

# CONCEPT DESIGN NARRATIVE FOR WAUKESHA PUBLIC LIBRARY – 1<sup>ST</sup> FLOOR RENOVATION

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## BUILDING INFORMATION

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Project Area of Work	35,344 SF
Location:	Waukesha, Wisconsin

## SECTION 1.0 PROJECT INFORMATION

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This project will renovate the majority of the first floor, excluding the Teen Room, staff and service areas. Renovations will include new partition walls, millwork, finishes, modifications to mechanical and electrical and plumbing systems.

### 1.1 BUILDING INFORMATION

- A. The library was constructed in several phases:
  - 1. The original Carnegie library
  - 2. A single story addition
  - 3. A major expansion and full renovation in 1986.
  - 4. A minor expansion and full renovation in 2004.
  - 5. A renovation of the Children's Library at the 2<sup>nd</sup> level.
- B. This will be a Level 2 Alteration according to the International Existing Building Code.
- C. Overall building systems, including the air handling units and fire protection systems, are beyond the scope of this renovation.

### 1.2 HAZARDOUS MATERIALS

- A. Hazardous materials survey, testing and abatement will be contracted separately.

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**SECTION 2.0 ESTIMATE PARAMETERS**

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**2.1 DOCUMENTS AVAILABLE FOR ESTIMATE**

- A. Existing Documentation
  - 1. Existing building drawings dated 1986 and 2004.
- B. Concept Design Documentation
  - 1. Proposed Floor Plans
  - 2. Proposed Furniture Plans for Reference
  - 3. Concept Design Narrative, including MEP narrative.

**2.2 ESTIMATE COMPONENTS**

- A. The estimate shall include a base cost for the construction and related work associated with the renovation as described below and noted on the drawings.
- B. The project will be awarded through a single General Contractor with on-site supervision and all general conditions. A 100% performance/labor and material payment bond will be required.
- C. Include separate line items in the estimate for the following add alternates. The alternates may be selected to be included with the full renovation project if funds are available.
  - 1. **ALTERNATE 1 | RECONFIGURE RESTROOM:** Provide a line item cost for reconfiguring the restrooms as shown on the drawings. Relocate the entrances from the park to inside the building, remove all fixtures and replace with new, replace all finishes.
  - 2. **ALTERNATE 2 | LOCAL HISTORY ROOM:** Provide the cost for the full renovation of the local history room to include: Raised floor system, allowance for wood shelving and wood trim, hearing loop, all new finishes, new decorative lighting.
  - 3. **ALTERNATE 3 | NEW CEILINGS AND LIGHTING:** Provide the cost to replace the existing ceilings and lighting with new ACT ceilings within existing grid system and new suspended linear LED light fixtures in the Non-Fiction and Periodicals areas.
  - 4. **ALTERNATE 4 | NEW CEILINGS AND LIGHTING:** Provide the cost to replace the existing ceilings and lighting with new ACT ceilings within existing grid system and new suspended linear LED light fixtures in the Atrium areas.

**2.3 PROJECT SCHEDULE**

- A. The building will remain in use during construction. Full exit access will need to be maintained.
- B. The library will relocate furnishings as needed to accommodate the construction. It is anticipated that replacement carpet will need to be installed in phases to accommodate the need to shift ranges of shelving.
- C. Estimate construction costs in current year prices and escalate to midpoint of construction. Advise on reasonable construction phase duration in weeks.

ACTIVITY	DURATION
Fundraising	2019-2020
Construction Documents	2020
Bidding/Award	Spring 2021
Construction	Spring 2021 – Fall 2021

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## SECTION 3.0 ARCHITECTURAL INTERIORS

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### 3.1 INTERIOR WALL SYSTEMS

- A. Operable Wall System: Hufcor, Modernfold or equal.
- B. Folding Glass Wall Systems: Nanawall L-45, full frame, 90 perpendicular stack storage.
- C. Glass Wall Systems: CRL 487 Series Office Partition System, 1-1/2" aluminum face trim for fully framed partitions.
- D. Acoustic Metal Stud Partitions; Metal studs, 5/8" gypsum board each side, one side to structure, acoustic insulation and sealant.
- E. Wall base: Rubber base, 4" straight profile.

