

THE CITY OF NAPLES WASTE WATER TREATMENT PLANT REUSE PUMP UPGRADES

10600 CHEVROLET WAY, SUITE 300
ESTERO, FLORIDA 33928
Ph: 239-390-1467 Fax: 239-390-1769



www.tetrattech.com

PROJECT LOCATION:

380 RIVERSIDE CIRCLE
NAPLES, FLORIDA 34102

CLIENT INFORMATION:

CITY OF NAPLES
735 EIGHT ST. S
NAPLES, FLORIDA 34102

Tt PROJECT No.:

200-08516-13002

CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:

TO UPGRADE THE SYSTEM BY REPLACING THE TWO (2) 350 HP PUMPS WITH TWO (2) 600 HP PUMPS AND ADDING NEW VFDS FOR ALL PUMPS. IN ADDITION TO THE PUMP IMPROVEMENTS, THE HEATING VENTILATION AND AIR CONDITIONING (HVAC) SYSTEM USED TO COOL THE ELECTRICAL ROOM WHERE THE EXISTING PUMP CONTROLS ARE LOCATED WILL NEED TO BE REPLACED TO PROVIDE SPACE FOR THE NEW VFD CONTROLS

ISSUED:

08/20/13 - 60% DESIGN
11/08/13 - PERMIT SET
02/11/14 - CONSTRUCTION SET

VICINITY MAP:

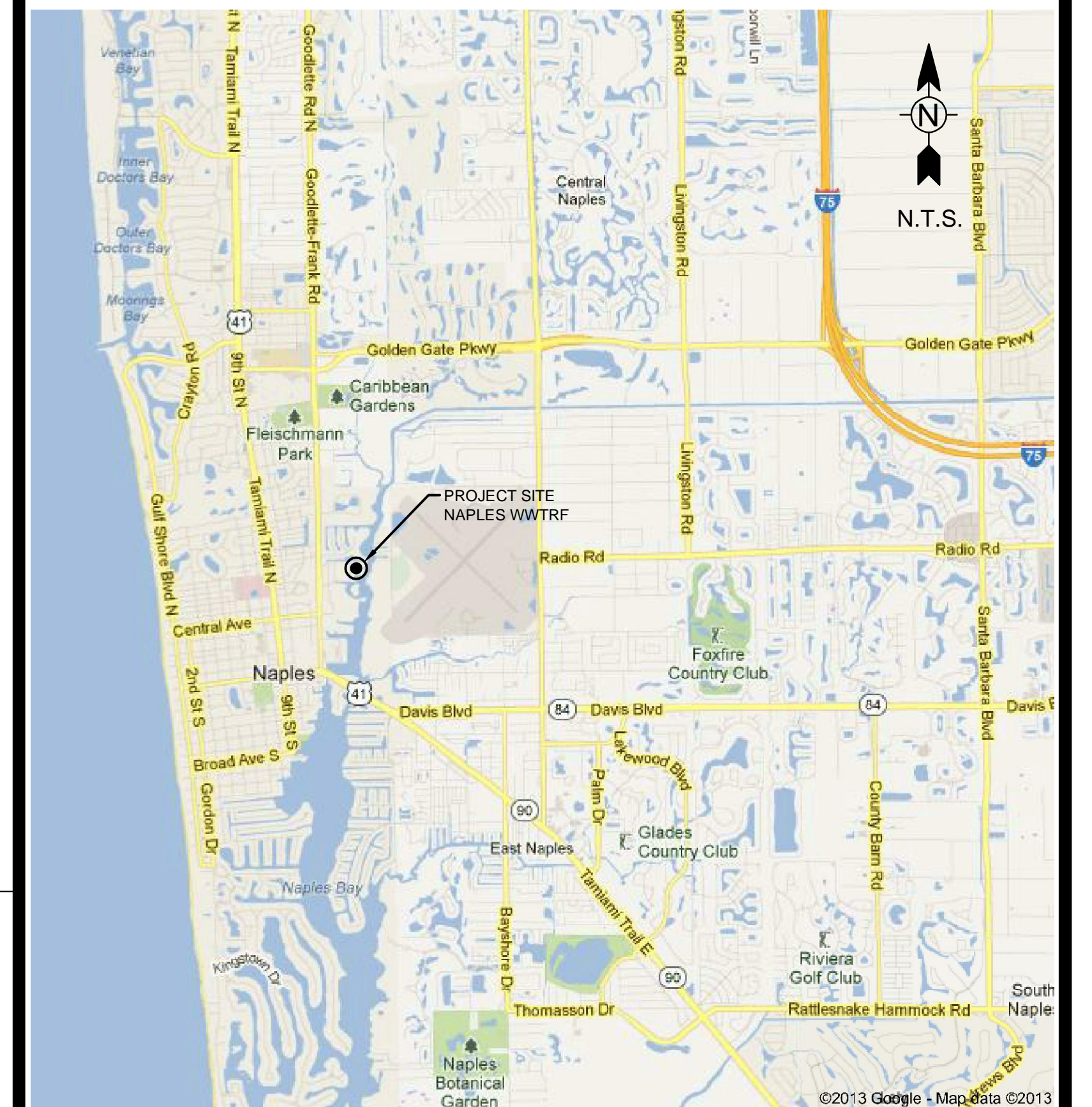


EXHIBIT A - ITB #14-028



CONSTRUCTION SET
FEBRUARY 2014

PREPARED FOR

THE CITY OF NAPLES

735 EIGHT ST. S
NAPLES, FLORIDA 34102

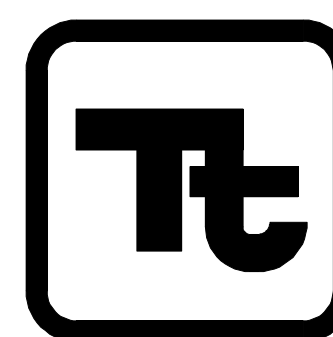
JOHN SOREY III	MAYOR
GARY PRICE	VICE MAYOR
BILL MOSS	CITY MANAGER
BOB MIDDLETON	UTILITIES DIRECTOR

CITY COUNCIL

TERESA HEITMANN
MARGARET "DEE" SULIK
BILL BARNETT
DOUG FINLAY
SAM SAAD III



February 11, 2014



TETRA TECH, INC.

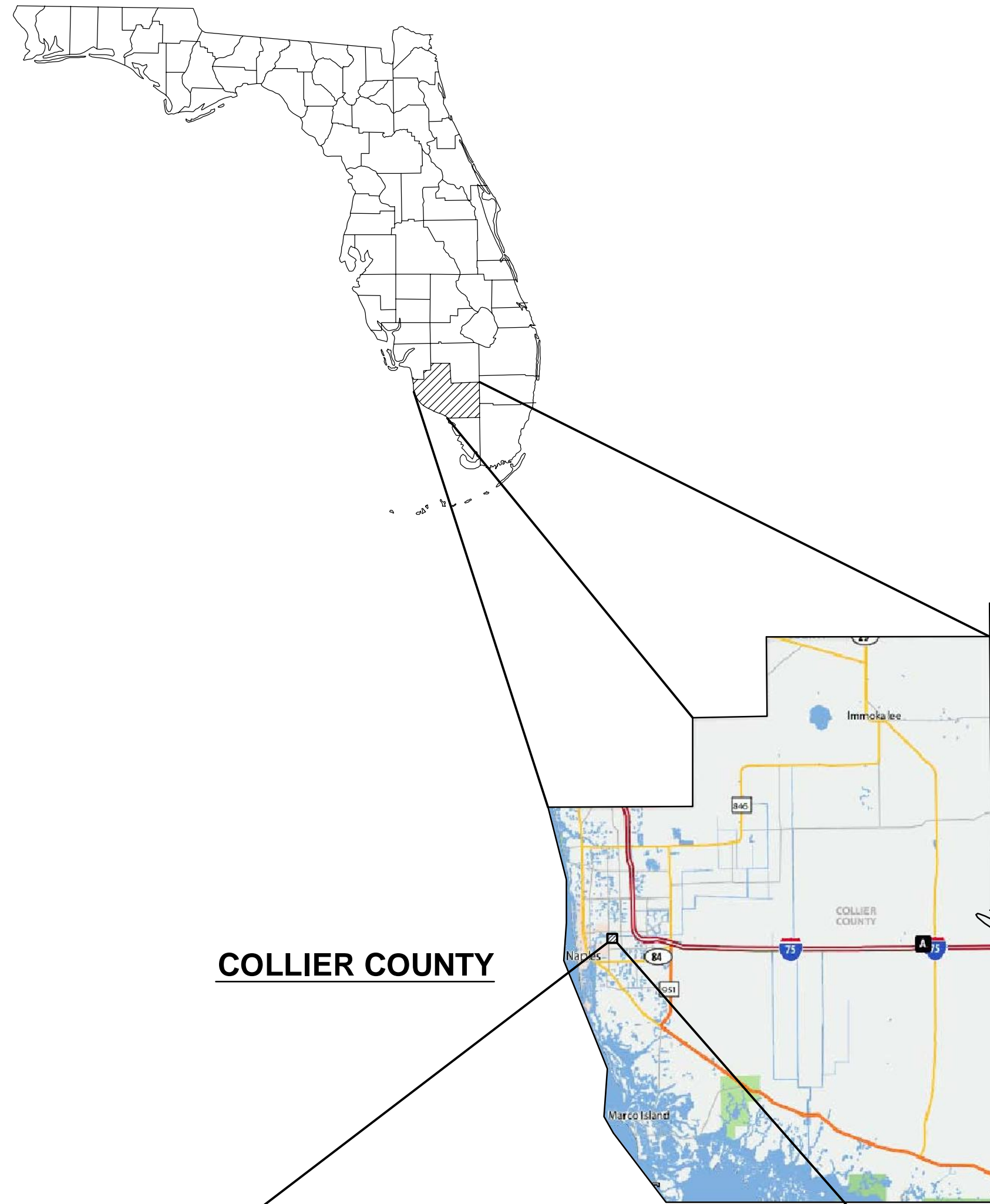
Infrastructure Offices Throughout Florida
Orlando * Fort Myers

