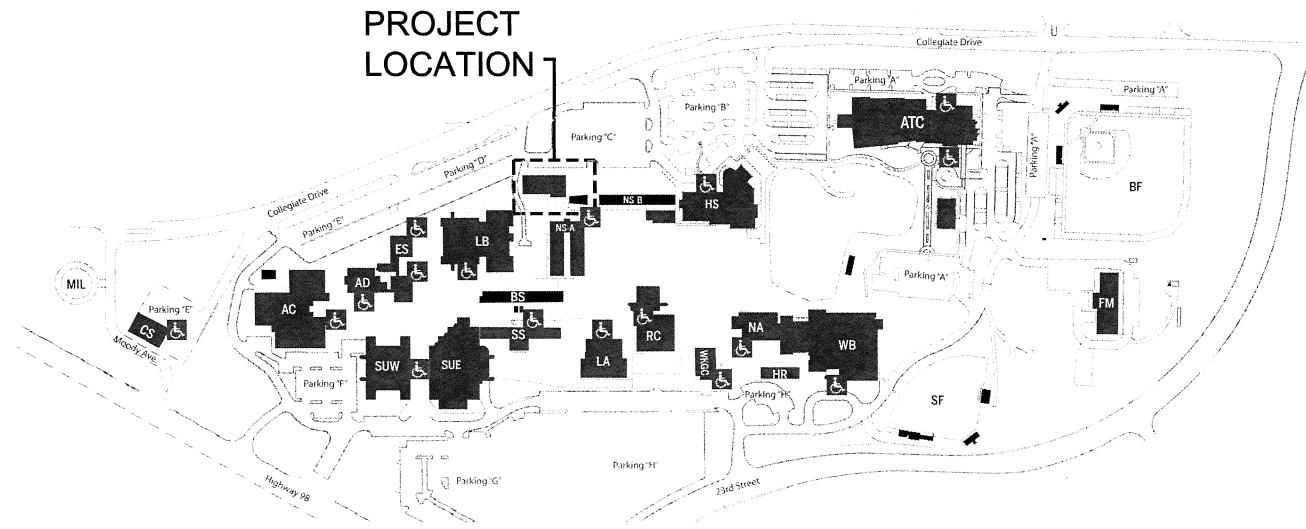


# CENTRAL PLANT REPAIRS

**SCHMIDT**  
CONSULTING GROUP, INC.  
MECHANICAL - ELECTRICAL - STRUCTURAL  
COMMUNICATIONS - INDUSTRIAL  
FLORIDA LICENSE NUMBER 05271  
40 S Palatka Pl, Ste 300 - Panama City, FL 32401  
P: 850-428-0050 - F: 850-432-6431  
WILLIAM JOSEPH JONES P.E.  
FLORIDA LICENSE NUMBER 58080  
SCG project: 2014-173

SEAL

REVISION NUMBER	DESCRIPTION



# GULF COAST STATE COLLEGE

5230 West Highway 98  
Panama City, FL 32401  
850.769.1551

VICINITY MAP  
NOT TO SCALE

GULF COAST STATE COLLEGE  
CENTRAL PLANT REPAIRS  
PANAMA CITY, FL

DRAWING LIST	
G000	COVER SHEET
S101	STRUCTURAL PLAN & NOTES
S201	BUILDING ELEVATIONS
S301	WALL SECTIONS & DETAILS
M001	LEGEND, NOTES, ABBREVIATION, AND DETAILS
M101	CHILLER PLANT DEMO PLAN
M201	CHILLER PLANT NEW WORK PLAN
M301	CHILLER PLANT ELEVATIONS
E101	CHILLER PLANT ELECTRICAL PLAN



DESIGNED BY:  
CAD  
DRAWN BY:  
CAD  
CHECKED BY:  
WJJ  
DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
COVER SHEET

FEBRUARY 20, 2015

SHEET:  
G000

SEAL

REVISION NUMBER	REVISION DESCRIPTION

REVISION NUMBER	REVISION DESCRIPTION

**GULF COAST STATE COLLEGE  
 CENTRAL PLANT REPAIRS**  
 PANAMA CITY, FL

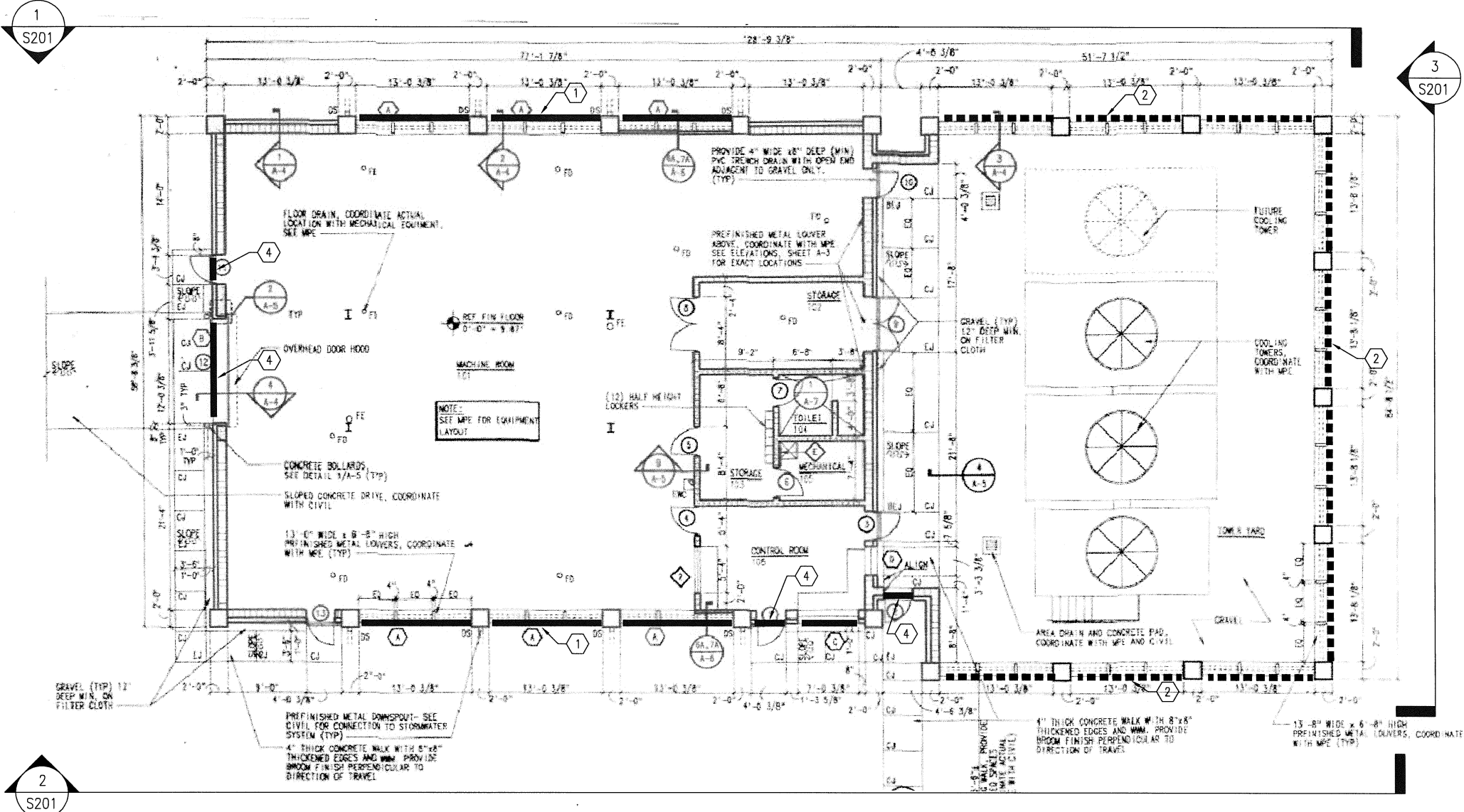
DESIGNED BY:  
SCS  
 DRAWN BY:  
JT  
 CHECKED BY:  
SCS  
 DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
STRUCTURAL PLAN & NOTES

SHEET:  
S101

**KEY NOTES**

- REMOVE PRECAST SILL & BRICK ABOVE ANGLE. CHIP AROUND EXISTING BOLT 1" DEEP, BURN OFF EXISTING BOLT AND FILL HOLE WITH EPOXY. PROVIDE AND INSTALL NEW GALVANIZED ANGLE TO MATCH EXISTING ANGLE. FOR BID PURPOSE ASSUME CONTINUOUS L5x3x3/8 W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.
- REMOVE PRECAST SILL & BRICK. INVESTIGATE CONDITION OF ANGLES, REPAIR IF REQUIRED.
- SAW CUT EXISTING ATTACHMENT AS REQUIRED. PROTECT AND REUSE EXISTING PRECAST CAP. REMOVE AND REPLACE EXISTING ANGLE, FOR BID PURPOSE ASSUME L6x4x3/8 HDG CONTINUOUS W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.
- WIRE BRUSH AND GRIND ALL RUST AND SCALE TO CLEAN STEEL. PAINT WITH ZINC RICH PAINT, SEE GENERAL NOTES. PAINT ALL LINTELS TO MATCH EXISTING.



