QUISENBERRY ARCARI
A R C H I T E C T S, L L C

318 Main Street, Farmington, CT 06032 www.qa-architects.com t (860) 677 - 4594 f (860) 677 - 8534

REHABILITATION / RECONSTRUCTION WORK FOR:

WILLIAM J. ZIEBELL
&
MARSHA J. ZIEBELL

APPLICANT #1581

ISSUE DATE: DECEMBER 29, 2014

10 SILVER STREET **MILFORD, CT**

LIST OF DRAWINGS

-	COVER
-	SITE PLAN
G1.1	GENERAL NOTES
A1.1	FLOOR PLANS, REPORT & DETAIL
P-1	PLUMBING
M-1	MECHANICAL
E-1	ELECTRICAL

COMMUNITY DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM (CDBG-DR)

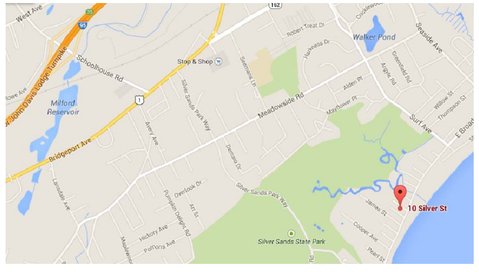
OWNER OCCUPIED REHABILITATION & REBUILDING PROGRAM (OORR)

SPONSORED IN CONJUNCTION WITH FUNDING FROM THE CONNECTICUT DEPARTMENT OF HOUSING

Connecticut still revolutionary

EQUAL HOUSING OPPORTUNITY

LOCATION MAP



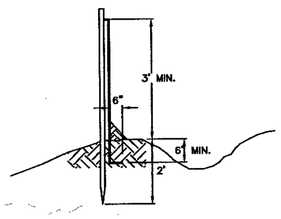
NORTH

10 SILVER STREET MILFORD, CT QA#1346-41

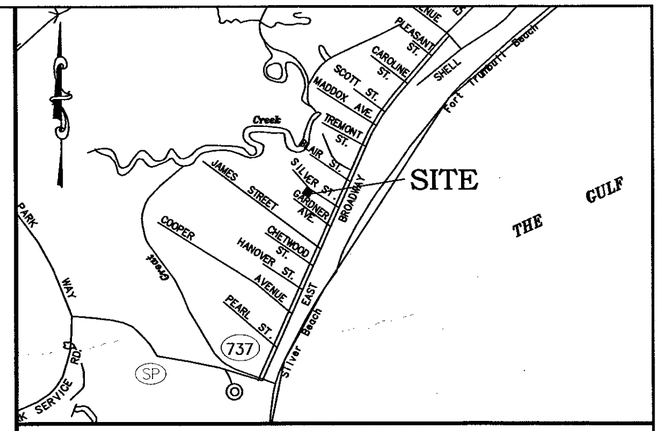
LEGEND

- —480— EXISTING CONTOURS
- PROPERTY LINE
- BUILDING SETBACK LINE
- 482 PROPOSED CONTOURS
- SILT FENCE
- LIMIT OF CLEARING

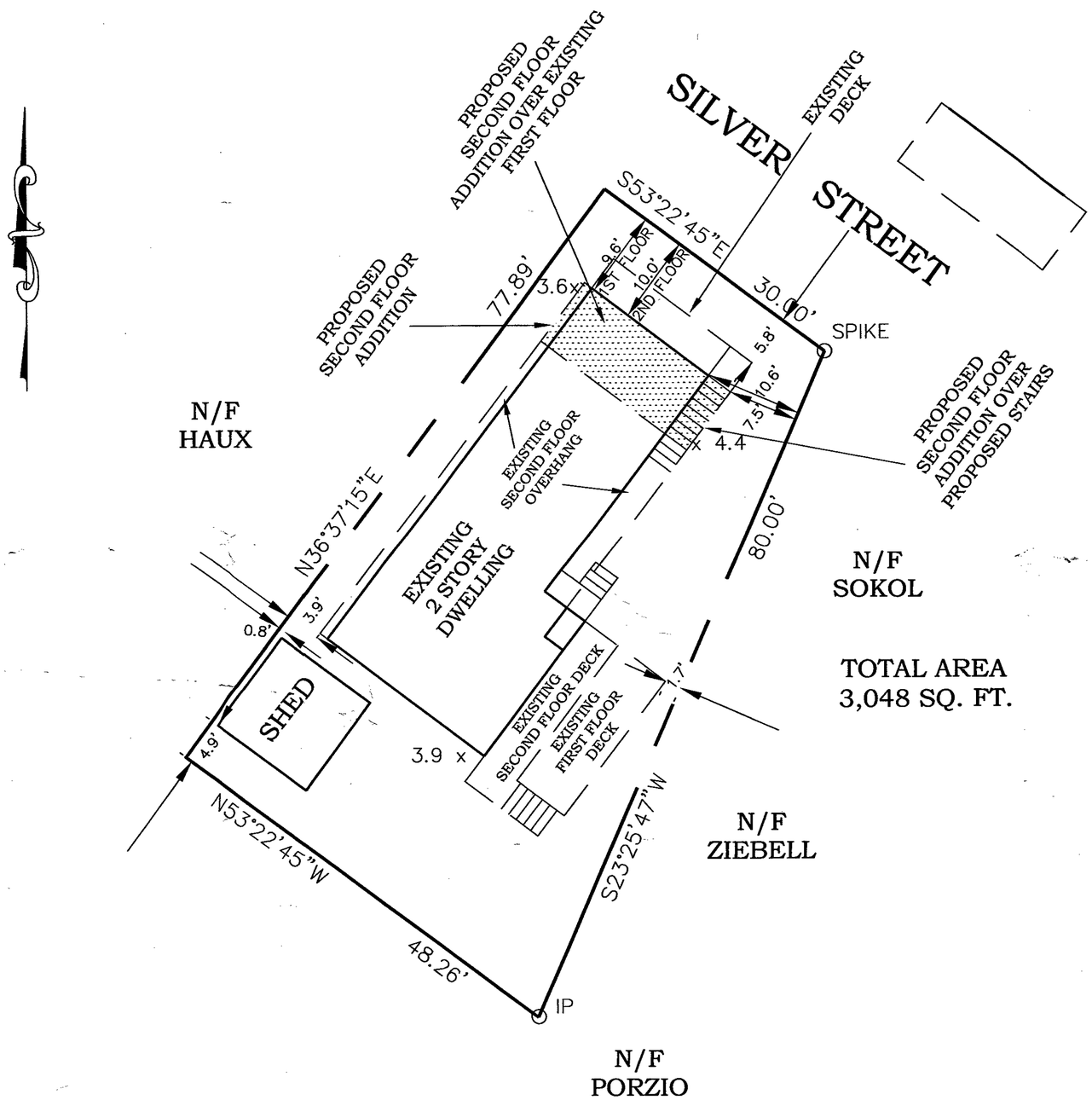
SILT FENCE



INSTALLATION NOTES:
1. EXCAVATE AND SECURE BOTTOM 8" OF SILT FENCE BELOW GRADE AS SHOWN.
2. EXCEPT FOR THE END POST, DRIVE ALL POSTS INTO THE GROUND AT BACK SIDE OF TRENCH SPACED A MAXIMUM OF 8 FT O. C.



LOCATION MAP
SCALE: 1"=800'



TOTAL AREA
3,048 SQ. FT.

ZONING PERMIT APPROVED FOR
Elevate existing single family dwelling to FFE 13.8'; construct 8'x20 addition to second living story
DATE 14 Nov 2013
ZONING ENFORCEMENT OFFICER

RECEIVED
NOV 14 2013
PLANNING & ZONING • MILFORD, CT 06460
INITIALS

RECEIVED
BUILDING DEPT.
MILFORD, CT

ZONE RESIDENTIAL (R-5)

VERTICAL DATUIM IS 1988
FLOOD ZONE AE REF. MAP 529 OF635 ON
MAP NO. 09009C0529J EFFECTIVE DATE JULY 8, 2013
BFE IS 11.0

No.	Date	REVISION DESCRIPTION

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 TO 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES. IT IS A MAP BASED ON A DEPENDANT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2. TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

FRED D'AMICO CONN. P.E., L.S. 10833

D'AMICO ASSOCIATES
SURVEYING & ENGINEERING CONSULTANTS
9 PARK ROAD
OXFORD, CONNECTICUT 06478
P: (203) 881-3184
F: (203) 881-0248
damicoassociates@sbcglobal.net

Job No.	Drn By
2809	JVD
Scale	Date
1"=10'	10/15/2013

Project Name
WILLIAM J. & MARSHA J. ZIEBELL
10 SILVER STREET
ASSESSORS MAP 27 BLOCK 454 PARCEL 6
MILFORD CONNECTICUT

Drawing Title
SITE PLAN
FOR
10 SILVER STREET

ABBREVIATIONS

A.F.F.	Above Finish Floor	HGT.	Height
A.C.	Acoustic, Acoustical	H.M.	Hollow Metal
A.C.T.	Acoustical Tile	HORIZ.	Horizontal
A/C	Air Conditioning	H.B.	Hose Bibb
A.H.U.	Air Handling Unit	IN.	Inch
ALT.	Alternate	INCL.	Included
ALUM.	Aluminum	INFO.	Information
ALF.	Aluminum Frame	I.D.	Inside Diameter
ANCH.	Anchor, Anchorage	INSUL.	Insulation
AB.	Anchor Bolt	INT.	Interior
L	Angle	JT.	Joint
ANOD.	Anodized	K.P.	Kick Plate
APPR.	Approved	LAB	Laboratory
ARCH.	Architect, Architectural	LAV.	Lavatory
ASB.	Asbestos	LTG.	Lighting
A.P.B.O.	As Provided By Owner	MACH.	Machine
A.S.B.O.	As Selected By Owner	MAINT.	Maintenance
ASPH.	Asphalt	MFRG.	Manufacturer
ASSY.	Assembly	M.BD.	Marker Board
ASST.	Assistant	MAS.	Masonry
AUTO.	Automatic	M.O.	Masonry Opening
BM	Beam	MAT.	Material
BRG.	Bearing	MAX.	Maximum
BEV.	Bevel, Beveled	MECH.	Mechanical
BIT.	Bituminous	MEZZ.	Mezzanine
BLK.	Block	MIN.	Minimum
BLKG.	Blocking	MISC.	Miscellaneous
BD.	Board	N	North
BOT.	Bottom	N.I.C.	Not In Contract
B.O.	Bottom Of	N.T.S.	Not To Scale
B.E.J.	Brick Expansion Joint	OFF.	Office
BLDG.	Building	O.C.	On Center
B.U.R.	Built Up Roofing	O.H.	Overhead
CAB.	Cabinet	O.D.	Outside Diameter
C.U.H.	Cabinet Unit Heater	PTD.	Painted
CAP.	Capacity	PR.	Pair
CASE	Casement	P.T.D.	Paper Towel Dispenser
CLG.	Ceiling	PASS.	Passage
CLGHT.	Ceiling Height	PERP.	Perpendicular
CEM.	Cement	PLAS.	Plaster
CTR.	Center	PLAM.	Plastic Laminate
CL.	Centerline	PL.	Plate
C.T.	Ceramic Tile	PLUMB.	Plumbing
C.BD.	Chalk Board	PLYWD.	Plywood
CLO.	Closet	PVC.	Polyvinylchloride
COL.	Column	P.E.J.	Precast Expansion Joint
CONC.	Concrete	PREFAB.	Prefabricated
CONF.	Conference	QTY.	Quantity
CJ	Control Joint	Q.T.	Quarry Tile
CONT.	Continuous	RAD.	Radius
CONTR.	Contractor	RWC	Rain Water Conductor
CORR.	Corridor	RECV.	Receiving
CRS.	Course, Courses	REFR.	Refrigerator
DEG.	Degree	REINF.	Reinforce
DEMO.	Demolition	REM	Remove
DEPT.	Department	REQ'D	Required
DET.	Detail	REV.	Revised, Revision
DIA.	Diameter	R.	Riser
DIM.	Dimension	R.D.	Roof Drain
DIST.	Distance	RM.	Room
DR.	Door	S.N.D.	Sanitary Napkin Dispenser
DBL.	Double	S.N.R.	Sanitary Napkin Receptacle
D.H.	Double Hung	SCHED.	Schedule
DN	Down	SC.	Scupper
D.S.	Downspout	SECT.	Section
DWG.	Drawing	S.J.	Seismic Joint
D.F.	Drinking Fountain	SHT.	Sheet
EA.	Each	SIM.	Similar
ELEC.	Electric, Electrical	S.D.	Soap Dispenser
EWC.	Electric Water Cooler	S.T.D.	Sound Transmission Class
EL.	Elevation	S.T.C.	Sound Transmission Coefficient
ELEV.	Elevator	SPEC.	Specifications
EMERG.	Emergency	SQ.	Square
EQ.	Equal	S.F.	Square Feet
EQUIP.	Equipment	S.S.	Stainless Steel
EXIST.	Existing	STD.	Standard
E.T.R.	Existing To Remain	STL.	Steel
EXP.	Expansion	STOR.	Storage
E.J.	Expansion Joint	STRUCT.	Structure, Structural
EXT.	Exterior	S.STL.	Structural Steel
E.I.F.S.	Exterior Insulation Finish System	SUSP.	Suspend, Suspension
FT.	Feet, Foot	S.A.T.C.	Susp. Acoustic Tile Ceiling
F.R.G.P.	Fiber Reinforced Gypsum Panel	T.BD.	Tack Board
FIN.	Finish, Finished	THRU	Through
F.E.	Fire Extinguisher	T.P.D.	Toilet Paper Dispenser
F.R.	Fire Retardant	T.M.E.	To Match Existing
FPRFG.	Fireproofing	T&G	Tongue and Groove
FIXT.	Fixture	T.O.	Top Of
FLASH	Flashing	T.	Tread
FLR.	Floor	TYP.	Typical
F.D.	Floor Drain	U.L.	Underwriter's Laboratory
FLR.FIN.	Floor Finish	U.H.	Unit Heater
FTG.	Footing	U.V.	Unit Ventilator
FDN	Foundation	U.O.N.	Unless Otherwise Noted
FURN.	Furnish, Furnishings, Furniture	VEST.	Vestibule
FURR.	Furred, Furring	VCT.	Vinyl Composition Tile
GA.	Gauge	W.P.	Waterproofing
GALV.	Galvanized	W.W.F.	Welded Wire Fabric
GYP. BD.	Gypsum Board	W.BD.	White Board
G.C.	General Contractor	W/	With
H.C.	Handicapped	WD.	Wood

