LEGEN	D	
	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	S	۲
STORM SEWER MANHOLE	D	۲
STORM SEWER CATCH BASIN (ROUND CASTING)	0	•
STORM SEWER CATCH BASIN (RECTANGULAR CAS	STING)	
PRECAST FLARED END SECTION	$\overline{\triangleleft}$	<
VALVE BOX	$\bowtie$	
FIRE HYDRANT	ď	•
CLEANOUT	, D	Ň
SANITARY SEWER		<b>_</b>
STORM SEWER -		
WATER MAIN	W	w
		IF
GAS MAIN -	C	
TELEPHONE LINE -	т	
	,	
UTILITY CROSSING		-+
LIGHT POLE	¢	•
ELECTRICAL TRANSFORMER OR PEDESTAL	E	
POWER POLE	-0-	
POWER POLE WITH LIGHT	$\overleftrightarrow$	×
GUY WIRE	-0	
STREET SIGN	þ	Þ
CONTOUR	749	(749)
SPOT ELEVATION	×(750.00)	+ 750.00
WETLANDS -		
FLOODWAY -		
FLOODPLAIN -		
HIGH WATER   EVEL (HWL)		
		~~~
	<sup>−</sup> <sup>∞</sup> <sup>6</sup> " ~ <sup>6</sup> "	<b>L</b> _/
	*	<b>→</b>
	– – –	 
	<b>T</b>	<b></b>
FENCE LINE, LEMPUKARY SILI	SF	
FENCE LINE, WIKE	X	—x—
FENCE LINE, CHAIN LINK OR IRON	()	0
FENCE LINE, WOOD OR PLASTIC		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		
ABBREVIA	ΓΙΟΝS	

MANHOLE

RADIUS

RIGHT-OF-WAY

STORM SEWER

TOP OF BANK

TOP OF CURB

TOP OF PIPE

WATER MAIN

SANITARY SEWER

TANGENCY OF CURVE

TOP OF FOUNDATION

INTERSECTION ANGLE

TOP OF FOUNDATION WALL

TOP OF SIDEWALK

NORMAL WATER LEVEL

POINT OF CURVATURE

POINT OF VERTICAL INTERSECTION

POINT OF TANGENCY

MH

PC

PT

R

PVI

ROW

SAN

ST

ΤВ

TC

TF

TΡ

ΤS

ΤW

WΜ

Δ

NWL

	OWNER'S DIRECTION.
2.	A GEOTECHNICAL REPORT HAS BORINGS OR INDICATED SAMP MADE AVAILABLE FOR THE CON FOR PURPOSES OF PLANNING,
3.	THE CONTRACTOR IS RESPONS
4.	THE CONTRACTOR SHALL PROM
5.	THE CONTRACTOR IS SOLELY INSTANCE RELY ON THE ENGIN
6.	QUESTIONS/CLARIFICATIONS V RESPONSES SHALL BE BINDING
7.	PRIOR TO START OF WORK, CO LIMITATIONS OF WORK ACCESS JOB EXTRAS.
8.	COMMENCEMENT OF CONSTRUTE TO COMPLETE THE PROJECT, W
9.	SHOULD ANY DISCREPANCIES OF THE DISCREPANCIES/CONFLIC SPECIFICATIONS AND PLANS, T
10.	THE CONTRACTOR SHALL, AT CONTRACTOR SHALL COMPLY V
11.	THE CONTRACTOR SHALL NOT JURISDICTIONAL ORDINANCES/
12.	SAFETY IS THE SOLE RESPONS CONNECTION WITH THE WORK.
13.	CONTRACTOR SHALL KEEP THE OPERATE UNDER GENERAL "GC
14.	THE CONTRACTOR SHALL INDE
15.	CONTRACTOR SHALL PROVIDE DELAY SHALL NOT BE THE RESP

16. IF ANY CITY FACILITIES ARE DAMAGED DURING CONSTRUCTION OR NEED RELOCATION DUE TO CONSTRUCTION, OWNER/DEVELOPER IS RESPONSIBLE FOR ALL COSTS. CITY STANDARDS TO BE FOLLOWED AND ALL WORK TO BE INSPECTED BY CITY OF WAUKESHA DPW - ENGINEERING DIVISION.

