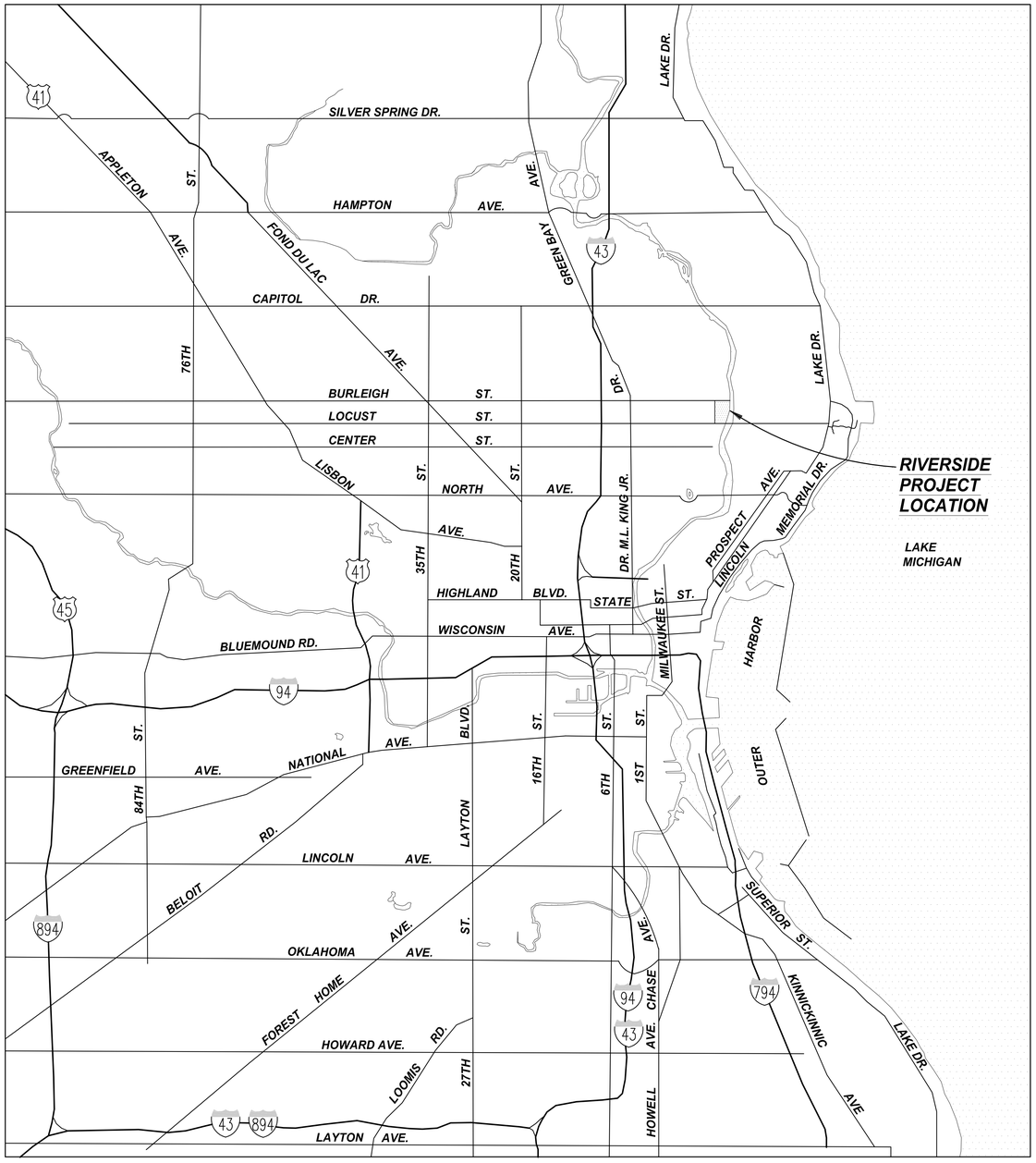
Milwaukee Water Works

RIVERSIDE PUMP STATION

R-168: RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN



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APPROX SCALE IN MILES

MILWAUKEE, WISCONSIN

LOCATION MAP

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WISCONSIN
DARRELL J. BERRY
E-16235
MILWAUKEE, WI
PROFESSIONAL ENGINEER

July 1, 2015

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Milwaukee Water Works — Water Engineering, Department of Public Works

RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
TITLE SHEET

		APPROVED	DATE
DESIGNED BY	Z. VERHAGE		7/1/2015 MANAGEMENT ENGINEER SENIOR
DRAWN BY	J. GROVES		7/1/2015 CHIEF DESIGN ENGINEER
CHECKED BY	D. BERRY		7/1/2015 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
DATE	05-18-2015		
SCALE	AS SHOWN		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------		

DRAWING NO. R-168-01

GENERAL NOTES

1. CONTRACTOR SHALL CONTACT DIGGERS HOTLINE (800-242-8511) PRIOR TO ANY EXCAVATION OR LAND DISTURBANCE.
2. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS INDICATED ON THE PLANS AND IN ACCORDANCE WITH THE LATEST WDNR SITE EROSION AND SEDIMENT CONTROL STANDARDS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF LAND DISTURBANCE ACTIVITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES THROUGH THE DURATION OF CONSTRUCTION AND REMOVE SAID MEASURES UPON RE-ESTABLISHMENT OF VEGETATIVE COVER. IT IS THE CONTRACTORS RESPONSIBILITY TO ADJUST AND SUPPLEMENT SEDIMENT AND EROSION CONTROL MEASURES AS FIELD CONDITIONS DICTATE.
3. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH (INVERT ELEVATION) OF ALL UTILITIES PRIOR TO CONSTRUCTION. LOCATIONS AND ELEVATIONS INDICATED ON PLAN ARE BASED ON HISTORICAL RECORDS.
4. PAVEMENT, SIDEWALK, AND CURB & GUTTER SHALL BE CLEANLY SAW CUT PRIOR TO UTILITY INSTALLATION. CONTRACTOR SHALL RESTORE ALL DISTURBED PORTIONS OF PAVEMENT AND CURB & GUTTER TO ORIGINAL CONDITIONS AFTER UTILITY INSTALLATION. RESTORED PAVEMENT AND SIDEWALK THICKNESSES SHALL MATCH EXISTING.
5. PROVIDE GRANULAR BACKFILL FOR ALL UTILITIES UNDER PAVEMENTS AND CURB & GUTTERS.
6. ALL DISTURBED VEGETATED AREAS OUTSIDE OF THE BIORETENTION AREAS, AND DISTURBED AREA NORTH OF THE NORTH PROPERTY LINE SHALL RECEIVE TOPSOIL, SEED (WISDOT MIX NO. 40) AND MULCH.
7. SPRINKLER SYSTEM INDICATED ON DRAWINGS IS FROM HISTORICAL RECORDS. LOCATION INDICATED IS APPROXIMATE. THE SYSTEM IS INOPERABLE. IF ENCOUNTERED DURING CONSTRUCTION, CLEANLY CUT PIPE AT EXCAVATION LIMITS.
8. NO EXISTING SANITARY SEWER DISCHARGES SHALL BE CONNECTED TO PROPOSED STORM SEWER SYSTEM. IF ANY DISCHARGES ARE ENCOUNTERED DURING CONSTRUCTION, THEY MUST BE REROUTED TO THE PROPOSED SANITARY SEWERS, OR EXISTING COMBINED SEWERS.

CONVENTIONAL SYMBOLS

PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SLOPE INTERCEPT
REFERENCE LINE
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
WOODED OR SHRUB AREA

PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) — ROCK
SPECIAL DITCH — LABEL
GRADE ELEVATION — 525.55
CULVERT (Profile View)

UTILITIES
ELECTRIC — E
FIBER OPTIC — FO
GAS — G
SANITARY SEWER — SAN
STORM SEWER — SS
COMBINED SEWER — SSS
TELEPHONE — T
WATER — W
OVERHEAD UTILITY — OH
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.0120	CLEARING	346	ID
201.0220	GRUBBING	346	ID
204.0150	REMOVING CURB AND GUTTER	575	LF
204.0260	ABANDONING INLETS	2	EACH
205.0100	EXCAVATION COMMON	625	CY
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	375	TON
311.0115	OPEN GRADED BASE COURSE	55	CY
455.0105	ASPHALTIC MATERIAL PG58-28	16	TON
455.0605	TACK COAT	54	GAL
460.1101	HMA PAVEMENT TYPE E-1	250	TON
523.0514	14-INCH X 23-INCH HERCP APRON END WALL	1	EACH
606.0200	RIPRAP MEDIUM	180	CY
610.0114	14-INCH X 23-INCH HERCP STORM SEWER PIPING	93	LF
612.0104	PIPE UNDERDRAIN 4-INCH	390	LF
619.1000	MOBILIZATION	1	EACH
628.1504	SILT FENCE	1000	LF
628.1520	SILT FENCE MAINTENANCE	1000	LF
628.2021	EROSION MAT CLASS II TYPE A	935	SY
628.7010	INLET PROTECTION, TYPE B	13	EACH
645.0120	GEOTEXTILE FABRIC TYPE HR	320	SY
645.0140	GEOTEXTILE FABRIC, TYPE SAS	250	SY
690.0150	SAWING ASPHALT	60	LF
690.0250	SAWING CONCRETE	10	LF
SPV.0035.01	ENGINEERED SOIL	110	CY
SPV.0035.02	BEDDING LAYER	70	CY
SPV.0060.01	42-INCH STORM MANHOLE	18	EACH
SPV.0060.02	42-INCH STORM CATCH BASIN	7	EACH
SPV.0060.03	48-INCH SANITARY SEWER MANHOLE	3	EACH
SPV.0060.04	SEWER BULKHEAD	19	EACH
SPV.0060.05	CURB/INLET OPENING	7	EACH
SPV.0060.06	CURB OPENING	1	EACH
SPV.0060.07	SALVAGE AND REPLACE LIGHT POLE	1	EACH
SPV.0090.01	12-INCH PVC SANITARY SEWER PIPING	15	LF
SPV.0090.02	8-INCH PVC SANITARY SEWER PIPING	129	LF
SPV.0090.03	BIORETENTION UNDERDRAIN SYSTEM	400	LF
SPV.0090.04	12-INCH RCP STORM SEWER PIPING	559	LF
SPV.0090.05	15-INCH RCP STORM SEWER PIPING	140	LF
SPV.0090.06	18-INCH RCP STORM SEWER PIPING	150	LF
SPV.0090.07	CONCRETE CURB & GUTTER 24-INCH TYPE D	915	LF
SPV.0090.08	SIX-FOOT SECURITY FENCE	520	LF
SPV.0090.09	TEMPORARY SECURITY FENCE	515	LF
SPV.0090.10	REMOVING SECURITY FENCE	515	LF
SPV.0105.01	SECURITY GATE AND HARDWARE	1	LS
SPV.0105.02	CHAIN GATE RELOCATION	1	LS
SPV.0180.01	NATIVE SEEDING	1500	SY
SPV.0180.03	CONCRETE TOPPING	7	SY
SPV.0195.01	POROUS ASPHALT	55	TON

