



RAMSEY CITY HALL SECURITY UPGRADES STUDY

June 04, 2024

- EXHIBIT A – COUNCIL CHAMBERS SECURITY
- EXHIBIT B – COUNCIL CHAMBERS GLAZING
- EXHIBIT C – LOBBY RECEPTION DESK
- EXHIBIT D – LEVEL 2 AFTER-HOURS ACCESS
- EXHIBIT E – LEVEL 2 RECEPTION WINDOWS
- EXHIBIT F – MAIN LEVEL RECEPTION WINDOWS
- EXHIBIT G – FIRE STATION 1 LOBBY / RECEPTION
- EXHIBIT H – POLICE LOBBY DOOR GLAZING
- COST ESTIMATES






EXHIBIT A – COUNCIL CHAMBERS SECURITY

GOALS

- Add ballistic resistant paneling to council dais
- Provide ballistic resistance at council chambers glass wall at lobby
- Provide electronic access control at chambers entry doors
- Provide secure shelter-in-place area for staff and council in adjacent AV room

Council Floor Plan -
1/8" = 1' - 0"

KEYNOTE LEGEND	
1	Modify glass for ballistic resistance
2	Replace door w/ ballistic resistant door panel
3	Add ballistic resistance to existing wall
4	Add electronic access control to door
5	Add electronic access control - council side
6	Add ballistic resistant panel behind dais
7	Ballistic resistant glazing
8	Spectator railing appx. 30" high to match dais, w/ latching swing gate
	ADA clearance

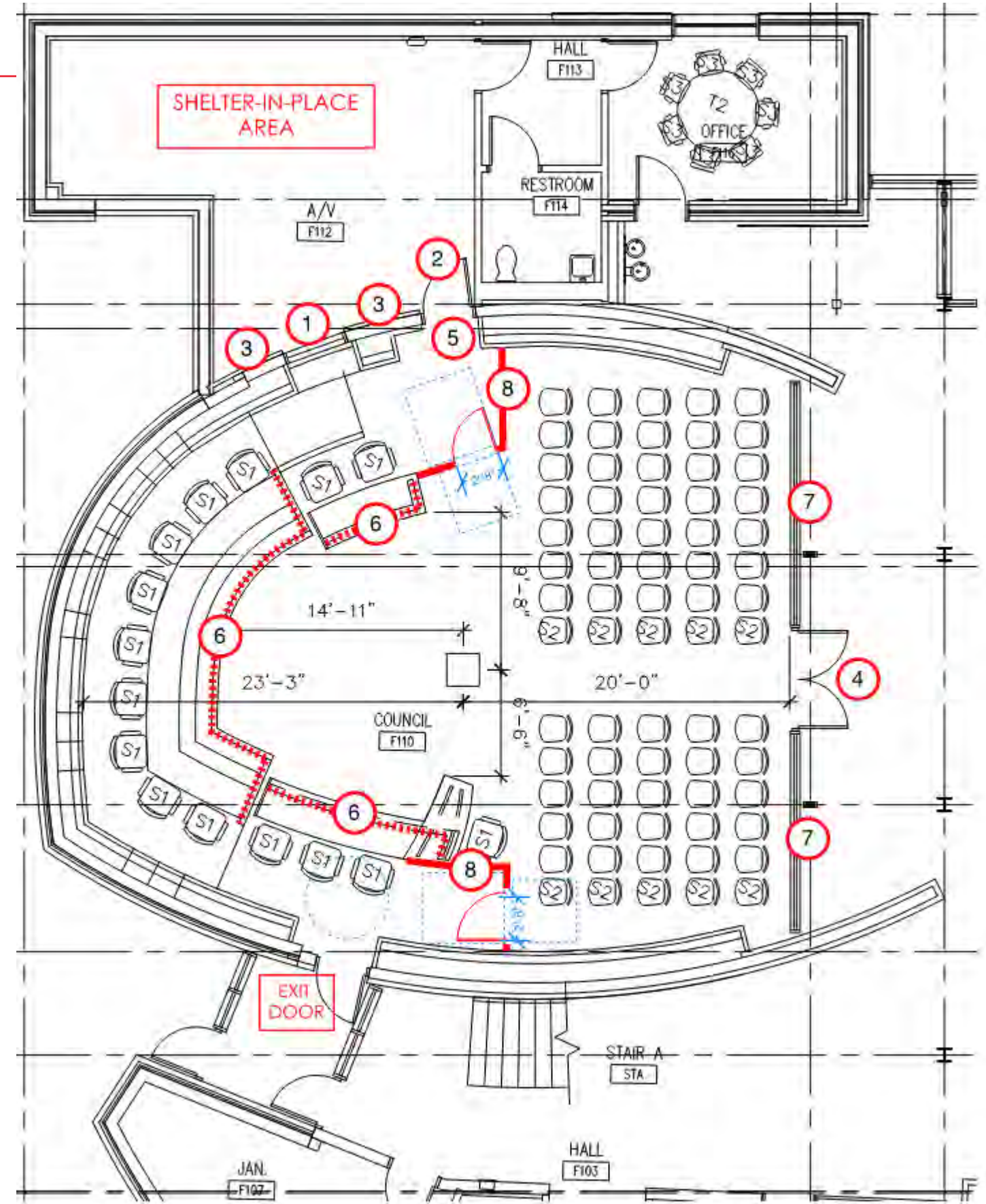
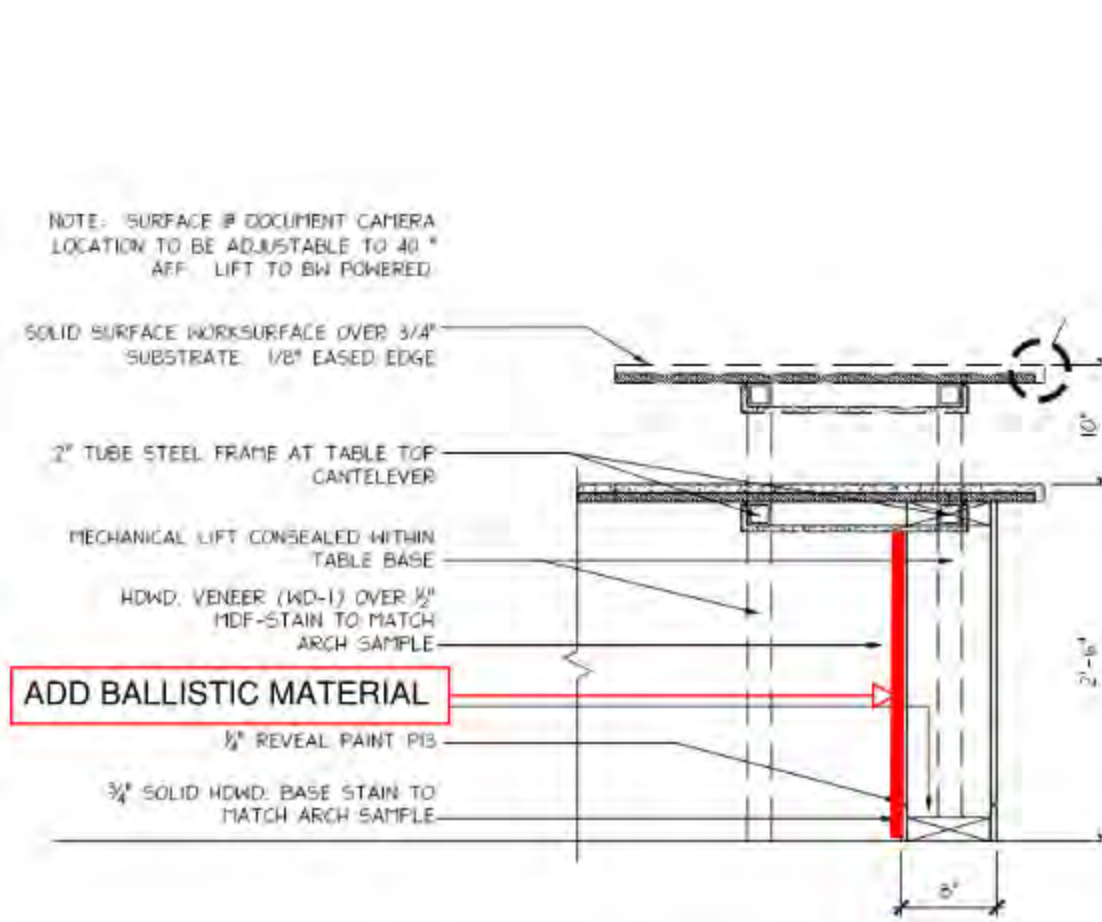


