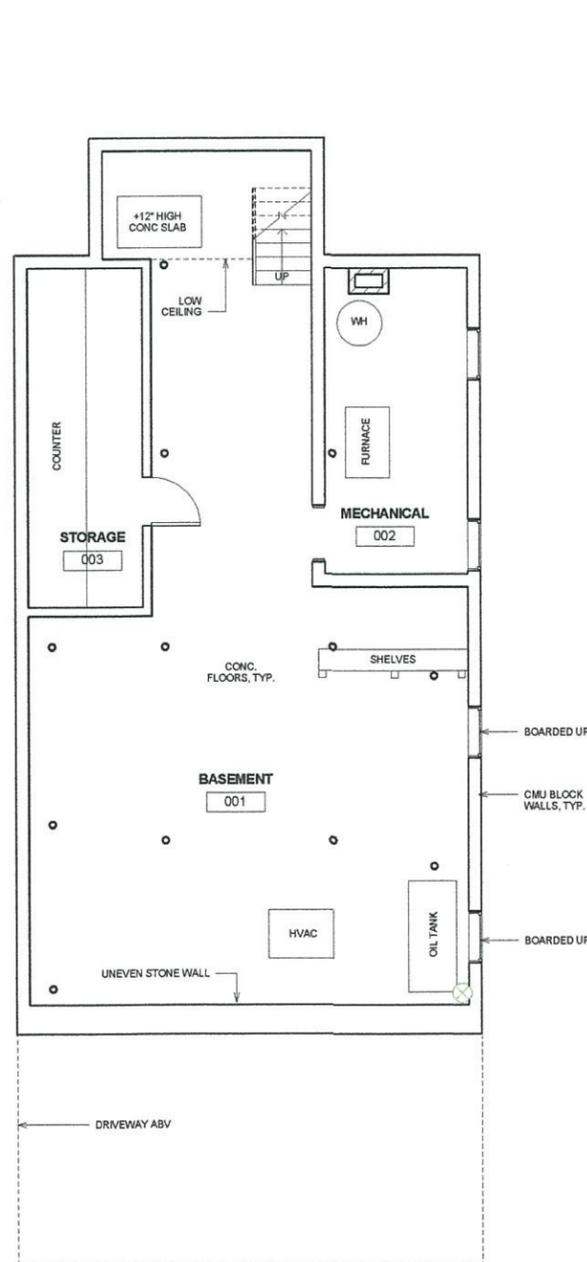


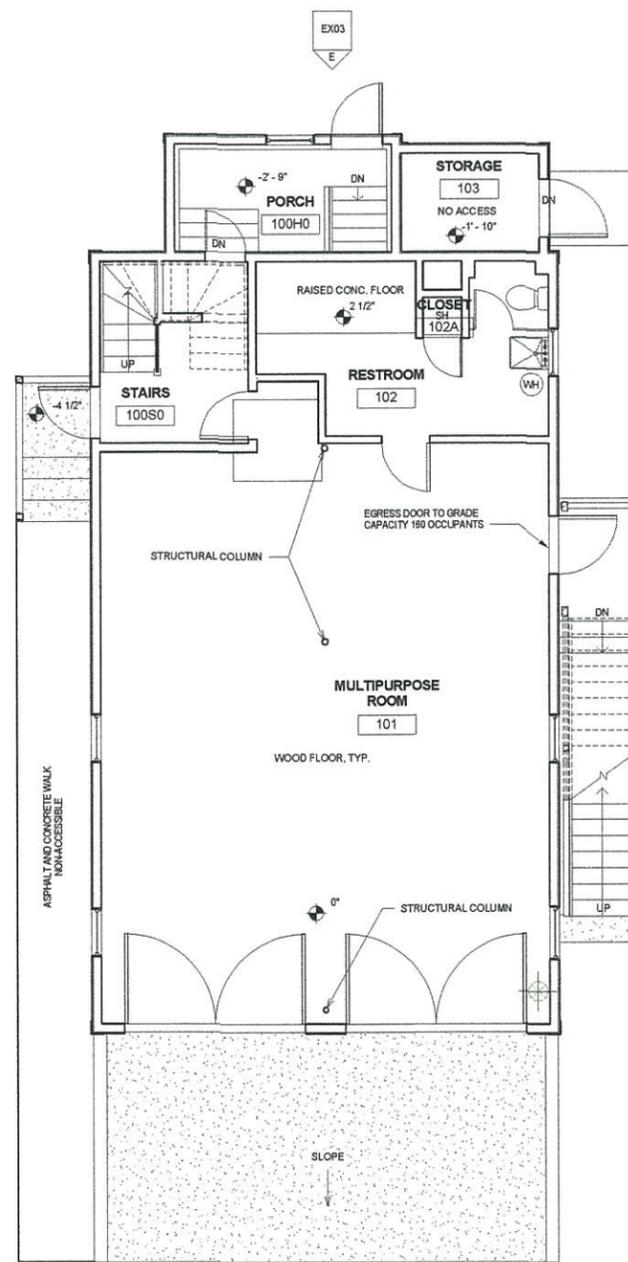




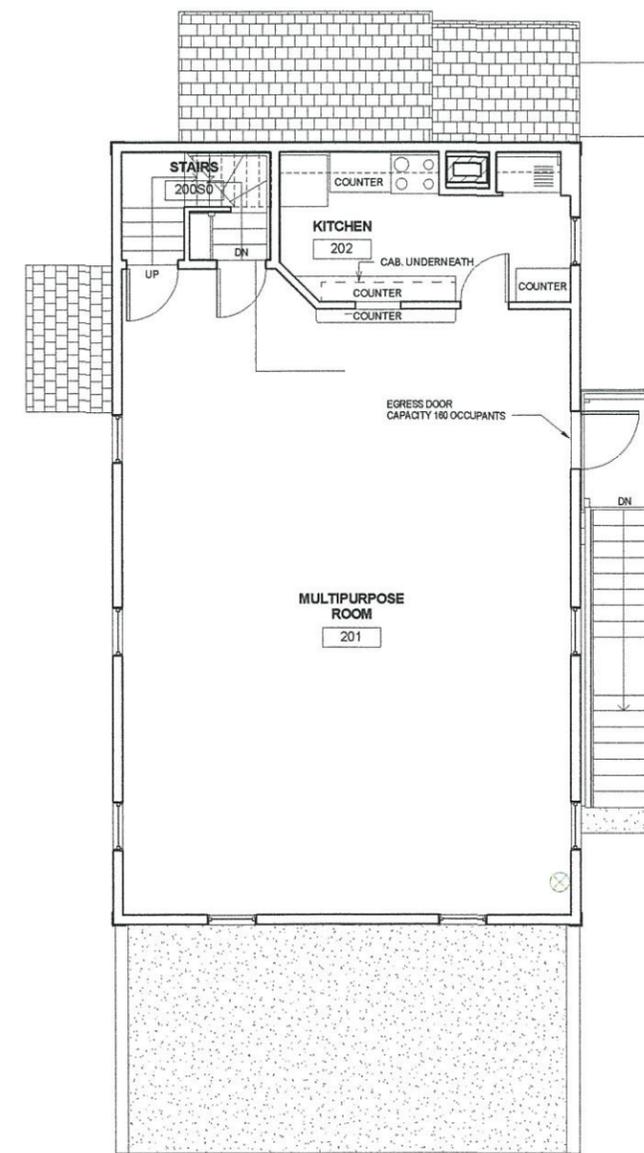
Existing Room Schedule		
Number	Name	Area
001	BASEMENT	680 SF
002	MECHANICAL	115 SF
003	STORAGE	104 SF
100S0	STAIRS	71 SF
101	MULTIPURPOSE ROOM	703 SF
102	RESTROOM	114 SF
102A	CLOSET	4 SF
100H0	PORCH	62 SF
103	STORAGE	36 SF
201	MULTIPURPOSE ROOM	745 SF
202	KITCHEN	107 SF
200S0	STAIRS	43 SF



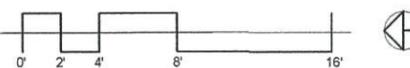
1 Basement - Existing Conditions  
1/4" = 1'-0"



2 First Floor - Existing Conditions  
1/4" = 1'-0"



3 Second Floor - Existing Conditions  
1/4" = 1'-0"



No.	Description	Date

Town of Acton  
WINDSOR  
BUILDING -  
100% DD

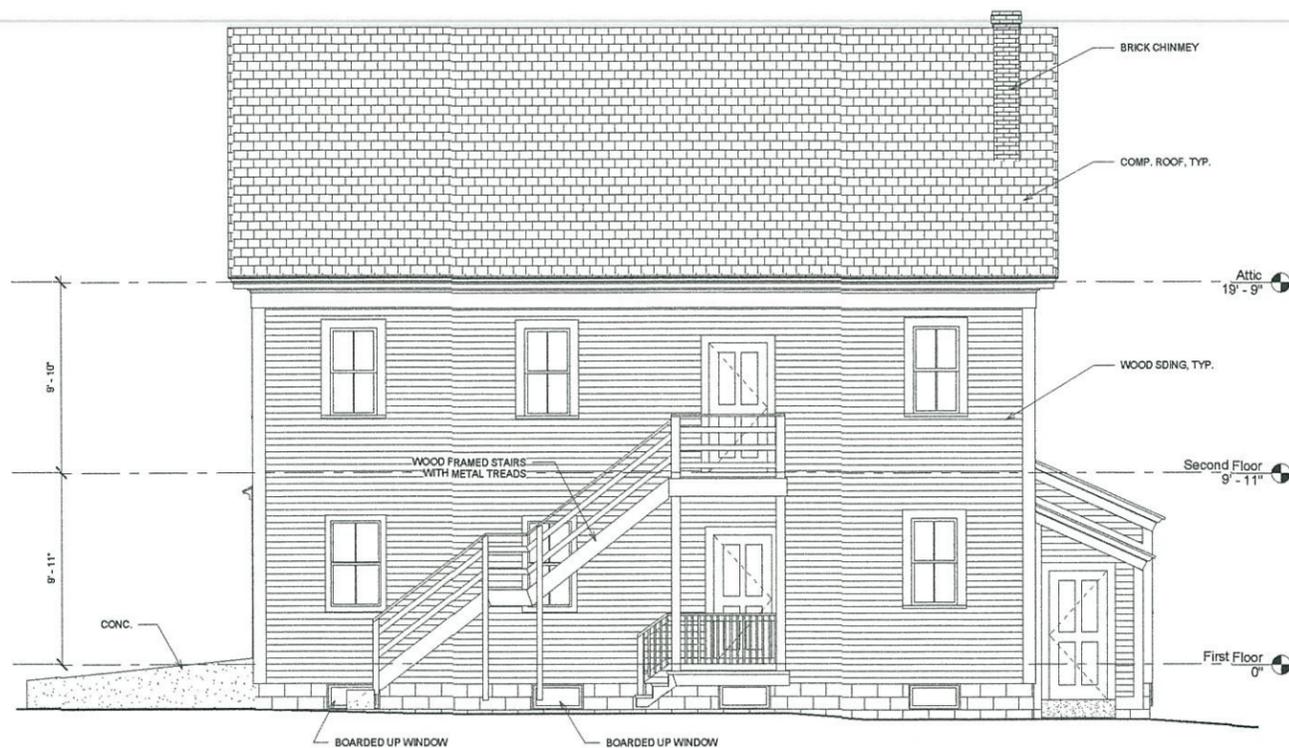
18 Windsor Ave.  
Acton, MA 01720

Existing Floor  
Plans

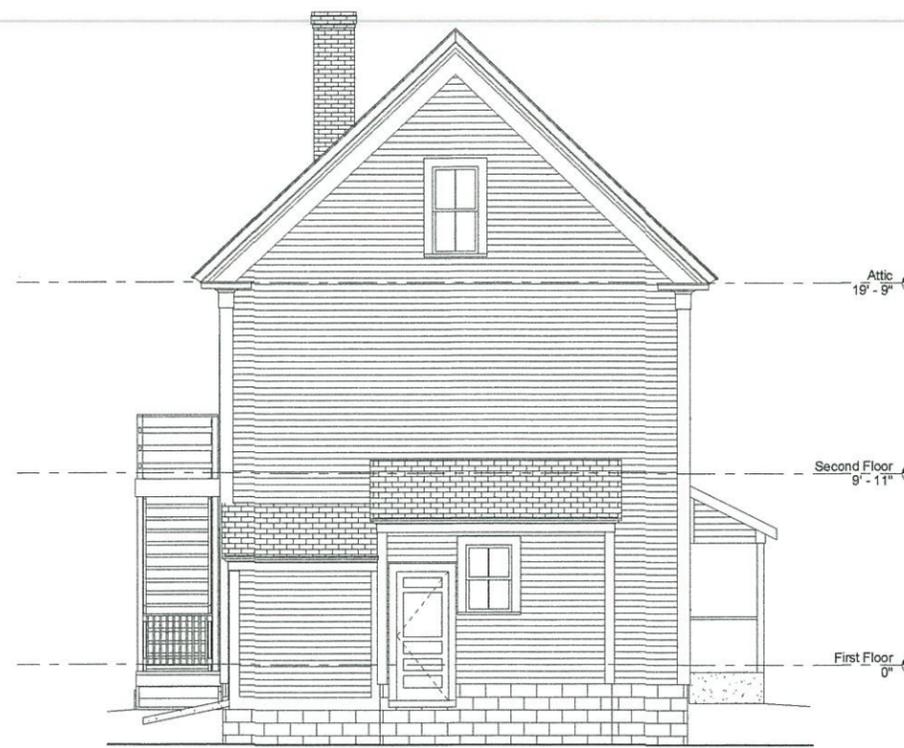
Project Number 13.1510.00  
Date August 30, 2013  
Drawn By PS  
Checked By ECS

EX02

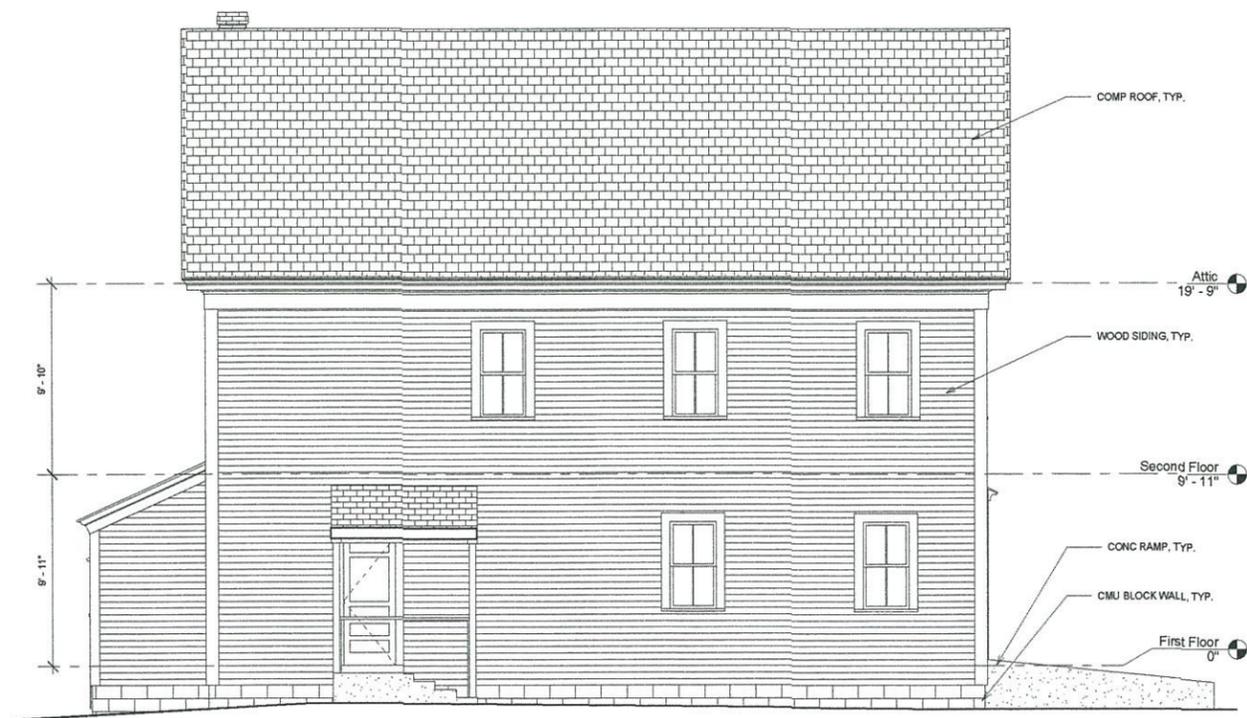
Scale 1/4" = 1'-0"



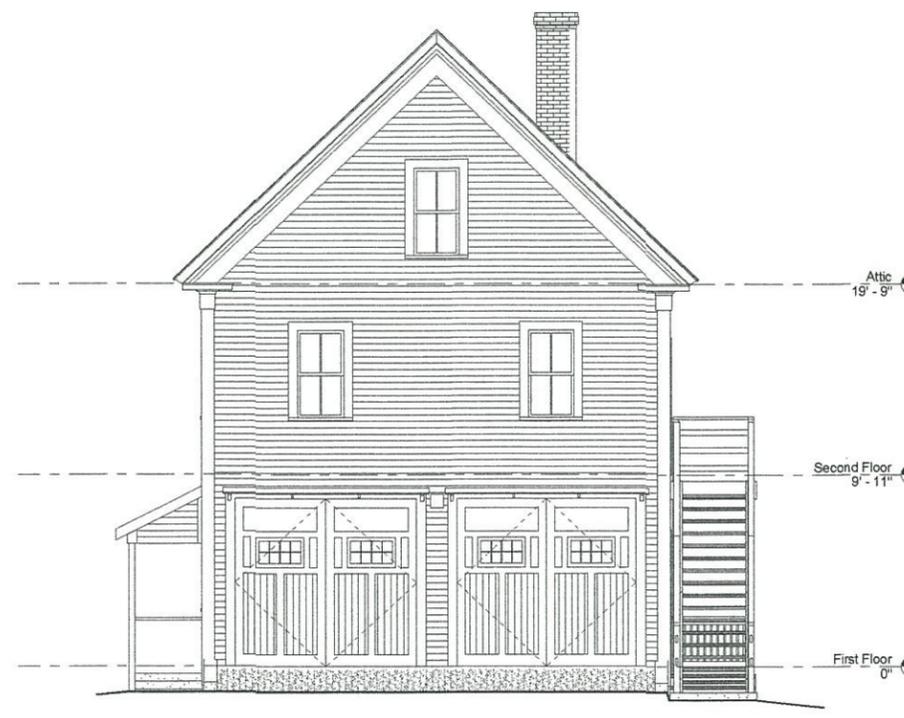
South  
1/4" = 1'-0"



East  
1/4" = 1'-0"



North  
1/4" = 1'-0"



West  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
WINDSOR  
BUILDING -  
100% DD

18 Windsor Ave.  
Acton, MA 01720

Existing Exterior  
Elevations

Project Number 13.1510.00  
Date August 30, 2013  
Drawn By PS  
Checked By Checker

**EX03**

Scale 1/4" = 1'-0"



- D1 REMOVE PARTITION
- D2 REMOVE AND SALVAGE DOOR SLAB, FRAME, AND TRIM
- D3 REMOVE APPLIANCE, TRANSPORT AND DONATE TO CORNERSTONE THRIFT SHOP (OR SIMILAR)
- D4 REMOVE FIXTURE, DISCARD
- D5 DEMOLISH STAIRWAY, PRESERVE PLASTER FINISH
- D6 DEMOLISH RAISED SLAB
- D8 CREATE FLOOR OPENING (HATCHED AREA DENOTES EXTENT)
- D9 DEMOLISH EXISTING GUARDRAIL AND HANDRAIL

### DEMOLITION NOTES

1. PRESENCE OF HAZARDOUS MATERIAL IS UNKNOWN. GENERAL CONTRACTOR TO PROCURE ENVIRONMENTAL STUDY PRIOR TO COMMENCING WORK.
2. PROTECT ALL EXISTING WALLS, CEILINGS, FLOORS, DOORS, WINDOWS, LIGHTS, COLUMNS, PLUMBING, HVAC, ETC. TO REMAIN.
3. AFTER REMOVAL/DEMOLITION, LEAVE ADJACENT AND REMAINING SURFACES READY FOR NEW WORK.
4. ALL DEMOLITION DEBRIS TO BE SORTED, SEPARATING SALVAGE, RECYCLABLE, AND TRUE WASTE PRODUCT.
5. IDENTIFY, PROTECT AND AVOID DISRUPTING ALL WIRING AND EQUIPMENT TO REMAIN, WHETHER BELONGING TO THE BUILDING OR AN ADJACENT TENANT. COORDINATE A TEMPORARY CONNECTION IF NECESSARY.
6. REMOVE ALL INTERIOR RECEPTACLES, LIGHTS, AND ASSOCIATED WIRING (INCLUDING COMMUNICATIONS CABLING) BACK TO BUILDING PANELS EXCEPT FOR THOSE DIRECTLY RELATED TO RECENTLY INSTALLED INFORMATION TECHNOLOGY SYSTEMS, EXTERIOR LIGHTING/POWER, AND RECENTLY INSTALLED HVAC SYSTEMS.
7. ALL MOLDINGS GENERATED FROM DEMOLISHED PARTITIONS AND DOORS TO BE SALVAGED AND REHABILITATED FOR REINSTALLATION. ALL T&G SUBFLOOR GENERATED FROM DEMOLISHED FLOOR AREAS TO BE SALVAGED AND REHABILITATED FOR REINSTALLATION.
8. ALL SUSPENDED OR APPLIED CEILINGS TO BE DEMOLISHED. ORIGINAL BEAD BOARD TO BE EXPOSED.
9. REMOVE ANY APPLIED FLOORING (EX: SHEETGOOD, TILE, CARPET). ORIGINAL SUBFLOOR TO BE EXPOSED.
10. REMOVE ALL WINDOW TREATMENTS
11. REMOVE ALL ABANDONED HEATING EQUIPMENT (BOILER, RADIATORS, ETC.) AND SALVAGE/RECYCLE
12. MULTIPURPOSE ROOM #101: PREPARE EXPOSED FLOOR FOR REFINISHING. PATCH FLOOR WITH WOOD OF MATCHING DIMENSION AND SPECIES AS REQUIRED; GC TO ASSUME 10% REPAIR AND REPLACE. PREPARE ALL SURFACES FOR PAINT. PATCH BEADBOARD AS REQUIRED; GC TO ASSUME 10% REPAIR AND REPLACE.
13. MULTIPURPOSE ROOM #201: PREPARE EXPOSED FLOOR FOR REFINISHING. REMOVE ALL WALLPAPER, AND PREPARE WALLS FOR PAINT.
14. BASEMENT (NOT SHOWN); DEMO TWISTED BEAM PER STRUCTURAL

### DEMOLITION SYMBOLS

- DEMOLISHED
- - - - - DEMOLISHED WALL
- ⌋ DEMOLISHED DOOR

No.	Description	Date

Town of Acton  
WINDSOR  
BUILDING -  
100% DD

18 Windsor Ave.  
Acton, MA 01720

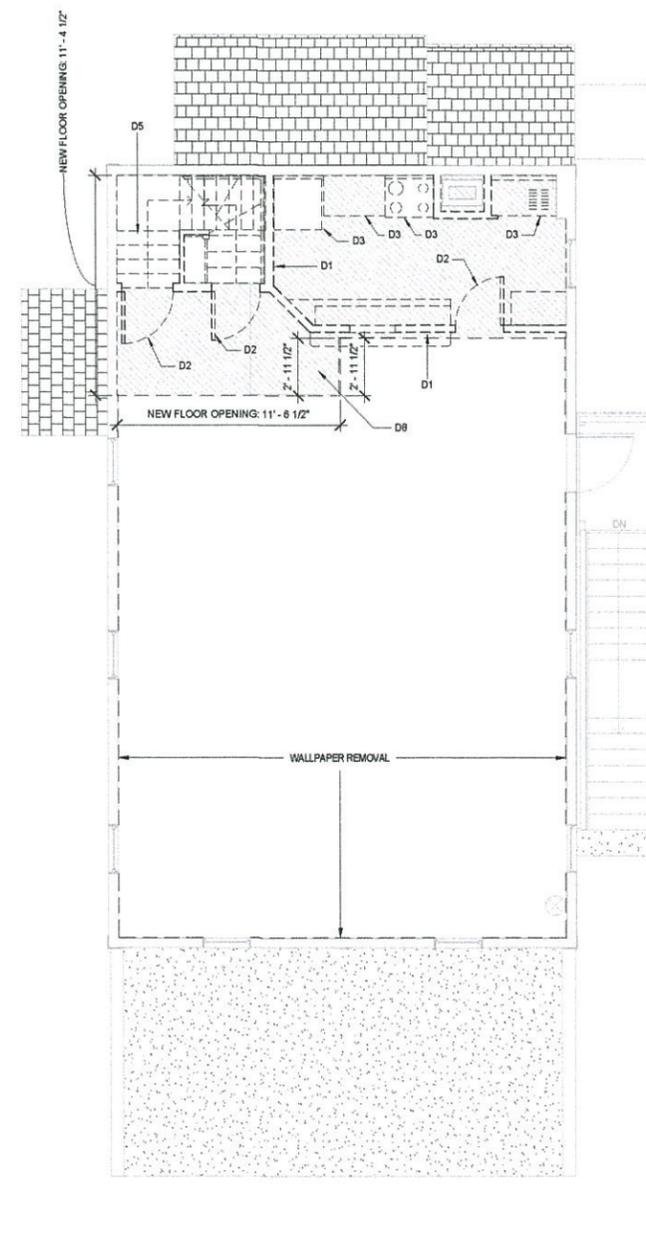
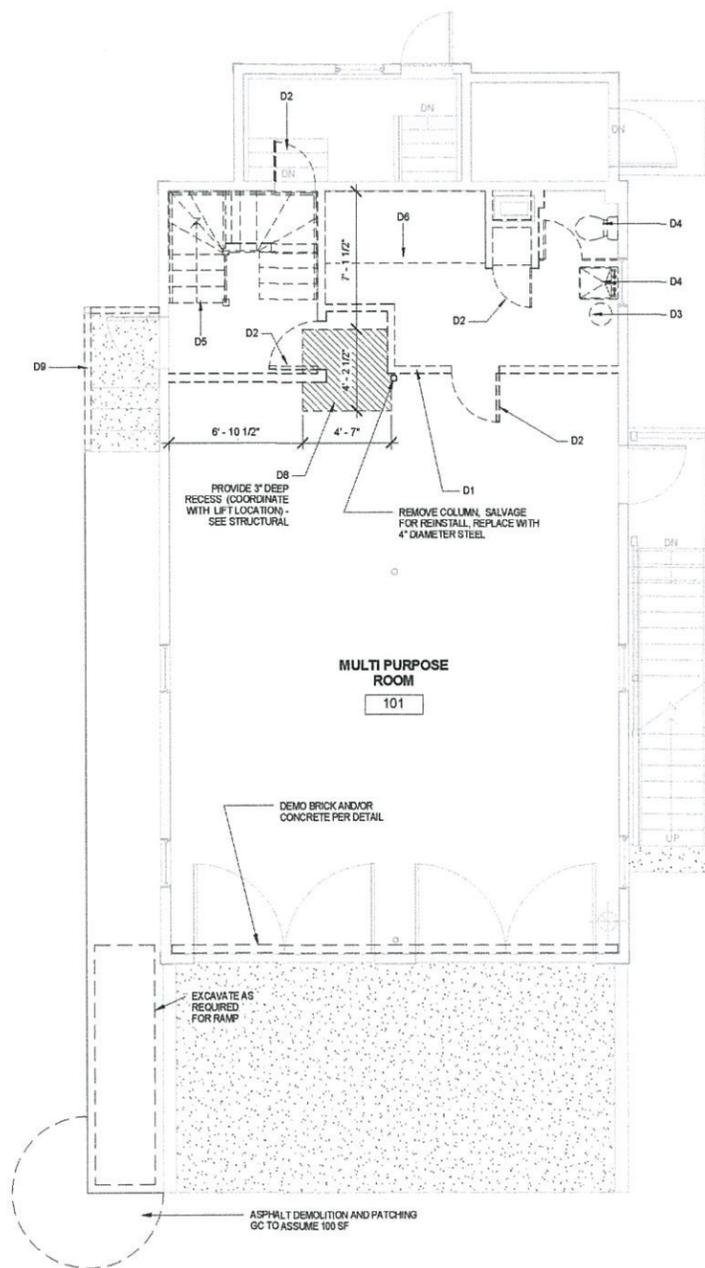
Proposed  
Demolition Plans

