

PRELIMINARY SITE CIVIL & LANDSCAPE PLANS  
FOR  
LOV-IT BRANDS CAMPUS  
BRISTOL, WI

LEGEND  
(PROPOSED FEATURES)

	TREE REMOVAL
	EXISTING ASPHALT PAVEMENT TO BE REMOVED
	SAWCUT LINE
	PROPOSED PROPERTY LINE
	PROPOSED SITE LIGHTING (DESIGNED BY OTHERS, FOR REFERENCE ONLY)
	MONUMENT SIGNS (CONSTRUCTION DETAILS BY OTHERS)
	SIGN
	HEAVY-DUTY CONCRETE PAVEMENT WITH STEEL REINFORCEMENT
	HEAVY-DUTY BITUMINOUS PAVEMENT
	STANDARD-DUTY BITUMINOUS PAVEMENT
	CONCRETE SIDEWALK
	PROPOSED 18" STANDARD CURB & GUTTER (AS SHOWN ON SITE PLAN)
	PROPOSED ACCESSIBLE PAVEMENT MARKING VAN ACCESSIBLE STALL
	STRUCTURAL RETAINING WALL - (DESIGNED BY OTHERS)
	PROPOSED 0.5-FOOT GRADE CONTOUR (ONLY USED WHEN CRITICAL)
	PROPOSED 1-FOOT GRADE CONTOUR
	PROPOSED 5-FOOT GRADE CONTOUR
	PROPOSED SPOT GRADE
	PROPOSED TOP OF CURB
	PROPOSED FINISHED SURFACE GRADE ADJACENT TO TOP OF WALL
	PROPOSED FINISHED SURFACE GRADE ADJACENT TO BASE OF WALL
	PROPOSED INLET PROTECTION
	PROPOSED SILT FENCE
	PROPOSED STONE TRACKING MAT
	EROSION CONTROL MATTING
	PROPOSED RIPRAP
	PROPOSED WATER MAIN
	PROPOSED STORM SEWER
	PROPOSED INLET / CB
	PROPOSED STORM MANHOLE

LEGEND

( )	INDICATES RECORDED DIMENSION WHERE DIFFERENT FROM ACTUAL MEASUREMENT
OR	SECTION OR 1/4 SECTION CORNER AS DESCRIBED
1" DIA. IRON PIPE FOUND	(UNLESS OTHERWISE NOTED)
1" DIA. IRON PIPE, 18" LONG-SET	(UNLESS OTHERWISE NOTED)
BOLLARD	
SOIL BORING/MONITORING WELL	
FLAGPOLE	
MAILBOX	
SIGN	
BILLBOARD	
AIR CONDITIONER	
CONTROL BOX	
TRAFFIC SIGNAL	
RAILROAD CROSSING SIGNAL	
CABLE PEDESTAL	
POWER POLE	
GUY POLE	
GUY WIRE	
LIGHT POLE	
SPOT/YARD/PEDESTAL LIGHT	
HANDICAPPED PARKING	
ELECTRIC MANHOLE	
ELECTRIC PEDESTAL	
ELECTRIC METER	
ELECTRIC TRANSFORMER	
TELEPHONE MANHOLE	
TELEPHONE PEDESTAL	
MARKED FIBER OPTIC	
GAS VALVE	
GAS METER	
GAS WARNING SIGN	
STORM MANHOLE	
ROUND INLET	
SQUARE INLET	
STORM SEWER END SECTION	
SANITARY MANHOLE	
SANITARY CLEANOUT OR SEPTIC VENT	
SANITARY INTERCEPTOR MANHOLE	
MISCELLANEOUS MANHOLE	
WATER VALVE	
HYDRANT	
WATER SERVICE CURB STOP	
WATER MANHOLE	
WELL	
WATER SURFACE	
WETLANDS FLAG	
MARSH	
CONIFEROUS TREE	
DECIDUOUS TREE	
SHRUB	
EDGE OF TREES	
SANITARY SEWER	
STO	STORM SEWER
W	WATERMAIN
G	MARKED GAS MAIN
E	MARKED ELECTRIC
OW	OVERHEAD WIRES
B	BUREAU ELEC. SERV.
T	MARKED TELEPHONE
TV	MARKED CABLE TV LINE
FO	MARKED FIBER OPTIC
750	INDICATES EXISTING CONTOUR ELEVATION
780.55	INDICATES EXISTING SPOT ELEVATION
	EXISTING PROPERTY LINE
	EXISTING EASEMENT LINE

VICINITY MAP



PLAN INDEX

SHEET NO.	DESCRIPTION
C100	TITLE SHEET
C200	EXISTING CONDITIONS AND DEMOLITION PLAN
C300	OVERALL SITE PLAN WITH AERIAL
C301	COLOR SITE PLAN
C302	PHASE 1 SITE PLAN
C303 - C307	DETAILED SITE PLANS
C400	OVERALL GRADING PLAN
C401	PHASE 1 GRADING PLAN
C402 - C409	DETAILED GRADING PLANS
C500	EROSION CONTROL PLAN
C600	OVERALL UTILITY PLAN
C601 - C608	DETAILED UTILITY PLANS
C700 - C704	TOWN ROAD PLANS
C800 - C804	DETAILS
C900	SPECIFICATIONS
L100	LANDSCAPE PLAN

DESIGN-BUILDER/  
CONSTRUCTION MANAGER:

**FoxArneson**  
5972 Executive Drive  
Suite 100  
Madison, WI 53719  
608.276.4400  
FOXARNESON.COM

CIVIL ENGINEER &  
LANDSCAPE ARCHITECT:

CREATIVITY BEYOND ENGINEERING

16745 W. Bluemound Road  
Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com

PROJECT MANAGER: PAUL MCILHERAN, P.E.  
PROJECT ENGINEER: ANDREW STASIUKVICIUS, P.E.



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PLAN DATE: 07/26/2024

REVISIONS	ISSUE DATE	SHEET NO.'S	ISSUED FOR:

DESCRIPTION

DATE

16745 W. Bluemound Road  
Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com

**raSmith**  
CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI  
Cedarburg, WI | Naperville, IL | Irvine, CA

LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI

TITLE SHEET

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R.A. Smith, Inc.

DATE: 07/26/2024

SCALE: 1" = 800'

JOB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHP

CHECKED BY: AJJS3

SHEET NUMBER

C100





NOTES

SURVEY WITHIN SITE LIMITS BY WAGNER EXCAVATING. TOPOGRAPHY OUTSIDE PROJECT LIMITS FROM DANE COUNTY GIS.

PARCEL BOUNDARIES DELINEATED BY WAGNER EXCAVATING ON SURVEY DATED 8/24/2023, PROVIDED TO RASMITH VIA CAD FILE ON 10/18/2023.

OLD ROADBED LOCATION IS ESTIMATED FROM A 1974 AERIAL IMAGE

WETLAND DELINEATION BY HEARTLAND ECOLOGICAL GROUP, INC., ON OCTOBER 20, 2023.

PROPERTY AREA = 101.3 AC.  
ONSITE DELINEATED WETLANDS = 22.9 AC

LEGEND

- WETLAND SETBACK
- 100-YR FLOOD LINE
- DELINEATED WETLANDS
- APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER
- TREE REMOVAL

DEMOLITION NOTES

- OBJECTS SHOWN IN BOLD ON THIS PLAN ARE TO BE DEMOLISHED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT AND BROUGHT TO GRADE WITH SUITABLE COMPACTED STRUCTURAL FILL MATERIAL PER THE SPECIFICATIONS.

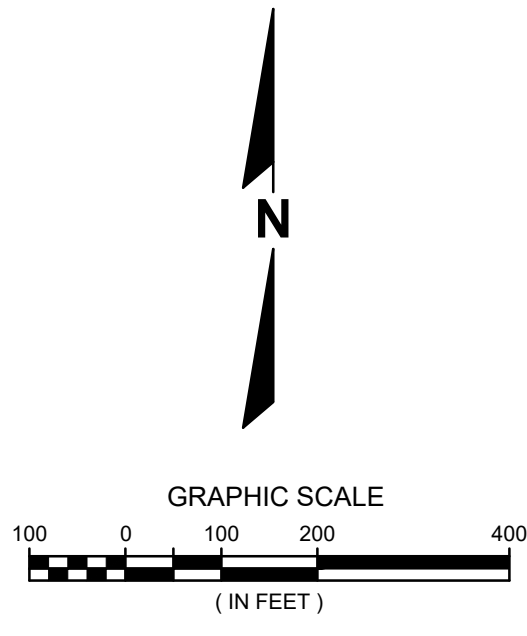


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DESCRIPTION		DATE
		</





BUILDING SIZING

BUILDING	SF
OFFICE (2 FLOORS)	20,000
PRODUCTION BUILDING 1	108,710
PRODUCTION BUILDING 2	106,875
PRODUCTION BUILDING 3	108,710
PRODUCTION BUILDING 4	106,875
PRODUCTION BUILDING 5	108,710
PRODUCTION BUILDING 6	108,680
SHOP - FUTURE BUILD	14,000

NOTES

AERIAL MAP PER MICROSOFT BING GEOMAP

SURVEY WITHIN SITE LIMITS BY WAGNER EXCAVATING. TOPOGRAPHY OUTSIDE PROJECT LIMITS FROM DANE COUNTY GIS.

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LEGEND

- WETLAND SETBACK
- - - - - 100-YR FLOOD LINE
- - - - - PROPOSED STORMWATER BASIN
- [Pattern] DELINEATED WETLANDS
- [Pattern] APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER

PARKING CALCULATIONS

	STANDARD STALLS 20'X10'	ADA STALLS 20'X8'	SEMI STALLS 55'X12'
FULL BUILD	244	3	25
PHASE 1 ONLY	68	3	22

\*DOES NOT INCLUDE DOCK DOORS



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DESCRIPTION

DATE

16745 W. Bluemound Road  
Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com

CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI  
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LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI

OVERALL SITE PLAN WITH AERIAL

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R.A. Smith, Inc.

DATE: 07/26/2024

SCALE: 1" = 200'

JOB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHP

CHECKED BY: AJS3

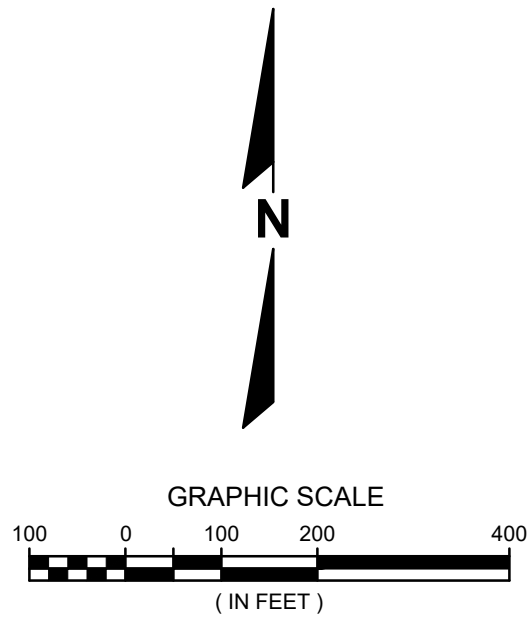
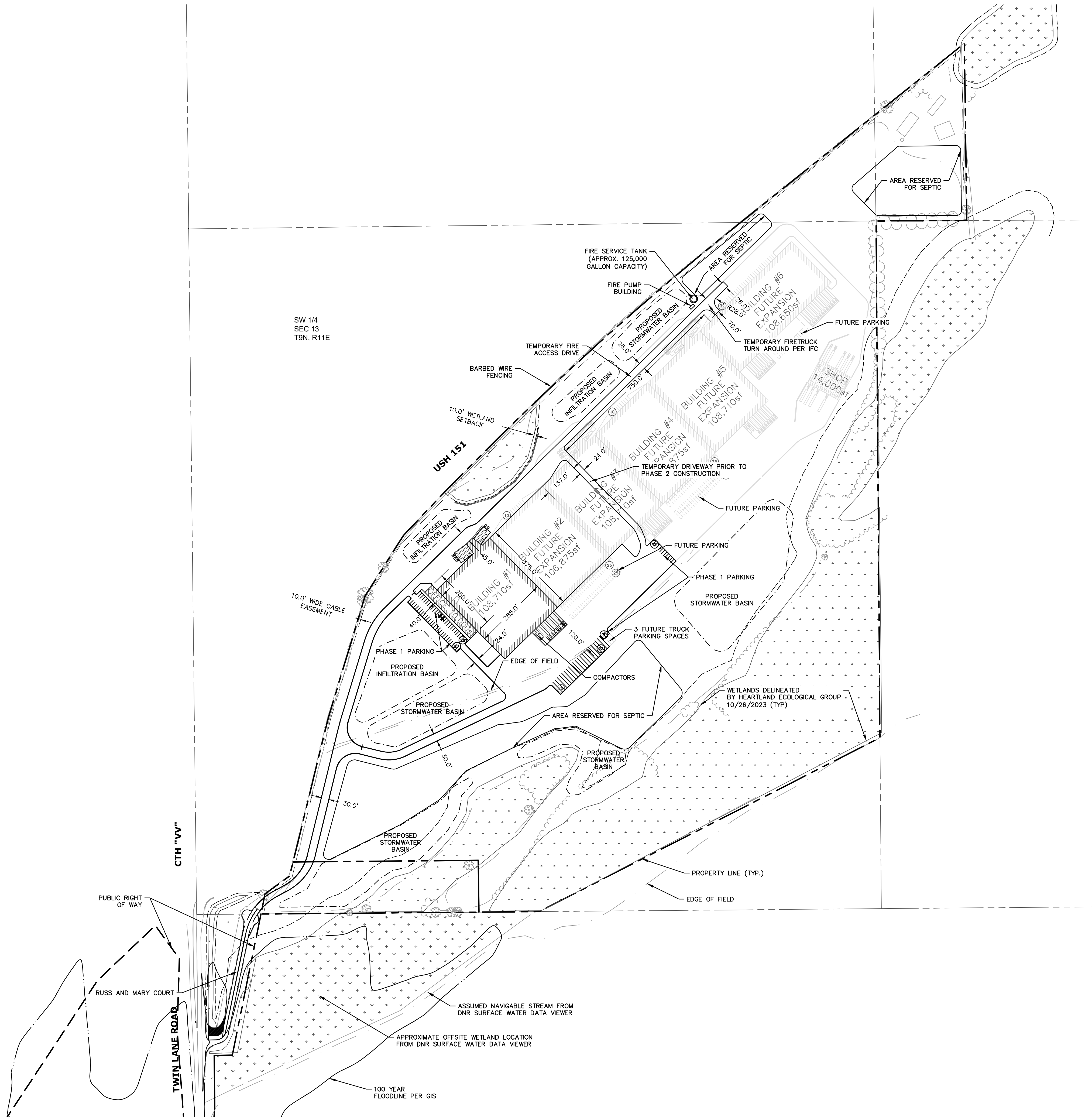
SHEET NUMBER

C300









NOTES

SURVEY WITHIN SITE LIMITS BY WAGNER EXCAVATING. TOPOGRAPHY OUTSIDE PROJECT LIMITS FROM DANE COUNTY GIS.

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WETLAND DELINEATION BY HEARTLAND ECOLOGICAL GROUP, INC., ON OCTOBER 20, 2023.

PROPERTY AREA = 101.3 AC.  
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LEGEND

- WETLAND SETBACK
- 100-YR FLOOD LINE
- PROPOSED STORMWATER BASIN
- DELINEATED WETLANDS
- APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER



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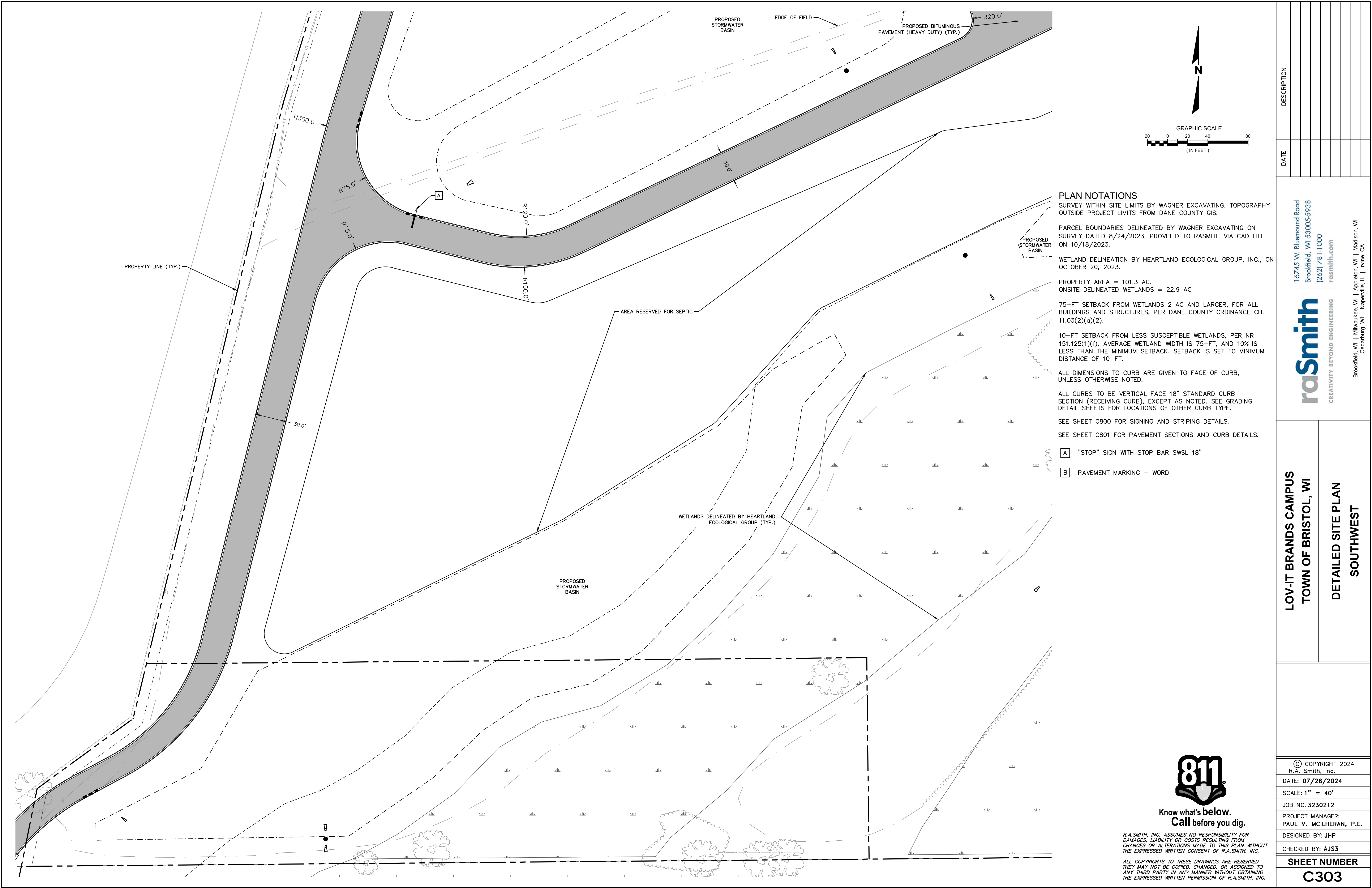
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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
OVERALL SITE PLAN PHASE 1	
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DATE: 07/26/2024	
SCALE: 1" = 200'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C302	



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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
DETAILED SITE PLAN SOUTHWEST	
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DATE: 07/26/2024	
SCALE: 1" = 40'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C303	



SURVEY WITHIN SITE LIMITS BY WAGNER EXCAVATING. TOPOGRAPHY OUTSIDE PROJECT LIMITS FROM DANE COUNTY GIS.

PARCEL BOUNDARIES DELINEATED BY WAGNER EXCAVATING ON SURVEY DATED 8/24/2023, PROVIDED TO RASMITH VIA CAD FILE ON 10/18/2023.

WETLAND DELINEATION BY HEARTLAND ECOLOGICAL GROUP, INC., ON OCTOBER 20, 2023.

PROPERTY AREA = 101.3 AC.  
ONSITE DELINEATED WETLANDS = 22.9 AC

75-FT SETBACK FROM WEILANDS 2 AC AND LARGER, FOR ALL BUILDINGS AND STRUCTURES, PER DANE COUNTY ORDINANCE CH. 11.03(2)(a)(2).

10-FT SETBACK FROM LESS SUSCEPTIBLE WETLANDS, PER NR 151.125(1)(f). AVERAGE WETLAND WIDTH IS 75-FT, AND 10% IS LESS THAN THE MINIMUM SETBACK. SETBACK IS SET TO MINIMUM DISTANCE OF 10-FT.

ALL DIMENSIONS TO CURB ARE GIVEN TO FACE OF CURB,  
UNLESS OTHERWISE NOTED.

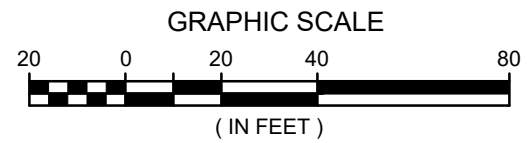
ALL CURBS TO BE VERTICAL FACE 18" STANDARD CURB  
SECTION (RECEIVING CURB), EXCEPT AS NOTED. SEE GRADING  
DETAIL SHEETS FOR LOCATIONS OF OTHER CURB TYPE.

SEE SHEET C800 FOR SIGNING AND STRIPING DETAILS.

SEE SHEET C801 FOR PAVEMENT SECTIONS AND CURB DETAILS.

A "STOP" SIGN WITH STOP BAR SWSL 18"

**B** PAVEMENT MARKING – WORD



COMPACTORS —

BUILDING #2  
FUTURE EXPANSION  
106,875sf

BUILDING #1  
108,710sf

OFFICE

## PROPOSED STORMWATER

EDGE OF FIELD

PROPOSED BITUMINOUS  
PAVEMENT (HEAVY DUTY) (TYP.)

BUILDING #3  
FUTURE EXPANSION  
108,710sf

**LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI**

**DETAILED SITE PLAN**

**SOUTH**

16745 W. Bluemound Road  
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CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI  
Cedarburg, WI | Naperville, IL | Irvine, CA

DESCRIPTION

DATE \_\_\_\_\_

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DATE: 07/26/2024

SCALE: 1" = 40'

JOB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHF

CHECKED BY: AJS

**SHEET NUMBER**

C304



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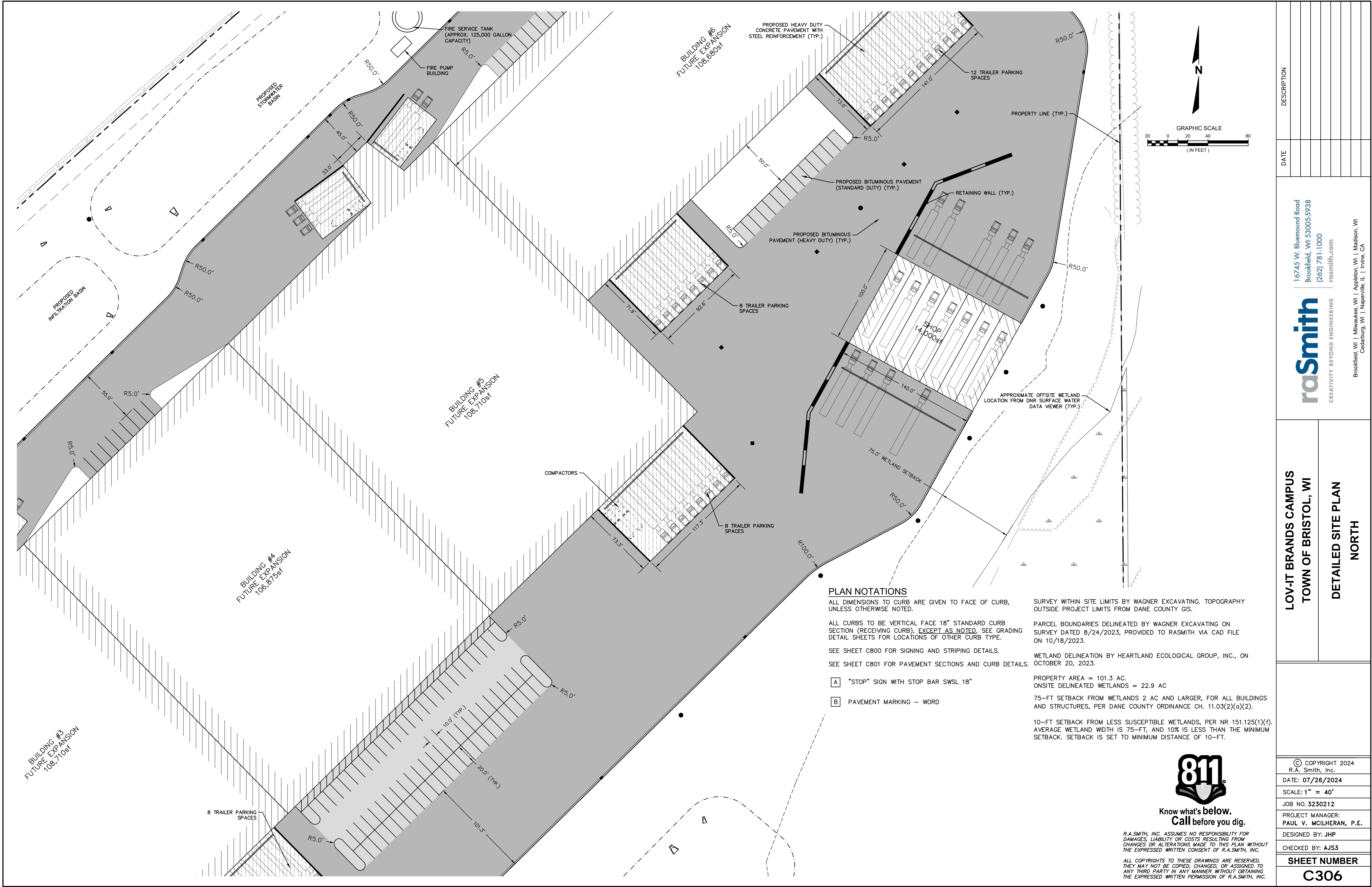
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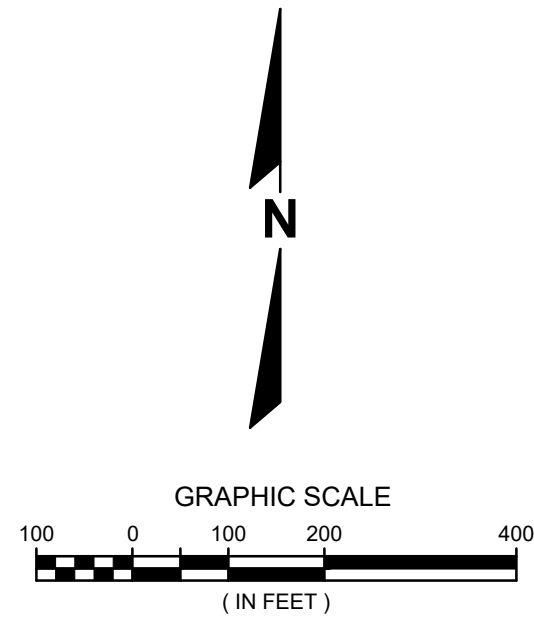
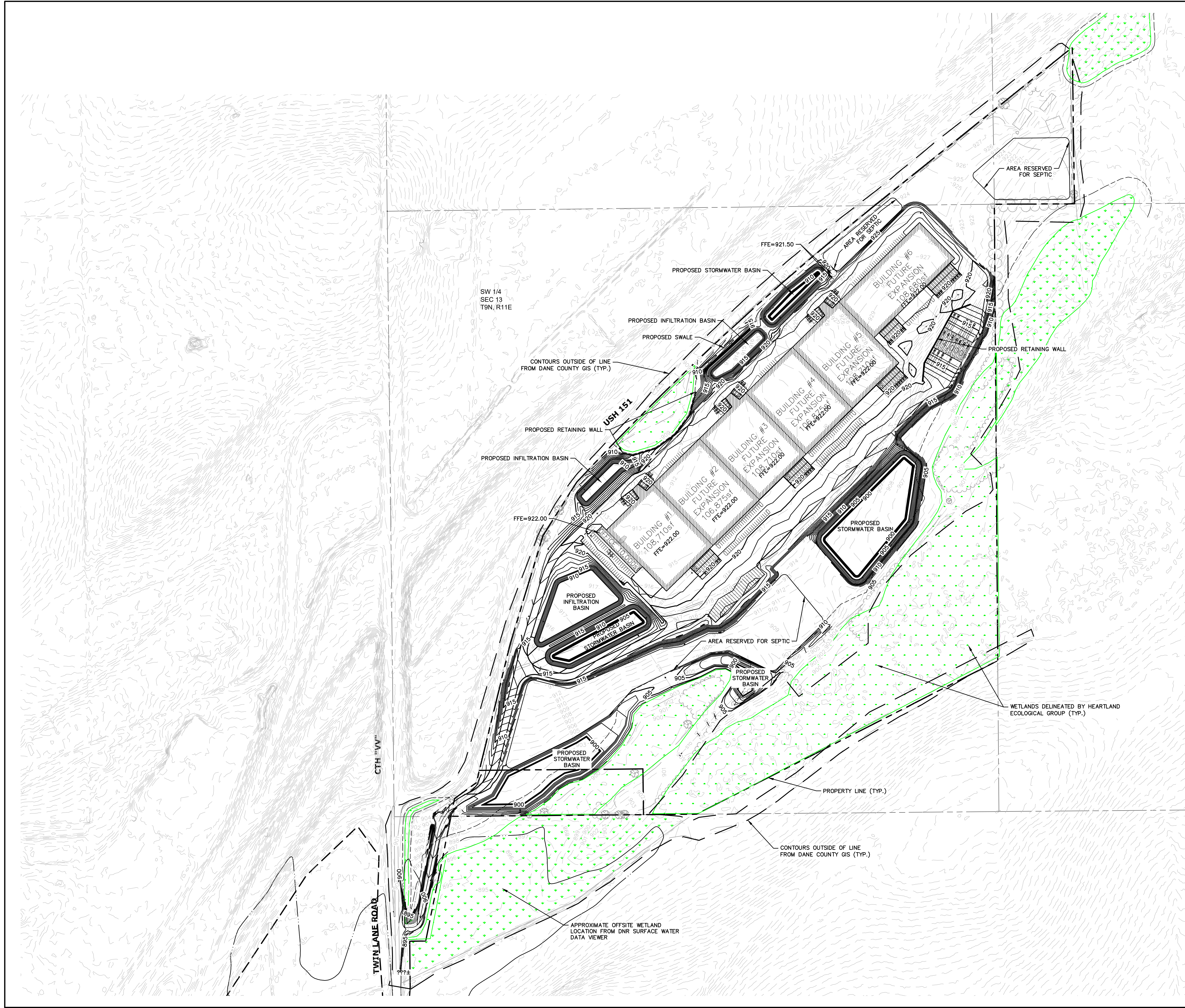
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<b>raSmith</b> CREATIVITY BEYOND ENGINEERING			
Brookfield, WI   Milwaukee, WI   Appleton, WI   Madison, WI Cedarburg, WI   Naperville, IL   Irvine, CA			
LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI		DETAILED SITE PLAN NORTH	
© COPYRIGHT 2024 R.A. Smith, Inc.		DATE: 07/26/2024	
SCALE: 1" = 40'		JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.		DESIGNED BY: JHP	
CHECKED BY: AJJS3		SHEET NUMBER	
		C306	







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NOTES

PARCEL BOUNDARIES DELINEATED BY WAGNER EXCAVATING ON SURVEY DATED 8/24/2023, PROVIDED TO RASMITH VIA CAD FILE ON 10/18/2023.

