

PROJECT MANUAL



REHABILITATION AND CONVERSION
“THE CHARLES GREWE HOUSE”
Dayton’s Bluff Historic District of Saint Paul, MN

735 MARGARET STREET
SAINT PAUL, MN

Developer/Owner
Ramsey County
Property Tax, Records & Election Services
90 West Plato Blvd.
Saint Paul, MN 55107

OFFICIAL VERSION
Permitted 5/25/19



FRONT STREET VIEW –JUNE 2018
735 MARGARET STREET ST
YEAR BUILT: 1890



Table of contents

<u>Table of Contents</u>	
Scope of Work Introduction	3 – 7
Waste Management Plan	8
Exterior Site Work	9 – 10
Excavation and Concrete	9
Grading/Landscaping	10
House Exterior	11 – 31
Demolition and Removal of Exterior Building Components	11
Masonry Chimney Removal	11
Roofing	12
Rear Basement/Below Ground Entry	12,13
Siding, Soffit, Fascia and Trim	13 – 17
Gutters and Downspouts	17
Exterior Foundation Wall	17,18
Exterior Entry Doors	18 – 20
Rough Carpentry Exterior	20 – 29
New Construction (Front Porch)	20 – 25
New Construction (Rear Porch)	25,26
Windows	27 – 30
Detached Two Car Garage Removal	30
Exterior Painting and Staining	31
House Interior	32 – 54
Demolition and Material Salvage	32
Rough Carpentry/Framing	33 – 35
Insulation	35,36
Drywall Installation, Finishing and Texturing	36,37
Interior Doors	37 – 39
Hardware	39,40
Cabinet and Countertop Installation	40
Finish Carpentry/Millwork/Stair Systems	40 – 43
Flooring	42,43
Painting	44
Attic	44
Basement	45
Electrical	45 – 50
Plumbing	51 – 53
HVAC	53,54
Sketches and Floorplans	55 – 63

Scope Introduction:

The following introduction will be considered read and understood by all participating bidders.

Heritage Preservation Commission Design Review

This property is located in the Dayton's Bluff Heritage Preservation District. Exterior work on the structure and grounds require review and approval from the Heritage Preservation Commission (HPC) before the building permit can be issued. Some of the materials that fall into this category are fencing, exterior doors, trim, windows, siding, railings, steps, roofing, decking and lighting. The materials listed in this scope of work were chosen in collaboration with the HPC staff; with the intention of refining the scope to be reviewed administratively by HPC staff. Any changes to a listed material within this scope will require an additional review.

The Dayton's Bluff Historic District Handbook is attached to this Project Manual. This handbook must be read, understood and followed by all participating contractors working on this project. This will supply, in detail, the guidelines and information needed to be in compliance with the building and rehabilitation practices and materials that are acceptable within this historic district.

***Exploratory Demolition Permit requirement-**

This project includes the removal of building materials or structural components located on the exterior of the house. In this case, it is mandatory that an Exploratory Demolition Permit is pulled with HPC. Once approved the contractor can initiate the removal. Specific to this project, the materials that fall into this category are:

- Tan caulking on the exterior asphalt siding around all windows and doors, in addition to all inside corner seams.
- Front 2 story open porch
- Rear open porch support posts and decking

Once removal is complete, all work to the exterior of the structure must stop until HPC has performed an on-site assessment of what has been uncovered, as a result of the removal. If anything is found and deemed to be significant in historic value, the scope may need to be edited to accommodate any changes required by HPC. If the required changes affect any binding cost proposals submitted by contractors, there will be allowance given to accommodate the change in the form of a change order.

Code Compliance Report: (Attachment B) The contractor shall correct all items listed in the attached code compliance report as well as the items listed and described in the Scope of Work. The intent of the Scope is to identify and correct all items but ultimately it is the contractor's responsibility to identify, correct and pass final inspection and obtain Certificate of Code Compliance as required by the City of St. Paul.

Pre-Renovation Hazardous Materials Survey: (Attachment C) Sample Testing and Lab Analysis has been conducted on various suspected building materials within and on the structure. A full written report of the Survey is included in your Project manual folder. It will be the Contractor's responsibility to read and understand the report.

- ❖ **Asbestos:** All interior building materials that tested positive for asbestos have been removed and abated. All exterior building materials that tested positive for asbestos are still present. These items include: **White window glazing and Exterior seam caulk** used on the asphalt siding throughout the structure, thus making the siding and caulking both asbestos containing material. **(It will be the window contractor's responsibility to handle the asbestos glazing material in compliance with Local and State regulations when removing, and provide the County with disposal documentation that coincides with the quantities listed in the report.)**
- ❖ **Lead Paint:** All lead based painted materials are still present within and on the structure. It is the contractor's responsibility to follow proper procedures and be in compliance with regulations when handling and disposing of lead based paint chips. The Hazardous Materials Report lists the building materials within the structure that contain lead based paint. This list can be found on page 3- C.2. The contractor will also be required to follow the Lead Hazard Reduction Guidelines located at the end of this project manual.
- ❖ **Ash content located in the basement chimney clean outs:** The chimney ash was analyzed according to EPA Analytical Method 2010C for TCLP-8 RCRA Metals and according to EPA Method 7470 for TCLP Mercury. Barium was detected at 0.56 milligrams per liter (mg/L), which is below the TCLP Maximum Limit of 100 mg/L. This material is not considered regulated waste.
- ❖ **Exposed dirt surface located in the garage:** Diesel range organics were detected at 610 milligrams per kilogram (mg/kg), which is above the MPCA's Petroleum Remediation Sections' guidelines for remediation of petroleum impacted soil (<100mg/kg DRO). This soil should be drummed and disposed of as petroleum impacted unregulated fill. Because the estimated volume of oil spilled is less than five gallons, this material does not need to be reported to the state duty officer.
- ❖ **Previously Unidentified or Unknown Hazardous Waste:** The contractor must notify The Construction Manager immediately upon finding any previously unknown, hidden or concealed waste that would be considered hazardous or regulated waste material, and instructions will be given to the contractor for proper disposal. Additional compensation will be allowed to the contractor if the contractor disposes of the materials at the request of the County. Alternatively, TFL may arrange for the disposal of the hazardous materials at the expense of the County.

Quality Control: All subcontractors are to be familiar with this Scope of Work and attached Plans and the work of all subcontractors that may affect their own. It is the responsibility of the contractor to check all dimensions provided and the methods of construction. Contractor to verify, on site, all dimensions, sizes and existing conditions listed in the Scope and Plans; report any discrepancies upon discovery to the Construction Manager (CM). Exposed deteriorated or missing framing visible at time of pre-bid walkthrough shall be repaired, reinforced or replaced as necessary and included in the bid.

Such items that are not exposed during pre-bid walkthrough and uncovered during rehab are to be reported to the CM to be addressed.

Surfaces and substrates shall be clean, smooth, plumb and level and properly prepared prior to applying finish materials; bidding should take this into consideration. Cover and protect all finished surfaces (floors, counters, bathtubs, new door thresholds, etc.) All labor is to be performed in a "workman-like" manner, consistent with industry/trade standards and practices of the City and manufacturers' installation instructions.

All products, equipment and materials are to be furnished "in the box" new (unless salvage material for reuse), install in accordance with the manufacturer's instructions: set in place, leveled and hooked up complete with all parts and in smooth and proper working order and ready to use. Materials, products or equipment that are damaged or defective in operation or appearance shall be replaced.

All mounted items with moving parts shall open, latch, lock and operate smoothly. Contractor is to assure that all doors, drawers, etc. operate smoothly and properly.

Safety and Security: The Contractor shall take all necessary precautions and reasonable care to render the entire site safe and free from all reasonable hazards. All work shall be performed in a safe and orderly manner. Any project related injuries shall be reported to the County. The Contractor shall secure the house against unintended entry, including locking all exterior doors and windows when occupied. Unauthorized persons shall be prohibited from entering. It is the Contractor's responsibility to keep the house secure at all times. All contractors, subcontractors and county employees must have an identification badge or card, stating the agency or company in which they represent, on their person at all times while on the work site. Anyone who cannot present such identification will not be allowed onto the work site.

Adjacent Property: Any damages to adjacent private or public properties shall be repaired at the contractor's expense and in a timely manner. The contractor shall give neighbors prior notice and receive the County's permission for any work requiring access to their property. The contractor shall clean up any construction debris on adjacent private or public property daily.

Permits: All active permits and HPC approvals associated with the work site must at all times be visibly mounted or posted inside, at or near the main entry or access point to the structure. At projects end contractor must turn in all closed out permits. All permits must be closed out before final draw.

Mandatory Job Site Postings: There must be designated area at the work site that visibly posts the following documents. It must always be accessible and included the following:

1. All active permits
2. Code Compliance Report
3. Project Manual
4. Hazardous Materials Report
5. Prevailing Wage Documentation
6. The Dayton's Bluff Historic District Handbook
7. HPC Certificate of Approval or final HPC resolution

It will be the contractor's responsibility to make sure that each of these documents are present at all times.

Utilities: Owner will pay for natural gas, water, and electric use during construction. Contractor is responsible to order service, coordinate connections and maintain utilities.

Manual and Warranty Information : Contractor will provide a house manual at completion of the project that includes all manuals for mechanical units, windows, storm doors, lighting fixtures, faucets, cabinetry care guide, shower door, etc. and any other warranty information.

Change Orders : The only change orders that can be approved by the construction manager must exist for one of the following reasons:

1. Something unforeseen happens or something is discovered that could not have been identified prior to proposals being developed.
2. The construction manager makes a change to the scope of work, in which case will be conducted through email and verbal communication in order to convey instructions clearly. This type of change can be in the form of a change order-cost increase or a change order-cost credit.

- Immediately upon discovering the change, the contractor must notify the C.M. to discuss.
- After review, the C.M. will either advise the contractor to submit a change order request form or verbally deny the ability based upon one of the above reasons not being met.
- If advised to submit the change order request form, the contractor must do this within 48 hours.
- The document must include the description of the work in question, reason for change request and dollar amount being charged or credited to the contracted total.
- Once received, the request will be evaluated by an office committee who ultimately will make final approval or denial.
- The contractor is **NOT** allowed to perform any work that is related to the change in question. All related work to this area of the scope must stop until the C.M. issues the committee results. Approved change orders are not valid unless signed and dated by the contractor and the C.M.
- Once the contractor receives the signed document, work can then resume.
- The change order request form must be submitted as part of the draw in which the work was performed.

Punch List: The Construction Manger punch list walk-through shall be conducted after the final clean-up. Items not in accordance with the Scope of Work shall be listed and corrected to the satisfaction of the Construction Manager. Dirt, dust or debris caused by the performance of punch list items after final clean is to be cleaned again.

Final Walk Through will be with the CM and contractor. All punch list work must be done in a timely Manner.

***The materials listed in this scope of work are an indication of the quality, style and finish of what we want to see incorporated into the rehabilitation. If the contractor would like to use a different product than what is stated in this scope of work; it must be equal in quality, style and finish and must also be approved by the Construction Manager.**



Specifications writer/designer - Paul Scharf
Construction Manager: ("CM") – Paul Scharf

The County shall be represented by:

Paul Scharf

Lead Real Estate/ Property Mgmt. Specialist
Ramsey County Tax Forfeited Land
90 West Plato Blvd.
St. Paul, MN 55107
Cell: 651-334-7223 (Main Contact Number)
Office: 651-266-2035
Fax: 651-266-2022

All correspondence, documents, submittals and questions shall be directed to him.

***All Invoices are to be submitted to:**

Linda Huerta

Tax Clerk II
Ramsey County Tax Forfeited Land
90 West Plato Blvd.
St. Paul, MN 55164
Email: Linda.huerta@co.ramsey.mn.us
Office: 651-266-2078
Fax: 651-266-2022

Waste Management Plan

All demolition and renovation waste building materials must be sent to an acceptable C&D Facility. Acceptable facilities are:

- Dem-Con site in Jordan, MN
- Veit at Como/280, St. Paul
- SKB, various locations, MN
- Atomic, Mpls. MN
-

Ramsey County will be supplying roll-offs for this project. The selected facility for this project is Veit. All orders and requests must go through the C.M.

All concrete and aggregate that is demoed or removed from the site is required to go to a separate recycling facility. Contractor is to provide load tickets documenting quantity and final destination.

***Additional practices are required at the worksite to initiate further recycling goals.
See Waste Management Plan:**

***If the contractor feels it necessary to secure dumpsters, temporary fencing may be installed to enclose them to deter theft, contamination and outside dumping.**

The 4R Program emphasizes and promotes the reuse of old building materials where practical

Reclaimed / Re-Used / Salvaged / Donated Building Materials

Any building material that is currently staged at the property is intended to be used in this project. Do not discard.

Building Material that Re-use- All existing millwork that is removed during interior demolition must be done carefully and labeled accordingly to room locations for re-installation.