**1 STRUCTURAL PLAN**  
 NOT TO SCALE

**GENERAL NOTES**

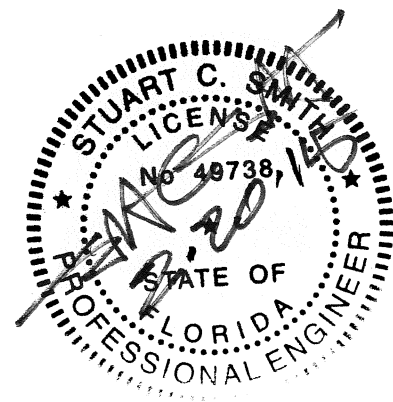
- THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010 EDITION.
- THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DOCUMENTS. USE THESE NOTES IN CONJUNCTION WITH THE SPECIFICATIONS. IF A CONFLICT EXISTS, THE MORE STRINGENT GOVERNS.
- COMPLY WITH REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2012 EDITION, AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES, STANDARDS, REGULATIONS, AND LAWS.
- REVIEW ALL CONTRACT DOCUMENTS, DIMENSIONS, AND SITE CONDITIONS AND COORDINATE WITH FIELD DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES IN WRITING TO THE CONTRACTING OFFICER. DO NOT CHANGE SIZE OR DIMENSIONS OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTION FROM THE STRUCTURAL ENGINEER OF RECORD.
- ANY DISCREPANCIES, OMISSIONS OR VARIATIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS DISCOVERED DURING THE BIDDING PERIOD SHALL BE IMMEDIATELY COMMUNICATED IN WRITING TO THE CONTRACTING OFFICER.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SAFETY AND CONSTRUCTION PROCEDURES.
- FIELD VERIFY ALL DIMENSIONS.
- ALL LOUVERS AND THEIR ATTACHMENTS TO THE EXISTING STRUCTURE SHALL CONFORM TO THE WIND LOAD CRITERIA OF THE FLORIDA BUILDING CODE 2010, EDITION OR ASCE7-10.  
 RISK FACTOR..... II  
 EXPOSURE..... C  
 WIND SPEED..... 135 MPH

**STRUCTURAL STEEL**

- ALL STEEL WORK (INCLUDING FABRICATION AND ERECTION) SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 13TH EDITION AND PROJECT SPECIFICATIONS, USE THE FOLLOWING:
  - A. ROLLED SHAPES, ASTM A992, GRADE 50.
  - B. PLATES BARS A36.
  - C. COLD-FORMED STEEL TUBING: ASTM A500, GRADE B.
  - D. HOT-FORMED STEEL TUBING: ASTM A501.
  - E. STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B.
- USE STRUCTURAL STEEL THAT IS FULLY WELDABLE WITHIN GRADES AND FROM ANY GRADE TO ANY OTHER GRADE. WELD ALL SHOP CONNECTIONS, U.N.O.
- ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1, LATEST EDITION, PUBLISHED BY THE AMERICAN WELDING SOCIETY (AWS). USE ELECTRODES CONFORMING TO AWS D1.1, E70 SERIES, U.N.O.
- ALL SHOP AND FIELD WELDERS, WELDING OPERATORS, AND TACKERS SHALL BE CERTIFIED ACCORDING TO AWS PROCEDURES FOR THE WELDING PROCESS AND WELDING POSITION USED.

**EXISTING LINTEL REPAIR**

- APPLY ZINC-RICH PAINT TO A CLEAN, DRY STEEL SURFACE BY EITHER A BRUSH OR SPRAY. ZINC-RICH PAINTS MUST CONTAIN EITHER BETWEEN 65% TO 69% METALLIC ZINC BY WEIGHT OR GREATER THAN 92% METALLIC ZINC BY WEIGHT IN DRY FILM. USE INORGANIC BINDERS THAT ARE PARTICULARLY SUITABLE FOR PAINTS APPLIED IN TOUCH-UP APPLICATIONS AROUND AND OVER UNDAMAGED HOT-DIP GALVANIZED AREAS.
- SURFACE PREPARATION**  
 ACCORDING TO ASTM A 780, THE SURFACE TO BE REPAIRED SHALL BE CLEANED TO SSPC-SP11 NEAR BARE METAL FOR LESS AGGRESSIVE FIELD CONDITIONS. HAND TOOLS MAY BE USED TO CLEAN AREAS TO BE RECONDITIONED. THE CLEANING MUST EXTEND INTO THE SURROUNDING, UNDAMAGED, GALVANIZED COATING.
  - APPLICATION**  
 THIS METHOD OF REPAIRING GALVANIZED SURFACES MUST TAKE PLACE AS SOON AS POSSIBLE AFTER PREPARATION IS COMPLETED AND PRIOR TO THE DEVELOPMENT OF ANY VISIBLE OXIDES. THE SPRAYING OR BRUSHING SHOULD BE IN AN APPLICATION OF MULTIPLE PASSES AND MUST FOLLOW THE PAINT MANUFACTURER'S SPECIFIC WRITTEN INSTRUCTIONS. ZINC-RICH PAINTING SHOULD BE AVOIDED IF HIGH HUMIDITY AND/OR LOW TEMPERATURE CONDITIONS EXIST BECAUSE ADHESION MAY BE ADVERSELY AFFECTED.
  - FINAL REPAIRED PRODUCT**  
 THE COATING THICKNESS FOR THE PAINT MUST BE 50% HIGHER THAN THE SURROUNDING COATING THICKNESS, BUT NOT GREATER THAN 4.0 MILS, AND MEASUREMENTS SHOULD BE TAKEN WITH EITHER A MAGNETIC, ELECTROMAGNETIC OR EDDY CURRENT GAUGE. FINALLY, THE SURFACE OF THE PAINTED COATING ON THE REPAIRED AREA SHOULD BE FREE OF LUMPS, COARSE AREAS, AND LOOSE PARTICLES.
  - PAINT TOP COAT**  
 PAINT ALL LINTELS TO MATCH EXISTING COLOR.



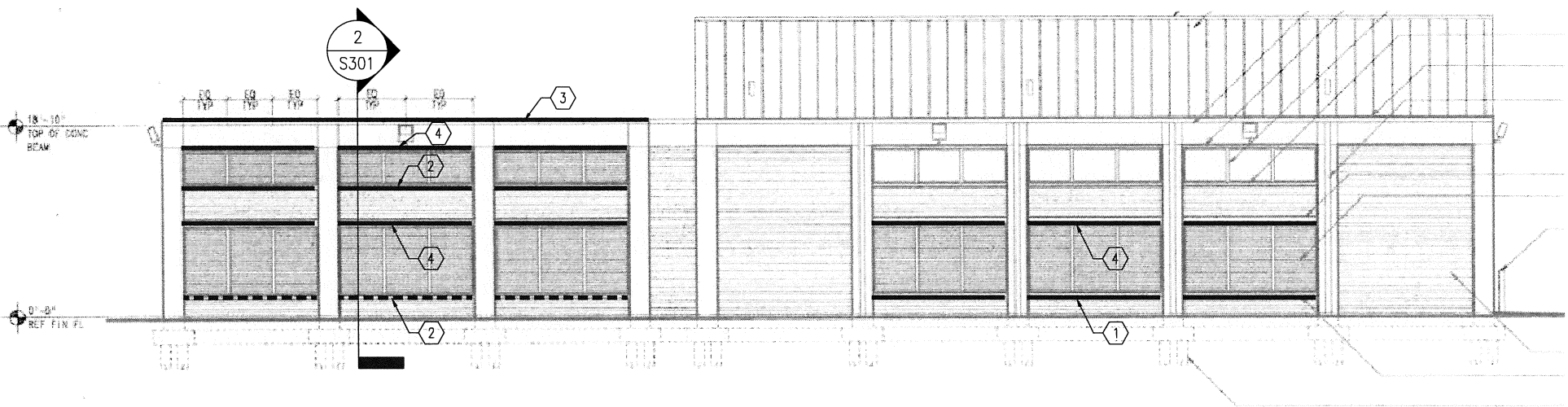
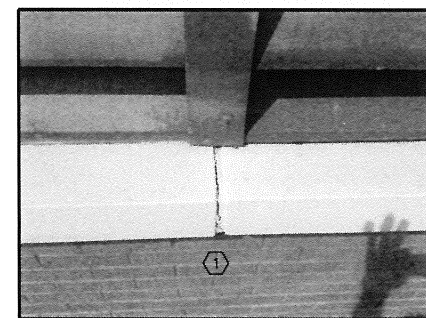
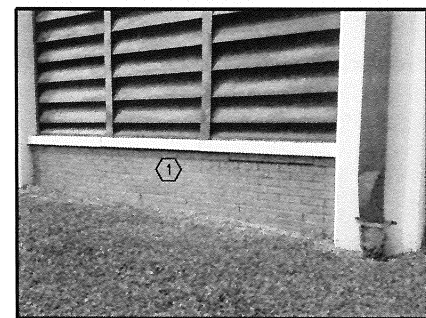
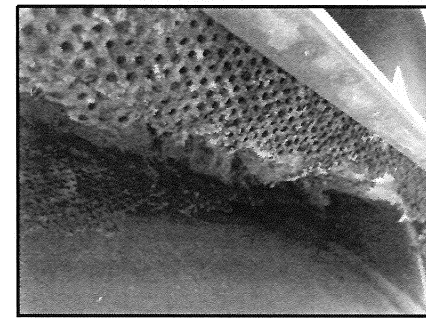
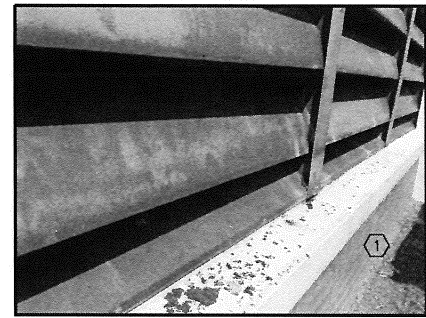
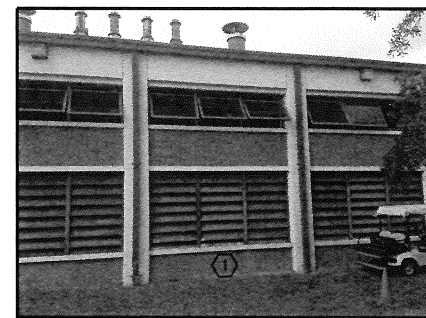
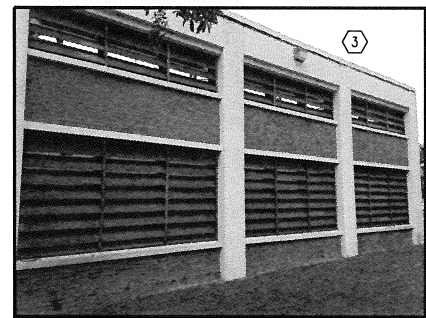
SEAL	
REVISION NUMBER	DESCRIPTION

