

GENERAL NOTES: (MUST USE ALL NOTES ON THIS SHEET FOR ALL PLANS)

- ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF MANHATTAN BEACH, LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND CALTRANS STANDARDS AS APPLICABLE. ALL WORK SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.
- WORK NOT DONE IN THE PRESENCE OF THE CITY INSPECTOR IS SUBJECT TO REJECTION.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE COMPLETED WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO TRAVELING PUBLIC.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH PROJECT CONSTRUCTION.
- ANY WALLS, FENCE STRUCTURES AND/OR APPURTENANCE ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- ALL DAMAGED AND/OR REMOVED DRIVEWAY APPROACH, P.C.C. SIDEWALK OR CURB AND GUTTER SHALL BE RECONSTRUCTED ACCORDING TO THE CITY OF MANHATTAN BEACH STANDARD DRAWINGS MBSI-110C-1(ST-1), MBSI-112A(ST-2), MBSI-120A(ST-3), RESPECTIVELY (UNLESS NOTED OTHERWISE).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND CLEANING OF THE PROPOSED WORK AREA.
- THE CONTRACTOR IS RESPONSIBLE FOR OVERALL JOBSITE MAINTENANCE; INCLUDING, BUT NOT LIMITED TO: STREET/SITE SWEEPING, TRASH AND/OR CONSTRUCTION-RELATED DEBRIS/WASTE, STORMWATER POLLUTION PREVENTION BMP, ETC...
- NO TRENCHES MAY BE LEFT OPEN OVERNIGHT UNLESS APPROVED IN WRITING BY THE CITY ENGINEER. SHOULD THE CONTRACTOR REQUEST TO LEAVE THE TRENCHES OPEN A PLAN FOR PROTECTING THE TRENCH AND THE PUBLIC SHALL BE SUBMITTED TO THE CITY ENGINEER IN WRITING FOR APPROVAL BEFORE BEING IMPLEMENTED. PLATING IS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AS REQUIRED PRIOR TO THE START OF THE WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY. IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE PRIOR TO BEGINNING OF EXCAVATION. TRAFFIC CONTROL SHALL BE APPROVED BY THE CITY ENGINEER. STREET STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.
- CONSTRUCTION SITE SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTACT A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/ EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/ EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARILY AREAS ON-SITE. PHYSICALLY SEPARATED FROM ENVIRONMENTAL STORM WATER RUNOFF WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO THE PROJECT BETWEEN 4:30 P.M. AND 7:30 A.M. ON ANY WEEK DAY AND NOT ON SATURDAY, OR SUNDAY, OR HOLIDAYS AT ANY TIME EXCEPT AS APPROVED IN WRITING BY THE CITY ENGINEER.
- CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY/SUBSTRUCTURE CROSSINGS AND WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTING ANY UTILITIES. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING UTILITIES/SUBSTRUCTURES ON THESE PLANS AND THOSE FOUND DURING CONSTRUCTION (SEE GENERAL NOTE NO 32).
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY FOR BACKFILL SUBJECT TO APPROVAL OF SOILS ENGINEER AND ANY UNUSED MATERIAL SHALL BE REMOVED FROM THE JOB UNLESS INSTRUCTED BY THE CITY ENGINEER TO DO OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE DURING ALL PHASES OF THE WORK TO PROVIDE FOR PUBLIC SAFETY AND CONVENIENCE. THE CONTRACTOR SHALL ESTABLISH ADEQUATE ACCESS TO ALL ENTRIES/DRIVEWAYS/GARAGES AND PARKING LOTS DURING THE WORKING DAY TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL GIVE COURTESY NOTICE (KNOCK ON DOOR) TO AN ADJACENT PROPERTY IMMEDIATELY PRIOR TO BLOCKING ENTRY/DRIVEWAY/GARAGE ACCESS. PEDESTRIAN ACCESS IS TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL ADJUST MANHOLES AND VALVE COVERS TO FINISHED GRADE. THE CONTRACTOR SHALL ADJUST, TIGHTEN AND/OR REPAIR MANHOLES, LIDS AND COVERS BY THE END OF EACH WORKING DAY TO ENSURE MINIMAL IMPACT (NOISE AND OTHERWISE) TO ADJACENT PROPERTY OWNERS.
- THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR THE COMPLETION OF THE PROPOSED IMPROVEMENTS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CALIFORNIA (LATEST EDITION) TO THE SATISFACTION OF THE CITY ENGINEER. ALL STREETS IN THE PROJECT SHALL MAINTAIN AT LEAST 2 LANES (1 LANE IN EACH DIRECTION). ALL TRAVEL LANES SHALL BE OPEN BETWEEN 5:00 A.M. AND 8:30 A.M. AND BETWEEN 3:30 P.M. AND 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 8:30 A.M. AND 3:30 P.M. FLAGGERS MAY BE USED IF ONE LANE IN EACH DIRECTION CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE TRAFFIC ENGINEER. ALL TRAFFIC LANES SHALL BE OPEN BEFORE AND AFTER WORK HOURS. WHERE NECESSARY, PROPERLY POST "TEMPORARY NO PARKING ANYTIME" SIGNS AT LEAST 72 HOURS BEFORE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE POLICE DEPARTMENT IMMEDIATELY UPON POSTING SIGNS. REFER TO THE CITY OF MANHATTAN BEACH TRAFFIC CONTROL REQUIREMENTS FOR MORE INFORMATION.
- USE OF TRENCH PLATING MAY BE APPROVED BY THE CITY ENGINEER UPON SUBMITTAL OF A PLATING PLAN AND APPROVAL OF PLANS. THE CITY ENGINEER SHALL BE FIRMLY SUPPORTED ON ALL ADJACENT PROPERTY OWNERS. ALL PLATES IN A.C. PAVEMENT SHALL BE STUDDED INTO PAVEMENT WITH TOP OF PLATES FLUSH WITH PAVEMENT SURFACE. THERE SHALL BE NO OPENINGS BETWEEN PLATES. PLATES SUPPORTED ON BEAMS SHALL BE BOLTED TO OR WELDED TO BEAMS BY TACK WELDING. TACK WELDING SHALL BE REQUIRED OF CONTIGUOUS PLATES. PLATES SHALL BE SECURED SO AS TO NOT MOVE, SLIP OR SLIDE AND CAPABLE OF CARRYING H-20 LOADING. ALL PLATE SURFACES SHALL BE ROUGHENED OR RAISED TO MINIMIZE TIRE SLIPPAGE. FOR CONCRETE SECTION OF STREETS THE PLATES MAY BE PLACED ON SURFACE AND HELD IN PLACE WITH ASPHALT CONCRETE EDGE BERMS AND STUDS INTO DRILLED HOLES.
- THE CONTRACTOR SHALL PROVIDE A 72-HOUR WRITTEN NOTIFICATION TO AFFECTED PROPERTIES (IN A DOOR-HANGER FORMAT), POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A STREET CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES OR IMPLEMENTATION OF PARKING RESTRICTIONS. THE CONTRACTOR SHALL COORDINATE THE PROJECT WORK AND ASSOCIATED PICK-UP ROUTES WITH THE CITY REFUSE COLLECTION COMPANY (WASTE MANAGEMENT) PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL FURNISH AND OPERATE A SELF-LOADING STREET SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION, IS IN PROGRESS OR IN COMPLETE.
- ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALT CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT, COLD JOINT, SCORE MARK OR EDGE OF PAVEMENT. NO "FLOATER" SLABS WILL BE PERMITTED. SAWCUT SLURRY SHALL BE REMOVED WITH A VACUUM MACHINE AND DISPOSED OF PROPERLY. NO SLURRY SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM.
- A PERMIT IS REQUIRED FOR ALL WORK ON CITY STREETS. THE CITY WILL ISSUE A "NO FEE" PERMIT TO THE CONTRACTOR. SHOULD THE CONTRACTOR OPERATION INVOLVE ANOTHER AGENCY'S JURISDICTION OR INFRASTRUCTURE A PERMIT AND INSPECTION SHOULD BE OBTAINED THEREOF FROM THAT AGENCY. THERE MAY BE A FEE THEREOF PAYABLE BY CONTRACTOR.
- IN SOME CASES MATCH LINES MAY OVERLAP FROM PLAN SHEET TO PLAN SHEET. CONTRACTOR SHOULD REVIEW PLANS THOROUGHLY.
- ALL PORTIONS OF STREET AFFECTED BY CONSTRUCTION, AS DETERMINED BY CITY ENGINEER, OUTSIDE OF TRENCH INCLUDING T-CUT SHALL BE RESTORED PER CITY OF MANHATTAN BEACH STD DWG MBSI-132A(ST-10). SHOULD ANY LINEAR OR AREA TRENCH JOINT BE LOCATED WITHIN 36" OF AN EXISTING PAVEMENT PATCH AND/OR CURB AND GUTTER ALIGNMENT, THE ADJACENT PAVEMENT SECTION/PATCH MUST BE REMOVED AND REPAVED ALONG WITH THE TRENCH PAVEMENT RESTORATION. ALL STRIPING & PAVEMENT MARKING SHALL BE REPLACED IN EXISTING & IN NEW PAVEMENT. GRINDING TO BE PERFORMED PER CITY ENGINEER INSTRUCTION. ALL TRAFFIC SIGNAL LIGHTS DAMAGED BY PROJECT WORK SHALL BE REPLACED IN THEIR ENTIRETY BACK TO CONTROL PANEL. CONTRACTOR SHALL TURN UNDER AND PROTECT IN PLACE STAMPED CONCRETE OR PAVERS, CROSSWALKS, CURB & GUTTERS. SHOULD CROSSWALKS BE DAMAGED ENTIRE CROSSWALK FROM CURB TO CURB SHALL BE REPLACED IN KIND WITHOUT ANY ADDITIONAL COMPENSATION TO THE CONTRACTOR.
- CONTRACTOR AND ALL SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS" PRIOR TO COMMENCING THE EXCAVATION OF TRENCH 5 FEET IN DEPTH OR GREATER AND INTO WHICH A PERSON WILL BE REQUIRED TO DESCEND. THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT TO DO SO FROM THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA (CAL OSHA) PURSUANT TO 7-10.4.1. CONTRACTOR

- SHALL SUBMIT A COPY OF THE SHORING PLAN SIGNED AS REQUIRED AND PERMIT TO THE ENGINEER PRIOR TO EXCAVATION.
- THE CITY ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTOR'S AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".
 - THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.05, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT EXISTING SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED. IF DAMAGED THEY ARE TO BE REPLACED AND A RECORD OF SURVEY IS TO BE PREPARED BY THE PROJECT SURVEYOR AND FILED WITH THE CITY ENGINEER AND THE COUNTY SURVEYOR.
 - CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.
 - THERE SHALL BE A MINIMUM OF 1 CERTIFIED EMPLOYEE ON SITE AT ALL TIMES OF CONSTRUCTION WITH RED CROSS FIRST AID TRAINING INCLUDING CPR TRAINING FOR THIS PROJECT. ALL EMPLOYEES ON THE PROJECT ARE TO HAVE CERTIFIED TRAINING FOR CONFINED SPACE WORK IN VICINITY OF SEWER. COPIES OF THE EMPLOYEE CERTIFICATES SHALL BE PROVIDED TO THE CITY ENGINEER. ALL EQUIPMENT NEEDED TO ENTER CONFINED SPACE/SEWER MANHOLES SHALL BE STORED ON THE PROJECT SITE AND USED FOR ANY AND ALL SUCH INSTANCES.
 - BASED ON INFORMATION OBTAINED FROM UTILITY/SUBSTRUCTURE OWNERS POSSIBLE CONFLICT LOCATIONS HAVE BEEN SHOWN ON THE PLANS. HOWEVER, THERE MAY BE OTHER CONFLICT LOCATIONS. THE INFORMATION PROVIDED BY UTILITY/SUBSTRUCTURE OWNERS IN VARIOUS INSTANCES DOES NOT INDICATE DEPTHS TO THEIR FACILITIES. WHERE DEPTH INFORMATION WAS NOT AVAILABLE, ENGINEER HAS PLOTTED THE UTILITIES/SUBSTRUCTURES AT DEPTHS AT WHICH SUCH UTILITIES/SUBSTRUCTURES ARE COMMONLY FOUND. HOWEVER, ENGINEER CANNOT VERIFY SUCH LOCATION AND ENGINEER DID NOT PERFORM ANY POTHOLES. IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.
 - TREES, FOLIAGE, SIGNS, PARKING METERS AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS, PUBLIC OR PRIVATE, SHALL BE REPLACED IN KIND.
 - THE CONTRACTOR IS ADVISED TO POTHOLE WHERE HE BELIEVES NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.
 - ENGINEER HAS NOT OBTAINED PLANS FOR THE UNDERGROUND FACILITIES OF LOOPS, CONDUITS, ETC. NOR HAVE SUCH FACILITIES BEEN FULLY PLOTTED ON THE PLANS. THE CONTRACTOR IS ADVISED TO LOCATE THE TRAFFIC SIGNAL UNDERGROUND FACILITIES BEFORE EXCAVATION OF THE TRENCH AND PROTECT IN PLACE. CONTRACTOR SHOULD CONTACT THE LOS ANGELES COUNTY'S TRAFFIC SIGNAL MAINTENANCE DEPARTMENT AND COORDINATE THE WORK.
 - FOR WORK UNDER ANY EXISTING CONCRETE (PCC) BUS PADS THE CONTRACTOR SHALL REMOVE BUS PAD AND REPLACE AFTER INSTALLATION OF SEWER PIPES (SEE SSPWC FOR DETAILS OF REPLACEMENT BUS PAD). TRENCH LESS METHOD MAY BE USED TO CROSS UNDER BUS PAD.
 - FOR ANY UNDER CROSSINGS ENTRY OF APPROACHES TO STORM DRAIN CATCH BASINS CONTRACTOR SHALL TUNNEL UNDER THESE AND SUPPORT APPROACH. UPON INSTALLATION OF SEWER AND COMPACTION OF TRENCH A 2 SACK SAND CEMENT SLURRY SHALL BE PLACED UNDER THE APPROACH.
 - IN SHOWING UTILITIES ENGINEER HAS PROVIDED INFORMATION RECEIVED FROM THE UTILITIES. IN SOME CASES SERVICE CONNECTIONS ARE SHOWN. HOWEVER PLANS FROM UTILITIES MAY NOT HAVE INCLUDED ALL SERVICE CONNECTIONS AND OTHER FEATURES SUCH AS FIRE HYDRANT LATERALS AND VAULTS AND BOXES. CONTRACTOR SHOULD BE PREPARED TO LOCATE SUCH AND TO PROTECT IN PLACE.
 - ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 - LATERALS FOR STORM DRAIN SYSTEM AND EXISTING SEWER MAY BE CONCRETE ENCASED (OVERPOUR). AS PART OF TRENCHING WORK CONTRACTOR SHALL REMOVE AND REPLACE ENCASEMENT (OVERPOUR) AS PART OF UNIT OR FIXED PRICE FOR INSTALLATION OF SEWER.

PRIVATE ENGINEERS NOTICE TO CONTRACTOR:

- ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.
- CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- UTILITIES: THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND BEST RECOLLECTION OF FACILITY STAFF. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATIONS OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR POTHOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND/OR BELOW GROUND UNLESS OTHERWISE NOTED. ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.
- ALL JOIN LINES SHALL BE SAWCUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
- ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENT INCLUDING, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, UTILITIES AND APPURTENANCES, TREES, SIGNS, AND STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS OTHERWISE INDICATED HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL MATERIALS, AND ALL ASSOCIATED COSTS.
- DEMOLITION PLAN BY SEPARATE PERMIT.

NPDES NOTES:

- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.

- DESIGNATED TRUCK WASHOUT AREA REQUIRED.
- TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERSAL BY WIND.
 - SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
 - THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR).

NS-2	DEWATERING OPERATIONS	SC-21	VEHICLE AND EQUIPMENT CLEANING
NS-3	PAVING & GRINDING OPERATIONS	SC-20	VEHICLE AND EQUIPMENT FUELING
WM-1	MATERIAL DELIVERY AND STORAGE	SC-22	VEHICLE AND EQUIPMENT REPAIRS
WM-2	MATERIAL USE	EC-2	PRESERVATION OF EXISTING VEGETATION
WM-4	SPILL PREVENTION AND CONTROL	WE-1	WIND EROSION CONTROL
WM-5	SOLID WASTE MANAGEMENT	SE-8	SAND BAG BARRIER
WM-8	CONCRETE WASTE MANAGEMENT	SE-10	STORM DRAIN INLET PROTECTION
		WM-9	SANITARY / SEPTIC WASTE MANAGEMENT

AMERICANS WITH DISABILITIES NOTES

- ALL SLOPES IN DIRECTION OF TRAVEL SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUM ALLOWED GRADES BY THE AMERICANS WITH DISABILITIES ACT ACCESS GUIDE (ADAAG), AND THE CALIFORNIA BUILDING CODE (CBC). IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO FAMILIARIZE THEMSELVES WITH THE ADAAG AND CBC AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE DESIGN ENGINEER SHALL BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
- THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO ADAAG AND CBC ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY ADAAG AND CBC ARE SUBJECT TO REJECTION BY THE INSPECTOR AND ANY MAY BE REQUIRED TO BE REMOVED AND REPLACED.
- SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING THE GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ADAAG OR CBC RELATED ITEMS OF THIS PROJECT BY THE INSPECTING AUTHORITY OR OTHER AFFECTED PARTIES.
- COMPLIANCE WITH ADAAG AND CBC CONSTRUCTION REQUIREMENTS AND CALIFORNIA TITLE 24 WILL BE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS.

UTILITY NOTES:

- ALL LANDSCAPE IRRIGATION BACKFLOW DEVICES MUST MEET CURRENT CITY REQUIREMENTS FOR PROPER INSTALLATION.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CALL DIG ALERT TO IDENTIFY THE LOCATION OF ALL UTILITIES
- NO DISCHARGE OF CONSTRUCTION WASTEWATER, BUILDING MATERIALS, DEBRIS, OR SEDIMENT FROM THE SITE IS PERMITTED. NO REFUSE OF ANY KIND GENERATED ON A CONSTRUCTION SITE MAY BE DEPOSITED IN RESIDENTIAL, COMMERCIAL, OR PUBLIC REFUSE CONTAINER AT ANY TIME. THE UTILIZATION OF WEEKLY REFUSE COLLECTION SERVICE BY THE CITY'S HAULER FOR ANY REFUSE GENERATED AT THE CONSTRUCTION SITE IS STRICTLY PROHIBITED. FULL DOCUMENTATION OF ALL MATERIALS/TRASH LANDFILLED AND RECYCLED MUST BE SUBMITTED TO THE PERMITS DIVISION IN COMPLIANCE OF THE CITY'S CONSTRUCTION AND DEMOLITION RECYCLING ORDINANCE.
- A CLAY 6" PROPERTY LINE CLEANOUT MUST BE INSTALLED ON A CLAY 6" SANITARY SEWER LATERAL. IF THERE IS NO 6" SEWER LATERAL, THEN A NEW ONE MUST BE INSTALLED. THE PROPERTY LINE CLEANOUT MUST STAY WITHIN THE JOB SITES PROPERTY LINES. SEE CITY STANDARD PLAN ST-5. CLEANOUT MUST BE ADDED TO THE SITE PLAN.
- A BACKWATER VALVE IS REQUIRED ON THE SANITARY SEWER LATERAL IF THE DISCHARGES FROM FIXTURES WITH FLOOD LEVEL RIMS ARE LOCATED BELOW THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC SEWER. SEE CITY STANDARD PLAN ST-24. MUST BE SHOWN ON THE PLAN IF APPLICABLE.
- IF ANY EXISTING SEWER LATERAL IS USED, IT MUST BE TELEVIEWED TO CHECK ITS STRUCTURAL INTEGRITY. THE TAPE MUST BE MADE AVAILABLE FOR REVIEW BY THE PUBLIC WORKS DEPARTMENT AND MUST SHOW PROOF OF THE LOCATION OF WHERE IT WAS SHOT. THE PUBLIC WORKS DEPARTMENT WILL REVIEW THE TAPE AND DETERMINE AT THAT TIME IF THE SANITARY LATERAL NEEDS REPAIRING, REPLACED, OR THAT IT IS STRUCTURALLY SOUND AND CAN BE USED IN ITS PRESENT CONDITION. VIDEOING OF LATERAL MUST BE IN ITS ORIGINAL STATE. NO CLEANING FLUSHING OR ALTERING PRIOR TO VIDEOING IS PERMITTED.
- ANY UNUSED WATER OR SANITARY SEWER LATERALS MUST BE ABANDONED AT THE CITY MAIN.
- RESIDENTIAL PROPERTIES MUST PROVIDE AN ENCLOSED STORAGE AREA FOR REFUSE CONTAINERS. THESE AREAS MUST BE CONSTRUCTED TO MEET THE REQUIREMENTS OF M.B.M.C. 5.24.030. THE AREA MUST BE SHOWN IN DETAIL ON THE PLANS BEFORE A PERMIT IS ISSUED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL THE STREET SIGNS, STREET LAMPS/LIGHTS, PARKING METERS, AND/OR TREES AROUND THE PROPERTY. IF THEY ARE DAMAGED, LOST OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY STREET MARKINGS THAT ARE DAMAGED OR REMOVED BY THE CONTRACTOR'S OPERATIONS. CONTACT THE PUBLIC WORKS INSPECTOR FOR SIGN SPECIFICATION AND SUPPLIERS.
- THE BACK OF DRIVEWAY APPROACH MUST BE SIX INCHES HIGHER THAN THE FLOW LINE ON THE STREET. M.B.M.C. 9.76.030.
- SIDEWALK, DRIVEWAY, CURB, AND GUTTER REPAIR OR REPLACEMENT MUST BE COMPLETED PER PUBLIC WORKS SPECIFICATIONS. SEE CITY STANDARD PLAN MBSI-110-1(ST-1), MBSI-112A(ST-2), MBSI-120A(ST-3), AND MBSI-132A(ST-10). THE PLANS MUST HAVE A PROFILE OF THE DRIVEWAY, PERCENTAGE (%) OF SLOPE ON DRIVEWAY, AND DRIVEWAY ELEVATIONS FOR EACH SIDE AND THE MIDDLE. IN THE CASE WHERE THE GARAGE LEVEL IS BELOW THE STREET DRAINAGE FLOW LINES, THE COMBINED SLOPE OF PUBLIC AND PRIVATE APPROACH SHALL NOT EXCEED 15% (CITY RECOMMENDS THAT GARAGE FINISH FLOOR ELEVATIONS SLOPE AT 1% MINIMUM TO THE PROPERTY LINE AT THE DRIVEWAY APPROACH WHICH WOULD MINIMIZE POSSIBILITY OF ANY FUTURE FLOODING IN THE GARAGE). CITY PLANS/SURVEYS MUST SHOW ELEVATIONS FOR EACH ADJOINING PROPERTY. NO DEVIATIONS IN ELEVATIONS BETWEEN PROPERTIES SHALL EXCEED MORE THAN ¼".
- WATER METERS MUST REMAIN ACCESSIBLE FOR METER READERS DURING CONSTRUCTION. WATER METERS SHALL BE PLACED NEAR THE PROPERTY LINE AND OUT OF THE DRIVEWAY APPROACH WHENEVER POSSIBLE. WATER METER PLACEMENT MUST BE SHOWN ON THE PLANS. SEE CITY STANDARD PLAN ST-15.
- IF WATER METER BOX IS DAMAGED DURING CONSTRUCTION, OR THE CITY DETERMINES THAT IT IS IN NEED OF REPLACEMENT, A NEW WATER METER BOX MUST BE PURCHASED FROM THE CITY. THE WATER METER BOX SHALL HAVE A TRAFFIC RATED LID.
- ALL STORM WATER, NUISANCE WATER, ETC. DRAIN LINES INSTALLED WITHIN THE STREET RIGHT OF WAY MUST BE CONSTRUCTED OF DUCTILE IRON PIPE AND LABELED ON THE SITE PLAN. DRAINS MUST BE SHOWN ON PLANS.
- PLAN HOLDER MUST HAVE THE PLANS RECHECKED AND STAMPED FOR APPROVAL BY THE PUBLIC WORKS DEPARTMENT BEFORE THE BUILDING PERMIT IS ISSUED.

	SUPPLEMENTAL NOTES: 1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. 2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING. 3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.		CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT 3621 BELL AVE. MANHATTAN BEACH, CA 310-802-5000	REVIEWED BY _____ DATE _____	REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	BY	DATE					ASSOCIATE ENGINEER GILBERT RAMOS
	NO.	DESCRIPTION		BY		DATE								
NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.	PROJECT MANAGER GILBERT GAMBOA, P.E.	RECOMMENDED BY _____ DATE _____												
CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION		MARINE AVENUE PARK SYNTHETIC FIELD TURF REPLACEMENT PROJECT GENERAL NOTES		PROJECT MANAGER GILBERT GAMBOA, P.E.	RECOMMENDED BY _____ DATE _____									
DESIGNED BY _____ DATE _____		SCALE _____ DATE _____		DRAWING NO. _____	SHEET 2 OF 6									

GRADING GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION AND AMENDMENTS OF THE CALIFORNIA BUILDING CODE. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE APPLICABLE CITY/COUNTY STANDARDS AND STANDARD SPECIFICATIONS, LATEST ADOPTED EDITION AND AMENDMENTS. IF THERE IS A CONFLICT BETWEEN CODES, THE CONTRACTOR WILL NOTIFY THE CIVIL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND DISPOSAL OF THE PROPOSED WORK AREA, THE CONTRACTOR SHALL DISPOSE OF ALL MATERIAL LEGALLY AND IS RESPONSIBLE FOR COMPLYING WITH LOCAL RECYCLING ORDINANCES.
- NO FILL SHALL BE PLACED ON THE EXISTING GROUND SURFACE UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL, DELETERIOUS MATERIAL AND SCARIFIED AND COMPACTED PER THE GEOTECHNICAL RECOMMENDATIONS.
- CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO FEET HORIZONTAL TO ONE FOOT VERTICAL, 2:1.
- FILLS SHALL BE COMPACTED TO THE MINIMUM PERCENTAGE OF MAXIMUM DRY DENSITY AS SPECIFIED IN THE PROJECT SOILS REPORT AND CERTIFIED BY THE GEOTECHNICAL ENGINEER.
- ALL EXISTING FILLS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ADDITIONAL FILLS ARE ADDED.
- ALL EXPOSED SLOPES SHALL BE PLANTED PER THE PROJECT LANDSCAPE PLANS AND IRRIGATED UNTIL GROUND COVER IS ESTABLISHED.
- THE STOCKPIILING OF EXCESS MATERIAL IS SUBJECT TO THE APPROVAL OF THE CITY.
- ALL TRENCH BACKFILLS ARE TO BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- ALL CUT SLOPES SHALL BE INVESTIGATED BY THE GEOTECHNICAL ENGINEER DURING GRADING TO DETERMINE IF ANY POTENTIAL STABILITY PROBLEMS EXIST. SHOULD EXCAVATION DISCLOSE ANY GEOTECHNICAL HAZARDS OR POTENTIAL GEOTECHNICAL HAZARDS THE GEOTECHNICAL ENGINEER SHALL RECOMMEND NECESSARY TREATMENT TO THE CONTRACTOR.
- THE FINAL COMPACTION REPORT AND APPROVAL FROM THE GEOTECHNICAL ENGINEER SHALL CONTAIN DETAILS REGARDING THE TYPE OF FIELD TESTING PERFORMED INCLUDING THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, OR DRIVE RING SHALL BE NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
- SANITARY FACILITIES SHALL BE MAINTAINED ON SITE THROUGHOUT THE DURATION OF CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF AND PROTECT ALL EXISTING UTILITIES AND TO ENSURE THAT SERVICE IS NOT DISRUPTED TO EXISTING FACILITIES.
- ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT EXISTING STRUCTURES AND ADJACENT PROPERTIES DURING CONSTRUCTION. IF THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY DUE TO OBSTRUCTING EXISTING DRAINAGE PATTERNS, THE CONTRACTOR IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- ALL PLANTERS ADJACENT TO THE FOUNDATIONS SHALL BE SEALED ALONG THE SIDE OF THE FOUNDATION FOOTING AND EXTENDED UNDER THE PLANTER A MINIMUM OF 12" TO PREVENT MOISTURE FROM REACHING THE FOUNDATION SUB-GRADE SOILS.
- EXPORTED MATERIAL SHALL BE TAKEN TO A LEGAL DUMP SITE OR PERMITTED RECEIVING SITE APPROVED BY THE LOCAL AGENCY HAVING JURISDICTION.
- PERMISSION IS REQUIRED FROM THE ADJACENT PROPERTY OWNER WHENEVER WORK IS PROPOSED OR NECESSARY ACROSS THE PROJECT'S PROPERTY LINES.
- ANY DIRT, ROCK DEBRIS OR CONSTRUCTION MATERIAL THAT IS TRACKED OR DROPPED WITHIN THE PUBLIC RIGHT OF WAY DURING THE TRANSPORTATION OF THAT MATERIAL OR EQUIPMENT ASSOCIATED WITH THE PROJECT SHALL BE CLEANED OR REMOVED DAILY.
- DIRT ACCESS RAMP OVER CURBS AND GUTTERS TO THE CONSTRUCTION SITE ARE PROHIBITED, WHEN NECESSARY FOR ENTRANCE TO SUCH CONSTRUCTION SITES, TEMPORARY ASPHALT RAMPS WITH A MINIMUM OF A 3" DIAMETER PIPE WILL CONSTRUCTED TO CONVEY GUTTER DRAINAGE.
- THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND OBTAINING REQUIRED PERMITS FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA).
- PROPOSED REVISIONS TO THE GRADING PLAN SHALL BE DRAWN IN RED PENCIL ON BOND COPIES OF THE APPROVED PLANS. THESE COPIES SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR APPROVAL. AFTER APPROVAL IS GIVEN, THE OWNER MAY REQUIRE AS-BUILT THE PLANS.
- RULE 403, AIR QUALITY CONTROL MUST BE IMPLEMENTED DURING CONSTRUCTION:
 - PERSON SHALL NOT CAUSE OR ALLOW THE EMISSIONS OF FUGITIVE DUST FROM ANY TRANSPORT, HANDLING, CONSTRUCTION OR STORAGE ACTIVITY SO THAT THE PRESENCE OF SUCH DUST REMAINS VISIBLE IN THE ATMOSPHERE BEYOND THE PROPERTY LINE OF THE EMISSION SOURCE. (DOES NOT APPLY TO EMISSION EMANATING FROM UNPAVED ROADWAYS OPEN TO PUBLIC TRAVEL OR FARM ROADS. THIS EXCLUSION SHALL NOT APPLY TO INDUSTRIAL OR COMMERCIAL FACILITIES).
 - A PERSON SHALL TAKE EVERY RESPONSIBLE PRECAUTION TO MINIMIZE FUGITIVE DUST EMISSIONS FROM WRECKING, EXCAVATION, GRADING CLEARING OF LAND AND SOLID WASTE DISPOSAL OPERATIONS.
 - A PERSON SHALL NOT CAUSE OR ALLOW PARTICULATE MATTER TO EXCEED 100 MICROGRAMS PER CUBIC METER WHEN DETERMINED AS THE PROPERTY LINE FOR A MINIMUM OF FIVE HOURS.
 - A PERSON SHALL TAKE EVERY REASONABLE PRECAUTION TO PREVENT VISIBLE PARTICULATE MATTER FROM BEING DEPOSITED UPON PUBLIC ROADWAYS. PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE REMOVAL OF PARTICULATE MATTER FROM EQUIPMENT PRIOR TO THE MOVEMENT ON PAVED STREETS ONTO WHICH SUCH MATERIAL HAS BEEN DEPOSITED.
 - SUBSECTIONS (22.1) AND (22.2) SHALL NOT BE APPLICABLE WHEN THE WIND SPEED INSTANTANEOUSLY EXCEEDS 40 KILOMETERS (25 MILES PER HOUR), OR WHEN THE AVERAGE WIND SPEED DETERMINATIONS SHALL BE ON A 15 MINUTE AVERAGE AT THE NEAREST OFFICIAL AIR-MONITORING STATION OR BY A WIND INSTRUMENT LOCATED AND MONITORED ON SITE.
- CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY BETWEEN THE HOURS OF 7:30 AM AND 4:30 PM, MONDAY THROUGH FRIDAY UNLESS OTHERWISE AUTHORIZED BY THE CITY.
- CONTRACTOR SHALL USE LOW EMISSION MOBILE CONSTRUCTION EQUIPMENT DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTIONS ENGINES TUNED CONSISTENT WITH MANUFACTURE'S SPECIFICATIONS DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.
 - CONTRACTOR SHALL USE LOW SULFUR FUEL FOR STATIONARY CONSTRUCTION EQUIPMENT AS REQUIRED BY AQMD RULE 431.1 AND 431.2 AND SHALL USE EXISTING POWER SOURCES AND CLEAN FUEL GENERATORS WHEN POSSIBLE AS FEASIBLE DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.
- CONSTRUCTION PARKING SHALL BE ON-SITE, TRAFFIC CONTROL AND ACCESS SHALL BE IN ACCORDANCE WITH THE AGENCY HAVING JURISDICTION OVER THE PROJECT.
- THE SPEED OF CONSTRUCTION VEHICLES ON-SITE SHALL BE LIMITED TO 15 MILES PER HOUR.
- TRUCKS AND LARGE CONSTRUCTION VEHICLES SHALL OBTAIN APPROVED HAUL ROUTES FROM CITY PUBLIC WORKS.

- CONTRACTOR SHALL CONTROL DUST IN AREAS USED FOR OFF-PAVEMENT PARKING, MATERIAL LAYDOWN AREAS OR THOSE AREAS AWAITING FUTURE CONSTRUCTION. FREQUENTLY ACCESSED AREAS SHALL BE PAVED OR BASED AS EARLY AS POSSIBLE TO MINIMIZE DIRT TRACKOUT THE PUBLIC RIGHT OF WAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING MEASURE:
 - CESSATION OF ACTIVITIES DURING A STAGE-2 SMOG EPISODE, CALL 800-242-4022 FOR THE DAILY SMOG FORECAST.
 - TRUCK ROUTES AND SCHEDULES FOR THE RECEIPT OF MATERIALS SHALL BE COORDINATED WITH THE APPROPRIATE AGENCIES.
 - WHERE FEASIBLE, ON-ROAD AND OFF-ROAD VEHICLES AND EQUIPMENT SHALL BE TURNED OFF AND SUBSEQUENTLY RESTARTED IF THE ANTICIPATED DURATION OF IDLING IS EXPECTED TO EXCEED FIVE MINUTES.
- THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING HIGH WIND DUST CONTROL MEASURE WHEN INSTANTANEOUS WIND SPEEDS EXCEED 25 MILES PER HOUR.
 - TERMINATION / MODIFICATION OF SCRAPERS, GRADERS OR DOZERS ON UNPAVED SURFACES UNTIL WINDS SUBSIDE.
 - APPLICATION OF WATER AS NEEDED TO ANY PREVIOUSLY GRADED SURFACE IF DUST EMANATION IS VISIBLE FROM SUCH A SURFACE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EQUIPMENT TO PREVENT VISIBLE SOOT FROM REDUCING LIGHT TRANSMISSION THROUGH THE EXHAUST STACK BY MORE THAN 20 PERCENT FOR MORE THAN THREE MINUTES PER HOUR AND USE LOW SULFUR FUEL AS REQUIRED BY THE APPROPRIATE AGENCY.
- TRUCKS USED IN HAULING DIRT TO OR FROM THE SITE ON PUBLIC ROADS WILL BE COVERED OR WILL MAINTAIN A SIX INCH DIFFERENTIAL BETWEEN THE MAXIMUM HEIGHT OF ANY MATERIAL HAULED AND THE TOP OF THE TRAILER, HAUL TRUCK DRIVERS WILL LOAD PRIOR TO LEAVING THE SITE TO PREVENT SOIL LOSS DURING TRANSPORTATION.
- PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE, EXISTING SURVEY MONUMENTS SHALL BE NOTED AND DOCUMENT BEFORE CONSTRUCTION. IF ANY MONUMENTS ARE DISTURBED DURING CONSTRUCTION THE CONTRACTORS SHALL PAY LICENSED LAND SURVEYOR OR REGISTERED ENGINEER TO RESET SUCH MONUMENTS.
- PAD CERTIFICATION IS REQUIRED. A SOILS OR CIVIL ENGINEER SHALL DETERMINE THAT THE GRADING PERFORMED IS IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND SUITABLE TO SUPPORT THE INTENDED STRUCTURE.
- ALL LANDSCAPE IRRIGATION BACKFLOW DEVICES MUST MEET CURRENT CITY REQUIREMENTS FOR PROPER INSTALLATION.
- NO DISCHARGE OF CONSTRUCTION WASTEWATER, BUILDING MATERIALS, DEBRIS, OR SEDIMENT FROM THE SITE IS PERMITTED. IN ADDITION, CONTROL MEASURES MUST ALSO BE TAKEN TO PREVENT STREET SURFACE WATER FROM ENTERING THE CONSTRUCTION SITE.

ROADWAY RECONSTRUCTION GENERAL NOTES:

- CURB AND GUTTER AND RAMP TO BE REPLACED TO MATCH EXISTING AND IN ACCORDANCE WITH CITY STANDARD DRAWING AND "GREEN BOOK" STANDARDS.
- JOIN NEW CURB AND GUTTER TO ASPHALT PAVEMENT PER DETAILS SHOWN OR REFERENCED. CONSTRUCT CURB AND GUTTER PER THE "GREEN BOOK" STD PLAN 120-2 AND CITY REQUIREMENTS UNLESS OTHERWISE SHOWN.
- JOIN NEW ASPHALT PAVING TO CURB AND GUTTER PER DETAILS SHOWN OR REFERENCED. PRIME ALL AREAS TO BE JOINED. SAW CUT ALL CONCRETE AND ASPHALT PAVING TO BE JOINED PRIOR TO DEMOLITION AND REMOVALS.
- ANY NEW CURB AND GUTTER CONSTRUCTED AT EXISTING ASPHALT WEARING COURSE SHALL BE JOINED WITH A MINIMUM SIX INCH NOTCH PER STANDARD DETAIL.
- DRIVEWAY APPROACHES DISTURBED BY THE WORK SHALL BE REPLACED PER DETAILS HEREIN OR GREEN BOOK STANDARDS.
- STREET EXCAVATION AND PAVEMENT RESTORATION SHALL BE PER CITY OF MANHATTAN BEACH STANDARD DRAWING MBSI-132A (ST-10) AND ALL REFERENCED STANDARDS. AC SHALL BE SAW CUT. ALL STREET TRENCHING SHALL RE RESTORED USING "T" CUT.
- PCC STREET EXCAVATION AND PCC PAVEMENT RESTORATION IN PCC ROADWAY AND WALKING STREETS SHALL BE EXTENDED TO THE SCORE LINES IN THE PAVEMENT. ALL SECTIONS TO BE REMOVED SHALL BE SAW CUT PRIOR TO DEMOLITION AND REMOVAL. NEW PCC SHALL BE CONSTRUCTED ON NATIVE SUBGRADE COMPACTED TO 90% FINISH SHALL MATCH CITY SIDEWALK STANDARDS OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINTS AND CONTRACTION JOINTS AS DIRECTED BY THE ENGINEER, AND AT MAXIMUM OF 20 FEET. SCORE PATTERN AS DIRECTED.
- MANHOLE FRAME AND COVERS, UTILITY VAULTS, VALVE BOXES, AND OTHER UTILITY ACCESS STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH SURFACE IN ACCORDANCE WITH STANDARD SPECIFICATIONS, CITY, AND COUNTY REQUIREMENTS.
- BLUE REFLECTORS SHALL BE INSTALLED ON THE ROADWAY SURFACE AT THE REQUIRED LOCATIONS TO INDICATE THE LOCATION OF EACH HYDRANT. REFLECTORS SHALL BE IN ACCORDANCE WITH FIRE DEPARTMENT REGULATIONS.
- THE EXISTENCE AND LOCATION OF MANHOLE, UTILITIES, VAULTS, BOXES, WATER METERS, VALVES AND OTHER STRUCTURES AND UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS AND SURFACE SURVEY PERFORMED. THESE ARE TO BE PROTECTED AND RESTORED/REPLACED IF DAMAGED OR DISTURBED AT CONTRACTOR'S SOLE EXPENSE.
- TRAFFIC STRIPING AND PAVEMENT MARKING REPAIR SHALL BE THERMOPLASTIC AS SPECIFIED, PER CAL TRANS 84 AND PER CITY REQUIREMENTS.
- THICKNESS OF PAVEMENT SHOWN IN THE PAVEMENT RESURFACING SCHEDULE APPLIES WITHIN THE LIMITS OF EXCAVATION. THE CONTRACTOR SHALL NOTE THAT FAILED PCC PAVEMENT SUBGRADE MAY BE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO PAVEMENT OUTSIDE THE LIMITS OF EXCAVATION AS A RESULT OF HEAVY TRAFFIC LOADING AND/OR INADEQUATE SHORING.
- STRAND WALKWAY SHALL BE RECONSTRUCTED IN FULL PANEL FROM JOINT TO JOINT. RESURFACING PAVEMENT SECTION SHALL BE FULLY REINFORCED AND DOWELED INTO EXISTING PAVEMENT WITH #4-EPOXY COATED REBAR @ 12" O.C. EACH WAY (MIN. 6" EMBEDMENT).
- ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.

