

DIVISION 1 GENERAL REQUIREMENTS

01.01 PROJECT DESCRIPTION:

In conjunction with Architectural, Structural, Electrical and Mechanical Drawings related to the project these Specifications describe the scope of Architectural, Structural, Mechanical, Plumbing, Electrical and other requirements for a Two Shed Dormer Addition, Rebuilt Rear Addition and Substantial Rehabilitation of 3413 Glenn Drive, Suitland, MD. In addition, the following reports and standards shall be considered as integral part to the above listed documents: a. The Prince George's County, Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes," b. The Prince George's County "Green Building Standards Addendum," January 2012, c. The Home Energy Profile by Energy Service Group - Central Maryland dated 8/30/2012, d. The Home Energy Audit by Energy Service Group - Central Maryland dated 8/30/2012, e. The Lead-Based Paint Inspection Report performed by One Source Environmental Project dated 9/10/2012, f. RA/NSP Guidelines for Amenities, Materials, and Color Palettes, December 2012.

All dimensions shown must be field verified by the Contractor. In submitting a fixed price bid for the Work, the Contractor and Subcontractors confirm that they have reviewed the Documents and have inspected the building and site relative to the intended Work and that the bid shall incorporate the furnishing of all labor, materials, equipment and permits necessary for the satisfactory completion of the rehabilitation of the property identified in these Specifications. **WORK PERFORMED CONCURRENTLY BY DEVELOPER'S CONSULTANT:**

The Contractor shall coordinate the work to be performed by Energy Service Group who shall be hired separately by the Developer with regard to "energy work" as detailed in their Memo for Proposal Repairs.

01.03 CODES, PERMITS & INSPECTIONS:

All work shall be done in strict compliance with the Prince George's County Building Code, including the 2006 IRC, as well as any and all other applicable codes, regulations and ordinances. The Contractor shall provide the building permit and all other permits and obtain all inspections required for the Work. Note: the developer shall be responsible for obtaining any zoning variance or special exception required.

01.04 PERMIT FEES AND NOTICES:

The Contractor shall secure and pay for all permits, fees and licenses necessary for the proper execution and completion of the work. Give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the work.

01.05 COORDINATION:

The Contractor shall be responsible for the coordination of the work of all Subcontractors as required to complete the Work, and shall verify that all work is done to the highest degree of craftsmanship by journeymen of the respective trades. The Contractor shall verify all dimensions, and shall work to critical alignments as indicated on the Drawings, and shall not scale the drawings for measurements. If any discrepancies in dimensions or conditions are found, the Contractor shall contact the Architect for clarification prior to proceeding with that portion of the work.

01.06 CHANGE IN THE WORK:

Any change in the work including substitution of materials, workmanship required by these Specifications, or changes in the scope of the work as described in the Specifications which may be proposed by the Contractor, or found necessary or desirable as the work progresses, shall be in writing with price change given. Changes shall be approved by the Developer, the Contractor and the Architect before any work incidental thereto is started.

01.07 WORKMANSHIP:

Workmanship shall be done in accordance with the standards of several trades known as a "workmanlike manner," and in accordance to the specific trade requirements, and manufacturer's and material installation guidelines.

01.08 LEAD-SPECIFIC LAWS, RULES, REGULATIONS AND GUIDELINES:

The execution of this work shall comply with all applicable federal, state and local laws, rules, regulations and guidelines for lead dust environments, including but not limited to: 20 CFR 1926.62 - Lead Construction Standard; 29 CFR 1910.1200 - Hazard Communication Standard; 40 CFR Part 745 - Lead Based Paint Poisoning Prevention in Certain Residential Structures (EPA Regulations); 24 CFR Part 35 - HUD's Lead Safe Housing Rule.

01.09 GREEN REQUIREMENTS:

The Contractor shall provide materials and products to meet the minimum requirements of The Prince George's County "Green Building Standards Addendum," January 2012. Specifically that: a. Carpets provided shall meet the Carpet and Rug Institute's "Green Label Certification," b. Materials, adhesives, sealants, and coating used throughout the Project shall be a low-VOC or have no VOC and of low-formaldehyde or have no formaldehyde, and c. Lighting and Electrical Fixtures and Equipment and Appliances shall meet the current ENERGY STAR requirements and bear the ENERGY STAR label.

01.10 WASTE MANAGEMENT / RECYCLING:

The Contractor shall recycle all cardboard, paper and plastic wrapping material removed from construction supplies. The Contractor shall maintain and manage recycling bins on site for all recyclable material including materials used by staff (bottles, cans, etc.) All surplus construction materials shall be either recycled or donated to a building supply nonprofit organization (donation to be made in Developer's name.) Such materials to be stockpiled include brick, glass block, flagstone pavers, wall paneling, etc. Consult with Developer for determination of stockpile locations and related considerations.

