURVEY:	JAN. 05, 2022
DESIGNED BY:	JAG
DRAWN BY:	LJH

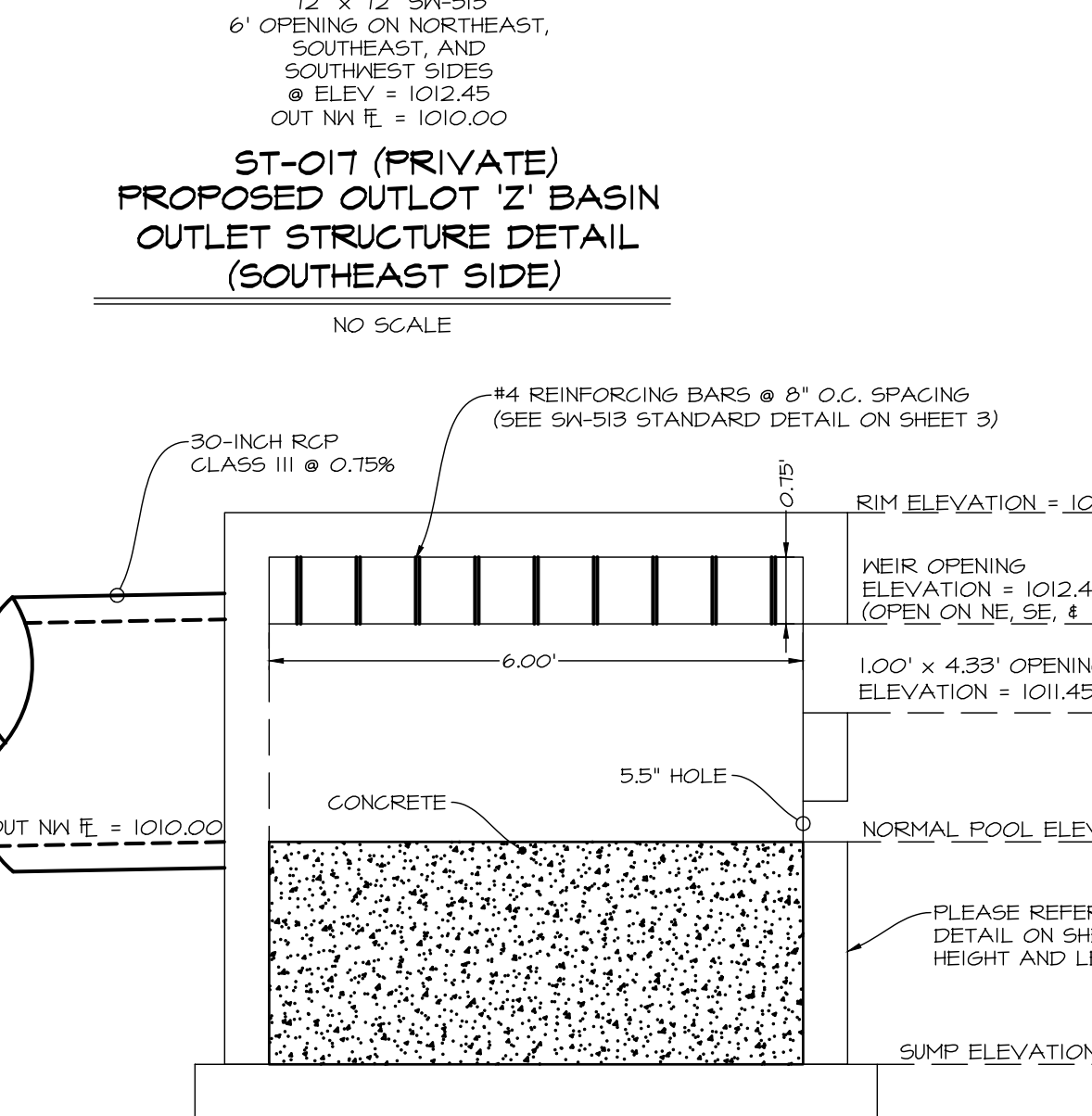
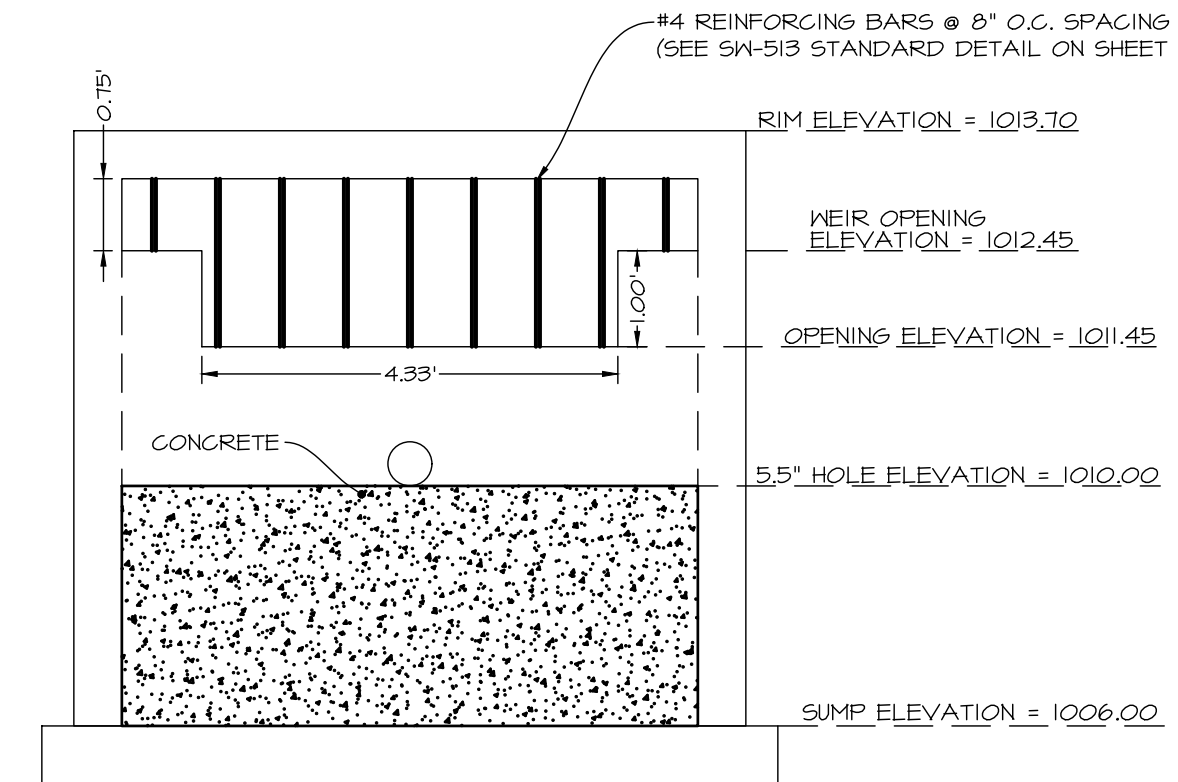
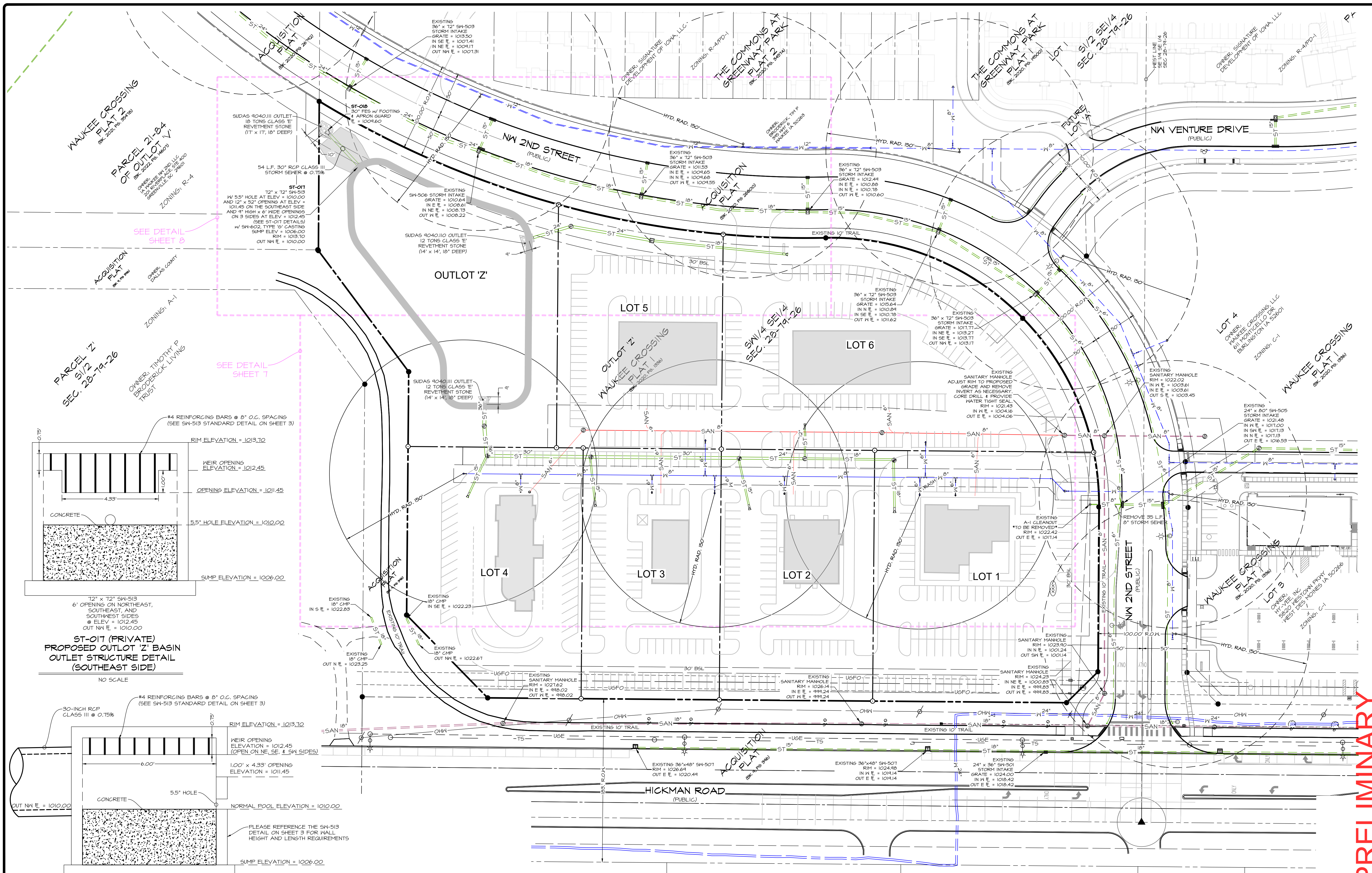
WAUKEE CROSSING PLAT 4
WAUKEE, IOWA
GRADING PLAN