Project Number	13.1510.00
Date	August 30, 2013
Drawn By	Author
Checked By	Checker

**D01**

Scale 1/4" = 1'-0"

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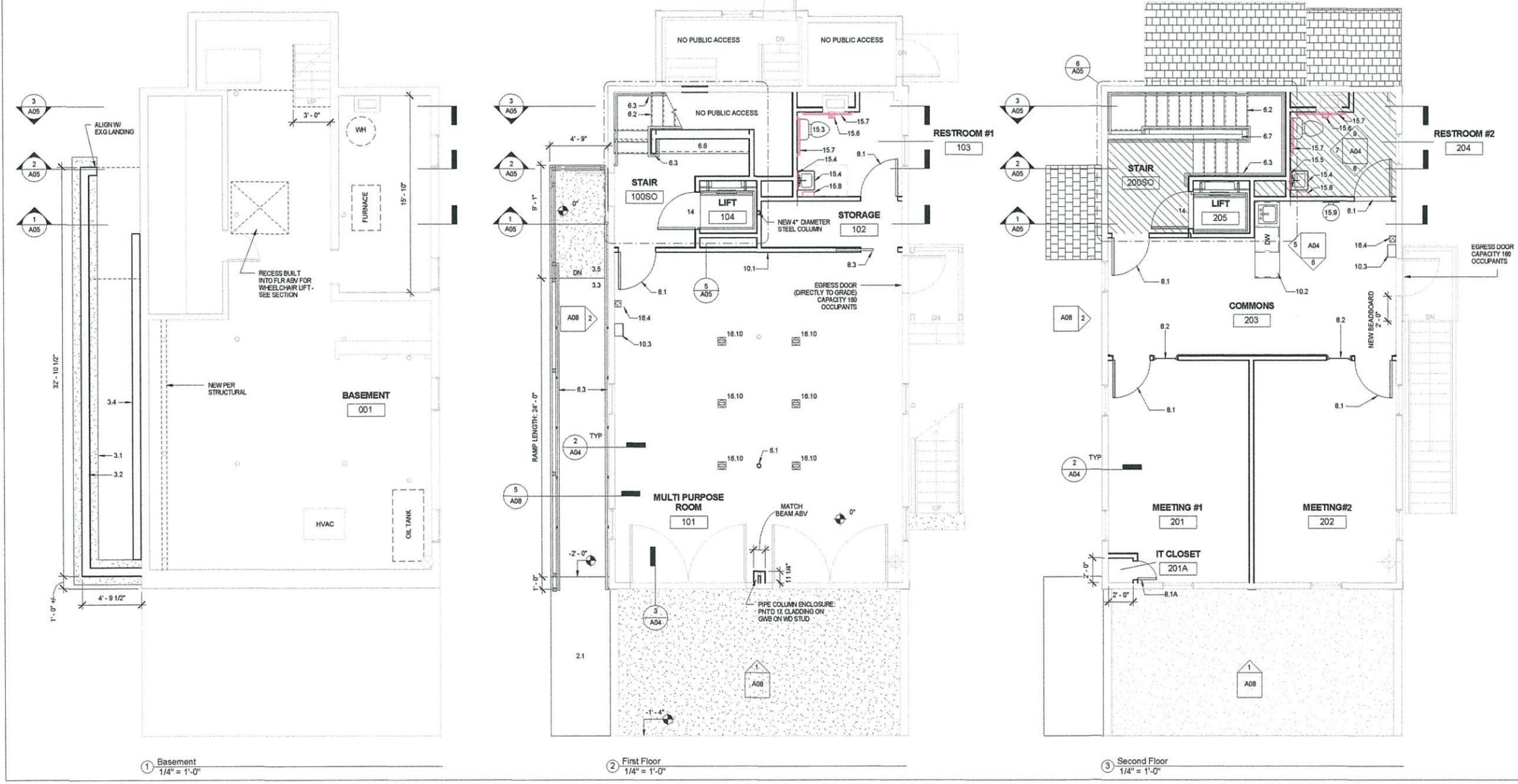


### GENERAL NOTES

- DIMENSIONS TO FACE OF FINISH, TYP
- FURNITURE AND WINDOW TREATMENTS PURCHASED, PROCURED, AND INSTALLED BY OWNER.
- ALL INTERIOR PARTITIONS: 2X4 @ 16" OC WOOD CONSTRUCTION. PROVIDE A SINGLE LAYER OF 5/8" TYPE "X" GWB ON EACH FINISH SIDE. RE-INSTALL SALVAGED WOOD TRIMS AND BASES. PRIME/PAIN WITH BENJAMIN MOORE "NATURA" NO VOC PAINT
- ALL EXISTING SURFACES: REMOVE LOOSE PAINT. PRIME/PAIN WITH BENJAMIN MOORE "NATURA" NO VOC PAINT
- ALL EXISTING FLOORS: SAND W/ 800 GRIT SHEET AND RE-SAND W/ 1500 GRIT SHEET. APPLY (2) COATS CLEAR SATN POLYURETHANE

ROOM FINISH SCHEDULE								
Name	Number	Occupancy	Area	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
BASEMENT	001	S-2	680 SF	NONE	NONE	NONE	NONE	REMOVE ABANDONED PIPES AND WIRING
STAIR	100SO	NA	127 SF	NONE	SEE GEN NOTES	SEE GEN NOTES	NONE	
MULTI PURPOSE ROOM	101	B	615 SF	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	
STORAGE	102	S-2	42 SF	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	PNT'D GWB	PROVIDE (30) WALL-MOUNTED COAT HOOKS
RESTROOM #1	103	NA	62 SF	VCT	VINYL COVE BASE	SEE GEN NOTES	PNT'D GWB	
LIFT	104	NA	19 SF	NONE	NONE	UNFINISHED GWB	NONE	
STAIR	200SO	NA	124 SF	RE-INSTALL SALVAGED T&G SUBFLOOR	NONE	SEE GEN NOTES	PNT'D GWB	HATCHED AREA DENOTES FLOOR TO BE REFRAMED W/ 2X10@16" OC, RE-INSTALL SALVAGED T&G SUBFLOOR
MEETING #1	201	B	186 SF	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	
IT CLOSET	201A		4 SF					
MEETING #2	202	B	204 SF	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	
COMMONS	203	B	253 SF	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	SEE GEN NOTES	
RESTROOM #2	204	NA	62 SF	VCT	VINYL COVE BASE	SEE GEN NOTES	PNT'D GWB	HATCHED AREA DENOTES FLOOR TO BE REFRAMED W/ 2X10@16" OC, 3/4" PLYWOOD SUBFLOOR
LIFT	205	NA	19 SF	NONE	NONE	NONE	UNFINISHED GWB	
UNOCCUPIED ATTIC	301	S-2	755 SF	NONE	NONE	NONE	NONE	NOT SHOWN, UNOCCUPIED

- ASPHALT TRANSITION, ASPHALT WALKWAY TO PUBLIC SIDEWALK - GRADE PER ADA/MAAB
- 8'X24" 3000 PSI CONCRETE FOOTING, 48" MIN BELOW FINISHED GRADE. (2#3 BAR CONTINUOUS IN LOWER THIRD OF FOOTING)
- 8" THICK, 3000 PSI CONCRETE WALL, EXTENDING FROM FOOTING TO UNDERSIDE OF RAMP, #3 BAR VERTICAL 4'-0" OC, #3 BAR HORIZONTAL ALIGNED W/ FINISHED GRADE. EXTERIOR FACE TO BE FORMED W/ VERTICAL 1X4 ROUGH PINE BOARDS. WARM BROWN COLOR ADDITIVE
- 4" THICK, 5000 PSI CONCRETE RAMP. BEAR ON NEW WALL, HAUNCH, AND COMPACTED BACKFILL SOILS. BROOM FINISH WALKING SURFACE. SMOOTH FINISH AT EXPOSED SIDES. WARM GRAY COLOR ADDITIVE
- 12'X12" THICK, 3000 PSI CONCRETE HAUNCH
- 4" THICK, 5000 PSI CONCRETE SLAB, 4X4 STEEL REINFORCING MESH IN BOTTOM THIRD OF SLAB, BEAR ON NEW WALL AND EXISTING STAIR AND LANDING. BROOM FINISH WALKING SURFACE. SMOOTH FINISH AT EXPOSED SIDES. SLOPE 1/2":1'-0" AWAY FROM BUILDING. WARM GRAY COLOR ADDITIVE
- SALVAGED WOOD COLUMN, REINSTALLED
- PRE-FABRICATED STAINED PINE INTERIOR STAIR, WALL-SUPPORTED STRINGERS
- STAINED PINE HANDRAIL, WALL-MOUNTED, JULIUS BLUM "CARLSTADT" STAINLESS STEEL BRACKET @ 4'-0" OC MIN
- 1-1/2" DIA CLOSET ROD AND 1X14 WD SHELF
- 1X6 STAINED PINE GUARDRAIL WALL CAP
- 3-0X6-8 MOHAWK COMMERCIAL FLUSH DOOR W/ STAINED FINISH, HOLLOW METAL FRAME, CLOSER, SCHLAGE HARDWARE
- 1-6X6-8 MOHAWK COMMERCIAL FLUSH DOOR W/ STAINED FINISH, HOLLOW METAL FRAME
- 2-0X6-8 TEMPERED GLASS SIDELIGHT, HOLLOW METAL FRAME
- 3-0X6-8 MOHAWK COMMERCIAL POCKET DOOR W/ STAINED FINISH
- CHALKBOARD PAINT
- PLASTIC LAMINATE COUNTERTOP, STAINLESS STEEL BAR SINK, UNDERCABINET REFRIGERATOR, (1) 24" MELAMINE SINK BASE, (1) 24" MELAMINE BASE CABINET
- FIRE EXTINGUISHER - WALL MOUNTED
- SAVARIA V1504 WHEELCHAIR LIFT, STANDARD FINISHES, DOOR INCLUDED
- AMERICAN STANDARD CLEAN HE FLOOR-MOUNTED TANK WATERCLOSET (#2514.101, OR EQ)
- AMERICAN STANDARD WALL-MOUNT SINK (#9141.011, OR EQ) AND AMERICAN STANDARD .5GPM SELECTRONIC FAUCET (#7055.205, OR EQ)
- FROST PRODUCTS 18"X24" MIRROR (#941, OR EQ)
- FROST PRODUCTS MULTI-ROLL TOILET TISSUE DISPENSER (#165, OR EQ)
- FROST PRODUCTS STAINLESS STEEL GRAB BAR (OR EQ)
- FROST PRODUCTS STAINLESS STEEL PAPER TOWEL DISPENSER (OR EQ)
- ELKAY WALL MOUNT ADA COMBO DRINKING FOUNTAIN (#E2H20-VRCGRN8, OR EQ)
- FIRE ALARM PULL STATION
- DUPLEX FLOOR BOX
- NATURAL GAS GENERATOR ON CONCRETE PAD



No.	Description	Date

Town of Acton  
**WINDSOR BUILDING - 100% DD**  
 18 Windsor Ave.  
 Acton, MA 01720

### Proposed Floor Plans

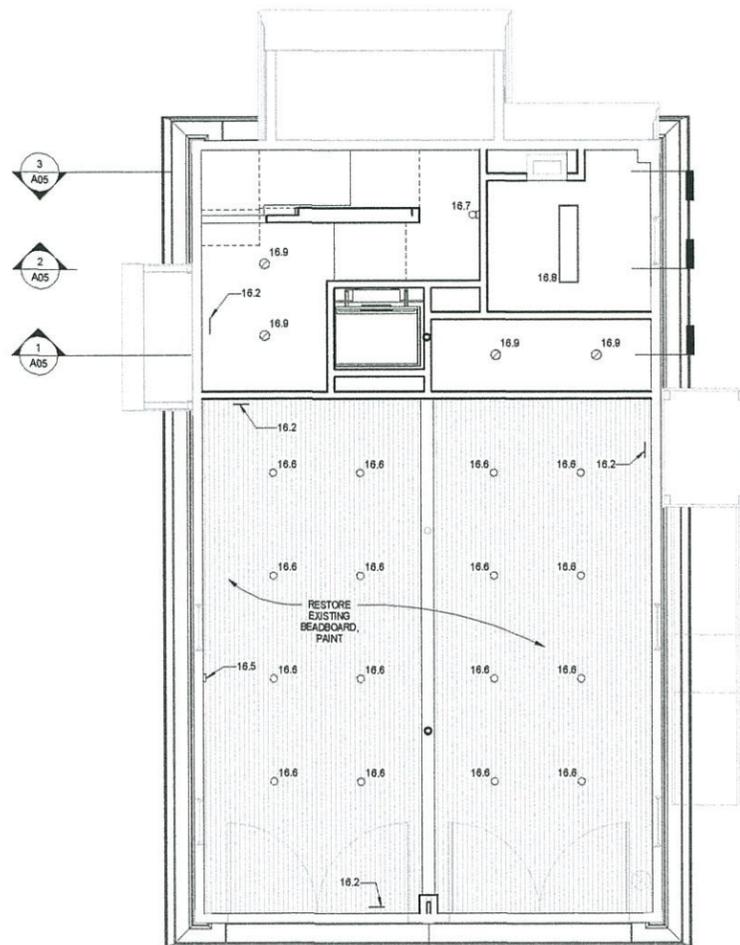
Project Number 13.1510.00  
 Date August 30, 2013  
 Drawn By VSA  
 Checked By JPV

**A01**  
 Scale 1/4" = 1'-0"

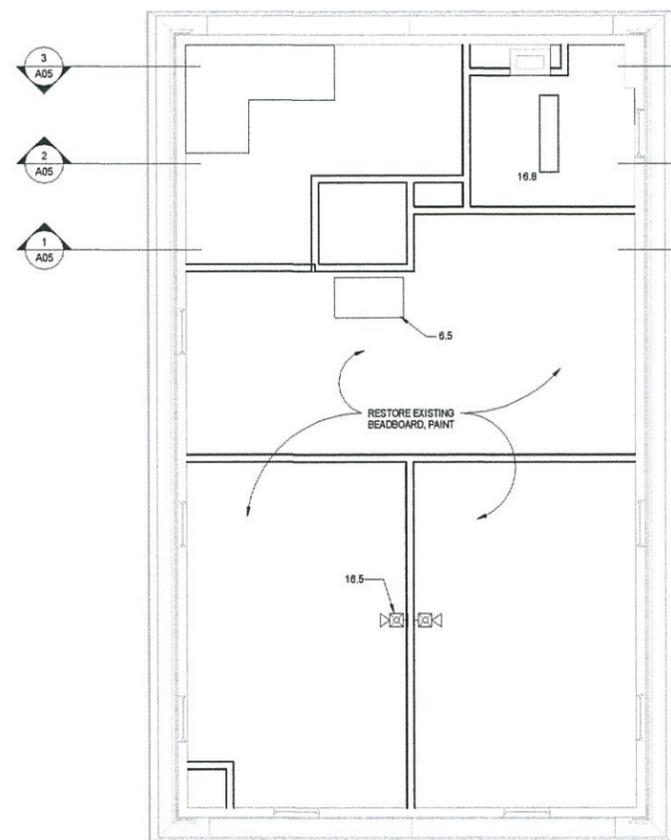
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### GENERAL NOTES

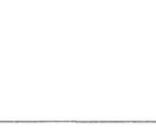
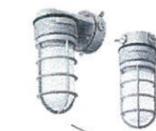
1. DIMENSIONS TO FACE OF FINISH, TYP
2. FURNITURE AND WINDOW TREATMENTS PURCHASED, PROCURED, AND INSTALLED BY OWNER.
3. ALL INTERIOR PARTITIONS: 2X4 @ 16"OC WOOD CONSTRUCTION, PROVIDE A SINGLE LAYER OF 5/8" TYPE "X" GWB ON EACH FINISH SIDE. RE-INSTALL SALVAGED WOOD TRIMS AND BASES. PRIME/PAINT WITH BENJAMIN MOORE "NATURA" NO VOC PAINT
4. ALL EXISTING SURFACES: REMOVE LOOSE PAINT, PRIME/PAINT WITH BENJAMIN MOORE "NATURA" NO VOC PAINT
5. ALL EXISTING FLOORS: SAND W/ 800 GRIT SHEET AND RE-SAND W/ 1500 GRIT SHEET, APPLY (2) COATS CLEAR SATIN POLYURETHANE



① First Floor  
1/4" = 1'-0"



② Second Floor  
1/4" = 1'-0"



- 6.5 PRE-FABRICATED DROP-DOWN ATTIC ACCESS STAIR
- 16.2 ILLUMINATED EXIT SIGN
- 16.5 FIRE STROBE
- 16.6 LITHONIA VAPOR TIGHT LED CEILING LIGHT (OLVTLM, OR EQ)
- 16.7 LITHONIA VAPOR TIGHT LED WALL LIGHT (OLVTWM, OR EQ)
- 16.8 LITHONIA "SURFACE COMMERCIALS" "LB" 1X4, TWO LAMP, SURFACE MOUNTED, FLUORESCENT LIGHT (OR EQ)
- 16.9 LITHONIA NON-IC 6" RECESSED DOWNLIGHT, SINGLE CFL LAMP (#LF6N) W/ WHITE TRIM (OR EQ)

No.	Description	Date

Town of Acton  
**WINDSOR  
 BUILDING -  
 100% DD**

18 Windsor Ave.  
 Acton, MA 01720

### Proposed Ceiling Plans

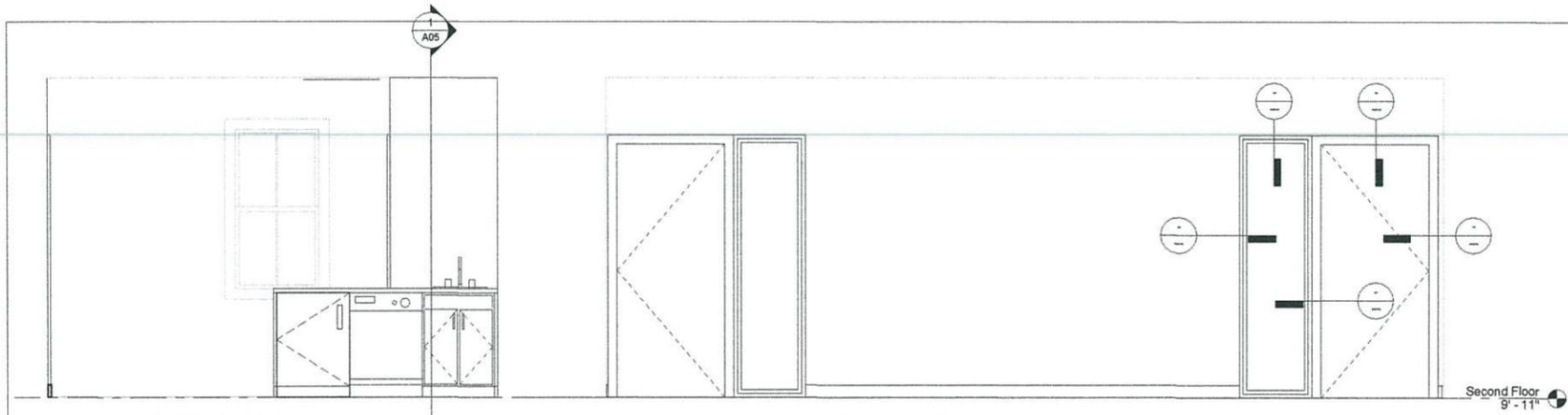
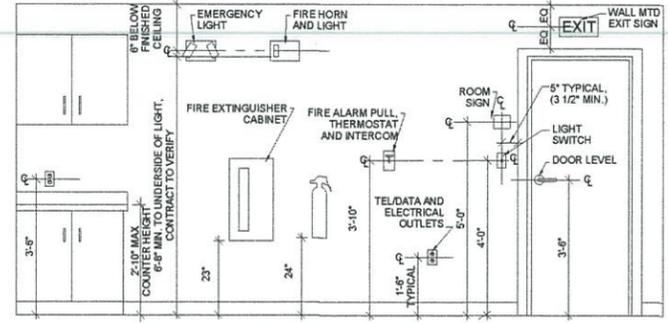
Project Number	13.1510.00
Date	August 30, 2013
Drawn By	Author
Checked By	Checker

**A02**

Scale As indicated

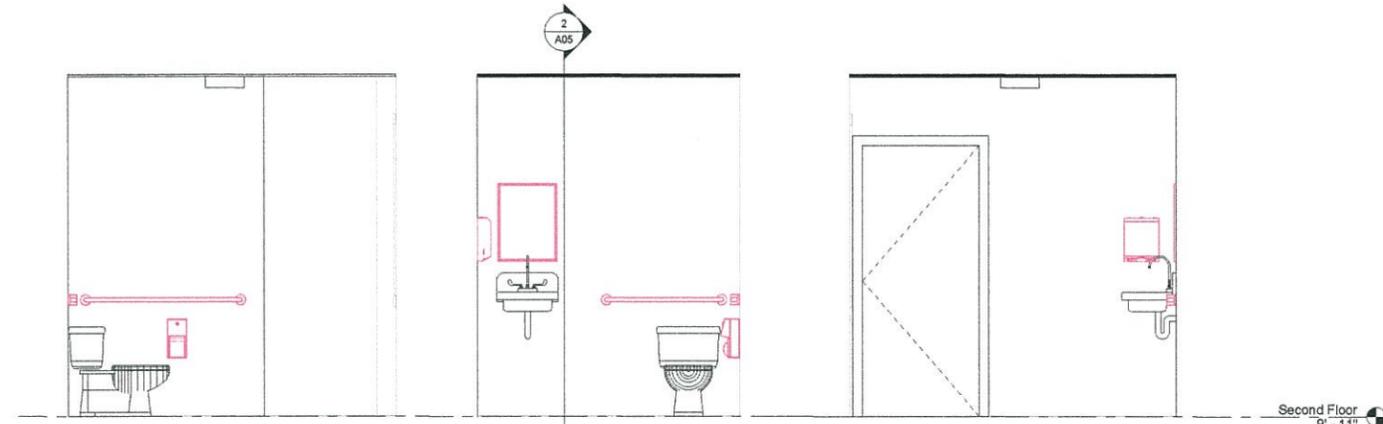


**TYPICAL MOUNTING HEIGHTS / NOT TO SCALE:**  
 ALL CONTROLS & SWITCHES  
 SHALL BE LOCATED AT LEAST 1'-6"  
 FROM AN INTERIOR CORNER.



