ADDENDUM #2 Water System Improvements – Proposed Booster Pump Station Village of Port Sanilac April 24, 2024

The following clarifications and additions are to be incorporated into the construction plans, bidding and contract documents:

- 1. Refer to Drawing Sheets S-0, A-1, and A-4. (see attached) Lintel over door 100 and 101 has been revised, see detail 4/A-4.
- Section 33 12 23 Skid Mounted Water Booster Pumping Systems, 1.02.A.1 Qualification of Manufacturers

The following additional suppliers have been approved as suppliers for this project.

- a. Precision Pumping Systems of Boise ID, Local Representative Solberg Knowles and Associates Joe Ciurlino (412) 737-5543
- Fluid Cooling Systems / Velocity Pump & Controls of Burton, MI Dan Orlowski (586) 533-8759

These manufacturers have indicated that they can meet all the specifications as well as BABAA requirements. The manufacturers will be responsible for modifying their standard designs to meet the requirements of the specifications.

Each bidder must acknowledge receipt of this addendum of the Bid Section C-410 Article 7.03.A.

END OF ADDENDUM

Prepared by: ROWE Professional Services Company 540 S. Saginaw Street Suite 200 Flint, MI 48502 (810) 341-7500

WOOD FRAMING

- 1. DIMENSIONAL FRAMING MATERIAL SHALL BEAR THE GRA HAVE MET THE REQUIREMENTS FOR:
- A. PLATES AND BLOCKING HEM FIR NO. 2 OR BETTER 2. ROOF SHEATHING AT THE SLOPED ROOF AREAS SHALL BE 1/2 INCH APA RATED WITH A PANEL SPAN RATING OF
- 32/16 AND SHALL BE EXTERIOR GRADE. 3. NAIL ROOF DECK TO SUPPORTS WITH 8D NAILS SPACED AT 6 INCHES O.C. AT SUPPORTED EDGES AND AT 12
- INCHES O.C. AT INTERMEDIATE SUPPORTS.
- DETAILS FOR SPECIFIC REQUIREMENTS.
- 5. ALL FRAMING SHALL BE ERECTED TRUE LEVEL AND/OR PLUMB. MEMBERS SHALL BE SECURELY NAILED OR BOLTED IN PLACE AS DETAILED AT THE PROPER LOCATIONS OR SPACING INDICATED. ALL FRAMING MEMBERS SHALL BE OF FULL LENGTH WITHOUT PIECES ADDED OR SPLICED. FURRING, BLOCKING, NAILERS, ETC. SHALL BE SECURELY ANCHORED IN PLACE.
- 6. COMPLY WITH THE RECOMMENDATIONS AND PRACTICES OF THE AITC, NFPA AND TIP FOR THE INSTALLATION OF ALL WOOD FRAMING.
- 7. ALL WOOD IN CONTACT WITH EXTERIOR, MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
- 8. ALL WOOD PROVIDED SHALL BE SEASONED WITH MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF Dressing

WOOD TRUSSES

- 1. ALL WOOD TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS: TOP CHORD DEAD LOAD 10 PSF + WEIGHT OF TRUSS + WEIGHT OF HVAC UNITS BOTTOM CORD DEAD LOAD 10 PSF + WEIGHT OF TRUSS TOP CHORD LIVE LOAD 20 PSF - SEE STRUCTURAL GENERAL NOTES SHEET A-1 FOR SNOW LOAD
- 2. THE EXTENT OF ROOF TRUSSES SHOWN ON THE PLANS IS FOR REFERENCE ONLY. THE FABRICATOR SHALL VERIFY ALL DIMENSIONS, TRUSS LAYOUT, CONFIGURATIONS, NUMBER OF EACH TYPE OF TRUSS REQUIRED, LOADING AND DETAILS.
- 3. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND INSTALLED PER TRUSS PLATE INSTITUTE, INC. SPECIFICATIONS AND NFPA NATIONAL, INC. SPECIFICATIONS AND NFPA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
- 4. ALL TRUSSES SHALL BE ANCHORED TO SUPPORTS AND INDICATED AN IF NOT INDICATED, PER MANUFACTURERS RECOMMENDATIONS.
- 5. DEFLECTION OF TRUSSES SHALL BE LIMITED TO MAXIMUM LIVE LOAD DEFLECTION OF SPAN/360. submittals:
- 6. SHOP DRAWINGS SHOWING SIZES, DESIGN VALUES, MATERIALS, AND DIMENSIONAL RELATIONSHIPS OF COMPONENTS AS WELL AS BEARING AND ANCHORAGE DETAILS. TO EXTEND ENGINEERING DESIGN CONSIDERATIONS ARE FABRICATOR'S RESPONSIBILITY, SUBMIT DESIGN ANALYSIS AND TEST REPORTS INDICATING TRUSS PERFORMANCE CHARACTERISTICS COMPLY WITH REQUIREMENTS, CALCULATIONS AND SUBMITTALS OF REQUIRED CONNECTORS TO CONNECT TRUSSES TO GIRDER TRUSSES.
- 7. PROVIDE SHOP DRAWINGS WHICH HAVE BEEN SIGNED AND STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF MICHIGAN.
- 8. DESIGN AND SPECIFICATION OF TEMPORARY AND PERMANENT WOOD TRUSS BRACING BY TRUSS MANUFACTURER AND SHOWN ON SHOP DRAWINGS. TRUSS INSTALLER SHALL PROVIDE AND INSTALL BRACING PER SHOP DRAWINGS.

