CITY OF SOMERVILLE

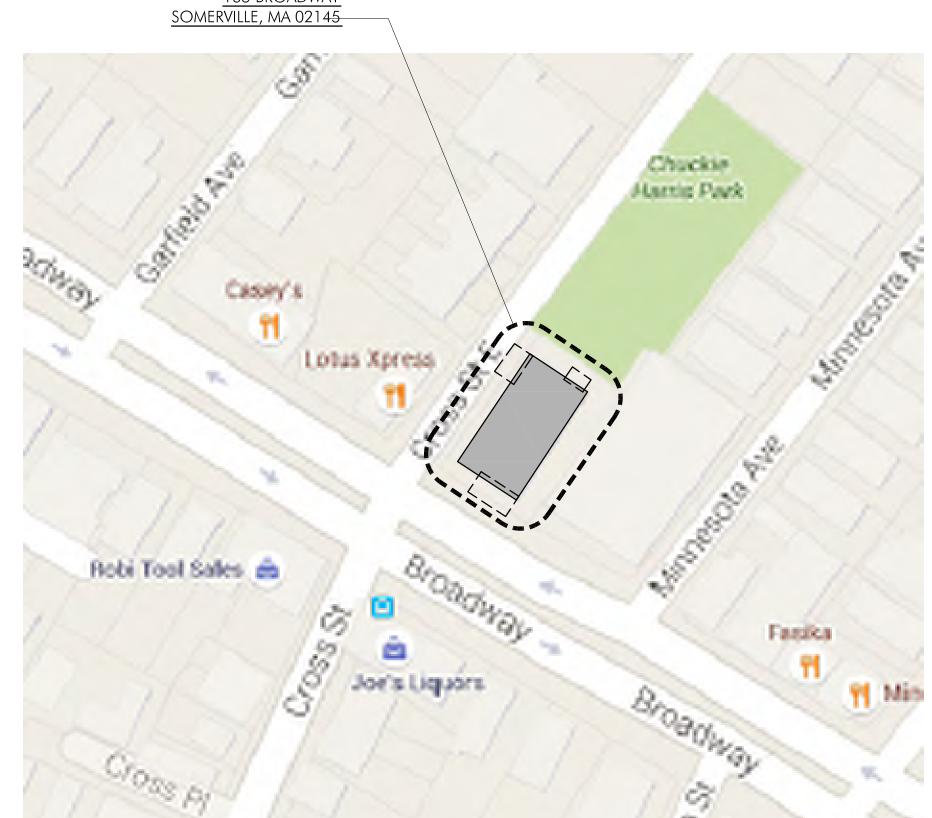
CROSS STREET SENIOR CENTER RENOVATIONS



LOCATOR MAP

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.

CROSS STREET SENIOR CENTER 165 BROADWAY



DRAWING SHEETS:

ARCHITECTURAL

- G0-01 COVER SHEET G0-02 FIRST FLOOR DEMOLITION KEY PLAN AND FIRST FLOOR KEY PLAN
- D1-01 FOOD PANTRY DEMOLITION ROOF PLAN AND FIRST FLOOR PLAN
- A1-01 FOOD PANTRY ROOF, FIRST FLOOR AND REFLECTED CEILING PLAN
- A1-02 RESTROOM DEMOLITION PLAN, **RESTROOM PLAN AND PARTITION SECTIONS**
- A2-01 FOOD PANTRY EXTERIOR **ELEVATIONS AND DETAILS**
- A4-01 FOOD PANTRY INTERIOR **ELEVATIONS** A4-02 FOOD PANTRY INTERIOR
- **ELEVATIONS AND DETAILS** A4-03 RESTROOM ELEVATIONS
- A4-04 RESTROOM ELEVATIONS AND FIXTURE DETAILS A5-01 STAIR PLAN, HANDRAIL ELEVATIONS
- AND DETAILS A5-02 FRONT ENTRY SLOPED SIDEWALK
- PLANS, ELEVATIONS AND DETAILS A5-03 FRONT ENTRY SLOPED SIDEWALK
- **SECTIONS AND DETAILS** A5-04 FRONT ENTRY DOOR ELEVATIONS AND SECTIONS
- A5-05 FOOD PANTRY ROOF DETAILS AND

A6-01 FOOD PANTRY / RESTROOMS FINISH SCHEDULE, DOOR SCHEDULE, DOOR **DETAILS AND ROOF DETAILS**

STRUCTURAL S1-01 ROOF FRAMING PLAN AND DETAILS

PLUMBING

P001 PLUMBING LEGEND NOTES &

- **SCHEDULES** P100 PLUMBING RESTROOM RENOVATION
- P101 PLUMBING RESTROOM RENOVATION
- P102 PLUMBING FOOD PREP RENOVATION
- P103 PLUMBING FOOD PREP RENOVATION PLAN

MECHANICAL

H100 HVAC PART PLANS, LEGEND, SCHEDULES & DETAILS

H101 HVAC FIRST FLOOR PLANS

ELECTRICAL

E001 LEGEND AND NOTES

E100 FIRST FLOOR BATHROOM PLANS AND FOOD PANTRY PLANS

GENERAL NOTES:

- PROJECT. ALL OF THE CONTRACTOR'S INSURERS SHALL PROIVIDE A WAIVER OF SUBROGATION IN FAVOR OF CITY OF SOMERVILLE AND CBI
- CASE OF CONFLICT, THE ARCHITECT SHALL BE NOTIFIED AND SHALL RESOLVE THE CONFLICT. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS.
- G2 IN ANY CASE OF CONFLICT BETWEEN OR WITHIN THE DRAWINGS AND THE PROJECT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN, AT THE SOLE DISCRETION OF THE ARCHITECT
- G3 THE CONTRACTOR SHALL MAKE NO DEVIATION FROM DESIGN DRAWINGS
- WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY SHALL BE REPEATED. ANY CONDITION FOUND NOT DETAILED SHALL BE CONSTRUCTED IN A MANNER SIMILAR TO THAT OF THE TYPICAL DETAILS
- G5 ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND LOCAL LAWS
- G6 GENERAL CONTRACTOR SHALL COORDINATE LOCATIONS OF OPENINGS PITS, BOXES, SUMPS, TRENCHES, SLEEVES, DEPRESSIONS, GROOVES, AND CHAMFERS, WITH MECHANICAL, ELECTRICAL AND PLUMBING
- THE STRUCTURAL DESIGN OF THE BUILDING IS BASED ON THE FULL THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE PROPER AND ADEQUATE PROVISIONS FOR STABILITY OF, AND ALL STRESSES TO, THE STRUCTURE DUE TO ANY CAUSE DURING CONSTRUCTION.
- CONTRACTOR SHALL NOT SCALE DRAWINGS. CONTRACTOR SHALL THE WORK FROM THE ARCHITECT. WORK COMPLETED BY THE CONTRACTOR WITHOUT DIMENSIONS OR INFORMATION SHALL BE DONE AT HIS OWN RISK AND SHALL BE REMOVED AND REINSTALLED TO THE SPECIFICATIONS OF THE ARCHITECT AT NO ADDITIONAL COST TO THE
- MEANS AND METHODS OF CONSTRUCTION AS WELL AS COMPLIANCE WITH OSHA AND OTHER SAFETY LAWS AND REGULATIONS IS EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR, HIS SUBCONTRACTOR(S), SUPPLIERS, CONSULTANTS AND SERVANTS.
- ALL ITEMS THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. IF ANY DAMAGE OCCURS THE CONTRACTOR SHALL REPAIR THE ITEM SO IT IS IN A LIKE NEW CONDITION OR REPLACE IT WITH A NEW ITEM THAT FUNCTIONS THE SAME OR BETTER THAN THE ORIGINAL ITEM.
- ALL ITEMS THAT ARE TO BE TEMPORARILY REMOVED & IS TO BE CLEANED AND PREPARED FOR REINSTALLATION. ALL REPAIR THE ITEM SO IT IS IN A LIKE NEW CONDITION OR REPLACE IT WITH A NEW ITEM THAT FUNCTIONS THE SAME OR BETTER THAN THE ORIGINAL ITEM.

LIST OF ABBREVIATIONS A.F.F. ABOVE FINISH FLOOR

APPROX.	APPROXIMATE		Δ
SIT.	BITUMINOUS		
SUR	BUILT UP ROOFING		
CB	CATCH BASIN		
CMU	CONCRETE MASONRY UNIT		
CONC.	CONCRETE		
CONT.	CONTINUOUS		
D.S.	DOWNSPOUT		
Q	EQUAL		
.W.	EACH WAY		
D	FLOOR DRAIN		,
ا	HANDICAP		
łΤ	HEIGHT		
Z	INVERT IN		
TUO	INVERT OUT		
O	INTERIOR DIAMETER		
.C.C.	LEAD COATED COPPER		
1AX.	MAXIMUM		
1IN.	MINIMUM		
1.0.	MASONRY OPENING		-
√A	NOT APPLICABLE		
1.I.C.	NOT IN CONTRACT		,
N.T.S.	NOT TO SCALE		
D.C.	ON CENTER		
DD	OVERHEAD DOOR		
D.H.	OPPOSITE HAND		
AV.	PAVERS		
.Τ.	PRESSURE TREATED		
IM.	SIMILAR TO		
.S.	STAINLESS STEEL		
_		1	

UNLESS OTHERWISE NOTED

SYMBOL LEGEND

PLUS OR MINUS

VERIFY IN FIELD

VINYL COVE BASE

ZINC COATED COPPER DIAMETER

TREAD

TYPICAL

U.O.N.

VCB

Z.C.C.

88 AX-XX	SEE DETAIL 88 ON SHEET AX-XX				
	BREAK LINE				
* *	DIMENSION LINE				
\longleftrightarrow	EXTENT				
00	DOOR TAG				
A	WINDOW TAG				

CONTACT INFORMATION:

Architect



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Owner

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CITY OF **SOMERVILLE CROSS STREET** SENIOR CENTER **RENOVATIONS**



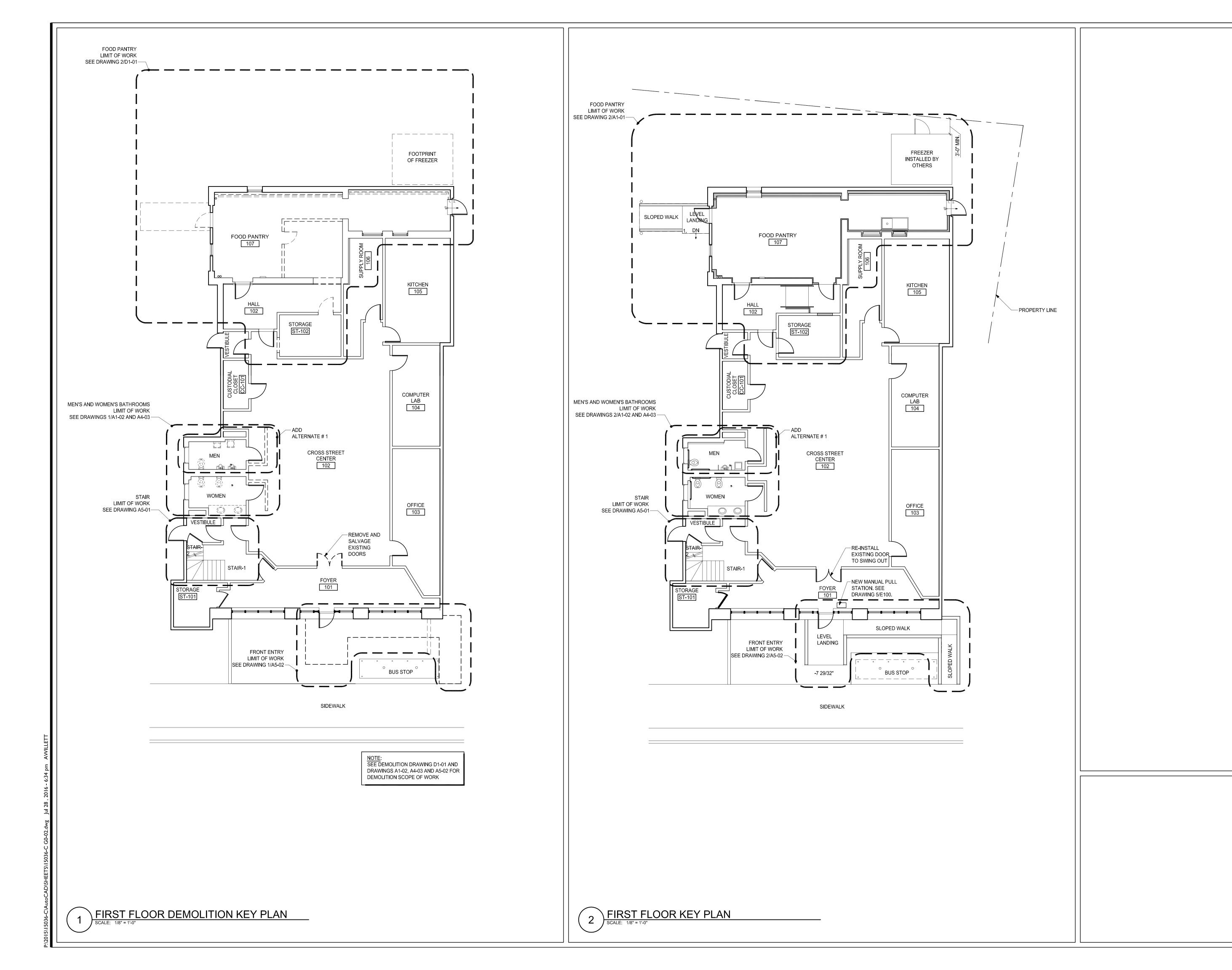
CAPITAL PROJECTS AND PLANNING DEPARTMENT

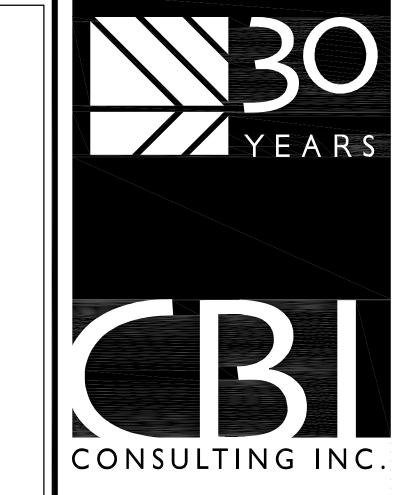
ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

COVER SHEET

BIDDING **DOCUMENTS**





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CITY OF
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CROSS STREET
SENIOR CENTER
RENOVATIONS



CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Titl

FIRST FLOOR
DEMOLITION KEY
PLAN AND FIRST
FLOOR KEY PLAN

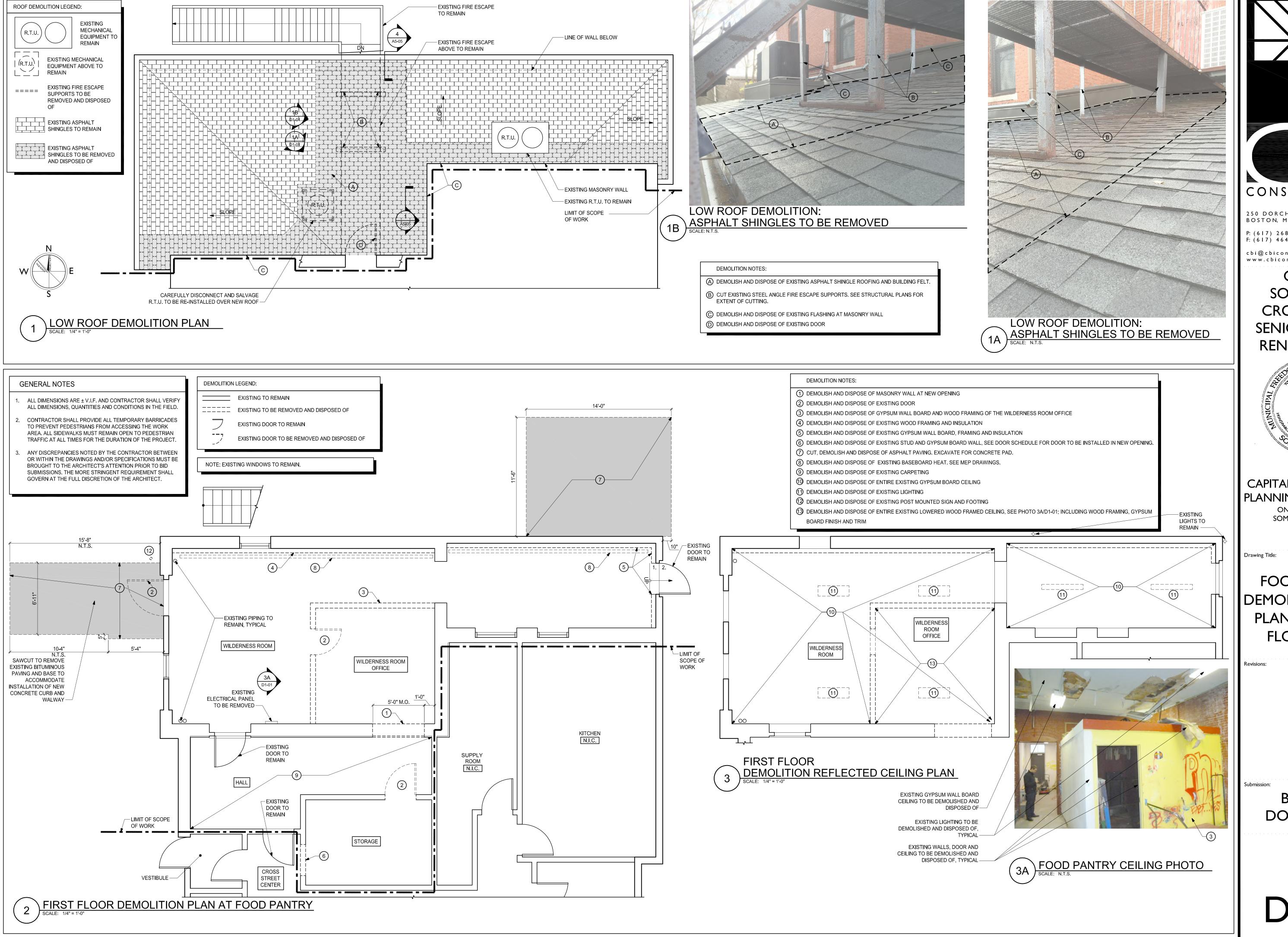
Revision

Submission:

BIDDING DOCUMENTS

Date: 07/29/
Project Number: 15036/
Project Manager: AM'
Drawn By: M
Scale: 1/8" = 1'-

G0-02





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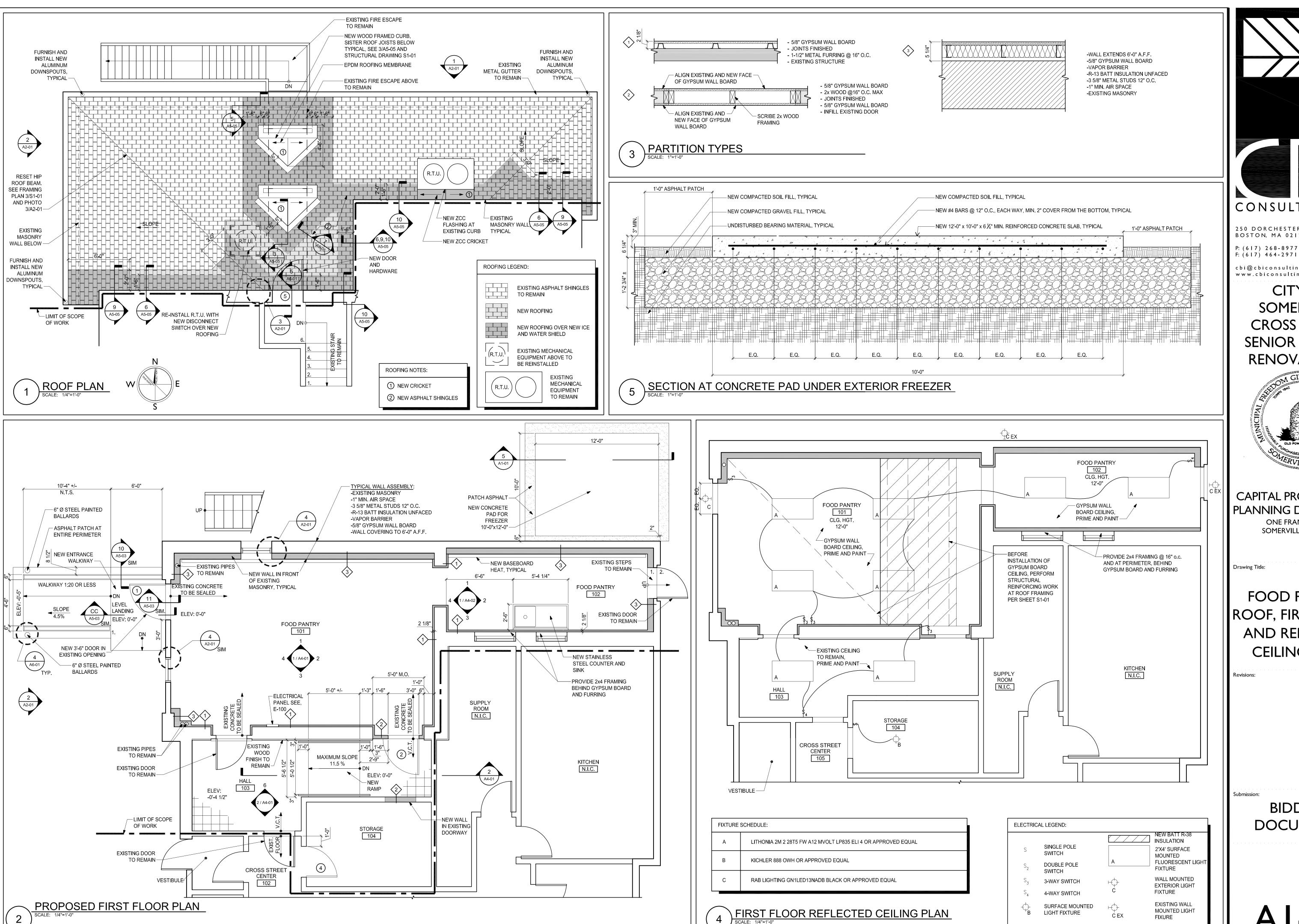


CAPITAL PROJECTS AND PLANNING DEPARTMENT

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FOOD PANTRY DEMOLITION ROOF PLAN AND FIRST FLOOR PLAN

> BIDDING **DOCUMENTS**





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CITY OF **SOMERVILLE CROSS STREET** SENIOR CENTER **RENOVATIONS**



CAPITAL PROJECTS AND PLANNING DEPARTMENT

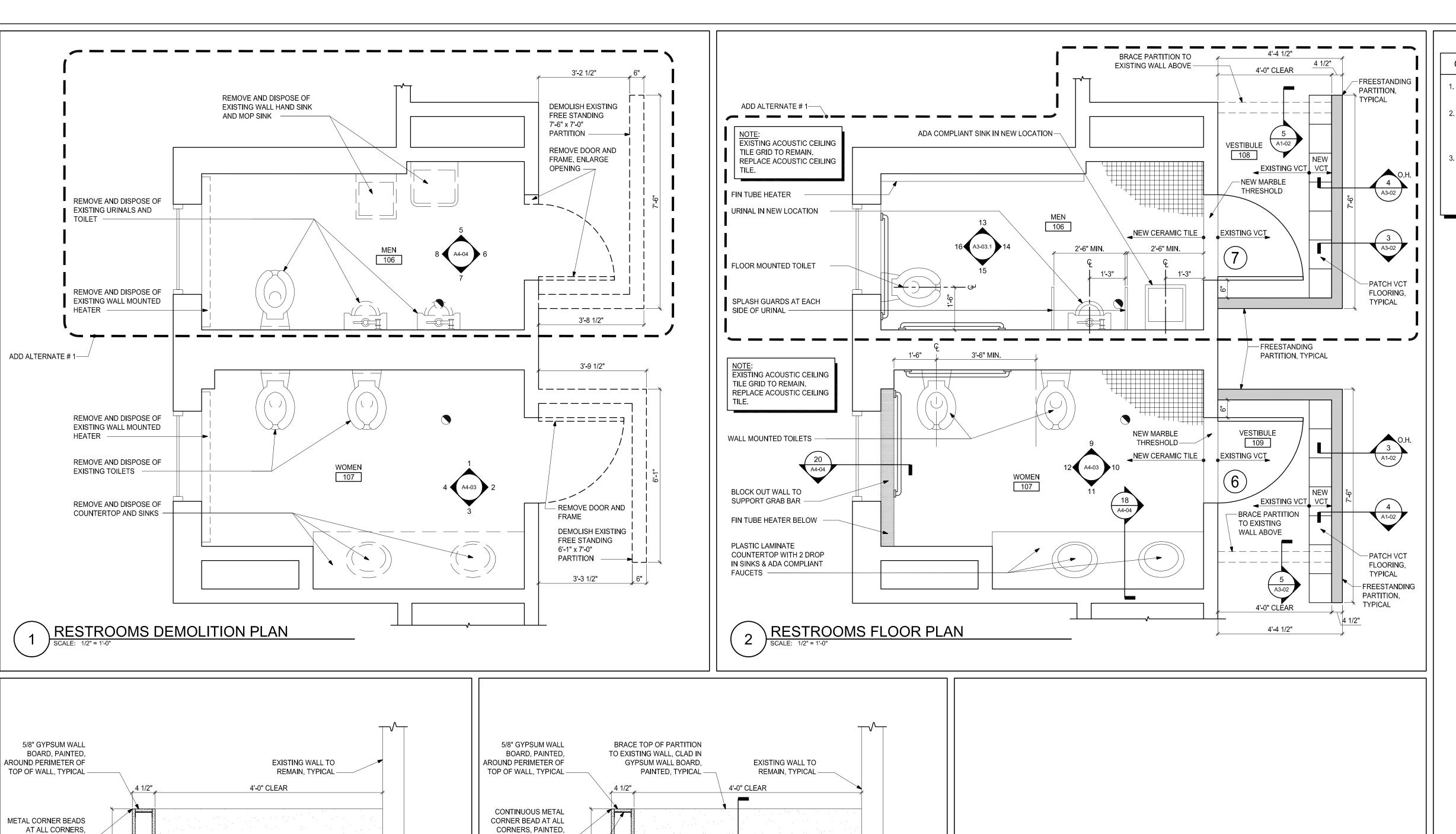
> ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

FOOD PANTRY ROOF, FIRST FLOOR AND REFLECTED **CEILING PLAN**

BIDDING **DOCUMENTS**

Drawn By:



TYPICAL -

TYPCIAL -

TYPICAL -

5/8" GYPSUM WALL BOARD, PAINTED,

5/8" GYPSUM WALL

BOARD, PAINTED,

3 1/2" METAL STUDS AT

3 1/2" WOOD BASE TO

PAINTED, EACH SIDE,

MATCH EXISTING,

TYPICAL -

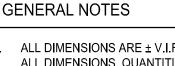
FLOORING, TYPICAL

3 1/2" WOOD BASE TO MATCH EXISTING,

SECTION AT SCREEN WALL

PAINTED, EACH SIDE, TYPICAL -

16" O.C., TYPICAL —



CONTINUOUS METAL CORNER BEAD AT ALL CORNERS,

– 5/8" GYPSUM WALL BOARD, ALL SIDES, TAPED AND PAINTED,

-(2) 3-1/2" BOX STUDS SECURED

TOGETHER, TYPICAL

- 5/8" GYPSUM WALL BOARD, ALL SIDES, TAPED AND PAINTED,

- ALL DIMENSIONS ARE \pm V.I.F. AND CONTRACTOR SHALL VERIFY ALL DIMENSIONS, QUANTITIES AND CONDITIONS IN THE FIELD.
- 2. CONTRACTOR SHALL PROVIDE ALL TEMPORARY BARRICADES TO PREVENT PEDESTRIANS FROM ACCESSING THE WORK AREA. ALL SIDEWALKS MUST REMAIN OPEN TO PEDESTRIAN TRAFFIC AT ALL TIMES FOR THE DURATION OF THE PROJECT.
- 3. ANY DISCREPANCIES NOTED BY THE CONTRACTOR BETWEEN OR WITHIN THE DRAWINGS AND/OR SPECIFICATIONS MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO BID SUBMISSIONS. THE MORE STRINGENT REQUIREMENT SHALL GOVERN AT THE FULL DISCRETION OF THE ARCHITECT.



