M. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.

N. ASTM D2103 - Polyethylene Film and Sheeting.

O. FS TT-C-800 - Curing Compound, Concrete, for New and Existing Surfaces.

1.03 QUALITY ASSURANCE

A. Perform work in accordance with ACI 301.

B. Maintain copy of ACI 301 on site.

1.04 TESTS

A. Submit proposed mix design for review prior to commencement of work.

B. Company will take cylinders and perform slump tests in accordance with ACI 301.

C. Three concrete test cylinders will be taken for every 50 (or less) cubic yards of concrete placed each day: minimum of 3 for each days pour.

D. One additional test cylinder will be taken during cold weather and cured on site under the same conditions as the concrete it represents.

E. One slump test will be taken for each set of test cylinders taken.

F. If the specified strength of concrete is not attained (per the cylinder tests), the contractor will be notified. He shall take appropriate measures (totally at his own cost) to prove the adequacy of the concrete. Union Electric shall be provided with copies of test results from these actions. Acceptable proof of adequacy of the concrete shall be:

a. Cored specimens obtained in accordance with ASTM C42, and tested in accordance with ASTM C39.

PART 2 PRODUCTS

2.01 FORM MATERIALS

A. Conform to ACI 301.

B. Plywood Forms: Douglas Fir or Spruce species; solid one side; sound undamaged sheets.

C. Lumber: Douglas fir species; Construction grade; with grade stamp clearly visible.

D. Steel Forms: Minimum 16 gage thick stiffened to support weight of concrete with minimum deflection.

E. Form Ties: Removable or Snap-off metal, of fixed or adjustable length.

2.02 REINFORCING STEEL

A. Reinforcing Steel: ASTM A615, 60 ksi yield grade billet steel; deformed bars; uncoated finish.

B. Welded Steel Wire Fabric: Plain type ASTM A185; in flat sheets or coiled rolls; uncoated finish.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150, normal - Type 1.

B. Fine and Coarse Aggregates: ASTM C33.

C. Water: Clean and not detrimental to concrete.

2.04 ADMIXTURES.

A. Air Entrainment Admixture: ASTM C260.

2.05 ACCESSORIES

A. Bonding Agent: Polymer resin emulsion, latex emulsion, or two component epoxy resin.

B. Form Release Agent: Colorless material which will not stain concrete, absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete.

2.06 CURING MATERIALS

A. Water: Clean and drinkable.

B. Absorptive Mat: Cotton fabric, clean, roll goods.

C. Absorptive Mat: Burlap fabric, clean, roll goods.

D. Absorptive Mat: Burlap-polyethylene, bonded to prevent separation during use.

E. Membrane Curing Compound: ASTM C309 or FS TT-C-800.

F. Polyethylene Film: ASTM D2103, 6 mil thick, clear color.

G. Clear Sealer: Sonneborn Lapidolith or Master Builder Saniseal.

2.07 CONCRETE MIX

A. Mix concrete in accordance with ASTM C94.

B. Ultimate strength 28 days 3000 psi, 5 1/2 sacks, minimum, of cement per cubic yard, 6 1/2 gallons of water per sack, maximum, including free moisture on aggregate.

C. Ultimate strength 28 days 4000 psi (use only where specifically required by drawings), 6 sacks, minimum, of cement per cubic yard, 6 gallons of water per sack, maximum, including free moisture on aggregate.

D. Maximum size of aggregate - 3/4".

E. Slump at point of placement - 3 inches with inadvertence margin of 2 inches, rejection at 5 inches.

F. Use air entraining admixture. (3% - 5% air by volume).

G. Contractor shall furnish mix designs for review prior to placing.

H. Mix designs shall be as prepared by a commercial testing laboratory, the Concrete Council of Greater St. Louis, or a design for which sufficient evidence (as determined by the Engineer) can be presented to show conformance to the requirements.

I. All ready mix tickets shall be furnished to the

Construction Supervisor. Each ticket shall show the following:

a. Name of concrete plant

b. Serial number of ticket

c. Date & contractor's name

d. Quantity of concrete

e. Certification that the concrete meets the mix design specified. The Company may, at its option, request the ticket to show the actual batched quantities which would include the adjustments for moisture in the aggregates.

f. Time when batch was loaded, or of first mixing cement, aggregate, and water.

