



Village of Menomonee Falls  
W156 N8480 Pilgrim Road  
Menomonee Falls, WI 53051-3140  
Telephone: (262) 532-4200

## STORMWATER MANAGEMENT FACILITIES OPERATION AND INSPECTION REPORT

Quarter Section  
Property Tax ID Number  
Date October 29, 2014

NW 1/4 Sec 4 Name of Business/Subdivision Lot 200 CSM 7648 – Crossroads  
MNFV0014990 Address of Property N95 W18345 County Line Road

Dry Pond		Location of Pond	North of Pick-n-Save in the parking lot
Wet Pond			
Other	X		

Year Pond  
Constructed

2013

Year of Last  
Certification

2014

Compliance Verification	Design	Actual	Compliant Yes	Non-Compliant No	Comments (Condition of Structure)	
<b>Primary Outlet Pipe</b>					Outlet Pipe Material	
Opening Diameter (inches)	21"	21"	X			
Upstream Invert	869.30	869.16	X			
Downstream Invert	869.15	868.87	X			
Length (feet)	10'	10'	X			
Slope (%)	1.00%	2.90%	X			
<b>Secondary Outlet Pipe</b>	(If Applicable)					
Opening Diameter (inches)						
Upstream Invert						
Downstream Invert						
Length (feet)						
Slope (%)						
<b>Riser</b>	(If Applicable)					
Opening Diameter (inches)					Not applicable	
Elevation						
<b>Upper Discharge Control</b>	(If Applicable)					
Opening Diameter (inches)					Not applicable	
Elevation						

Compliance Verification	Design	Actual	Compliant Yes No		Comments
<b>Lower Discharge Control</b>	(If Applicable)				
Opening Diameter (inches)	21"	21"	X		
Elevation	869.30	869.16	X		
<b>Other (Description)</b>					
Opening Type and Size (inches)					Not applicable
Elevation					
<b>Emergency Spillway</b>					
Elevation					Not applicable
Length of spillway (feet)					Not applicable
<b>Embankment</b>	Present Yes no		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation			Not applicable		
Animal burrows or slope erosion					
<b>Storm Sewer Outfalls</b>	Type & Size		Location		Comments
Outfall 1	21" cmp		Underground to MH		Drains the system
Outfall 2	27" conc		Downstream from MH		Downstream pipe from connection MH
Outfall 3					
Storage Properties	Design	Actual	Compliant Yes	Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	869.30	869.16	X		Survey total station for elevations and a tape measure to check depths. Pondpack computer program to check volumes.
Design High Water Elevation	874.73	874.44	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)	17.90 sf	16.29 sf	X		
Area at Design High Water Elevation (Ac)	56.62 sf	55.62 sf	X		
Active Storage Available (Ac-Ft)*	0.68 acft	0.68 acft	X		
Lowest Elevation at Top of Embankment (If Applicable)				X	
Average Elevation at Top of Embankment (If Applicable)				X	
Maximum Bottom Elevation	866.30	866.25	X		
Average Pond Bottom Elevation	866.30	866.34	X		
Pond Bottom Area (Ac)	0.0	0.0	X		
Maximum Pond Depth	8.5'	8.5'	X		
Average Pond Depth	8.5'	8.5'	X		
Average Permanent Pool Depth (Wet Ponds)	3.0'	2.8'	X		

\*To Determine Active Storage  $V=H/3(A1+A2+(A1xA2)/2)$

Wet Ponds Use  $H$  = Height of Section,  $A1$  = area at normal water elevation,  $A2$  = area at top section

Dry Ponds Use  $H$  = Height of Section,  $A1$  = pond bottom area,  $A2$  = area at top section

Sketch Outlet or Attach to Document

Place Photograph of Pond or Attach to Document

Attached

Attached

Place Photograph of Pond or Attach to Document

Attach As-built Survey to the Document for the first report submission

Inspection Firm: Jahnke & Jahnke Associates  
Phone Number: 262-542-5797  
Address: 711 West Moreland Blvd  
Waukesha, WI 53188