01.11 CUTTING AND PATCHING GENERAL:

Where required to cut into existing construction to provide for the installation or performance of other work and subsequent fitting and patching, all work shall restore surfaces to their original condition or to the adjoining new surface. Except as otherwise indicated, or as directed by Architect, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work. Restore exposed finishes of patched areas and where necessary extend restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

01.12 CUTTING AND PATCHING SYSTEMS:

Patch existing systems which are altered or obstructed by the work. Patch in a manner to maintain proper system operation and performance. Systems include, but are not limited to: structural, mechanical, electrical, plumbing, security, audio/visual, foundation drainage, waterproofing, rain leader, etc.

01.13 CUTTING AND PATCHING PRECAUTIONS:

Do not cut and patch structural work in a manner that would result in a reduction of load-carrying capacity or of load-deflection ratio. Do not cut and patch operational or safety related components in a manner that would result in a reduction of their capacity to perform in the manner intended. Do not cut or patch work exposed on the buildings exterior or in its occupied spaces, in a manner that would, in the Architect's opinion, result in lessening the building's aesthetic qualities. Do not cut and patch work in a manner that would result in substantial visual evidence of cut and patch work. Remove and replace work judged by the Architect to have been cut and patched in a visually unsatisfactory manner.

01.14 ALLOWANCES:

Provide allowances for the following items (installation shall be included in base bid): **Allowance Item: Kitchen and Laundry Appliances.** Range, Microwave/Range Hood, Dish Washer, Disposal, Refrigerator, Washer and Dryer. Material Allowance: \$4,000.00 (See Guidelines for Amenities, Materials, and Color Palettes, for brands.)

DIVISION 2: DEMOLITION & SITEWORK

02.01 GENERAL:

The Contract for Construction shall include all demolition and sitework required to complete the Work indicated and described in the Construction Documents. Provide all facilities, labor, materials, equipment, and services required. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

02.02 CODES & STANDARDS:

All demolition and site work shall conform to all applicable local, state, federal and national codes and standards. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes," and The Prince George's County "Green Building Standards Addendum," January 2012.

02.03 UTILITIES:

All existing underground utilities shall be physically located by the Contractor prior to the beginning of any construction in the vicinity of these utilities. For location of utilities contact Miss Utilities at 800-257-7777 at least 48 hours prior to any earth disturbance. The Construction Documents do not represent that all existing utilities are shown or that those shown are correctly located. It is the Contractor's responsibility to contact each utility company, dig test pits, and take all and whatever steps are necessary to accurately locate and protect all existing utilities. No construction shall be accomplished until the accurate locations of utilities have been made and it has been determined by the Contractor that construction can be accomplished in accordance with these plans without utility conflicts.

02.04 DEMOLITION:

Provide for the demolition of all existing items which will interfere with the Work indicated in the Construction Documents. Provide demolition of Exterior items as shown on the Drawings to include but not limited to all existing asphalt and concrete surfaces, chain linked and wood fences, shrubbery, brush and overgrown weeds, rotted trees, stumps and the existing shed in order to provide the site free for seeding and planting (see section 2.10 below). Provide mechanical, electrical and plumbing demolition as may be required to complete that portion of the Work. Follow EPA requirements for the removal and disposal of items containing lead based paint. Except as otherwise indicated, all demolished items shall be hauled from the site and shall be properly disposed of. Note that the Drawings do not account for all items related to these trades which may require demolition, each subcontractor shall make a field visit prior to submitting their bid so as to account for the demolition required to complete the Work indicated.

02.05 REMOVAL OF HAZARDOUS MATERIAL:

After conducting a soil sampling at the exterior corner of the existing Mechanical Room, the sampling showed a Hazardous Level of Diesel Range Organics (DRO) at 11,000 PPM. The safe level is 230 PPM. L&M General and Environmental Contractors of Capitol Heights, Maryland shall be contracted to provide the labor, material, equipment, disposal and insurance to remove the contaminated soil; and an industrial Hygienist to collect soil samples for analyses after removal. All work shall conform to all applicable local, state federal, and national codes and standards. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

02.06 EXCAVATIONS:

Provide for the excavation and removal (hauling and dumping) of earth as required for the foundation work indicated. Refer to the drawings to determine the extent of excavation required.

02.07 GRADING:

Within construction limits, rough grade as required to obtain finished grading sloping away from all walls of the house. Slope shall be minimum 5% (6") for the first 10 feet away from the house. Compact all fill as required. Where walks and slabs occur, use a gravel sub base to required elevation.

