AMAYA ARCHITECTS

ADDENDUM NUMBER 1

For:

Dinan Residence
17 Orland Street
Milford, Connecticut

Project Number 1065

10th of September 2014

The Drawings and Specifications prepared by Amaya Architects and it's Consultants entitled **"Elevate and Renovate Existing Residential Structure"** and known as the **"Dinan Residence located at 17 Orland Street, Milford, Connecticut"** Project Number 1065, Drawings and Specifications dated the 31st of July 2014 (Bid Set) and the 29th of August 2014 (MEP Drawings), are hereby amended in the following particulars:

Item #	Section/Dwg	Description
1	Section 07460	Add Specification Section 07460 – Vinyl Siding. Use double 4" clapboard siding in rough cedar finish, Monogram 46 Series as manufactured by Certainteed. Provide insulation board over the existing siding. Existing siding to remain in-place.
2	Section 01230	Add Section 01230 – Alternates – 3.1 Schedule of Alternates – Add 3.1.C – Provide alternate pricing for adding necessary components needed for Air Conditioning. Alternate pricing should include all equipment required and the cost of the installation. See attached Drawing M-1 for additional information.
3	Section 01230	Add Section 01230 – Alternates – 3.1 Schedule of Alternates – Add 3.1.D – Provide alternate pricing for Composite Decking Material in lieu of Pressure Treated Lumber. See Specifications for additional material information.
4	Section 01230	Add Section 01230 – Alternates – 3.1 Schedule of Alternates – Add 3.1.E – Provide alternate pricing for Composite Railing Material in lieu of Pressure Treated Lumber. See Specifications for additional material information.
5	Drawing P-1	Delete Drawing P-1 – Plumbing Plans dated the 20th of June 2014 and included in Bid Set – Add Drawing P-1 – Plumbing Plans dated the 29th of August 2014 included with this Addendum.

6	Drawing M-1	Delete Drawing M-1 – Mechanical Plans dated the 20th of June 2014 and included in Bid Set – Add Drawing M-1 – Mechanical Plans dated the 29th of August 2014 included with this Addendum.
7	Drawing E-1	Delete Drawing E-1 – Electrical Plans dated the 20th of June 2014 and included in Bid Set – Add Drawing E-1 – Electrical Plans dated the 29th of August 2014 included with this Addendum.
8	Drawing SP-1	Delete Drawing SP-1 – MEP Specifications dated the 20th of June 2014 and included in Bid Set – Add Drawing SP-1 – MEP Specifications dated the 29th of August 2014 included with this Addendum.

END OF ADDENDUM ONE

SECTION 07460 – VINYL SIDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this Section.

1.2 SUMMARY

A. This Section includes siding and all siding accessories required for a complete installation. Accessories are based on type of siding selected.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For siding including related accessories.

C. Qualification Data: For qualified vinyl siding Installer.

D. Product certificates.

E. Product test reports.

F. Research/evaluation reports.

G. Maintenance data.

H. Warranty: Sample of special warranty.

1.4 QUALITY ASSURANCE

A. Vinyl Siding Installer Qualifications: A qualified installer who employs a VSI-Certified Installer on Project.

B. Source Limitations: Obtain each type, color, texture and pattern of siding, including related accessories, from single source from single manufacturer.

C. Preinstallation Conference: Conduct conference at Project site.

1.5 WARRANTY

A. Special Warranty: Standard form in which manufacturer agrees to repair or replace siding that fail(s) in materials or workmanship within specified warranty period.

1. Warranty Period: Lifetime Limited Warranty including Lifetime Fade Protection to original purchaser.

1.6 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Furnish full lengths of siding including related accessories, in a quantity equal to 4 squares of each color and type installed or as otherwise directed by Owner.

PART 2 - PRODUCTS

2.1 VINYL SIDING

A. General: Integrally colored vinyl siding complying with ASTM D 3679.

1. Basis-of-Design Product: Subject to compliance with requirements, provide CertainTeed Monogram 46 Series or comparable product by one of the following:

a. Alside – Charter Oak
b. Georgia Pacific – Heritage Hill

B. Design: Double 4” Clapboard, rough cedar finish with STUDfinder Installation System.

C. Nail Hem: RigidForm 220 Technology Roll Over Nail Hem.

D. Lock: CertiLock self-aligning post formed positive lock.

E. Width: 8”.

F. Length: 12 Feet – 6 Inches.

G. Nominal Thickness: 0.046 Inches.

H. Panel Projection: 3/4 Inch.

I. Panel Exposure: 4 Inch.

J. Color: As selected by Owner from standard Manufacturer’s color selections.

2.2 ALTERNATE SIDING

A. Cedar Impressions® Double 7” Straight Edge Perfection Shingle as manufactured by CertainTeed.

B. Design: Double 7” Straight Edge Perfection Shingles

C. Lock: Molded perimeter lock for seamless appearance

D. Width: 14”- Double course

E. Length: 48”

F. Nominal Thickness: .100”

G. Panel Projection: ¾”

H. Panel Exposure: 7”

I. Color: As selected by Owner from standard Manufacturer’s color selections.

2.3 ACCESSORIES

A. Siding Accessories, General: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building on figuration.

1. Provide accessories made from same material as matching color and texture of adjacent siding unless otherwise indicated.

B. Vinyl Accessories: Integrally colored vinyl accessories complying with ASTM D 3679 except for wind-load resistance.

1. Texture: Smooth

C. Flashing: Provide tin/zinc coated copper flashing complying with Division 07 Section “Sheet Metal Flashing and Trim” at window and door heads and where indicated.

D. Fasteners:

1. For fastening to wood, use siding nails of sufficient length to penetrate a minimum of 1 inch into substrate.
2. For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of ¼ inch, or three screw-threads, into substrate.
3. For fastening vinyl, use hot-dip galvanized fasteners. Where fasteners will be exposed to view, use prefinished aluminum fasteners in color to match item being fastened.

2.4 INSULATION BOARD

A. Insulation Board – General: Provide reinforced insulating sheathing over the existing sheathing located under the existing wood shingles.

1. Basis of Design: Foamular Propink Extruded Polystyrene (XPS) Rigid Foam Insulation as manufactured by Owens Corning.

2. Other Sources: Other product sources will be considered.

B. Product Compliance: Shall be as follows

1. Thickness: ½" thick

2. R-Value: R-3

3. Compliance Standards: Meets or exceeds – ASTM C578 Type X

4. Edges: Square

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of siding and related accessories.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Comply with siding manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.

1. Do not install damaged components.
2. Center nails in elongated nailing slots without binding siding to allow for thermal movement.

B. Install vinyl siding and related accessories in accordance with ASTM D 4756.

1. Install fasteners for horizontal vinyl siding no more than 16 inches o.c.
2. Install fasteners for vertical vinyl siding no more than 12 inches o.c.

C. Install rigid foam insulation as per manufacturer's standards for the given application.

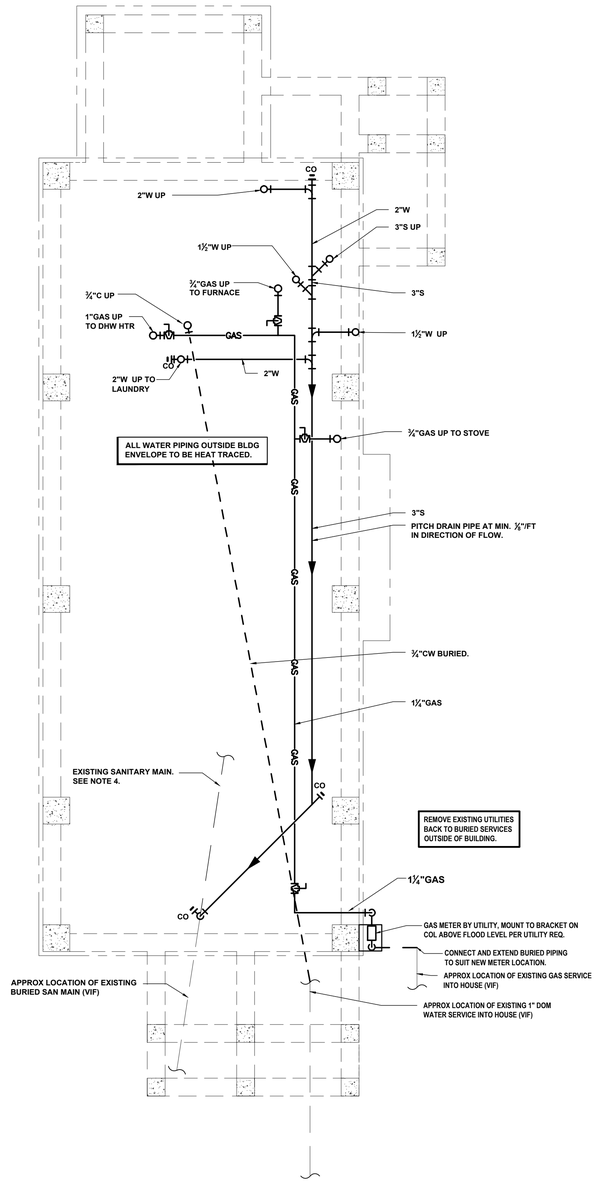
D. Install joint sealants as specified in Division 07 Section “Joint Sealants” and to produce weathertight installation.