### 3.2 INTERIOR DOORS, FRAMES AND HARDWARE

- A. All swing doors to be solid core, wood veneer, grade A, OAK, plain sliced, clear finish. Doors to be 3'-0" x 7'-0".
- B. Door hardware shall be mortise style locksets with levers. All finishes to be dull brass.

### 3.3 MILLWORK

- A. Local History Room millwork to be wood veneer plywood with solid wood edge trim. Provide the following:
  - a. Built in wood shelving, 7 ft. tall at north alcove as shown on plans.
  - b. Wood wall paneling to window sill height, 4 ft., all walls.
  - c. Wood base trim and wood crown molding, two piece, all walls.
  - d. Solid surface window sills.
  - e. Ceiling to be a combination of gyp bd soffits (20%) and large format ACT tile.
  - f. Provide allowance for decorative light fixtures.
  - g. Provide hearing loop below carpet.
- B. Public space millwork shall be laminate construction, conforming to AWI standards for custom grade.
  - 1. Maker Lab:
    - a. 10 ft. Upper and lower cabinets with integrated sink.
    - b. Countertop shall be stainless steel sheet over plywood substrate.
  - 2. Computer Area and Recording Studios:
    - a. Wall hung countertop to be laminate with solid wood edge.

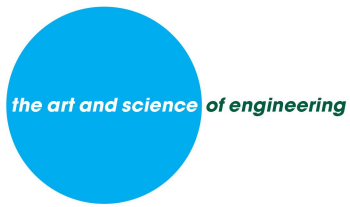
- C. Desks will be furnished under a separate contract.

### 3.4 INTERIOR FINISHES

- A. Epoxy over existing concrete at Maker Lab.
  - 1. Spartacote System by Laticrete or equal.
  - 2. Provide seamless transition to 4" tall base.
  - 3. Include removal of existing carpet and floor prep as required.
- B. Carpet Tile (all other areas)
  - 1. \$25 per square yard material cost
- C. Accessible Ceiling Systems:
  - 1. Provide new ceiling tile and grid at Circulation, Prefunction, Program Rooms, and Computers.
    - a. Armstrong, Ultima 1912, beveled tegular edge, 24" square nominal size,
  - 2. Replace tile with new tile in existing grid at Media Collection, Bridge and Fiction Collections.
    - a. Armstrong, Ultima 1912, beveled tegular edge, 24x48 nominal size,
  - 3. ALTERNATE 3: Replace ceiling tile in existing grid at Non-Fiction and Periodicals.
  - 4. ALTERNATE 4: Replace ceiling tile in existing grid at Atrium North and South.
- D. Paint systems:
  - 1. Typical paint to be low VOC type, eggshell finish.
  - 2. Provide high performance, damp resistant paint at skylight area plaster.
- E. Acoustic Systems at Entry and Atrium:
  - 1. Provide Carved Tile by Turf at the following locations:
    - a. 1,000 sf at Entry
    - b. 1,600 sf at Atriums

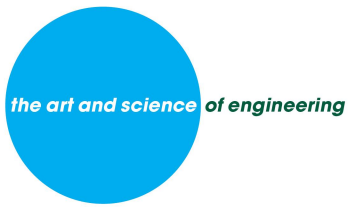
### SECTION 4.0 BUILDING SYSTEMS

- A. At Maker Lab provide (6) ceiling mounted, retractable power cords, one over each table.
- B. At Maker Lab and Recording Studio provide outlets at 12" on center above counters. Provide one location for 220 power below interior window, adjacent to counter, for future laser cutter.
- C. At Computres provide Steelcase Thread Modular Power Distribution System as shown on the Renovation Floor Plan:
  - 1. 6 locations at Computers to include power track with infeed at existing wall locations, ramps, one door connectors and 36" power hubs.
  - 2. Provide 6 additional power hubs for use with existing outlets.
- D. At Local History provide floorboxes integrated with raised floor system for power/data/av.
- E. \



