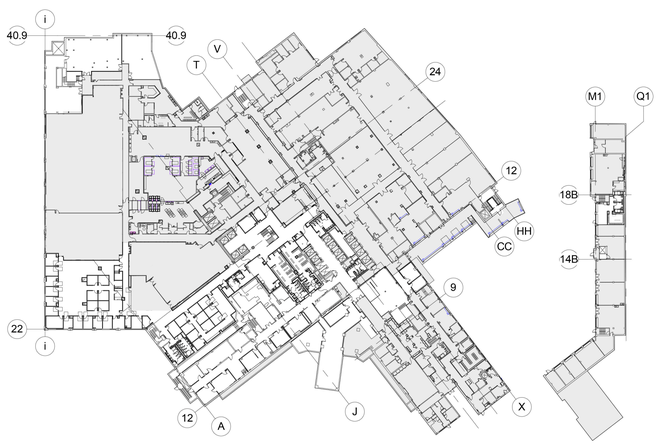


C1 GROUND FLOOR PLAN - BASE BID WORK

NTS

SCOPE OF WORK INCLUDES:

- ALL CORRIDORS NOT RENOVATED AS PART OF PREVIOUS PHASE WORK.
- ALL FIRE AND SMOKE BARRIERS AS REQUIRED TO CREATE APPROVED SMOKE ZONES.
- STAFF LOUNGE AND LOCKER/TOILET FACILITIES.
- TWO (2) OFFICE SUITES.
- PHARMACY CACHE STORAGE.
- EXIT STAIR WORK BETWEEN GROUND AND FIRST FLOOR.
- GROUND FLOOR ELECTRICAL AND IT CLOSETS, INCLUDING INFRASTRUCTURE AND BACKBONE SCOPE OF WORK, AND INTERNAL PLATFORMS.
- FIRE PANEL ROOM - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, BUILDING 1).
- PUMP ROOM - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, WEST WING, BUILDING 1).
- PUMP ROOM - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, NORTH SIDE, BUILDING 6).
- SECONDARY MANIFOLD ROOM - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, BUILDING 1).
- MED VAC/AIR ROOM - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, BUILDING 1).
- FA ATS - **NOT DEPICTED ON DIAGRAM** (FIRST FLOOR, BUILDING 1).

ARCHITECTRAL SCOPE:

- PROVIDE CMU BLOCK WALLS, DOORS, HARDWARE, WINDOWS, AND FRAMES TO DELINEATE AND ENCLOSE REQUIRED AREAS.
- CONSTRUCT CMU WALLS TO ACHIEVE THE REQUIRED RATINGS FOR FIRE AND SMOKE ZONE PARTITIONS AS INDICATED ON GI3001.
- PROVIDE ALL LIGHTING, CEILING AND FINISH WORK TO PROVIDE A COMPLETE AND USEABLE SPACE.

MECHANICAL SCOPE:

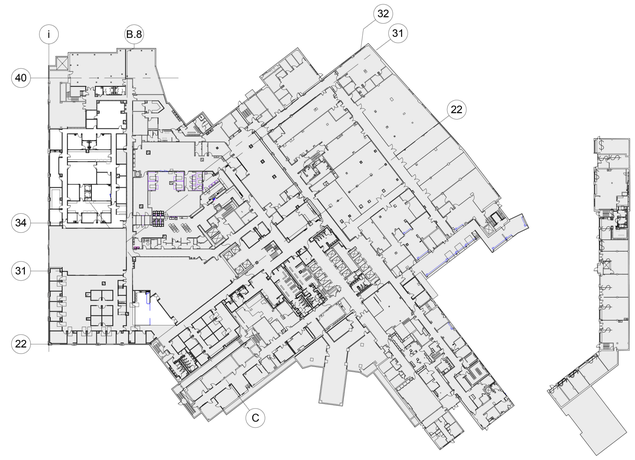
- PROVIDE ALL MECHANICAL HEAT, AIR AND VENTILATION WITHIN, AND AREA AND SCOPE USED TO SERVE THE AREA DELINEATED BY THE WALLS, INCLUDING ALL ASSOCIATED PUMPS, PIPING, AND CONTROLS.
- IN-SCOPE AREAS MAY BE ON THE GROUND FLOOR, IN THE 7TH FLOOR MECHANICAL PENTHOUSE OR ON THE ROOF.

ELECTRICAL/SECURITY/FIRE ALARM SCOPE:

- PROVIDE TEMPORARY/INTERIM EGRESS LIGHTING AND FIRE AND SMOKE ALARMS IN AREAS NOT REQUIRING FULL BUILD-OUT (CONFERENCE/AUDITORIUM, SIMULATION CENTER). TEMPORARY/INTERIM LIGHTING AND FIRE ALARM SHALL BE COMPLIANT WITH GOVERNING CODES FOR OPEN SPACES WITHIN THE BUILDING.
- PROVIDE PERMANENT FIRE ALARM, LIGHTING, POWER AND LOW-VOLTAGE SYSTEMS AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA. WORK TO INCLUDE RELAYS, CONTROLS, SWITCHES, ETC. TO PROVIDE AN OPERATIONAL SYSTEM.
- SECURITY AT ALL DOORS AND CORRIDOR CAMERAS AS PER THE CONSTRUCTION DOCUMENTS.
- PROVIDE NEW FIRE ALARM COMMAND AND CONTROL EQUIPMENT ON THE FIRST FLOOR TO REPLACE THE EXISTING EQUIPMENT ON THE GROUND FLOOR PER THE CONSTRUCTION DOCUMENTS.

PLUMBING/SPRINKLER SCOPE:

- PROVIDE TEMPORARY/INTERIM FIRE PROTECTION IN AREAS NOT REQUIRING FULL BUILD-OUT (CONFERENCE/AUDITORIUM, SIMULATION CENTER).
- PROVIDE ALL FLOOD MITIGATION WORK WHICH INCLUDES RAISING EXISTING CONTROLS AND EQUIPMENT ABOVE THE FLOODPLAIN APPROXIMATELY 54" ABOVE GROUND FLOOR LEVEL.
- IN-SCOPE AREAS MAY BE LOCATED IN NORTH AND SOUTH PUMP ROOMS, AND NORTH, SOUTH AND WEST STEAM PITS. THIS INCLUDES INSTALLATION OF BACK-FLOW PREVENTERS, AND RELOCATION OF PUMPS AND SYSTEMS, AND ALL WORK ON THE FIRST FLOOR.
- PROVIDE ALL HOT AND COLD WATER, VENT, SANITARY AND STORM DRAINAGE WORK AND SYSTEMS WITHIN AND SERVING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA.
- PROVIDE ALL FIRE PROTECTION WORK AND SYSTEMS WITHIN AND PROVIDING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO SERVE A COMPLETE AND USEABLE AREA.



C4 GROUND FLOOR PLAN - PRICE OPTION 1

NTS

SCOPE OF WORK INCLUDES:

- SIMULATION CENTER - BUILDING 6, NORTHWEST QUADRANT BETWEEN COLUMN LINES '34' AND '40', AND BETWEEN COLUMN LINES 'I' AND 'B.8'. REFER TO PARTIAL PLANS '1' AND '2'.
- KITCHENETTE/LOUNGE - BUILDING 6, ADJACENT TO BUILDING 1 WEST WING BETWEEN COLUMN LINES '31' AND '32', AND BETWEEN COLUMN LINES 'C' AND '22'. REFER FOR PARTIAL PLAN '3'.

ARCHITECTRAL SCOPE:

- PROVIDE CMU BLOCK WALLS, DOORS, HARDWARE, WINDOWS, AND FRAMES TO DELINEATE AND ENCLOSE REQUIRED AREAS.
- PROVIDE ALL LIGHTING, CEILING AND FINISH WORK TO PROVIDE A COMPLETE AND USEABLE SPACE.

MECHANICAL SCOPE:

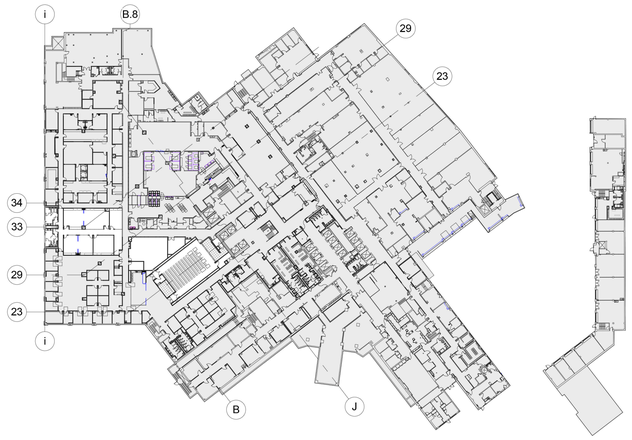
- PROVIDE ALL MECHANICAL HEAT, AIR AND VENTILATION WITHIN, AND AREA AND SCOPE USED TO SERVE THE AREA DELINEATED BY THE WALLS, INCLUDING ALL ASSOCIATED PUMPS, PIPING, AND CONTROLS.
- IN-SCOPE AREAS MAY BE ON THE GROUND FLOOR, IN THE 7TH FLOOR MECHANICAL PENTHOUSE OR ON THE ROOF.
- AHU-2 SERVING THE SIMULATION CENTER IS LOCATED IN THE 7TH FLOOR MECHANICAL PENTHOUSE.

ELECTRICAL/SECURITY/FIRE ALARM SCOPE:

- PROVIDE PERMANENT FIRE ALARM, LIGHTING, POWER AND LOW-VOLTAGE SYSTEMS AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA. WORK TO INCLUDE RELAYS, CONTROLS, SWITCHES, ETC. TO PROVIDE AN OPERATIONAL SYSTEM.
- SECURITY AND NURSE CALL, AS PER THE CONSTRUCTION DOCUMENTS FOR THE PARTICULAR IN-SCOPE AREAS.

PLUMBING/SPRINKLER SCOPE:

- PROVIDE ALL HOT AND COLD WATER, VENT, SANITARY AND STORM DRAINAGE WORK AND SYSTEMS WITHIN AND SERVING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA.
- PROVIDE ALL FIRE PROTECTION WORK AND SYSTEMS WITHIN AND SERVING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA.



C7 GROUND FLOOR PLAN - PRICE OPTION 2

NTS

SCOPE OF WORK INCLUDES:

- MEETING ROOMS - BUILDING 6, CENTRAL LOCATION OF THE WEST SIDE BETWEEN COLUMN LINES '29' AND '34', AND BETWEEN COLUMN LINES 'I' AND 'B.8'. REFER TO PARTIAL PLAN '2'.
- AUDITORIUM, INCLUDING MECHANICAL SUPPORT AND AUDITORIUM STORAGE - BUILDING 6, ADJACENT TO BUILDING 1 WEST WING BETWEEN COLUMN LINES '23' AND '33', AND BETWEEN COLUMN LINES 'B' AND 'J'. REFER FOR PARTIAL PLAN '3'.

ARCHITECTRAL SCOPE:

- PROVIDE CMU BLOCK WALLS, DOORS, HARDWARE, WINDOWS, AND FRAMES TO DELINEATE AND ENCLOSE REQUIRED AREAS.
- PROVIDE ALL LIGHTING, CEILING AND FINISH WORK TO PROVIDE A COMPLETE AND USEABLE SPACE.

MECHANICAL SCOPE:

- PROVIDE ALL MECHANICAL HEAT, AIR AND VENTILATION WITHIN, AND AREA AND SCOPE USED TO SERVE THE AREA DELINEATED BY THE WALLS, INCLUDING ALL ASSOCIATED PUMPS, PIPING, AND CONTROLS.
- IN-SCOPE AREAS MAY BE ON THE GROUND FLOOR, IN THE 7TH FLOOR MECHANICAL PENTHOUSE OR ON THE ROOF.
- AHU-X SERVING THE AUDITORIUM IS LOCATED IN THE ADJACENT MECHANICAL ROOM.
- PROVIDE NEW ROOFTOP CHILLER AS INDICATED ON THE CONSTRUCTION DOCUMENTS.

ELECTRICAL/SECURITY/FIRE ALARM SCOPE:

- PROVIDE PERMANENT FIRE ALARM, LIGHTING, POWER AND LOW-VOLTAGE SYSTEMS AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA. WORK TO INCLUDE RELAYS, CONTROLS, SWITCHES, ETC. TO PROVIDE AN OPERATIONAL SYSTEM.
- SECURITY, AS PER THE CONSTRUCTION DOCUMENTS FOR THE PARTICULAR IN-SCOPE AREAS.

PLUMBING/SPRINKLER SCOPE:

- PROVIDE ALL HOT AND COLD WATER, VENT, SANITARY AND STORM DRAINAGE WORK AND SYSTEMS WITHIN AND SERVING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA.
- PROVIDE ALL FIRE PROTECTION WORK AND SYSTEMS WITHIN AND SERVING THE AREA AS PER THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE AND USEABLE AREA.

NO	REVISIONS	DATE
1	ADDENDUM 1	03/20/2015
	ISSUE FOR BID	10/31/2014

CONSULTANTS:

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ARCHITECT/ENGINEERS:

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500 Seventh Ave, 11th Floor, New York, NY 10018 . 212-904-1212

Drawing Title: **GROUND FLOOR PRICING OPTION PLANS**

Approved: Project Director

Project Title: **VA NY HARBOR HEALTHCARE SYSTEM MANHATTAN CAMPUS / GROUND FLOOR PHASE 2B**

Location: **423 E 23RD STREET, NEW YORK, NY 10010**

Date: **08 / 25 / 2014** | Checked: **SK** | Drawn: **LT**

Project Number: **228727**

Building Number: **1, 2, & 6**

Drawing Number: **AE0004**

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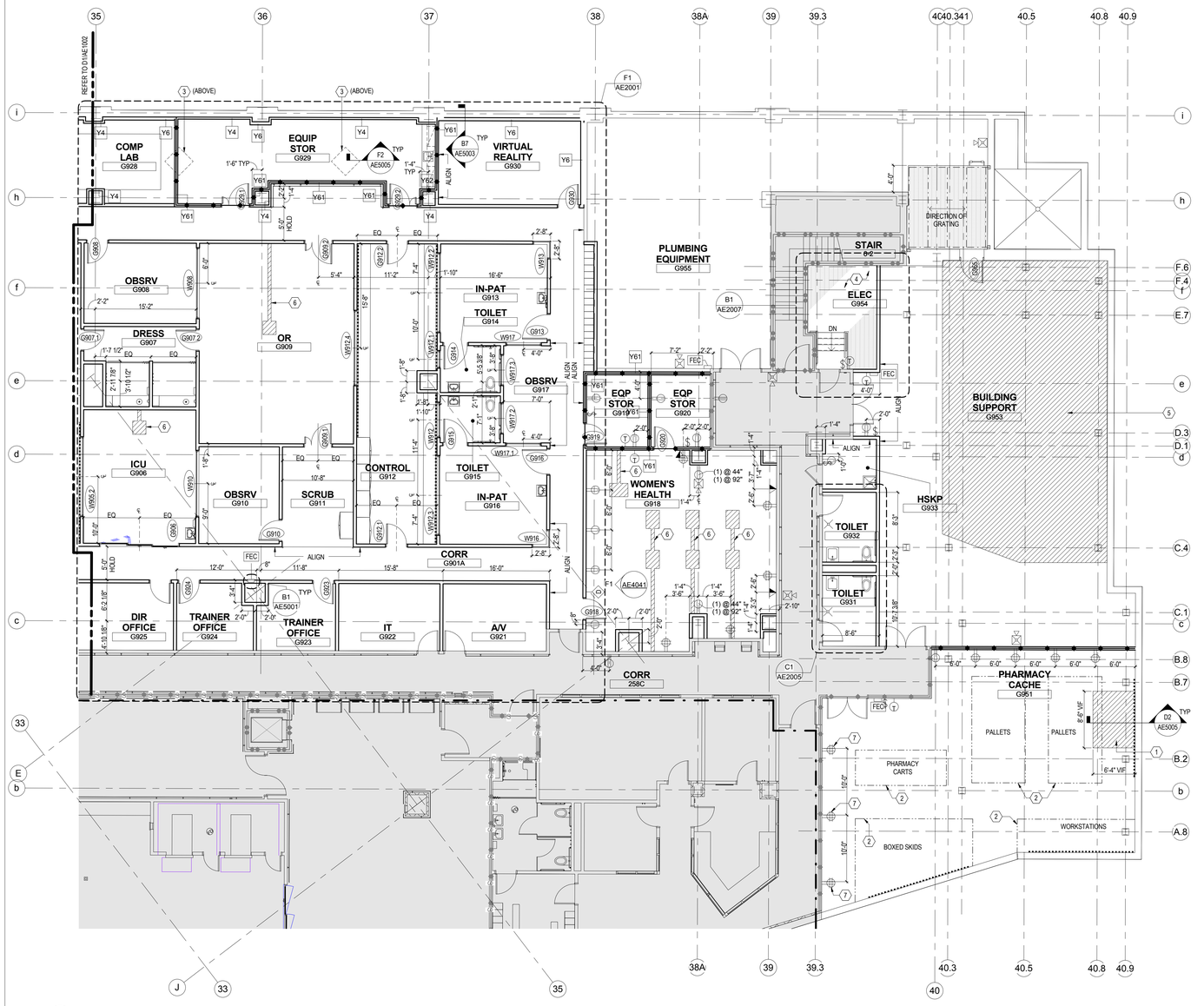


