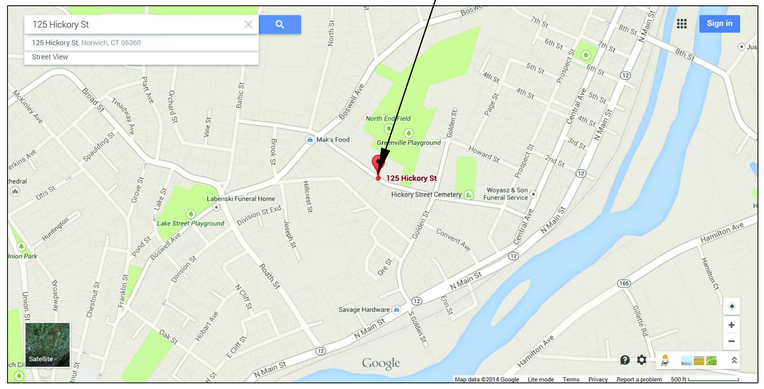
THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
OWNER OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

June 27, 2014

csa project 1347-21

Rios Residence Interior Rehabilitation and Remediation
Application No. 1971
125 Hickory Street
Norwich, CT 06360

PROJECT SITE



LOCATION PLAN

not to scale

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Drawing List

Title Sheet
A-1 FLOOR PLAN, ELEVATIONS and DETAILS
MEP-1.0 MECHANICAL, ELECTRICAL and PLUMBING PLANS, DETAILS and SPECIFICATIONS.

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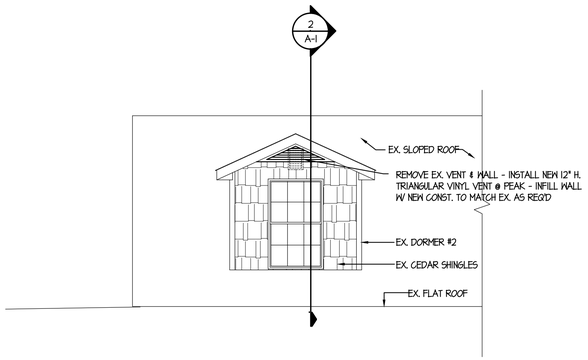
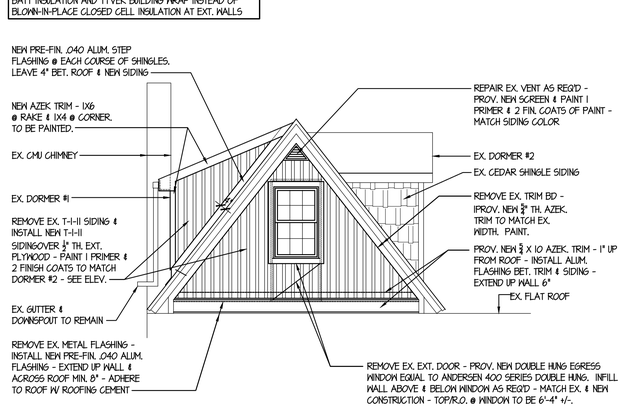


3 A-1 SOUTH ELEVATION - 2ND FLOOR

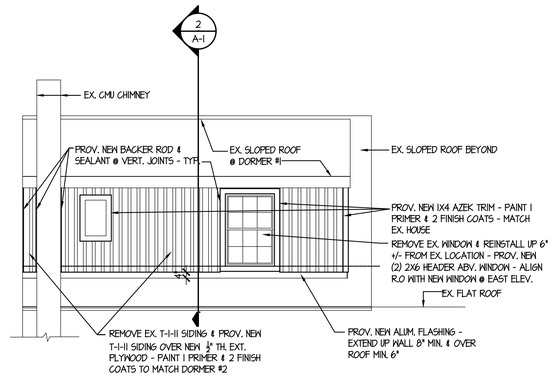
SCALE: 1/4" = 1'-0"

NOTES:
1. PROV. NEW SELF-ADHERING MEMBRANE EQ. TO 'VYCOR PLUS' BY W.R. GRACE at SILL and JAMBS, MIN. 6". PROV. NEW PRE-FIN .040 ALUM. FLASHING AT WINDOW HEADS BEFORE INSTALLATION OF NEW SIDING AT NORTH & EAST WALLS
2. PROVIDE ALTERNATE PRICE FOR INSTALLATION OF R-21 BATT INSULATION AND TYVEK BUILDING WRAP INSTEAD OF BLOWN-IN-PLACE CLOSED CELL INSULATION AT EXT. WALLS



