



**THE PRINCE GEORGE'S COUNTY GOVERNMENT**  
**Department of Housing and Community Development**  
**The Redevelopment Authority**

**CDBG Substantial Rehabilitation**  
**Standards for Single Family Homes**  
**Neighborhood Stabilization Program**  
**GREEN BUILDING STANDARDS ADDENDUM**

**PROPERTY: 3404 Randall Road, SUITLAND, MARYLAND, 20746**



**June 22<sup>nd</sup> 2015**

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## ENERGY STAR

Should any provision of the CDBG Substantial Rehabilitation Standards for Single Family Homes Specifications be in conflict with this Green Addendum, applicable provision of the Green Addendum will prevail and supersede the conflicting provision of the CDBG Substantial Rehabilitation Standards for Single Family Homes Specifications.

# INTRODUCTION

This Green Addendum to the CDBG Substantial Rehabilitation Standards provides Specifications and guidance for implementation of the Green Suitland NSP3 Acquisition and Rehabilitation Activity and other NSP activities to be undertaken.

## Definition of Construction Project Types

**Substantial Rehabilitation:** A project that includes the demolition and removal of all interior components down to bare stud walls, which exposes significant portions of the structure and the building envelope through demolition, that replaces/improves major building systems and finishes, or that includes the treatment of framing subjected to mold and mildew.

**Moderate Rehab:** A project that through selective demolition, partially exposes the structure and air barrier of the building envelope and/or replaces or improves major building systems.

**Minor Rehab:** A project that involves only cosmetic repairs, replacements and/or may replace faulty heating, electrical or plumbing equipment.

## GREEN Addendum Definitions

**ACCA (Air Conditioning Contractors of America)** The national trade association for HVAC contractors. Also the source of the Most recognized systems for calculating heating and cooling loads, selecting HVAC equipment to meet those loads and for designing ductwork to deliver the appropriate conditioned air to buildings. See Manuals J, S, and D below. ACCA also is the only source at present for training HVAC contractors to meet the requirements of ENERGY STAR Version 3.0.

**ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Standard 62.2-2010:** Establishes minimum requirements for ventilation and acceptable indoor air quality in low-rise residential building. [www.ashrae.org/technology/page/548](http://www.ashrae.org/technology/page/548).

**CFM (cubic feet per minute):** A standard unit of measurement for airflow that indicates how many cubic feet of air is passing through a fixed point per minute.

**ECM (electronically commutated motor):** A DC electric motor that uses electricity efficiently, particularly at lower speeds, also known as a “brushless DC motor.”

**ENERGY STAR:** A voluntary labeling program designed to identify and promote energy efficient products to reduce greenhouse gas emissions. Introduced by the EPA in 1992, ENERGY STAR Qualified Homes represent an accepted, national standard for single-family and low-rise residential New Construction projects. Light fixtures and appliances may also be ENERGY STAR Qualified Products and carry the ENERGY STAR label.

**Engineered wood products:** Wood building materials manufactured by gluing particles, fibers, or veneers to increase strength.

**Formaldehyde:** A chemical used widely by industry to manufacture building materials and numerous household products. Formaldehyde is also a by-product of combustion and certain other natural processes, and thus may be present in substantial concentrations both indoors and outdoors. Health effects include eye, nose, and throat irritation; wheezing and coughing; fatigue; skin rash; and severe allergic reactions. Formaldehyde is a known carcinogen. [www.epa.gov/iaq/formalde.html](http://www.epa.gov/iaq/formalde.html).

## INTRODUCTION (Continued)

**Green Compliant:** Examples of green compliant material requirements include but are not limited to the use of the following:

-- LOW-or NO VOC paints and sealant, Formaldehyde Free, Renewable and Sustainable Resource Recycled Materials Organic Material, Asbestos Free, Low Carbon Foot Printing, Natural Resource, Abundant Resource, Biodegradable Material, Meets E 1 Standards, Meets the Carpet and Rug Institutes Green Label Certification

-- Types Of Flooring – , carpet, concrete, cork, hardwood, laminate, rubber, stone, tile and sheet vinyl

Note: Various entities list particular products as “Green” but there is the potential for “Green Washing” by claiming a product is Green without the certification of such by a reputable third party.

**HERS Index (Home Energy Rating System Index):** A scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home (based on the 2006 International Energy Conservation Code) scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower a home’s HERS Index, the more energy efficient it is in comparison to the HERS Reference Home. Each 1-point decrease in the HERS Index corresponds to a 1% reduction in energy consumption compared to the HERS Reference Home; thus a home with a HERS Index of 85 is 15% (or 75 is 25%) more energy efficient than the HERS Reference Home, which has an index of 100.

**Manual D:** Manual prepared by the Air Conditioning Contractors of America (ACCA) on residential duct design and sizing.

**Manual J:** Manual prepared by ACCA on residential load calculations.

**Manual S:** Manual prepared by ACCA on residential equipment selection.

**VOCs (Volatile Organic Compounds):** A large group of carbon-based chemicals that easily evaporate at room temperature. [www.epa.gov/iaq/voc.html](http://www.epa.gov/iaq/voc.html)

## Specifications

The burden of proof is on the contractor to show that all materials, preparation, finishing and workmanship, are compliant with the projects specifications and industry standards.

### Prince George’s County Building Permits

- Contractor shall provide building permits as required for the rehabilitation project and shall have specialty contractors provide permits for plumbing, heating and air-conditioning and electrical work to be performed. Provide inspection approvals from county inspectors and the NSP Construction Manager before close-in.

### Addendums & Warranties

Contractor is to provide a packet containing all manufacturer’s manuals and warranties on all the installed equipment, fixtures and appliances, at the time of the Final Inspection. Any/All pre-existing items are exempt unless required in the work write-up. Final invoice will not be processed until packet is provided.

## DIVISION 1- GENERAL REQUIREMENTS

### Energy Efficiency and Testing

- **Standard:** The target Energy Efficiency performance is to meet or exceed the current ENERGY STAR requirement for the region at the time of project completion. Projects will be subject to ENERGY STAR Version 3.0. and LEED for Homes.
- **Testing:** Testing to determine compliance with ENERGY STAR shall be done by an independent third party, Certified HERS Rater. Moderate and Minor projects will be modeled and tested but will not be held to the ENERGY STAR standard. However energy efficiency to the greatest extent feasible will be a high priority for all projects including Moderate and Minor Rehabs. The NSP Construction Manager will review all projects to ensure that the energy efficiency requirements of this Green Building Standards Addendum are met and are fully addressed in the specifications.
- **Rater(s):** Cost for the HERS Rater should be included in construction budget. Only a Redevelopment Authority approved HERS Rater may be used.
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### Building Envelope Air Tightness and Testing

**Standard:** Air tightness of building enclosure (envelope) – 0.40 CFM 50 per sq. ft. of building enclosure (measured at 50 Pascal's (Pa)) (The building enclosure includes the floors, walls and ceilings that are part of the building envelope).

- **Testing:** Before a project is determined to be completed by the NSP Construction Manager, the house shall undergo a blower door test by a third party HERS Rater to verify that the air tightness of the building enclosure (envelope) meets the current standard listed above.

### HVAC Equipment and Ductwork Installation and Testing

- **Standard:** All duct connections shall be sealed with a UL listed low VOC mastic product designed for that purpose.
- **Standard:** New HVAC equipment shall be sized using the current edition of the Air Conditioning Contractors of America (ACCA) Manual J Heat loss calculation tool <https://www.acca.org> (calculate manual J based on the post rehab building envelope), and equipment shall be selected for installation using the current edition of the ACCA Manual S. If new ductwork is installed the current edition of the ACCA Manual D shall be required to design and size ductwork. The completed ACCA Manuals J, S and D (when D is required) must be reviewed by the HERS Rater for approval prior to installation.
- **Standard:** Combustion appliances must meet the Building Performance Institute (BPI) standard for Combustion Safety and Carbon Monoxide Protection of occupants as certified by a BPI certified Building Analyst Professional.
- **Testing:** Provide any ACCA Manuals J, S & D reports that are required by the Standard above with first Draw documents to the HERS rater. Combustion safety, balanced delivery of conditioned air per ACCA Manual design, and approved levels of ductwork leakage are required and must be tested by the HERS rater. . The completed ACCA Manuals J, S and D (when D is required) must be reviewed by the HERS Rater for approval prior to installation.
- **Standard:** Duct leakage shall be measured by the HERS rater. Total Rater-measured duct leakage shall be less than 6 CFM25 per 100 sq. ft. of conditioned floor area. Rater -measured duct leakage to outdoors shall be less than 4 CFM25 per 100 sq. ft. of conditioned floor area. (ENERGY STAR requirement)

## DIVISION 1- GENERAL REQUIREMENTS

### Lead Safe and Lead Paint Clearance Testing

- Standard: For all properties constructed prior to 1978, renovation repair and painting shall comply with the EPA Mid-Atlantic Region Lead-Based Paint Renovation, Repair, and Painting Rule, requiring the use of certified /, using certified renovators and workers trained in lead-safe work practices, and the Code Of Maryland Regulations (COMAR 26.02 and 26.16) and OSHA 29CFR 1926.62. Testing: For all properties constructed prior to 1978, testing shall be conducted by an inspector & laboratory accredited by the Maryland Department of the Environment.

### Inspecting Energy Related Features

**To verify the installation of energy-related features, such as those listed below in bullets, all homes shall have at least 4 on-site inspections by the Developer's Construction Manager and the NSP Construction Manager**

1. After air sealing and mechanical rough-in before insulation installation
2. After the installation of exterior doors and windows while the flashing details are visible
3. After insulation installation
4. At construction completion

The HERS Rater's inspection schedule may differ slightly but ideally would be coordinated these inspections.

Examples of energy efficient components to be inspected include:

- Duct installation and sealing.
- Building envelope air sealing details.
- Proper installation of insulation, including no gaps, voids, or compressions.
- Insulation is accurately fitting cavity
- Windows and doors are to be flashed, caulked, and sealed properly.

### Integrated Pest Management

- Use Integrated Pest Management methods to control pests where and when possible.
- Seal all cracks, holes and crevices on interior surfaces and exterior surfaces to prevent access by pests.
- Place a thin dusting of 98% boric acid under kitchen cabinets, in wall cavities, cracks and crevices in the kitchen.
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### Allowances

Appliances have been specified so no allowance is provided for their purchase. See Division 11

## **DIVISION 1- GENERAL REQUIREMENTS**

### **Materials and Resources**

#### **Materials**

- Use pre-cut or pre-assembled building systems or methods.
- Use building materials that require no additional resources to complete application onsite.
- Use recycled-content building materials.
- Use materials from renewable resources or agricultural byproducts.