E1 PARTIAL GROUND FLOOR PLAN - PART 1

1/8" = 1'-0"

NEW WORK NOTES:

1. REFER TO SHEET AE0002 FOR PART PLAN TRUE NORTH LOCATION WITHIN BUILDINGS 1, 2, & 6.
2. REFER TO AE0001 FOR TYPICAL PLAN LEGENDS AND SYMBOLS.
3. CONTRACTOR TO REVIEW GENERAL NOTES PRIOR TO COMMENCEMENT OF THE WORK.
4. CONTRACTOR TO REVIEW PROPOSED FLOOR PLANS PRIOR TO COMMENCEMENT OF THE WORK. CONFLICTS AND COORDINATION DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE A/E PRIOR TO COMMENCEMENT OF THE WORK.
5. CONTRACTOR TO ENSURE THE RATING INTEGRITY OF EXISTING WALLS TO REMAIN IS NOT COMPROMISED DURING DEMOLITION AND NEW CONSTRUCTION. EXISTING CONDITIONS WHICH COMPROMISE THE INTEGRITY OF THE WALL SHALL BE REPAIRED BY THE CONTRACTOR TO ENSURE THE INTENDED FIRE RATING IS MAINTAINED.
6. THE ENTIRE BUILDING, INCLUDING FLOORS AT WHICH WORK AREAS ARE LOCATED WILL BE OCCUPIED THROUGHOUT CONSTRUCTION. EXITS SHALL BE KEPT READILY AVAILABLE AND UNOBSTRUCTED AT ALL TIMES. NOISY WORK OR OTHER WORK THAT WOULD BE DISRUPTIVE TO ADJACENT SPACES, INCLUDING FLOOR(S) ABOVE, SHOULD BE COORDINATED WITH THE VA AND PERFORMED "OFF HOURS" IF DIRECTED BY THE VA.
7. ALL DIMENSIONS ARE TO FINISH FACE OF WALL, UNLESS OTHERWISE NOTED.
8. DOORS AND FRAMES IN NEW WALL CONSTRUCTION TO BE 4" FROM FACE OF WALL TO OUTSIDE FACE OF DOOR FRAME, U.O.N.
9. ALL PARTITIONS TO BE TYPE Y6, UNLESS OTHERWISE NOTED. EXPOSED CMU SHALL BE BULLNOSE AT OUTSIDE CORNERS; NO BULLNOSE AT CMU CORNERS WHERE CORNER GUARDS OR CERAMIC AND PORCELAIN WALL TILE ARE SCHEDULED.
10. NEW DOORS AND FRAMES IDENTIFIED IN LOCATIONS WHERE EXISTING DOORS AND FRAMES HAVE BEEN DEMOLISHED SHALL MATCH IN SIZE, TYPE AND DETAIL, UNLESS NOTED OTHERWISE. NOTATIONS ON DRAWINGS ARE TO BE VERIFIED IN THE FIELD FOR ACCURACY WITH EXISTING CONDITIONS. FIELD CONDITIONS WHICH DEVIATE FROM INFORMATION PROVIDED ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE A/E FOR FINAL COORDINATION AND RESOLUTION PRIOR TO ORDERING OR INSTALLING NEW DOORS OR FRAMES.
11. PROVIDE CONTROL JOINTS AT 25'-0" O.C. MAXIMUM FOR CMU AND GYPSUM BOARD PARTITIONS, UNLESS OTHERWISE NOTED.
12. REVIEW FLOOR SLAB ACROSS ENTIRE SCOPE OF WORK PRIOR TO NEW CONSTRUCTION ACTIVITIES. INFILL DEMOLISHED FLOOR SLABS RESULTING FROM PREVIOUS REMEDIATION / ABATEMENT / DEMOLITION WORK. IN AREAS WHERE PREVIOUS DEMOLITION OR EXISTING CONDITIONS HAVE CAUSED UNEVENNESS OF THE FLOOR SLAB, CONTRACTOR SHALL PATCH AND LEVEL EXISTING SLAB TO MATCH ADJACENT SLAB CONSTRUCTION. COORDINATE WITH FINISH PLANS AND DETAILS.
13. SUB-FLOOR SHALL BE CLEAN AND FREE OF DUST, SOLVENTS, SEALERS, ADHESIVE RESIDUE, AND OTHER FOREIGN MATERIALS PRIOR TO FINISH FLOOR INSTALLATION.
14. VERIFY EXISTING COLUMN CENTERLINES, SIZES AND LOCATIONS PRIOR TO THE START OF WORK. BRING ANY DISCREPANCIES TO THE A/E'S ATTENTION PRIOR TO START OF WORK IN THAT AREA.
15. DIMENSIONS SHOWN AS V.I.F. SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY IN DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK.
16. NEW CONSTRUCTION ADJOINING EXISTING CONSTRUCTION IN THE SAME PLANE SHALL BE FLUSH WITH NO VISIBLE JOINT, UNLESS OTHERWISE NOTED.
17. EXISTING FLOOR ACCESS HATCHES TO PERIMETER STEAM TRENCH ARE TO BE MAINTAINED AND COORDINATED WITH PROPOSED FLOOR FINISHES.
18. PATCH/REPAIR EXISTING CMU WALLS TO ORIGINAL CONDITION.
19. FURNITURE SHALL BE OFOI AND IS SHOWN IS FOR INFORMATION ONLY.
20. REFER TO AE4001 FOR ADDITIONAL TOILET ROOM ACCESSORY INFORMATION.
21. REFER TO AF6002 FOR ROOM FINISH SCHEDULE.
22. REFER TO AF1000 SERIES FOR EXTENT OF WALL PROTECTION.
23. NO INFRASTRUCTURE OR UTILITIES SHALL BE INSTALLED IN OR PASS THROUGH EXIT ENCLOSURES UNLESS IN COMPLIANCE WITH NFPA 101 SECTION 7.1.3.2.1.

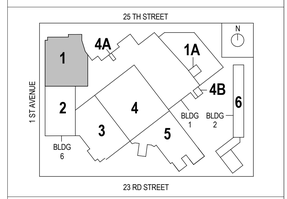
ELECTRICAL DEVICE NOTES:

1. REFER TO AE0001 FOR TYPICAL PLAN LEGENDS AND SYMBOLS.
2. ELECTRICAL OUTLETS AND TELE/DATA HAVE BEEN BEEN INDICATED ON THE AE1XXX, AE2XXX AND AE4XXX SERIES DRAWINGS, AND DEMONSTRATE SPECIFIC LOCATIONS WHERE DEVICES ARE TO BE LOCATED. THE PLANS MAY NOT INCLUDE ALL DEVICES IN SCOPE, AND DO NOT INDICATE THE LOCATION OF ANY A/V DEVICES, UNLESS SPECIFIC LOCATION COORDINATION IS REQUIRED. COORDINATION WITH THE ELECTRICAL AND AV DRAWINGS INCLUDING ELECTRICAL AND AV DEVICE SYMBOLOGY, IS REQUIRED TO DETERMINE THE ENTIRE SCOPE OF WORK.
3. REFER TO AE4001 FOR TYPICAL MOUNTING HEIGHTS AND RELATIONSHIP OF DEVICE TO DOOR OPENING, WHERE APPLICABLE.
4. REFER TO ELECTRICAL DRAWINGS FOR CIRCUITING INFORMATION.
5. COORDINATE FURNITURE POWER AND DATA CONNECTIONS WITH THE VA FURNITURE VENDOR. LOCATIONS ON ARCHITECTURAL PLANS ARE FOR REFERENCE ONLY.
6. UNLESS OTHERWISE NOTED, LOCATE ALL OUTLETS 44 IN. ABOVE FINISHED FLOOR.
7. OUTLETS LOCATED WITHIN 72 IN. OF ANY SINK, CUPSINK OR OTHER WET SERVICE SHALL BE G.F.I. TYPE, TYPICAL.
8. MAINTAIN A MINIMUM 16 IN. OFFSET DISTANCE BETWEEN OUTLETS ON ADJACENT SIDES OF A WALL.
9. CENTER RECEPTACLES/DEVICES LOCATED ON COLUMNS/COLUMN ENCLOSURES, UNLESS OTHERWISE NOTED.

KEYNOTES

	1	NEW ELEVATOR PIT INFILL.
1	2	EQUIPMENT SHALL BE (OFOI) AND IS SHOWN FOR INFORMATION ONLY
	3	INFILL SKYLIGHT OPENING AT SLAB ABOVE. REFER TO F2/AE5005 FOR ADDITIONAL INFORMATION.
1	4	NEW THICK MOULDED FIBERGLASS GRATING OVER STEEL SUPPORTS AND POSTS. GRATING TO BE SIZED SO NO UNIT EXCEEDS 40 POUNDS AND CAN BE EASILY REMOVED BY TWO PEOPLE. FINISHED HEIGHT OF ELEVATED FLOOR = @24".
	5	NEW CONCRETE TOPPING SLAB. LEVEL DEPRESSION WITH ADJACENT FLOOR SLAB TO REMAIN.
	6	PATCH SLAB AS REQUIRED AFTER INSTALLATION OF FLOOR BOX. REFER TO ELECTRICAL AND A/V DRAWINGS FOR ADDITIONAL INFORMATION.
	7	SURFACE-MOUNT FIXTURES AT EXISTING WALLS

KEY PLAN:



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NO	REVISIONS	DATE
1	ADDENDUM 1	03/20/2015
	ISSUE FOR BID	10/31/2014

CONSULTANTS:

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ARCHITECT/ENGINEERS:

HDR
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500 Seventh Ave, 11th Floor, New York, NY 10018 . 212-904-1212

Drawing Title: PARTIAL GROUND FLOOR PLAN - PART 1

Approved: Project Director

Project Title: VA NY HARBOR HEALTHCARE SYSTEM MANHATTAN CAMPUS / GROUND FLOOR PHASE 2B

Location: 423 E 23RD STREET, NEW YORK, NY 10010

Date: 08 / 25 / 2014 | Checked: SK | Drawn: LT/MC

Project Number: 228727

Building Number: 1, 2, & 6

Drawing Number: AE1001

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

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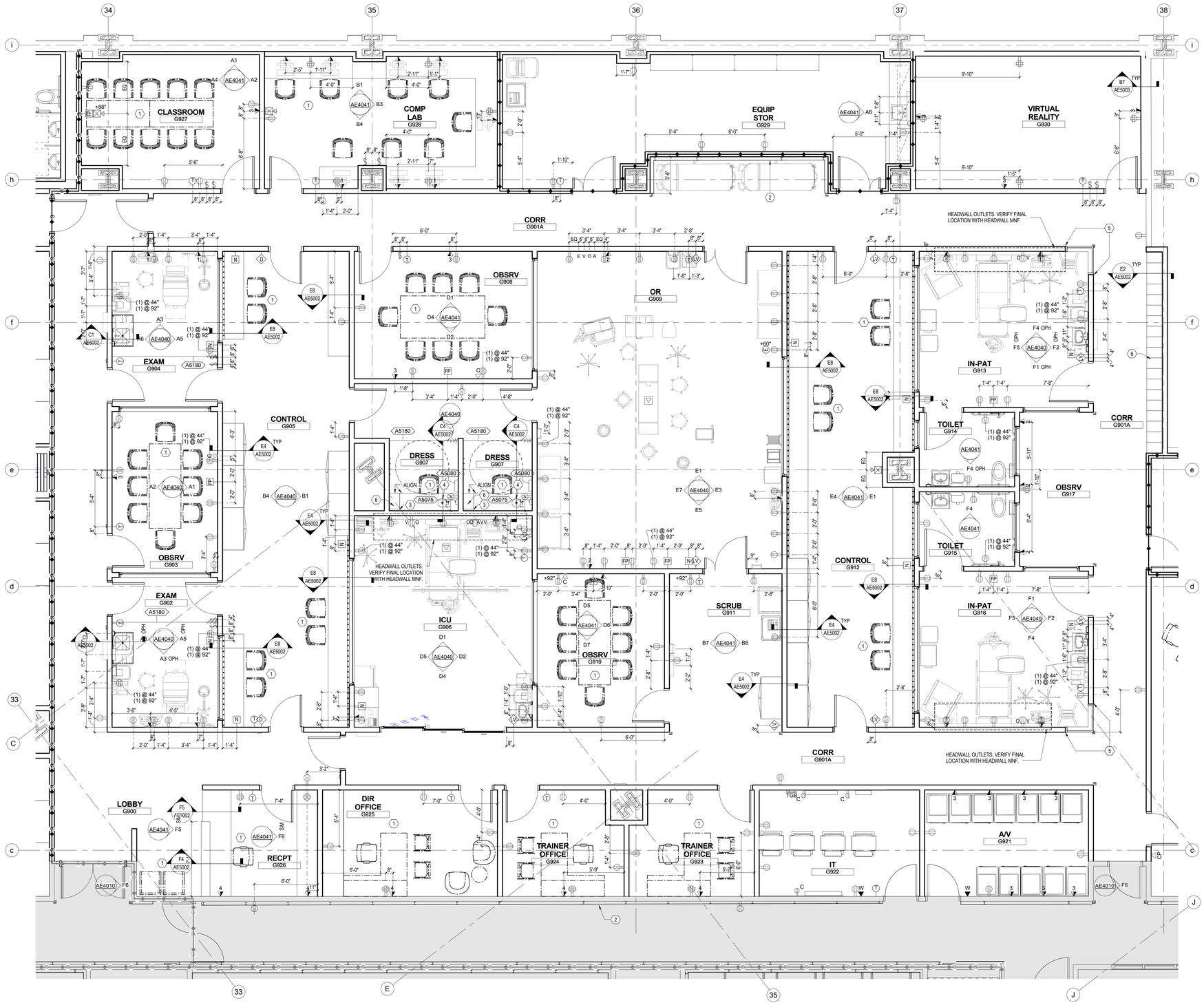

F1 ENLARGED SIM CENTER PLAN

1/4" = 1'-0"

NEW WORK NOTES:

1. REFER TO SHEET AE0002 FOR PART PLAN TRUE NORTH LOCATION WITHIN BUILDINGS 1, 2, & 6.
2. REFER TO AE0001 FOR TYPICAL PLAN LEGENDS AND SYMBOLS.
3. CONTRACTOR TO REVIEW GENERAL NOTES PRIOR TO COMMENCEMENT OF THE WORK.
4. CONTRACTOR TO REVIEW PROPOSED FLOOR PLANS PRIOR TO COMMENCEMENT OF THE WORK. CONFLICTS AND COORDINATION DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE A/E PRIOR TO COMMENCEMENT OF THE WORK.
5. CONTRACTOR TO ENSURE THE RATING INTEGRITY OF EXISTING WALLS TO REMAIN IS NOT COMPROMISED DURING DEMOLITION AND NEW CONSTRUCTION. EXISTING CONDITIONS WHICH COMPROMISE THE INTEGRITY OF THE WALL SHALL BE REPAIRED BY THE CONTRACTOR TO ENSURE THE INTENDED FIRE RATING IS MAINTAINED.
6. THE ENTIRE BUILDING, INCLUDING FLOORS AT WHICH WORK AREAS ARE LOCATED WILL BE OCCUPIED THROUGHOUT CONSTRUCTION. EXITS SHALL BE KEPT READILY AVAILABLE AND UNOBSTRUCTED AT ALL TIMES. NOISY WORK OR OTHER WORK THAT WOULD BE DISRUPTIVE TO ADJACENT SPACES, INCLUDING FLOOR(S) ABOVE, SHOULD BE COORDINATED WITH THE VA AND PERFORMED "OFF HOURS" IF DIRECTED BY THE VA.
7. ALL DIMENSIONS ARE TO FINISH FACE OF WALL, UNLESS OTHERWISE NOTED.
8. DOORS AND FRAMES IN NEW WALL CONSTRUCTION TO BE 4" FROM FACE OF WALL TO OUTSIDE FACE OF DOOR FRAME, U.O.N.
9. ALL PARTITIONS TO BE TYPE Y5, UNLESS OTHERWISE NOTED. EXPOSED CMU SHALL BE BULLNOSE AT OUTSIDE CORNERS; NO BULLNOSE AT CMU CORNERS WHERE CORNER GUARDS OR CERAMIC AND PORCELAIN WALL TILE ARE SCHEDULED.
10. NEW DOORS AND FRAMES IDENTIFIED IN LOCATIONS WHERE EXISTING DOORS AND FRAMES HAVE BEEN DEMOLISHED SHALL MATCH IN SIZE, TYPE AND DETAIL, UNLESS NOTED OTHERWISE. NOTATIONS ON DRAWINGS ARE TO BE VERIFIED IN THE FIELD FOR ACCURACY WITH EXISTING CONDITIONS. FIELD CONDITIONS WHICH DEVIATE FROM INFORMATION PROVIDED ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE A/E FOR FINAL COORDINATION AND RESOLUTION PRIOR TO ORDERING OR INSTALLING NEW DOORS OR FRAMES.
11. PROVIDE CONTROL JOINTS AT 25'-0" O.C. MAXIMUM FOR CMU AND GYPSUM BOARD PARTITIONS, UNLESS OTHERWISE NOTED.
12. REVIEW FLOOR SLAB ACROSS ENTIRE SCOPE OF WORK PRIOR TO NEW CONSTRUCTION ACTIVITIES. INFILL DEMOLISHED FLOOR SLABS RESULTING FROM PREVIOUS REMEDIATION / ABATEMENT / DEMOLITION WORK. IN AREAS WHERE PREVIOUS DEMOLITION OR EXISTING CONDITIONS HAVE CAUSED UNEVENNESS OF THE FLOOR SLAB, CONTRACTOR SHALL PATCH AND LEVEL EXISTING SLAB TO MATCH ADJACENT SLAB CONSTRUCTION. COORDINATE WITH FINISH PLANS AND DETAILS.
13. SUB-FLOOR SHALL BE CLEAN AND FREE OF DUST, SOLVENTS, SEALERS, ADHESIVE RESIDUE, AND OTHER FOREIGN MATERIALS PRIOR TO FINISH FLOOR INSTALLATION.
14. VERIFY EXISTING COLUMN CENTERLINES, SIZES AND LOCATIONS PRIOR TO THE START OF WORK. BRING ANY DISCREPANCIES TO THE A/E'S ATTENTION PRIOR TO START OF WORK IN THAT AREA.
15. DIMENSIONS SHOWN AS V.I.F. SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY IN DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK.
16. NEW CONSTRUCTION ADJOINING EXISTING CONSTRUCTION IN THE SAME PLANE SHALL BE FLUSH WITH NO VISIBLE JOINT, UNLESS OTHERWISE NOTED.
17. EXISTING FLOOR ACCESS HATCHES TO PERIMETER STEAM TRENCH ARE TO BE MAINTAINED AND COORDINATED WITH PROPOSED FLOOR FINISHES.
18. PATCH/REPAIR EXISTING CMU WALLS TO ORIGINAL CONDITION.
19. FURNITURE SHALL BE OFOI AND IS SHOWN IS FOR INFORMATION ONLY.
20. REFER TO AE4001 FOR ADDITIONAL TOILET ROOM ACCESSORY INFORMATION.
21. REFER TO AF6002 FOR ROOM FINISH SCHEDULE.
22. REFER TO AF1000 SERIES FOR EXTENT OF WALL PROTECTION.
23. NO INFRASTRUCTURE OR UTILITIES SHALL BE INSTALLED IN OR PASS THROUGH EXIT ENCLOSURES UNLESS IN COMPLIANCE WITH NFPA 101 SECTION 7.1.3.2.1.

