

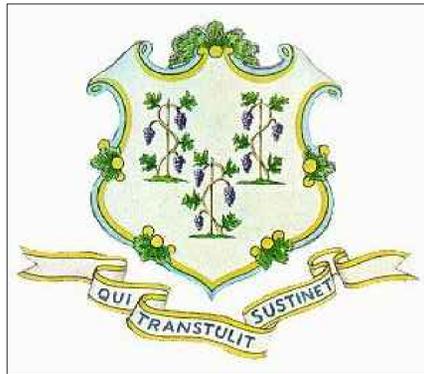
THE STATE OF CONNECTICUT DEPARTMENT OF HOUSING (DOH) COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR) OWNER OCCUPIED REHABILITATION and REBUILDING PROGRAM (OORR)



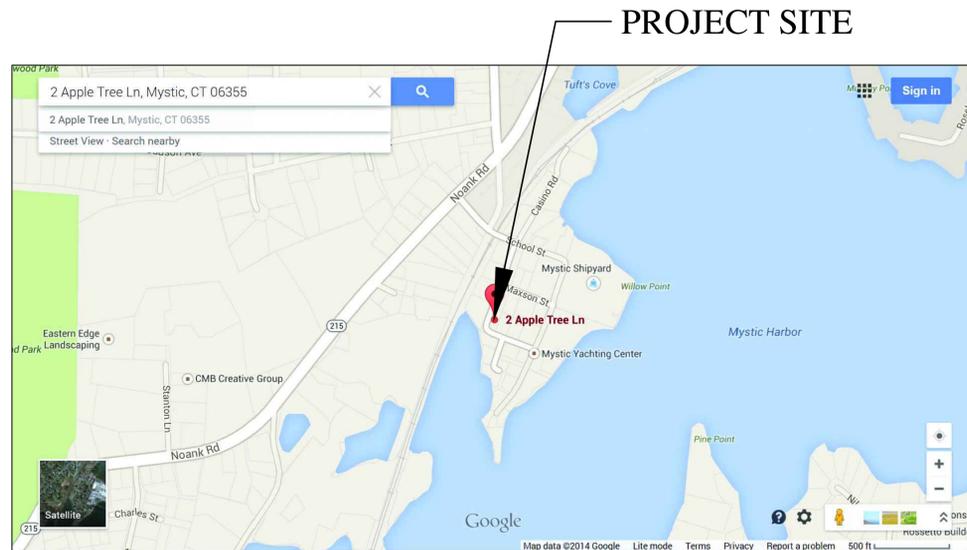
January 26, 2015

csa project 1347-22

Issued for:
Bidding and Construction



Smith Residence - Mitigation, Rehabilitation and Reconstruction Application No. 2011 2 Appletree Lane West Mystic, 06355



LOCATION PLAN

not to scale



Drawing List

TITLESHEET

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- E-5.0 ELECTRICAL SCHEDULES & NOTES
- E-5.1 ELECTRICAL SPECIFICATIONS



Architect

Capital Studio Architects, LLC
1379 Main Street
East Hartford, Connecticut 06108
tel: 860.289.3262 fax: 860.289.3163

Civil / Site Engineer

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PO Box 1167
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South Windsor, CT 06074
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Environmental Consultant

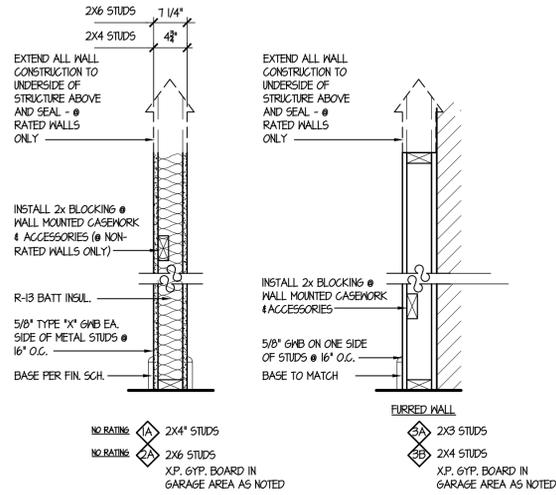
Eagle Environmental, Inc.
8 South Main Street, Suite 3
Terryville, Connecticut 06786
tel: 860.589.8257 fax: 860.585.7034

Structural Engineer

William M. Lapoint, PE
1379 Main Street
East Hartford, CT 06108
tel: 860.622.0840

MEP Engineer

Consulting Engineering Services
811 Middle Street
Middletown, CT 06457
tel: 860.632.1682 fax: 860.632.1768



GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH APPLICABLE STATE OF CONNECTICUT BUILDING AND FIRE CODES AND SAFETY CODES. BEFORE WORK BEGINS CONTRACTOR IS TO CONTACT CALL BEFORE YOU DIG AT 1-800-422-4455 TO LOCATE ALL UNDERGROUND UTILITIES.
- WORK PERMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL SECURE ALL REQUIRED LOCAL AND STATE OF CONNECTICUT PERMITS PRIOR TO COMMENCING WORK. ALL COSTS OF SECURING PERMITS SHALL BE PAID BY THE OWNER.
- ALL MATERIALS AND EQUIPMENT THAT WILL BE USED IN THE CONSTRUCTION OF THIS PROJECT ARE SUBJECT TO THE APPROVAL OF THE OWNER. ALL MATERIALS AND EQUIPMENT REQUIRED BY NOTES OR SPECIFICATIONS SHALL BE SUBMITTED IN THE FORM OF SAMPLES AND SHOP DRAWINGS FOR APPROVAL BY ARCHITECT. WHERE COLOR SELECTIONS ARE MADE, COMPLETE SAMPLES SHALL BE FURNISHED TO THE ARCHITECT.
- ALL EXISTING OR NEW CONSTRUCTION DISTURBED OR DAMAGED DURING THE COURSE OF THIS WORK SHALL BE RESTORED TO MATCH EXISTING ADJACENT SURFACES OR ORIGINAL CONSTRUCTION.
- PRECAUTION MUST BE EXERCISED AT ALL TIMES FOR THE PROTECTION OF PERSONS AND PROPERTY. THE SAFETY PROVISIONS OF APPLICABLE LAWS AND CONSTRUCTION CODES MUST BE OBSERVED. CONTRACTOR SHALL TAKE OR CAUSE TO BE TAKEN SUCH ADDITIONAL SAFETY AND HEALTH MEASURES AS ARE REASONABLY NECESSARY. MACHINERY, EQUIPMENT AND OTHER HAZARDS GUARDED IN ACCORDANCE WITH SAFETY PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, TO THE EXTENT THAT SUCH PROVISIONS ARE NOT IN CONTRADICTION OF APPLICABLE LAWS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND PRESERVE IN OPERATIONAL CONDITION ALL UTILITIES TRaversING THE WORK AREA. DAMAGE TO ANY UTILITY DUE TO WORK UNDER THIS CONTRACT SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT NO ADDITION COST TO THE OWNER. UTILITY SHUT DOWNS MUST BE COORDINATED WITH THE OWNER.
- EACH BIDDER WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF WITH THE CONDITIONS WHICH WOULD IN ANY MANNER AFFECT THE WORK UNDER THE CONTRACT AND NO LATER CLAIMS FOR EXTRA COMPENSATION FOR LABOR, MATERIALS AND EQUIPMENT WHICH COULD HAVE BEEN FORESEEN BY SUCH EXAMINATION WILL BE RECOGNIZED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASUREMENTS FOR HIS WORK AT THE SITE AND SHALL VERIFY ALL MEASUREMENTS AND DIMENSION GIVEN ON THE DRAWINGS. DO NOT SCALE DRAWINGS.
- DO NOT PROCEED WITH CHANGE IN SCOPE OF WORK WITHOUT WRITTEN APPROVAL FROM OWNER OR ARCHITECT.
- ALL DEMOLITION SHOWN ON THESE DRAWINGS IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RELOCATION WORK NECESSARY TO PROPERLY COMPLETE THE PROJECT, REGARDLESS IF DEMOLITION WORK IS SHOWN OR NOT ON DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR LEGAL DISPOSAL OF ALL CONSTRUCTION WASTE AND REMOVED ELEMENTS, UNLESS NOTED OTHERWISE ON DRAWINGS. DEBRIS SHALL BE DISPOSED OF ON A DAILY BASIS.
- THE CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SHORING, BRACING AND SHEATHING AS REQUIRED FOR SAFETY AND FOR PROPER EXECUTION OF WORK AND HAVE SAME REMOVED WHEN WORK IS COMPLETED.
- THE OWNER RETAINS THE RIGHT TO SALVAGE ANY DEMOLISHED OR CONTRACTOR REMOVED MATERIAL(S). CONTACT OWNER BEFORE REMOVAL FROM SITE.



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SMITH RESIDENCE
APPLICATION No. 2011
2 APPLETREE LANE
WEST MYSTIC, CT.

FINISH NOTES

- PRIME AND PAINT ROOM WITH 2 COATS OF PAINT-COLOR TO BE SELECTED BY OWNER/
- PRIME AND PAINT ALL WOOD MOLDINGS AND TRIM-COLOR TO BE SELECTED BY OWNER.
- DO NOT PROCEED WITH CHANGE IN SCOPE OF WORK WITHOUT WRITTEN APPROVAL FROM OWNER OR ARCHITECT.
- ALL FINISHES TO BE SELECTED BY OWNER.

DEMOLITION NOTES:

- ALL DEMOLITION SHOWN ON THESE DRAWINGS IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RELOCATION WORK NECESSARY TO PROPERLY COMPLETE THE PROJECT, REGARDLESS IF DEMOLITION WORK IS SHOWN OR NOT ON DRAWINGS.
- ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LATEST STATE OF CONNECTICUT BUILDING AND FIRE CODES (SEE CODE DATA).
- WORK PERMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL SECURE ALL REQUIRED LOCAL AND STATE OF CONNECTICUT PERMITS PRIOR TO COMMENCING WORK. ALL COSTS OF SECURING PERMITS SHALL BE PAID BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR LEGAL DISPOSAL OF ALL CONSTRUCTION WASTE AND REMOVED ELEMENTS, UNLESS NOTED OTHERWISE ON DRAWINGS. DEBRIS SHALL BE DISPOSED OF ON A DAILY BASIS.
- ALL EXISTING OR NEW CONSTRUCTION DISTURBED OR DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING ADJACENT SURFACES OR ORIGINAL CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SHORING, BRACING AND SHEATHING AS REQUIRED FOR SAFETY AND FOR PROPER EXECUTION OF WORK AND HAVE SAME REMOVED WHEN WORK IS COMPLETED.
- THE OWNER RETAINS THE RIGHT TO SALVAGE ANY DEMOLISHED OR CONTRACTOR REMOVED MATERIAL(S). CONTACT OWNER BEFORE REMOVAL FROM SITE.

DRAWING NOTES:

- CONTRACTOR TO FIELD MEASURE ALL SPACES AND VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.
- NOTIFY ARCHITECT IMMEDIATELY OF DISCREPANCIES BETWEEN DRAWINGS AND GENERAL CONDITIONS.
- DRAWINGS ARE + OR - AND ARE BASED ON BEST INFORMATION AVAILABLE AT THE TIME OF PRODUCTION.
- DO NOT SCALE DRAWINGS.
- DO NOT PROCEED WITH CHANGE IN SCOPE OF WORK WITHOUT WRITTEN APPROVAL FROM OWNER OR ARCHITECT.

SCOPE OF WORK

- REFER TO SPECIFICATIONS FOR COMPLETE DETAILED DESCRIPTIONS.
- BASE BID ITEMS:**
- ELEVATION OF EXISTING STRUCTURE
 - SELECTIVE DEMOLITION, INCLUDING REMOVAL OF ALL EXISTING FOUNDATION COMPONENTS, REMOVAL OF FIREPLACE AND ITEMS RELATED TO REMOVAL OF EXISTING DECK AND STAIRS. REMOVE EXISTING BULKHEAD DOOR. DISPOSAL OF EXISTING OIL TANK (SEE ENVIRONMENTAL INFO)
 - INSTALL NEW FOUNDATION AT GARAGE, PIER SUPPORTS UNDER EXISTING STRUCTURE.
 - RELOCATION OF EXISTING UTILITIES (REFER TO MECHANICAL DRAWINGS)
 - REPLACEMENT AND ELEVATE DECK AND STAIRS.
 - PATCH AND REPAIR AREA OF CHIMNEY REMOVAL.
 - CONSTRUCTION OF NEW ROOM AT MAIN FLOOR, CONSTRUCTION OF NEW INTERIOR STAIRS.
 - INSTALLATION OF NEW WINDOWS
 - PRIME AND PAINT NEW AREAS.
 - INSTALLATION OF NEW SIDING AS NECESSARY.
 - EXTEND DOWNSPOUTS WHERE SHOWN ON PLANS.

date	description	no.
revisions		

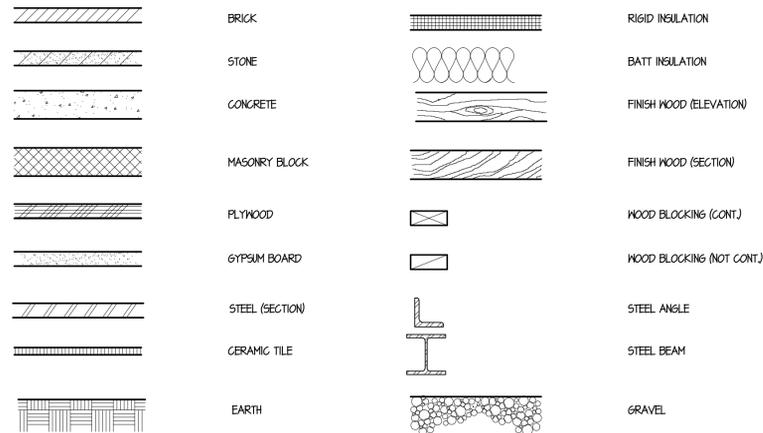
GENERAL INFORMATION

A-0.0

date drawn	26 JAN 2015
scale	PM/JRP/BD AS SHOWN
checked	PM
project no.	1347-22
application no.	2011

5 PARTITION TYPES

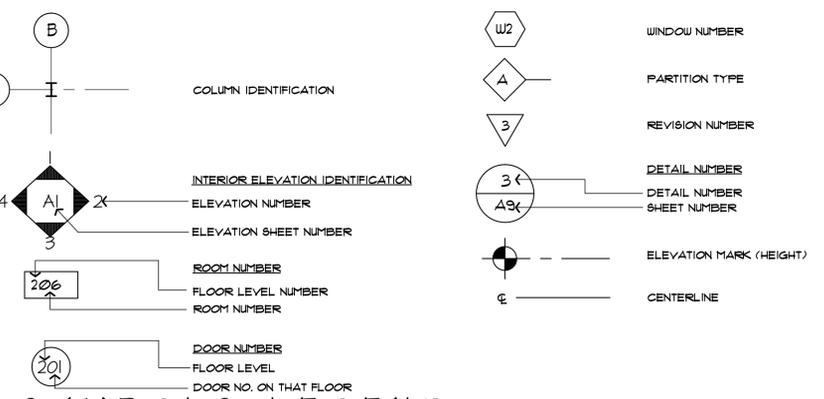
A-0.0 SCALE: NO SCALE



4 MATERIALS LEGEND

A-0.0 SCALE: NO SCALE

A.C.T.	ACOUSTICAL CEILING TILE	I.D.	INSIDE DIAMETER
ALT.	ALTERNATE	INSUL.	INSULATION
ALUM.	ALUMINUM	JAN.	JANITOR
ARCH.	ARCHITECTURAL	JT.	JOINT
ASB.	ASBESTOS	KIT.	KITCHEN
A.T.	ASPHALT TILE	LAM.	LAMINATED
®	AT	L.P.	LOW POINT
B.C.	BRICK COURSE	LCKR.	LOCKER
BD.	BOARD	MAS.	MASONRY
B.F.	BOTTOM OF FOOTING	MAT.	MATERIAL
BLDG.	BUILDING	MAX.	MAXIMUM
CAB.	CABINET	M.C.	MASONRY COURSE
C/C	CENTER TO CENTER	MECH.	MECHANICAL
C.T.	CERAMIC TILE	MEM.	MEMBRANE
C.J.	CONTROL JOINT	MFR.	MANUFACTURER
C.L.	CENTER LINE	MIN.	MINIMUM
CLG.	CEILING	MIR.	MIRROR
COL.	COLUMN	MISC.	MISCELLANEOUS
COMP.	COMPACTED	M.O.	MASONRY OPENING
CONC.	CONCRETE	N.I.C.	NOT IN CONTRACT
CONN.	CONNECTION	NO.	NUMBER
CONT.	CONTINUOUS	N.T.S.	NOT TO SCALE
CORR.	CORRIDOR	O/C	ON CENTER
CSK.	COUNTERSINK	O.D.	OUTSIDE DIAMETER
D.F.	DRINKING FOUNTAIN	OPNG.	OPENING
DET.	DETAIL	OPP.	OPPOSITE
DNG.	DRAWING	P.T.	PRESSURE TREATED
DN.	DOWN	R.	RISER (RADIUS)
DP.	DAMP PROOFING	RAD.	RADIATOR
ELECT.	ELECTRICAL	R.B.	RUBBER BASE
E.J.	EXPANSION JOINT	R.D.	ROOF DRAIN
ELEV.	ELEVATION (ELEVATOR)	REF.	REFERENCE
E.P.	ELECTRICAL PANEL	REINF.	REINFORCING
EQUIP.	EQUIPMENT	R.L.	RAIN LEADER
E.M.C.	ELECTRIC WATER COOLER	R.M.	ROOM
EXP.	EXPANSION	SIM.	SIMILAR
F.A.P.	FIRE ALARM PANEL	SPEC.	SPECIFICATION
F.D.	FLOOR DRAIN	STL.	STEEL
F.E.	FIRE EXTINGUISHER	STRUCT.	STRUCTURAL
F.H.C.	FIRE HOSE CABINET	STOR.	STORAGE
FIN.	FINISH	SUSP.	SUSPENDED
FL.	FLOOR	TERR.	TERRAZZO (TERRACE)
F/M	FACE OF MASONRY	T&G.	TONGUE AND GROOVE
F/F	FACE OF FRAMING	THRESH.	THRESHOLD
FDN	FOUNDATION	T.	TREAD
F.R.	FIRE RATED	T/S	TOP OF SLAB
FTG.	FOOTING	T/W	TOP OF WALL
G.M.U.	GLAZED MASONRY UNIT	TYP.	TYPICAL
GNB	GYPSUM WALLBOARD	V.C.T.	VINYL COMPOSITE TILE
GALV.	GALVANIZED	V.B.	VINYL BASE
GL.	GLASS	VERT.	VERTICAL
GLZ.	GLAZING	VEST.	VESTIBULE
GYP. BD.	GYPSUM WALL BOARD	V.W.C.	VINYL WALL COVERING
HGT.	HEIGHT	W	WITH
H.M.	HOLLOW METAL	W.C.	WATER CLOSET
H.P.	HIGH POINT	WD.	WOOD
HDWD.	HARDWOOD	WIND.	WINDOW
HDWR.	HARDWARE	WP.	WATERPROOFING



3 SYMBOLS LEGEND

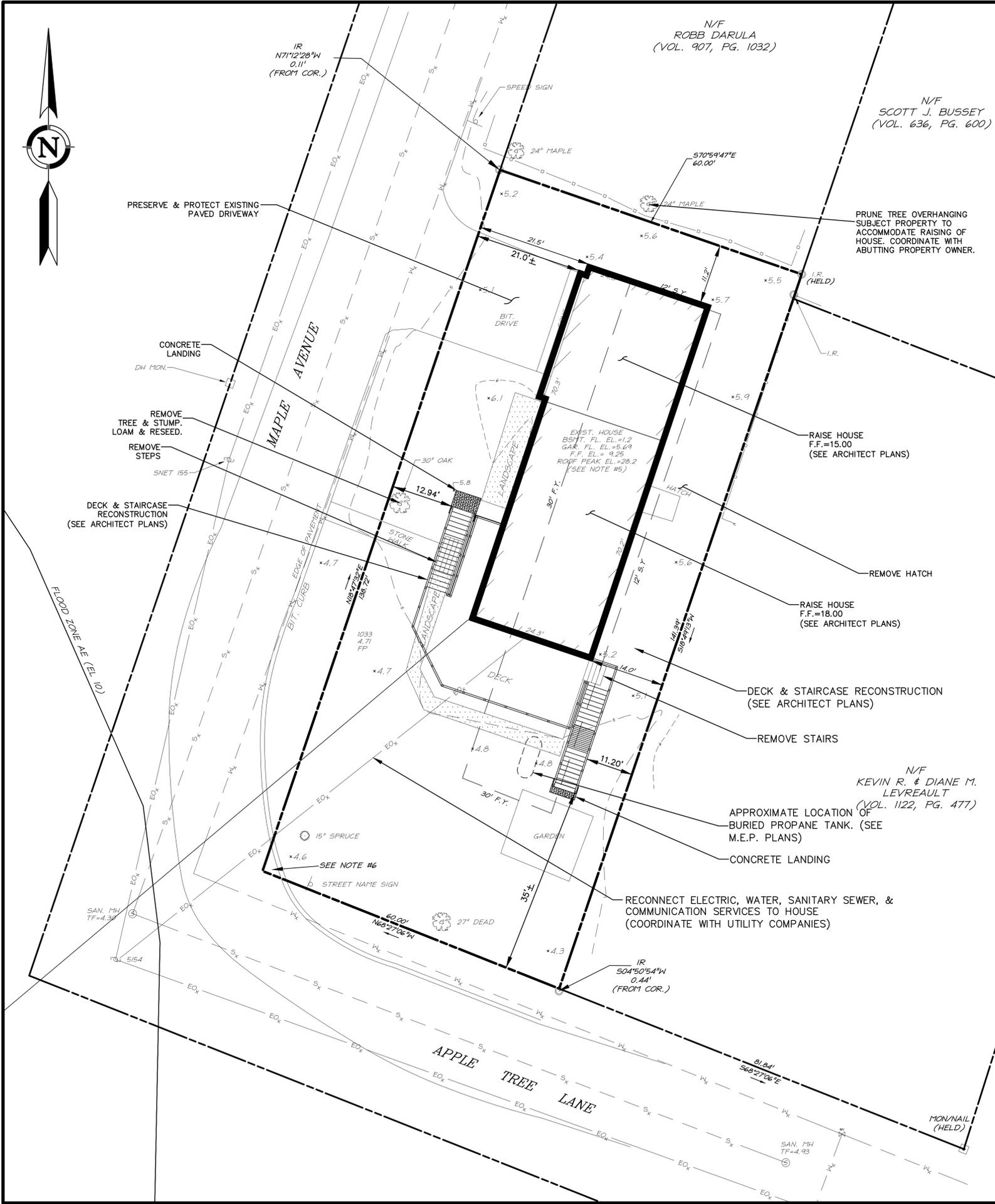
A-0.0 SCALE: NO SCALE

2 ABBREVIATIONS

A-0.0 SCALE: NO SCALE

1 NOTES

A-0.0 SCALE: NO SCALE

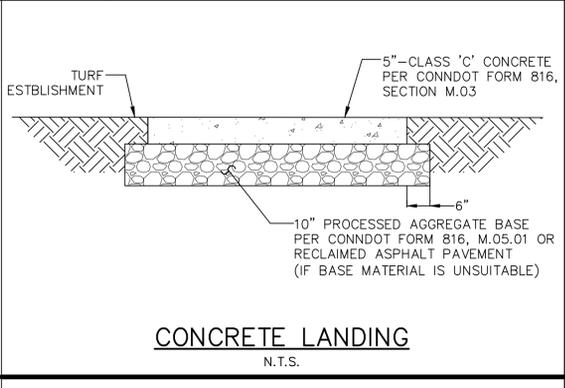
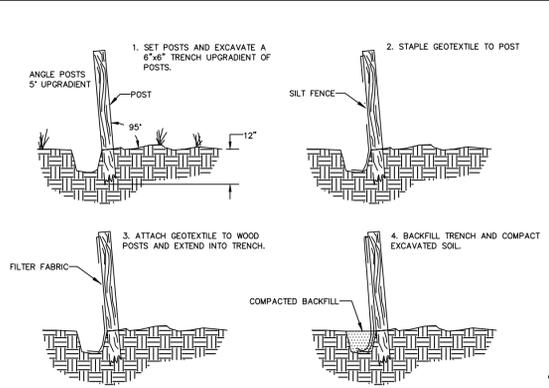
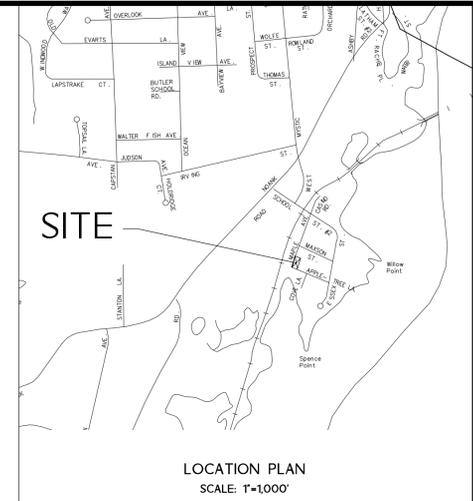