10600 CHEVROLET WAY - SUITE 300 - ESTERO - FL 33928
TELEPHONE (239) 390-1467 - FAX (239) 390-1769 - WWW.TETRA TECH.COM

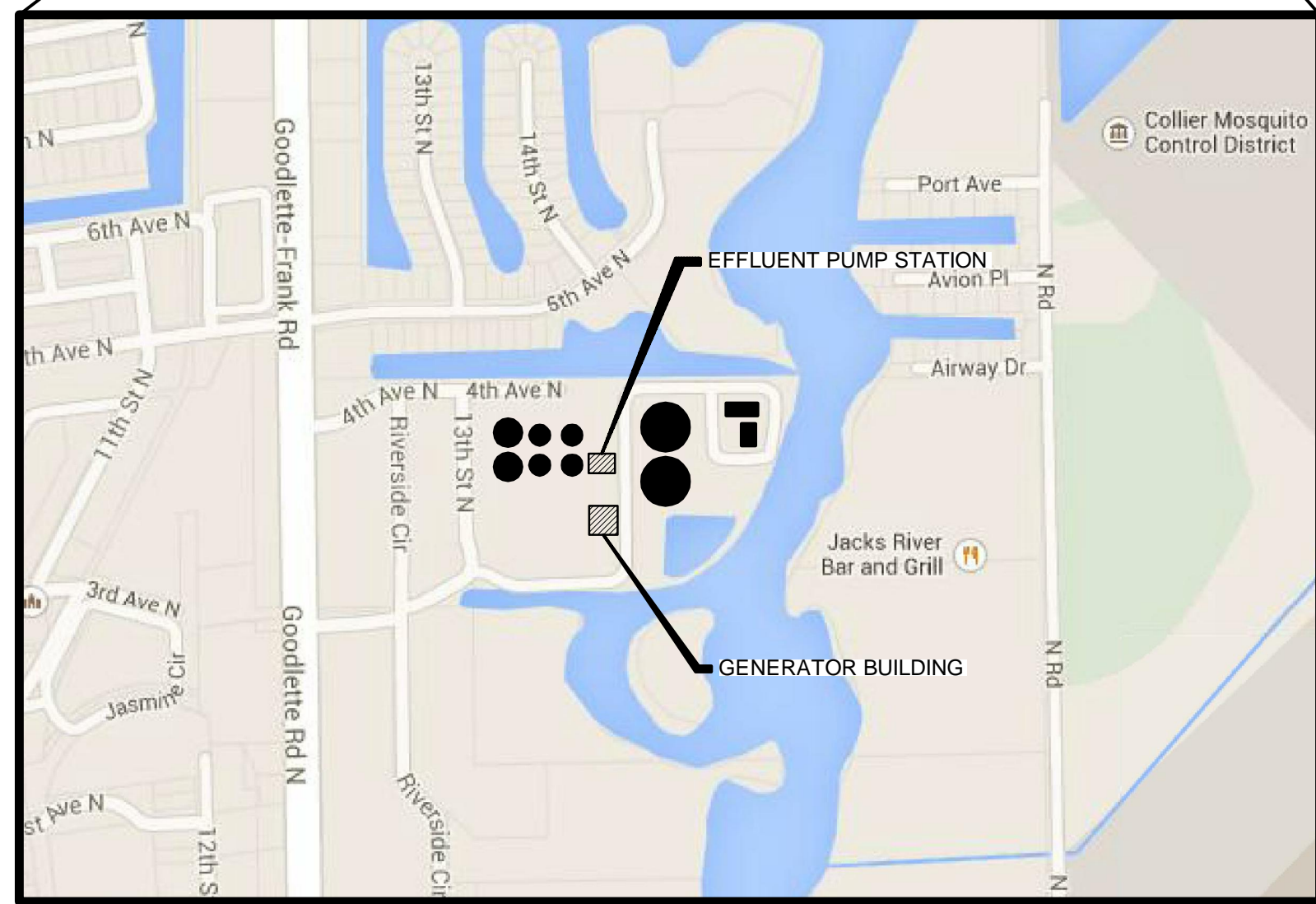
Daniel M. Nelson, P.E.
Florida Registration 56152
Tetra Tech Inc.
10600 Chevrolet Way, Ste. 300
Estero, Florida 33928
Engineering Business No. 2429

DATE _____

2/12/2014 5:10:47 PM - P:\NER\08516\200-08516-13002\CAD\SHSEFILES\G-001 LOC MAP-GENERAL NOTES-DWG INDEX.DWG - MARQUEZ, GERMAIN



COLLIER COUNTY



**NAPLES WWTRF
PROJECT SITE**

GENERAL NOTES

- ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE CITY OF NAPLES, THE PLANS, AND CONSTRUCTION SPECIFICATIONS. WHERE CONFLICTS OR OMISSIONS EXIST, THE CITY OF NAPLES STANDARDS SHALL DICTATE. SUBSTITUTIONS AND DEVIATION FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN HAND BEFORE BEGINNING ANY CONSTRUCTION. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. ANY PENALTIES, STOP WORK ORDERS ON ADDITIONAL WORK RESULTING FROM THE CONTRACTOR BEING IN VIOLATION OF THE REQUIREMENTS ABOVE SHALL BE FULLY BORNE BY THE CONTRACTOR.
- THE LOCATION OF ALL EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER OR CITY ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FIRST. ANY FEES ASSOCIATED WITH UTILITY RELOCATIONS SHALL BE BORNE IN ACCORDANCE WITH RESPECTIVE UTILITY COMPANY STANDARDS. IT IS REQUESTED UTILITY COMPANIES MOVE THEIR PARTICULAR UTILITIES. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND AT LEAST 48 HOURS BEFORE REQUIRED INSPECTION ON EACH AND EVERY PHASE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. NO PRESSURE TESTING, OR FINAL TESTING WILL BE ACCEPTED UNLESS WITNESSED BY THE ENGINEER'S REPRESENTATIVE.
- ALL CONTRACTORS, CITY REPRESENTATIVES, AND UTILITY COMPANIES ARE RESPONSIBLE FOR THEIR RESPECTIVE SURVEYING AND LAYOUT FROM BENCHMARK PROVIDED ON CONSTRUCTION PLANS. ANY SURVEY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED UPON COMPLETION OF THE WORK BY A REGISTERED LAND SURVEYOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY CONSTRUCTION ACTIVITIES FROM TAKING PLACE OUTSIDE OF THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS. ANY ON-SITE OR OFFSITE AREAS DISTURBED SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS AND ALL PERMITS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS TO THE ENGINEER OF RECORD WITHIN TWO (2) WEEKS AFTER CONSTRUCTION HAS BEEN COMPLETED ON EACH PHASE.
- PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DE-WATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE, AND MATERIALS TO BE DISPOSED OF OFFSITE, ALL OF WHICH WILL AFFECT HIS PRICING. ANY DELAY, INCONVENIENCE, OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL, AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST, FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.
- THE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION UNLESS SODDING, OR OTHER MORE READILY EFFECTIVE STABILIZATION PRACTICES ARE SPECIFIED ON THE PLANS.
- AN ALLOWANCE HAS BEEN INCLUDED FOR VFD PROGRAMMING, WHICH SHALL BE PERFORMED BY TETRA TECH, INC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PHYSICAL EFFORTS ASSOCIATED WITH THE VFD INSTALLATION, LESS PROGRAMMING.
- WORK SHALL BE PERFORMED SUCH THAT ONLY ONE (1) REUSE PUMP MAY BE OUT OF OPERATION AT A TIME AND SUCH THAT TWO 600 HP PUMPS ARE ONLINE AT ALL TIMES.
- SCOPE OF WORK AS DEFINED IN SECTION 01010 INCLUDES REPLACING CONTROLS FOR ALL (4) PUMPS, REPLACING HVAC UNITS IN GENERATOR BUILDING, AND REMOVING AND REPLACING EXISTING PUMP No. 3 AND ASSOCIATED PIPING/APPURTENANCES. WITH THE EXCEPTION OF CONTROLS/WIRING, ALL WORK ASSOCIATED W/ PUMP No. 4 AND ITS ASSOCIATED PIPING/APPURTENANCES IS SHOWN AS FUTURE AND NOT INCLUDED AS PART OF THIS PROJECT.

