

SCOPE OF WORK

CATEGORY: BC02 Concrete: Structural

1.01 Related Documents

Division 00 – General Conditions and Supplementary Conditions

Division 01 – General Requirements

Exhibit A – Baseline Schedule

Exhibit B – Logistics Plan

Exhibit C – Soils Report: RMA Group dated August 8, 2024

Exhibit C.1 – Hydrology Report by KPFF Consulting Engineers dated 4/12/24

Exhibit D – Hazmat reports by Charles Taylor Environmental Technical Services

Exhibit E – Final Environmental Impact Report State Clearinghouse No.2023110328 dated June 2024

Exhibit E.1 – Mitigation Monitoring and Reporting Program State Clearinghouse No.2023110328 dated

Exhibit F – Reference Plans: The Construction of Ontario Regional Sports Complex (offsite utility and street plans)

Exhibit F.1 – Reference Plans: Mass Grading Package Phase 1

Exhibit F.2 – Reference Plans: Mass Grading Package Phase 2

Exhibit G – Site Concrete Limits

1.02 Relevant Technical Specifications Sections:

APPENDIX B – ARCHITECTURAL SPECIFICATIONS

03 30 00 – CAST-IN-PLACE CONCRETE

07 92 00 – JOINT SEALANTS

PART 2 – GENERAL INCLUSIONS:

1. The work includes but is not necessarily limited to furnishing all: labor, materials and the installation of same, appliances, tools, equipment, facilities, transportation, receiving and unloading, hoisting, task lighting, applicable taxes and services necessary for, and incidental to, performing all operations in connection with this scope of work.
2. The breakdown of the scope of work by specifications is for organizational purposes only. The scope noted herein provides additional clarity only. It is not necessarily all inclusive. Where there is a reference to a detail, plan sheet or a note, this is to bring awareness only. Unless specifically “excluded”, this Contractor has the entire scope of work.
3. The scope noted herein; regardless, if duplicated in another’s scope of work and other contract documents, shall be included in this Category Contractor’s base bid. In the event a scope item is duplicated in another Contractor’s scope of work and/or other contract documents, this does not relieve this Contractor from the responsibility of the scope. It shall be the Construction Manager’s discretion as to which Contractor will perform the scope of work and who shall provide a credit for the value of the scope not provided.
4. Any reference in this scope to “Contractor”, “Category Contractor”, “Bid Category Contractor”, “Bid Package”, “Trade Contractor”, “Contractor”, “Subcontractor” or any version of these are all synonymous / one-in-the same.
5. Contractor shall provide at the job site a Superintendent fluent in written and spoken English at all times during the performance of this Contractor’s scope of work. It is the Contractor’s responsibility to supervise their on-site crews and subcontractors at all times work is being performed under Contractor’s scope of work.
6. Contractor is responsible to know the latest SCAQMD requirements:
 - A. Includes implementing those means necessary to ensure any and/or all related work materials, fluids, equipment, etc. are stored or covered in a manner acceptable to the requirements.

