

**TAMALPAIS UNIFIED HIGH SCHOOL DISTRICT**

**SIR FRANCIS DRAKE HIGH SCHOOL  
POOL REPLASTER**

**1327 Sir Francis Drake Blvd.  
San Anselmo, CA 94960**

**PROJECT MANUAL  
JANUARY 2020**

PREPARED BY:

AQUATIC DESIGN GROUP, INC.  
2226 FARADAY AVENUE  
CARLSBAD, CALIFORNIA 92008

TEL 760-438-8400  
FAX 760-438-5251

**TABLE OF CONTENTS**  
**CONSTRUCTION SPECIFICATIONS**  
**SIR FRANCIS DRAKE HIGH SCHOOL POOL REPLASTER**

---

**INTRODUCTORY INFORMATION**

00 00 01	Title Page
00 00 10	Table of Contents

**SPECIFICATIONS**

**DIVISION 1 – GENERAL CONDITIONS**

01 11 00	Summary of Work
01 33 00	Submittals and Substitutions
01 50 00	Temporary Facilities and Controls
01 77 00	Project Closeout

**DIVISION 2 – SITE WORK**

02 05 00	Demolition
----------	------------

**DIVISION 3 - CONCRETE**

**DIVISION 4 – MASONRY**

(No Sections Listed)

**DIVISION 5 – METALS**

(No Sections Listed)

**DIVISION 6 – WOOD AND PLASTICS**

(No Sections Listed)

**DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

(No Sections Listed)

**DIVISION 8 – DOORS AND HARDWARE**

(No Sections Listed)

**DIVISION 9 – FINISHES**

(No Sections Listed)

**DIVISION 10 – SPECIALTIES**

(No Sections Listed)

**DIVISION 11 – EQUIPMENT**

(No Sections Listed)

**DIVISION 12 – FURNISHINGS**

(No Sections Listed)

**DIVISION 13 – SPECIAL CONSTRUCTION**

13 11 04 Swimming Pool Ceramic Tile

13 11 05 Swimming Pool Plaster

13 11 06 Swimming Pool Equipment

**DIVISION 14 – CONVEYING SYSTEMS**

(No Sections Listed)

**DIVISION 15 – MECHANICAL**

(No Sections Listed)

**DIVISION 16 – ELECTRICAL**

(No Sections Listed)

## SECTION 01 11 00

### SUMMARY OF WORK

#### PART 1 - GENERAL

All applicable portions of Division 1, including the drawings and general provisions of the contract, the general and supplementary conditions and Division 1 specification sections which apply to work of this section as if printed herein.

#### 1.01 DESCRIPTION

A. Section Includes:

1. Description of the Work (refer to 1.03).
2. Duties of the Contractor (refer to 1.04).
3. Permits and fees (refer to 1.06).
4. Layout of work (refer to 1.07).

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. The scope of this project includes, but is not limited to: removal of existing swimming pool plaster finishes and select tile finishes. Installation of new swimming pool plaster and tile finishes, new VGB main drains and other work as shown and specified in the construction documents. All other items as required to provide a completely operational aquatic facility. Project is located at Sir Francis Drake High School, 1327 Sir Francis Drake Blvd, San Anselmo, CA 94960.
- B. Work of this contract generally consists of demolition, preparation and new construction and such other items not mentioned that are required by the Contract Documents, law and governmental codes and regulations.
- C. For convenience, the Specifications are divided into sections as set forth in the Table of Contents, but such segregation shall not be considered as limiting the work of any subcontract or trade, and the Owner will not be responsible for any division of work by subcontracts. Unless otherwise provided, the Contractor shall be solely responsible for all subcontract arrangements of work regardless of the locations of provisions in the Specifications.
- D. Compensation for bid items not specifically identified in these Special Provisions shall include all labor, materials, tools, equipment, safety measures, and supervision required to complete the work to grades and dimensions shown on the plans or staked in the field. There shall be no compensation except for bid items specified in the Bidder's Proposal. The cost of all work in the Contract Documents not specifically identified as a bid item or described within a bid item shall be included in related bid items, and no additional compensation shall become due the Contractor by nature of compliance with the Contract Documents except as provided for in the General Conditions of the Contract for Construction, under "Changes in the Work."

#### 1.03 CONTRACTOR DUTIES

- A. Construct the work under a single prime contract in strict conformity with the Contract Documents.
- B. Accept the site and the character of the work as they exist on the first day of work under this Contract.
- C. Coordinate work of employees and subcontractors.
- D. Expedite the work to assure compliance with schedules.
- E. Coordinate the work with that of other contractors and work done by the Owner.
- F. Comply with orders and instructions of the Owner's Representative.

#### 1.04 CONTRACTOR FURNISHED PRODUCTS

- A. Contractor Responsibilities:
  - 1. Designate needed submittals and delivery date for each product in progress schedule. Coordinate deliveries with Owner's Representative.
  - 2. Receive product(s) at site. Store until incorporated into the work.
  - 3. Inspect deliveries jointly with Owner's Representative, record shortages and damaged or defective items.
  - 4. Protect product(s) from damage, theft and from exposure to the elements.
  - 5. Assemble, install, connect, adjust and/or finish product(s) as required under provisions of the Contract Documents.
  - 6. Repair or replace products damaged or stolen subsequent to receipt, at no cost to the Owner.

#### 1.05 PERMITS AND FEES

- A. The Contractor shall obtain and pay for all permits, fees and licenses required by all government agencies and necessary for successful completion of the work. The Contractor shall maintain copies of all required permits on site and shall, upon request, furnish the Owner with copies thereof.

#### 1.06 LAYOUT OF WORK

- A. Field surveys for control of all grading and construction shall be the responsibility of the Contractor. All such surveys, including construction staking, shall be under the supervision of a California licensed surveyor or civil engineer. Staking shall be performed on all items ordinarily requiring grade and alignment at intervals normally accepted by the agencies and trades involved. Payment for construction survey staking shall be considered as included in the various items of work and no additional allowance will be made thereof. Bench marks shall be provided by the Owner as shown on Drawings.

### PART 2 - PRODUCTS

NOT USED

### PART 3 – EXECUTION

2019.095  
JANUARY 2020

SIR FRANCIS DRAKE HIGH SCHOOL POOL REPLASTER  
SAN ANSELMO, CA

NOT USED

**END OF SECTION**

## SECTION 01 33 00

### SUBMITTALS

#### PART 1 - GENERAL

All applicable portions of Division 1, including the drawings and general provisions of the contract, the general and supplementary conditions and Division 1 specification sections which apply to work of this section as if printed herein.