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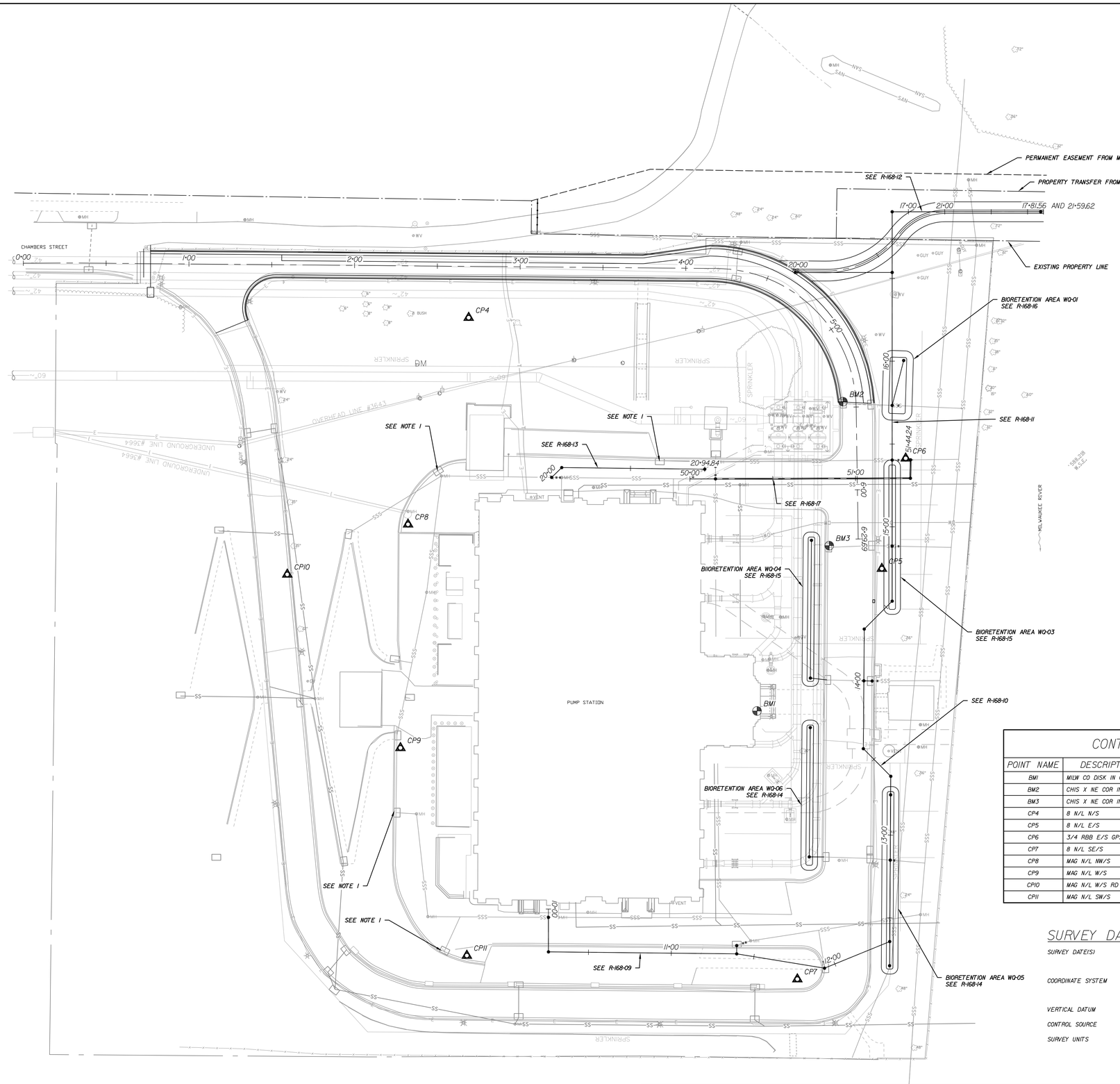
Milwaukee Water Works
Water Engineering
Department of Public Works

RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
GENERAL NOTES AND LEGEND

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
SCALE	NOT TO SCALE		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------		

DRAWING NO. R-168-02



NOTES

1. SAW CUT PAVEMENT AND CURB AND GUTTER. REMOVE EXISTING INLET AND SALVAGE EXISTING FRAME AND GRATE. INSTALL NEW CATCH BASIN OVER EXISTING SEWER (SEE DETAIL NOTE 6 ON R-168-18). INSTALL SALVAGED FRAME AND GRATE. RESTORE DISTURBED PAVEMENT AND CURB AND GUTTER TO EXISTING CONDITION.

CONTROL DATA

POINT NAME	DESCRIPTION	Y	X	ELEVATION
BM1	MLW CO DISK IN CONC	312102.502	610230.187	601.71
BM2	CHIS X NE COR INL FRAME	312289.267	610282.061	601.88
BM3	CHIS X NE COR INL FRAME	312202.335	610273.782	600.13
CP4	8 N/L N/S	312339.971	610056.072	616.95
CP5	8 N/L E/S	312188.469	610305.533	600.66
CP6	3/4 RBB E/S GPS BASE	312255.046	610319.938	601.48
CP7	8 N/L SE/S	311940.572	610254.514	600.29
CP8	MAG N/L NW/S	312215.189	610019.453	601.04
CP9	MAG N/L W/S	312080.219	610014.874	600.18
CP10	MAG N/L W/S RD	312184.962	609946.537	624.88
CP11	MAG N/L SW/S	311954.826	610054.969	600.09

SURVEY DATA:

SURVEY DATE(S)	APRIL 2014
COORDINATE SYSTEM	WISCONSIN COUNTY COORDINATES SYSTEM, MILWAUKEE COUNTY, 2012 HORZ. ADJUSTMENT
VERTICAL DATUM	NGVD 29
CONTROL SOURCE	WISCORS
SURVEY UNITS	US SURVEY FEET

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Milwaukee Water Works
Water Engineering
Department of Public Works

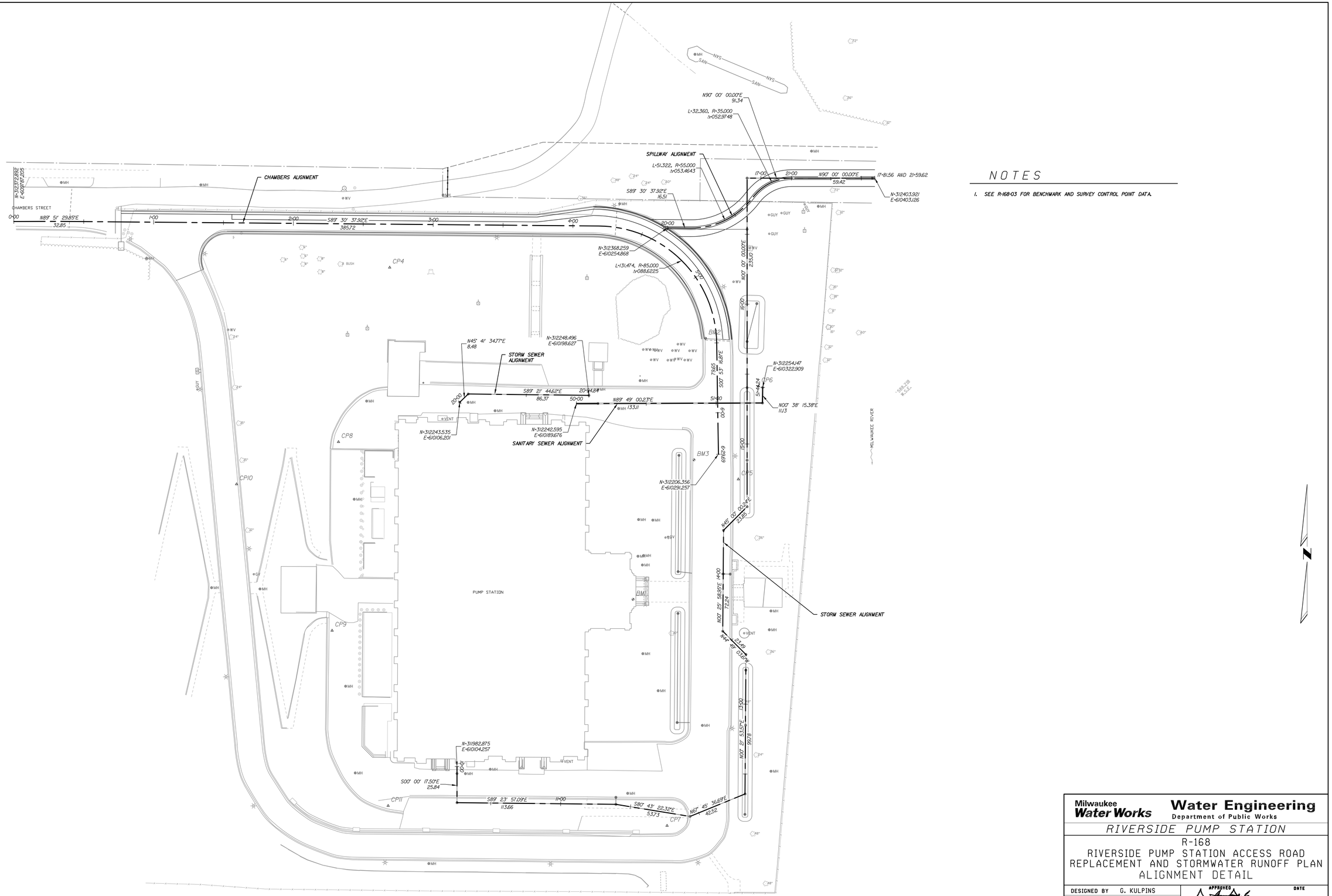
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
OVERALL SITE PLAN & SURVEY CONTROL

DESIGNED BY	G. KULPINS
DRAWN BY	C. JONES
CHECKED BY	D. BERRY
DATE	05-18-2015
SCALE	1"=30'-0"
PROJECT NUMBER	R-168
OFFICIAL NOTICE 111-2015	
FILE NO.	----------

APPROVED	DATE
MANAGEMENT ENGINEER SENIOR	7/1/2015
CHIEF_DESIGN_ENGINEER	7/1/2015
SPECIAL_DEPUTY_COMMISSIONER_OF_PUBLIC_WORKS	

DRAWING NO. R-168-03



NOTES

1. SEE R-168-03 FOR BENCHMARK AND SURVEY CONTROL POINT DATA.

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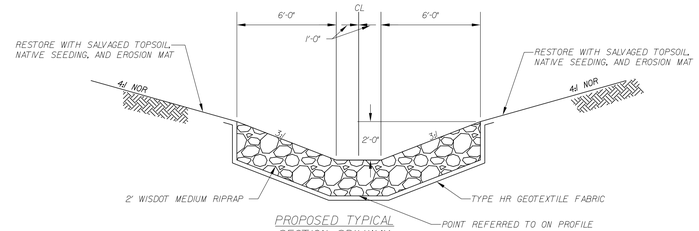
RIVERSIDE PUMP STATION

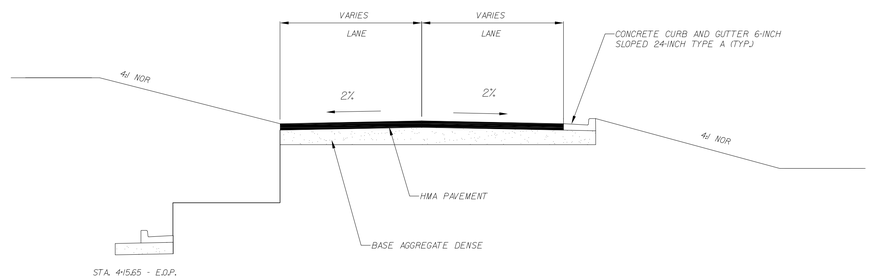
R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
ALIGNMENT DETAIL

		APPROVED	DATE
DESIGNED BY	G. KULPINS	MANAGEMENT ENGINEER SENIOR	7/1/2015
DRAWN BY	C. JONES	CHIEF DESIGN ENGINEER	7/1/2015
CHECKED BY	D. BERRY	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015
DATE	05-18-2015		
SCALE	1"=30'-0"		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

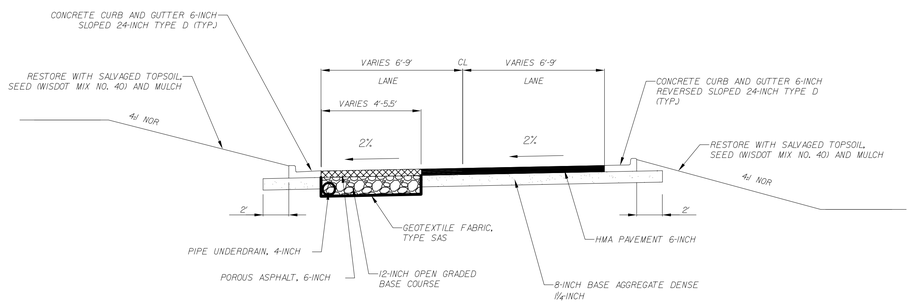
DRAWING NO. R-168-04



PROPOSED TYPICAL SECTION SPILLWAY



EXISTING TYPICAL SECTION RIVERSIDE ACCESS ROAD



PROPOSED TYPICAL SECTION RIVERSIDE ACCESS ROAD

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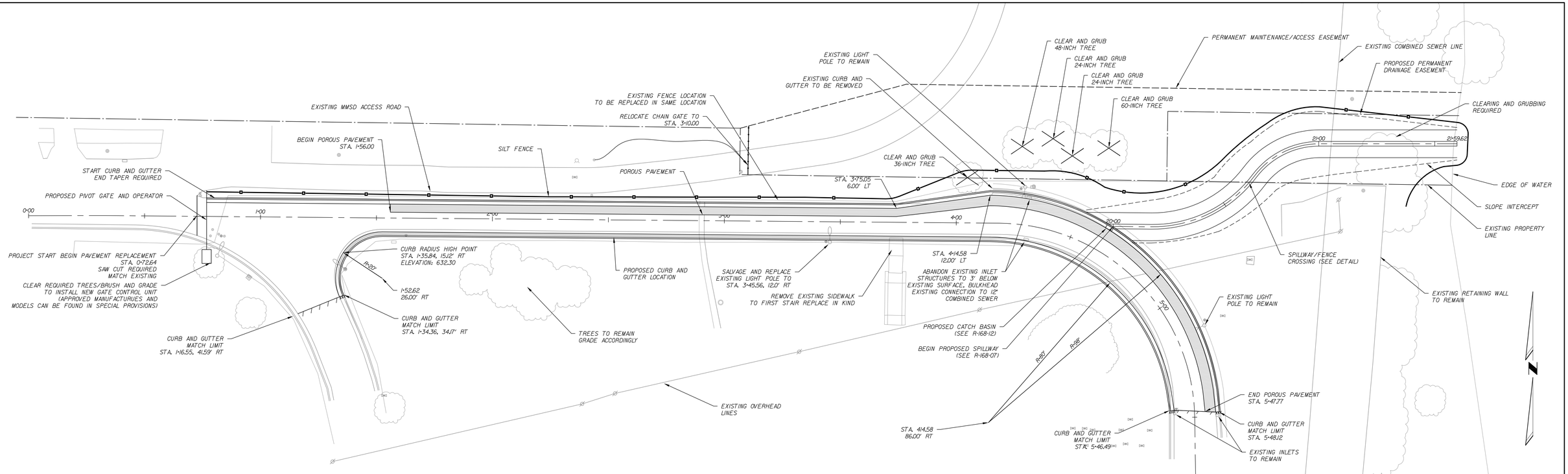
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
TYPICAL SECTIONS

