

Shelter with a purpose. Families with a future.

Overnight Shelter Design

## ROOM AT THE INN - OVERNIGHT SHELTER CONCEPT DESIGN

#### **ROOM AT THE INN RENOVATION DESIGN NARRATIVE**

The renovations at Room at the Inn will provide both clients and staff with a more comfortable, safe, and operational environment. In supporting the mission, the primary goal is to transform the 30-year-old office building into a safe and comfortable environment for clients during difficult transitional times in their life. In support of that goal, the accompanying staff space, conference space, and storage areas are incorporated into the building's footprint. Accommodating the mission goals in a 30 year old office building with significant changes will present challenges that will drive the project scope.

- First, the building code requirements for changing an older office building (B Occupancy) to a more restrictive temporary residential facility (R1 Occupancy) will mean the upgrade of several systems including fire sprinkler, fire alarm, fire partitions, and ventilation.
- Careful consideration of the re-use of existing assets including architectural elements and building systems are a high priority in creating economic efficiency and mission critical function.
- Conference spaces and large storage spaces also require more restrictive systems considerations similar to those outlined above.
- Meal preparation will require kitchen facilities that comply with the St. Louis County Health Department's requirements.
- Two of the five roof top air handlers are aging and will be required to be replaced not only because of their age, but also because of the increased ventilation requirements.
- Energy code might require the replacement of the existing single pane glazing with more efficient insulated glazing. While this would represent an initial capital cost, the operating cost of the building would be reduced.
- Accessibility code requirements will represent some cost impact by requiring replacement of door hardware and dedication of more space for maneuverability.

### Client Living

Client living areas are designed to accommodate nine families with small private bedrooms averaging 130 square feet. These rooms will have daylighting from windows, vinyl flooring. acoustical ceiling, and upgraded fire separation between rooms. Eight separate bath facilities will be available that will provide a variety of configurations to accommodate family requirements. Four new bath rooms will include tub/shower, toilet, and lavatory. Two new family bath rooms will also include tub/shower, toilet, and lavatory as well as extra space to allow moms to help children. These two rooms will be handicapped accessible. Two existing shower rooms will be maintained with the existing tub and shower fixtures. All bath rooms will receive new tile floors and wainscot, drywall floors and ceilings, ventilation fans, and required accessories.

A generous common living and dining area adjacent to the bedrooms is available. The living area will accommodate chairs and sofas and television. A computer room next to the living area is planned to allow for clients easy computer access with 4 – 6 stations available. These areas will include vinyl flooring, drywall walls and acoustical ceiling. Meal preparation will be done in either a commercial kitchen or a warming kitchen. While this decision is pending, the kitchen and pantry will be located adjacent to the dining area and will allow the flexibility of having meals prepared by professional staff or by resident. A commercial kitchen comes with a commercial range and hood with fire suppression system, 3 compartment sink, hand sink, mop sink, grease trap and cold storage. A warming kitchen does not have the commercial range and hood with fire suppression. Room at the Inn is currently evaluating



if the less costly warming kitchen would sufficiently accommodate client needs. Other client spaces include 310 square feet of storage areas and laundry facilities similar to those in the existing facility. These will also have vinyl flooring, drywall partitions and acoustical ceiling.

Client living spaces will be separated from the other building functions to provide privacy and security. Access to the outside and other parts of the building will be provided by access-controlled doors.

### Staff Space

Supporting staff space is clustered to provide the greater privacy and confidentiality. Eight Staff Offices averaging 140 square feet and a 160 square foot Director Office are located along the perimeter of the building to provide daylighting. The office finishes will include carpet, sound insulated drywall partitions, and acoustical tile ceilings. A Project Room and large Storage area are also included in this area. A 210 square foot Break Room, a volunteer/Practicum/Reception space and Night Room round out the staff space areas. These are primarily interior spaces with vinyl flooring, painted drywall partitions, and acoustical tile ceilings. The Reception space will also utilize the existing skylight to provide enhanced daylighting at this interior space.