WETLAND DELINEATION BY HEARTLAND ECOLOGICAL GROUP, INC., ON OCTOBER 20, 2023.

PROPERTY AREA = 101.3 AC.  
ONSITE DELINEATED WETLANDS = 22.9 AC

LEGEND

- WETLAND SETBACK
- 100-YR FLOOD LINE
- DELINEATED WETLANDS
- APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER



Know what's below.  
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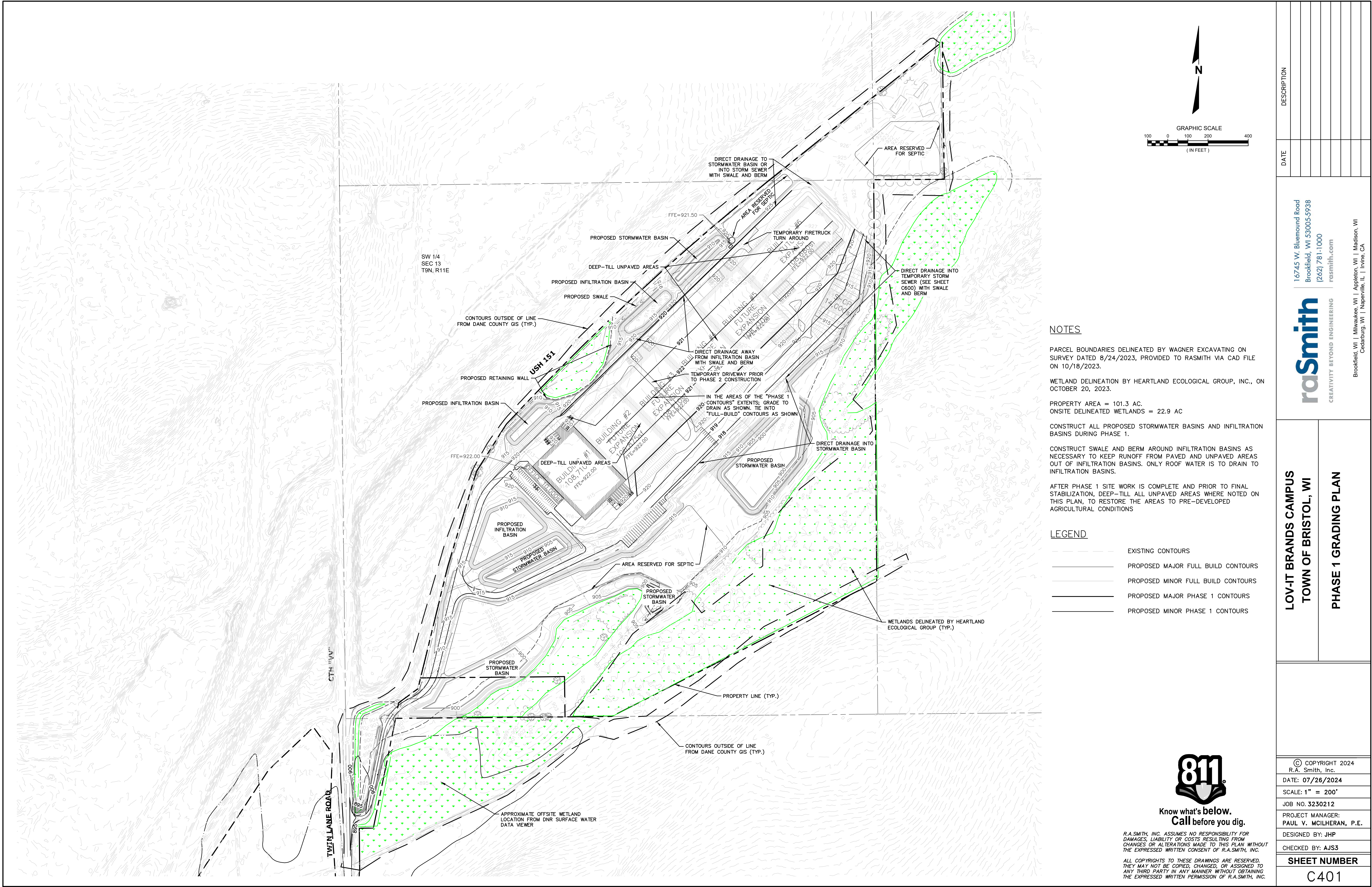
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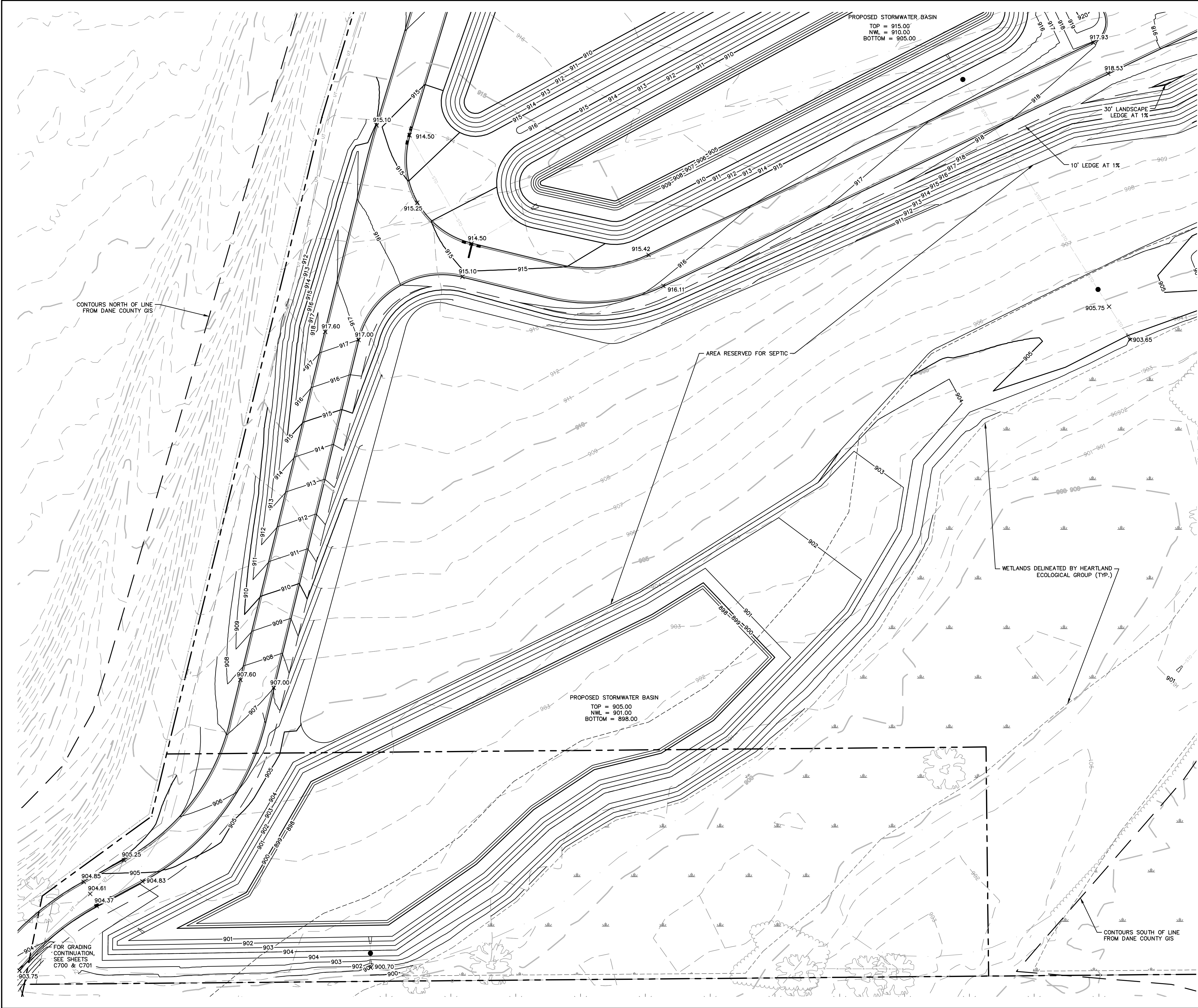
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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
OVERALL GRADING PLAN	
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DATE: 07/26/2024	
SCALE: 1" = 200'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C400	



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**PLAN NOTATIONS**

EXISTING CONTOURS FROM WAGNER EXCAVATING SURVEY AND FROM DANE COUNTY GIS.

ALL DIMENSIONS TO CURB ARE GIVEN TO FACE OF CURB, UNLESS OTHERWISE NOTED.

ALL CURBS TO BE VERTICAL FACE 18" STANDARD CURB SECTION (RECEIVING CURB), EXCEPT AS NOTED. SEE GRADING DETAIL SHEETS FOR LOCATIONS OF OTHER CURB TYPE.

TW/BW GRADES CORRESPOND TO THE GROUND OR PAVEMENT ELEVATIONS AT THE WALL. T/W GRADE IS THE ELEVATION AT THE WALL ON THE HIGH SIDE. B/W GRADE IS THE ELEVATION AT THE WALL ON THE LOW SIDE. TOP OF THE RETAINING WALL MAY BE HIGHER THAN THE PAVEMENT. FOR DOCK WALLS, SEE ARCHITECTURAL PLANS FOR THE RETAINING WALL HEIGHT.

ALL STAIRS SHOWN ON THESE PLANS ARE FOR LOCATION AND MATERIAL REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONSULTING WITH A GEOTECHNICAL ENGINEER AND/OR STRUCTURAL ENGINEER FOR APPROPRIATE DESIGN CERTIFICATION PRIOR TO CONSTRUCTION, DEPENDING ON THE TYPE OF STAIRS. FOR ALL CONCRETE BLOCK MODULAR SYSTEMS, CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION PER MANUFACTURER'S SPECIFICATIONS. ALL NECESSARY GEORID, REINFORCEMENT, BACKFILL, COMPACTION AND DRAIN TILE ARE TO BE COORDINATED BETWEEN THE CONTRACTOR, GEOTECHNICAL ENGINEER, AND SUPPLIER. RASN ASSUMES NO RESPONSIBILITY FOR THE INSTALLATION, GEOTECHNICAL INTEGRITY, OR STABILITY OF THESE STAIRS AND RETAINING WALLS. SEE ARCHITECTURAL PLANS FOR WALLS AND STAIRS ADJACENT TO BUILDING.

THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING QUANTITIES AND FOR THE ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSION OF ENTRANCES, VESTIBULES, STAIRS, RETAINING WALLS, RAMPS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.



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Brookfield, WI   Milwaukee, WI   Appleton, WI   Madison, WI Cedarburg, WI   Naperville, IL   Irvine, CA	
LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
DETAILED GRADING PLAN SOUTHWEST	
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DATE: 07/26/2024	
SCALE: 1" = 40'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C402	



PLAN NOTATIONS

EXISTING CONTOURS FROM WAGNER EXCAVATING SURVEY AND FROM DANE COUNTY GIS.

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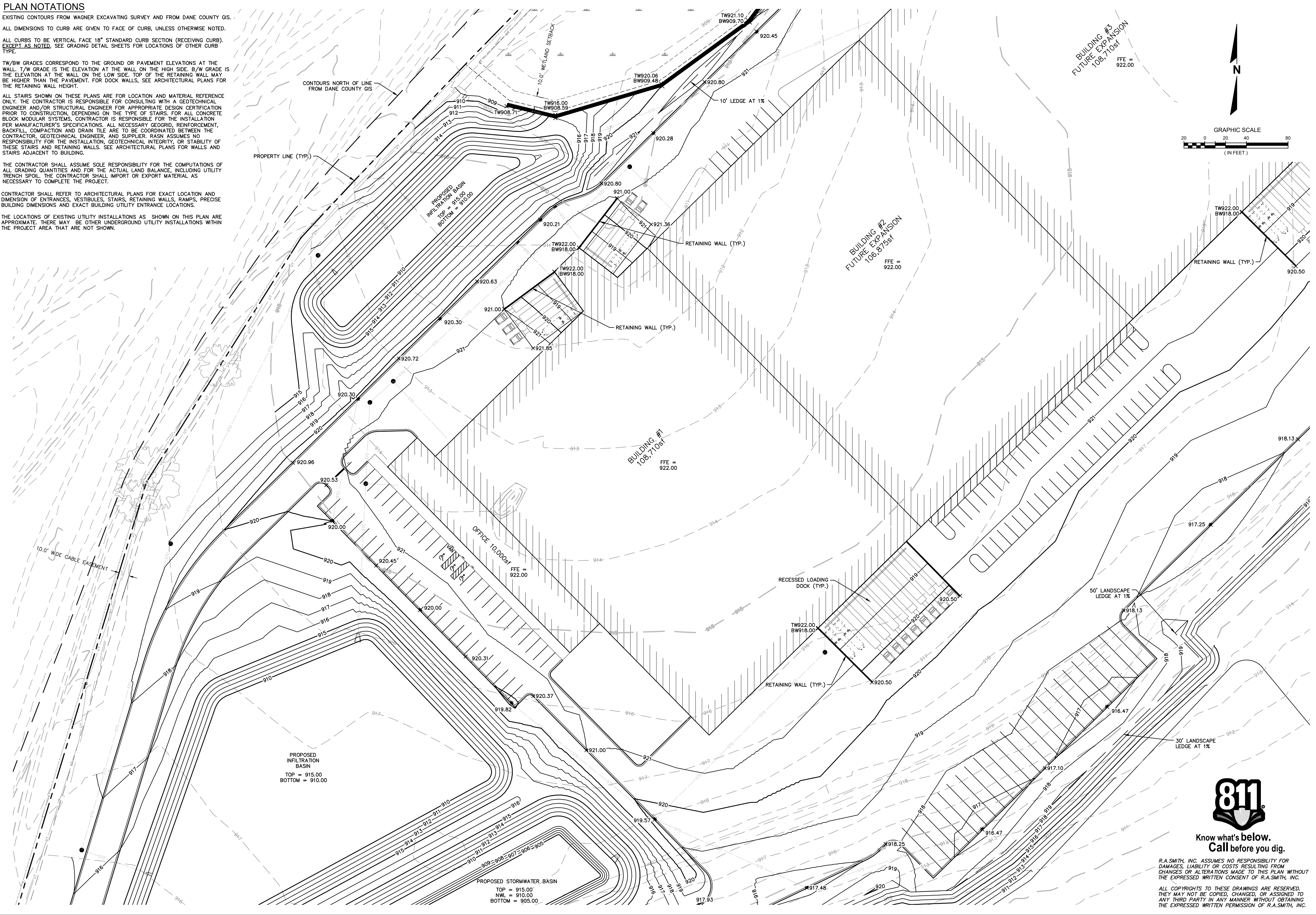
TW/BW GRADES CORRESPOND TO THE GROUND OR PAVEMENT ELEVATIONS AT THE WALL. T/W GRADE IS THE ELEVATION AT THE WALL ON THE HIGH SIDE. B/W GRADE IS THE ELEVATION AT THE WALL ON THE LOW SIDE. TOP OF THE RETAINING WALL MAY BE HIGHER THAN THE PAVEMENT. FOR DOCK WALLS, SEE ARCHITECTURAL PLANS FOR THE RETAINING WALL HEIGHT.

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THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING QUANTITIES AND FOR THE ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.

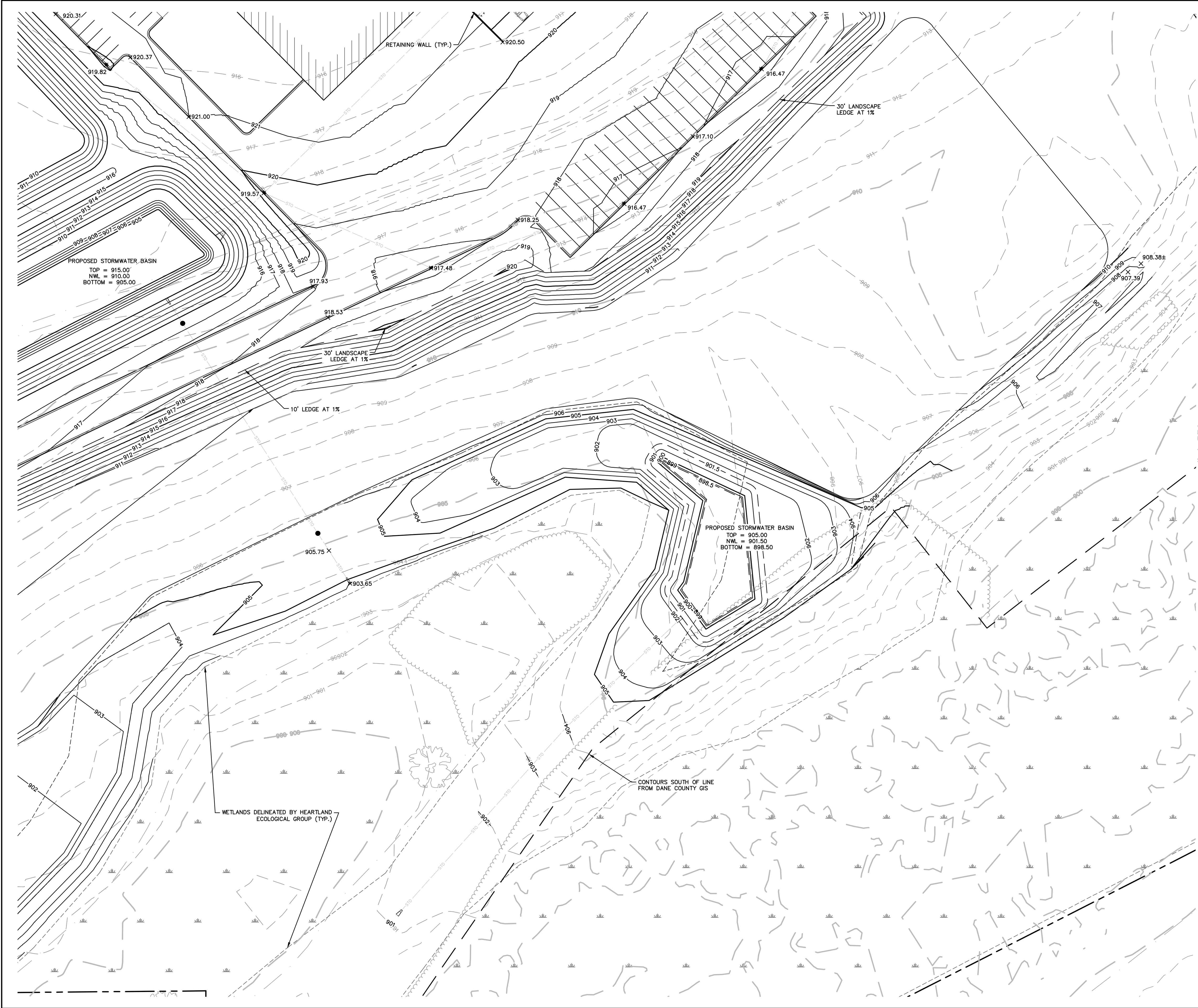
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DESCRIPTION		DATE	
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
raSmith CREATIVITY BEYOND ENGINEERING			
Brookfield, WI   Milwaukee, WI   Appleton, WI   Madison, WI Cedarburg, WI   Naperville, IL   Irvine, CA			
LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI			
DETAILED GRADING PLAN SOUTH			
© COPYRIGHT 2024 R.A. Smith, Inc.			
DATE: 07/26/2024			
SCALE: 1" = 40'			
JOB NO. 3230212			
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.			
DESIGNED BY: JHP			
CHECKED BY: AJS3			
SHEET NUMBER			
C403			





**PLAN NOTATIONS**

EXISTING CONTOURS FROM WAGNER EXCAVATING SURVEY AND FROM DANE COUNTY GIS.

ALL DIMENSIONS TO CURB ARE GIVEN TO FACE OF CURB, UNLESS OTHERWISE NOTED.

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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
DETAILED GRADING PLAN SOUTH POND	
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DATE: 07/26/2024	
SCALE: 1" = 40'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C404	





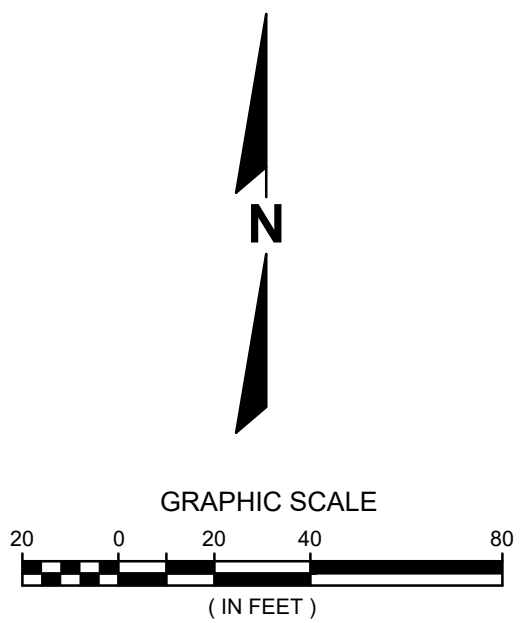
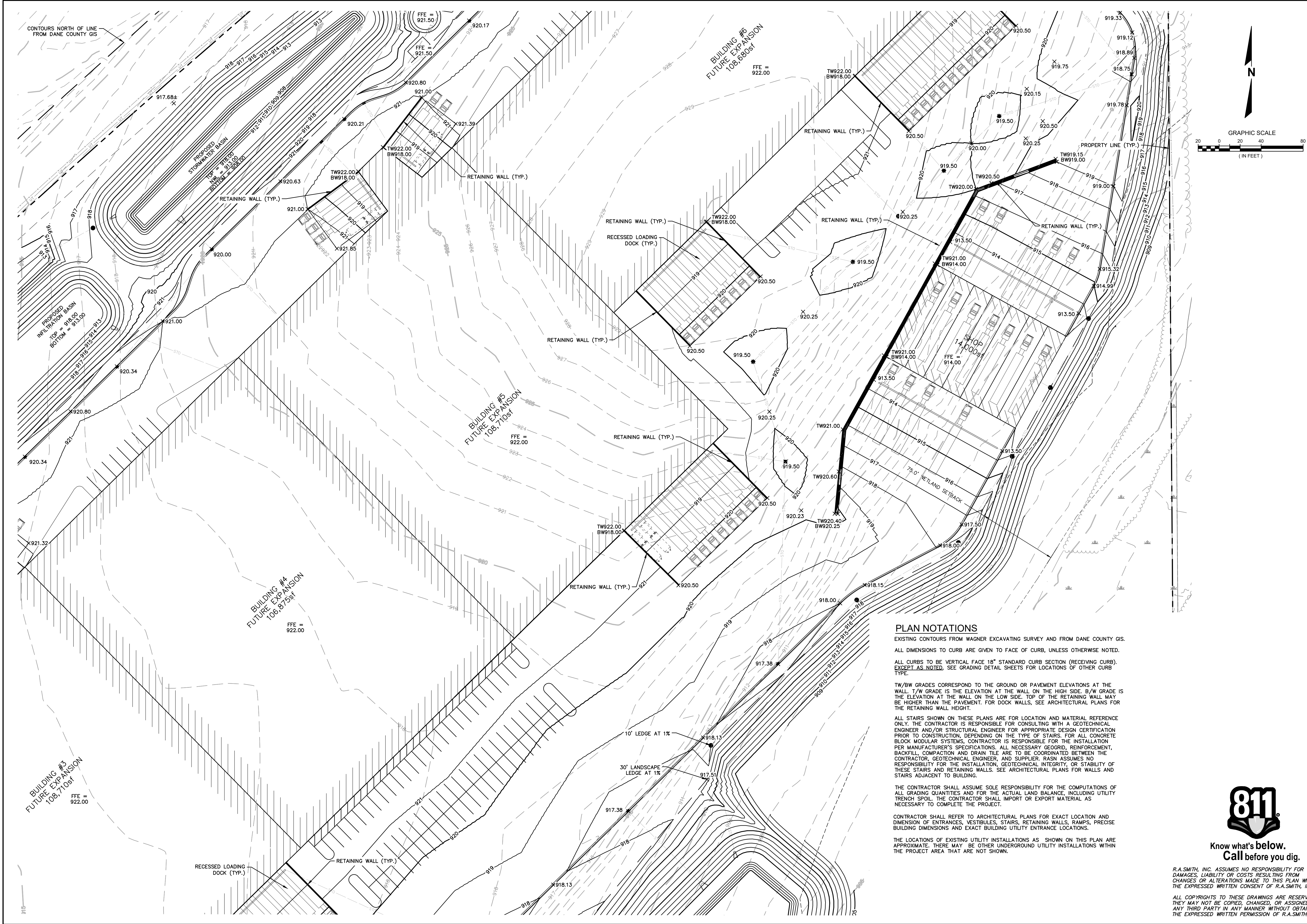












