

1631 A STREET SE WASHINGTON, DC 20003

ABBREVIATIONS

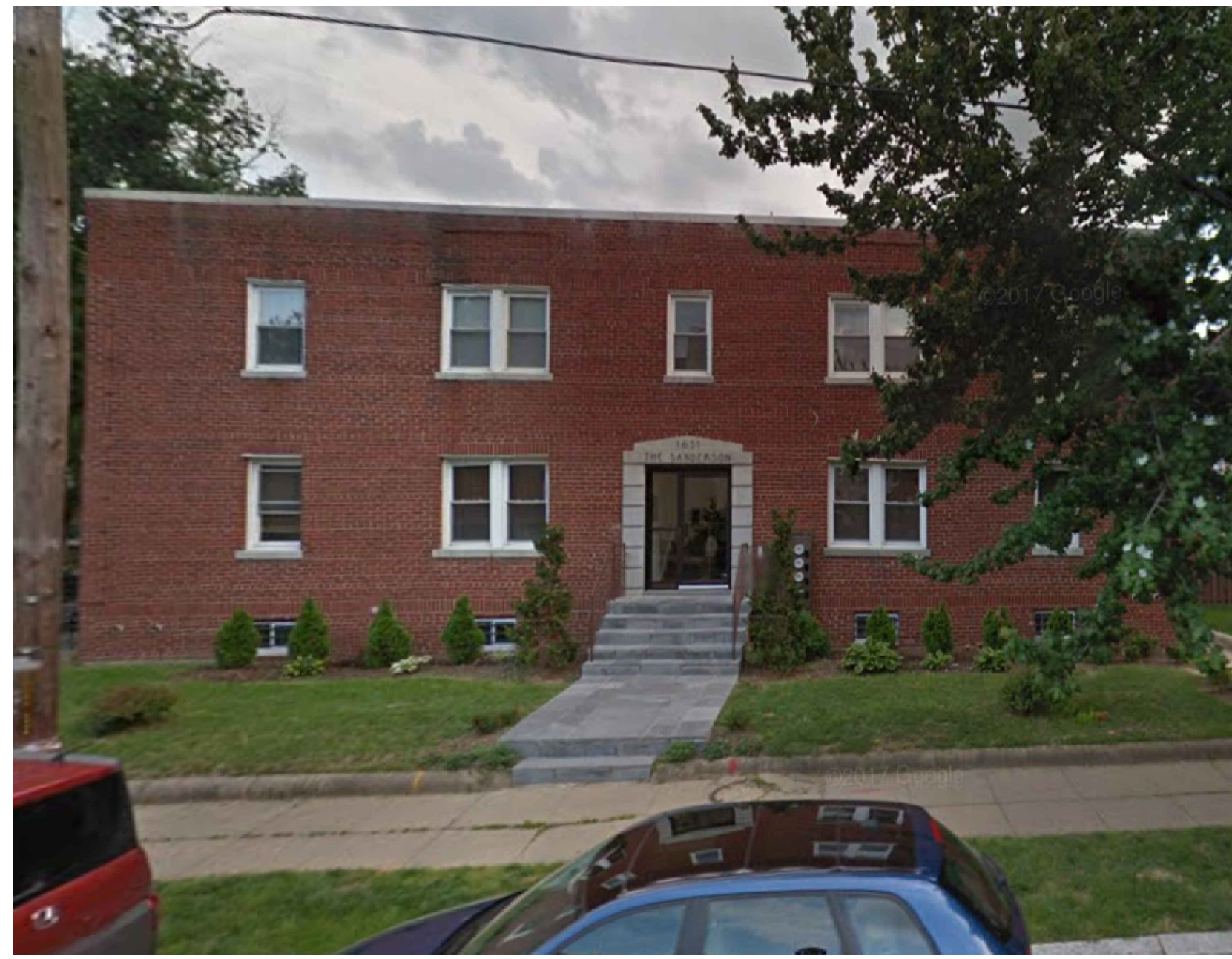
A.B.	ANCHOR BOLT
ACOUS.	ACOUSTICAL
ADDL.	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
ALUM./AL	ALUMINUM
ANOD.	ANODIZED
AWI	ARCHITECTURAL WOODWORK INSTITUTE
BL'G.	BLOCKING
BM.	BEAM
BRG.	BEARING
C.H.	CEILING HEIGHT
C.J.	CONTROL JOINT
CLG.	CEILING
CLOS.	CLOSET
CMU.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONF.	CONFERENCE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CORR.	CORRIDOR
CPT.	CARPET
CT	CERAMIC TILE
DIMS.	DIMENSIONS
DN.	DOWN
DWC	DRYWALL CHANNEL
DWG'S.	DRAWINGS
EACH	EACH
E.J.M.	ELASTOMERIC JOINT MATERIAL
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
EXPAN.	EXPANSION
EXT.	EXTERIOR
F.C.U.	FAN COIL UNIT
F.D.	FLOOR DRAIN
F.F.	FINISHED FLOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN.	FINISH
FLR.	FLOOR
FLASHG.	FLASHING
FR. / FRM.	FRAME
FRT.	FIRE RETARDANT TREATMENT
FTG.	FOOTING
FURN.	FURNISHED
FURR'G.	FURRING
GA.	GALVANIZED IRON
GEN.	GENERAL
G.I.	GALVANIZED IRON
GL.	GLASS
GYP. BD.	GYPSUM BOARD
H.M.	HOLLOW METAL
HR.	HOUR
INSUL.	INSULATION, INSULATED
JAN.	JANITOR
JT.	JOINT
MECH.	MECHANICAL
MGR.	MANAGER
MIN.	MINIMUM
MNT.	MOUNT
MTL.	METAL
MFR.	MANUFACTURER
NO.	NUMBER
O.C.	ON CENTER
P.C.	PORTLAND CEMENT
PLAS. LAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
PMEJ	PREMOLDED EXPANSION JOINT
P.P.T.	PRESERVATIVE PRESSURE TREATMENT
PNT.	PAINT
ROP.	REFLECTED CEILING PLAN
RE.	REFERENCE
REC'P.	RECEPTION
REINF.	REINFORCING
RESIL.	RESILIENT
RET.	RETAINING
REQ'D.	REQUIRED
SCHED.	SCHEDULE
SC WD	SOLID CORE WOOD
SECT.	SECTION
SECY.	SECRETARY
S.O.I.C.	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
SHT.	SHEET
STL.	STEEL
STN	STAIN
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
TELE.	TELEPHONE
TEMP.	TEMPERED
T.G.	TOP OF GRATE
TLWC	TOP OF LIGHTWEIGHT CONCRETE
T.V.	TELEVISION
T.W.	TOP OF WALL
TYP.	TYPICAL
U.L.	UNDERWRITERS LABORATORIES
VERT.	VERTICAL
VEST.	VESTIBULE
VCT	VINYL COMPOSITION TILE
VWC	VINYL WALL COVERING
W/F	WITH
WD.	WOOD
WP.	WORKING POINT

GRAPHIC SYMBOLS

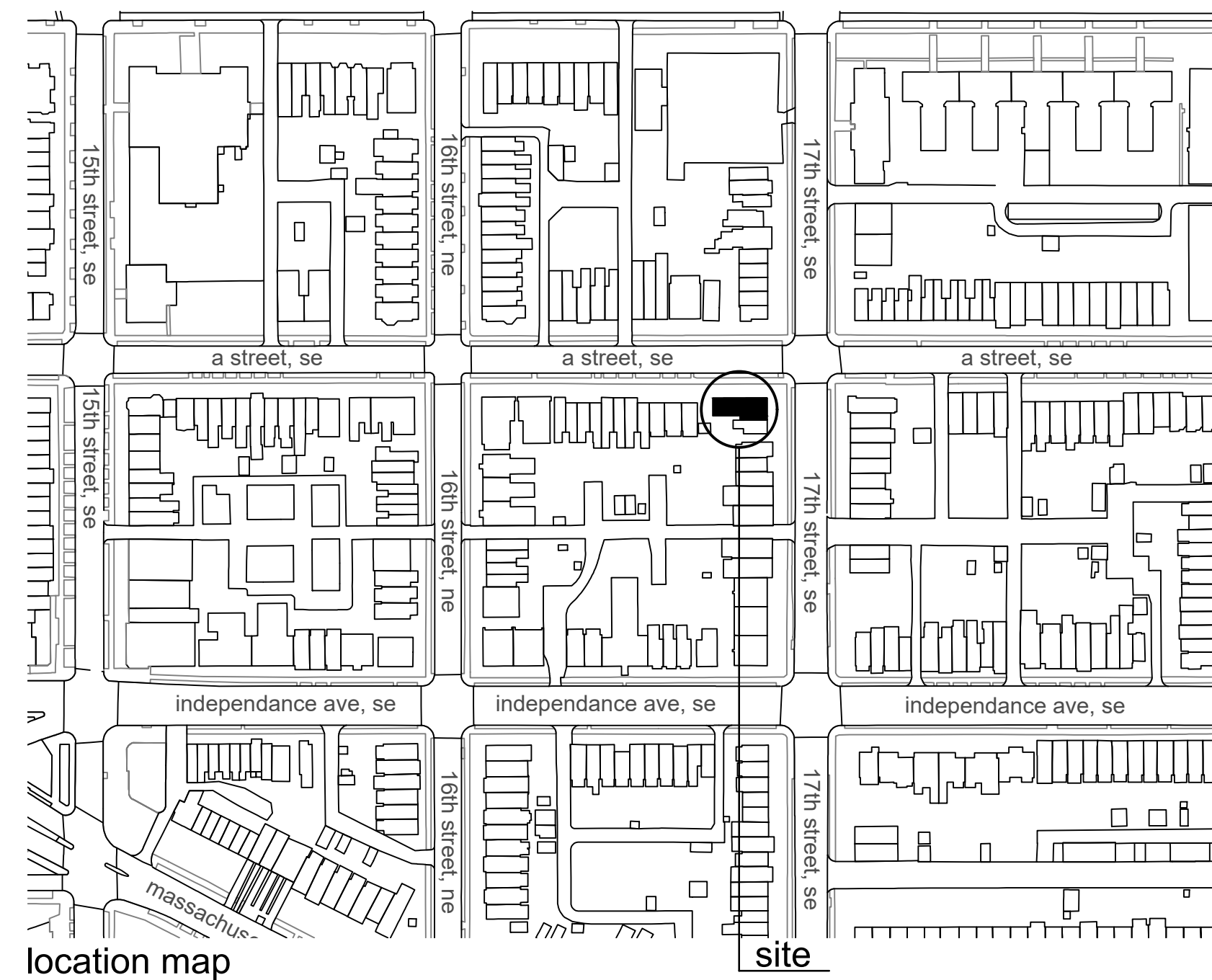
	DETAIL NUMBER
	WALL SECTION
	SHEET WHERE DETAIL APPEARS
	BUILDING SECTION
	DETAIL MARK
	INTERIOR ELEVATION
	SHEET WHERE DETAIL APPEARS
	PARTITION TYPE
	WINDOW TYPE
	DOOR NUMBER
	REVISION NUMBER
	NEW STUD WALL
	WALL TO BE REMOVED

MATERIAL SYMBOLS

	EARTH
	CONCRETE MASONRY UNIT
	BRICK
	POURED CONCRETE
	GRAVEL FILL
	MARBLE
	SAND, PLASTER, GYPSUM WALL BOARD
	METAL
	ROUGH LUMBER
	FINISHED WOOD
	PLYWOOD (LARGE SCALE)
	PLYWOOD (SMALL SCALE)
	RIGID INSULATION
	BATT INSULATION



existing front photograph



location map

Section 503 Alteration—Level 1

503.1 Scope

Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

503.2 Application

Level 1 alterations shall comply with the provisions of Chapter 7.