GENERAL SIGNAGE AND STRIPING NOTES:

- ALL REQUIRED STRIPING AND SIGNAGE SHALL CONFORM WITH THE LATEST APPLICABLE CALTRANS STANDARD PLANS AND LATEST CALTRANS STANDARD SPECIFICATIONS, INCLUDING SECTION 84 AND CITY AND COUNTY STANDARDS AND REQUIREMENTS.
- COMPLY WITH ALL MARKING REQUIREMENTS OF AGENCY HAVING JURISDICTION. PAVEMENT LEGENDS SHALL CONFORM TO CITY OR AGENCY STENCILS. SIGNS, STRIPES, AND PAVEMENT LEGENDS SHALL BE REFLECTORIZED.
- TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
- REPLACE ALL SIGNAGE AND STRIPING DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.

TRAFFIC CONTROL REQUIREMENTS:

- THE CONTRACTOR SHALL OBTAIN A CITY PERMIT FOR WORK PERFORMED IN THE RIGHT-OF-WAY, AND PROVIDE THE CITY WITH GENERAL LIABILITY INSURANCE IN THE AMOUNT OF \$2,000,000.00, NAMING THE CITY AS ADDITIONALLY INSURED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK ON A PUBLIC STREET TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES ACCORDING TO THE WORK AREA TRAFFIC CONTROL HANDBOOK? LATEST EDITION, OR CALIFORNIA MUTCD, TO INSURE THE SAFE MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH OR AROUND THE WORK AREA AND PROVIDE MAXIMUM PROTECTION AND SAFETY TO CONSTRUCTION WORKERS. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO START OF WORK FOR ANY CONDITIONS NOT COVERED BY THE WATCH OR CA MUTCD.
- FLASHING ARROW BOARD(S) ARE MANDATORY FOR LANE CLOSURES ON MAJOR STREETS. THEY SHALL OPERATE UNTIL TRAFFIC CONTROL IS REMOVED.
- ALL TRAVEL LANES SHALL BE OPEN BETWEEN 5:00 A.M. AND 8:30 A.M. AND BETWEEN 3:30 P.M. AND 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 8:30 A.M. AND 3:30 P.M UNLESS OTHERWISE INDICATED ON PLAN. FLAGGERS MAY BE USED IF ONE LANE IN EACH DIRECTION CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE ENGINEER. ALL TRAFFIC LANES SHALL BE OPEN BEFORE AND AFTER WORK HOURS.
- ALL OPEN TRENCHES SHALL BE COVERED WITH NON-SKID STEEL PLATES OR TEMPORARY ASPHALT PAVEMENT BEFORE AND AFTER WORK HOURS.
- ALL SIGNS, DELINEATORS, BARRICADES, ETC., SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS LATEST EDITION, THE CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES: (LATEST EDITION), AND THE WATCH? LATEST EDITION. ALL BARRICADES SHALL BE EQUIPPED WITH FLASHING/STEADY BURN WARNING LAMPS AT NIGHT. ALL CONES, DELINEATORS, BARRICADES, AND "K" RAIL SHALL BE REFLECTORIZED. ALL TRAFFIC CONTROL SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY. ANY DEVICES NOT PART OF THE REQUIRED TRAFFIC CONTROL OR DETOURS SHALL BE REMOVED FROM THE VIEW OF THE TRAVELLING PUBLIC IMMEDIATELY.
- THE CONTRACTOR SHALL NOTIFY THE MTA BUS STOPS AND ZONES DISPATCHER AND ANY OTHER AFFECTED TRANSIT SERVICES AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.
- WHERE NECESSARY, PROPERLY POST "TEMPORARY NO PARKING ANYTIME" SIGNS AT LEAST 72 HOURS BEFORE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE POLICE DEPARTMENT IMMEDIATELY UPON POSTING SIGNS.
- VEHICULAR AND PEDESTRIAN ACCESS TO ADJACENT PROPERTIES SHALL BE PROVIDED AT ALL TIMES. CLOSED SIDEWALKS SHALL BE POSTED WITH "SIDEWALK CLOSED" SIGNS AT EACH APPROACH TO THE CLOSURE AND AN APPROVED ALTERNATE ROUTE PROVIDED.
- PROTECT TRAFFIC SIGNAL DETECTORS IN PLACE OR REPLACE WITHIN 5 CALENDAR DAYS OF FINAL PAVING. ALL DETECTORS DAMAGED BY THE WORK SHALL BE REPLACED TO THE STANDARDS OF THE CITY PUBLIC WORKS DEPARTMENT.
- NOTIFY PUBLIC WORKS INSPECTOR (310) 802-5306, AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION IN RIGHT-OF-WAY. NOTIFY FIRE AND POLICE DISPATCH (310) 802-5103 PRIOR TO STARTING WORK OR CLOSING LANES/STREETS EVERY DAY.
- ANY REVISIONS TO THE TRAFFIC CONTROL PLANS OR REQUIREMENTS SHALL BE APPROVED BY THE ENGINEER.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

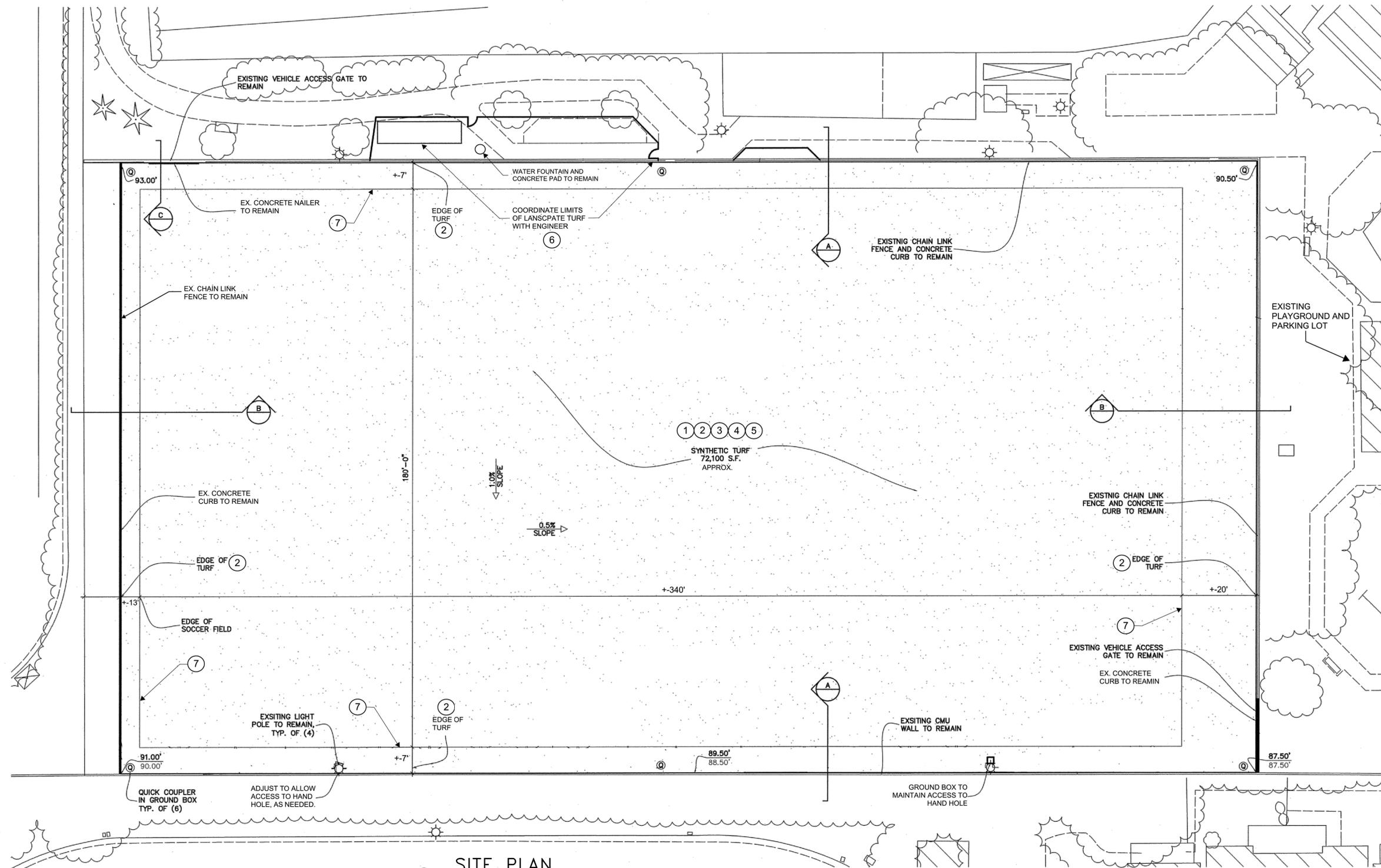
SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

**CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
3621 BELL AVE.
MANHATTAN BEACH, CA
310-802-5000**

REVIEWED BY	DATE

CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION																							
MARINE AVENUE PARK SYNTHETIC FIELD TURF REPLACEMENT PROJECT GENERAL NOTES CONTINUED																							
REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DESCRIPTION	BY	DATE																	RECOMMENDED BY CITY ENGINEER KATHERINE DOHERTY DATE: 5/1/2023	
NO.	DESCRIPTION	BY	DATE																				
DESIGNED BY ASSOCIATE ENGINEER GILBERT RAMOS DATE: 04-27-23		PROJECT MANAGER GILBERT GAMBOA, P.E. DATE: 04-27-23																					
SCALE N/A		DATE 04-27-2023																					
SHEET 3 OF 6		D-946																					



(A) SITE PLAN
NTS



- ① REMOVE AND DISPOSE OF EXISTING SYNTHETIC TURF
- ② INSPECT AND REPAIR SHOCK PAD AND EDGE ANCHOR NAILER BOARD (WHERE OCCURS)
- ③ FURNISH AND INSTALL NEW SYNTHETIC TURF, INCLUDING EDGE ANCHOR NAILING
- ④ CUSTOM LOGO, LINEWORK, AND MARKINGS; SEE STRIPING PLAN SHEET 5
- ⑤ CONSTRUCT STANDARD INFILL
- ⑥ INSTALL NEW LANDSCAPE TURF (AT BLEACHERS)
- ⑦ COORDINATE FINAL STRIPING LAYOUT WITH ENGINEER PRIOR TO FABRICATION

811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

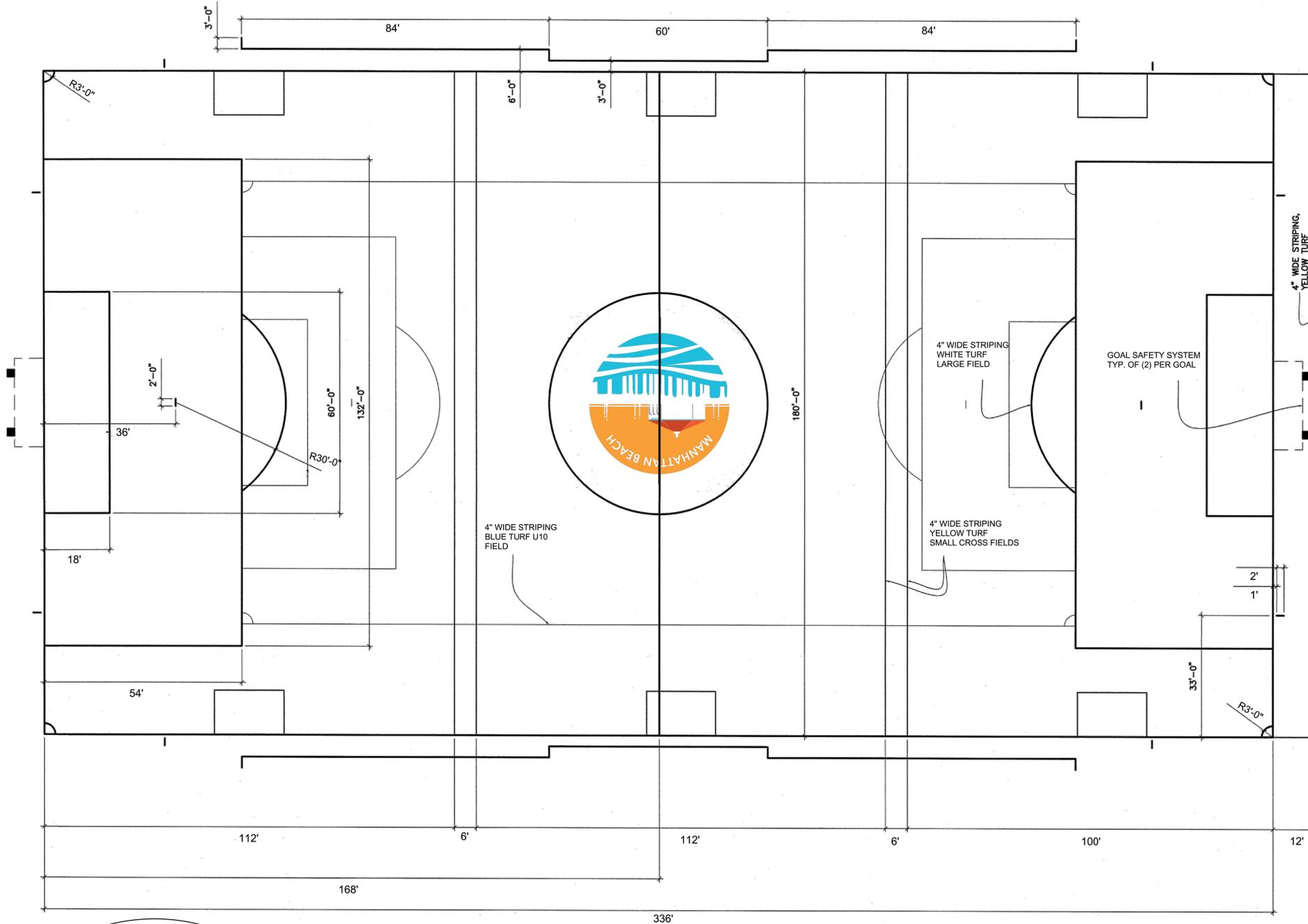
SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

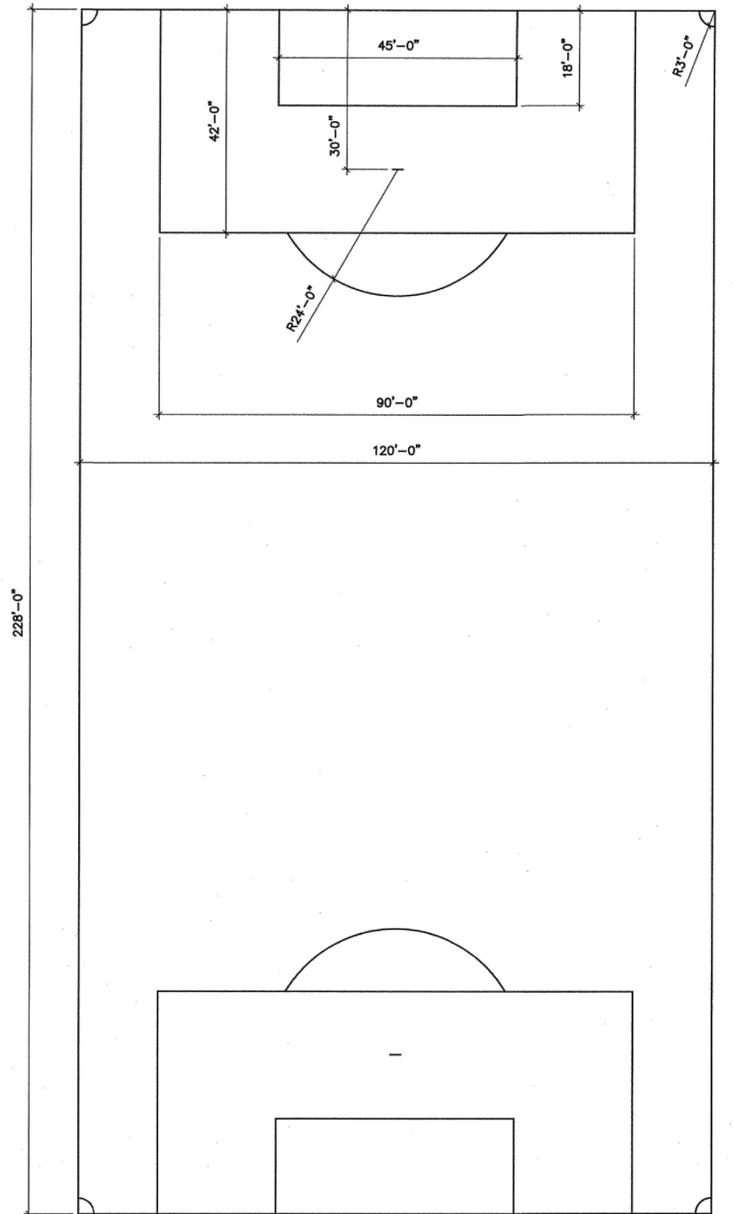
CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
3621 BELL AVE.
MANHATTAN BEACH, CA
310-802-5000

REVIEWED BY	DATE

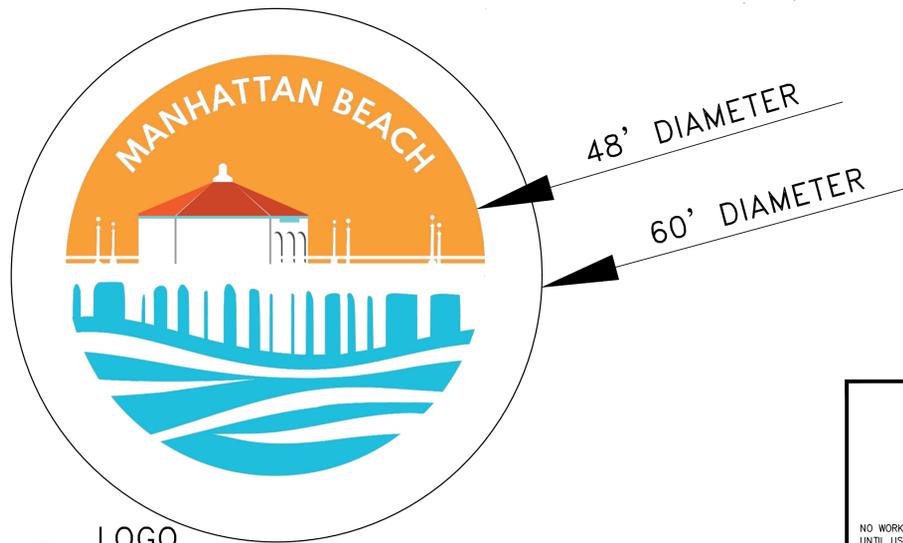
CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION																									
MARINE AVENUE PARK SYNTHETIC FIELD TURF REPLACEMENT PROJECT CONSTRUCTION PLAN																									
<table border="1"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS				NO.	DESCRIPTION	BY	DATE									<table border="1"> <tr> <td> RECOMMENDED BY <i>Katherine Doherty</i> DATE 04-27-23 </td> <td> DATE 5/1/2023 </td> </tr> <tr> <td> PROJECT MANAGER GILBERT GAMBOA, P.E. </td> <td> CITY ENGINEER KATHERINE DOHERTY </td> </tr> <tr> <td> DESIGNED BY <i>Dalbert Ramos</i> DATE 04-27-23 </td> <td> ASSOCIATE ENGINEER GILBERT RAMOS </td> </tr> </table>		RECOMMENDED BY <i>Katherine Doherty</i> DATE 04-27-23	DATE 5/1/2023	PROJECT MANAGER GILBERT GAMBOA, P.E.	CITY ENGINEER KATHERINE DOHERTY	DESIGNED BY <i>Dalbert Ramos</i> DATE 04-27-23	ASSOCIATE ENGINEER GILBERT RAMOS
REVISIONS																									
NO.	DESCRIPTION	BY	DATE																						
RECOMMENDED BY <i>Katherine Doherty</i> DATE 04-27-23	DATE 5/1/2023																								
PROJECT MANAGER GILBERT GAMBOA, P.E.	CITY ENGINEER KATHERINE DOHERTY																								
DESIGNED BY <i>Dalbert Ramos</i> DATE 04-27-23	ASSOCIATE ENGINEER GILBERT RAMOS																								
SCALE N/A		DATE 04-27-2023																							
SHEET 4 OF 6		DRAWING NO. D-946																							



(A) SOCCER STRIPING PLAN
NTS



(B) U10 SOCCER STRIPING PLAN
NTS



(C) LOGO
NTS

811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

- SUPPLEMENTAL NOTES:**
1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
 2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
 3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

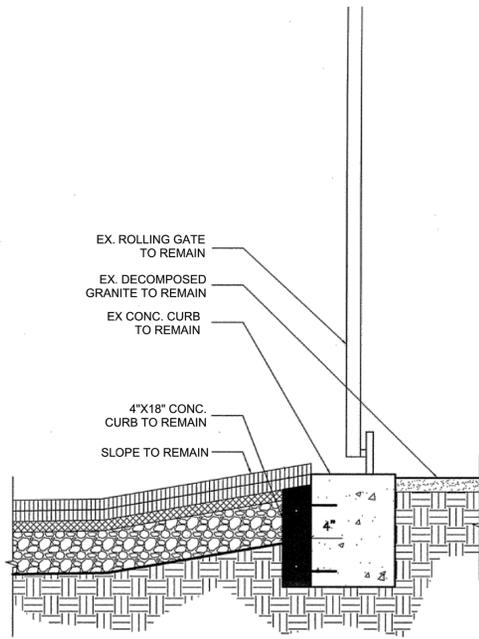
CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
3621 BELL AVE.
MANHATTAN BEACH, CA
310-802-5000

NO.	DESCRIPTION	BY	DATE

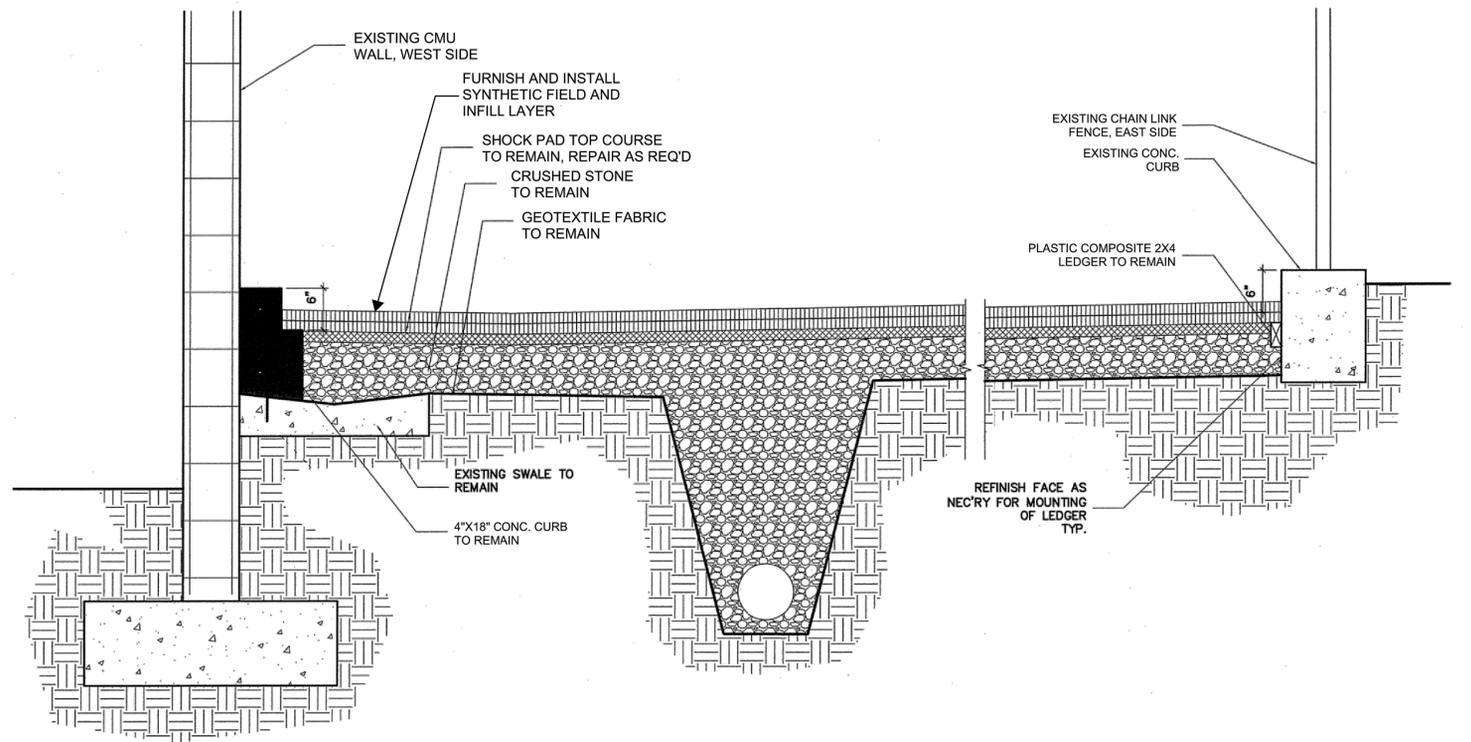
CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**MARINE AVENUE PARK SYNTHETIC
FIELD TURF REPLACEMENT PROJECT
STRIPING PLAN**

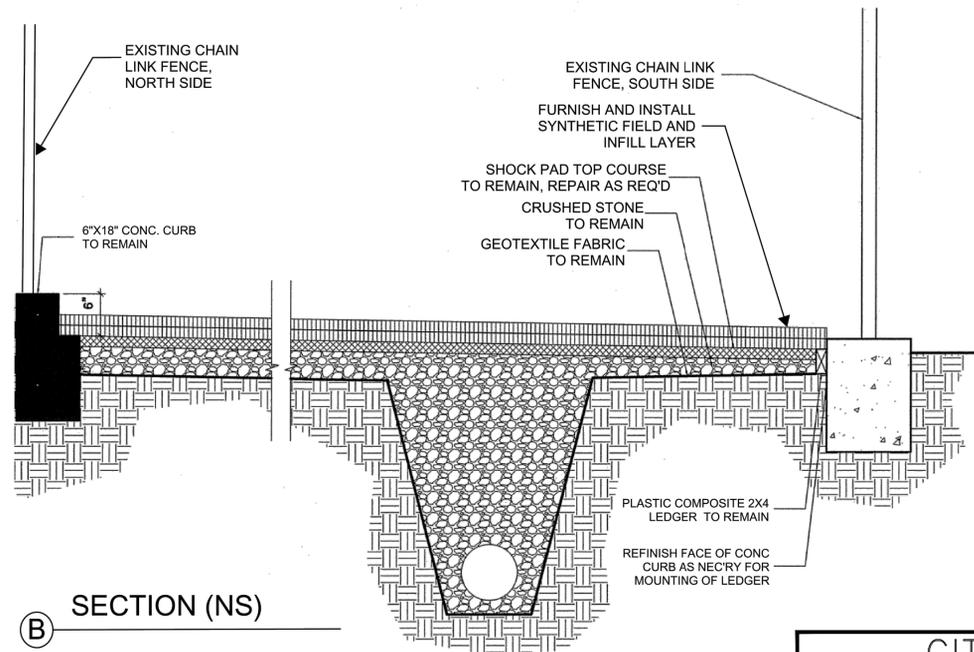
REVISIONS NO. DESCRIPTION BY DATE REFERENCE	REVIEWED BY DATE _____	RECOMMENDED BY DATE <i>Katherine Doherty</i> 04-27-23 CITY ENGINEER KATHERINE DOHERTY	DATE 04-27-23 ASSOCIATE ENGINEER GILBERT RAMOS
SCALE N/A	DATE 04-27-2023	DRAWING NO. D-946	SHEET 5 OF 6



C SECTION (EW) @ GATE



A SECTION (EW)



B SECTION (NS)

811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
3621 BELL AVE.
MANHATTAN BEACH, CA
310-802-5000

REVIEWED BY	DATE

<p align="center">CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION</p> <p align="center">MARINE AVENUE PARK SYNTHETIC FIELD TURF REPLACEMENT PROJECT CROSS SECTION</p>											
<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DESCRIPTION	BY	DATE					<p>DESIGNED BY: <i>Dilbert Ramos</i> 04-27-23 ASSOCIATE ENGINEER GILBERT RAMOS</p>	
NO.	DESCRIPTION	BY	DATE								
<p>REFERENCES</p>		<p>RECOMMENDED BY: <i>Katherine Doherty</i> 5/1/2023 CITY ENGINEER KATHERINE DOHERTY</p>									
<p>SCALE: N/A</p>		<p>DATE: 04-27-2023</p>									
<p>SHEET 6 OF 6</p>		<p>DRAWING NO. D-946</p>									

CITY OF MANHATTAN BEACH BID DOCUMENTS

PROJECT NO. D-946
BID NUMBER E1277-23C

MARINE AVENUE PARK
SYNTHETIC FIELD TURF REPLACEMENT PROJECT
APRIL 2023



CITY OF MANHATTAN BEACH
PUBLIC WORKS ENGINEERING
GILBERT GAMBOA, PROJECT MANAGER

1400 HIGHLAND AVENUE
MANHATTAN BEACH, CA 90266

Katherine Doherty, City Engineer C76589

Engineer/Architect of Record Approval

NOTICE INVITING BIDS FOR	NIB-1
INSTRUCTIONS TO BIDDERS	I-1
CHECKLIST FOR BIDDERS	I-6
BID	B-1
CONTRACT	C-1
PAYMENT BOND (LABOR AND MATERIALS).....	C-6
PERFORMANCE BOND	C-8
WARRANTY BOND	C-10
PART 1 – GENERAL PROVISIONS	1-1
SECTION 0. GENERAL PROVISIONS DEFINED.....	1-1
SECTION 1. GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS	1-1
SECTION 2. SCOPE OF THE WORK	1-5
SECTION 3. CONTROL OF THE WORK	1-22
SECTION 4. CONTROL OF MATERIALS	1-28
SECTION 5. LEGAL RELATIONS AND RESPONSIBILITIES	1-30
SECTION 6. PROSECUTION AND PROGRESS OF THE WORK	1-38
SECTION 7. MEASUREMENT AND PAYMENT	1-42
SECTION 8. FACILITIES FOR AGENCY PERSONNEL	1-51
SECTION 9. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN....	1-52
SECTION 10. ADDITIONAL TERMS	1-58
PART 2 - CONSTRUCTION MATERIALS	2-1
PART 3 - CONSTRUCTION METHODS	3-1
PART 4 - EXISTING IMPROVEMENT.....	4-1
PART 5 - PIPELINE SYSTEM REHABILITATION (NOT USED).....	5-1
PART 6 - TEMPORARY TRAFFIC CONTROL.....	6-1
PART 7 - STREET LIGHTING AND TRAFFIC SIGNAL SYSTEM (NOT USED)	7-1

PART 8 - LANDSCAPE AND IRRIGATION (NOT USED) 8-1
PART 9 - SPECIAL INSTRUCTIONS 9-1
PART 10 – STANDARD AND SPECIAL TECHNICAL PROVISIONS 10-1

APPENDIX I PROGRESS PAYMENT REQUEST FORM APPENDIX I-1
APPENDIX II DAILY REPORT..... APPENDIX II-1
APPENDIX III APPLICABLE CITY STANDARD PLANS APPENDIX II-1
APPENDIX IV GEOTECHNICAL OR OTHER REPORTS..... APPENDIX IV-1

**NOTICE INVITING BIDS
FOR**

Marine Avenue Park Synthetic Field Turf Replacement Project

Project Number: D-946 Number: E1277-23C

NOTICE IS HEREBY GIVEN that the City of Manhattan Beach, California (“City”) invites sealed Bids for the Project. The City will receive **ELECTRONIC BIDS ONLY** up to 11 a.m. on Wednesday, May 24, 2023 at which time the **ELECTRONIC** bids will be opened and posted on PlanetBids. The deadline to submit questions related to the bid documents is Tuesday May 16, 2023 at 1 p.m.

Bids shall be received electronically only on the PlanetBids Portal accessible through the City of Manhattan Beach Public Works Department Bid Opportunities webpage at <https://www.manhattanbeach.gov/departments/public-works/bid-opportunities>. To submit your bid electronically and to review Bid tabulation results (“Bid Opening”), please visit the following link:<https://pbsystem.planetbids.com/portal/48136/bo/bo-detail/104588>.

Contract Documents in PDF format (including City Special Provisions and Project Plans, but not including Standard Plans, Standard Specifications, or Reference Specifications) shall be obtained from the link/website above.

Total Cost per set: \$100.00

All fees listed above are non-refundable. The Contract Documents must be purchased online; they cannot be purchased or mailed from City Hall. Bidders are solely responsible for on time submission of their electronic bid. The City will only consider bids that have been transmitted successfully and have been issued an ebid confirmation number with a time stamp from the bid management system indicating that the bid was submitted successfully. Transmission of bids by any other means will not be accepted. Bidders shall be solely responsible for informing themselves with respect to the proper utilization of the bid management system, for ensuring the capability of their computer system to upload the required documents, and for the stability of their internet service. Failure of the bidders to successfully submit electronic bids shall be at the bidders’ sole risk and no relief will be given for late and/or improperly submitted bids. Bidders experiencing any technical difficulties with the bid submission process may contact PlanetBids at (818) 992-1771. Neither the City, nor PlanetBids, makes any guarantee as to the timely availability of assistance, or assurance that any given problem will be resolved by the bid submission deadline.

Bids must remain valid and shall not be subject to withdrawal for 90 calendar days after the Bid opening date.

SCOPE OF WORK. The Project includes, without limitation, furnishing all necessary labor, materials, equipment and other incidental and appurtenant Work necessary to satisfactorily complete the Project, as more specifically described in the Contract Documents. This Work will be performed in strict conformance with the Contract Documents, permits from regulatory agencies with jurisdiction, and applicable regulations. The quantity of Work to be performed and materials to be furnished are approximations only, being given as a basis for the comparison of **BIDS**. Actual quantities of Work to be performed may vary at the discretion of the City Engineer.

Time for completion of the Work is 20 total Working Days from the date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials.

OPTIONAL PRE-BID MEETING AND SITE VISIT. An optional pre-bid meeting will be held on Wednesday May 10, 2023 at 10 a.m. 1625 Marine Ave, Marine Ave Park Soccer Field followed by an optional site visit. No allowances for cost adjustments will be made if a Bidder fails to adequately examine the Project site before submitting a Bid.

REGISTRATION WITH THE DEPARTMENT OF INDUSTRIAL RELATIONS. In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or subcontractor shall be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5 [with limited exceptions for bid purposes only under Labor Code Section 1771.1(a)].

PREVAILING WAGES. In accordance with Labor Code Section 1770 *et seq.*, the Project is a “public work.” The selected Bidder (Contractor) and any Subcontractors shall pay wages in accordance with the determination of the Director of the Department of Industrial Relations (“DIR”) regarding the prevailing rate of per diem wages. Copies of those rates are on file with the Director of Public Works and are available to any interested party upon request. The Contractor shall post a copy of the DIR’s determination of the prevailing rate of per diem wages at each job site. This Project is subject to compliance monitoring and enforcement by the DIR.

BONDS. Each Bid must be accompanied by a cash deposit, cashier’s check, certified check or Bidder’s Bond issued by a Surety insurer, made payable to the City and in an amount not less than ten percent of the total Bid submitted. Personal or company checks are not acceptable. Upon Contract award, the Contractor shall provide faithful performance and payment Bonds, each in a sum equal to the Contract Price, as well as a warranty or maintenance Bond that is valid for one year from Project acceptance in the amount of ten percent of the Contract Price. All Bonds must be issued by a California admitted Surety insurer using the forms set forth in the Contract Documents, or in any other form approved by the City Attorney. Failure to enter into the Contract with the City, including the submission of all required Bonds and insurance coverages, within ten calendar days after the date of the mailing of written notice of contract award to the Bidder, shall subject the Bid security to forfeiture to the extent provided by law.

LICENSES. Each Bidder shall possess a valid Class “A” or “B” or “C27” (Landscaping) Contractor’s license issued by the California State Contractors License Board or a combination of Class “C61” (Limited Specialty) and “D12” (Synthetic Products) at the time of the Bid submission, unless this Project has any federal funding, in which case the successful Bidder must possess such a license at the time of Contract award.

RETENTION SUBSTITUTION. Five percent of any progress payment will be withheld as retention. In accordance with Public Contract Code Section 22300 and at the request and expense of the Contractor, securities equivalent to the amount withheld may be deposited with the City or with a State or federally chartered bank as escrow agent, which shall then pay such moneys to the Contractor. Upon satisfactory completion of the Project, the securities shall be returned to the Contractor. Alternatively, the Contractor may request that the City make payments of earned retentions directly to an escrow agent at the Contractor’s expense. No such substitutions shall be accepted until all related documents are approved by the City Attorney.

BIDDING PROCESS. The City reserves the right to reject any Bid or all Bids, and to waive any irregularities or informalities in any Bid or in the bidding, as deemed to be in its best interest.

By: 
Katherine Doherty, City Engineer

4/24/2023
Date

INSTRUCTIONS TO BIDDERS

FORM OF BID. Bids shall be made on the Bid forms found herein. Bidders shall include all forms and fill in all blank spaces, including inserting "N/A" (for not applicable) where necessary. The Bid shall be enclosed in a sealed envelope bearing the Bidder's name and the Project name and identification number as described in the Notice Inviting Bids.

Any Bid not accompanied by a Contractor's Statement completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury may be deemed non-responsive and rejected. If the City determines that any information provided by a Bidder in the Contractor's Statement is false or misleading, or is so incomplete as to be false or misleading, the City may reject the Bid submitted by such Bidder as being non-responsive.

DELIVERY OF BIDS. The Bid shall be delivered by the time and date and to the place specified in the Notice Inviting Bids. No oral, faxed, emailed, or telephonic Bids or alternatives will be considered. Bidders are solely responsible for ensuring that their Bids are received in proper time, and Bidders assume all risks arising out of their chosen means of delivery. Any Bid received after the Bid submission deadline shall be returned unopened. Bidders are invited to be present for Bid opening. Accepted Bids shall become the property of the City.

AMENDED BIDS. Unauthorized conditions, limitations or provisos attached to a Bid may cause the Bid to be deemed incomplete and non-responsive.

WITHDRAWAL OF BID. A Bid may be withdrawn without prejudice upon written request by the Bidder filed with the City Clerk before the Bid submission deadline. Bids must remain valid and shall not be subject to withdrawal for 90 Days after the Bid opening date.

BIDDER'S SECURITY. Each Bid shall be accompanied by cash, a certified or cashier's check payable to the City, or a satisfactory Bid Bond in favor of the City executed by the Bidder as principal and an admitted surety insurer as Surety, in an amount not less than ten percent of the amount set forth in the Bid. The cash, check or Bid Bond shall be given as a guarantee that, if selected, the Bidder will execute the Contract in conformity with the Contract Documents, and will provide the evidence of insurance and furnish the specified Bonds, within ten calendar days after the date of delivery of the Contract Documents to the Bidder. In case of the Bidder's refusal or failure to do so, the City may award the Contract to the next lowest responsible bidder, and the cash, check, or Bond (as applicable) of the lowest Bidder shall be forfeited to the City to the extent permitted by law. No Bid Bond will be accepted unless it conforms substantially to the form provided in these Contract Documents.

QUANTITIES APPROXIMATE. Any quantities shown in the Bid form or elsewhere herein shall be considered as approximations listed to serve as a general indication of the amount of Work or materials to be performed or furnished, and as basis for the Bid comparison. The City does not guarantee that the actual amounts required will correspond with those shown. As deemed necessary or convenient, the City may increase or decrease the amount of any item or portion of Work or material to be performed or furnished or omit any such item or portion, in accordance with the Contract Documents.

ADDENDA. The City Engineer may, from time to time, issue Addenda to the Contract Documents. The City shall post all documents to the City's website at <https://www.manhattanbeach.gov>. The Addenda may also be posted to PlanetBids at

<https://www.manhattanbeach.gov/departments/public-works/bid-opportunities>. Bidders are responsible for ensuring that they have received any and all Addenda. It is the Bidder's responsibility to actively check PlanetBids and/or the City's website for Addenda or bulletin updates. Each Bidder is responsible for verifying that it has received all Addenda issued. Bidders must acknowledge receipt of all Addenda, if any, using the Addenda Acknowledgement Form included in these Bid Documents. Failure to acknowledge receipt of all Addenda may cause a Bid to be deemed incomplete and non-responsive.