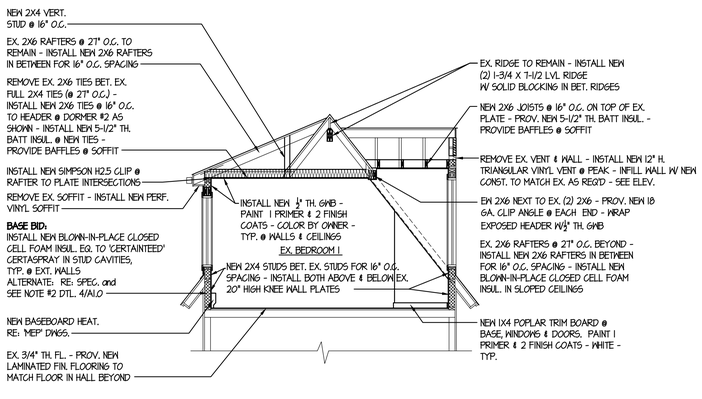
4 A-1 EAST ELEVATION - 2ND FLOOR

SCALE: 1/4" = 1'-0"



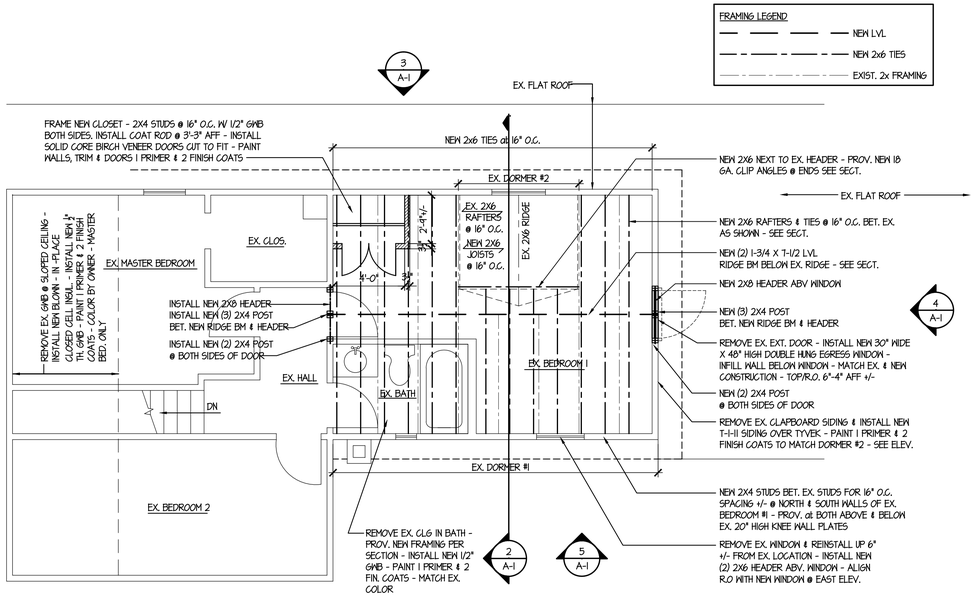
5 A-1 NORTH ELEVATION - 2ND FLOOR

SCALE: 1/4" = 1'-0"



2 A-1 SECTION

SCALE: 1/4" = 1'-0"



1 A-1 PARTIAL 2ND FLOOR PLAN

SCALE: 1/4" = 1'-0"

SCOPE OF WORK

- REFER TO SPECIFICATIONS FOR COMPLETE DETAILED DESCRIPTIONS.

BASE BID ITEMS:

1. SELECTIVE DEMOLITION, INCLUDING REMOVAL OF EXT. WALL SHEATHING, EXT. DOOR, PLASTER/GWB CEILINGS, ETC. - SEE PLAN.
2. BLOWN - IN - PLACE CLOSED CELL FOAM INSULATION, NEW BATT INSULATION & NEW STYROFOAM BAFFLES
3. ROUGH CARPENTRY TO INCLUDE LVL BEAM, RAFTERS, JOISTS, STUDS, POSTS & EXT. PLYWOOD & MISC. METAL CLIPS, ANGLES, ETC.
4. EGRESS WINDOW - ANDERSEN 400 SERIES DOUBLE HUNG WINDOW IN WHITE EXT. COLOR WITH SCREEN & WHITE HARDWARE - SEE PLAN FOR SIZE - PROVIDE JAMB EXTENSIONS AS NEEDED
5. EXT. SIDING and COMPOSITE (AZEK) TRIM BOARDS & VINYL VENT
6. INTERIOR GYPSUM BOARD & LAMINATE FLOORING
7. INT. WOOD TRIM BOARDS & MISC. ITEMS (COAT ROD, ETC.)
8. EXT. BACKER ROD & SEALANT WORK
9. ALUM. FLASHING, PEEL & STICK MEMBRANE & ROOFING CEMENT
10. EXT. & INT. PAINT
11. NEW MECH., ELEC. and PLUMBING WORK TO INCLUDE BASEBOARD HEAT - SEE 'MEP' DWG.

NOTE:
PROVIDE ALTERNATE PRICE FOR INSTALLATION OF R-21 BATT INSULATION EQUAL TO 'OMENS CORNING' ECOTOUCH AND TYVEK BUILDING WRAP INSTEAD PLACE OF BLOWN-IN-PLACE CLOSED CELL FOAM INSULATION AT EXT. WALLS

GENERAL INFO

1. THE CONTRACTOR MUST VISIT THE SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING AND PROPOSED CONDITIONS PRIOR TO BIDDING THE PROJECT, ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
2. PROTECT ALL EXISTING CONSTRUCTION TO REMAIN. REPAIR TO ORIGINAL CONDITION IF DAMAGED AT NO ADDITIONAL COST TO THE OWNER.

DESIGN LOADS

Roof Load	30 p.s.f.
Wind	100 mph

ABBREVIATIONS

CONC.	CONCRETE
EX.	EXISTING
GWB	GYPSUM BOARD
O.C.	ON CENTER
P.T.	PRESSURE TREATED
R	RISER
W/	with
CONT.	CONTINUOUS
TH.	THICK

LEGEND

- 3 — REVISION NUMBER
- DETAIL NUMBER
- 3 / A9 — DETAIL NUMBER / SHEET NUMBER
- ELEVATION MARK (HEIGHT)
- ℄ — CENTERLINE
- 1 / A-5 — SECTION MARKER / DETAIL NUMBER / SHEET NUMBER
- EXISTING WALL
- NEW WALL
- A — WALL TYPE
- 9 — DOOR TYPE

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RIOS RESIDENCE INTERIOR REHABILITATION and REMEDIATION APPLICATION No. 1971
125 Hickory Street
Norwich, CT 06360

date	description	no.

revisions

FLOOR PLAN, ELEVATIONS and DETAILS

A-1

date	27 JUNE 2014
drawn	JH
scale	AS SHOWN
checked	JP/DH
project no.	1341-21
application no.	1971

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GENERAL PROCEDURES ALL TRADES

