

## **UNION STREET DAM FISH PASS**

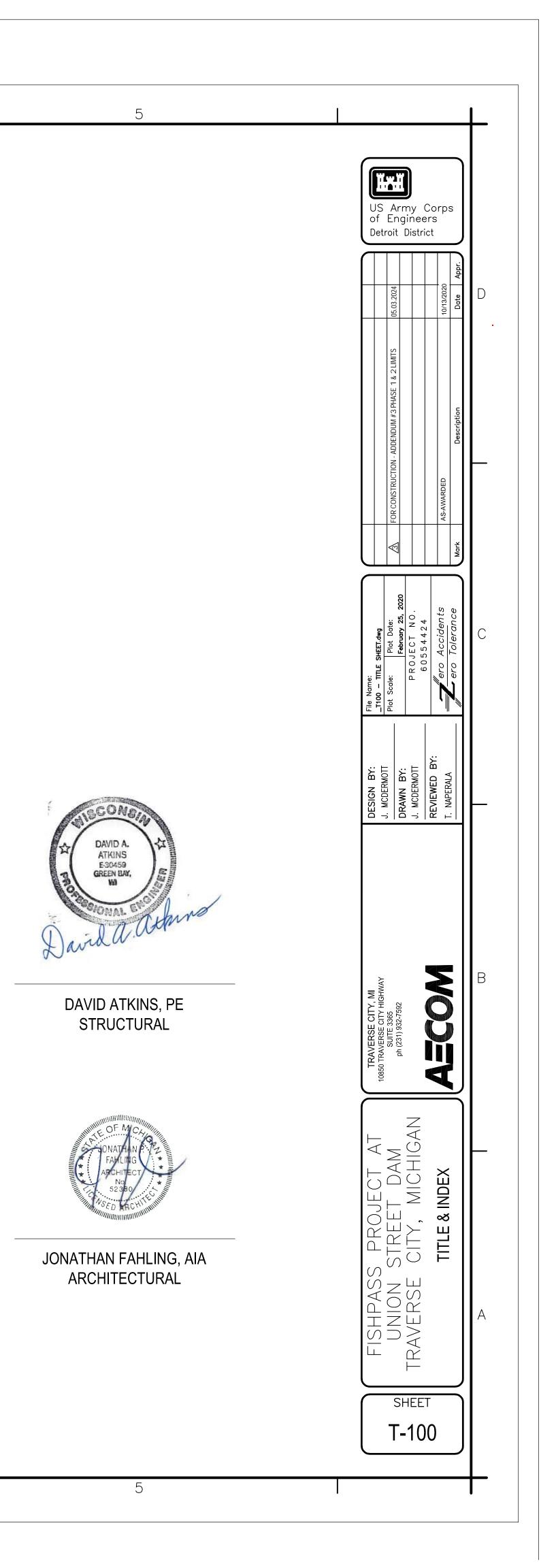


TROY NAPERALA, PE PROJECT MANAGER CIVIL & HYDRAULICS

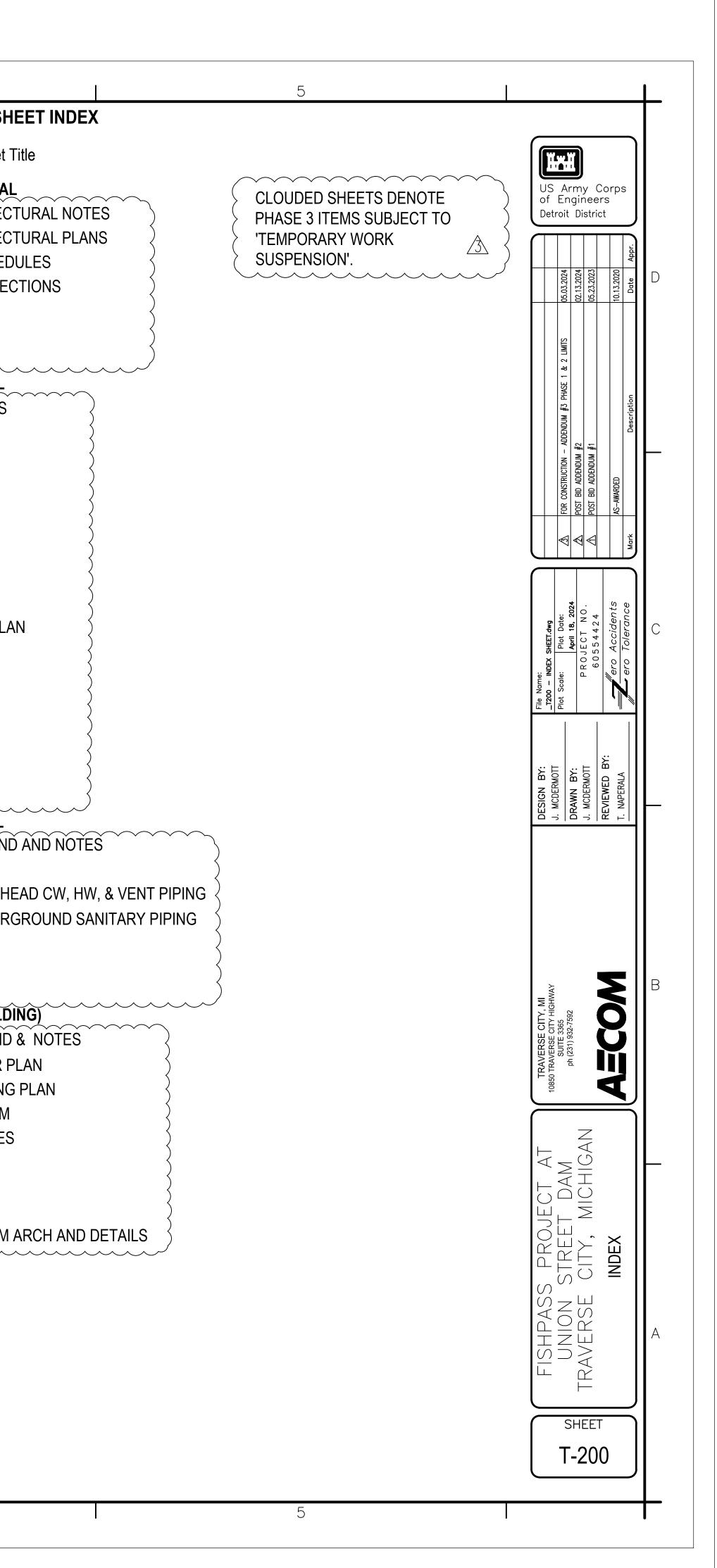


VIKRAM GAUTAM, PE GEOTECHNICAL

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BTN CB C & CL CO CO CO CO CO CO	STORM CATCH BASIN G CURB & GUTTER CENTER LINE CLEAN OUT NC. CONCRETE R CONTRACTING OFFICER'S REPRESENTATIVE C CITY of TRAVERSE CITY C CONTROL POINT WITH NUMBER	OF WOR APPLICA CONFOF EXECUTI GOVERN	RACTOR SHALL R K FOR ALL PERMI BLE PERMITS. MANCE WITH AI ON OF THE WO IMENT. ADDITION ED IN THE SPECIFI
C.Y DIA E	. DIAMETER EASTING	10. ALL NOI PLANS.	N-PAVED DISTUR
	7./EL. ELEVATION EXIST. EXISTING FABRIC ENCAPSULATED SOIL E. FINISH FLOOR ELEVATION FIBER REINFORCED PIPE	11. THE CO RIGHT-C PROPER	NTRACTOR SHAI F-WAY AND E TY TO ACCESS TH PPERTY OWNER IS
GA HYI INV I.E. LB LF	L. GALLON D. HYDRANT	HISTORI AND A CONTRA	HAN PLANS THAT C CONSTRUCTION PPURTENANCES. CTOR SHOULD SU 65 AND 1967 EXI
MH N PP	I MANHOLE (ANY UTILITY) NORTHING POWER POLE	13. TOPOGF	APHY SHOWN HI
PV( PVI	MT. PAVEMENT	14. WATER	LEVEL IS SUBJECT
P.C RCI S.B SN	<ul> <li>REINFORCED CONCRETE PIPE</li> <li>SOIL BORING</li> </ul>	CONSTR	
SP\ S.S. STN	V TEMPORARY SHEET PILE WALL STAINLESS STEEL A STORM SYSTEM		ES SHALL BE TAI
S.Y T.P TYF Y.D	. TOP OF PIPE P. TYPICAL		RK FOR THE CONE S REQUIRED UND
W/ WN WS	L WATER LINE // WATER MAIN	ELECTRONIC F	II FS
<u>GEN</u>	IERAL NOTES	AFTER BIDS H	AVE BEEN SUBM
1.	THE CONTRACTOR SHALL HAVE SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY.	<u>SPECIAL NOTES</u> 1. PROTECTIO	5
