

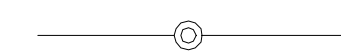
LEGEND

EXISTING



SANITARY SEWER OR SERVICE
STORM SEWER OR SERVICE
WATER MAIN
WATER SERVICE
FORCE MAIN
MANHOLE
CATCH BASIN
INLET
DRIYELL
FLARED END SECTION
FIRE HYDRANT
WATER VALVE W/ BOX AND COVER
WATER VALVE VAULT
WATER SERVICE BOX OR CURB STOP
WATER METER
CLEAN OUT
SEPTIC VENT
TO BE ABANDONED AND/OR REMOVED

PROPOSED



GAS LINE
GAS VALVE W/ BOX AND COVER
GAS VALVE VAULT
GAS METER
GAS RISER
GAS SERVICE VALVE

TELEPHONE CABLE
TELEPHONE DUCT
TELEPHONE VAULT
TELEPHONE RISER

CABLE TELEVISION (BURIED)
CABLE T.V. RISER
CABLE T.V. VAULT

UNDERGROUND ELECTRICAL
ELECTRIC METER
PAD MOUNTED TRANSFORMER
ELECTRIC VAULT
JUNCTION BOX

UTILITY POLE w/ GUY ANCHOR
UTILITY POLE w/ LIGHT
LIGHT STANDARD
MAIL BOX
STREET SIGN
RAILROAD SIGNAL
TRAFFIC SIGNAL CONTROLLER
TRAFFIC SIGNAL POST W/ SIGNAL HEAD
HANDHOLE
DECIDUOUS TREE (W/ TRUNK INCH DIA.

(HATCHED SHALL
BE REMOVED)

A (HATCHED SHALL

PUETZ ROAD
WATER MAIN REPLACEMENT



SCALE: 1" = 4000'

-PROJECT LOCATION

[illegible]

WATER and SEWER UTILITY

A COMMITMENT TO WATER QUALITY

BAXTER & WOODMAN
Consulting Engineers



CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting.

Utility Engineer
Date

SA. TB
ST. TB
W. TB
G. TB
E. TB
T. TB
I. TB
TS. TB
PP. TB



Professional Engineer
Cam A. Vaz

REVISION	BY	DATE
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CITY OF OAK CREEK, WISCONSIN

DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE
G.V.	2/14/2018	T.B.	2/14/2018	G.V.	2/14/2018

COVER SHEET

APPROVED BY

UTILITY ENGINEER

APPROVED BY

CITY ENGINEER DATE

SCALE	SHEET
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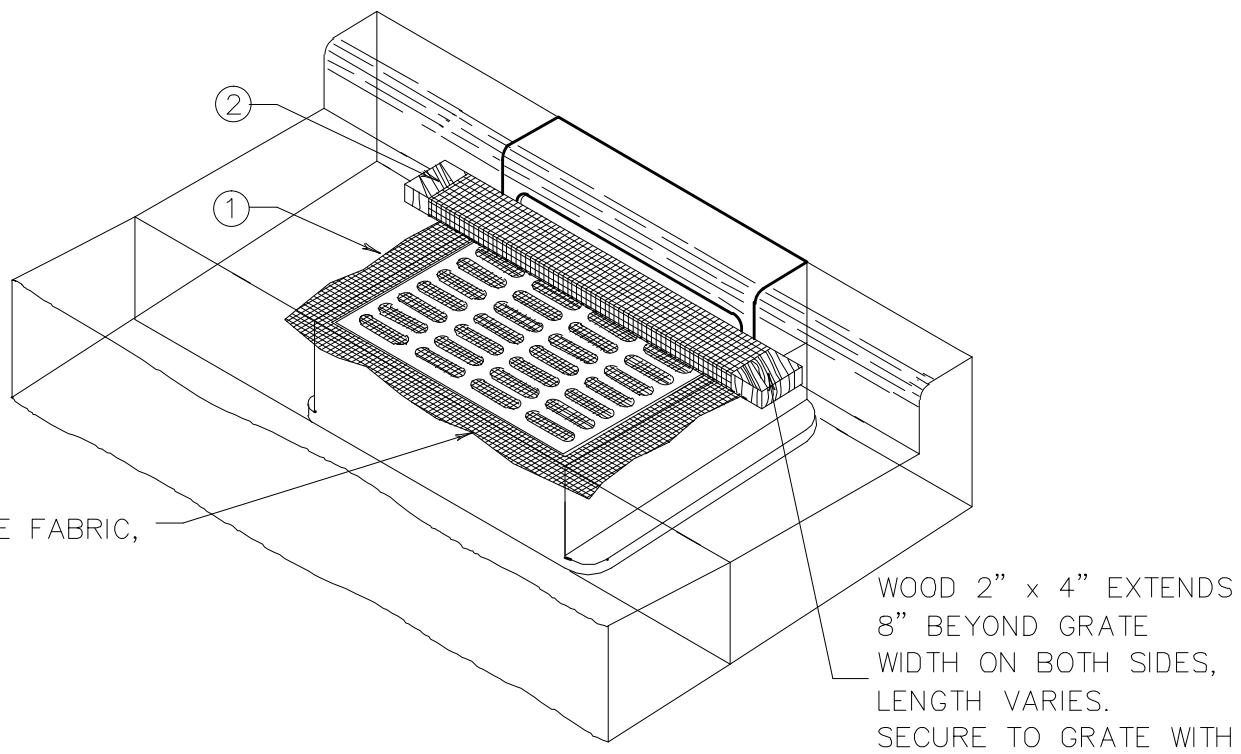
PLAN	
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HOR. N/A | 1

