



Parks & Recreation
316 Vernon Street
Roseville CA 95678

Addendum No. 3

DATE: April 7, 2010
TO: Prospective Bidders
FROM: Tara L. Gee, Sr. Landscape Architect
RE: W-52 (Bud Nichols) Park Construction Project

Notice is hereby given that the following clarifications, corrections, additions, and deletions shall apply to the Contract Documents for the above referenced Project, and shall be made a part thereof, and subject to all requirements thereof, as if originally drawn or specified.

Receipt of this Addendum No. 3 must be acknowledged in writing on the Proposal page PROP- 2 of the Project Manual.

Item 3.1 Water Meters and Hydrant Use:

Contact the Environmental Utilities Department at 774-5750 for Information on costs. Information regarding water meters and costs to be included in the bids in contained in the Parks Construction Standards.

Item 3.2 Grading: is intended to be a balanced project. Contractor to verify quantities. Minor discrepancies will be handled as field adjustments if realistic.

Item 3.3 Restroom:

Restroom plans are contained in the plan set. This is not a pre-fabricated structure. Specifications are attached.

Item 3.4 Add Alternate - Mainline:

Delete 1" mainline and Add a 2" mainline

Item 3.5 Substitutions:

Contractors are asked to bid materials as specified in the plans. Substitutions will be considered during the submittal process. A bid including materials other than those specified is at the Contractor's risk.

Item 3.6 Topsoil:

Topsoil is to be placed in all areas where turf or landscapes are to be installed.

For all other questions, see the Parks Construction Standards. Information regarding clearing & grubbing, water meters, irrigation valves, wires and controllers, etc is contained in the Parks Construction Standards.

You are reminded that the Question & Answer period closed on April 2, 2010. In order to stay on schedule for bid opening, no additional questions will be accepted.

End of Addendum No. 3

**Section 04200
Unit Masonry
(for Standard Comfort Station #2)**

PART 1 - GENERAL

1. Conditions

- A. The general provisions of the Contract, including General and Supplementary Conditions and General Requirements apply to the work specified in this section.

2. Scope of Work

- A. Provide all labor, materials, and equipment required to complete the unit masonry work as indicated on the Drawings and/or specified herein.

- B. Work includes, but not limited to the following:

1. Concrete masonry units.
2. Face brick units.
3. Pre-cast Elements.
4. Installation of all required reinforcements, fasteners, anchors and accessories.
5. Cleaning of unit masonry.

- C. Related work specified **on drawings**:

1. See Drawings, Sheet SD1.
2. Paints and finishes - concrete sealer.

3. Quality Assurance

- A. Material and installation standards: Comply with recommendations of the Brick Institute of America (BIA) standards; National Concrete Masonry Association standards; and ASTM standards.

- B. Verify all measurements indicated on Drawings by taking field measurements; proper fit and attachment of all units is required.

- C. Accurately fit, cut, and securely mortar together all units to produce a plumb, level and rigid installation.
 - D. All work and materials shall comply with Uniform National Building Codes (latest edition), and all other applicable codes and ordinances that govern the work of this Section.
4. Qualification of Installers
- A. Installers shall be trained and experienced in the skills required and shall be completely familiar with the materials and their installation. Qualified installers shall be present at all time during the progress of work.
5. Coordination
- A. Coordinate with all other trades whose work relates to unit masonry installation for placing all required reinforcements, fasteners, anchor, accessories, etc.
6. Submittals
- A. Submit for Parks and Recreation Department written approval two (2) representative samples of each unit specified.
 - B. Submit manufacturer's certificate that units meet or exceed material specifications.

PART 2 - PRODUCTS

1. Concrete Masonry Units
- A. ASTM C-652, split-face concrete masonry hollow units, wire cut. Standard and bond beam units. Size and color as indicated on the Drawings. Color shall be selected from manufacturer's standard colors by Parks and Recreation Department.
2. Stone Veneer
- A. As shown on Drawings.
3. Precast Concrete Molding and Baseboard
- A. As shown on Drawings.