### Conference Space

Providing flexible conference space is an important component to the mission of the facility. There are three main conference spaces that offer a good range of flexibility. First, there is a 375 square foot Children's Room for children while parents are in counseling. This room will have interior viewing window and will provide daylighting. A large 1,100 square foot Conference Room can be partitioned into two smaller 550 square foot rooms offers great flexibility. The third space is 350 square feet to accommodate smaller groups. The conference rooms are all located along the perimeter of the building to provide daylighting and will have carpeted or vinyl tile floors, drywall partitions and acoustical ceilings. The moveable partition will be an accordion door with moderate sound limiting characteristics.

ROOM AT THE INN Concept Design



## **FLOOR PLAN**

1/16'' = 1' - 0''



DRAWING KEY

BUILDING GSF 12,850 SF

ADMINISTRATION

1,992 SF

PROGRAM AREA

1,806 SF

CLIENT AREA

3,420 SF

STORAGE

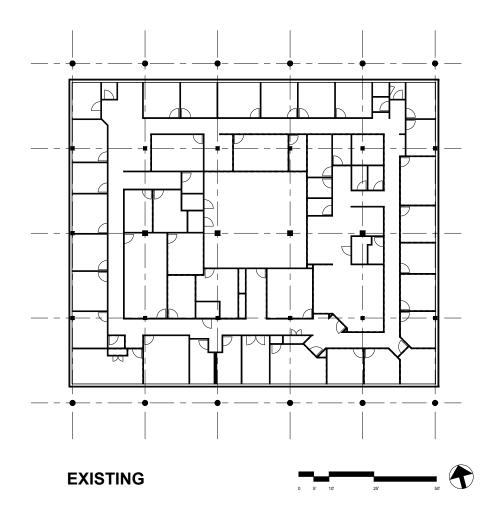
BUILDING UTILITIES AND RESTROOMS

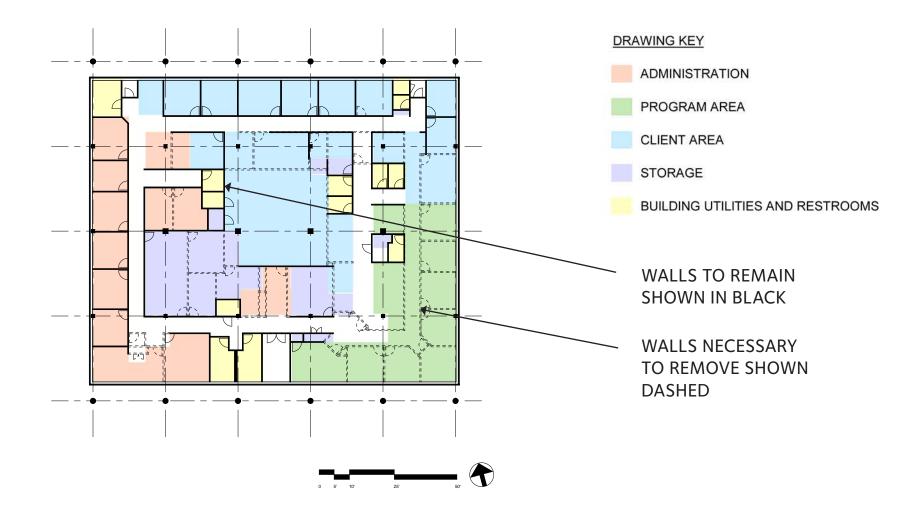
740 SF

### PROGRAM - OPTION B.1

(1) DIRECTOR OFFICE
(7) OFFICES
(2) COUNSELING OFFICES
(1-2) VOLUNTEER / PRACTICUM WORKSTATIONS
OVERNIGHT ROOM
PROJECT ROOM
COPY AREA
BREAK AREA
(2) STAFF TOILETS (EXISTING)

- ASSEMBLY (WHEN MOVEABLE PARTITION IS OPEN)
  (3) LARGE CONFERENCE ROOMS
  CHILDREN'S ROOM W/ (EXISTING) TOILET
  DAY CLIENT SHOWER AND TUB ROOMS (EXISTING)
- (9) OVERNIGHT CLIENT ROOMS (25) BEDS
  (4) CLIENT BATHROOMS
  (2) FAMILY BATHROOM W/ TUB (MODIFIED EXISTING TOILETS)
  (1) SHOWER ROOM, (1) TUB ROOM
  CLIENT STORAGE
  LAUNDRY ROOM
  KITCHEN AND PANTRY STORAGE
  DINING AND LIVING AREAS
  COMPUTER ROOM
- CENTRAL STORAGE AREAS TO BE SUBDIVIDED AS NEEDED MISC. SUPPORT STORAGE THROUGHOUT
- MEN / WOMEN TOILETS (EXISTING)
  JANITOR'S CLOSET
  ELECTRICAL ROOMS
  SPRINKLER ROOM