# MEP Scope of Work

## Waukesha Public Library



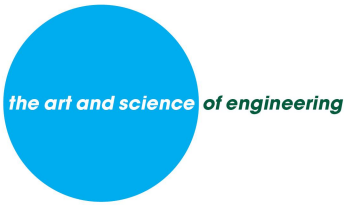
## **FIRE PROTECTION**

### **1. SPRINKLER MODIFICATIONS**

- 1.1 Modify existing sprinkler piping and head layout to accommodate new spaces in the following remodeled areas:
  - 1.1.1 Program Rooms A & B
  - 1.1.2 Demonstration Kitchen
  - 1.1.3 Study Rooms (four)
  - 1.1.4 Maker Space.

### **2. MATERIALS**

- 2.1 Piping: Schedule 40, black steel, threaded and coupled or flanged.
- 2.2 Sprinklers: Concealed heads



## PLUMBING

### 1. PARK RESTROOMS

- 1.2 Provide new plumbing fixtures as indicated in scriptural plans.
- 1.3 Modify existing water supply, drain and vent piping as required to accommodate new fixture layout.

### 2. DEMONSTRATION KITCHEN

- 2.2 Provide new sinks and faucets that are not part of the kitchen equipment package. Confirm layout, type and quantity with Architect.
- 2.3 Provide new electric water heater to supply water hot water to kitchen.
- 2.4 Extend cold water supply piping from nearest existing piping with sufficient capacity to new plumbing fixtures, kitchen equipment and new water heater. Extend new hot water piping from water heater to plumbing fixtures and kitchen equipment.
- 2.5 Provide new grease interceptor as required by plumbing code. Coordinate configuration and location with Architect.
- 2.6 Extend new sanitary drain piping from new fixtures and equipment to nearest existing drain with sufficient capacity to accommodate additional load.
- 2.7 Coordinate plumbing requirements with kitchen equipment supplier.

### 3. MATERIALS

- 3.1 Sanitary drain and vent piping: Schedule 40 PVC.
- 3.2 Domestic water piping: Type L copper tubing with solder fittings. Domestic water piping shall be insulated with rigid fiberglass pipe insulation with ASJ jacket.

## HVAC

### 1. PROGRAM SPACE

- 1.2 Existing HVAC ductwork, and equipment serving the spaces to be removed.
- 1.3 Provide a new VAV box for each space to provide heating, cooling and ventilation to each new space. VAV boxes shall have hot water reheat coils. Connect ductwork from existing duct main to VAV boxes and extend ductwork from VAV boxes to new ceiling diffusers
- 1.4 Extend new hot water piping from existing system to new reheat coils.
- 1.5 Provide new controls in each space including thermostats and CO2 sensors for demand-based ventilation control. New controls shall be compatible with existing building automation system.

### 2. DEMONSTRATION KITCHEN

- 2.1 Existing HVAC ductwork, and equipment serving the spaces to be removed.
- 2.2 Provide new kitchen hood exhaust from range hood. Extend welded steel exhaust duct up through second floor to new exhaust fan on roof. Coordinate exhaust requirements with kitchen equipment supplier. Coordinate routing of new ductwork with Architect.
- 2.3 Provide hot water radiant heating panels in kitchen to maintain space temperature when exhaust system is not running. Forced air shall not be an acceptable substitute.
- 2.4 Extend natural gas piping as required from existing piping to new kitchen equipment. Coordinate requirements with kitchen equipment supplier.