4. Masonry Mortar

- A. ASTM C-270, Type M, consisting of one (1) part cement and three (3) parts sand with quarter (1/4) part lime.
- B. LATICRETE 3701 grout and Mortar Admix
- C. Mortar compressive strength at 28 days shall be 3000 PSI

5. Grout

- A. Grout mix ratio by volumes: one part Portland Cement (ASTM C-150, Type 1); two parts minimum to three parts maximum damp loose sand, two (2) parts coarse aggregate (ASTM C-404).
- B. LATICRETE 3701 Grout and Mortar Admix.
- C. Grout compressive strength at 28 days shall be 3000 PSI.

6. Unit Masonry Reinforcement

- A. Horizontal Joint Reinforcement: Truss type, hot-dipped galvanized zinc coated steel construction; 3/16 inch side rods with No. 9 cross ties.
- B. Horizontal and vertical rebar reinforcements: ASTM A-615, Grade 40, size as indicated on the Drawings.

7. Concrete

- A. See Drawings, Sheet SD1.

PART 3 - EXECUTION

1. General

- A. Supply anchor devices as indicated on the Drawings and as required to install materials as specified in other sections of work.
- B. Cut units where required with a power saw or order units pre-cut from manufacturer.
- C. Construct walls and other masonry construction to the full thickness indicated on the Drawings, using unit sizes as indicated.
- D. Establish lines, levels, and coursing. Protect from disturbances.

2. Coursing

- A. Install units straight and plumb with all courses true to line and level.
- B. Install units in pattern as indicated on the Drawings.
- C. Maintain unit courses to uniform width. Make vertical and horizontal joints equal and of uniform thickness.

3. Placing and Bonding

- A. Lay units in full bed of mortar properly jointed with other work.
- B. Install full mortar coverage of vertical and horizontal face of joints. Maintain uniform joint width of 3/8" – 1/2", depending on nominal unit sizes. Cut joints flush and tool slightly concave.
- C. Fully bond intersections and external and internal corners.
- D. Do not shift or tap units after mortar has taken initial set. Where adjustment must be made remove mortar and replace.
- E. Remove excess mortar.
- F. Fill hollows at concrete masonry units solid with grout or as indicated on the Drawings. Fill hollows of structural brick block units where reinforcement occurs solid with grout or as indicated on the Drawings.

4. Reinforcement

- A. Horizontal joint reinforcement: Place masonry joint reinforcement sixteen (16) inches on center or as indicated on the Drawings.
- B. Place joint reinforcement continuous and lap reinforcement according to the recommendations of the Manual of Standard Practice of the Concrete Reinforcing Steel Institute.
- C. Horizontal and vertical rebar reinforcement: Install with bond and beam spacing and rebar spacing as indicted on Drawings.
- D. Place and consolidate grout fill without disturbing reinforcing. Cells containing reinforcement shall be grouted solid.

5. Curing and Protection

- A. Provide thorough curing of joints and grout pours.

- B. Protect newly laid masonry from exposure to precipitation, excessive drying, freezing, soiling, backfill and other harmful elements.

6. Waterproofing

- A. All walls below grade shall be waterproofed on the backside extending from the foundation to the brick cap.
- B. Install in conformance with manufacturer's specifications.

7. Cleaning

- A. Brush off excess mortar as work progresses. Dry-brush masonry at end of each day's work.
- B. Clean masonry with cleaners and methods approved by masonry units manufacturer.
- C. Rinse walls by washing off cleaning solution, dirt and mortar using clean, pressurized water.
- D. Repair damage to adjacent materials that occurs during cleaning operation at no additional cost to the Owner.

END OF SECTION

Section 05120 Structural and Miscellaneous Steel (for Standard Comfort Station #2)

PART 1 - GENERAL

1. Conditions

- A. The general provisions of the Contract, including General and Special Provisions apply to the work specified in this Section.

2. Scope of Work

- A. Furnish all labor, materials, and equipment as required to fabricate and install all structural and miscellaneous steel work as indicated on Drawings and specified herein.
- B. Although such work or materials are not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a secure and complete installation.
- C. Provide shop drawings for all work.
- D. Completely coordinate with work of all other trades.