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CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Titl

RESTROOM
DEMOLITION PLAN,
RESTROOM PLAN
AND PARTITION
SECTIONS

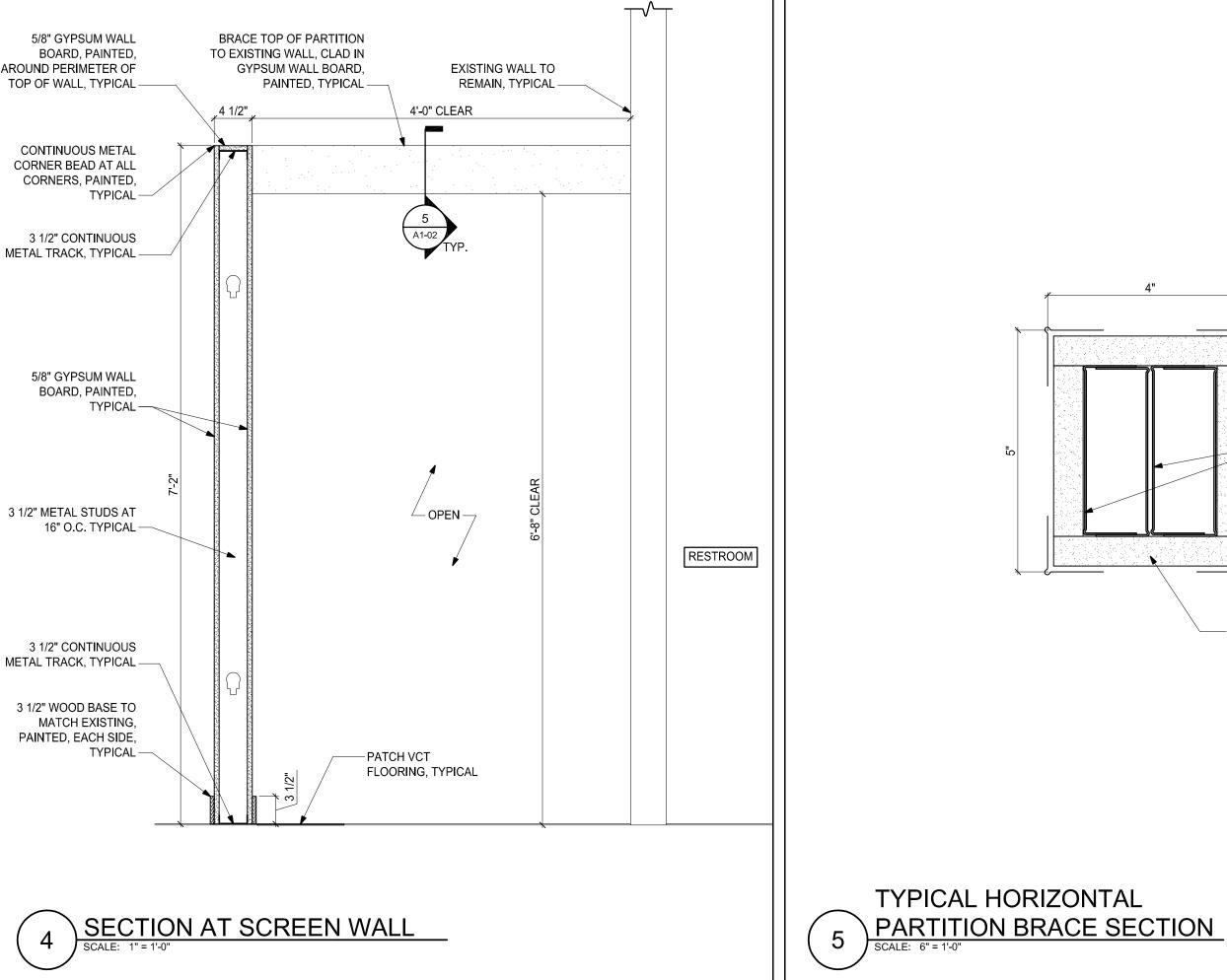
Revisions:

Submission:

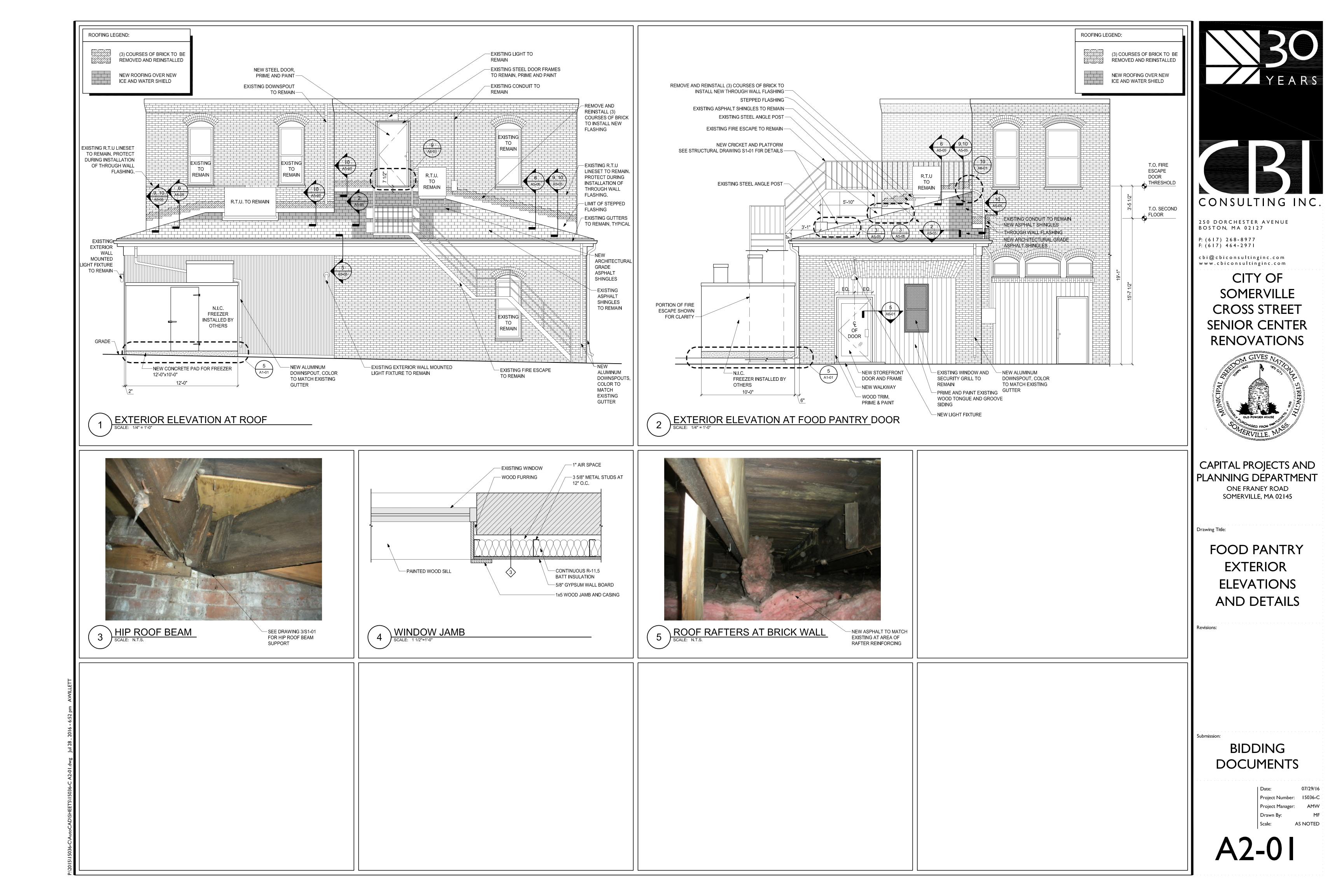
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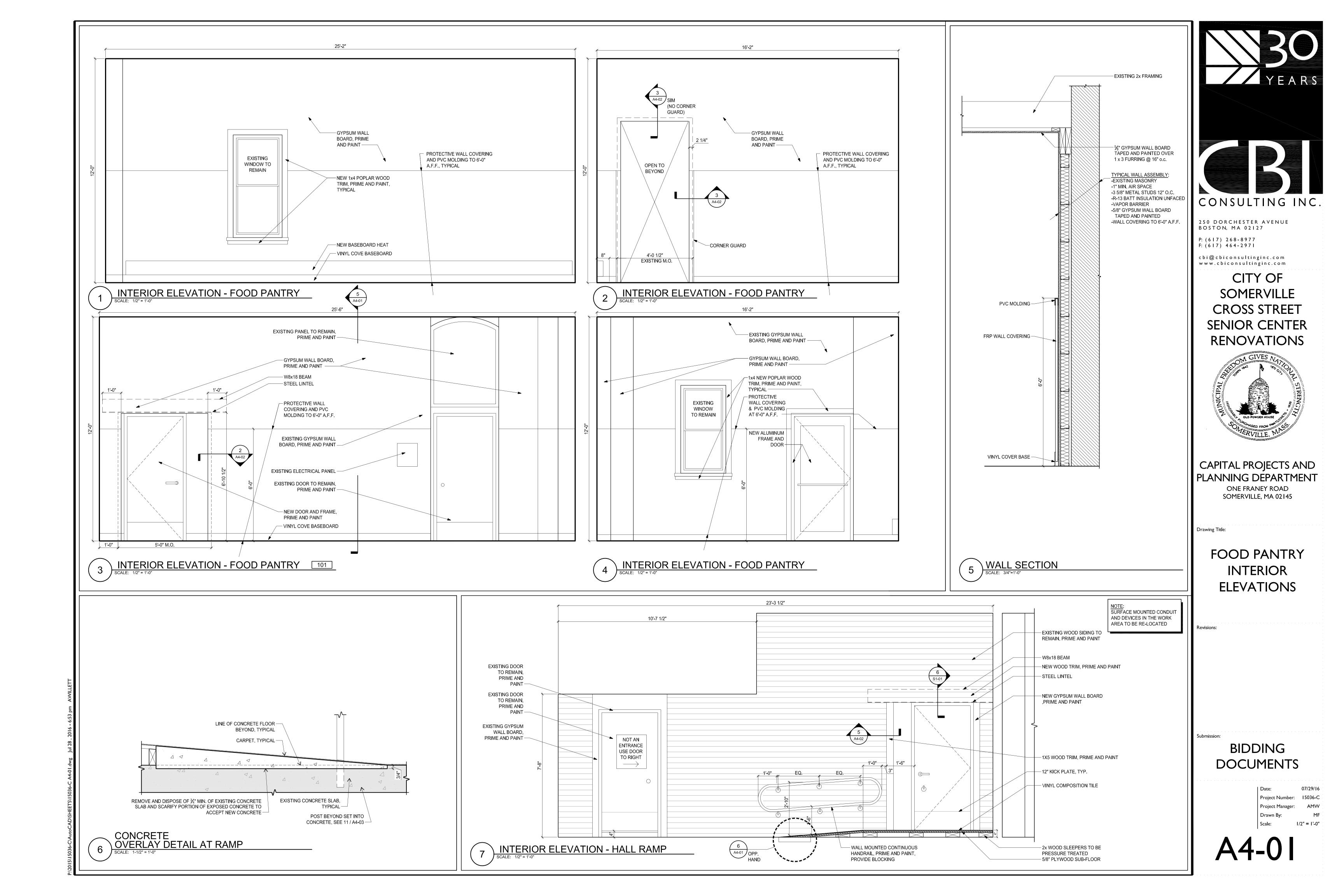
Date: 07/
Project Number: 150
Project Manager: A
Drawn By:
Scale: 1/8" =

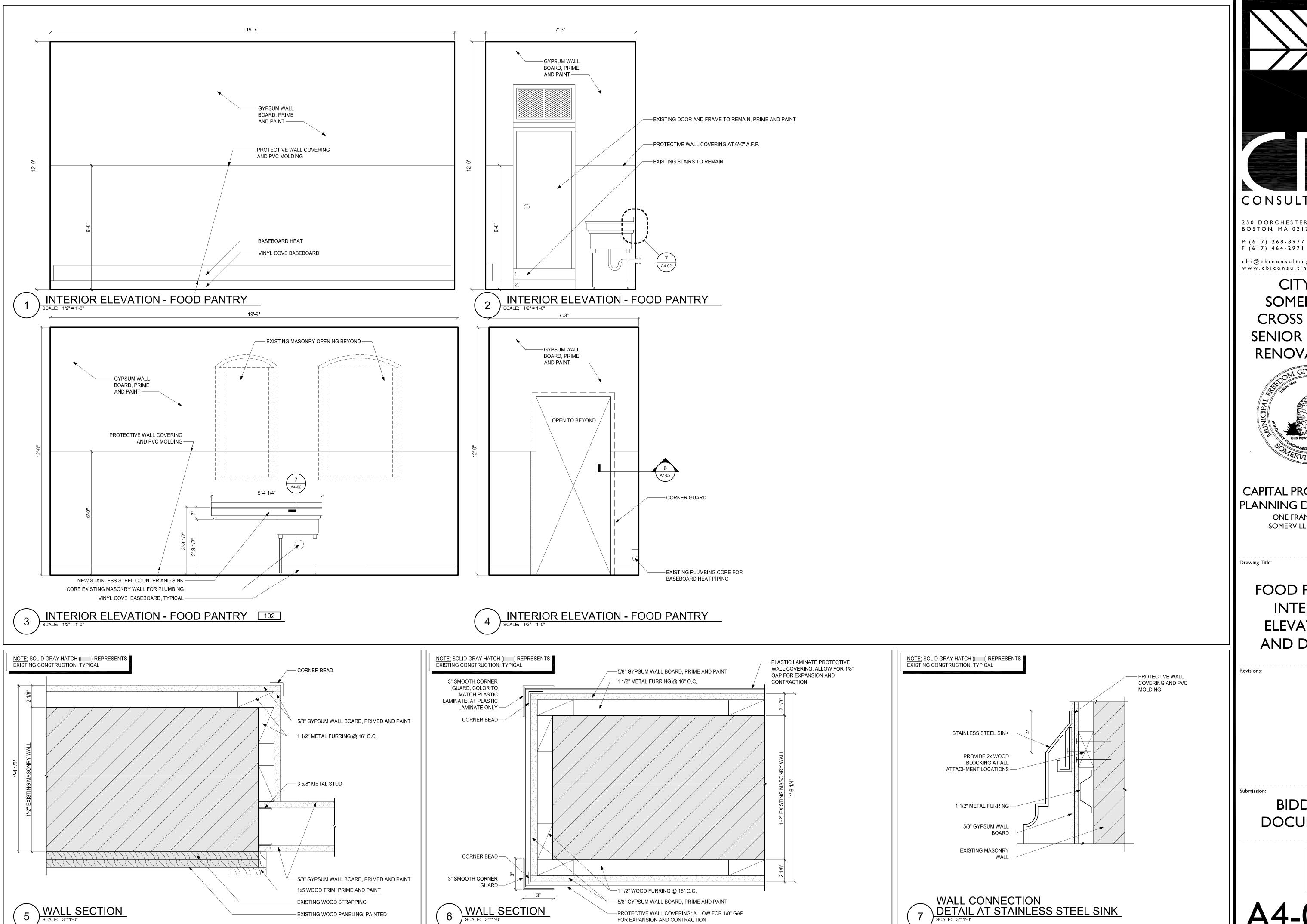
AI-02



RESTROOM







- 5/8" GYPSUM WALL BOARD, PRIME AND PAINT

PROTECTIVE WALL COVERING; ALLOW FOR 1/8" GAP FOR EXPANSION AND CONTRACTION

EXISTING WOOD STRAPPING

EXISTING WOOD PANELING, PAINTED

5 WALL SECTION
SCALE: 3"=1'-0"

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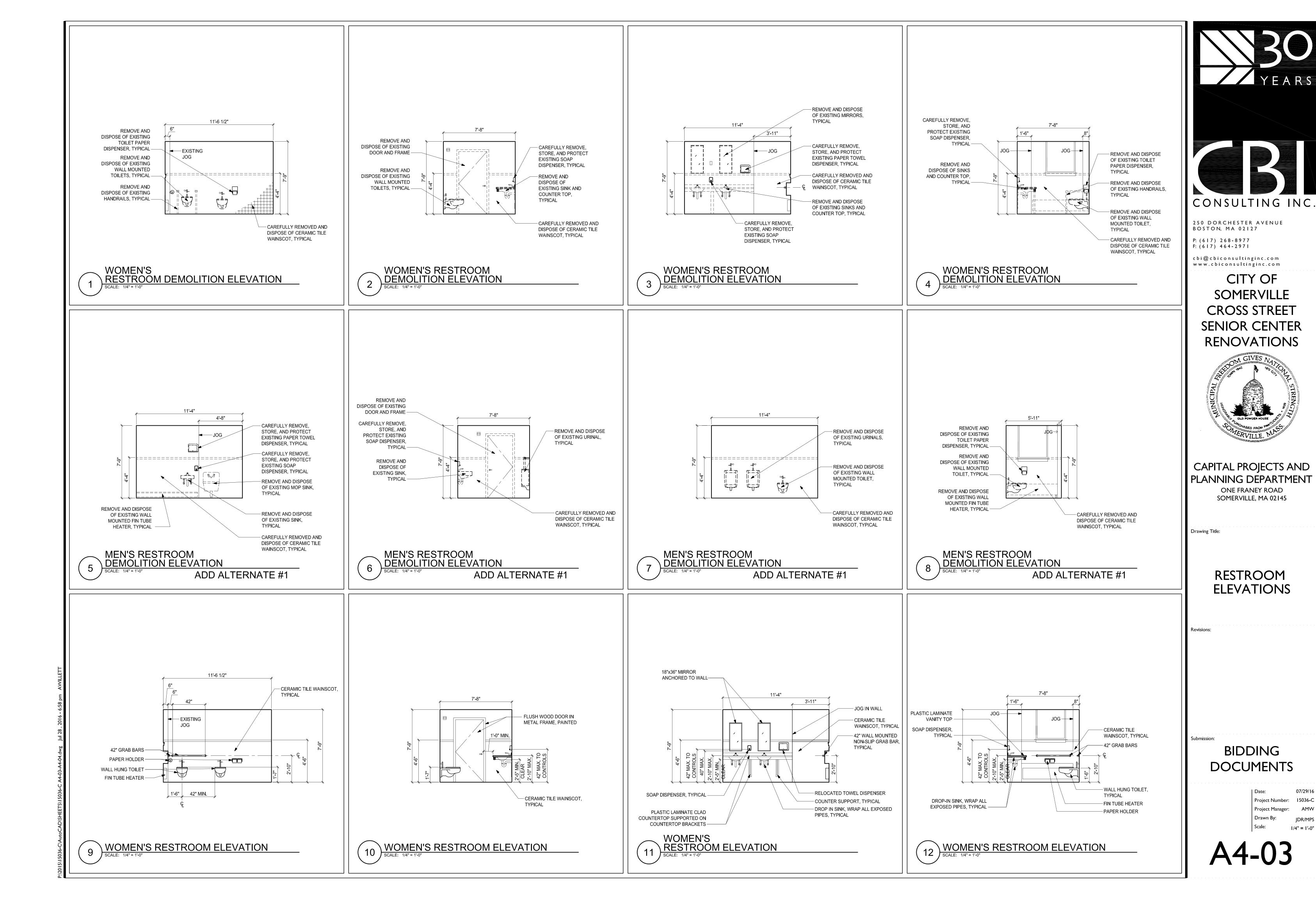
CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

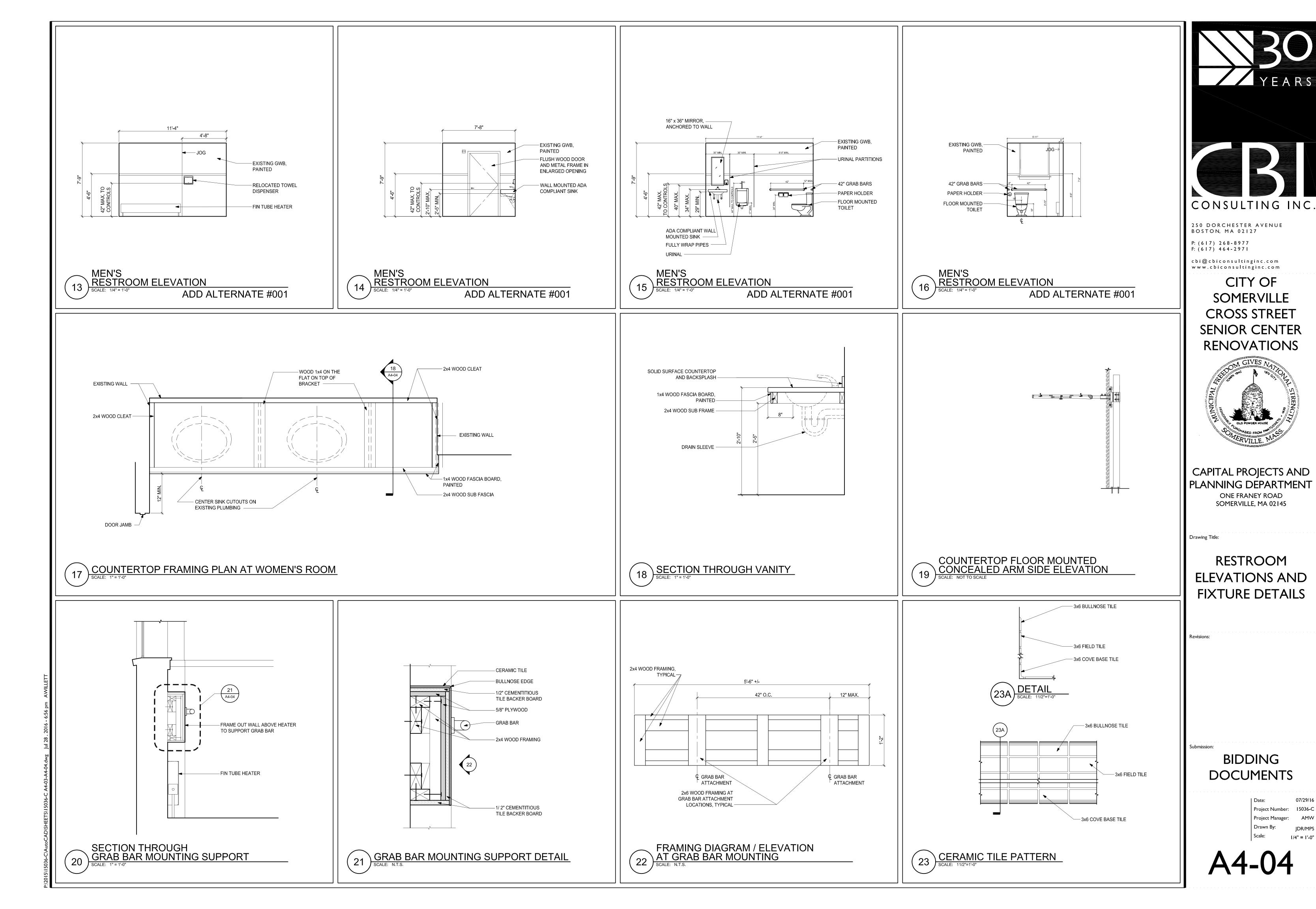
FOOD PANTRY INTERIOR ELEVATIONS AND DETAILS

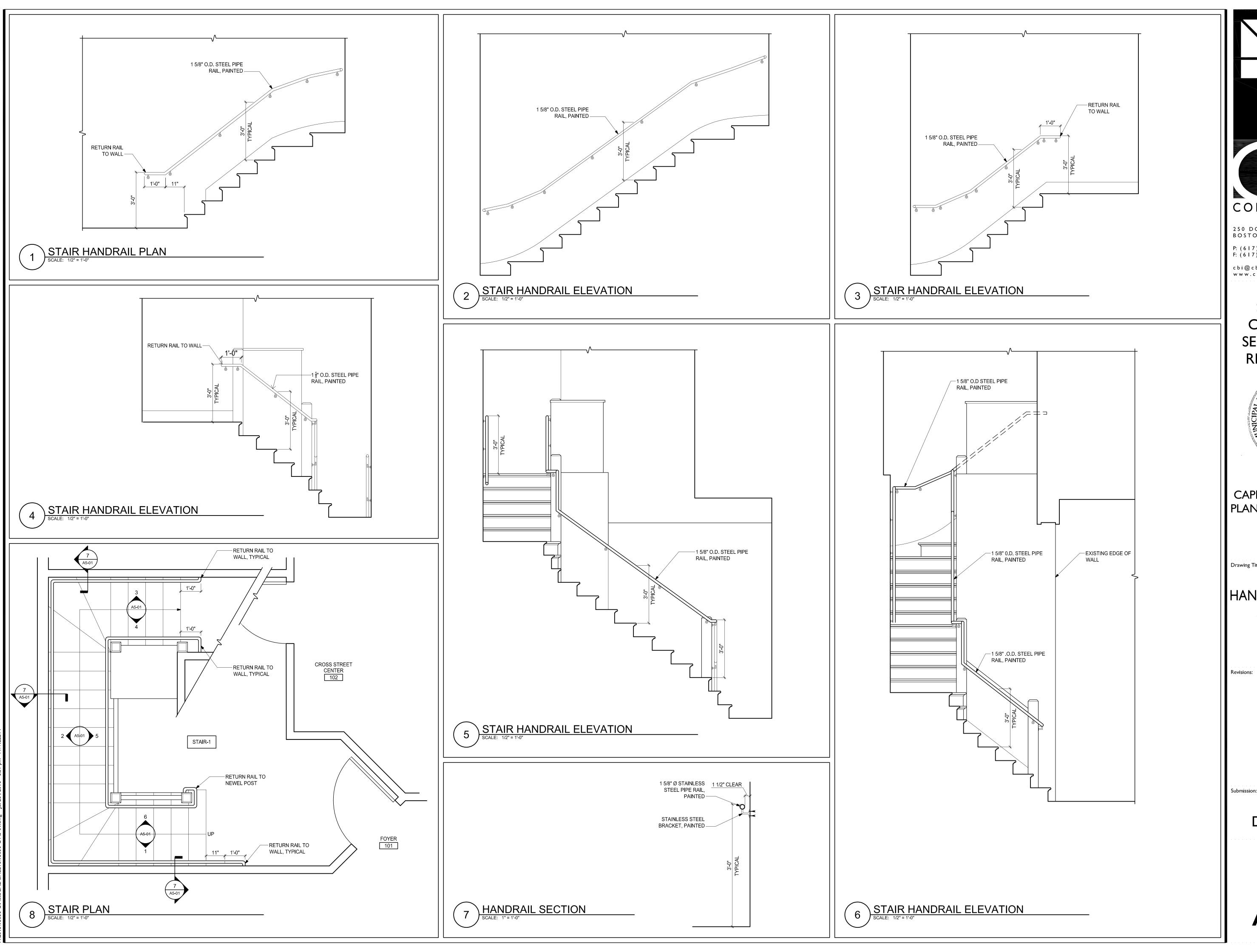
BIDDING **DOCUMENTS**

> Drawn By: 1/2" = 1'-0"



1/4" = 1'-0"