SHEET INDEX

C001	COVER SHEET, GENERAL NOTES, INDEX OF DRAWINGS, SYMBOL LISTS
EVS001	ENERGY DETAILS
ESV002	ENERGY NOTES
EVS003	ADDITIONAL EFFICIENCY PACKAGE
ESV004	KITCHEN HOOD/BATH EXHAUST FAN SPECIFICATIONS
D001	EXISTING / DEMOLITION FLOOR PLANS
A001	PROPOSED FLOOR PLANS
A002	FIRE PENETRATION DETAILS
M001	MECHANICAL FLOOR PLANS, NOTES, LEGENDS, RISERS
P001	PLUMBING FLOOR PLANS, NOTES, LEGENDS, RISERS
P002	DUCT SHEET DETAIL AND NOTE
E001	ELECTRICAL FLOOR PLANS, NOTES, LEGENDS, RISERS AND CHARTS

ENERGY NOTES: (NOT USED IN THIS PROJECT).

- BUILDING LEAKAGE TEST TO BE PERFORMED TO ENSURE BUILDING LEAKAGE NOT EXCEED 3 AIR CHANGES PER HOUR.
- TESTING TO BE PERFORMED BY THIRD PARTY CONTRACTOR.
- THERE SHALL BE PROGRAMMABLE THERMOSTATS INSTALLED THRU-OUT.
- A DUCT LEAKAGE TEST SHOWING A PASSING RATING OF <8CFM PER 100 SF CONDITIONED FLOOR AREA AT A PRESSURE OF 50 PASCAL
- SUPPLY DUCTS IN ATTIC ARE TO BE INSULATED WITH R-8 ALL OTHER DUCTS IN UNCONDITIONED SPACES OR OUTSIDE THE BUILDING ENVELOPE TO BE R-6.
- GRAVITY DAMPERS TO BE INSTALLED AT ALL INTAKES / EXHAUST.
- HVAC LINE SET PIPING TO BE INSTALLED WITH UV PROTECTANT AND WRAPPED IN MINIMUM R-3 INSULATION.
- ALL HOT WATER PIPES TO BE WRAPPED IN MINIMUM R-3 INSULATION.
- AIR HANDLERS SHALL NOT EXCEED LEAKAGE RATE OF 2%.
- VENTILATION AND EFFICACY FLOW REQUIREMENTS EXHAUST FANS MIN. 50 CFM AND 48 WATTS.
- 85% OF ALL PERMANENT FIXTURES OR 85% LAMPS IN PERMANENT FIXTURES USED ARE TO BE HIGH EFFICIENT LAMPS.
- U FACTORS = DOORS/WINDOWS = 0.30 - SKYLIGHTS = 0.55

DESIGN CRITERIA

FLOOR LIVE LOAD	40psf / SLP RM 30psf
FLOOR DEAD LOAD	15psf
SNOW LOAD (roof live load)	30psf
WIND LOAD	20psf
CONCRETE STRENGTH	3000psi
DOUGLAS FIR STRUCT. SELECT	1600psf.
STEEL GRADE	A36
SOIL BEARING CAPACITY	1500PSF
BASIC WIND SPEED	110 MPH 3 second gust Seismic design category = B
FROST LINE	18 inches
FOOTING DEPTH	30 inches (bottom of footing)

APPLICABLE BUILDING CODES:

2017 DCMR 12
2015 IBC
2015 IEBC
2017 DCMR 12, ICCA 117.1.2009
NEC 2014

ROOF COVERING: (NOT USED)

PER 2017 DCMR R402.6.1 SOLAR REFLECTIVE INDEX- INITIAL AND AGED VALUES OF SRI SHALL BE CALCULATED IN ACCORDANCE WITH ASTM E1980 FOR MEDIUM-SPEED WIND CONDITION, USING A CONVECTION COEFFICIENT OF (2.1 BTU/(H x FT² x °F)) OR THE METRIC EQUIVALENT (12W/(M² x K)). THE SRI SHALL BE BASED UPON SOLAR REFLECTANCE AS MEASURED IN ACCORDANCE WITH ASTM E1918 OR ASTM C1549, AND THE THERMAL EMITTANCE AS MEASURED IN ACCORDANCE WITH ASTM E408 OR ASTM C1371. FOR ROOFING PRODUCTS, THE VALUES FOR SOLAR REFLECTANCE AND THERMAL EMITTANCE SHALL BE DETERMINED BY A LABORATORY ACCREDITED BY A NATIONALLY RECOGNIZED ACCREDITATION ORGANIZATION, SUCH AS THE COOL ROOF RATING COUNCIL CRRC-1 PRODUCT RATING PROGRAM, AND SHALL BE LABELED AND CERTIFIED BY THE MANUFACTURER.

SCOPE OF WORK:

ADD TWO UNITS IN CELLAR WITH ALL ASSOCIATED MEP SYSTEMS.

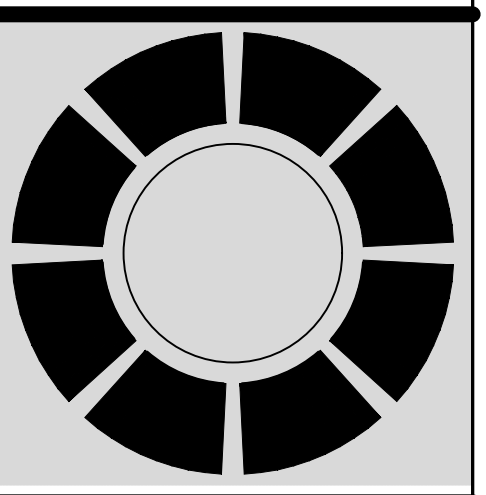
PROJECT DATA

BUILDING DATA	EXISTING	PROPOSED
SQUARE:	1086	1086
LOT:	0804	0804
ZONE	RF-1	RF-1
TYPE OF CONSTRUCTION	3B	3B
USE GROUP	R2	R2
YEAR BUILT	1941	1941
LAND AREA	2,000 SF	2,000 SF
NO. STORIES ABOVE GRADE	02	02
NUMBER OF UNITS	04	06
FULLY SPRINKLED	no	no
FIRE ALARM	no	no
CELLAR	yes	yes

INSULATION VALUES

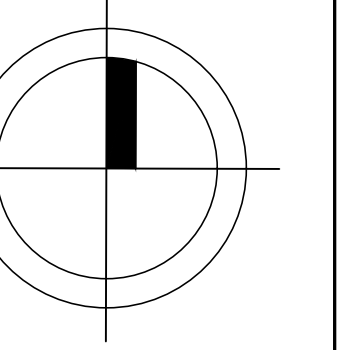
ROOF / ATTIC	R-49 12" DEEP CAVITY WITH CLOSED-CELL 2LB. FOAM INSULATION
EXT. WALLS	R-20 4" DEEP CAVITY WITH CLOSED-CELL 2LB. FOAM INSULATION
UNVENTED ATTIC	R-15 AIR IMPERMEABLE INSULATION EITHER RIGID FOAM BOARD OR SPRAY FOAM INSULATION. R VALUE PER INCH RIGID FOAM BOARD = 4.0 +o 6.0 SPRAY FOAM = 3.2 +o 3.8
FENESTRATION U-FACTOR	0.30 U-FACTOR
SKYLIGHT U-FACTOR	0.55 U-FACTOR
GLAZED FENESTRATION SHGC	0.40 SOLAR HEAT GAIN COEFFICIENT (SHGC)
CEILING	R-49 R-19 IN CAVITY + R-5 CONTINUOUS ON THE EXTERIOR, OR R-13 IN CAVITY + R-10 CONTINUOUS ON THE EXTERIOR, OR R-15 CONTINUOUS OR R22/0.45 U-FACTOR EQUIVALENT.
WOOD FRAME WALL & RIM JOISTS	R-15 CONTINUOUS ON THE EXTERIOR, OR R-20 CONTINUOUS ON THE INT.
MASS WALL	R-25 + R-5 CONTINUOUS
FRAME FLOOR ELEVATED SLAB	R-15 CONTINUOUS
BASEMENT WALL	R-19 IN CAVITY + R-5 CONTINUOUS ON THE EXTERIOR, OR R-13 IN CAVITY + R-10 CONTINUOUS ON THE EXTERIOR, OR R-15 CONTINUOUS
SLAB ON GRADE	R-10 PERIMETER INSULATION FOR A DEPTH OF 2 FT.
CONDITIONED CRAWLSPACE WALL	R-19 IN CAVITY + R-5 CONTINUOUS ON THE EXTERIOR, OR R-13 IN CAVITY + R-10 CONTINUOUS ON THE EXTERIOR, OR R-15 CONTINUOUS
MIN. SOUND TRANSMISSION RATING	STC 45 (IRC) STC 50 (IBC)

For SI: 1 foot = 304.8 mm.
a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
c. The second R-value applies when more than half the insulation is on the interior of the mass wall.
d. R-5 shall be added to the required slab edge R-values for heated slab.
Where Section R402.1.2 would require R-49 insulation in the ceiling but the depth of the roof rafters does not allow R-49, the ceiling insulation value may be reduced to R-38. This reduction shall not apply to the U-factor alternative approach in Section R402.1.4 and the total UA alternative in Section R402.1.5.



COVER SHEET

1631 A STREET, SE WASHINGTON, DC 20003



Mark	Date	Revision

AUGUST 09, 2024

KILLETTE | ASSOCIATES

202-257-2237

C001

Board of Zoning Adjustment
District of Columbia
CASE NO. 21303
EXHIBIT NO. 9

1. THE WORK CONSISTS OF THE FURNISHING OF ALL LABOR, MATERIAL, EQUIPMENT, SERVICE, SUPERVISION AND PERFORMING ALL WORK CALLED FOR IN THE COMPLETION OF THE REHABILITATION OF 1631 A STREET, SE. WDC 20003, INCLUDING SITE IMPROVEMENTS AS SET FORTH IN THE ARCHITECTURAL, STRUCTURAL, HEATING, VENTILATION, AIR CONDITIONING, PLUMBING AND ELECTRICAL AND THE ACCOMPANYING WARRANTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING THE ABOVE DRAWINGS AND THE SPECIFICATIONS BOOK AS BEING INTEGRATED INTERDEPENDENT DOCUMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL LICENSED TRADE PERMITS AND SCHEDULING ALL INSPECTIONS INCLUDING FINAL OCCUPANCY AS REQUIRED BY THE DISTRICT OF COLUMBIA CONSUMER AND REGULATORY AFFAIRS, PEPCO, WASHINGTON GAS COMPANY, AT&T AND OTHER AFFECTED UTILITY COMPANY.
3. ALL CHARGES, CONTRIBUTIONS, COSTS AND OTHER MEANS OF REIMBURSEMENT ASSOCIATED WITH THE INSTALLATION AND SERVICE BY LOCAL AUTHORITIES AND UTILITY COMPANIES SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID AND FINAL CONTRACT PRICE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COST OF ALL UTILITIES USED IN THE PERFORMANCE OF THE WORK.