		APPROVED	DATE
DESIGNED BY	Z. VERHAGE		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	
CHECKED BY	D. BERRY		7/1/2015
DATE	05-18-2015	CHIEF DESIGN ENGINEER	
SCALE	NOT TO SCALE		7/1/2015
PROJECT NUMBER	R-168	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
OFFICIAL NOTICE 111-2015			
FILE NO.	----------	DRAWING NO. R-168-05	



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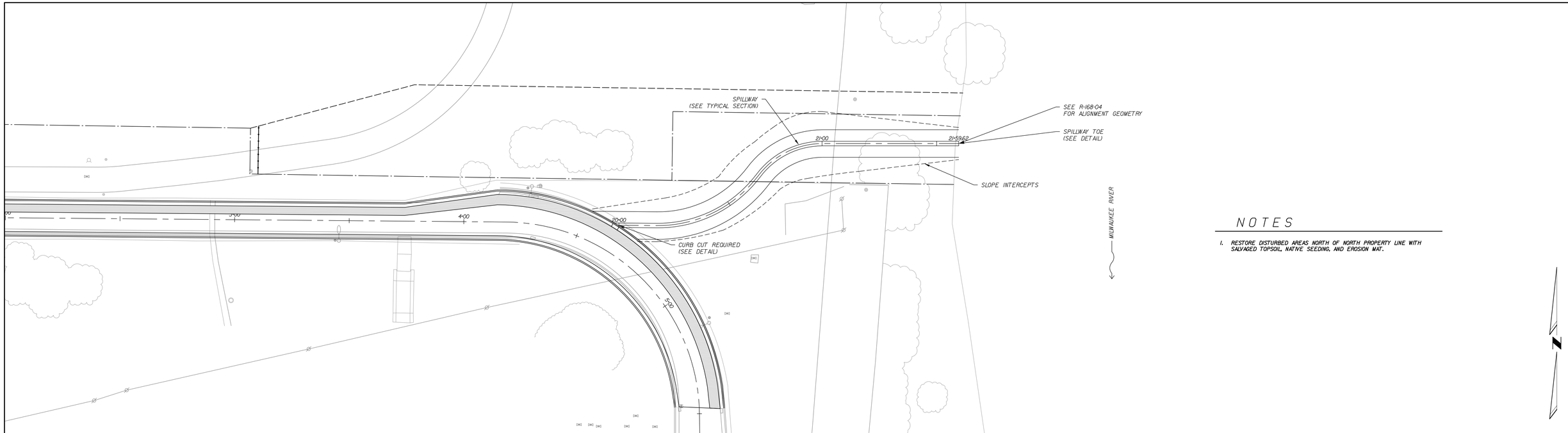
RIVERSIDE PUMP STATION

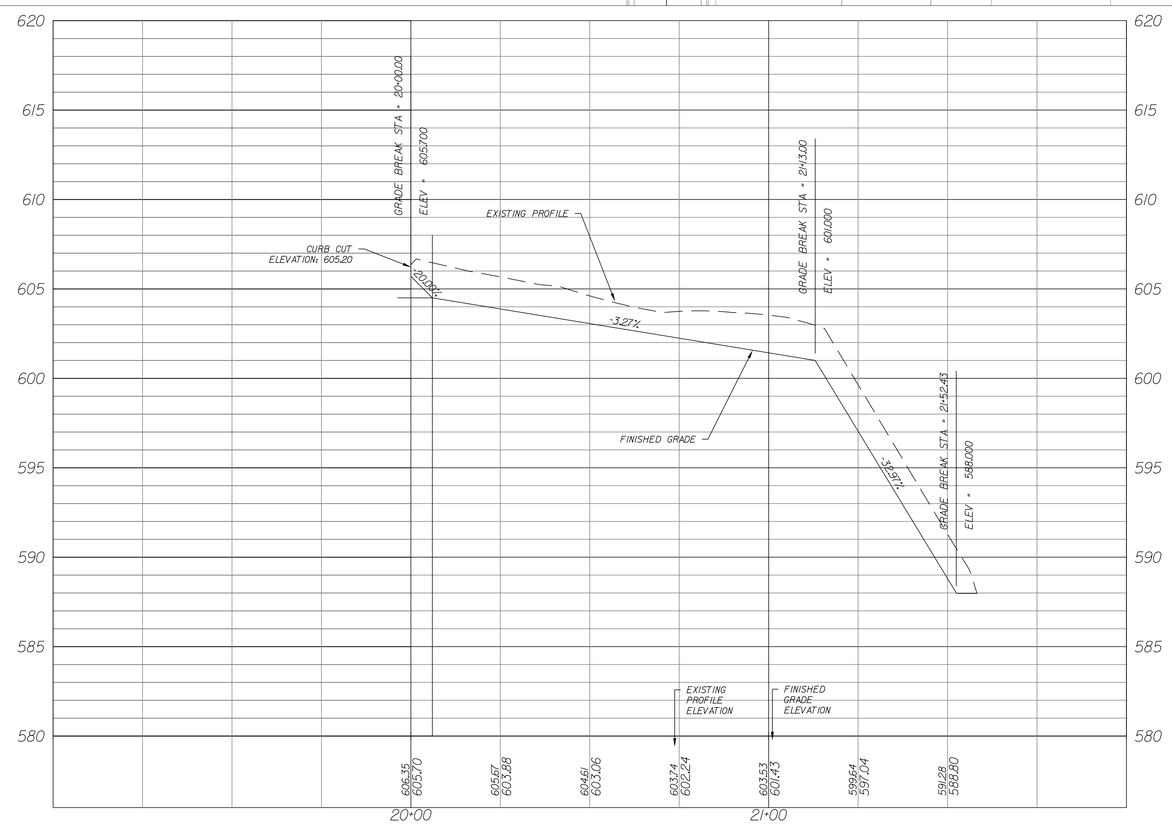
R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
ROAD PLAN & PROFILE

		APPROVED	DATE
DESIGNED BY	Z. VERHAGE		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	
CHECKED BY	D. BERRY		7/1/2015
DATE	05-18-2015	CHIEF DESIGN ENGINEER	
SCALE	1"=20'-0" HORZ 1"=4'-0" VERT		7/1/2015
PROJECT NUMBER	R-168	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
OFFICIAL NOTICE	111-2015		
FILE NO.	----------	DRAWING NO.	R-168-06



NOTES

1. RESTORE DISTURBED AREAS NORTH OF NORTH PROPERTY LINE WITH SALVAGED TOPSOIL, NATIVE SEEDING, AND EROSION MAT.



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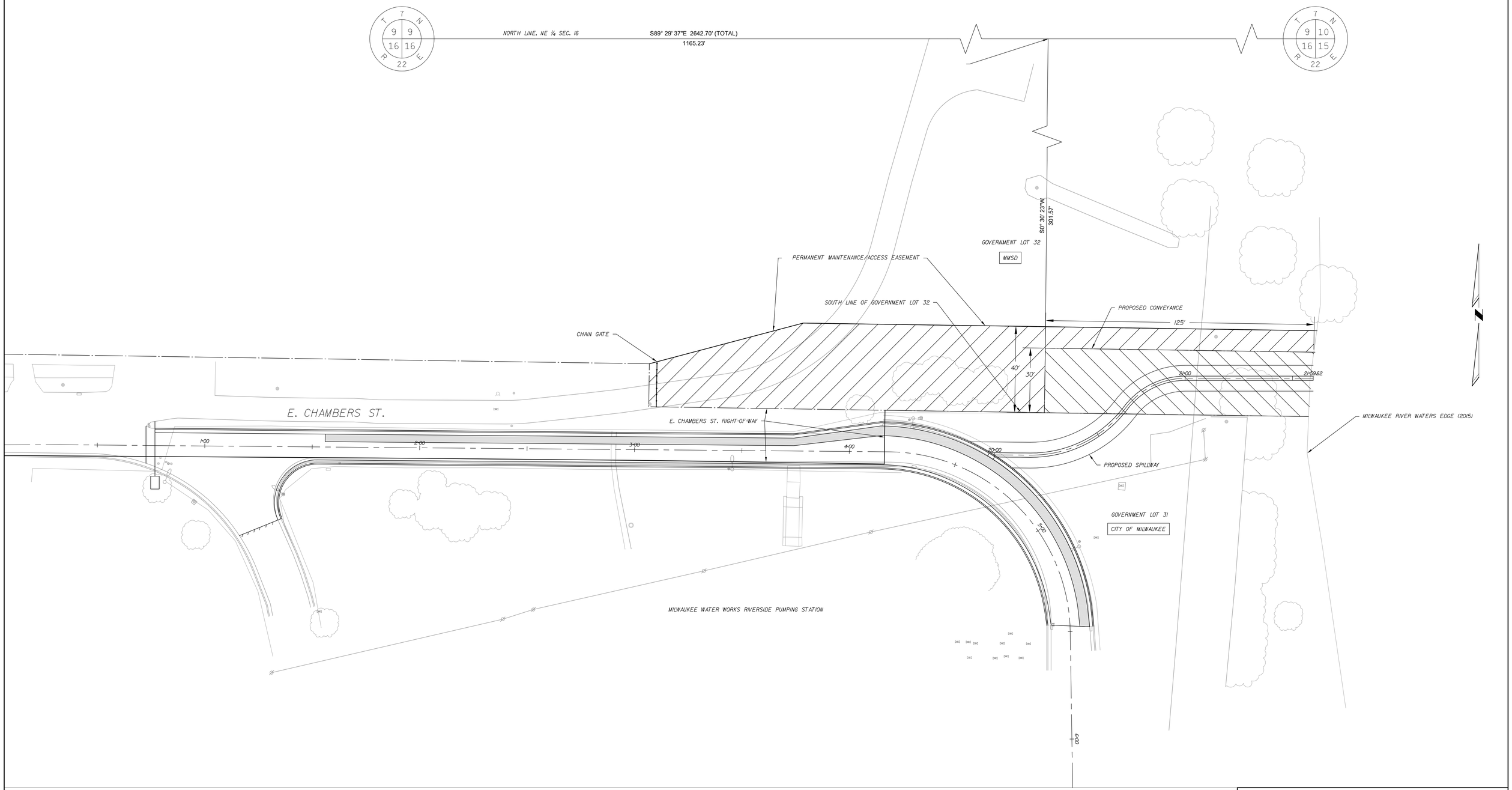
Milwaukee Water Works — Water Engineering
Department of Public Works

RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
SPILLWAY PLAN & PROFILE

		APPROVED	DATE
DESIGNED BY	Z. VERHAGE		
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY		
DATE	05-18-2015	CHIEF DESIGN ENGINEER	7/1/2015
SCALE	1"=20'-0" HORZ 1"=4'-0" VERT		
PROJECT NUMBER	R-168	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-07



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Milwaukee Water Works

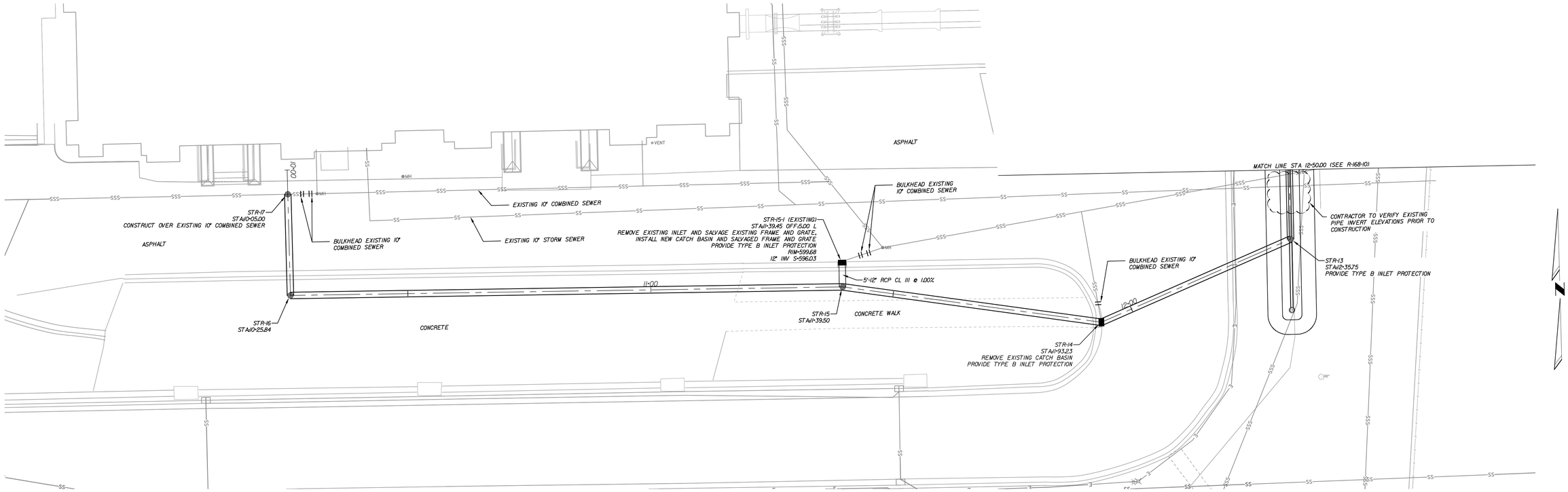
Water Engineering
Department of Public Works