Zoning Information

ZONE: RS-12 Residential

ITEM	REQUIRED	EXISTING CONDITIONS	PROPOSED CONDITIONS
Minimum Lot Area	12,000 s.f.	8,398 s.f.*	8,398 s.f.*
Minimum Lot Width	80 feet	60 feet*	60 feet*
Minimum Lot Area per Dwelling Unit	12,000 s.f.	8,398 feet*	8,398 feet*
Minimum Front Yard	30 feet	21.5 feet*	11.58 feet**
Minimum Side Yard	12 feet	11.2 feet*	7.10 feet**
Minimum Rear Yard	30 feet	n/a	n/a
Maximum Building Coverage	20%	27.7%*	29.6%**
Maximum Building Height	30 feet	20.3'	29.0'

* Existing non-conformity
** Requesting variance



LEGEND

EXISTING	DESCRIPTION
COMMUNICATION	
Cx	OVERHEAD COMM. LINES (CABLE, TEL., ETC.)
DOMESTIC WATER	
Wx	WATER MAIN
WSx	WATER SERVICE
WV	WATER VALVE
FD	FIRE HYDRANT
LIGHTING	
PL	POLE MOUNTED LIGHT
NATURAL GAS	
Gx	GAS MAIN
POWER	
EOx	ELECTRICAL LINES, OVERHEAD
EUx	ELECTRICAL LINES, UNDERGROUND
UP	UTILITY POLE
PROPERTY	
---	PROPERTY LINE
O	IRON PIN
□	MONUMENT
ROADS	
—o—o—o—	GUARD RAIL
SITE FEATURES	
x x	BARBED WIRE FENCE
o o o o	CHAIN LINK FENCE
— — — —	RAIL FENCE
□ □	STOCKADE FENCE
+ +	WIRE FENCE
OR	TREE
— — — —	TREE LINE
SANITARY SEWER	
Sx	SANITARY SEWER MAIN
SM	SANITARY SEWER MANHOLE
STORM SEWER	
Dx	STORM DRAIN PIPE
DM	STORM DRAIN MANHOLE
CI	CURB INLET
CB	CATCH BASIN
TOPOGRAPHY	
95	CONTOUR
X61.95	SPOT ELEVATION
WETLANDS	
▲▲▲▲	WETLANDS LINE

NOTES:

- PROPERTY IS IN THE RS-12 ZONE.
- PARCEL CONTAINS 8,398 SQUARE FEET OR 0.193 ACRES.
- LOT IS NON-COMPLYING TO CURRENT ZONING REGULATIONS WITH RESPECT TO AREA AND YARD REQUIREMENTS.
- PROPERTY DOES FALL WITHIN THE LIMITS OF A FLOOD HAZARD ZONE AE (EL 10) AS DEPICTED ON: "FIRM FLOOD INSURANCE RATE MAP: TOWN OF GROTON, CONNECTICUT, NEW LONDON COUNTY, PANEL 528 OF 554, COMMUNITY PANEL NUMBER 09010528J, EFFECTIVE DATE: AUGUST 5, 2013. PREPARED BY FEDERAL EMERGENCY MANAGEMENT AGENCY FEDERAL INSURANCE ADMINISTRATION.
- THE EXISTING HOUSE IS NON-COMPLYING TO CURRENT ZONING REGULATIONS WITH RESPECT TO FRONT AND SIDE YARD REQUIREMENTS.
- A PORTION OF THE PAVED SURFACE OF APPLE TREE LANE ENCLOSED ONTO THE PROPERTY.
- PROPERTY IS TOGETHER WITH A RIGHT OF WAY TO THE WATER TO BE USED IN COMMON WITH OTHERS AS CONTAINED IN A "WARRANTY" DEED DATED SEPTEMBER 26, 1944 AND RECORDED IN VOLUME 109, PAGE 231.
- COORDINATE DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1983/2012 (NAD 83/2012) AND VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORDINGS SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO DESIGN PROFESSIONALS, INC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" FOR UNDERGROUND UTILITY MARKING AT LEAST TWO FULL WORKING DAYS PRIOR TO START OF CONSTRUCTION: 1-800-922-4455 OR WWW.CBYD.COM.

MAP REFERENCES:

- PROPOSED SUBDIVISION OF LAND BELONGING TO PACKER, MAXSON STREET AND APPLE TREE LN, GROTON, CONNECTICUT, SCALE: 1"=20' SHEET 1 OF 1 DATE: NOVEMBER 1996. PREPARED BY HAYWARD - HOLBROOK.
- MAP OF WILLOW POINT WEST MYSTIC, CONN. SCALE: 1"=40' JUNE 1927. PREPARED BY E.E. BUCKLIN, CIVIL ENGINEER.

SURVEY NOTES:

- THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-308-1 THRU 20-308-20 AND THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
- TYPE OF SURVEY IS A PROPERTY AND TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT THE LOCATION OF IMPROVEMENTS RELATIVE TO PROPERTY LINES.
- THIS IS A DEPENDENT RESURVEY BASED ON MAP REFERENCE #1.
- HORIZONTAL ACCURACY MEETS CLASS A-2 STANDARDS AND VERTICAL ACCURACY MEETS CLASS T-2 STANDARDS.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

LAWRENCE R. GEISLER, JR., L.S. 12327 LIC. NO.

425 SULLIVAN AVENUE
P.O. BOX 1107
SOUTH WINDSOR, CT 06074
860-291-9257 - F
www.designprofessionals.com

PREPARED FOR:
LORI ANNE SMITH
2 APPLE TREE LANE
WEST MYSTIC, CT

PROJECT NO.: 34002011
DATE: 9/19/14
DESIGN BY: LAK
CHECKED BY: LAK

LORI ANNE SMITH
2 APPLE TREE LANE
WEST MYSTIC, CONNECTICUT

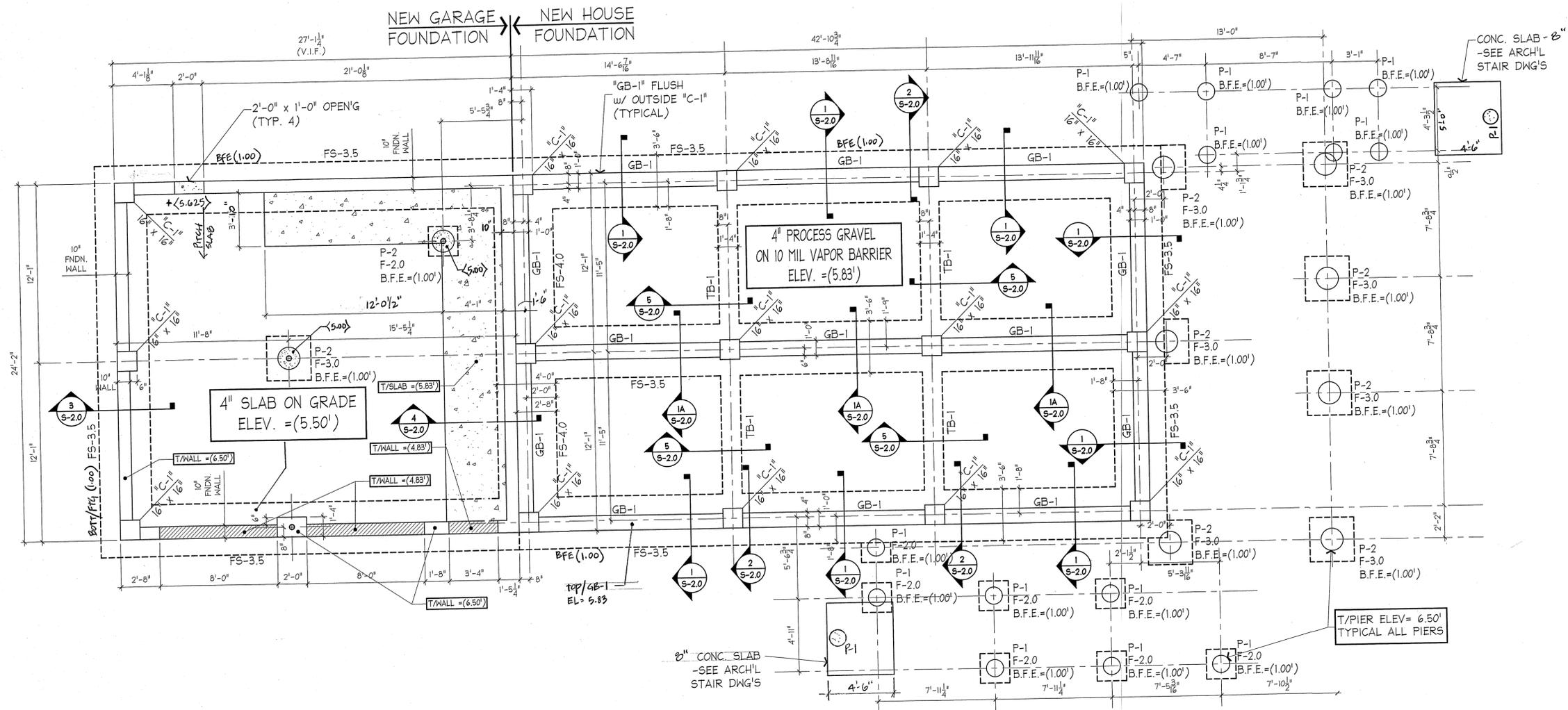
PLOT PLAN

SCALE: 0 5 10 20'
1" = 10'

SHEET
1

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

SMITH RESIDENCE
APPLICATION No. 2011
2 APPLETREE LANE
WEST MYSTIC, CT.



1 FOUNDATION PLAN
S-1.0 SCALE: 1/4"=1'-0"



NOTES:

- TOP/ SLAB-ON-GRADE ELEV. = 0'-0" (LOCAL ELEV. 5.83') UNLESS NOTED THUS (±). ALL ELEVATIONS (+ OR -)
- SLAB-ON-GRADE SHALL BE 4" THICK (3500 psi), REINFORCED w/ 6X6 W2.0XW2.0 WWF OR FIBERMESH ALTERNATIVE ON 4" PROCESS GRAVEL OVER 10 MIL POLY VAPOR BARRIER ON 8" NEW COMPACTED STRUCTURAL FILL.
- BFE INDICATES "BOTTOM OF FOOTING ELEVATION", ALL FOOTINGS TO BEAR ON 8" STRUCTURAL FILL
- FIBERMESH OPTION: @ CONCRETE SLAB, SYNTHETIC FIBER UNIFORMLY DISPERSED IN CONCRETE MIXTURE @ MANUF. RECOMMENDED RATE; NOT LESS THAN 1.5lb/cy.
- GARAGE:
4" SCHED. 40 PIPE C.R.S.
CAP PLATE: 3/8" x 8"
BASE PLATE: 1/2" x 14" x 14" w/ (4) 3/8" A.B.
ALL STEEL PRIME & RUST PROOF PAINTED

FOOTING SCHEDULE

TYPE:	SIZE:	REINF.
F-2.0	2'-0" x 2'-0" x 1'-0"	(3) #5 E.W. BOTT.
F-3.0	3'-0" x 3'-0" x 1'-0"	(3) #5 E.W. BOTT.
FS-3.5 (STRIP)	3'-6" wide x 1'-6" deep	(6) #5 L.W. #5 @ 12" S.W. (2 LAYERS)
FS-4.0 (STRIP)	4'-0" wide x 1'-6" deep	(8) #5 L.W. #5 @ 12" S.W. (2 LAYERS)

PIER/TUBE SCHEDULE

NO:	SIZE:	REINF.
P-1	14" φ TUBE	(2) #5 DOWEL INTO FOOTING
P-2	18" φ TUBE	(2) #5 DOWEL INTO FOOTING
C-1	16" x 16"	(4) #6 DOWELS (EXTEND TO "FS") w/ #3 HOOPS @ 16" oc



1379 Main Street
East Hartford, CT 06108
phone: 860.222.0840
wmlpe@aol.com

date	description	no.
ISSUED FOR BID		01/26/15

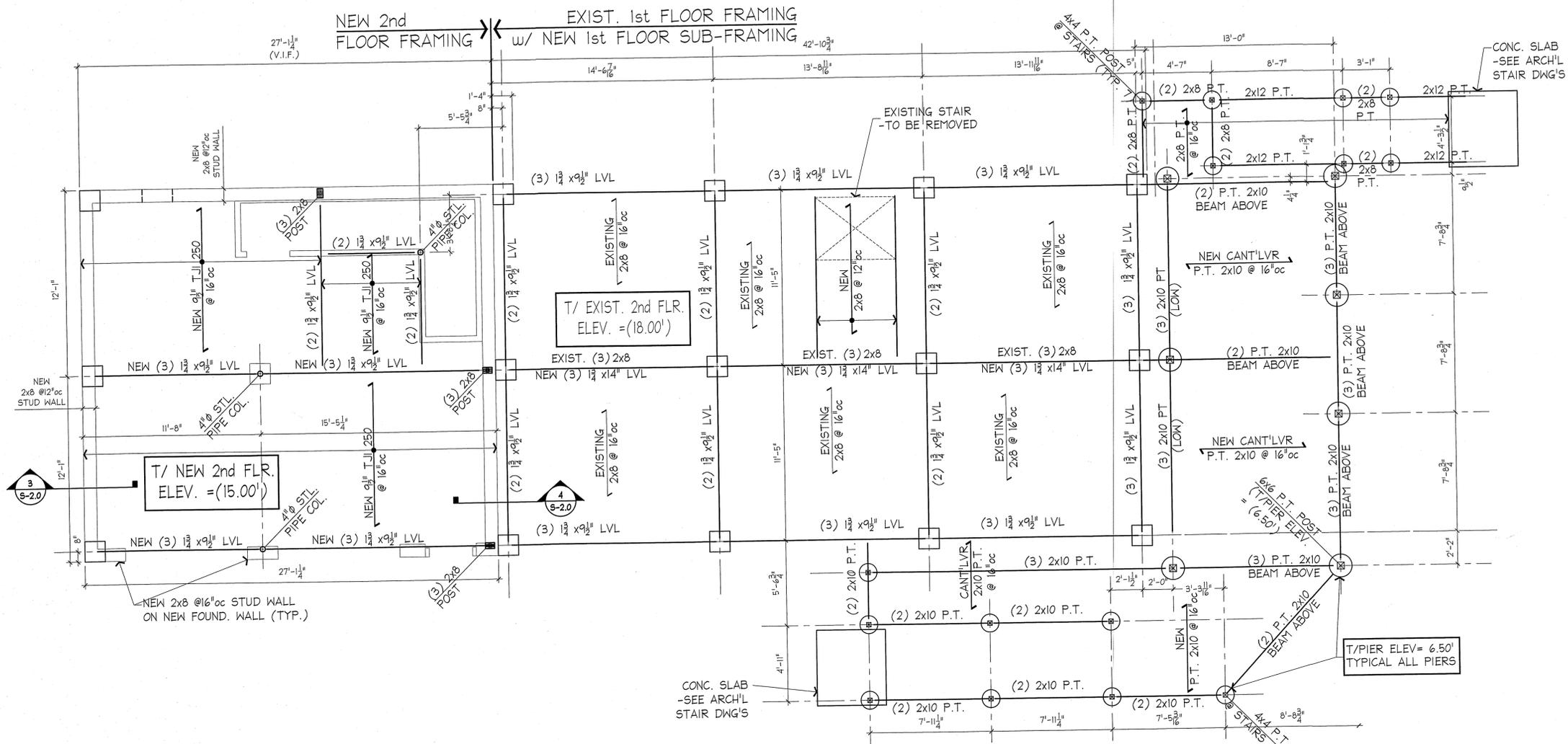
FOUNDATION PLAN

S-1.0

date: 26 JAN. 2015
drawn: JB
scale: AS SHOWN
checked: WML
project no.
application no. 2011

THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
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2 APPLETREE LANE
WEST MYSTIC, CT.



DECK NOTES:

1. ALL FASTENERS TO BE GALV. OR S.S.
2. POST CONNECTIONS:
CAP= PC2/EPC2 -SIMPSON STRONG-TIE
BASE= CBQ66 -SIMPSON STRONG-TIE

1 LOWER LEVEL w/ 1st & 2nd FLOOR FRAMING
SCALE: 1/4"=1'-0"



WML WILLIAM M. LAPONT, PE

1379 Main Street
East Hartford, CT 06108
Voice: 860.622.0840
www.capstudio.com

date	description	no.
	ISSUED FOR BID	01/26/15

1st & 2nd FLOOR FRAMING PLAN

S-1.1

date	26 JAN. 2015
drawn	JB
scale	AS SHOWN
checked	WML
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application no.	2011

STRUCTURAL NOTES:

A. GENERAL

1. ALL WORK SHALL CONFORM TO THE CT BUILDING CODES: IRC 2003, & 2007 & 2009 CONNECTICUT SUPPLEMENT, ALL FEMA Requirements and the Town of West Mystic. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED TO MAINTAIN STRUCTURAL STABILITY DURING CONSTRUCTION.
2. IF REQ'D, ALL FIELD TESTING SHALL PERFORMED BY AN ACCREDITED TESTING LABORATORY.

B. FOUNDATION

4. ALL FOUNDATIONS SHALL BEAR ON APPROVED STRUCTURAL FILL. ANY UNSUITABLE SOIL CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ARCHITECT/ENGINEER.
5. SLAB-ON-GRADE SUB-GRADE SHALL BE COMPACTED USING A VIBRATORY TAMPER OR JUMPING SOIL RAMMER AFTER THE STRUCTURAL BACKFILL HAS BEEN APPROVED.
6. PROVIDE BACKFILL MATERIAL (Submit for Approval) FOR FOUNDATION WALLS AND BELOW FOOTINGS & SHALL BE PLACED IN LAYERS NOT TO EXCEED 8". REF: BACKFILL SPECIFICATIONS.
7. WHERE BOTT/FOOTINGS ARE BELOW THE GROUNDWATER ELEVATION, PLACE 8" OF 3/8" CRUSHED STONE UNDER FOOTINGS.

C. CONCRETE (All materials to be submitted for Review before start of work)

8. CONCRETE MATERIALS ARE AS FOLLOWS: 3000 psi at WALLS, FOOTINGS, and EXTERIOR SLABS, 3500 psi at SLAB-ON-GRADE & COLUMNS/PIERS.
9. REINFORCEMENT: ASTM A615, Fy = 60 ksi.
10. CONCRETE WORK SHALL CONFORM TO ACI 301-03 & ACI 318-03.
11. MINIMUM COVER FOR REBAR:
 - 1 CONCRETE AGAINST EARTH.....3"
 - 2 CONCRETE EXPOSED TO WEATHER.....2"
 - 3 CONCRETE AT INTERIOR SLABS.....1"

12. INTERIOR FLOOR
 - BASEMENT SLAB SHALL HAVE A STEEL TROWEL FINISH. PITCH TO EXTERIOR.
 - EXTERIOR SLABS SHALL RECEIVE A COURSE BROOM FINISH. VERIFY WITH OWNER ON SLAB TREATMENT BEFORE PRECEDING.
13. APPLY CURING COMPOUND TO SLABS IMMEDIATELY FOLLOWING TROWELING. Cure-N-Seal #30 or EQUAL.
14. GROUT & RUB ALL EXPOSED SURFACES OF FOUNDATION WALLS WITHIN 48 HOURS OF POUR.
15. SAW CUT SLAB-ON-GRADE CONTROL JOINTS AT A MAX. (8' x 8') MAX. JOINTS SHALL BE CUT 1/4" min. and WITHIN 24 HOURS OF POUR. FILL JOINTS WITH NON SHRINK GROUT.

D. STEEL (All materials to be submitted for Review before start of work)

16. MATERIALS: (All exposed steel shall be galvanized)
 - W or HP Sections.....ASTM A992, Fy = 50 ksi.
 - PLATES, ANGLES, ETC.....ASTM A36, Fy = 36 ksi.
 - ANCHOR BOLTS (galv).....ASTM A307.
 - PIPE COLS.....ASTM A501, Fy = 36 ksi.
17. WHERE WOOD BLOCKING IS ATTACHED TO STEEL, PROVIDE 9/16" DIA HOLES AT 24" oc.