SHEET
OF 11
A-2162



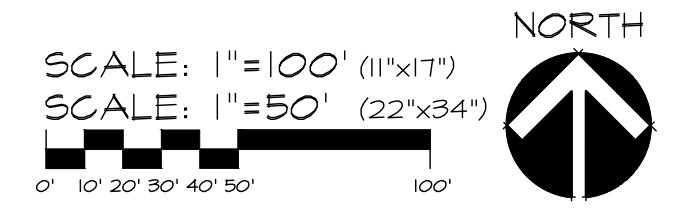
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NOTE: THIS OUTLET STRUCTURE REQUIRES SCHEDULED MAINTENANCE. PLEASE SEE THE MAINTENANCE PLAN ON PAGE 1 FOR DETAILS.

NOTE: SANITARY SEWER, STORM SEWER, & WATER MAIN INTERNAL TO THE PLAT BOUNDARY ARE PRIVATE UNLESS NOTED OTHERWISE.



PRELIMINARY

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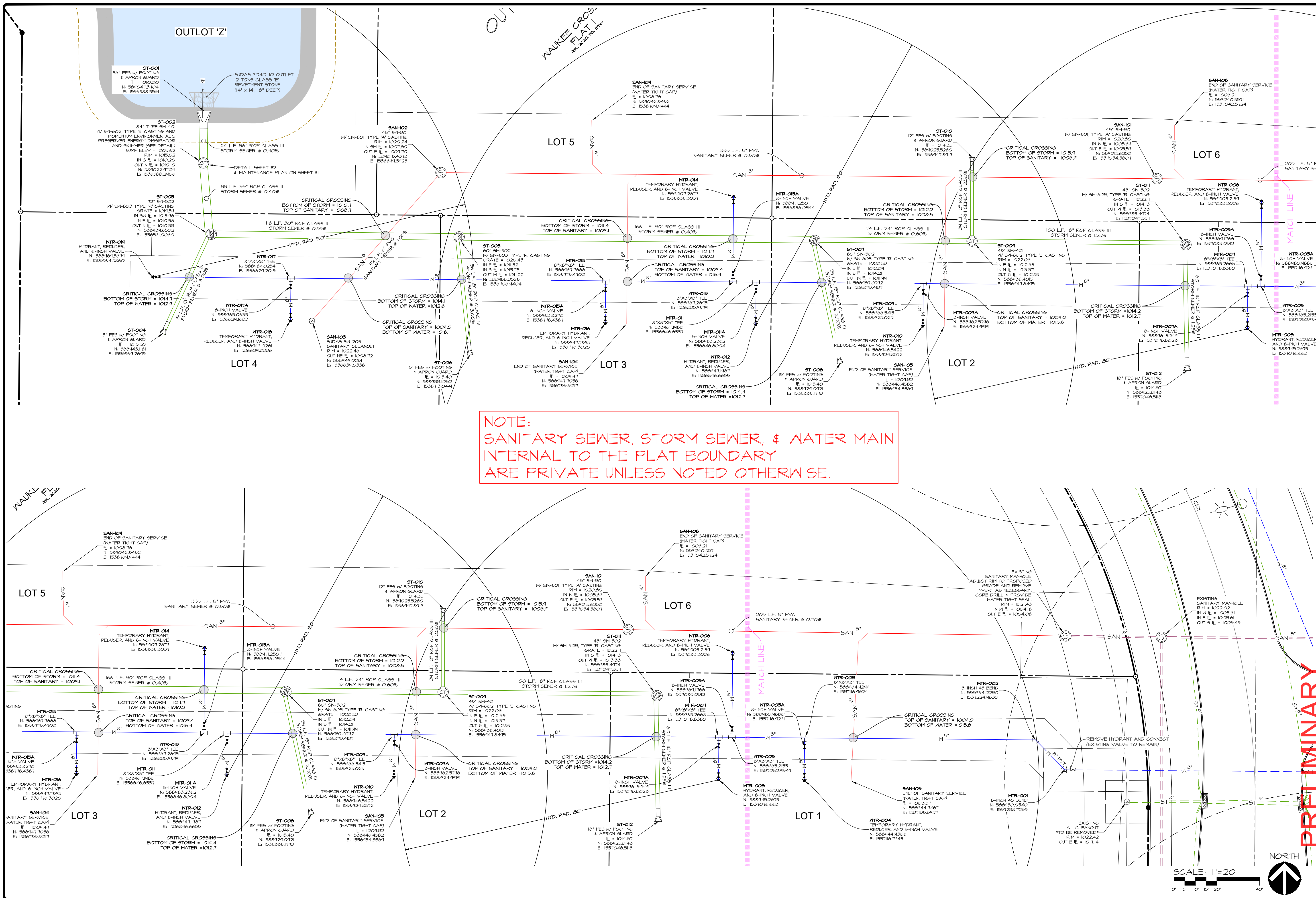
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Waukee Crossing Plat 4
Waukee, Iowa
UTILITY PLAN - OVERALL