Sheet List Table

Sheet Number	Sheet Title
G-000	COVER
G-001	LOCATION MAP, GENERAL NOTES, AND DRAWING INDEX
G-002	LEGENDS AND ABBREVIATIONS
D-101	REUSE PUMPS UPGRADES DEMOLITION PLAN AND SECTIONS
D-102	REUSE PUMPS UPGRADES IMPROVEMENTS PLAN AND SECTIONS
M-101	HVAC DEMOLITION & NEW WORK FLOOR PLANS
M-601	HVAC SCHEDULES AND DETAILS
E-001	ELECTRICAL LEGENDS
E-002	INSTRUMENTATION LEGENDS
E-101	GENERATOR BUILDING & EFFLUENT PUMP STATION DEMOLITION PLANS
E-102	GENERATOR BUILDING & EFFLUENT PUMP STATION ELECTRICAL PLANS
E-103	GENERATOR BUILDING & EFFLUENT PUMP STATION ELECTRICAL PLANS_(2)
E-601	POWER ONE-LINE
E-602	CONTROL PANEL MODIFICATION AND WIRING



CONSTRUCTION SET

Daniel M. Nelson, P.E.
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10800 Chevrolet Way, Ste. 300
Estero, Florida 33928
Engineering Business No. 2423



MARK	DATE	DESCRIPTION

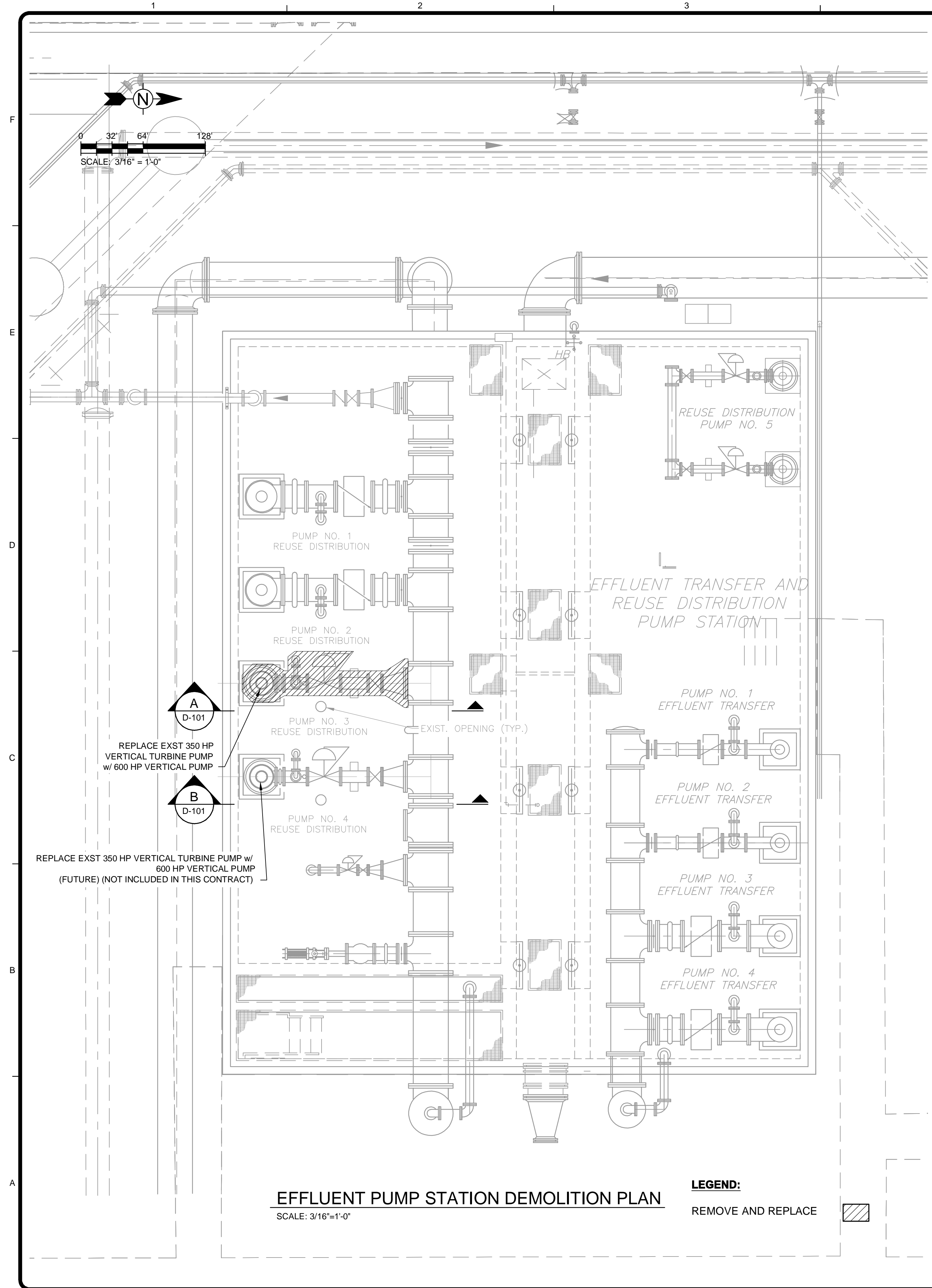
CITY OF NAPLES, FLORIDA
CITY OF NAPLES WWTRF
REUSE PUMP UPGRADES
LOCATION MAP,
GENERAL NOTES,
AND DRAWING INDEX

Project No.: 200-08516-13002
Designed By: DMN
Drawn By: GM
Checked By: DMN

G-001

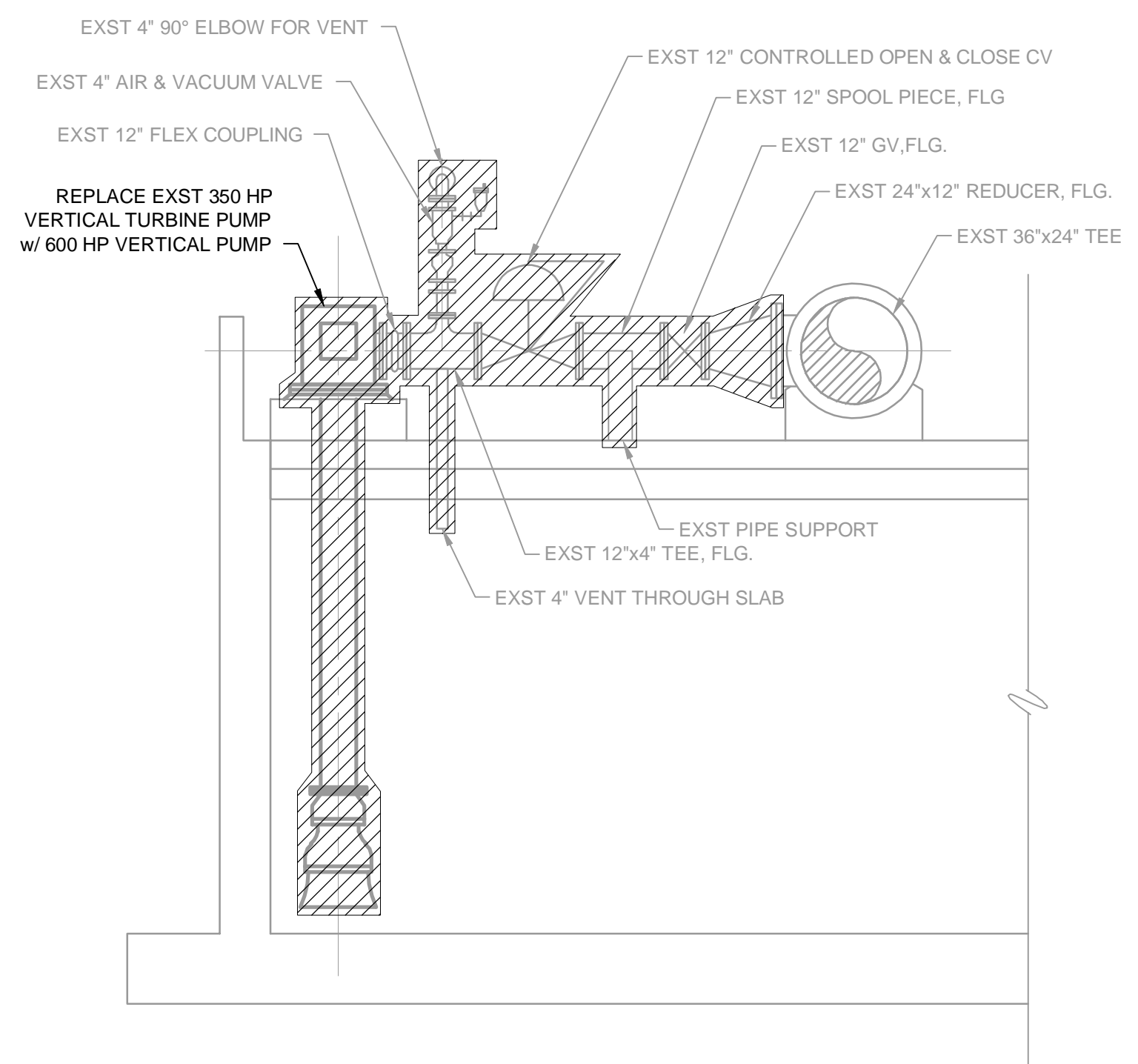
Copyright: Tetra Tech
Bar Measures 1 inch