3. References (Latest Edition)

- A. AISC: Standard Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings by the American Institute of Steel Construction (AISC).
- B. AISC – Code of Standard Practice – Manual of Steel Construction – Allowable Stress Design (ASD).
- C. AISC – Code of Standard Practice of Steel Buildings and Bridges.
- D. ASTM A36 – Structural Steel
- E. ASTM A-53: Black and Hot Dipped Zinc – Coated Welded and Seamless Steel Pipe.
- F. ASTM A-120: Black and Hot Dipped Zinc – Coated Welded and Seamless Steel Pipe.
- G. ASTM A307 – Carbon Steel Externally Threaded Standard Fasteners.

- H. ASTM A500 – Cold Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.
- I. ASTM A501 – Hot Formed Welded and Seamless Carbon Steel Structural Tubing.
- J. AWS A2.4 – Symbols of Welding, Brazing, and Nondestructive Examination.
- K. AWS D1.1 – Structural Welding Code.
- L. SSPC (Steel Structures Painting Council) – Painting Manual.
- M. California Building Code (CBC), latest edition.

4. Regulatory Requirements

- A. Safety Requirements: Work shall comply with all Federal, State and municipal regulations regarding safety, including the requirements of the following:
 - 1. William-Steiger Occupational Safety & Health Act of 1970
 - 2. State of California, California Administrative Code, Title 8 Industrial Relations, Chapter 4, Subchapter 4, “Construction Safety Orders” and other State and local agencies having jurisdiction.
- B. Uniform Building Code (UBC), latest edition.

5. Submittals

- A. Shop Drawings: General
 - 1. Before any structural steel is fabricated or delivered to jobsite, submit Shop Drawings in accordance with the General Conditions of these specifications.
 - 2. Shop Drawings shall clearly show all pieces with all pertinent dimensions, data, layout, sizes and weights, connections, and all controlled dimensions and elevations. Drawings shall clearly distinguish between shop and field bolts and welds. Errors in dimensions shown on shop drawings shall be responsibility of Contractor.
 - 3. Show details, including cuts, copes, connections, holes, threaded fasteners, and welds in accordance with AWS.

4. Indicate which structural units, members or brackets require field cuts or welds due to construction techniques.
5. Indicated metal fabricator's method for radius form bents of pipe or tubing.
6. All shop and field welds shall be indicated by AWS Welding Symbols.
 - a) Indicate size, length and type of each weld.
 - b) Special Inspection required by UBC and Building Department.

B. Welding:

1. Certification of Welder's Qualifications.
2. Welding Procedure: Submit descriptive data to illustrate welding procedures to be performed.

6. Quality Assurance

- A. Fabricated structural steel members in accordance with AISC Code of Standard Practice.
- B. Perform Work in accordance with AISC Section 10.
- C. Perform Work in accordance Uniform Building Code (UBC), latest edition.
- D. All welding procedures, welders, welding operation, and tackers shall be qualified in accordance with AWS Standard Code D1.1.
- E. Maintain one copy of each document on site.
- F. Fabricator: Company specializing in performing the work of this section.
- G. Erector: Company specializing in performing the work of this section.
- H. All construction shall conform with applicable building codes, project specifications and applicable regulations. Where the provisions of applicable codes, material manufacturer's requirements, and project specifications conflict, the more stringent provision shall govern.
- I. Certification: Furnish, before fabrication, a mill certified report (in duplicate) of the tests for each heat of steel or iron from which the material is to be

fabricated, containing the results of chemical and physical tests required by the ASTM specifications for the materials.

- J. Qualify welding processes and welding operators in accordance with AWS "Standard Qualifications Procedure". Provide certification that welders to be employed in work have satisfactorily passed AWS qualification test within the previous twelve (12) months. If recertification of welders is required, retesting will be Contractor's responsibility.
- K. Work shall comply with the Drawings, Specifications and approved Shop Drawings in every aspect. All errors of fabrication and connections, defective materials, fasteners, and workmanship shall be replaced at the expense of the Contractor.

7. Delivery, Storage and Handling

- A. Deliver anchor bolts and anchorage devices which are to be embedded in cast-in-place concrete or masonry in ample time so as not to delay that Work.
- B. Store materials to permit easy access for inspection and identifications. Keep steel members off the ground using pallets, platforms, or other supports. Protect steel members and packaged materials from corrosion and deterioration. Remove any damaged items from the site and replace at no cost to the Owner.
- C. Use all means necessary to protect structural steel before, during and after installation.