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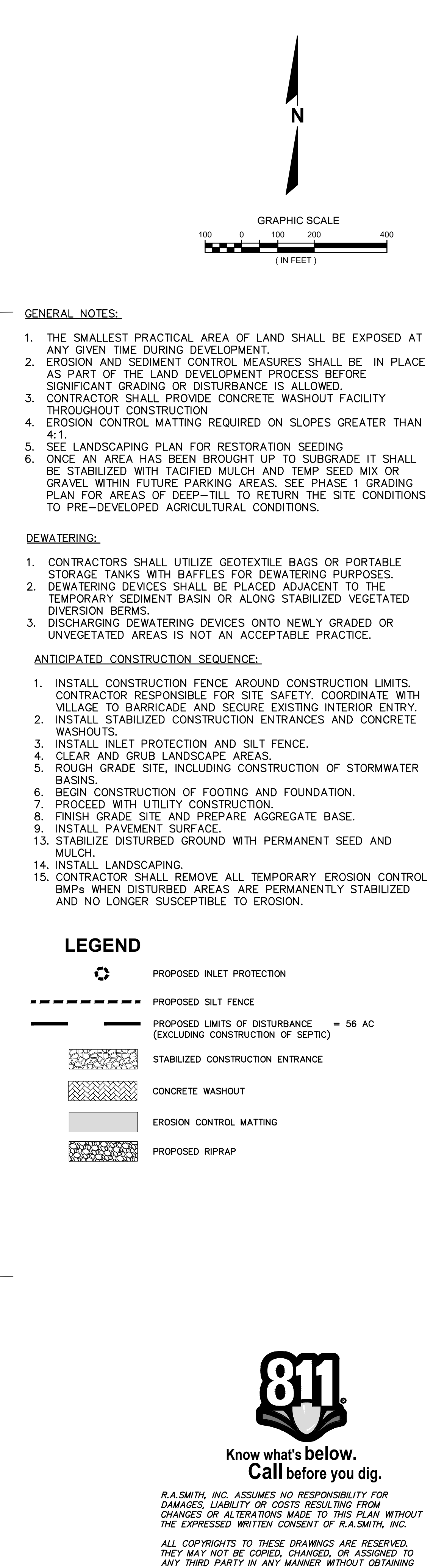
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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
DETAILED GRADING PLAN NORTH	
© COPYRIGHT 2024 R.A. Smith, Inc.	
DATE: 07/26/2024	
SCALE: 1" = 40'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C408	





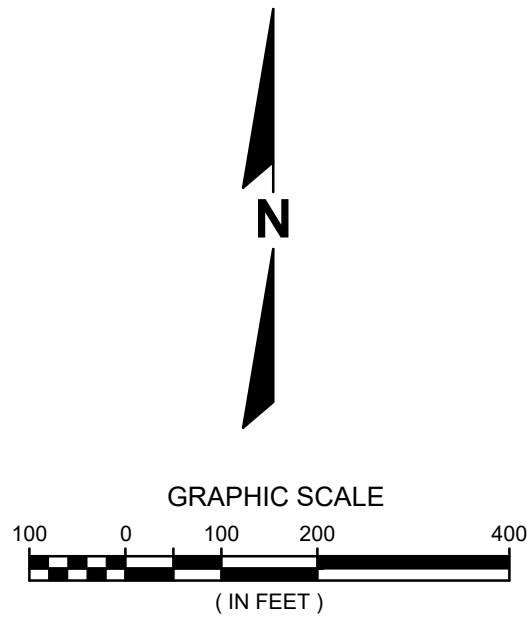
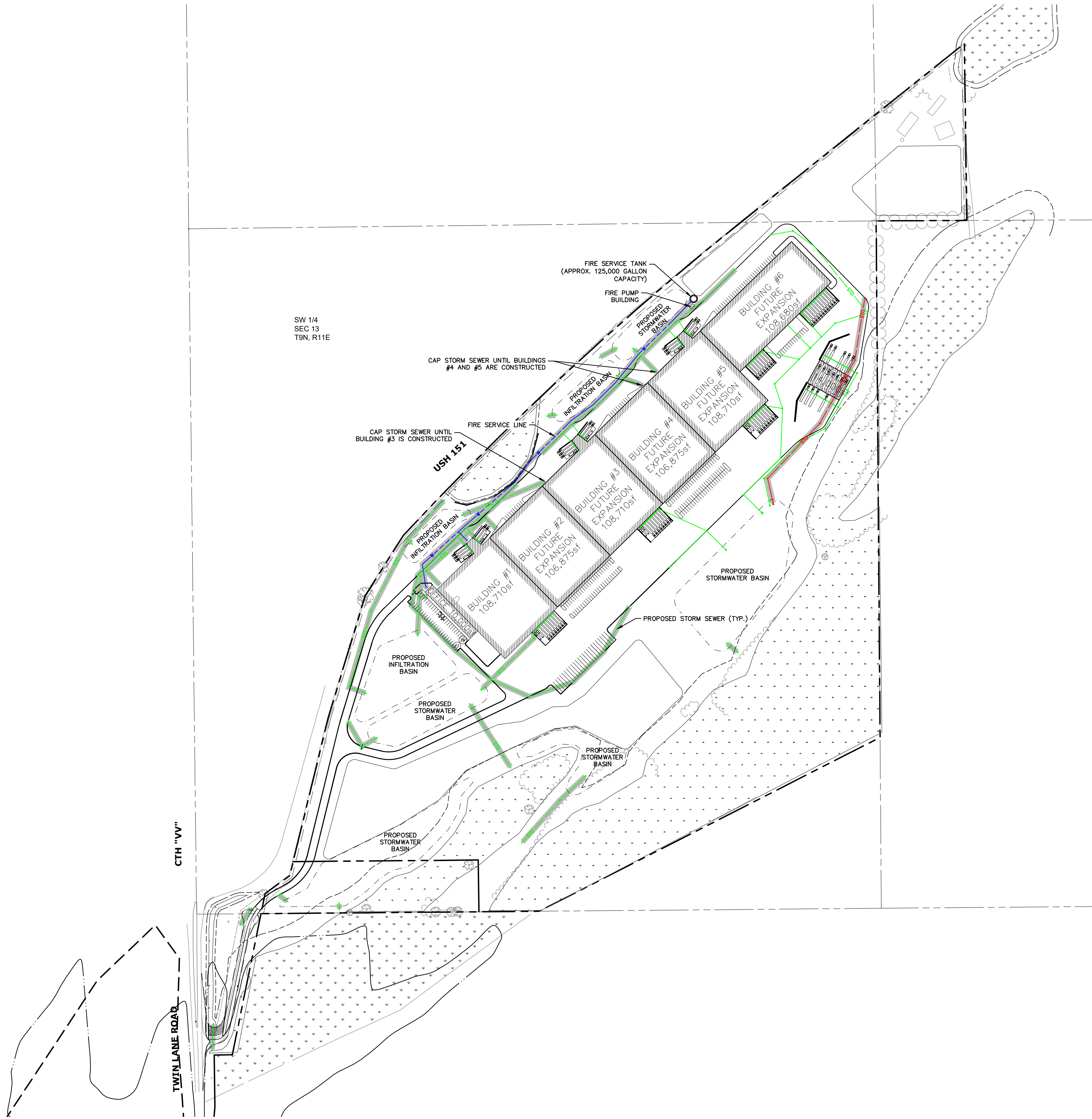




LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI		 CREATIVITY BEYOND ENGINEERING rasmith.com	16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000	DATE	DESCRIPTION
EROSION CONTROL PLAN					
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DATE: 07/26/2024					
SCALE: 1" = 200'					
JOB NO. 3230212					
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.					
DESIGNED BY: JHP					
CHECKED BY: AJS3					
SHEET NUMBER					
C500					



P:\323021\2\Drawg\Sheets\3230212-UP01.dwg, UTILITY PLAN, 7/26/2024, 10:53:43 AM, jhp



NOTES

AT STORM INLETS INSTALLED DURING PHASE 1 THAT ARE NOT IN A CURB LINE IN PHASE 1 BUT WILL BE LOCATED IN THE CURB LINE IN THE FULL BUILD-OUT, INSTALL NEENAH R-3067-C (WITH NO CURB HEAD). THIS CASTING WILL BE SWAPPED WITH A NEENAH R-3067, TYPE C GRATE (WITH CURB HEAD) IN THE FULL BUILD-OUT BEFORE THE CURB IS POURED.

LEGEND

- FIRE SERVICE LINE INSTALLED DURING PHASE 1
- STORM SEWER INSTALLED DURING PHASE 1
- STORM SEWER INSTALLED DURING FULL BUILD-OUT
- TEMPORARY STORM SEWER INSTALLED DURING PHASE 1, TO BE REMOVED IN FUTURE PHASE WHEN ADDITIONAL STORM SEWER IS CONSTRUCTED

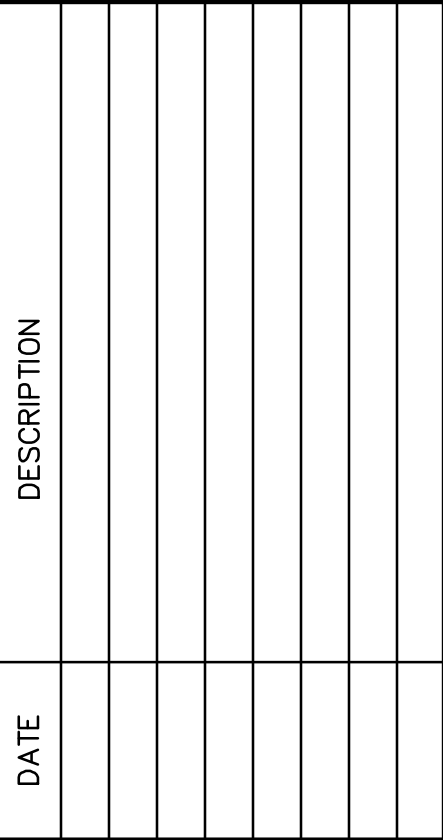


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OVERALL UTILITY PLAN	
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DATE: 07/26/2024	
SCALE: 1" = 200'	
JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.	
DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C600	






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**LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI  
DETAILED UTILITY PLAN  
SOUTHWEST**



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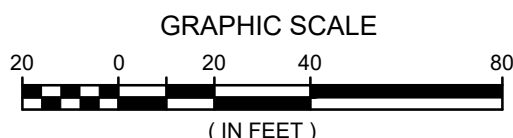


RIM ELEVATIONS ARE GIVEN TO THE FLOWLINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE CASTING FOR MANHOLES. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURE OR THE END OF PIPE WHERE THERE IS A FLARED END SECTION.

PIPE LENGTH DISTANCES AND ELEVATIONS ARE GIVEN TO THE CENTER OF MANHOLES AND INLETS AND THE PIPE END OF FLARED END SECTIONS. FLARED END SECTIONS SHALL BE PLACED TO BLEND WITH EXISTING OR PROPOSED TOPOGRAPHY.

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AT ALL STORM SEWER INLETS (STO INLET), INSTALL FINGER DRAINS. SEE DETAIL SHEET C804.



GRAPHIC SCALE

( IN FEET

( IN FEET

DESCRIPTION
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DATE \_\_\_\_\_

16745 W. Bluemound Road  
Brookfield, WI 53005-5938

**raSmith**  
CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI  
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**LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI**

## DETAILED UTILITY PLAN SOUTH



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R.A. Smith, Inc.

DATE: 07/26/2024

SCALE: 1" = 40'

IOB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHE

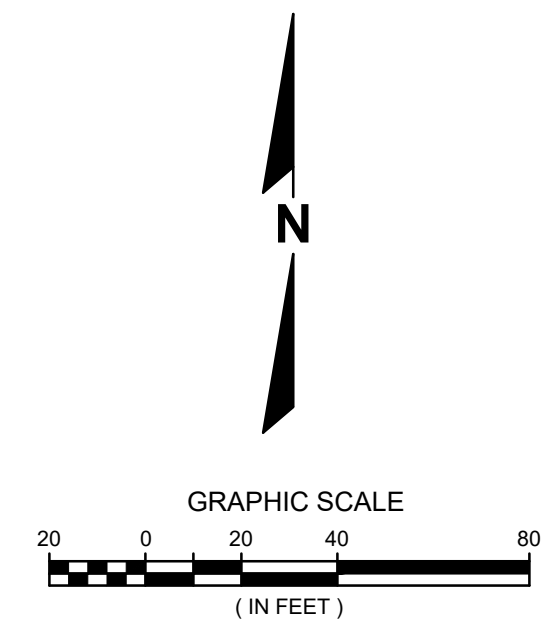
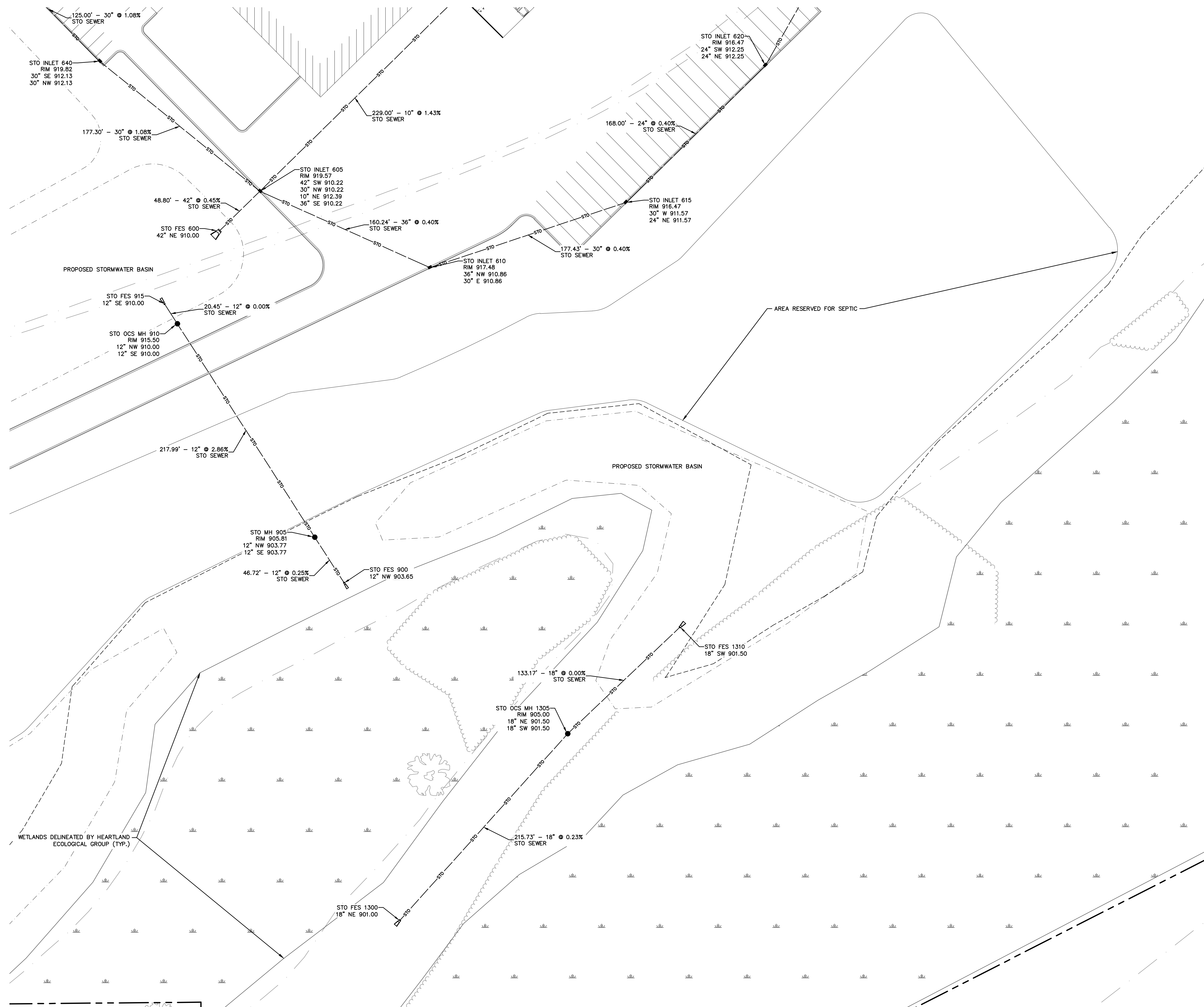
DESIGNED BY: CH

CHECKED BY: AJS

SHEET NUMBER

C602





### PLAN NOTATIONS

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(262) 781-1000  
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**LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI**

## DETAILED UTILITY PLAN SOUTH POND

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DATE: 07/26/2024

SCALE: 1" = 40'

JOB NO. 3230212

PROJECT MANAGER:  
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DESIGNED BY: JHF

CHECKED BY: AJS3

SHEET NUMBER

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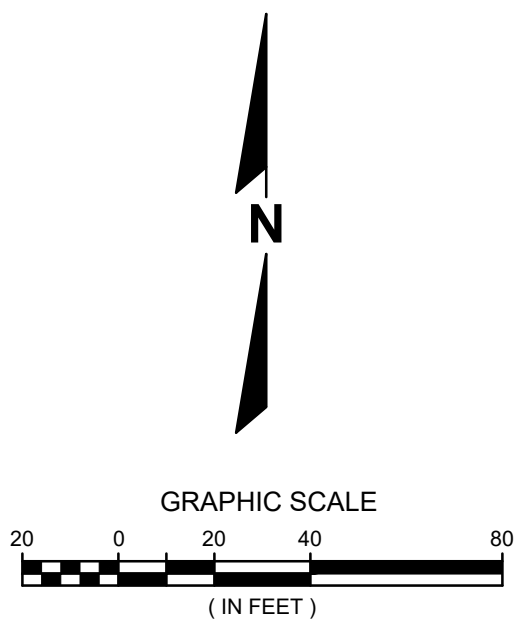
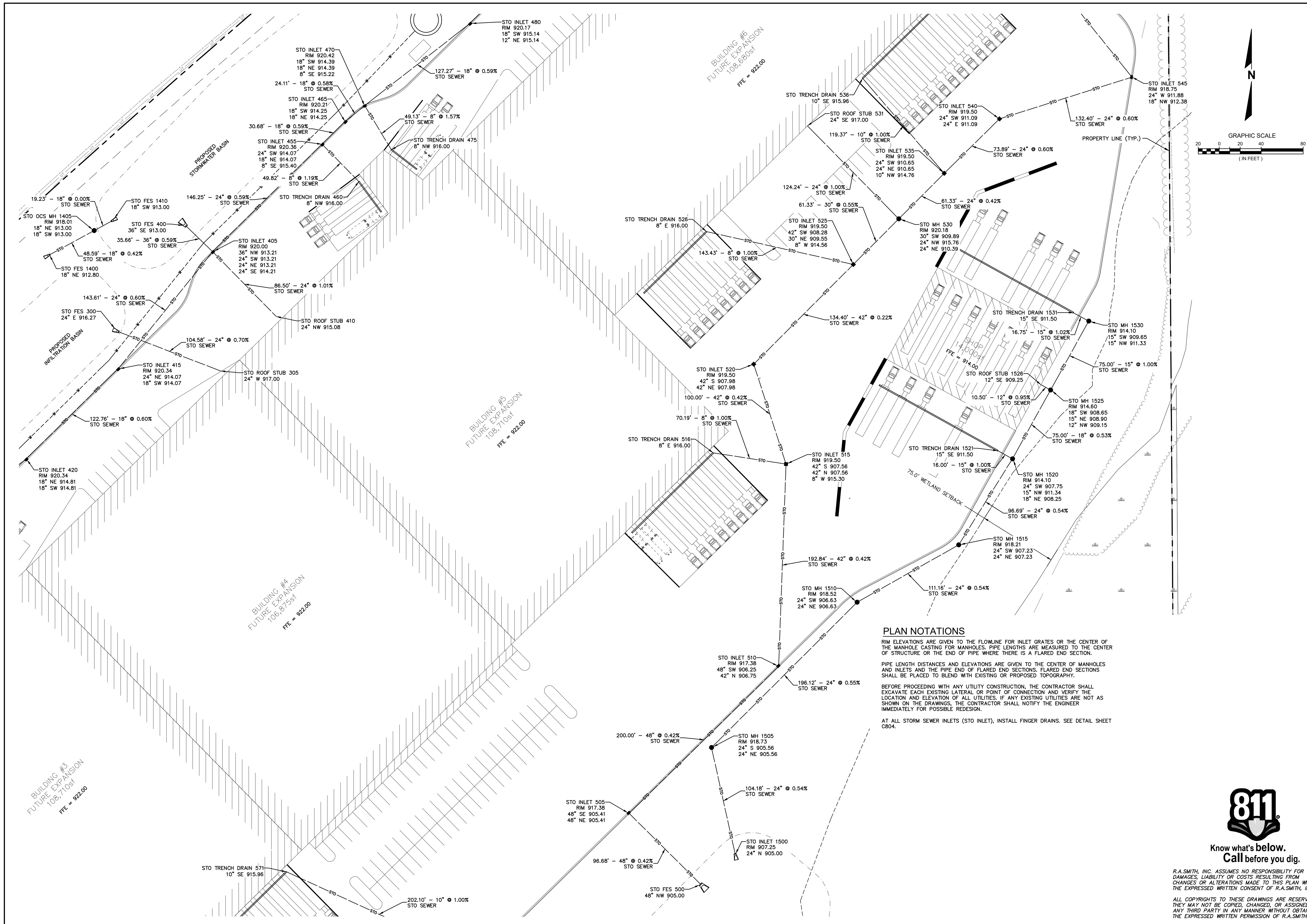












**LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI  
DETAILED UTILITY PLAN  
NORTH**

DESCRIPTION
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DATE \_\_\_\_\_

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Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com



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Cedarburg, WI | Naperville, IL | Irvine, CA

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DATE: 07/26/2024

SCALE: 1" = 40'

DB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHP

**SHEET NUMBER**

C607



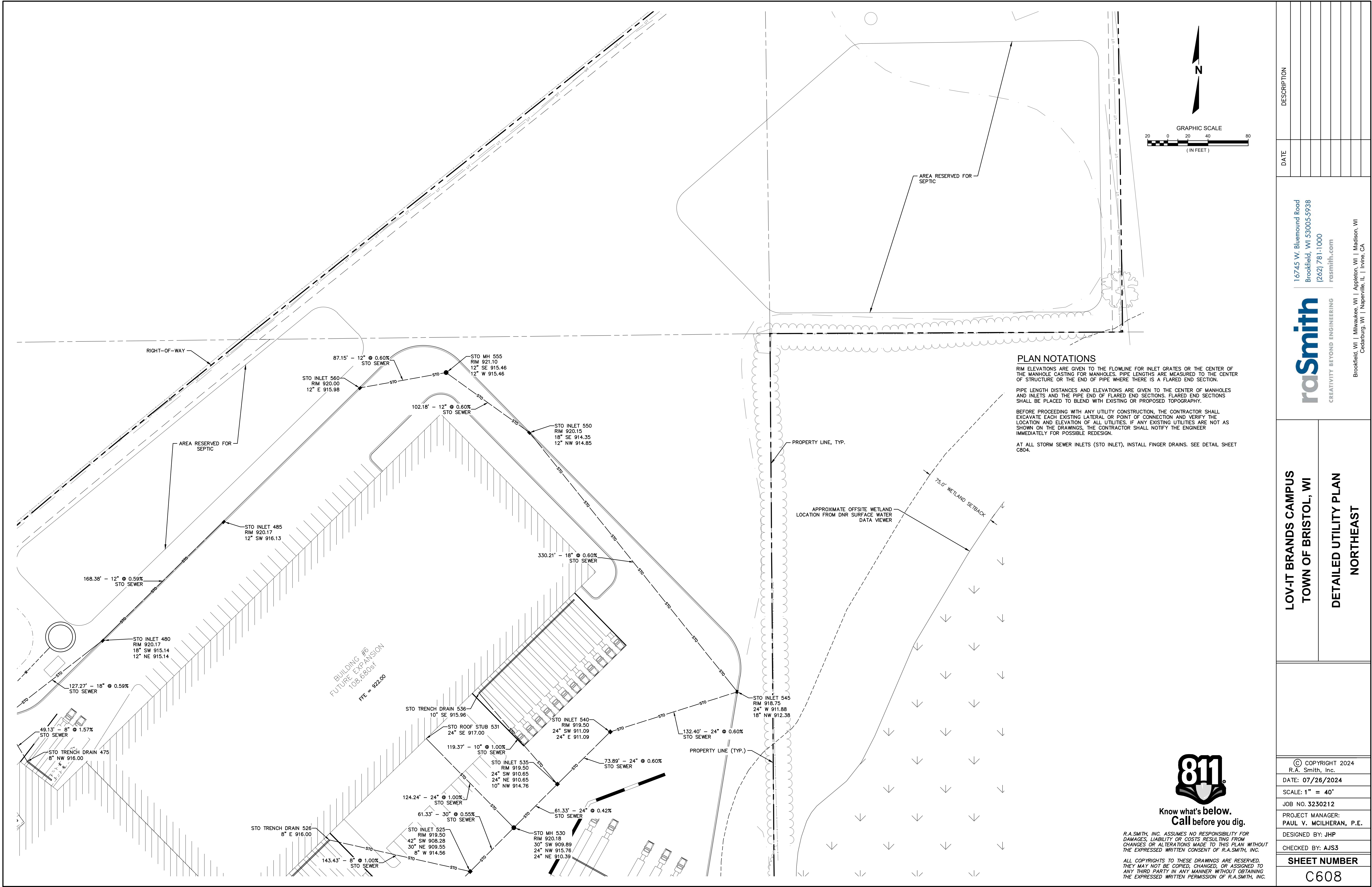
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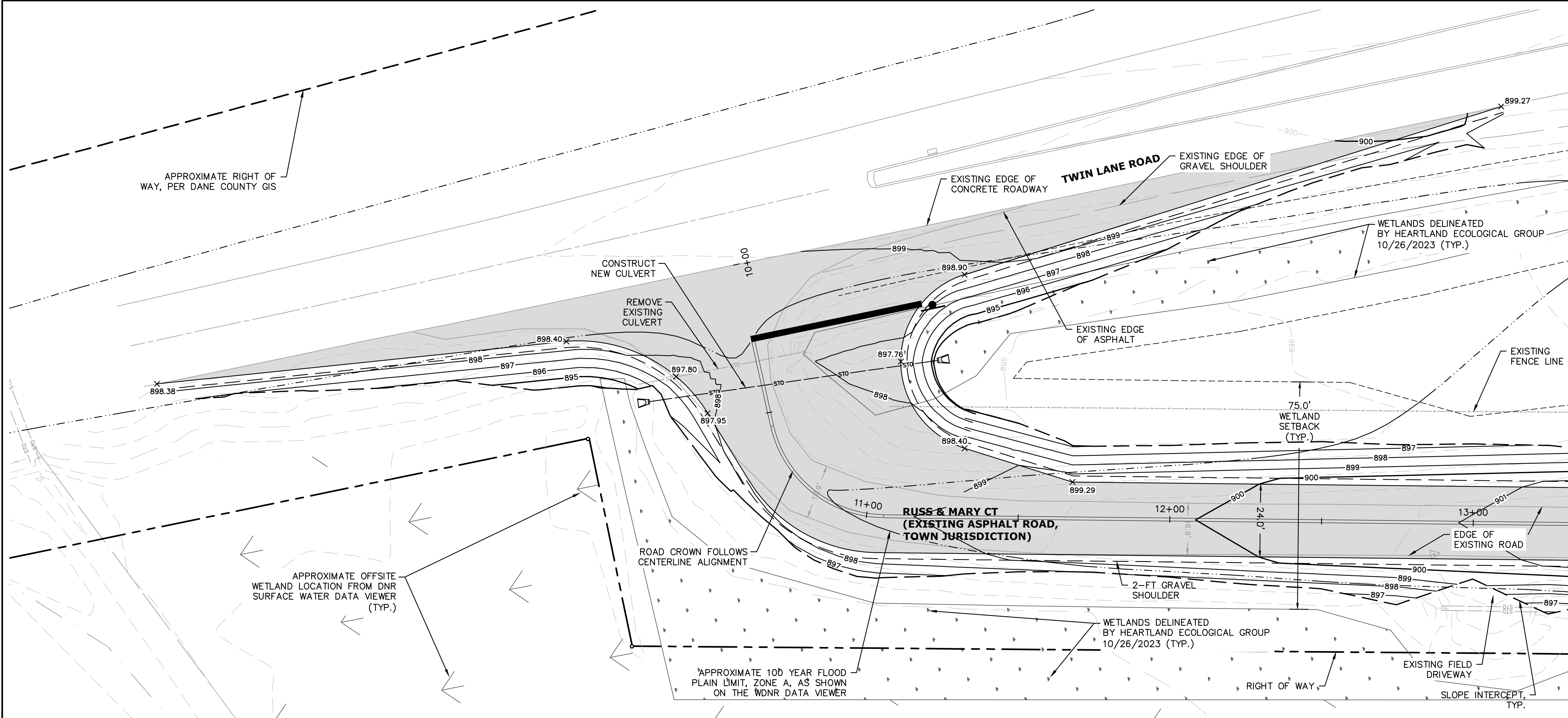


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LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	
DETAILED UTILITY PLAN NORTHEAST	
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DESIGNED BY: JHP	
CHECKED BY: AJS3	
SHEET NUMBER	
C608	





NOTES

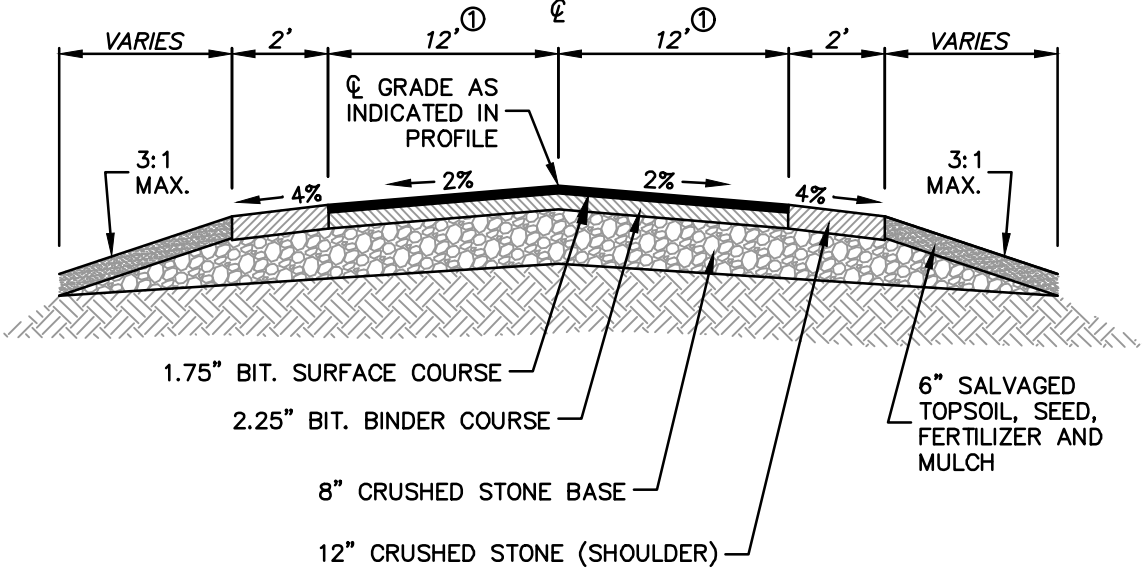
PARCEL BOUNDARIES DELINEATED BY WAGNER EXCAVATING ON SURVEY DATED 8/24/2023, PROVIDED TO RASMITH VIA CAD FILE ON 10/18/2023.

