

EXAMPLE CONSTRUCTION SPECIFICATIONS

CITY OF GRASS VALLEY - WORKFORCE HOUSING DESIGN PROGRAM

General Conditions

Supplementary General Conditions:

Division 1 - General Requirements

Construction and Demolition Waste:

All Construction Waste products shall be reused salvaged and / or recycled to the maximum extent possible. Provide receptacles for sorting of recyclable materials. Resources for recycling construction debris: Visit C.I.W.M.B's web site at www.iwmb.ca.gov for local haulers and markets.

Division 2- Site Work

02010 SUBSURFACE EXPLORATION

Any indication of toxic materials shall be cause for notifying the Owner immediately.

02100 CLEARING

Site Clearing: Remove all debris, fences and vegetation. Before placing fill, place fill in 6" lifts compacted at 90%; bench each lift into the original ground.

02110 DEMOLITION

Remove all fencing from the site with the exception of the fence along adjacent properties.

02500 SITE DRAINAGE

Storm Drainage: Provide culverts, pipes, manholes, catch basins and storm sewers as required to meet City of Grass Valley improvement specifications.

02600 PAVING AND SURFACING

Paving: Walks to be 3.5" concrete paving per city standards. Compact subgrade below paving (upper 6" - 90%). Public sidewalks shall have scoring at 24" to 30" on center. Replace all deteriorated curb, gutter and sidewalk.

02700 SITE IMPROVEMENTS

Finish Grading: Place all fills in 6" lifts by approved machine method. Backfill to provide proper drainage away from all buildings. Minimum top soil depth to be 6 inches. Surface drainage shall not cross property lines and shall drain to main drive for collection.

Irrigation Systems: Irrigation systems installed in front yards will be operable by individual lots.

02800 LANDSCAPING

Lawns and Planting: Rolled turf for all lawn areas. Provide drought tolerant, low profile, low maintenance ground cover where indicated. New trees to be 15 gallon size. Tree selection to be limited to drought tolerant non-fruit bearing species. Irrigation system to be fully automatic with various head shapes as required to provide 100% coverage. Provide mowing strip areas at all lawn areas that are contiguous to building walls.

Division 3 - Concrete

03310 STRUCTURAL CONCRETE

All Concrete: To be 2500 psi, 28 day, 5 sack, 5 inch maximum slump with no additives.

Foundations: Spread footings for two story buildings to be 18 inch width, 24 inch depth as per City of Grass Valley Building Department requirements.

Slab on Grade: 4 inch concrete slabs on grade typical with a 4" aggregate base. Provide vapor barrier at all slabs with habitable space above. Two-pour concrete slabs with footings with 6" x 6" x #10 x #10 WWM at mid-depth and #4 reinforcing bars top and bottom in all footings.

03400 PRE-CAST CONCRETE

Precast Concrete: Provide pre-cast concrete splash blocks at all down spouts which will sheet drain. Connect and divert down spouts at walkways.

Division 4 - Masonry

04200 UNIT MASONRY

Column Bases: Standard brick veneer columns with reinforced grouted C.M.U. core.

Division 5 - Metals

05500 MISCELLANEOUS METAL FABRICATIONS

Fabricate from mild steel, factory prime with lead oxide.

Division 6 - Carpentry

06100 ROUGH CARPENTRY

General: Provide blocking at 8 feet o.c. in stud walls and as required by code for draft stops. Ease all exposed edges of all frames and trim.

Materials: All framing members "standard and better" Douglas Fir unless otherwise noted. Osmose pressure treated when in contact with concrete.

All Joists and Beams: Douglas Fir #2

Floor Framing: 12" Wood I-joist

Floor Sheathing: At wood joists and trusses APA rated Stud-I-Floor 24 oc, tongue and groove edges or square edge with blocking. Stagger end joints and leave 1/8" spacing at all joints.

Floor Underlayment: 3/8" particle board, manufactured and labeled for underlayment use (used at sheet vinyl floor areas).

Exterior Wall Structural Sheathing: APA rated sheathing, 24/0 exterior

Roof Sheathing: APA rated 48/24 exterior.

Installation: Nail all framing per framing schedule.

Exterior Deck: 2- 3" galvanized screw each piece to each framing member.

Roof Sheathing: 8d at 6" o.c. to each support.

Floor Sheathing: glue and screw

Wall Sheathing: 8d at 6" o.c. at sheet perimeter, 12" o.c. to other supports.