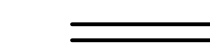
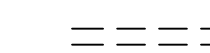

4. ALL WORK SHALL BE DONE IN A LEGAL MANNER. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE CODES, REGULATIONS AND LAWS OF THE DISTRICT OF COLUMBIA CONSUMER AND REGULATORY AFFAIRS WHEN THE DRAWINGS OR SPECIFICATIONS OMIT ANY PARTICULAR AREA GOVERNED BY THE CODES. THOSE CODES SHALL BE USED AS BEING THE MINIMUM IN CASES WHERE THE DRAWINGS OR SPECIFICATIONS INDICATE LESSER REQUIREMENTS.
5. PROTECT FROM DAMAGE ALL EXISTING SURFACES AND FINISHES TO REMAIN. CAREFULLY PERFORM DEMOLITION OPERATIONS SO AS NOT TO DAMAGE ADJACENT SURFACES TO REMAIN.
6. THESE NOTES ARE GENERAL IN NATURE AND APPLY TO THE ENTIRE BUILDING WHETHER OR NOT SPECIFICALLY NOTED OR REFERENCED ON EACH FLOOR. THE DRAWINGS INDICATE ONLY THE GENERAL EXTENT OF DEMOLITION WORK AND MAY NOT INCLUDE ALL DEMOLITION WHICH WILL BE REQUIRED FOR NEW CONSTRUCTION. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK. CONTRACTOR'S PRE-BID SITE VISIT SHALL VERIFY ALL EXISTING CONDITIONS AND SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL REQUIRED DEMOLITION IN AREAS UNDERGOING MODIFICATION WHETHER SUCH WORK IS OR IS NOT INDICATED ON THE DRAWINGS. REFER TO ALL

7. THE CONTRACTOR SHALL FURNISH TO THE OWNER ALL WARRANTIES AND BONDS OF AFFIDAVIT FROM SUPPLIERS AND MANUFACTURERS ON THE NEW ROOF, ALL MECHANICAL EQUIPMENT, APPLIANCES AND OTHER ITEMS AS MAY BE REQUESTED IN THE BODY OF THE SPECIFICATIONS. THE CONTRACTOR SHALL ALSO FURNISH TO THE OWNER A 3-RING LOOSE LEAF NOTEBOOK OF ALL OPERATING AND MAINTENANCE MANUALS OF ANY AND ALL EQUIPMENT PROVIDED AND INSTALLED UNDER THIS CONTRACT.
8. ITEMS TO BE SALVAGED FOR RE-USE SHALL BE STORED IN A SAFE AND SECURE LOCATION AS DIRECTED THE CONTRACTING OFFICER UNTIL REINSTALLATION.
9. REMOVE ALL INTERIOR PARTITIONS AND INTERIOR DOORS AS INDICATED ON ARCHITECTURAL PLANS.
10. REMOVE ALL EQUIPMENT AND MACHINERY INCLUDING APPURTENANCES, STUDS, HANGERS AND FASTENERS LOCATED IN CEILINGS, WALLS, AND FLOORS THAT IS LOCATED IN THE AFFECTED AREA.

general and demolition notes

11. EXISTING DRAWINGS ARE FOR GENERAL REFERENCE AND MAY NOT ALWAYS NECESSARILY REPRESENT EXISTING CONDITIONS ACCURATELY.
12. DIMENSIONS SHOWN IN NOMINAL SIZES ARE FOR THE PURPOSE OF DESCRIBING THE CONSTRUCTION AND ARE NOT TO BE TAKEN AS THE ACTUAL SIZE OF THE COMPONENT.
13. ALL WORK SHALL CONFORM TO THE CURRENT CODE STANDARDS OF THE TRADES. INSTALL ALL MANUFACTURED ITEMS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
14. DEMOLITION SHALL GENERALLY BE ARRANGED TO AGREE WITH THE ACCOMPLISHMENT OF THE WORK AND COORDINATED WITH THE WORK OF THE OTHER TRADES. CONTRACTOR SHALL EXAMINE ALL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
15. CONTRACTOR SHALL PATCH ALL HOLES IN WALLS, FLOORS, AND CEILINGS AND REPAIR OR REPLACE ALL EXISTING ITEMS DAMAGED BY THE WORK WHETHER OR NOT SPECIFICALLY NOTED ON THE DRAWINGS TO BE REPAIRED IN THE AREA AFFECTED BY THE WORK.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE PLUMBING, MECHANICAL, AND ELECTRICAL, SYSTEMS FULLY OPERATIONAL. PROVIDE ADDITIONAL LIGHTING FIXTURES, ELECTRICAL OUTLETS AND SWITCHES, AND PLUMBING AS SHOWN ON THE DRAWINGS OR AS IS NECESSARY TO PROVIDE A COMPLETE INSTALLATION FOR THE INTENDED OCCUPANCY.
17. PROVIDE PORTABLE FIRE EXTINGUISHERS PER 2017 DCBC 906

legend

-  EXISTING MASONRY WALLS TO REMAIN
-  EXISTING INTERIOR WALLS TO REMAIN
-  EXISTING ITEMS TO BE REMOVED
-  FIRE RATED WALL ASSEMBLIES EXISTING TO REMAIN MIN ONE HOUR AT UNITS SEPARATION / MIN TWO HOUR AT STAIRS AND CORRIDORS

LEAD BASED PAINT REMOVAL

LESS THAN 300SF OF PAINTED SURFACES DISTURBED (SEE - PHOTOGRAPHS) BUILDING UN - OCCUPIED. PAINT REMOVAL WILL BE CONDUCTED IN TWO WAYS: WITH HAND TOOLS FOR SPOT PAINT REMOVAL TO ALLOW CREWS TO MAKE STRUCTURE REPAIRS, AND WITH POWER TOOLS TO REMOVE THE PAINT FROM THE STRUCTURE. WORKER TRAINING AND QUALIFICATIONS. ALL PERSONNEL PERFORMING THIS WORK ARE TRAINED AND QUALIFIED IN THE REQUIRED PROCEDURES FOR THE REMOVAL AND DISPOSAL OF LEAD PAINT. REMOVAL METHODS AND EQUIPMENT TESTING. LEAD PAINT REMOVAL METHODS AND PAINT REMOVAL EQUIPMENT TESTING WILL FOLLOW ALL RELEVANT FEDERAL, STATE, COUNTY AND CITY REGULATIONS. THE LEAD REMOVAL WORK WILL BE INSPECTED BY EXPERIENCED AND QUALIFIED PERSONNEL.

THE PAINT REMOVAL WORK WILL INCLUDE:

SURFACE PREP AND CLEANING / REMOVAL OF PAINT BY HAND TOOL OR POWER TOOL / APPLYING PAINT IN NEAT AND PROFESSIONAL MANNER

SAFE WASTE CONTAINMENT AND DISPOSAL

DEBRIS AND WASTE FROM LEAD PAINT REMOVAL WILL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH REGULATIONS BY TRAINED PROFESSIONALS. COMPLIANCE WITH CONTAINMENT AND DISPOSAL REQUIREMENTS WILL BE RECORDED AND CONFIRMED DAILY.

HAZARDOUS WASTE CONTAINMENT AND DISPOSAL:

FOR SPOT REMOVAL WITH HAND TOOLS, A "SHROUD" IS ATTACHED TO THE TOOL TO CAPTURE DEBRIS. FOR POWER TOOL REMOVAL, THE WORK WILL BE CONDUCTED IN A CONTAINED ENCLOSURE THAT WILL BE MAINTAINED, CLEANED AND INSPECTED DAILY. AIR QUALITY MONITORING WILL BE PERFORMED TO ENSURE COMPLIANCE WITH LOCAL AND FEDERAL REGULATIONS. THE HANDLING, STORAGE, TESTING, HAULING AND DISPOSAL OF ALL LEAD PAINT WASTE IS STRICTLY REGULATED. THE CONTRACTOR OR INDIVIDUAL(S) CONDUCTING THE RENOVATIONS MUST BE AT MINIMUM TRAINED IN LEAD-SAFE WORK PRACTICES OR CERTIFIED BY EPA AND/OR DOEE TO CONDUCT ACTIVITIES IN PROPERTIES CONSTRUCTED PRIOR TO 1978.