##### 1.01 DESCRIPTION

A. Section Includes:

1. Submit to the Engineer shop drawings, product data and samples required under the various Sections of these Specifications.
2. Prepare and submit with Construction Schedule, a separate schedule listing dates for submission and dates reviewed shop drawings, product data and samples will be needed for each product.

##### 1.02 PRODUCT HANDLING

- A. Make all submittals of Shop Drawings, Samples, and requests for substitution in accordance with the provisions of these Specifications.

#### PART 2 - PRODUCTS

##### 2.01 SCHEDULE OF SUBMITTALS

- A. Compile a complete schedule of all submittals required for the project, complete with major division and subdivision headings and broken into individual trades. Format shall be 8-1/2" x 11". The schedule shall be in such a form as to allow for notations next to each required submittal including, but not necessarily limited to, submission dates, action taken, approvals and re-submittals. Submit such a schedule to the Engineer for his comments and approval. The approved Schedule of Submittals shall be kept current at all times and an updated copy shall be kept in the Project Field Office for review.

##### 2.02 SHOP DRAWINGS AND PRODUCT INFORMATION SUBMITTALS

- A. Unless otherwise specifically directed by the Engineer, make all Shop Drawings accurately to a scale sufficiently large to show all pertinent features of the item and its' method of connection and interface to the Work.
- B. Submit all Shop Drawings in the form of four (4) blue-line prints of each Shop Drawing. In the case of Product Information, submit no less than four (4) copies for review. Where contents of submitted product information include data not pertinent to the submittal, clearly indicate which portion is being submitted for review.
- C. Submittals are required on all items to ensure the latest and most complete manufacturer's data is available. The Contractor assumes full responsibility for problems which could have been noted on valid submittals not furnished.

- D. In the event that an item or items specified by the Engineer will not be available in time for installation during orderly progress of the Work, so notify the Engineer prior to receipt of bids. Verify that all items specified will be available. Costs of delays because of non-availability of materials will be back-charged as necessary and shall not be borne by the Owner.
- E. Of the four (4) bluelines required; two bluelines will be returned to the Contractor upon completion of the Engineer's review, one will be sent to the Owner and the other will be kept on file in the Engineer's office.

### 2.03 SAMPLES

- A. Unless otherwise specifically directed by the Engineer, all Samples shall be of the precise article proposed to be furnished.
- B. Submit all Samples in the quantity which is required to be returned, plus one (1) which will be retained by the Engineer.

### 2.04 CALCULATIONS

- A. Where required, the Contractor shall retain a licensed Civil or Structural Engineer to provide structural calculations sufficient to show the adequacy of all members and connections to be reviewed.

### 2.05 COLORS

- A. Unless the precise color and pattern is specifically described in the Contract Documents, whenever a choice of color or pattern is available in a specified product submit accurate color charts and pattern charts to the Engineer for his review and selection.
- B. Unless all available colors and patterns have identical costs and identical wearing capabilities and are identically suitable for the installation, completely describe the relative costs and capabilities of each.

### 2.06 MANUALS

- A. Where manuals are required to be submitted upon completion of the installation, prepare all such manuals in durable plastic binders approximately 8-1/2" x 11" in size and with at least the following features:
  - 1. Identification readable through the outside of the cover, stating the general nature of the manual and the project to which it pertains.
  - 2. Neatly typewritten Index near the front of the manual, furnishing immediate information as to location in the manual of all data regarding the installation.
  - 3. Complete instruction regarding operation and maintenance of all equipment involved.
  - 4. Complete nomenclature of all replaceable parts, their part numbers, current cost and name and address of the Vendors of the parts.
  - 5. Copy of all guarantees and warranties issued on the installation.

6. Copy of the approved Shop Drawings with all data concerning changes made during construction.
- B. Where contents of manuals include manufacturer's catalog, clearly indicate the precise items included in this installation and delete, or otherwise clearly indicate, all manufacturer's data with which this installation is not concerned.
- C. Unless otherwise specifically directed by the Engineer, deliver two (2) copies of the manual to the Owner and one (1) copy to the Engineer.

## 2.07 RECORD DRAWINGS

- A. Where required by the Contract Documents or where changes to the Contract Documents have been made by change order, revision to clarification drawings, or where minor changes to the Contract were required because of unforeseen conditions or as may be required by the Engineer, prepare accurate Record Drawings indicating all pertinent data and dimensions necessary to adequately describe the contract deviations to the Owner for his future use.

## 2.08 SUBSTITUTIONS

- A. Reference in the Contract Documents to any material, product, or process by name, make or catalog number shall be interpreted as establishing a standard of quality and design intent and not construed as prohibiting substitutions of any other such material, product, or process, provided such substitution is specifically approved by the Engineer prior to receipt of bids. Requests for substitutions shall be submitted no later than ten (10) working days prior to bid date.
- B. Acceptance of substitutions will not relieve the Contractor from responsibility for complying with the Contract Documents.
- C. At the discretion of the Engineer, testing of samples of materials proposed for substitutions may be required. The testing shall be done by an independent testing laboratory selected by the Owner, the costs of which shall be borne by the Contractor.
- D. At the discretion of the Engineer, the Contractor may be required to furnish a written guarantee, in addition to that already required, ensuring the satisfactory performance of the proposed substitutes.
- E. All additional labor and materials which may be required for the proper installation of any substitution, or required as a consequence of any substitution, will be provided at no additional cost to the Owner.
- F. Bids shall be based upon the data given in the Contract Documents, or upon previously approved items or techniques as "approved equals" by the Engineer. Where calculations or shop drawings are required for approval, allowance shall be made for meeting the requirements of the Contract Documents and all applicable codes and ordinances.
- G. Bidders may, in addition, submit separate bids using materials and equipment of other manufacturers, providing the difference in cost is stated for each item proposed to be substituted.