WOOD

1. ALL STRUCTURAL WOOD SHALL BE IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION" AND THE "MANUAL OF HOUSE FRAMING" AS PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA), INCLUDING PROVISIONS FOR NAILING, FIRE STOPPING, ANCHORAGE, FRAMING AND BRACING.
2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, STRUCTURAL LUMBER SHALL BE AS FOLLOWS:
   A. INTERIOR EXPOSURE: STRUCTURAL WOOD PROTECTED FROM MOISTURE SHALL BE HEM-FIR #2 OR BETTER.
   B. EXTERIOR EXPOSURE: STRUCTURAL WOOD EXPOSED TO MOISTURE, THE WEATHER, IN CONTACT WITH CONCRETE, LOCATED WITHIN 8 INCHES OF SOIL, OR LESS THAN 18 INCHES FROM THE FLOOR OF A CRAWL SPACE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR BETTER, WITH RETENTION MEETING OR EXCEEDING THE REQUIREMENTS OF THE BUILDING CODE.
   C. PLYWOOD: PLYWOOD SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS (Y 510). PLYWOOD FLOOR DECKING SHALL BE CONTINUOUS OVER TWO OR MORE SPANS WITH THE FACE-GRAIN RUNNING PERPENDICULAR TO SUPPORT JOISTS.
      I. ROOF SHEATHING: C-D/EXT-APA, ½" THICK
      II. WALL SHEATHING: C-D/EXT-APA, ½" THICK
      III. SUBFLOORING: C-D/EXT-APA, ¾" THICK
3. NAILING SCHEDULE SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODE'S "RECOMMENDED FASTENING SCHEDULE". NAIL PLYWOOD SHEATHING AND SUBFLOORING 6"O.C AT EDGES AND 12"O.C. ALONG INTERMEDIATE SUPPORTS, LEAVING SPACES BETWEEN PANELS AS RECOMMENDED BY THE APA. UTILIZE RING-SHANK OR SCREW TYPE NAILS FOR PLYWOOD SUBFLOORING AND APPLY APPROPRIATE CONSTRUCTION ADHESIVE TO ADEQUATELY SECURE PLYWOOD TO FLOOR JOISTS.
4. INSTALL JOIST HANGERS, COLUMN CAPS AND BASES WHERE REQUIRED. METAL FABRICATIONS SHALL BE OF APPROPRIATE SIZE AND TYPE FOR THE MEMBERS AND SUPPORT CONDITIONS. WHERE FLANGE SUPPORT JOIST HANGARS ARE USED IN CONJUNCTION WITH STEEL BEAMS, CARE SHALL BE TAKEN TO INSTALL THE HANGERS CLEAR OF CONTACT WITH THE STEEL BEAM BY INSTALLING 2X WOOD TOP PLATES.
5. NOTCHING SHALL NOT EXCEED 1/6TH OF THE DEPTH OF A JOIST OR RAFTER AND SHALL OCCUR ONLY IN THE OUTER QUARTER OF THE SPAN. NOTCHES SHALL NOT BE PERMITTED IN THE MIDDLE HALF OF THE SPAN. NOTCH LENGTH SHALL NOT EXCEED 1/3RD OF THE JOIST DEPTH. NOTCHES ARE NOT PERMITTED IN ENGINEERED LUMBER PRODUCTS.
6. HOLES IN JOISTS OR RAFTERS SHALL OCCUR IN THE MIDDLE 1/3RD OF THE SPAN. THE HOLE DIAMETER SHALL NOT EXCEED 1/3RD OF THE JOIST DEPTH. HOLES IN ENGINEERED LUMBER PRODUCTS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
7. ENGINEERED LUMBER INDICATED ON THE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOISTS LABELED TJI ARE COMPOSITE I-JOISTS AS MANUFACTURED BY TRUS-JOIST. MEMBERS LABELED LVL ARE LAMINATED VENEER LUMBER (1.9E MICROLLAM BY TRUS-JOIST). THE SUBSTITUTION OF OTHER PRODUCTS ARE ONLY PERMITTED WITH BACKUP ENGINEERING PLANS AND CALCULATIONS.

THERMAL & MOISTURE PROTECTION

1. PROVIDE AND INSTALL BUILDING THERMAL INSULATION IN ACCORDANCE WITH THE FOLLOWING:
   A. EXTERIOR WALLS: R-19 MINIMUM
   B. SLOPED CEILINGS: R-30 MINIMUM
   C. FLAT CEILINGS: R-38 MINIMUM
   D. CEILINGS OVER UNCONDITIONED SPACE: R-21 MINIMUM
   E. CEILINGS OVER BASEMENT: R-21 MINIMUM
2. INSTALL VENTING IN SLOPED CEILING AREAS TO PERMIT AIRFLOW ALONG THE COOL SIDE OF THE INSULATION FROM THE EAVE TO RIDGE.
3. DO NOT LEAVE KRAFT-PAPER FACED INSULATION EXPOSED. INSTALL TYPE FSK FOIL TO PROTECT EXPOSED INSULATION.
4. INSTALL EITHER INTERIOR AND/OR EXTERIOR FOUNDATION INSULATION AS REQUIRED BY LOCAL BUILDING CODES.

FINISHES

GYPSUM BOARD

1. PROVIDE AND INSTALL GYPSUM WALL BOARD IN ACCORDANCE WITH AMERICAN STANDARD SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM WALLBOARD, AS APPROVED BY THE AMERICAN STANDARDS ASSOCIATION, LATEST EDITION; APPLICABLE PARTS THEREOF ARE HEREBY MADE A PART OF THIS SPECIFICATION EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE CALLED FOR IN THE SPECIFICATION, IN LOCAL CODES, OR BY THE MANUFACTURER OF THE GYPSUM WALLBOARD, WHOSE REQUIREMENTS SHALL BE FOLLOWED.
2. PROVIDE AND INSTALL MOISTURE-RESISTANT GYPSUM WALLBOARD WHERE REQUIRED. PROVIDE TYPE X GYPSUM BOARD AS CALLED FOR ON THE DRAWINGS.
3. PROVIDE ½" TYPE X GYPSUM BOARD AT ALL WALLS BETWEEN GARAGE AND HOUSE. ⅝" TYPE X GYPSUM BOARD SHALL BE PROVIDED AT GARAGE CEILING WHICH HAS LIVING SPACE ABOVE.

PAINT

1. APPLICATION OF PAINT OR OTHER COATING SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. READY-MIXED PAINT SHALL NOT BE THINNED, EXCEPT AS PERMITTED IN THE APPLICATION INSTRUCTIONS.

ELECTRICAL NOTES

1. ELECTRICAL DRAWINGS ARE INTENDED TO BE USED FOR SCHEMATIC DESIGN ONLY. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF FINAL ELECTRICAL DESIGN.
2. FINAL LOCATIONS OF ALL ELECTRICAL DEVICES AND THEIR INTENDED OPERATION IS TO BE COORDINATED WITH THE OWNER.
3. ELECTRICAL CONTRACTOR SHALL PURCHASE AND INSTALL ALL NEW COMPONENTS AS REQUIRED TO PROPERLY SERVICE THE SPACE(S) AFFECTED BY THIS CONSTRUCTION PROJECT. IF THE MODIFICATION OF EXISTING ELECTRICAL SYSTEMS IS NECESSARY, SUCH MODIFICATIONS SHALL NOT ADVERSELY AFFECT THE OPERATION OF THESE SYSTEMS.
4. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
5. COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES. DO NOT ALTER THE WORK OF PREVIOUS TRADES WITHOUT PRIOR APPROVAL.
6. ELECTRICAL CONTRACTOR MUST PROVIDE AND INSTALL ALL DUCT WORK ASSOCIATED WITH EXHAUST FANS.
7. PERFORM ALL NEW ELECTRICAL WORK IN ACCORDANCE WITH LOCAL CODES AND ACCEPTED STANDARDS OF PRACTICE.

DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN			SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP
	SPEED (mph)	TOPOGRAPHIC effects	WIND EXPOSURE CATEGORY		Weathering	Frost line depth	Termite	
30 psf	APPEND. R	n/a	R301.2.1.4	APPEND. R	SEVERE	42"	MODERATE TO HEAVY	7° F

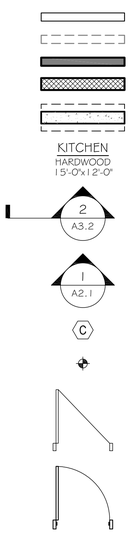
ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD	AIR FREEZING INDEX	MEAN ANNUAL TEMP	CLIMATE ZONE
YES	FEMA MAP	1500 OR LESS	50° F	5A

CODES THIS PROJECT WAS DESIGNED TO:
2009 INTERNATIONAL RESIDENTIAL CODE W/ 2013 CONNECTICUT AMENDMENT
2009 INTERNATIONAL ENERGY CONSERVATION CODE W/ 2013 CONNECTICUT AMENDMENT
2011 NATIONAL ELECTRICAL CODE (NFPA 70) W/ 2013 CONNECTICUT AMENDMENT

ELECTRICAL MOUNTING HEIGHTS

1. ALL DIMENSIONS ARE TO THE CENTER OF THE DEVICE UNLESS OTHERWISE NOTED. SEE ELECTRICAL DRAWINGS FOR TYPES AND LOCATIONS.
2. RECEPTACLES: 18" A.F.F. (AT LOCATIONS ABOVE CASEWORK, MOUNT BOTTOM OF RECEPTACLE AT 2" ABOVE BACKSPLASH, AT LOCATIONS BELOW CASEWORK, MOUNT AT 24" A.F.F.
3. EXTERIOR RECEPTACLES: 24" A.F.G. (20" A.F.F.)
4. SWITCHES: 48" A.F.F.
5. BOILER EMERGENCY SWITCHES: 60" A.F.F.
6. DATA / PHONE OUTLETS: 18" A.F.F.
7. TV OUTLETS: 18" A.F.F. OR 18" BELOW FINISHED CEILING
8. WALL PHONE: 48" A.F.F. TO CENTER OF EARPIECE
9. SECURITY KEYPAD: 48" A.F.F.

ARCHITECTURAL SYMBOLS



EXISTING WALL
WALL TO BE DEMOLISHED
NEW STUD WALL
NEW CMU WALL
NEW FOUNDATION WALL
ROOM NAME
FLOOR FINISH
ROOM SIZE (if applicable)
SECTION MARKER
ELEVATION MARKER
WINDOW IDENTIFICATION
ELEVATION MARKER
EXISTING DOOR
NEW DOOR

GENERAL NOTES

1. ALL CONSTRUCTION ON THIS HOME, AND ANY CHANGES MADE TO THE DESIGN OF THIS HOME, EITHER BEFORE OR DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE BUILDING CODE. NOTHING REPRESENTED WITHIN THESE PLANS SHALL ALLEVIATE THE APPLICABLE CODE REQUIREMENTS FOR THE CONSTRUCTION RELATED TO THIS PROJECT.
2. NOTIFY QUISENBERRY ARCARI ARCHITECTS, LLC AT (860) 677-4594 IMMEDIATELY IF PROBLEMS SHOULD ARISE DURING THE CONSTRUCTION ON THIS HOME WITH RESPECT TO STRUCTURAL INTEGRITY, FRAMING CONFLICTS, OR GENERAL CONCERNS.
3. THESE DRAWINGS DO NOT REPRESENT ALL COMPONENTS OR DETAILS REQUIRED TO PROPERLY CONSTRUCT THIS HOME. IT IS ASSUMED THAT THE WORK WILL BE PERFORMED BY COMPETENT, SKILLED AND LICENSED TRADE CONTRACTORS IN ACCORDANCE WITH INDUSTRY STANDARDS AND CARE.
4. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL NEW FINISHES (ROOFING, SIDING, TRIM, ETC.) SHALL MATCH EXISTING.
5. PATCH EXISTING AREAS AFFECTED BY THE NEW WORK. MATCH EXISTING FINISHES UNLESS DIRECTED OTHERWISE BY THE OWNER.
6. EXTEND EXISTING SERVICES (MECHANICAL, PLUMBING, ELECTRICAL, ETC.) TO ACCOMMODATE THE NEW CONSTRUCTION. PROVIDE UPGRADES TO EXISTING COMPONENTS AS NECESSARY TO PROVIDE SATISFACTORY PERFORMANCE WITHIN THE COMPLETED STRUCTURE.