8. Coordination

- A. Coordinate and furnish all required anchorages, templates, and patterns, setting drawings, and installation directions for all built-in items. Supervise the proper location and the installation of all built-in items. Deliver all items required to be embedded in concrete, masonry or built into other material to their respective Contractor. Provide holes and connections for Work of others Contractors.

9. Field Measurements

- A. Take field measurements prior to preparation of Shop Drawings and metal fabrication. Proper fit and attachments of all items is required; allow for trimming and fitting when taking field measurements before metal fabrication.

10. Shop Assembly

- A. Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

PART 2 - PRODUCTS

1. General

- A. Use materials of size and thickness indicated or, if not indicated, as required to produce strength and durability in finished product for use intended.
- B. Metal surfaces used for fabrications of miscellaneous metal items which will be exposed to view shall be smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.
- C. All other materials not specifically described, but required for a complete and proper installation, shall be new, free from rust, best quality of their respective kind, and subject to the approval of the Project Inspector.

2. Steel Plates, Shapes and Bars

- A. All miscellaneous steel shall be standard cold-rolled sections, new, free from rust, and conforming to ASTM A-36.

3. Steel Pipe

- A. All steel pipe shall be black steel pipe, except where indicated to be galvanized, complying with provisions of:
 - 1. ASTM A-120, Schedule 40 for pipe less than four (4) inch diameter.
 - 2. ASTM A-53 ERW for pipe greater than four (4) inch diameter.

4. Steel Tubing

- A. All steel tubing shall be cold-formed steel tubing conforming to ASTM A-500, Grade B.

5. Fasteners

- A. General: Provide electro-zinc plated fasteners for exterior use or where built into exterior walls or slabs. Select fasteners for the type, grade and class specified.

- B. Bolts and Nuts: Regular hexagon-head carbon steel type conforming to ASTM A-307, Grade A with electro-zinc plating.
- C. Flat Washers: U.S.S. standard round carbon steel type conforming to FS FF-W-92 with electro-zinc plating.
- D. Lock Washers: Helical spring carbon steel type conforming to FS FF-W-84 with electro-zinc plating.
- E. Anchor Bolts: Nonheaded "J" bolt type, unless otherwise indicated on Drawings, conforming to ASTM A-307, Grade A with electro-zinc plating.

6. Shop Paint

- A. Primer shall be Red Oxide Primer, conforming to Federal Specification TT-P-31 for steel surfaces and Federal Specifications TT-P-64b for galvanized surfaces.

7. Grout

- A. Pre-mixed, factory packaged, non-shrinking, non-metallic, non-staining, non-corrosive and non-gaseous grout complying with CE CRD-C588. Provide grout specifically manufactured for exterior applications.

PART 3 - EXECUTION

1. General

- A. Comply with AISC Code and Specifications and maintain Work in safe and stable conditions during erection. Provide temporary bracing and shoring as required; remove when final connections are in-place.
- B. Execute all Work using skilled metal workers only. Do all welding as per AWS Specifications with certified welders.
- C. When possible, fit and shop assemble all metal Work, ready for installation, with shop and field connections welded or attached with fasteners as indicated on Drawings.
- D. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where fabrication and installation of the work of this section may properly commence.
- E. Make all required measurements in the field to ensure proper and adequate fit of miscellaneous metal items.

F. It is the intent of the Drawings to indicate detail connections. Where connection detail is not shown, detail shall be patterned after a connection similar condition, or an AISC standard type.