- H. Provide to the Engineer all information necessary and required to evaluate proposed substitutions. Do not base bid on the assumptions that a material will be approved as equal by the Engineer unless the item has been specifically approved for this Work by the Engineer prior to the receipt of bids.
- I. The Contractor assumes full responsibility that substituted items or procedures will meet the job requirements and is responsible for the cost of redesign and of modifications to this and all other parts of the work caused by substituted items.
- J. Submittals will be checked for general conformance with the design concept of the project, but acceptance does not guarantee quantities shown and does not supersede requirements to properly install work. Submittals for proposed alternatives will be judged not only for the acceptability of the items themselves, but of the items as they are used under the conditions of this particular project.

### **PART 3 - EXECUTION**

#### **3.01 IDENTIFICATION OF SUBMITTALS OR SUBSTITUTIONS**

- A. Completely identify each submittal and re-submittal by showing at least the following information:
  - 1. Name and address of entity submitting information, plus name and telephone number of individual who may be contacted for further information.
  - 2. Name of project for this Work.
  - 3. Drawing number and Specification Section number to which the submittal applies.
  - 4. Number of all submittals sequentially, whether this is an original submittal or a re-submittal, and if a re-submittal, what number re-submittal.

#### **3.02 COORDINATION**

- A. Prior to submittal for Engineer's review:
  - 1. Fully coordinate all submittals by determining and verifying all field dimensions and conditions, materials, catalog numbers, and similar data.
  - 2. Coordinate as required with all other trades and with all public agencies involved.
  - 3. Secure all necessary prior approvals and signify by stamp, or other means, that they have been secured.
  - 4. Clearly indicate all deviations from Contract Documents.

#### **3.03 TIMING OF SUBMITTALS**

- A. Make all submittals within ten (10) days of the date of the award of the contract for the Work, and far enough in advance of scheduled dates of installation to provide adequate time for all required reviews, both by the Engineer and his consultants, for securing necessary approvals, for possible revision and re-submittal, and for placing of orders and securing delivery. In scheduling, allow a minimum of ten (10) full working days for the Engineer's review. Cost of delays occasioned by the tardiness of submittals will be back-charged as necessary.

### **3.04 ENGINEER'S REVIEW**

- A. The Engineer's review will be only for conformance with the design concept and with the information given in the Contract Documents. The Engineer's review and approval of Shop Drawings and Samples shall not relieve the Contractor of responsibility for deviation from the requirements of the Contract Documents unless the Contractor has informed the Engineer in writing of such deviation at the time of submittal and the Engineer has given written approval to the specific deviation, nor shall the Engineer's approval relieve the Contractor from responsibility for errors and omissions in the Shop Drawings and Samples. Should the Engineer be required to review any submittal more than three (3) separate times due to the inadequacy of the submittal and due to no fault of the Engineer, the Contractor shall render to the Engineer the Engineer's direct cost for review of all subsequent re-submittals.

### **3.05 COMPLIANCE WITH APPROVALS**

- A. Do not commence any portion of the Work requiring approval of Shop Drawings or Samples by the Engineer until the submittal has been approved by the Engineer. All such portions of the Work shall be in accordance with the approved Shop Drawings and Samples.

**END OF SECTION**

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

All applicable portions of Division 1, including the drawings and general provisions of the contract, the general and supplementary conditions and Division 1 specification sections which apply to work of this section as if printed herein.

##### 1.01 DESCRIPTION

- A. Section Includes: Temporary facilities and controls required for this work include, but are not limited to: temporary utilities such as water, electricity and telephone; field offices and sheds; haul roads; enclosures such as fences, barricades, and canopies; sanitary facilities; scaffolding and safety equipment. All such temporary facilities shall be located for convenience and safety and maintained in a safe and sanitary condition at all times until completion of the Contract, then removed from the site and disposed of as required or as directed.

##### 1.02 COMPLIANCE WITH CODES AND REGULATIONS

- A. Compliance with all requirements of pertinent safety regulations is described in the General Conditions of the Contract for Construction and shall include, but not necessarily be limited to: Federal Occupational Health Administration (OSHA) and latest edition, Uniform Building Code (with California Amendments) and ADA (American Disability Act).

##### 1.03 PRODUCT HANDLING

- A. Use all means necessary to maintain all temporary facilities and controls in proper and safe condition throughout progress of the work. In the event of damage or loss, immediately make all repairs and replacements necessary and at no additional cost to the Owner.

#### PART 2 - PRODUCTS

##### 2.01 TEMPORARY UTILITIES

- A. General:
  - 1. Provide and pay all costs for all utilities required for performance of the work.
  - 2. Provide safe distribution of required utilities to the job areas for use of all trades.
- B. Temporary Water: Furnish and install all necessary temporary piping and, upon completion of the work, remove all such temporary piping.
- C. Temporary Electricity: Furnish and install all necessary temporary wiring; furnish and install distribution boxes within 100 feet of each portion of the work so located that the individual trades may use their own construction-type extension cords to obtain adequate power and lighting at all points where required by inspectors and for safety.

- D. Telephone: Maintain in the Contractor's field office or in a protected location on the job site for the use of the subcontractors; the telephone may be coin operated.

## 2.02 ACCESS FACILITIES

- A. The Contractor shall provide access facilities to the construction area as are necessary and required for carrying out the work and the same shall be kept passable at all times. Contractor shall be responsible for any damage to streets, curbs and sidewalks due to the use of such facilities, and such damaged portions shall be repaired as required to place them in the same condition as existed prior to the commencement of the work. Contractors shall comply in every respect with applicable Building Codes regarding the use of public streets and sidewalks and provide the proper barricading and lighting of public thoroughfares surrounding the construction activities.

## 2.03 ENCLOSURES, FENCES, BARRICADES AND CANOPIES

- A. Furnish, install, and maintain for the duration of construction, all required scaffolds, fences, barricades, canopies, warning signs, steps, bridges, platforms and other temporary construction necessary for proper completion of the work in compliance with all pertinent safety regulations. In addition, it is recommended that all existing improvements which are not to be altered or removed be protected by means of temporary barricades or other suitable means.

## 2.04 PUMPING

- A. Keep the site, excavations, and structures free of accumulation of water at all times, whether from underground seepage, rainfall, drainage, or broken utility lines.

## 2.05 SANITARY FACILITIES

- A. Furnish and install all required temporary toilet buildings with sanitary toilets for use of all workmen. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction. Maintain in a sanitary condition at all times.

## 2.06 FIRE PROTECTION

- A. Temporary fire extinguishers shall be provided and available at the job site in accordance with the appropriate NFPA Bulletins and good practice.