3.3 ADJUSTING AND CLEANING

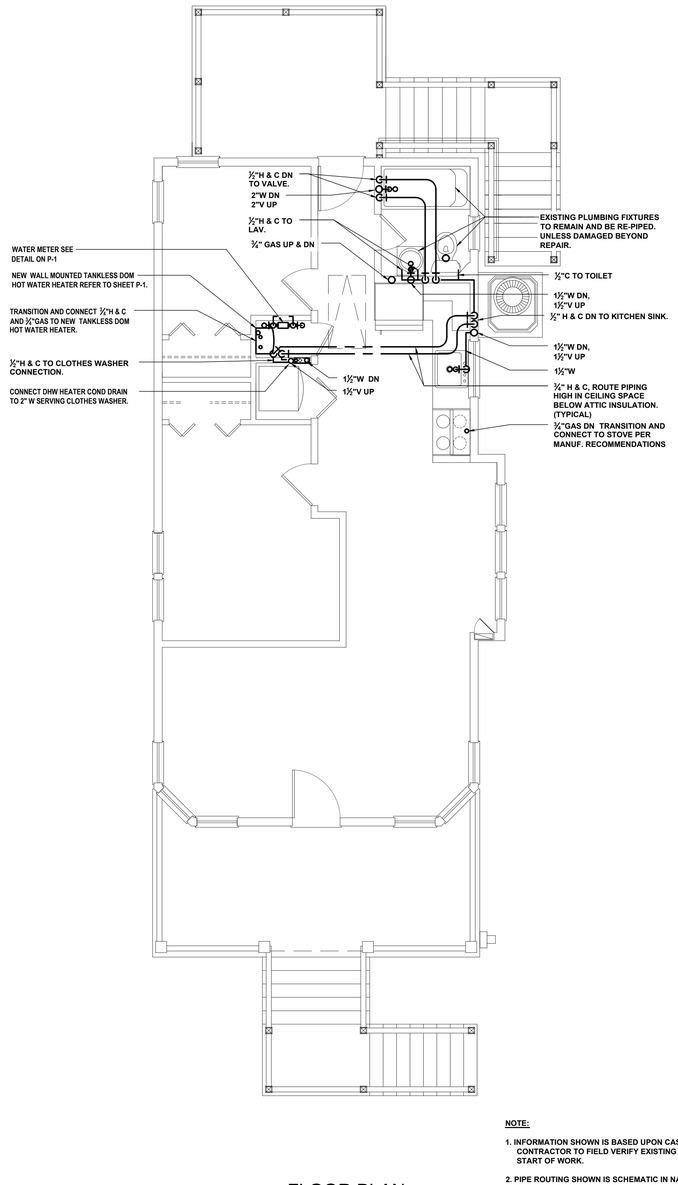
A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.

B. Clean finished surfaces according to manufacturer’s written instructions and maintain in a clean condition during construction.

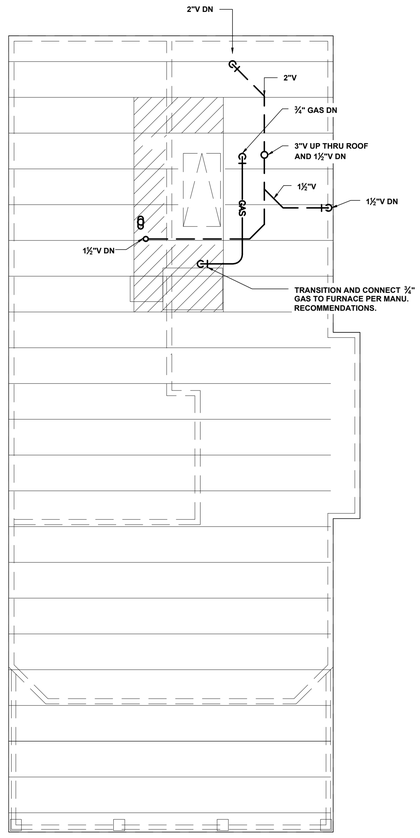
END OF SECTION 07460



1 FOUNDATION PLAN
1/4"=1'-0"



2 FLOOR PLAN
1/4"=1'-0"



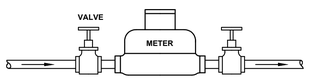
3 ATTIC PLAN
1/4"=1'-0"

PLUMBING SYMBOL LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WASTE, SOIL AND STORM		BUTTERFLY VALVE		UNION
	BURIED PIPE		CHECK VALVE		CIRCULATING PUMP
	COLD		PRESSURE REDUCING VALVE		FLOOR DRAIN
	HOT		BACKFLOW PREVENTER		ROOF DRAIN
	RECIRCULATION		PLUG VALVE		CLEAN OUT
	VENT		CONTROL VALVE		THERMOMETER
	BALL VALVE		HOSE BIBB		PIPE ELBOW UP
	GATE VALVE		PRESSURE RELIEF VALVE		PIPE ELBOW DN
	OS&Y GATE VALVE		STRAINER		CAP

NOTE: ABOVE LEGEND IS GENERAL IN NATURE. NOT ALL SYMBOLS ARE ASSOCIATED WITH THIS PROJECT.

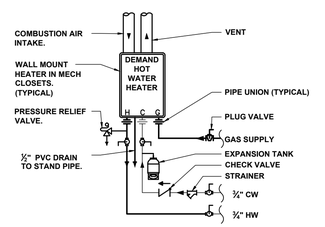
NOTE:

1. INFORMATION SHOWN IS BASED UPON CASUAL FIELD OBSERVATIONS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO THE START OF WORK.
2. PIPE ROUTING SHOWN IS SCHEMATIC IN NATURE, ACTUAL ROUTING SHALL BE COORDINATED WITH EXISTING UTILITIES AND OTHER TRADES PRIOR TO THE START OF WORK.
3. DOMESTIC COLD WATER, SANITARY AND NATURAL GAS SERVICES TO BE ELEVATED ABOVE FLOOD LEVEL AND INSTALLED PER UTILITY REQUIREMENTS. A BACKFLOW VALVE SHALL BE INSTALLED IN THE SANITARY MAIN.
4. REMOVE ALL H, C, GAS & DRAIN PIPING SERVING BLDG AND RE-PIPE AS SHOWN.



ALL PIPING AND FITTINGS BY CONTRACTOR.
METER SUPPLIED BY UTILITY.

4 TYPICAL WATER METER PIPING DETAIL
NTS



NOTE: INSTALL WATER HEATER PER MANUFACTURERS RECOMMENDATIONS.