WETLAND DELINEATION BY HEARTLAND ECOLOGICAL GROUP, INC., ON OCTOBER 20, 2023.

PROPERTY AREA = 101.3 AC.  
ONSITE DELINEATED WETLANDS = 22.9 AC

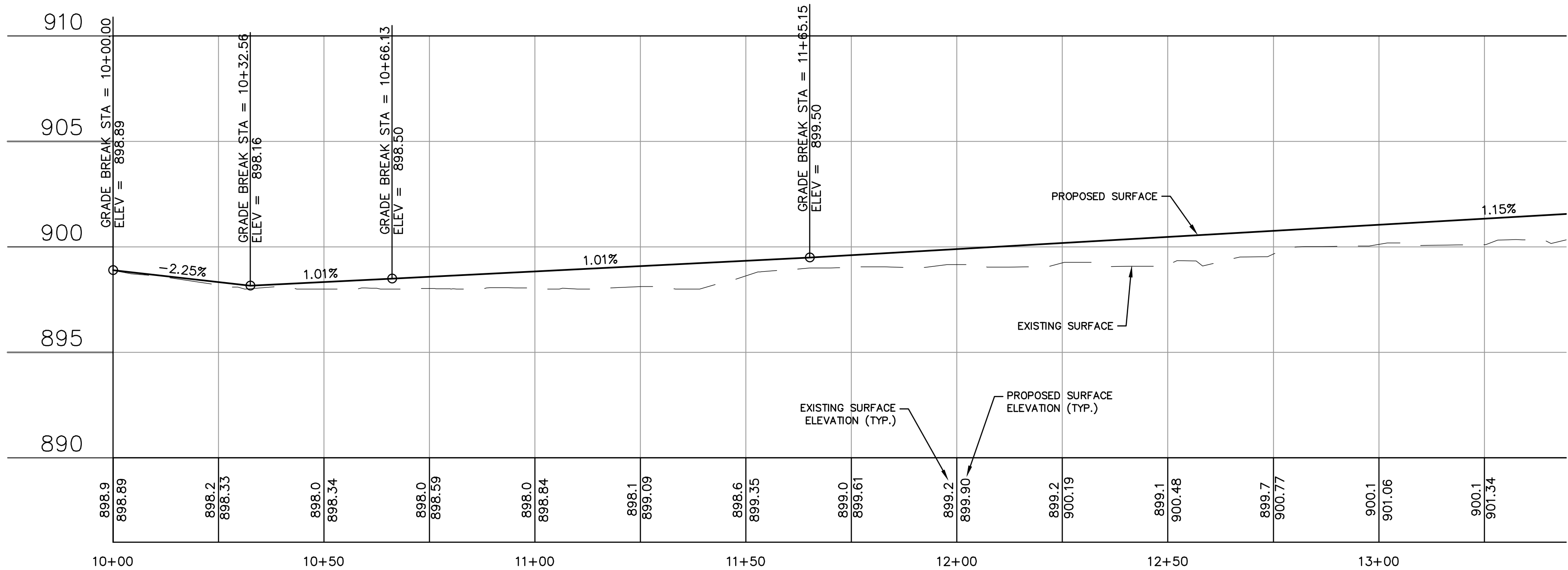
LEGEND

- WETLAND SETBACK
- 100-YR FLOOD LINE
- PROPOSED STORMWATER BASIN
- SLOPE INTERCEPT
- DELINEATED WETLANDS
- APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER
- PROPOSED ASPHALT PAVEMENT (TOWN ROAD SECTION)



TYPICAL TOWN ROAD SECTION

NOTE: WIDTH VARIES AT TWIN LANE ROAD INTERSECTION AND AT CUL-DE-SAC.



HORIZ. SCALE: 1" = 20'  
VERT. SCALE: 1" = 4'



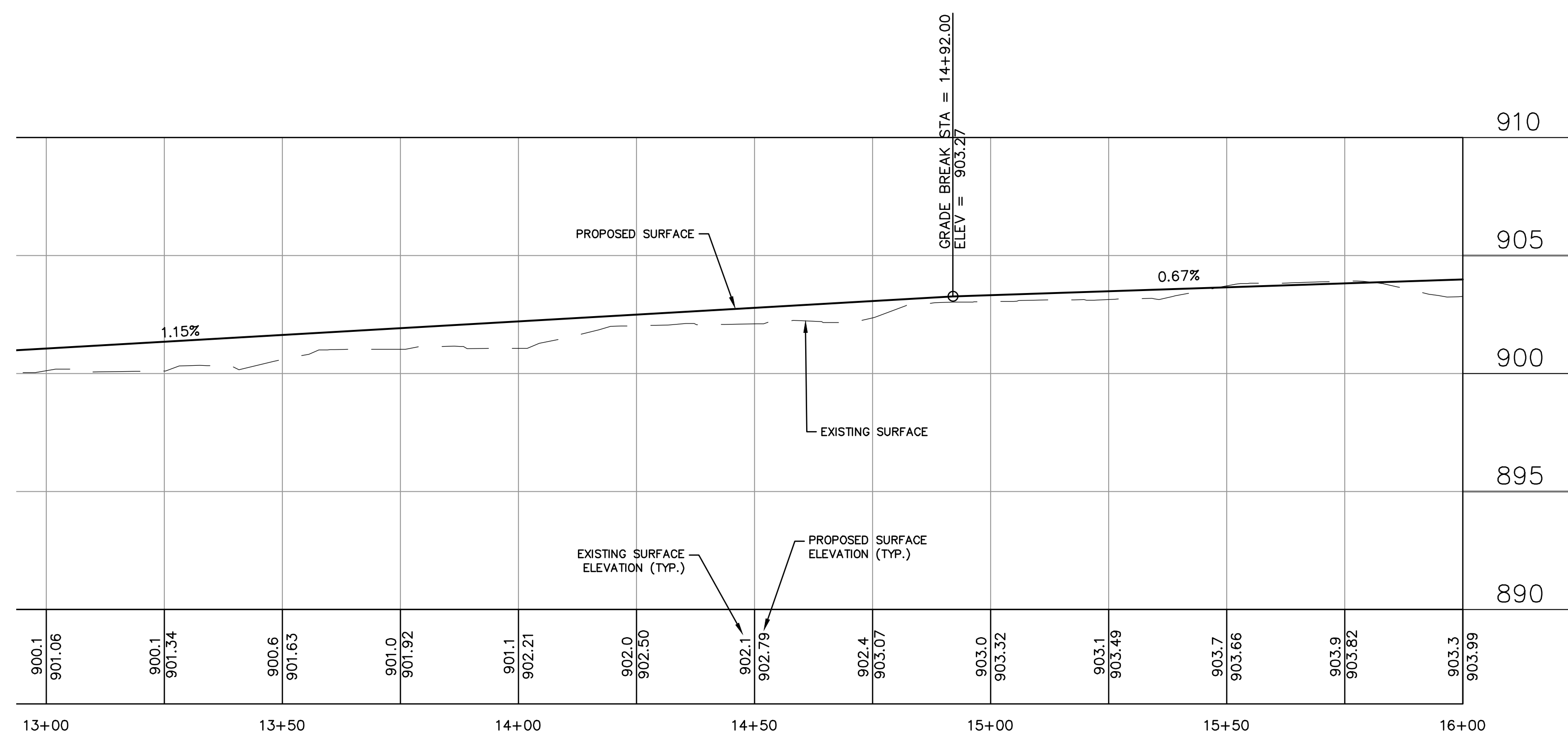
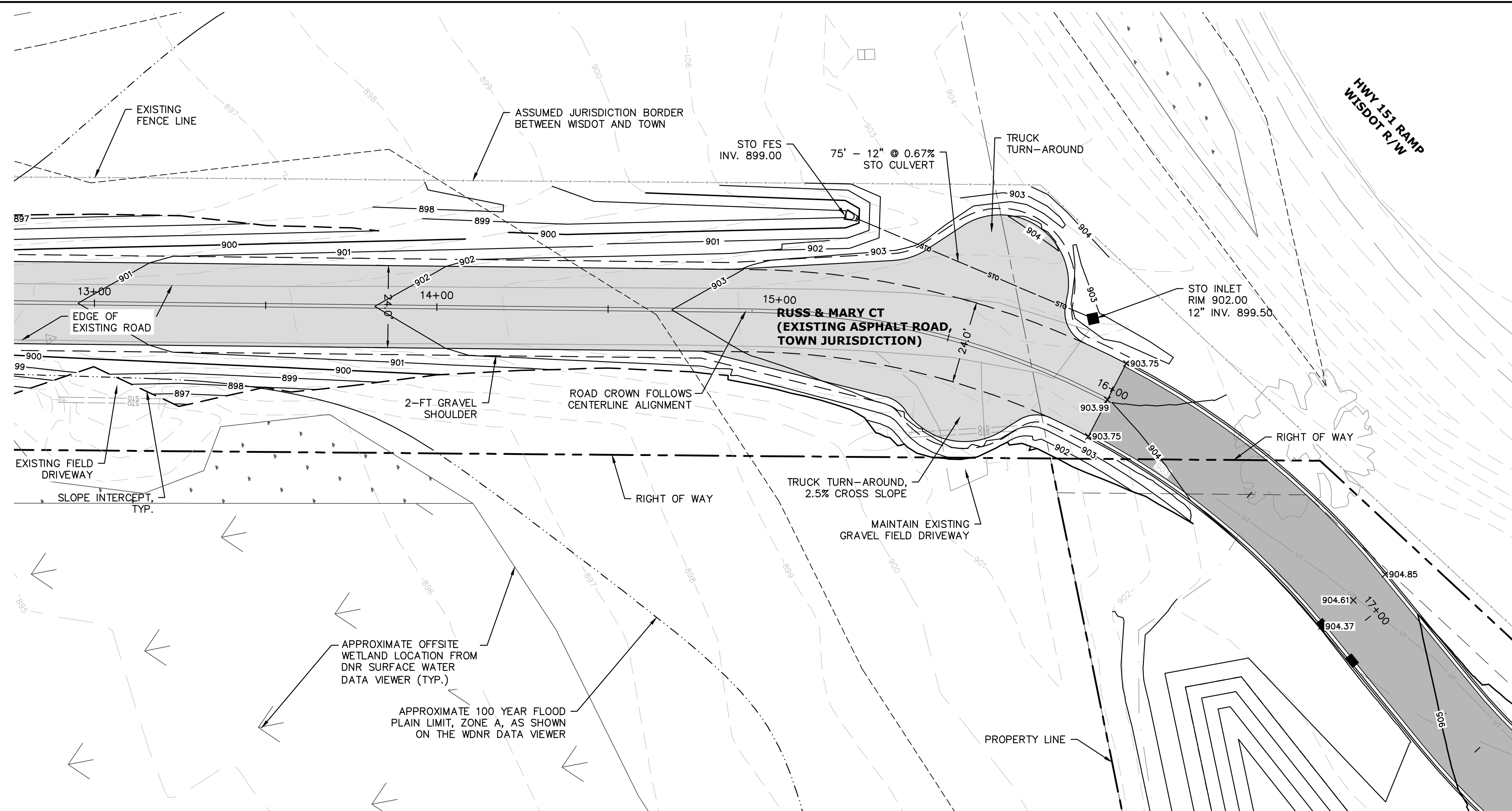
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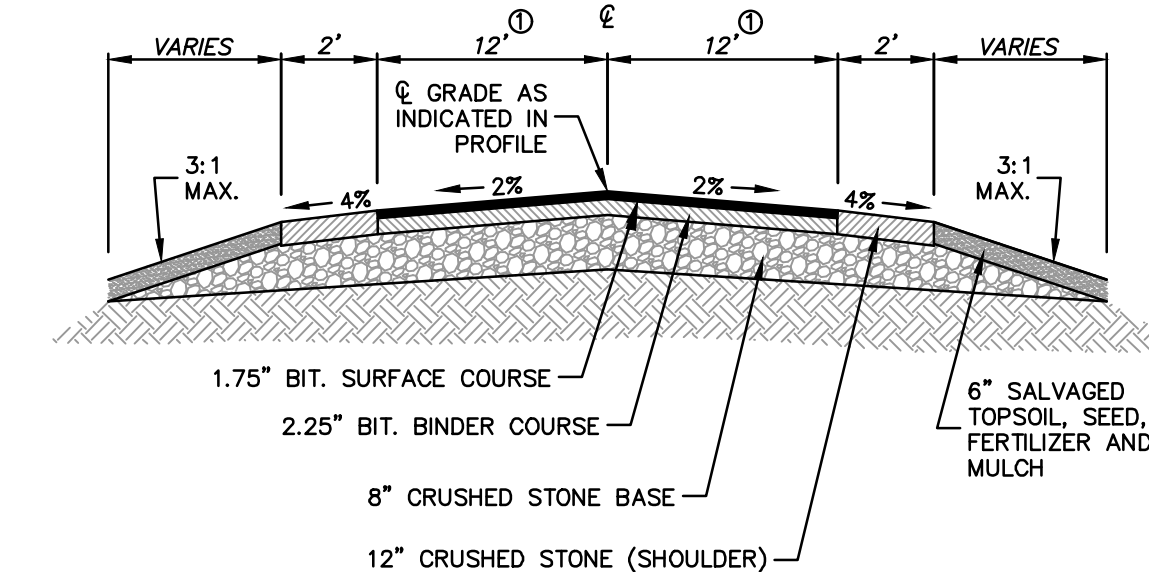
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DESCRIPTION		DATE	
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI		RUSS & MARY COURT PLAN & PROFILE - SOUTH	
© COPYRIGHT 2024 R.A. Smith, Inc.		DATE: 07/26/2024	
SCALE: 1" = 20'		JOB NO. 3230212	
PROJECT MANAGER: PAUL V. MCILHERAN, P.E.		DESIGNED BY: JHP	
CHECKED BY: AJS3		SHEET NUMBER	
		C700	





HORIZ. SCALE: 1" = 20'  
VERT. SCALE: 1" = 4'



TYPICAL TOWN ROAD SECTION

NOTE: TOWN ROAD SECTION ENDS AT STA 16+00

① NOTE: WIDTH VARIES AT TWIN LANE ROAD INTERSECTION AND AT CUL-DE-SAC.



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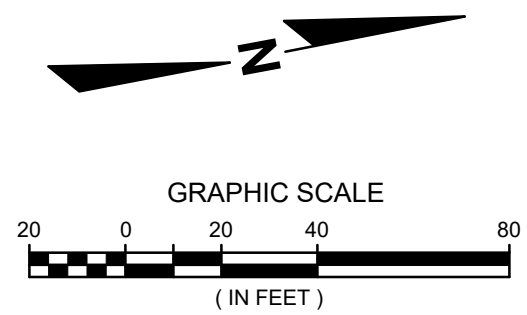








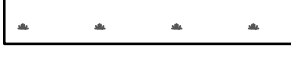











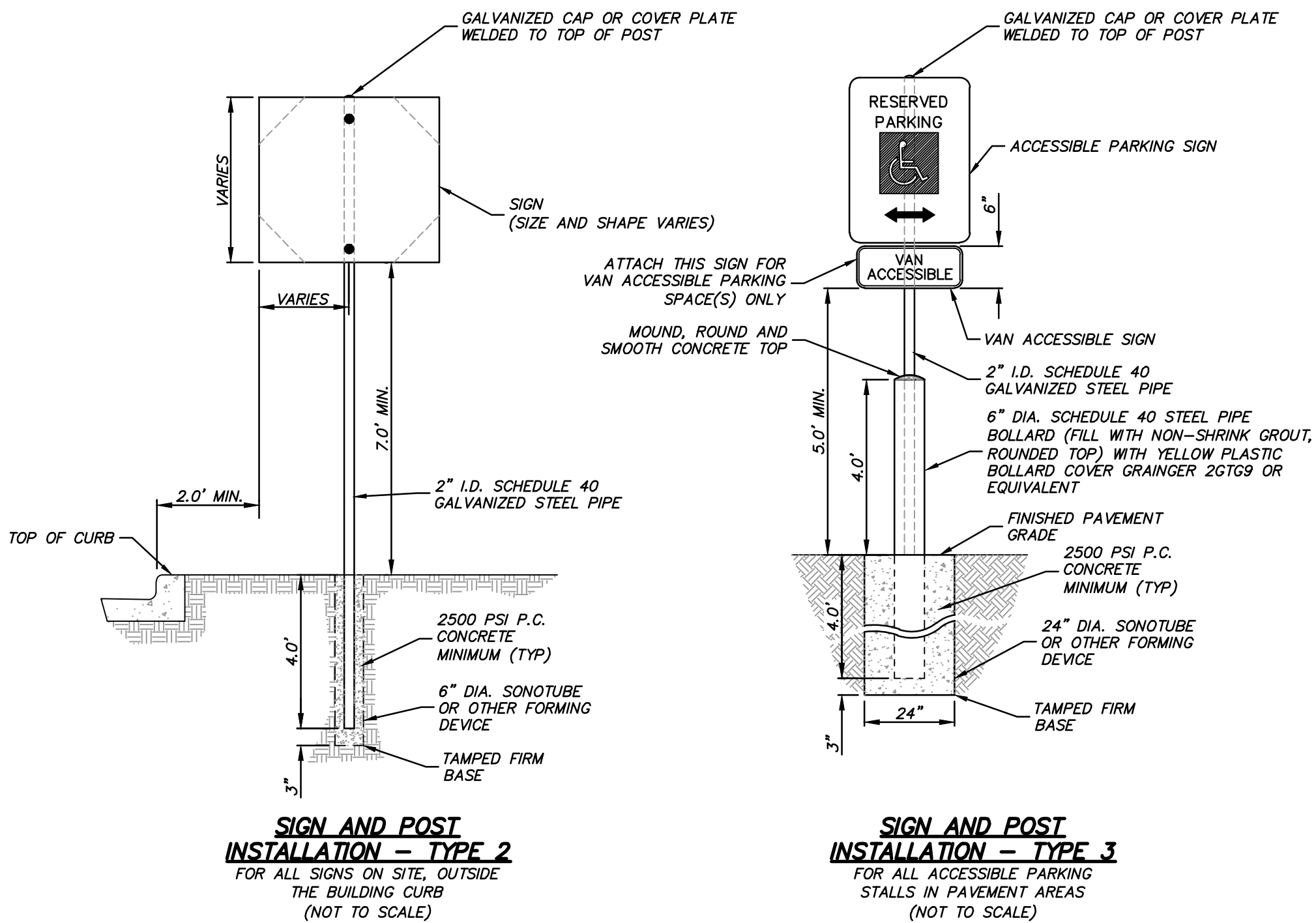
- 
- |   |  |
|---|--|
|  | WETLAND SETBACK  |
|  | 100-YR FLOOD LINE  |
|  | PROPOSED STORMWATER BASIN                                  |
|  | AREA RESERVED FOR SEPTIC                                   |
|  | DELINEATED WETLANDS  |
|  | APPROXIMATE WETLANDS FROM DNR<br>SURFACE WATER DATA VIEWER |
|  | PROPOSED WETLAND FILL (581 SF)                             |
|  | PROPOSED FLOODPLAIN IMPACT (14,667 SF)                     |

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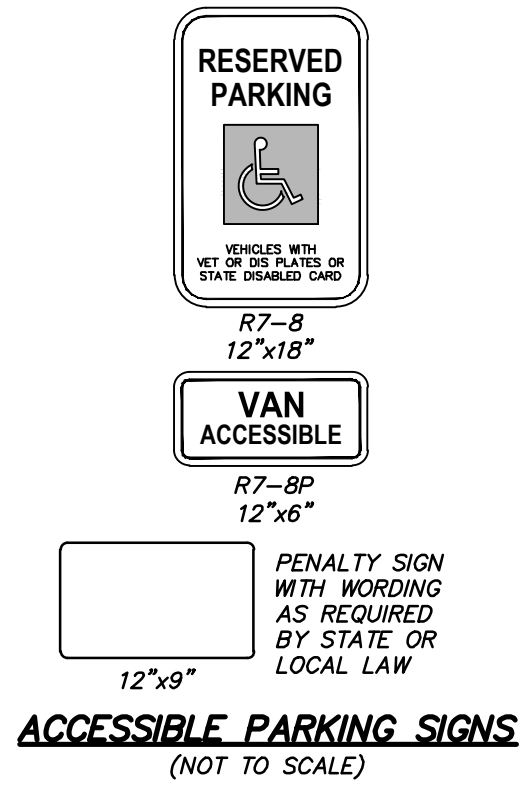
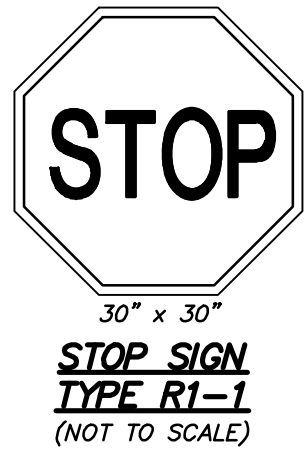
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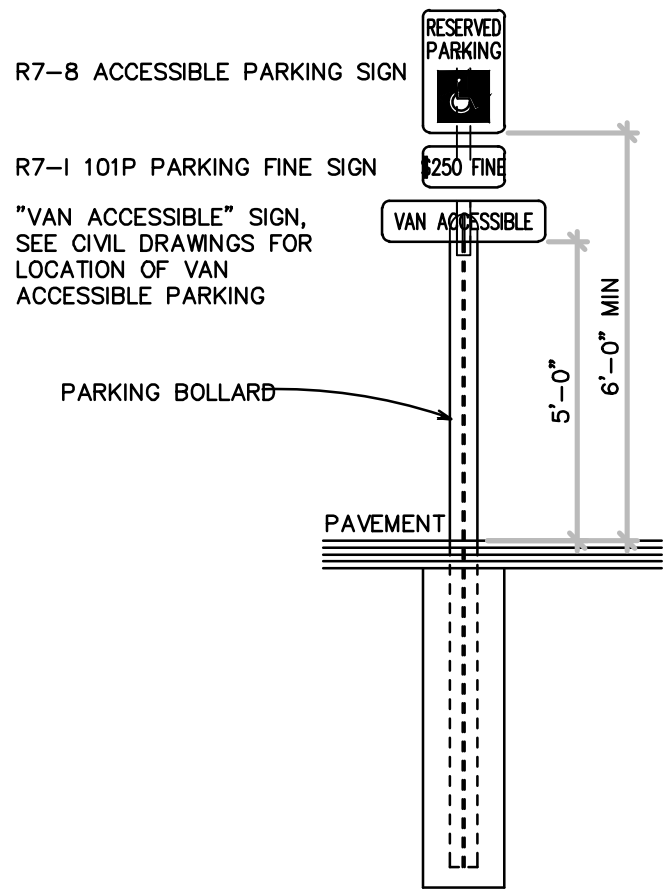
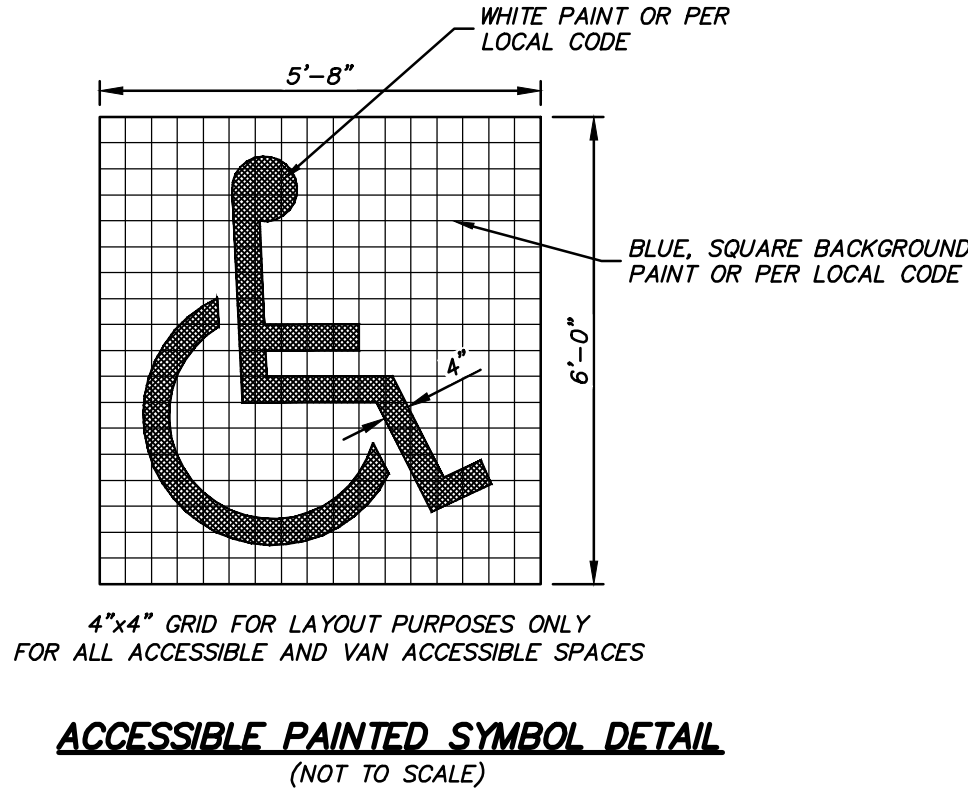
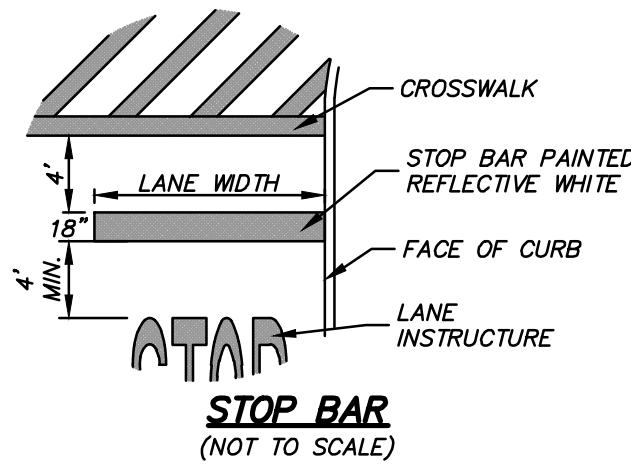