SHEET OF 11
A-2162

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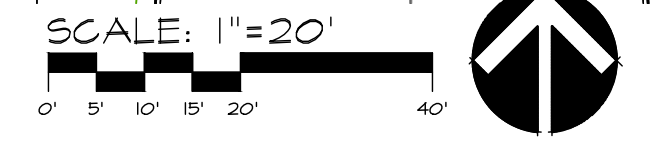
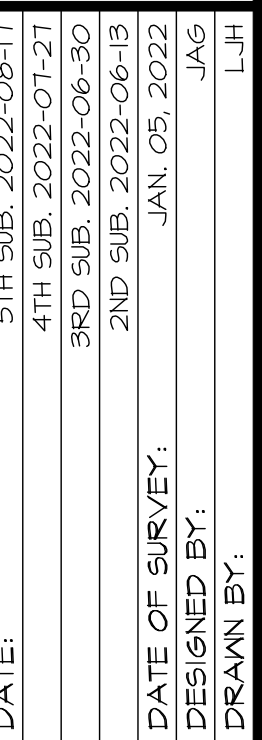
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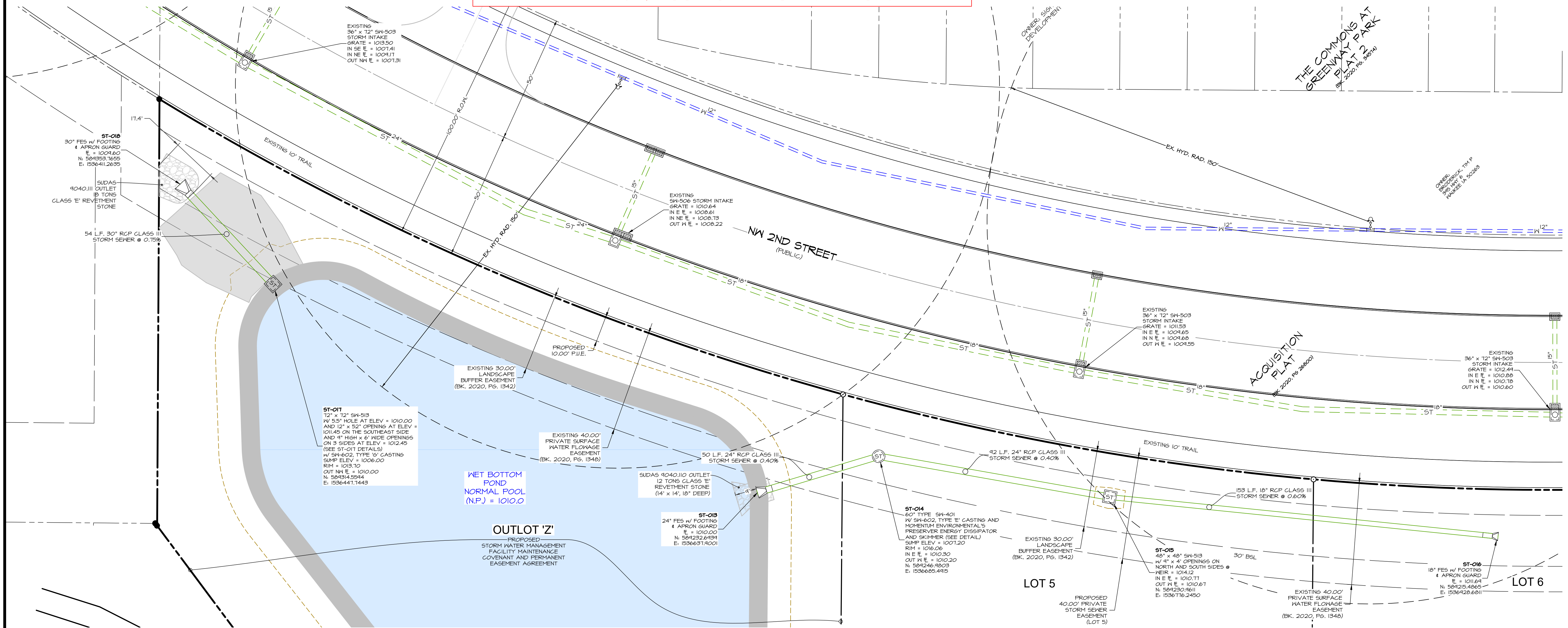
PRELIMINARY
 WAUKEE CROSSING PLAT 4
 WAUKEE, IOWA
 UTILITY PLAN - DETAIL LOTS 1 - 6

SHEET
 OF 11
 A-2102

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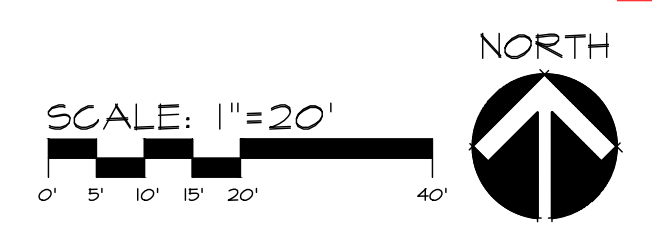


NOTE:
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DATE OF SURVEY:	2ND SUB. 2022-06-13
DESIGNED BY:	JAN. 05, 2022
DRAWN BY:	JUH

PRELIMINARY
WAUKEE CROSSING PLAT 4
 WAUKEE, IOWA
UTILITY PLAN - DETAIL OUTLOT 'Z' LOTS 5 & 6



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STORM WATER POLLUTION PREVENTION PLAN

I. SITE DESCRIPTION/APPLICANT/SCHEDULE

- OWNER/APPLICANT: WAUKEE CROSSING, L.L.C.
611 MONTICELLO DRIVE, BURLINGTON, IOWA 52601
CONTACT: MIKE PIERSON, PHONE: 319-572-0125
- LOCATION: A PARCEL OF LAND IN THE SW 1/4 AND SE 1/4 OF SECTION 28, T19N, R26W
- NATURE OF CONSTRUCTION ACTIVITY: GRADING AND CONSTRUCTION FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT
- AREAS: TOTAL SITE AREA = 9.48 ACRES
SITE AREA AFFECTED = 10.01 ACRES
- RUNOFF COEFFICIENT = 0.25 (RATIONAL METHOD)
APPROXIMATE SLOPES ANTICIPATED: 3:1 OR FLATTER
- 100 YEAR RUNOFF: APPROXIMATELY 42 CFS
- RUNOFF FROM THIS PROJECT WILL FLOW INTO STORM SEWER TO LITTLE WALNUT CREEK TO WALNUT CREEK
- SOILS:
• CANISTEO CLAY LOAM, BEMIS MORAINNE WITH SLOPES BETWEEN 0% TO 2%
• NICOLLET LOAM WITH SLOPES BETWEEN 1% TO 3%
• CLARION LOAM, BEMIS MORAINNE WITH SLOPES BETWEEN 2% TO 6%
- ESTIMATED DATE WORK IS TO COMMENCE: JULY 2022
- ESTIMATED DATE WORK IS TO BE COMPLETED: DECEMBER 2023

2. CONTROLS (ALL SEDIMENT AND EROSION CONTROLS TO BE INSTALLED, MAINTAINED AND REPLACED PER SUDAS SECTION 9040)

- EROSION AND SEDIMENT CONTROLS
- STABILIZATION PRACTICES
- EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND STABILIZE DISTURBED AREAS.
- PERMANENT SEEDING AND/OR SODDING AFTER CONSTRUCTION.
- VEGETATIVE BUFFER STRIPS THROUGHOUT PROJECT.
- PROTECTION OF TREES AND PRESERVATION OF MATURE VEGETATION WHEREVER POSSIBLE.
- STRUCTURAL PRACTICES
- SILT FENCES - TEMPORARY DEVICE TO REMOVE SEDIMENT FROM RUNOFF
- TEMPORARY SEDIMENTATION BASIN - TEMPORARY STRUCTURE TO DETAIN RUNOFF AND ALLOW SEDIMENTATION TO SETTLE OUT
- RIP RAP - PLACED AT OUTLET OF STORM SEWER TO PREVENT DOWNSTREAM EROSION
- DRAINAGE SWALES - STABILIZES SURFACE FROM EROSION WHILE CARRYING SURFACE RUNOFF
- INLET PROTECTION - FILTERS SEDIMENT FROM RUNOFF PRIOR TO ENTERING STORM SEWER SYSTEM
- STORM WATER MANAGEMENT
- FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND NATURAL DEPRESSIONS.
- INFILTRATION OF RUNOFF ON SITE
- VELOCITY DISSIPATION DEVICES AT DISCHARGE LOCATIONS TO PROVIDE NON-EROSIVE VELOCITY FLOWS.
- WASTE DISPOSAL
- ALL MATERIAL WASTES MUST BE REMOVED FROM SITE.
- OFF-SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED.
- STABILIZE ENTRANCE WITH 8-INCHES OF LIMESTONE IN ORDER TO PREVENT MUD FROM TRACKING OUT ONTO ROADWAY
- TOTAL COMPLIANCE WITH APPLICABLE STATE/LOCAL WASTE DISPOSAL REGULATIONS.
- CONTROLS MUST BE IN GOOD OPERATING CONDITION UNTIL CONSTRUCTION ACTIVITY IS COMPLETE AND FINAL STABILIZATION HAS BEEN REACHED.