STRUCTURAL SPECIFICATIONS

MASONRY

RADE MARK OF AN ALS	SC APPROVED A	GENCY AND SHALL

4. ALL FRAMING SHALL BE ANCHORED TO SUPPORTS USING SIMPSON STRONG TIE CONNECTORS OR EQUAL. SEE

- 1. THE MASONRY PORTIONS OF THIS STRUCTURE ARE DESIGNED ACCORDING TO THE LATEST WORKING STRESS DESIGN PROVISIONS OF THE MASONRY STANDARDS JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 402) INCLUDING (ACI 530.1/ASCE 6/TMS 602) INCLUDING SECTIONS 2106 AND 2107 OF CHAPTER 21 IN THE MICHIGAN BUILDING CODE MASONRY COMPONENTS HAVE BEEN DESIGNED ACCORDING TO THE PROVISIONS FOR SEISMIC DESIGN CATEGORY B. 2. ALL STRUCTURAL MASONRY IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MASONRY STANDARDS
- JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602). MASONRY SUBMITTALS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602 SECTION 1.5. MASONRY TESTING AND INSPECTIONS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602 SECTION 1.6, TABLE 5, LEVEL 2 QUALITY ASSURANCE.
- 3. ALL STRUCTURAL MASONRY HAS BEEN ENGINEERED IN ACCORDANCE WITH CHAPTER 2, ALLOWABLE STRENGTH DESIGN. COMPRESSION STRENGTH SHALL BE DETERMINED ACCORDING TO THE UNIT STRENGTH METHOD FOR CONCRETE MASONRY MSJC SECTION 1.4.B.2.b.
- 4. ALL BLOCK SHALL CONFORM TO ASTM C 90 AND C 140, TYPE 1, GRADE N.
- 5. MORTAR SHALL CONFORM TO ASTM C 90 AND C 140, TYPE 1, GRADE N IN CONTACT WITH EARTH-TYPE M OR S TYPE M OR S = 1900 PSI REINFORCED-TYPE S TYPE N = 2150 PSI NOT IN CONTACT WITH EARTH-TYPE N, M OR S
- 6. GROUT SHALL CONFORM TO ASTM C 476, WITH PEA GRAVEL AGGREGATE AND MINIMUM STRENGTH OF 2000 PSI.
- 7. MINIMUM MASONRY COMPRESSIVE STRENGTH SHALL BE f'm = 1500 PSI.
- 8. ALL STRUCTURAL MASONRY SHALL COURSE IN STANDARD RUNNING BOND, UNLESS NOTED OTHERWISE. ALL INTERSECTING BEARING WALLS, SHEAR WALLS OR OTHER STRUCTURAL WALLS SHALL BE LAID UP IN INTERLOCKED, BONDED COURSING. MECHANICAL ANCHORS OR WALL TIES MAY BE SUBSTITUTED WITH PRIOR APPROVAL BY THE ENGINEER.
- 9. PROVIDE HORIZONTAL WIRE TYPE REINFORCING WITH 9 GAUGE SIDE RODS AND 9 GAUGE CROSS RODS IN EVERY SECOND COURSE (16" O.C.), IN ALL MASONRY WALLS. SPACE AT 8" O.C. AT PARAPET WALLS. PROVIDE "LADDER" TYPE REINFORCING ONLY IN WALLS WITH VERTICAL REINFORCING. PROVIDE ADJUSTABLE TIES AT ALL LINTELS AND CAVITY WALLS AT 18" O.C. MAXIMUM SPACING.
- 10. PROVIDE 1-#5 VERTICAL BAR EACH SIDE OF EACH CONTROL JOINT; SEE PLANS FOR ADDITIONAL REINFORCING AT CORNERS, OPENINGS, ETC.
- 11. ALL REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM A615, GRADE 60. VERTICAL REINFORCING BARS SHALL BE HELD IN PLACE BY POSITIONERS SPACED NOT FURTHER THAN RECOMMENDED BY CODE.
- 12. PROVIDE A CONTINUOUS BOND BEAM, WITH 2-#5's, AT TOP OF WALLS PARALELL WITH ROOF/FLOOR FRAMING. STEP BOND BEAMS ELEVATIONS AS REQUIRED, LAP MINIMUM 32".
- 13. PERFORM GROUTING ACCORDING TO THE FOLLOWING: - ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID - ALL CORES WITH VERTICAL REINFORCING OR TO RECEIVE DRILLED IN ANCHORS SHALL BE GROUTED SOLID - Maximum 4'-0" high lifts
- 14. ALL BEAMS SUPPORTING MASONRY, INCLUDING STEEL, PRECAST AND MASONRY LINTELS ARE TO BEAR 8" MIN. ON 3 COURSES OF SOLID MASONRY.
- 15. MASONRY LINTELS FOR MISCELLANEOUS OPENINGS:

- MASONRY LINTEL (2) courses - REINF. w/2-#5 TOP AND BOTTOM AND #3 TIES @ 6" O.C. FOR SPANS UP TO 7'-4'' \.....

CO	NCRETE	
1. TH D S1 IN Pf	HE CONCRETE PORTIONS OF THE STRUCTURE ARE DESIGNED ACCORDING TO THE LATEST ULTIMATE STRENGTH DESIGN PROVISIONS OF THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR TRUCTURAL CONCRETE AND COMMENTARY (ACI 318) INCLUDING SECTIONS 1902 THRU 1907 OF CHAPTER 19 I THE MICHIGAN BUILDING CODE. CONCRETE COMPONENTS HAVE BEEN DESIGNED ACCORDING TO THE ROVISIONS FOR SEISMIC DESIGN CATEGORY.	
2. A W O Pf O	ALL CONCRETE SHALL BE NORMAL WEIGHT (150 PCF), EXCEPT SUPPORTED SLABS WHICH SHALL BE LIGHT VEIGHT (110 PCF). MINIMUM CONCRETE STRENGTH SHALL BE f'C = 3000 PSI MIN. AT 28 DAYS, UNLESS NOTED DTHERWISE; SUPPORTED SLABS AND SLABS ON GRADE SHALL BE f'C = 3500 PSI MIN. UNLESS NOTED OTHERWISE. ROVIDE f'C = 4000 PSI WITH 6% \pm 1% ENTRAINED AIR WHERE CONCRETE IS EXPOSED TO EXTERIOR ATMOSPHERE DR WEATHER.	2024 NS ER SCALE
3. A T(LL CONCRETE SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150. AGGREGATE SHALL CONFORM O ASTM C33.	ARCH DA DE DE
4. C C C	CONCRETE ADMIXTURES SHALL BE USED TO FACILITATE CONCRETE PLACEMENT, AID DIFFICULT PLACING CONDITIONS OR ASSIST IN ATTAINING SPECIFIED CONCRETE QUALITIES. ADMIXES SHALL HAVE LESS THAN 0.05% CHLORIDE IONS.	GR: MC NC
	- AIR ENTRAINMENT PER ASTM C260 - WATER REDUCER PER ASTM C494, TYPE A - WATER REDUCER/ACCELERATOR PER ASTM C494, TYPE C OR E - WATER REDUCER/RETARDER PER ASTM C494, TYPE B OR D - SUPERPLASTICIZER PER ASTM C494, TYPE F OR G	PLAN DATE PROJECT M REVIEWER: SCALE:
5. C SI C FC	CONCRETE MIXES SHALL BE PROPORTIONED PER SECTION 3.9 OF ACI-301. CERTIFIED HISTORICAL TEST DATA HALL SERVE AS A BASIS FOR EACH MIX DESIGN. DEVIATIONS SHALL BE SUBSTANTIATED WITH ADDITIONAL CERTIFIED TRIAL MIX TESTING AND RESULTS. SUBMIT MIX DESIGN HISTORICAL TEST DATA OR TRIAL MIX RESULTS OR APPROVAL PRIOR TO PROCEEDING WITH THE WORK. WHERE HISTORICAL TEST DATA IS NON-EXISTENT THE OLLOWING GUIDELINES SHALL APPLY:	NAL VY 841-7500 841-7573 spsc.com
	COMPRESSIVECEMENTWATER/CEMENTSTRENGTH, f'cCONTENTRATIO	AIN 310) 3 10) 3 10) 3 10) 3
<u>TYP</u> STA STA STA AIR	PE (28 DAY, PSI) (LBS./C.Y.) (BY WEIGHT) (SLUMP) ANDARD, NORMAL WT. 3000 MIN. 470 MIN. 0.52 MIN. 4" MAX. ANDARD, NORMAL WT. 3500 MIN. 517 MIN. 0.50 MAX. 4" MAX. ANDARD, LIGHT WT. 3500 MIN. 564 MIN. 0.44 MAX. SEE SPEC. R ENTRAINED, NORM. WT. 4000 MIN. 564 MIN. 0.40 MAX. 4" MAX.	FESS]
