



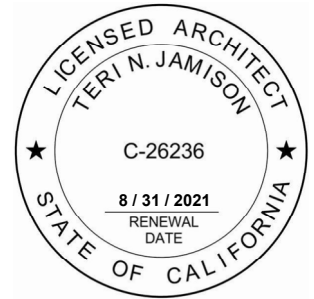
December 11, 2019

Rainforth Grau Architects Project No. 18-1381
DSA File and Application No. 39-H8 / 02-117815
PTN: 75499-143

ADDENDUM NO. 05

Tracy High School – New Parking Lot
Tracy, California

Rainforth Grau Architects



1. ALL WORKMANSHIP, MATERIALS, APPLIANCES AND EQUIPMENT which may be included in the following items shall be the same relative quantity as described for similar work set forth in the original or main specifications of which these Addendum items shall be considered a part.
2. ADDENDUM DRAWINGS: NONE
3. PROJECT MANUAL
 - A. Table of Contents
 1. REVISE section 32 3119 Decorative Metal Fences and Gates (All-Welded) to read 32 3119.10 Decorative Metal Gates (All-Welded).
 2. ADD 32 3119.20 Decorative Metal Fences (Mechanically Fastened).
 - B. Section 32 3119, Decorative Metal Fences and Gates (All-Welded)
 1. DELETE this section in its entirety and REPLACE with 32 3119.10, Decorative Metal Gates (All-Welded) included with this addendum.
 - C. Section 32 3119.20, Decorative Metal Fences (Mechanically Fastened)
 1. ADD Section 32 3119.20, included with this addendum, to follow 32 3119.10.
4. DRAWINGS: NONE

*** END OF ADDENDUM ***

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PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. All-welded decorative metal fences and gates.

1.2 RELATED REQUIREMENTS

- A. Section 01 6116, Volatile Organic Compound (VOC) Content Restrictions; for VOC limits pertaining to adhesives, sealants, fillers, primers, and coatings.
- B. Section 01 8113, Sustainable Design Requirements, for CAL-Green general requirements and procedures.

1.3 REFERENCES AND STANDARDS

- A. California Building Code (CBC), edition as note on the Drawings, as adopted by the California Division of the State Architect (DSA).
- B. California Green Building Standards Code, edition as noted on the Drawings, as adopted by the California Division of the State Architect (DSA).
- C. ASTM International (ASTM):
 - 1. A 500/A 500M: Standard Specification for Cold-Formed Welded Carbon and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - 2. A 513/A 513M: Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing.
 - 3. A 123: Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 4. A 153: Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 5. A 384: Practice for Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies.
 - 6. D 6386: Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel product and Hardware Surfaces for Painting.
 - 7. D 7396: Standard Guide for Preparation of New, Continuous Zinc-Coated (Galvanized) Steel Surfaces for Painting.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Submittal Procedures:
 - 1. Action Submittals shall be submitted in accordance with Section 01 3300, Submittal Procedures.

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2. Sustainable Design Submittals shall comply with the additional requirement of Section 01 8113, Sustainable Design Requirements.
 3. Closeout Submittals shall be submitted in accordance with Section 01 7700, Closeout Procedures.
- B. Coordinate installation of anchorages. Furnish setting drawings, diagrams, templates, and directions for installing anchorages, including sleeves, inserts, anchor bolts, and items with integral anchors, to be embedded in concrete.

1.5 ACTION SUBMITTALS

- A. Shop Drawings: Submit showing all parts, connections and anchorages, adjacent materials, fully dimensioned and noted.
1. Indicate plan layout, spacing of components, locations and sizes of support structures, post foundation dimensions, hardware anchorage and schedule of components.
 2. Provide evidence that mounting plates, lock boxes, and similar items have been sized, located and coordinated properly with the finish hardware supplier and installer where applicable.
- B. Product Data: Submit list and complete descriptive data of all products and finishes proposed for use. Include manufacturer's specifications, published warranty or guarantee, installation instructions, and maintenance instructions.
- C. Samples: Typical frame member, 12 inches long, finished as specified.
- D. CAL-GREEN Submittals:
1. Product Data – VOC Limits: For adhesives, sealants, fillers and primers, documentation including printed statement of VOC contents to verify compliance with limits specified in Section 01 6116.