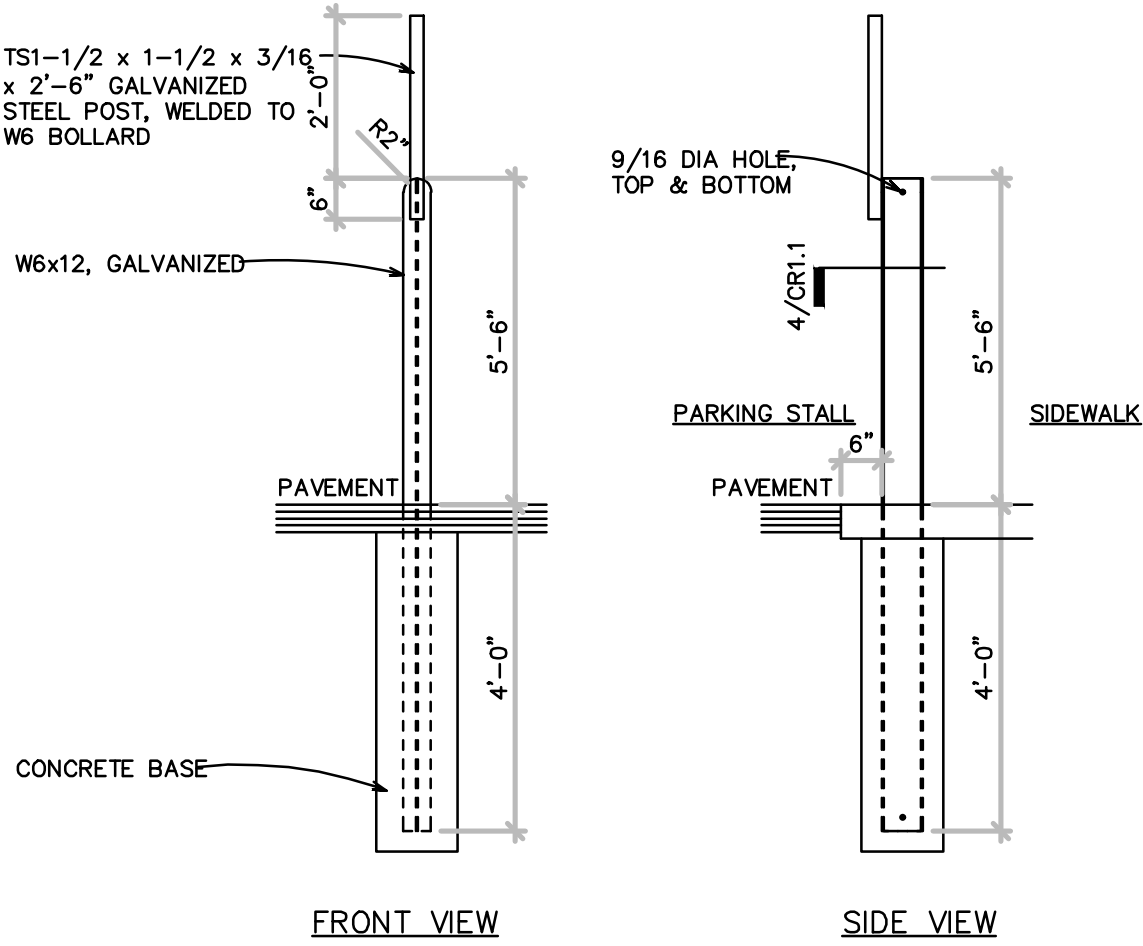
- NOTES:**
- ALL SIGNS SHALL BE MOUNTED TO POSTS BY MEANS OF 5/16" BOLTS. HOLES 3/8" IN DIAMETER, DRILLED THROUGH BOTH SIDES OF POSTS PRIOR TO SIGN INSTALLATION.
  - ALL POST SHALL HAVE A GALVANIZED CAP OR COVER PLATE WELDED TO TOP OF POST.



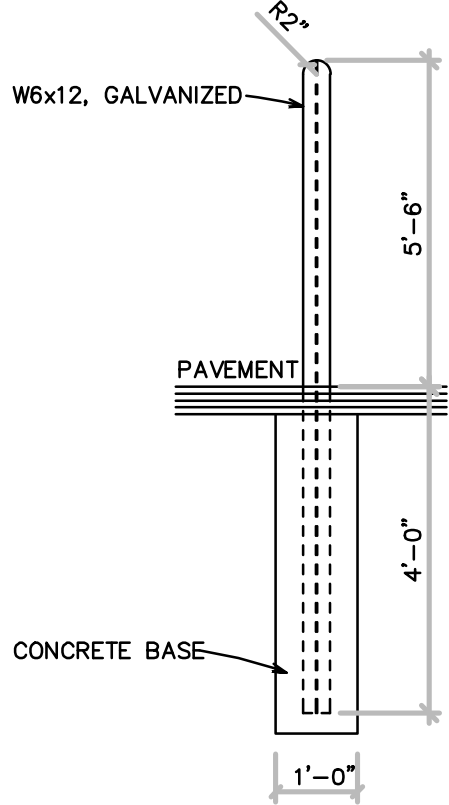
**NOTES:**  
ALL SIGNS, POSTS AND FITTINGS SHALL BE PER MUTCD STANDARDS



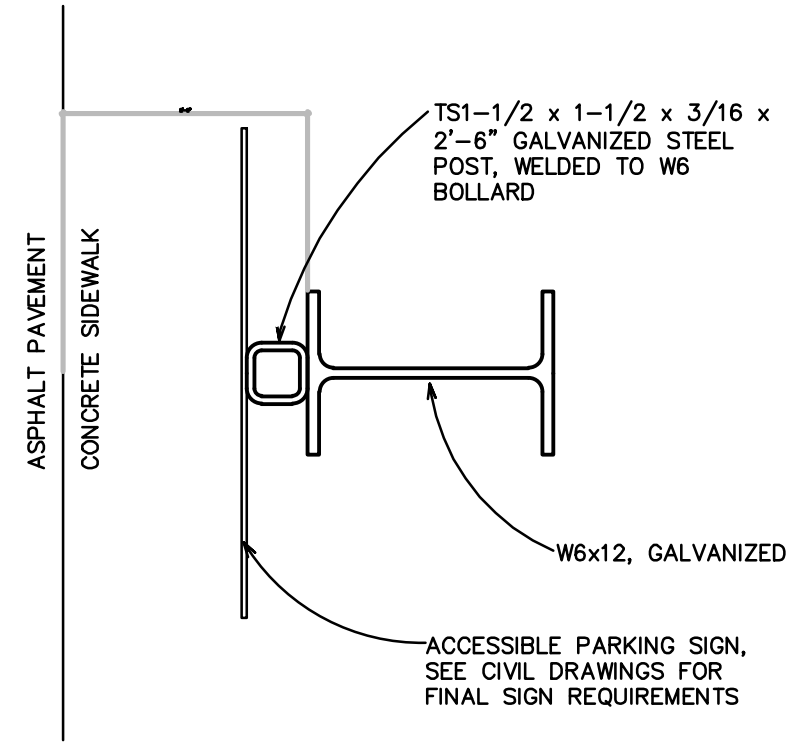
1 ACCESSIBLE PARKING POST



2 ACCESSIBLE PARKING POST



3 PARKING BOLLARD DETAIL



4 ACCESSIBLE PARKING POST



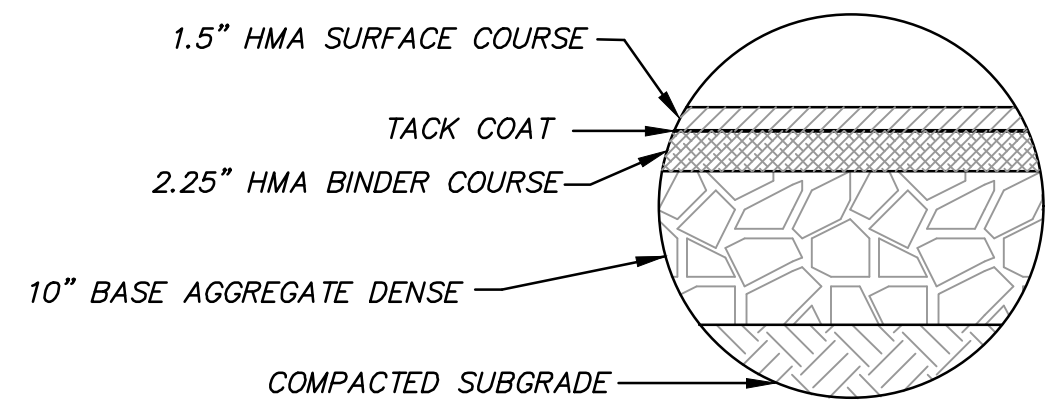
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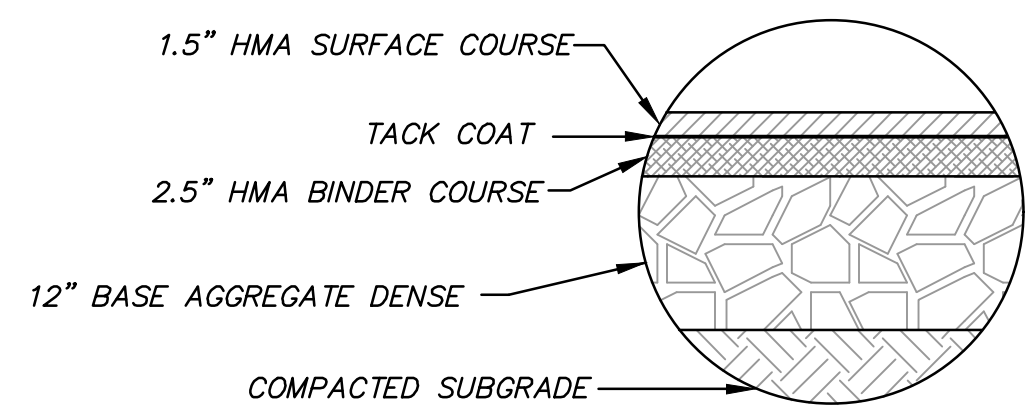
DESCRIPTION	DATE	16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com
LOV-IT BRANDS CAMPUS TOWN OF BRISTOL, WI	SITE DETAILS SIGNING	Brookfield, WI   Milwaukee, WI   Appleton, WI   Madison, WI Cedarburg, WI   Naperville, IL   Irvine, CA
© COPYRIGHT 2024 R.A. Smith, Inc. DATE: 07/26/2024 SCALE: N.T.S. JOB NO. 3230212 PROJECT MANAGER: PAUL V. MCILHERAN, P.E. DESIGNED BY: JHP CHECKED BY: AJS3		
SHEET NUMBER		C800



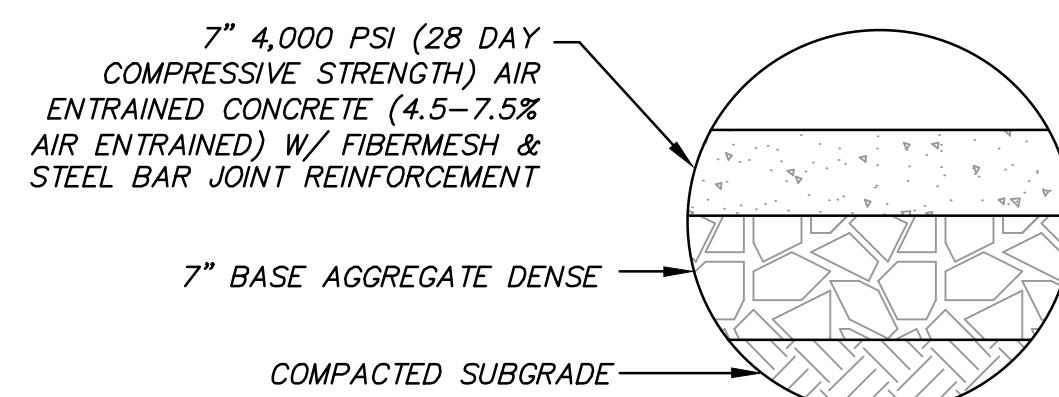
NOTE: FINAL PAVEMENT SECTIONS PER  
GEOTECHNICAL REPORT, WHEN AVAILABLE



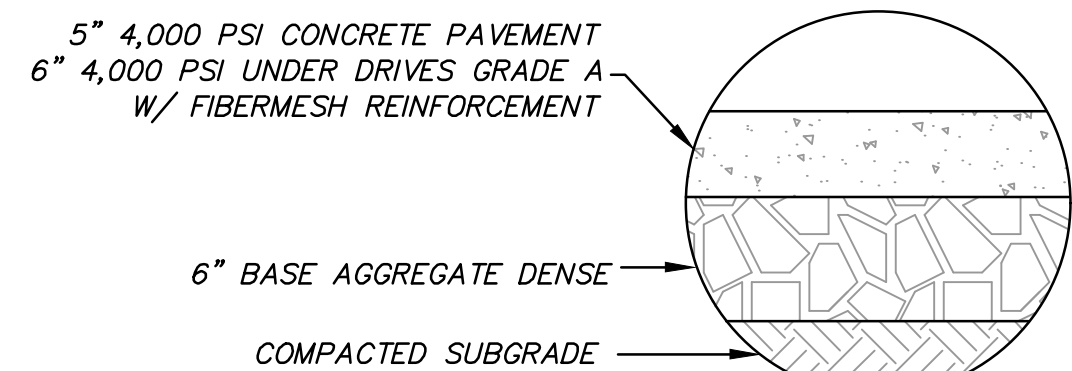
BITUMINOUS PAVEMENT (STANDARD DUTY)



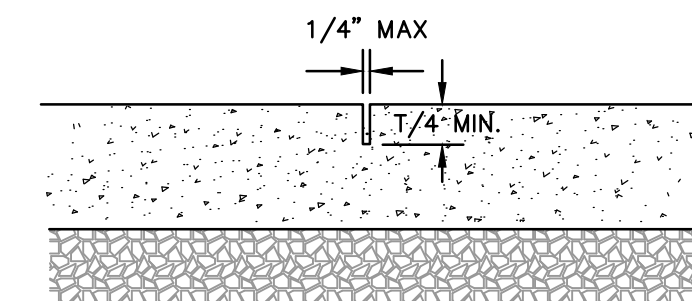
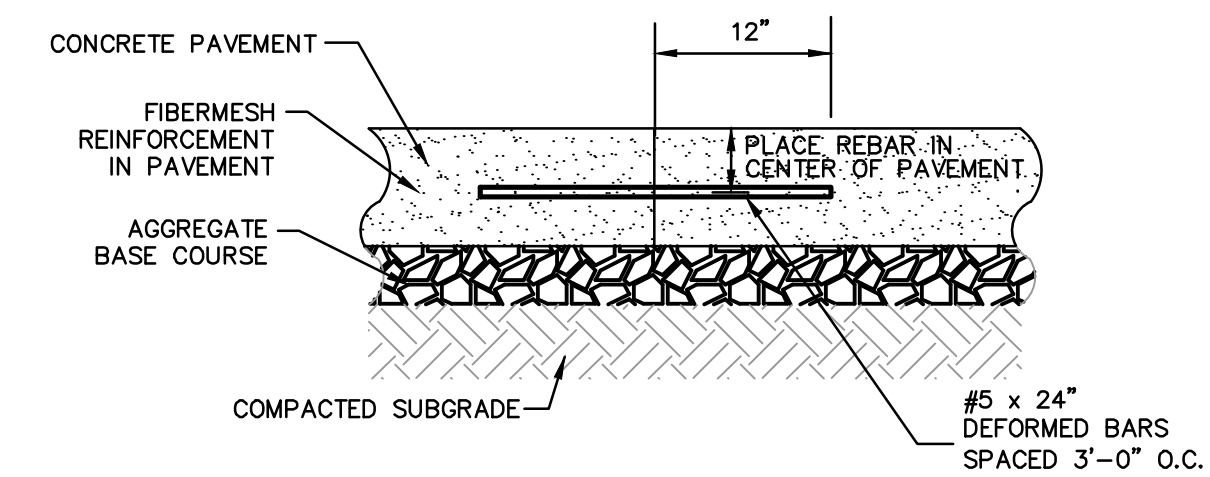
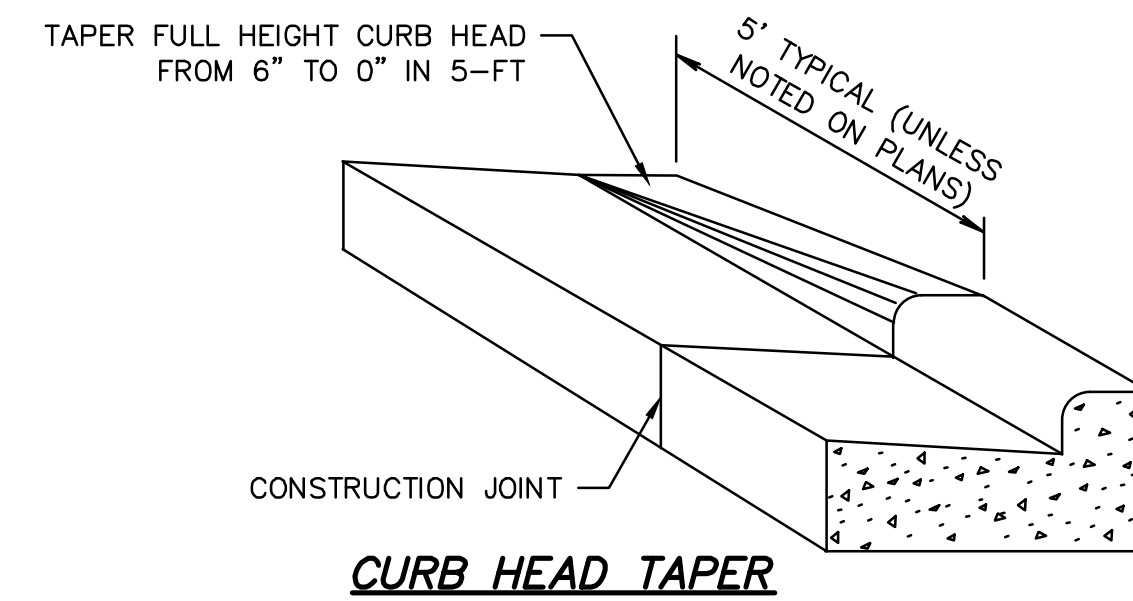
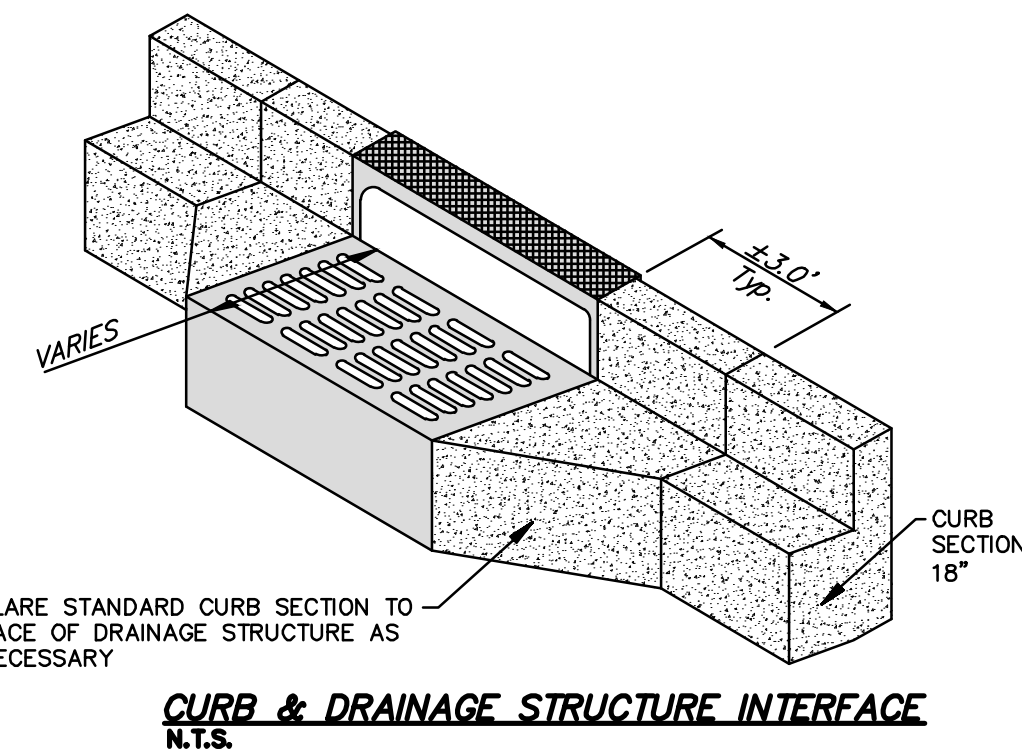
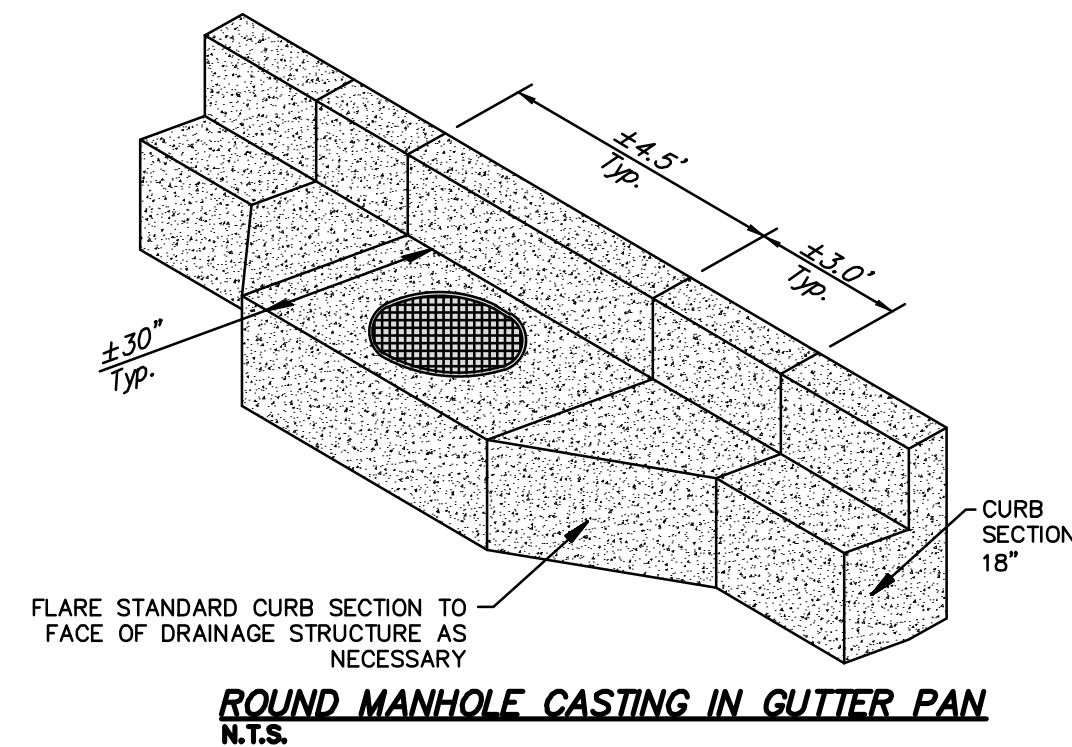
BITUMINOUS PAVEMENT (HEAVY DUTY)



## HEAVY DUTY CONCRETE PAVEMENT WITH STEEL REINFORCEMENT



CONCRETE SIDEWALK SECTION



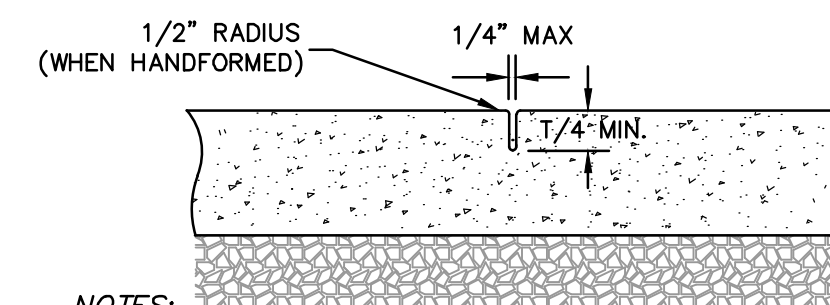
NOTES:

1. FOR SAW-CUT CONTRACTION JOINTS, MAKE THE SAW CUT AS SOON AS THE SLAB IS ABLE TO SUPPORT THE WEIGHT OF THE WORKERS AND SAWING EQUIPMENT WITHOUT DAMAGE TO THE FINISHED SURFACE OF THE SLAB, BUT WITHIN 24 HOURS.