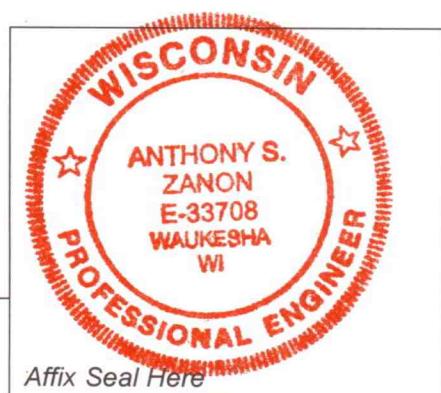
Inspector Name: Robert Thomas  
Inspection Date: 7/19/2013 and 10/20/2014

Certifying Professional Anthony S. Zanon, PE  
Name:  
Phone Number: 262-542-5797

Date:  
10/29/2014

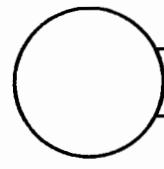
Signature:

*Anthony S. Zanon*

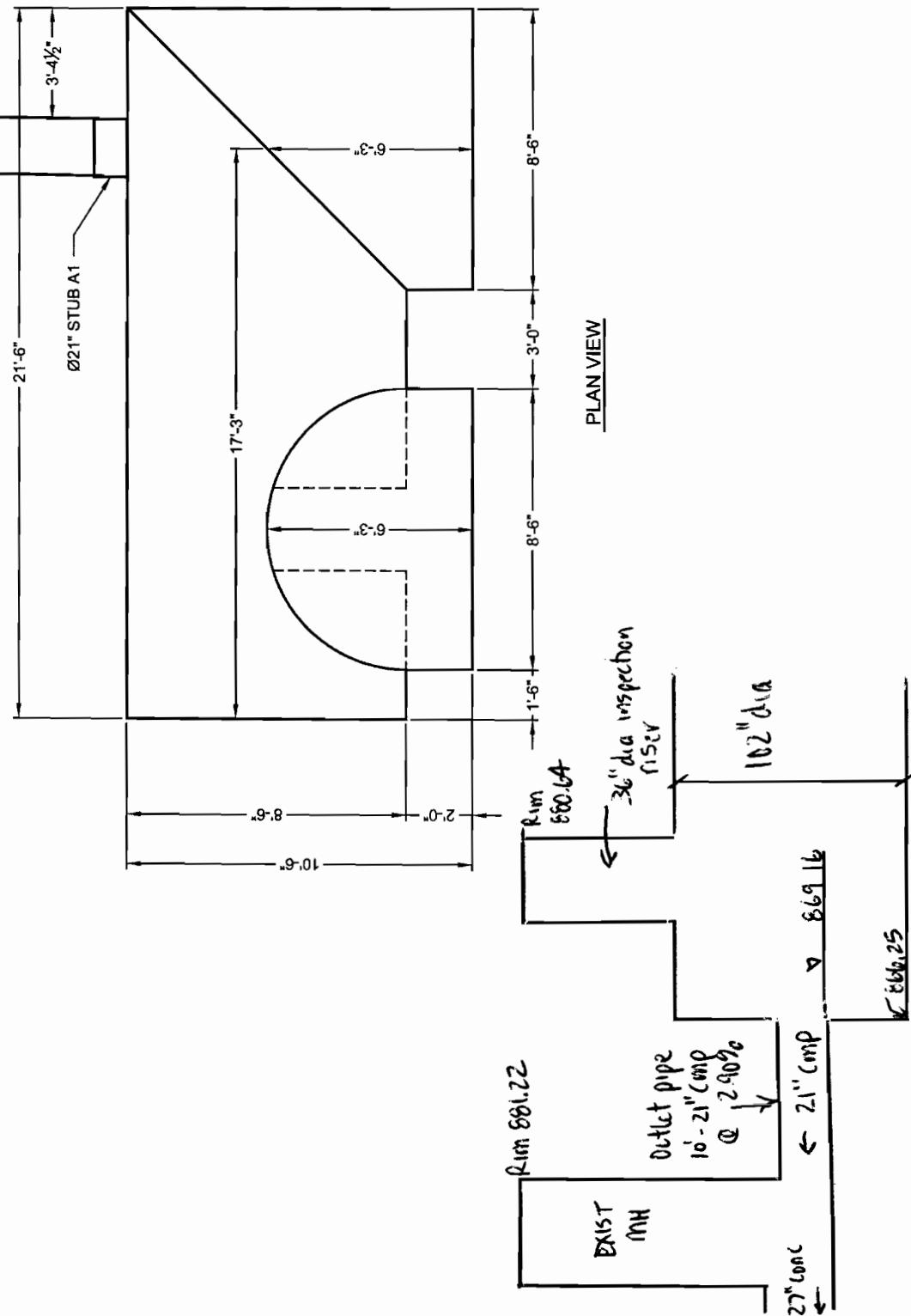


Affix Seal Here

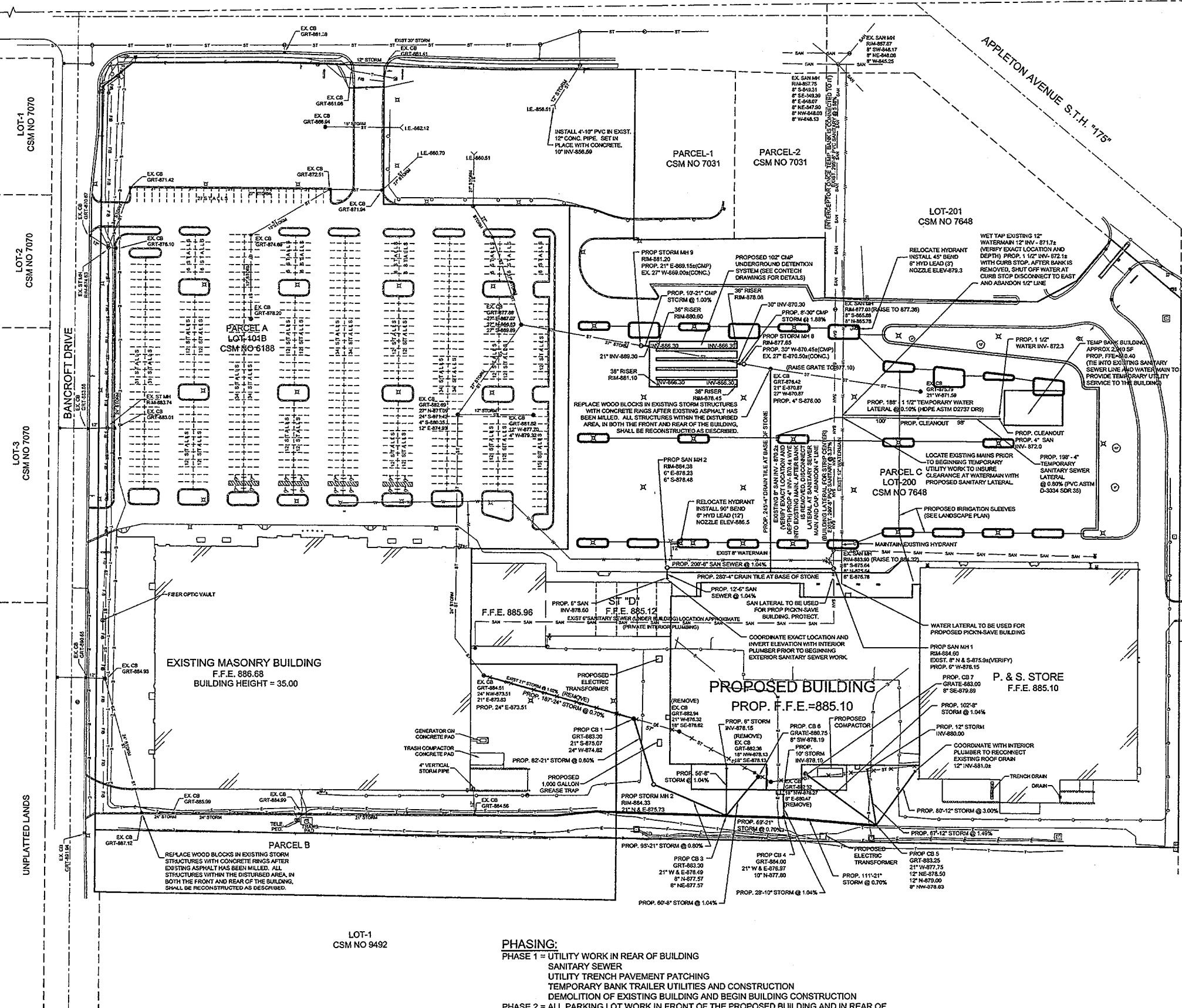
EXIST MH



Outlet Pipe  
10'-21" CMP  
② 2.90%

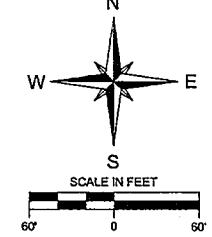


## COUNTY LINE ROAD C.T.H. "Q"



REFERENCE BENCHMARK: TOP OF CONCRETE MONUMENT WITH BRASS CAP FOUND MARKING THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 4-4-20  
ELEV. - 879.10 - NGVD 1929

REFERENCE BEARING: BEARINGS ARE REFERENCED TO THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 4, TBN, R20E WHICH HAS A RECORDED BEARING OF NORTH 89°20'48" EAST PER C.S.M. NO. 6188.