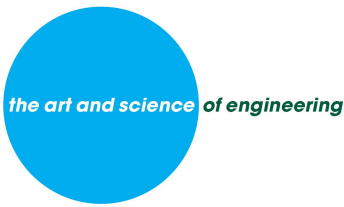
### 3. MAKER SPACE

- 3.1 Existing HVAC ductwork, and equipment serving the spaces to be removed.
- 3.2 Provide a new VAV box to provide heating, cooling and ventilation. VAV box shall have hot water reheat coil. Connect ductwork from existing duct main to VAV boxes and extend ductwork from VAV boxes to new ceiling diffusers
- 3.3 Extend new hot water piping from existing system to new reheat coils.
- 3.4 Provide new thermostat, compatible with existing building automation system.
- 3.5 Provide new exhaust fan for space. System shall exhaust all air supplied to Maker Spaces so that no air is reconsulted rom Maker Space to rest of building. Extend ductwork from space to exhaust fan which shall discharge through east wall (over Record Room).

### 4. STUDY ROOMS

- 4.1 Existing HVAC ductwork, and equipment serving the spaces to be removed.
- 4.2 Provide a new VAV box for each space to provide heating, cooling and ventilation to each new space. VAV boxes shall have hot water reheat coils. Connect ductwork from existing duct main to VAV boxes and extend ductwork from VAV boxes to new ceiling diffusers





- 4.3 Extend new hot water piping from existing system to new reheat coils.
- 4.4 Provide new thermostat in each room, compatible with existing building automation system.

## 5. PARK RESTROOMS

- 5.1 Modify existing exhaust system as required to accommodate new room configurations.

## 6. MATERIALS AND GENERAL REQUIREMENTS

- 6.1 Controls: Modify and extend existing building automation system as required to serve new spaces. Coordinate requirements for room sensors (displays, adjustability, etc.) with Owner.
- 6.1 Hot-Water Piping: One of the following:
  - 6.1.1 Schedule 40 steel piping with threaded or grooved fittings.
  - 6.1.2 Type L copper tubing with soldered fittings.
- 6.2 Natural Gas Piping: Schedule 40 steel with threaded or welded fittings.
- 6.3 Ducts: Galvanized steel.
  - 6.3.1 Exception: Kitchen exhaust ducts shall be welded black steel.
- 6.4 HVAC Insulation:
  - 6.4.1 Piping: Rigid fiberglass with all-service jacket, thickness as required to meet energy code.
  - 6.4.2 Ductwork:
    - 6.4.2.1 Indoors: Fiberglass batt and board with foil-scrim-kraft jacket, thickness as required to meet energy code.
    - 6.4.2.2 Kitchen Exhaust: Fire-wrap insulation.
- 6.5 Diffusers and Grilles: Aluminum or steel, match style of existing diffusers and grilles where appropriate.

## ELECTRICAL

### 7. PROGRAM SPACE

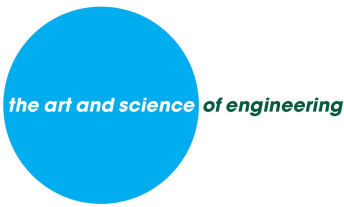
- 7.2 Provide lighting and lighting control revisions to accommodate the new room layouts.
- 7.3 Provide exit lights at the two doors in Program B space.
- 7.4 Provide power to the motorized partition.
- 7.5 Review locations of existing receptacles in the Program A and Program B spaces and provide new receptacles and 120V branch circuit wiring as needed. Refer to NEC 210.71.
- 7.6 Review locations of existing data outlets in the space and provide new data outlets as needed.
- 7.7 Review coverage of existing P.A. system and speakers and provide new speakers as needed.
- 7.8 Existing hearing loop to be extended. Refer to architectural narrative, and coordinate with Architect for hearing loop installation requirements.
- 7.9 Review locations of existing fire alarm system audible and visual notification appliances and provide new appliances as needed..