1.6 INFORMATION SUBMITTALS

- A. Sample of manufacturers' warranty.

1.7 CLOSEOUT SUBMITTALS

- A. Submit executed guarantee and warranty as specified.

1.8 QUALITY ASSURANCE

- A. Use only new materials and products.
- B. Use materials and products of one manufacturer whenever possible.
- C. All materials, components, assemblies, workmanship and installation are to be observed by the Owner's Project Inspector. Work not so inspected is subject to uncovering and replacement.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Deliver undamaged products to job in manufacturer's sealed containers and/or original bundles with tags and labels intact.
- B. Store materials in weather protected, dry conditions off of ground and in areas so as to not interfere with the progress of the work.
- C. Transport, store and handle in strict accord with the manufacturer's written recommendations.

1.10 FIELD CONDITIONS

- A. Make and be responsible for all field dimensions necessary for proper fitting and completion of work. Report any discrepancies to Architect before proceeding.

1.11 GUARANTEE AND WARRANTY

- A. Manufacturer:
 - 1. In addition to the Contractor's Standard Guarantee, furnish Owner with manufacturer's fully executed written commercial warranty for specified coating materials against defects and the following:
 - a. Manufacturer's available warranty for specified hardware.
- B. Contractor: In addition to its standard Guarantee under the Contract, furnish Owner a special extended written 5-year guarantee, cosigned by installer, agreeing to repair or replace decorative metal gates that fail to perform as required within guarantee period as a result of failure of materials or installation workmanship at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 DESIGN AND PERFORMANCE CRITERIA

- A. General:
 - 1. Use new components free from defects affecting service and appearance.
 - 2. Sizes specified or shown shall be considered minimum size.
 - 3. If modifications to designs indicated are proposed in order to meet code requirements, indicate them as such on shop drawing submittals. Work with Architect to arrive at an acceptable design that is sufficiently similar to the design indicated.
- B. Structural Performance of Railing Assemblies and Guardrails:
 - 1. Top Rails of Guards:
 - a. Uniform load of 50 pounds/foot applied in any direction.

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- b. Concentrated load of 200 pounds applied in any direction.
- c. Uniform and concentrated loads need not be assumed to act concurrently.
- 2. Infill of Guards:
 - a. Concentrated load of 50 pounds applied horizontally on an area of 1 square foot.
 - b. Infill load and other loads need not be assumed to act concurrently.
- C. Industry Standards:
 - 1. Comply with "Metal Rail Manual" of National Ornamental and Miscellaneous Metals Association (NOMMA).
- D. Sustainable Design:
 - 1. VOC Limits for field-applied adhesives, sealants, fillers, coatings and primers shall comply with limits specified in Section 01 6116.

2.2 DECORATIVE METAL GATES

- A. General:
 - 1. Assembly: shall be all-welded construction. No mechanical fasteners or connectors are permitted.
 - 2. Tubing for Pickets, Rails and Posts: ASTM A 500 or ASTM A 513, hot-rolled or cold-rolled steel tubing depending on size.
 - a. Steel tubing for pickets shall have a minimum yield strength of 33 ksi. All other tubing to be 50 ksi.
 - b. Steel shall not be pre-galvanized or pre-coated prior to the hot-dip preparation and coating process.
 - c. Steel shall be hot dipped galvanized before fabrication as specified.
- B. Gate Fabrication and Components: Deliver to the project site prefabricated.
 - 1. Gate assemblies shall be shop welded and delivered to the project site prefabricated. Shop coat weld joints, scratches and other areas where hot-dip galvanized coating was removed or damaged with specified galvanized metal repair primer.
 - 2. Pickets: 3/4-inch square, 16-gauge tubular steel, spaced as indicated on the drawings.
 - 3. Rails and Gate Frame: 1-1/2-inch square, 14-gauge tubular steel, spaced as indicated on the drawings.
 - 4. Kick Plates: 12 gauge; 10-inches high x gate width.
 - 5. Astragal: 10 gauge galvanized steel sheet.
- C. Fittings and Accessories:

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1. General: Provide all necessary fittings and accessories as required for a complete fence system.
 2. Security Screen: 16-gauge, galvanized and perforated steel sheet with 1/8-inch holes staggered at 3/16-inches on center. Provide as a part of the fabricated gate or fence panel assembly, hot-dip galvanized.
- D. Gate Hardware:
1. As noted on the approved plans.

2.3 GALVANIZING

- A. Hot-dip galvanize interior and exterior surfaces of all steel fence components.
1. Fence components shall include pickets, horizontal rails, posts, post caps, fittings, plates and other components as shown in assembly.
- B. Surface Preparation Prior to Galvanizing: In accordance with SSPC Specification SP-10, "Near White Blast Cleaning."
- C. Comply with ASTM A153 for galvanizing of iron and steel hardware.
- D. Comply with ASTM A123 for galvanizing of assembled steel products and rolled, pressed, and forged-steel shapes, plates, bars, and strips 1/8 inch thick and heavier.
- E. Newly galvanized items shall not be water quenched or chromate quenched after galvanizing if they are scheduled to receive a paint coating.

2.4 PROTECTIVE PAINT COATINGS

- A. General:
1. Comply with manufacturer's preparation and application instructions for each coating and NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Manufacturer's instructions shall govern in event of conflict.
 2. Coatings shall be shop-applied to the greatest extent possible, including galvanized items, except surfaces and edges to be field welded.
 3. Corrosion Control: Prevent galvanic action and other forms of corrosion by insulating metals from direct contact with incompatible materials.
 4. Steel members shall be protected and be free of corrosion when ready to receive field-applied finish coatings. Apply coatings before rusting occurs.
 5. Metal shall be degreased.
 6. Finish exposed fasteners to match adjacent metal.
- B. Products:

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1. Galvanized Metal Repair Compound: "ZRC Galvalite", single component, high zinc dust content (zinc rich) repair compound for iron, steel and galvanized metal by ZRC Worldwide, or equal.
 2. Finish Paints:
 - a. General:
 - 1) Materials specified are from PPG Industries, Inc. and are intended to establish standard of quality for the specified coating system. Coatings of equal quality, appearance, and performance and offering the same or better warranty as specified will be considered by the Architect.
 - 2) Coating Color: Each coat shall be applied in a different color or shade from the preceding coat to aid in determining the uniformity, mil thickness and coverage of the coating.
 - b. First Coat: "Pitt-Guard Rapid Coat" Direct-to-Rust Epoxy Mastic, 5.0 to 7.0 mils DFT.
 - c. Second and Third Coats: "Pitthane Ultra" Acrylic Aliphatic Urethane, 2.5 mils DFT per coat.
 - 1) Color: Match existing.
 - d. Do not exceed manufacturer's recommended total system thickness.
 - e. Paint additives are prohibited unless specified and approved by the Architect or the coating manufacturer.
- C. Surface Preparation – Galvanized Surfaces:
1. General: Surfaces shall be cleaned and profiled prior to receiving applied coatings in accordance with ASTM D 6386 or ASTM D 7396 for sheet products.
 - a. Methods shall be selected based on age of galvanized coating, condition of surface and specified paint coating.
 - b. High spots and rough edges shall be smoothed out.
 - c. Care shall be taken not to damage the zinc coating.
 2. Cleaning: Surface shall be prepared in accordance with SSPC SP-1 followed by application of pre-paint conditioner.
 3. Comply with the additional requirements of the following:
 - a. Recommendations included in the AGA document "Duplex Systems: Painting Over Hot Dip Galvanized Steel."
 - b. Procedures required by the coating manufacturer.
 4. Repair hot-dipped galvanized coating damaged in shop or during field erection/welding by coating with specified galvanized metal repair primer applied in accordance with manufacturer's recommendations.
- D. Priming:
1. Surface Preparation: As specified.