02.08 BRACING AND SHORING:

Provide bracing and shoring as required to protect existing construction to remain from damage, as well as to protect persons and property. Verify all bearing conditions prior to beginning demolition.

02.09 PROTECTIONS:

Protect existing trees and vegetation which are to remain from physical damage. Do not store materials or equipment within the drip line. Protect structures, utilities, sidewalks, pavements, and other items in areas of work. Provide necessary protection to prevent damage to persons or property. Restore any damaged property to a better condition existing prior to the start of the work unless otherwise noted.

02.10 TERMITE CONTROL:

Provide TermiMesh, or equivalent physical barriers, and low or no-chemical content soil treatment such as Borates for termite prevention at the areas of new construction and at existing areas as recommended by a qualified, registered pest control professional.

02.11 LANDSCAPING:

Remove all vegetation and all other obstructions on the Site (See Sheet A-0b and Demolition above). Provide new trees, shrubbery, seeding of entire site, and hardscape as shown in the Drawings. All new plantings of trees and plants are to be native species and 100% appropriate to the site's soil and climate. Do not include any invasive species. Provide top soil at all planting areas. Topsoil: Free of debris, rock, gravel, and consisting of a sandy loam containing not more than 2 to 2.5% organic matter. Furnish and place topsoil 4 inches thick over area to be seeded. Spread evenly to true contours and hand rake to an even, smooth surface, ready for seeding. Provide irrigation of all new vegetation until stable. Winter plantings shall be irrigated in the Spring to insure stabilization. Refer to Landscaped Plan for additional requirements and details.

02.12 FENCING:

Remove all existing fencing. Provide and install new 6ft high vinyl privacy fence at property line of rear and side yards and 3ft high picket fence at front property line as indicated in the Drawings. Provide Developer with samples for review and approval.

02.13 ASPHALT DRIVEWAY:

Provide and install new 54 foot long asphalt driveway for three-car off-street parking as shown in drawings. Width to follow and align with existing curb cut.

02.14 ADDITIONAL REQUIREMENTS:

Refer to Structural Specifications on the Drawings for additional site work requirements.

DIVISION 3: CONCRETE

03.01 GENERAL:

The Contract for Construction shall include all concrete work required to complete the Work indicated and described in the Construction Documents. Provide all facilities, labor, materials, equipment, and services required. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

03.02 CODES & STANDARDS:

Concrete work shall conform to all applicable local, state, federal and national codes and standards, as well as those established by the American Concrete Institute as described in its current publications. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes." The products and materials used shall be approved by the American Society for Testing Materials as the most applicable to the work described and the conditions encountered.

03.03 CONCRETE MATERIALS:

All concrete to have minimum compressive strength (FC) = 3000 psi in 28 days. All concrete to be poured in accordance with ACI 301-83 specification. Concrete exposed to weather to be air-entrained. All reinforcing steel to meet ASTM-A-615 Grade 60. Furnish support bars and all required accessories in accordance with C.R.S.I. Standards. Note: Prior to the use of any add mixtures, provide information to the Architect for review and discussion.

03.04 CONCRETE FOOTINGS:

Provide concrete footings, grade and edge beams as required for the work indicated. Footings shall have a minimum depth of 2'-6" below grade (to bottom). Provide step down footings as required to meet the level of the existing foundation at abutting conditions. Refer to the Drawings for other specific conditions.

03.05 EXISTING FOUNDATION:

Note that existing foundation conditions are unknown and any reference in the drawings and specifications, and addenda to specific conditions are based on assumptions which are subject to field verification.

03.06 CONCRETE WALKWAY:

Provide and install 36 inch concrete walkway from new Front Porch to Sidewalk. Refer to Drawings for location.

DIVISION 4: MASONRY/ STONE

04.01 GENERAL:

The Contract for Construction shall include all masonry and stone work required to complete the Work indicated and described in the Construction Documents. Provide all facilities, labor, materials, equipment, and services required. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

04.02 CODES & STANDARDS:

Masonry and stone work shall conform to all applicable local, state, federal and national codes and standards, as well as those established by the Brick Institute of America, Concrete Masonry Association, and the Building Stone Institute as described in their current publications. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes." The products and materials used shall be approved by the American Society for Testing Materials as the most applicable to the work described and the conditions encountered.

