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ADDENDUM NO. 1

DATE: March 27, 2020

FROM: Baxter & Woodman, Inc., Consulting Engineers

TO: Planholders of record for the Work titled:

VILLAGE OF HOFFMAN ESTATES, ILLINOIS  
CHIPPENDALE LIFT STATION REHABILITATION

The Bidding Documents are amended as follows:

1. ADVERTISEMENT FOR BIDS

- A. Bid opening time and date are changed to 10 A.M. on Thursday, April 9, 2020.

2. DRAWINGS

- A. Delete Sheet G-1 in its entirety, and insert attached Sheet G-1, revision dated March 26, 2020 in lieu thereof.

Revision to add IEPA Project Sign Detail.

- B. Delete Sheet C-1 in its entirety, and insert attached Sheet C-1, revision dated March 26, 2020 in lieu thereof.

Revision to realign existing force main; and to move plug valve, sleeve, and change required restoration.

- C. Delete Sheets M-1 and M-2 in their entirety, and insert attached Sheets M-1 and M-2, revision dated March 26, 2020 in lieu thereof.

Piping and pump layouts for the existing (demolition) drawing and for the proposed pumps, piping, valves, and fittings drawing have been revised. In addition, the Notes on Sheet M-2 were revised.

- D. Delete Sheet E-2 in its entirety, and insert attached Sheet E-2, revision dated March 26, 2020 in lieu thereof.

Revision to remove valve, sleeve, and required restoration southwest of engine generator.

3. SPECIFICATIONS

A. Section 00 01 10 TABLE OF CONTENTS revise accordingly for the following:

B. Section 00 41 00.13, BID FORM:

Delete Section 00 41 00.13, BID FORM in its entirety and insert the attached BID FORM, revision dated March 26, 2020 in lieu thereof.

C. Section 00 43 33, PROPOSED PRODUCTS FORM:

Delete Section 00 43 33, PROPOSED PRODUCTS FORM in its entirety and insert the attached PROPOSED PRODUCTS FORM, revision dated March 26, 2020 in lieu thereof.

D. Section 23 00 00, HEATING, VENTILATING, AND AIR CONDITIONING (HVAC):

Page 23 00 00-2, add paragraph 2.2:

"2.2 DEHUMIDIFIER:

A. Provide a low temperature, self-contained unit complete with humidistat, automatic defrost system, automatic shut-off and signal light to indicate drip pan is full, 10-quart drip pan, and 3/8-inch plastic drain hose to the sump.

a. Moisture removal: 45 pints per day at 80 degrees F and 60 percent relative humidity.

b. Voltage: 120 volts, single phase, 60 Hz A.C.

B. Acceptable manufacturers:

a. Soleus Air Model HMT-D45E-A.

b. Dayton Model 39K869.

c. Oasis Model MJ-E22.

d. Or equal.

E. Section 33 39 43.52, INTERIOR STRUCTURE PROTECTION – POLYUREA:

Insert attached new Section 33 39 43.52, INTERIOR STRUCTURE PROTECTION – POLYUREA into the project manual.

F. Section 43 21 39.71, SUBMERSIBLE PUMPING EQUIPMENT [NON-CLOG]:

Page 43 21 39.71-11, delete paragraph 2.6 A. 4. b. and replace with the following:

"b. Primex."

G. The Meeting Minutes from the Mandatory Pre-Bid Conference on March 5, 2020 are attached.

Nothing in this Addendum shall be construed as changing other requirements of the Bidding Documents. Each Bidder shall acknowledge receipt of this Addendum where indicated in the Bid Form.

END OF ADDENDUM NO. 1



**LEGEND**

EXISTING		PROPOSED	
	GATE VALVE		
	PLUG VALVE		
	BUTTERFLY VALVE		
	GLOBE VALVE		
	PROCESS PIPING (* SEE ABBREVIATIONS)		
AE - AERATION EFFLUENT		RAS - RETURN ACTIVATED SLUDGE	
CE - COMBINED EFFLUENT		RS - RAW SEWAGE	
CL2 - CHLORINE		RW - RAW WASTEWATER	
CLS - CHLORINE SOLUTION		SA - SANITARY SEWER	
CSD - CL2 CONTACT TANK SLUDGE		SC - SCUM	
CSM - CL2 CONTACT TANK SCUM		SCR - SCREENINGS	
CS - CHLORINE SOLUTION		SDS - SULFUR DIOXIDE SOLUTION	
DCS - DECHLORINATION SOLUTION		SE - SECONDARY EFFLUENT	
DE - DECANT		SH - SODIUM HYPOCHLORITE	
DR - DRAIN		SO2 - SULFUR DIOXIDE	
DG - DIGESTER GAS		SSD - SECONDARY SLUDGE	
EFF - EFFLUENT		SJM - SECONDARY SCUM	
EFI - EXCESS FLOW INFLUENT		ST - STORM SEWER	
EFR - EXCESS FLOW RETURN		SUP - SUPERNATANT	
FE - FINAL EFFLUENT		TAS - THICKENED ACTIVATED SLUDGE	
FM - FORCE MAIN		TD - TANK DRAIN	
G - NATURAL GAS		TOF - THICKENER OVERFLOW	
IA - INSTRUMENT AIR		TPS - THICKENED PRIMARY SLUDGE	
INF - INFLUENT		TS - THICKENED SLUDGE	
ML - MIXED LIQUOR		W1 - POTABLE WATER	
NPW - NON-POTABLE WATER		W2 - NON-POTABLE WATER	
PA1 - PROCESS AIR (AERATION TANK BLOWERS)		W3 - RECYCLED PLANT EFFLUENT	
PA2 - PROCESS AIR (DIGESTER BLOWERS)		V - VENT	
PE - PRIMARY EFFLUENT		WNS - WASTE NITRIFIED SLUDGE	
PI - PRIMARY INFLUENT		W - WATER	
PSD - PRIMARY SLUDGE		WAS - WASTE ACTIVATED SLUDGE	
PSM - PRIMARY SCUM		WS - WASTE SLUDGE	
	MANHOLE		
	CATCH BASIN		
	INLET		
	DRYWELL		
	FLARED END SECTION		
	FIRE HYDRANT		
	YARD HYDRANT		
	WATER VALVE W/ BOX AND COVER		
	WATER VALVE VAULT		
	BUFFALO BOX OR CURB STOP		
	WATER METER		
	CLEAN OUT		
	TO BE REMOVED		
	TO BE ABANDONED		
	PREVIOUSLY ABANDONED		
	TO BE DEMOLISHED		
	GAS LINE		
	GAS VALVE W/ BOX AND COVER		
	GAS VALVE VAULT		
	GAS METER		
	GAS RISER		
	TELEPHONE CABLE		
	TELEPHONE DUCT		
	TELEPHONE VAULT		
	TELEPHONE RISER		

**ABBREVIATIONS**

A.F.F.	ABOVE FINISH FLOOR	R	STRUCTURE TO BE RECONSTRUCTED
BOD	BOTTOM OF DUCT ELEVATION	A	STRUCTURE TO BE ADJUSTED
CL	CENTERLINE	▲	CENTRAL ANGLE
CONC	PORTLAND CEMENT CONCRETE	D=	DEGREE OF CURVE
BIT	BITUMINOUS PAVEMENT	T=	TANGENT LENGTH
GR	GRAVEL	L=	CURVE LENGTH
CMP	CORRUGATED METAL PIPE	R=	RADIUS OF CURVE
FH	FIRE HYDRANT	E=	EXTERNAL DISTANCE
CI	CAST IRON	SE=	SUPERELEVATION (FT. PER FT. OF WIDTH)
DI	DUCTILE IRON	X=	EXTERNAL DISTANCE OF VERTICAL CURVE
F-F	FACE-TO-FACE	PC	POINT OF CURVATURE
E-E	EDGE-TO-EDGE	PI	POINT OF INTERSECTION
B-B	BACK-TO-BACK	PT	POINT OF TANGENCY
BM	BENCH MARK	POT	POINT ON TANGENCY
INV EL	INVERT ELEVATION	PCC	POINT OF COMPOUND CURVATURE
CL EL	CENTERLINE ELEVATION	PRC	POINT OF REVERSE CURVATURE
P	POINT	VC	VERTICAL CURVE
G	GUTTER	N&W	NAIL AND WASHER
C	CURB	TCE	TEMPORARY CONSTRUCTION EASEMENT
BC	BACK OF CURB	VD	VOLUME DAMPER
EOP	EDGE OF PAVEMENT		
PL	PROPERTY LINE		
ROW	RIGHT OF WAY		
FL	FLOW LINE		
TF	TOP OF FRAME		
TC	TOP OF CURB OR CONCRETE		

**PIPE MATERIAL ABBREVIATIONS**

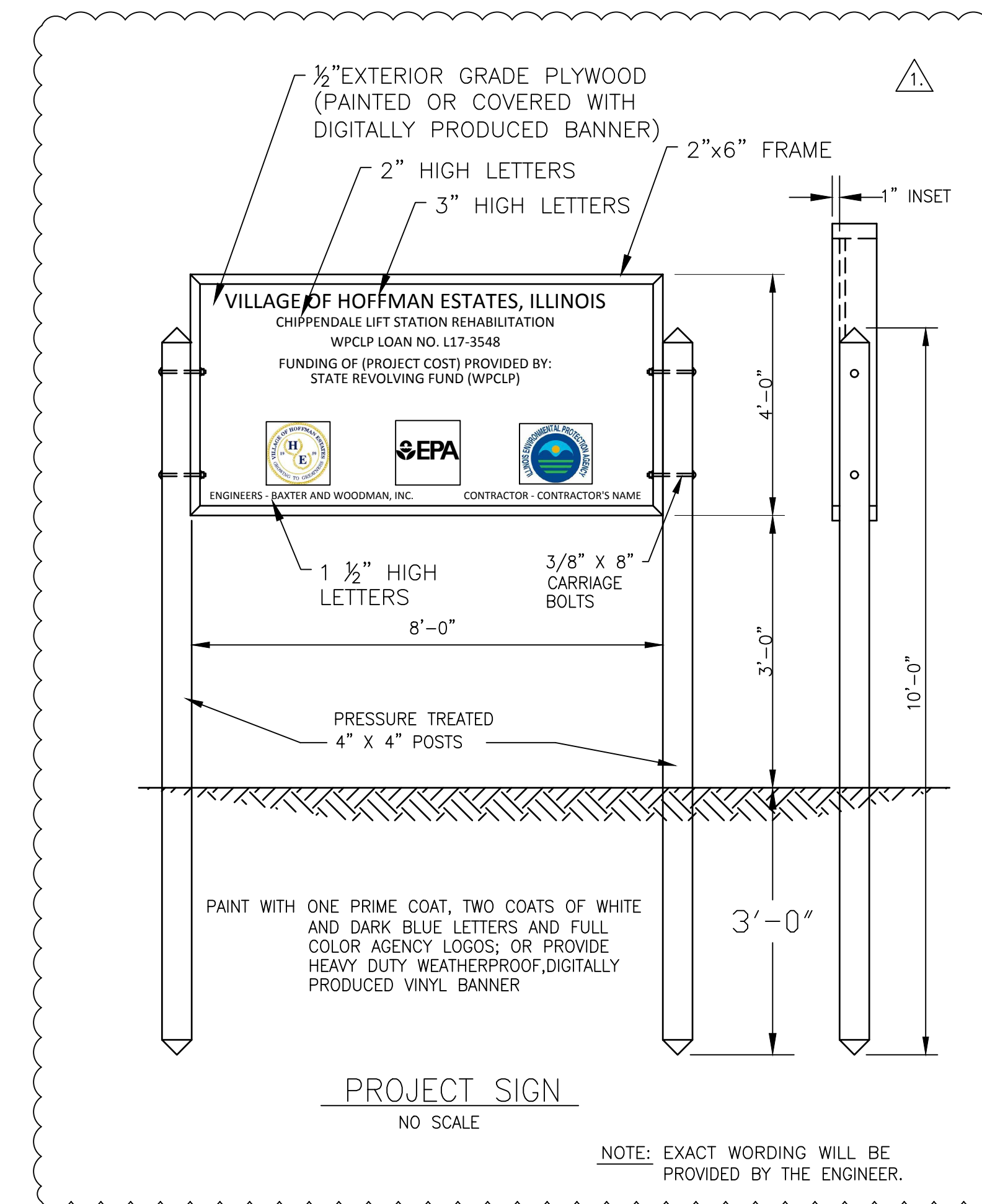
COP	- COPPER
D.I.	- DUCTILE IRON
PVC	- POLYVINYLCHLORIDE
RCP	- REINFORCED CONCRETE PIPE
S.S.	- STAINLESS STEEL
W.S.	- WELDED STEEL