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2. Apply air-dried primer after cleaning and pretreatment, to provide a minimum dry film thickness.
 3. Apply primer within 8 hours of preparation of surface or sooner if necessary, to prevent rusting.
- E. Preparation:
1. Before a surface is coated, it shall be cleaned carefully of all dust, dirt, mud, grease, oil, loose rust and other contaminants.
 2. Galvanized surfaces shall be prepared and repaired as specified.
 3. Immediately prior to painting, the prepared surface shall be inspected for compliance with the manufacturer's specified degree of surface preparation and requirements for warranty including subsequent inspection between coats.
 4. Prepared, galvanized steel shall be coated within 8 hours of proper and accepted preparation.
- F. Field Application of Coatings:
1. Materials shall be delivered to the job site in the original and unopened containers, plainly marked with the proper designation of the product, as well as the name of the manufacturer.
 - a. Coating materials at the job site shall be subject to inspection.
 - b. Materials shall be stored in a clean, dry, well ventilated place, protected from sparks, flame, direct rays of the sun, and excessive heat or cold.
 - c. The Contractor shall be solely responsible for the protection and safety of the materials stored at the job site.
 2. Application Conditions:
 - a. Exterior painting shall only take place when good weather conditions prevail.
 - b. Painting shall not be undertaken during foggy or misty conditions or when precipitation is imminent.
 - c. The temperature of the surface to be painted shall be at least 5-degrees F above the dew point. When substrate temperatures are high, care shall be taken during paint application to prevent formation of voids, pin holes, and bubbles due to the rapid evaporation of solvent. These requirements also apply during the curing stage of the coatings.
 3. Protection of Surrounding Area:
 - a. Surrounding area and surfaces not to be painted shall be protected during cleaning, preparation and painting operations.
 - b. Drifting of overspray shall be controlled and contained during painting operations so that finish is contained to the work only.
 4. Comply with the additional requirements specified in Section 09 9100, Painting.
- G. Curing Time: The manufacturer's required minimum or maximum curing time between coats shall be strictly adhered to. Applicator shall verify curing times with manufacturer.

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- H. Application and Repair: The application shall leave no sags, runs or holidays. Damage, imperfections or holes in any coat shall be cleaned and repaired to conform to manufacturer's requirements in order to maintain the warranty prior to final inspection.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine the conditions under which the gate is to be installed and advise the General Contractor of any conditions detrimental to the proper and timely completion of the work. Work shall not proceed until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.
- B. The Contractor shall take field measurements for this work and notify the Architect of any discrepancies between plan and field dimensions.

3.2 INSTALLATION

- A. Install all-welded metal gates as indicated on the Drawings, reviewed submittals, and in accordance with industry standard and best practices.
- B. Upon receipt at job site, materials shall be checked to ensure that no damage occurred during handling or shipping. Contractor shall repair or replace material at no additional cost to the Owner.
- C. Gates:
 - 1. Install plumb, level and secure for a full opening without interference.
 - 2. Install hardware not previously installed in shop and adjust hardware for smooth operation.
- D. Field Welding:
 - 1. Comply with applicable AWS specification for procedures of manual shielded metal arc welding, for appearance and quality of welds and for methods used in correcting welding work.
 - 2. Weld connections shall be limited to locations where fabrication cannot be shop welded because of shipping size limitations or conditions of installation.
 - 3. Grind exposed welded joints smooth and restore finish to match finish of adjacent surfaces.
- E. Field Finishing: Provide painted finish utilizing preparation, coatings, and application process specified in Part 2.

END OF SECTION

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PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Mechanically assembled decorative metal fences and gates.
 - 2. Shop finishing.

1.2 RELATED REQUIREMENTS

- A. Section 32 1600, Site Concrete.