QUISENBERRY ARCARI ARCHITECTS, LLC
www.qa-architects.com
T (860) 677-4594
F (860) 677-8534
318 Main Street
Farmington, CT 06032

NOT FOR CONSTRUCTION
ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:
WILLIAM J. ZIEBELL
&
MARSHA J. ZIEBELL
APPLICANT #1581
10 SILVER STREET
MILFORD, CT

Sheet Description:
GENERAL NOTES

Issue Dates:
DECEMBER 29, 2014

No Scale

Project #: QA 1346-41
Drawn By:

Sheet #:
G1.1

Perrone & Zajda Engineers, LLC
Southway Executive Park, Unit #511
35 Cold Spring Road, Rocky Hill, CT 06067
Phone: (860) 513-1155, Fax: (860) 436-3362
Email: brucepernone@aol.com

This letter regards Perrone & Zajda Engineers LLC's site visit on October 21 2014, with Quisenberry Arcari Architects LLC, to 11 Silver Street in Milford, Connecticut. The purpose of the field visit: to observe the structural condition of the existing building.

The existing house is a 2-story wood framed structure on 10" reinforced concrete foundation walls, with exterior wood framed decks and stairs. The 2nd floor framing bearing over the concrete foundation walls is 1¾"x 9½" Versalam 2.0 floor joists at 16"o/c maximum spanning 14'-6", sistered against the existing wood floor framing. There is a triple 1¾" x 9½" Versalam 2.0 beam spanning 12'-3", which supports the bearing ends of some of the 1¾" x 9½" Versalam 2.0E joists at 16"o/c maximum, and the wood floor framing from a small bump-out addition to the rear side of the house. See Photos #1, #2 and #3.

Photo #1

Photo #2

Photo #3

It is our opinion that the framing, which we observed is adequate, with the exception that some additional Simpson Strong-Tie items will be required for proper anchorage of the floor framing, and exterior deck framing.
There were metal joist hangers and ties observed at the exterior deck framing, but there were areas with the absence of metal ties or unobserved at the main floor framing and some deck framing, which will require Simpson Strong-Tie items as following: type 'H2.5A', 18 gauge, galvanized ties at floor joists to wood supports with 5-8d nails to floor joists and 5-8d nails to wood support; 'FSA', 12 gauge, galvanized foundation anchors at triple Versalam beam bearing on concrete foundation walls with 2- ½" diameter Hilti KWIK HUS screw anchors with minimum 3" embedment into concrete foundation wall and 8-10d x 1½" nails to beam; 'UFP10-SDS3' universal foundation plates at 4'-0" o/c maximum along sill plate to concrete foundation wall with 5-SDS ¼" x 3" screws to wood sill plate and 2- ½" diameter Hilti KWIK HUS screw anchors with minimum 3" embedment into concrete foundation wall if sill plates not anchored to foundation; 'LPT5', 20 gauge galvanized framing plates at 4'-0" o/c maximum along timber sill beam and sill plate with 5- 8d x 1½" nails to sill plate and 6- 8d x 1½" nails to timber sill beam, if not anchored to concrete foundation wall; and '1212HT' and '1212HL', 7 gauge, galvanized 'T' and 'L' strap ties in pairs at deck beams atop deck posts with 3- 5/8" diameter thru-bolts per pairs. See Photos #4, #5 and #6.

Photo #4

Photo #5

Photo #6

Photo #7

'H2.5A' Ties at each joist Typical
'LPT5' Framing Plates at 48"o/c Max.
'FSA' Foundation Anchors
'UFP10-SDS3' Universal Fndn. Plates at 48"o/c Max.
'H2.5A' Ties at each joist Typical
'1212HT' 'T' Strap Ties in Pairs (1 at Each Side)
'1212HL' 'L' Strap Ties in Pairs (1 at Each Side)

Some of the deck posts to deck support beams appeared to be nailed together. These will require minimum of 2- 4½" HeadLok screws to fasten the notched out post and beam together. Also, additional notched out stringer fastened to the existing stringer will be required to support the cantilevering ends of the stair risers and treads. See Photo #8.

Photo #8

Fasten Beam to Notched out Post with Min. 2 - 4 1/2" HeadLok Screws
Additional Notched Out Stringer Sistered to Existing Notched Out Stringer

The single Versalam floor joists sistered to the existing single wood floor joists should be fastened together with 10d nails at 8"o/c maximum staggered top and bottom. The single Versalam floor joist sistered to multiple wood floor joist members should be fastened together with 2 rows of ½" diameter thru-bolts at 24"o/c maximum staggered. See Photo #9 and #10.

Photo #9

Photo # 10

Fasten together with 2 Rows 10d Nails at 8"o/c Max.
Fasten together with 2Rows of 1/2" Diameter Thru-Bolts at 24"o/c Max.

The 8d nails are 0.131" diameter x 2½" long, unless the length is indicated otherwise, and the 10d nails are 0.148" diameter x 3" long, unless the length is indicated otherwise.

Existing conditions and dimensions are to be verified in the field by the contractor prior to fabrication and installation of any new materials. The contractor should notify the Architect of any field discrepancies for possible further instructions. The present State of Connecticut Building Code: 2003 International Building Code (IBC) with 2005 State of Connecticut Supplement, 2009 Amendments, and 2009 International Residential Code (IRC), with 2013 Amendments, are to be followed.

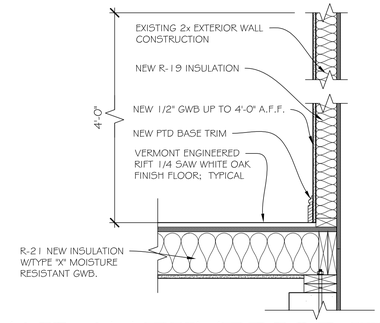
If you have any questions, please do not hesitate to contact this office.

Sincerely,

Bruce R. Perrone, P.E.

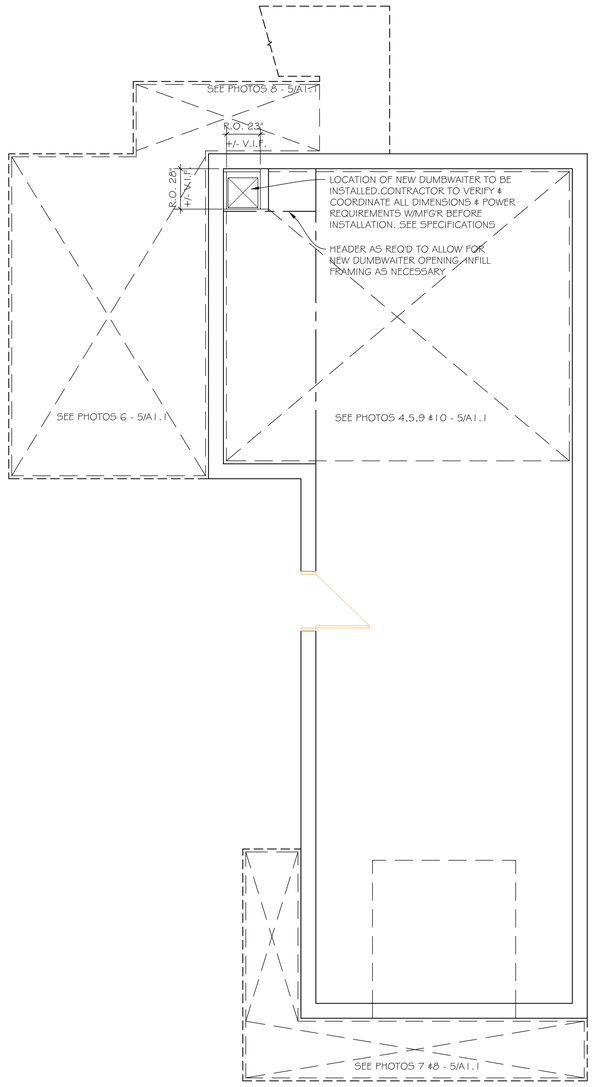
STATE OF CONNECTICUT BRUCE R. PERRONE No. 14016 LICENSED PROFESSIONAL ENGINEER

STRUCTURAL REPORT 5



DETAIL AT EXTERIOR WALL 4

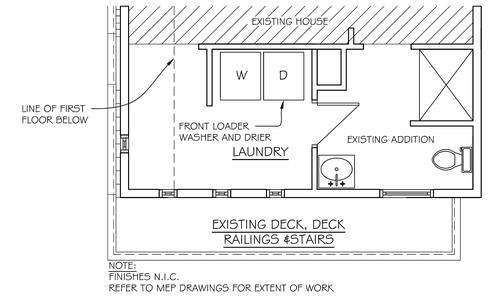
SCALE: 1" = 1'-0"



NOTE: R-21 NEW INSULATION W/TYPE "X" MOISTURE RESISTANT GWB.

EXISTING FOUNDATION PLAN 3

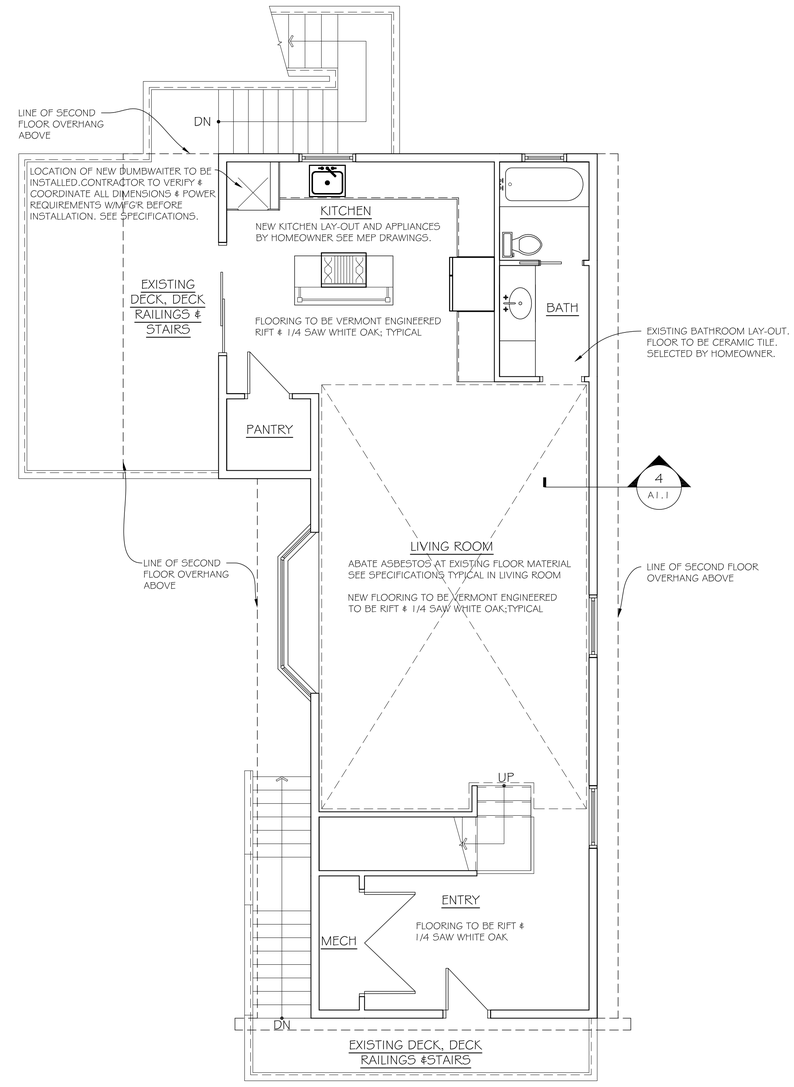
SCALE: ¼" = 1'-0"



NOTE:
FINISHES N.I.C.
REFER TO MEP DRAWINGS FOR EXTENT OF WORK

EXISTING SECOND FLOOR PLAN 2

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



EXISTING FIRST FLOOR PLAN 1

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

0 2' 4' 8'

NORTH

QUISENBERRY ARCARI ARCHITECTS, LLC
www.qa-architects.com
T (860) 677-4594
F (860) 677-8534
318 Main Street
Farmington, CT 06032

NOT FOR CONSTRUCTION ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:
WILLIAM J. ZIEBELL
&
MARSHA J. ZIEBELL
APPLICANT #1581
10 SILVER STREET
MILFORD, CT