- B. Contractor shall provide and maintain adequate dust control throughout the duration of their operation, including, but not limited to: washing/sweeping of existing sidewalks, public streets and concrete and asphalt access roads on a daily basis. Mitigation of dust shall be to the satisfaction of the Owner, City/County, and/or SCAQMD.
 - C. Any penalties the owner receives due to this Contractor's negligence will be forwarded to this Contractor for reimbursement.
7. Contractor shall take reasonable care to maintain Storm Water Pollution (SWPPP) related erosion control facilities and temporary storm water diversion means during all work.
- A. If inclement weather is foreseeable during operations of this trade, this Contractor shall use its best effort to leave the site in a condition that minimizes the effects of erosion caused by such weather.
 - B. Contractor to protect all work from effects of inclement weather at its own cost. Protection of this Contractor's work area is the responsibility of same.
 - C. Any corrections and or repairs required due to damage inflicted by the work of this Contractor shall be the responsibility of same.
 - D. Any penalties the owner receives due to this Contractor's negligence will be forwarded to this Contractor for reimbursement.
 - E. Contractors requiring wash out shall have their washout container(s) clearly marked. NO direct dumping onsite and/or into sewer and/or draining systems.
 - F. Contractor to review 01 64 00 for additional relevant information.
8. Contractor shall comply with all CAL OSHA requirements.
9. Written survey requests are to be provided to Construction Manager's Superintendent a minimum of three (3) working days prior to the start of work requiring surveying and are to be submitted in a manner that does not require excessive surveyor move-ins.
10. Contractor shall properly install and maintain all barricades, traffic control, warning lights, flagmen, for deliveries, hauling and/or disposal, including permits & fees as required by local and/or governing Agencies / municipalities for Contractor's scope of work whether expressly mentioned or not.
11. Contractor shall provide additional fencing, barricades, and/or other protection, which is in addition to site perimeter temporary fencing provided by others to protect open excavations or other hazards resulting from this Contractor's work. Contractor shall cover all open trenches with Cal OSHA compliant covering or soil each day. Temporary trench covering is to be installed in a manner so as to eliminate tripping hazard. It is the Contractor's responsibility to security material and equipment. Any theft of material/equipment is the Contractor's responsibility to replace.
12. Contractor is responsible to turn in Inspection Requests (IRs) and/or testing requests to Construction Manager's Superintendent no less than 48 hours prior to desired IOR inspection and no less than 72 hours for testing laboratory (LOR) inspection. Work must be complete and in compliance with the contract documents prior to IOR inspection. Contractor shall provide the necessary resources to make up time and bear all related cost associated with any late inspection requests and/or rejected inspections.
- A. Contractor foreman shall walk with the IOR during all inspections for this subcontractor's scope of work.
13. Any F.O.B. material and/or coordination required for the installation by this Contractor and/or other Contractors, shall be forwarded by the supplying Contractor with a letter of transmittal and detailed shop drawings showing dimensions, locations, and individual piece count to the installing Contractor via Tilden-Coil. ALL F.O.B. deliveries shall be coordinated with Construction Manager and the receiving Contractor at least 48 hours in advance. The receiving Contractor shall unload, inventory, and inspect materials. All shortages and damaged material must be noted on said transmittal. Receiving Contractor shall sign and date transmittal. Once the transmittal has been signed, it shall be the receiving Contractor's responsibility to protect and secure the material. Supplying Contractor shall forward a copy of signed transmittal to the Construction Manager's site office for

their review and records. Supplying Contractor shall forward all F.O.B. material within the time limits as noted in the construction schedule so as to not delay receiving Contractor's work. If work is delayed due to the untimely forwarding of required material and/or information, the applicable Contractor shall be responsible for any and all costs incurred due to delays and/or corrective work.

14. A representative from this Contractor is to be on site to receive all material deliveries, whether they are performing work on site at the time or not. Construction Manager will not receive or sign for any deliveries of this Contractor's material. Contractor is to provide traffic control, including but not limited to flagmen, signage, delineators, etc. for any delivery vehicles that are unable to be unloaded on the project site, in accordance with all local traffic laws.
15. Contractor understands that housekeeping is critical to both safety and efficiency. Therefore, daily cleanup is an obligation of the contract. Contractor is responsible to legally remove their debris offsite on a daily basis or as necessary as not to be an impact to safety and dependent trades / progress of the project schedule. If daily housekeeping falls below acceptable standards, the Owner shall consider one of the three options to mitigate:
 - A. Require a composite cleanup crew, as needed, until standard is restored. Contractor's manpower contribution size will be based on manpower size as follows:
 - i. 1 to 5 workers = 1, 6 to 10 workers = 2, 11-15 workers = 3, 16 to 20 workers = 4, 20+ workers = 5.
 - B. Hire a separate cleanup crew as needed until standard is restored. Hired crew will be funded via a deductive change order to the offending Contractor(s).
 - C. Require an "all hands" cleanup session as needed until standard is restored.
16. Contractor shall protect all existing on and/or offsite conditions. Any damage sustained by the work of this Contractor, shall be repaired or replaced by the next shift or as directed by Construction Manager or Owner at the expense of this Contractor.
17. For known trade causing damage, it is required to be repaired by the next shift.
18. Contractor has been allotted a number of days for construction activities that relates to this trade. Contractor must manage to complete all work in allotted time frame without excuse. Contractor agrees to assign the appropriate manpower to complete the activities. Therefore, all clarification and approvals must be obtained prior to start of work and in such time as to allow response, procurement, and preparation without compromising the schedule activity time and scheduled start date and finish date. Late coordination and RFI's requested during work progress will not be an excuse for delay.
19. Contractor shall provide their own storage and safety measures.
20. Mobilizations and move-ins as necessary to achieve the progression of the project schedule.
21. Contractor understands and is responsible for all layout for their respective work.
22. Any new substrate provided by others for this Contractor's use and/or any existing substrate (existing conditions) is found to be unacceptable at the time of installation, Contractor shall advise Construction Manager before commencing. Any repairs and/or replacement required to the substrate once Contractor has commenced their work on the substrate, all costs associated with the removal and replacement of finished product shall be at the expense of this Contractor.

