

## **SPECIFICATIONS FOR 2023 SINGLE FAMILY INFILL PROJECTS**

1. GENERAL
  - A. Work will conform to applicable local, state, and national codes applicable at time of contract.
  - B. Work will be done to standards of the industry as recognized by the National Association of Home Builders as published in the Residential Construction Performance Guidelines.
  - C. Building Permits, Street Opening Permit, Kenosha Water Utility Permits and Fees
    1. Includes allowance for fees charged by governmental bodies before granting a zoning, building, or related permits.
    2. CONTRACTOR will act as agent for CITY to prepare and submit documents necessary for all Building Permits, Street Opening Permit (Kenosha Public Works Dept.) and Kenosha Water Utility Permits & Fees
  - D. Duplication of construction documents as needed by CONTRACTOR.
  - E. CITY to provide at City's cost, survey of proposed home on lot for permits and including:
    1. Provide up to date survey map of lot only.
    2. Stake out principle corners of home and garage on lot and construction off set stakes.
    3. Confirm locations and elevations of foundation and garage slab after construction and prepare new survey map showing lot with actual home and garage slab locations.
  - F. Utility usage
    1. The cost of natural gas, water, sewer, electrical, or telephone services, if any, shall be paid for by the CITY.
- II. SITE WORK
  - A. Lot Clearing
    1. Any site work in preparation for grading and excavating such as cutting and removal of trees and brush or removal of vegetation, debris, fences, or unwanted buildings to be completed by the CONTRACTOR .
  - B. Erosion Control
    1. Includes fence, straw bales, or other measures undertaken to control erosion on site.
    2. These measures are required and dictated by the City.
  - C. Construction Drive
    1. Includes placing gravel for temporary driveway during construction.
  - D. Curb Cut
    1. Includes cutting and removal of street curb for driveway or other openings required.

- E. Concrete Driveway and Driveway Approach (Per CITY Approved Drainage Plan as indicated on the Plat of Survey)
    - 1. Driveway: to be 4" thick, 6-bag Portland cement, Low Chert concrete with fiber mesh placed over a compacted 4" gravel base.
    - 2. Control joints to be tooled or sawn minimum 20 foot on center, 1 inch in depth.
    - 3. Surface to be broom-finished.
    - 4. Drive Apron: to be 6" thick, 6-bag Portland cement, Low Chert concrete with fiber mesh placed over 4" compacted gravel base
    - 5. Concrete color is natural (uncolored) with round, tooled edges.
    - 6. Driveway Approach requires a City Public Works Dept. Permit
  
  - F. Service Sidewalks
    - 1. Includes concrete sidewalks installed per Survey Drawing.
    - 2. Minimum 4" thick, 6-bag Portland cement concrete with fiber mesh, 42" wide with tooled construction joint every 48" to 60".
    - 3. Surface to be broom-finished.
    - 4. Concrete color is natural (uncolored) with round, tooled edges.
  
  - G. Public Sidewalk
    - 1. Includes removal and replacement of all front and side (for corner lots) public sidewalks per City of Kenosha sidewalk requirements (City Sidewalk requires a Sidewalk Permit from City Public Works Dept.)
  
  - H. Fill Material
    - 1. Includes the purchase and trucking of soil, gravel, or other fill to or from the site.
  
  - I. Rough Grade
    - 1. Includes shaping the contours of the lot to make suitable for finish grade less 3" to 4" to allow for final landscaping.
- III. UTILITIES
- A. Water Service
    - 1. Includes installation of 1" diameter coiled copper water pipe from water main in the street to "curb stop" in parkway and then to inside of basement. Work to include all City of Kenosha and Water Utility permits and fees, including Street Opening Permit from City of Kenosha Public Works Dept.  
Water line in basement to be installed within 8" of foundation wall per the plans.
    - 2. Provide a minimum of 12" No. 1 Washed Stone backfill around all laterals. Installation and Backfill of all Sewer and Water Laterals shall be performed in strict conformance to applicable State and Local Codes.
    - 3. Trench will be backfilled at time of construction.
    - 4. Soil slumping after occupancy is responsibility of CITY.
    - 5. New water service shut off box in parkway to be properly marked and protected to prevent damage from trucks/machinery.
  
  - Sewer Service
    - 1. Includes installation of 6" diameter PVC sewer pipe per Wisconsin Plumbing Code from main sewer line in street to inside home. Water test

required for new sewer lateral. Work to include all City of Kenosha and Kenosha Water Utility permits and fees., including a City of Kenosha Street Opening Permit from the City's Public Works Department.

2. Verify locations and depths of sanitary sewer with the Kenosha Water Utility.
3. Provide a minimum of 12" No. 1 Washed Stone backfill around all laterals. Installation and Backfill of all Sewer and Water Laterals shall be performed in strict conformance to applicable State and Local Codes.
4. Trench will be backfilled at time of construction.

C. Storm Water Connection (Sump Pump Drain Line Connection to Main Storm Sewer)

1. Includes installation of 4" diameter PVC sewer pipe per Wisconsin Plumbing Code from Storm Sewer main in street to to the sump pump drain line.
2. Trench will be back filled at time of construction
3. Soil slumping after occupancy is responsibility of CITY.
4. Storm Water connections for sump pumps will be required for this project. Plumbing contractor to apply for necessary storm sewer connection permit.
5. verify locations and depths of storm sewer with City Public Works Department, Engineering Division.

D. Gas Service

1. CONTRACTOR to apply for service at start of construction with the assistance of City.
2. Charges by local gas service company for installation of service connection to be paid by CITY.

E. Electric Service

1. CONTRACTOR to apply for electrical service at start of construction with the assistance of CITY.
2. Charges by local electric companies for service connection to be paid by CITY.