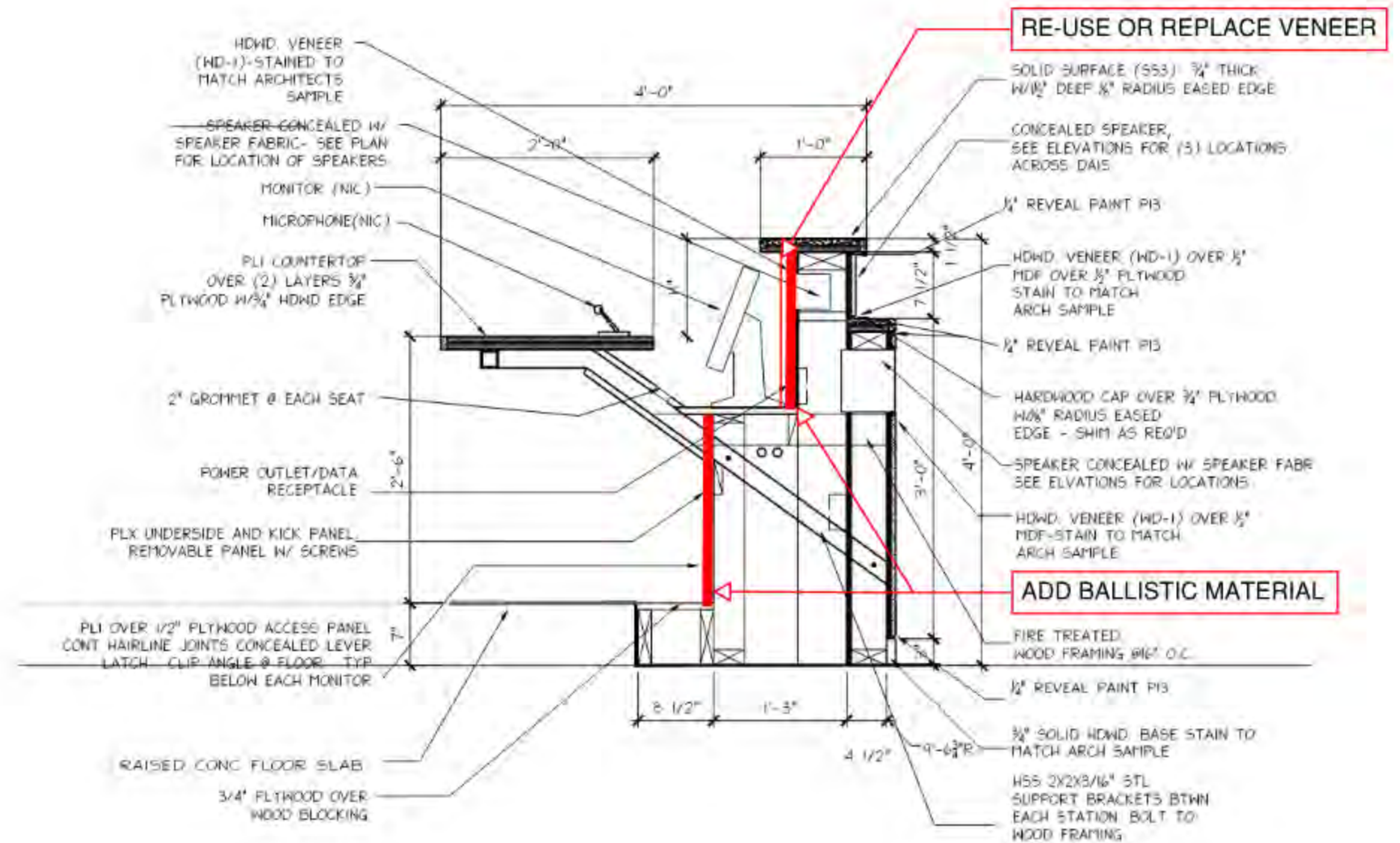


EXHIBIT A – COUNCIL CHAMBERS SECURITY

Location of proposed ballistic resistant paneling installed within existing council dais:



STAFF TABLE SECTION



COUNCIL DAIS SECTION



EXHIBIT B – COUNCIL CHAMBERS SECURITY

- Option 1 – Remove fixed glazing panels and replace with ballistic resistant glazing within existing curtain wall frame. Add ballistic resistant film to door vision panels.
- Option 2 – Apply ballistic resistant film at back of existing glazing including at the door vision panels

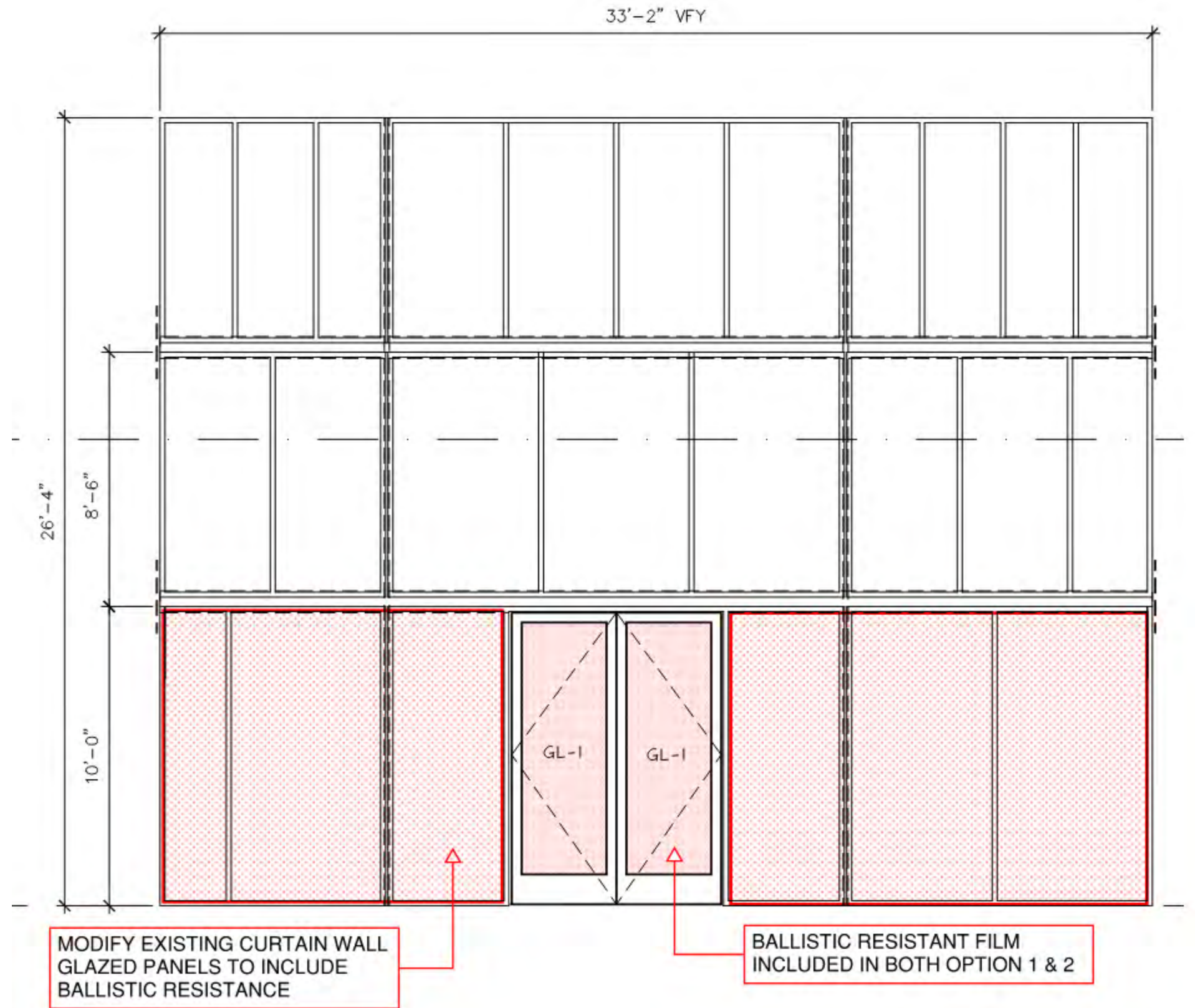
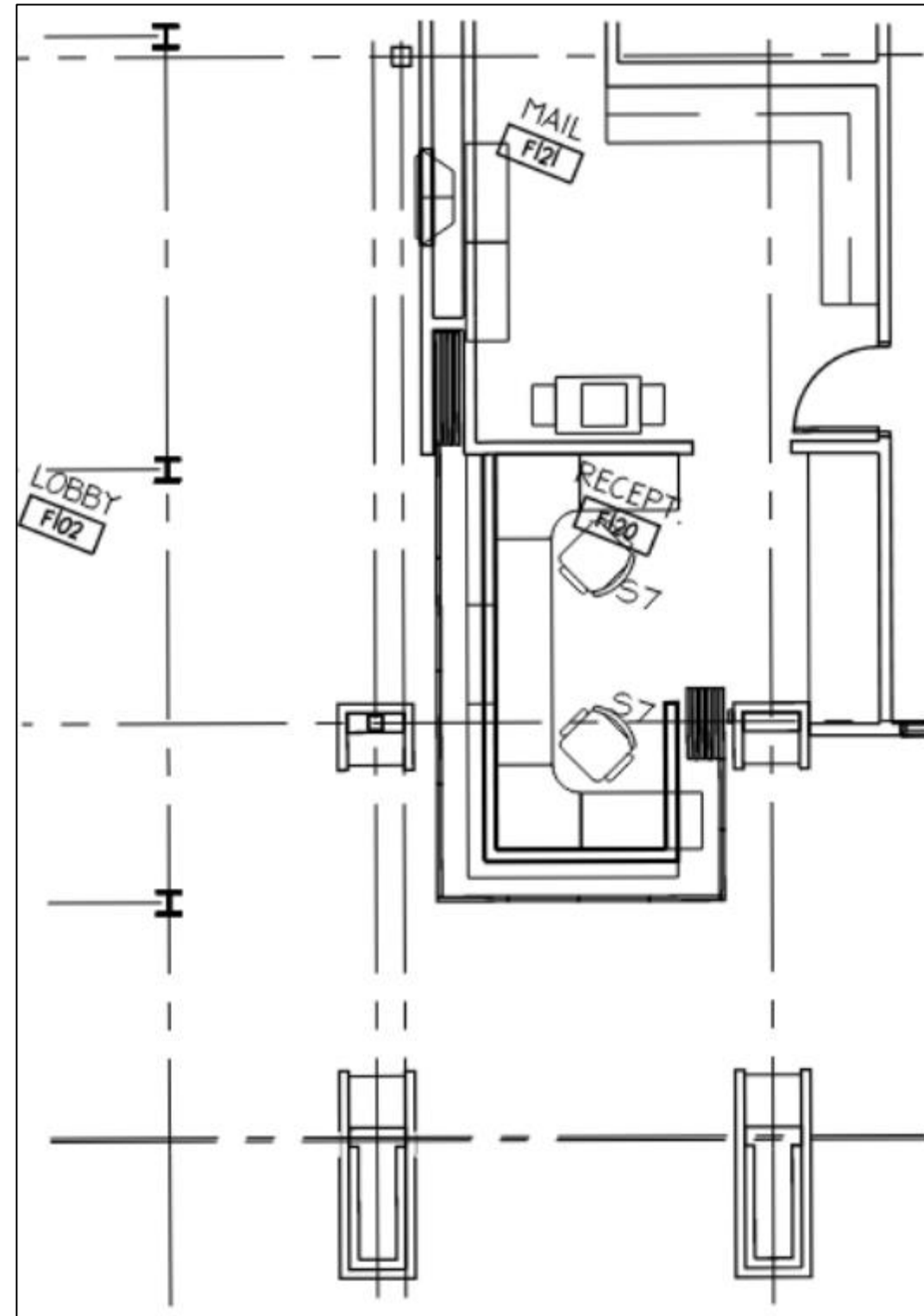