2. Fabrication

A. General

1. Use materials of size and thickness indicated on Drawings or approved on Shop Drawings to produce strength and durability in finished product for use intended. Work to dimensions are indicated on drawings or approved on Shop Drawings, using proven details of fabrication and support.
2. All fabrication shall be in accordance with AISC Specifications for fabrication of structural steel, Uniform Building Codes, and requirements of regulatory agencies.
3. Do not field cut or alter structural metal units, members or brackets without approved Shop Drawings.
4. Fabricate and pre-assemble work in shop to greatest extent possible.
5. Fabricate exposed work true to line, shape and level with accurate angles and radiuses. Ease exposed metal edges to a radius of approximately 1/32 inch.
6. Make cuts, bends, punching and drilling accurate, neat and properly located. Grind and file smooth all parts exposed to view; leave exposed surfaces free of fabrication marks. Mark and match-mark units requiring field assembly.
7. All welds shall be continuous, unless otherwise indicated, complying with AWS Specifications. Form exposed connections with tight, flush and smooth hairline joints. Grind exposed welds smooth and flush to match and blend with adjoining surfaces.
8. Cut, reinforce, drill and tap fabricated metal work as indicated on Drawings to receive finish hardware, fasteners and similar items.

B. Bolted Connections:

1. Punch or drill holes 1/16 inch larger than bolt size and spear-ream before inserting bolts.

2. Ream unfair holes, but only up to next larger bolt size. Where unfairness exceeds maximum, weld hole in base material solid and drill hole of proper size.
3. As erection progresses, bolt up work to take care of dead load, lateral forces, and erection stresses. Provide any additional bracing necessary to resist all possible forces during erection. Contractor is entirely responsible for the stability of the structural steel work until the job is complete.

C. Assembly with Standard Threaded Fasteners:

1. Beveled Washers: Provide under bolt heads or nuts resting on surfaces exceeding 5 percent slope with respect to head or nut.
2. Draw up tight, check threads with chisel, or provide approved lock washers or self-tightening nuts.

D. Welded Connections:

1. Perform welding using shielded metal arc, submerged arc, gas metal arc, or flux cored arc methods in accordance with appropriate sections of AWS D1.1 and UBC Chapter 27.
2. In addition to specific requirements of Drawings, details of welded joints shall comply with all requirements for joints which are accepted without qualification tests under the AWS Code. If sizes of fillet welds are not shown on Drawings, use AWS minimum weld size, but not less than thinnest part thickness minus 1/16 inch.
3. Plan welding operations to eliminate stress build-up.
4. Field Welding:
 - a) Perform field welding in accordance AWS D1.1.
 - b) Where field welding is applied to existing flexural members involving application of significant amounts of heat to member, provide temporary shoring to prevent deflections.
 - c) Provide Special Inspection per the UBC, latest edition.

E. Column Bases:

1. Finish in accordance with AISC. Lack of contact bearing with column shall not exceed 1/16 inch.

F. Bearing Plates:

1. Finish in accordance with AISC. Provide for attachment as shown on Drawings.

G. Cut, drill (tap where indicated or required), or punch holes perpendicular to metal surfaces. Do not flame cut holes or enlarge holes by burning. Drill holes in bearing plates.

3. Shop Painting

A. Shop paint all metal Work, except members or portions of members to be embedded in concrete or masonry, surfaces and edges to be field welded, stainless steel, and galvanized surfaces, unless otherwise indicated.

B. Clean all metal work to be primed and painted in accordance with SECTION 09900 – PAINTING AND FINISHES.

C. Immediately after surface preparation brush or spray on primer in accordance with manufacturer's instruction at a rate to provide uniform dry film thickness of 20 mils for each coat. Use painting methods which will result in full coverage of joints, corners, edges and exposed surfaces.

D. Apply one (1) shop coat to fabricated metal items, except apply two () coats of primer to surfaces inaccessible after assembly or installation.

E. Give any painted built-in portions one (1) field coat of primer on all abraded areas after installation.

4. Galvanizing

A. All metal fabrications intended for exterior use or for use in high moisture areas are to be hot-dip galvanized, unless otherwise noted.

B. Hot dip galvanizing or zinc coatings, applied on products fabricated from rolled, pressed and forged steel shapes, plates, bars and strips shall comply with ASTM Specification A123-73.

C. Hot dip galvanizing or zinc coatings on assembled steel products shall comply with ASTM Specifications A386.

D. The weight of coatings shall be as designated in Table 1 for the class and thickness of material to be coated. Galvanized surfaces for which a shop coat of paint is specified shall be chemically treated to provide a bond for the paint.