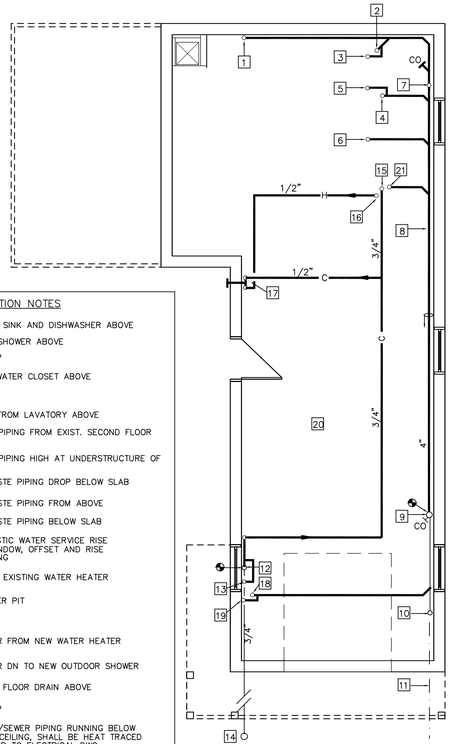
Sheet Description:
FLOOR PLANS REPORT & DETAIL

Issue Dates:
DECEMBER 29, 2014

AS NOTED

Project #: QA 1346-41
Drawn By: JcB

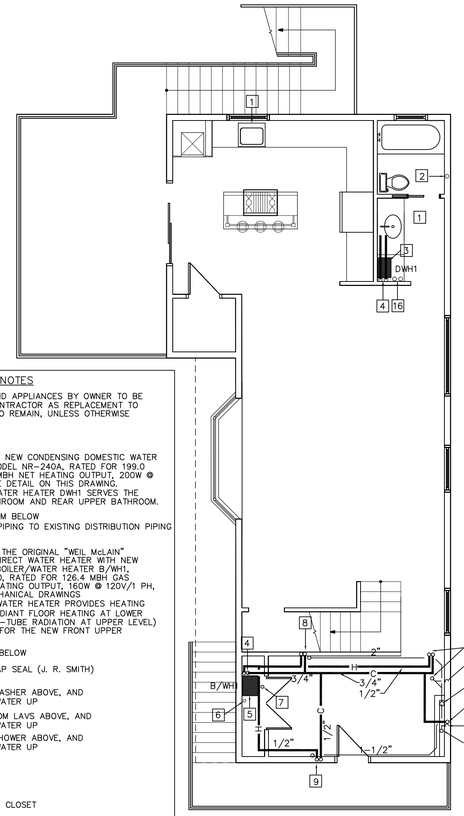
Sheet #:
A1.1



STREET LEVEL FLOOR PLAN – PLUMBING
SCALE: 3/16"=1'-0"

PLUMBING CONSTRUCTION NOTES

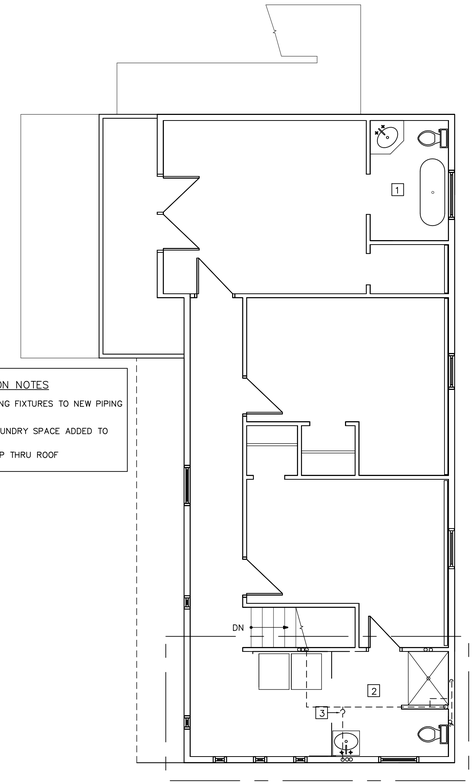
1. NEW 2" WASTE FROM SINK AND DISHWASHER ABOVE
2. NEW 2" WASTE TUB/SHOWER ABOVE
3. NEW 1-1/2" VENT UP
4. NEW 4" SAN. FROM WATER CLOSET ABOVE
5. NEW 2" VENT UP
6. NEW 1-1/2" WASTE FROM LAVATORY ABOVE
7. NEW 4" SAN/WASTE PIPING FROM EXIST. SECOND FLOOR BATHROOM
8. NEW 4" SAN/WASTE PIPING HIGH AT UNDERSTRUCTURE OF GARAGE LEVEL.
9. EXISTING 4" SAN/WASTE PIPING DROP BELOW SLAB
10. EXISTING 3" SAN/WASTE PIPING FROM ABOVE
11. EXISTING 4" SAN/WASTE PIPING BELOW SLAB
12. EXISTING 3/4" DOMESTIC WATER SERVICE RISE TO UNDERSIDE OF WINDOW, OFFSET AND RISE ABOVE GARAGE CEILING
13. NEW 3/4" CW UP TO EXISTING WATER HEATER
14. EXISTING WATER METER PIT
15. NEW 3/4" CW UP
16. NEW 1/2" HOT WATER FROM NEW WATER HEATER ABOVE
17. NEW 1/2" HOT WATER DN TO NEW OUTDOOR SHOWER
18. NEW 2" WASTE FROM FLOOR DRAIN ABOVE
19. NEW 1-1/2" VENT UP
20. ALL WATER AND SAN/SEWER PIPING RUNNING BELOW AND ABOVE GARAGE CEILING, SHALL BE HEAT TRACED AND INSULATED. REFER TO ELECTRICAL DWG.
21. 4" DRAIN PIPING FROM DWH1 FUNNEL ABOVE, 2" VENT RISE



LOWER LEVEL FLOOR PLAN – PLUMBING
SCALE: 3/16"=1'-0"

PLUMBING CONSTRUCTION NOTES

1. NEW PLUMBING FIXTURES AND APPLIANCES BY OWNER TO BE INSTALLED BY PLUMBING CONTRACTOR AS REPLACEMENT TO EXISTING. EXISTING PIPING TO REMAIN, UNLESS OTHERWISE NOTED
2. EXISTING 4" SAN/WASTE DN
3. THE OWNER WILL PROVIDE A NEW CONDENSING DOMESTIC WATER HEATER DWH1, "NAVIEN", MODEL NR-240A, RATED FOR 199.0 MBH GAS INPUT & 189.05 MBH NET HEATING OUTPUT, 200W @ 120V/1 PH, ETL LISTED. SEE DETAIL ON THIS DRAWING. DRAWING. THIS DOMESTIC WATER HEATER DWH1 SERVES THE KITCHEN, REAR LOWER BATHROOM AND REAR UPPER BATHROOM.
4. NEW 3/4" COLD WATER FROM BELOW CONNECT NEW HOT WATER PIPING TO EXISTING DISTRIBUTION PIPING TO FIXTURES.
5. THE OWNER HAS REPLACED THE ORIGINAL "WEIL McLAIN" BOILER FURNISHED WITH INDIRECT WATER HEATER WITH NEW CONDENSING COMBINATION BOILER/WATER HEATER B/WH1, "BAXI" MODEL LUNA HT-380, RATED FOR 126.4 MBH GAS INPUT & 112.6 MBH NET HEATING OUTPUT, 160W @ 120V/1 PH, ETL LISTED. DETAIL ON MECHANICAL DRAWINGS THIS COMBINATION BOILER/WATER HEATER PROVIDES HEATING FOR BOTH FLOORS (NEW RADIANT FLOOR HEATING AT LOWER LEVEL AND EXISTING FINNED-TUBE RADIATION AT UPPER LEVEL) AND DOMESTIC HOT WATER FOR THE NEW FRONT UPPER BATHROOM.
6. NEW "STUDOR" VENT FROM BELOW
7. NEW FLOOR DRAIN WITH TRAP SEAL (J. R. SMITH)
8. EXISTING 2" WASTE FROM WASHER ABOVE, AND NEW 1/2" HOT AND COLD WATER UP
9. EXISTING 1-1/2" WASTE FROM LAVS ABOVE, AND NEW 1/2" HOT AND COLD WATER UP
10. EXISTING 2" WASTE FROM SHOWER ABOVE, AND NEW 1/2" HOT AND COLD WATER UP
11. EXISTING 1-1/2" VENT UP
12. EXISTING 4" SAN WASTE DN
13. NEW 1/2" CW UP TO WATER CLOSET
14. EXISTING 2" VENT UP
15. EXISTING 4" SAN FROM WATER CLOSET ABOVE
16. NEW 4" FUNNEL AND PIPING DN TO ABOVE CEILING AT GARAGE LEVEL. 2" "STUDOR" VENT RISE



UPPER LEVEL FLOOR PLAN – PLUMBING
SCALE: 3/16"=1'-0"

PLUMBING CONSTRUCTION NOTES

1. RECONNECT ALL PLUMBING FIXTURES TO NEW PIPING LOCATED BELOW.
2. NEW BATHROOM AND LAUNDRY SPACE ADDED TO EXISTING BUILDING.
3. EXISTING VENT PIPING UP THRU ROOF

PLUMBING LEGEND

	NEW PIPING (DARK)
	EXISTING PIPING (LIGHT)
— C —	COLD WATER PIPING
— H —	HOT WATER PIPING
	DIRECTION OF FLOW
	PITCH OF PIPING
— CO	CLEANOUT
CW	COLD WATER
HW	COLD WATER
CLG	CEILING
	POINT OF NEW CONNECTION

FIXTURE CONNECTION SCHEDULE

FIXTURE	HOT	COLD	SAN/WASTE	VENT
WATER CLOSET	–	1/2"	4"	2"
LAV	1/2"	1/2"	1-1/2"	1-1/2"
TUB/SHOWER	1/2"	1/2"	2"	1-1/2"
SINK	1/2"	1/2"	2"	1-1/2"
WASHER	1/2"	1/2"	2"	1-1/2"

CONSTRUCTION NOTES:

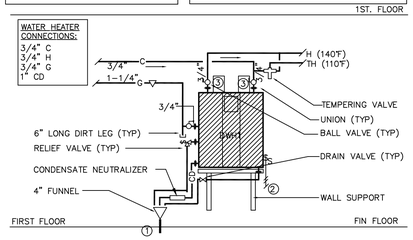
1. 4" PIPING DN TO GARAGE LEVEL
2. POWER BY OTHERS
3. APPROVED CONCENTRIC VENTING