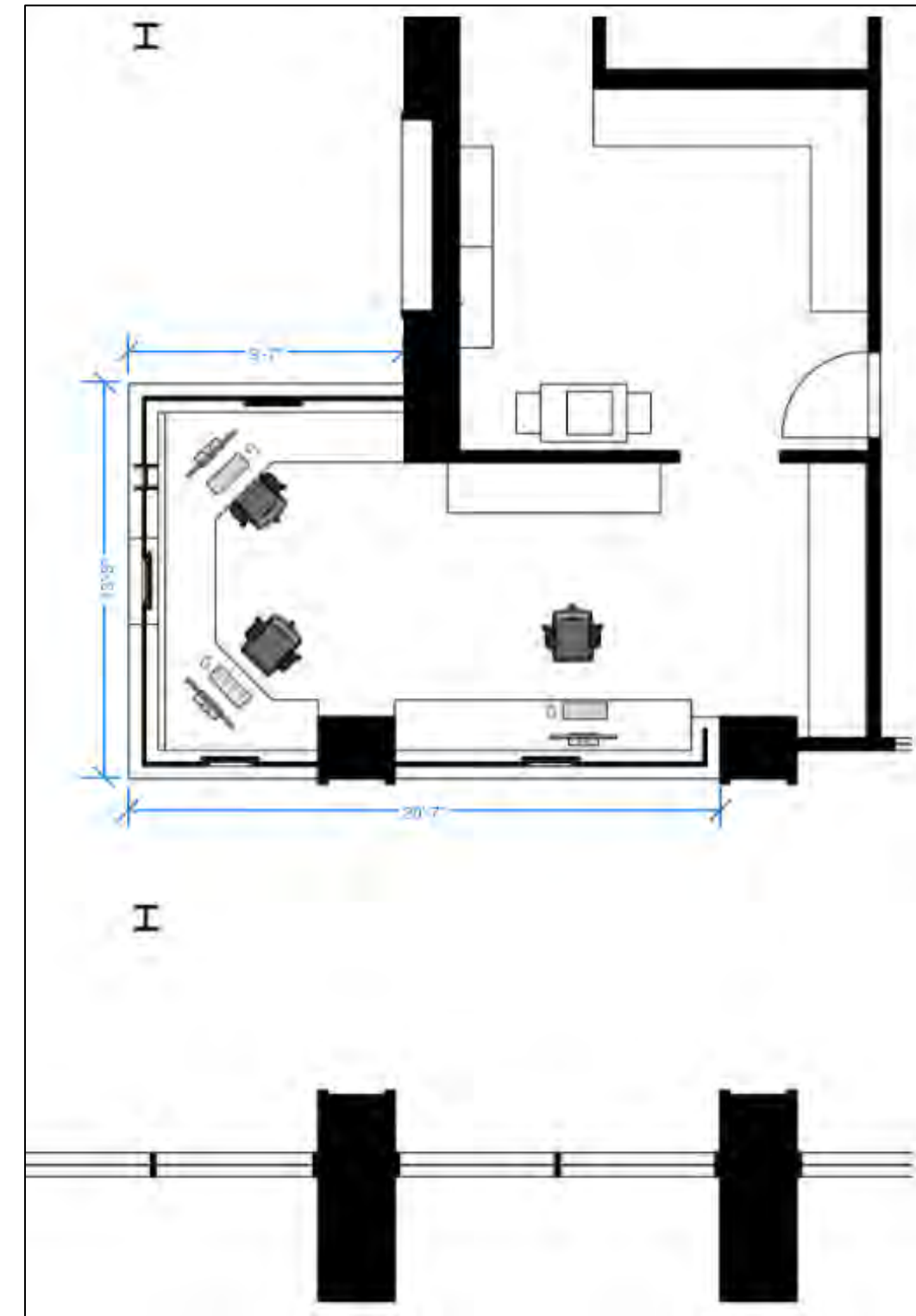
EXHIBIT C – LOBBY RECEPTION DESK

GOALS

- Provide workspace for 3 staff at the reception counter
- Improve staff visibility and sightlines to both lobby entrances
- Incorporate UL 752 Level 3 ballistic resistant panels below counter
- Incorporate UL 752 Level 3 ballistic resistant glazing above counter
- Secure reception desk to prevent after-hours public access



EXISTING RECEPTION DESK



PROPOSED RECEPTION DESK



EXHIBIT C – LOBBY RECEPTION DESK



3D VIEWS



BALLISTIC RESISTANT GLAZING EXAMPLE



EXHIBIT D – LEVEL 2 AFTER-HOURS ACCESS

GOALS

- Ability to secure 2nd level of city hall after-hours

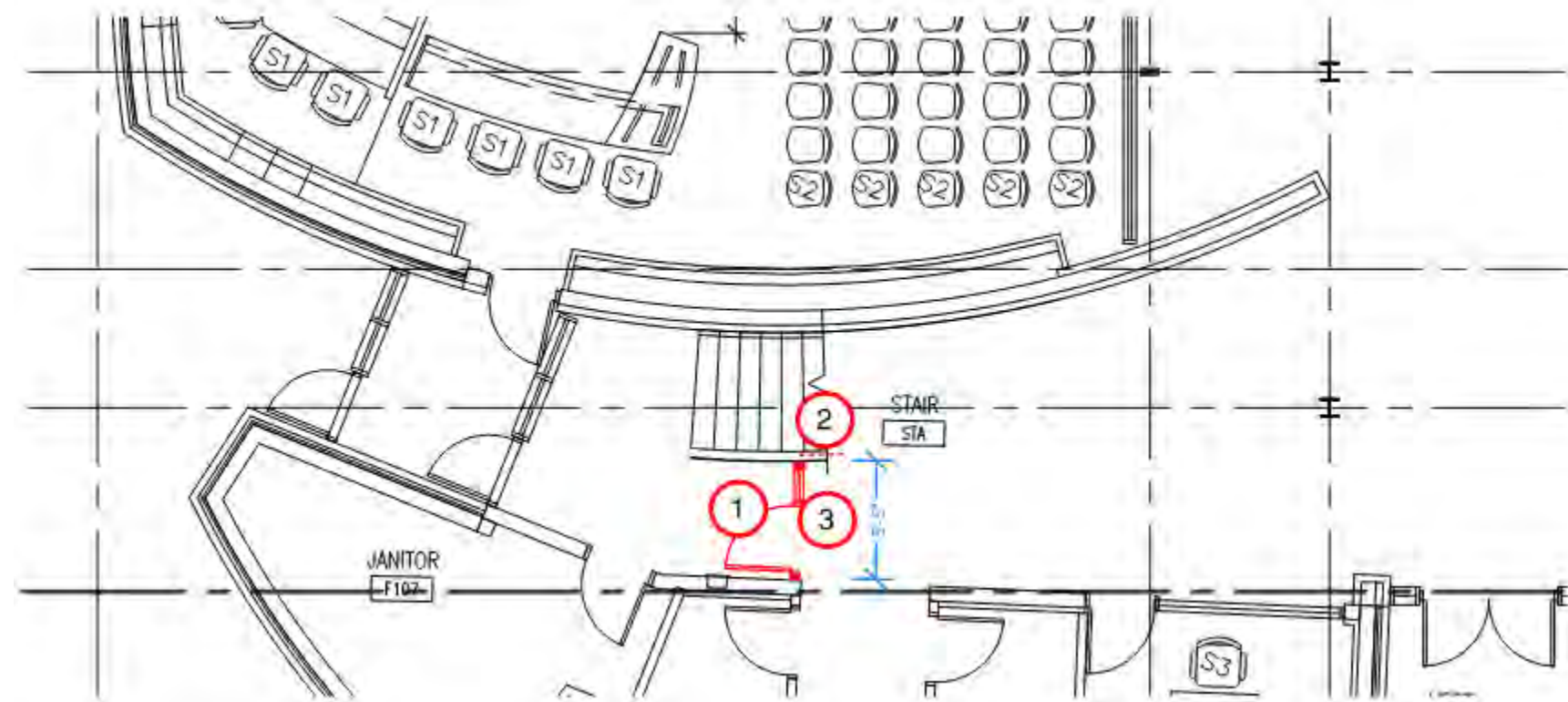
COMMENTS

- Add a storefront frame and door with electronic access control to create a barrier at the bottom of the stairs to control access to the 2nd level

KEYNOTE LEGEND	
1	Storefront system appx. 8'-2" high, match restroom vestibule height
2	Glass barrier along top of stair guard railing
3	Add electronic access control to door - (Lobby side)



3D VIEW



2ND LEVEL - PARTIAL PLAN

EXHIBIT E – LEVEL 2 RECEPTION WINDOWS (Administration / Finance)

OPTION 1: SUB-LOBBY

GOALS

- Provide secure service counters for city hall departments to prevent unintended access to city office areas and provide staff with a barrier of separation for safety

COMMENTS

- Create a secure sub-lobby within the department office space with a dedicated reception window for finance and administration
- Utilize existing suite door from concourse
- Utilize current office furniture

KEYNOTE LEGEND	
1	Service counter with glass barrier
2	Metal stud wall with gyp. board finish
3	Add electronic access control to door
4	Remove hinged doors and workstation walls