F. Temporary Heat (Not In Contract)

1. Use of temporary L.P. gas tanks and temporary burners during construction to prevent damage to foundation or to provide heat during construction to be arranged by the CONTRACTOR after approved by the CITY. CITY to cover costs of temporary heat.

IV. EXCAVATION

A. Site and Soil Conditions

1. Any unknown objects, buried utilities, old foundations/floors, voids or unsuitable soil conditions found below grade that must be filled or removed shall be reported to the CITY by the CONTRACTOR.
2. CONTRACTOR shall provide CITY with an estimate cost to remove extra objects/material and a change order must be prepared and approved before proceeding with any additional work.
3. In the event that poor soil conditions are discovered on the site, the CONTRACTOR shall work with the CITY to obtain a soil engineering plan

and cost estimate to provide the engineering, materials, labor and supervision to prepare the site to a buildable condition.

B. Excavation and Backfill

1. Includes digging all footings/foundation to design depths per drawings.
2. Backfilling footings and basement floor area with No. 1 Fractured Limestone
3. Backfilling foundation with clean on-site materials against foundation (no concrete, bricks or other rubble to be used as backfill material).
2. Contractor shall furnish and install all Sewer, Water and Sump Pump Discharge Laterals at depths required
3. Backfill areas below slabs, stoops, sidewalks and interior of foundation walls with No. 1 Fractured Limestone as detailed on plans.
4. All exterior backfilling including planted or lawn areas shall be with clean excavated materials and graded to within 4" of final finish grade as indicated on the Plat of Survey/Drainage Plan approved by the City Engineering Div. and submitted with the Building Permit Application. No bricks, concrete, or other rubble to be used as backfill material. Fine grading and planting to be furnished by the City's Landscape Contractor.
5. All footings shall repose on undisturbed soil having a minimum bearing capacity of 3,000 P.S. F.
6. Disturbed area around home will be shaped to slope away from home.
7. Detached garage is slab on grade (See Section V-G).

C. Final Grade

1. Includes machine grading with tractor equipment to shape portion of lot disturbed by construction to allow water to flow away from home. Contractor's final grading to be 4" below the final finish grade as indicated on the Plat of Survey/Drainage Plan approved by the City Engineering Div.
2. Final grading is usually done later in the construction schedule to fill settling around foundation and utilities.
3. Grade is to be approximately 28" below top of foundation to allow for black dirt and planting.
4. Fine landscape grading by the CONTRACTOR.

D. Trucking

1. Includes movement of soil to or from the site, as required.

V. FOOTINGS AND FOUNDATIONS

A. Concrete Walls and Footings

1. Concrete to be 5-bag, 3,000 psi Portland cement mix.
2. Footings shall be formed and placed on undisturbed soil.
3. All footings, pads, and walls shall be installed per drawings.
4. Full basement walls to be reinforced with one #5 rebar at top of wall and two in footing and one at each bottom corner of window set at a 45 degree angle.
5. Provide beam pockets for steel "I" beam(s) or wood laminated beam(s) per plans.

6. All footing and wall forms to be thoroughly oiled prior to placement of footing and wall reinforcement. Oiling forms after reinforcement shall be prohibited.
  7. All reinforcement shall be suspended from Form Support Ties. Hooking of reinforcement shall be prohibited.
  8. All Concrete shall be vibrated during placement to prevent the occurrence of Honey Comb Voids. All pours shall be continuous. Cold Joints in Footings and Walls shall be prohibited. Place all Key ways for footings as detailed on plans.
  9. Concrete walls are not a finished living surface and will contain minor surface irregularities.
  10. Anchor bolts are installed at the top of walls for attachment of sill plate.
  11. Steel wall ties will be removed prior to occupancy.
  12. Footings are 8" x 16". Walls are 8" x 8'.
  13. Upper 24" of exposed foundation walls are to be brick patterned per plans.
- B. Pier Pads
1. Concrete footings under basement columns per plans.
- C. Porch Piers/Masonry Work
1. Isolated concrete footings installed from 2" to 3" above final finished grade to below the frost line for point loads at decks.
  2. Front porch piers to be modular size, tumbled style, concrete brick approved by the CITY and as noted on plans. Brick color per exterior finish schedule.
  3. Masonry Contractor shall furnish all labor and materials necessary and required to complete the Masonry Work indicated and detailed on plans.
  4. All masonry to be installed in a professional workmanlike manner with all joints tooled and cleaned.
  5. All concrete brick pier cores to be filled with concrete block and mortar.
- D. Drain Tile
1. **Provide and install a "Certain Teed" or equivalent Form-A-Drain tile system (2 ¼" X 8"), installed per manufacturer's instructions.**
  2. Stone to be installed around the inside and outside of Form-A-Drain system with 12" of stone on the outside.
  3. Interior and exterior of footing to be connected with "bleeders" every 8' on center.
- E. Basement Windows
1. Basement windows to be 4 over 4, 8" x8" glass block to be supplied and installed by the foundation subcontractor. Provide a vented glass block window in at least one (1) location.
  2. Size is approximately 32" wide x 16" tall. Refer to plans for number and locations.
- F. Perimeter Insulation
1. Install R-10 foam board insulation from below anticipated grade down to four feet installed over wall ties on exterior of home.

G. Concrete Slabs

1. Basement slab to be 6-bag, 4,000 psi Portland cement mix, 4 inches thick on plastic vapor barrier on four inches of compacted stone base. Finish to be Smooth Mirror Like finish.
2. Garage slab to be formed with 12" deep x 8" wide thickened edge around entire perimeter and minimum 4" compacted stone base.
3. Garage Slab to be sloped 3 1/2" to allow for drainage. Form and pour a sloped curb to achieve a level surface for the wall sill plate installation (curb slope to 3 1/2" high at front of garage slab sloping to 0" high at rear of garage slab).
4. Front of garage slab to be at elevation per the approved survey.
5. Anchor bolts to be placed in edge of slab per code.
6. Garage slab to be 6-bag mix, Low Chert concrete with fiber mesh, 4" thick with a 12" deep x 8" concrete thickened edge for entire perimeter of slab per plans on 4" compacted stone base.
7. Concrete slab finish to be Smooth.
8. Control joints to be cut in every 10 feet.
9. Garage slab size per drawing and site survey. **(NOTE: Garage slab location and elevation to be recertified by surveyor at completion of concrete form set-up, prior to pouring slab.)** USE LOW CHERT CONCRETE.