## PART 3 - EXECUTION

### 3.01 SPECIAL CONDITIONS OF THE SITE

- A. The area to be set aside for the use of the Contractor is indicated on the Drawings as "Limit of Work." Except for sub-surface utility work, curb and gutter, temporary roads and any other work specifically shown or noted, the Contractor shall confine his exterior operations within the limits-of-work so indicated.
- B. Work shall not proceed for the site or buildings until all temporary work such as utilities, barricades, field office and sanitary facilities are furnished and installed.

- C. Parking of vehicles by construction personnel shall be limited to areas outside the limits-of-work in locations as designated by the Owner's Representative.

### **3.02 MATERIAL STORAGE AND PROTECTION**

- A. During the progress of the work, products and materials shall be neatly stored in accordance with the appropriate manufacturer's recommendations and shall be properly cared for and protected from weather, vandalism and theft.
- B. All installed products and materials shall be adequately protected until such time as the Owner accepts the Project.

### **3.03 CONDITIONS AT THE SITE**

- A. The Contractor shall make all necessary inspections of the job site and of the work to be fully aware of the conditions of all temporary facilities and controls at all times.
- B. The Contractor shall take all steps necessary to prohibit any part of the premises, the buildings, or structures to be overloaded by setting thereon any material or equipment, or performing thereon any of his work, which could cause any loss, damage, and/or injury to person or property.
- C. The Contractor shall make a close inspection of all materials as delivered and shall promptly return all defective materials without waiting for their rejection by the Engineer.

### **3.04 REMOVAL**

- A. Maintain all temporary facilities and controls as long as needed for the safe and proper completion of the work. Remove all such temporary facilities and controls as rapidly as progress of the work will permit, or as directed by the Engineer.

### **3.05 RESTORATION OF AREAS**

- A. Upon completion of the project, all temporary facilities shall be removed from the site and all areas not otherwise improved but which were adversely affected by the Contractor's work shall be returned to their original condition to the satisfaction of the Engineer.

### **3.06 FINAL SITE CLEAN-UP**

- A. Prior to final inspection, thoroughly clean the entire site and restore to a neat, acceptable condition. Remove from the entire site all construction waste and unused materials, dunnage, loose rock and stones, excess earth, roots, weeds, and all debris of any description resulting from the work. Hose down and scrub where necessary all new concrete and asphalt pavement and paved walks, and all existing concrete and asphalt pavement and walks dirtied as a result of the work. Thoroughly remove mortar drippings from concrete walks and other pavements, where they occur.

**END OF SECTION**

## SECTION 01 77 00

### CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

All applicable portions of Division 1, including the drawings and general provisions of the contract, the general and supplementary conditions and Division 1 specification sections which apply to work of this section as if printed herein.

##### 1.01 DESCRIPTION

- A. Section Includes: The work includes, but is not necessarily limited to, performing all operations necessary for and properly incidental to closing out the project and assisting in Owner's final inspection as hereinafter specified.

##### 1.02 FINAL COMPLETION

- A. When the Contractor considers the work, or a designated portion of the work complete, submit written request to Owner's Representative for inspection. By submittal of request, Contractor certifies that:
1. Contract Documents have been reviewed.
  2. Work has been completed in accordance with the Contract Documents and is ready for inspection.
  3. Equipment systems have been tested, adjusted, balanced and are fully operational.
- B. Submit request a minimum of five (5) working days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time during contract period to complete inspections and any corrections.
- C. Should Owner's Representative inspection find work incomplete, Owner's Representative will notify Contractor in writing, listing observed deficiencies.
- D. Contractor shall remedy listed deficiencies and send a request for final inspection. At the Owner's option, a reinspection(s) of the work to identify additional deficiencies, if any, may be required. Owner's costs associated with reinspection(s) are subject to provisions of Article 1.04 of this Section.
- E. When Owner confirms work is complete, and close-out submittals as referred to in Article 1.05 of this Section are provided, Owner's Representative will notify Contractor of date of completion in writing.

##### 1.03 REINSPECTIONS

- A. Should status of completion of work require reinspection(s) by Owner due to failure of work to comply with Contractor's claims on initial inspection, Owner may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

- B. Inspections initiated at the request of the Owner will not be subject to the provisions of this Article.

**1.04 CLOSE-OUT SUBMITTALS**

- A. Project Record Documents
- B. Operation and Maintenance Data
- C. Warranties and Guarantees
- D. Spare Parts and Maintenance Materials
- E. Evidence of Payment and Lien Releases along with a list of all subcontractors which contributed labor or materials to the project.
- F. Other data and materials as may be required in individual Sections of the Specifications.

**1.05 APPLICATION FOR FINAL PAYMENT**

- A. Submit application for final payment in accordance with provisions of the Contract for Construction.

**PART 2 - PRODUCTS**

NOT USED

**PART 3 - EXECUTION**

NOT USED

**END OF SECTION**

## SECTION 02 05 00

### DEMOLITION

#### PART 1 - GENERAL

All applicable portions of Division 1, including the drawings and general provisions of the contract, the general and supplementary conditions and Division 1 specification sections which apply to work of this section as if printed herein.

#### 1.01 DESCRIPTION

A. Section Includes:

1. The scope of this project includes, but is not limited to: removal of existing swimming pool plaster finishes, select tile and main drains and other items as noted on the construction documents.

B. Site Visitation: In preparing a proposal, visit the site, carefully examine the Drawings and Specifications, and determine that the work can be properly executed in accordance with the Contract Documents. No allowance will be made for any error through negligence in observing the site conditions.

#### PART 2 - PRODUCTS

NOT USED

#### PART 3 - EXECUTION

#### 3.01 TREATMENT OF EXISTING FACILITIES

A. Protection: Use necessary procedures, caution and covering to protect from damage existing facilities, equipment and accessories not noted to be replaced or restored. Maintain active utilities traversing the project site in operating condition.

B. Replacement: In the event of damage, immediately notify the Owner, and make all repairs and replacements necessary to the approval of the Engineer without change in contract amount or time.

#### 3.02 REMOVAL OF DEBRIS

A. All items noted for demolition shall be immediately removed from the project site and hauled and dumped in compliance with all local codes and regulations, including payment of any associated fees.

#### 3.03 SAFETY BARRICADES

A. Provide substantial barricades around and at all areas and openings as soon as such areas and openings are created. Barricades must be adequate to block access and give warning to the general public.