**BENCHMARKS (NAVD 88)**

B.M. #1 - SOUTHEAST BOLT WITH "X" AT NORTHEAST CORNER OF HILLCREST BOULEVARD AND CHIPPENDALE ROAD ELEV. = 789.73

**GENERAL NOTES**

1. THE PRECONSTRUCTION VIDEO RECORDING OF CONSTRUCTION AREAS MUST BE PROVIDED PRIOR TO START OF CONSTRUCTION.
2. CONTACT THE VILLAGE OF HOFFMAN ESTATES PUBLIC WORKS DEPARTMENT (847-490-6800) AND J.U.L.I.E. (1-800-892-0123) 48 HOURS PRIOR TO EXCAVATION FOR UTILITIES.
3. INSTALL EROSION CONTROL DEVICES AND TEMPORARY WORK BOUNDARY FENCES PRIOR TO CONSTRUCTION.
4. COMPLY WITH "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", AND "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS" - THE STATE OF ILLINOIS - DURING ALL PHASES OF CONSTRUCTION.
5. COORDINATE WITH UTILITY COMPANIES TO SUPPORT, PROTECT, OR REMOVE AND REPLACE ALL POWER POLES OR POLE ANCHORS THAT ARE EFFECTED BY CONSTRUCTION, EVEN WHERE SUPPORT IS NOT INDICATED ON PLAN SHEETS. THE COST OF THIS WORK IS CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE IMPROVEMENTS.
6. COORDINATE WITH UTILITY COMPANIES TO RELOCATE FACILITIES IN CONFLICT WITH NEW STRUCTURES. THE COST OF THIS WORK IS CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE IMPROVEMENTS.
7. DO NOT STORE MATERIALS, STRUCTURES, OR MACHINES WHERE THEY WILL OBSTRUCT STREET CROSSING OR DRIVEWAY SIGHT LINES.
8. PROTECT ALL PAVED AREAS FROM DAMAGE WHERE CRAWLER- TRACK TYPE MACHINERY IS USED.
9. VAULT RIM ELEVATIONS WILL BE ADJUSTED TO FINAL GRADE AT TIME OF FINAL PAVING OR LANDSCAPING. ADJUSTMENT OF NEW STRUCTURES TO FINAL GRADE IS CONSIDERED INCIDENTAL TO THE NEW STRUCTURE, REGARDLESS OF THE NUMBER OF TIMES THE ADJUSTMENTS MUST BE MADE.
10. PAVEMENT MARKING LOCATIONS ARE APPROXIMATE ONLY. MARK EXACT LOCATIONS, SIZES, AND COLORS OF STREET MARKINGS ON "JOB" SET OF PLANS PRIOR TO REMOVAL. REPLACE PAVEMENT MARKINGS AT EXISTING LOCATIONS, AND PROVIDE TEMPORARY TAPE WHERE REQUIRED.
11. THE SOUTH PARKING LOT ENTRANCE FOR 1800 CHIPPENDALE ROAD MUST REMAIN OPEN AND UNOBSTRUCTED.
12. THE VILLAGE WILL PROVIDE PERPETUAL MAINTENANCE AND WEEKLY MONITORING OF THE LIFT STATION AFTER FINAL COMPLETION.
13. WORK SHALL BE PERFORMED BY AN EXPERIENCED AND QUALIFIED CONTRACTOR
14. ALL CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR. PG CONCRETE MIX DESIGN IS 4000 PSI AT 28 DAYS.
15. CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS, PIPING LAYOUT, AND ORIENTATION OF INLET(S), DISCHARGE AND CONDUIT(S).
16. ALL PIPING & VALVES, STRUCTURES, ELECTRIC, ETC. ARE TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
17. ALL FASTENERS, BOLTS, ETC. WITHIN THE WET WELL SHALL BE 304 OR 316 STAINLESS STEEL.
18. DRY WELL PIPE SHALL BE BITUMINOUS COATED, CEMENT LINE DUCTILE IRON PIPE, CLASS 53 OR PRESSURE CLASS 350, CONFORMING TO ANSI A-21.10 (AWAY C150) AND ANSI A-21.51 (AWAY C151). CEMENT MORTAR LINING SHALL CONFORM TO ANSI A-21.4 (AWAY C-104). JOINTS SHALL BE FLANGED CONFORMING TO ANSI A-21.11 (AWAY C-110).
19. DRY WELL FITTINGS SHALL BE FLANGED, DUCTILE IRON WITH CEMENT MORTAR LINING CONFORMING TO ANSI AS21.10 (AWAY C-110).
20. USE LINK SEALS AT ALL PIPE WALL PENETRATIONS.
21. THE HATCH SUPPLIER IS TO BE CONTACTED AT THE TIME THE WET WELL LOCATION IS CAST TO CONFIRM EXACT HATCH LOCATIONS.



CONSULTANTS

MILESTONE

FOR BIDDING

NO.	DATE	DESCRIPTION
1	3-26-20	ADDENDUM NO. 1

REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWING

**PLAN SHEET DESIGNATION**

C	COVER
H	HAZARDOUS MATERIALS
C	CIVIL
L	LANDSCAPE
S	STRUCTURAL
A	ARCHITECTURAL
I	INSTRUMENTATION
Q	EQUIPMENT
F	FIRE PROTECTION
P	PLUMBING
M	MECHANICAL
E	ELECTRICAL
T	TELECOMMUNICATIONS
R	RESOURCE

PROJECT NO.	120822.40
SCALE:	AS NOTED
DATE:	2-21-2020
DESIGNED BY:	SMF
DRAWN BY:	SLE
CHECKED BY:	SMF

CLIENT

**VILLAGE OF HOFFMAN ESTATES, ILLINOIS**

**SANITARY SEWER SYSTEM IMPROVEMENTS**

**CHIPPENDALE LIFT STATION REHABILITATION**

SHEET TITLE

**LEGEND, ABBREVIATIONS, GENERAL NOTES, SHEET INDEX AND BENCHMARKS**

**G-1**

I:\CRYSTAL LAKE\HOFFMAN\120822-CHIPNDPS\CADD\DWGS\LEGEND AND INDEX.DWG G-1 LEGEND ABBREVIATIONS  
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\*\*\* REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWING \*\*\*

PLAN SHEET DESIGNATION

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CLIENT

**VILLAGE OF HOFFMAN ESTATES, ILLINOIS**

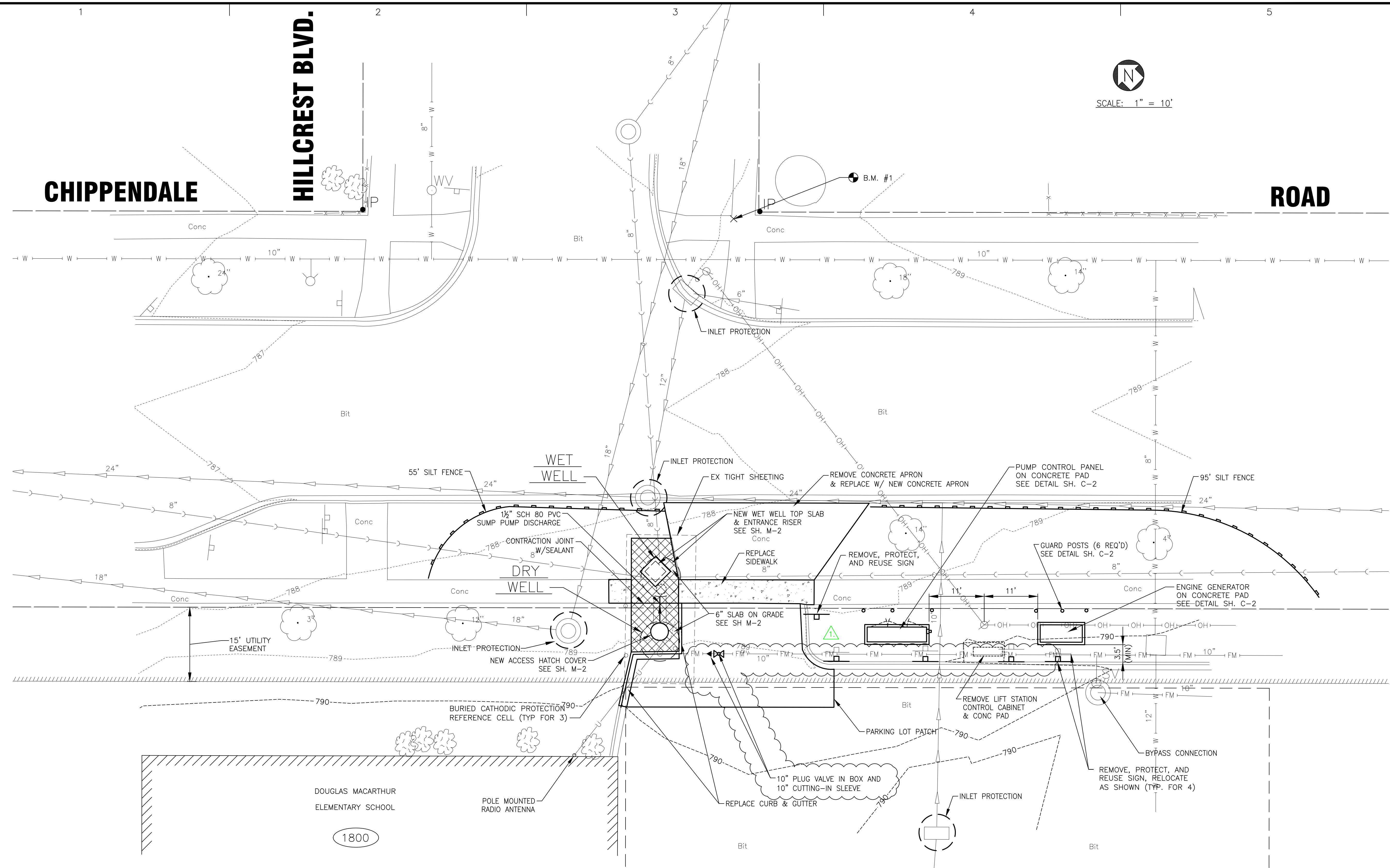
**SANITARY SEWER SYSTEM IMPROVEMENTS**

**CHIPPENDALE LIFT STATION REHABILITATION**

SHEET TITLE

**SITE PLAN**

**C-1**



TEMPORARY BY-PASS PUMPING SYSTEM NOTES

- PROVIDE, OPERATE, AND MAINTAIN A TEMPORARY SUBMERSIBLE BY-PASS PUMP IN EACH OF THE THREE MANHOLES IMMEDIATELY UPSTREAM OF THE WET WELL.
- PLUG THE DOWNSTREAM SEWER IN EACH OF THE THREE MANHOLES UPSTREAM OF THE WET WELL.
  - SAN5766, APPROX. 370 FT. NORTH OF WET WELL.
  - SAN5774, APPROX. 92 FT. EAST OF WET WELL.
  - SAN5780, APPROX. 331 FT. SOUTH OF WET WELL.
- PROVIDE AND MAINTAIN DISCHARGE HOSES AND FITTINGS FROM EACH OF THE BY-PASS MANHOLES TO THE FORCEMAIN BY-PASS FITTING LOCATED IN THE PARKING LOT OF THE SCHOOL.
- PROVIDE AND MAINTAIN RAMPS OVER HOSES AT ALL SIDEWALK, DRIVEWAY, AND ENTRANCE CROSSINGS.
- CONSTRUCT A TEMPORARY PAVEMENT TRENCH ACROSS CHIPPENDALE ROAD FOR THE BY-PASS HOSE TO ELIMINATE THE NEED FOR A RAMP.
  - PROVIDE THE NECESSARY BACKFILL FOR MAINTAINING A SMOOTH CROSSING FOR VEHICLES.
  - RESTORE THE PAVEMENT AS SPECIFIED AT THE CONCLUSION OF THE PROJECT.
- PROVIDE ALL OTHER ITEMS AND SERVICES NEEDED FOR THE SUCCESSFUL OPERATION OF THE BY-PASS SYSTEM.
- PROVIDE THE BY-PASS PLAN AND SCHEDULE FOR APPROVAL BY THE OWNER PRIOR TO INSTALLING THE TEMPORARY SYSTEM.

CONSULTANTS

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PROJECT NO: 120822.40

SCALE: AS NOTED  
DATE: 2-21-2020  
DESIGNED BY: SMF  
DRAWN BY: SLE  
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**VILLAGE OF  
HOFFMAN ESTATES, ILLINOIS**