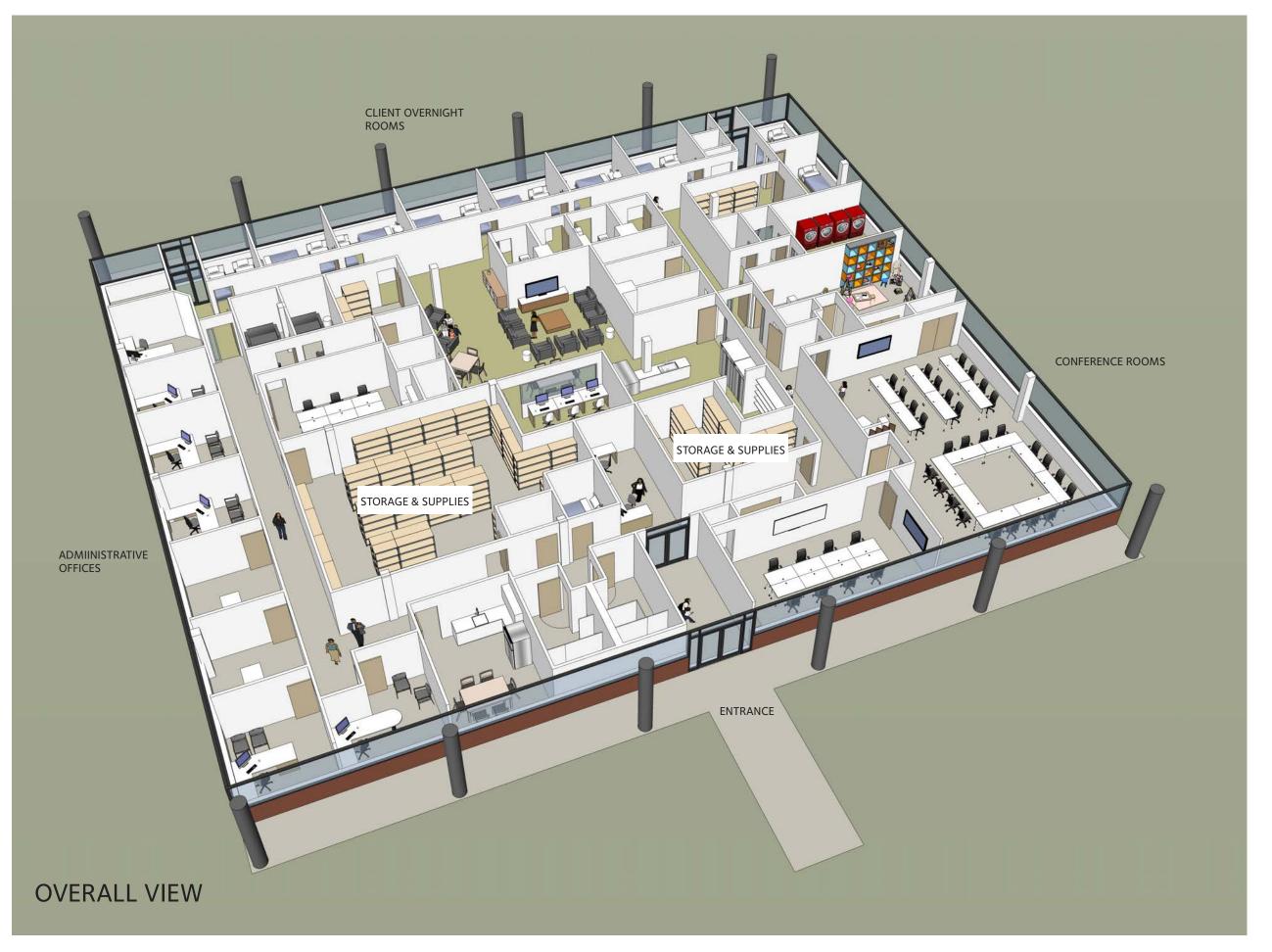


# **EXISTING WALLS**

# **EFFICIENT