VI. ROUGH FRAME

- A. 1. Pressure treated 2" x 6" wood plates to be attached to top of foundation walls by drilling for previously installed anchor bolts. All sill plates to have a continuous closed cell foam sill sealer or equal. All gaps must be filled with "OSI Quad Pro Series" caulk to insure a tight fit at full perimeter of building, as needed.
- B. Floors
2. To be or TJI joists or Dimensional Lumber in accordance with the architectural plans. Sizing as specified on floor framing plans.
- C. Floor Sheathing
1. To be 3/4" OSB, glued with OSI PL400 adhesive and screwed @ 6" o.c. at panel edge joists and 12" o.c. at intermediate support joists.
- D. Exterior House Walls
1. To be 2" x 4" studs 24" o.c. **OR** 2" x 6" studs (in accordance with the individual house plans).  
Exterior walls to include 2" x 2" nail backer at all window framing (as needed) to accommodate installation of the 3 1/2" vinyl J-Channel Lineal to be installed for all exterior door and window openings.  
Walls to be braced at corners with OSB or plywood corners (per Wisconsin Building Code) and covered with 1/2" **"Dow-Super Tuff R-Board" Polyisocyanurate foam board with poly/aluminum facing or approved equal.** Foam board to be installed with a continuous bead of construction adhesive at each sheet's full perimeter to be applied prior to securing to the studs.

2. **Exterior wall sheathing to be 1" thick, R-7, "Dow-Super Tuff R Board" Polyisocyanurate foam board with poly/aluminum facing or approved equal.** Sheathing to be nailed to face of studs PLUS a continuous bead of construction adhesive at each sheet's full perimeter to be applied prior to securing to the studs. Nails to be 1 3/4", corrosion resistant, ring shank nails with a 1" diameter plastic cap. Secure the 4' x 8' boards 12" o.c. around the perimeter and 16" o.c. in the field or as required by Wisconsin Building Code.
  3. Exterior face of sheathing to have all joints continuously taped with **"Venture Tape" #15855CW-2 Polypropylene Sheathing Tape** or approved equivalent (**Not "Tyvek" Tape**). All holes or cracks in the "R" Board are to be repaired and taped with the approved sheathing tape.
  4. "Tyvek" or other approved house wrap to be used only at gabled areas with OSB and/or plywood sheathing and all other areas with wood sheathing. Care to be taken to insure House Wrap is "shingled" lapped over the foam board sheathing and taped with "Tyvek" tape.
  5. Wall heights will be per architectural drawings.
  6. General contractor to coordinate and insure that all draft stopping and/or caulking at exterior thermal boundaries is properly installed by the framing contractor and/or insulation contractor to eliminate exterior air infiltration. It will be the responsibility of the general contractor to correct any discrepancies found during site inspections of framing, air sealing and insulation.
- E. Garage and Gable Walls
1. Exterior garage walls to be 2" x 4" walls, 16" o.c. with 7/16" OSB sheathing. Exterior walls now need to be covered with "Tyvek" or approved equivalent house wrap.
  2. Gable walls above ceiling height to be trusses with 7/16" OSB sheathing.
  3. Garage size per architectural drawings.
  4. Any exposed vinyl siding nails on the inside walls are to be trimmed off to be flush with wall sheathing.
- F. Interior Walls
1. To be 2" x 4" studs, 16" o.c. except 2" x 6" studs, 16" o.c. walls where noted.
- G. Interior Door Headers
1. To be single 2" x 12" at bearing walls or double 2" x 4" if not.
- H. Exterior Door and Window Headers
1. Exterior door and window headers to be Superior Wood Systems SWII pre-engineered insulated headers or equivalent insulated header material.
- I. Stairs
1. Glued, screwed and constructed of five (5) 2" x 12" SPF stringers with

1/2" OSB risers and 2" x 12" SPF stair treads (unfinished).

J. Roof

1. To be engineered trusses, 16" o.c. or joists 16" o.c. (except 24" o.c., where noted on plans) with 1/2" OSB roof sheathing and 2" x 6" rough fascia per drawings. BOSB roof sheathing panels to be installed per Structural Board Association recommendations with a minimum 1/8" gap on all butting edges, and edge clips applied. Minimum fastening schedule is 8d nails spaced 6" o.c. at supported edges and 12" intermediate. Roof pitches are per drawings at house and 7/12 at garage - exact dimensions to be determined by drawings and architect. Roof to be cut open at ridge to receive ridge vent per manufacturer's specifications.

K. Basement Beam

1. To be steel "I" beam(s) or wood laminated beam(s) per the architectural plans.
2. Structural Steel Contractor shall furnish all labor, materials and crane necessary and required to complete the Structural Steel Work as indicated and detailed on the architectural plans.
3. Structural Steel Work shall include furnishing and erection of all Steel Beams and Columns indicated and detailed on plans.
4. Materials: Structural Steel Beams, Angles, Setting Plates, Cap Plates and Base Plates: A.S.T.M. A-36.
5. Connection Bolts: A.S.T.M. a-235 High Strength Bolts, Nuts and Washers.
6. Welds: E70 Electrodes (W.T.S.0.0.1 Method). Grind all welds smooth.
7. All Structural Steel shall receive two (2) coats Red Shop Primer.