2/11/2014 5:00:04 PM - P:\ER\08516\200-08516-13002\CAD\SHSHEETFILES\D-101 REUSE PUMPS UPGRADES DEMOLITION PLAN AND SECTIONS.DWG - MARQUEZ, GERMAIN



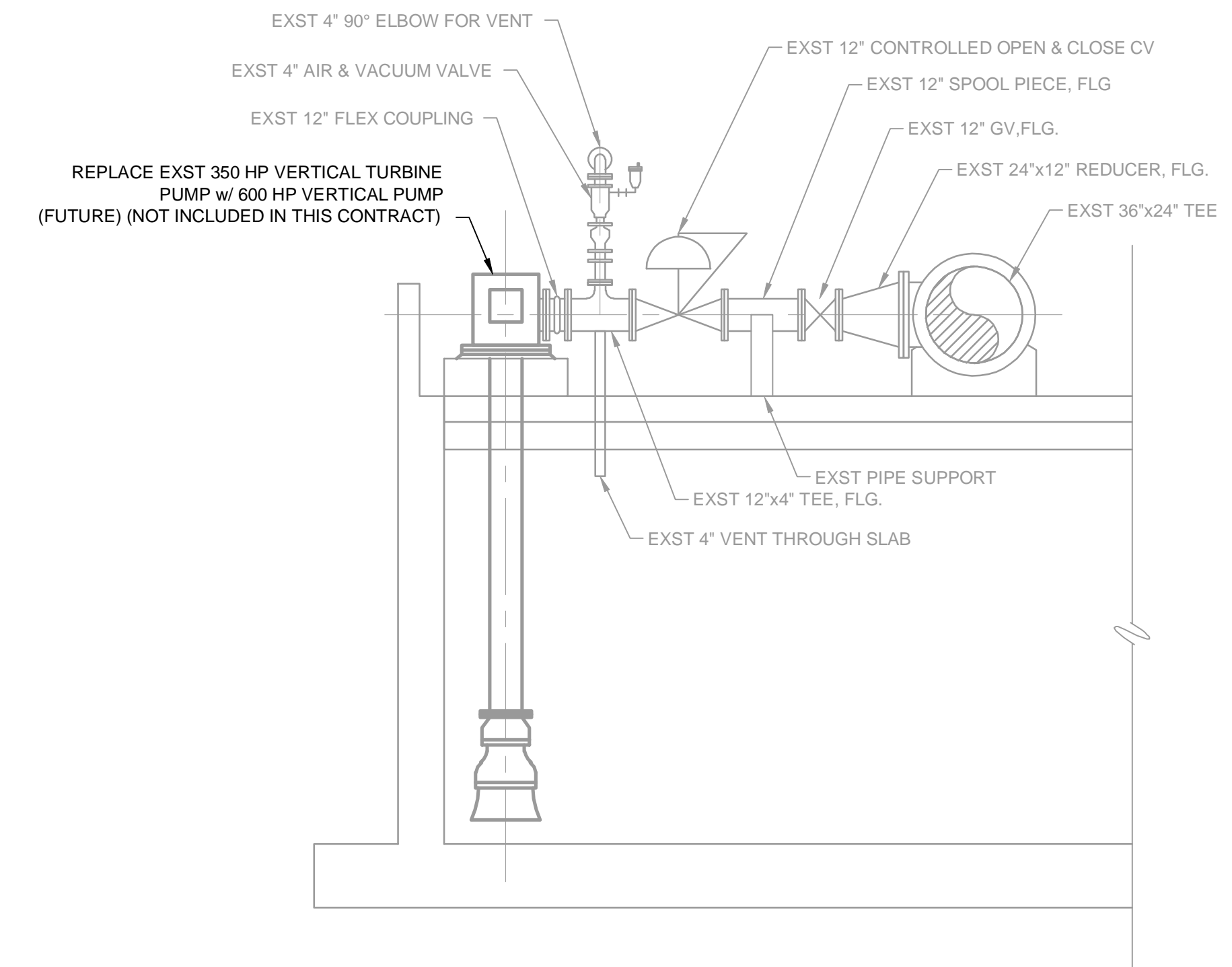
EFFLUENT PUMP STATION DEMOLITION PLAN
SCALE: 3/16"=1'-0"

LEGEND:
REMOVE AND REPLACE



PUMP No. 3 DEMOLITION
A SECTION
D-101 SCALE: 1/4"=1'-0"

LEGEND:
REMOVE AND REPLACE



PUMP No. 4 DEMOLITION
B SECTION
D-101 SCALE: 1/4"=1'-0"

NOTE:
WORK ASSOCIATED WITH PUMP No. 4 IS FUTURE AND NOT INCLUDED WITH THIS CONTRACT.

CONSTRUCTION SET

Daniel M. Nelson, P.E.
P.E. No. 56152, FL
10600 Chevrolet Way, Ste. 300
Estero, Florida 33928
Engineering Business No. 2423
DATE



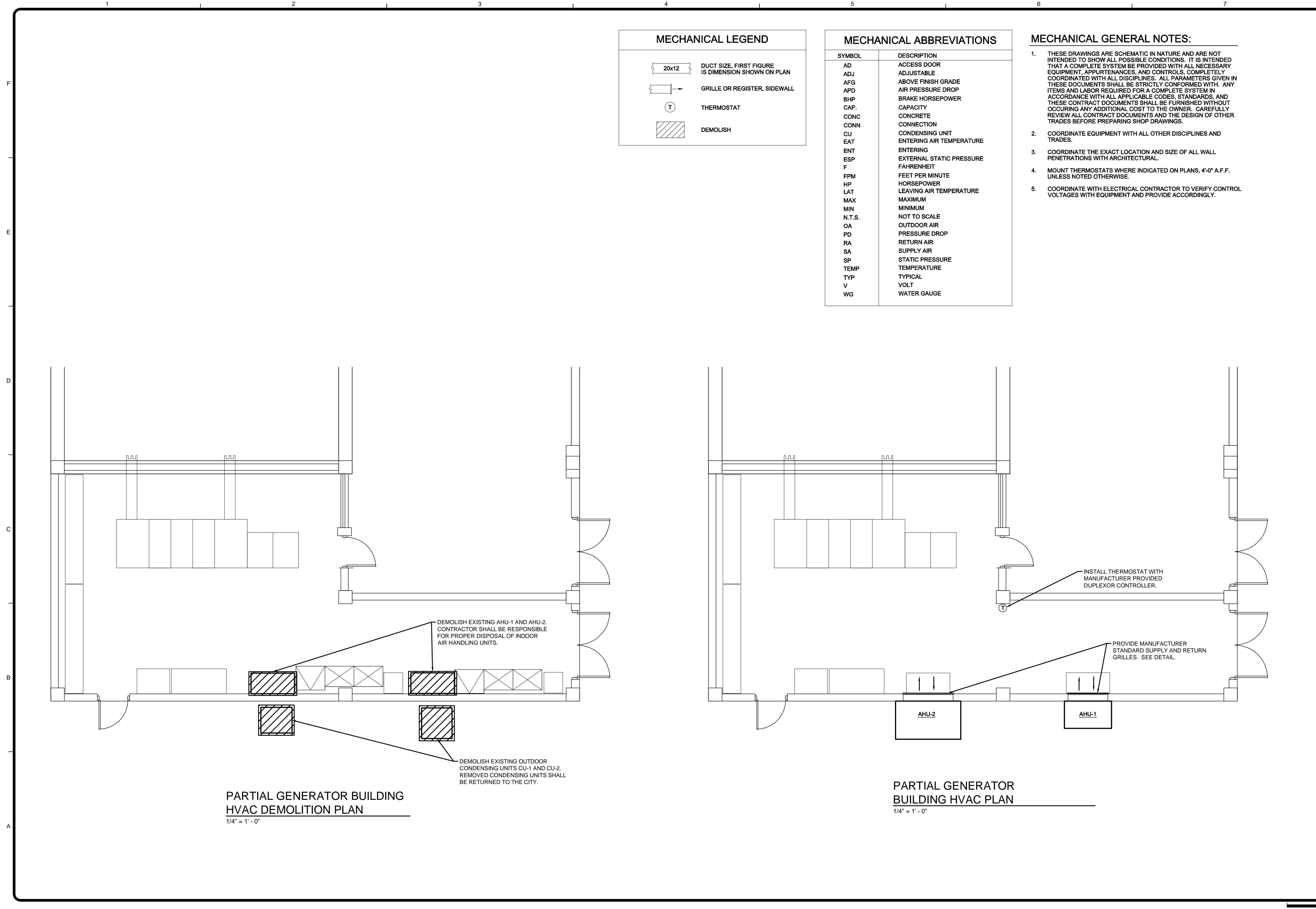
BY	DATE	DESCRIPTION

CITY OF NAPLES, FLORIDA
CITY OF NAPLES WWTRF
REUSE PUMP UPGRADES
DEMOLITION
PLAN & SECTIONS

Project No.: 200-08516-13002
Designed By: DMN
Drawn By: GM
Checked By: DMN

D-101

2/11/2014 5:03:06 PM - P:\REV\08516\200-08516-13002\CAD\SHSHEETFILES\M-101 HVAC DEMOLITION PLAN & NEW WORK FLOOR PLANS.DWG - MARQUEZ, GERMAIN