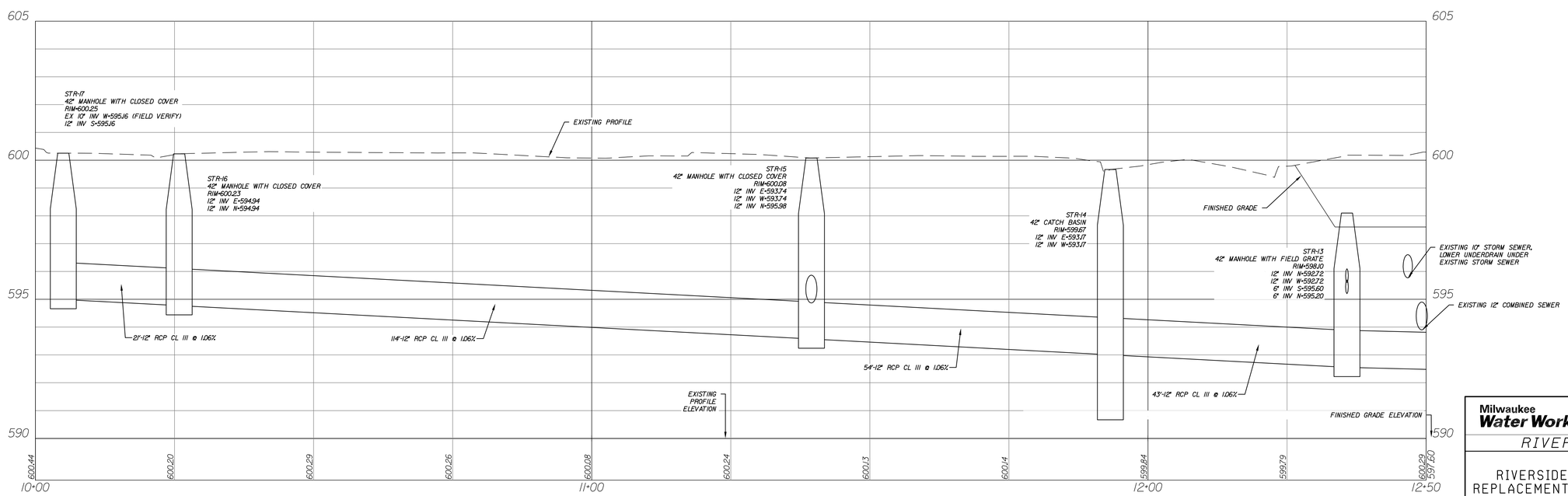
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
MMSD PROPERTY CONVEYANCE

		APPROVED	DATE
DESIGNED BY	Z. VERHAGE		
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY		
DATE	05-18-2015	CHIEF DESIGN ENGINEER	7/1/2015
SCALE	1"=20'-0" HORZ		
PROJECT NUMBER	R-168	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-08





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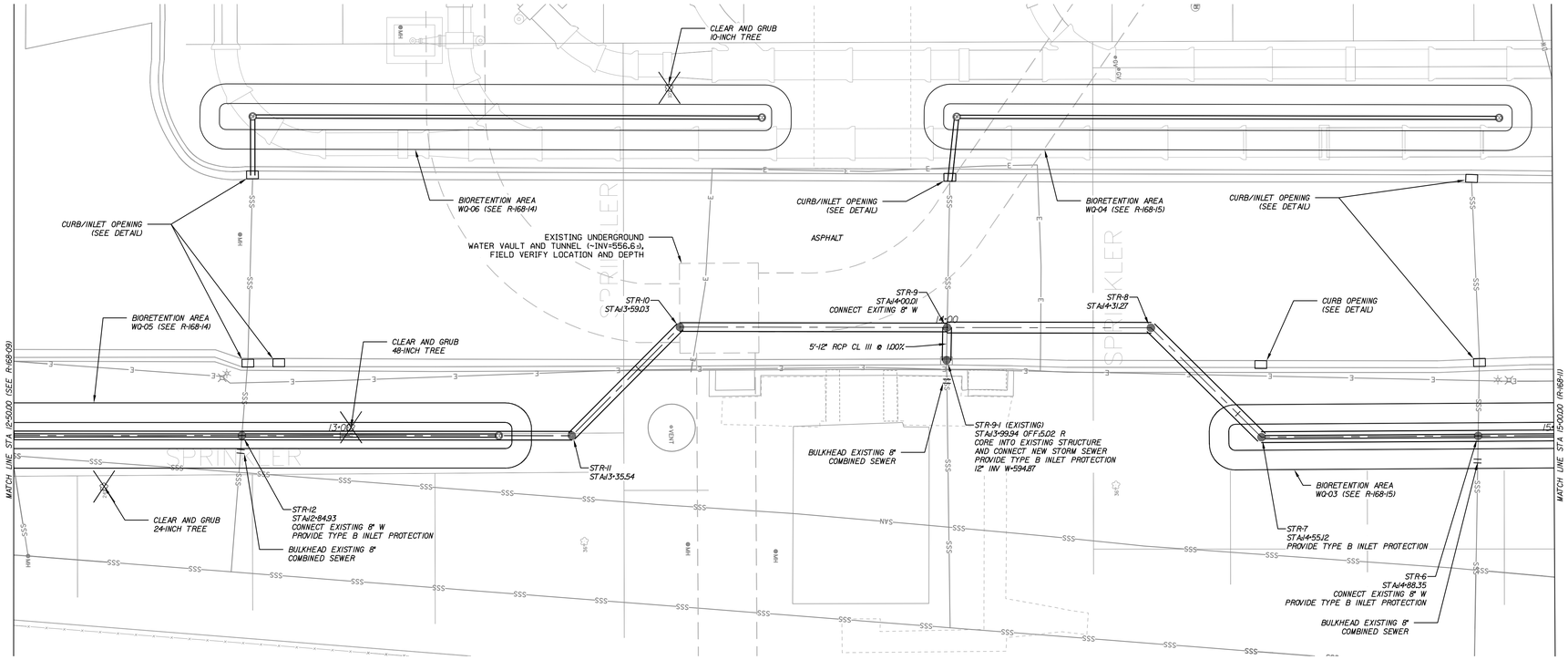
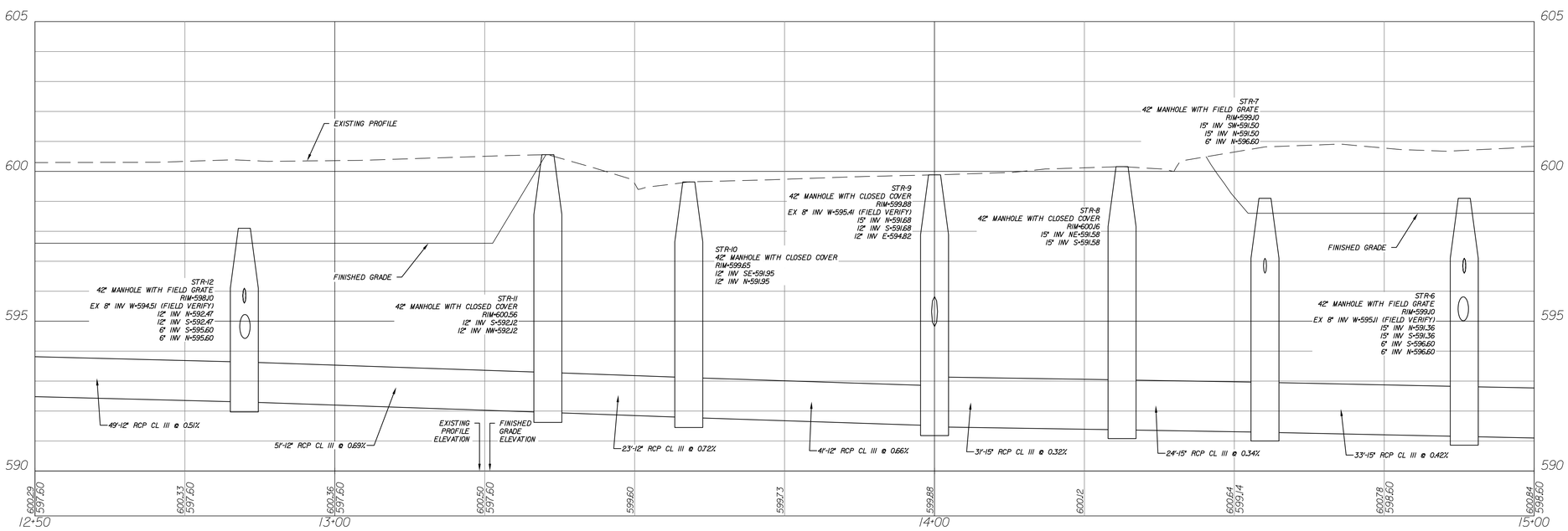
R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
STORM SEWER PLAN & PROFILE

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015 MANAGEMENT ENGINEER SENIOR
DRAWN BY	C. JONES		7/1/2015 CHIEF DESIGN ENGINEER
CHECKED BY	D. BERRY		7/1/2015 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
DATE	05-18-2015		
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------		

DRAWING NO. R-168-09





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TOLL FREE, TO OBTAIN LOCATION OF UNDERGROUND
BEFORE YOU DIG, WISCONSIN STATUTE 182.0175 REQUIRES
MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

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NO.	DATE	REVISION	BY	CHKD.
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Milwaukee Water Works

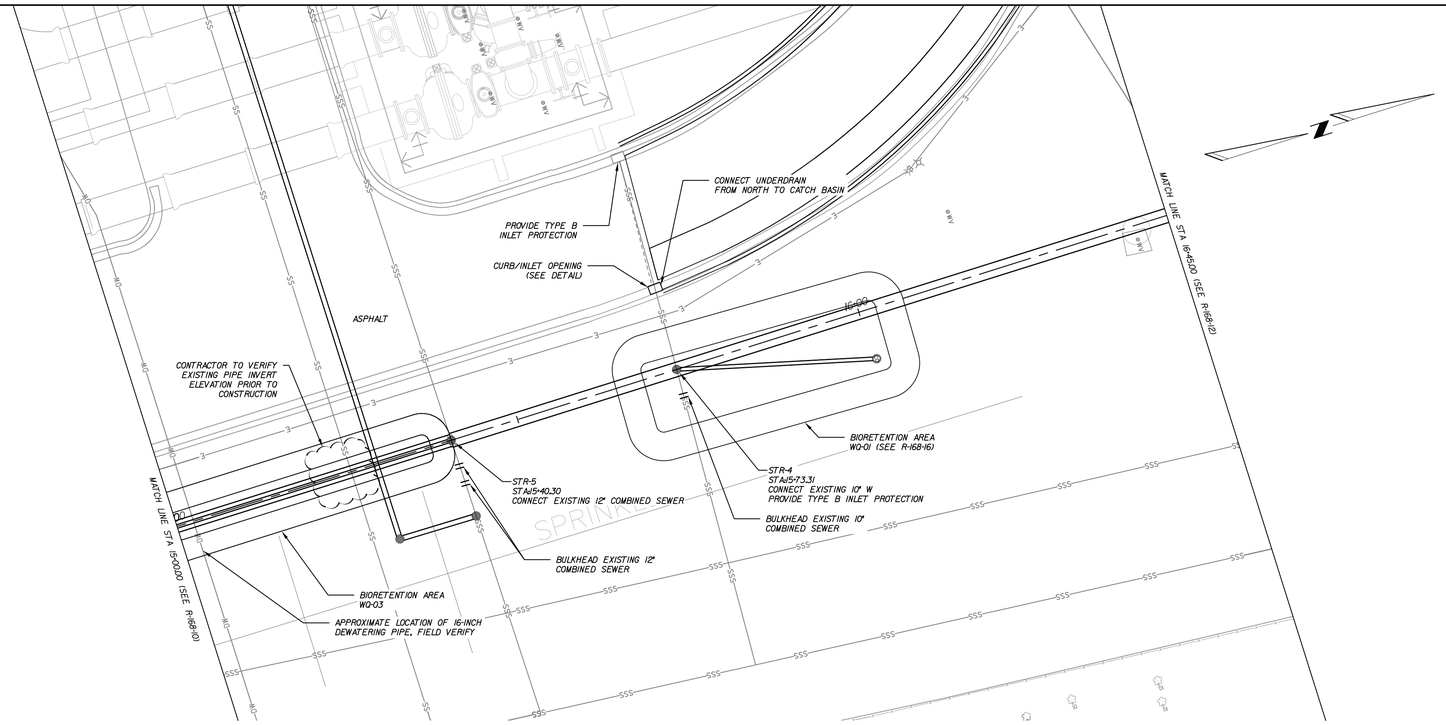
Water Engineering
Department of Public Works