ELECTRICAL DEVICE NOTES:

1. REFER TO AE0001 FOR TYPICAL PLAN LEGENDS AND SYMBOLS.
2. ELECTRICAL OUTLETS AND TELE/DATA HAVE BEEN BEEN INDICATED ON THE AE1XXX, AE2XXX AND AE4XXX SERIES DRAWINGS, AND DEMONSTRATE SPECIFIC LOCATIONS WHERE DEVICES ARE TO BE LOCATED. THE PLANS MAY NOT INCLUDE ALL DEVICES IN SCOPE, AND DO NOT INDICATE THE LOCATION OF ANY A/V DEVICES, UNLESS SPECIFIC LOCATION COORDINATION IS REQUIRED. COORDINATION WITH THE ELECTRICAL AND AV DRAWINGS INCLUDING ELECTRICAL AND AV DEVICE SYMBOLOGY, IS REQUIRED TO DETERMINE THE ENTIRE SCOPE OF WORK.
3. REFER TO AE4001 FOR TYPICAL MOUNTING HEIGHTS AND RELATIONSHIP OF DEVICE TO DOOR OPENING, WHERE APPLICABLE.
4. REFER TO ELECTRICAL DRAWINGS FOR CIRCUITING INFORMATION.
5. COORDINATE FURNITURE POWER AND DATA CONNECTIONS WITH THE VA FURNITURE VENDOR. LOCATIONS ON ARCHITECTURAL PLANS ARE FOR REFERENCE ONLY.
6. UNLESS OTHERWISE NOTED, LOCATE ALL OUTLETS 44 IN. ABOVE FINISHED FLOOR.
7. OUTLETS LOCATED WITHIN 72 IN. OF ANY SINK, CUPSINK OR OTHER WET SERVICE SHALL BE G.F.I. TYPE, TYPICAL.
8. MAINTAIN A MINIMUM 16 IN. OFFSET DISTANCE BETWEEN OUTLETS ON ADJACENT SIDES OF A WALL.
9. CENTER RECEPTACLES/DEVICES LOCATED ON COLUMNS/COLUMN ENCLOSURES, UNLESS OTHERWISE NOTED.

KEYNOTES

1	MOVEABLE FURNITURE SHOWN FOR COORDINATION PURPOSES ONLY. FURNITURE TO BE PROVIDED AND INSTALLED BY VA.
2	WALL GUARD, TYP. REFER TO DETAILS ON SHEET AE5001 FOR ADDITIONAL INFORMATION.
3	FILLER PANEL.
4	SINK. REFER TO PLUMBING DWGS.,& SPECS FOR ADDITIONAL INFORMATION.
5	REFER TO 09 29 00 AND DETAIL D4/AE6002 FOR ADDITIONAL INFORMATION REGARDING HEAD CONDITION ABOVE CORNER OBSERVATION WINDOWS.
6	12"W x 18"DEEP DOUBLE TIER PLASTIC LAMINATE LOCKER, TYP.

FULLY SPRINKLERED

NO	REVISIONS	DATE
1	ADDENDUM 1	03/20/2015
	ISSUE FOR BID	10/31/2014

CONSULTANTS:

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ARCHITECT/ENGINEERS:

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500 Seventh Ave, 11th Floor, New York, NY 10018 . 212-904-1212

Drawing Title: ENLARGED SIM CENTER PLAN

Approved: Project Director

Project Title: VA NY HARBOR HEALTHCARE SYSTEM MANHATTAN CAMPUS / GROUND FLOOR PHASE 2B

Location: 423 E 23RD STREET, NEW YORK, NY 10010

Date: 08 / 25 / 2014 | Checked: SK | Drawn: LT/MC

Project Number: 228727

Building Number: 1, 2, & 6

Drawing Number: AE2001

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

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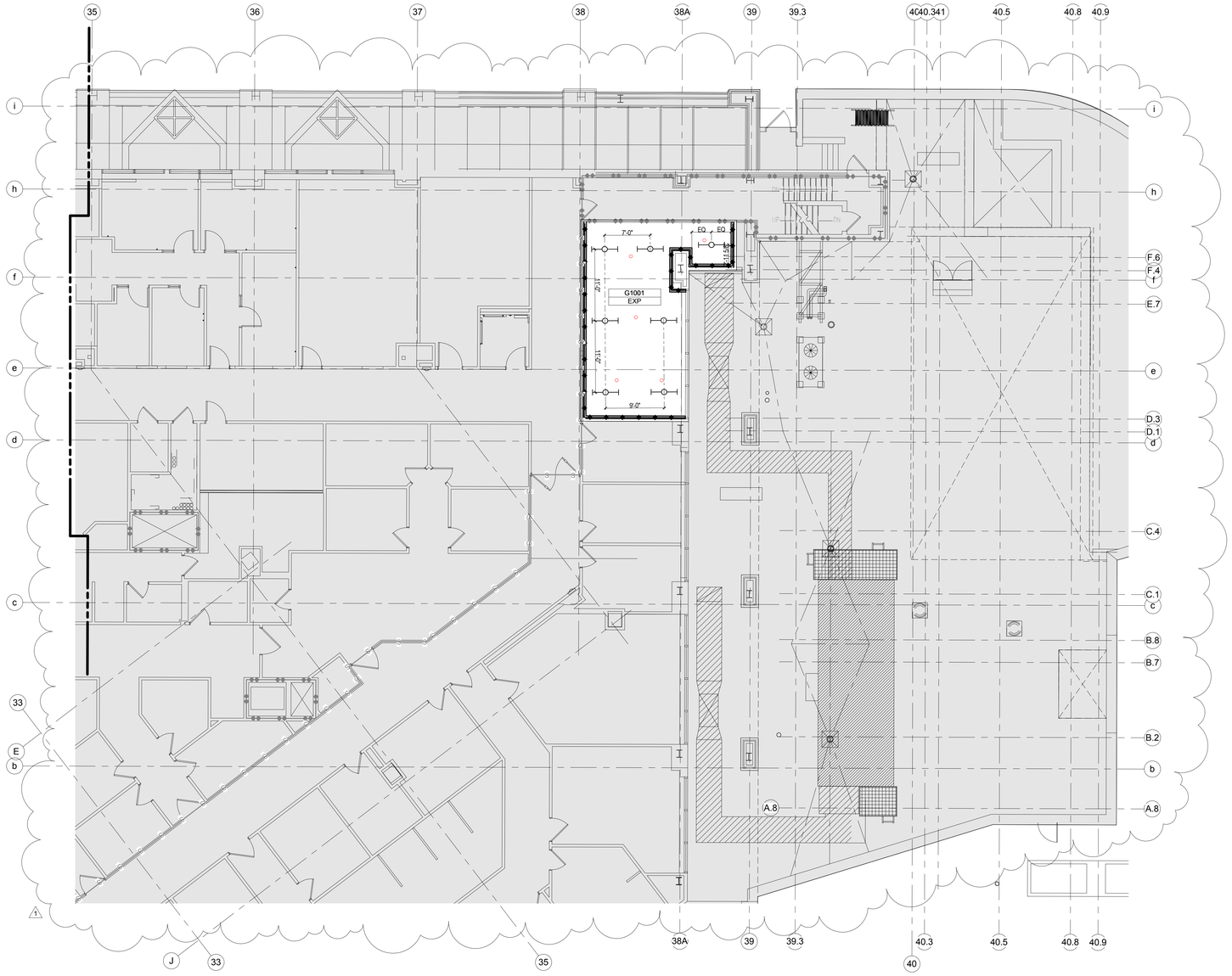
DOOR AND FRAME SCHEDULE

IDENTIFICATION			DIMENSIONS				PANEL				FRAME							
			WIDTH											DETAILS				
DOOR NO	ROOM NO	ROOM NAME	W1	W2	TOTAL WIDTH	H	TYPE	MATERIAL	FINISH	GLAZING	TYPE	MATERIAL	FINISH	HEAD	JAMB	FIRE RATING	HARDWARE GROUP	NOTES
1-1.1	1-1	STAIR	3' - 0"			7' - 0"	2	HM	P-2	GL-8 (1)	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-6	
1-1.2	1-1	STAIR	3' - 0"	3' - 0"	6' - 0"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	D2/AE6002	E2/AE6002	90	HW-12M	
1-1.3	1-1A	STOR	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	D2/AE6002	E2/AE6002	90	HW-6	
1-2.1	1-2	STAIR	3' - 8"			7' - 0"	2	HM	P-2	GL-8 (1)	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-6	
1-2.2	1-2	STAIR	3' - 8"			7' - 0"	2	HM	P-2	GL-4	A	HM	P-2	D2/AE6002	E2/AE6002		HW-6	
1-3	1-3	STAIR	3' - 8"			7' - 0"	2	HM	P-2	GL-4	A	HM	P-2	D2/AE6002	C2/AE6002		HW-6	
														SIM	SIM (1)			
1-4	1-4	STAIR	3' - 0"			7' - 0"	2	HM	*	GL-8	A	HM	*	C2/AE6002	C2/AE6002	90	HW-6	
6-1	6-1	STAIR	3' - 8"			7' - 0"	2	HM	*	GL-8 (1)	A	HM	*	C2/AE6002	C2/AE6002	90	HW-6	
0145W	0145W	A/C EQUIP RM	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-5	
0209S	0209S	STORAGE	3' - 6"	1' - 4"	4' - 10"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11	
0209SA	0209SA	IT	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-SH-3	
258B	258B	CORR	3' - 0"			8' - 0"	44	-	*	GL-4a	-	-	*	-	-		HW-6	
714	714	STORAGE	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	45	HW-5	
715	715	SHAFT	2' - 6"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G001.1	G600	LOBBY	3' - 6"	3' - 6"	7' - 0"	7' - 0"	2/2	HM	*	GL-8 (1)	A	HM	*	C7/AE6002	C7/AE6002	90	HW-12L	
G001.2	G001	ELEV LOBBY	3' - 6"	3' - 6"	7' - 0"	7' - 0"	2/2	HM	P-2	GL-4	A	HM	P-2	C7/AE6002	C7/AE6002		HW-12M	CROSS CORRIDOR SMOKE DOOR
G001.3	G001	ELEV LOBBY	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-4A	
G001W	G001W	ELEC CAB	3' - 8"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	90	HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G002	G002	HSKP	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	90	HW-5	
G004	G004	CLOSET	3' - 0"	3' - 0"	6' - 0"	7' - 0"	6/6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-11A	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G011	G011	UNISEX TOILET / CHANGING	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-1	
G012	G012	UNISEX TOILET / CHANGING	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-1	
G113	G113	CORR	3' - 8"			7' - 0"	2	HM	P-2	GL-8 (1)	A	HM	P-2	D2/AE6002	C2/AE6002	90	HW-SH-6	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G114W	G114W	LAUNDRY CHUTE	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-4B	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G116	G116	F D	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-3A	
G116W	G116W	TELEPHONE EQUIP	3' - 0"	3' - 0"	6' - 0"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-SH-9	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G119W	G119W	ELEC CLT	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G120W	G120W	CORR	3' - 6"	1' - 4"	4' - 10"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-8	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G121W.1	G121W	STAIR	3' - 8"			7' - 0"	2	HM	P-2	GL-8 (1)	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-6	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G121W.2	G121W	STAIR	3' - 0"			7' - 0"	2	HM	P-2	GL-4	A	HM	P-2	C2/AE6002	C2/AE6002		HW-6	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G121W.3	G121W	STAIR	2' - 6"			6' - 8"	2	HM	P-2	GL-4		HM	P-2	C2/AE6002	C2/AE6002		HW-6	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G122W	G122W	PUMP ROOM	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G122WA	G122WA	SHAFT	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-5	
G123W.1	G123W	MECHANICAL	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G123W.2	G123W	MECHANICAL	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-5	
G124W	G124W	STEAM ROOM	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-5	
G125W.1	G125W	STEAM ROOM	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-5	
G125W.2	G125W	STEAM ROOM	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G126W	G126W	STORAGE	3' - 8"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G127W	G127W	ACCESS ALCOVE	2' - 6"	2' - 6"	5' - 0"	5' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-11A	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G128W	G128W	FIRE PUMP ROOM	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-5	
G129W	G129W	ENGINEERING STORAGE	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-5	
G130W	G130W	STORAGE	3' - 8"	2' - 4"	6' - 0"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G133W	G133W	ENGINEERING STORAGE	3' - 0"	3' - 0"	6' - 0"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G140W	G140W	MAIL / COPY	3' - 0"			7' - 0"	6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002		HW-4A	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G143C.1	G143C	CORR	2' - 6"			6' - 6"	8	HM	P-2	GL-8 (1)	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-5	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G143W	G143W	IRM COMPUTER STORAGE	3' - 6"	1' - 4"	4' - 10"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11	
G144W.1	G144W	EMS STORAGE	3' - 8"			7' - 0"	2	HM	P-2	GL-8 (1)	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-5F	
G144W.2	G144W	EMS STORAGE	3' - 0"	2' - 0"	5' - 0"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11B	
G145C	G145C	CLOTHING STORAGE	3' - 6"	1' - 4"	4' - 10"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	45	HW-11	
G382	G382	MALE TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G383	G383	FEMALE TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G500A	G500A	MECHANICAL ROOM	3' - 6"	1' - 4"	4' - 10"	7' - 0"	6/6	HM	P-2	-	A	HM	P-2	C2/AE6002	C2/AE6002	90	HW-11	REPLACE DOOR AND FRAME IN EXISTING WALL OPENING. VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION AND INSTALLATION OF NEW DOOR AND FRAME.
G600.2	G600	LOBBY	3' - 6"	3' - 6"	7' - 0"	7' - 0"	2/2	HM	*	GL-8 (1)	A	HM	*	C7/AE6002	C7/AE6002	60	HW-12M	
G603	G603	MALE LOCKER	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	45	HW-1A	
G604	G604	MALE TOILET	3' - 0"			7' - 0"	-	-	-	-	A	HM	*	C2/AE6002	C2/AE6002		-	CASED OPENING
G605	G605	FEMALE LOCKER	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	45	HW-1A	
G606	G606	FEMALE TOILET	3' - 0"			7' - 0"	-	-	-	-	A	HM	*	C2/AE6002	C2/AE6002		-	CASED OPENING
G607.1	G607	BREAK AREA	3' - 0"			7' - 0"	2	HM	*	GL-8	A	HM	*	C2/AE6002	C2/AE6002	45	HW-1A	
G607.2	G607	BREAK AREA	3' - 0"			7' - 0"	2	HM	*	GL-8 (1)	A	HM	*	C2/AE6002	C2/AE6002	20	HW-1A	20 MINUTE SMOKE DOOR IN 1-HOUR RATED WALL. REF. NFPA 101 SECTION 18.3.7.6.
G609	G609	STORAGE	2' - 6"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	
G610	G610	TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-2D	
G611	G611	TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-2D	
G616	G616	ELEC	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	PROVIDE OSHA 1910.145 COMPLIANT ALUMINUM SIGN,10"W X 7"H, YELLOW BACKGROUND WITH BLACK TYPE READING "CAUTION OPEN DOOR SLOWLY", MECHANICALLY FASTEN AT 60" A.F.F. ON ROOM SIDE OF DOOR
G618.1	G618	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G618.2	G618	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G620	G620	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G621	G621	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G622	G622	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G623	G623	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G624	G624	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G625	G625	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G626	G626	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G627	G627	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G628	G628	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE
G629	G629	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002 (1)		HW-3B	SEE D9/AE6002 AND E9/AE6002 FOR HEAD AND JAMB CONDITION AT BORROWED LITE (1)
G630	G630	IT	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G631	G631	FEMALE TOILETS	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G632	G632	MALE TOILETS	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G650	G650	STORAGE	3' - 8"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	
G701.1	G701	AUDITORIUM	3' - 6"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-6	
G701A.1	G701A	VEST	3' - 0"	3' - 0"	6' - 0"	7' - 0"	2/2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-12B	
G701A.2	G701A	VEST	3' - 0"	3' - 0"	6' - 0"	7' - 0"	2/2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-8H	
G701B.1	G701B	VEST	3' - 0"	3' - 0"	6' - 0"	7' - 0"	2/2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-12B	
G701B.2	G701B	VEST	3' - 0"	3' - 0"	6' - 0"	7' - 0"	2/2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-8H	
G702	G702	VESTIBULE	3' - 0"	3' - 0"	6' - 0"	7' - 0"	6/6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-12B	
G705	G705	BUILDING SUPPORT	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	
G707	G707	IT	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G708	G708	KITCHENETTE	3' - 0"			8' - 0"	44	-	-	GL-4a	-	-	-	-	-		HW-SH-4	
G709	G709	COAT CLOSET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1A	
G710	G710	STORAGE	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002	45	HW-5	
G711	G711	HSKP	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	
G712	G712	AV / CONTROL ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	
G714	G714	LOBBY	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G715	G715	RECEPT	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-3B	
G716	G716	COPY/FAX	4' - 0"			7' - 0"	-	-	-	-	A	HM	*	C2/AE6002	C2/AE6002		-	CASED OPENING
G717	G717	OPEN OFFICE	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G718	G718	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-3B	
G719	G719	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G720	G720	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G721	G721	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G722	G722	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT

DOOR AND FRAME SCHEDULE

IDENTIFICATION			DIMENSIONS				PANEL				FRAME							
			WIDTH											DETAILS				
DOOR NO	ROOM NO	ROOM NAME	W1	W2	TOTAL WIDTH	H	TYPE	MATERIAL	FINISH	GLAZING	TYPE	MATERIAL	FINISH	HEAD	JAMB	FIRE RATING	HARDWARE GROUP	NOTES
G723	G723	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G724	G724	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G725	G725	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G726	G726	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G727	G727	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G728	G728	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G729	G729	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G730	G730	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G731	G731	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G732	G732	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G733	G733	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G734	G734	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G735	G735	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G736	G736	OFFICE	3' - 0"			7' - 0"	6	HM	*	-	B	HM	*	C2/AE6002	C2/AE6002		HW-3B	GL-7 AT SIDELIGHT
G737	258B	CORR	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-5	PROVIDE OSHA 1910.145 COMPLIANT ALUMINUM SIGN,10"W X 7"H, YELLOW BACKGROUND WITH BLACK TYPE READING "CAUTION OPEN DOOR SLOWLY", MECHANICALLY FASTEN AT 60" A.F.F. ON ROOM SIDE OF DOOR
G801.1	G801	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-1A	
G802	G802	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G803	G803	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G804	G804	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G805	G805	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G806	G806	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G807	G807	MEETING ROOM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G808.1	G801	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G808.2	G801	CORR	3' - 0"			7' - 0"	2	HM	*	GL-8 (1)	A	HM	*	C2/AE6002	C2/AE6002	20	HW-1A	20 MINUTE SMOKE DOOR IN 1-HOUR RATED WALL. REF. NFPA 101 SECTION 18.3.7.6.
G809	G809	VEST	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G810	G810	FEMALE TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G811	G811	VEST	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G812	G812	MALE TOILET	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1	
G901.1	G901	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G901.2	G901	CORR	3' - 0"			7' - 0"	2	HM	*	GL-4	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G902.1	G902	EXAM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G902.2	G902	EXAM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1S	
G903	G903	OBSRV	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G904.1	G904	EXAM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G904.2	G904	EXAM	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1S	
G905.1	G905	CONTROL	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-SH-3	
G905.2	G905	CONTROL	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1A	
G906	G906	ICU	12' - 0"			7' - 0"	46	BY MNF	BY MNF	GL-4	BY MNF	BY MNF	BY MNF	BY MFR	BY MFR		HW-1C	
G907.1	G907	DRESS	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-4B	
G907.2	G907	DRESS	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1B	
G908	G908	OBSRV	3' - 0"			7' - 0"	6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-1A	
G909.1	G909	OR	3' - 0"	1' - 0"	4' - 0"	7' - 0"	6/6	HM	*	-	A	HM	*	C2/AE6002	C2/AE6002		HW-10H	
G909.2	G909	OR	3' - 0"	1' - 0"	4' - 0"	7' - 0"	6/6	HM	*



F1 PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - PART 1

1/8" = 1'-0"

0 4'-0" 8'-0" 16'-0"

REFLECTED CEILING NOTES:

1. REFER TO SHEET AE0002 FOR PART PLAN TRUE NORTH LOCATION WITHIN BUILDINGS 1, 2, & 6.

2. REFER TO AE0001 FOR TYPICAL PLAN LEGENDS AND SYMBOLS.

3. CENTER GRID IN ROOM, IN BOTH DIRECTIONS, UNLESS OTHERWISE NOTED.

4. REFER TO HVAC, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL CEILING DEVICE INFORMATION. BRING CONFLICTS TO ATTENTION OF THE A/E FOR FINAL COORDINATION AND RESOLUTION.

5. CENTER ALL CEILING FIXTURES, ACESSORIES AND SPRINKLER HEADS WITHIN ACOUSTICAL CEILING TILE, UNLESS OTHERWISE NOTED.

6. IN GYPSUM BOARD CEILING CONSTRUCTION, ALIGN ALL CEILING FIXTURES, ACCESSORIES AND SPRINKLER HEADS WITH ADJACENT FIXTURES, UNLESS OTHERWISE NOTED. BRING CONFLICTS TO ATTENTION OF A/E FOR FINAL COORDINATION AND RESOLUTION.

7. WHERE PLANS OR RCP CALLS FOR EXPOSED CEILINGS, CONTRACTOR SHALL CLEAN AND PREPARE THE UNDERSIDE OF THE EXISTING STRUCTURE FOR NEW FINISHES PER DRAWINGS AND SPECIFICATIONS.

8. SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS BUILDABLE AS SHOWN. REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS FOR DESIGN OF THESE SYSTEMS (DUCT SIZE, CIRCUITING, ETC.). LOCATIONS OF THESE DEVICES SHALL BE AS SHOWN ON THE ARCHITECTURAL RCPs. IN CASES WHERE CONFLICTS ARISE BETWEEN THE LIGHTING AND OTHER CEILING DEVICES, CONTRACTOR SHALL OBTAIN WRITTEN CLARIFICATION FROM THE A/E PRIOR TO START OF WORK IN QUESTION AND RELATED WORK.

9. LOCATE LIGHT SWITCHES AT HEIGHT 48" A.F.F., UNLESS OTHERWISE NOTED.

10. CEILING TILE/GRID/HANGERS ARE NOT DESIGNED TO SUPPORT THE WEIGHT OF ADDITIONAL EQUIPMENT OR MATERIALS. SUPPORT CABLE, CONDUIT, FIXTURES, ETC. INDEPENDENTLY FROM THE STRUCTURE.

11. COORDINATE PLACEMENT OF REQUIRED WALL OR CEILING ACCESS PANELS WITH MEP EQUIPMENT REQUIRING ACCESS; A/E TO REVIEW PRIOR TO FRAMING. IMMEDIATELY ALERT A/E TO ACCESS PANELS REQUIRED BUT NOT INDICATED ON THE RCP.

12. LOCATE NEW SPRINKLER HEADS IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13, INTERNATIONAL PLUMBING CODE (IPC) AND OTHER APPLICABLE CODES.

13. SPRINKLER HEADS SHOWN ON THE ARCHTECTURAL RCP INDICATE HEAD LOCATIONS IN AREAS WHERE COORDINATION WITH ARCHITECTURAL DETAILS IS CRITICAL. CODE COMPLIANCE AND SPECIFIED COVERAGE MUST BE MAINTAINED. REFER TO FIRE PROTECTION DRAWINGS FOR REQUIRED SPRINKLER HEAD COVERAGE AND ADDITIONAL INFORMATION. IN LOCATIONS WHERE THE FIRE PROTECTION AND ARCHITECTURAL DRAWINGS ARE IN CONFLICT, CONTRACTOR SHALL OBTAIN WRITTEN CLARIFICATION FROM THE A/E PRIOR TO START OF WORK.

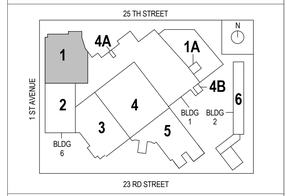
14. SPRINKLER CONTRACTOR SHALL VERIFY ALL COVERAGE OF NEW AND EXISTING (IF ANY) SPRINKLER HEADS. IF CODE CALLS FOR ADDITIONAL HEADS OR RELOCATION OF HEADS, CONTRACTOR TO INCLUDE THE COST FOR THIS WORK IN HIS BASE PROPOSAL. CONTRACTOR SHALL FURNISH A/E WITH STAMPED SPRINKLER DRAWINGS.

15. SUBMIT FIRE SPRINKLER LAYOUT FOR COORDINATION/APPROVAL BY A/E. PATTERN OF SPRINKLER LAYOUT SHALL COORDINATE WITH PATTERN OF LIGHTING LAYOUT AND WITH OTHER CEILING COMPONENTS.

REFLECTED CEILING SYMBOLS

- ACOUSTICAL TILE CEILING (24X24)
- GYPSUM CEILING
- SEAMLESS SOUND ABSORBING PLASTER
- ACOUSTICAL PLANK CEILING (24X72)
- SEMI-RECESSED SPRINKLER
- UPRIGHT SPRINKLER
- OS — CEILING MOUNTED LOW VOLTAGE OCCUPANCY SENSOR
- OS — CEILING MOUNTED LINE VOLTAGE OCCUPANCY SENSOR
- COVE MOUNTED LIGHTING FIXTURE
- CEILING MOUNTED RECESSED WALLWASHER LIGHTING FIXTURE
- EXIT LIGHT OUTLET WITH FIXTURE - SHADING INDICATES LOCATION OF FACE(S). ARROWS INDICATE DIRECTIONAL ARROWS WHERE REQUIRED. WALL MOUNTED SIGNS AT + 90" CENTERED ABOVE DOOR WHERE APPLICABLE
- WALL MOUNTED LINEAR LIGHTING FIXTURE
- PENDANT LINEAR LIGHT FIXTURE
- RECESSED LINEAR LIGHTING FIXTURE - LENGTH AS SHOWN ON THE PLANS
- PENDANT INDUSTRIAL LIGHT FIXTURE
- CEILING MOUNTED RECESSED DOWNLIGHT
- RECESSED 2' X 2' LIGHT FIXTURE
- RECESSED 2' X 4' LIGHT FIXTURE
- RECESSED 1' X 4' LIGHT FIXTURE
- SECURITY CAMERA (BY VA)
- HVAC SUPPLY DIFFUSER
- HVAC RETURN DIFFUSER
- ACCESS DOORS - COORDINATE EXACT LOCATIONS WITH DIVISION 23; FIELD COORDINATE LOCATIONS
- 101 / 9'-0" — ROOM NUMBER AND CEILING HEIGHT

KEY PLAN:



FULLY SPRINKLERED

NO	REVISIONS	DATE
1	ADDENDUM 1	03/20/2015
	ISSUE FOR BID	10/31/2014

CONSULTANTS:

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ARCHITECT/ENGINEERS:

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Drawing Title: PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - PART 1