**3.04 CLEAN-UP**

- A. Upon completion of the work of this Section, immediately remove all broken concrete, debris and rubbish occasioned by this work to the approval of the Engineer.

**END OF SECTION**

## SECTION 13 11 04

### SWIMMING POOL CERAMIC TILE

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

##### 1.02 WORK INCLUDED

- A. Furnish and install all swimming pool ceramic tile detailed on the Drawings, including, but not limited to, the following:
  - 1. Waterline Face Tile (match existing).
  - 2. Gutter Cap Tile (match existing).
  - 3. Lane Line / Target Tile.
  - 4. Trim Tile (at 4'-6" depth and stairs)
  - 5. Depth / Caution Marker Tile on Deck.

##### 1.03 QUALITY ASSURANCE

- A. Qualifications of Workers:
  - 1. The entity performing the work of this Section shall have been successfully engaged in the respective trade for at least five (5) years immediately prior to commencement of the Work.
  - 2. For actual construction operations, use only trained and experienced workers with a minimum of three (3) years experience with the materials and methods specified.
  - 3. Provide at least one person who shall be present at all times during execution of the work of this Section, with a minimum of five (5) years experience with the type of materials being installed, the referenced standards, and who shall direct all Work performed under this Section.
- B. Standards: In addition to complying with all pertinent codes and regulations:
  - 1. Manufacture of all tile shall be in accordance with ANSI A-137.1.
  - 2. Install ceramic tile in accordance with the recommendations contained in the 2020 "Handbook for Ceramic Tile Installation" of the Tile Council of America, Inc.
- C. Tolerances: Install all swimming pool ceramic tile straight, true, plumb and square within a tolerance horizontally of one in 200 and a tolerance vertically of one in 500. Waterline and gutter bullnose tile shall be level to 1/8" (+/- 1/16") around entire perimeter of swimming pools.

#### 1.04 SUBMITTALS AND SUBSTITUTIONS

- A. Provide submittals in conformance with the requirements of Section 01 33 00.
- B. Samples: Submit samples of each color and pattern in the specified groups. Character samples can be representative for review prior to screening of actual tile.
- C. Master Grade Certificate: Prior to opening ceramic tile containers, submit a Master Grade Certificate, signed by the manufacturer of the tile used and issued when the shipment is made, stating the grade, kind of tile, identification marks for the tile containers, and the name and location of the Project.
- D. Specifications: Submit manufacturer's recommended installation specifications for the Work.
- E. Submit proof of qualifications as specified in Article 1.03.A of this Section.

#### 1.05 PRODUCT HANDLING

- A. Delivery: Deliver all materials to the Project Site in the manufacturer's original unopened containers with all labels intact and legible.
- B. Storage: Store all materials under cover in a manner to prevent damage and contamination, and store only the specified materials at the Project site.
- C. Protection: Use all means necessary to protect swimming pool ceramic tile before, during and after installation and to protect the installed Work specified in other Sections.
- D. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner's Representative.

### PART 2 - PRODUCTS

#### 2.01 TILE

- A. Waterline Face Tile: (Replace any damaged to match existing)
  - 1. Material: All waterline face tile shall be glazed ceramic tile (Group III standard) as manufactured by Dal-Tile or approved equal.
  - 2. Size: 6 x 6 inches.
  - 3. \*Color: Dal-Tile #D129, 'Sky Blue'. Contact Kylee Midura [kylee.midura@daltile.com](mailto:kylee.midura@daltile.com) (858)344-0019.
- B. Gutter Cap Tile: (Replace any damaged to match existing)
  - 1. Material: All gutter cap tile shall be glazed ceramic tile (Group III standard) as manufactured by Dal-Tile or approved equal.
  - 2. Size: 2-1/2 x 6 inches (#A-7250).
  - 3. \*Color: Dal-Tile #D129, 'Sky Blue'.

- C. Lane Line / Target Tile:
1. Material: Group 3 quality, frost proof unglazed ceramic mosaic tile with absorption rate of less than 1% as manufactured by Dal-Tile or approved equal.
  2. Size: 1 x 1 inches.
  3. \*Color: Dal-Tile #D311, 'Black' in the 25 yard direction.
- D. Trim Tile (at stairs and at 4'-6" depth):
1. Material: Group 3 quality, frost proof unglazed ceramic mosaic tile with absorption rate of less than 1% as manufactured by Dal-Tile or approved equal.
  2. Size: Stairs: 1 x 1 inches, with S-812 quarter round. Color: Dal-Tile #D-311, 'Black'.
  3. Size: Stairs: 2 x 6 inches with integral quarter round. Color: Black, non-slip. Inlays or equal.
  4. Size at 4'-6" depth: 1 x 1 inches. Color: Dal-Tile #D023 'Galaxy'
- E. Depth / Caution Marker Tile (at deep gutter pool deck):
1. Material: Group 3 quality, frost proof unglazed ceramic mosaic tile with absorption rate of less than 1% as manufactured by Dal-Tile or approved equal.
  2. Size: 1 x 1 inches.
  3. Color: Dal-Tile #D-311, 'Black' letters and numbers on #D014, 'Light Gray' field.

## 2.02 MORTAR

- A. Sand for Mortar: Comply with requirements of fine aggregate for concrete.
- B. Cement: Type I Portland Cement, conforming to ASTM C150.
- C. Hydrated Lime: Conforming to ASTM C206 or 207, Type S.
- D. Water: From a potable source.
- E. Mortar shall meet ASTM C270 standards.

## 2.02 THIN SET MORTAR

- A. Laticrete 254 Platinum. Laticrete, Custom or equal.
- B. Water: From a potable source.
- C. Mortar shall meet ASTM C627 standards.

## 2.03 GROUT

- A. All tile grout shall be waterproof grout complying with the recommendations of referenced standards. Grout color shall be grey for dark backgrounds, white for light backgrounds (verify colors with Architect).

## 2.04 OTHER MATERIALS

- A. All other materials, not specifically described but required for a complete and proper installation of ceramic tile as indicated on the Drawings, shall be new, first quality of their respective kinds, and subject to the approval of the Designated Representative.