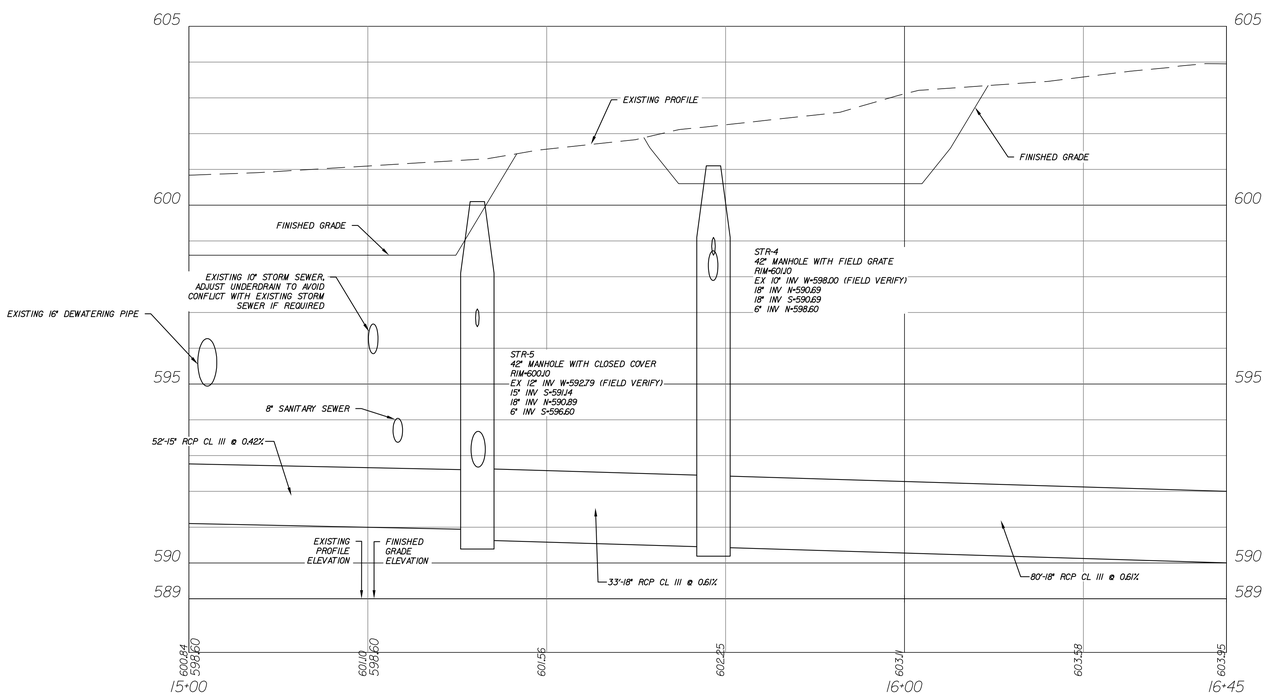
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
STORM SEWER PLAN & PROFILE

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015 MANAGEMENT ENGINEER SENIOR
DRAWN BY	C. JONES		7/1/2015 CHIEF_DESIGN_ENGINEER
CHECKED BY	D. BERRY		7/1/2015 SPECIAL_DEPUTY_COMMISSIONER_OF_PUBLIC_WORKS
DATE	05-18-2015		
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------		

DRAWING NO. R-168-10





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BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES
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NO.	DATE	REVISION	BY	CHKD.
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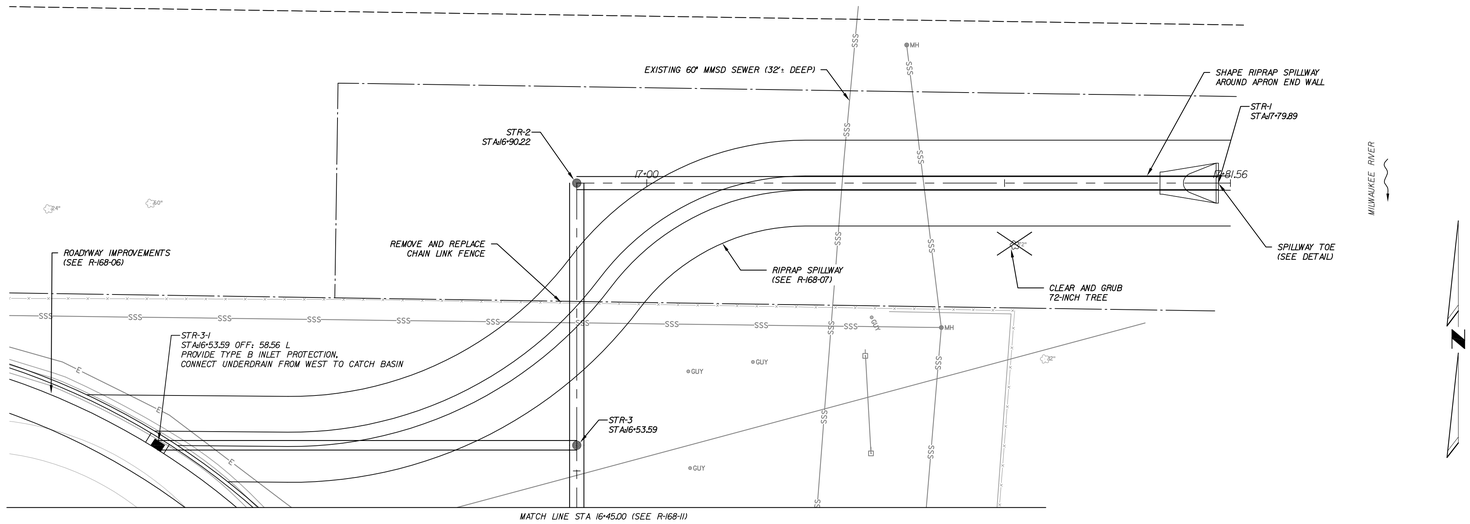
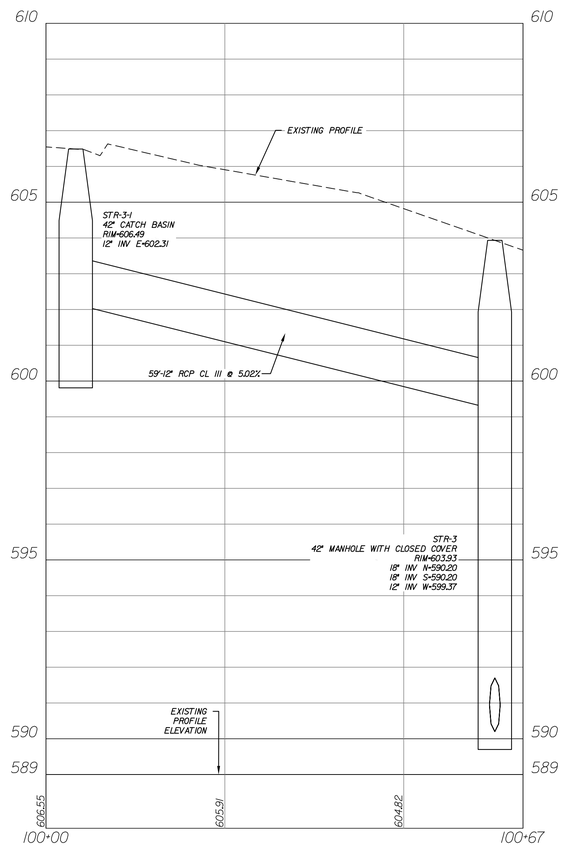
Milwaukee Water Works
Water Engineering
Department of Public Works

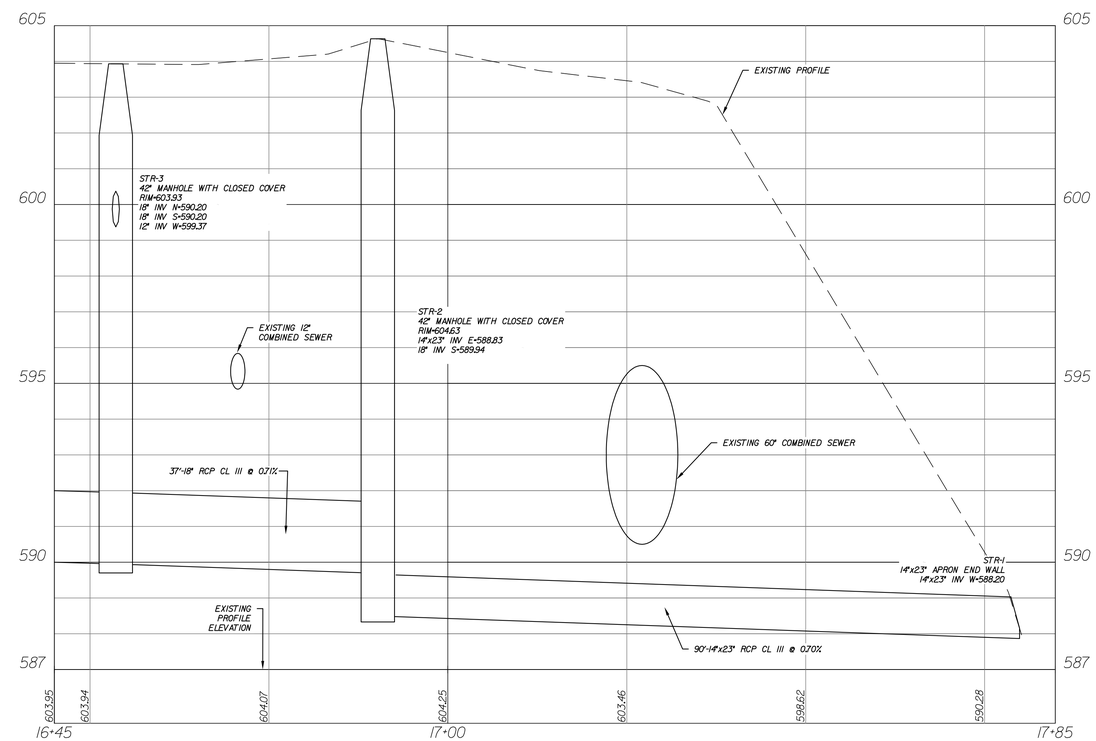
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
STORM SEWER PLAN & PROFILE

DESIGNED BY	G. KULPINS	APPROVED	DATE
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY		7/1/2015
DATE	05-18-2015	CHIEF DESIGN ENGINEER	7/1/2015
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------	DRAWING NO.	R-168-11