2. DEPTH OF SAW-CUT SHOULD BE  $T/4$  (MIN.).

3. FOLLOW ARCHITECTURAL SPECIFICATIONS, SECTION 321313 - CONCRETE PAVING FOR FULL JOINT SPECIFICATIONS.

CONTRACTION JOINT - SAWED



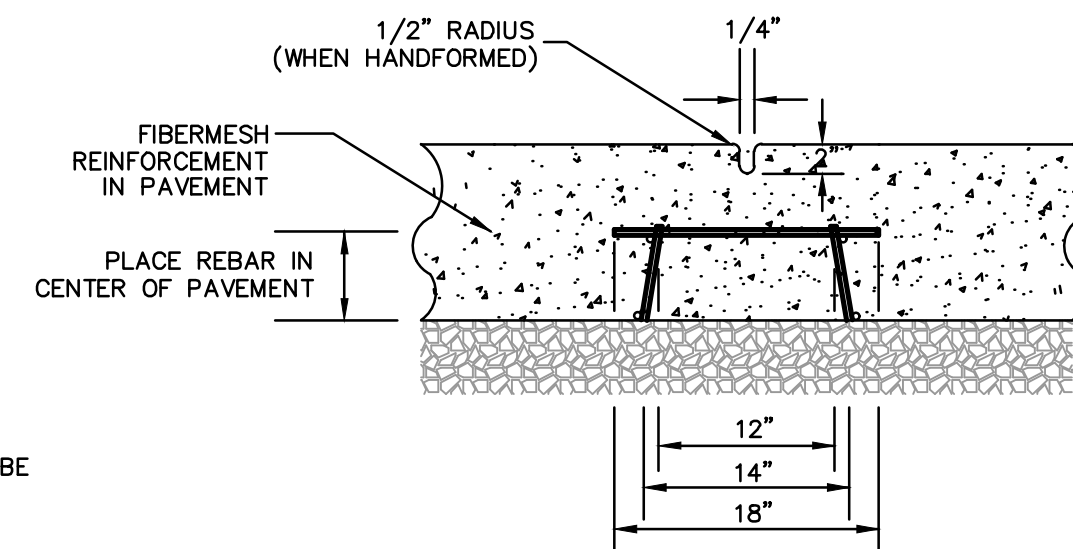
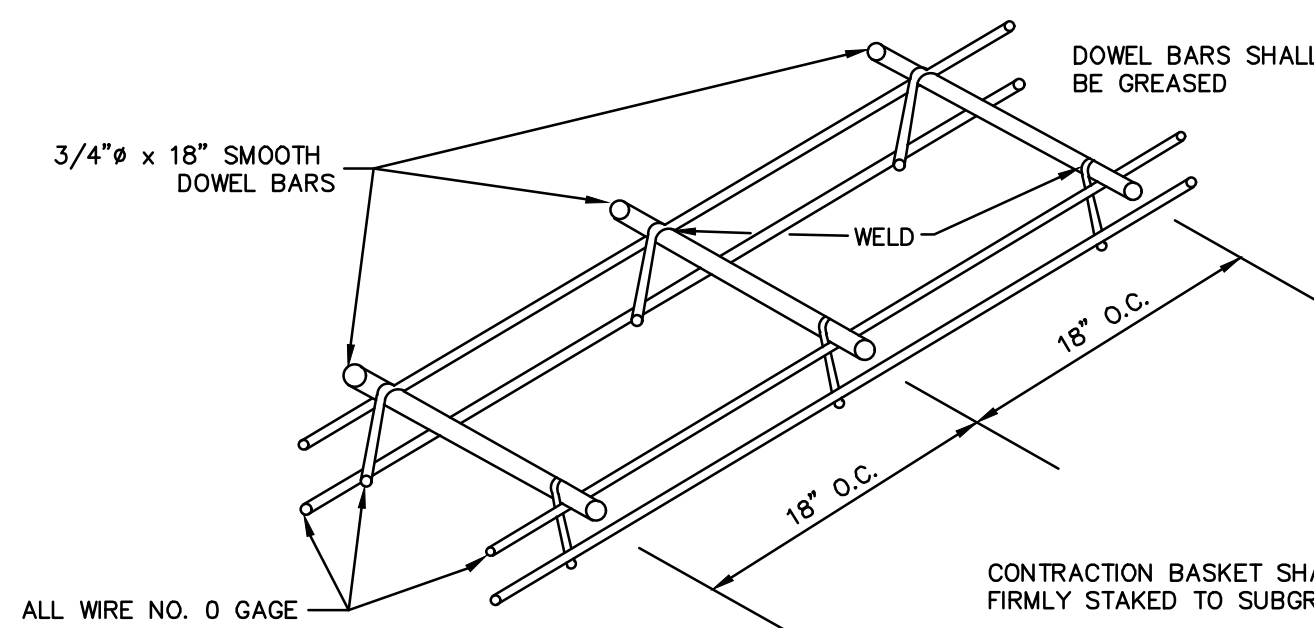
NOTES:

1. FOR TOOLED CONTRACTION JOINTS, MAKE THE TOOLED JOINT WHILE THE CONCRETE IS WET ENOUGH TO BE FORMED USING A TOOL.

2. DEPTH OF TOOLED JOINT SHOULD BE  $T/4$  (MIN.).

3. FOLLOW ARCHITECTURAL SPECIFICATIONS, SECTION 321313 – CONCRETE PAVING FOR FULL JOINT SPECIFICATIONS.

CONTRACTION JOINT - TOOLED



### CONCRETE PAVEMENT TRANSVERSE JOINTS



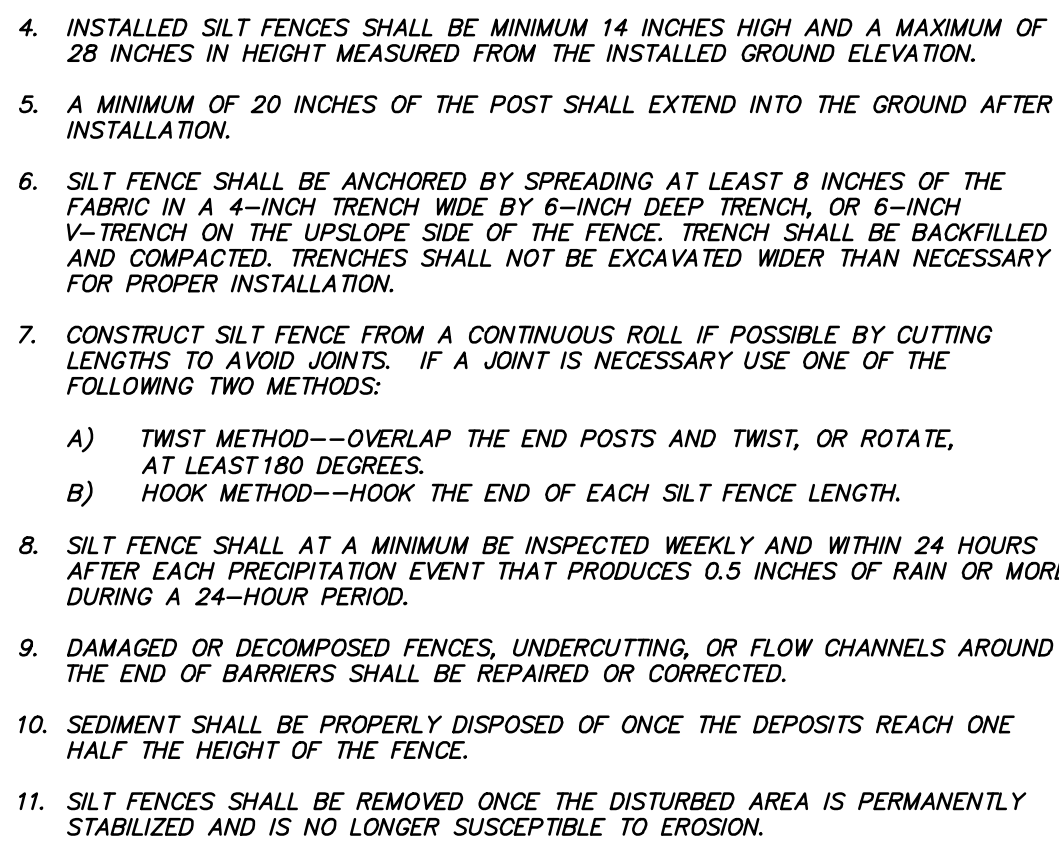
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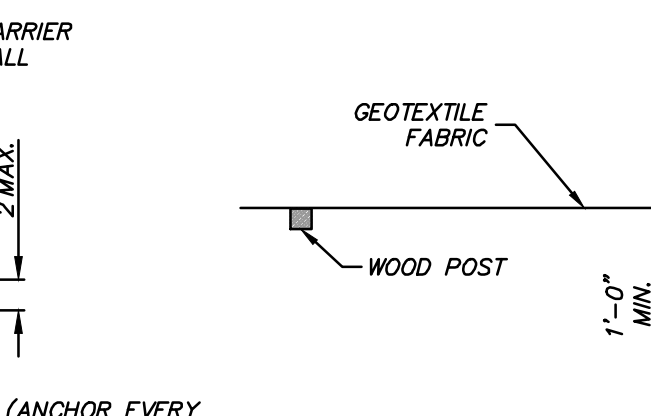
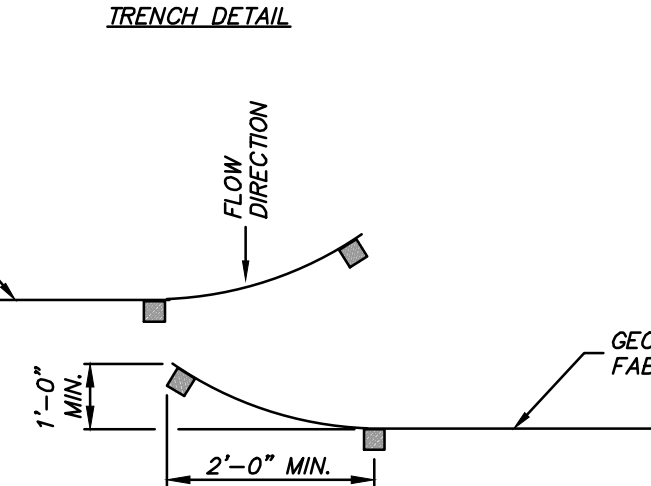
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[illegible]





**NOTES:**  
1. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.



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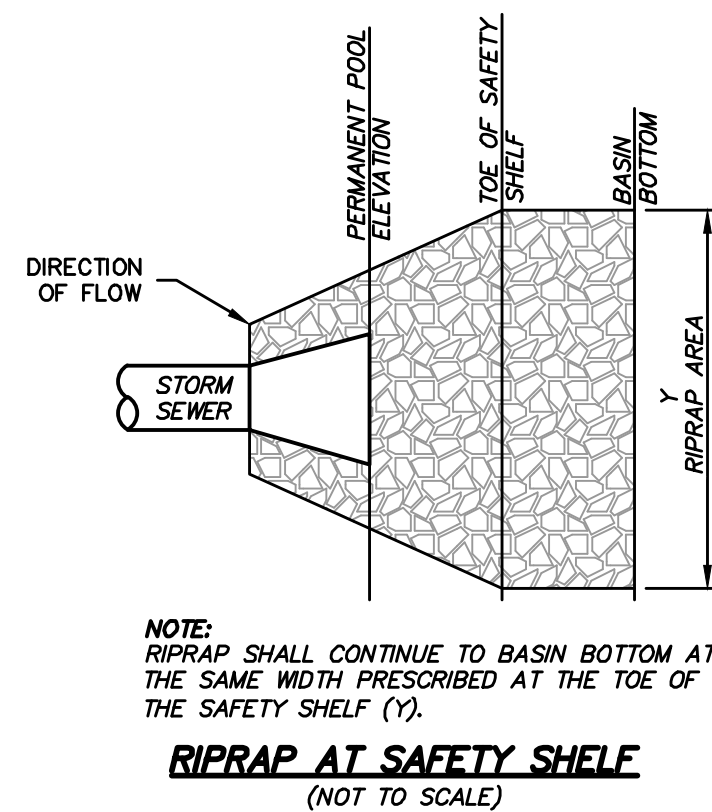
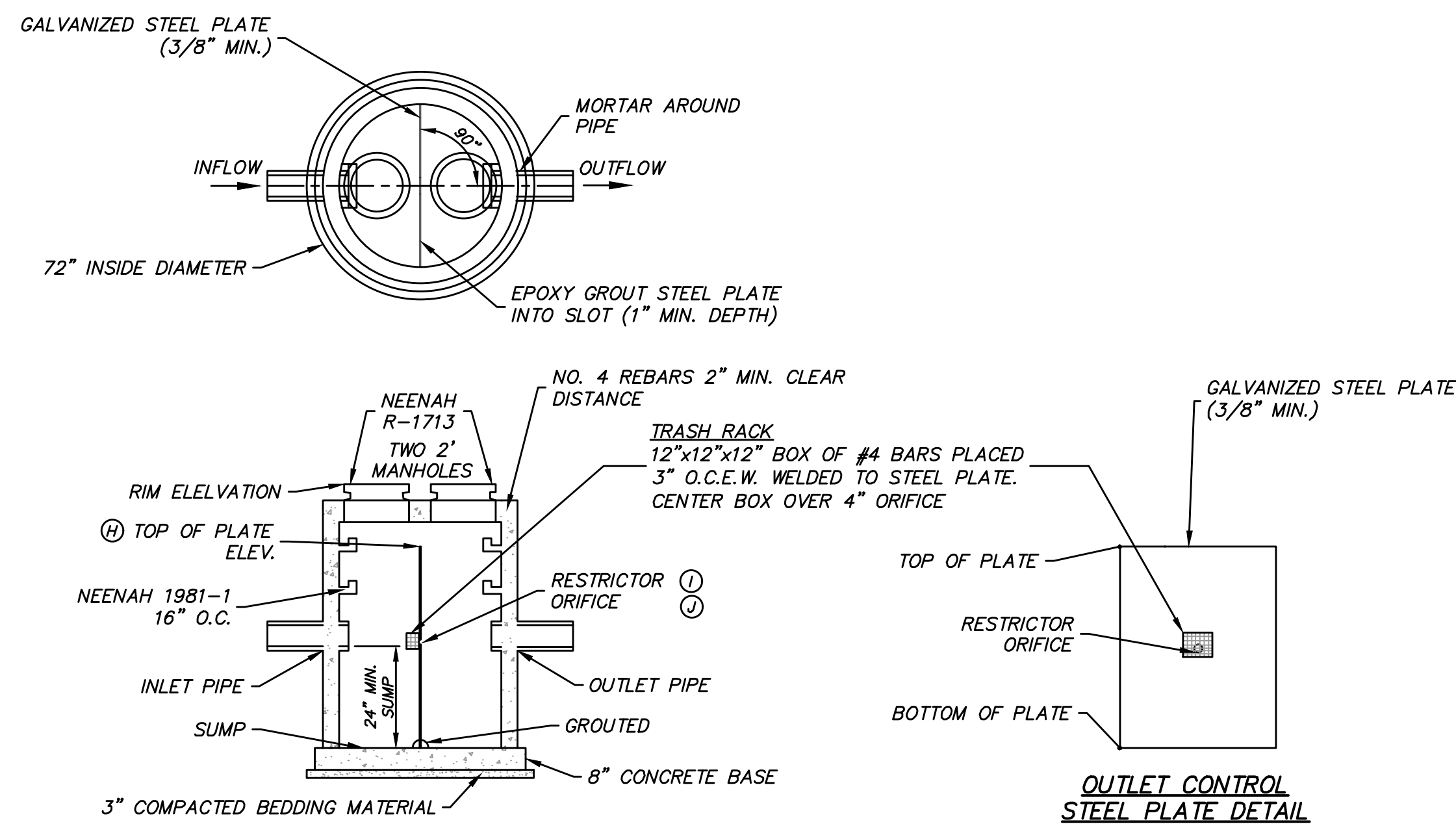
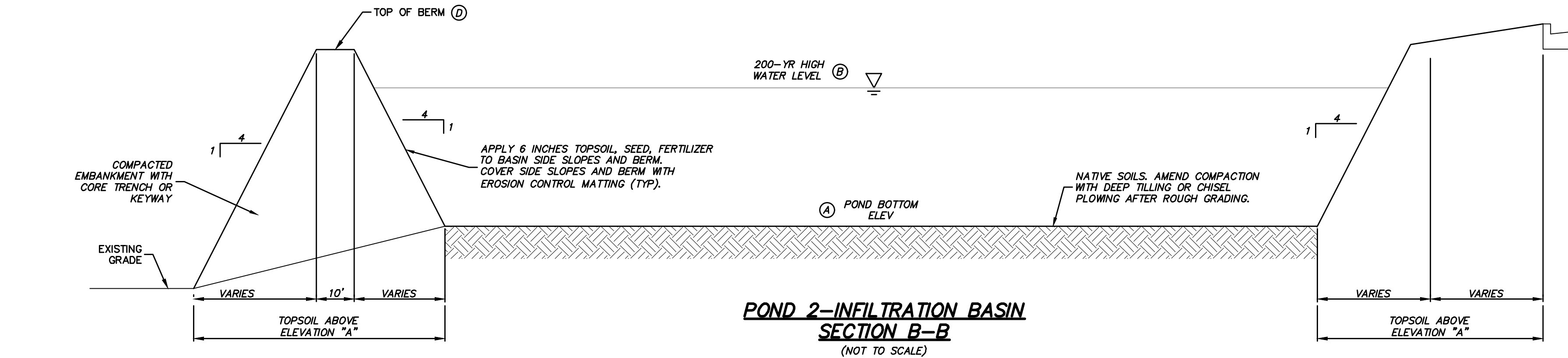
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P:\3230212\Dwg\Sheets\3230212-DT01.dwg, EROSION CONTROL, 7/26/2024 10:55:32 AM, jhp



THE ENTIRE POND AREA, FROM THE BASE OF THE EMERGENCY SPILLWAY TO THE POND BOTTOM SHALL BE UNDERCUT, SCARIFIED AND COMPACTED. THE UNDERCUT AREA SHALL THEN BE FILLED WITH CLAY AND COMPACTED AS CLAY LINER. ALL MATERIAL USED FOR EMBANKMENT FOR STORM WATER PONDS SHALL BE PLACED AND COMPACTED IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.

A GEOTECHNICAL ENGINEER SHALL SUPERVISE THE EXCAVATION AND CONSTRUCTION OF ALL STORM WATER PONDS AND EMBANKMENTS. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH PROJECT GEOTECHNICAL REPORT.



NOTES:

1. STRUCTURE SHALL BE CONSTRUCTED CONFORMING TO THE REQUIREMENTS OF ASTM C-478.
2. REINFORCING STEEL NOT SHOWN
3. "I" AND "J" CORRESPOND TO ORIFICE RESTRICTOR SIZES AND INVERTS. "J" IS THE SECOND (HIGHER ELEV.) RESTRICTOR AND NOT PROVIDED IN ALL CASES.

**POND OUTLET CONTROL STRUCTURE DETAIL**  
(NOT TO SCALE)



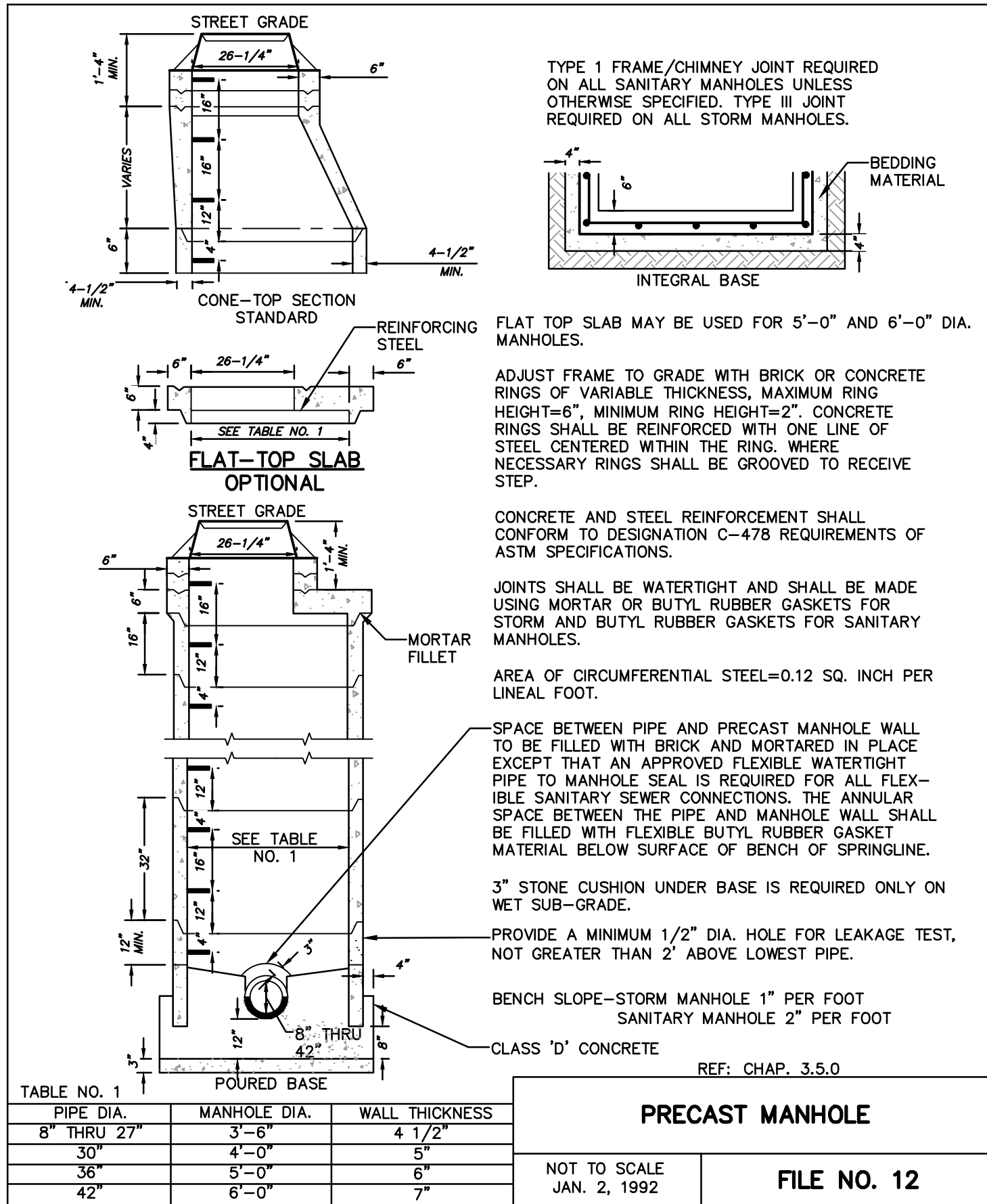
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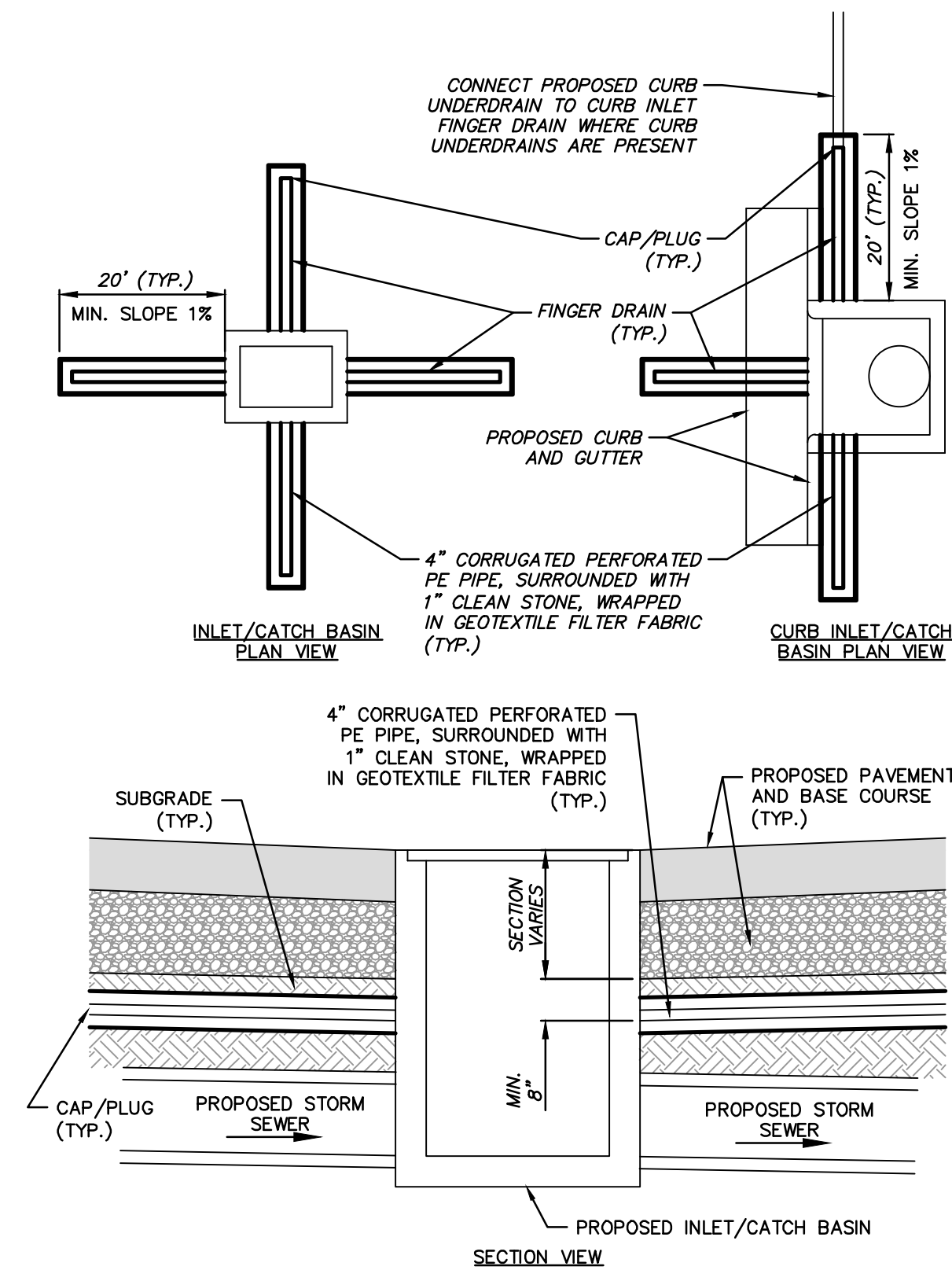
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MANHOLE & INLET STRUCTURE DETAIL PER FILE NO. 12. STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN (NOT TO SCALE)



NOTES

- FINGER DRAINS ARE TO BE INSTALLED ON ALL INLETS AND CATCH BASINS IN PAVEMENT OR CURB.
- FOR ALL PERFORATED FINGER DRAINS, PERFORATIONS ARE TO BE DRILLED ALONG BOTTOM SURFACE OF PIPE, SPACED AT 12-INCH CENTERS. MINIMUM 4 HOLES PER ROW.
- PIPE CONFORMING TO WISDOT SPECIFICATION 612.
- INSTALL PIPE WITH PERFORATED HOLES FACING DOWN.

INLET FINGER DRAIN

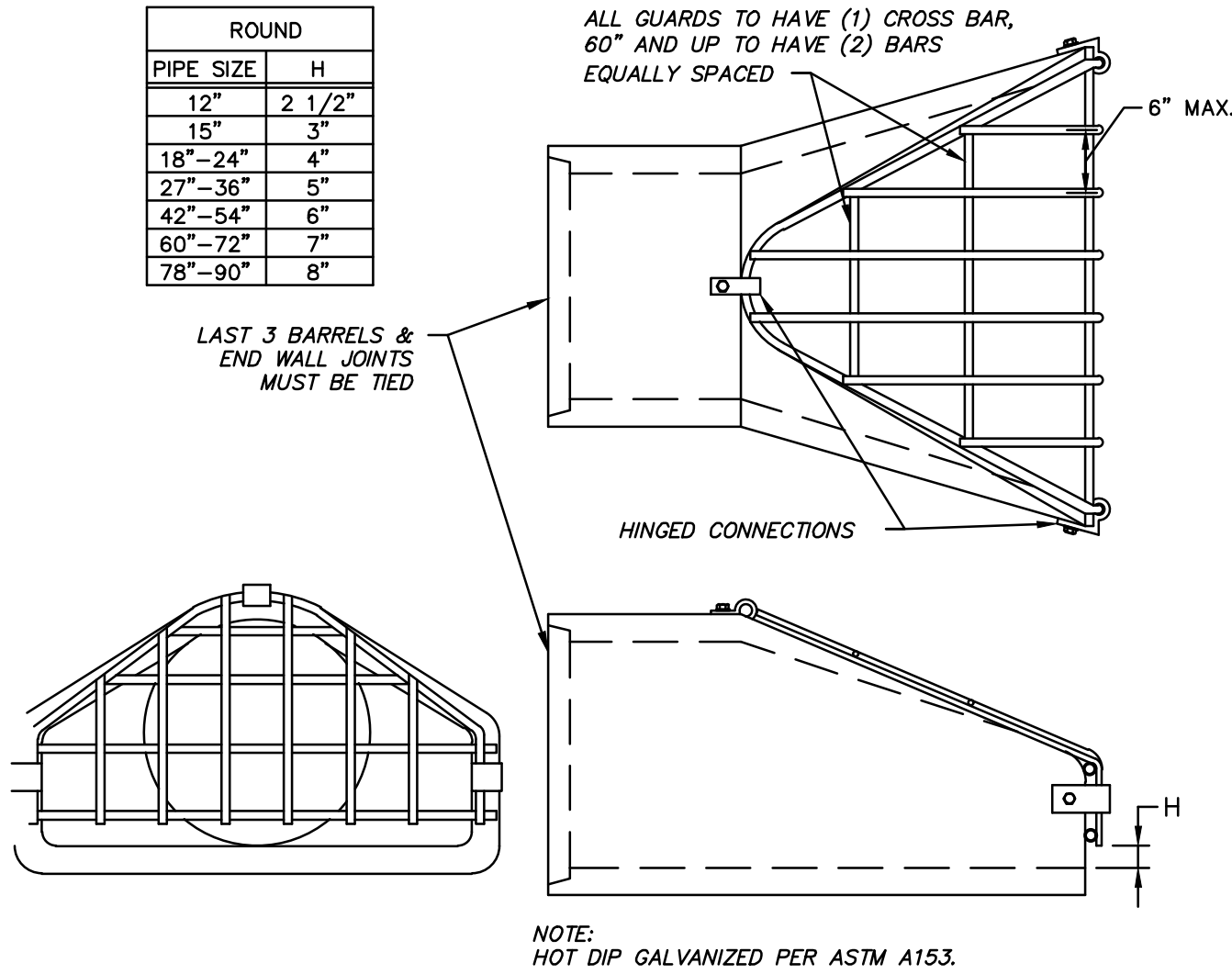
STORM STRUCTURE NOTES:

STORM STRUCTURE SIZES:  
UNLESS OTHERWISE NOTED ON THE PLANS OR BELOW, ALL STRUCTURES TO BE 48" INSIDE DIAMETER.