Exterior Site Work:

(See Exterior Site Sketch)

Excavation and Concrete

Private Walkways

- ❖ Install new concrete private walkway from rear deck steps to the edge of the newly poured concrete parking slab. Walkway to be 3' wide and 4" thick.
- ❖ Front private walkway from city sidewalk to newly constructed wood steps of front porch are to remain. Accommodate length and height to transition appropriately to first step riser.
- ❖ Repair/fill any voids, missing areas or cracks within existing walkways. Ensure all surfaces (old and new) blend and match in height, design and color.
- ❖ Ensure that all private walkway areas provide for positive drainage, designed to carry water away from the foundation of the structure on all sides

Off-Street Asphalt Parking Pad and New Concrete Parking Slab

- ❖ Excavate and remove the asphalt parking slabs located on the both sides of the existing garage.
 - Grade and landscape this area with seed. (See Grading and Landscaping section)
- ❖ Remediate contaminated soil on the site where the previous 2-car detached garage once existed by removing 3" of surface soil and drum for disposal as petroleum impacted soil at a MN Pollution Control Agency permitted industrial and/or demolition landfill approved to accept petroleum impacted unregulated fill. (See Attachment D, IHSC Pre-Renovation Survey, page 7)
- ❖ Depending on the depth after drumming, continue to remove soil to accommodate for a 4" layer of ½" crushed rock.
- ❖ Excavate for proper footings that will accommodate the weight load of a future 2-car detached garage.
- ❖ After footings are installed and inspected, pour concrete slab using a 2,500 psi or greater with fiber mesh reinforcement
 - Compact and screed concrete.
 - Trowel for a non-slip "broom finish"
 - Compact and screed concrete.
 - Trowel for a non-slip "broom finish"

Grading/Landscaping

Prior to executing this activity, Contractor will discuss timeline and schedule with C.M. This may require seasonal activity and may require Contractor to return at the end of the project depending on initiation of this phase of work.

- ❖ Remove and dispose of all vegetation currently growing on the property. This includes all trees, shrubs and stumps, including their entire root system located around the house and neighboring fence lines.
- ❖ Remove all stones, bricks, rocks and other debris that are scattered around the property.
- ❖ Grade slope away from all areas of the house to ensure positive water run-off is diverted from all foundation walls.
- ❖ Fill any holes, or low spots to yard areas. Grade yard to prep for seed laying and spread 1 ½" to 2" of new black dirt to areas where seed will be installed. Minimize any ruts and remove large stones and debris. Repair any damage caused as a result of the construction, vehicle and roll-off activity.
- ❖ Apply seed (mixture/species to be determined by C.M.) thoroughly on all areas that are to be grass.
 - Install netting with hay for wind control and protection.
 - Use erosion barriers where needed to protect city sidewalks and portions of alley from dirt run-off.
 - Cover any bare soils in yard areas from front to rear. All bare soils must be covered with seed and maintained by general contractor until completion of the project. If seed is disturbed during construction it will be the general contractor's responsibility to repair or replace it.
- ❖ Maintenance: Watering of the seed or sod will be the general contractor's responsibility until the completion of the project.

House Exterior:

Demolition and Removal of Exterior Building Components

Must be performed in conjunction with the **exploratory demolition permit** and HPC post removal assessment. See scope introduction, section 1, for further information. Photo documentation must be done prior to the removal of any materials or structures associated with the exterior of the house/garage. Check with C.M. before initiating any demolition to these areas.)

The materials that are to be removed include:

- Top layer of asphalt siding throughout- (Handling and disposal must be done in accordance with MDH regulations and proper disposal documentation must be provided.)
- Entire front, 2-story, open front porch and all of its associated components- This includes excavation and removal of the existing footings.
- Rear open porch and all of its components. (Inspect existing footings for possible re-use.

***See Rough Carpentry Section for Specifications on the Construction of the new porches and canopies**

***Once the removal of these materials has been completed, the C.M. will notify the HPC to schedule an on-site assessment. This is a requirement and no other work associated with the exterior of the structure is allowed to continue until assessment has been completed.**

Masonry Chimney Removal

(See Roof Section)

- Deconstruct and remove the portions of the two (2) brick chimneys on the roof to be 1' below the roof decking, inside the attic. The remaining portions of the 2 chimneys are to remain intact at their current locations.
- Fill the holes resulting from the chimney removal. Frame and deck the two areas to eliminate the voids and prep for roof decking.

***The contractor must develop and design a safety system or process that will allow for the removed bricks to be transported to the ground in a safe manner. The contractor will be responsible for any damage caused by falling bricks or other building materials to neighboring properties during demo and reconstruction.**

Roofing

The contractor is responsible to verify the number of existing layers of shingles.

- Complete tear-off all shingles on the house. This will include the newly constructed front porch canopy and the existing rear porch canopy.
- with 4' x 8' - ½" OSB roof sheathing. Re-deck over the existing plank decking. Replace any existing decking that is rotten or damaged. Remove all skylights from roof, frame them in and deck them.
- Remove all decorative fascia, and cove moldings to the entire house. All structurally stable and non-rotted pieces are to be saved. (See Soffits, Fascia and Gutters Section of the Scope) Ensure there is solid backing for the reinstallation of soffit and fascia boards.
- Install new metal flashings where necessary and to all valleys.
- Install Certainteed Winter-Guard ice and water barrier to 6' at all drip edges, wrap up all sidewall/roof junctions and at all penetrations.
- Install drip edge.
- Install an **Architectural Style Shingle**: Color will be **Weatherwood**.
- **Assure no leakage**. Clean up and remove all debris and nails from the site.

It may be necessary to coordinate the re-roofing system into sections due to the size and shape of the roof. If doing so, **DO NOT** leave the roof exposed after hours or overnight to the weather/elements. Tarp spread over large areas of the roof will not be acceptable.

Rear Basement/Below Ground Entry

The rear basement entry from the exterior is going to be removed and abandoned.

- ❖ Remove lift door, hardware and associated components.
- ❖ Remove Exterior house door, jam and associated components.
- ❖ Use foundation grade concrete blocks to fill door opening.
 - Use the proper size (width) blocks to match as closely as possible to the existing limestone foundation wall.
 - Drill and install masonry embedders (rebar).
 - Fill all cavities and embed rebar with concrete.
- ❖ Fill and seal areas where new block and existing limestone meets with mortar or approved caulking material to be watertight.
- ❖ On the exposed, exterior side of the foundation wall, apply a waterproof membrane to all areas

that will ultimately be under grade once backfilled.

- ❖ Backfill area with properly compacted soil.
- ❖ Final top grade must slope away from the house to ensure positive water run-off.

Siding

(See Exterior Painting Section/ Exterior Rough Carpentry Section/Window Section)

*The existing, top layer of asphalt siding was considered asbestos containing and removed by a specialized abatement company for disposal.

Repair, Refinish of Original Wood Lap Siding

- Remove any existing cables, wiring or other abandoned hardware including all satellite dishes that are attached to the house
- Install new siding at locations where window/door openings are to be altered. (See Window Section: Master Bath 2nd floor, Master Bedroom 2nd floor, Third Floor Rear Gable)
- Repair or replace any missing, rotted or damaged pieces. New lap must match the size and design of the existing wood lap.
- Make sure all siding is adhered properly to the structure. Appropriately secure any loose sections. Ensure that seams are properly caulked and not visible.

All exterior coverings of the house are to be primed and painted. (See Exterior Painting Section)

1. Installation of decorative, accent siding to gable locations.

Material to be pre-approved by HPC prior to installation. (See Exterior Painting Section)

All four, 3rd story gables will be sided with the same decorative shake material. The West side gable is the only area where the original shake still exists. **See photo below.** The new shake is to match in design and style as the original. Install the new shake at all gable locations of the house.

Description: staggered/wavy edged design.

Material is to be made of fiber cement or a wood composite.

Before installation, consult with the C.M. for approval of the material.

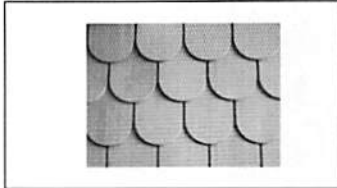


- Remove existing cedar shake siding from front gable. (All other gables had asphalt siding that has been abated by asbestos contractors.)
- Frame in and close the opening where the door was located at the rear third floor gable. (See Exterior Rough Carpentry.)
- Install new house wrapping weather barrier over sheathing using: **Tyvek House Wrap by Dupont** or approved equal, taping all seams. Install according to manufacturer's written instructions.
- Install new fiber cement shake siding to all identified locations. Installation to be performed according to manufacturer's recommendations.

***(Consult with painters prior to installation. Unfinished shake is to be painted with at least one full coat prior to installation.)**

2. Installation of decorative (Scalloped, Fish-scale), accent siding at center locations to all sides.

Material to be pre-approved by HPC prior to installation. (See Exterior Painting Section)



**Allura™ 1/4" x 16" x 48" Fiber Cement
Shake Siding Half Rounds**

- Install new house wrapping weather barrier over sheathing using: **Tyvek House Wrap by Dupont** or approved equal, taping all seams. Install according to manufacturer's written instructions.
-
- Install new 1" x 4" trim to the top and lower sections of the fish-scale siding to act as transition strips separating the house lap siding from the decorative siding.
- Install new fiber cement shake siding to all identified locations. Installation to be performed according to manufacturer's recommendations.
***(Consult with painters prior to installation. Unfinished shake is to be painted with at least one full coat prior to installation.)**



Decorative Shake fiber cement installed to all gables of the house.

Install new corner trim where existing is missing, or damaged beyond repair.

Install new transition boards to top and bottom of the strip containing the decorative fish-scale siding. None are to be salvaged. Must match in size to the existing.

Location for the install of the decorative fish-scale, fiber cement siding. It will wrap around all three sides except for the front.

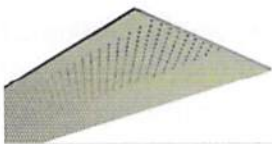
Exterior Soffit, Fascia and Trim:

(Refer to pages 15-16 of the Historic District Handbook for Acceptable Repair Procedures.)

The removal of the 2-story front porch has uncovered the original decorative dental moldings that are still present only on the front side of the house. These are to remain and stay exposed as it was when originally built. The decorative moldings have been removed from the other three sides.

***Any newly installed fascia or trim must be milled to match the existing material of the house. Newly added material must be approved by HPC.**

- Repair or replace any areas of soffit, fascia and trim components that are damaged or missing. Ensure that there are no missing areas to the existing soffit and that any rotted areas are replaced with structurally elements. Remove any grate vents to the existing soffits. Install new, primed, fiber cement vented soffit material to all soffit areas. This material is to be installed right over the existing soffit



Allura™ 16" Textured Vented Fibercement Soffit

Model Number: 1408963 | Menards® SKU: 1408963

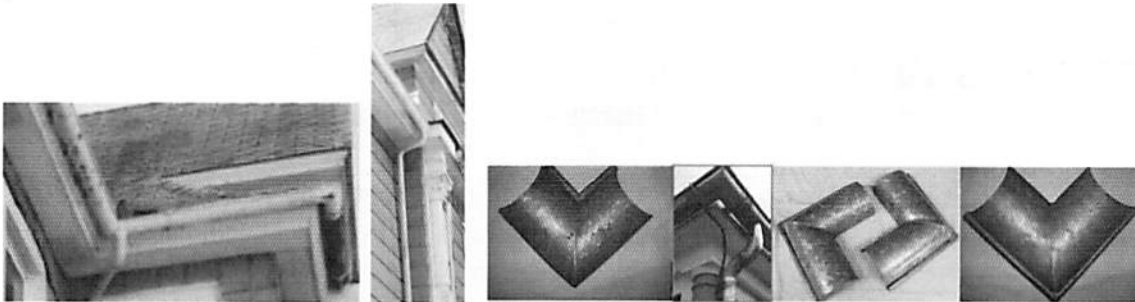
- (Existing crown fascia material measures 5 ½" in width.) Replace all existing crown, fascia molding with new to match as close as possible in size, shape and design.
- Appropriately secure any loose sections.
- Apply caulking to all seams and transitions.
- At new window locations, install trim to match existing window trim.

All Exterior- Fascia, soffit, trim, siding, doors and porch components will be painted, stained or sealed. (See Exterior Painting Section.)

Gutters and Downspouts:

(Material to be pre-approved by HPC before installation.)

Currently, the structure is equipped with a gutter system on the west side only. Any portions or parts of the existing gutter system that is usable must be saved and re-used. Scrape, sand and paint the re-usable portions. Any portions that need to be replaced must be replaced with a like material that matches in size and design. In addition to repairing and replacing the gutter system on the west side, the contractor will be responsible to install a new system with the same material, to be located on the east side of the house as well. Positions and placements of downspouts are to be done to ensure positive water run-off on all sides.



- Downspouts are to have a minimum of 2' to 4' rain leader extension.
- **Install Splash Guards** to ensure positive water run-off away from the foundation of the structure.

Exterior Foundation Wall:

* (Refer to page 12 of the Historic District Handbook for Acceptable Repair Procedures.)

- Repair, repoint and seal all deteriorating joints, cracks or voids in the exposed foundation of the house and garage. A mortar specification shall be submitted to HPC staff for review and approval. (Nothing stronger than TYPE N or TYPE O) Please include mortar strength, color, and

joint profile. If any new bricks are necessary, they shall match existing in size, color, and texture. **No water sealant, repellent or paint of any kind shall be applied to masonry.**

Exterior Entry Doors:

(See Exterior Rough Carpentry Section.)

* (Refer to page 19 of the Historic District Handbook for Acceptable Repair Procedures.)

-Temporary Steel Construction Doors will be installed to all entry locations until the finishing stages of the project. This is to allow for adequate security during the rehab and to allow for off-site restoration to the salvaged replacement doors before they are installed.

- -The Third-Floor rear, gable exterior door is being abandoned and removed.

There will be three (3) exterior entry points located on the house.

These being an original components to the structure when it was built, the HPC guidelines prevent the openings from being converted, changed, altered or eliminated.

1. Front double doors-

*** The existing double doors are to be salvaged. Do not destroy or throw away. The C.M. will arrange to transport them off-site.**

- The new doors will be approved by the HPC as required. Ramsey County will be donating the salvaged, fully refurbished, antique double door slabs (**construction- wood**) that will be installed at this location accompanied with the door hardware (plates, knobs and mortise lock)
- Repair or rebuild door jambs where necessary.
- Install door slabs to jambs and assure smooth operation and latching capabilities.