PART 3 - TRADE SPECIFIC INCLUSIONS:

Building Related Concrete:

1. All building related cast-in-place (structural or non-structural) concrete including but not limited to:
 - A. Footings, foundations, grade beams, and concrete walls.
 - B. Slab-on-grade, topping slabs, and fill over metal decking or wood sheathing.
 - C. Concrete cap on top of masonry wall (ref: 1/S1.4)

- D. Stairs and ramps.
- E. Elastizell at entire second floor deck (interior and exterior).
- F. Walls and drywall will be installed prior to installation of light weight topping slabs.
- G. Install separation membrane to protect the drywall.

2. Excavation, reinforcement and concrete foundations for the KeyCode Media digital video display board per S-14. Includes providing and installing steel anchor bolts and 2" grout bed under steel columns.

3. All survey for this scope of work including establishing all control points from benchmarks.
4. Foundations for the (3) large art sculptures; Whistle, Baseball and Soccer Ball. Coordinate with Electrical Contractor for conduit, power, and low voltage requirements.
5. Depressed slab, vapor barrier, redwood barrier, rigid insulation, felt overlay, and 4" topping slab at freezers. Reference B/K4.2.
6. Where waterproofing is provided at exterior of elevator pits, this contractor will form pit walls and allow enough room for waterproofing contractor to access/install the waterproofing.
7. Coordinate with other trades for sleeving and all slab and/or wall openings, recesses and/or block outs. Consider all plan sheets, not just the structural plans when providing layout.
8. Layout and install all items to be embedded into concrete such as anchor bolts, sleeves, templates, hold-downs, ledgers, plates and wood nailers. Install per approved shop drawings.
 - A. Anchor bolts and embeds unless noted otherwise, to be provided by others FOB to this Contractor for receiving, unloading, coordination, and installation.
 - B. Anchor bolts shall be set to the proper elevation to achieve the appropriate projection of anchors. Contractor shall survey all anchor bolts and assemblies to ensure proper placement and shall set at least one leveling nut at the appropriate elevation and shall mark this nut with paint for proper identification.
 - C. Furnish and install wood nailers.
 - D. Concrete Contractor shall be responsible for any corrective work necessary as a result of incorrect installation.
7. Under slab vapor barrier assembly. Vapor barrier and accessories to be Stego-15mil regardless of other products specified.
8. Block out (diamond block-out) at slab-on-grade for all structural columns, pour back and provide isolation joints.
9. Non-shrink dry pack and grouting for structural & architectural column base plates, ~~light pole base plates~~, and building wall framing base plates. Patch all block outs such as column block outs, door frame recess block outs, and beam pockets.
 - A. Pour in place stair pan concrete treads and landings. Tooled or abrasive nosing's where noted. Prior to placing concrete in stairs and landings, drill 4 weep holes in each tread, 8 holes in each landing, and apply compatible waterproofing.
 - B. Concrete Contractor shall install temporary material to fill each stair tread, landings, and top & bottom of stringers to allow for safe and unobstructed access on stairs. Concrete Contractor shall maintain fill material until such time the concrete is placed.
 - C. Stair pan pours must be coordinated to ensure floor access during construction hours.
 - D. Concrete Contractor to install, maintain and remove (when directed) temporary safety rails at all stairs.
 - E. Concrete Contractor to install plywood protection over concrete treads and maintain until final cleaning or sooner if requested by the Construction Manager.
 - F. Remove and properly dispose of temporary materials.

12. Perimeter, interior, and exterior forming as required for areas where topping slab is not pouring against masonry.
13. Slab edge at exterior door conditions, shall align with the center of the door opening; regardless, if shown or not.
14. Contractor is responsible for curing methods and compounds. Verify the compatibility of compounds for appropriate finishes, including polished concrete and/or with adhesives used by the Flooring Contractor.
15. Joint sealant / hardener at SOG conditions.
16. Floor flatness shall be in accordance with the concrete, and finish flooring specifications for all flooring related finishes. The more stringent requirements shall prevail.
 - A. Hire a third part testing company to measure FF/FL numbers within 48 hours after placing concrete slabs / topping slabs. Issue report within 1 week of placing concrete.
 - B. Grind areas that curled at joints & high spots, and infill low areas as needed. Concrete Contractor is responsible for any correction to the floors exceeding tolerances.

Reinforcement:

17. All steel reinforcing for all structural and non-structural building related foundations, slab on grade, decks, mechanical/utility/fixture pads, and walls including welded wire mesh and all reinforcing accessories.
18. Rebar Welding:
 - A. Rebar greater than 6'-0" that welds to structural steel.
 - B. Rebar less than 6'-0" and welds to structural steel is by others.
 - C. All other rebar welding where noted.
 - D. Should Contractor elect to butt weld rebar, Contractor shall be responsible for all cost associated with the necessary approval and associated delays.
19. Hoisting of reinforcement is by Concrete Contractor.
20. Rebar splice lengths shall take into consideration the required starter walls so that appropriate splice lengths are maintained. Coordinate footing elevations and stem wall heights with concrete and masonry contractors.
21. All dowels, smooth or speed dowels and epoxy dowels. Smooth/slip dowels shall be cut smooth with a saw and will not be sheared. Drill dowel where necessary grease, slip dowel sleeve, and epoxy as required.