STORM SEWER STRUCTURES AND CASTINGS NOTE:  
FOR ALL STRUCTURES, CONTRACTOR TO VERIFY THAT CASTING IS COMPATIBLE WITH STRUCTURE. MANHOLE OPENING MUST BE AS WIDE OR WIDER THAN CASTING OPENING. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.

MANHOLE (STO MH):  
REFER TO FILE NO. 12 (STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN), EXCEPT:  
1. USE CASTING NEENAH R-1642, WITH SOLID LID.  
2. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN  
3. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH STRUCTURE. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.

INLET (STO INLET):  
REFER TO FILE NO. 12 (STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN), EXCEPT:  
USE CASTING AS INDICATED BELOW:  
1. INLETS IN CURB - USE CASTING NEENAH R-3290, TYPE C GRATE.  
2. INLETS IN PAVEMENT - USE CASTING NEENAH R-1792-GG GRATE.  
3. TRENCH DRAINS - USE NEENAH R-4990-CX, TYPE A GRATE.  
4. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN  
5. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH STRUCTURE. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.



BAR SIZES							
STANDARD DESIGN				HEAVY DESIGN			
PIPE SIZE	HOLE DIA. REQ'D	BOLT DIA.	BAR SIZE	PIPE SIZE	HOLE DIA. REQ'D	BOLT DIA.	BAR SIZE
12"-24"	3/4"	5/8"	5/8"	12"-18"	3/4"	5/8"	3/4"
27"-48"	7/8"	3/4"	3/4"	21"-42"	7/8"	3/4"	1"
54"-90"	1 1/8"	1"	1"	48"-90"	1 1/8"	1"	1 1/4"
BOLT LENGTH = PIPE WALL THICKNESS + 2 1/2"							

BAR GRATES FOR FLARED END SECTIONS - ONLY FOR END SECTIONS 24" AND GREATER



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DESCRIPTION

DATE

16745 W. Bluemound Road  
Brookfield, WI 53005-5938  
(262) 781-1000  
rasmith.com

**raSmith**  
CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI  
Cedarburg, WI | Naperville, IL | Irvine, CA

LOV-IT BRANDS CAMPUS  
TOWN OF BRISTOL, WI

SITE DETAILS  
STORM SEWER

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DATE: 07/26/2024

SCALE: N.T.S.

JOB NO. 3230212

PROJECT MANAGER:  
PAUL V. MCILHERAN, P.E.

DESIGNED BY: JHP

CHECKED BY: AJS3

SHEET NUMBER

C804



DIVISION 1 – GENERAL REQUIREMENTS

01 41 00 – REGULATORY REQUIREMENTS

- THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED:
  - WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) STORM WATER TECHNICAL STANDARDS
  - WISCONSIN EROSION CONTROL PRODUCT ACCEPTABILITY LIST
  - STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (SSWSCW)
  - WISCONSIN ADMINISTRATIVE CODE, SECTIONS SPS 381–387
  - WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
  - WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) APPROVED PRODUCT LISTS (APL)
  - FEDERAL HIGHWAY ADMINISTRATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
  - WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD)
  - UNITED STATES DEPARTMENT OF JUSTICE ADA STANDARDS
  - UNITED STATES DEPARTMENT OF TRANSPORTATION ADA STANDARDS FOR TRANSPORTATION FACILITIES
  - MUNICIPALITY DEVELOPMENT STANDARDS
- THE OWNER, ENGINEER AND MUNICIPALITY SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS AND FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING THE PROPERTY) AND THE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
- SHOP DRAWINGS AND/OR MANUFACTURER'S PRODUCT DATA SUBMITTALS ARE REQUIRED ONLY IF THE PRODUCT OR METHOD OF CONSTRUCTION IS DIFFERENT FROM THAT SPECIFIED OR IF REQUIRED BY THE MUNICIPAL ENGINEER.
  - ALL DOCUMENTS SUBMITTED FOR REVIEW SHALL HAVE THE SPECIFIC MATERIAL, PART, SIZE, ETC. HIGHLIGHTED IN RED. THE DRAWING OR EXHAUST DUCT SHEET HAS MULTIPLE PRESSURE RATING FOR DIFFERENT SIZE BENDS. HIGHLIGHT THE PRESSURE CLASS & SIZE TO BE USED ON PROJECT. ALL SUBMITTALS NOT PROPERLY IDENTIFYING THE SPECIFIC MATERIAL BEING USED WILL BE REJECTED.
  - CONTRACTOR SHALL SUBMIT A PDF COPY AND AN EXPLANATION AS TO HOW THE SUBSTITUTION MEETS THE PROPOSED DESIGN. PRODUCT SPECIFICATION SHEETS WITHOUT EXPLANATION WILL NOT BE ACCEPTED TO THE OWNER'S REPRESENTATIVE OR ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL THE OWNER'S APPROVAL IS GIVEN. IN PROJECT SCHEDULING CONTRACTOR SHALL ACCOUNT FOR 5 WORKING DAYS FOR SUBMITTAL REVIEW. IN THE EVENT SUCH SUBSTITUTION IS APPROVED, THE OWNER WILL REQUIRE FROM THE CONTRACTOR THE DEDUCTION FROM THE CONTRACT AMOUNT EQUAL TO ANY SAVINGS IN MATERIAL COST RESULTING FROM USE OF THE PROPOSED SUBSTITUTE.
  - THE CONTRACTOR SHALL ASSUME COMPLETE AND SOLE RESPONSIBILITY FOR THE QUALITY OF WORK. IF CHANGES OR ADJUSTMENTS ARE RECOMMENDED BY THE CONTRACTOR, THEY MAY BE MADE ONLY UPON WRITTEN APPROVAL OF THE OWNER OR THEIR REPRESENTATIVE.
    - ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE OWNER OR THEIR REPRESENTATIVE SHALL DECIDE ALL QUESTIONS WHICH SHALL ARISE AS TO THE QUALITY AND ACCEPTABILITY OF THE WORKMANSHIP. THE DILIGENT EXECUTION OF THE CONTRACT, THE INTENTION OF THE PLANS AND SPECIFICATIONS BY THE OWNER OR THEIR REPRESENTATIVE SHALL DETERMINE THE AMOUNT OF WORK PERFORMED AND MATERIALS FURNISHED.
    - FAILURE OR NEGLIGENCE OF THE OWNER OR THEIR REPRESENTATIVE TO CONDEMN OR REJECT SUBSTANDARD OR INFERIOR WORK OR MATERIALS SHALL NOT BE CONSTRUED TO IMPLY AN ACCEPTANCE OF SUCH WORK OR MATERIALS, IF IT BECOMES EVIDENT AT ANY TIME PRIOR TO THE FINAL ACCEPTANCE OF THE WORK BY THE OWNER. NEITHER SHALL IT BE CONSTRUED AS BARRING THE OWNER, AT ANY TIME SUBSEQUENT TO THE COMPLETION OF THE COMPLETED PROJECT, HE SHALL CALL THE NEED TO BUILD ANEW ALL PORTIONS OF THE SUBSTANDARD OR INFERIOR WORK OR REPLACEMENT OF IMPROPER MATERIALS WHEREVER FOUND.
    - INSPECTION BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND ALL MATERIAL FURNISHED. HIGH INSPECTION MAY EXTEND TO ALL OR ANY PART OF THE WORK AND TO THE PREPARATION, FABRICATION OR MANUFACTURE OF THE MATERIALS TO BE USED. THE INSPECTOR IS NOT AUTHORIZED TO REVOKE, ALTER OR WAIVE ANY REQUIREMENTS OF THE SPECIFICATIONS, NOR IS HE AUTHORIZED TO ACCEPT OR APPROVE ANY PORTION OF THE COMPLETED PROJECT. HE SHALL CALL THE ATTENTION OF THE CONTRACTOR TO ANY FAILURE OF THE WORK OR MATERIALS TO CONFORM TO THE SPECIFICATIONS AND CONTRACT, AND SHALL HAVE THE AUTHORITY TO REJECT MATERIALS. ANY DISPUTE BETWEEN THE INSPECTOR AND THE OWNER OR THEIR REPRESENTATIVE, HE SHALL CALL THE REPRESENTATIVE. ANY ADVICE WHICH THE INSPECTOR MAY GIVE THE CONTRACTOR SHALL IN NO WAY BE CONSTRUED AS BINDING THE ENGINEER IN ANY WAY OR RELEASING THE CONTRACTOR FROM FULFILLING ANY OF THE TERMS OF THE CONTRACT.
    - ALL MATERIALS AND EACH PART OF DETAIL OF THE WORK SHALL BE SUBJECT AT ALL TIMES TO INSPECTION BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE OR THE AUTHORITY HAVING JURISDICTION AND THE CONTRACTOR WILL BE HELD STRICTLY TO THE TRUE INTENT OF THE SPECIFICATIONS IN REGARD TO QUALITY OF MATERIALS AND WORKMANSHIP. THE DILIGENT EXECUTION OF THE CONTRACT. INSPECTION MAY INCLUDE MILL, PLANT OR SHOP INSPECTION, AND ANY MATERIAL FURNISHED UNDER THESE SPECIFICATIONS IS SUBJECT TO SUCH INSPECTION. THE OWNER OR HIS REPRESENTATIVES SHALL BE ALLOWED ACCESS TO ALL PART OF THE WORK, AND SHALL BE FURNISHED WITH SUCH INFORMATION AND ASSISTANCE BY THE CONTRACTOR AS IS DETERMINED BY THE OWNER OR HIS REPRESENTATIVE, TO MAKE A COMPLETE AND DETAILED INSPECTION.
    - ALL WORKMANSHIP SHALL CONFORM TO THE BEST STANDARD PRACTICE. UNLESS OTHERWISE SPECIFIED, THE SPECIFICATIONS AND RECOMMENDED ASSOCIATION OF MANUFACTURERS AND INDUSTRIAL MANUFACTURERS SHALL BE USED AS GUIDES FOR THE STANDARDS OF WORKMANSHIP.
    - ALL EXPOSED ITEMS OF WORK SHALL PRESENT A NEAT WORKMANLIKE APPEARANCE AND SHALL BE AS TRUE TO SHAPE AND ALIGNMENT AS POSSIBLE TO OBTAIN WITH MEASURING OR LEVELING INSTRUMENTS. MATERIALLY USED IN THE RESPECTIVE TYPES OF WORK SHALL BE SOUND AND FULLY PROTECTED AGAINST DAMAGE AND PREMATURE DETERIORATION. IT IS SPECIFICALLY UNDERSTOOD THAT IN ALL QUESTIONS OF QUALITY AND ACCEPTABILITY OF WORKMANSHIP, THE CONTRACTOR AGREES TO ABIDE BY THE DECISION OF THE OWNER OR THEIR REPRESENTATIVE.
    - ALL MATERIALS AND WORKMANSHIP NOT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS DEFECTIVE, AND ALL SUCH MATERIALS, WHETHER IN-PLACE OR NOT, SHALL BE REJECTED AND SHALL BE REMOVED FROM THE WORK BY THE CONTRACTOR AT HIS EXPENSE. UPON FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH ANY ORDER OF THE OWNER RELATIVE TO THE PROVISIONS OF THIS ARTICLE, THE OWNER SHALL HAVE THE AUTHORITY TO REMOVE AND REPLACE SUCH DEFECTIVE MATERIAL AND TO DEDUCT THE COST OF REMOVAL AND REPLACEMENT FROM ANY MONIES DUE TO THE CONTRACTOR BY ANY OTHER MEANS.
    - THE CONTRACTOR SHALL KEEP A LEGIBLE COPY OF THE PLANS, SPECIFICATIONS, AND ALL PERMITS AT THE SITE OF THE WORK AT ALL TIMES.
    - THE COMPLETION OF THE WORK AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE THE OWNER OR THEIR REPRESENTATIVE WITH A MARKED-UP SET OF DRAWINGS SHOWING ALL CHANGES OR VARIATIONS FROM THE ORIGINAL DRAWINGS. THESE CHANGES SHALL BE MADE ON A SET OF FIELD DRAWINGS AS THE WORK TAKES PLACE, NOT AFTER THE WORK IS COMPLETE. THIS SET OF DRAWINGS SHOULD BE KEPT CLEAN IN A LOCATION AT THE SITE WHERE THE OWNER OR THEIR REPRESENTATIVE MAY EXAMINE THEM.
    - THE MARKED-UP DRAWINGS SHALL BE ACCURATE. ARBITRARY MARKINGS ARE OF NO VALUE. CAREFUL MEASUREMENTS SHOULD BE MADE TO LOCATE UNDERGROUND EXTERIOR AND INTERIOR UTILITIES AND INTERIOR SEWERS, GAS LINES, WATER LINES, ELECTRICAL CONDUIT AND MISCELLANEOUS PIPING.
  - CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRAFFIC CONTROL PLANS AND PERMITTING FOR ALL WORK TO BE COMPLETED ONSITE OR IN THE PUBLIC RIGHT-OF-WAY.

01 70 00 – EXECUTION & CLOSEOUT REQUIREMENTS

- THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE WITH THIS PLAN.
- EXISTING UTILITY INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON BEST AVAILABLE PUBLIC RECORDS, AS-BUILT DRAWINGS, AND FIELD OBSERVATIONS. NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR ACCURACY OR COMPLETENESS. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND NATURE OF EXISTING UTILITIES, AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
- THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL PROPOSED UTILITY CONNECTIONS AND CROSSINGS PRIOR TO PROCEEDING WITH ANY WORK. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED. COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND SUBSEQUENT RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION.
- THE CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF THE BENCHMARKS AND HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES IN FIELD VERIFICATION OR HORIZONTAL CONTROL PRIOR TO ANY CONSTRUCTION.
- SURVEY BENCHMARKS AND CONTROL POINTS SHALL BE MAINTAINED AND PROTECTED FROM DISTURBANCE.
- PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED AT ALL TIMES. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED.
- PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SITE SHALL BE LIMITED TO THE CONSTRUCTION ENTRANCE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES, SHALL BID ON THEIR OWN ESTIMATE OF THE WORK REQUIRED, AND SHALL NOT RELY ON THE ENGINEER'S ESTIMATE.
- REQUESTS FOR CLARIFICATION WILL BE INTERRUPTED BY THE OWNER/ENGINEER PRIOR TO AWARD OF CONTRACT, AND WHEN NECESSARY OFFICIAL WRITTEN RESPONSES WILL BE ISSUED. OFFICIAL WRITTEN RESPONSES SHALL BE BINDING TO THE WORK. IN NO WAY SHALL VERBAL DIALOGUE CONSTITUTE OFFICIAL RESPONSE.
- SHOULD ANY DISCREPANCIES BE DISCOVERED BY THE CONTRACTOR AFTER AWARD OF CONTRACT, NOTIFY THE ENGINEER BY WRITING IMMEDIATELY. IF CONSTRUCTION IS AFFECTED BY THE DISCREPANCIES SHALL NOT COMMENCE OR CONTINUE UNTIL AN OFFICIAL WRITTEN RESPONSE IS ISSUED.
- ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF 12 MONTHS FROM THE DATE OF FINAL ACCEPTANCE. THIS GUARANTEE SHALL INCLUDE ALL DEFECTS IN MATERIALS AND WORKMANSHIP.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

DIVISION 31 – EARTHWORK

31 10 00 – SITE CLEARING & DEMOLITION

- WORK SHALL CONSIST OF DEMOLITION, ABANDONMENT, AND REMOVAL OF EXISTING FOUNDATIONS, WALLS, SLABS, FENCES, PIPING, PAVEMENTS, AND OTHER MANMADE ITEMS INTERFERING WITH NEW CONSTRUCTION. WORK SHALL ALSO CONSIST OF REMOVAL OF SHRUBS, VEGETATION, ROOTS, STUMPS, RUBBISH, AND OTHER PERISHABLE MATERIAL INTERFERING WITH NEW CONSTRUCTION.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES.
- INSTALL PERIMETER FENCING AS INDICATED PRIOR TO COMMENCING ANY CONSTRUCTION RELATED ACTIVITY.
- CLEARLY IDENTIFY ALL VEGETATION TO BE PRESERVED AND/OR RELOCATED PRIOR TO CLEARING AND GRUBBING.
- PROTECT EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY DAMAGED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION, OR AS OTHERWISE ACCEPTABLE TO THE OWNER.
- REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
- REMOVE ALL PAVEMENT TO BE REMOVED IN STRAIGHT LINES TO FULL DEPTH.
- DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS. BREAK UP CONCRETE SLABS THAT ARE 2 FEET OR MORE BELOW PROPOSED SUBGRADE TO PERMIT DRAINAGE.
- DISCONNECT AND SEAL/CAAP EXISTING UTILITIES THAT TO BE REMOVED, RELOCATED, OR ABANDONED IN ACCORDANCE WITH REQUIREMENTS OF UTILITY PROVIDERS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING NECESSARY REMOVAL AND/OR RELOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS.
- DO NOT INTERRUPT UTILITY SERVICE TO EXISTING FACILITIES UNLESS PERMITTED BY THE OWNER.
- VOIDS LEFT BY REMOVALS SHALL BE LEVELED TO PREVENT PONDING OF WATER.
- REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE. RUBBISH, TRASH, GARBAGE, AND LITTER SHALL BE PLACED IN SEALED CONTAINERS THROUGHOUT CONSTRUCTION.

31 20 00 – EARTH MOVING

- WORK SHALL CONSIST OF STRIPPING AND STORAGE OF TOPSOIL, EXCAVATION, EMBANKMENT, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE LAND BALANCE, COMPACTION, FINISH GRADING, SUBGRADE PREPARATION, AND REPLACEMENT OF TOPSOIL.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- ALL EARTHMOVING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND SUBSEQUENT RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION BASED ON FIELD CONDITIONS, AND THESE REQUIREMENTS. THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
- PROTECT EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY DAMAGED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION, OR AS OTHERWISE ACCEPTABLE TO THE OWNER.
- ENCOUNTERED, EXCAVATED MATERIAL MAY INCLUDE ROCK AND UNCLASSIFIED OBSTRUCTIONS, WHICH IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE WORK.
- EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND BUILDING PAD AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE REMOVED TO A MINIMUM OF WITHIN AND A MINIMUM OF 10 FEET BEYOND BUILDING PAD AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- AREAS SHALL BE GRADED TO WITHIN 1 INCH, MORE OR LESS, OF PROPOSED SUBGRADE. DEVIATIONS SHALL NOT BE CONSISTENT IN ONE DIRECTION.
- DISKING, HARROWING AND AGRICULTURAL TECHNIQUES SHALL BE USED TO DRY SUBGRADE PRIOR TO PROOF ROLLING.
- IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER, PROOF ROLL SUBGRADE BELOW BUILDING PAD AND PAVEMENT AREAS DURING DRY WEATHER WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK WHERE COHESIVE SOILS ARE PREDOMINANT. PROOF ROLLING SHALL BE COMPLETED PRIOR TO ANY FURTHER CONSTRUCTION. THE PROOF ROLL SUBGRADE WHICH IS OBSERVED TO RUT OR DEFLECT EXCESSIVELY SHALL BE UNDERCUT IN ACCORDANCE WITH RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. DO NOT PROOF ROLL WET OR SATURATED SUBGRADE.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION TO ALLEVATE WATER PONDING, SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION TO ALLEVATE WATER PONDING, SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION TO ALLEVATE WATER PONDING, SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- TOPSOIL REPLACEMENT DEPTH SHALL BE AS CALLED OUT ON THE CIVIL OR LANDSCAPE PLANS, OR A MINIMUM OF 6 INCHES.
- TOPSOIL IN PARKING ISLANDS: ALL PARKING LOT ISLANDS TO BE BACKFILLED WITH TOPSOIL TO A MINIMUM DEPTH OF 18" BY GRADING CONTRACTOR TO INSURE LONG TERM PLANT LIFE. CROWN ALL PLANTING ISLANDS A MINIMUM OF 6" TO PROVIDE PROPER DRAINAGE, UNLESS OTHERWISE SPECIFIED.

31 25 00 – EROSION & SEDIMENTATION CONTROLS

- WORK SHALL CONSIST OF INSTALLATION OF TEMPORARY AND PERMANENT PRACTICES FOR SEDIMENTATION CONTROL, EROSION CONTROL, SLOPE PROTECTION, AND REMOVAL OF PRACTICES UPON FINAL SITE STABILIZATION.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- INSTALLATION AND MAINTENANCE OF PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WORK TECHNICAL STANDARD. THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION TO ALLEVATE WATER PONDING, SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- ALL PRACTICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY. EARTHWORK ASSOCIATED WITH INSTALLATION OF PRACTICES MAY OCCUR CONCURRENTLY.
- ALL PRACTICES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH PERMIT REQUIREMENTS.
- ALL PRACTICES SHALL BE ROUTINELY INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. THE CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND CONDUCT REPAIRS AS NEEDED.
- ALL DISTURBED AREAS SHALL DRAIN TO A CONTROL PRACTICE AT ALL TIMES DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING UPON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL ADDITIONAL CONTROL PRACTICES TO MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL PRACTICES NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
- ALL DISTURBED GROUND LEFT INACTIVE FOR 7 DAYS SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE AND MULCH. THE TEMPORARY SEED MIXTURE SHALL BE IN ACCORDANCE WITH SECTION 630 OF WISDOT STANDARD SPECIFICATIONS. WINTER WHEAT OR RYE SHALL BE USED FOR TEMPORARY SEED AFTER SEPTEMBER 1.
- DISTURBED AREAS THAT CAN NOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION DUE TO TEMPERATURE OR CLIMATE SHALL BE STABILIZED FROM THE COMMENCEMENT OF CONSTRUCTION BY COVERING WITH A GEOTEXTILE.
- ALL ACTIVITIES ON THE PROJECT SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME.
- JUST GENERATED BY CONSTRUCTION RELATED ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING, OR OTHER APPROPRIATE MEASURES.
- THE CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED PRIOR TO DISCHARGE FROM THE PROJECT SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT SITE AND PUBLIC ROADS DURING CONSTRUCTION. PUBLIC ROADS SHALL BE KEPT FREE OF SEDIMENT TRACKED FROM AREAS UNDER CONSTRUCTION BY DAILY SWEEPING OR OTHER MEANS.
- FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
- ALL SEEDED AREAS SHALL BE FERTILIZED, RESEEDD AS NECESSARY, AND MULCHED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN TO MAINTAIN A VIGOROUS DENSE VEGETATIVE COVER.

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 12 00 – ASPHALT PAVING

- WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF HOT-MIX ASPHALT, PAVEMENT MARKING, SIGNAGE, AND CLEANUP.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- ASPHALT PAVEMENT MIX DESIGNS SUBMITTED FOR REVIEW SHALL BE FORMATTED USING WISDOT MIX DESIGN STANDARD DATA INPUT FORM/REPORT 249.
- CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
- ASPHALTIC MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 455 OF WISDOT STANDARD SPECIFICATIONS.
- AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 460 OF WISDOT STANDARD SPECIFICATIONS.
- DO NOT CONDUCT ASPHALT PAVING IF ANY OF THE FOLLOWING CONDITIONS EXIST: CRUSHED STONE BASE IS WET OR EXCESSIVELY DAMP; TEMPERATURE IS BELOW 30 DEGREES FAHRENHEIT AT TIME OF BINDER COURSE INSTALLATION; TEMPERATURE HAS BEEN BELOW 35 DEGREES FAHRENHEIT WITHIN 12 HOURS PRIOR TO TACK COAT APPLICATION; TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AT TIME OF SURFACE COURSE INSTALLATION.
- COMPACT ASPHALT IN ACCORDANCE WITH SECTION 450 OF WISDOT STANDARD SPECIFICATIONS. COMPACT ASPHALT TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS 1/4-INCH FOR BINDER COURSE, AND WITHIN PLUS 1/4-INCH FOR SURFACE COURSE (NO MINUS).
- APPLY TACK COAT BETWEEN ASPHALT COURSES AT A MINIMUM RATE OF 0.25 GAL/SY.
- NO TRAFFIC SHALL BE ALLOWED ON ASPHALT AFTER FINAL ROLLING UNTIL IT HAS COOLED AND HARDENED.
- FINAL ASPHALT SURFACE SHALL BE WITHIN A 1/8-INCH TOLERANCE AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED LONGITUDINALLY OR TRANSVERSELY. REMOVE AND REPLACE ALL RAISED AND DEPRESSED AREAS EXCEEDING TOLERANCE.
- A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS AT ADA PARKING STALLS AND ADJACENT UNLOADING AREAS IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- A SLOPE NO GREATER THAN 2% ALONG THE LENGTH OF THE ACCESSIBLE ROUTE IS REQUIRED. A SLOPE NO GREATER THAN 2% ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

32 13 00 – CONCRETE PAVING

- WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF CONCRETE, AND CLEANUP.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
- CONCRETE PAVING SHALL BE IN ACCORDANCE WITH WISDOT STANDARD SPECIFICATIONS:
  - SECTION 405– COLORED AND STAMPED CONCRETE PAVING
  - SECTION 415– CONCRETE SIDEWALKS AND PATIOS
  - SECTION 416– CONCRETE PAVEMENT REPAIR
  - SECTION 601– CONCRETE CURBING
  - SECTION 602– CONCRETE SIDEWALK AND PATIO PAVING
- CONCRETE SHALL BE GRADE A AIR-ENTRAINED IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS.
- WATER SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C94 / C94M.
- AIR-ENTRAINING SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C260.

DIVISION 32 – EXTERIOR IMPROVEMENTS

- RETARDING, WATER-REDUCING, AND NON-CHLORIDE ACCELERATING ADMIXTURES SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND AASHTO M194.
- LIGHT CURING COMPOUND SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS AND AASHTO M194.
- CONCRETE FORMS SHALL REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE INSTALLATION AND SHALL BE CLEANED AFTER EACH USE. CONCRETE FORMS SHALL BE COATED WITH RELEASE AGENT TO ALLOW SEPARATION WITHOUT DAMAGE TO CONCRETE.
- ALL JOINTS BETWEEN CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS. JOINT PATTERN SHALL FOLLOW ARCHITECTURAL PLANS IF AVAILABLE.
- ISOLATION JOINTS SHALL CONSIST OF PREFORMED JOINT FILLER STRIPS ABUTTING CURBING, INLETS, CATCH BASINS, MANHOLES, STRUCTURES, AND OTHER CONSTRUCTION JOINTS.
- EDGES OF CONCRETE PAVEMENT, CURBING, SIDEWALK, PATIOS, AND JOINTS SHALL BE TOoled IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADII. REPEAT TOOLING AFTER APPLYING SURFACE FINISHES AND ELIMINATE TOOL MARKS ON SURFACES.
- FINISH, CURE, AND PROTECT PAVEMENT IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS.
- FINISH (LIGHT BROOM), CURE, AND PROTECT SIDEWALK AND PATIOS IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
- FINISH (ARTIFICIAL TURF DRAG), CURE, AND PROTECT VEHICULAR PAVEMENT AND PADS IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS.
- MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
- MAXIMUM DIFFERENCE BETWEEN CONCRETE SIDEWALKS AND ADJACENT PAVEMENT SURFACES SHALL NOT EXCEED 1/4-INCH VERTICAL.
- A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS AT ADA PARKING STALLS AND ADJACENT UNLOADING AREAS IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- A SLOPE NO GREATER THAN 2% ALONG THE LENGTH OF THE ACCESSIBLE ROUTE IS REQUIRED. A SLOPE NO GREATER THAN 2% ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- ALL ACCESSIBLE DOORWAYS REQUIRE AN EXTERIOR LANDING THAT IS A MINIMUM OF 5 FEET BY 5 FEET WITH A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
- REMOVE AND REPLACE CONCRETE THAT IS BROKEN, DAMAGED, DEFECTIVE, OR DOES NOT COMPLY WITH THE REQUIREMENTS LISTED ABOVE.