## LEGEND:

- CONCRETE MONUMENT WITH BRASS CAP FOUND
- EXISTING SANITARY MANHOLE
- EXISTING PULL BOX
- EXISTING POWER POLE
- EXISTING SIAMESE CONNECTION
- EXISTING SIGN
- EXISTING TELEPHONE PEDESTAL
- EXISTING WATER VALVE
- EXISTING CHAIN LINK FENCE
- EXISTING GUARD RAIL
- EXISTING RETAINING WALL
- EXISTING UNDERGROUND FIBER OPTIC
- SAN
- EXISTING SANITARY SEWER
- ST
- EXISTING STORM SEWER
- E
- EXISTING UNDERGROUND ELECTRIC
- G
- EXISTING UNDERGROUND GAS
- T
- EXISTING UNDERGROUND TELEPHONE
- W
- EXISTING WATER MAIN

## UTILITY NOTES:

1. GENERAL:
  - A. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION (STANDARD SPECS), THE WISCONSIN ADMINISTRATIVE CODE, THE REQUIREMENTS OF THE VILLAGE OF MENOMONEE FALLS AND THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT.
  - B. THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE A MINIMUM OF 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
  - C. ALL UTILITY WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. UTILITY CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXCESS SPOIL MATERIAL FROM THE TRENCH UNLESS OTHERWISE DIRECTED BY THE GENERAL CONTRACTOR.
  - D. ALL BEDDING AND COVER MATERIAL SHALL BE CRUSHED STONE CHIPS PER THE STANDARD SPECS. SECTION 8.4.3.2.
  - E. GRANULAR BACKFILL SHALL BE USED PER THE STANDARD SPEC. SECTION 8.4.3.4.
  - F. COORDINATE ALL BUILDING LATERALS WITH THE GENERAL CONTRACTOR PRIOR TO INSTALLING SAID LATERAL.
  - G. THE WATER LATERAL, SANITARY LATERAL, STORM SEWER AND ROOF DRAINS SHALL BE INSTALLED WITH A TRACER WIRE CONSISTING OF AN INSULATED AWS #12 COPPER SOLID CORE WIRE TAPE TO THE LATERAL/MAIN. THIS IS IN ACCORDANCE WITH STAT. 1820715(2).