The new front double doors will be of Victorian Era age, and design. The top halves will have glass panels with decorative recessed panels below. Note: The doors in this photo are not the exact doors that will be provided, instead they are being used to visualize what is being proposed to the HPC for approval. Installed product will be very similar to what is shown here.

2. East side original parlor entry door with storm door-

* The existing entry door and storm door are to be salvaged. Do not destroy or throw away. The C.M. will arrange to transport them off-site.

- The new door will be approved by the HPC as required. Ramsey County will be providing the door hardware (plates, knobs and mortise locks for both units.)
- The existing entry door and storm door will be replaced. Ramsey County will be providing the new, salvaged, fully refurbished, antique entry door slab. (**construction-wood**) The new replacement storm door will be custom built as a replica of the existing unit. (This will be built off-site by a specialized window fabricator. **Construction – wood**, See T.C. Woodworks scope of work under the Window Section.)
- The contractor, not the fabricator, will be responsible to install the new door slab and storm door.
- Repair or rebuild door jamb where necessary to accommodate the new units.
- Install door slab to jamb and assure smooth operation and latching capabilities of both the entry door and the storm door.



The new east side door and storm door will be of Victorian Era age, and design. The doors in this photo are not the exact doors that will be provided, instead they are being used to visualize what is being proposed to the HPC for approval. The new, salvaged and custom-built product will be very similar to what is shown here.

3. Rear entry door-

- The new door will be approved by the HPC as required. Ramsey County will be providing the door (**Construction – primed steel**) and its hardware (plates, knobs and mortise lock)
- Repair or rebuild door jamb where necessary to accommodate the new unit.
- Install door slab to jamb and assure smooth operation and latching capabilities of both the entry door and the storm door.



Mastercraft® E-214 Embossed 36" W x 80" H
Primed Steel 6-Lite Exterior Door Slab with
External Grilles

Model Number: 4096776

Menards® SKU: 4096776

Variation: Primed White Steel & White Exterior
Grilles

Unit to be provided by Ramsey County

Rough Carpentry (Exterior):

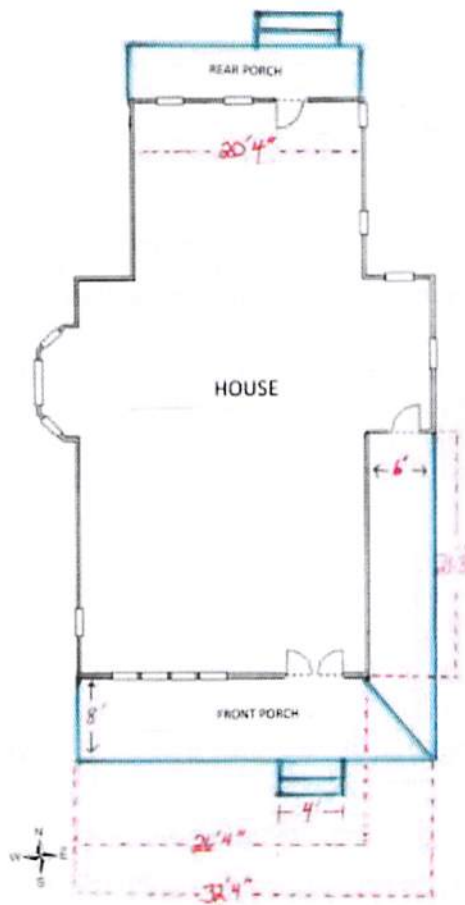
1. New Construction – Porches and Canopies

* (Refer to pages 16-17 of the Historic District Handbook for Acceptable Building Procedures and Design.)

*It is the contractor's responsibility to independently verify all measurements indicated in a sketch that is part of this section. If there is a discrepancy with any of the measurements provided below, the contractor must notify the C.M. before continuing any scope related work.

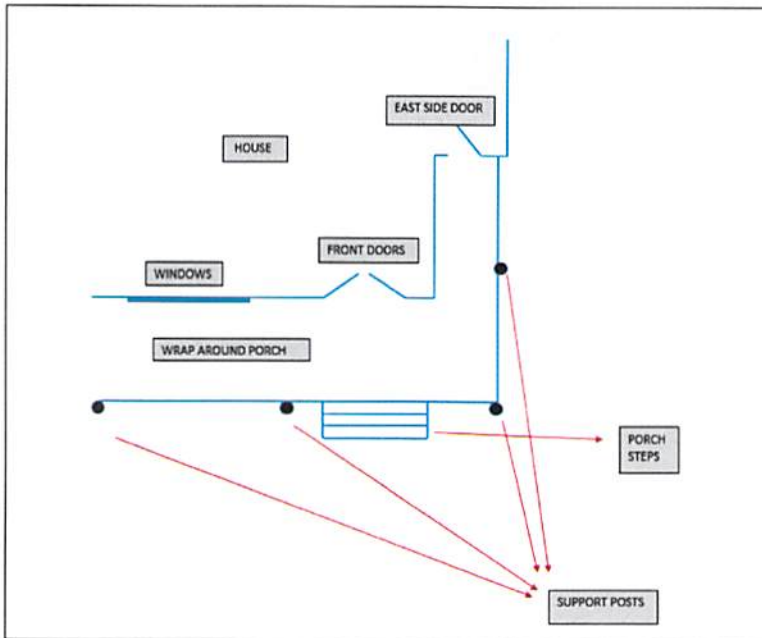
(There are three (2) locations where construction of new porches will take place on the house.)

Front wrap-around porch: The structure, when built, had a wrap-around front porch as shown in the sketch below. The intention is to re-build a replica of the original porch. It should match, as close as possible, in size and style to the original. This will be constructed as a single story, open porch that will wrap around the east corner of the house and terminate at the east side entry door location. It is to be constructed as a shed roof design. The outline of the original shed roof can still be seen on the original lap siding. This will present a good reference for size and location when constructing the new porch.



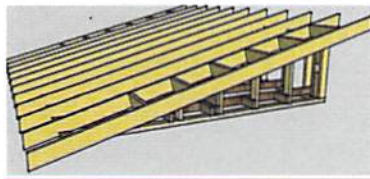
- Refer to building inspector for adequate footing size and placement. (See Exterior Concrete Section.) Location of the footings will need to coordinate with the support posts of the canopy. All footings must line up with a support post above it. Footings are to have post base embedded to the footings for posts to attach.

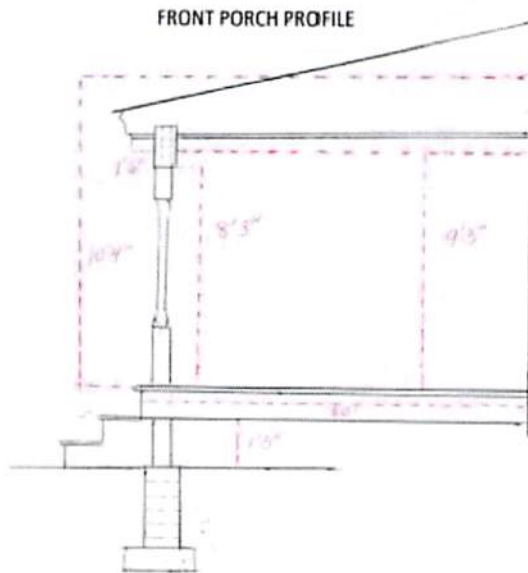
Note: There are to be 2 support posts on the front section of the wrap-around porch, with the southeast corner being the 3rd. There is to be 1 support post on the side section of the porch, with the southeast corner being the 2nd. The side wrap around canopy is to tie into and anchor to the exterior wall of the house at the bay. (See sketch below)



Fypon® QuickPost® QuickRail® 5" x 5" x 8' 8" White Colonial Porch Post
 (Actual Size 4-1/4" x 4-1/4" x 104")

- Use the placement of the existing footings to determine the width of the new porch. The porch deck should extend 8' from the front of the house.
- Install a new ledger board, bolted to the rim joist of the house to accommodate the new wrap around porch. Use size, type, and number of bolts required by city inspector using 12" spacing between bolts.
- Ensure that a water membrane has been installed to the house and is positioned behind the ledger board. Install metal flashing to the top of the ledger board.
- Install treated 6" x 6" treated posts fastened on top of footings with metal connectors.
- Install triple 2x10 beam to footing posts with metal connector on all sides.
- Set 2x10 treated floor joist at 16" apart. Joist hang on ledger and toe nail onto beam.
- Install cedar wood tongue-and-groove deck boards running perpendicular to the front elevation.
- Frame a shed roof design with a 6"/12" rise and run and attach rafter plate to the exterior wall to accommodate the rise and run using lag screws. This should end up being close to the position of the original porch that was present when the house was built. Refer to sketch for measurements.

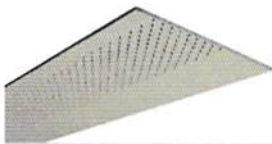




- Install framing members to accommodate for a flat ceiling. Provide adequate ventilation to the void between ceiling and roof at soffit locations. Install 7/16" OSB roof decking to roof framing.
- Install 7/16" OSB roof decking to roof framing to accommodate for shingles. (See Roofing Section. **The vendor that roofed the house is contracted to roof the porch canopies as well.**)
- Set appropriate header using LVL (Laminated Vaneer Lumber). Specifications for header must be approved by the building inspector. Header placement is to be set where it allows for 8" of soffit, between header and fascia.



- Install 1' x4" (paint grade lumber) baord to rafter tails.
- Install the same soffit material as used on the house to all soffit areas. (

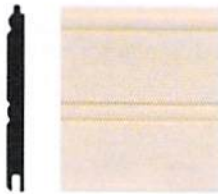


Allura™ 16" Textured Vented Fibercement Soffit

Model Number: 1400903 | Menards® SKU: 1400903

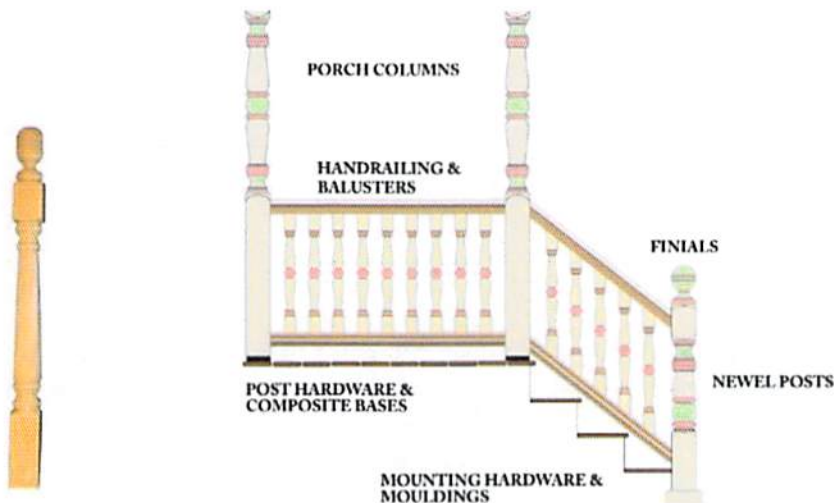
- Wrap headers with paint grade lumber.

- Install clear wood, tongue and groove wainscott paneling to ceiling joists. (Note: See Electrical Section- Accommodate for recessed lighting. Coordinate with electrician before installation of tongue and groove boards.

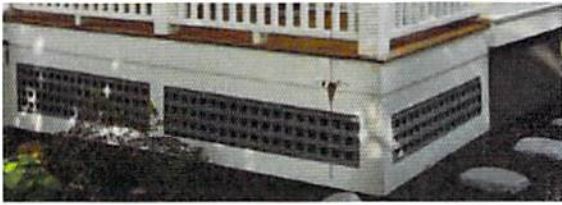


House Of Fara 0.67 Sq. Ft. Basswood Tongue And Groove Wainscot Paneling, Wood, Wood

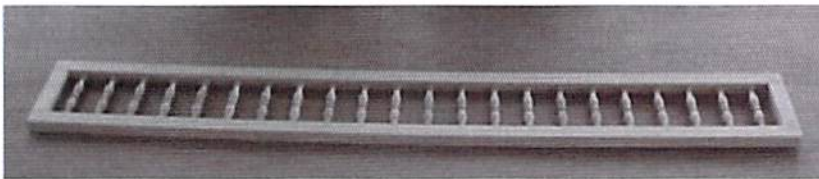
- Build and install railing to wrap around the porch with decorative spindles and grip able handrail system to code. Balustrade shall have both a top and bottom rail with the spindles terminating within the bottom rail.
- Build a 4' wide wooden stair system to be centered between (2) two canopy support posts. Install solid wood risers using paint grade lumber. Install cedar stair treads. Newel posts to be colonial design to match support posts and balusters. (See photo below)



- Install skirt to porch with framed lattice panels to. Panels must be centered between posts and framed on all sides. (Lattice material to be plastic and framing material to be engineered wood to protect from rotting)



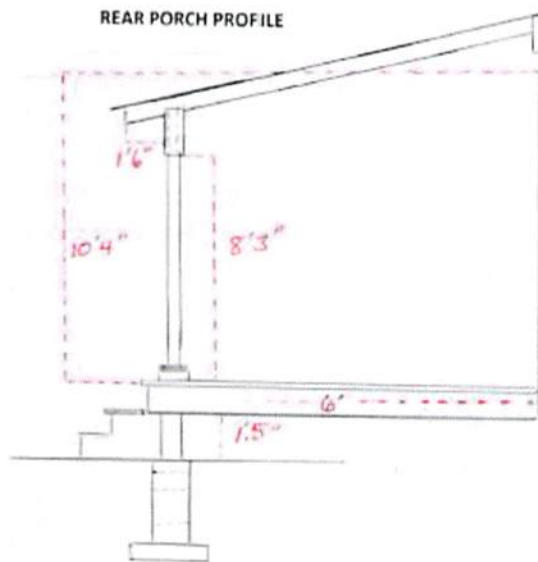
- Install a basic spandrel between each support post resting on the porch header. At each support post, on each side, install a decorative bracket. Material will be similar to photos shown below.