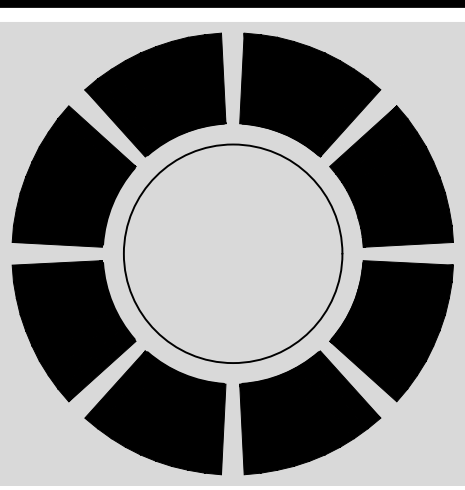
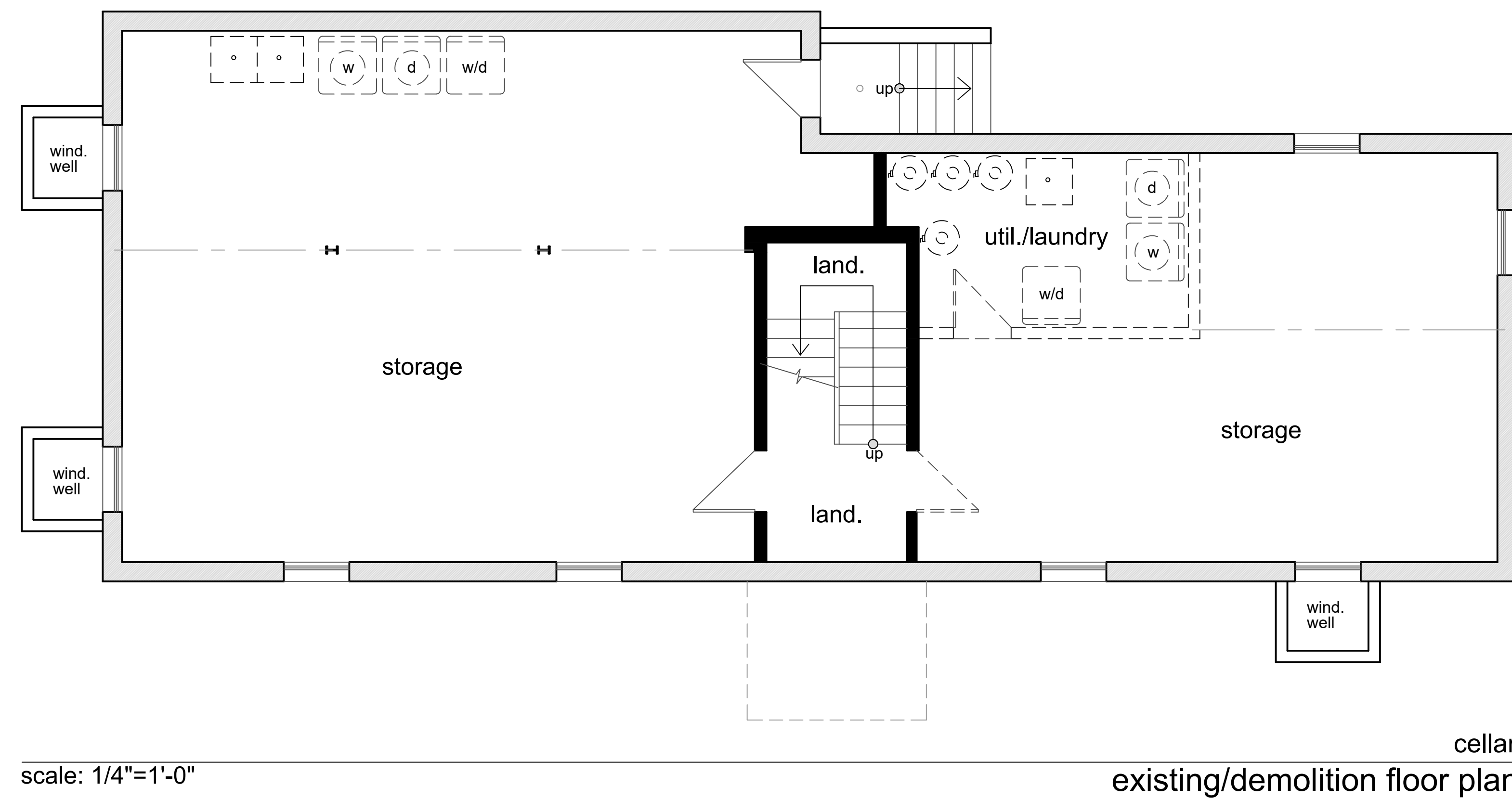
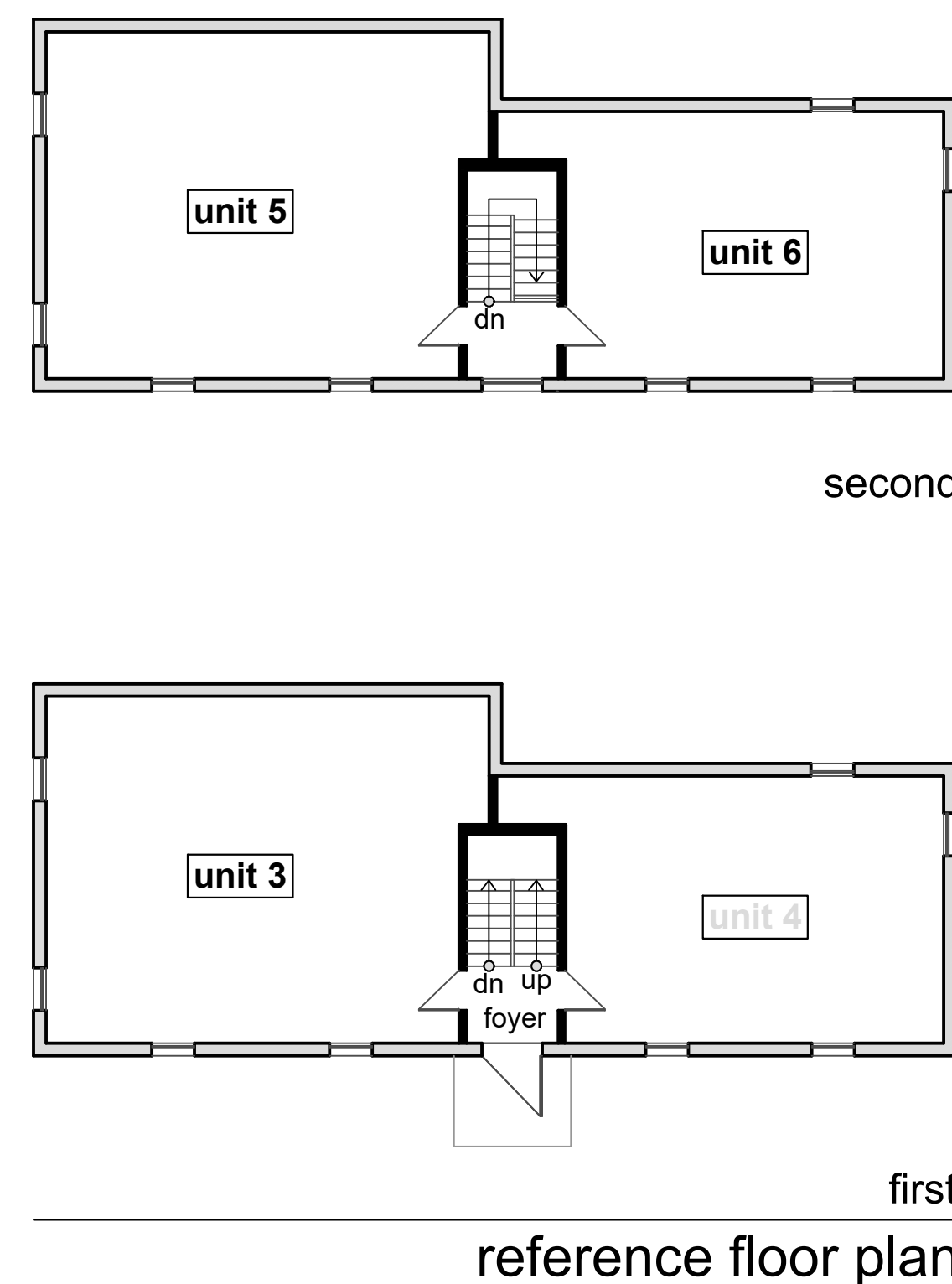
LEAD - SAFE WORK PRACTICES DC. AND FEDERAL LAW.

TO REDUCE THE CHANCE OF POISING CHILDREN OCCUPANTS, NEIGHBORS, AND WORKERS, IN DWELLINGS CONSTRUCTED PRIOR TO 1978, ALWAYS ENSURE THAT CONTAINMENT / BARRIERS ARE IN PLACE TO KEEP THE DERIS / DUST AT A MINIMUM OR AWAY FROM OTHERS, AND YOUR WORKER HAVE THE PROPER EQUIPMENT TO PROTECT THEMSELVES FROM HAZARDS. AD HERE TO LEAD - SAFE WORK PRACTICES WITHIN 20 DCMR SECTION: 3302 ([HTTP://DOEE.DC.GOV/PUBLICATIONS/2013-LEADREGULATIONS-FINALIZED](http://doee.dc.gov/publications/2013-LEADREGULATIONS-FINALIZED)). IF YOU EVER HAVE ANY QUESTIONS RELATING TO LEAD-BASED PAINT HAZARDS IN THE DISTRICT, VISIT WWW.DOE.DC.GOV/LEAD.

FAILURE TO FOLLOW OSHA LEAD IN CONSTRUCTIONS STANDARDS MAY LEAD TO POISONING OF WORKERS WILL RESULT IN SIGNIFICANT FINES.

ENSURE THAT CONTAINMENT/BARRIERS ARE IN PLACE TO KEEP THE DEBRIS/DUST AT A MINIMUM AND AWAY FROM OTHERS AND YOUR WORKERS HAVE THE PROPER EQUIPMENT TO PROTECT THEMSELVES FROM HAZARDS. ALSO, ADHERE TO LEAD-SAFE WORK PRACTICES WITHIN 20 DCMR §3302 AND TO ANY OTHER REQUIREMENTS ON ANY NOTICES OR ORDERS ISSUED.

THE CONTRACTOR AND/OR INDIVIDUAL(S) CONDUCTING THE RENOVATIONS MUST BE AT MINIMUM TRAINED IN LEAD-SAFE WORK PRACTICES OR POSSESS CERTIFICATIONS FROM EPA AND/OR DOEE TO CONDUCT ACTIVITIES IN PROPERTIES CONSTRUCTED PRIOR TO 1978. PLEASE ADHERE TO THIS REQUIREMENT.



existing/demolition floor plans

1631 A STREET SE, WASHINGTON, DC 20003

Mark	Date	Revision

SEPTEMBER 04, 2024

D001

1. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. CIRCUIT NUMBERS SHOWN ARE FOR IDENTIFICATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BALANCE ALL PHASES IN THE PANEL BOARD. (BALANCE LOAD).
3. SEE MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL MOTORS AND OTHER EQUIPMENT BEFORE ROUGH-IN.
4. WHERE WIRE SIZES ARE INDICATED ON THE PLANS FOR INDIVIDUAL CIRCUITS, THE INDICATED WIRE SIZE SHALL APPLY TO THE COMPLETE CIRCUIT UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT NOT FURNISHED UNDER THIS SECTION BEFORE ROUGH-IN.
6. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION OF BUILDING EQUIPMENT BEFORE ROUGH-IN.
7. CONDUIT AND/OR CABLE RUNS ARE SHOWN SCHEMATICALLY. BUILDING CONDITION WILL DETERMINE ACTUAL RUNS.
8. MODULAR METERING EQUIPMENT WHEN USED IN CONJUNCTION WITH STANDARD 10K CIRCUIT BREAKER IN BUILDING LOAD CENTERS, SHALL BE SERIES RATED FOR MINIMUM 22K RMS SYMMETRICAL AMPERES.

9. ALL JUNCTION BOXES SHALL BE OF CODED GAUGE AND OF THE SIZE, REQUIRED TO ACCOMMODATE CONSTRUCTION SHOWN.
10. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTION BEFORE ROUGH-IN.
11. THE CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER THE EXACT LOCATION OF CONNECTION BOX TO MECHANICAL EQUIPMENT BEFORE ROUGH-IN.
12. THE CONTRACTOR SHALL EXTEND WIRING FROM THE JUNCTION BOX, RECEPTACLE, ETC., AND MAKE FINAL CONNECTION TO ALL BUILDING ELECTRICAL CONNECTIONS.
13. ALL WORKMANSHIP, MATERIALS AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER THE ACCEPTANCE OF CONSTRUCTION BY THE OWNER.
14. LOAD CENTER SHALL BE THE CIRCUIT BREAKER TYPE AS MANUFACTURED BY SQUARE D CO., CUTTLER HAMMER OR EQUAL.
15. THE CONTRACTOR SHALL VISIT EXISTING SITE AND DETERMINE WHICH MATERIALS EFFECT HIS BID.
16. THE CONTRACTOR SHALL RESTORE ALL SYSTEMS AND AREAS DISTURBED BY HIS WORK TO THE SATISFACTION OF THE OWNER AND DEVELOPER.

17. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND CERTIFICATIONS OF INSPECTIONS INCLUDING THE COST OF SAME IN HIS CONTRACT.
18. ALL NEW MATERIALS FURNISHED FOR THIS PROJECT SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC.
19. ALL PHOTOCELLS SHALL BE WEATHERPROOFED, SURFACED MOUNTED WITH CORROSION PROOF PLATE AND SHALL BE MANUFACTURED BY TORK OR SIMILAR.
20. THE CONTRACTOR MUST ASSURE EQUIPMENT GROUNDING SYSTEM CONTINUITY.
21. THERMOSTAT WIRING SHALL BE AS PER DIAGRAM BY UNIT MANUFACTURER, SEE MECHANICAL PLANS FOR EXACT LOCATION.
22. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AND OTHER RULES AND REGULATIONS OF THE LOCAL ELECTRICAL AND BUILDING CODES.
23. ALL WIRING SHALL BE "BX" WITH COPPER GROUND.
24. OUTLETS MOUNTED ON COMMON WALL SHALL NOT BE MOUNTED BACK TO BACK. THEY SHALL BE STAGGERED TO PREVENT SOUND TRANSMISSION.
25. NUMBER AND SIZE OF CONNECTORS, CONDUIT, CONTROL PANEL AND ANNUNCIATOR FOR THE FIRE ALARM PANEL SHALL BE RECOMMENDED BY MANUFACTURER TO PERFORM WORK AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.

electrical notes

26. UNIT SHALL BE PREWIRED WITH A MINIMUM OF 2 PAIR OF 24 AWG TELEPHONE CABLES USING MODULRAS JACKS, TERMINATING IN STANDARD NETWORK INTERFACE AS REQUIRED BY C & P TELEPHONE COMPANY.
27. THE CONTRACTOR SHALL COORDINATE DOOR ENTRY SYSTEM REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN AND PROVIDE ALL NECESSARY COMPONENTS TO ENSURE THAT A COMPLETE OPERATING SYSTEM IS PROVIDED.
28. BRANCH CIRCUIT CONNECTORS SHALL BE MINIMUM NO. 12 AWG, HOMERUNS SHALL BE NO. 10 AWG = TW INSULATION +/- LARGER = THW INSULATION +/- FEEDERS = TWH +/- OUTSIDE OR UNDERGROUND FEEDERS = THWN INSULATION.
29. AFCI OUTLETS IN ALL HABITABLE ROOMS.
30. CARBON MONOXIDE ALARMS ARE REQUIRED FOR THE DWELLING UNIT WHERE FUEL FIRED APPLIANCES ARE INSTALLED. [2013 DCBC 908.7]
31. BATHROOMS REQUIRE ONE DEDICATED 20 AMPERE CIRCUIT FOR THE OUTLETS TO LIGHTING, RECEPTACLES IN EACH BATHROOM [2013 DCEC 210.11 (C)(3)]
32. THE WATER HEATER MUST HAVE A CODE COMPLIANT DISCONNECTING MEANS UNLESS IT IS FUEL-FIRED. [2013DCEC 422.30 & 422.31 (B)]
33. SERVICING OUTLET WITHIN 25' PER NEC 210.63

electrical graphical symbols

- T THERMOSTAT
- RECESSED LIGHTING
- EXHAUST FAN
- ELECTRICAL PANEL
- HEAVY DUTY OUTLET
- ELECTRIC METER
- CEILING MOUNTED INCANDESCENT FIXTURE
- GARBAGE DISPOSAL
- WEATHERPROOF OUTLET
- EXISTING WIRING
- FIRE EXTINGUISHER SHALL HAVE A MINIMUM RATING OF 1-A: 10-B: C [DCMR 12A, 2017, 906.2]
- EMERGENCY LIGHTS
- EXIT SIGN
- HP HOUSE PANEL
- INCANDESCENT WALL MOUNTED LIGHT FIXTURE
- AFCI ARC-FAULT INTERRUPT IN ALL HABITABLE ROOMS METHOD OF COMPLIANCE: INSTALL AFCI RECEPTACLE
- \$3 THREE WAY LIGHT SWITCH
- MD MOTION DETECTOR
- SINGLE POLE LIGHT SWITCH
- GFCI GROUND FAULT CIRCUIT INTERRUPT IN ALL AREAS WHERE WATER IS WITHIN 10 FEET OF ANY PLUMBING FIXTURE METHOD OF COMPLIANCE: INSTALL GFCI OUTLETS
- (S/C) COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS HARDWIRED AND INTERCONNECTED USED IN HOUSEHOLDS INSTALLED BETWEEN 6 AND 20 FEET ALONG A HORIZONTAL PATH FROM A STATIONARY OR FIXED COOKING APPLIANCE SHALL BE LISTED FOR RESISTANCE TO COMMON NUISANCE SOURCES FROM COOKING
- (B/F) FIRE ALARM PULL STATION WITH BELL AND STROBE

ENERGY NOTES :

85% OF ALL PERMANENT FIXTURES OR 85% LAMPS IN PERMANENT FIXTURES USED ARE TO BE HIGH EFFICIENT LAMPS

ENERGY NOTES / RECESSED LIGHTING:

RECESSED LIGHTING INSTALLED AT TOP FLOOR/ THERMAL ENVELOPE TO BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED WITH AIR BARRIER MATERIAL, FILM OR SOLID MATERIAL SEAL AIR BARRIER AROUND TOP FLOOR RECESSED LIGHTS PER LOCAL CODE REQUIREMENTS

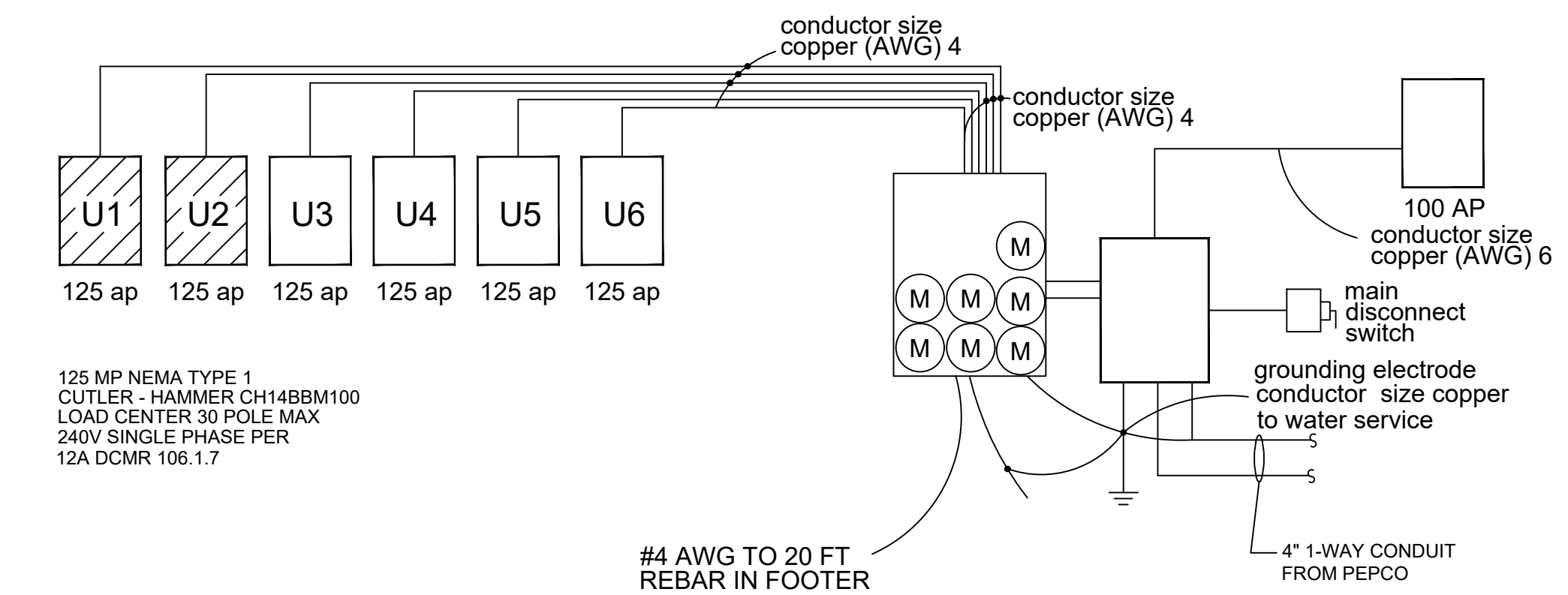
notes:

ELECTRICAL SYSTEMS, SWITCHES, OUTLETS AND ELECTRICAL PANELS ARE EXISTING TO REMAIN. NO WORK TO PANELS

PROVIDE AND INSTALL TAMPER RESISTANT RECEPTACLE IN DWELLING UNITS AT ALL LOCATIONS EXCEPT WHERE THEY ARE MOUNTED HIGHER THAN 5'6" ABOVE THE FLOOR OR IN A SPACE DEDICATED TO A SPECIFIC APPLIANCES. [NEC 406.12]

NOTES:

An 8 AWG grounding electrode conductor shall be protected with rigid metal conduit, intermediate metal conduit, rigid polyvinyl chloride (typ PVC) nonmetallic conduit thermosetting resin type(RTRC) nonmetallic conduit, electrical metallic tubing or cable armor.



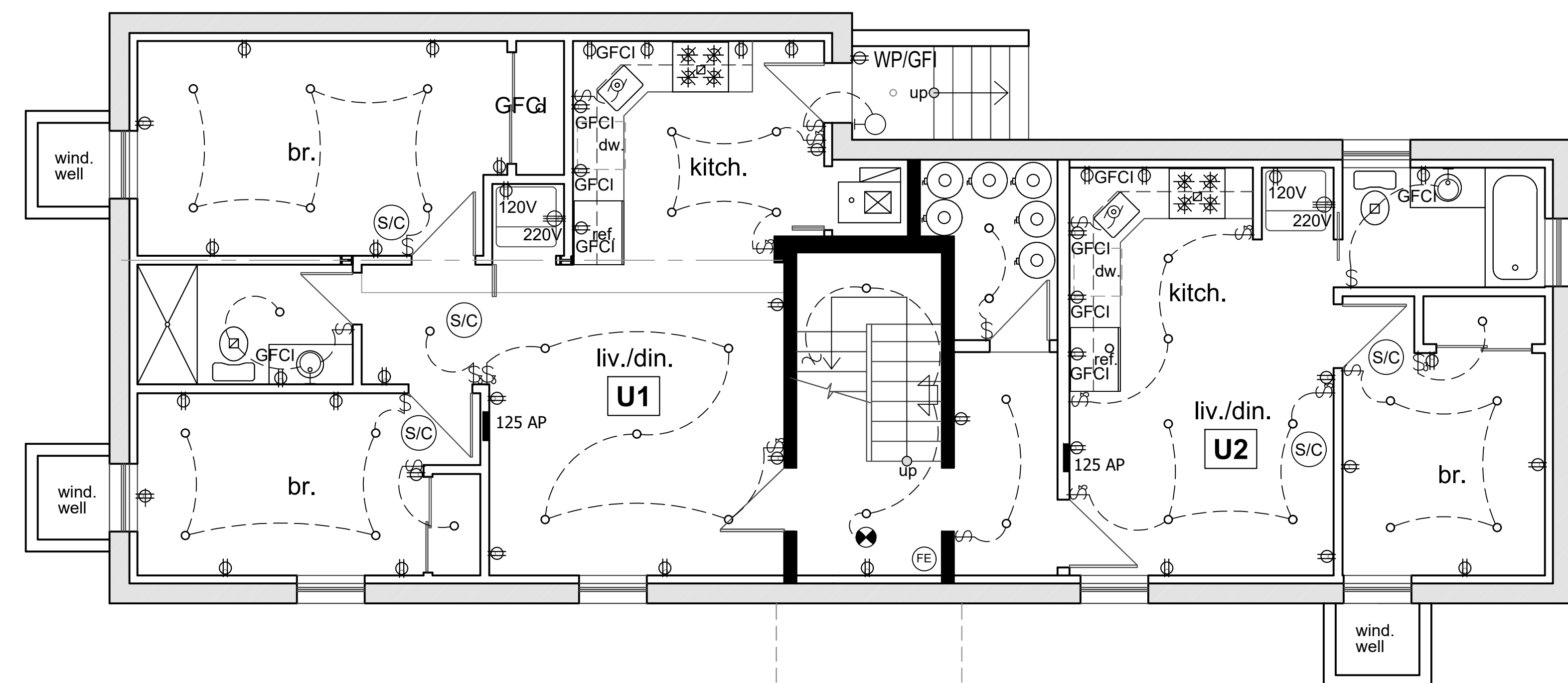
electrical riser diagram(existing)