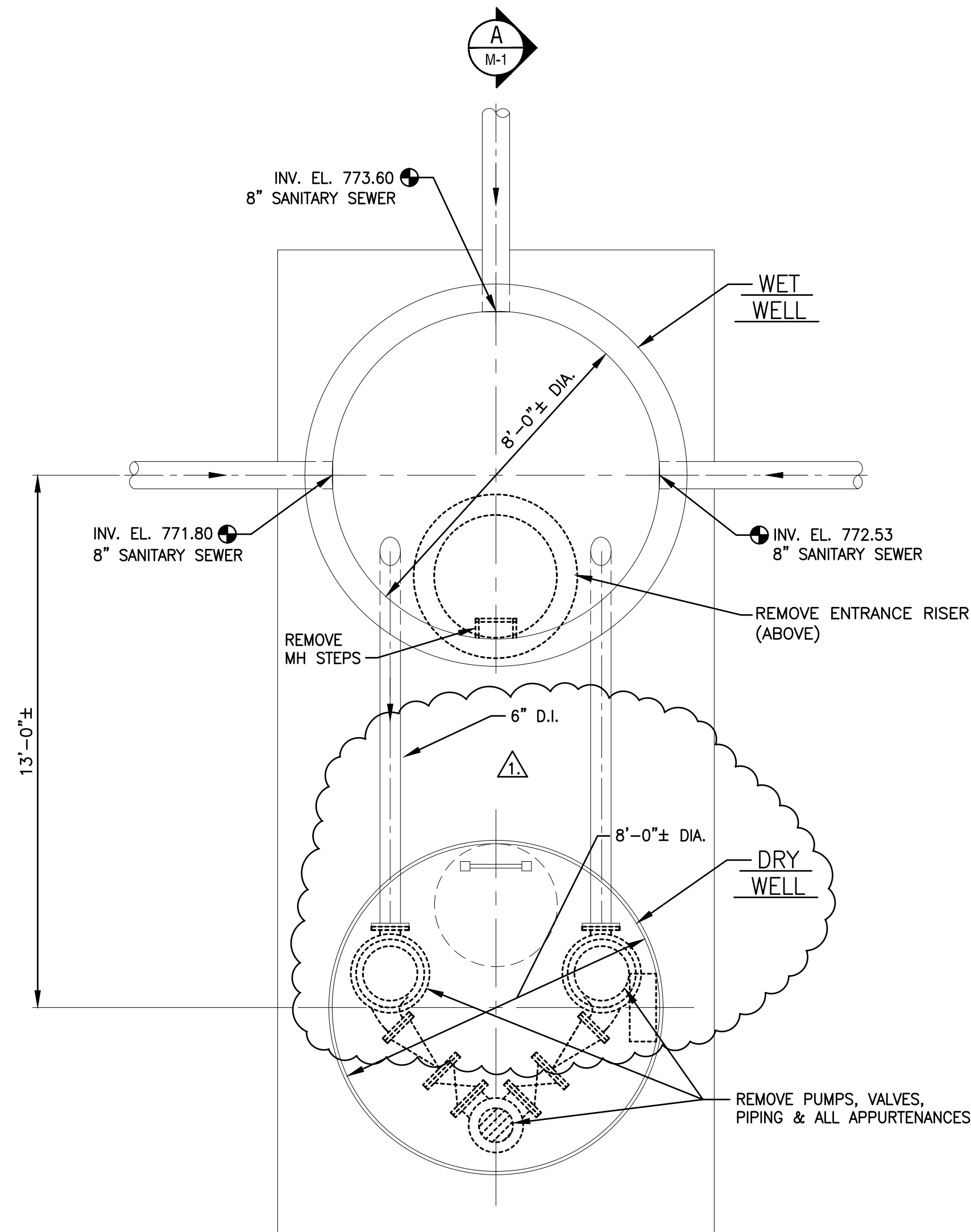
**SANITARY SEWER SYSTEM IMPROVEMENTS**

**CHIPPENDALE LIFT STATION  
REHABILITATION**

SHEET TITLE

**LIFT STATION DEMOLITION  
PLAN AND SECTION**

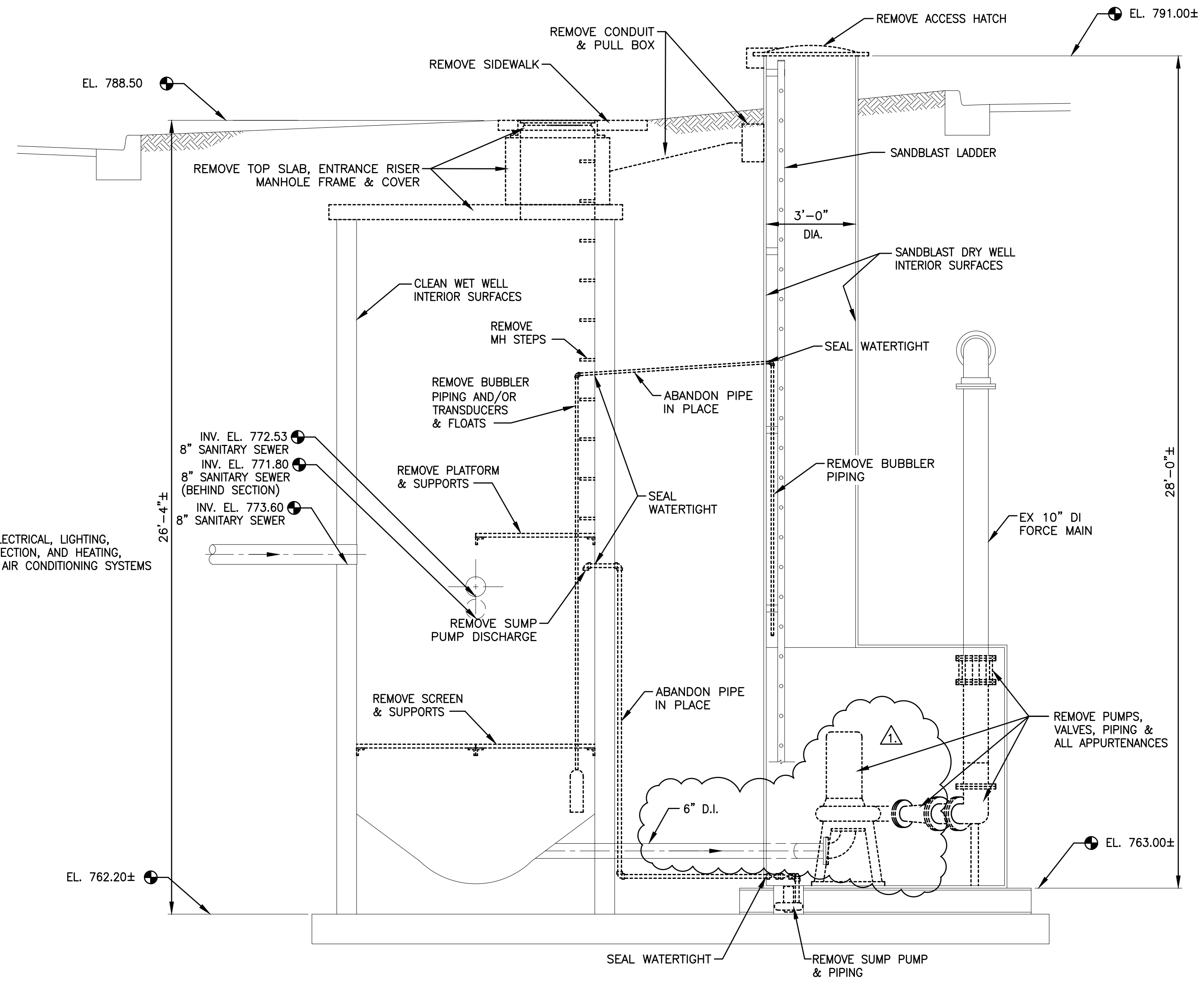
**M-1**



**DEMOLITION PLAN**  
SCALE: 3/8" = 1'-0"

**NOTES:**

- REMOVE ALL ELECTRICAL, LIGHTING, CATHODIC PROTECTION, AND HEATING, VENTILATION & AIR CONDITIONING SYSTEMS AND DEVICES.



**SECTION**

SCALE: 3/8" = 1'-0"



CONSULTANTS

MILESTONE

FOR BIDDING

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1	3-26-20	ADDENDUM NO. 1

\*\*\* REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWING \*\*\*

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- R - RESOURCE

PROJECT NO: 120822.40

SCALE: AS NOTED  
DATE: 2-21-2020  
DESIGNED BY: SMF  
DRAWN BY: SLE  
CHECKED BY: SMF

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**VILLAGE OF HOFFMAN ESTATES, ILLINOIS**