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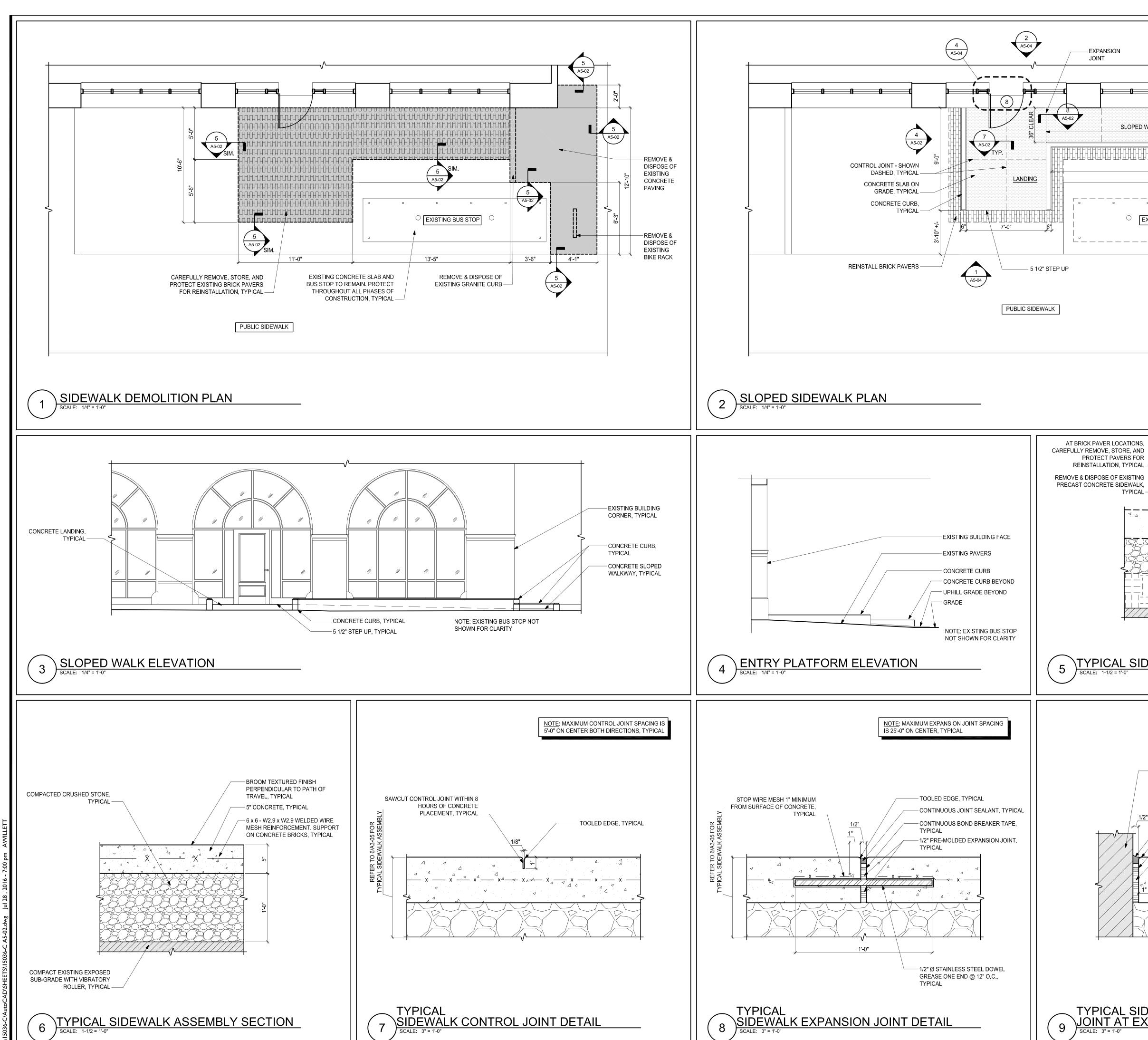


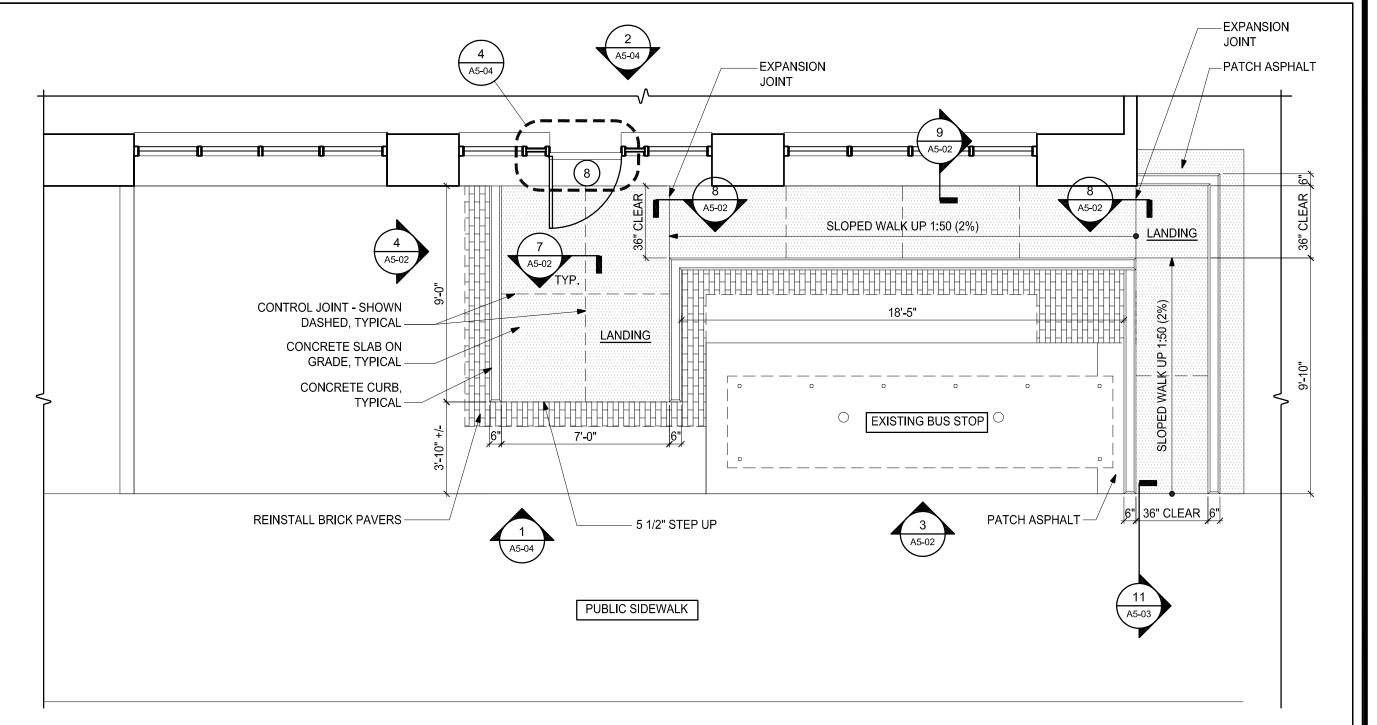
CAPITAL PROJECTS AND PLANNING DEPARTMENT

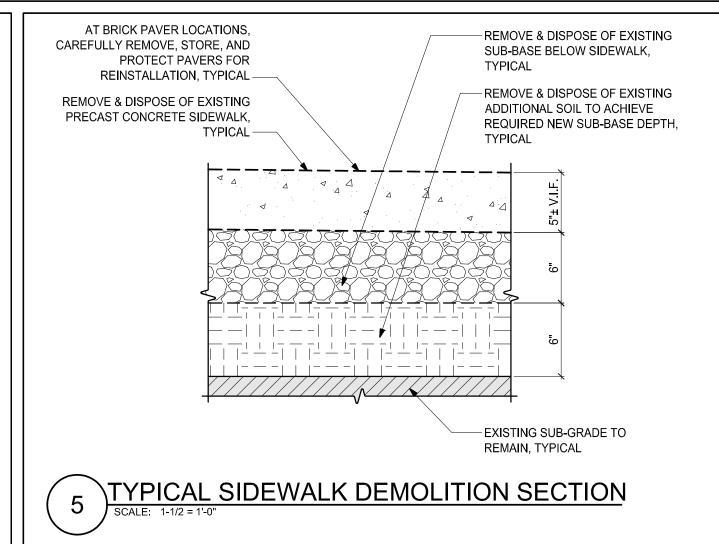
ONE FRANEY ROAD SOMERVILLE, MA 02145

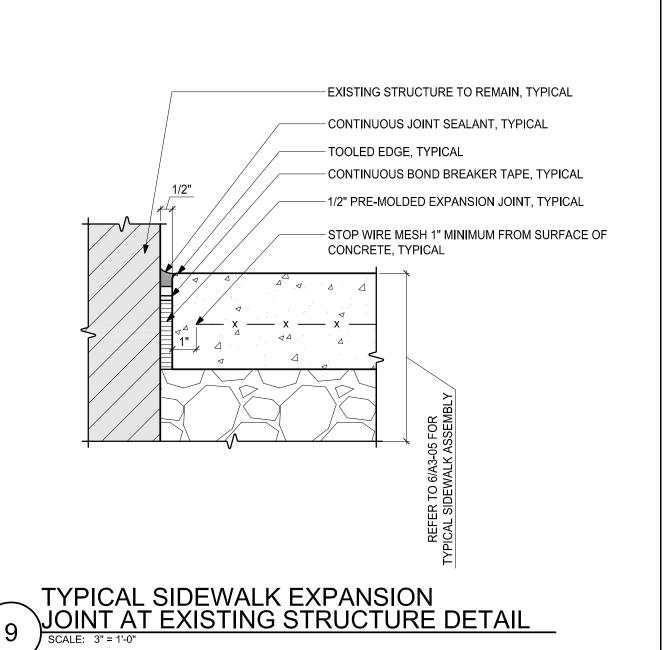
STAIR PLAN, HANDRAIL ELEVATIONS AND DETAILS

BIDDING DOCUMENTS











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CITY OF **SOMERVILLE CROSS STREET** SENIOR CENTER **RENOVATIONS**



CAPITAL PROJECTS AND PLANNING DEPARTMENT

> ONE FRANEY ROAD SOMERVILLE, MA 02145

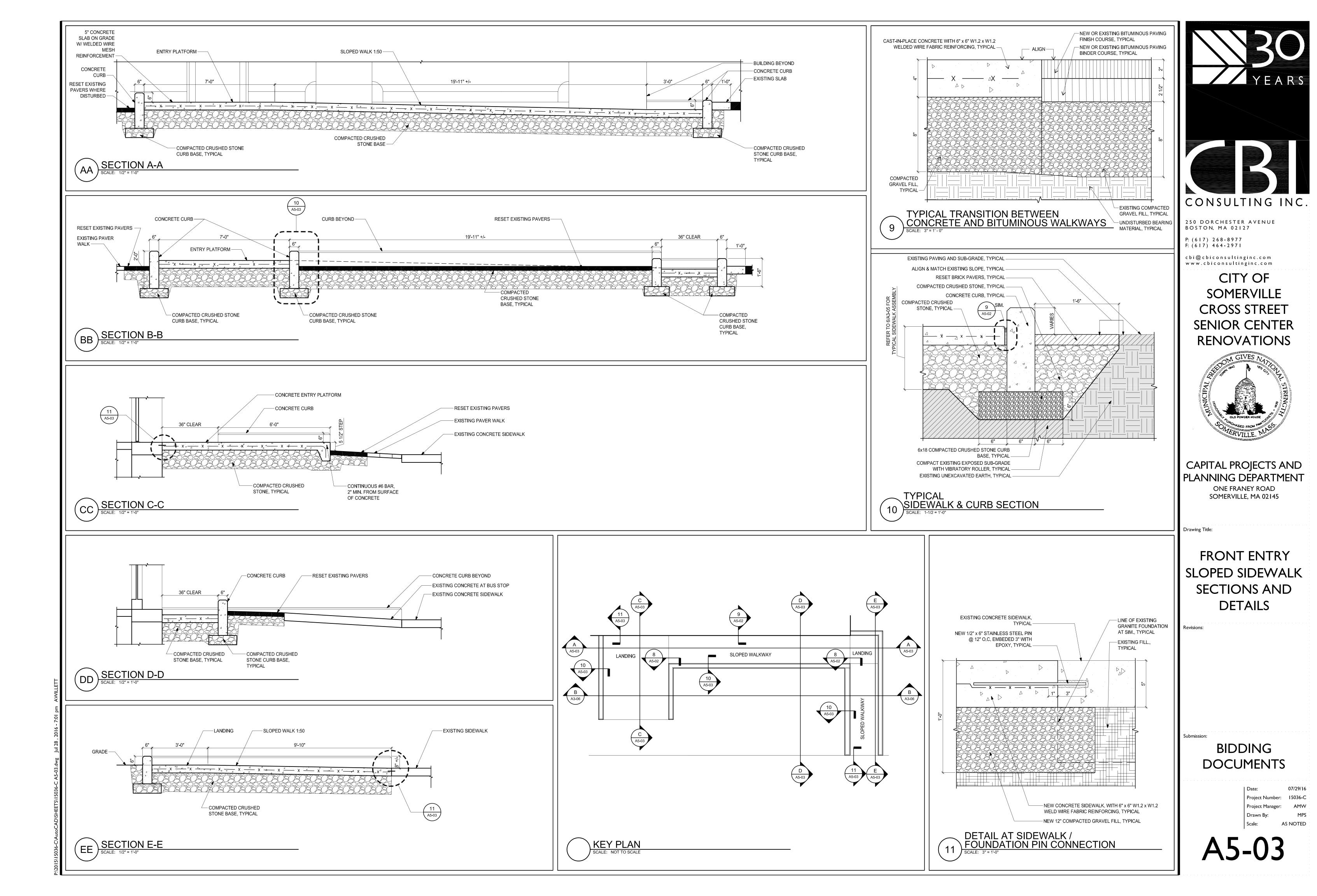
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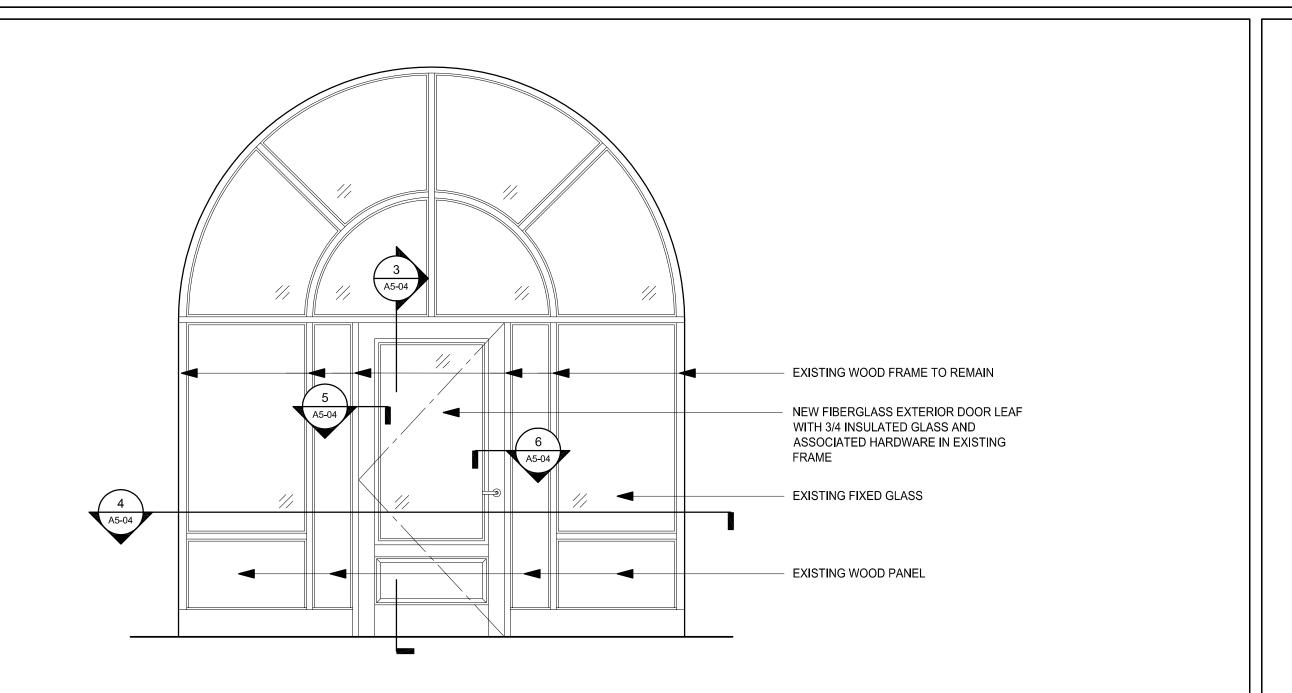
FRONT ENTRY SLOPED SIDEWALK PLANS, ELEVATIONS AND DETAILS

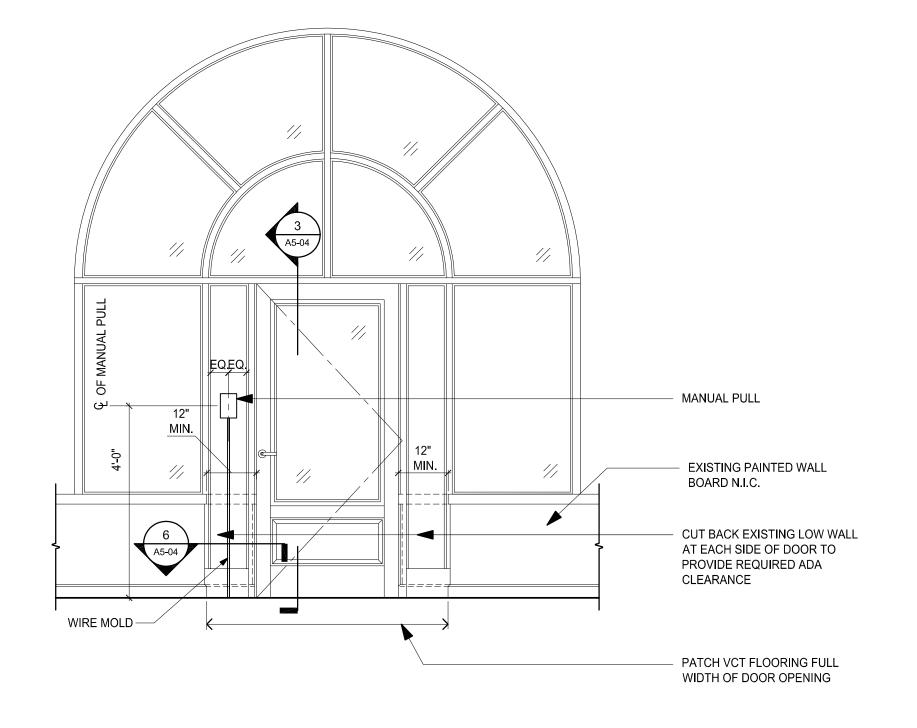
BIDDING

Drawn By: AS NOTED

DOCUMENTS



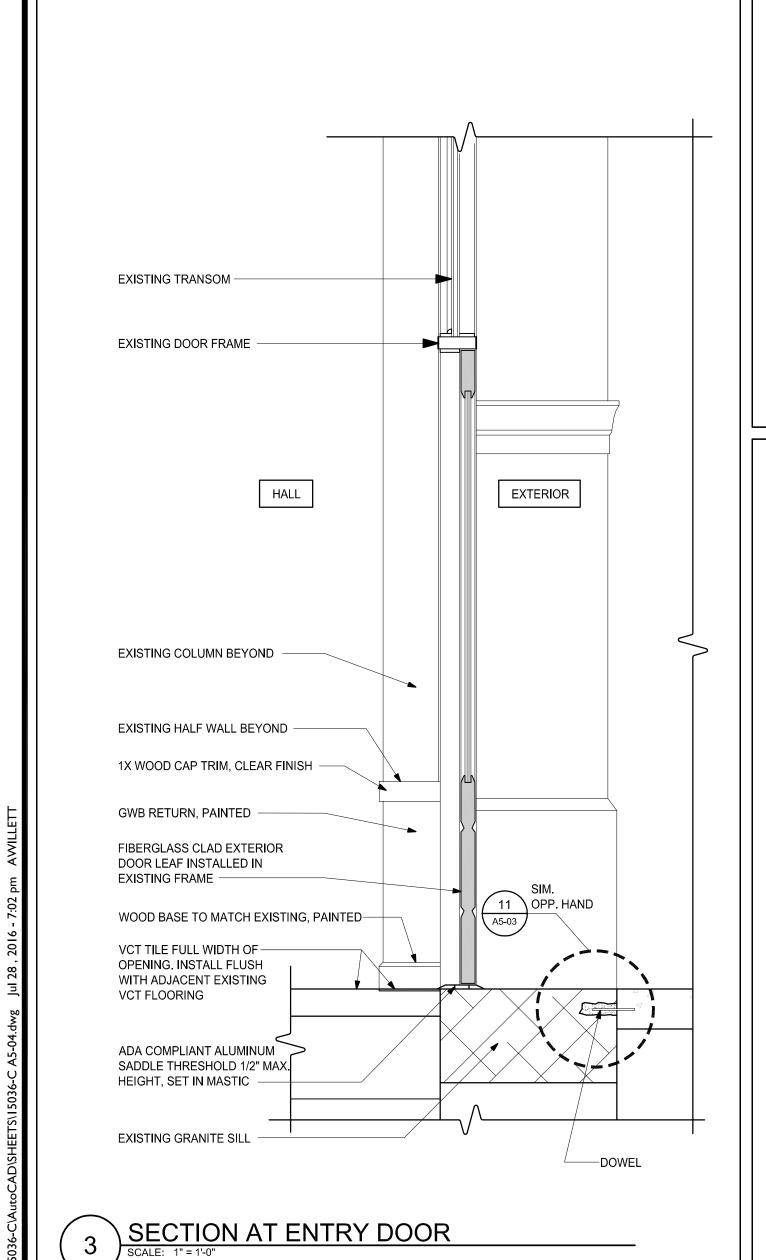


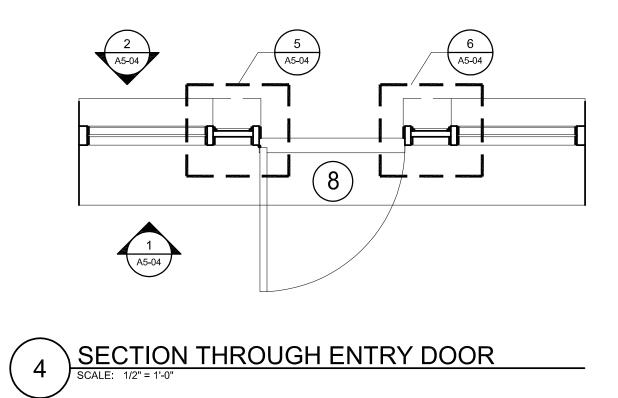


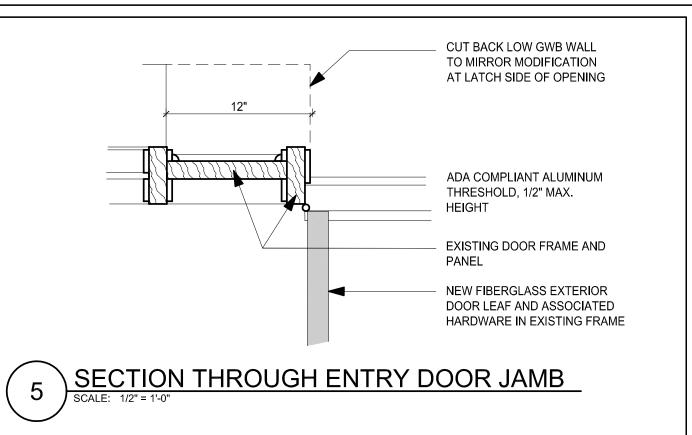
ENTRY DOOR EXTERIOR ELEVATION

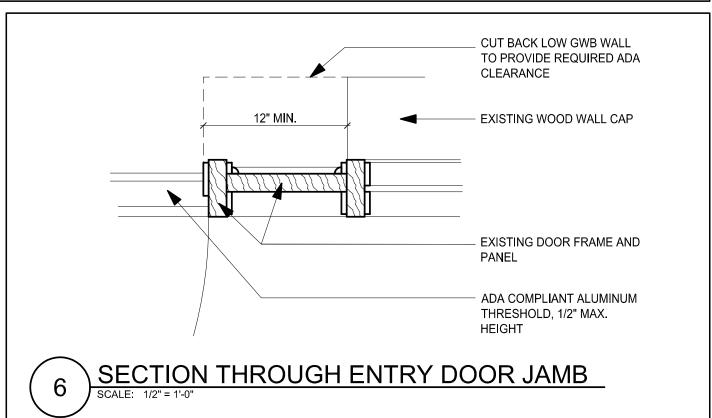
SCALE: 1/2" = 1'-0"

2 ENTRY DOOR INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"











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CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

FRONT
ENTRY DOOR
ELEVATIONS
AND SECTIONS

Povisions

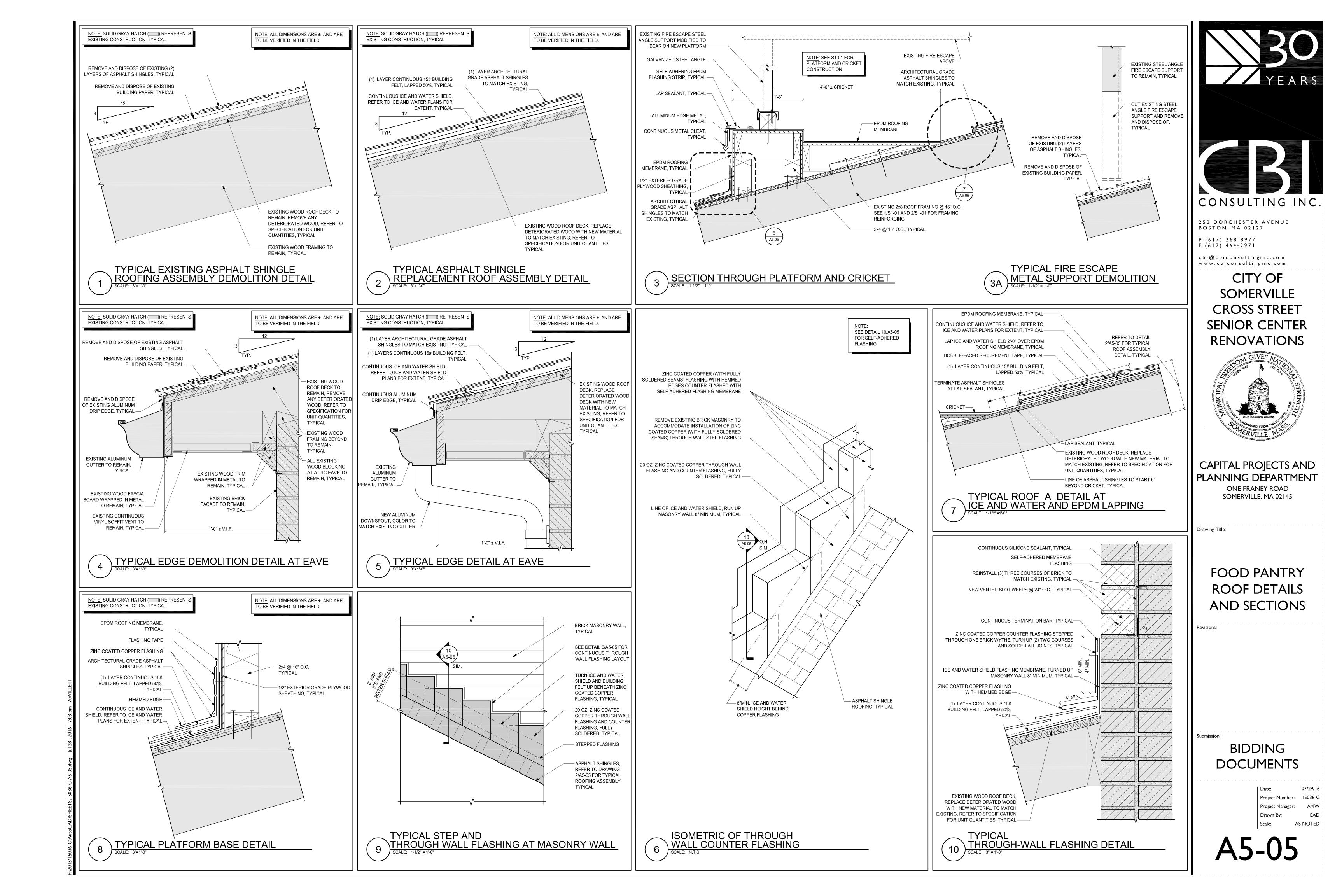
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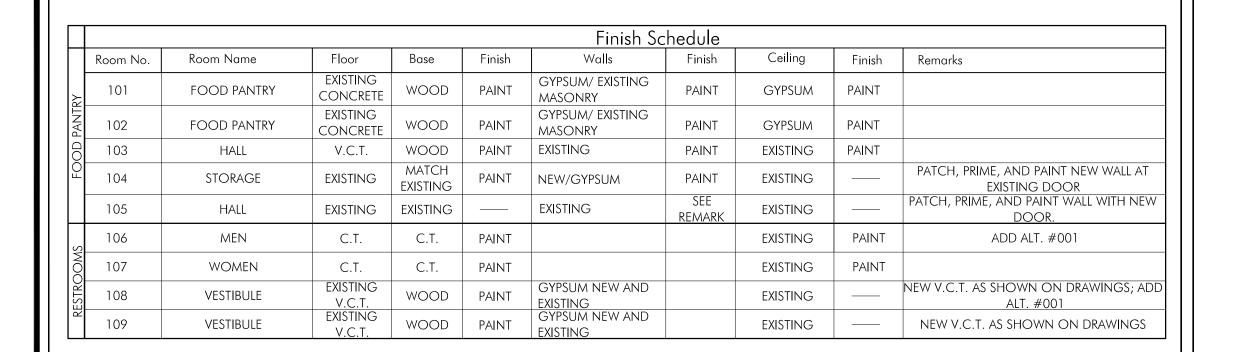
DOCUMENTS