5 KITCHENETTE ELEVATION  
1/2" = 1'-0"

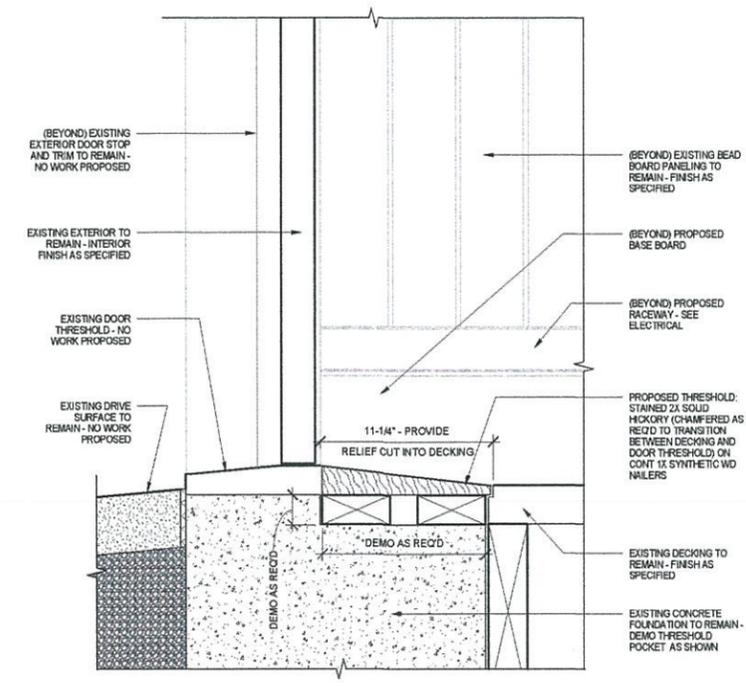
6 MEETING ROOM ELEVATION  
1/2" = 1'-0"



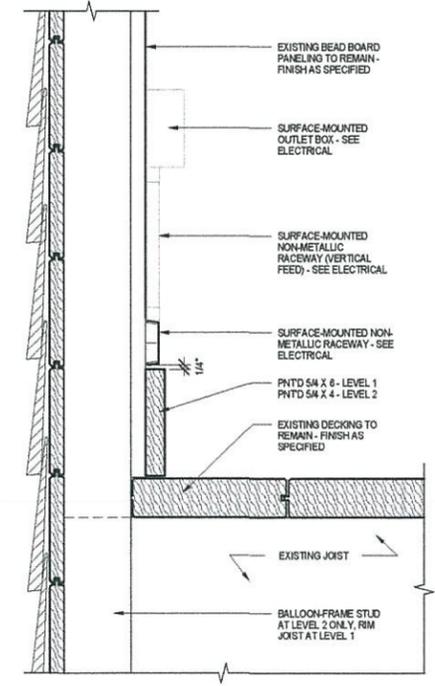
9 LAV 3  
1/2" = 1'-0"

7 LAV 2  
1/2" = 1'-0"

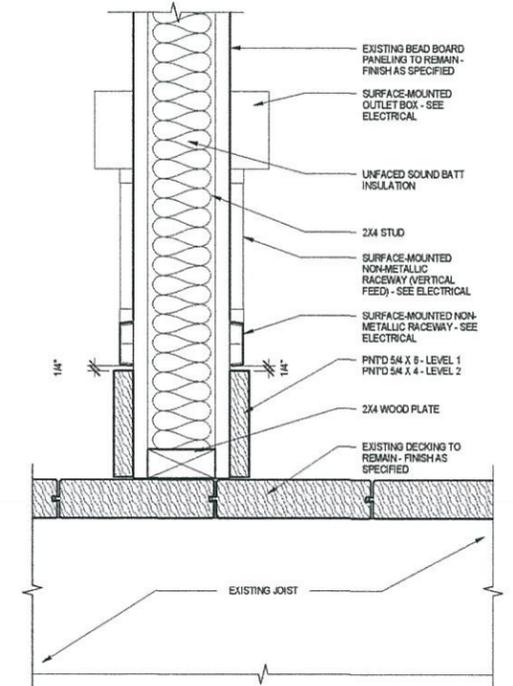
8 LAV 1  
1/2" = 1'-0"



3 BAY DOOR THRESHOLD DETAIL  
3" = 1'-0"



2 TYP BASE DETAIL AT EXTERIOR WALL  
3" = 1'-0"



1 TYPICAL BASE DETAIL AT NEW PARTITIONS  
3" = 1'-0"

No.	Description	Date

**Town of Acton  
WINDSOR  
BUILDING -  
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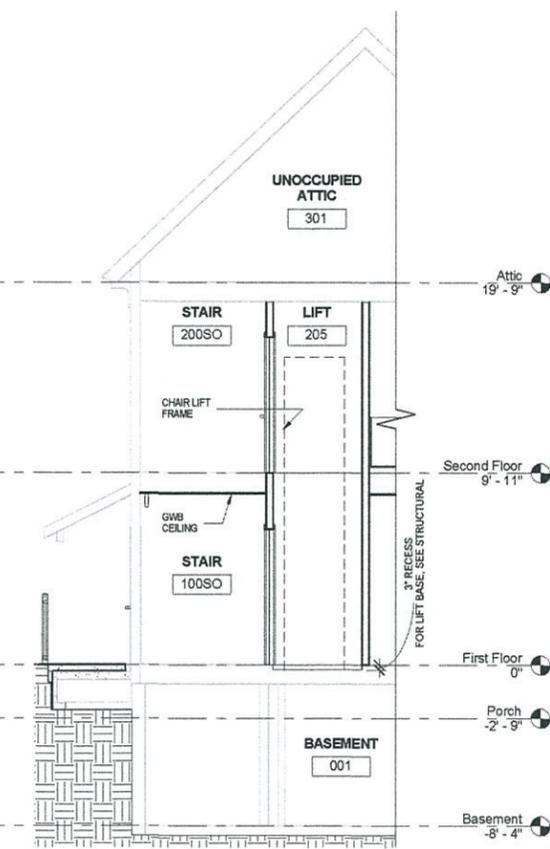
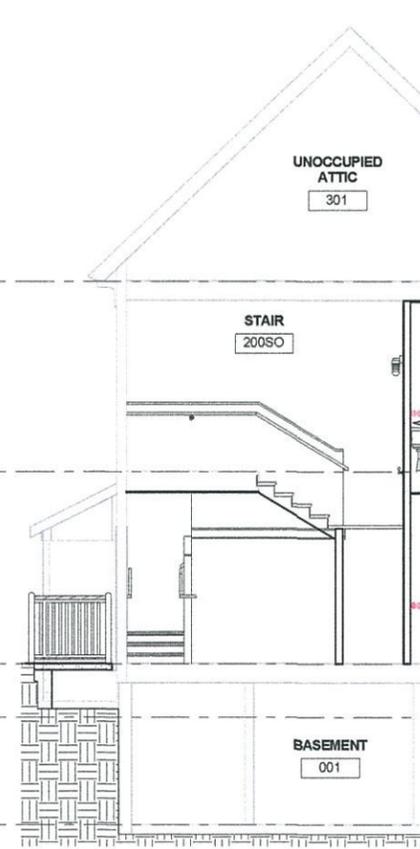
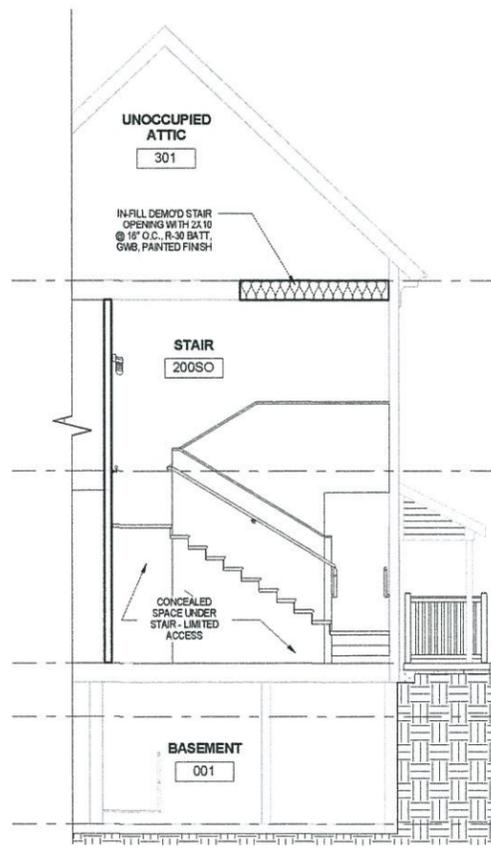
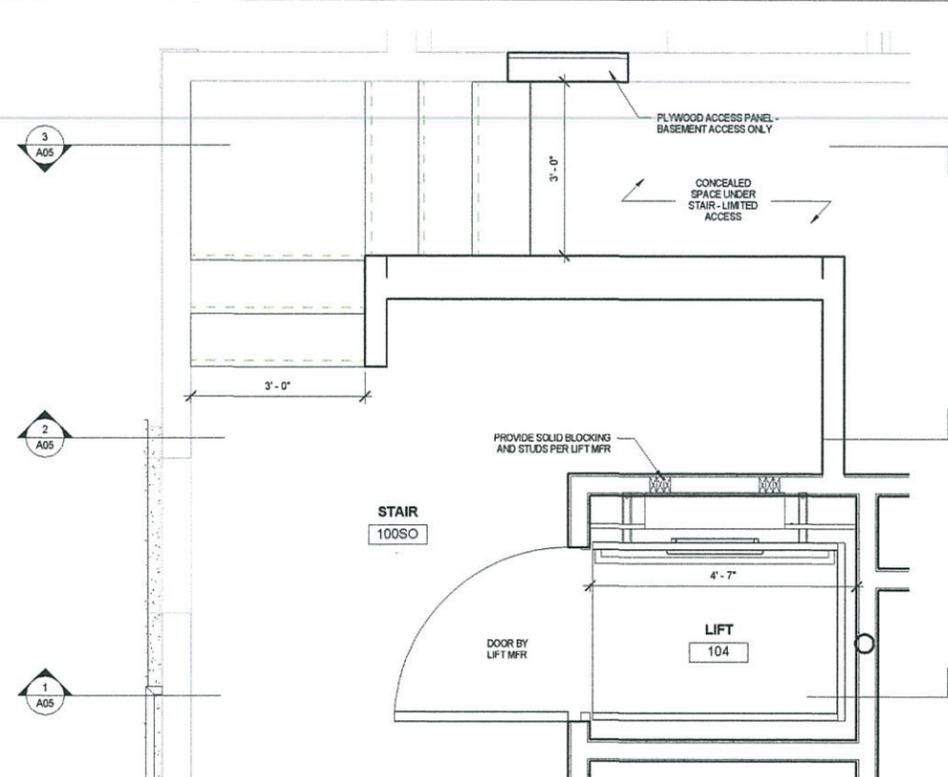
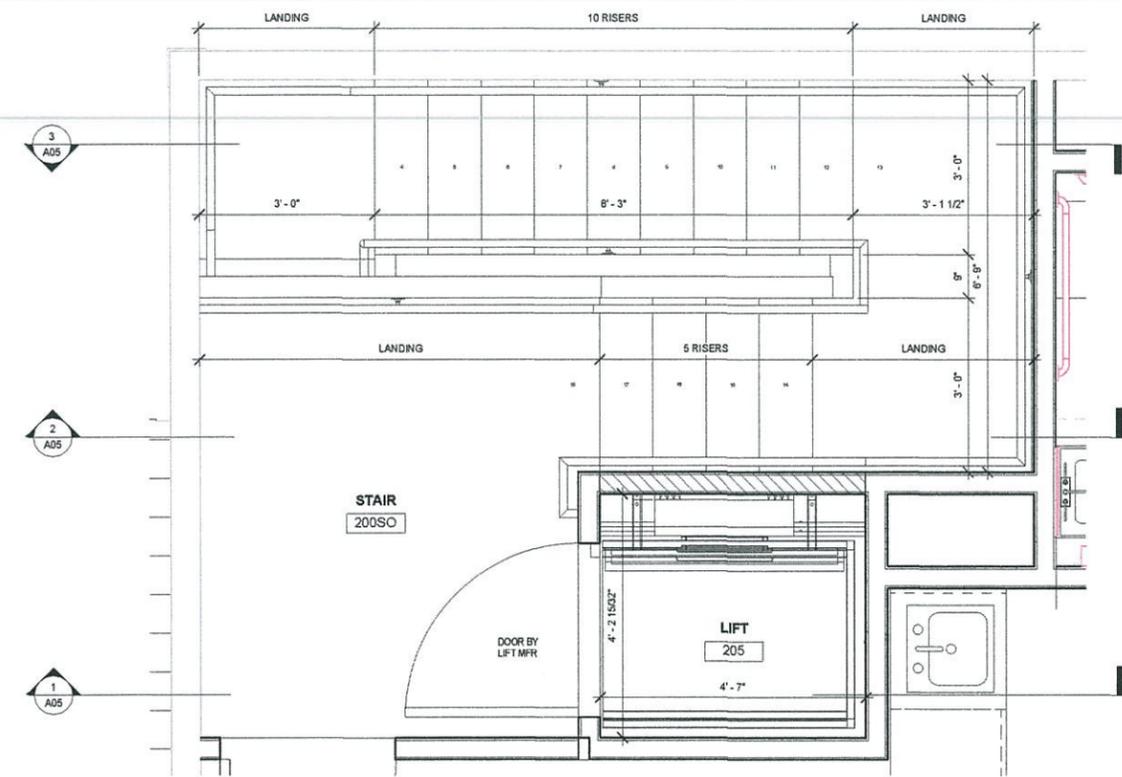
18 Windsor Ave.  
Acton, MA 01720

**Details**

Project Number 13.1510.00  
 Date August 30, 2013  
 Drawn By Author  
 Checked By Checker

**A04**

Scale As indicated



No.	Description	Date

Town of Acton  
 WINDSOR  
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 Acton, MA 01720

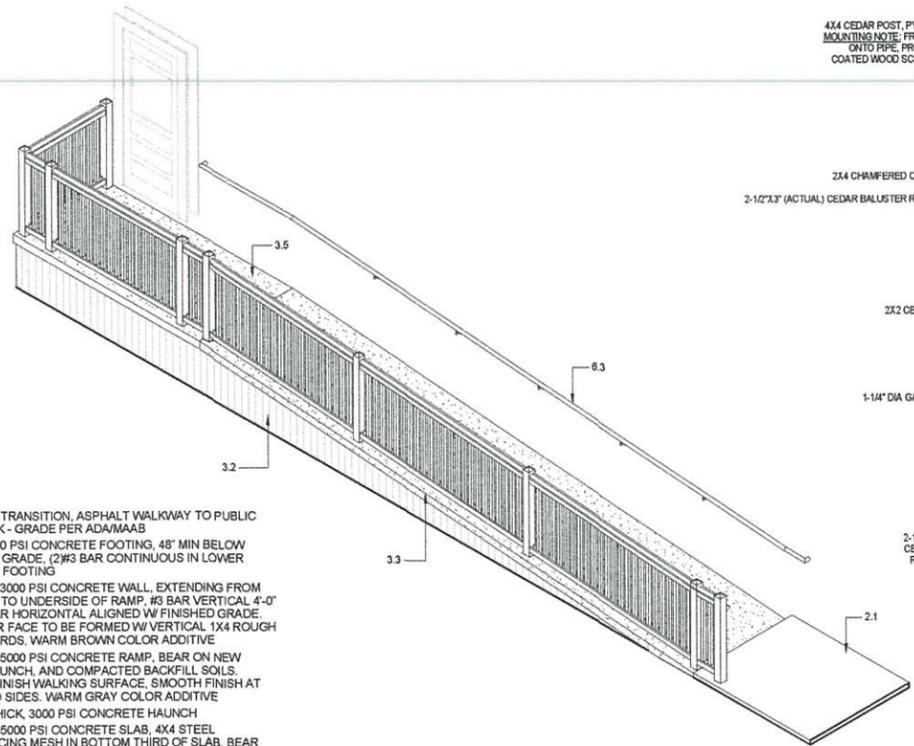
Vertical Circulation

Project Number 13.1510.00  
 Date August 30, 2013  
 Drawn By Author  
 Checked By Checker

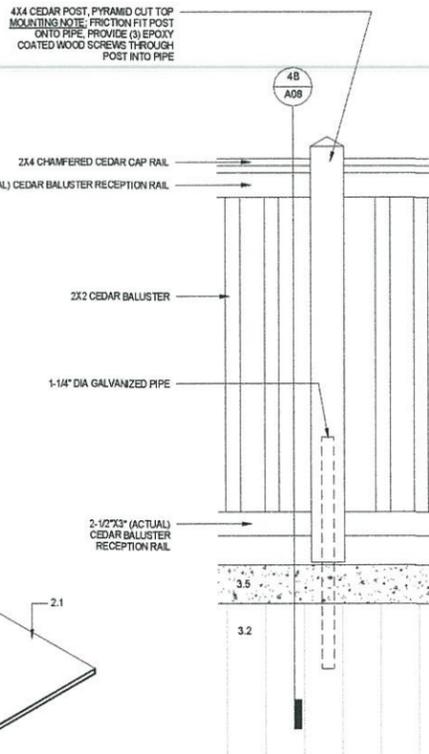
**A05**

Scale As indicated

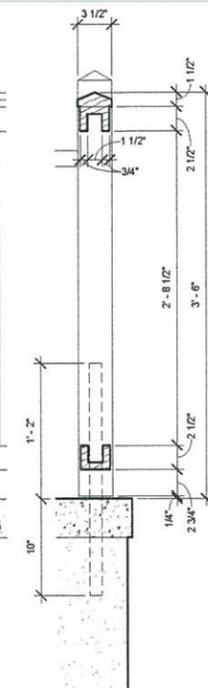
- 2.1 ASPHALT TRANSITION, ASPHALT WALKWAY TO PUBLIC SIDEWALK - GRADE PER ADAMAAB
- 3.1 8"x24" 3000 PSI CONCRETE FOOTING, 48" MIN BELOW FINISHED GRADE, (2)#3 BAR CONTINUOUS IN LOWER THIRD OF FOOTING
- 3.2 8" THICK, 3000 PSI CONCRETE WALL, EXTENDING FROM FOOTING TO UNDERSIDE OF RAMP, #3 BAR VERTICAL 4'-0" OC, #3 BAR HORIZONTAL, ALIGNED W/ FINISHED GRADE. EXTERIOR FACE TO BE FORMED W/ VERTICAL 1X4 ROUGH PINE BOARDS, WARM BROWN COLOR ADDITIVE
- 3.3 4" THICK, 5000 PSI CONCRETE RAMP, BEAR ON NEW WALL, HAUNCH, AND COMPACTED BACKFILL SOILS. BROOM FINISH WALKING SURFACE, SMOOTH FINISH AT EXPOSED SIDES, WARM GRAY COLOR ADDITIVE
- 3.4 12"x12" THICK, 3000 PSI CONCRETE HAUNCH
- 3.5 4" THICK, 5000 PSI CONCRETE SLAB, 4X4 STEEL REINFORCING MESH IN BOTTOM THIRD OF SLAB, BEAR ON NEW WALL AND EXISTING STAIR AND LANDING. BROOM FINISH WALKING SURFACE, SMOOTH FINISH AT EXPOSED SIDES, SLOPE 1/4" 1'-0" AWAY FROM BUILDING, WARM GRAY COLOR ADDITIVE
- 6.3 STAINED PINE HANDRAIL, WALL-MOUNTED, JULIUS BLUM "CARLSTADT" STAINLESS STEEL BRACKET @ 4'-0" OC MIN
- 16.12 NATURAL GAS GENERATOR ON CONCRETE PAD



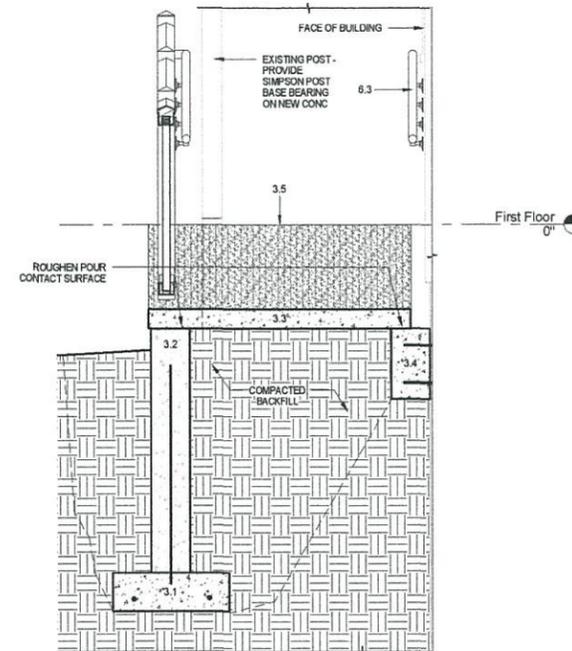
3 RAMP ISOMETRIC



4A CEDAR GUARDRAIL  
1 1/2" = 1'-0"



4B CEDAR GUARDRAIL SECTION  
1 1/2" = 1'-0"



5 RAMP SECTION  
3/4" = 1'-0"



2 North Elevation - Proposed  
1/4" = 1'-0"



1 West Elevation - Proposed  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
WINDSOR  
BUILDING -  
100% DD

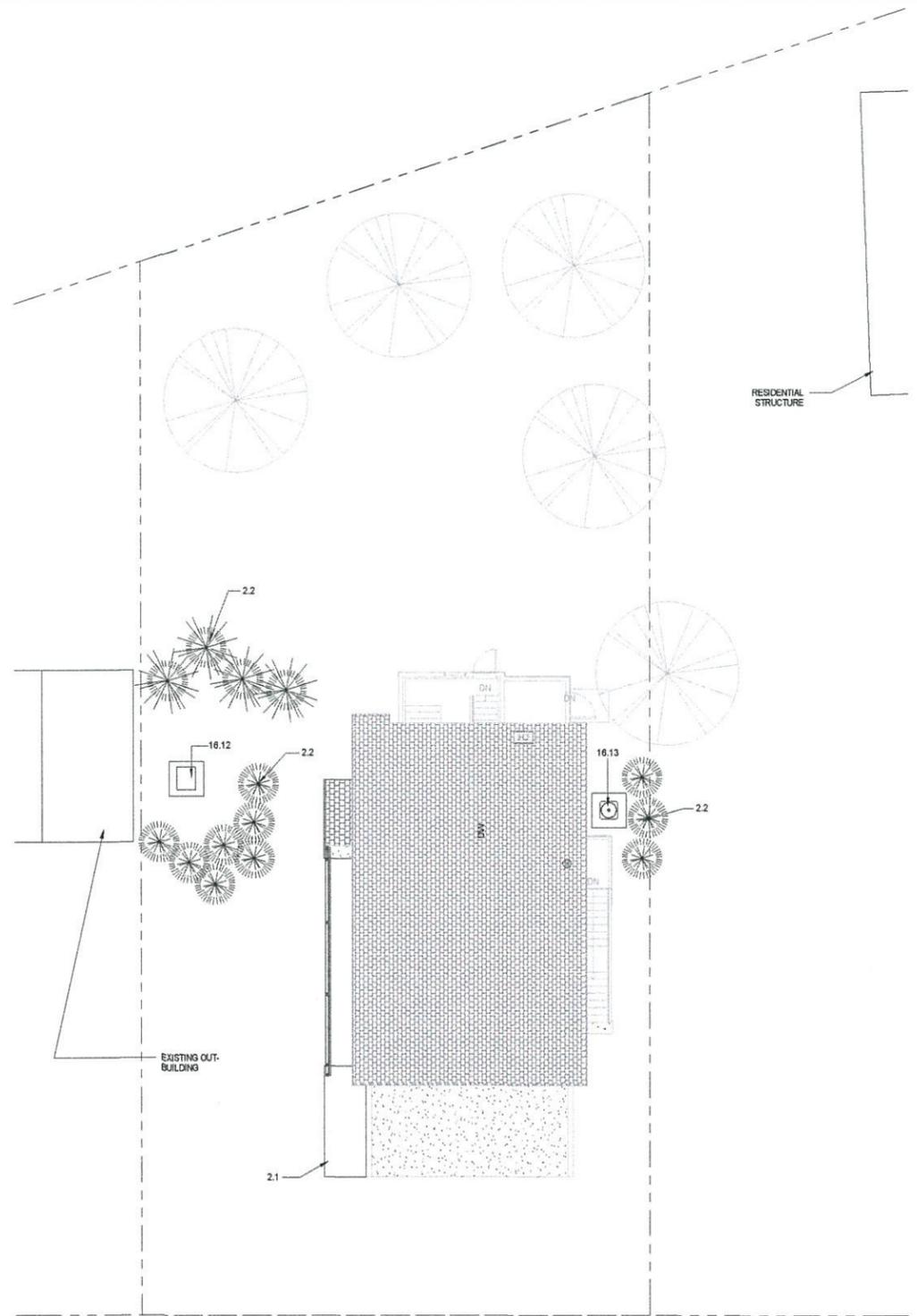
18 Windsor Ave.  
Acton, MA 01720

Proposed Exterior  
Elevations

Project Number 13.1510.00  
Date August 30, 2013  
Drawn By Author  
Checked By Checker

**A08**

Scale As indicated



- 2.1 ASPHALT TRANSITION, ASPHALT WALKWAY TO PUBLIC SIDEWALK - GRADE PER ADAMAAB
- 2.2 EVERGREEN SCREENING
- 16.12 NATURAL GAS GENERATOR ON CONCRETE PAD
- 16.13 CONDENSER ON CONCRETE PAD

No.	Description	Date

**Town of Acton  
WINDSOR  
BUILDING -  
100% DD**

18 Windsor Ave.  
Acton, MA 01720

**Architectural Site  
Plan**

Project Number	13.1510.00
Date	August 30, 2013
Drawn By	BD
Checked By	JPV

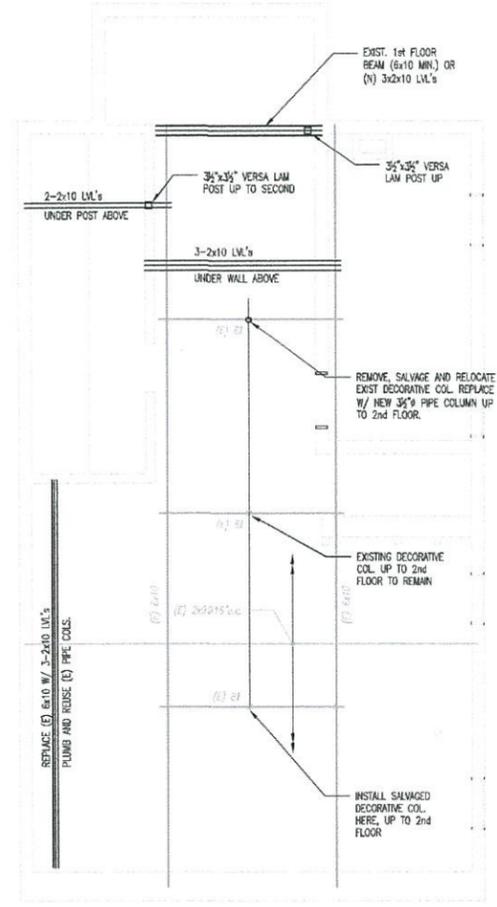
**A09**

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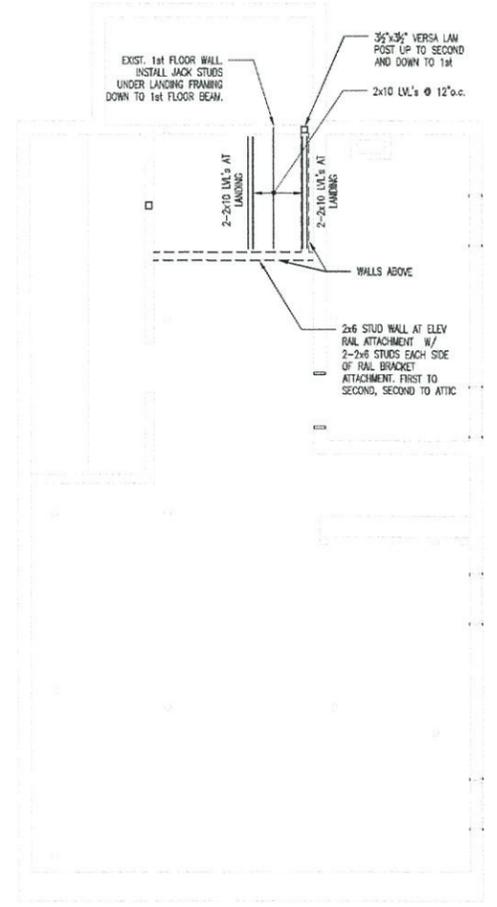
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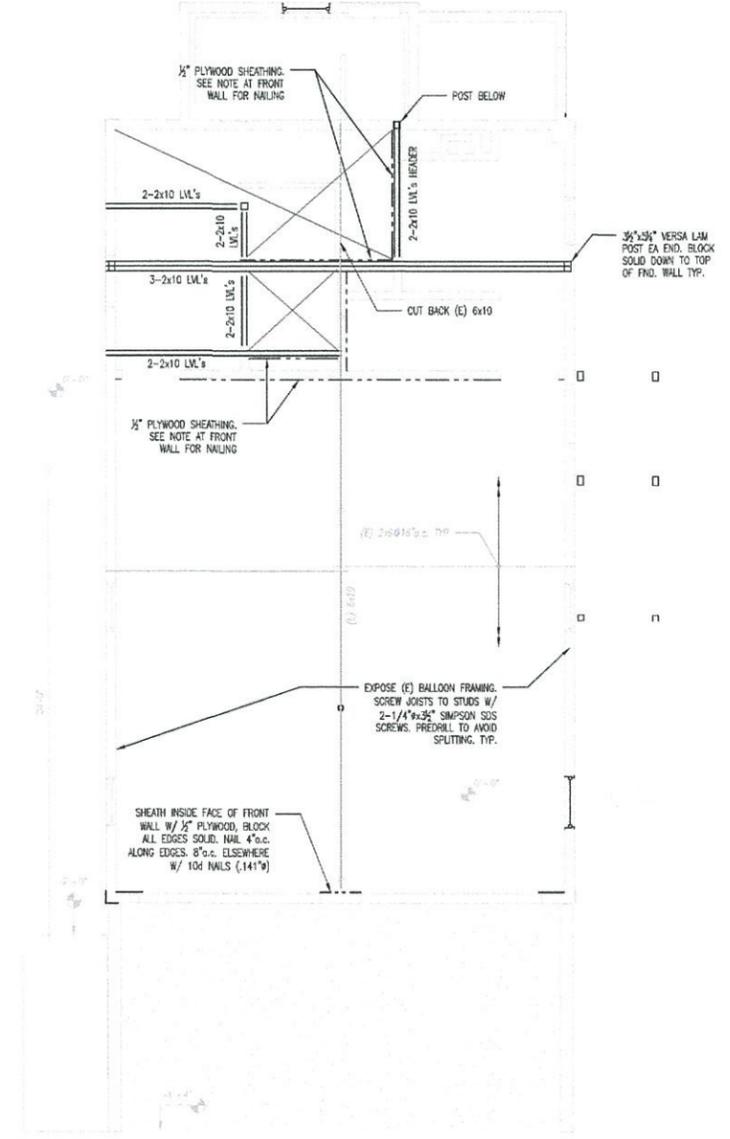
**BOSTON  
BUILDING  
CONSULTANTS**