USE OF EXISTING WALLS**

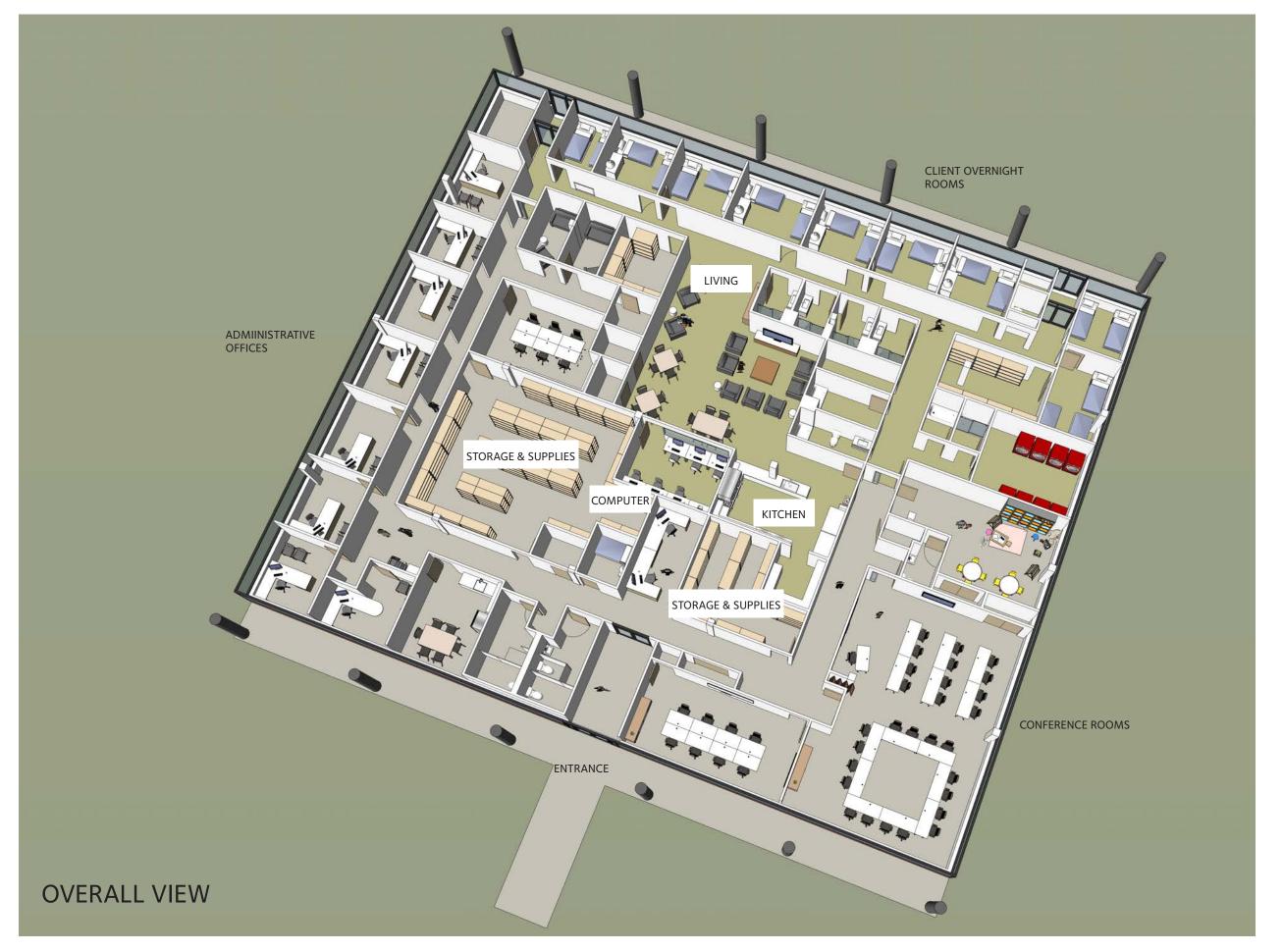
1/32" = 1' - 0"

