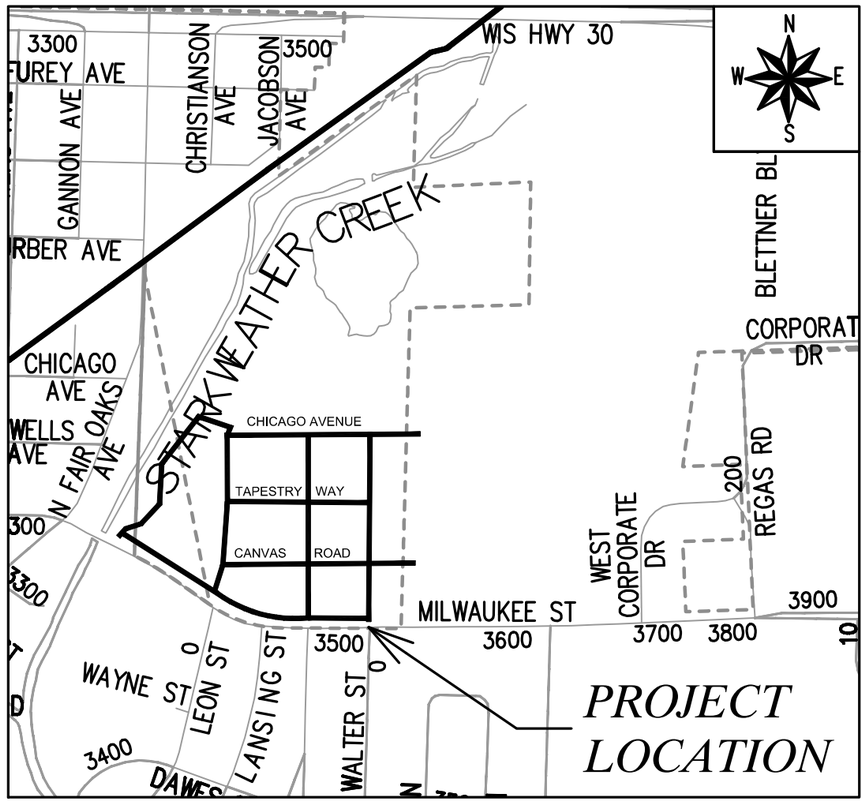
Madison, Wisconsin

CITY OF MADISON
CITY ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
PLAN OF PROPOSED IMPROVEMENT

STARKWEATHER PLAT PHASE 1
STORMWATER MANAGEMENT

CITY PROJECT NO. 15430
CONTRACT NO. 9571

INDEX OF SHEETS



PUBLIC IMPROVEMENT PROJECT APPROVED

JULY 18, 2025

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

05/04/2026

City Engineer — Date

GRADING AND EROSION CONTROL PLAN DESIGNED BY:

WISCONSIN RANDALL T. KOHNKE E-32521 MADISON WI PROFESSIONAL ENGINEER

05/04/2026

STORMWATER MANAGEMENT PLAN , BIORETENTION, AND INFILTRATION BASINS DESIGNED BY:

LICENSED PROFESSIONAL ENGINEER THOMAS H PRICE #062044971 STATE OF ILLINOIS

Thomas Price

Thomas Price (May 4, 2026 14:50:51 CDT)

05/04/2026

PLOT SCALE: 1:40" = 1:40"_XREF
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ORIGINATOR: CITY_OF_MADISON

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PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	ALICIA COOLEY 309-712-5576 ALICIA.COOLEY@ADSPIPE.COM
ADS SALES REP:	BRENT YEAGER 608-212-7742 BRENT.YEAGER@ADSPIPE.COM
PROJECT NO:	S360413

Advanced Drainage Systems, Inc.

SiteAssist™
FOR STORMTECH
INSTALLATION INSTRUCTIONS
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STARKWEATHER CREEK / VOIT FARMS REGIONAL DISTRICT STORMWATER

MADISON, WI

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-7200.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

1. STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

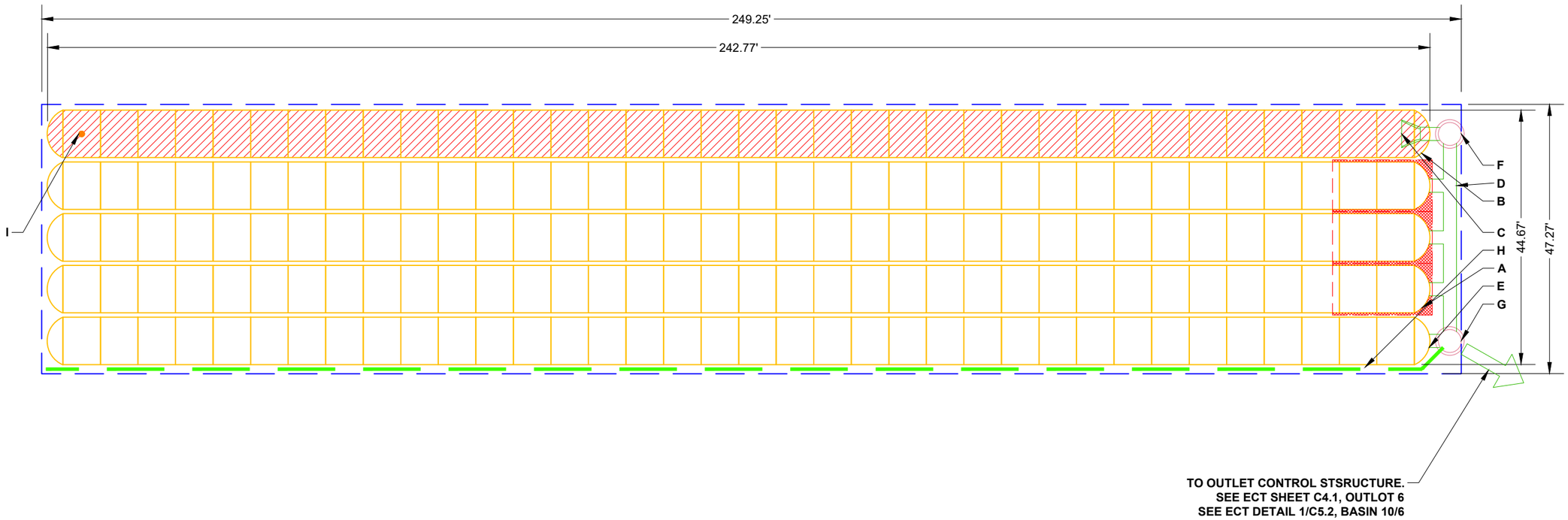
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT - BASIN 10/OUTLOT 6	
180	STORMTECH MC-7200 CHAMBERS
10	STORMTECH MC-7200 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	STONE VOID
50889	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)
11724	SYSTEM AREA (SF)
593.0	SYSTEM PERIMETER (ft)

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" TOP PARTIAL CUT END CAP, PART#: MC4500IEPP24T / TYP OF ALL 24" TOP CONNECTIONS	23.05"	
PREFABRICATED END CAP	B	24" BOTTOM PARTIAL CUT END CAP, PART#: MC4500IEPP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.26"	
FLAMP	C	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
MANIFOLD	D	24" x 24" TOP MANIFOLD, ADS N-12	23.05"	
PIPE CONNECTION	E	24" BOTTOM CONNECTION	2.26"	
CONCRETE STRUCTURE	F	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		28.5 CFS IN
CONCRETE STRUCTURE	G	OCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		7.0 CFS OUT
UNDERDRAIN	H	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		
INSPECTION PORT	I	4" SEE DETAIL		

*INVERT ABOVE BASE OF CHAMBER

PROPOSED ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	868.00
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	863.50
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	863.00
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	863.00
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	863.00
TOP OF STONE:	862.00
TOP OF MC-7200 CHAMBER:	861.00
24" x 24" TOP MANIFOLD INVERT:	857.92
24" ISOLATOR ROW PLUS INVERT:	856.19
24" BOTTOM CONNECTION INVERT:	856.19
BOTTOM OF MC-7200 CHAMBER:	856.00
UNDERDRAIN INVERT:	855.25
BOTTOM OF STONE:	855.25



ISOLATOR ROW PLUS
(SEE DETAIL)

PLACE MINIMUM 17.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

STARKWEATHER CREEK / VOIT FARMS BASIN 10
MADISON, WI, USA

DATE: 11/10/2025 | DRAWN: BM | CHECKED: N/A | PROJECT #:

DATE	DWN	CHK

StormTech®
Chamber System

4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

0 20 40

CONCEPTUAL LAYOUT - BASIN 12 / OUTLOT 5

182	STORMTECH MC-7200 CHAMBERS
14	STORMTECH MC-7200 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
52,456	**INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)**
12191	SYSTEM AREA (ft²)
512	SYSTEM PERIMETER (ft)

CONCEPTUAL ELEVATIONS - BASIN 12

872.00	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
867.50	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
867.00	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
867.00	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
867.00	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
866.00	TOP OF STONE
865.00	TOP OF MC-7200 CHAMBER
861.92	30" X 24" TOP MANIFOLD (24" PIPE INVERT)
861.43	30" X 24" TOP MANIFOLD (36" PIPE INVERT)
860.19	24" ISOLATOR ROW PLUS CONNECTION INVERT
860.27	36" BOTTOM MANIFOLD / CONNECTION INVERT
860.00	BOTTOM OF MC-7200 CHAMBER
859.25	UNDERDRAIN INVERT
859.25	BOTTOM OF STONE

NOTES

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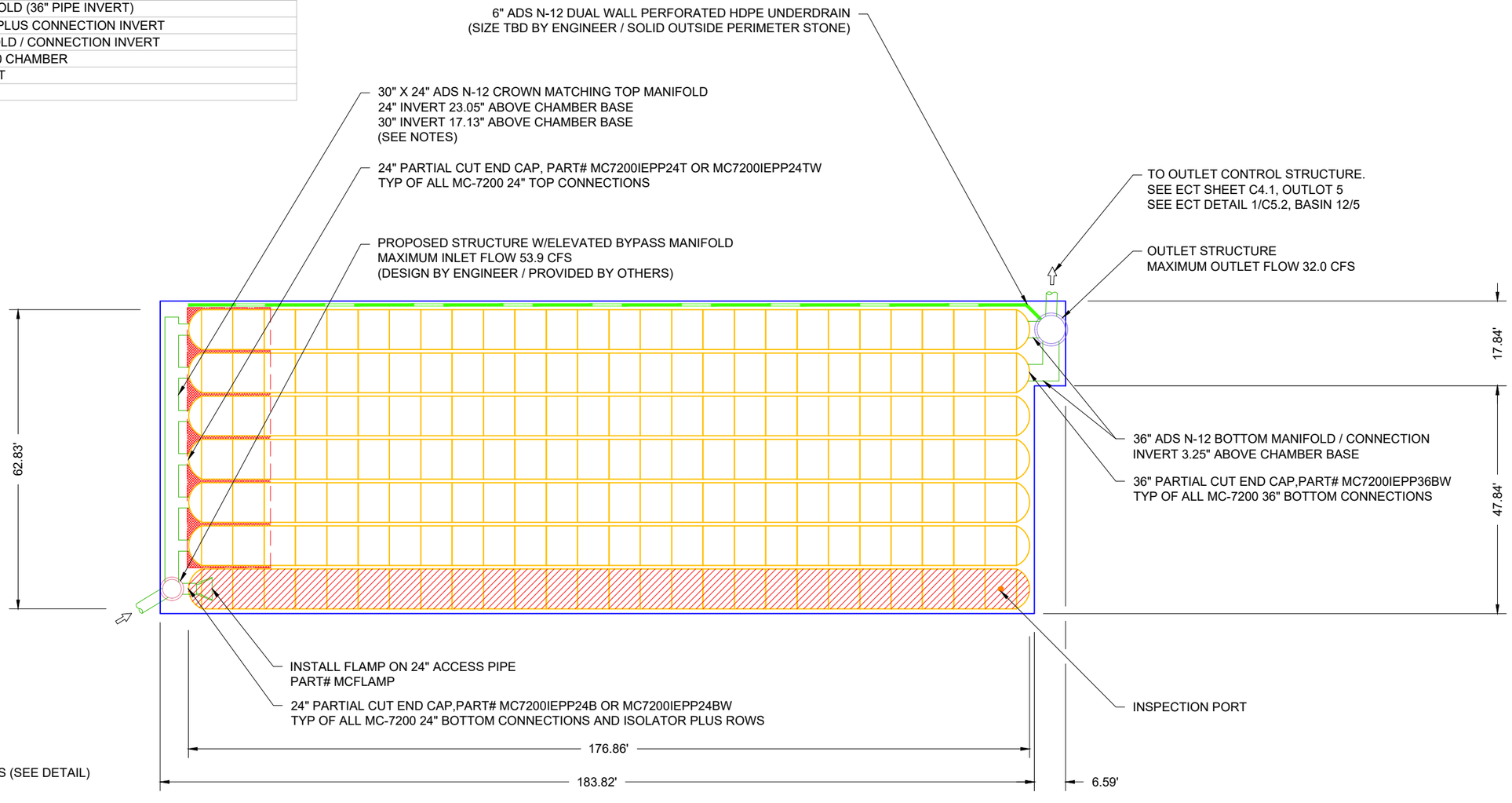

ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 17.5' OF ADSPLUS125 WOVEN GEOTEXTILE
OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET
FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

THERMOPLASTIC LINER (SEE TECHNICAL NOTE 6.50 /
PROVIDED BY OTHERS / DESIGN BY OTHERS)

STARKWEATHER CREEK / VOIT FARMS
REGIONAL DISTRICT STORMWATER
MADISON, WI

DATE: 6/21/2023 | DRAWN: PEM
PROJECT #: S360413 | CHECKED: JPR

DATE	DRWN	CHKD	DESCRIPTION
08/20/24	AVM	JPR	REVISED PER MARK UP
06/22/23	CJM	CJM	REDRAW SYSTEM 22 W/MC-7200 CHAMBERS

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50' 25' 0

CONCEPTUAL LAYOUT - BASIN 22 / OUTLOT 2

143	STORMTECH MC-7200 CHAMBERS
14	STORMTECH MC-7200 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
41,909	**INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)**
9809	SYSTEM AREA (ft²)
438	SYSTEM PERIMETER (ft)

CONCEPTUAL ELEVATIONS - BASIN 22

869.00	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
864.50	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
864.00	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
864.00	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
864.00	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
863.00	TOP OF STONE
862.00	TOP OF MC-7200 CHAMBER
858.92	30" X 24" TOP MANIFOLD (24" PIPE INVERT)
858.43	30" X 24" TOP MANIFOLD (36" PIPE INVERT)
857.19	24" ISOLATOR ROW PLUS CONNECTION INVERT
857.27	36" BOTTOM MANIFOLD / CONNECTION INVERT
857.00	BOTTOM OF MC-7200 CHAMBER
856.25	UNDERDRAIN INVERT
856.25	BOTTOM OF STONE

NOTES

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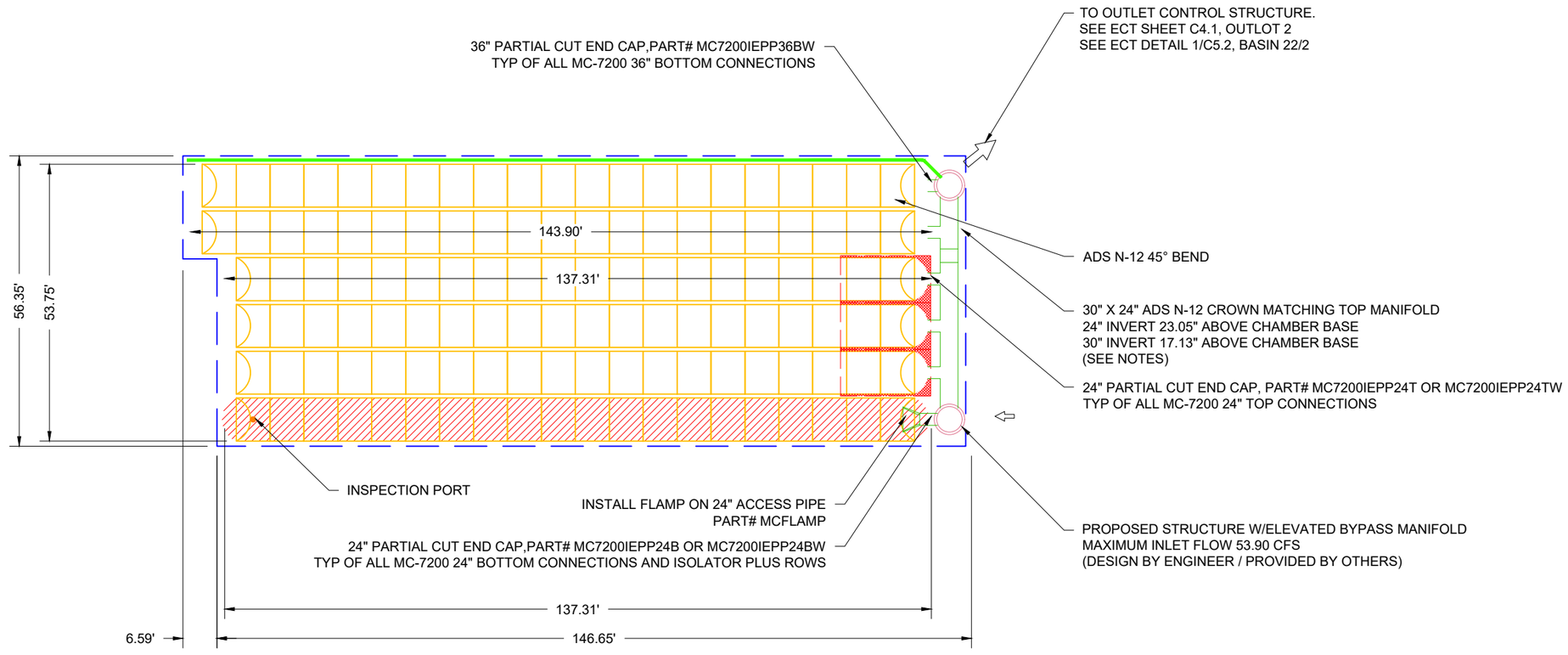

ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 17.5' OF ADSPLUS125 WOVEN GEOTEXTILE
OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET
FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

STARKWEATHER CREEK / VOIT FARMS
REGIONAL DISTRICT STORMWATER
MADISON, WI

DATE: 6/21/2023 | DRAWN: PEM
PROJECT #: S360413 | CHECKED: JPR

DATE	DRWN	CHKD	DESCRIPTION
08/20/24	AVM	JPR	REVISED PER MARK UP
06/22/23	CJM	CJM	REDRAW SYSTEM 22 W/MC-7200 CHAMBERS

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0 25' 50'

CONCEPTUAL LAYOUT - BASIN 30 / OUTLOT 1

175	STORMTECH MC-7200 CHAMBERS
14	STORMTECH MC-7200 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	% STONE VOID
51,078	**INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)**
11954	SYSTEM AREA (ft²)
490	SYSTEM PERIMETER (ft)

CONCEPTUAL ELEVATIONS - BASIN 30

867.00	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
862.50	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
862.00	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
862.00	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
862.00	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
861.00	TOP OF STONE
860.00	TOP OF MC-7200 CHAMBER
856.92	24" TOP MANIFOLD INVERT
855.19	24" ISOLATOR ROW PLUS CONNECTION INVERT
855.25	30" BOTTOM CONNECTION INVERT
855.00	BOTTOM OF MC-7200 CHAMBER
854.25	UNDERDRAIN INVERT
854.25	BOTTOM OF STONE