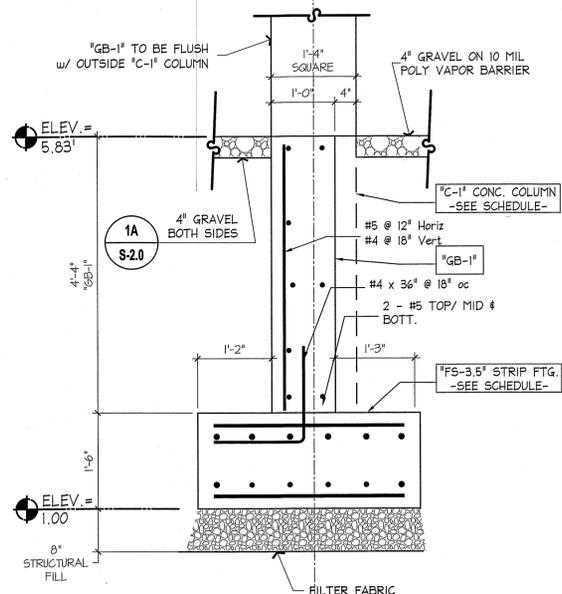
E. WOOD (All materials to be submitted for Review before start of work)

18. MATERIALS: USE HEM OR DOUG FIR-LARCH, NO. 1 OR BETTER FOR ALL CONVENTIONAL FRAMING. USE LUMBER WITH LESS THAN 19 PERCENT MOISTURE CONTENT. Design Data - Fb = 1000 psi, E = 1500 ksi
19. MATERIALS: USE LVL OR EQUAL (micro-lam) BEAMS AS INDICATED ON DRAWINGS. FOLLOW MANUF. REQUIREMENTS FOR INSTALLATION AT EXTERIOR DECK. MIN BEARING = 3 1/2" Design Data - Fb = 2800 psi, E = 2000 ksi
20. USE TJI (truss joist or Approved Equal) FLOOR TRUSSES AS INDICATED ON DRAWINGS. USE WEB STIFFENERS AND SOLID BLOCKING AT ALL BEARING POINTS AND AS REQUIRED PER MANUFACTURE. TJI'S ARE UNSTABLE UNTIL BRACED LATERALLY, PROVIDE TEMPORARY BRACING AND SHORING BEFORE ALL FLOORING IS IN PLACE. MIN. BEARING FOR TJI'S = 3 1/2".
21. USE SIMPSON (or Approved Equal) STRONG TIE JOIST HANGERS AND FRAMING CONNECTORS. SUBMIT TO ENGINEER FOR REVIEW.
22. TIE RAFTERS TO WALL PLATES WITH SIMPSON HURRICANE CONNECTORS. SEE DETAILS.
23. DOUBLE UP FLOOR JOISTS NEXT TO ALL FLOOR PENETRATIONS GREATER THAN 24".
24. DO NOT CUT HOLES IN FLOOR JOISTS WITHOUT APPROVAL FROM ENGINEER OR MANUF.
25. ANY LUMBER TOUCHING CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
26. IT IS CRITICAL THAT ALL ROOF RAFTERS, RIDGE BEAMS, HEADERS AND BEARING WALLS CARRY THEIR LOADS DOWN TO THE FOUNDATION. WHENEVER A BEAM OR HEADER BEARS ON A FRAMED WALL, INSTALL A 3-2X4 COL.(OR AS NOTED) IN THE FRAMED WALL VERTICALLY UNDER THE BEARING POINT LOAD. USE SOLIB BLOCKING BETWEEN FLOORS.
28. CONTRACTOR SHALL CONFORM TO THE "WOOD FRAME CONSTRUCTION MANUAL", 110 mph, EXPOSURE C (WFCM), FOR ALL NAILING PATTERNS, FASTENING & CONNECTIONS. SEE DWGS FOR ADDITIONAL SHEAR WALL CONNECTIONS.

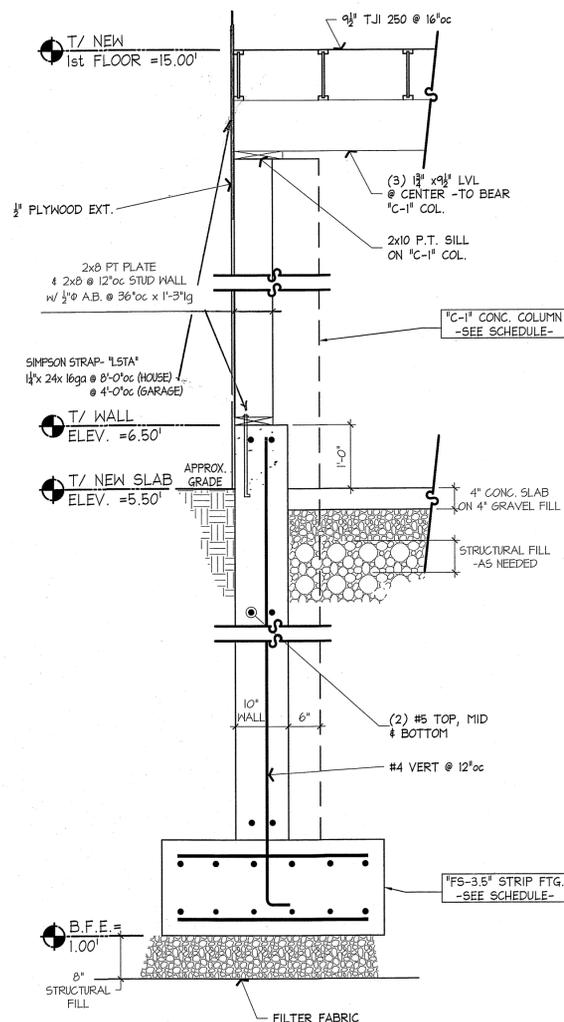
F. DESIGN CRITERIA (WEST MYSTIC, CT)

FIRST FLOOR LIVE LOAD = 40 psf
 SECOND FLOOR (Bedrooms) LIVE LOAD = 30 psf
 ATTIC FLOOR LIVE LOAD = 10 psf
 EXTERIOR DECK LIVE LOAD = 60 psf
 ROOF LIVE LOAD = 30 psf
 WIND LOAD (App K).....110 mph (3 sec)
 PRESUMPTIVE SOIL BEARING PRESSURE.....1.5 TONS/SF

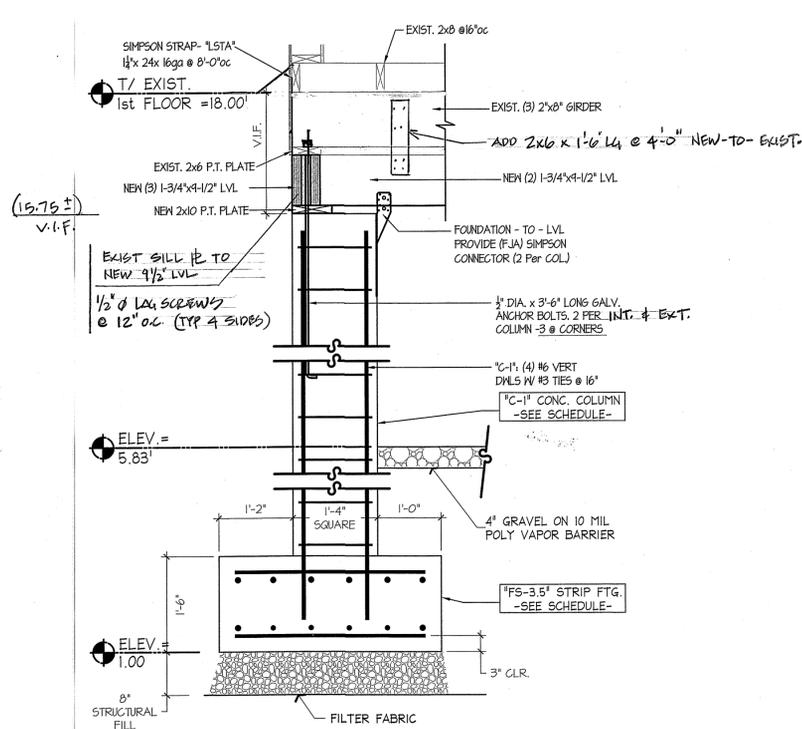
NOTE: The structural design was performed only for general conformance at this Site in West Mystic, CT, using the assumed local site conditions and general compliance with the CT State Code and based on information provided by the Architect/Owner. The Building Contractor is responsible for: dimensions to be confirmed and coordinated at the job site with the Architect & Owner, information that pertains to the fabrication process, or to the means, methods, techniques, sequences, and procedures of construction. The Contractor is responsible for all work in a safe and satisfactory manner. Any discrepancies shall be brought to the attention of the Architect/Engineer/ Owner before the start of Work.



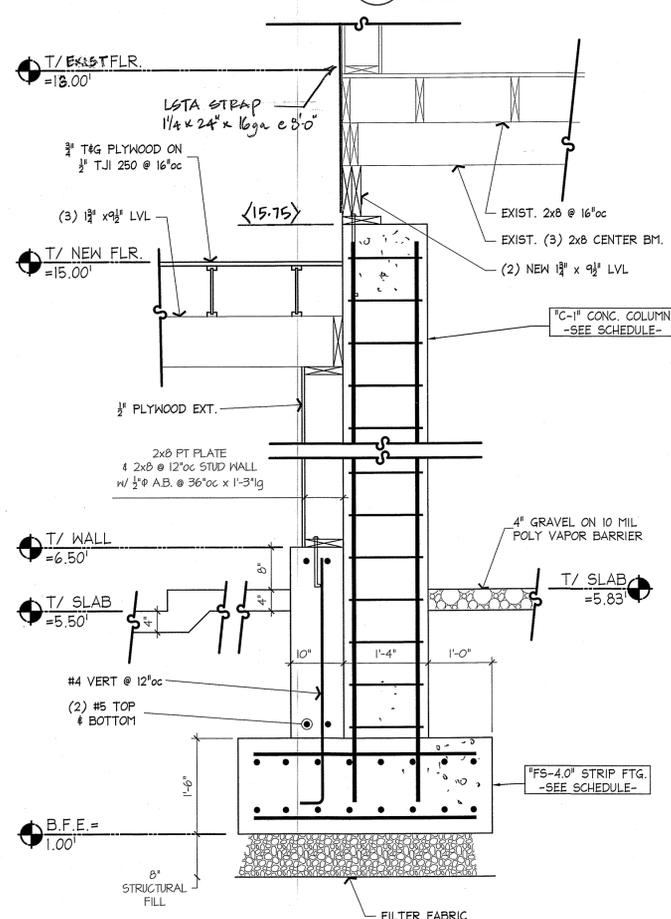
1 1A "GB-1" - TYPICAL WALL @ PERIMETER
 S-2.0 SCALE: 3/4"=1'-0"



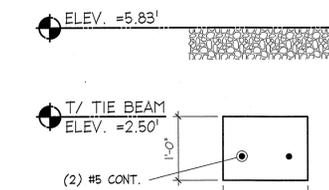
3 SECTION @ EXT. GARAGE WALL
 S-2.0 SCALE: 3/4"=1'-0"



2 "C-1" - SECTION @ PIER
 S-2.0 SCALE: 3/4"=1'-0"



4 SECTION @ EXIST/NEW WALL
 S-2.0 SCALE: 3/4"=1'-0"



5 "TB-1" CONC. TIE BEAM
 S-2.0 SCALE: 3/4"=1'-0"



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

SMITH RESIDENCE APPLICATION No. 2011 2 APPLTREE LANE WEST MYSTIC, CT.



date	description	no.
1/26/15	ISSUED FOR BID	

SECTIONS & NOTES

S-2.0

date drawn scale checked project no. application no.
 25 JAN. 2015
 JB
 AS SHOWN
 WML
 application no. 2011

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

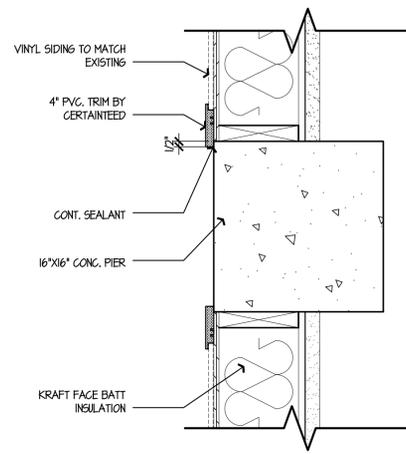
SMITH RESIDENCE
APPLICATION No. 2011
2 APPLETREE LANE
WEST MYSTIC, CT.

date	description	no.
	revisions	

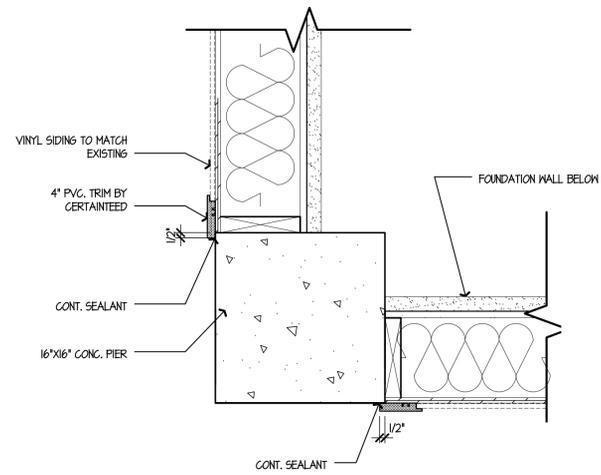
FOUNDATION PLAN

A-1.0

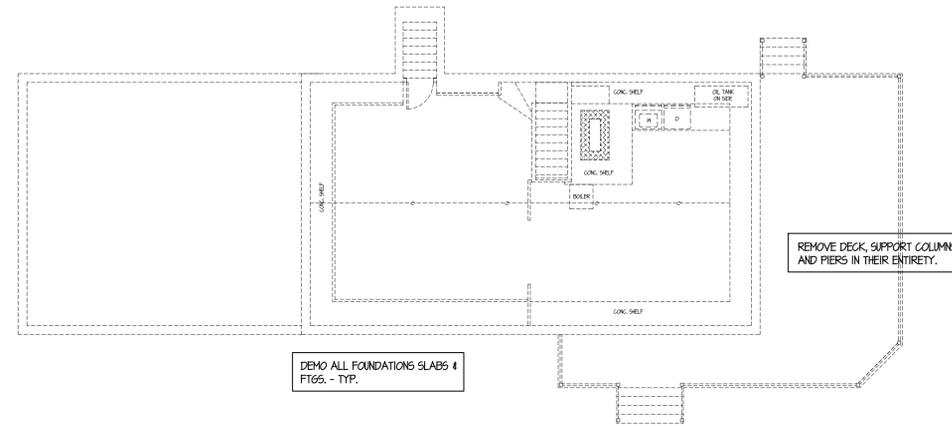
date	26 JAN 2015
drawn	PM/JRP/BD
scale	AS SHOWN
checked	PM
project no.	1347-22
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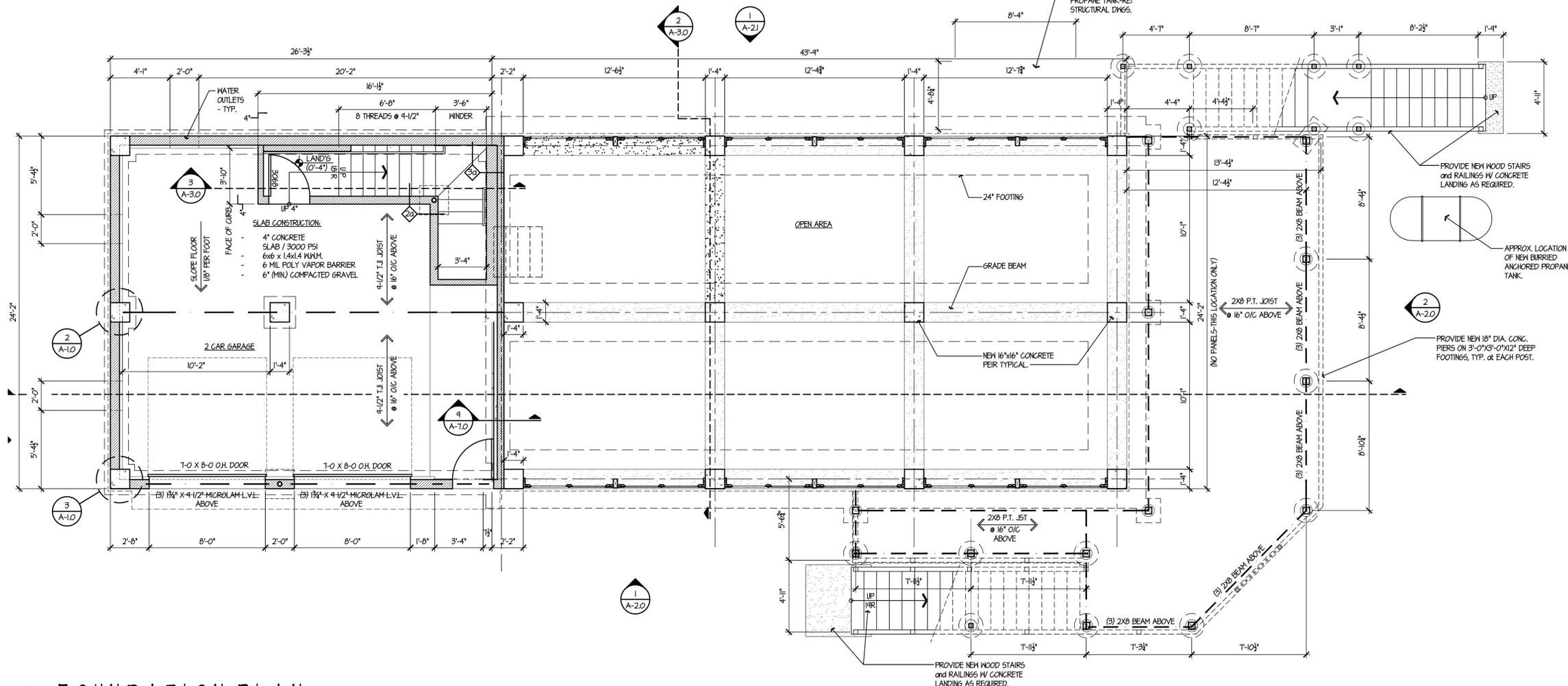
2 PLAN DETAIL
SCALE: 1/8" = 1'-0"



3 PLAN DETAIL
SCALE: 1/8" = 1'-0"



4 FOUNDATION DEMO PLAN
SCALE: 1/8" = 1'-0"



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

FOUNDATION / CONCRETE WORK NOTES:

- FOUNDATION WORK TO BE PERFORMED BY WORKMAN EXPERIENCED IN THEIR TRADE.
- ALL CONCRETE FOR WALLS AND FOOTINGS SHALL BE SHALL BE 3000 PSI CLASS CONCRETE.
- IN AREAS OF FULL UNDER SLAB & FOOTINGS, BANK RUN GRAVEL SHALL BE INSTALLED UP TO 8" BELOW THE BOTTOM OF THE SLAB AND COMPACTED IN 8" LIFTS TO 95% MAX. DRY DENSITY AS PER ASTM 1556, METHOD "D".
- REBAR SHALL BE IN ACORDANCE W/ ASTM 615, GRADE 40.
- ALL REINFORCING BARS SHALL BE PLACED AND NECESSARY BAR SUPPORTS PROVIDED, AS PER CONCRETE REINFORCING STEEL INSTITUTE STANDARD "PLACING REINFORCING BARS".
- ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" X 3/4" UNLESS OTHERWISE NOTED.
- PROVIDE 8" CRUSHED STONE UNDER FOUNDATION SLAB. CRUSHED STONE TO EXTEND 1'-0" MINIMUM BEYOND EDGE OF SLAB.
- CHAIRS AND OTHER BAR SUPPORTS IN CONTACT WITH FORMS SHALL BE CLASS "C" PLASTIC PROTECTED IN ACCORDENCE WITH E.R. S.I. MANUAL OF STANDARD PRACTICE OR SHALL BE SOLID P.V.C. BAR SUPPORTS.

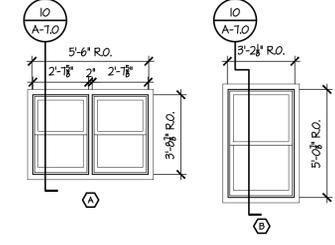
THE STATE OF CONNECTICUT
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APPLICATION No. 2011
2 APPLETREE LANE
WEST MYSTIC, CT.