Approved: Project Director

Project Title: VA NY HARBOR HEALTHCARE SYSTEM MANHATTAN CAMPUS / GROUND FLOOR PHASE 2B

Location: 423 E 23RD STREET, NEW YORK, NY 10010

Date: 08 / 25 / 2014 | Checked: SK | Drawn: LT

Project Number: 228727

Building Number: 1, 2, & 6

Drawing Number: AE7101

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

VA FORM 08-6231

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR FINISH	FLOOR BASE	WALLS NORTH FINISH	WALLS EAST FINISH	WALLS SOUTH FINISH	WALLS WEST FINISH	CEILING MATERIAL	NOTES
1-1	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
1-1A	STOR	C	-	P-1	P-1	P-1	P-1	EXP	
1-2	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
1-3	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
1-4	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
6-1	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
6-2	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
0145W	A/C EQUIP RM	C	-	P-1	P-1	P-1	P-1	EXP	
0145X	Room	C	-	P-1	P-1	P-1	P-1	EXP	
0175S	PUMP ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
0209S	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
0209SA	IT	C	RB-1	P-1	P-1	P-1	P-1	EXP	
0211E	ENTRY	C	RB-1	P-1	P-1	P-1	P-1	EXP	
252	BUILDING SUPPORT	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
258	CORR	RES 5-1	RES 5-1	P-1	P-1	P-1	P-1	AT-1/GWB	APPLY BASE TO BOTH SIDES OF CORRIDOR
258A	CORR	RES-5-1	RES 5-1	P-1	P-1	P-1	P-1	AT-1/GWB	APPLY BASE TO BOTH SIDES OF CORRIDOR
258B	CORR	RES 5-1/RES 5-2	RES 5-1/RES 5-2	-	-	-	-	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION
258C	CORR	RES-5-1	RES 5-1	P-1	P-1	P-1	P-1	AT/GWB	APPLY BASE TO BOTH SIDES OF CORRIDOR
714	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
715	SHAFT	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
1000W	FIRE PANEL ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
1121W	STAIR								
CO-2	ELEV LOBBY								
G001	ELEV LOBBY	RES 5-1	RES 5-1	-	-	-	-	GWB/AT-2	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION. APPLY BASE TO BOTH SIDES OF CORRIDOR
G001W	ELEC CAB	C	-	P-1	P-1	P-1	P-1	EXP	
G002	HSKP	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G003	WASHER DRYER	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G004	CLOSET	C	-	P-1	P-1	P-1	P-1	EXP	
G010	BREAK ROOM	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G010A	LOCKER ROOM	RES-6A	RES-6A	P-1	P-1	P-1	P-1	GWB	
G011	UNISEX TOILET / CHANGING	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G012	UNISEX TOILET / CHANGING	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G013	test								
G113	CORR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G114W	LAUNDRY CHUTE	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
G116	F D	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
G116W	TELEPHONE EQUIP	C	-	P-1	P-1	P-1	P-1	EXP	
G119W	ELEC CLT	C	-	P-1	P-1	P-1	P-1	EXP	
G120W	CORR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G121W	STAIR	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G122W	PUMP ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
G122WA	SHAFT	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
G123W	MECHANICAL	C	-	P-1	P-1	P-1	P-1	EXP	
G124W	STEAM ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
G125W	STEAM ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
G126W	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G127W	ACCESS ALCOVE	C	-	P-1	P-1	P-1	P-1	EXP	
G128W	FIRE PUMP ROOM	C	-	P-1	P-1	P-1	P-1	EXP	
G129W	ENGINEERING STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G130W	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G133W	ENGINEERING STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G140W	MAIL / COPY	C	RB-1	P-1	P-1	P-1	P-1	AT-1	
G143C	CORR	C	RB-1	P-1	P-1	P-1	P-1	AT-1	
G143W	IRM COMPUTER STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G144W	EMS STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G145C	CLOTHING STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G382	MALE TOILET	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G383	FEMALE TOILET	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G500A	MECHANICAL ROOM	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NIC EXISTING FINISHES TO REMAIN
G600	LOBBY	RES 5-1	RES 5-1	-	-	-	-	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION. APPLY BASE TO BOTH SIDES OF CORRIDOR
G601	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G602	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G603	MALE LOCKER	RES-6A	RES-6A	P-1	P-1	P-1	P-1	GWB	
G604	MALE TOILET	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G605	FEMALE LOCKER	RES-6A	RES-6A	P-1	P-1	P-1	P-1	GWB	
G606	FEMALE TOILET	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G607	BREAK AREA	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G608	VENDING / KITCHENETTE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	SEE AF1000 SERIES FOR ACCENT PAINT
G609	STORAGE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G610	TOILET	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G611	TOILET	RES-6A	RES-6A	CT-2	CT-2	CT-2	CT-2	GWB	PROVIDE FULL HEIGHT SSM-1 IN SHOWER AREA, REFER TO AF1000 SERIES.
G615	CORR	RES-5-1	RES 5-1	-	-	-	-	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION
G616	ELEC	C	-	P-1	P-1	P-1	P-1	EXP	
G617	WORKSTATIONS 1-4	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G618	CORR	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G619	COPY	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G620	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G621	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G622	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G623	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G624	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G625	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G626	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G627	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G628	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G629	OFFICE	RES-6A	RES-6A	P-1	P-1	P-1	P-1	AT-1	
G630	IT	C	-	P-1	P-1	P-1	P-1	EXP	
G631	FEMALE TOILETS	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G632	MALE TOILETS	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G650	STORAGE	EXISTING	EXISTING	P-1	P-1	P-1	P-1	EXP	
G701	AUDITORIUM	RES 5-1/CPT-1	RES 5-1	-	-	-	-	SAP-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION. RAISED ACCESS FLOOR TO BE INSTALLED OVER FINISHED FLOOR AT STAGE. REFER TO AE1000 SERIES FOR FINISH LOCATIONS. PROVIDE RUBBER TREAD WITH INTEGRATED RISER AT RAISED ACCESS FLOOR STAIR TREADS AND RISERS. SEATING FABRIC TO BE BERNHARDT TEXTILES, HERO 3463-044 TWILIGHT WITH CRYPTON (OR EQUAL MOISTURE BARRIER) BACKING. 1
G701A	VEST	RES 5-1	RES 5-1	P-4	P-4	P-4	P-4	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G701B	VEST	RES 5-1	RES 5-1	P-4	P-4	P-4	P-4	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G701C	WHEELCHAIR LIFT	RES 5-1	RES 5-1	-	-	-	-	SAP-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION. RAISED ACCESS FLOOR TO BE INSTALLED OVER FINISHED FLOOR AT STAGE. REFER TO AE1000 SERIES FOR FINISH LOCATIONS.
G702	VESTIBULE	RES 5-1	RES 5-1	P-4	P-4	P-4	P-4	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G704	AUDITORIUM STORAGE	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G705	BUILDING SUPPORT	C	-	P-1	P-1	P-1	P-1	EXP	
G707	IT	C	-	P-1	P-1	P-1	P-1	EXP	
G708	KITCHENETTE	RES 5-1	RES 5-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION
G709	COAT CLOSET	RES 5-1	RES 5-1	P-1	P-1	P-1	P-1	AT-1	
G710	STORAGE	C	-	P-1	P-1	P-1	P-1	EXP	
G711	HSKP	C	RB-1	P-1	P-1	P-1	P-1	EXP	
G712	AV / CONTROL ROOM	C	-	P-4	P-4	P-4	P-4	AT-1	RAISED ACCESS FLOOR TO BE INSTALLED OVER FINISHED FLOOR AT STAGE. REFER TO AE1000 SERIES FOR FINISH LOCATIONS.
G713	WAITING AREA	RES-5-1	RES 5-1	-	-	-	-	SAP-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR WALL FINISH INFORMATION
G714	LOBBY	CPT-2	RB-1	P-1	P-1	P-1	P-1	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G715	RECEPT	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G716	COPY/FAX	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G717	OPEN OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR FINISH	FLOOR BASE	WALLS NORTH FINISH	WALLS EAST FINISH	WALLS SOUTH FINISH	WALLS WEST FINISH	CEILING MATERIAL	NOTES
G718	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G719	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G720	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G721	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G722	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G723	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G724	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G725	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G726	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G727	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G728	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G729	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G730	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G731	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G732	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G733	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G734	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G735	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G736	OFFICE	CPT-2	RB-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G737	ELEC	C	-	P-1	P-1	P-1	P-1	EXP	
G801	CORR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G802	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G803	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G804	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G805	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G806	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G807	MEETING ROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G808	CORR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G809	VEST	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G810	FEMALE TOILET	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G811	VEST	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G812	MALE TOILET	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000 SERIES, FOR WALL FINISH INFORMATION
G900	LOBBY	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G901	CORR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G901A	CORR	RES-6A-1	RES-6A-1	-	-	-	-	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION.
G902	EXAM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G903	OBSRV	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G904	EXAM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G905	CONTROL	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G906	ICU	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G907	DRESS	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G908	OBSRV	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G909	OR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G910	OBSRV	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G911	SCRUB	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G912	CONTROL	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G913	IN-PAT	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G914	TOILET	RES-6A-1	RES-6A-1	CT-3	CT-3	CT-3	CT-3	GWB	
G915	TOILET	RES-6A-1	RES-6A-1	CT-3	CT-3	CT-3	CT-3	GWB	
G916	IN-PAT	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G917	OBSRV	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G918	WOMEN'S HEALTH	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G919	EQP STOR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	
G920	EQP STOR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	
G921	A/V	C	-	P-1	P-1	P-1	P-1	P-1	
G922	IT	C	-	P-1	P-1	P-1	P-1	P-1	
G923	TRAINER OFFICE	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G924	TRAINER OFFICE	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G925	DIR OFFICE	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G926	RECPT	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1/GWB	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING. REFER TO AE4000 SERIES AND AF1000 SERIES FOR ADDITIONAL WALL FINISH INFORMATION
G927	CLASSROOM	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G928	COMP LAB	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	PROVIDE VENEER PLASTER SYSTEM, VP-3, ON WALLS TO PROVIDE CONTINUOUS SMOOTH SURFACE PRIOR TO PAINTING
G929	EQUIP STOR	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	
G930	VIRTUAL REALITY	RES-6A-1	RES-6A-1	P-1	P-1	P-1	P-1	AT-1	
G931	TOILET	CT-1	MR-1	-	-	-	-	GWB	REFER TO INTERIOR ELEVATIONS, AE4000

DEPARTMENT OF VETERANS AFFAIRS
VHA MASTER SPECIFICATIONS

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TA5004	AudioVisual Systems Diagram – Simulation Center
TA5005	AudioVisual Systems Diagram – Women’s Health

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SECTION 05 50 00
METAL FABRICATIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section specifies items and assemblies fabricated from structural steel shapes and other materials as shown and specified.

B. Items specified.

1. Support for Wall and Ceiling Mounted Items: (12, 14A, 14C).
2. Frames: (24E).
3. Gratings.
4. Safety Nosings.
5. Railings: (10).
6. Linear Bar Grilles.

1.2 RELATED WORK

A. Prime and finish painting: Section 09 91 00, PAINTING.

B. Stainless steel corner guards: Section 10 26 00, WALL AND DOOR PROTECTION.

1.3 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Manufacturer's Literature and Data: For gratings and safety nosings, each type.

C. Shop Drawings:

1. Each item specified, showing complete detail and dimensions, location in the project, material and size of components, method of joining various components and assemblies, reinforcements, finish, and location, size and type of anchors.
2. Provide templates and rough-in measurements as required.

D. Manufacturer's Certificates:

1. Anodized finish as specified.
2. Live load designs as specified.

E. Design Calculations for specified live loads including dead loads.

1.4 QUALITY ASSURANCE

A. Each manufactured product shall meet, as a minimum, the requirements specified, and shall be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.

B. Each product type shall be the same and be made by the same manufacturer.

C. Assembled product to the greatest extent possible before delivery to the site.

D. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver finished manufactured materials in protective packaging with labels legible and intact and unbroken.

B. Store finished manufactured materials in manufacturer’s unopened packaging until installation.

C. Protect finished manufactured materials from damage during handling and construction operations before, during and after installation.

1.6 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. American Society of Mechanical Engineers (ASME):

B18.6.1-97.....Wood Screws

B18.2.2-87(R2005).....Square and Hex Nuts

C. American Society for Testing and Materials (ASTM):

A36/A36M-08.....Structural Steel

A48-03(R2008).....Gray Iron Castings

A53-10.....Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

A123-09.....Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

A167-99(R2009).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip

A307-10.....Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

A312/A312M-09.....Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

A653/A653M-10.....Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process

B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
C1107-08.....Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
F436-10.....Hardened Steel Washers
F468-10.....Nonferrous Bolts, Hex Cap Screws, and Studs for General Use
F593-02(R2008).....Stainless Steel Bolts, Hex Cap Screws, and Studs
F1667-11.....Driven Fasteners: Nails, Spikes and Staples

D. American Welding Society (AWS):
D1.1-10.....Structural Welding Code Steel
D1.2-08.....Structural Welding Code Aluminum
D1.3-08.....Structural Welding Code Sheet Steel

E. National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500-06.....Metal Finishes Manual
MBG 531-09.....Metal Bar Grating Manual
MBG 532-09.....Heavy Duty Metal Bar Grating Manual

F. Structural Steel Painting Council (SSPC)/Society of Protective Coatings:
SP 1-04.....No. 1, Solvent Cleaning
SP 2-04.....No. 2, Hand Tool Cleaning
SP 3-04.....No. 3, Power Tool Cleaning

G. Federal Specifications (Fed. Spec):
RR-T-650E.....Treads, Metallic and Nonmetallic, Nonskid

PART 2 - PRODUCTS

2.1 DESIGN CRITERIA

A. In addition to the dead loads, design fabrications to support the following live loads unless otherwise specified.

B. Railings and Handrails: 900 N (200 pounds) in any direction at any point.

C. Gratings: Steel Type B, welded; with minimum bearing bar size 30 mm by 3 mm (1-1/4 inches by 1/8 inch) and maximum 1219 mm (48 inch) span between supports; 113 kg/m^2 (250 pounds per square foot). Use 226 kg (500 pounds) for concentrated loads.

2.2 MATERIALS

A. Structural Steel: ASTM A36.

B. Stainless Steel: ASTM A167, Type 302 or 304.

C. Aluminum, Extruded: ASTM B221, Alloy 6063-T5 unless otherwise specified. For structural shapes use alloy 6061-T6 and alloy 6061-T4511.

D. Steel Pipe: ASTM A53.

1. Galvanized for exterior locations.
2. Type S, Grade A unless specified otherwise.
3. NPS (inside diameter) as shown.

E. Cast-Iron: ASTM A48, Class 30, commercial pattern.

F. Primer Paint: As specified in Section 09 91 00, PAINTING.

G. Modular Channel Units:

1. Factory fabricated, channel shaped, cold formed sheet steel shapes, complete with fittings bolts and nuts required for assembly.
2. Form channel with in turned pyramid shaped clamping ridges on each side.
3. Provide case hardened steel nuts with serrated grooves in the top edges designed to be inserted in the channel at any point and be given a quarter turn so as to engage the channel clamping ridges. Provide each nut with a spring designed to hold the nut in place.
4. Factory finish channels and parts with oven baked primer when exposed to view. Channels fabricated of ASTM A525, G90 galvanized steel may have primer omitted in concealed locations. Finish screws and nuts with zinc coating.
5. Fabricate snap-in closure plates to fit and close exposed channel openings of not more than 0.3 mm (0.0125 inch) thick stainless steel.

H. Grout: ASTM C1107, pourable type.

2.3 HARDWARE

A. Rough Hardware:

1. Furnish rough hardware with a standard plating, applied after punching, forming and assembly of parts; galvanized, cadmium plated, or zinc-coated by electro-galvanizing process. Galvanized G-90 where specified.
2. Use G90 galvanized coating on ferrous metal for exterior work unless non-ferrous metal or stainless is used.

B. Fasteners:

1. Bolts with Nuts:
   a. ASME B18.2.2.
   b. ASTM A307 for 415 MPa (60,000 psi) tensile strength bolts.
   c. ASTM F468 for nonferrous bolts.
   d. ASTM F593 for stainless steel.
2. Screws: ASME B18.6.1.
3. Washers: ASTM F436, type to suit material and anchorage.
4. Nails: ASTM F1667, Type I, style 6 or 14 for finish work.

2.4 FABRICATION GENERAL

A. Material:

1. Use material as specified. Use material of commercial quality and suitable for intended purpose for material that is not named or its standard of quality not specified.
2. Use material free of defects which could affect the appearance or service ability of the finished product.

B. Size:

1. Size and thickness of members as shown.
2. When size and thickness is not specified or shown for an individual part, use size and thickness not less than that used for the same component on similar standard commercial items or in accordance with established shop methods.

C. Connections:

1. Except as otherwise specified, connections may be made by welding, riveting or bolting.
2. Field riveting will not be approved.
3. Design size, number and placement of fasteners, to develop a joint strength of not less than the design value.
4. Holes, for Rivets and Bolts: Accurately punched or drilled and burrs removed.
5. Size and shape welds to develop the full design strength of the parts connected by welds and to transmit imposed stresses without permanent deformation or failure when subject to service loadings.
6. Use Rivets and bolts of material selected to prevent corrosion (electrolysis) at bimetallic contacts. Plated or coated material will not be approved.

7. Use stainless steel connectors for removable members, machine screws or bolts.

D. Fasteners and Anchors:

1. Use methods for fastening or anchoring metal fabrications to building construction as shown or specified.
2. Where fasteners and anchors are not shown, design the type, size, location and spacing to resist the loads imposed without deformation of the members or causing failure of the anchor or fastener, and suit the sequence of installation.
3. Use material and finish of the fasteners compatible with the kinds of materials which are fastened together and their location in the finished work.
4. Fasteners for securing metal fabrications to new construction only, may be by use of threaded or wedge type inserts or by anchors for welding to the metal fabrication for installation before the concrete is placed or as masonry is laid.
5. Fasteners for securing metal fabrication to existing construction or new construction may be expansion bolts, toggle bolts, power actuated drive pins, welding, self drilling and tapping screws or bolts.

E. Workmanship:

1. General:
   a. Fabricate items to design shown.
   b. Furnish members in longest lengths commercially available within the limits shown and specified.
   c. Fabricate straight, true, free from warp and twist, and where applicable square and in same plane.
   d. Provide holes, sinkages and reinforcement shown and required for fasteners and anchorage items.
   e. Provide openings, cut-outs, and tapped holes for attachment and clearances required for work of other trades.
   f. Prepare members for the installation and fitting of hardware.
   g. Fabricate surfaces and edges free from sharp edges, burrs and projections which may cause injury.
2. Welding:
   a. Weld in accordance with AWS.

b. Welds shall show good fusion, be free from cracks and porosity and accomplish secure and rigid joints in proper alignment.
c. Where exposed in the finished work, continuous weld for the full length of the members joined and have depressed areas filled and protruding welds finished smooth and flush with adjacent surfaces.
d. Finish welded joints to match finish of adjacent surface.

3. Joining:
   a. Miter or butt members at corners.
   b. Where frames members are butted at corners, cut leg of frame member perpendicular to surface, as required for clearance.
4. Anchors:
   a. Where metal fabrications are shown to be preset in concrete, weld 32 x 3 mm (1-1/4 by 1/8 inch) steel strap anchors, 150 mm (6 inches) long with 25 mm (one inch) hooked end, to back of member at 600 mm (2 feet) on center, unless otherwise shown.
   b. Where metal fabrications are shown to be built into masonry use 32 x 3 mm (1-1/4 by 1/8 inch) steel strap anchors, 250 mm (10 inches) long with 50 mm (2 inch) hooked end, welded to back of member at 600 mm (2 feet) on center, unless otherwise shown.
5. Cutting and Fitting:
   a. Accurately cut, machine and fit joints, corners, copes, and miters.
   b. Fit removable members to be easily removed.
   c. Design and construct field connections in the most practical place for appearance and ease of installation.
   d. Fit pieces together as required.
   e. Fabricate connections for ease of assembly and disassembly without use of special tools.
   f. Joints firm when assembled.
   g. Conceal joining, fitting and welding on exposed work as far as practical.
   h. Do not show rivets and screws prominently on the exposed face.
   i. The fit of components and the alignment of holes shall eliminate the need to modify component or to use exceptional force in the assembly of item and eliminate the need to use other than common tools.

F. Finish:
   1. Finish exposed surfaces in accordance with NAAMM Metal Finishes Manual.
   2. Aluminum: NAAMM AMP 501.
      a. Mill finish, AA-M10, as fabricated, use unless specified otherwise.
      b. Satin #4 brushed finish.
      c. Clear anodic coating, AA-C22A41, chemically etched medium matte, with Architectural Class 1, 0.7 mils or thicker.
      d. Painted: AA-C22R10.
   3. Steel and Iron: NAAMM AMP 504.
      a. Zinc coated (Galvanized): ASTM A123, G90 unless noted otherwise.
      b. Surfaces Exposed in Finished Work:
         1) Finish smooth rough surfaces and remove projections.
         2) Fill holes, dents and similar voids and depressions with epoxy type patching compound.
      c. Shop Prime Painting:
         1) Surfaces of Ferrous metal:
            a) Items not specified to have other coatings.
            b) Galvanized surfaces specified to have prime paint.
            c) Remove all loose mill scale, rust, and paint, by hand or power tool cleaning as defined in SSPC-SP2 and SP3.
            d) Clean of oil, grease, soil and other detrimental matter by use of solvents or cleaning compounds as defined in SSPC-SP1.
            e) After cleaning and finishing apply one coat of primer as specified in Section 09 91 00, PAINTING.
         2) Non Ferrous Metals: Comply with MAAMM-500 series.
   4. Stainless Steel: NAAMM AMP-504 Finish No. 4.