Example of both pieces installed together.

Rear Open Porch and Canopy: Construct an open rear porch to replicate the original one that was removed. Install to be exact size, height and width of the original. This porch will be of a basic design and less decorative compared to the front wrap-around porch. It is to be constructed as a shed roof design. The outline of the original shed roof can still be seen on the original lap siding. This will present a good reference for size and location when constructing the new porch.

- Refer to building inspector for adequate footing size and placement. (See Exterior Concrete Section.) Location of the footings will need to coordinate with the support posts of the canopy. All footings must line up with a support post above it. Footings are to have post base embedded



- to the footings for posts to attach. The porch decking should extend 6' from the front of the house. (Refer to sketch for porch measurements.)
 - There will be a total of 4 support posts and footings. Posts to be 4" x 4" treated lumber.
 - Install a new ledger board, bolted to the rim joist of the house to accommodate for weight load. Use size, type, and number of bolts required by city inspector using 12" spacing between bolts.
 - Ensure that a water membrane has been installed to the house and is positioned behind the ledger board. Install metal flashing to the top of the ledger board.
 - Install treated 6" x 6" treated posts fastened on top of footings with metal connectors.
 - Install triple 2x10 beam to footing posts with metal connector on all sides.
 - Set 2x10 treated floor joist at 16" apart. Joist hang on ledger and toe nail onto beam.
 - Install 7/16" OSB roof decking to roof framing to accommodate for shingles. (See Roofing Section. **The vendor that roofed the house is contracted to roof the porch canpoies as well.**)
 - Install cedar wood tongue-and-groove deck boards running perpendicular to the front elevation.
 - Frame a shed roof design with a 6"/12" rise and run and attach rafter plate to the exterior wall to accommodate the rise and run using lag screws. This should end up being close to the position of the original porch that was present when the house was built.
 - Install appropriate header to accommodate weight load.
 - Build a 4' wide (2 step) wooden stair system to be centered between (2) two canopy support posts. Stairs should end up being in line with the private walkway leading to the parking pad. Install solid wood risers using paint grade lumber. Install cedar stair treads.
- Note: There will be no railing system installed to this porch.**
- Install skirt to porch with framed lattice panels to. Panels must be centered between posts and framed on all sides. (Lattice material to be plastic and framing material to be engineered wood to protect from rotting)

2.Windows and Doors:

There are two (2) locations where existing exterior doors are being altered and/or converted to windows. Refer to "Windows" section for window openings that are being altered for rough carpentry instructions.

***Carpenters will be responsible for installing the custom made windows. (See T.C. Woodwork's Scope of Work under the Window Section. The storm windows and basement windows will be installed by the fabricators/builder's of those units.**

- 2nd floor-front of house porch access- There will no longer be a second story front porch. Remove the door and all associated components. Frame in and convert to accommodate for window installation. The window is to match in exact size, style and design as the 2 windows located beside it to the west. This will become the third window of this series. Finish material:



Interior- Wood
Exterior- Wood

HPC will approve window specifications.

- 3rd Floor gable, exterior door- There will no longer be an opening at this location. Frame in to accommodate for sheathing, insulation and decorative, shake siding installation.



Windows:

(See Hazardous Materials Report- Asbestos containing.)

*According to lab test results, the exterior (white) window putty that encases the existing windows has been identified as a Cat II Non-Friable asbestos containing material. Refer to page 2 for mandatory instructions and submittals required.

***All new windows will be pre-approved by the HPC prior to being installed.**

NOTE- Due to the historic guidelines in place for window specifications in this district, all window work has been assigned to specialized vendors:

The following scope of work and window specifications have been assigned to

Borden Window LLC:

For all house windows with the exception of:

1. **The altered location identified under the rough carpentry section (Second floor- front of house where door becomes a window)**
2. **Basement windows**
3. **The 3 round top storm windows located on the second floor on the front of the house.**
4. **The east side, non-operational window located in the 3rd-floor gable.**

- Install new weather stripping to all windows.
- Remove and abandon weight pulley system to all operating double-hung windows and insulate the cavities using Greenguard certified fiberglass insulation, with the exception of three, including bulb seal on tops, center and bottom of sash.
- Build 2 new wooden sashes to match old window where they have been damaged beyond repair. (1 upper and 1 lower sash to arched second floor windows on the front of the house.)
- Replace/repair the rope system to three (3) double-hung windows located on the first floor on the front of the house.
- All remaining windows- Install a new track system to all double hung windows for operation. All to have appropriate seal and operate smoothly with tilt-in function for cleaning and access.
- Replace any damaged or missing glass panes throughout to all windows.
- Remove all loose putty to exterior sides and meld new to match.
- Remove and dispose of all debris associated with the work above.

**At end of project, the contractor is to include waste manifest and proof of proper disposal for the removed existing putty that is positive for asbestos containing material.

Strom Windows:

(With the exception of the three arched top windows located on the second floor of the front of the house.)

All existing openings are not to be altered

Install all new storm windows throughout to all window locations. Include the 3 altered and new locations as described above

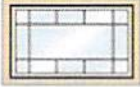
Larson Gold Series, Flush Mount- ½ screen Historic Look Aluminum (color charcoal)

The following scope of work and window specifications have been assigned to

T.C. Woodworks:

***T.C. Woodworks will not be responsible for the installation of the units, with the exception of the basement windows.**

- **3 Arched-Top Storm Windows (2nd floor, Front of House):** Construct and build new pine storm windows for the second story, arched topped windows.
Specifications: 5/4" Northern White Pine, clear. To be glazed with double-strength glass, 1/1 lites and primed for installation.
- **2nd floor-front of house porch access:** Construct and build a new double hung window with double-strength glass, 1/1 lite at this location. Carpenters will have framed the opening after converting the door to a window. The opening will match in size, style and design, exactly to the windows beside it, on the west. Ultimately, this window will become the 4th of that series. Construction to be 5/4" Northern White Pine, clear and primed for installation.

- **1st Floor, West side Picture Window:** Construct and build a new single-paned, non-operating window at this location to match the existing one in size. The opening is not to be altered.
 Window construction to be Northern White Pine, clear, glazed with double-strength glass, and primed for installation. Design to replicate a time period piece with multiple lites.

- **2nd floor-front of house porch access:** Construct and build a new double hung window with double-strength glass, 1/1 lite at this location. Carpenters will have framed the opening after converting the door to a window. The opening will match in size, style and design, exactly to the windows beside it, on the west. Ultimately, this window will become the 3rd of that series. Construction to be 6/4" Northern White Pine, clear and primed for installation.
- **Basement Windows:** There are two units to each opening.
 - Where able, repair any existing, broken or non-functioning window panes and associated components.
 - Window units where jams are damaged beyond repair must be rebuilt as pre-hung units with the incorporated panes. Construction to be Northern White Pine, clear, with double pane glass, and primed for installation. Design to replicate the existing units, exactly.
 - All windows must be functional and able to operate as intended with locking capabilities.
- **East and West side, 3rd floor windows located in the gables:** Construct and build a new non-

operating window at this location to match the existing one in size and design. The openings are not to be altered. Construction to be Northern White Pine, clear, with double pane glass, and primed for installation. Design to replicate the existing units, exactly.

*In addition to the windows, T.C. Woodworks will also be asked to construct the following:

- **East side, original parlor entry, storm door:** Construct and build a new wooden storm door, (slab only) to replicate as close as possible to the photo shown below. Construction to be Northern White Pine, clear, glazed with single pane glass, and primed for installation.



Window frames (interior and exterior sides) to all locations are to be painted to match the exterior finish of the house windows. (See Painting Section.)

Detached Two-Car Garage:

Inspections have determined that the existing garage is structurally compromised. C.M. has received approval from the HPC for the removal of the garage structure. A demolition permit will be required and the responsibility of the contractor.

***Photo documentation is required by the HPC prior to removal. Check with C.M. prior to initiating removal.**

***The removal will be a deconstruction process that will render all uncompromised framing members to be salvaged. ANY studs or joists that are full or close to full lengths are to be salvaged and staged for the C.M. to remove and transport off site.**

Exterior Painting and Staining:

Product Requirements:

Paints: Only use approved best grade paints and primers meeting the Green Seal G-11 Environmental Standard

Caulks, Sealants, Strippers and Adhesives: Comply with regulation 8, rule 51, Air Quality Management. Low or no Voc (Urethane Caulk)

All building materials that are to be painted must be free of rot and damage. Surface that have been repaired must sanded and prepped for painting. Ensure smooth and even transitions at caulk lines and edges.

Exterior building materials that are to be **painted or stained** are listed below. **Colors and sheen are still to be determined.** A consultation with the construction manager will take place during the orientation with the contractor.

1. Front/Rear Porches- balusters, handrails
2. Front/Rear Porches- support posts:
3. Front/Rear Porches- header
4. Front/Rear Porches- soffit
5. Front/Rear Porches- fascia
6. Front/Rear Porch- decking/stair treads (Cedar)
7. Front Porch- canopy ceiling
8. Front Porch- decorative spandrel and brackets
9. House- decorative shake siding at gable locations.
10. House- decorative scalloped, shake stripe around house
11. House- existing and new Lap Siding
12. House- soffit
13. House- fascia
14. House- window and door trim
15. House- window sashes
16. Basement Windows- both interior and exterior sides of basement wood window frames
17. Exterior Rear Door

Interior Site Work:

(See New Floor Plan Layouts)

Demolition and Material Salvage

(Refer to the Existing and New Floor Plans)

***Prior to any demolition work or removal of building materials, the contractor is required to conduct a walkthrough with C.M. to identify building materials that are to be salvaged and not disposed of. The C.M. will arrange for the transport of salvaged materials to an off-site location.**

- Using extreme caution, carefully remove all baseboards, door casings, rosettes, and quarter round **except** at all window locations. Remove all nails, screws and hardware from the removed millwork. Number and mark removed millwork using a system that will identify where they came from for re-installation. Group millwork by room location and stage millwork in 3rd floor attic area.
*All window casings must remain on the exterior walls. The integrity of the window could be compromised if removed. It's not until the sheet rocking phase begins, that the window-casing can be removed. Once areas around windows are sheet-rocked, re-install removed casings as soon as possible around windows
- Continue with the demolition of wall/ceiling plaster and lath where indicated. Consult with C.M. for specific instructions. Most of the ceilings throughout will remain except where specified. **At all exterior walls, there is a skim coating behind the lath that is to remain untouched. The removal of lath on exterior walls must be lifted off in order to protect the fragile insulative skim- coating that exists.**
- Carefully remove plaster coating from face of bricks around the fireplace surround up to the ceiling in the main level living room. Take measures to protect the wooden mantel-fireplace surround and hearth tiles at floor from falling debris to prevent damage. Cover these materials fully with a hardboard or similar material before beginning the removal. Repeat the same process to the brick chimney in the kitchen on all sides.
- Remove all fixtures, swing doors, lighting and hardware throughout the structure. **Consult with the C.M.** for specific instructions. Some of these materials will be identified as salvage and not disposed of.

Rough Carpentry/Framing

(Refer to the Existing and New Floor Plans)

At locations where walls are being removed, altered, or changed, it is the contractor's responsibility to inspect the structural framing and install appropriate headers to accommodate for weight load support if needed.

All removed existing, rough sawn framing lumber that is full, or close to full length, is to be salvaged. Stage the framing lumber inside the structure and alert the C.M. When it is ready to be transported to an off-site location. The contractor will not be responsible for the hauling and transportation of the lumber.

Once all framing is complete, it will be the contractor's responsibility to schedule an inspection with the C.M. and building inspector, which is a requirement, prior to the walls being closed up with Sheetrock.

The Scope below refers to a location within the house according to the Existing Floor Plan (see sketch).

1. Floor 1 entry area/Living Room-

Remove framing members at the original pass-through from the entryway to the living room that was previously walled up. Convert this opening back to its original state. Frame opening to accommodate casing on both sides to match the other pocket door opening.

Inspect pocket doors for proper functioning. Clear tracks of any debris and ensure that they operate smoothly.

2. Floor 1 Parlor Closet/Pantry-

Frame wall in existing pantry closet to shorten the depth. New depth to be 2 feet, allowing this space to accommodate only shelving. The remaining space left over will be added to the parlor closet, giving this space more room. The depth will stay the same, only the length will be expanded. Frame the opening to the new bedroom closet to accommodate for a 48" sliding door.

3. Floor 1 Kitchen/Dining Room-

- Remove the East/West running wall that currently separates the kitchen from the dining room. Work with electrician, HVAC and plumber to remove wires, venting, piping and other components within this wall. Frame and install any necessary structural elements if needed. Work with city building inspector to ensure compliance. This is assumed to be non-load bearing; however, it is the contractor's responsibility to confirm.
- Build half wall to be cabinet height that will enclose kitchen cabinets at island peninsula as shown in the kitchen layout. Build wall at same height on the north side of the brick chimney to act as a structural end-cap to the island cabinetry to separate cabinet end and chimney wall.

- Frame in area where old entry to basement steps were at one time. Frame to accommodate Sheetrock to be flush with kitchen walls. There will only be one entry point to basement steps.

4. Basement Steps-

According to the building inspector the existing staircase can remain even though it is not code for rise and run as it currently stands. It will be considered a "grandfathered" feature. Inspect stringers and treads for stability and structure. Repair or add additional support where needed. Ensure that it is securely fastened to structure.