WINDOW SCHEDULE

ID	UNIT	ROUGH OPENING	S.F. CLR OP'G	MAX. CLR OP'G WIDTH	MAX. CLR OP'G HEIGHT	S.F. CLR GLASS	REMARKS
A	TR0236-2H	5' 6" x 3' 8 1/8"	3.33	21 3/4"	11 3/4"	6.23	D.H. W/STORM MATCH PROTECTION & STRUCTURAL MILL
B	TR0410	3' 2-1/8" x 5' 0-1/8"	5.43	33 3/4"	25 3/4"	11.7	D.H. W/STORM MATCH PROTECTION

* ALL WINDOWS ARE ANDERSEN "400" SERIES TILT WASH WINDOWS UNLESS OTHERWISE NOTED

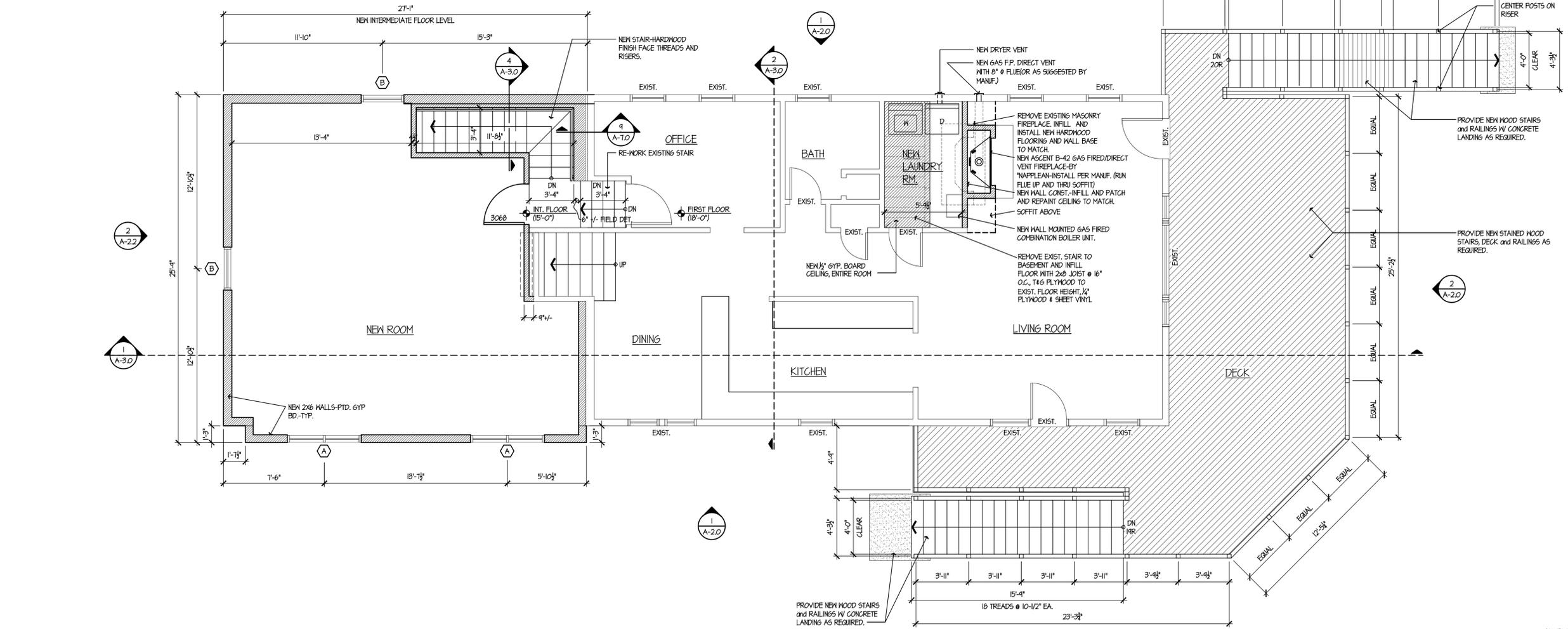
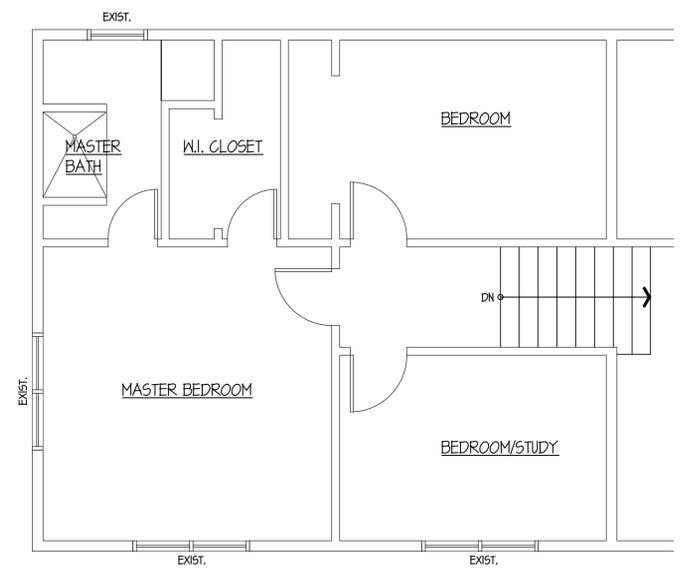


WINDOW ELEVATIONS

3 A-1.1 SCALE: 1/4" = 1'-0"

EXISTING SECOND FLOOR PLAN

2 A-1.1 SCALE: 1/4" = 1'-0"



FIRST FLOOR PLAN

1 A-1.1 SCALE: 1/4" = 1'-0"

date	description	no.
	revisions	

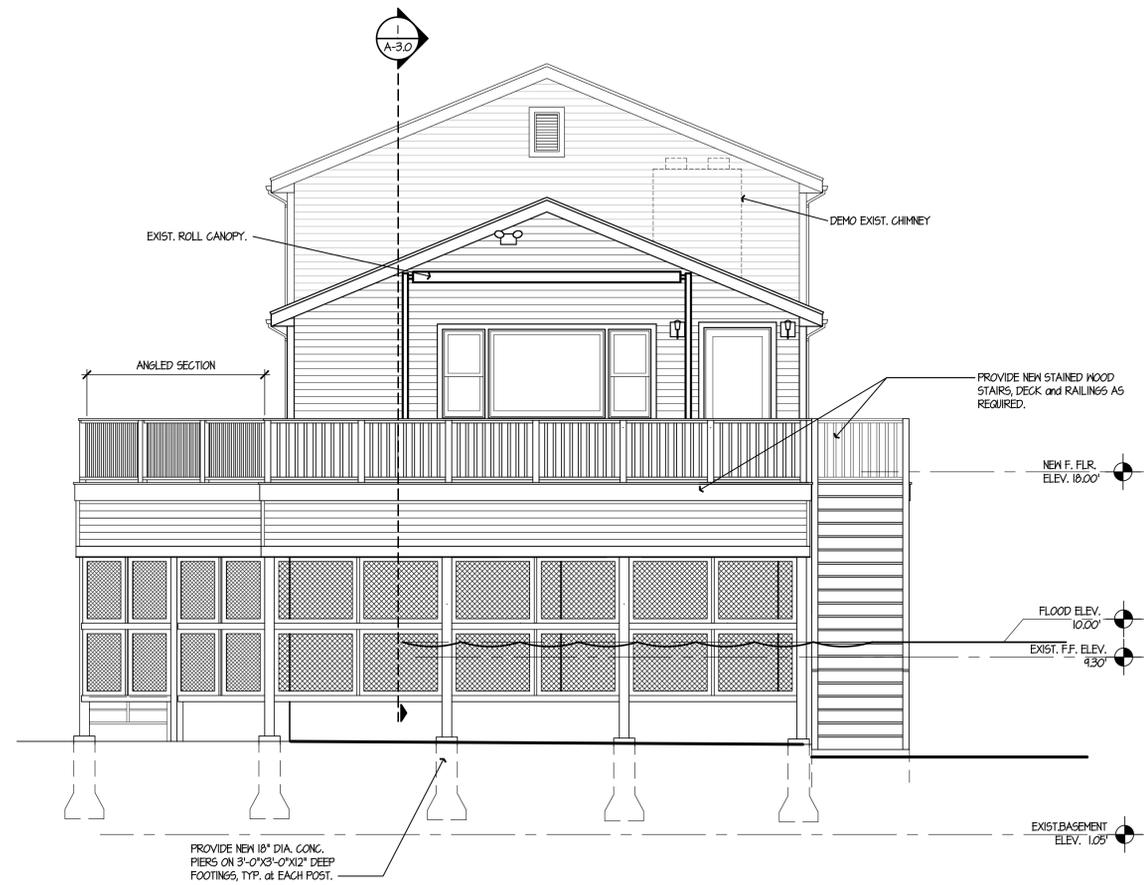
FIRST & SECOND FLOOR PLANS

A-1.1

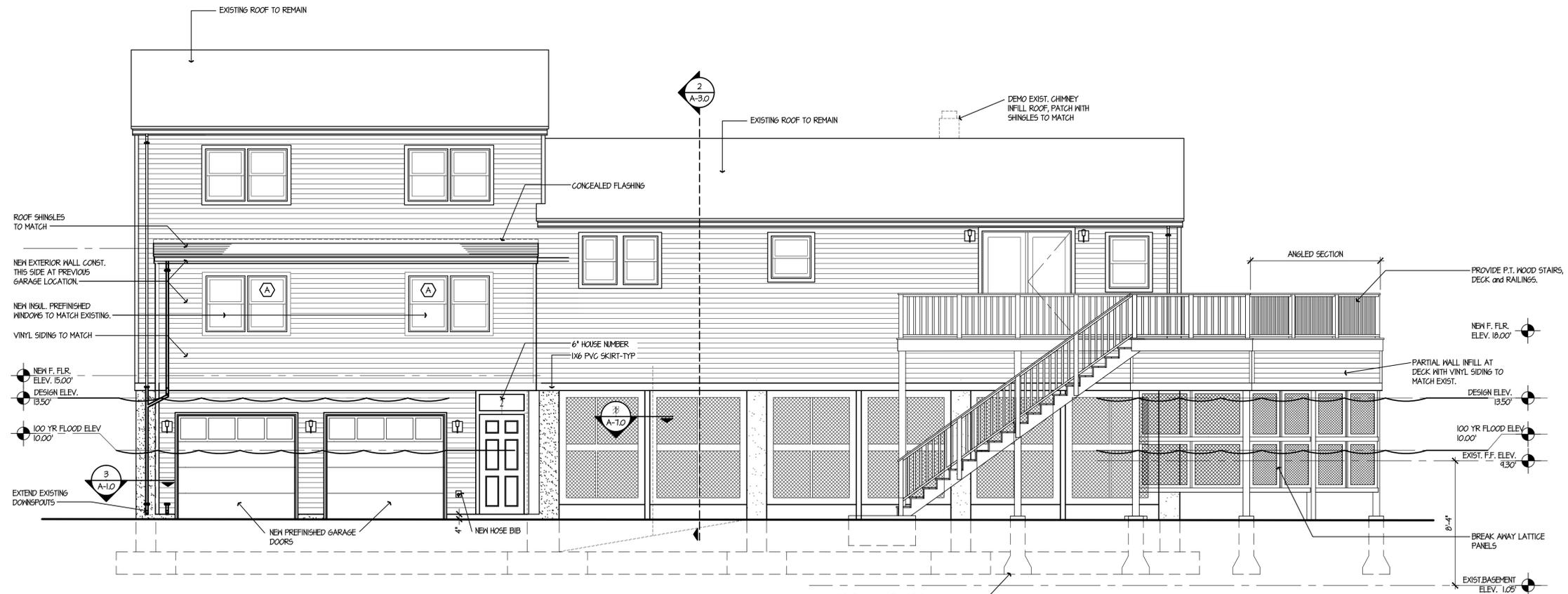
date	26 JAN 2015
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2 SOUTH ELEVATION (FACING APPLE TREE LANE)
SCALE: 1/4"=1'-0"



1 WEST ELEVATION (FACING MAPLE AVE)
SCALE: 1/4"=1'-0"

date	description	no.
	revisions	

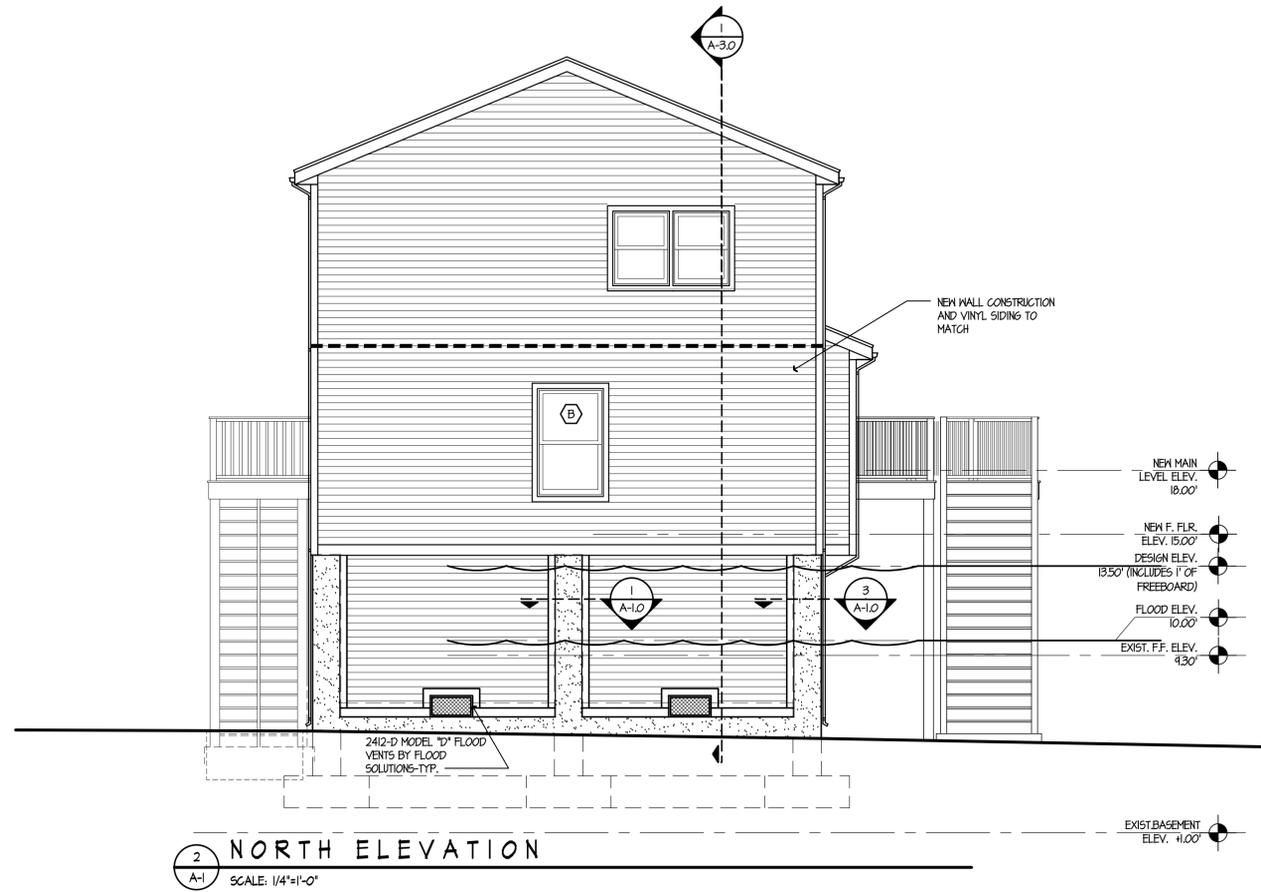
BUILDING ELEVATIONS

A-2.0

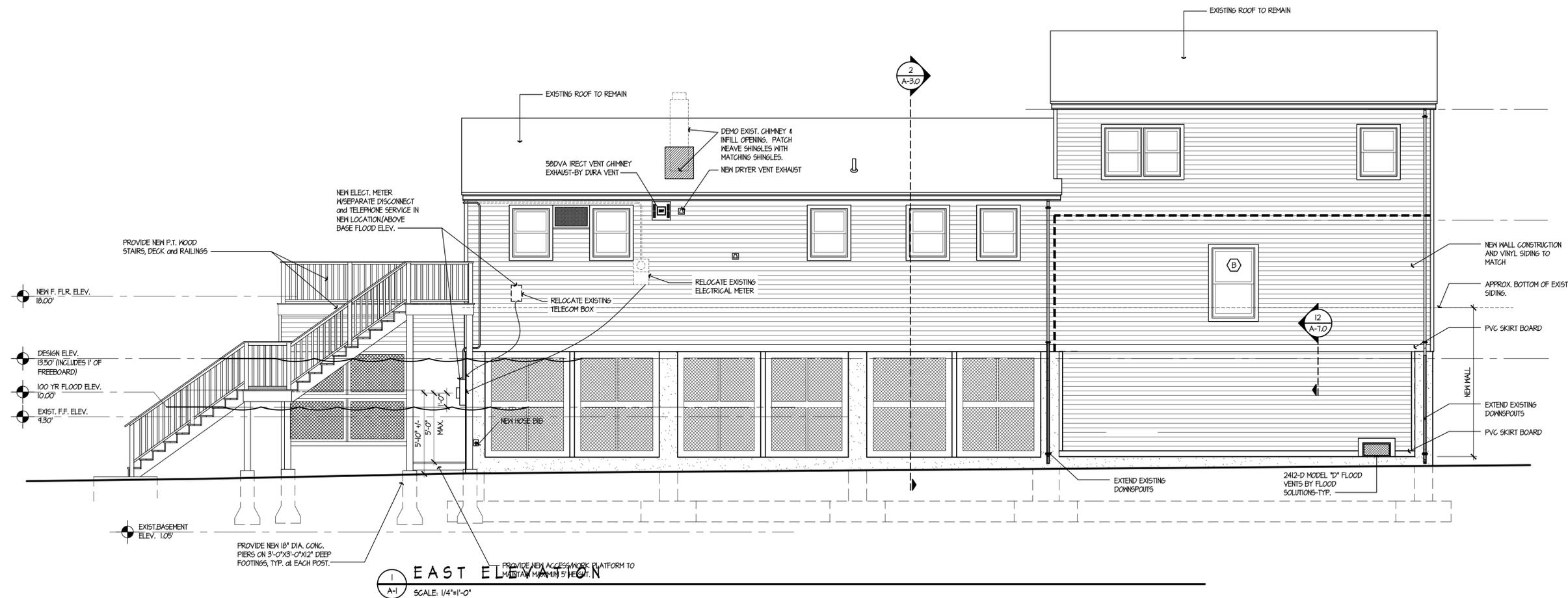
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2 NORTH ELEVATION
SCALE: 1/4"=1'-0"



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

date	description	no.
	revisions	

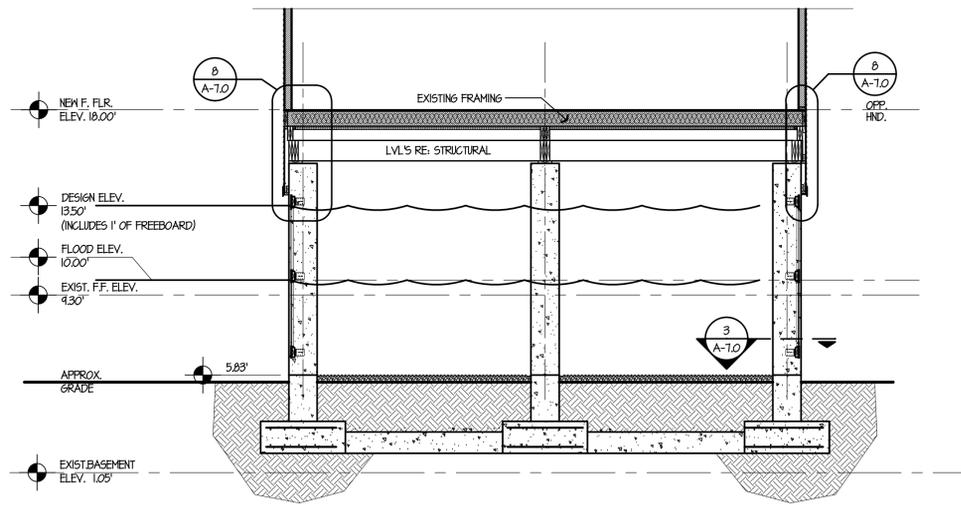
BUILDING ELEVATIONS

A-2.1

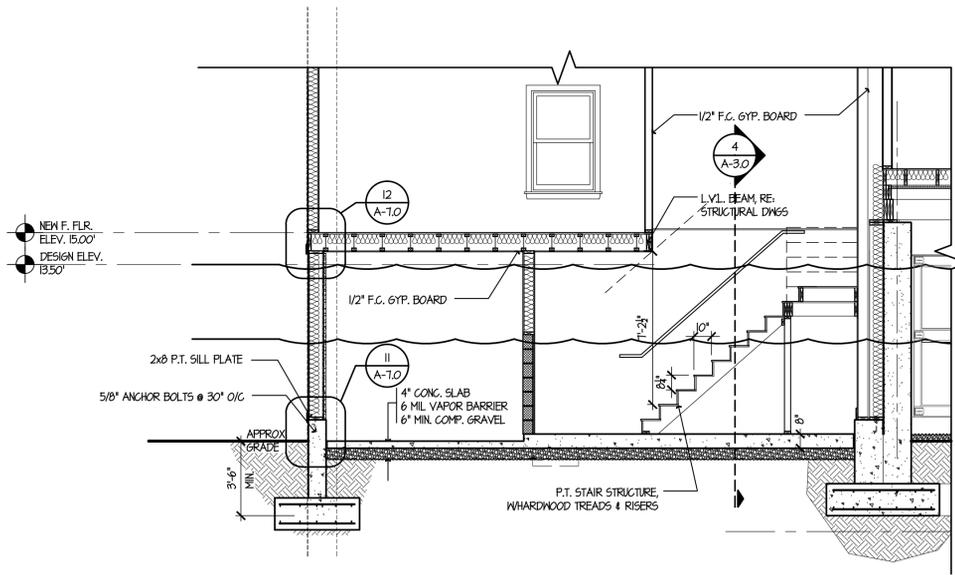
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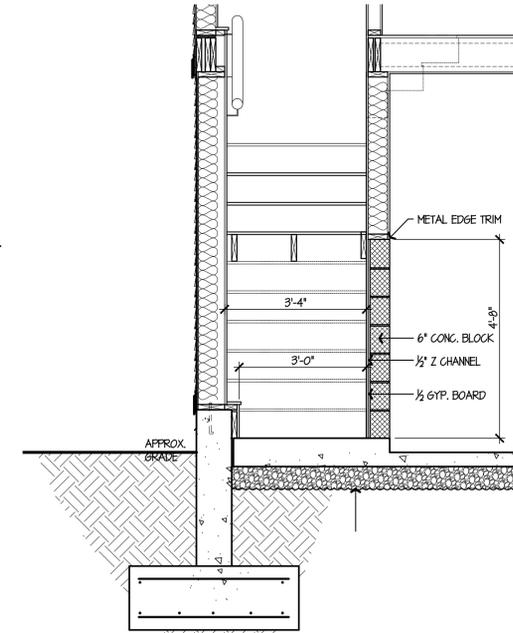
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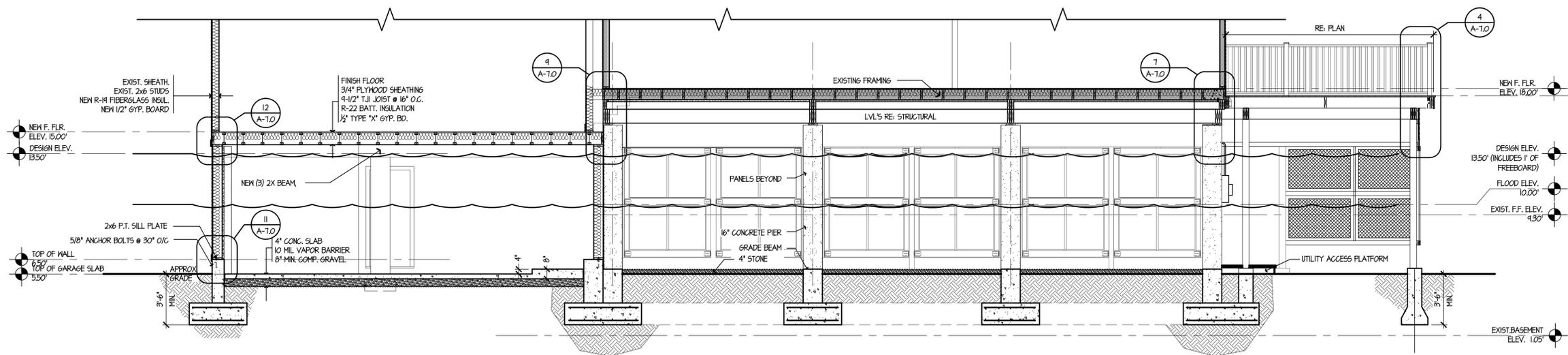
2
SECTION
SCALE: 1/4" = 1'-0"