06170 PREFABRICATED STRUCTURAL WOOD

Roof Trusses: Pre-manufactured, pre-engineered gang nail Douglas Fir 2" nominal trusses (spaced at 24 inches o.c.). End wall trusses at gable ends.

06500 PREFABRICATED STRUCTURAL PLASTIC

Exterior Deck: Wood polymer lumber by Trex or approved equal.

06200 FINISH CARPENTRY

Exterior Trim: Spruce or cedar, select for appearance

Interior Trim, Window and Door Frames: B and better. S4S Pine. Paint grade.

06410 CABINET WORK

Cabinets: Construction -- flush overlay.

Materials: All exposed wood to be pre-stained oak. Door and drawer fronts - lumber core, sand and fill edges. Vertical partitions and shelves: edge banded medium grade 1-M-2 or better particle boards, set in metal shelf supports on all shelves where notes. Drawers - 1/2" "B" plywood sides and back, 1/4" hardboard bottom, K and V dual drawer guides Hinges - "Micro" self-latching, full concealed, 1 pair per drawer.

Linen cabinets, or closet

Cutting Board Tops: Clear maple, laminated, 3/4" thick.

06424 PLASTIC LAMINATE

Countertops and 4" Backsplashes: Laminated plastic, standard gauge, solid colors selected, provide wall nose edge, coves and self-edge trim.

Division 7 - Moisture Protection

07150 DAMPPROOFING

Membranes: Provide .004" plastic vapor barrier under all concrete slabs with habitable space above. Provide one layer of building paper as backing for all exterior (?).

07200 INSULATION

Insulation: Exterior walls at finished spaces to be R-19, 5.5" glass fiber foil back batts in 6" walls and R-15 in 4" walls. Ceiling below roof to be R-38, 11.5" glass fiber foil back batts. . Raised wood first floor to be R-19 glass fiber batts.

07300 SHINGLES AND ROOFING TILES

Shingle Roof: Class A Fiberglass shingles, "Architect 80" by Certaineed

07600 FLASHING AND SHEET METAL

Flashing, Gutters and Down spouts: 26 gauge, galvalume, prime with mill coat of galvanized primer, or as noted.

Window flashing: Provide a 12" wide bituthene window flashing on all windows.

07900 SEALANTS

Caulking: GE architectural sealants or equal at all metal to wood connections (thresholds, etc.) Standard caulking material elsewhere.

Division 8 - Doors and Windows

08010 GENERAL PROVISIONS

Installation: All openings shall be fully prepared to receive doors and windows. Final cleaning and protection of installed units shall be the responsibility of the General Contractor.

08200 WOOD DOORS

Wood Doors:

Interior doors: Paint grade, molded wood, 1 3/8" thick with 1/8" wood fiber skin with 6 rectangular panels. All doors edged to match face.

Exterior doors: Metal skin with solid wood frame and foam insulation core, pressed six panel or full lite, 1 3/4" thick.

08560 VINYL WINDOWS

Sliding, Single Hung and Fixed Frames Windows: Provide extruded vinyl windows of the types and dimensions shown on the Drawings, complete with anchors of the types needed for the installation, and complying with the following standards as defined in ANSI-AAMA 101-93, except as may be called for otherwise on the Drawings: 1) U-value with Clear glass = 0.49, 2) Performance class: R-20
Finish: Integrally colored white window members and matching white on the frame members of all screens.

08586 SCREENS

Screens: Screen Frames to be .020 tubular roll-formed vinyl sections fitted with 18x14 fiberglass mesh. Screens to have pull tabs and leaf springs for release and containment.

08700 HARDWARE AND SPECIALTIES

Doors: All locks and latchsets to be Schlage Type "F" unless noted otherwise. Exterior entry doors - all units to be Schlage "H" series security locksets and deadbolts.

08730 WEATHERSTRIPPING AND SEALS

Sealants: All doors and windows shall be carefully sealed as per manufacturer's instructions.

Weatherstripping:

Doors: curf type applied.

Windows: Vents shall be weather stripped around the panel perimeter with silicone treated pile weather stripping.

08740 THRESHOLDS

Thresholds: Extruded aluminum Model #182A Pemko or approved (at entry doors,, concrete decks and walks).