**GULF COAST STATE COLLEGE  
 CENTRAL PLANT REPAIRS  
 PANAMA CITY, FL**

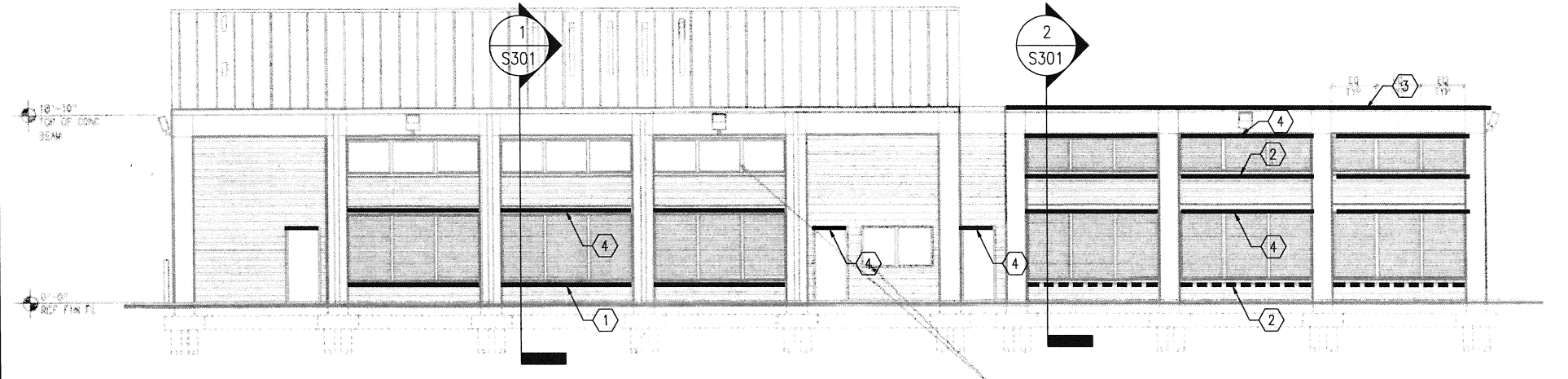
DESIGNED BY:  
SCS  
 DRAWN BY:  
JT  
 CHECKED BY:  
SCS  
 DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
BUILDING ELEVATIONS

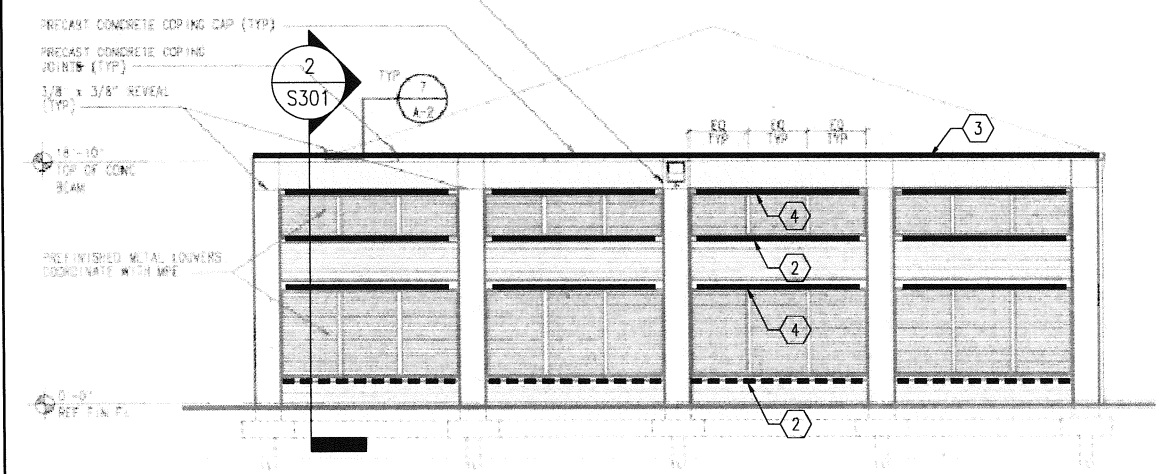
SHEET:  
S201



**1 NORTH ELEVATION**  
NOT TO SCALE



**2 SOUTH ELEVATION**  
NOT TO SCALE



**3 EAST ELEVATION**  
NOT TO SCALE

**KEY NOTES**

- 1 REMOVE PRECAST SILL & BRICK ABOVE ANGLE. CHIP AROUND EXISTING BOLT 1" DEEP, BURN OFF EXISTING BOLT AND FILL HOLE WITH EPOXY. PROVIDE AND INSTALL NEW GALVANIZED ANGLE TO MATCH EXISTING ANGLE. FOR BID PURPOSE ASSUME CONTINUOUS L5x3x3/8 W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.
- 2 REMOVE PRECAST SILL & BRICK. INVESTIGATE CONDITION OF ANGLES, REPAIR IF REQUIRED.
- 3 SAW CUT EXISTING ATTACHMENT AS REQUIRED. PROTECT AND REUSE EXISTING PRECAST CAP. REMOVE AND REPLACE EXISTING ANGLE, FOR BID PURPOSE ASSUME L6x4x3/8 HDG CONTINUOUS W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.
- 4 WIRE BRUSH AND GRIND ALL RUST AND SCALE TO CLEAN STEEL. PAINT WITH ZINC RICH PAINT, SEE GENERAL NOTES. PAINT ALL LINTELS TO MATCH EXISTING.



SEAL
------

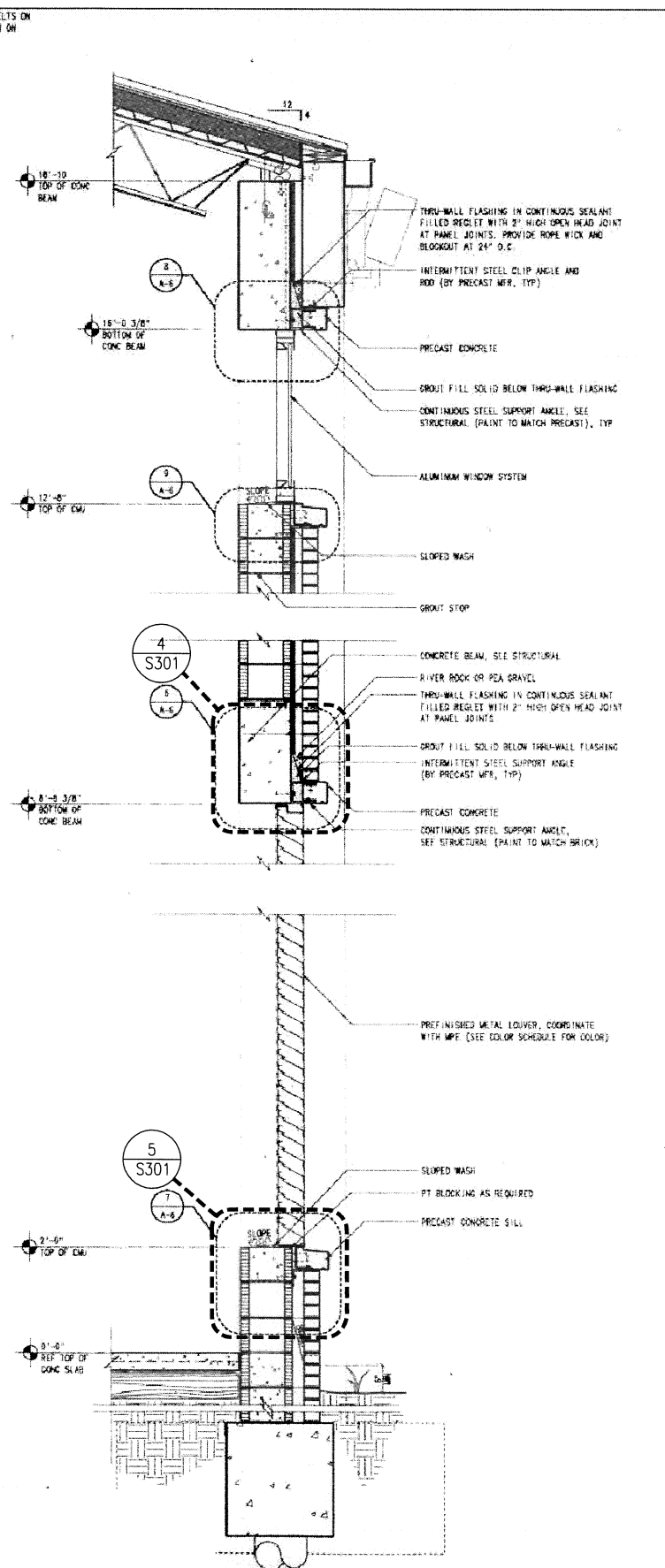
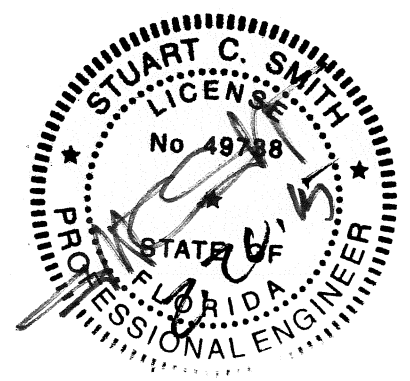
REVISION NUMBER	DESCRIPTION