DISCREPANCIES IN BIDS. Each Bidder shall set forth as to each item of Work, in clearly legible words and figures, a unit or line item Bid amount for the item in the respective spaces provided for this purpose.

In case of discrepancy between the unit price and the extended amount set forth for the item, the unit price shall prevail. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or if the unit price is the same amount as the entry in the "extended amount" column, then the amount set forth in the "extended amount" column for the item shall prevail in accordance with the following:

- (1) As to lump sum items, the amount set forth in the "extended amount" column shall be the unit price.
- (2) As to unit price items, the amount set forth in the "extended amount" column shall be divided by the estimated quantity for the item set forth in the Bid documents, and the price thus obtained shall be the unit price.

In case of discrepancy between words and figures, the words shall prevail.

COMPETENCY OF BIDDERS. In evaluating Bidder responsibility, consideration will be given not only to the financial standing, but also to the general competency of the Bidder for the performance of the Project. Each Bidder shall set forth in the designated area of the Bid form a statement of its experience. No Contract will be executed with a Bidder that is not licensed and registered with the DIR in accordance with State law, and with any applicable specific licensing requirements specified in these Contract Documents. These licensing and registration requirements for Contractors shall also apply to all Subcontractors.

BIDDER'S EXAMINATION OF SITE AND CONTRACT DOCUMENTS. The Bidder, at its sole cost and expense, is required to carefully examine the Contract Documents and the Project site to become fully acquainted with the conditions affecting the Work. The failure of a Bidder to receive or examine any of the Contract Documents or to inspect the site shall not relieve such Bidder from any obligation relating to the Bid, the Contract, or the Work required under the Contract Documents. The City assumes no responsibility or liability to any Bidder for, nor shall the City be bound by, any understandings, oral representations or oral agreements of the City's agents, employees or officers concerning the Contract Documents or the Work made prior to execution of the Contract. By submitting a Bid, Bidder represents: (1) that Bidder has read and understands the Contract Documents; (2) the Bid is made in compliance with the Contract Documents and is based upon the labor, materials, equipment, and systems required by the Contract Documents; (3) that Bidder understands that all labor, materials, equipment, and systems to be furnished for the Work shall be furnished for the prices bid; (4) that it has visited the Project site, familiarized itself with the local conditions under which the Work is to be performed; (5) that it is fully experienced, qualified and competent to perform the Work set forth in the Contract Documents; (6) that it shall not damage or endanger and shall preserve and protect

adjacent properties; (7) that it is properly equipped, organized, and financed to perform the Work; (8) that it is properly permitted and licensed by the California Contractors State Licensing Board to perform the Work; (9) that it has familiarized itself with all conditions bearing upon transportation, disposal, handling, and storage of materials; (10) that it has familiarized itself with the availability of labor, water, electric power, and roads; (11) that it has familiarized itself with uncertainties of weather, or similar physical conditions at the Project site; (12) that it has familiarized itself with the character of equipment and facilities needed preliminary to and during performance of the Work; (13) that it has familiarized itself with the staging and material storage constraints of the Project site and surrounding buildings and will confine its staging and storage operations to approved areas; and (14) that it will coordinate its construction activities with the other contractors performing work on the Project site, if any, including, but not limited to, any separate contractor retained by the City.

No information derived from an inspection of records or investigation will in any way relieve the Contractor from its obligations under the Contract Documents nor entitle the Contractor to any additional compensation. The Contractor shall not make any claim against the City based upon ignorance or misunderstanding of any condition of the Project site or of the requirements set forth in the Contract Documents. No claim for additional compensation will be allowed which is based on a lack of knowledge of the above items. Bidders assume all risks in connection with performance of the Work in accordance with the Contract Documents, regardless of actual conditions encountered, and waive and release the City with respect to any and all claims and liabilities in connection therewith, to the extent permitted by law.

The omission of any portion or item of Work from the Bid that is reasonably inferable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

DISQUALIFICATION OF BIDDERS. No Person shall be allowed to make, file or be interested in more than one Bid for the Project. A Person that has submitted a sub-bid to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from making a prime Bid. If there is a reason to believe that collusion exists among the Bidders, all affected Bids will be rejected.

RETURN OF BID SECURITY. The successful Bidder's Bid security shall be held until the Contract is executed. Bid security shall be returned to the unsuccessful Bidders within a reasonable time, which in any case shall not exceed 90 Days after the successful Bidder has signed the Contract.

AWARD OF CONTRACT. The City reserves the right to reject any or all Bids or any parts thereof or to waive any irregularities or informalities in any Bid or in the bidding. The Contract award, if made, will be to the lowest responsible, responsive Bidder and is anticipated to occur within 90 calendar Days after the Bid opening. The Contract award may be made after that period if the selected Bidder has not given the City written notice of the withdrawal of its Bid.

DETERMINATION OF LOWEST BIDDER IF ADDITIVE OR DEDUCTIVE ITEMS. In accordance with Public Contract Code Section 20103.8, the lowest Bid shall be determined by comparing the total Bid price of all Base Bid Items and Additive Alternate Bid Items, using the Engineer's estimate of quantities for the Work as set forth in the Bidder's Proposal. The amount of the contract award will be based on the available budget for the project. It may be only for the Base Bid or if the budget allows, include Additive Bid Items. In the event that any or all of the Alternate Bid Items are not awarded as part of the Contract, the City reserves the right to add any or all of the Alternate Bid Items by Change Order or Construction Change Directive at the prices set forth in the Bid.

TRENCHING. If the Project involves the construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet deep or more, then each Bidder must submit, as a Bid item, adequate sheeting, shoring, and bracing, or an equivalent method, for the protection of life or limb, which shall conform to applicable safety orders. This final submission must be accepted by the City in advance of excavation and must include a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from caving ground during the excavation Work. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

LISTING SUBCONTRACTORS. Each Bidder shall submit a list of the proposed Subcontractors on the Project, as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, *et seq.*).

WORK OF SUBCONTRACTORS. All Bidders are encouraged to disseminate all of the Specifications, Drawings, and other Contract Documents to all persons or entities submitting sub-bids to the Bidder.

INELIGIBLE SUBCONTRACTORS. The successful Bidder is prohibited from performing Work on the Project with any Subcontractor who is ineligible to perform work on a public works project pursuant to Sections 1777.1 or 1777.7 of the California Labor Code. By submitting a Bid, each Bidder certifies that it has investigated the eligibility of each and every listed Subcontractor and has determined that none is ineligible to perform Work pursuant to the Labor Code.

EXECUTION OF CONTRACT. The selected Bidder shall execute the Contract in the form included in these Contract Documents within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Additionally, the selected Bidder shall also secure all insurance and Bonds as herein specified, and provide copies to the City, within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Failure or refusal to execute the Contract or to conform to any of the stipulated requirements shall be just cause for the annulment of the award and forfeiture of the Bidder's security. In such event, the City may declare the Bidder's security forfeited to the extent permitted by law, and the City may award the Contract to the next lowest responsible Bidder or may reject all bids.

SIGNATURES. The Bidder shall execute all documents requiring signatures, and shall cause to be notarized all documents that indicate such a requirement. The Bidder shall provide evidence satisfactory to the City, such as an authenticated resolution of its board of directors or a power of attorney, indicating the capacity of the person(s) signing the Bid to bind the Bidder to the Bid and any Contract arising therefrom.

INSURANCE AND BONDS. The Contractor shall not begin Work until it has given the City evidence of all required insurance coverage (including all additional insured endorsements), a Bond guaranteeing the Contractor's faithful performance of the Contract, and a Bond securing the payment of claims for labor and materials. Where a Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO for review by the City.

TELEPHONES. Bidders are hereby notified that the City will not provide telephones for their use at the time of Bid submission.

INTERPRETATION OF CONTRACT DOCUMENTS. Any Bidder that is in doubt as to the intended meaning of any part of the Contract Documents, or that finds discrepancies in or omissions from the Contract Documents, may submit to the City Engineer a written request for an interpretation or correction not later than the date specified in the Notice Inviting Bids. Requests for clarification received after this date will be disregarded. Please indicate the Project and identification number in the request for clarification. Telephonic requests will not be taken. Any interpretation or correction of the Contract Documents will be made only by a written Addendum. No oral interpretation of any provision in the Contract Documents shall be binding.

TRADE NAMES OR EQUALS. Requests to substitute an equivalent item for a brand or trade name item must be made by written request submitted no later than ten calendar days after the award of contract. Requests received after this time shall not be considered. Requests shall clearly describe the product for which approval is requested, including all data necessary to demonstrate acceptability.

TAXES. Except as may be otherwise specifically provided herein, all sales and/or use taxes assessed by federal, State or local authorities on materials used or furnished by the Contractor in performing the Work shall be paid by the Contractor. The Bidder shall calculate payment for all sales, unemployment, pension and other taxes imposed by federal, State, and local law and shall include these payments in computing the Bid.

CHECKLIST FOR BIDDERS

The following information is required of all Bidders at the time of Bid submission:

- _____ Completed and Signed Bid Schedule, including cover sheet (page B-1)
- _____ Completed and Signed Contractor's Statement
- _____ Completed References Form
- _____ Completed Subcontractor Designation Form
- _____ Completed, Signed and Notarized Bid Bond or Other Security Form
- _____ Signed Noncollusion Declaration Form
- _____ Signed copies of all Addenda (if any)
- _____ Evidence satisfactory to the City indicating the capacity of the person(s) signing the Bid to bind the Bidder

Failure of the Bidder to provide all required information in a complete and accurate manner may cause the Bid to be considered non-responsive.

BID

CITY OF MANHATTAN BEACH

Marine Avenue Park Synthetic Field Turf Replacement Project

TO THE HONORABLE MAYOR AND CITY COUNCIL OF THE CITY OF MANHATTAN BEACH:

The undersigned, as Bidder, declares that: (1) this Bid is made without collusion with any other person and that the only persons or parties interested as principals are those named herein; (2) the undersigned has carefully examined the Contract Documents (including all Addenda) and the Project site; and (3) the undersigned has investigated and is satisfied as to the conditions to be encountered, the character, quality and quantities of Work to be performed, and the materials to be furnished. Furthermore, the undersigned agrees that submission of this Bid shall be conclusive evidence that such examination and investigation have been made and agrees, in the event the Contract be awarded to it, to execute the Contract with the City of Manhattan Beach to perform the Project in accordance with the Contract Documents in the time and manner therein prescribed, and to furnish or provide all materials, labor, tools, equipment, apparatus and other means necessary so to do, except as may otherwise be furnished or provided under the terms of the Contract Documents, for the following stated unit prices or lump-sum price as submitted on the Bid herein.

This Bid is made with the full knowledge of the kind, quantity, and quality of the materials and Work required and, if it is accepted by the City, the Bidder shall enter into a Contract and furnish the bonds, insurance, and other documents as required by the Contract Documents within ten calendar days after award of the Contract. The Bidder agrees that failure to execute and return the Contract or the required faithful performance bond, labor and materials payment bond, warranty bond, and insurance certificates to the City within the ten calendar day period shall be sufficient cause for the rescission of the award and forfeiture of the Bid Security to the City to the extent permitted by law.

Accompanying this Bid is cash, a cashier's check, a certified check or a Bid Bond in an amount equal to at least ten percent of the total aggregate Bid price based on the quantities shown and the unit prices quoted. The undersigned further agrees that, should it be awarded the Contract and thereafter fail or refuse to execute the Contract and provide the required evidence of insurance and Bonds within ten calendar days after delivery of the Contract to the undersigned, then the cash, check or Bid Bond shall be forfeited to the City to the extent permitted by law.

CITY OF MANHATTAN BEACH

BID SCHEDULE FOR

Marine Avenue Park Synthetic Field Turf Replacement Project

Bidder's Name: _____

Bidder's Address: _____

To the Honorable Mayor and Members of the City Council:

In compliance with the Notice Inviting Bids, the undersigned hereby agrees to execute the Contract to furnish all labor, materials, equipment and supplies for the Project in accordance with the Contract Documents to the satisfaction and under the direction of the City Engineer, at the following prices:

Base Bid Items as Follows:

BASE BID SCHEDULE:

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
1		Mobilization	LS	1	\$	\$
2		Remove and Dispose of Existing Synthetic Turf	SF	75,000	\$	\$
3		Inspect and repair shockpad and edge anchor nailer board (where occurs)	LS	1	\$	\$
4		Furnish and Install New Synthetic Turf, including edge anchor nailing	SF	75,000	\$	\$
5		Custom Logo, Linework and markings	LS	1	\$	\$
6		Construct Standard Infill	LS	1	\$	\$
7		Install New Landscape Turf (at Bleachers)	SF	2,000	\$	\$
8		Site Security	LS	1		
		TOTAL BASE BID SCHEDULE:				\$

NOTES:

- 1) In the CODE column (S) denotes a specialty item, (%) denotes progress payments for that lump sum item will be allowed based on the percentage of completion in each pay period, and (C) denotes payments will be made after the completion of the lump sum item. See Subsection 9-2.1 of the General Provisions for details.
- 2) In the UNIT column (LS) denotes a lump sum item. See Section 9 of the General Provisions for details.
- 3) Estimated quantities are for the purpose of Bid comparison only; payments will be made on the basis of actual measurement of Work completed, except for lump sum (LS) items. For lump sum items, see Note 1. The Bid Price shall include, but not limited to, sales tax and all other applicable taxes and fees.
- 4) Items may be adjusted or deleted. Therefore, regardless of total actual volume (percentage) compared to estimated quantities, the unit prices provided above by the Bidder shall be applied to the final quantity when payment is calculated for these items. No adjustment in the unit prices will be allowed. The City reserves the right to not use any of the estimated quantities; and if this right is exercised, the Contractor will not be entitled to any additional compensation. Cost of all export of material shall be included in the above unit costs; no additional compensation will be granted for such expenses.

Total Bid Price = Base Bid Schedule Amount

SIGNATURE PAGE TO FOLLOW

TOTAL BID PRICE IN DIGITS: \$ _____

TOTAL BID PRICE IN WORDS: _____

The undersigned certifies to have a minimum of three consecutive years of current experience in the type of Work related to the Project and that this experience is in actual operation of the firm with permanent employees performing a part of the Work as distinct from a firm operating entirely by subcontracting all phases of the Work. The undersigned also certifies to be properly licensed by the State as a contractor to perform this type of Work. The undersigned possesses California Contractor's License

Number _____, Class _____, which expires on _____.

Signature: _____ Title: _____ Date: _____

Signature: _____ Title: _____ Date: _____

BIDDER'S PROPOSAL – CONTRACTOR'S STATEMENT

Marine Avenue Park Synthetic Field Turf Replacement Project

Fill out all of the following information. Attach additional sheets if necessary.

- (1) Bidder's Name: _____
- (2) If the Bidder's name is a fictitious name, who or what is the full name of the registered owner? If the Bidder's name is not a fictitious name, write "N/A" in the response to this question. If you are doing business under a fictitious name, provide a copy of the filed valid Fictitious Business Name Statement.

- (3) Business Address: _____
- (4) Telephone: _____ Email: _____
- (5) Type of Firm – Individual, Partnership, LLC or Corporation: _____
- (6) Corporation organized under the laws of the State of: _____
- (7) California State Contractor's License Number and Class: _____
Original Date Issued: _____ Expiration Date: _____
- (8) DIR Contractor Registration Number: _____
- (9) List the name and title of the person(s) who inspected the Project site for your firm:

- (10) Number of years' experience the company has as a contractor in construction work: _____
- (11) List the names, titles, addresses and telephone numbers of all individuals, firm members, partners, joint ventures, and company or corporate officers having a principal interest in this Bid:

- (12) List all current and prior D.B.A.'s, aliases, and fictitious business names for any principal having interest in this Bid:

(13) List the dates of any voluntary or involuntary bankruptcy judgments against any principal having an interest in this Bid:

(14) For all arbitrations, lawsuits, settlements and the like (in or out of court) that the company or any principal having an interest in this Bid has been involved with in the past five years:

a. List the names, addresses and telephone numbers of contact persons for the parties:

b. Briefly summarize the parties' claims and defenses:

c. State the tribunal (e.g., Superior Court, American Arbitration Association, etc.), the matter number, and the outcome:

(15) Has the company or any principal having an interest in this Bid ever had a contract terminated by the owner or agency? If yes, explain.

(16) Has the company or any principal having an interest in this Bid ever failed to complete a project? If yes, explain.

(17) Has the company or any principal having an interest in this Bid ever been terminated for cause, even if it was converted to a "termination of convenience"? If yes, explain.

(18) For projects that the company or any principal having an interest in this Bid has been involved with in the last five years, did you have any claims or actions:

- a. By you against the owner? Circle one: Yes No
- b. By the owner against you? Circle one: Yes No
- c. By any outside agency or individual for labor compliance?
Circle one: Yes No
- d. By Subcontractors? Circle one: Yes No
- e. Are any of these claims or actions unresolved or outstanding?
Circle one: Yes No

If your answer is "yes" to any part or parts of this question, explain.

(19) Has the company or any of its principals ever been debarred by any agencies? Is yes, please explain.

(20) For all public agency projects in excess of \$15,000.00 that you are currently working on or have worked on in the past two years, provide the following information:

Project 1 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 2 Name/Number _____

Project Description _____

Approximate Construction Date From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?
Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 3 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?
Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 4 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$ _____ Final Contract Amount: \$ _____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 5 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$ _____ Final Contract Amount: \$ _____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 6 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$ _____ Final Contract Amount: \$ _____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

[Continue to Next Page]

Upon request of the City, the Bidder shall furnish evidence showing a notarized financial statement, financial data, construction experience, or other additional information.

Failure to provide truthful answers to the questions above or in the following References Form may result in the Bid being deemed non-responsive.

Urban Runoff Certification. The Bidder certifies to the City that he/she has trained his/her employees and Subcontractors, if any, for Urban Runoff management and has included sufficient sums in the Bid Price to cover such costs of training as stipulated in the most current Regional Water Quality Control Board requirements, including the Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System (NPDES) Permit. The Contractor is responsible for all clean up and payment of all fines levied as a result of any illegal discharge (as defined in NPDES permit) occurring as a result of the Contractor's Work and/or operations.

I, the undersigned, certify and declare that I have read all the foregoing answers to the Bidder's Proposal – Contractor's Statement and know their contents. The matters stated in the Bidder's Proposal – Contractor's Statement answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is correct.

Company

Signature: _____

Name: _____

Title: _____

Date: _____

Signature: _____

Name: _____

Title: _____

Date: _____

**DESIGNATION OF SUBCONTRACTORS
[Public Contract Code Section 4104]**

Marine Avenue Park Synthetic Field Turf Replacement Project

List all Subcontractors who will perform Work or labor or render service to the Contractor in or about the construction of the Work or improvement, or a Subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the Plans and Specifications, in an amount in excess of one-half of one percent of the Contractor's total Bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent of the Contractor's total Bid or \$10,000.00, whichever is greater. If all Subcontractors do not fit on this page, attach another page listing all information for all other Subcontractors.

Name under which Subcontractor is Licensed and Registered	CSLB License Number(s) and Class(es)	DIR Contractor Registration Number	Address and Phone Number	Type of Work (e.g., Electrical)	Percentage of Total Bid (e.g., 10%)*

*The percentage of the total Bid shall represent the "portion of the work" for the purposes of Public Contract Code Section 4104(b).

BID BOND

Marine Avenue Park Synthetic Field Turf Replacement Project

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), has issued an invitation for Bids for the Work described as follows: _____

WHEREAS _____
(Name and address of Bidder)

("Principal"), desires to submit a Bid to City for the Work.

WHEREAS, Bidders are required to furnish a form of Bidder's security with their Bids.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety"), a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$ _____), being not less than ten percent of the total Bid price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal is awarded the Contract for the Work by the City and, within the time and in the manner required by the bidding specifications, enters into the written form of Contract included with the bidding specifications, furnishes the required Bonds (one to guarantee faithful performance and the other to guarantee payment for labor and materials), and furnishes the required insurance coverage, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

In case suit is brought upon this instrument, Surety further agrees to pay all court costs incurred by the City in the suit and reasonable attorneys' fees in an amount fixed by the court. Surety hereby waives the provisions of Civil Code Section 2845.

IN WITNESS WHEREOF, this instrument has been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

Name: _____

Address: _____

Telephone No.: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

“Surety”

Company Name: _____

Address: _____

Telephone No.: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

NOTE: *This Bond must be dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached.*

**NONCOLLUSION DECLARATION FORM
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
[Public Contract Code Section 7106]**

Marine Avenue Park Synthetic Field Turf Replacement Project

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, to effectuate a collusive or sham Bid, and has not paid, and will not pay, any Person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Date: _____

Date: _____

ADDENDA ACKNOWLEDGMENT FORM

Marine Avenue Park Synthetic Field Turf Replacement Project

Bidder's Name: _____

The Bidder shall signify receipt of all Addenda here, if any:

Addendum Number	Date Received	Signature

If there are more Addenda than there is room in the chart above, attach another page acknowledging receipt of the Addenda.

CONTRACT

CITY OF MANHATTAN BEACH CONTRACT FOR Marine Avenue Park Synthetic Field Turf Replacement Project

THIS CONTRACT ("Contract") is made and entered this _____ day of _____, 20____ ("Effective Date"), by and between the CITY OF MANHATTAN BEACH, a California municipal corporation ("City") and _____, a _____ [Legal Form of Entity and state of formation, e.g., California corporation, limited partnership, limited liability company] ("Contractor"). The Contractor's California State Contractor's license number is _____.

In consideration of the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. Contract Documents. The Contract Documents consist of this Contract, the Notice Inviting Bids, Instructions to Bidders, Bid (including documentation accompanying the Bid and any post-Bid documentation submitted before the Notice of Award), the Bonds, permits from regulatory agencies with jurisdiction, General Provisions, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Addenda, Change Orders, and Supplemental Agreements. The Contract Documents are attached hereto and incorporated herein by reference.

2. Scope of Services. The Contractor shall perform and provide all materials, tools, equipment, labor, and services necessary to complete the Work in a good and workmanlike manner for the project identified as Marine Avenue Park Synthetic Field Turf Replacement ("Project"), as described in the Contract Documents

3. Compensation.

3.1 Contract Price and Basis for Payment. In consideration for the Contractor's full, complete, and timely performance of the Work required by the Contract Documents, the City shall pay the Contractor for the actual quantity of Work required under the Bid Items awarded by the City performed in accordance with the lump sum prices and unit prices for Bid Items, set forth in the Bidder's Proposal submitted with the Bid. The sum of the unit prices and lump sum prices for the Bid Items, awarded by the City is \$_____ ("Contract Price"). It is understood and agreed that the quantities set forth in the Bidder's Proposal for which unit prices are fixed are estimates only and that the City will pay and the Contractor will accept, as full payment for these items of work, the unit prices set forth in the Bidder's Proposal multiplied by the actual number of units performed, constructed, or completed as directed by the Engineer.

3.2 Payment Procedures. Based upon applications for payment submitted by the Contractor to the City, the City shall make payments to the Contractor in accordance with Section 7 of the Standard Specifications, as modified by Section 7 of the General Provisions.

4. Contract Time.

4.1 Initial Notice to Proceed. The City shall issue the "Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials." The date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials constitutes the date of commencement of the Contract Time of 20 Working Days. The Contract Time includes the time necessary to fulfill preconstruction requirements, place the order for materials, and to complete construction of the Project (except as adjusted by subsequent Change Orders).

The Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials shall further specify that the Contractor must complete the preconstruction requirements and order materials within 10 Working Days after the date of commencement of the Contract Time; this duration is part of the Contract Time.

Preconstruction requirements include, but are not limited to, the following:

- Submitting and obtaining approval of Baseline Schedule
- Submitting and obtaining approval of Traffic Control Plans
- Submitting and obtaining approval of the Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Plan (WPCP)
- Submitting and obtaining approval of critical required submittals
- Installation of the approved Project Identification Signs
- Obtaining approved Permits from all applicable agencies
- Obtaining a Temporary Use Permit for a construction yard, if applicable
- Notifying all agencies, utilities, residents, etc., as outlined in the Contract Documents
- Submitting and obtaining approval of a Project Staffing List with contact information and a Project Emergency Contact List.

4.2 Notice to Pothole Pole Foundation Locations. (NOT USED) - The City shall issue a "Notice to Pothole Pole Foundation Locations," at which time the Contractor shall pothole all pole foundation locations within five working days after the date of the "Notice to Pothole Pole Foundation Locations." All potholes shall be the maximum width and full depth of the proposed foundation. The Contractor shall notify the City of the results in writing within five working days.

4.3 Notice to Proceed with Order of Poles. (NOT USED) - After all pole foundation locations are potholed and determined to be suitable, the City shall issue a "Notice to Proceed with Order of Poles," at which time the Contractor shall place the order for the poles within five working days of the date of the "Notice to Proceed with Order of Poles." The Contractor shall submit to the City proof of the order and the manufacturer's tentative delivery schedule on the manufacturer's letterhead within five working days of the date of placing the order.

4.4 Notice to Proceed with Construction. After all preconstruction requirements are met and materials have been ordered in accordance with the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials, the City shall issue the "Notice to Proceed with Construction," at which time the Contractor shall diligently prosecute the Work, including corrective items of Work, day to day thereafter, within the remaining Contract Time.

5. Liquidated Damages for Delay and Control of Work.

5.1 Liquidated Damages. The Contractor and the City have agreed to liquidate damages pursuant to Section 6-9 of the General Provisions.

6. Early Completion.

6.1 Bonus for Early Completion. (Not in Contract)

6.2 City Not Liable for Contractor Failure to Achieve Early Completion. While the Contractor may schedule completion of all of the Work, or portions thereof, earlier than the Contract Time, the City is exempt from liability for and the Contractor will not be entitled to an adjustment of the Contract Sum or to any additional costs, damages, including, but not limited to, claims for extended general conditions costs, home office overhead, jobsite overhead, and management or administrative costs, or compensation whatsoever, for use of float time or for the Contractor's inability to complete the Work earlier than the Contract Time for any reason whatsoever.

7. Work after Stop Work Notice. Any work completed by the Contractor after the issuance of a Stop Work Notice by the City shall be rejected and/or removed and replaced as specified in the applicable Section of the Special Provisions.

8. Antitrust Claims. In entering into this Contract, the Contractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. § 15) or under the Cartwright Act (Business and Professions Code Section 16700 *et seq.*) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor without further acknowledgment by the parties.

9. Prevailing Wages. The City and the Contractor acknowledge that the Project is a public work to which prevailing wages apply.

10. Workers' Compensation. Labor Code Sections 1860 and 3700 provide that every contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of Labor Code Section 1861, by signing this Contract, the Contractor certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract."

11. Titles. The titles used in this Contract are for convenience only and shall in no way define, limit or describe the scope or intent of this Contract or any part of it.

12. Authority. Any person executing this Contract on behalf of the Contractor warrants and represents that he or she has the authority to execute this Contract on behalf of the Contractor and has the authority to bind the Contractor to the performance of its obligations hereunder.

13. Entire Agreement. This Contract, including the Contract Documents and any other documents incorporated herein by specific reference, represents the entire and integrated

Contract between the City and the Contractor. This Contract supersedes all prior oral or written negotiations, representations or agreements. This Contract may not be modified or amended, nor any provision or breach waived, except in a writing signed by both parties that expressly refers to this Contract.

14. Counterparts. This Contract may be executed in counterpart originals, duplicate originals, or both, each of which is deemed to be an original for all purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

CITY:

City of Manhattan Beach,
a California municipal corporation

By: _____
Name: Bruce Moe
Title: City Manager

ATTEST:

By: _____
Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

By: _____
Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO FISCAL IMPACT:

By: _____
Name: Steve S. Charelian
Title: Finance Director

APPROVED AS TO CONTENT:

By: _____
Name: Erick Lee
Title: Public Works Director

CONTRACTOR:

[Contractor's Legal Name]

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

**PROOF OF AUTHORITY TO BIND
CONTRACTING PARTY REQUIRED**

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or the Specifications accompanying the same shall in any manner affect its obligations on this Bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____

Signature: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

Civil Code Sections 2845 and 2849. The City is the principal beneficiary of this Bond and has all rights of a party hereto.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

Signature: _____
Print Name: _____
Title: _____
Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

CHECKLIST FOR EXECUTION OF CONTRACT

TO BE SUBMITTED BY SUCCESSFUL BIDDER:

- _____ Two executed copies of the Contract
- _____ Completed, signed and notarized Payment Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Performance Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Warranty Bond (original) in the amount of 10% of the Contract
- _____ Workers' Compensation Certificate with attached Certificate of Insurance
- _____ General Liability insurance certificate naming the City as a co-insured
- _____ Automobile insurance naming the City as a co-insured
- _____ Umbrella/Excess Liability (General aggregate) insurance certificate naming the City as a co-insured, if applicable
- _____ Additional insured endorsement – comprehensive general liability
- _____ Additional insured endorsement – automobile liability
- _____ Additional insured endorsement – excess liability
- _____ Primary and Non-Contributory Endorsement- General Liability Policy
- _____ Waiver of Subrogation - general liability
- _____ Waiver of Subrogation - Worker's Compensation

ALL SUBMITTALS WILL BE RETAINED BY CITY, EXCEPT FOR ONE COPY OF THE FULLY EXECUTED CONTRACT

PART 1 - GENERAL PROVISIONS

SECTION 0. GENERAL PROVISIONS DEFINED

0-1 STANDARD SPECIFICATIONS

The 2021 edition of "Standard Specifications for Public Works Construction", as amended by the Contract Documents, is incorporated into the Contract Documents by this reference. The Work described herein shall be done in accordance with the provisions of the Standard Specifications, as amended by the Contract Documents.

0-2 NUMBERING OF SECTIONS

The number of sections and subsections in these General Provisions are compatible with the numbering in the Standard Specifications. Subsections of architectural and/or other work may be numbered according to the Construction Specifications Institute (CSI) format.

0-3 SUPPLEMENTATION OF STANDARD SPECIFICATIONS

The Sections that follow supplement, but do not replace, the corresponding provisions in Party 1 (General Provisions) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these General Provisions, these General Provisions shall control.

SECTION 1. GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

The provisions below shall supplement, but not replace, those provisions in Section 1 of the Standard Specifications.

1-2 TERMS AND DEFINITIONS

Whenever in the Standard Specifications or in the Contract Documents the following terms are used, they shall be understood to mean the following:

Agency – The City of Manhattan Beach.

Applicable Law – All State, federal, and local laws, statutes, ordinances, codes, rules, and regulations governing the Work.

Bid Item – An item of Work listed on the Bid Schedule.

Board – The City Council of the City of Manhattan Beach.

City – The City of Manhattan Beach

City Council – The City Council of the City of Manhattan Beach

Contract Documents – As defined in Section 1 of the Contract.

Contract Time – The number of Working Days stated in the Contract for the completion of the Work.

County – County of Los Angeles, California

Detour – A temporary route for traffic (vehicular or pedestrian) around a closed portion of a road or travel way.

Engineer – The City Engineer, acting either directly or through properly authorized agents. Such agents shall act within the scope of the particular duties entrusted to them.

Estimated Quantities – The quantities of Work anticipated to be performed, as set forth in the Bid Schedule, designated as units or a lump sum.

Excavation – Any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way (Cal. Gov. Code § 4216).

Final Acceptance- Acceptance of the Work by the City Council and direction to staff to cause recordation of the Notice of Completion, pursuant to Section 3-13.1 these General Provisions.

Inspector – An authorized representative of the City, assigned by the City to make inspections of Work performed by or materials supplied by the Contractor.

Major Item of Work – A bid item amount that is at least 10% of the total contract award amount.

Minor Item of Work – A bid item amount that is less than 10% of the total contract award amount.

Notice of Completion – The notice authorized by Civil Code Section 9204.

Notice to Proceed or Notice to Proceed with Construction – A written notice issued by the City to the Contractor that authorizes the Contractor to perform the Work.

Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials – A written notice issued by the City to the Contractor that authorizes the Contractor to proceed with preconstruction requirements and the acquisition or purchase of materials that are to be incorporated into the Work and establishes the date of commencement of the Contract Time.

Project – See Work.

Punch List – A list of items of Work to be completed or corrected by the Contractor in order to complete the Work as specified in the Contract Documents.

Shop Drawings – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier, or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

State – The State of California.

Submittal – Any drawing, calculation, specification, product data, samples, manuals, requests for substitutes, spare parts, photographs, survey data, traffic control plans, record drawings, bonds or similar items required to be submitted to the City under the terms of the Contract.

Traffic Engineer – The representative of the Engineer who is assigned traffic-related matters.

Work – The construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, services provided or to be provided by the Contractor to fulfill the Contractor's obligations.

Working Day - Any calendar day except Saturdays, Sundays, and the following holidays:

- New Year's Day January 1
- Martin Luther King, Jr. Day 3rd Monday in January
- Presidents' Day 3rd Monday in February
- Memorial Day Last Monday in May
- Independence Day July 4
- Labor Day 1st Monday in September
- Columbus Day..... 2nd Monday in October
- Veterans' Day..... November 11
- Thanksgiving 4th Thursday in November
- Friday after Thanksgiving 4th Friday in November
- Christmas Day..... December 25

If a holiday falls upon a Sunday, the following Monday shall be the day the holiday is observed, and if a holiday falls upon a Saturday, the preceding Friday shall be the day the holiday is observed.

Work Directive – A unilateral written order issued by the City directing the Contractor to continue performance of the Work or a disputed item of Work pending resolution of a claim or dispute concerning the scope of Work.

1-3 *ABBREVIATIONS*

1-3.3 Institutions

The institutions listed in Section 1-3.3 of the Standard Specifications shall be supplemented by the list below:

<u>Abbreviation</u>	<u>Word or Words</u>
AAN	American Association of Nurserymen
AGCA	Associated General Contractors of America
APWA	American Public Works Association
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute
NEC	National Electric Code
NFPA	National Fire Protection Association
SSS.....	State of California Standard Specifications, Latest edition, Department of Transportation
SSP.....	State of California Standard Plans, Latest edition, Department of Transportation

1-7 AWARD AND EXECUTION OF THE CONTRACT

1-7.2. Contract Bonds. The following paragraphs shall be added following the seventh paragraph:

The Faithful Performance Bond shall remain in force until the date of recordation of the Notice of Completion. The Labor and Materials Bond shall remain in force until expiration of the time within which the California Labor Commissioner may serve a civil wage and penalty assessment against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1741, and until the expiration of the time within which a joint labor management committee may commence an action against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1771.2.

The warranty or maintenance Bond shall be valid for one year from the date of recordation of Notice of Completion by the County Recorder, in the amount of ten percent of the Contract Price. Other than the details listed herein, the warranty or maintenance Bond shall adhere to the requirements for Bonds in Section 1-7.2 of the Standard Specifications. Nothing herein shall abridge or amend Section 3-13.3 of the Standard Specifications or the related provisions in these Contract Documents.

All Bonds must be submitted using the required forms, which are in the Contract Documents, or on any other form approved by the City Attorney.

SECTION 2. SCOPE OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 2 of the Standard Specifications, unless specifically noted below.

2-1 WORK TO BE DONE

The following paragraphs shall be added at the end of Subsection 2-1:

All work which is defective in its construction or deficient in any of the requirements of the Plans and Specifications shall be remedied or removed and replaced by the Contractor in an acceptable manner at his own expense. No compensation will be allowed for any work done beyond the lines and grades shown on the Plans or established by the Engineer. Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer and the City may cause the defective work to be remedied or removed and replaced at the expense of the Contractor.

Any unauthorized or defective work, defective material or workmanship or any unfaithful or imperfect work that may be discovered before Final Acceptance of work by the Board shall be corrected immediately with no extra charge even though it may have been overlooked in previous inspections and estimates or may have been caused due to failure to inspect the work.

2-2 PERMITS

Before starting any construction work, the Contractor will be required to obtain all necessary permits from the City, which may include obtaining an encroachment permit for Work within the public right-of-way, as well as all other permits required from all other agencies. Should this Project require construction of trenches or excavations which are five feet or deeper and into which a person is required to descend, the Contractor shall obtain a Cal/OSHA permit and furnish the City with a copy before Work can commence on this Project. The Contractor shall bear all cost for fees for all agencies except for the City's permit fees.

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. All City of Manhattan Beach permits required for the performance of the Contract shall be issued on a "no fee" basis.

2-4 COOPERATION AND COLLATERAL WORK

The Contractor shall be responsible for coordinating all Work with the City's street sweeping, trash pick-up, and street maintenance contractors, emergency services departments, utility companies' crews, and others when necessary. Payment for conforming to these requirements shall be included in other items of Work, and no additional payment shall be made thereof.

2-5 THE CONTRACTOR'S EQUIPMENT AND FACILITIES

The use of excessively loud equipment and warning signals shall be avoided, except in those cases required for the protection of personnel.

2-5.4 Haul Routes

Subsection 2-5.4 of the Standard Specifications shall be deleted and replaced as follows:

The Contractor must obtain the Engineer's approval before using any haul routes. Further detail requirements for haul traffic are delineated in the Special Provisions.

2-6 CHANGES REQUESTED BY THE CONTRACTOR

Add the following paragraph:

2-6.1 General

If the Contractor alleges that instructions issued after the date of the Contract will result in increases to the Contract Price or Contract Time, if latent or unforeseen conditions require modification of the Contract Documents, or the Contractor otherwise becomes aware of the need for or desirability of a change in the Work, a Change Order Proposal ("COP") may be submitted to the City in writing, using the forms provided herein in Subsection 2-7.1.1 of the General Provisions, and must specify the reasons for such change, including relevant circumstances and impacts on the construction schedule. The Contractor may request additional compensation and/or time through a COP but not for instances that occurred more than ten calendar days prior to the COP. The Contractor's failure to initiate a COP within such period shall be deemed a waiver of the right to adjustment of the Contract Price or the Contract Time for the alleged change, unless such waiver is prohibited under state law. Any COP that is approved by the City will be incorporated in a Change Order or Construction Change Directive. If the City determines that the Work in question is not a change, the City shall issue a Work Directive, ordering the Contractor to proceed with the Work without delay. If the COP is denied but the Contractor believes that it does have merit, the Contractor may submit a claim to the City.

2-7 CHANGES INITIATED BY THE AGENCY

The City reserves the right, without notice to the Surety, to increase or decrease the quantity of any item or portion of the Work described in the Contract Documents or to alter or omit portions of the Work so described, as may be deemed necessary or expedient by the Engineer, without in any way making the Contract void. Such increases, alterations or decreases of Work shall be considered and treated as though originally contracted for, and shall be subject to all the terms, conditions and provisions of the original Contract. The Contractor shall not claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease, alteration or omission of any kind of Work to be done.

2-7.1 General

Add the following paragraphs at the end of Subsection 2-7.1:

The City reserves the right to make changes in the Work, including the elimination of any Bid Item, after execution of the Contract and without invalidating the Contract by:

A. Change Order approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy); or

B. Construction Change Directive approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy);

A change that causes the total value of all changes to exceed the Contract contingency amount established at the time of award of the Contract must be approved by the City Council. No payments in excess of the original Contract Price will be made until a Change Order is approved in the normal course of business. The City may, at any time, without notice to the Contractor's surety(ies), order changes in the Work within the general scope of the Contract. Such changes in the Work shall not relieve or release the surety(ies) of its (their) obligations under the Performance and Payment Bonds issued for the Project. Changes in the Work made pursuant to this Article 3 shall in no way release any guarantee or warranty provided by the Contractor.

The City may issue a Change Order Proposal Request ("COPR"), in writing, to the Contractor, describing a proposed change to the Work and requesting that the Contractor submit an itemized Change Order Proposal ("COP") to the City. The Contractor shall submit the COP to the City Engineer, using the forms provided herein in Subsection 2-11.2 of these General Provisions, within ten calendar days after the City's issuance of the COPR. If the Contractor fails to submit a COP within such period of time, it shall be presumed that the change described in the City's COPR will not result in an increase to the Contract Price or Contract Time and the change shall be performed by the Contractor without such increases. A COPR does not authorize the Contractor to commence performance of the changed work. The Contractor shall not perform any change until receipt of the City's written approval. If the City approves the Contractor's COP, the City shall issue a Change Order.

Whenever a change is pending, the Contractor shall notify the City if it is necessary to halt other Work in the area of the change that would be affected thereby, until such time as the change is authorized.

Any change to the Contract Price shall be in a sum mutually agreed to by the Contractor and the City. When the cost for Extra Work cannot be agreed upon, the City will pay for Extra Work based on the accumulation of costs as provided for in Subsection 7-4, "Payment for Extra Work," of the Standard Specifications and the General Provisions.

2-7.1.1 Change Order

A Change Order is a written instrument prepared by the City and signed by the City and the Contractor, stating their agreement upon all of the following:

- A. The scope of the change in the Work;
- B. The amount of the adjustment, if any, in the Contract Price; and
- C. The extent of the adjustment, if any, in the Contract Time.