5 WATER HEATER PIPING SCHEMATIC DIAGRAM

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Sheet Tytle:
PLUMBING PLANS

APPLICATION # 1065

DINAN RESIDENCE
17 Orland Street
Milford,Connecticut 06460

STATE OF CONNECTICUT
DEPARTMENT OF HOUSING
COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY PROGRAM
(CDBG-DR)

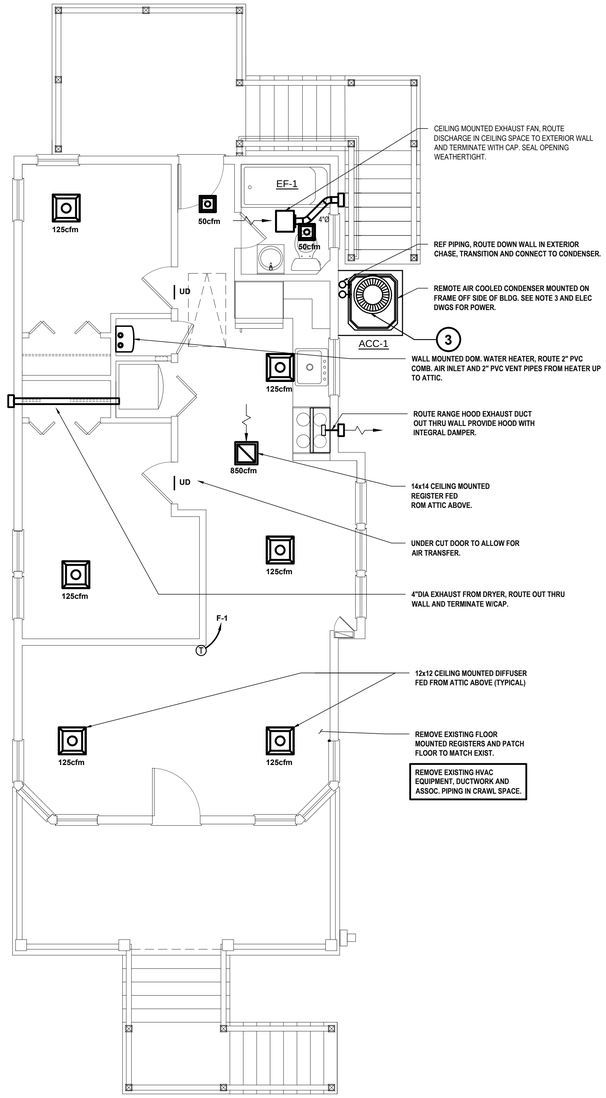
Date:
ISSUED FOR BIDDING 8/29/14

Job Number:
Drawn By: JTF
Approved By: RJS

Sheet Number:
P-1

MECHANICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
S/A	SUPPLY AIR		RETURN AIR OR OUTSIDE AIR FLOW	UD	UNDERCUT DOOR
R/A	RETURN AIR		RETURN AIR OR EXHAUST AIR FLOW	CUH	CABINET UNIT HEATER
O/A	OUTSIDE AIR		VOLUME DAMPER (VD)	ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST AIR		REGISTER OR GRILLE		PIPE ELBOW TURNED UP
EF	EXHAUST FAN		DIFFUSER		PIPE ELBOW TURNED DOWN
AFF	ABOVE FINISHED FLOOR		R/A RECTANGULAR DUCT RISER		PIPE TEE UP
BOD	BOTTOM OF DUCT ELEVATION		S/A RECTANGULAR DUCT RISER		PIPE TEE DN
HX	HEAT EXCHANGER		EXH RECTANGULAR DUCT RISER		PIPE CAP
FD	FIRE DAMPER		R/A ROUND DUCT RISER		GATE VALVE
CFM	CUBIC FEET PER MINUTE		S/A ROUND DUCT RISER		BALL VALVE
C	COLD WATER (DOMESTIC)		EXH ROUND DUCT RISER		PRESSURE GAUGE W/SHUTOFF COCK
ACC	AIR-COOLED CONDENSER	T	THERMOSTAT		CHECK VALVE
RTU	PACKAGED ROOF TOP AC UNIT	M	MOTORIZED DAMPER		BLIND FLANGE
VD	VOLUME DAMPER	TS	TEMPERATURE SENSOR		CONTROL VALVE
UH	UNIT HEATER		FLEXIBLE CONNECTOR		SOLENOID VALVE
PF	PADDLE TYPE FAN		BALANCE VALVE		STRAINER
AC	AIR CONDITIONING		DRAIN VALVE		MANUAL AIR VENT
MAU	MAKE-UP AIR UNIT		PIPE UNION		PIPE REDUCER
CP	CONTROL PANEL		STRAINER WITH BLOWDOWN		DIRECTION OF FLOW
HWS&R	HOT WATER SUPPLY & RETURN		THERMOMETER	M	2-WAY CONTROL VALVE
P	PUMP	LD	LOUVERED DOOR	M	3-WAY CONTROL VALVE
UD	UNDERCUT DOOR				



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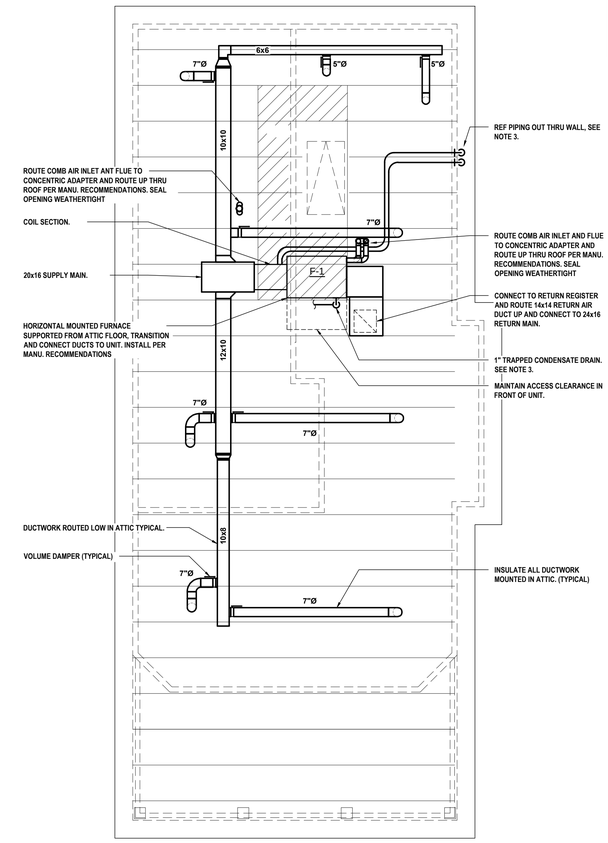

2 ATTIC PLAN
1/4"=1'-0"

EXHAUST FAN SCHEDULE

NUMBER	AIR FLOW (CFM)	STATIC PRESSURE	MOTOR SPEED	FAN SPEED	HP	ELEC	AREA SERVING	TYPE	SONES	MANU/MODEL	REMARKS
EF-1	80	0.25"W.G.	-	1166RPM	12W	120V/1PH	BATHROOMS	CEILING	0.6	PANASONIC MODEL FV-08VKSL3	SEE NOTES 1, 2 & 3

NOTES:
1) MANU/MODEL LISTED ARE ONLY USED AS THE BASIS FOR DESIGN. REFER TO SPECIFICATIONS FOR LIST OF ACCEPTABLE MANU/MODELS.
2) PROVIDE ALL FANS WITH DISCONNECT SWITCHES, AND BACKDRAFT DAMPERS.
3) ALL FANS TO BE ENERGY STAR RATED.

NOTES:

1. INFORMATION SHOWN IS BASED UPON CASUAL FIELD OBSERVATIONS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO THE START OF WORK.

2. CONTRACTOR TO COORDINATE WITH EXISTING UTILITIES AND OTHER TRADES PRIOR TO THE START OF WORK.

3. ALL AIR CONDITIONING COMPONENTS PROVIDED WITH SYSTEM INCLUDING COOLING COIL, COND DRAIN, REF PIPING, REMOTE CONDENSER AND ALL ASSOCIATED ACCESSORIES ARE AN ADD ALTERNATE.