VII. WINDOWS

- A. To be "Alliance- Windgate", "Windsor- Next Dimension Pro", Single Hung Windows, or approved equivalent solid vinyl double pane, Low-E glass, argon gas with integral wood extension jambs and welded corners. Window performance: NFRC rating certification to have a U-Value of 0.30 or lower, SHGC rating of 0.33 or better and a R-Value Rating of 3.45 or better, and Energy Star® certification.
- B. Glass to be insulated glass with Low-E coating and argon gas with a lifetime limited warranty, transferable 10-year minimum warranty to subsequent owners against seal failure or other manufacturing defects.
- C. Window muntins for front elevation windows to be included per elevations. Muntins to be grills in airspace.
- D. Top and Side Window Flanges to be taped with "**DuPont**" "**FlexWrap tape or approved equivalent**", per "DuPont" Window Flashings Systems Installation Guidelines.  
**BOTTOM WINDOW FLANGES NOT TO BE TAPED.**
- E. All windows to be cased in 3 1/2" Vinyl J-Channel (Color per exterior finish schedule). CONTRACTOR to supply extra 3-1/2" vinyl J-channel trim to case all exterior doors.
- F. Operable windows to include full snap-in screens.
- G. Window operation shall be single hung, casement or fixed units per plan.
- H. Window exterior color to be per Exterior Color Schedule.
- I. All window hardware to be standard.



J. **WINDOWS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.**

VIII. EXTERIOR DOORS

- A. To be insulated steel, raised panel doors of width noted on drawings, by 6'8" tall with pre-hung wood jamb with extension and bored for door handle and deadbolt. Manufactured by Western Building Products, or approved equivalent doors.
- B. Threshold to be metal with adjustable oak strip.
- C. Door and jamb to be factory primed.
- D. Three standard hinges per door machined for doorknob and deadbolt with antique brass hinges. Top hinges to be set with long screws to penetrate into rough door framing.
- E. Strike plates for dead bolt locks and garage service doors to be set with long screws at least 1/2" long to secure into the 2"x4" rough door framing.
- E. Door styles per door schedule.
- F. Storm doors to be **Mid-View for front door and High-View for rear door**, self-storing storm and screen. Manufactured by "Pella" or "Larson Life- Core" with styles per door schedules. Color per exterior finish schedule. **All storm doors to be installed with safety chains.**
- G. All exterior doors to be cased in 3 1/2" Vinyl J-Channel.

IX. GARAGE DOOR

- A. Door to be steel, raised-panel door. Overhead, "Crest Series", "Clopay" or "Amaar Weathergard"
- B. Bottom weather-strip is "U" shaped.
- C. Standard weather-strip is applied at top and sides of door.
- D. Door size indicated on drawings.
- E. Door shall be uninsulated.
- F. Door includes 10-year limited warranty from manufacturer.
- G. Garage door opener to be 1/2 h.p., chain drive with single button controller mounted to garage wall and two remote control units.
- H. Garage door color to be white.

X. ROOFING

- A. To be "Owens Corning – Oakridge," IKO – Cambridge LT" or approved equivalent 30-year manufacturers warranty, dimensional shingles, or approved equal shingles installed over 15-lb felt paper per manufacturer's instructions. Color per Exterior finish schedule.
- B. Valleys to be layered with 90-lb. felt or roll roofing with shingles lapped over valley on one side and cut to valley on other side.
- C. Roofing to be installed over pre-finished metal gutter apron at eaves and pre-finished metal drip edge or cedar drip edge at gable rakes.
- D. Standard aluminum step flashing to be installed at roof to side wall intersections. Standard "L" flashing to be installed at other roof intersections.
- E. Roofing and metal trim color per drawings.
- F. Install ridge vent system per manufacturer's specifications.

XI. SIDING & TRIM

- A. Vinyl siding to be "Mastic – Carvedwood 44 (Premium Colors), or approved equivalent Double 4" Vinyl; 0.044" thickness or greater horizontal panels and trim pieces of color and shape per drawings and installed per manufacturer's

instructions. Trim pieces to include 3 1/2" face corner boards. Color per Exterior finish schedule to be provided by the City.

- B. Vinyl Shingle siding to be "Foundry Shingles" or equivalent Perfection Style PVC Vinyl Shake Shingles, double 7" cedar texture vinyl horizontal panels and trim pieces of color and shape per drawings and installed per manufacturer's instructions. Color per Exterior finish schedule.
- C. All Windows and Doors to be trimmed "Mastic – 3 1/2" Vinyl Lineal or approved equal 3-1/2" Vinyl "J"-Channel and accessory trim. Color per Exterior Finish Schedule.

## XII. SOFFIT AND FASCIA

- A. To be vented aluminum, "Alcoa" Aluma-Guard, "Rollex" or equivalent 0.019 gauge soffit. Every third panel to be vented type panel.
- B. Sub-fascia to be 2"x 6" SPF covered with "Alcoa Performance Metals", "Rollex" or equal 6" pre-formed 0.024 gauge aluminum fascia panels. Rakes to receive Aluminum Drip edge and eaves to receive Aluminum Gutter Apron.
- C. Color per Exterior finish schedules to be provided by CITY.

## XIII. SIDING ACCESSORIES

- A. Light blocks and decorative louvers are vinyl per house exterior color scheme.

## XIV. WOOD DECK (Unfinished)

- A. 4" x 4" treated pine posts on concrete piers poured from frost line to 2" to 3" above final finish grade.
- B. 2" x 8" treated joists 16" o.c. with hangers applied on both ends.
- C. 5/4" x 6" pressure treated, round-edge decking screwed to joists with galvanized deck screws.  
Deck boards to be installed in a "picture frame" style with 5/4" x 6" deck boards around the perimeter of the deck using mitered corners. This system will require an additional joist on either end of the deck to receive the "picture framed" perimeter deck boards.
- D. "TuffBilt" paint ready or prefinished vinyl plastic lattice under porch edge per drawings. Color per Exterior finish schedule.
- E. Stair risers to be 1"x 8", Pressure Treated Pine
- F. Lattice frame also to be 1"x 4" Western Red Cedar, primed and painted per exterior color scheme.