J. Water added to the concrete at the site will be shown on the ticket.

K. Concrete shall be delivered to the job site and discharge completed within 1 1/2 hours after the beginning of the mixing operations.

L. The Company or its assigned representative shall be provided with full access to the batch facilities during normal working hours for the purpose of inspecting ingredients and processes used in the manufacture and delivery of the concrete.

PART 3 EXECUTION

3.01 FORMWORK ERECTION

A. Verify lines, levels, and measurement before proceeding with formwork.

B. Hand trim sides and bottom of earth forms; remove loose dirt.

C. Install formwork in accordance with ACI-347, Recommended Practice for Concrete Formwork.

D. Do not apply form release agent where concrete surfaces

receive special finishes or applied coatings which may be affected by agent.

E. Coordinate work of other Sections in forming and setting openings, slots, recesses, chases, sleeves, bolts, anchors, and other inserts.

3.02 REINFORCEMENT

A. Place, support, and secure reinforcement against displacement.

B. All splice (lap) lengths and development lengths to be calculated and detailed per ACI-318.

3.03 INSPECTION

A. Verify anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, held securely, and will not cause hardship in placing concrete.

3.04 EXISTING WORK

A. Where new concrete is dowelled to existing work, drill holes in existing concrete, insert steel dowels, and pack with non-shrink grout.

B. Prepare previously placed concrete by cleaning with steel brush and apply bonding agent in accordance with manufacturer's instructions.

3.05 PLACING CONCRETE

A. Notify Construction Supervisor minimum 24 hours prior to commencement of concreting operations.

B. Concrete shall not be placed when the outdoor temperature is below 40½F, nor when freezing temperatures are expected before final set, except when adequate provisions (ACI 306A) are made for protection, and prior approval is obtained from the Engineer.

C. When deposited in the forms, the concrete temperature shall be between 60½F and 80½F. The concrete shall be maintained above 50½F for the entire cure period. The

removal of forms and temperature protection equipment shall be such that the concrete shall not be subject to a sudden drop of more than 25½F in 24 hours.

D. Concrete placed during hot weather shall be done in accordance with ACI 305R. Concrete shall have a placing temperature which will not cause loss of slump, flash set, or cold joints. Chemical admixtures may be required.

E. Concrete placement may be prohibited if in the opinion of the Construction Supervisor, the sun, heat, wind, rain, snow, temperature, etc. prevent best results from being obtained.

F. Concrete whose temperature exceeds 90½F will be rejected.

G. The use of calcium chloride is prohibited.

H. All concrete shall be mechanically vibrated, spaded, and hand tamped to assure consolidation, a dense smooth surface, complete embedment of reinforcement, etc.

I. Vibration shall not extend into lower courses which have obtained initial set.

J. Vibrating of concrete shall not disturb the formwork or reinforcement.

K. Vibration shall not be used to "move" concrete.

L. Ensure reinforcements, inserts, embedded parts, formed joints, etc. are not disturbed during concrete placement.

M. Maintain concrete cover and around reinforcing per ACI-318.

N. Place concrete continuously between predetermined construction and control joints.

O. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Construction Supervisor upon discovery.

3.04 SCHEDULE OF FORMED SURFACES/FINISHES

A. Form finish of all exterior concrete except as listed below.

B. Float finish all tops of exterior concrete.

C. Camber all exposed foundation edges 3/4 inch, with 45½ bevel.

D. Broom finish all exterior slabs and slab type surfaces.

3.05 TREATMENT

A. Apply sealer to all exterior concrete.

B. Prior to sealing, the concrete shall be cleaned, flushed, and allowed to thoroughly dry.

C. A minimum of two coats of sealer shall be applied to the concrete surfaces. Manufacturer's directions and application instructions shall be followed. Additional coats shall be applied if recommended by the manufacturer.

SECTION 05120

STRUCTURAL STEEL

PART 1 GENERAL

A. SECTION INCLUDES

1. Structural steel framing members, support members, struts and fasteners.

B. REFERENCES

A. ASTM A6 - General Requirements for Delivery of Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use.

B. ASTM A36 - Structural Steel.

C. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.