**GULF COAST STATE COLLEGE**  
**CENTRAL PLANT REPAIRS**  
PANAMA CITY, FL

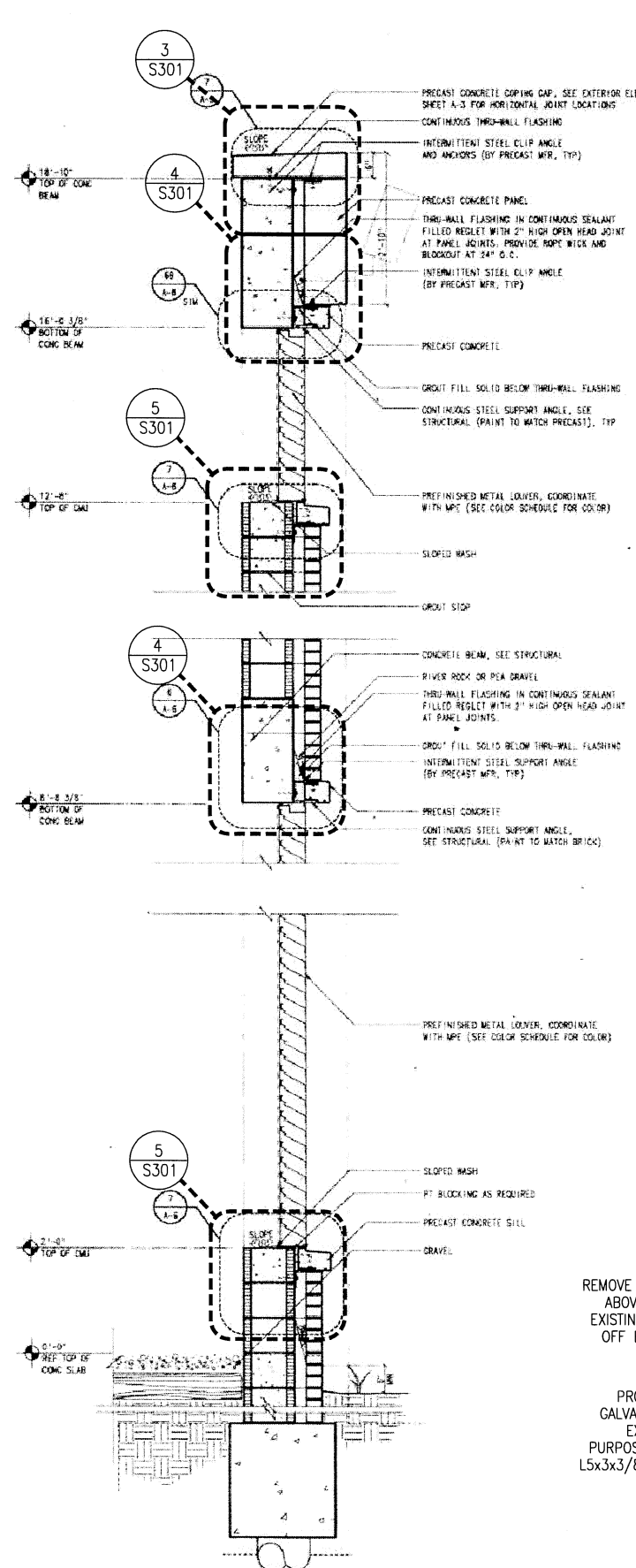
DESIGNED BY:  
SCS  
DRAWN BY:  
JT  
CHECKED BY:  
SCS  
DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
WALL SECTIONS & DETAILS

SHEET:  
S301



**1 WALL SECTION**  
NOT TO SCALE

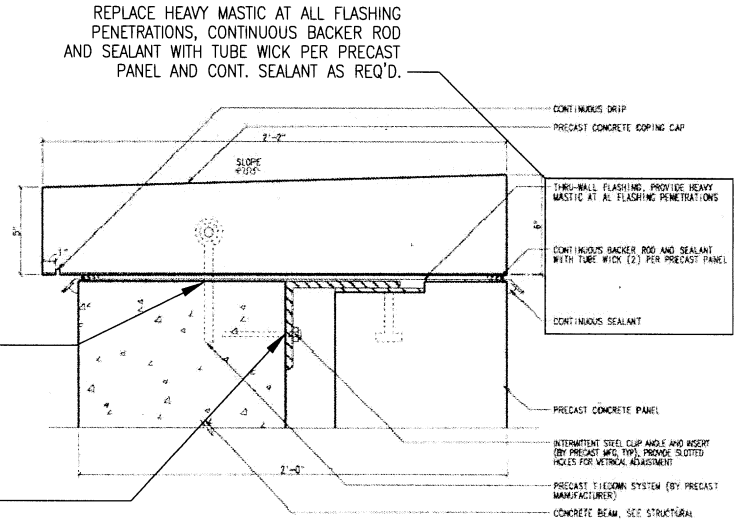


**2 WALL SECTION**  
NOT TO SCALE

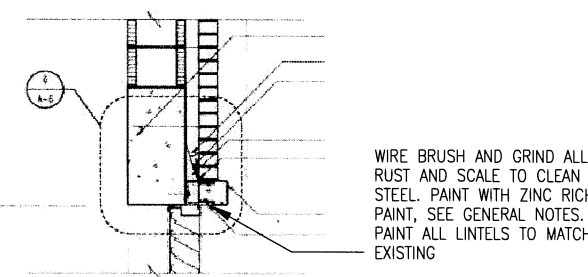
REPLACE HEAVY MASTIC AT ALL FLASHING PENETRATIONS, CONTINUOUS BACKER ROD AND SEALANT WITH TUBE WICK PER PRECAST PANEL AND CONT. SEALANT AS REQ'D.

SAW CUT EXISTING ATTACHMENT AS REQUIRED. PROTECT AND REUSE EXISTING PRECAST CAP. DRILL AND INSTALL NEW 5/8"Ø THREADED RODS INTO CONCRETE AND PRECAST CAP. SET W/ EPOXY, 2 1/2" MIN. EMBEDMENT

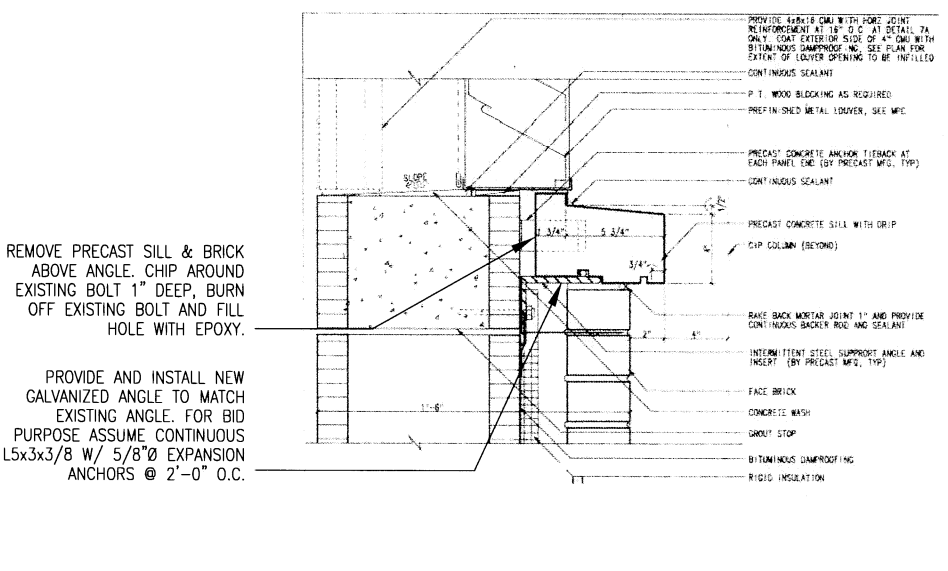
REMOVE AND REPLACE EXISTING ANGLE, FOR BID PURPOSE ASSUME L6x4x3/8 HDC CONTINUOUS W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.



**3 COPING DETAIL**  
NOT TO SCALE



**4 LOUVER HEAD DETAIL**  
NOT TO SCALE



**5 LOUVER SILL DETAIL**  
NOT TO SCALE

REMOVE PRECAST SILL & BRICK ABOVE ANGLE. CHIP AROUND EXISTING BOLT 1" DEEP, BURN OFF EXISTING BOLT AND FILL HOLE WITH EPOXY.

PROVIDE AND INSTALL NEW GALVANIZED ANGLE TO MATCH EXISTING ANGLE. FOR BID PURPOSE ASSUME CONTINUOUS L5x3x3/8 W/ 5/8"Ø EXPANSION ANCHORS @ 2'-0" O.C.