E. Except for bolts and nuts, all galvanizing shall be done after fabrication.

5. Installation

A. General:

1. Compliance: Erect and install all miscellaneous metal in strict accordance with the Drawings, the reviewed shop drawings, and the referenced standards, aligning straight, plumb, and level within a tolerance of one in 200. Accurately assemble structural steel to lines and elevations indicated, within specified AISC tolerances.
2. Splice metal Work only where indicated and approved on Shop Drawings.
3. Install anchorage devices and fasteners where required for securing miscellaneous metal fabrications to in-place construction; including anchorage devices and fasteners that require to be cast into concrete or masonry. Provide temporary bracing or anchors in formwork for items cast into concrete or similar construction.
4. Perform cutting, drilling, and fitting required for installation of miscellaneous metal fabrications. Set Work accurately in location, alignment and elevation. Install items plumb, level, true and free of rack; measured from established lines and levels.
5. Fit exposed connections accurately together to form tight hairline joints. Weld connections which are not to be left as exposed joints, but cannot be shop welded due to shipping size limitations. Grind exposed joints smooth and touch-up shop paint coat.
6. Do not weld, cut or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication, and are intended for bolted or screwed field connections.
7. All field welds shall conform to AWS Specifications. Grind all exposed welds smooth and flush to match and blend with adjoining surfaces.
8. Clean and touch-up all field welds and scratches with shop paint as specified.

6. Finishes

- A. Finish all fabricated metal Work as per SECTION 09900 – PAINTING AND FINISHES.

END OF SECTION

Section 09900
Painting and Finishes
(for Standard Comfort Station #2)

PART 1 - GENERAL

1. Conditions

- A. The general provisions of the Contract, including General Conditions and Special Provisions apply to the work specified in this Section.

2. Description

- A. Work includes, but is not limited to the following:

1. Provide all materials, tools, equipment, appliances, labor and supervision required to paint and finish all surfaces and/or components as specified herein and as indicated on the Drawings, including all miscellaneous items and labor required to complete the Work of this Section.
2. Surface preparation, priming and painting of all metal, masonry and wood surfaces as indicated on Drawings or as follows:
 - a) Miscellaneous surfaces.
3. All surfaces that are left unfinished by the requirements of other sections shall be painted or finished as part of this contract.

- B. Related Work described elsewhere.

1. SECTION 05120 – STRUCTURAL AND MISCELLANEOUS STEEL

- C. Definition: The term “paint”, as used herein, shall mean all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime intermediate or finish coats.

3. Work Not Included

- A. Pre-Finished Items: Unless otherwise specified or indicated on the Drawings, do not include the painting of items that are specified to receive manufacturer’s factory finish, i.e. such items as site furnishings, irrigation equipment, electrical equipment, etc. See applicable Sections.

- B. Finished Metal Surfaces: Unless otherwise specified, all metal surfaces or anodized aluminum, stainless steel, chromium plate, copper, bronze or similar finished materials do not require painting.

4. Submittals

- A. Provide in accordance with the General Conditions prior to ordering material, a complete, detailed list of materials proposed for use on work. Include affidavit from manufacturer stating that proposed materials are the best of their respective kinds and suitable for intended purpose. Submit in ample time to avoid delays in work if the list, or portions thereof, are rejected.
- B. Painter shall prepare and submit color samples to match color chips in 12-inch square size and must receive approval from Project Inspector before applying final paint coats to finish surfaces. Approved samples shall be retained at the Project Inspector's office for record.

5. Paint Coordination

- A. Provide prime coats which are compatible with finish paints used. Review other Sections of these specifications in which prime paints are to be provided to ensure compatibility of total painting system for various surfaces. Upon request from other trades, furnish information and specifications for finish materials proposed for use, to ensure compatible prime coats are used. Provide barrier coats over incompatible primers or remove and reprime as required. Notify Project Inspector in writing of any anticipated problems using specified painting systems with surfaces primed by others.

6. Job Conditions

- A. Applicator shall examine areas, surfaces and conditions under which painting Work is to be applied and notify the Project Inspector in writing of conditions detrimental to proper and timely completion of Work. Do not proceed with Work until unsatisfactory conditions have been corrected in a manner acceptable to Project Inspector and Applicator, or Applicator shall assume responsibility for and rectify any unsatisfactory finish resulting.
- B. Starting of painting Work shall be construed as Applicator's acceptance of surfaces and conditions.

