

SCOPE OF WORK

CATEGORY: BC03 Concrete: North Site Concrete

PART 1 – GENERAL

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:

03 10 00 – Concrete Forms and Accessories

03 20 00 – Concrete Reinforcing

03 21 00 – Reinforcing Bars

03 30 00.01 – Cast-In-Place Concrete (Site)

03 45 00 – Architectural Precast Concrete

03 45 00.01 – Architectural Precast Concrete

31 23 00 – Excavation and Fill (As It Applies)

32 13 13 – Concrete Paving

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 and 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. Bottom stair landings at buildings.

Drilled Caissons / Piles / Foundations:

2. All foundations for all site items unless specifically excluded.
3. Provide shop drawings and schedule showing drill and pour sequence.
4. Gravel backfill at top of piles to protect reinforcement during grading operations.
5. Temporary plywood collar around pile hole. Top of piles to be cast/sleeved/formed as to not have over pour and be able to "plug in" to the bottom of the pile caps.
6. Restore grade to +/- .10'.
7. Remove all drilled spoils.
8. Concrete foundations and bases for all signage in the W-sheets.

Site Related Concrete:

9. All site and off-site concrete (structural or non-structural) including but not limited to sidewalks, handicap ramps, landings, flatwork, stairs, curbs, curb & gutters, swales, driveway approaches, substrate, steel and concrete bollard bases, site walls, seat walls, concrete CIP benches, equipment foundations, housekeeping and mechanical pads, thickened edges, and mow curb/ strips.
10. All survey for this scope of work including establishing all control points from benchmarks.
11. Detectable warning surfaces/truncated domes at all concrete paved conditions.
12. Refer to all plans for additional site paving scope information.
13. Install FOB:
 - A. Handrail sleeves. Concrete Contractor has handrail footings.
 - B. Bollards and/or bollard sleeve and footing. Fill bollard with concrete.
14. All joint sealant at concrete related joints and/or where concrete abuts an adjacent surface.
15. Terraced seating (reference 1/L-2.20 and 1/L-2.16).

16. Mow curbs beneath site fencing.
17. Mow curbs as noted at the tops of circular foundations (reference S-5 for an example).
18. Concrete Stage (ref. detail 1/L-2.40).
19. Washout bins.
20. Cast-in-place concrete seat wall caps.
21. Art sculpture (whistle, soccer ball, and baseball) foundations.

Reinforcement:

22. All steel reinforcing for all structural and non-structural building related foundations, slab on grade, decks, mechanical pads, and walls including welded wire mesh and all reinforcing accessories.
23. Reinforcing bar and welded wire fabric for site work including but not limited to flatwork, concrete paving, thickened edge, equipment and housekeeping pads, sidewalks, ramps, stairs/steps, curbs, gutters, swales, approaches, planter walls, site walls, seat walls, light bollards, steel pipe bollards, monument signs, equipment pads, light pole bases and cages, concrete and masonry footings and foundations.
24. 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.
25. Unload and hoist reinforcing. Coordinate hoisting of elevated deck reinforcement with Structural Steel Contractor. If Steel Contractor's crane is not on-site, hoisting of reinforcement is by Concrete Contractor.
26. 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.
27. 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:

28. Concrete Contractor to receive building pad and site area subgrade at $\pm 0.10'$. Concrete Contractor shall fine grade for concrete installation. 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 subgrade elevations as they were provided.
 - C. Contractor shall be responsible to legally remove any remaining spoils from the fine grading operation.
29. Excavate all work included in this scope including, recesses, depressions, thickened edges, foundations, footings, and walls. Backfill and compact to subgrade elevation.
30. All necessary formwork.