2-7.1.1.1 Accord and Satisfaction

The Contractor's agreement on any Change Order shall be a full compromise and settlement of all adjustments to the Contract Time and Contract Price, and compensation for any and all delay,

extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences, and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of the Impacts on the overall Work under the Contract arising directly or indirectly from the performance of Work described in the Change Order. By execution of any Change Order, the Contractor agrees that the Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of whatsoever nature, character or kind arising out of or incidental to the Change Order. No action, conduct, omission, product failure, or course of dealing by the City shall act to waive, modify, change, or alter the requirement that Change Orders must be in writing, signed by the City and the Contractor, and that such written Change Orders are the exclusive method for effectuating any change to the Contract Sum and/or Contract Time.

2-7.1.2 Construction Change Directive

A Construction Change Directive is a written order prepared and signed by the City, directing a change in the Work prior to the Contractor's agreement on adjustment, if any, in the Contract Price or Contract Time, or both. The City may, by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Price and Contract Time being adjusted accordingly. Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved. A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The City's form of Construction Change directive is provided in Subsection 2-11 of the General Provisions.

2-8 *EXTRA WORK*

Subsection 2-8 of the Standard Specifications shall be deleted and replaced as follows:

New and unforeseen work will be classified as Extra Work only when the Work is not covered and cannot be paid for under any of the various items or combination of items for which a Bid price appears on the Bid. The Contractor shall not do any Extra Work except upon written order from the Engineer.

All Extra Work shall conform to the Plans and Specifications.

The Contractor shall furnish to the Engineer each Subcontractor's signed and detailed estimate of the cost for labor, materials, and equipment, including the markup by such Subcontractor for overhead and profit for Work added or deducted to a Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the sub-Subcontractor's signed detailed estimate of the cost for labor, materials, and equipment, including the markup by such sub-Subcontractor for overhead and profit for Work added or deducted to a sub-Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the vendor or supplier's signed detailed estimate or quotation of the cost to the Contractor for Work added or deducted from a vendor or suppliers scope of Work.

2-10 *DISPUTED WORK*

Delete Subsection 2-10 in its entirety and substitute the following:

In the event of disputed Work, the City shall have the right to unilaterally issue a written Work Directive; and the Contractor shall continue performance pending resolution of the dispute and shall maintain cost data described in Subsection 2-8 of the Standard Specifications and the General Provisions. The City's form of Work Directive is provided in Subsection 2-11 of the General Provisions. Payment shall be made for such disputed Work as is later determined by negotiation between the parties or as is fixed by a court of law.

2-11 *FORMS*

Add Section 2-11 to incorporate the following forms, which appear in the succeeding pages.

2-11.1 Change Order Form

2-11.2 Change Order Proposal Forms

- (a) Change Order Proposal Summary Report
- (b) Labor Cost Report
- (c) Labor Rates Report
- (d) Material Cost Report
- (e) Equipment Cost Report
- (f) Special Forces/Services Cost Report

2-11.3 Construction Change Directive Form

2-11.4 Work Directive Form



**CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
Engineering Division**

CONTRACT CHANGE ORDER NO. 1 (Final)

PROJECT NO.: D-946

DESCRIPTION: Marine Avenue Park Synthetic Field Turf Replacement Project

TO: Construction Company, Inc.

You are hereby instructed to comply with the following changes from the Contract Plans and Specifications:

SUMMARY OF CHANGES		
Description (Detailed Explanation Attached)	Change in Contract Price¹	Change in Work Days
1.	\$0.00	
2. Adjustment in Final Bid Quantities	\$0.00	
Net Change in Contract Price and Work Days	\$0.00	

¹Deduction or decrease in Contract Price is denoted in parentheses.

The following change is hereby made a part of the Contract Documents and shall be performed under the same terms and conditions as required by the original Contract Documents. Except as modified herein, the original Contract Documents and all prior amendments shall remain in full force and effect and all of the terms of the Contract Documents are hereby incorporated in this Change Order.

SUMMARY OF ALL CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT\$000,000.00
CCO1 (FINAL).....\$0.00
TOTAL\$000,000.00

SUMMARY OF WORKING DAYS

FIRST DAY OF WORK:..... Date
CONTRACT WORKING DAYS..... X
TIME EXTENSION: CCO 1 (Final) Y
NEW TOTAL WORKING DAYS:.....X+Y
LAST DAY OF WORK..... New Date



CHANGE ORDER DETAIL

Change Order No.: 1 (Final)

Project No.: D-946

Description: Marine Avenue Park Synthetic Field Turf Replacement Project

The changes or interpretations described and noted herein are hereby authorized. The signed original of this order is on file in the Department of Public Works. Shown as separate paragraphs: (A) Reason for Change; (B) Description of Change; (C) Change in Contract Costs; and (D) Change in Completion Date.

Item No. 1:

A. Reason for Change:
Due to conditions encountered during construction, modifications to the amount of Work were determined to be appropriate, and the changes were addressed by means of adjusting applicable contract quantities, as outlined below.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST ¹
New Item				0	0	0	0.00

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
Add Y Working Days

Item No. 2:

A. Reason for Change:



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST ¹
New Item				0	0	0	0.00

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
No Change.

SIGNATURE PAGE TO FOLLOW:



The original Contract Price was (\$0.00). Contract Change Order No. 1 (Final) increased the Contract Price by (\$0.00). The new Contract Price will be \$00/100, resulting in an increase of approximately 0.00% to the original Contract.

The original Contract Time of X Working Days was extended by Y Working Days per Change Order No. 1 (Final). The last contract Working Day is new Date.

Ordered: _____
Public Works Director

Date: _____

Concurred by: _____
City Engineer

Date: _____

Concurred by: _____
Project Manager

Date: _____

Acceptance by the Contractor:

This Change Order is in full compromise and settlement of all adjustments to Contract Time and Contract Price, and compensation for any and all delay, extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of these Impacts on the overall Work under the Contract arising directly or indirectly from the performance of Work described in this Change Order. By execution of this Change Order, the Contractor agrees that this Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of any nature, character or kind arising out of or incidental to this Change Order.

Name: _____

Date: _____

Title: _____



CHANGE ORDER PROPOSAL FORM

2-11.2(a) CONTRACT CHANGE ORDER PROPOSAL SUMMARY REPORT

Date _____

CCO Proposal No. _____ Contractor _____

Item No. _____ Location _____

General Contractor	AMOUNT
1. Labor Cost.....	\$ _____
2. Material Cost.....	\$ _____
3. Equipment Cost.....	\$ _____
4. Special Forces/Services.....	\$ _____
Subtotal Contractor Cost•	\$ _____
5. Subcontractor/Sub-Subcontractor Name _____	
Labor Cost.....	\$ _____
Material Cost.....	\$ _____
Equipment Cost.....	\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost	
6. Subcontractor/Sub-Subcontractor Name _____	
Labor Cost.....	\$ _____
Material Cost.....	\$ _____
Equipment Cost.....	\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost.....	\$ _____
TOTAL CONTRACT CHANGE ORDER COSTS	\$ _____



CHANGE ORDER PROPOSAL FORM

2-11.2(b) LABOR COST REPORT Date

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

CLASSIFICATION AND NAME	HOURS	HOURLY RATE	EXTENDED AMOUNTS
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
TOTAL LABOR			\$

Overhead/profit 20%.....\$ _____

Total labor/overhead/profit.....\$ _____

Subcontractor's mark-up of total Sub-Subcontractor labor/overhead/profit (if applicable) 5%.....\$ _____

General contractor's mark-up of total Subcontractor or Sub-Subcontractor labor/overhead/profit (if applicable) 5%\$ _____

Total.....\$ _____



CHANGE ORDER PROPOSAL FORM

2-11.2(c) LABOR RATES REPORT Date

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

CLASSIFICATION:		
TAXABLE BASE:		AMOUNT
Base Hourly Pay		\$
Vacation		\$
TOTAL TAXABLE BASE		\$
TAXES & INSURANCE	PERCENT	AMOUNT
Social Security Tax		\$
State Unemployment Tax		\$
Federal Unemployment Tax		\$
Workmen's Compensation		\$
Liability & Umbrella Insurance		\$
TOTAL TAXES & INSURANCE		\$
FRINGE BENEFITS	AMOUNT	
Pension	\$	
Health & Welfare	\$	
Training	\$	
Other Fringe Benefits	\$	
TOTAL FRINGE BENEFITS	\$	
AMOUNT	\$	



CHANGE ORDER PROPOSAL FORM

2-11.2(d) MATERIAL COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

INVOICE NO.	DESCRIPTION	AMOUNT
1.	Material	\$
	Sales Tax (Prevailing Tax Rate) 9.50%	\$
	Subtotal	\$
2.	Material	\$
	Sales Tax (Prevailing Tax Rate) 9.50%	\$
	Subtotal	\$
3.	Material	\$
	Sales Tax (Prevailing Tax Rate) 9.50%	\$
	Subtotal	\$
SUBTOTAL MATERIAL COST		\$

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent data shall be submitted along with the material cost report.

Overhead/profit 15%..... \$ _____

Total material/overhead/profit \$ _____

Subcontractor's mark-up of total Sub-Subcontractor material/overhead/profit (if applicable) 5% \$ _____

General contractor's mark-up of total Subcontractor or Sub-Subcontractor labor/overhead/profit (if applicable) 5% \$ _____

Total..... \$ _____



CHANGE ORDER PROPOSAL FORM
2-11.2(e) EQUIPMENT COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

EQUIPMENT NO. (Description, Type, Size)	HOURS	HOURLY RATE	EXTENDED AMOUNTS
SUBTOTAL EQUIPMENT COST			\$

Overhead/profit 15%..... \$ _____

Total equipment/overhead/profit \$ _____

Subcontractor's mark-up of total Sub-Subcontractor
equipment/overhead/profit (if applicable) 5% \$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor equipment/overhead/profit (if applicable) 5%..... \$ _____

Total..... \$ _____



CHANGE ORDER PROPOSAL FORM

2-11.2 (f) SPECIAL FORCES/SERVICES COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

INVOICE NO.	DESCRIPTION	AMOUNT
1.		\$
		\$
	Subtotal	\$
2.		\$
		\$
	Subtotal	\$
3.		\$
		\$
	Subtotal	\$
SUBTOTAL MATERIAL COST		\$

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent date shall be submitted along with the special forces/services cost report.

Overhead/profit 15%.....\$ _____

Total Special Forces/Services/Overhead/Profit\$ _____



2-11.3 CONSTRUCTION CHANGE DIRECTIVE

Distribution to: CITY CONTRACTOR OTHER PROJECT MANAGER

PROJECT:	DIRECTIVE NO.:
	DATE:
	CONTRACT DATE:
TO CONTRACTOR:	CONTRACT FOR:

You are hereby directed to make the following change(s) to this Contract:

PROPOSED ADJUSTMENTS

- The proposed basis of adjustment to the Contract Price is:
 - Lump Sum (increase) (decrease) of \$ _____
 - Unit Price of \$ _____ per _____
 - Daily time and materials records of actual costs plus a overhead and profit, as provided in Subsection 2-8, "Extra Work," the Standard Specifications and the General Provisions, [subject to a Not-To-Exceed Amount of \$ _____].\
 - as follows:
- The Contract Time is proposed to (be adjusted) (remain unchanged). The proposed adjustment, if any, is (an increase of ____ days) (a decrease of ____ days).

If the Contractor disagrees with the proposed adjustments, it must submit its own proposal within ten days of the date of this Construction Change Directive pursuant to Contract Documents or the proposed adjustment will become final and binding on the Contractor.

When signed by the City and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Ordered: _____
Public Works Director

Date: _____

Concurred by: _____
City Engineer

Date: _____

Concurred by: _____
Project Manager

Date: _____



2-11.4 WORK DIRECTIVE

Distribution to: CITY CONTRACTOR FIELD OTHER PROJECT MANAGER

PROJECT:	WORK DIRECTIVE NO.:
	DATE:
	CONTRACT DATE:
TO CONTRACTOR:	CONTRACT FOR:

You are hereby directed to continue performance of the following Work, without delay, pending resolution of the dispute concerning such Work and maintain the cost data described in Subsection 2-8, "Extra Work," of the Standard Specifications and the **General Provisions** to the Contract for the performance of such Work:

Neither the issuance of this Work Directive nor the requirement for the Contractor to maintain cost data constitutes approval by the City of a change in the Work or modification of the Contract Documents.

Ordered: _____ Date: _____
Public Works Director

Concurred by: _____ Date: _____
City Engineer

Concurred by: _____ Date: _____
Project Manager

SECTION 3. CONTROL OF THE WORK

3-1 ASSIGNMENT

Any purported assignment without written consent of the City shall be null, void, and of no effect, and the Contractor shall hold harmless, defend and indemnify the City and its officers, officials, employees, agents and representatives with respect to any claim, demand or action arising from or relating to any unauthorized assignment.

If the City opts to consent to assignment, the City's consent shall be contingent upon: (1) a letter from the Surety agreeing to the assignment and assigning all of the Bonds to the assignee without any reduction, or the assignee supplying all new Bonds in the amounts originally required under the Contract Documents; and (2) the assignee supplying all of the required insurance in the amounts required in the Contract Documents. Until the Surety assigns all of the Bonds or the assignee supplies all of the new Bonds, and until the assignee supplies all of the required insurance, an assignment otherwise consented to in writing by the City shall not be effective. Even if the City consents to assignment, no assignment shall relieve the Contractor of liability under the Contract.

3-3 SUBCONTRACTORS

3-3.1 Subcontractors. Add the following sections:

Subcontractors shall be listed by the Bidder in accordance with these specifications and must be properly licensed under the laws of the State of California for the type of work which they are to perform. Copies of all Subcontracts shall be made available to the Engineer, upon request.

3-3.2 A Subcontractor whose prosecution of the work is not satisfactory shall be terminated immediately by the Contractor upon the receipt of a written notice by the Engineer. Subcontractors whose work was determined to be unsatisfactory shall not be allowed to perform any work on the job site.

3-5 INSPECTION

The Contractor shall arrange and pay for all off-site inspection of the Work required by any ordinance or governing authorities. The Contractor shall also arrange and pay for other inspections, including tests in connection therewith, as may be assigned or required.

Add the following paragraphs:

3-5.1 Inspection

An inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the Contractor's management of the Work. Any advice which an inspector may give the Contractor shall not be binding to the Engineer or to the City, or release the Contractor from fulfilling all the terms of the Contract.

No partial payment, inspection, taking possession of, or other act made or done by the Engineer or the City with respect to the work prior to final completion and acceptance thereof shall affect or prejudice the right of the Engineer or the City to reject any defective work or material or to require the complete fulfillment of all the provisions of the Contract.

If the Engineer deems it expedient and not in the best interest of the City to correct work injured or done not in accordance with the Contract, the defective work may be accepted subject to an equitable deduction from the Contract Price which may be made therefor by the City upon certification from the Engineer.

Reexamination of any work may be ordered by the Engineer at any time prior to Final Acceptance and, if so ordered, the work must be uncovered by the Contractor. If such work be found in accordance with the Contract, the City will pay the cost of reexamination and replacement. If such work be found defective or not in accordance with the Contract, the Contractor shall pay such costs.

3-7 CONTRACT DOCUMENTS

3-7.1 General

All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on the control set to show the as-built conditions. This control set of Plans shall also be edited for all Addenda, Requests for Information, Change Orders, field changes not involving cost, and any other variation that occurred during construction. Upon completion of all Work, the Contractor shall return the control set to the Engineer. Final payment will not be made until this requirement is met.

Where a work feature is shown on the drawings or identified in the Specifications but is not specifically indicated as an item in the Bid Schedule, and there is no ambiguity regarding the requirement to construct, install, or construct and install that work feature, the Contractor is required to complete the work feature. All costs to the Contractor for constructing, installing, or both constructing and installing such a work feature shall be included in the Bid.

3-7.2 Precedence of the Contract Documents

The following shall replace Section 3-7.2:

With regard to Section 3-7.2 in the Standard Specifications, the Special Provisions shall control over the General Provisions, and the Notice Inviting Bids and Instructions to Bidders (in that order) shall control over the Bid, such that the order of precedence shall be as follows:

1. Requirements of law.
2. Permits issued by regulatory agencies with jurisdiction.
3. Change Orders and Supplemental Agreements, whichever occurs last.
4. Contract.
5. Addenda.
6. Notice Inviting Bids.
7. Instructions to Bidders.
8. Bid/Proposal.
9. Special Provisions.
10. General Provisions.
11. Plans.
12. Standard Plans.
13. Standard Specifications.
14. Reference Specifications.

3-8 SUBMITTALS.

3-8.1 General

The following paragraphs shall be added at the end of Subsection 3-8.1:

The Contractor shall, at its own expense, transmit to the Engineer for review and acceptance, working drawings, shop drawings, supporting information, and/or other available instructive and descriptive information from the manufacturer, when and as required by the Plans or General Provisions or requested by the Engineer. Shop drawings will not be required for standard items in common use for which adequate manufacturers' literature is available unless otherwise required by the Engineer.

The Contractor shall consecutively number, thoroughly check, approve and sign each submittal and transmit the submittals to the Engineer for review. In the event that certain submittals are submitted without the Contractor's approval signature or are unacceptable to the City, they shall be rejected by the Engineer. The Contractor shall thereafter correct the submittals and resubmit.

In the event that in the process of development of the submittals it is discovered that there are defects and/or errors on the Plans that result in conflict between the Plans and the submittals, or if the submittals show variation from the Plans or other Contract Documents, the Contractor shall thoroughly describe and explain any defects and/or conflicts in its transmittal letter to the Engineer.

The Engineer's review of the submittals will be for general design and arrangement only, and shall not relieve the Contractor from responsibility for errors of any sort in the submittals or of the responsibility for executing the work in accordance with the Contract Documents. The Contractor shall allow a minimum of 20 Working Days for review of submittals. The Contractor shall be solely responsible for the correctness of the submittals, for shop fits and field connections, and for the results obtained by use of such submittals. The Contractor shall verify and be fully responsible for all dimensions and job-site conditions affecting the Work and shall be responsible for furnishing and installing the proper materials required by the Contract Documents.

The Contract Time will not be extended due to the failure of the Contractor to provide submittals as required by the Contract Documents in a timely manner.

3-9 *SUBSURFACE DATA*

The following paragraphs shall be added at the end of Subsection 3-9:

If the City or its consultants have made investigations of subsurface conditions in areas where the Work is to be performed, such investigations shall be deemed made only for the purpose of study and design. If a geotechnical or other report has been prepared for the Project, the Contractor may inspect the records pertaining to such investigations subject to and upon the conditions hereinafter set forth. The inspection of the records shall be made in the office of the Engineer. It is the Contractor's sole responsibility to determine whether such investigations exist, and the City makes no affirmative or negative representation concerning the existence of such investigations.

The records of any such investigations are made available solely for the convenience of the Contractor. It is expressly understood and agreed that the City, the Engineer, their agents, consultants or employees assume no responsibility whatsoever with respect to the sufficiency or accuracy of any investigations, the records thereof, and the interpretations set forth therein. No warranty or guarantee is expressed or implied that the conditions indicated by any such investigations or records are representative of those existing in the Project area. The Contractor agrees to make such independent investigations and examination as necessary to be satisfied of the conditions to be encountered in the performance of the Work.

The Contractor represents that it has studied the Plans, Specifications and other Contract Documents, and all surveys and investigation reports of subsurface and latent physical conditions, has made such additional surveys and investigations as necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents, and that it has correlated the results of all such data with the requirements of the Contract Documents. No claim of any kind shall be made or allowed for any error, omission or claimed error or omission, in whole or in part, of any geotechnical exploration or any other report or data furnished or not furnished by the City.

3-10 SURVEYING

The following paragraph shall be added before the first paragraph of Section 3-10.1:

The Contractor shall verify all dimensions on the drawings and shall report to the City any discrepancies before proceeding with related Work. The Contractor shall perform all survey and layout Work per the benchmark information on the Project Plans. All surveying Work must conform to the Professional Land Surveyors' Act (Business and Professions Code Section 8700 *et seq*). All Project surveying notes and "cut-sheets" are to be provided to the City after the completion of each surveying activity and all final surveying notes shall be provided before final payment to the Contractor.

The Contractor is responsible for hiring a Surveyor to set survey points to be used for re-establishments of disturbed monuments and submit Corner Records to the County Surveyor. Copy of the submitted Corner Records must be provided to the City prior to actual disturbance of the monuments. The Contractor shall also cause all disturbed survey monuments within the project work area to be re-established at the end of the project. This also includes filing Corner Records and Record of Survey with the County Surveyor within 7 days of substantial completion of the construction work and submitting a copy to the City of the filed paperwork receipt within 2 days of submission. The Contractor is required to provide a copy of the County Surveyor's acceptance within 2 days of receipt from the County Surveyor.

Construction stakes shall be set and stationed by the Contractor at its expense. Unless otherwise indicated in the Special Provisions, surveying costs shall be included in the price of items bid. No separate payment will be made. Re-staking and replacement of construction survey markers damaged as a result of the Work, vandalism, or accident shall be at the Contractor's expense.

3-11 CONTRACT INFORMATION SIGNS

Section 3-11 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

The names, addresses and specialties of the Contractor, Subcontractors, architects or engineers may not be displayed on any signage within the public right-of-way. This signage prohibition includes advertising banners hung from truck beds or other equipment.

3-12 WORKSITE MAINTENANCE

The following paragraphs shall be added at the end of Section 3-12.1:

Clean-up shall be done as Work progresses at the end of each day and thoroughly before weekends. The Contractor shall not allow the Work site to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction operation. Materials which need to be disposed shall not be stored at the Project site, but shall be removed by the end of each Working Day. If the job site is not cleaned to the satisfaction of the Engineer, the cleaning will be done or contracted by the City and shall be back-charged to the Contractor and deducted from the Contract Price.

The Contractor shall make arrangements for storing its equipment and materials. The Contractor shall make its own arrangements for any necessary off-site storage or shop areas necessary for the proper execution of the Work. Approved areas within Work site may be used for temporary storage; however, the Contractor shall be responsible for obtaining any necessary permits from the City. In any case, the Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the traveled way or on any section where traffic is restricted at any time.

The Contractor shall deliver, handle, and store products in accordance with the manufacturer's written recommendations and by methods and means that will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at the Project site and overcrowding of construction spaces. In particular, the Contractor shall provide delivery and installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.

Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to ensure products are undamaged and are maintained under required conditions.

The Contractor shall promptly remove from the vicinity of the completed Work, all rubbish, debris, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final Acceptance of the Work by the City will be withheld until the Contractor has satisfactorily complied with the foregoing requirements for final clean-up of the Project site.

All costs associated with the clean-up and storage required to complete the Project shall be the sole responsibility of the Contractor.

Pursuant to the provisions of Section 3-12 and Section 5-7 of the Standard Specifications and these General Provisions, the Contractor is responsible for Project site maintenance and for public convenience and safety. Payment for compliance with these provisions is considered as included in the prices bid for other contract items.

The City, however, to maintain good public relations, may deem it necessary to require special Project site maintenance, and public convenience and safety actions and work to be

performed by the Contractor that are over and above those required by the provisions of Section 3-12 and Section 5-7 of the Standard Specifications and these General Provisions.

These actions and work shall be as directed by the Engineer in writing and payment for compliance therewith shall be on a cost plus basis for extra work per Section 7-4 of the Standard Specifications and applied against the not-to-exceed bid item for "Special Project Site Maintenance and Public Convenience and Safety."

The first sentence of Section 3-12.4.2 shall not be incorporated, and shall instead be replaced with the following:

Construction materials and equipment shall not be stored in streets, roads, or highways unless otherwise specified in the Special Provisions or approved by the Engineer.

3-13 COMPLETION, ACCEPTANCE AND WARRANTY

The Contractor shall complete all Work under the Contract within the stipulated Working Days from the Notice to Proceed, as stated in the Contract. The Contractor shall not be allowed to begin any construction activity at the site before the issuance of the Notice to Proceed. Between the period of the Notice of Award and Notice to Proceed, the Contractor shall process Shop Drawings and begin procuring equipment and materials.

3-13.2 Acceptance

The Project will not be considered complete and ready for City Council direction to staff regarding recordation of the Notice of Completion until all Work required by the Contract Documents has been fully completed in compliance with the Contract Documents and all Applicable Laws including, but not limited to, correction or completion of all punch list items, the Work site is cleaned up in accordance with Section 3-12 of the Standard Specifications, the General Provisions, and the Special Provisions, and all of the following items have been received by the Engineer:

1. A form of Notice of Completion, with all information required by the California Civil Code;
2. All written guarantees, warranties, and special warranties if applicable;
3. All "as-builts" and record drawings;
4. Duly completed and executed forms of Conditional Waiver and Release On Final Payment from the Contractor, Subcontractors of any tier, suppliers, and other person eligible to file stop notices in connection with the Work; and
5. Duplicate copies of all operating instructions and manufacturer's operating catalogs and data, together with such field instructions as necessary to fully instruct City personnel in correct operation and maintenance procedures for all equipment installed listed under the electrical, air conditioning, heating, ventilating and other trades. This data and instructions shall be furnished for all equipment requiring periodic adjustments, maintenance or other operation procedures.

The Contractor shall allow at least seven Working Days' notice for final inspection. Such notice shall be submitted to the Engineer in writing.

3-13.3 Warranty

For the purposes of the calculation of the start of the warranty period, the Work shall be deemed to be completed upon the date of recordation of the Notice of Completion. If that direction is contingent on the completion of any items remaining on a punchlist, the Work shall be deemed to be completed upon the date of the Engineer's acceptance of the final item(s) on that punchlist.

The Contractor shall repair or replace defective materials and workmanship as required in Section 3-13.3 of the Standard Specification at its own expense. Additionally, the Contractor agrees to defend, indemnify and hold the City harmless from claims of any kind arising from damage, injury or death due to such defects.

The parties agree that no certificate given shall be conclusive evidence of the faithful performance of the Contract, either in whole or in part, and that no payment shall be construed to be in acceptance of any defective Work or improper materials. Further, the certificate or final payment shall not terminate the Contractor's obligations under the warranty herein. The Contractor agrees that payment of the amount due under the Contract and the adjustments and payments due for any Work done in accordance with any alterations of the same, shall release the City, the City Council and its officers and employees from any and all claims or liability on account of Work performed under the Contract or any alteration thereof.

SECTION 4. CONTROL OF MATERIALS

4-1 GENERAL

The provisions below shall supplement but not replace those provisions in Section 4-1 of the Standard Specifications.

The first paragraph of Section 4-1 is replaced with the following:

Wherever applicable, materials shall conform to the latest Standards of the American Society for Testing Materials. All workmanship in the fabrication, assembly and construction of materials and equipment shall be neat and workmanlike in every respect. All equipment offered shall be of the manufacturer's latest design.

The Contractor and all Subcontractors, suppliers, and vendors shall guarantee that the Work will meet all requirements of this Contract as to the quality of materials, equipment, and workmanship.

4-1.1 Property Rights in Materials

Nothing in the Contract shall be construed as vesting in the Contractor any right, title, or interest in material used in the Work after it has been attached or affixed to the Work or the soil. All such material shall become the property of the City upon being so attached or affixed.

4-2 PROTECTION

Add the following at the end of Subsection 4-2:

Materials shall not be stored in the right-of-way unless written permission is given by the Engineer.

4-4 TESTING

Delete Subsection 4-4 in its entirety and substitute the following:

Unless otherwise called for in the Special or General Provisions, all testing of materials will be performed by the City in such number and at such locations as deemed necessary by the Engineer to ensure compliance with the Contract Documents. The cost of all testing that can be performed within 50 miles of the Project will be borne by the City. The cost of all testing that must be performed 50 miles or more from the Project will be borne by the Contractor. The cost of all re-testing will be borne by the Contractor, and the amount due the City for the re-testing will be deducted from the Contract Price via Change Order.

The cost of rework material testing, overtime, travel and other related costs incurred by the City will be deducted from the Contract Price via Change Order.

4-6 TRADE NAMES

If the Contractor requests to substitute an equivalent item for a brand or trade name item, the burden of proof as to the comparative quality and suitability of alternative equipment or articles or materials shall be upon the Contractor, and the Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Engineer. All requests for substitution shall be submitted, together with all documentation necessary for the Engineer to determine equivalence, no later than ten calendar days after the award of the Contract, unless a different deadline is listed in the Special Provisions.

4-9 RECYCLING OF MATERIALS

Subsection 4-9 is hereby added to the Standard Specifications as follows:

4-9.1 Recycling of Asphalt Concrete, Portland Cement Concrete, Aggregate Base, and Green Waste are Required

The records of disposal, including scale tonnages, shall be furnished to the City on a monthly basis. Failure to comply with the requirements of this Section will result in delay of progress payment.

4-9.2 Contractor's Obligation

The City is committed to a recycling program. If available, it is the obligation of the Contractor, under the Contract, to recycle the waste material through an approved recycling plant. Records and reports of waste recycle will be submitted to the City on a regular monthly basis.

The provisions below shall supplement but not replace the provisions in Section 5 of the Standard Specifications.

SECTION 5 LEGAL RELATIONS AND RESPONSIBILITIES

5-3 LABOR

5-3.1.1 Public Work

The Contractor acknowledges that the Project is a “public work” as defined in Labor Code Section 1720 *et seq.* (“Chapter 1”), and that this Project is subject to (a) Chapter 1, including without limitation Labor Code Section 1771 and (b) the rules and regulations established by the Director of Industrial Relations (“DIR”) implementing such statutes. The Contractor shall perform all Work on the Project as a public work. The Contractor shall comply with and be bound by all the terms, rules and regulations described in (a) and (b) as though set forth in full herein.

5-3.2.1 Copies of Wage Rates

Pursuant to Labor Code Section 1773.2, copies of the prevailing rate of per diem wages for each craft, classification, or type of worker needed to perform the Project are on file at City Hall and will be made available to any interested party on request. By initiating any Work on this Project, the Contractor acknowledges receipt of a copy of the DIR determination of such prevailing rate of per diem wages, and the Contractor shall post such rates at each job site covered by these Contract Documents.

5-3.2.2 Failure to Pay Prevailing Rates

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty paid to the City, forfeit \$200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the DIR for the work or craft in which the worker is employed for any public work done pursuant to these Contract Documents by the Contractor or by any Subcontractor.

5-3.2.3 Debarment or Suspension

The Contractor shall not perform Work with any Subcontractor that has been debarred or suspended pursuant to California Labor Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. The Contractor and Subcontractors shall not be debarred or suspended throughout the duration of the Contract pursuant to Labor Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. If the Contractor or any Subcontractor becomes debarred or suspended during the duration of the Project, the Contractor shall immediately notify the City.

5-3.3 Payroll Records

The Contractor shall comply with and be bound by the provisions of Labor Code Section 1776, which requires the Contractor and each Subcontractor to (1) keep accurate payroll records and verify such records in writing under penalty of perjury, as specified in Section 1776, (2) certify and make such payroll records available for inspection as provided by Section 1776, and (3) inform the City of the location of the records. The Contractor has ten days in which to comply subsequent to receipt of a written notice requesting these records, or as a penalty to the City, the Contractor shall forfeit \$100.00 for each Day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

5-3.4 Hours of Labor

The Contractor acknowledges that eight hours labor constitutes a legal day's work. The Contractor shall comply with and be bound by Labor Code Section 1810. The Contractor shall comply with and be bound by the provisions of Labor Code Section 1813 concerning penalties for workers who work excess hours. The Contractor shall, as a penalty paid to the City, forfeit \$25.00 for each worker employed in the performance of this Project by the Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of Division 2, Part 7, Chapter 1, Article 3 of the Labor Code. Pursuant to Labor Code Section 1815, work performed by employees of the Contractor in excess of eight hours per day, and 40 hours during any one week shall be permitted upon public work upon compensation for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay.

5-3.5 Apprentices

The following paragraph should be added at the end of Subsection 5-3.5:

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1777.6 and 1777.7 and California Code of Regulations Title 8, Section 200 *et seq.* concerning the employment of apprentices on public works projects. The Contractor shall be responsible for compliance with these Sections for all apprenticeable occupations. Before commencing Work on this Project, the Contractor shall provide the City with a copy of the information submitted to any applicable apprenticeship program. Within 60 Days after concluding Work, Contractor and each of its Subcontractors shall submit to the City a verified statement of the journeyman and apprentice hours performed under this Contract.

5-3.6 Registration with the DIR

Subsection 5-3.6 is hereby added to the Standard Specifications as follows:

In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or Subcontractor shall be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5.

5-3.7 Compliance Monitoring and Posting Job Sites

Subsection 5-3.7 is hereby added to the Standard Specifications as follows:

This Project is subject to compliance monitoring and enforcement by the DIR. The Contractor shall post job site notices, as prescribed by regulation.

5-3.8 Subcontractors

Subsection 5-3.8 is hereby added to the Standard Specifications as follows:

For every Subcontractor who will perform Work on the Project, the Contractor shall be responsible for such Subcontractor's compliance with Chapter 1 and Labor Code Sections 1860 and 3700,

and the Contractor shall include in the written Contract between it and each Subcontractor a copy of the provisions in this Section 5-3 of the General Provisions and a requirement that each Subcontractor shall comply with those provisions. The Contractor shall be required to take all actions necessary to enforce such contractual provisions and ensure Subcontractor's compliance, including without limitation, conducting a periodic review of the certified payroll records of the Subcontractor and upon becoming aware of the failure of the Subcontractor to pay its workers the specified prevailing rate of wages. The Contractor shall diligently take corrective action to halt or rectify any failure.

5-3.9 Prevailing Wage Indemnity

Subsection 5-3.9 is hereby added to the Standard Specifications as follows:

To the maximum extent permitted by law, the Contractor shall indemnify, hold harmless and defend (at the Contractor's expense with counsel reasonably acceptable to the City) the City, its officials, officers, employees, agents and independent contractors serving in the role of City officials, and volunteers from and against any demand or claim for damages, compensation, fines, penalties or other amounts arising out of or incidental to any acts or omissions listed in Section 5-3 of the General Provisions by any Person (including the Contractor, its Subcontractors, and each of their officials, officers, employees and agents) in connection with any Work undertaken or in connection with the Contract Documents, including without limitation the payment of all consequential damages, attorneys' fees, and other related costs and expenses. All duties of the Contractor under this Section 5-3.9 shall survive expiration or termination of the Contract.

5-4 INSURANCE

The first paragraph of Section 5-4.1 of the Standard Specifications shall not be incorporated and shall instead be replaced with the following:

The Contractor shall provide and maintain insurance naming the City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials as insureds or additional insureds regardless of any inconsistent statement in the policy or any subsequent endorsement whether liability is attributable to the Contractor or the City. The insurance provisions shall not be construed to limit the Contractor's indemnity obligations contained in the Contract. The City will not be liable for any accident, loss, or damage to the Work before completion, except as otherwise specified in Section 6-5.

The Contractor shall at all times during the term of the Contract carry, maintain, and keep in full force and effect the insurance referenced in Section 5-4 of the Standard Specifications, as modified below.

The following provisions are hereby added to Section 5-4.1 of the Standard Specifications:

5-4.1.1 Acceptability of Insurers.

The insurance policies required under this Section 5-4 shall be issued by an insurer authorized or admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section 5-4.

5-4.1.2 Additional Insured.

The City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials, shall be the insured or named as additional insureds covering the Work, regardless of any inconsistent statement in the policy or any subsequent endorsement, whether liability is attributable to the Contractor or the City. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds. This provision shall also apply to any excess/umbrella liability policies.

5-4.1.3 Primary and Non-Contributing.

The insurance policies required under this Section 5-4 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to the City. Any insurance or self-insurance maintained by the City, its officers, employees, agents or volunteers, shall be in excess of the Contractor's insurance and shall not contribute with it. This provision shall also apply to any excess/umbrella liability policies.

5-4.1.4 Contractor's Waiver of Subrogation.

The insurance policies required under this Section 5-4 shall not prohibit the Contractor and the Contractor's employees, agents or Subcontractors from waiving the right of subrogation prior to a loss. The Contractor hereby waives all rights of subrogation against the City.

5-4.1.5 Deductibles and Self-Insured Retentions.

Any deductibles or self-insured retentions must be declared to and approved by the City. At the City's option, the Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to the City, or the Contractor shall procure a bond guaranteeing payment of losses and expenses.

5-4.1.6 Cancellations or Modifications to Coverage.

The Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 5-4 during the term of the Contract. The commercial general and automobile liability policies required under the Contract shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to the City. If any insurance policy required under this Section 5-4 is canceled or reduced in coverage or limits, the Contractor shall, within two business days of notice from the insurer, phone, fax or notify the City via certified mail, return receipt requested, of the cancellation of or changes to the policy

5-4.1.7 City Remedy for Noncompliance.

If the Contractor does not maintain the policies of insurance required under this Section 5-4 in full force and effect during the term of the Contract, or in the event any of the Contractor's policies do not comply with the requirements under this Section 5-4, the City may either immediately terminate the Contract or, if insurance is available at a reasonable cost, the City may, but has no duty to, take out the necessary insurance and pay, at the Contractor's expense, the premium thereon. The Contractor shall promptly reimburse the City for any premium paid by the City or the City may withhold amounts sufficient to pay the premiums from payments due to the Contractor.

5-4.1.8 Evidence of Insurance.

At least two Working Days prior to the performance of Services under the Contract, the Contractor shall furnish the City's Risk Manager with a certificate or certificates of insurance and all original endorsements (both of which must reference the same Policy number), evidencing and effecting the coverages required under Section 5-4 of the Standard Specifications, as modified by this Section 5-4. The endorsements are subject to approval by the City's Risk Manager. The Contractor may provide complete, certified copies of all required insurance policies to the City. The Contractor shall provide proof to the City's Risk Manager that insurance policies expiring during the term of the Contract have been renewed or replaced with other policies providing at least the same coverage. The Contractor shall furnish such proof at least two weeks prior to the expiration of the coverages.

The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements must specifically name the City of Manhattan Beach and its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials as insureds or additional insureds. The Contractor shall maintain current insurance certificates and endorsements on file with the City's Risk Manager at all times during the term of this Contract. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

Where the Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO. If the evidence of insurance submitted by the Contractor pursuant to this Section 5-4 evidences that the insurance is provided by the PEO, all such PEO-provided insurance coverages and indemnities must comply with the requirements of these Contract Documents.

5-4.1.9 Indemnity Requirements not Limiting.

Procurement of insurance by the Contractor shall not be construed as a limitation of Contractor's liability or as full performance of the Contractor's duty to indemnify the City under Section 5-8 of the Contract.

5-4.1.10 Subcontractor Insurance Requirements.

The Contractor shall require each of its Subcontractors that perform Services under the Contract to maintain insurance coverage that meets all of the requirements of this Section -5-4.

5-4.1.11 Replacement Insurance

The Contractor agrees that it will not cancel, reduce or otherwise modify the insurance coverage. The Contractor agrees that if it does not keep the required insurance in full force and effect, and such insurance is available at a reasonable cost, the City may take out the necessary insurance and pay the premium thereon, and the repayment thereof shall be deemed an obligation of the Contractor and the cost of such insurance may be deducted, at the option of the City, from payments due the Contractor. This shall be in addition to all other legal options available to the City to enforce the insurance requirements.

5-4.1.12 Subcontractors

The Contractor shall ensure all Subcontractors and their employees are listed as additional insureds on all of the Contractor's insurance.

The provisions below shall supplement but not replace those provisions in Sections 5-4.2, 5-4.3, and 5-4.4 of the Standard Specifications.

5-4.2 General Liability Insurance

Instead of the minimum limits listed in Section 5-4.2 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If the Contractor is a limited liability company, the commercial general liability coverage shall be amended so that the Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

5-4.3 Workers' Compensation Insurance

Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of \$1,000,000.00 per accident for bodily injury or disease. If the Contractor has no employees while performing the Work under the Contract, a Workers' Compensation policy is not required, but the Contractor shall execute a declaration that it has no employees.

5-4.4 Automobile Insurance

Instead of the minimum limits listed in Section 5-4.4 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of the Contract with a combined single limit of \$2,000,000.00 per accident for bodily injury and property damage. If the Contractor does not use any owned, non-owned or hired vehicles in the performance of the Work under this Contract, the Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required by Subsection 5-4.2.

5-4.5 Insurance Requirements not Limiting

Subsection 5-4.5 is hereby added to the Standard Specifications as follows:

If the Contractor maintains broader coverage and/or higher limits than the minimums required above, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City. No representation is made that the minimum insurance requirements of this Contract are sufficient to cover the obligations of the Contractor under this Contract.

5-4.6 If required by the City, the Contractor shall also provide the following policy(ies) of insurance: (NOT USED).

5-7 SAFETY

The provisions below shall supplement but not replace those provisions in Subsection 5-7 of the Standard Specifications.

5-7.8 Steel Plate Covers

5-7.8.1 General

The Contractor shall cover all openings, trenches and excavations at the end of each Work Day with steel plate covers.

5-8 INDEMNIFICATION

The following indemnity provisions shall supersede the indemnity in Section 5-4.1 of the Standard Specifications.

5-8.1 Contractor's Duty.