2.	THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL HEALTH AND SAFETY STANDARDS, LAWS, AND REGULATIONS TO INCLUDE USACE EM 385-1-1.	DURING THE E SHALL BE RES FROM FLOODS	XECUTION OF TH PONSIBLE FOR F AND DAMAGE O IEL AFTER WORK
3.	THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT AND MAINTAIN ANY EXISTING UTILITY SERVICES SHOWN ON THESE PLANS AND ANY OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS AND SHOULD BE INTERPRETED AS SUCH. THE CONTRACTOR IS REQUIRED TO PROVIDE A MARK-OUT OF ALL UTILITIES WITHIN THE AREA OF WORK PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR TO CALL MISS DIG (1-800-482-7171) TO OBTAIN A MARK-OUT OF PUBLIC UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT THE PRIVATE UTILITIES LISTED ON THIS SHEET TO ARRANGE FOR MARK-OUT OF PRIVATE UTILITIES NOT LOCATED BY THE MISS DIG SYSTEM. CONTRACTOR SHALL BE AWARE OF HIGH-VOLTAGE OVERHEAD ELECTRIC LINES. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES AND ALL COSTS TO REPAIR DAMAGE TO ANY UTILITY (SEWERS, WATER, GAS, ELECTRICAL, CABLE, UNDERDRAIN SYSTEMS, & SPRINKLER SYSTEMS, ETC.) KNOWN, OR OTHERWISE, SHALL BE BORNE SOLELY BY THE CONTRACTOR. ACCEPTANCE & APPROVAL OF SAID REPAIRS SHALL BE PER THE OWNER OF THE DAMAGED UTILITY.	UNION STREET APPURTENANG CHANNEL, RI RESTORATION LIMITED TO, MATERIALS, G CONSTRUCTIO BOULDERS, CO AND RESTORA PROJECT LIMIT MANAGES WA UNION STREET THE MDEQ H INFORMATION DAM:	OF THE WORK SH DAM INCLUDIN CES, CONSTRUCTI ESEARCH BUILD AFTER CONSTRUC CONCRETE REMO CONSTRUCTION N OF INSTREAM ONSTRUCTION OF TION OF THE RIV TS. THIS WORK T TER LEVELS ON DAM WITHIN TH YDROLOGIC STUI FOR THE BOAR
