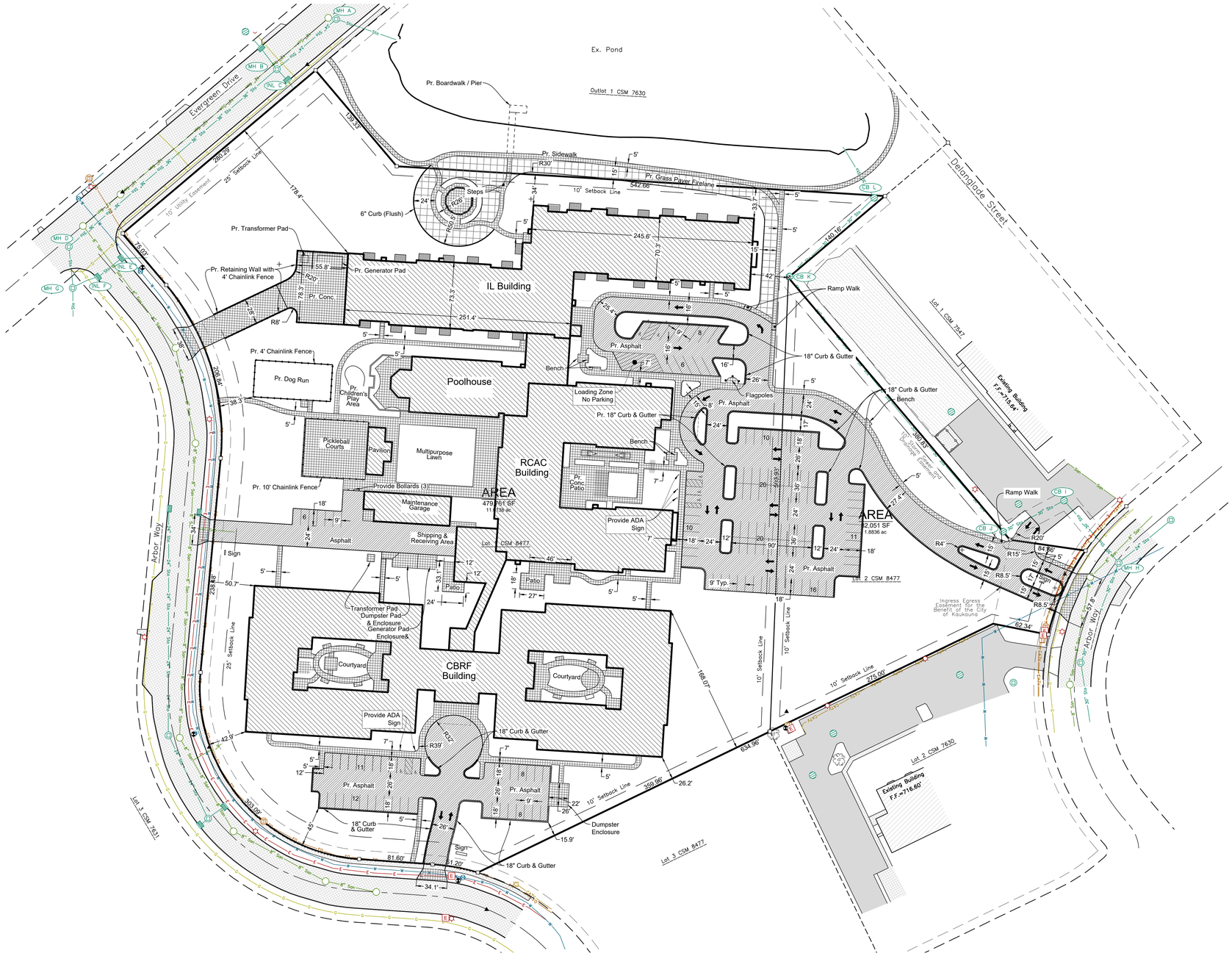

LOCATION MAP

PC 35 OF SEC PC 1, T 21 N, R 18 E,
CITY OF KAUKAUNA
OUTAGAMIE COUNTY, WI

LEGEND

- Underground Cable TV
- Underground Fiber Optic
- Sanitary Sewer
- Storm Sewer
- Underground Gas Line
- Water Main
- Underground Electric
- Fence - Steel
- Index Contour - Existing
- Intermediate Contour - Existing
- Sanitary MH / Tank / Base
- Storm Manhole
- Inlet
- Catch Basin / Yard Drain
- Hydrant
- Utility Valve
- Light Pole / Signal
- Electric Transformer
- Telephone Pedestal
- Telephone Manhole
- +799.9 Ex Spot Elevation
- CATV Pedestal
- Post / Guard Post
- Deciduous Tree
- Benchmark
- Asphalt Pavement
- Concrete Pavement
- Gravel
- Proposed Building
- Proposed Asphalt
- Proposed Concrete
- Proposed Gravel

SITE INFORMATION:
Legal Description: Lot 1 & 2,CSM 8477
Parcel #: 322095700 & 322095705
Current Use: Vacant
Proposed Use: Long Term Care

Current Zoning: CHD - Commercial Highway District

Site Areas
Parcel Area: 561,488 SF (12.89 Acres)
Total Existing Impervious: 0 SF (0%)

Proposed Building Area: 137,003 SF
Proposed Pavement Area: 95,758 SF
Proposed Sidewalk Area: 50,482 SF

Total Proposed Impervious: 283,243 SF (50.4%)
Total Proposed Greenspace: 278,245 SF (49.6%)

Overall Runoff Curve Number:
(283,243*98+278,245*80) / Total = 89.1

PARKING CALCULATIONS
CBRF: 39 Parking Spaces, includes 2 Handicap
RCAC: 101 Parking Spaces, includes 3 Handicap
IL: 14 Parking Spaces, includes 2 Handicap

Total: 154 Surface Parking Spaces and 120 Parking Garage Spaces

PROPERTY OWNER:
The Reserve on Arbor Way, LLC
James Boris
N58W33138 Township Road M
Nashotah, WI 53058
Telephone: (414) 405-1162
Email: james.borisiii@icloud.com

DAVEL ENGINEERING & ENVIRONMENTAL, INC.
Civil Engineers and Land Surveyors
1164 Province Terrace, Menasha, WI 54952
Ph: 920-991-1866 Fax: 920-441-0804
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PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
09/27/24	City Site Plan Submittal

KEY PLAN

SHEET INFORMATION

PROGRESS DOCUMENTS NOT FOR CONSTRUCTION

These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and shall not be used for final bidding or construction-related purposes.

PROJECT MANAGER PM

PROJECT NUMBER 123192-01

SITE PLAN

C100

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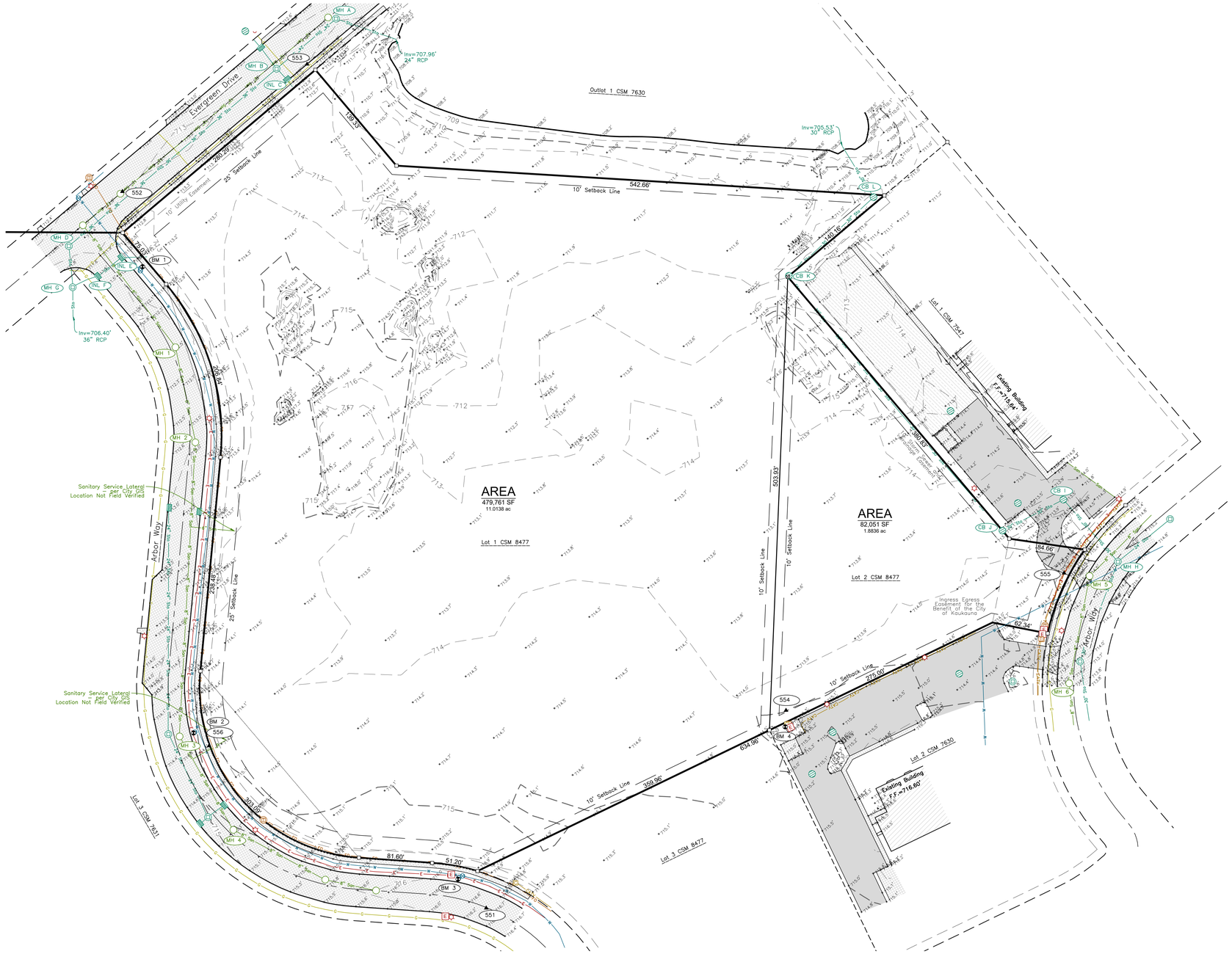