1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL MECHANICAL AND ELECTRICAL DRAWINGS UNLESS NOTED OTHERWISE.
2. DESCRIPTION
   A. THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY OCCUPIED AND THE PROJECT WILL PROCEED IN A MANNER WHICH WILL MINIMIZE ANY INCONVENIENCE TO THE BUILDING OCCUPANTS.
   B. SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, PLANT, TRANSPORTATION, RIGGING, STAGING, APPURTENANCES, AND SERVICES NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN.
3. DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT
   A. FURNISH: THE TERM "FURNISH" MEANS TO "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."
   B. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
   C. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
   D. REMOVE: THE TERM REMOVE MEANS TO DISCONNECTFROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER.'
   E. SUBSTITUTIONS: 'SUBSTITUTIONS' ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
4. DRAWINGS
   A. PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL.
5. SURVEY AND MEASUREMENTS:
   A. PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK TO BE PERFORMED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS. INCLUDE IN THE BID ALL DEMOLITION WORK REQUIRED.
   B. DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.
   C. PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT, THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
   D. ARRANGE INSTALLATION TO PROVIDE ACCESS TO EQUIPMENT FOR EASY MAINTENANCE AND REPAIR.
6. CODES AND STANDARDS: ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STATE OF CONNECTICUT ACCEPTED VERSION OF THE FOLLOWING
   A. INTERNATIONAL RESIDENTIAL CODE
   B. INTERNATIONAL BUILDING CODE
   C. INTERNATIONAL PLUMBING CODE
   D. INTERNATIONAL MECHANICAL CODE
   E. NATIONAL ELECTRIC CODE (NFPA 70)
   F. THE LIFE SAFETY CODE (NFPA 101)
7. PERMITS AND FEES: THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.
8. SHOP DRAWINGS:
   A. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
      a. DIMENSIONS.
      b. IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
      c. COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED.
      d. NOTATION OF COORDINATION REQUIREMENTS.
      e. NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
      f. SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS NEEDED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
      g. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
      h. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
      i. PROVIDE SUBMITTALS AS INDICATED IN SPECIFIC SPECIFICATION SECTIONS.
9. 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.
10. THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS THAN 5 DAYS PRIOR TO THE INTERRUPTION.
11. OPERATION AND MAINTENANCE
   A. UPON COMPLETION OF ALL WORK AND TESTS, THE CONTRACTOR SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESENTATIVE IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE AT LEAST SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGINEER IN ADVANCE OF THIS PERIOD.
   B. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND IN BOOKLET FORM. ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION AND DESIGNATION PARTITIONS WITH IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER.
   C. OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE THE FOLLOWING:
      a. MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
      b. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
      c. COPIES OF WARRANTIES.
      d. APPROVED SHOP DRAWINGS AND PRODUCT DATA.
      e. INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL INCLUDE PERTINENT DATA SUCH AS: MAKE, MODEL NUMBER, SERIAL NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BELT SIZE, FILTER QUANTITIES AND SIZES, BEARING NUMBER, ETC. SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DONE AND FREQUENCY.
      f. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD.
12. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
13. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.
14. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.

MEANS AND METHODS ALL TRADES

1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
3. MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
4. CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
5. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
6. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERTIGHT.
7. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
8. ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL DAMPERS, VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.
9. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS.

HVAC SPECIFICATIONS

1. PIPING AND FITTINGS
   A. HVAC HYDRONIC PIPING: FOR PIPE SIZES 2" DIAMETER AND LESS, PIPING SHALL BE TYPE L COPPER TUBING WITH 95-5 TIN-ANTIMONY SOLDER JOINTS. REFRIGERANT PIPING: REFRIGERANT PIPING SHALL BE TYPE ACR COPPER TUBING.
2. INSULATION:
   A. INSULATION THICKNESS SHALL BE IN ACCORDANCE WITH LATEST EDITION OF ATHE IECC EXCEPT THAT PIPE INSULATION SHALL NOT BE LESS THAN 1" THICK AND, FLEXIBLE DUCTWORK INSULATION SHALL NOT BE LESS THAN 1-1/2" THICK. ALL INSULATION MATERIALS, ADHESIVES, COATINGS, AND OTHER ACCESSORIES SHALL HAVE FLAME SPREAD RATINGS OF 25 OR LESS, AND SMOKE DEVELOPED RATINGS OF 50 OR LESS AS TESTED BY ASTM E-84 (NFPA 255) METHOD. ALL INSULATION MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA AND ASHRAE STANDARDS.
   B. PIPE INSULATION SHALL BE FIBERGLASS WITH VAPOR BARRIER JACKET. PROVIDE INSULATION FOR THE FOLLOWING PIPING SYSTEMS:
      a. HVAC HYDRONIC SUPPLY AND RETURN PIPING
3. PIPING INSTALLATIONS
   A. INSTALL PIPING IN ACCORDANCE WITH ALL APPLICABLE CODES AND GOOD PRACTICES.
   B. INSTALL UNIONS OR FLANGES IN PIPES ADJACENT TO EACH VALVE, CONTROL DEVICE AND AT FINAL CONNECTIONS EACH PIECE OF EQUIPMENT.
   C. INSTALL DIELECTRIC UNIONS TO JOIN DISSIMILAR METALS.
   D. INSTALL AND ANCHOR PIPING TO ENSURE PROPER EXPANSION AND CONTRACTION.
   E. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS AND DRAIN VALVES AT ALL LOW POINTS.
   F. ANCHOR PIPING TO ENSURE PROPER DIRECTION OF EXPANSION AND CONTRACTION.
   G. PROVIDE ALL NECESSARY CONTROL DEVICES, EQUIPMENT, MATERIALS, LABOR, WIRE AND CONDUIT TO PERFORM THE SEQUENCES OF OPERATION AS INDICATED. WIRING AND CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 16. ALL CONTROL WIRING INSTALLED WITHIN AIR PLENUM SPACES TO BE TEFLON COATED RATED FOR PLENUM CEILINGS.