4.	THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO ENSURE ALL UTILITY SERVICES WILL REMAIN FUNCTIONAL DURING THE CONSTRUCTION PERIOD.		AGE AREA OF 27 52 SQUARE MILES
5.	THE CONTRACTOR SHALL HAVE A FULL SIZE SET OF THE MOST RECENTLY APPROVED FINAL PLANS MARKED "AS AWARDED" ON THE JOB SITE AT ALL TIMES.	SITE DATUM THE DATUM I NAVD88 DATU	JSED FOR THIS I M.
6.	UPON COMPLETION OF EACH DAY'S WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE WORK AREA SECURED AND FREE OF HAZARDS AND SHALL PROVIDE ALL NECESSARY TEMPORARY SIGNS, WARNING DEVICES, AND BARRICADES.		
7.	THE CONTRACTOR SHALL KEEP ACCURATE AND LEGIBLE RECORDS OF ALL CHANGES OF WORK THAT OCCUR DURING CONSTRUCTION AND INFORMATION ON "AS-BUILT" CONDITIONS. DOCUMENTATION OF CHANGES AND AS-BUILT INFORMATION SHALL BE RECORDED ON AN APPROVED SET OF FULL SIZE FINAL PROJECT PLANS AND DELIVERED TO THE COR WITHIN 90 DAYS AFTER COMPLETION OF WORK.		
8.	THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY, STRUCTURES, UTILITIES AND LANDSCAPING FROM ANY DAMAGE, EROSION AND SILTATION THAT RESULTS FROM THE CONSTRUCTION BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, SILT FENCE, DIKES, ETC.) UNTIL SUCH TIME THE PROJECT IS COMPLETED AND ACCEPTED BY THE GOVERNMENT.		
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**REFER TO SPECIFICATION SECTION 01 11 00 SUMMARY** AIT REQUIREMENTS AND GUIDANCE IN OBTAINING THE THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICABLE PERMIT REQUIREMENTS DURING THE VORK AND PRIOR TO FINAL ACCEPTANCE BY THE ONAL DETAILS ON CONTRACTOR RESPONSIBILITIES ARE FICATIONS.