SEAL	
------	--

REVISION NUMBER	DESCRIPTION

REVISION NUMBER	DESCRIPTION

**GULF COAST STATE COLLEGE**  
**CENTRAL PLANT REPAIRS**  
 PANAMA CITY, FL

DESIGNED BY:  
 CAD  
 DRAWN BY:  
 CAD  
 CHECKED BY:  
 WJJ  
 DATE:  
 FEBRUARY 20, 2015

SHEET TITLE:  
 LEGEND, NOTES,  
 & ABBREVIATIONS

SHEET:  
**M001**

**LEGEND**

- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED
- 1** **DETAIL NAME**  
NOT TO SCALE
- EQUIPMENT TAG
- SHEET NOTE
- POINT OF CONNECTION TO EXISTING

**ABBREVIATIONS**

- BOL BOTTOM OF LOUVER
- EF EXHAUST FAN
- (E) EXISTING
- (N) NEW
- TYP TYPICAL

**LOUVER LEGEND**

- LOUVER (L-1) LOUVER EQUAL TO RUSKIN HZ850, AMCA 540, AMCA 550, AND MIAMI DADE CERTIFIED, STATIONARY DRAINABLE BLADE EXTRUDED ALUMINUM LOUVER. PROVIDE WITH BIRD SCREEN. LOUVER COLOR TO MATCH EXISTING. LOUVER SIZE AS INDICATED (FACE AREA) WITH A MINIMUM OF 30% FREE AREA. COORDINATE LOUVER WITH EXACT EXISTING WALL OPENING AND WITH STRUCTURAL.

**GENERAL NOTES**

1. THE MECHANICAL CONTRACTOR IS TO COORDINATE WITH THE GENERAL CONTRACTOR AND OTHER TRADES FOR REQUIRED OPENINGS IN WALLS.
2. VERIFY COLLAR SIZES ON ALL EQUIPMENT OUTLETS. TRANSITION DUCTWORK AS NECESSARY.
3. INSTALL EQUIPMENT TO MANUFACTURERS RECOMMENDED CLEARANCES.
4. DO NOT MOUNT DISCONNECT SWITCHES ON HVAC EQUIPMENT EXCEPT AS RECOMMENDED BY MANUFACTURER.
5. EXHAUST AIR DUCTWORK TO BE LOW PRESSURE SINGLE WALL RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A.
6. WORK SHALL COMPLY WITH THE FOLLOWING AGENCIES
  - 2010 FLORIDA BUILDING CODE
  - 2010 FLORIDA MECHANICAL CODE
  - NATIONAL FIRE PROTECTION AGENCY (NFPA)
  - AMERICAN SOCIETY OF HEATING AND REFRIGERATION ENGINEERS (ASHRAE)

**SEQUENCE OF OPERATIONS**

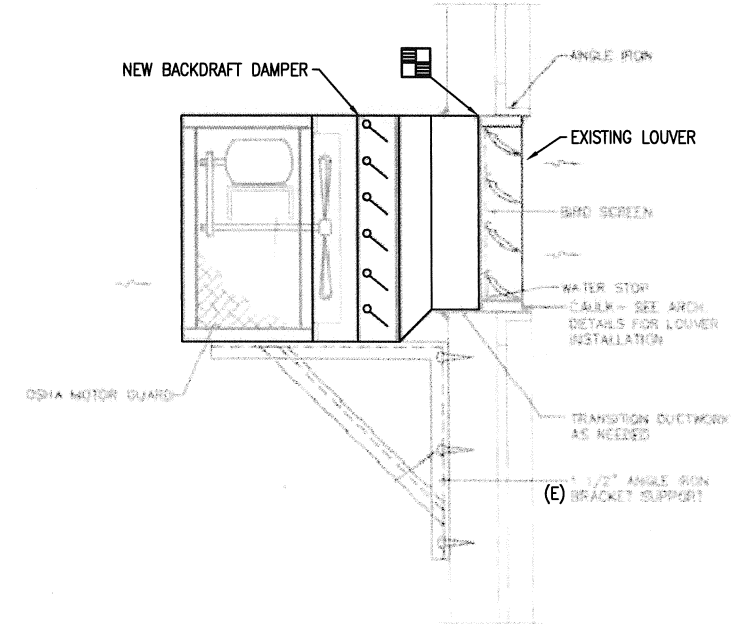
START/STOP AND LOCAL OVERRIDE SHALL BE CONTROLLED BY THE EXISTING SIEMENS DDC SYSTEM. PROVIDE A CONTROL POINT TO ENABLE/DISABLE EXHAUST FAN.

PROVIDE NEW SPACE TEMPERATURE SENSOR TO CONTROL THE EXHAUST FAN. UPON A RISE IN SPACE TEMPERATURE ABOVE 78°F (ADJUSTABLE), THE EXHAUST FAN SHALL START ON LOW SPEED AND CYCLE TO HIGH SPEED ON A RISE IN SPACE TEMPERATURE ABOVE 85°F (ADJUSTABLE). ON A DROP IN SPACE TEMPERATURE BELOW 75°F THE FAN SHALL STOP.

**FAN SCHEDULE**

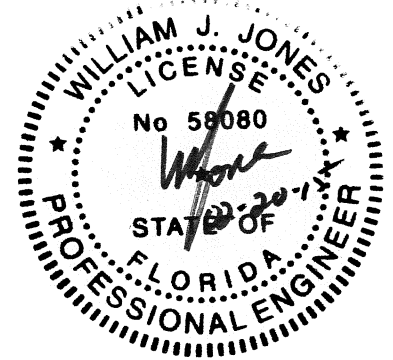
MARK	TYPE	DRIVE	PERFORMANCE DATA					ELECTRICAL DATA		
			CFM	E.S.P. (IN. W.C.)	MAX. RPM	MAX. SONES	MIN. HP	VOLTS	PHASE	Hz
EF-1	SWP	BD	15,000	0.25	1,725	18.9	2.0	460	3	60

- NOTES:
1. SWP - SIDEWALL PROPELLER TYPE EXHAUST FAN; BD - BELT DRIVE
  2. PROVIDE FAN WITH 2 SPEED MOTOR.
  3. PROVIDE FAN WITH AN INTEGRAL DISCONNECT.
  4. PROVIDE WITH GRAVITY BACKDRAFT DAMPER.
  5. PROVIDE WITH WALL COLLAR AND OSHA MOTOR GUARD.
  6. SEE ELECTRICAL FOR COMBINATION MOTOR STARTER/DISCONNECT.
  7. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL.
  8. BASIS OF DESIGN IS GREENHECK.



NOTE:  
 1. MOUNT NEW EXHAUST FAN TO EXISTING LOUVER. MOUNT EXHAUST FAN ON EXISTING SHELF BRACKET. INSTALL PER MANUFACTURER REQUIREMENTS.

**1** **PROPELLER EXHAUST FAN MOUNTING DETAIL**  
 NOT TO SCALE



**SHEET NOTES**

- ① EXISTING LOUVER TO BE REMOVED AND REPLACED WITH LOUVER OF SAME SIZE.
- ② DEMOLISH EXISTING EXHAUST FAN. ASSOCIATED LOUVER TO REMAIN. ASSOCIATED SHELF TO WHICH FAN IS MOUNTED TO REMAIN.

**GENERAL NOTES**

- 1. INFORMATION INDICATING LOCATION OF EXISTING EQUIPMENT WAS OBTAINED FROM SITE VISITS AND EXISTING DESIGN DRAWINGS BY BOSEK, GIBSON & ASSOCIATES, INC. DATED SEPT. 8, 1994 AND ARE REPRESENTATIVE OF THE BEST AVAILABLE SOURCE TO DATE.

**GENERAL DEMOLITION NOTES**

- 1. CONTRACTOR SHALL CUT AND PATCH ANY AREAS NECESSARY TO PERFORM WORK. WALL FINISH TO MATCH EXISTING.
- 2. ALL MECHANICAL ASSOCIATED ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM JOB SITE.
- 3. CONTRACTOR SHALL NOT DISRUPT EXISTING UTILITY SERVICES WITHOUT WRITTEN PERMISSION FROM OWNER.
- 4. UNLESS NOTED OR SHOWN OTHERWISE, ALL EXISTING UTILITY SERVICES SHALL REMAIN INTACT AND ACTIVE TO FACILITATE REVISED CONDITIONS.
- 5. CONTRACTOR SHALL PROVIDE MODIFICATIONS TO EXISTING UTILITY SERVICES TO ACCOMMODATE REVISED CONDITIONS.