ELECTRICAL SPECIFICATIONS

1. GROUNDING SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 70.
   A. GROUND EXPOSED, NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, AND NEUTRAL CONDUCTOR OF WIRING SYSTEMS.
2. WIRING SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 70.
   A. CONDUCTORS NO. 8 AWG AND LARGER DIAMETER SHALL BE STRANDED ANNEALED COPPER. CONDUCTORS NO. 10 AWG AND SMALLER DIAMETER SHALL BE SOLID ANNEALED COPPER. CONDUCTOR SIZES AND AMPACITIES SHOWN ARE BASED ON COPPER, UNLESS INDICATED OTHERWISE. UNLESS SPECIFIED OR INDICATED OTHERWISE OR REQUIRED BY NFPA 70. UNLESS OTHERWISE INDICTED WIRING METHODS SHALL BE:
      a. BRANCH CIRCUITING INSIDE THE BUILDING IN DRY AREAS SHALL BE 600 VOLT, TYPE NM-B.
   B. MAKE ALL SPLICES IN ACCESSIBLE LOCATIONS. MAKE SPLICES IN CONDUCTORS NO. 10 AWG AND SMALLER DIAMETER WITH INSULATED, PRESSURE-TYPE CONNECTOR.
   C. PHASE CONDUCTORS SHALL BE IDENTIFIED BY COLOR CODING. THE COLOR OF THE INSULATION ON PHASES A AND B RESPECTIVELY (FOR SINGLE PHASE) OF DIFFERENT VOLTAGE SYSTEMS SHALL BE AS FOLLOWS: 120/240 VOLT, SINGLE/PHASE: BLACK AND RED.
3. BOXES:
   A. ALL OUTLETS, SWITCH AND JUNCTION BOXES SHALL BE NONMETALLIC BOXES.
   B. BOXES SHALL BE SIZED IN ACCORDANCE WITH NFPA 70.
4. OUTLETS AND SWITCHES:
   A. ALL OUTLETS AND SWITCHES SHALL BE WHITE.
   B. MOUNT LIGHTING SWITCHES 48 INCHES ABOVE FINISHED FLOOR, RECEPTACLES 18 INCHES ABOVE FINISHED FLOOR, AND OTHER DEVICES AS INDICATED. MEASURE MOUNTING HEIGHTS OF WIRING DEVICES AND OUTLETS TO TOP OF DEVICE OR OUTLET.
   C. SINGLE AND DUPLEX RECEPTACLES SHALL BE RATED 15 AMPERES, 125 VOLTS, TWO-POLE, THREE-WIRE, GROUNDING TYPE WITH POLARIZED PARALLEL SLOTS. RECEPTACLE SHALL BE SIDE OR BACK WIRED WITH TWO SCREWS PER TERMINAL. THE THIRD GROUNDING POLE SHALL BE CONNECTED TO THE METAL MOUNTING YOKE.
   C. WALL SWITCHES SHALL BE OF THE TOTALLY ENCLOSED TUMBLER TYPE. WIRING TERMINALS SHALL BE OF THE SCREW TYPE OR OF SOLDERLESS PRESSURE TYPE HAVING SUITABLE CONDUCTOR-RELEASE ARRANGEMENT. SWITCHES SHALL BE RATED 15 AMPERE 120 VOLT FOR USE ON ALTERNATING CURRENT ONLY.
   D. DEVICE PLATES SHALL BE ONE-PIECE TYPE AND BE PROVIDED FOR ALL RECEPTACLES, OUTLETS, SWITCHES AND FITTINGS. PLATES ON UNFINISHED WALLS AND ON FITTINGS SHALL BE OF IMPACT RESISTANT PLASTIC HAVING ROUNDED OR BEVELED EDGES. PLATES ON FINISHED WALLS SHALL BE IMPACT-RESISTANT PLASTIC. PLATES SHALL BE INSTALLED WITH ALL FOUR EDGES IN CONTINUOUS CONTACT WITH FINISHED WALL SURFACES WITHOUT THE USE OF MATS OR SIMILAR DEVICES. PLATES SHALL BE INSTALLED WITH AN ALIGNMENT TOLERANCE OF 1/16 INCH. THE USE OF SECTIONAL-TYPE DEVICE PLATES WILL NOT BE PERMITTED. PLATES INSTALLED IN WET LOCATIONS SHALL BE GASKETED AND PROVIDED WITH A HINGED, GASKETED COVER, UNLESS OTHERWISE SPECIFIED.
5. PROVIDE ALL NECESSARY JUNCTION BOXES, PULL BOXES, PULL WIRES, COVER PLATES AND OTHER MISCELLANEOUS EQUIPMENT WHICH IS NOT SHOWN ON THE CONTRACT DOCUMENTS BUT NECESSARY TO COMPLETE THE WORK.
6. COORDINATE ALL WORK WITH OTHER TRADES AND ARRANGE INSTALLATION TO AVOID CLASHES BETWEEN EQUIPMENT, WORK OF OTHER TRADES AND BUILDING STRUCTURE.