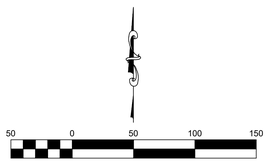

LEGEND

CATV	Underground Cable TV		Sanitary MH / Tank / Base		CATV Pedestal
FO	Underground Fiber Optic		Storm Manhole		Post / Guard Post
San	Sanitary Sewer		Inlet		Deciduous Tree
Sto	Storm Sewer		Catch Basin / Yard Drain		Benchmark
G	Underground Gas Line		Hydrant		Asphalt Pavement
W	Water Main		Utility Valve		Concrete Pavement
E	Underground Electric		Light Pole / Signal		Gravel
	Fence - Steel	E	Electric Transformer		
800	Index Contour - Existing		Telephone Pedestal		
799	Intermediate Contour - Existing		Telephone Manhole		
		+799.9	Ex Spot Elevation		

General Notes:

1. Zoning Information
   City of Kaukauna:
   CHD Commercial Highway District
   Setbacks:
   Front Yard: 25 Feet
   Side Yard: 10 Feet
   Rear Yard: 10 Feet
   Height: 56 Feet (4 stories)

   Caveat: Building zones depicted are based on building setbacks in effect at the time of the survey and should not be relied upon without first obtaining written verification thereof from the City of Kaukauna and any other local agencies.

2. Floodplain Information
   (Subject Site mapped per FIRM Map No. 55087C0342D with and effective date of July 7, 2010
   Mapped as "Zone X": Area determined to be outside the 0.2% annual chance floodplain.

3. Existing utilities shown are indicated in accordance with available records and field measurements. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response. The contractor shall be responsible for obtaining exact locations & elevations of all utilities, including sewer & water from the the property owners of the respective utilities. All utility the property owners shall be notified by the contractor 72 hours prior to excavation. Contact Digger's Hotline (1-800-242-8511) for exact utility locations.

4. This topographic survey was performed during winter conditions. Utility and ground features shown on this map are indicated based on what was observed at the time. Utility markings and existing features may have been covered by snow and/or ice and may not be shown on this map.

5. This is not a boundary survey.

SURVEYOR'S CERTIFICATE

I, Scott R. Andersen, hereby certify that I have surveyed this property and this topographical map is a true representation thereof and shows the size and location of the property and the location of all apparent roadways. I hereby certify that said topographical survey and map were made in accordance with acceptable professional standards and that the information contained thereon is, to the best of my knowledge, information and belief, a true and accurate representation thereof.

Scott R. Andersen, Wisconsin Professional Land Surveyor No. S-3169 — Date

DAVEL ENGINEERING & ENVIRONMENTAL, INC.
Civil Engineers and Land Surveyors
1164 Province Terrace, Menasha, WI 54952
Ph: 920-991-1866 Fax: 920-441-0804
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LOCATION MAP

PC 35 OF SEC PC 1, T 21 N, R 18 E,
CITY OF KAUKAUNA,
OUTAGAMIE COUNTY, WI

BENCHMARKS (NAVD88)

BM 0 NGS Benchmark
PID DE7760 and Designation - 4X80
Elev 728.44

BM 1 Fire Hydrant, Tag Bolt
N R/W Arbor Way
Elev 713.96

BM 2 Fire Hydrant, Tag Bolt
N R/W Arbor Way ±15' NE of MH 3
Elev 716.69

BM 3 Fire Hydrant, Tag Bolt
N R/W Arbor Way ±44' NW of CPT 551
Elev 718.58

BM 4 NW Cor. Elec. Concrete Pad
±18' S of CPT 554
Elev 715.52

Horizontal Control

The Reserve on Arbor Way- City of Kaukauna
Thursday, January 11, 2024
Davel Engineering and Environmental
Horizontal Control (per Outagamie County Coordinate System)

Point Number	Northing	Easting	Description
551	576453.98	860910.77	CPT MAG
552	577249.93	860506.81	CPT MAG
553	577391.31	860711.82	CPT MAG
554	576673.65	861243.66	CPT HUB
555	576826.11	861552.33	CPT MAG
556	576634.18	860603.02	CPT MAG

Sanitary Structures

Structure	#	Rim	Inv	Size	Material	Direction
MH	1	712.29	702.16	8"	PVC	NW
			702.19	8"	PVC	SE
MH	2	712.82	702.49	8"	PVC	NW
			702.52	8"	PVC	S
MH	3	714.44	703.91	8"	PVC	NW
			703.93	8"	PVC	SE
MH	4	715.08	704.41	8"	PVC	NW
			704.43	8"	PVC	SE
MH	5	714.47	692.54	8"	PVC	NE
			692.57	8"	PVC	SW
MH	6	714.09	699.26	8"	PVC	NE
			699.29	8"	PVC	SW

Storm Structures

Structure	#	Rim	Inv	Size	Material	Direction
MH	A	712.09	707.61	24"	RCP	SW
			707.61	24"	RCP	E
MH	B	712.50	707.67	24"	RCP	NE
			707.67	36"	RCP	SW
			707.75	15"	RCP	E
			707.75	15"	RCP	W
INL	C	711.98	707.43	15"	RCP	W
			707.45	15"	RCP	E
MH	D	712.28	706.85	36"	RCP	N
			706.85	36"	RCP	SE
INL	E	711.28	707.24	15"	RCP	S
			707.28	15"	RCP	NE
INL	F	711.39	707.12	15"	RCP	NE
			707.10	15"	RCP	SW
MH	G	712.64	706.45	36"	RCP	NW
			706.59	15"	RCP	NE
			706.40	36"	RCP	SE
			706.59	15"	RCP	SW
MH	H	714.91	707.13	30"	RCP	NW
			707.21	30"	RCP	SW
			707.21	24"	RCP	NE
CB	I	713.41	706.98	30"	RCP	SE
			706.98	30"	RCP	W
CB	J	712.89	706.61	30"	RCP	NW
			706.61	30"	RCP	E
CB	K	711.92	705.79	30"	RCP	SE
			705.69	30"	RCP	NE
CB	L	711.47	705.34	30"	RCP	SW
			705.34	30"	RCP	NE

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PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
07/02/24	SCHEMATIC DESIGN