3
SECTION
SCALE: 1/4" = 1'-0"



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



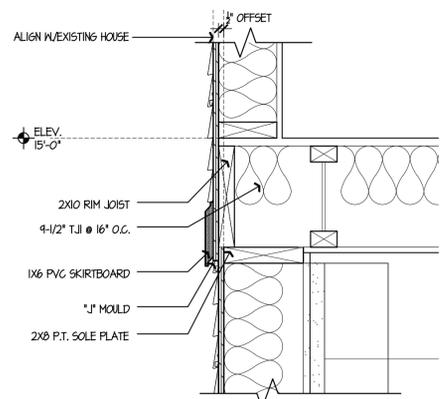
1
SECTION
SCALE: 1/4" = 1'-0"

date	description	no.
	revisions	

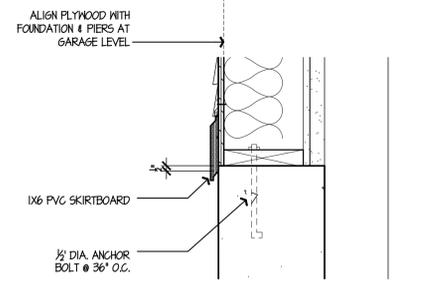
SECTIONS

A-3.0

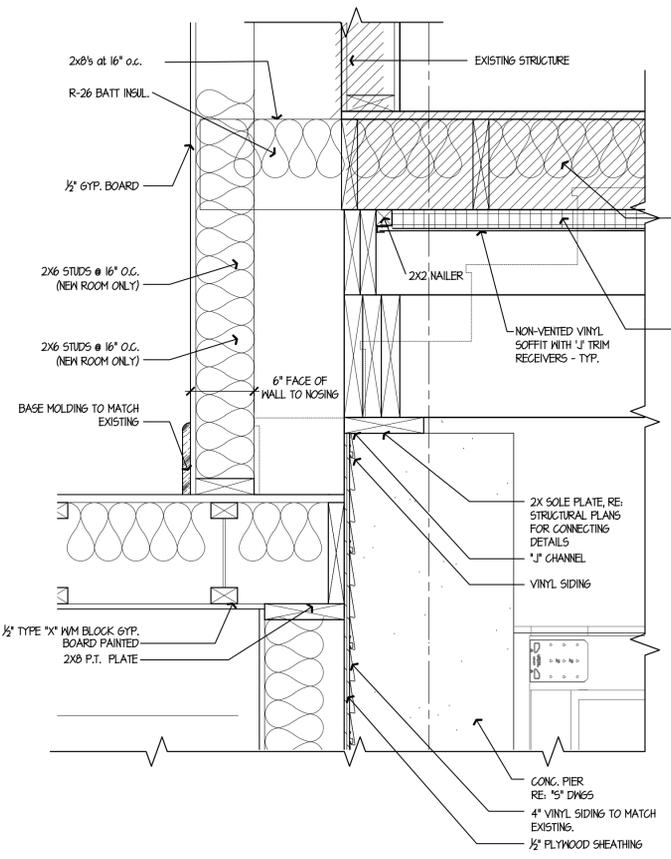
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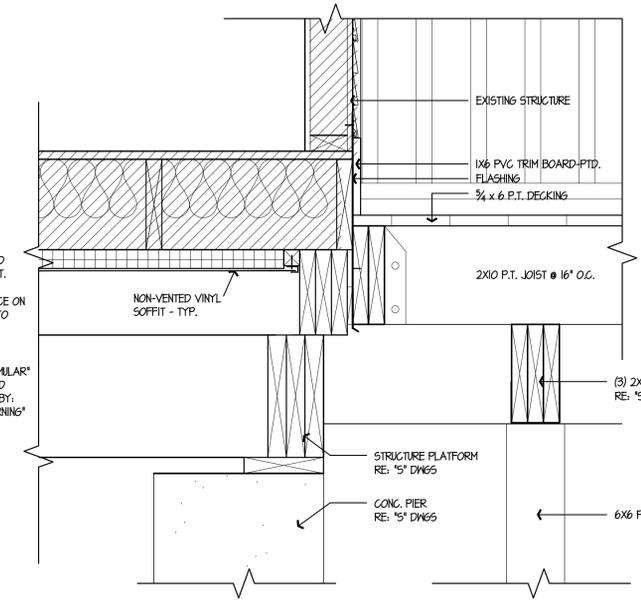
12 RIM JOIST DETAIL
SCALE: 1/2"=1'-0"



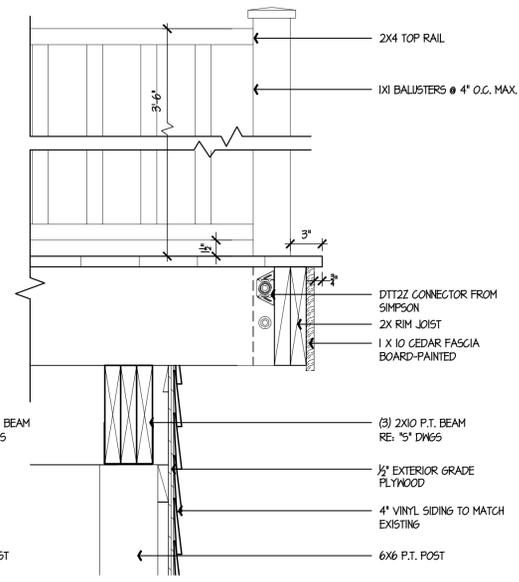
11 RIM JOIST DETAIL
SCALE: 1/2"=1'-0"



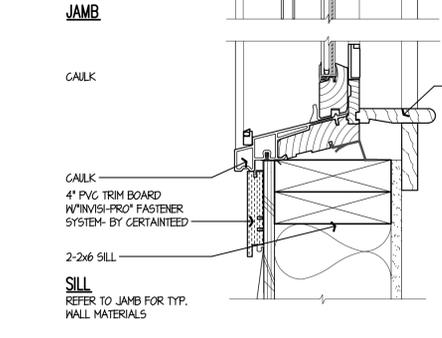
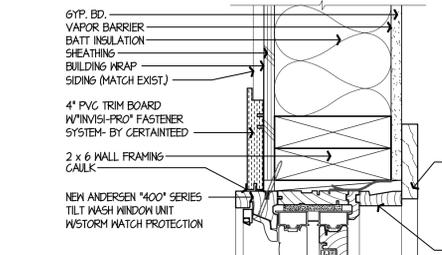
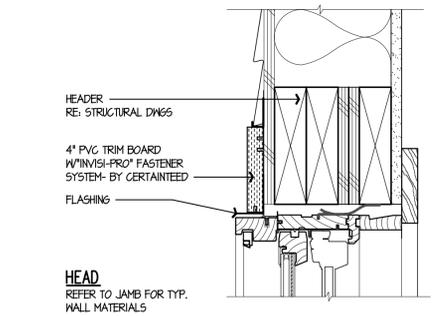
9 DETAIL@ DIMISING WALL
SCALE: 1/2"=1'-0"



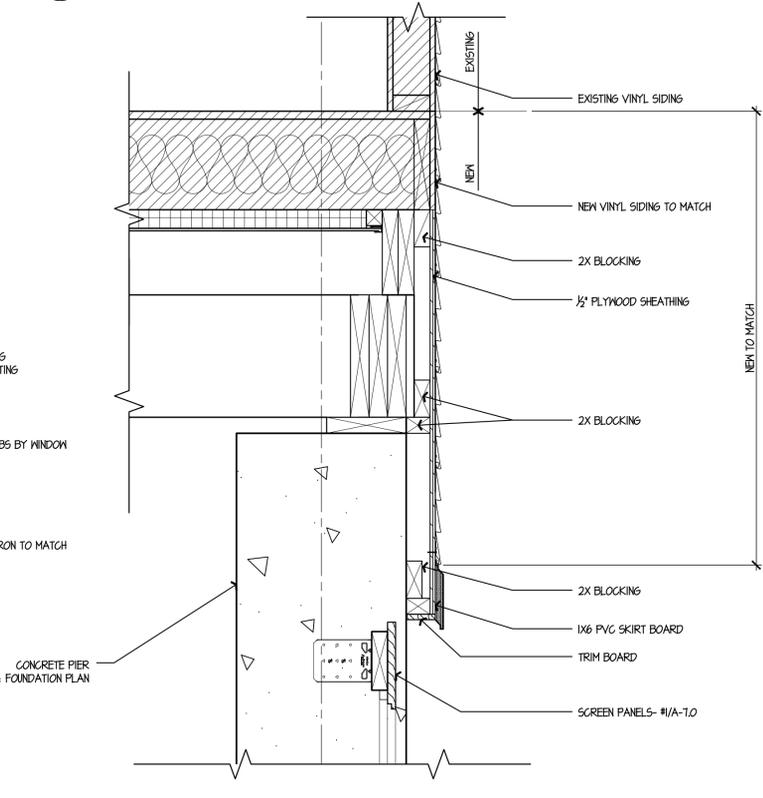
7 DETAIL@ WALL/DECK
SCALE: 1/2"=1'-0"



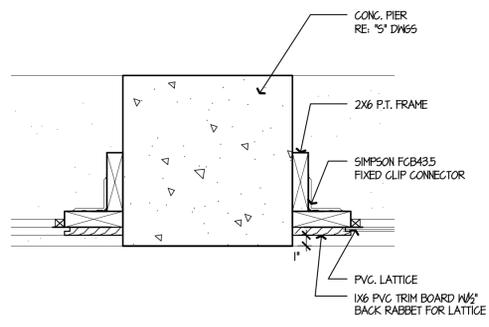
3 DETAIL@ DECK
SCALE: 1/2"=1'-0"



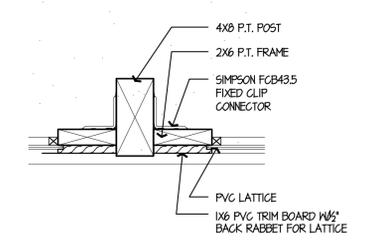
10 DETAIL@ NEW WINDOWS
SCALE: 1/2"=1'-0"



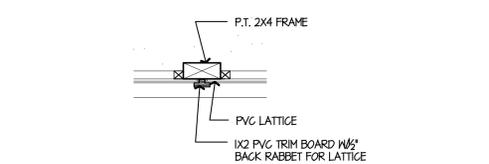
8 DETAIL@ SKIRTBOARD
SCALE: 1/2"=1'-0"



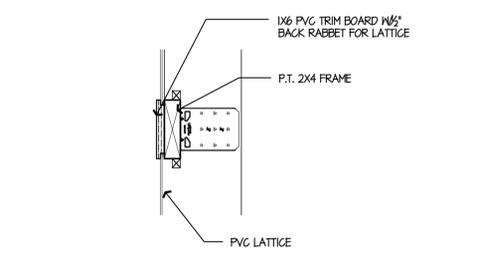
6 PANEL DETAIL
SCALE: 1/2"=1'-0"



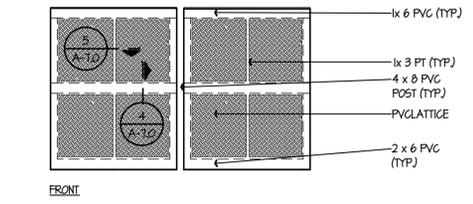
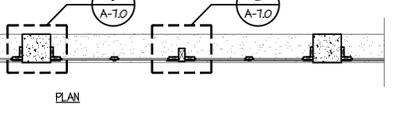
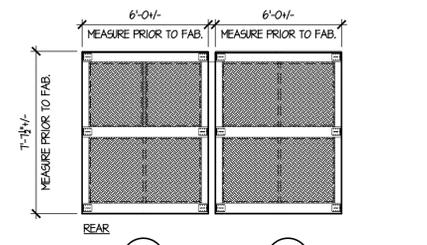
2 PANEL DETAIL
SCALE: 1/2"=1'-0"



5 PANEL DETAIL
SCALE: 1/2"=1'-0"



4 PANEL DETAIL
SCALE: 1/2"=1'-0"



1 BREAK AWAY PANEL DETAILS
SCALE: 1/4"=1'-0"

date	description	no.
	revisions	

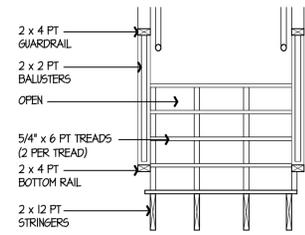
DETAILS

A-7.0

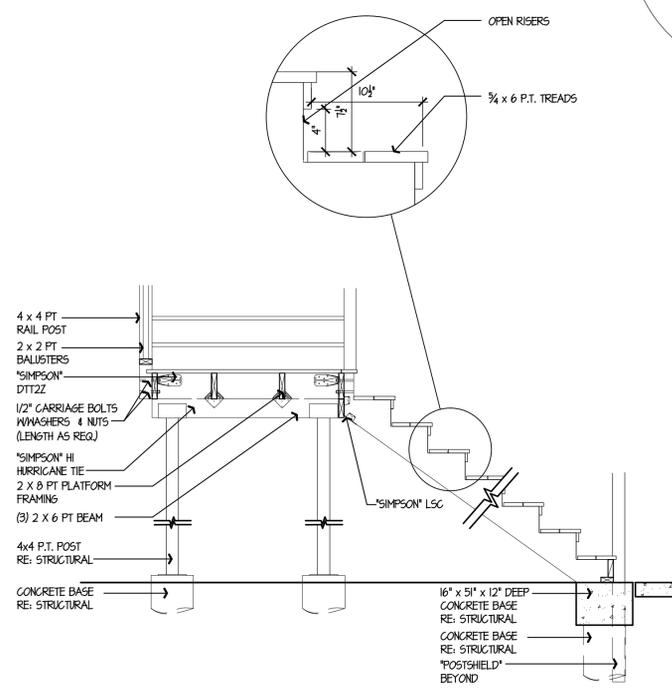
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SMITH RESIDENCE
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2 APPLETREE LANE
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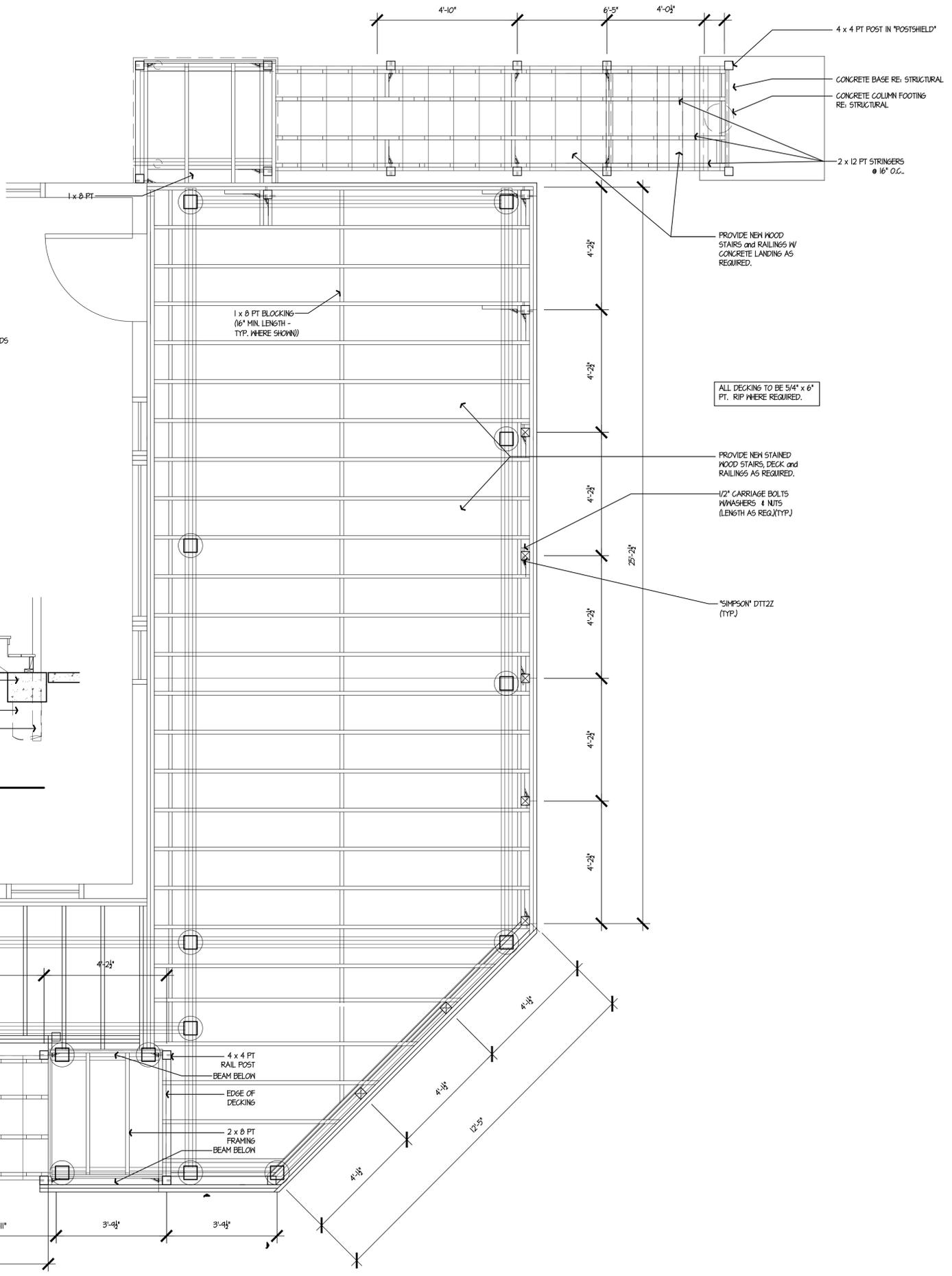


NOTE 1 - HANDRAIL MIN. HEIGHT 34" - MAX HEIGHT 38"
NOTE 2 - GUARDRAIL MIN. HEIGHT 36"
HANDRAIL TO BE LOCATED MIN. 1-1/2" BELOW GUARDRAIL



2 STAIR SECTION
A-7.1 SCALE: 1/2" = 1'-0"

3 STAIR SECTION
A-7.1 SCALE: 1/2" = 1'-0"



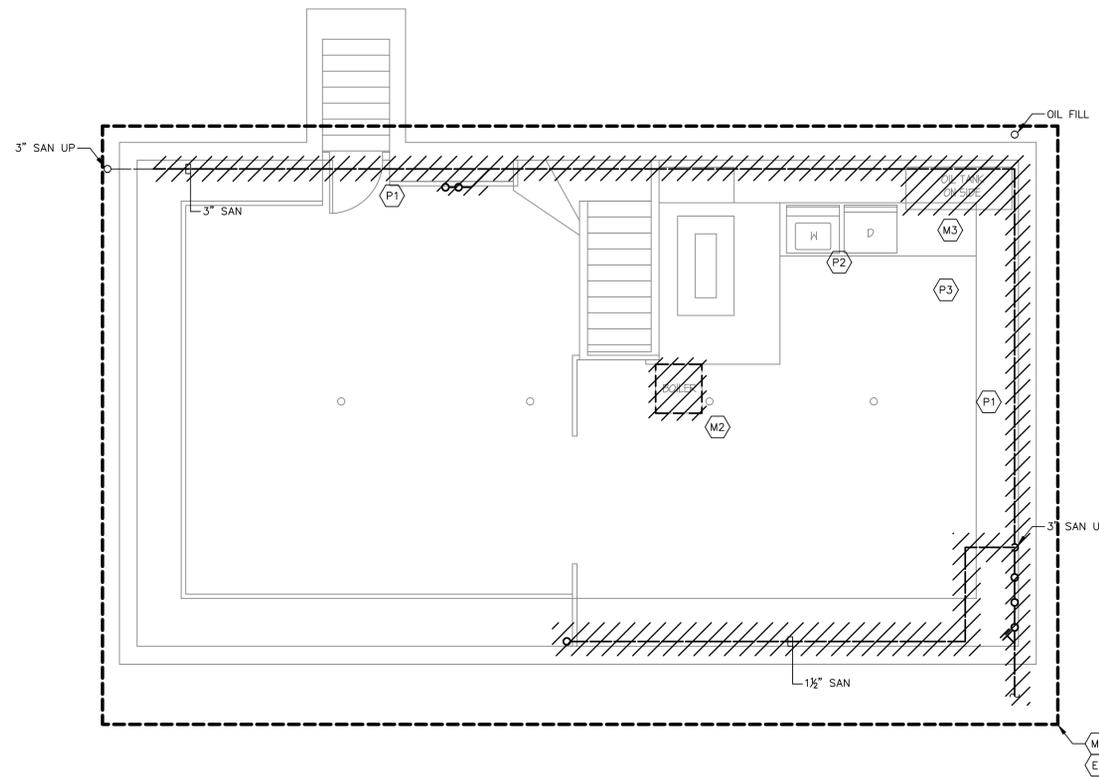
1 DECK & STAIR FRAMING
A-7.1 SCALE: 1/2" = 1'-0"

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DETAILS

A-7.1

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1
A-1 DEMOLITION BASEMENT PLAN
SCALE: 1/4"=1'-0"



PLUMBING KEY NOTES	
P1	REMOVE EXISTING SANITARY PIPING LOCATED IN BASEMENT AS INDICATED. EXISTING RISERS TO FIXTURES SHALL REMAIN FOR NEW CONNECTION.
P2	REMOVE ALL SUPPLY AND DRAINAGE PIPING SERVING WASHING MACHINE.
P3	REMOVE EXISTING SUMP PUMPS AND ALL ASSOCIATED PIPING AND CONTROLS.
P4	REMOVE EXISTING HOSE BIBB AND ALL ASSOCIATED PIPING BACK TO NEAREST ACTIVE MAIN.

MECHANICAL KEY NOTES	
M1	REMOVE ALL HYDRONIC HEATING PIPING LOCATED IN BASEMENT FEEDING FIRST FLOOR. EXISTING RISERS SHALL REMAIN FOR NEW CONNECTION UNLESS OTHERWISE INDICATED.
M2	REMOVE EXISTING BOILER AND ALL ASSOCIATED PIPING, SPECIALTIES, AND CONTROLS.
M3	REMOVE EXISTING FUEL OIL TANK AND ALL ASSOCIATED PIPING.
M4	REMOVE EXISTING BASEBOARD RADIATION AND ASSOCIATED PIPING.
M5	REMOVE EXISTING THERMOSTAT AND ALL ASSOCIATED CONTROL WIRING.