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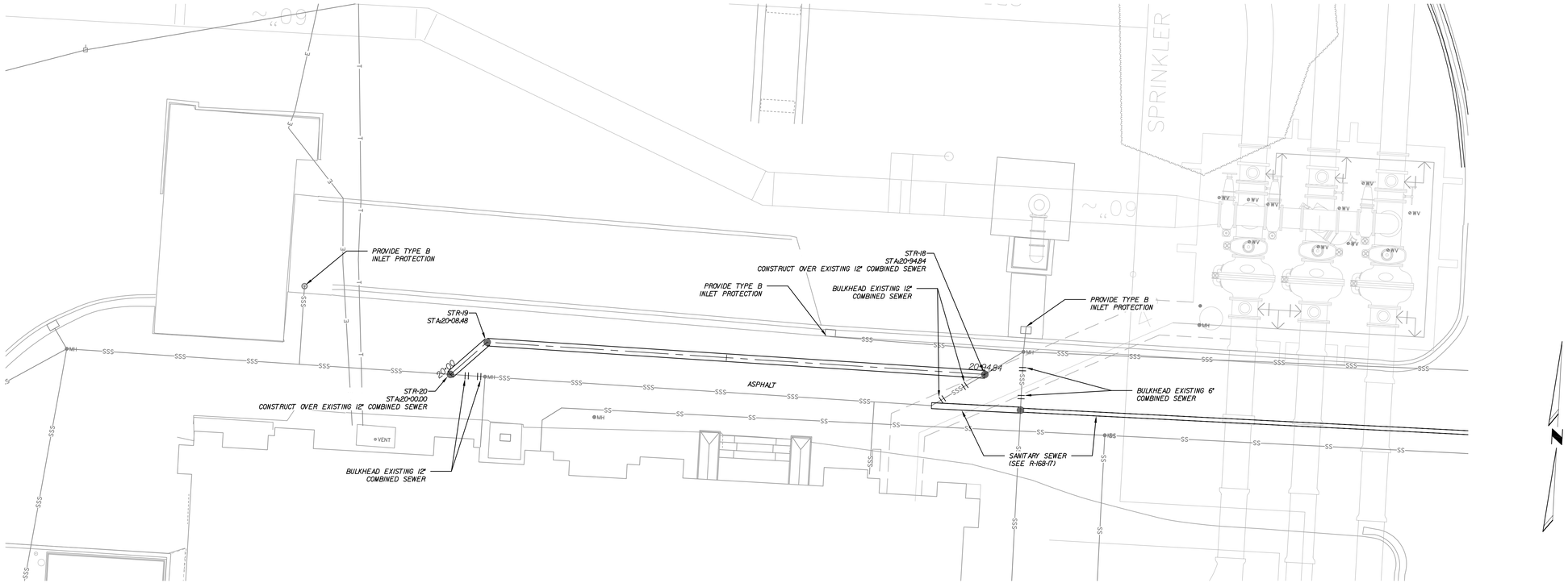
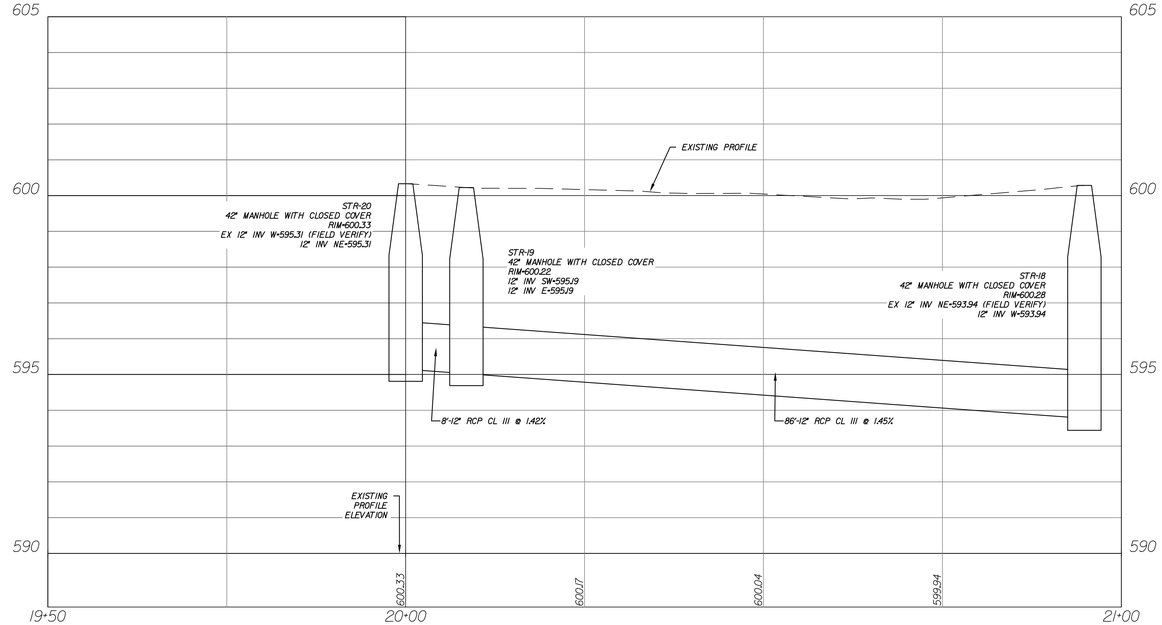
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
STORM SEWER PLAN & PROFILE

DESIGNED BY	G. KULPINS	APPROVED	DATE
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY		7/1/2015
DATE	05-18-2015	CHIEF DESIGN ENGINEER	7/1/2015
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
PROJECT NUMBER	R-168		
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-12





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Milwaukee Water Works
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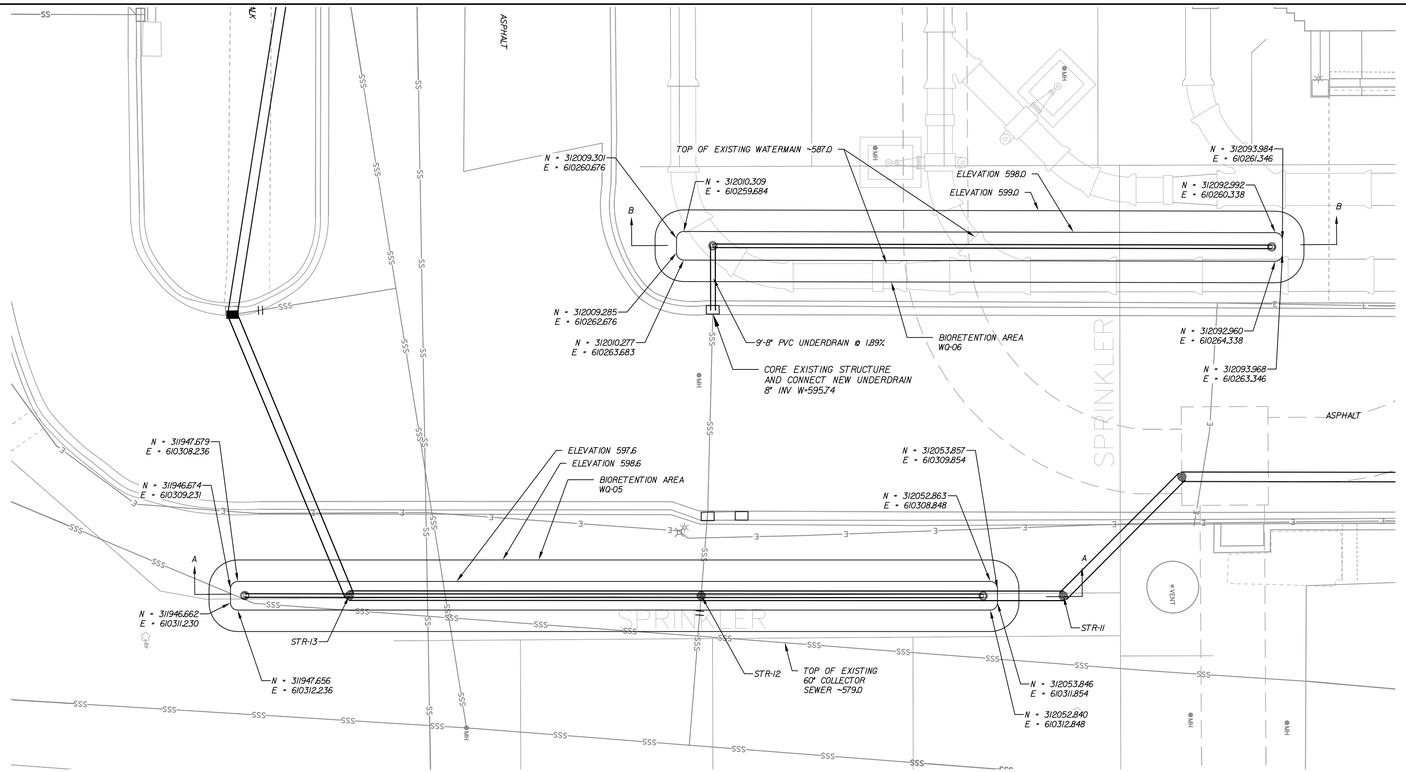
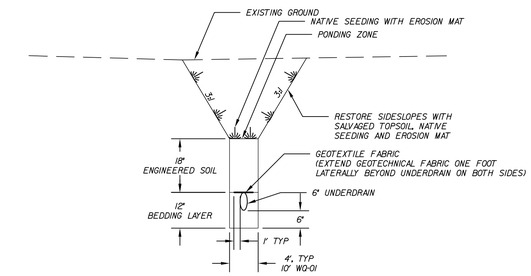
Department of Public Works

RIVERSIDE PUMP STATION

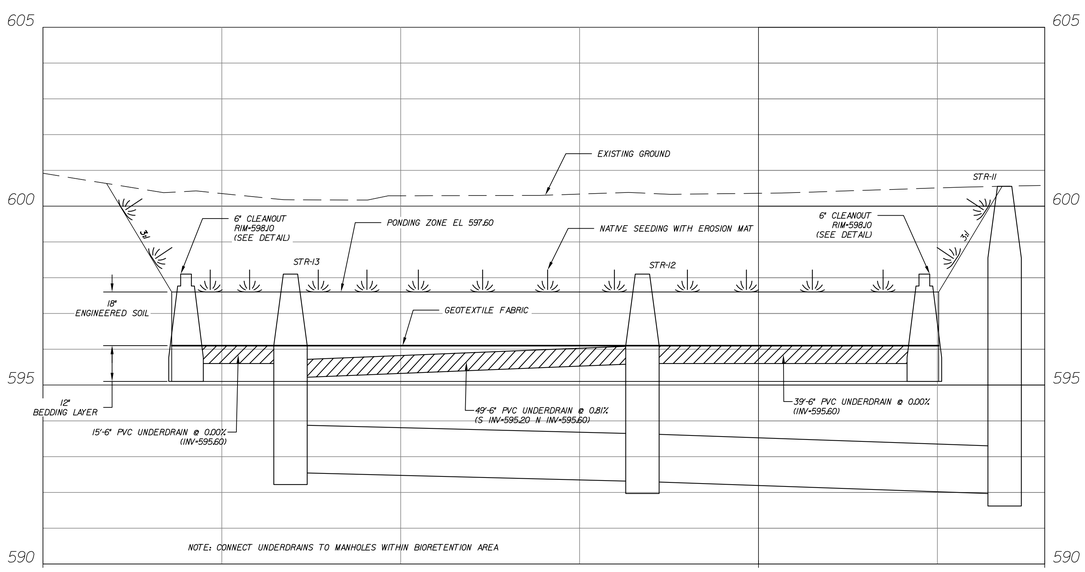
R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
STORM SEWER PLAN & PROFILE