**PARTIAL GENERATOR BUILDING
HVAC DEMOLITION PLAN**
1/4" = 1' - 0"

PARTIAL GENERATOR BUILDING HVAC PLAN
1/4" = 1' - 0"

MECHANICAL LEGEND	
	DUCT SIZE, FIRST FIGURE IS DIMENSION SHOWN ON PLAN
	GRILLE OR REGISTER, SIDEWALL
	THERMOSTAT
	DEMOLISH

MECHANICAL ABBREVIATIONS	
SYMBOL	DESCRIPTION
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AFG	ABOVE FINISH GRADE
APD	AIR PRESSURE DROP
BHP	BRAKE HORSEPOWER
CAP.	CAPACITY
CONC	CONCRETE
CONN	CONNECTION
CU	CONDENSING UNIT
EAT	ENTERING AIR TEMPERATURE
ENT	ENTERING
ESP	EXTERNAL STATIC PRESSURE
F	FAHRENHEIT
FPM	FEET PER MINUTE
HP	HORSEPOWER
LAT	LEAVING AIR TEMPERATURE
MAX	MAXIMUM
MIN	MINIMUM
N.T.S.	NOT TO SCALE
OA	OUTDOOR AIR
PD	PRESSURE DROP
RA	RETURN AIR
SA	SUPPLY AIR
SP	STATIC PRESSURE
TEMP	TEMPERATURE
TYP	TYPICAL
V	VOLT
WG	WATER GAUGE

- MECHANICAL GENERAL NOTES:**
- THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH. ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT OCCURRING ANY ADDITIONAL COST TO THE OWNER. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
 - COORDINATE EQUIPMENT WITH ALL OTHER DISCIPLINES AND TRADES.
 - COORDINATE THE EXACT LOCATION AND SIZE OF ALL WALL PENETRATIONS WITH ARCHITECTURAL.
 - MOUNT THERMOSTATS WHERE INDICATED ON PLANS, 4'-0" A.F.F. UNLESS NOTED OTHERWISE.
 - COORDINATE WITH ELECTRICAL CONTRACTOR TO VERIFY CONTROL VOLTAGES WITH EQUIPMENT AND PROVIDE ACCORDINGLY.

TETRA TECH

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CONSTRUCTION SET

Donald S. Borden, P.E.
P.E. No. 64172, FL
10600 Chevrolet Way, Ste. 300
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Engineering Business No. 2429

DATE _____

MARK	DATE	DESCRIPTION	BY
1	11/08/13	ISSUED FOR PERMIT	

CITY OF NAPLES, FLORIDA
CITY OF NAPLES WWTRF
REUSE PUMP UPGRADES
**HVAC DEMOLITION AND
NEW WORK FLOOR PLANS**

Project No.: 200-08516-13002
Designed By: SBR
Drawn By: SBR
Checked By: SBR

M-101

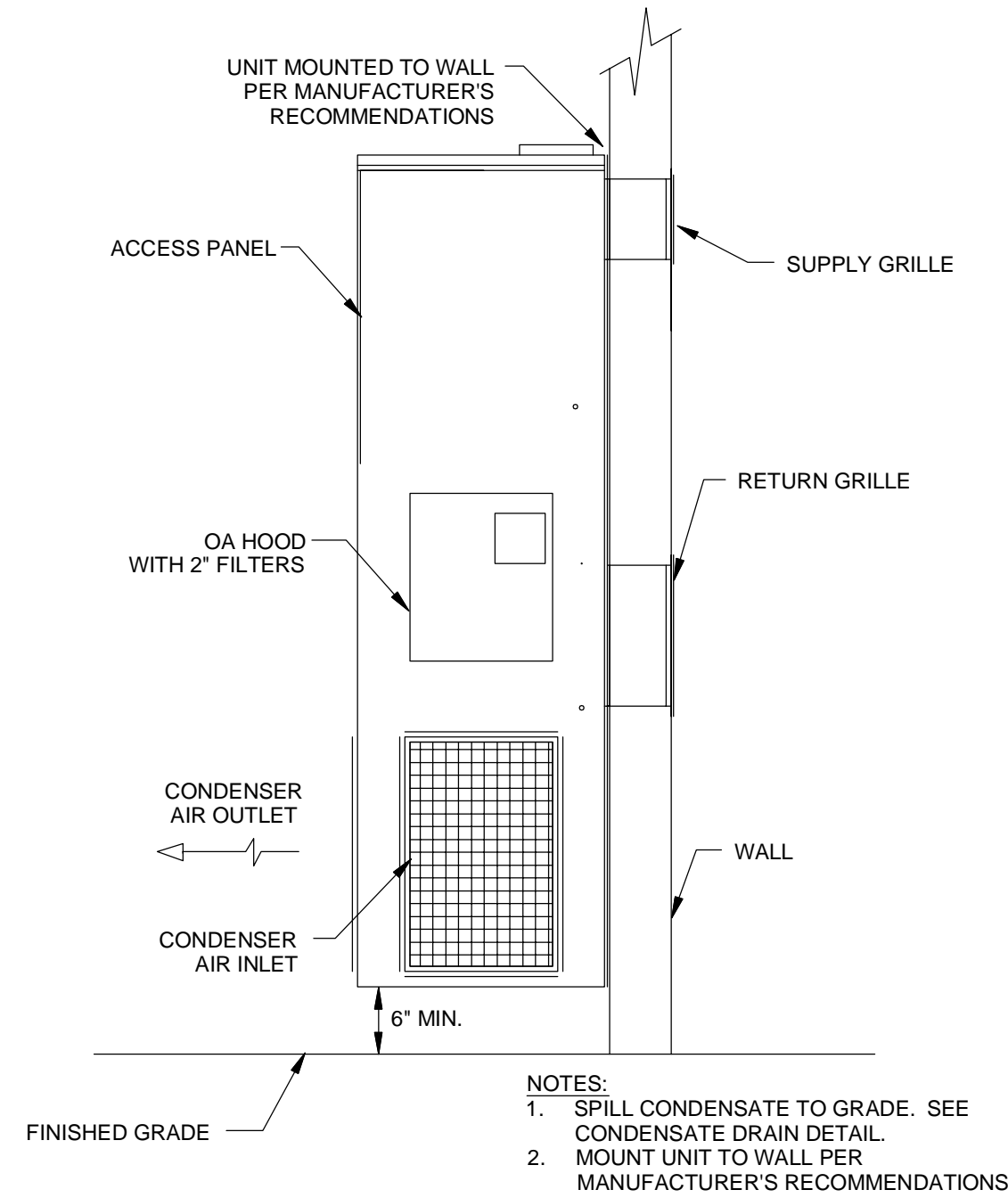
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Bar Measures 1 inch

AIR HANDLING UNIT SCHEDULE

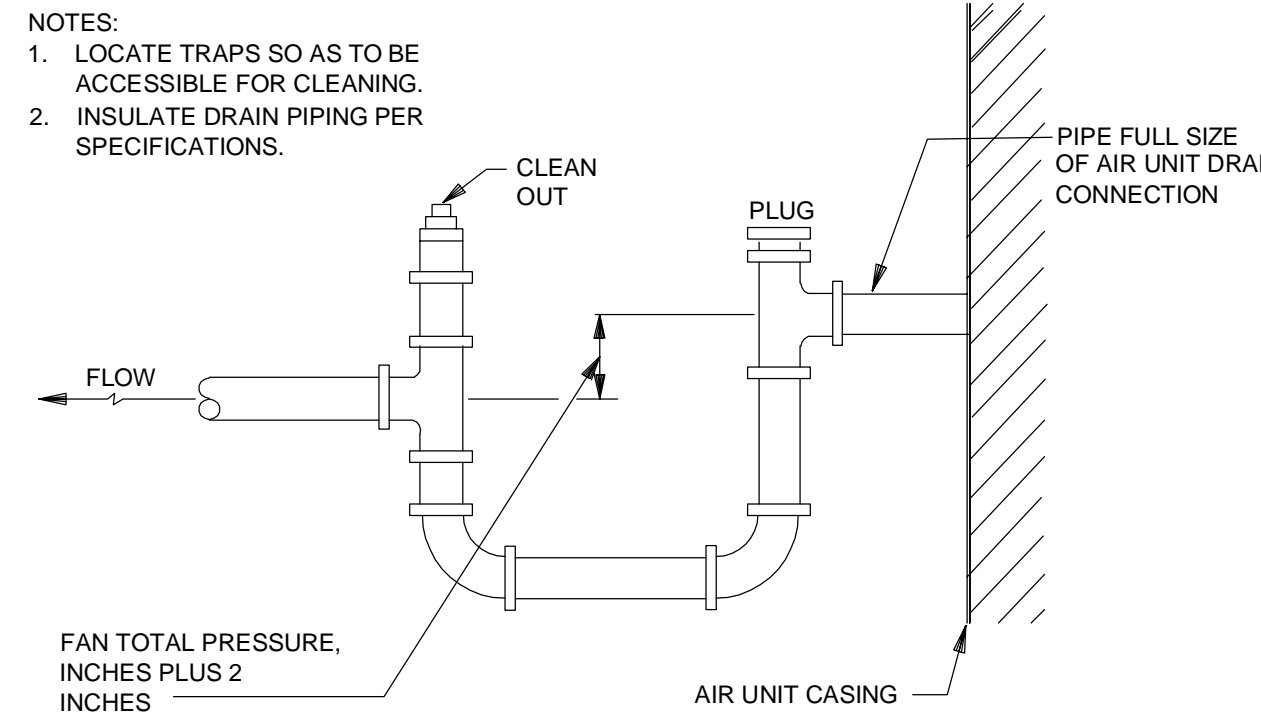
MARK	BASED ON MANUFACTURER / MODEL	AREA SERVICED	SUPPLY FAN			COOLING CAPACITY							HEATING CAPACITY		VOLTS/ PHASE	FILTERS	AMBIENT TEMP.	WEIGHT (LBS)	REMARKS	
			CFM	MIN. O.A.	E.S.P. (IN W.G.)	TOTAL MBH	SENSIBLE MBH	SENSIBLE HEAT RATIO	E.A.T. DB/WB (°F)	L.A.T. DB/WB (°F)	MAX COIL FACE VELOCITY (FPM)	REFRIG.	NO. OF CIRCUITS	CAPACITY (kW)						MCA
AHU-1	SPECIFIC SYSTEMS / AIRPAK 120	ELEC EQUIPMENT	3900	50	0.1	122.8	89.4	0.73	80 / 67	56 / 56	550	R410A	2	N/A	N/A	460/3	MFR. STD.	95	1000	SEE NOTES
AHU-2	SPECIFIC SYSTEMS / AIRPAK 180	ELEC EQUIPMENT	5700	50	0.1	170.8	115.4	0.68	80 / 67	56 / 56	550	R410A	2	N/A	N/A	460/3	MFR. STD.	95	1150	SEE NOTES