G. Protection:
   1. Insulate aluminum surfaces that will come in contact with concrete, masonry, plaster, or metals other than stainless steel, zinc or white bronze by giving a coat of heavy-bodied alkali resisting bituminous paint or other approved paint in shop.
   2. Spot prime all abraded and damaged areas of zinc coating which expose the bare metal, using zinc rich paint on hot-dip zinc coat items and zinc dust primer on all other zinc coated items.

2.5 SUPPORTS

A. General:
   1. Fabricate ASTM A36 structural steel shapes as shown.
   2. Use clip angles or make provisions for welding hangers and braces to overhead construction.
   3. Field connections may be welded or bolted.

B. For Ceiling Hung Toilet Stall:
   1. Use a continuous steel channel above pilasters with hangers centered over pilasters.
   2. Make provision for installation of stud bolts in lower flange of channel.
   3. Provide a continuous steel angle at wall and channel braces spaced as shown.
   4. Use threaded rod hangers.
   5. Provide diagonal angle brace where the suspended ceiling over toilet stalls does not extend to side wall of room.

C. For Wall Mounted Items:
   1. For items supported by metal stud partitions.
   2. Steel strip or hat channel minimum of 1.5 mm (0.0598 inch) thick.
   3. Steel strip minimum of 150 mm (6 inches) wide, length extending one stud space beyond end of item supported.
   4. Steel hat channels where shown. Flange cut and flatted for anchorage to stud.
   5. Structural steel tube or channel for grab bar at water closets floor to structure above with clip angles or end plates formed for anchors.
   6. Use steel angles for thru wall counters. Drill angle for fasteners at ends and not over 100 mm (4 inches) on center between ends.

D. For Intravenous Track and Cubical Curtain Track:
   1. Fabricate assembly of steel angle as shown.
   2. Drill angle bent ends for anchor screws to acoustical suspension system and angle for hanger wires.
   3. Provide pipe sleeve welded to angle.

E. For Medical/Surgical Lights:
   1. Fabricate as shown to suit equipment furnished.
   2. Drill leveling plate for light fixture bolts.

2.6 FRAMES

A. Channel Door Frames:

1. Fabricate of structural steel channels of size shown.
2. Miter and weld frames at corners.
3. Where anchored to masonry or embedded in concrete, weld to back of frame at each jamb, 5 mm (3/16 inch) thick by 44 mm (1-3/4 inch) wide steel strap anchors with ends turned 50 mm (2 inches), and of sufficient length to extend at least 300 mm (12 inches) into wall. Space anchors 600 mm (24 inches) above bottom of frame and 600 mm (24 inches) o.c. to top of jamb. Weld clip angles to bottom of jambs and provide holes for expansion bolts.
4. Where anchored to concrete or masonry in prepared openings, drill holes at jambs for anchoring with expansion bolts. Weld clip angles to bottom of frame and provide holes for expansion bolt anchors as shown. Drill holes starting 600 mm (24 inches) above bottom of frame and 600 mm (24 inches) o.c. to top of jamb and at top of jamb. Provide pipe spacers at holes welded to channel.
5. Where closure plates are shown, continuously weld them to the channel flanges.
6. Weld continuous 19 x 19 x 3 mm (3/4 x 3/4 x 1/8 inch) thick steel angles to the interior side of each channel leg at the head and jambs to form a caulking groove.
7. Prepare frame for installation of hardware specified in Section 08 71 00, DOOR HARDWARE.
   a. Cut a slot in the lock jamb to receive the lock bolt.
   b. Where shown use continuous solid steel bar stops at perimeter of frame, weld or secure with countersunk machine screws at not more than 450 mm (18 inches) on center.

2.7 GRATINGS

A. Fabricate gratings to support live loads specified and a concentrated load as specified.

B. Provide clearance at all sides to permit easy removal of grating.

C. Make cutouts in gratings with 6 mm (1/4 inch) minimum to 25 mm (one inch) maximum clearance for penetrations or passage of pipes and ducts. Edge band cutouts.

D. Fabricate in sections not to exceed 2.3 m^2 (25 square feet) in area and 90 kg (200 pounds) in weight.

E. Fabricate sections of grating with end-banding bars.

F. Fabricate angle frames and supports, including anchorage as shown.

1. Fabricate intermediate supporting members from "T's" or angles.
2. Locate intermediate supports to support grating section edges.
3. Fabricate frame to finish flush with top of grating.
4. Locate anchors at ends and not over 600 mm (24 inches) o.c.
5. Butt or miter, and weld angle frame at corners.

G. Steel Bar Gratings:

1. Fabricate grating using steel bars, frames, supports and other members shown in accordance with Metal Bar Grating Manual.
2. Galvanize steel members after fabrication in accordance with ASTM A123, G-90 for exterior gratings, gratings in concrete floors, and interior grating where specified.
3. Use welded bars for interior gratings in locations indicated on Drawings.

2.8 SAFETY NOSINGS

A. Fed. Spec. RR-T-650, Type C.

1. Aluminum: Class 2, Style 2.

B. Fabricate nosings for interior use from cast aluminum. Use one Class throughout.

C. Fabricate nosings approximately 100 mm (4 inches) wide with not more than 9 mm (3/8 inch) nose**; no-trip bevel at back edge, drilled holes for countersunk screws**.

D. **Provide leveling compound at dished or uneven stair treads to create a level step surface.**

E. Provide **fully adhered** nosings **to existing corrected stair construction.** ~~**with integral type anchors spaced not more than 100 mm (4 inches) from each end and intermediate anchors spaced approximately 375 mm (15 inches) on center.**~~

F. Fabricate nosings to extend within 100 mm (4 inches) of ends of concrete stair treads except where shown to extend full width.

G. **Provide abrasive filler consisting of a mixture of aluminum oxide and silicone granules in an epoxy resin and hardener mixture and locked into channels in extruded aluminum base, alloy 6036-T6. Coefficient of friction 1.02 dry, 0.98 wet per ASTM F609.**

2.9 RAILINGS

A. In addition to the dead load design railing assembly to support live load specified.

B. Fabrication General:

1. Provide continuous welded joints, dressed smooth and flush.
2. Standard flush fittings, designed to be welded, may be used.
3. Exposed threads will not be approved.
4. Form handrail brackets to size and design shown.
5. Interior Post Anchors:
   a. Provide flanged fittings for securing fixed posts to floor with expansion bolts, unless shown otherwise.
   b. Weld or thread flanged fitting to posts at base.
   c. For securing removable posts to floor, provide close fitting sleeve insert or inverted flange base plate with stud bolts or rivets concrete anchor welded to the base plate.
   d. Provide sliding flange base plate on posts secured with set screws.
   e. Weld flange base plate to removable posts set in sleeves.

C. Handrails:

1. Close free ends of rail with flush metal caps welded in place except where flanges for securing to walls with bolts are shown.
2. Make provisions for attaching handrail brackets to wall, posts, and handrail as shown.

D. Aluminum Railings:

1. Fabricate from extruded aluminum.
2. Punch intermediate rails and bottom of top rails for passage of posts and machine to a close fit.
3. Where shown use extruded channel sections for top rail with 13 mm (1/2 inch) thick top cover plates and closed ends.
4. Fabricate brackets of extruded or wrought aluminum as shown.
5. Fabricate stainless pipe sleeves with closed bottom at least 150 mm (6 inches) deep having internal dimensions at least 13 mm (1/2 inch) greater than external dimensions of posts where set in concrete.

2.10 LINEAR BAR GRILLES

A. Aluminum grille inserts in fin tube enclosures. Refer to Drawings for details and locations.

1. Core: Rectangular linear bars 19 mm (3/4 inch) deep, cross-section deflected 10 degrees on both sides, 6.5 mm (1/4 inch) thick across deflected face tapering to 3 mm (1/8 inch) at bottom, spaced 12 mm (1/2 inch) on center pencil-proof, welded and interlocked to 3 mm (1/8 inch) thick x 12 mm (1/2 inch) deep rectangular metal bar crossbars spaced +/- 203 mm (8 inches) on center.
2. No frame.
3. Provide concealed access door matching core at locations indicated.
4. Provide manufacturer’s standard fasteners suitable for intended application.
5. Finish: Brushed Satin #4.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Set work accurately, in alignment and where shown, plumb, level, free of rack and twist, and set parallel or perpendicular as required to line and plane of surface.

B. Items set into concrete or masonry.
   1. Provide temporary bracing for such items until concrete or masonry is set.
   2. Place in accordance with setting drawings and instructions.
   3. Build strap anchors, into masonry as work progresses.

C. Set frames of gratings flush with finish floor.

D. Field weld in accordance with AWS.
   1. Design and finish as specified for shop welding.
   2. Use continuous weld unless specified otherwise.

E. Install anchoring devices and fasteners as shown and as necessary for securing metal fabrications to building construction as specified. Power actuated drive pins may be used except for removable items and where members would be deformed or substrate damaged by their use.

F. Spot prime all abraded and damaged areas of zinc coating as specified and all abraded and damaged areas of shop prime coat with same kind of paint used for shop priming.

G. Isolate aluminum from dissimilar metals and from contact with concrete and masonry materials as required to prevent electrolysis and corrosion.

H. Secure escutcheon plate with set screw.

3.2 INSTALLATION OF SUPPORTS

A. Anchorage to Structure:
   1. Secure angles or channels and clips to overhead structural steel by continuous welding unless bolting is shown.
   2. Secure supports to concrete inserts by bolting or continuous welding as shown.
   3. Secure supports to mid height of concrete beams when inserts do not exist with expansion bolts and to slabs, with expansion bolts. unless shown otherwise.
   4. Secure steel plate or hat channels to studs as detailed.

B. Ceiling Hung Toilet Stalls:
   1. Securely anchor hangers of continuous steel channel above pilasters to structure above.
   2. Bolt continuous steel angle at wall to masonry or weld to face of each metal stud.
   3. Secure brace for steel channels over toilet stall pilasters to wall angle supports with bolts at each end spaced as shown.
   4. Install diagonal angle brace where the suspended ceiling over toilet stalls does not extend to side wall of room.
   5. Install stud bolts in lower flange of channel before installing furred down ceiling over toilet stalls.

C. Supports for Wall Mounted items:
   1. Locate center of support at anchorage point of supported item.
   2. Locate support at top and bottom of wall hung cabinets.
   3. Locate support at top of floor cabinets and shelving installed against walls.
   4. Locate supports where required for items shown.

D. Ceiling Support for Medical/Surgical Light:
   1. Anchor support to structure above as shown.
   2. Set leveling plate as shown level with ceiling.
   3. Secure operating light to leveling plate in accordance with light manufacturer's requirements.

E. Supports for intravenous (IV) Track and Cubicle Curtain Track:
   1. Install assembly where shown after ceiling suspension grid is installed.
   2. Drill angle for bolt and weld nut to angle prior to installation of tile.

3.3 OTHER FRAMES

A. Set frame flush with surface unless shown otherwise.

B. Anchor frames at ends and not over 450 mm (18 inches) on centers unless shown otherwise.

3.4 GRATINGS

A. Set grating flush with finish floor.

B. Set frame in formwork before concrete is placed.

C. Where grating terminates at a wall bolt frame to concrete or masonry with expansion bolts unless shown otherwise.

D. Secure removable supporting members in place with stainless steel bolts.

E. Bolt gratings to supports.

3.5 SAFETY NOSINGS

A. Install safety nosings at the following:

1. Interior concrete steps.

B. Install flush with horizontal and vertical surfaces.

C. Install nosing to within 100 mm (4 inches) of ends of concrete stair treads, except where shown to extend full width.

3.6 RAILINGS

A. Aluminum Railing and Posts:

1. Install pipe sleeves in concrete formwork.
2. Set posts in sleeve and pour grout to surface on exterior locations and to within 6 mm (1/4 inch) of surface for interior locations except to where posts are required to be removable.
3. Apply beveled bead of urethane sealant over sleeve at post perimeter for exterior posts and flush with surface for interior posts as specified in Section 07 92 00, JOINT SEALANTS.

B. Anchor to Walls and Floor:

1. Anchor rails to concrete or solid masonry with machine screws through flanged fitting to steel plate.
   a. Anchor steel plate to concrete or solid masonry with expansion bolts.
   b. Anchor steel plate to hollow masonry with toggle bolts.
2. Anchor flanged fitting with toggle bolt to steel support in frame walls.

C. Handrails:

1. Anchor brackets for metal handrails as detailed.

2. Install brackets within 300 mm (12 inches) of return of walls, and at evenly spaced intermediate points not exceeding 1200 mm (4 feet) on centers unless shown otherwise.
3. Expansion bolt to concrete or solid masonry.
4. Toggle bolt to installed supporting frame wall and to hollow masonry unless shown otherwise.

3.7 LINEAR BAR GRILLES

A. Examination:
1. Field verify fin tube enclosure openings and substrates are ready to receive products.
2. Notify the VA Resident Engineer and Architect in writing if unsuitable conditions are found.
3. Beginning installation activities indicates the installer’s acceptance of conditions.

B. Installation:
1. Clean surfaces prior to installation.
2. Install linear bar grilles in accordance with manufacturer’s recommendations and the approved shop drawings.
3. Replace products damaged by subsequent construction activities.

3.8 CLEAN AND ADJUSTING

A. Adjust movable parts including hardware to operate as designed without binding or deformation of the members centered in the opening or frame and, where applicable, contact surfaces fit tight and even without forcing or warping the components.

B. Clean after installation exposed prefinished and plated items and items fabricated from stainless steel, aluminum and copper alloys, as recommended by the metal manufacturer and protected from damage until completion of the project.

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SECTION 08 41 13
ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies interior aluminum entrance work including hung doors, **interior** **ICU** sliding doors, sidelights, and other components to make a complete assembly.

1.2 RELATED WORK

A. Glass and Glazing: Section 08 80 00, GLAZING.

B. Hardware: Section 08 71 00, DOOR HARDWARE.

C. Automatic Door Operators: Section 08 71 13, AUTOMATIC DOOR OPERATORS.

1.3 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Shop Drawings: (1/2 full scale) showing construction, anchorage, reinforcement, and installation details.

C. Manufacturer’s Literature and Data:

1. Doors, each type.
2. Entrance and Storefront construction.

D. Samples:

1. Door corner section, 450 mm x 450 mm (18 x 18 inches), of each door type specified, showing vertical and top hinge edges, door closer reinforcement, and internal reinforcement; include sliding door mechanisms.
2. Two samples of anodized aluminum of each color showing finish and maximum shade range.

E. Manufacturer's Certificates:

1. Stating that aluminum has been given specified thickness of anodizing.
2. Indicating manufacturer's qualifications specified.

1.4 QUALITY ASSURANCE

A. Approval by Contracting Officer is required of products of proposed manufacturer, or supplier, and will be based upon submission by Contractor certification.

B. Certify manufacturer regularly and presently manufactures aluminum entrances and storefronts as one of their principal products.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver aluminum entrance and storefront material to the site in packages or containers; labeled for identification with the manufacturer's name, brand and contents.

B. Store aluminum entrance and storefront material in weather-tight and dry storage facility.

C. Protect from damage from handling, weather and construction operations before, during and after installation.

1.6 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. American Society for Testing and Materials (ASTM):

B209-07.....Aluminum and Aluminum-Alloy Sheet and Plate

B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes

E283-04.....Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

E331-00(R2009).....Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference

F468-10.....Nonferrous Bolts, Hex Cap Screws, and Studs for General Use

F593-02(R2008).....Stainless Steel Bolts, Hex Cap Screws, and Studs

C. National Association of Architectural Metal Manufacturers (NAAMM):

AMP 500 Series.....Metal Finishes Manual

D. American Welding Society (AWS):

D1.2-08.....Structural Welding Code Aluminum

1.7 PERFORMANCE REQUIREMENTS

A. Shapes and thickness of framing members shall be sufficient to withstand a design wind load of not less than 1.4 kPa (30 pounds psf) of supported area with a deflection of not more than 1/175 times the length of the member and a safety factor of not less than 1.65 (applied to overall load failure of the unit). Provide glazing beads, moldings, and trim of not less than 1.25 mm (0.050 inch) nominal thickness.

B. Air Infiltration: When tested in accordance with ASTM E283, air infiltration shall not exceed 2.63 x 10-50 cm per square meter (0.06 cubic feet per minute psf) of fixed area at a test pressure of 0.30 kPa (6.24 pounds psf) 80 kilometers (50 mile) per hour wind.

C. Water Penetration: When tested in accordance with ASTM E331, there shall be no water penetration at a pressure of 0.38 kPa (8 pounds psf) of fixed area.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Aluminum, ASTM B209 and B221:

1. Alloy 6063 temper T5 for doors, door frames, and fixed glass sidelights.
2. Alloy 6061 temper T6 for guide tracks for sliding doors and other extruded structural members.
3. For color anodized finish, use aluminum alloy as required to produce specified color.

B. Fasteners:

1. Aluminum: ASTM F468, Alloy 2024.
2. Stainless Steel: ASTM F593, Alloy Groups 1, 2 and 3.

2.2 FABRICATION

A. Fabricate doors, of extruded aluminum sections not less than 3 mm (0.125 inch) thick. Fabricate glazing beads of aluminum not less than 1.0 mm (0.050 inch) thick.