3. CONTRACTORS
GENERAL CONTRACTOR SHALL HAVE PRIMARY RESPONSIBILITY OF IMPLEMENTING MEASURES CONTAINED IN PLAN.

- ALL CONTRACTORS AND SUBCONTRACTORS SHALL SIGN A CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT SITE RELATING TO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. SEE CERTIFICATION THIS SHEET.
- PERSONS ACCOMPLISHING WORK UNDER THIS PERMIT:

NAME: _____
ADDRESS: _____

PHONE: _____

NAME: _____
ADDRESS: _____

PHONE: _____

NAME: _____
ADDRESS: _____

PHONE: _____

NAME: _____
ADDRESS: _____

PHONE: _____

4. IMPLEMENTATION / MAINTENANCE

- MAINTAIN EFFECTIVE OPERATING CONDITIONS OF ALL PROTECTIVE MEASURES IDENTIFIED IN PLAN.
- CURB CUT SHALL BE ONE OF THE FIRST ITEMS OF CONSTRUCTION IN ORDER TO ACCESS SITE. "JUMPING THE CURB" IS NOT ALLOWED.
- PRIOR TO INITIAL GRADING, INSTALL PERIMETER SILT FENCE TO PROTECT UNDISTURBED AREAS.
- DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
- AFTER INITIAL GRADING PRIOR TO UTILITY CONSTRUCTION, ALL DISTURBED AREAS OUTSIDE PROPOSED RIGHT-OF-WAYS ARE TO HAVE TEMPORARY SEEDING AND MULCHING. CONTRACTORS AND SUBS ARE TO MINIMIZE DISTURBANCE TO THESE SEEDING AREAS THROUGH USE OF SPECIFIC ACCESS ROUTES WITHIN SITE.
- INSTALL ADDITIONAL CONTROLS AS CONSTRUCTION COMMENCES. PROVIDE SILT FENCE, INTAKE BASKETS, ETC. AS SOON AS POSSIBLE DURING CONSTRUCTION.
- TEMPORARY EARTH PILES SHALL HAVE DOWNSLOPE SILT FENCE PROTECTION.
- ALL INTAKES AND MANHOLES TO HAVE SILT FENCE AROUND THEM PRIOR TO PAVING AND INLET FILTERS AFTER PAVING. INLET FILTERS SHALL REMAIN IN PLACE UNTIL SITE HAS PERENNIAL GROUND COVER.
- ALL INTAKES SHALL BE COVERED DURING CONSTRUCTION TO PREVENT SEDIMENTATION DEPOSITS WITHIN STORM SEWER. INTAKE BASKETS SHALL BE PLACED IN STRUCTURE ONCE CASTINGS ARE IN PLACE.
- ANY SOIL OR SPILL, WASHED, TRACKED OR DROPPED ON TO ADJOINING RIGHT-OF-WAYS AND PROPERTY SHALL BE CLEANED UP BY CONTRACTOR IMMEDIATELY. EARTH RAMPS SHALL NOT BE CONSTRUCTED IN STREET GUTTER.
- MATERIAL OR EQUIPMENT STORAGE AREAS MUST BE WITHIN LIMITS OF SOIL DISTURBING ACTIVITY. THESE AREAS SHALL BE INSPECTED FOR POTENTIAL POLLUTANTS ENTERING SYSTEM.
- DURING CONSTRUCTION IF IT BECOMES EVIDENT THAT DISTURBED AREA WILL NOT BE DISTURBED FOR PERIOD EXCEEDING 14 DAYS, STABILIZATION OF THE DISTURBED AREAS SHALL INITIATE IMMEDIATELY.
- PERMANENT SEEDING AND MULCHING TO BE DONE IMMEDIATELY AFTER FINAL GRADING.
- ANY FAILED AREA OF SEEDING SHALL BE RESEEDED - IN THE EVENT THAT SEEDING/MULCHING DOES NOT OCCUR PRIOR TO WINTER, ALL DISTURBED AREAS SHALL BE MULCHED.
- SILT FENCING SHALL BE CLEANED WHEN THEY HAVE LOST 50% OF THEIR CAPACITY.
- DRAINAGE SWALES REMAIN UNDISTURBED.
- ROCK OUTLET PROTECTION SHALL REMAIN INTACT.
- PERMANENT FINAL PLANT COVERINGS OR STRUCTURES SHALL BE INSTALLED IMMEDIATELY AFTER FINAL GRADING IS COMPLETED. REPLANTING MAY BE REQUIRED TO ENSURE ADEQUATE VEGETATIVE COVER IS ESTABLISHED. ADEQUATE VEGETATIVE COVER IS CONSIDERED TO BE 70% MIN. COVERAGE OF SOIL SURFACE BY INTENDED SPECIES. IF NATIVE LANDSCAPE IS USED, THEN 70% COVERAGE BY COVER CROP IS REQUIRED.
- SOIL SHALL BE WATERED DURING DRY, WINDY CONDITIONS TO MINIMIZE EROSION.
- WORK REQUIRING ENTERING AND LEAVING SITE OVER COUNTY ROADWAYS INCLUDING MATERIAL DELIVERY AND MOVEMENT OF EQUIPMENT SHALL NOT BE PERMITTED DURING PERIODS WHEN GROUND IS EXCEPTIONALLY SOFT AND WET AND EROSION BY VEHICLE IS CERTAIN.
- SOIL STOCKPILES SHALL BE STABILIZED WITH VEGETATION OR COVERED. MOWING MAY BE REQUIRED IF VEGETATION BECOMES A NUISANCE.
- EROSION CONTROL CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE SITE HAS BEEN PERMANENTLY ESTABLISHED WITH GROUND COVER.
- CONCRETE WASHOUT AREA SHALL BE DESIGNED AND CONSTRUCTED PER SUDAS SECTION 11.050 AND SHALL HAVE AN IMPERMEABLE LINER TO CONTAIN ALL WASTE CONCRETE MATERIALS. WHEN CONTAINER IS 3/4 FULL (AVOID SPILLOVER) PCC WASTE SHALL BE DISPOSED OF PROPERLY (SENT TO AN APPROPRIATE RECYCLING FACILITY). PCC WASTE SHALL NOT BE BURIED ON SITE.
- TRASH SHALL BE CLEANED UP DAILY OR PUT INTO COVERED DUMPSTER.

5. INSPECTIONS

- CONTRACTOR SHALL KEEP A COPY OF SWPPP ON SITE
- QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- INSPECT SITE FOR EVIDENCE OF, OR POTENTIAL OF, POLLUTANTS ENTERING DRAINAGE SYSTEM FROM STORED MATERIALS.
- OBSERVE EROSION AND SEDIMENT CONTROL MEASURES TO ENSURE THAT THEY ARE OPERATING CORRECTLY. REPAIR AND REPLACE AS NECESSARY.
- LOCATIONS WHERE VEHICLES ENTER OR EXIT SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
- INSPECT DISCHARGE LOCATIONS TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
- ANY MODIFICATIONS TO PLAN AS RESULT OF AN INSPECTION SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS OF INSPECTION. IF IT IS DETERMINED TO BE IMPRACTICABLE TO MAKE THESE CHANGES WITHIN 72 HOURS OF INSPECTION, REASONING AND AN ESTIMATED DATE OF WHEN CHANGES WILL BE MADE SHALL BE DOCUMENTED IN PLANS.
- AN INSPECTION REPORT SHALL BE PREPARED AND RETAINED AS PART OF PREVENTION PLAN UNTIL PROJECT TERMINATION. THIS REPORT WILL CONTAIN FOLLOWING:
• SUMMARY OF SITE OR OPER INSPECTION
• QUALIFICATIONS OF PERSONNEL MAKING INSPECTION.
• MAJOR OBSERVATIONS RELATING TO IMPLEMENTATION OF PREVENTION PLAN.
• ANY ACTIONS TAKEN
• SIGNATURE
- REPORTS SHALL CONFORM TO STANDARDS SET BY IOWA DNR. COPIES OF THESE REPORTS SHALL BE FORWARDED TO OWNER.
- CONTRACTOR IS TO TAKE NECESSARY ACTIONS TO CORRECT DEFICIENCIES FOUND DURING INSPECTIONS AS SOON AS PRACTICABLE BUT IN NO CASE LATER THAN SEVEN (7) DAYS AFTER INSPECTION. IF IT IS DETERMINED THAT IT IS IMPRACTICABLE TO MAKE THESE CHANGES WITHIN 72 HOURS OF INSPECTION, REASONING AND AN ESTIMATED DATE OF WHEN CHANGES WILL BE MADE SHALL BE DOCUMENTED IN PLANS.
- SWPPP RECORDS SHALL BE RETAINED FOR AT LEAST THREE YEARS AFTER NOTICE OF DISCONTINUATION HAS BEEN FILED.