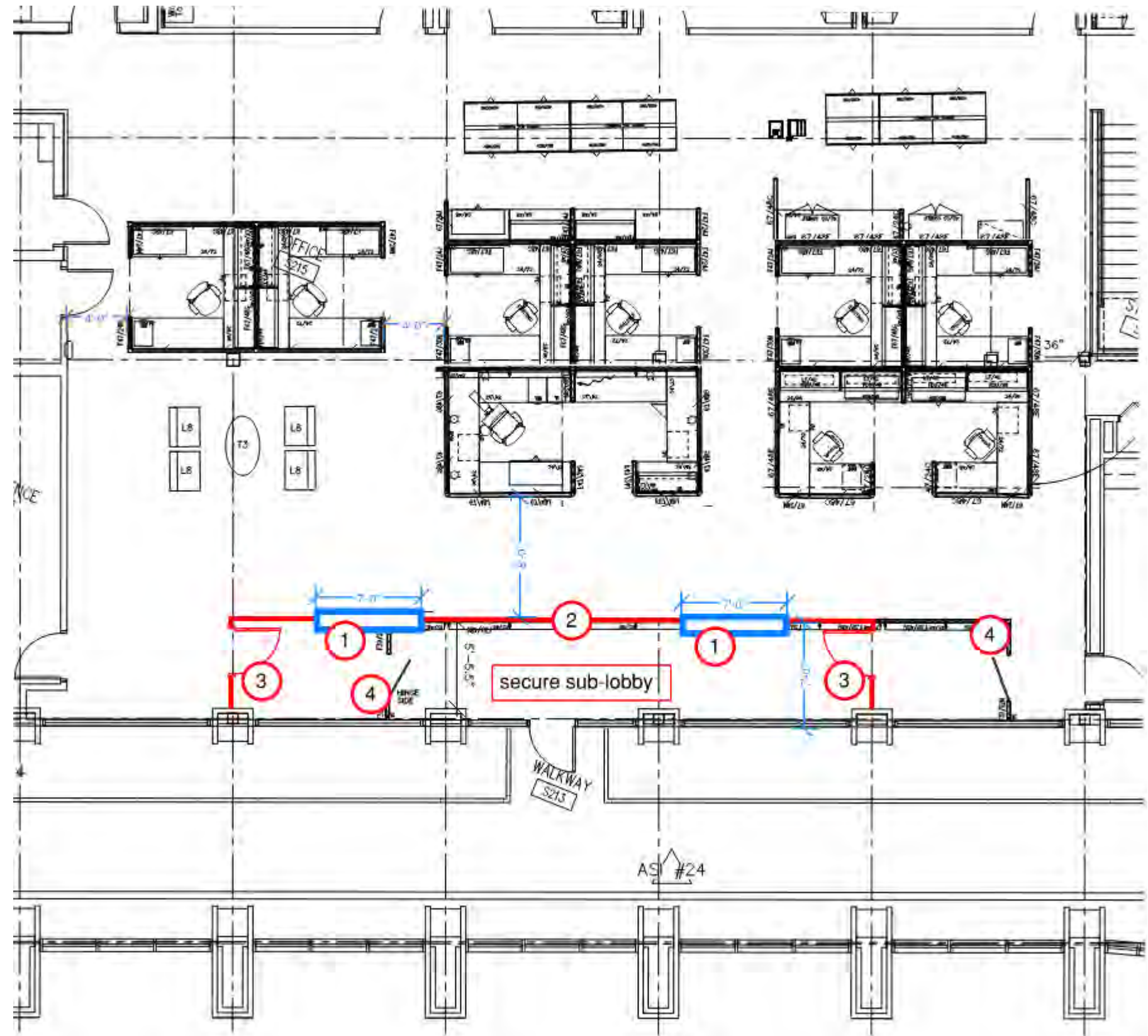


EXHIBIT E – LEVEL 2 RECEPTION WINDOWS (Administration / Finance)

OPTION 2: CONCOURSE WINDOW

GOALS

- Provide secure service counters for city hall departments to prevent unintended access to city office areas and provide staff with a barrier of separation for safety

COMMENTS

- Requires structural infill to floor
- Patching existing wood finishes and flooring
- Modification of existing glass railings

KEYNOTE LEGEND	
1	Remove existing hollow metal frame
2	Service counter with glass barrier
3	Walkway floor/structure spanning between existing beams
4	Existing beam
5	Remove existing door
6	Infill existing HMF opening with new elec. access door
7	Remove hinged doors and workstation walls

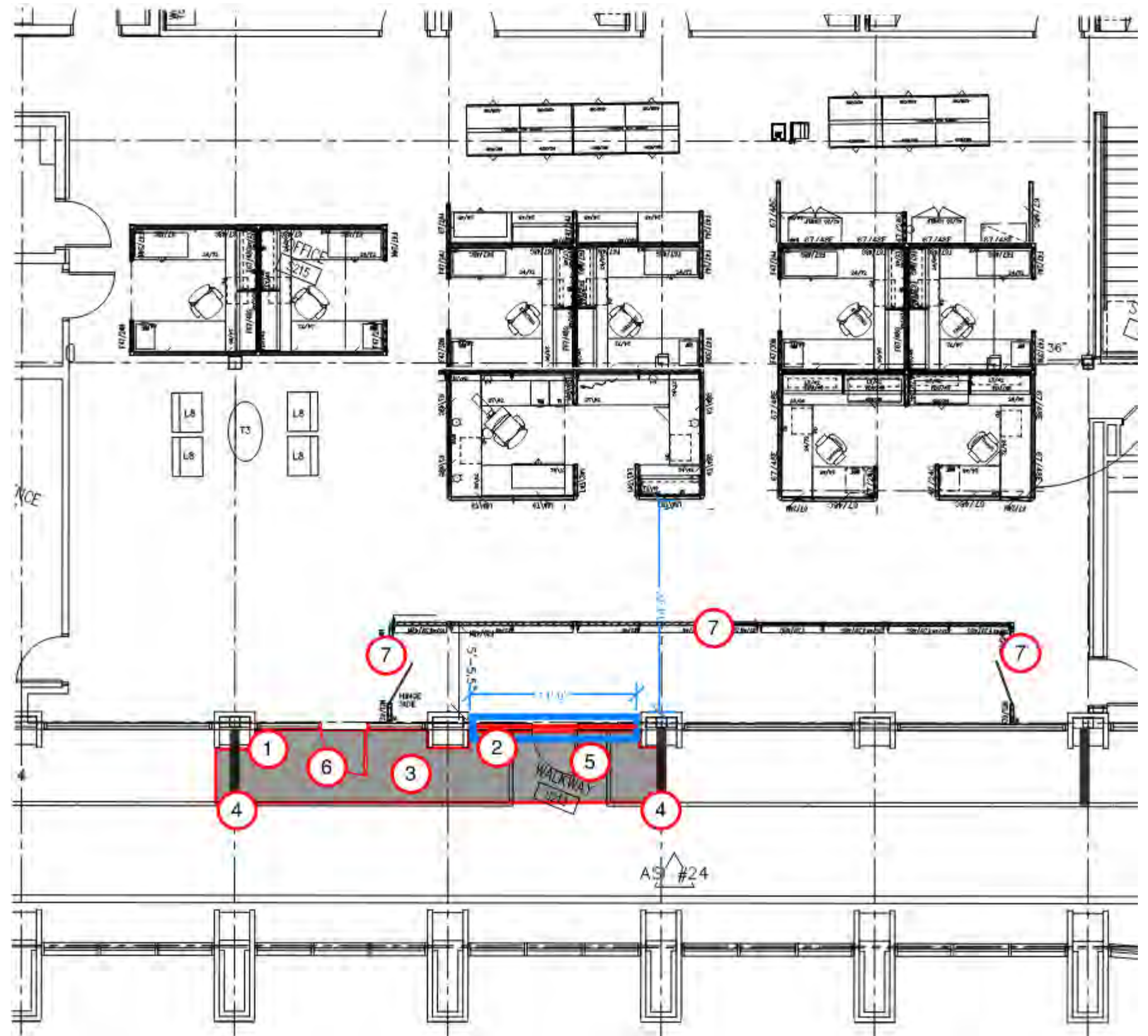


EXHIBIT E – LEVEL 2 RECEPTION WINDOWS (Engineering)

OPTION 1: SUB-LOBBY

GOALS

- Provide secure service counters for city hall departments to prevent unintended access to city office areas and provide staff with a barrier of separation for safety

COMMENTS

- Create a secure sub-lobby within the department office space
- Utilize existing suite door from concourse
- Utilize current office furniture

KEYNOTE LEGEND	
1	Service counter with glass barrier
2	Metal stud wall with gyp. board finish
3	Add electronic access control to door
4	Remove hinged doors and workstation walls