B. Accurately form metal parts and accurately fit and rigidly assemble joints, except those joints designed to accommodate movement. Seal joints to prevent leakage of both air and water.

C. Make welds in aluminum in accordance with the recommended practice AWA D1.2. Use electrodes and methods recommended by the manufacturers of the metals and alloys being welded. Make welds behind finished surfaces so as to cause no distortion or discoloration of the exposed side. Clean welded joints of welding flux and dress exposed and contact surfaces.

D. Make provisions in doors and frames to receive the specified hardware and accessories. Coordinate schedule and template for hardware specified under Section 08 71 00, DOOR HARDWARE. Where concealed

closers or other mechanisms are required, provide the necessary space, cutouts, and reinforcement for secure fastening.

E. Fit and assemble the work at the manufacturer's plant. Mark work that cannot be permanently plant-assembled to assure proper assembly in the field.

2.3 PROTECTION OF ALUMINUM

A. Isolate aluminum from contact with dissimilar metals other than stainless steel, white bronze, or zinc by any of the following:
   1. Coat the dissimilar metal with two coats of heavy-bodied alkali resistant bituminous paint.
   2. Place caulking compound, or non-absorptive tape, or gasket between the aluminum and the dissimilar metal.
   3. Paint aluminum in contact with mortar, concrete and plaster, with a coat of aluminum paint primer.

2.4 FRAMES

A. Fabricate doors, frames, mullions, frames for fixed glass and similar members from extruded aluminum not less than 3 mm (0.125 inch) thick.

B. Provide integral stops and glass rebates and applied snap-on type trim.

C. Use concealed screws, bolts and other fasteners. Secure cover boxes to frames in back of all lock strike cutouts.

D. Fabricate framework with thermal breaks in frames where insulating glass is scheduled and specified under Section 08 80 00, GLAZING.

2.5 STILE AND RAIL DOORS

A. Nominal 45 mm (1-3/4 inch) thick, with stile and head rail 90 mm (3-1/2 inches) wide, and bottom rail 250 mm (10 inches) wide.

B. Bevel single-acting doors 3 mm (1/8 inch) at lock, hinge and meeting stile edges. Provide clearances of 2 mm (1/16 inch) at hinge stiles, 3 mm (1/8 inch) at lock stiles and top rails, and 5 mm (3/16 inch) at floors and thresholds. Form glass rebates integrally with stiles and rails. Glazing beads may be formed integrally with stiles and rails or applied type secured with fasteners at 150 mm (6 inches) on centers.

C. Construct doors with a system of welded joints or interlocking dovetail joints between stiles and rails. Clamp door together through top and bottom rails with 9 mm (3/8 inch) primed steel rod extending into the stiles, and having a self-locking nut and washer at each end. Reinforce stiles and rails to prevent door distortion when tie rods are tightened. Provide a compensating spring-type washer under each nut to

take up any stresses that may develop. Construct joints between rails and stiles to remain rigid and tight when door is operated.

D. **ICU Door System: Single slide telescoping, full breakout.**

E. Weather-stripping: Provide removable, woven pile type (silicone-treated) weather-stripping attached to aluminum or vinyl holder. Make slots for applying weather-stripping integral with doors and door frame stops. Apply continuous weather-stripping to heads, jambs, bottom, and meeting stiles of doors and frames. Install weather-stripping so swinging and sliding doors move freely and close positively.

2.6 REINFORCEMENT FOR BUILDERS HARDWARE

A. Fabricate from stainless steel plates.

B. Hinge and pivot reinforcing: 4.55 mm (0.1793 inch) thick.

C. Reinforcing for lock face, flush bolts, concealed holders, concealed or surface mounted closers: 2.66 mm (0.1046 inch) thick.

D. Reinforcing for all other surface mounted hardware: 1.5 mm (0.0598 inch) thick.

2.7 FINISH

A. In accordance with NAAMM AMP 500 series.

B. Anodized Aluminum:

1. Clear Finish: Chemically etched medium matte, with clear anodic coating, Class I Architectural, 7 mils thick.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Allowable Installation Tolerances: Install work plumb and true, in alignment and in relation to lines and grades shown. Variation of 3 mm (1/8 inch) in 2400 mm (8 feet), non-accumulative, is maximum permissible for plumb, level, warp, bow and alignment.

B. Anchor aluminum frames to adjoining construction at heads, jambs and bottom and to steel supports, and bracing. Anchor frames with stainless steel or aluminum countersunk flathead, expansion bolts or machine screws, as applicable. Use aluminum clips for internal connections of adjoining frame sections.

C. Where work is installed within masonry or concrete openings, place no parts other than built-in anchors and provision for operating devices located in the floor, until after the masonry or concrete work is completed.

D. Install hardware specified under Section 08 71 00, DOOR HARDWARE.

E. Install hung and sliding door operators specified under Section 08 71 13, AUTOMATIC DOOR OPERATORS.

3.2 ADJUSTING

After installation of entrance and storefront work is completed, adjust and lubricate operating mechanisms to ensure proper performance.

3.3 PROTECTION, CLEANING AND REPAIRING

Remove all mastic smears and other unsightly marks, and repair any damaged or disfiguration of the work. Protect the installed work against damage or abuse.

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SECTION 08 80 00
GLAZING

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies glass, decorative glazing film, related glazing materials and accessories. Glazing products specified apply to factory or field glazed items.

1.2 RELATED WORK

A. Factory glazed by manufacturer in following units:
   1. Doors: Section 08 11 13, HOLLOW METAL DOORS AND FRAMES.
   2. Framed Mirrors: Section 10 28 00, TOILET, BATH, AND LAUNDRY ACCESSORIES.
   3. Section 08 41 13, ALUMINUM-FRAMED ENTRANCES AND STOREFRONT.
   4. Section 08 41 26, ALL-GLASS DOOR ENTRANCES.
   5. Framed Backpainted Glass Assembly: Section 10 11 13, MARKERBOARDS.

1.3 LABELS

A. Temporary Labels:
   1. Provide temporary label on each light of glass identifying manufacturer or brand and glass type, quality and nominal thickness.
   2. Label in accordance with NFRC (National Fenestration Rating Council) label requirements.
   3. Temporary labels shall remain intact until glass is approved by Resident Engineer.

B. Permanent Labels:
   1. Locate in corner for each pane.
   2. Label in accordance with ANSI Z97.1 and SGCC (Safety Glass Certification Council) label requirements.
      a. Tempered glass.
      b. Laminated glass or have certificate for panes without permanent label.

1.4 PERFORMANCE REQUIREMENTS

A. Building Enclosure Vapor Retarder and Air Barrier:
   1. Utilize the inner pane of multiple pane sealed units for the continuity of the air barrier and vapor retarder seal.
   2. Maintain a continuous air barrier and vapor retarder throughout the glazed assembly from glass pane to heel bead of glazing sealant.

B. Glass Thickness:
   1. Select thickness of exterior glass to withstand dead loads and wind loads acting normal to plane of glass at design pressures calculated in accordance with applicable code.
   2. Test in accordance with ASTM E1300.
   3. Thicknesses listed are minimum. Coordinate thicknesses with framing system manufacturers.

1.5 SUBMITTALS

A. In accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Manufacturer's Certificates:
   1. Certificate on "R" value when value is specified.

C. Warranty: Submit written guaranty, conforming to General Condition requirements, and to “Warranty of Construction” Article in this Section.

D. Manufacturer's Literature and Data:
   1. Glass, each kind required.
   2. Insulating glass units.
   3. Transparent (one-way vision glass) mirrors.
   4. Elastic compound for metal sash glazing.
   5. Glazing cushion.
   6. Sealing compound.
   7. Decorative glazing film material, each type required.

E. Samples:
   1. Size: 150 mm by 150 mm (6 inches by 6 inches).
   2. Backpainted glass and backpainted magnetic glass.
   3. Mirror glass.
   4. Transparent (one-way vision glass) mirrors.
   5. 300 mm by 300 mm (12 inches by 12 inches) of each decorative glazing film material, showing color, pattern and/or custom graphic design, and thickness.
   6. One 300 mm by 2438 mm (1 foot wide by 8 feet high) full height sample of GF-2 decorative glazing film with custom digital graphic as indicated on Drawings.

F. Preconstruction Adhesion and Compatibility Test Report: Submit glazing sealant manufacturer’s test report indicating glazing sealants were

tested for adhesion to glass and glazing channel substrates and for compatibility with glass and other glazing materials.

1.6 DELIVERY, STORAGE AND HANDLING

A. Delivery:
   1. Schedule delivery to coincide with glazing schedules so minimum handling of crates is required. Do not open crates except as required for inspection for shipping damage.
   2. Deliver materials in manufacturer’s unopened packaging with manufacturer’s name and product identification.

B. Storage: Store cases according to printed instructions on case, in areas least subject to traffic or falling objects. Keep storage area clean and dry.

C. Handling: Unpack cases following printed instructions on case. Stack individual windows on edge leaned slightly against upright supports with separators between each.

D. Protect sealed-air-space insulating glazing units from exposure to abnormal pressure changes, as could result from substantial changes in altitude during delivery by air freight. Provide temporary breather tubes which do not nullify applicable warranties on hermetic seals.

1.7 PROJECT CONDITIONS

Field Measurements: Field measure openings before ordering tempered glass products. Be responsible for proper fit of field measured products.

1.8 WARRANTY

A. Warranty: Conform to terms of "Warranty of Construction", FAR clause 52.246-21, except extend warranty period for the following:
   1. Insulating glass units to remain sealed for ten (10) years.
   2. Laminated glass units to remain laminated for five (5) years.
   3. Decorative glazing film to remain free from defects in material or workmanship for three (3) years.

1.9 APPLICABLE PUBLICATIONS

A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by basic designation only.

B. American National Standards Institute (ANSI):
Z97.1-2004.....Safety Glazing Material Used in Building - Safety Performance Specifications and Methods of Test

C. American Society for Testing and Materials (ASTM):
C794-10.....Adhesion-in-Peel of Elastomeric Joint Sealants
C864-05.....Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers
C920-11.....Elastomeric Joint Sealants
C1036-06.....Flat Glass
C1048-12.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass
E84-14.....Surface Burning Characteristics of Building Materials
E119-10.....Standard Test Methods for Fire Test of Building Construction and Material
E2190-10.....Insulating Glass Unit

D. Code of Federal Regulations (CFR):
16 CFR 1201 - Safety Standard for Architectural Glazing Materials; 2010

E. National Fire Protection Association (NFPA):
80-13.....Fire Doors and Windows
252-12.....Standard Method of Fire Test of Door Assemblies

F National Fenestration Rating Council (NFRC)

G. Safety Glazing Certification Council (SGCC) 2012:
Certified Products Directory (Issued Semi-Annually)

H. Glass Association of North America (GANA):
Glazing Manual (Latest Edition)
Sealant Manual (2009)

PART 2 - PRODUCT

2.1 GLASS

A. Use thickness stated unless specified otherwise in assemblies.

B. Factory label each factory cut lite of glass. Do not remove labels until approved. Labels on glass surfaces which will be in accessible after installation may be removed prior to installation, providing glass is certified to be as specified.

C. Limit localized roll distortion to 0.127 mm (0.005 inch).

2.2 HEAT-TREATED GLASS

A. Clear Tempered Glass (GL-4, GL-4a):
   1. ASTM C1048, Kind FT, Condition A, Type I, Class 1, Quality q3.
   2. Thickness, 6 mm (1/4 inch).

B. Clear Tempered Backpainted Glass (GL-1, GL-2):
   1. ASTM C1048, Kind FT, Condition A, Type I, Class 2, Quality q3.
   2. Backpaint Color(s): As indicated in Finish Legend on Drawings.
   3. Thickness, 6 mm (1/4 inch).
   4. Backpainted Magnetic Marker Glass (GL-1): Two-sided backpainted coating. Refer to details and Finish Legend on Drawings.
   5. Integral formed metal backer plate for mounting backpainted glass (GL-1 and GL-2) is specified in Section 10 11 13, MARKEROARDS.

C. Clear Tempered Etched Glass (obscure):
   1. ASTM C1048, Kind FT, Condition A, Type I, Class 1, Quality q3; etched on one side.
   2. Thickness, 6 mm (1/4 inch).

2.3 FIRE RESISTANT GLASS WITHOUT WIRE MESH (GL-8)

A. **Type 1 (Transparent float glass), Class 1 (Clear); fire-rated glass ceramic, 5 mm (3/16 inches) thick; polished surface.**

B. **Fire-protective glass products used to protect against smoke and flames only shall be rated as indicated on drawings and required by local building code and shall be tested in accordance with NFPA 252 (Standard Methods of Fire Tests of Door Assemblies) and NFPA 257 (Standard on Fire Test for Window and Glass Block Assemblies).**

C. **Fire-resistive products used to protect against smoke, flame, and the transmission of radiant heat shall be rated as indicated on drawings and shall be tested in accordance with NFPA 252 and ASTM E119 (Standard Test Methods for Fire Tests of Building Construction and Materials).**

D. **Fire-rated glass or glass assembly shall be classified by Underwriters Laboratory (UL), Intertek Testing Services-Warnock Hersey (ITS-WHI) or any other OSHA certified testing laboratory. All glass shall bear a permanent mark of classification in accordance with local building code.**

E. **Maximum size is per the manufacturer's test agency listing for doors.**

F. **Where safety glazing is required by local building code, fire-rated glass shall be tested in accordance with CPSC 16 CFR 1201 Category I or II and bear a permanent mark of classification.**

1. **Category I products are limited to 0.84 m^2 (9 $feet^2$) and tested to no less than 203 Nm (150 ft-lbs) impact loading.**
2. **Category II products are greater than 0.84 m^2 (9 $feet^2$) and tested to no less than 542 Nm (400 ft-lbs) impact loading. Category II products can be used in lieu of Category I products.**

2.4 COATED GLASS

A. Reflective (Mirror) Tempered Glass (GL-3):
   1. ASTM C1048, Kind FT, Condition C, Type I, Class 1, Quality q2 with copper and silver coating, organic overcoating. Make unframed edges polished and square cut.
   2. Thickness, 6 mm (1/4 inch).3. Mirror Adhesive: As recommended by mirror manufacturer.

B. Low-E Tempered Glass (GL-6):
   1. ASTM C1048, Kind FT, Condition C, Type I, Class 1, Quality q3 with low emissivity pyrolytic coating having an E of 0.15.
   2. Apply coating to second surface of insulating glass units.
   3. Thickness, 4.8 mm (3/16 inch).

C. Transparent Mirror (One-Way-Vision Glass) (GL-5, GL-5a):
   1. ASTM C1036, Type I, Class 1, Quality q2 or Class 3, Quality q3; Grey Glass.
   2. Thickness, 6 mm (1/4 inch).
   3. Coated one face with a hard adherent reflective film of chromium or other coating of proven equivalent durability.
   4. Visible Light Transmittance: 8 percent, plus or minus 2 percent.
   5. Visible Reflectance: 60 percent, plus or minus 5 percent.
   6. Light ratio; mirror side 10 or more; observer side one or less.
   7. Assemble with coating covered and protected with a layer of clear glass not less than 3 mm (1/8 inch) thick.
   8. Clean interface glass prior to assembly.
   9. Tape edge to seal interface and hold panes together.

2.5 LAMINATED GLASS

A. Two or more lites of glass bonded with an interlayer material for use in building glazing.

B. Use 1.5 mm (0.060 inch) thick interlayer for:
   1. Heat strengthened or fully tempered glass assembles.

C. Use min. 0.75 mm (0.030 inch) thick interlayer for vertical glazing where 1.5 mm (0.060 inch) thick interlayer is not otherwise shown or required.

2.6 LAMINATED GLAZING ASSEMBLIES

A. Clear Tempered Glazing:
   1. Both panes ASTM C1048, Kind FT, Condition A, Type I, Class 1, Quality q3.
   2. Thickness: Each pane 4.8 mm (3/16 inch) thick.

B. Clear Heat Strengthened Glazing:
   1. Both panes, ASTM C1048, Kind HS, Condition A, Type I, Class 1, Quality q3.
   2. Thickness: Each pane, 3 mm (1/8 inch) thick.

2.7 INSULATING GLASS UNITS (GL-6)

A. Provide factory fabricated, hermetically sealed glass unit consisting of two panes of glass separated by a dehydrated air space and comply with ASTM E2190.

B. Assemble units using glass types specified:

C. Sealed Edge Units (SEU):
   1. Insulating Glass Unit Makeup:
      a. Outboard Lite: Laminated glass, two lites 3 mm (1/8-inch) thick each, laminated with 1.5 mm (0.060-inch) clear interlayer
         1. Glass Type: Heat-treated.
         2. Glass Tint: Clear.
         3. Nominal Thickness: Overall 6 mm (1/4-inch).
         4. Glass Strength: Tempered.
         5. Coating Orientation: Surface #2.
      b. Spacer:
         1. Nominal Thickness: 12 mm (1/2-inch).
         2. Gas Fill: Air.
      c. Inboard Lite: Laminated glass, two lites 3 mm (1/8-inch) thick each, laminated with 1.5 mm (0.060-inch) clear interlayer.
         1. Glass Type: Heat-treated.
         2. Glass Tint: Clear.
         3. Nominal Thickness: Overall 6 mm (1/4-inch).
         4. Glass Strength: Tempered.
   2. Performance Characteristics (Center of Glass), At Least:
      a. Visible Transmittance: 60%.

b. Visible Reflectance: 11% out; 13% in.

c. Winter U-factor (U-value): 0.28 winter; 0.26 summer.

d. Shading Coefficient (SC): 0.35.

e. Solar heat Gain Coefficient (SHGC): 0.31.