To the fullest extent permitted by law, the Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. The Contractor shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. The Contractor shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

5-8.1.1 Taxes and Workers' Compensation

The Contractor shall pay all required taxes on amounts paid to the Contractor under the Contract, and indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract. The Contractor shall fully comply with the Workers' Compensation law regarding the Contractor and the Contractor's employees. The Contractor shall indemnify and hold the City harmless from any failure of the Contractor to comply with applicable Workers' Compensation laws. The City may offset against the amount of any fees due to the Contractor under the Contract any amount due to the City from the Contractor as a result of the Contractor's failure to promptly pay to the City any reimbursement or indemnification arising under this Subsection 5-8.1.1.

5-8.1.2 Subcontractor Indemnity Agreements

The Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 5-8 from each and every Subcontractor or any other person or entity involved by, for, with or on behalf of the Contractor in the performance of the Contract. If the Contractor fails to obtain such indemnity obligations, the Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Liabilities at law or in equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor's Subcontractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor's Subcontractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

5-8.2 Workers' Compensation Acts not Limiting.

The Contractor's indemnifications and obligations under this Section 5-8, or any other provision of the Contract, shall not be limited by the provisions of any Workers' Compensation act or similar act. The Contractor expressly waives its statutory immunity under such statutes or laws as to the City, its officers, agents, employees and volunteers.

5-8.3 Insurance Requirements not Limiting.

The City does not, and shall not, waive any rights that it may possess against the Contractor because of the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to the Contract. The indemnities in this Section 5-8 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, tax, assessment, penalty or interest asserted against the City.

5-8.4 Survival of Terms.

The Contractor's indemnifications and obligations under this Section 5-8 shall survive the expiration or termination of the Contract.

5-8.5 Civil Code Exception.

Nothing in this Section 5-8 shall be construed to encompass Indemnitees' sole negligence or willful misconduct to the limited extent that the underlying Contract is subject to Civil Code Section 2782(a) or the City's active negligence to the limited extent that the underlying Contract Documents are subject to Civil Code Section 2782(b), provided such sole negligence, willful misconduct or active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction.

5-8.6 Nonwaiver of Rights.

Indemnitees do not and shall not waive any rights that they may possess against the Contractor because the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to these Contract Documents. This indemnity provision is effective regardless of any prior, concurrent, or subsequent active or passive negligence by Indemnitees and shall operate to fully indemnify Indemnitees against any such negligence.

5-8.7 Waiver of Right of Subrogation.

The Contractor, on behalf of itself and all parties claiming under or through it, hereby waives all rights of subrogation and contribution against the Indemnitees, while acting within the scope of their duties, from all Claims arising out of or incident to the activities or operations performed by or on behalf of the Contractor regardless of any prior, concurrent or subsequent active or passive negligence by Indemnitees.

SECTION 6. PROSECUTION AND PROGRESS OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 6 of the Standard Specifications.

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

6-1.1 Construction Schedule

In addition to the construction schedule required pursuant to Section 6-1.1 of the Standard Specifications after notification of the Contract award and before any start of the Project, as well as the revised construction schedule in advance of beginning revised operations, the Contractor shall submit an updated construction schedule with its monthly invoice every month. Progress payments shall be contingent upon the receipt of monthly updated construction schedules.

One week before the scheduled pre-construction meeting, the Contractor must submit a construction schedule to the Engineer for review and approval. The Contractor shall make revisions as required by the Engineer. The schedule must account for all subcontract work, as well as the work of the Contractor, submittals, coordination with the other contractors performing concurrent work and the Traffic Control Plan. The Contractor shall update this Construction Schedule when directed by the Engineer, or when:

- a. A Change Order significantly affects the Contract completion date or the sequence of construction approach or activities; or
- b. The actual sequence of the Work, or the planned sequence of the Work, is changed and does not conform to the Contractor's current accepted Project construction schedule.

6-1.1.1 Pre-Construction Conference

Subsection 6-1.1.1 is hereby added to the Standard Specifications as follows:

Approximately five Days before the commencement of Work at the site, a pre-construction conference will be held at the City and shall be attended by the Contractor's Project manager, its on-site field superintendent, and any Subcontractors that the Contractor deems appropriate. Attendance by the Contractor and any Subcontractors designated is mandatory.

Contractor shall submit its 24-hour emergency telephone numbers to the Engineer for approval a minimum of two Working Days before the pre-construction conference. Unless previously submitted to the Engineer, the Contractor shall bring to the pre-construction conference copies of each of the following:

- 1) Construction Schedule.
- 2) Procurement schedule of major equipment and materials and items requiring long lead time.
- 3) Shop drawing/sample submittal schedule.
- 4) Preliminary schedule of values (lump sum price breakdown) for progress payment purposes.
- 5) Written designation of the on-site field superintendent and the Project manager. Both daytime and emergency telephone numbers shall be included in the written designation.

The purpose of the conference is to designate responsible personnel and establish a working relationship. The parties will discuss matters requiring coordination and establish procedures for handling such matters. The complete agenda will be furnished to the Contractor before the meeting date. The Contractor shall be prepared to discuss all of the items listed below.

- 1) The Contractor's construction schedule.
- 2) Notification of local residents before starting any Work and keeping them informed throughout the Project.
- 3) Procedures for transmittal, review, and distribution of the Contractor's submittals.
- 4) Processing applications for payment.
- 5) Maintaining record documents.
- 6) Critical Work sequencing.
- 7) Maintaining sewage service during construction, including proposed by-passes.
- 8) NPDES requirements, if any.
- 9) Field decisions and Change Orders.
- 10) Use of Project site, office and storage areas, security, housekeeping, and the City's needs.
- 11) Major equipment deliveries and priorities.
- 12) Traffic control.
- 13) Any other item that the City representative states is relevant to the meeting.

6-1.1.2 Weekly Progress Meetings

Subsection 6-1.1.2 is hereby added to the Standard Specifications as follows:

Progress meetings will be held each week during the course of the Project. The meeting location, day of the week and time of day will be mutually agreed to by the City and the Contractor. The Contractor shall provide a two-week "look ahead" schedule for each meeting. The construction manager will preside at these meetings and will prepare the meeting agenda, meeting minutes and will distribute minutes to all persons in attendance. As the Work progresses, if it is determined by agreement of the attendees, that weekly meetings are not necessary, the weekly progress meetings may be changed to bi-weekly progress meetings.

6-2 PROSECUTION OF THE WORK

Add the following as Section 6-2.1:

6-2.1 Excess Cost of City Personnel and Inspection Personnel

For any overtime or emergency work beyond a regular eight-hour day and for any work performed on Saturday, Sunday, or holidays, the charges for City personnel and City consultants/independent contractors, including inspection, required on the job site shall be the responsibility of the Contractor and all costs therefor shall be deducted from the payments due

the Contractor. The cost of City personnel and City consultants/independent contractors shall be computed pursuant to the actual costs incurred by City, including but not limited to, overtime costs, fringe benefits, and overhead costs.

6-3 *TIME OF COMPLETION*

6-3.2 Contract Time Accounting

Add the following at the end of Subsection 6-3.2:

The Contract Time for completion of the Work, including corrective items of Work, shall be in accordance with Section 4 of the Contract. Contract Time extensions, when granted by the Engineer, will be in Working Days and in accordance with the Contract Documents, and will be set forth in writing via Change Order.

Add the following as Section 6-3.2.1:

6-3.2.1 Hours of Work

The Contractor shall not conduct any operations or perform any Work pertaining to the Project outside the working days and hours as defined in Section 10-8 Working Days and Hours. In the event that the Contractor abuses the hours of work requirement, a written warning will follow. After each additional warning, a \$200.00 penalty will be deducted from the Contract amount.

6-4 *DELAYS AND EXTENSIONS OF TIME*

Add the following at the end of Subsection 6-4:

Unless otherwise agreed in writing, an adjustment to the Contract time by reason of a Change Order shall be agreed to at the time the Change Order is issued and accepted by the Contractor. If the Change Order does not reserve the right of the parties, or either of them, to seek an adjustment to the Contract time, then the parties forever relinquish and waive such right and there shall be no further adjustments to the Contract time.

6-4.2 Extensions of Time

Add the following at the end of Subsection 6-4.2:

In the event it is deemed appropriate by the City to extend the time for completion of the Work, any such extension shall not release any guarantee for the Work required by the Contract Documents, nor shall any such extension of time relieve or release the Sureties on the Bonds executed. In executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extensions of time. The amount of time allowed by an extension of time shall be limited to the period of the delay giving rise to the same as determined by the City. Notwithstanding any dispute which may arise in connection with a claim for adjustment of the Contract time, the Contractor shall promptly proceed with the Work.

6-4.3 Payment for Delays

Add the following at the end of Subsection 6-4.3:

Notwithstanding any other terms and conditions of the Contract Documents, the City shall have no obligation whatsoever to increase the Contract Price or extend the time for delays.

Unless compensation and/or mark up is agreed upon by the City, the Contractor agrees that no payment of compensation of any kind shall be made to the Contractor for damages or increased overhead costs caused by any delays in the progress of the Contract, whether such delays are avoidable or unavoidable or caused by any act or omission of the City or its agents. Any accepted delay claim shall be fully compensated for by an extension of time to complete the performance of the Work.

This Section shall not apply to compensable delays caused solely by the City. If a compensable delay is caused solely by the City, the Contractor shall be entitled to a Change Order that: (1) extends the time for completion of the Contract by the amount of delay caused by the City; and (2) provides equitable adjustment, as determined by the City, to the Contractor.

6-6 SUSPENSION OF THE WORK

6-6.1 General

Add the following paragraph following paragraph at the end of Subsection 6-6.1:

In the event a suspension of work is ordered because of failure on the part of the Contractor to carry out orders given or to perform any provisions of the Work, such suspension of work shall not relieve the Contractor of its responsibility to complete the work within the time limit set forth herein and shall not be considered cause for extension of the time for completion, and further, such suspension of work shall not entitle the Contractor to any additional compensation.

6-8 TERMINATION OF THE CONTRACT FOR CONVENIENCE

In addition to the reasons for termination listed in Section 6-8 of the Standard Specifications, which allow termination upon any written notice, the City may cancel the Contract for any other reason or for no reason upon 30 Days' written notice. The rest of the procedure outlined in Section 6-8 shall apply to such situation, including the Contractor's required immediate notification of Subcontractors and suppliers and the payment. In no event (including termination for impossibility or impracticability, due to conditions or events beyond the control of the City, for any other reason or for no reason) shall the total amount of money to Contractor exceed the amount which would have been paid to the Contractor for the full performance of the services described in the Contract.

Furthermore, some of the City's projects are funded in whole or in part by funds other than the City's General Fund. If this Project is funded by such external funds in whole or in part, or if those external funds are terminated or reduced at any time and for any reason or for no reason at all, and the City determines at its discretion that no other funding is available for continuation of this Project, the City will not be obligated to continue funding for the services contained in these Contract Documents and may terminate the Project immediately. The City shall reimburse the Contractor for its work satisfactorily completed until the termination date. In no event shall the total amount of money to the Contractor exceed the amount which the City has received in funding from its external source. The Special Provisions may include further details in this regard.

6-9 LIQUIDATED DAMAGES

For the purposes of the calculation of the start of the liquidated damages, the Work shall be deemed to be completed when the same has been completed in accordance with the Plans and Specifications therefor and to the satisfaction of the Engineer, and the Engineer has certified such completion in accordance with Section 3-13.1 of the Standard Specifications. The liquidated damages value is hereby amended to be \$300 per day.

SECTION 7. MEASUREMENT AND PAYMENT

The provisions below shall supplement but not replace those provisions in Section 7 of the Standard Specifications.

7-1 MEASUREMENT OF QUANTITIES OF UNIT PRICE WORK

7-1.1 General

Add the following at the end of Subsection 7-1.1:

All items of Work which are not designated on the Bid Schedule by the letters "F" or "LS" or words "Final" or "Lump Sum" shall have final pay quantities measured and paid for in accordance with the Standard Specifications and these General Provisions.

7-1.2 Methods of Measurement

Add the following at the end of Subsection 7-1.2:

The Contract Price shall constitute full compensation for all labor, equipment, materials, tools and incidentals required to complete the Project as outlined in these Contract Documents and as directed by the Engineer.

7-2 LUMP SUM WORK

Delete the first sentence of Subsection 7-2 and substitute the following:

Items of Work which are designated by the letters "LS" or the words "Lump Sum" in the Estimated Quantities column of the Bid Schedule shall be paid for at the price indicated in the Bid, unless the dimensions of the Work, as shown on the Plans, are revised by the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantity of such Work, the final payment for the lump sum item will be revised in proportion to the change in dimensions authorized by Change Order.

Add the following at the end of Subsection 7-2:

The Contractor shall submit a Work item breakdown of the Bid, described in the second paragraph of Subsection 7-2, "Lump Sum Work," of the Standard Specifications, within ten Working Days after award of the Contract and/or at any other time as required by the Engineer.

No guarantee is made regarding the amount of Work required to complete a lump sum item of Work.

7-2.1 Progress Payments for Lump Sum Items of Work

The word "Complete" in the Estimated Quantities column of the Bid Schedule for a lump sum item of Work shall mean that payment for that item will only be made after all Work for that item has been completed. The "%" symbol in the Estimated Quantities column of the Bid Schedule for a lump sum item of Work shall mean that progress payments for that item will be allowed based on the percentage of completion as determined by the Engineer in each pay period, typically every 30 days. (See Subsection 7-3.2 of the Standard Specifications and these General Provisions.)

7-3 PAYMENT

7-3.1 General

Add the following at the end of Subsection 7-3.1:

In accordance with Public Contract Code Section 7107, if no claims have been filed and are still pending, the amount deducted from the final estimate and retained by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be withheld for any other lawful purposes.

Whenever the Contractor is required to perform work or furnish equipment, labor, tools, and materials of any class for which no price is fixed in the proposal, it shall be understood that such work, equipment, labor, tools, and materials shall be provided without extra charge, allowance, or direct payment of any kind. The cost of performing such work or furnishing such equipment, labor, tools, and materials shall be included in the unit bid prices in the proposal most closely related to the work and no additional compensation will be made thereof.

If any portion of the work done or materials furnished under the Contract shall prove defective or not in accordance with the Specifications and Contract drawings, and if the imperfection in the same is not of sufficient magnitude or importance to make the work dangerous or undesirable, the Engineer shall have the right and authority to retain the work instead of requiring it to be removed and reconstructed, but he shall make such deductions therefor in the payment due the Contractor as may be just and reasonable.

Delete the tenth paragraph of Subsection 7-3.1 and substitute the following:

Not later than 60 days from the date of Final Acceptance, the five percent deducted and retained from each progress estimate (see Subsection 7-3.2 of the Standard Specifications and these General Provisions) by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

7-3.2 Partial and Final Payment

7-3.2.1 Monthly Closure Date and Invoice Date

Subsection 7-3.2.1 is hereby added to the Standard Specifications as follows:

The Contractor shall prepare and submit the form attached herewith (see Appendix I), or its own form in an identical format, to the Engineer for all requests for progress payments for the work performed in accordance with the provisions of the Contract during the preceding month. The progress payment request shall be submitted monthly, and a maximum of one progress payment request may be submitted each month. The Contractor shall submit a Conditional Waiver and

Release Form (Civil Code Section 8132) with the applicable monthly progress payment request. Progress payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

7-3.2.2 Payments

Subsection 7-3.2.2 is hereby added to the Standard Specifications as follows:

The City shall make payments within 30 Working Days after receipt of the Contractor's undisputed and properly submitted payment request, including an updated construction schedule pursuant to Section 6-1.1 of the General Provisions. The City shall return to the Contractor any payment request determined not to be a proper payment request as soon as practicable, but not later than seven Working Days after receipt, and shall explain in writing the reasons why the payment request is not proper. Acceptance by the Contractor of the payment made in accordance with the final estimate shall be a release to the City, its officers, agents, and employees excepting only claims against the City for any amount withheld by it at the time of such payment.

7-3.2.3 Retention

Subsection 7-3.2.3 is hereby added to the Standard Specifications as follows:

The City shall withhold not less than five percent from each progress payment. The City shall withhold not less than five percent of the Contract Price from the Final Payment Amount (defined in Section 7-3.2.4) until at least 35 days after recordation of the Notice of Completion, or recordation of a notice of cessation, but not longer than the period permitted by Public Contract Code Section 7107.

In addition to retained percentage and liquidated damages, the City may withhold payments to the Contractor including for defective work not remedied and other valid claims against the Contractor.

7-3.2.4 Final Invoice and Payment

Subsection 7-3.2.4 is hereby added to the Standard Specifications as follows:

Whenever the Contractor shall have completely performed the Contract in the opinion of the Engineer, the Contractor shall submit to the Engineer a written statement of the final quantities of Contract items in the form of the final invoice, which must have an identical format to the progress payment request form attached herewith (see Appendix I). Upon receipt of the final payment request, the Engineer shall check the quantities included therein and shall authorize a payment amount, which in the Engineer's opinion shall be just and fair, covering the value of the total amount of Work done by the Contractor, less all previous payments and all amounts to be retained under the provisions of the Contract Documents ("Final Payment Amount"). The Contractor shall submit a Conditional Waiver and Release form (Civil Code Section 8136) with the Final Payment request. The Engineer shall then request that the City accept the Work and that the City Clerk be authorized to file, on behalf of the City in the office of the County Recorder, a Notice of Completion of the Work herein agreed to be done by the Contractor. In addition, the final payment will not be released until the Contractor returns the control set of Plans and Specifications showing the redlined as-built conditions.

Final payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

7-3.2.5 Substitute Security

Subsection 7-3.2.5 is hereby added to the Standard Specifications as follows:

In accordance with Public Contract Code Section 22300, the Contractor may request that it be permitted to substitute securities in lieu of having retention withheld by the City from progress payments when such payments become due or, in the alternative, the Contractor may request that the City make payments of earned retentions directly to an agreed upon designated escrow agent at the Contractor's expense. If the Contractor selects either one of these alternatives, the following shall control.

7-3.2.5.1 Substitution of Securities for Performance Retention

Subsection 7-3.2.5.1 is hereby added to the Standard Specifications as follows:

At some reasonable time before any progress payment would otherwise be due and payable to the Contractor in the performance of Work under these Contract Documents, the Contractor may submit a request to the City in writing to permit the substitution of retentions with securities equivalent to the amount estimated by the City ("estimated amount of retention") to be withheld. The Contractor shall deposit such securities with the City or may, in the alternative, deposit such securities in escrow with a State or federally chartered bank in California, as the escrow agent, at the Contractor's expense. Such securities will be the equivalent or greater in value of the estimated amount of retention. If the Contract is modified by written Modifications or Change Orders or the Contractor otherwise becomes entitled to receive an amount more than the Contract Price at the time the securities are deposited, the Contractor shall, at the request of the City, deposit with the City or escrow agent, whichever is applicable, additional securities within a reasonable time so that the amount of securities on deposit with the City or escrow agent is equivalent or greater in value than the amount of retention the City would otherwise be entitled to withhold from progress payments due or to become due to the Contractor as the Work progresses. The City shall withhold any retention amount that exceeds the security amount until the additional securities are deposited and, if the deposit is with an escrow agent, the City has confirmation from that escrow agent of the new total value of securities. Upon satisfactory completion of the Contract, which shall mean, among other things, that the City is not otherwise entitled to retain proceeds from progress payments as elsewhere provided in the Contract or under applicable law, the securities shall be returned to the Contractor. The City shall, within its sole discretion, determine whether the amount of the securities on deposit with the City or escrow agent is equal to or greater than the amount of estimated retention of progress payments that could otherwise be held by the City if the Contractor had not elected to substitute same with securities.

7-3.2.5.2 Deposit of Retention Proceeds with an Escrow Agent

Subsection 7-3.2.5.2 is hereby added to the Standard Specifications as follows:

As an alternative to the substitution of securities, as provided above, or the City otherwise retaining and holding retention proceeds from progress payments, the Contractor may request the City to make payments of retentions earned directly to an escrow agent with the same qualifications as required in Section 7-3.2.5.1 above and at the expense of the Contractor. At its sole expense, the Contractor may direct the investment of such retention payments into only such securities as mentioned in Section 7-3.2.5.3 below and shall be entitled to interest earned on such investments

on the same terms provided for securities deposited by the Contractor. Upon satisfactory completion of the Contract, which shall mean when the City would not otherwise be entitled to withhold retention proceeds from progress payments had the Contractor not elected to have such proceeds deposited into escrow, the Contractor shall be allowed to receive from the escrow agent all securities, interest and payments deposited into escrow pursuant to the terms of this Section. The Contractor shall pay to each Subcontractor, not later than ten Days of receipt of payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount withheld to ensure performance of the Contractor.

7-3.2.5.3 Subcontractor Entitlement to Interest

Subsection 7-3.2.5.3 is hereby added to the Standard Specifications as follows:

If the Contractor elects to receive interest on any moneys withheld in retention by the City, then the Subcontractor shall receive the identical rate of interest received by the Contractor on any retention moneys withheld from the Subcontractor by the Contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the Subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the Subcontractor. If the Contractor elects to substitute securities in lieu of retention, then, by mutual consent of the Contractor and the Subcontractor, the Subcontractor may substitute securities in exchange for the release of moneys held in retention by the Contractor. The Contractor shall pay each Subcontractor, not later than ten Days after receipt of escrow moneys, the amount owed to each Subcontractor from the moneys plus the respective amount of interest earned, net of costs attributed to the retention held from each Subcontractor, on the amount of retention withheld to ensure performance of the Subcontractor.

7-3.2.5.4 Securities Eligible for Investment

Subsection 7-3.2.5.4 is hereby added to the Standard Specifications as follows:

Securities eligible for investment shall include those listed in Government Code Section 16430, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed upon between the Contractor and the City. The Contractor shall be the beneficial owner of any securities substituted for any monies withheld and shall receive any interest thereon.

7-3.2.5.5 Escrow Agreement for Security Deposits in Lieu of Retention

Subsection 7-3.2.5.5 is hereby added to the Standard Specifications as follows:

The escrow agreement that shall be used for the deposit of securities in lieu of retention shall substantially conform to the form prescribed in Public Contract Code Section 22300(f).

7-3.2.5.6 Inconsistencies with Prevailing Statutory Requirements

Subsection 7-3.2.5.6 is hereby added to the Standard Specifications as follows:

If there is any inconsistency between or differences in Public Contract Code Section 22300 and the terms of this provision, or any future amendments thereto, Section 22300 shall control.

7-3.5.2. Increases of More than 25 Percent

Delete Subsection 7-3.5.2 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceed the Bid quantity by more than 25%, a Change Order will be issued and payment for the quantity in excess of 25% of the Bid quantity will be made on the basis of an adjustment to the Contract Unit price mutually agreed to by the City and the Contractor or pursuant to Subsection 7-3.7 "Agreed Prices."

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price exceeds the bid quantity by more than 25%.

7-3.5.3 Decreases of More than 25 Percent

Delete Subsection 7-3.5.3 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications be less than 75% of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, a Change Order shall be issued and payment shall be made on the basis of an adjustment to the Contract Unit Price mutually agreed to by the City and the Contractor, or pursuant to Subsection 7-3.7 "Agreed Prices"; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price.

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price is less than 75% of the Bid quantity.

7-3.5.4 Changes for Items Not Covered by Unit Prices

Subsection 7-3.5.4 is hereby added to the Standard Specifications as follows:

Payment for any change for an Item of Work not covered by a Contract Unit Price shall be made pursuant to Subsection 7-4 "Payment for Extra Work."

7-4 PAYMENT FOR EXTRA WORK

7-4.1 General

Add the following at the end of Subsection 7-4.1

Any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid on the basis of the net total cost. The cost of deleted Work not covered by a Contract Unit Price shall be determined by the Engineer based on the schedule of lump sum prices submitted by the Contractor in accordance with Subsection 7-2, "Lump Sum Work," of the Standard Specifications and the General Provisions.

7-4.2.1 Labor

Delete Subsection 7-4.2.1 in its entirety and substitute the following:

The cost of labor will be the actual cost for wages prevailing locally for each craft or type of worker (including foreman when authorized by the Engineer) performing the Extra Work at the time the Extra Work is done, plus liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, as well as assessments or benefits required by lawful collective bargaining agreements.

To the actual wages, as defined above, will be added a labor surcharge set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed. The labor surcharge shall constitute full compensation for all payments imposed by State and federal laws and for all other payments made to, or on behalf of, the workers, other than actual wages, subsistence and travel paid to the workers. The labor surcharge includes Workers' Compensation, Social Security, Medicare, Federal Unemployment, State Unemployment, and State Training taxes.

Except when direct supervision is provided by working foremen whose time is included in accordance with Subsection 7-4.2.2, the cost of direct supervision of Extra Work, when such direct supervision is provided exclusively for the Extra Work and not in conjunction with or at the same time as supervision for other Work, and when approved in advance in writing by the Engineer, may be charged to the Extra Work. Such cost includes only the actual cost of supervision labor, plus payroll taxes, insurance, and pension costs. The cost of transportation, use of vehicle, and other costs incurred by supervision will not be allowed.

7-4.2.2 Materials

Add the following to the end of Subsection 7-4.2.2:

If the Contractor does not furnish satisfactory evidence of the cost of the materials from the actual supplier thereof within 10 days following delivery of materials to the Work site, the Engineer reserves the right to establish the cost of the materials at the lowest current wholesale prices at which the materials were available, in the quantities concerned, delivered to the location of the Work site, less any discounts.

7-4.2.3 Tool and Equipment Rental

Delete Subsection 7-4.2.3 in its entirety and substitute the following:

No payment will be made for individual pieces of equipment or tools not listed in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed and that have a replacement value of \$200.00 or less, whether or not consumed by use. Such equipment or tools shall be considered to be small tools.

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

Move in and out, or minimum charges other than the hourly rate, shall not apply to equipment available from the force already on the Project site.

For equipment that is rented from a local equipment agency, the Contractor will be paid at the hourly rate shown on the rental agency invoice or agreement for the time the equipment is used on Extra Work. If a minimum equipment rental amount is required by the local equipment rental agency, the actual amount charged will be paid to the Contractor.

If it is deemed necessary by the Engineer to use equipment not listed in the Labor Surcharge and Equipment Rental Rates publication, a suitable rental rate for that equipment will be established by the Engineer. The Contractor may furnish any cost data that might assist the Engineer in the establishment of the rental rate. If the rental rate established by the Engineer is \$10.00 per hour or less, the provisions above concerning rental of equipment from a local equipment agency shall apply.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

When owner operated equipment is used to perform Extra Work to be paid on a force account basis, the Contractor will be paid for the equipment and operator as follows:

1. Payment for the equipment will be made at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

2. Payment for the cost of labor will be made in conformance with the provisions in Subsection 7-4.2.1 "Labor" of the General Provisions.

7-4.3 Markup

Delete Subsection 7-4.3 in its entirety and substitute the following:

The markup for overhead and profit on Extra Work shall be in accordance with the following schedule.

7-4.3.1 Work by Contractor.

The following percentages shall be added to the Contractor's costs and shall constitute the markup for all overhead and profit:

- 1) Labor 20%
- 2) Materials 15%
- 3) Equipment Rental 15%
- 4) Other Items and Expenditures..... 15%

To the sum of the costs and markups provided for in this subsection, one percent shall be added as compensation for bonding.

7-4.3.2 Work by Subcontractor.

For Extra Work performed by a Subcontractor, the markup established in Subsection 7-4.3.1 of the General Provisions shall be applied to the Subcontractor's costs. An additional five percent shall be added to the Subcontractor's final cost, which shall reimburse the Contractor for administrative costs, including overhead and profit.

7-4.3.3 Work by Sub-Subcontractor.

Subsection 7-4.3.3 is hereby added to the Standard Specifications as follows:

For Extra Work performed by a sub-Subcontractor, the markup established in Subsection 7-4.3.1 of the General Provisions shall be applied to the sub-Subcontractor's costs. An additional ten percent shall be added to the sub-Subcontractor's final cost, five percent of which shall reimburse the Contractor for administrative costs, including overhead and profit, and five percent of which shall reimburse the Subcontractor for administrative costs, including overhead and profit.

7-4.3.4 Work by Specialist.

Subsection 7-4.3.4 is hereby added to the Standard Specifications as follows:

If the Engineer and the Contractor agree that a service or an item of Extra Work cannot be performed by the forces of the Contractor or those of any of its Subcontractors or sub-Subcontractors, such service or Extra Work item may be performed by a specialist. Invoices for such services or items of Extra Work calculated on the basis of current market prices may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization.

If the Contractor is required to perform Extra Work that requires a fabrication or matching process in a fabrication or machine shop facilities away from the Project site, the charges for that portion of the Extra Work performed in such facility may, by agreement between the Contractor and Engineer, be accepted as a specialist billing.

For Extra Work performed by a specialist, 15% shall be added to the specialist's invoice price less a credit to the City for any cash or trade discount offered or available, whether or not such discount may have been taken; such percentage shall reimburse the Contractor for administrative costs, including overhead and profit.

7-4.3.5 Work not Covered by Unit Prices.

Subsection 7-4.3.5 is hereby added to the Standard Specifications as follows:

Markup for overhead and profit on any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid, in accordance with this Subsection 7-4.3 of the General Provisions, only if the net cost increases the Contract Price (i.e., if the cost for added Work exceeds the cost for deleted Work).

7-4.4 Daily Reports by Contractor

Delete the first sentence of Subsection 7-4.4 and substitute the following:

The Contractor shall submit daily reports for Extra Work showing all labor, material, and equipment costs incurred.

Add the following at the end of Subsection 7-4.4:

The daily reports shall describe in detail the Extra Work that was performed and the location (station, etc.). Separate daily reports shall be submitted for Extra Work that is performed for more than one location and for different tasks that are performed on the same day. Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily reports, or if not available, they shall be submitted with subsequent daily reports. The Contractor shall maintain the Contractor's records in such a manner as to provide a clear accounting of the costs.

Upon completion of the Extra Work, the Contractor shall submit a summary of costs, including markup for overhead and profit. All costs shall be in accordance with this Section 7-4 "Payment for Work." The signature of the City's Inspector on a daily report shall indicate agreement with the information reflected therein, not that the Contractor is entitled to payment of the costs in the report. The Engineer shall review the daily reports. The Engineer shall compare the Inspector's records with the completed daily reports furnished by the Contractor and make any necessary adjustments. When the daily reports are agreed upon and signed by both parties, these reports shall become the basis of payment for the Extra Work performed.

7-4.5 Extension of Time

Add the following as Subsection 7-4.5:

If the Contractor is delayed in completing the Extra Work due to a change ordered by the City, the time for completion of Work will be extended in accordance with Section 6-4 of these General Provisions.

7-6 *AUDIT*

The City or its representative shall have the option of inspecting and/or auditing all records and other written materials used by the Contractor in preparing its billings to the City as a condition precedent to any payment to the Contractor or in response to a construction claim or a Public Records Act (Government Code Section 6250 *et seq.*) request. The Contractor will promptly furnish documents requested by the City at no cost. Additionally, the Contractor shall be subject to State Auditor examination and audit at the request of the City or as part of any audit of the City, for a period of three and one-half years after Final Acceptance under the Contract. The Contractor shall include a copy of this Section 7-6 in all contracts with its Subcontractors, and the Contractor shall be responsible for immediately obtaining those records or other written material from its Subcontractors upon a request by the State Auditor or the City. If the Project includes other auditing requirements, those additional requirements will be listed in the Special Provisions.

SECTION 8. FACILITIES FOR AGENCY PERSONNEL

8-1 GENERAL

The following paragraph shall be added following the first paragraph of Section 8-1:

No field offices for City personnel shall be required; however, City personnel shall have the right to enter upon the Project at all times and shall be admitted to the offices of the Contractor to use the telephone, desk and sanitary facilities provided by the Contractor for its own personnel.

Sections 9 and 10 are hereby added to Part 1 of the Standard Specifications, as follows:

SECTION 9. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

9.1 GENERAL

To ensure that solid waste generated in the City is reduced, reused or recycled, the Contractor shall submit a "Waste Management Plan" (WMP) to the Engineer for review and approval, using the form found at the end of this Section 9. After the WMP has been reviewed by the Engineer, it will be returned to the Contractor in one of the following four status conditions:

- "Approved"
- "Further Explanation Required": The Engineer will return the WMP to the Contractor with questions about the WMP. The Contractor shall resubmit plan with each of the City's questions answered thoroughly.
- "Denied": The Engineer will indicate the reasons for denial. The Contractor shall then re-submit a new WMP that complies with the requirements of this Section or request an Infeasibility Exemption.
- "Infeasibility Exemption Approved"

The Contractor shall follow the WMP and document results during demolition and construction. Final documentation shall be submitted at the end of the project to the Engineer for review of compliance with the original WMP. The amount deducted from the final estimate and retained by the City in accordance with Section 7.3.1 and 7.3.2 shall be withheld until final WMP is submitted to the City and approved by the City.

9-2 DEFINITIONS

- a) "Construction" means the building of any facility or structure or any portion thereof including any tenant improvements to an existing facility or structure.
- b) "Construction and Demolition Debris" means used or discarded materials removed from premises during construction of the Project.
- c) "Conversion Rate" means the rate set forth in the standardized Conversion Rate Table approved by the City Council pursuant to this Section for use in estimating the volume or weight of materials identified in a Construction and Demolition Waste Reduction and Recycling Plan.
- d) "Divert" means to use material for any purpose other than disposal in a landfill. Diversion credit is given for source reduction (waste reduction), recycling, and composting.
- e) "Diversion Requirement" means the diversion of at least 65% of the total Construction and Demolition Debris generated by a Project via reduction (source reduction), reuse or recycling, unless the Contractor has been granted an Infeasibility Exemption, in which case the Diversion Requirement shall be the maximum feasible diversion rate established by the Engineer.
- f) "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the

quality standards necessary to be used in the marketplace.

- g) "Renovation" means any change, addition, or modification in an existing structure.
- h) "Reuse" means further or repeated use of Construction or Demolition Debris. An example is the reuse of crushed concrete as road base or as aggregate on the construction site.
- i) "Salvage" means the controlled removal of Construction or Demolition Debris from project for the purpose of recycling, reuse, or storage for later recycling or reuse.
- j) "Construction and Demolition Waste Management Plan" means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor/Contractor for any Covered or Noncovered Project that indicates the estimated diversion that the Contractor/Contractor anticipates in diverting from disposal.
- k) "Construction and Demolition Waste Management Report" means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor for any Project that documents the disposal and diversion tonnages and destinations.

9-3 *INFEASIBILITY EXEMPTION*

- a) Application. If the Contractor experiences unique circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement, the Contractor shall apply for an exemption at the time that it submits the WMP. The Contractor shall indicate on the WMP the maximum rate of diversion the Contractor believes is feasible for each material and the specific circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement.
- b) The Engineer shall review the information supplied by the Contractor and may meet with the Contractor to discuss possible ways of meeting the Diversion Requirement. Based on the information supplied by the Contractor, the Engineer shall determine whether it is possible for the Contractor to meet the Diversion Requirement.
- c) If the Engineer determines that it is infeasible for the Contractor to meet the Diversion Requirement due to unique circumstances, the Engineer shall determine the maximum feasible diversion rate for each material and shall indicate this rate on the WMP submitted by the Contractor. The Engineer shall return a copy of the WMP to the Contractor marked "Infeasibility Exemption Approved."
- d) Denial of Exemption. If the Engineer determines that it is possible for the Contractor to meet the Diversion Requirement, the Engineer shall so inform the Contractor in writing. The Contractor will have 15 days to resubmit a new WMP. If the Contractor fails to resubmit a new WMP, or if the resubmitted WMP does not comply with the requirements of the plan, the Engineer shall deny the WMP.

9-4 *DIVERSION PROGRAM*

The methodology used to calculate diversion is based on the Title 14, California Code of Regulations, Article 6.1 Solid Waste Generation Study, Section 18722 et seq, and is consistent with CalRecycle measurement protocols. The following equation defines the "Generation-Based Diversion Quantification Methodology":

$$\begin{aligned} \text{Generation} &= \text{Disposal + Diversion} \\ \text{Diversion Rate (\%)} &= \frac{\text{Diversion Tons}}{\text{Generation Tons}} \end{aligned}$$

9-5 *ADDITIONAL INFORMATION*

Other materials to assist the Contractor in completing the WMP can be found on the City's website at www.manhattanbeach.gov.

- Construction and Demolition Debris Recycling Guide
- Construction and Demolition Recycling Brochure

CITY OF MANHATTAN BEACH
Construction & Demolition Waste Management Plan

Manhattan Beach Municipal Code 5.26 requires construction projects to reuse or recycle 65% of all construction site waste (all demolition and roof tear-off projects, and all construction with a total value of \$100,000).

REQUIRED GOAL: REUSE OR RECYCLE A MINIMUM OF 65% OF ALL PROJECT WASTE

Instructions:

1. Complete entire WMP & submit to the Project Manager as a project submittal.
2. Reuse and/or recycle at least 65% of all construction site waste and keep good records of all facility waste tickets.
3. Submit a copy of this WMP and ALL recycling and landfill facility weight tickets before Final Inspection to the Project Manager as a new project submittal. **A COPY OF THIS WMP AND RECEIPTS OF ALL RECYCLING AND DISPOSAL SHALL BE SUBMITTED BEFORE FINAL PAYMENT WILL BE MADE BY THE CITY.**

Fines for Non-Compliance (MBMC 5.26.020): Demo projects up to \$5,000 and Construction projects up to \$10,000

Project Name: _____

Project Address: _____

Type of Project: Street Improvement Water Main Sewer Main
 Storm Drain Other

Total Bid Price: \$ _____

Requesting Infeasibility Exemption: Yes No

Contractor Name: _____ **Contact Name:** _____

Address: _____ **Contact Phone:** _____

Recycler: _____ **Recycler Contact:** _____

Recycler Address: _____ **Recycler Contact Phone:** _____

	CITY USE ONLY	
	Application (Date)	Final (Date)
Approved	_____	_____
Further explanation needed (see attached)	_____	_____
Denied	_____	_____

Infeasibility Exemption Approved	_____
Reviewed By	_____

Submit this form and the attached Waste Management Plan Table to: **Project Manager by email or
 Engineering Division, City of Manhattan Beach 3621 Bell Avenue, Manhattan Beach, CA 90266**

CITY OF MANHATTAN BEACH

Construction & Demolition Waste Management Plan Table

Project Name: _____

Total Estimated Waste Generated by Project: _____ (IN TONS).
 (Ask your hauler, recycler or site cleanup vendor to assist you. Use receipts from your previous jobs for estimates.)

Complete and return with Building Permit Application				Complete and return with receipts prior to final building approval		
Material Type	Estimated Reused/ Recycled	Estimated Disposed/ Landfilled	Vendor or Facility to be Used (Destination)	Actual Reused/ Recycled	Actual Disposed/ Landfilled	Vendor or Facility Used (Destination)
Asphalt & Concrete						
Bricks/Masonry/Tiles						
Building Materials (doors, windows, fixtures, etc.)						
Cardboard						
Concrete Pavement and Grindings						
Drywall (new, unpainted)						
Asphalt Pavement Grindings						
Landscape Debris (Plant & Tree Trimmings)						
Scrap Metal						
Unpainted Wood & Pallets						
Other (painted wood & drywall, roofing, etc.)						
Mixed C&D*						
Trash/Garbage						
TOTAL						

*Mixed C&D is defined as a mixture of three or more materials (e.g., wood, drywall, roofing, etc.) from construction or demolition sites that will be taken to a "qualified" facility for recycling. (See C&D Debris Recycling Guide.)

If you are requesting an infeasibility exemption and the estimated amount reused/recycled is less than 65%, please explain why (attach additional sheets if necessary):

If the actual amount reused/recycled is less than 65%, please explain why:

Prepared by (please print): _____

Date: _____

Contractor Signature: _____

Phone Number: _____

Conversion Rates

The following conversion rates are estimates. The ranges vary widely, depending on how the materials are handled (compacted, loose, chipped, etc.). Use the conversion factors and receipts from any previous projects to help you estimate the potential amount of materials and diversion. Take into consideration the type and load of vehicles that will be used to haul the materials. Ask your hauler or recycler to assist you in estimating these numbers.

Material	Lbs/cy	Tons/cy
Asphalt	1,400 lbs/cy	0.7 tons/cy
Brick	2,430 lbs/cy	1.21 tons/cy
Cardboard	100 lbs/cy	0.05 tons/cy
Concrete	2,600 lbs/cy (Sources range from 1,000 to 4,000)	1.3 tons/cy
Dirt/Soils	2,660 lbs/cy	1.33 tons/cy
Drywall	700 lbs/cy	0.35 tons/cy
Wood (chipped)	300 – 650 lbs/cy	0.15 – 0.3 tons/cy
Mixed C&D Debris	900 lbs/cy	0.45 tons/cy
Mixed Waste/Trash	100 – 350 lbs/cy	0.5 – 0.175 tons/cy

SECTION 10. ADDITIONAL TERMS

10-1 NONDISCRIMINATORY EMPLOYMENT

The Contractor shall not unlawfully discriminate against any individual based on race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation or military and veteran status. The Contractor understands and agrees that it is bound by and will comply with the nondiscrimination mandates of all statutes and local ordinances and regulations.