6. NON-STORM WATER DISCHARGES

- WATER MAIN FLUSHING
- FLUSHED WATER WILL BE DISCHARGED INTO THE STORM SEWER SYSTEM WHERE, WHEN DISCHARGED, IT WILL UNDERGO EROSION AND SEDIMENT CONTROLS CONSISTING OF:
• SILTATION BASIN
• ROCK OUTLET PROTECTION (RIPRAP)
• SILT FENCING
• EXISTING VEGETATION
- FLUSHED WATER CONTAINING CHEMICALS (I.E. CHLORINE AND/OR DETERGENTS) NEED TO BE NEUTRALIZED PRIOR TO DISCHARGE TO THE CONTROLS LISTED.
- PETROLEUM STORAGE INCLUDING BUT NOT LIMITED TO FUEL, GEAR OIL, ENGINE OIL, HYDRAULIC OIL, WASTE OIL SHALL NOT BE STORED ON SITE.
- CONCRETE WASHOUT AREAS SHALL BE DESIGNED IN COMPLIANCE WITH SUDAS SPECIFICATION 11.050.
- PORTABLE TOILETS SHALL BE SECURED FROM OVERTURNING AND SHALL HAVE DOWNSLOPE SILT FENCE PROTECTION. HOLDING TANK WILL BE PUMPED OUT AS NEEDED AND DISPOSED OF OFF-SITE.
- CONTRACTOR SHALL CONTAIN AND PROPERLY DISPOSE OF ALL CONCRETE RAUCUTTINGS AND GRINDING.
- DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING OF TRENCHES AND EXCAVATIONS, ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS SUCH AS DEWATERING BAGS OR EQUAL.
- FOLLOWING DISCHARGES ARE PROHIBITED:
• WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO
• PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS
• FUEL OIL OR SOLVENTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE
• SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING
- DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS SHALL BE TREATED IN SEDIMENT BASIN OR EQUAL CONTROL.
- EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER PRESENT MATERIALS TO PRECIPITATION AND STORM WATER SHALL BE MINIMIZED.
- DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS SHALL BE MINIMIZED.

7. REPORT ANY HAZARDOUS CONDITIONS CONDITION AND UPDATE PLAN

- IOWA LAW REQUIRES THAT HAZARDOUS CONDITION OR SPILL IS REPORTED NOT MORE THAN SIX HOURS AFTER ONSET OF SAID CONDITION OR SPILL. IDNR AND LOCAL OR COUNTY SHERIFF'S OFFICE SHALL BE NOTIFIED.
- MODIFY SWPPP WITHIN 5 CALENDAR DAYS OF HAZARDOUS CONDITION. PLAN UPDATE SHALL INCLUDE RELEASE AND CIRCUMSTANCES OF RELEASE AND PLANS TO PREVENT FUTURE REOCCURRENCE OF SUCH RELEASES.

8. NOTICE OF DISCONTINUATION (NOD)

- WITHIN 30 DAYS OF FINAL SITE STABILIZATION OWNER OR GENERAL CONTRACTOR MUST SUBMIT NOTICE OF DISCONTINUATION TO IDNR. NOD SHALL INCLUDE:
• NAME OF THE OWNER OR OPERATOR TO WHICH COVERAGE UNDER GENERAL PERMIT WAS ISSUED
• GENERAL PERMIT NUMBER AND PERMIT AUTHORIZATION NUMBER
• DATE CONSTRUCTION SITE REACHED FINAL STABILIZATION
• SIGNED CERTIFICATION
- NOD SHALL BE MAILED TO:
STORM WATER COORDINATOR
IOWA DEPARTMENT OF NATURAL RESOURCES
502 E. 9TH STREET
DES MOINES, IOWA 50319-0034

THE PRESERVER NOTES

- 1. THE PRESERVER SHALL BE MAINTAINED AND INSPECTED IN ACCORDANCE WITH MOMENTUM ENVIRONMENTAL'S PRESERVER INSPECTION AND MAINTENANCE MANUAL. THE MANUAL CAN BE OBTAINED BY CONTACTING THE ENGINEER.
1.1 THE PRESERVER SHALL BE INSPECTED, AT A MINIMUM, TWICE ANNUALLY, IN THE SPRING AND FALL. SPRING INSPECTION SHALL OCCUR AFTER SNOWMELT, BLOSSOM/SEED FALL AND SPRING STREET CLEANING AND SHALL OCCUR PRIOR TO HEAVY RAINFALL. FALL INSPECTION SHALL OCCUR AFTER LEAF FALL AND FALL STREET CLEANING AND SHALL OCCUR PRIOR TO SNOW/RAINFALL.
1.2 NOTEWORTHY ITEMS DURING INSPECTION SHALL INCLUDE (BUT NOT LIMITED TO):
1.2.1 POLLUTANT DEPTHS - OIL/FLOATABLES, SEDIMENT/SETTLABLE SOLIDS
1.2.2 SITE CONDITIONS - STABILIZATION, CONSTRUCTION ACTIVITY, EQUIPMENT WASH-DOWN, EROSION, WINTER SANDING
1.2.3 MAINTENANCE/CLEANING PERFORMANCE
1.2.4 POLLUTANT COMPOSITION - HYDROCARBONS (OIL, GAS, GREASE), TRASH, ORGANICS
1.2.5 WATER LEVEL - BELOW OUTLET INVERT INDICATES LEAKING
1.2.6 STRUCTURAL CONDITION - CASTING CONDITION, CHIMNEY CONDITION (ADJUSTING RING DETERIORATION, LEAKING/PROPER SEAL), SPALLING CONCRETE, PRESERVER COMPONENTS (CONDITION, CONNECTIONS, DEBRIS ACCUMULATION)
1.3 MAINTENANCE FREQUENCY SHALL BE DETERMINED BASED OFF OF INSPECTIONS AND THE POLLUTANT STORAGE VOLUME (POLLUTANT STORAGE VOLUME SHALL BE DETERMINED IN ACCORDANCE WITH MOMENTUM ENVIRONMENTAL'S PRESERVER INSPECTION AND MAINTENANCE MANUAL.
1.3.1 TYPICAL STRUCTURE CLEANOUT SHALL INCLUDE VACUUMING OUT THE WATER AND DEBRIS CONTAINED IN THE STRUCTURE. WATER CAN BE SPRAYED TO DISLodge AND/OR DEBRIS FOR VACUUM COLLECTION. COLLECTED POLLUTANTS SHALL BE PROPERLY DISPOSED OF. CONFINED SHALL ENTRY PROCEDURES SHALL BE FOLLOWED IF PHYSICAL ACCESS IS NECESSARY.
1.3.2 STRUCTURAL CONDITION SHALL BE DETERMINED AFTER CLEANOUT OF THE STRUCTURE. ANY NECESSARY REPAIRS SHALL OCCUR AS SOON AS POSSIBLE.

SEQUENCE OF MAJOR ACTIVITIES

- 1. PRE-CONSTRUCTION: SOIL STABILIZATION AND EROSION CONTROL MEASURES WILL BE PLACED BY CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION OPERATIONS. VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ACHIEVED.
2. INSTALL UPSTREAM DIVERSIONS, DOWN SLOPE AND SIDE SLOPE PERIMETER CONTROLS BEFORE COMMENCING LAND DISTURBING ACTIVITIES.
3. DO NOT DISTURB AN AREA UNLESS IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
4. COVER OR STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
5. TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT ON SEASONAL WEATHER CHANGES.
6. IF INFILTRATION METHODS ARE USED, INSTALL THEM AFTER UPSTREAM IS STABILIZED.
7. DO NOT REMOVE PERIMETER CONTROLS UNTIL UPSTREAM AREAS ARE STABILIZED.
8. DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED AS SOON AS POSSIBLE.
9. NOTICE OF DISCONTINUATION WILL BE FILED ONCE SITE IS STABILIZED.

OWNER'S CERTIFICATION

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE AS PART OF THIS CERTIFICATION. FURTHER, BY MY SIGNATURE, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE, ALONG WITH THE CONTRACTOR AND SUBCONTRACTORS SIGNING SUCH CERTIFICATIONS, TO THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES" AT THE IDENTIFIED SITE. AS A CO-PERMITTEE, I UNDERSTAND THAT I, AND MY ORGANIZATION, ARE LEGALLY REQUIRED UNDER THE CLEAN WATER ACT AND THE CODE OF IOWA, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN DEVELOPED UNDER THIS NPDES PERMIT AND THE TERMS OF THIS NPDES PERMIT.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

NAME / TITLE: _____

COMPANY: _____

TELEPHONE NUMBER: _____

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE AS PART OF THIS CERTIFICATION. FURTHER, BY MY SIGNATURE, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE, ALONG WITH THE OWNER(S) AND OTHER CONTRACTORS AND SUBCONTRACTORS SIGNING SUCH CERTIFICATIONS, TO THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES" AT THE IDENTIFIED SITE. AS A CO-PERMITTEE, I UNDERSTAND THAT I, AND MY COMPANY, ARE LEGALLY REQUIRED UNDER THE CLEAN WATER ACT AND THE CODE OF IOWA, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN DEVELOPED UNDER THIS NPDES PERMIT AND THE TERMS OF THIS NPDES PERMIT.