HYDRONIC SPECIALTIES

FLOW CONTROL VALVES: EQUAL TO "BELL & GOSSETT", STRAIGHT PATTERN, MODEL SA

PRESSURE REDUCING VALVES: EQUAL TO BELL & GOSSETT", MODEL B 7-12, 1-1/4", IF INCOMING WATER PRESSURE EXCEEDS 80 PSI

1ST. FLOOR



DOMESTIC WATER HEATER PIPING SCHEMATIC DIAGRAM

FOR GAS PIPNG, SEE MECHANICAL DRAWINGS

SCOPE OF WORK

1. – ALL POTENTIAL CONTRACTORS SHALL BECOME FAMILIAR WITH THE SITE CONDITIONS, PRIOR TO START ANY WORK.
2. – ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE 2009 INTERNATIONAL RESIDENTIAL CODE AND 2009, 2011, 2012 & 2013 CONNECTICUT AMENDMENTS TO THE STATE BUILDING AND FIRE SAFETY CODES, OTHER APPLICABLE CODES, STANDARDS, REGULATIONS, ORDINANCES,, ETC., AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES AND UTILITY COMPANIES HAVING JURISDICTION. THIS CONTRACTOR SHALL BE A LICENSED MECHANICAL CONTRACTOR, AND SHALL BE RESPONSIBLE TO OBTAIN A CONSTRUCTION PERMIT AND PAY FOR ALL APPLICABLE FEES, TAXES, TESTS, ETC. NO WORK SHALL BE PERFORMED UNTIL SHOP DRAWINGS FOR ALL EQUIPMENT, DEVICES AND MAJOR MATERIALS ARE SUBMITTED AND APPROVED IN WIRING BY THE PROJECT ENGINEER.
3. – FURNISH & INSTALL ALL EQUIPMENT, DEVICES, MATERIALS, ETC., AS INDICATED, SHOWN AND SPECIFIED FOR COMPLETE OPERATIONAL SYSTEMS, APPROVED BY ARCHITECT/ENGINEER & OWNER'S REPRESENTATIVE, AND LOCAL AUTHORITIES HAVING JURISDICTION.
4. – THIS CONTRACTOR IS RESPONSIBLE TO SUBMIT TO THE ARCHITECT/ENGINEER SHOP DRAWINGS FOR ALL EQUIPMENT & DEVICES, MATERIALS, ETC., AND FURTHER OBTAIN ALL NECESSARY APPROVALS, PRIOR TO STARTING THIS WORK.
5. – THIS CONTRACTOR SHALL INCLUDE IN HIS/HER WORK, WITHOUT EXTRA COST TO OWNER, ANY LABOR, MATERIAL APPARATUS AND DRAWING ADDITIONS TO THE CONTRACT DRAWINGS AND SPECIFICATIONS IN ORDER TO COMPLY WITH THE CURRENT APPROVED CODES, STANDARDS, ORDINANCES, RULES AND REGULATIONS, ETHER SHOWN OT NOT ON THESE DRAWINGS AND SPECIFICATIONS.
6. – ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY, WITH ALL REQUIRED CLEARANCES FOR MAINTENANCE AND SERVICE.
7. – WATER PIPING SHALL BE COPPER TYPE L, HARD DRAWN, AS PER ASTM B88. FITTINGS SHALL BE SOLDER WROUGHT COPPER, AS PER ASME B16.22. JOINTS SHALL BE SOLDER LEAD FREE, AS PER ASME B32.
   SANITARY AND VENT PIPING ABOVE GRADE, SHALL BE PVC PIPING, ASTM D2729, SCHEDULE 40, WITH PVC FITTINGS AND ASTM D2855 SOLVENT WELD JOINTS.
   HEATING HOT WATER AND DRAIN PIPING SHALL BE COPPER TYPE L, HARD DRAWN, AS PER ASTM B88. FITTINGS SHALL BE SOLDER WROUGHT COPPER, AS PER ASME B16.22.
   FURNISH AND INSTALL SHUT-OFF/ISOLATION VALVES ON ALL MAIN BRANCHES AS REQUIRED.
   INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION. SLOPE PIPING TO DRAIN AT LOW POINTS.
   INSTALL SPECIALTIES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
   PERFORM COLD LEAK TESTS AND REPAIR JOINTS, AS NECESSARY. CLEAN AND FLUSH PIPING BEFORE START-UP.
   CLEANOUTS FOR EXPOSED PIPING SHALL BE EQUAL TO "WADE"
   PIPE HANGERS AND SUPPORTS TO CONFORM TO ASME B31.9 AND MSS SP58.
   HANGERS SHALL BE CARBON STEEL RING, ADJUSTABLE, COPPER PLATED. UNIONS SHALL BE BRONZE SOLDERED JOINTS.
   DIELECTRIC CONNECTIONS SHALL BE UNION WITH GALVANIZED OR PLATED THREADED END, COPPER SOLDER END, WATER IMPERVIOUS ISOLATION BARRIER. BALL VALVES SHALL BE BRONZE, ONE PIECE BODY, CHROME PLATED BRONZE BALL, TEFLON SEATS AND STUFFING BOX RING WITH SOLDERED ENDS.
   GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED JOINTS. GAS BALL VALVES SHALL BE 150 PSI WOG BRONZE BODY, STRAIGHTAWAY PATTERN, SQUARE HEAD, THREADED ENDS.
   FURNISH AND INSTALL CONDENSATE DRAIN PIPING, FITTINGS AND SPECIALTIES FOR A COMPLETE OPERATIONAL SYSTEMS. CONDENSATE DRAIN PIPING SHALL BE PVC PIPE, ASTM D2729, SCHEDULE 40, WITH PVC FITTINGS AND SOLVENT CEMENT JOINTS, AS PER ASTM D2564. FURNISH & INSTALL EXHAUST & COMBUSTION AIR PIPING, PVC SCHEDULE 80, AT ALL GAS-FIRED COMBINATION BOILERS/DOMESTIC WATER HEATERS, AS INDICATED ON DRAWINGS.
   BEFORE BEING PLACED IN SERVICE, ALL NEW POTABLE WATER (DOMESTIC COLD AND HOT WATER), SHALL BE PURGED OF DELETERIOUS MATTER, AND CHLORINATED IN ACCORDANCE WITH AWWA C651 OR AWWA C652, AND AS REQUIRED BY LOCAL BUILDING AND HEALTH DEPARTMENT CODES.
8. – FURNISH & INSTALL PIPING INSULATION TO ALL NEW PIPING, AS FOLLOWS:
   - INSULATE COLD WATER PIPING RUNNING ABOVE GYPSUM BOARD CEILING AND BUILDING INSULATION WITH 1-1/2" THICK FIBERGLASS INSULATION WITH ASJ. PROVIDE HEAT TRACING ON THIS PIPING AND COVER WITH INSULATION.
   - INSULATE HEATING HOT WATER PIPING RUNNING ABOVE GYPSUM BOARD CEILING AND BUILDING INSULATION WITH 1-1/2" THICK FIBERGLASS INSULATION WITH ASJ.
   - INSULATE SANITARY SEWER AND DRAIN PIPING RUNNING BELOW GYPSUM BOARD CEILING WITH 1-1/2" THICK FIBERGLASS INSULATION WITH ASJ. PROVIDE HEAT TRACING ON THIS PIPING AND COVER WITH INSULATION.
   - INSULATE ALL NEW HOT & COLD DOMESTIC WATER AND HEATING HOT WATER PIPING LOCATED WITHIN THE MECHANICAL ROOM WITH 1" THICK FIBERGLASS INSULATION WITH ASJ.
9. – COVER ALL EXPOSED GAS PIPING, FITTINGS & SUPPORTS IN THE MECHANICAL ROOM WITH TWO (2) COATS OF PRIMER AND TWO (2) LAYERS OF YELLOW ENAMEL WEATHER RESISTANT PAINT.
10. – FURNISH & INSTALL INSTRUMENTATION, SUCH AS THERMOMETERS, WHERE REQUIRED, AND OR INDICATED. RE-USE THE EXISTING CONTROLS SUCH AS RADIATION ZONE CONTROL VALVES, RE-CONNECT CONTROL VALVES TO THEIR THERMOSTATS, AS REQUIRED. ALL CONTROL WIRING SHALL BE COPPER, TWISTED PAIR SHIELDED TYPE, #16 OR BETTER. PROVIDE ALL NECESSARY DEMONSTRATION AND TRAINING TO THE OWNER'S REPRESENTATIVE(S) FOR COMPLETE OPERATIONAL SYSTEMS.
11. – FURNISH & INSTALL EQUIPMENT NAMEPLATES, PIPE MARKERS, VALVE TAGS, ETC., IN COMPLIANCE WITH ANSI A13.1.
12. – PROVIDE THREE (3) SETS OF "AS-BUILT" DRAWINGS TO ARCHITECT/ENGINEER AT PROJECT COMPLETION.
13. – THIS PROJECT SHALL BE DEEMED COMPLETE ONLY AFTER IS THOROUGHLY INSPECTED, DEMONSTRATED TO AND APPROVED IN WRITING BY THE LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S REPRESENTATIVE AND ARCHITECT/ ENGINEER. ALL WARRANTIES SHALL START AFTER RECEIVING THESE APPROVALS.

GENERAL NOTES

1. – THE INFORMATION SHOWN ON THIS DRAWING IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THIS CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THIS DRAWING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO SUBMITTING HIS BID.
2. – THIS CONTRACTOR IS REQUIRED TO PERFORM THIS WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, ORDINANCES, ETC., AND TO MEET THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND OWNER, WHETHER OR NOT SPECIFICALLY INDICATED OR SPECIFIED ON THIS DRAWING.
3. – ALL PENETRATIONS THRU FLOOR AND WALLS SHALL BE FIRE STOPPED WITH "THOMAS AND BETTS" – FLAMESAFE, TYPE FST FIRESTOP COMPOUND OR APPROVED EQUIVALENT, CONFORMING TO ASME E814/UL1479.

REVISIONS

NO.	NATURE OF REVISION	DATE	BY
1			
2			
3			
4			
5			
6			

COPYRIGHT NOTICE

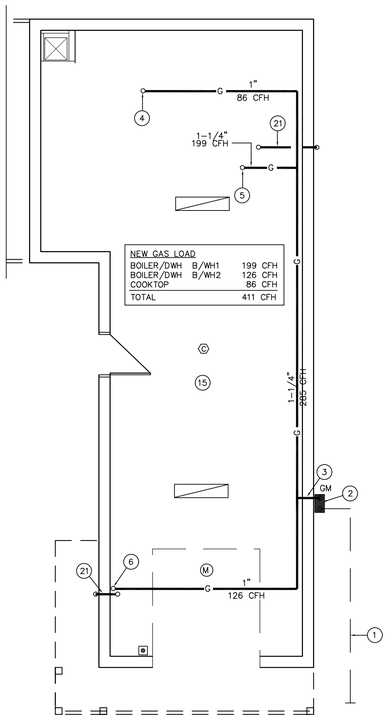
The information contained herein is the proprietary and confidential property of Dumitru T. Petrescu, P.E., LLC. Reproductions, publication, distribution or duplication in whole or in part requires the written permission of the above parties.
Copyright 2014, All Rights Reserved.

Project Engineer:
DUMITRU T. PETRESCU, P.E., LLC
Mechanical & Electrical Consulting Engineers
567 Rayzoe Terrace, Hamden, CT 06514-1008
(203) 287-9995

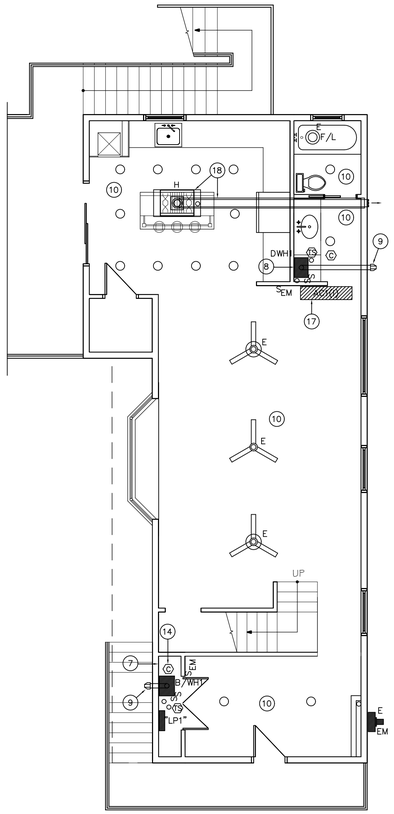
CONTRACTOR:

Project:
REHABILITATION/RECONSTRUCTION WORK FOR:
WILLIAM ZIEBELL
APPLICANT #1581
10 SILVER STREET MILFORD, CT
PLUMBING

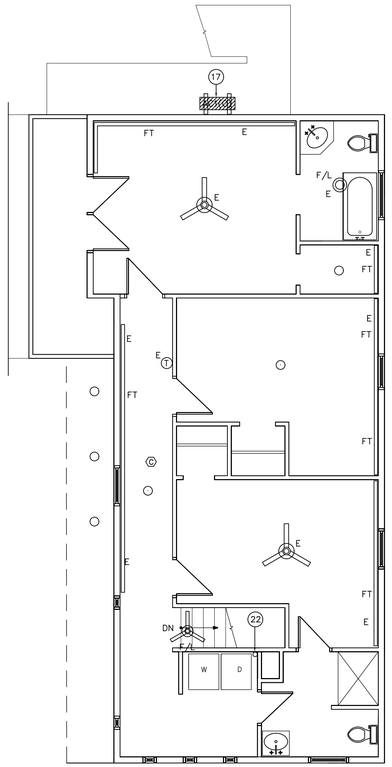
drawn by: CP
scale: NOTED
date: December 29, 2014
checked by: DTP
project number: DTP14036
drawing number: P-1



STREET LEVEL FLOOR PLAN – MECHANICAL
SCALE: 3/16"=1'-0"



LOWER LEVEL FLOOR PLAN – MECHANICAL
SCALE: 3/16"=1'-0"



UPPER LEVEL FLOOR PLAN – MECHANICAL
SCALE: 3/16"=1'-0"

MECHANICAL LEGEND AND ABBREVIATIONS

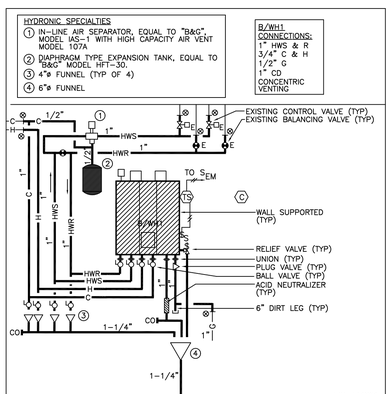
————	EXISTING DUCTWORK/PIPING/ EQUIPMENT TO REMAIN (E)
——— –	EXISTING DUCTWORK/PIPING/ EQUIPMENT TO BE REMOVED (R)
————	NEW DUCTWORK/PIPING/EQUIPMENT
B#	BOILER
DWH#	DOMESTIC WATER HEATER
B/WH#	COMBINATION BOILER/DOMESTIC WATER HEATER
H	RANGE HOOD
KH	KICKSPACE HEATER (HYDRONIC)
F/L	FAN LIGHT
AC#(I)	AIR CONDITIONING INTERIOR UNIT
AC#(O)	AIR CONDITIONING OUTDOOR UNIT
FT	FINNED–TUBE RADIATION
GM	GAS METER
CU#	CONDENSING UNIT, AIR COOLED
P#	PUMP
ET#	EXPANSION TANK
G	GAS PIPING
C & H	COLD & HOT WATER PIPING
HWS/HWR	HOT WATER SUPPLY/RETURN PIPING
Ⓒ	CARBON MONOXIDE DETECTOR/ CONTROLLER
(15)	THERMAL SWITCH (SET AT 165 F)
S_S	SERVICE SWITCH
S_{EM}	EMERGENCY SHUTDOWN SWITCH
E	EXISTING TO REMAIN
ER	EXISTING TO BE RELOCATED
R	EXISTING TO BE REMOVED
⊗	CONNECT TO EXISTING