ROOM AT THE INN Concept Design



ROOM AT THE INN Concept Design

**hkw**architects



ROOM AT THE INN Concept Design

**hkw**architects



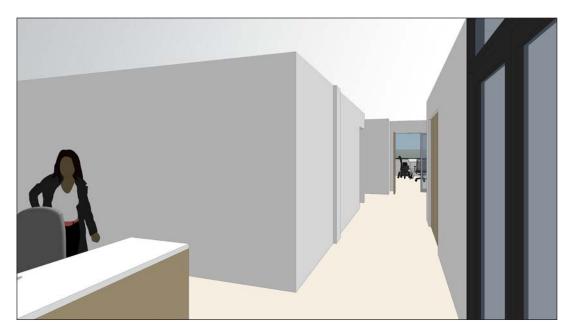
**CONFERENCE AREAS** 

ROOM AT THE INN Concept Design

**hkw**architects

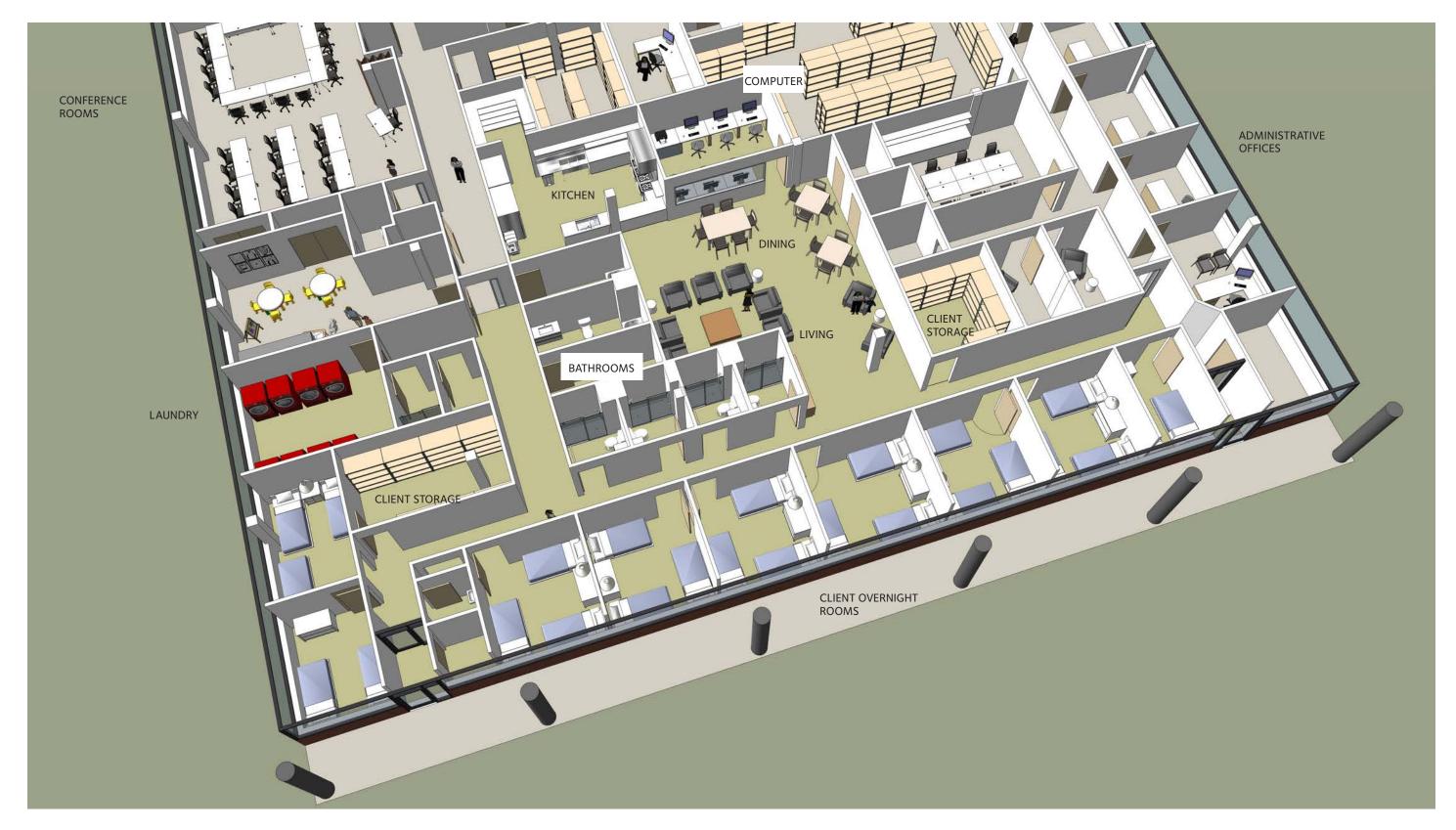


**CONFERENCE AREAS** 



ROOM AT THE INN Concept Design

**hkw**architects



CLIENT OVERNIGHT AREA VIEW

ROOM AT THE INN Concept Design









CLIENT LIVING, DINING, KITCHEN, & COMPUTER AREAS

ROOM AT THE INN Concept Design

**hkw**architects

## CONSTRUCTION COST ESTIMATE - CONCEPT DESIGN

#### ROOM AT THE INN - INTERIOR RENOVATION

20.022.00

Description	Outputitus Haite	Cost non Unit	Tatal	CONSTRUCTION COST ESTIMATE
Description Division 2 - Demolition	Quantity Units	Cost per Unit	Total	Remarks
Architectural	12,157 SF	\$4.00 SF	\$48,626	
MEPFP	12,157 SF	\$3.00 SF	\$36,470	
Division 3 - Concrete				
Cast In Place				
Floor Replacement	100 SF	\$8.00	\$800	
Division 5 - Metal				
Miscellaneous Metal				
Accordian Partition Framing	30 lf	\$250.00	\$7,500	
Division 6 - Wood				
Miscellaneous				
Miscellaneous Wood Blocking	1 LS	\$500.00 LS	\$500	
Millwork				
Countertop Corian	75 LF	\$165.00 LF	\$12,375	
Base Cabinets	60 LF	\$500.00 LF	\$30,000	
Upper Cabinets	48 LF	\$250.00 LF	\$12,000	
Closet Shelf	41 lf	\$100.00 lf	\$4,100	
Division 7- Thermal & Moisture Protection	4.16	ĆE 000 00	¢5 000	
Miscellaneous Roof Repair  Miscellaneous Sealant	1 LS 1 LS	\$5,000.00 \$2,000.00	\$5,000 \$2,000	