1.3 REFERENCES AND STANDARDS

- A. California Building Code (CBC), edition as note on the Drawings, as adopted by the California Division of the State Architect (DSA).
- B. ASTM International (ASTM):
 - 1. A 653/A 653M: Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot Dip Process.
 - 2. A 924/A 924M: Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot Dip Process.
 - 3. A 1011/A 1011M: Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength and High-Strength Low-Alloy with Improved Formability.
 - 4. B 117: Practice for Operating Salt Spray (Fog) Apparatus.
 - 5. D 523: Test Method for Specular Gloss.
 - 6. D 714: Standard Test Method for Evaluating Degree of Blistering of Paints.
 - 7. D 822: Practice For Conducting Tests On Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
 - 8. D 1654: Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
 - 9. D 2244: Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
 - 10. D 2794: Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
 - 11. D 3359: Test Method for Measuring Adhesion by Tape Test.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Submittal Procedures:

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1. Action Submittals shall be submitted in accordance with Section 01 3300, Submittal Procedures.
 2. Closeout Submittals shall be submitted in accordance with Section 01 7700, Closeout Procedures.
- B. Coordinate installation of anchorages. Furnish setting drawings, diagrams, templates, and directions for installing anchorages, including sleeves, inserts, anchor bolts, and items with integral anchors, to be embedded in concrete.

1.5 ACTION SUBMITTALS

- A. Shop Drawings: Submit showing all parts, connections and anchorages, adjacent materials, fully dimensioned and noted.
1. Indicate plan layout, spacing of components, locations and sizes of support structures, post foundation dimensions, hardware anchorage and schedule of components.
 2. Provide evidence that mounting plates, lock boxes, and similar items have been sized, located and coordinated properly with the finish hardware supplier and installer where applicable.
- B. Product Data: Submit list and complete descriptive data of all products and finishes proposed for use. Include manufacturer's specifications, published warranty, installation instructions, and maintenance instructions.
- C. Samples: Typical frame member, 12 inches long, finished as specified.

1.6 CLOSEOUT SUBMITTALS

- A. Submit executed guarantee and warranty as specified.

1.7 QUALITY ASSURANCE

- A. Use only new materials and products.
- B. Use materials and products of one manufacturer.
- C. All materials, components, assemblies, workmanship and installation are to be observed by the Owner's Project Inspector. Work not so inspected is subject to uncovering and replacement.
- D. The Contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to job in manufacturer's sealed containers and/or original bundles with tags and labels intact. Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling

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- B. Store materials in weather protected, dry conditions off of ground and in areas so as to not interfere with the progress of the work.
- C. Transport, store and handle in strict accord with the manufacturer's written recommendations.

1.9 FIELD MEASUREMENTS

- A. Make and be responsible for all field dimensions necessary for proper fitting and completion of work. Report any discrepancies to Architect before proceeding.

1.10 WARRANTY

- A. Manufacturer: In addition to the Contractor's Standard Guarantee, furnish Owner with manufacturer's fully executed written warranty for decorative metal fencing and gates against defects in materials, workmanship, and finish for 20 years.

PART 2 - PRODUCTS

2.1 DESIGN AND PERFORMANCE CRITERIA

- A. General:
 - 1. Use new components free from defects affecting service and appearance.
 - 2. Sizes specified or shown shall be considered minimum size.
 - 3. If modifications to designs indicated and specified are proposed in order to meet code requirements, indicate them as such on shop drawing submittals. Work with Architect to arrive at an acceptable design that is sufficiently similar to the design indicated.
- B. Structural Performance of Railing Assemblies and Guardrails:
 - 1. Top Rails of Guards:
 - a. Uniform load of 50 pounds/foot applied in any direction.
 - b. Concentrated load of 200 pounds applied in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 2. Infill of Guards:
 - a. Concentrated load of 50 pounds applied horizontally on an area of 1 square foot.
 - b. Infill load and other loads need not be assumed to act concurrently.
- C. Industry Standards:
 - 1. Comply with "Metal Rail Manual" of National Ornamental and Miscellaneous Metals Association (NOMMA).
- D. Sustainable Design:

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1. VOC Limits for field-applied adhesives, sealants, fillers, coatings and primers shall comply with limits specified in Section 01 6116.