D. ASTM A325 - High Strength Bolts for Structural Steel Joints.

E. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.

F. ASTM A501 - Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.

G. AWS A2.0 - Standard Welding Symbols.

H. AWS D1.1 - Structural Welding Code.

I. AISC - Specification for the Design, Fabrication and Erection of Structural Steel for Buildings.

J. AISC - Code of standard practice for steel buildings and bridges.

K. AISC - Specification for Structural Joints using ASTM A325 or A490 Bolts approved by the Research Council on Riveted and Bolted Structural Joints of the Engineering Foundation and endorsed by AISC.

C. SUBMITTALS

1. Submit under provisions of Section 1A.

2. Shop Drawings:

a. Submit shop drawings prepared under supervision of a registered (Missouri) professional engineer, including complete details and schedules for fabrication and assembly of structural steel and all other materials specified in this Section.

b. Verify by taking on-site measurements, dimensions for existing conditions and for items requiring coordination with other trades before fabrication. Show dimensions on the Shop Drawings and note that they have been verified.

c. Indicate profiles, sizes, spacing, and locations of structural members, openings, connections, attachments and fasteners.

d. Indicate welded connections with AWS A2.0 welding symbols. Indicate net weld lengths.

e. Show surface preparation and painting requirements.

3. Welder's Certificates: Submit qualification record of procedures, tackers, welders, and welding operators to the Engineer. Provide certification that welders to be employed in work have satisfactorily passed AWS qualification tests within the previous 12 months. If recertification of welders is required, retesting will be Contractor's responsibility.

F. Product Data: Submit producer's or manufacturer's specifications and installation instructions for all products specified. Include data to show compliance with specifications (including specified standards).

1.4 QUALITY ASSURANCE

A. Fabricate structural steel members in accordance with AISC - Specification for the Design, Fabrication and Erection of Structural Steel for Buildings.

B. Maintain one copy of document on site.

1.5 QUALIFICATIONS

A. Fabricator: Company specializing in performing the work of this Section with minimum 5 years documented experience.

B. Erector: Company specializing in performing the work of this Section with minimum 10 years documented experience.

1.6 FIELD MEASUREMENTS

A. Verify that field measurements are as shown on Drawings.

1.7 DELIVERY, STORAGE, AND HANDLING:

A. Storage materials to permit easy access for inspection and identification. Keep steel members off ground, using pallets, platforms, or other supports. Protect steel members and packaged materials from corrosion and deterioration.

B. Do not store materials on structure in a manner that might cause distortion or damage to members or supporting structures. Repair or replace damaged materials or structures as directed.

PART 2 PRODUCTS

A. MATERIALS

1. Structural Steel Members, Plates and Bars: ASTM A36.

2. Steel Pipe: ASTM A53, Type E or S, Grade B or ASTM, A501.

C. Cold-Formed Steel Tubing: ASTM A500, Grade B.

D. Unfinished (Machine) Threaded Fasteners: ASTM A307, regular low-carbon steel bolts and nuts with hexagonal heads.

E. High-Strength Threaded Fasteners: ASTM A325, heavy hexagon structural bolts, hot formed heavy hexagon

nuts, and hardened washer. Bolts, nuts, and washers shall conform to the AISC Specification for structural joints using ASTM A325 or A490 bolts.

F. Welding Materials: AWS D1.1; Welding electrodes shall be low hydrogen type electrodes compatible with the type of steel welded. An E70 electrode shall be used for all Carbon Steel to Carbon Steel welds. Weld materials shall match or exceed the base metal in strength.

2.2 FABRICATION

A. Fabricate items of structural steel in accordance with AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings and also in accordance with the final shop drawings.

B. Connections of new steel to existing steel shall typically be welded. Connection of new steel to new steel will be either bolted or welded, as indicated.

1. Provide high-strength threaded fasteners for bolted connections, except where unfinished (machine) bolts are indicated.

C. All bolted joints shall be in accordance with AISC Specification for Structural Joints using ASTM A325 or A490 bolts. All bolted connections shall have a minimum of two bolts.