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------	DRAWING NO.	R-168-13

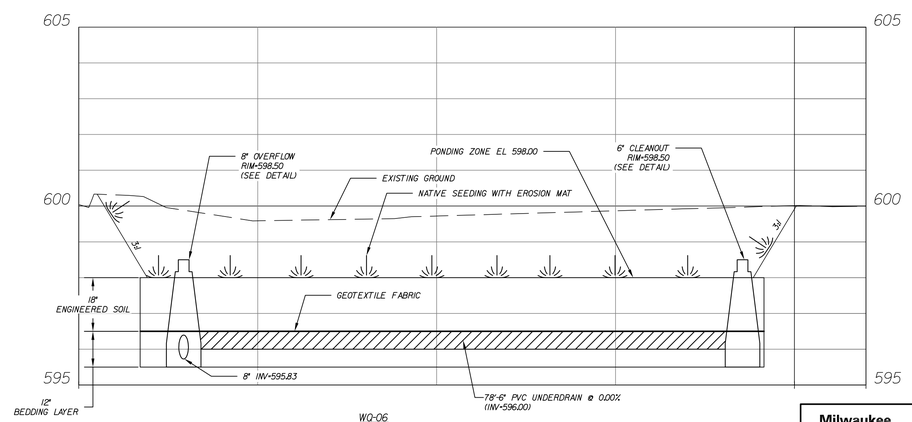




TYPICAL BIORETENTION AREA SECTION



WQ-05
SECTION A-A



WQ-06
SECTION B-B

CALL DIGGERS HOTLINE
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Milwaukee Water Works
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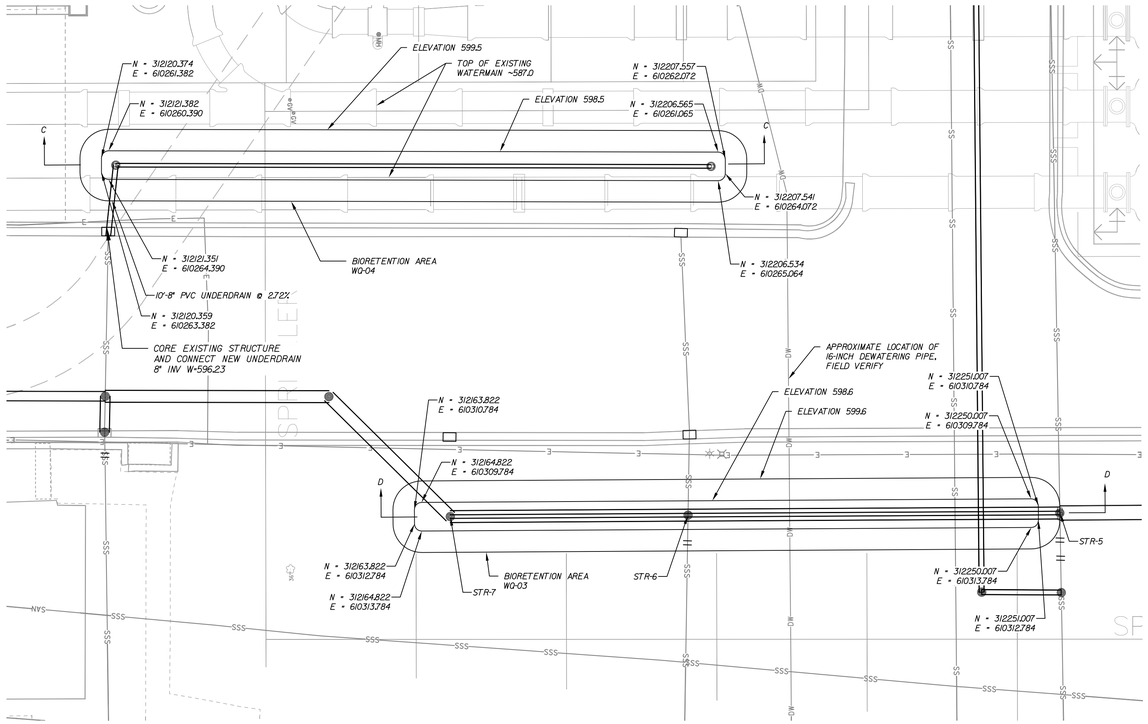
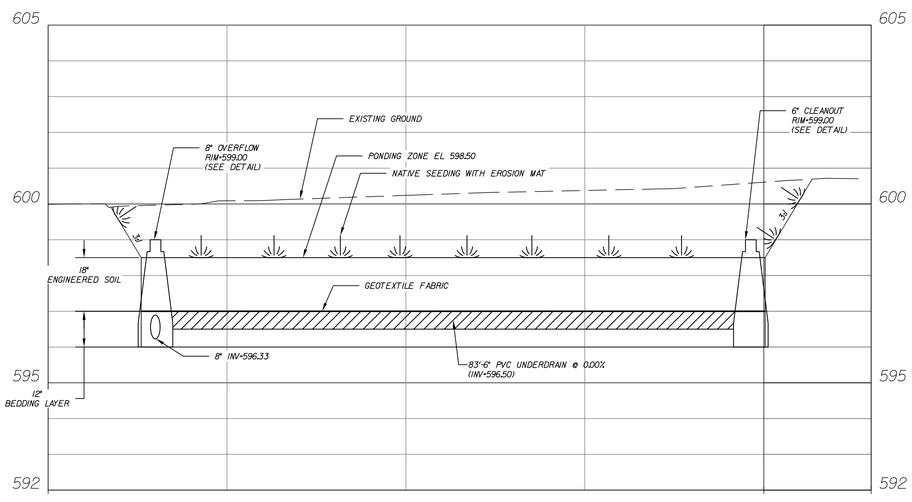
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
BIORETENTION AREA SECTIONS

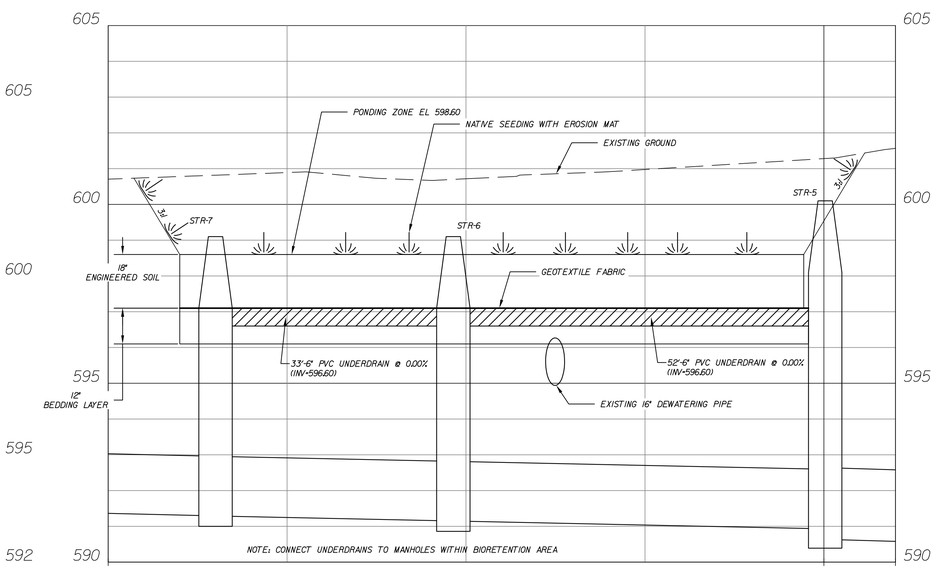
		APPROVED	DATE
DESIGNED BY	G. KULPINS	MANAGEMENT ENGINEER SENIOR	7/1/2015
DRAWN BY	C. JONES		
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-14





WQ-04
SECTION C-C



WQ-03
SECTION D-D

CALL DIGGERS HOTLINE
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TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

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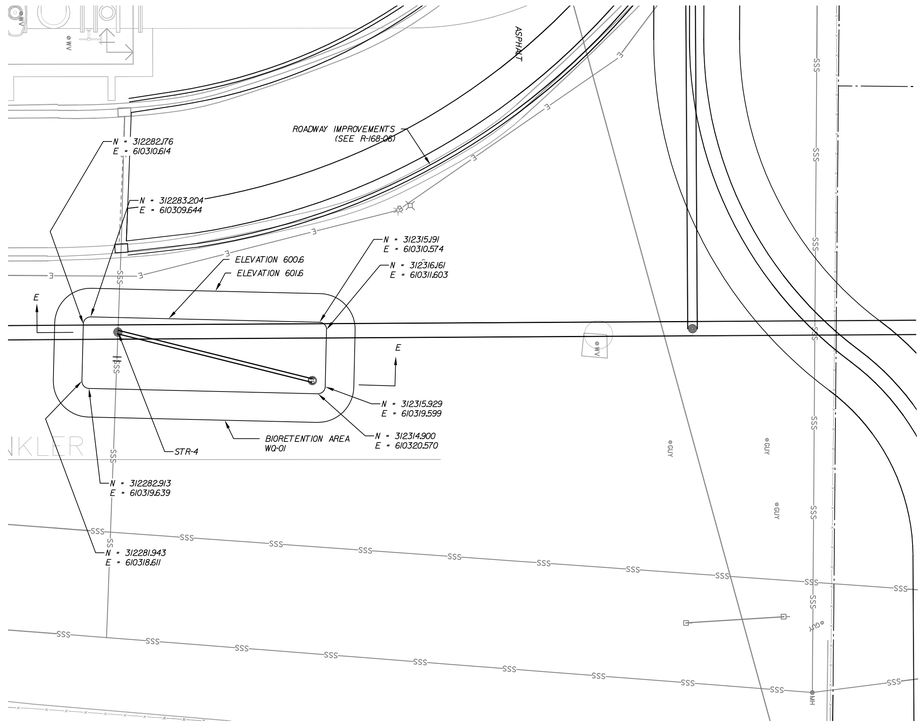
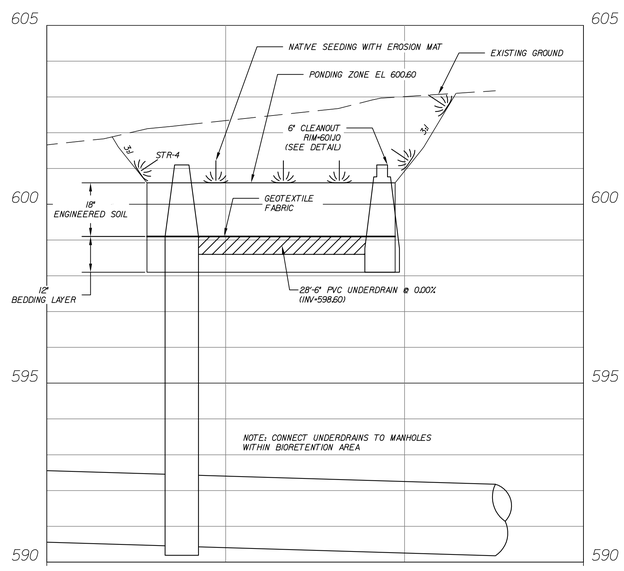
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
BIORETENTION AREA SECTIONS

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE 111-2015			
FILE NO.	----------		

DRAWING NO. R-168-15





WQ-01
SECTION E-E

CALL DIGGERS HOTLINE
1-800-242-8511
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BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES
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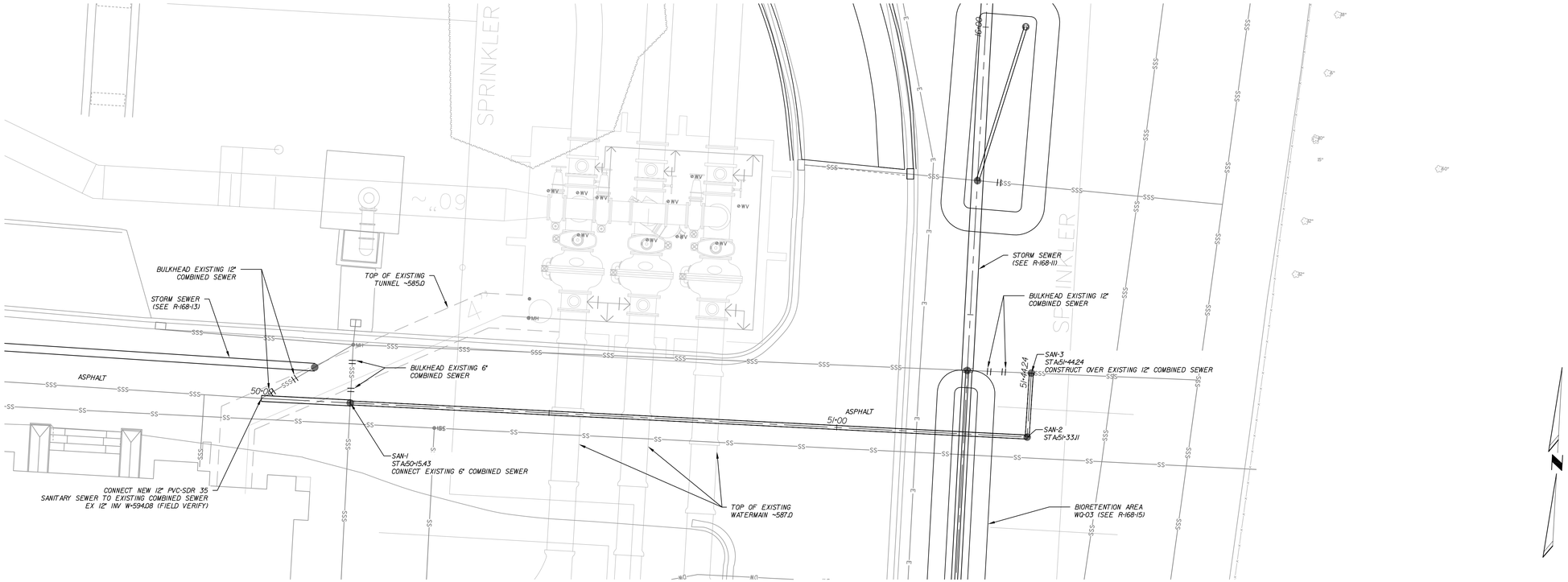
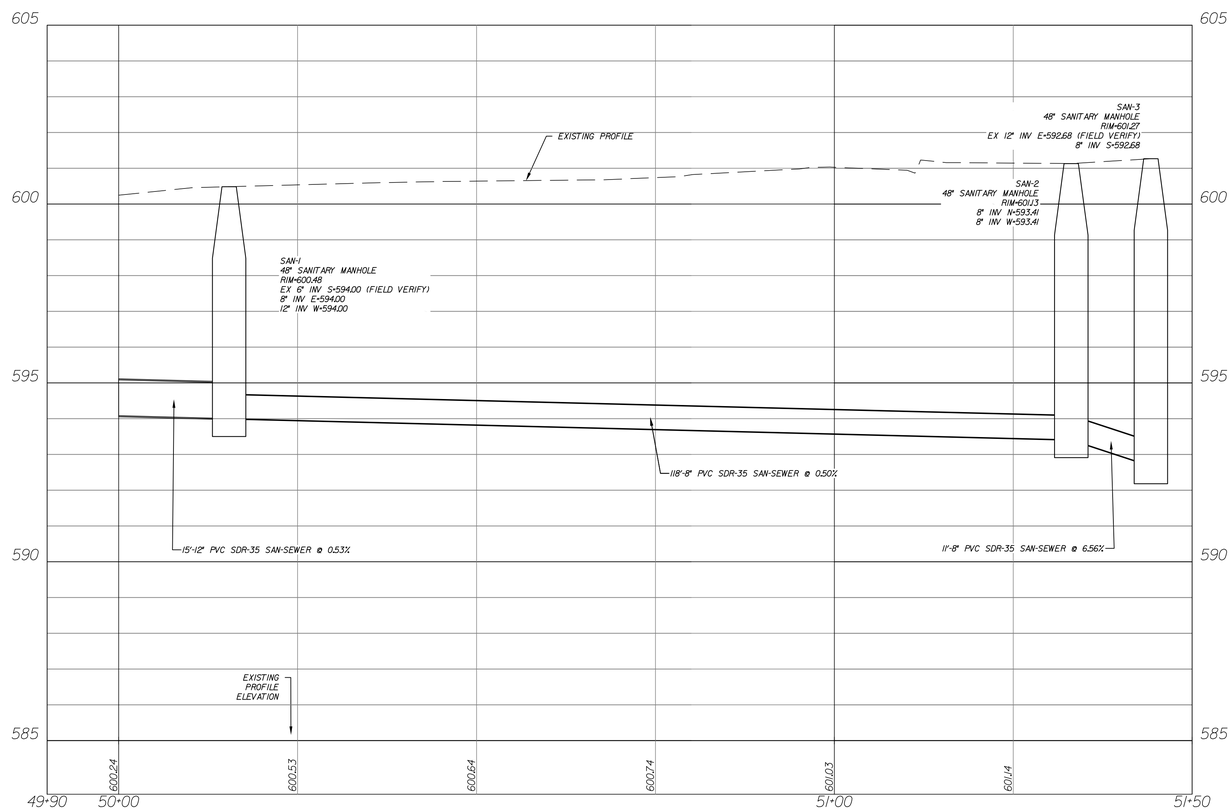
RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
BIORETENTION AREA SECTIONS