**PINNACLE** ENGINEERING GROUP

Z:\PROJECTS\2023\3134.00-WI\CAD\SHEETS\3134.00 COVER SHEET.DWG

BASE LINE

BOTTOM OF PIPE

CURB AND GUTTER

DEGREE OF CURVE

FINISHED FLOOR

FINISHED GRADE

FLOW LINE

FLOODPLAIN

FLOODWAY

FRAME

INVERT

EDGE OF PAVEMENT

FLARED END SECTION

FINISHED YARD GRADE

HIGH WATER LEVEL

LENGTH OF CURVE

CATCH BASIN

CENTERLINE

LONG CHORD OF CURVE

BP

C & G

CB

CL

D

EP

FES

FF

FG

FL

FP

FR

FW

FYG

INV

HWL

WISCONSIN OFFICE 15850 W. BLUEMOUND ROAD BROOKFIELD, WI 53005 (262) 754-8888

CHICAGO I MILWAUKEE : NATI

PLAN I DESIGN I DELIVER

www.pinnacle-engr.com

# **ENGINEERING IMPROVEMENT PLANS**

FOR

# **METALTEK INTERNATIONAL**

# WAUKESHA, WI

PLANS PREPARED FOR

# METALTEK INTERNATIONAL, INC.

**905 E SAINT PAUL AVE** WAUKESHA, WISCONSIN 53188



## **GENERAL NOTES**

THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE

> S BEEN PREPARED FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN LING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THERE FROM BY THE CONTRACTOR. DATA IS NVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.

SIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.

MPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS

RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH NEER'S ESTIMATE.

WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL G ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.

ONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, S, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF

UCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.

OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY CTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.

ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE WITH ALL PERMIT REQUIREMENTS.

TIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE 3 DAYS IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL /CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.

SIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN

E JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OOD HOUSEKEEPING."

EMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

3 DAYS' NOTICE FOR ANY WORK REQUIRING OBSERVATION BY THE VILLAGE. FAILURE TO PROVIDE THIS NOTICE MAY DELAY THE ABILITY OF THE CONTRACTOR TO COMPLETE THE WORK. HOWEVER, ANY PONSIBILITY OF THE VILLAGE OR ITS REPRESENTATIVES.

# METALTEK INTERNATIONAL

**COVER SHEET** 

1405 E SAINT PAUL AVE, WAUKESHA, WI 53188

## **INDEX OF SHEETS**

- **C-0 COVER SHEET EXISTING CONDITIONS & DEMOLITION PLAN** C-1
- C-2 SITE PLAN
- C-3 **GRADING & EROSION CONTROL PLAN**
- C-4 UTILITY PLAN
- C-5 **CONSTRUCTION DETAILS**
- C-6 CONSTRUCTION DETAILS
- LANDSCAPE PLAN L-1
- LANDSCAPE GENERAL NOTES & DETAILS L-2

## **PROJECT CONTACTS**

DESIGNER CONTACT AARON KOCH 20725 WATERTOWN RD. SUITE 100 BROOKFIELD, WI 53186 (262) 754-8888

ALL SITE IMPROVEMENTS AND CONSTRUCTION SHOWN ON THE PLANS SHALL CONFORM TO THE CITY OF WAUKESHA **DEVELOPMENT HANDBOOK & INFRASTRUCTURE** SPECIFICATIONS. WHERE THE PLANS DO NOT COMPLY, IT SHALL BE THE SOLE RESPONSIBILITY AND EXPENSE OF THE DEVELOPER TO MAKE REVISIONS TO THE PLANS AND/OR CONSTRUCTED INFRASTRUCTURE TO COMPLY.



ш 

**C-6** 



	AARON E. KOCH E-34639 MENOMONEE FALLS, WIS. ONAL ENG 04/03/24	GRAPI 0		LE (FEET) 40'	G CONDITION	
REVISIONS		34.00	AEK 04/24 "=20'	SHEET	<b>IN</b>	
OMMENTS    04/03/24		0. <b>31</b>	TE <u>03/</u> (	<b>C-1</b>	SH SH	
		G JOB N	G PM ART DA <sup>-</sup> ALE	<b>C-6</b>	© COP	



SITE PLAN

#### LIGHT DUTY PAVEMENT (SEE DETAIL SHEET C-5)

#### CONCRETE SIDEWALK (SEE DETAIL SHEET C-5)

E

- (A)**3" SOLID WHITE STRIPE**
- (B) 3" DIAGONAL AT 45° SPACED 2' O.C.