SCOPE OF WORK

1. – ALL POTENTIAL CONTRACTORS SHALL BECOME FAMILIAR WITH THE SITE CONDITIONS, PRIOR TO START ANY WORK.
2. – ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE 2009 INTERNATIONAL RESIDENTIAL CODE AND 2009, 2011, 2012 & 2013 CONNECTICUT AMENDMENTS TO THE STATE BUILDING AND FIRE SAFETY CODES, OTHER APPLICABLE CODES, STANDARDS, REGULATIONS, ORDINANCES,, ETC., AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES AND UTILITY COMPANIES HAVING JURISDICTION. THIS CONTRACTOR SHALL BE A LICENSED MECHANICAL CONTRACTOR, AND SHALL BE RESPONSIBLE TO OBTAIN A CONSTRUCTION PERMIT AND PAY FOR ALL APPLICABLE FEES, TAXES, TESTS, ETC. NO WORK SHALL BE PERFORMED UNTIL SHOP DRAWINGS FOR ALL EQUIPMENT, DEVICES AND MAJOR MATERIALS ARE SUBMITTED AND APPROVED IN WIRING BY THE PROJECT ENGINEER.
3. – FURNISH & INSTALL ALL EQUIPMENT, DEVICES, MATERIALS, ETC., AS INDICATED, SHOWN AND SPECIFIED FOR COMPLETE OPERATIONAL SYSTEMS, APPROVED BY ARCHITECT/ENGINEER & OWNER'S REPRESENTATIVE, AND LOCAL AUTHORITIES HAVING JURISDICTION.
4. – THIS CONTRACTOR IS RESPONSIBLE TO SUBMIT TO THE ARCHITECT/ENGINEER SHOP DRAWINGS FOR ALL EQUIPMENT & DEVICES, MATERIALS, ETC., AND FURTHER OBTAIN ALL NECESSARY APPROVALS, PRIOR TO STARTING THIS WORK.
5. – THIS CONTRACTOR SHALL INCLUDE IN HIS/HER WORK, WITHOUT EXTRA COST TO OWNER, ANY LABOR, MATERIAL APPARATUS AND DRAWING ADDITIONS TO THE CONTRACT DRAWINGS AND SPECIFICATIONS IN ORDER TO COMPLY WITH THE CURRENT APPROVED CODES, STANDARDS, ORDINANCES, RULES AND REGULATIONS, ETHER SHOWN OT NOT ON THESE DRAWINGS AND SPECIFICATIONS.
6. – ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY, WITH ALL REQUIRED CLEARANCES FOR MAINTENANCE AND SERVICE.
7. – WATER PIPING SHALL BE COPPER TYPE L, HARD DRAWN, AS PER ASTM B88. FITTINGS SHALL BE SOLDER WROUGHT COPPER, AS PER ASME B16.22. JOINTS SHALL BE SOLDER LEAD FREE, AS PER ASME B32.
SANITARY AND VENT PIPING ABOVE AND BELOW GRADE, SHALL BE PVC PIPING, ASTM D2729, SCHEDULE 40, WITH PVC FITTINGS AND ASTM D2855 SOLVENT WELD JOINTS.
HEATING HOT WATER AND DRAIN PIPING SHALL BE COPPER TYPE L, HARD DRAWN, AS PER ASTM B88. FITTINGS SHALL BE SOLDER WROUGHT COPPER, AS PER ASME B16.22.
FURNISH AND INSTALL SHUT–OFF/ISOLATION VALVES ON ALL MAIN BRANCHES AS REQUIRED.
INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION. SLOPE PIPING TO DRAIN AT LOW POINTS.
INSTALL SPECIALTIES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
PERFORM COLD LEAK TESTS AND REPAIR JOINTS, AS NECESSARY. CLEAN AND FLUSH PIPING BEFORE START–UP.
CLEANOUTS FOR EXPOSED PIPING SHALL BE EQUAL TO "WADE".
PIPE HANGERS AND SUPPORTS TO CONFORM TO ASME B31.9 AND MSS SP58.
HANGERS SHALL BE CARBON STEEL RING, ADJUSTABLE, COPPER PLATED. UNIONS SHALL BE BRONZE SOLDERED JOINTS. DIELECTRIC CONNECTIONS SHALL BE UNION WITH GALVANIZED OR PLATED THREADED END, COPPER SOLDER END, WATER IMPERVIOUS ISOLATION BARRIER. BALL VALVES SHALL BE BRONZE, ONE PIECE BODY, CHROME PLATED BRONZE BALL, TEFLON SEATS AND STUFFING BOX RING WITH SOLDERED ENDS.
GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED JOINTS. GAS BALL VALVES SHALL BE 150 PSI WOG BRONZE BODY, STRAIGHTAWAY PATTERN, SQUARE HEAD, THREADED ENDS.
FURNISH AND INSTALL CONDENSATE DRAIN PIPING, FITTINGS AND SPECIALTIES FOR A COMPLETE OPERATIONAL SYSTEMS. CONDENSATE DRAIN PIPING SHALL BE PVC PIPE, ASTM D2729, SCHEDULE 40, WITH PVC FITTINGS AND SOLVENT CEMENT JOINTS, AS PER ASTM D2564. FURNISH & INSTALL CONCENTRIC EXHAUST & COMBUSTION AIR PIPING, PVC SCHEDULE 80, AT ALL GAS–FIRED COMBINATION BOILERS/DOMESTIC WATER HEATERS, AS INDICATED ON DRAWINGS.
BEFORE BEING PLACED IN SERVICE, ALL NEW POTABLE WATER (DOMESTIC COLD AND HOT WATER), SHALL BE PURGED OF DELETERIOUS MATTER, AND CHLORINATED IN ACCORDANCE WITH AWWA C651 OR AWWA C652, AND AS REQUIRED BY LOCAL BUILDING AND HEALTH DEPARTMENT CODES.
8. – FURNISH & INSTALL PIPING INSULATION TO ALL NEW PIPING, AS FOLLOWS:
   – INSULATE COLD WATER PIPING RUNNING ABOVE GYPSUM BOARD CEILING AND BUILDING INSULATION WITH 1–1/2" THICK FIBERGLASS INSULATION WITH ASJ. PROVIDE HEAT TRACING ON THIS PIPING AND COVER WITH INSULATION.
   – INSULATE HEATING HOT WATER PIPING RUNNING ABOVE GYPSUM BOARD CEILING AND BUILDING INSULATION WITH 1–1/2" THICK FIBERGLASS INSULATION WITH ASJ.
   – INSULATE SANITARY SEWER AND DRAIN PIPING RUNNING BELOW GYPSUM BOARD CEILING WITH 1–1/2" THICK FIBERGLASS INSULATION WITH ASJ. PROVIDE HEAT TRACING ON THIS PIPING AND COVER WITH INSULATION.
   – INSULATE ALL NEW HOT & COLD DOMESTIC WATER AND HEATING HOT WATER PIPING LOCATED WITHIN THE MECHANICAL ROOM WITH 1" THICK FIBERGLASS INSULATION WITH ASJ.
9. – COVER ALL EXPOSED GAS PIPING, FITTINGS & SUPPORTS IN THE MECHANICAL ROOM WITH TWO (2) COATS OF PRIMER AND TWO (2) LAYERS OF YELLOW ENAMEL WEATHER RESISTANT PAINT.
10. – FURNISH & INSTALL INSTRUMENTATION, SUCH AS THERMOMETERS, WHERE REQUIRED, AND OR INDICATED. RE–USE THE EXISTING CONTROLS SUCH AS RADIATION ZONE CONTROL VALVES, RE–CONNECT CONTROL VALVES TO THEIR THERMOSTATS, AS REQUIRED. ALL CONTROL WIRING SHALL BE COPPER, TWISTED PAIR SHIELDED TYPE, #16 OR BETTER. PROVIDE ALL NECESSARY DEMONSTRATION AND TRAINING TO THE OWNER'S REPRESENTATIVE(S) FOR COMPLETE OPERATIONAL SYSTEMS.
11. – FURNISH & INSTALL EQUIPMENT NAMEPLATES, PIPE MARKERS, VALVE TAGS, ETC., IN COMPLIANCE WITH ANSI A13.1.
12. – PROVIDE THREE (3) SETS OF "AS–BUILT" DRAWINGS TO ARCHITECT/ENGINEER AT PROJECT COMPLETION.
13. – THIS PROJECT SHALL BE DEEMED COMPLETE ONLY AFTER IS THOROUGHLY INSPECTED, DEMONSTRATED TO AND APPROVED IN WRITING BY THE LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S REPRESENTATIVE AND ARCHITECT/ ENGINEER. ALL WARRANTIES SHALL START AFTER RECEIVING THESE APPROVALS.

CONSTRUCTION NOTES:

1. EXISTING 1–1/4" BURIED GAS SERVICE LOAD TO BE VERIFIED BY THE GAS COMPANY – VERSUS THE NEW GAS LOAD (411 CFH). NEW GAS SERVICE BY THE GAS COMPANY WILL REQUIRE TO ACCOMMODATE THIS NEW GAS LOAD.
2. NEW GAS METER BY THE GAS COMPANY (GAS LOAD: 411 CFH). NEW METER TO BE MOUNTED ON THE NEW CONCRETE WALL WHERE INDICATED. PROVIDE MAIN GAS PLUG SHUTOFF VALVE ON GAS PIPING RISER AT METER.
3. NEW 1–1/4" GAS PIPING TIGHT TO THE FLOOR OVERHEAD.
4. NEW 1" GAS PIPING RISER TO COOKTOP ABOVE. PROVIDE NEW GAS PLUG SHUTOFF VALVE ON RISER.
5. NEW 1–1/4" GAS PIPING RISER TO DWH1 ABOVE. PROVIDE NEW GAS PLUG SHUTOFF VALVE ON RISER.
6. NEW 1" GAS PIPING RISER TO B/WH1 ABOVE. PROVIDE NEW GAS PLUG SHUTOFF VALVE ON RISER.
7. THE OWNER HAS REPLACED THE ORIGINAL "WEIL McLAIN" BOILER FURNISHED WITH INDIRECT WATER HEATER WITH NEW CONDENSING COMBINATION BOILER/WATER HEATER B/WH1, "BAXI" MODEL LUNA HT–380, RATED FOR 126.4 MBH GAS INPUT & 112.6 MBH NET HEATING OUTPUT, 160W @ 120V/1 PH, ETL LISTED. REFER TO DETAIL ON THIS DRAWING.
THIS COMBINATION BOILER/WATER HEATER PROVIDES HEATING FOR BOTH FLOORS (NEW RADIANT FLOOR HEATING AT LOWER LEVEL AND EXISTING FINNED–TUBE RADIATION AT UPPER LEVEL) AND DOMESTIC HOT WATER FOR THE NEW FRONT UPPER BATHROOM. WIRE THE COMBINATION BOILER/WATER HEATER B/WH1 SERVICE SWITCH IN SERIES WITH A THERMAL SWITCH AND AN EMERGENCY SHUTDOWN SWITCH BY THE ELECTRICAL CONTRACTOR.
8. THE OWNER WILL PROVIDE A NEW CONDENSING DOMESTIC WATER HEATER DWH1, "NAVIEN", MODEL NR–240A, RATED FOR 199.0 MBH GAS INPUT & 189.05 MBH NET HEATING OUTPUT, 200W @ 120V/1 PH, ETL LISTED. REFER TO DETAIL ON THE PLUMBING DRAWING. THIS DOMESTIC WATER HEATER DWH1 SERVES THE KITCHEN, REAR LOWER BATHROOM AND REAR UPPER BATHROOM. WIRE THE DOMESTIC WATER HEATER DWH1 SERVICE SWITCH IN B/WH1 SERVICE SWITCH IN SERIES WITH A THERMAL SWITCH SERIES WITH THE THERMAL SWITCH AND AN EMERGENCY SHUTDOWN SWITCH BY THE ELECTRICAL CONTRACTOR CONTRACTOR.
9. APPROVED TYPE CONCENTRIC AIR VENTING TO BE TERMINATED AS PER THE MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY.
10. AREA SERVED BY NEW RADIANT FLOOR HEATING SYSTEM ON A SEPARATE HEATING ZONE. COORDINATE WITH OWNER.
11. NOT USED.
12. NOT USED.
13. NOT USED.
14. NEW APPROVED TYPE AC/DC CARBON MONOXIDE DETECTOR WITH VISUAL & AUDIBLE ALARM (TYP).
15. RE–INSTALL THE REMOVED HOT WATER SUPPLY & RETURN PIPING SERVING THE LOWER LEVEL NEW RADIANT FLOOR HEATING ON A SEPARATE ZONE COORDINATE PIPING ROUTING WITH OWNER. RUN ALL PIPING THROUGH THE FLOOR JOISTS ABOVE THE BUILDING'S INSULATION. INSULATE THIS PIPING WITH 1–1/2" THICK FIBERGLASS INSULATION WITH ASJ. PROVIDE "ZESTON" FITTINGS PRE–MOLDED INSULATION COVERS (TYP).
16. NOT USED.
17. EXISTING 2–TON SPLIT AIR CONDITIONING SYSTEM TO REMAIN (E).
18. NEW 36"Wx24"Dx6.8"H S.S. ISLAND RANGE HOOD (H) OVER THE GAS–FIRED COOKTOP UNIT, "Z LINE", MODEL ZLGL2, RATED FOR 760 MAX., 120V/1 PH, FURNISHED BY OWNER. THE 6"ø EXHAUST DUCTWORK TO BE TERMINATED OUTSIDE WITH S.S. MESH SCREEN AND COVERED WITH 1–1/2" THICK UL LISTED FIRE RATED BLANKET WITH ZERO CLEARANCE TO COMBUSTIBLES.
19. NOT USED.
20. NOT USED.
21. 1–1/4" DRAIN PIPING FROM THE 6"ø FUNNEL IN THE SPACE ROOM ABOVE, FURNISHED WITH ELECTRIC HEAT TRACING, 1–1/2" 1–1/2" THICK FIBERGLASS INSULATION AND PVC COVER JACKET. TERMINATE DRAIN PIPING 2'–0" ABOVE FINISHED GRADE.
22. 4"ø CLOTHES DRYER VENT KIT, EQUAL TO "BROAN", TERMINATED WITH PITCHED ROOF CAP. FURNISHED & INSTALLED BY THE OWNER'S MECHANICAL CONTRACTOR.