		APPROVED	DATE
DESIGNED BY	G. KULPINS	MANAGEMENT ENGINEER SENIOR	7/1/2015
DRAWN BY	C. JONES		
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-16





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RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD
REPLACEMENT AND STORMWATER RUNOFF PLAN
SANITARY SEWER PLAN & PROFILE

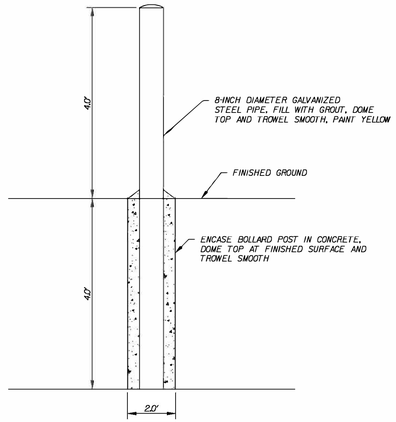
DESIGNED BY	G. KULPINS
DRAWN BY	C. JONES
CHECKED BY	D. BERRY
DATE	05-18-2015
SCALE	1"=10'-0" HORZ 1"=2'-0" VERT
PROJECT NUMBER	R-168
OFFICIAL NOTICE 111-2015	
FILE NO.	----------

APPROVED	DATE
MANAGEMENT ENGINEER SENIOR	7/1/2015
CHIEF DESIGN ENGINEER	7/1/2015
SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	7/1/2015

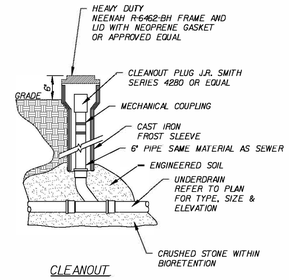
DRAWING NO. R-168-17

DETAIL NOTES

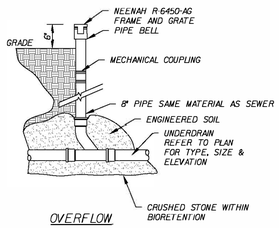
1. EROSION CONTROL INLET PROTECTION SHALL CONFORM TO WISDOT STANDARD DETAIL SDDBE 10-2. EROSION CONTROL SILT FENCING SHALL CONFORM TO WISDOT STANDARD DETAIL SDDBE 9-6.
2. MANHOLES SHALL CONFORM TO WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION FILE 12. FRAME AND CLOSED COVERS SHALL CONFORM TO FILE 14A AND 14B AS APPLICABLE. FIELD GRATES, WHERE INDICATED ON DRAWINGS, SHALL BE NEENAH R-4342, OR EQUAL.
3. PAVEMENT SAWCUT SHALL CONFORM TO WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION FILE 1.
4. TRENCH SECTION FOR REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS C BEDDING CONFORMING TO WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION FILE 3. PROVIDE SHEATHING AS FIELD CONDITION DICTATE.
5. TRENCH SECTION FOR PVC PIPE SHALL BE CLASS B BEDDING CONFORMING TO WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION FILE 4. PROVIDE SHEATHING AS FIELD CONDITION DICTATE.
6. CATCH BASINS SHALL CONFORM TO WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION FILE 26. CASTING SHALL NOT INCLUDE CURB BOX.



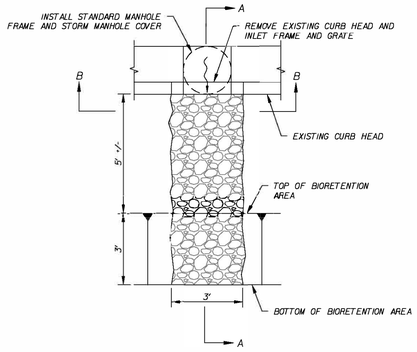
BOLLARD DETAIL



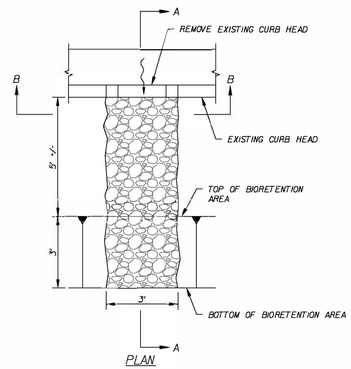
CLEANOUT



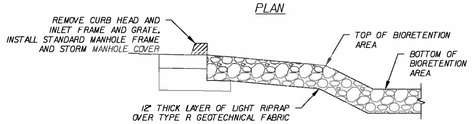
OVERFLOW



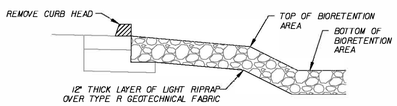
PLAN



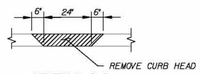
PLAN



SECTION A-A

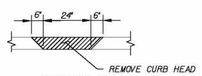


SECTION A-A



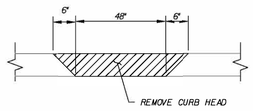
SECTION B-B

CURB/INLET OPENING

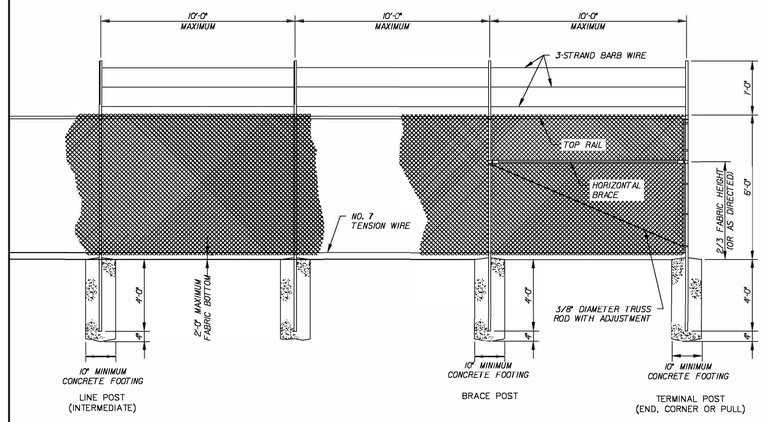


SECTION B-B

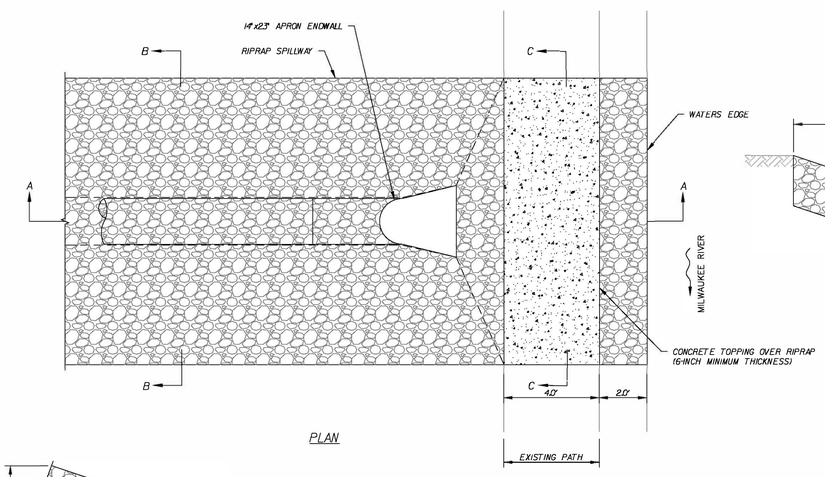
CURB OPENING



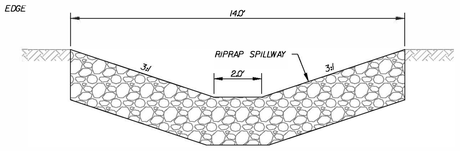
CURB CUT FOR SPILLWAY



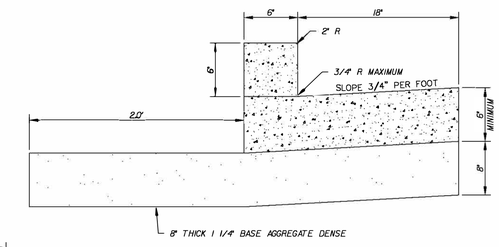
CHAIN LINK FENCE



PLAN

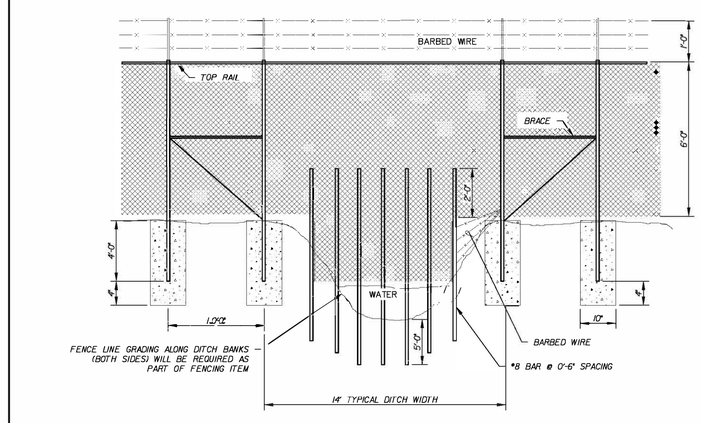


SECTION B-B

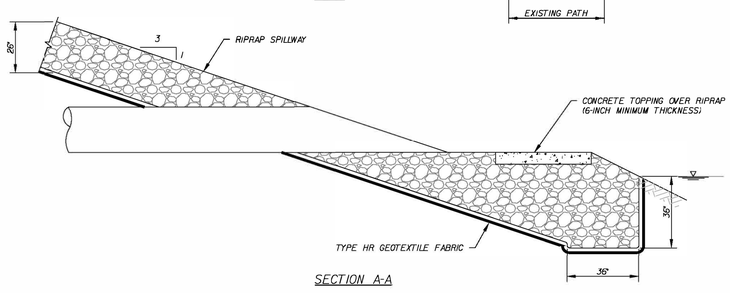


NOTE:
FOR REJECT CURB AND GUTTER SLOPE OF PAN WILL MATCH ADJACENT PAVEMENT

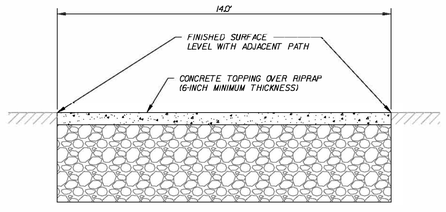
24" CURB AND GUTTER DETAIL



TYPICAL DITCH CROSSING DETAIL



SECTION A-A



SECTION C-C

SPILLWAY TOE DETAIL

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

Mead & Hunt
Mead & Hunt, Inc.
10700 West Research Drive,
Suite 155
Wauwatosa, WI 53226
phone: 262-790-0232
meadhunt.com

NO.	DATE	REVISION	BY	CHKD.
△				
△				
△				
△				

Milwaukee Water Works
Water Engineering
Department of Public Works

RIVERSIDE PUMP STATION

R-168
RIVERSIDE PUMP STATION ACCESS ROAD REPLACEMENT AND STORMWATER RUNOFF PLAN
SITE DETAILS

		APPROVED	DATE
DESIGNED BY	G. KULPINS		7/1/2015
DRAWN BY	C. JONES	MANAGEMENT ENGINEER SENIOR	7/1/2015
CHECKED BY	D. BERRY	CHIEF DESIGN ENGINEER	7/1/2015
DATE	05-18-2015	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
SCALE	NOT TO SCALE		
PROJECT NUMBER	R-168		
OFFICIAL NOTICE	111-2015		
FILE NO.	----------		

DRAWING NO. R-168-18