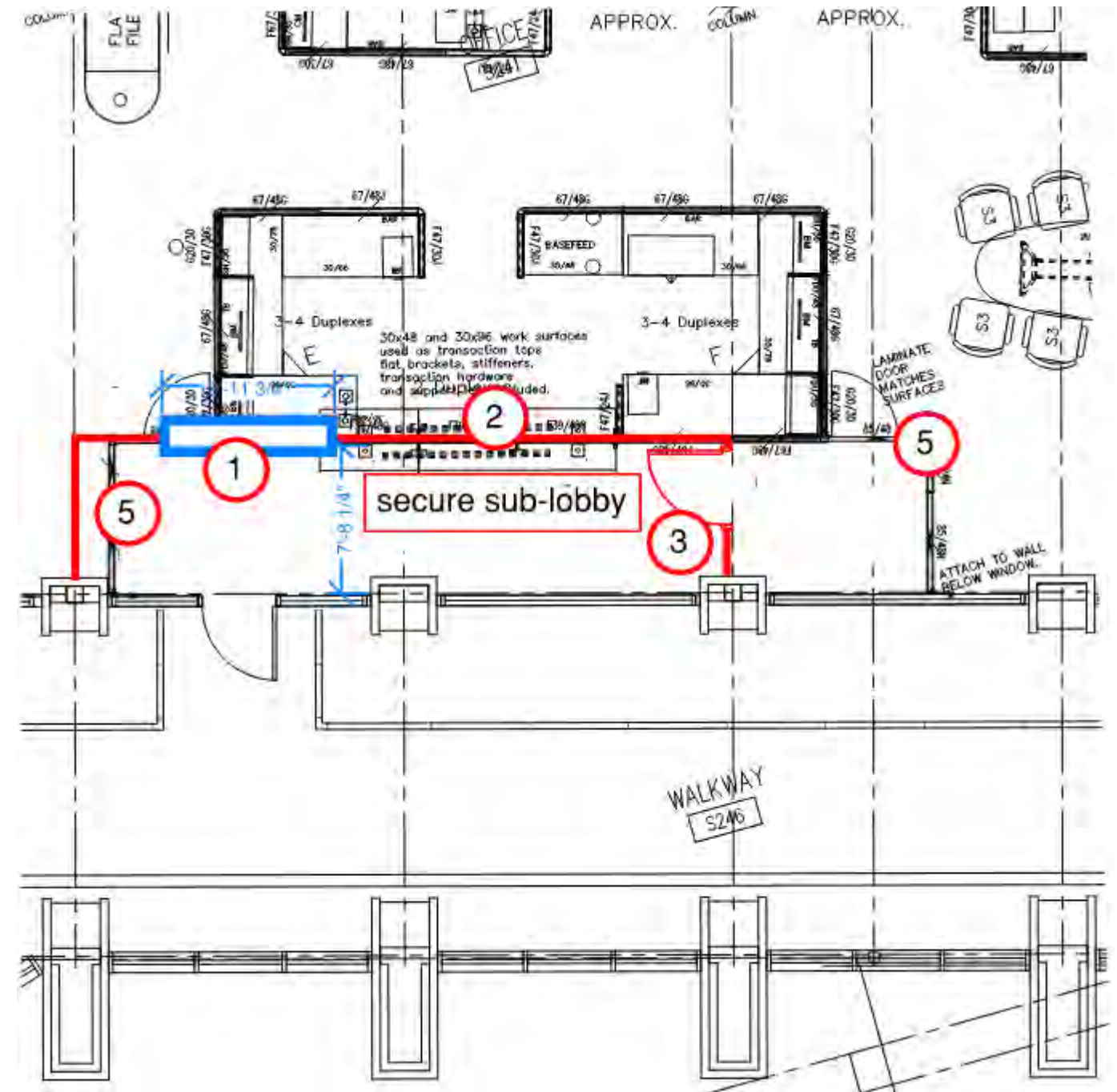


EXHIBIT E – LEVEL 2 RECEPTION WINDOWS (Engineering)

OPTION 2: CONCOURSE WINDOW

GOALS

- Provide secure service counters for city hall departments to prevent unintended access to city office areas and provide staff with a barrier of separation for safety

COMMENTS

- Uses existing opening for constructing a new service window
- Requires structural infill to floor
- Patching existing wood finishes and flooring
- Modification of existing glass railings

KEYNOTE LEGEND	
1	Remove existing hollow metal frame
2	Service counter with glass barrier
3	Walkway floor/structure spanning between existing beams
4	Existing beam
5	Remove hinged doors and workstation walls

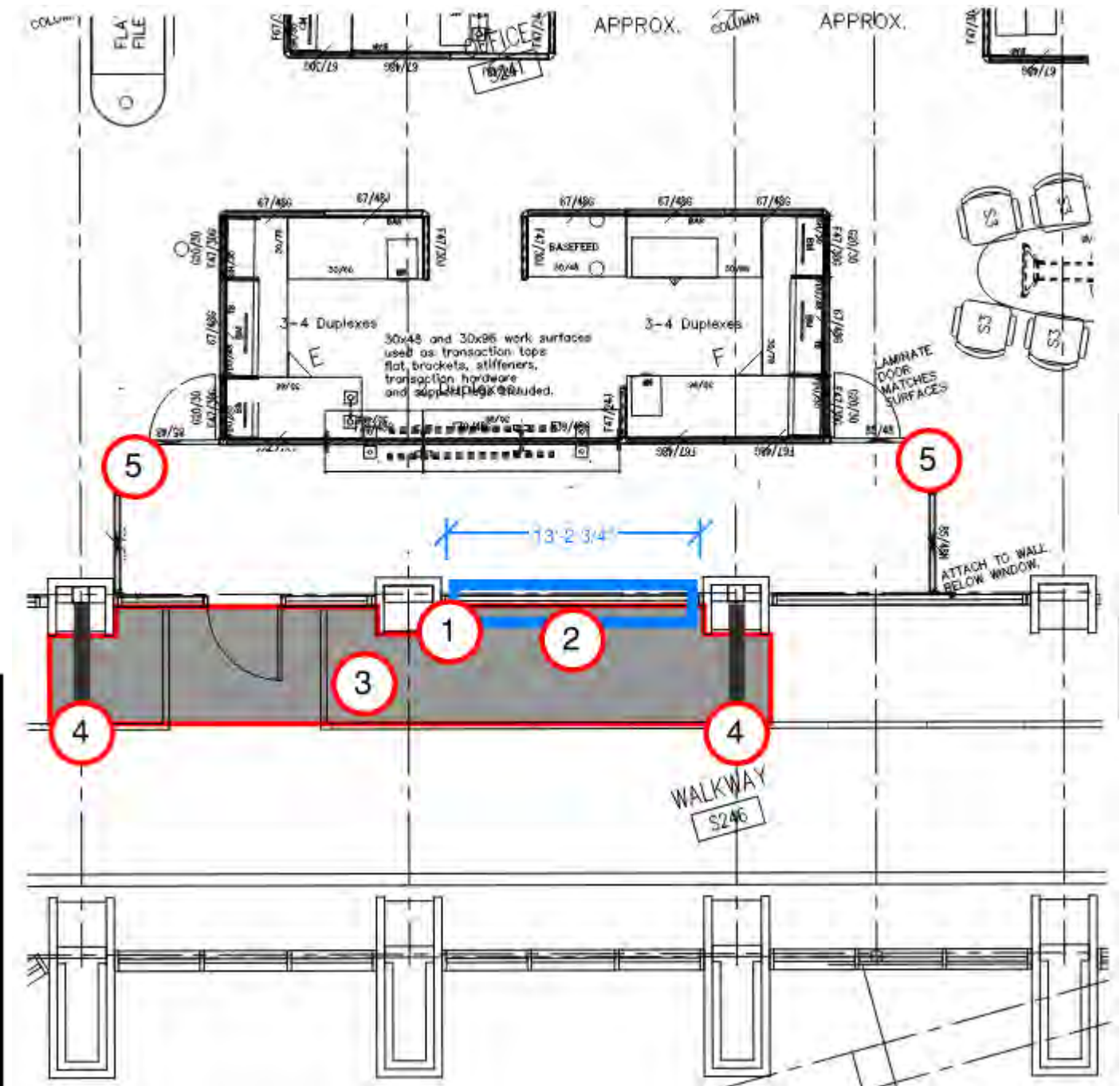




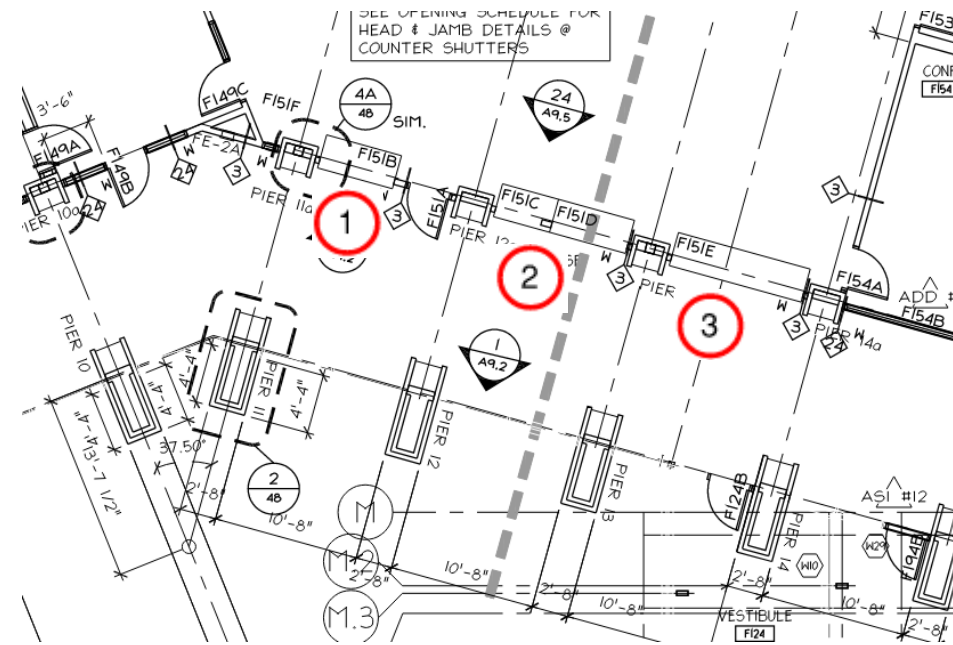
EXHIBIT F – MAIN LEVEL RECEPTION WINDOWS

GOALS

- Provide a secure barrier at existing reception windows along the main level concourse

COMMENTS

- Add non-ballistic glass barriers to existing openings with pass-thru for papers/packages