**FIRST FLOOR FRAMING PLAN**  
1/4"=1'-0"



**STAIR LANDING FRAMING**  
1/4"=1'-0"



**SECOND FLOOR FRAMING**  
1/4"=1'-0"

No.	Description	Date

**Town of Acton  
Windsor Building  
100% Design Development  
Set**

18 Windsor Ave.  
Acton, MA 01720

**Framing  
Plans**

Project Number 2000.01  
Date 30 August 2013  
Drawn By FJM  
Checked By JB

**S-0001**  
Scale 1/4" = 1'-0"

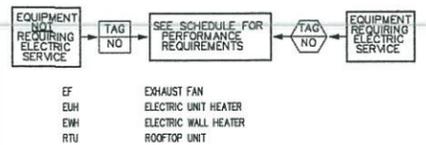
**GENERAL NOTES**

- HVAC WORK IS INDICATED DIAGRAMMATICALLY. EXACT LOCATIONS OF ALL COMPONENTS ARE TO BE DETERMINED IN THE FIELD AND BY THE ACTUAL BUILDING CONDITIONS. DUCTS, PIPING OR EQUIPMENT INTERFERING WITH OTHER INSTALLATIONS SHALL BE RELOCATED AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER. EXACT LOCATIONS MUST HAVE THE APPROVAL OF THE ARCHITECT.
- ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES BEFORE ANY INSTALLATION IS MADE.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MASS STATE BUILDING CODES, MANUFACTURER'S APPROVED PUBLISHED LITERATURE, AND AUTHORITIES HAVING JURISDICTION.
- INSTALLATION OF EQUIPMENT SHALL PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT.
- ALL CEILING MOUNTED EQUIPMENT SHALL BE INSTALLED IN SUCH A WAY THAT LIGHTS, WIRING, PIPING, AND DUCTWORK DO NOT BLOCK ACCESS TO UNITS AND RELATED ACCESSORIES.
- HVAC CONTRACTOR SHALL COORDINATE ALL WALL, CEILING, FLOOR, ROOF AND BEAM PENETRATIONS WITH ARCHITECT AND STRUCTURAL ENGINEER.
- ALL DUCT SIZES SHOWN ARE NET INSIDE CLEAR DIMENSIONS.
- PROVIDE VOLUME DAMPERS AT EVERY MAIN BRANCH TAKE-OFF AND AS INDICATED AND IN SUCH OTHER LOCATIONS WHERE REQUIRED TO PROPERLY BALANCE THE SYSTEM.
- PROVIDE INSTRUMENT TEST HOLES WITH CAPS IN AIR DISTRIBUTION SYSTEMS AS REQUIRED TO BALANCE SYSTEM.
- HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHEETMETAL PLENUMS, TRANSITIONS, FITTINGS, ETC. AT HVAC EQUIPMENT.
- ALL MISCELLANEOUS SUPPORTS REQUIRED FOR HVAC EQUIPMENT INSTALLATION SHALL BE PROVIDED BY HVAC SUBCONTRACTOR.
- EXACT LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS TO BE DETERMINED BY ARCHITECTURAL REFLECTED CEILING PLAN.
- EXACT ELEVATION FOR SIDE WALL DIFFUSERS, REGISTERS AND GRILLES SHALL BE APPROVED BY THE ARCHITECT BEFORE INSTALLATION.
- ALL EXPOSED EQUIPMENT (REGISTERS, UNIT HEATERS, ETC.) SHALL HAVE COLORS SELECTED BY THE ARCHITECT, UNLESS NOTED OTHERWISE.
- EXACT LOCATION OF THERMOSTAT TO BE COORDINATED WITH FINAL LOCATION OF WALL MOUNTED ARCHITECTURAL AND ELECTRICAL EQUIPMENT.
- ROOF OPENINGS SHALL BE SIZED FROM APPROVED SHOP DRAWINGS.

**ABBREVIATIONS**

ACD	AUTOMATIC CONTROL DAMPER
AD	ACCESS DOOR
AFB	ABOVE FINISHED FLOOR
AHHP	AS HIGH AS POSSIBLE
AP	ACCESS PANEL
ARCH	ARCHITECT
ATC	AUTOMATIC TEMPERATURE CONTROL
BDD	BACKDRAFT DAMPER
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
BOD	BOTTOM OF DUCT
CAP	CAPACITY
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CP	CLEANOUT
CP	CONTROL PANEL
DA	DIAMETER
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EBB	ELECTRIC BASEBOARD RADIATION
ECH	ELECTRIC CABINET HEATER
EFF	EFFICIENCY
ELV	ELEVATION
ER	EXHAUST REGISTER
ESP	EXTERNAL STATIC PRESSURE
EWI	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FA	FREE AREA
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FDB	FLAT ON BOTTOM
FDT	FLAT ON TOP
FPI	FINN PER INCH
FPM	FEET PER MINUTE
FT	FEET
FTR	FINNED TUBE RADIATION
CAL	GALLONS
CALV	CALVANIZED
GC	GENERAL CONTRACTOR
GF	GLYCOL FEED
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HZ	HERTZ
IN	INCHES
KE	KITCHEN EXHAUST
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU'S PER HOUR
MCC	MOTOR CONTROL CENTER
NC	NORMALLY CLOSED
NC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OBD	OPPOSED BLADE DAMPER
OD	OUTSIDE DIAMETER
#	PHASE
PRV	PRESSURE REDUCING VALVE
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH (GAUGE)
R	RETURN
RCP	RADIANT CEILING PANEL
RA	RETURN AIR
RG	RETURN GRILLE
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
S	SUPPLY
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SCT	SATURATED CONDENSING TEMPERATURE
SD	SMOKE DAMPER
SF	SQUARE FEET
SFD	SMOKE/FIRE DAMPER
SP	STATIC PRESSURE
SQ	SQUARE
SR	SUPPLY REGISTER
SST	SATURATED SUCTION TEMPERATURE
STL	STEEL
TYP	TYPICAL
UC	UNDERCUT DOOR
V	VOLTS
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
W/	WITH
W/O	WITHOUT
WB	WET BULB TEMPERATURE
WG	WATER GAUGE
WMS	WIRE MESH SCREEN

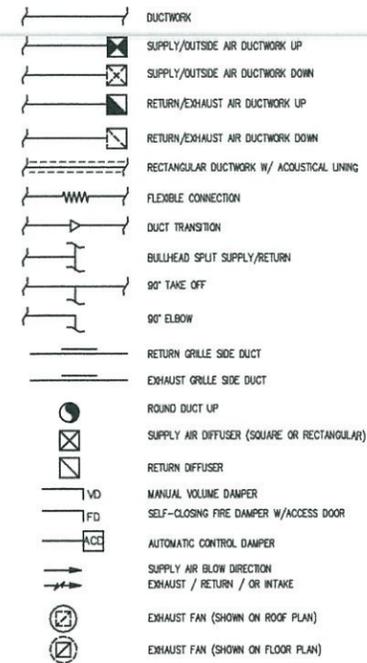
**EQUIP. TAG SYMBOLS & ABBREVIATIONS**



**INSTRUMENTATION**

- Ⓧ HEATING/COOLING THERMOSTAT
- Ⓢ SMOKE DETECTOR

**DUCTWORK LEGEND/SYMBOLS**



No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

HVAC Legend  
and General  
Notes

Project Number 13.1510.00

Date JULY 31, 2013

Drawn By RLB

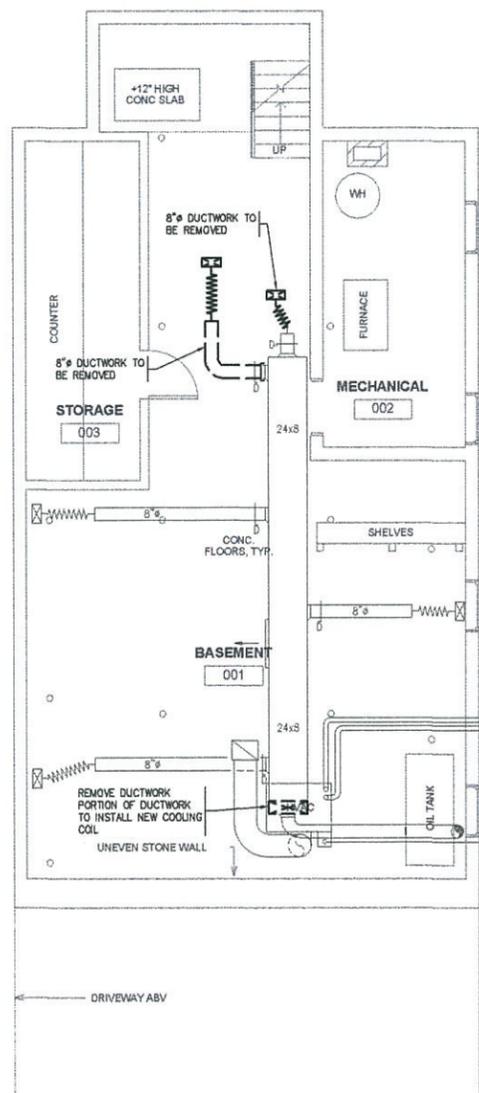
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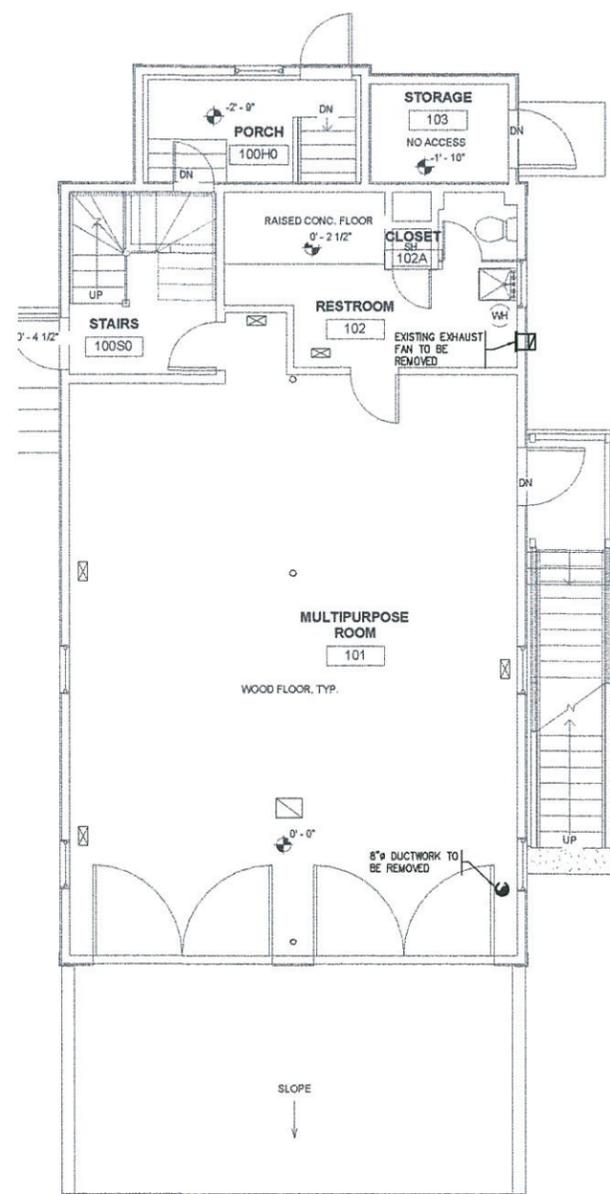
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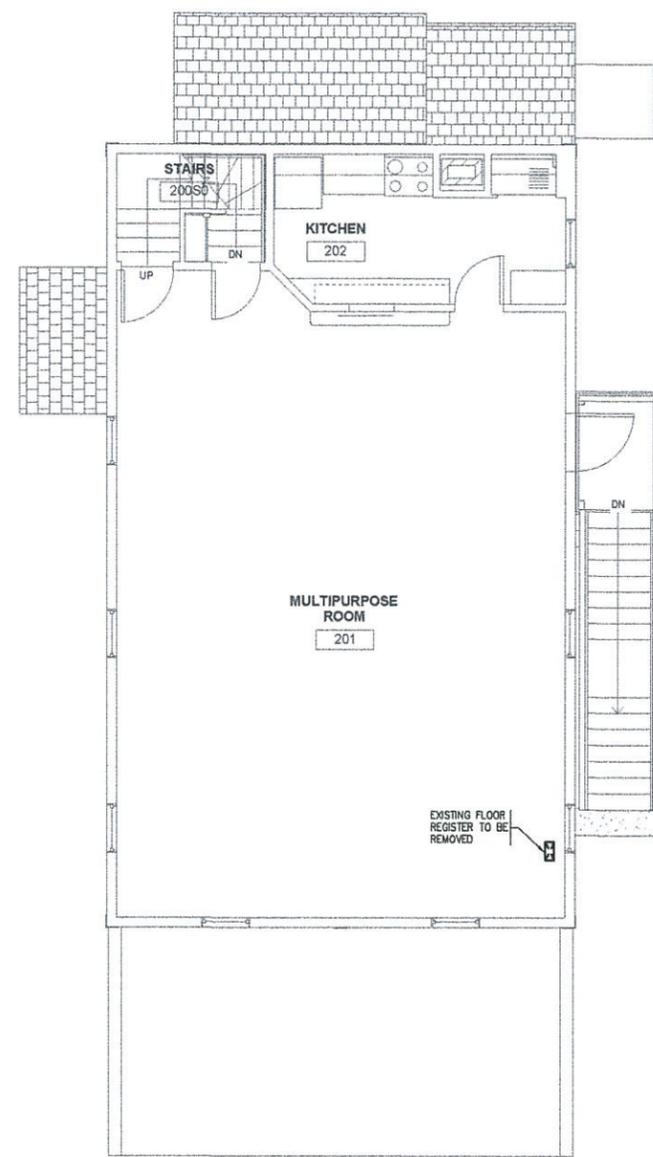
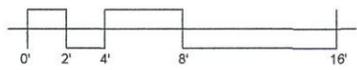
BOSTON BUILDING CONSULTANTS



1 Basement - Existing Conditions 1/4" = 1'-0"



2 First Floor - Existing Conditions 1/4" = 1'-0"



3 Second Floor - Existing Conditions 1/4" = 1'-0"

No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

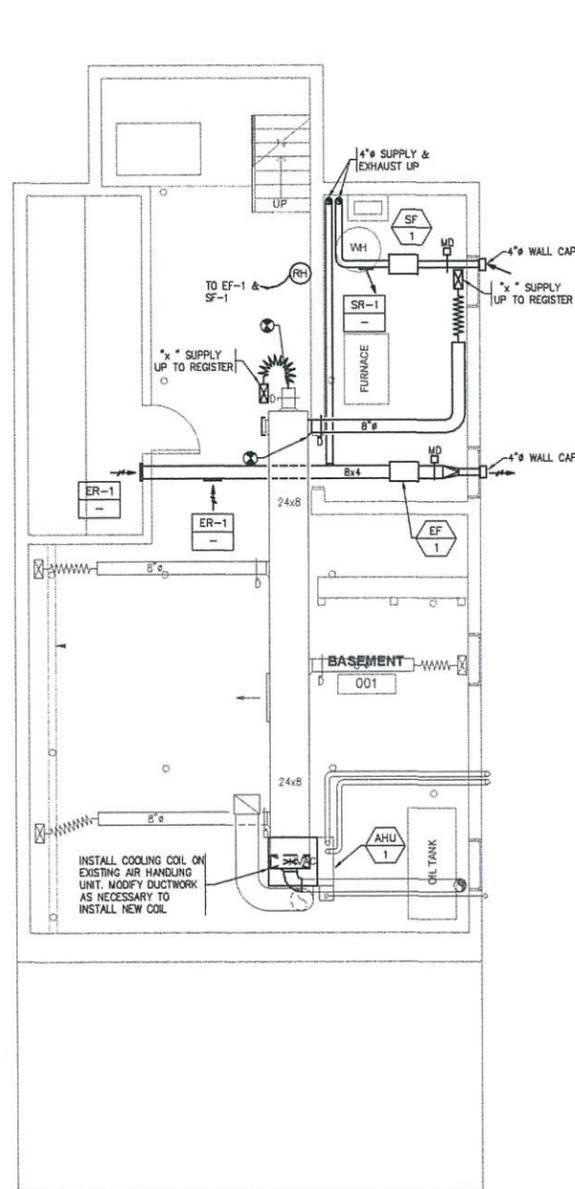
HVAC  
Demolition Plans

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By BM

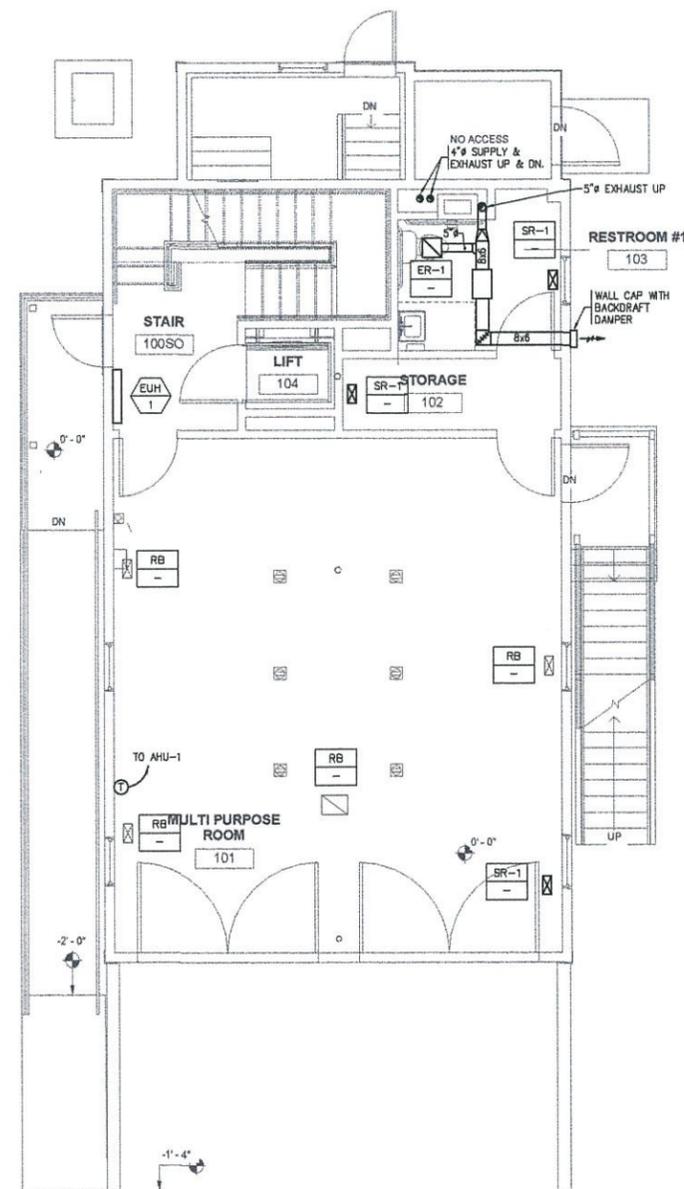
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Scale 1/4" = 1'-0"



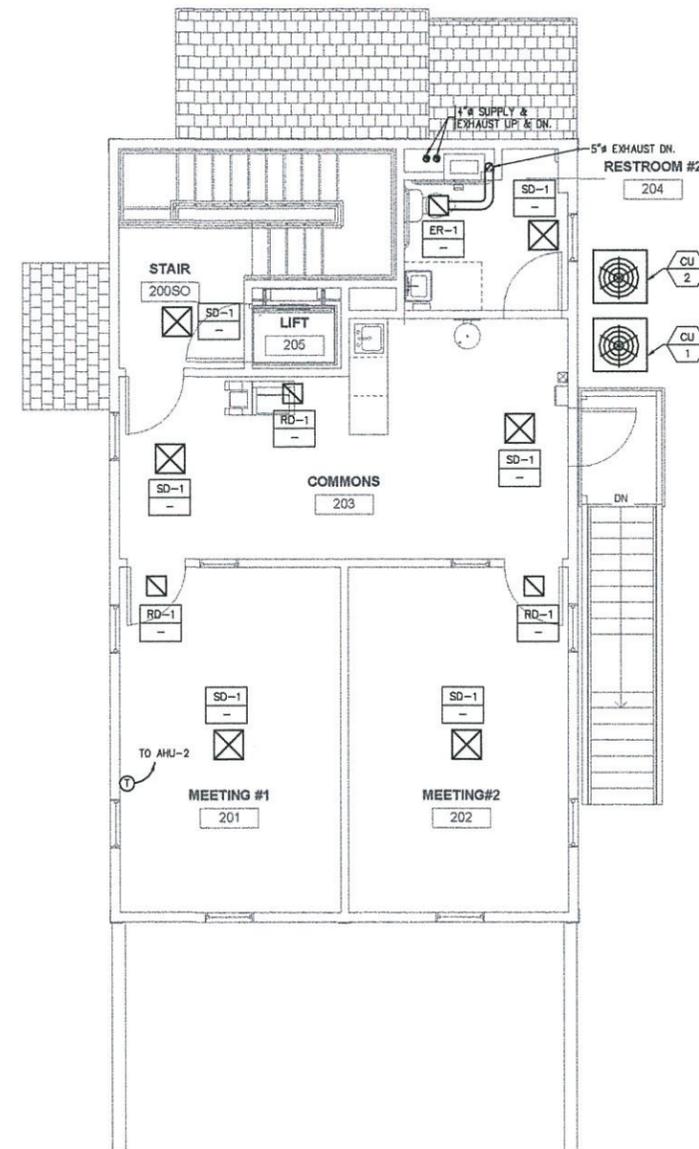
**BOSTON  
BUILDING  
CONSULTANTS**



① Basement  
1/4" = 1'-0"



② First Floor  
1/4" = 1'-0"



③ Second Floor  
1/4" = 1'-0"

No.	Description	Date

**Town of Acton  
Windsor Building**

**PROGRESS**

18 Windsor Ave.  
Acton, MA 01720

**Hvac New Work  
Plans**

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By BM

**H-101**

Scale 1/4" = 1'-0"

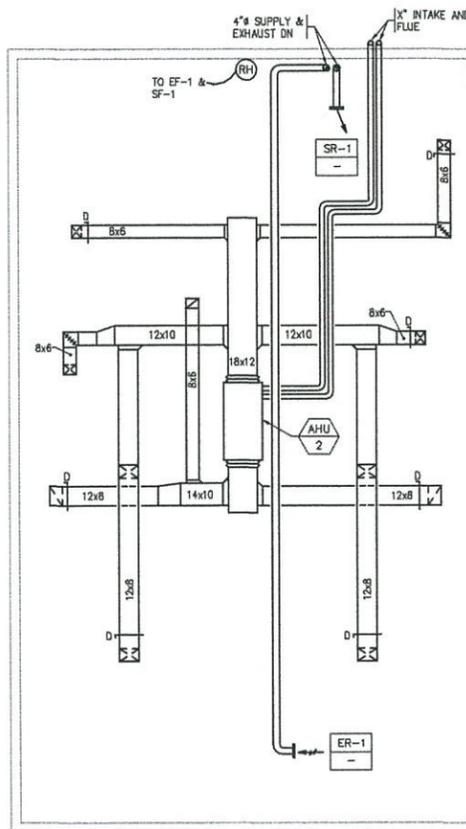
AHU AIR HANDLING UNIT SCHEDULE																		
TAG NO.	LOCATION	TYPE	SUPPLY FAN				DX COOLING COIL			NATURAL GAS			ELECTRICAL DATA			WEIGHT (LBS)	MANUFACTURER & MODEL #	REMARKS
			TOTAL CFM	ESP (IN WC)	MOTOR HP	REFRIG TYPE	TOTAL MBH	SENSIBLE MBH	INPUT (MBH)	MIN PRESS (IN WC)	MAX PRESS (IN WC)	V	PH	HZ				
AHU-1	BASMENT (EXISTING)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AHU-2	ATTIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ACCU AIR COOLED CONDENSING UNIT SCHEDULE																			
TAG NO.	LOCATION	UNIT SERVED	TOTAL CAP MBH	COMPRESSOR DATA				CONDENSER DATA				ELECTRICAL DATA					WEIGHT (LBS)	MANUFACTURER & MODEL NO.	REMARKS
				NO.	NOMINAL SIZE	RLA (EA)	LRA (EA)	# OF FANS	HP (EA)	FLA (EA)	RA (EA)	MCA	MOP	V	PH	HZ			
CU-1	GRADE	AHU-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CU-2	GRADE	AHU-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

SF SUPPLY FAN SCHEDULE												
TAG NO.	FAN TYPE	CFM	ESP (IN WC)	SPEED (RPM)		ELECTRICAL DATA					MANUFACTURER & MODEL #	REMARKS
				FAN	MOTOR	DRIVE	HP	V	PH	HZ		
SF-1	BASMENT	-	-	-	-	BELT	-	120	1	60	GREENHECK MODEL	-

EF EXHAUST FAN SCHEDULE												
TAG NO.	FAN TYPE	CFM	ESP (IN WC)	SPEED (RPM)		ELECTRICAL DATA					MANUFACTURER & MODEL #	REMARKS
				FAN	MOTOR	DRIVE	HP	V	PH	HZ		
EF-1	BASMENT	-	-	-	-	BELT	-	120	1	60	GREENHECK MODEL	-
EF-2	RESTROOM	-	-	-	-	BELT	-	120	1	60	GREENHECK MODEL	-

DIFFUSER, REGISTER & GRILLE SCHEDULE											
TAG NO.	MODULE SIZE (IN)	ROUND ADAPTER SIZE (IN)	FLEX DUCT SIZE (IN)	SERVICE	CFM RANGE		MANUFACTURER & MODEL NO.	REMARKS			
					MIN	MAX					
CD-1	24x24	6"	6"	SUPPLY	60	120	TITUS TDC	-			
CD-2	24x24	8"	8"	SUPPLY	125	210	TITUS TDC	-			
CD-3	24x24	10"	10"	SUPPLY	215	325	TITUS TDC	-			
CD-4	24x24	12"	12"	SUPPLY	330	475	TITUS TDC	-			
RD-1	24x24	N/A	N/A	RETURN	50	2100	TITUS 50RL	CORE ONLY			
ER-1	9x9	N/A	N/A	EXHAUST	50	275	TITUS 350RL	-			