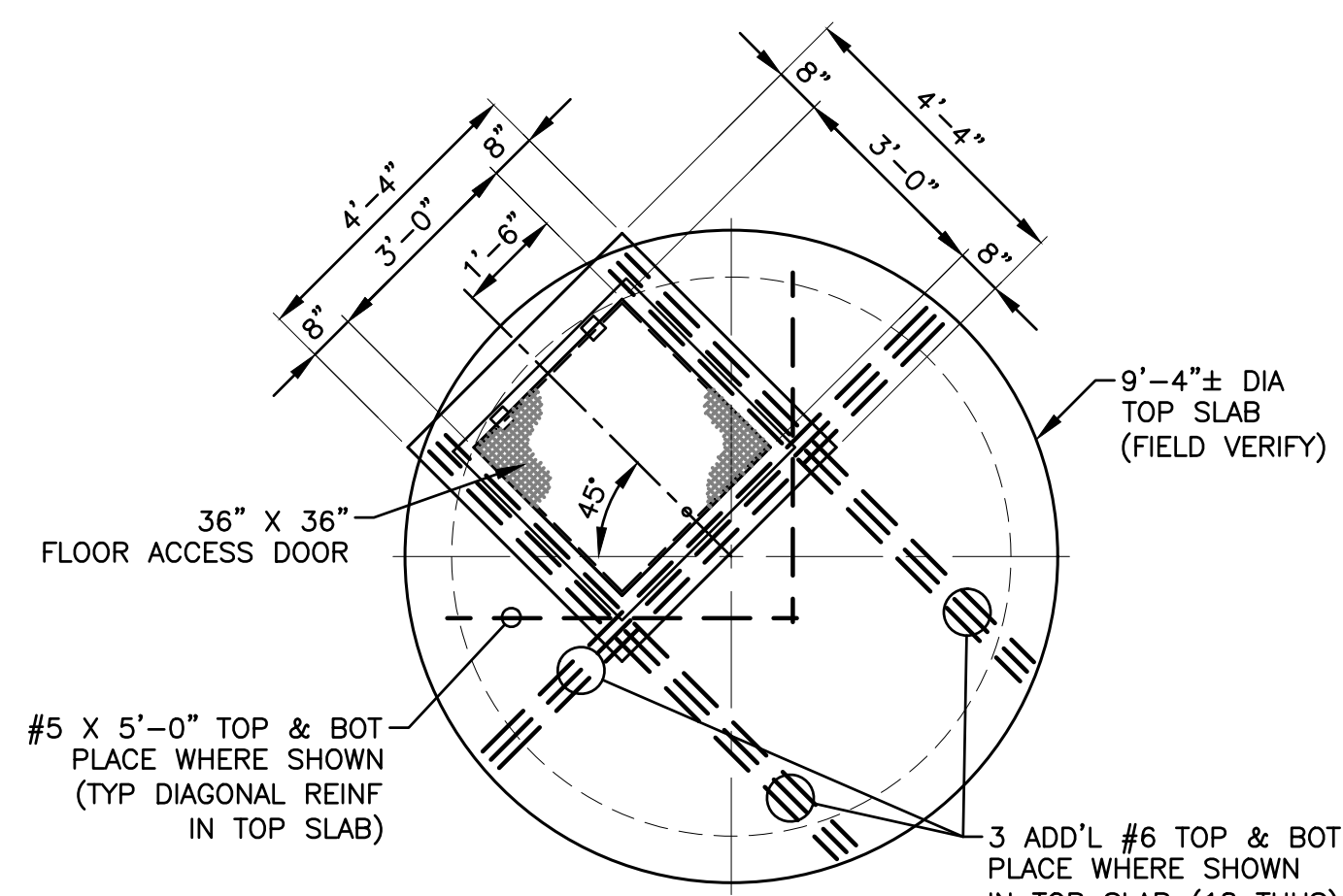
**SANITARY SEWER SYSTEM IMPROVEMENTS**

**CHIPPENDALE LIFT STATION REHABILITATION**

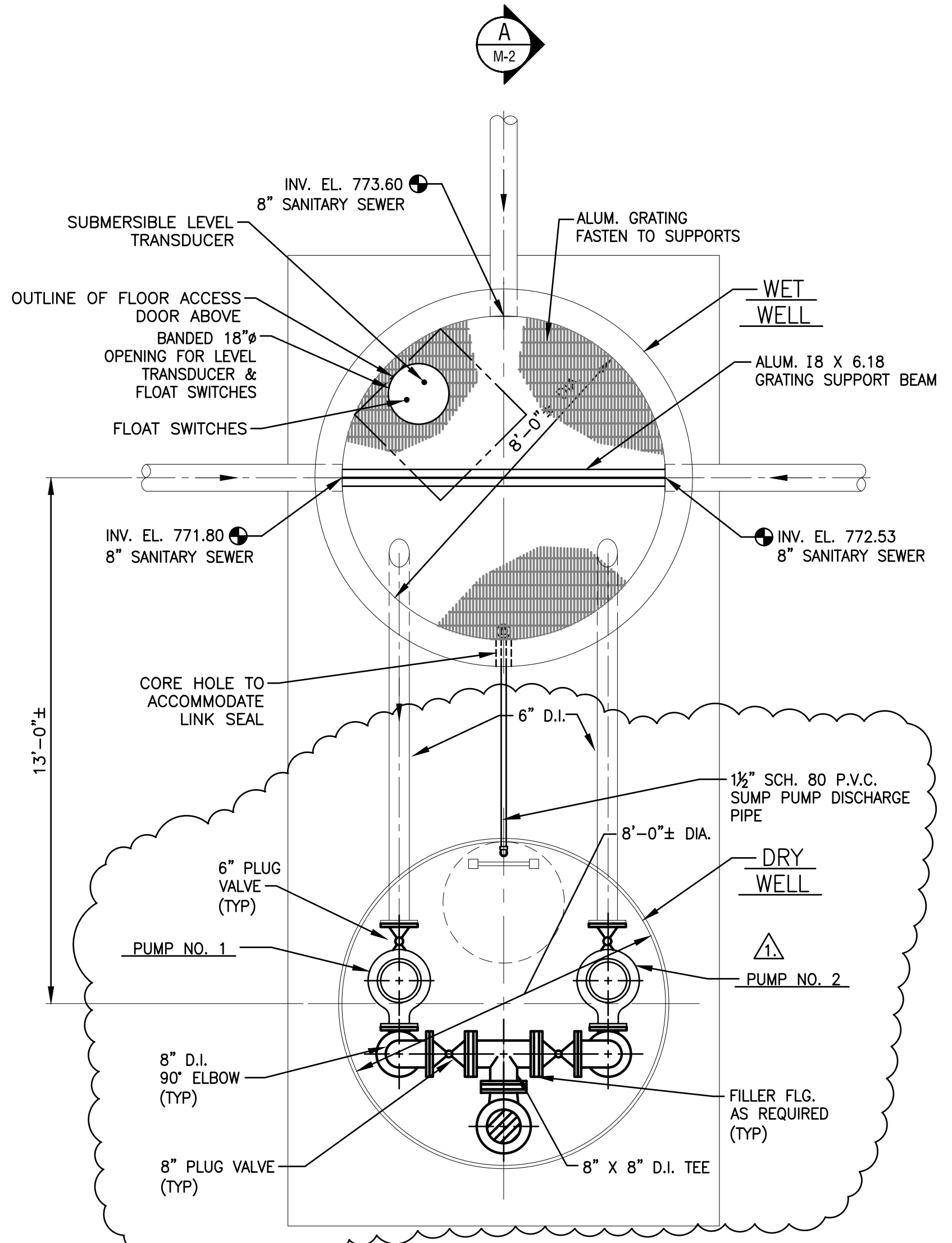
SHEET TITLE

**LIFT STATION PLAN AND SECTION**

**M-2**



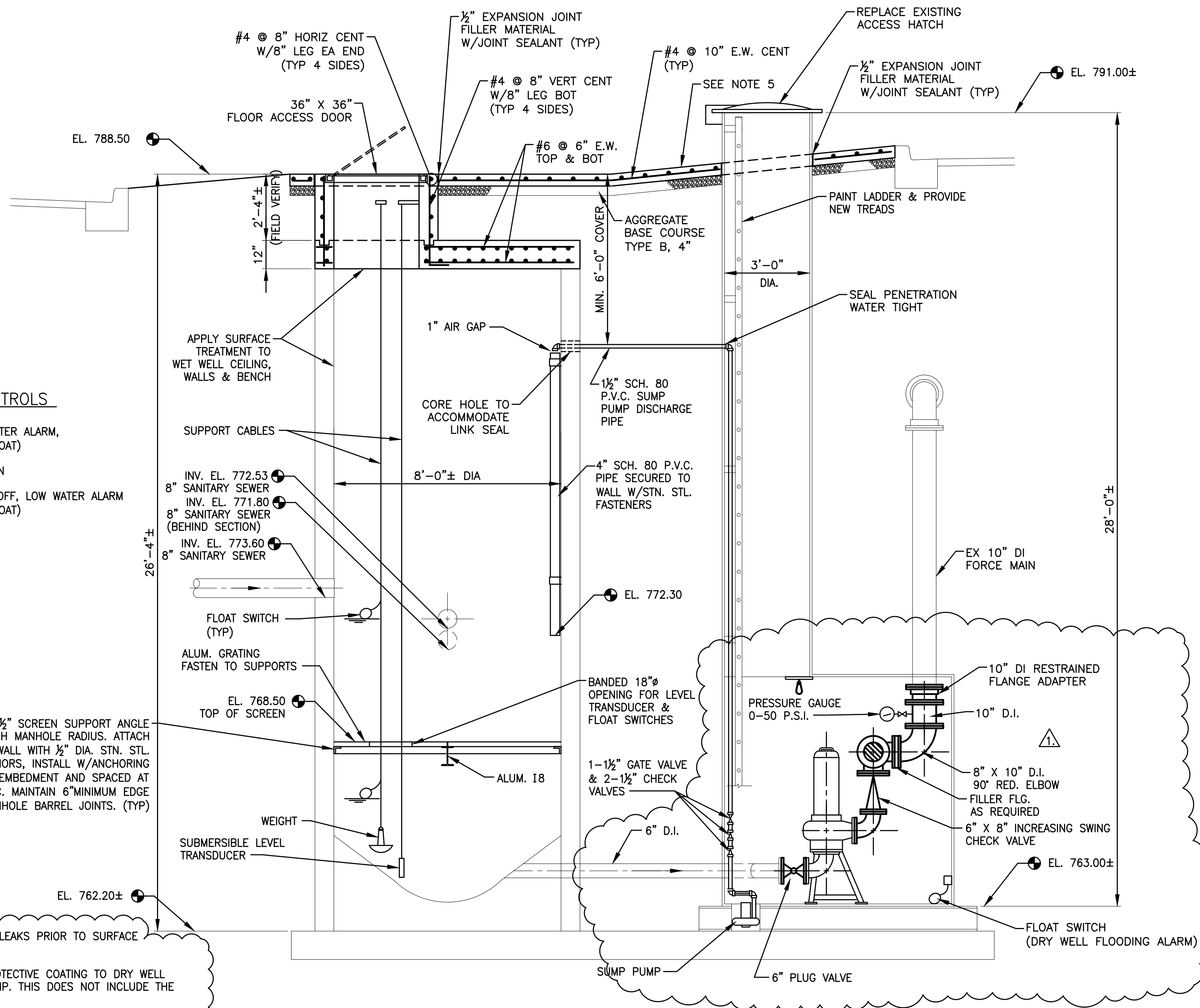
**WET WELL UPPER PLAN**  
SCALE: 3/8" = 1'-0"



**PLAN**  
SCALE: 3/8" = 1'-0"

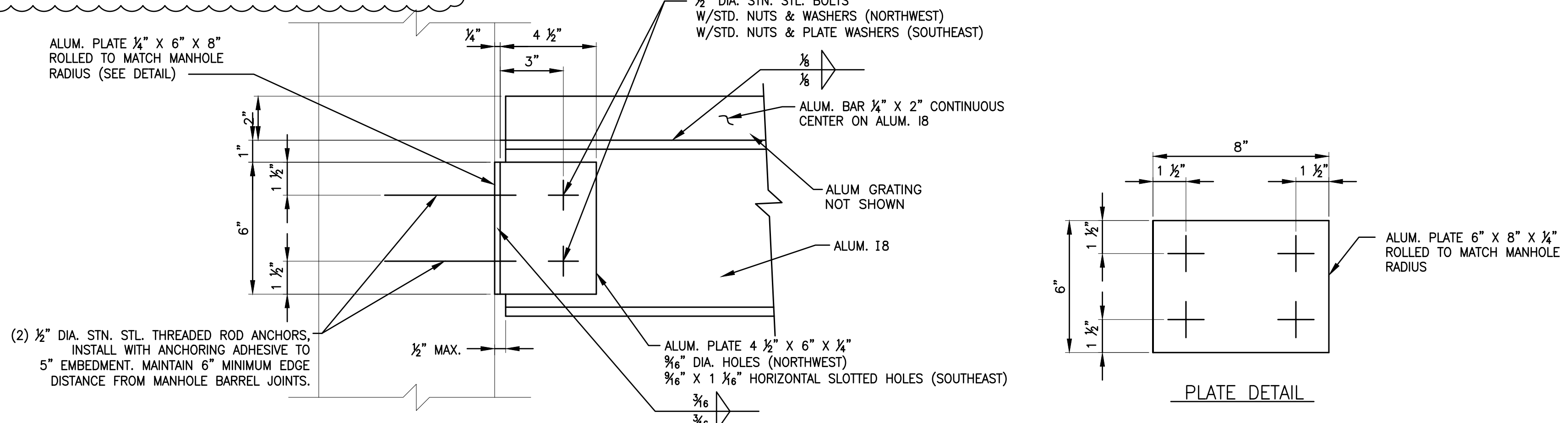
**PUMP CONTROLS**

- 772.00 HIGH WATER ALARM, (W/BACK-UP FLOAT)
- 771.50 PUMP ON
- 766.50 PUMPS OFF, LOW WATER ALARM (W/BACK-UP FLOAT)



**SECTION A**  
SCALE: 3/8" = 1'-0"

- NOTES:**
1. USE ACRYLAMIDE GEL GROUT TO REPAIR LEAKS PRIOR TO SURFACE TREATMENT.
  2. APPLY POLYURETHANE OR POLYUREA PROTECTIVE COATING TO DRY WELL VAULT FLOORS, WALLS, CEILING, AND SUMP. THIS DOES NOT INCLUDE THE ACCESS SHAFT.
  3. PROVIDE NEW EXHAUST FAN (10 CFM) ENCLOSURE AT THE BASE OF THE LADDER TO MATCH THE EXISTING EXHAUST FAN ENCLOSURE.
  4. REPLACE 5 LADDER RUNGS AS IDENTIFIED BY OWNER DURING CONSTRUCTION.
  5. 6" SLAB ON GRADE, SEE SITE PLAN SH C-1 & PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS PER DETAIL SH C-2.
  6. SEE STRUCTURAL GENERAL NOTES SH. C-2.
  7. PROVIDE DEHUMIDIFIER IN THE DRY WELL VAULT.
  8. PROVIDE POLYURETHANE, POLYUREA, OR EPOXY PROTECTIVE COATING FOR WET WELL SURFACE TREATMENT.



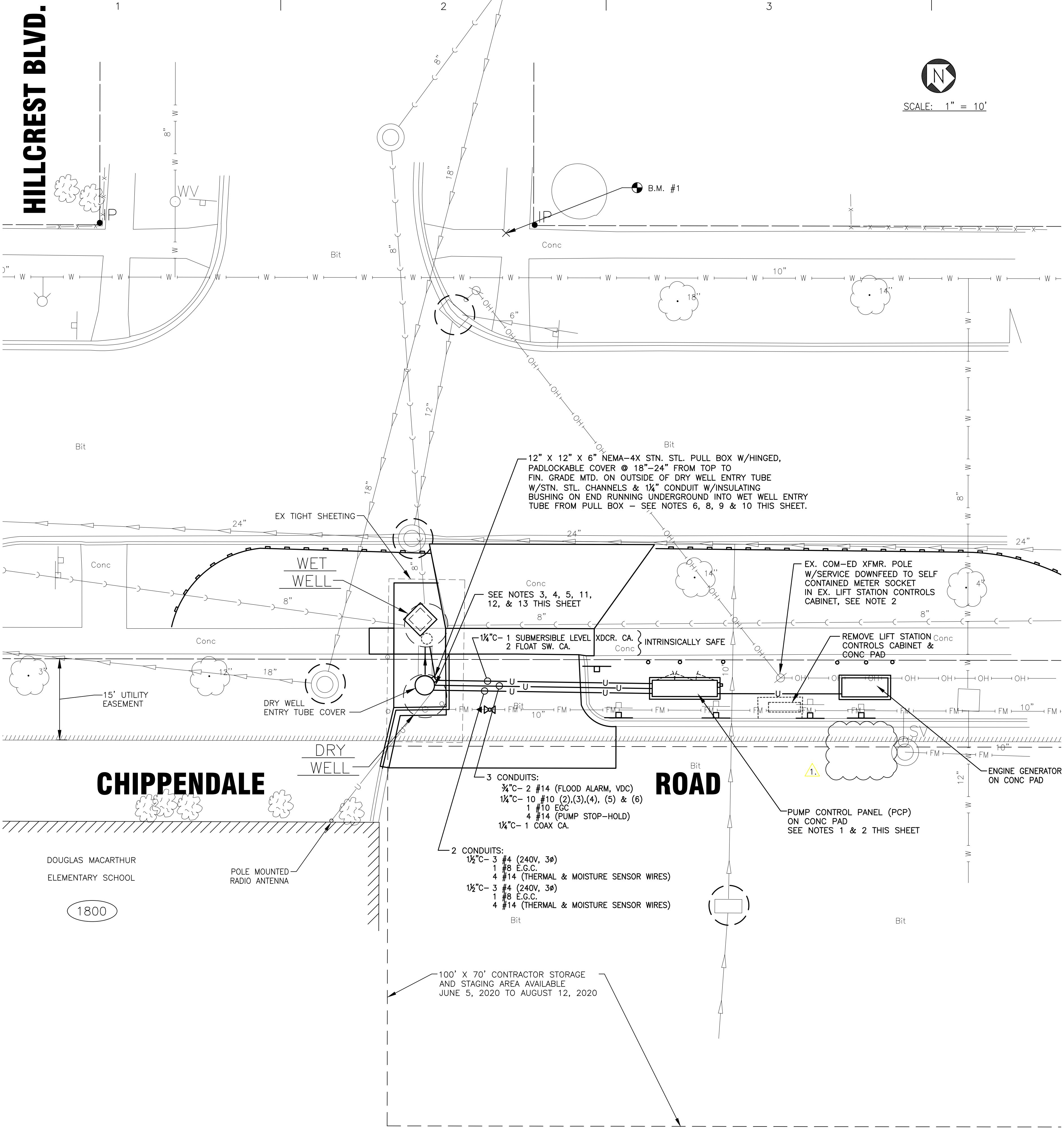
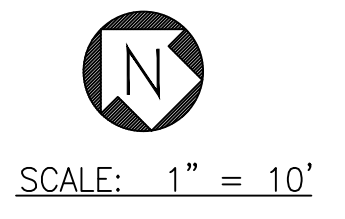
**SCREEN SUPPORT BEAM CONNECTION DETAIL**  
SCALE: 3" = 1'-0"

I:\CRYSTAL LAKE\HOFFMAN\120822-CHIPPENDALE\DWGS\LIFT STATION.DWG M-2 LIFT STATION  
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**ELECTRICAL NOTES**