NOTES:

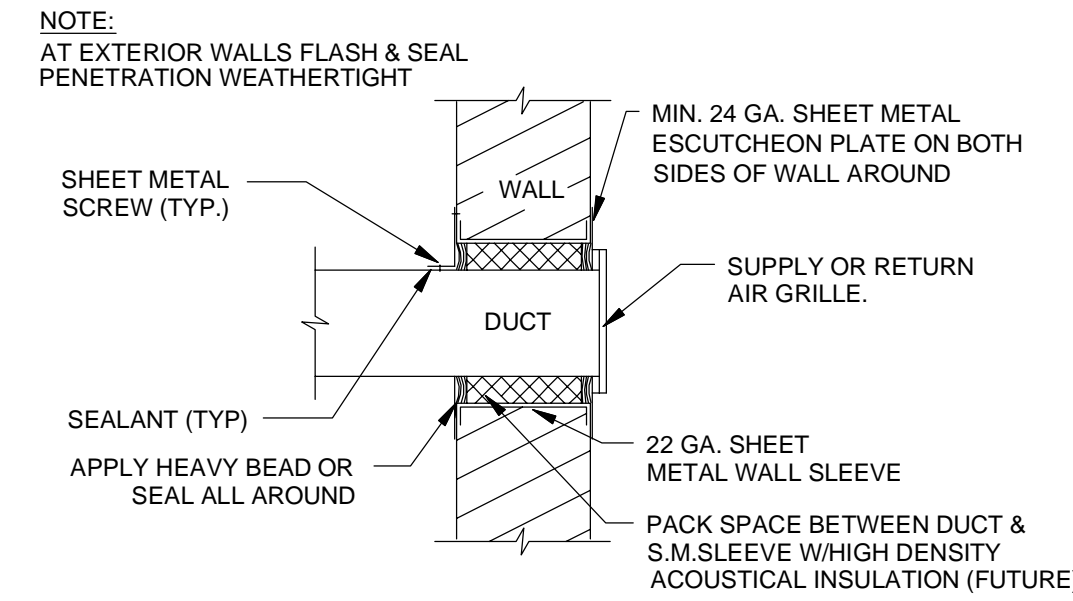
1. INSTALL SUPPLY MOUNTED IONIZATION TYPE DUCT SMOKE DETECTORS INTERLOCKED WITH UNIT TO PROVIDE SHUT DOWN.
2. PROVIDE TECHNICOAT COATED COILS, 316 STAINLESS STEEL CABINET, AND CARBOLINE COATED CONDENSER SECTION.
3. PROVIDE CONDENSATE DRAIN TO GRADE.
4. PROVIDE LOW AMBIENT CONTROL.
5. PROVIDE DUPLEXOR CONTROLLER.
6. PROVIDE MANUFACTURER STANDARD WALL-MOUNTED SUPPLY AND RETURN GRILLES.



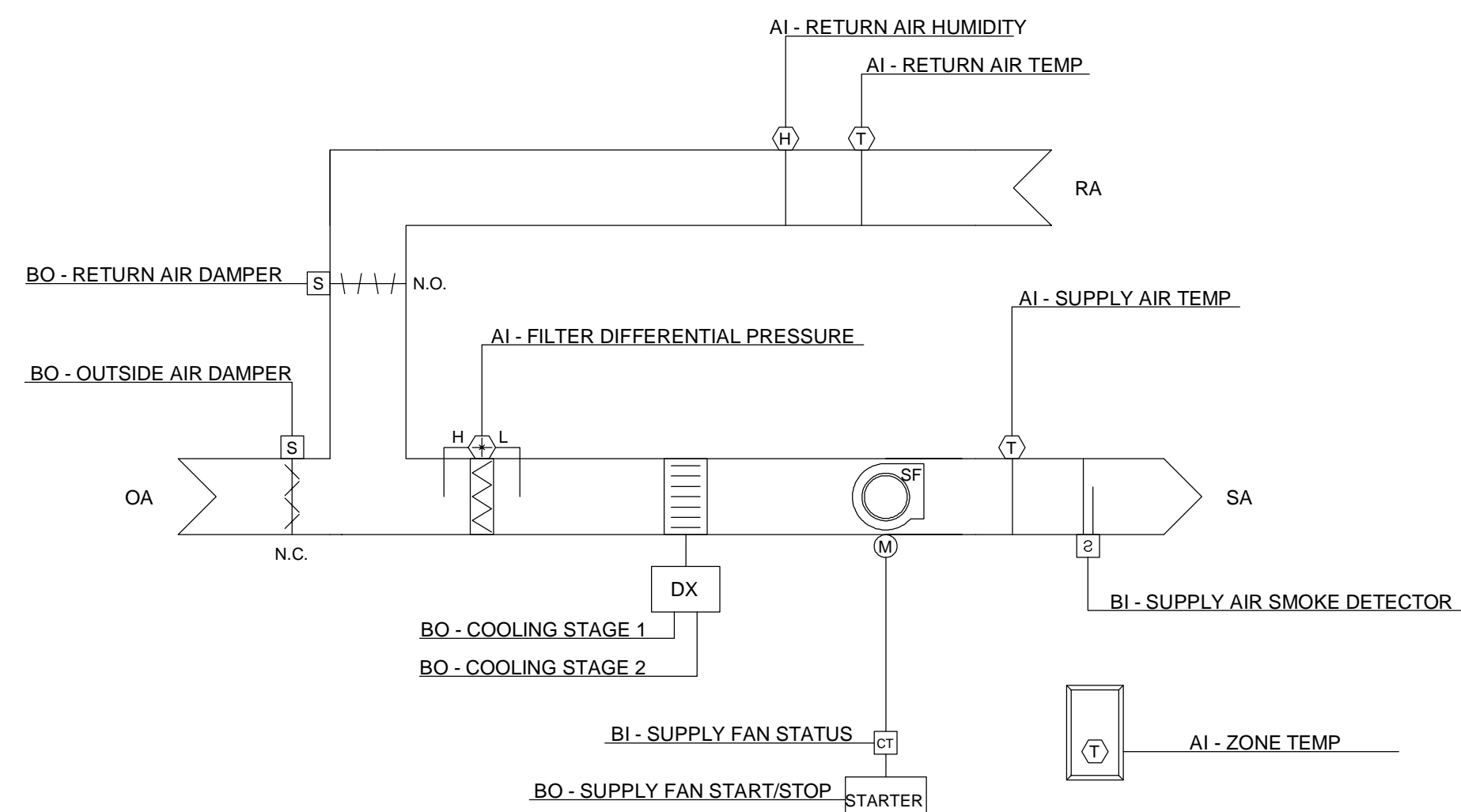
1 THROUGH-WALL AHU DETAIL
M-601 N.T.S.



2 CONDENSATE DRAIN DETAIL
M-601 N.T.S.



3 DUCT PENETRATION THRU WALL
M-601 N.T.S.



4 SINGLE ZONE UNIT - CONTROLS SCHEMATIC
M-601 N.T.S.

SINGLE ZONE UNIT - SEQUENCE OF OPERATION

RUN CONDITIONS - CONTINUOUS:
THE UNIT SHALL RUN WHENEVER THE SPACE REQUIRES COOLING AND SHALL MAINTAIN:

- A 74°F (ADJ.) COOLING SETPOINT
- A 70°F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
- LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN 40°F (ADJ.).

SUPPLY AIR SMOKE DETECTION:

THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SUPPLY AIR SMOKE DETECTOR STATUS.