1 Attic Floor  
1/4" = 1'-0"



No.	Description	Date

Town of Acton  
Windsor Building  
  
PROGRESS  
  
18 Windsor Ave.  
Acton, MA 01720

Hvac Attic Plan,  
Schedule &  
Details

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By BM

H-102  
Scale 1/4" = 1'-0"



SYMBOL	DESCRIPTION	NOTES
<b>LIGHTING FIXTURES</b>		
F1	WALL OR CEILING MOUNTED LIGHTING FIXTURE	UPPER CASE LETTERS INDICATE FIXTURE TYPE REFERENCE TO FIXTURE SCHEDULE "EX" INDICATES EXISTING FIXTURE TO REMAIN. SUBSCRIPT LOWER CASE LETTERS INDICATE SWITCH CONTROL ASSOCIATIONS APPLICATION OF ARROWS THUS: INDICATES LIGHT OUTPUT OF DIRECTIONALLY ORIENTED LIGHTING FIXTURE SHADING OF FIXTURES THUS: INDICATES FIXTURE IS PART OF EMERGENCY LIGHTING SYSTEM POWERED BY EMERGENCY LIGHTING PANELBOARDS
FP		
R1		
AM		
F4		
	POLE TYPE LIGHTING EQUIPMENT	
<b>EMERGENCY LIGHTING</b>		
	EMERGENCY LIGHTING UNIT	WIRED TO CENTRAL BATTERY SYSTEM
	DUAL REMOTE EMERGENCY LIGHTING HEAD	
	SINGLE REMOTE EMERGENCY LIGHTING HEAD	
<b>EXIT SIGNS</b>		
XW	CEILING MOUNTED EXIT SIGN	APPLICATION OF SHADED QUADRANTS AND ARROWS THUS: WIRED TO CENTRAL BATTERY SYSTEM
XW	WALL MOUNTED EXIT SIGN	INDICATE LETTERED FACE AND DIRECTIONAL ARROWS AS REQUIRED UPPER CASE LETTERS INDICATE REFERENCE TO LIGHTING FIXTURE SCHEDULE "WP" - INDICATES WEATHER PROOF "XW" - INDICATES FIXTURE TYPE "1" - INDICATES CIRCUIT NUMBER
<b>WIRING DEVICES-SWITCHES</b>		
S <sub>1</sub>	SINGLE POLE SWITCH	20A 120-277V AC "WP" - INDICATES WEATHER PROOF SUBSCRIPT LOWER CASE LETTERS INDICATE SWITCH CONTROL ASSOCIATIONS
S2	DOUBLE POLE SWITCH	SUBSCRIPT UPPER CASE LETTERS DENOTE SWITCH TYPE AS LISTED IN NON-STANDARD SWITCHES
S3	THREE-WAY SWITCH	UNLESS NOTED OTHERWISE SWITCHES SHALL BE MOUNTED 48" TO CENTER LINE A.F.F
S4	FOUR-WAY SWITCH	
Sk	KEY OPERATED SWITCH	
OC	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR	
DC	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR	PROVIDE DUAL CIRCUIT SWITCH FOR ROOMS WITH DUAL SWITCHING
PC	PHOTOCELL WALL MOUNTED	
<b>SINGLE LINE AND SCHEMATIC DIAGRAM</b>		
100	CIRCUIT BREAKER (3 POLE UNLESS OTHERWISE NOTED) 100 REFERS TO TRIP RATING	
	TRANSFORMER (AS NOTED)	
	MOTOR, NUMBER INDICATES HORSEPOWER	
11	GROUND	
	FUSE, CURRENT LIMITING FUSE	

SYMBOL	DESCRIPTION	NOTES
<b>WIRING DEVICES - RECEPTACLES</b>		
	WALL DUPLEX CONVENIENCE OUTLET MTD 18" AFF	20A/125V, 2P, 3W, GNDG., NEMA 5-20R SHADING OF SYMBOL THUS: INDICATES RECEPTACLE WITH EACH HALF SEPARATELY WIRED. (HALF CONSTANT HALF SWITCH CONTROLLED.)
	FLOOR DUPLEX CONVENIENCE OUTLET	"1" - INDICATES CIRCUIT NUMBER SUBSCRIPT LOWER CASE LETTERS INDICATE SWITCH CONTROL ASSOCIATIONS
	FLOOR DOUBLE DUPLEX CONVENIENCE OUTLET	
	CEILING MOUNTED DUPLEX CONVENIENCE OUTLET	SHADING OF SYMBOL THUS: INDICATES RECEPTACLE MTD 6" ABOVE COUNTER TO CENTER LINE
	ISOLATED GROUND DUPLEX CONVENIENCE OUTLET	"WP" - INDICATES WEATHER PROOF "C" - INDICATES MOUNTED ABOVE COUNTER "SB" - INDICATES SMART BOARD "HD" - INDICATES HAND DRYER
	WALL DOUBLE DUPLEX CONVENIENCE OUTLET	
	GROUND FAULT INTERRUPTING TYPE RECEPTACLE	
	GROUND FAULT INTERRUPTING TYPE DOUBLE DUPLEX RECEPTACLE	
	SPECIAL PURPOSE POWER RECEPTACLE	
	FURNITURE FEED	
<b>JUNCTION BOXES</b>		
	CEILING/FLOOR MOUNTED JUNCTION BOX	"HD" - INDICATES POWER CONNECTION FOR HAND DRYERS "P" - INDICATES POWER CONNECTION "C" - INDICATES COMMUNICATION CONNECTION "EWC" - INDICATES ELECTRIC WATER COOLER PROVIDE JUNCTION BOX FOR HARD WIRED TYPE OR SIMPLEX RECEPTACLE FOR PLUG IN TYPE.
	WALL MOUNTED JUNCTION BOX	
	SURFACE MOUNTED JUNCTION BOX	
	FREE STANDING JB MOUNTED ON CONDUIT STUBBED UP FROM FLOOR	"1" - INDICATES CIRCUIT NUMBER
	WALL MOUNTED JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT	
<b>MOTORS AND CONTROLS</b>		
	MOTOR	COMPLETE INFO. FOR MOTOR IS INDICATED BY APPLICATION OF INDEXING SYMBOLS REFERENCE TO SCHEDULE OF MECHANICAL EQUIPMENT
	COMBINATION MAGNETIC MOTOR STARTER	SUBSCRIPT INDICATES NEMA SIZE COMPLETE INFORMATION FOR CONTROL ITEMS IS INDICATED BY THE INDEXING SYMBOL REFERENCE APPLIED TO ASSOCIATED EQUIP.
P1 (2)	MANUAL MOTOR STARTER (THERMAL OVERLOAD SWITCH)	P1 INDICATES PANELBOARD (2) INDICATES CIRCUIT NUMBER
<b>DISTRIBUTION EQUIPMENT</b>		
	SURFACE MOUNTED PANEL	
	FLUSH MOUNTED PANEL	
	SURGE PROTECTION DEVICE	
	AUTOMATIC TRANSFER SWITCH	
	TRANSFORMER	
	OVERCURRENT AND/OR SWITCHING DEVICE	COMPLETE INFORMATION FOR DEVICES IS INDICATED BY APPLICATION OF TAG SYMBOLS 30 - INDICATES UNFUSED SWITCH 30 - FRAME SIZE 15 - INDICATES FUSED SWITCH 15 - FUSE SIZE INDICATES ENCLOSED CIRCUIT BREAKER INDICATES COMBINATION FUSED SWITCH AND STARTER INDICATES BY OTHERS

SYMBOL	DESCRIPTION	NOTES
<b>FIRE ALARM SYSTEM</b>		
	MANUAL PULL STATION	
	VISUAL ONLY DEVICE	
	COMBINATION AUDIO AND VISUAL DEVICE	
	CEILING MOUNTED AUDIBLE & VISUAL DEVICE	
	FIRE ALARM CONTROL PANEL	
	REMOTE ALARM INDICATING DEVICE	
	COMBINATION AUDIO AND VISUAL MNI DEVICE	
	FIRE ALARM ANNUNCIATOR	"WP" - INDICATES WEATHER PROOF
	MASTER BOX	
	MONITOR MODULE	
	CONTROL MODULE	
	DETECTOR	DETECTOR TYPE: E- ELEVATOR RECALL H- FIXED TEMPERATURE HEAT DETECTOR (200°F) D- IN DUCT DETECTOR
	SPRINKLER SYSTEM OR GENERATOR SYSTEM MONITOR	FS-WATER FLOW TS-TAMPER SWITCH
	KNOX BOX LOCATION	
	REMOTE TEST STATION	"B" INDICATES TEST STATION FOR BEAM TYPE SMOKE DETECTORS. "D" INDICATES TEST STATION FOR DUCT TYPE SMOKE DETECTORS.
	ROTATING BEACON LIGHT	"F" INDICATES FIRE ALARM STROBE LIGHT
	MAGNETIC DOOR HOLDER	PROVIDED BY DIV. 8. PROVIDE CONNECTION TO DOOR HOLDERS
<b>BRANCH CIRCUITRY AND RACEWAY SYSTEM</b>		
	LIGHTING AND APPLIANCE BRANCH CIRCUITRY CONCEALED	HOME RUNS ARE INDICATED THUS: PP1 (1) HOMERUN DESIGNATION TO PANEL PP1 CIRCUIT #1, WITH THE FOLLOWING CONDUIT/WIRES UNLESS OTHERWISE NOTED: • 3/4" EMT WITH 2#12, 1#12GND THWN TO 20AMP SINGLE PHASE CIRCUITS. • 3/4" EMT WITH 2#10, 1#10GND THWN TO 30AMP SINGLE PHASE CIRCUITS. • 3/4" EMT WITH 2#8, 1#10GND THWN TO 40AMP SINGLE PHASE CIRCUITS. • 3/4" EMT WITH 2#6, 1#10GND THWN TO 50AMP SINGLE PHASE CIRCUITS. FOR 3 PHASE CIRCUITS REFER TO DRAWING E-03 CONDUIT/CABLE FEEDER SCHEDULE
	INDIVIDUAL RUN TURNING UP	
	INDIVIDUAL RUN TURNING DOWN	
	INDIVIDUAL RUN TURNING UP & DOWN	
<b>TEL/DATA &amp; SECURITY SYSTEMS</b>		
	WALL MOUNTED TEL/DATA OUTLET	"10" INDICATES ONE CAT6 DROP "20" INDICATES TWO CAT6 DROP "30" INDICATES TWO CAT6 DROP
	CLOCK	
	SPEAKER	
	CEILING MOUNTED SPEAKER	
	CLOSED CIRCUIT TELEVISION CAMERA	
	DOOR CONTACT	

ABBREVIATIONS	
ABBR	ABBREVIATIONS
A/AMP	AMPERE
AC	ALTERNATING CURRENT
A/C	AIR CONDITIONING
AF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
BAT	BATTERY
BECO	BOSTON EDISON COMPANY
BIS	BYPASS ISOLATOR SWITCH
BSS	BELOW CEILING STRUCTURE
C	CONDUIT
CATV	CABLE TELEVISION
CAB	CABINET
CB	CIRCUIT BREAKER
CEC	COMMONWEALTH ELEC. CO.
CCTV	CLOSED CIRCUIT TELEVISION
CCT	CIRCUIT
CL	CENTERLINE
CM	CENTIMETER
CLG	CEILING COMPANY
COL	COLUMN
C/T	CURRENT TRANSFORMER
COOL	COOL WHITE
DET	DETAIL
DN	DIMETER
DISC	DISCONNECT
DN	DOWN
DIST	DISTRIBUTION PANEL
DPT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DT	DUST TIGHT
DWG	DRAWING
EA	EACH ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATOR
ES	ENERGY SAVING
FDR	FEEDER
FLR	FLOOR
FLUO	FLUORESCENT
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
HC	HUNG CEILING
HGT	HEIGHT
HD	HIGH INTENSITY DISCHARGE LAMP
HO	HIGH OUTPUT HORSE POWER
HP	HIGH PRESSURE SODIUM HEATING VENTILATION AND AIR CONDITIONING
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HZ	HERTZ
HV	HIGH VOLTAGE
IG	ISOLATED GROUND
IN	INCHES
INCAND	INCANDESCENT
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KW	KILOWATT
L	LENGTH
LA	LIGHTNING ARRESTOR
LP	LIGHTING CONTROL PANELBOARD
LTG	LIGHTING
LV	LOW VOLTAGE
M	METER
MM	MILLIMETER
MCB	MAIN CIRCUIT BREAKER
MCC	MECHANICAL
MFR	MANUFACTURER
MLG	MAIN LUG ONLY
MISC	MISCELLANEOUS
MTD	MOUNTED
N	NEUTRAL
N/C	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHTING CAT
N/O	NORMALLY OPEN
NO	NUMBER
OC	ON CENTER
O/C	OVERCURRENT
OL	OVERLOAD
PB	PULL BOX
PH	PHASE
PHL	PANEL
PP	PUMP
PRI	PRIMARY
P/T	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
RECEPT	RECEPTACLE
REC	RECESSED
RPA	RELAY PANEL
SEC	SECONDARY
SP	SPARE
SPECS	SPECIFICATIONS
SPKLR	SPEAKER
SW	SWITCH
TE	TERMINAL BOARD
TEL	TELEPHONE
TV	TELEVISION
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLTS
VA	VOLT AMPERAGE
VAC	VACUUM
VENT	VENTILATING
VT	VAPOR TIGHT
W	WATT
W/W	WITH WORK AREA OUTLET
WP	WEATHERPROOF
XD	EXISTING TO BE DEMOLISHED
XL	EXISTING TO BE RELOCATED
XM	EXISTING TO REMAIN
XR	EXISTING TO BE REPLACED

SYMBOL LIST NOTES	
1.	CERTAIN SYMBOLS SHOWN IN THE SYMBOL LIST DO NOT APPEAR ELSEWHERE IN THE DRAWINGS, SUCH SYMBOLS ARE INCLUDED TO PERMIT INTERPRETATIONS TO BE MADE IN THE EVENT OF DESIGN CHANGES, FOR THIS REASON THE SCOPE OF WORK IS TO BE DETERMINED ONLY FROM DRAWINGS OTHER THAN THE SYMBOL LIST.

GENERAL NOTES	
1.	ALL CONDUITS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE APPLICABLE LOCAL AND NATIONAL CODES.
2.	PROVIDE ALL SUPPLEMENTARY STEELWORK REQUIRED FOR PROPERLY MOUNTING AND/OR SUPPORTING EQUIPMENT AND MATERIALS. EQUIPMENT SHALL NOT BE SUPPORTED TO THE UNDERSIDE DECK OF THE EXISTING ROOF. ALL EQUIPMENT IN THESE AREAS MUST BE SUPPORTED BY THE EXISTING STEEL SUPPORT STRUCTURE. PROVIDE ALL SUPPLEMENTARY STEEL TO CREATE PROPER MOUNTING PROVISIONS.
3.	CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS. EMPTY CONDUITS SHALL HAVE NYLON PULL LINE.
4.	CONDUITS SHALL BE TERMINATED SO AS TO PERMIT HEAT CONNECTIONS TO MOTORS AND OTHER EQUIPMENT.
5.	NO CONDUIT SMALLER THAN 3/4", NOR WIRE SIZE SMALLER THAN NO. 12 A.W.G. FOR POWER SHALL BE USED UNLESS OTHERWISE NOTED.
6.	THE WIRING DIAGRAMS, QUANTITY AND SIZE OF THE WIRES AND CONDUIT REPRESENTED WITH A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE CONSTRUCTION MANAGER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
7.	SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. RECEPTACLES SHALL BE MOUNTED 18" ABOVE FINISHED FLOOR.
8.	ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INSIDE OF EXTERIOR WALLS ABOVE GRADE OR IN OTHER LOCATIONS CONSIDERED AS DAMP, SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
9.	8. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO THE FLOOR SHALL NOT EXCEED 6'-6".
10.	LIGHTING FIXTURES SHALL BE MOUNTED ACCORDING TO THE MOUNTING HEIGHT GIVEN ON THE DRAWINGS, WITH THE DISTANCE BEING MEASURED FROM THE BOTTOM OF THE LIGHTING FIXTURE TO THE FINISHED FLOOR.
11.	FOR LOCATION OF HVAC, PLUMBING, FIRE PROTECTION, AND MISCELLANEOUS EQUIPMENT SEE RESPECTIVE TRADE DRAWINGS.
12.	ALL CONDUIT RUNS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION OR EXPANSION AND DEFLECTION TYPE FITTINGS AS REQUIRED. FOR EXACT LOCATIONS OF EXPANSION JOINTS SEE STRUCTURAL DRAWINGS.
13.	ALL MOTOR STARTER CONTROL TRANSFORMERS SHALL BE SIZED TO PROVIDE SUFFICIENT VOLT-AMPERE CAPACITY FOR OPERATING ALL ELECTRICAL DEVICES ASSOCIATED WITH CONTROL OF THE MOTOR. IN ADDITION TO THE STARTER COIL, IT SHALL INCLUDE RELAYS, TIMERS, MOTOR HEATERS, INDICATING LIGHTS, ETC.
14.	CONDUIT AND WIRE (NOT SHOWN) FOR FIXTURES, SWITCHES AND/OR RECEPTACLES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND SHALL BE: A. 3/4" (MIN.) CONDUIT RUN B. EXPOSED IN UNFINISHED AREAS. C. CONCEALED ABOVE HUNG CEILING AND IN WALLS IN FINISHED AREAS. D. NO. 12 (MIN.) Cu. WIRE (MIN.) THIN/THIN* NO. OF WIRES AS REQUIRED.
14.	ALL 120V BRANCH CIRCUITS GREATER THAN 100 LINEAR FEET SHALL BE NO. 10AWG MIN.
15.	THE ELECTRICAL CONTRACTOR SHALL PROVIDE LAYOUTS FOR ALL ELECTRICAL ROOMS BASED ON ACTUAL EQUIPMENT OF MANUFACTURER SELECTED. SUBMIT FOR REVIEW PRIOR TO INSTALLATION.
16.	ALL WORK SHOWN IS NEW (FURNISHED AND INSTALLED) UNLESS OTHERWISE NOTED.
17.	PROVIDE ELECTRICAL OUTLET PLATE GASKET SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND ON INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.
18.	THE ELECTRICAL CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL SHOWING ALL ELECTRICAL TELEPHONE, SECURITY, FIRE ALARM, COMMUNICATION AND OTHER SYSTEMS CONDUITS IN SLAB AND ABOVE CEILING ETC., COORDINATE WITH OTHER TRADES AND BUILDING'S STRUCTURE TO AVOID ANY CONFLICT.
19.	ALL TERMINATION LUGS SHALL BE SIZED ACCORDINGLY TO ACCOMMODATE INDICATED CONDUCTORS.
20.	THE ELECTRICAL CONTRACTOR SHALL SUBMIT PLANS FOR APPROVAL SHOWING ALL COMMUNICATIONS EQUIPMENT AND DEVICES THROUGHOUT THE BUILDING. THE ELECTRICAL CONTRACTOR SHALL ALSO LABEL AND IDENTIFY ALL CONDUITS THAT SERVE DIFFERENT SYSTEMS.
21.	REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
22.	COORDINATE LOCATIONS OF ALL LIGHT FIXTURES IN MECHANICAL AND ELECTRICAL ROOMS WITH LAYOUT OF EQUIPMENT, PIPING AND DUCTWORK.
23.	ALL EXIT SIGNS SHALL BE UNSWITCHED.
24.	ALL SWITCHED LIGHT FIXTURES CIRCUITED TO A NORMAL/EMERGENCY CIRCUIT ARE TO BE WIRED WITH AN EMERGENCY BY-PASS RELAY.
25.	ALL 20 AMPERE, SINGLE POLE CIRCUITS SHALL BE PROVIDED WITH A SEPARATE FULL SIZE NEUTRAL CONDUCTOR.
26.	CONFIRM EXACT POWER REQUIREMENTS AND CONNECTION LOCATIONS FOR ALL EQUIPMENT WITH THE PLUMBING, FIRE PROTECTION, HVAC AND GENERAL CONTRACTORS.

No.	Description	Date

**Town of Acton  
Windsor Building**

**PROGRESS**

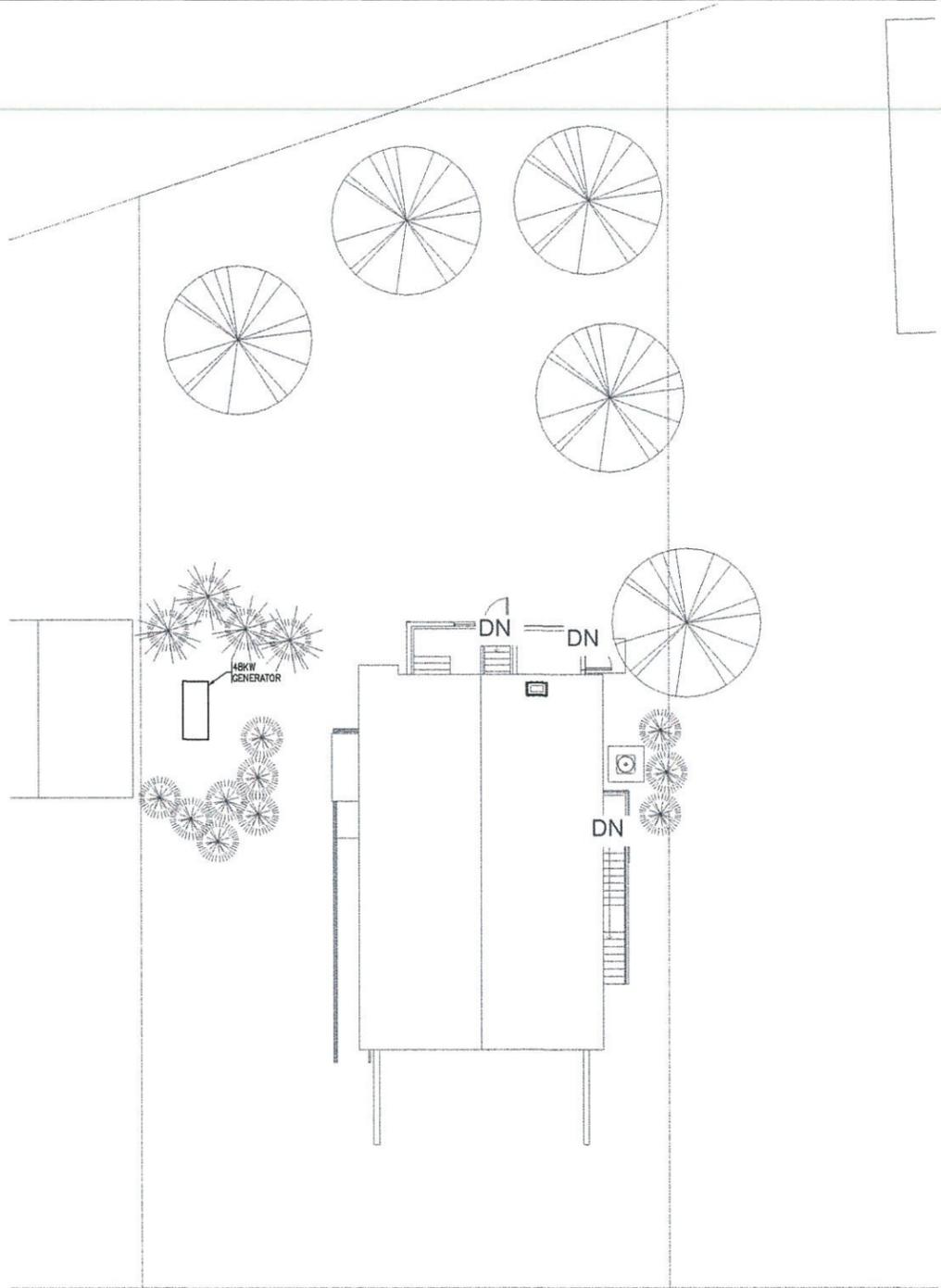
18 Windsor Ave.  
Acton, MA 01720

**Electrical  
Legend &  
General Notes**

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By MC

**E-001**

Scale NONE



BOSTON  
BUILDING  
CONSULTANTS

No.	Description	Date

Town of Acton  
Windsor Building  
  
PROGRESS  
  
18 Windsor Ave.  
Acton, MA 01720

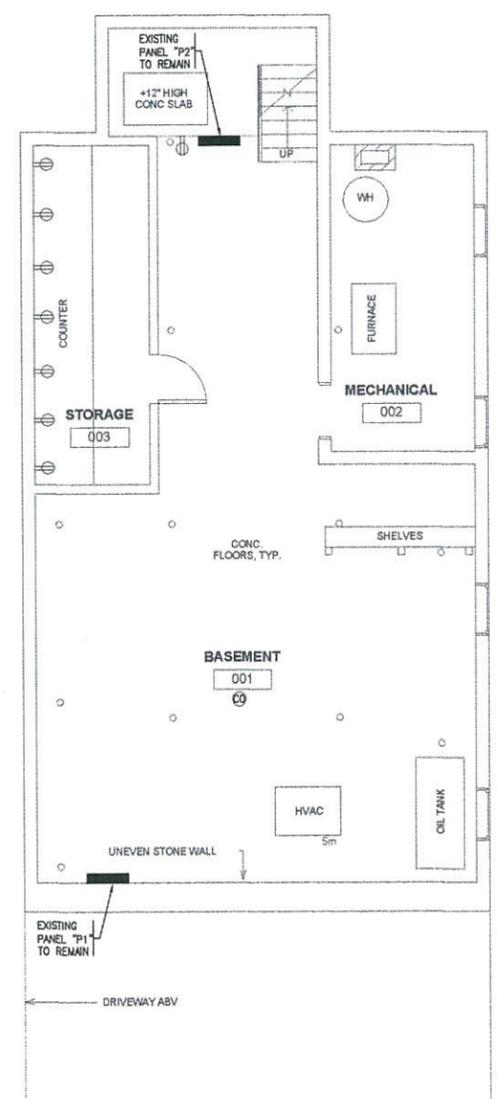
**Electrical  
Site Plan**

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By MC

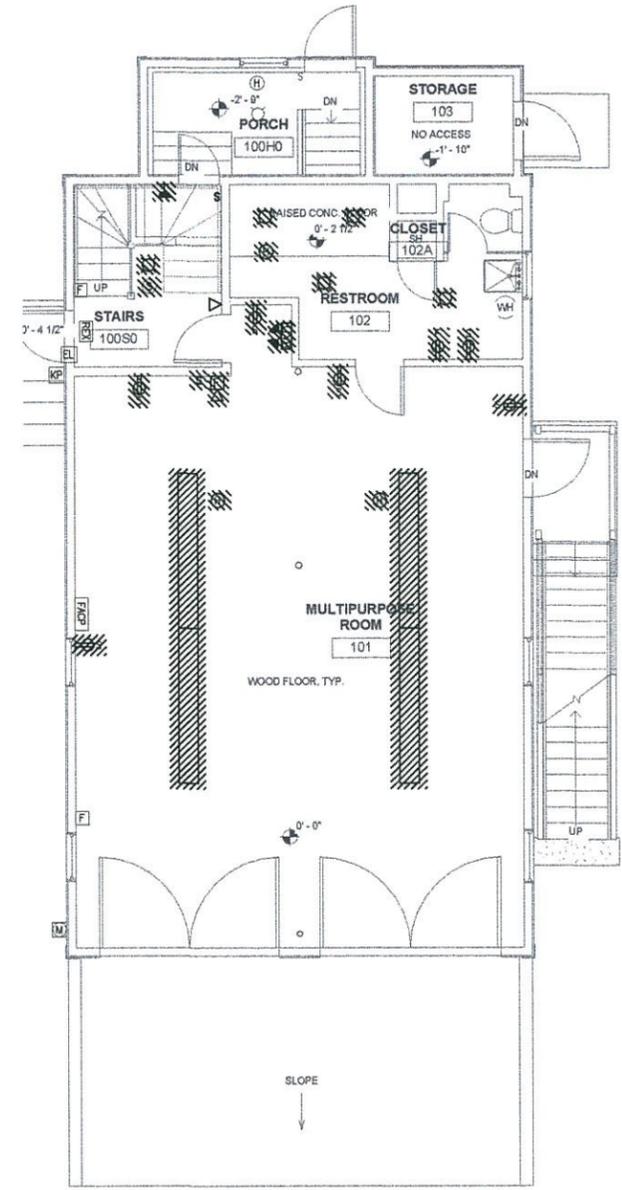
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Scale 1/8"=1'-0"