PROFILE	OF
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HOR.	$\frac{N/A}{N/A}$	7
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FILE NO:18102-1C-2389



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE C

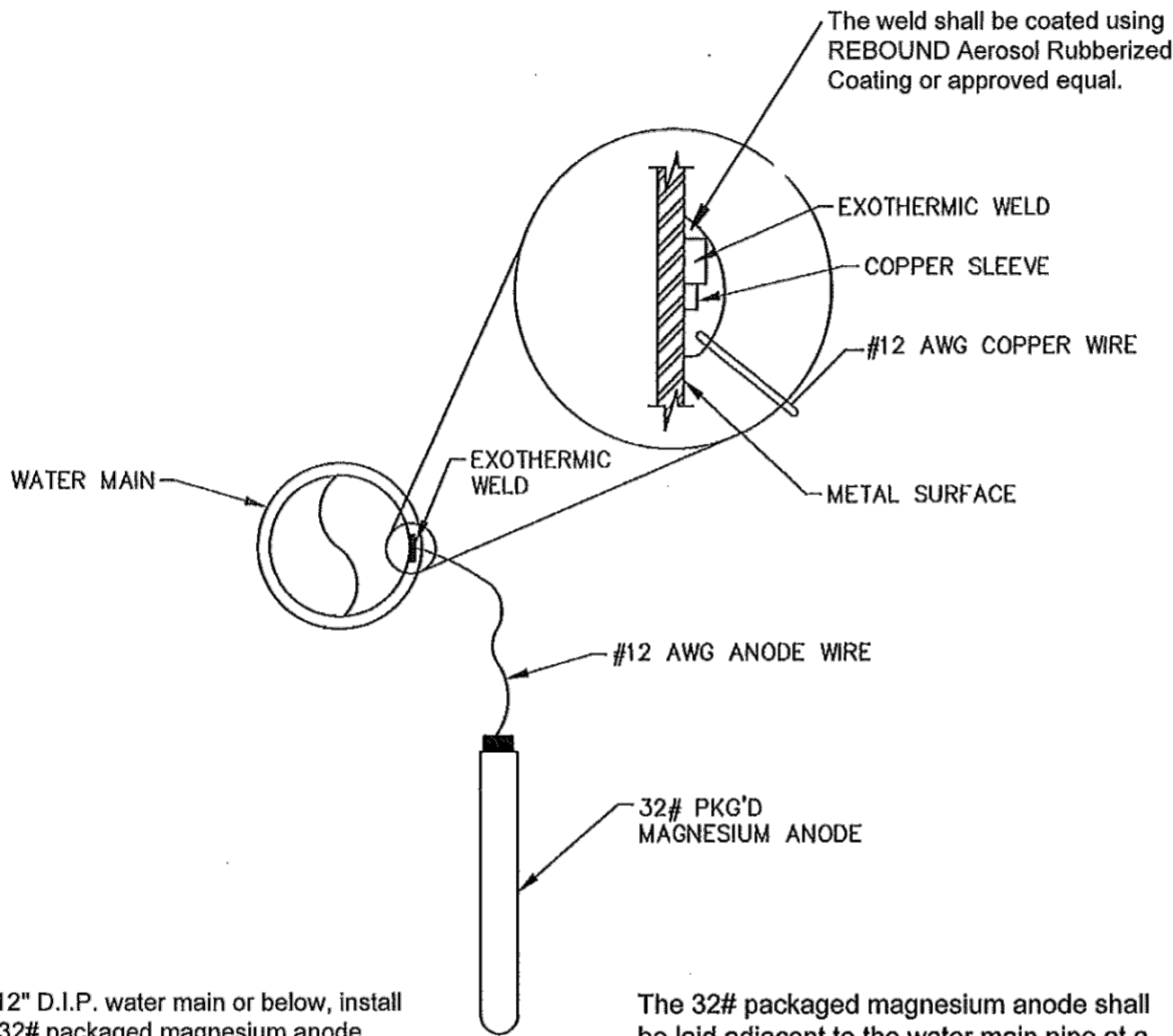
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