KEY PLAN

SHEET INFORMATION

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PROJECT MANAGER PM

PROJECT NUMBER 123192-01

TOPOGRAPHIC SURVEY

C101

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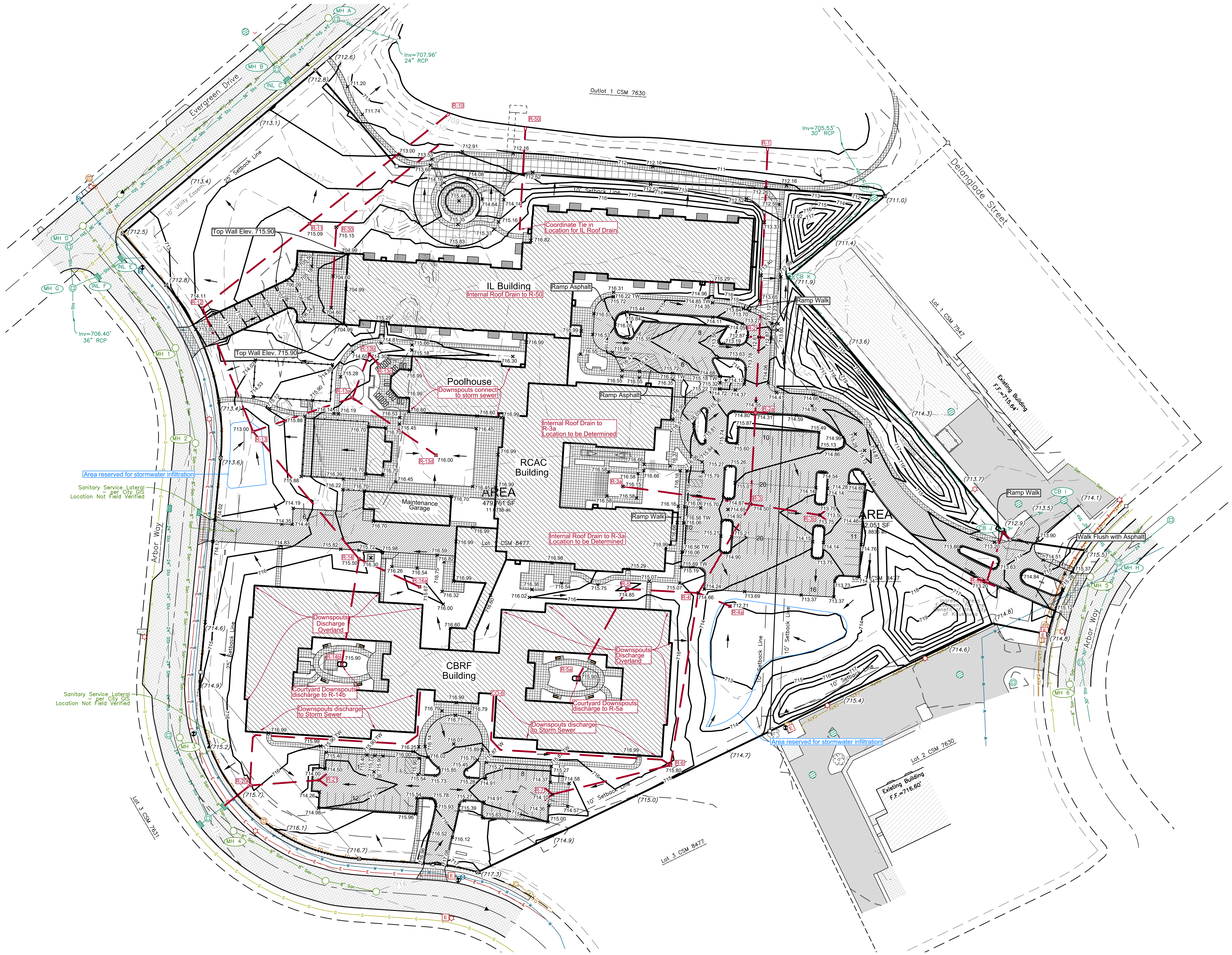

BENCHMARKS (NAVD88)

BM 0 NGS Benchmark
PID DE7760 and Designation - 4X80
Elev 728.44

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Elev 718.58

BM 4 NW Cor. Elec. Concrete Pad
±18' S of CPT 554
Elev 715.52

NOTES:

1. Existing utilities shown are indicated in accordance with available records and field measurements. The contractor shall be responsible for obtaining exact locations & elevations of all utilities, including sewer and water from the owners of the respective utilities. All utility owners shall be notified by the contractor 72 hours prior to excavation. Contact Digger's Hotline (1-800-242-8511) for exact utility locations.
2. The Contractor shall verify all staking and field layout against the plan and field conditions prior to constructing the work and immediately notify the Engineer of any discrepancies.
3. Contractor shall remove all excess materials from the site. Earthwork contractors shall verify topsoil depth.
4. Updated survey and title search have not been authorized and the boundary and easements shown may be inaccurate or incomplete.

LEGEND

- Underground Cable TV
- Underground Fiber Optic
- Sanitary Sewer
- Storm Sewer
- Underground Gas Line
- Water Main
- Underground Electric
- Fence - Steel
- Index Contour - Existing
- Intermediate Contour - Existing
- Sanitary MH / Tank / Base
- Storm Manhole
- Inlet
- Catch Basin / Yard Drain
- Hydrant
- Utility Valve
- Light Pole / Signal
- Electric Transformer
- Telephone Pedestal
- Telephone Manhole
- +799.9 Ex Spot Elevation
- CATV Pedestal
- Post / Guard Post
- Deciduous Tree
- Benchmark
- Asphalt Pavement
- Concrete Pavement
- Gravel
- Proposed Storm Sewer
- 608 Proposed Contour
- Proposed Swale
- Proposed Culvert
- ×608.73 Prop. Flowline Spot Elev.
- ×608.73 TW Prop. Top of Walk Elev.
- +(608.7) Existing Grade
- Proposed Building
- Proposed Asphalt
- Proposed Concrete
- Proposed Gravel
- Proposed Storm Manhole
- Proposed Curb Inlet
- Prop. Catch Basin / Yard Drain
- Proposed Endwall
- Proposed Rip Rap
- Prop. Drainage Direction
- FF=000.0 Prop. Finished Floor Elev.
- Emergency Overflow for Runoff

Scale: 50 0 50 100 150

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PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
09/27/24	City Site Plan Submittal

KEY PLAN

SHEET INFORMATION

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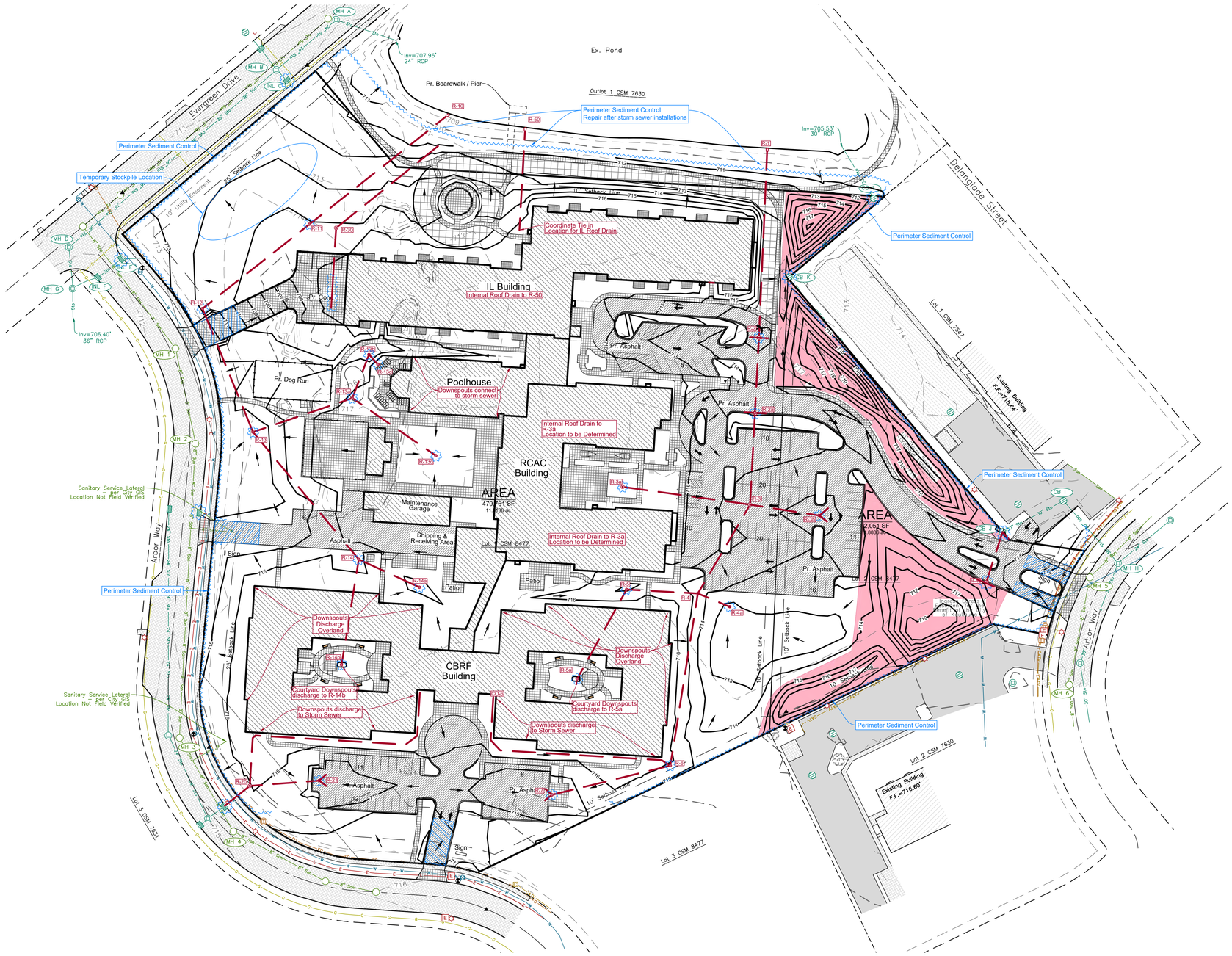
PROJECT MANAGER PM