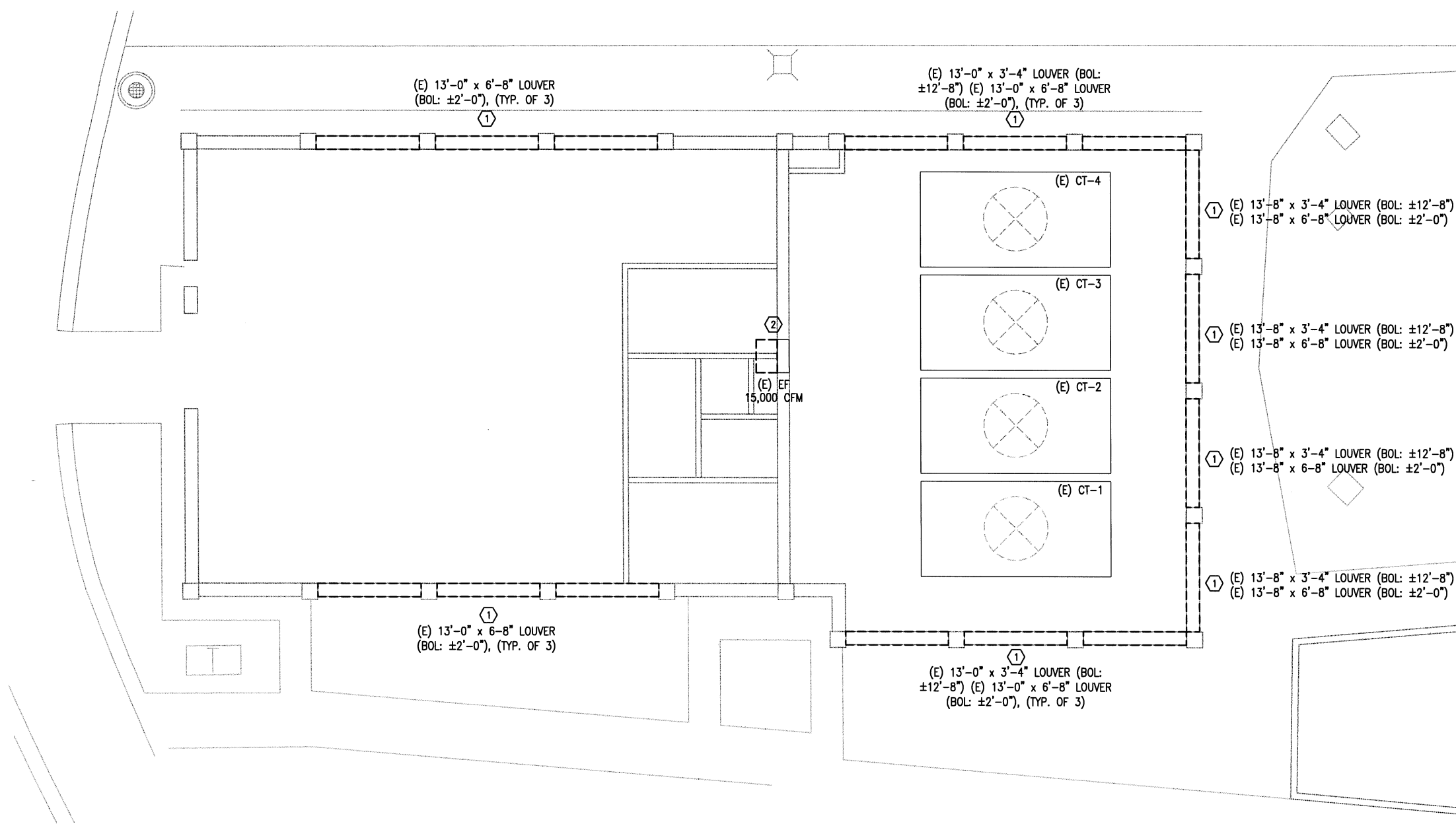
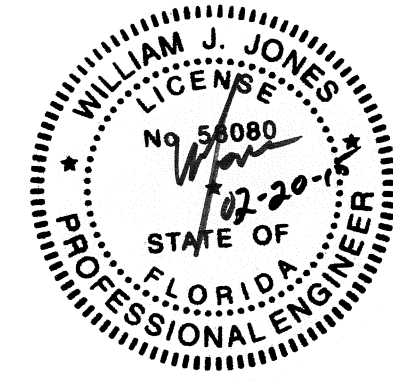
REVISION NUMBER	REVISION DESCRIPTION

**GULF COAST STATE COLLEGE**  
**CENTRAL PLANT REPAIRS**  
PANAMA CITY, FL

DESIGNED BY:  
CAD  
DRAWN BY:  
CAD  
CHECKED BY:  
WJJ  
DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
CHILLER PLANT  
DEMO PLAN

SHEET:  
M101



CHILLER PLANT  
MECHANICAL DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"

**SHEET NOTES**

- ① PROVIDE NEW LOUVER L-1. APPROXIMATE SIZE INDICATED (WIDTHxHEIGHT). REFER TO ELEVATIONS AND DETAILS ON SHEET M301. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- ② COORDINATE INSTALLATION OF NEW EXHAUST FAN WITH EXISTING LOUVER AND EXISTING SHELF. PROVIDE TRANSITION AS NECESSARY.

**GENERAL NOTES**

- 1. TEST AND BALANCE NEW SYSTEM TO DESIGN AIR FLOW RATES.

SEAL	
REVISION NUMBER	DESCRIPTION

**GULF COAST STATE COLLEGE**  
**CENTRAL PLANT REPAIRS**  
 PANAMA CITY, FL

DESIGNED BY:  
CAD

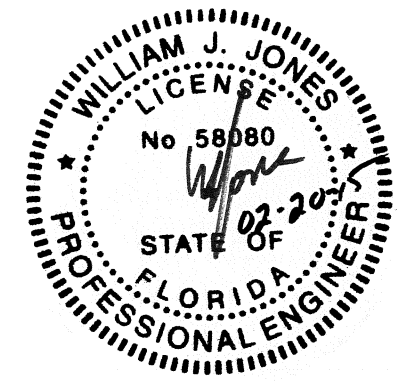
DRAWN BY:  
CAD

CHECKED BY:  
WJJ

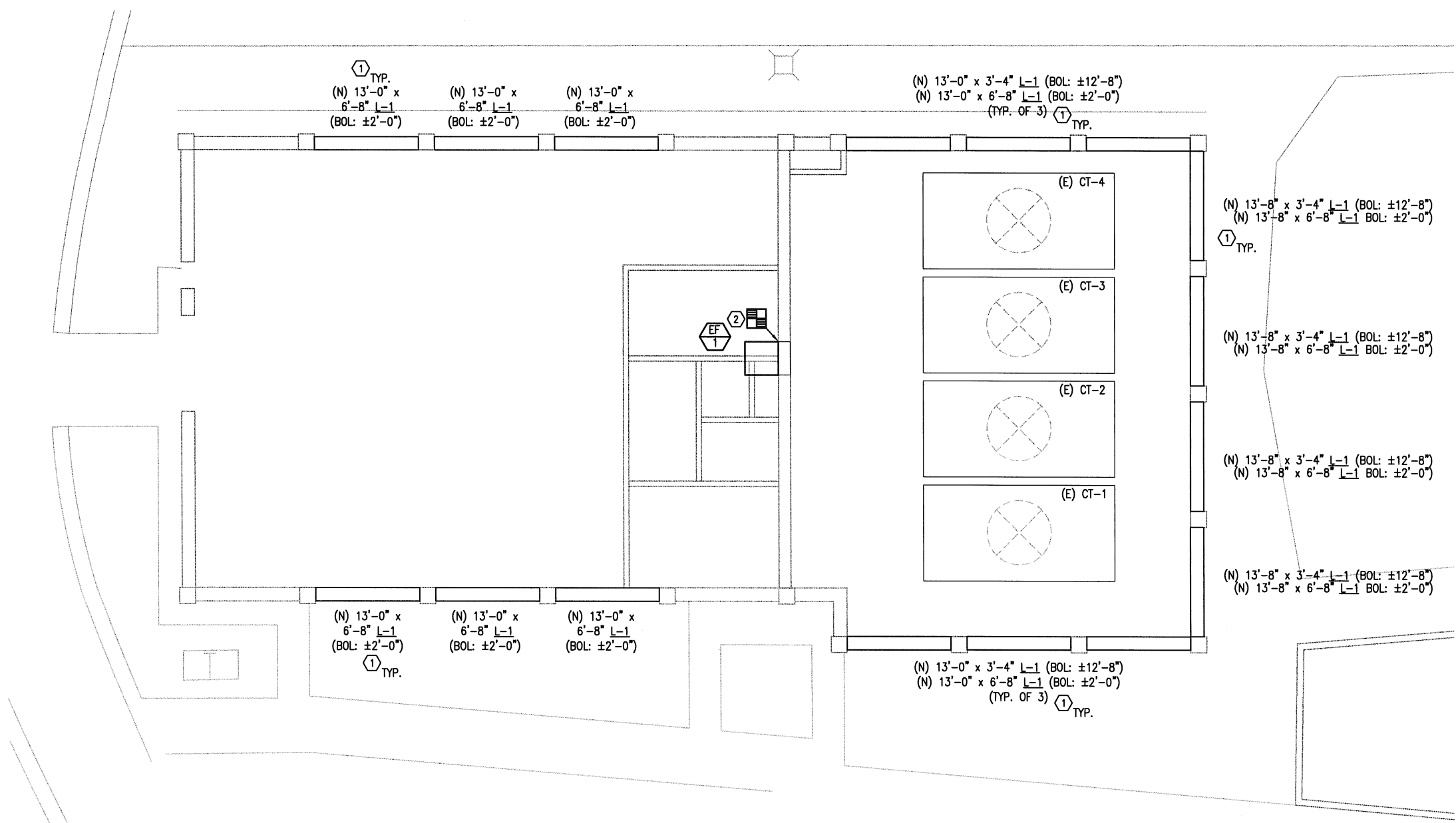
DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
CHILLER PLANT  
NEW WORK PLAN

SHEET:  
M201

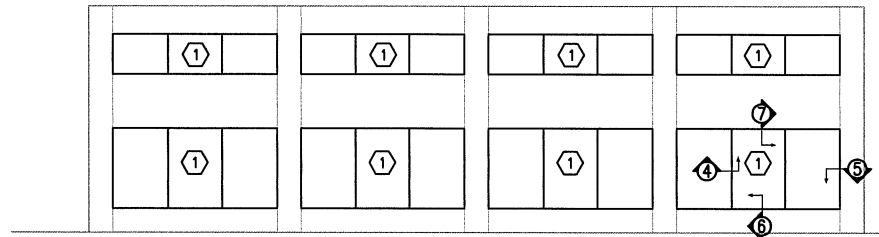


CHILLER PLANT  
 NEW WORK PLAN  
 1  
 SCALE: 1/8"=1'-0"