## XV. POSTS, STAIR / HAND RAILS, STARIS , PORCH SKIRTING (LATTICE)

- A. Front porch posts are to be "Turncraft" or equal columns (Field cut as required) **OR** site built and cedar wrapped per architectural drawings.
- B. Porch and deck stairs to be constructed per plans and Wisconsin Building Code. Stair treads to be 5/4" x 6" pressure treated, round edge decking screwed to the stringers. Stairs to have the stringers spaced at a maximum of 24" apart.
- C. Stair stringers and handrail posts to sit on 4" poured concrete sidewalk. Handrail posts to be lag bolted to the inside of the stringer with min. of two bolts.
- D. Construct front porch handrail systems with pre-primed Western Red Cedar upper and lower rails, handrails and balusters, with 4" x 4" pressure treated posts per drawings.  
Stair rail material may be pressure treated to meet Building Code requirements.  
Balusters to be toenailed with corrosion resistant nails into top and bottom rails.

No face nailing or screwing of balusters allowed.

Font porch posts, rails and balusters and stair risers to be primed and painted.  
Rear porch decks to be constructed with pressure treated posts, rails and balusters. Rear deck rails and balusters to be left unpainted. FOR REAR DECK, PRIME AND PAINT RIM JOIST, STAIR RISERS AND CEDAR LATTICE FRAMING PER EXTERIOR COLOR SCHEME.

- E. Porch/deck skirting to be vinyl plastic paint-ready or pre-finished lattice per drawings.
- F. Western Red Cedar, lattice frame to be 1" x 4" Western Red Cedar, primed and painted.
- G. Install 3/4" Western Red Cedar toe kicks (primed and painted) under both front and rear entry doors.

XVI. GUTTERS, DOWNSPOUTS AND RUNOFF EXTENSIONS

- A. Pre-finished .032 aluminum, 5-inch standard "OGEE" shaped gutters.
- B. Downspouts are 2" x 3" or 3" x 4" if required with min. of 3' runoff extensions.
- C. Color per Exterior finish schedules, to match soffits and fascias.

XVII. AIR SEALING AND INSULATION (***ALL HOMES WILL BE CONSISTENT WITH ENERGY STAR PROGRAM STANDARDS***):

- A. Exterior 2" X 4" walls to have R-13 Unfaced fiberglass batts installed to manufacturer's recommendations with 4 mil vapor retarder.
- B. Install R-50 Blown-in Fiberglass insulation at flat ceilings below attic. All other insulation to be installed per architectural plans.
- C. Install air channels between joists or trusses at eaves to insure attic ventilation is provided. As much insulation depth as possible to be maintained over the top plates of exterior walls to insure a continuous thermal barrier between ceiling and wall is provided.
- D. Interior Basement Wall Insulation to be installed full wall height on interior of foundation.  
Interior basement wall insulation to be R-6.5, 1", "Thermax" with White Finish or equal wall insulation panels glued to the interior concrete basement walls and taped at the seams with "Thermax" white tape. (Wall insulation to be installed approx 6" above basement floor.)
- E. R-15 spray-in foam is to be provided at all exterior rim and band joist locations. Care should be taken to insure insulation is in direct contact with surface of band/rim joist and maintains manufacturer's recommended thickness.
- F. R-19 encapsulated fiberglass insulation to be installed in floor joists, where noted on plans.
- G. Energy air sealing is to be provided by insulation contractor prior to installation of any insulation. The "sealing" will include Low Expanding, closed cell foam at all exterior doors and windows; foaming or caulking of all mechanical penetrations in thermal boundaries and between floors and framing. The contractor is responsible to insure that all penetrations, gaps and seams in the thermal boundaries are permanently sealed prior to installation of any insulation. Attic area framing is also to be air sealed with foam sealant.
- H. Caulk all penetrations through the foundation or rim joist for electrical service, sump pump drain, gas piping, cable TV and phone line. Use OSI Quad Pro Series Caulk.
- I. It will be the responsibility of the contractor to correct any discrepancies found during visual inspections that are deemed to be included within his original scope

of work.

XVIII. DRYWALL

- A. To be 5/8" drywall at trussed ceilings, 1/2" drywall at 16" o.c. framed ceilings, and 1/2" drywall at all interior walls and inside basement stairwell.
- B. Finished with three coats of mud and sanded smooth.
- C. Drywall in home will not have visible surface irregularities when viewed from a distance of six feet under normal, ambient light.
- D. All Drywall to receive "sand" texture.

XIX. INTERIOR DOORS

- A. Doors to be "JeldWen" Pre-primed, Hardboard Molded, Solid Core Panel Doors (Smooth Skin) Door style to be "Colonist", Smooth Panel, or equal pre-hung, solid core, 6 Panel doors with paint-grade jambs and three standard hinges with antique brass, satin nickle or aged bronze finish to match lock sets.
- B. Doors are 1-3/8" thick by 6'-8" tall. Widths per plan and door schedule.
- C. Doors to be spray painted with a semi gloss-finish latex paint or satin finish oil/alkyd paint. (See painting section)
- D. All interior doors to have long screws installed for each top hinge to secure the door to the rough door framing.

XX. DOOR HARDWARE

- A. "Residential" series by "Schlage" (Accent, Sacramento or Latitude style levers) or equal. Finish to be antique brass, satin nickle or aged bronze.
- B. Exterior steel doors have locking hardware keyed alike. Patio door locks are by window supplier.
- C. Interior door hardware is not keyed, with "privacy" locks only at bedrooms and baths.
- D. Lock style for exterior doors is Accent, Sacramento or Latitude levers.
- E. Lock style for interior doors is Accent, Sacramento or Latitude levers.
- F. Cabinet type knobs to be installed at double closet doors.
- G. Round recessed pulls to be installed for sliding closet doors.