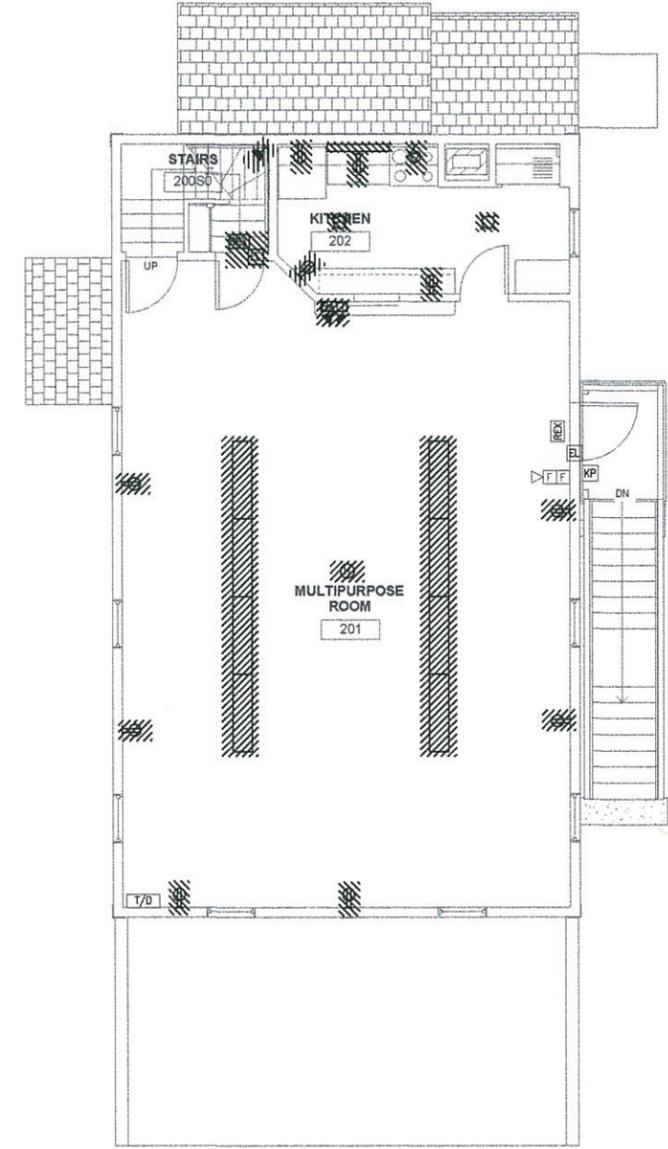
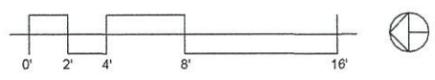
**BOSTON  
BUILDING  
CONSULTANTS**



① Basement - Existing Conditions  
1/4" = 1'-0"



② First Floor - Existing Conditions  
1/4" = 1'-0"



③ Second Floor - Existing Conditions  
1/4" = 1'-0"

No.	Description	Date

**Town of Acton  
Windsor Building**

**PROGRESS**

18 Windsor Ave.  
Acton, MA 01720

**Electrical  
Demolition  
Plans**

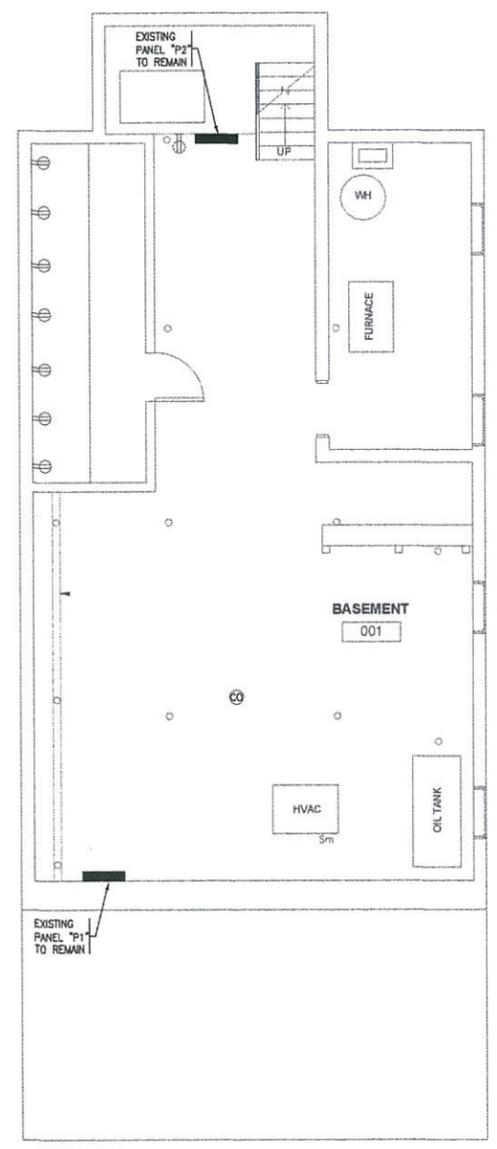
Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By MC

**E-100**

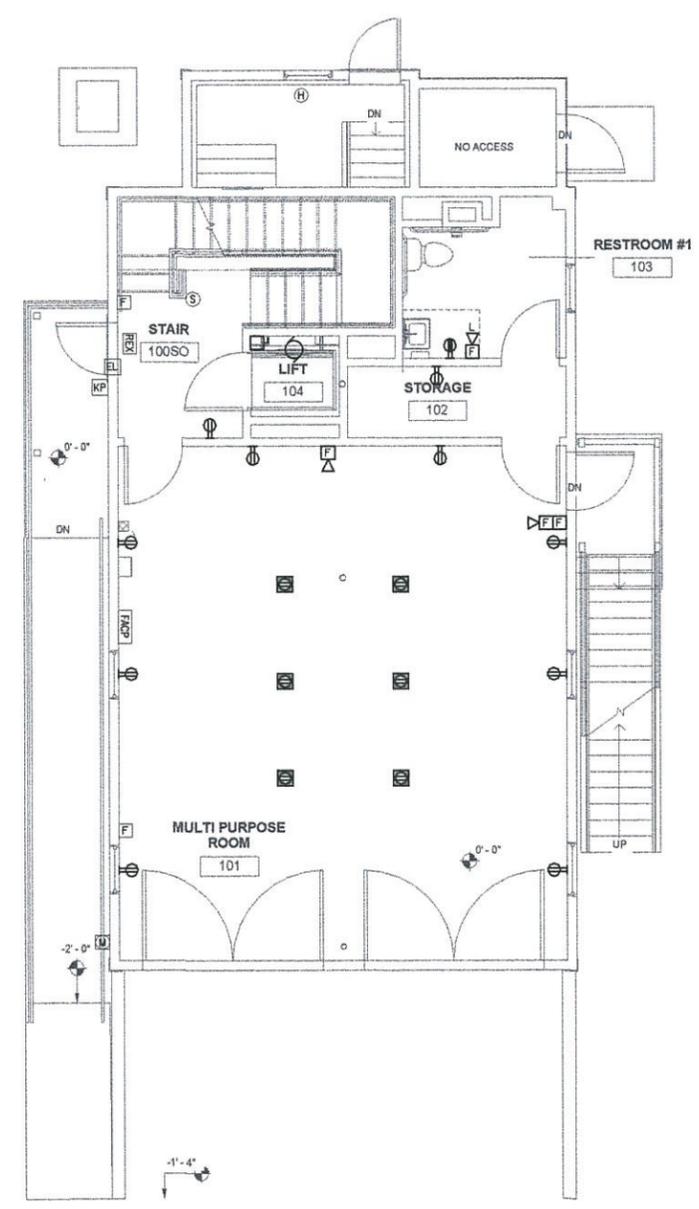
Scale 1/4" = 1'-0"



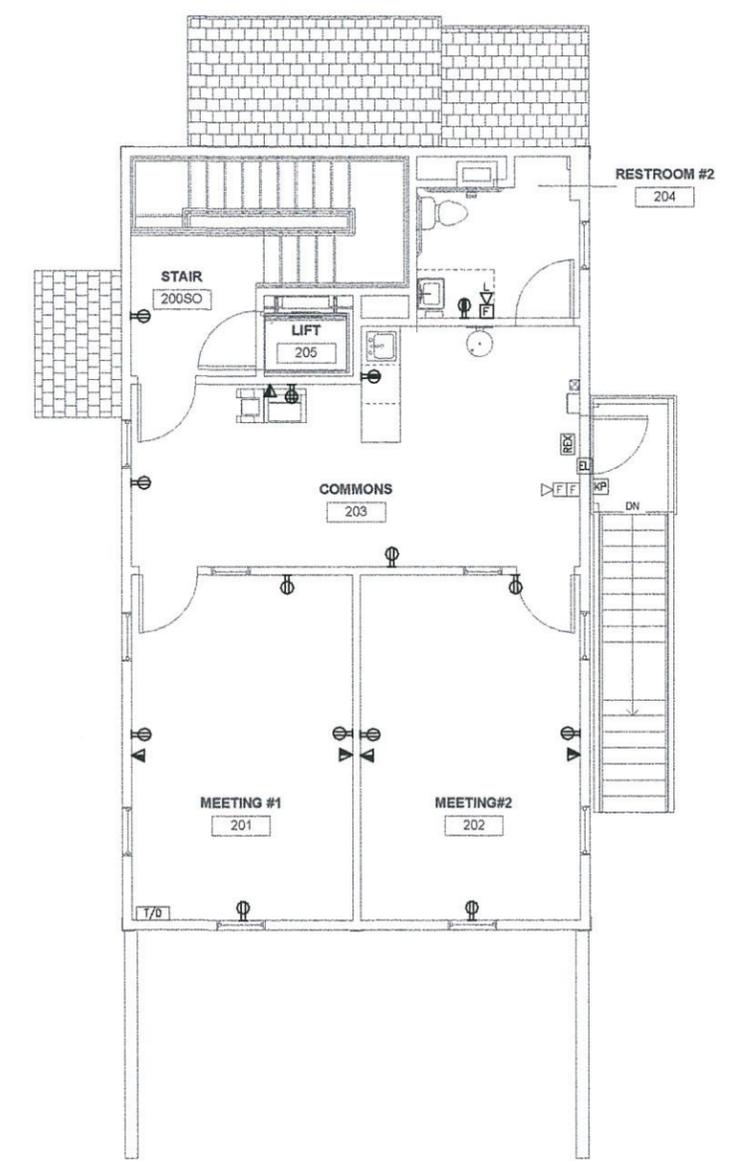
BOSTON BUILDING CONSULTANTS



1 Basement  
1/4" = 1'-0"



2 First Floor  
1/4" = 1'-0"



3 Second Floor  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

Electrical Power  
Plans

Project Number 13.1510.00

Date JULY 31, 2013

Drawn By RLB

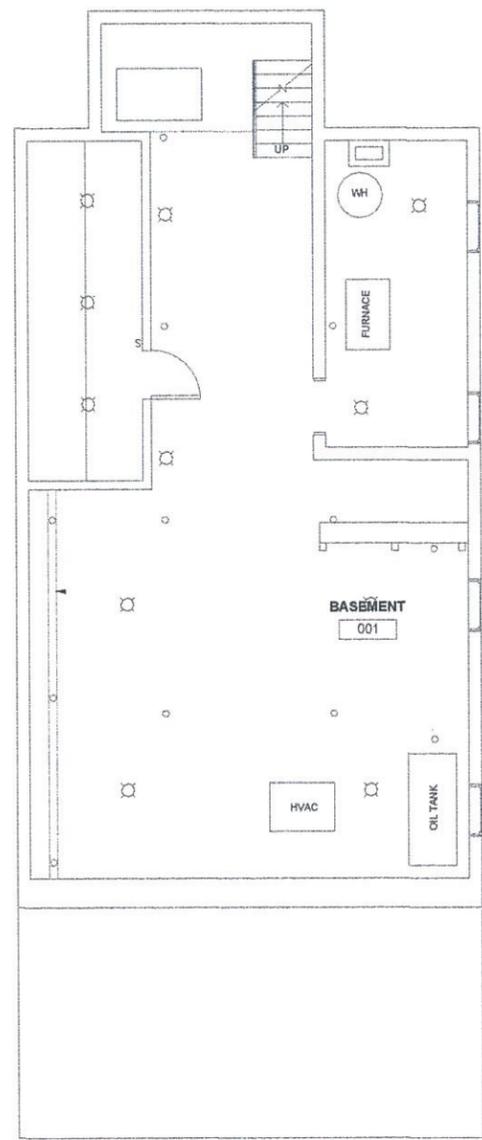
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E-101

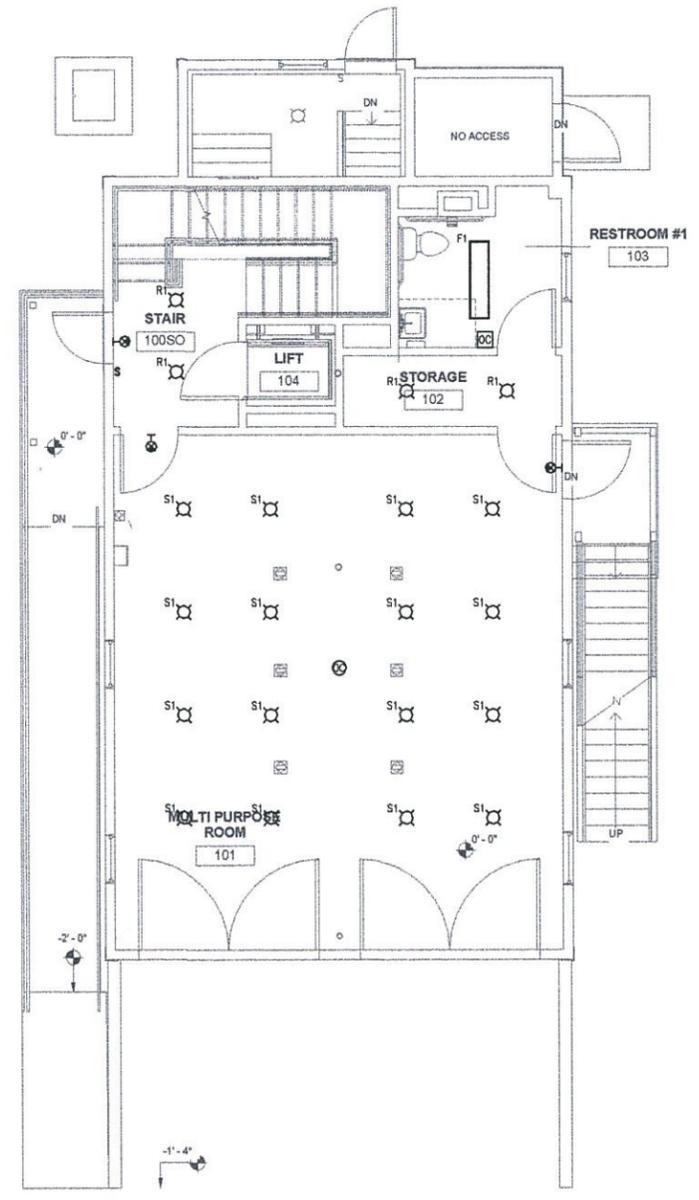
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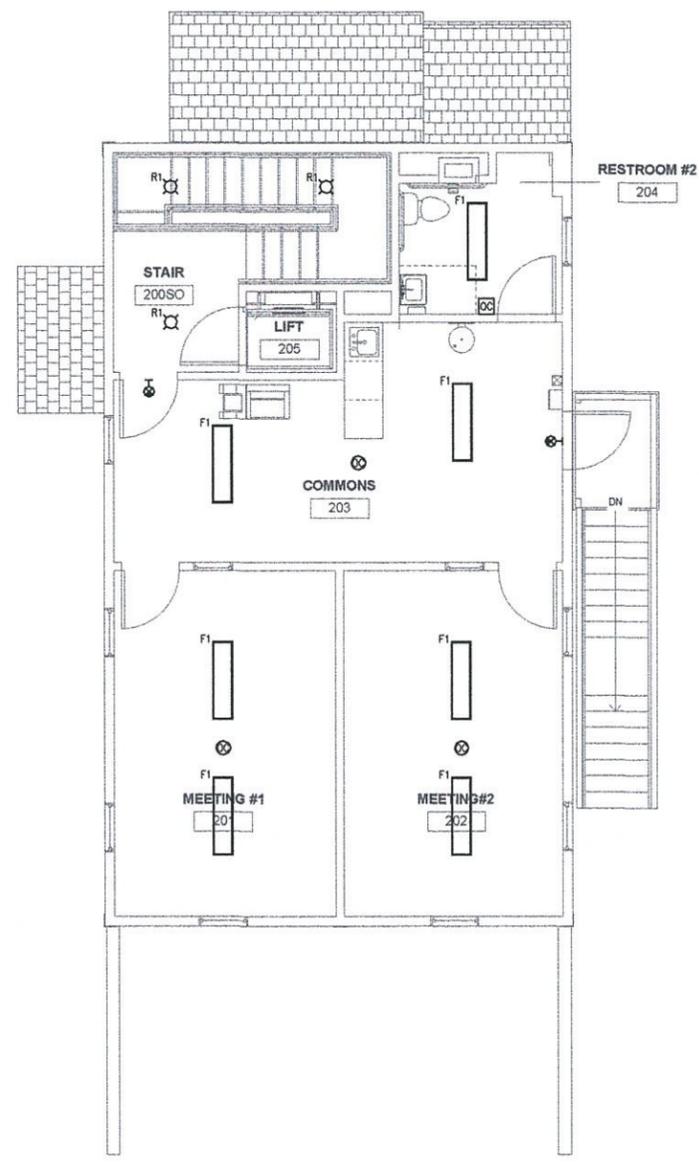
BOSTON  
BUILDING  
CONSULTANTS



1 Basement  
1/4" = 1'-0"



2 First Floor  
1/4" = 1'-0"



3 Second Floor  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

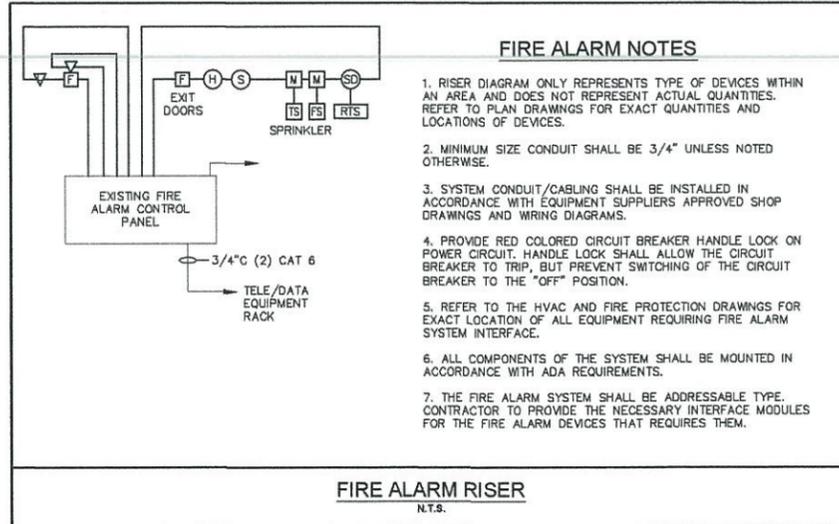
Electrical  
Lighting Plans

Project Number 13.1510.00  
 Date JULY 31, 2013  
 Drawn By RLB  
 Checked By MC

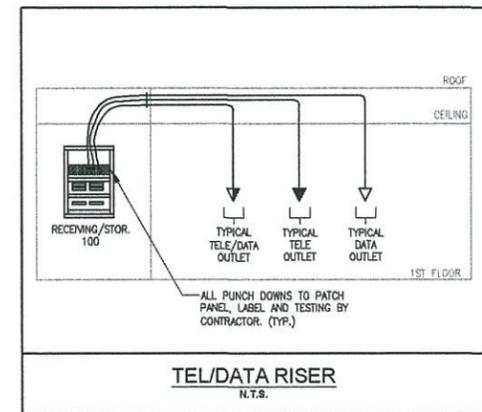
E-102

Scale 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE							
TYPE	DESCRIPTION	MANUFACTURER & CATALOG SERIES	LAMPS		VOLTS	WATTS	REMARKS
			NUMBER	TYPE			
F1	1X4 SURFACE MOUNTED FLUORESCENT LIGHTING FIXTURE	LITHONIA LIGHTING LB-2-28T5-120-GE81015	2	28W T5	120	60	
S1	SURFACE MOUNTED VAPORTIGHT LED CEILING FIXTURE	LITHONIA LIGHTING OLVTOM	-	LED	120	-	
R1	6" RECESSED DOWNLIGHT	LITHONIA LIGHTING 6HF-1/26CFL-F6BSW 120	1	26W CFL	120	30	
ES	EXIT SIGN	LSI INDUSTRIES VE-6-R-LB-WH	1	LED	277	-	REFER TO DWGS. FOR MOUNTING TYPES
EB	EMERGENCY BATTERY UNIT	LSI INDUSTRIES HPM-12-25-WH	2	12 WATT MR16	277	-	



EXISTING PANELBOARD SCHEDULE													
NO. P1						LOCATION: BASEMENT							
208/120 V, 3 PH, 4 W, 225 A MAIN, 225 A SOLID NEUTRAL, 150 A MCB PANELBOARD TO HAVE TVSS PROTECTION SURFACE MOUNTING													
22,000 AIC AT 120 V FULL GROUND BUS - A MLO													
CIRCUIT	DESCRIPTION OF LOAD	LOAD (KVA)			BREAKER		BREAKER			LOAD (KVA)			CIRCUIT
		A#	B#	C#	TRIP	POLE	POLE	TRIP	A#	B#	C#	DESCRIPTION OF LOAD	
1	114, 115 & 116 CORRIDOR RECEP	-	-	-	20	1	1	20	-	-	-	2	
3	-	-	-	-	20	1	1	20	-	-	-	4	
5	-	-	-	-	20	1	1	20	-	-	-	6	
7	-	-	-	-	20	1	1	20	-	-	-	8	
9	-	-	-	-	20	1	1	20	-	-	-	10	
11	-	-	-	-	20	1	1	20	-	-	-	12	
13	-	-	-	-	20	1	1	20	-	-	-	14	
15	-	-	-	-	20	1	1	20	-	-	-	16	
17	-	-	-	-	20	1	1	20	-	-	-	18	
19	-	-	-	-	20	1	1	20	-	-	-	20	
21	-	-	-	-	20	1	1	20	-	-	-	22	
23	-	-	-	-	20	1	1	20	-	-	-	24	
25	-	-	-	-	20	1	1	20	-	-	-	26	
27	-	-	-	-	20	1	1	20	-	-	-	28	
29	-	-	-	-	20	1	1	20	-	-	-	30	
SUB-TOTAL CONNECTED		-	-	-					SUB-TOTAL CONNECTED				
SUB-TOTAL CONNECTED		KVA A# =							KVA B# =				
SUB-TOTAL CONNECTED		KVA B# =							KVA C# =				
SUB-TOTAL CONNECTED		KVA C# =							TOTAL CONNECTED		KVA =		
G - PROVIDE GFCI TYPE CIRCUIT BREAKER													



EXISTING PANELBOARD SCHEDULE													
NO. P2						LOCATION: BASEMENT							
208/120 V, 3 PH, 4 W, 225 A MAIN, 225 A SOLID NEUTRAL, 150 A MCB PANELBOARD TO HAVE TVSS PROTECTION SURFACE MOUNTING													
22,000 AIC AT 120 V FULL GROUND BUS - A MLO													
CIRCUIT	DESCRIPTION OF LOAD	LOAD (KVA)			BREAKER		BREAKER			LOAD (KVA)			CIRCUIT
		A#	B#	C#	TRIP	POLE	POLE	TRIP	A#	B#	C#	DESCRIPTION OF LOAD	
1	114, 115 & 116 CORRIDOR RECEP	-	-	-	20	1	1	20	-	-	-	2	
3	-	-	-	-	20	1	1	20	-	-	-	4	
5	-	-	-	-	20	1	1	20	-	-	-	6	
7	-	-	-	-	20	1	1	20	-	-	-	8	
9	-	-	-	-	20	1	1	20	-	-	-	10	
11	-	-	-	-	20	1	1	20	-	-	-	12	
13	-	-	-	-	20	1	1	20	-	-	-	14	
15	-	-	-	-	20	1	1	20	-	-	-	16	
17	-	-	-	-	20	1	1	20	-	-	-	18	
19	-	-	-	-	20	1	1	20	-	-	-	20	
21	-	-	-	-	20	1	1	20	-	-	-	22	
23	-	-	-	-	20	1	1	20	-	-	-	24	
25	-	-	-	-	20	1	1	20	-	-	-	26	
27	-	-	-	-	20	1	1	20	-	-	-	28	
29	-	-	-	-	20	1	1	20	-	-	-	30	
SUB-TOTAL CONNECTED		-	-	-					SUB-TOTAL CONNECTED				
SUB-TOTAL CONNECTED		KVA A# =							KVA B# =				
SUB-TOTAL CONNECTED		KVA B# =							KVA C# =				
SUB-TOTAL CONNECTED		KVA C# =							TOTAL CONNECTED		KVA =		
G - PROVIDE GFCI TYPE CIRCUIT BREAKER													



No.	Description	Date

**Town of Acton Windsor Building**

**PROGRESS**

18 Windsor Ave.  
Acton, MA 01720

**Electrical Schedules & Details**

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By RLB  
Checked By MC

**E-200**

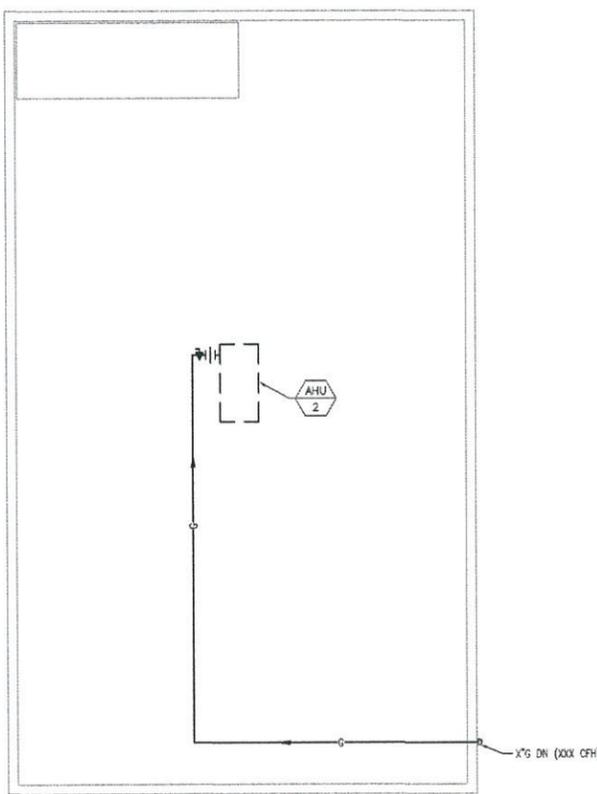
Scale NONE

PLUMBING FIXTURE SCHEDULE							
DESIGNATION	FIXTURE DESCRIPTION	CONNECTION SIZE					REMARKS
		CW	HW	TW	S/W	V	
P-1A	WATER CLOSET - HANDICAPPED	1/2"	-	-	4"	2"	FLOOR MOUNTED
P-2A	LAVATORY - HANDICAPPED	1/2"	1/2"	-	2"	2"	WALL HUNG
P-3A	SINK - HANDICAPPED	1/2"	1/2"	-	2"	2"	S.S. DROP-IN
P-4A	DRINKING FOUNTAIN - HANDICAPPED	1/2"	-	-	1 1/2"	1 1/2"	BARRIER FREE

**CASEWORK NOTES:**

1. ALL FINAL CONNECTIONS TO CASEWORK SINKS AND EQUIPMENT SHALL BE BY THE PLUMBING CONTRACTOR.
2. ALL EXPOSED VALVES, PIPING AND FITTINGS SHALL BE CHROME PLATED.
3. PLUMBING CONTRACTOR SHALL PROVIDE EACH CONNECTION TO EACH SINK OR PIECE OF EQUIPMENT ITS OWN INDIVIDUAL SHUTOFF VALVE.
4. MANUFACTURED CASEWORK CONTRACTOR SHALL PROVIDE ALL EQUIPMENT LISTED IN THE CASEWORK SCHEDULE INCLUDING TRIM, FAUCETS, BUBBLERS, SINK WASTES AND TAIL PIECES. PLUMBING CONTRACTOR SHALL PROVIDE FULL SIZE TRAP AND EXTENSION. PLUMBING CONTRACTOR SHALL ASSEMBLE AND INSTALL ALL PLUMBING RELATED ITEMS INCLUDING TRIM, FAUCETS, BUBBLERS, SINK WASTE, TAIL PIECES, TRAPS AND EXTENSIONS.