## 2. SANITARY SEWER:

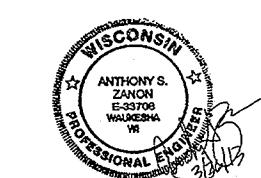
- A. THE SANITARY SEWER PIPE SHALL BE PVC ASTM D-3034 SDR 35. JOINTS SHALL BE MADE BY THE USE OF AN ELASTOMERIC SEAL CONFORMING TO ASTM D312.
- B. THE SANITARY SEWER MANHOLES SHALL BE PRECAST MEETING FILE NO. 12 OF THE STANDARD SPECS. THE FRAME AND COVER SHALL BE NEENAH R-3067.
- C. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH THE GENERAL CONTRACTOR BEFORE BEGINNING WORK.
- D. THE EXTERIOR OF THE SANITARY SEWER MANHOLES SHALL BE MAC WRAPPED. THERE SHALL BE INTERNAL AND EXTERNAL SEALS ON THE MANHOLES.

## 3. WATER MAIN:

- A. HYDRANT LEAD SHALL BE PVC AWWA C-900 DR18. JOINTS SHALL BE MADE BY THE USE OF ELASTOMERIC SEAL CONFORMING TO ASTM D3139.

## 4. STORM SEWER:

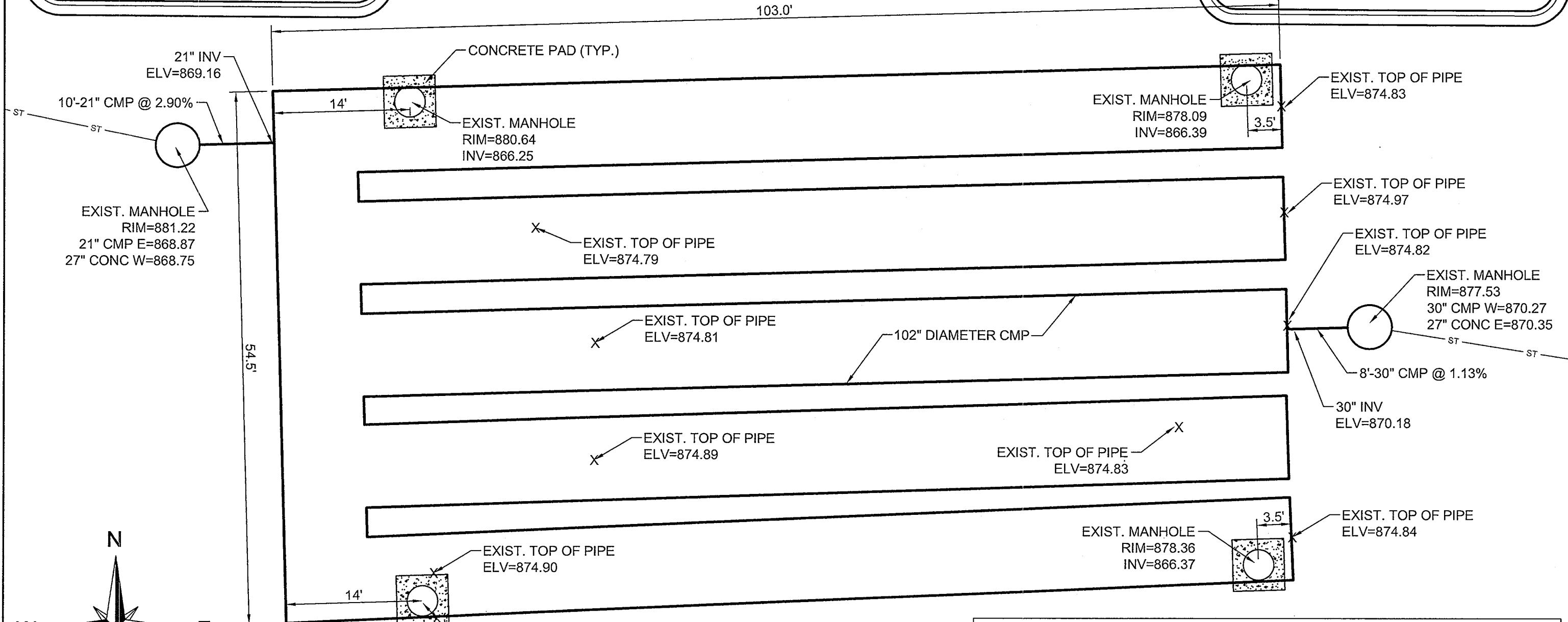
- A. THE STORM SEWER PIPE SHALL BE ADS N-12 WITH W.T. JOINTS UNLESS NOTED TO BE CORRUGATED METAL PIPE.
- B. ALL CATCH BASINS AND STORM SEWER MANHOLES SHALL BE PRECAST, REINFORCED CONCRETE, 48" MINIMUM INSIDE DIAMETER WITH BASE, STEPS, ECCENTRIC TOP SECTION AND IRON GRATE RATED FOR TRAFFIC. NO SUMPS.
- C. THE FRAME AND GRATE FOR THE CATCH BASINS LOCATED OUTSIDE THE CURB LINE SHALL BE NEENAH R-2467-D.
- D. THE FRAME AND GRATE FOR THE CATCH BASINS LOCATED IN THE CURB LINE SHALL BE NEENAH R-3067.
- E. ALL STORM INLETS IN THE WORK AREA SHALL BE PROTECTED BY TYPE B INLET PROTECTION UNTIL THE FINAL ASPHALT HAS BEEN PLACED AND THE LANDSCAPE AREAS STABILIZED.
- F. THE UNDERGROUND DETENTION SYSTEM IS A 102" SOLID WALL CORRUGATED METAL PIPE WITH ALT2 FINISH. SEE CONTECH DRAWINGS FOR SPECIFIC DETAILS.