XXI. INTERIOR TRIM

- A. 1 1/16" X 3 1/4" Finger Jointed Pine, Pre-primed, Colonial profile casing at all doorways, swing doors, closet doors and windows as shown on drawings.
- B. MDF, 9/16" X 5-1/2" solid painted baseboard on walls at floor with milled top profile as shown on drawings or attached trim detail pages.
- C. Painted MDF or paint-grade shoe molding at "hard" floors at base.
- D. Maple Veneer stairway skirtboards/closed stretcher for main stairway (primed and painted) and 1" x 10" pine skirtboard for basement stairway (to be primed and painted).
- E. Stair walls and railings to be open where shown on drawings.  
Railing design, including newel posts, balusters and rails per detail in the architectural drawings.  
Newell Posts are "Coffman" #C-4075, Beech. Balusters are "Coffman/Western" #W-500, Maple.  
Handrails are "Coffman/Western", Beech: Top Rails are C-6010 P w/C-6050 plow; Bottom Rails are C-6045 P w/C6050 plow, Beech, including Handrail Fillet and Rosettes at wall as needed.

F. Wood jamb extensions are included with windows.

XXII. SHELVING

- A. White-wrapped particle board shelving on unfinished 1/2" x 3" pine cleat with wood closet poles.
- B. Closets will be single shelf and pole unless indicated otherwise on floor plans. Closets may have sloping ceilings. Verify ceiling height on sections to determine number of shelves space allows.
- C. Use same shelves in bathrooms where noted on plans.
- D. Exposed shelving in bedrooms to be 1"x12" paint-grade or MDF with painted cove molding ledgers per architectural drawings.

XXIII. FINISH CARPENTRY

- A. Install all interior doors and exterior storm doors, interior and exterior door hardware, wood trim, shelving, standard cabinetry, countertops and cabinet pulls/knobs.
- B. Include cost of providing and installing door and drawer pulls for all kitchen and bath cabinets.

XXIV. CABINETS (Allowance)

- A. Design, measure, furnish, and deliver kitchen, bath, or other standard, pre-finished cabinets with trim and accessories. (Cabinet door and drawer knobs to be supplied and installed by the CONTRACTOR).
- B. See Finish Carpentry Section for installation.
- C. **Type and style of all cabinetry to be "HomeCrest Cabinetry", in Natural Maple, or "Merillat Classic" in Natural Maple or approved equivalent cabinetry. HomeCrest cabinets to be Bexley, Dover or Sedona. Merillat cabinets to be Portrait, Tolani or Glenrock. Wall cabinets to be 30" or 42" high per the architectural plans.**
- D. NOTE: Cabinet selections and layout must be made in a timely manner early in the project.

XXV. COUNTERTOPS

- A. Furnish and install all laminate countertops (standard finish) for kitchen and any built in desks per the architectural plans.
- B. Laminate tops to be post-formed plastic laminate for all counter tops, except cultured marble in bathrooms.
- C. Furnish and install white-on-white cultured marble tops to be furnished and installed for all bath vanities/sinks.

XXVI. MIRROR/BATH ACCESSORIES

- A. Mirrors
  - 1. Provide and install 1/4" plate glass mirrors to be installed with clips 36" tall over back of vanities.
  - 2. Width is slightly smaller than vanities.
- B. Bath Accessories
  - 1. Towel bars and paper holders to be supplied and installed by the Contractor.

XXVII. APPLIANCES (\$800 Allowance)

- A. General Contractor to furnish the following dishwasher and kitchen fan with installation by the Electrical, HVAC and Plumbing Subcontractors:
  - 1. "Amana" dishwasher, model # ADB1400AW (Energy Star® approved) or equal (Color to be White).
  - 2. "Amana" Model #AMV2307PFW (White), 1.6 Cu. Ft. Over-The-Range microwave oven light/fan combination, or approved equal in white, vented to the exterior for kitchen.

#### XVIII. FLOORING

- A. Provide and install vinyl flooring and carpeting as specified below and according to all manufacturer's specifications per drawings.
- B. Vinyl sheet flooring installed in kitchen and bathrooms.
  - 1. Brand to be "Congoleum ArmorCore Pro" with "ArmorGuard" vinyl or equivalent.
  - 2. Installation to include "Multi-Ply" or "Pre-Floor" brand 1/4" underpayment, installed to manufacturers recommendations.
  - 3. 10-year warranty.
  - 4. Maximum installed price allowance not to exceed: \$5.35 per square foot.
- C. Vinyl Plank flooring to be installed in Living Room, 1<sup>st</sup> floor hallway, front entryway and dining room
  - 1. Brand to be "
    - 1. 25-year warranty.
    - 2. Maximum installed price allowance not to exceed: \$10.00 per square foot.
- C. Carpeting to be installed in bedrooms 26 oz. per yd. Berber, Textured or Frieze by "Phenix" "Mohawk", or "Shaw".
  - 1. Carpet Pad to be 6 lb., 1/2" REBOND padding or equal, installed to manufacturer's specifications.
  - 2. Warranties: 10-year quality assurance; 5-year stain/soil; and 5-year texture retention.
  - 3. Maximum installed price allowance not to exceed: \$6.00 per square foot.
- D. Transition strips between vinyl and carpet to be square nosed end cap transition strips used for laminate flooring installations in maple or birch wood tone.
- E. Carpet basement stairs with 26 oz. per yd. Berber by "Mohawk", or "Shaw", using "waterfall" or contour installation.
  - 1. Carpet pad to be 6 lb., 1/2" REBOND pad.
  - 2. Color to be coordinated with first floor carpet.
  - 3. Maximum installed price allowance not to exceed: \$5.00 per square foot plus labor charge on steps.
- F. All flooring to be installed where indicated on plans and in accordance with manufacturer's instructions.