PROJECT NUMBER 123192-01

DRAINAGE & GRADING PLAN

C102



LEGEND

CATV CATV	Underground Cable TV	Sanitary MH / Tank / Base	CATV Pedestal
FO FO	Underground Fiber Optic	Storm Manhole	Post / Guard Post
San San	Sanitary Sewer	Inlet	Deciduous Tree
Sto Sto	Storm Sewer	Catch Basin / Yard Drain	Benchmark
G G	Underground Gas Line	Hydrant	Asphalt Pavement
W W	Water Main	Utility Valve	Concrete Pavement
E E	Underground Electric	Light Pole / Signal	Gravel
	Fence - Steel	Electric Transformer	
600	Index Contour - Existing	Telephone Pedestal	
799	Intermediate Contour - Existing	Telephone Manhole	
		+799.9 Ex Spot Elevation	
	Proposed Storm Sewer	Proposed Storm Manhole	
608	Proposed Contour	Proposed Curb Inlet	
	Proposed Swale	Prop. Catch Basin / Yard Drain	
	Proposed Culvert	Proposed Endwall	
	Proposed Silt Fence	Proposed Rip Rap	
	Prop. Drainage Direction	Proposed Urban Type B Erosion Mat	
		Proposed Class I Type B Erosion Mat	
	Proposed Tracking Pad	Proposed Inlet Protection	
	Proposed Ditch Check	Type of Inlet Protection	
	Proposed Building		
	Proposed Asphalt		
	Proposed Concrete		
	Proposed Gravel		

Planned Sediment and Erosion Control Practices

All erosion control practices shall be in place prior to disturbing the site. All sediment and erosion control devices and methods shall be in accordance with DNR Technical Standards and the WisDOT Erosion Control product acceptability lists (PAL). It is the responsibility of the Contractor to minimize the area disturbed and the duration of the disturbance. Erosion & sediment control measures shall be maintained on a continuing basis until the site is permanently stabilized. All applicable controls must be in place at the end of each work day with all off-site sediments being cleaned daily or as necessary as no sediment flushing is allowed.

1) Diverting Flow
   a) Permanent Diversion - Intended to divert runoff around disturbed areas to a location where the water can be discharged without adversely impacting the receiving area or channel. Permanent diversions or drainage swales will be used to route runoff to the storm sewer inlets and storm water pond.

2) Overland Flow
   a) Silt Fence - Intended to provide a temporary barrier to the transportation of sediment offsite. Silt fence also reduces the velocity of sheet flow; thereby reducing the erosion potential of flowing water. Silt fencing is not to be used in areas of channelized flow and sediment deposits shall be removed when a 6-inch depth is reached. The silt fence shall be repaired or replaced as necessary to maintain a barrier. **All Silt Fence shall be installed and maintained in accordance with DNR Technical Standard 1056**. It will be placed at the following locations:
      i) along the site perimeter where runoff will leave the site, per plan.
      ii) and at the toe of soil piles if the pile will remain in place for more than seven (7) days.
      iii) as slope interruption within the development
   b) Mulching and Erosion Mat - Intended to reduce the amount of erosion caused by raindrop impact, high overland and concentrated flow velocities and assist the establishment of both temporary and permanent vegetation. **All Erosion Mat shall be installed and maintained in accordance with DNR Technical Standards 1052 and 1053 and all Mulching with DNR Technical Standard 1058**. In addition to mulching, Erosion Mat is required per plan and if field conditions warrant.
   c) Seeding - Intended to provide a reduction of overland flow velocities and stabilize disturbed areas. Seeding will be used on all disturbed areas within seven days of the completion of the activity that will disturb the area. **All permanent seeding and fertilization shall be in accordance with the Landscape Plan.** If required, temporary seeding shall consist of Oats, Rye, Winter Wheat, and/or Annual Ryegrass applied at rates and during the season specified by the Technical Standard but no later than October 1st. Sod placement may occur at any time sod is available and the sod and soil are not frozen.

3) Track out Control - Intended to reduce the amount of sediment transported onto public roads or offsite access points. **The Tracking Pad shall be installed and maintained in accordance with DNR Technical Standard 1057**. Trackout controls will be constructed at the site entrances as indicated on the plan.

4) Dust Control - Intended to reduce surface to air transport of dust during construction. **Dust control shall be implemented with use of methods provided in DNR Technical Standard 1068.** These methods include the use of polymers, seeding, and mulch.

5) Dewatering BMP - Intended to reduce the amount of sediment conveyed due to dewatering practices. **Dewatering practices require compliance with DNR Technical Standard 1061.** The use of geotextile bags is required to prevent sedimentation with a stable discharge adjacent to the existing pond. **The bags shall meet the requirements of DNR Technical Standard 1061**. Upon completion of the dewatering operation, all materials must be disposed of properly in accordance with all state and local requirements.

6) Waste Material - All onsite waste and construction materials shall be handled and disposed of properly. No waste material is allowed to enter the storm sewer system or receiving waters.

Sequence of Construction

1) Obtain plan approval and other applicable permits.
2) Install & maintain sediment control measures. Clearing & Grubbing. Spring 2025
3) Sewer and Water Construction, Building Foundation Construction: Spring 2025
4) Site Work and Gravel Base installations: Summer 2025
5) Curb & Gutter, Sidewalk, and Asphalt Paving: Fall 2025.
6) Stabilize lawn and ditch areas no later than one week after final grade is established.
7) Remove all temporary sediment control measures after 70-percent vegetative cover is established. Water if necessary to establish healthy and well rooted vegetation.
8) Complete project schedule and phasing to be determined.

Maintenance Plan

The contractor is responsible for inspection and maintenance of sediment and erosion control measures until the project is completed. The inspections shall be made every seven days or within 24-hours of a rainfall event of 0.50-inch or greater. Any practices that are damaged or not working properly shall be repaired by the end of the day. Accumulated sediment shall be removed when it has reached a height of one-half the height of the structure. In addition, the following measures shall be taken:

1) All seeded areas will be re-seeded and mulched as necessary according to the specifications in the planned practices to maintain a vigorous, dense vegetated cover.
2) Remove silt fence and temporary structures only after final stabilization and vegetative cover is established.
3) Avoid the use of fertilizers and pesticides in or adjacent to channels or ditches.
4) Construction and waste materials shall be properly disposed.

Weekly inspection reports shall be maintained by the contractor. These reports shall document inspections and maintenance performed. The date and time of the inspections, the inspector's name, and the status of construction and any maintenance performed. Refer to Appendix C or the DNR website for a template: https://dnr.wisconsin.gov/topic/Stormwater/construction/forms.html. Upon request, the inspection reports shall be made available to the owner, the engineer, the Wisconsin Department of Natural Resources, or the City of Kaukauna.

Responsible Parties

Best Management Practices (BMPs) Construction and Maintenance:

Consolidated Construction Company

BMP Inspection and Compliance Enforcement

City of Kaukauna

Wisconsin Department of Natural Resources

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PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
09/27/24	City Site Plan Submittal