10-2 NOTICE TO PROCEED

Upon award of the Contract and signing the Contract Documents, the City shall issue the Contractor a Notice to Proceed. The City will not authorize any Work to be done under these Contract Documents before the Contract has been fully executed. Any Work that is done by the Contractor in advance of such time shall be considered as being done at the Contractor's own risk and responsibility, and as a consequence will be subject to rejection.

10-3 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the final acceptance of the Work by the City as defined in Section 3-13.2 of the General Provisions, by written action of the Engineer, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part of the Work by the action of the elements, criminal acts, or any other cause. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the Work occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries or damages arising from the sole negligence or willful misconduct of the City, its officers, agents or employees. In the case of suspension of Work from any cause whatever, the Contractor shall be responsible for all materials and the protection of Work already completed, shall properly store and protect them if necessary, and shall provide suitable drainage and erect temporary structures where necessary.

10-4 PROCEDURE IN CASE OF DAMAGE TO PUBLIC PROPERTY

Any portions of curb, gutter, sidewalk or any other City improvement damaged by the Contractor during the course of construction shall be replaced by the Contractor at its own cost. The cost of additional replacement of curb, gutter or sidewalk in excess of the estimated quantities shown in the Bid form and Specifications, and found necessary during the process of construction (but not due to damage resulting from carelessness on the part of the Contractor during its operation), shall be paid to the Contractor at the unit prices submitted in its Bid.

10-5 REMOVAL OF INTERFERING OBSTRUCTIONS

The Contractor shall remove and dispose of all debris, abandoned structures, tree roots and obstructions of any character encountered during the process of excavation. It is understood that the cost of any such removals are made a part of the unit price bid by the Contractor under the item for excavation or removal of existing Work.

10-6 SOILS ENGINEERING AND TESTING

An independent certified materials testing firm must be retained by the Contractor to perform materials tests and applicable special inspections during the Contractor's entire operation to ascertain compliance with the Contract requirements. . If the initial tests do not meet the Contract requirements, the Contractor shall bear the cost of all subsequent tests.

The Contractor shall provide a copy of the testing and inspection reports to the Engineer within 24 hours upon receipt.

If the City requires other tests or more specific requirements for testing regarding this Project, those details will be included in the Special Provisions.

10-7 ACCESS TO PRIVATE PROPERTY

Unless otherwise stated in the Special Provisions, the Contractor shall be responsible for all fees and costs associated with securing permission to access private property for any portion of the Project.

10-8 WORKING DAYS AND HOURS

The Contractor shall do all Work between the hours of 7:30 a.m. to 4:30 p.m., Monday through Friday. No Work will be allowed on Saturday, Sunday or City holidays listed on the City's website unless specifically mentioned in the Contract Documents or authorized by the City Engineer.

In addition, no Work will be allowed on any election or special election day that may be declared within a 300-foot radius of any voting location or in any location that will disturb access to any voting location, as determined and directed by the City Engineer. If the Work is within the 300-foot radius or disturbs access to any voting location, as determined by the City Engineer, a time extension of one Working Day will be granted for each such Day that Work cannot be performed.

A permit may have other hours or Days for the Contractor to do the Work, and those hours and Days shall supersede any hours and Days written in this Section.

Whenever the Contractor is permitted or directed to perform night Work or to vary the period during which Work is performed during the Working Day, the Contractor shall give 24 hours' notice to the Engineer so that inspection may be provided. Charges to the Contractor for inspection will be incurred as stated in Section 6-2.1.

10-9 CLAIM DISPUTE RESOLUTION

In the event of any dispute or controversy with the City over any matter whatsoever, the Contractor shall not cause any delay or cessation in or of Work, but shall proceed with the performance of the Work in dispute. The Contractor shall retain any and all rights provided that pertain to the resolution of disputes and protests between the parties. The Disputed Work will be categorized as an "unresolved dispute" and payment, if any, shall be as later determined by mutual agreement or a court of law. The Contractor shall keep accurate, detailed records of all Disputed Work, claims and other disputed matters.

All claims arising out of or related to the Contract Documents or the Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code

Section 810 *et seq.*) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 *et seq.* (Article 1.5), where applicable. The Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and Article 1.5 (if applicable), and must then adhere to Article 1.5 and Section 9204, as applicable, pursuant to the definition of “claim” as individually defined therein.

10-10 THIRD PARTY CLAIMS

The City shall have full authority to compromise or otherwise settle any claim relating to the Project at any time. The City shall timely notify the Contractor of the receipt of any third-party claim relating to the Project. The City shall be entitled to recover its reasonable costs incurred in providing this notice.

10-11 COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable federal, State and local laws, ordinances, codes and regulations in force at the time the Contractor performs pursuant to the Contract Documents.

10-12 CONTRACTOR'S REPRESENTATIONS

By signing the Contract, the Contractor represents, covenants, agrees, and declares under penalty of perjury under the laws of the State of California that: (a) the Contractor is licensed, qualified, and capable of furnishing the labor, materials, and expertise necessary to perform the services in accordance with the terms and conditions set forth in the Contract Documents; (b) there are no obligations, commitments, or impediments of any kind that will limit or prevent its full performance under the Contract Documents; (c) there is no litigation pending against the Contractor that could adversely affect its performance of the Contract, and the Contractor is not the subject of any criminal investigation or proceeding; and (d) to the Contractor's actual knowledge, neither the Contractor nor its personnel have been convicted of a felony.

10-13 CONFLICTS OF INTEREST

The Contractor agrees not to accept any employment or representation during the term of the Contract or within 12 months after acceptance as defined in Section 3-13.2 of the General Provisions that is or may likely make the Contractor “financially interested,” as provided in Government Code Sections 1090 and 87100, in any decisions made by the City on any matter in connection with which the Contractor has been retained pursuant to the Contract Documents.

10-14 APPLICABLE LAW

The validity, interpretation, and performance of these Contract Documents shall be controlled by and construed under the laws of the State of California, excluding California's choice of law rules. Venue for any such action relating to the Contract shall be in the Los Angeles County Superior Court.

10-15 TIME

Time is of the essence in these Contract Documents.

10-16 INDEPENDENT CONTRACTOR

The Contractor and Subcontractors shall at all times remain, as to the City, wholly independent contractors. Neither the City nor any of its officials, officers, employees or agents shall have control over the conduct of the Contractor, Subcontractors, or any of their officers, employees, or agents, except as herein set forth, and the Contractor and Subcontractors are free to dispose of all portions of their time and activities that they are not obligated to devote to the City in such a manner and to such Persons that the Contractor or Subcontractors wish except as expressly provided in these Contract Documents. The Contractor and Subcontractors shall have no power to incur any debt, obligation, or liability on behalf of the City, bind the City in any manner, or otherwise act on behalf of the City as agents. The Contractor and Subcontractors shall not, at any time or in any manner, represent that they or any of their agents, servants or employees, are in any manner agents, servants or employees of the City. The Contractor and Subcontractors agree to pay all required taxes on amounts paid to them under the Contract, and to indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract Documents. The Contractor shall include this provision in all contracts with all Subcontractors.

10-17 CONSTRUCTION

In the event of any asserted ambiguity in, or dispute regarding the interpretation of any matter herein, the interpretation of these Contract Documents shall not be resolved by any rules of interpretation providing for interpretation against the party who causes the uncertainty to exist or against the party who drafted the Contract Documents or who drafted that portion of the Contract Documents.

10-18 NON-WAIVER OF TERMS, RIGHTS AND REMEDIES

Waiver by either party of any one or more of the conditions of performance under these Contract Documents shall not be a waiver of any other condition of performance under these Contract Documents. In no event shall the making by the City of any payment to the Contractor constitute or be construed as a waiver by the City of any breach of covenant, or any default that may then exist on the part of the Contractor, and the making of any such payment by the City shall in no way impair or prejudice any right or remedy available to the City with regard to such breach or default.

10-19 TERM

The Contract is effective as of the Effective Date listed, and shall remain in full force and effect until the Contractor has fully rendered the services required by the Contract Documents or the Contract has been otherwise terminated by the City. However, some provisions may survive the term listed within this Section, as stated in those provisions.

10-20 NOTICE

Except as otherwise required by law, any notice or other communication authorized or required by these Contract Documents shall be in writing and shall be deemed received on (a) the day of delivery if delivered by hand or overnight courier service during the City's regular business hours or (b) on the third business day following deposit in the United States mail, postage prepaid, to the addresses listed on the Contractor's Bid and City Hall, or at such other address as one party may notify the other.

10-21 SEVERABILITY

If any term or portion of these Contract Documents is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of these Contract Documents shall continue in full force and effect.

10-22 REQUIREMENT TO MITIGATE THE SPREAD OF COVID-19

The Contractor and all Subcontractors for the Work shall comply with all applicable Federal, State, Los Angeles County, and City statutes, regulations, orders, and ordinances regarding COVID-19 Infection Prevention. This requirement specifically includes, without limitation, compliance with the "Safety and Health Guidance COVID-19 Infection Prevention in Construction" issued by the California Department of Industrial Relations, Division of Occupational Safety and Health and Safety on October 27, 2020 and as may be amended from time to time by the Department.

Prior to the pre-construction meeting, the Contractor shall submit to the City a "COVID-19 Mitigation Program" implementing these requirements and shall post the COVID-19 Mitigation Program on the project site in a manner designated by the City's Project Manager. The failure of employees or workers of the Contractor and all subcontractors on the Work to comply with these requirements shall be a default per Section 6-7.1, and may also result in a suspension of the Work pursuant to Section 6-6. Contractor acknowledges that, in the event that the Engineer suspends the Work as a result of such failure by Contractor or one of its subcontractors to comply with these requirements, City is not responsible for the delay, and that pursuant to Section 6-6.1 the Contractor is not entitled to compensation. The Contractor shall also pay to the City the costs and expenses incurred by the City resulting from the failure of employees of the Contractor and all subcontractors on the Work to comply with these requirements including, but not limited to, the salaries and benefits for City employees who are unable to work due to exposure to COVID-19 as a result of such failure, and workers compensation benefits and expenses. Delays in the Work resulting from Contractor's or its subcontractor's failure to comply with these regulations shall not be considered an unforeseen event entitling Contractor to an extension of time or payment for delay pursuant to Section 6-4 of the Standard Specifications.

PART 2 - CONSTRUCTION MATERIALS (NOT USED)

PART 3 - CONSTRUCTION METHODS

The corresponding provisions in Part 3 (Construction Methods) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

SECTION 306 - OPEN TRENCH CONDUIT CONSTRUCTION

306-3.1 GENERAL

Pursuant to Public Contract Code Section 7104, if the project involves trenching more than four (4) feet deep, Contractor shall promptly and before the following conditions are disturbed notify the City in writing of any:

a. Material that Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code Section 25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; and/or

b. Subsurface or latent physical conditions at the site differing from those indicated; and/or

c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

d. As required by Labor Code Section 6705 and in addition thereto, whenever work under the Contract that involves an estimated expenditure in excess of twenty-five thousand dollars (\$25,000) for the excavation of any trench or trenches five (5) feet or more in depth, Contractor shall submit for acceptance by City in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by Contractor, and all costs therefor shall be included in the price of the Contract. Nothing in this provision shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this provision shall be construed to impose tort liability on the City or on any City officer, agent, consultant, representative, or employee. All plans, processing and shoring costs are Contractor's responsibility and must be included in Contractor's bid.

PART 4 - EXISTING IMPROVEMENT

The corresponding provisions in Part 4 (Existing Improvement) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

SECTION 400 - PROTECTION AND RESTORATION

400-1 GENERAL

All costs to the Contractor for protecting, removing, restoring, relocating, repairing, replacing, or reestablishing existing improvements shall be included in the Bid.

The contractor shall be responsible for the establishment, maintenance and decommission when considered appropriate by the Engineer of the following:

Protection and restoration of existing improvements: Contractor shall protect, relocate, repair, replace or re-establish all existing improvements within the project limits which are not designated for removal (i.e. signs, markings, striping, posts, curb, gutter, sidewalk, ADA detectable warning devices, asphalt, delineators, plants, irrigation infrastructure, fences, walls, structures, survey control monumentation, etc.) which are damaged or removed as a result of its operations or as required by the Plans and/or Specifications. Relocations, repairs, replacements or re-establishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions at contractor's expense to the satisfaction of the Engineer.

SECTION 402 - UTILITIES

402-1 LOCATION

The location and existence of any underground Utility or substructure has not been obtained. The methods used and costs involved to locate existing elements, points of connection and all construction methods are the Contractor's sole responsibility. Accuracy of information furnished, as to existing conditions, is not guaranteed by the City. The Contractor, at its sole expense, must make all investigations necessary to determine locations of existing elements, which may include contacting Underground Service Alert and other private underground locating firm(s), utilizing specialized locating equipment, hand trenching, or both. For every Dig Alert Identification Number issued by Underground Service Alert during the course of the Project, the Contractor must submit to the City the following form. The Contractor shall be responsible for preserving the integrity of the existing underground utilities at the site.

UNDERGROUND SERVICE ALERT IDENTIFICATION NUMBER FORM

No excavation will be permitted until this form is completed and returned to the City.

Government Code Section 4216 *et seq.* requires a Dig Alert Identification Number to be issued before a permit to excavate will be valid.

To obtain a Dig Alert Identification Number, call Underground Service Alert at **811** a minimum of three (3) Working Days before scheduled excavation. For best response, provide as much notice as possible up to ten (10) Working Days.

Dig Alert Identification Number: _____

Dated: _____

("CONTRACTOR")

By: _____

Printed Name: _____

Title: _____

By: _____

Printed Name: _____

Title: _____

Note: This form is required for every Dig Alert Identification Number issued by Underground Service during the course of the Work. Additional forms may be obtained from the City upon request.

402-1.3 Entry by Utility Owners

The right is reserved to the owners of public Utilities or franchises to enter the Project site for the purpose of making repairs or changes in their property that may be necessary as a result of the Work as well as any other reason authorized by the City. When the Contract Documents provide for the Utility owners to alter, relocate or reconstruct a Utility, or when the Contract Documents are silent in this regard and it is determined by the City Engineer that the Utility owners must alter, relocate or reconstruct a Utility, the Contractor shall schedule and allow adequate time for those alterations, relocations or reconstructions by the respective Utility owners. City employees and agents shall likewise have the right to enter upon the Project site at any time and for any reason or no reason at all.

402-2 PROTECTION

If Contractor damages or breaks the Utilities, it will be the Contractor's responsibility to repair the Utility at no cost to the Utility or the City.

402-3 REMOVAL

Facilities encountered during the prosecution of the Work that are determined to be abandoned shall be removed by the Contractor as required for the Work, unless directed otherwise by the City Engineer. The remaining portion of the existing Utility which is left in place shall be accurately recorded, in elevation and plan, on the control set of Contract Drawings.

402-4 RELOCATION

The Contractor shall cooperate fully with all Utility forces of the City or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities that interfere with the progress of the Work. The Contractor shall schedule the Work so as to minimize interference with the relocation, altering, or other rearranging of facilities.

402-6 COOPERATION

The Contractor's attention is directed to the fact that Work may be conducted at or adjacent to the site by other contractors during the performance of the Work under this Contract. The Contractor shall conduct its operations so as to cause a minimum of interference with the work of such other contractors, and shall cooperate fully with such contractors to provide continued safe access to their respective portions of the site, as required to perform work under their respective contracts. Compensation for compliance shall be included in the various items of the Work, and no additional compensation shall be allowed therefor.

402-7 NOTIFICATION

The Contractor shall notify the City Engineer and the owners of all Utilities and substructures not less than forty-eight (48) hours before starting construction.

PART 5 - PIPELINE SYSTEM REHABILITATION (NOT USED)

PART 6 - TEMPORARY TRAFFIC CONTROL

The corresponding provisions in Part 6 (Construction Methods) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

SECTION 600 – ACCESS

600-1 GENERAL

SEE PART 9 – SPECIAL INSTRUCTIONS, SECTION 3-2 CONSTRUCTION PHASING

Due to the heavily visited area, the contractor shall minimally impact parking, pedestrian traffic, and vehicle traffic, by providing adequate access to all Marine Avenue Park facilities not impacted by construction and to provide traffic control where requested by the City Engineer.

The Contractor shall maintain vehicular and pedestrian access adjacent to the project site.

SECTION 601 – TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES

601-3.5 SIGNS AND SIGNAGE

Where necessary, properly post "TEMPORARY NO PARKING ANYTIME" signs at least 72 hours before start of work, and the type of sign and information included on the sign shall conform to the requirements included in the Right-of-Way Permit issued by the City. The Contractor shall notify the Police Department immediately upon posting signs.

Vehicular and pedestrian access to adjacent properties shall be provided at all times. Closed sidewalks and/or bike paths shall be posted with "SIDEWALK CLOSED" signs at each approach, to the closure and a City approved alternate route provided, where necessary.

The Contractor shall obtain a Manhattan Beach City Permit for work performed in the right-of-way, and provide the City with evidence of insurance coverage in compliance with section 7-3 "Insurance" in the General Provisions of the Specifications for this project. Notify the Public Works Inspector at (310) 802-5306, at least 72 hours prior to any construction in right-of-way. At least 72 hours in advance of closing, partially closing or reopening, any street, alley, sidewalk or other public thoroughfare, the Contractor shall notify the Police, Fire, Traffic and Engineering Department and affected residents and business owners. Deviations must first be approved in writing by the Engineer.

Paths of travel: Contractor is required to provide a pedestrian management plan to show how pedestrians, bicyclists, and vehicles are detoured around each construction area, and providing appropriate traffic control for escorting vehicles, equipment and materials on and off Marine Avenue Park.

PART 7 - STREET LIGHTING AND TRAFFIC SIGNAL SYSTEM (NOT USED)

PART 8 - LANDSCAPE AND IRRIGATION (NOT USED)

PART 9 - SPECIAL INSTRUCTIONS

SECTION 1. GENERAL

1-1. PROJECT DESCRIPTION

The Marine Avenue Park Synthetic Field Turf Replacement Project is a Public Works project including, but not limited to, demolition of the existing turf and appurtenances, installation of new synthetic field turf, landscape turf including all incidental work described in the contract documents.

1-2. GENERAL COORDINATION

All work shall be coordinated with City of Manhattan Beach staff and/or city vendors, including but not limited to, sequencing and installation of synthetic field turf, staging area, phasing and scheduling, and traffic control / access throughout the project site.

1-3. GENERAL COOPERATION

The Contractor shall conduct its operations so as to cause a minimum of interference with the work of such other contractors or vendors in the vicinity (City projects or private), special events set-up/tear-down, and classes, and shall cooperate fully with such contractors and staff personnel to provide continued safe access to their respective portions of the park, as required to perform work under their respective contracts.

SECTION 2. STAKEHOLDERS

2-1 STAKEHOLDERS

The following is a list of the primary stakeholders and outside permitting agencies:

- 1) City of Manhattan Beach Department of Public Works
- 2) City of Manhattan Beach Parks and Recreation Department
- 3) Various user groups

SECTION 3. SCHEDULE

3-1 CONSTRUCTION SCHEDULE

Contractor should be prepared for the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials to be issued approximately July 2023 in an effort to account for review and product lead times. The anticipated project completion date milestone shall be September 1, 2023.

3-2 CONSTRUCTION PHASING

Contractor must submit a work sequence and phasing plan to the Engineer for review and approval prior to any site mobilization. Demolition of the existing synthetic field turf shall not commence until new synthetic field turf improvements have been approved, fabricated, delivered and ready to install.

Contractor shall conduct its operations so as to permit access to all adjacent properties and to other

Marine Avenue Park facilities in compliance with the requirements of all applicable ADA rules and regulations including but not limited to the Marine Avenue Park parking lot, baseball field, basketball courts, playground equipment, common areas, and Marine Avenue Park Skate Spot not directly affected by the construction activities. The project site consists of the multi-use playing field within Marine Avenue Park boundaries and any ancillary structures affected by construction activities around its perimeter.

Demolition Plan: contractor shall submit a demolition plan for review by City Staff including a written scope of all demolition activities on the plans and their proper disposal in compliance with the City's Construction & Demolition Waste Management Plan. Contractor shall not commence any construction work prior to the plan's approval by City Staff.

Construction Site Security Plan: contractor is responsible for all site security issues during the construction phase of this project. Contractor to provide a comprehensive security plan for City approval.

Work site maintenance: contractor shall obtain written approval for the construction laydown and/or staging areas prior to mobilization. Due to space limitations contractor shall provide a remote staging area for all materials and equipment. Contractor shall submit a staging area plan showing at a minimum address, plot plan with delineating the staging area with construction boundary fencing and posting a sign identifying the area as the construction staging area. Contractor shall be responsible for the installation of all applicable temporary BMPs within the staging area. Contractor shall be responsible for restoring the staging area to its original state or an improved state at the end of construction or when it ceases to be a staging area for the construction site. Temporary use permit will be required if a private property within the City of Manhattan Beach is utilized.

Protection and restoration of existing improvements: contractor shall protect, relocate, repair, replace or re-establish all existing improvements within the project limits which are not designated for removal (i.e. shock pad, field drainage system, trees and plants, irrigation infrastructure, curbs, swales, fences, sidewalk, walls, signs, structures, etc.) which are damaged or removed as a result of its operations or as required by the Plans and Specifications. Relocations, repairs, replacements or re-establishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions at contractor's expense to the satisfaction of the Engineer.

Cooperation clause: contractor will likely be required to cooperate and coordinate with other contractors onsite as necessary. No additional compensation will be provided for this effort.

Project signage and information: contractor to install minimum 4'x4' sign stating at a minimum the following:

- Project name
- The legend "Playing field is closed due to construction activities from <Date> to <Date>". The date(s) information will be defined and shown on the sign prior to starting any construction activities.
- Contractor name, contact person and 24 hour contact information.
- Identical signs shall be provided locations designated by the Engineer.

Full compensation for compliance with all requirements on this section shall be considered as included in the appropriate bid items, except as otherwise noted.

SECTION 4. COORDINATION OF WORK

4-1 STAGING AREA

During construction, the approved / designated construction staging and Contractor's laydown area will be the Marine Park Soccer Field per the construction documents. Should the Contractor require an additional staging area, the Contractor shall make its own arrangements for any necessary off-site storage, parking, or shop areas needed for the proper execution of the Work including the transfer of materials and equipment to and from the project vicinity. No overnight material or equipment staging will be allowed at the designated parking lots, unless approved by the City. Compensation for compliance shall be included in the line item for general requirements or various items of the Work, and no additional compensation shall be allowed therefor.

Construction Parking Management Plan (CPMP): contractor shall submit a CPMP including location for parking for services, deliveries, workers and loading onto the project site for review and shall not commence any construction work prior to its approval by City Staff. Contractor will ensure all its workers and other associated entities of the project to park outside of the immediate construction site location and to use public transportation and/or carpool to the project.

4-2 SPECIAL EVENTS AND CITY CLASSES – (NOT USED)

PART 10 - STANDARD AND SPECIAL TECHNICAL PROVISIONS

MARINE AVENUE PARK SYNTHETIC FIELD TURF REPLACEMENT PROJECT PROJECT NO. D-946

TECHNICAL SPECIFICATIONS AND REQUIREMENTS

The Technical Specifications are organized into Divisions and Sections using the 49-division format and CSI's MasterFormat, current edition, numbering system.

The Technical Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Contract Documents are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Contract Documents or Technical Specifications to determine numbers and names of Sections in the Contract Documents.

Sections in Division 1 govern the execution of the Work of all Sections in the Technical Specifications.

The Technical Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Language used in the Technical Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Technical Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted. The words "shall", "shall be", or "shall comply with", depending on the context, are implied where a colon is used within a sentence or phrase.

TABLE OF CONTENTS

DIVISION 1 – GENERAL REQUIREMENTS

Section 01 11 00 – Summary of Work..... 01 11 00
Section 01 33 00 – Submittals..... 01 33 00
Section 01 41 00 – Regulatory Requirements..... 01 41 00
Section 01 74 00 – Construction Waste Management and Disposal..... 01 74 00
Section 01 78 00 – Closeout Procedures..... 01 78 00

DIVISION 2 – EXISTING CONDITION

Section 02 00 01 – Basic Site Materials and Methods..... 02 00 01
Section 02 30 00 – Earthwork..... 02 30 00
Section 02 41 01 – Demolition 02 41 00

DIVISION 32 – EXTERIOR IMPROVEMENTS

Section 32 18 23 – Synthetic Field Turf Surfacing32 18 23

PLANS: Drawings for Project No. D-946 (Separate Document)

TECHNICAL APPENDICES (NOT USED)

END OF TABLE OF CONTENTS

SECTION 01 11 00 SUMMARY OF WORK

PART 1 GENERAL

1.1 SUMMARY

- A. The Contractor shall provide all materials, labor, tools, supplies, equipment, transportation, superintendence, temporary construction, and all other services and facilities necessary to complete the demolition of existing portions and construction of new improvements, including all incidental work described in the contract documents.
- B. The scope of work as contained in the Contract Documents and as indicated in the Drawings.
- C. Secure necessary permits, perform coordination work, regulatory requirements, and site environmental requirements for the Project.
- D. All work shall be in accordance with applicable codes and local regulations that may apply. In case of conflict in or between the Contract Documents and a governing code or ordinance, the more stringent standard shall apply.
- E. The Contractor shall review and fully familiarize themselves with all of the requirements of the project, including Best Management Practices, provided in Drawings.

1.2 RELATED SECTIONS

- A. Section 01 33 00 – Submittals

1.3 LOCATION

- A. The Marine Avenue Park Synthetic Field Turf Replacement Project site is located at 1625 Marine Ave, Manhattan Beach, California 90266.

1.4 ACCESS AND USE OF SITE

- A. Access to the project site is from Marine Avenue. Temporary project storage shall be coordinated with and approved by the Engineer.
- B. Coordinate and cooperate with others working in the area, including the City of Manhattan Beach staff, to ensure that all roadways, streets, and sidewalks are kept open and free of soil, dust, and debris.
- C. Failure to keep the roadways, streets, and sidewalks clean will be basis for the City to suspend work.
- D. Staging Area: Contractor shall submit a staging area plan. This limited staging area can be available on a temporary basis for the Contractor's use for the following:
 - 1. Storage
 - 2. Stockpiling materials (temporary basis)

1.5 PROJECT ENVIRONMENTAL GOALS

- A. Environmental goals include:

1. Maintain a safe working environment.
2. Preserve and restore the site ecosystem and biodiversity.
3. Minimize off-site environmental impact including truck trips through adjoining neighborhoods, pollution and construction noise.
4. Manage construction site and storage of materials to avoid negative impacts to the site and surrounding community.
5. Reduce construction waste through reuse, recycling, and supplier take-back, if applicable.

1.6 SITE CONDITIONS

Site Investigation: The Contractor acknowledges satisfaction as to the nature and location of the Work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, power, and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during work, and all other matters that can in any way affect the work or the cost thereof under this Contract.

1.7 SUBMITTALS

- A. Contacts: For each Contractor representative, Contractor shall submit to the City the office telephone number, cellular telephone number, pager number if applicable, and residence telephone number.
- B. Correspondence to the City shall be serialized and dated.
 1. Furnish original and one copy.
 2. Administrative and technical questions shall be formally submitted in a Request for Information (RFI) format.
- C. Contractor shall submit a work sequence and phasing plan for City review and approval prior to site mobilization.
- D. Daily Reports:
 1. Submit reports daily that detail, on a form acceptable to the City:
 - a) A record of operations, labor, and equipment available, used and idle.
 - b) Materials and equipment received each day.
 - c) Problems encountered.
 - d) If Contractor fails to submit reports daily, the City may withhold payments for undocumented work until such time as Contractor submits the required information.
 - e) Contractor shall make available any records as requested by City to verify that the reports are accurate.
 2. Submit each morning, a list of specific items requiring testing, final inspection,

monitoring, and witnessing by the City on that day and for the following day.

1.8 SEQUENCING (ORDER OF WORK)

- A. It is not the intent of these Specifications to define the order of work. However, the design has been based on a sequence of events to enable a logical progression of the work to its earliest completion.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 CONTRACTOR'S DUTIES

- A. Except as otherwise specified, furnish the following to the full extent required by the Contract:
 - 1. Full-time superintendent.
 - 2. Construction equipment, tools, machinery, and materials
 - 3. Utilities required for demolition, construction, and related activities.
 - 4. Other facilities and services necessary to properly execute and complete the Work, including security for Worksite, storage and protection of all materials awaiting incorporation into the Work.

3.2 CONTRACTOR'S USE OF WORKSITE

- A. Confine Worksite operations to areas permitted by law, ordinances, permits and the Contract.
- B. Consider the safety of the Work and that of the people and property on and adjacent to the Worksite when determining amount, location, movement, and use of materials and equipment on Worksite.
- C. Do not load Worksite with equipment and products not specifically needed for the work. Only equipment, tools or materials required for this Work may be stored at the Worksite.
- D. Protect products, equipment and materials stored on Worksite.
- E. Assume full responsibility for the protection and safekeeping of products stored on the site under this Contract.

END OF SECTION 01 11 00

SECTION 01 33 00 SUBMITTALS

PART 1 GENERAL

1.1 SUMMARY

- A. This section consists of requirements for Contractor submittals to the City including plans, procedures, certificates, shop drawings, product data, samples, requests for information (RFI), and miscellaneous work-related submittals. Individual requirements for submittals are described in pertinent sections of these specifications.

1.2 RELATED SECTIONS

See each specification section for submittal requirements.

1.3 TYPES OF SUBMITTALS

- A. Submittals are categorized for convenience as follows:
1. Work Plans and Procedures: Include narrative descriptions, diagrams, equipment, and procedures for construction activities.
 2. Certificates of Compliance: Include certified material test reports and tickets demonstrating compliance with materials, tests, and specifications indicated.
 3. Shop Drawings: Include specially prepared technical data, including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements, and similar information not in standard printed form for general application.
 4. Product Data: Include standard printed information on materials, products, and systems, not specially prepared for this project, other than designation of selections from among available choices printed therein.
 5. Samples: Include physical examples of materials for limited visual inspection and (where indicated) for more detailed testing and analysis. Note: See section 32 18 23 (Synthetic Field Turf Surfacing) for samples of Synthetic Field Turf to be submitted to the City prior to construction.
 6. Miscellaneous Submittals: Related directly to work, including work schedule, phasing plans, daily logs, requests for information (RFI), permits, warranties, maintenance data and agreements, workmanship bonds, survey data survey reports, physical work records, quality testing reports, certifying reports, copies of industry standards, record drawings, field measurement data, operating manuals, maintenance materials, similar information, similar devices, and similar materials applicable to work and not processed as shop drawings, product data, and samples.
 7. Request for information (RFI): After Award of Bid, the RFI process shall proceed as outlined in below. In no case will an RFI submitted by a subcontractor be responded to the City.
 - a) RFI answers will be on a form provided by the Contractor. Contractor shall submit RFI form to the Engineer for approval prior to the first RFI.

Contractor shall submit RFI electronically. The answers on the form will be the only response required unless additional Plans are provided by the Engineer or City. No time and cost impacts will be reviewed by the City on this form. Contract Documents will not be revised via RFI answers. Time and cost impacts will be determined through the change order process, not the RFI process.

1.4 SCHEDULE OF SUBMITTALS

- A. Contractor shall identify submittals that will be required in each section of specifications and determine the date on which the submittal will be made. Milestones are specified for selected submittals and are specified in each section. The submittal schedule shall be submitted with the contractor's Preliminary Schedule to the City for approval. No work shall commence at the project site until these schedules are submitted.
- B. Throughout duration of this contract, the Contractor shall submit all product and procedure documentation for activities in this contract as required by Contract Documents. Contractor shall account for additional time for long lead items as required.
- C. Contractor shall submit to the City documented proof from the manufacturer indicating delivery dates to the project site of long lead components, that is components requiring ten (10) calendar days and more to deliver to the project site, within five (5) calendar days of "Notice to Proceed", for review by the City.

1.5 GENERAL SUBMITTAL REQUIREMENTS

- A. Submittals shall be made for all permanent materials incorporated in work whether specified to be submitted or not. RFI will be processed in the same fashion as other submittals. RFI will be processed by the City within five (5) calendar days after receipt from the Contractor
- B. Submittals shall be made for a complete system. Piecemeal submittals will not be accepted.
- C. At the pre-construction meeting, the City and the Contractor shall discuss exact procedure to be adopted for processing of submittals. Generally, submittals shall be made at the time indicated on the Contractor's approved submittal schedule. Submittals shall be made to the City by the Contractor. Submittals will be processed by the City within five (5) calendar days after receipt from the Contractor.
- D. No portion of the work requiring submission of a shop drawing, product data, and sample shall commence until the submittal has been approved by the City. All such portions of the work shall be in accordance with approved submittals. No extension of time will be given for any re-submittal for approval by the City.
- E. Submittals shall be consecutively numbered by each specification section using a document identifier, including submittal number and appropriate suffix, which shall include specification section number.
- F. Contractor shall, before making submittals, ensure that products will be available in quantities and in time required by contract.
- G. Contractor shall coordinate and sequence different categories of submittals for interface units of work so that one will not be delayed for coordination with another.
- H. Contractor shall maintain a file of all approved submittal documents at the work site.

- I. Contractor shall furnish permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name, and similar information to distinguish it from other submittals. Include the following:
 - 1. Submittal document identifier number.
 - 2. Respective Contract Drawing numbers.
 - 3. Field dimensions, as required, clearly identified as such.
 - 4. Identification of deviations from Contract Drawings and Specifications.
 - 5. Applicable standards, for example, American Society of Testing Material (ASTM) and Standard Specifications for Public Works Construction (SSPWC).
- J. Contractor shall show his executed internal review and approval marking. Submittals that are received from sources other than through the Contractor's office and that have not undergone the Contractor review will be returned and stamped "Rejected".
- K. Contractor shall be responsible for delivery of submittals in properly specified format for each submittal category. Failure to follow this direction shall not relieve the Contractor from compliance with contract cost and schedule.
- L. Except as otherwise indicated more stringently in individual work sections, the Contractor shall comply with requirements specified herein for each indicated category of submittal.
- M. To maintain continuity in work throughout this contract, the Contractor shall submit the same manufacturer, product, and procedure documentation for all like work specified herein. Different model numbers, products, and manufacturers for similar work will not be accepted, unless otherwise noted.

1.6 SHOP DRAWINGS

- A. Unless otherwise approved by the City or indicated in specific sections of the Specifications, when preparing for approval the Contractor shall prepare shop drawings on a size of 24 inches by 36 inches, which shall be accurately prepared to a scale sufficiently large to show all pertinent aspects of item and its method of connection to work. Contractor shall submit all submittals electronically to City.
- B. Where a submission involves engineering computations and original design work is depicted, the submission shall be signed by a California Professional Engineer licensed in the discipline required for the work and show the professional engineer's name, the professional engineer's State of California registration number, the professional engineer's seal, and the professional engineer's original signature. The submission shall certify that computations and design work are correct and in conformance with standards, codes, and acceptable engineering practice.
- C. Printing and distribution of submitted shop drawing and working drawings by the Contractor for the City's use shall be by the Contractor. Contractor shall make and distribute all copies required for his purposes.
- D. Where drawings are to be reviewed by others, in addition to the City, number of copies of such drawings to be submitted shall be increased as directed by the City at the Contractor's expense.

1.7 PRODUCT DATA

- A. Contractor shall furnish manufacturer's literature for all equipment, products, specialties, manufactured items, and items required by sections of these specifications. Contractor shall copies of manufacturer's literature electronically to the City.
- B. Contractor shall collect required data into one submittal for each unit of work and system, and clearly mark each copy to show which choices and options are applicable to the project.
- C. Contractor shall include the manufacturer's standard printed recommendations for application and use, compliance with standards, notation of field measurements that have been checked, and special coordination requirements.
- D. Contractor shall highlight manufacturer's standards diagrams, schedules, performance charts, illustrations, calculations, and other descriptive data to show information which is applicable to contract
- E. Contractor shall indicate dimensions, clearance, performance characteristics, capacities, and other diagrams, as applicable.
- F. Contractor shall identify manufacturer's standards diagrams, schedules, performance charts, illustrations, calculations, and other descriptive data to show information, that are applicable to the contract. Highlighting alone of pertinent sections is not acceptable as highlighted will not copy.

1.8 GENERAL DISTRIBUTION

- A. Contractor shall distribute approved submittals (not included in foregoing copy submittal requirements) to subcontractors, suppliers, fabricators, installers, governing authorities, and others as necessary for proper performance of work.
- B. Contractor shall distribute approved submittals (in excess of the submittals required above) to subcontractors, suppliers, fabricators, installers, governing authorities, and others as necessary for proper performance of work.

1.9 REVIEW OF SUBMITTALS

- A. The City will review submittals for general conformance with design concept. Review by the City shall not relieve the Contractor of responsibility for full compliance with contract requirements, for proper design of details, for proper fabrication techniques, for proper construction techniques, for proper coordination with other trades, and for furnishing all devices required for safe satisfactory construction and safe satisfactory operation.

1.10 SUBMITTAL STATUS

- A. Submittals reviewed by the City and returned to the Contractor will be marked with one of the following designations:
 - 1. No Exceptions Taken.
 - 2. Make Corrections Noted.
 - 3. Revise and Resubmit.

4. Rejected.
 5. Submit Specified Item.
 6. No Action Taken.
- B. Contractor shall not proceed with procurement, manufacture, and fabrication of items submitted for review until such submittals have been designated by the City as “No Exceptions Taken” or “Make Corrections Noted”. Failure by the Contractor to receive timely submittal approval shall not relieve the Contractor from conforming to contract cost and schedule.

1.11 SUBSTITUTIONS

- A. Substitutions shall only be made with prior written approval by the City.
- B. Exceptions: Exceptions to the above requirements for substitutions shall only be made where the material, product, and equipment specified is no longer manufactured or available, and there is no successor material, product, and equipment manufactured or available. The fact that any material, product, and equipment presently specified has a "long lead time" shall not be construed by anyone as making it "unavailable" for the purposes of this exception.
- C. City's Review of Contractor Submittals:
1. The time required for these additional reviews will not be cause for the Contractor to add time to the project completion date.
 2. The City will provide the Contractor with normal review of alternates, substitutions, change orders, and RFI, according to the Specifications. However, in the event the Contractor causes the City undue review time because of:
 - a) Improperly prepared forms.
 - b) RFI where information or data is already on the Drawings or in the Specifications.
 - c) Evaluation of City-authorized substitutions 10 or more calendar days after the Award of Contract. Improperly prepared submittals, change orders, and other information requiring the City's review, including incomplete, phased, and partial Shop Drawings and submittals.
 - d) Three or more reviews of a Shop Drawing submittal.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION 01 33 00

**SECTION 01 41 00
REGULATORY REQUIREMENTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned and referenced elsewhere in the Contract Documents. Refer also to Appendices for additional regulatory permitting information.

1.2 REFERENCES

- A. All pertaining statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work are hereby incorporated into these Contract Documents the same as if repeated in full herein and such are intended where any reference is made in either the singular or plural to Code or Building Code unless otherwise specified including, without limitation, those in the list below. Make available at the site such copies of the listed documents applicable to the Work as the City may request including mentioned portions of the California Building Code (CBC Current Edition).
1. California Building Code (CBC), as adopted and amended by the City of Manhattan Beach, including the research reports approved by the Building Division for materials, equipment, systems, and designs as applicable to the Work.
 2. Title 8 CBC, Industrial Relations, including without limitation Chapter 4, Division of Industrial Safety, Safety Orders (CAL-OSHA).
 3. Title 19 CBC, Public Safety.
 4. California Mechanical Code (UMC).
 5. California Plumbing Code (UPC).
 6. California Fire Code (UFC).
 7. California Electrical Code (UEC) and National Electrical Code (NEC).
 8. State and Local Public Health Codes.
 9. Other statutes, ordinances, laws, regulations, rules, orders, and codes specified in other Sections of the Specifications or bearing on the Work.
 10. Environmental Protection Agency (EPA).
 11. California Energy Commission non-residential manual for Title 24.
 12. Manual on Uniform Traffic Control Devices (MUTCD most current edition)
 13. Standard Specifications for Public Works Construction and Standard Plans for Public Works Construction (APWA most current edition)
 14. State of California Department of Transportation Standard Specifications (CALTRANS most current edition)
 15. State of California Department of Transportation Standard Plans (CALTRANS most current edition)
 16. City of Manhattan Standard Plans (COMBSP) (most current edition)

1.3 ADDITIONAL REQUIREMENTS:

- A. Contractor shall make note of any regulatory agency permit special conditions. It is the responsibility of the Contractor to review and follow all additional regulatory requirements applicable to the site.