MAIN LEVEL – RECEPTION COUNTERS



GLASS SECURITY BARRIER EXAMPLE

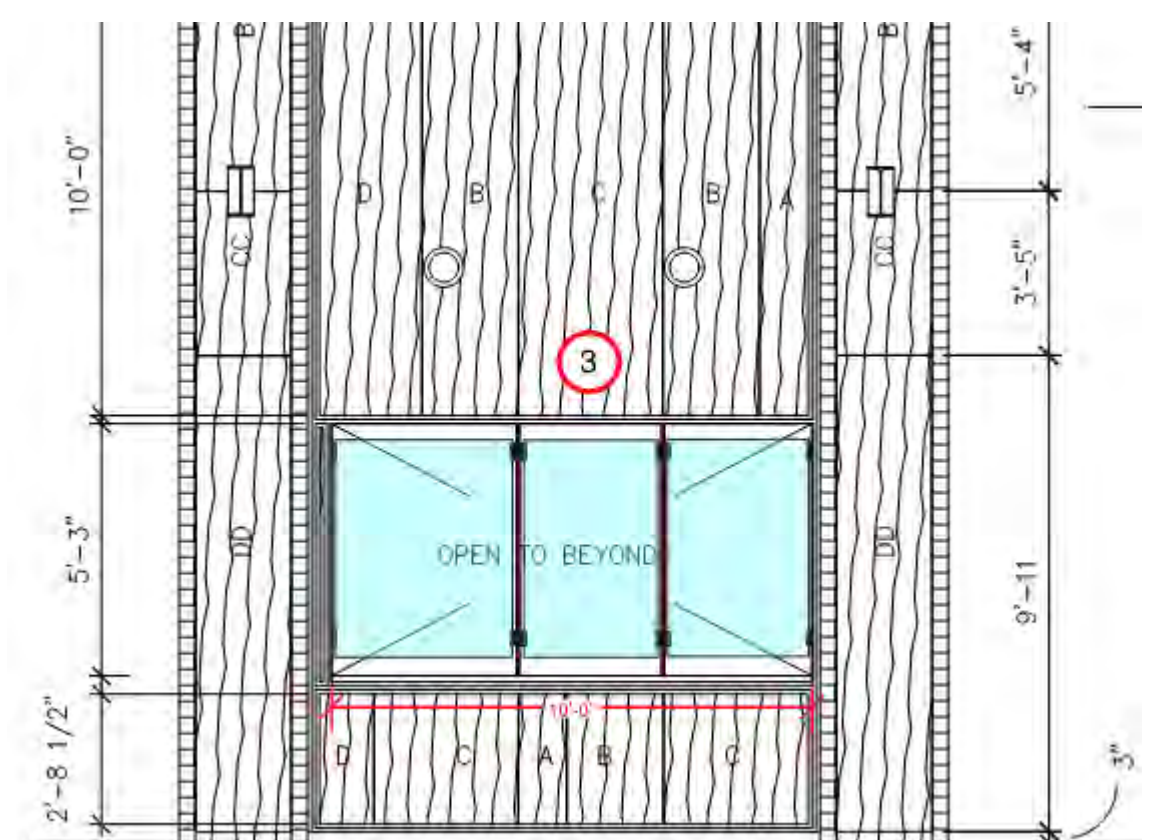
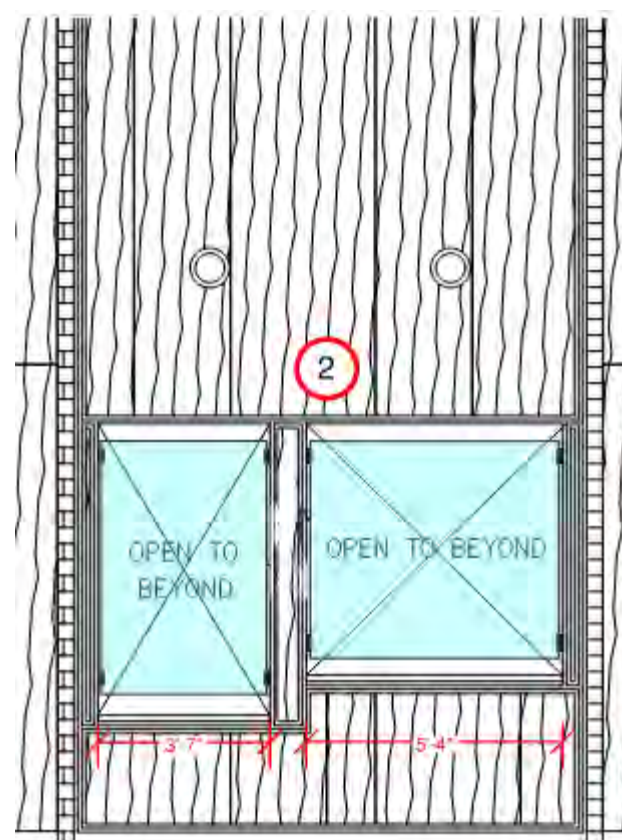
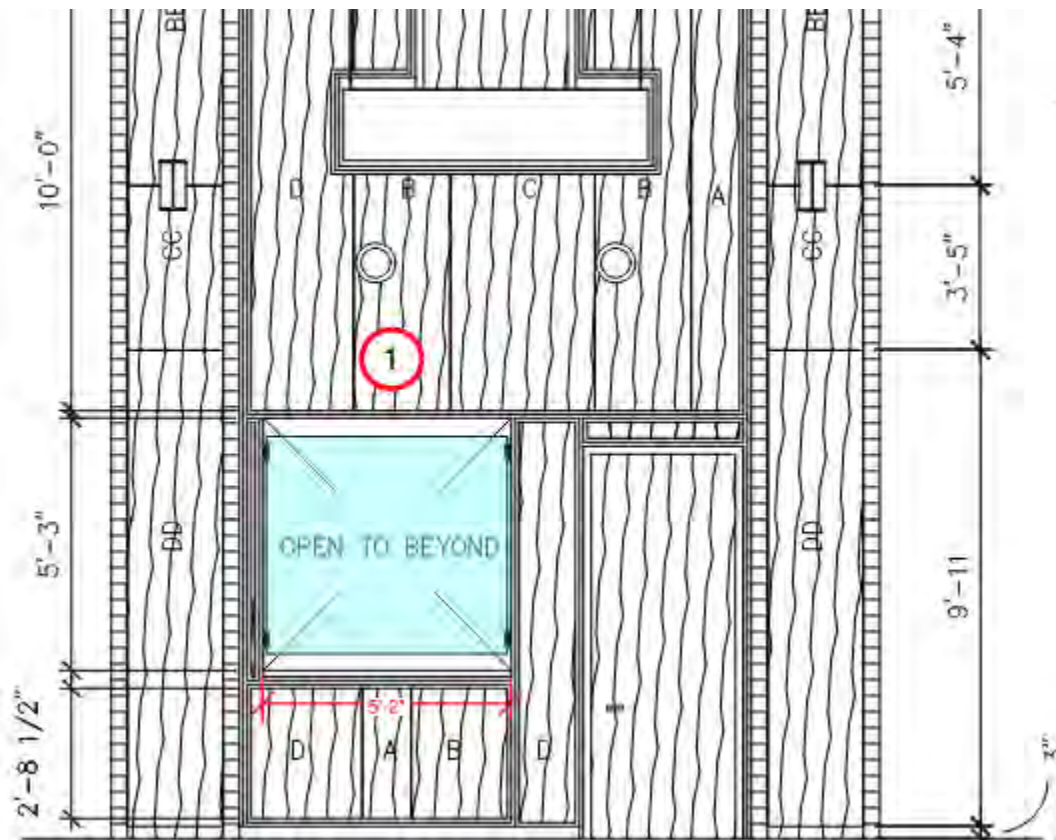


EXHIBIT G – FIRE STATION 1 LOBBY / RECEPTION

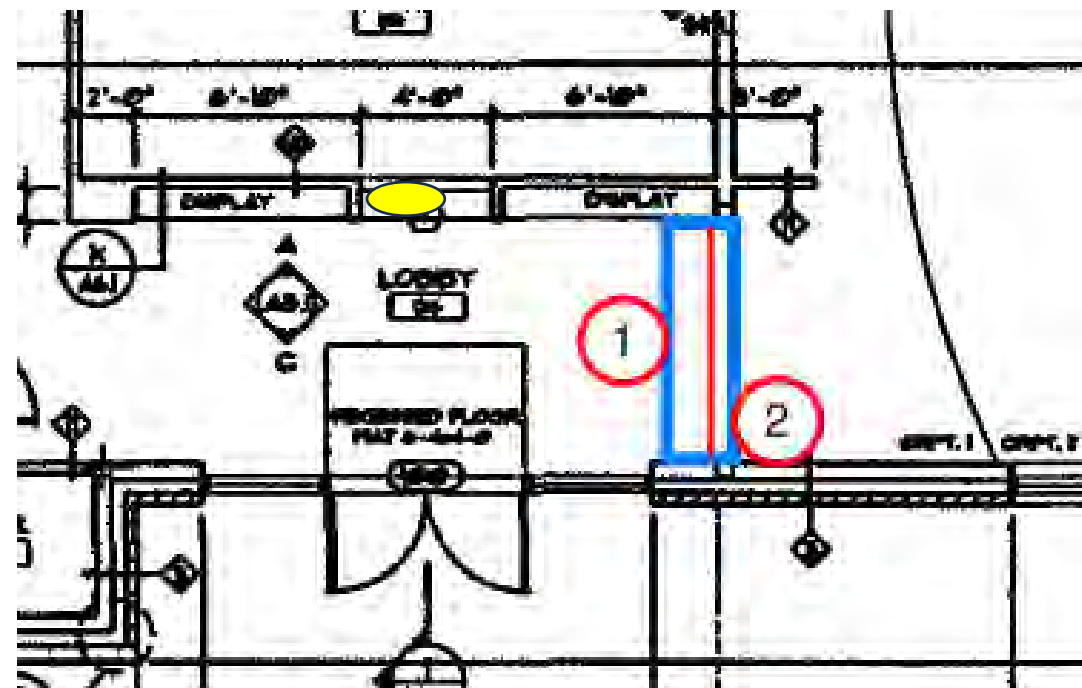
GOALS

- Provide secure office area for firefighters with defined public space and lobby.