iviiscellaneous Sealant	1 L5	\$2,000.00	\$2,000	
Division 8 - Openings				
Doors				
Existing Doors	35 EA	\$200.00 ea	\$7,000	
New Door Single	16 EA	\$1,500.00 ea	\$24,000	
Reused Single Door (Lockset)  New Door Pairs	15 EA 3 EA	\$400.00 ea	\$6,000	
Access Panels	1 LS	\$2,800.00 ea \$3,000.00 ea	\$8,400 \$3,000	
Access Control	1 1.5	\$3,000.00 ea	\$3,000	
Access Control	5 dr	\$2,100.00	\$10,500	
Division 9 - Finishes				
Walls				
A - Existing 2 1/2" studs with 1/2" dw				
B - New 2 1/2" studs with 1/2" dw	445 LF	\$50.00 LF	\$22,250	
C - 3 5/8" studs with 5/8" dw to deck	227 LF	\$100.00 LF	\$22,700	
D - 1 1/2" studs with 1/2" dw over exist.	71 LF	\$45.00 LF	\$3,195	
E - 6" stud with 1/2" dw to clng (plumb)	30 LF	\$80.00 LF	\$2,400	
Misc. Int. Wall Repair & Framing Misc. Ext. Wall Repair & Framing	644 LF 442 LF	\$4.00 LF \$2.00 LF	\$2,576 \$884	
Wall Tile	442 LF	\$2.00 LF	300 <del>4</del>	
СТ	1,016 SF	\$12.00 SF	\$12,192	
Ceilings				
New ACT , New Grid	12,157 SF	\$5.50 SF	\$66,861	
Sound Batts at Offices	1,160 SF	\$1.50 SF	\$1,740	
Drywall	0 SF	\$5.50 SF	\$0	
Flooring Floor Preparation	12,157 SF	\$1.50 SF	\$18,235	
Existing Flooring to Remain	684 SF	\$0.50 SF	\$342	
Carpet Tile	3,125 SF	\$7.00 SF	\$21,875	
LVT	7,973 SF	\$6.00 SF	\$47,835	
Porcelian Tile	375 SF	\$15.00 SF	\$5,625	
Base Resilient Base	3,276 LF	\$3.50 LF	\$11,466	
Painting	0,2.0 Li	70.00 Li	,, ····	
Walls	26,208 SF	\$1.25 SF	\$32,760	
Division 10 - Specialties				
Division 10 - Specialties  Room Signs	65 EA	\$100.00	\$6,500	