INLET PROTECTION—GENERAL NOTES

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

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

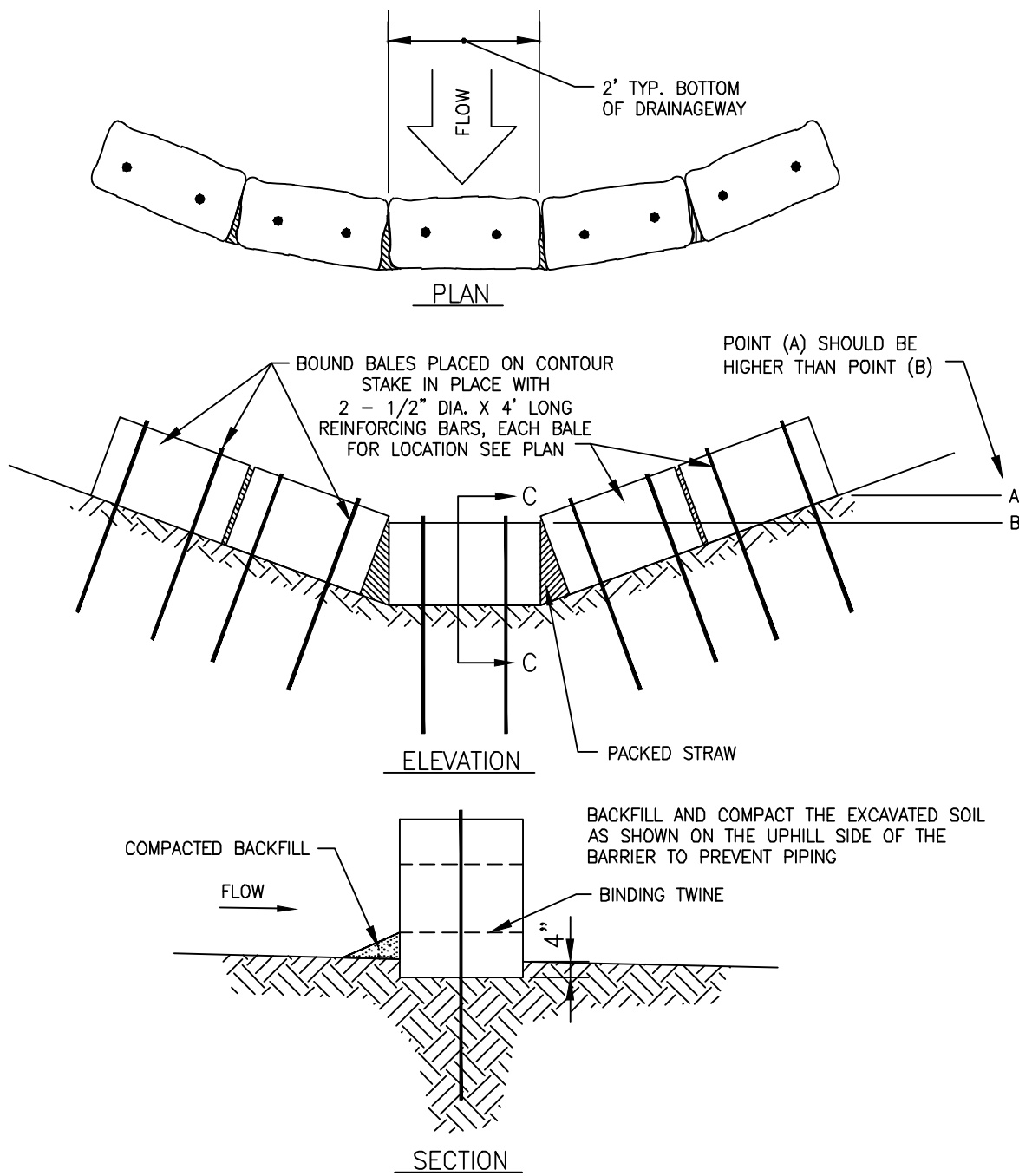


For 12" D.I.P. water main or below, install one 32# packaged magnesium anode.
For 16" D.I.P. water main or above, install two 32# packaged magnesium anodes.

The 32# packaged magnesium anode shall be laid adjacent to the water main pipe at a point that allows for the greatest separation between anode and water main.

GALVANIC ANODE INSTALLATION
N.T.S.

OAK CREEK WATER & SEWER UTILITY
DATE: 2/11/2014
SCALE: N.T.S.



NOTES:

1. STAGGER BALES TO COVER JOINTS IF MORE THAN 1 ROW IS USED.
2. WHEN ROLLED EXCELSIOR IS USED, ANGLE STAKES IN THE DIRECTION OF FLOW, DRIVE THEM 2' ON CENTER, AND ENTWINE THE ENDS OF THE STAKES IN THE MESH ROLL COVERING.