MTD: SURFACE MOUNTED									
VOLTS: 120/240; 1-PHASE; 3-WIRE					MAIN CIRCUIT BREAKER 125 AMPERES 120/240 VOLTS				
MAIN: 125 AMPERES					LUGS: STANDARD				
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	RANGE	240	10	30A	15A	14	120	LIVING ROOM LIGHTS	2
3					15A	14	120	DINING ROOM LIGHTS	4
5	DRYER	240	10	30A	15A	14	120	BEDROOM LIGHTS	6
7					15A	14	120	BEDROOM LIGHTS	8
9	KITCHEN LIGHTING	120	14	15A	15A	14	120	LIGHTS	10
11					15A	14	120	SPARE	12
13	BEDROOM RECEPT	120	14	15A	15A	14	120	SMOKE DETECTORS	14
15	BEDROOM RECEPT	120	14	15A	30A	10	240	FURNACE	16
17	RECEPTABLE	120	14	15A					18
19	RECEPT	120	14	15A	30A	10	240	W/HEATER	20
21	BATH LIGHTS	120	14	15A	15A	14	120	REFRIG RECEPT	22
23					20A	12	120	SMALL APPL RECEPT	24
25	ACQU	240	8	30A	20A	12	120	SMALL APPL RECEPT	26
27	RECEPTACLE	120	12	20A	20A	12	120	SMALL APPL RECEPT	28
29	SPARE	120	12	20A	15A	12	120	LIGHTS	30

existing panels to remain

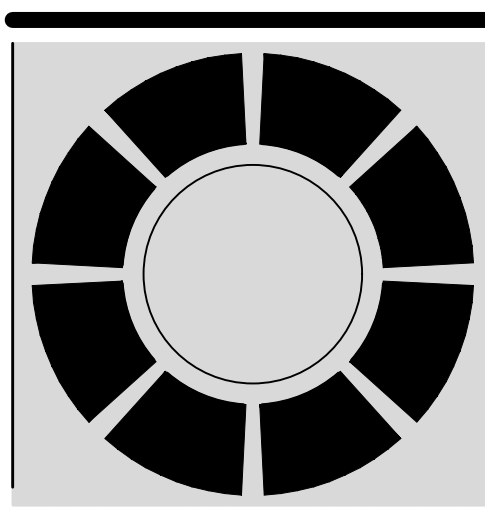
MTD: SURFACE MOUNTED									
VOLTS: 120/240; 1-PHASE; 3-WIRE					SUB CIRCUIT BREAKER 100 AMPERES 120/240 VOLTS				
MAIN: 100 AMPERES					LUGS: STANDARD				
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	CORRIDOR LIGHTS	120	12	20A	20A	12	120	CORRIDOR LIGHTS	2
3	CORRIDOR RECEPTS	120	12	20A	20A	12	120	CORRIDOR RECEPTS	4
5	SMOKE DETECTOR	120	12	20A	20A	12	120	SMOKE DETECTORS	6
7	LAUNDRY/UTILITY	120	12	20A					
9	SPARE	220	12	20A					
11	SPARE	220	12	20A					
13	SPARE	120	12	20A					
15	SPARE	120	12	20A					
17	SPARE	120	12	20A					
19									

existing house panel to remain



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

cellar electrical floor plan



electrical floor plans
 1631 A STREET SE, WASHINGTON, DC 20003

Mark	Date	Revision

SEPTEMBER 04, 2024

E001

- FURNISH ALL LABOR, MATERIALS, FIXTURES EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE AND PROPERLY FUNCTIONING H.V.A.C. SYSTEM, PLUMBING SYSTEM, AND ELECTRICAL SYSTEM.
- ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND REGULATIONS, CONSIDERED AS MINIMUM REQUIREMENTS.
- APPLY FOR AND PAY FOR ALL PERMITS AND CONNECTION FEES REQUIRED FOR THE WORK.
- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK TO BE DONE AND SHALL EXAMINE THE SITE AND CONSIDER THE CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO OPERATE IN THE PERFORMANCE OF THE CONTRACTED WORK. NO ALLOWANCES SHALL BE MADE SUBSEQUENTLY IN THIS CONNECTION, FOR ANY ERRORS THROUGH NEGLIGENCE ON HIS PART. THE CONTRACTOR IS HERE BY ADVISED THAT HE WILL BE REQUIRED TO OBSERVE ALL RECOMMENDED PRACTICES FOR FIRE AND SAFETY PRECAUTIONS FOR THE PROTECTION OF THE FACILITY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LOCATIONS AND CLEARANCES AND COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO STARTING OF WORK.
- FOR OTHER DETAILS, THE ARCHITECTURE, STRUCTURAL, HVAC PLUMBING, ELECTRICAL PLANS AND EXISTING CONSTRUCTION SHALL BE FOLLOWED AND ALL WORK PERFORMED UNDER THIS SPECIFICATION SHALL BE NEATLY FITTED THERETO.
- ALL DUCTWORK SHALL BE FABRICATED FROM FIELD TAKEN DIMENSIONS AND NOT FROM DRAWINGS. PRIOR TO DUCT FABRICATION, CEILING CLEARANCES SHALL BE VERIFIED WITH ALL ELECTRICAL, PLUMBING AND ARCHITECTURAL WORKS.
- SUBMIT SIX COPIES OF EACH SHOP DRAWINGS FOR THE FOLLOWING: HIGH EFFICIENCY FURNACE, SPLIT SYSTEM COOLING COILS, AIR COOLED CONDENSING UNIT, THERMOSTAT, GRILLES, REGISTERS, DUCTS, TRIMS, PIPES, JOINING METHODS, WATER HEATER, GUY GRAY UNIT, FLOOR DRAINS, BREAKER PANEL, CIRCUIT BREAKERS, SWITCHES, LUMINAIRES, MOTION DETECTORS, DISCONNECT SWITCHES AND OUTLETS.
- ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR CONTROLLERS, PILOT OTHER DEVICES, AND SHALL DO ALL WIRING REQUIRED EXCEPT A.T.C. WIRING.
- DUCTWORK SHALL BE SHEET METAL, GALVANIZED, CONSTRUCTED, BRACED AND SUPPORTED IN ACCORDANCE WITH SMACNA LOW PRESSURE GUIDES. SEAL ALL JOINTS TO BE AIRTIGHT USING HARDCAST # AM-401 TAPE APPLIED OVER CLEAN, DRY DUCT.
- ALL SUPPLY AND RETURN DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED WITH 1/2" FIBERGLASS INSULATION WITH ASI VAPOR BARRIER OR EQUAL.
- GRILLES, REGISTERS, AND DIFFUSERS SHALL BE OF CAPACITIES, INDICATED, SIZED IN ACCORDANCE WITH MANUFACTURERS PRINTED LITERATURE FOR RESIDENTIAL SOUND LEVELS AND THROWS. MOUNT

- TIGHT TO CONSTRUCTION USING NEOPRENE GASKET TO PREVENT AIR LEAKAGE AND STREAKING. BRANCHES FROM MAIN TO OUTLETS SHALL BE MADE USING ADJUSTABLE DEFLECTORS POSITIONED AND SECURED TO PROVIDE SPECIFIED AIR QUANTITIES. REGISTERS AND GRILLES SHALL BE MFD. BY LIMA OR EQUAL, AND SHALL MATCH COLOR OF ADJACENT CEILING OF WALL. COORDINATE LOCATION OF CEILING REGISTER WITH LIGHT.
- CUTTING OF FLOORS, WALLS, AND CEILINGS SHALL BE REQUIRED FOR THE INSTALLATION OF PIPES, CONDUITS, DUCTS, WIRING, SLEEVES AND SEAL AS REQUIRED AND DIRECTED BY THE ARCHITECT.
- ALL SYSTEMS SHALL BE ADJUSTED AND BALANCED WITH AIR QUANTITIES NOTED OR AS DIRECTED. TOLERANCE SHALL BE FROM MINUS 5 PERCENT TO PLUS 25 PERCENT.
- ALL EQUIPMENT SHALL BE CLEANED AND ADJUSTED AND REQUIRED TO GIVE SATISFACTORY OPERATION.
- ASSEMBLE PRINTED INSTRUCTION FOR THE OPERATION AND MAINTENANCE OF EACH MAJOR ITEM. BIND TOGETHER WITH EQUIPMENT CUTS AND CONTROL WIRING DIAGRAMS, DELIVER THREE COPIES TO ARCHITECT.
- FINAL INSPECTION AND TEST SHALL BE MADE BY THE CONTRACTOR IN THE PRESENCE OF THE ARCHITECT. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, INSTRUMENTS AND MISCELLANEOUS EQUIPMENT REQUIRED FOR THE TESTS. FINAL PAYMENT SHALL BE HELD PENDING SATISFACTORY OUTCOME OF THE FINAL INSPECTION.

mechanical notes

- PROVIDE ALL INSPECTION REPORTS AND APPROVALS BY UTILITIES, GOVERNMENT, OR AUTHORITIES AS REQUIRED, INCLUDING OCCUPANCY PERMIT.
- PROVIDE TURNING VANES, SPLITTER DAMPERS AND VOLUME DAMPERS AS NECESSARY TO BALANCE THE AIR SYSTEM. ALL SYSTEMS SHALL BE ADJUSTED AND BALANCED WITH AIR QUANTITIES AS SHOWN ON DRAWINGS BY INDEPENDENT BALANCING COMPANY OR PROFESSIONAL ENGINEER.
- ALL MECHANICAL REFRIGERANT LINE PENETRATIONS OF FIRE-RESISTANCE RATED MEMBRANES MUST BE PROPERLY SEALED TO ASSURE THAT THE REQUIRED FIRE-RESISTANCE RATING IS NOT REDUCED. [2013 DCBC 703.2]
- CONDENSATION DISPOSAL IS REQUIRED FOR THE AIR HANDLERS. [2013 DCBC 307.2]
- KITCHENS IN THE RESIDENCES MUST BE VENTILATED. MECHANICAL EXHAUST S REQUIRED. [2013 DCBC 505.1]
- PENETRATIONS OF FLOOR/CEILING ASSEMBLIES AND ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING MUST BE PROTECTED WITH FIRE DAMPERS, SMOKE DAMPERS, OR FIRE/SMOKE DAMPERS AS NECESSARY. [2013 DCBC 302.2; 2013 DCBC 705.10; 2013 DCBC 716.5]

mechanical symbols

AFF	ABOVE FINISH FLOOR	☒	SUPPLY DUCT
CR	CEILING REGISTER	☒	RETURN DUCT
CG	CEILING GRILLE		
☒	EXHAUST FAN	➔	HWR (HIGH WALL REGISTER)
LWR	LOW WALL REGISTER	CFM	CUBIC FEET PER MINUTE
HRAR	HIGH RETURN AIR REGISTER	↔R.A.	RETURN AIR
LRAR	LOW RETURN AIR REGISTER		