NOTES

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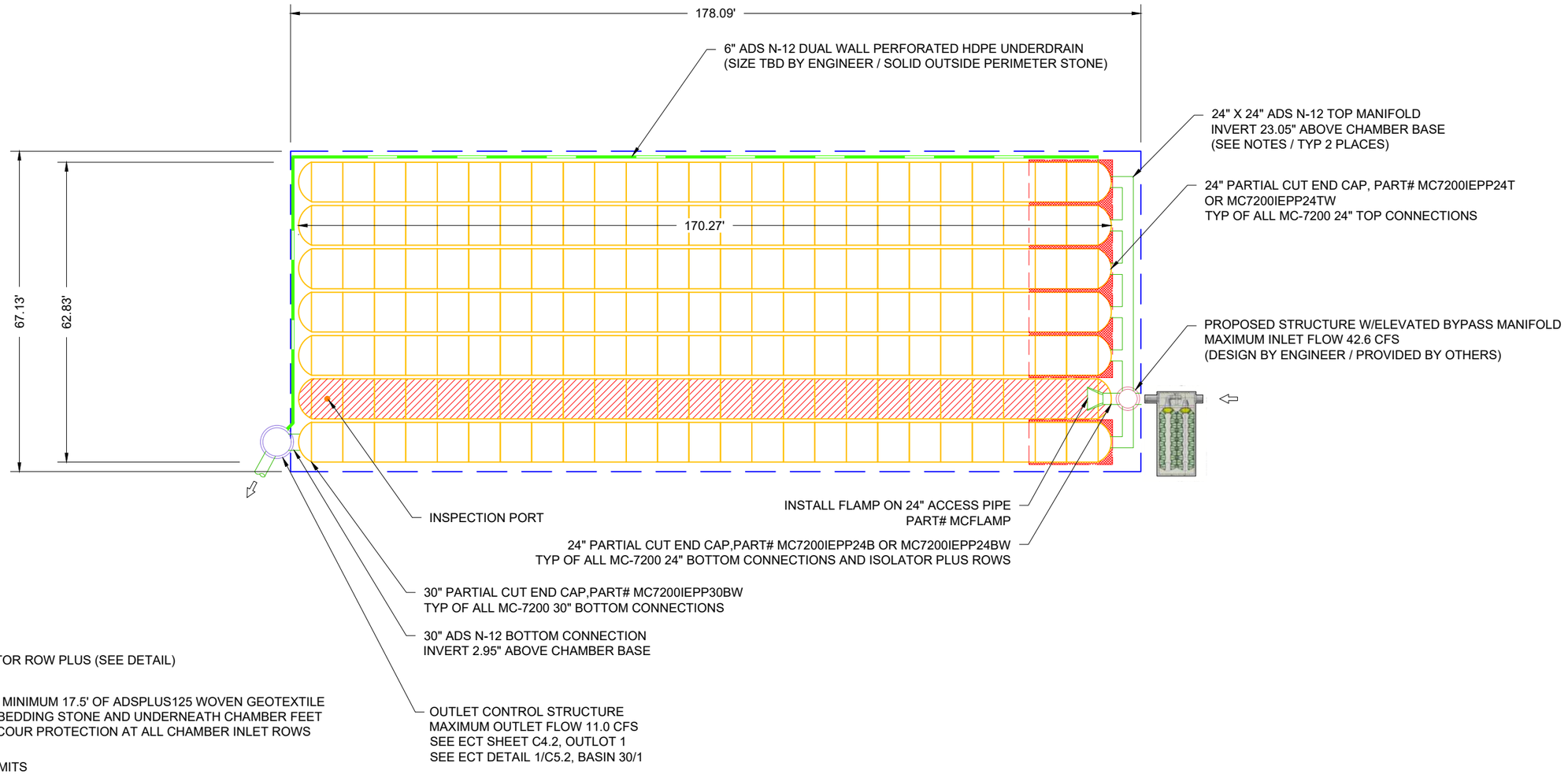

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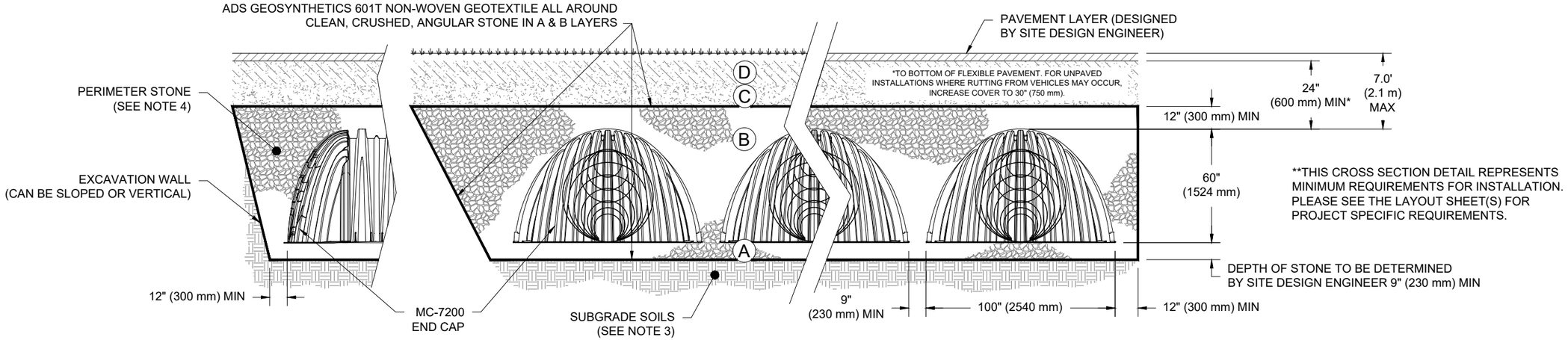
HILLIARD, OH 43026

50'
25'
0

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

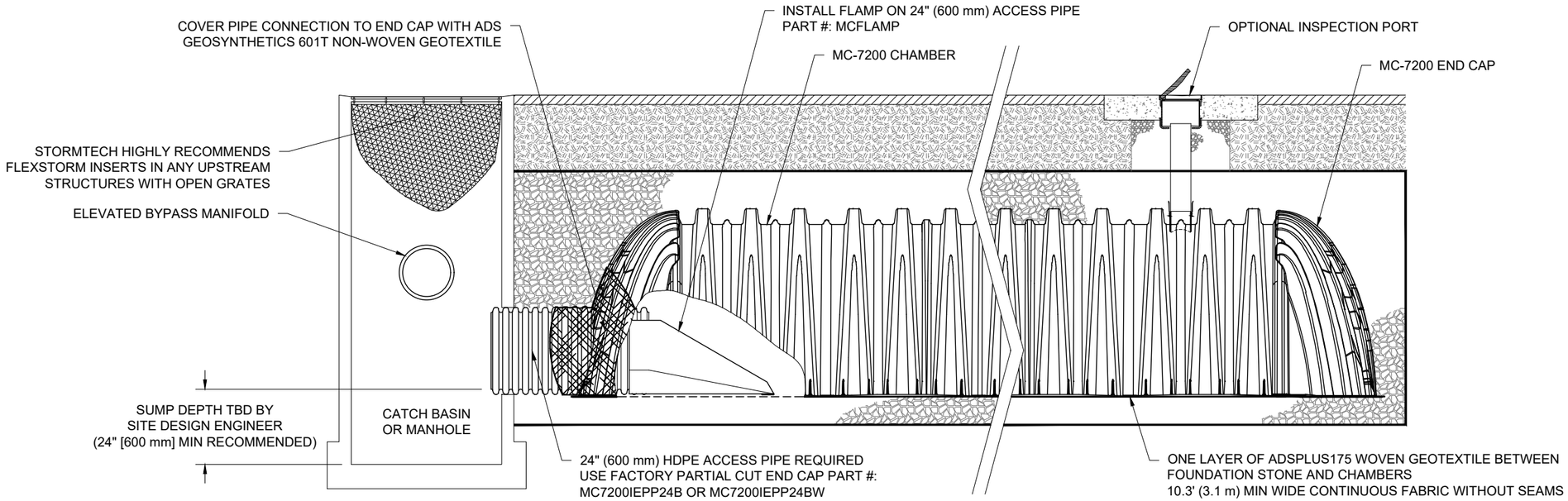
STARKWEATHER CREEK / VOIT FARMS
REGIONAL DISTRICT STORMWATER
MADISON, WI

DATE: 6/21/2023 | DRAWN: PEM
PROJECT #: S360413 | CHECKED: JPR

DATE	DRWN	CHKD	DESCRIPTION
08/20/24	AVM	JPR	REVISED PER MARK UP
06/22/23	CJM	CJM	REDRAW SYSTEM 22 WMC-7200 CHAMBERS

StormTech®
Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026



MC-7200 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

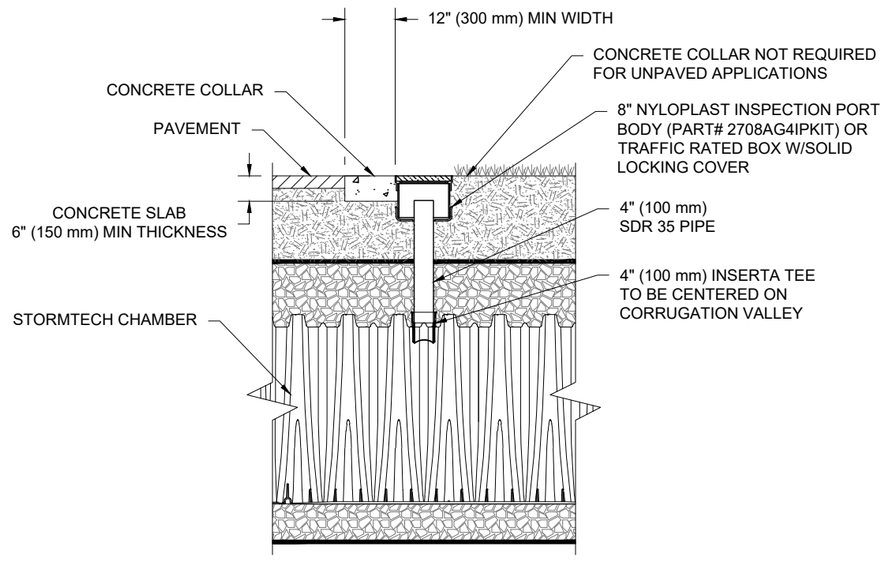
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)
NTS

STARKWEATHER CREEK / VOIT FARMS
REGIONAL DISTRICT STORMWATER
MADISON, WI

DATE: 6/21/2023 | DRAWN: PEM
PROJECT #: S360413 | CHECKED: JPR

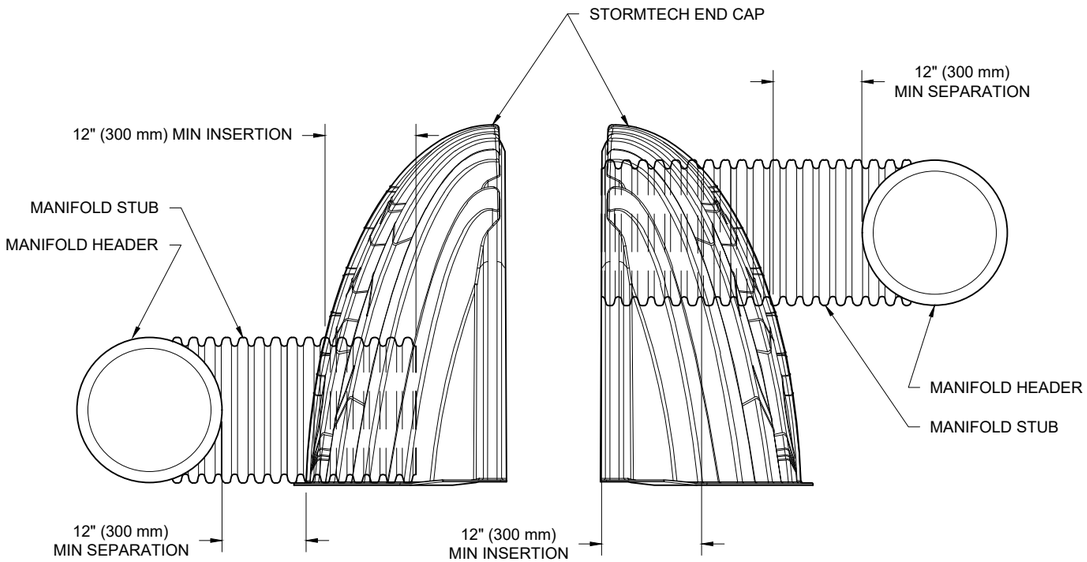
DATE	DRWN	CHKD	DESCRIPTION
08/20/24	AVM	JPR	REVISED PER MARK UP
06/22/23	CJM	CJM	REDRAW SYSTEM 22 W/MC-7200 CHAMBERS

StormTech® Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

MC-SERIES END CAP INSERTION DETAIL

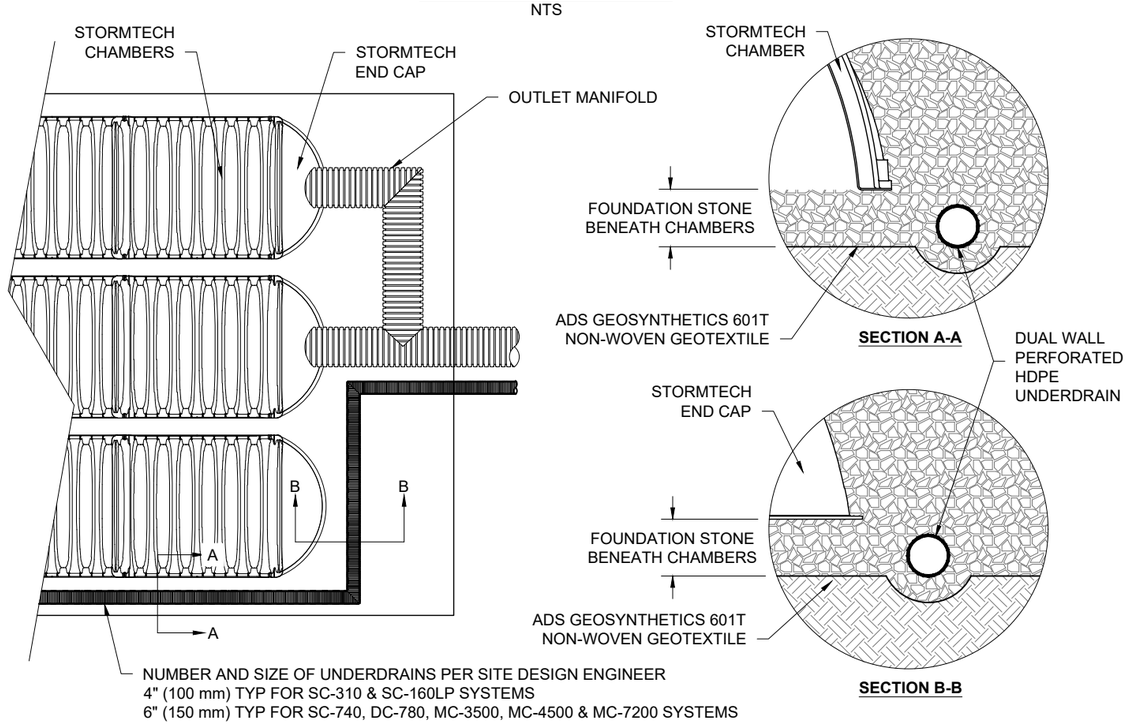
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

UNDERDRAIN DETAIL

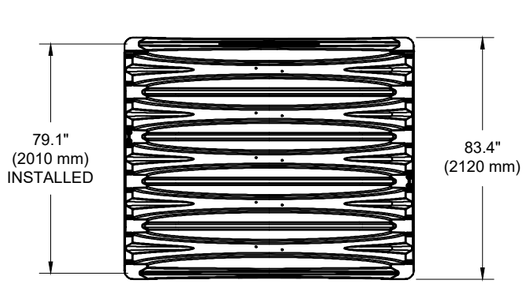
NTS

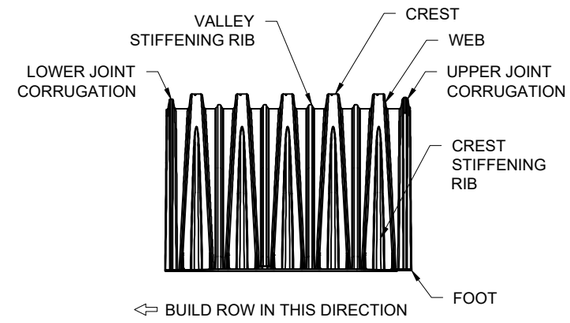


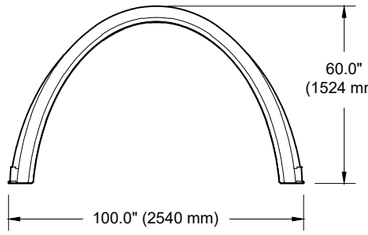
NUMBER AND SIZE OF UNDERDRAINS PER SITE DESIGN ENGINEER
4" (100 mm) TYP FOR SC-310 & SC-160LP SYSTEMS
6" (150 mm) TYP FOR SC-740, DC-780, MC-3500, MC-4500 & MC-7200 SYSTEMS

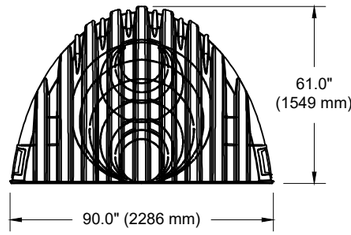
MC-7200 TECHNICAL SPECIFICATION

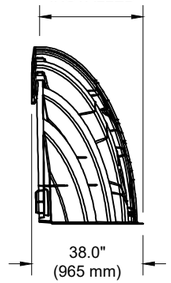
NTS











NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 79.1"	(2540 mm X 1524 mm X 2010 mm)
CHAMBER STORAGE	175.9 CUBIC FEET	(4.98 m³)
MINIMUM INSTALLED STORAGE*	267.3 CUBIC FEET	(7.56 m³)
WEIGHT (NOMINAL)	205 lbs.	(92.9 kg)

NOMINAL END CAP SPECIFICATIONS

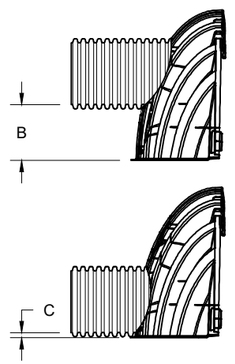
SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC7200IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200IEPP06B		---	0.86" (22 mm)
MC7200IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC7200IEPP08B		---	1.01" (26 mm)
MC7200IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200IEPP10B		---	1.33" (34 mm)
MC7200IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC7200IEPP12B		---	1.55" (39 mm)
MC7200IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200IEPP15B		---	1.70" (43 mm)
MC7200IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC7200IEPP18TW			
MC7200IEPP18B		---	1.97" (50 mm)
MC7200IEPP18BW			
MC7200IEPP24T	24" (600 mm)	23.05" (585 mm)	---
MC7200IEPP24TW			
MC7200IEPP24B		---	2.26" (57 mm)
MC7200IEPP24BW			
MC7200IEPP30BW	30" (750 mm)	---	2.95" (75 mm)
MC7200IEPP36BW	36" (900 mm)	---	3.25" (83 mm)
MC7200IEPP42BW	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-7200 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

STARKWEATHER CREEK / VOIT FARMS
REGIONAL DISTRICT STORMWATER
MADISON, WI

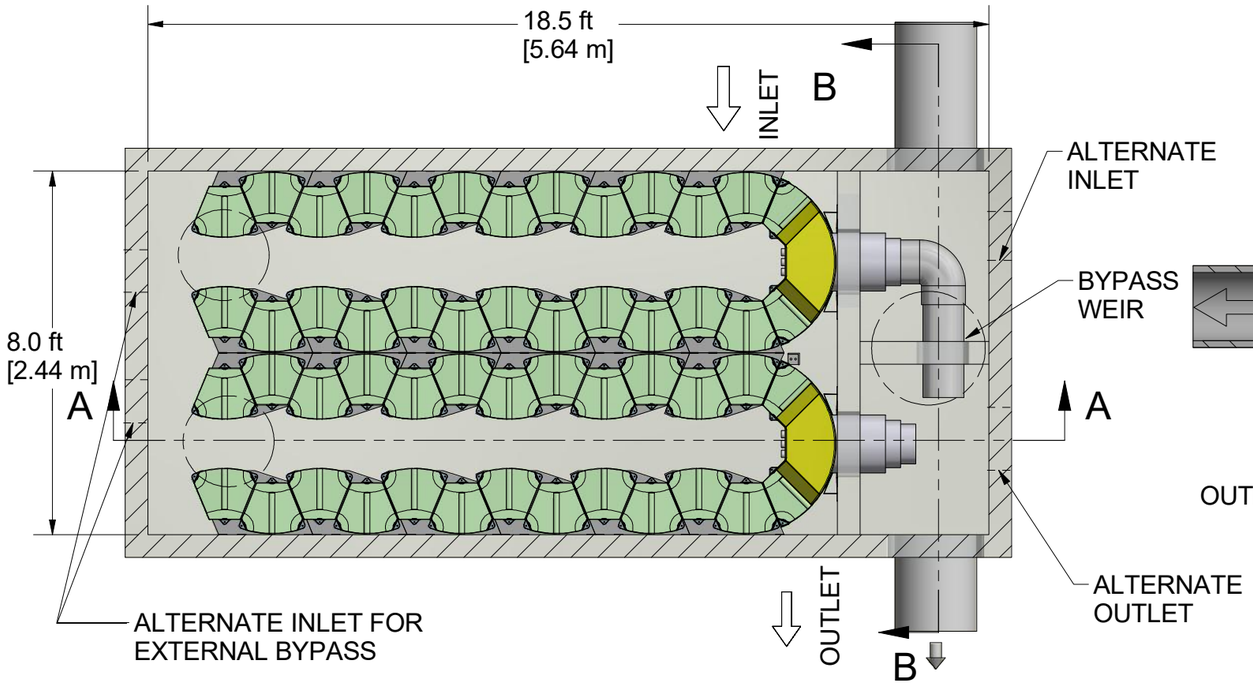
DATE: 6/21/2023 | DRAWN: PEM
PROJECT #: S360413 | CHECKED: JPR