SUPPLY FAN:

THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

COOLING STAGES:

THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT. TO PREVENT SHORT CYCLING, THERE SHALL BE A USER DEFINABLE (ADJ.) DELAY BETWEEN STAGES, AND EACH STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE COOLING SHALL BE ENABLED WHENEVER:

- THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT.
- AND THE SUPPLY FAN STATUS IS ON.

OUTSIDE AIR DAMPER:

THE OUTSIDE AIR DAMPER SHALL OPEN TO PROVIDE MINIMUM OUTSIDE AIR VENTILATION ANYTIME THE UNIT IS ACTIVATED. THE MIXED AIR DAMPERS SHALL CLOSE 5SEC (ADJ.) AFTER THE SUPPLY FAN STOPS.

FILTER DIFFERENTIAL PRESSURE MONITOR:

THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- FILTER CHANGE REQUIRED: FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

RETURN AIR HUMIDITY:

THE CONTROLLER SHALL MONITOR THE RETURN AIR HUMIDITY.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH RETURN AIR HUMIDITY: IF THE RETURN AIR HUMIDITY IS GREATER THAN 70% (ADJ.).
- LOW RETURN AIR HUMIDITY: IF THE RETURN AIR HUMIDITY IS LESS THAN 35% (ADJ.).

SUPPLY AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
- LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

MULTI-UNIT CONTROL:

MANUFACTURER SUPPLIED DUPLEXOR CONTROLLER SHALL BE PROVIDED FOR STAGING THE TWO SINGLE ZONE UNITS AS REQUIRED TO MEET THE ZONE SETPOINT. THE CONTROLLER SHALL ALSO PROVIDE AUTO CHANGEOVER TO SWITCH THE BACKUP UNIT EVERY USER DEFINABLE PERIOD OF TIME (ADJ.).

SINGLE ZONE UNIT - POINTS LIST

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC		
	AI	AO	BI	BO	AV	BV	SCHED	TREND		ALARM	
ZONE TEMP	X								X	X	
FILTER DIFFERENTIAL PRESSURE	X								X		
RETURN AIR HUMIDITY	X								X	X	
SUPPLY AIR TEMP	X								X	X	
SUPPLY AIR SMOKE DETECTOR			X						X	X	
SUPPLY FAN STATUS			X						X	X	
SUPPLY FAN START/STOP				X					X	X	
COOLING STAGE 1				X					X	X	
COOLING STAGE 2				X					X	X	
OUTSIDE AIR DAMPER				X						X	
RETURN AIR DAMPER				X						X	
COOLING SETPOINT								X		X	
HIGH ZONE TEMP									X		
LOW ZONE TEMP									X		
SUPPLY FAN FAILURE									X		
SUPPLY FAN IN HAND									X		
SUPPLY FAN RUNTIME EXCEEDED									X		
COMPRESSOR RUNTIME EXCEEDED									X		
FILTER CHANGE REQUIRED									X		
HIGH RETURN AIR HUMIDITY									X		
LOW RETURN AIR HUMIDITY									X		
HIGH SUPPLY AIR TEMP									X		
LOW SUPPLY AIR TEMP									X		
TOTALS	4	0	2	5	0	0	0	10	12	11	
	TOTAL HARDWARE (11)				TOTAL SOFTWARE (22)						



CONSTRUCTION SET

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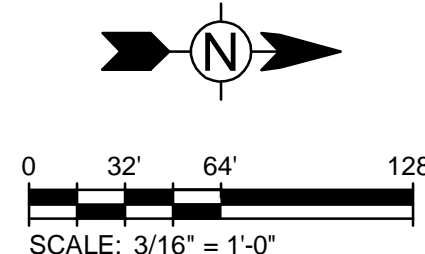
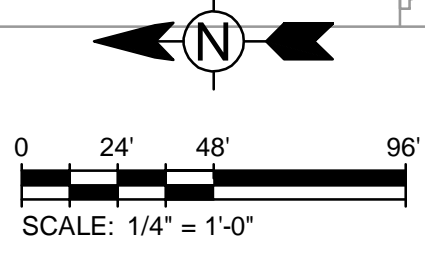
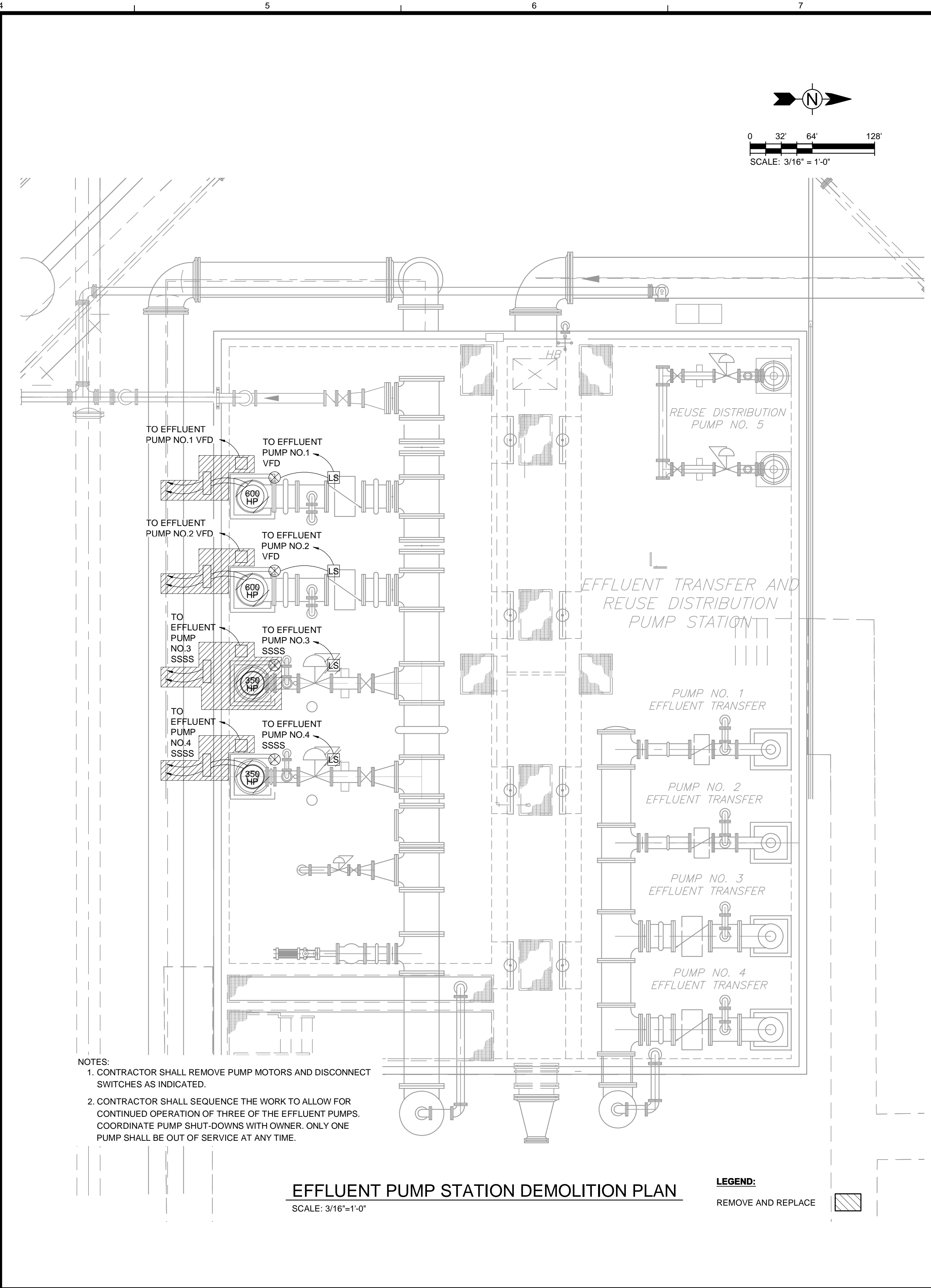
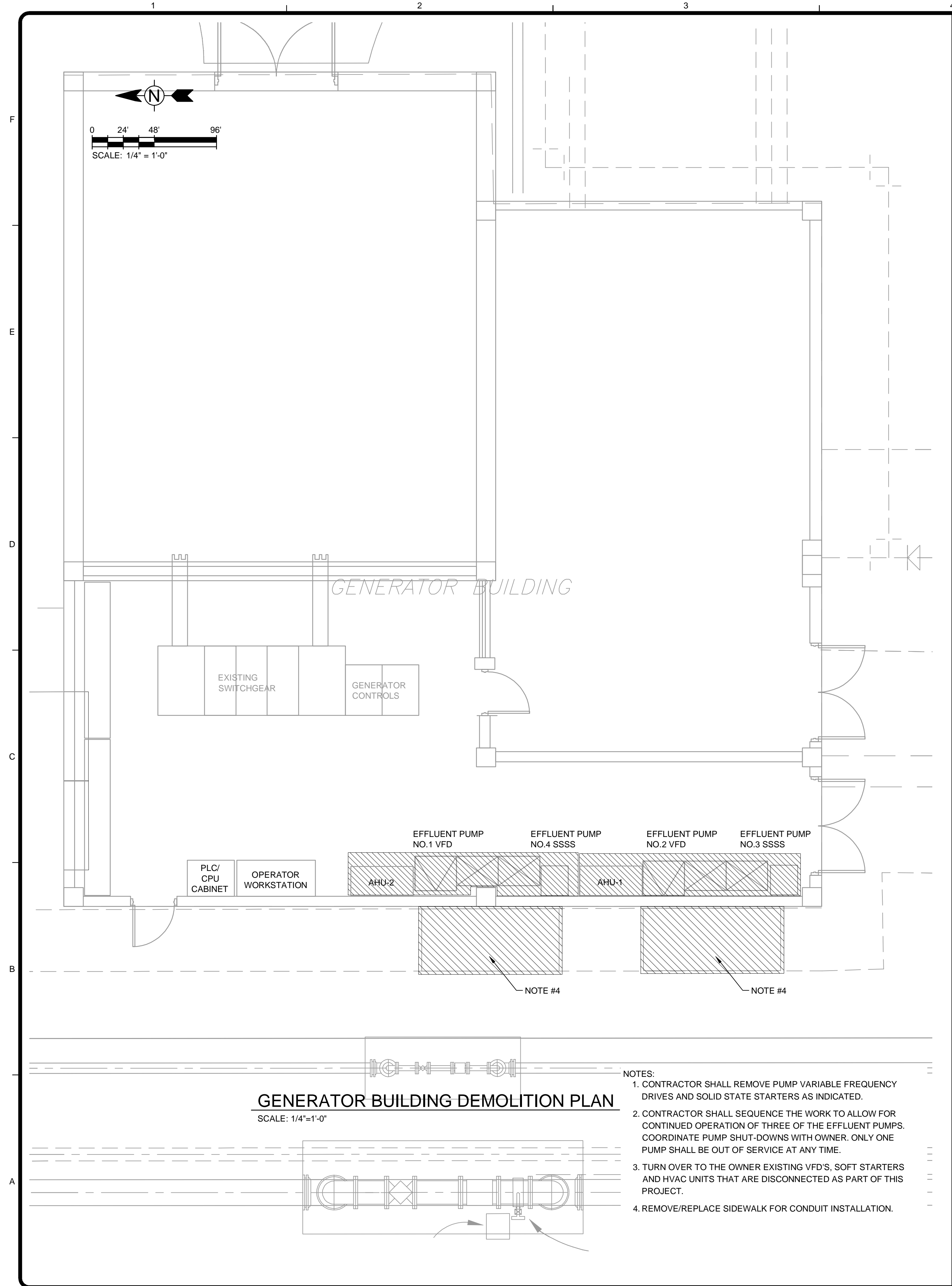
MARK	DATE	DESCRIPTION	BY
1	11/08/13	ISSUED FOR PERMIT	