ELECTRIC WATER HEATER SCHEDULE										
I.D.	MANUFACTURER	MODEL	GALS.	RECOVERY		KW	VOLTS	PHASE	HZ	REMARKS
				G.P.H.	Δ TEMP °F					
EW-1	-	-	-	-	100	-	-	1	60	FIRST FLR BATHROOM BELOW LAVATORY
EW-2	-	-	-	-	100	-	-	1	60	SECOND FLR BATHROOM BELOW LAVATORY



1 Attic  
1/4" = 1'-0"

**PLUMBING NOTES:**

1. THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY FOR CONTINUOUS OPERATION, THE PLUMBING SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT.
2. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THE PLUMBING SUB-CONTRACT, LABOR AND TESTING PERFORMED HEREIN SHALL BE IN COMPLETE ACCORDANCE WITH THE STATE BUILDING CODE, LOCAL FUEL GAS AND PLUMBING CODES, ALL LOCAL CODES AND REGULATIONS, NATIONAL FIRE PROTECTION ASSOCIATION, INSURANCE REGULATIONS AND REQUIREMENTS GOVERNING SUCH WORK.
3. ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED AS PART OF THE WORK OF THE SPECIFICATION INCLUDING ALL FEES OR EXPENSES INCURRED.
4. FOR CONTINUATION OF SITE UTILITIES, REFER TO CIVIL DRAWINGS
5. FOR PLUMBING SCHEDULES, REFER TO DRAWING P001
6. PROVIDE NEW BALL VALVES THROUGHOUT, INCLUDE REPLACING ANY EXISTING GATE VALVES WITH NEW BALL VALVES OF SAME SIZE BEING REPLACED.
7. WHERE WATER PIPING IS SHOWN DROPPING INTO PLUMBING CHASES WITH SIZES NOTED, THAT SIZE SHALL BE CARRIED FULL LENGTH THROUGH THE CHASE. REFER TO PLUMBING FIXTURE SCHEDULE ON THIS DRAWING FOR INDIVIDUAL FIXTURE CONNECTION SIZES.
8. UNLESS OTHERWISE NOTED, ALL BURIED BELOW FLOOR PIPING SHALL BE SUPPORTED FROM THE SLAB.
9. UNLESS OTHERWISE NOTED, ALL HORIZONTAL DRAINAGE PIPING WHICH IS 3" OR LESS IN DIAMETER SHALL RITCH OF NOT LESS THAN 1/4" PER FOOT AND ALL HORIZONTAL DRAINAGE PIPING WHICH IS 4" OR LARGER IN DIAMETER SHALL RITCH OF NOT LESS THAN 1/8" PER FOOT.
10. ALL BELOW FLOOR PIPING THAT INTERSECTS A GRADE BEAM REQUIRES COORDINATION WITH STRUCTURAL FOR STRUCTURAL DETAILS, REFER TO STRUCTURAL DRAWINGS.
11. PROVIDE ALL FLOOR CLEANOUTS WITH HUB AND SPIGOT, LEAD AND CASKUM JOINTS FROM CLEANOUT TO AND INCLUDING CONNECTION TO SANITARY OR STORM DRAIN.
12. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES AND EQUIPMENT.
13. HANDICAPPED ACCESSIBLE FIXTURES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AND THE RULES AND REGULATIONS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD. WHERE THE TWO STANDARDS DIFFER, THE MORE STRINGENT SHALL APPLY.
14. HANDICAPPED ACCESSIBLE FIXTURES SHALL BE IN ACCORDANCE WITH THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS.
15. INTERIOR PLUMBING AND HVAC EQUIPMENT REQUIRING A NATURAL GAS CONNECTION SHALL BE PROVIDED WITH AN EMERGENCY GAS RELIEF VENTS AT EACH GAS TRAIN IN ACCORDANCE WITH THE MASSACHUSETTS FUEL GAS CODE AND AS INDICATED WITH THE FOLLOWING CHART:

CFH	AMOUNT OF RELIEF VENTS REQUIRED	SIZE OF EACH RELIEF VENT		
		0' TO 40'	0' TO 100'	0' TO 200'
UNDER 1,000 CFH	1	3/4"	1"	1 1/4"
1,000 CFH TO 2,500 CFH	3	3/4"	1"	1 1/4"
2,500 CFH TO 12,500 CFH	3	3/4"	1"	1 1/4"
OVER 12,500 CFH	4	3/4"	1"	1 1/4"

**PLUMBING DEMOLITION NOTES:**

1. DISCONNECT AND MAKE SAFE EXISTING PLUMBING SYSTEMS. LEAVE EQUIPMENT TO BE DEMOLISHED BY GENERAL CONTRACTOR AND LEAVE DEBRIS TO BE REMOVED BY GENERAL CONTRACTOR.
2. REMOVE EXISTING PLUMBING STACKS, MAINS AND BRANCHES WHEN SERVING FIXTURES TO BE DEMOLISHED. REMOVE PIPING BACK TO ACTIVE MAIN AND PROVIDE CAP OR PLUG TO SUIT SYSTEM. OBTAIN EXISTING RECORD DRAWINGS FROM OWNER. MAINTAIN EXISTING PLUMBING RISERS AND STACKS SERVING FIXTURES TO REMAIN.
3. AFTER WALLS AND CEILINGS ARE REMOVED AND PIPING IS EXPOSED, VERIFY PIPING SERVES ONLY PLUMBING FIXTURES INDICATED FOR DEMOLITION BEFORE SHUT-DOWN FOR DISCONNECTION. IDENTIFY EXISTING PIPING WHICH SERVES FIXTURES TO REMAIN. PROMPTLY NOTIFY ARCHITECT OF ACTIVE PIPING TO BE MAINTAINED WHEN LOCATED IN PARTITIONS TO BE DEMOLISHED.
4. REMOVE EXISTING STACKS AND RISERS LOCATED IN EXISTING PARTITIONS TO BE DEMOLISHED AND PROVIDE NEW OFF-SET AT CEILING AND DROP THROUGH FLOOR AND RECONNECT TO EXISTING SERVICES AT THE FLOOR BELOW.

**PLUMBING LEGEND**

SYMBOL	ABBREVIATION	DESCRIPTION
		EXISTING WORK (INDICATED AS LIGHT LINEWORK)
	RE	REMOVE EXISTING PIPING
	RE	REMOVE EXISTING PIPING AND/OR EQUIPMENT/FIXTURES
		ABOVE FLOOR PIPING (INDICATED AS SINGLE LINEWORK)
		BELOW FLOOR PIPING (INDICATED AS DOUBLE LINEWORK)
		NEW WORK (INDICATED AS HEAVY LINEWORK)
	CW	COLD WATER
	HW	HOT WATER
	HWC	HOT WATER CIRCULATION
	S/W	SANITARY DRAINAGE (SOIL/WASTE)
	V	SANITARY VENT
	G	GAS (NATURAL)
	UP	UP (PENETRATES LEVEL ABOVE)
		RISE (BUT DOES NOT PENETRATE LEVEL ABOVE)
	DN	DOWN (PENETRATES LEVEL BELOW)
		DROP (BUT DOES NOT PENETRATE LEVEL BELOW)
		DIRECTION OF FLOW
		DIRECTION & DESIGNATION OF SLOPE (IN FT/FT)
		SHUTOFF VALVE
		BALL VALVE
	BVA	BALANCING VALVE ASSEMBLY
	PRV	PRESSURE REDUCING VALVE
	CV	CHECK VALVE
	RFPBP	REDUCED PRESSURE BACKFLOW PREVENTER
	DV	DRAIN VALVE WITH HOSE THREADS
		NATURAL GAS SHUTOFF VALVE
	PG	PRESSURE GAUGE W/ GAUGE COCK
	SA	SHOCK ABSORBER
	CO	CLEANOUT
	COT	CLEANOUT TEE
	WCO	WALL CLEANOUT
	FCO	FLOOR CLEANOUT
	GCO	GRADE CLEANOUT
	DCO	DANDY CLEANOUT
	FD	FLOOR DRAIN
	HB	HOSE BIBB
	WH	WALL HYDRANT
	AP	ACCESS PANEL
	AVB	ATMOSPHERIC VACUUM BREAKER
	CI	CAST IRON
	CLDI	CEMENT LINED DUCTILE IRON
	NIPC	NOT IN PLUMBING CONTRACT
	PC	PLUMBING CONTRACTOR
	NO	NORMALLY OPEN
	NC	NORMALLY CLOSED
	INV	INVERT ELEVATION
	DST	DEEP SEAL TRAP
	W&T	WASTE & TRAP
	VV	VALVE IN VERTICAL
	OED	OPEN END DRAIN W/ BACKWATER VALVE
	VTR	VENT THRU ROOF
		CAPPED CONNECTION
	UN	UNION
	ST	STRAINER
	WTS	WATER TIGHT SLEEVE
	P-	PLUMBING FIXTURE DESIGNATION
	WM	WATER METER
	WH	WATER HEATER
	SP	SUMP PUMP
	SE	SEWAGE EJECTOR
	ETR	EXISTING TO REMAIN
	EW	EMERGENCY EYEWASH/SHOWER
	EX	EXISTING
	CTE	CONNECT TO EXISTING
	CC	CUT AND CAP
	CLG	CEILING
	RE	REMOVE EXISTING
	TDL	TOTAL DEVELOPED LENGTH
	TMV	THERMOSTATIC MIXING VALVE
	VS	VENT STACK
	1 P-	DIAGRAM NUMBER (INDICATES LETTER AND REFERENCE DRAWING)



No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

LEGEND, NOTES,  
SCHEDULE &  
ATTIC PLAN

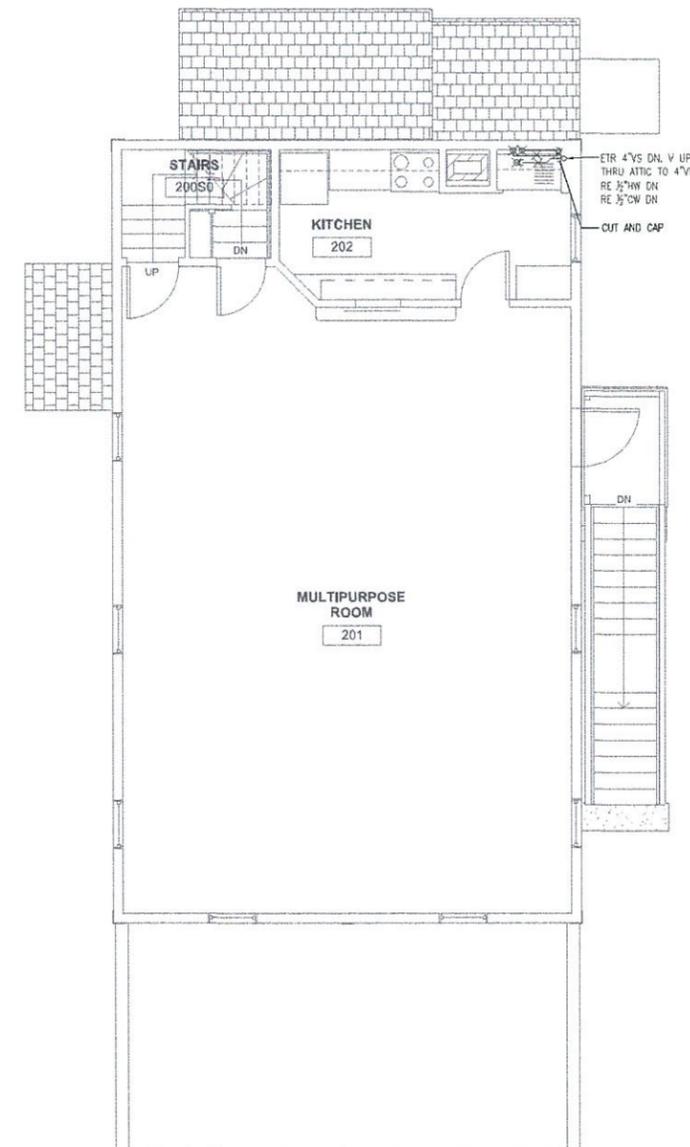
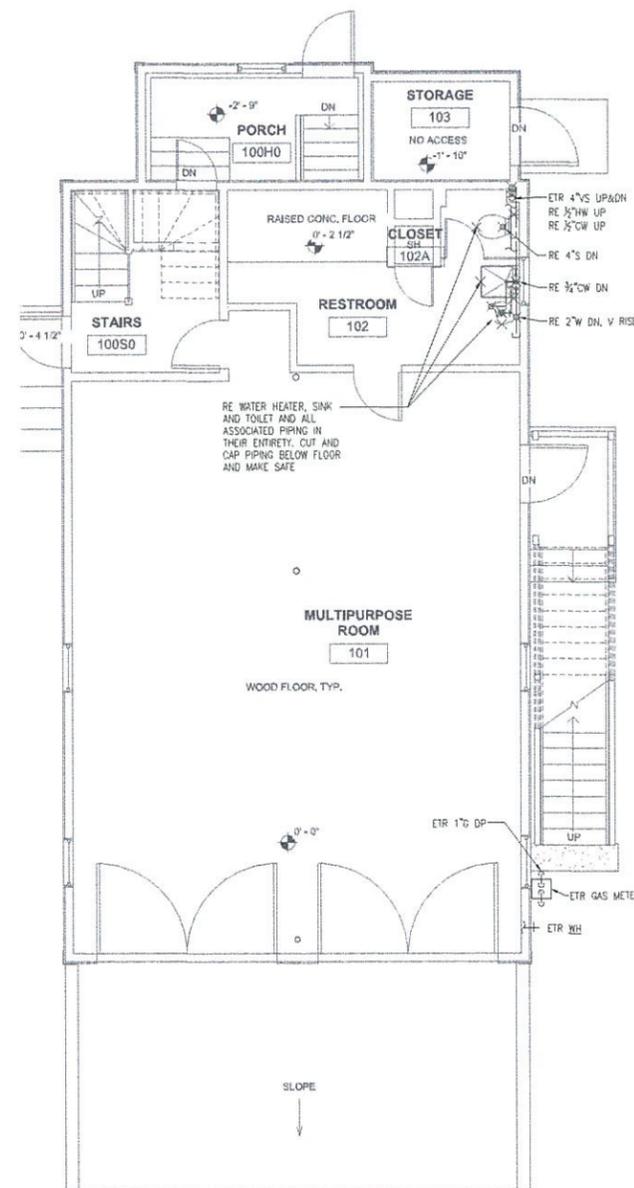
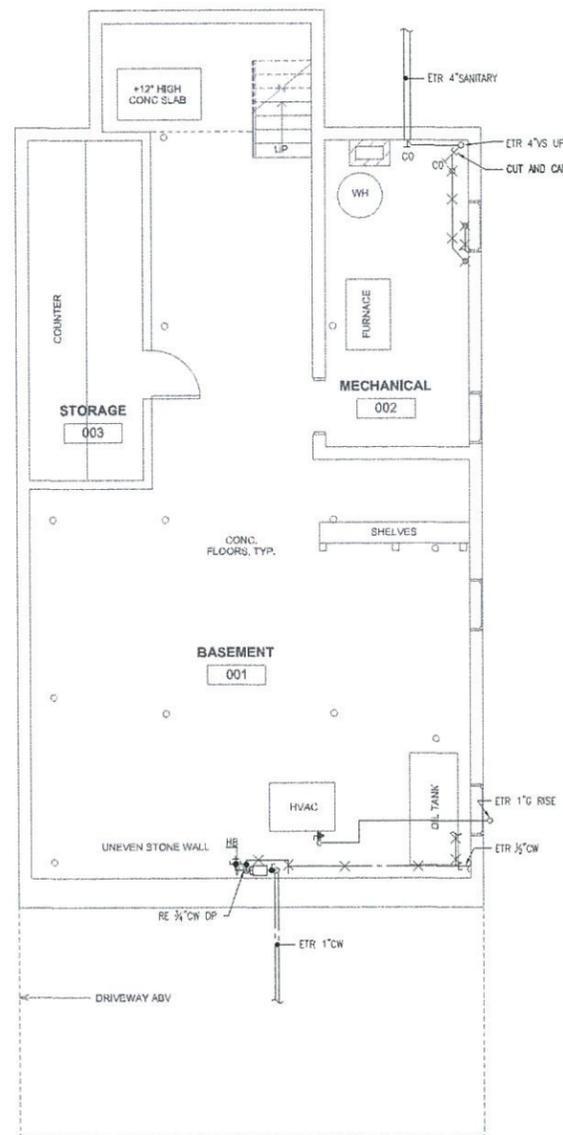
Project Number	13.1510.00
Date	JULY 31, 2013
Drawn By	GPC
Checked By	JAL

**P-001**

Scale AS NOTED

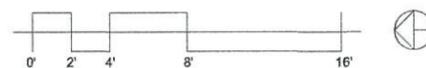


**BOSTON  
BUILDING  
CONSULTANTS**



① Basement - Existing Conditions  
1/4" = 1'-0"

② First Floor - Existing Conditions  
1/4" = 1'-0"



③ Second Floor - Existing Conditions  
1/4" = 1'-0"

No.	Description	Date

**Town of Acton  
Windsor Building**

**PROGRESS**

18 Windsor Ave.  
Acton, MA 01720

**Existing Floor  
Plans**

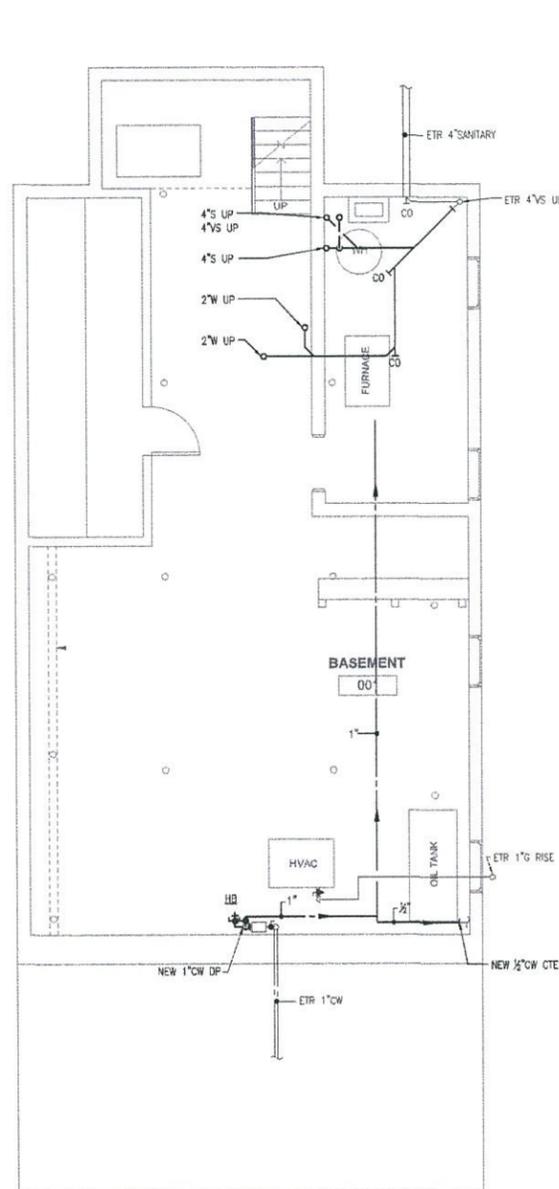
Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By GPC  
Checked By JAL

**P-100**

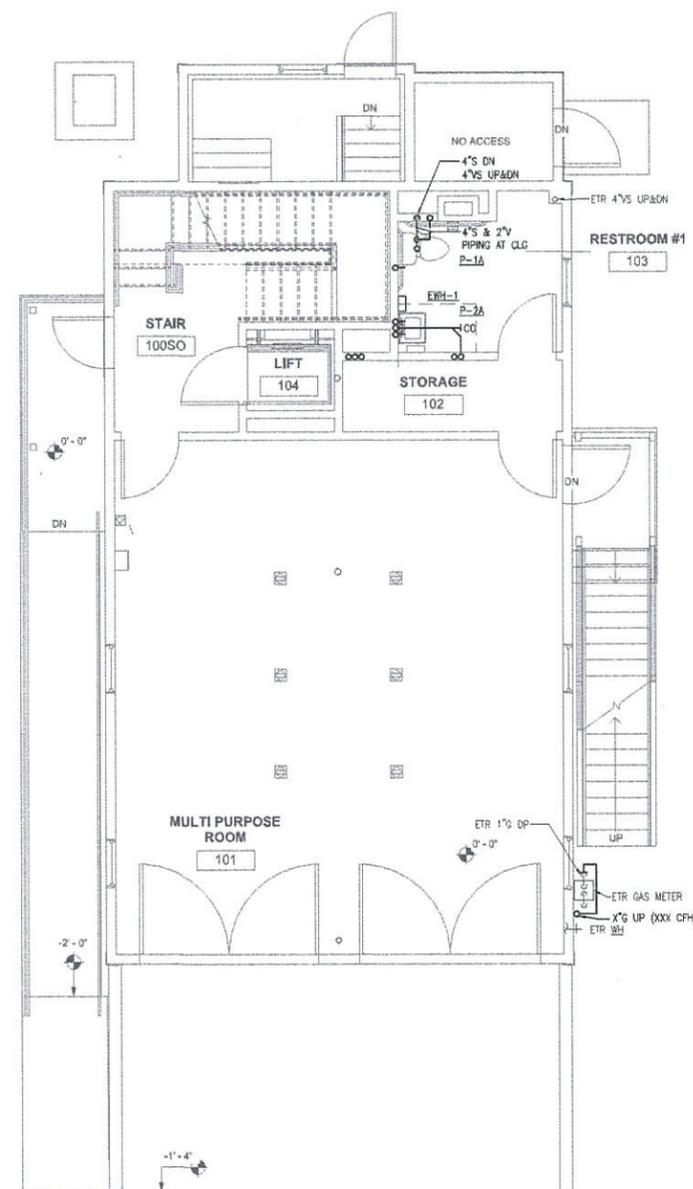
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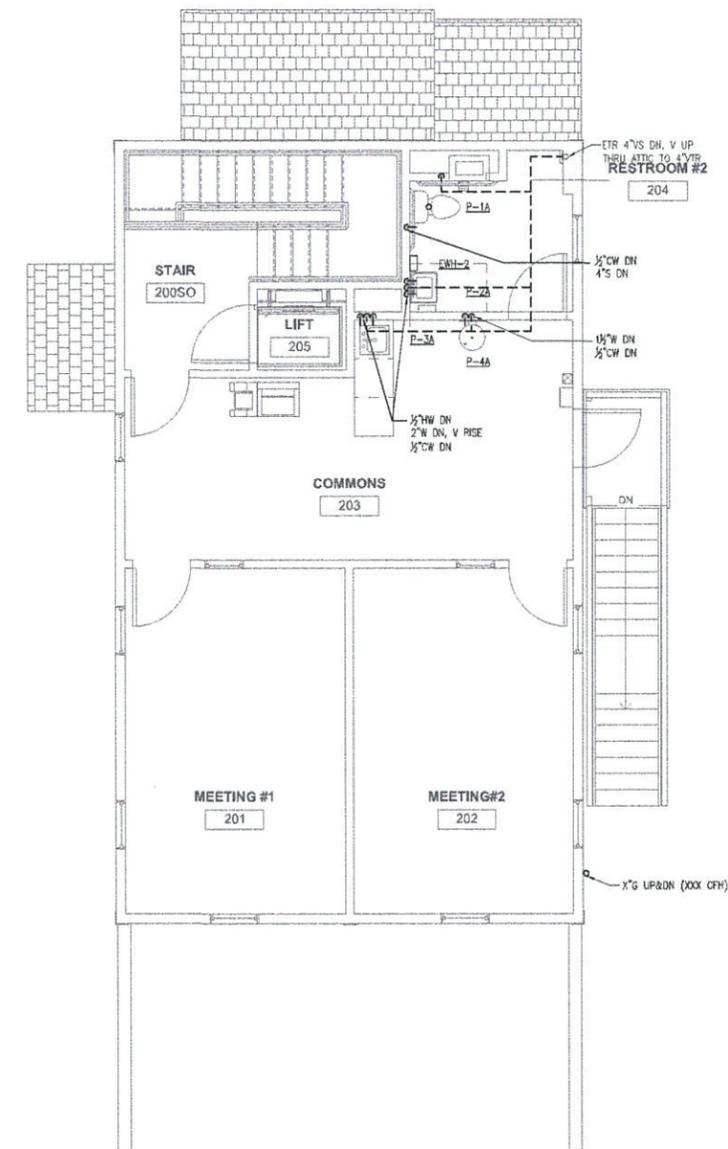
BOSTON  
BUILDING  
CONSULTANTS



1 Basement  
1/4" = 1'-0"



2 First Floor  
1/4" = 1'-0"



3 Second Floor  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
Windsor Building  
  
PROGRESS  
  
18 Windsor Ave.  
Acton, MA 01720

Proposed Floor Plans

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By GPC  
Checked By JAL

**P-101**  
Scale 1/4" = 1'-0"

## FIRE PROTECTION DESIGN CRITERIA:

1. FIRE SUPPRESSION CRITERIA
  - A. REFER TO THE SITE UTILITY DRAWING FOR HYDRANT LOCATIONS.
  - B. THE FIRE PROTECTION CONTRACTOR SHALL MAKE PROVISIONS FOR OBTAINING UPDATED FLOW TEST INFORMATION FOR THIS PROJECT. ANY FLOW TEST INFORMATION NOTED IN THE CONTRACT DOCUMENTS ARE CONSIDERED PRELIMINARY. A NEW FLOW TEST SHALL BE REQUIRED AT THIS CONTRACTOR'S EXPENSE.
 