04.03 CONCRETE MASONRY:

Where required in conjunction with the foundation work, concrete masonry units shall meet the requirements of ASTM C90, grade N-1 (moisture cured), lightweight, hollow, with minimum compressive strength of 1500 psi. Masonry mortar shall meet the requirements of ASTM C270, type M. Installation of Concrete Masonry Units shall be per the published specifications and recommendations of the National Concrete Masonry Association, and the product manufacturer(s), as applicable to the work described and the conditions encountered. Provide horizontal joint reinforcement at 16 inches on center vertically, typically. Exposed end units shall be solid block. All new concrete masonry below grade shall be parged (both sides) and painted in accordance with Division 9 of these Specifications.

04.04 FIELDSTONE STEPPING STONES:

Provide and install fieldstone stepping stones at the Front of house and at the Rear Deck as shown in the drawings. Provide developer with samples for review and approval.

04.05 ADDITIONAL REQUIREMENTS:

Refer to Structural Specifications on the Drawings for additional masonry requirements.

DIVISION 5: METALS

05.01 GENERAL:

The Contract for Construction shall include all metal work required to complete the Work indicated and described in the Construction Documents. Provide all facilities, labor, material, equipment, and services required. The Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

05.02 CODES & STANDARDS:

Metal work shall conform to all applicable local, state, federal and national codes and standards as well as those established by the National Association of Architectural Metal Manufacturer and the American Institute of Steel Construction as described in their current publications. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes." The products and materials used shall be approved by the American Society for Testing Materials as the most applicable to the work described and the conditions encountered.

05.03 MISC. METAL:

Provide Miscellaneous metal as required, including loose lintels for masonry walls, bolts, plates, anchors, hangers, and other required items for framing and supporting woodwork.

DIVISION 6: WOOD / CARPENTRY

06.01 GENERAL:

The Contract for Construction shall include all woodwork required to complete the Work indicated and described in the Drawings. Provide all facilities, labor, materials, equipment, and services required. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

06.02 CODES & STANDARDS:

Woodwork shall conform to all applicable local, state, federal and national codes and standards as well as those established by the National Forest Products Association, the American Plywood Association and the Architectural Woodwork Institute as described in their current publications. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes," and The Prince George's County "Green Building Standards Addendum," January 2012. The products and materials used shall be approved by the American Society for Testing Materials as the most applicable to the work described and the conditions encountered.

06.03 FRAMING MATERIALS:

Provide and install all framing lumber as required to complete the Work. Refer to Structural Specifications on the Drawings for specific material and installation requirements. All framing material in direct contact with concrete, masonry, or within 8 inches of grade shall be pressure treated with preservatives.

06.04 EXISTING SHEATHING & SUBFLOORING:

Evaluate condition of existing exterior roof and wall sheathing and subflooring. Repair or replace as needed. Replaced roof sheathing (subflooring) shall be 3/4 inch tongue and groove. Plywood shall be installed per APA specifications, requirements and recommendations.

06.05 NEW SHEATHING & SUBFLOORING:

Exterior wall sheathing at new construction shall be standard grade plywood, exterior glue, 1/2 inch thick. Roof sheathing at new construction shall be interior plywood with exterior glue, 5/8 inch thick and installed with clips. Floor sheathing (subflooring) shall be 3/4 inch tongue and groove. Plywood shall be installed per APA specifications, requirements and recommendations.

06.06 CEMENT BOARD SIDING:

Remove all layers of existing siding (vinyl, wood and other) to expose all existing sheathing. Evaluate and repair sheathing as per Section 06.04 above. Provide and install factory primed Cement Board Siding at new addition walls and at existing house as indicated in the Drawings. The material shall be HardiePlank Lap Siding pre finished smooth, 5" exposure lap siding as manufactured by James Hardie of Mission Viejo, California, or approved equal. Installation shall be per the product manufacturer's written specifications, requirements and recommendations. Cement Board Siding color and finish shall be selected by the Developer. Siding shall be field painted in accordance with Division 9 of these Specifications. Coordinate Cement Board Siding installation with flashing requirements as required for a complete and weather tight installation.

06.07 EXISTING WOOD TRIM AT PORCH:

Evaluate condition of existing trim band boards and ceiling at Front Porch. Repair or replace as required. Sand exist paint as necessary to achieve a smooth surface prior to priming and painting. **Note: Per test results conducted on 9/10/12 these materials contain lead based paint.** Follow all EPA regulations and recommendations. Refer to Division 9 of these Specifications for painting requirements. See Report for lead analysis.

06.08 PVC TRIM:

Provide and install PVC Trim Board material, Azek or approved equal, in sizes and shapes as indicated, or required, for corner boards, band boards and window and door trim as indicated in the Drawings. Installation shall be per the product manufacturer's written specifications, requirements and recommendations for the installation indicated and the conditions encountered. PVC Trim Boards shall be primed and painted in accordance with the requirements of these Specifications. Coordinate Trim Board installation with flashing requirements as required for a complete and weather tight installation.