5. Floor 2 Bathroom Unit 2-

This room is being removed in its entirety. This room is not original to the building when it was built. Remove walls and floor to expose the open foyer below to convert space back to the original floor plan. Frame walls where necessary to eliminate doorway to removed bathroom. Install structural framing member to exposed floor joists to accommodate for dry wall installation on all open sides.

6. Floor 2 Living Room Unit 2-

This area of the 2nd floor will be converted to a Master Bedroom Suite.

- Frame and build walls for laundry closet that will be located in the new Master Bedroom Suite. Opening is to accommodate for a 60" bi-fold door to be centered. The depth of the closet should be 3 feet to accommodate for future appliance units. **Note: The beam from the first-floor wall below is off-set from the wall above. Utilize the floor beam below to determine the location of the new wall which will represent the back wall to the new laundry closet.**
- The scope calls for the existing doorway that used to give access to the 2nd floor porch to be eliminated. Frame and enclose the doorway and convert the opening to accommodate for a double-hung window. The window is to match in size to the other two that are beside it. This new window will become the 3rd of the series that is currently there. Provide the rough opening for the window that is being fabricated for this location.
- Demo and remove the existing closet. Leave the chimney that is located on the back wall of the closet. Frame the walls according to the new layout for floor 2. Create a bathroom and walk-in closet with exact measurements for depth and width to be determined on sight with the C.M. during the site evaluation. Refer to the new layout for floor 2 to get a reference as to the proposed size of rooms and their locations. Both openings are to be located on the same wall. Frame closet opening to accommodate for a 36" sliding door. Frame the bathroom opening to accommodate for a 32" pocket door. Pocket door frame is to be incorporated in to the wall design during rough carpentry. (This material will be supplied to you by the C.M.)
- Frame new entry door location for the master bedroom as depicted on new layout floor 2. The opening is to accommodate a 32" pre-hung, swing door.

7. Floor 2 Kitchen Unit 2/Kitchen Unit 3-

This area of the 2nd floor will be converted to a Family Room.

- Remove the East/West wall that currently divides the two kitchens.
- Remove the short North/South wall that currently contains the doorway to Kitchen Unit 2
- Remove the doorway located on the landing at the top of the staircase. Remove door, jam and associated components. Remove doorway framing members. This area at the top of the landing will become open on all sides. Frame to accommodate for drywall.

8. Floor 2 Living Room Unit 3-

- Build and frame a new doorway at location shown on the new layout for floor 2. Opening is to accommodate a pre-hung 32" door to swing into the room.
- Frame and close the existing opening to the closet located under the stairwell. Frame a new opening for closet access on the adjacent wall that faces the bedroom. This opening is to accommodate for a sliding barn door to be mounted on the outside wall that hangs freely.

9. Floor 2 Bedroom Unit 3-

Create new linen closet location by opening the hallway side of the closet wall that is currently giving closet space to Bedroom Unit 3. Frame and close the opening on the bedroom side to accommodate for dry wall. Frame the new opening to accommodate for a 30" pre-hung, swing door that opens to the hallway.

10. Floor 2 Rear Staircase-

Demo and remove the door, jam and all its components. There will no longer be a doorway at this location. Frame to accommodate for dry-wall.

Insulation:

- ❖ Any areas of exterior walls where framing has become exposed, use specifications according to 2019 International Energy Conservation Code. (R Value 19/21 for exterior wood framed walls) using batting with vapor barrier or sprayed insulation.
- ❖ The existing, exterior walls have 2 elements of insulation. The outside cavities have been filled with a blown insulation which was installed at some point after its build. The original layer of insulation is the fibrous, skim coating that is present under the top layer of lath and plaster that has been removed throughout most of the main level. This skim coating is to remain in place where it is still intact. Install foam boarding, with a thickness to accommodate the void so that the foam boarding sits flush with the face of the framing. To be installed in a way it will not interfere with the drywall installation.
- ❖ Basement - Spray foam voids at all rim joist locations if applicable.
- ❖ Attic door to unheated storage area is to be insulated according to current building code, using rigid foam board material.

- ❖ Install rafter vents (insulation baffles) to the eaves to provide adequate air movement and flow from the soffits. Pull back floor boards two feet from exterior top plate around the perimeter of the house. Tightly pack in batt insulation at top plate location and two feet into the attic floor space
- ❖ Seal all bypasses.
- ❖ Install additional blown-in cellulose insulation to the entire attic area, (unfinished space only) Goal to achieve an R-Value between 40 and 50.

Drywall Installation, Finishing and Texturing:

(Refer to the Existing and New Floor Plans)

***The vendor is responsible for drywall installation hung to walls and ceilings where framing is exposed and repair to existing plaster and drywall located throughout the house. This includes all phases of drywall finishing taping, mudding, sanding and texturing. The contractor will be expected to clean the work site to remove all dust created from sanding to the best of their ability.**

The drywall contractor must coordinate with the C.M. for scheduling to confirm that all inspections for rough-in installation have been completed.

Millwork- All window and door casings, as well as baseboards throughout the entire house have been removed, marked and stored away for re-installation.

Stocking- Large amounts of drywall cannot be staged in one area of the house. Loads should be evenly distributed throughout the house. Drywall may be stacked only against partitions that are perpendicular to the floor joist and will be laid flat when running with the joist.

Hanging-

- Walls will be 1/2" standard tapered edge gypsum on all interior walls and ceilings.
- Water resistant drywall to be used in bathrooms for all walls and ceilings.
- When
- Screws shall be used around the perimeter of each sheet (perimeter screws) and shall be 1 3/8" drywall screws. Screws shall be used in the field (field screwed) with 1 1/4" drywall screws, minimum of three (3) screws in the field (each stud), or more as required by code.
- All outside corners on drywalled areas shall be covered with non-corrosive corner bead and shall be nailed 8" on center with 1 3/8" drywall nails. NO CRIMPING ALLOWED.
- All openings will be cut tight to mechanical and electrical fixtures with a maximum tolerance of 1/4".
- Drywall shims shall be used where necessary. Drywall shall not be installed without proper backing. Drywall returns around windows and doors are to be shimmed as necessary to provide uniform margins.
- When filling areas within walls where existing plaster is still intact, ensure that the width of the filled in portions creates for a smooth transition between old and new.

Finishing-

- Tape and a minimum of (2) coats of mud shall be applied on all non-textured areas and tape and (1) coat on textured areas to achieve a smooth and professional finish. **No blade marks, seams, or other imperfections in the finish job will be acceptable if visible after texturing. Must not detect locations of seams after final sand.**
- All ceilings throughout are to have a knock-down final finish. Texturing will be applied as evenly in density as possible. The Subcontractor prior to the texturing of the walls will remove any over spray.
- All knockdown areas shall be de-burred or sanded as necessary to maintain a smooth finished surface.
- At the time of de-burring, walls at ceiling shall be struck to affect a straight, clean line.
- The Subcontractor will be responsible for a uniform final product.
- Texture, per project specifications, will be of an even application and free of excessive pinholes.
- Correct and repair all walls where existing plaster is present. Fill all, dents, cracks, holes, scrapes, nail pops and imperfections. Drywall seams should not be visible after final sanding.

Clean up:

- Removal of all drywall scraps from the job site is the Subcontractor's responsibility and to be done the day the hangers are finished to prevent delays for inspections. Also, Subcontractor must clean and scrape the day after texture.
- The Subcontractor shall scrape all drywall mud and/or texture from the floors and surfaces to the leave the house in a broom clean and dry condition the day after texture.
- All electrical boxes will be left free of debris such as mud, tape, etc.

Punch List Repairs and Patching:

- The Subcontractor will make any drywall repairs that are a result of poor drywall, finish or texture at his expense regardless of the quantity.

Interior Doors:

(Refer to New Floor Plan Sketches)

All interior door slabs and hinges will be provided to the contractor by Ramsey County.

The contractor will not be responsible for installation of door hardware other than hanging the door.

*Finish Carpenter is responsible for scheduling a walkthrough with the C.M. to identify all interior door swings prior to installation.

*All doors are to be hung level and meet functional and aesthetical requirements.

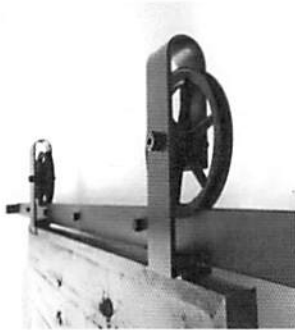
Main Level:

The main level doors will consist of original doors from the property or salvaged, age appropriate doors from an off-site location. Unless the existing door opening is being abandoned and removed, according to the new layout,

there will be no openings that are to be changed or altered on this level. Provided doors will be sized to fit the existing openings. All measure roughly 84" tall

*Repair or replace damaged or missing, existing door jambs throughout the main level. Use paint grade lumber (poplar) **If hinged locations do not match up with the supplied salvage door for that location, replace the door jamb accommodate for the newly hinged door slab.**

1. **Foyer:** This location will have new, salvaged french double doors. Hang door slabs accordingly.
2. **Front Entry:** This location will keep the existing double, oak pocket doors. Inspect rolling mechanisms to ensure that the door wheels operate correctly and smoothly along wooden tracks within the walls. **This must occur prior to the walls being closed up.**
3. **Living Room:** This location will keep the existing double, oak pocket doors. Inspect rolling mechanisms to ensure that the door wheels operate correctly and smoothly along wooden tracks within the walls. **This must occur prior to the walls being closed up.**
4. **Bedroom 1:** This location will have a new, salvaged wide oak pocket door. The door is to be hung on the outside header on the dining room side of the opening. The tracks and wheels will also be supplied to the contractor along with the door.



5. **Bedroom 1 (under stairs closet):** This location will have new, salvaged door to fit the existing opening.
6. **Bedroom 2 (closet 2):** This location will have new, salvaged door to fit the existing opening.
7. **Bathroom:** This location will have new, salvaged door to fit the existing opening.
8. **Basement:** This location will have new, salvaged door to fit the existing opening.

Second and Third Level:

The second level doors will consist of new pre-hung doors throughout. Newly constructed openings will be built to accommodate the supplied pre-hung units. Existing openings will be framed accordingly to accommodate the supplied pre-hung unit. Each existing opening, for height, will convert from an 84" rough opening to 82 ½" rough opening. The existing widths of each opening will remain the same. There are 2 existing openings on the second level that have transom windows. Those are to be abandoned and framed down to 82 ½".

All rough door openings that call for swing or pocket door mounting are to be Pre-Hung, Primed Mastercraft-3 Panel Solid Core Doors as shown below.



All rough door openings that call for sliding doors are to be



Hardware:

(All hardware for doors, windows and cabinetry throughout will be supplied by Ramsey County)

Hardware, both salvaged and new are to be installed to provide their expected functionality.

Windows: All windows will have age appropriate, oil rubbed bronze locks and pulls similar to the photos shown below.



Main Level Doors: Doors on this level will be equipped with salvaged, antique hardware which will include:

- Hinges
- Door Plates
- Door knobs
- Mortice Locks
- Pocket Door Pulls

Cabinet and Countertop Installation:

(See Kitchen and Bath Drawings and Layout)

*** Refer to the new floor plan sketches. The CM will provide the Contractor with new cabinetry plans showing exact sizes and layout. It will ultimately be the contractor's responsibility to double check the provided plans to make sure that the right sizes and dimensions are being ordered per the plan. It will be mandatory for the contractor to schedule an on-site meeting with the C.M. prior to any ordering of cabinetry or countertops.**

*** The County will provide all cabinetry and countertops for the kitchen and bathrooms. The Contractor will be responsible for any additional tools or materials necessary for assembly and installation.**

- Install new kitchen cabinets, bathroom vanities and countertops according to manufacturer's recommendations and the provided specifications.
- Ensure that all components operate smoothly and as intended.
- Ensure that all countertops are level and that there are no gaps between walls and the countertops.

Finish Carpentry / Millwork / Stair Systems:

All existing trim has been removed and stored on the third level for re-installation with the exception of any heavily worn, damaged or cracked pieces. The majority was salvageable.

Contractor will be responsible to pull nails and re-install salvaged trim to windows, doors and floors throughout as it was prior to demolition. Install to be flush and even. Any gaps must be less than a 1/4" so that it is caulkable prior to painting.

Window, Door, Floor Trim:

- Baseboard (3-piece unit: Main body, top-rail and quarter round)
- Casing
- Rosettes

To ensure that there is enough salvaged trim installed to high visibility areas, the following rooms will not have the existing salvaged trim installed:

- Bathrooms
- Master Bedroom Suite

These rooms will have new trim installed and supplied to the contractor by Ramsey County. The new trim will be a close replica to the existing salvaged trim. Installation method to imitate the other rooms of the house. (Paint grade poplar)

*Millwork in areas that consist of hardwood flooring is to be installed after the floors have been refinished.

Crown Molding:

This material is prefinished. Any caulking to the material should be done to be non-visible and match the color of the molding.

Install supplied crown molding to the entire main level.



Inside corners will be installed with crown blocks as shown here. They will be painted to match the finish color of the crown as close as possible. There will be no outside corner blocks. Outside corners are to be mitered accordingly.

Stair Systems:

Main Stairwell-

- Replace all existing stair treads with solid oak treads.
(Cut to fit all treads and prior to final install, painter to stain and poly. SEE PAINTING SECTION)
- Repair any damaged stair risers.
- Install salvaged stair railing and balusters to top portion of staircase as it originally would have been at time of build. (All of the original pieces should be on site and staged on the third floor. If there are pieces missing, notify the C.M. so they can be located at an off-site location and provided to the carpenter. Any newly added material is to match the existing as close as possible)
Ensure that railings and newel posts are solid and sturdy when installed.
- Repair any damaged millwork associated with the staircase system and oak wainscoting to the front entry area, including any missing decorative designs on newel posts)

Rear Stairwell- (To be carpeted, SEE FLOORING SECTION)

- Replace any damaged or cracked stair treads or risers with new composite material.