#### **Material Protection and Moisture Prevention**

- Protect unused moisture-sensitive materials from water damage through just-in-time delivery, storing unused materials in a dry area, or tenting materials and storing on a raised platform.
- Maintain moisture content of materials to industry standards.

#### **Disposal/Recycle**

- Recycle all cardboard generated by construction and all cardboard trash in the house to the local recycling plant.
- Recycle all construction and demolition debris where possible

#### **Site-Work**

- Furnish and install new plantings per plans and specifications
- Furnish and install grade topsoil to create a minimum slope of 5% (6") for the first 10 ft. away from building.
- All gutter, downspouts and conductors are to divert the water away from the foundation through an under-ground plastic perforated piping system. Run perforated piping to nearest outfall.
- If site conditions will not allow for the installation of the grading & piping system requirements listed above, the inability to perform the requirements must be approved by the NSP Construction Manager.

#### **Surface Water Management**

- For erosion control, if portions of lot are located on a steep slope, reduce long-term runoff effects through use of terracing and retaining walls.
- For erosion control, plant one tree, four 5-gallon shrubs, or 50 square feet of native groundcover per 500 square of disturbed area
- For runoff from roof, install permanent storm water controls (e.g., vegetated swales, on-site rain garden, dry well, or rain-water cistern) designed to manage runoff from the home.
  - edge at the bottom of the exterior walls to force water away from the building.

## DIVISION 2

### Site-Work

#### Landscaping:

- Landscaping in the front of the home is required to provide a pleasant curb appeal.
- A budget of at least \$3,000 is required for landscaping.
- Demolish trees and plantings per plans and specifications
- Furnish new plantings per plans and specifications
- Do not plant invasive species
- Furnish and install topsoil over seeded area per landscape plan.  
▶▶ **Note:** Plant No Silver Maple Trees or any invasive plants.

#### Conserve Existing Onsite Vegetation

- Minimize disturbance of and damage to trees and other existing vegetation, except all foundation damaging trees/plants which shall be removed from site.
- Prepare designated existing trees and vegetation for impact of construction by pruning, root pruning, fertilizing and watering.

#### Minimize Soil Disturbance and Erosion

- Schedule construction activities to minimize exposed soil.
- Use alternative means to install utilities, use of smaller equipment, shared trenches or easements.
- Designate limits of clearing and grading.
- Stockpiled topsoil must be protected from erosion using tarps, filter fabric, moats, swales, and/or erosion control fences.
- Furnish and install silt fencing around the full perimeter of the lot, to slow the run-off from the site and keep topsoil in place.
- Furnish and install gravel beds or “speed bumps”, where silt fencing cannot be added due to vehicle trespass from the site, to keep soil from leaving the driveway location

#### Rain Barrels

Furnish and install rain barrels with a volume that meets 0.62 gallons per square foot of roof space for 50% of the roof foot print area. Submit rain barrel data for approval before order and or installation. The rain barrels should be connected to all the down spouts. Send samples for approval

#### Rain Barrel Stands

Furnish and install rain barrel stands for each rain barrel. Send us samples for approval.



## DIVISION 6

### Framing Techniques and Plans

#### Oriented Strand Board (OSB)

- Use as an alternative to plywood for sheathing, flooring and roofing unless otherwise specified.

#### Exterior Doorways

- Minimum net clear width shall be 36".

#### Interior Doorways

- All interior doors shall be installed per specifications and plans

#### Exterior Components

#### Fascia and Trim

- Demolish existing siding, sheathing, roofing, soffit boards, columns and wood trims for all exterior doors and windows per plans and specifications
- Furnish and install siding, sheathing, roofing soffit boards, columns and wood trims for all exterior doors and windows per plans and specifications

#### Deck

- Furnish and install new Trex deck and porch per plans
- Deck and Porch to be Madeira Color
- Install two rows of Winchester Grey Trex decking boards on outer edges of the deck and porch, and also on the steps of deck and porch (\*see picture #1)

#### Specifications

**Manufacturer:** Trex Company Inc

- Type: **Trex Select® Decking**
- Colors: Madeira and Winchester Grey
- Size: 1" Square Edge Boards
- Supplier: Home Depot or other Vendor

#### Deck Railing

- Furnish and install new Vinyl railing per plans and specification

#### Specifications

**Manufacturer:** Trex Company Inc

- Type: **Trex Select® Decking**
- Colors: White
- Type: Vinyl
- Supplier: Home Depot or other Vendor
- 

#### Wood Blocking

- Wood blocking shall be installed in between framing members of the following areas to support all handrails and grab-bars.
- The blocking shall be nominal 2" thick lumber of a width sufficient to keep all fasteners a minimum 1" from the edge of the blocking.
- Blocking shall fit snugly between framing members and shall be securely attached to the framing. All bathroom walls, Shower stalls, Tub/Shower areas and in stairway wall to 2nd floor.

## DIVISION 6

### Interior Components

#### Handrail

- Furnish and install new hand rails per plans. Furnish and install stain on handrail

#### Specifications

Type: Stair Simple Hemlock Axxys

Color: Primed

Size: 8 ft. Hand Rail (Un-Drilled)

Model #: HE268/T08A

Supplier: Home Depot

#### Hand rail and railing system for Master bedroom

- Furnish and install new hand and rail system per plans.

Paint/ stain to match the wainscoting

#### Specifications

Type: Polar Top Pin baluster and matching railing system

Color: White

Size: 36 in. x 1-1/4 in

Model #: PR501536

Supplier: Home Depot

#### Trim and Molding

Paint molding before installation with two coats of paint

- Demolish all existing trim in the house. Furnish and install baseboard trim throughout the house
- Furnish & install and crown molding on all windows, kitchen, living, dining, hallway & all bed rooms.
- Furnish and install shoe molding in entryway, living room, dining room, kitchen in all bedrooms.
- Furnish and install and chair rail with backer in the living room, dining room and all bedrooms. Owner's suite is considered a bedroom. Chair rail height to be 24in below ceiling
- Furnish and install wainscoting in the, living, dining and master bedroom/owners suite
- Furnish and install coffered ceiling in living and dining area per picture (1x4 pine).
- Furnish and install paneling in hall bath room.
- Furnish and install window and door trim/molding/casing on all doors and windows

#### Baseboard

##### Base Trim

#### Specifications

Type: MDF Primed Base Molding CMPC LWM 623

Color: Primed

Size: 1/2 in. x 3 1/4 in. x 144 in

Model #: UMD0623-08

Supplier: Home Depot

##### Shoe Molding

#### Specifications

Type: American Wood Moulding WM126

Color: Finished white

Size: 1/2 in. x 3/4 in. x 8 ft.

Model #: 126-POPPFJ8

Supplier: Home Depot

**Coffered Ceiling****Specifications**

Type: Sure-Wood Forest Products (Painted to match wainscoting)  
Color: Poplar boards  
Size: 1 in. x 4 in. x 8 ft. (S4S)  
Model #: 1X4X8 POP-3PL  
Supplier: Home Depot

**Paneling****Specifications**

Type: Fashion Wall 4-ft Primed Hardboard Double Bead Wainscot  
Color: White  
Size: Height: 4ft Width: 32in  
Model #: 1393248  
Supplier: Lowes

**Wainscoting****Specifications**

Type: Wall design painted HDF recessed wainscot  
Color: White  
Size: Height: 2-5/8-ft Length: 48in  
Model #: PANLOWESPWSCT3248  
Supplier: Lowes

**Chair Rail Molding (\*Chair Rail Molding Backer)****Specifications**

Type: Wood grain Millwork WM 390 Finger-Jointed  
Color: *Primed*  
Size: 7/16 in. x 4-1/2 in  
Manufacturer: American Heritage  
Model #: AMH-959-PFJ  
Supplier: Home Depot

**Chair Rail Molding (\*Chair Rail)****Specifications**

Type: Wood grain Millwork WM 390, Prime Finger-Jointed,  
Color: *Primed*  
Size: 2-5/8 in. x 1 1/16 in. x 192 in  
Manufacturer: Elliotii Pine Chair Rail  
Model #: PFP0390  
Supplier: Home Depot

**Crown Trim (Crown Molding)****Specifications**

Type: *House of Fara*  
Color: *MDF Primed*  
Size: *3/4 in. x 5-1/4 in. x 96 in*  
Manufacturer: House Fara  
Model #: 8813  
Supplier: Home Depot

**Window and Door Trim/Casing/Molding****Specifications**

Type: WM Primed Finger-Jointed Pine Casing Door Pack  
Color: *Primed*  
Size: 1 1/16 in. x 2-1/4 in. x 420 (5-Pieces/7 ft.) 366 in.  
Manufacturer: Wood grain Millwork  
Model #: 108376  
Supplier: Home Depot

## DIVISION 6

### Kitchen Cabinets

#### Wall

- Furnish and install wall cabinets constructed of solid hardwood face-frames, doors and drawer fronts with ½" wood /plywood carcasses and floors. Drawer boxes shall be wood/plywood. Carcasses will be joined using wood, metal or plastic corner bracing.
- All particleboard components shall meet ANSI A208.1 for formaldehyde emission limits or all exposed particleboard shall be sealed with a clear low-VOC sealant or have a factory-applied sealant prior to installation. All MDF edges shall meet ANSI A208.2 for formaldehyde emission limits or all exposed MDF edges shall be sealed with a clear low-VOC sealant or have a factory-applied low-VOC sealant prior to installation.
- Measure, order, furnish and install glass doors and shelves for kitchen cabinets per kitchen drawings. Contractor to use supplier of choice for glass panes and shelves, minimum specifications for cabinet doors 1/8" tempered glass and for glass shelves 1/4" thick, tempered heavy glass

#### Base

- Furnish and install new base cabinets with toe kick
- All base cabinet fronts at sink area must be of the removable style/design for the purpose of accessibility. Install base cabinets constructed of solid hardwood face-frames, doors and drawer fronts with ½" wood/plywood carcasses and floors.
- All cabinet doors and drawers shall have loop or U shaped style handles installed as low as possible on wall cabinets and as high as possible on base cabinets.
- Base cabinets are to include a pull out workspace such as a pull out cutting board or an accessible 30 inch AFF work station can be substituted for the pull out work space
- Drawer boxes shall be wood or plywood, and joined using wood, metal or plastic corner bracing.
- Use cabinets that are Environmentally Certified under Kitchen Cabinet Manufacturers Association's (KCMA) Environmental Stewardship Program (ESP).
- Cabinets shall be of a height to accommodate the countertop height of 36