- REMOVE EXISTING LIFT STATION CONTROL CABINET. PROVIDE NEW NEMA 3R PUMP CONTROL PANEL (PCP) WITH THE FOLLOWING:
  - 200A SERVICE ENTRANCE FUSED DISCONNECT SWITCH, 240V, 3P
  - 200A AUTOMATIC TRANSFER SWITCH (ATS)
  - 200A MANUAL TRANSFER SWITCH (MTS)
  - RELOCATED PORTABLE GENERATOR RECEPTACLE (FROM EXISTING CONTROL PANEL)
  - PUMPS CONTROLLER AND STARTERS
  - 120VAC PANEL BOARD AS SHOWN ON SH.E-3
  - GFCI DUPLEX CONVENIENCE RECEPTACLE W/WP COVER MOUNTED ON FRONT COVER
  - FACTORY PREWIRED PER CONTROL PANEL POWER & ELEMENTARY CONTROL DIAGRAM
  - COMPLY WITH SPEC. SECT. 43 21 39.71.
- COORDINATE WITH COMED THE RELOCATION OF THE SERVICE METER TO THE SIDE OF THE NEW PUMP CONTROL PANEL.
- PROVIDE PENETRATION ON DRY WELL ENTRANCE TUBE AT APPROXIMATELY 12" A.F.G. PROVIDE NIPPLE AND LB FITTING ON OUTER AND INNER SIDE OF EACH PENETRATION.
- PROVIDE PENETRATION ON DRY WELL ENTRANCE TUBE AT APPROXIMATELY 12" A.F.G. PROVIDE NIPPLE AND LB FITTING ON OUTER AND INNER SIDE OF PENETRATION. CONNECT WIRES TO SERVE SUMP PUMP, LIGHT FIXTURE, BLOWER, DEHUMIDIFIER, CATHODIC PROTECTION AND FLOOD ALARM FLOAT SWITCH IN EQUIPMENT VAULT.
- PROVIDE NEMA-4X JUNCTION BOX W/GROUND BUS TO SERVE 120 VAC BR. CCT. WIRES, EGC & FLOOD ALARM FLOAT SWITCH WIRES RUNNING FROM PUMP CONTROL PANEL TO SUMP PUMP, DEHUMIDIFIER, LIGHT FIXTURE, VENTILATION BLOWER, CATHODIC PROTECTION & FLOOD ALARM FLOAT SWITCH IN DRY WELL.
- SEPARATELY SUPPORT SUBMERSIBLE TRANSDUCER AND EACH FLOAT SWITCH FROM THEIR CABLES WITH STN. STL. OPEN WEAVE, MESH TYPE CABLE GRIPS SUSPENDED FROM SIDE OF WET WELL ENTRY TUBE.
- CAULK INSIDE OF EACH CONDUIT FOR LEVEL XDCR. & FLOAT SW. CABLES @ ENTRY TO PULL BOX MTD. ON OUTSIDE OF DRY WELL ENTRY TUBE USING DUCT SEALING COMPOUND.
- ALL ELECTRICAL WORK & EQUIPMENT IN RAW SEWAGE WET WELL SHALL COMPLY WITH NATIONAL ELECTRICAL CODE (N.E.C.) ARTICLE 500 REQUIREMENTS FOR CLASS 1, DIVISION 1, GROUP D HAZARDOUS LOCATIONS.
- SEAL UNUSED OPENINGS ON DRY WELL ENTRANCE TUBE AND WET WELL REMAINING AFTER REMOVAL OF EX. CONDUITS.
- SUBMERSIBLE LEVEL TRANSDUCER & EACH FLOAT SWITCH IN WET WELL ARE POWERED FROM INTRINSICALLY SAFE CIRCUITS IN PCP. THEIR RESPECTIVE CABLES MUST BE CONTINUOUS (UN-SPLICED) FROM TERMINATION IN PCP TO DEVICE.
- EXTEND EX. COAX CABLE & RELATED EQUIPMENT IN DRY WELL TO PCP. PROVIDE CABLE & CONNECTORS AS REQUIRED.
- PROVIDE 60A/3P, NF, HD DISC. SW. W/GND. LUG AND STOP-HOLD PUSHBUTTON IN NEMA-4X ENCLOSURE MTD. ON WALL @ ~ 6'-0" FROM TOP TO FLOOR IN DRY WELL FOR EACH RAW SEWAGE PUMP.
- FOR EACH PUMP, PROVIDE JB MTD. ON WALL IN DRY WELL FOR TERMINATION OF PUMP SENSOR CABLE LEADS TO SENSOR WIRES RUNNING IN 3/4" CONDUIT TO PUMP CONTROL PANEL.
- TWO PUMPS MUST NOT RUN SIMULTANEOUSLY AT ANY TIME DURING OPERATION.
- ALL CABLE IN THE WET WELL SHALL BE SUPPORTED FROM THE HATCH COVER FRAME WITH STAINLESS STEEL, OPEN WEAVE, MESH TYPE, KEELLESS (OR EQUAL) CABLE GRIPS.
- CONTRACTOR SHALL PROVIDE CONTROL AND POWER CORDS OF SUFFICIENT LENGTH TO REACH CONTROL PANEL FROM POINT OF ORIGIN ON PUMPS WITHOUT SPLICING.
- ALL CONDUITS TO BE PROVIDED WITH SEAL TIGHT CONNECTORS. CONDUITS ARE AS FOLLOWS:
  - 3/4" FLOOD ALARM
  - 1/2" LIGHTING, HVAC, AND CATHODIC PROTECTION SYSTEM POWER
  - 1/2" SCADA RADIO ANTENNA
  - 1/2" PUMP POWER CORD AND SENSOR CABLES
  - 1/2" TRANSDUCER CABLE AND BACK-UP FLOAT CABLES
- POWER FOR THE SUMP PUMP WITH IN THE DRY WELL SHALL BE PROVIDED FROM A SINGLE, 20A GROUNDED, NOON RECEPTACLE IN WEATHER PROOF BOX WITH WEATHERPROOF COVER THAN CAN BE FULLY CLOSED WHEN THE PIGGY-BACK FLOAT SWITCH PLUG AND SUMP PUMP ARE INSERTED INTO THE RECEPTACLE. A SECOND 20A GROUNDED, FBI RECEPTACLE SHALL BE PROVIDED WITHIN THE WEATHER PROOF BOX.
- INSTALL TWO (2) 10 FOOT LONG 1/2" DIAMETER COPPER, OR COPPER CLAD STEEL, DRIVEN GROUND ROD WITH A #6 BARE COPPER MAIN GROUNDING WIRE CONNECTED FROM IT TO THE BONDED NEUTRAL LUG IN THE MAIN SERVICE ENCLOSURE.
- ALL CONDUITS, WHERE THEY ENTER THE OPEN BOTTOM OF THE CONTROL ENCLOSURE, SHALL HAVE AN INSULATED THROAT GROUNDING BUSHING THAT IS BONDED TO GROUND WITH A #6 COPPER WIRE.



- 3 CONDUITS:**  
 3/4" C - 2 #14 (FLOOD ALARM, VDC)  
 1/2" C - 10 #10 (2),(3),(4), (5) & (6)  
 1 #10 EGC  
 4 #14 (PUMP STOP-HOLD)  
 1/4" C - 1 COAX CA.
- 2 CONDUITS:**  
 1/2" C - 3 #4 (240V, 3P)  
 1 #8 E.G.C.  
 4 #14 (THERMAL & MOISTURE SENSOR WIRES)
- 1/2" C - 3 #4 (240V, 3P)**  
 1 #8 E.G.C.  
 4 #14 (THERMAL & MOISTURE SENSOR WIRES)

100' X 70' CONTRACTOR STORAGE AND STAGING AREA AVAILABLE JUNE 5, 2020 TO AUGUST 12, 2020

CONSULTANTS

MILESTONE

FOR BIDDING

NO.	DATE	DESCRIPTION
1	3-26-20	ADDENDUM NO. 1

REVISIONS

NO. DATE DESCRIPTION

1 3-26-20 ADDENDUM NO. 1

\*\* - REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWING

PLAN SHEET DESIGNATION

COVER	G - GENERAL
H	HAZARDOUS MATERIALS
C	CIVIL
L	LANDSCAPE
S	STRUCTURAL
A	ARCHITECTURAL
I	INSTRUMENTATION
Q	EQUIPMENT
F	FIRE PROTECTION
P	PLUMBING
M	MECHANICAL
E	ELECTRICAL
T	TELECOMMUNICATIONS
R	RESOURCE

PROJECT NO.	120822.40
SCALE:	AS NOTED
DATE:	2-21-2020
DESIGNED BY:	PVT
DRAWN BY:	SLE
CHECKED BY:	HDH

CLIENT

**VILLAGE OF HOFFMAN ESTATES, ILLINOIS**

**SANITARY SEWER SYSTEM IMPROVEMENTS**

**CHIPPENDALE LIFT STATION REHABILITATION**

SHEET TITLE

**ELECTRICAL SITE PLAN**

I:\CRYSTAL LAKE\HOFFMAN\120822-CHIPPENDALE\DWG\CADD\DWG\120822 - TOPO - C3D12-EJM.DWG ELECTRICAL SITE PLAN  
 Plotted: 03/25/20 By: 078MSB  
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 State of Illinois - Professional Design Firm  
 License No. - 184-001121 - Expires 4-30-19



00 41 00.61

BID FORM

ONE ORIGINAL BID SHALL BE SUBMITTED

To: President and Board of Trustees  
Village of Hoffman Estates  
1900 Hassell Road  
Hoffman Estates, Illinois 60169  
(hereinafter called Owner)

From: \_\_\_\_\_  
Company

\_\_\_\_\_  
Address

City State Zip Code

( ) \_\_\_\_\_  
Telephone

( ) \_\_\_\_\_  
FAX  
(hereinafter called Bidder)

\_\_\_\_\_  
E-MAIL

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to furnish all labor, materials, tools, and services required for the construction of the Chippendale Lift Station Rehabilitation for the Village of Hoffman Estates, Cook County, Illinois (Engineers' Job No. 120822.40), all in accordance with the Bidding Documents prepared by Baxter & Woodman, Inc., Consulting Engineers.
2. Bidder accepts all of the terms and conditions of the Advertisement for Bids and Bidder Instructions, including without limitation those dealing with the disposition of Bid Security. This Bid will remain open for **120** days after the date of Bid opening or for such longer period of time that Bidder may agree to in writing upon request of Owner. Bidder will sign and submit the Agreement with the Bonds and other documents required by the Bidding Documents within 10 days after the date of Owner's Notice of Award.
3. In submitting this Bid, Bidder represents, as set forth in the Agreement, that:
  - a. Bidder has examined copies of all the Bidding Documents.



- b. Bidder is familiar with the nature and extent of the Bidding Documents, Work, site, locality, and all local conditions and legal and regulatory requirements that in any manner may affect cost, progress, performance, or furnishing of the Work, and has made such independent investigations as Bidder deems necessary.
- c. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- d. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- e. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- f. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigation, explorations, tests, studies, and data with the Bidding Documents.
- g. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- h. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the Work for which this Bid is submitted.
- i. This Bid is genuine and not made in the interest or on behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm, or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
- j. Bidder is not barred from contracting with the Owner as a result of a violation 720 ILCS 5/33 et seq.

- k. Bidder agrees that no less than the prevailing rate of wages under the Davis-Bacon Wage Act (40 USC 276a through 276a-5) as determined by the U.S. Department of Labor shall be paid to all laborers, workmen and mechanics performing work under this contract.
- l. Bidder agrees to cooperate with all Davis-Bacon Wage Act compliance activities including employee interviews by Owner.
- m. Bidder complies with the provisions of the Employment of Illinois Workers on Public Works Act (30 ILCS 570/) as they may apply to this Project.
- n. Bidder will comply with the requirements of Sections 22.51(f)(2)(B) and 22.51a(d)(2)(B) of the Illinois Environmental Protection Act ([415 ILCS5/22.51(f)(2)(B)] and [415 ILCS5/22.51a(d)(2)(B)]) for the disposal of uncontaminated soils including uncontaminated soil mixed with other clean construction or demolition debris (CCDD) materials and has included any costs associated with compliance in the Bid.
4. Bidder submits the following Schedule of Unit Prices for the Work to be performed in accordance with the Bidding Documents and agrees that items of work not specifically mentioned in the Schedule which are necessary and required to complete the Work intended shall be done incidental to and as part of the items of work for which a unit price is given, and understands that no additional payment will be made for such incidental work.

Bidder agrees that the Owner may select any one or more Parts of this Bid, and if awarded the Contract for such Part or Parts of this Bid, the Bidder agrees to perform and complete the work at the Contract Unit Prices submitted herein.

#### SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1.2	PRECONSTRUCTION VIDEO RECORDING:	1 LSUM	Lump Sum	\$ _____
1.3	EROSION AND SEDIMENTATION CONTROL:			
	Silt Fence	125 LIN FT	\$ _____	\$ _____
	Inlet Filter	1 EACH	\$ _____	\$ _____
1.4	WET WELL AND DRY WELL DEMOLITION:	1 LSUM	Lump Sum	\$ _____
1.5	WET WELL REHABILITATION:	1 LSUM	Lump Sum	\$ _____
1.6	DRY WELL REHABILITATION:	1 LSUM	Lump Sum	\$ _____

## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1.7	PUMPING EQUIPMENT:	2 EACH	\$_____	\$_____
1.8	PIPING AND VALVES:	1 LSUM	Lump Sum	\$_____
1.9	CONTROL CABINET AND ELECTRICAL WORK:	1 LSUM	Lump Sum	\$_____
1.10	PAVEMENT RESTORATION:			
	HMA Street	100 SQ YDS	\$_____	\$_____
	HMA Parking Lot	240 SQ YDS	\$_____	\$_____
	PCC Driveway Apron	60 SQ YDS	\$_____	\$_____
	PCC Curb & Gutter	120 LIN FT	\$_____	\$_____
	PCC Sidewalk	225 SQ FT	\$_____	\$_____
1.11	GRASS RESTORATION:	150 SQ YDS	\$_____	\$_____
1.12	TEMPORARY BYPASS PUMPING:	1 LSUM	Lump Sum	\$_____
1.13	TRAFFIC CONTROL AND PROTECTION:	1 LSUM	Lump Sum	\$_____
1.14	PROCESS CONTROL INTEGRATION:	1 LSUM	Lump Sum	\$_____
1.15	EMERGENCY GENERATOR:	1 LSUM	Lump Sum	\$_____
1.16	MOBILIZATION:	1 LSUM	Lump Sum	\$_____
<b>TOTAL AMOUNT OF BID PROPOSAL: \$</b>				<u>_____</u>

5. Bidder agrees the Work will be substantially completed on or before September 15, 2020, and completed and ready for final payment in accordance with paragraph 1.11 of the Supplementary Conditions on or before October 15, 2020.
- a. The above dates are predicated on the Contractor receiving a Notice to Proceed no later than Monday, May 18, 2020.
  - b. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.
  - c. **Owner acknowledges disruptions to the vendor supply chain due to “shelter-in-place” restrictions. Completion dates will be adjusted based on availability and lead times of equipment.**
6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of \_\_\_\_\_ or \_\_\_\_\_ Percent of the Bid Amount.



7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ email: \_\_\_\_\_

8. Bidder submits all items listed in Section 00 43 93.61 – Bid Submittal Checklist.

9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____

11. Bidder certifies that all iron and steel products used in the project for the construction, alteration, maintenance, or repair of a public water system are produced in the United States in compliance with Section 608 of the Water Resources Reform and Development Act”.

12. By submission of the Bid, Bidder certifies, and in the case of a Joint Bid, each party thereto certifies as to his own organization, that in connection with the Bid:

- a. The prices in the Bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor.
- b. Unless otherwise required by law, the prices quoted in the Bid have not knowingly been disclosed by the Bidder, prior to opening, directly, or indirectly to any other Bidder or to any competitor; and
- c. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.