Date: 07/
Project Number: 150

Project Number: I 5036-C
Project Manager: AMW
Drawn By: MPS
Scale: AS NOTED

A5-04

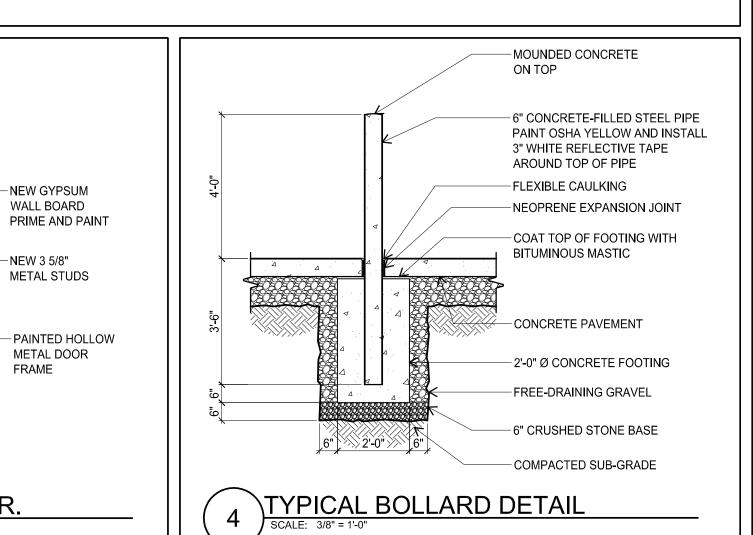




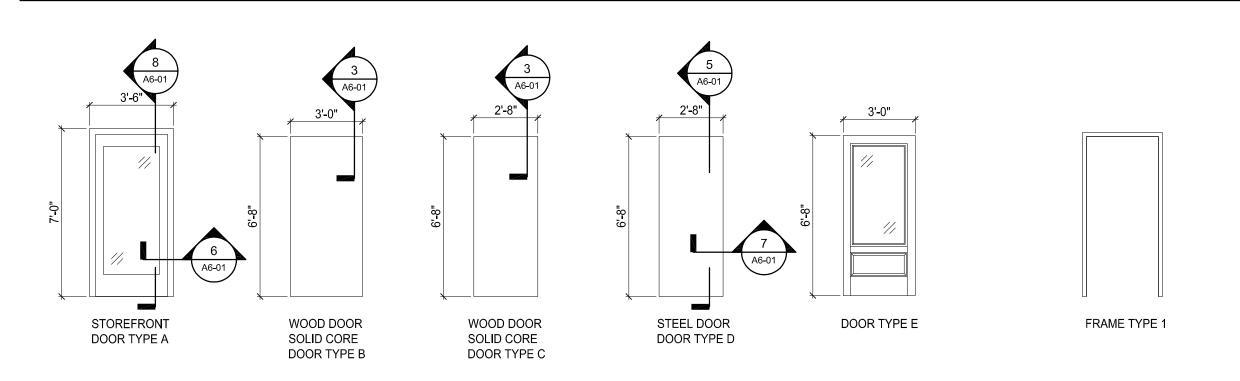


NOTE: SOLID GRAY HATCH (_____) REPRESENTS EXISTING CONSTRUCTION, TYPICAL

TYPICAL



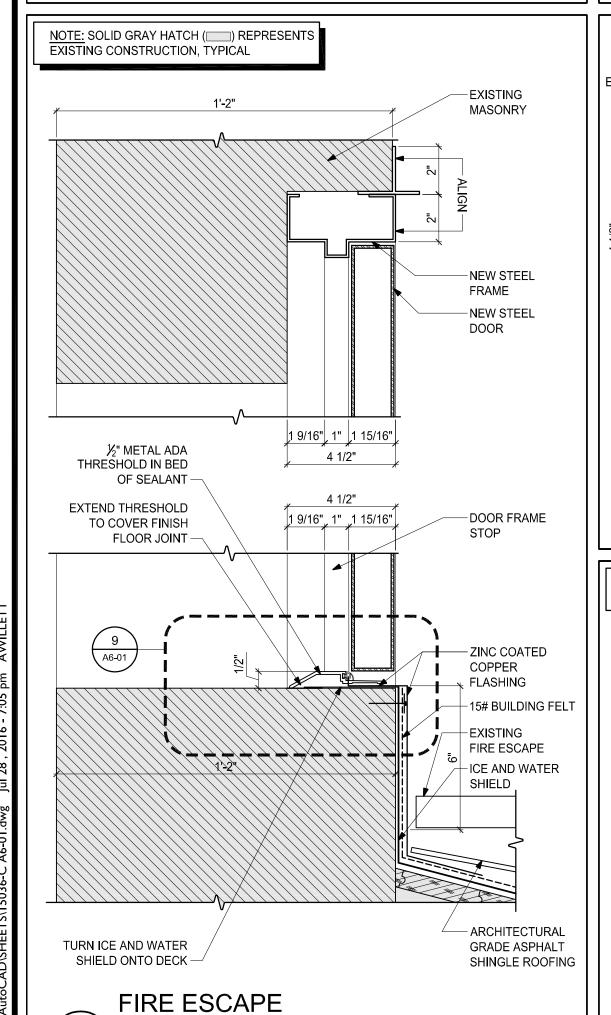
	Door Schedule																	
#				D	OOR			FRAME			FRAME RAME			ᆝᅵᆯᆝᅵᇤᆂᅵᅟ᠐ᅵ				
DOOR 4	ROOM	SIZE	THICKNESS	TYPE	MATERIAL	DOOR FINISH	SIZE	TYPE	MATERIAL	FRAME FINISH	CLOSE	UNDERCU	THRESHO	VISION	WEATH STRIPP	FIRE	HARDWARE SETS	REMARKS
1	EXTERIOR	3'-6" x 6'-8"		Α	ALUMINUM	BRONZE		—	ALUMINUM	_	Υ	Ν	Υ	Z	Υ	Ν	SET #1 LOCKSET	
2	FOOD PANTRY	3'-0" x 6'-8"		В	WOOD	PAINT		1	WOOD	PAINT	Υ	N	_	Ν	N	N	SET #2 LOCKSET	
3	FOOD PANTRY	existing									_	_	-	_	_	_	SET #2 LOCKSET	
4	HALL	2'-8" x 6'-8"		С	WOOD	PAINT		1	WOOD	PAINT	N	Ν	_	Z	N	N	SET #3 LOCKSET	
5	2ND FLOOR	2'-8" x 6'-8"	2"	D	STEEL	PAINT					Υ	Ν	Υ	Z	Υ	N	SET #4 LOCKSET	SECOND FLOOR FIRE ESCAPE DOOR
6	WOMEN	3'-0" x 6'-8"		В	WOOD	PAINT		1	WOOD	PAINT	Y	Y	Y	Z	Ν	N	SET #5 LOCKSET	
7	MEN	3'-0" x 6'-8"		В	WOOD	PAINT	_	1	WOOD	PAINT	Y	Υ	Y	Z	N	N	SET #5 LOCKSET	ADD ALT. #1
8	FOYER	3'-0" x 6'-8"		Е	FIBERGLASS	FACTORY	existing	1	existing	·	Y	N	Y	_	Y	N	SET #1 LOCKSET	



Hardware Sets									
SET #1	SET #2	SET #3	SET #4	SET #5					
STOREFRONT DOOR FOOD PANTRY	FOOD PANTRY INTERIOR ENTRY	STORAGE	FIRE ESCAPE	restrooms					
PADDLE HANDLE DEAD BOLT	LEVER HANDLE LOCK FROM HALL SIDE KICK PLATE 12" (BOTH SIDES) CLOSER WEATHER STRIPPING	LEVER HANDLE LOCK FROM HALL SIDE	SURFACE MOUNTED VERTICAL ROD DEVICE STRIKES KEYED LEVER THROUGH BOLTS	PUSH/PULL/KICK MORTISE OCCUPIED/ VACANT BOLT WITH LATCH RELEASE CLOSER					

2 DOOR SCHEDULE SCALE: 1/4" = 1'-0"

NOTE: SOLID GRAY HATCH () REPRESENTS

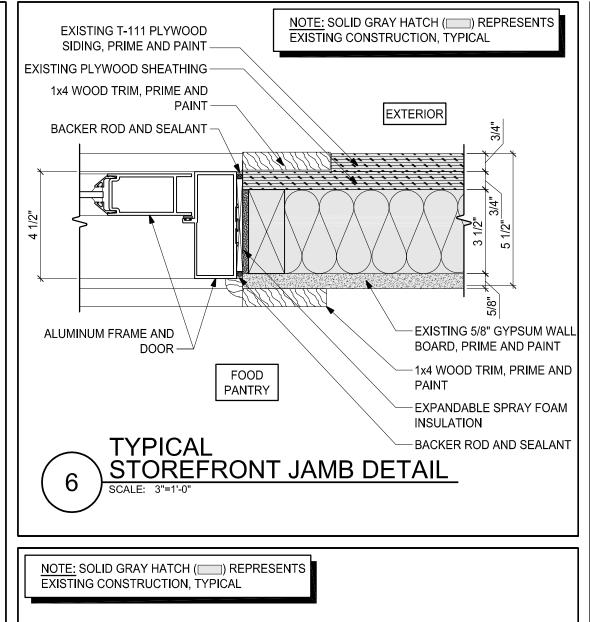


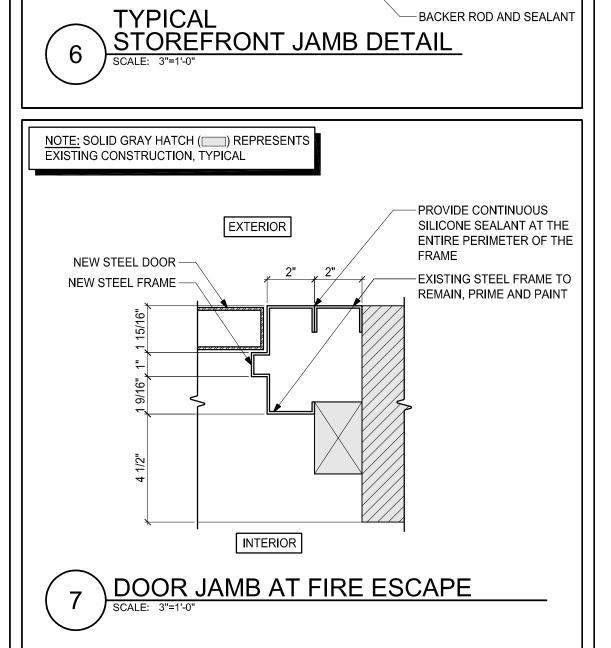
DOOR HEAD / SILL DETAIL

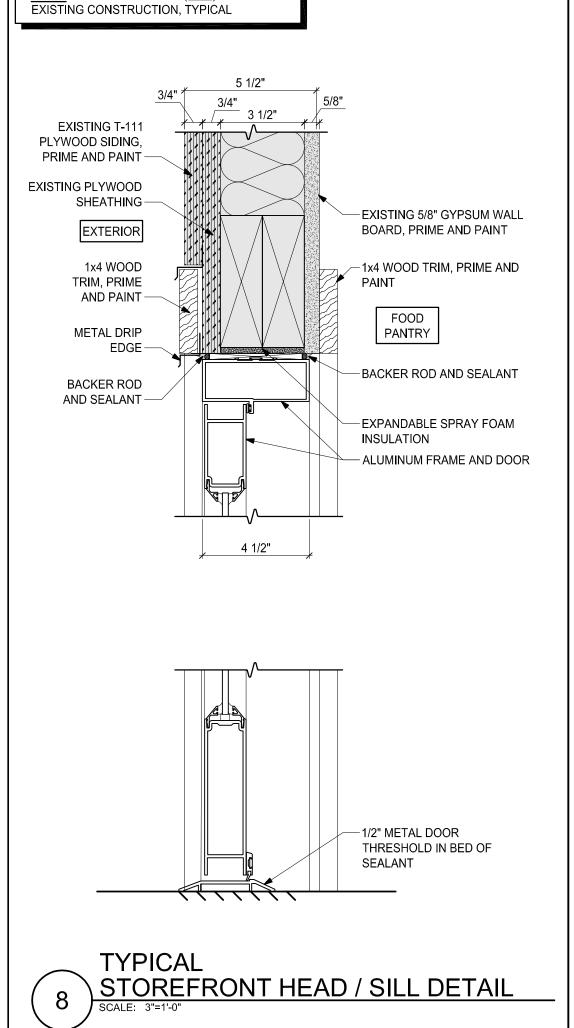
2" ± V.I.F.

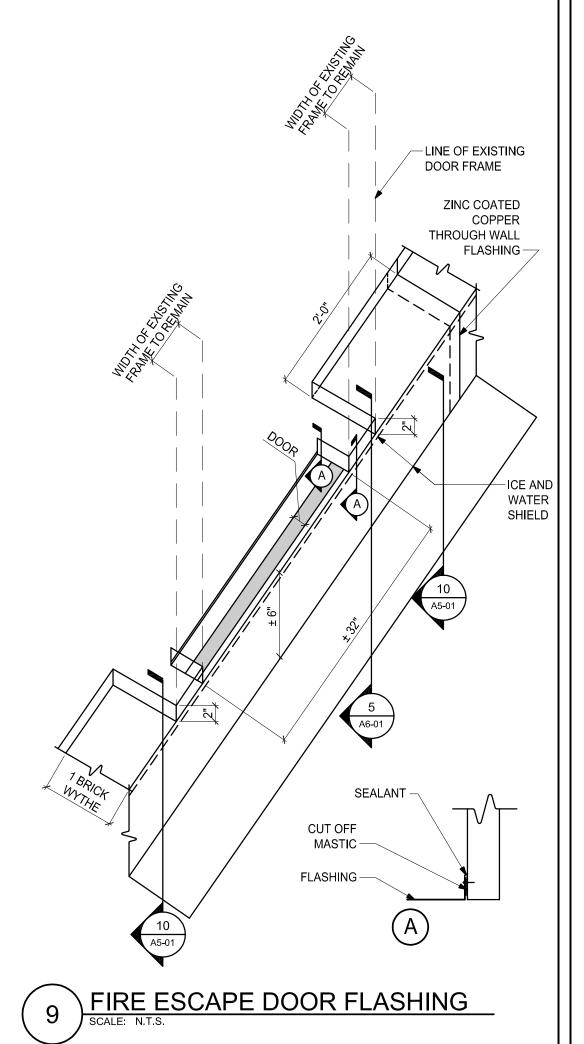
C LABEL JAMB/HEAD 1 HR.

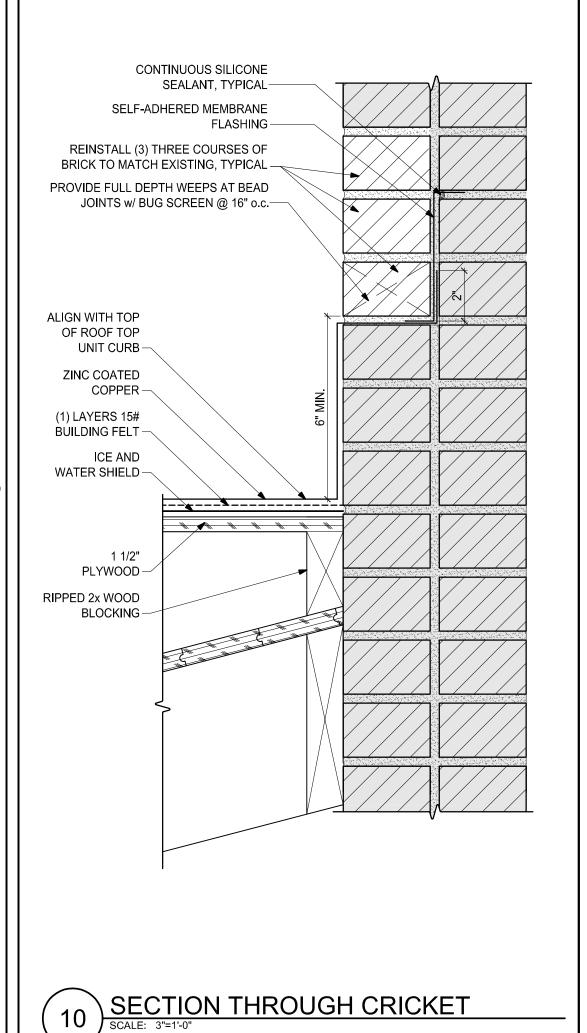
5 5/8" ± V.I.F.













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CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

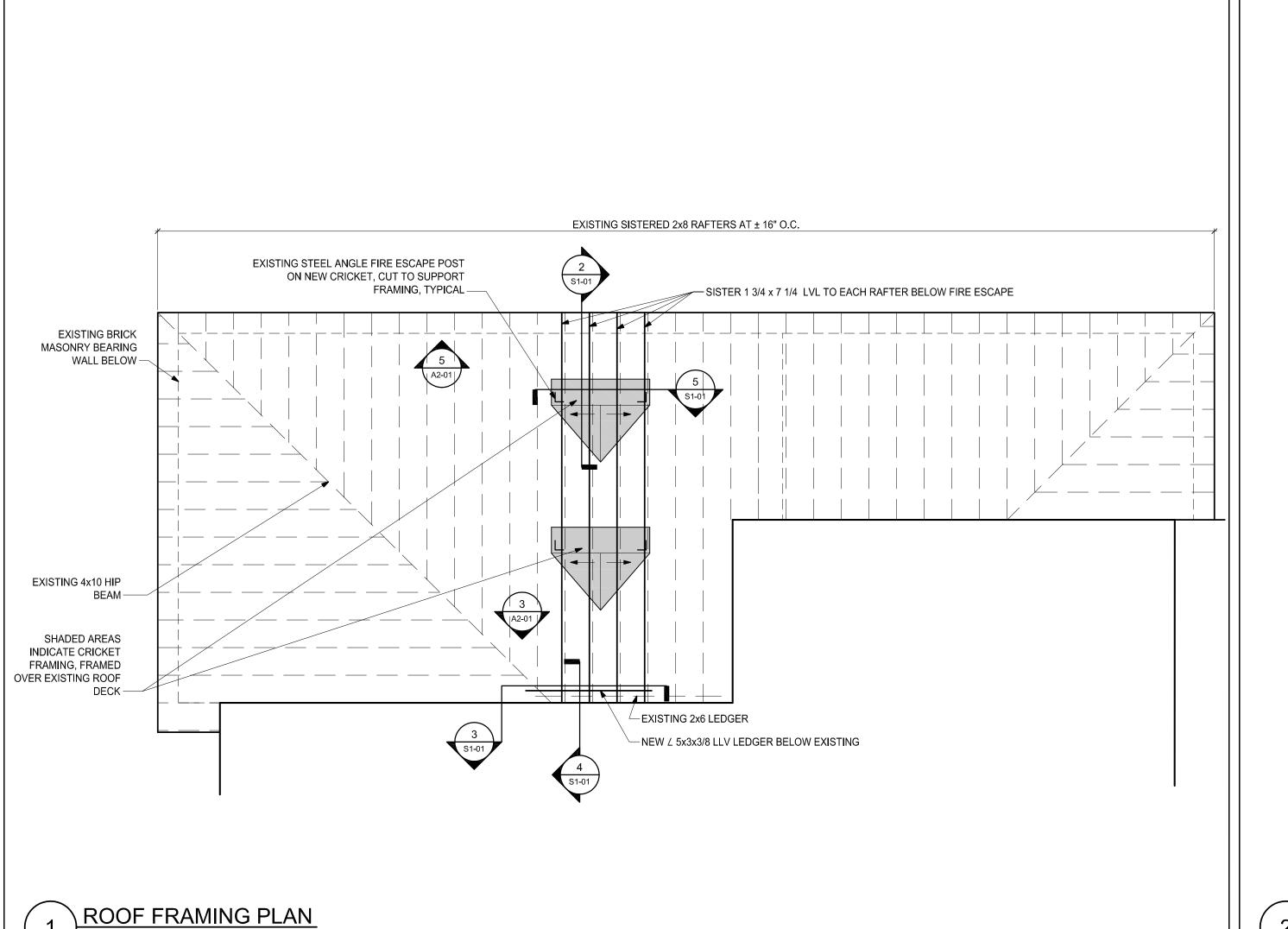
FOOD PANTRY/
RESTROOMS
FINISH SCHEDULE,
DOOR SCHEDULE,
DOOR DETAILS
AND ROOF DETAILS

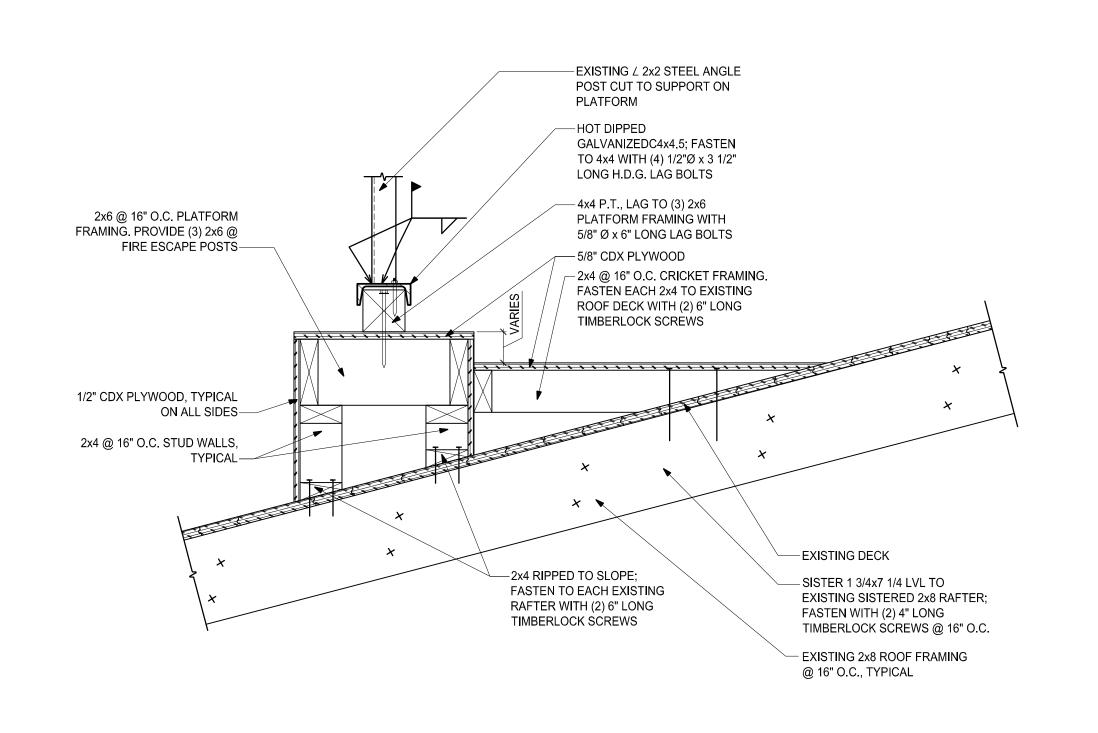
ubmission:

BIDDING DOCUMENTS

Date: 07/
Project Number: 150
Project Manager: A
Drawn By:
Scale: 1/4"=

A6-01





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CITY OF **SOMERVILLE CROSS STREET** SENIOR CENTER **RENOVATIONS**



CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

ROOF FRAMING PLAN AND **DETAILS**

BRICK TO MATCH EXISTING

SAWCUT OPENING IN

EXISTING BRICK -

1/4 3 @ 12 1/4 3 @ 12

NOTE:
TEMPORARY SUPPORT OF THE
MASONRY DURING CONSTRUCTION
IS REQUIRED AND IS THE

RESPONSIBILITY OF THE

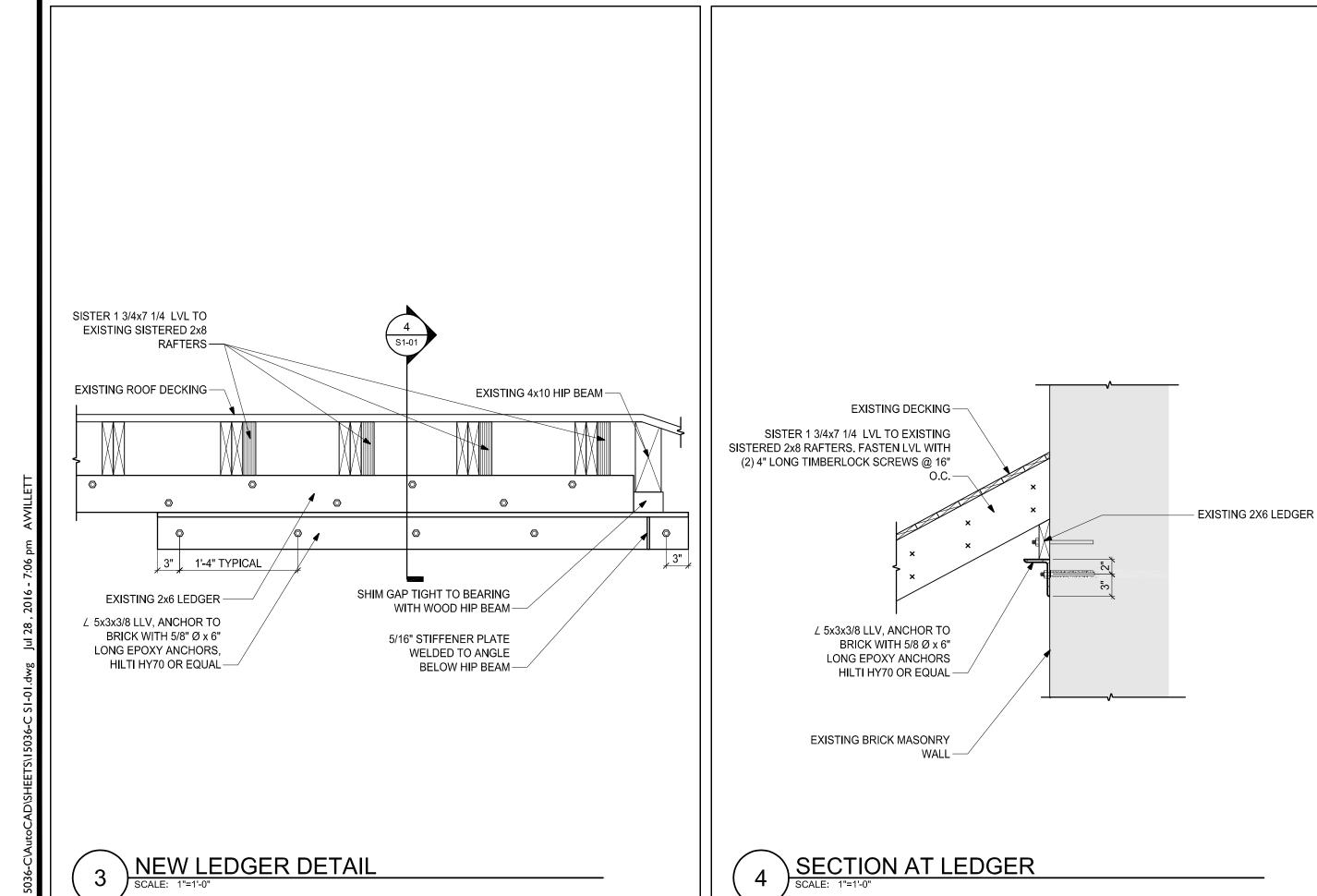
CONTRACTOR

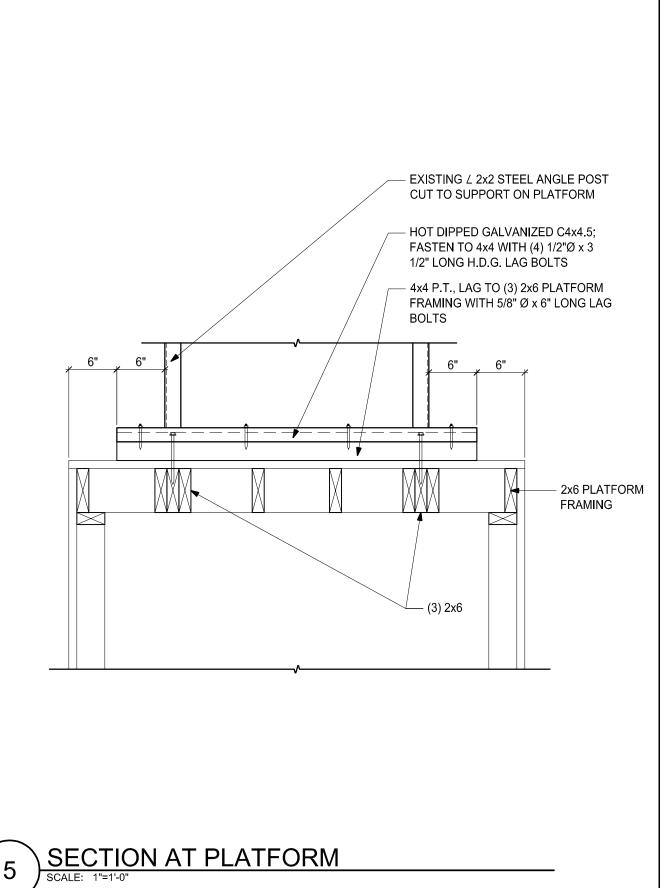
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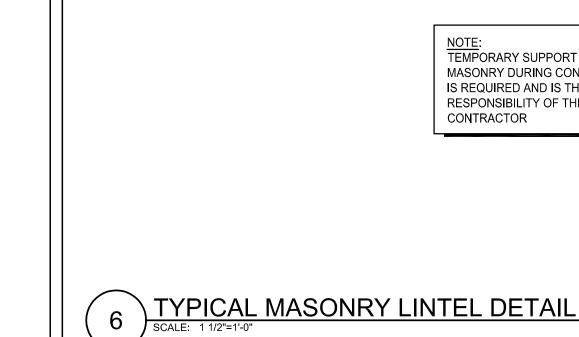
DOCUMENTS

Project Manager: Drawn By: **AS NOTED**

TYPICAL CRICKET DETAIL







EXISTING MASONRY WALL—

1/2"x4" LONG HEADED STUDS WELDED TO TOP OF BEAM @

GROUT SOLID TO BEARING

W 8x18; PROVIDE MIN. 12" BEARING ON SOLID MASONRY AT EACH END

ABOVE BEAM—

OF LINTEL-

3/8" PLATE-

PLUMBING GENERAL LEGEND

———HW———	HW	120°F HOT WATER ABOVE FLOOR
— - CW— - —	CW	COLD WATER ABOVE FLOOR
———EXHW———	HW	EXISTING 120°F HOT WATER ABOVE FLOOR
EXCW	CW	EXISTING COLD WATER ABOVE FLOOR
	ECO	END CLEANOUT
	НВ	HOSE BIBB
		SANITARY PIPING UNDERGROUND OR BELOW THE FLOOR
	SAN	SANITARY ABOVE FLOOR
——EXS——	EXS	EXISTING SANITARY ABOVE FLOOR
	V	VENT ABOVE FLOOR
		CAPPED PIPE
0		ELBOW UP OR RISE
		ELBOW DOWN OR DROP
ECO		END CLEANOUT BELOW FLOOR. PROVIDE ACCESS PANEL IN CEILING OF UNIT ON FLOOR BELOW
———TP————		COLD WATER FOR TRAP PRIMER ABOVE GROUND
O FD	FD	FLOOR DRAIN AS INDICATED
G	G	GAS PIPING ABOVE GROUND BY PLUMBING CONTRACTOR
———EXG———	G	EXISTING GAS PIPING ABOVE GROUND BY PLUMBING CONTRACTOR
		GAS SERVICE BALL VALVE WITH TEE HANDLE
		DEMOLITION AREA

	BUILDI	NG PLU	MBING	FIXTL	JRE S	SCHEDULE
TAG No.	FIXTURE	COLD WATER(in)	HOT WATER(in)	SAN (in.)	VENT (in.)	REMARKS
P-1	WATER CLOSET	1"	-	4"	2"	TOTO WALL MOUNTED, FLUSHOMETER 1.28 GPF, MODEL #CT708EG, TOILET SEAT MODEL #SC134. TOTO HIGH—EFFICIENCY TOILET ECOPOWER FLUSHOMETER VALVE, 1.28 GPF, MODEL #TET6LN.
P-1A	WATER CLOSET HANDICAP ACCESSIBLE	1"	_	4"	2"	TOTO FLOOR MOUNTED, ADA ACCESSIBLE, FLUSHOMETER 1.28 GPF, MODEL #CT705ELN, TOILET SEAT MODEL #SC134. TOTO HIGH-EFFICIENCY TOILET ECOPOWER FLUSHOMETER VALVE, 1.28 GPF, ADA ACCESSIBLE, MODEL #TET6LN.
P-2	LAVATORY HANDICAP ACCESSIBLE	1/2"	1/2"	2"	2"	TOTO COUNTER MOUNTED, ADA COMPLIANT MODEL #LT402. TOTO GOOSENECK ECOPOWER FAUCET SINGLE SUPPLY, ADA COMPLIANT MODEL #TEL155D10EM
P-2A	LAVATORY HANDICAP ACCESSIBLE	1/2"	1/2"	2"	2"	TOTO WALL MOUNTED, ADA COMPLIANT MODEL #LT307. TOTO GOOSENECK ECOPOWER FAUCET SINGLE SUPPLY, ADA COMPLIANT MODEL #TEL155D10EM
P-3	URINAL HANDICAP ACCESSIBLE	3/4"	_	2"	2"	TOTO WALL MOUNTED, HIGH-EFFICIENCY, ADA COMPLIANT, MODEL #UT445U. TOTO HIGH-EFFICIENCY URINAL ECOPOWER FLUSHOMETER VALVE, 0.5 GPF, ADA COMPLIANT, MODEL #TETU1LN.
P-4	SINK	1/2"	1/2"	2"	2"	AERO FREE STANDING SINK MODEL #2F-2424-9. BOWL DEPTH IS TO BE 9". AERO FAUCET SHALL BE MODEL #S-1, 8" O.C. FAUCET (CH), 12" SPOUT.

1. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE DRAWINGS FOR LEFT OR RIGHT HAND DRAIN OPENINGS FOR ALL TUB/SHOWER FIXTURES

2. ALL HANDICAP ACCESSIBLE FIXTURES SHALL BE ADA COMPLIANT

3. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL FIXTURE INSTALLATION DIMENSIONS WITH THE ARCHITECTURAL DETAILS ON THE ARCHITECTURAL DRAWINGS 4. THE PLUMBING CONTRACTOR SHALL REVIEW THE PROJECT SPECIFICATION SHEETS FOR ADDITIONAL INFORMATION REGARDING THE PLUMBING FIXTURES

ABBREVIATION

TYP TYPICAL ABOVE FINISH FLOOR VENT THRU ROOF VTR BLDG BUILDING COLD WATER W/ CW DOWN NON-FREEZE WALL HYDRANT DANDY (RISER) CLEANOUT DCO DRAWING HOT WATER DANDY (RISER) CLEANOUT VENT ECO END CLEANOUT SAN SANITARY EXISTING FLOOR CLEANOUT STORM DRAIN FIXTURE NUMBER <u>P-#</u> INDIRECT WASTE PLUMBING CONTRACTOR ΥH OUTSIDE NON-FREEZE YARD HYDRANT NTS NOT TO SCALE FCO FLOOR CLEANOUT NATURAL GAS

GENERAL PLUMBING NOTES

- 1. ALL PLUMBING WORK SHALL BE DONE IN ACCORDANCE WITH THE MASSACHUSETTS STATE PLUMBING AND FUEL GAS CODE.
- 2. CAREFULLY COORDINATE LOCATION OF PIPING WITH ALL OTHER TRADES.
- 3. ALL PIPING SHOWN DIAGRAMMATIC ALLY AND EXACT LOCATION SHALL BE DETERMINED IN THE FIELD.

GENERAL CONTRACTOR

- 4. ALL PIPING SHALL BE RUN CONCEALED ABOVE CEILINGS, IN WALLS AND IN CHASES, UNLESS OTHERWISE NOTED.
- 5. NO STRUCTURAL MEMBERS SHALL BE CUT WITHOUT THE APPROVAL OF THE ENGINEER.
- 6. ALL PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE.
- 7. RUN WATER PIPE ON THE WARM SIDE OF BUILDING INSULATION. NO WATER PIPING
- SHALL BE RUN IN EXTERIOR WALLS.
- 8. PROVIDE DRAW OFFS WITH BALL VALVE, HOSE END VACUUM BREAKER, CAP & CHAIN AT ALL DOMESTIC WATER LOW POINTS AND PITCH PIPING TO DRAIN.
- 9. ALL SANITARY WASTE PIPING SHALL PITCH A MIN. OF 1/8" PER FT. FOR PIPING 4" & LARGER, 1/4" FOR PIPING UP TO 3". ALL VERTICAL SANITARY LINES TO BE INSULATED, INSULATION AS SPECIFIED.
- 10. PROVIDE ACCESSIBLE CLEANOUTS AT THE BASE OF ALL STACKS, AS SHOWN, AND AS REQUIRED.
- 11. ALL PIPING SHALL BE NEW, INSTALLED PARALLEL TO BUILDING LINES AND PITCHED
- 12. PLUMBING CONTRACTOR SHALL PROVIDE FIRE STOPPING FOR ALL PENETRATIONS THROUGH ALL FLOORS, FIRE WALLS AND FIRE RATED SEPARATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR THESE AREAS AND PROVIDE LINK SEAL FIRE STOPPING KITS.
- 13. PLUMBING CONTRACTOR SHALL BE FURNISH, INSTALL AND MAINTAIN ALL SCAFFOLDING, HOISTING
- EQUIPMENT, DERRICKS, ETC., NECESSARY FOR INSTALLATION OF WORK.
- 14. ALL PLUMBING PIPING AND DRAINS SHALL BE KEPT CLEAR OF BLOCKAGE WHILE CONSTRUCTION IS UNDERWAY. ALL PLUMBING PIPING SHALL BE DEBURRED BEFORE JOINTS ARE MADE.
- 15. ALL CONDITIONS SHOWN ARE APPROXIMATE ONLY. ALL CONDITIONS SHALL BE VERIFIED IN THE FIELD. ALL NEW SYSTEMS SHALL BE COORDINATED WITH ALL CONDITIONS AND TRADES. EXACT LOCATIONS OF ALL CONNECTIONS TO SYSTEMS AND EQUIPMENT SHALL BE DETERMINED IN FIELD.
- 16. PRIOR TO BID, THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL TRADE DRAWINGS AND ALL ASPECTS OF THE WORK AND ALL CONDITIONS TO WHICH THE WORK WILL BE INSTALLED. ANY DISCREPANCIES BETWEEN THE WORK SHOWN
- ON THE DRAWINGS AND ANY CONDITIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING.
- 17. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATIONS OF ALL VENT PIPING THROUGH THE ROOF WITH THE ROOF TOP HVAC EQUIPMENT. ALL VENT PIPES THRU THE ROOF SHALL MAINTAIN THE PROPER DISTANCES FROM ALL HVAC ROOF TOP EQUIPMENT IN ACCORDANCE WITH THE STATE PLUMBING CODE.
- 18. CAREFULLY COORDINATE LOCATION OF PIPING WITH ALL OTHER TRADES AND ALL CONDITIONS AT THE SITE.
- 19. DIELECTRIC INSULATING FITTINGS SHALL BE USED WHERE PIPES OF DISSIMILAR METALS
- ARE CONNECTED, AND AT THE WATER HEATER.
- 20. THE INFORMATION SHOWN ON THE DRAWINGS IS GENERALLY DIAGRAMMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTES OF PIPING OR LOCATIONS OF VALVES AND EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO DETERMINE THE BEST ROUTES OF PIPING AND LOCATIONS. OF VALVES AND EQUIPMENT IN CONJUNCTION WITH WITH COORDINATION BETWEEN ALL OTHER TRADES AT THE SIGHT.
- 21. ALL NEW SYSTEMS SHALL BE TESTED, BALANCED AND ADJUSTED TO INSURE PROPER OPERATION AND CODE COMPLIANT INSTALLATION PIPING AND EQUIPMENT SHALL BE TESTED IN ACCORDANCE WITH THE STATE PLUMBING CODE
- 22. THE CONTRACTOR SHALL BE CAREFUL TO INSURE THAT NO CROSS CONNECTIONS ARE MADE BETWEEN THE POTABLE WATER SUPPLY AND ALL SOURCES OF CONTAMINATION OR CROSS CONNECTION.
- 23. ALL PIPING MATERIALS, FITTINGS VALVES UNIONS, HANGERS, EQUIPMENT, INSTALLATION AND ALL ASPECTS OF THE PLUMBING WORK SHALL BE AS APPROVED BY THE MASSACHUSETTS STATE PLUMBING AND FUEL GAS CODES
- 24. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS AND FLOORS TO ACCOMMODATE INSTALLATION OF NEW PIPING AND EQUIPMENT. CONTRACTOR SHALL PATCH ALL SURFACES TO MATCH THE EXISTING CONDITIONS AND TO THE SATISFACTION OF THE ARCHITECT.
- 25. PROVIDE SERVICE STOPS FOR ALL FIXTURES
- GAS METERS AND MAIN REGULATORS SHALL BE BY THE GAS UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE WITH THE GAS UTILITY FOR EXACT LOCATION OF ALL GAS METERS
- ALL FINAL CONNECTIONS TO GAS EQUIPMENT SHALL BE MADE WITH A SHUT OFF VALVE, A UNION AND A DIRT LEG. DIRT LEGS SHALL BE PROVIDE AT THE BASE OF ALL VERTICAL GAS PIPING.
- 28. SEE PLUMBING FIXTURE SCHEDULES AND DETAILS FOR ALL PIPE SIZES NOT SHOWN ON PLANS, AND FOR ALL PLUMBING CONNECTIONS TO FIXTURES THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING PLUMBING
- 29. ADJUSTABLE, SELF LIMITING GAS REGULATORS SHALL BE PROVIDED AT EACH AND EVERY PIECE OF GAS FIRED EQUIPMENT THAT REQUIRES A GAS REDUCTION OF PRESSURE AT THE FIXTURE.
- 30. THE TERM "CONTRACTOR" SHALL MEAN PLUMBING CONTRACTOR
- 31. THE CONTRACTOR SHALL CAREFULLY COORDINATE ALL UNDERGROUND PIPING WITH THE FIRE PROTECTION CONTRACTOR TO DETERMINE THE BEST ROUTE FOR ALL UNDERGROUND PIPING
- 32. PLUMBER SHALL FURNISH AND INSTALL ALL TRAPS, ANGLE STOPS, WASTE ARMS, STRAINERS, TAILPIECES, FIXTURE SUPPLIES AND ALL PLUMBING CONNECTIONS TO ALL PLUMBING FIXTURES REQUIRING PLUMBING AND AS REQUIRED FOR A COMPLETE PLUMBING SYSTEM.
- 33. ALL PLUMBING FIXTURE TYPES AND LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL HAVE THE APPROVAL OF THE ARCHITECT FOR ALL PLUMBING FIXTURE TYPES, QUANTITIES AND LOCATIONS PRIOR TO PURCHASE
- 34. THE PLUMBING CONTRACTOR SHALL CREATE A SCALE DRAWING FOR THE BUILDING SHOWING THE LOCATIONS OF ALL BACK FLOW PREVENTION DEVICES AND DETAILS OF THEIR INSTALLATION METHODS. THE PLUMBING CONTRACTOR SHALL ALSO OBTAIN MANUFACTURER CUT SHEETS OF ALL BACK FLOW PREVENTION DEVICES AND SHALL INDICATE THE SIZES AND MODEL NUMBERS BEING USED. THE PLUMBING CONTRACTOR SHALL SUBMIT THESE DRAWINGS AND CUT SHEETS TO THE LOCAL WATER AUTHORITY FOR APPROVAL. NO BACK FLOW PREVENTION DEVICE SHALL BE INSTALLED UNTIL WRITTEN APPROVAL OF ALL BACK FLOW PREVENTION DEVICES HAS BEEN OBTAINED BY THE PLUMBING CONTRACTOR FROM THE LOCAL WATER AUTHORITY.
- 35. IN THE EVENT THAT THERE ARE DISCREPANCIES BETWEEN PIPE SIZES SHOWN ON THE PLANS VERSUS THAT SHOWN ON THE DETAILS OR RISER DIAGRAMS, THE LARGER PIPE SIZE SHALL BE FOLLOWED.
- 36. THE CONNECTIONS TO ALL GAS FIRED EQUIPMENT SHOWN ARE APPROXIMATE ONLY AND SHALL BE VERIFIED IN THE FIELD BY THE PLUMBING CONTRACTOR.
 THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GAS FIRED EQUIPMENT TO DETERMINE THE EXACT LOCATION AND TYPE OF GAS CONNECTION
 AND SHALL MAKE ALL REQUIRED ADJUSTMENTS TO THE DRAWINGS AT NO EXTRA COST TO THE CONTRACT.
- 37. ALL VENT TERMINATIONS ABOVE THE ROOF SHALL BE LOCATED A MINIMUM DISTANCE OF 25 FEET AWAY FROM ANY FRESH AIR INTAKE. IN THE EVENT THAT THE 25 FOOT DISTANCE CANNOT BE ACHIEVED THEN A MINIMUM OF 10 FEET OF DISTANCE SHALL BE MAINTAINED AND THE VENT PIPE SHALL RISE UP TO A MINIMUM OF 2 FEET ABOVE THE FRESH AIR INTAKE



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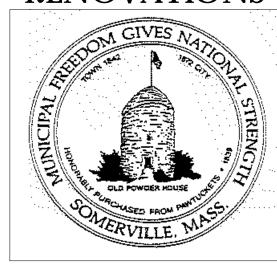


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> CITY OF **SOMERVILLE CROSS STREET** SENIOR CENTER RENOVATIONS



CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

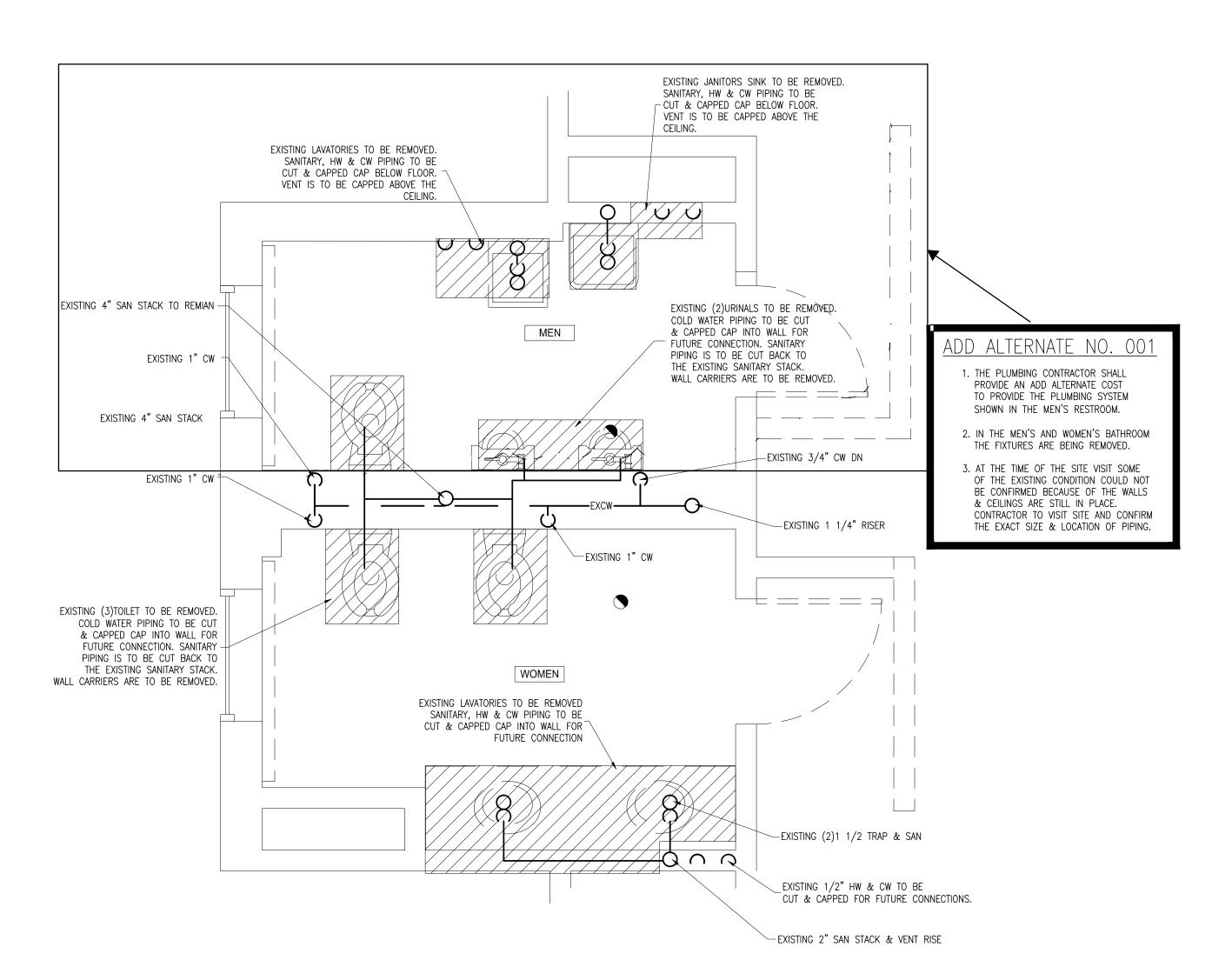
PLUMBING LEGEND, NOTES, & **SCHEDULES**

Revisions:

Submission:

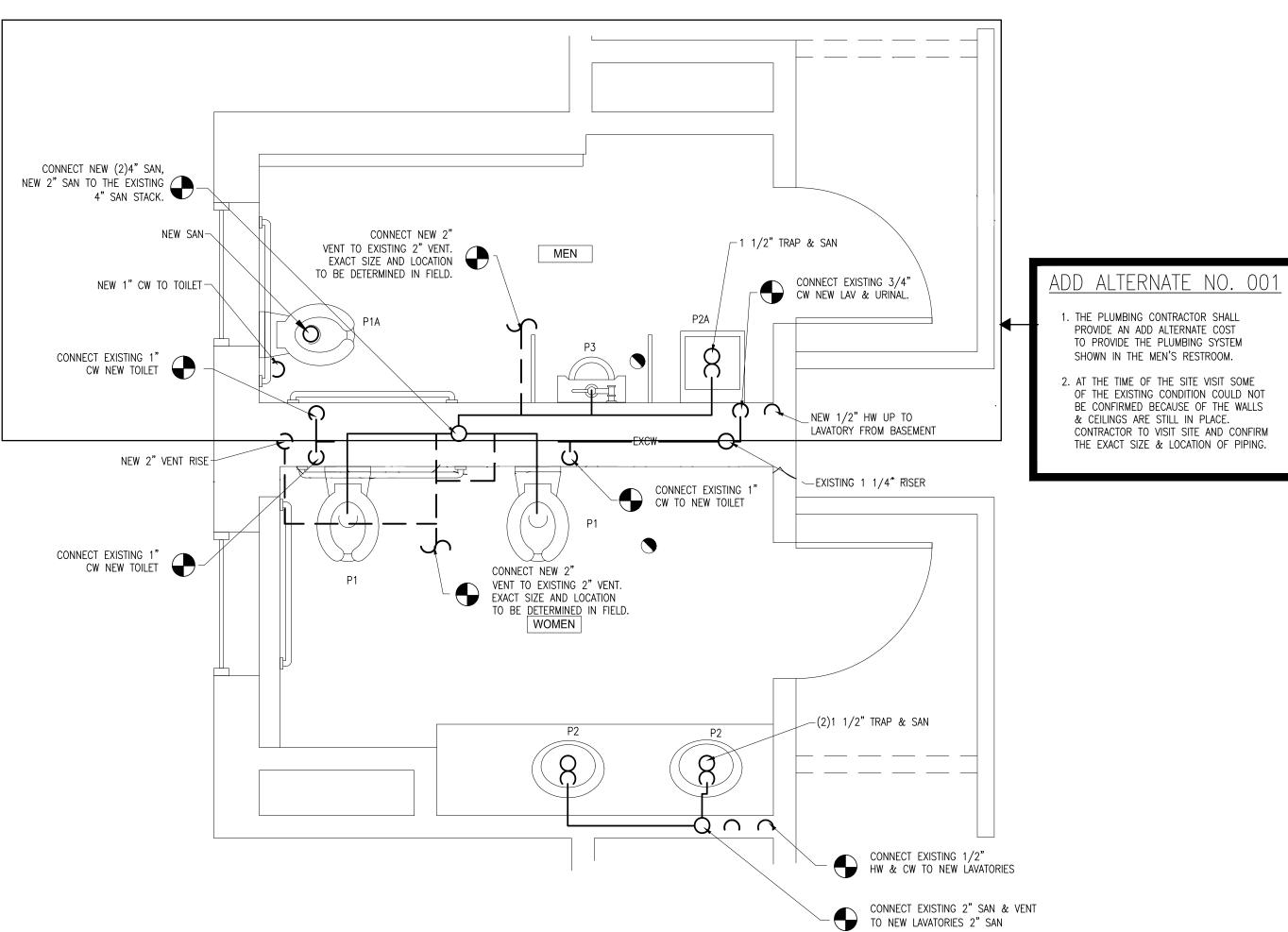
BIDDING **DOCUMENTS**

> Project Number: 15036-C Project Manager: AMW Drawn By: Scale: AS NOTED



PLUMBING - First Floor Restroom Demolition Plan

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



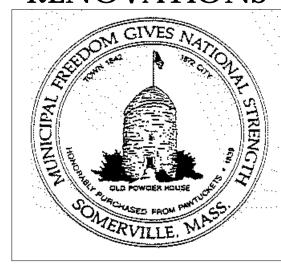
PLUMBING - First Floor Restroom New Plan
SCALE: 1/2"= 1'-0"