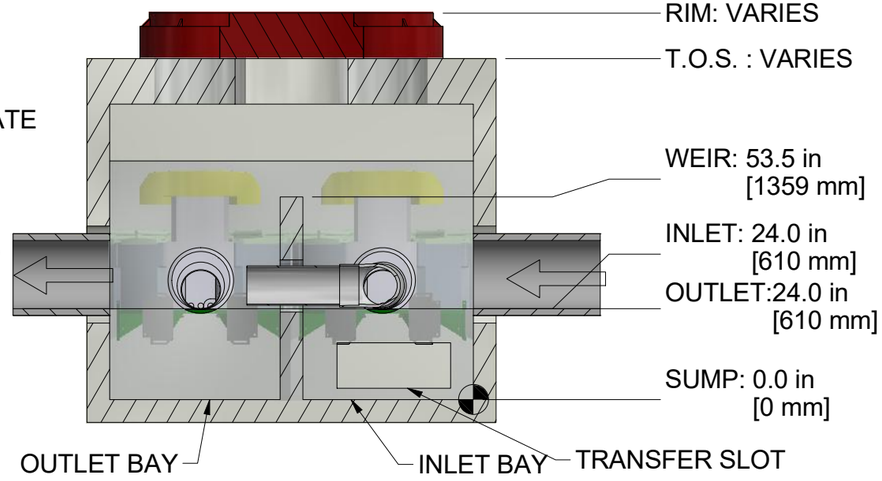
DATE	DRWN	CHKD	DESCRIPTION
08/20/24	AVM	JPR	REVISED PER MARK UP
06/22/23	CJM	CJM	REDRAW SYSTEM 22 W/MC-7200 CHAMBERS

StormTech®
Chamber System
888-892-2694 | WWW.STORMTECH.COM

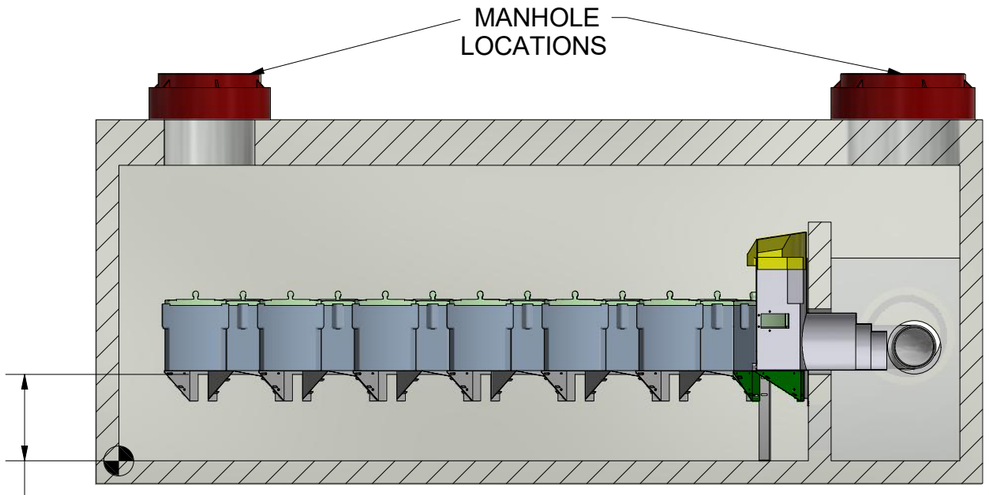
4640 TRUEMAN BLVD
HILLIARD, OH 43026

ADS





SECTION B-B



SECTION A-A

CAPACITIES:

- Minimum performance: 80% removal. Washington DOE/NJCAT verified at the peak treatment flow.
- Peak treatment flow:
  .033 CFS (0.9 LPS) (15 GPM) per module (Ribbons)
  .022 CFS (0.6 LPS) (10 GPM) per module (Long Ribbons)
  .056 CFS (1.6 LPS) (25 GPM) per module (CPZ)
- Maximum number of ribbon modules per outlet module: 36
- Maximum number of CPZ modules per outlet module: 18 (contract Hydro if more are required)

ADDITIONAL DESIGN INFORMATION:

- Normal operating W.S.E. is 26-30" (660-762mm) above the outlet invert
- Media Types Available: Ribbons, CPZ

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERENCES ARE:
FRACTIONS ± 1/16
DECIMALS:
X.X ± .06
X.XX ± .03
X.XXX ± .015
ANGLES: ± .5°

PROJECTION

COMMENTS:

1. STRUCTURE WALL AND SLAB THICKNESSES ARE NOT TO SCALE
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING THE STRUCTURE
3. NOT FOR CONSTURCION CONTACT HYDRO FOR SITE SPECIFIC DRAWING
4. NOT ALL SIZES AVAILABLE IN ALL AREAS
5. SUMP DEPTH AVAILABLE IN 24" (610mm) CPZ, RIBBONS AND 36" (914mm) LONG RIBBONS DEPTH

REVISION HISTORY

REV	BY	DESCRIPTION	DATE
-	ER	FIRST RELEASE	3/8/2019

DATE: 3/8/2019
SCALE: 1:40
DRAWN BY: ER
CHECKED BY:
APPROVED BY

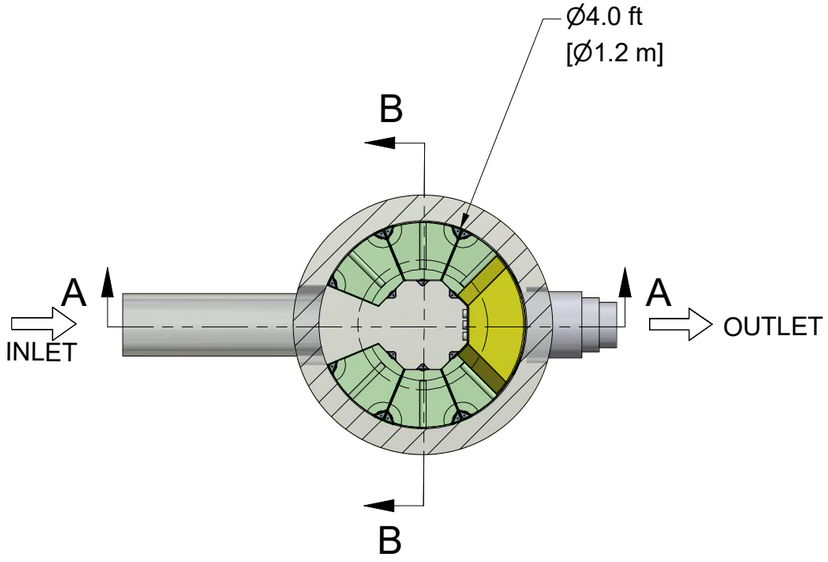
Title
UP-FLO FILTER
8ft (2438mm) X 18.5ft (5639mm)

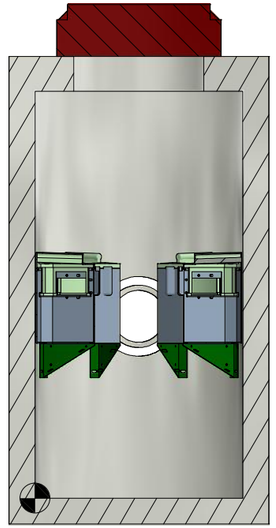
52 MODULES MAX

Hydro International

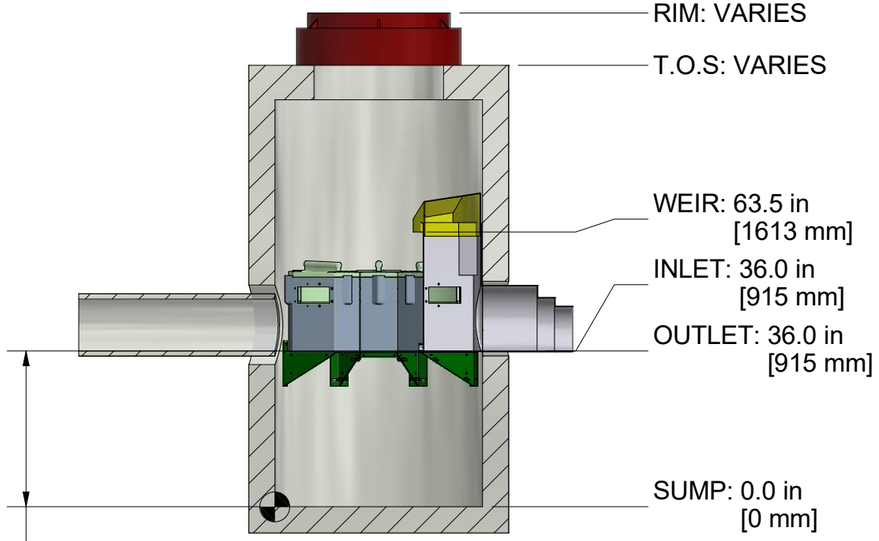
94 Hutchins Drive
Portland, ME 04102
Tel: +1 (207) 756-6200
Fax: +1 (207) 756-6212
hydro-int.com

WEIGHT: N/A
MATERIAL:
NEXT ASSEMBLY: 8x18.5-1
DRAWING NO.: 8x18.5-UFF-1
SHEET SIZE: B
SHEET: 1 OF 1
Rev: -

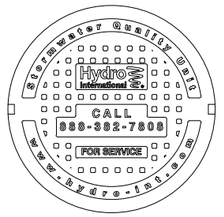




SECTION B-D



SECTION A-A



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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERENCES ARE:
FRACTIONS ± 1/16
DECIMALS:
X.X ± .06
X.XX ± .03
X.XXX ± .015
ANGLES: ± .5°

PROJECTION

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REVISION HISTORY

REV	BY	DESCRIPTION	DATE
-	ER	FIRST RELEASE	6/17/2019

DATE: 6/17/2019
SCALE: NTS
DRAWN BY: ER
CHECKED BY:
APPROVED BY

Title
UP-FLO FILTER
4ft Manhole

6 MODULES MAX

Sizing Tool

Hydro International®
94 Hutchins Drive
Portland, ME 04102
Tel: +1 (207) 756-6200
Fax: +1 (207) 756-6212
hydro-int.com

WEIGHT: N/A
MATERIAL:
NEXT ASSEMBLY: 4 MH-1
DRAWING NO.: 4 MH-UFF-1
SHEET SIZE: B
SHEET: 1 OF 1
Rev: -

BASIN 10 / OUTLOT 6

BASIN 22 / OUTLOT 2

BASIN 12 / OUTLOT 5

BASIN 30 / OUTLOT 1

OUTLOT 8

CITY TO PROVIDE COURTESY MOWING FOR PATH 10' OFFSET TYP. ADJACENT TO PUBLIC PROPERTY

OUTLOT 7: PARKS LAND

CHICAGO AVENUE PATH

STARKWEATHER CREEK PATH

FAIR OAKS AVENUE

COURTESY MOWING FOR PATH WITHIN PUBLIC PROPERTY

CHICAGO AVENUE

LOT 13

LOT 12

LOT 11

LOT 10

LOT 5

N LEON STREET

N HARDING STREET

N WALTER STREET

OUTLOT 6

OUTLOT 4

OUTLOT 2

TAPESTRY WAY

OUTLOT 5

OUTLOT 3

LOT 4

LOT 7

LOT 8

LOT 9

LOT 6

MILWAUKEE STREET PATH

GARVER PATH

CANVAS ROAD

OUTLOT 1

LOT 2

LOT 1

MILWAUKEE STREET

MAINTENANCE LEGEND:

= SIDEWALK AND BIKE PATHS REQUIRE SNOW REMOVAL BY CITY

= BUS STOP PAD REQUIRES SNOW REMOVAL BY CITY

=COURTESY MOWING ADJACENT TO PATH BORDERING/WITHIN PUBLIC LAND

=STORMWATER BASINS TO BE MAINTAINED PER CONTRACT 9571

= PUBLIC CITY ENGINEERING STORMWATER PROPERTY

= PRIVATE OUTLOT

NOT FOR CONSTRUCTION - CITY RECORDS ONLY

MARK	REVISION	DATE	BY
---	---	---	---
---	---	---	---
---	---	---	---
---	---	---	---

Designed By: ###
Date: 4/14/2026 11:09 AM
Scale: Custom
15430
MN-1

15430

MAINTENANCE PLAN (CITY USE ONLY)

STARKWEATHER PLAT PHASE 1 STORMWATER MANAGEMENT

MADISON, WI

CONTRACT NO: 9571

\\Gisserver\data\DESIGN\Projects\15430\CAD\Streets\15430EN-Maintenance.dwg

15430

MN-1

SYMBOL LEGEND

- EXISTING POST
- EXISTING SIGN
- EXISTING CURB INLET
- EXISTING ENDWALL
- EXISTING RECTANGULAR FIELD INLET
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER MAIN VALVE
- EXISTING CURB STOP
- EXISTING WATER MANHOLE
- EXISTING GAS VALVE
- EXISTING DOWN GUY
- EXISTING ELECTRIC MANHOLE
- EXISTING TV MANHOLE
- EXISTING ELECTRIC PEDESTAL
- EXISTING TELEPHONE MANHOLE
- EXISTING LIGHT POLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING UTILITY POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING UNIDENTIFIED MANHOLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING TRAFFIC SIGNAL
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE

LINEWORK LEGEND

- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING WATER MAIN
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING FIBER OPTIC LINE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD GENERAL UTILITIES
- EXISTING GUY LINE
- EXISTING RETAINING WALL
- EXISTING GENERAL FENCE
- EXISTING WIRE FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING CORPORATE BOUNDARY LINE
- 100-YEAR FLOODPLAIN BOUNDARY FROM WDNR
- EXISTING EDGE OF WATER AS SURVEYED ON 7/20/2022
- EXISTING WETLAND DELINEATION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 850.7' 100-YEAR FLOODPLAIN ELEVATION CROSS SECTIONS

SURVEY LEGEND

- BENCHMARK
- FOUND CHISELED "X"
- PUBLIC LAND CORNER AS NOTED
- FOUND 1" ø IRON PIPE
- FOUND 2" ø IRON PIPE
- FOUND 1 1/4" ø IRON ROD
- FOUND 3/4" ø IRON ROD
- FOUND RAILROAD SPIKE
- SET CHISELED "X"
- SET NAIL
- SET P.K. NAIL

HATCHING LEGEND

- EXISTING CONCRETE PAVEMENT/SIDEWALK
- EXISTING ASPHALT
- EXISTING GRAVEL
- DETECTABLE WARNING PAVER

BENCHMARK TABLE:

(1) **BENCHMARK #1 – ELEV. 858.28'**: TOP NUT OF FIRE HYDRANT LOCATED ON THE NORTH SIDE OF MILWAUKEE STREET 450'± WEST OF LEON STREET.

(2) **BENCHMARK #2 – ELEV. 865.81'**: TOP NUT OF FIRE HYDRANT LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF MILWAUKEE STREET AND LANSING STREET.

(3) **BENCHMARK #3 – ELEV. 867.07'**: TOP NUT OF FIRE HYDRANT LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF MILWAUKEE STREET AND HARDING STREET.

(4) **BENCHMARK #4 – ELEV. 873.06'**: TOP NUT OF FIRE HYDRANT LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF MILWAUKEE STREET AND WALTER STREET.

GENERAL NOTES:

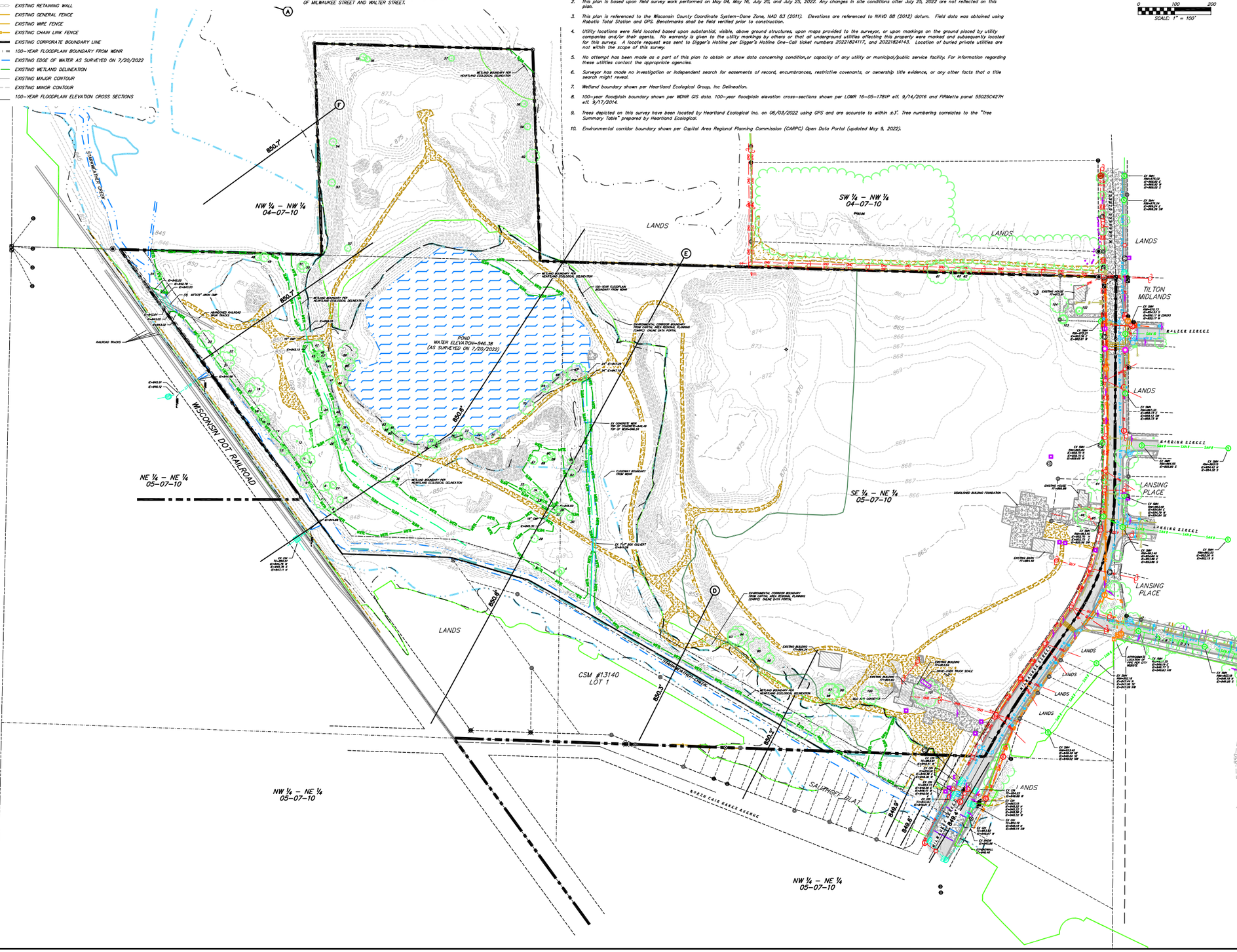
1. This survey was prepared based upon information provided in Commitment for Title Insurance, Commitment No. NCS–1107413–MAD, dated January 13, 2022 at 7:30 a.m. from First American Title Insurance Company, 25 West Main Street, Suite 400, Madison, WI 53703.
   - 1.1. Exception #11: There are no easements referenced, only an option to purchase.
   - 1.2. Exception #12: The Document references an easement for spur track. There are no spur tracks located within or immediately adjacent to the limits of the Parcels Surveyed. There is a spur track located on the North side of the mainline track and within the existing Railroad Right–of–Way. This Document also references the relocation of Starkweather Creek. The limits of Starkweather Creek have been shown.
   - 1.3. Exception #13: Pertains to a sewage drainfield located on 3450 Milwaukee Street, (Parcel 008/0710–051–8251–0) for the benefit of the house located on 3510 Milwaukee Street, (Parcel 008/0710–051–9860–6). The easement for said drainfield is blanket in nature and not plottable. It is possible that this house is served by City Sewer & Water. If that is the case, the Owner should have bills indicating such. Further, Section C of this Document indicates that "In the event the residence on parcel 1 shall be served by a municipal sewerage system, this easement shall cease and be null and void.", so this exception could be removed without the benefit of a survey.
   - 1.4. Exception #14: There are multiple Parcels referenced in this Quit Claim Deed. Some of the Parcels are located outside of the limits of the Survey and are within the Town of Sun Prairie (Parcels 058/0811–221–9685–9 & 058/0811–224–8003–5). Easements referenced in these Parcels do not pertain to the Parcels Surveyed. There are no easements referenced in the Parcels included in this Survey, only exceptions for conveyance for highway purposes.
2. This plan is based upon field survey work performed on May 04, May 16, July 20, and July 25, 2022. Any changes in site conditions after July 25, 2022 are not reflected on this plan.
3. This plan is referenced to the Wisconsin County Coordinate System–Dane Zone, NAD 83 (2011). Elevations are referenced to NAVD 88 (2012) datum. Field data was obtained using Robotic Total Station and GPS. Benchmarks shall be field verified prior to construction.
4. Utility locations were field located based upon substantial, visible, above ground structures, upon maps provided to the surveyor, or upon markings on the ground placed by utility companies and/or their agents. No warranty is given to the utility markings by others or that all underground utilities affecting this property were marked and subsequently located for this survey. A locate request was sent to Digger's Hotline per Digger's Hotline One–Call ticket numbers 20221824117, and 20221824143. Location of buried private utilities are not within the scope of this survey.
5. No attempt has been made as a part of this plan to obtain or show data concerning condition,or capacity of any utility or municipal/public service facility. For information regarding these utilities contact the appropriate agencies.
6. Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, or ownership title evidence, or any other facts that a title search might reveal.
7. Wetland boundary shown per Heartland Ecological Group, Inc Delineation.
8. 100–year floodplain boundary shown per WDNR GIS data. 100–year floodplain elevation cross–sections shown per LOMR 16–05–1781P eff. 9/14/2016 and FIRMette panel 55025C427H eff. 9/17/2014.
9. Trees depicted on this survey have been located by Heartland Ecological Inc. on 08/03/2022 using GPS and are accurate to within ±3'. Tree numbering correlates to the "Tree Summary Table" prepared by Heartland Ecological.
10. Environmental corridor boundary shown per Capital Area Regional Planning Commission (CARPC) Open Data Portal (updated May 9, 2022).