13. The person signing this Bid certifies that: (Check applicable box.)

- He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to that above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

14. Bidder is currently certified as an MBE or WBE under EPA's DBE Program?

Yes  No

Respectfully submitted, signed, and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

(SEAL)

\_\_\_\_\_  
Bidder

By \_\_\_\_\_

\_\_\_\_\_  
Name - Title

ATTEST:

\_\_\_\_\_  
\_\_\_\_\_  
Name - Title

END OF BID FORM

00 43 33

PROPOSED PRODUCTS FORM

1. FAILURE TO SUBMIT THIS FORM WITH THE BID FORM, OR REVISING THE LISTED MANUFACTURERS IN THIS FORM, SHALL CAUSE REJECTION OF THE BID AS NON-RESPONSIVE.

2. Pursuant to bidding requirements for the Work titled:

VILLAGE OF HOFFMAN ESTATES, ILLINOIS  
CHIPPENDALE LIFT STATION REHABILITATION

Bidder's lump sum price proposed on the Bid Form is based upon one of the following items of equipment and materials as shown on the Drawings and described in the Specifications. Bidder shall circle the item (A or B) included in the Bid. Should Bidder fail to indicate which manufacturer is included in the Bid, Bidder shall provide Item A.

SPECIFICATION SECTION	DESCRIPTION OF ITEM	MANUFACTURER (CIRCLE ONE)
09 90 00	Painting and Coating	(A) Tnemec (B)
43 21 39.71	Pump Control Panel	(A) Metropolitan Ind. (B) Primex
		(A) (B)
		(A) (B)
		(A) (B)
		(A) (B)
		(A) (B)





## SECTION 33 39 43.52

### INTERIOR STRUCTURE PROTECTION - POLYUREA

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Provide wet well rehabilitation as shown and noted on the Drawings, as specified herein, and as needed for a complete and proper installation, and in accordance with the latest revision of the "Standard Specifications for Water and Sewer Construction in Illinois", except as revised herein.
- B. This specification covers work, materials and equipment required for protecting the concrete wet well by monolithic spray-application of a fast setting, high-build, two component, elastomeric, 100% solids, and solvent-free polyurea coating; to provide corrosion protection as required.
  - 1. Procedures for surface preparation, cleaning, application, and testing are described herein, and on the Drawings.
- C. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Division 01 - General Requirements of these Specifications.
- D. References:
  - 1. ASTM D638 – Tensile Strength, psi
  - 2. ASTM D638 – Elongation %
  - 3. ASTM D624 – Tear Strength, force per unit thickness
  - 4. ASTM E96 – Water Permeation g/day/m<sup>2</sup>
  - 5. ASTM D4060 – Abrasion, mg loss/1,000 cycles
  - 6. ASTM D7234 (Concrete) - Pull-off Strength of Coatings Using a Portable Adhesion Tester
  - 7. ASTM D4541 (Steel)
  - 8. ASTM D2584 - Volatile Matter Content
  - 9. ASTM D6866 – Biobased Content
  - 10. ASTM D2240 - Durometer Hardness, Shore D
  - 11. ASTM C109 - Compressive Strength Hydraulic Cement Mortars.
  - 12. ASTM D412 – Test Methods for Thermoplastic Elastomers - Tension
  - 13. ASTM C579 - Compressive Strength of Chemically Setting Silicate and Silica Chemical Resistant Mortars.
  - 14. ASTM - The published standards of the American Society for Testing and Materials.
  - 15. SSPC - The published standards of the Society of Protective Coatings.
  - 16. NACE - The published standards of National Association of Corrosion Engineers (NACE International).

## 1.2 SUBMITTALS

- A. Shop Drawing Submittals:
  - 1. Technical data sheet on each product used, including ASTM test results indicating the product is suitable for its intended use per these specifications.
  - 2. Material Safety Data Sheets (MSDS) for each product used.
  - 3. ASTM References.
  - 4. Descriptive literature including manufacturer's recommended installation procedures and surface preparation requirements.
  - 5. Project specific guidelines and recommendations.
  - 6. Work procedures including flow diversion plan, and method of repair.
  - 7. Qualification of Applicator:
    - a. Manufacturer certification that applicator has been trained and approved in the handling, mixing, and application of the products to be used.
      - (1) Certification letter shall be dated within six months of bid date.
    - b. Certification that the equipment to be used for applying the product has been manufactured or approved by the protective coating manufacturer and the applicator personnel have been trained and certified for the proper use of the equipment.
    - c. Five (5) recent references of applicator indicating successful application of intended product(s).
    - d. Proof of any necessary federal, state, or local permits or licenses necessary to complete the project.
  - 8. Design details for any additional ancillary systems and equipment to be used in site and surface preparation, application, and testing.
  - 9. Submit all drawings, technical information, and shop drawings to Engineer at least 10 working days prior to, and receive approval of same prior to ordering any interior structure protection materials.
- B. Operation and Maintenance Manuals – None Required.
- C. Certificates and Guarantees – None Required.
- D. Spare Parts – None Required.
- E. Comply with pertinent provisions of Section 01 33 00.

## 1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications shall include a manufacturer with a minimum of three years' experience providing polyurea base sealants and coatings.
  - 1. The manufacturer shall be a primary blender of pure polyurea products with proprietary formulations, and shall maintain a Certified Applicator program, and have capacity to provide field technical services as required.

- B. Applicator shall initiate and enforce quality control procedures consistent with applicable ASTM, NACE, and SSPC standards and the protective coating manufacturer's recommendations.
- C. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- D. Corrosion materials/products shall be suitable for installation in a severe hydrogen sulfide environment without any deterioration to the liner.
- E. Use only approved equipment designed and manufactured by the material supplier specifically for the application of the coating system in sanitary systems.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Materials are to be kept dry, protected from weather, and stored under cover.
- B. Protective coating materials are to be stored between 50° F and 90° F.
  - 1. Do not store near flame, heat or strong oxidants.
- C. Protective coating materials are to be handled according to their material safety data sheets.

#### 1.5 SITE CONDITIONS

- A. Applicator shall conform with all local, state and federal regulations including those set forth by OSHA, RCRA, and the EPA and any other applicable authorities.
- B. Procedures shall be provided by Contractor for flow diversion or bypass pumping to allow Applicator to perform the specified work.
- C. Concrete substrate moisture shall be <5% at the surface.
- D. Provide ventilation and illumination as required for proper installation and application of the coating material.
  - 1. Verify no personal property or materials to be used in the project are within the spray fly pattern during application of the coating material.

#### 1.6 MAINTENANCE – Reserved.

#### 1.7 WARRANTY

- A. Applicator shall warrant all work against defects in materials and workmanship for a period of three (3) years, from the date of final acceptance of the project.

- B. Applicator shall, within a reasonable time after receipt of written notice, repair defects in materials or workmanship which may develop during said three year warranty period, and any damage to other work caused by such defects or the repairing of same, at Applicator's expense and without cost to the Owner.

## PART 2 - PRODUCTS

### 2.1 GENERAL

- A. Provide prepackaged materials that are designed, manufactured, and intended for existing concrete rehabilitation and coating, and the specific application in which they are used.
1. Properly clean and prepare all surfaces as specified and required for the application of the intended products.
  2. Stop all active points of infiltration using chemical grout as specified prior to applying the liner system.

### 2.2 INTERIOR STRUCTURE SEALING

- A. Minor Infiltration Control Material:
1. Use a rapid setting cementitious product to stop minor water infiltration with the following minimum requirements:
    - a. Compressive strength (ASTM C 109): 1,000 psi, 1 hr.; 2,500 psi, 24 hrs.
    - b. Set time: <1.0 minute.
  2. Acceptable manufacturers/products:
    - a. Strong-Seal Corp., Strong-Plug.
    - b. Sauereisen, Instaplug No. F-180.
    - c. Or equal.
- B. Heavy Infiltration Control Material:
1. Use a quick setting, one or two component, expanding chemical grout.
  2. Acceptable manufacturers/products:
    - a. Spetec N450.
    - b. Avanti AV-280 Hydrofoam.
    - c. Or equal.
- C. Topcoating Material:
1. Factory blended, rapid setting, high early strength, non-shrink cementitious or epoxy repair mortar that can be troweled or pneumatically spray applied.
    - a. Must be compatible with proposed protective coating/lining material.



## 2.3 PROTECTIVE COATING (LINING) MATERIAL

### A. General:

1. The solvent-free, 100% Solids, polyurea material shall be used to form a corrosion protective monolithic liner covering all interior surfaces of the structure.
2. Material must be fast setting with a return to service time within one hour of completion.

### B. Materials:

1. Primer: Chemprime 3558, two-component epoxy primer for use on concrete substrates.
  - a. Apply at 3 to 6 mils and directed by manufacturer's technical data.
2. Coating/Liner: Chemline ARC rapid curing polyurea consisting of a plural component spray.

### C. Properties:

- |                          |            |                                   |
|--------------------------|------------|-----------------------------------|
| 1. Tensile strength      | ASTM D638  | >3,850 psi                        |
| 2. Tear Strength         | ASTM D624  | 570 pli                           |
| 3. Bond (Concrete)       | ASTM D7234 | > 200 psi<br>or Substrate Failure |
| 4. Elongation            | ASTM D638  | 425%                              |
| 5. Hardness, Shore D     | ASTM D2240 | 52                                |
| 6. Modulus of Elasticity | ASTM D412  | 2,000 psi                         |

### D. Applied thickness:

1. Lining shall be installed to a thickness necessary to qualify as a monolithic (void free) liner.
2. Roughness of the substrate will dictate the thickness needed to create the monolithic liner and eliminate any opportunity for voids in the lining.
3. The minimum value for coating thickness for corrosion protection shall be **125 mils**.

### E. Acceptable manufacturer:

1. Chemline Inc., Chemline Polyurea Liner. Phone: 314-664-2230
2. Or approved equal.

## PART 3 - EXECUTION

### 3.1 SURFACE CONDITIONS

#### A. Examine the areas and conditions under which work of this Section will be performed.

1. Correct conditions detrimental to timely and proper completion of the Work.
2. Do not proceed until unsatisfactory conditions are corrected.

### 3.2 FIELD MEASUREMENTS AND INSPECTIONS

- A. Make necessary inspections and measurements in the field to assure application methods and materials are in accordance with these Specifications and manufacturers recommendations.
- B. Comply with all local, state, and federal regulatory agency requirements regarding environment, health, and safety.

### 3.3 SURFACE PREPARATION

- A. Remove all loose material from manhole wall and bench using a high pressure water spray.
  - 1. Minimum water pressure: 3,000 psi.
  - 2. Remove loose and protruding mortar and concrete.
  - 3. Remove oil, grease, roots, or other contaminants that may inhibit bonding of the rehabilitation materials.
  - 4. Fill voids and active leaks on the fillet and pipe seals as necessary with patching mix as recommended by the manufacturer.
  - 5. If required, drill and pressure grout large leaks as recommended by the manufacturer.

### 3.4 STRUCTURE SEALING AND LINING

- A. See Notes on Sheet M-1 of Drawings regarding video recording of conditions in wet well prior to work inside wet well and after coating/lining has been completed.
- B. Repair mortar applicators shall be trained to properly apply the cementitious mortar according to manufacturer's recommendations.
- C. Protective coating (lining) must be applied by a Certified Applicator of the protective coating (lining) manufacturer and according to manufacturer's requirements and specifications.
- D. All leaks shall be plugged and/or grouted, and all sewage flows shall be stopped, prior to preparation for topcoating and coating/lining work on interior surfaces of the wet well structure.
- E. Pump discharge elbows, pump discharge piping, valve vault sump pump discharge piping, and concrete fillets shall be installed prior to coating/lining of wet well.
- F. Cover pumps, motors, power and control cables, guide rails, and pump receiving flange on discharge elbow to prevent coating/lining application on this equipment.
  - 1. If this equipment is installed after the coating/lining, protect the coating/lining from damage with mats, pads, etc.
- G. Surfaces to be coated/lined include:
  - 1. Bottom and new fillets of wet well.

2. Wet well walls, including new pipe penetrations and intermediate pipe support connections to wall.
  3. Underside of new wet well flat slab top. (Coated/lined prior to installation on the existing wet well walls).
    - a. Protect access hatch from spray application of coating/lining.
- H. Conform to the recommendations of the manufacturer, including materials handling, mixing, environmental controls during application, safety, and spray equipment.
1. A representative of the lining materials manufacturing company shall be on-site the day of lining application.
  2. Use spray equipment specifically designed for the liner system.
  3. Installation of the protective coating/lining shall not commence until the wet well walls are dry to the touch.
  4. Temperature of the surface to be coated should be maintained between 55° F and 80° F during application.
    - a. Prior to and during application, care should be taken to avoid exposure of direct sunlight or other intense heat source to the structure being coated/lined.
  5. Affix a permanent identification of the date of work performed to the structure in a readily visible location.
  6. Provide a final written report to the Owner detailing the date of work, description of repairs, and coating/lining application.

### 3.5 INSPECTION

- A. Liner thickness shall be the minimum value specified, and shall be confirmed during the Adhesion Testing described below.
- B. Final liner system shall be completely free of pinholes or voids as evidenced by High Voltage Spark Testing.
  1. After the protective coating has set hard to the touch it shall be inspected with high-voltage spark testing (holiday detection) equipment and procedures.
  2. Surface shall first be dried, an induced holiday shall then be made on to the coated concrete surface and shall serve to determine the minimum/maximum voltage to be used to test the coating for holidays at that particular area.
  3. The spark tester shall be initially set at 100 volts per 1 mil of film thickness applied, but may be adjusted as necessary to detect the induced holiday (refer to NACE RPO188-99).
  4. All detected holidays shall be marked and repaired by abrading the coating surface with grit disk paper or other hand tooling method.
    - a. After abrading and cleaning, additional protective coating material can be hand applied to the repair area.
    - b. All touch-up/repair procedures shall follow the protective coating manufacturer's recommendations.