NORTH

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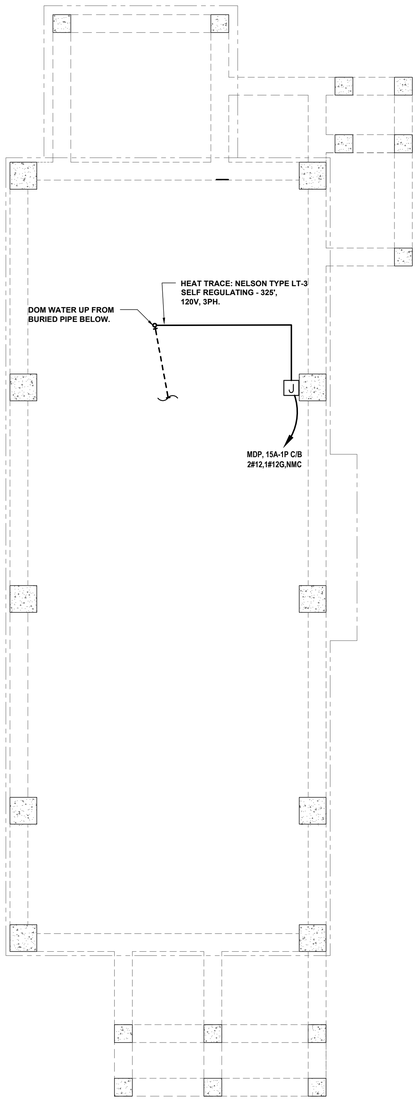

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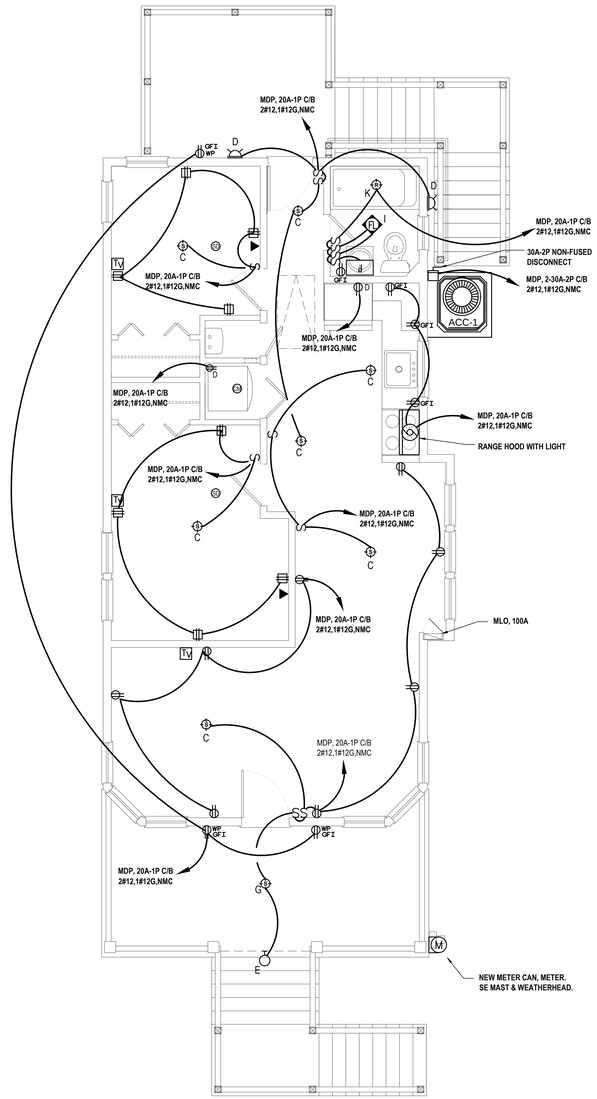

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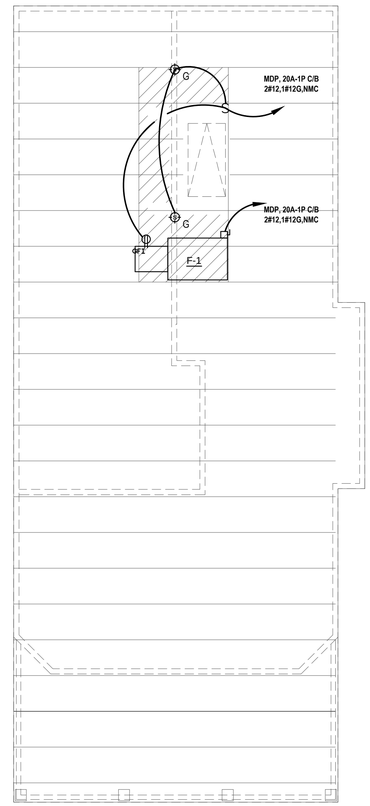

3 ATTIC PLAN
1/4"=1'-0"

ELECTRICAL FIXTURE KEY

- A, B — PENDANT LIGHT FIXTURE
- C, G, L — SURFACE MOUNTED LIGHT FIXTURE
- H1,H2 — RECESSED CEILING LIGHT FIXTURE
- D — WALL MOUNTED FLOOD LIGHT FIXTURE
- E — EXTERIOR SURFACE LIGHT FIXTURE
- F — EXTERIOR SURFACE LIGHT
- I — EXHAUST FAN/LIGHT
- J — WALL MOUNTED 2 LIGHT VANITY FIXTURE
- K — RECESSED LED CEILING LIGHT FIXTURE

- S — SINGLE POLE SWITCH
- S_3 — THREE WAY SWITCH
- S_4 — FOUR WAY SWITCH
- S_{PS} — PULL SWITCH

- DUPLEX RECEPTACLE
- DUPLEX WITH GROUND FAULT INTERRUPTER
- DUPLEX WATER PROOF GROUND FAULT INTERRUPTER
- ARC FAULT INTERRUPTED DUPLEX RECEPTACLE
- ARC FAULT INTERRUPTED DUPLEX RECEPTACLE TOP SWITCHED
- QUADROPLEX RECEPTACLE
- DEDICATED RECEPTACLE
- DRYER RECEPTACLE

- TELEPHONE OUTLET / INTERNET OUTLET
- COAXIAL CABLE FOR TELEVISION

- EXHAUST FAN
- EXHAUST FAN/LIGHT
- CEILING FAN

- SD — SMOKE DETECTOR
- CM — CARBON MONOXIDE DETECTOR
- MDP — MAIN DISTRIBUTION PANEL
- NMX — ROMEX

NOTE: WHERE OUTLETS ARE NOT SPECIFICALLY LOCATED ON THE DRAWINGS, PROVIDE MINIMUM NUMBER TO SATISFY LOCAL AND ALL GOVERNING CODES. LOCATE AS DETERMINED IN THE FIELD WITH THE ARCHITECT. WHERE OUTLETS ARE REQUIRED BY CODE AND INSTALLED WITHOUT SUCH SPECIFIC DIRECTION, LOCATE AS DIRECTED BY THE ARCHITECT

NOTE: COORDINATE FIXTURE LOCATION WITH FRAMING, HVAC PLANS AND INTERIOR DRAWINGS.

NOTES:

1. **A/C EQUIPMENT IS ADD ALTERNATE BY OWNER.**
2. **IF A/C IS INSTALLED - ALL SE EQUIP. AND MAIN PANEL MUST BE UPSIZED TO A 240/120V, 1ϕ, 100A SYSTEM. MUST ALSO BE ADD ALTERNATE BY OWNER. SE CABLE 3-#2/0, 1#4G, COPPER CABLE.**
3. **SMOKE, SMOKE/CARBON MONOXIDE DETECTORS TO BE WIRED IN TANDEM (TYPICAL) .**