D. All welded construction shall comply with the building and tubular provisions of AWS D1.1 Code.

1. Assemble and weld built-up sections by methods which will prevent warping.

2. Use welding procedures and sequences that prevent locked-in stresses or distortions.

E. All connections will be subject to the Engineer's review.

2.3 FINISH

A. Clean, prepare, shop prime and finish coat structural component surfaces in accordance with Section 09900.

B. Do not prime surfaces that will be field welded.

2.4 SOURCE QUALITY CONTROL AND TESTS

A. Testing of components will be performed under provisions of Section 1A.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field connections are acceptable and are ready to receive work.

B. Beginning of installation means erector accepts existing conditions.

2.02 ERECTION

A. Erect structural steel in accordance with AISC Specification, Bolting Specification and Code of Standard Practice as herein specified.

B. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.

C. Field weld components indicated on Drawings.

D. Do not field cut or alter structural members without approval of the Engineer.

E. Provide temporary planking, scaffolding, and working platforms as necessary to effectively complete work.

F. Do not enlarge unfair holes in members by burning or by use of drift pins. Ream holes that must be enlarged to admit bolts.

G. Immediately after erection, prime welds, abrasions and surfaces not shop primed, except surfaces to be in contact with concrete.

3.03 FIELD QUALITY CONTROL

A. Field inspection will be performed under the provisions of Section 1A.

END OF SECTION

SECTION 05520

HANDRAILS AND RAILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Steel pipe handrails, balusters, and fittings.

1.02 RELATED SECTIONS

A. Section 05120-Structural Steel: Attachment plates and angles.

B. Section 09900 - Painting.

1.03 REFERENCES

A. ASTM A53- Pipe Steel, Black and Hot-Dipped, Zinc-coated Welded and Seamless.

1.04 DESIGN REQUIREMENTS

A. Handrails shall be in accordance with OSHA requirements.

B. Railing assembly, wall rails, and attachments to resist lateral force of 200 lbs. at any point without damage or permanent set.

1.05 SUBMITTALS

A. Submit under provisions of Section 1A.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

1.06 FIELD MEASUREMENTS

A. Verify that field measurements are as indicated on Drawings and shop Drawings.

PART 2 PRODUCTS

2.01 STEEL RAILING SYSTEM

A. Pipe: ASTM A53, Grade B, Schedule 40.

B. Fittings: Elbows, T-shapes, wall brackets, escutcheons; machined steel.

C. Exposed Fasteners: Flush countersunk screws or bolts; consistent with design of railing.

D. Splice Connectors: Steel welding collars.

E. Shop Primer for Ferrous Metal: See Section 09900 - Painting

2.02 FABRICATION

A. Fit and shop assemble components in largest practical sizes, for delivery to site.

B. Fabricate components with joints tightly fitted and secured.

C. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.

D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

E. Continuously seal joined pieces with weld.

F. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

G. Accurately form components to each other and to building structure.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

B. Beginning of installation means erector accepts existing conditions.

3.02 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.

3.03 INSTALLATION

A. Install components plumb and level, accurately fitted, free from distortion or defects.

B. Provide anchors, plates and angles required for connecting railings to structure. Anchor railing to structure.

C. Field weld anchors as indicated on Drawings. Touch-up welds with primer. Grind welds smooth.

D. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

END OF SECTION

SECTION 05530

GRATING AND FLOOR PLATES

PART 1 GENERAL

1.01 WORK INCLUDED

A. Formed metal gratings and checkered floor plating.

B. Formed openings.

C. Perimeter closures.

1.02 RELATED WORK

A. Section 05120 - Structural Steel: Framed steel openings.

B. Section 05520 - Handrails and Railings.

C. Section 09900 - Painting

1.03 REFERENCES

A. ANSI/NAAMM A202.1 - Metal Bar Grating Manual.

B. ASTM A36 - Structural Steel.

C. ASTM A569 - Steel, Carbon, Hot-rolled Sheet and Strip, Commercial Quality.

1.04 SYSTEM DESCRIPTION

A. Load Design: ANSI/NAAMM A202.1.

B. Live Load: 100 lbs/sq ft. minimum.

C. Deflection Under Live Load: 1/240.

D. Size grating and plates to maximum deflection limits by single support design.

1.05 SUBMITTALS

A. Submit shop drawings and product data under provisions of Section 1A.

B. Provide details of grates, plates, supports, span and deflection table, openings, and perimeter construction details and tolerances.