#### Pulls and Knobs

- Furnish and install pulls on all Kitchen drawers and top cabinets
- Furnish and install knobs on all Kitchen base cabinets

#### Wall and Base Cabinets

##### Specifications

Manufacturer: Wolfe Classic Cabinets  
Line: Hudson Cabinets  
Color: Painted Antique White  
Supplier: Mid-South Building Supply

#### Drawer Pulls

##### Specifications

Width: 3 inches  
Type: Double Beaded  
Color: Black  
Model #: PBF809Y-FB-C  
Manufacturer: Liberty Hardware  
Supplier: Home Depot

## DIVISION 6

### Kitchen Cabinets (continued)

Knobs

#### Specifications

Size: 1-3/8 in  
Type: Double Beaded  
Color: Black  
Model #: PBF808Y-FB-C  
Manufacturer: Liberty Hardware  
Supplier: HomeDepot

- After field measure for sizing, install granite countertop to a maximum height of 36". Seal all exposed surfaces including the underside of the countertop with a low VOC sealant.
- Provide end-caps and cutout for sink.
- Caulk countertop to adjoining walls with low VOC caulking to match wall color.
- All cabinet doors and drawers shall have pulls installed as low as possible on wall cabinets and knobs installed as high as possible on base cabinets.
- Base cabinets are to include a pull out workspace such as a pull out cutting board or an accessible 30 inch AFF work station can be substituted for the pull out work space

### Bathrooms

#### Base Wood Cabinets

- Furnish and install new bathroom cabinets with toe kick
- All base cabinet fronts at sink area must be of the removable style/design for accessibility.
- Install base cabinets constructed of solid hardwood face-frames, doors and drawer fronts with 1/2" wood/plywood carcasses and floors.
- Drawer boxes shall be wood or plywood, and joined using wood, metal or plastic corner bracing.
- Use cabinets that are Environmentally Certified under Kitchen Cabinet Manufacturers Association's (KCMA) Environmental Stewardship Program (ESP).
- \*Wolf Cabinets specified are Environmentally Certified under Kitchen Cabinet Manufacturers Association's (KCMA) Environmental Stewardship Program (ESP))
- Cabinets shall be of a height to accommodate the countertop height of 36

### Hall Bath

#### Specifications

Door Style: Wolfe Classic Cabinets  
Line: Dartmouth  
Color: Dark Sable  
Supplier: Mid-South Building Supply  
Species: Maple

### Master bath

#### Specifications

Door Style: Wolfe Classic Cabinets  
Line: Dartmouth  
Color: Dark Sable  
Supplier: Mid-South Building Supply  
Species: Maple

## DIVISION 6

### Siding/Exterior Finish

- In homes where siding is replaced, a minimum ½" foil faced Polyisocyanurate rigid foam insulation board shall be installed behind the new siding.
- Demolish existing siding, per plans and specifications
- Furnish and install cement board lap siding per plans and specifications

#### Specifications

Manufacturer:	Premium Pointe 360
Type:	Double 4.5 Dutchlap
Color:	Cypress
Exposure:	4.5" inches
Supplier	Mid South Cabinets

## DIVISION 7

### Roofing and Roof Elements

#### Sheathing

- All sheathing shall be OSB board and of proper thickness for spacing of roof rafters.
- Demolish existing per plans and specification
- Furnish and install per plans and specifications

#### Roofing

##### Standards for Replacement and Repair of Roof Coverings

- If existing sheathing is in poor condition replace with 7/16" OSB sheathing at right angles to rafters; nailed every 10" at center and 6" on edges with 8d common nails. Clean roof deck thoroughly to remove debris and to make ready to accept roof covering. Install minimum of 1 ply, 15 lb. 36" wide asphalt felt with minimum 16" selvage, and 30 year life, 3 tab asphalt or fiberglass shingles, minimum 300 lb. class A, shingles in accordance with the shingle manufacturer's written specifications and with a minimum of four (4) nails per shingle.
- Install self-adhesive Ice-Guard (ice dam protection) beneath all flashings and on all edges and ridges and valleys and extend the ice-guard back at least 2' past the interior wall.
- Install new aluminum, enamel-finish drip edge flashing on all edges.
- Install new boot flashings on all vent stacks
- Install new roof ridge vent per manufacturer's printed instructions and install soffit or gable vents to complete the venting system. If house has no existing gable vents, provide soffit vents and mechanical turbine roof ventilators.
- Install new metal flashings; (chimney, counter, step, and valley).
- All debris shall be placed in a dumpster at the end of each day.

#### Roofing

- Demolish existing roof per plans or specifications
- Furnish and install per plans and or specifications

#### Specifications

Manufacturer:	CertainTeed Traditional Energy Star)
Line:	XT-30 (XT-TM EXTRA TOUGH 30)
Type:	30 year fiber-glass
Color:	Moiré Black

## DIVISION 7

### Insulation & Air Sealing Structure

#### Air Seal Structure

- **Furnish and install insulation and sealants per plans and specifications**
  - **Insulation and sealing must be inspected and approved by the NSP Construction Manager and the HERS rater.**
  - The ENERGY STAR Version 3 Thermal Enclosure System Rater Checklist shall be completed to document that the air sealing is complete. See section 3 - Fully-Aligned Air Barriers and Section 5 - Air Sealing.
  - Seal all accessible cracks, gaps and holes in the building envelope (the barrier between the indoor conditioned space and the outside) with either low VOC caulk if less than 1/4" wide or expanding foam if greater than 1/4" wide.
  - Seal all top plate and bottom plate penetrations. If the foundation masonry wall is open core concrete block seal the tops of the block with expanding foam.
  - Seal all penetrations created by plumbing, gas lines, electrical boxes and outlets.
  - Seal large accessible gaps around windows between house framing and window frame—use special care on large sliding-glass doors and vinyl-framed windows. Do not use expansive foam on these.
- **Note:** Take care to seal all joints without excess sealant.
- Seal any gaps in the building envelope adjacent to flues with carefully cut to fit sheet metal that is securely fastened to framing, then sealing all seams and gaps with fire rated caulk.
  - 
  - Ensure that any recessed light fixtures in ceilings that are a part of the building envelope are rated for insulation contact (ICAT rated) and properly gasketed (sealed) to the drywall. If they are not, replace them with fixtures rated for insulation contact or remove the fixture(s) and seal the resulting opening(s) with plywood on top of the ceiling finish that is securely fastened to the ceiling and install an electrical box to connect a new surface mounted fixture that will cover the resulting hole.
  - Attic access panels and drop-down stairs will be equipped with a durable  $\geq R-10$  insulated cover that is gasketed (i.e. not caulked) to produce continuous air seal when occupant is not accessing the attic.
  - All mechanicals shall have the rough-in inspections signed off first, before any unit can be air sealed.
  - Air sealing must be done and inspected/approved by the NSP Construction Manager, prior to the installation of insulation.

## DIVISION 7

### Insulation & Air Sealing Structure

#### Air Seal Structure

**Furnish and install insulation and sealants Insulation and sealing must be inspected and approved by the NSP Construction Manager and the HERS rater.**

- Seal all accessible cracks, gaps and holes in the building envelope (the barrier between the indoor conditioned space and the outside) with either low VOC caulk if less than 1/4" wide or expanding foam if greater than 1/4" wide.
  - Seal all top plate and bottom plate penetrations. If the foundation masonry wall is open core concrete block seal the tops of the block with expanding foam.
  - Seal all penetrations created by plumbing, gas lines, electrical boxes and outlets.
  - Seal large accessible gaps around windows between house framing and window frame—use special care on large sliding-glass doors and vinyl-framed windows. Do not use expansive foam on these.
  - Furnish and install insulation in the basement per inspection report, code and manufacturers
- ▶▶ **Note:** Take care to seal all joints without excess sealant.

#### Insulation Performance Standards and Testing

**Standard:** Rim Joists: R-19 minimum

**Standard:** Exterior Wall System: R-19 minimum.

- Demolish damaged insulation in basement
- Furnish and install insulation R-19 with aluminum jacket
- Furnish and install sound batt insulation at top portion of demising wall

**Standard:** Attic: R-38 minimum

Attic: R-38 minimum, or the current ENERGY STAR required level, including the backside of the access panel door. Provide sufficient air-flow area for attic ventilation from soffit vents and provide gable end venting for cross ventilation. Supplement attic venting if needed with turbine-type mechanical vents.

- Furnish and install R-38 insulation in the attic
- **Testing:** Developer and NSP Construction Manager Inspection of materials and workmanship prior to covering and the HERS rater rough inspection on insulation and air sealing prior to close in.

#### Existing Walls Not Being Demolished

##### Rim Joist Insulation:

The exterior 1.5" rigid insulation from the walls should extend overtop of the exterior of the rim joists.



## **Water Lines**

### *Copper Only*

- Insulate all exposed and accessible hot and cold water lines with closed cell polyethylene slip on pipe insulation, sized to fit pipe diameter.
- Seal seams with 5 mil pipe insulation sealing tape or closure clips designed for pipe insulation placed every 4".
- Seal all butt joints between sections of pipe with 5 mil pipe insulation sealing tape.
- Neatly miter all angled junctions.

## **Spray Foam**

- After cleaning the area thoroughly, apply Green-compliant, expanding foam either separately or in combination with batt insulation to achieve a minimum R19, and meet building code fire retardancy requirements. Apply to the rim joist at the entire perimeter of the basement and/or crawl space exterior walls. Install to R 19 at a minimum.
- Use a foam product that meets International Residential Code (IRC), Section R314.5.11, and Underwriters Laboratories, Inc. (UL) classification Certificate R7813.
- Insulate and air seal the rim and band area between the first floor subfloor down to the top of the foundation wall and seal all penetrations and the top of the foundation.
- Seal all openings within the area of the rim joist created by plumbing, gas lines, electrical boxes or any other penetrations.
- When exposed through removal of wall, ceiling or floor surfaces, the Rim/Band joist between floors shall be sealed as described above.

## **Flashing**

- Effective flashings must be used on all rough openings, including membrane flashing on bottom of all rough openings for windows, (pan flashing with back dam), and doors using adhesives compatible with drainage plane materials. Also install window and door jamb and head flashing that integrates with drainage plane.

## **Division 8: Doors**

### **Exterior Doors**

#### **Security Doors**

- Demolish existing front and rear security doors
- Furnish and Install front and rear security door per plans, specifications and manufacturer's instructions. All locksets shall be lever handle style
- Furnish and install rust protection per manufacturer's instruction for rust protection.