DITCH CHECK STRAW BALE OR EXCELSIOR BARRIER
NO SCALE

GENERAL NOTES:

1. CONTRACTOR SHALL REMOVE SIGNS, MAILBOXES, ETC. DURING CONSTRUCTION. IMMEDIATELY AFTER PIPE INSTALLATION AND BACKFILL OCCURS, ALL SIGNS, MAILBOXES, ETC. SHALL BE RETURNED TO THEIR PREVIOUS LOCATION. ALL STOP SIGNS MUST BE DISPLAYED AT ALL TIMES.
2. 4-INCHES OF INSULATION IS REQUIRED WHEREVER COVER OVER THE TOP OF WATER MAIN AND/OR WATER LATERAL IS LESS THAN 6 FT. OR WHERE SHOWN ON PLANS. (INCIDENTAL TO PROPOSED WATER MAIN)
3. RESTRAINT OF PROPOSED WATER MAIN IS INCIDENTAL TO WATER MAIN CONSTRUCTION.
4. SUPPORTING OF POWER/LIGHT POLES ALONG THE ENTIRE PROJECT LIMITS FOR PROPOSED WATER MAIN IS INCIDENTAL TO PROPOSED WATER MAIN CONSTRUCTION.
5. LOCATION OF PROPOSED WATER LATERALS ON PLANS ARE APPROXIMATE. FINAL LOCATION SHALL BE DETERMINED IN FIELD DURING CONSTRUCTION.
6. CONTRACTOR SHALL REINSTATE ALL SUMP PUMP DISCHARGES DAMAGED DURING CONSTRUCTION OR EXTEND EXISTING DISCHARGES AS REQUIRED WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL FURNISH NEW PIPE MATERIAL TO MATCH EXISTING PIPE, AND JOIN WITH A WATERTIGHT SEAL. (INCIDENTAL TO PROPOSED WATER MAIN)
7. THE BASE SURVEY AND PROPOSED LINework WAS PREPARED BY BAXTER & WOODMAN, INC. IN JANUARY, 2018. ALL UNDERGROUND UTILITIES AND STRUCTURES HAVE BEEN SHOWN TO A REASONABLE DEGREE OF ACCURACY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE THERETO.
8. CONTRACTOR SHALL PROVIDE CLASS D CONCRETE BUTTRESS RESTRAINT AT ALL HORIZONTAL BENDS W/STANDARD DIMENSIONS PER FILE NO. 44 OF THE STANDARD SPECIFICATIONS. RESTRAIN VERTICAL BENDS AND LENGTH OF HYDRANT LEADS WITH RESTRAINT HARNESSSES OR APPROVED EQUAL. RESTRAINT OF PROPOSED WATER MAIN IS INCIDENTAL TO WATER MAIN CONSTRUCTION.
9. ALL STATIONS AND DIMENSIONS ARE TO CENTER OF STRUCTURE/FITTING OR OPERATING NUT OF HYDRANT.
10. COORDINATES IN THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 27). GROUND ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF OAK CREEK VERTICAL DATUM (NGVD29-580.60').
11. CONTRACTOR SHALL INSTALL GALVANIC ANODE CORROSION PROTECTION AT EACH CONNECTION TO EXISTING WATER MAIN.
12. CONTRACTOR SHALL INSTALL BRASS GROUNDING RODS AT ALL CONNECTIONS TO EXISTING WATER MAIN AND CONNECT TO TRACER WIRE WITH 5/8" GROUND ROD CLAMP MANUFACTURED BY STORM COPPER COMPONENTS OR EQUAL TO BE USED FOR FUTURE UTILITY LOCATING.
13. PVC FITTINGS SHALL BE USED ON ALL PVC PIPE. PVC FITTINGS 4" TO 12" IN DIAMETER SHALL BE INJECTION MOLDED AND COMPLY WITH THE REQUIREMENTS OF AWWA C907 AND BE CERTIFIED CSA B137.2. MOLDED FITTINGS WILL BE MADE OF PVC COMPOUND WITH A MINIMUM HYDROSTATIC DESIGN BASIS OF 4000 PSI. MOLDED FITTINGS MUST BE FACTORY MUTUAL APPROVED AND LISTED BY THE UNDERWRITER'S LABORATORIES INTERNATIONAL (ULI) IF A PARTICULAR TYPE OR PVC FITTING IS NOT MANUFACTURED OR UNAVAILABLE. THE CONTRACTOR MAY USE DUCTILE IRON FITTINGS ON A CASE BY CASE BASIS WITH THE APPROVAL OF THE UTILITY ENGINEER.
14. CONTRACTOR SHALL NOTIFY OAK CREEK WATER & SEWER UTILITY 48 HOURS BEFORE TAKING ANY WATER MAIN OUT OF SERVICE.
15. STAINLESS STEEL HARDWARE SHALL BE USED FOR ALL HYDRANTS AND VALVES.
16. ALL HYDRANTS WILL BE SET SO THAT THE MAIN NOZZLE FACES THE ADJACENT STREET (INCIDENTAL).
17. THE CONTRACTOR SHALL PROVIDE APPROPRIATE EQUIPMENT TO FILL, FLUSH AND SAMPLE NEW WATER MAINS.

RESTORATION NOTES:

1. DITCHLINES TO BE RESTORED WITH 3" OF TOPSOIL, HYDROSEED AND EROSION MATTING. CONTRACTOR SHALL INSURE POSITIVE DRAINAGE WITH LONGITUDINAL DITCH SLOPE MATCHING THE LONGITUDINAL GRADE OF THE ROAD CENTER LINE.
2. ALL SAWCUTTING, PAVEMENT REMOVAL, EXCAVATION, MATERIALS, AND LABOR NECESSARY FOR THE INSTALLATION OF THE PROPOSED WATER SERVICE LATERALS IS INCIDENTAL TO WATER SERVICE BID ITEM.