D. Submit two samples 12 x 12 inches in size illustrating surface finish, color, and texture.

E. Submit manufacturer's installation instructions under provisions of Section 1A.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS.

A. The following are acceptable:

IKG Borden, type W194
Blaw-Knox, type 1
McNichols Co, type GW

2.02 MATERIALS

A. Sheet Steel: ASTM A569; A36; carbon steel with raised lug pattern (Medium).

B. Formed Steel: ASTM A36, 36 ksi of shapes indicated.

2.03 FABRICATION

A. Fabricate grates and plates of sizes indicated.

B. Weld joints of intersecting grating sections.

C. Provide support framing for openings.

D. Bearing Bar: 1 1/4" x 3/16" inches size, spaced 1 3/16 inches.

E. Cross Bar: 3/8" x 1/8" inches size, spaced 4" inches.

F. Anchorages: Welded.

2.05 FINISHES

A. Paint: Paint grating sections with manufacturers standard black bituminous paint except for grating

sections listed in Section 09900.

B. Paint: Paint checkered plate per Section 09900.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify that opening sizes and dimensional variations are acceptable to suit grating tolerances.

B. Verify that supports are correctly positioned.

C. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install grates and floor plates in accordance with manufacturer's instructions.

B. Secure grating with welds to prevent movement.

3.03 TOLERANCES

A. Conform to ANSI/NAAMM A202.1.

END OF SECTION

SECTION 09900
PAINTING

PART 1 - GENERAL

1.01 WORK INCLUDED

This work includes providing finishes for the new structural and miscellaneous steel framing. This will also include all items necessary and reasonably incidental to the completion of the overall job. The work generally includes:

A. Prepare surfaces which are to receive finish.

B. Shop finish new steel, field touch-up for damaged coatings and field coating of field welded connection areas. Finish surfaces as indicated in schedule at end of this Section.

1.02 RELATED WORK

A. Section: 05120 Structural Steel
05520 Handrail and Railings
05530 Grating and Floor Plates

1.03 REFERENCES

A. ANSI/ASTM D16 - Definition of Terms Relating to Paint, Varnish, Laquer, and Related Products.

1.04 DEFINITIONS

A. Conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.05 REGULATORY REQUIREMENTS

A. Conform to applicable code for flame/fuel/smoke rating requirements for finishes.

B. All coatings, thinners, etc. shall be lead and chromate free, and VOC compliant. Volatile organic compounds per gallon of coating shall be limited to less than 3.5 pounds/gallon (preferably less than 2.8 pounds/gallon) in the coatings thinned, ready to apply state.

1.06 SUBMITTALS

A. Submit product data under provisions of Section 1A.

B. Provide product data on all finishing products.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Paint materials shall be received in sealed original labelled containers, bearing manufacturer's name, type of paint, brand name, color designation and instructions for mixing and/or reducing.

B. Provide adequate storage facilities. Store paint materials at minimum ambient temperature of 45½ F in well ventilated area.

C. Take precautionary measures to prevent fire hazards and spontaneous combustions.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Ensure surface temperatures or the surrounding air temperature is above 50 degrees F, below 100 degrees F, and a minimum of 5½F above dewpoint before applying finishes.

B. Provide adequate continuous ventilation and sufficient heating facilities to maintain temperatures above 50 degrees F for 24 hours before, during and 12 hours after application of finishes.

C. Provide minimum 25 foot candles of lighting on surfaces to be finished.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS - PAINT

A. Primer: Carbo-Zinc 11HS, Inorganic Zinc Primer

B. Finish: Carboline 801 Epoxy

C. Substitutions: The Owner will consider comparable products from the following manufacturers: Sherwin-Williams, Ameron, Porter Paints, Valspar, and Tnemec

Contractor shall indicate weight of VOC per gallon as well as per cent of zinc in dry film thickness on substitutions. (11HS primer contains 84% zinc. Any substitution should have a minimum of 79% zinc).