31. 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.
32. Crushed Aggregate Base and/or sand under site concrete work where noted or specified.
33. Sandblasting and/or use other means as necessary to ensure reinforcing is in an acceptable condition before concrete pour.
34. Provide rough surface condition where concrete abuts an adjacent material as noted.
35. Subgrade at site stairs will be a straight grade from upper subgrade to the lower subgrade by the Grading Contractor. Any fine grading required to achieve the necessary subgrade for the stairs is by the Concrete Contractor. Includes backfill of walls as necessary to achieve finish grade.
36. 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.
37. Remove debris from footings, SOG substrates before pours.
38. Install and maintain rebar caps, during the installation of rebar and/or until permanent finish such as concrete or masonry have been installed.
39. 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.
40. 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.
41. 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.
42. Integral colors and finishes as noted or specified.
43. Sealer finish where noted.
44. Forward shop drawings showing all necessary pour sequences for review and approval.
45. 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.

46. Coordinate with Grading Contractor for layback of safety slopes necessary for the construction of retaining walls. Grading Contractor shall complete the grading and fill of the layback area, only after completion of the wall and/or retaining structure. Concrete Contractor shall backfill all other items created by this scope, including foundations, curbs, walls, and planters.
47. Includes all pre molded joint fillers filled with non-shrink caulk and glaze. Provide sand casted finish at the direction of the Construction Manager whether shown or not. Includes all caulking/sealant at site concrete terminating against face of building.
48. Upon completion of the work and after punchlist corrections have been made broom sweep and power-wash all concrete surfaces. Includes managing water run-off to avoid flooding adjacent areas.
49. 400 Journeyman hours of labor to be used at the discretion of the Construction Manager, provide SOV line item showing allowance, any unused hours will be returned to the owner upon project completion.
A. \$15,000 of materials to be provided for the above labor if required.
50. Demo, remove, haul and dispose of 300LF of installed curb and gutter. Provide an additional 300LF of curb and gutter replacement. Provide a separate SOV line item for this work, any unused portion of this allowance will be credited back to the owner.
51. Demo, remove, haul and dispose of 2,500 square feet of installed concrete flatwork up to 8" in thickness. Provide an additional 2,500 square feet of concrete flatwork replacement, include #4 reinforcing bar 18" on center each way and doweling into existing concrete, thickness to be 6". Provide a separate SOV line item for this work, any unused portion of this allowance will be credited back to the owner.
52. Concrete pads at compactors and bins.
53. Concrete sub-surface slab at the playground area under the rubber finish surface by the playground equipment contractor. Surrounding concrete curbs and flatwork to the playground equipment by the Site Concrete Contractor, includes preparing/restoring the subgrade on the interior side of the curb for others.
54. Concrete sections above light pole footings adjacent to site paving as shown in details 2 & 3/E-0.06.
- 55. ~~Contractor shall install all metal railing sleeves into concrete. Where plans show railing to be "wet-set" or embedded, contractor is to assume this to be a sleeve. The railing contractor will provide all metal sleeves F.O.B. to this contractor for installation. Layout drawings will be provided by the railing contractor for this contractor to install per those drawings.~~**
56. Full base section for site concrete and pavers where shown.
57. One coat of Vandlguard by Rainguard International at all exposed concrete (ref. note F on sheet L-2.08).
58. Topcast #5 retardant finish by Dayton Superior at concrete steps (ref. Note E on detail 3/L-2.03).
59. Footings for all signage found on W-sheets.
A. All embedded posts are to be set by this contractor. Posts to be FOB from Signage Contractor.
B. For bidding purposes, assume sign type E12 to receive footing similar to 7/S-5.

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. Light pole concrete bases/standards (By Electrical Contractor)
2. Playground Equipment Footings (By Owner)
3. Fence and Gate Post Footings (By Fencing Contractor)
4. Flagpoles (by General Package A Contractor)
5. Netting Pole Footings (by General Package A Contractor)
6. Ballfield Pole Footings (by Owner)
7. Foundations for site masonry (by Masonry contractor)
8. Foundations for tensioned fabric shade structures (by General Package A Contractor)
9. Foundations for scoreboards (by General Package A Contractor)
10. Foundations for KeyCode Media digital video board (by Structural Concrete Contractor)
- 11. Foundations for Large Art Sculptures (by Structural Concrete Contractor)**