- Install grip able oak handrail using oil rubbed bronze hardware. (Handrails must return into the wall as per code requirements.)



Third Floor Stairwell-

- Replace any damaged or cracked stair treads or risers with new paint grade lumber.
- Install grip able oak handrail using oil rubbed bronze hardware. (Handrails must return into the wall as per code requirements.)

Flooring:

*** All flooring is to be installed with manufacturer's recommended underlayment.**

***At all areas where one style of flooring meets another, install the appropriate transition molding.** (Example: At bathroom entry points. If the flooring outside of the bathroom is hardwood, use a matching hardwood transition molding or reducer)

❖ **Carpet:** Color and Style TBD

Wall to wall carpeting installed over ½" medium density rebound pad with a minimum of seams. Carpet and pad must meet the Carpet and Rug Institute's Green Label certification and FHA requirements for moderate and heavy traffic. Stretch carpet and tack all edges. Carpet seems must be sewn or glued to provide a well bonded joint.

Locations that are to be carpeted:

- Rear Stairwell- To start at the bottom riser.
- 2nd Level Rear Hallway- Including Linen Closet
- 2nd Level Bedroom 3- Including closet
- 2nd Level Bedroom 4- Including closet
- 2nd Level Master Bedroom
- 2nd Level Family Room

❖ **Hardwood Refinishing:** Color and Style TBD

Repair any areas that are rotted or missing. Schedule a walk through with the C.M. to determine areas that will require replacement of hardwood. New material is to match the existing in width and wood species. When installed, ensure smooth and undetectable transitions from new to old. Fill any voids or gaps. Sand down (machine sand) to raw wood surface and even out any waves from warping. County to inspect before moving forward after sanding. Apply stain to sanded floors. Coloring of stain to be approved by county before

application. Varnish with 3 coats of water based polyurethane sealer, sanding between coats. To be satin finish.

Locations that are to be refinished:

- Main Level Front Entry
- Main Level Living Room
- Main Level Dining Room
- Main Level Bedroom #1
- Main Level Kitchen
- Third Level Den

❖ **Tile: Color and Style TBD**

-Install ¼" **Durock** or equivalent cement substrate to subflooring prior to installation in areas calling for floor tile.

-Install ½" **Durock** or equivalent cement substrate to framing members. Then apply a sheet membrane such as **Schluter Kerdi** or approved equivalent to the cement board with thinset to create a tight, dry shower unit.

County to select tile material and designs. Tile to be installed evenly, flush and smooth to walls and floors.

Install per manufacturers recommendations.

Floor tile- allow for 1/8" grout lines (unsanded grout)

Wall tile- allow for 1/16" grout lines (unsanded grout)

Locations that are to be tiled:

- Main Level Front Foyer Floor
- Main Level Rear Entry Landing Floor
- Main Level Bath Floor
- Main Level Bath Shower Surround Walls
- 2nd Level Bath 2 Floor
- 2nd Level Bath 2 Shower Surround Walls
- 2nd Level Master Bath Floor
- Laundry Closet Floor

Areas to be painted (SEE PAINTING SECTION)

Basement Steps

Basement Floor Slab

Third Floor Attic Steps

Painting:

* All paint selections are available through Sherwin Williams unless otherwise stated. Paints should be Low VOC whenever possible.

** All painting requires two coats and the finish to be smooth and even.

Painting-

- ❖ **Exterior Doors:** Interior should be painted the same as the exterior side (See Exterior Painting Section).
- ❖ **Interior Doors and Closet Doors:** Prime and paint with (semi-gloss sheen) Dover White (SW 6385).
- ❖ **Ceilings:** Prime and paint with (flat sheen) Ceiling Bright White (SW 7007).
- ❖ **Window/Door Casings:** Prime and paint with (semi-gloss sheen) Dover White (SW 6385).
- ❖ **Baseboard:** Prime and paint with (semi-gloss sheen) Dover White (SW 6385).
- ❖ **Walls:** Prime and paint with (eggshell sheen) Color TBD.

Staining-

- ❖ **Main Level Staircase:**
 - **Handrail, Newel Post, Balusters and oak Wainscoting:** Surface repair and refinish without sanding down existing coat. Use a gel stain to entire area. Apply Polyurethane with (semi-gloss sheen) to all areas giving all a fresh coat Tint/Coloring TBD.
 - **New Oak Stair Treads to Front Stairwell:** Stain all treads to match the other stair components/millwork. Apply 3 coats of polyurethane to each tread, sanding between coats. Ensure a smooth and even finish.
***SEE FINISHED CARPENTRY/MILLWORK SECTION**
Carpenter will fit and cut stair treads prior to staining and poly application. Once third coat of poly has cured, carpenter will install the stair treads to their locations.
- ❖ **Main Level Fireplace:** Surface repair and refinish without sanding down existing coat. Use a gel stain to entire area. Apply Polyurethane with (semi-gloss sheen) to all areas giving all a fresh coat Tint/Coloring TBD.
- ❖ **Main Level Interior Doors:** Surface repair and refinish without sanding down existing coat. Use a gel stain to entire area. Apply Polyurethane with (semi-gloss sheen) to all areas giving all a fresh coat Tint/Coloring TB

Attic:

(See Insulation Section)

- Perform general clean-up, (cobwebs, dirt and other misc. debris)
- Repair missing, broken or loose floor boards to unfinished area. Ensure that there are no gaps between floor boards.

Basement:

(See Insulation Section and Painting Section)

Demolition:

- Remove and dispose of all contents
- Abandoned and existing mechanical units and components-pipes, wires, conduits, ducts, etc.
- All framing, walls and sheet-rocking, paneling, (building materials) that are not load bearing.

Concrete:

- Repair any areas of broken, cracked and heaved flooring prior to painting. Pour new where recommended. Must have a continuous level flooring with no exposed dirt.
- Repair and tuck point walls where there may be voids or cracks in the block as well as those around windows. Ensure no water penetration.

Mold Remediation:

- Treat and eliminate mold from all surfaces such as floors and walls.
- Completely dry out basement and eliminate all sources of moisture and water leakage from the exterior.
- Sweep entire ceiling area clean of all dirt, cobwebs and dust.

Electrical:

(See New Floor Plans and Kitchen/Bathroom Layout)

In addition to this scope of work, Plumbing Contractor shall correct all items listed in the Electrical Section of the Code Compliance Report as well as provide for all other repairs listed in this scope of work. All necessary permits as required by the City of St. Paul, must be pulled at the beginning of the project and all must be approved and closed by the inspector, to consider the project completed.

Warranty: The entire plumbing system shall meet the requirements of the MN State Building Code, and the City of St. Paul Building Inspections Department.

Electrical Contractor is responsible to design, provide and install a brand new 200 AMP electrical system from meter and beyond to accommodate the new floor plans as provided. The system must provide for a safe, adequate supply of electrical current. The system must be adequately sized, properly grounded, free of hazards and all components properly mounted and secure. The design must allow for future expansion.

Lighting fixtures and all light bulbs for the entire scope of work will be purchased and provided by Ramsey County. The C.M. will deliver and stage the fixtures at the worksite for the electricians to install. Coordinate for delivery by scheduling with the C.M. when ready.

Demo and Disconnects:

- Remove, disconnect and recycle the entire existing electrical system and all associated components throughout the structure, on all levels. This includes all boxes, wire, straps, devices, light fixtures, cables, panels, and conduit both on the interior and exterior of the house.
- The existing overhead power, supply lines from the pole to the house are to be abandoned and removed. When the structure has been approved for temporary power by the electrical inspector, it will be the contractor's responsibility to coordinate with the utility company and the C.M. for this request. A "Fast App" application must be submitted to Xcel Energy, Builder's Division for the new power supply lines to be running underground, from the alley to the house. C.M. will provide new service and account information to Xcel Energy when service can be restored.
- **Main Panel:** Install one (1) new 200-amp service panel to be located in the basement, mounted on the east wall. Coordinate with the utility company for best placement for receiving underground power lines. Each circuit should be clearly labeled to identify the locations that they supply. Blank spots should have blank labels.
- **Circuit Load Distribution:** All circuit wiring shall be properly sized to serve the load. Dedicated circuits shall serve no other outlets.
 - **Kitchen and bathrooms-** No less than 20-amp circuit shall be present for each bathroom and the kitchen.
 - **Dedicated circuits are required for the following units:**
 - Refrigerator
 - Range (220w)
 - Washing Machine
 - Clothes Dryer (220w)
 - Water Heater
 - Garbage Disposal
 - Furnace
 - Microwave Oven/Range Hood Exhaust
 - Dishwasher
- **Receptacle locations in Bathrooms:**
 - **Bathrooms with 1 vanity or sink-** There shall be 1 double GFCI device with 4 plug options, installed on the closest wall located at the side of the vanity/sink.
 - **Bathrooms with 2 vanities/sinks-** There shall be 1 single GFCI device placed at each vanity or sink within a usable distance from each.
 - Ceiling Exhaust/Light combination fixture is to be operated off from one switch so that the fan stays running while the light is activated.
- **Devices:** All devices to be white, with white cover plates. Assure the proper number of devices are installed to each room according to city building code. One on each wall where feasible. Electrical load calculations should be done on each circuit.

- **Grounding and System Protection:** Ground the following elements according to the requirements of THE National Electrical Code (NEC)
 - Service Entrance
 - Metal Water Pipe
 - Equipment and wiring
- **Wire Splices:** All wire splices shall be placed in accessible, approved junction boxes, which are properly covered.
- **Telephone:** Run new wire to accommodate phone jack in the kitchen, living room, family room and all bedrooms.
- **Cable T.V.:** Run new wire to accommodate for cable T.V. jacks in the living room, kitchen, family room and all bedrooms.
- **Smoke and Carbon Detectors:** Follow city building requirements. Check with inspector. Gutted areas with exposed framing require new hard wired, interconnected units to be installed. Assure that the new design includes the appropriate devices in all rooms as indicated in city building code.
- **Exterior outlets:** Install two (3) new GFCI exterior outlets; one located with access from the front porch, one from the east porch and one from the rear porch. Devices should be protected within a covered box.

New Wiring for lighting fixture locations for each room within the house.

The Scope below refers to a location within the house according to the New Floor Plans (see sketch).

*The contractor must schedule an appointment with the C.M. for a walkthrough of the structure to identify the location of fixtures, switches and devices. Confirm that the list below is correct and reflects any changes that were made, if any. This appointment should be scheduled once rough carpentry has been completed and the framing represents the new floor plan as shown in the floor plan sketches at the back of this manual.

The new electrical wiring system should accommodate for the below instructions regarding: **fixture type, quantity and location** within each room or area within the house.

*Note: All fixtures will be provided by C.M. (Coordinate for delivery.)

1st Floor

ROOM / AREA	TYPE	QUANTITY	LOCATION
Foyer	Semi Flush mount	1	Centered in room, installed on the ceiling
Front Entry	Wall sconce	2	One at the bottom of stairwell on exterior wall One at the top of the stairwell of the shared wall with bedroom
Main Stairwell	Chandelier	1	Hang from ceiling centered in the area where the stairwell makes a 90 degree turn. Operated off from switch at top and bottom of stairwell
Living Room	Ceiling Fan/Light	1	Centered in room installed on the ceiling
	Ceiling track	1	Centered on the width of the brick fireplace installed on the ceiling, 3 feet from brick.
Dining Room	Chandelier	1	Centered in room, installed on the ceiling
Bedroom 1	Ceiling Fan/Light	1	Centered in room, installed on the ceiling
Closet Bedroom 1a	Flush Mount	1	Centered in area, installed on the ceiling
Closet Bedroom 1b	Flush mount	1	Centered in area, installed on the ceiling
Kitchen	Recessed can light 4"	6	To be determined on-site w/ C.M.
	Pendants	2	Centered over the island, installed on the ceiling
	Flush mount	1	Centered over north wall window, installed in built-in cabinetry unit
Bath 1	Exhaust Fan/Light	1	Centered in room, installed on the ceiling
	Vanity	1	Centered above sink and mirror installed on the wall
Rear Entry	Semi Flush mount	1	Centered in area, installed on the ceiling

Rear Stairwell to 2nd	Wall sconce	2	North exterior wall at bottom landing and east exterior wall at top landing. Operated off from switch at top and bottom of stairwell
-----------------------	-------------	---	---

2nd Floor and Finished Attic Space

ROOM / AREA	TYPE	QUANTITY	LOCATION
Master Bedroom	Ceiling Fan/Light	1	Centered in east area, installed on the ceiling
	Semi Flush	1	Centered in west area, installed on the ceiling.
	Semi Flush	1	Centered in hallway as you enter the room. Installed on the ceiling
Walk-in-closet	Track	1	Centered in room, installed on the ceiling
Master Bath	Exhaust Fan/Light	1	Centered in room, installed on the ceiling
	Vanity	1	Centered above vanity, leaving room for wall hung mirror of 30" in height. Installed on the wall.
Laundry Closet	Track	1	Centered in area, installed on the ceiling
Family Room	Recessed Can lights 4"	6	Spaced evenly throughout the ceiling of the room, with the ceiling fan at center. Operated from a dimmer switch.
	Ceiling Fan/Light	1	Centered in room, installed on the ceiling
Bedroom 3	Ceiling Fan/Light	1	Centered in room, installed on the ceiling
Closet Bedroom 3	Flush Mount	1	Centered in area, installed on the ceiling
	Vanity	2	Centered above each vanity sink, leaving room for wall hung mirror of 30" in height. Installed on the wall.