SURVEYED FOR:
VOIT LAND, LLC
3450 MILWAUKEE STREET
MADISON, WI 53714

SURVEYED BY:
Vierbicher Associates, Inc.
999 Fourier Drive,
Suite 201
Madison, WI 53717
(608) 826–0532

BEARINGS ARE BASED UPON THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY; THE WEST LINE OF THE NW 1/4 OF SEC 04–07–10 MEASURED AS BEARING S01°36'15"W

0 100 200
SCALE: 1" = 100'



vierbicher
advisors / engineers / surveyors

Existing Conditions

Starkweather Plat
City of Madison
Dane County, WI

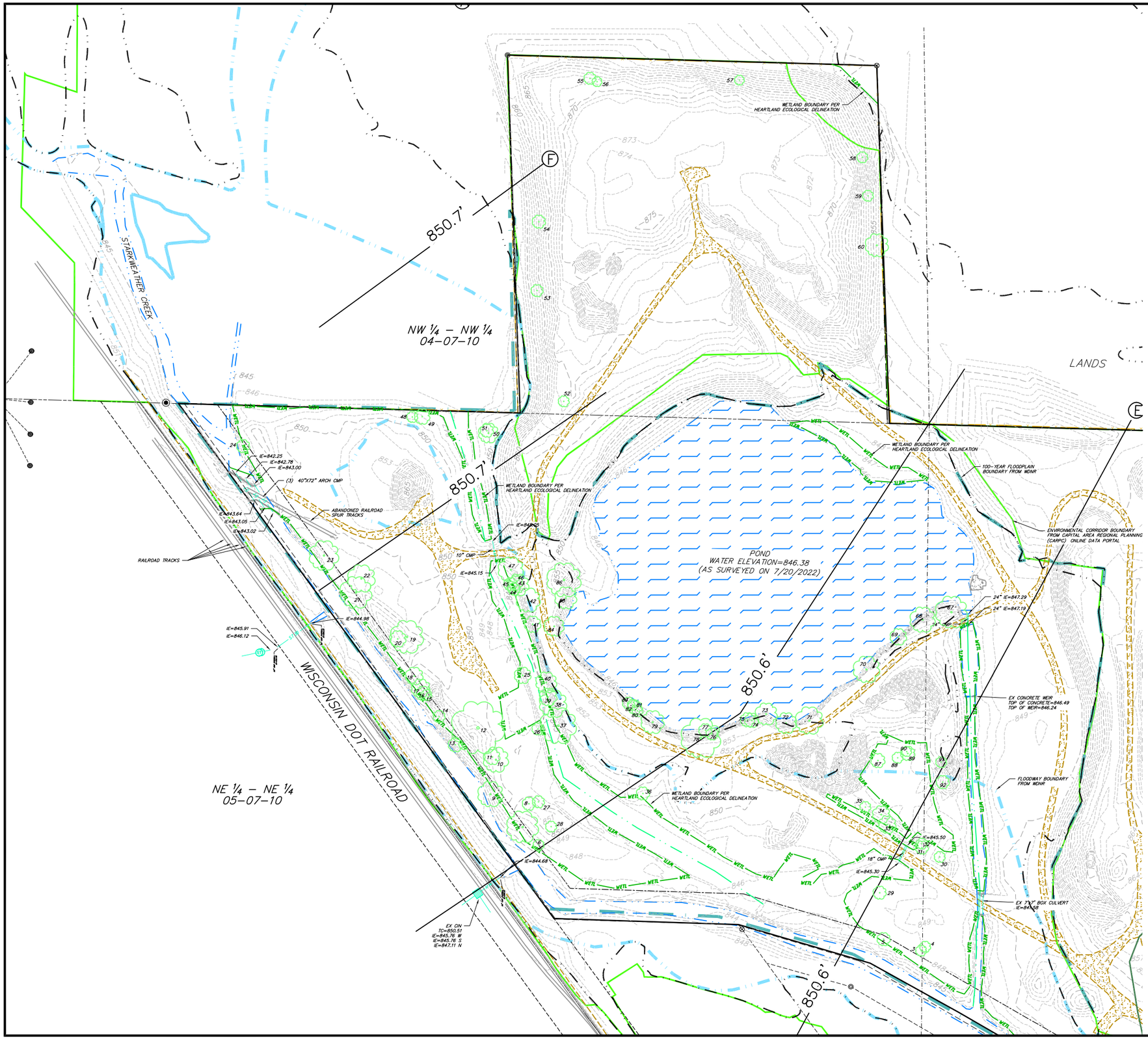
REVISIONS			
NO.	DATE	REMARKS	

REVISIONS			
NO.	DATE	REMARKS	

DATE: 04/02/2026
DRAFTER: AMEA
CHECKED: MMAR/RKOL
PROJECT NO: 220031

C1.0

02 Apr 2026 - 3:04p M:\Stone House Development\220031_Voit Farm\CAD\V220031_Topo.dwg by: rjdill



SYMBOL LEGEND

- EXISTING POST
- EXISTING SIGN
- EXISTING CURB INLET
- EXISTING ENDWALL
- EXISTING RECTANGULAR FIELD INLET
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING WATER MAIN VALVE
- EXISTING CURB STOP
- EXISTING WATER MANHOLE
- EXISTING GAS VALVE
- EXISTING DOWN GUY
- EXISTING ELECTRIC MANHOLE
- EXISTING TV MANHOLE
- EXISTING ELECTRIC PEDESTAL
- EXISTING TELEPHONE MANHOLE
- EXISTING LIGHT POLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING UTILITY POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING UNIDENTIFIED MANHOLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING TRAFFIC SIGNAL
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE

SURVEY LEGEND

- BENCHMARK
- FOUND CHISELED "X"
- PUBLIC LAND CORNER AS NOTED
- FOUND 1" ø IRON PIPE
- FOUND 2" ø IRON PIPE
- FOUND 1 1/4" ø IRON ROD
- FOUND 3/4" ø IRON ROD
- FOUND RAILROAD SPIKE
- SET CHISELED "X"
- SET NAIL
- SET P.K. NAIL

GRAPHIC SCALE FEET
0 40 80 160

HATCHING LEGEND

- EXISTING CONCRETE PAVEMENT/SIDEWALK
- EXISTING ASPHALT
- EXISTING GRAVEL
- DETECTABLE WARNING PAVER

LINEWORK LEGEND

- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING WATER MAIN
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING FIBER OPTIC LINE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD GENERAL UTILITIES
- EXISTING GUY LINE
- EXISTING RETAINING WALL
- EXISTING GENERAL FENCE
- EXISTING WIRE FENCE
- EXISTING CHAIN LINK FENCE
- FLOODWAY BOUNDARY FROM WDNR
- 100-YEAR FLOODPLAIN BOUNDARY FROM WDNR
- EXISTING EDGE OF WATER AS SURVEYED ON 7/20/2022
- EXISTING WETLAND DELINEATION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 850.7' 100-YEAR FLOODPLAIN ELEVATION CROSS SECTIONS

vierbicher
advisors / engineers / surveyors

Existing Conditions - North

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS NO.	DATE	REMARKS

REVISIONS NO.	DATE	REMARKS

DATE 04/02/2026
DRAFTER ZDRE/JDEL
CHECKED RKOL
PROJECT NO. 220031

C1.1

SW ¼ – NW ¼
04–07–10

SE ¼ – NE ¼
05–07–10

LANDS

TILTON MIDLANDS

LANSING PLACE

W A L K E R S T R E E T

H A R D I N G S T R E E T

L A N S I N G S T R E E T

100–YEAR FLOODPLAIN BOUNDARY FROM WDNR

ENVIRONMENTAL CORRIDOR BOUNDARY FROM CAPITAL AREA REGIONAL PLANNING (CARPC) ONLINE DATA PORTAL

FLOODWAY BOUNDARY FROM WDNR

EX CONCRETE WEIR
TOP OF CONCRETE=846.49
TOP OF WEIR=846.24

EX 7'X7' BOX CULVERT
IE=844.58

24" IE=847.29

24" IE=847.19

WETLAND BOUNDARY PER HEARTLAND ECOLOGICAL DELINEATION

STARKWEATHER CREEK

CSM #13140
LOT 1

850.3'

850.2'

EXISTING HOUSE
FF=875.81

EX SMH
RIM=870.73
IE=854.53 S
IE=858.17 W (DROP)
IE=855.17 W

EX SMH
RIM=872.21
IE=862.56 E
IE=862.61 W

EX SMH
RIM=867.33
IE=858.73 E
IE=859.13 SW
IE=858.73 W

EX SMH
RIM=865.80
IE=858.70 N
IE=858.70 E
IE=858.65 W

EX SMH
RIM=864.55
IE=855.95 S

EX SMH
RIM=863.15
IE=854.42 N
IE=854.32 S

EXISTING HOUSE
FF=866.88

DEMOLISHED BUILDING FOUNDATION

EX SMH
RIM=863.49
IE=854.84 E
IE=854.79 W
IE=854.84 SE

EX SMH
RIM=863.50
IE=855.70 N
IE=855.75 E
IE=855.56 SW

EX SMH
RIM=863.40
IE=854.60 N
IE=853.86 E
IE=853.86 S

EX SMH
RIM=860.50
IE=852.20 N
IE=852.15 S

EXISTING BARN
FF=864.46

EXISTING BUILDING
FF=863.64

DRIVE–OVER TRUCK SCALE

EXISTING BUILDING
FF=864.24

EXISTING BUILDING
FF=864.60

SILO AND CONVEYOR

EX CIN
TC=853.91
IE=849.51 W

EX CIN
TC=853.91
IE=849.36 E
IE=849.36 W

EX CIN
TC=853.73
IE=849.36 E

APPROXIMATE LOCATION OF PIPE PER CITY WEBSITE

EX SMH
RIM=857.35
IE=849.19 E
IE=846.77 S
IE=846.63 NW

EX SMH
RIM=852.18
IE=847.44 N
IE=847.06 SE
IE=847.09 NW

EX SMH
RIM=85.
IE=846.
IE=846.

EX SMH
RIM=855.40
IE=849.49 NE
IE=848.84 SE
IE=849.52 NW

EX SMH
RIM=876.04
IE=869.24 E
IE=868.28 SW
IE=868.82 E
IE=868.92 W
IE=869.02 S

SYMBOL LEGEND

- EXISTING POST
- EXISTING SIGN
- EXISTING CURB INLET
- EXISTING ENDWALL
- EXISTING RECTANGULAR FIELD INLET
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT
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- EXISTING UTILITY POLE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING UNIDENTIFIED MANHOLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING TRAFFIC SIGNAL
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE

SURVEY LEGEND

- BENCHMARK
- FOUND CHISELED "X"
- PUBLIC LAND CORNER AS NOTED
- FOUND 1" ø IRON PIPE
- FOUND 2" ø IRON PIPE
- FOUND 1 1/4" ø IRON ROD
- FOUND 3/4" ø IRON ROD
- FOUND RAILROAD SPIKE
- SET CHISELED "X"
- SET NAIL
- SET P.K. NAIL

HATCHING LEGEND

- EXISTING CONCRETE PAVEMENT/SIDEWALK
- EXISTING ASPHALT
- EXISTING GRAVEL
- DETECTABLE WARNING PAVER

LINEWORK LEGEND

- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING WATER MAIN
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING FIBER OPTIC LINE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD GENERAL UTILITIES
- EXISTING GUY LINE
- EXISTING RETAINING WALL
- EXISTING GENERAL FENCE
- EXISTING WIRE FENCE
- EXISTING CHAIN LINK FENCE
- FLOODWAY BOUNDARY FROM WDNR
- 100–YEAR FLOODPLAIN BOUNDARY FROM WDNR
- EXISTING EDGE OF WATER AS SURVEYED ON 7/20/2022
- EXISTING WETLAND DELINEATION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 850.7' 100–YEAR FLOODPLAIN ELEVATION CROSS SECTIONS

GRAPHIC SCALE FEET
0 40 80 160

vierbicher
advisors / engineers / surveyors

Existing Conditions - South

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS NO.	DATE	REMARKS

REVISIONS NO.	DATE	REMARKS

DATE 04/02/2026
DRAFTER ZDRE/JDEL
CHECKED RKOL
PROJECT NO. 220031

C1.2

02 Apr 2026 - 3:01p M:\Stone House Development\220031_Volt Farm\CADD\220031_Topo.dwg by: jdel

CSM #13140
LOT 1

SAUTHOFF PLAT

STARKWEATHER CREEK

SE ¼ – NE ¼
05-07-10

SW ¼ – NW ¼
04-07-10

LANDS

REMOVE SITE TREES (TYP.)

REMOVE GRAVEL (TYP.)

REMOVE CONCRETE (TYP.)

REMOVE OVERHEAD UTILITIES (TYP.)

REMOVE SANITARY LATERAL, PLUG AT MANHOLE

REMOVE SANITARY LATERAL, PLUG AT MANHOLE

REMOVE BUILDING (TYP.)

REMOVE SANITARY SEWER

REMOVE AND REPLACE ASPHALT PAVEMENT PER CITY STANDARD SPEC. (TYP.)

REMOVE AND REPLACE PAVEMENT PER CITY STANDARD SPEC. (TYP.)

CONTRACTOR TO COORDINATE REMOVAL AND RELOCATION OF OVERHEAD UTILITIES AND POWER POLES WITH OWNER OF SAID UTILITIES (TYP.)

REMOVE TREE LINE (TYP.)

LANSING PLACE

TIL TO MIDLAND

N
W E
S

GRAPHIC SCALE FEET
0 40 80 160

DEMOLITION PLAN LEGEND

- CURB AND GUTTER REMOVAL
- ASPHALT REMOVAL
- CONCRETE REMOVAL
- BUILDING REMOVAL
- GRAVEL REMOVAL
- TREE REMOVAL
- SAWCUT
- UTILITY STRUCTURE REMOVAL
- UTILITY LINE REMOVAL

NOTE:

THE DEVELOPER SHALL DETERMINE WHETHER SOIL AND WATER ON THE LAND ARE CONTAMINATED. ANY CONTAMINATED SOIL OR WATER SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH ALL WISCONSIN DEPARTMENT OF NATURAL RESOURCES REGULATIONS AT THE SOLE COST OF THE DEVELOPER, AND IN CONSULTATION WITH THE CITY. FOLLOWING DISPOSAL, DEVELOPER SHALL PROVIDE ANY NECESSARY RECORDS PERTAINING TO THE DISPOSAL ACTIVITY TO THE CITY.

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Demolition Plan

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS			
NO.	DATE	REMARKS	

REVISIONS			
NO.	DATE	REMARKS	

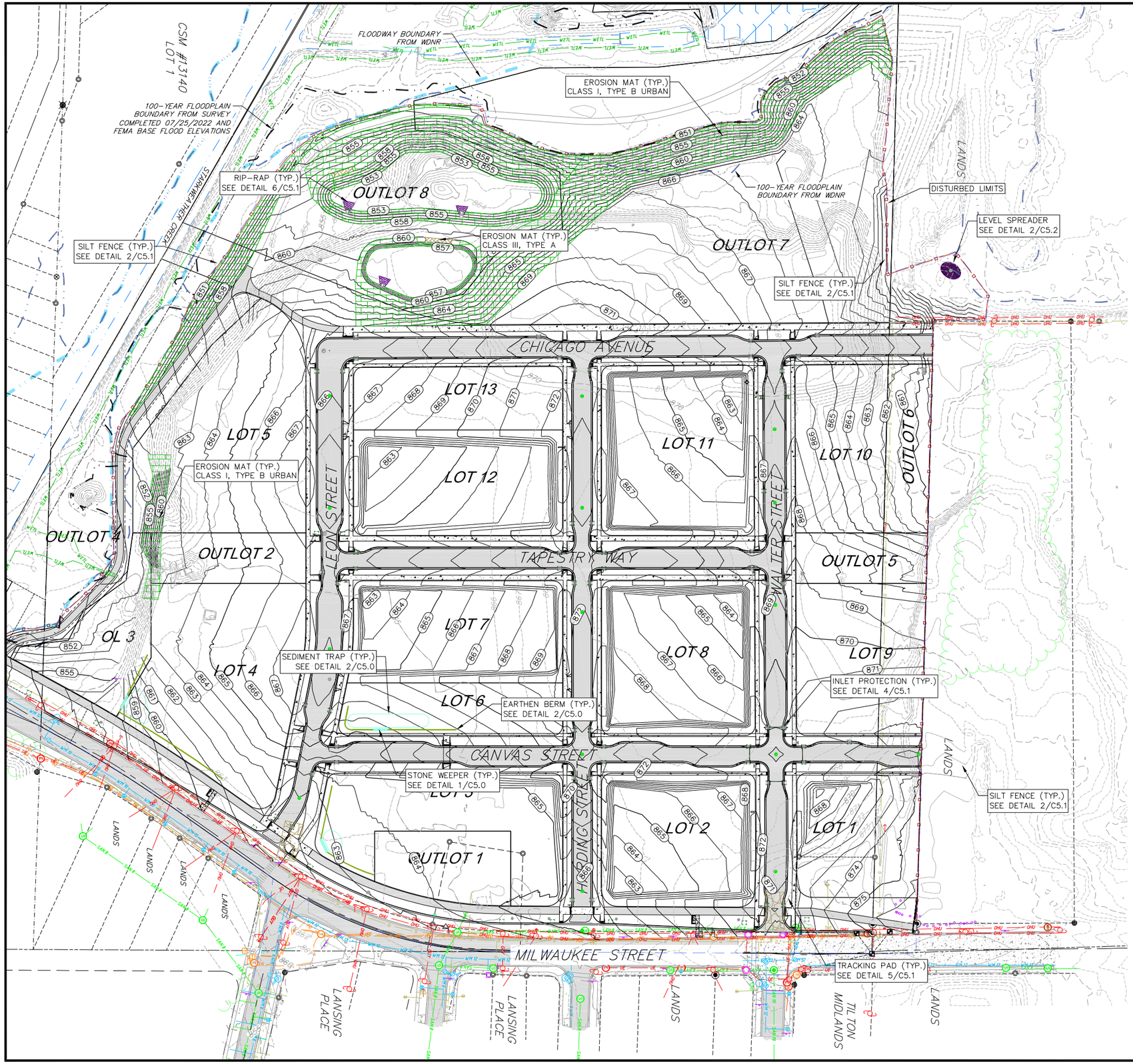
DATE
04/02/2026

DRAFTER
ZDRE/JDEL

CHECKED
RKOL

PROJECT NO.
220031

C2.0



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GRAPHIC SCALE FEET
0 40 80 160

GRADING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- PROPOSED SLOPE ARROWS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- EROSION MAT CLASS III, TYPE C
- TRACKING PAD
- RIP RAP
- STONE WEEPERS
- EROSION MAT CLASS I, TYPE B

GRADING NOTES:

1. CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING. FINAL GRADE SHALL BE ESTABLISHED ON PAVED SURFACES BY USING THE PUBLIC IMPROVEMENT PLANS ISSUED BY THE CITY.
2. ALL GRADES SHOWN REFERENCE FINISHED ELEVATIONS.
3. NO LAND DISTURBANCE ACTIVITIES SHALL BEGIN UNTIL ALL EROSION CONTROL BMP'S ARE INSTALLED.
4. SEE DETAIL SHEETS FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE.
5. DEVELOPER SHALL NOT USE PARK PROPERTY FOR CONSTRUCTION STAGING, STOCKPILING MATERIAL, OR ANY OTHER PURPOSE UNLESS SPECIFICALLY APPROVED BY THE PARKS SURPERINTENDENT.
6. NO FILL SHALL BE PLACED WITHIN THE 100-YEAR FLOODPLAIN WITHOUT APPROVAL FROM CITY OF MADISON ZONING. CONTACT CHRISTINA THIELE (cthiele@cityofmadison.com) WITH ANY QUESTIONS PRIOR TO SITE PLAN SUBMITTAL.

