

# SCOPE OF WORK

## CATEGORY: BC07 Structural Steel

### 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:

05 05 13 – Shop Applied Coatings for Metal (Tnemec and Zinc Priming)

05 12 00 – Structural Steel

05 12 00.01 – Structural Steel Framing

05 50 00 – Metal Fabrication

05 50 00.01 – Miscellaneous Metals

05 70 00 – Decorative Metals

09 97 13 – Steel Coatings (See Site Work Specifications)

09 91 13 – Exterior Painting (as it applies)

09 91 23 – Interior Painting (as it applies)

09 94 00 – Powder Coating (as it applies)

### 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:**

#### **Structural and Miscellaneous Metal: Building**

1. All structural and miscellaneous steel shapes 10 gauge and heavier, unless specifically excluded.
  - A. Structural and/or miscellaneous steel shapes are not limited to only what is shown on the structural plan sheets. Steel Contractor shall review all plan sheets for structural and miscellaneous steel shapes.
2. Steel support at all deck openings. Refer to Architectural and M.E.P. plans for any openings that may not be shown on structural drawings.
3. Field layout for all embeds into masonry walls.
4. Bolts for nailers shop welded to top flange of beam(s).
5. Furnish and install hoist beam and safety beam at elevator shaft; regardless, if shown or not.
6. Studs that weld to structural or miscellaneous steel.
7. Rebar 6'-0" or less in length that welds to structural steel.
8. Weld rebar greater than 6'-0" FOB and installed by others.
9. Steel shapes and/or members not sized at bid time, Contractor shall include shaped sizes scaled to size. Plates, angles, tubes, channels, and other items not sized at the time of bid shall be minimum ¼ inch or matching similar adjacent items. If the attachment of members are not detailed at bid time, Contractor shall include that of similar condition.
10. Stair assembly with stair pan and/or bent plate stair treads, risers, closures, and landing pans irrespective of gauge for a complete installation. All bent plate risers shall have a 3/4" return at the top of the tread (shown or not). Coordinate with selected abrasive nosing.
  - A. Provide (4) ½" weep holes at each stair tread and (8) ½" weep holes at each landing.
11. Stairs are to be installed at the time of structural steel erection. If not, Steel Contractor will provide an OSHA compliant temporary stair assembly until the stairs are installed at their expense.
12. All welds on 13b/S1.5.
13. Meet galvanized, metalized, stainless steel requirements noted in specification sections noted above.
14. Reference detail 1/S1.4; The 3 ½ x 3 ½ x 3/8 angles are shown to be shop welded to rebar. Deliver to the rebar manufacturer, timely and with layout template.
15. McNichols perf panel structure attachments and panels.
16. Steel supports for awnings – reference 7/A9.2
17. All survey for this scope of work inclusive of establishing control points.

18. **Main Entry Archway, or otherwise known as Gateway Identity sign types A01, A02-D, A02-F complete per S-11. These arch entries are to be per the quantity shown on the Selbert Perkins Designs Signage plans in accordance with details on L-2.28 and L-2.29. Verify sign quantities per the Selbert Perkins design signage plans.**
19. **Monument Identity sign steel complete. Includes setting in concrete in coordination with the Structural Concrete Contractor. Verify sign quantities per the Selbert Perkins design signage plans.**
20. **Field Identity, Pedestrian Information, Vehicle Direction, Parking Regulations, Sign Type E04 and all other member sized structural steel signs complete. Includes setting in concrete in coordination with the Structural Concrete Contractor. Verify sign quantities per the Selbert Perkins design signage plans.**

#### **Structural and Miscellaneous Metal – Site**

21. Scoreboards support and structural attachments. Coordinate with concrete contractor and provide bracing to secure the supports during concrete placement.
22. 150'x50' KeyCode Media Video board anchor bolts FOB to concrete contractor

#### **Railings:**

23. Building and site guardrail, handrail, and cane rail assemblies. Embed railings as shown/ required. Rail ends shall be capped (regardless if shown or not), welded and ground smooth.
24. **Sandblast metal rails as shown prior to applying Tnemec.**
25. Core holes as shown or necessary.
26. **Railings are to be installed by means of coring through new concrete and anchored with epoxy, this is not noted in the plans but is the suggested method of installation in the event that the railing can not be fabricated in time and in place per the baseline schedule. Grout to be color matched to the surrounding concrete surface and finish type. No sleeves and post grouting will be accepted. Contractor has the option to install all railing as shown in the plans without coring.**

#### **F. O. B.:**

27. All F.O.B structural embeds into concrete and /or masonry.
  - A. Embeds without templates, E.G. low wall supports.
  - B. Embeds are to be pre-assembled with template for each required location with directional orientation to match drawings and the proper bolt projection locked in place with two nuts. This contractor will check bolt location prior to delivery of HSS Columns. Notify Tilden-Coil if any embedded bolts are outside of the erection tolerance. Should this contractor fail to identify any out-of-tolerance bolts prior to erection, they will be responsible for any delay costs that they incur.
  - C. Each template shall be marked in such a manner as to correspond with the embed shop drawing installation locations.
28. Metal bollards.