Bath 2	Exhaust Fan/Light	1	Centered in room, installed on the ceiling
Rear Hall	Semi-Flush	1	Centered in area, installed on the ceiling
Bedroom 4	Semi-Flush	1	Centered in room, installed on the ceiling
Closet Bedroom 4	Flush Mount	1	Centered in room, installed on the ceiling
Attic Stairwell	Wall sconce	2	Located on the left interior wall at the top of the landing. Operated off from switch at top and bottom of stairwell
Attic Finished Space	Flush Mount	1	Centered in room, installed on the ceiling

Basement and Basement Stairwell Fixtures:

- Wire to accommodate 6 interconnected pull-chain porcelain utility lights all to be operated off one switch at top of basement stair location. Space fixtures evenly to distribute light to all areas of the unfinished space.
- Wire to accommodate a wall sconce located on the right interior wall where the stairs make a 90-degree turn

Attic Space (unfinished) Fixtures:

- Install 6 interconnected pull-chain porcelain utility lights to be accessed at switch located on the left wall of attic space after stepping inside the room. (All operate off 1 switch) Space fixtures evenly to distribute light to all areas of the unfinished space

Exterior Fixtures:

- Wire to accommodate 9 recessed 4" can lights to be installed on the front wrap around porch. They are to be spread scattered within the tongue and groove ceiling. 6 to be located on the front porch ceiling and 3 on the east side porch ceiling

Plumbing:

(See New Floor Plans and Kitchen/Bathroom Layout)

**Refer to Exterior Site Work for scope pertaining to the excavation and replacement of underground lead water line. Plumber is responsible to orchestrate the removal and abatement procedures in accordance with the Saint Paul Water Department.

In addition to this scope of work, Plumbing Contractor shall correct all items listed in the Plumbing section of the Code Compliance Report as well as provide for all other repairs listed in this scope of work. All necessary permits as required by the City of St. Paul, must be pulled at the beginning of the project and all must be approved and closed by the inspector, to consider the project completed.

Warranty: The entire plumbing system shall meet the requirements of the MN State Building Code, and the City of St. Paul Building Inspections Department.

Plumbing Contractor is responsible to design, provide and install a brand-new plumbing system from meter and beyond to accommodate the new floor plan as provided

- **Demolition:** Remove and dispose of existing plumbing system throughout the house including all abandoned piping, its components and associated hardware. Demo everything to the main stack clean out. This includes any plumbing systems located on the third floor.
- **Water Meter:** raise and relocate housing for new water meter. Must be removed from below ground and new housing to be at least 12" from basement floor.
- **Water Supply Pipes:** All supply lines are to be done with PEX. Ensure cut-off valves and back-flow preventers at laundry tub, exterior hose bibs and additionally per code; shut-off valves at laundry tub, kitchen sink, toilet, bathtub and shower. Exposed piping and valves behind toilet are to be chrome-plated. All supply lines are to be within heated space and properly insulated against freezing. Do not notch any structural framing members without prior review and approval by C.M.
- **Floor Drain:** Install new floor drain to be flush with basement slab. Coordinate with concrete contractor for any plumbing work located under basement slab.
- **Sewer Clean-out Service:** raise and relocate sewer clean-out. Sewer line to be cleaned out (augured) from floor drain to street. Do this at the beginning of the project – NOT at your final, in case the floor needs to be broken up to repair or replace the sewer line. Assure proper hook-up and operation to floor drain. Provide documentation of work.
- **DWV:** Reuse (if possible) existing main stack at basement floor clean out. Replace everything above that point. Install all new drains and drain assemblies to all fixtures. Vent to code.

- **Water Heater:** Replace with new gas fired, direct vent through sidewall, 40 Gallon Richmond or approved equal. Include installation and all utility hook-ups.
- **Hose Bibs:** Install 2 new anti-siphon frost proof type with back flow preventer; one to be located at the rear of house and one to be located at the East side of the house.

Laundry (New Laundry Location on floor 2)-

-Abandon and remove laundry location in basement.

-Design plumbing system to accommodate supply lines with shut-off valves and drain system located in wall for future washer at location according to floor plan.

-Install an emergency water pan at floor with drain system.

Bathroom Fixtures:

Bathrooms #1 and #3-

- ❖ Provide and install new; White Kohler or Pro-Flow 1.3 GPF toilet.
- ❖ Provide and install new Moen Lav faucet – (oil-rubbed bronze) Series Chateau, Model #4621 set to 2.0 GPM max flow.
- ❖ Provide and install new Moen Tub/Shower faucet – (oil-rubbed bronze) Series Chateau, set to 2.0 GPM max flow.
- ❖ Install provided cultured marble vanity tops to bathroom vanities.
- ❖ Provide and install new bathtub. Cast iron or Americast to fit space indicated in layout and design. Install new drains and vents to code.

Bathroom #2 (Master Bath)

- ❖ Provide and install new; White Kohler or Pro-Flow 1.3 GPF toilet.
- ❖ Provide and install new Moen Lav faucet – (oil-rubbed bronze) Series Chateau, Model #4621 set to 2.0 GPM max flow.
- ❖ Provide and install new Moen Shower faucet – (oil-rubbed bronze) Series Chateau, set to 2.0 GPM max flow.
- ❖ Install provided cultured marble vanity tops to bathroom vanities.
- ❖ Provide and install new tile ready shower base with center drain to space indicated in layout and design. Install new drains and vents to code.

*New bathtubs are to be protected once installed from construction debris and standing. Rosin paper or cardboard should be taped in place. If they are damaged during construction, it is the Contractor's responsibility to make an acceptable repair or replace fixture

Kitchen Fixtures:

- ❖ Provide and install stainless steel, two compartments, 22x33 inch Moen sink. Install new drain and vent to code.
- ❖ Provide and install Moen Faucet, (Oil rubbed bronze)

*Install gas supply line and shut-off valve for future range. Locate as close to the baseboard as possible.

HVAC:

(See New Floor Plans for Floor 1 and 2)

In addition to this scope of work, HVAC Contractor shall correct all items listed in the HVAC section of the Code Compliance Report as well as provide for all other repairs listed in this scope of work. All necessary permits as required by the City of St. Paul, must be pulled at the beginning of the project and all must be approved and closed by the inspector, to consider the project completed.

Warranty: The entire HVAC system shall meet the requirements of the MN State Building Code, and the City of St. Paul Building Inspections Department.

HVAC Contractor is responsible to design, provide and install a brand new forced-air HVAC system to accommodate the new floor plan which will ensure adequate heating to all habitable rooms. It will be the contractor's responsibility to provide a Heat-Loss Calculation that passes the current code adopted by the City of St. Paul Department of Safety and Inspections.

- **Existing Heating System:** The HVAC contractor is responsible for the disconnect and removal of the entire existing steam heat boiler system, piping and all other associated components. Ramsey County is donating the cast iron radiators. Remove and transport all existing radiators off-site for either recycling or reuse purposes.
- **Natural Gas Meter:** It is necessary for the C.M. and HVAC company to arrange to get the gas meter installed once the inspector has approved the work. There will only be one gas meter since this is a single-family dwelling. Coordinate where needed with the CM for all XCEL Energy account information.
- **Forced Air Furnace:** Design, provide for and install an entire new high efficiency, side wall vented, forced air heating system. New system to be a Goodman (or approved equal) gas furnace minimum 92+, sealed combustion unit. The new system is to be located in the basement at a location that will provide for the easiest install and space to vent to the exterior. Coordinate location with Plumbing Contractor and water heater design. The new unit is to be placed on a 2" concrete pad. Install three ducts and vent to heat basement. Design duct system that will accommodate new floor plans. Design to have the least amount

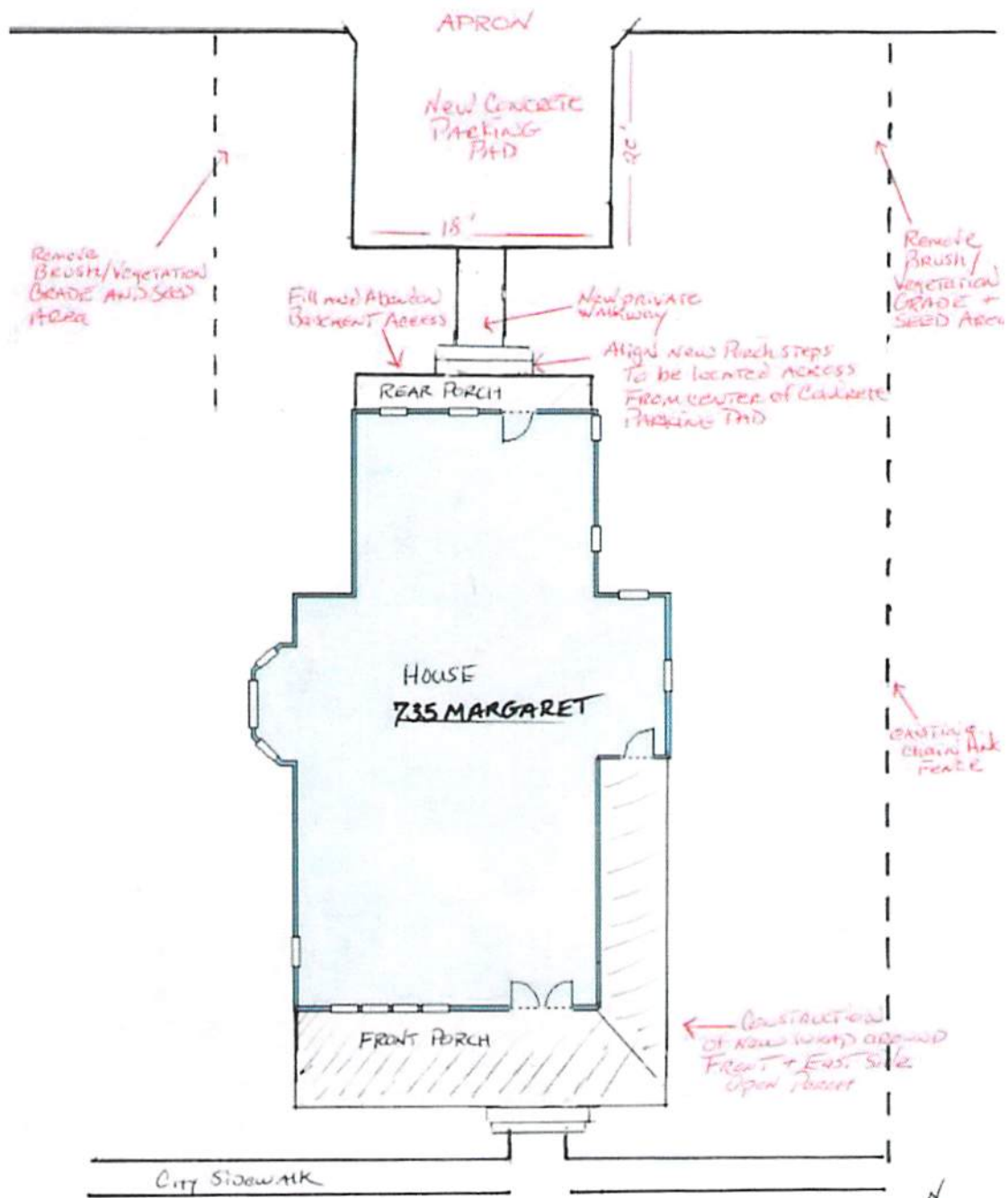
of run to each room where possible. Coordinate design with the rough carpentry contractor to efficiently utilize space.

- **Gas Lines:** Remove existing gas lines. Design and install new gas lines from meter to house. Use Gastite Tubing instead of copper. Ground as required. Verify integrity of all new gas pipe lines. Carefully check all connections and shut-off valves.
- **Kitchen Ventilation:** Install provided stainless steel exhaust fan/light combo to be located above future range with venting to the exterior.
- **Bathrooms:** Install provided **Broan XB ULTRA GREEN 110 CFM** ceiling bathroom exhaust fan with Humidity Sensing, Energy Star Rated, in each bathroom properly vented to the exterior per manufacturer's recommendations.
- **Main Level Fireplace:** Inspect chimney. Conduct chimney sweep to ensure that the chimney is clean and fully functional. The fireplace is to be converted from wood burning to be natural gas functioning. Provide and install gas supply line to chimney location. The new unit is to be vent-free gas logs with a blower system. Log specs to be ceramic fiber logs. Consult with C.M. for approval of the proposed unit and its design before purchase or installation.

Contractors are to provide both gas and electric hook-ups for future range.