#### **Front Security Door**

##### **Specifications**

Make: Grisham 467 Series  
Type: Black  
Model #: 46726  
Size: 36"x80" (\*2 week lead times)  
Supplier: Home Depot

#### **Front Security Door Lockset**

##### **Specifications**

Make: Kwikset Lido Venetian Bronze Entry Lever (ADA compliant, smart key feature)  
Type: Entry Lever and Single Cylinder Deadbolt Combo Pack  
Color: Venetian Bronze  
Model #: 991LL 11P SMT CP  
Supplier: Home Depot

#### **Rear Security Door**

##### **Specifications**

Make: Unique Home Designs, Inc  
Type: Su Casa Out swing Patio Security Door  
Model #: SPD02020721054  
Color: Black  
Size: 60 in x 80 in, 72 in X 80 in and 96 in x 80 in  
Supplier: Home Depot

#### **Rear Security Door Lockset**

##### **Specifications**

Make: Kwikset Lido Venetian Bronze Entry Lever (ADA compliant, smart key feature)  
Type: Entry Lever and Single Cylinder Deadbolt Combo Pack  
Color: Venetian Bronze  
Model #: 991LL 11P SMT CP  
Supplier: Home Depot

#### **Entry Doors**

- Demolish existing front entry door. Furnish and install an ENERGY STAR Certified fiberglass door, complete with lockset and deadbolt lockset.
- All locksets and deadbolt locks shall be keyed alike. The door must also include one 180 degree peep hole at 59 " above finished floor. ( See section on peep holes)
- The threshold is to be no higher than ½" if the entry is at the visit-ability/accessibility route. All doors, front/rear/side, shall be 36" wide.
- Demolish trim and frame of the door
- Furnish and install new trim and frame
- Demolish existing weather strips. Furnish and install new weather strips

## **Division 8: Exterior Doors**

### **Entry Doors (continued)**

#### **Front Entry Door**

##### **Specifications**

Make: Feather River Door Medina  $\frac{3}{4}$  Oval Primed (Energy Star Certified)  
Type: Fiberglass Pre-Hung/Inswing  
Color: White  
Model #: 131105  
Size: 36in x 80in  
Supplier: Home Depot

#### **Lock**

##### **Specifications**

Make: Schlage Camelot Keypad Lever  
Type: Lock set and deadbolt set  
Color: Bronze Accent  
Model #: FE595 CAM 716 ACC  
Supplier: Home Depot

#### **Sliding Glass**

##### **Specifications**

Make: JELDWEN  
Type: Fiberglass Primed  
Color: White  
SHGC: Per plans  
U Value: Per plans  
Size: 72in x 80in or per opening  
Supplier: Home Depot

#### **Lock**

##### **Specifications**

Make: Schlage Camelot Keypad Lever  
Type: Lock set and deadbolt set  
Color: Bronze Accent  
Model #: FE595 CAM 716 ACC  
Supplier: Home Depot

#### **Peep Holes**

- A second 180 degree peep hole shall be installed at 45" above the finished floor.
- All Exterior Entry Doors shall have peep holes, except the following:
  - Exterior doors with clear view side-lite(s).
  - Exterior doors with lite(s).
  - Garage, Service Door

## Division 8: Interior Doors

- Demolish all existing interior doors including bathroom, closet and utility doors.
- Furnish and install new doors in all rooms, all closets, all bathrooms and utility rooms
- Furnish, install complete with passage latch set, privacy set on the bathroom(s) and bedroom(s).
- All doors that are not fiberglass, solid wood or pre-finished shall be sealed using a low/no VOC product on all six sides and the pre-drilled lock-set hole(s) shall also be sealed..

### Doors

#### Specifications

- *Make:* JELD-WEN
- *Type:* 6 Panel Slab Door
- *Color:* White
- *Model:* 138343
- *Size:* 24" X 80", 30" x 80" or verify sizes
- *Supplier:* The Home Depot

### Bifold Doors

#### Specifications

- Make:* JELD-WEN Hollow Core Bostonian
- Type:* 6 Panel Bifold Door
- Color:* White
- Model:* 05316
- Supplier:* The Home Depot

### Interior Door Latch Sets

- All latch sets shall be lever knob or handle style. Furnish and install knobs for all interior doors

### Interior Door Knobs

#### Specifications

- Make:* Kwikset
- Type:* Cove Venetian Bronze Bed/Bath Knob
- Color:* Venetian Bronze
- Model:* 300CV 11P 6AL RCS
- Supplier:* The Home Depot

### Interior Hall, Stair and Closet Knobs

#### Specifications

- Make:* Kwikset
- Type:* Cove Venetian Bronze Hall/Closet Knob
- Color:* Venetian Bronze
- Model:* 200CV 11P 6AL RCS
- Supplier:* The Home Depot

## **DIVISION 8**

### **Windows**

- All operable primary windows installed shall have a sill height minimum of 24" and a maximum height of 30" from the finished floor or as required by code. A primary window is defined as a window in a living area above grade. Each room/living space must have at least one primary window.
- Exceptions
  - Kitchen – The height standard does not apply to windows over cabinets.
  - Bathroom – For the reason of privacy, the height standard does not apply.

However, if the bathroom window is above the bathtub, the sill height must be 59" above the floor or safety grilles must be installed to prevent falling against the glass sash..

### **Windows and Walkout Doors**

- Demolish all existing windows and walk out doors
- Furnish Install new window per plans, specifications, window and door schedule
- Field verify sizes and window requirements
- Windows shall have 6lite grill patterns for upper sash

### **Windows**

#### **Specifications**

Make: Andersen Energy Star  
Type: 200 series Vinyl Windows  
Color: White  
Trim: 31/2" flat with decorative trim  
U-value: 0.32  
SHGC: 0.35  
Supplier: The Home Depot or other vendor Grills: Colonial

### **Window Screens**

- Demolish all existing window and door screens
- Furnish and install screens for all operable glass doors and windows

## **DIVISION 9: Finishes and Accessories**

### **Paints & Finishes**

#### **Application**

- All paints and finishes shall meet the Green Seal Standard GS-11.
- Application shall be one coat primer and two coats of finish.
- Doors shall be finished on all six sides.
- Furnish and install paint for all the walls, ceilings, interior doors, interior trim and exterior trim

#### **Exterior Painting**

Furnish and install Benjamin Moore semi-gloss latex paint per plans and specifications

#### **Exterior Trim**

##### **Specifications**

*Make:* Benjamin Moore  
*Type:* Semi-Gloss  
*Color:* Absolute White  
*Supplier:* The Home Depot

#### **Interior trim and doors**

##### **Specifications**

*Make:* Kilz Pro-X  
*Type:* Semi-Gloss  
*Color:* Absolute White  
*Model#:* PXW41  
*Supplier:* The Home Depot

#### **Living Room, Entry Hall Way and Dining Area**

- Furnish and install wainscoting color below the chair rail (this includes below granite countertop)
- Furnish and install paint above the chair rail

##### **Specifications**

*Make:* Kilz Pro-X  
*Type:* Flat  
*Color:* Vanilla View  
*Model#:* PX04  
*Supplier:* The Home Depot

#### **Ceilings**

- Furnish and install paint on all the ceilings except bathrooms, kitchen, laundry and mechanical room and where specified otherwise.

##### **Specifications**

*Make:* Kilz Pro-X  
*Sheer:* Flat  
*Color:* Navajo White  
*Model#:* PXW03  
*Supplier:* The Home Depot

## DIVISION 9

### Finishes and Accessories (Paints & Finishes)

#### Bathrooms

- Furnish and install paint in all the bathroom walls and ceilings

##### Specifications

Make: *Kilz Pro-X*  
Sheer: *Egg Shell*  
Color: *Navajo White*  
Model#: *PXW16*  
Supplier: *The Home Depot*

#### Bedrooms

##### Master Bedroom

- Furnish and install paint above the chair rail.
- Furnish and install wainscoting below the chair rail

##### Paint above chair rail

##### Specifications:

Make: *Kilz Pro-X*  
Type: *Flat*  
Color: *Leatherette*  
Model#: *PX0592*  
Supplier: *The Home Depot*

##### Bedroom #1 and #3

- Furnish and install paint above chair rail
- Furnish and install chair rail
- Furnish and install paint below the chair rail

##### Paint above Chair Rail

##### Specifications:

Make: *Kilz Pro-X*  
Sheer: *Flat*  
Color: *Vanilla View*  
Model#: *PX04*  
Supplier: *The Home Depot*

##### Paint below Chair Rail

##### Existing Color Specifications

Make: *Kilz Pro-X*  
Type: *Flat*  
Color: *Aged Ivory*  
Model#: *PXW12*  
Supplier: *The Home Depot*

## DIVISION 9

### Finishes and Accessories (Paints & Finishes)

#### Bedrooms (continued)

##### Bedroom #2, and #4

- Furnish and install paint above trim
- Furnish and install chair rail
- Furnish and install paint below the trim

##### Paint below Trim

###### Specifications:

Make: *Kilz Pro-X*  
Sheer: *Flat*  
Color: *Vanilla View*  
Model #: *PX04*  
Supplier: *The Home Depot*

##### Paint above Trim

###### Existing Color Specifications

Make: *Kilz Pro-X*  
Type: *Flat*  
Color: *Aged Ivory*  
Model #: *PXW12*  
Supplier: *The Home Depot*

#### Kitchen

- Furnish and install paint on kitchen walls and ceilings

##### Specifications

Make: *Kilz Pro-X*  
Sheer: *Egg Shell*  
Color: *Navajo White*  
Model #: *PXW16*  
Supplier: *The Home Depot*

#### Laundry and Mechanical Room

- Furnish and install paint on walls and ceiling

##### Specifications

Make: *Kilz Pro-X*  
Sheer: *Egg Shell*  
Color: *Navajo White*  
Model #: *PXW16*  
Supplier: *The Home*

#### Caulking

All caulking shall be a 25-year or better, paintable Low/No VOC caulk



## **DIVISION 9: Finishes and Accessories**

### **Counter Tops**

- Furnish and install new granite counter tops, **NO backsplash required in kitchen**
- After field measure for sizing, install granite countertop to a maximum height of 36". Seal all exposed surfaces including the underside of the countertop with a low VOC sealant.
- Provide end-caps and cutout for sink.
- Caulk countertop to adjoining walls with low VOC caulking to match wall color.