GENERAL NOTES ALL TRADES

1. ALL MECHANICAL AND ELECTRICAL ITEMS INCLUDING BUT NOT LIMITED TO PIPING, DUCTWORK, WIRING, EQUIPMENT, SWITCHES, OUTLETS, ETC SHALL BE INSTALLED ABOVE THE FLOOR PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
2. ALL WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, DIFFUSER LOCATIONS, THERMOSTAT AND SENSOR LOCATIONS, ETC.
3. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS PRIOR TO PROVIDING ALL EQUIPMENT, PIPING AND DUCTWORK.
4. ALL 120VAC BRANCH CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE INCREASED TO #10, #10G., UNLESS NOTED OTHERWISE.
5. ALL NEW ELECTRICAL POWER WIRING EXTERIOR OF THE PROPERTY SHALL BE TYPE-NMC.

MECHANICAL KEY NOTES

- (M1) CONNECT NEW 3/4" HEATING HOT WATER PIPING TO EXITING PIPING IN THIS AREA. CONTRACTOR TO FIELD VERIFY EXISTING PIPE LOCATION PRIOR TO INSTALLATION AND FABRICATION.
- (M2) EXISTING EXHAUST FAN AND LIGHT TO REMAIN IN BATHROOM CEILING. REMOVE AND REINSTALL FOR CEILING REPLACEMENT.

ELECTRICAL KEY NOTES

- (E1) 2#12+1#12G, TO NEW 20A AFCI TYPE CIRCUIT BREAKER IN EXISTING PANEL. LOCATED IN BASEMENT.
- (E2) PROVIDE NEW 20AMP/1POLE AFCI TYPE CIRCUIT BREAKER IN EXISTING SPACE IN EXISTING ELECTRICAL PANEL.
- (E3) PROVIDE NEW LIGHTING FIXTURE 'PROGRESS #P3926' WITH (3)13W SCREW BASE COMPACT FLUORESCENT LAMPS.
- (E4) PROVIDE A HARDWIRED COMBINATION SMOKE & CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP. 'BRK ELECTRONIC #SC9120B
- (E5) EXISTING EXHAUST FAN AND LIGHT TO REMAIN IN BATHROOM CEILING. REMOVE AND REINSTALL FOR CEILING REPLACEMENT.

DEMOLITION KEY NOTES

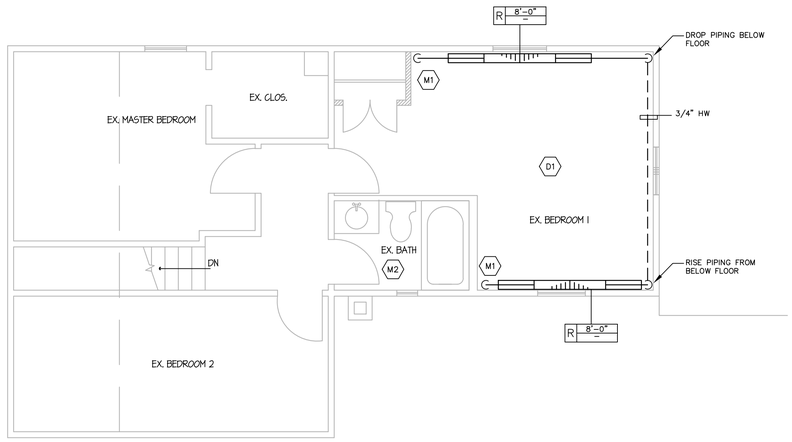
- (D1) REMOVE EXISTING 3/4" HEATING HOT WATER CROSSOVER PIPING IN SPACE.
- (D2) DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES, SWITCHES, POWER RECEPTACLES AND ALL ASSOCIATED BRANCH CIRCUIT WIRING BACK TO ELECTRICAL PANEL.