2.2 DECORATIVE METAL FENCING AND GATES

- A. Fence System: Industrial ornamental steel fence with flush top rail, standard picket spacing, and 2-rail panels; "Montage II ATF (All Terrain Flexibility)" "by Ameristar Fence Products, Tulsa, OK, or equal.

1. Design: "Majestic" with flush bottom rail.

2.3 MATERIALS AND COMPONENTS

- A. Steel material for fence panels and posts shall conform to the requirements of ASTM A 653/A 653M, with a minimum yield strength of 45,000 psi with a G-90 hot-dip galvanized zinc coating.
- B. Line and Corner Posts: 12 gauge steel tubing, 3 inches square.
- C. Pickets: 14 gauge steel tubing, 1 inch square.
- D. Rails: 12 gauge steel channel, 1.75 inches wide x 1.75 inches high.
 1. Cross sectional shape of the rails shall be steel channel, with the outside cross-sectional dimensions of 1.75" x 1.75" x 1.05".
 2. Picket holes in the rail shall be spaced at 4.715 inches on center.

2.4 FABRICATION

- A. Pickets, rails, and posts shall be pre-cut to specified lengths. Rails shall be pre-punched to accept pickets.
- B. Pickets shall be inserted into the pre-punched holes in the rails and shall be aligned to standard spacing using a specially calibrated alignment fixture. Each picket and rail shall be joined using the fusion welding process thus completing the rigid panel assembly.
- C. Completed panels shall be capable of supporting a 600 pound load applied at midspan without permanent deformation. Panels shall be biasable to a 25 percent slope in grade.

2.5 PROTECTIVE PAINT COATINGS

- A. Shop Applied Coating System: The manufactured galvanized panels, gates and posts shall receive a multi-stage pretreatment/wash with zinc phosphate followed by a duplex application of epoxy primer and an acrylic topcoat to create a total coating thickness of 2-mils; "E-Coat" by Ameristar Fence Products, Inc., or equal meeting the following performance criteria:

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QUALITY CHARACTERISTICS	ASTM TEST METHOD	PERFORMANCE REQUIREMENTS
Adhesion:	D 3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance:	B 117, D 714 and D 1654	Corrosion Resistance over 1,500 hours (Scribed per D 1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance:	D 2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance:	D 822, D 2244, and D 523 (60° Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units)

- B. Color: Black, as selected by the Architect.
- C. Exposed fastenings shall be finished to match.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine the conditions under which the fencing is to be installed for conditions detrimental to the proper and timely completion of the work. Work shall not proceed until unsatisfactory conditions have been corrected.
- B. Take field measurements and notify the Architect of any discrepancies between the Drawings and field dimensions.

3.2 INSTALLATION

- A. install mechanically fastened metal fencing system in accordance with manufacturer's requirements, industry standard and best practices.
- B. Upon receipt at job site, materials shall be checked to ensure that no damage occurred during handling or shipping. Contractor shall repair or replace material at no additional cost to the Owner.
- C. Fence posts shall be set in accordance with the spacing recommended by the manufacturer.
- D. Panels shall be attached to posts with brackets as supplied by the manufacturer.
- E. Dig post holes in firm, undisturbed compacted soil.

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1. Footing shall be sized as required by the manufacturer.
 2. Concrete shall conform to the requirements specified in be as specified in Section 32 1600, Site Concrete.
- F. Install posts and panel sections plumb and level.
- G. Touch up field abrasions and damage to factory-painted finish.
1. Touch-up shall be unnoticeable in completed installation.
 2. Touch-up components determined as unacceptable by the Architect shall be replaced at no additional cost to Owner.

END OF SECTION

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