### **Granite Counter Tops**

#### **Specifications**

Color: *Black Galaxy*  
Edge: *Quarter Round-Over*  
Cut Out: *Double Bowl Under-Mount Sink*  
Sink Type: *Stainless Steel (SS)*  
Supplier: *Mid-South*

### **Solid Surface Countertops**

#### **Cultured Marble Vanity tops**

- Demolish existing integral sinks and countertops
- After field measure for sizing, furnish and install new cultured marble vanity tops with integral sinks, back splashes side splashes and counter tops in powder room, master bath and hall bath
- Install a 24" or wider, plywood vanity with cultured marble integrated top, (no higher than 36"), bowl and backsplash and single lever brass bodied chrome faucet with a maximum 2.0 GPM flow rate.
- Include PVC DWV with Air Admittance Valve, type L copper with brass bodied stops or PEX supply piping, and escutcheon plates on all supply and waste lines.

### **Master Bath and Lower Bath**

#### **Specifications**

Cultured marble tops and back splash

Make: *Virginia Marble*  
Size: *43" or as per field measurement*  
Color: *White Vein White*  
Sink Type: *Integral*  
Model #: *011-2341-00*  
Supplier: *Mid-South Building Supply*

### **Hall Bath**

#### **Specifications**

Cultured marble tops and back splash

Make: *Virginia Marble*  
Color: *Walnut*  
Sink Type: *Integral*  
Size: *36" or as per field measurement*  
Model #: *410*  
Supplier: *Mid-South Building*

## **DIVISION 9: Finishes and Accessories**

### **Floor Coverings**

- All adhesives used shall be no/low VOC products
- All floor tile, sheet goods and wood flooring in the kitchen must be extended under the base cabinet at the sink area because it shall have a removable front.
- All bathrooms shall have non-slip green compliant flooring that meets the FloorScore® certification.
- Install an approved Green Compliant, LEED or Enterprise Green Communities Standards compliant product: Tile, Sheet Goods and Wood

►► **NOTE:** At all entryway floor areas at the exterior doors, must be covered with water-resistant flooring; no carpet. The dimensions shall be a minimum of a 4' X 4' area.

### **Tile**

#### **Adhesives**

All adhesives used shall comply with the following:

- The volatile organic compound (VOC) content of adhesives, adhesive bonding primers or adhesive primers in this project shall not exceed the limits defined in Rule 1168 – “Adhesive and Sealant Applications”, amended 1 January 2005): South Coast Air Quality Management District (SCAQMD), State of California, <http://www.aqmd.gov/rules/download.html>

#### **Ceramic Tile Surrounds**

- Use highly durable, moisture-resistant materials in all tub/shower enclosures such as cement board and fiberglass-reinforced paperless drywall.

►► **Note:** Cement Board is required in bathrooms behind tile. Cement Board or Green Board is permitted in kitchens, basement and laundry rooms.

## **DIVISION 9: Finishes and Accessories**

**Kitchen Floor: Furnish and install kitchen tile and accent diagonally, developer to approve**

### **Specifications**

*Make:* Daltile  
*Type:* Santa Barbara Pacific Sand  
*Model #:* SB23912HD1P2  
*Color:* Sand Tile  
*Size:* 9 in x 12 in  
*Supplier:* Home Depot

### **Accent Tile (floor)**

#### **Specifications**

*Make:* Daltile  
*Type:* Copper Mystery Decorative Wall Accent  
*Model #:* ST66212DCOCC1L  
*Size:* 2 in x 12 in  
*Supplier:* Home Depot

### **Backsplash (\*Kitchen wall)**

#### **Specifications**

*Make:* Daltile  
*Type:* Pacific Sand Universal Mosaic Tile  
*Model #:* SB2524BWHD1P2  
*Size:* 2 in x 4 in  
*Supplier:* Home Depot

### **Backsplash (Kitchen Wall Accents)**

#### **Muriel (One Wall Only)**

Kitchen Backsplash Muriel Italian Pizza Kitchen backsplash 24" x 18" on 6" tile  
Order, Furnish and install 1 Muriel piece in the center of back splash on the left wall, right under plate rack.  
Lead times apply contact vendor. Go to [www.lindapaul.com](http://www.lindapaul.com) to order.

#### **Muriel surround and wall tile base**

Daltile 3/4 in. x 6 in. Pacific Sand Quarter Round Tile Model # SB23A106CC1P2  
Order, furnish & install ¾ round pacific sand around Muriel on all four sides available at the home depot.  
Order, furnish & install ¾ round pacific sand on granite countertop before installing wall backsplash tile.

#### **Kitchen Backsplash Accent Tiles(Both Walls)**

Order, Furnish and install tumbled marble tiles under each cabinet. The tiles should be centered on the backsplash and under each wall. Developer to approve location before installation

6" x 6" tumbled marble tiles

PK-1 Italian Chef, garlic, basil and cheese (Order, Furnish and install 3)

PK-2 Outdoor pizza oven tile (Order, Furnish and install 3)

PK-3 Pizza and tomatoes (Order, Furnish and install 3)

PK-4 Italian cheese, pizza and tomatoes (Order, Furnish and install 3)

Total accent tiles to be installed (12) . Go to [www.lindapaul.com](http://www.lindapaul.com) to order.

## Laundry Area

- Furnish and install tile on floor
- All adhesives, sealants and grout used shall be no/low VOC products

### Vinyl Sheet

#### Specifications

*Make:* Armstrong Vinyl Sheet  
*Type:* Wide River Park Rustic  
*Model#:* G4830  
*Color:* Oak Butterscotch  
*Size:* 12 ft Wide  
*Supplier:* Home Depot

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## **DIVISION 9: Finishes and Accessories**

### **Master Bath Wall Shower tile**

**Pattern:** The walls shall be tiled with 12x8 tile with the following accents pattern

**Crown:** From ceiling install 1inx8in Merola Tile Aroa Arena Cigarro Tile, then Merona Tile Aroa Arena 2inx8in tile,

**Wall:** Install 12x8 tile per picture (with 12x8 decorative tile every three tiles starting on second row)

**Base:** From floor install, Merona Tile Aroa Arena 8inx2in then Merola Tile Aroa Arena Cigarro 1in x 8in

### **Crown**

#### **Specifications**

Pencil Rail Wall Trim	Merola Tile
Type:	<i>Aroa Arena Cigarro</i>
Model #:	WBLARAC
Size:	1 in. x 8 in
Supplier:	Home Depot

### **Trim**

#### **Specifications**

Trim Tile:	Merola Tile
Type:	<i>Aroa Arena Ceramic Listello</i>
Model #:	WBLARAL2
Size:	2 in x 8 in
Supplier:	<i>Home Depot</i>

### **Wall Tile**

#### **Specifications**

<i>Accent Tile:</i>	Merola Tile
Type:	Aroa Arena Ceramic Wall Tile
Model #:	WBLARA
Color:	Beige/Glazed Smooth Finish
Size:	12 in x 8 in
Supplier:	The Home Depot

### **Decorative Tile (wall)**

#### **Specifications**

<i>Accent Tile:</i>	Merola Tile
Type:	Aroa Arena Ceramic Wall Tile
Model #:	WBLARAD
Color:	Beige/Glazed Smooth Finish
Size:	12 in x 8 in
Supplier:	The Home Depot

### **Base Tile**

#### **Specifications**

<i>Accent Tile:</i>	Merola Tile
Type:	Aroa Arena Ceramic Wall Tile
Model #:	WBLARAL3
Color:	Beige/Glazed Smooth Finish
Size:	3 in x 8 in
Supplier:	The Home Depot

## **Master Bath Floor and Shower Floor**

### **Shower Floor Tile Pattern**

Tile pattern for the bathroom floor shall be 12x12in tile installed diagonally with accent tile as shown in picture.

#### **Specifications**

Base Tile (Bathroom and Shower): Merola Tile  
Type: Aroa Arena Ceramic Wall Tile  
Model #: WBLARABN  
Color: Beige/Glazed Smooth Finish  
Size: 8 in x 2 in  
Supplier: The Home Depot

#### **Specifications**

Floor Tile (Shower and Bathroom): Merola Tile  
Type: Aroa Siena Ceramic Floor Tile  
Model #: FBL12ARS  
Color: Browns/Tans  
Size: 12-1/2 in x 12-1/2 in  
Supplier: The Home Depot

**\*Furnish and install soap dish holder to match tile**

## **Hall Bath Floor**

### **Floor Tile**

#### **Specifications**

Accent Tile: Daltille  
Type: Santa Barbara Pacific Sand  
Model #: SB231212HD1P2  
Color: Beige/Cream  
Size: 12in x 12in  
Supplier: The Home Depot

#### **Accent Tile**

#### **Specifications**

Accent Tile: Daltille Illumini (Diamond)  
Type: Decorative Wall Accent  
Model #: 758193  
Color: Beige/Cream  
Size: 3in x 12 in  
Supplier: The Home Depot

**\*Furnish and install soap dish holder to match tile**

## **DIVISION 9: Finishes and Accessories**

### **Hall Bath Wall Tile**

**Tile Pattern:** Tile pattern from tub to shall be as follows: The walls shall be tiled with 6x6 tile with the following accents:

**Base:** From floor install, Tile Baseboard,  $\frac{3}{4}$  round, accent tile 3x12,  $\frac{3}{4}$  round,  
**Chair (middle)**  $\frac{3}{4}$  round, accent tile 3x12,  $\frac{3}{4}$  round  
**Crown** From ceiling install  $\frac{3}{4}$  round, 2x6 chair, accent tile 3x12, 2x6,  $\frac{3}{4}$  round  
**Chair**

#### **Specifications**

Chair Tile: Santa Barbara Pacific Sand  
Type: Chair Rail Ceramic Wall Tile  
Model #: 767624  
Size: 2 in x 6 in  
Supplier: Home Depot

### **Hall Bath Wall Tile**

#### **Specifications**

Tile: Santa Barbara Pacific Tile  
Type: Ceramic Wall Tile  
Model #: 618409  
Color: Whites  
Size: 6 in x 6 in  
Supplier: Home Depot

### **Hall Bath Wall Tile Accent**

#### **Specifications**

Accent Tile: Daltile  
Type: Illumini Umber Linear  
Model #: 758329  
Color: Beige /Cream  
Size: 3 in x 12 in  
Supplier: The Home Depot

### **Hall Bath Wall Tile Accent**

#### **Specifications**

Accent Tile: Diamond  
Type: Illumini Umber  
Model #: 758193  
Color: Beige /Cream  
Size: 3 in x 12 in  
Supplier: The Home Depot

**\*Tile Baseboard:** Furnish and install tile baseboard trim in lieu of wood base board trim in the kitchen, bathrooms and laundry room areas entry area.