RED AREAS SHALL BE RESTORED AS SHOWN ON THE

ALL ACCESS THE WORK AREAS USING THE PUBLIC EXISTING EASEMENTS ONLY. CROSSING PRIVATE THESE AREAS WITHOUT WRITTEN PERMISSION FROM IS PROHIBITED.

AT ARE ALREADY PART OF THE CONTRACT DOCUMENTS, ON DOCUMENTS ARE ALSO AVAILABLE FOR THE DAM IF ADDITIONAL INFORMATION IS DESIRED, SUBMIT REQUEST TO THE COR. HISTORIC PLANS FROM XIST AND ARE AVAILABLE UPON REQUEST.

HERE REPRESENTS CONDITIONS EXISTING AT THE TIME MADE (SUMMER 2017).

CT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR ATION OF WATER LEVELS THAT MAY EXIST DURING

AKEN TO PREVENT DEBRIS FROM FALLING FROM THE AND BEING TRANSPORTED DOWNSTREAM.

IDITIONS SHOWN AS "PROPOSED", "FINISH", AND DER THIS CONTRACT.

MITTED AND A SELECTION IS MADE, ELECTRONIC FILES INTRACTOR FOR LOCATING KEY DESIGN ITEMS.

HE WORK SHOWN ON THESE PLANS, THE CONTRACTOR PROTECTION OF THE WORK AREA AND EQUIPMENT OR DELAYS DUE TO FLOODS. NO EQUIPMENT SHALL BE K HOURS.

SHOWN ON THESE PLANS IS THE MODIFICATION OF THE NG DEMOLITION OF EXISTING DAM STRUCTURES AND TION OF NEW WEIRS, BYPASS CHANNEL, FISH-SORTING DING. PEDESTRIAN BRIDGE. PARK AREAS. AND UCTION. THE WORK GENERALLY INCLUDES, BUT IS NOT /IOVAL, REMOVAL AND DISPOSAL OF FILL/SEDIMENT OF THE BYPASS AND FISH-SORTING CHANNELS, M HABITAT INCLUDING CHANNEL BED MATERIAL AND OF SHOWN BRIDGES/BUILDINGS AND PARK FEATURES, IVER BANK AND OTHER DISTURBED AREAS WITHIN THE WILL BE CONDUCTED WHILE CONTRACTOR ACTIVELY THE BOARDMAN RIVER AND FLOW OVER/THROUGH HE CONSTRAINTS SPECIFIED IN THESE PLANS.

UDIES UNIT PROVIDED THE FOLLOWING HYDROLOGY RDMAN RIVER AT THE LOCATION OF UNION STREET

275.47 SQUARE MILES AND CONTRIBUTING DRAINAGE

PROJECT AND ALL ELEVATIONS SHOWN ARE IN THE

DETAILED HYDRAULIC ANALYSIS (INCLUDING SURFACE WATER ELEVATIONS) FOR BOTH EXISTING AND PROPOSED CONDITIONS ARE AVAILABLE IN THE TECHNICAL MEMORANDUM 2, INCLUDED IN THE BASIS OF DESIGN APPENDIX FOR THIS PROJECT.

MDEQ 50 % FREQUENCY DISCHARGE VALUES (HALF OF FLOWS ARE GREATER AND HALF ARE LESS) FOR THE ALL MONTHS DURING WHICH CONSTRUCTION WILL TAKE PLACE:

JANUARY 260 CFS FEBRUARY 250 CFS MARCH 290 CFS APRIL 400 CFS MAY 320 CFS JUNE 280 CFS JULY 250 CFS AUGUST 240 CFS SEPTEMBER 240 CFS OCTOBER 260 CFS NOVEMBER 280 CFS DECEMBER 280 CFS