### **PART 3 - EXECUTION**

#### **3.01 SURFACE CONDITIONS**

- A. Inspection:
  - 1. Prior to all Work of this Section, carefully inspect the installed Work of other trades and verify that all such Work is complete to the point where this installation may properly commence.
  - 2. Verify that ceramic tile can be installed in accordance with the original design and all referenced standards.
- B. Discrepancies:
  - 1. In the event of discrepancy, immediately notify the Designated Representative.
  - 2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.
  - 3. Failure to notify the Designated Representative and give written notice of discrepancies shall constitute acceptance by the Contractor of existing conditions as fit and proper to receive its Work.

#### **3.02 INSTALLATION**

- A. Method:
  - 1. Install all ceramic tile in strict accordance with installation method P601-02 of the 2020 Handbook for Ceramic Tile Installation of the Tile Council of America, Inc.
  - 2. Be certain to install all ceramic tile perfectly level, flush, plumb, and to the finish grades and elevations indicated on the Drawings.
- B. Interface:
  - 1. Carefully establish and follow the required horizontal and vertical elevations to insure proper and adequate space for the work and materials of other trades. And cooperate as required with other trades to insure proper and adequate interface of ceramic tile Work with the Work of other trades.

#### **3.03 GROUTING**

- A. Follow grout manufacturer's recommendations as to grouting procedures and precautions.
- B. Remove all grout haze, observing grout manufacturer's recommendations as to use of acid and chemical cleaners.

#### **3.04 EXTRA STOCK**

- A. Provide one (1) unopened box of extra tile for 2.01C and 2.01E for Owners use at a future time.

**3.05 CLEAN-UP**

- A. Upon completion of the swimming pool ceramic tile installation, thoroughly clean and polish the exposed surfaces of tile work. Completely clean work area of debris and rubbish occasioned by this Work and dispose of to the approval of the Designated Representative.

**END OF SECTION**

**SECTION 13 11 05**

**SWIMMING POOL PLASTER**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. Swimming pool plaster and waterproofing of swimming pool structures as indicated on the Drawings and herein specified.
- B. Start-up and operation instructions to Owner's operations and maintenance personnel and properly balance swimming pool water chemistry until the Owner takes occupancy.

**1.02 QUALITY ASSURANCE**

- A. Qualifications of Workers:
  - 1. The entity performing the work of this Section shall have been successfully engaged in the respective trade for at least five (5) years immediately prior to commencement of the Work.
  - 2. For actual construction operations, use only trained and experienced workers with a minimum of three (3) years experience with the materials and methods specified.
  - 3. Provide at least one person who shall be present at all times during execution of the work of this Section, with a minimum of five (5) years experience with the type of materials being installed, the referenced standards, and who shall direct all Work performed under this Section.
- B. Standards: Swimming pool plaster shall conform with requirements of Chapter 31B of California Building Code, latest edition. In addition, meet requirements of applicable portions of most current edition of the "Technical Manual," National Plasterers Council, Mission Viejo, California.
- C. Start-up:
  - 1. Furnish a swimming pool water chemistry consultant, with a minimum of five (5) years experience, possessing either AFO (Aquatic Facility Operator) or CPO (Certified Pool Operator) certification(s), to supervise and properly balance swimming pool water chemistry.
  - 2. Demonstrate to the Owner's Representative that all systems are fully operational and that calcium hardness, total alkalinity, chlorine residual and pH levels are within specified limits.
  - 3. Standards: Furnish labor and chemicals as required to condition the water properly to the following specifications:
    - a. Calcium Hardness: 200-400 parts per million (PPM)
    - b. Total Alkalinity: 80-100 PPM
    - c. Chlorine Residual: 1.00 to 2.0 PPM

- d. pH Factor: 7.2 to 7.6

### 1.03 SUBMITTALS AND SUBSTITUTIONS

- A. Provide submittals in conformance with the requirements of Section 01 33 00.
- B. Submit proof of qualifications as specified in Article 1.02.A and 1.02.C.1 of this Section.

### 1.04 PRODUCT HANDLING

- A. Delivery: Deliver materials to the Project Site in the manufacturer's original unopened containers with all labels intact and legible.
- B. Storage: Store materials under cover in a manner to prevent damage and contamination, and store only the specified materials at the Project Site.
- C. Protection: Use all means necessary to protect the swimming pool plaster before, during, and after installation and to protect the installed Work specified in other Sections.
- D. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner's Representative.

### 1.05 ENVIRONMENTAL CONDITIONS

- A. No plastering shall be done under unsuitable conditions of weather or temperature. No plastering shall be done when prevailing temperature is 40 degrees Fahrenheit or less.
- B. Do not install plaster during rain and, if rain commences after plastering has begun, immediately protect the plaster from rain by all means necessary until the plaster has set.
- C. Do not install plaster during wind greater than 10 mph and, if wind commences after plastering has begun, immediately protect the plaster from wind by all means necessary until the plaster has set.

## PART 2 PRODUCTS

### 2.01 CEMENT / AGGREGATE

- A. Luna Quartz® tiny pebble finish by Wet Edge Technologies. Altima® quartz finish by Wet Edge Technologies. Pebble-Fina® pool finish by Pebble Technologies.

### 2.02 COLOR

- A. Wet Edge Technologies shall be Luna Quartz® "Polar White". Wet Edge Technologies shall be Altima® "White". Pebble Technology shall be Pebble-Fina® "Classico". Contractor to obtain written approval on selected pebble color from the local Health Department prior to installation. Submit cut sheet, color sample and written approval for review by Architect and Owner.

### **2.03 WATER**

- A. Water for swimming pool plaster shall be clean and free from injurious amounts of acid, alkali, and organics.

### **2.04 GUTTER WATERPROOFING**

- A. Xypex, Miracote Miraflex Membrane C, or approved equal. Mix and apply per manufacturer's recommendations for specific application. Color shall be Gray.

## **PART 3 EXECUTION**

### **3.01 SURFACE CONDITIONS**

- A. Inspection:
  - 1. Prior to Work of this Section, carefully inspect the installed Work of other trades and verify that all such Work is complete to the point where this installation can properly commence.
  - 2. Verify that swimming pool plaster can be installed in accordance with the original design and all referenced standards, including proprietary application techniques and application training/certifications.
- B. Discrepancies:
  - 1. In the event of discrepancy, immediately notify the Owner's Representative.
  - 2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.
  - 3. Failure to notify the Owner's Representative and give written notice of discrepancies shall constitute acceptance by the Contractor of existing conditions as fit and proper to receive the Work.