LUMINAIRE SCHEDULE

SYMBOL	LABEL	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP
P	A	PROGRESS LIGHTING	P5011-09	12"Ø INCANDESCENT PENDANT FIXTURE WITH BRUSHED NICKEL FINISH, PRE-WIRED WITH 10' OF WIRE UL-CUL LISTED	1 (m) 100w
P	B	PROGRESS LIGHTING	P5012-09	20"Ø INCANDESCENT PENDANT FIXTURE WITH BRUSHED NICKEL FINISH, PRE-WIRED WITH 10' OF WIRE UL-CUL LISTED	1 (m) 100w
S	C	KICHLER	8109	INCANDESCENT 2 LAMP FLUSH MOUNT INDOOR CEILING FIXTURE WITH BRUSHED NICKEL FINISH.	2 60W
	D	RAB LIGHTING	FF42QT/PC/ES	EXTERIOR FLUORESCENT FLOOD LIGHT, DIE CAST ALUMINUM HOUSING, TEMPERED GLASS.	42W TRIPLE
	E	LITHONIA LIGHTING	OSC 13F-120-P-LP-WH	EXTERIOR FLUORESCENT WALL LIGHT, ALUMINUM HOUSING, WITH WHITE ACRYLIC DIFFUSER, DUSK/DAWN PHOTOCELL	13W GU25BASE
	F	QUORUM INTERNATIONAL	Q680-9	1 LIGHT OUTDOOR WALL SCONCE, BLACK OR WHITE FINISH, UL DAMP RATED	1 100W
S	G	QUORUM INTERNATIONAL	3009-3-65	SATIN NICKEL MODERN SINGLE FLUSH MOUNT CEILING FIXTURE, GLASS COVER, DAMP LOCATION RATED	1 60W
R	H1,2	PRESCOLITE	H1 - DBXQL H2 - LB6LEDA10L	RECESSED LED DOWN LIGHT MODULE WITH QUICKLINK LED DOWNLIGHT AIRSHIELD HOUSING	-
R	I	BROAN	QTXE110FLT	ULTRA-QUIET HIGH PERFORMANCE BATH FAN/LIGHT FIXTURE WITH MODERN STYLED GRILLE,	2 18W GU24 W/4W NIGHT LIGHT
	J	SEA GULL	44061-962	2 LIGHT BATH VANITY FIXTURE IN BRUSHED NICKEL, SATIN WHITE GLASS, UL DAMP RATED.	2 100W
P	K	WAC LIGHTING	HR-LED331-WT WITH - HR-LED309-NIC-W	RECESSED LED DOWN LIGHT WITH NEW CONSTRUCTION HOUSING	3 LEDS MAX 6W
S	L	SEA GULL	5326-962	SINGLE LIGHT BRUSHED NICKEL CEILING FIXTURE WITH WHITE GLASS DIFFUSER	A19 60W MAX.

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Approved By: JKH

Sheet Number:
E-1

DIVISION 15000 - MECHANICAL

PART 1 - GENERAL

1.1 PIPE HANGERS AND SUPPORTS SHALL MEET THE REQUIREMENTS OF MSS SP-69 AND SP-89 DEVELOPED BY THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVES AND FITTINGS INDUSTRY INC.

1.2 SEISMIC SUPPORTS AND RESTRAINTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL MEET STATE BUILDING CODE REQUIREMENTS AND SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES.

1.3 GENERAL PIPING REQUIREMENTS:

A. ALL PIPING SHALL BE RUN PARALLEL TO THE LINE OF THE BUILDING.

B. PITCH OF LINES SHALL BE UNIFORM AND TRUE WITH NO SAGS, POCKETS OR TRAPS. ECCENTRIC FITTINGS SHALL BE USED WHERE NECESSARY TO PROVIDE COMPLETE DRAINAGE.

C. PROVIDE ISOLATION VALVES AT ALL CONNECTIONS TO FIXTURES AND ALL BRANCH TAKE-OFFS.

D. PROVIDE MANUAL VENT VALVES AT ALL HIGH POINTS AND DRAIN VALVES AT ALL LOW POINTS.

E. SCREWED PIPE JOINTS SHALL BE MADE WITH TEFLON PIPE THREAD TAPE OR APPROVED PIPE JOINT COMPOUND.

1.4 GENERAL DUCTWORK REQUIREMENTS:

A. ALL DUCTWORK SHALL BE INSTALLED STRAIGHT AND PARALLEL TO LINE OF BUILDING AND SHALL BE SUBSTANTIALLY SUPPORTED AS REQUIRED BY SMACNA MANUALS.

B. DUCT SIZES SHOWN SHALL BE STRICTLY FOLLOWED AND NO CHANGES IN SHAPE OR DIMENSIONS SHALL BE MADE BY THE CONTRACTOR WITHOUT FIRST OBTAINING APPROVAL FROM THE ENGINEER. WHERE DUCTS MUST BE OFFSET TO CLEAR STRUCTURAL MEMBERS AND, IF NECESSARY TO ALTER DIMENSIONS OF THE DUCTS, THIS MAY BE DONE PROVIDED THE CROSS-SECTIONAL AREA IS IN NO CASE REDUCED.

C. ALL DUCT RUNS SHALL BE CHECKED FOR CLEARANCES BEFORE INSTALLATION OF ANY DUCTWORK. ABOVE HUNG CEILINGS, DUCT LOCATIONS AND ELEVATIONS MUST BE COORDINATED WITH WORK OF OTHER TRADES TO AVOID CONFLICTS WITH EXISTING DUCTWORK, PIPING, CONDUIT AND RECESSED FIXTURES. CLEARANCES BELOW DUCTS IN EQUIPMENT ROOMS AND AREAS WITHOUT HUNG CEILINGS MUST BE ADEQUATE FOR ACCESS AND MAINTENANCE OF EQUIPMENT.

D. INSTALL FLEXIBLE DUCT CONNECTIONS AT INLET AND DISCHARGE DUCT CONNECTIONS TO FANS.

E. INSTALL MINIMUM 10" X 12" ACCESS DOOR FOR INSPECTION IN DUCTS AT ALL DUCT MOUNTED ACCESSORIES, CONTROL COMPONENTS AND WHERE SHOWN ON THE DRAWINGS.

1.5 TESTING:

A. ALL PIPING SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL BE PRESSURE TESTED WITH CLEAN WATER, UNLESS NOTED OTHERWISE, TO INSURE TIGHTNESS.
1. HOT AND COLD WATER SUPPLY PIPING SHALL BE TESTED TO 150 PSIG.
2. DRAINAGE AND VENT PIPING SHALL BE TESTED TO 10 FOOT HEAD OF WATER.
3. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH NFPA 54. TEST PRESSURE SHALL BE 3 PSIG. TEST MEDIUM SHALL BE AIR, NITROGEN OR CARBON DIOXIDE.
4. REFRIGERATION PIPING SHALL BE TESTED TO 200 PSIG. TEST MEDIUM SHALL BE NITROGEN.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL PLUGS, PIPING, VALVES, HOSES, AND PUMPS NECESSARY FOR THE REQUIRED TESTS AND FOR PROPER DISPOSAL OF THE TEST MEDIUM UPON COMPLETION OF THE TESTS.

1.6 CLEANING OF THE PIPING SYSTEMS:

A. UPON COMPLETION OF ALL WORK AND SATISFACTORY TESTING, ALL PIPING SYSTEMS (EXCEPT REFRIGERATION AND GAS PIPING) SHALL BE FLUSHED WITH WATER TO REMOVE DIRT, GRIT, CHIPS AND FOREIGN MATTER. GAS PIPING SHALL BE PURGED OF AIR IN ACCORDANCE WITH NFPA 54.

B. WATER FOR FLUSHING SHALL BE USED IN SUFFICIENT QUANTITY TO PRODUCE A VELOCITY OF AT LEAST 2.5 FEET PER SECOND. FLUSHING SHALL CONTINUE UNTIL DISCHARGE WATER SHOWS NO DISCOLORATION OR EVIDENCE OF FOREIGN MATERIALS.

C. DURING FLUSHING OPERATION, ALL VALVES SHALL BE OPERATED SEVERAL TIMES, BYPASSES OPENED AND EQUIPMENT FLUSHED.

D. UPON COMPLETION OF FLUSHING OPERATIONS, ALL STRAINERS, FILTERS AND BLOWDOWNS SHALL BE REMOVED AND CLEANED OF ACCUMULATED WASTE.

E. CARE SHOULD BE TAKEN TO INSURE THE COMPLETE REMOVAL OF ALL WATER FROM THE LINE OR SYSTEM AFTER TESTING. IF THERE IS ANY DANGER OF CONTAMINATION OR FREEZING, BLOW OUT THE FLUID WITH DRY, OIL-FREE AIR.

1.7 CLEANING AND STERILIZATION OF POTABLE WATER SYSTEM: PURGE OF DELETERIOUS MATTER AND DISINFECT PRIOR TO USE. THE METHOD TO BE FOLLOWED SHALL BE THAT PRESCRIBED BY THE HEALTH AUTHORITY HAVING JURISDICTION, OR, IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURE DESCRIBED IN EITHER AWWA C652 OR AWWA C5186.