## Division 9:

### Floor Coverings

#### Stairs, Dining, Living Areas

##### Hardwood

- Demolish flooring. Re-fasten subflooring.
- Furnish and install underlayment. Furnish and install flooring

##### Specifications

Manufacturer: Home Legend  
Type: Hardwood  
Model: HL400  
Color: Brazilian Cherry  
Size: 5/8 in. Thick x 5 in. Wide x 40-1/8 in. Length  
Supplier: The Home Depot

#### Bedrooms and Recreation room

##### Carpet

- Demolish all existing flooring.
- Furnish and Install carpet and padding throughout in except kitchen, baths, foyer and entryways
- Install over 1/2" medium easy pad with a minimum of seams
- Stretch carpet to eliminate puckers, scallops and ripples
- Cover entire floor including closets in the rooms
- Include tackle strips, metal edge strips and mending tape.

##### Specifications

Manufacturer: Home Decorators Collection Cressbrook II (T)  
Type: Carpet  
Model Number: HDA090TX31  
Color: Color Sugar N Spice  
Size: 3/8 in. Thick x 4 in. Wide x 38-5/8 in. Length  
Supplier: The Home Depot

##### Carpet padding

Manufacturer: Scotchgard  
Type: Thick Foam Premium  
Model Number: BZ0307  
Size: 1/2 in thick  
Supplier: The Home Depot

#### Shower Door

Furnish and install shower enclosure for master bath shower and all bath tubs

##### Specifications

Manufacturer: Delta Crestfield  
Color: Sliding Bypass Oil Rubbed Bronze with Frameless Clear Glass  
Model: 158867  
Size: 59-3/8 in. x 70 in (Verify Size on Site)  
Supplier: The Home Depot



## **Shower Door Handles (2)**

Furnish and install shower doors handles for shower

### **Specifications**

Manufacturer: Delta Crestfield Handle  
Color: Bronze  
Model: SDBR003-OB-R  
Size: 20in  
Supplier: The Home Depot

Furnish and install shower doors handles for shower

### **Specifications**

Manufacturer: Delta Crestfield Handle  
Color: Bronze  
Model: SDBR003-OB-R  
Size: 20in  
Supplier: The Home Depot

## **Tub Doors (All Tubs) Frameless Sliding Tub/Shower Door**

### **Specifications**

Manufacturer: KOHLER  
Model: K-702200-L-ABV  
Internet: 100644161  
Size: Fluence 60 in. x 58-5/16 in. (Verify Size On site)  
Color: Anodized Brushed Bronze with Clear Glass

## **Bath Accessories**

Manufacturer: Delta Crestfield 3-Piece Bath Accessories Kit in Venetian Bronze  
Color: Venetian Bronze  
Model: 138296  
Supplier: The Home Depot

## **Wall Mirrors**

- The mirror shall be mounted with the bottom edge of the reflecting surface no higher than 40" above the finished floor
- Furnish and install new bathroom mirrors in hall and master bath
- Mirrors should be full width of the vanity tops
- Frame the mirrors in the bathrooms white for hall bath and java color for master bath
- The mirrors should be framed around with 1x4,3/4 round and a crown molding header (see picture)

## Division 9:

### Medicine Cabinets

- Furnish and install new bathroom recessed medicine cabinets in master bath and hall bath
- The medicine cabinet shall have at least one usable shelf no higher than 44" above the finished floor.
- The medicine cabinet mirror shall have the bottom reflective edge no higher than 40" above the finished floor.

### Hall Bath

#### Specifications

*Manufacturer:* **American Classic**

*Type:* *Recessed Mount Medicine Cabinet*

*Color:* *White*

*Size:* **21in**

*Model:* *S2126-WH-R*

*Supplier:* *The Home Depot*

### Master-Bath

#### Specifications

*Manufacturer:*

*Type:* *Recessed Mount Medicine Cabinet*

*Color:* **Java/ Dark**

*Size:* **20in**

*Model:* *SC20SD-JAV*

*Supplier:* *The Home Depot*

### Lower-Bath

#### Specifications

*Manufacturer:*

*Type:* *Recessed Mount Medicine Cabinet*

*Color:* **Java/ Dark**

*Size:* **20in**

*Model:* *SC20SD-JAV*

*Supplier:* *The Home Depot*

\*\*\*\*\***DIVISION 10 (Not included)**\*\*\*\*\*

## **DIVISION 11**

### **Dehumidifier**

Furnish and Install an ENERGY STAR Certified (65 pint minimum) dehumidifier in the mechanical room.

#### **Specifications:**

Make: SPT Dehumidifier with Energy Star  
Color: White  
Size: 65 pint  
Supplier: Sears  
Model: SD-65E

### **Electric Range**

Demolish existing range. Furnish and install range for the Kitchen. Furnish and install anti-tip device

#### **Specifications**

Make: Frigidaire  
Type: 30" Freestanding Electric Range  
Size: 5.3 cu. ft.  
Color: Stainless Steel  
Model #: FFEF3018LM  
Supplier: Sears

### **Micro-hood**

- Furnish and Install an ENERGY STAR Certified, exterior ducted, enameled micro hood with integral minimum 2 speed fan control and filter and light switched separately capable of a minimum 150 cfm at a maximum of 10 scones.
- Include metal vent, to the exterior, with all seams sealed with duct mastic, and roof or wall cap/ damper assembly flashed appropriately for the exterior finish.

#### **Specifications**

Make: Frigidaire  
Type: Micro-hood Combination 1.8 cu.ft  
Color: Stainless Steel  
Size: 30"  
Model #: FPBM189K  
Supplier: Sears

### **Dishwashers**

- Demolish existing dishwasher.
- Furnish and Install an ENERGY STAR Certified Dishwasher below:

#### **Specifications**

Make: Frigidaire  
Type: Front Control energy Efficient  
Color: Stainless Steel  
Size: 23 5/8"  
Model #: FFBD2411NS  
Supplier: Home Depot

## DIVISION 11(continued)

### Refrigerator

- Furnish and Install Refrigerator for the Kitchen
- The refrigerators shall be an accessible style refrigerator per the Fair Housing Act Guidelines.

#### **Specifications**

*Make:* Frigidaire  
*Type:* Front Control energy Efficient  
*Color:* Stainless Steel  
*Size:* 23 5/8"  
*Model#:* FFBD2411NS

### Washer

- Demolish existing washer. Furnish and Install washer laundry room

#### **Specifications**

*Make:* LG Electronics (Energy Star)  
*Type:* High-Efficiency Front Control Top Load Washer  
*Color:* White  
*Size:* 4.5 cu. ft  
*Model#:* WT1201CW  
*Supplier:* Home Depot

All appliance manuals to be provided to the NSP Construction Manager

### Clothes Dryers

– **Natural Gas clothes dryers are** highly recommended over electric clothes dryers because of their relative cost of operation.

Note: Minimum 7.0 cubic feet capacity, Sensor Dry System and 5 Temperature Levels – (High, Medium High, Medium, Low and Ultra Low)

- Demolish existing dryer.
- Furnish and Install dryer for the laundry room

#### **Specifications**

*Make:* LG Electronics (Energy Star)  
*Type:* Electric Dryer with Steam  
*Color:* White  
*Size:* 7.3 cu. ft  
*Model#:* DLEY1201W  
*Supplier:* Home Depot

All appliance manuals to be provided to the NSP Construction Manager

## DIVISION 12

### Blinds

- Demolish existing window and door treatments
- Furnish and install shades in all windows and glass doors

#### **Windows First Floor**

#### **Specifications**

*Make:* Bali Blinds  
*Collection:* Skylar with Continuous-loop Lift and Reverse Roll  
*Color:* White  
*Model#:* 40607  
*Supplier:* Bali Blinds

## DIVISION 13-14 Not Included

## DIVISION 15

### Floor Drains

*Mandatory on all projects, except those with hung sewer lines*

- For existing basement floor drains, install back water valves.

### Sump Pumps

- If deemed necessary with NSP Construction Manager having the final approval.

### Plumbing, Bathroom

►► **Note:** All water lines are to be run inside an insulated conditioned/envelope space.

**Commode** Install 1.1 Gallon per Flush (GPF), pressure assisted closed coupled commode tested through the latest Maximum Performance (MaP) testing sponsored by Canadian Water and Wastewater Association (CWWA), the California Urban Water Conservation Council (CUWCC), the U.S.-Canadian Alliance for Water. Efficiency (AWE) and Veritec Consulting Inc. that has shown to score 800 or better on the (MaP)

- Furnish and install seat, supply pipe, shut-off valve, and wax seal.
- Demolish existing commodes. Furnish and install commodes in master bath and hall bath

### Commodes

#### Master Bath and Hall Bath

#### Specifications

*Make:* American Standard Yorkville FloWise  
*Type:* 2-Piece 1.1 GPF Pressure Assisted Elongated Toilet  
*Color:* White  
*Width:* 20.5 in  
*Model #:* 2878.100.020  
*Supplier:* The Home Depot

### Toilet Seats

#### Hall Bath

#### Specifications

*Make:* American Standard Laurel Elongated Closed Front Toilet Seat  
*Size:* Depth 14.25in  
*Color:* White  
*Width:* 14in  
*Model #:* 5311.012.020  
*Supplier:* The Home Depot

### Master Bath

#### Specifications

*Make:* BEMIS Slow Close STA-TITE Elongated Closed Front Toilet Seat  
*Size:* Depth 14.25in  
*Color:* Espresso Brown  
*Width:* 14in  
*Model #:* 1200SLOWT 248  
*Supplier:* The Home Depot

### Lavatory Faucets

- Install all metal, washer-less faucet with drain pop-up lever, with a maximum flow rate of 1.1 GPM.
- Installation shall include supply lines and shut off valves.

## **Exterior Wall**

### **Paints & Finishes**

#### **Application**

All paints and finishes shall meet the Green Seal Standard GS-11.

Application shall be one coat primer and two coats of finish.