Toilet Accessories - Bath	8 EA	\$910.00	\$7,280	
Toilet Accessories - Toilet	3 EA	\$505.00	\$1,515	
Fire Extinguisher Cabinet	2 EA	\$350.00	\$700	
Division 11 - Equipment				
Kitchen Appliances				
Refrigerator	EA	\$3,000.00	\$0	
Range	1 EA	\$4,000.00	\$4,000	
Hood	1 EA	\$15,000.00	\$15,000	
Storage Shelves	45 EA	\$15,000.00	\$13,500	
Accordian Partition (30' x 8')	240 SF	\$120.00	\$28,800	
Accordian Partition (50 x 8 )	240 31	\$120.00	\$20,000	
Division 21 - Fire Protection				
Sprinklers	1 LS	\$19,708.00	\$19,708	
New Service Entrance	1 LS	\$29,801.00	\$29,801	
Division 22 - Plumbing				
General Plumbing	1 LS	\$113,149.00	\$113,149	
Division 23 - Mechanical				
Mechanical	1 LS	168,267	\$168,267	
Division 26 - Electrical				
Electrical	1	\$145,884	\$145,884	
SUBTOTAL	12,157 SF		\$1,049,310	
General Conditions	10%		\$104,931	
Contingency			\$0	
TOTAL			\$1,154,241	
TOTAL CONSTRUCTION	12,157 SF	\$94.95 SF	\$1,154,241	
GLAZING ALTERNATE				
Division 8 - Openings				ESTIMATED ENERGY
Glazing				- · · · · · · · · · · · · · · · · · · ·
Replace Existing Exterior Glazing	2000 SF	\$55.00 SF	\$110,000	SAVINGS OF
	10%		\$11,000	
General Conditions Contingency	1070		\$0	

THIS IS A "CONCEPT" LEVEL ESTIMATE OF CONSTRUCTION COST. THE DESIGN NARRATIVES OUTLINE THE SCOPE OF MAJOR BUILDING SYSTEMS NECESSARY FOR THE R-1 OCCUPANCY. THIS ESTIMATE IS CONSTRUCTION ONLY. IT DOES NOT INCLUDE SOFT COSTS SUCH AS FIXTURES, FURNISHINGS, EQUIPMENT, PROFESSIONAL FEES, AND CONTINGENCIES.

ROOM AT THE INN Concept Design

### MEPFP SCOPE OF WORK DESCRIPTION

### 1.1 MECHANICAL SYSTEM SCOPE OF WORK

- A. System description: DEDICATED OUTDOOR AIR UNIT WITH INDIVIDUAL ROOFTOP UNITS FOR ZONE CONTROL
- B. Existing rooftop units will remain to provide heating and cooling for each zone in the building. Thermostats will be relocated as needed for new layout.
- C. Existing supply ducts from each rooftop unit will be modified as needed for the new layout and the updated zoning plan.
- D. Return air is planned to be through the ceiling return air plenum.
- E. New return air grilles and sound boots to be added to all air devices to transfer air into Corridor or open office space.
- F. Air will be returned to RTUs 1 through 5 through each rooftop unit duct stubbed into the ceiling space at each RTU. Return air ducts at each RTU shall remain and be slightly extended to be turned up in the ceiling for sound attenuation. Air shall return to these units through an above ceiling plenum and transfer boots.
- G. Provide new dedicated outdoor air system for the building. Outdoor air shall be ducted directly to these openings to provide code required ventilation air throughout the building. Provide exhaust ductwork and air devices as needed to keep the space neutral.
- H. Extend gas piping from the existing gas meter up to the new DOAS unit.
- I. Rework existing gas piping from old Laundry to new Laundry room. Extend gas piping to all new gas fired dryers.
- J. Extend gas piping down to new Kitchen range and oven.
- K. Rework natural gas piping at existing meter for larger piping to support new equipment.
- L. Existing Mechanical Equipment
  - 1. RTU-1, RTU-2, RTU-3, RTU-4 and RTU-5: constant volume air handling units with natural gas heating and DX cooling coil. No dehumidification sequence is present on any existing unit. Units are located on roof of building.
  - 2. New Mechanical Equipment
    - a. New Dedicated Outdoor Air System (DOAS):
      - 1) Provide new DOAS serving new renovated spaces.