1.8 INSULATION FOR REFRIGERANT PIPING SHALL BE FLEXIBLE ELASTOMERIC CELLULAR, ARMSTRONG ARMAFLEX AP OR APPROVED EQUAL. SEAMS AND JOINTS SHALL BE SEALED WITH MANUFACTURERS ADHESIVE. ALL INSULATION SHALL BE FINISHED WITH MANUFACTURERS FINISH. INSULATION THICKNESS AT SUCTION LINE AND LIQUID LINE SHALL BE 1-1/2".

1.9 PIPE INSULATION SHALL BE RIGID, HEAVY DENSITY, PREFORMED GLASS FIBER, WITH ALL SERVICE JACKET. JACKET SHALL HAVE PRESSURE SENSITIVE TAPE CLOSURE. BUTT JOINTS SHALL HAVE 3" WIDE TAPE OF SAME MATERIAL. VALVES AND FITTINGS SHALL BE INSULATED WITH ZESTON, OR APPROVED EQUAL, INSULATED PVC, ONE PIECE, SNAP-TYPE COVERS AND ZESTON 1 1/2" Z-TAPE, 10 MIL. EXTERIOR INSULATED PIPES SHALL HAVE ALUMINMUM JACKET. INSULATION THICKNESS AS FOLLOWS:

SYSTEM	INSULATION THICKNESS
A. DOMESTIC COLD WATER EXTERIOR TO BLDG ENVELOPE	2"
B. DOMESTIC COLD WATER	1-1/2"
C. DOMESTIC HOT WATER AND TEMPERED HW	1-1/2"

1.10 PIPE IDENTIFICATION:

A. ALL PIPING SHALL BE IDENTIFIED WITH NAME AND FLOW DIRECTION ARROWS. MARKERS SHALL BE PLACED EVERY 40 LINEAL FEET ON STRAIGHT RUNS, AT CHANGES IN DIRECTION, AND AT WALL PENETRATIONS (BOTH SIDES).

B. PIPE MARKERS SHALL BE EQUAL TO SETMARK, AS MANUFACTURED BY SETON NAMEPLATE CO.
1. TEXT AND BACKGROUND COLORS SHALL FOLLOW ANSI A13.1.

1.10 DUCT INSULATION:

A. MATERIALS SHALL BE MANVILLE, OWENS/CORNING, CERTAINTEED OR APPROVED EQUAL.

B. INSULATION FOR SUPPLY AND RETURN AIR DUCTWORK SHALL BE 1-1/2", 1 LB. NOMINAL DENSITY FIBERGLASS BLANKET WITH FSK JACKET APPLIED AS RECOMMENDED BY THE MANUFACTURER.

PART 2 - PLUMBING

2.1 WATER PIPING: SHALL BE TYPE L HARD DRAWN COPPER TUBING CONFORMING TO ASTM B88, WITH ASME B16.22 WROUGHT COPPER FITTINGS, ASTM B32 SOLDER GRADE 95TA JOINTS. PEX PIPING WITH ASSOCIATED FITTINGS ALLOWED FOR INDIVIDUAL RUNOUTS FROM HEADER.

2.2 BURIED DRAINAGE PIPING: SANITARY AND VENT PIPING SHALL BE CENTRIFUGALLY SPUN, BELL AND SPIGOT, SERVICE WEIGHT, CAST IRON PIPE, TAR COATED CONFORMING TO ASTM A74. FITTINGS SHALL BE MADE OF SAME MATERIAL AS PIPE AND SHALL BE COMPATIBLE WITH IT. JOINTS SHALL BE MADE USING NEOPRENE RUBBER GASKET FOR PUSH-ON JOINTING.

2.3 ABOVE GROUND DRAINAGE PIPING: SANITARY AND VENT PIPING SHALL BE CENTRIFUGALLY SPUN, BELL AND SPIGOT, SERVICE WEIGHT "NO HUB" CAST IRON PIPE, TAR COATED, CONFORMING TO ASTM A74. FITTINGS SHALL BE MADE OF SAME MATERIAL AS PIPE AND SHALL BE COMPATIBLE WITH IT. JOINTS SHALL BE MADE USING NEOPRENE SEALING SLEEVE AND A 4-BAND STAINLESS STEEL SHIELD WITH TIGHTENING DEVICE.

2.4 NATURAL GAS PIPING: NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL CONFORMING TO ASTM A53. FITTINGS SHALL BE 150 LB MALLEABLE IRON SCREWED CONFORMING TO ASTM B16.3. JOINTS SHALL BE THREADED OR WELDED IN ACCORDANCE WITH ANSI B31.2 AND NFPA 54.

2.5 VALVES SHALL BE AS FOLLOWS:

A. BALL VALVES: 2" AND SMALLER - JAMESBURY CLINCHER SERIES 2000.

B. PLUG VALVES: 2" AND SMALLER - DEZURIK SERIES 100.

2.6 WATER HAMMER ARRESTERS: TYPE "K" HARD DRAWN COPPER BARREL, BRASS PISTON AND THREADED ADAPTER. NORMAL OPERATING PRESSURE 35 TO 250 PSIG. WATER HAMMER ARRESTERS SHALL BE PRECISION PLUMBING PRODUCTS INC., SC SERIES, MODEL SC500 OR EQUAL.

2.7 PLUMBING FIXTURES (OR APPROVED EQUAL):

A. WATER CLOSET: ADA COMPLIANT, VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL, WHITE, 1.28 GPF, KOHLER MODEL K-3837 WITH KOHLER MODEL K-4774 SEAT.

B. LAVATORY: VITREOUS CHINA, PEDESTAL MOUNTED, WHITE, 4" CENTERS, KOHLER MODEL K-2286. PROVIDE CHROME FINISHED, DUAL LEVER HANDLE FAUCET, KOHLER MODEL K-12266 WITH 1.5 GPM AERATOR AND 1-1/4" TAILPIECE WITH POP-UP DRAIN.

C. SHOWER: 60"x30", FLOOR MOUNTED, WHITE, RECEPTOR, HIGH GLOSS ACRYLIC, STERLING MODEL 72171110 WITH KOHLER MODEL K-706000 SLIDING SHOWER DOORS. PROVIDE CHROME FINISHED KOHLER MODEL K-12014-4 SHOWER TRIM WITH KOHLER MODEL K-304RITE-TEMP PRESSURE BALANCING, DIAPHRAGM TYPE MIXING VALVE WITH HIGH TEMP LIMIT SAFETY.

D. KITCHEN SINK: ADA COMPLIANT, COUNTER MOUNTED, SELF-RIMMING, 18 GA, STAINLESS STEEL, SINGLE HOLE, JUST MODEL SLX-225A-A-GR. PROVIDE SINGLE HANDLE, TOUCH-CONTROL, PULL OUT SPRAY, CHROME FINISHED FAUCET, KOHLER MODEL K-560 WITH 1.8 GPM AERATOR, DRAIN WITH STRAINER AND 1-1/2" TAILPIECE.

E. CLOTHES WASHER CONNECTION: SYMMONS MODEL W-602 WITH BRASS WATER CONTROL VALVES AND DRAIN.

2.8 PLUMBING EQUIPMENT

A. DOMESTIC WATER HEATER SHALL BE ENERGY STAR RATED, PACKAGED, WALL MOUNTED, NATURAL GAS-FIRED, TANKLESS, ULTRA HIGH EFFICIENCY (0.98 ENERGY FACTOR), CONDENSING TYPE, NAVIEN MODEL NPE-180S OR APPROVED EQUAL. PROVIDE WITH INTEGRAL DDC CONTROLS, FULLY MODULATING BURNER WITH DIRECT SPARK IGNITION, DUAL STAINLESS STEEL HEAT EXCHANGERS, GAS VALVE WITH SAFETIES, PLUMB EASY VALVE SET, DIRECT VENT WITH OUTDOOR VENT KIT AND CONDENSATION NEUTRALIZATION KIT. HEATER SHALL BE DESIGNED FOR USE WITH 115V/1-PHASE POWER. CAPACITY SHALL BE 15,000 TO 150,000 BTUH WITH AN ENERGY FACTOR OF 0.98.