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CAPITAL PROJECTS AND PLANNING DEPARTMENT

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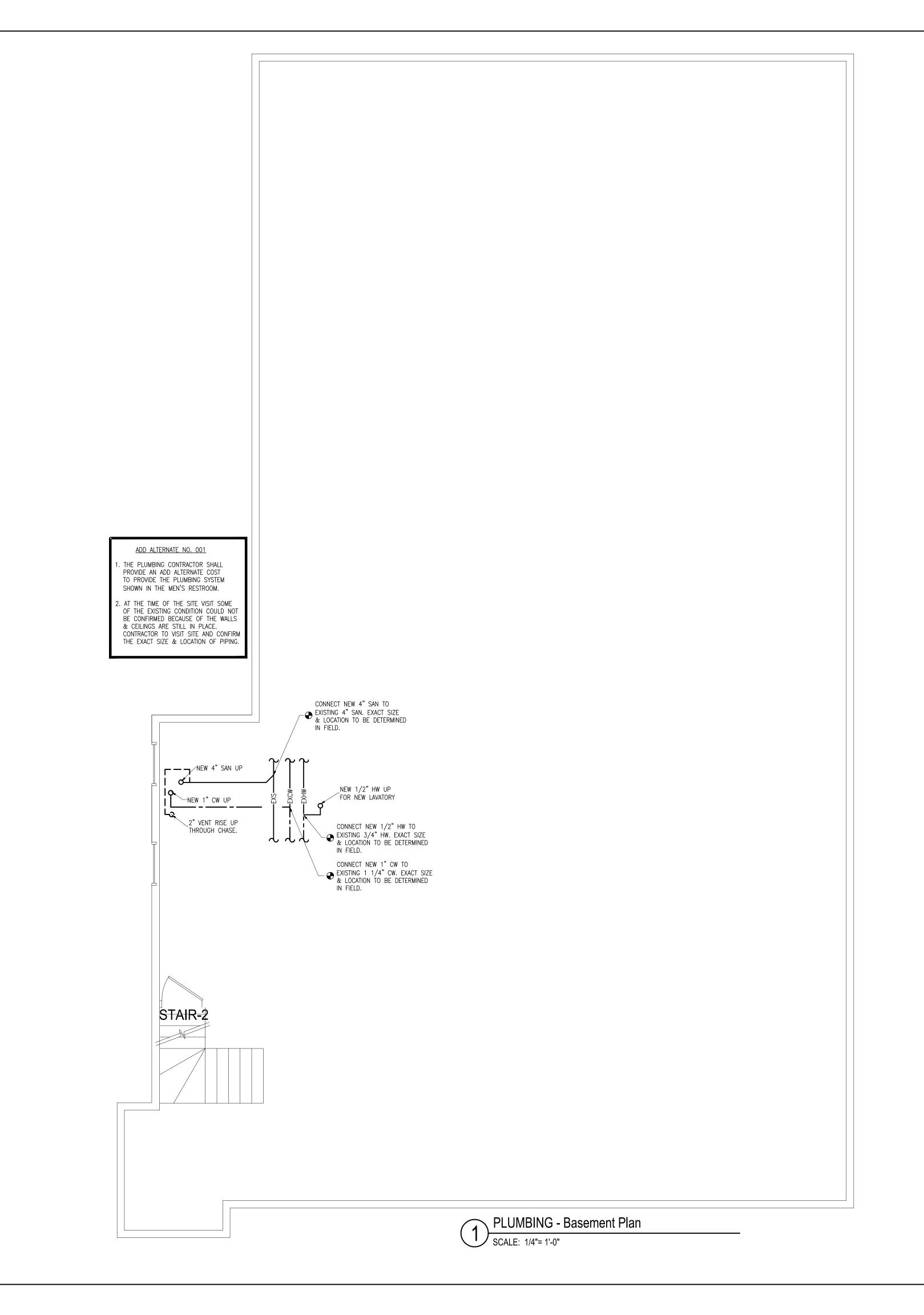
PLUMBING RESTROOM RENOVATION PLAN

Submission:

BIDDING DOCUMENTS

Date: 07/29/16
Project Number: 15036-C
Project Manager: AMW
Drawn By: CG
Scale: AS NOTED

P100

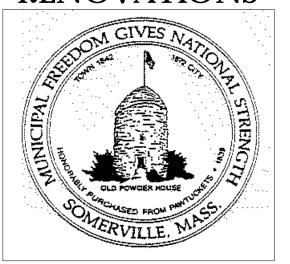




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CAPITAL PROJECTS AND PLANNING DEPARTMENT

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Drawing Title:

PLUMBING RESTROOM RENOVATION PLAN

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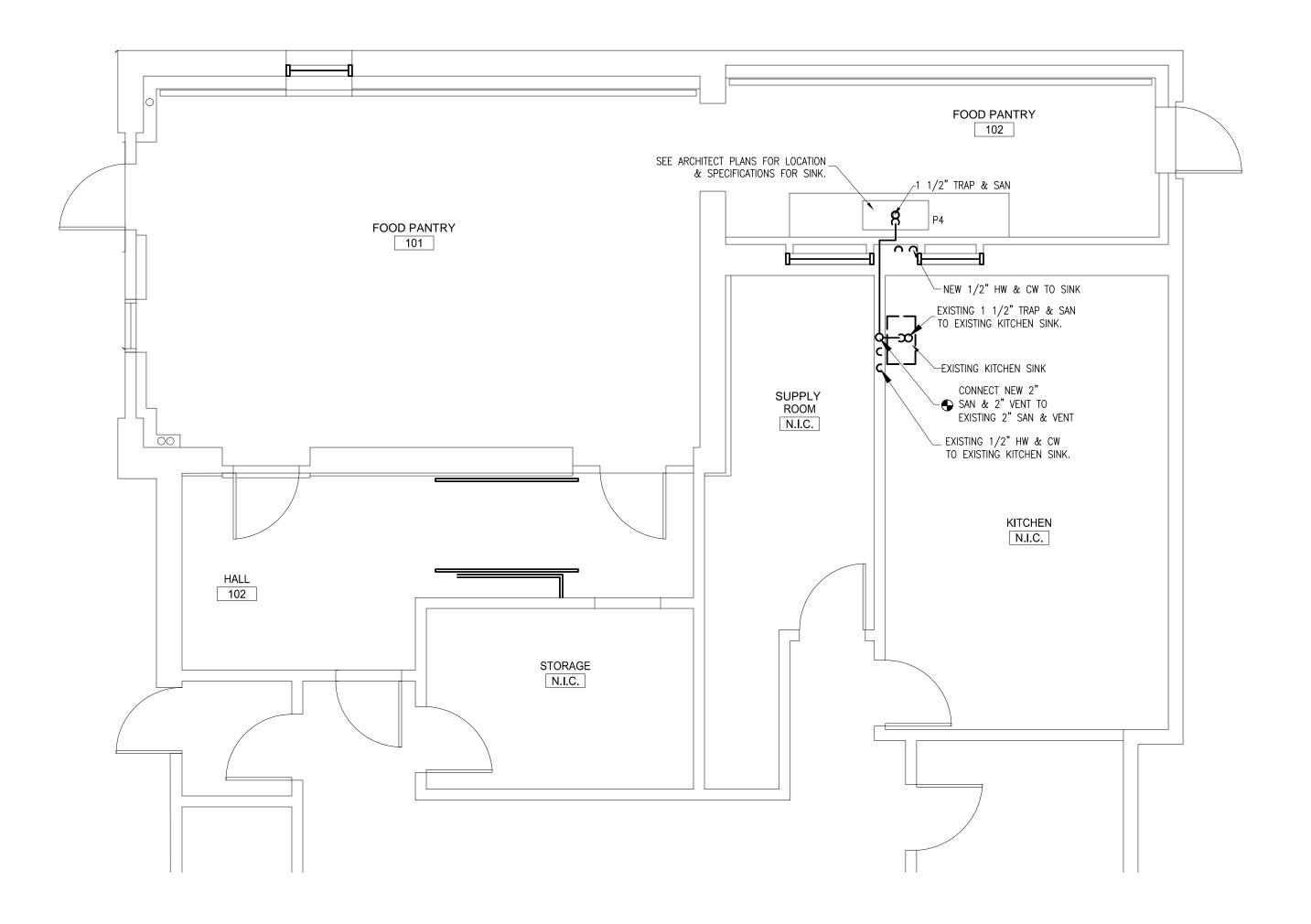
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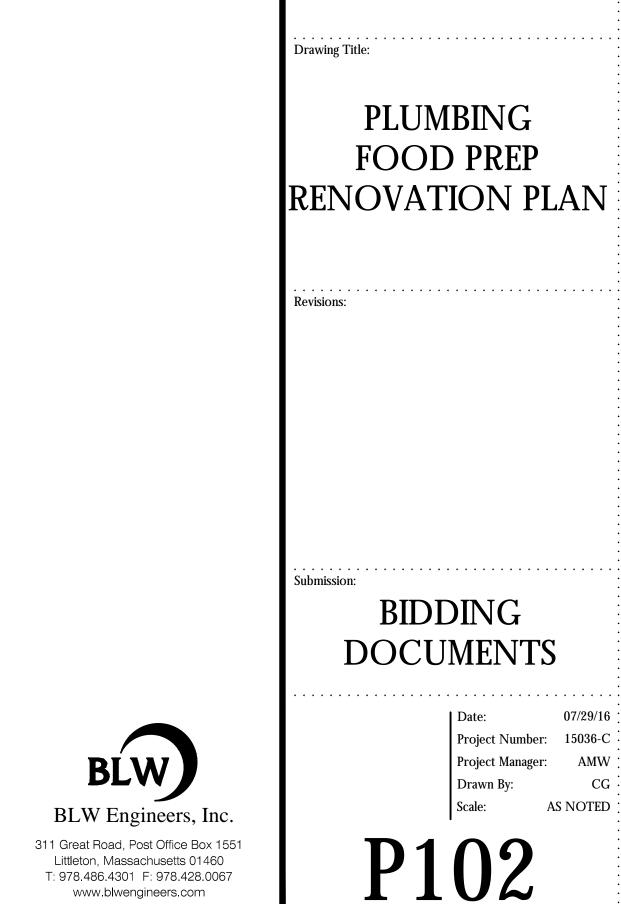
BIDDING DOCUMENTS

Date: 07/29/16
Project Number: 15036-C
Project Manager: AMW
Drawn By: CG
Scale: AS NOTED

P101



PLUMBING - First Floor New Plan SCALE: 1/4"= 1'-0"





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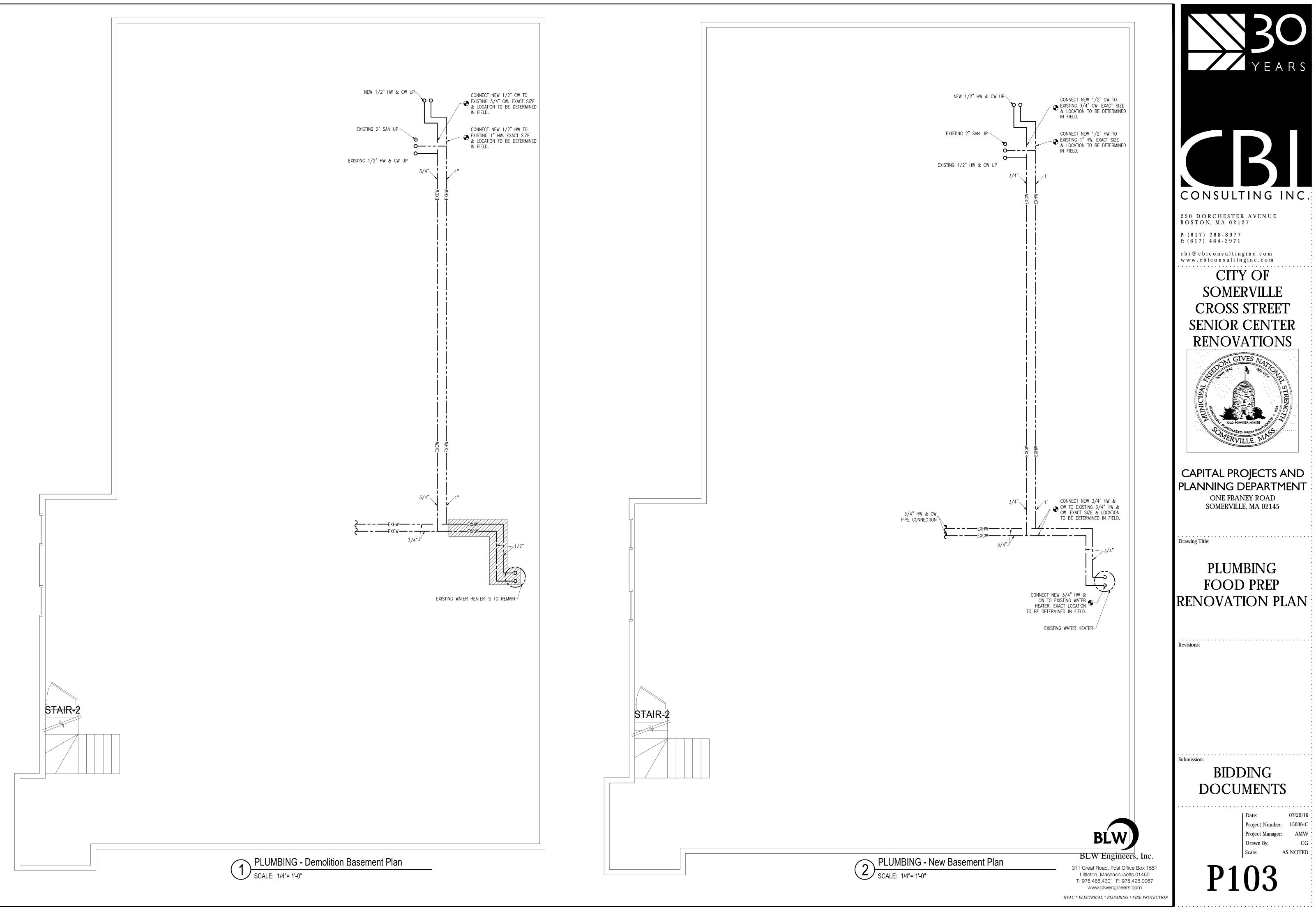
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PLUMBING FOOD PREP RENOVATION PLAN

BIDDING DOCUMENTS

> Drawn By: Scale: AS NOTED



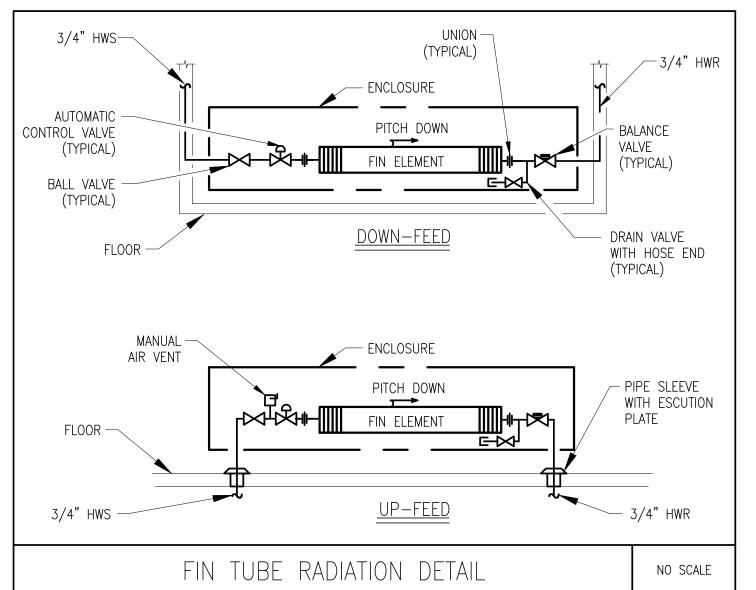


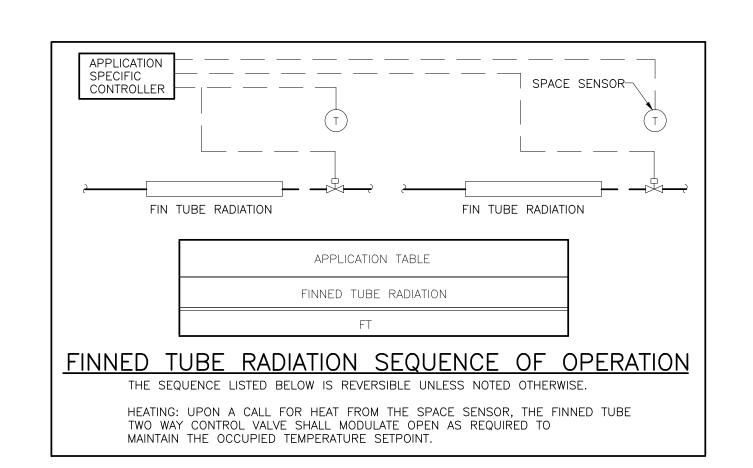
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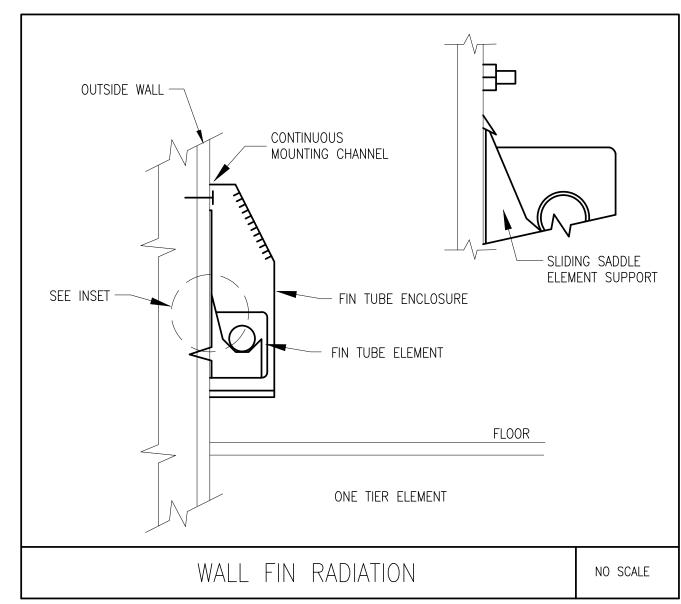
RENOVATION PLAN

AS NOTED





ABBREVIATIONS	DRAWING NOTES	GENERAL NOTES	DEMOLITION GENERAL NOTES
ATC AUTOMATIC TEMP. CONTROL BTUH BRITISH THERMAL UNIT PER HR. CFM CUBIC FEET PER MINUTE CONN. CONNECT CONTR CONTRACTOR CP CONTROL PANEL DB DRY BULB TEMPERATURE (*F) DIA. DIAMETER DN DOWN DWG DRAWING EAT ENTERING AIR TEMPERATURE EC ELECTRICAL CONTRACTOR EWT ENTERING WATER TEMPERATURE GC GENERAL CONTRACTOR GPM GALLONS PER MINUTE HP HORSE POWER HVAC HEATING, VENTILATION AND AIR CONDITIONING LWT LEAVING WATER TEMPERATURE MBH THOUSANDS OF BRITISH THERMAL UNITS PER HOU MECH MECHANICAL NTS NOT TO SCALE PD PRESSURE DROP	ACCU-1 EQUIPMENT DESIGNATION DRAWING REVISION NOTE CONNECT TO EXISTING REVISION CLOUD EQUIPMENT TAGS EF EXHAUST FAN FTR FINNED TUBE RADIATION	DETERMINED IN THE FIELD TO AVOID CONFLICT WITH OTHER TRADES AND EXISTING SITE CONDITIONS	 PRIOR TO COMMENCING WORK OF THIS SECTION, EXAMINE SITE AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED. DETERMINE EXACT LOCATIONS OF EXISTING EQUIPMENT, PIPING AND CONTROLS. REPORT TO OWNER ANY CONDITIONS THAT MIGHT ADVERSELY AFFECT WORK. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS AND PREPARATORY WORK. COMPLY WITH ALL STATE AND LOCAL CODES AS TO REMOVAL AND DISPOSAL OF EQUIPMENT REMOVED FROM THE SITE. COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION. COMPLY WITH ANSI A10.6 AND NFPA 241. PERMITS: GIVE ALL REQUIRED NOTICES, FILE ALL REQUIRED PLANS AND SPECIFICATIONS RELATING TO THE WORK OF THIS SECTION WITH THE PROPER AUTHORITIES AND PAY FOR ANY REQUIRED PERMITS. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON—SITE IS NOT PERMITTED.



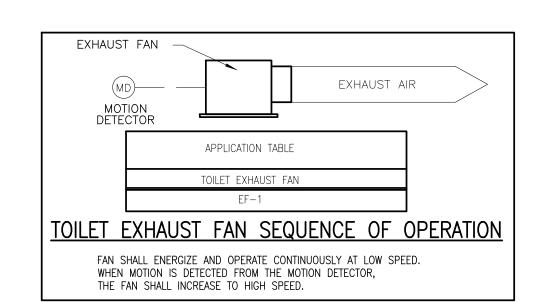
	FAN SCHEDULE										
LOCATION(S) MANU		MANUFACTURER MODEL No.			FAN DATA			ELECTRICAL DATA			REMARKS
TAG No.	SERVED	(AS STANDARD)	(AS STANDARD)	TYPE	CFM	RPM	ESP(IN)	VOLTS	PHASE	HP	112111111111
EF-1	BATHROOM	PANASONIC	FV-05-11VKS1	CEILING	80 MAX.	1131	.25	120	1	10.2 WATTS .10 AMPS	1,2,3

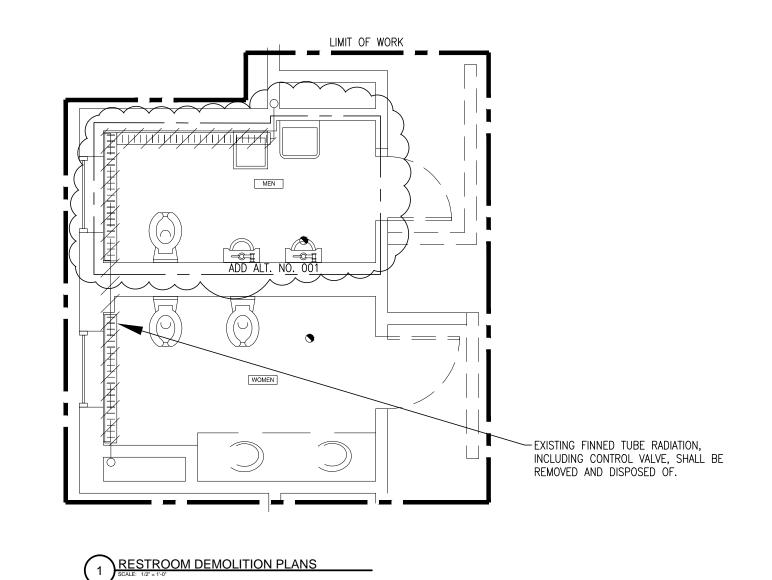
1. PROVIDE DISCONNECT SWITCH.
2. PROVIDE WALL CAP TERMINATION — BROAN MODEL 641 (S.S.)
3. PROVIDE MOTION SENSOR.

				FINNED	TUBE R	ADIATION	SCHED	ULE	
TAG No.	MANUFACTURER (AS STANDARD)	MODEL No. (AS STANDARD)	TYPE	TUBE SIZE (IN.)	FINS/FT	FIN THICKNESS (IN.)	RATING BTU/FT	LENGTH	REMARKS
FTR-1	STERLING	LB2	C/AL	3/4"	50	0.011	770 @180° EWT (1 GPM)	VARIES	PROVIDE ENCLOSURE, MOUNTING BRACKETS

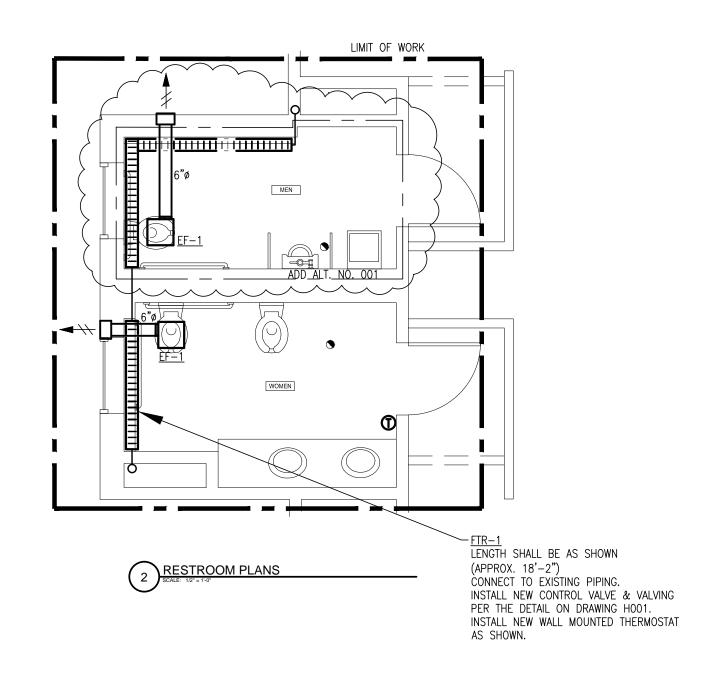
PIPING SCHEDULE								
SERVICE	LOCATION	PIPING	FITTINGS	JOINTS				
HYDRONIC HEATING 2-1/2" AND SMALLER	ABOVE GROUND	TYPE "L" SEAMLESS COPPER TUBING	WROUGHT COPPER, PRESSURE FITTING	MECHANICAL CONNECTION OR SWEAT SOLDER				

INSULATION SCHEDULE								
			FOR PIPE DIA. (INCHES)					
LOCATION	INSULATION TYPE	FITTING INSULATION TYPE	RUNOUTS		1 1/4"-1 1/2" L THICKNESS (INCI			
HEATING HOT WATER PIPING HWS & HWR	FIBERGLASS WITH ALL SERVICE JACKET	FIBERGLASS WITH PVC JACKET	1-1/2"	1 1/2"	1 1/2"	2"		









HVAC - First Floor Part Plan New Work Plan

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

ADD ALTERNATE NO. 001

THE MECHANICAL CONTRACTOR SHALL PROVIDE AN ADD ALTERNATE COST TO PROVIDE THE HVAC SYSTEM AS SHOWN IN THE MEN'S RESTROOMS ONLY ON THIS DRAWING.