COMBINATION BOILERS/WATER HEATERS PIPING SCHEMATIC DIAGRAM

GENERAL NOTES

1. – THE INFORMATION SHOWN ON THIS DRAWING IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THIS CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THIS DRAWING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO SUBMITTING HIS BID.
2. – THIS CONTRACTOR IS REQUIRED TO PERFORM THIS WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, ORDINANCES, ETC., AND TO MEET THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND OWNER, WHETHER OR NOT SPECIFICALLY INDICATED OR SPECIFIED ON THIS DRAWING.
3. – ALL PENETRATIONS THRU FLOOR AND WALLS SHALL BE FIRE STOPPED WITH "THOMAS AND BETTS" – FLAMESAFE, TYPE FST FIRESTOP COMPOUND OR APPROVED EQUIVALENT, CONFORMING TO ASME E814/UL1479.

REVISIONS

NO.	NATURE OF REVISION	DATE	BY
1			
2			
3			
4			
5			
6			

COPYRIGHT NOTICE

The information contained herein is the proprietary and confidential property of Dumitru T. Petrescu, P.E., LLC. Reproductions, publication, distribution or duplication in whole or in part requires the written permission of the above parties.
Copyright 2014, All Rights Reserved.

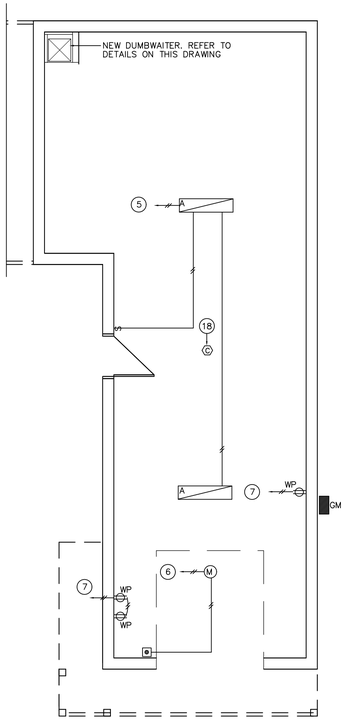
Project Engineer:
DUMITRU T. PETRESCU, P.E., LLC
Mechanical & Electrical Consulting Engineers
567 Rayzoe Terrace, Hamden, CT 06514-1008
(203) 287-9995

CONTRACTOR:

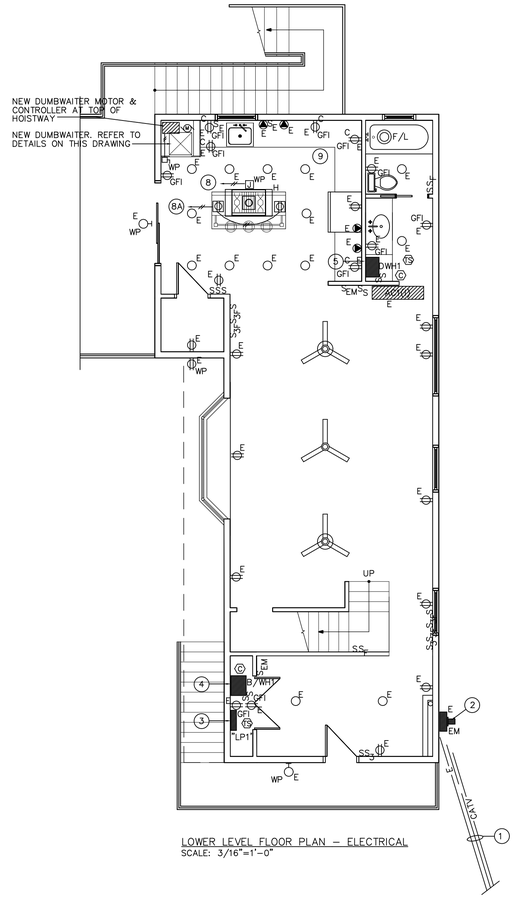
Project:
REHABILITATION/RECONSTRUCTION WORK FOR:
WILLIAM ZIEBELL
APPLICANT #1581
10 SILVER STREET MILFORD, CT

MECHANICAL

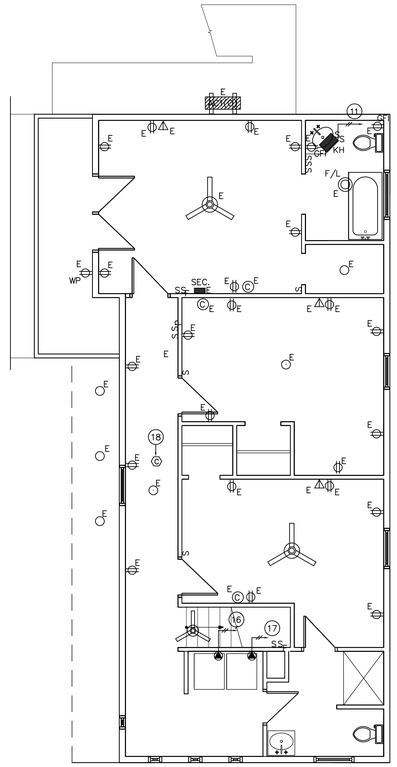
drawn by DTP
scale NOTED
date December 29, 2014
checked by DTP
project number DTP14036
drawing number M–1



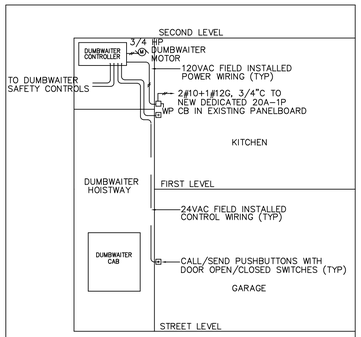
STREET LEVEL FLOOR PLAN – ELECTRICAL
SCALE: 3/16"=1'-0"



LOWER LEVEL FLOOR PLAN – ELECTRICAL
SCALE: 3/16"=1'-0"



UPPER LEVEL FLOOR PLAN – ELECTRICAL
SCALE: 3/16"=1'-0"



NEW DUMBWAITER DETAIL – ELECTRICAL
NTS

SCOPE OF WORK – DUMBWAITER

1. – THIS CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE CONDITIONS, PRIOR TO SUBMITTING HIS/HER BID.
2. – ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE 2005 CONNECTICUT STATE BUILDING AND FIRE SAFETY CODES, 2005 NATIONAL ELECTRICAL CODES, 2005 CONNECTICUT ELEVATOR CODE, 2009 INTERNATIONAL ENERGY CONSERVATION CODE, 2009 & 2011 CONNECTICUT AMENDMENTS TO THE STATE BUILDING AND FIRE SAFETY CODES, STANDARDS, RULES & REGULATIONS, OTHER APPLICABLE CODES, STANDARDS, REGULATIONS, ORDINANCES, ETC., AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION. THIS CONTRACTOR SHALL BE A LICENSED ELECTRICAL CONTRACTOR AND SHALL BE RESPONSIBLE TO OBTAIN A CONSTRUCTION PERMIT, AND PAY FOR ALL APPLICABLE FEES, TAXES, TESTS, ETC., NO WORK SHALL BE PERFORMED UNTIL SHOP DRAWINGS FOR ALL EQUIPMENT, DEVICES AND MAJOR MATERIALS ARE SUBMITTED AND APPROVED IN WRITING BY THE PROJECT ENGINEER AND OWNER'S REPRESENTATIVE(S).
3. – THIS CONTRACTOR SHALL INCLUDE IN THIS WORK, WITHOUT EXTRA COSTS TO THE OWNER, ANY EQUIPMENT, DEVICES, MATERIALS, LABOR, ETC., AND ANY DRAWINGS ADDITIONS TO THESE CONTRACT DOCUMENTS, IN ORDER TO FULLY COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, STANDARDS, ORDINANCES, ETC., WHETHER OR NOT SPECIFICALLY INDICATED ON THESE CONTRACT DOCUMENTS.
4. – THIS WORK SHALL BE PERFORMED BY A QUALIFIED CERTIFIED CONTRACTOR IN THE STATE OF CONNECTICUT. THIS CONTRACTOR SHALL BE RESPONSIBLE TO GIVE ALL NECESSARY NOTICES, APPLY FOR ALL PERMITS AND PAY ALL GOVERNMENT TAXES, FEES AND OTHER COSTS IN CONNECTION WITH THIS WORK; FILE ALL NECESSARY PLANS, DOCUMENTS, AND OBTAIN ALL NECESSARY APPROVALS FROM THE STATE BUREAU OF ELEVATORS, AND LOCAL AUTHORITIES HAVING JURISDICTION, AND SHALL ARRANGE FOR ALL NECESSARY INSPECTIONS, AND FURTHER OBTAIN ALL NECESSARY CERTIFICATES.
5. – FURNISH & INSTALL NEW DUMBWAITER POWER, SAFETY CONTROLS AND AUXILIARY DEVICES WIRING/CONDUITS AS REQUIRED PER ASME/ANSI A17.1 AND 2011 NEC, ART. 620, AS INDICATED BELOW AND AS REQUIRED FOR FULL COMPLIANCE, AND AS PER THE MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY:
   - SAFETY SWITCH FOR POWER TO DUMBWAITER MOTOR & CONTROLLER, AND THE FIELD RELATED WIRING/CONDUITS FOR FULL OPERATION.
   - RELATED LOW VOLTAGE FIELD CONTROL WIRING/CONDUITS FOR FULL OPERATION TO ALL CONTROLS, SAFETY AND AUXILIARY DEVICES FURNISHED BY THE DUMBWAITER'S MANUFACTURER, SUCH AS CALL/SEND PUSHBUTTONS AT EACH LEVEL, DOOR OPEN/CLOSED SWITCHES, CAR DOOR SWITCHES, ETC., AS REQUIRED
6. – ALL POWER WIRING SHALL BE COPPER, RATED FOR 600 VOLTS WITH THHN OR THWN INSULATION. ALL SIGNALING AND COMMUNICATION WIRING SHALL BE COPPER, #16 AWG OR BETTER, TWISTED SHIELDED TYPE, UL LISTED FOR THE INTENDED TASK, UNLESS OTHERWISE NOTED. MOUNT WIRING IN EMT CONDUITS WHERE EXPOSED IN DRY AREAS OTHER THAN MECHANICAL/ELECTRICAL ROOMS. MOUNT WIRING IN STEEL GALVANIZED RIGID CONDUITS WITH LIQUIDTIGHT FITTINGS, IN MECHANICAL/ELECTRICAL ROOMS AND WHERE EXPOSED OUTSIDE. USE MC CABLE IN LIEU OF CONDUITS WHERE CONCEALED IN DRY AREAS. USE NON–METALLIC FLEXIBLE CONDUITS WITH LIQUIDTIGHT FITTINGS FOR THE LAST 2'–0" CONNECTIONS TO ALL VIBRATING EQUIPMENT.
7. – REFER TO SECTION 14 12 11 – ELECTRIC DUMBWAITER GEARED TRACTION, FOR ADDITIONAL INFO.
8. – THIS CONTRACTOR IS REQUIRED TO PROVIDE SHOP DRAWINGS, INCLUDING EQUIPMENT AND DEVICES CATALOG CUTOUTS WIRING DIAGRAMS, PROGRAMMING INSTRUCTIONS SERVICING MANUALS, ETC., AND FURTHER OBTAIN APPROVALS FROM THE ARCHITECT/ENGINER PRIOR STARTING ANY WORK.
9. – ALL EQUIPMENT AND DEVICES SHALL BE PROVIDED WITH PERMANENT ENGRAVED NAMEPLATES. ALL WIRING, CABLES & CONDUITS ARE REQUIRED TO BE IDENTIFIED EVERY TEN (10) FEET ALONG ROUTING, WITH WIRE MARKERS, AS REQUIRED PER ANSI STANDARDS. ALL PANEBOARDS SHALL BE PROVIDED WITH TYPED DIRECTORIES.
10. – THIS WORK SHALL BE DEEMED COMPLETE ONLY AFTER IS THOROUGHLY INSPECTED, TESTED, DEMONSTRATED, AND APPROVED IN WRITING BY THE STATE OF CONNECTICUT – BUREAU OF ELEVATORS, LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S REPRESENTATIVE AND ARCHITECT/ENGINEER. ALL WARRANTIES SHALL START UPON RECEIVING THESE WRITTEN APPROVALS.