B. WATER HEATER FLUE AND COMBUSTION AIR INTAKE SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD FITTINGS.

PART 3 - HVAC

3.1 FURNACE

A. HORIZONTAL (UPFLOW), 96% AFUE, ENERGY STAR RATED, TWO-STAGE, NATURAL GAS-FIRED, DIRECT VENTED, MULTI-SPEED ECM BLOWER MOTOR, AMERICAN STANDARD GOLD ZM SERIES, MODEL AUH2B060A9V3VB MAXIMUM CAPACITY 58,200 BTUH. PROVIDE WITH CONCENTRIC VENT ADAPTER KIT MODEL BAYAIR30AVENTA.

B. COOLING COIL: CASED HORIZONTAL, SPLIT SYSTEM, MATCHED TO FURNACE, AMERICAN STANDARD 4TXC SERIES.

C. REMOTE AIR-COOLED CONDENSER: R-410A BASED, MINIMUM 16 SEER, DESIGNED FOR USE WITH SPECIFIED GAS-FIRED FURNACE. PLATINUM XM SERIES, AMERICAN STANDARD MODEL 4A7A6036E.

3.2 EXHAUST FAN

A. ENERGY STAR RATED, LOW NOISE, CEILING MOUNT TYPE, FAN SHALL BE VARIABLE SPEED, DIRECT DRIVE, BRUSHLESS DC MOTOR, ACOUSTICALLY INSULATED AND AMCA CERTIFIED. PROVIDE FAN WITH CEILING GRILLE, 32-WATT FLUORSCENT LIGHT AND 4-WATT NIGHT LIGHT. NOISE LEVEL SHALL BE LESS THAN 1 SONE AT HIGH SPEED. FAN SHALL BE PANASAONIC WHISPER-LITE SERIES MODEL FV-08VQL4.

3.3 REMOTE AIR-COOLED CONDENSER

A. R-410A BASED, MINIMUM 14.50 SEER, AMERICAN STANDARD SILVER SI SERIES. CONDENSER SHALL BE DESIGNED FOR USE WITH EXISTING AMERICAN STANRARD FREEDOM 90 GAS-FIRED FURNACE. CONTRACTOR TO FIELD VERIFY REQUIRED CAPACITY.

3.4 PIPING

A. REFRIGERANT PIPING SHALL BE TYPE L ACR COPPER TUBING WITH WROUGHT COPPER FITTINGS AND 95/5 SOLDERED JOINTS.

3.5 DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. PROVIDE TURNING VANES WHERE SQUARE ELBOWS ARE USED, ACCESS DOORS AT ALL DUCT MOUNTED CONTROL DEVICES AND VOLUME DAMPERS AS REQUIRED FOR PROPER BALANCING OF THE SYSTEM. FLEXIBLE DUCT SHALL BE THERMAFLEX MODEL M-KF WITH 1 1/2" INSULATION, UL 181 LISTING AND MAXIMUM LENGTH OF 8'-0".

3.6 DIFFUSER, REGISTERS AND GRILLES

A. SHALL BE EQUAL TO QUALITY AND PERFORMANCE OF MODELS MANUFACTURED BY TITUS. SIZES AND TYPES SHALL MATCH EXISTING.

3.7 CONTROLS: ELECTRONIC CONTROLS SHALL INCLUDE THERMOSTATS, CONTROL PANELS, RELAYS, TRANSFORMERS, SENSORS AND ACCESSORIES AS REQUIRED TO PERFORM THE SEQUENCES AS DESCRIBED BELOW. INSTALLATION OF CONDUIT, CONDUCTORS AND ELECTRICAL DEVICES SHALL CONFORM TO DIVISION 16000 - ELECTRICAL.

CONTROLS, SEQUENCES-OF-OPERATION:

A. THERMOSTAT SHALL BE TOUCH SCREEN 7 DAY PROGRAMMABLE TYPE HONEYWELL MODEL RTH8500D.

B. EXHAUST FAN SHALL OPERATE UPON ACTIVATION OF ROOM LIGHT SWITCH, FAN SHALL OPERATE ON HIGH SPEED SUBJECT TO A (ADJ.) TIME DELAY.

PART 4 - EXECUTION

4.1 CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO THE START OF WORK INCLUDING SIZES OF PIPING TO BE RE-USED. CONTRACTOR SHALL NOTIFY THE OWNER IF ANY DIFFERENCES FROM THE DESIGN DOCUMENTS ARE NOTED.

4.2 CONTRACTOR SHALL COORDINATE WITH ALL TRADES PRIOR TO THE START OF WORK.

4.3 ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

4.4 CONTRACTOR SHALL INSTRUCT HOMEOWNER ON THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AT THE COMPLETION OF CONSTUCTION AT A TIME CONVENIENT TO THE OWNER.

4.5 CONTRACTOR SHALL PROVIDE TWO COPIES OF PROJECT O&M MANUALS TO THE OWNER AT COMPLETION OF PROJECT.

DIVISION 1600 - ELECTRICAL

WORK INCLUDED - THE WORK TO BE PROVIDED UNDER THIS DIVISION INCLUDES:

A. FEEDERS AND PANELS.

B. POWER WIRING FOR MECHANICAL AND PLUMBING EQUIPMENT.

SCOPE - THIS WORK SHALL CONSIST OF THE FURNISHING OF ALL LABOR, MATERIALS AND SERVICES REQUIRED COMPLETE, READY FOR CORRECTION OPERATION, ALL ELECTRICAL WORK CALLED FOR BY THE ACCOMPANYING DRAWINGS AND SPECIFICATIONS. ALL ELECTRICAL SHALL BE PERFORMED IN ACCORDANCE WITH THE 2011 NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES.

PERMITS, FEES AND INSPECTIONS - THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, PAY ALL GOVERNMENTAL AND STATE SALES TAXES AND FEES APPLICABLE. THE CONTRACTOR SHALL FILE ALL DRAWINGS, AND OBTAIN ALL NECESSARY APPROVAL FROM PROPER AUTHORITY OR AGENCY HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION COVERING HIS WORK. THE CONTRACTOR SHALL SEE THAT ALL REQUIRED INSPECTIONS AND TESTS ARE MADE AND SHALL COOPERATE TO MAKE THESE TESTS AS THOROUGH AND AS READILY MADE AS POSSIBLE.

COORDINATION - ALL WORK SHALL BE CARRIED OUT IN CONJUNCTION WITH OTHER TRADES AND FULL COOPERATION SHALL BE GIVEN IN ORDER THAT ALL WORK MAY PROCEED WITH A MINIMUM OF DELAY AND INTERFERENCE.

GUARANTEES - ALL WORKMANSHIP AND MATERIALS SHALL BE FULLY GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL COMPLETION OF THE ENTIRE INSTALLATION COVERED BY THIS CONTRACT. SHOULD ANY DEFECTS OCCUR DURING THIS GUARANTEE PERIOD, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DEFECTIVE EQUIPMENT, MATERIALS AND/OR WORK WITHOUT COST TO THE OWNER.

TEMPORARY LIGHT AND POWER - FURNISH AND INSTALL TEMPORARY ELECTRICAL POWER AND LIGHTING FOR USE BY ALL CONTRACTORS DURING THE COURSE OF CONSTRUCTION. ALL TEMPORARY WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE ARTICLES IN THE NATIONAL ELECTRICAL CODE, O.S.H.A. AND WITH ALL REQUIREMENTS OF ANY AUTHORITIES HAVING JURISDICTION OVER WORK.