1.4 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT REQUIREMENTS

- A. Contractor shall meet South Coast Air Quality Management District (AQMD) air emissions requirements.
- B. The emissions include all Contractor's equipment, including excavation equipment, waterborne barge and crane equipment, pile driving equipment, tie back installation equipment, hauling equipment, and material transportation equipment. It also includes emissions from worker's vehicles commuting to and from the project site.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 41 00

**SECTION 01 74 00
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes: Procedures for achieving the most environmentally conscious work feasible within the limits of the Construction Schedule, Contract Sum, and available materials, equipment, and products.
 - 1. Participate in promoting efforts of the City to create an energy-efficient and environmentally sensitive structure.
 - 2. Use recycled-content, toxic-free, and environmentally sensitive materials and equipment.
 - 3. Use environmentally sensitive procedures.
 - a) Protect the environment, both on site and off site, during demolition and construction operations.
 - b) Prevent environmental pollution and damage.
 - c) Effect optimum control of solid wastes.
- B. The City requires that this project generate the least amount of trash and waste possible.
- C. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- D. Minimize trash and waste disposal in landfills; reuse, salvage, and recycle as much waste as economically feasible.
- E. Contractor shall submit periodic Waste Disposal Reports. All landfill disposal, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues.
- F. Contractor shall develop, submit and follow a Waste Management Plan designed to implement these requirements.
- G. Methods of trash and waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping and burying.
- H. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to federal, state, and local

requirements, pertaining to legal disposal of all construction and demolition waste materials.

- I. Related Documents: The Contract Documents shall apply to the work of this Section. Additional requirements and information necessary to complete the work of this Section may be found in other documents and prevailing City Ordinances.

1.2 RELATED SECTIONS

- A. Section 02 41 01 – Demolition.
- B. Section 02 30 00 – Earthwork.

1.3 DEFINITIONS

- A. Construction and demolition waste: Includes solid wastes such as building materials, packaging, rubbish, debris, and rubble resulting from construction, repair, and demolition operations.
 1. Rubbish: Includes both combustible and noncombustible wastes such as paper, boxes, glass, crockery, metal and lumber scrap, metal cans, and bones.
 2. Debris: Includes both combustible and noncombustible wastes such as leaves and tree trimmings that result from construction or maintenance and repair work.
- B. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, soil, or the like.
- C. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- D. Chemical waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals, and inorganic wastes.
- E. Diversion: Redirection of waste ordinarily deposited in a municipal landfill to a recycling facility or to another destination for reuse.
- F. Environmental pollution and damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; or degrade the utility of the environment for aesthetic, cultural, or historical purposes.
- G. Hazardous materials: Includes pesticides, biocides, and carcinogens as listed by recognized authorities, such as the U.S. Environmental Protection Agency (USEPA) and the International Agency for Research on Cancer (IARC).
- H. Municipal Solid Waste Landfill: A permitted facility that accepts solid, non-hazardous waste such as household, commercial, and industrial waste, including construction and demolition waste.
- I. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, and reactivity.

- J. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- K. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- L. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- M. Recycling: The process of sorting, cleansing, treating, and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- N. Return: To give back reusable items or unused products to vendors for credit.
- O. Reuse: To reuse a construction waste material in some manner on the project site.
- P. Sanitary wastes:
 - 1. Garbage: Refuse and scraps resulting from preparation, cooking, distribution, or consumption of food.
 - 2. Sewage: Domestic sanitary sewage.
- Q. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- R. Sediment: Soil and other debris that has been eroded and transported by site activity or storm run-off water.
- S. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- T. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- U. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- V. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.
- W. Wet products: Materials and products installed in wet form, including paints, sealants, adhesives, and special coatings.

1.4 SUBMITTALS

- A. Solid Waste Management and Environmental Protection Plan: Prepare and submit at the Preconstruction Meeting a Solid Waste Management and Environmental Protection Plan including, but not limited to, the following:
 - 1. Procedures for Recycling/Reuse Program in compliance with the City recycling code.
 - 2. Revise and resubmit Solid Waste Management and Environmental Protection Plan as required by the City.

- a) Approval of the Contractor's Solid Waste Management and Environmental Protection Plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
- B. With each Contractor's Report submit an updated Summary of Solid Waste Disposal and Diversion. Submit on form in Appendix A of this Section. Include manifests, weight tickets, receipts, and invoices specifically identifying the Project and waste material for:
 - 1. Municipal Solid Waste Landfills.
 - 2. Recycling/Reuse Facilities.
- C. With Record Submittals as specified in Section 01 78 00 – Closeout Procedures, submit the following:
 - 1. Final Summary of Solid Waste Disposal and Diversion. Submit on form in Appendix A of this Section.
 - 2. Resource Conservation and Recovery Act – Project Summary. Submit on form in Appendix B of this Section.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 RECYCLING AND REUSE

- A. Collection: Implement a recycling/reuse program that includes separate collection of waste materials of the following types as appropriate to local and regional recycling/reuse facilities:
 - 1. Asphalt.
 - 2. Concrete.
 - 3. Metal.
 - a) Ferrous.
 - b) Non-ferrous.
 - 4. Wood.
 - 5. Debris.
 - 6. Glass.
 - 7. Clay brick.
 - 8. Paper/Cardboard.

9. Plastic.
 10. Paint.
 11. Others as appropriate.
- B. Recycling/reuse centers: Contact governmental solid waste offices, USEPA regional offices, and applicable non-profit organizations.
- C. Handling:
1. Clean materials which are contaminated prior to placing in collection containers. Deliver materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to recycling process.
 2. Arrange for collection by or delivery to the appropriate recycling or reuse facility.

3.2 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, City, and Engineer.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
1. Provide containers as required.
 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- E. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- F. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- G. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- H. Salvage: Set aside, sort, and protect products to be salvaged for reuse offsite.

3.3 ENVIRONMENTAL CONTROLS

- A. Protection of natural resources: Preserve the natural resources within the Project boundaries and outside the limits of permanent work performed under this Contract in their existing condition or restore to an equivalent or improved condition as approved by the Engineer, upon completion of the work.
1. Confine demolition and construction activities to work area limits indicated on the Plans and as directed by the Engineer.
 - a) Demolition and salvage operations: As specified in Section 02 41 01 – Demolition.
 - b) Disposal operations for demolished and waste materials that are not identified to be salvaged, recycled or reused:
 - 1) Remove debris, rubbish, and other waste materials resulting from demolition and construction operations, from site.
 - 2) No burning permitted.
 - 3) Transport materials with appropriate vehicles and dispose off- site to areas which are approved for disposal by governing authorities having jurisdiction.
 - 4) Avoid spillage by covering and securing loads when hauling on or adjacent to public streets or highways. Remove spillage and sweep, wash, or otherwise clean project site, streets, or highways.
 - 5) Comply with applicable regulations.
 2. Water resources as follows:
 - a) Comply with requirements of the National Pollutant Discharge Elimination System (NPDES) and the State Pollutant Discharge Elimination System (SPDES).
 - b) Oily substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water. Store and service construction equipment at areas designated for collection of oil wastes.
 - c) Mosquito abatement: Prevent ponding of stagnant water conducive to mosquito breeding habitat.
 - d) Prevent run-off from site during demolition and construction operations.
 3. Land resources: Prior to construction, identify land resources to be preserved within the work area. Do not remove, cut, deface, injure, or destroy land resources, including trees, shrubs, vines, grasses, top soil, and land forms without permission from the City.
 4. Air Resources: Prevent creation of dust, air pollution, and odors.

- a) Use water sprinkling, temporary enclosures, and other appropriate methods to limit dust and dirt rising and scattering in air to lowest practical level. Do not use water when it may create hazardous or other adverse conditions such as flooding and pollution.
 - b) Store volatile liquids, including fuels and solvents, in closed containers.
 - c) Properly maintain equipment to reduce gaseous pollutant emissions.
5. Fish and Wildlife Resources: Manage and control construction activities to minimize interference with, disturbance of, and damage to fish and wildlife.
6. Noise Control: Perform demolition and construction operations to minimize noise. Perform noise producing work in less sensitive hours of the day or week as directed by the Engineer.
- a) Repetitive, high level impact noise will be permitted only between the hours permitted in the City Noise Ordinance. Do not exceed the limitations specified by OSHA.
 - b) Provide equipment and sound-deadening devices and take noise abatement measures that are necessary for compliance.

Appendix A

SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION

Project Name: _____

Contractor Name: _____ License Number: _____

Contractor Address: _____

Solid Waste Material	Date Material Disposed/ Diverted	Amount Disposed/ Diverted (ton or CY)	Municipal Solid Waste Facility (name, address, & phone number)	Recycling/Reuse Facility (name, address, & phone number)	Comments (if disposed, state why not diverted)
Asphalt					
Concrete					
Metal					
Wood					
Debris					
Glass					
Clay brick					
Paper					
Cardboard					
Plastic					
Paint					
Other					

Signature: _____ Date: _____

Appendix B

RESOURCE CONSERVATION AND RECOVERY ACT – PROJECT SUMMARY

Project Name: _____

Contractor Name: _____ License Number: _____

Contractor Address: _____

1.1 USEPA GUIDELINE ITEMS

A. Fly Ash:

1. Total dollar amount of concrete and cement provided for this project.

\$ _____

2. Total dollar amount of concrete and cement containing fly ash provided for this project.

\$ _____

3. Were there any technical impediments to increasing the amount of concrete and cement containing fly ash provided for this project? _____

a) If yes, please explain. _____

2.0 SPECIFICATIONS - NOT USED

3.1 SOLID WASTE PREVENTION

- A. Total dollar amount of solid waste disposed (landfill) for this project.

\$ _____

- B. Total weight of solid waste disposed (landfill) for this project. _____

4.1 RECYCLING

- A. Total dollar value of solid waste diverted from landfill and recycled or reused for this project. (Express as total dollar amount for solid waste disposal in landfill for equivalent type and amount of diverted waste.)

\$ _____

- B. Total weight of solid waste diverted from landfill and recycled or reused for this project. (Express as total weight for solid waste disposal in landfill for equivalent type and amount of diverted waste.)

\$ _____

5.1 COMMENTS

- A. Comments and suggestions for increasing amount of recycled materials used in construction materials.

- B. Comments and suggestions for improving solid waste prevention and recycling efforts during construction.

Signature: _____ Date: _____

END OF SECTION 01 74 00

**SECTION 01 78 00
CLOSEOUT PROCEDURES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Project Record Documents
 - 1. Throughout progress of the Work, maintain an accurate record of changes in the Contract Documents, as described in Article 3.1 below.
 - 2. Upon completion of the Work, transfer the recorded changes to a set of Record Documents, as described in Article 3.2 below.
- B. Operation and Maintenance Documents
- C. Warranties and Bonds

1.2 QUALITY ASSURANCE

- A. Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved by the City.
- B. Accuracy of records:
 - 1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
 - 2. Accuracy of records shall be such that future searches for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.
- C. Make entries within 24 hours after receipt of information that the change has occurred.

1.3 RECORD SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 00 - Submittals
- B. The City's approval of the current status of Project Record Documents shall be a prerequisite to the City's approval of request for progress payment and request for final payment under the Contract.
- C. Prior to submitting each request for progress payment, secure the City's approval of the current status of the Project Record Documents.
- D. Prior to submitting request for final payment, submit the final Project Record Documents to the City Engineer and secure their approval.

1.4 RECORD DOCUMENT PROTECTION AND HANDLING

- A. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the final

Project Record Documents.

- B. In the event of loss of recorded data, use means necessary to again secure the data to the City's approval.
 - 1. Such means shall include, if necessary in the opinion of the City, removal, and replacement of concealing materials.
 - 2. In such case, provide replacements to the standards originally required by the Contract Documents.

1.5 SUBSTANTIAL COMPLETION:

- A. Preparation of the Punch List.
 - 1. When the Contractor considers that the Work, or a portion thereof that the City will occupy separately, is substantially complete, advise the City and provide Contractor's own punch list for City perusal. Failure to provide a preliminary punch list will render Contractor statement of substantial completion invalid. Upon receipt of preliminary list, City shall prepare and submit to the Contractor an updated comprehensive list of items to be completed and corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure of the Contractor to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents
- B. City's Inspection
 - 1. Give the City at least 5 working days advance notice of readiness for inspection as each phase and area of the Work is completed for occupancy. Correct deficient cleaning operations, as determined and directed by City. The City will schedule and make an inspection within a reasonable time to determine whether the Work or designated portion thereof is substantially complete. City will add additional items as it sees fit to the punch list. Failure of the City to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- C. Final Cleaning
 - 1. Contractor shall, prior to the Occupancy of the Project or portion thereof by the City and as a condition of further payment, clean the Work to be occupied.
- D. Cleanup and Disposal
 - 1. Requirements herein are part of all other Sections of the Specifications and shall be coordinated with such additional clean up and disposal requirements as may be specified in other Sections. Contractor's final cleaning shall be completed with non-toxic environmentally safe products. Leave the entire Work broom clean except where vacuum clean or other condition is specified.
- E. Control During Work
 - 1. Take care to avoid spread of dust, dirt, debris, water, cement, sprayed materials, and other substances about the site and to adjacent property. Clean up spills of materials at time of occurrence. Remove dirt, debris, waste, and rubbish daily, and do not allow to accumulate in the structure or on the site. Do not store flammable and toxic materials in the area.
- F. Contractor's Supervision

1. Inform all trades and workers of cleaning requirements, and monitor where Work is in progress to ensure full compliance with all clean up requirements in this and other Sections

G. Disposal

1. Do not dispose of any rubbish and waste material in fill and backfill. Remove debris, rubbish, and waste material from the City's property to a properly licensed disposal facility and pay hauling and dumping charges. Conform to federal, state, and local laws, ordinances, rules, regulations, and orders pertaining.

H. Surfaces Not Mentioned

1. Clean according to the intent of this Section and as required for City's approval.

I. Contaminated Earth

1. Final clean up includes removal and disposal of earth that is contaminated and unsuitable for support of plant life in planting areas, and filling of resulting excavations with suitable approved soil as directed and approved. Contaminated areas include those used for disposal of waste concrete, mortar, plaster, masonry, and similar materials, areas in which washing out of concrete and plaster mixers or washing of tools and similar cleaning operations have been performed, and all areas that are oiled, paved, or chemically treated. Do not dispose of waste oil, solvents, paints, solutions, and similar penetrating materials by depositing and burying on the City's property.

J. Correction of Work

1. If the City's inspection discloses any item, whether or not included on the Contractor's list, that is not in accordance with the requirements of the Contract Documents, the Contractor shall before issuance of the certificate of Substantial Completion, complete and correct such item or items upon the written notification of the City.

1.6 FINAL COMPLETION AND ACCEPTANCE:

- A. Until the formal acceptance of the Work by the City, the Contractor shall have the charge and care and shall bear risk or injury or damage to any part thereof regardless of cause, whether arising from the execution or from the non-execution of the Work. Rebuild, repair, restore, and make good all injuries or damages to any portion of the Work occasioned by any of the above causes before its completion and acceptance and shall bear the expense thereof. In the case of suspension of the Work for any cause whatsoever, take all materials and shall properly store them if necessary and shall erect temporary structures where necessary.

B. Notice of Completion

1. Certify in writing to the City, prior to final payment, that the entire Project is substantially complete, and request that the City issue a Notice of Completion. Within a reasonable time thereafter, the City and the Contractor shall make a joint inspection. If the City determines that the Work is not substantially complete, it will notify the Contractor in writing and state its reasons. Project completion shall be defined as the date that the punch list is completed to the City's satisfaction, after which the Notice of Completion will be filed upon authorization and acceptance by the City Council.

C. Submittals

1. Submit with or prior to Application for Final Payment, Consent of Surety to final Payment and remaining releases, waivers, guarantees, and all project data required by

the Contract Documents.

D. Record Documents

1. Retention shall not be released until all as-builts, inspection cards, stamped permit drawings, permits cards, sepias, CADD files, and related City sign-off documents are transmitted in an orderly and accurate manner.

E. Post Construction Inspection

1. Prior to the expiration of one (1) month from the date of substantial completion, the City will make an inspection of the project to determine whether correction or repair Work is required. It is the Contractor's responsibility to complete any remedial work identified as a result of this inspection.

PART 2 – PRODUCTS

2.1 RECORD DOCUMENTS

- A. Job set: Promptly following receipt of the City's Notice to Proceed, secure from the City at no charge to the Contractor, one complete set of all Drawings and Specifications comprising the Contract.
- B. Final Record Documents: At a time nearing the completion of the Work, secure from the City at no charge to the Contractor, one complete set of all Drawings in the Contract.

PART 3 – EXECUTION

3.1 MAINTENANCE OF JOB SET:

- A. Immediately upon receipt of the job set described in Paragraph 2.1A above, identify each of the Documents with the Title, "RECORD DOCUMENTS JOB SET."
- B. Preservation:
 1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the City.
 2. Do not use the job set for any purpose except entry of new data and for review by the City, until start of transfer of data to final Project Record Documents.
 3. Maintain the job set at the site of Work as that site is designated by the City.
 4. Making entries on Drawings:
 - a. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
 - b. Date all entries.
 - c. Call attention to the entry by a "cloud" drawn around the area or areas affected.
 - d. In the event of overlapping changes, use different colors for the overlapping changes.
 5. Make entries in the pertinent other Documents as approved by the City.

6. Conversion of schematic layouts:
 - a. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items, is shown schematically and is not intended to portray precise physical layout.
 - 1) Final physical arrangement is determined by the Contractor, subject to the City's approval.
 - 2) However, design of future modifications of the facility may require accurate information as to the final physical layout of items which are shown only schematically on the Drawings.
 - 3) Show on the job set of Record Drawings, by dimension accurate to within one inch, the centerline of each run of items as described above.
 - (a) Clearly identify the item by accurate note such as "cast iron drain" and "galv. water".
 - (b) Show, by symbol or note, the vertical location of the item such as "under slab," "in ceiling plenum," and "exposed".
 - (c) Make all identification sufficiently descriptive that it may be related to the Specifications.
 - 4) The City may waive the requirements for conversion of schematic layouts where, in the City's judgment, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the City.

3.2 FINAL PROJECT RECORD DOCUMENTS

- A. The purpose of the final Project Record Documents is to provide factual information regarding all aspect of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination.
- B. Approval of recorded data prior to transfer:
 1. Following receipt of the drawings described in Paragraph 2.1B above, and prior to start of transfer of recorded data thereto, secure the City's approval of all recorded data.
 2. Make required revisions.
- C. Transfer of data to Drawings:
 1. Carefully transfer change data shown on the job set of Record Drawings to the corresponding transparencies, coordinating the changes as required.
 2. Clearly indicate at each affected detail and Drawing a full description of changes made during construction, and the actual location of items described in above.
 3. Call attention to each entry by drawing a "cloud" around the areas affected.
 4. Make changes neatly, consistently, and with the proper media to assure longevity and clear reproduction.
- D. Transfer of data to other Documents:
 1. If the Documents other than Drawings have been kept clean during progress of the Work, and if entries thereon have been orderly to the approval of the City, the job set of

those Documents other than Drawings will be accepted as final Record Documents.

2. If any such Document is not so approved by the City, secure a new copy of that Document from the City at the City's usual charge for reproduction and handling, and carefully transfer the change data to the new copy to the approval of the City.
3. Contractor shall supply the City with as-built data in a CADD format approved by the City.

E. Review and Submittal:

1. Submit the completed set of Project Record Documents to the City as described above.
 - a. Contractor and any of the subcontractors involved shall attend post-construction conferences to clarify the Final Record Documents as may be required by City, at no extra cost to City.
 - b. Make required changes and promptly deliver the final Project Record Documents to the City.

3.3 CHANGES SUBSEQUENT TO ACCEPTANCE

- A. The Contractor has no responsibility for recording changes in the Work subsequent to Final Completion, except for changes resulting from Work performed under Warranty.

END OF SECTION 01 78 00

**SECTION 02 00 01
BASIC SITE MATERIALS AND METHODS**

PART 1 - GENERAL

1.1 SUMMARY

- A. BASIC SITE MATERIALS AND METHODS consists of furnishing transportation, labor, materials, and equipment to locate, protect, repair, remove, replace, and dispose of existing surface and subsurface conditions and improvements at the Project site, including existing utilities, structures, and substructures. This Section also covers basic materials and methods common to new site construction.

1.2 RELATED SECTIONS

- A. Section 02 41 00 - Demolition

1.3 REFERENCES

- A. Reference Specifications (RS) are the 2021 Edition of the "Greenbook", Standard Specifications for Public Works Construction.
- B. American Society for Testing and Materials (ASTM International)
 1. ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
 2. ASTM D1557 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³)
 3. ASTM D6938 Standard Test Method for Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth)

1.4 EXISTING SUBSURFACE CONDITIONS

- A. Location of existing pipelines, utilities, and substructures shown on Drawings are approximate only. Contractor shall be responsible for performing locating services to identify existing utilities that may be impacted by construction activities.
- B. Keep existing services and facilities in operation except when the Engineer permits shutdown in writing, and then only after temporary services have been provided.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Slurry Material: Cement-sand slurry: Class 100-E-100 in conformance with RS Subsection 201-1.1.2, Table 201-1.1.2(A).

PART 3 - EXECUTION

3.1 VERIFICATION OF SITE CONDITIONS

- A. Notify Underground Service Alert 48 hours prior to commencing demolition, excavation, trenching, drilling, or similar underground work. Contact owners of existing lines and substructures that may interfere with work.

- B. Hand-dig excavations to design depths where alignments shown on Drawings occur within 5 feet radially of existing utilities. Hand-dig until the existing utility is located.

3.2 PROTECTION OF EXISTING UTILITIES

- A. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by the Engineer. Do not interrupt existing utilities serving facilities occupied and used by the City except when approved in writing and then only after temporary utility services have been approved and provided. Do not begin demolition or deconstruction work until all utility disconnections have been made. Shut off and cap utilities for future use, as indicated.
- B. Piping, electrical and mechanical equipment, and other items obstructing the new construction shall be carefully removed. Items designated as being salvageable in the contract documents shall be turned over to the City. The Contractor shall transport and store salvageable items on the premises as directed by the Engineer. Items that are not designated to be salvaged shall be immediately disposed of off the site in a lawful manner.
- C. The Engineer shall be immediately advised if utilities that are not shown on the drawings are encountered during demolition operations. They shall not be disturbed until specific instructions are received from the Engineer.
- D. Existing utilities, piping systems, and electrical and mechanical equipment to remain in place shall be adequately supported, protected, and maintained until work is complete.
- E. Protect existing facilities adjacent to the Work to avoid damage. Repair or replace existing structures and improvements located above or below ground which are damaged or removed as a result of the Contractor's operations wherever such existing improvements are not specifically designated to be permanently removed. Structures to protect and repair include, but are not limited to, pipelines, wires, cables, electrical pullboxes, conduits, vaults, and maintenance holes. Repairs and replacements shall be made at Contractor's expense and shall be equal to existing improvements and shall match existing in finish and dimension.

3.3 INTERFERING SUBSTRUCTURES

- A. Consult the Engineer immediately for directions whenever substructures not shown on Drawings interfere with or affect Work. Contractor shall propose means and methods to the Engineer to deal with the interferences. The Engineer will make final decision on method of correction or protection to be used.
 - 1. If interfering substructures must be removed, the following shall be done before removing or cutting the substructures:
 - a. Tap the line and determine if the line contains any kind of liquid or gaseous material.
 - b. If storm drain or sewer lines are empty or filled with concrete or mud slurry, lines may be cut, removed, and capped or plugged with City's approval, in conformance with RS Subsection 306-5.
 - c. Test conductors in conduits appearing to be abandoned and verify that conductors are de-energized. Remove de-energized conductors. Report energized conductors to the Engineer and cease removal work until Engineer authorizes work to resume.
 - d. Consult the Engineer for methods of handling other substructures.
 - e. Notify the Engineer to identify contents of unknown line if it is found to contain liquid or gaseous material. Remove contents and dispose in conformance with applicable regulations. Such work may be considered a Change in the Work and

payment will be determined in conformance with the GENERAL CONDITIONS Section.

2. Evacuated lines or remaining portions of abandoned lines shall be removed as described in this Article for empty lines.

END OF SECTION 02 00 01

**SECTION 02 30 00
EARTHWORK**

PART 1 GENERAL

1.1 SUMMARY

- A. EARTHWORK consists in general, of furnishing all labor, materials, equipment tools, and incidentals, and doing all the work involved in excavation, stockpiling, filling, and backfilling, including compacting, and disposal of surplus or unusable materials, as indicated on the plans as specified and as directed by the City.

1.2 RELATED SECTIONS

- A. Section 02 41 00 – Demolition
- B. Section 03 30 00 – Cast-In-Place Concrete

1.3 REFERENCES

A. General

- 1. The publications listed below form a part of this specification to the extent referenced.
- 2. Where a date is given for reference standards, the edition of that date shall be used. Where no date is given for reference standards, the latest edition available on the date of Notice Inviting Bids shall be used.

B. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D 422	Standard Test Method for Particle-Size Analysis of Soils
ASTM D 698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/cu.ft. (600 kN-m/cu.m.))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/cu.ft. (2,700 kN-m/cu.m.))
ASTM D2922	Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D 3017	Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
ASTM D 5030	Standard Test Method for Density of Soil and Rock in Place by the Water Replacement Method in a Test Pit

C. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC); Latest Edition

1.4 SUBMITTALS

- A. Material Samples: Representative samples of materials to be imported shall be submitted as 100-pound bulk packages. The Contractor shall certify their compliance with these specifications.
- B. Test Reports and Certifications: The following test reports and certifications shall be submitted.
 - 1. Certification that all materials used are in accordance with these specifications. Certifications of compliance shall contain the following:
 - a. Name of supplier
 - b. Type of material being supplied and available quantity
 - c. A statement that the material complies with these specifications
 - d. Copies of test results from a qualified testing laboratory
- C. Permits: Copies of permits required to perform the work, including permits applicable to slope grading, excavation, and safety, shall be submitted.
- D. Plans and Procedures: The following plans and procedures shall be submitted.
 - 1. A drawing and method statement for control and disposal of surface water, including storm runoff and construction water, from the works.
 - 2. A detailed plan for the protection and the safety of workers when trenches and excavations are equal to or greater than 5 feet in depth.

1.5 DEFINITIONS

- A. Percent Compaction—The ratio of the field in-place dry density to the laboratory maximum dry density, expressed as a percentage.
- B. Fill—For the purposes of this section, the words “fill” and “backfill” are synonymous and refer to soils, rock, or soil-rock combinations that are conditioned, placed or replaced, and compacted to the percent compaction specified.
- C. Special Fill Materials—The materials listed in the applicable section of this specification, other than fill, backfill slurry, and rip-rap.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with SSPWC, Sections 300 and 301, unless otherwise noted in these specifications.
- B. Certificates of Compliance
 - 1. A certificate of compliance will not relieve the Contractor of responsibility for incorporating material into the work which is in accordance with the drawings and these specifications.

1.7 PROJECT CONDITIONS

- A. Loading and Surcharge

1. The Contractor shall use caution in performing the work and shall use methods that avoid the imposition of heavy loads and surcharges on new or existing pipelines, utilities, and structures.
 - a. Loads shall not be placed upon or against recently completed concrete structures until the concrete has attained its full design strength.
 - b. The Contractor shall furnish shoring and bracing that is required to prevent collapse, deflection, deformation, or other damage to structures, conduits, or pipelines during construction or backfill operations.
 - c. Shoring and bracing shall not be removed until the work requiring their use has been completed and the Engineer has approved the removal.
 2. The Contractor shall be liable for damage caused by excessive loads and shall repair or restore damaged facilities at no additional cost to the City.
- B. Excavation and backfill in the vicinity of existing piping, utilities, and structures shall be performed only by methods and with equipment approved by the Engineer.

PART 2 PRODUCTS

2.1 MATERIALS

A. Fill

1. Unless determined to be unsuitable by the Engineer, soils and earth materials obtained from required excavations or soils and earth materials from approved borrow sites may be used for fill and slope cover.
2. Fill materials shall be naturally occurring, well-graded soil or soil-rock combinations, free of wood, trash, construction debris, and organic, contaminated, or deleterious material.
3. Particle-Size Limitations
 - a. The maximum particle size shall be 6 inches. Materials that are in excess of 6 inches in size may be placed in fill only with the approval of and under the direction of the Engineer.
 - b. The maximum particle size of fill materials placed within 3 feet of structures or pipelines shall be 3 inches.
4. The type of material used in the pipe-zone of trenches shall be as shown on the drawings.
5. Sand backfill and bedding shall have a minimum sand equivalent of 30 when tested in accordance with ASTM D2419. Gradation of the material shall be in accordance with the following:

U.S. Standard <u>Sieve Size</u>	Percentage Passing <u>by weight</u>
½-inch	100
No. 4	70-100
No. 16	50-90
No. 50	10-40
No. 200	0-10

- B. Crushed aggregate base shall be in accordance with SSPWC Section 200-2.2. Where approved

by the Engineer, sand may be substituted for rock dust.

- C. Permeable material shall be in accordance with Caltrans Standard Specifications, Section 68-1.025, Class 2 Grading.
- D. Crushed rock shall be in accordance with SSPWC Section 200-1.1 and Section 200-1.2. Gradation shall be one inch unless otherwise determined by site conditions, then it will be selected by the Engineer.

2.2 GEOTEXTILES

- A. Geotextiles shall be in accordance with SSPWC Section 213-2 and as shown on the Drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that survey benchmark and intended elevations for the work are as indicated.

3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Stake and flag locations of utilities.
- C. Locate, identify, and protect utilities that remain and protect from damage.
- D. Underground Utilities and Substructures
 1. Utilities and substructures within the work areas shall be located prior to sitework and identified with aboveground markers over their locations.
 2. Underground Service Alert (Telephone: 1-800-422-4133) shall be given a 2 working day minimum, advance notification of excavation.
 3. Utility and substructure installations and their general locations shown on the drawings may not be a complete listing.
 4. Utilities and substructures that are encountered in work areas and that are not shown on the drawings shall be reported to the Engineer immediately.
 5. Where unidentified existing utilities are encountered and determined to be abandoned, only the interfering portions shall be removed. Work shall not be performed on an active utility without obtaining prior approval of the Engineer and the utility owner. The Contractor shall not proceed without instructions, except to correct an immediate hazard or emergency condition. Work performed by the Contractor in the absence of written instructions will be entirely at Contractor's own risk.
- E. Subsurface physical conditions or unknown physical conditions that are unusual in nature or that differ materially from those shown in the soils investigation report shall be reported to the Engineer immediately and confirmed in writing.
- F. Regulatory Requirements

1. Notify the City Grading Inspector 24 hours prior to placing fill or backfill as required by the Grading Permit.
2. Where buildings or other improvements adjacent to the excavation may be damaged by these operations, the Contractor shall act as agent of the City and give the notice required by Section 832 of the California Civil Code relating to lateral and subjacent support.
3. The amount of dust raised during earthwork shall not exceed the limitations of the South Coast Air Quality Management District (AQMD). Before proceeding with excavation, the Contractor shall obtain permits for excavation and safety that are required by authorities having jurisdiction.

3.3 PROTECTION, SHEETING, SHORING, BRACING, AND EXCAVATION SLOPES

- A. Protection Plan: When necessary to prevent caving and to protect adjacent structures or property, trenches and excavations shall be protected, shored, sheeted, braced, or sloped in accordance with CCR Title 8 and the regulations of local authorities having jurisdiction. Where trenches and excavations are equal to or greater than 5 feet in depth, the Contractor shall submit to the Engineer a detailed plan for the protection and the safety of workers. If the protection plan varies from the shoring system standards of CCR Title 8, the plan shall be prepared and signed by a civil or structural engineer currently registered in the State of California. If the trench protection system includes the use of a shield, the design, construction, and manner of using the shield shall be reviewed by the Engineer before using the shield in the work.
- B. The Contractor shall furnish, place, and maintain supports and shoring that may be required for trenches and excavations and shall be responsible for damages related to their inadequacy or failure.
- C. Excavation widths shall be increased accordingly to accommodate the protective devices, which shall be maintained in place during execution of the work. Temporary measures installed to protect workers, shoring, and bracing shall be removed on completion of the work.
- D. Loose material that appears dangerous to workers or to new or existing facilities shall be removed as a part of the excavation work. An increase in the size of the excavation as a result of this removal shall not relieve the Contractor from the necessity of making the removal.

3.4 WATER CONTROL

- A. When earthwork operations are in or near the water and a potential for silt plumes exists, as determined by the City, Contractor shall surround the area with a floating containment boom equipped with a full-depth turbidity screen. The containment booms shall remain in place until the earthwork is complete and the City has authorized their removal.

3.5 EROSION CONTROL

- A. Exposed areas of construction shall be protected from erosion by wind and water until stabilization is achieved or the project is complete.
- B. Temporary erosion-control measures shall not be removed without the approval of the Engineer and shall be removed upon project completion.
- C. Silt and debris shall be removed from check berms, basins, or other drainage-control features after each rainstorm until the project is complete.
- D. Precautionary measures shall be provided to prevent erosion of complete, graded areas.

3.6 EQUIPMENT

A. Compaction Equipment

1. The type of compaction equipment, including hand-operated equipment, shall be suitable for the type of soil being compacted and shall be adequate to obtain the percent compaction specified with the method employed.
2. Crushed rock shall be compacted with vibratory compactors above water and a towed sheepsfoot or similar type roller below water, or as approved by the Engineer.
3. Equipment for placement and compaction shall be maintained in good condition at all times to ensure that the results obtained are uniform and the maximum obtainable for the specified equipment.
4. Impact-type stompers will not be allowed adjacent to structures or for pipeline backfill.

3.7 CLEARING, GRUBBING, AND STRIPPING

- A. Clearing, grubbing, and stripping shall be completed as a separate item of work before beginning the excavation, stockpiling, trenching, or fill operations.

3.8 EXCAVATION

- A. Notify City of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- B. Correct areas that are over-excavated by filling with excavated material to achieve a minimum 90 percent of the maximum dry density per ASTM D 1557.
- C. Whenever excavated materials are to be used directly in fill or are stockpiled for later use in fill, the excavation and stockpiling shall be performed using equipment and procedures selected to minimize the effects of natural stratification and variations in material and to optimize conditioning of materials for compaction.
- D. Excavations shall be accurately made to the lines, grades, elevations, and cross sections shown on the drawings. The bottom of excavations shall be undisturbed soil or rock.
1. Over excavation of trenches or of structure foundations will not be permitted. The Contractor shall also avoid unnecessary disturbance of adjacent ground.
- E. If the Engineer determines that material encountered at the foundation grade is unstable or unsuitable, the material shall be removed to expose acceptable material and replaced with approved fill material.
- F. Where the foundation material at the bottom of an excavation is disturbed or loosened during excavation or otherwise, the disturbed material shall be recompacted or removed and replaced with approved materials as directed by the Engineer.
- G. Suitable excavated materials may be stockpiled in the Contractor's designated areas. Unacceptable materials shall be removed from the project site.

3.9 PREPARATION OF FOUNDATIONS AND SUBGRADE AREAS

A. General

1. Materials shall be excavated to sufficient depth to ensure complete removal of loose, soft,

weak, unstable, organic, or other materials determined by the Engineer as unsuitable for foundations.

2. Rocks, stones, or other objects shall not intrude into the space in which structural concrete is to be placed. The Contractor shall completely remove or cut back protruding materials to the limits of structural concrete. Rocks or stones, including those cut back and trimmed, which in the opinion of the Engineer are loose or otherwise unstable for the prepared foundation shall be removed.
 3. Upon completion of excavation, loose material shall be removed from the foundation surface. Foundation surfaces on soils shall be prepared in accordance with these specifications for the particular feature to be placed upon them. Foundation surfaces on rock shall be thoroughly cleaned by blowing with compressed air, and when required by these specifications, they shall be cleaned with water or a combination of air and water.
 4. Foundation surfaces shall be firm, unyielding, and free of standing water at the time of placing other materials on them.
 5. Materials shall not be placed on a foundation until the foundation has been approved by the Engineer. The Engineer will inspect exposed rock surfaces when overburden soils are completely removed.
 6. After completion of preparation and after the foundation is approved by the Engineer, the Contractor shall promptly place concrete, backfill, aggregate, base course, or fill, as the case may be, upon it to prevent deterioration of the surface. Where deterioration of the surface occurs due to air-slaking, mechanical breakdown, loosening from traffic, erosion, or other cause, additional excavation, compaction, foundation preparation, and cleanup shall be performed as required.
- B. Where the bottom line of excavations cannot be cut to a uniform surface due to rock or other hard formation, the interfering formation or rock shall be removed to the prescribed lines and thoroughly cleaned of mud and debris. The resulting overbreak below the bottom line shall be filled to the required grade with concrete under structures and approved soil or rock materials elsewhere.
- C. After foundation areas have been approved by the Engineer and before placement of fill material, foundation surfaces shall be scarified to a minimum depth of 6 inches but not more than 8 inches, moisture-conditioned as specified for fill, and compacted to the specified percent compaction. Cobbles and boulders greater than 6 inches in size shall be removed from the scarified soil before compaction.

3.10 PLACEMENT AND COMPACTION OF FILL

- A. The operations of material conditioning, filling, and compaction shall be systematic. Methods that are not conducive to achieving the required percent compaction shall be changed immediately, as directed by the Engineer.
- B. Material Placement and Moisture Conditioning
1. Fill materials that are to be compacted shall be placed in horizontal layers 8 inches thick, maximum, measured before compaction, unless otherwise specified.
 2. Each layer shall be spread evenly over the entire area and shall be thoroughly mixed during the spreading to obtain uniformity of material and moisture in each layer.

3. At the time of compaction, the moisture content of the fill material shall be between -1 and +2

percent of optimum moisture content, unless otherwise specified. This required moisture content shall be achieved in fill materials prior to transport to the fill area and shall be maintained uniformly throughout each layer of material until compaction of the layer is complete. Only minor, final corrections to moisture conditioning may be done in the fill area. When necessary before compaction, limited, controlled sprinkling may be allowed, followed by discing to obtain a uniform moisture distribution.

4. Non-conforming materials requiring significant moisture conditioning shall be removed from the fill area and processed as necessary.
5. After compaction and as determined by the Engineer, each layer shall be sufficiently scarified to provide a bond with the next layer.

C. Condition of Fill

1. The fill throughout the cross section shall be free of lenses, pockets, streaks, and layers of material differing substantially in texture or gradation from the surrounding fill.
2. The condition of fill materials shall be maintained so that the surfaces will readily drain at all times.
3. Materials that become soft, unstable, yielding, or exhibit pumping shall be removed.
4. Ruts in the surface of a layer of fill shall be filled and leveled satisfactorily before compaction.

D. Compaction

1. After being placed, mixed, and spread evenly, each layer of fill shall be thoroughly compacted to the specified percent compaction.
2. The equipment and the method employed shall be demonstrated to be capable of achieving the required percent compaction in a test fill or an area identified as a test fill. The method shall not be subsequently changed unless another test section validates the change.
3. Compaction shall be continuous over the entire area.

E. Surfaces that are ruptured or uneven after compaction shall be repaired and re-leveled before the next layer of material is placed. However, where the compacted surface of any layer of material is too smooth or too dry to bond properly with the succeeding layer, the Engineer may direct that it shall be scarified to no less than 3 inches nor more than 5 inches in depth and conditioned prior to the placing of the next layer.

F. Fill Adjacent to Pipes and Structures

1. Appropriate precautions shall be taken when backfilling within 2 feet of pipelines or within 5 feet of walls or structures to avoid creating or imposing loads which could damage the pipelines, walls, or structures or which could cause the settlement lateral movement of the pipeline, walls, or structures.
2. Fill shall not be dropped directly upon pipes, structures, or conduits. At these locations, heavy compaction equipment shall not be used, and backfill shall be placed in layers 4 inches thick, maximum.
3. Each layer shall be thoroughly compacted with hand-operated, power-driven tampers.

4. In addition to lightweight compaction equipment, the Contractor shall use shoring or other means to avoid overstressing adjacent walls, structures, or pipelines.
5. The fill shall be brought up evenly on all sides of the feature.

G. Ponding and Jetting

1. Compaction by ponding or jetting will not be permitted.

H. Slope Construction

1. Compacted fill shall be overbuilt sufficiently to permit trimming to the design lines in fully compacted material.
 2. Fill slopes shall be constructed simultaneously with the embankment fill or general fill area.
 3. No point on the completed slope shall vary from the designated plane by more than 3 inches, measured normal to the slope face.
 4. The surface of the bare fill slope shall be maintained in a stable condition and shall be protected from erosion until completion of the project.
- I. Fill materials shall be placed in lanes parallel to the fill axis to allow for surface drainage. The top of fill shall be maintained horizontal until final grade is achieved. However, a 3 percent cross slope may be maintained for drainage purposes.
- J. When rain or impending rain stops work on a section of fill, the surface shall be smoothed and sealed with drum or wheeled rollers to facilitate drainage. Before resuming work in this area and placing the next layer, the surface shall be scarified and moisture-conditioned as directed by the Engineer.
- K. When directed by the Engineer, the plane surface of completed fill shall be evenly trimmed and then rolled with drum or wheel rollers to provide a tight surface.
- L. Abrupt transitions of grade in the foundation upon which fill material is to be placed shall be trimmed or filled, as applicable, to provide a smooth, regular surface. Abrupt transitions of grade shall be avoided when placing fill.