#### XXIX. EXTERIOR PAINTING

- A. Paint steel entry doors and jambs with two coats of latex enamel paint (spray or roll only).
- B. Front Porch: prime and finish paint wood porch posts, handrails, balusters, trim boards and step risers (and lattice where painted) with two coats of latex, flat exterior paint.

Rear Porch: Prime and paint rim joist, stair risers, cedar lattice framing only.  
Handrails, balusters and stair treads to be left unpainted.

- C. Paint garage door frame with two coats of latex flat paint.
- D. Deck and stair treads are unfinished. Stair risers to be painted exterior trim color.
- E. See Exterior finish schedule for paint colors. **As general rule**; balusters and porch column(s) to be **light color**; all exterior handrails, 4 x 4 posts, doors, step risers, wood trim, lattice, porch skirtboard to be the **darker color**.
- F. Exterior paint to be "Sherwin Williams Super Paint, A-100" or equivalent exterior latex primer and finish paint.

### XXX. INTERIOR PAINTING

- A. Spray latex primer with sand texture for the entire house.  
Spray finish coat on all walls and ceilings with Benjamin Moore #73 (Navajo White Latex) over primer. One color throughout house includes touch-ups prior to move in.
- B. Trim to be latex prime painted and finish painted with semi-gloss enamel finish, Sherwin Williams, Extra White Base with 2/32 black tint.
- C. Interior doors to be latex prime painted and finish painted by **spray painting or rolling** with semi-gloss finish, Sherwin Williams, Extra White Base with 2/32 black tint. (No brush painting of doors allowed).
- D. Interior side of entry doors to be painted with semi-gloss latex enamel in same color as interior trim. Entry doors to spray painted or rolled, no brush painting of doors.
- E. Fill and sand nail holes for all trim. Nail holes for natural finish handrail systems to be filled with a putty matching the wood species.
- F. Garage and basement are unfinished.
- G. Interior paint to be "Sherwin Williams Pro Mar 400 Series" or equivalent latex primer and finish paint.

### XXI. PLUMBING

- A. Plumbing Contractor shall furnish all labor, material and fixtures necessary and required to complete the Plumbing Work as indicated and detailed on the drawings as specified herein.  
All fixtures and equipment to be supplied as specified or substituted with an approved equivalent product. All substitutions must be approved by the City of Kenosha.
- B. Work Included: All sewer and water piping, gas piping to HVAC, range and clothes dryer, all water closets, lavatories, sinks, floor drains, hose bibs, shock arrestors, valves, sleeves, sump pump, sanitary sump pump if needed for basement floor drains and laundry waste, water heater, system design, engineering and all necessary plumbing permits.
- C. Waste and Vent Piping: Schedule 40 P.V.C. . Sized per Wisconsin Plumbing Code.
- D. Water Supply Piping: CPVC water piping per the Wisconsin Plumbing Code.
- E. Shock Arrestors: per Wisconsin Plumbing Code.
- F. 1.6 gallon, flush toilet; Kohler Highline Curve (white) or American Standard Edgemere or Champion Chair Height (white) with stop/supply #OCR19-C.
- G. Fiberglass, full surround tub and shower modules; Aker CM-60 (white).
- H. Chrome, single lever faucets; Moen Chateau Chrome #L4635 at sinks with pop-up assembly, stop/supply OCR19X-C.
- I. Chateau Chrome Posi-temp L2353EP bath faucet and Gerber #41-818 brass tub

- waste.
- J. One 50-gallon water heater; "A.O. Smith", ProLine XE Power Vent 50 gallon, Model #GPVT-50.
  - K. Gas piping to furnace, water heater, range and dryer.
  - L. Dishwasher Hook-up.
  - M. Double-bowl, stainless steel, kitchen sink; "Elkay Celebrity" 33" x 22" with Moen #67430 faucet with spray, PVC trap and stop/supply OCR19X-C.
  - N. One (1) garbage disposal; "Insinkerator - Badger 5" or approved equivalent disposal.
  - O. Two outside hose bibs, ¾" Frostless Type.
  - P. Provide and install laundry supply and waste including wash tub or laundry room sink per the architectural drawings.
  - Q. One sump crock, sump pump (**Model M53-Zoeller or equivalent submersible sump pump**) and piping through wall.  
Crock to be 18" x 22" with AK Industries "AKP30000", 18" plastic cover with bolt down gasket kit or equal plastic cover that provides a gas tight seal.
  - R. Basement floor drain located within three (3) feet of furnace and hot water heater. Location to be coordinated between HVAC and Plumbing subcontractors.
  - S. **ALTERNATE:** Sanitary sump pump and pit if needed for basement floor drains and laundry waste.
  - T. Install "Marlam" or "Leslie Marble" or equal cultured marble bath vanity tops with side splash per plans. Vanity tops to be supplied by the General Contractor.
  - U. Entire Plumbing System shall be installed in strict compliance with the State of Wisconsin Plumbing Code, Chapter 81 and City of Kenosha.
  - V. Plumbing Design shall be the responsibility of the Plumbing Contractor.