3. Glass shall be tempered as required by codes, or as required to meet thermal stress and wind loads.
4. Glass heat-treated by horizontal (roller hearth) process with inherent roller wave distortion parallel to the bottom edge of the glass as installed when specified.

2.8 GLAZING ACCESSORIES

A. As required to supplement the accessories provided with the items to be glazed and to provide a complete installation. Ferrous metal accessories exposed in the finished work shall have a finish that will not corrode or stain while in service.

B. Setting Blocks: ASTM C864:
1. Channel shape; having 6 mm (1/4 inch) internal depth.
2. Durometer Shore A Hardness of 80 to 90.
3. Block Lengths: 50 mm (2 inches) except 100 to 150 mm (4 to 6 inches) for insulating glass.
4. Block Width: Approximately 1.6 mm (1/16 inch) less than the full width of the rabbet.
5. Block Thickness: Minimum 4.8 mm (3/16 inch). Thickness sized for rabbet depth as required.

C. Spacers: ASTM C864:
1. Channel shape having a 6 mm (1/4 inch) internal depth.
2. Flanges not less 2.4 mm (3/32 inch) thick and web 3 mm (1/8 inch) thick.
3. Lengths: One, 25 to 76 mm (1 to 3 inches).
4. Durometer Shore A Hardness of 40 to 50.

D. Sealing Tapes:
1. Semi-solid polymeric based material exhibiting pressure-sensitive adhesion and withstanding exposure to sunlight, moisture, heat, cold, and aging.
2. Shape, size and degree of softness and strength suitable for use in glazing application to prevent water infiltration.

E. Glazing Sealants: ASTM C920, silicone neutral cure:
1. Type S.

2. Class 25.
3. Grade NS.
4. Durometer Shore A Hardness of 25 to 30.

F. Neoprene or EPDM Glazing Gasket: ASTM C864.
1. Channel shape; flanges may terminate above the glazing channel or flush with the top of the channel.
2. Designed for dry glazing.

G. Color:
1. Color of glazing compounds, gaskets, and sealants used for aluminum color frames shall match color of the finished aluminum and be nonstaining.
2. Color of other glazing compounds, gaskets, and sealants which will be exposed in the finished work and unpainted shall be black, gray, or neutral color.

2.9 DECORATIVE GLAZING FILM (GF-1, GF-2)

A. General: Glazing films shall be Class A as defined in ASTM E84.

B. Privacy Film (GF-1):
1. Translucent (matte frosted), with visual light transmittance of 56 percent and visible light reflectance of 18 percent, nominal 0.08 mm (3 mil) thick vinyl film; manufacturer’s standard liner.
2. Thickness with adhesive: Nominal 0.08 mm to 0.1 mm (3 to 4 mil); clear color adhesive.

C. Custom Designed Graphic Film (GF-2):
1. Transparent (optically clear), nominal 0.05 mm (2 mil) thick vinyl film; transparent liner.
2. Thickness with adhesive: Nominal 0.08 mm to 0.1 mm (3 to 4 mil); clear color adhesive.
3. Custom graphic digitally created. Graphic design furnished by A/E. Use film manufacturer’s recommended ink formulations.

D. Accessories:
1. Including but not limited to edge sealer, premasking tape, prespacing tape, etc.
2. Provide as required for installation and durability.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of Conditions:

1. Examine openings for glass and glazing units; determine they are proper size; plumb; square; and level before installation is started.
2. Verify that glazing openings conform with details, dimensions and tolerances indicated on manufacturer’s approved shop drawings.

B. Advise Contractor of conditions which may adversely affect glass and glazing unit installation, prior to commencement of installation: Do not proceed with installation until unsatisfactory conditions have been corrected.

C. Verify that wash down of adjacent masonry is completed prior to erection of glass and glazing units to prevent damage to glass and glazing units by cleaning materials.

3.2 PREPARATION

A. For sealant glazing, prepare glazing surfaces in accordance with GANA-02 Sealant Manual.

B. Determine glazing unit size and edge clearances by measuring the actual unit to receive the glazing.

C. Shop-fabricate and cut glass with smooth, straight edges of full size required by openings to provide GANA recommended edge clearances.

D. Verify that components used are compatible.

E. Clean and dry glazing surfaces.

F. Prime surfaces scheduled to receive sealants, as determined by preconstruction sealant-substrate testing.

3.3 INSTALLATION - GENERAL

A. Install in accordance with GANA-01 Glazing Manual and GANA-02 Sealant Manual unless specified otherwise.

B. Glaze in accordance with recommendations of glazing and framing manufacturers, and as required to meet the Performance Test Requirements specified in other applicable sections of specifications.

C. Set glazing without bending, twisting, or forcing of units.

D. Do not allow glass to rest on or contact any framing member.

E. Glaze doors in a securely fixed or closed and locked position, until sealant, glazing compound, or putty has thoroughly set.

F. Etched Glass:

1. Install units with one patterned surface with smooth surface orientation as indicated o Drawings.

2. Install units with etched pattern in same direction, unless otherwise indicated.

G. Tempered Glass: Install with roller distortions in horizontal position, unless otherwise directed.

1. Backpainted Glazing: Handle with extreme care to protect coatings from damage during handling and installation. Install with integral metal backer plate as detailed on Drawings and in accordance with manufacturer's written instructions.
2. Butt Glazing: Clean edges of glass. Fill void flush on both sides with clear silicone sealant. Tool or wipe sealant for smooth appearance.

H. Transparent (One-Way Vision Glass) Mirror: Use continuous channel glazing gasket.

I. Mirrored Glass: Use adhesive only. Follow GANA Glazing Manual in absence of manufacturer's recommendations.

J. Laminated Glass:

1. Tape edges to seal interlayer and protect from glazing sealants.
2. Do not use putty or glazing compounds.

K. Insulating Glass Units:

1. Glaze in compliance with glass manufacturer's written instructions.
2. When glazing gaskets are used, they shall be of sufficient size and depth to cover glass seal or metal channel frame completely.
3. Do not use putty or glazing compounds.
4. Do not grind, nip, cut, or otherwise alter edges and corners of fused glass units after shipping from factory.
5. Install with tape or gunnable sealant in wood sash.

L. **Wireless Fire Resistant Glass:**

1. **Glaze in accordance with UL design requirements.**

3.4 INSTALLATION - DRY METHOD (TAPE AND GASKET SPLINE GLAZING)

A. Cut glazing spline to length; install on glazing pane. Seal corners by butting and sealing junctions with butyl sealant.

B. Place setting blocks at 1/4 points with edge block no more than 150 mm (6 inches) from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure to attain full contact.

D. Install removable stops without displacing glazing spline. Exert pressure for full continuous contact.

E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.

F. Trim protruding tape edge.

3.5 INSTALLATION – EXTERIOR WET/DRY METHOD (PREFORMED TAPE AND SEALANT)

A. Cut glazing tape to length and set against permanent stops, 5 mm (3/16 inch) below sight line. Seal corners by butting tape and dabbing with butyl sealant.

B. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame to complete the continuity of the air and vapor seal.

C. Place setting blocks at 1/4 points with edge block no more than 150 mm (6 inches) from corners.

D. Rest glazing on setting blocks and push against tape and heel bead of sealant with sufficient pressure to achieve full contact at perimeter of pane or glass unit.

E. Install removable stops, with spacer strips inserted between glazing and applied stops, 6 mm (1/4 inch) below sight line. Place glazing tape on glazing pane or unit with tape flush with sight line.

F. Fill gap between glazing and stop with appropriate type sealant to depth equal to bite of frame on glazing, but not more than 9 mm (3/8 inch) below sight line.

G. Apply cap bead of appropriate type sealant along void between the stop and the glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

3.6 INSTALLATION - INTERIOR WET/DRY METHOD (TAPE AND SEALANT)

A. Cut glazing tape to length and install against permanent stops, projecting 1.6 mm (1/16 inch) above sight line.

B. Place setting blocks at 1/4 points with edge block no more than 150 mm (6 inches) from corners.

C. Rest glazing on setting blocks and push against tape to ensure full contact at perimeter of pane or unit.

D. Install removable stops, spacer shims inserted between glazing and applied stops at 600 mm (24 inch) intervals, 6 mm (1/4 inch) below sight line.

E. Fill gaps between pane and applied stop with appropriate type sealant to depth equal to bite on glazing, to uniform and level line.

F. Trim protruding tape edge.

3.7 INSTALLATION - DECORATIVE GLAZING FILM

A. Inspection:
   1. Examine glazing surfaces and conditions under which decorative film is to be install.
   2. Field verify film size for each glass panel, within tolerances and dimensions established.

B. Do not install on glass with edge damage.

C. Install in accordance with manufacturer's instructions.
   1. Install film continuously, but not necessarily in one continuous length. Install with no gaps or overlaps.
   2. Install film completely adhered to glass without bubbles, wrinkles, blisters, and other defects.

D. Cut and trim film edges neatly at a uniform distance of 1.5 mm to 3mm (1/16 inch to 1/8 inch) from edge of rebate or edge of glass at jams, corners and joints.
   1. Maintain clean cut utilizing sharp blades.

E. Cleaning and Protecting:
   1. Remove left over material and debris from work area.
   2. Touch up, repair, or replace damaged panels.
   3. Protect from damage by other trades.
   4. Clean per manufacturer's recommendations.

3.8 REPLACEMENT AND CLEANING

A. Clean new glass surfaces removing temporary labels, paint spots, and defacement after approval by Resident Engineer.

B. Replace cracked, broken, and imperfect glass, or glass which has been installed improperly.

C. Leave glass, putty, and other setting material in clean, whole, and acceptable condition.

3.9 PROTECTION

A. Protect finished surfaces from damage during erection, and after completion of work. Strippable plastic coatings on colored anodized finish are not acceptable.

3.10 GLAZING SCHEDULE

A. **Fire Resistant Glass (GL-8):**
   1. **Use Fire Resistant Glass without wire mesh in rated doors as indicated on Drawings.**

B. Tempered Glass:
   1. Install in doors unless indicated otherwise.
   2. Install in storefront, entrances, and door sidelights adjacent to doors.
   3. Use clear tempered glass (GL-4, GL-4a): Standard and butt glaze installations where indicated on Drawings.
   4. Backpainted Magnetic Marker Glass (GL-1): Use clear tempered glass with two-sided coating. Install where indicated on Drawings.
   5. Backpainted Glass (GL-2): Use clear tempered glass with back-side coating. Install where indicated on Drawings.
   6. Reflective Mirror Glass (GL-3): Use clear tempered glass, coated, unframed. Install where indicated on Drawings.

C. Laminated Insulating Glass (GL-6):
   1. Install SEU clear tempered laminated glass units in locations indicated on Drawings.

D. Transparent Mirror (One-Way-Vision Glass) (GL-5, GL-5a): Standard (GL-5) and butt glaze (GL-5a) installations in locations where indicated.

E. Etched Glass (obscure) (GL-7):
   1. Install in interior locations where indicated on Drawings.
   2. Refer to Finish Legend on Drawings for Etched Glass (obscure) pattern.

F. Decorative Glazing Film (GF-1 and GF-2):
   1. Install in interior locations where indicated on Drawings.
   2. Refer to Finish Legend on Drawings for patterned glazing film and for custom designed graphic glazing film.

- - - E N D - - -

SECTION 11 70 00
HOSPITAL EQUIPMENT – GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section specifies the furnishing, installation, and connection of hospital equipment.

B. Completely coordinate with work of other trades.

1.2 RELATED WORK

A. Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS: Seismic supports and lateral bracing.

B. Division 22, PLUMBING: General plumbing requirements and items common to more than one section of Division 22.

C. Division 23, HEATING, VENTILATING, AND AIR CONDITIONING (HVAC): General HVAC requirements and items common to more than one section of Division 23.

D. Division 26, ELECTRICAL: General electrical requirements and items common to more than one section of Division 26.

E. Division 27, COMMUNICATIONS: General communications requirements and items common to more than one section of Division 27.

1.3 QUALITY ASSURANCE

A. Dimensions, voltages, electrical power requirements, and utility connections are based on items specified elsewhere, on items listed in the Equipment Schedule on the Drawings, and on items in associated Equipment Manuals/Binders of manufacturers’ product data.

B. Contractor is responsible for costs for dimensional adjustments and for providing or arranging for additional electrical or utility services or equipment required as a result of using approved substitute products.

C. If necessary to vary from arrangement indicated, make such variations only after approval of Architect and at no additional expense to Owner.

D. Field verify all dimensions involving Work. Measure recesses and openings and provide trim pieces, fillers, closures in sizes required.

E. Equipment may be inspected by Owner at manufacturer's plant prior to shipment.

F. Equipment found not in accordance with specifications and approved drawings may be rejected.

G. Replace rejected equipment at no cost to Owner.

H. Electric operated equipment, heated equipment, or both:
   1. Comply with latest version of National Electrical Manufacturer's Association (NEMA), National Electric Code (NEC) and Underwriters' Laboratories, (UL).

I. Installer Qualifications: Manufacturer, or approved in writing by manufacturer.

1.4 SUBMITTALS

A. Submit one electronic copy of the following:
   1. Shop Drawings:
      a. Submit drawings to indicate arrangement and location of equipment.
      b. Complete equipment list including manufacturer, model number, power and utility requirements, room name and number where located.
   2. Product Data:
      a. Submit, simultaneously with the shop drawings, manufacturers' literature describing specified equipment, complete maintenance and operating manuals, including technical data sheets, wiring diagrams, and information for ordering replacement parts.
   3. Installer qualifications.
   4. Contract Closeout Information:
      a. Warranty.
      b. Owner instructions.
      c. Operation and Maintenance manuals.
         1) If changes have been made to the maintenance and operating manuals originally submitted, submit updated maintenance and operating manuals two weeks prior to the final inspection.
      d. Parts lists.
   5. Certifications: Two weeks prior to final inspection, Contractor shall submit certification that each equipment assembly or system has been properly installed and tested.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Contractor Installed - Contractor Furnished New Equipment:
   1. Contractor store equipment to prevent damage to materials or structure in dry, weathertight, ventilated spaces.
   2. Deliver to site in manufacturer's original labeled containers.
   3. Protect exposed surfaces and edges until work is completed.

4. Repair or remove and replace damaged or rejected work.

B. ~~**Contractor Installed - Owner Furnished Equipment:**~~

1. ~~**Contractor to obtain such equipment from Owner.**~~
2. ~~**Protect exposed surfaces and edges until work is completed.**~~
3. ~~**Contractor shall provide fasteners, supports, or other miscellaneous items necessary for complete installation, not provided by equipment manufacturer.**~~
4. ~~**Owner to provide Contractor with rough-in and installation Drawings of purchased equipment.**~~
5. ~~**Delivery place and time to be determined by Owner but not necessarily during normal working hours.**~~

C. Contractor and Owner mutually inspect existing equipment prior to removal, upon delivery to new location, and after installation to verify physical appearance and working condition.

1.6 WARRANTY

A. Manufacturer’s standard warranty against equipment failure, including cost of shipping, repair, replacement and legal discard of waste materials.

B. Equipment furnished by Owner for installation by Contractor, shall be excluded from Contractor's one year warranty.

PART 2 - PRODUCTS

2.1 EQUIPMENT

A. Provide equipment of each specialty type, as indicated in the Equipment Schedule on the Drawings and in associated Equipment Manuals/Binders, by one manufacturer, insofar as is possible and except as otherwise indicated.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine substrates and conditions under which work is to be performed.

B. Ensure that appropriate and adequate wall and ceiling backing has been installed.

1. Coordinate and direct installation of backing required for wall-mounted and ceiling-mounted equipment.

C. Correct unsatisfactory conditions.

D. Start of work constitutes acceptance of responsibility for performance.

3.2 INSTALLATION

A. Follow Section 01 00 00, GENERAL REQUIREMENTS for quality control of installation.

B. Install per manufacturers' printed instructions, drawings, or both.

C. Except for final connection, installation of each item shall be complete in every respect.

1. Provide controls, regulating devices and other accessories necessary for proper operation and maintenance of equipment including, but not necessarily limited to, pressure reducing valves, strainers, steam traps, control valves, relief valves, etc.
2. Include necessary accessories whether or not they are specifically indicated.

D. Where an item of equipment is furnished without a cord and plug, electrical wiring from equipment shall be brought to an equipment junction box to make a final connection between item and junction box with flexible connection.

E. Provide stands, supports, sleeves, collars, escutcheons, ferrules, brackets, braces or other miscellaneous items required for a complete installation.

F. Repair damage done to premises as a result of installation.

G. Repair or replace damaged, stained or rejected work.

H. Test and adjust items of equipment for satisfactory operation.

I. Remove debris left by equipment installation.

- - - E N D - - -