GENERAL CONTRACTOR

NAME / TITLE: _____

COMPANY: _____

TELEPHONE NUMBER: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

QUANTITIES

- 9,425 LF SILT FENCE
0.45 ACRES SEEDING - TYPE 1 (PERMANENT)
8.71 ACRES SEEDING - TYPE 2 (PERMANENT)
10.01 ACRES SEEDING - TYPE 4 (TEMPORARY AS NEEDED)
42 TONS CLASS 'E' RIPRAP OVER ENGINEERING FABRIC
11 EA INTAKE FILTER BASKETS
1 EA CONSTRUCTION ENTRANCE

AREA OF DISTURBANCE

10.01 ACRES

PRELIMINARY

WAUKEE CROSSING FLAT 4
WAUKEE, IOWA

SEDIMENTATION & EROSION CONTROL NOTES

SHEET

OF 11

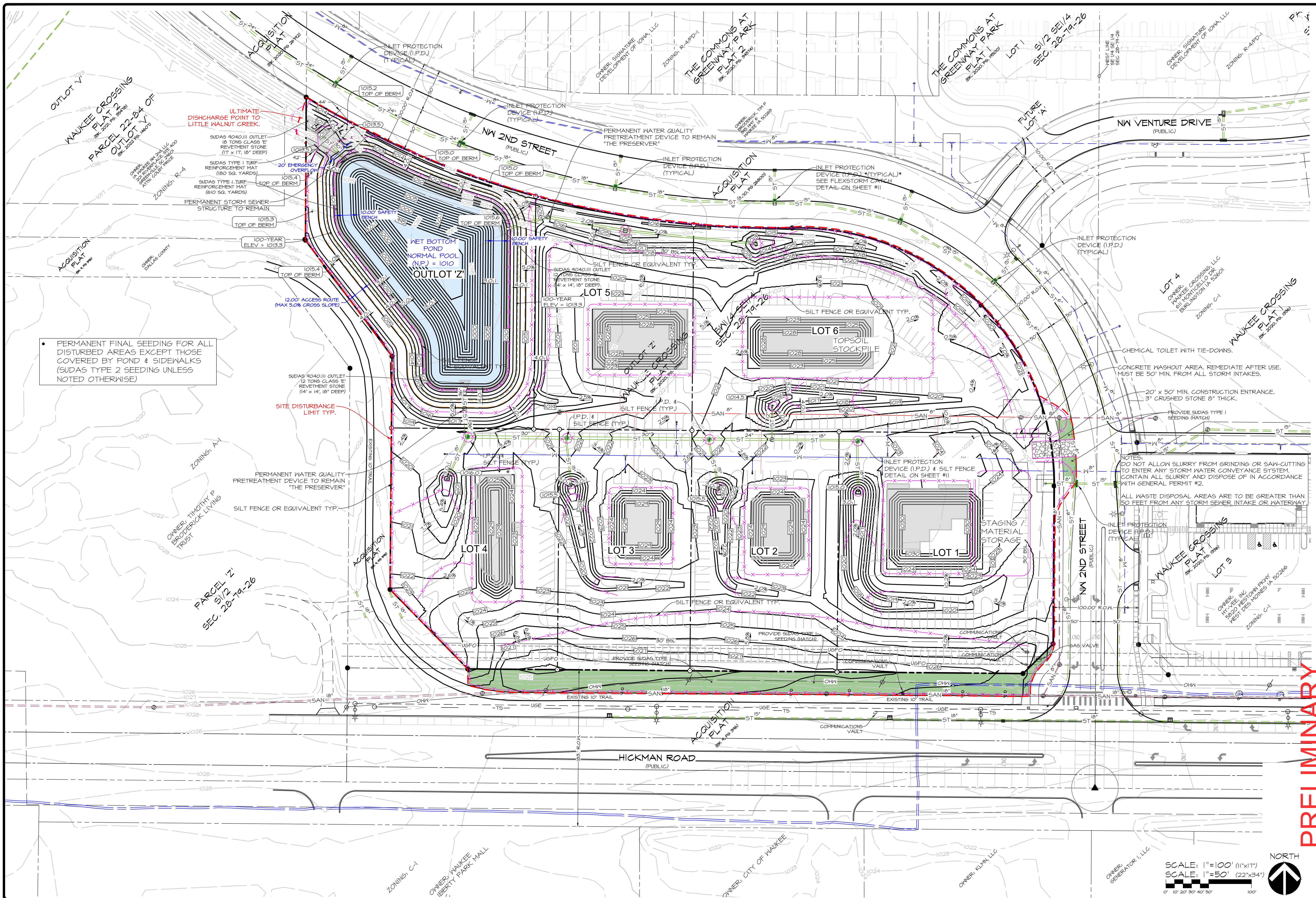
A-2162

DATE: 5TH SUB. 2022-09-17
4TH SUB. 2022-07-27
3RD SUB. 2022-06-30
2ND SUB. 2022-06-18
JAN. 05, 2022
DESIGNED BY: JAG
DRAWN BY: LKH



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2400 86th Street Unit 12 Des Moines, Iowa 50322
515.276-4884 mail@cecinc.com

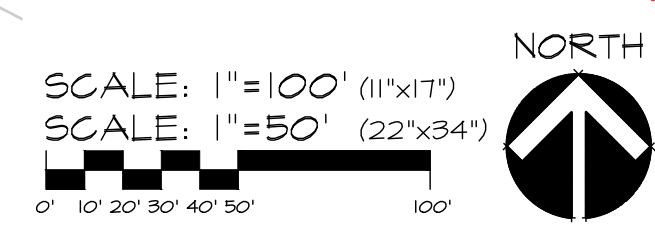
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PRELIMINARY