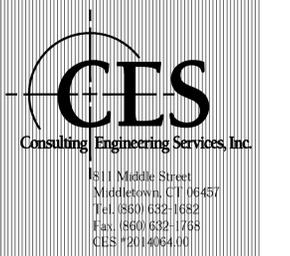
ELECTRICAL KEY NOTES	
E1	REMOVE ALL ELECTRICAL LIGHTS, OUTLETS SWITCHES, AND POWER FEEDS TO EQUIPMENT IN BASEMENT BACK TO SOURCE.
E2	REMOVE EXISTING MAIN PANEL AND ALL ASSOCIATED WIRING OUT TO UTILITY METER. REFER TO KEYNOTE 5 FOR MORE INFORMATION.
E3	REMOVE EXISTING GARAGE PANEL AND ALL ASSOCIATED WIRING BACK TO MAIN 30A/2P CIRCUIT BREAKER IN MAIN PANEL.
E4	REMOVE ALL ELECTRICAL LIGHTS, LIGHTING SWITCHES, POWER OUTLETS AND ALL ASSOCIATED WIRING.
E5	REMOVE EXISTING ELECTRIC SERVICE TO THE RESIDENCE, INCLUDING WEATHER HEAD AND ALL ASSOCIATED WIRING FROM WEATHER HEAD TO METER, METER, METER SOCKET, FEEDER AND CONNECTION TO MAIN PANEL IN THE RESIDENCE.

DEMOLITION LEGEND	
SYMBOL	DESCRIPTION
	REMOVE EXISTING DUCTWORK/EQUIPMENT
	REMOVE EXISTING PIPING/EQUIPMENT
ETR	EXISTING TO REMAIN
	THERMOSTAT
	HOSE BIBB



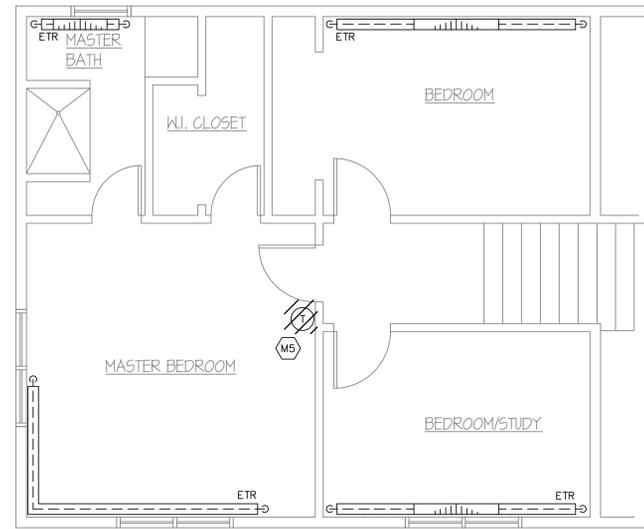
THE STATE OF CONNECTICUT
DEPARTMENT OF HOUSING (DOH)
COMMUNITY DEVELOPMENT BLOCK GRANT - DISASTER RECOVERY (CDBG-DR)
DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (OOR)

SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLE TREE LANE WEST MYSTIC, 06355



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project no.	2014064.00
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3 DEMOLITION SECOND FLOOR PLAN
 A-I SCALE: 1/4"=1'-0"

PLUMBING KEY NOTES

- P1 REMOVE EXISTING SANITARY PIPING LOCATED IN BASEMENT AS INDICATED. EXISTING RISERS TO FIXTURES SHALL REMAIN FOR NEW CONNECTION.
- P2 REMOVE ALL SUPPLY AND DRAINAGE PIPING SERVING WASHING MACHINE.
- P3 REMOVE EXISTING SUMP PUMPS AND ALL ASSOCIATED PIPING AND CONTROLS.
- P4 REMOVE EXISTING HOSE BIBB AND ALL ASSOCIATED PIPING BACK TO NEAREST ACTIVE MAIN.

MECHANICAL KEY NOTES

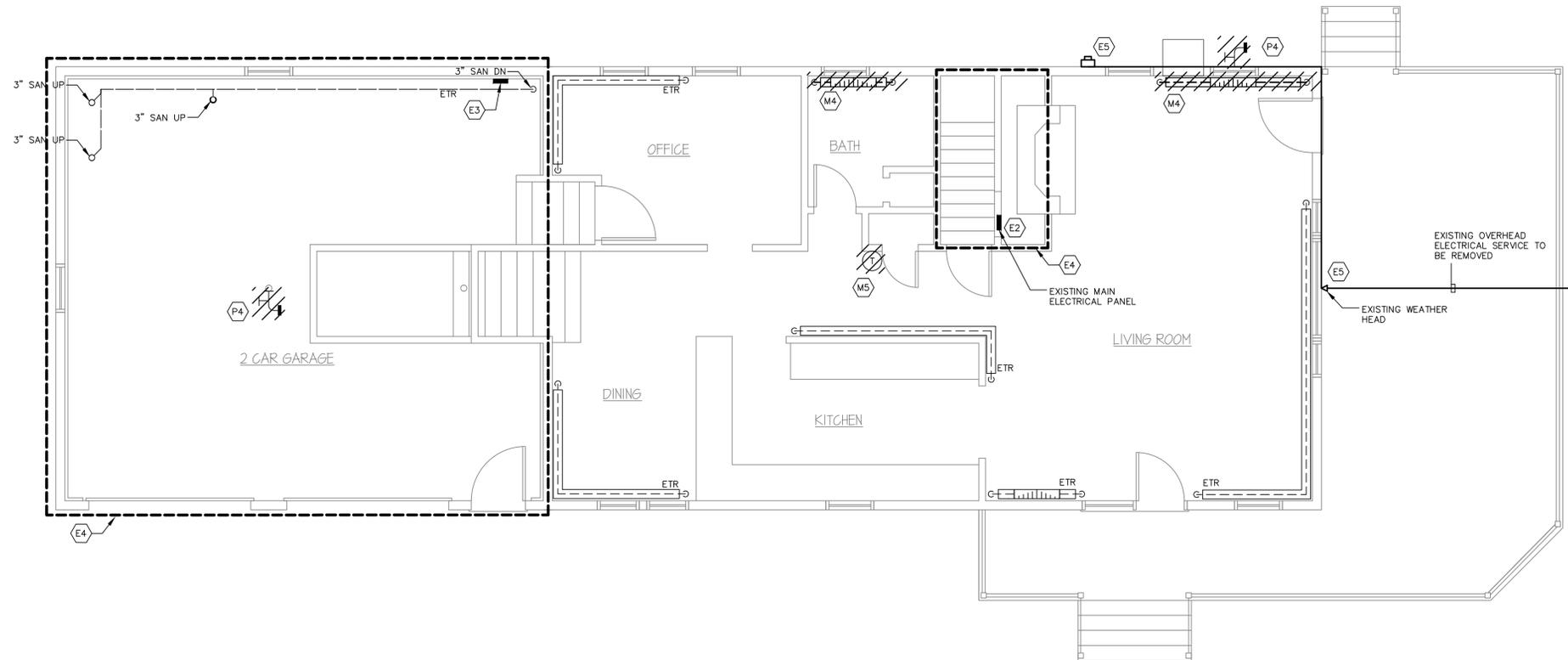
- M1 REMOVE ALL HYDRONIC HEATING PIPING LOCATED IN BASEMENT FEEDING FIRST FLOOR. EXISTING RISERS SHALL REMAIN FOR NEW CONNECTION UNLESS OTHERWISE INDICATED.
- M2 REMOVE EXISTING BOILER AND ALL ASSOCIATED PIPING, SPECIALTIES, AND CONTROLS.
- M3 REMOVE EXISTING FUEL OIL TANK AND ALL ASSOCIATED PIPING.
- M4 REMOVE EXISTING BASEBOARD RADIATION AND ASSOCIATED PIPING.
- M5 REMOVE EXISTING THERMOSTAT AND ALL ASSOCIATED CONTROL WIRING.

ELECTRICAL KEY NOTES

- E1 REMOVE ALL ELECTRICAL LIGHTS, OUTLETS SWITCHES, AND POWER FEEDS TO EQUIPMENT IN BASEMENT BACK TO SOURCE.
- E2 REMOVE EXISTING MAIN PANEL AND ALL ASSOCIATED WIRING OUT TO UTILITY METER. REFER TO KEYNOTE 5 FOR MORE INFORMATION.
- E3 REMOVE EXISTING GARAGE PANEL AND ALL ASSOCIATED WIRING BACK TO MAIN 30A/2P CIRCUIT BREAKER IN MAIN PANEL.
- E4 REMOVE ALL ELECTRICAL LIGHTS, LIGHTING SWITCHES, POWER OUTLETS AND ALL ASSOCIATED WIRING.
- E5 REMOVE EXISTING ELECTRIC SERVICE TO THE RESIDENCE, INCLUDING WEATHER HEAD AND ALL ASSOCIATED WIRING FROM WEATHER HEAD TO METER, METER SOCKET, FEEDER AND CONNECTION TO MAIN PANEL IN THE RESIDENCE.

DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	REMOVE EXISTING DUCTWORK/EQUIPMENT
	REMOVE EXISTING PIPING/EQUIPMENT
ETR	EXISTING TO REMAIN
	THERMOSTAT
	HOSE BIBB

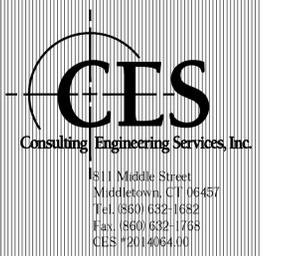


2 DEMOLITION FIRST FLOOR PLAN
 A-I SCALE: 1/4"=1'-0"



THE STATE OF CONNECTICUT
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 DOH OCCUPIED REHABILITATION and REBUILDING PROGRAM (ORR)

SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLETREE LANE WEST MYSTIC, 06355



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SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION
APPLICATION No. 2011
2 APPLE TREE LANE
WEST MYSTIC, 06355

CES
Consulting Engineering Services, Inc.
1811 Middle Street
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Tel: 860.632-1682
Fax: 860.632-1768
CES #2014064.00

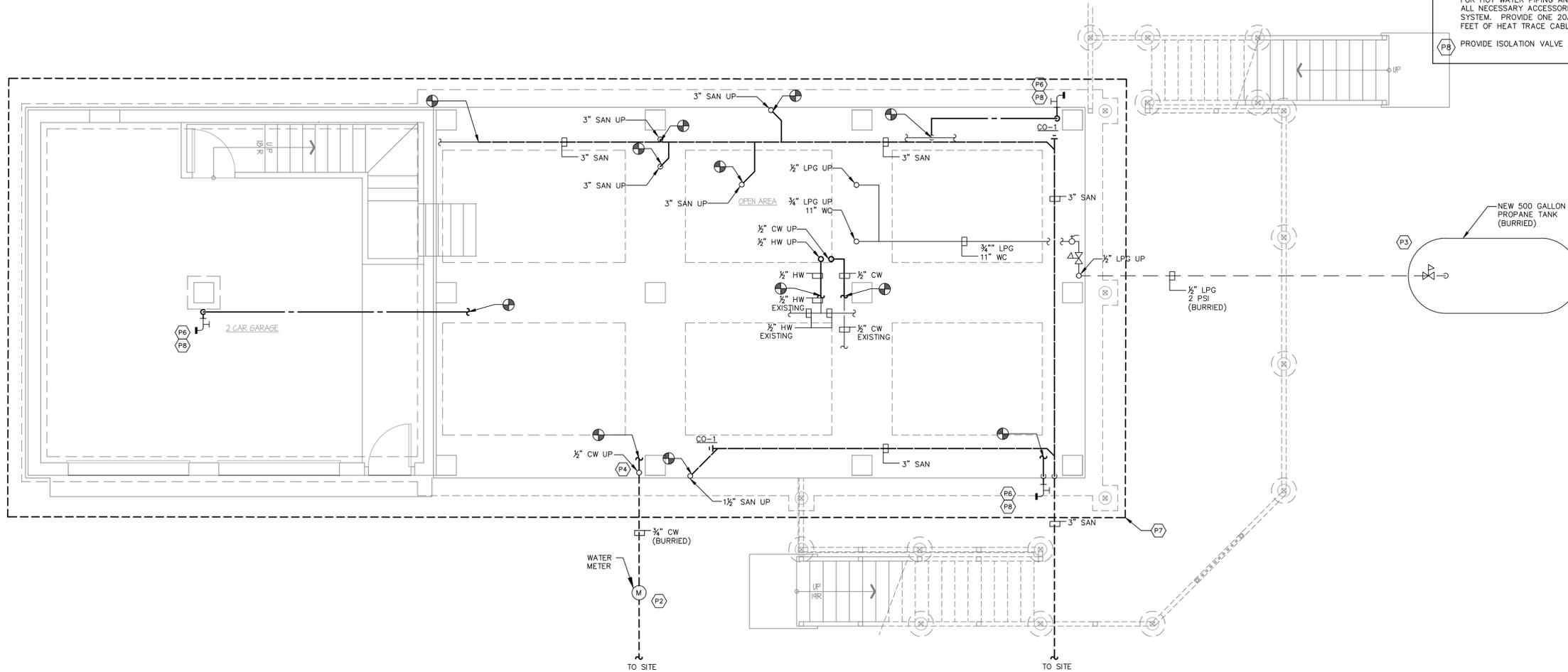
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GENERAL NOTES ALL TRADES

1. PLUMBING ITEMS INCLUDING BUT NOT LIMITED TO PIPING, EQUIPMENT, ETC SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, ETC.

PLUMBING KEY NOTES

- (P1) PROVIDE WATER-TITE MODEL #W2700 HA WASHING MACHINE OUTLET BOX.
- (P2) PROVIDE NEW WATER METER NEAR PROPERTY LINE ON STREET. METER SHALL BE INSTALLED IN METER PIT. VERIFY ALL INSTALLATION LOCATIONS AND PIT REQUIREMENTS WITH UTILITY COMPANY PRIOR TO BIDDING AND INSTALLATION.
- (P3) PROVIDE NEW 500 GAL ABOVE GROUND PROPANE TANK. TANK SHALL BE ASME RATED. INSTALL TANK PER ALL LOCAL CODES AND NFPA 58. ANCHOR TANK TO CONCRETE PAD PER FEMA AND ARCHITECTURAL AND STRUCTURAL DETAILS.
- (P4) PROVIDE PRESSURE RELIEF VALVE AND ISOLATION VALVE ON RISE.
- (P5) PROVIDE 2" P-TRAP FOR CONDENSATE REMOVAL.
- (P6) PROVIDE NEW EXTERIOR WALL HYDRANT 3' ABOVE FINAL FINISHED GRADE. PROVIDE LOW POINT DRAIN ON PIPING DROP FROM HOUSE. HOSE BIB SHALL BE ANTISIPHON, BRASS, WITH 3/4" THREADED OUTLET AS MANUFACTURED BY WOODFORD OR APPROVED EQUAL.
- (P7) ALL NEW AND EXISTING DOMESTIC COLD WATER SUPPLY PIPING EXPOSED BELOW THE PROPERTY SHALL BE INSULATED WITH 1/2" FIBERGLASS INSULATION WITH CONTINUOUS PVC JACKETING. ALL HOT AND COLD WATER PIPING EXPOSED BELOW THE PROPERTY SHALL BE HEAT TRACED WITH SELF REGULATION HEAT TRACE CABLE MODEL H612 AS MANUFACTURED BY PENTAIR. CABLE SHALL BE 120V INPUT AND HAVE AN OUTPUT OF 6W PER FOOT. PROVIDE ONE HEAT TAPE FOR HOT WATER PIPING AND ONE HEAT TAPE FOR COLD WATER PIPING. PROVIDE ALL NECESSARY ACCESSORIES NEEDED FOR COMPLETE AND OPERATIONAL SYSTEM. PROVIDE ONE 20A/120V DEDICATED POWER CIRCUIT FOR EVERY 150 FEET OF HEAT TRACE CABLE.
- (P8) PROVIDE ISOLATION VALVE ABOVE FLOOD PLANE ON DROP TO HOSE BIB.

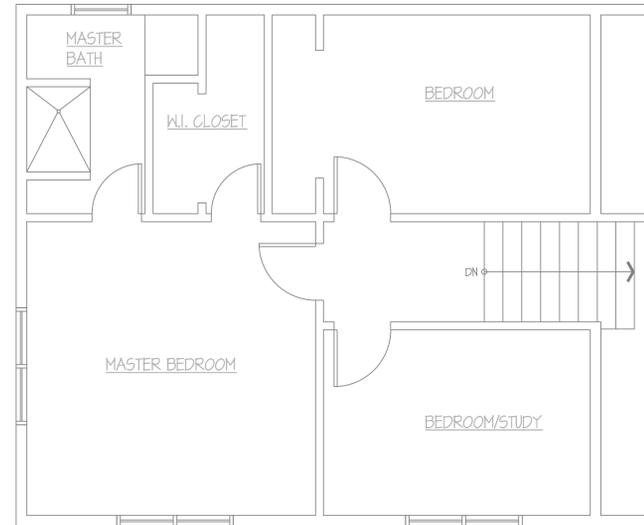


1 NEW WORK BASEMENT PLAN
A-1 SCALE: 1/4"=1'-0"

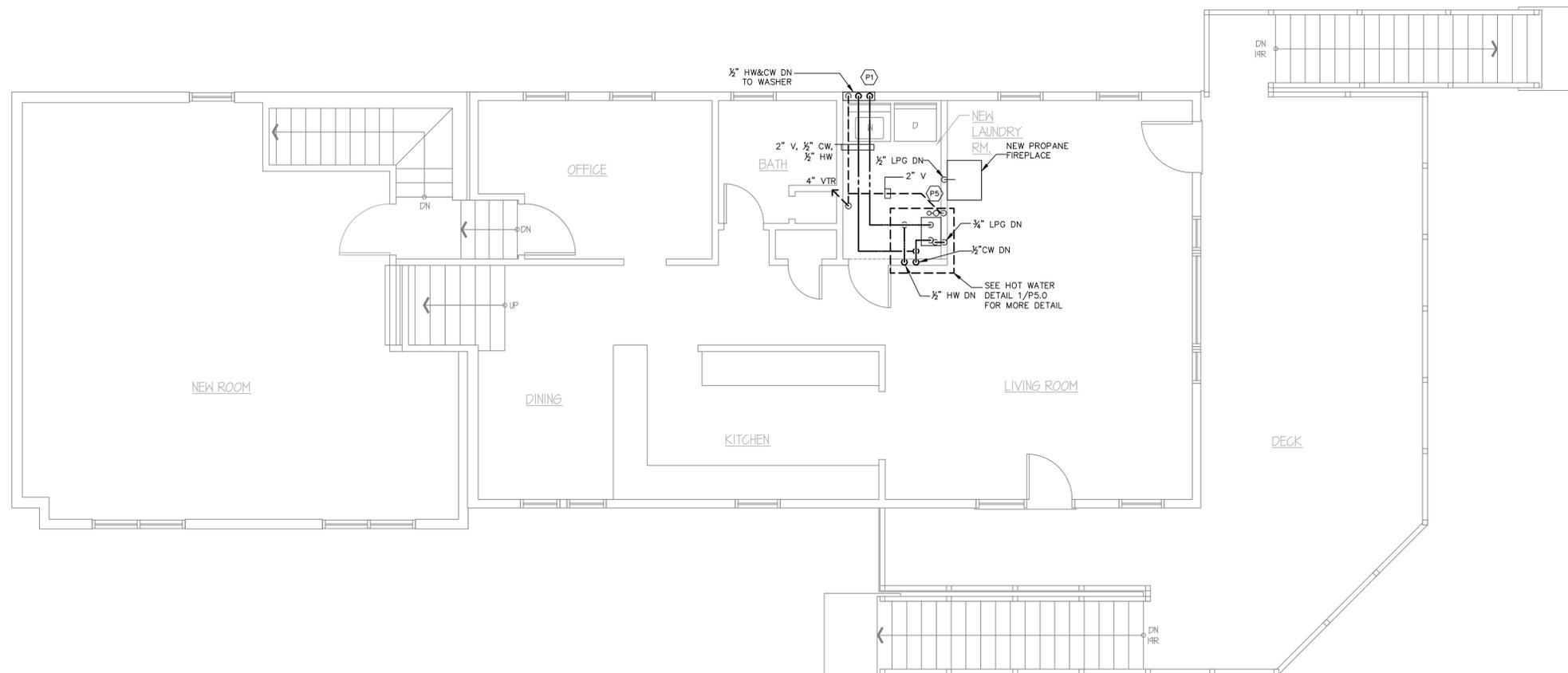


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1
A-1 NEW WORK SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"



1
A-1 NEW WORK FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

GENERAL NOTES ALL TRADES

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2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, ETC.