THE MOST RECENT FLOW TEST DATA AVAILABLE IS AS FOLLOWS:

HYDRANT FLOW TEST DATA

TEST DATE: -  
 LOCATION: -  
 ELEVATION: -  
 STATIC: -  
 RESIDUAL: -  
 FLOW: -  
 PERFORMED BY: -
  - C. THE FOLLOWING SPRINKLER DESIGN DENSITIES SHALL BE USED FOR SPRINKLER SYSTEM PIPE SIZING.
 

LIGHT HAZARD OCCUPANCIES GROUP 1

DESIGNED FOR .10 GPM OVER THE MOST REMOTE 1500 SQUARE FEET.  
 MAXIMUM SPACING OF 225 SQUARE FEET PER SPRINKLER HEAD UNLESS OTHERWISE NOTED

ORDINARY HAZARD OCCUPANCIES GROUP 1

DESIGNED FOR .15 GPM OVER THE MOST REMOTE 1500 SQUARE FEET.  
 MAXIMUM SPACING OF 130 SQUARE FEET PER SPRINKLER HEAD UNLESS OTHERWISE NOTED

ORDINARY HAZARD OCCUPANCIES GROUP 2

DESIGNED FOR .20 GPM OVER THE MOST REMOTE 1500 SQUARE FEET.  
 MAXIMUM SPACING OF 130 SQUARE FEET PER SPRINKLER HEAD UNLESS OTHERWISE NOTED
  - D. INCLUDE A 10 PSI CUSHION AS PART OF THE CALCULATION.  
 INCLUDE 100 GPM FOR INSIDE HOSE STREAM AS PART OF THE CALCULATION.  
 MAXIMUM VELOCITIES SHALL NOT EXCEED 20 FEET PER SECOND.
  - E. FIRE PROTECTION SIGNALING SYSTEMS CONTROL EQUIPMENT AND ANNUNCIATOR PANEL ARE SHOWN ON THE ELECTRICAL DRAWINGS.
  - F. THE SPRINKLER LAYOUTS SHOWN ON THESE DRAWINGS HAVE BEEN HYDRAULICALLY CALCULATED. THE RESULTS OF THE HYDRAULIC CALCULATION SHOW THAT THERE IS SUFFICIENT PRESSURE TO OPERATE THE APPROPRIATE NUMBER OF HEADS AT THE MOST REMOTE DESIGN AREAS. PIPE SIZES AND NODE LOCATIONS HAVE BEEN LEFT ON THE PLANS TO INDICATE DESIGN RATIONALE.
  - G. THE SPRINKLER CONTRACTOR SHALL FOLLOW THE DESIGN CRITERIA INDICATED ON THE DRAWINGS BUT WILL BE ALLOWED TO VARY THE PIPE SIZES TO ALLOW FOR COORDINATION AND MINOR CHANGES IN THE PREPARATION.
2. SEQUENCE OF OPERATION
  - A. WET SPRINKLER SYSTEM

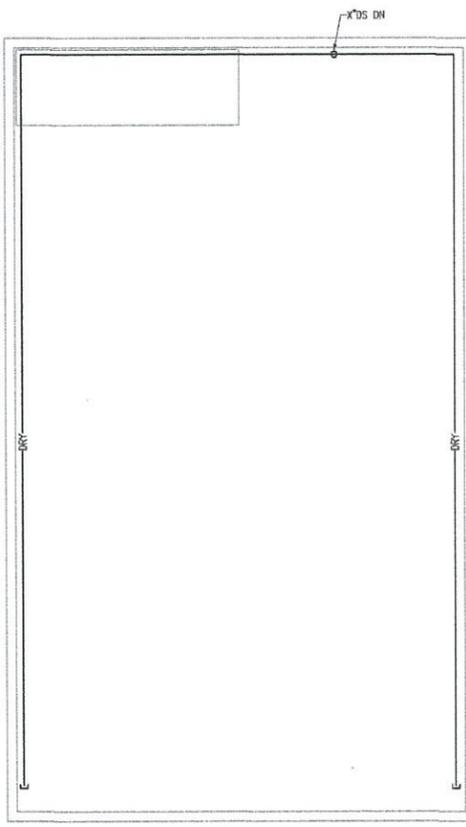
THE WET PIPE SYSTEM EMPLOYS AUTOMATIC (CLOSED FUSIBLE LINK) SPRINKLERS ATTACHED TO PIPING CONTAINING WATER, UNDER PRESSURE AT ALL TIMES. WHEN FIRE OCCURS, INDIVIDUAL SPRINKLERS ARE ACTUATED BY HEAT, AND WATER FLOWS IMMEDIATELY. THE FLOW OF WATER RAISES THE ALARM VALVE CLAPPER FROM ITS SEAT. THIS PERMITS WATER TO ENTER THE ALARM LINE. A PRESSURE SWITCH ON THE ALARM LINE IS ACTIVATED PROVIDING AN ELECTRIC SIGNAL WHICH IS SENT TO THE MAIN FIRE ALARM CONTROL PANEL. THIS SIGNAL WILL BE FORWARDED TO THE FIRE DEPARTMENT. A FIRE DEPARTMENT CONNECTION IS CONNECTED TO THE DISCHARGE SIDE OF THE WET ALARM VALVE FOR USE BY THE FIRE DEPARTMENT PUMPER TRUCK.
3. TESTING CRITERIA FOR FINAL ACCEPTANCE
  - A. APPROVAL OF SPRINKLER SYSTEM
    1. THE INSTALLING SPRINKLER CONTRACTOR SHALL:
      - a. NOTIFY THE AUTHORITY HAVING JURISDICTION AND OWNERS REPRESENTATIVE OF THE TIME AND DATE TESTING WILL BE PERFORMED.
      - b. PERFORM ALL REQUIRED ACCEPTANCE REQUIREMENTS LISTED IN NFPA 13 (2007)
      - c. COMPLETE AND SIGN THE APPROPRIATE CONTRACTOR'S MATERIAL AND TEST CERTIFICATES.
    - B. COMPLETE AS-BUILT DRAWINGS AS SPECIFIED.

## FIRE PROTECTION LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
		ABOVE FLOOR PIPING (INDICATED AS SINGLE LINEWORK)
		BELOW FLOOR PIPING (INDICATED AS DOUBLE LINEWORK)
		NEW WORK (INDICATED AS HEAVY LINEWORK)
	F	FIRE MAIN
	WS	WET SPRINKLER MAIN
	DS	DRY SPRINKLER MAIN
	UP	UP (PENETRATES LEVEL ABOVE)
	RISE	RISE (BUT DOES NOT PENETRATE LEVEL ABOVE)
	DN	DOWN (PENETRATES LEVEL BELOW)
	DP	DROP (BUT DOES NOT PENETRATE LEVEL BELOW)
		DIRECTION OF FLOW
		SHUTOFF VALVE (OUTSIDE SCREW AND YOKE WITH SUPERVISORY SWITCH)
	CV	CHECK VALVE
	DV	DRAIN VALVE WITH HOSE THREADS
	SS	SUPERVISORY SWITCH
	FS	FLOW SWITCH
	PS	PRESSURE SWITCH
	PG	PRESSURE GAUGE
	NIFPC	NOT IN FIRE PROTECTION CONTRACT
	FPC	FIRE PROTECTION CONTRACTOR
	VV	VALVE IN VERTICAL
	OED	OPEN END DRAIN
	BFP	BACKFLOW PREVENTER
	WACV	WET ALARM CHECK VALVE
	DACV	DRY ALARM CHECK VALVE
	WTS	WATER TIGHT SLEEVE
	FZCV	FLOOR ZONE CONTROL VALVE
	FDC	FIRE DEPARTMENT CONNECTION (STORZ)
		ISOLATION VALVE W/ TAMPER SWITCH
	PENDENT	EXISTING PENDENT SPRINKLER
	UPRIGHT	UPRIGHT SPRINKLER
	UPRIGHT	UPRIGHT SPRINKLER W/ PROTECTIVE GUARD
	DRY	DRY EXTENDED COVERAGE SIDEWALL SPRINKLER
	CONCEALED	CONCEALED PENDENT SPRINKLER
		DRY PENDENT SPRINKLER
		PENDENT SPRINKLER
		CAP
	CC	CUT AND CAP
	CTE	CONNECT TO EXISTING
	NAS	NO AUTOMATIC SPRINKLER

## FIRE PROTECTION NOTES:

1. THE WORK COVERED CONSISTS OF FURNISHING ALL LABOR AND MATERIALS NECESSARY TO INSTALL, COMPLETE AND READY FOR CONTINUOUS OPERATION, THE FIRE PROTECTION SYSTEMS, APPARATUS AND EQUIPMENT FOR THIS PROJECT.
2. ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THE FIRE PROTECTION SUB-CONTRACT, LABOR AND TESTING PERFORMED HEREIN SHALL BE IN COMPLETE ACCORDANCE WITH THE STATE BUILDING CODE, ALL LOCAL CODES AND REGULATIONS, NATIONAL FIRE PROTECTION ASSOCIATION, INSURANCE REGULATIONS AND REQUIREMENTS GOVERNING SUCH WORK.
3. ANY AND ALL PERMITS REQUIRED FOR INSTALLATION OF ANY MATERIAL SHALL BE OBTAINED AS PART OF THE WORK OF THE SPECIFICATION INCLUDING ALL FEES OR EXPENSES INCURRED.
4. IT IS THE INTENT OF THESE DOCUMENTS THAT THE ENTIRE BUILDING SHALL BE 100% SPRINKLERED INCLUDING ELECTRIC ROOMS AND TELECOMMUNICATION ROOMS.
5. PROVIDE A COMPLETE HYDRAULICALLY CALCULATED SPRINKLER SYSTEM THROUGHOUT THE BUILDING. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH NFPA 13 AND INCLUDING ALL RULES AND REGULATIONS OF THE LOCAL FIRE DEPARTMENT.
6. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION AND AMOUNT OF SPRINKLER HEADS. SPRINKLER HEADS ARE SHOWN ON THE REFLECTED CEILING PLAN AS A GUIDE AND AID TO THE CONTRACTOR IN PREPARATION OF THE FABRICATION DRAWINGS. MODIFICATION TO THE HEAD SPACING WILL BE ALLOWED AT NO COST TO THE PROJECT SUBJECT TO ARCHITECTS/ENGINEERS APPROVAL AND CONTINUED COMPLIANCE WITH NFPA 13.
7. THE SPRINKLER CONTRACTOR SHALL PREPARE WORKING DRAWINGS OF THE SPRINKLER WORK AND OBTAIN APPROVALS FROM THE LOCAL FIRE DEPARTMENT PRIOR TO INSTALLATION.
8. ROUTING OF SPRINKLER MAINS, BRANCHES AND HEADS SHALL BE THOROUGHLY COORDINATED WITH OTHER TRADES AND BUILDING STRUCTURE PRIOR TO SUBMISSION OF COORDINATED SHOP DRAWINGS.
9. SPRINKLER HEADS IN AREAS WITH NO FINISHED CEILING SHALL BE UPRIGHT TYPE, LOCATED AS HIGH AS POSSIBLE. HEADS SUBJECT TO PHYSICAL DAMAGE (GYMNASIUM) SHALL BE INSTALLED WITH PROTECTIVE CAGES. IN ALL OTHER AREAS (UNLESS OTHERWISE INDICATED), SPRINKLER HEADS SHALL BE SEMI-RECESSED.
10. REFER TO DESIGN NARRATIVE FOR SPRINKLER DENSITY AND AREA OF APPLICATION.
11. SPRINKLERS SHALL BE LOCATED ABOVE AND BELOW ALL DUCTWORK GREATER THAN 4'-0" IN WIDTH.
12. MISCELLANEOUS DISCREPANCIES OR OMISSIONS WHICH MIGHT APPEAR ON THE PLANS OR SPECIFICATIONS WILL NOT RELIEVE THE FIRE PROTECTION SUB-CONTRACTOR OF CODE COMPLIANCE.



① Attic  
1/4" = 1'-0"



No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

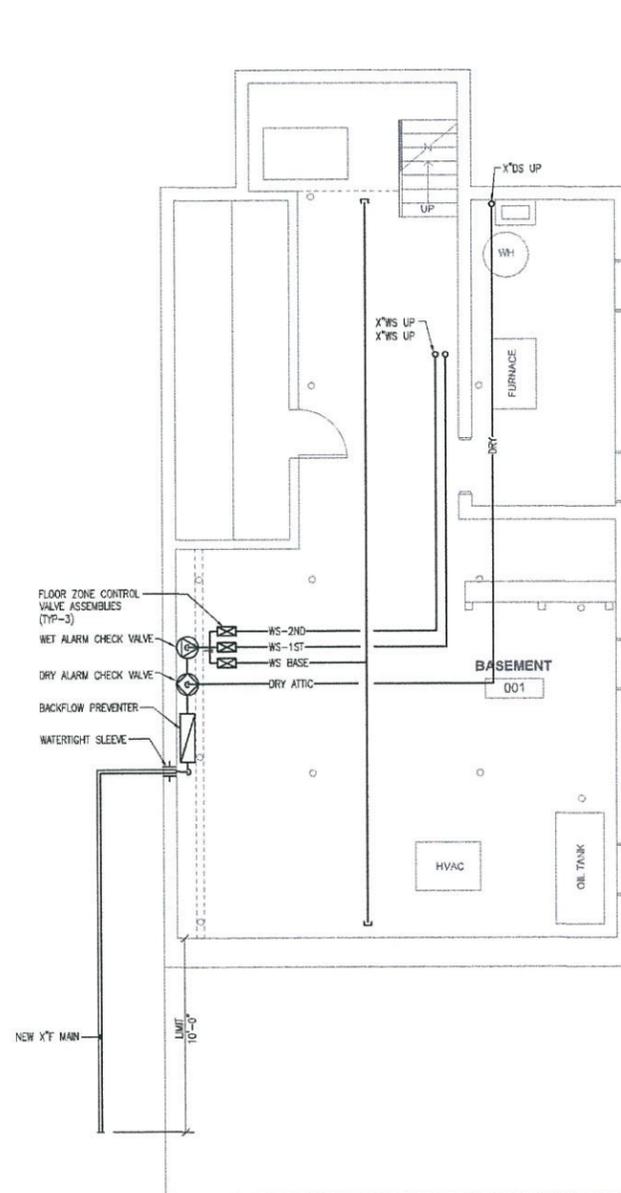
### LEGEND, NOTES & ATTIC PLAN

Project Number 13.1510.00  
 Date JULY 31, 2013  
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 Checked By JAL

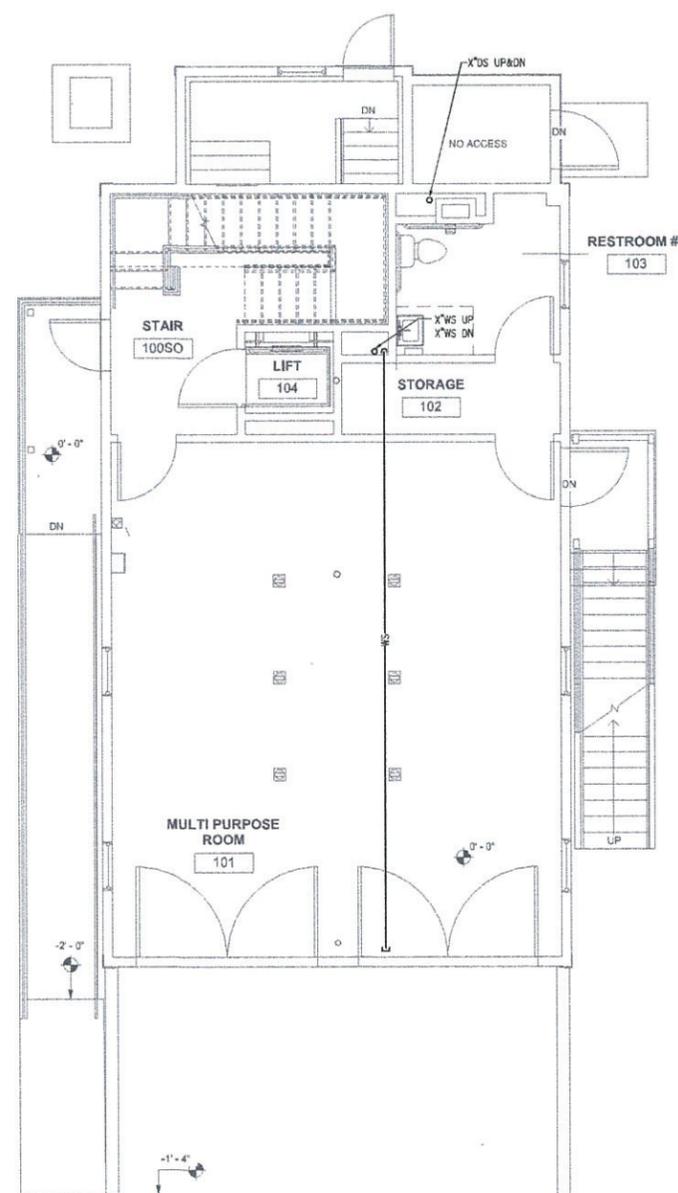
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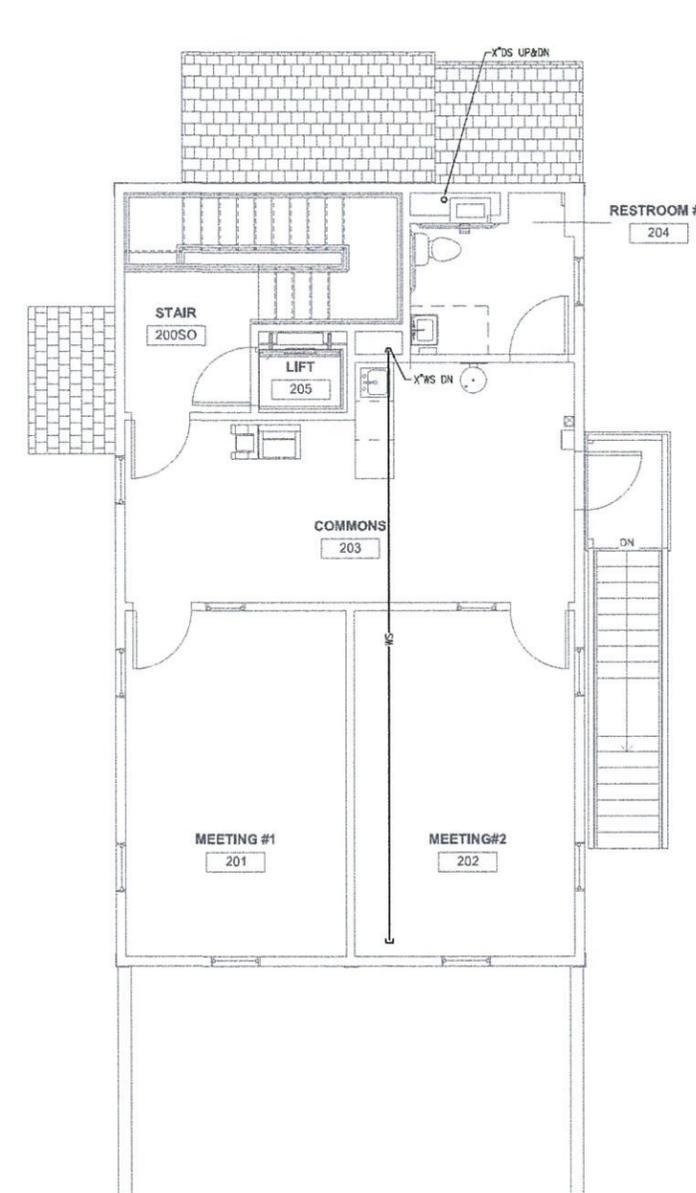
BOSTON BUILDING CONSULTANTS



1 Basement  
1/4" = 1'-0"



2 First Floor  
1/4" = 1'-0"



3 Second Floor  
1/4" = 1'-0"

No.	Description	Date

Town of Acton  
Windsor Building

PROGRESS

18 Windsor Ave.  
Acton, MA 01720

Proposed Floor  
Plans

Project Number 13.1510.00

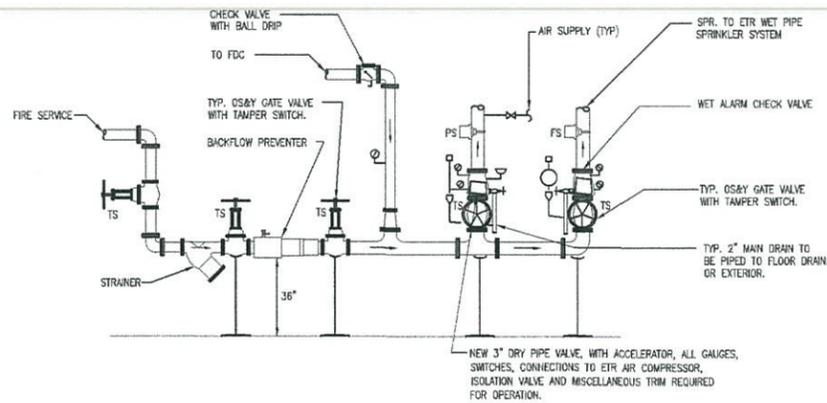
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Drawn By GPC

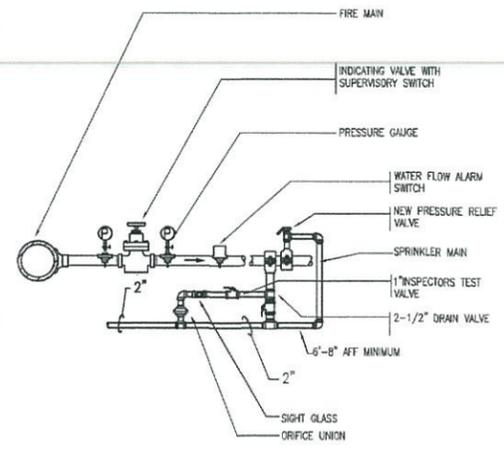
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FP-100

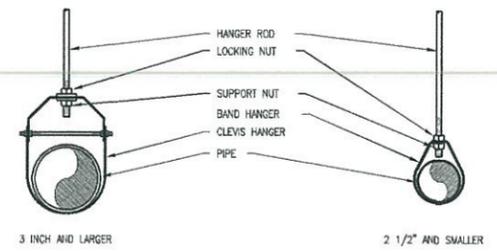
Scale 1/4" = 1'-0"



1 COMBINATION WET AND DRY SPRINKLER RISER ASSEMBLY DIAGRAM

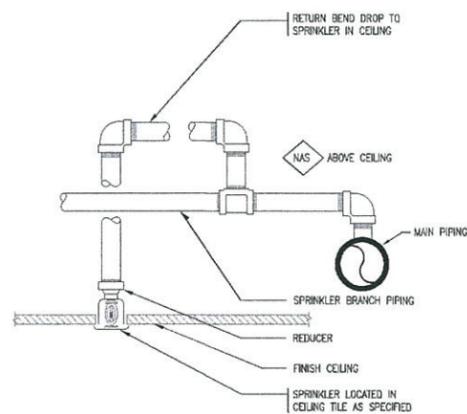


2 FLOOR ZONE CONTROL VALVE ASSEMBLY

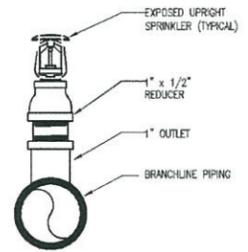


HANGER ROD SCHEDULE		HANGER ROD SPACING	
PIPE SIZE	ROD SIZE	PIPE SIZE	MAX. ALLOWABLE SPACING
UP TO 2"	3/8" DIA.	1"	7'
2 1/2" & 3"	1/2" DIA.	1 1/4"	8'
4" AND 5"	5/8"	1 1/2"	9'
6" - 8"	3/4"	2"	10'
10 & 12"	7/8"	2 1/2"	11'
		3" - 12"	12'

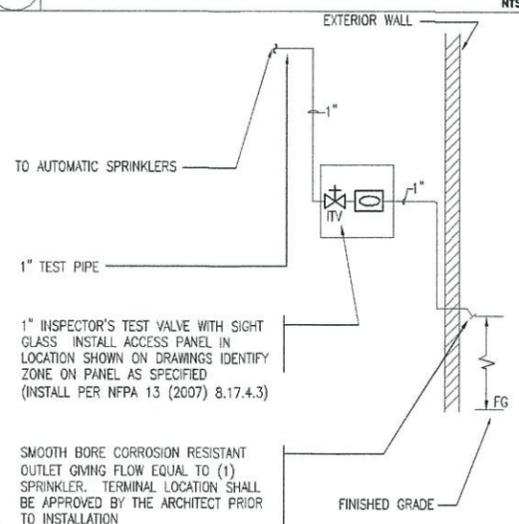
3 TYPICAL PIPE HANGER DIAGRAM



4 CONCEALED SPRINKLER



5 UPRIGHT SPRINKLER



6 INSPECTOR'S TEST DRAIN



No.	Description	Date

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PROGRESS  
  
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Acton, MA 01720

DIAGRAMS

Project Number 13.1510.00  
Date JULY 31, 2013  
Drawn By GPC  
Checked By JAL

FP-101

Scale NONE