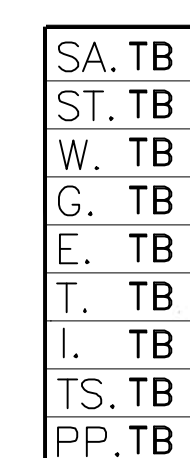
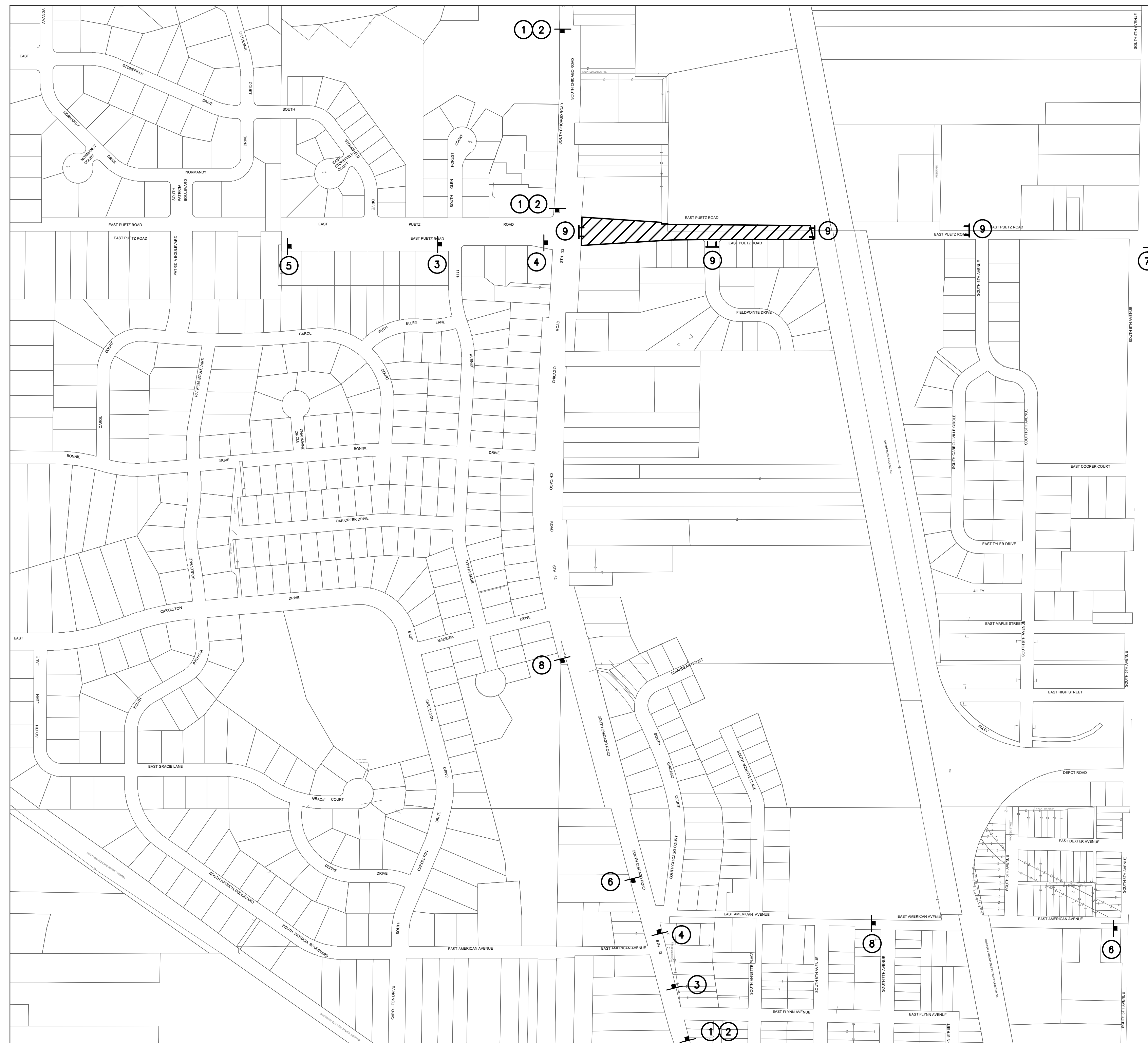
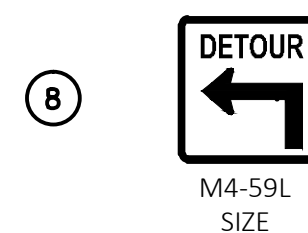
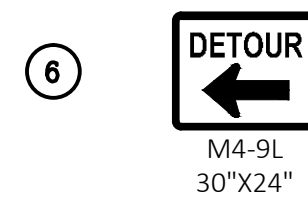
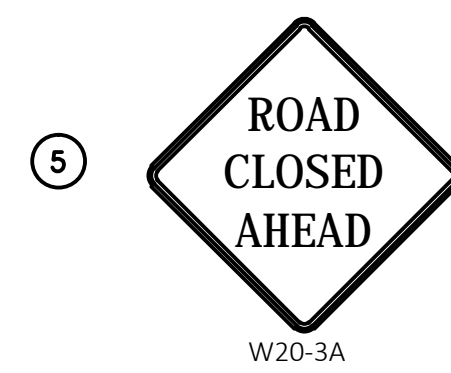
This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting.