MATERIALS AND WORKMANSHIP - ALL MATERIALS AND APPARATUS REQUIRED FOR THE WORK EXCEPT AS OTHERWISE SPECIFIED, SHALL BE NEW AND OF FIRST-CLASS QUALITY AND SHALL BE FURNISHED, DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL AND SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. WHERE NO SPECIFIC KIND OR QUALITY OF MATERIAL IS GIVEN, A FIRST-CLASS STANDARD ARTICLE AS ACCEPTED BY THE ARCHITECT SHALL BE FURNISHED. ALL EQUIPMENT AND MATERIALS SHALL BE SPECIFICATION GRADE AND BEAR THE UNDERWRITER'S LABEL. ALL WORK SHALL BE OF A QUALITY CONSISTENT WITH GOOD TRADE PRACTICE AND SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. THE ARCHITECT RESERVES THE RIGHT TO REJECT ANY WORK WHICH, IN HER OPINION, HAS BEEN INSTALLED IN A SUB-STANDARD, DANGEROUS OR UNSERVICEABLE MANNER. THE CONTRACTOR SHALL REPLACE SAID WORK IN A SATISFACTORY MANNER AT NO EXTRA CHARGE TO THE OWNER.

PENETRATION SEALANT - ALL PENETRATIONS SHALL BE SEALED WITH 3M INTUMESCENT FIRE BARRIER PENETRATION SEALANT, APPLIED PER MANUFACTURER'S AND U.L. GUIDELINES.

MATERIALS:

GENERAL - ALL MATERIALS AND EQUIPMENT PROVIDED UNDER THIS SECTION SHALL BE NEW, FIRST GRADE, BEST OF THEIR SECTION AND SHALL MEET THE REQUIREMENTS OF ALL STANDARDS SET UP TO GOVERN THE MANUFACTURE OF ELECTRICAL MATERIALS AND COMPLY WITH ALL APPLICABLE CODES AND STANDARDS. ALL EQUIPMENT AND MATERIALS SHALL BE SPECIFICATION GRADE AND BEAR UNDERWRITER'S (U.L.) LABEL.

POWER - FROM UTILITY AT 240/120V, 1 PHASE, 3 WIRE IS AVAILABLE FROM EXISTING UTILITY METER AND METER CAN AS SHOWN ON THE DRAWINGS

WIRE - CONDUCTORS SHALL BE U.L. LISTED, 600 VOLTS, 90 DEG. C., SINGLE CONDUCTOR TYPE THWN/THHN. 98% CONDUCTIVITY ANNEALED UNCOATED COPPER WITH PVC INSULATION COVERED WITH NYLON SHEATH JACKET. TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UNDERWRITER'S LABORATORIES STANDARD 83. WIRE SHALL BE IDENTIFIED BY SURFACE MARKING, INDICATING MANUFACTURER'S IDENTIFICATION, CONDUCTOR SIZE AND METAL, VOLTAGE RATING, U.L. SYMBOL AND TYPE DESIGNATION. CONDUCTORS SHALL BE STRANDED. MINIMUM SIZE SHALL BE #12AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY ESSEX, ROME CABLE, TRIANGLE CABLE OR GENERAL CABLE.

NON METALIC SHEATHED CABLE - TYPE - NM-B CABLE SHALL BE OF MAXIMUM OPERATING VOLTAGE: 600 VOLTS, MAXIMUM CONDUCTOR OPERATION, TEMPERATURE: 90°C DRY (CONDUCTOR AMPACITY IS LIMITED TO 60°C, IN ACCORDANCE WITH NEC).

ARMORED CABLE (AC) - ARMORED CABLE SHALL BE OF GALVANIZED STEEL INTERLOCKING ARMOR CONSTRUCTION. COLOR CODED THERMOPLASTIC INSULATED COPPER CONDUCTORS, 90 DEG. C, 600 VOLTS. CONDUCTOR SIZES SHALL BE AS INDICATED ON THE DRAWINGS. IF NOT INDICATED, THE SIZES OF POWER AND LIGHTING CONDUCTORS SHALL NOT BE LESS THAN SIZE #12AWG. MANUFACTURED BY AMERICAN FLEXIBLE CONDUIT, TRIANGLE OR SOUTHWIRE. CONNECTORS SHALL BE SQUEEZE TYPE, DIE CAST ZINC, OR MALLEABLE IRON - CADMIUM PLATED. MANUFACTURED BY O-Z GEDNEY, APPLETON OR THOMAS-BETTS.

FITTINGS - CONDUIT STRAPS SHALL BE SNAP-TYPE, DOUBLE RIBBED STEEL - ZINC PLATED. METAL CLAD CABLE AND FLEXIBLE METALLIC CONDUIT CONNECTORS SHALL BE MALLEABLE IRON-ZINC PLATED, MALE HUB THREADS WITH LOCKNUT.

BOXES - RECESSED OUTLET BOXES SHALL BE DRAWN STEEL, GALVANIZED WITH A MINIMUM DEPTH OF 1-1/2 INCHES. MINIMUM SIZE SHALL BE 4 INCH X 4 INCH SQUARE. PROVIDE AND INSTALL PLASTER RINGS AS REQUIRED.
OUTLET BOXES FOR SURFACE MOUNTED SWITCHES AND RECEPTACLES SHALL BE TYPE FD, CAST FERROALLOY WITH THREADED HUBS. PROVIDE GASKETED COVER AS REQUIRED.

SWITCHES - SPECIFICATION GRADE, 120-277VAC 20 AMP, SINGLE POLE. COLOR SHALL BE (IVORY) (GRAY) (WHITE) (BROWN) (RED).
RECEPTACLE AND SWITCH COVER PLATES SHALL BE (SMOOTH THERMOPLASTIC) (STAINLESS STEEL 302) (IVORY) (RED) (LABELED EMERGENCY) (WHERE INDICATED).

PANELBOARDS - PANELBOARDS: NEMA PB 1, CIRCUIT BREAKER TYPE, USE EXISTING PANEL AND EXISTING CIRCUIT BREAKER NOTED IN PANEL FOR BOILER CIRCUIT.

IDENTIFICATION - PROVIDE AND INSTALL MARKERS FOR ALL CONDUITS. MARKERS SHALL BE "BRADY" TYPE ADHESIVE-BACKED, PLASTIC-FACED OF SUITABLE COLOR. MARKER SHALL IDENTIFY SYSTEM AND ELECTRICAL CHARACTERISTICS. INSTALL MARKERS AT POINT OF ORIGIN, TERMINATION, ADJACENT TO EACH INTERMEDIATE SPLICE, AND ALL BOXES IN RUN. IDENTIFY ALL CONDUCTORS AT ORIGIN, TERMINATION AND AT INTERMEDIATE BOXES BY MEANS OF "BRADY" TYPE, PRESSURE SENSITIVE, PLASTIC COATED FACE, STICK-ON LABELS EXCEPT FEEDERS SHALL HAVE PHENOLIC TAGS ENGRAVED WITH CIRCUIT DESIGNATIONS AND ATTACHED WITH PLASTIC TIE-WRAPS.

TESTING - UPON COMPLETION OF HIS WORK, CONTRACTOR SHALL CONDUCT (WITH OTHER RELATED CONTRACTORS) OPERATING TESTS OF ALL ELECTRICALLY OPERATED OR CONTROLLED EQUIPMENT FOR APPROVAL AT SUCH TIME AS THE OWNER MAY DIRECT. EQUIPMENT SHALL OPERATE IN ACCORDANCE WITH THE REQUIREMENTS OF DRAWINGS AND SPECIFICATIONS. TESTS SHALL BE PERFORMED IN THE PRESENCE OF OWNER. THE CONTRACTOR SHALL PROVIDE LABOR, MATERIALS, AND INSTRUMENTS REQUIRED FOR ELECTRICAL PORTION OF TESTS. DEFECTIVE MATERIALS AND WORKMANSHIP DISCLOSED BY TEST SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE.

PROTECTIVE PAINTING - TOUCH-UP FACTORY PAINTED EQUIPMENT THAT HAS BEEN DAMAGED DURING HANDLING OR INSTALLATION. FEATHER DAMAGED AREA AND APPLY PRIMER PLUS TWO FRESH COATS TO MATCH EXISTING FINISH.

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MEP SPECIFICATIONS

APPLICATION # 1065

DINAN RESIDENCE
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Milford,Connecticut 06460

STATE OF CONNECTICUT
DEPARTMENT OF HOUSING
COMMUNITY DEVELOPMENT BLOCK GRANT
DISASTER RECOVERY PROGRAM
(CDBG-DR)

Date:
ISSUED FOR BIDDING 8/29/14

Job Number:
Drawn By:
Approved By: RJS/JKH

Sheet Number:
SP-1