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING CONSTRUCTION TO PUBLIC PROPERTY, PRIVATE PROPERTY OR UTILITIES.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER AND CITY, PRIOR TO PLACING AN ORDER OF ANY SUCH ITEM.
3. EXISTING TOPOGRAPHIC INFORMATION IS BASED ON FIELD OBSERVATIONS AND/OR PLAN OF RECORD DRAWINGS. CONTRACTOR SHALL VERIFY TOPOGRAPHIC INFORMATION PRIOR TO STARTING CONSTRUCTION.
4. RIGHT OF WAY (ROW) AND PROPERTY LINES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTATION. ANY MONUMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED. CONTRACTOR SHALL ALSO COORDINATE THE PROPOSED INSTALLATION OF NEW FACILITIES AS REQUIRED.

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advisors / engineers / surveyors

Grading and Erosion Control Plan - Overall

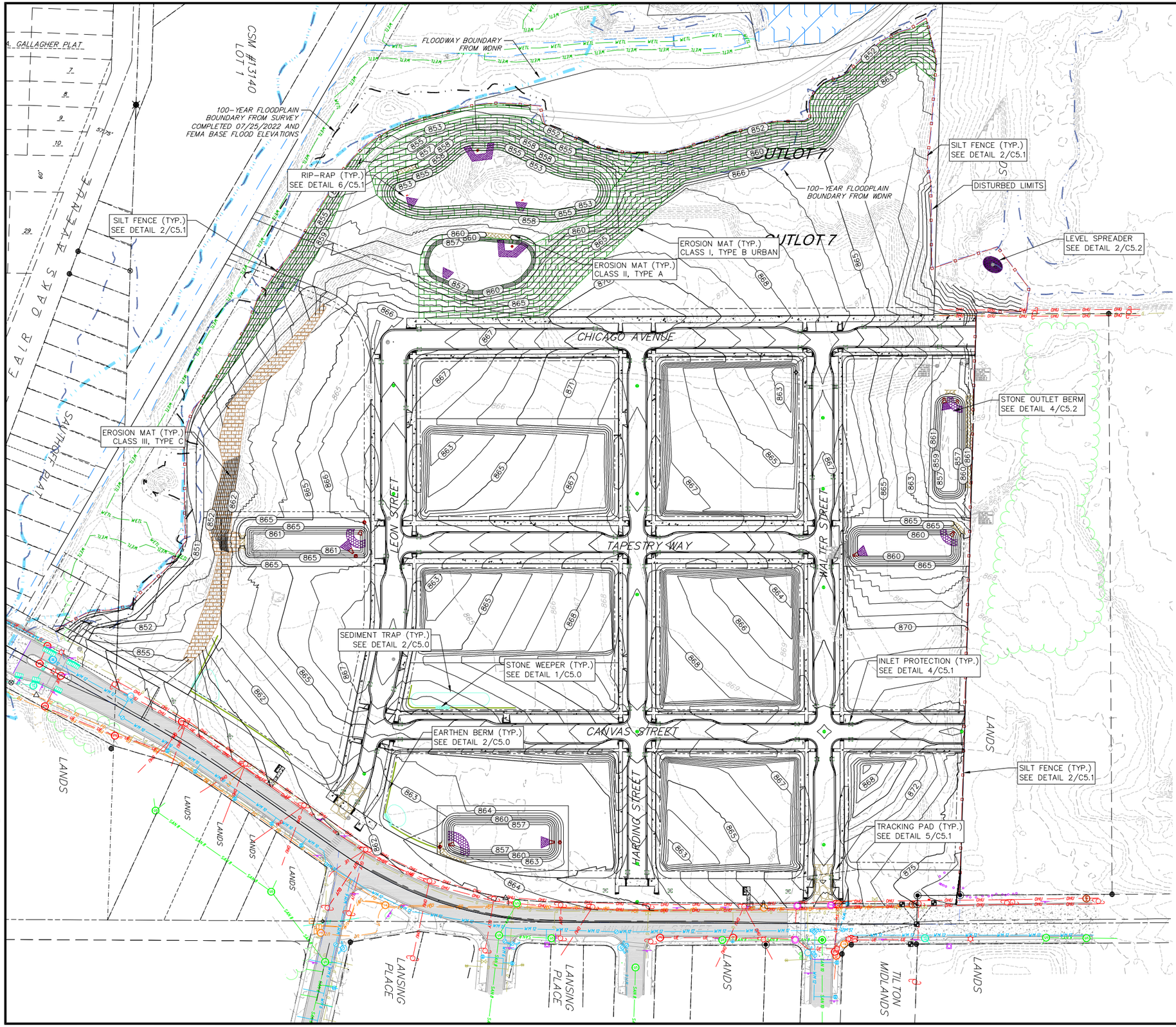
Starkweather Plat
City of Madison
Dane County, WI

REVISIONS			
NO.	DATE	REMARKS	
NO.	DATE	REMARKS	

DATE 04/02/2026
DRAFTER ZDRE/JDEL
CHECKED RKOL
PROJECT NO. 220031

C3.0

03 Apr 2026 - 9:28a M:\Stone House Development\220031_Voll Farm\CADD\220031_Grading & EC.dwg by: rkol



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GRAPHIC SCALE, FEET

0 40 80 160

GRADING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- PROPOSED SLOPE ARROWS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- EROSION MAT CLASS II, TYPE A
- TRACKING PAD
- RIP RAP
- STONE WEEPERS
- EROSION MAT CLASS I, TYPE B URBAN

GRADING NOTES:

1. CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING. FINAL GRADE SHALL BE ESTABLISHED ON PAVED SURFACES BY USING THE PUBLIC IMPROVEMENT PLANS ISSUED BY THE CITY.
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3. NO LAND DISTURBANCE ACTIVITIES SHALL BEGIN UNTIL ALL EROSION CONTROL BMP'S ARE INSTALLED.
4. SEE DETAIL SHEETS FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE.
5. DEVELOPER SHALL NOT USE PARK PROPERTY FOR CONSTRUCTION STAGING, STOCKPILING MATERIAL, OR ANY OTHER PURPOSE UNLESS SPECIFICALLY APPROVED BY THE PARKS SUPERINTENDENT.
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5. CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED. CONTRACTOR SHALL ALSO COORDINATE THE PROPOSED INSTALLATION OF NEW FACILITIES AS REQUIRED.

vierbicher
advisors / engineers / surveyors

Grading and Erosion Control - Interim

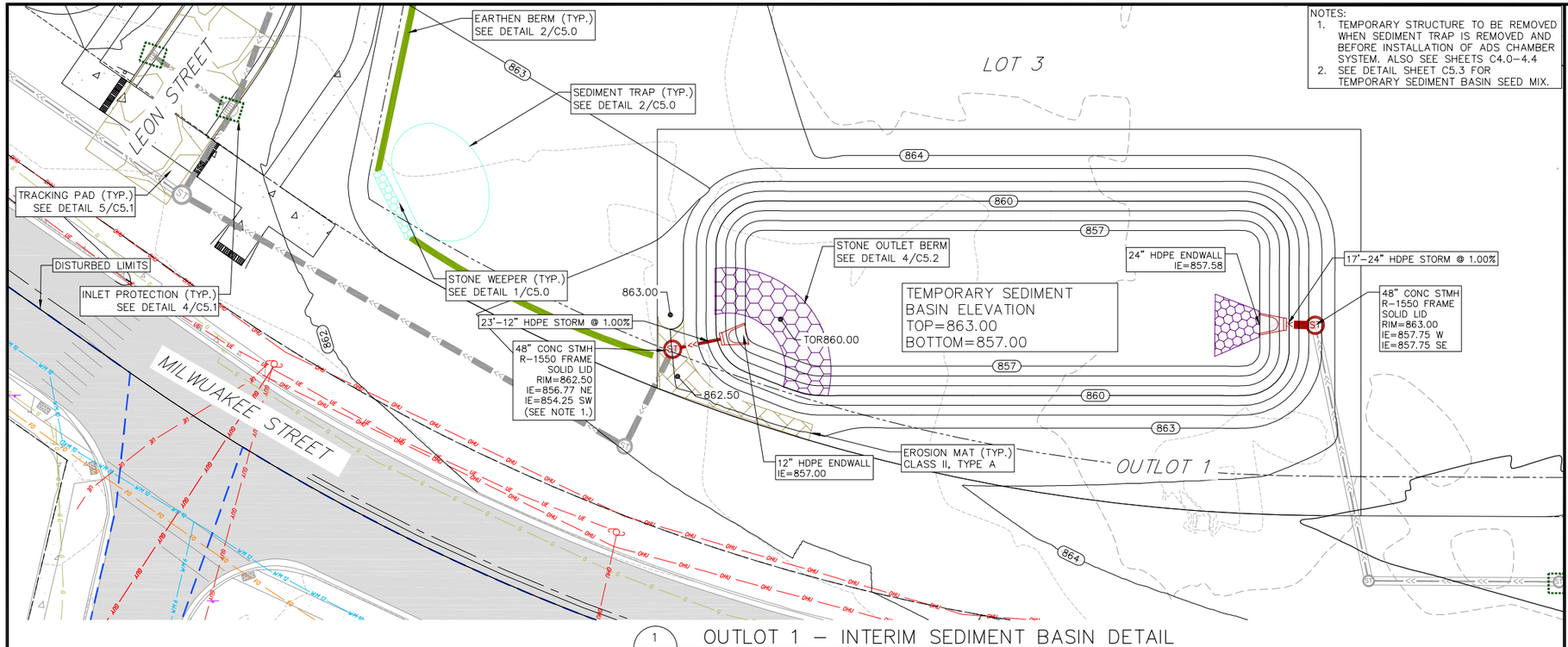
Starkweather Plat
City of Madison
Dane County, WI

REVISIONS			
NO.	DATE	REMARKS	
NO.	DATE	REMARKS	

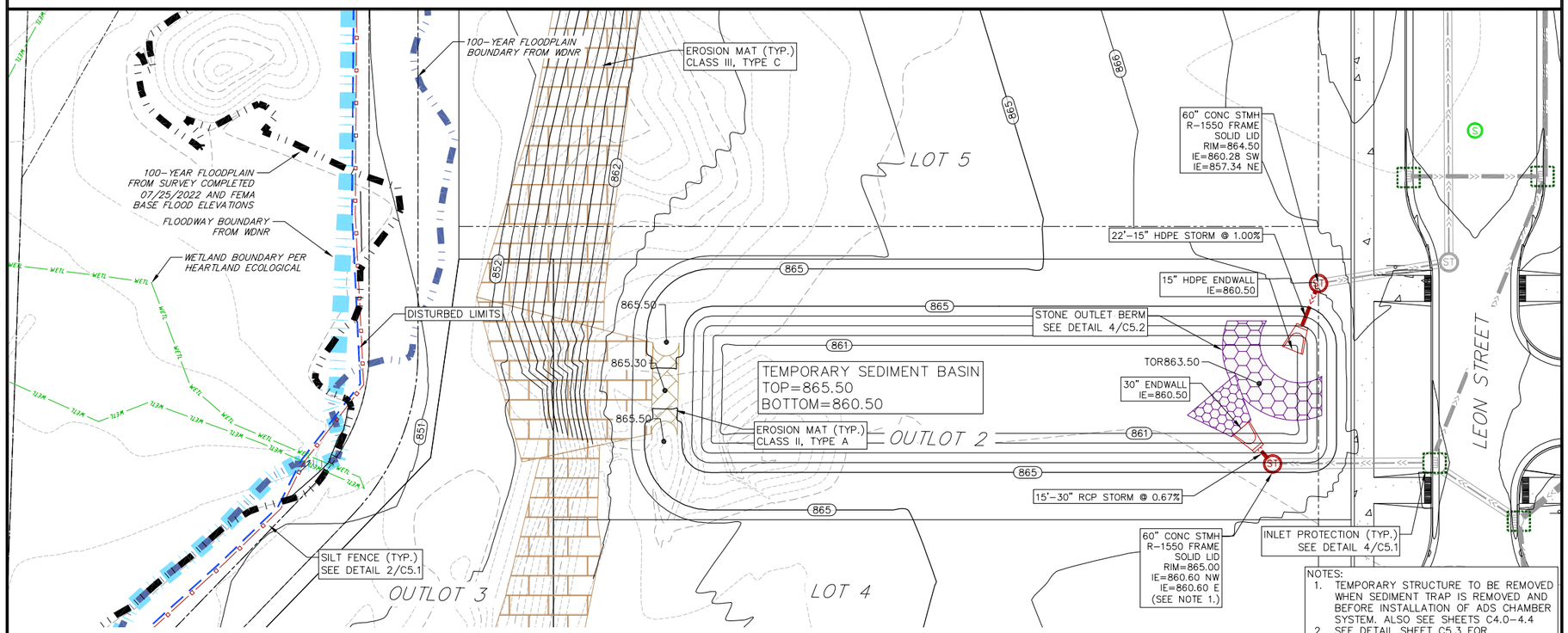
DATE 04/02/2026
DRAFTER ZDRE/JDEL
CHECKED RKOL
PROJECT NO. 220031

C3.1

03 Apr 2026 - 9:56a M:\Stone House Development\220031_Volt Farm\CADD\220031_Interim Grading & EC.dwg by: rkol



1 / 3.2 OUTLOT 1 – INTERIM SEDIMENT BASIN DETAIL



2 / 3.2 OUTLOT 2 – INTERIM SEDIMENT BASIN DETAIL

N

GRAPHIC SCALE, FEET
0 10 20 40

GRADING LEGEND

- 820 — EXISTING MAJOR CONTOURS
- 818 — EXISTING MINOR CONTOURS
- 820 — PROPOSED MAJOR CONTOURS
- 818 — PROPOSED MINOR CONTOURS
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- 2.92% PROPOSED SLOPE ARROWS
- 1048.61 EXISTING SPOT ELEVATIONS
- 1048.61 PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- EROSION MAT CLASS II, TYPE A
- TRACKING PAD
- RIP RAP
- STONE WEEPERS
- EROSION MAT CLASS I, TYPE B

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Interim Grading Detail - Outlot 1 & Outlot 2

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS			
NO.	DATE	REMARKS	

REVISIONS			
NO.	DATE	REMARKS	

DATE 04/02/2026
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PROJECT NO. 220031

C3.2

CHICAGO AVENUE

WALTER STREET

TAPESTRY WAY

LOT 11

LOT 10

OUTLOT 6

OUTLOT 5

LOT 8

LOT 9

NOTES:
1. TEMPORARY STRUCTURE TO BE REMOVED WHEN SEDIMENT TRAP IS REMOVED AND BEFORE INSTALLATION OF ADS CHAMBER SYSTEM. ALSO SEE SHEETS C4.0–4.4
2. SEE DETAIL SHEET C5.3 FOR TEMPORARY SEDIMENT BASIN SEED MIX.

4'X4' SAS
R-1550 FRAME
SOLID LID
RIM=862.73
IE=856.90 N
IE=856.90 S

62'–21" HDPE STORM @ 0.65%

861.50

861.00

861.50

65'–21" HDPE STORM @ 1.00%

4'X4' SAS
R-1550 FRAME
SOLID LID
RIM=861.84
IE=855.25 S
IE=855.15 E

21" HDPE ENDWALL
IE=856.50

21" HDPE ENDWALL
IE=856.50

INLET PROTECTION (TYP.)
SEE DETAIL 4/C5.1

TOR859.50

STONE OUTLET BERM
SEE DETAIL 4/C5.2

TEMPORARY SEDIMENT
BASIN ELEVATION
TOP=861.50
BOTTOM=856.50

EROSION MAT (TYP.)
CLASS II, TYPE A

DISTURBED LIMITS

SILT FENCE (TYP.)
SEE DETAIL 2/C5.1

5'X5' SAS
R-1550 FRAME
SOLID LID
RIM=867.50
IE=854.36 N
IE=859.20 SW

864.50

865.00

TEMPORARY SEDIMENT BASIN ELEVATION
TOP=865.00
BOTTOM=860.00

EROSION MAT (TYP.)
CLASS II, TYPE A

865.00

18" HDPE ENDWALL
IE=860.00

35'–18" HDPE STORM @ 1.00%

TOR863.00

30" HDPE ENDWALL
IE=860.00

4'X4' SAS
R-1550 FRAME
SOLID LID
RIM=869.70
IE=860.70 NE
IE=863.47 SW

STONE OUTLET BERM
SEE DETAIL 4/C5.2

15'–30" HDPE STORM @ 0.67%

INLET PROTECTION (TYP.)
SEE DETAIL 4/C5.1

NOTES:
1. TEMPORARY STRUCTURE TO BE REMOVED WHEN SEDIMENT TRAP IS REMOVED AND BEFORE INSTALLATION OF ADS CHAMBER SYSTEM. ALSO SEE SHEETS C4.0–4.4
2. SEE DETAIL SHEET C5.3 FOR TEMPORARY SEDIMENT BASIN SEED MIX.