KEY PLAN

SHEET INFORMATION

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PROJECT MANAGER PM

PROJECT NUMBER 123192-01

EROSION & SEDIMENT CONTROL PLAN

C103

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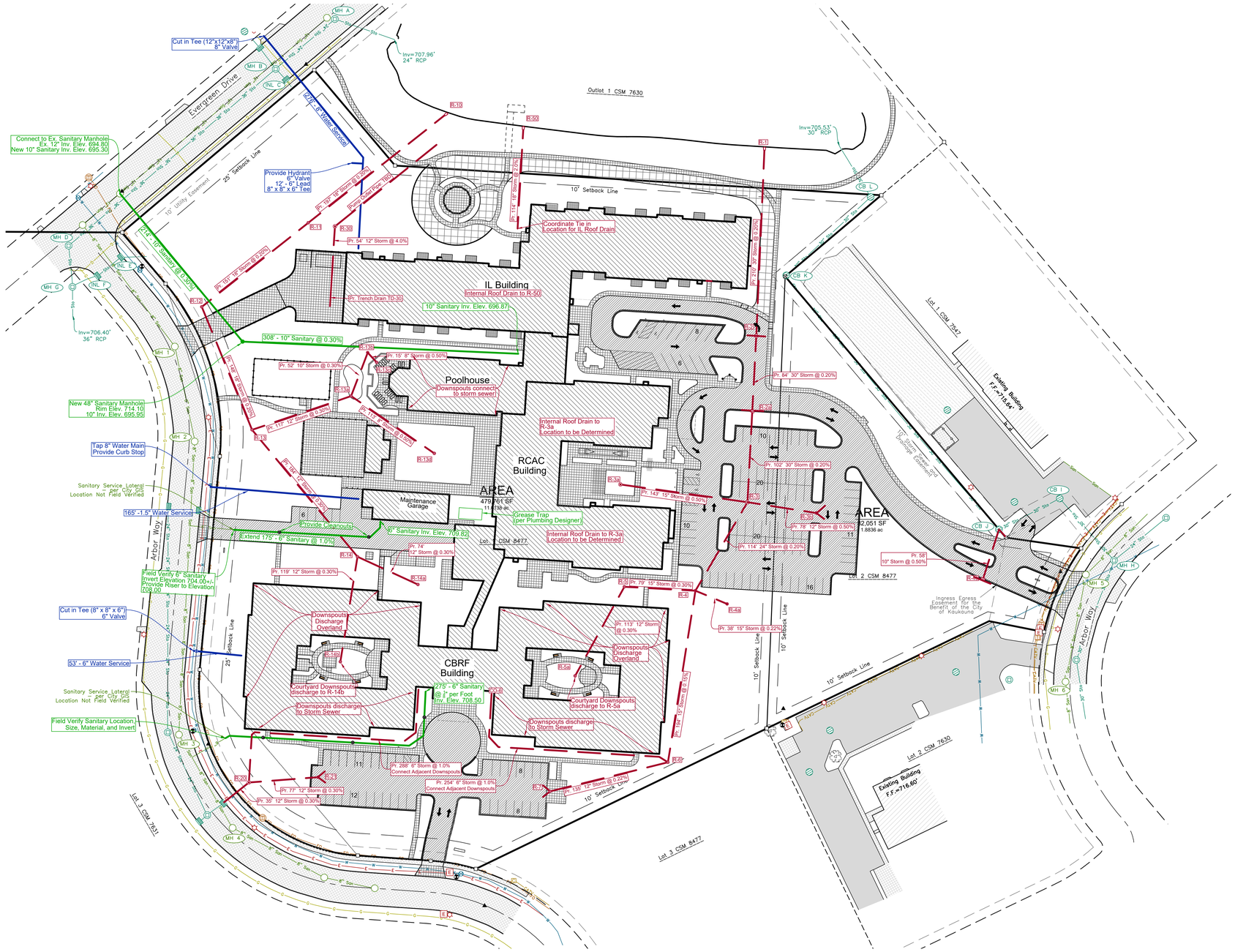

LEGEND

Underground Cable TV	Sanitary MH / Tank / Base	CATV Pedestal
Underground Fiber Optic	Storm Manhole	Post / Guard Post
Sanitary Sewer	Inlet	Deciduous Tree
Storm Sewer	Catch Basin / Yard Drain	Benchmark
Underground Gas Line	Hydrant	Asphalt Pavement
Water Main	Utility Valve	Concrete Pavement
Underground Electric	Light Pole / Signal	Gravel
Fence - Steel	Electric Transformer	
Index Contour - Existing	Telephone Pedestal	
Intermediate Contour - Existing	Telephone Manhole	
	+799.9 Ex Spot Elevation	
Proposed Storm Sewer	Proposed Sanitary Manhole	Proposed Reducer
Proposed Sanitary Sewer	Proposed Storm Manhole	Proposed Plug
Proposed Water Main	Proposed Curb Inlet	Proposed Water MH
608 Proposed Contour	Prop. Catch Basin / Yard Drain	Proposed Tee
Proposed Swale	Proposed Endwall	Proposed Cross
Proposed Culvert	Proposed Hydrant	Proposed 90° Bend
Proposed Building	Proposed Valve	Proposed 45° Bend
Proposed Asphalt	Proposed Curb Stop	Proposed 22.5° Bend
Proposed Concrete	Proposed Cleanout	
Proposed Gravel		

50 0 50 100 150

Sewer and Water shall be constructed in accordance with the State of Wisconsin Standard Specifications for Sewer and Water Construction, and the Standard Specfications of the City of Kaukauna (sewers) and Kaukauna Utilities (water).

Streets shall be constructed in accordance with the State of Wisconsin Standard Specifications for Highway and Structures Construction. Pulbic Streets and Sidewalk damaged as part of this project shall be replaced in kind per Standard Specficiations of the City of Kaukauna.

Contractor shall locate all buried facilities prior to excavating. This plan may not correctly or completely show all buried utilities.

The Contractor shall verify all staking and field layout against the plan and field conditions prior to constructing the work and immediately notify the Engineer of any discrepancies.

The Contractor shall comply with all conditions of the Erosion Control Plan and the Storm Water discharge Permit. All Erosion Control shall be done in accordance with the Plan and Wisconsin DNR Technical Standards.

The outside services are shown to stop at a point 5 feet outside the foundation wall. The Contractor shall be responsible for coordination of continuation of the services into the building to properly coincide with the interior plumbing plans, and compliance with all plumbing permits.

The Contractor is responsible for compliance with Department of Safety & Professional Services, Chapter SPS 382, for lateral construction and cleanout locations.

The contractor shall coordinate with provider for electric, gas, and telecommunication service connection and relocations.

Pipe lengths are measured to center of structure. Endwalls are included in pipe length.

Water Pipe shall be PVC C900 D(18), with minimum of 18 gauge, insulated (blue), single-conductor copper tracer wire, or equivalent, per SPS 382.40 (8)(k).

Sanitary Sewer Pipe shall be PVC SDR 35, with minimum of 18 gauge, insulated (green), single-conductor copper tracer wire, or equivalent, per SPS 382.30 (11)(h).

Storm Sewer Pipe shall be PVC SDR(35), Reinforced Concrete Class III, or HDPE, AASHTO M 294, Type S with water tight joints, with minimum of 18 gauge, insulated (brown), single-conductor copper tracer wire, or equivalent, per SPS 382.36 (7)(d)10.a.

Refer to C501 for storm sewer schedules.

Provide Underdrains for Storm Inlets R-2, R-2a, R-3b, R-7, R-14, R-21, R-40, CB J.

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PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
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KEY PLAN

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PROJECT MANAGER PM

PROJECT NUMBER 123192-01

UTILITY PLAN

C104

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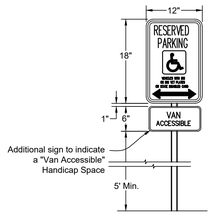
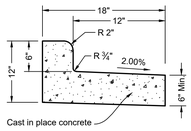
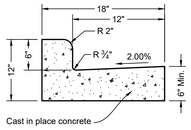


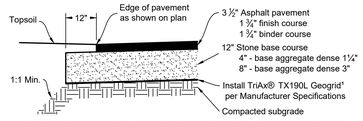
HANDICAP PARKING SIGN DETAIL



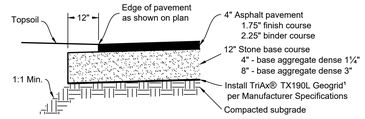
18" REJECT STANDARD CURB



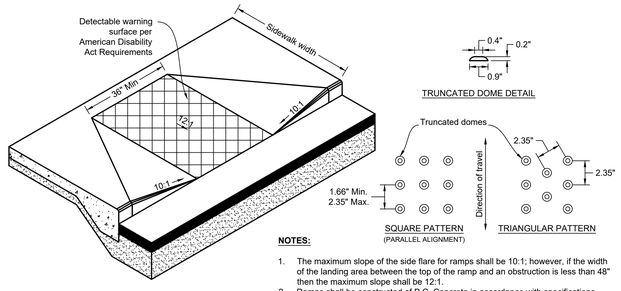
18" ACCEPT STANDARD CURB



LIGHT DUTY ASPHALT PAVEMENT SECTION



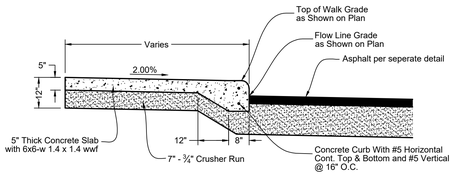
HEAVY DUTY ASPHALT PAVEMENT SECTION



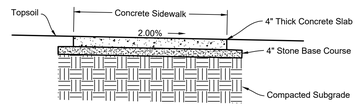
CURB RAMP DETAIL

NOTES:

1. The maximum slope of the side flare for ramps shall be 10:1; however, if the width of the landing area between the top of the ramp and an obstruction is less than 48" then the maximum slope shall be 12:1.
2. Ramps shall be constructed of P.C. Concrete in accordance with specifications.
3. Thickness of ramps will be the same as the adjacent sidewalk with a minimum of 4". Ramp shall include all required expansion joints and variable height edge treatment.
4. Slope ramp up at max, 12:1 from depressed curb to sidewalk.