7. Weather Conditions

- A. Apply water base paints only when temperature of surfaces to be painted and surrounding air temperature are between fifty (50) degrees F (10 degrees C) and ninety (90) degrees F (32 degrees C), unless otherwise permitted by paint manufacturer's printed specifications.

- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between forty-five (45) degrees F (7 degrees C) and ninety-five (95) degrees F (35 degrees C), unless otherwise permitted by paint manufacturer's printed specifications.
- C. Do not apply paint in rain, fog or mist; or when relative humidity exceeds eighty-five (85) percent; or to damp or wet surfaces.

8. Delivery and Storage

- A. Deliver materials to job site in original, new and unopened packages or containers bearing manufacturer's name and label, and the following information:

- Manufacturer's Name
- Manufacturer's stock number and date of manufacture
- Special color mix: name and number
- Contents by volume for major pigment and vehicle constituents
- Thinning instructions
- Application instructions

- B. Store materials and equipment as approved by applicable codes and enforce good housekeeping practices. Any soiled or used rags waste, etc., shall be removed from the site every night and every precaution shall be taken to avoid the danger of fire. No paint materials shall be washed or emptied on the site or into any sewer drains, storm drains or street gutters.

9. Protections

- A. Protection Work of other trades, whether to be painted or not, against damage by painting and finishing Work. Provide suitable covering or other methods of protection during progress of this Work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to the Project Inspector.
- B. Provide "Wet Paint" signs as required to protect newly painted surfaces. Remove all protective materials upon completion of the Work and touch-up and restore all damaged or defaced surfaces, including the removal of paint spots from other surfaces.

10. Guarantee

- A. Adhesion: All materials applied shall be guaranteed for a period of two (2) years against failure due to surface conditions, materials, or application.

There shall be no evidence of fingerprints blisters, running, peeling, scaling, chalking, streaks or stains.

PART 2 - PRODUCTS

1. Color Schedule

- A. Project Inspector shall furnish to the Contractor a color schedule of paints to be used based on one of the approved manufacturer's color charts or requirements for specially mixed colors. Use of one of the other approved manufacturer's requires the Contractor to match the color schedule provided by the Project Inspector.
- B. Manufacturers names used to designate colors of color schedule is not intended to imply that products names are required to the exclusion of equivalent products of other manufacturers.
- C. All colors and manufacturers shall be approved and authorized by the Project Inspector before commencing Work.

2. Materials Quality

- A. Provide best quality grade of various types of paints as regularly manufactured by acceptable paint materials manufacturer. Materials not displaying manufacturer's identification as a standard, best-grade product will not be acceptable.
 - 1. Acceptable paint manufacturers include, or approved equal:
 - a) Tnemec
 - b) The Glidden Company
 - c) Pratt and Lambert, Inc.
 - d) Dunn Edwards
 - e) Sherwin-Williams
 - f) W.P. Fuller Company
 - g) Kelly-Moore Paint Company
- B. Provide primer and undercoat paint produced by the same manufacturer as finish paint. In the event that this is not feasible, notify Parks and Recreation Department. Use only thinners approved by paint manufacturer, and use only within recommended limits.

3. Materials

- A. Wood - exterior and interior:
1st coat: Kelly-Moore, 255 Acry-Shield 100% Acrylic primer
- or- Weather Shield Exterior primer
2nd & 3rd coats: Kelly-Moore 1250 Acry-Shield 100% Acrylic
Exterior Semi-Gloss Enamel
- B. Split-face masonry - exposed exterior surfaces only:
1st & 2nd coats: Tnemec, Series V626, Dur A Pell GS
(sealer & anti-graffiti coating)
- C. Interior masonry surfaces - smooth face:
1st coat: Tnemec, Series 130, Envirofill
(block filler, anti-bacterial properties)
2nd & 3rd coats: Tnemec, Series 280,, Tneme-Glaze
(modified polyamine epoxy)
Select color from manufacturer's 16 standard
colors)
- D. Concrete floor and base - interior of building only:
1st & 2nd coats Tnemec, Series 201, Epoxoprime
- E. Metals:
1st coat: Kelly-Moore,1725 Acry-Shield 100% Acrylic
Metal primer - or - see item #3 directly below
2nd & 3rd coats: Kelly-Moore 1250 Acry-Shield 100% Acrylic
Exterior Semi-Gloss Enamel

4. Metal Primer

- A. Primer for metal surfaces shall be Red Oxide Primer, conforming to Federal Specification TT-P-31 for metal surfaces and Federal Specification TT-P-64b for galvanized surfaces.