REVISED: APRIL 16, 2012  
REVISED: MAY 2, 2012  
REVISED: JUNE 29, 2012 (REVISED UNDERGROUND SYSTEM)  
REVISED: AUGUST 23, 2012 (PHASE NOTES & TEMP BANK)  
REVISED: OCTOBER 12, 2012 (SANITARY LATERAL & REMOVE WATER LATERAL)  
REVISED: MARCH 22, 2013 (COORDINATE W/ INTERIOR PLUMBER/CURB LINE)  
REVISED: MARCH 26, 2013 (TEMP BANK)

PROPOSED UTILITY PLAN CROSSROADS SHOPPING CENTER PART OF THE NW 1/4 OF SEC.4, T8N, R20E VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN	
JAHNKE & JAHNKE ASSOCIATES INC. PLANNERS & PROFESSIONAL ENGINEERS 711 W. MORELAND BLVD. - WAUKESHA, WI 53188 TEL NO. (262) 542-5797 FAX (262) 542-7638 (E-MAIL: brb@jahnkeandjahnke.com)	
SCALE: 1" = 60' DRAWN BY: B.R. CHECKED BY: J.R.S. FILE NO.: MENOMONEE 286 BOOK: MENOMONEE 51 JOB: S-7616/2011 SHEET 8 OF 9	

NOTES:  
1. MANUFACTURER-CONTECH  
CMP DETENTION SYSTEM  
2. INSTALLED IN JUNE 2013



### UNDERGROUND DETENTION SYSTEM AS-BUILT

CROSSROADS SHOPPING CENTER

PART OF THE NW 1/4 OF SEC.4, T8N, R20E

VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN

JAHNKE & JAHNKE ASSOCIATES INC.

PLANNERS & PROFESSIONAL ENGINEERS

711 W. MORELAND BLVD.-WAUKESHA, WI. 53188

TEL.No.(262)542-5797 FAX(262)542-7698 (E-MAIL brohling@jahnkeandjahnke.com)

SCALE: 1" = 10'	DATE: OCTOBER 29, 2014
DRAWN BY: B.R.	CHECKED BY: A.S.Z.
BOOK: MENOMONEE 56	JOB: S-7616:2013
	SHEET 2 OF 2