06.09 FRONT PORCH AND DECK FLOORING:

Provide and install new Trex decking at the Existing Front Porch and at the New Rear Deck.

06.10 FRONT PORCH COLUMNS:

Provide and install new fiberglass structural front porch columns set on existing masonry piers as detailed in the Drawings. Width and proportion of columns shall be appropriate to shorter length to provide a tapered look that fits with base and capital sizes. **Treat existing paint as containing lead where the report may or may not indicate.** Columns shall be primed and painted in accordance with Division 9 of these Specifications. Developer to choose color of paint.

06.11 RAILING:

Replace existing railing at Front Porch with vinyl railing as indicated in the Drawings. Provide and install new vinyl railing at Deck perimeter as indicated in the Drawings. Installation shall be per manufacturer's written instructions and recommendations and shall conform to all code loading and sizing requirements.

06.12 INTERIOR WOOD TRIM:

Provide and install standing and running trim in the shapes and sizes to match the existing house trim profiles, or as otherwise indicated in the Drawings. The material, its fabrication, and its installation shall conform to the Custom Grade Specifications and Requirements of Section 300 of the Architectural Woodwork Institute's Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program manual, most current edition, as applicable to the Work indicated and the conditions encountered. Unless otherwise noted, all wood used for interior standing and running trim shall be trim grade pine, fir or poplar, and shall be painted in accordance with Division 9 of the Specifications.

06.13 KITCHEN, BATH VANITY AND OTHER CABINETS:

Provide and install kitchen and vanity cabinets as indicated in the Drawings. Cabinets shall be constructed of solid hardwood face-frames, doors, and drawer fronts with 1/2 inch wood/plywood carcasses and floors. Carcasses shall be joined using wood, metal or plastic corner bracing. Kitchen and bath vanity cabinets shall be Environmentally Certified under the Kitchen Cabinet Manufacturer's Association's Environmental Stewardship Program. All manufactured units shall comply with ANSI A161.1 "Recommended Minimum Construction and Performance Standards for Kitchen and Vanity Cabinets" or an equivalent standard. All cabinets shall bear the label of an independent agency that certifies minimum construction standards have been met. Cabinets shall be constructed using formaldehyde free or low formaldehyde, and low VOC materials. Contractor shall provide Developer with specifications and shop and layout drawings including styles and finishes for review, selection and approval. Refer to RA/NSP Guidelines for Amenities, Materials, and Color Palettes, December 2012 for further details including hardware for cabinetry.

06.14 CLOSET FIT-OUTS:

Provide and install closet fit-outs as indicated in the drawings. Include single rods and shelf as standard closets, and double rods and built-in shelving at Walk-in-closets unless otherwise noted. Closet fit-outs shall be of wood construction.

DIVISION 7: THERMAL AND MOISTURE PROTECTION

07.01 GENERAL:

The Contract for Construction shall include all thermal and moisture protection work required to complete the Work indicated and described in the Construction Documents. Provide all facilities, labor, materials, equipment, and services required. The General Contractor shall provide for the coordination of the work of this division with the work of any and all other divisions as required.

07.02 CODES & STANDARDS:

Thermal and moisture protection work shall conform to all applicable local, state, federal and national codes and standards as well as those established by the National Roofing Manufacturer's Association and the Sheet Metal and Air Conditioning Manufacturer's Association. Additionally, the work shall conform to The Prince George's County Department of Housing and Community Development "CDBG Substantial Rehabilitation Standards for Single Family Homes," and The Prince George's County "Green Building Standards Addendum," January 2012. The products and materials used shall be approved by the American Society for Testing Materials as the most applicable to the work described and the conditions encountered.

07.03 BUILDING INSULATION:

All Energy Improvements and insulation will be provided by Energy Services Group and will meet or exceed standard insulation practices. Standard insulation practices include providing and installing R-21 batt insulation at all new exterior frame walls, minimum R-13 blow-in insulation at all existing exterior frame walls, R-38 batt or equivalent closed foam cell insulation (where batt insulation if not practicable) at all new and existing attics or rafters, R-30 batt insulation at new and existing crawl spaces, and R-13 batt insulation at basement furred walls. At duct work running in unconditioned spaces R-6 insulation is used. At new and existing crawl space walls foil-faced foam insulation is used. Spray foam insulation is used at all rim boards. All gaps or leaks from crawl spaces to the exterior are sealed with polyurethane foam sealant. All small gaps between joints and around penetrations in exterior wall framing, and at floors, light fixtures,