SKETCHES

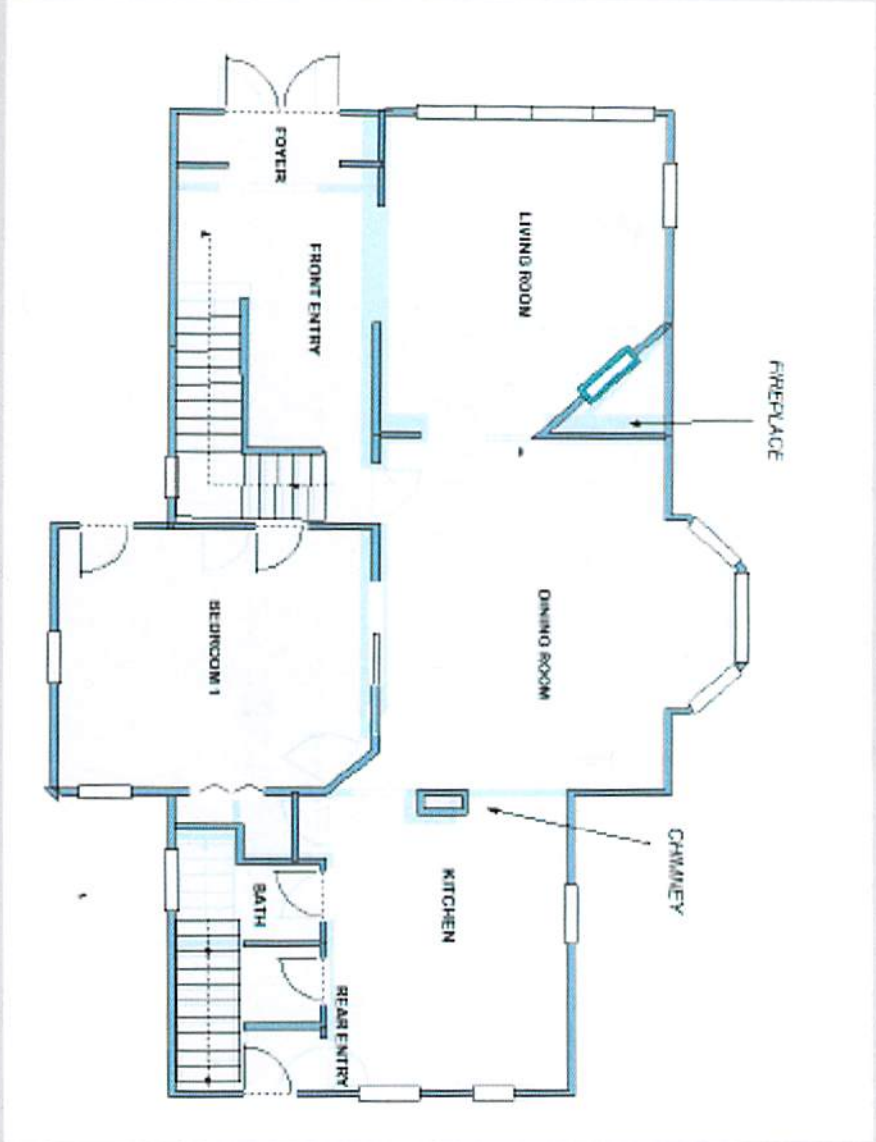
FLOORPLANS



EXTERIOR SITE SKETCH

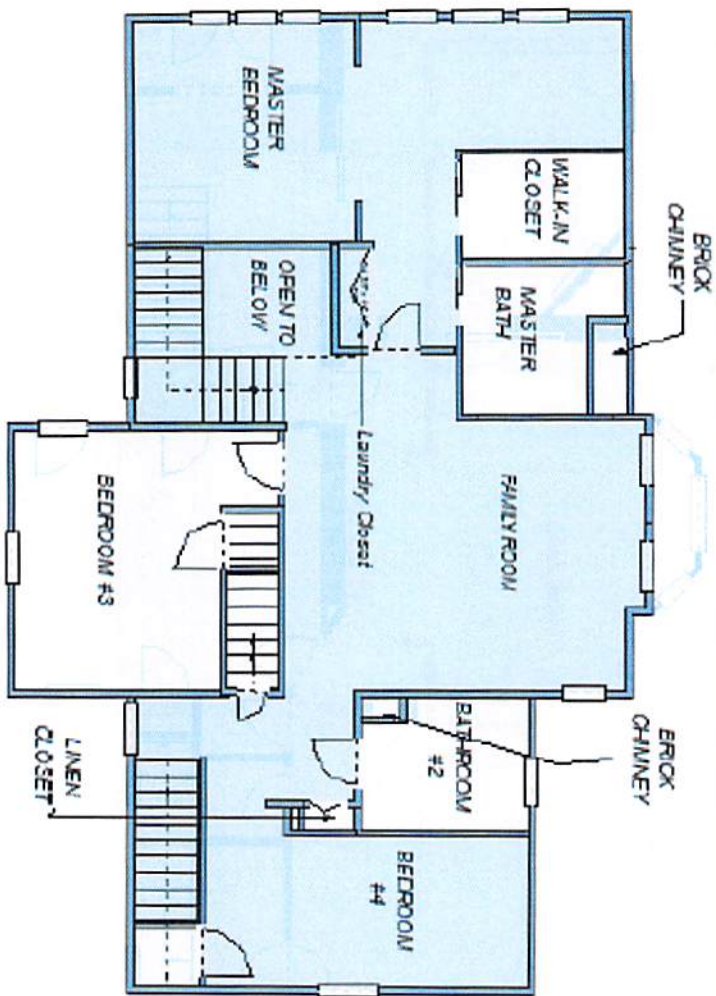
FRONT STREET VIEW
SKETCH



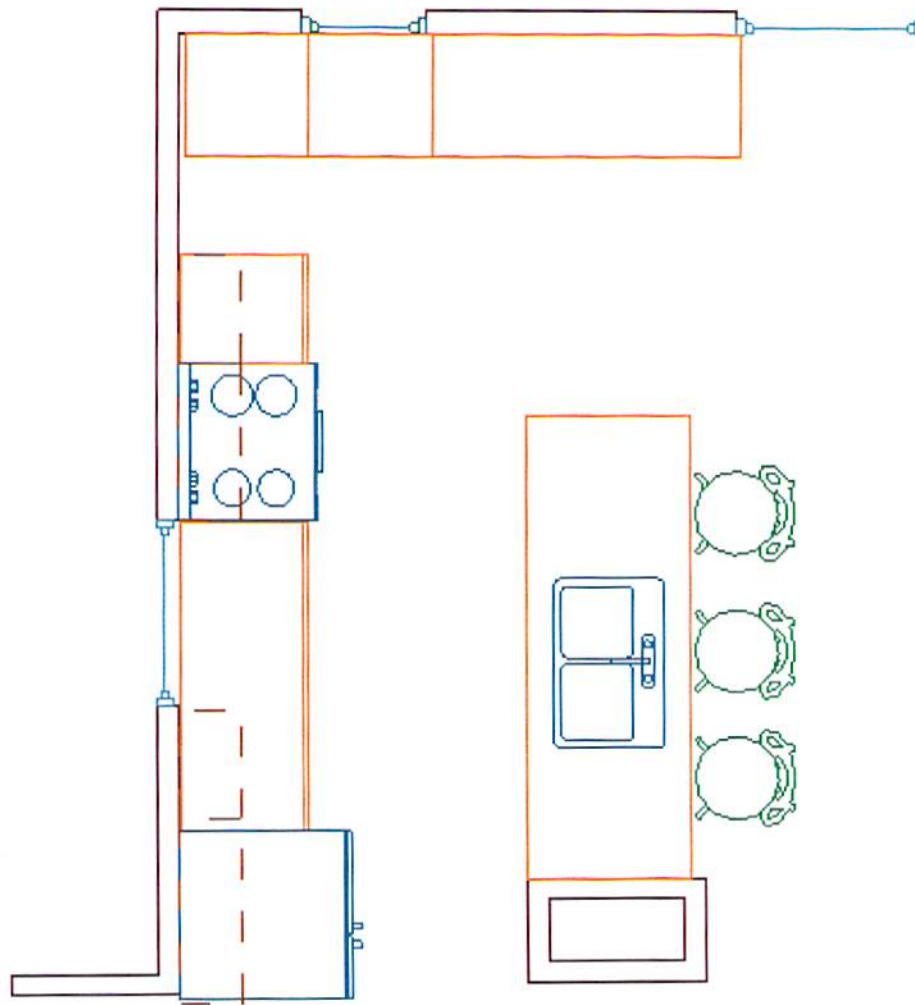


FLOOR 1 - NEW LAYOUT

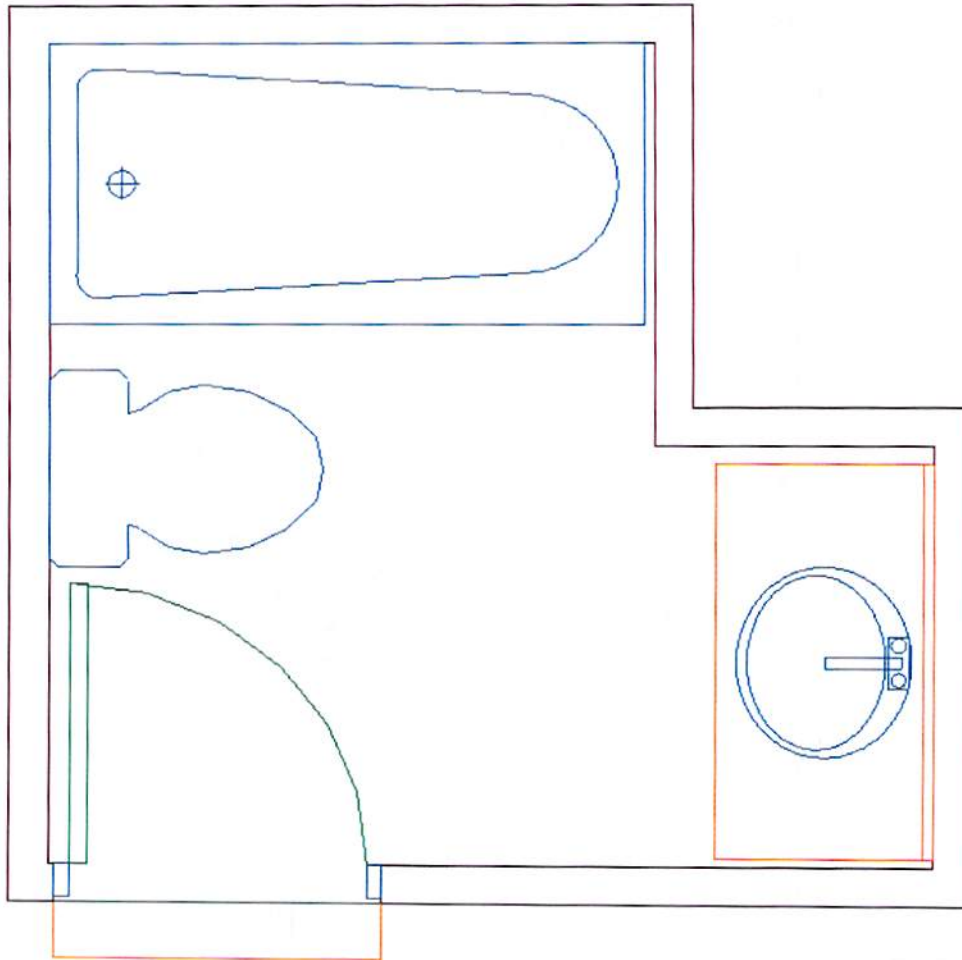
FLOOR 2 - NEW LAYOUT



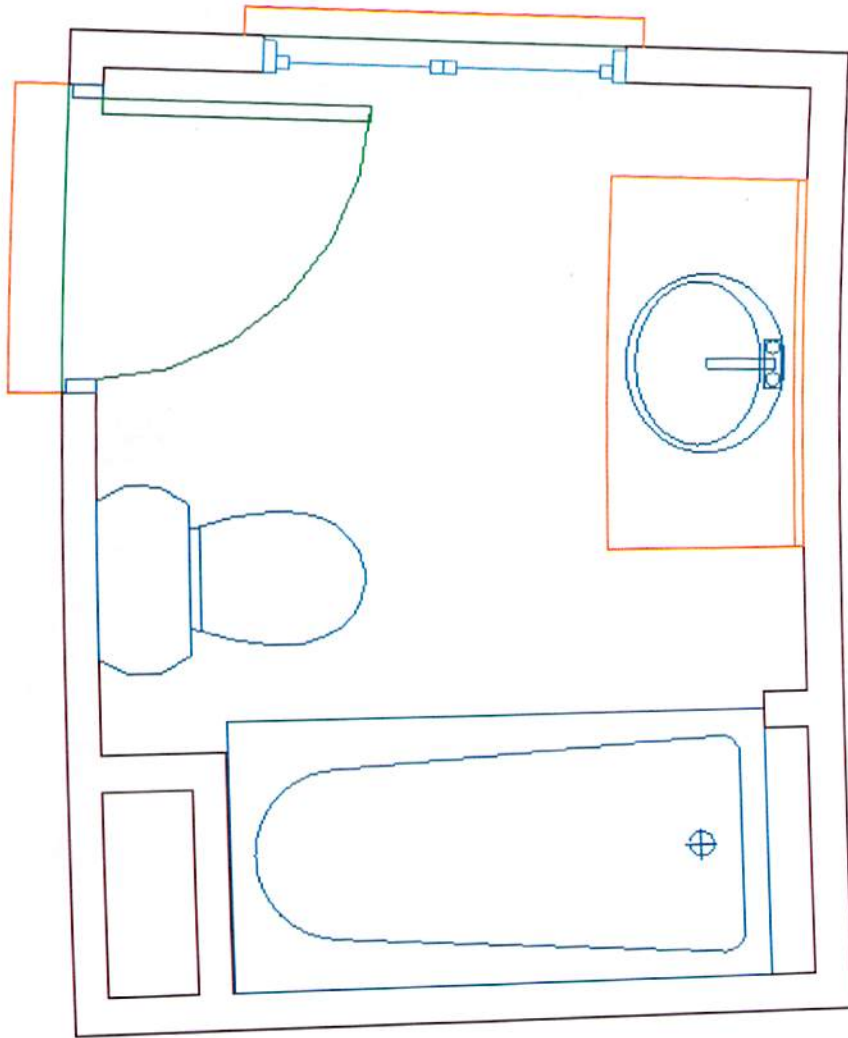
NEW KITCHEN LAYOUT



Main Floor Bathroom – New Layout and Design



Bath 2 Second Level – New Layout



Master Bathroom and Closet Layout