- C. Final liner system shall be properly installed to adhere to the concrete substrate of the wet well wall as evidenced by Adhesion Testing.
1. Adhesion (pull) testing shall be conducted after the coating/lining system has cured per manufacturer instructions and in accordance with ASTM 7234 (Concrete).
  2. Adhesion tests shall be performed on a minimum of three areas of the structure – in the upper 1/3, at the mid-section, and in the lower 1/3 of the wet well wall.
  3. A minimum of one ¾” dolly shall be affixed to the lined surface at each testing location.
    - a. The adhesive used to attach the dollies to the liner shall be rapid setting with a tensile strength in excess of the liner material and permitted to cure in accordance with manufacturer recommendations.
    - b. The lining material and dollies shall be adequately prepared to receive the adhesive.
  4. Prior to pull test, the Contractor shall utilize a scoring device to cut through the coating until the substrate is reached.
    - a. Extreme care shall be required while scoring to prevent micro-cracking in the coating.
    - b. Failure due to improper dolly adhesive or scoring shall require retesting.
  5. The pull test in each area shall meet or exceed 200 psi and shall include subbase adhered to the back of the dolly or no visual signs of coating material in the test hole.
  6. Pull tests with results between a minimum 150 psi and 200 psi shall be acceptable if more than 50% of the subsurface is adhered to the back of the dolly.
  7. If any test fails, a minimum of three additional re-test locations in the same section of the wet well shall be tested, as directed by the Engineer.
  8. If any of the retests fail, all loosely adhered or unadhered liner in the failed area, as determined by the Engineer, shall be removed and replaced at the Applicator’s expense.
- D. Visual inspection will be performed by the Owner and Engineer and the coating/lining manufacturer’s representative.
1. Any deficiencies in the finished liner system shall be marked and repaired according to the procedures of the manufacturer.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 MEASUREMENT

- A. Measurement will not be made for the mobilization/demobilization required for the work of this Section and for the coating/ling work specified in this Section.

- B. Due to unknown conditions within the wet well, measurement will be made for preparation work and materials as follows:
  - a. Repair and substrate preparation crew time; per day
  - b. Chemical Grout for stopping leaks; per gallon
  - c. Cementitious Grout or Mortar (40 pound bag) per bag

4.2 PAYMENT

- A. This payment will include all the labor, materials, and any equipment required to complete the work.
- B. Payment for work specified in this Section will be made at the Contract Unit Lump Sum Price for the listed Items, in the Schedule of Prices:
  - 33 39 43.51/01; Mobilization/Demobilization
  - 33 39 43.51/02; Coating/Lining Work inside Wet Well
- C. Payment for work specified in this Section will be made at the Contract Unit Prices for the following listed Items, in the Schedule of Prices:
  - 33 39 43.51/03; Repair and Substrate Preparation - Day
  - 33 39 43.51/04; Chemical Grout - Gallon
  - 33 39 43.51/05; Cementitious Grout or Mortar - Bag
- D. The Bidder/Contractor shall provide Contract Unit Lump Sum Prices for the following listed items at the end of the Schedule of Unit Prices:
  - Unnumbered; 3 Year Warranty on Wet Well Lining
- E. Payment will not be made for any other items except as listed above. All other costs associated with such work shall be considered incidental and shall be included in the prices bid for various items to which they pertain in the Schedule of Prices.

END OF SECTION





VILLAGE OF HOFFMAN ESTATES, ILLINOIS  
WPLCP Loan No. L173548  
Chippendale Lift Station Rehabilitation

MANDATORY PRE-BID CONFERENCE  
March 5, 2020

**Introductions:**

*Village of Hoffman Estates:* Haileng Xiao, Superintendent of Water & Sewer  
*Village of Hoffman Estates:* Jeremy Jahnke, Water Operations Supervisor  
*Baxter & Woodman, Inc.:* Shane Firsching, Project Manager

An Optional site visit to the work site will follow this meeting. Questions and answers from the site visit, but not a list of attendees at the site visit, will be included in the summary Minutes to be included in Addendum No. 1 for the project.

**Project Description**

The project is described generally in the ADVERTISEMENT FOR BIDS, and is repeated below as part of this Pre-Bid Conference.

Village of Hoffman Estates, Illinois – Chippendale Lift Station Rehabilitation – WPCLP Loan No. L173548

The proposed construction consists of rehabilitating the existing steel can style lift station. The work includes temporary bypass pumping, wet well rehabilitation, dry well (pump chamber) rehabilitation, pumps and motors, controls in an above-ground cabinet, emergency power generator and transfer switch, integration of the new equipment to the existing electrical service, site restoration, and other miscellaneous items of work.

The Village is not releasing the Engineers' Opinion of Probable Construction Cost.

**Bid Receiving**

Sealed proposals will be received at the Office of the Village Clerk at 1900 Hassel Road, Hoffman Estates, Illinois 60169 until 10:00 A.M., Wednesday, April 1, 2020 and at that time will be publicly opened and total amount of bid proposal read aloud.

**Schedule**

Bids are scheduled to be received and opened April 1, 2010. The Public Works & Utilities Committee review is scheduled for April 6, 2020 with Village Board of Trustees approval of the committee's report on April 20, 2020. The Village Board of Trustees intends to authorize issuance of the Notice of Intent to Award Contingent on IEPA Loan Offer on May 18, 2020, after which date the Notice can be sent and the Agreement can be prepared and executed.

**Funding**

The project is designated as L173548 for funding through the Illinois Environmental Protection Agency (IEPA) Water Pollution Control Loan Program (WPCLP).

All Bidders must comply with the IEPA WPCLP policy regarding the increased use of disadvantaged businesses. This policy requires all Bidders to advertise in a daily, Regional newspaper, OR the Bidders may publish the Advertisement in an established, online Bidder's Clearinghouse such as the "Dodge Report". The Advertisement must run one (1) day at least sixteen (16) days prior to Bid opening, **no later than Monday, March 16, 2020**. If there will be no subcontracts awarded, no advertisement is required. See loan requirements in Section 00 21 00.61 and in Sections 00 74 23.01 through 00 74 23.07, inclusive, of the Project Manual.

Compliance with American Iron and Steel is required for Loan Funding. See requirements on Page 43 of Section 00 21 00.61 and the following:

### **American Iron & Steel Requirement**

Compliance is required with the "Use of American Iron and Steel" requirements as contained in Section 608 of the Water Resources Reform and Development Act.

A requirement of the Illinois Water Pollution Control Loan Program is the American Iron and Steel requirements for state revolving funds as contained in section 436 of H.R. 3547, Consolidated Appropriations Act (CAA), 2014. The Act was signed into law in January of 2014 as P.L. 113-76. The law requires that all iron and steel products used in a water system or treatment works project funded by a state water pollution control revolving fund are produced in the United States.

The law states that "iron and steel products" refers to the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal iron or steel castings, fire and yard hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforcing steel for reinforced precast concrete, and other construction materials."

The AIS requirements of the CAA are not the same as the Buy American provisions of ARRA.

USEPA also has provisions for Nationally Approved and Project Specific Waivers.

Information and clarification about the AIS requirements are at the USEPA website [http://water.epa.gov/grants\\_funding/aisrequirement.cfm](http://water.epa.gov/grants_funding/aisrequirement.cfm).

Additionally, the IEPA has required specific language related to AIS requirements be added to loan program projects. This language can be found in multiple sections of the Project manual. For example, in the WRF Improvements project, CERTIFICATE 00 62 33.13 BIDDER CERTIFICATION REGARDING THE USE OF AMERICAN IRON AND STEEL PRODUCTS is required to be submitted with the Bid.

The Project Manual also describes documentation requirements. These projects are using the step certification process recommended by USEPA. Step certification requires a certification from each handler of the product from the source iron and/or steel through manufacturing and finishing for each covered/coated item. A certification form is included in the project manuals for this purpose.

Below is the process that will be followed during construction:

- ) Contractor will submit a list of items subject to American Iron and Steel requirements prior to first application for payment, but no later than 7 calendar days after the date of the Pre-Construction Meeting.

- ) American Iron and Steel Conference with Owner and Engineer to finalize the list used to track certification submittals. An AIS Conference will be held for this project.
- ) Submit Preliminary Documentation with shop drawings or sixty days prior to shipment for items not requiring shop drawing submittals.
- ) Submit Final Documentation no later than seven calendar days prior to shipment.

### **Information during Bidding Period**

Contractors can visit the work site during normal working hours (8:00 a.m. to 3:30 p.m.) Monday through Friday. Contact Haileng Xiao, Superintendent of Water & Sewer at (847) 781-2703 to make arrangements. Please give 24 hours' notice.

All pertinent documents may be examined at the Office of the Village Clerk at 1900 Hassel Road, Hoffman Estates, Illinois 60169 or online at [bhfxplanroom.com](http://bhfxplanroom.com). Documents can be purchased **only** through BHFx Digital Imaging at [bhfxplanoom.com](http://bhfxplanoom.com).

Questions during the bidding phase should be directed to the project engineer – Shane Firsching, Baxter & Woodman, Inc., 815.444.3395, [sfirsching@baxterwoodman.com](mailto:sfirsching@baxterwoodman.com).

Plan holders are reminded the Project Manual for the project stipulates all questions and requests for information must be submitted at least five (5) business days before the bid opening to provide sufficient time to inform all bidders of the information. The bid opening is on Wednesday, April 1, 2020, so questions must be received no later than noon on Wednesday, March 25, 2020. Questions received after March 25, 2020 may not be answered. Only questions answered by formal written Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect.

### **Contractor Registration with Village**

Contractor and their Subcontractors are required to register with the Village only **after** a Contract has been awarded for the project.

All Contractors and Subcontractors doing work for the Village of Hoffman Estates are required to first obtain a registration certificate from the Village. The fee for the registration certificate is \$100.00, and the certificate is valid for one year. The Contractor and Subcontractors are required to maintain a valid registration certificate throughout the duration of their Work. Registration certificate forms can be obtained at Village Hall. More information can be found at the following website:

<https://www.hoffmanestates.org/home/showdocument?id=18971>

**Other Specifications of Special Note** (required by the Village, not WPCLP funding)

### **Submittal Exchange**

Electronic submittals are required to be made through Submittal Exchange as described in Paragraph 3.3 of Section 01 33 01. Submittal Exchange is a website designed specifically for transmitting submittals between construction team members. Baxter & Woodman will set up and define the requirements of the Project to be submitted, transmitted, and maintained through Submittal Exchange. Training is available from Submittal Exchange regarding use of the website and PDF submittals.

## **Warranty**

The contract documents are written with the specific intention that the project as a whole is warranted for a period of 3 years after the date of acceptance of the Work and final payment by Owner. Therefore, the Project Manual includes language (Section 00 73 00.61, paragraph 1.6.D.1. – 6.19A) stating:

Contractor shall execute and deliver to Owner, before the final payment will be issued, a written warranty that guarantees that all work is in accordance with the Contract Documents and will not be defective. This warranty shall guarantee all work for a period of three years from the date of acceptance of the Work and final payment by Owner, except for equipment, motors, electrical controls, and other mechanical devices, which shall be guaranteed for a period of two years from the date of acceptance of the Work and final payment by Owner unless a different guarantee period of time is specified under other parts of the Contract Documents.

## **Deducts**

IEPA loan funding will not reimburse for spare parts, extra materials, or extended warranties. The Bid Form includes a requirement for the bidder to provide deducts for the cost of these items. This will allow the construction loan manager to indicate the correct reimbursement amount to IEPA.

## **PROJECT SPECIFIC INFORMATION**

A list of items that must be submitted with the Bid can be found in Section 00 43 93.61 BID SUBMITTAL CHECKLIST.

Bids are to be submitted as required in Section 00 41 00.61 BID FORM. This project will be awarded on the basis of the total summed amount of each Pay item quantity times the unit price for that Pay Item, without consideration of deduct prices provided in the BID FORM.

## **Contract Times**

Contract Times are listed on the BID FORM, Section 00 41 00.61, paragraph 5. Based on a Notice to Proceed date of May 18, 2020, the work will be Substantially Complete by September 15, 2020 (approx. 120 calendar days after the Contract Time commences to run). Work will be completed and ready for final payment by October 15, 2020 (approx. 150 calendar days after the Contract Time has begun).

Liquidated damages are listed in the SUPPLEMENTARY CONDITIONS, Section 00 73 00.61. Paragraph 1.19 includes the addition of 12.06 Liquidated Damages. Contractor shall pay Owner as liquidated damages for delay (but not as a penalty) \$1,000 for each day that expires after the time specified in the BID FORM for Substantial Completion until the Work is substantially complete. Contractor shall pay Owner \$500 for each day that expires after the time specified in the BID FORM for completion and readiness for final payment.

The target construction schedule, which depends on receipt of a Loan Offer from IEPA, is to issue the notice to proceed no later than May 18, 2020. The approximate completion dates would then be as follows:

- Substantial completion on September 15, 2020 (120 days)
- Completion and final payment on October 15, 2020 (150 days)

## **Bidder Requirements**

Bidders are instructed that the apparent low Bidder, or any other Bidder so requested, shall submit to the office of Engineer within five (5) days after the receipt of Bids a list of the names of Bidder's proposed subcontractors whose portion of the Work exceeds \$10,000, along with a description of the Work to be performed by each.

## **Permits**

A building permit from the Village is not required.

## **Construction Coordination and Phasing**

The description of the project coordination and construction phasing is in specification SECTION 01 31 13.16 PROJECT COORDINATION AND CONSTRUCTION PHASING. This section provides coordination and cooperation requirements between contractors to maintain the operation of the existing lift station and construct the improvements. Contractor is responsible for coordinating with School District 54.