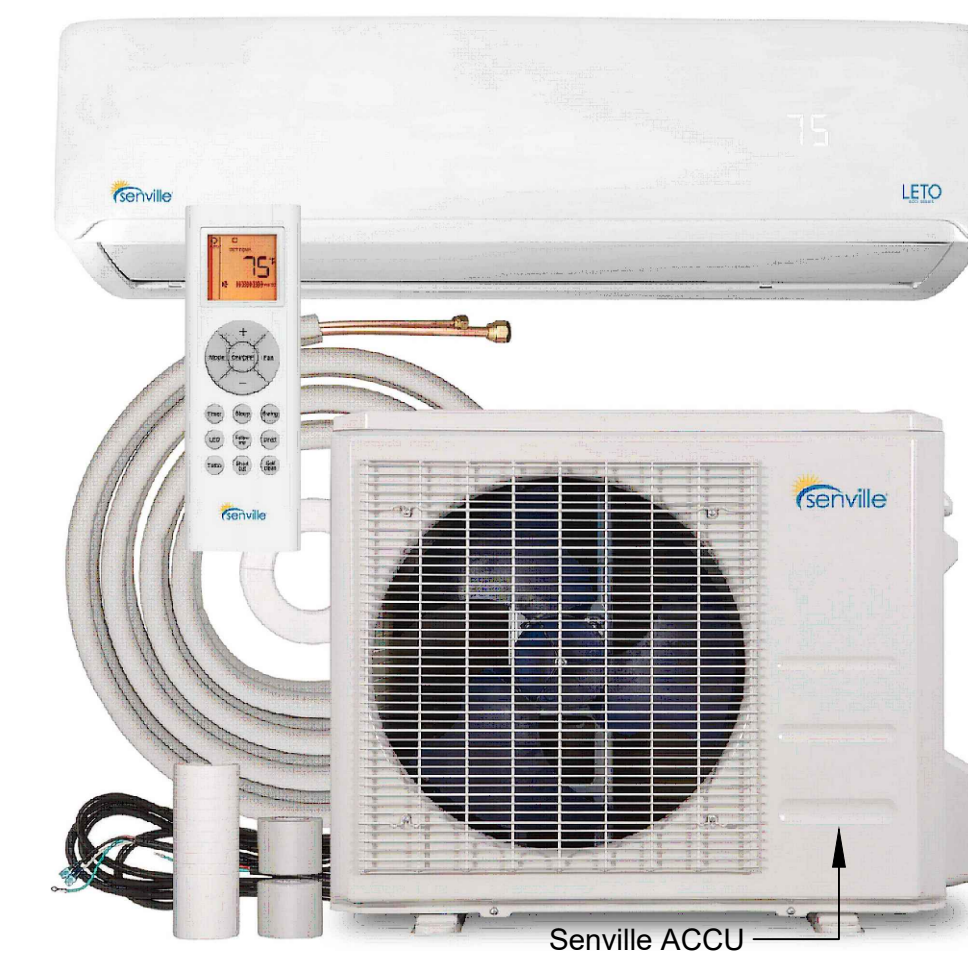
hvac insulation notes:

SERVICE HVAC UNITS / CLEAN DUCTS / CLEAN REGISTERS / GRILLES

mechanical notes: (venting)

- EXISTING TOILET EXHAUST PIPING TO REMAIN (SEE PLANS) PER 2017 MECHANICAL CODE (DCMC) SECTIONS 503.3.1 / 502.1.8
- CLOTHES DRYER EXHAUST TO REMAIN (SEE PLANS) PER 2017 DC MECHANICAL CODE (DCMC) SECTIONS 504.8.6
- EXISTING HEAT PUMPS TO REMAIN / SERVICE AND CLEAN DUCTS.

12000 BTU Mini Split Air Conditioner - Heat Pump - SENL/12CD/110V



Product Overview

The Serville SENL-12CD is a 12000 BTU mini split air conditioner and heat pump that offers a versatile and efficient solution to cooling and heating your home or business.

- **18 SEER (EER) High Efficiency Air Conditioner & Heater**
- **With built-in Heat Pump (Up to 16C / 61F) Suitable for Heat Climate**
- **4 DC Inverter Technology for Minimal Energy Consumption (Up to 40% Savings per Year)**
- **Built-in Dehumidification Function, Fan Speed Function for Complete Climate Control**
- **Recommended for rooms sized 450-750 sq. ft.**

19 SEER AC & Heat Pump

The Serville LT10 Series offers some of the highest efficiency in its class, with a **19 SEER** efficiency rating. Enjoy the benefits of a cool climate controlled room, as well as efficient heating, that can be added to virtually any home, business or space that you need to cool and heat. An efficient, affordable and exceptionally designed mini split AC/heat pump with minimal outdoor noise, ensuring the most comfortable overall experience. Find out more about [SENL-12CD](#) here.

High Efficiency Inverter

Serville continues the sustainability, efficiency and advanced eco-friendly performance, with its inverter technology. The results are drastic reduction of energy usage by up to 30%, ultimately making it one of the most efficient systems with inverter technology. Its technology like this that helps the business system to reach such high SEER ratings, cut the a split system with inverter technology to ensure that you are minimizing your energy costs.

Technical Specifications

Model Number	SENL-12CD/K
Power Supply (V~V~Hz)	115V, 60, 60Hz
Cooling (Btu/h)	12000 (3500-10300)
Input (W)	1000
Rated Current (A)	8.83
EER (BTU/W)	10.9
SEER BTU/W	19
Heating (Btu/h)	12000 (3600-13500)
Input (W)	1026
Rated Current (A)	8.63
COP W/W	3.43
HSPF-1	8.5
HSPF-2	7.5
Minimum Circuit Ampacity (A)	16
Max Fuse (A)	20
Indoor Dimensions (WxDxH) (in.)	23.5x17.4x41.69
Indoor Air Flow (l/h/m ³) CFM	294/232/71
Indoor Noise Level (l/h/m ³) dB	38/30/28
Outdoor Noise Level (l/h/m ³) dB	55
Outdoor Dimensions (WxDxH) (in.)	31.50x13.1x23.81
Refrigerant Type	R410A
Refrigerant Pre-charge	28 FL
Connection Wiring	16AWG#4 Stranded, unshielded
Thermostat Type	Remote Control
Warranty	2 Year (Parts) / 5 Year (Compressor)
Application Area	450-750 Sq. Ft.

mini-split specification

Goodman
Air Conditioning & Heating

ARUF SERIES

MULTI-POSITION,
MULTI-SPEED AIR HANDLER
WITH PSC MOTOR
1 1/2 TO 5 TONS

Contents

- Normal volume..... 2
- Product Specifications..... 3
- Heater Kit Nomenclature..... 3
- Dimensions..... 4
- Air-Flow Data..... 5
- Heat Kit Data..... 6
- Wiring Diagram..... 8
- Accessories..... 11

Product Features

- Quiet Reversible for cooling and heat pump applications
- Direct drive, multi-speed PSC blower motor
- Aluminum evaporator coil
- Coil mounting track for quick repositioning
- Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 155
- Cabinet air leakage less than 1.0% at 0.5 inch H₂O when tested in accordance with ASHRAE standard 155
- 3 W - 23 WV electric heater kit
- AHRI certPAC ETL listed
- Rigid Servair™ cabinet
- Horizontal or vertical configuration capabilities
- 2" depth for easier access
- QuietDuct™ free thermoplastic drain pan with secondary drain connections
- Service top access and drain access to reduce condensation when installed in humid locations
- Roll-formed insulation covers the internal ducting to reduce cabinet condensation
- Galvanized, leather grain-embossed finish
- Quiet-Net™ sound insulation reduction
- Tool-less filter access

Standard Features

- Energy efficient compressor
- Factory-installed filter rack
- Copper/aluminum fin coil
- Service valves with rear connection and wire-rope surge ports
- Control with lag connection
- Ground lag connection
- AHRI Certified
- ETL Listed

Cabinet Features

- GoodHeat™ bonded sound control top design
- Steel blower coil guard
- Heavy gauge galvanized steel cabinet
- Attractive Architectural Gray powder-paint finish with 360-hour salt-spray approval
- Top and side maintenance access
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2012 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kit available)

10 PARTS YEAR WARRANTY

Goodman
Air Conditioning & Heating

GSX14

SPLIT SYSTEM AIR CONDITIONER
14 SEER / 12.2 EER
COOLING CAPACITY: 18,000 - 60,000 BTU/h

Contents

- Normal volume..... 3
- Product Specifications..... 3
- Expanded Cooling Data..... 4
- Performance Data..... 27
- AHRF Ratings..... 29
- Dimensions..... 31
- Accessories..... 32

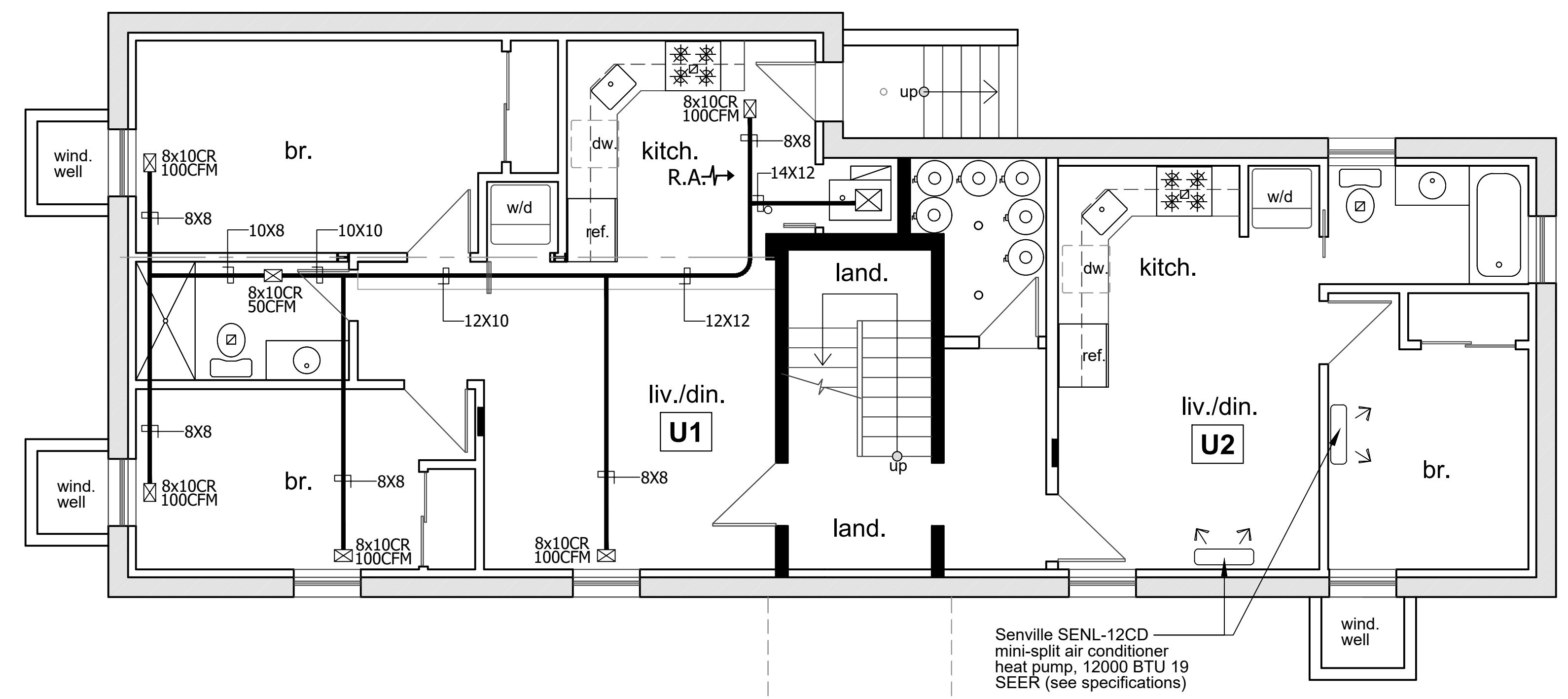
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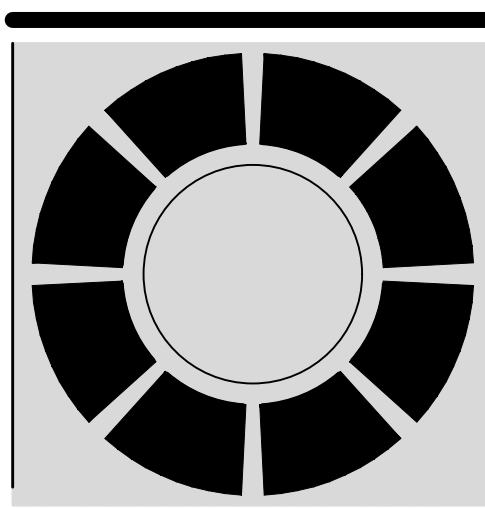
15-05X14