PART 3 - EXECUTION

1. Surface Preparation

- A. General: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions, and as herein specified, for each particular surface condition.
- B. Paint no items fitted with finish hardware or other similar items until hardware has been removed or provided with surface-applied protection prior to surface preparation and painting operations. Install hardware or remove surface-applied protection after paint has dried.
- C. Metal Surfaces: Clean all metal surfaces, which are not galvanized or shop-painted, of scale, dirt, rust and other deleterious materials before priming. Clean metal in accordance with Steel Structures Painting Council (SSPC) Specifications.
 - 1. SP-2: Hand Tool Cleaning
 - 2. SP-3: Power Tool Cleaning
 - 3. SP-7: Brush-off Blasting Cleaning

Remove oil, grease, and similar contaminants in accordance with:

- 1. SP-1: Solvent Cleaning
 - D. Galvanized Surface: Clean all galvanized surfaces of oil and other surface contaminants with a crystalline zinc phosphate pretreatment (phosphoric acid etch). Remove pretreatment solution by thoroughly washing with clean water and wipe dry.
2. Materials Preparation
- A. Mix and prepare painting materials in accordance with manufacturer's specifications.
 - B. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into materials. Remove film and if necessary, strain materials before using.
3. Application of Primer Coat
- A. Apply primer coat to all surfaces which are required to be painted or finished, and which have not been prime coated or shop-painted by others. For metal surfaces, touch up shop-painted coats as required.
 - B. Immediately after surface preparation brush or spray on primer in accordance with manufacturer's instructions at a rate to provide uniform dry

film thickness of two (2.0) mils for each coat. Use painting methods which shall result in full coverage of joints, corners, edges and exposed surfaces.

- C. All primer coats shall be free from runs, sags, and other defects. All coats shall be thoroughly dry before applying succeeding coats.
- D. Apply one (1) coat of metal primer for metal surfaces, as specified and/or as recommended by manufacturer's instructions.

4. Application of Paint

- A. Apply paint in accordance with manufacturer's instructions. Use applicators and techniques best suited for each surface and type of materials being painted.
- B. All painting Work shall be done by skilled workman in a professional manner. All coats shall be evenly spread and shall be free from run, sags and other defects. All coats shall be thoroughly dry before applying succeeding coats.
- C. All individual coats of paint shall be inspected and approved by the Project Inspector before application of the succeeding specified coat; otherwise no credit for the coat applied shall be given, and the Applicator shall automatically assume responsibility to recoat the Work. The applicator shall provide the Project Inspector a report of each coat applied when completed for inspection and approval to comply with the above.
- D. Where coverage is incomplete, not uniform, or not to the required dry film thickness, provide an additional coat at no extra cost to the Developer.
- E. Apply finish coats of paint to all exposed surfaces as follows:
 - 1. For primed metal surfaces, apply two (2) coats of 100% acrylic latex base paint, per manufacturer's recommendations. Apply first coat of paint within 72 hours of primer application. If first coat of finish paint cannot be applied within the specified application time, the contractor shall re-clean and re-primer all exposed metal surfaces prior to start of metal painting operations.
- F. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
- G. Apply first-coat material to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practical after preparation and before subsequent surface deterioration's.

- H. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- I. Apply all coating without reduction, except as specifically required by label directions, or required by this Section.
- J. Sand carefully between all coats on smooth surfaces for good adhesion of subsequent coats.
- K. Paint all exposed surfaces and anything inaccessible after installation prior to installation, if required to be painted.
- L. Following project completion, deliver all excess paint and color samples to Parks and Recreation Department.

END OF SECTION