ELECTRICAL SYMBOL LIST

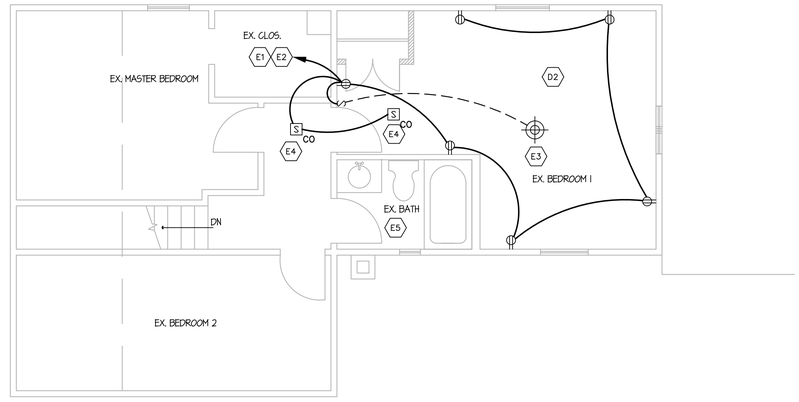
SYMBOL	DESCRIPTION
	CEILING MOUNTED CIRCULAR FIXTURE
S	SINGLE POLE TOGGLE SWITCH
	DUPLEX WALL MOUNTED RECEPTACLE
	BRANCH CIRCUIT WIRING, CONCEALED IN WALLS OR CEILINGS
	HOMERUN TO PANELBOARD, UNLESS INDICATED OTHERWISE SHALL BE CONNECTED TO A 1 POLE, 20 AMP CIRCUIT BREAKER
	BRANCH CIRCUIT WIRING, SWITCHED
SCO	CEILING MOUNTED COMBINATION SMOKE & CARBON MONOXIDE DETECTOR WITH BATTERY BACKUP

PIPING LEGEND

SYMBOL	DESCRIPTION
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
	GATE VALVE
	BALL VALVE
	PIPE DROP
	PIPE RISE



1/- PARTIAL 2ND FLOOR PLAN - MECHANICAL
SCALE: 1/4"= 1'-0"



2/- PARTIAL 2ND FLOOR PLAN - ELECTRICAL
SCALE: 1/4"= 1'-0"

FINNED TUBE RADIATION SCHEDULE

SYMBOL	MANUFACTURER/ MODEL NUMBER	CAPACITY BTUH/LF	EWT (°F)	LWT (°F)	ENCLOSURE HEIGHT	NO. OF TIERS	PIPE SIZE	FIN SIZE	REMARKS
R	SLTANT FIN FIN/LINE 30	580	180	160	7-7/8"	1	3/4"	2-⅝" X 2-⅜"	ALL

REMARKS:
1. SELECTION BASED ON SLANT FIN ACCEPTABLE EQUIVALENTS BY STERLING OR VULCAN.
2. PROVIDE ALL REQUIRED MOUNTING HARDWARE AND ENCLOSURE ACCESS PANELS.

INDICATES TYPE OF FIN TUBE — R | LENGTH / GPM — INDICATES LENGTH OF ACTIVE FINNED ELEMENT; INDICATES HEATING H.W. FLOW (GAL. PER MINUTE)

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THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)

RIOS RESIDENCE INTERIOR REHABILITATION and REMEDIATION APPLICATION No. 1971
125 Hickory Street Norwich, CT 06360

CES Consulting Engineering Services, Inc.
511 Middle Street
Middletown, CT 06457
Tel. (860) 632-1682
Fax. (860) 632-1758
CES #2014064.00

date	description	no.

revisions

MECHANICAL, ELECTRICAL AND PLUMBING PLANS & DETAILS

MEP-1.0

date	6/27/14
drawn	VM/AK
scale	AS SHOWN
checked	DTB
project no.	1347-21
application no.	1971