6. A Ri W TF	ALL CONCRETE WORK AND PLACEMENT SHALL CONFORM TO THE LATEST ACI STANDARDS AND ECOMENDATIONS. FREE FALL SHALL NOT EXCEED 10 FEET FOR ALL CONCRETE CONTAINING HIGH-RANGE VATER REDUCER (SUPERPLASTICIZER) AND 5 FEET FOR ALL OTHER CONCRETE. PROVIDE ELEPHANT TRUNK, REMIES OR OTHER PLACING EQUIPMENT OR OPENINGS IN SIDES OF FORMS AS REQUIRED TO LIMIT FREE FALL.	SC
7. A S1 Pl D	LL REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM A615, GRADE 60. ALL REINFORCING TEEL SHALL BE CONTINUOUS AND SHALL 36 BAR DIAMETER LAP MINIMUM. ALL SHALL BE FABRICATED AND LACED IN ACCORDANCE WITH ACI 315 AND ACI 318, LATEST EDITION. HOOK ALL BEAM BARS AT JISCONTINUOUS ENDS.	E P ICE
8. A Pf	LL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 FURNISHED IN FLAT MATS OR SHEETS, NOT IN ROLLS. ROVIDE MINIMUM 6" LAP BETWEEN SHEETS. ALL SLAB REINFORCING SHALL BE SUPPORTED ON CHAIRS.	M N
DES 1.	IGN DATA SEISMIC = PER ASCE 7-16 WITH Sd1 = 0.079, Sd1 = 0.065, SDc = A	Rowe Building S. Saginaw St., Suite 2 , MI 48502
		The F 540 S
	File Triumph Engineering & Design, Inc. 10775 S, SAGINAW ST. GRAND BLANC, MI 48439 (PH) 810.584.7364 (F) 810.584.7362 www.flumpheng.com	VILLAGE OF PORT SANILAC VATER SYSTEM IMPROVEMENTS PROPOSED BOOSTER PUMP STATION STRUCTURAL SPECIFICATION SHEET
	PLAN SUBMITTALS AND CHANGES PRELIMINARY PLANS - **NOT FOR CONSTRUCTION** DATE DESCRIPTION	REV:
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		HARDWARE SPECIFICATIONS PART 1 - PRODUCTS 1.1 MANUFACTURERS: A. THE FOLLOWING MANUFACTURERS ARE APPROVED SUBJECT TO COMPLIANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS. APPROVAL OF MANUFACTURERS OTHER THAN THOSE LISTED SHALL BE IN ACCORDANCE WITH DIVISION 1. ITEM: MANUFACTURER: APPROVED: CONTINUOUS HINGES: STANLEY: SELECT, ABH LOCKSETS: DORMA: SCHLAGE L SERIES, SARGENT 8200 SERIES CYLINDERS:DORMA: SCHLAGE L SERIES, SARGENT 8200 SERIES COSERS: DORMA: B000 LCN 404XP, STANLEY CLD-4550, SARGENT 251 PROTECTION PLATES: TRIMCO: BURNS, DONJO FLUSH BOLTS: TRIMCO: ABH, DCI THRESHOLD & GASKETING: NATIONAL GUARD: REESE, K.N. CROWDER									THE			
			CODENAME BY BY OTHERS DM DORMA DOOR COM NA NATIONAL GUARD ST STANLEY TR TRIMCO REQUIRED OPTION LIST CODE DESCRIPTION FC FULL PLASTIN B4E BEVELED 4 E CSK COUNTER SI MKD MASTER KEY 1/4-20-2" COMBO 1/4-20 FINISH LIST CODE DESCRIPTION AL ALUMINUM 626 SATIN CHROMIUM 630 SATIN STAINLESS 3 689 ALUMINUM PAINTE	N C COV DGES NK KIO ED (SO X COM PLATE STEEL	S =R - KICK F CK AND GL) BO MS/J	PLAT MOF ANC	'ES P PLATES CHOR (SS)							