- (C)R7-8 HANDICAP PARKING SIGN (SEE DETAIL SHEET C-5)
- (D)18" CURB & GUTTER (SEE DETAIL SHEET C-5)
- BUILDING DOOR SLAB (2% MAX SLOPE WITHIN DRIVE IN OR MAN DOOR)
- (F) TAPER CURB HEADS (SEE DETAIL SHEET C-5)
- (16) PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

### SITE DATA TABLE

SITE AREA: 38,415 SF (0.88 AC) DISTURBANCE AREA: 38,415 SF (0.88 AC)

EXISTING PERVIOUS AREA: 2,007 SF (0.05 AC)

EXISTING IMPERVIOUS AREA: 36,409 SF (0.83 AC) PROPOSED PERVIOUS AREA: 16,307 SF (0.37 AC)

PROPOSED IMPERVIOUS AREA: 22,109 SF (0.51 AC)

PROPOSED PARKING STALL COUNT: - SURFACE PARKING: 29 STALLS 2 ADA STALLS - TOTAL PARKING: 29 STALLS

THE CONTRACTOR SHALL NOTIFY ALL INTERESTED **GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY** THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE **3 DAYS IN ADVANCE OF CONSTRUCTION TO COMPLY WITH** ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.

ALL WORK WITHIN CITY RIGHT OF WAY AND CITY EASEMENTS TO BE IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS AND DETAILS.

NOTIFY CITY ENGINEERING DEPT. 5 DAYS PRIOR TO WORK IN CITY RIGHT OF WAY.

LIMITS OF FINAL CITY STREET PAVEMENT AND CURB GUTTER REMOVAL AND REPLACEMENT TO BE MARKED BY CITY ENGINEERING STAFF IN FIELD.

		AARON E. KOCH E-34639 MENOMONEE FALLS, WIS. ONAL COMMUNICATION MENOMONEE ALLS, WIS. ONAL COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION COMUNICATION COMMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNICATION COMUNI	GRAP 0	HICAL SCA	H LE (FEET) 40'	Z
	REVISIONS		34.00	AEK )4/24 ''=20'	SHEET	
<u>1</u> PER CITY COMMENTS	<u>04/03/24</u>		. <b>31</b>	E_03/C	C-2	
			PEG JOB No	PEG PM START DA1 SCALE	C-6	© TT

Ο Ŭ www.pinnacle-engr. 



**GRADING & EROSION CONTROL PLAN** 



0

U

engr.

www.pinnacle

чů,

ALL WORK SHALL BE IN CONFORMANCE WITH THE DNR WPDES PERMIT AND CITY OF WAUKESHA EROSION CONTROL PERMIT. SITE SEQUENCING IS ANTICIPATED BASED ON THE BEST INFORMATION AVAILABLE PRIOR TO CONSTRUCTION, DEVIATIONS FROM THE SEQUENCE MAY OCCUR WHEN THERE IS GOOD REASON TO DO SO. ALL CHANGES SHALL BE DOCUMENTED IN WRITING AND REVIEWED/APPROVED BY THE OWNER AND/OR

INSTALL PERIMETER SILT FENCE, INLET PROTECTION AND TEMPORARY CONSTRUCTION ENTRANCE.

ENGINEER IF NECESSARY.

- REMOVAL OF ALL SITE FEATURES THAT INTERFERE WITH NEW DEVELOPMENT INCLUDING ASPHALT, CONCRETE, CURB & GUTTER, FENCES, LIGHT POLES, UTILITIES, TREES, LANDSCAPING & ANY FOUNDATIONS.
- STRIP AND STOCKPILE TOPSOIL. INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE. STABILIZE STOCKPILE BY MULCHING, VEGITATIVE COVER, TARP, OR OTHER MEANS IF REMAINING MORE THAN 20 DAYS. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS OR TEMPORARY
- SEDIMENT BASIN/TRAP AS NEEDED. BEGIN BUILDING CONSTRUCTION.