Utility Engineer Date

EROSION CONTROL NOTES

1. ALL PERMIT CONDITIONS SHALL BE MET DURING CONSTRUCTION OF THE PROJECT.
2. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF OAK CREEK, AND SHALL MEET OR EXCEED EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS".
3. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. REPAIRS AND MAINTENANCE SHALL BE COMPLETED WITHIN 24 HOURS OF INSPECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY.
5. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
6. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT AS PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN THE PUBLIC STREET FREE OF DUST AND DIRT.
8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ALL TOPSOIL AND FILL STOCKPILES. NOTIFY THE CITY OF OAK CREEK OF ANY NEW STOCKPILE LOCATIONS.
9. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
10. ANY SOIL DISTURBANCE AND/OR SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILE, IF REMAINING FOR MORE THAN THIRTY DAYS. PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS.
11. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, AND MULCHING SODDING, COVERING WITH TARPS, OR EQUIVALENT BEST MANAGEMENT PRACTICES. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
12. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORK DAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORK DAY.
13. NOTIFY THE CITY WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
14. NOTIFY THE CITY OF COMPLETION OF ANY BEST MANAGEMENT PRACTICES WITHIN THE NEXT WORKING DAY AFTER THEIR INSTALLATION.
15. OBTAIN PERMISSION IN WRITING FROM THE CITY OF OAK CREEK WATER & SEWER UTILITY DEPARTMENT PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
16. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
17. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
18. WHENEVER SOIL EXHIBITING OBVIOUS SIGNS OF CONTAMINATION IS ENCOUNTERED DURING EXCAVATION OR INSTALLATION, CEASE WORK IMMEDIATELY, TAKE APPROPRIATE IMMEDIATE PRECAUTIONS TO ENSURE WORKER HEALTH AND SAFETY, AND CONTACT OPERATIONS SUPERVISOR OR INSPECTOR.
19. WATER PUMPED FROM THE SITE, INCLUDING BUT NOT LIMITED TO, PITS OR TRENCHES SHALL BE TREATED BY SEDIMENT BASINS, AN APPROVED SEDIMENT BAG, A STRAW BALE DEWATER BASIN, A COMBINATION OF BOTH, OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICES SPECIFIED IN THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS". WATER SHALL NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
20. PRIOR TO INITIATING ANY LAND DISTURBANCE IN WETLANDS, CONFIRM THAT NECESSARY FEDERAL, STATE, AND LOCAL PERMITS HAVE BEEN OBTAINED.

SA. TB ST. TB W. TB G. TB E. TB T. TB I. TB TS. TB PP. TB		CITY OF OAK CREEK, WISCONSIN			APPROVED BY UTILITY ENGINEER DATE				
		DESIGNED BY G.V.	DATE 2/14/2018	DRAWN BY T.B.	DATE 2/14/2018	CHECKED BY G.V.	DATE 2/14/2018	APPROVED BY	
		GENERAL NOTES AND DETAILS						CITY ENGINEER DATE	
								SCALE	SHEET
								PLAN HOR. N/A	2
								PROFILE HOR. N/A	OF
								VER. N/A	7
								FILE NO:18102-2C-2390	
		REVISION BY		DATE					



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GARY A.
VOGEL
E-34025
ELICHOORN,
WIS.

WISCONSIN
PROFESSIONAL ENGINEER

DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE
G.V.	2/14/2018	T.B.	2/14/2018	G.V.	2/14/2018