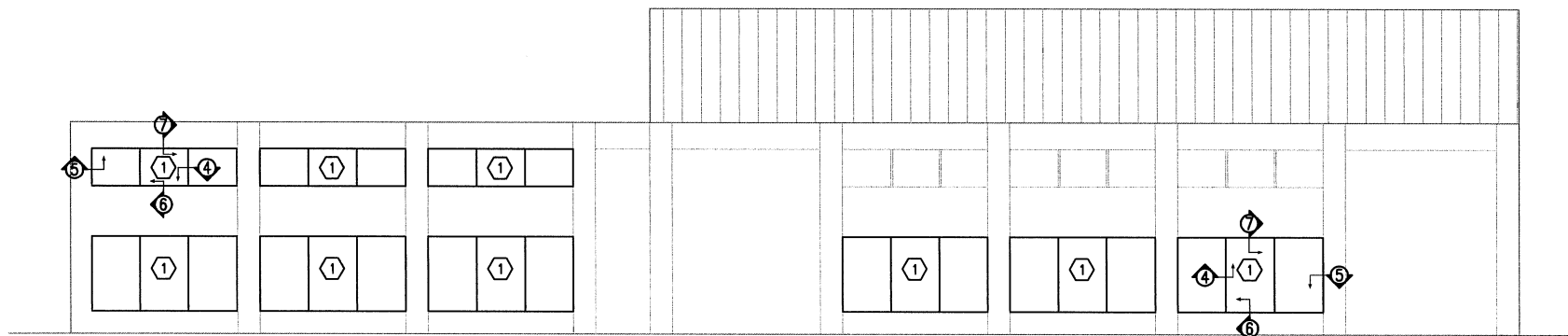


**SHEET NOTES**

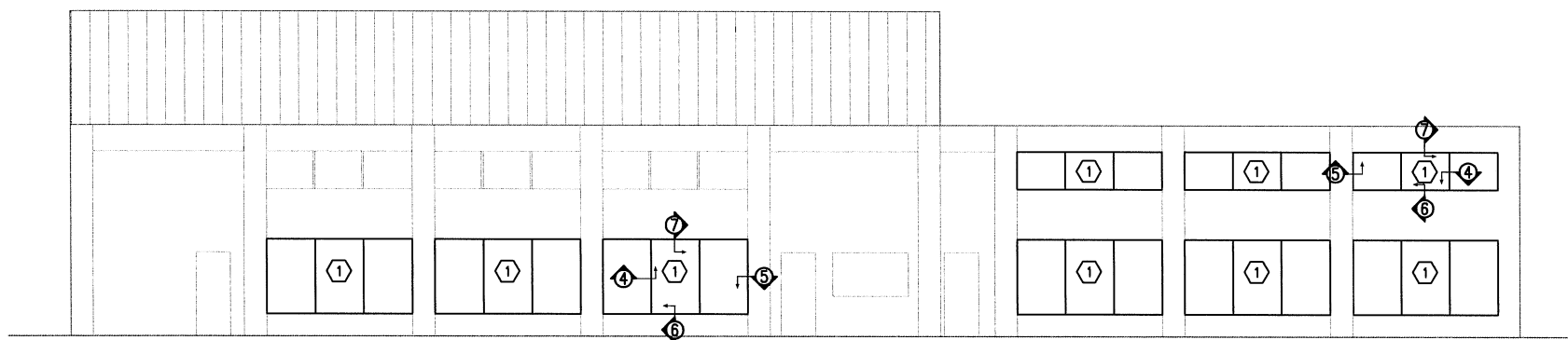
① EXISTING METAL LOUVERS TO BE REMOVED AND REPLACED WITH NEW LOUVER L-1 OF SAME SIZE. COLOR OF LOUVER TO MATCH EXISTING. SEE DETAILS AS INDICATED ON THIS SHEET. CONTRACTOR TO FIELD VERIFY.



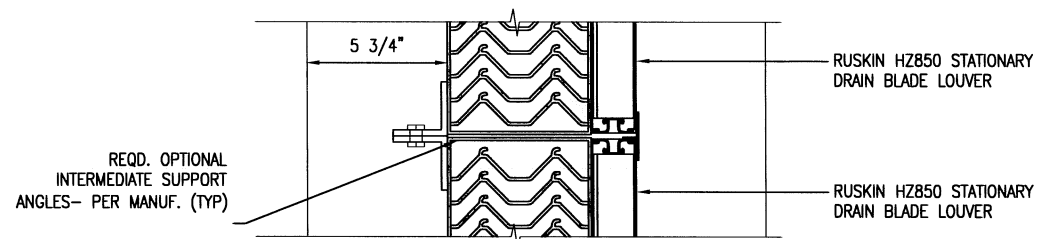
① **CHILLER PLANT EAST ELEVATION**  
NOT TO SCALE



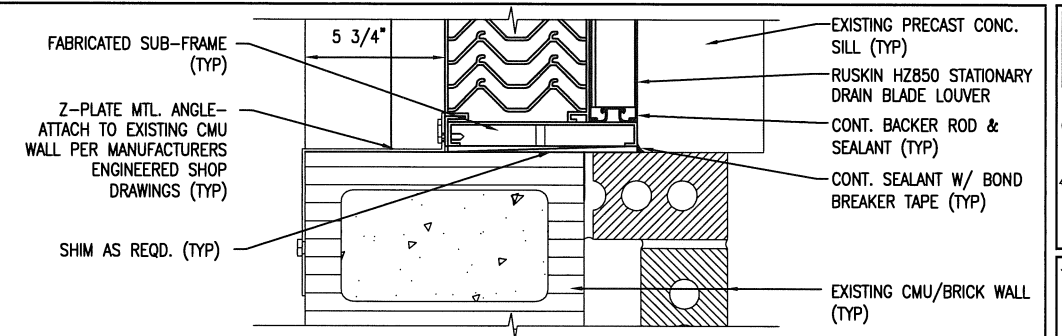
② **CHILLER PLANT NORTH ELEVATION**  
NOT TO SCALE



③ **CHILLER PLANT SOUTH ELEVATION**  
NOT TO SCALE

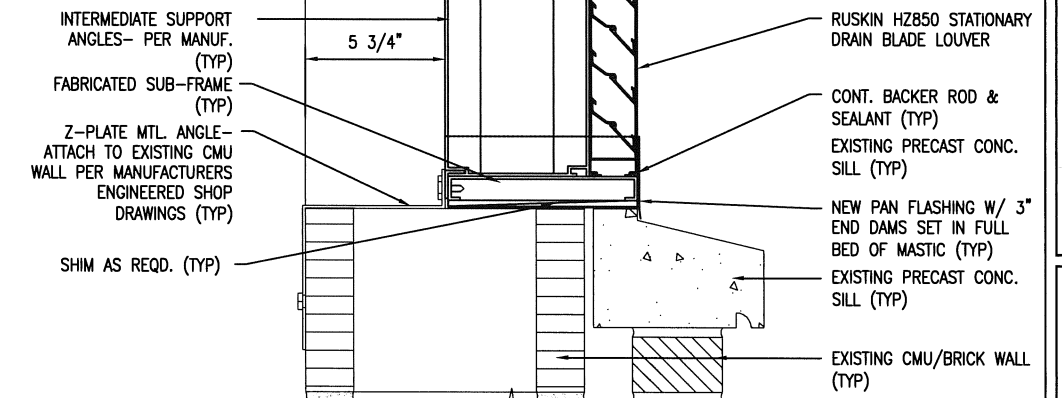


④ **(L-1) JAMB MULLION**  
NOT TO SCALE



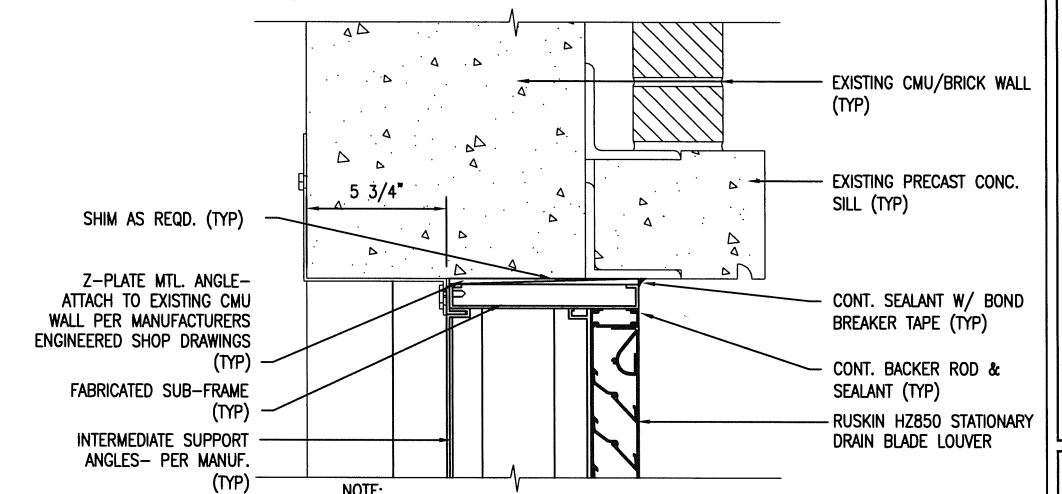
NOTE:  
1. CONTRACTOR SHALL SUBMIT MANUFACTURERS ENGINEERED SHOP DRAWINGS STAMPED BY A REGISTERED ENGINEER IN THE STATE OF FLORIDA.

⑤ **(L-1) JAMB DETAIL**  
NOT TO SCALE



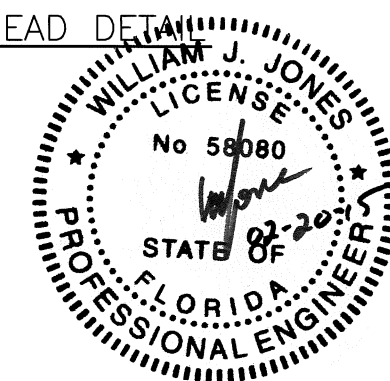
NOTE:  
1. SEE STRUCTURAL DETAIL 5 ON SHEET S301.