M. Compaction Requirement

1. Fill beneath structures shall be compacted to a percent compaction of 95 percent, minimum. Other fill, unless otherwise specified, shall be compacted to a percent compaction of 90 percent, minimum.
2. The 95 percent relative compaction requirement of these specifications shall be considered satisfied when both of the following are met:
 - a. At least 4 of any 5 consecutive density tests in a zone yield dry densities that are equal to or greater than 95 percent of the laboratory maximum dry density.
 - b. No density test yields a dry density less than 95 percent of the laboratory maximum dry density.

3. Final subgrade surfaces shall be compacted to the specified percent compaction and moisture content and then protected until the Contractor is ready to place concrete, pavement, or structure.
4. Fill material shall be removed as necessary where gradation, placement, moisture content, or compaction of the fill materials does not fully comply with these specifications. Unsatisfactory material shall be removed promptly and replaced with material that is in accordance with these specifications, or it shall be blended, disced, moistened, recompact, or otherwise reworked to achieve compliance.

3.11 DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS

- A. Excess or unsuitable excavated materials, oversized materials, rubble, broken asphalt concrete, broken concrete, waste derived from earthwork, and other construction debris shall be removed from the site and disposed of at an approved location.
- B. The Contractor shall obtain permission from the owner or agency concerned before material is disposed of, either temporarily or permanently, on privately or publicly owned property. Satisfactory written evidence that permission has been obtained shall be furnished to the Engineer prior to the beginning of disposal activities.
- C. When determined by the Engineer that the City can utilize suitable excess excavated materials in areas within the site, the Contractor shall haul and place the materials in the areas designated.
- D. Temporary Storage
 1. Materials to be used for earthwork or materials to be disposed of offsite may be temporarily stored in areas of the site assigned for the use of the Contractor.

3.12 BLASTING

- A. Blasting will not be permitted.

3.13 SITE TOLERANCES

- A. Grading or subgrading shall be performed to achieve the elevations shown on the drawings with well-compacted, reasonably smooth, and uniform transitions connecting adjacent areas. A minimum slope of 1/4 inch per foot shall be provided, inclined away from structures unless otherwise shown on the drawings. Final grading of the worksite shall blend with the contours of the adjacent areas and shall be subject to the Engineer's approval. The finished surface of a graded area shall not exceed a variation of ± 0.1 foot from the established elevation.

3.14 FIELD QUALITY CONTROL

- A. Materials shall not be used until tested and approved by the Engineer.
- B. Tests
 1. The Engineer reserves the option to observe all excavation, filling, and compaction operations and perform tests during the progress of the work to determine compliance with these specifications. The Contractor shall pay for an independent Materials Laboratory to perform soils sampling and testing, if requested by the City. Contractor shall notify the Engineer 48 hours in advance of the needed testing. No covering work shall be performed until the City has approved the test results. The Contractor shall cooperate and assist as required in the making of these tests and shall allow a reasonable time for them to be performed. Where the

fill surface is disturbed, density tests will be made in the compacted materials below the disturbed zone.

2. Where tests indicate material, moisture, or compaction deficiencies, the Contractor shall recompact or, where necessary, remove the unsuitable material and replace with acceptable material compacted as specified.

3. Gradation testing will be in accordance with ASTM D422.

C. The laboratory maximum dry density and optimum moisture content will be determined in accordance with ASTM D1557.

D. The field in-place dry density for soils and earth materials containing individual particle sizes no greater than 1-1/2 inches in maximum dimension will be determined in accordance with ASTM D1556 using a sand cone or USBR 7230 using a nuclear meter.

1. The field in-place dry density for soils and earth materials containing individual maximum particle sizes greater than 1-1/2 inches but no greater than 5 inches in dimension will be determined in accordance with ASTM D4914.

2. The field in-place dry density for soils and earth materials containing individual particle sizes greater than 5 inches in maximum dimension will be determined in accordance with ASTM 5030.

E. The field in-place dry density and moisture content for soils and earth materials containing oversized particles will be corrected in accordance with the basic procedures of USBR 7205, Section 11, Method B.

F. For rapid-compaction control, the Engineer will provide the Contractor with field estimates of percent compaction, using a method that yields accurate and consistent results.

3.15 CLEANUP

A. Before acceptance of the work, the Contractor shall clear work areas by removing equipment, barricades, surplus materials, temporary erosion control measures, and rubbish. The project site shall be left in a condition acceptable to the Engineer.

END OF SECTION 02 30 00

**SECTION 02 41 00
DEMOLITION**

PART 1 - GENERAL

1.1 SUMMARY

- A. DEMOLITION consists of furnishing transportation, labor, materials, and equipment to perform demolition, removal, disposal, and salvage, including but not limited to the following:
 - 1. Demolition and removal of existing structures within the limits as shown on Drawings:
 - a. Synthetic Field Turf and Ancillary Components
 - 2. Other removal work as shown on Drawings.
 - 3. Remove excess material from the Project site upon completion of the Work.
- B. Develop a Waste Management Plan in conformance with the CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL Section.

1.2 RELATED SECTIONS

- A. Section 32 18 23 Synthetic Field Turf Surfacing

1.3 REFERENCES

- A. Reference Specifications (RS) are the 2021 Edition of the “Greenbook”, Standard Specifications for Public Works Construction.

1.4 SUBMITTALS

- A. General
 - 1. Submit the following in accordance with the submittal procedures as defined in the Division 1 Specifications. Note that approval of submittals by the Engineer shall not be construed as relieving the Contractor from responsibility for compliance with the Specifications nor from responsibility of errors of any sort in the submittals.
 - 2. At least 48 hours in advance of operations, the Contractor shall submit following preconstruction submittals.
- B. Preconstruction Submittals:
 - 1. Demolition Plan: Submit a demolition plan including sequence of work and methods for demolishing structures. Include plan for capture, control, and transport of demolished materials.
 - 2. Materials Haul Route
 - 3. Procedures, equipment to be used, and operational sequences.
 - 4. Work Procedures: Proposed salvage, demolition, deconstruction, and removal procedures for approval before work is started.
 - 5. Disposal Sites: Proposed disposal sites for debris from demolition
 - 6. Proposed schedule for the demolition work
 - 7. Manifests and characterization of testing

1.5 REGULATORY AND SAFETY REQUIREMENTS

- A. Comply with federal, state, and local hauling and disposal regulations.
- B. Demolition of the existing Synthetic Field Turf shall not commence until new Synthetic Field Turf improvements have been approved, fabricated, delivered and ready to install.

1.6 DUST AND DEBRIS CONTROL

- A. Prevent the spread of dust and debris to adjacent buildings and structures, and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

1.7 PROTECTION

- A. Traffic Control Signs
 - 1. Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Notify the Engineer prior to beginning such work.
- B. Existing Conditions Documentation:
 - 1. Before beginning any demolition or deconstruction work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions showing the condition of structures and other facilities adjacent to areas of alteration or removal. Photographs sized 4 inch will be acceptable as a record of existing conditions. Include in the record the elevation of the top of foundation walls, finish floor elevations, possible conflicting electrical conduits, plumbing lines, the location and extent of existing cracks and other damage and description of surface conditions that exist prior to starting work. It is the Contractor's responsibility to verify and document all required outages which will be required during the course of work, and to note these outages on the record document.
- C. Items to Remain in Place:
 - 1. Take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the City. Repair or replace damaged items as approved by the Engineer. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract. Do not overload structural elements or pavements to remain. Provide new supports and reinforcement for existing construction weakened by demolition, deconstruction, or removal work. Repairs, reinforcement, or structural replacement require approval by the Engineer prior to performing such work. Any damage to the adjacent structures or pavements during demolition shall be made good to the satisfaction of the Engineer at the Contractor's expense. Stop work immediately if adjacent structures appear to be in danger.
- D. Existing Construction Limits and Protection:
 - 1. Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide temporary shoring and bracing for support of building components to prevent settlement or other movement. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove dust, dirt, and debris from work areas daily.
- E. Weather Protection:
 - 1. Protect materials and equipment from the weather at all times. Have materials and workmen ready to provide adequate and temporary covering of exposed areas and materials where necessary.

F. Utility Service:

1. Maintain existing utilities indicated to stay in service and protect against damage during demolition and deconstruction operations. Locate and mark utilities to remain with highly visible tags or flags, with identification of utility type. Coordinate work with utility companies and notify before starting work. Comply with their requirements and obtain required permits. Do not disrupt public utilities without permit from the authority having jurisdiction. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 2 weeks prior written notification to the City. Do not close, shut off, or disrupt existing utility branches or take-off that are in use without at least 2 weeks prior written notification to the City. The cost of either relocation or removal and plugging of utilities shall be incidental to the demolition and removal work. Provisions shall be made to install temporary services to supply the adjacent structures where necessary.

G. Protection of Personnel:

1. Before, during and after the demolition and deconstruction work the Contractor shall continuously evaluate the condition of the structures being demolished and deconstructed and take immediate action to protect all personnel working in and around the project site. No area, section, component, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

PART 2 - PRODUCTS

2.1 REMOVED MATERIALS:

- A. All material and debris, either existing or resulting from demolition and removal work, which are not designated to be salvaged or relocated, shall become the property of the Contractor and shall be removed from the property and disposed of off-site at an approved facility. The Contractor shall exercise care in performing demolition and removal work in order not to damage adjacent structures or materials to be reused or stored for future use as directed by the Engineer.

PART 3 - EXECUTION

3.1 WORK TO BE ACCOMPLISHED BEFORE DEMOLITION

- A. The Contractor shall not begin demolition until the Engineer has reviewed and accepted the Contractor's Work Plan, proposed schedule, and methods of performing the demolition work, and until Synthetic Field Turf materials have been fabricated, delivered and ready to install.
- B. The Contractor shall obtain and verify measurements for modification work and shall establish exact layouts, locations, line work, and elevations of work in relation to existing conditions in order to match the existing symmetry of the Synthetic Soccer Field Turf layout, configurations and alignments accordingly.

3.2 DEMOLITION

- A. Demolition work shall not exceed the limits shown on Drawings.
- B. Control dust in conformance with REGULATORY REQUIREMENTS Section.
- C. Should Contractor decide to move any large items off the site intact, Contractor shall make arrangements for required permits, clearances, and utilities.
- D. Remove vermin infested and harmful materials from site. Dispose of materials in conformance

with applicable health regulations to protect workers, tenants, and the public.

- E. Perform demolition under Engineer's inspection in conformance with applicable safety standards and requirements.
- F. Burning of material on site is prohibited.
- G. No debris shall be allowed to enter ocean waters.
- H. Existing structures and pavement that are indicated on the plans to be removed shall be completely removed in accordance with the provisions of SSPWC Section 300-1.3, "Removal and Disposal of Materials." Sawcuts at the boundary of improvement to remain and those to be removed shall be not less than 2 inches deep.
- I. Locate demolition and deconstruction equipment throughout the existing structures and remove materials so as to not impose excessive loads to supporting structural elements.
- J. Saw cut concrete structures along straight lines to full depth. Make each cut in structure perpendicular to the face and in alignment with the demolition limits shown on the contract drawings. Break out the remainder of the concrete provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, grind smooth or saw cut entirely through the concrete.
- K. Perform pavement removals in conformance with BASIC SITE MATERIALS AND METHODS Section.
- L. Repair or replace surface and subsurface improvements removed or damaged as a result of the Contractor's operations in conformance with BASIC SITE MATERIALS AND METHODS Section.

3.3 REGULATORY REQUIREMENTS

- A. BMPs for effective perimeter control shall be in place at all times to control the discharge of pollutants from the Project site during construction. Construction waste shall be contained and protected against wind and exposure to storm water at all times, unless being actively handled. Chemical, fuel, and lubricant containers shall be kept closed and protected from damage or upset at all times, unless being actively used. Dirt and landscaping material stockpiles shall have effective erosion control BMPs in place to prevent their transport in storm water or directly into the channel and shall not be located in any waters of the United States. Discharges of wastewater from the Project site are prohibited.
- B. Substances resulting from Project-related activities and that could be harmful to aquatic life shall not be discharged to soils or waters of the State. These substances include but are not limited to petroleum lubricants and fuels, cured and uncured cements, epoxies, paints and other protective coating materials, Portland cement concrete or asphalt concrete, and washings and cuttings thereof. All waste concrete shall be removed from the Project site.
- C. Motorized equipment shall not be maintained or parked in or near any stream crossing, channel, or harbor margin in such manner that petroleum products or other pollutants from the equipment might enter these areas under any flow conditions. Vehicles shall not be driven, or equipment shall not be operated on-site in waters of the State onsite, except as necessary to complete the proposed Project.
- D. Prior to construction activities, the Permittee shall delineate the work area with brightly colored fencing or other methods to ensure temporary impacts to waters of the United States and waters of the State do not exceed the limits authorized by the project permits.

- E. No demolition or construction materials, equipment, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.
- F. Any and all debris resulting from demolition or construction activities, and any remaining construction material, shall be removed from the project site within 24 hours of completion of the project.
- G. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.
- H. Machinery or construction materials not essential for project improvements will not be allowed at any time in the intertidal zone.
- I. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.
- J. The CONTRACTOR shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.
- K. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility.
- L. All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.
- M. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.
- N. The discharge of any hazardous materials into any receiving waters shall be prohibited.
- O. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.
- P. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity.
- Q. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

3.4 SAFETY AND PROTECTION

- A. Protect existing buildings, substructures, and other improvements within and adjacent to the work site in conformance with the BASIC SITE MATERIALS AND METHODS Section.
- B. Provide, erect, and maintain barriers, barricades, lighting, and guard rails as required to protect general public, workers, and adjoining properties.

- C. Cease operation and notify Engineer immediately if demolition appears to endanger life, facilities, or property. Do not resume operations until safe conditions have been restored.
- D. Refer to REGULATORY REQUIREMENTS Section for additional requirements in the event that hazardous wastes are discovered.

3.5 OWNERSHIP AND DISPOSAL

- A. Refer to BASIC SITE MATERIALS AND METHODS Section for requirements concerning ownership and disposal criteria for demolished materials.

3.6 DEMOLITION AND REMOVAL

A. Remove and dispose of materials in conformance to Waste Management Plan. See CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL Section.

3.7 OTHER NON-SPECIFIED DEMOLITION

- A. The Contractor shall perform the demolition required for joining and tying in new work to existing work. Items removed temporarily for the convenience of the Contractor shall be replaced to the satisfaction of the Engineer.
- B. Features or items that are damaged by the Contractor during the course of the work shall be repaired and restored to a state equal or superior to that which existed before beginning of the work, as judged by the Engineer.

END OF SECTION 02 41 0

**SECTION 32 18 23
SYNTHETIC FIELD TURF SURFACING**

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The extent of artificial turf work is shown on the drawings.
- B. Artificial turf work includes, but is not limited to, the following:
 - 1. A complete synthetic turf system, consisting of a vertical draining gravel blanket and nominal 50 oz., two and one quarter inch (2.25") long polyethylene parallel-ling slit and monofilament blended fibers with thatch, tufted in alternate stitch rows into a three ply (woven/non-woven/woven) primary backing with a secondary backing consisting of a minimum of 26 ounces of urethane per square yard.
 - 2. A resilient infill system, consisting of a mixture of SBR rubber and silica sand.
 - 3. Tufted-in game lines and perimeter lines per drawings. Remaining required game markings shall be permanently inlaid or painted as per drawings; direction of Owner or Owner's Representative.
 - 4. Edge details.
 - 5. Maintenance manual.
 - 6. Written company warranty: 10-year company warranty supported by a 3rd party insured 10-year warranty policy from an A-Rated domestic insurance carrier. Letters of credit are not permissible. Actual and current policy must be submitted for verification. Insured warranty must provide for \$10,000,000 aggregate and \$10,000,000 "per claim" coverage per year for the 10-year warranty period. Letters of Credit or warranty coverage from a "related party" company will not be accepted.
 - 7. Striping and seaming plan: Striping plan; layouts for the sports as shown on the drawings showing any field lines, logos, markings and boundaries.
 - 8. Train field maintenance personnel in proper care maintenance procedures.
- C. Provide all materials, labor, equipment and services required to accomplish related work in accordance with the drawings and specifications.
- D. The artificial turf shall be specifically designed, manufactured and installed for the intended sports and events. Typically sports include, but are not limited to, football, soccer, lacrosse, field hockey, baseball and softball. At the time of substantial completion, the system's shock attenuation shall have an average G-max value less than 125 at time of install, based on ASTM-F355A. At no time shall the G-max value exceed 175 throughout the life of the warranty.
- E. Copies of independent laboratory test reports on system or components:
 - 1. ASTM D 792 Specific Gravity

2. ASTM D 1335 Tuft Bind
 3. ASTM D 5034 Grab Breaking Strength
 4. ASTM D 418 Pile Height, Tuft Spacing, Face Weight and Total Weight
 5. ASTM D 2859 Flammability (Pill test)
 6. ASTM F 1551 Water Permeability
- F. Prior to Final Acceptance, the Turf Vendor shall submit to the owner three (3) copies of their maintenance manuals. These manuals will include all necessary instructions for the proper care and maintenance of the newly installed synthetic turf system.

1.2 SUBMITTALS

Submit the following within 48 hours of bid opening, as requested:

- A. Three (3) copies of most recent installation/reference list for all projects of similar scope to this project completed in the last the years.
- B. Written certification that the Turf Vendor manufactures all of its own polyethylene turf fibers and finished turf systems at its own facilities that are located in the U.S.
- C. Three (3) copies of most recent independently audited financial statements.
- D. Turf Vendor's current ASBA Certified Field Builder (synthetic) certificate
- E. Written certification that the synthetic turf will be installed by the Turf Vendor's own in-house installation crew. Distributors and third-party installation companies will not be allowed.
- F. Three (3) copies of required 3rd party insurance policy, demonstrating that all of the requirements outlined in Section 1.04 F Quality Assurance are met. Actual policy must be submitted.
- G. One (1) 12" x 12" sample of proposed synthetic turf carpet and one (1) 12" x 12" boxed turf sample including infill representative of finished synthetic turf system. Also submit three (3) copies of product data and testing documents demonstrating that proposed system meets or exceeds all specified requirements. One (1) 12" x 12" sample of rubber ShockPad must also be submitted, if applicable.

Note: If these submittal items are requested and deemed to be insufficient, the Turf Vendor will not be approved.

Submit the following prior to the ordering of materials:

- A. Provide a colored striping plan detailing lines, numbers and letters. Coordinate with Owner or Owner's Representative and Architect to get final approval of all designated colors, dimensions and logo/lettering designs.
- B. Material Certificates and Samples: Provide seven (7) copies for each material from material producer that will be used for this project. Each material certificate must be stamped and checked as approved by the Turf Vendor before submittal to the Architect.

- C. Provide to the Architect materials samples of the following: Two (2) 12" x 12" samples of synthetic turf carpet and color yarn samples, two bagged samples each of rubber and sand infill material or two bagged samples of rubber infill material.
- D. Submittals: Prior to order of materials, the Turf Vendor shall submit a sample warranty, seam layout plan, striping plan and any details of construction that deviate from the plans and specifications.
- E. Submit three (3) copies of the resume of proposed installation foreman. Installation crew must meet or exceed all requirements outlined in Section 1.04.
- F. Three (3) copies of Field Builder's recommended maintenance equipment cut sheets.

1.3 JOB CONDITIONS

- A. All job conditions in Section 02200 apply.

1.4 QUALITY ASSURANCE

- A. Provide a qualified installation foreman to coordinate and review the component parts of the artificial turf system. Submit a resume of experience for Architect's approval prior to starting work.
- B. Infilled Artificial Turf:
 - 1. Technicians employed by the Turf Vendor skilled in the installation of athletic-caliber infilled synthetic turf systems will undertake the placement of the turf. Special brushing equipment and techniques will be used in the installation.
 - 2. The designated in-house installation crew shall have installed a minimum of thirty (30) high quality, stadium grade infilled synthetic turf systems of 65,000 square feet or greater in the past three years.
 - 3. A notarized letter from the Turf Vendor that the installation crew and foreman are factory certified must be submitted prior to the start of turf installation.
- C. The Turf Vendor shall meet the following criteria:
 - 1. **Manufacturer:**
 - a. The Turf Vendor must manufacture its own turf fibers and finished turf systems "in-house" at its own manufacturing facilities, and these facilities MUST be located in the United States. The Turf Vendor must install this type of artificial turf system with its own in-house installation crews and provide project references of the synthetic grass system being installed with its own installation crews at 100 similar exterior sites in the United States over the last 5 years, a minimum of 65,000 square feet each.
 - b. The Turf Vendor must have actively been in business – under its current name and ownership – for at least the past five years; and must have a minimum of 250 athletic fields still in use in the United States for a minimum of the past 5 years. The Turf Vendor must not have filed bankruptcy nor sold its assets to a third party in the last five years. The Turf Vendor must not be a defendant in any class action lawsuits where field failures/defects are the basis of the lawsuits.

- c. The Turf Vendor must employ competent workmen skilled in this type of artificial turf installation. The designated Supervisory personnel on the project must be employed by, and certified, in writing, by the Turf Vendor as competent in the installation of this material, including gluing or sewing seams and proper installation of the infill mixture. The Turf Vendor shall have a qualified job foreman on site to certify the installation and warranty compliance.

D. Warranty:

1. The warranty coverage shall not be prorated nor place limits on the amount of the field's usage
2. The Field Builder shall submit its written company warranty: 10-year warranty which warrants the usability and playability of the artificial turf system for its intended uses. A 3rd party insured 8-year warranty from an A-Rated domestic insurance carrier is required in addition to the Field Builder's warranty. Letters of credit in lieu of an insurance policy are not acceptable.
3. The Field Builder's warranty must have the following characteristics:
 - a. Provide full coverage for a minimum of ten(10) years from the date of Substantial Completion.
 - b. Warrant materials and workmanship.
 - c. Warrant that the materials installed meet or exceed the system specifications.
 - d. Repair or replace such portions of the installed materials that are no longer serviceable to maintain a serviceable and playable surface.
 - e. Be from a single source covering workmanship and all materials.
 - f. Assure the availability of exact or substantially the same replacement materials for the artificial turf system installed for the full warranty period.
 - g. Include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism and acts of God beyond the control of the Turf Manufacturer or Field Builder.
 - h. Cover defects in the installation and workmanship. Assure the installation was done in accordance with both the Field Builder's recommendations and any written directives of the Field Builder's on-site representative.
 - i. Shall be limited to repair or replacement of the affected areas at the option of the Field Builder, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs.
 - j. The Field Builder may be required, upon the request of the Owner, to provide a list of ten (10) clients for which they have completed after-the-sale warranty work.
 - k. All designs, game markings and layouts shall conform to all currently applicable National Federation State High School Association or NCAA rules and regulations, or league specific requirements, depending on what applies.

- l. All components and Turf Vendor's installation methods shall be designed and manufactured for use on outdoor athletic fields. The materials as hereinafter specified, shall withstand full climatic exposure in the location of the field, be resistant to insect infestation, rot, fungus and mildew; it shall also withstand ultra-violet rays and extreme heat, it shall allow the free flow of water horizontally to perimeter areas and vertically to the gravel blanket and into the field drainage system below the surface.
- m. The sewn primary seams of all system components shall provide a permanent, tight, secure and hazard-free athletic playing surface. All inlaid markings (game lines, logos, etc.) shall remain in place throughout the duration of the warranty period.
- n. The installed artificial turf system's drainage capability shall allow water flow through the system (turf & infill) at a rate of not less than 10 inches +/- per hour.

PART 2 – PRODUCTS

2.1 SYNTHETIC GRASS SYSTEM

A. Synthetic Grass – Predator

B. Pile Weight: 50 oz/sy

Face Yarn Type: 100% polyethylene parallel-long slit fiber (Ultrablade Sharkstooth) and a diamond shaped monofilament fiber (Apex) tufted on a 3/8" gauge tufting machine in alternating stitch rows

Yarn Denier: 10,000 for Ultrablade Sharkstooth, 12,000 for Apex

Yarn Thickness: 140 microns for Ultrablade Sharkstooth, 380 microns for Apex

Pile Height (Finished): 2.25"

Color: Field Green/ Lime Green blend (Field Green and Field Green/Lime Green blend as alternating field panels)

Construction: Broadloom tufted

Stitch Rate: 3/8"

Tufting Gauge: 3/8"

Primary Backing: 9 oz. per SY, 3-part, woven, non-woven, woven backing

Secondary Backing: 26 oz. per SY urethane coating

Total Product Weight: 83 oz. per SY (+/- 2 oz.)

Finished Roll Width: 15'

Finished Roll Length: Up to 220'

Perforation (Outdoors): 3/16" holes on staggered 2" by 2.25" (approximate) centers

Turf Permeability: > 20" +/- per hour

Infill Composition: 35% SBR Rubber and 65% rounded or sub-angular, uniformly sized silica sand

The carpet shall be delivered in 15-foot-wide rolls. The perimeter white line shall also be tufted into the individual sideline rolls, when applicable. The rolls shall be of sufficient length to go from sideline to sideline. Head seams, between the sidelines, will not be acceptable.

As applicable, provide game markings as follows: soccer and related markings shall be cut in and glued or painted in accordance with Turf Vendor's recommendations.

Provide a City logo as follows: See plan drawing detail – Coordinate final approval with the City Engineer.

Alternative painting for those who choose to not inlay lines, game markings and graphics shall be as directed and approved by Field Builder. Acceptable synthetic turf paint manufacturers:

1. Pioneer Paints: 800-877-1500
2. World Class Paints: 800-748-9649
3. Approved Equivalent

B. Seaming Materials:

Adhesives for bonding inlaid synthetic turf markings shall be two-component fast-set urethane adhesive obtained from a single manufacturer and be equivalent to Ultrabond Turf PU 2K as manufactured by Mapei Corporation, Deerfield Beach, FL (800) 992-6273, or approved equal as designated by the Turf Vendor.

Seaming Tape: Tape for securing inlays in the tufted synthetic turf shall be high quality tape made with a minimum roll width of 12 inches.

- C. Resilient Infill:** A resilient infill system, consisting of a specially formulated mixture of approximately 35% SBR Rubber and 65% sand per SF, engineered to provide the look, feel, footing and shock absorption of a natural grass field in ideal conditions. Finished infill depth shall be 75% of the finished pile height of the turf system being installed at the time field is completed. Turf Vendor will provide Owner with independent testing confirming this infill depth upon completion of the field.
- D. Sand Particulate.** The sand provided as a component of the infill mixture shall be rounded or sub-angular so as to minimize abrasion to the athlete and synthetic grass fibers.
- E. Basis of bid:** Standard of Quality shall be Sprinturf Predator synthetic turf system as built by Sprinturf, LLC, or Owner approved equal. Contact Sprinturf at 843-936-6023.

2.2 LANDSCAPE TURF

A. A synthetic turf system, consisting of fibrillated parallel-long slit and monofilament blended fibers with thatch ,1.25" in height, with a face weight of 65oz., Tufted into Quadribind primary backing with a proflow secondary backing to make a total product weight of 94oz.

2.3 VERTICAL DRAINAGE BASE MATERIALS (NOT USED)

- D. Excavation:** Existing natural grass field shall be excavated to the depth established by the Architect and as shown on the excavation plan. The sub grade shall be shaped to achieve a .5% (one half of one percent) slope from the center of the field to each sideline in order to mirror the grade of the finished synthetic turf surface. The sub grade shall also be compacted, and proof rolled to a minimum of a 95% compaction rate.
- E. Geotextile Filter Fabric:** Non-woven polypropylene geotextile fabric shall be chemically and biologically inert and shall be Mirafi 140N, Mirafi Inc., Pendergrass, GA (888) 795-0808, or approved equal. The geotextile will be installed over the compacted subgrade and in the collector trenches (prior to installation of stone in the collector trenches)

F. Drainage Pipe: A network of perforated HDPE highway grade drainage pipe (1" x 12" flat panel pipe) shall be installed under a 6" layer of free draining base aggregate. The drainage pipe will be installed in a herringbone pattern every 15 feet on center and will be connected to 8" to 12" (list required size based on design) perimeter collector lines as shown on drawings.

1. ADS AdvanEdge, 800-821-6710 or approved equal.
 - A. 1 inch by 12-inch flat drain.
 - B. 8-inch diameter perforated collector drainpipe.
 - C. Architect approved equal.

G. Stone Base Courses:

The following gradation of stone is a typical and recommended specification. The synthetic turf Base Contractor is required to focus on achieving the planarity, porosity and compaction requirements to provide a sound crushed stone base for synthetic turf installation.

1. The free-draining base aggregate base layer shall consist of a consistent depth of open graded material. Base drainage aggregate used must achieve a 95% minimum overall compaction rate. Material shall conform to the AASHTO #57 limestone classification. An open graded aggregate material may be used if available.

#57 Base Aggregate: (5" depth)

	<u>Approximate Percentage Passing</u>
1-1/2" Sieve	100%
1" Sieve	95 - 100%
1/2" Sieve	25 - 60%
#4 Sieve	0 - 10%
#8 Sieve	0 - 5%

2. The choker material shall be AASHTO #10.

It is critically important that the #10 choker layer is not laser-graded at more than 1" depth. Layers deeper than 1" are susceptible to over-compaction and restriction of porosity, leading to drainage issues.

Subject to architectural approval, local or regional stone specifications that meet compaction and porosity requirements are permitted.

#10 Choker Material: (1" depth)

	<u>Approximate Percentage Passing</u>
3/8" Sieve	100%
#4 Sieve	85 - 100%
#100 Sieve	10 - 30%

PART 3 – EXECUTION

3.1 SUBMITTALS

- A. Prior to ordering materials, submit a 3rd party insured warranty policy, a sample warranty, seam layout of field, striping plan and all details of construction that deviate from the plans and specifications.

3.2 VERTICALLY DRAINING BASE (NOT USED)

- A. The synthetic turf Base Contractor shall strictly adhere to the installation procedures outlined under this section. Any variance from these requirements must be accepted in writing, by the Field Builder's on-site representative, and submitted to the Architect/Owner, verifying that the changes do not in any way affect the warranty.
- B. Install geotextile fabric over excavated and prepared sub-grade in accordance Field Builder's recommendations. Provide a 36" minimum overlap at all seams. Fabric shall first be installed in the drainage trenches prior to installation of perimeter collector lines. After backfilling of all trenches is complete, the entire field shall be covered with fabric prior to the base aggregate application.
- C. Trenching, Drainage Pipe Installation and Backfilling: All piping shall be as specified and connected by Field Builder's couplers, plugs etc.
 - 1. The base grade shall be shaped to mirror the finished grade and approved by the Architect and/or Owner's Representative. The Base Contractor shall begin layout and trenching for the drainage network as indicated on the drainage plan and all details that apply. Collector lines shall be installed before lateral lines and shall begin with the deepest elevations. Collector lines shall be connected to discharge outlet at the onset of operations. Trenching progress shall work upward in elevation to allow for immediate discharge of water from the entire field in the event of a rainfall.
 - 2. No trenches, with or without pipe, shall be permitted, to remain unfilled overnight and/or while crews are not progressively working on site.
 - 3. All perimeter trenches must be dug in accordance with the field drainage plan details.
 - 4. After all collector and lateral lines have been installed, the Base Contractor shall repair any sub grade undulations prior to installing geotextile fabric.
- D. Concrete Header Curb and Pressure Treated Wood Turf Nailer: The synthetic turf perimeter fastening structure shall be installed before the drainage aggregate.
 - 1. The 6" x 12" concrete header curb shall be installed in accordance with the Drawings and/or Shop Drawings and these Specifications. The foundation of the concrete header curb shall be a compacted free draining aggregate. Future water entering the foundation shall have a free draining path directly to the perimeter collector pipe.
 - 2. Install a pressure treated wood 2" x 4" nailer. Pressure treated wood nailer shall be set 1.5 inches below top of the curb by means of a Tapcon or ramset every 12 inches. This shall be the responsibility of the Base Contractor. See synthetic turf edge attachment detail.
- E. Base Drainage Aggregate: The installation of the base drainage aggregate shall only begin after the drainage pipe installation has been inspected and approved by Owner's Representative. Installation of the Free Draining Base Aggregate shall follow procedures that protect the base grade soils and

drainage pipe. The drainage pipe network and its existing elevations shall not be disrupted through ground pressures from trucks, dozers or by any other means.

1. The base grade subsoil shall be dry before undertaking the placement of base aggregate.
 2. Delivery trucks shall enter the field only from the designated entrance point. Base course stone shall be dumped closest to the entrance first and continuously worked towards the furthest point of the field. Extreme care must be taken not to disturb sub grade or drainage network.
 3. Track-type dozers shall push out the stone from behind the pile onto and toward the field center. Dozers shall only traffic the aggregate they are spreading.
 4. Bulldozer blades shall be equipped with a laser-guided hydraulic system. Care shall be taken not to disturb or contact the base grade soils with the dozer blades or tracks. All equipment trafficking over the drainage aggregate shall insure there is a minimum depth of 4" of aggregate between the geotextile fabric and the dozer track ground contact position.
 5. When the aggregate spreading is completed, the surface shall be further-firmed by a 5-ton roller. Static vibration shall not be part of this process.
 6. The stone shall be left firm, but not over-compacted as to protect the porosity and drainage capabilities of the aggregate profile.
 7. After the drainage stone has been uniformly spread throughout the surface, the surface shall receive a final laser finished grade. This process shall be accomplished using a turf-type tractor, or lightweight grader, equipped with high flotation tires and a hydraulically controlled laser blade.
 8. The free-draining base course must be installed to a depth of 5 inches and shall be independently tested for an overall compaction rate of 95% proctor.
- F. Choker Levels: The base drainage stone final elevations shall mirror the proposed choker layer final grade material. Care shall be taken not to allow the coarser aggregate to surface into the profile or finished grade of the choker layer.
1. It is critically important that the #10 choker layer is not laser-graded at more than 1" depth. Layers deeper than 1" are susceptible to over-compaction and restriction of porosity, leading to drainage issues.
 2. The choker layer shall be applied using high flotation grading equipment. The choker material shall be evenly spread throughout the proposed field surface to the final pre-pad or pre-turf elevations.
 3. After the choker material has been uniformly spread throughout the surface by the described method, the surface shall receive a final laser finish grade. This process shall be accomplished using a turf-type tractor, or lightweight grader, equipped with high flotation tires and a hydraulically controlled laser blade.

4. Care shall be taken throughout the installation not to force the choker material into the porosity of the base aggregate below.
 5. Final choke layer must be graded by means of a laser within 0 to 1/2 inch from design grade. The finished surface tolerance must not exceed ¼ inch over 10 feet in all directions. Base Contractor must provide a topographical survey with a minimum of 200 shots demonstrating finished grade meets all written requirements.
 6. Final layer of stone must be installed at a depth of 1.5 inches. Finished aggregate base must be proof-rolled by means of 2- to 5-ton roller. The finished aggregate base must achieve an overall compaction rate of 95% proctor in accordance with ASTM D1557. It shall also be flush with top of pressure treated wood nailer.
 7. The synthetic turf Base Contractor is required to stringline the entire field every five feet to identify high and low spots. And identified high and low spots must be eliminated prior to installation of the synthetic turf.
- G. Base Acceptance: The Architect and/or Owner's Representative must jointly approve the base before turf installation can begin.
- H. Synthetic Turf and Infill Materials
1. After an inspection of current Base/Pad are signed off on, the synthetic turf installation shall begin. The first roll shall begin with the longest perpendicular cross-field distance. No head seams shall be permitted in the inbound playing surface.
 2. The rolls of turf shall be rolled out a minimum of four hours prior to starting seaming procedures and allowed to relax/expand.
 - a. All visible wrinkles shall be stretched out before seaming.
 - b. Seams shall be flat, tight and permanent with no separation or fraying.
 - c. Synthetic turf yarn fabric that is trapped or glued between seams shall be freed from the seams by hand or other approved method to an upright position prior to the commencement of brushing and top-dressing procedures.
 - d. All synthetic turf seams shall be assembled as follows: The full width rolls shall be laid out across the field. Utilizing standard state of the art adhering or sewing procedures, each roll shall be attached to the next.
 - e. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed perpendicular to the playing field. The yard lines, game markings, sidelines, etc. of all applicable sports shall be tufted into carpet by the manufacturer wherever possible.
 3. After all seaming is completed and inlaid lines, logos and lettering have been installed; the infill materials shall be spread evenly, using a drop spreader or top dresser.
 - a. SBR Rubber and sand shall be applied in a uniform rate of multiple applications until the specified infill depth is achieved.

- b. Infill material shall be brushed between infill applications with a motorized rotary broom and pull-type groomer brush simultaneously.
- c. A minimum infill rate of 2.8 lbs of rubber and 4.2 lbs. of sand per square foot is required.

I. Tufted and Inlaid Lines

1. Layout and descriptions of tufted, inlaid and/or painted lines shall be as indicated on final shop drawings.
2. Inlaid lines and field markings shall be cut in using seaming methods recommended by the Field Builder.

J. Synthetic Turf Perimeter Attachment:

1. After final trimming of the turf, the turf shall be screwed, nailed, stapled or glued to the pressure treated wood nailer system as per the Field Builder's recommendations.

3.3 FIELD LAYOUT

- A. Field layout shall be as shown on the record drawings. Typically the final approved striping and seaming plan that was used to manufacture and install the field is acceptable. Any Owner-approved changes that took place during the installation must be marked in red and resubmitted.

3.4 CLOSEOUT

- A. The Field Builder must verify that a qualified representative has inspected the installation and that the finished field surface conforms to the Field Builder's requirements.
- B. The Field Builder must provide the Owner with the pull behind maintenance brush as outlined in section 2.04 New Synthetic Turf Grooming Equipment.
- C. The Field Builder shall provide a warranty to the Owner that covers defects in materials and workmanship of the turf for a period of 10 years from the date of Substantial Completion as described in 1.04 F. Submit three (3) copies of the warranty.
- D. The company's 10-year warranty must also be supported by a 3rd party insured 10-year warranty from an A-rated domestic insurance carrier. The value of the policy shall be \$20,000,000 for each insured warranty and \$25,000,000 annual aggregate. Only true 3rd party policies will be accepted. Companies submitting policies that are actually letters of credit or not truly a 3rd party insurance policy will not be accepted. Submit three (3) copies of the actual insurance policy.
- E. The Field Builder must submit three (3) copies of its standard maintenance manual to the owner.
- F. Field Builder must train Owner's designated field personnel in proper grooming and care procedures. This includes training field personnel how to properly use grooming equipment as well as make minor repairs.
- G. Extra materials: Field Builder must leave 500 lbs. of rubber granules and the equivalent of 15' x 10' (all pieces combined) of turf with Owner before leaving job site. All salvageable pieces of colored turf used during the installation should be left with the Owner as well.

3.5 CLEAN UP

- A. Field Builder shall provide the labor, supplies and equipment as necessary for final cleaning of surface and installed items.
- B. All usable remnants of new material shall be neatly rolled up and turned over to the Owner at a place and area designated by the Owner.
- C. During the contract and at intervals as directed by the Architect and as synthetic turf installation is completed, clear the site of all extraneous materials, rubbish, or debris and leave the site in a clean, safe, well draining, neat condition.
- D. Surface, recesses, enclosures, etc. shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

3.6 G-MAX TESTING

- A. Optional at substantial completion, the Field Builder can, as specified, hire an independent testing laboratory to perform a G-max test (ASTM 355, 1936 method) to verify that the shock attenuation properties of the field meet the requirements set forth in this specification. Submit three (3) copies of the G-max test to the Owner.
- B. At the time of substantial completion, the average G-max rating must not exceed 125 at the time of install. The average G-max must not exceed 165 at any time during the life of the warranty. The Owner reserves the right to have the field tested for shock attenuation at its own cost at anytime it deems necessary. If at anytime the G-max ranges reach unacceptable levels, it is the responsibility of the Field Builder to bring the field back into the required ranges at no cost to the Owner.

END OF SECTION 32 18 23.29

**APPENDIX I
PROGRESS PAYMENT REQUEST FORM**

TO: CITY OF MANHATTAN BEACH
 Engineering Division, 1400 Highland Avenue, Manhattan Beach, CA 90266
 PROJECT TITLE _____
 PROJECT NO. _____

FROM: CONTRACTOR _____ Date _____
 Address _____
 Telephone _____ Progress Estimate # _____
 Submitted by _____ Contract Award Amount \$ _____

No.	Description	Contract Quantity	Previous Quantity	Quantity This Estimate	Unit Price	Amount This Estimate	Total Quantity to Date	Total Amount to Date
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
	Total							
	Less Retention							
	Less Previous Billing(s)							
	Total Amount Due							

City Approval: _____ Date: _____

NOTE: An updated Project Schedule must be provided with each monthly progress payment in accordance with Section 6-1 of the General Provisions in addition to a Conditional Waiver and Release form per Section 9 -3.2.1

**APPENDIX III
APPLICABLE CITY STANDARD PLANS
(NOT USED)**

**APPENDIX IV
GEOTECHNICAL OR OTHER REPORTS
(NOT USED)**