### **3.02 INSTALLATION OF GUTTER WATERPROOFING**

- A. Provide two (2) coats of the specified gutter waterproofing prior to plastering the swimming pool. Prepare surfaces to receive waterproofing and cure in conformance with manufacturer's recommendations. Provide steel trowel application method to ensure uniform smooth, dense surface finish.

### **3.03 REMOVAL OF EXISTING TILE AND PLASTER SURFACES**

- A. Surfaces to receive plaster shall have all existing finishes including plaster and tile removed by use of a chipping gun or pick down to bare concrete/shotcrete exposing a clean rough surface.

### **3.04 INSTALLATION OF POOL PLASTER**

A. Outdoor Pools or Spas:

1. Completion of other work: **DO NOT** commence plastering of swimming pool(s) or spa(s) until the following conditions have been met:
  - a. The Health Department and/or other governing agencies have approved the pool(s) and/or spas) for plaster.
  - b. All concrete pool deck construction is complete and the pool decks have been thoroughly cleaned.
  - c. All landscaping in areas adjacent to the pool(s) or spa(s) is complete and the landscape irrigation system is operable.
  - d. All painting in the pool area is complete.
  - e. All welding and grinding in locations adjacent to the pool area are complete.
  - f. The backwash sewer connection is complete.
  - g. Pool(s) and/or spa(s) area(s) perimeter fencing installation is complete.
  - h. All trash and debris have been removed from areas adjacent to the pool(s) or spa(s), particularly those areas that are normally upwind from the pool(s) or spa(s).
  - i. All dust raising construction and/or activities in areas adjacent to the pool(s) or spa(s) are complete or mitigated.
  - j. The circulation pump(s) is/are operational.
  - k. The mechanical system has been flushed sufficiently to remove all dirt and debris from the piping system.
  - l. All necessary chemicals (Chlorine, pH adjuster, Sodium Bicarbonate and Calcium Chloride or any other required chemicals) are on site and ready for use.
  - m. Obtain written approval from the Owner's Representative and the Architect.

B. Indoor Pools or Spas:

1. Completion of Other Work: **DO NOT** commence plastering of swimming pool(s) or spa(s) until the following conditions have been met:
  - a. The Health Department has approved the pool(s) and/or spa(s) for plaster.
  - b. All work above the pool(s) and/or spa(s) is complete.
  - c. All painting in the pool area is complete.
  - d. All welding and grinding in locations adjacent to the pool area are complete.
  - e. The backwash sewer connection is complete.
  - f. All concrete pool deck construction is complete and the pool decks have been thoroughly cleaned.
  - g. The circulation pump(s) is/are operation.
  - h. The mechanical system has been flushed sufficiently to remove all dirt and debris from the piping system.
  - i. All necessary chemicals (Chlorine, Acid, Sodium Bicarbonate and Calcium Chloride) are on site and ready to use.
  - j. Obtain written approval from the Owner's Representative and the Architect.

- C. Contractor accepts all liability from damage done to the pool plaster if the pool(s) or spa(s) is (are) plaster before the completion of the above listed items or without the written approval of the Owner's Representative and the Architect.

D. **POOL PLASTER AUTHORIZATION FORM:**

1. The pool(s) and or spa(s) at **Sir Francis Drake High School** is/are hereby approved for the installation of the pool plaster. Pursuant to the requirements of specification section 13 11 05, paragraph 3.03.

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Date

\_\_\_\_\_  
Architect / Project Manager

\_\_\_\_\_  
Date

E. Preparation:

1. Do not apply plaster over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions otherwise detrimental to the formation of a durable plaster finish.
2. Consult with manufacturer on application to specific surfaces being treated. Follow manufacturer's recommendation for curing of cast-in-place concrete or shotcrete surfaces prior to application of plaster.
3. Protect ceramic tile, decking, deck equipment, gratings, fittings and other items by suitable covering or masking.
4. Mask or remove all hardware, hardware accessories, machined surfaces, plates, lighting fixtures and similar items in place not to receive pool plaster. Following completion of plaster for each space or area remove masking. Re-install all removed items utilizing workers skilled in the trades involved.

F. Application:

1. Finish shall be applied to a uniform thickness of 3/8" to 1/2" over the entire surface. The walls shall be scratch-coated followed by a finish coat. Material applied to the floor after the walls have been applied shall be accelerated to assure uniform setting time throughout the pool surface.
2. Float the plaster to a uniform plane and trowel to a smooth, dense, impervious surface using extreme care to avoid stains.
3. Take special care in finishing around pool fittings, making sure to mask off or plug openings so as not to fill such openings with excess plaster. Be certain to completely enclose pool fittings with plaster to insure a leak-proof seal around pipes, fittings, lights, anchors, etc.
4. Accurately interface with the finish planes of items installed by other trades.
5. Quartz-cement plaster is to be applied by a licensed applicator as approved by the manufacturer, and in accordance with manufacturer's training.

**3.05 CURING**

- A. Preparation: Anticipate the need for required equipment and have all such equipment

immediately available for use upon completion of pool plastering.

B. Pool Filling:

1. After the plaster has sufficiently dried and before drying has proceeded to a damaging point, cure the plaster by gradually filling the pool with water, preventing all damage to finished plaster surfaces.
2. Flow the water continuously until the pool is filled.
3. When the weather is hot and/or water pressure is low, keep the pool walls damp while the pool is filling.
4. Coordinate with Contractor to ensure that the pool is continuously monitored while filling to prevent overflow.

### 3.06 EQUIPMENT ACTIVATION

- A. All water chemistry and filtration mechanical equipment shall be operational upon filling of pool after plaster. Chemicals and other related support items as supplied by Contractor, shall be in supply at start-up.
- B. For the first seven (7) calendar days after completion of the pool plaster, brush all plastered surfaces at least twice a day and coordinate with General Contractor to ensure that the plaster is carefully maintained after the initial seven (7) day period. In addition, coordinate with the Contractor to ensure that pool filtration equipment is continuously running during the initial seven day period.
- C. Start-up and provide qualified personnel to operate pool equipment for a period not less than seven (7) days after the pool is placed in operation, or until the Owner takes occupancy of the facility or letter of substantial completion. During this time, Contractor shall instruct and supervise the Owner's personnel in the various operating and maintenance techniques involved. Contractor shall be responsible for supply of chemicals during this not less than seven (7) day period and at time of turnover to Owner, chemical storage tanks shall be full. (Owner's personnel shall be fully trained and capable of assuming swimming pool maintenance tasks, training may begin before Owner takes occupancy).