32 17 00 – PAVEMENT MARKING

- WORK SHALL CONSIST OF INSTALLATION OF PARKING LOT STRIPING, DIRECTIONAL ARROWS, AND ACCESSIBLE SYMBOLS.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH SECTION 646 OF WISDOT STANDARD SPECIFICATIONS AND WISDOT APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS NOTED OTHERWISE ON THIS PLAN. MARKINGS SHALL BE IN ACCORDANCE WITH SECTION 646 OF WISDOT STANDARD SPECIFICATIONS.
- ALL PARKING LOT STRIPING SHALL BE 4-INCH WIDTH UNLESS NOTED OTHERWISE ON THIS PLAN.
- BARRICADE WORK AREA DURING INSTALLATION AND UNTIL PAVEMENT MARKING IS DRIED. PROTECT ADJACENT AREAS.
- APPLY PAVEMENT MARKING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS TO PRODUCE MARKINGS AS INDICATED WITH UNIFORM, STRAIGHT EDGES. TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS.
- PAVEMENT MARKING TO CLEAR AND DRY FROM TREE TRUNKS, TREE FRONTS, TO CURB, PAVEMENT BONDING.
- NOTIFY OWNER OF ANY UNSOUND CONDITIONS PRIOR TO COMMENCING WORK. APPLYING PAVEMENT MARKING CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.

32 32 00 – RETAINING WALLS

- WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT, SUPERVISION, AND DIRECTION TO CONSTRUCT RETAINING WALL SYSTEMS IN REASONABLY CLOSE CONFORMITY TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THIS PLAN. RETAINING WALLS SHOWN ON THIS PLAN ARE FOR GENERAL LOCATION AND MATERIAL REFERENCE ONLY.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- THE CONTRACTOR SHALL PROCURE DETAILED DESIGN CALCULATIONS AND DRAWINGS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER WITH EXPERIENCE WITH RETAINING WALL DESIGN AND LICENSED IN THE STATE IN WHICH THE RETAINING WALLS ARE TO BE CONSTRUCTED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SURROUNDING STRUCTURES AND UTILITIES ARE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION ADJACENT TO THE RETAINING WALLS DOES NOT DISTURB OR PLACE TEMPORARY LOADS ON THE RETAINING WALLS THAT EXCEED DESIGN LOADS.

DIVISION 33 – UTILITIES

33 10 00 – WATER DISTRIBUTION

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE WATER DISTRIBUTION SYSTEM AND ALL APPURTENANCES.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- ALL PUBLIC WATER DISTRIBUTION WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE NR 811, MUNICIPALITY DEVELOPMENT STANDARDS AND SSSWCW.
- ALL PRIVATE WATER DISTRIBUTION WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE SPS 382, MUNICIPALITY DEVELOPMENT STANDARDS AND SSSWCW.
- POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 18, CLASS 150 CONFORMING TO AWWA C900 WITH INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS IN ACCORDANCE WITH SECTION 8.2.0 OF SSSWCW.
- DUCTILE IRON PIPE (DIP) SHALL BE CLASS 150 CONFORMING TO AWWA C151 WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 8.1.6 OF SSSWCW.
- POLYETHYLENE TUBING SHALL BE SDR 9 IN ACCORDANCE WITH SECTION 8.2.4.0 OF SSSWCW AND CONFORM TO AWWA C901.
- COPPER TUBING SHALL BE TYPE "K" IN ACCORDANCE WITH SECTION 8.2.4.0 OF SSSWCW AND CONFORM TO ASTM B88.
- ALL VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.3.0.0 OF SSSWCW AND CONFORM TO AWWA C800 AND ASTM B62.
- GATE VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.2.7.0 OF SSSWCW AND CONFORM TO AWWA C500.
- BUTTERFLY VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.2.6.0 OF SSSWCW AND CONFORM TO AWWA C504.
- VALVE BOXES SHALL BE IN ACCORDANCE WITH SECTION 8.2.9.0 OF SSSWCW AND CONFORM TO ASTM 445. VALVE BOXES SHALL BE SIZE OD, SORER TYPE, 3 PIECE ASSEMBLY, WITH COVERS MARKED "WATER". ALL VALVE BOXES SHALL BE SET TO PROPOSED GRADE, TRULY VERTICAL, AND SUPPORTED BY USE OF ADAPTOR.
- HYDRANTS SHALL BE IN ACCORDANCE WITH SECTION 8.2.0 OF SSSWCW AND CONFORM TO AWWA C502. PUMPER NOZZLE SHALL BE PERPENDICULAR TO AND ORIENTED TOWARDS THE PAVEMENT. HYDRANTS SHALL BE ATTACHED BY MEANS OF TEE AND HAVE A GROUND LINE TO CENTER DISTANCE OF 18 TO 21 INCHES.
- FITTING SHALL BE IN ACCORDANCE WITH SECTION 8.2.2.0 OF SSSWCW, CONFORMING TO AWWA C110, AND PROVIDED WITH MECHANICAL JOINTS.
- MECHANICAL JOINTS SHALL BE MADE WITH "COR TEN" NUTS AND BOLTS, OR CORROSION-RESISTANT EQUIVALENTS CONFORMING TO AWWA C111.
- POLYETHYLENE WIRE SHALL BE IN ACCORDANCE WITH SECTION 8.21.0 OF SSSWCW AND PROVIDED FOR ALL METAL PIPES AND FITTINGS.
- THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH SECTION 4.3.1.3 OF SSSWCW AND PROVIDED FOR ALL BENDS, ELBOWS, AND TEES.
- TRENCH SECTION SHALL BE IN ACCORDANCE WITH FILE NO. 36 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.4.3.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- TRENCH BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.4.3.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.4.3.5 OF SSSWCW BENEATH GREENSPACE AREAS, UNLESS ALTERNATIVE COMPACTION IS RECOMMENDED IN THE GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION, IN WHICH CASE THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- TRACER WIRE SHALL BE BLUE AND INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC WATER MAIN PIPE, PRIVATE WATER MAIN PIPE, AND BUILDING WATER SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 400 FEET.
- PROPOSED WATER SERVICES SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL.
- THE CONTRACTOR IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF BENDS REQUIRED TO COMPLETE CONSTRUCTION, WHICH SHALL BE INCIDENTAL AND INCLUDED IN THE COST OF WORK.
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES TO FINISHED SURFACE.
- THE CONTRACTOR IS RESPONSIBLE FOR PRESSURE TESTING AND SAFE WATER SAMPLING. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH SECTION 4.15.0 OF SSSWCW. DISINFECTION SHALL BE IN ACCORDANCE WITH SECTION 4.16.0 OF SSSWCW AND CONFORM TO AWWA C651. WATER MAINS SHALL BE FLUSHED AND TESTED IN THE PRESENCE OF THE WATER UTILITY OPERATOR.

33 30 00 – SANITARY SEWERAGE

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE SANITARY SEWERAGE SYSTEM AND ALL APPURTENANCES.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- ALL PUBLIC SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE NR 110, MUNICIPALITY DEVELOPMENT STANDARDS AND SSSWCW.
- ALL PRIVATE SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE SPS 382, MUNICIPALITY DEVELOPMENT STANDARDS AND SSSWCW.
- POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 FOR DEPTHS LESS THAN 18 FEET, AND SHALL BE SDR 41 FOR DEPTHS GREATER THAN 18 FEET, BOTH WITH PUSH-ON RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTIONS 8.10.6 AND 8.4.1.4 OF SSSWCW.
- MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.3.9.0 OF SSSWCW AND CONFORM TO ASTM C443. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
- TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.4.3.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- TRENCH BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.4.3.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.4.3.5 OF SSSWCW BENEATH GREENSPACE AREAS, UNLESS ALTERNATIVE COMPACTION IS RECOMMENDED IN THE GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION, IN WHICH CASE THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- ALL CONNECTIONS TO EXISTING SANITARY SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE. PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR ALL BUILDING SANITARY SERVICE PIPES, UNLESS NOTED OTHERWISE.

DIVISION 33 – UTILITIES

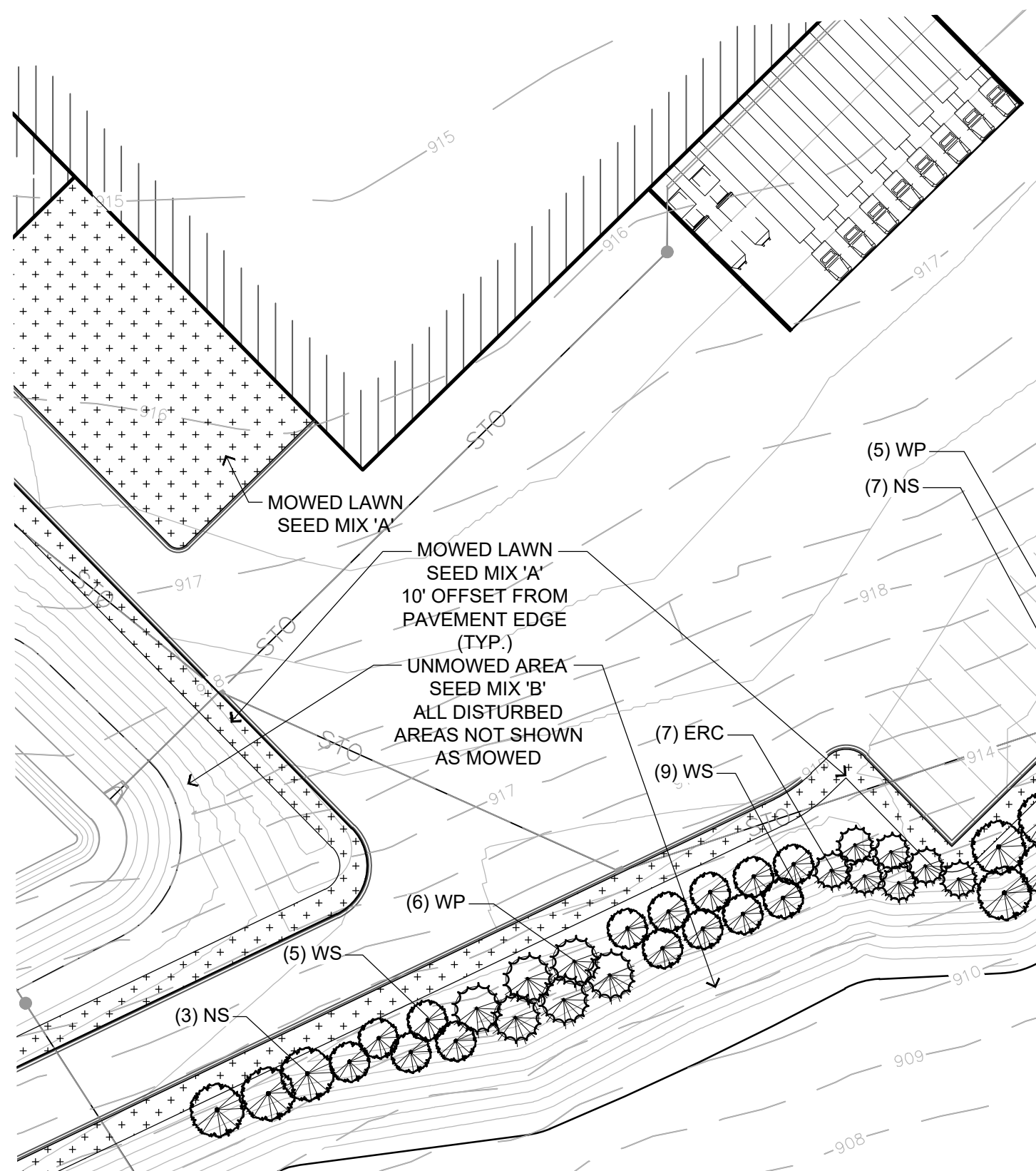
- CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN AREAS WITH OVERHEAD POWER LINES. ALL SET FLUSH WITH SURFACE.
- TRACER WIRE SHALL BE GREEN AND INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC SANITARY SEWER PIPE, PRIVATE SANITARY INTERCEPTOR PIPE, AND BUILDING SANITARY SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 400 FEET.
- PROPOSED SANITARY SERVICES SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. CONNECTIONS TO DOWNSPOUTS SHALL BE PER DETAILS ON THE BUILDING PLUMBING PLANS. THE EXACT LOCATION OF DOWNSPOUTS SHALL BE PER THE ARCHITECTURAL PLANS.
- AFTER INSTALLATION OF SANITARY SEWERAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE. CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

33 40 00 – STORMWATER DRAINAGE

- WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE STORMWATER DRAINAGE SYSTEM AND ALL APPURTENANCES.
- ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- ALL PUBLIC STORMWATER DRAINAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE SPS 382, MUNICIPALITY DEVELOPMENT STANDARDS AND SSSWCW.
- ALL PRIVATE STORMWATER DRAINAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE SPS 382 AND MUNICIPALITY DEVELOPMENT STANDARDS.
- REINFORCED CONCRETE (RC) AND END SECTIONS SHALL BE IN ACCORDANCE WITH SECTION 8.6.0 OF SSSWCW AND CONFORM TO ASTM C76 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM C443, UNLESS NOTED OTHERWISE. 12-INCH DIAMETER PIPE SHALL BE CLASS V, 15-INCH DIAMETER PIPE SHALL BE CLASS IV, AND 18-INCH DIAMETER PIPE AND LARGER SHALL BE CLASS III.
- CORRUGATED METAL PIPE (CMP) AND END SECTIONS SHALL BE 16 GAUGE CONFORMING TO ASTM A760.
- HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE ADS N12 WT 16 PIPE CONFORMING TO ASTM F2648 WITH WATER TIGHT JOINTS CONFORMING TO ASTM D3212, GASKETS CONFORMING TO ASTM F477 AND FITTINGS CONFORMING TO ASTM F2306.
- POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 WITH PUSH-ON RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212.
- MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.3.9.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDER



<u>CODE</u>	<u>QTY</u>	<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>INSTALLED SIZE</u>	<u>ROOT</u>	<u>SPACING</u>	<u>MATURE SIZE</u>
<b>EVERGREEN TREES</b>							
ERC	21	Eastern Red Cedar	Juniperus virginiana	6' HT	B&B	Spacing as shown	35' x 15'
NS	15	Norway Spruce	Picea abies	6' - 7' HT	B&B	Spacing as shown	50' x 25'
WS	30	White Spruce	Picea glauca	6' - 7' HT	B&B	Spacing as shown	50' x 15'
WP	16	White Pine	Pinus strobus	6' - 7' HT	B&B	Spacing as shown	60' x 30'

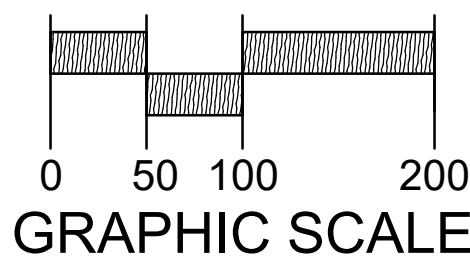
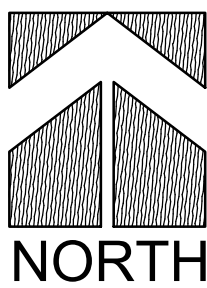
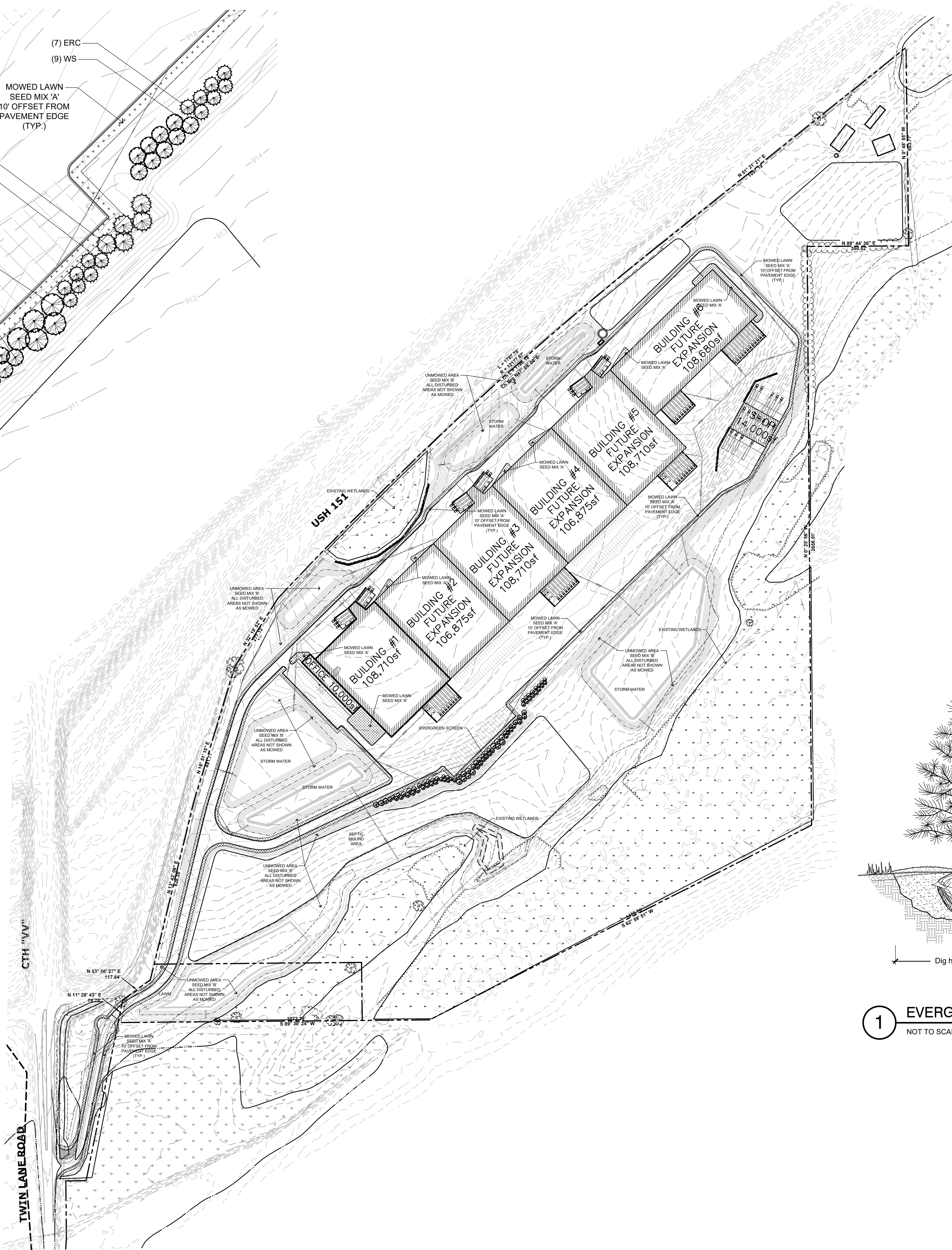


## GENERAL LANDSCAPE NOTES





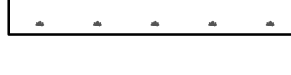
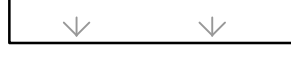
1. Contractor responsible for contacting public and private underground utility locating service to have site marked prior to any digging or earthwork.
2. Contractor to verify all plant quantities shown on plant list and verify with plan. Report any discrepancies immediately to general contractor.
3. All plantings shall comply with standards as described in American Standard of Nursery Stock - ANSI Z60.1 (latest version). General contractor or owner's representative reserves the right to inspect and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged.
4. Any potential plant substitutions must be submitted in writing to the general contractor and approved by the owner's representative or landscape architect prior to installation. All plants must be installed as per sizes and quantities shown on plant material schedule, unless approved by the owner's representative or landscape architect. Any potential changes to sizes shown on plan and appropriate cost credits / adjustments must be submitted in writing to the general contractor and approved by the owner's representative or landscape architect prior to installation.
5. The subsequent requirements regarding topsoil should be coordinated between the general contractor, grading contractor and landscape contractor.
6. Subgrade areas shall be graded to within 1", more or less, of proposed subgrade. Deviations shall not be consistent in one direction.
7. Topsoil should be placed to meet proposed finished grade. All landscaped areas to receive a minimum depth of 6" of clean topsoil (per note below).
8. Topsoil shall be: screened existing stockpiled topsoil, existing in-place soil, or screened soil from an off-site source that will support plant growth, and meets the following requirements. Clean topsoil shall be free of rocks, coarse fragments, gravel, sticks, trash, debris, roots over 3/4" and any substances harmful to plant growth. It also must be free of plants or plant parts of any noxious weeds. Topsoil shall contain 3 to 5 percent decomposed organic matter and a pH between 5.5 and 7.0.
9. Seeded areas: to receive a settled minimum depth of 6" of blended, prepared and non-compacted topsoil. Landscape contractor is responsible for excavation and removal of unwanted material (gravel, debris, roots) and other extraneous material harmful to plant growth) to the specified depth, supplementing with additional topsoil (if necessary) and the fine grading of all seeded areas.
10. Tree planting (see planting detail): plant all trees slightly higher than finished grade prior to install. Remove excess soil from top of root ball. If needed, An auger is not an accepted method of tree planting. Carefully side walk of tree prior to installation. Once tree has been placed into the hole, it is at the correct depth and vertical alignment and will not longer be moved; brace root ball by tamping soil around the lower portion of the root ball. Remove and discard weeds / rope, burrito and support wire from the sides of root ball. Backfill pit with 75% existing soil removed from excavation and 25% compact blended prior to backfilling holes, in six-inch lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. Do not over compact or use mechanical or pneumatic tamping equipment. Discard any gravel, heavy clay or stones. When hole has been backfilled to three-quarters of its depth, pour water around the root ball and allow to soak into soil to settle the soil. Continue backfilling until soil is brought to grade level.

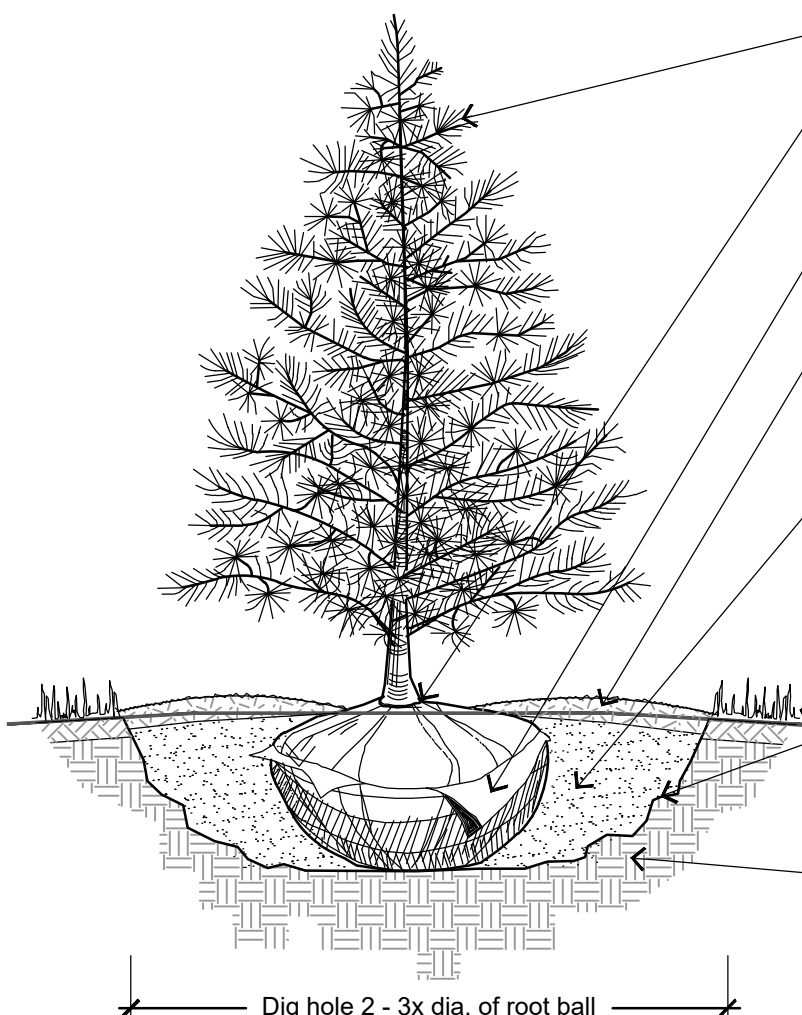
Provide a 3" deep, 4 ft. diameter shredded hardwood bark mulch ring around all trees in lawn areas, reduced to 1" deep on top of root ball. Keep mulch 3'- 5' away from trunk of tree. Trees that are installed incorrectly will be replaced at the time and expense of the landscape contractor. Trees too large for two people to lift in and out of holes, shall be placed with sling. Do not rock the trees in holes to raise them.

1. Lawn installation for all seeded turf grasses: remove / kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil and seed bed by removing all surface stones 1" or larger and grading lawn areas to finish grade. Apply a starter fertilizer and specified seed, ensure good seed to soil contact, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer mix information to general contractor prior to installation. Erosion control measures are to be used in swales and on steep grades, where applicable. Methods of installation may vary at the discretion of the landscape contractor on higher responsibility to establish and guarantee a smooth, uniform, quality turf. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind damage. Marshes may contain reed canary grass that is not acceptable as a mulch covering.
2. An acceptable quality turf is defined as having no more than 5% of the total area with bare spots larger than 1/2 square foot and uniform coverage throughout all turf areas.
3. Seed mix type 'A' for lawn areas - uses only a premium quality seed mix. Premium blend seed mix (or equivalent), 50% seedling bluegrass, 25% creeping red fescue, 25% perennial ryegrass applied at 5 lbs per 1,000 SF or at recommended rates from supplier. Provide seed specifications to general contractor prior to installation.
3. Seed mix type 'B' for unimowed areas including slopes of stormwater basins: Wisconsin DNR No. 10 seed mix: 40% Kentucky bluegrass 98/85, 25% creeping red fescue, 20% perennial ryegrass, 10% white clover & 5% red top applied at 1.5 lbs per 1,000 SF or at recommended rates from supplier. Provide seed specifications to general contractor prior to installation. Preparation of soil to be the same as for all other seeded turf grass areas.
4. The landscape contractor is responsible for the watering and maintenance of all landscape areas at time of planting and throughout construction until the substantial completion of the installation and acceptance by the owner. This includes all trees, shrubs, evergreens, perennials, ornamental grasses and seeded slopes and turf grass areas. The landscape contractor is responsible for watering, mulching, weeding, pruning, deadheading, pruning, insect/disease / debris, weeding up grass clipped, fertilizing and maintaining turf areas (including applying pre and post emergent herbicides), and any other needs that are required to keep the landscape healthy and well maintained.
5. Substantial Completion of Landscape: after the landscape has been installed, the landscape contractor is responsible to conduct a final review with the owner's representative and the general contractor to ensure that all plans and specifications have been met. After this review, the landscape will be considered to be installed in substantial completion unless otherwise noted by the owner's representative and/or general contractor. Any items missing or incomplete, shall be corrected within 30 days. The landscape contractor should provide written watering and maintenance instructions for the new plantings and lawn to the owner.
6. Warranty and replacements: All plants (trees, evergreens, shrubs, perennials, ornamental grasses and groundcovers) shall be warranted by the landscape contractor to be in healthy and flourishing condition for a period of one year from the date of substantial completion. This assumes the owner performs required maintenance (i.e. regular watering) after substantial completion of the landscape. Only one replacement per plant will be required during the warranty period, except for losses or damage due to acts of God or other causes beyond the control of the landscape contractor. Replacements shall be plants of the same variety, size and closely match adjacent specimens in size. The landscape contractor is responsible for keeping a documented record of which plants have been replaced during the warranty period.



## LEGEND

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-  WETLAND SETBACK  
 100-YR FLOOD LINE  
 PROPOSED STORMWATER BASIN  
 DELINEATED WETLANDS  
 APPROXIMATE WETLANDS FROM DNR SURFACE WATER DATA VIEWER  
 MOWED LAWN AREAS — SEED MIX 'A'



- Prune only broken branches after installation, never trim leader
- Plant root flare 1" to 3" above finish grade
- Cut / completely remove burlap, twine and wire cage from sides of root ball
- 3" layer of shredded hardwood mulch over loosened soil ring reduced to 1" of mulch on top of root ball. Keep mulch 3-5' away from trunk of tree.
- Backfill with blended 75% clean, native soil and 25% compost
- Backfill in lifts, water in well and tamp lightly by hand to eliminate air pockets
- Finish grade
- Use shovel to roughen up sides of hole. Do not use auger to dig hole.
- Existing, undisturbed subgrade

1 EVERGREEN TREE PLANTING DETAIL



Know what's **below**.  
**Call** before you dig.

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