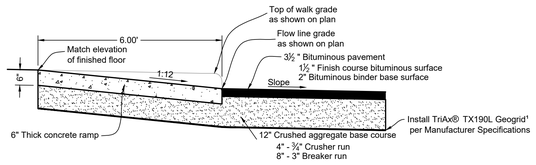


INTEGRAL SIDEWALK / PAVEMENT SECTION

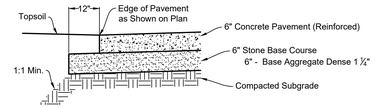


CONCRETE SIDEWALK SECTION

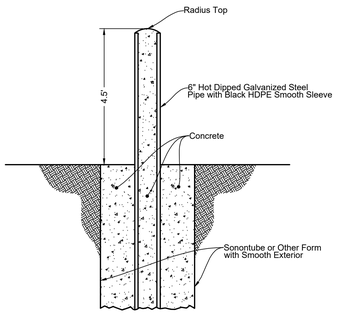
NOTE: Fire Lane Sidewalk Shall be 6-inch reinforced section.



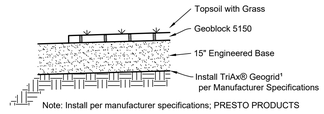
CURB RAMP SECTION



CONCRETE PAVEMENT SECTION



BOLLARD DETAIL



Note: Install per manufacturer specifications; PRESTO PRODUCTS

GEOBLOCK POROUS PAVEMENT

DAVEL ENGINEERING & ENVIRONMENTAL, INC.
Civil Engineers and Land Surveyors
1164 Province Terrace, Menasha, WI 54952
Ph: 920-991-1866 Fax: 920-441-0804
www.davel.pro

eua
milwaukee | madison | green bay | denver | atlanta

PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
09/27/24	City Site Plan Submittal

KEY PLAN

SHEET INFORMATION

PROGRESS DOCUMENTS NOT FOR CONSTRUCTION

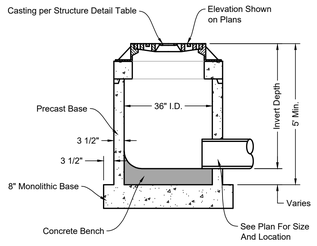
These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and shall not be used for final bidding or construction-related purposes.

PROJECT MANAGER PM

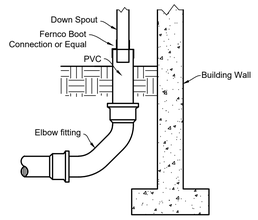
PROJECT NUMBER 123192-01

CONSTRUCTION DETAILS

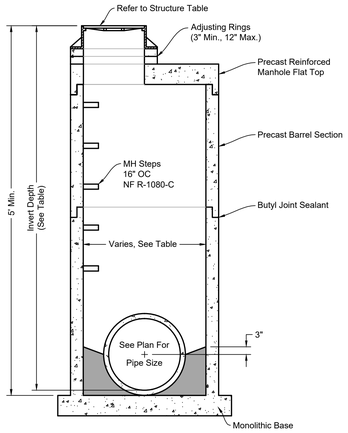
C500



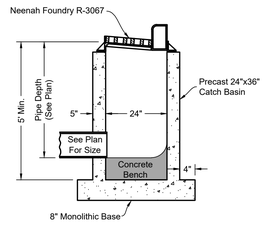
STORM CATCH BASIN



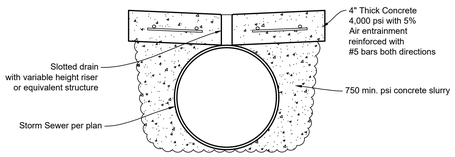
ROOF DRAIN CONNECTION TO STORM SEWER



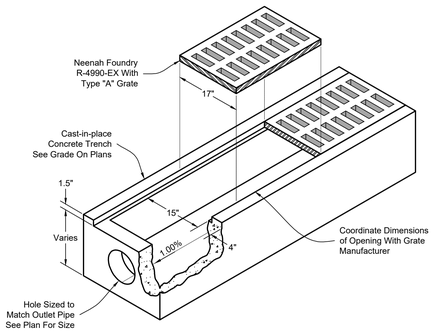
STANDARD STORM MANHOLE



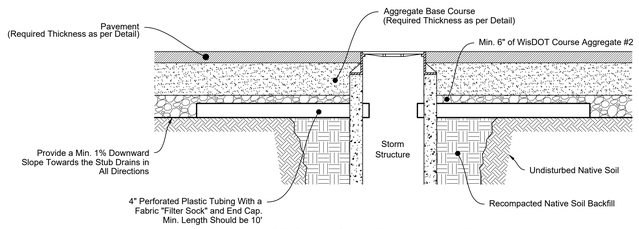
CURB INLET DETAIL



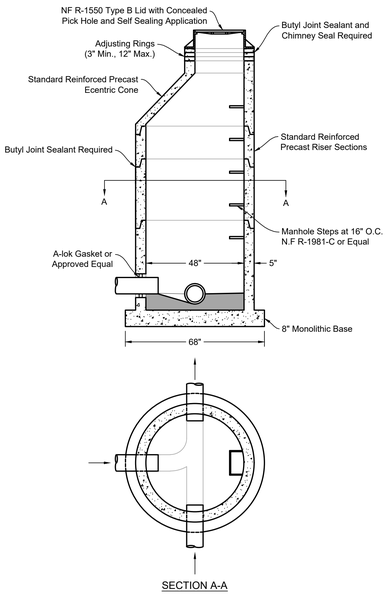
LINEAR DRAIN DETAIL



TRENCH DRAIN DETAIL



STORM SEWER UNDERDRAIN



SANITARY MANHOLE

STORM SEWER STRUCTURE SUMMARY

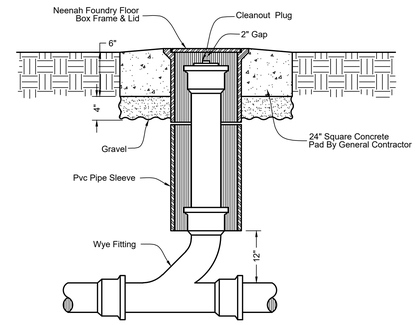
Name	Type	Size	Cover Type	Rim Elev.	Pipe Invert Elev.	Invert Depth (ft)	Total Depth (ft)
R-1	Endwall	---	---	---	708.00	---	---
R-2	MH (60) Inlet	60" ID	R-1550 (open)	712.61	708.42	4.19	5.00
R-2a	MH (60) Inlet	60" ID	R-3065	714.31	708.59	5.72	5.72
R-3	MH (60) Inlet	60" ID	R-1550 (open)	714.50	708.62	5.88	5.88
R-3a	CB (36)	36" ID	R-2540	716.15	710.09	6.06	6.06
R-3b	CB (36)	36" ID	R-2540	713.50	709.91	3.59	5.00
R-4	MH (48) Inlet	48" ID	R-1550 (open)	714.62	709.15	5.47	5.47
R-4a	CB (36)	36" ID	R-2425	712.71	709.69	3.02	5.00
R-5	CB (36)	36" ID	R-2540	714.85	709.99	4.86	5.00
R-5a	CB (36)	36" ID	R-2540	715.90	710.33	5.57	5.57
R-6	CB (36)	36" ID	R-2540	715.80	709.89	5.91	5.91
R-7	CB (36)	36" ID	R-2540	714.10	710.34	3.76	5.00
R-10	Endwall	---	---	---	708.00	---	---
R-11	MH (48) Inlet	48" ID	R-1550 (open)	715.09	708.39	6.70	6.70
R-12	MH (48) Inlet	48" ID	R-1550 (open)	714.11	708.70	5.41	5.41
R-13	CB (36)	36" ID	R-2540	713.00	708.99	4.01	5.00
R-13a	CB (36)	36" ID	R-2540	716.00	709.64	6.36	6.36
R-13b	CB (36)	36" ID	R-2540	714.30	709.90	4.40	5.00
R-13c	CB (36)	36" ID	R-2540	716.50	710.07	6.43	6.43
R-13d	CB (36)	36" ID	R-2540	716.00	710.63	5.37	5.37
R-14	CB (36)	36" ID	R-2540	715.50	709.84	5.66	5.66
R-14a	CB (36)	36" ID	R-2540	715.67	710.07	5.60	5.60
R-14b	CB (36)	36" ID	R-2540	715.90	710.20	5.70	5.70
R-20	CB (36)	36" ID	R-2540	716.00	710.14	5.86	5.86
R-21	CB (36)	36" ID	R-2540	714.00	710.37	3.63	5.00
R-30	MH (60)	60" ID	R-1710	715.15	700.00	15.15	15.15
TD-30	Trench Drain	Refer to Detail		704.40	702.16	2.24	---
40	Inlet	3'x2' ID	R-3067	713.20	708.40	4.80	5.00