3 / 3.3 OUTLOT 5 AND 6 – INTERIM SEDIMENT BASIN DETAIL

N

W E

S

GRAPHIC SCALE, FEET
0 10 20 40

GRADING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- PROPOSED SLOPE ARROWS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- EROSION MAT CLASS II, TYPE A
- TRACKING PAD
- RIP RAP
- STONE WEEPERS

vierbicher
advisors / engineers / surveyors

Interim Grading Detail - Outlot 5 & Outlot 6

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

DATE
04/02/2026

DRAFTER
ZDRE/JDEL

CHECKED
RKOL

PROJECT NO.
220031

C3.3

02 Apr 2026 - 3:22p M:\Stone House Development\220031_Volt Farm\CADD\220031_Interim Grading & EC.dwg by: jdel

SILT FENCE (TYP.)
SEE DETAIL 2/C5.1

DISTURBED LIMITS

100-YEAR FLOODPLAIN
BOUNDARY FROM WDNR

100-YEAR FLOODPLAIN
BOUNDARY FROM SURVEY
COMPLETED 07/25/2022 AND
FEMA BASE FLOOD ELEVATIONS

100-YEAR FLOODPLAIN
PER WDNR

8"-12" HDPE STORM @ 1.25%

24" CONC CB
RIM=853.00
IE=850.1
(SEE NOTE 1)

STONE OUTLET BERM
SEE DETAIL 4/C5.2

TOR853.50

858.00

857.50

858.00

FUTURE INFILTRATION
BASIN ELEVATION
TOP=858.00
BOTTOM=853.00

LOW FLOW DRAIN AND CLEANOUT (TYP.)
SEE DETAIL SHEET C4.4 AND 1/C5.3

OUTLOT 8

24" ENDWALL
IE=853.00

30" ENDWALL
IE=853.00

EROSION MAT (TYP.)
CLASS II, TYPE A

860.00

859.50

860.00

24" CONC CB
RIM=857.00
IE=854.60
(SEE NOTE 1)

8"-8" HDPE STORM @ 1.25%

SEDIMENT BASIN ELEVATION
TOP=860.00
BOTTOM=857.00

TOR859.00

STONE OUTLET BERM
SEE DETAIL 4/C5.2

RIP-RAP (TYP.)
SEE DETAIL 6/C5.1

21" ENDWALL
IE=857.00

OUTLOT 7

EROSION MAT (TYP.)
CLASS I, TYPE B URBAN

INLET PROTECTION (TYP.)
SEE DETAIL 4/C5.1

LOT 5

LEON STREET

CHICAGO AVENUE

NOTES:
1. TEMPORARY STRUCTURE TO BE REMOVED WHEN INFILTRATION BASIN IS BROUGHT ONLINE. ALSO SEE SHEETS C4.0-4.4
2. SEE DETAIL SHEET C5.3 FOR TEMPORARY SEED MIX AND ADDITIONAL RESTORATION MEASURES.

4 / 3.4 OUTLOT 8 – INTERIM SEDIMENT BASIN DETAIL

N
W E
S

GRAPHIC SCALE, FEET
0 10 20 40

GRADING LEGEND

- 820 — EXISTING MAJOR CONTOURS
- 818 — EXISTING MINOR CONTOURS
- (820) PROPOSED MAJOR CONTOURS
- (818) PROPOSED MINOR CONTOURS
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- 2.92% PROPOSED SLOPE ARROWS
- 1048.61 EXISTING SPOT ELEVATIONS
- 1048.61 PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- EROSION MAT CLASS II, TYPE A URBAN
- TRACKING PAD
- RIP RAP
- STONE WEEPERS
- EROSION MAT CLASS I, TYPE B

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advisors / engineers / surveyors

Interim Grading Detail - Outlot 8

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS			
NO.	DATE	REMARKS	

REVISIONS			
NO.	DATE	REMARKS	

DATE
04/02/2026

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CHECKED
RKOL

PROJECT NO.
220031

C3.4

PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
- STORM SEWER CURB INLET
- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
- ROOF DRAIN CLEANOUT
- SANITARY SEWER PIPE (GRAVITY)
- SANITARY SEWER PIPE (FORCE MAIN)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER MAIN
- WATER SERVICE LATERAL PIPE
- FIRE HYDRANT
- WATER VALVE
- CURB STOP
- WATER VALVE MANHOLE
- PROPOSED PIPE INSULATION
- GAS MAIN
- ELECTRIC SERVICE

ABBREVIATIONS

STMH – STORM MANHOLE
FI – FIELD INLET
CI – CURB INLET
CB – CATCH BASIN
EW – ENDWALL
SMH – SANITARY MANHOLE

NOTES

1. INVERT TO BE COORDINATED WITH CITY ROW STORMWATER SYSTEM PLANS
2. INLET TO BE CORED IN THE FUTURE TO ACCOMODATE ADJACENT DEVELOPMENT.

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Proposed Utility Plan - Overall

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS

NO.	DATE	REMARKS

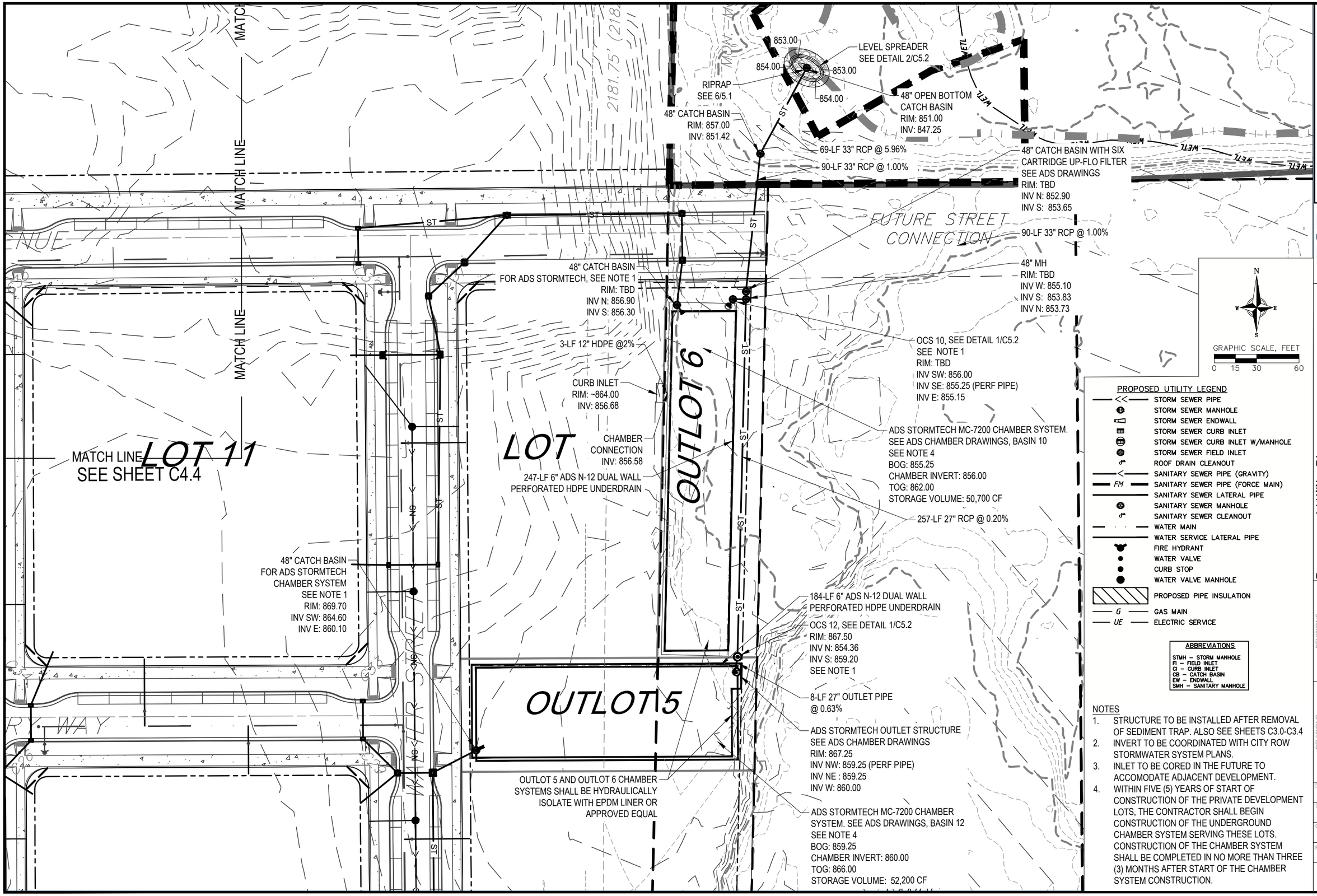
REVISIONS

NO.	DATE	REMARKS

DATE 04/02/2026
DRAFTER GM
CHECKED TP
PROJECT NO. 220031

C4.0

03 Apr 2026 - 1:35p N:\S1115-STONEHOUSE DEVELOPMENT\220587-STONEHOUSE-STARKWEATHER VOIT FARM\08_CAD\T06_permits\C4.0 UTILITY.dwg by: gmoran



PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
- STORM SEWER CURB INLET
- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
- ROOF DRAIN CLEANOUT
- SANITARY SEWER PIPE (GRAVITY)
- SANITARY SEWER PIPE (FORCE MAIN)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER MAIN
- WATER SERVICE LATERAL PIPE
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NOTES

1. STRUCTURE TO BE INSTALLED AFTER REMOVAL OF SEDIMENT TRAP. ALSO SEE SHEETS C3.0-C3.4
2. INVERT TO BE COORDINATED WITH CITY ROW STORMWATER SYSTEM PLANS.
3. INLET TO BE CORED IN THE FUTURE TO ACCOMODATE ADJACENT DEVELOPMENT.
4. WITHIN FIVE (5) YEARS OF START OF CONSTRUCTION OF THE PRIVATE DEVELOPMENT LOTS, THE CONTRACTOR SHALL BEGIN CONSTRUCTION OF THE UNDERGROUND CHAMBER SYSTEM SERVING THESE LOTS. CONSTRUCTION OF THE CHAMBER SYSTEM SHALL BE COMPLETED IN NO MORE THAN THREE (3) MONTHS AFTER START OF THE CHAMBER SYSTEM CONSTRUCTION.

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Lombard, IL 60148
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Proposed Utility Plan

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C4.1

CANVAS STREET

LOT 3

OUTLOT 1

LANSING PLACE

LANSING PLACE

66' R/W WIDTH

170-LF 6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN
OCS 30, SEE DETAIL 1/C5.2
ALSO SEE SHEET C3.2
SEE ADS CHAMBER DRAWINGS
RIM: 862.68
INV E: 856.00
INV SE: 854.25 (PERF PIPE)
INV S: 854.25

33 LF 18" RCP

ADS STORMTECH MC-7200 CHAMBER SYSTEM. SEE ADS DRAWINGS, BASIN 30
SEE NOTE 4
BOG: 854.25
CHAMBER INVERT: 855.00
TOG: 861.00
STORAGE VOLUME: 51,000 CF

48" CATCH BASIN
FOR ADS STORMTECH CHAMBER SYSTEM
SEE NOTE 1
RIM: 869.70
INV E: 856.70
INV W: 855.10

48" CATCH BASIN
RIM: 865.00
INV W: 857.76
INV S: 857.75
INV N: SEE NOTE 3

HYDRO-INTERNATIONAL 50 CARTRIDGE UP-FLO FILTER IN 8' X 18.5' VAULT. SEE ADS CHAMBER DRAWINGS.
SEE NOTE 1
INLET EL. 857.70
OUTLET EL. 856.75

N
W E
S

GRAPHIC SCALE, FEET
0 10 20 40

PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
- STORM SEWER CURB INLET
- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
- ROOF DRAIN CLEANOUT
- SANITARY SEWER PIPE (GRAVITY)
- FM — SANITARY SEWER PIPE (FORCE MAIN)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER MAIN
- WATER SERVICE LATERAL PIPE
- FIRE HYDRANT
- WATER VALVE
- CURB STOP
- WATER VALVE MANHOLE
- PROPOSED PIPE INSULATION
- G — GAS MAIN
- UE — ELECTRIC SERVICE

ABBREVIATIONS

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SMH – SANITARY MANHOLE

NOTES

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Proposed Utility Plan

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS
NO. DATE REMARKS

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CHECKED TP
PROJECT NO. 220031

C4.2

MATCH LINE MATCH LINE MATCH LINE MATCH LINE MATCH LINE MATCH LINE MATCH LINE

LOT 5

SEE SHEET C4.4

LOT 1

OUTLOT 2

APPROX. 4

EC4

EC6

EC5

EC7

N00°00'00"E 136.79'

S00°00'00"E 136.79'

S44°05'28"W 94.94'

"W 30.85'

41 LF 24" RCP
OCS 22, SEE DETAIL 1/C5.2
RIM: 867.00
INV NE: 857.34
INV SW: 857.40

18-LF 24" HDPE, TYPE S @0.22%

48" CATCH BASIN
SEE ADS CHAMBER DRAWINGS
RIM: 866.58
INV W: 857.44
INV E: 857.44
INV NW: 856.25 (PERF PIPE)

170-LF 6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN

100-YEAR FLOODPLAIN BOUNDARY FROM WDNR

100-YEAR FLOODPLAIN FROM SURVEY COMPLETED 07/25/2022 AND FEMA BASE FLOOD ELEVATIONS

ADS STORMTECH MC-7200 CHAMBER SYSTEM.
SEE ADS CHAMBER DRAWINGS, BASIN 22
SEE NOTE 4
BOG: 856.25
CHAMBER INVERT: 857.00
TOG: 863.00
STORAGE VOLUME: 35,000 CF

48" CATCH BASIN
FOR ADS STORMTECH
CHAMBER SYSTEM
SEE NOTE 1
RIM: 866.38
INV E: 860.60
INV W: 857.10

DIVERSION STRUCTURE
60" CATCH BASIN
RIM: 866.31 SEE NOTE 2
INV SE: SEE NOTE 2
INV NE: 862.44 WITH 9.5" PLATE RESTRICTOR
WEIR CREST: 863.70
INV W: 860.72 (D.S. SIDE OF WEIR)

GRAPHIC SCALE, FEET
0 10 20 40

PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
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- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
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- SANITARY SEWER PIPE (FORCE MAIN)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
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Dane County, WI

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C4.3

PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
- STORM SEWER CURB INLET
- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
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- SANITARY SEWER CLEANOUT
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157-LF 21" RCP @4.73%

21" FES
INV: 842.58

48" FLAT TOP CATCH BASIN W/
24" OPENING, SEE DETAIL 1/C5.4
RIM: 854.85
INV N: 850.00
INV S: 850.00

FLOODWAY BOUNDARY FROM WDNR

GRAPHIC SCALE, FEET
0 15 30 60

100-YEAR FLOODPLAIN FROM SURVEY COMPLETED 07/25/2022 AND FEMA BASE FLOOD ELEVATIONS

100-YEAR FLOODPLAIN BOUNDARY FROM WDNR

INFILTRATION BASIN
BOTTOM AREA: 20,850 SF
MINIMUM STORAGE: 125,861 CF AT EL. 857.50

ENGINEERED SOIL LAYER, SEE DETAIL 1/C5.4

133-LF 12" HDPE, TYPE S SOLID PIPE @ 0.50%

INV: 850.22

116-LF 12" HDPE, TYPE S SOLID PIPE @ 0.50%

CLEANOUT W 18" CLOSED GRATE
RIM: 853.00
INV: 850.94
SEE DETAIL 5/C5.2

CLEANOUT W 18" CLOSED GRATE
RIM: 853.00
INV: 850.58
SEE DETAIL 5/C5.2

24" FES
INV: 853.00

INFILTRATION BASIN, SEE DETAIL 1,2/C5.4

30" FES
INV: 853.00

47-LF 30" RCP @4.44%

60" FLAT TOP CATCH BASIN
SEE DETAIL 3/C5.2
RIM: 858.00
INV N: 854.00
INV SW: 854.50

BIORETENTION BASIN, SEE DETAIL 3/C5.2, 2/C5.4

117-LF 8" HDPE, TYPE S PERF PIPE @0.00%

45-LF 8" HDPE, TYPE S PERF PIPE @0.00%

BIORETENTION BASIN
BOTTOM AREA: 10,790 SF
MINIMUM STORAGE: 41,355 CF AT EL. 859.5

ENGINEERED SOIL AND OPEN GRADED STONE LAYERS, SEE DETAIL 3/C5.2

30" FES INV 857.00

CLEANOUT W 12" CLOSED GRATE
RIM: 857.00
INV: 854.50
SEE DETAIL 5/C5.2

N29°57'26"E 521.79'

N37°18'03"E 257.65'

S37°18'03"W 242.87'

S35°38"E 415.61'

100-YEAR FLOODPLAIN BOUNDARY FROM WDNR

SEE SHEET C4.3

SEE SHEET C4.1
MATCH LINE

MATCH LINE

MATCH LINE MATCH LINE MATCH LINE MATCH LINE MATCH LINE

LOT 13

LOT 5

LOT 1

CHICAGO AVENUE

ENVIRONMENTAL CORRIDOR BOUNDARY FROM CAPITAL AREA REGIONAL PLANNING (CARPC) ONLINE DATA PORTAL

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Proposed Utility Plan
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Dane County, WI

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DATE 04/03/2026
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PROJECT NO. 220031

C4.4

EROSION CONTROL MEASURES

1. EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE CITY OF MADISON EROSION CONTROL ORDINANCE AND CHAPTER NR 216 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARDS (http://dnr.wi.gov/runoff/stormwater/techstds.htm) AND WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.
3. INSTALL SEDIMENT CONTROL PRACTICES (TRACKING PAD, PERIMETER SILT FENCE, INLET PROTECTION, SEDIMENT BASINS, ETC.) PRIOR TO INITIATING OTHER LAND DISTURBING CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE CITY, DNR AND/OR COUNTY. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
5. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
6. A 3" CLEAR STONE TRACKING PAD SHALL BE INSTALLED AT THE END OF ROAD CONSTRUCTION LIMITS TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE ADJACENT PAVED PUBLIC ROADWAY. SEDIMENT TRACKING PAD SHALL CONFORM TO WisDNR TECHNICAL STANDARD 1057. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORK DAY.
7. STABILIZED DISTURBED GROUND: ANY SOIL OR DIRT PILES WHICH WILL REMAIN IN EXISTENCE FOR MORE THAN 7-CONSECUTIVE DAYS, WHETHER TO BE WORKED DURING THAT PERIOD OR NOT, SHALL NOT BE LOCATED WITHIN 25-FEET OF ANY ROADWAY, PARKING LOT, PAVED AREA, OR DRAINAGE STRUCTURE OR CHANNEL (UNLESS INTENDED TO BE USED AS PART OF THE EROSION CONTROL MEASURES). TEMPORARY STABILIZATION AND CONTROL MEASURES (SEEDING, MULCHING, TARPING, EROSION MATTING, BARRIER FENCING, ETC.) ARE REQUIRED FOR THE PROTECTION OF DISTURBED AREAS AND SOIL PILES, WHICH WILL REMAIN UN-WORKED FOR A PERIOD OF MORE THAN 7-CONSECUTIVE CALENDAR DAYS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL SITE HAS STABILIZED.
8. INLET FILTERS ARE TO BE PLACED IN STORMWATER INLET STRUCTURES AS SOON AS THEY ARE INSTALLED. ALL PROJECT AREA STORM INLETS NEED FRAMED INLET PROTECTION IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATION FOR PUBLIC WORKS IMPROVEMENTS. THE FILTERS SHALL BE MAINTAINED UNTIL THE SITE IS CONSIDERED STABLE.
9. TERRACES SHALL BE RESTORED WITH 6" TOPSOIL, PERMANENT SEED, FERTILIZER AND MULCH. LOTS SHALL BE RESTORED WITH 6" TOPSOIL, TEMPORARY SEED, FERTILIZER AND MULCH.
10. SEED, FERTILIZER AND MULCH SHALL BE APPLIED WITHIN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING, TEMPORARY SEED SHALL BE PLACED.
11. FOR THE FIRST SIX WEEKS AFTER RESTORATION (E.G. SEED & MULCH, EROSION MAT, SOD) OF A DISTURBED AREA, INCLUDE SUMMER WATERING PROVISIONS OF ALL NEWLY SEEDED AND MULCHED AREAS WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
12. SILT FENCE OR EROSION MAT SHALL BE INSTALLED ALONG THE CONTOURS AT 100 FOOT INTERVALS DOWN THE SLOPE ON THE DISTURBED SLOPES STEEPER THAN 5% AND MORE THAN 100 FEET LONG THAT SHEET FLOW TO THE ROADWAY UNLESS SOIL STABILIZERS ARE USED.
13. SEDIMENT SHALL BE CLEANED FROM STREETS AND ROADSIDE DITCHES AFTER EACH RAINFALL AND PRIOR TO PROJECT ACCEPTANCE.
14. ALL CONSTRUCTION ENTRANCES SHALL HAVE TEMPORARY ROAD CLOSED SIGNS THAT WILL BE IN PLACE WHEN THE ENTRANCE IS NOT IN USE AND AT THE END OF EACH DAY.
15. ANY PROPOSED CHANGES TO THE EROSION CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY AND WISCONSIN DNR.
16. THE CITY, WISCONSIN DNR, OWNER AND/OR ENGINEER MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AT ANY TIME DURING CONSTRUCTION.