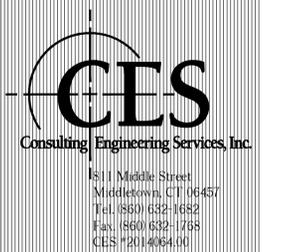
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- P4 PROVIDE PRESSURE RELIEF VALVE AND ISOLATION VALVE ON RISE.
- P5 PROVIDE 2" P-TRAP FOR CONDENSATE REMOVAL.
- P6 PROVIDE NEW EXTERIOR WALL HYDRANT 3' ABOVE FINAL FINISHED GRADE. PROVIDE LOW POINT DRAIN ON PIPING DROP FROM HOUSE. HOSE BIB SHALL BE ANTISIPHON, BRASS, WITH 3/4" THREADED OUTLET AS MANUFACTURED BY WOODFORD OR APPROVED EQUAL.
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PLUMBING ABBREVIATIONS

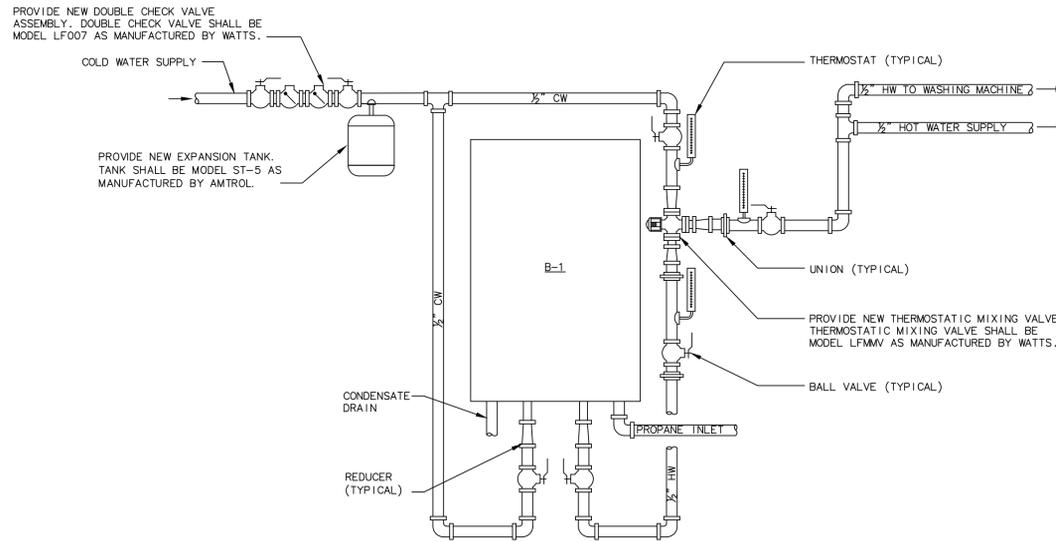
ABBREVIATION	DESCRIPTION
BTU	BRITISH THERMAL UNIT
CO	CLEANOUT
CW	COLD WATER
DN	DOWN
ET	EXPANSION TANK
HB	HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RECIRCULATION
LPG	LIQUIFIED PETROLEUM GAS
TYP	TYPICAL
V	VENT
VTR	VENT THRU ROOF

PLUMBING PIPING LEGEND

SYMBOL	DESCRIPTION
—	COLD WATER
—	HOT WATER (110°F)
—	SANITARY WASTE ABOVE FLOOR
—	SANITARY WASTE BURIED
—	VENT
—LPG	LIQUIFIED PETROLEUM (LP) GAS ABOVE GRADE
—LPG	LIQUIFIED PETROLEUM (LP) GAS BURIED
—	90° ELBOW DOWN
—	90° ELBOW UP
—	TEE UP
—	TEE DOWN
—	DROP AND RUN
—	TEE OFF TOP OF PIPE
—	TEE OFF BOTTOM OF PIPE
—	CLEANOUT
—	FLOOR CLEANOUT
—	HOSE BIBB
—	DIRECTION OF FLOW
—	END CAP
—	CLEAN OUT

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
(M)	WATER METER
—	THERMOMETER
—	PRESSURE REGULATOR
—	CONNECT NEW TO EXISTING
—	VENT THRU ROOF



1 WATER HEATER PIPING DIAGRAM
N.T.S.

- GENERAL PROCEDURES ALL TRADES**
1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, 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 DISCONNECT FROM 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. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0", HIGHLIGHT, ENCLOSE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
- B. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
- DIMENSIONS.
 - IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
 - COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED.
 - NOTATION OF COORDINATION REQUIREMENTS.
 - 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:
- MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
 - MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
 - COPIES OF WARRANTIES.
 - APPROVED SHOP DRAWINGS AND PRODUCT DATA.
 - BALANCE REPORTS.
 - 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.
 - 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. AS-BUILT DRAWINGS
- A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER, DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF THE MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
- B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
- C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
- D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED

- IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
14. 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.
15. 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. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
7. 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.
8. 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.
9. 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.
10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.
- PLUMBING**
1. PIPING:
- A. DOMESTIC WATER PIPING SHALL BE COPPER TUBING TYPE L. SOLDER FILLER METALS SHALL BE 95-5 TIN-ANTIMONY SOLDER JOINTS.
- B. WASTE AND VENT PIPING SHALL BE PVC, TYPE DWV PIPE AND FITTINGS WITH SOLVENT CEMENTED JOINTS.
- C. LPG PIPING SHALL BE SCHEDULE 40, CARBON STEEL PIPE, WITH THREADED JOINTS AND FITTINGS OR TYPE L COPPER TUBING.
2. INSULATION:
- A. INSULATION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE IECC EXCEPT THAT PIPE INSULATION SHALL NOT BE LESS THAN 1" 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 MANUFACTURER'S 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:
- DOMESTIC COLD WATER PIPING
 - DOMESTIC HOT WATER PIPING
- C. ALL EXPOSED DOMESTIC WATER PIPE SHALL BE WRAPPED WITH A PVC VAPOR BARRIER JACKET AS MANUFACTURED BY ZESTON OR APPROVED EQUAL. PVC JACKETING SHALL BE FINISHED TO BE WATER TIGHT.
3. PIPING INSTALLATION:
- 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. INSTANT AND ANCHOR PIPING TO ENSURE PROPER EXPANSION AND CONTRACTION.
- E. ANCHOR PIPING TO ENSURE PROPER DIRECTION OF EXPANSION AND CONTRACTION.
- F. SUPPORT PIPING TO PREVENT VIBRATION OR SAGGING. PROVIDE HANGER SPACING ACCORDING TO DISTANCES LISTED IN APPLICABLE CODES AND REGULATIONS.
4. PLUMBING IDENTIFICATION
- A. PLUMBING IDENTIFICATION WORK SHALL COMPLY WITH ANSI A13.1. NAMES, ABBREVIATIONS AND OTHER DESIGNATIONS USED IN MECHANICAL IDENTIFICATION WORK SHALL CORRESPOND WITH DESIGNATIONS SHOWN, SPECIFIED OR SCHEDULED.
- B. VALVE TAGS SHALL BE 1-1/2" DIAMETER, 19-GAGE POLISHED BRASS WITH STAMP-ENGRAVED LETTERING, ATTACH VALVES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- C. PROVIDE VALVE TAG ON EVERY VALVE, EXCLUDING DRAIN VALVES.
- D. PIPE IDENTIFICATION, PLASTIC PIPE MARKERS, FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC, PERFORMED TO FIT AROUND PIPE OR PIPE COVERING. MINIMUM INFORMATION INDICATING FLOW DIRECTION ARROW AND IDENTIFICATION OF FLUID BEING CONVEYED.
5. TESTING AND ADJUSTING
- A. ALL WATER PIPING SHALL BE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE PROVED TIGHT UNDER WATER PRESSURE OF 100 PSIG. THE PRESSURE SHALL BE APPLIED GRADUALLY AND THEN HELD FOR A MINIMUM OF TWO HOURS.
- B. ALL WASTE PIPING SHALL BE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE FILLED WITH WATER TO A HEAD OF NOT LESS THAN 10 FEET. THE WATER LEVEL AT THE TOP OF THE TEST HEAD OF WATER SHALL NOT DROP FOR AT LEAST 15 MINUTES.
- C. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR ALL TESTING.



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

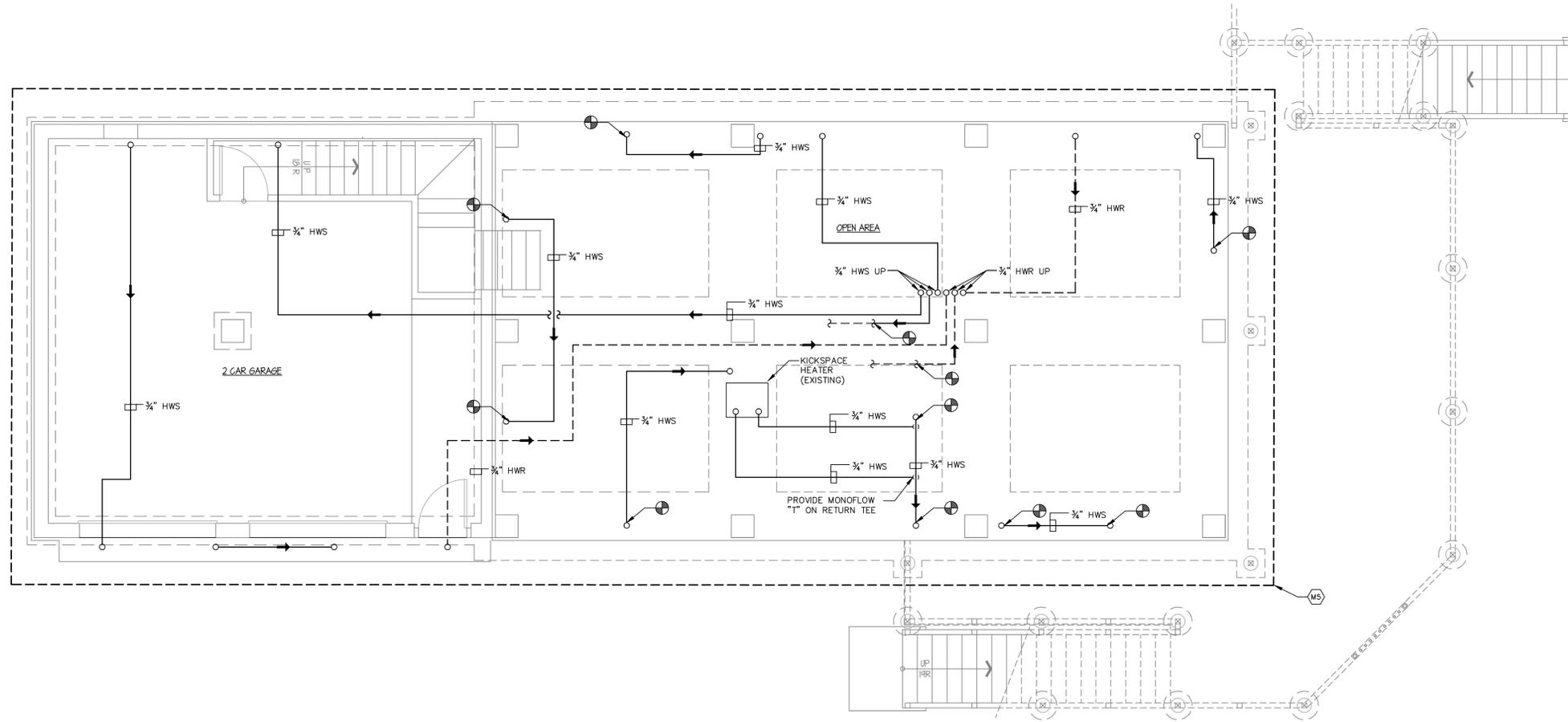
SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLE TREE LANE WEST MYSTIC, 06355



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GENERAL NOTES ALL TRADES

1. MECHANICAL ITEMS INCLUDING BUT NOT LIMITED TO PIPING, EQUIPMENT, ETC SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS INCLUDING ACCESS PANELS FOR VALVES AND EQUIPMENT, THERMOSTAT AND SENSOR LOCATIONS, ETC.

MECHANICAL KEY NOTES

- (M1) PROVIDE 4" DRYER EXHAUST DUCT. DUCT SHALL BE ALUMINUM RIDGED FLEXIBLE DUCTWORK. TERMINATE THROUGH WALL WITH DRYER EXHAUST CAP.
- (M2) PROVIDE 7 DAY FULLY PROGRAMMABLE THERMOSTAT.
- (M3) PROVIDE 2" PVC INTAKE AND VENT. TERMINATE THROUGH WALL MANUFACTURERS CONCENTRIC VENT.
- (M4) PROVIDE NEW DIRECT VENT CHIMNEY WITH APPLIANCE ADAPTOR FOR GAS FIREPLACE. DIRECT VENT CHIMNEY SHALL TERMINATE HORIZONTALLY WITH MANUFACTURER SUPPLIED TERMINATION CAP. VENT SHALL BE 5" INNER LINER AND 8" OUTER LINER WITH 430 STAINLESS STEEL INNER FLUE AND GALVANIZED STEEL OUTER CASTING. DIRECT VENT CHIMNEY SHALL BE MODEL SURE-SEAL DV AS MANUFACTURED BY METAL-FAB OR APPROVED EQUAL. APPLIANCE ADAPTOR SHALL BE MODEL SURE-SEAL 5DDA AS MANUFACTURED BY METAL-FAB OR ACCEPTED VENT MANUFACTURER.
- (M5) HOT WATER SUPPLY AND RETURN PIPING THROUGH JOISTS IN INSULATION.



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 2 APPLE TREE LANE
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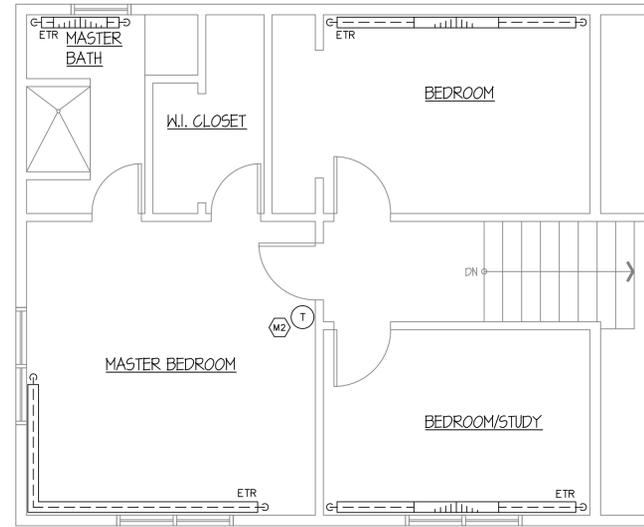
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1 NEW WORK BASEMENT PLAN
 A-1 SCALE: 1/4"=1'-0"



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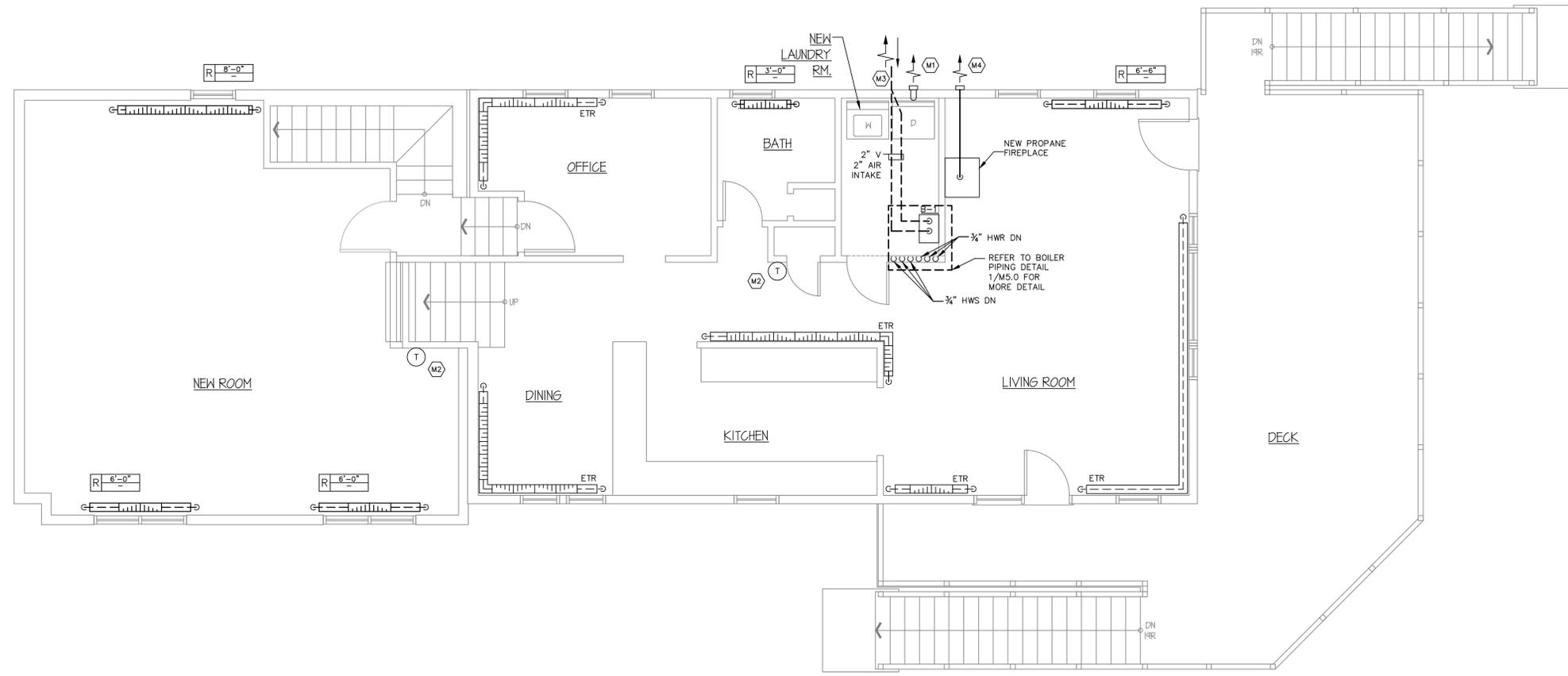
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NEW WORK SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

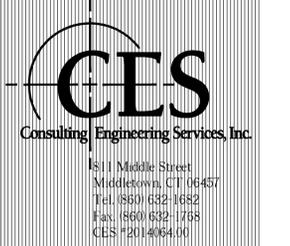


NEW WORK FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



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MECHANICAL ABBREVIATION LIST	
ABBREVIATION	DESCRIPTION
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
ET-#	EXPANSION TANK
EWT	ENTERING WATER TEMPERATURE
HD	HEAD
HP	HORSE POWER
HPR	HIGH PRESSURE STEAM CONDENSATE RETURN
HPS	HIGH PRESSURE STEAM CONDENSATE SUPPLY
LWT	LEAVING WATER TEMPERATURE
MIN	MINIMUM
N.T.S.	NOT TO SCALE
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO.	NUMBER
NOM	NOMINAL
OA	OUTSIDE AIR
P-#	PUMP
PD	PRESSURE DROP (FEET OF WATER OR INCHES OF WATER)
SPEC	SPECIFICATION
TEMP	TEMPERATURE
TYP	TYPICAL

PIPING LEGEND	
SYMBOL	DESCRIPTION
	HOT WATER SUPPLY
	HOT WATER RETURN
	VENT
	BALL VALVE
	CHECK VALVE
	PIPE DROP
	PIPE RISE
	DIRECTION OF FLOW
	END CAP

BOILER SCHEDULE																
SYMBOL	MANUFACTURER/ MODEL NUMBER	MEDIA	GROSS OUTPUT (MBH)	GROSS INPUT (MBH)	EWT/LWT (°F)	FUEL DATA		DOMESTIC HOT WATER DATA			BURNER DATA			PRESSURE DROP (FT H2O)	REMARKS	
						TYPE	RATE (MBH)	GPM	EWT (°F)	LWT (°F)	AMPS	VOLTS	PHASE			FLOW (GPM)
B-1	LAARS/MASCOT LX 150	HW	142.5	150	160/180	PROPANE	150	5	45	105	1.5	120	1	-	-	ALL

REMARKS:
 1. BURNER FIRING SHALL BE MODULATING WITH A 5:1 TURN DOWN RATIO.
 2. PROVIDE WITH CONDENSATE NEUTRALIZATION KIT.
 3. PROVIDE WITH MANUFACTURER O2 SENSOR.
 4. PROVIDE WITH MANUFACTURER SUPPLY WATER TEMPERATURE SENSOR.

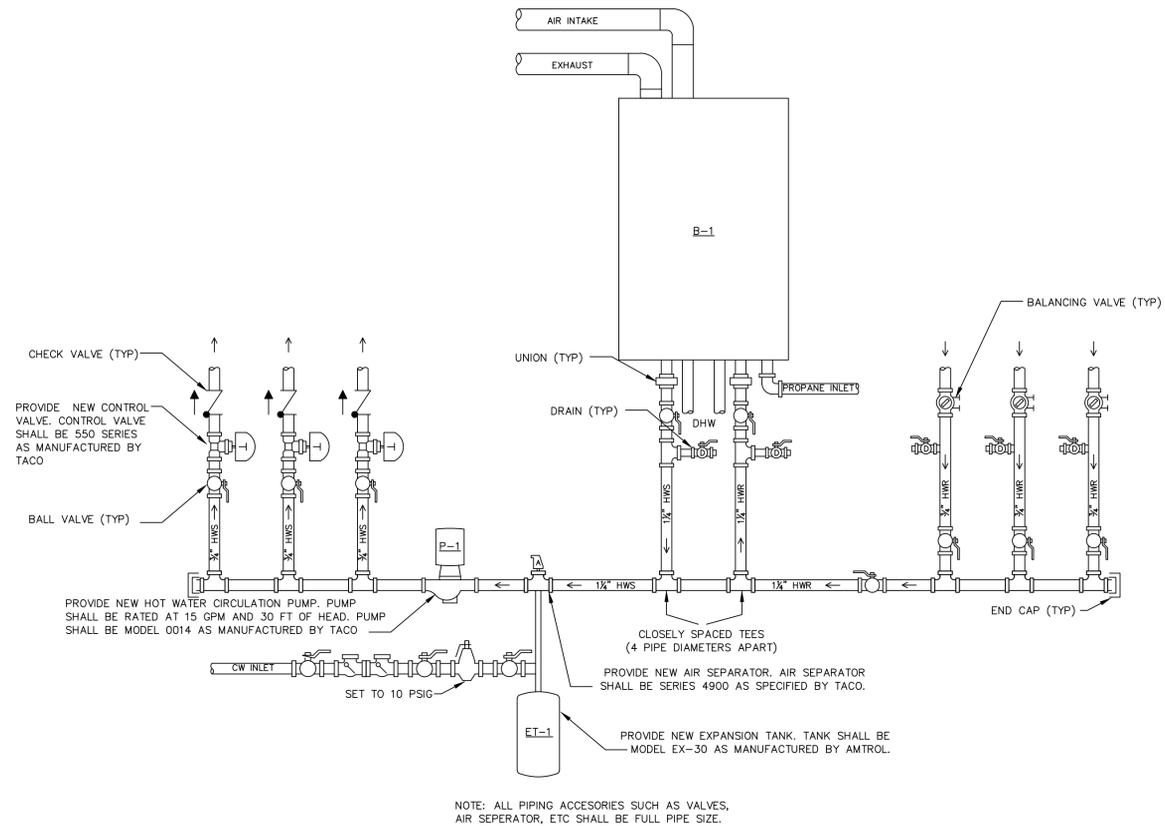
HW = HOT WATER

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	SLANT FIN FIN/LINE 30	580	180	160	7-7/8"	1	3/4"	2-5/8" X 2-1/8"	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**
 INDICATES LENGTH OF ACTIVE FINNED ELEMENT: **L**
 INDICATES HEATING H.W. FLOW (GAL. PER MINUTE): **GPM**

HVAC SYMBOLS LEGEND	
SYMBOLS	DESCRIPTION
	THERMOSTAT
	RETURN/EXHAUST/OUTSIDE AIR ARROW
	SUPPLY ARROW
	EXHAUST VENT
	CONNECTION TO EXISTING
	EXISTING TO REMAIN

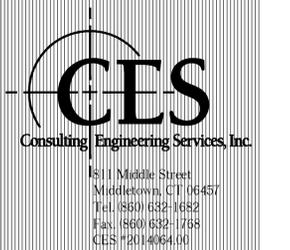


1 BOILER PIPING DETAIL
N.T.S.



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- GENERAL PROCEDURES ALL TRADES**
1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, 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 DISCONNECT/FROM 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 OWE 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. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0". HIGHLIGHT, ENIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
 - B. 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. BALANCE REPORTS.
 - f. 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.
 - g. 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. AS-BUILT DRAWINGS
 - A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
 - B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
 - C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
 - D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
 13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED

- IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
14. 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.
 15. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR THEIR RECORDS.
 - A. **MEANS AND METHODS ALL TRADES**
 1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
 2. DO NOT BURIN 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. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
 7. 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.
 8. 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.
 9. 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.
 10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.