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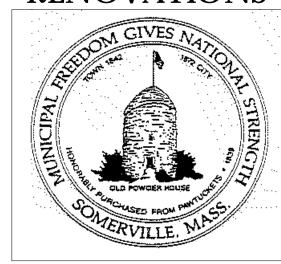
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CAPITAL PROJECTS AND PLANNING DEPARTMENT ONE FRANEY ROAD

SOMERVILLE, MA 02145

Drawing Title:

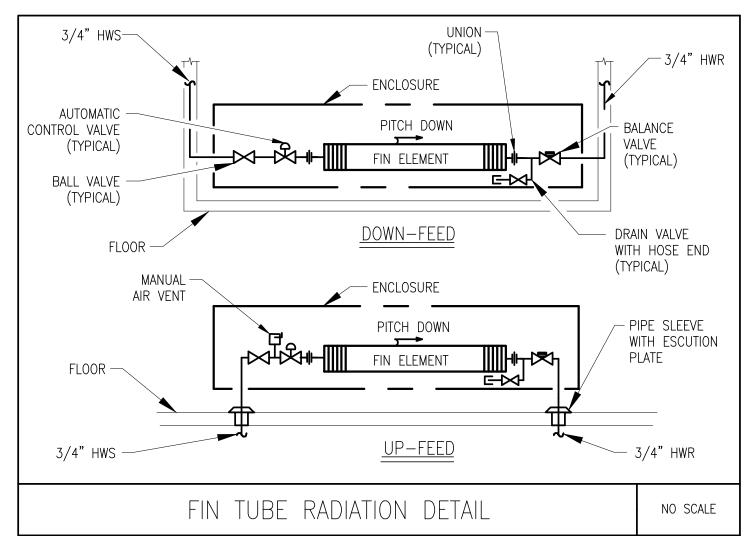
HVAC
PART PLANS,
LEGEND, SCHEDULES
& DETAILS

Revisions:

BIDDING DOCUMENTS

Date: 07/29/16
Project Number: 15036-C
Project Manager: AMW
Drawn By: CMF
Scale: AS NOTED

H100



APPLICATION TABLE

FINNED TUBE RADIATION

FINNED TUBE RADIATION SEQUENCE OF OPERATION

HEATING: UPON A CALL FOR HEAT FROM THE SPACE SENSOR, THE FINNED TUBE

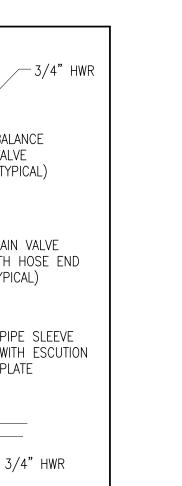
THE SEQUENCE LISTED BELOW IS REVERSIBLE UNLESS NOTED OTHERWISE.

TWO WAY CONTROL VALVE SHALL MODULATE OPEN AS REQUIRED TO

MAINTAIN THE OCCUPIED TEMPERATURE SETPOINT.

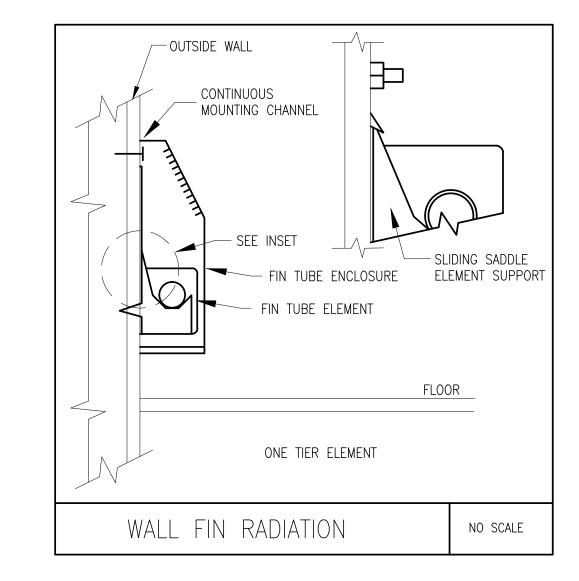
APPLICATION SPECIFIC CONTROLLER

FIN TUBE RADIATION

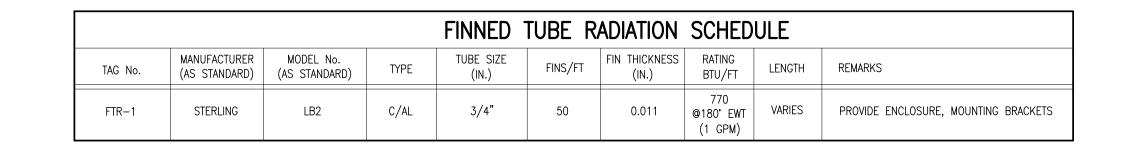


SPACE SENSOR-

FIN TUBE RADIATION

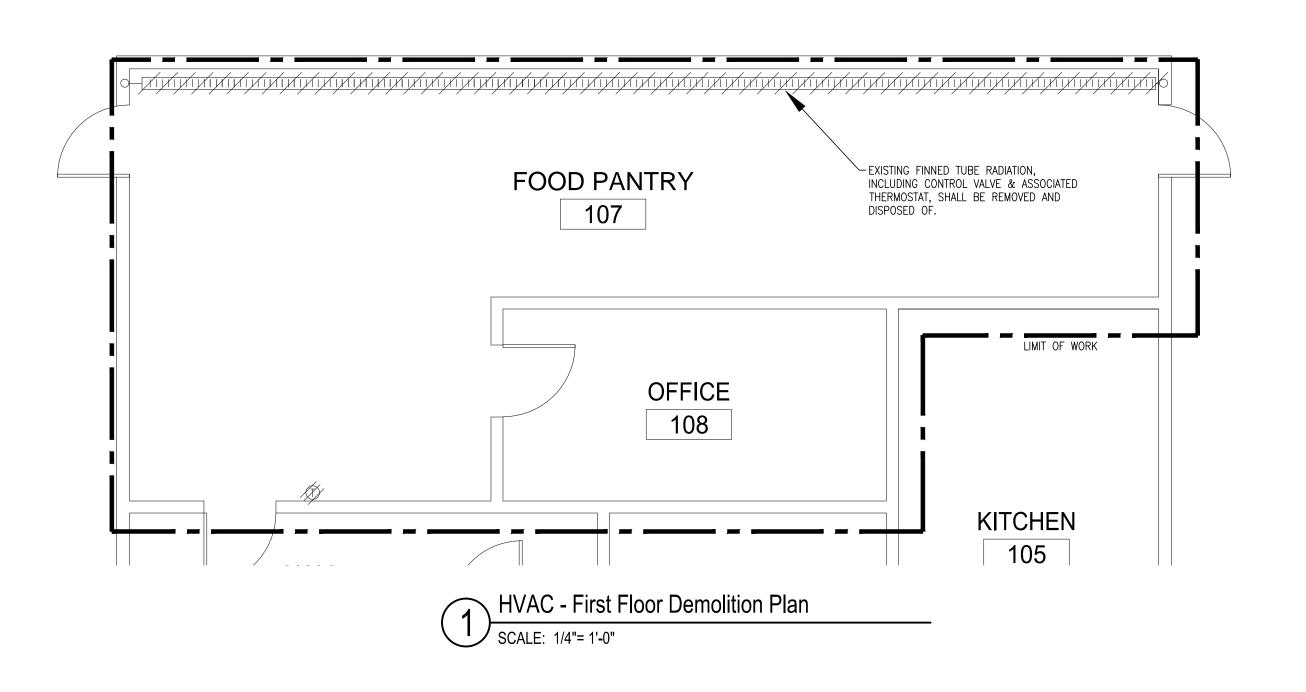


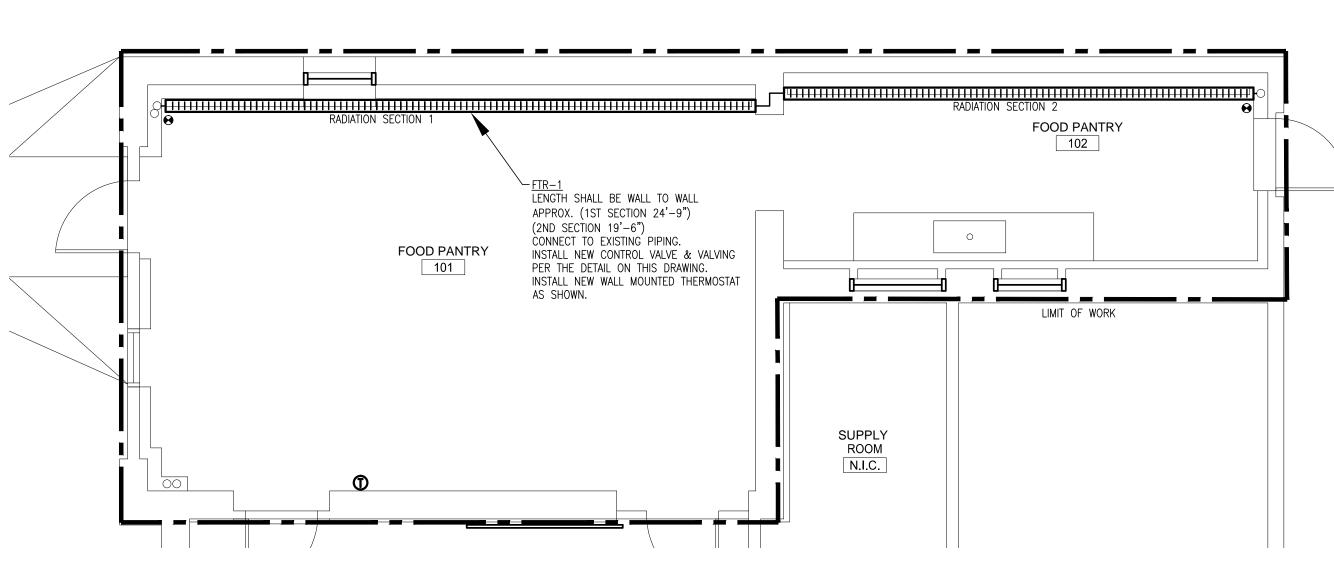
ABBREVIATIONS	DRAWING NOTES	GENERAL NOTES	DEMOLITION GENERAL NOTES
ADDICEVIATIONS	DIAWING NOTES	GENERIE NOTES	DEMOLITION GENERAL NOTES
ATC AUTOMATIC TEMP. CONTROL BTUH BRITISH THERMAL UNIT PER HR. DB DRY BULB TEMPERATURE ('F) DWG DRAWING EAT ENTERING AIR TEMPERATURE EC ELECTRICAL CONTRACTOR EWT ENTERING WATER TEMPERATURE GC GENERAL CONTRACTOR GPM GALLONS PER MINUTE HP HORSE POWER HVAC HEATING, VENTILATION AND AIR CONDITIONING LWT LEAVING WATER TEMPERATURE MBH THOUSANDS OF BRITISH THERMAL UNITS PER HOUR NTS NOT TO SCALE PD PRESSURE DROP	ACCU-1 EQUIPMENT DESIGNATION DRAWING REVISION NOTE DRAWING WORK NOTE CONNECT TO EXISTING REVISION CLOUD EQUIPMENT TAGS FTR FINNED TUBE RADIATION	DETERMINED IN THE FIELD TO AVOID CONFLICT WITH OTHER TRADES AND EXISTING SITE CONDITIONS	 PRIOR TO COMMENCING WORK OF THIS SECTION, EXAMINE SITE AND CONDITIONS UNDER WHICH WORK WILL BE PERFORMED. DETERMINE EXACT LOCATIONS OF EXISTING EQUIPMENT, PIPING AND CONTROLS. REPORT TO OWNER ANY CONDITIONS THAT MIGHT ADVERSELY AFFECT WORK. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS AND PREPARATORY WORK. COMPLY WITH ALL STATE AND LOCAL CODES AS TO REMOVAL AND DISPOSAL OF EQUIPMENT REMOVED FROM THE SITE. COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION. COMPLY WITH ANSI A10.6 AND NFPA 241. PERMITS: GIVE ALL REQUIRED NOTICES, FILE ALL REQUIRED PLANS AND SPECIFICATIONS RELATING TO THE WORK OF THIS SECTION WITH THE PROPER AUTHORITIES AND PAY FOR ANY REQUIRED PERMITS. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON—SITE IS NOT PERMITTED.



		PIPING SCHE	DULE	
SERVICE	LOCATION	PIPING	FITTINGS	JOINTS
HYDRONIC HEATING 2-1/2" AND SMALLER	ABOVE GROUND	TYPE "L" SEAMLESS COPPER TUBING	I WDALIALIT CADDED DDECCLIDE EITTINA	MECHANICAL CONNECTION OR SWEAT SOLDER

	INSULATION SCHEDULE								
LOCATION	INSULATION TYPE	FITTING INSULATION TYPE	RUNOUTS	MAINS <u><</u> 1"	E DIA. (INCHES) 1 1/4"-1 1/2" L THICKNESS (INCH	2"-6" HES)			
HEATING HOT WATER PIPING HWS & HWR	FIBERGLASS WITH ALL SERVICE JACKET	FIBERGLASS WITH PVC JACKET	1-1/2"	1 1/2"	1 1/2"	2"			





2 HVAC - First Floor New Work Plan
SCALE: 1/4"= 1'-0"

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CROSS STREET SENIOR CENTER RENOVATIONS



CAPITAL PROJECTS AND PLANNING DEPARTMENT

ONE FRANEY ROAD SOMERVILLE, MA 02145

Drawing Title:

HVAC FIRST FLOOR PLANS

BIDDING DOCUMENTS

Project Manager: Drawn By: AS NOTED

GENERAL SPECIFICATIONS

- CONDITIONS OF THE CONTRACT AND DIVISION 1, GENERAL REQUIREMENTS APPLY TO WORK SHOWN ON THESE DRAWINGS. EXAMINE DRAWINGS AND OTHER SPECIFICATIONS FOR REQUIREMENTS THAT AFFECT WORK SHOWN ON THESE DRAWINGS.
- PROVIDE ITEMS REFERRED TO IN SINGULAR NUMBER IN CONTRACT DOCUMENTS IN QUANTITIES NECESSARY TO COMPLETE
- VISIT SITE AND EXAMINE CONDITIONS UNDER WHICH WORK MUST BE PERFORMED. REPORT ADVERSE CONDITIONS IN WRITING TO ARCHITECT. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS INCLUDING PREPARATORY WORK DONE BY OTHERS.
- PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT AS SHOWN ON DRAWINGS. COORDINATE ELECTRICAL WORK WITH WORK SHOWN ON THESE DRAWINGS.
- GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.
- PERFORM WORK AS REQUIRED BY CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.
- MATERIAL AND EQUIPMENT SHALL BE UL, NEMA, ANSI, IEEE, ADA & CBM APPROVED FOR INTENDED SERVICE. MATERIAL AND INSTALLATION SHALL MEET REQUIREMENTS OF NATIONAL AND STATE ELECTRICAL CODE.
- MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET MUST BE COMPLETE, CURRENT AND AVAILABLE FOR INSPECTION WHEN REQUISITIONS FOR PAYMENT ARE SUBMITTED.
- GUARANTEE WORK IN WRITING FOR ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS OR INSTALLATION AT NO COST TO OWNER. CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND

REPLACEMENTS UNDER GUARANTEE AT NO COST TO OWNER.

- D. SUBMIT GUARANTEE TO ARCHITECT BEFORE FINAL PAYMENT. STATEMENT OF GUARANTEE REQUIREMENTS SHALL NOT BE INTERPRETED TO LIMIT OWNER'S RIGHTS UNDER LAW AND THIS CONTRACT.
- . DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT SHOWN ON PLANS, AND VICE VERSA, AS IF EXPRESSLY REQUIRED ON
- 12. UTILIZE MOLDED CASE CIRCUIT BREAKERS. MINIMUM INTERRUPTING CAPACITY SHALL BE 10,000 AMPS SYMMETRICAL AT 240 VOLTS, AND 14,000 AMPS SYMMETRICAL AT 480 VOLTS.
- 13. ADDRESS QUESTIONS REGARDING DRAWINGS TO ARCHITECT IN WRITING BEFORE AWARD OF CONTRACT. OTHERWISE, ARCHITECT INTERPRETATION OF MEANING AND INTENT OF DRAWINGS SHALL BE FINAL.
- . SUBMIT SHOP DRAWINGS AND PRODUCT DATA WITHIN THIRTY (30) DAYS AFTER AWARD OF CONTRACT. CHECK, STAMP AND MARK WITH PROJECT NAMES SUBMITTALS BEFORE TRANSMITTING TO ARCHITECT. INDICATE DEVIATIONS FROM CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE PROVIDED FOR ALL EQUIPMENT SHOWN ON THE DRAWINGS. PROVIDE SHOP DRAWINGS ON LIGHTING, PANELBOARDS, CIRCUIT BREAKERS, CONDUIT, WIRING DEVICES, LIGHTING CONTROL DEVICES, CABLE AND CONDUCTORS, FIRE ALARM INCLUDING BATTERY CALCULATIONS, RISER DIAGRAM, EQUIPMENT CUTS AND DISCONNECTS.
- 5. DEVIATION FROM CONTRACT DOCUMENTS, OR PROPOSED SUBSTITUTION OF MATERIALS OR EQUIPMENT FOR THOSE SPECIFIED, SHALL BE REQUESTED IN SEPARATE LETTER, WHETHER DEVIATIONS ARE DUE TO FIELD CONDITIONS. STANDARD SHOP PRACTICE, OR OTHER CAUSE.
- 16. SUBSTITUTIONS FOR SCHEDULED LIGHTING EQUIPMENT WILL BE REJECTED UNLESS SUBSTITUTION SUBMITTAL IS RECEIVED WITHIN TEN (10) DAYS AFTER CONTRACT AWARD.
- 17. SCHEDULE AT LEAST TEN (10) WORKING DAYS, EXCLUSIVE ON TRANSMITTAL TIME FOR SUBMITTAL REVIEW.
- 18. ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE.
- 19. ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
- 20. ALL COMPONENTS SHOWN ON THE RISER DIAGRAMS, BUT NOT ON THE PLAN OR VICE VERSA, SHALL BE INCLUDED AS IF SHOWN ON BOTH
- 21. LOCATION OF MECHANICAL EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL
- 22. ALL RACEWAY RUNNING THROUGH BUILDING EXPANSION JOINTS SHALL BE EQUIPPED WITH EXPANSION FITTINGS.
- 23. CONDUIT HOMERUNS SHOWN ON THE DRAWING WITH MORE THAN THREE (3) CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. THE CONTRACTOR SHALL NOT INSTALL MORE THAN THREE (3) CURRENT CARRYING CONDUCTORS IN A RACEWAY UNLESS DONE SO STRICTLY BY THE NATIONAL ELECTRICAL CODE AS AMENDED BY THE STATE.
- 24. THE ELECTRICAL CONTRACTOR SHALL CONSULT AND COOPERATE WITH CONTRACTORS OF OTHER TRADES TO AVOID ANY INTERFERENCE IN THE INSTALLATION OF THEIR RESPECTIVE EQUIPMENT. CONTRACTOR SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE ARCHITECT
- 25. Branch Circuit Wiring may not be shown graphically on drawings and may be indicated by circuit numbers BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT INDICATED GRAPHICALLY. PHASE BALANCE ALL PANELBOARDS IN FIELD. CIRCUIT NUMBERS ARE DIAGRAMMATIC, UTILIZE AVAILABLE SPACE OR PROVIDE ADDITIONAL BREAKERS AND PANELBOARDS AS NECESSARY
- 26. ALL NEW WIRING SHALL BE TYPE THHN/THWN RATED 75-90°C, 600V. WET-DRY LOCATIONS. MINIMUM BRANCH CIRCUIT WIRING SHALL BE NO. 12 AWG SOLID COPPER. BRANCH CIRCUITS LONGER THAN 75 FEET FOR 120 VOLTS SHALL BE AT LEAST NO. 10 AWG FROM PANEL TO LAST OUTLET.
- 27. ALL NEW EXPOSED INTERIOR WIRING ABOVE 8'-0" NOT EXPOSED TO DAMAGE SHALL BE INSTALLED IN ELECTRIC METALLIC TUBING. ALL WIRING IN CONCRETE SLABS OR EXPOSED IN ROOM BELOW 8'-0" OR EXPOSED TO DAMAGE SHALL BE INSTALLED IN RIGID STEEL CONDUIT. EXTERIOR WIRING SHALL BE IN GALVANIZED RIGID METALLIC CONDUIT.
- 28. ALL GROUNDING SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AS AMENDED BY THE STATE OF MASSACHUSETTS.
- 29. ALL FIREPROOFING FOR ELECTRICAL PENETRATIONS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 30. SYSTEM FEEDERS AND BRANCH CIRCUITS THAT PASS THROUGH ALTERED AREAS AND SERVE OTHER AREAS SHALL BE MAINTAINED.
- 31. Provide New Typed Identification directory in Panelboards indicating circuit function or equipment served. LABEL ALL ELECTRICAL PANELS, DISCONNECT SWITCHES AND OTHER EQUIPMENT WITH ENGRAVED VINYL PLATES. NAMEPLATE LETTERING SHALL BE 1/4" MINIMUM.
- 32. PANELBOARDS SHALL BE DOOR-IN-DOOR CONSTRUCTION WITH COPPER BUS. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC. BOLT-ON. PANELBOARDS AND BREAKERS SHALL BE CUTLER HAMMER. SQUARE 'D'. G.E. OR SIEMENS. PROVIDE TYPE IDENTIFICATION DIRECTORY CARDS IN PANELBOARD INDICATING CIRCUIT FUNCTION OR EQUIPMENT SERVED.
- 35. DISCONNECT SWITCHES SHALL BE HEAVY DUTY (HD). SIDE OPERATED WITH INTERLOCKING COVER, G.E., SQUARE "D", CUTLER HAMMER OR SIEMENS OR EQUAL.
- 36. ALL WIRING (LOW VOLTAGE, TEL/DATA, FIRE ALARM, POWER BRANCH CIRCUIT) SHALL BE PLENUM RATED; NO EXCEPTIONS. NON-PLENUM RATED CABLES OF ANY KIND SHALL NOT BE PROVIDED.

POWER NOTES

- ALL CONDUIT, WIRING AND ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST STANDARDS OF THE NATIONAL & STATE ELECTRICAL CODES AND ANY APPLICABLE LOCAL REGULATIONS.
- ALL CONDUITS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN. ALL CONDUIT RUNS SHALL BE RIGIDLY
- NO CONDUIT SMALLER THAN 3/4 INCH ELECTRICAL TRADE SIZE SHALL BE USED, UNLESS SPECIFICALLY CALLED FOR ON THE DRAWINGS.
- PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT TO MAKE INSTALLATION COMPLETE IN EVERY DETAIL UNDER THIS CONTRACT WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS.
- WIRING DEVICES SHALL BE SPECIFICATION GRADE, 20 AMP, WITH SMOOTH NYLON DEVICE PLATES AS MANUFACTURED BY HUBBELL, OR EQUAL. COLOR TO MATCH EXISTING OR AS APPROVED BY ARCHITECT.
- CONDUCTORS AND CABLE SHALL BE MINIMUM #12 AWG, 600 VOLT, COPPER WITH TYPE THHN/THWN INSULATION. PROVIDE SEPARATE GREEN GROUND IN ALL FEEDERS. WIRE SIZE #8 AWG AND LARGER SHALL BE STRANDED, #10 AWG AND SMALLER SHALL BE SOLID. COLOR CODE CONDUCTORS BLACK, RED, BLUE, WITH WHITE NEUTRAL AND GREEN GROUND EXCEPT AS NOTED FOR 120 VOLT
- MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED: a.) CONVENIENCE RECEPTACLE (GENERAL), 1'-6" FROM FLOOR TO CENTERLINE. b.) CONVENIENCE RECEPTACLE (OFFICE), 1'-6" FROM FLOOR TO CENTERLINE.
- c.) TELEPHONE OUTLETS, 1'-6" FROM FLOOR TO CENTERLINE.
- PROVIDE SEPARATE HOT, GROUND AND NEUTRAL CONDUCTOR FOR ALL CIRCUITS CONNECTED TO ARC-FAULT CIRCUIT

EXISTING EQUIPMENT DESIGNATIONS

- EXISTING TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND CONDUCTORS.
- XM EXISTING TO REMAIN.
- EXISTING EQUIPMENT TO BE REPLACED WITH NEW. CONNECT NEW EQUIPMENT TO EXISTING CIRCUIT.
- EXISTING EQUIPMENT TO BE RELOCATED. JUNCTION AND EXTEND EXISTING CONDUIT AND CONDUCTORS.
- NEW LOCATION FOR EXISTING EQUIPMENT. JUNCTION AND EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.

GENERAL NOTES

- 1. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
- 2. ALL FLOOR, MASONRY WALLS AND STRUCTURAL CEILING PENETRATIONS SHALL BE SLEEVED.
- 3. PROVIDE FIRE/MOISTURE SEAL FOR WALL, FLOOR OR CEILING PENETRATIONS.
- 4. DO NOT LAY CABLES OR RACEWAY ON, OR SUPPORT FROM SUSPENDED CEILING OR PIPING AND DUCTWORK.
- 5. OUTLET BOXES SHALL BE MOUNTED FLUSH. CONDUIT SHALL BE RUN CONCEALED. WHERE WALLS ARE BLOCK, DEVICES AND WIRING SHALL BE SURFACE MOUNTED. PROVIDE WIREMOLD OR EQUAL TO SURFACE MOUNTED RACEWAY WITH
- 6. ALL WIRING WITHIN UTILITY CLOSETS MAY BE IN SURFACE MOUNTED CONDUIT. EMT MAY BE UTILIZED.
- 7. FLEXIBLE CONDUIT CONNECTIONS SHALL BE A MAXIMUM OF 6'-0".
- 8. MC TYPE CONDUCTOR WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS. MC CABLE SHALL BE UTILIZED ONLY WHERE COMPLETELY CONCEALED.

LIGHTING NOTES

- 1. ALL CONDUIT, FIXTURES AND OUTLETS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN.
- 2. ALL LIGHTING FIXTURE SPACING DIMENSIONS AND MOUNTING HEIGHTS ARE RECOMMENDED LOCATIONS. SLIGHT VARIATIONS WHERE NECESSARY TO AVOID INTERFERENCE SHALL BE DETERMINED IN THE FIELD.
- 3. MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED: a.) LIGHT SWITCHES, 4'-0" FROM FLOOR TO CENTERLINE.
 - b.) LIGHTING PANELBOARDS, 6'-6" FROM FLOOR TO TOP. c.) LIGHT FIXTURES - SEE LIGHTING FIXTURE SCHEDULE, MOUNTING HEIGHT OF FIXTURE IS MEASURED TO
- 4. WHERE REQUIRED, ADDITIONAL SUPPORT STEEL FOR THE LIGHTING INSTALLATION SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEISMIC RESTRAINTS SHALL BE INCLUDED AS PER STATE BUILDING CODE.
- 5. PROVIDE SEPARATE UN-SWITCHED NEUTRAL TO ALL EMERGENCY LIGHT FIXTURES CONTAINING EMERGENCY BALLASTS.
- 6. FOR RENOVATION PROJECTS, PROVIDE NEW BRANCH CIRCUITRY BETWEEN ALL NEW FIXTURES BEING PROVIDED, UNLESS NOTED OTHERWISE ON DRAWINGS.

FIRE ALARM NOTES

WORK PLUS 10% OF EXISTING.

- 1. THE ELECTRICAL CONTRACTOR SHALL COMPLETE A CERTIFICATE CERTIFYING THAT THE SYSTEM HAS BEEN 100 PERCENT TESTED AND FUNCTIONS IN COMPLETE COMPLIANCE WITH THE SYSTEM SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS. THE CERTIFICATE SHALL BE SIGNED BY THE INSTALLER, ELECTRICAL CONTRACTOR AND THE OWNER. AFTER RECEIPT OF THE CERTIFICATION, THE FIRE PREVENTION OFFICER AND/OR THE FIRE ALARM SUPERVISOR WILL CONDUCT AN INSPECTION IN THE COMPANY OF THE INSTALLER AND A REPRESENTATIVE OF THE OWNER WITHIN SCOPE OF
- 2. ALL PULL STATIONS MUST BE OF THE DOUBLE ACTION TYPE. BREAKGLASS RODS WILL NOT BE PERMITTED.
- 3. ALL FIRE ALARM VISUAL DEVICES SHALL BE SYNCHRONIZED.
- 4. ALL WIRING METHODS SHALL BE AS APPROVED BY THE WIRING INSPECTOR AND THE FIRE DEPARTMENT. ALL FIRE ALARM CABLE SHALL BE PLENUM RATED.
- 5. ALL SYSTEM COMPONENTS SHALL BE UL LISTED. IF EXISTING EQUIPMENT IS BEING UTILIZED ALL COMPONENTS MUST BE
- UL LISTED COMPATIBLE WITH EXISTING. 6. ALL WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA 72 SERIES PAMPHLETS, AND ALL
- STATE AND LOCAL CODES. 7. THE ELECTRICAL CONTRACTOR MUST OBTAIN AN ELECTRICAL PERMIT FROM THE TOWN BUILDING DEPARTMENT AND A PERMIT FROM THE FIRE DEPARTMENT PRIOR TO COMMENCEMENT OF EQUIPMENT INSTALLATION. A FLOOR PLAN SHOWING ALL ALARM DEVICES, LOCATION OF MASTER BOX, PANELS, ANNUNCIATORS, A ONE-LINE WIRING DIAGRAM AND AN ANNUNCIATOR DETAIL SHOWING ZONE LABELING WILL BE REQUIRED TO BE SUBMITTED BEFORE THE FIRE DEPARTMENT ISSUES A PERMIT.
- 8. INSTALLATION OF EQUIPMENT SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS APPROVED BY
- 9. ALL FIRE ALARM EQUIPMENT, INSTALLATION AND OPERATION SHALL BE IN CONFORMANCE WITH THE LOCAL FIRE DEPARTMENT INSTALLATION REQUIREMENTS AND SYSTEM INSTALLATION GUIDELINES.
- 10. ALL EQUIPMENT SHOWN ON DRAWINGS IS DIAGRAMMATIC.