- a) DOAS to have energy recovery wheel, natural gas heating, modulating hot gas reheat, DX cooling coil, powered exhaust
- Provide new ductwork from DOAS to return air openings of existing RTUs.
- 3) Provide new exhaust ductwork back to DOAS.
- New Commercial Kitchen Hood, associated Exhaust Fan and Makeup Air Unit
  - 1) Provide new commercial kitchen hood for new kitchen equipment.
  - 2) Include new Type 1 commercial kitchen hood with Ansul fire suppression. Hood shall include exhaust and make-up air connections.
  - 3) Provide gas fired makeup air unit and makeup air duct to hood. Provide kitchen grease exhaust fan with welded grease duct and 2hour fire wrap for hood exhaust. Provide Accurex or equal kitchen hood controller for exhaust and makeup air.

### 1.2 LIGHTING SCOPE OF WORK

A. Provide new LED fixtures in locations where ceilings are replaced.

#### 1.3 POWER DISTRIBUTION SCOPE OF WORK

- A. The existing panels consist of the following:
  - MDP: 1200A 120/208V Main Distribution Panel for the main electrical service; 1200A main breaker. Provides power for five RTUs, three branch panels, and the parking lot lighting.
    - a. There is a 400A spare and a 60A spare for use.
- B. Utilize existing panels located in existing to remain electrical closets. Provide additional or replacement breakers as required to serve new electrical loads. Provide additional panelboards where required to accommodate additional loads.
- C. Provide power for new mechanical DOAS unit on roof.
- Disconnect existing electric water and remove associated feeder. New water heater to be gas fired.

ROOM AT THE INN Concept Design

**hkw**architects

20.022.00 May 10, 2021

11

### MEPFP SCOPE OF WORK DESCRIPTION

### 1.4 FIRE ALARM SCOPE OF WORK

- A. New fire alarm devices to be installed for new sprinkler riser.
- B. New conference/meeting rooms to have new horn/strobes as needed to meet code.
- C. Smoke detectors to be added to each Bedroom.
- D. Add smoke detector to the DOAS exhaust air.

### 1.5 DATA/IT SCOPE OF WORK

- A. Existing data drops to be removed where walls are removed. The data lines shall be removed back to the existing Data closet.
- B. All new data devices to be wired back to existing Data closet.
- C. Provide wireless access points as needed.

### 1.6 PLUMBING SCOPE OF WORK

- 1. Route new underground sewer from all new plumbing fixtures back to existing. Sawcut and excavate for the new waste piping to be tied to the existing underground waste piping.
- 2. Replace existing electric water heater with new gas fired, high efficiency water heater sized for the new plumbing fixtures in the building.
- 3. Provide new grease interceptor on exterior of east side of building and tie to existing underground sewer.
- 4. Install new reduced pressure backflow preventor on existing water entrance to meet latest code requirements for buildings with a Kitchen.

#### 1.7 FIRE PROTECTION SCOPE OF WORK

- 1. Minimum Scope
  - a. Sprinkler demolition shall occur in all areas where the ceiling grid is being demolished and replaced.
  - b. Sprinklers shall be installed in the new ceiling grid to provide full coverage.
  - c. CPVC sprinkler piping in areas that are changed to ordinary hazard spaces shall be replaced with black steel piping.

### 2. Extended Scope (depending on flow test information)

- a. The existing 2" sprinkler entrance, riser, and main shall be demolished. Fire Protection entrance outside of the building shall be demolished back to the city water line across Bridgeland Drive.
- b. A new Fire Protection entrance, riser, and main shall be installed, 4" system shall be provided. Including, but not limited to, backflow preventor, check valve, flow switch, at least half of the Fire Protection main, underground entrance, and city water connection.
- c. Underground work estimated to be 140ft from the building to the city water main. This includes 35ft of concrete and asphalt work.
- d. The FDC shall be increased to a 4" connection.

ROOM AT THE INN Concept Design