- Demolish Existing paint. Prep and repaint existing stucco
- Furnish and install water proof, low VOC paint at approved for stucco

#### **Paint**

##### **Specifications**

BEHR Premium Elastomeric Masonry, Stucco and Brick Paint 1-gal. #MS-82

Model: # 06801

Color: Cobble Stone Gray

#### **Primer**

##### **Specifications**

BEHR Premium Plus, 1-Qt. Multi-Surface Exterior Primer and Sealer

Model # 43604

Internet # 100156313

Store SKU # 926741

## **EXTERIOR BRICK**

Power-wash brick and concrete driveway and the end of the job

## **CONSTRUCTION CLEANING**

Contractor to provide house cleaning services at the end of the job after cleaning up and hauling all his construction waste

## **DUMPSTER**

Contractor to provide dumpster for before starting work

## DIVISION 15

### Separate Shower Area and Tubs

- The shower is to have a low step-up entry and with a floor area of minimum 3' x 4' ,
- Shower control to be no higher than 48" from floor. All shower floors shall be of a non-slip material.
- Shower-head shall be an adjustable height spray hand-held model with a maximum 1.75 GPM flow
- The walls are to be finished as green compliant as possible and all adhesives to be low/no VOC.
- All controls shall be single lever style and with an anti-scald device.
- Tub design to have a wide, flat edge that can be sat on when entering and exiting the tub.

### Bathtubs

#### Master Bath and Hall Bath

- Furnish and install cement board behind the tubs or showers
- Furnish and install new ceramic tubs (steel or cast iron)
- Install a lever operated pop-up drain and overflow, all drain pipes, shower rod, a single lever shower diverter tub/shower faucet or an approved equal with an anti-scald device and a hand-held adjustable height showerhead with a maximum 1.75 GPM flow rate.
- Shower controls shall be no higher than 48" or lower than 18" from the tub/shower floor.
- All tubs shall have non-slip bottoms and a wide flat edge that can be sat on when entering and exiting the bathtub.

### Specifications

Make: *Bootz Industries Maui*  
Size: *5ft*  
Color: *White*  
Model #: *011-2340-00*  
Supplier: *The Home depot*

### Bathroom Sinks

#### Master, lower bath and Hall Bath

- Furnish and install new cultured marble integral sinks and counter tops in master and hall bath
- Install a 24" or wider, plywood vanity with cultured marble integrated top, (no higher than 36"), bowl and backsplash and single lever brass bodied chrome faucet with a maximum 1.75 GPM flow rate.
- Furnish and install PVC DWV with Air Admittance Valve, type L copper with brass bodied stops or PEX supply piping, and escutcheon plates on all supply and waste lines.

### Master & Lower bath

### sink Specifications

Make: *Virginia Marble*  
Size: *48" Verify*  
Color: *White Vein White*  
Model #: *101*  
Supplier: *Mid-South Building Supply*

### Hall Bath

### Specifications

- Make: *Virginia Marble*
  - Size: *48" Verify*
  - Color: *Walnut Granite*
  - Model #: *420*
- Supplier: *Mid-South Building Supply*



## DIVISION 15

### Kitchen

#### Plumbing

All water lines in Substantial Rehabs are to be run inside an insulated conditioned/envelope space.

##### Double Bowl Sink

- Furnish and install a 22 gauge 33"x22"x8" double bowl with self-rimming kitchen sink including a steel, metal body faucet, rated at 1.5 GPM or less, with a 15 year drip- free warranty, grease trap, supply lines, full port ball type shut-off valves and escutcheon plates on all supply and drain lines.  
NOTE: All copper is to be soldered (no compression fittings) & all PVC fittings glued. No exceptions.
- Double bowl stainless steel sink and Cut-out for under mount sink by granite supplier

##### Garbage Disposal

- Remove existing disposal. Furnish and install new disposal with a minimum 3/4 hp rating.

##### Specifications

Make: InSinkErator Evolution Compact

Model#: Compact

Size: ¾ hp

Supplier: Home Depot

##### Faucets

All faucets will be caulked with a low VOC sealant to decrease water damage

- Furnish and install new faucet with sprayer, all metal, washers-less with a maximum flow rate of 1.5 GPM.
- If using a faucet with a higher rate than 1.75 GPM, It must be Retro-Fitted with a different aerator to accommodate the 1.5 GPM or less, standard.
- Installation shall include supply lines and shut off valves.
- Sprayer may be separate or Faucet / Sprayer combination style.

##### Kitchen Sink Faucet

##### Specifications

- Make: Moen
- Type: Lindley Single-Handle Pull-Down Sprayer
- Color: Mediterranean Bronze
- GPM 1.5
- Model #: CA87012BRB
- Supplier: The Home Depot

### Bathrooms

Furnish and install new faucets, shower heads, handles, drains and accessories

##### Sinks (\*For both Master bathroom and hall bath)

##### Specifications

Make: Delta Porter, (Water Sense)

Type: Center set 2-Handle High Arc Bathroom Faucet

Size: 4inch

Color: Oil Rubbed Bronze

GPM 1.5

Model #: 25984LF-OB

Supplier: The Home Depot

## DIVISION 15

### Master and Lower Level Bathrooms

#### Shower Head

##### Specifications

Make: MOEN Eco Performance, Water Sense  
Type: One Function eco performance shower head  
Color: Oil Rubbed Bronze  
GPM 1.5  
Model #: 6313ORB  
Supplier: Any Supplier

#### Moen Shower Arm and Flange Kit

Model # S122ORB  
Supplier: Home Depot

#### Shower Strainer

Make: MOEN shower strain  
Size: 4-1/4 in.  
Color: Oil Rubbed Bronze  
Model #: 101664ORB  
Supplier: The Home Depot

#### Master bath Tub Faucet

Make: Pfister Treviso  
Size: Width 16in  
GPM: 1.5  
Color: Velvet Aged Bronze  
Model #: F-048-DV00  
Supplier: The Home Depot

#### Hall Bath

#### Moen Shower Arm and Flange Kit

Model # S122ORB  
Supplier: The Home Depot

#### Moen Brantford Diverter Tub Spout

Model # 3857ORB  
Supplier: The Home Depot

#### Shower Head

##### Specifications

Make: MOEN Eco Performance, Water Sense  
Type: One Function eco performance shower head  
Color: Oil Rubbed Bronze  
GPM 1.5  
Model #: 6313ORB  
Supplier: The Home Depot

## DIVISION 15

### Water Heaters

#### Installation

- For safety, set water heater temperatures no higher than 120 degrees Fahrenheit.
- Water heater to be located within 30 feet of pipe run of all bathrooms and kitchen if feasible.
- Furnish and install drain pan piping to municipal system.
- 

#### Tankless Hot water heater

- Demolish existing water heater.
- Furnish and Install an Energy Star certified tank less water electric water heater system with a minimum 7 gallon per minute flow rate.
- Furnish and install a drip pan and overflow pipe. The vent pipe and cap should be installed
- Furnish and install pressure and temperature relief valve, discharge tube to within 6" of floor, owner's manual and all venting, piping. All duct work to power vent to exterior
- Provide separate electrical circuit, water inlet and outlet shut off valves to code. The water heater should be reconnected to the plumbing system and tested

#### Specifications

Manufacturer: Rheem  
Make: Eco sense on Demand  
Type: Indoor Tank less Water Tank  
Model: RETE 27  
Supplier: Home Depot  
Size: 27KW 240

#### Bath Accessories

- Furnish and install bath accessories in all the bathrooms
- Furnish and install soap dish to match bathroom wall tile color and texture.
- Furnish and install, grab bars and toilet paperholders

#### Specifications

Manufacturer: Delta Greenwich  
Color: Satin Nickel  
Type: 3-Piece Bath Accessory Kit  
Model: 138283  
Supplier: The Home Depot

#### Closet Wire

- Furnish and install closet wire, poles and or shelves in all closets.

#### Door Stoppers

- Furnish and install door stoppers on all doors

## DIVISION 15

Provide a Whole House Ventilation System to meet the Current ASHRAE 62.2 Standard

### **Bathroom Exhaust Fan with Constant Background Ventilation**

- Furnish and Install an ENERGY STAR Certified bathroom exhaust fan that has both a background constant ventilation setting adjustable in CFM to meet the ASHRAE 62.2 ventilation standard, and a boost setting with a minimum 80 CFM rating.
- Install the fan in a centrally located full bathroom. Switch both the fan and bathroom light together (either the light in the fan, if present, or the main bathroom light).
- The fan shall also have a time delay setting that will enable the fan to continue its boost run time past the time when it is switched off. The time delay shall be set to 20 minutes.

### **Bathroom Fans**

#### **Specifications**

Make: Panasonic  
Type: Whisper Lite 80 CFM Ceiling Exhaust Bath Fan with Light ENERGY STAR\*  
Model #: FV-08VKM3

### **Bathroom Fan Switches**

#### **Specifications**

Make: Panasonic  
Type: Whisper Control 3-Function On/Off Switch with Humidity Control and Timer  
Model #: FV-WCCS2-A

### **Return Air Transfer System**

- In absence of return air ductwork in the bedrooms or bathrooms, install a Return Air Pathway, 12" X 6" or 12" X 12", Sound and Light restricted by-pass grill to balance forced-air system. Install in specified room and common space to provide return air. Seal to wall finish and install flange trim.

### **Dryer Vent**

- Furnish and Install 4" rigged metal vent tubing from the specified dryer location to a 4" wall mounted dryer vent hood with a back-flow preventer and NO screening.
  - Do not fasten with nails, screws or other fasteners that protrude into the interior of the exhaust duct.
  - Seal all seams in the system with duct mastic or aluminum foil tape, not duct tape. Secure duct and hood to framing.
- 
- ►► NOTE: Only a Maryland licensed mitigator can test and treat a home for radon gas. Project Manager to Schedule testing

## **DIVISION 15**

### **Demolish existing HVAC system**

### **Furnish and install new HVAC system per plans and specifications**

#### **NOHVAC DURING CONSTRUCTION –**

- Mask off all HVAC outlets during construction.
- Avoid any use of the HVAC equipment during construction if at all possible.
- Otherwise, have all HVAC ducts and coils cleaned by a professional company at the time of completion on the project.
- Cover ducts during construction to prevent them from getting dirty. HVAC systems should not be operated until all dust-producing activities have completed.
- This has implications for installation of flooring as specific humidity targets must be met. In those cases, supplemental heating and cooling must be provided if any sawing is done inside.
- Project team to flush the house for 48 non-continuous hours by opening the windows and turning on exhaust fans.
- Project team to give table of dates and times flush-out occurred, as well as a narrative of the flush out procedure.

#### **HVAC contractor shall perform/verify the following:**

- -- Start-up procedure according to manufactures instructions.
- -- Refrigerant charge verified by super-heat and/or sub-cooling method.
- -- Burner set to fire at nameplate input.
- -- Air handler setting/fan speed.
- -- Total airflow within 20% Or 25% of design flow per manual D, if using none ducted systems then this requirement is irrelevant.
- -- Total external system static should not exceed equipment capability at rated flow.

#### **Air Conditioner**

- Furnish and Install AC unit per plans and specifications
- Sizing and proper installation are critical to the Energy efficiency and home comfort, so it is important to hire a qualified technician.