THE AUTHORITY HAVING JURISDICTION.

- 11. THE FIRE ALARM SYSTEM SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY BOTH THE ENGINEER AND THE LOCAL FIRE DEPARTMENT. THE SHOP DRAWINGS MUST BE SIGNED OFF BY THE FIRE DEPARTMENT AND ENGINEER PRIOR TO ORDERING AND INSTALLATION OF EQUIPMENT.
- 12. ALL JOINTS AND CONNECTIONS SHALL BE IN JUNCTION BOXES. ALL CONNECTIONS NOT ON APPROVED TERMINAL STRIPS SHALL BE SOLDERED AND TAPED. ALL JUNCTION BOXES SHALL BE PAINTED RED.
- 13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THAT ALL CONNECTING WIRING MAINTAIN ELECTRICAL INTEGRITY, WITH NO OPEN CIRCUITS, GROUNDS, LEAKAGE OR OTHER FAULTS. CONNECTION TO THE MUNICIPAL SYSTEM WILL NOT BE PERMITTED IF ANY FAULTS EXIST. AND THE CONTRACTOR HAS THE PERMANENT RESPONSIBILITY FOR THE MAINTENANCE OF ALL SUCH WIRING FOR A ONE-YEAR PERIOD. IF FAULTS DEVELOP AFTER INSTALLATION, CORRECTION MUST BE MADE BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL COMPLETION. THE FIRE DEPARTMENT MAY REQUIRE DISCONNECTION OF THE FIRE ALARM BOX FROM THE MUNICIPAL SYSTEM UNTIL PROPER CONNECTIONS AND/OR REPAIRS ARE MADE. SUCH A DISCONNECTION MAY REQUIRED A FIRE WATCH DURING THAT TIME THE BUILDING IS WITHOUT A MASTER FIRE ALARM BOX AND ALARM SYSTEM. THIS FIRE WATCH WILL BE AT THE FIRE DEPARTMENT'S DIRECTION AND PAYMENT FOR SUCH A WATCH WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED POWER SUPPLIES FOR A COMPLETE AND OPERATIONAL SYSTEM. POWER SUPPLY CALCULATIONS SHALL BE INCLUDED IN FIRE ALARM SUBMITTAL.
- 15. ALL EQUIPMENT SHALL BE MADE AVAILABLE FOR TEST AND INSPECTION WHEN REQUIRED BY THE FIRE DEPARTMENT.
- 16. ALL SYSTEMS SHALL BE DC. SUPERVISED, BATTERY STANDBY FIRE ALARM SYSTEM. A SEPARATE AC CIRCUIT MUST BE PROVIDED FOR THE FIRE ALARM SYSTEM. STANDBY BATTERIES AND THE CHARGING SYSTEM SHALL BE SUPERVISED.
- 17. THE BATTERIES USED WITH THE FIRE ALARM CONTROL PANEL SHALL BE CAPABLE OF OPERATING THE PANEL FOR TWENTY-FOUR (24) HOURS WITH A FIVE (5) MINUTE RING-DOWN AT THE END OF THE TWENTY-FOUR (24) HOUR PERIOD. THE CALCULATION USED TO DETERMINE BATTERY CAPACITY SHALL BE PRESENTED TO THE FIRE DEPARTMENT AT THE TIME OF INSPECTION. PROVIDE ADDITIONAL BATTERIES AND CALCULATIONS WITH SHOP DRAWINGS.
- 18. THE VISUAL INDICATORS OF THE EVACUATION SIGNALS MUST STAY ILLUMINATED UNTIL THE SYSTEM IS RESET.

ABBREVIATIONS

HORSEPOWER

/AMP	AMPERE	IMC	INTERMEDIATE METALLIC CONDUIT
Ċ	ALTERNATING CURRENT	JB	JUNCTION BOX
F	AMPERE FRAME	KVA	KILOVOLT-AMPERE
FF	ABOVE FINISHED FLOOR	KW	KILOWATT
FG	ABOVE FINISHED GRADE	LTG	LIGHTING
IC	APRERE INTERRUPTING CAPACITY	PWR	POWER
L	ALUMINUM	MCB	MAIN CIRCUIT BREAKER
Τ	AMPERE TRIP	MEC	MASSACHUSETTS ELECTRICAL CODE
TS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
WG	AMERICAN WIRE GAUGE	MTG	MOUNTING
	CONDUIT	MTD	MOUNTED
KT	CIRCUIT	MCC	MOTOR CONTROL CENTER
В	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE
U	COPPER	NS	NON-SYSTEM
L	CENTERLINE	NTS	NOT TO SCALE
С	DIRECT CURRENT	No., #	NUMBER
Ε	DUAL ELEMENT	PC "	PLUMBING CONTRACTOR
WG	DRAWING	RPM	REVOLUTIONS PER MINUTE
C	ELECTRICAL CONTRACTOR	RMS	ROOT MEAN SQUARE VALUE
MH	ELECTRICAL MANHOLE	RGS	RIGID STEEL CONDUIT
NC	ELECTRIC WATER COOLER	SF	SQUARE FOOT
MT	ELECTRIC METALLIC CONDUIT	SN	SOLID NEUTRAL
_MT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	SWBD	SWITCHBOARD
С	GENERAL CONTRACTOR	TYP	TYPICAL
ND	GROUND	٧	VOLTS
Fl	GROUND FAULT INTERRUPTING	VA	VOLT-AMPERE
VAC	HEATING, VENTILATION AND AIR CONDITIONING	VFD	VARIABLE FREQUENCY DRIVE
_			

WEATHERPROOF

DEMOLITION NOTES

- REFER TO THE ARCHITECTURAL DRAWINGS FOR THE FULL EXTENT OF THE SCOPE OF DEMOLITION. DISCONNECT AND MAKE SAFE ALL ELECTRICAL EQUIPMENT IDENTIFIED FOR REMOVAL ON THE HVAC, PLUMBING AND FIRE PROTECTION PLANS. THE ELECTRICAL SCOPE MAY EXTEND BEYOND THE AREA DEFINED BY THE ARCHITECTURAL DEMOLITION LIMITS TO FULLY COMPLY WITH VARIOUS REQUIREMENTS DEFINED BY THESE NOTES.
- THE ELECTRICAL DEMOLITION PLANS AND DETAILS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE SUBMISSION OF BIDS TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON WALLS AND/OR CEILINGS TO BE REMOVED SHALL BE DISCONNECTED AND MADE SAFE. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION.
- 3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF THE WORK. DAMAGE SHALL INCLUDE BUT NOT BE LIMITED TO DESTRUCTION OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR TO BE SALVAGED.
- 4. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE
- 5. THE ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL BRANCH CIRCUITS, FEEDERS AND SYSTEM COMPONENTS, WHICH ARE TO REMAIN WITHIN THE AREA OF DEMOLITION SCOPE. THERE SHALL BE NO INTERRUPTION OF SERVICE TO ANY AREA OUTSIDE THE SCOPE LIMITS WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE. EXISTING EQUIPMENT TO REMAIN SHALL BE LEFT IN A CODE COMPLIANT MANNER.
- THE ELECTRICAL CONTRACTOR SHALL DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS.
- ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE DE-ENERGIZED AND LABELED SPARE. 7. THE ELECTRICAL CONTRACTOR SHALL TEMPORARILY SUPPORT ALL ITEMS TO REMAIN THAT ARE AFFECTED BY THE DEMOLITION OF BUILDING STRUCTURAL COMPONENTS (WALLS, CEILINGS, ETC.). TEMPORARILY SUPPORTED ITEMS SHALL BE PERMANENTLY
- 8. ALL REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF UNLESS IDENTIFIED FOR REUSE. THE OWNER'S REPRESENTATIVE SHALL INSPECT ALL RETAINED ITEMS PRIOR TO PLACEMENT IN THE IDENTIFIED STORAGE LOCATION BY THE ELECTRICAL
- 9. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY FUNCTIONAL DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD. REUSE OF EXISTING FIRE ALARM SYSTEM RACEWAYS SHALL NOT BE ALLOWED. ALL REQUIRED SYSTEM SHUTDOWNS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE AUTHORITY HAVING JURISDICTION. DEMOLITION OF THE EXISTING SYSTEM SHALL NOT COMMENCE UNTIL THE NEW SYSTEM HAS BEEN COMPLETELY INSTALLED, TESTED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- 10. REMOVED FLUORESCENT AND HID LAMPS AND BATTERIES SHALL BE RECYCLED BY A FACILITY APPROVED BY THE OWNER'S REPRESENTATIVE. A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PREPARED FOR ALL DISPOSALS AND RETURNED WITH ALL APPLICABLE SIGN OFF'S PRIOR TO APPLICATION FOR FINAL PAYMENT.
- 11. ALL BALLAST IN LIGHTING FIXTURES TO BE DISPOSED SHALL BE VERIFIED TO BE PCB FREE. ALL BALLAST MANUFACTURED PRIOR TO 1979 AND NOT LABELED AS PCB FREE SHALL BE CONSIDERED TO CONTAIN PCBs. PROVIDE WRITTEN VERIFICATION TO THE OWNER'S REPRESENTATIVE THAT CONFIRMS PCB FREE WASTE. WHERE PCB FREE WASTE CANNOT BE VERIFIED, BALLAST SHALL BE RECYCLED BY A FACILITY APPROVED BY THE OWNER'S REPRESENTATIVE, WITH PCB COMPONENTS ELIMINATED BY A HIGH TEMPERATURE INCINERATION. A UNIFORM HAZARDOUS WASTE MANIFEST SHALL BE PREPARED FOR ALL DISPOSALS AND RETURNED WITH ALL APPLICABLE SIGN OFF'S PRIOR TO APPLICATION FOR FINAL PAYMENT. ALL HANDLING SHALL CONFORM TO EPA REQUIREMENTS. PROVIDE BREAKOUT COST FOR THIS SCOPE.

BRANCH CIRCUIT AND FEEDER SYMBOLS

SUPPORTED AND INSTALLED WHEN FINALIZED STRUCTURES ARE IN PLACE.

BRANCH CIRCUIT OR FEEDER CONCEALED UNLESS OTHERWISE NOTED. BRANCH CIRCUIT DIAGONAL LINES INDICATE NUMBER OR CONDUCTORS, NO DIAGONAL LINES INDICATES TWO (2) CONDUCTORS (1 PHASE AND 1 NEUTRAL). GROUND WIRE(S) NOT INDICATED. MINIMUM SIZE CONDUCTOR #12 AWG AND 3/4" CONDUIT, UNLESS OTHERWISE NOTED

4#1,1#6G-1½"C INDICATES (3) #1 AWG(PHASE), (1)#1 AWG(NEUTRAL), (1) #6 GROUND IN A 1-1/2" CONDUIT

FLEXIBLE CONNECTION TO MOTOR OR EQUIPMENT

20A/3P conductor. (1) grounding conductor understood.

HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1. DIAGONAL LINES INDICATE (1) PHASE AND (1) NEUTRAL <u>↓</u> 20A/1P CONDUCTOR. (1) GROUNDING CONDUCTOR UNDERSTOOD.

PP1-1,3 HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1 & 3. DIAGONAL LINES INDICATE (2) PHASE AND (2) NEUTRAL (2)20A/1P conductor. (2) grounding conductor understood.

1-1,3,5 HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE AND (3) NEUTRAL (3)20A/1P CONDUCTOR. (3) GROUNDING CONDUCTOR UNDERSTOOD.

PP1-1,3,5 HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE CONDUCTORS. NEUTRAL CONDUCTOR NOT REQUIRED. (1) GROUNDING CONDUCTOR UNDERSTOOD.

PP1-1,3,5 HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE AND (1) NEUTRAL

LIGHTING FIXTURE SYMBOLS

- FLUORESCENT LIGHTING FIXTURE, CEILING/SURFACE/RECESSED/PENDANT OR WALL MOUNTED. "A" DENOTES LIGHTING FIXTURE TYPE (SEE FIXTURE SCHEDULE), "2" DENOTES CIRCUIT NUMBER, "a" DENOTES SWITCH CONTROL
- COMPACT FLUORESCENT LIGHT FIXTURE, CEILING/SURFACE/RECESSED OR PENDANT MOUNTED. "B" DENOTES LIGHTING FIXTURE TYPE, "4" DENOTES CIRCUIT NUMBER, "b" DENOTES SWITCH CONTROL
 - EMERGENCY BATTERY UNIT WITH TWO (2) HEADS
- EXIT SIGN, SHADED REGION INDICATES FACE

OCCUPANCY SENSORS

- CEILING MOUNTED OCCUPANCY SENSOR, 360' TWO-SIDED, 1950SF COVERAGE (50' DIAMETER), PHILIPS LIGHTING CONTROLS No. ITSCS (FOR PARTIAL COVERAGE APPLICATIONS, A PROVIDED MASK CAN BE TRIMMED TO ADJUST COVERAGE) OR EQUAL
 - COVERAGE DIMENSIONS APPLY TO DEVICE BEING CENTERED. ACTUAL COVERAGE'S CAN VARY ON THE SHAPE AND USE OF APPLICABLE SPACE. COVERAGE MAY BE REDUCED IF DEVICE IS MOUNTED GREATER THAN 12 FEET HIGH. SENSORS REQUIRE RELAY PACKS, PHILIPS LIGHTING CONTROLS No. ITSRP1U (SINGLE CIRCUIT), ITSRP2 (TWO CIRCUIT) OR ITSRP4

FIRE ALARM SYSTEM

AUDIBLE/VISUAL DEVICE, TOP OF DEVICE MOUNTED NOT LESS THAN 90" AFF AND NOT LESS THAN 6" BELOW FINISHED

15 VISUAL DEVICE, ENTIRE LENS MOUNTED NOT LESS THAN 80" AFF AND NOT MORE THAN 96" AFF

SMOKE DETECTOR, "D" INDICATES DUCT MOUNTED SMOKE DETECTOR, "R" INDICATES ELEVATOR RECALL, "NS" INDICATES

FIRE ALARM CONTROL PANEL

MOTOR AND CONTROLS

MOTOR, NUMERAL INDICATES HORSEPOWER

PANELBOARD AND TERMINAL CABINET

120/208VOLT LIGHTING OR POWER PANEL, SURFACE MOUNTED

MISCELLANEOUS

MECHANICAL EQUIPMENT TAG, REFER TO MECHANICAL SCHEDULE

RECEPTACLES AND OUTLETS

- DUPLEX CONVENIENCE RECEPTACLE OUTLET, GROUNDING TYPE, RATED 20A, 125V TYPE. "5" DENOTES CIRCUIT NUMBER, MOUNTING HEIGHT 18" TO CENTERLINE AFF
- GROUND FAULT INTERRUPTING OUTLET, RATED 20A, 125V RECEPTACLE, MOUNTING HEIGHT 18" TO CENTERLINE AFF
- JUNCTION BOX, COORDINATE MOUNTING HEIGHT WITH ARCHITECT, 'F' INDICATES FAN RATED JUNCTION BOX

SWITCHING SYMBOLS

EXCEED 6'-7" AFF

- SINGLE POLE SWITCH, RATED 20A, 120/277V, MOUNTING HEIGHT 48" TO CENTERLINE OF TOGGLE SWITCH IN "ON"
- POSITION. "a" DENOTES FIXTURE SWITCH CONTROL MANUAL MOTOR STARTER, RATED 20A, 250V, COORDINATE MOUNTING HEIGHT IN FIELD, MOUNTING HEIGHT SHALL NOT

LIGHTING FIXTURE SCHEDULE MANUFACTURER FIXTURE VOLTAGE DESCRIPTION AND CATALOG NUMBER WATTAGE TYPE 1' X 4' RECESSED LED LENSED FIXTURE PHILLIPS # LED 120V **E.C. TO CONFIRM CEILING TYPE FOR HARDWARE PRIOR TO PURCHASE.** HLS14GLR28L35ULAG 2' X 4' RECESSED LED FIXTURE PHILLIPS # 120 LED **E.C. TO CONFIRM CEILING TYPE FOR HARDWARE PRIOR TO PURCHASE.** HLS24GLR30L35ULAG EXTERIOR FIXTURE WITH BATTERY BACKUP RAB LIGHTING # 120 GN1LED13NADB BLACK SURFACE MOUNTED FIXTURE KICHLER # 120 LED 888 OWH **EMERGENCY BATTERY UNIT** PHILLIPS # LED 120 VU6LSD COMBINATION EXIT AND EMERGENCY LIGHT UNIT WITH BATTERY BACKUP PHILLIPS # LED 120 **VCLANRW**

INTERRUPTING CAPACITY 10,000 AMPS RMS SYM					MAIN: 100AMP M.C.B.					MOUNTING: RECESSED	
	KVA LOAD		CB/	скт.		скт.	CB/	KVA LOAD			
DESCRIPTION	ØA ØB PHASE	No.	PHASE	No.	PHASE	ØΑ	øΒ	DESCRIPTION			
PANTRY RECEPTACLES	.90		20	1	Α	2	20	.54		PANTRY RECEPTACLES	
PANTRY LIGHTING		.85	20	3	В	4	20		.72	PANTRY RECEPTACLES	
PANTRY RECEPTACLES	1.1		20	5	Α	6	20	1.4		WALK IN COOLED	
EXISTING LOAD		_	20	7	В	8	20		1.4	WALK-IN COOLER	
EXISTING LOAD	_		20	9	Α	10	20	1.4		WALK IN EDECTED	
EXISTING LOAD		_	20	11	В	12	20		1.4	WALK-IN FREEZER	
EXISTING LOAD	_		20	13	Α	14	20	1.2		COOLER/FREEZER LIGHTING AND DOOR HEATER	
EXISTING LOAD		_	_	15	В	16	-		_	-	
_	_		_	17	Α	18	-	_		-	
				19	В	20				_	

E.C. SHALL CONNECT EXISTING LOADS BEING UTILIZED FOR AREAS THAT ARE NOT PART OF THIS RENOVATION. JUNCTION AND EXTEND EXISTING

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> CROSS STREE SENIOR CENTER RENOVATIONS



CAPITAL PROJECTS AND PLANNING DEPARTMENT ONE FRANEY ROAD

SOMERVILLE. MA 02145

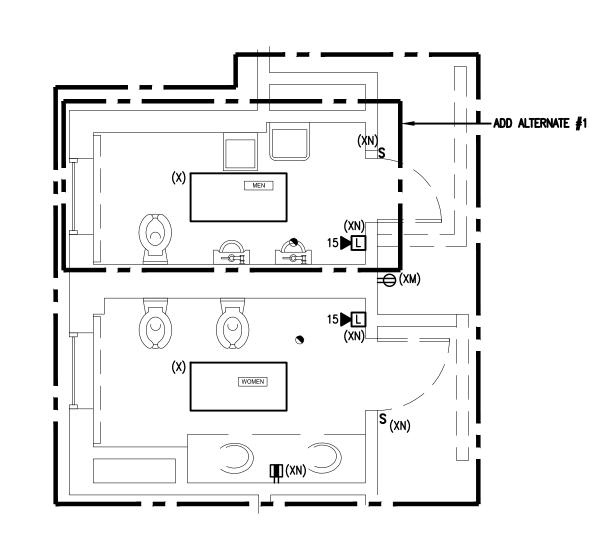
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LEGEND AND **NOTES**

BIDDING

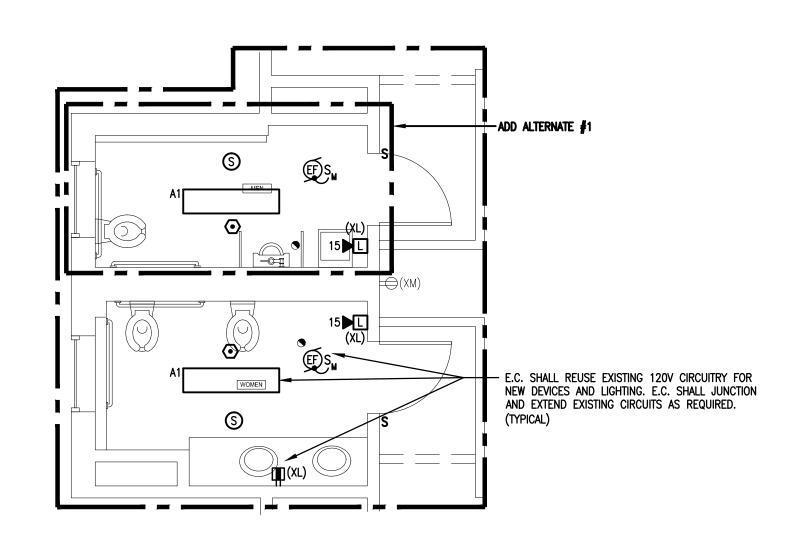
DOCUMENTS

Project Number: 15036-C Project Manager: Drawn By: Scale: AS NOTED



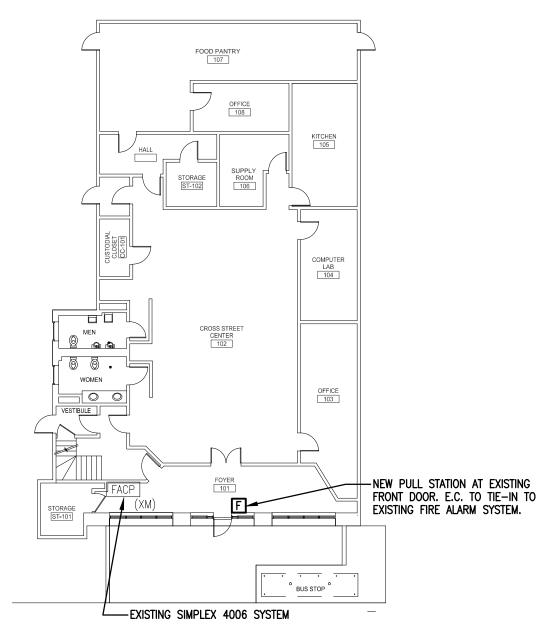
ELECTRICAL - First Floor Bathroom Demolition Plan

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



2 ELECTRICAL - First Floor Bathroom New Work Plan

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

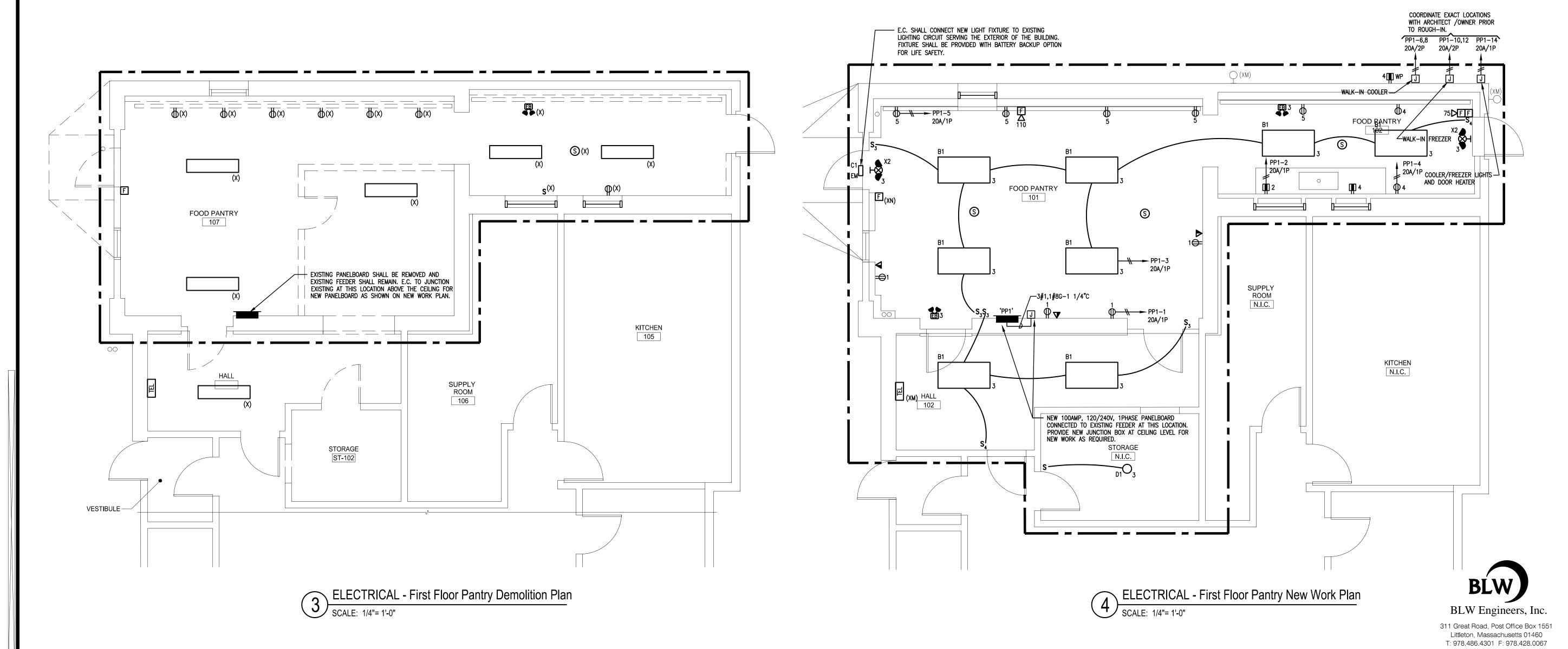


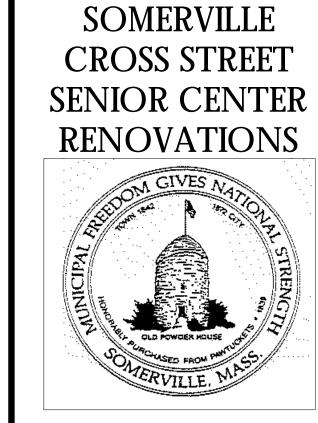
5 ELECTRICAL - First Floor Key Plan

SCALE: 1/16"= 1'-0"

NFIRE ALARM NOTES:

- 1. ALL NEW FIRE ALARM DEVICES SHALL BE CONNECTED TO EXISTING SIMPLEX 4006 SYSTEM. E.C. TO JUNCTION AND EXTEND EXISTING CIRCUITRY AS REQUIRED FOR NEW DEVICES. PROVIDE ALL EQUIPMENT, BOOSTERS, NAC EXTENDERS, RELAYS, CARDS, PROGRAMMING AND TESTING AS REQUIRED.
- 2. NEW AUDIO/VISUAL DEVICES SHALL BE SYNCHRONIZED WITH EXISTING DEVICES. PROVIDE SYNCHRONIZED DEVICES OR SYNC. CARDS IN EXISTIGN SYSTEM AS REQUIRED.





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Drawing Title:

FIRST FLOOR **PLANS**

BIDDING DOCUMENTS

Project Manager: Drawn By: AS NOTED

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