WAUKEE CROSSING PLAT 4
WAUKEE, IOWA
SEDIMENTATION & EROSION CONTROL PLAN

SHEET
OF 11
A-2162

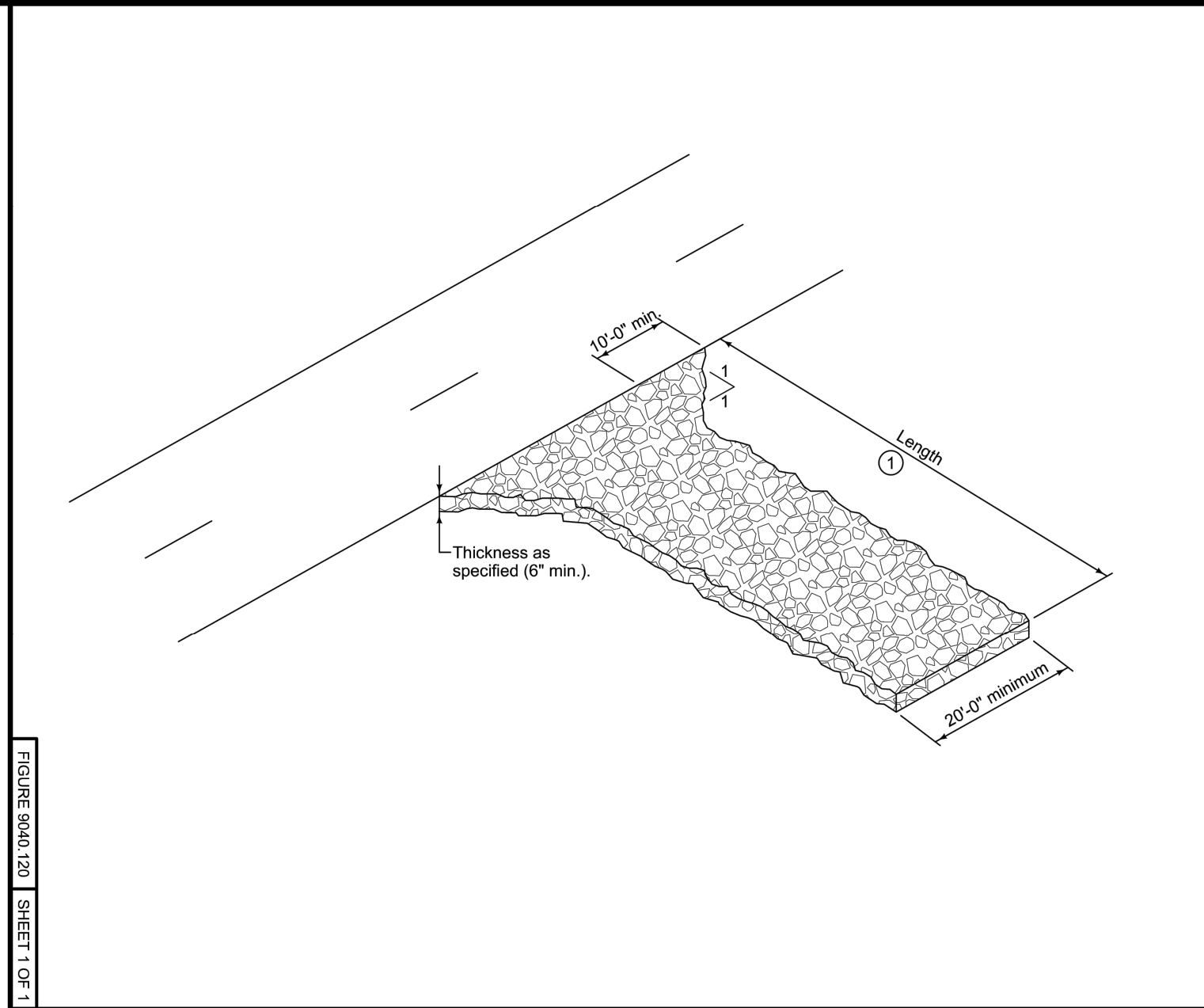


DATE: 5TH SUB, 2022-08-17
4TH SUB, 2022-07-27
3RD SUB, 2022-06-30
2ND SUB, 2022-06-13
DATE OF SURVEY: JAN. 05, 2022
DESIGNED BY: JAG
DRAWN BY: LKH

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CEC

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SUDAS 9040.120

SUDAS Standard Specifications

STABILIZED CONSTRUCTION ENTRANCE

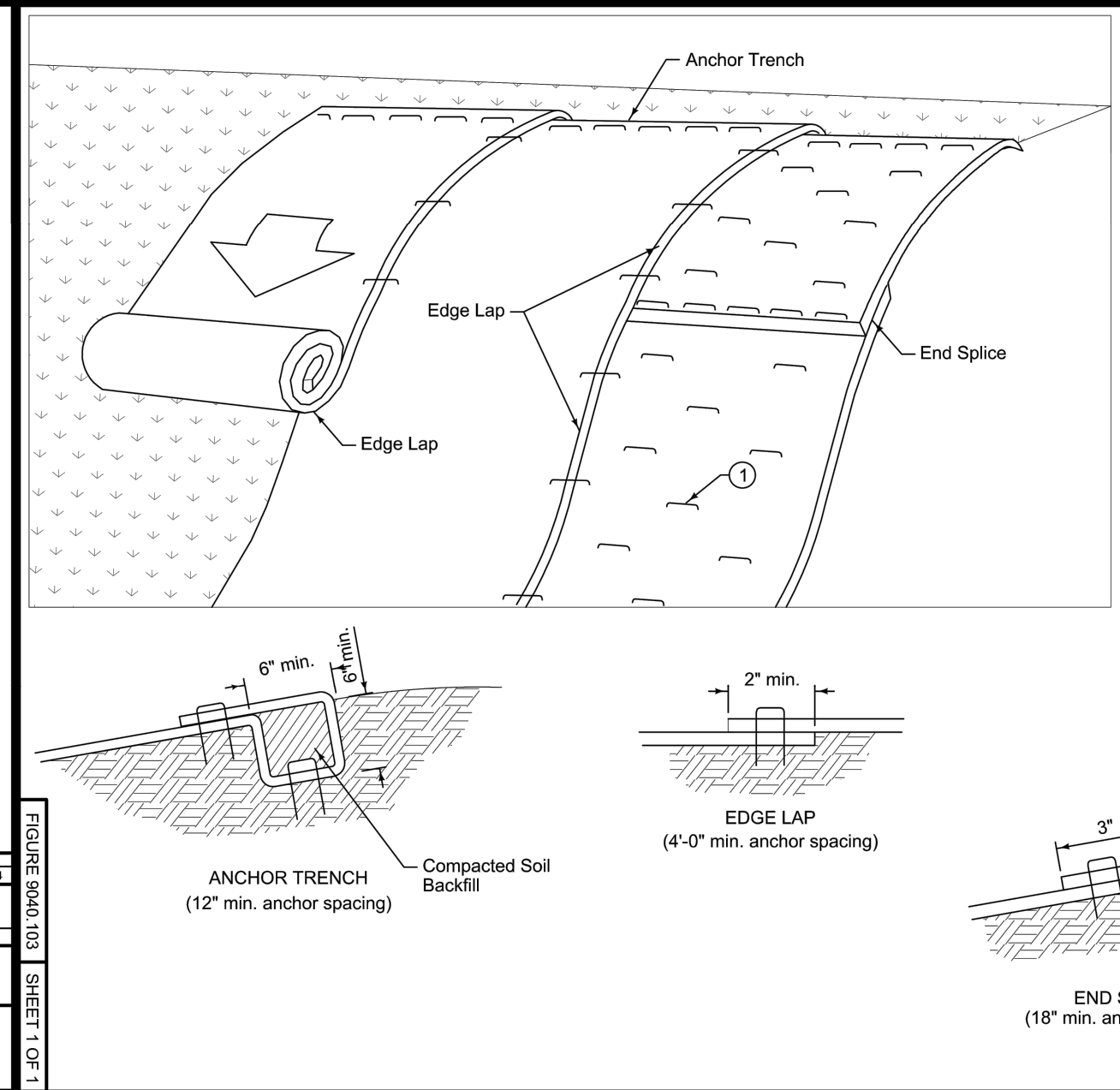


TABLE 1

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

SUDAS 9040.103

SUDAS Standard Specifications

ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES

FLEXSTORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION
PRODUCT SELECTION AND SPECIFICATION DRAWING

NOTES:

- ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
- UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
- FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

STYLE	FRAME STYLE AND SIZE	Frame P/N
ROUND	Small Round (up to 20" dia grates (A) (6" min.))	625RD
	Med Round (20" - 25" dia grates (A) up to 25" dia openings (B))	626RD
	Large Round (25" - 32" dia grates (A) up to 30" openings (B))	628RD
RECT / SQUARE	FX Round (24" dia - 30" dia grates (A) up to 30" dia openings (B))	629RSQ
	Small Rect / Square (up to 18" (B) x 18" (D) openings or 48" perimeter)	625SQ
	Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	626SQ
COMBINATION INLET FILTERS	Large Rect / Square (up to 36" (B) x 24" (D) openings or 144" perimeter)	628SQ
	XL Rect / Square (side by side) (up to 48" (B) x 36" (D) openings)	629LSQ
	Small Rect / Square (off Rect sizing, shipped with Magnetic Curb Flaps)	626CB
NYLOPLAST	Med Rect / Square (off Rect sizing, shipped with Magnetic Curb Flaps)	626CB
	Large Rect / Square (off Rect sizing, shipped with Magnetic Curb Flaps)	628CB
	XL Rect / Square (off Rect sizing, shipped with Magnetic Curb Flaps)	629LSB
NYLOPLAST	12" diameter Nyloplast castings (Stainless Steel Framing standard)	621SNV
	18" diameter Nyloplast castings (Stainless Steel Framing standard)	6218NV
	24" diameter Nyloplast castings (Stainless Steel Framing standard)	6224NV
NYLOPLAST	30" diameter Nyloplast castings (Stainless Steel Framing standard)	6230NV

FLEXSTORM FILTER BAGS	(22" depth)	(12" depth)	Clean Water Flow Rate (GPM/ft ²)	Min A.O.S. (US Steel)
FX Standard Woven Bag	FX	FX-S	200	40
IL/IDOT Non-Woven Bag	IL	IL-S	145	70

Frame P/N from Step 1.	Filter Bag P/N from Step 2.
------------------------	-----------------------------