### 3.07 CLEAN-UP

- A. Upon completion of swimming pool plaster, remove all materials, equipment and debris occasioned by this Work and leave the job site in a clean and presentable condition. Perform all such clean-up to the approval of the Owner's Representative.

### 3.08 WARRANTY

- A. All applicators must provide a minimum of five (5) year warranty for application and workmanship additional to the manufacturer's warranty for product.

**END OF SECTION**

**SECTION 13 11 06**

**SWIMMING POOL EQUIPMENT**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. Swimming pool equipment items required for this Work as indicated on the Drawings and specified herein.

**1.02 QUALITY ASSURANCE**

- A. Qualifications of Workers:
  - 1. The entity performing the work of this Section shall have been successfully engaged in the respective trade for at least five (5) years immediately prior to commencement of the Work.
  - 2. For actual construction operations, use only trained and experienced workers with a minimum of three (3) years experience with the materials and methods specified.
  - 3. Provide at least one person who shall be present at all times during execution of the work of this Section, with a minimum of five (5) years experience with the type of materials being installed, the referenced standards, and who shall direct all Work performed under this Section.
- B. All equipment supplied or work performed shall comply with regulations governing public swimming pools and spas as contained within Chapter 31 of California Building Code, latest edition.

**1.03 SUBMITTALS AND SUBSTITUTIONS**

- A. Provide submittals in conformance with the requirements of Section 01 33 00.
- B. Required submittals include:
  - 1. Swimming Pool Fittings as specified in Article 2.01 of this Section.
  - 2. Swimming Pool Deck Equipment as specified in Article 2.02 of this Section.
- C. Submit proof of qualifications as specified in Article 1.02.A of this Section.
- D. The equipment shown on the plans represent the first listed items in the technical specifications. The Contractor shall be responsible for all required field coordination and installation of any approved equal product to provide a fully working and warranted system. The Contractor shall submit detailed shop drawings for any products used other than the first listed specified items. Contractor provided shop drawings shall include details and quality equal to the original plans and construction documents. The Contractor shall provide any and all required engineering including but not limited to structural and anchorage requirements for any proposed equipment other than the first

listed specified equipment. The Contractor is responsible to provide a factory certified representative(s) to start-up and provide on-site training for all swimming pool mechanical equipment provided.

#### 1.04 PRODUCT HANDLING

- A. Protection: Use all means necessary to protect swimming pool equipment items before, during and after installation and to protect the installed work specified in other Sections.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner's Representative.

### PART 2 – PRODUCTS

#### 2.01 FITTINGS

- A. Main Drain Sumps, Frames & Grates: Remove and replace the existing pool main drain with 'Lawson Aquatics' #MLD-FG-1836 main drain sump with frame and grate. Two (2) total. The Contractor shall provide to the Owner a Certificate of Compliance, signed by a licensed design professional, for main drain sump(s) and frame(s) and grate(s), as required by the Virginia Graeme Baker Act. P.O.C to existing 12" main drain suction piping to create equal split suction with minimum 3 foot drain separation.
- B. Floor Return Inlet 1-1/2" Adjustable: 'StaRite' #08417-0000, United Industries, or approved equal. Field verify. Sixty-six (66) total. Replace top covers on all existing or complete floor inlet if damaged.

#### 2.02 DECK EQUIPMENT

- A. Recessed Grabrail Steps, Set of 3: KDI-Paragon #3212, no known equal. Three (3) sets of three total. Replace any damaged as required.

### PART 3 EXECUTION

#### 3.01 SURFACE CONDITIONS

- A. Inspection:
  - 1. Prior to installing the items of this Section, carefully inspect the installed Work of other trades and verify that all such Work is complete to the point where this installation may properly commence.
  - 2. Verify that the swimming pool equipment items may be installed in strict accordance with original design, pertinent codes and regulations, and the manufacturers' recommendations.
- B. Discrepancies:

1. In the event of discrepancy, immediately notify the Owner's Representative.
2. Do not proceed with installation in areas of discrepancy until all such discrepancies are fully resolved.
3. Failure to notify the Owner's Representative and give written notice of discrepancies shall constitute acceptance by the Installer of existing conditions as fit and proper to receive its Work.

### **3.02 INSTALLATION**

- A. Supply and install items of swimming pool equipment in strict accordance with applicable codes and regulations, the original design, and the manufacturer's published recommendations, anchoring firmly and securely for long life under hard use.
- B. Coordinate with other trades to insure all imbedded items are set plumb and flush. Railing ends must have anchor sockets and escutcheon plates. Be certain that deck equipment and railings are properly bonded prior to imbedding.
- C. All equipment shall be braced and/or anchored to resist a horizontal force acting in any direction using the criteria shown on the Drawings.

### **3.03 EQUIPMENT ACTIVATION**

- A. All water chemistry and filtration mechanical equipment shall be operational upon filling of pool after plaster. Chemicals and other related support items as supplied by Contractor, shall be in supply at start-up.
- B. For the first seven (7) calendar days after completion of the pool plaster, brush all plastered surfaces at least twice a day and coordinate with General Contractor to ensure that the plaster is carefully maintained after the initial seven-day period. In addition, coordinate with the Contractor to ensure that pool filtration equipment is continuously running during the initial fourteen-day period.
- C. Start-up and provide qualified personnel to operate pool equipment for a period not less than seven (7) days after the pool is placed in operation, or until the Owner takes occupancy of the facility or letter of substantial completion. During this time, Contractor shall instruct and supervise the Owner's personnel in the various operating and maintenance techniques involved. Contractor shall be responsible for supply of chemicals during this not less than seven (7) day period and at time of turnover to Owner, chemical storage tanks shall be full. (Owner's personnel shall be fully trained and capable of assuming swimming pool maintenance tasks, training may begin before Owner takes occupancy).

### **3.04 CLEAN-UP**

- A. Upon completion of swimming pool equipment, remove all debris, materials and equipment occasioned by this Work to the approval of the Owner's Representative.

2019.095  
JANUARY 2020

SIR FRANCIS DRAKE HIGH SCHOOL POOL REPLASTER  
SAN ANSELMO, CA

END OF SECTION