- A. The last day of school is scheduled for May 28, 2020, but could extend to June 4, 2020, depending on snow days.
- B. School staff are scheduled to return to work on August 13, 2020. Students are scheduled to return to school on August 17, 2020.
- C. The contractor may not mobilize the project site until after the last day of student attendance.
- D. Maintain one open driveway to the school parking lot at all times.
- E. Complete all excavation, pipe installation, conduit installation, backfill, and concrete placement prior to August 13, 2020.
  - 1. Installation of the above ground control cabinet, generator, and integration work can be performed after school starts as long as the work does not impede school student drop-off and pick-up.
- F. Complete final pavement restoration in one day's time, unless the work is completed prior to the first day of student attendance.
- G. Work performed is subject to School District #54 review and approval. Plan construction activities in advance and in coordination with school activities.

## **Facility Start-up**

The Facility Startup specification Section 01 91 58 provides requirements for submitting detailed plans and schedule for startup, scheduling pre-startup conference, specific process startups requirements and required steps for substantial completion.

## Testing

Section 01 45 29 TESTING LABORATORY SERVICES states the Contractor is to provide an independent testing laboratory service. Contractor needs to include within the Contract Unit Prices amounts sufficient to cover all testing required of the Contractor under pertinent Sections of the Specifications.

## Miscellaneous

- ) The Contractor should pay attention to Section 01 22 29 Measurement and Payment for a description of the various pay items and what is included in each pay item.

## Recap / Concluding Remarks

Addendum No. 1:

- ) Minutes from this meeting, including questions and answers; and questions and answers from the optional site visit will be included.

Additional Addenda might be required to address questions from Bidders/Vendors.

There will be an optional site visit at the work site located at 1800 Chippendale Road, Hoffman Estates, Illinois immediately following this Pre-Bid Conference.

## Pre-Bid Conference Questions and Responses:

The following questions were asked and responded to during the Pre-Bid Conference:

1. Is May 18 a hard date for issuance of the construction contract Notice to Proceed?
  - a. *The May 18 date is set to establish a latest date for the Notice to Proceed. The Notice to Proceed may be issued prior to May 18.*
2. Does the contractor get paid by the Village or State of Illinois?
  - a. *The contractor will be paid by the Village regardless of whether IEPA SRF Loan is used or not.*
3. Bid proposals must be good for 120 days. How does 120 days apply?
  - a. *The Village is pursuing an IEPA SRF Loan to fund the project. IEPA reviews the bid proposal prior to issuing the loan agreement. The review period is typically less than 120 days.*
4. Can the wet well be rehabilitated with the same product as the dry well?
  - a. *Yes, see the Addendum revisions.*
5. Are there any changes to the listed control panel manufacturers?
  - a. *Yes, see the Addendum revisions.*
6. The completion schedule seems too tight. Are there any adjustments to completion dates?
  - a. *There are no revisions to the project schedule. The Village will endeavor to issue Notice to Proceed as early as possible.*



7. What are the flow rates on each of the 3 sewers coming in to the wet well?
  - a. *Dry weather flow from each of the three upstream sewers averages 35 gpm with a maximum dry weather peak flow of 60 gpm.*
  - b. *Wet weather flow from each of three upstream sewers can reach a peak flow of 300 gpm.*
  
8. Clarify discharge route for temporary bypass piping. Are driveway crossings, road ramps, or driveway ramps expected?
  - a. *Dry Well Rehabilitation – Install permanent plug valve on existing force main per Sheet C-1. Close new plug valve and install two 8” muni balls into the suction side of pumps in wet well. Use wet well for suction side of bypass pump and use the existing bypass connection for discharge to the existing force main.*
  - b. *Wet Well Rehabilitation*
    - (1) *Option 1 - See attached exhibit. The wet well will have to be muni balled off utilizing three plugs stopping any flow of water into the wet well during rehabilitation work. Provide a pump at each of the upstream manholes to discharge to a central storage container or frac-out tank. Provide a central pump to convey the wastewater in the temporary storage container to the existing bypass connection and force main. The pumps at each of the manholes will require four ramps for driveways. One roadway crossing is needed which can be achieved with ramps or trenching.*
    - (2) *Option 2 - The wet well will have to be muni balled off utilizing three plugs stopping any flow of water into the wet well during rehabilitation work. Provide a pump at each of the upstream manholes to discharge to a temporary manifold with a single discharge to the existing bypass connection and force main. The pumps at each of the manholes will require four ramps for driveways. One roadway crossing is needed which can be achieved with ramps or trenching.*
  
9. Is redundancy on the bypass pumps required?
  - a. *When three bypass pumping locations (three separate manholes) are used, provide one redundant bypass pumping system that could be used at any of the three manhole locations. (Total of four bypass pumping systems – three active, one standby.)*
  - b. *When one bypass pumping location (the wet well) is used, provide one redundant bypass pumping system. (Total of two bypass pumping systems – one active, one standby.)*
  
10. What are surcharging limitations on bypass pumping?
  - a. *See attached exhibit for surcharging limitations.*
  
11. Who is the current integrator for the Village?
  - a. *Concentric Integration*
  
12. Is the pump drawn to scale and which manufacturer is it based on?
  - a. *Yes, the pump is drawn to scale and is based on the Grundfos pump.*
  
13. What is included in HVAC section? Does it include a dry well heater, dehumidifier, or exhaust fan?
  - a. *See revised Section 23 00 00. An exhaust fan is included. A dehumidifier was added by Addendum.*

14. Are the pumps running on VFDs?
  - a. *The proposed pumps will run on soft starters. VFDs are not included in the design.*
15. Does the ComEd meter get replaced or relocated?
  - a. *The existing ComEd meter will be reused and relocated.*
16. Is there a heater in the cabinet?
  - a. *No.*
17. Is the ATS in the control panel or generator?
  - a. *The automatic transfer switch will be located in the control panel cabinet.*
18. Is there a map of the force main and intended bypass pumping plan?
  - a. *Yes, see the Addendum revisions.*
19. Are the drawing dimensions of the existing dry well, internal piping, valves, and fittings taken directly from previous drawings or were they manually measured in the field?
  - a. *The Addendum revisions are based on field measurements.*
20. Does the dry well cover get replaced?
  - a. *Yes.*
21. Does the wet well leak? Are any inspections of the wet well available?
  - a. *The wet well leaks at the joints between precast concrete sections and at some of the steps. There are no inspection reports available.*
22. Does the dry well leak?
  - a. *There are no active leaks in the dry well.*

**PRE-BID CONFERENCE SIGN-IN SHEET**

**PROJECT:** Village of Hoffman Estates – Chippendale Lift Station Rehabilitation

**DATE:** Thursday, March 5, 2020

**TIME:** 10:00 a.m.

**LOCATION:** Public Works, 2305 Pembroke Avenue, Illinois 60169

Name	Representing	Phone Number	Email Address
Haileng Xiao, Supt. of Water & Sewer	Village of Hoffman Estates	847-781-2703	haileng.xiao@hoffmanstates.org
Shane Firsching	Baxter & Woodman	815-444-3395	sfirsching@baxterwoodman.com
MARC KRESMAY	MKC LLC	847-479-0909	MARC@KRESMAY.COM
GERARDO ESPARZA	MISELS CONSTRUCTION	312-420-5041	JOHNTHOMAS@MISELSCONSTRUCTION.COM
Mike Carroll	Rain for Rent	815.600.0000	McCarroll@rainforrent.com
Garry Sementa	Archon Construction	630-495-0015	GARRY@ARCHONCONSTRUCTION.COM
George Ismail	Martam Const.	(847)608-6800	George@martam.com

**PRE-BID CONFERENCE SIGN-IN SHEET**

**PROJECT:** Village of Hoffman Estates – Chippendale Lift Station Rehabilitation

**DATE:** Thursday, March 5, 2020

**TIME:** 10:00 a.m.

**LOCATION:** Public Works, 2305 Pembroke Avenue, Illinois 60169

Name	Representing	Phone Number	Email Address
Jeremy Jahnke	Village of Hoffman Estates	847-490-6800	Jeremy.Jahnke@HoffmanEstates.org



Wet Well Rehabilitation  
Bypass Pumping - Wet Well  
Option 1

By-Pass Pump 1  
-one bike path ramp

Install permanent  
plug valve on existing  
force main.

Central storage or  
frac-out tank for  
receiving discharge  
from Bypass Pumps  
1, 2, and 3.

By-Pass Pump 2  
-one road crossing

By-Pass Pump 4  
to existing By-pass  
Connection

By-Pass Pump 3  
- 3 driveway ramps



200ft

-88.109 42.061 Degrees



Wet Well Rehabilitation  
Bypass Pumping - Wet Well  
Option 2

By-Pass Pump 1  
-one bike path ramp

Install permanent  
plug valve on existing  
force main.

Temporary manifold  
with single discharge  
for discharge to  
existing bypass  
connection and force  
main.

By-Pass Pump 2  
-one road crossing

By-Pass Pump 3  
- 3 driveway ramps





**Bypass Pumping Manholes  
Allowable Surge**

Note: These are the allowable surcharging limitations during optimal conditions. Allowable surcharging depths may be reduced if basement backups occur.

**SAN5766**  
Rim: 787.94'  
Invert: 773.04' 8" SE  
Max. Surge: 779'  
Max. Surge Depth: 6.0'

**MacArthur  
School**

**SAN5774**  
Rim: 786.78'  
Invert: 773.28' 8" SW  
Max. Surge: 776'  
Max. Surge Depth: 2.7'

**SAN5780**  
Rim: 791.91'  
Invert: 773.61' 8" NW  
Max. Surge: 781'  
Max. Surge Depth: 7.4'





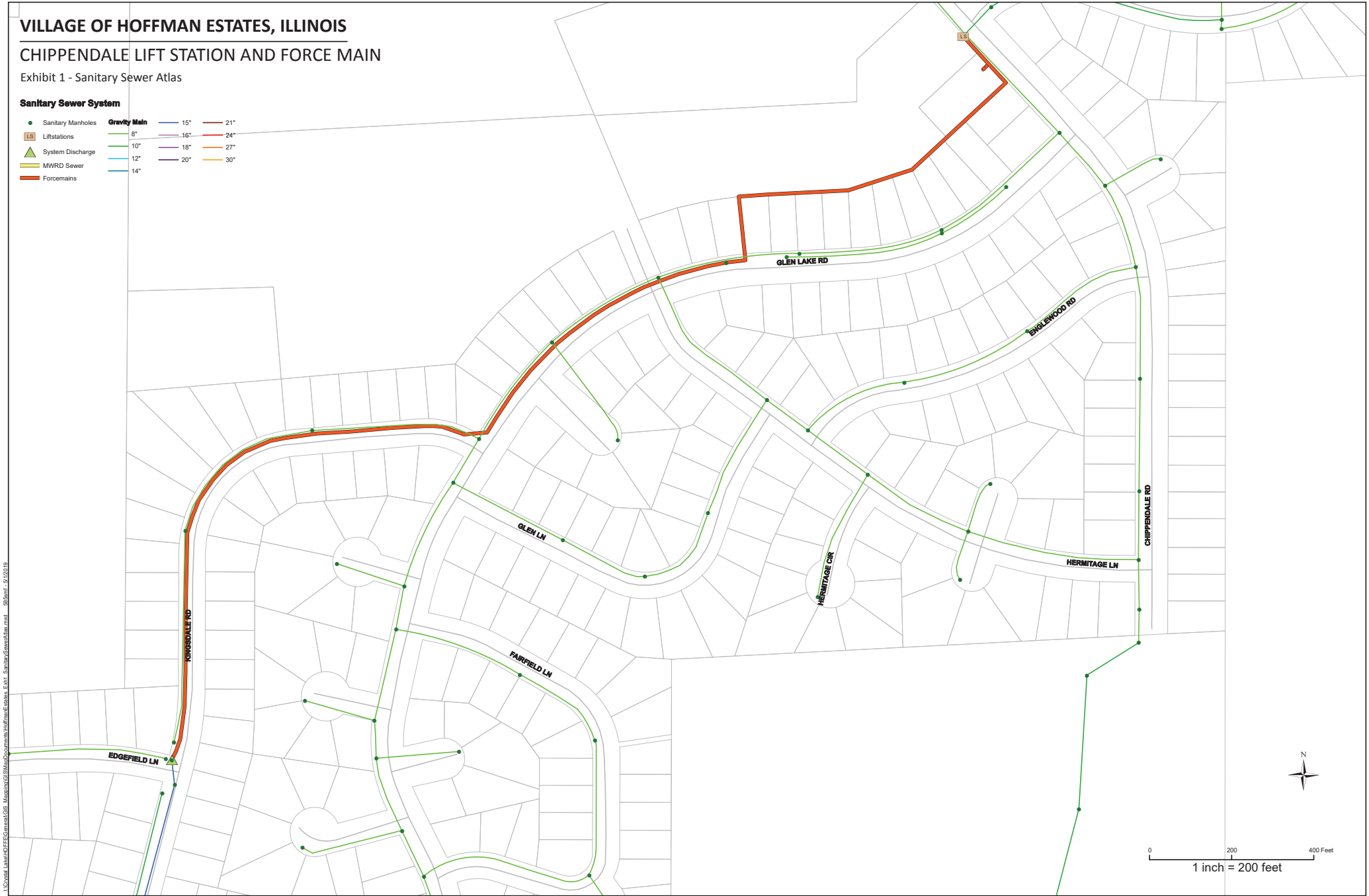
# VILLAGE OF HOFFMAN ESTATES, ILLINOIS

## CHIPPENDALE LIFT STATION AND FORCE MAIN

Exhibit 1 - Sanitary Sewer Atlas

### Sanitary Sewer System

- |                     |                     |     |     |
|---------------------|---------------------|-----|-----|
| ● Sanitary Manholes | <b>Gravity Main</b> | 15" | 21" |
| LS Liftstations     | 8"                  | 16" | 24" |
| ▲ System Discharge  | 10"                 | 18" | 27" |
| — MWRD Sewer        | 12"                 | 20" | 30" |
| — Force mains       | 14"                 |     |     |



I:\Civild\_Linework\General\GIS\_Maps\GIS\MapDocuments\HoffmanEstates\Exhibit\_1\_SanitarySewerAtlas.mxd\_28Sept\_15\_10219