SYMBOL LIST

SYMBOL	DESCRIPTION
	WALL MOUNTED FIXTURE
	WALL MOUNTED FLOOD FIXTURE
S S_3	SINGLE POLE/THREE POLE SWITCH
S_W S_{3W}	SINGLE POLE/THREE POLE SWITCH WEATHERPROOF TYPE
S_S	SERVICE SWITCH
S_{EM}	EMERGENCY SHUTDOWN SWITCH
J OR J	JUNCTION BOX
	DUPLEX/QUAD RECEPTACLE
	GARAGE DOOR PUSH BUTTON
	SAFETY/DISCONNECT SWITCH
TS	THERMAL SWITCH
C	CARBON MONOXIDE DETECTOR
WP	WEATHERPROOF
AFF	ABOVE FINISHED FLOOR
B/WH#	COMBINATION BOILER/WATER HEATER
DWH#	DOMESTIC WATER HEATER
KH	KICKSPACE HEATER
H	RANGE HOOD
E	EXISTING TO REMAIN
ER	EXISTING TO BE RELOCATED
R	EXISTING TO BE REMOVED

EQUIPMENT SELECTION

A SURFACE MOUNTED FLUORESCENT LIGHTING FIXTURE, EQUAL TO "COOPER LIGHTING", MODEL DCI–332–120V–EB81–U–WG, FURNISHED WITH 3–32W T8 LAMPS, LOW TEMPERATURE ELECTRONIC BALLAST, CLOSED TOP REFLECTOR, WIRE GUARD, UL LISTED FOR DAMP LOCATIONS.

NOTES:
1. – INSTALL LIGHTING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY.
2. – PROVIDE ALL NECESSARY ACCESSORIES, SUPPORTS, ETC., AS REQUIRED FOR AN APPROVED COMPLETE INSTALLATION.

HEAT TRACING TAPE

HEAT TRACING TAPE, WET SELF–REGULATING PIPE HEATING TAPE, EQUAL TO "RAYCHEM", MODEL H612050, RATED FOR 5W/FT OR 0.05A/FT @ 40 F & 120V/1 PH, FURNISHED WITH BUILT–IN THERMOSTAT, UL LISTED.

NOTES:
1. – INSTALL HEAT TRACING TAPE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND WARRANTY.
2. – REFER TO THE DRAWING M–1, SCOPE OF WORK, ITEM #8, TO THE EXTENT OF THE HEAT TRACING TAPE WORK.
3. – PROVIDE (2) HEAT TRACING TAPE CIRCUITS TO (2) NEW 20A–1P CIRCUIT BREAKERS IN PANELBOARD "LP1", EACH WIRED WITH 2#10+1#12G, 3/4"C.

SCOPE OF WORK

1. – THIS CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING CONDITIONS, PRIOR TO STARTING THIS WORK.
2. – ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE 2009 INTERNATIONAL RESIDENTIAL CODE, 2005 CONNECTICUT STATE BUILDING & FIRE SAFETY CODES, 2011 NATIONAL ELECTRICAL CODE, 2009, 2011, 2012 & 2013 AMENDMENTS TO THE SATE BUILDING AND FIRE SAFETY CODES, AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
3. – THIS CONTRACTOR IS REQUIRED TO APPLY AND OBTAIN ALL REQUIRED PERMITS, PAY FOR ALL FEES, TAXES AND PROVIDE ALL TESTS REQUIRED BY THE LOCAL AUTHORITIES JURISDICTION.
4. – THIS CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY LIGHTING AND POWER AS REQUIRED DURING CONSTRUCTION FOR HIS/HER WORK, AND FURTHER PAY FOR UTILITY COMPANY CHARGES. ALL POWER INTERRUPTIONS SHALL BE SCHEDULED AT AT LEAST 48 HOURS IN ADVANCE.
5. – THIS CONTRACTOR IS REQUIRED TO PROVIDE DEMOLITION, NEW SERVICE EQUIPMENT, LIGHTING FIXTURES, ACCESSORIES & SUPPORTS, POWER TO EQUIPMENT FURNISHED BY OTHERS (I.E. HVAC & PLUMBING CONTRACTORS, ETC.), JUNCTION/PULLING BOXES, WIRING/CONDUITS & SUPPORTING DEVICES, SWITCHING DEVICES, ETC., FOR COMPLETE OPERATIONAL SYSTEMS, APPROVED BY THE LOCAL AUTHORITIES HAVING JURISDICTION, OWNER'S REPRESENTATIVE AND PROJECT ENGINEER.
6. – ALL NEW ELECTRICAL EQUIPMENT, SUCH AS SERVICE EQUIPMENT, LIGHTING FIXTURES, CONDUITS, ETC., SHALL BE RESTRAINED TO THE BUILDING'S STRUCTURAL ELEMENTS, AS REQUIRED.
7. – FURNISH & INSTALL GROUNDING AND BONDING FOR ALL ELECTRICAL EQUIPMENT AND OWNER'S FURNISHED EQUIPMENT IN STRICT ACCORDANCE WITH THE 2011 NATIONAL ELECTRICAL CODE.
8. – FURNISH AND INSTALL NEW LIGHTING FIXTURES, LAMPS AND SUSPENSION ACCESSORIES. APPLY FOR ANY UTILITY COMPANY INCENTIVES/REBATES TOWARDS ENERGY EFFICIENT LAMPS/BALLASTS AND PROVIDE CREDIT TO OWNER AT PROJECT COMPLETION.
9. – ALL WIRING SHALL BE COPPER OR EQUAL, WITH THHN OR THWN INSULATION, RATED FOR 600 VOLTS. USE EMT CONDUITS BETWEEN PANELBOARDS IN DRY AREAS. USE GALVANIZED STEEL RIGID CONDUITS WITH LIQUIDTIGHT FITTINGS BETWEEN PANELBOARDS IN WET AREAS AND WHEN EXPOSED AT EXTERIOR. USE NON–METALLIC CONDUITS WITH FUSION WELDED FITTINGS BELOW GRADE. USE ROMEX/BX WIRING INSIDE THIS HOUSE.
10. – ALL WIRING, CABLES & CONDUITS ARE REQUIRED TO BE IDENTIFIED EVERY TWENTY (20) FEET ALONG ROUTING, WITH WIRE AND CONDUIT MARKERS, EQUAL TO "SETON NAMEPLATE" AND IN STRICT ACCORDANCE WITH ANSI Z53.1–1979 AND NFPA–70 REQUIREMENTS. THESE MARKERS SHALL IDENTIFY CIRCUIT NUMBER & PANELBOARD SERVING EACH INDIVIDUAL CIRCUIT. PROVIDE TYPED DIRECTORIES FOR ALL PANELBOARDS.
11. – THIS WORK SHALL BE DEEMED COMPLETE ONLY AFTER HAS BEEN THOROUGHLY INSPECTED AND APPROVED BY THE LOCAL AUTHORITIES HAVING JURISDICTION AND AND PROJECT ENGINEER. THIS CONTRACTOR IS REQUIRED TO PROVIDE THREE (3) SETS OF "AS–BUILT" DRAWINGS AND OPERATION & MAINTENANCE MANUALS, PRIOR TO PROJECT COMPLETION & COMMISSIONING. NO WORK SHALL START BEFORE THE CONTRACTOR SUBMIT SHOP DRAWINGS FOR ALL DEVICES AND ACCESSORIES, MATERIALS, ETC., AND FURTHER OBTAIN APPROVALS FROM THE ENGINEER AND OWNER'S REPRESENTATIVE.

CONSTRUCTION NOTES:

1. EXISTING ELECTRICAL, TEL./DATA & CABLE TV OVERHEAD SERVICES HAVE BEEN RE–ESTABLISHED AFTER THE HOUSE HAS BEEN RAISED. PROVIDE 5/8" DIAMETER 8'–0" LONG COPPER GROUND ROD WITH BONDED GROUND CONDUCTOR AS PER 2011 NEC REQUIREMENTS.
2. EXISTING ELECTRICAL METER RAISED ABOVE THE 500 YEARS FLOOD LEVEL.
3. EXISTING ELECTRICAL PANEL, 200A @ 120/240V, 1 PH, MCB, 30 CKTS. THE ORIGINAL 100A SERVICE PANEL WAS UPGRADED BY THE OWNER'S ELECTRICAL CONTRACTOR.
4. NEW COMBINATION WALL MOUNTED GAS–FIRED CONDENSING HOT WATER BOILER AND DOMESTIC WATER HEATER B/WH1. WIRE THE SERVICE SWITCH IN SERIES WITH THE THERMAL SWITCH AND EMERGENCY SHUTDOWN SWITCH WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
4. NEW GAS–FIRED CONDENSING DOMESTIC WATER HEATER DWH1. WIRE THE SERVICE SWITCH IN SERIES WITH THE THERMAL SWITCH AND EMERGENCY SHUTDOWN SWITCH WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
5. WIRE WITH NEW LIGHTING 2#12+1#12G TO EXISTING LIGHTING CIRCUIT.
6. WIRE THE NEW GARAGE DOOR OPENER WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
7. WIRE THE NEW RECEPTACLE OUTLETS WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
8. WIRE THE NEW RANGE HOOD FAN/LIGHTS WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
8A. WIRE NEW FLOOR RECEPTACLE OUTLETS WITH 2#12+1#12G TO NEW 20A–1P GFI CIRCUIT BREAKER IN PANEL "LP1".
9. WIRING OF ALL NEW APPLIANCES FURNISHED BY OWNER TO ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS, RECOMMENDATIONS & WARRANTY, AND AS PER THE 2011 NEC.
10. NOT USED.
11. WIRE THE NEW RANGE HOOD FAN/LIGHTS WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
12. NOT USED.
13. NOT USED.
14. NOT USED.
15. NOT USED.
16. WIRE NEW CLOTHES WASHER SPECIAL OUTLET WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
17. WIRE NEW CLOTHES DRYER SPECIAL OUTLET WITH 2#12+1#12G TO NEW 20A–1P CIRCUIT BREAKER IN PANEL "LP1".
18. NEW AC/DC CARBON MONOXIDE DETECTOR WTH VISUAL & AUDIBLE ALARM. WIRE WITH 2#12+1#12G TO EXISTING LIGHTING CIRCUIT PRIOR TO ANY SWITCHES OR OTHER MEANS OF DISCONNECT.

GENERAL NOTES

1. – THE INFORMATION SHOWN ON THIS DRAWING IS BASED UPON THE INFORMATION SHOWN ON THE BUILDING PLANS AND LIMITED FIELD INVESTIGATIONS AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THIS CONTRACTOR SHALL VERIFY THE INFORMATION INDICATED ON THIS DRAWING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO SUBMITTING HIS BID.
2. – THIS CONTRACTOR IS REQUIRED TO PERFORM THIS WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, ORDINANCES, ETC., AND TO MEET THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND OWNER, WHETHER OR NOT SPECIFICALLY INDICATED OR SPECIFIED ON THIS DRAWING.
3. – ALL PENETRATIONS THRU FLOOR AND WALLS SHALL BE FIRE STOPPED WITH "THOMAS AND BETTS" – FLAMESAFE, TYPE FST FIRESTOP COMPOUND OR APPROVED EQUIVALENT, CONFORMING TO ASME E814/UL1479.

REVISIONS

NO.	NATURE OF REVISION	DATE	BY
1			
2			
3			
4			
5			
6			

COPYRIGHT NOTICE

The information contained herein is the proprietary and confidential property of Dumitru T. Petrescu, P.E., LLC. Reproductions, publication, distribution or duplication in whole or in part requires the written permission of the above parties.
Copyright 2011, All Rights Reserved.

Project Engineer:
DUMITRU T. PETRESCU, P.E., LLC
Mechanical & Electrical Consulting Engineers
567 Rayzoe Terrace, Hamden, CT 06514-1008
(203) 287-9995

CONTRACTOR:

Project:
REHABILITATION/RECONSTRUCTION WORK FOR:
WILLIAM ZIEBELL
APPLICANT #1581
10 SILVER STREET MILFORD, CT

ELECTRICAL

drawn by: DTP
scale: NOTED
date: December 29, 2014
checked by: DTP
project number: DTP14036
drawing number: E–1