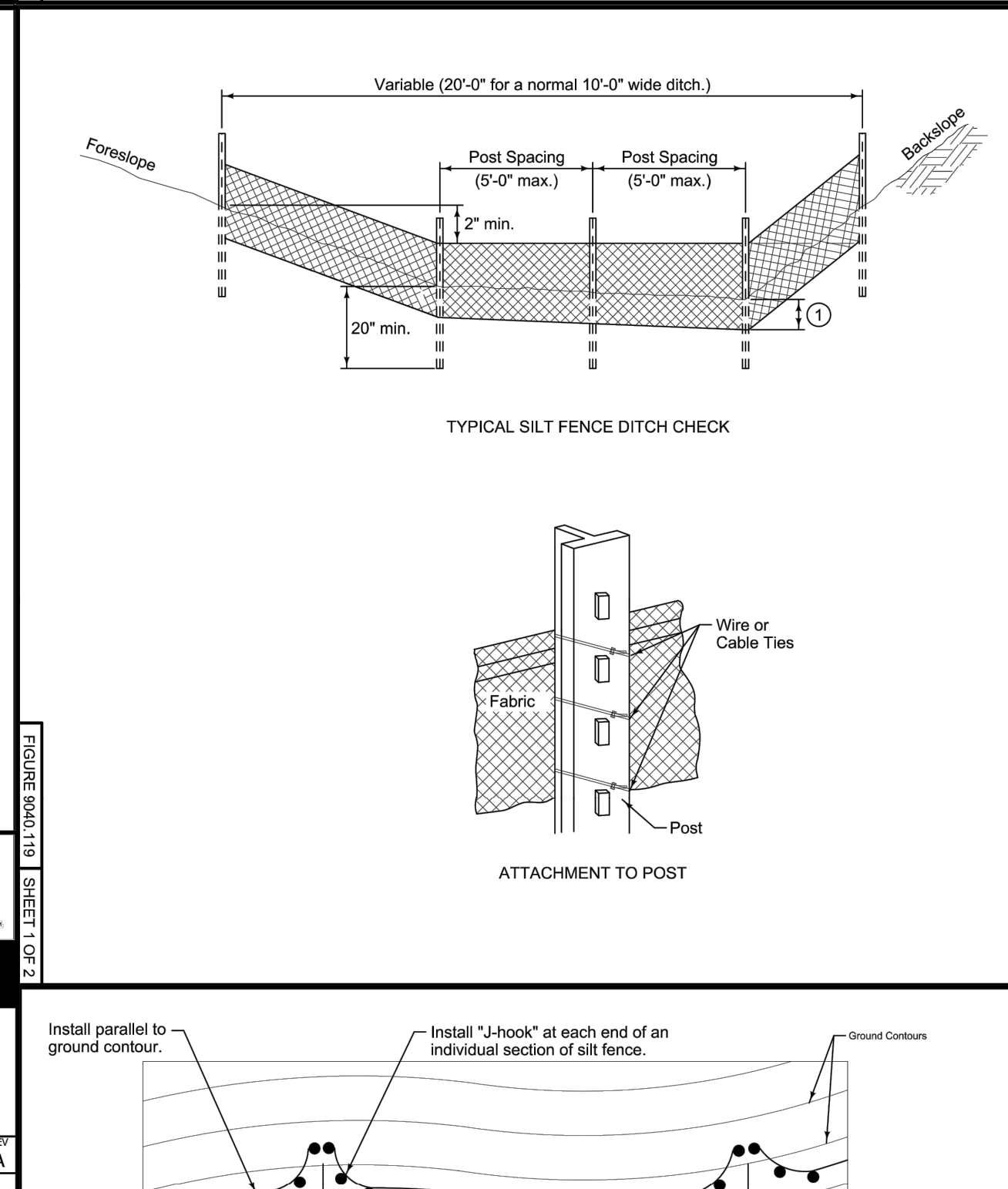
Nominal Bag Size	Solids Storage (Cuft)		Filtered Flow Rate at 50% Max (CFS)	
	FX (Woven)	IL (Non-Woven)	FX (Woven)	IL (Non-Woven)
Small	1.6	1.2	0.9	0.9
Medium	2.1	1.7	1.3	1.3
Large	3.5	2.7	1.9	1.9
XL	4.2	3.6	2.6	2.6

INSTALLATION:

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

FLEXSTORM INLET FILTERS. CATCH IT

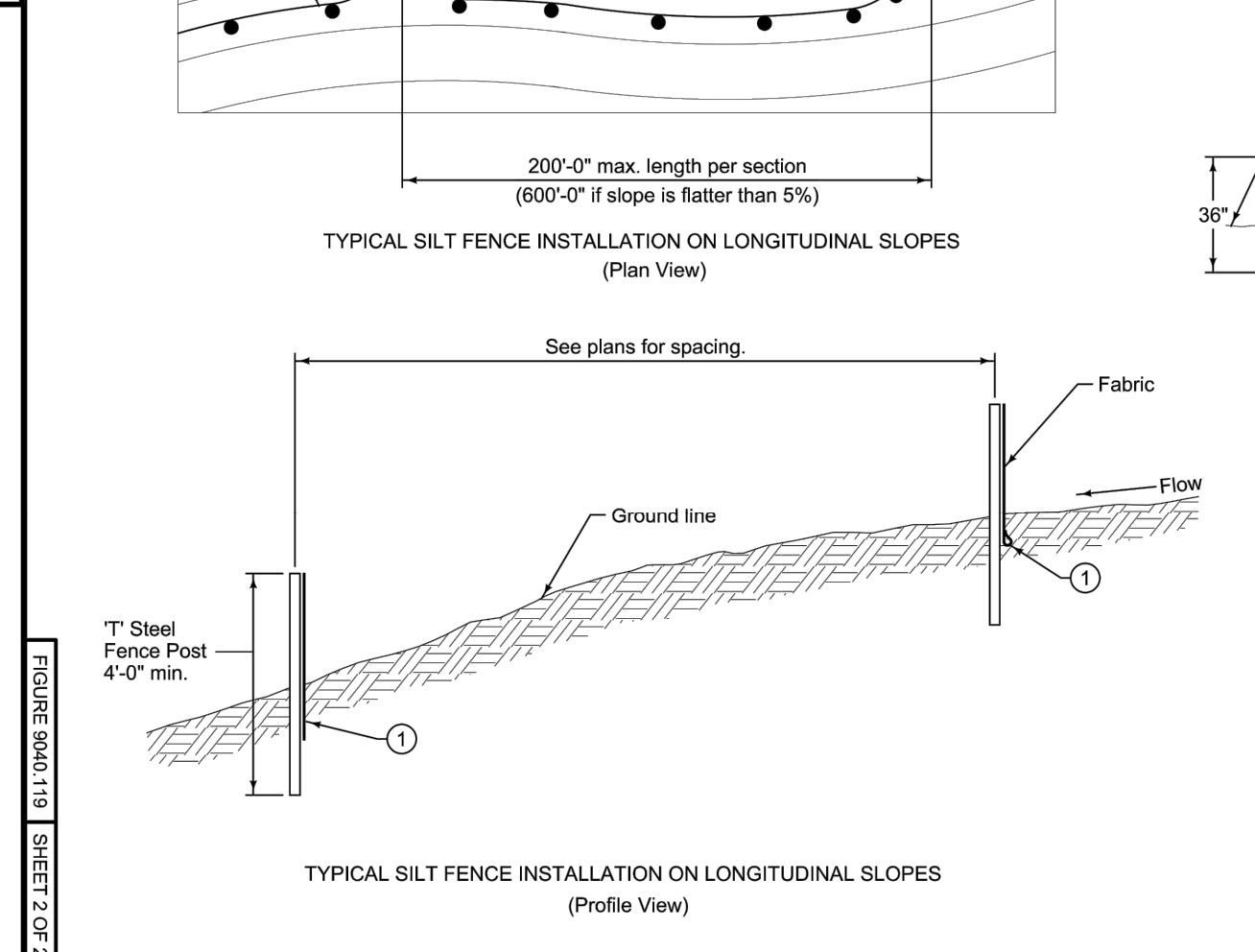
ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM (866) 287-8655 PH (630) 355-3477 FX INFO@INLETFILTERS.COM



SUDAS 9040.119

SUDAS Standard Specifications

SILT FENCE



SUDAS 9040.119

SUDAS Standard Specifications

SILT FENCE

PRELIMINARY

WAUKEE CROSSING FLAT 4

WAUKEE, IOWA

SEDIMENTATION & EROSION CONTROL DETAILS

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SHEET 11 OF 11

A-2162

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SUDAS 9040.120

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STABILIZED CONSTRUCTION ENTRANCE

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