UTILITY ENGINEER _____ DATE _____

APPROVED BY

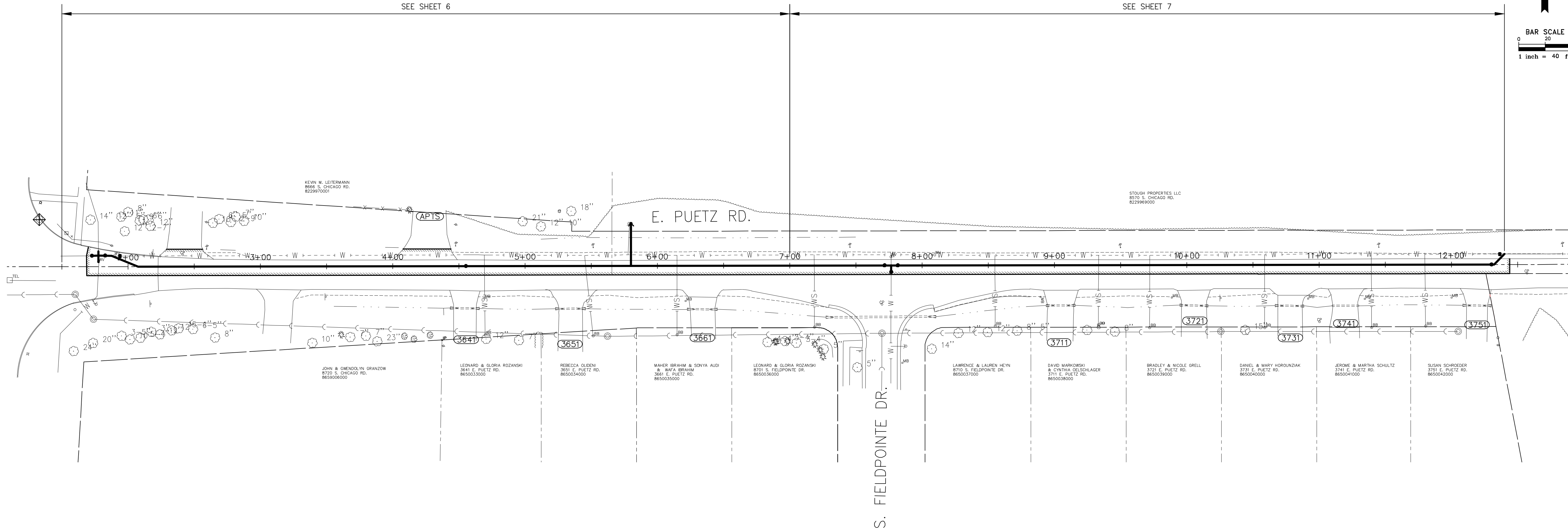
CITY ENGINEER	DATE
SCALE	SHEET

PLAN	
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PROFILE	OF
HOR. <u>N/A</u>	
VER. <u>N/A</u>	7

FILE NO:18102-4C-2392

Utility Engineer
Date

S. CHICAGO RD. / S.T.H. 32



This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting.

Utility Engineer Date

SA.TB
ST.TB
W.TB
G.TB
E.TB
T.TB
I.TB
TS.TB
PP.TB



Gary A. Vogel

REVISION BY DATE

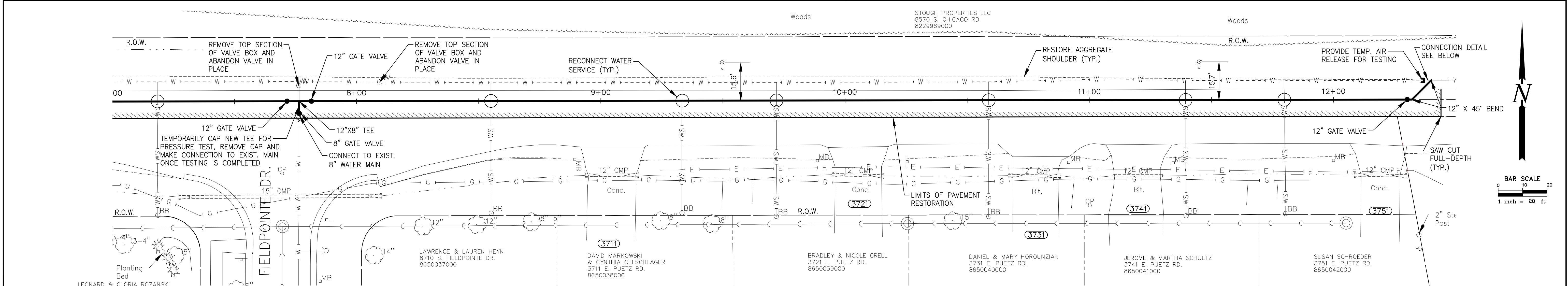
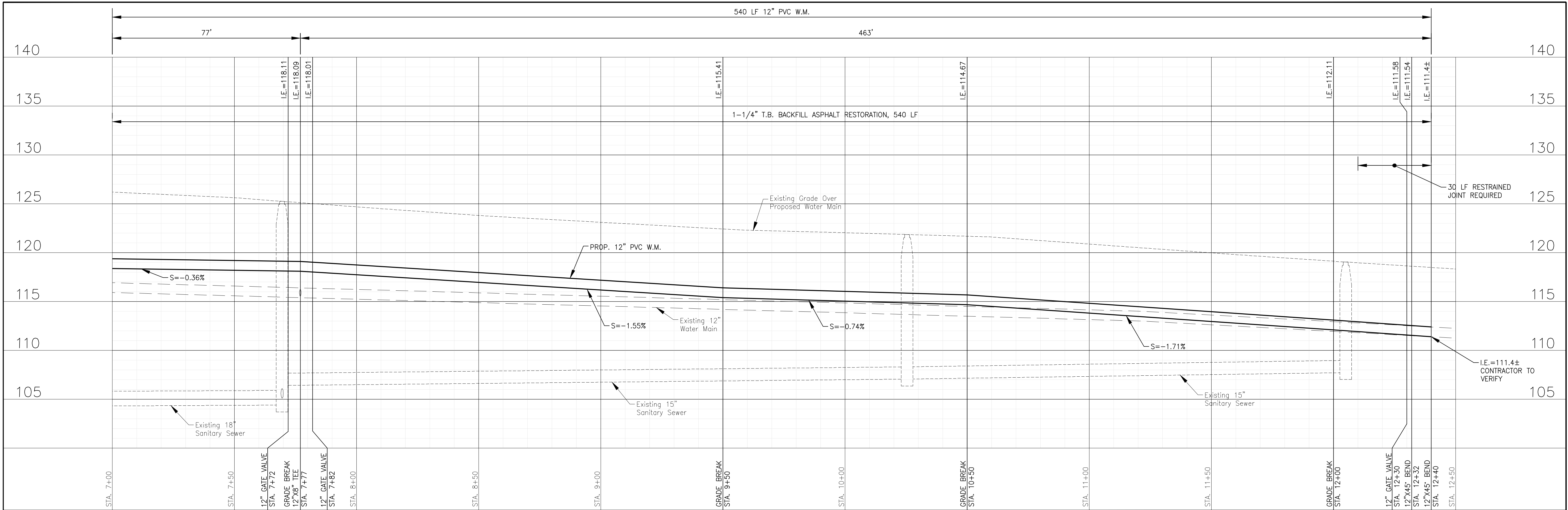
CITY OF OAK CREEK, WISCONSIN

DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE
G.V.	2/14/2018	T.B.	2/14/2018	G.V.	2/14/2018

GENERAL LAYOUT

IN: E. PUETZ RD.
FR: 73' E. OF S. CHICAGO RD.
TO: 1140' E. OF S. CHICAGO RD.

APPROVED BY	
UTILITY ENGINEER	DATE
APPROVED BY	
CITY ENGINEER	DATE
SCALE	SHEET
PLAN HOR. 1"=20'	5
PROFILE HOR. 1"=20'	OF
VER. 1"=5'	7
FILE NO:18102-5C-2393	



ESTIMATE OF QUANTITIES

BID ITEM NOS.	DESCRIPTION	QUANTITY
1	12" PVC WATER MAIN, 1 1/4" T.B. BACKFILL	540 L.F.
2	8" PVC WATER MAIN, 1 1/4" T.B. BACKFILL	5 L.F.
3	CONNECT TO EXISTING 12" WATER MAIN	1 EA.
4	CONNECT TO EXISTING 8" WATER MAIN	1 EA.
5	12" GATE VALVE	3 EA.
6	8" GATE VALVE	1 EA.
7	WATER SERVICE LATERALS (RECONNECT)	7 EA.
8	ASPHALT PAVEMENT REMOVAL	705 S.Y.
9	HMA PAVEMENT, 19MM LOWER LAYER, TYPE 3LT, PG 58-28	106 TON
10	HMA PAVEMENT, 12.5MM UPPER LAYER, TYPE 4LT, PG 58-28	74 TON
11	1 1/2" DENSE GRADED AGGREGATE BASE COURSE	25 TON
12	STONE SHOULDER, 3/4" T.B.	67 TON
13	SAW EXISTING PAVEMENT FULL DEPTH	556 L.F.
14	EXCAVATION BELOW BASE, 1 1/4" DENSE GRADED LIMESTONE	24 TON
15	EXCAVATION BELOW BASE, BREAKER RUN	24 TON
16	PAVEMENT MARKING, EPOXY, 4-INCH WHITE EDGE LINE	544 L.F.
17	PAVEMENT MARKING, EPOXY, 4-INCH YELLOW BROKEN CENTERLINE	117 L.F.
18	PAVEMENT MARKING, EPOXY, 4-INCH YELLOW DOUBLE CENTERLINE	310 L.F.

NOTES:

- RESTORATION OF LAWNS & DITCHES SHALL BE HYDRO-SEEDING WITH EROSION MAT.
- UTILIZE PROPER TYPE & SIZE EQUIPMENT TO LIMIT DISTURBANCE OF LAWNS & DITCHES.

CONNECTION DETAIL (NON-PRESSURE) NO SCALE

CONTRACTOR: _____

DATE COMPLETED: _____

TYPE OF PIPE, A.S.T.M. NO.: _____

DATE: _____

UTILITY ENGINEER: _____ **DATE:** _____

REVISION BY: _____ **DATE:** _____

CITY OF OAK CREEK, WISCONSIN

DESIGNED BY: _____ DATE: _____ DRAWN BY: _____ DATE: _____ CHECKED BY: _____ DATE: _____

G.V. 2/14/2018 T.B. 2/14/2018 G.V. 2/14/2018

WATER MAIN RELAY

IN: E. PUETZ RD.

FR: 600' E. OF S. CHICAGO RD.

TO: 1140' E. OF S. CHICAGO RD.

APPROVED BY

UTILITY ENGINEER _____ DATE _____

APPROVED BY

CITY ENGINEER _____ DATE _____

SCALE _____ SHEET _____

PLAN HOR. 1"=20' 7

HOR. 1"=20' OF

VER. 1"=5' 7

FILE NO:18102-7C-2395