- 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. FOR PIPE SIZES LARGER THAN 2" DIAMETER, PIPING SHALL BE SCHEDULE 40 CARBON STEEL WITH THREADED, WELDED OR FLANGED JOINTS.
 - B. CONDENSATE DRAIN: SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD FITTINGS OR TYPE L COPPER TUBING WITH 95-5 TIN-ANTIMONY SOLDER FILLER METALS.
 2. FLUE AND COMBUSTION AIR PIPING
 - A. ALL NATURAL GAS FIRED EQUIPMENT COMBUSTION AIR PIPING, FLUE AND JOINTS SHALL BE SCHEDULE 40 POLYVINYL CHLORIDE (PVC). JOINTS SHALL BE SOLVENT WELD.
 3. INSULATION:
 - A. INSULATION THICKNESS SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE 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, CONTIGS, 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
 4. 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. SUPPORT PIPING TO PREVENT VIBRATION OR SAGGING. PROVIDE HANGER SPACING ACCORDING TO DISTANCES LISTED IN APPLICABLE CODES AND REGULATIONS.
 5. TESTING, ADJUSTING AND BALANCING
 - A. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE SERVICES OF AN INDEPENDENT TESTING, ADJUSTING, AND BALANCING (TAB) AGENCY TO PROVIDE TAB SERVICES FOR THE MECHANICAL SYSTEMS. THE TAB AGENCY SHALL BE CERTIFIED BY NATIONAL ENVIRONMENTAL, BALANCING BUREAU (NEBB) OR THE ASSOCIATED AIR BALANCE COUNCIL (AABC) IN THOSE TESTING AND BALANCING DISCIPLINES REQUIRED FOR THIS PROJECT. THE TAB AGENCY SHALL HAVE AT LEAST ONE PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE SERVICES ARE TO BE PERFORMED AND CERTIFIED BY NEBB OR AABC AS A TEST AND BALANCE ENGINEER.
 - B. PRIOR TO TESTING, ADJUSTING, AND BALANCING, THE MECHANICAL CONTRACTOR SHALL VERIFY THAT THE SYSTEMS HAVE BEEN INSTALLED AND ARE OPERATING AS SPECIFIED. APPROVED SHOP DRAWINGS, AS BUILT DRAWINGS, AND ALL OTHER DATA REQUIRED FOR EACH SYSTEM AND/OR COMPONENT TO BE TESTED SHALL BE MADE AVAILABLE AT THE JOB SITE DURING THE ENTIRE TAB EFFORT. THE OWNER SHALL BE NOTIFIED IN WRITING OF ALL EQUIPMENT, COMPONENTS, OR BALANCING DEVICES, THAT ARE DAMAGED, INCORRECTLY INSTALLED, OR MISSING, AS WELL AS ANY DESIGN DEFICIENCIES THAT WILL PREVENT PROPER TESTING, ADJUSTING, AND BALANCING. TESTING, ADJUSTING, AND BALANCING SHALL NOT COMMENCE UNTIL APPROVED BY THE OWNER.
 - C. PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM IDENTIFIED, IN ACCORDANCE WITH THE DETAILED PROCEDURES OUTLINED IN EITHER NEBB'S "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING OF ENVIRONMENTAL SYSTEMS" OR AABC "NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE". THE TAB AGENCY SHALL TEST, ADJUST, AND BALANCE THE FOLLOWING MECHANICAL SYSTEMS:
 - a. ALL AIR HANDLING EQUIPMENT
 - b. ALL PUMPING SYSTEMS
 - c. ALL SUPPLY AIR SYSTEMS
 - d. ALL RETURN AIR SYSTEMS
 - e. ALL HYDRONIC SYSTEMS
 - f. VERIFY OPERATION OF ALL TEMPERATURE CONTROL SYSTEMS
 - g. TEST SYSTEMS FOR PROPER SOUND AND VIBRATION LEVELS
 - D. SUBMIT TESTING, ADJUSTING, AND BALANCING REPORTS BEARING THE SEAL AND SIGNATURE OF THE TAB PROFESSIONAL ENGINEER. PREPARE A REPORT OF RECOMMENDATIONS FOR CORRECTING UNSATISFACTORY MECHANICAL PERFORMANCES WHEN A SYSTEM CANNOT BE SUCCESSFULLY BALANCED.
 - E. 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 TEFLOX COATED RATED FOR PLENUM CEILING.



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

SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLETREE LANE WEST MYSTIC, 06355



date	description	no.
	revisions	

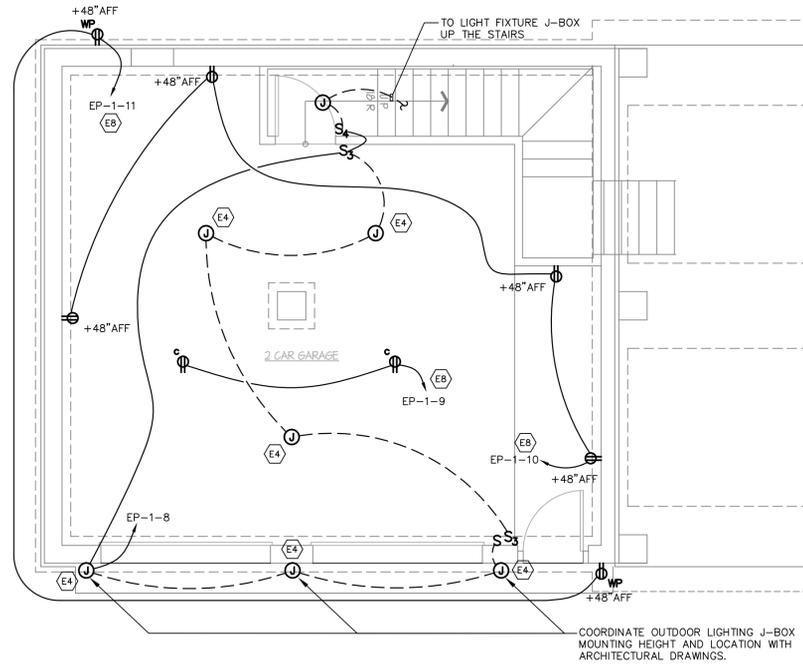
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date drawn scale checked project no. application no.	JANUARY 30, 2015 ANK AS SHOWN DTB 2014064.00

GENERAL NOTES ALL TRADES

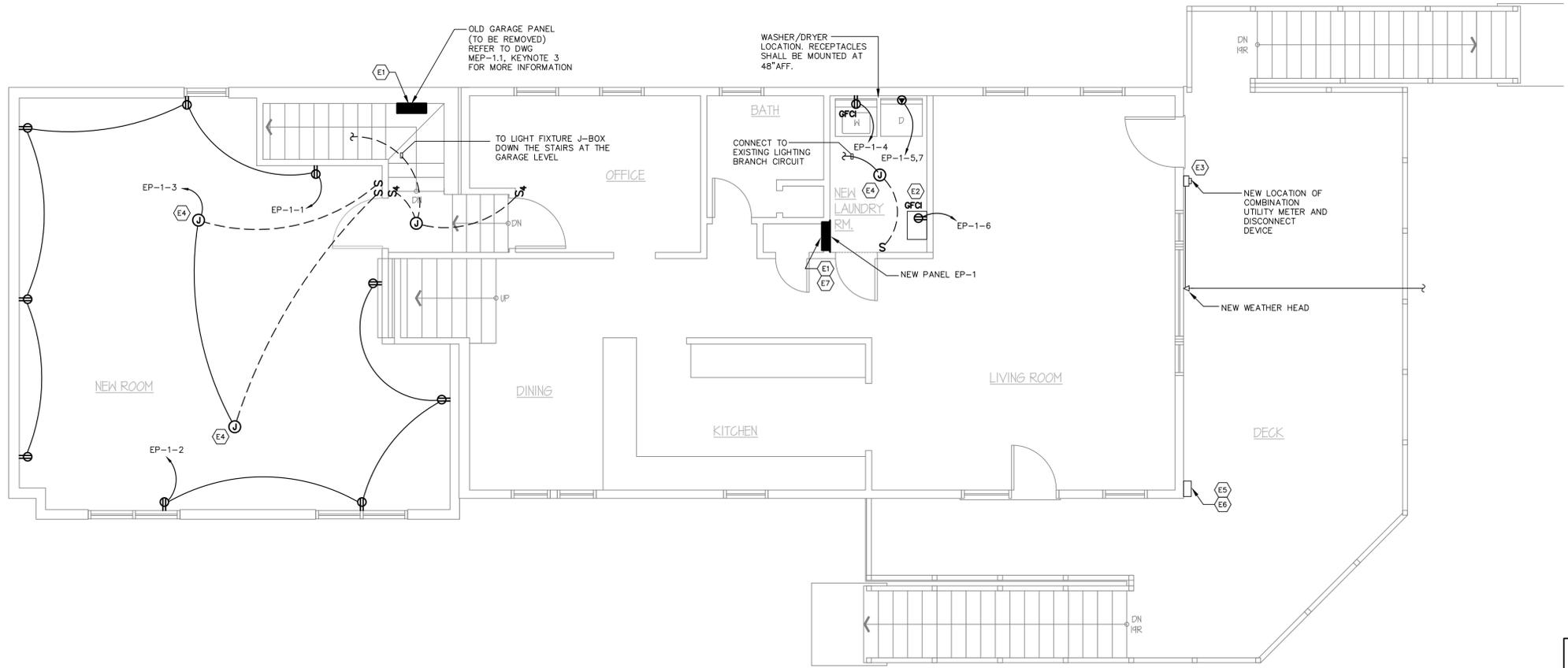
1. ELECTRICAL ITEMS INCLUDING BUT NOT LIMITED TO WIRING, EQUIPMENT, SWITCHES, OUTLETS, ETC SHALL BE INSTALLED ABOVE THE FLOOD PLANE AS DETERMINED BY THE ARCHITECTURAL PLANS.
2. WORK SHALL BE COORDINATED WITH ARCHITECTURAL PLANS.
3. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS PRIOR TO PROVIDING ALL EQUIPMENT AND PIPING.
4. CIRCUITS SHALL BE #12 FOR 20A-1P CIRCUIT BREAKERS AND #14 FOR 15A CIRCUIT BREAKERS IN PANEL INDICATED UNLESS NOTED OTHERWISE.

ELECTRICAL KEY NOTES

- E1 PROVIDE NEW SPLICE/JUNCTION BOXES AS REQUIRED FOR EXTENSION OF ALL CIRCUIT TO NEW PANEL LOCATION. ALL JUNCTIONS SHALL BE IN ACCESSIBLE AREA AND WIRE SHALL MATCH EXISTING.
- E2 PROVIDE 120VAC/20AMP GFCI RECEPTACLE FOR BOILER. 12-2 FEED TO NEW 20A 1-POLE BREAKER IN PANEL 'EP-1'
- E3 PROVIDE NEW ELECTRIC SERVICE TO THE RESIDENCE. PROVIDE NEW WEATHER HEAD, WIRING (FROM WEATHER HEAD TO METER), METER, METER SOCKET, NEW FEEDER TO PANEL 'EP-1' AND CONNECTION TO PANEL 'EP-1'. REFER TO DISTRIBUTION RISER DIAGRAM FOR MORE INFORMATION. COORDINATE WITH THE UTILITY COMPANY ALL WORK AND PARTS ASSOCIATED WITH PROVIDING A NEW SERVICE.
- E4 PROVIDE 12-2 WIRING AND JUNCTION BOX TO THIS LOCATION. WIRING AND JUNCTION BOX SHALL BE PROTECTED FOR FUTURE USE AND INSTALLATION OF LIGHTING FIXTURE. OWNER SHALL PROVIDE LIGHTING FIXTURE BASED ON ALLOWANCE PROVIDED UNDER THIS PROJECT. REFER TO PANELBOARD SCHEDULE FOR CKT INFORMATION. REFER TO DWGS FOR WIRING INFORMATION.
- E5 NEW TELEPHONE SERVICE SHALL BE PROVIDED. CONNECT TO EXISTING TELEPHONE DISTRIBUTION EQUIPMENT AND CABLING. COORDINATE WITH THE TELEPHONE COMPANY ALL WORK AND PARTS ASSOCIATED WITH PROVIDING A NEW SERVICE.
- E6 NEW CATV SERVICE SHALL BE PROVIDED. CONNECT TO EXISTING CATV DISTRIBUTION EQUIPMENT AND CABLING. COORDINATE WITH THE CATV COMPANY ALL WORK AND PARTS ASSOCIATED WITH PROVIDING A NEW SERVICE.
- E7 PROVIDE NEW PANEL 'EP-1' 200A/MCB, 2P, 120/240V, 42-POLE, 3-WIRE.
- E8 CIRCUITS UNDER THIS KEYNOTE SHALL BE PROVIDED WITH CIRCUIT BREAKERS OF GFCI TYPE IN PANEL 'EP-1'



1 NEW WORK GARAGE PLAN
SCALE: 1/4"=1'-0"



2 NEW WORK FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



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

SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLE TREE LANE WEST MYSTIC, 06355



date	description	no.
revisions		

E-1.0

date	JANUARY 30, 2015
drawn	VMC
scale	AS SHOWN
checked	DTB
project no.	2014064.00
application no.	

GENERAL PROCEDURES ALL TRADES

1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL PLUMBING, 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, OBSTRUCTIONS, 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 DISCONNECT/FROM 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 THE WORK AS 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. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'-0", HIGHLIGHT, ENIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
 - B. 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 MARK 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. 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. BALANCE REPORTS.
 - f. 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.
 - g. 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. AS-BUILT DRAWINGS
 - A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
 - B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
 - C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE.
 - D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED

- IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
14. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, 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.
 15. 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. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
 7. 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.
 8. 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.
 9. 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.
 10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SHACMA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.

ELECTRICAL SPECIFICATIONS

1. CONTACT THE POWER COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL NECESSARY EQUIPMENT, GROUNDING, CONDUITS, WIRE, TRENCHING, SAND AND BACKFILL ETC., FOR THE POWER COMPANY SERVICE CONNECTIONS AND ACTIVATION OF SERVICE FOR THE PROJECT. ALL EQUIPMENT SHALL MEET THE POWER COMPANIES REQUIREMENTS AND SHALL BE SUBMITTED TO THE POWER COMPANY PRIOR TO ORDERING OR INSTALLATION.
2. CONTACT THE TELEPHONE COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL BOXES, TERMINATIONS, CONDUITS AND WIRING PER DRAWINGS.
3. CONTACT THE CABLE TELEVISION COMPANY FOR NECESSARY COORDINATION OF SERVICE REQUIREMENTS AND PAY FOR ALL RELATED CHARGES FOR THE SERVICE INSTALLATION. PROVIDE ALL BOXES, TERMINATION, CONDUITS AND WIRING PER DRAWINGS.
4. SERVICE-DISCONNECTING MEANS SHALL BE OF THE TYPE AS INDICATED WITH EXTERNAL HANDLE FOR MANUAL OPERATION. WHEN SERVICE DISCONNECTING MEANS IS A PART OF AN ASSEMBLY, THE ASSEMBLY SHALL BE LISTED AS SUITABLE FOR SERVICE ENTRANCE EQUIPMENT. ENCLOSURES SHALL BE SHEET METAL WITH HINGED COVER FOR SURFACE MOUNTING UNLESS OTHERWISE INDICATED.
5. PANELBOARD/LOAD CENTER:
 - A. PROVIDE CIRCUIT BREAKER TYPE PANELBOARD/LOAD CENTER WITH BUS RATING AS INDICATED ON DRAWINGS.
 - B. MINIMUM INTEGRATED SHORT CIRCUIT RATING: 10,000A RMS SYMMETRICAL.
 - C. MOLDED CASE CIRCUIT BREAKER: NEMA AB, PLUG ON TYPE THERMAL MAGNETIC TRIP CIRCUIT BREAKERS, WITH COMMON TRIP HANDLES PER POLES, LISTED AS TYPE SWD FOR LIGHTING CIRCUITS, CLASS A GROUND FAULT INTERRUPTER CIRCUIT BREAKER AS INDICATED ON DRAWINGS. ARC-FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKERS AS INDICATED ON DRAWINGS.
 - D. ENCLOSURE: GENERAL PURPOSE.
 - E. BOX: FLUSH TYPE WITH DOOR AND PULL RING LATCH, FINISH IN MANUFACTURER STANDARD GRAY ENAMEL.
6. MOUNT PANELBOARDS, CIRCUIT BREAKERS, AND DISCONNECTING SWITCHES SO HEIGHT OF OPERATING HANDLE AT ITS HIGHEST POSITION IS MAXIMUM 78 INCHES ABOVE FLOOR.
7. ALL BACKBOARDS SHALL UTILIZE FIRE RETARDANT 3/4 INCH PLYWOOD, SIZED AS INDICATED ON THE DRAWINGS.
8. 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.
 - B. MAKE GROUND CONNECTION AT MAIN SERVICE EQUIPMENT, AND EXTEND GROUNDING CONDUCTOR TO POINT OF ENTRANCE OF METALLIC WATER SERVICE. MAKE CONNECTION TO WATER PIPE BY SUITABLE GROUND CLAMP WITH METER JUMPER OR LUG CONNECTION TO PLUGGED TEE. IF FLANGED PIPES ARE ENCOUNTERED, MAKE CONNECTION WITH LUG BOLTED TO STREET SIDE OF FLANGED CONNECTION. SUPPLEMENT METALLIC WATER SERVICE GROUNDING SYSTEM WITH ADDITIONAL MADE ELECTRODE IN COMPLIANCE WITH NFPA 70. MAKE GROUND CONNECTION TO DRIVEN GROUND RODS ON EXTERIOR OF BUILDING. GROUND RODS SHALL BE OF COPPER-CLAD STEEL CONFORMING TO UL 467 NOT LESS THAN 19.1 MM (3/4 INCH) IN DIAMETER BY 2.4 METER (8 FEET) IN LENGTH OF THE SECTIONAL TYPE DRIVEN FULL LENGTH INTO THE EARTH WHERE GROUND FAULT PROTECTION IS EMPLOYED. ENSURE THAT CONNECTION OF GROUND AND NEUTRAL DOES NOT INTERFERE WITH CORRECT OPERATION OF FAULT PROTECTION.
9. 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 CAPACITIES SHOWN ARE BASED ON COPPER, UNLESS INDICATED OTHERWISE. UNLESS SPECIFIED OR INDICATED OTHERWISE OR REQUIRED BY NFPA 70. UNLESS OTHERWISE INDICATED WIRING METHODS SHALL BE:
 - a. SERVICE ENTRANCE WIRING AND WIRING TO DISTRIBUTION PANELS. WIRES SHALL BE IN PVC CONDUIT AND SHALL BE 600-VOLT, TYPE THHN/THHN ANNEALED COPPER.
 - b. BRANCH CIRCUITING INSIDE THE BUILDING IN DRY AREAS SHALL BE 600 VOLT, TYPE NM-B.
 - c. BRANCH CIRCUITING OUTSIDE THE BUILDING AND IN WET/DAMP AREAS SHALL BE 900 VOLT, TYPE UF-B.
 - d. WIRES SUBJECT TO DAMAGE SHALL BE IN PVC CONDUIT.
 - B. MAKE ALL SPLICES IN ACCESSIBLE LOCATIONS. MAKE SPLICES IN CONDUCTORS NO. 10 AWG AND SMALLER DIAMETER WITH INSULATED, PRESSURE-TYPE CONNECTOR. MAKE SPLICES IN CONDUCTORS NO. 8 AWG AND LARGER DIAMETER WITH SOLDERLESS CONNECTOR, AND COVER WITH INSULATION MATERIAL EQUIVALENT TO CONDUCTOR INSULATION.
 - 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.
9. BOXES:
 - A. ALL OUTLETS, SWITCH AND JUNCTION BOXES SHALL BE NONMETALLIC BOXES.
 - B. BOXES SHALL BE SIZED IN ACCORDANCE WITH NFPA 70.
 - C. EXTERIOR BOXES SHALL BE GASKETED AND WATERTIGHT.
10. 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.
 - a. SWITCHED RECEPTACLES SHALL BE THE SAME AS OTHER RECEPTACLES SPECIFIED EXCEPT THAT THE UNGROUNDED POLE OF EACH SUITABLE RECEPTACLE SHALL BE PROVIDED WITH A SEPARATE TERMINAL. ONLY THE TOP RECEPTACLE OF A DUPLEX RECEPTACLE SHALL BE WIRED FOR SWITCHING APPLICATION.
 - C. RECEPTACLES WITH GROUND FAULT CIRCUIT INTERRUPTERS SHALL HAVE THE CURRENT RATING AS INDICATED, AND SHALL BE UL CLASS A TYPE UNLESS OTHERWISE SHOWN. GROUND FAULT CIRCUIT PROTECTION SHALL BE PROVIDED AS REQUIRED BY NFPA 70 AND AS INDICATED ON THE DRAWINGS.
 - D. WEATHERPROOF RECEPTACLES SHOWN SHALL BE MOUNTED IN A BOX WITH A

- GASKETED, WEATHERPROOF, WATERPROOF COVER PLATE AND GASKETED CAP OVER EACH RECEPTACLE OPENING.
- E. 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 120/277-VOLT FOR USE ON ALTERNATING CURRENT ONLY.
 - F. DIMMING SWITCHES SHALL BE SLIDE TYPE, SOLID-STATE, FLUSH MOUNTED, AND SIZED FOR THE LOADS.
 - G. 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.
 11. 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.
 12. PROVIDE ALL NECESSARY WIRE, CONDUIT AND EQUIPMENT TO SUPPLY POWER TO THE HEATING, VENTILATION AND AIR CONDITIONING EQUIPMENT, PLUMBING EQUIPMENT AND FIRE PROTECTION EQUIPMENT. CONTROL WIRING AND CONDUIT SHALL BE PROVIDED UNDER DIVISION 15.
 13. COORDINATE ALL WORK WITH OTHER TRADES AND ARRANGE INSTALLATION TO AVOID CLASHES BETWEEN EQUIPMENT, WORK OF OTHER TRADES AND BUILDING STRUCTURE.



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

SMITH RESIDENCE MITIGATION, REHABILITATION AND RECONSTRUCTION APPLICATION No. 2011 2 APPLETREE LANE WEST MYSTIC, 06355



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