CONSTRUCTION SEQUENCE:

1. INSTALL SILT FENCE, INLET PROTECTION AND TRACKING PAD.
2. STRIP TOPSOIL.
3. INSTALL SILT FENCE AROUND TOPSOIL STOCK PILE.
4. ROUGH GRADE STREETS & LOTS TO SUBGRADE (PER PLAN)
5. CONSTRUCT TEMPORARY SEDIMENT BASINS.
6. RESTORE LOT AREAS – TOPSOIL, SEED, FERTILIZE AND MULCH.
7. CONSTRUCT TEMPORARY STONE WEEPERS AND EARTHEN BERMS.
8. CONSTRUCT UNDERGROUND UTILITIES.
9. INSTALL INLET PROTECTION IN NEW STORM SEWER STRUCTURES.
10. CONSTRUCT ROADS (STONE BASE, CURB & GUTTER, AND SIDEWALK AND ASPHALTIC PAVEMENT).
11. RESTORE TERRACES – TOPSOIL, PERMANENT SEED AND FERTILIZE.
12. CONSTRUCT STORMWATER MANAGEMENT FACILITIES AND RESTORE.
13. REMOVE TRACKING PAD, SILT FENCE AND INLET PROTECTION AFTER DISTURBED AREAS ARE RESTORED.

SEEDING RATES:

TEMPORARY:
1. USE ANNUAL OATS AT 3.0 LB./1,000 S.F. FOR SPRING AND SUMMER PLANTINGS.
2. USE WINTER WHEAT OR RYE AT 3.0 LB./1,000 SF FOR FALL PLANTINGS STARTED

AFTER SEPTEMBER 15.

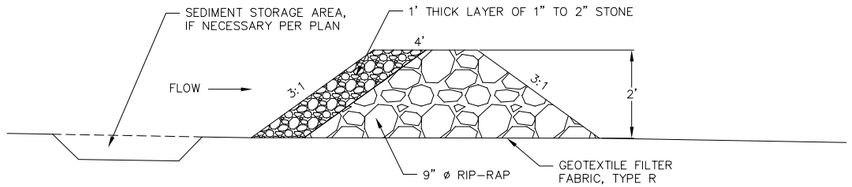
PERMANENT:
1. USE WISCONSIN D.O.T. SEED MIX #40 AT 2 LB./1,000 S.F.

FERTILIZING RATES:

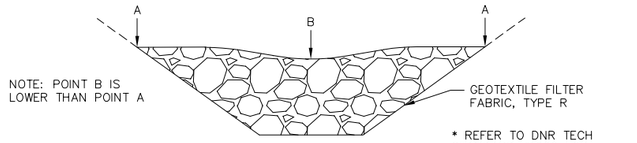
TEMPORARY AND PERMANENT:
USE WISCONSIN D.O.T. TYPE A OR B AT 7 LB./1,000 S.F.

MULCHING RATES:

TEMPORARY AND PERMANENT:
USE ½" TO 1-½" STRAW OR HAY MULCH, CRIMPED PER SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION 627, WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION

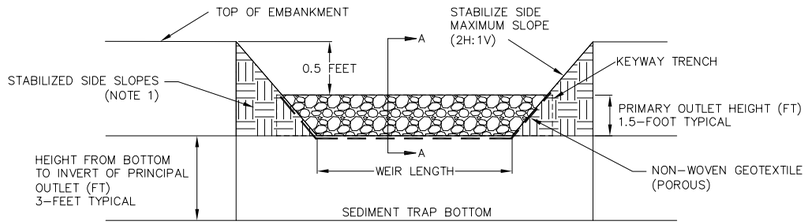


SECTION VIEW



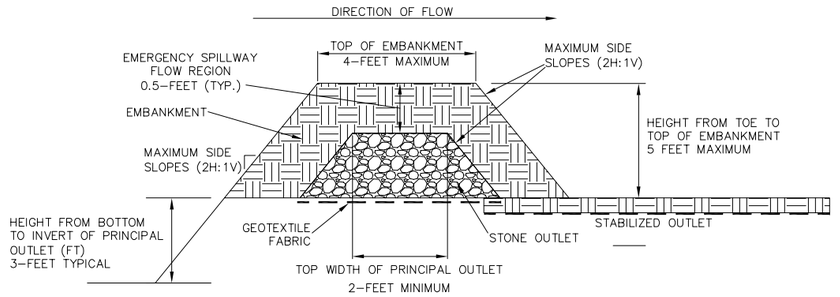
FRONT VIEW

1 / 6.0 WEEPER
NOT TO SCALE



CROSS SECTION OF PRINCIPAL OUTLET

NOTE 1: SIDE SLOPES AND FACES OF EARTHEN EMBANKMENT AROUND OUTLET SHALL BE ARMORED WITH RIPRAP OR STABILIZED WITH EROSION MAT SUFFICIENT TO HANDLE FLOWS FROM THE 10-YEAR STORM.



VIEW A-A OF PRINCIPAL OUTLET

2 / 6.0 SEDIMENT TRAP
NOT TO SCALE

vierbicher
advisors / engineers / surveyors

Construction Notes and Details
Starkweather Plat
City of Madison
Dane County, WI

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

DATE 04/02/2026
DRAFTER ZDRE/JDEL
CHECKED RKOL
PROJECT NO. 220031

C5.0

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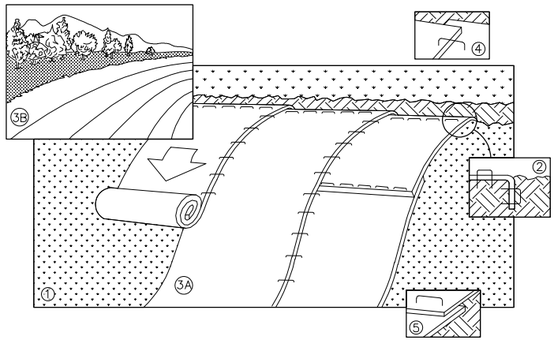


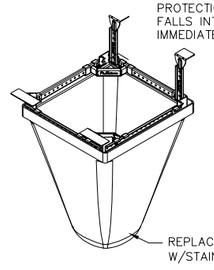
NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
   NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS <A.> DOWN, OR <B.> HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

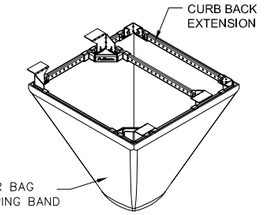
1 / 6.1 EROSION MAT
NOT TO SCALE

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

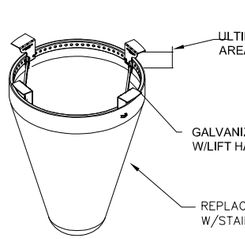
WHEN REMOVING OR MAINTAINING INLET PROTECTION, ANY TRAPPED MATERIAL THAT FALLS INTO THE INLET SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.



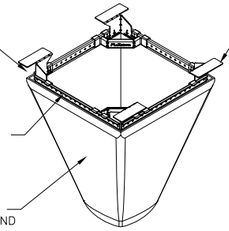
FLEXSTORM CATCH-IT INLET FITLERS FOR ROLLED CURB



FLEXSTORM CATCH-IT INLET FITLERS FOR CURB BOX OPENINGS (MAGNETIC CURB FLAP)



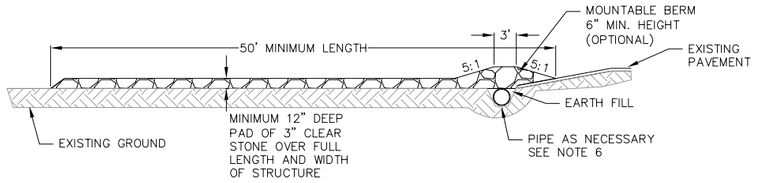
FLEXSTORM CATCH-IT INLET FILTERS FOR ROUND OPENINGS



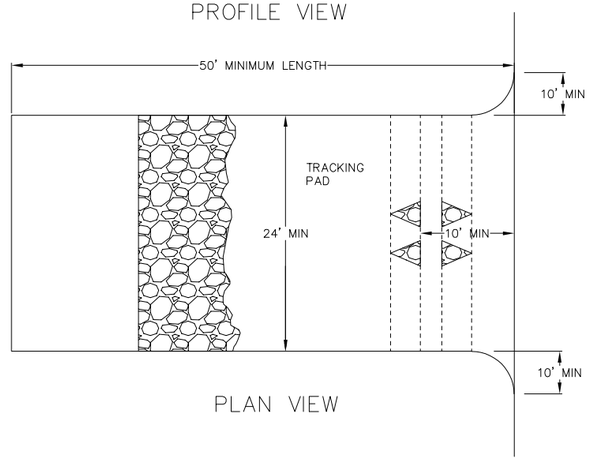
FLEXSTORM CATCH-IT INLET FITLERS FOR SQUARE/RECTANGULAR OPENINGS

NEENAH CASTING	INLET TYPE	GRATE SIZE	OPENING SIZE	ADS P/N
1040/1642/1733	ROUND	26	24	62MRDFX
3067 W/FLAP	CURB BOX	35.25 X 17.75	33.0 X 15.0	62LCBEXTFX
3067 EXTENDED BACK	CURB BOX	35.25 X 17.75	33.0 X 15.0	62LCBEXTFX
3246A	CURB BOX	35.75 X 23.875	33.5 X 21.0	62LCBFX
3030	SQUARE/RECT	23 X 16	20.5 X 13.5	62MCBFX
3067-C	SQUARE/RECT	35.25 X 17.75	33 X 15	62LSQFX

4 / 6.1 FRAMED INLET PROTECTION
NOT TO SCALE



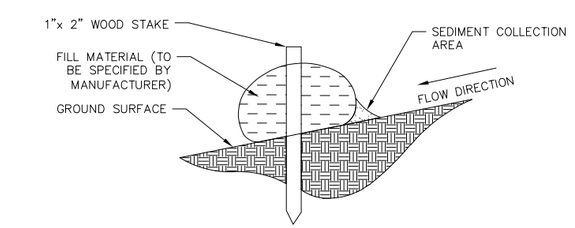
PROFILE VIEW



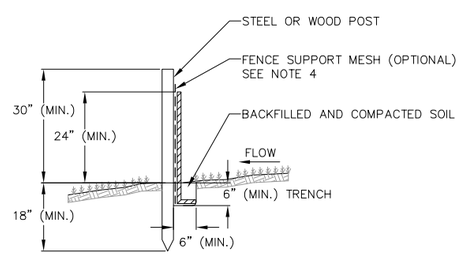
PLAN VIEW

1. FOLLOW WISCONSIN DNR TECHNICAL STANDARD 1057 FOR FURTHER DETAILS AND INSTALLATION.
2. LENGTH – MINIMUM OF 50'
3. WIDTH – 24' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
4. ON SITES WITH A HIGH GROUND WATER TABLE OR WHERE SATURATED CONDITIONS EXIST, GEOTEXTILE FABRIC SHALL BE PLACED OVER EXISTING GROUND PRIOR TO PLACING STONE. FABRIC SHALL BE WISDOT TYPE-HR GEOTEXTILE FABRIC.
5. STONE – CRUSHED 3" CLEAR STONE SHALL BE PLACED AT LEAST 12" DEEP OVER THE ENTIRE LENGTH AND WIDTH OF ENTRANCE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" STONE OVER THE PIPE. PIPE SHALL BE SIZED ACCORDING TO THE DRAINAGE REQUIREMENTS. WHEN THE ENTRANCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE SHALL NOT BE NECESSARY. THE MINIMUM PIPE DIAMETER SHALL BE 6". CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF SAID PIPE.
7. LOCATION – A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS AND/OR LEAVES THE CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE TRACKING PAD.

5 / 6.1 TRACKING PAD
NOT TO SCALE



2 / 6.1 SILT SOCK
NOT TO SCALE

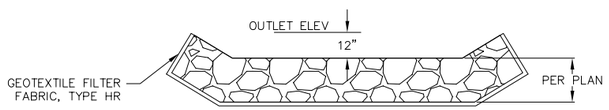


NOTES:

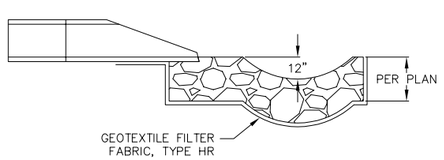
1. INSTALL SILT FENCE TO FOLLOW THE GROUND CONTOURS AS CLOSELY AS POSSIBLE.
2. CURVE THE SILT FENCE UP THE SLOPE TO PREVENT WATER FROM RUNNING AROUND THE ENDS.
3. POST SPACING WITH FENCE SUPPORT MESH = 10 FT. (MAX.)

   POST SPACING WITHOUT FENCE SUPPORT MESH = 6 FT. (MAX.)
4. SILT FENCE SUPPORT MESH CONSISTS OF 14-GAUGE STEEL WIRE WITH A MESH SPACING OF 6 IN. X 6 IN. OR PREFABRICATED POLYMERIC MESH OF EQUIVALENT STRENGTH

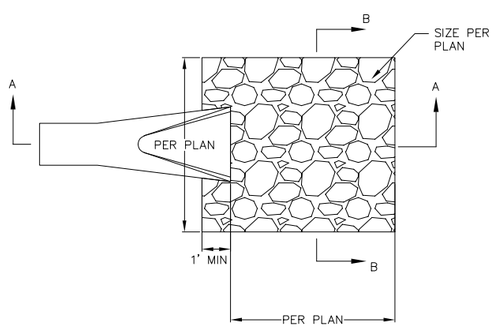
3 / 6.1 SILT FENCE
NOT TO SCALE



CROSS SECTION B-B



CROSS SECTION A-A



PLAN VIEW

6 / 6.1 RIP-RAP OUTLET
NOT TO SCALE

vierbicher
advisors / engineers / surveyors

Construction Details

Starkweather Plat
City of Madison
Dane County, WI

REVISIONS

NO.	DATE	REMARKS

REVISIONS

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DATE 04/02/2026
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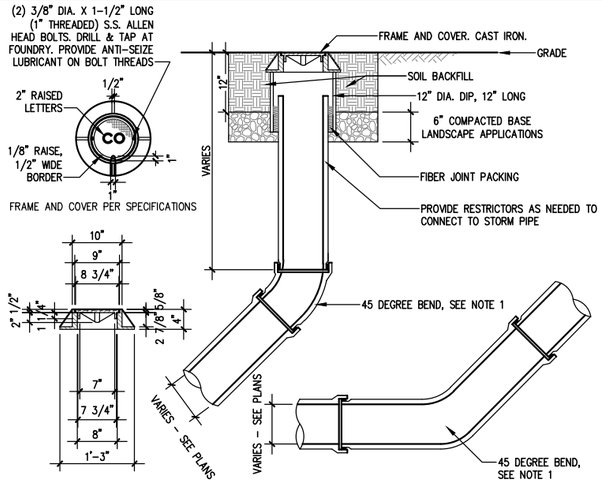
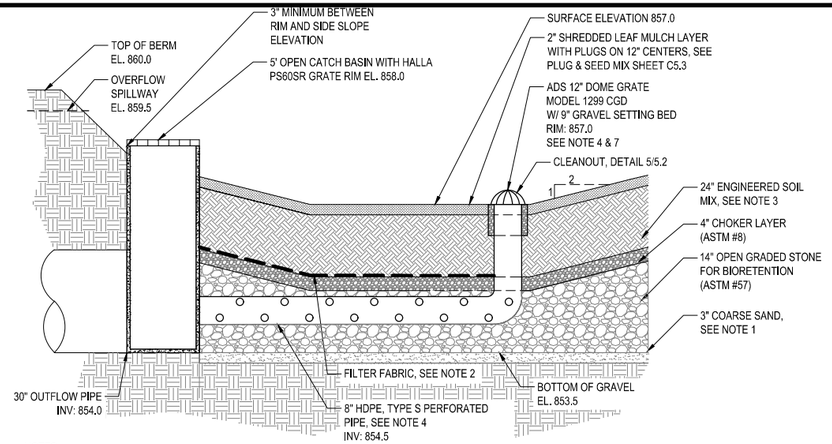


NOTE 1: TWO 22.5 DEGREE FITTINGS SHALL BE USED IN SUCCESSION TO ACHIEVE A TOTAL 45 DEGREE BEND.

5 CLEAN OUT

3/8"=1'-0"



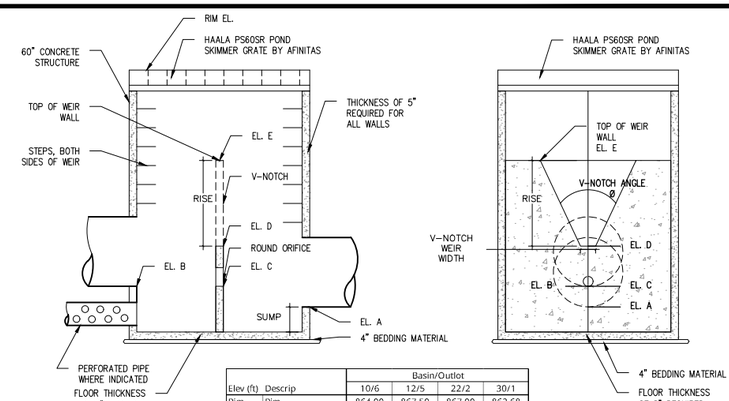
NOTES

1. 3" LAYER OF SAND SHALL BE VERTICALLY MIXED WITH SUBGRADE SOILS TO A DEPTH OF 2-4 INCHES.
2. 48" WIDTH NON WOVEN NEEDLE PUNCH FILTER FABRIC SHALL EXTEND FULL LENGTH OF PERFORATED PIPE.
3. ENGINEERED SOIL MIX SHALL CONFORM TO WDNR TECH STANDARD 1004.
4. CLEANOUT COVER TO BE OPEN GRATE DURING WINTER, OTHERWISE CLOSED.
5. BIORETENTION BASIN SHALL BE USED AS TEMPORARY SEDIMENT TRAP DURING CONSTRUCTION. FOR SEDIMENT TRAP, EXCAVATE ONLY TO BIORETENTION SURFACE ELEVATION. PROVIDE PERMANENT SEEDING AND EROSION BLANKET. DO NOT INSTALL UNDERDRAIN DURING TEMPORARY CONDITION.
6. AFTER THE DRAINAGE AREA IS STABILIZED, THE GRAVEL AND BIORETENTION SOIL LAYERS SHALL BE INSTALLED AND THE BASIN SHALL BE SEEDED AND PLUGGED PER THE PLANT LIST ON SHEET C5.3. THE BASIN BOTTOM SHALL BE SEEDED AND BLANKETED AND PLUGGED ON 12" CENTERS THROUGH THE BLANKET.
7. DURING PERMANENT VEGETATION ESTABLISHMENT, THE CLEANOUT COVERS MAY BE REMOVED TO FACILITATE SEED GERMINATION AND ESTABLISHMENT.