⑥ **(L-1) SILL DETAIL**  
NOT TO SCALE



NOTE:  
1. SEE STRUCTURAL DETAIL 4 ON SHEET S301.

⑦ **(L-1) HEAD DETAIL**  
NOT TO SCALE



REVISION NUMBER	DESCRIPTION

REVISION NUMBER	DESCRIPTION

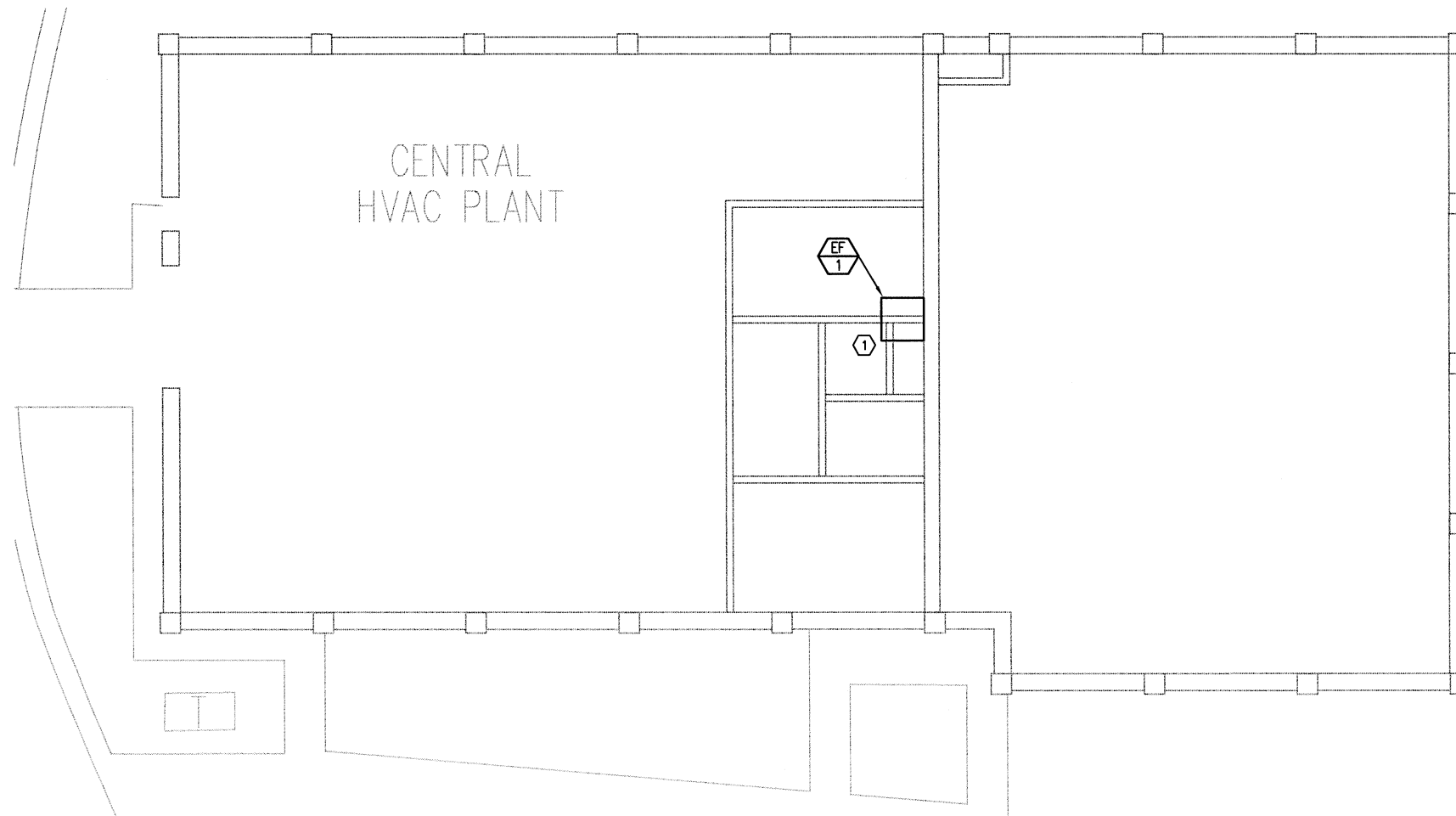
**GULF COAST STATE COLLEGE**  
CENTRAL PLANT REPAIRS  
PANAMA CITY, FL

DESIGNED BY:  
CAD  
DRAWN BY:  
CAD  
CHECKED BY:  
WJJ  
DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
CHILLER PLANT ELEVATIONS

SHEET:  
M301



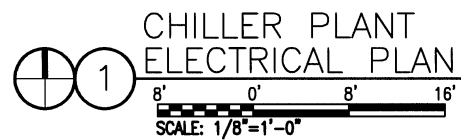


CENTRAL  
HVAC PLANT

MECHANICAL EQUIPMENT ELECTRICAL SCHEDULE

MARK	ITEM	VOLTAGE/Ø	MCA	LOAD	MEANS OF DISCONNECT*	C/B TRIP (AMPS)	FEEDER		
							Ø	GND	CONDUIT
EF-1	EXHAUST FAN	480/3	3.4	2HP	NOTE 1	EXISTING	EXISTING	EXISTING	EXISTING

NOTES:  
1. DISCONNECT INTEGRAL TO EQUIPMENT BY DIVISION 23.



SHEET NOTES

- ① DISCONNECT EXISTING EXHAUST FAN, AND RECONNECT NEW EXHAUST FAN TO EXISTING CIRCUIT.

GENERAL NOTES

- ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2011 EDITION OF THE NATIONAL ELECTRICAL CODE.
- CONDUIT ROUTINGS AND DEVICE/EQUIPMENT LOCATIONS SHOWN ARE DIAGRAMMATIC ONLY, CONTRACTOR SHALL FIELD ROUTE AND LOCATE AS REQUIRED. CONDUIT ROUTINGS SHALL BE NORTH/SOUTH OR EAST/WEST.
- ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE PROVIDED WITH SUITABLE PHENOLIC NAMEPLATES.
- THE CONDUIT MATERIAL SHALL BE AS FOLLOWS (SEE SPECIFICATION FOR EXCEPTIONS AND ADDITIONAL INFORMATION):
  - A) BELOW GRADE – RIGID NON-METALLIC (POWER & SITE LIGHTING ONLY).
  - B) RISER FROM 36" BELOW GRADE – RIGID GALVANIZED STEEL.
  - C) CONCEALED RISER FROM 36" BELOW GRADE – RIGID NON-METALLIC. (POWER ONLY)
  - D) ABOVE GRADE SUBJECT TO PHYSICAL ABUSE – RIGID GALVANIZED STEEL OR INTERMEDIATE.
  - E) ABOVE GRADE NOT SUBJECT TO PHYSICAL ABUSE OR WEATHER – ELECTRICAL METALLIC TUBING.
  - F) INDOORS NOT SUBJECT TO PHYSICAL ABUSE – ELECTRICAL METALLIC TUBING.
- THE LOADS SHOWN FOR APPLIANCES AND EQUIPMENT ARE BASED ON DESIGN INFORMATION. THE CONTRACTOR SHALL VERIFY ALL APPLIANCE LOADS PRIOR TO RUNNING THE CIRCUIT. THE MINIMUM CIRCUIT REQUIREMENTS SHALL BE BASED ON THE APPLIANCE NAMEPLATE VALUE OR CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ADDITIONAL COMPENSATION SHALL NOT BE ALLOWED FOR APPLIANCE MODIFICATIONS BY THE CONTRACTOR.
- ALL SAFETY SWITCH DISCONNECTS LOCATIONS IN MECHANICAL ROOMS SHALL HAVE 3'-0" MIN. OF WORKING SPACE IN FRONT OF DISCONNECT; COORDINATE WITH MECHANICAL CONTRACTOR AND EQUIPMENT LOCATIONS.
- FINAL CONDUIT CONNECTIONS TO HEAT PUMPS, AIR HANDLERS, EXHAUST FANS, AND WATER HEATERS SHALL BE FLEXIBLE METAL (LIQUID TIGHT IN FLAMMABLE, OUTSIDE AND OTHER DAMP AND WET LOCATIONS).
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION AND SIZE OF EQUIPMENT WHICH ARE PROVIDED BY OTHERS AND CONNECTED BY ELECTRICAL.
- ALL EXHAUST FAN DISCONNECTS AND OVERLOADS ARE SCHEDULED TO BE PROVIDED UNDER DIVISION 23.
- WORKING SPACE OF 36" FOR 120/208 SYSTEMS AND 42" FOR 277/480 SYSTEMS SHALL BE MAINTAINED IN FRONT OF ALL ELECTRICAL PANELS AND DEVICES.
- FINAL CONNECTION TO ALL EQUIPMENT IS SHOWN DIAGRAMMATIC. PROVIDE FINAL CONNECTION AS REQUIRED PER MANUFACTURER OF EQUIPMENT.

SEAL

REVISION  
DESCRIPTION

REVISION  
NUMBER

GULF COAST STATE COLLEGE  
CENTRAL PLANT REPAIRS  
PANAMA CITY, FL

DESIGNED BY:  
JTH

DRAWN BY:  
JTH

CHECKED BY:  
TAN

DATE:  
FEBRUARY 20, 2015

SHEET TITLE:  
CHILLER PLANT  
ELECTRICAL  
PLAN

SHEET:  
E101