08800 GLAZING

All glass shall conform to requirements as set forth in the Uniform Building Code with regard to glass thickness and safety glazing requirements. Insulating glass shall be 5/8" overall and shall be certified to meet a S.I.G.M.A. "A level" rating

1. U-value with Low E-2 glass: 0.39
2. Performance class: R-20
3. Glazing shall be:

- a. Dual glazed "Low E2 - 171" or "Low E2 - 172" .
- b. Visible light transmittance: 72%
- c. Shading Coefficient: 0.47
- d. Solar Heat Gain Coefficient: 0.41

Division 9 - Finishes

09180 CEMENT PLASTER

Cement Plaster: 7/8" stucco exterior with an imperfect smooth or sand finish with integral acrylic color.

09250 GYPSUM WALLBOARD

Wallboard: Standard gypsum board 1/2" thick or as noted, water-resistant at bathrooms, 5/8" type "X" at party walls and other required fire separations. Double nail throughout. Tape all joints, spackle three coats - all joints and nail indents, sand ready for painting. Use metal bead at exposed corners, metal "J" at exposed edges.

09300 TILE

Ceramic Tile Tub/Shower Surround - Dal tile or approved equal 4-1/4" x 4-1/4" thin set over 1/2" fiber cement board (Duro rock or Wonder board)

09650 RESILIENT FLOORING

Resilient Floor Covering: Sheet vinyl - Armstrong or approved .090" gauge set with waterproof adhesive recommended by floor covering manufacturer.

09680 CARPETING

Carpet: Nylon, Antron III or better. Quality level to meet FHA minimum requirements, 1/8 gauge or better, static control, cut pile with Action-Bak, 26 oz. total weight. (Not low end - an upgrade)

09900 PAINTING

General: Use paints of one manufacturer throughout. ICI paints or approved equal.

Exterior Painting: Trim - 2 coats solid body water base acrylic paint. Sheet metal - 1 coat galvanized metal primer, 2 coats exterior enamel, oil base. Miscellaneous metals - 1 coat metal primer, 2 coats exterior enamel, oil base. Exposed wood decking - 1 coat semi-transparent Duck Back stain.

Interior Painting: Wallboard - prime and 1 coat latex per finish schedule (kitchen and bath semi-gloss enamel; other rooms flat latex). Door and window wood trim - Prime and 2 coats semi-gloss, acrylic enamel, oil base. Cabinet exteriors - Sand, steel wool, stain and satin varnish, 2 coats. Cabinet interiors - one coat stain. Interior Doors - stain, oil base, and 2 coats satin varnish.

Division 10 - Specialties

10800 TOILET AND BATH ACCESSORIES

Mirror: in bathroom full width of vanity

Glass Shower Doors: At showers, tempered glass, aluminum frame, magnetic catch.

Medicine Cabinet: At each bathroom

Division 11 - Equipment

Appliances: Medium quality by G.E. or approved equal. Colors selected by Architect.

Range: Gas

Hood: Color to match range

Refrigerator: hook ups only

Garbage Disposal: 1/2 Horsepower

Washer/dryer: hook ups only

Water Heaters: Gas, 40 gallon size.

Division 12 -14 - not used**Division 15 - Mechanical**

Cooling/Heating Equipment: Units and equipment to be Carrier with an SEER of 13 minimum or approved equal.

Indoor Units: Fan coil unit with gas fired heating

Outdoor Unit: Electric condensing unit

Supply Registers: Prefinished wall type, rectangular with adjustable blades.

Return Air Grill: Prefinished louver type rectangular, paint duct behind black.

Thermostat: Honeywell programmable or approved (mount at 5'-0")

Plumbing: General: Size service line to each unit per drawings.

Install all piping and supports in conformance with all applicable codes and industry standards for multi-family residential construction. Conceal all piping, provide c.o. as required. Install all fixtures and connect all appliances with required piping. All waste lines to be approved PVC plastic.

Domestic Water Pipe: Below grade and below slab copper piping shall be type "L". All other copper piping shall be type "M".

Fixtures: Medium quality white vitreous china fixtures. Medium quality stainless steel kitchen sink, and cast iron lavatories.

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Division 16 - Electrical

The work of this Contractor shall consist of furnishing and installing everything necessary for a complete electrical system including , but not limited to:

- Transformer

- Site distribution

- Meter centers

- Site lighting

- Off-site street lighting - to be City of Grass Valley approved "Historic ornamental" street lights unless directed otherwise by Public Works

- Unit wiring

- Light fixtures and outlets

- Telephone & Cable wiring