- INSTALL UTILITY PIPING AND STRUCTURES. IMMEDIATELY INSTALL INLET
- PROTECTION. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSE, PLACEMENT OF CURBS, PAVEMENT, WALKS, ETC
- PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
- EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE **3 DAYS IN ADVANCE OF CONSTRUCTION TO COMPLY WITH** ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.

ALL WORK WITHIN CITY RIGHT OF WAY AND CITY EASEMENTS TO BE IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS AND DETAILS.

NOTIFY CITY ENGINEERING DEPT. 5 DAYS PRIOR TO WORK IN CITY RIGHT OF WAY.

						I CONTROL
	AARON E. KOCH E-34639 MENOMONEE FALLS, WIS. NAL E-04/03/24	GR			H LE (FEET)	EROSION
	CZR	0		1" = 20'	40'	 
REVISIONS    04/03/24		_	Vo. <u>3134.00</u> AEK	\TE_03/04/24 1"=20	SHEET C-3	ADIN (

1 PER CITY COMMENTS

PLAN



	LEGEND
۲	SANITARY SEWER MANHOLE
۲	STORM SEWER MANHOLE
•	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	VALVE BOX
≪	FIRE HYDRANT
<b></b>	SANITARY SEWER
	FORCE MAIN
<b></b>	STORM SEWER
))	DRAIN TILE
— w —	WATER MAIN
FP	FIRE PROTECTION
	UTILITY CROSSING
IÉI	ELECTRICAL CABLE
IGI	GAS MAIN
ITI	TELEPHONE LINE
IOHWI	OVERHEAD WIRES
	ELECTRICAL TRANSFORMER OR PEDESTAL
	POWER POLE
$\times$	POWER POLE WITH LIGHTS
Þ	STREET SIGN
-200000000000000000-	UTILITY TO BE REMOVED

THE CONTRACTOR SHALL NOTIFY ALL INTERESTED **GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY** THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE **3 DAYS IN ADVANCE OF CONSTRUCTION TO COMPLY WITH** ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.

ALL WORK WITHIN CITY RIGHT OF WAY AND CITY EASEMENTS TO BE IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS AND DETAILS.

NOTIFY CITY ENGINEERING DEPT. 5 DAYS PRIOR TO WORK IN CITY RIGHT OF WAY.

ALL SANITARY SEWER TO BE INSTALLED IN ACCORDANCE TO CITY OF WAUKESHA STANDARDS. ALL APPLICATIONS AND FEES FOR SANITARY SEWER MUST BE COMPLETED AND PAID PROIOR TO CONNECTION TO SEWER SYSTEMS.

ANY UTILITY WORK IN THE RIGHT OF WAY AND ALL SANITARY CONNECTIONS TO BE INSPECTED BY CITY. NOTIFY CITY 72 HOURS IN ADVANCE OF CONNECTING TO SEWER.

	AARON E. KOCH E-34639 MENOMONEE FALLS, WIS. VONAL ENOMONEE FALLS, WIS. VONAL ENOMONEE FALLS, WIS.	GRAP 0	HICAL SCA	LE (FEET) 40'	PLAN
REVISIONS		34.00	AEK )4/24 "=20'	SHEET	<b>3</b>
<u>1 PER CITY COMMENTS</u> <u>04/03/24</u>		31:	<u>03/C</u>	<b>C-4</b>	
			РМ ХТ DATE _E	CE	
			PEG STAF SCAL	<b>L-D</b>	



CAGO I MILWAUKEE : NA

1405 E SAINT PAUL AVE, WAUKESHA, WI 53188

# DETAIL CTION D **L**R E S S S S CODVR

04/03/24

SURFAC

#137 06/01/15

## SHEET **C-5** OF **C-6**

#### GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- 1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS. 2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- 3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- 4. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- THIS PROJECT
- 5. 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 ADS N-12. FOR PIPE 10" OR LESS IN DIAMETER, PVC. ASTM D-3034, SDR-26, MAY ALSO BE USED. WHERE SPECIFICALLY REQUIRED, REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS), MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM 6. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH 7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 INSERTA WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS. TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES. 6. ALL STORM SEWER PIPE WITHIN THE VILLAGE RIGHT-OF-WAY (ROW) SHALL BE REINFORCED CONCRETE PIPE (RCP). ANY CULVERTS WITHIN THE VILLAGE ROW SHALL BE RCP OR CORRUGATED METAL PIPE IN ACCORDANCE
- 8 SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY. 9. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- 10. TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.