CITY OF MAPLES, FLORIDA
CITY OF MAPLES WWTRF
REUSE PUMP UPGRADES
HVAC SCHEDULES
AND DETAILS

Project No.: 200-08516-13002
Designed By: SBR
Drawn By: SBR
Checked By: SBR

M-601

2/11/2014 5:04:01 PM - P:\ER\08516\200-08516-13002\CAD\SHSHEETFILES-E-101 GENERATOR BLDG & EFFLUENT PUMP STATION DEMOLITION PLANS.DWG - MARQUEZ, GERMAN



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PHONE: (239) 390-1467 FAX: (239) 390-1769

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201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering Business No. 2429

DATE

CITY OF NAPLES, FLORIDA
CITY OF NAPLES WWTRF
REUSE PUMP UPGRADES
**GENERATOR BUILDING AND
EFFLUENT PUMP STATION
DEMOLITION PLANS**

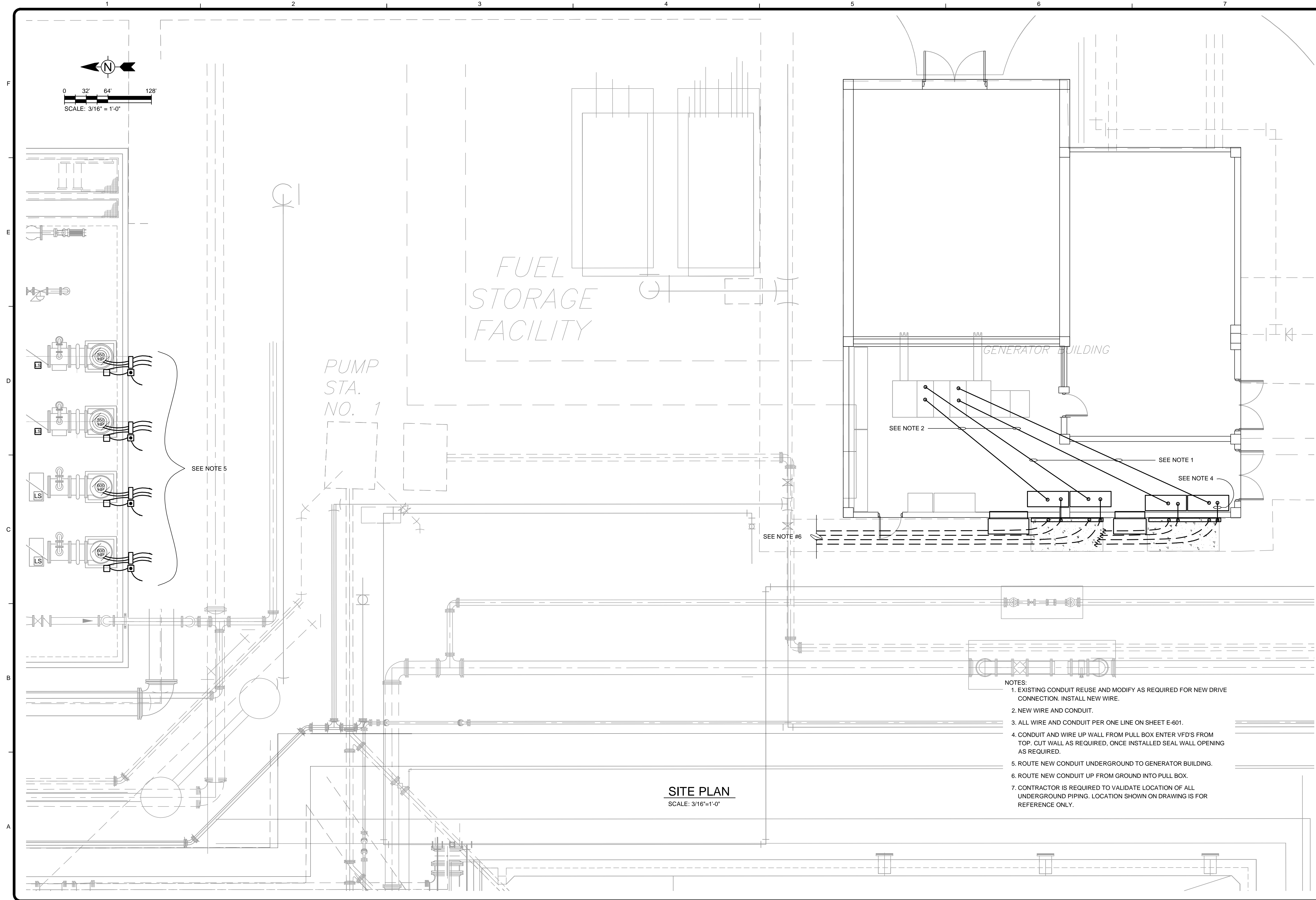
MARK	DATE	DESCRIPTION

Project No.: 200-08516-13002
Designed By: J. LAWTON
Drawn By: J. LAWTON
Checked By: W. PAISON

E-101

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Bar Measures 1 inch

2/11/2014 5:04:34 PM - P:\ER\08516\200-08516-13002\CAD\SHETS\ELE-103 GENERATOR BLDG & EFFLUENT PUMP STATION ELECTRICAL PLANS.DWG - MARQUEZ, GERMAIN



SITE PLAN
SCALE: 3/16"=1'-0"

- NOTES:
1. EXISTING CONDUIT REUSE AND MODIFY AS REQUIRED FOR NEW DRIVE CONNECTION. INSTALL NEW WIRE.
 2. NEW WIRE AND CONDUIT.
 3. ALL WIRE AND CONDUIT PER ONE LINE ON SHEET E-601.
 4. CONDUIT AND WIRE UP WALL FROM PULL BOX ENTER VFD'S FROM TOP. CUT WALL AS REQUIRED. ONCE INSTALLED SEAL WALL OPENING AS REQUIRED.
 5. ROUTE NEW CONDUIT UNDERGROUND TO GENERATOR BUILDING.
 6. ROUTE NEW CONDUIT UP FROM GROUND INTO PULL BOX.
 7. CONTRACTOR IS REQUIRED TO VALIDATE LOCATION OF ALL UNDERGROUND PIPING. LOCATION SHOWN ON DRAWING IS FOR REFERENCE ONLY.

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CONSTRUCTION SET

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201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering Business No. 2429

DATE _____

CITY OF NAPLES, FLORIDA
CITY OF NAPLES WWTRF
REUSE PUMP UPGRADES
GENERATOR BUILDING AND
EFFLUENT PUMP STATION
ELECTRICAL PLANS (2)

MARK	DATE	DESCRIPTION	BY

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