#### **Slab Homes**

- Duct work shall not be run in or under the slab, due to the possibility of condensation or water infiltration which will cause mold and mildew.

#### **Attic**

- Duct work running thru the attic shall have insulated wrap installed to a R-8 before installing attic insulation.

#### **Radon Gas**

- Furnish and Install a passive radon gas vent system during construction with an electric outlet installed in the attic. Install the outlet less than 3ft. from the vent pipe, to make the system an active system if need to be after testing for radon gas.
- After house has been air-sealed, test for radon gas and if test shows elevated levels then install an active system to vent radon and soil gases.
- Home must not have high levels of radon gas after construction is complete & home is air sealed.

## DIVISION 15 (Continued) HVAC

### **NO HVAC DURING CONSTRUCTION –:**

Start-up procedure according to manufactures instructions, Refrigerant charge verified by super-heat and/or sub-cooling method. Burner set to fire at nameplate input. Air handler setting/fan speed.

Total airflow within 20% Or 25% of design flow per manual D, if using none ducted systems then this requirement is irrelevant. Total external system static should not exceed equipment capability at rated flow. HVAC UNIT

- Demolish existing heat pump and outdoor condensing unit
- Furnish and install new split system heat pump with new Energy Star and variable frequency model.
- Demolish existing indoor unit and the outdoor condensing unit
- Furnish and install new indoor unit and the outdoor condensing unit
- 3 tons system should be sufficient, furnish manuals J and D for sizing
- Demolish existing thermostat Furnish and install Nest thermostat.
- Demolish disconnect switch to outdoor condensing unit.
- Furnish and install disconnect switch to outdoor condensing unit
- Clean all existing return ductwork

### Registers

- Demolish all floor and wall mounted registers.
- Furnish and install all floor and wall mounted registers
- Match existing wall registers with floor registers

### Living and dining room Specifications

Manufacturer: Décor Grates Color: Cherry Wood

Type: Brazilian Cherry Wood Floor Register with Damper Box

Model:WLC212-N Supplier: The Home Depot

### Rest of house Specifications

Manufacturer: Décor Grates

Color: Cast Iron Black Steel

Type: Black Steel Scroll Wall and Ceiling Register

Model:ST614W Supplier: The Home Depot

### Grilles

- Demolish all return grilles and wall mounted grilles
- Furnish and install filter return grilles and wall mounted grilles

### Specifications

Manufacturer: Décor Grates

Color: Black Steel

Type: Steel Cold Air Return Grille

Model: ST614R

Supplier: The Home Depot

## DIVISION 16

### Electrical

#### Main Electric Service Box

Main electric service box to be installed on first floor if possible.

It is mandatory that the main electric service box be installed on the first floor for all projects presented as meeting 100% Accessible/Universal Design. Main electric service box shall have provisions for at least four, (4), additional circuits.

#### Electrical Service

- Furnish and install new electrical system per plans and specifications
- Evaluate existing circuitry
- Furnish and Install a 200 amp 3 wire service complete with breaker type panel box, with all circuits labeled and balanced. Leave provision for at least 4 additional circuits.
- Provide separate appliance circuits in kitchen.
- New service is to have arc fault breakers, per local code. Include new exterior meter panel.
- Service box shall be installed on first floor if possible

#### Receptacles, switches and plates

- Demolish existing receptacles, switches and plates
- Furnish and install **white** receptacles, switches and plates throughout the house

#### Smoke Alarms

- Demolish existing smoke alarms
- Furnish and Install one interconnected, hard-wired smoke detector with battery back-up in each sleeping room, outside each separate sleeping area in the immediate area of the bedrooms and on each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics.

#### Specifications

Manufacturer: Nest Protect  
Color: White  
Type: Smoke + Carbon Monoxide Alarm  
Model: S1001LW  
Supplier: The Home Depot

#### Smoke Alarms

- Furnish and Install one interconnected, hard-wired smoke detector with battery back-up in each sleeping room, outside each separate sleeping area in the immediate area of the bedrooms and on each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics.

#### ►► EXCEPTION:

Smoke alarms in existing areas shall not be required to be interconnected and hard wired where the alterations or repairs do not result in the removal or opening-up of interior wall or ceiling exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.

#### Carbon Monoxide Detectors

- Furnish and Install one on each floor area and basement, all to be hardwired and inter-connected.

#### ►► Exception:

Carbon monoxide detectors in existing areas shall not be required to be interconnected and hard wired where the alterations or repairs do not result in the removal or opening-up of interior wall or ceiling exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes. All homes equipped with combustion appliances or an attached garage shall have a carbon monoxide (CO) alarm installed in a central location in the immediate vicinity of each separate sleeping zone. (e.g. in a hallway adjacent to bedrooms.) See IAP spec for additional details. .

## DIVISION 16

### Furnish and install fixtures with LED bulbs

#### Fixtures

##### (1). LED RECESSED

###### Specifications

Per plans and specifications

##### (2.) Surface Mounted

###### Rhodes Nutmeg Recessed

###### Specifications:

**Manufacturer:** Hampton Bay

**Model #:** 29001

**Internet #:** 100459862

**Size:** 6 in.

**Supplier:** The Home Depot

##### (3). LED RECESSED

###### Specifications

Per plans and specifications

##### (4a) Vanity Sconce hall bathroom

###### Specifications

**Make:** Glomar Ballerina

**Type:** 5-Light Surface –Mount

**Size:** 36in (Verify Sizes)

**Color:** Mahogany -Bronze

**Model #:** HD-3124

**Supplier:** The Home Depot

##### 4b). Master Bathroom Sconce

###### Specifications

**Make:** Green Matters Ballerina Bath Light

**Type:** 3-Light Mahogany

**Size:** 24in (Verify Sizes)

**Color:** Bronze

**Model #:** HD-3122

**Supplier:** The Home Depot

##### (5). Exterior Sconce

###### Specifications

**Make:** Progress Lighting Wall Lantern

**Type:** Motion-Sensor Outdoor

**Size:** 5-1/2 in. W x 13 in. H

**Color:** Black

**Model #:** Model # P5662-31

**Supplier:** The Home Depot



#### **(6).Chandelier Light**

Nutmeg Down-light

##### **Specifications**

Manufacture: Hampton Bay

Model #: 27109

Internet # 202024301

Rhodes Type: 3-Light

Supplier: The Home Depot

#### **(7).Mini- Pendant Lights**

**Rhodes 1-Light Nutmeg**

##### **Specifications**

**Manufacturer: Hampton Bay**

Model #: 27010

Internet #: 202024799

#### **(8). Fluorescent**

##### **Specifications**

**Make: Philips Day-Brite Lens Troffer**

**Type: Recessed**

**Size 2x4**

**Model#: TG8-TG PL3**

**Supplier: Branch Electric Supply )**

#### **(9a) Ceiling Fans**

**Master Bedroom/Owners Suite**

##### **Specifications**

Make: Hampton Bay Gazebo II 52 in

Type: Indoor/Outdoor

Color: Weathered Bronze

Model #: YG188-WB

**Supplier: Home**

#### **(9b) ) Ceiling Fans**

**All Bedrooms**

##### **Specifications**

Make: Hunter

Type: Low Profile II 48 in fan

Color: White

Model: 52062

Supplier: Home Depot

## 10). Inside Cabinet Lighting

### Specifications

Make: Miniature recessed lighting  
Type: Recessed cabinet lighting must be included in the wiring  
Model #: Provide samples for approval

## 10). Inside Cabinet Lighting

### Specifications

Make: Snap low under cabinet lighting  
Type: Under cabinet lighting must be included in the wiring  
Model #: Provide samples for approval

## (12.) Exterior Wall Entry Door/Porch Light Fixture

### Specifications

Make: ALL-PRO™ Dusk-to-Dawn LED Floodlight (EnergyStar)  
Type: Led Outdoor Security series  
Color: Bronze  
Model #: FSS1530LPCES  
Supplier: Cooper Lighting

## All Bathrooms

### Exhaust Fans

#### Hall Bathroom

### Fan Switch

### Specifications

Make:  
Type: Panasonic Whisper Control 3-Function On/Off Switch with Humidity Control & Timer  
Color: White  
Model #: FV-WCCS1-W  
Supplier: Home Depot

### Fans

### Specifications

Make: Panasonic Whisper Lite  
Type: 80 CFM Ceiling Exhaust Bath Fan with Light ENERGY STAR  
Color: White  
Model #: FV-08VQL5  
Supplier: Home Depot

## Bathrooms Fans and Light

- Bathroom Exhaust Fans With Light Shall be Energy Star certified and no louder than 1.0 sones

One bathroom shall be a continuous motion fan with motion activated fan boost with the continuous CFM setting adjusted to meet the constant ventilation requirements of ASHRAE Standard 62.2. All other bathrooms shall have fans with a time delay setting

## DIVISION 16

### Fixtures

Furnish and Install box extenders for electrical outlets on the wainscoting covered walls in the living and family area.

### Box Extenders

#### Specifications

Carlson 14.0 cu in 1 Gang Old Work Plastic Electrical

Box Item# 70990

Supplier: Loewes

Electric Device Height: Please note the following:

*Measure To The Center Of Device AFF*

--Wall Outlet – 18"

-- Wall Switch – 42"

-- Phone Jack – 18"

-- Cable Connection – 18 "

-- Thermostat – 48"

-- Door Bell Button – 42"

►► NOTE: If an outlet or switch is obstructed by a base cabinet or countertop, then the maximum height for the switch or outlet shall be 46" above finished floor.

### Utility Meters

- Furnish and install or have all the utility companies furnish and install all the applicable meters to include water, gas, power and any other applicable meters per plans and specifications or as necessary.
- The contractor shall ensure all the meters are in working order and all utilities are operational at job completion.

### Note:

All bidding questions should be emailed to Patricia A. Omondi to [Paomondi@co.pg.md.us](mailto:Paomondi@co.pg.md.us), by **July 1<sup>st</sup> 2015**. No responses will be issued after that date and time. If the schedule, cost break down, Electrical, Plumbing and HVAC proposals, RWC pre-approval letter, sheathing option prices are not attached, the bid will be considered non-responsive and will be rejected. We reserve the right to award part or all of the work as we deem necessary.

### **Patricia Omondi**

Redevelopment Authority

Community Developer IV

9201 Basil Court, Suite 504

Largo, Maryland, 20774

Tel: (301) 883-5304 Fax : (301) 883-5291

Email: [Paomondi@co.pg.md.us](mailto:Paomondi@co.pg.md.us)

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