TRENCH: CLAY DAMS SHOULD EXTENT TO 3 FEET BELOW SUBGRADE IN PAVED AREAS OR 3 FEET FROM FINAL GROUND SURFACE IN UNPAVED AREAS.

THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEPT IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

- 11. THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS 12. CLAY CHECK DAMS SHALL BE CONSTRUCTED TO PREVENT MIGRATION OF WATER WITHIN THE TRENCH SECTION ON PUBLIC SANITARY SEWER, SANITARY FORCE MAIN, WATER MAIN TRENCH SECTIONS. CLAY DAMS SHALL BE 10 FEET ALONG THE LENGTH OF A PIPE; CLAY DAMS SHALL BE KEYED INTO THE NORMAL TRENCH WALL SO THAT THE WIDTH OF THE DAM IS 2 FEET WIDER THAN THE NORMAL TRENCH WALL ON EACH SIDE OF THE
- SPECIFICATIONS FOR GRADING & EROSION CONTRO
- 1. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER 3. SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES
- SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE. 1. AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1 🗄 INCH DIAMETER LIMESTONE TRAFFIC BOND AGGREGATE BASE COURSE UNLESS NOTED OTHERWISE. SUBSTITUTION AND/OR RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE 4. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WITTING BEFORE ANY DEVIATIONS ARE MADE.
- 5. IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY, ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE 2. SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS. APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE. AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT. AND EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK. MAXIMUM LIQUID LIMIT (ASTM-D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTFULLY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN 4. ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460 LT 58-28 S IS REQUIRED EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER. PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT, IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNITED SOIL CLASSIFICATION SYSTEM (ASTM CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS , GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE D-2487). FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7, 602.3.2.5, AND 601.3.4-5, OF THE STANDARD SPECIFICATIONS. CONSTRUCTION JOINTS SHALL BE SPACED NOT FURTHER THAN 10' FOR PAVEMENT, 10' FOR THE STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY. OR 5 PERCENT SIDEWALKS (OR THE WIDTH OF THE WALK), AND 15' FOR CURB. EXPANSION JOINTS SHALL BE SPACED NO FURTHER THAN 50' FOR PAVEMENT, 300' FOR CURB, AND 100' FOR WALKS. CONCRETE SHALL BE FINISHED PER HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED. COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY, DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.
- . NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED. 7. SUBGRADE TOLERANCES ARE +/-1" FOR LANDSCAPE AREAS AND +/-  $\frac{1}{2}$ " FOR ALL PAVEMENT AND BUILDING AREAS.
- 8. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE.
- TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD 9. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL
- NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER. 10. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN

#### **EROSION CONTROL SPECIFICATIONS & REQUIREMENTS**

PERMIT HAS BEEN OBTAINED.

SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE FUMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (WPDES PERMIT NO. WI-S067831-4) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL ROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES

ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS

- QUALIFIED PERSONNEL: (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH OR MORE PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERNAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT REPORTING SHALL BE IN ACCORDANCE WITH THE GENERAL PERMIT CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- POST WNDR CERTIFICATE OF PERMIT COVERAGE ON SITE ANI MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED THE SITE IS STABILIZED AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
- KEEP COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- MODIFICATIONS TO THE APPROVED SWAPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED I MODIFICATIONS CONFORM TO BMPS. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- OWNER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
- INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED
- WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL
- REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS.
- ), INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCES PRIOR TO ANY LAND-DISTURBUNG ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCES.
- . INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WONR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
- 2. WHERE POSSIBLE. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.

14. PUMPS MAY BE USED AS BYPASS DEVICES IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO APPROVED FILTER BAG OR APPROVED SETTLING DEVICE. PROTECTION AND MAINTAIN 15 PROVIDE ANTI-SCOUR NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING TO

TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER

CONTAMINATION OR IF DEWATERING WILL OCCUR FROM A

HIGH CAPACITY WELL (70 GPM OR MORE). DEWATERING ONLY

AFTER THE APPROPRIATE WONR DEWATERING DISCHARGE

- EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF ACCORDANCE WITH WDNR TECHNICAL STANDARD DEWATERING #1061
- 6. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WONR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP #1063.