AHU	DESCRIPTION	CAPACITY	GAS INPUT/OUTPUT MBTUH			SUPPLY AIR (CFM)	OUTDOOR AIR (CFM)	EAT	LAT	AFUE	EER/SEER	AHU	CONDENSER	BASE OF DESIGN	
			HEATING (MBH)	COOLING (TONS)	Low										Med
1	HVAC UNIT	39.0	1.5	28/24.7	40/38	525	45	75.0	62.6	54.0	48.0	96	11.5/14	ACVC9604038N / CAPF1824A6D / GSX130181E	GOODMAN

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

cellar
mechanical floor plan



mechanical floor plan
1631 A STREET SE, WASHINGTON, DC 20003

Mark	Date	Revision

SEPTEMBER 04, 2024

M001

plumbing notes

1. ALL WORK SHALL BE DONE IN ACCORDANCE TO THE LOCAL PLUMBING CODE.
2. THE PROVISIONS OF THE CODE SHALL APPLY TO THE ERECTION, INSTALLATION, ALTERATION, REPAIRS, HEALTH, PROPERTY AND PUBLIC WELFARE BY REGULATING AND CONTROLLING THE DESIGN, CONSTRUCTION, INSTALLATION, QUALITY OF MATERIALS, LOCATION, OPERATION, AND MAINTAINANCE OR USE OF PLUMBING EQUIPMENT AND SYSTEMS.
3. ALL PLUMBING SYSTEMS, MATERIALS AND APPURTENANCES, BOTH EXISTING AND NEW, AND ALL PART THEREOF SHALL BE MAINTAINED IN PROPER CONDITION IN ACCORDANCE WITH THE ORIGINAL DESIGN IN A SAFE AND COMPLIANCE WITH THE CODE EDITION UNDER WHICH INSTALLED. THE OWNER OR OWNERS DESIGNATED AGENT SHALL BE RESPONSIBLE FOR MAINTAINANCE OF PLUMBING SYSTEMS TO DETERMINE COMPLIANCE WITH THIE PROVISION. THE CODE OFFICIAL SHALL HAVE THE AUTHORITY TO REQUIRE ANY PLUMBING SYSTEM TO BE RE-INSPECTED.
4. MINOR ADDITIONS, ALTERATIONS, RENOVATIONS AND REPAIRS TO EXISTING PLUMBING SYSTEMS SHALL BE PERMITTED IN THE SAME MANNER AND ARRANGEMENT AS IN THE EXISTING SYSTEM, PROVIDED THAT SUCH REPAIRS OR REPLACEMENT ARE NOT HAZARDOUS AND ARE NOT APPROVED.
5. FINAL INSPECTION SHALL BE MADE AFTER THE BUILDING IS COMPLETE, ALL PLUMBING FIXTURES ARE IN PLACE AND PROPERLY CONNECTED, AND THE STRUCTURE IS READY FOR OCCUPANCY. THE HOLDER OF THE PLUMBING SHALL BE RESPONSIBLE FOR THE SCHEDULING OF SUCH INSPECTIONS.
6. INSTALL ANTI-SCOLD DEVICES TO PREVENT SCALDING AT SHOWER/BATHS.
7. PROTECT THE WATER SUPPLY SYSTEM FROM WATER HAMMER AT QUICK CLOSING VALVE LOCATIONS.
8. THE WATER HEATER RELIEF VALVE SHALL MEET ALL THE REQUIREMENTS OF THE CODE.

plumbing notes:

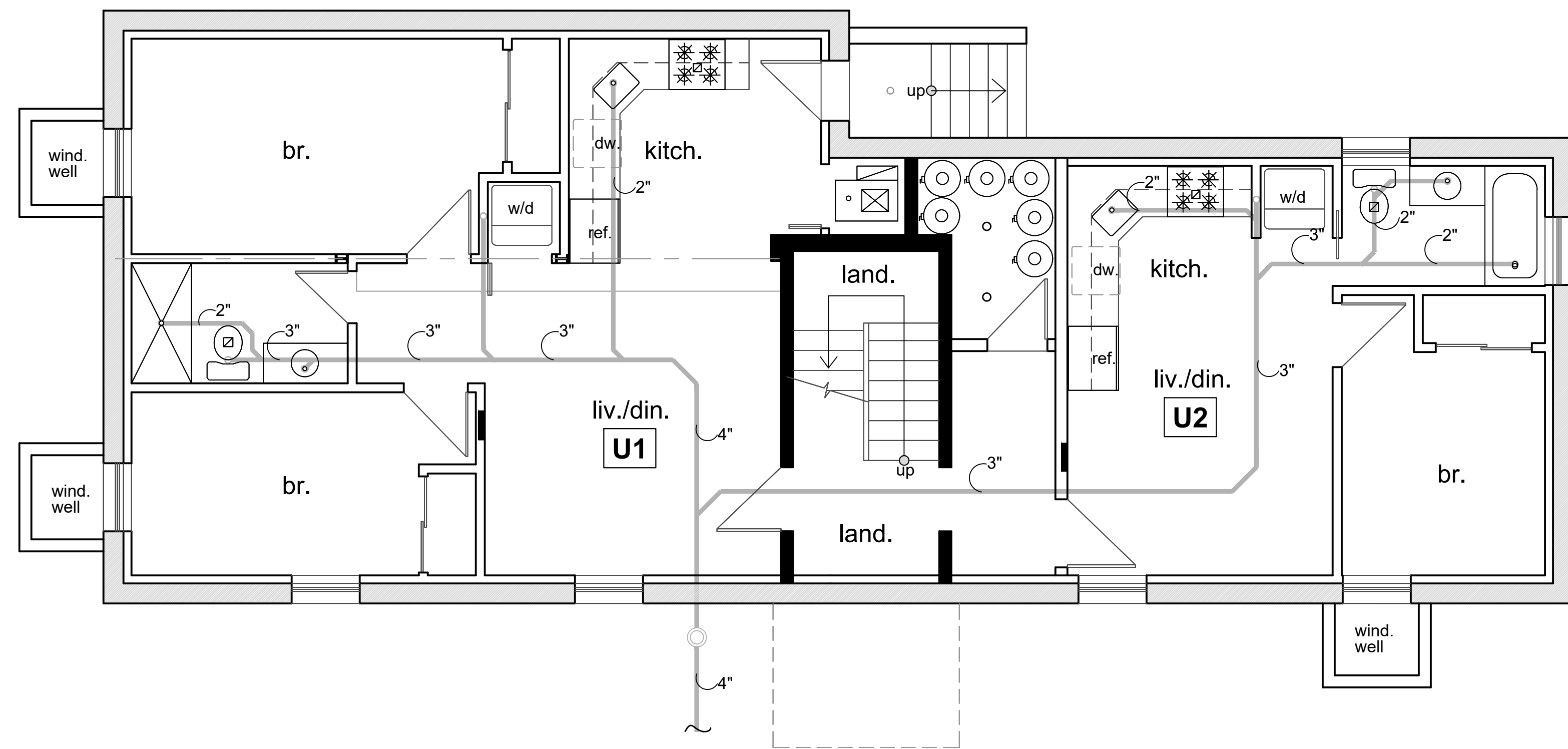
- PER 2017 DC PLUMBING CODES SECTIONS 424.5 / 424.3, CONTRACTOR SHALL INSTALL CONTROL VALVES AT BATHTUBS / SHOWERS, PROVIDE WITH HIGH LIMIT STOP CAPABILITY CAPABLE OF LIMITING THE WATER TEMPERATURE TO 120°F.
- PER 2017 DC PLUMBING CODES SECTION 606.1, A FULL OPEN SHUTOFF VALVE SHALL BE PROVIDED IN THE DOMESTIC WATER PIPING AT THE POINT OF ENTRY INTO THE NEW DWELLING UNIT
- REMOVE EXISTING PLUMBING FIXTURES AND REPLACE WITH NEW IN SAME LOCATION

plumbing graphic symbols

AAV ◊	AIR ADMITTANCE VALVE	--- CW ---	COLD WATER
V.T.R.	VENT THRU ROOF	--- HW ---	HOT WATER
BT	BATH TUB	_____	WASTE
LAV.	LAVATORY	-----	VENT
WC	WATER CLOSET	▽	GAS SHUT OFF VALVE
LAV.	LAVATORY	--- G ---	GAS SUPPLY LINE
WC	WATER CLOSET	○ WM	WATER METER
⊥	WATER SHUT OFF VALVE		

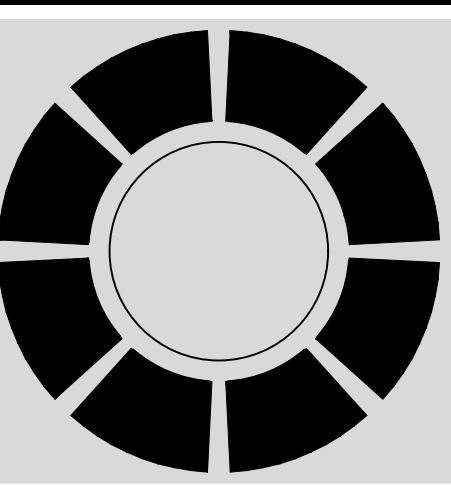
plumbing fixture schedule (EXISTING)

FIXTURE #	WASTE PIPE SIZE	VENT PIPE SIZE	COLD WATER PIPE SIZE	HOT WATER PIPE SIZE	REMARKS
WATER CLOSET	3"	2"	1/2"	none	FLOOR MOUNTED FLUSH TANK
KITCHEN SINK	2"	1 1/2"	1/2"	1/2"	IN COUNTER TOP
WASHER	2"	2"	1/2"	1/2"	FLOOR MOUNTED FLUSH TANK
BATHTUB	2"	1 1/2"	1/2"	1/2"	PRESSURE BALANCE MIXING VALVE
LAVATORY	2"	1 1/2"	1/2"	1/2"	IN COUNTER TOP
SHOWER	2"	1 1/2"	1/2"	1/2"	PRESSURE BALANCE MIXING VALVE
DISHWASHER	2"	1 1/2"	1/2"	1/2"	FLOOR MOUNTED FLUSH TANK



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

cellar
plumbing floor plan



mechanical and plumbing floor plans

1631 A STREET SE, WASHINGTON, DC 20003

Mark	Date	Revision

SEPTEMBER 04, 2024

P001