MDEQ PROVIDED ANNUAL PEAK FLOOD DISCHARGE VALUES: 50% (2 YEAR) 850 CFS 10% (10 YEAR) 1200 CFS 2% (50 YEAR) 1700 CFS

1% (100 YEAR) 1800 CFS 0.5% (200 YEAR) 2000 CFS 0.2% (500 YEAR) 2400 CFS

## PRECONSTRUCTION MEETING

CONTRACTOR SHALL COORDINATE AND ARRANGE FOR A PRECONSTRUCTION MEETING AT THE SITE PRIOR TO THE START OF CONSTRUCTION TO BE ATTENDED BY THE CITY OF TRAVERSE CITY, GREAT LAKES FISHERY COMMISSION, CONTRACTOR, AND COR. PRIOR TO THE TIME OF THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL HAVE THE LIMITS OF THE WORK (GRADING AND ACCESS ROUTES) STAKED AND THE LOCATIONS OF EXISTING UTILITIES MARKED OUT. THE PURPOSE OF THIS IS TO CONFIRM THE PROPOSED WORK WILL NOT CONFLICT WITH THE ADJACENT SITES. IF A CONFLICT IS IDENTIFIED AT THAT TIME, THE CONTRACTOR SHALL REQUEST DIRECTION FROM THE GOVERNMENT PER THE CONTRACT.

NAME OF OV

TRAVERSE CI ATTENTION: CONSTRUCTI 1131 HASTIN TRAVERSE CI RSOLAK@TCL 231-932-4554

DTE **ATTENTION:** PROJECT COC 609 BJORNSC **BIG RAPIDS**, LAWRENCE.E 231-592-324

**CONSUMERS** ATTENTION: 821 HASTING TRAVERSE CI CURTIS.HANS 231-929-626

**EVERSTREAM** ATTENTION: **3950 SPARKS GRAND RAPI** BKUNTER@E 616-608-894

ATT ATTENTION: **TEAM LEADE** 

142 E. STATE TRAVERSE CI KD1484@AT 231-941-270

**CITY OF TRAV** 231-922-4467

## CONSTRUCTION OF CITY OWNED UTILITIES

ALL UTILITIES THAT SHALL BE OWNED BY THE CITY OF TRAVERSE CITY AT THE CONCLUSION OF THE PROJECT SHALL BE CONSTRUCTED TO APPLICABLE CITY STANDARDS OR ORDINANCES. THESE STANDARDS INCLUDE (BUT ARE NOT LIMITED TO) WATER MAINS, STORM SEWERS AND SANITARY SEWERS.

ALL CONNECTIONS TO EXISTING CITY UTILITIES SHALL BE COORDINATED WITH THE CITY DEPARTMENT OF MUNICIPAL UTILITIES AT 231-922-4900.

## PUBLIC UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED ON OUR SURVEYS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO IT'S ACCURACY AND THE LOCATION OF EXISTING UTILITIES. SEE SPECIFICATION 01 11 00 AND BELOW.

WNER	TYPE OF UTILITY
CITY LIGHT AND POWER : ROD SOLAK FION COORDINATOR NGS ST. CITY, MI 49686 CLP.ORG 54	ELECTRICAL
: LARRY BOURKE ORDINATOR SON RD. MI 49307 BOURKE@DTEENERGY.COM 44	GAS M
S ENERGY : CURTIS HANSEN G STREET CITY, MI 49684 ISEN@CMSENERGY.COM 65	ELECTRICAL
M : BRIAN KUNTER S DR SE PIDS, MI 49546 EVERSTREAM.NET 45	TELECOM
: KATHY DOHM-BEISER ER E STREET, FLOOR 2 WEST CITY, MI 49684 TT.COM 07	TELECOM
VERSE CITY	SANITARY, STORM SEWER, W

	US Army Corps of Engineers Detroit District							,			
			05.03.2024	1202.00.00				10/13/2020	Date Appr.	D	
			FOR CONSTRUCTION - ADDENDLIM #3 PHASE 1 & 21 IMITS						Description		
			A FOR CONSTRUCT					AS-AWARDED	Mark		
	File Name:	G100 – GENERAL NOTES.dwg	Plot Scale: Plot Date:	March 05, 2020	PROJECT NO.	60554474 60554474		ero Accidents	ero Tolerance	С	
	DESIGN BY:			DRAWN BY:			REVIEWED BY.				
	TRAVERSE CITY. MI	10850 TRAVERSE CITY HIGHWAY	SUITE 3365	ph (231) 932-7592						В	
			INION STREFT DAM	UNION JUNELI DAM	TRAVERSE SITY MICHICAN			GENERAL NOTES		A	
dig.				SH G							
Ι										+	

W.W.W



JOHN MCWETHY 400 BOARDMAN AVE TRAVERSE CITY, MI 49684 JMCWETHY@TRAVERSECITYMI.GOV WATER MAIN