- 17. CONSTRUCT AND PROTECT THE BIOINFLTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1004. BIOINFILTRATION MAY BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DO NOT EXCAVATE FINAL 1' OR INSTALL STONE/ENGINEERED MEDIA UNTIL UPSTREAM AREA IS STABILIZED. WHEN THIS ACCOMPLISHED, REMOVE THE FINAL 1' PLUS ANY SOIL WHICH APPEARS TO BE IMPACTED BY SEDIMENT AND COMPLETE CONSTRUCTION OF **BIOINFILTRATION AREA**
- 3. INSTALL AND MAINTAIN SILT FENCING PER WONR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
- REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY, REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
- ). INSTALL AND MAINTAIN FILTER SOCK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS
- IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
- . IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL 34. NOTIFY THE OWNER IMMEDIATELY IF THERE IS A DISCHARGE REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH. TACKIFIER AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
- 23. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
- . SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE MUNICIPALITY. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATEL

- 13 NOTIEY OWNER & ENGINEER IF DEWATERING IS SCHEDULED 25 OWNER IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES #1068 26. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTE OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW
  - THESE MATERIALS TO BE CARRIED BY RUNOFF INTO TH RECEIVING CHANNEL. 27. COORDINATE WITH THE OWNER. ENGINEER AND DNF REPRESENTATIVE TO UPDATE THE LAND DISTURBANCE
  - PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSE LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. TH DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SIL FENCE, HAY BALES, FILTER SOCKS OR COMPACTED EARTHEN BERMS
  - 28. FOR NON-CHANNELIZED FLOW ON DISTURBED C CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE OF THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIS (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
  - 29. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR TH SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON TH PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WOOT'S WISDOT PRODUCT ACCEPTABILITY US (PAL): INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
  - MAKE PROVISIONS FOR WATERING DURING THE FIRST WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
  - 31. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTRO MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC) OR AS DIRECTED BY OWNER MUNICIPALITY. OR DNR REPRESENTATIVE.
  - 32. OWNER IS RESPONSIBLE FOR COMPLYING WITH AL APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING O CONTAMINATED MATERIALS. SITE-SPECIFIED INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OF GROUNDWATER CONTAMINATION CAN BE FOUND ON WNDR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM PUBLIC DATABASE.
  - MAINTAIN SOIL EROSION CONTROL DEVICE THROUGH TH DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS ARE FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCE ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
  - OF SEDIMENT AND/OR OTHER CONTAMINANTS.

PLAN I DESIGN I DELIVER www.pinnacle-engr.com

WISCONSIN OFFICE:

15850 W. BLUEMOUND ROAD

BROOKFIELD, WI 53005

(262) 754-8888

**PINNACLE** ENGINEERING GROUP HICAGO I MILWAUKEE : NATIO

Z:\PROJECTS\2023\3134.00-WI\CAD\SHEETS\3134.00-WI CONSTRUCTION DETAILS.DWG

#### SPECIFICATIONS FOR PRIVATE UTILITIES

- 1. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN. 2. ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS, CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE
- 3. PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
- 4. CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL 5. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS
- WITH THE VILLAGE'S STANDARDS AND SPECIFICATIONS FOR DEVELOPMENT SECTION 1-7 (10) 7. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MADE WITH POLYVINYL CHLORIDE STANDARD DIMENSION RATIO 35 WYE FITTINGS. A MINIMUM OF 6' OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- 8. MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE, PVC SHALL BE AWWA C-900. DI SHALL BE AWWA C151, CLASS 52 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6' COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONRISING STEM, RESILIENT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE
- 9. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. 10. TRACER WIRE (NO. 8 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END.
- 11. MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- 12. PRIOR TO FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE, INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- SPECIFICATIONS FOR PAVING

## METALTEK INTERNATIONAL

**CONSTRUCTION DETAILS** 

## 1405 E SAINT PAUL AVE, WAUKESHA, WI 53188

# DETAI NOI. 2 S **S**