3 BIORETENTION AREA

NTS

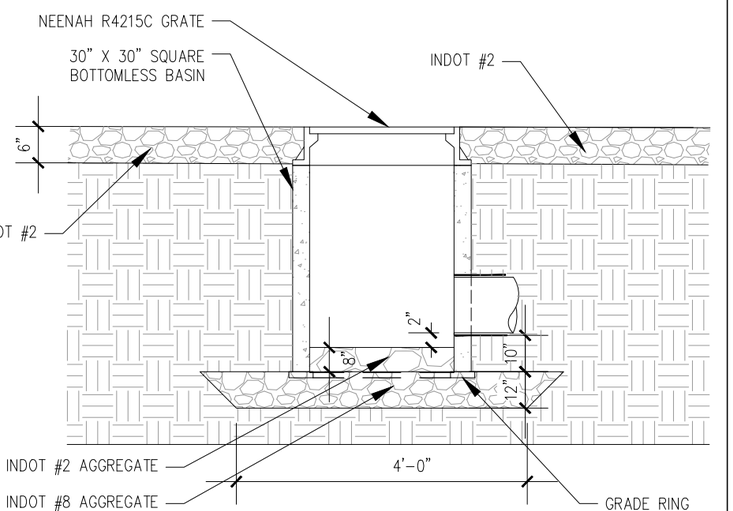
31 22 00_Rain Garden_02_0.0313.dwg



		Basin/Outlot			
Elev (ft)	Descrip	10/6	12/5	22/2	30/1
Rim	Rim	864.00	867.50	867.00	862.68
EL. E	Top of Wall	861.50	866.00	862.50	860.50
EL. D	V-Notch invert	858.10	861.20	860.00	858.10
EL. C	Orifice invert	855.25	859.20	857.44	856.00
EL. B	Inflow invert	856.00	859.15	857.40	855.00
EL. A	Outflow invert	855.15	854.36	857.34	854.25
	Perf Pipe invert	855.25	859.25	856.25	854.25
V-Notch width (in)		1.20	1.20	24.00	1.20
V-Notch Angle		20	35	20	45
V-Notch Rise (ft)		3.40	4.80	2.50	2.40
Orifice Dia. (in)		4	5	4	7
Sump Depth (in)		18	18	18	18

1 CHAMBER SYSTEM OUTLET CONTROL STRUCTURE

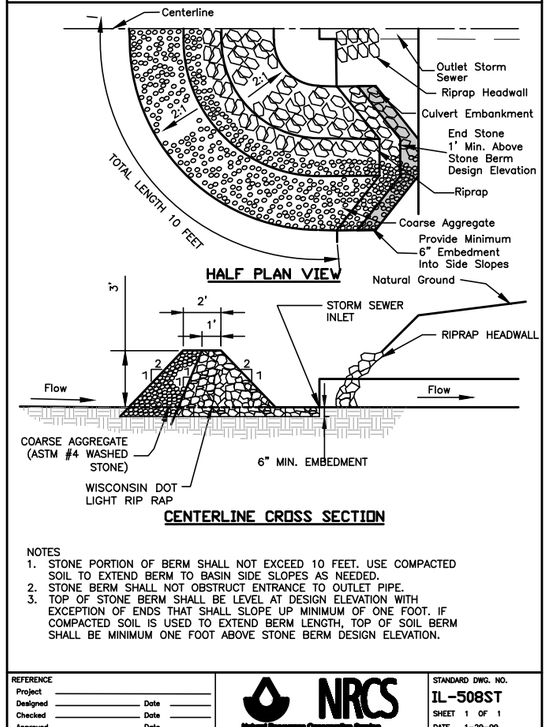
NTS



6 OPEN BOTTOM CATCH BASIN

NTS

SEDIMENT BASIN STONE OUTLET BERM



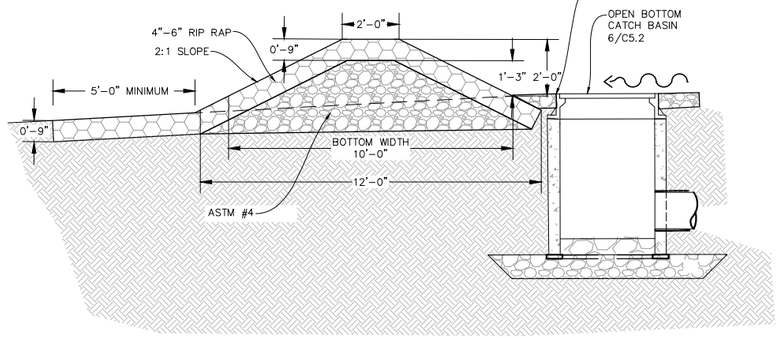
NOTES

1. STONE PORTION OF BERM SHALL NOT EXCEED 10 FEET. USE COMPACTED SOIL TO EXTEND BERM TO BASIN SIDE SLOPES AS NEEDED.
2. STONE BERM SHALL NOT OBSTRUCT ENTRANCE TO OUTLET PIPE.
3. TOP OF STONE BERM SHALL BE LEVEL AT DESIGN ELEVATION WITH EXCEPTION OF ENDS THAT SHALL SLOPE UP MINIMUM OF ONE FOOT. IF COMPACTED SOIL IS USED TO EXTEND BERM LENGTH, TOP OF SOIL BERM SHALL BE MINIMUM ONE FOOT ABOVE STONE BERM DESIGN ELEVATION.

REFERENCE			STANDARD DWG. NO.
Project		NRCS Natural Resources Conservation Service	IL-508ST
Designed	Date		SHEET 1 OF 1
Checked	Date		DATE 1-29-99
Approved	Date		

4 SEDIMENT BASIN STONE OUTLET BERM

NTS



NOTES

1. LEVEL SPREADER SHALL BE CONSTRUCTED LEVEL AND FOLLOW A CONSISTENT CONTOUR.
2. BEGINNING TWO FEET FROM THE LEVEL SPREADER ENDS, THE BERM SHALL SLOPE UP MINIMUM 1 FOOT TO ENSURE NO FLOW AROUND LEVEL SPREADER.

2 BERM LEVEL SPREADER SECTION

NTS

vierbicher planners | engineers | advisors

ECT
403 W St Charles Rd.
Lombard, IL 60148
Phone: (630) 339-2000
www.ectinc.com

Construction Details

Starkweather Plat
City of Madison
Dane County, WI

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NO.	DATE	REMARKS

DATE 04/03/2026
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PROJECT NO. 220031

C5.2

PERMANENT SEED MIXES FOR INFILTRATION BASIN & BIORETENTION AREA
(SEE ECOSYSTEM ESTABLISHMENT PLAN, DATED 2/27/2026 BY HEARTLAND ECOLOGICAL GROUP)

Table 1. Prairie Seed Mix
(applies to Infiltration and Bioretention Basin Side Slopes and Remainder of Project Area)

Nomenclature		Seed Metrics
Scientific Name	**Common Name**	**Oz/Acre**
Grasses, Sedges, Rushes		
Andropogon gerardii	Big Bluestem	4.0
Bouteloua curtipendula	Side oats Grama	60.0
Bromus kalmii	Prairie Brome	4.0
Carex bicknellii	Bicknell's Oval Sedge	1.0
Carex brevior	Fescue Sedge	1.5
Carex molesta	Field Oval Sedge	2.0
Elymus canadensis	Canada Wild Rye	36.0
Elymus virginicus	Virginia Wild Rye	16.0
Panicum virgatum	Switch Grass	2.5
Schizachyrium scoparium	Little Bluestem	32.0
Sorghastrum nutans	Indian Grass	6.0
Sporobolus heterolepis	Prairie Dropseed	1.0
Forbs		
Achillea millefolium	Yarrow	1.0
Agastache foeniculum	Blue Giant Hyssop	1.0
Allium cemuum	Nodding Onion	1.0
Amorpha canescens	Lead Plant	1.0
Asclepias syriaca	Common Milkweed	1.0
Asclepias tuberosa	Butterfly Weed	2.0
Astragalus canadensis	Canadian Milk Vetch	1.0
Baptisia alba	White Wild Indigo	1.0
Chamaecrista fasciculata	Partridge Pea	8.0
Coreopsis palmata	Prairie Coreopsis	1.0
Dalea candida	White Prairie Clover	1.0
Dalea purpurea	Purple Prairie Clover	4.0
Drymocallis arguta	Prairie Cinquefoil	0.5
Echinacea pallida	Pale Purple Coneflower	2.0
Echinacea purpurea	Purple Coneflower	2.0
Eryngium yuccifolium	Rattlesnake Master	2.0
Euthamia graminifolia	Grass-leaved Goldenrod	0.5
Heliopsis helianthoides	False Sunflower	2.5
Lespedeza capitata	Round-headed Bush Clover	1.0
Liatris aspera	Rough Blazing Star	1.0
Monarda fistulosa	Wild Bergamot	1.0
Oligoneuron rigidum	Stiff Goldenrod	2.0
Penstemon digitalis	Foxglove Beardtongue	1.0
Pycnanthemum virginianum	Mountain Mint	0.5
Ratibida pinnata	Yellow Coneflower	2.0
Rudbeckia hirta	Black-eyed Susan	3.0
Rudbeckia subtomentosa	Sweet Black-eyed Susan	0.5
Rudbeckia triloba	Brown-eyed Susan	0.5
Silphium laciniatum	Compass Plant	2.0
Solidago speciosa	Showy Goldenrod	0.5
Symphyotrichum laeve	Smooth Blue Aster	1.5
Symphyotrichum novae-angliae	New England Aster	0.8
Tradescantia ohiensis	Ohio Spiderwort	2.0
Verbena stricta	Hoary Vervain	2.0
Zizia aurea	Golden Alexanders	3.5

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre
Grasses and Sedges	12	166
Forbs	35	57.3
Totals	**47**	**223.3**

Table 2. Infiltration and Bioretention Basin Bottom Seed Mix

Nomenclature		Seed Metrics
Scientific Name	**Common Name**	**Oz/Acre**
Grasses, Sedges, Rushes		
Andropogon gerardii	Big Bluestem	5.0
Bromus ciliatus	Fringed Brome	2.0
Bromus kalmii	Prairie Brome	4.0
Calamagrostis canadensis	Blue Joint Grass	0.5
Carex bebbii	Bebb's Oval Sedge	2.0
Carex brevior	Fescue Sedge	2.0
Carex molesta	Field Oval Sedge	2.0
Carex vulpinoidea	Brown Fox Sedge	3.0
Elymus canadensis	Canada Wild Rye	24.0
Elymus virginicus	Virginia Wild Rye	24.0
Glyceria striata	Fowl Manna Grass	1.0
Juncus dudleyi	Dudley's Rush	0.2
Panicum virgatum	Switch Grass	2.5
Schizachyrium scoparium	Little Bluestem	8.0
Scirpus atrovirens	Dark-green Bulrush	0.5
Sorghastrum nutans	Indian Grass	5.0
Spartina pectinata	Prairie Cord Grass	4.0
Forbs		
Asclepias incarnata	Swamp Milkweed	2.0
Asclepias syriaca	Common Milkweed	2.0
Astragalus canadensis	Canadian Milk Vetch	1.0
Chamaecrista fasciculata	Partridge Pea	4.0
Eupatorium perfoliatum	Boneset	0.5
Euthamia graminifolia	Grass-leaved Goldenrod	0.5
Eutrochium maculatum	Joe Pye Weed	0.5
Helenium autumnale	Sneezeweed	0.5
Heliopsis helianthoides	False Sunflower	2.5
Hypericum ascyron ssp. pyramidatum	Great St. John's Wort	0.5
Liatris pycnostachya	Prairie Blazing Star	1.0
Lobelia siphilitica	Great Blue Lobelia	0.5
Monarda fistulosa	Wild Bergamot	1.5
Oligoneuron riddellii	Riddell's Goldenrod	0.5
Oligoneuron rigidum	Stiff Goldenrod	2.0
Parthenium integrifolium	Wild Quinine	1.0
Physostegia virginiana	Obedient Plant	1.0
Pycnanthemum virginianum	Mountain Mint	0.5
Ratibida pinnata	Yellow Coneflower	2.0
Rudbeckia hirta	Black-eyed Susan	3.0
Rudbeckia subtomentosa	Sweet Black-eyed Susan	0.5
Rudbeckia triloba	Brown-eyed Susan	0.5
Silphium integrifolium	Rosinweed	2.0
Symphyotrichum ericoides	Heath Aster	0.1
Symphyotrichum laeve	Smooth Blue Aster	0.5
Symphyotrichum novae-angliae	New England Aster	1.0
Thalictrum dasycarpum	Purple Meadow Rue	1.0
Tradescantia ohiensis	Ohio Spiderwort	1.0
Verbena hastata	Blue Vervain	1.0
Vernonia fasciculata	Common Ironweed	1.0
Zizia aurea	Golden Alexanders	2.5

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre
Grasses, Sedges, Rushes	17	89.7
Forbs	31	38.1
Totals	**48**	**127.8**

Table 3. No Stratification Native Seed Mix (City of Madison)[1]

Nomenclature		Seed Metrics		
Scientific Name	**Common Name**	**Oz/Acre**	**Seeds/ft²**	**% Mix by No. Seeds**
Grasses				
Andropogon gerardii	Big Bluestem	2.0	0.5	0.96
Elymus canadensis	Canada Wild Rye	2.0	0.2	0.50
Elymus virginicus	Virginia Wild Rye	16.0	1.5	3.23
Sorghastrum nutans	Indian Grass	8.0	2.2	4.62
Forbs				
Helenium autumnale	Sneezeweed	2.0	6.0	12.51
Monarda fistulosa	Wild Bergamot	2.0	3.2	6.74
Pycnanthemum virginianum	Mountain Mint	2.0	10.1	21.18
Ratibida pinnata	Yellow Coneflower	2.0	1.4	2.89
Rudbeckia hirta	Black-eyed Susan	2.0	4.2	8.86
Veronicastrum virginicum	Culver's Root	1.0	18.4	38.51

[1]Seed mix is designed for 1.0 acre. This seed mix should be installed with an appropriate temporary cover crop based on timing of installation.

Table 4. Temporary Cover Crop Seed Mix[1]

Nomenclature		Installation Timing[2,3]	Installation Rate w/ Permanent Seed (lbs/acre)
Scientific Name	**Common Name**		
Avena sativa	Common Oats	Mid-April-August	40
Triticum aestivum	Winter Wheat	August-April	40

[1] Seed mix is designed for 1 acre. Select appropriate species from table above based on timing of installati

[2] Spring (April-May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

[3] September-October preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

Table 5. Infiltration and Bioretention Basin Bottom Plant Plugs[1]

Nomenclature		Bioretention Basin Plugs[2]	Infiltration Basin Plugs[2]
Scientific Name	**Common Name**		
Grasses, Sedges, Rushes			
Bouteloua curtipendula	Side Oats Grama		1,100
Carex molesta	Field Oval Sedge	1,100	
Carex vulpinoidea	Brown Fox Sedge	1,100	
Panicum virgatum	Switchgrass		1,100
Schizachyrium scoparium	Little Bluestem		1,100
Spartina pectinata	Prairie Cord Grass	1,056	
Forbs			
Allium cemuum	Nodding Onion		1,100
Amorpha canescens	Leadplant		1,100
Asclepias incarnata	Swamp Milkweed	1,100	
Asclepias syriaca	Common Milkweed		1,100
Chamaecrista fasciculata	Partridge Pea		1,100
Dalea purpurea	Purple Prairie Clover		1,100
Echinacea pallida	Pale Purple Coneflower		1,100
Eutrochium maculatum	Joe Pye Weed	1,100	
Liatris pycnostachya	Prairie Blazing Star		1,100
Monarda fistulosa	Wild Bergamot	1,100	1,100
Physostegia virginiana	Obedient Plant	1,024	
Pycnanthemum virginianum	Mountain Mint	1,024	
Ratibida pinnata	Yellow Coneflower		1,100
Rudbeckia hirta	Black-Eyed Susan		1,100
Silene regia	Royal Catchfly		1,100
Symphyotrichum novae-angliae	New England Aster	1,100	1,100
Tradescantia ohiensis	Ohio Spiderwort		1,100
Verbena stricta	Hoary Vervain		1,100
Veronicastrum virginicum	Culver's Root		1,100
Zizia aurea	Golden Alexanders	1,100	1,056

[1]Virigina Wild Rye (*Elymus virginicus*) shall be installed wihtin the basin bottoms at a rate of 5 lb/acre with an appropriate temporary cover crop following initial grading and during the interim period while the basins serve as temporary sediement basins.

[2]Plant plugs shall be installed at a spacing of one foot on center within the bioretention and infiltration basin bottoms after final grading and seeding.

Diversity and Density Metrics

Plant Type	Species Richness	Number of Plugs	Number of Plugs
Grasses, Sedges, Rushes	6	3,256	3,300
Forbs	20	7,548	18,656
Totals	**26**	**10,804**	**20,856**

vierbicher
planners | engineers | advisors
ECT
403 W St Charles Rd.
Lombard, IL 60148
Phone: (630) 339-2000
www.ectinc.com

Construction Details
Starkweather Plat
City of Madison
Dane County, WI

REVISIONS
NO. | DATE | REMARKS

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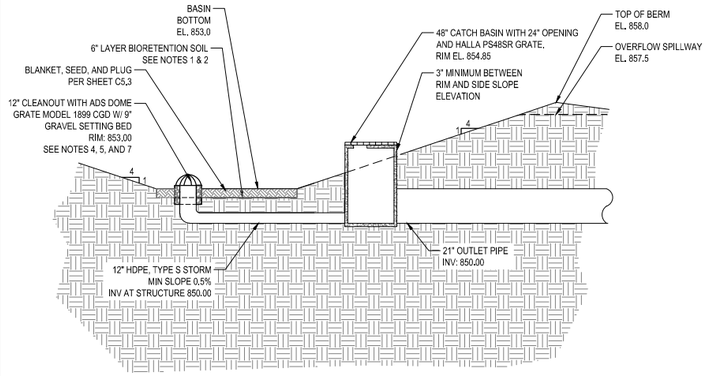
NO. | DATE | REMARKS

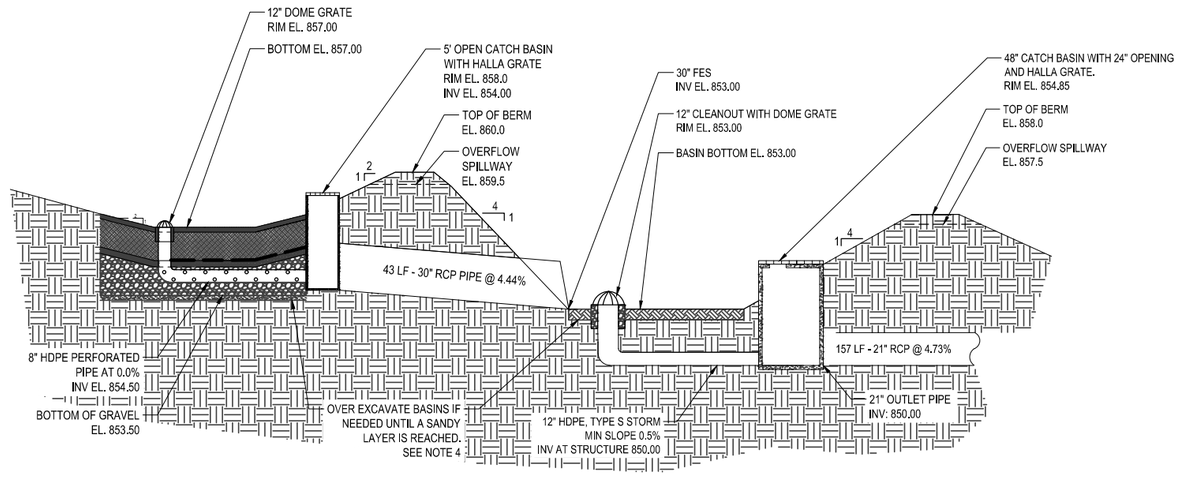
DATE 04/03/2026
DRAFTER GM
CHECKED TP
PROJECT NO. 220031

C5.3



NOTES
1. ENGINEERED SOIL MIX SHALL CONFORM TO WDNR TECH STANDARD 1004.
2. SCARIFY SUBGRATE TO 2" DEPTH PRIOR TO PLACING BIORETENTION SOIL.
3. SEE GRADING PLAN, SHEET C3.0-C3.4 FOR BASIN SHAPE AND STRUCTURE LOCATIONS
4. CLEANOUT COVER TO BE OPEN GRATE DURING WINTER, OTHERWISE CLOSED.
5. INFILTRATION BASIN SHALL BE USED AS TEMPORARY DETENTION BASIN DURING CONSTRUCTION. FOR DETENTION BASIN, EXCAVATE ONLY TO BIORETENTION SOIL SURFACE ELEVATION. PROVIDE TEMPORARY SEEDING AND EROSION BLANKET. CLEANOUT AND STORM SHALL BE INSTALLED WITH OPEN COVER DURING DETENTION BASIN OPERATION.
6. AFTER THE DRAINAGE AREA IS STABILIZED, EXCAVATE TO SUBGRADE PRIOR TO INSTALLING BIORETENTION SOIL LAYER. BIORETENTION SOIL SHALL BE INSTALLED AND THE BASIN SEEDED AND PLUGGED PER THE PLANT LIST AND DETAIL THIS SHEET. THE BASIN BOTTOM SHALL BE SEEDED AND BLANKETED AND PLUGGED ON 18" CENTERS THROUGH THE BLANKET.
7. DURING PERMANENT VEGETATION ESTABLISHMENT, THE CLEANOUT COVERS MAY BE OPEN TO FACILITATE SEED GERMINATION AND ESTABLISHMENT.

1 INFILTRATION BASIN NTS



NOTES:
1. SEE DETAIL 3, SHEET C5.2 FOR BIORETENTION BASIN DESIGN DETAILS
2. SEE DETAIL 1, SHEET C5.4 FOR INFILTRATION BASIN DESIGN DETAILS
3. SEE SHEET C4.4 GRADING AND UTILITIES
4. A CERTIFIED SOIL INSPECTOR SHALL VERIFY THAT SOIL LAYER MET AT THE BOTTOM OF BASIN IS SANDY SOIL WITH AN INFILTRATION RATE OF AT LEAST 0.50 IN/HR.

2 BIORETENTION AND INFILTRATION BASINS CROSS SECTION NTS

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