XXXII. H.V.A.C.

- A. Includes all material, labor system design, and required heat loss calculations for complete heating/cooling system.
- B. One 95 AFUE furnace; Carrier Comfort95, Luxair TM9E, Comfortmaker QuietComfort96, or equal with Lifetime Warranty on the primary and secondary heat exchanger; 10 Year Parts Warranty.
- C. One air conditioning system (14 SEER); Carrier Comfort14, Luxair TC4 or equal.
- D. Standard air cleaner.
- E. All duct work to be installed inside the thermal boundary of the structure. No duct work is allowed in unconditioned attic space unless agreed by the Owner prior to beginning any duct installation.
- F. All supply and return ducts to be constructed with sheet metal, sized, connected and supported in accordance with the Wisconsin HVAC Code. All supply and return ducts to be completely sealed with either approved mastic sealed or taped. Tape must be UL 181A or UL 181B approved. No unlisted "DUCT TAPE" is allowed.
- G. Fresh air intake system.
- H. Venting for bathroom fans, dryer and rangehood. (**To be installed with as straight and direct runs to the exterior as possible**).
- I. Kitchen Hood fan must be exhausted to exterior of building. No "recycling" ventilation allowed. Exhaust fan must meet a 100 CFM exhaust rate.
- J. Whole house spot ventilation is required in 2<sup>nd</sup> Floor Bathroom. This is achieved by installing a low sone (1.5 or less) rated Bath Fan achieving as least a minimum site-tested flow rate of 50 CFM. (Fan to be supplied and installed by electrical subcontractor. **Rigid** type Vent Pipe to exterior to be supplied and



- installed installed by HVAC subcontractor).
- K. Programmable thermostat; Honeywell RTH7600D or approved equivalent.
- L. H.V.A.C. System Design shall be the responsibility of the H.V.A.C. Contractor

### XXXIII. ELECTRICAL

- A. Includes all material and labor for complete installation of electrical wiring and devices, per plan, with Romex wiring, and standard almond devices to meet Wisconsin Residential Electric Code. General Contractor to file application with WE Energies for electrical service at start of construction.
- B. 200-amp, 40-circuit service panel.
- C. 220-volt circuit for A/C, dryer and range.
- D. Furnish and install the following bath fans:  
**Central Bath:** provide and install a “Panasonic Whisper” Vent Fan”, or other City approved 80 CFM (Max Airflow), Low Sone, (rated 1.0 sones or less).  
 To meet the intent of “Focus on Energy”, the Central bath fan will provide Whole House Ventilation to be switched both both inside the bathroom and also with a switch **installed in the hallway outside the bathroom** and labeled as “Whole House Ventilation”.
- E. **Master Bath:** provide and install a “Panasonic Whisper” or equivalent 80 CFM, Low sone (rated 1.0 sones or less for master bath with built-in humidity sensor or installed with a humidity sensor switch.
- F. Install standard lights per drawings (Light Fixtures to be provided by General Contractor).
- G. Install ceiling fan(s) (Only if called for in the architectural plans).
- H. Microwave circuit for microhood (above range).
- I. Install kitchen microhood. (Microhood to be provided by General Contractor. See page 14, Item XVII for the microhood specification).
- J. Dishwasher circuit and garbage disposal outlet/switch
- K. Laundry circuit.
- L. One sump pump outlet in basement to code
- M. Garage door opener circuit and electrical to garage with lights, GFCI outlet, door opener, and switches. Provide 3-way at the entry door in kitchen to control front garage lights in the kitchen. Garage door opener remote control to be programmed, if required.
- N. Television cable outlets and wiring per drawings installed ready for cable company hook-up. Include one Cat6 jack and one cable jack for the master bedroom and one each for the living room.
- O. Provide and install Smoke Detectors and Carbon Monoxide Detectors (combination units acceptable) to code
- P. Provide and install Door Chimes (front and rear doors)
- Q. Exterior GFCI porch outlets to code (front and rear)

- XXXIV. LIGHTING (Allowance \$1,000.00)
- A. Light fixtures, including LED light bulbs for all fixtures per house plans (including basement fixtures, exterior lights and garage lights).
- XXXV. CLEAN-UP DUMPSTERS
- A. Includes periodic clean up during construction and debris removal.
- XXXVI. FINAL CLEANING
- A. Includes cleaning construction dirt and dust from finished interior surfaces once prior to move-in.
  - B. Includes sweeping and washing down basement floor, furnace, hot water heater, etc., and garage.
  - C. Includes cleaning inside of glass windows.
  - D. Includes removing stickers from windows and countertops.
  - E. Includes vacuuming and cleaning carpet, cleaning floors.
  - F. Includes cleaning toilet fixtures and inside cabinets.
- XXXVIII. LANDSCAPING (Allowance \$7,500.00)
- A. Provide all labor, supervision, equipment, materials and liability insurance to complete the following landscaping work by a qualified and insured landscaping company.
  - B. Trucking, final grading and installation of landscaping **per the approved City Engineering Div., Drainage Plan for the project site.**
  - C. Work includes: final grading with black dirt fill and topsoil (pulverized), install 6" deep plastic edging to separate lawn areas from mulched planter bed areas, weed barrier under all mulched planter beds, mulch, shrubs, plants, sod, and clean up (sweep and wash down all sidewalks, driveway, street, porches and stairs).
  - C. Include a monthly cost to provide weekly watering of the sod and plantings.
  - D. Landscape Plan to be submitted to City for review and approval prior to the start of work.
  - E. Landscaping contractor to provide Certificate of Insurance that meets the City's insurance requirements.
- XXXIX.INSPECTIONS
- A. CONTRACTOR to request the following CITY inspections prior to proceeding to the next phase of work (these are required inspections by the CITY's Designated Construction Inspector and Energy Star Program Inspector and are not associated with the required Building Permit Inspections, City Public Works Department Street Opening and Restoration Inspections and Kenosha Water Utility Inspections).
    1. Excavation inspection
    2. Footing form-up/drain tile inspection
    3. Foundation form-up and pouring inspection
    4. Garage slab excavation and form-up inspection
    5. Rough framing inspection
    6. Mechanical inspection (Plumbing, Electrical & HVAC rough-ins)
    7. Exterior sheathing inspection (prior to installation of siding and aluminum trim)
    10. Drywall inspection
    11. Trim out inspection

12. Final Inspection and Punch List
13. Final Punch List inspection