STORM SEWER PIPE SUMMARY

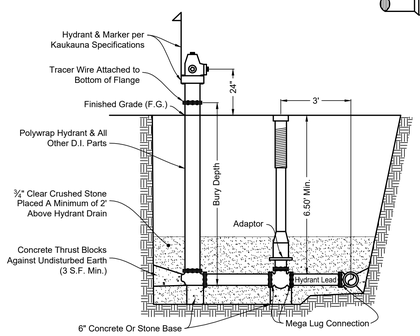
Reach US	Reach DS	US Invert Elev	DS Invert Elev	Length (feet)	Slope (ft/ft)	Size (inch)	Node Drop (feet)	Drainage Area #	Total Area (SF)	Grass (SF)	Roof (SF)	Pavement (SF)	Runoff* (GPM)	Pipe Flow (GPM)	Capcity (GPM)
R-2	R-1	708.42	708.00	210	0.0020	30		A	36786	11099	0	25687	897	6280	8919
R-2a	R-2	708.59	708.42	84	0.0020	30							0	0	8919
R-3	R-2	708.62	708.42	102	0.0020	30			0	0	0	0	0	5383	8919
R-3a	R-3	710.09	709.37	143	0.0050	15		B	39706	1098	33468	5140	1456	1456	2221
R-3b	R-3	709.91	709.52	78	0.0050	12		Z	27820	4715	0	23105	756	756	1225
R-4	R-3	709.15	708.92	114	0.0020	24			0	0	0	0	0	3171	4919
R-4a	R-4	709.69	709.60	38	0.0022	15		C	88760	61410	3048	24302	1455	1455	1473
R-5	R-4	709.99	709.75	78	0.0030	12		H	14868	4358	7188	3322	421	831	949
R-5a	R-5	710.33	709.99	113	0.0030	12		G	15522	5829	7300	2393	410	410	949
R-6	R-4	709.89	709.60	194	0.0015	15			0	0	0	0	0	884	1216
CO-6	R-6	712.88	710.34	254	0.0100	6		F	7188	0	7188	0	276	276	273
R-7	R-6	710.34	710.04	135	0.0022	12		E	29970	14865	0	15105	608	608	813
R-11	R-10	708.39	708.00	197	0.0020	18			0	0	0	0	0	2092	2284
R-12	R-11	708.70	708.39	151	0.0020	18			0	0	0	0	0	2092	2284
R-13	R-12	708.99	708.70	148	0.0020	18		M	45495	25311	2890	17294	887	2092	2284
R-13a	R-13	709.64	709.29	116	0.0030	12			0	0	0	0	0	588	949
R-13b	R-13a	709.90	709.74	52	0.0030	10		O	11534	6694	0	4840	213	213	584
R-13c	R-13b	710.07	710.00	15	0.0050	8			Part of Area O						415
R-13d	R-13a	710.63	710.07	113	0.0050	8		N	13608	2442	1000	10166	375	375	415
R-14	R-13	709.84	709.29	184	0.0030	12			0	0	0	0	0	617	949
R-14a	R-14	710.07	709.84	74	0.0030	12		I	10173	6203	3260	710	207	207	949
R-14b	R-14	710.20	709.84	118	0.0030	12		J	15522	5829	7300	2393	410	410	949
R-20	Existing Inlet	710.14	710.03	35	0.0030	12			0	0	0	0	0	720	949
R-21	R-20	710.37	710.14	77	0.0030	12		L	24800	15093	0	9707	444	444	949
CO-22	R-20	711.88	710.44	288	0.0050	6		K	7188	0	7188	0	276	276	193
TD-30	R-30	702.16	700.00	54	0.0400	12		Q	7770	0	0	7770	239	239	3465
	TD-30	702.51	702.16	35	0.0100	12				Area Q above				0	1732
40	CB J	708.40	708.11	58	0.0050	10		D	9882	5297	0	4585	192	192	753
IL Roof Drain	50	710.28	708.00	114	0.0200	18		P	125537	0	125537	0	4828	4828	7223

Contractor to Field Verify location, invert elevation, and condition for connections to existing infrastructure.

*DSPS 382.36 (5) Area Method. Peak Flow GPM = Roof Sq Ft / 26 Sq Ft per GPM + Pavement Sq Ft / 32.5 Sq Ft per GPM + Lawn Sq Ft / 104 Sq ft per GPM. The onsite stormwater detention system is designed to route water to the municipal storm sewer for treatment by a Town regional stormwater pond.



OUTDOOR CLEANOUT



HYDRANT DETAIL

DAVEL ENGINEERING & ENVIRONMENTAL, INC.
Civil Engineers and Land Surveyors
1164 Province Terrace, Menasha, WI 54952
Ph: 920-991-1866 Fax: 920-441-0804
www.davel.pro

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milwaukee | madison | green bay | denver | atlanta

PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
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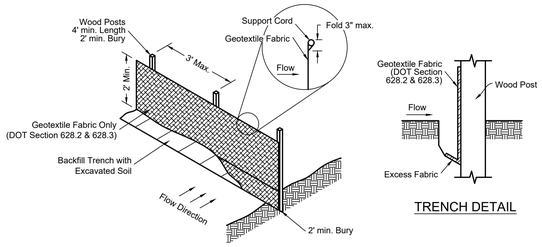
PROJECT MANAGER PM

PROJECT NUMBER 123192-01

SEWER & WATER DETAILS

C501



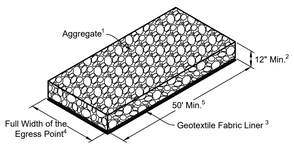
TRENCH DETAIL

Silt fence notes:

1. Detail of construction not shown on this drawings shall conform to criteria set by authorities having jurisdiction and by DNR Technical Standard 1056.
2. When possible, the silt fence should be constructed in an arc or horseshoe shape with the ends pointing upslope to maximize both strength and effectiveness.
3. Attach the fabric to the posts with wire staples or wooden lath and nails.
4. 8'-0" post spacing allowed if a woven geotextile fabric is used.
5. Trench shall be a minimum of 4" wide and 6" deep to bury and anchor the geotextile fabric. Fold material to fit trench and backfill and compact trench with excavated soil.
6. Geotextile fabric shall be reinforced with an industrial polypropylene netting with a maximum mesh spacing of 3/4" or equal. A heavy-duty nylon top support chord or equivalent is required.
7. Steel posts shall be studded "tee" or "u" type with a minimum weight of 128 lbs/lineal foot (without anchor). Fin anchors shall be a minimum size of 4" diameter or 1 1/2" x 3 1/2", except wood posts for geotextile fabric reinforced with netting shall be a minimum size of 1 1/8" x 1 1/8" oak or hickory.

SILT FENCE INSTALLATION

DNR TECHNICAL STANDARD 1056



TRACKING PAD DETAIL

DNR TECHNICAL STANDARD 1057

Note [1] Use hard, durable, angular stone or recycled concrete meeting the gradation in Table 1. Where this gradation is not available, meet the gradation in Wisconsin Department of Transportation (DOT) 2022 Standard Specification, Section 312, Select Crushed Material.

Note [2] Slope the stone tracking pad in a manner to direct runoff to an approved treatment practice.

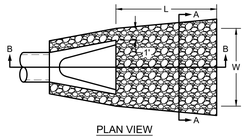
Note [3] Select fabric type based on soil conditions and vehicles loading.

Note [4] Install tracking pad across full width of the access point, or restrict existing traffic to a dedicated egress lane at least 12 feet wide across the top of the pad.

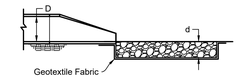
Note [5] If a 50' pad length is not possible due to site geometry, install the maximum length practicable and supplement with additional practices as needed.

TABLE 1: GRADATION FOR STONE TRACKING PADS

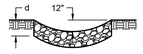
Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5



PLAN VIEW



SECTION B-B



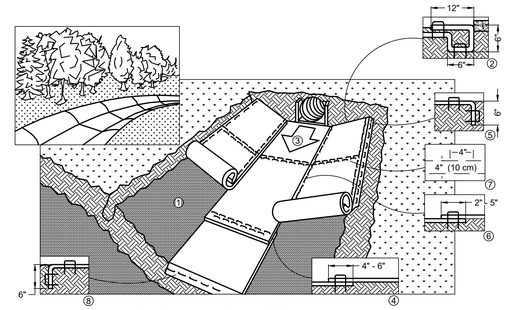
SECTION A-A

D	12"	15"	18"	21"	24"	30"	36"	42"	48"	54"	60"
L	10'	12'	16'	20'	20'	25'	28'	33'	37'	40'	45'
W	11'	13'	20'	22'	24'	28'	32'	38'	42'	45'	50'
d	12"	12"	12"	18"	18"	18"	24"	24"	24"	24"	24"
Riprap	Light	Light	Light	Med.	Med.	Med.	Heavy	Heavy	Heavy	Heavy	Heavy
cu yds	2.6	3.6	7.8	14.3	15.6	22.6	38.4	53.2	65.8	76.3	95.0

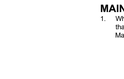
Notes:

1. Excavate below channel outlet and widen channel outlet to the required riprap thickness for each apron. Foundation to be set to zero grade and smoothed.
2. Place geotextile fabric on bottom and sides of prepared foundation. Fabric shall extend under endwall in accordance with DOT specifications. (DOT Section 628.2 & 628.3)
3. Exercise care in placement of riprap to avoid damage to filter fabric.
4. Use riprap conforming to Wisconsin DOT specifications. (DOT Section 606.2 & 606.3)
5. Use DOT Type R geotextile fabric for light riprap. Use Type HR for medium and heavy riprap. (DOT Section 606.2, 606.3, 628.2 & 628.3)
6. Use 12" dimension for pipes less than 12" in diameter.