2.02 MATERIALS

A. Coatings: Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily an uniformly dispersed to a homogeneous coating.

B. Coatings: Spray and brush properties; capable of drying or curing free of streaks or sags.

C. Accessory Materials: Thinners and other materials not specifically indicated but required to achieve the finishes specified. All accessory materials must be supplied by the coatings manufacturer.

2.03 FINISHES

A. Refer to schedule at end of Section for surface finish and color schedule.

PART 3 - EXECUTION

3.01 INSPECTION

A. Thoroughly examine surfaces scheduled to be painted prior to commencement of work. Report in writing to Engineer, any condition that may potentially affect proper application. Do not commence until such defects have been corrected.

B. Correct defects and deficiencies in surfaces which may adversely affect work of this Section.

C. Shop finish new structural steel, except around field welded connections.

D. Upon delivery of steel to the site, all surfaces shall be free of defects. Surfaces shall be inspected by the Construction Supervisor upon receipt and unloading at Sioux Plant. If defects are found, the Construction Supervisor shall determine the extent of the touch-up work will be done at the Contractor's expense.

E. For field touch-up work the Contractor shall notify the Construction Supervisor and allow him to inspect surfaces after cleaning and before primer or paint is applied.

3.02 PREPARATION FOR SHOP PAINTING

A. Correct minor defects and clean surfaces which affect work of this Section.

B. Remove grease, rust, scale, dirt, and dust form steel surfaces. Remove oil and grease with solvents, in compliance with Solvents, in compliance with SSPC-SP1-82. Prepare surfaces to be painted with a Commercial Blast Cleaning, SSPC-SP-6. Ensure steel surfaces are at the specified preparation level immediately prior to paint application.

3.03 PREPARATION FOR FIELD PAINTING

A. Correct minor defects and clean surfaces which affect work of this Section.

B. Remove grease, rust, scale, dirt, and dust form steel and iron surfaces. Remove oil and grease with solvents, in compliance with Solvents, in compliance with SSPC-SP1-82, Solvent Cleaning. Prepare surfaces to be field painted to a hand or power tool cleaning in accordance with SSPC-SP-2 or 3. Ensure steel surfaces are at the specified preparation level immediately prior to paint application.

3.04 PROTECTION

A. Protect elements surrounding the work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.05 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Allow applied coat to dry before next coat is applied.

F. Contractor shall notify Union Electric one day prior to applying the primer and each coat of paint. Union Electric shall have the Construction Supervisor and/or a Technical representative from the painting manufacture inspect the application of each coat of paint.

3.06 CLEANING

A. As work proceeds, promptly remove paint where spilled, splashed, or spattered.

3.07 PAINT SCHEDULE
Shop Painting

AREAS & ITEMS TO BE PAINTED	PRIME COAT	FINISH COAT	COLOR
All new structural steel, including: connection angles, misc. plates, hanger angles, toe plates @ openings.	11HS 2-3 Mils DFT	801 Epoxy 4-6 Mils DFT	Gray - Match existing structural steel
Grating	MFG STD Bituminous		Black
Checkered Pl.	11HS 2-3 Mils DFT	801 Epoxy 4-6 Mils DFT	Gray - Match existing struct. steel
Ladders/Cages	11HS 2-3 Mils DFT	801 Epoxy 4-6 Mils DFT	Gray - Match existing struct. steel
All new handrails & kickplates	11HS 2-3 Mils DFT	801 Epoxy 4-6 Mils DFT	Gray - Match existing struct. steel

Note: All numbers used are based on Carboline Paint.

3.08 PAINT SCHEDULE - FIELD TOUCH-UP

AREAS & ITEMS TO BE PAINTED	PRIME COAT	FINISH COAT	COLOR
Touch-up for field welded connections		801 Epoxy 6-8 MILS DFT	Match color of the existing structural steel
Touch-up for welded connections of grating		801 Epoxy 6-8 MILS DFT	Match color of new structural steel

Note: All numbers are based on Carboline Paint.