Miscellaneous Scope of Work and Coordination:

22. Grading contractor will leave grade 2" below subgrade. Concrete contractor build up from there to establish to certified pad.
23. Beginning of installation means that Concrete Contractor accepts the conditions and grades of the existing subgrade.
 - A. Any revisions to the subgrade elevations, after acceptance will be at the expense of this Contractor. All cost associated to remove/repair/replace work installed under this scope of work shall be the responsibility of this Contractor.
 - B. Contractor shall maintain the certified pad elevations.
 - C. Contractor shall be responsible to legally remove any remaining spoils from the fine grading operation.
24. Concrete contractor shall include a "touch-up" grading of the building pads to return to subgrade, after all underground has been installed and backfilled.
25. Excavate all work included in this scope including, recesses, depressions, thickened edges, foundations, footings, and walls. Backfill and compact to subgrade elevation.

26. All necessary formwork.
27. Protect excavated footings. Maintain excavations, staging areas, and access by dewatering / pumping water and remove mud as well as restoring compaction.
 - A. Contractor may elect to install a rat slab at bottom of footing as their means and methods in protecting the integrity of the footing bottom.
 - B. Any footing restoration shall commence immediately as not to impact the schedule.
28. Sandblasting and/or use other means as necessary to ensure reinforcing is in an acceptable condition before concrete pour.
29. Provide rough surface condition where concrete abuts an adjacent material as noted.
30. Sawcut or tool of expansion joints as required by the drawings, specifications, and American Concrete Institute (ACI). Provide shop drawings for all construction and control joints prior to pouring concrete.
31. Remove debris from footings, SOG substrates, and decks before pours.
32. Install and maintain rebar caps, during the installation of rebar and/or until permanent finish such as concrete or masonry have been installed.
33. Patch and sack (smooth rubbed finish) all exposed concrete to match designed finishes. Sack all concrete foundation walls that are exposed 2" and greater between the finish surface and the building finish; regardless, if shown on not. Trowel on cement finish will not be allowed.
34. Excess spoils generated by this scope of work shall be placed at an on-site location as determined and approved by the Construction Manager. Protect spoils according to SWPPP requirements until they have been located to the determined location. Once the spoils have been located to a common site location, they shall be the responsibility of others to maintain.
35. Areas to receive waterproofing shall be formed or finished to have a smooth and uniform surface for the application of the waterproofing. This includes all necessary grinding and patching of form-tie/shape-tie holes.
36. Floor sealer where noted.
37. Forward shop drawings showing all necessary pour sequences for review and approval.
38. Provide a minimum 6' x 6' mock-up:
 - A. Each concrete finish including color, joints, and flatness; regardless, if specified or not for approval by Architect/Owner.
 - B. Concrete Contractor to maintain mock-up through the duration of the project, as well as remove and legally dispose.

PART 4 – ALLOWANCES:

1. Bid Contractor shall include in their base bid the Trade Specific Bid Category Allowance identified in Division 01 (Specification Section 01 21 00 – Allowance). This allowance shall be used at the discretion of the Construction Manager and/or Owner. The allowance shall not be used for this Contractors' poor workmanship, missed scope, delays imposed due to this Contractor, or corrective work. All labor rates and material cost shall be determined in accordance with the General Conditions. All mark-up, general conditions, bonds, fee, overhead & profit, insurance, and supervision for this allowance shall be in addition to the allowance amount identified in Division 01 and is to be included in this Contractor's Base Bid. This allowance shall be specifically itemized on this Bid Category Contractors Schedule of Values.

PART 5 – EXCLUSIONS

1. Architectural Precast Concrete (by Masonry contractor)
2. **Site Concrete (by Site Concrete Contractors)**
3. Foundations for net poles (by General Package contractor A)
4. Foul poles and outfield posts (by Owner)
5. Foundations for flag poles (by General Package contractor A)
6. **Foundations for dugouts (by Site Concrete Contractors)**
7. Foundations for shade structures (by General Package contractor B)
8. Foundation for Soccer confinement netting (by General Package contractor A)
9. Foundations for ornamental and chain link fencing and gates (by Chain Link and Fencing contractor)
10. Concrete pad at shipping container (by Site Contractor)
11. Foundations for wayfinding signage (by Site Concrete contractor)
12. ~~Foundations for LED Video Board (by Site Concrete contractor)~~

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