#### **General Scope of Work and Coordination:**

29. All ladders such as, parapet, ships, elevator, mechanical plan forms and related steel backing for same.
30. All related appurtenances steel clips, clevises, steel rods and expansion anchors.
31. AESS where noted.

32. Preparation and treatment of structural steel and miscellaneous iron shall be as follows; regardless, if shown or not:
- A. Exterior: Galvanized.
  - B. Interior scheduled for fireproofing: Unprimed.
  - C. Interior topside of beam flanges and trusses where deck puddle welds: Unprimed.
  - D. Embedded in concrete: Unprimed.
  - E. In contact with concrete but not embedded: Prepared and primed.
  - F. Interior conditions not described above: Prepared and primed.
33. Weld close and ground smooth any galvanized breathing holes; regardless, if noted or not.
34. Exposed tube steel ends shall be welded closed and ground smooth; regardless, if shown or not.
35. Erection holes exposed to view or weather shall be welded closed and ground smooth; regardless, if shown or not. Remove erection aides.
36. Touch-up damage and field welding with approved zinc rich spray paint.
37. Provide partial submittal for embedded items (including anchor bolts) to expedite approval, fabrication, and delivery of these items.
38. Erection sequencing plan shall be submitted no less than 2 months in advance of steel erection start date for approval.
39. Bent plate installation is not to vary more than the tolerance of the framing clips to steel connections as to provide plumb framing. The bent plate shall be installed in the field, NOT welded in the shop to ensure the required alignment. Coordinating bent plate alignment with Construction Manager and Concrete Contractor for SOG alignment BEFORE the commencement of bent plate installation. If not coordinated accordingly, cost associated with remedy / repairs shall be at the Steel Contractor's expense.
40. Coordinate quantity and size of holes in structural and/or miscellaneous steel for use by other trades.
41. Brace and/or shoring as required to provide a safe work environment.
42. Beginning of erection constitutes acceptance of foundation/concrete support. Survey embedded items which structural columns will be placed to confirm the horizontal and vertical control. Submit findings NO later than three (3) weeks prior to steel installation.
- A. Steel and Concrete Contractors along with the Construction Manager shall review concrete foundations, concrete support, survey comments, as well as the leveled nuts.
  - B. Once the building has been turned over to Steel Contractor, assume responsibility for the care and protection of the embedded items and foundations.
43. Certified fire extinguisher during welding, grinding, open flame conditions. Provide a fire watch at least thirty minutes after completion of open flame, grinding, and welding operations.
44. Protect adjacent surfaces during welding or touchup painting. Any damage shall be repaired.
45. Welding blankets shielding the public from direct view of welding operations.
46. Self-powered portable welding units are required for work of this scope. Temporary power will not be available for welding operations.

47. Provide safe and unobstructed access to any or all parts of the structural steel and miscellaneous metals work requiring inspection; including, but not limited to, provision of a ladder, boom lift, or man lift, and necessary safety considerations, for the inspector(s) to inspect Work.
48. Temporary use of testing equipment such as, torque wrenches, and skidmore's, for the testing of high strength bolts and structural steel related work. Equipment shall be properly calibrated and with current calibration certification.
49. Elevator Pit Ladder

#### **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. Rebar greater than 6 feet that welds to structural steel.
2. Catalogue hardware at wood members and glu-lams (by Rough Carpentry Contractor)
3. Artwork structural (by Signage Contractor)
4. Site Signage (by Signage Contractor)
5. Flag Poles (by General Package A Contractor)
6. Dugout poles (by General Package A Contractor)
7. Mister Poles (by Plumbing Contractor)
8. Backstop foul line, outfield posts (by Athletic Field Turf Contractor)
9. Netting supports (by General Package A)
10. Metal roofing (by Roofing, Waterproofing, Sheet Metal Contractor)
11. Structural Steel for the large 150'x50' KeyCode Media video board per sheet S-14 (by Owner)
12. **Omega II Fence System (by Ornamental Fencing Contractor)**





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