OUTLET PROTECTION



1. Prepare soil before installing Rolled Erosion Control Products (RECP's), including any necessary application of lime, 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 channel by anchoring the RECP's in a 6" (15 cm) deep x 6" (15 cm) wide trench with approximately 12" (30 cm) of RECP's extended beyond the up-slope portion of the trench. Anchor the RECP's with a row of staples/stakes approximately 12" (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30 cm) portion of RECP's back over seed and compacted soil. Secure RECP's over compacted soil with a row of staples/stakes spaced approximately 12" (30 cm) across the width of the RECP's.
3. Roll center RECP's in direction of water flow in bottom of channel. RECP's will unroll with appropriate side against the soil surface. All RECP's must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using the DOT system, staples/stakes should be placed through each of the colored dots corresponding to the appropriate staple pattern.
4. Place consecutive RECP's end over end (shingle style) with a 4" - 6" (10 cm - 15 cm) overlap. Use a double row of staples staggered 4" (10 cm) apart and 4" (10 cm) on center to secure RECP's.
5. Full length edge of RECP's at top of side slopes must be anchored with a row of staples/stakes approximately 12" (30 cm) apart in a 6" (15 cm) deep x 6" (15 cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECP's must be overlapped approximately 2" - 5" (5cm - 12.5 cm) (depending on RECP's type) and stapled.
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 M - 12 M) intervals. Use a double row of staples staggered 4" (10 cm) apart and 4" (10 cm) on center over entire width of the channel.
8. The terminal end of the RECP's must be anchored with a row of staples.stakes approximately 12" (30 cm) apart in a 6" (15 cm) deep x 6" (15 cm) wide trench. Backfill and compact the trench after stapling.
Note:
* In loose soil conditions, the use of staple or stake lengths greater than 6" (15 cm) may be necessary to properly anchor the RECP's.
9. Detail provided by North American Green (www.nagreen.com)



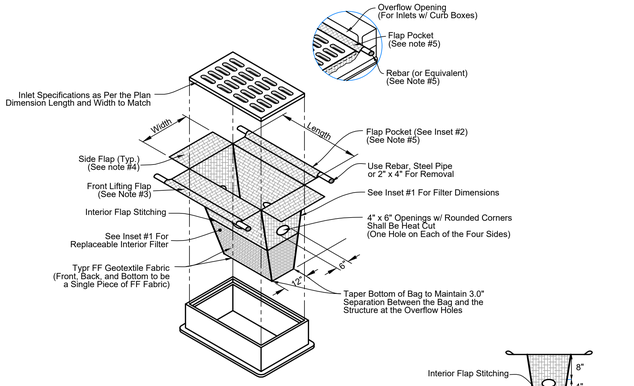
Critical Points
A. Overlaps and seams
B. Projected Water line
C. Channel Bottom/side slope vertices

Note:
* Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

** In loose soil conditions, the use of staple or stake lengths greater than 6" (15 cm) may be necessary to properly anchor the RECP's.

EROSION MAT CHANNEL INSTALLATION

DNR TECHNICAL STANDARD 1053



INLET PROTECTION, TYPE D-M

DNR TECHNICAL STANDARD 1060

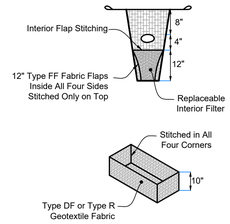
(CAN BE INSTALLED IN ANY INLET WITH OR WITHOUT A CURB BOX)

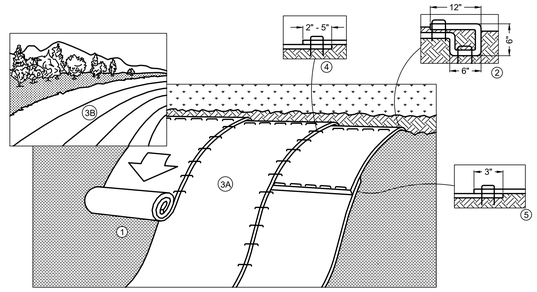
NOTES:

1. Taper bottom of bag to maintain three inches of clearance between the bag and the structure, measured from the bottom of the overflow openings to the structure wall.
2. Geotextile fabric, Type FF for flaps, top and bottom of outside of filter bag. Front, back and bottom of filter bag being one piece.
3. Front lifting flap is to be used when removing and maintaining filter bag.
4. Side flaps shall be a maximum of two inches long. Fold the fabric over and reinforce with multiple stitches.
5. Flap pockets shall be large enough to accept wood 2" x 4". The rebar, steel pipe, or wood shall be installed in the rear flap and shall not block the top half of the curb face opening.

MAINTENANCE NOTES:

1. When removing or maintaining inlet protection, care shall be taken so that the sediment trapped in the fabric does not fall into the structure. Material that has fallen into the inlet shall be immediately removed.

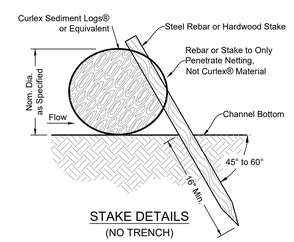




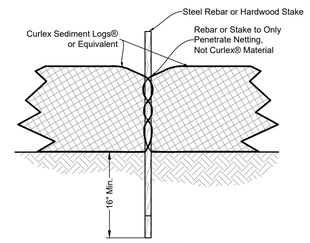
1. Prepare soil before installing Rolled Erosion Control Products (RECP's), including any necessary application of lime, fertilizer, and seed.
Note: When using cell-o-seed do not seed prepared area. Cell-o-seed must be installed with paper side down.
2. Begin at the top of the slope by anchoring the RECP's in a 6" (15 cm) deep x 6" (15 cm) wide trench with approximately 12" (30 cm) of RECP's extended beyond the up-slope portion of the trench. Anchor the RECP's with a row of staples/stakes approximately 12" (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30 cm) portion of RECP's back over seed and compacted soil. Secure RECP's over compacted soil with a row of staples/stakes spaced approximately 12" (30 cm) across the width of the RECP's.
3. Roll the RECP's (A.) down or (B.) horizontally across the slope. RECP's will unroll with appropriate side against the soil surface. All RECP's must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using the Dot system, staples/stakes should be placed through each of the colored Dots corresponding to the appropriate staple pattern.
4. The edges of parallel RECP's must be stapled with approximately 2" - 5" (5 cm - 12.5 cm) overlap depending on RECP's type.
5. Consecutive RECP's spliced down the slope must be placed end over end (shingle style) with an approximate 3" (7.5 cm) overlap. Staple through overlapped area, approximately 12" (30 cm) apart across entire RECP's width.
Note: * In loose soil conditions, the use of staple or stake lengths greater than 6" (30 cm) may be necessary to properly secure the RECP's.
6. Detail provided by North American Green (www.nagreen.com)
7. Turf Reinforcement Mats (TRM's) shall be installed in accordance with the above specifications for all RECP's. Anchoring size and pattern is to be installed per manufacturer specifications for clay soils having 4:1 slope. All TRM's shall be topsoil filled, seeded, and covered with a Class 2, Type B erosion mat in accordance with all manufacturer specifications.

EROSION/TURF REINFORCEMENT MAT SLOPE INSTALLATION

DNR TECHNICAL STANDARD 1052



STAKE DETAILS
(NO TRENCH)



STAKE DETAIL
(FRONT VIEW)

FRONT ELEVATION

NOTE:
Stake installation shall meet manufacturer's requirements in regard to spacing, material, size, and bury depth.

SEDIMENT LOG DETAIL

DAVEL ENGINEERING & ENVIRONMENTAL, INC.
Civil Engineers and Land Surveyors
1164 Province Terrace, Menasha, WI 54952
Ph: 920-991-1866 Fax: 920-441-0804
www.davel.pro

eu:a
milwaukee | madison | green bay | denver | atlanta

PROJECT INFORMATION

THE RESERVE ON ARBOR WAY

KAUKAUNA, WI
54130

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
09/27/24	City Site Plan Submittal

KEY PLAN

SHEET INFORMATION

PROGRESS DOCUMENTS NOT FOR CONSTRUCTION

These documents reflect progress and intent and may be subject to change, including additional detail. These are not final construction documents and shall not be used for final bidding or construction-related purposes.

PROJECT MANAGER PM

PROJECT NUMBER 123192-01

EROSION & SEDIMENT CONTROL DETAILS

C502