### 8. DEMONSTRATION KITCHEN

- 8.1 Provide new lighting and lighting controls.
- 8.2 Provide receptacles and 120V branch circuits. All receptacles to be GFCI type.
- 8.3 Provide power connections and branch circuits for the commercial kitchen equipment, and any ventilation equipment.
- 8.4 Circuits to outlets and equipment located under the kitchen exhaust hood shall have shunt-trip breakers interconnected to the fire suppression system.
- 8.5 Provide power and fire alarm interface wiring for the fire suppression system serving the exhaust hood
- 8.6 Provide a fire alarm system audible and visual notification appliance.

### 9. MAKER SPACE

- 9.1 Provide new lighting and lighting controls.
- 9.2 Provide receptacles and 120V branch circuits. Provide ceiling mounted cord reel(s) to serve work areas that are not adjacent to the walls.
- 9.3 Provide power connections and branch circuits for the specialty equipment (e.g. – wood carver, laser cutter, etc.), and related ventilation equipment.
- 9.4 Provide power connections and branch circuits to the two sound booths and associated ventilation equipment.



- 9.5 Provide fire alarm system audible and visual notification appliances (visual only in the two sound booths).

## **10. STUDY ROOMS**

- 10.1 Provide new lighting and lighting controls.
- 10.2 Provide receptacles and 120V branch circuits. A minimum of two receptacles in each of the two smaller study rooms, and four receptacles in each larger study room.
- 10.3 Provide a data outlet in each study room.
- 10.4 Provide a fire alarm system visual notification appliance in each study room.

## **11. COMPUTER TABLES**

- 11.1 Provide receptacles and 120V branch circuits to the computer tables. Run the wiring in an ultra-thin raceway system (similar to "Thread" by Steelcase) installed under the carpet from the nearest wall or column to the computer tables.

## **12. COLLECTIONS SPACE**

- 12.1 Provide receptacles and 120V branch circuits along the north window wall to serve the tables and sitting areas along the wall. Include the section of the north wall that is located in the Serials area (east of the entry to the Local History Room).
- 12.2 Locate receptacles so that there is a receptacle at each table and/or chair grouping.
- 12.3 Receptacles to include two USB ports for charging of patron's personal electronic devices.

## **13. LOCAL HISTORY ROOM**

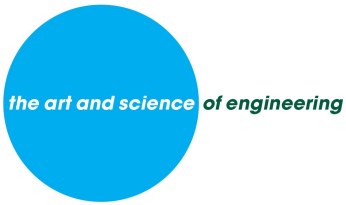
- 13.1 Provide a receptacle and 120V branch circuit for the hearing loop amplifier. Verify location of amplifier with Architect.
- 13.2 Provide a network data outlet and AV outlet for the hearing loop amplifier. Interconnect the AV outlet to the P.A. system amplifier that serves this room.
- 13.3 Refer to architectural narrative for the hearing loop requirements.

## **14. PARK RESTROOMS**

- 14.1 Relocate the light switches to accommodate the door relocations from the park side to the interior.

## **15. MATERIALS AND GENERAL REQUIREMENTS**

- 15.1 All new light fixtures shall be LED. Style of fixtures to be as close as possible to match surrounding existing light fixtures.
- 15.2 Automatic lighting controls shall meet current energy code requirements.



- 15.3 Duplex receptacles shall be 20A, 125V commercial spec grade. Finish of devices and wall plates to match existing devices.
- 15.4 New 120V branch circuits shall be extended from the nearest electrical panel. Provide new circuit breakers for all new circuits.
- 15.5 Data outlets shall be Cat 6. Provide data cable back to server rack and terminate on existing patch panel.
- 15.6 All new branch circuit wiring and data cabling to be installed concealed wherever possible. Where concealment is not possible, use Wiremold surface metal raceway. Installation and routing of surface metal raceway shall be approved by the Architect.
- 15.7 All fire alarm wiring shall be installed in raceway. Provide all programming required to connect new devices to the existing fire alarm control panel.