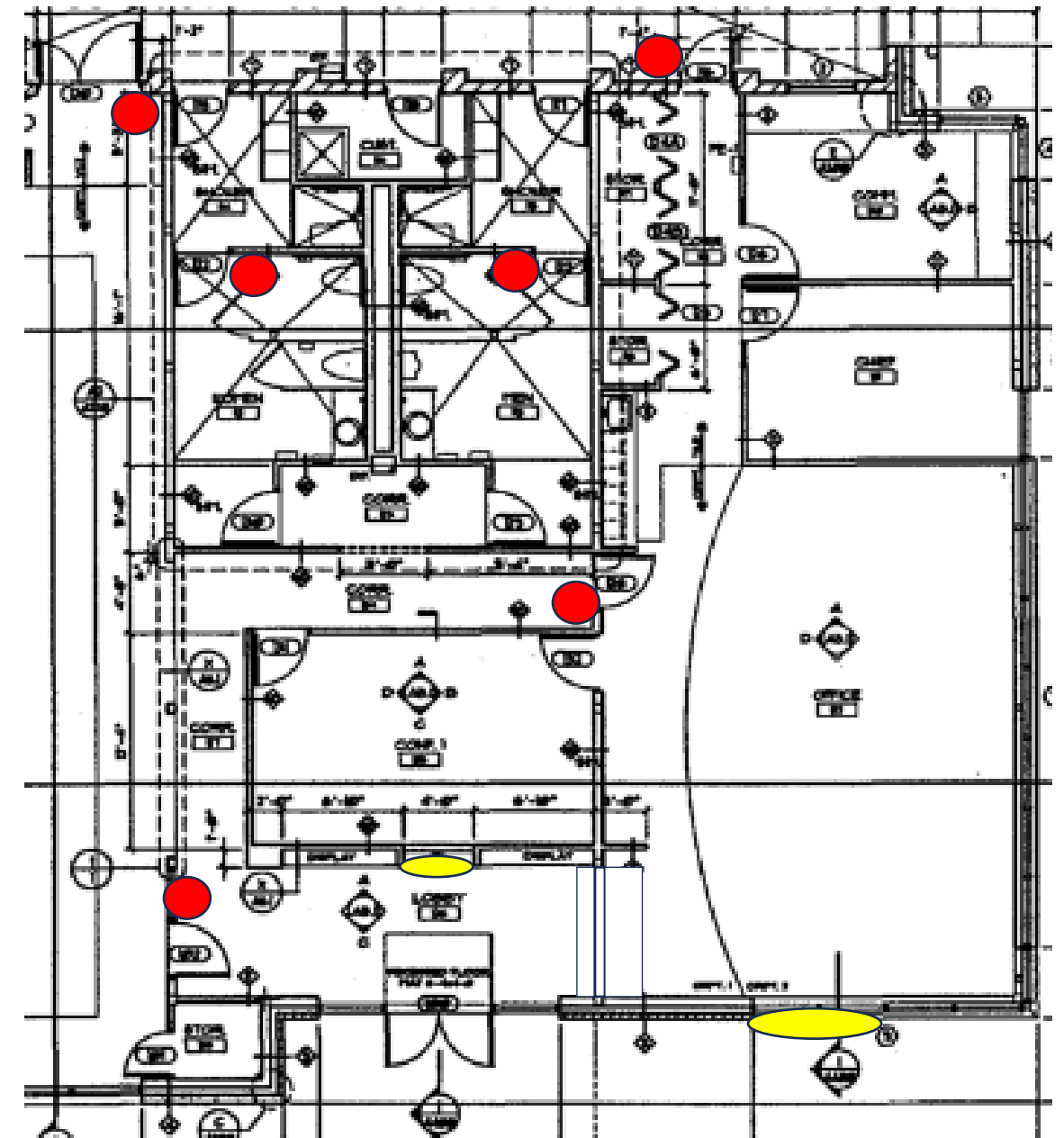
COMMENTS

- Add electronic access control to readers to six existing doors (See plan)
- Add wall and reception window off public lobby

KEYNOTE LEGEND	
1	Service counter with glass barrier
2	Remove existing glass door/wall
3	Add electronic access control to door



LOBBY NEW RECEPTION WINDOW



PARTIAL FIRE STATION 1 FLOOR PLAN

- ADD ELECTRONIC ACCESS CONTROL
- ADD ATTACK RESISTANT FILM TO WINDOW

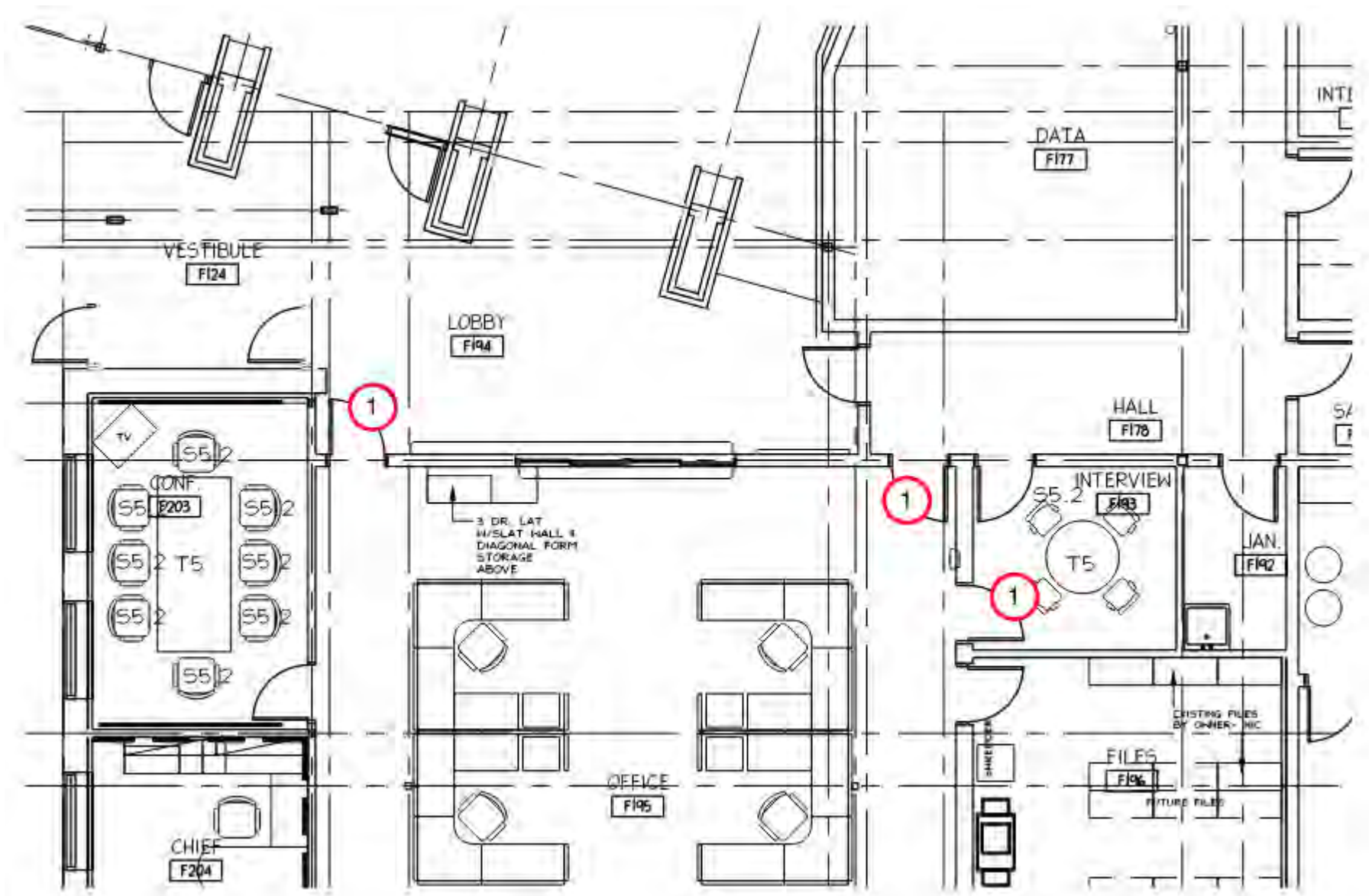


EXHIBIT H – POLICE LOBBY DOORS

GOALS

- Replace door vision panels with 60-minute attack resistant glazing

KEYNOTE LEGEND	
1	Replace door glazing w/ attack resistant glazing



POLICE LOBBY FLOOR PLAN



UL 752 STANDARD FOR BULLET-RESISTANT MATERIALS TESTING

UL RATING	WEAPON	AMMUNITION	WEIGHT	VELOCITY	SHOTS	TYPICAL USES	BALLISTIC MATERIAL APPROXIMATE THICKNESS
1	9mm Pistol	9mm Full Metal Copper Jacket with Lead Core	124 grains 8 grams	1175 FPS to 1293 FPS		Gas stations Banks Pharmacies Retail Shops	L1 Glazing 0.5"-1.25" L1 Fiberglass 0.25" Armor Plate 0.25"
2	.357 Magnum Pistol	.357 Magnum Jacketed Lead Soft Point	158 grains 10.2 grams	1250 FPS to 1375 FPS		Gas stations Banks Pharmacies Retail Shops	Glazing 0.75"-1.375" Fiberglass 0.375" Armor Plate 0.25"
3	.44 Magnum Pistol	.44 Magnum Lead Semi-Wadcutter Gas Checked	240 grains 15.6 grams	1350 FPS to 1485 FPS		Schools Utilities Police Stations Municipal Offices	Glazing 1.25" Fiberglass 0.5" Armor Plate 0.25"
4	.30 Caliber Rifle	.30 Caliber Rifle Lead Core Soft Point	180 grains 11.7 grams	2540 FPS to 2794 FPS		Government Military Elevated Risk Areas	Glazing 1.5" Fiberglass 1.375" Armor Plate 0.25"
5	7.62mm Rifle	7.62mm Rifle Lead Core Full Metal Copper Jacket Military Ball	150 grains 9.7 grams	2750 FPS to 3025 FPS		Government Military Elevated Risk Areas	Glazing 1.625" Fiberglass 1.375" Armor Plate 0.3125"
6	9mm Submachine Gun	9mm Full Metal Copper Jacket with Lead Core	124 grains 8 grams	1400 FPS to 1540 FPS		Government Military Elevated Risk Areas	Glazing 1.25" Fiberglass 0.5" Armor Plate 0.25"
7	5.56mm Rifle	5.56mm Rifle Full Metal Copper Jacket with Lead Core	55 grains 3.56 grams	3080 FPS to 3388 FPS		Government Military Elevated Risk Areas	Glazing 2.1875" Fiberglass 1.625" Armor Plate 0.25"
8	7.62mm Rifle	7.62mm Rifle Lead Core Full Metal Copper Jacket Military Ball	150 grains 9.7 grams	2750 FPS to 3025 FPS		Government Military Elevated Risk Areas	Glazing 2.5" Fiberglass 1.625" Armor Plate 0.3125"

RECOMMENDATION

OPTIONAL UPGRADE

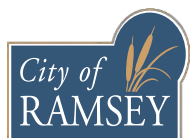
TOTAL SECURITY SOLUTIONS

935 Garden Lane
Fowlerville, MI 48836

Phone: 866.734.6277

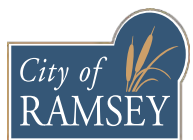
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COST ESTIMATES



COST ESTIMATES: COUNCIL CHAMBERS SECURITY IMPROVEMENTS

COUNCIL DAIS | BALLISTIC REINFORCEMENT (EXHIBIT A):

Council Chambers Security Upgrades - Dais Ballistic Resistance	
Retrofit council dais and staff desks with ballistic resistant material rated UL 752 Level 3	
Add millwork barrier rails and gates with ballistic resistant material rated UL 752 Level 3	
Sub Total:	\$35,000.00
Design Contingency (10%):	\$3,500
Construction Contingency (7%):	\$2,450
Total:	\$40,950.00
ADD ALTERNATE: Increase protection to UL 752 Level 7 ballistic resistance.	ADD \$19,500

COUNCIL CHAMBERS | ADD ALTERNATES (EXHIBIT B):

Council Chambers Security Upgrades - Add Alternate Option A (AV Safe Room)	
Replace AV Room F112 door with UL 752 Level 3 ballistic resistant wood door rated UL 752 level 3.	
Add electronic card access to AV Room F112 door at council chamber's side.	
Replace glazing in hollow metal frame between council chambers and AV Room F112 with UL 752 Level 3 ballistic resistant glazing .	
Add UL 752 Level 3 ballistic resistant paneling on face of wall in AV Room F112 between AV / Council Chambers	
Sub Total:	\$22,750.00
Design Contingency (10%):	\$2,275.00
Construction Contingency (7%):	\$1,592.50
Total:	\$26,617.50
ADD ALTERNATE: Increase protection to UL 752 Level 7 ballistic resistance.	ADD \$20,500

Council Chambers Security Upgrades - Add Alternate Option B (Access Control)	
Add electronic card access to council chamber's double doors at lobby entrance	
Add electronic card access to council chamber's south exit door on lobby side (assumes no change to headend equipment)	
Sub Total:	\$12,000.00
Design Contingency (10%):	\$1,200
Construction Contingency (7%):	\$840
Total:	\$14,040.00

Council Chambers Security Upgrades - Add Alternate Option C1 (Ballistic Resistant Glazing)	
Replace existing glass at council chamber's lobby wall with UL 752 Level 3 ballistic resistant glazing from floor to 10ft above (assumes no changes to existing curtain wall framing). No changes to glazed entry doors.	
Add UL 752 Level 3 ballistic resistant film to existing glazed aluminum entry doors from lobby into council chambers	
Sub Total:	\$86,400.00
Design Contingency (10%):	\$8,640.00
Construction Contingency (7%):	\$6,048.00
Total:	\$101,088.00
ADD ALTERNATE: Increase protection to UL 752 Level 7 ballistic resistance.	ADD \$37,440

Council Chambers Security Upgrades - Add Alternate Option C2 (Ballistic Resistant Film)	
Add UL 752 Level 3 ballistic resistant film to existing glazing at council chamber's lobby wall from floor to 10ft above, including glazing within door panels.	
Sub Total:	\$99,600.00
Design Contingency (10%):	\$9,960.00
Construction Contingency (7%):	\$6,972.00
Total:	\$116,532.00
ADD ALTERNATE: Increase protection to UL 752 Level 7 ballistic resistance.	ADD \$29,200



COST ESTIMATES: CITY HALL & POLICE LOBBY SECURITY IMPROVEMENTS

CITY HALL | LOBBY RECEPTION DESK REPLACEMENT (EXHIBIT C):

Lobby Reception Desk Replacement	
Demolish and replace lobby reception desk with new desk including UL 752 Level 3 ballistic glazing and ballistic resistant paneling in millwork. Includes new carpet finish within staff work area.	
Sub Total:	\$235,000
Design Contingency (10%):	\$23,500
Construction Contingency (7%):	\$16,450
Total:	\$274,950
ADD ALTERNATE: Increase protection to UL 752 Level 7 ballistic resistance.	ADD \$61,800
DEDUCT ALTERNATE: Laminated glass in lieu of ballistic resistant glazing.	DEDUCT \$38,450

CITY HALL | MAIN LEVEL RECEPTION WINDOWS (EXHIBIT F):

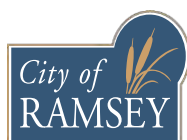
City Hall Level 1 Service Counters	
Add 3/8" tempered glass panel screen with metal supports to existing (4) service counter openings.	
Sub Total:	\$10,925
Design Contingency (10%):	\$1,093
Construction Contingency (7%):	\$765
Total:	\$12,782

CITY HALL | SECOND LEVEL CONTROLLED ACCESS (EXHIBIT D):

City Hall Second Level After-hours Public Access	
Install black aluminum storefront and glazed aluminum entry door at level 1.	
Add electronic access control to new door (assumes no change to headend equipment)	
Add electronic access control to public elevator to control access to the second floor (allowance)	
Patch existing millwork as needed.	
Sub Total:	\$20,500
Design Contingency (10%):	\$2,050
Construction Contingency (7%):	\$1,435
Total:	\$23,985

POLICE LOBBY – DOOR PANEL SECURITY GLAZING (EXHIBIT H):

Police Lobby & Entrance Door Glazing Replacement	
Replace existing vision panels in (3) doors with 60 minute attack resistant glazing.	
Replace existing insulated vision panel at exterior door to parking area with 60 minute attack resistant insulated glazing.	
Sub Total:	\$3,450
Design Contingency (10%):	\$345
Construction Contingency (7%):	\$242
Total:	\$4,037





COST ESTIMATES: CITY HALL SERVICE COUNTERS SECURITY IMPROVEMENTS

CITY HALL | LEVEL 2 ADMIN/FINANCE SERVICE COUNTERS (EXHIBIT E):

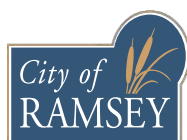
City Hall Level 2 Admin/Finance Department Service Counters - Option 1	
Add (2) wood doors in hollow metal frames with electronic card access control.	
Add 8ft tall metal stud walls with painted gypsum finish.	
Modifications to existing pendant lighting.	
Modifications to electrical (power).	
Modifications to data/low-voltage	
Add (2) 3/8" tempered glass service counter screens set in metal channels.	
Solid surfacing counters at service counters.	
Fire suppression systems modifications allowance.	
Furniture relocation/modifications allowance.	
Sub Total:	\$44,490
Design Contingency (10%):	\$4,449
Construction Contingency (7%):	\$3,114
Total:	\$52,053

City Hall Level 2 Admin/Finance Department Service Counters - Option 2	
Modification of existing glazed railings.	
Infill floor structure between existing structural beams, includes floor and ceiling finish below.	
Modifications/patching of existing finishes.	
Add (1) glazed service window.	
Relocate existing hollow metal frame and door with access control.	
Modifications to electrical (power).	
Modifications to data/low-voltage	
Furniture modifications allowance.	
Demolition allowance	
Sub Total:	\$79,500
Design Contingency (10%):	\$7,950
Construction Contingency (7%):	\$5,565
Total:	\$93,015

CITY HALL | LEVEL 2 ENGINEERING SERVICE COUNTER (EXHIBIT E):

City Hall Level 2 Engineering Department Service Counter - Option 1	
Add (1) wood doors in hollow metal frames with electronic card access control.	
Add 8ft tall metal stud walls with painted gypsum finish.	
Modifications to existing pendant lighting.	
Modifications to electrical (power).	
Modifications to data/low-voltage	
Add (1) 3/8" tempered glass service counter screens set in metal channels.	
Solid surfacing counters at service counters.	
Fire suppression systems modifications allowance.	
Furniture relocation/modifications allowance.	
Sub Total:	\$28,525
Design Contingency (10%):	\$2,853
Construction Contingency (7%):	\$1,997
Total:	\$33,374

City Hall Level 2 Engineering Department Service Counter - Option 2	
Modification of existing glazed railings.	
Infill floor structure between existing structural beams, includes floor and ceiling finish below.	
Modifications/patching of existing finishes.	
Add (1) glazed service window.	
Modifications to electrical (power).	
Modifications to data/low-voltage	
Furniture modifications allowance.	
Demolition allowance	
Sub Total:	\$73,500
Design Contingency (10%):	\$7,350
Construction Contingency (7%):	\$5,145
Total:	\$85,995



COST ESTIMATES: FIRE STATION 1 SECURITY IMPROVEMENTS

FIRE STATION 1 | SECURITY IMPROVEMENTS & ACCESS CONTROL (EXHIBIT G):

Fire Station Lobby & Office Security	
Add electronic access control to (6) existing doors.	
Add 3/8" tempered glass service counter screen set in metal channels.	
Add metal stud wall with gypsum finish and UL 752 level 3 ballistic resistant material.	
Demolition	
Sub Total:	\$42,300
Design Contingency (10%):	\$4,230
Construction Contingency (7%):	\$2,961
Total:	\$49,491
ADD ALTERNATE: Add ballistic resistant film to south exterior office window.	
	\$43,875
ADD ALTERNATE: Add UL 752 Level 3 ballistic glazing to private office window in existing frame.	
	\$8,000
ADD ALTERNATE: Add UL 752 Level 3 ballistic resistance to new lobby reception window.	
	\$7,200

