CITY OF MANHATTAN BEACH

PLANS FOR

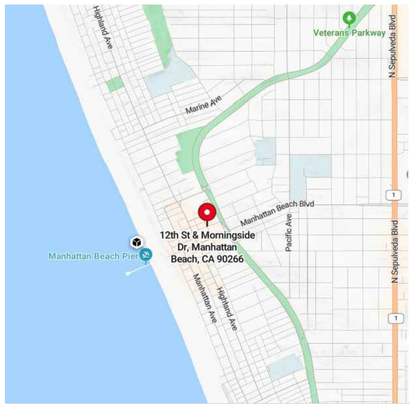
INTERIM SURFACE PARKING LOT 3 PROJECT

1155 MORNINGSIDE DR.

PUBLIC WORKS DEPARTMENT

3621 BELL AVENUE

MANHATTAN BEACH, CALIFORNIA 90266



LOCATION MAP
NOT TO SCALE

SITE & PROJECT INFORMATION:

LOT AREA: 13,459 SQ. FT. (0.31 ACRES)

APN: 4179-005-903

LEGAL DESCRIPTION: LOTS 10 THROUGH 14 INCLUSIVE IN BLOCK 92, OF MANHATTAN BEACH NO. 2, IN THE CITY OF MANHATTAN BEACH, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1, PAGES 95 AND 96 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

ZONING DISTRICT: CD
AREA DISTRICT: III

EXISTING & PROPOSED USE: COMMERCIAL PARKING FACILITY

SCOPE OF WORK:

PROJECT WILL CONSTRUCT AN INTERIM SURFACE PARKING LOT WITH LANDSCAPING, PARKING LOT LIGHTS, EV CHARGING STATIONS AND TRASH ENCLOSURE, SUBJECT TO CITY COUNCIL RESOLUTION NO. 25-0012.

INDEX OF DRAWINGS

CODES:

2022 CALIFORNIA BUILDING CODE;
2022 CALIFORNIA MECHANICAL CODE;
2022 CALIFORNIA PLUMBING CODE;
2022 CALIFORNIA ELECTRICAL CODE;
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE; AND
MANHATTAN BEACH MUNICIPAL CODE (MBMC)

STANDARD PLANS:

CITY OF MANHATTAN BEACH

MBSI-112A-0(ST-2)	SIDEWALK
MBSI-116A-0	COMMERCIAL DRIVEWAY
MBSI-116D-0	COMMERCIAL DRIVEWAY
MBSI-120A-0(ST-2)	CURB AND GUTTER
MBSI-413A-0	SIGN INSTALLATION
MBSS-200A-0	SEWER LATERAL CONNECTION & CLEANOUT
MBSI-132A-0(ST-10)	STREET EXCAVATION AND PAVEMENT RESTORATION.

APWA

120-2	CURB AND GUTTER – BARRIER

CALTRANS

A88A	CURB RAMPS

ABBREVIATIONS

℄	CENTER LINE
CF	CURB FACE
C&G	CURB AND GUTTER
SW	SIDEWALK
GB	GRADE BREAK
EP	EDGE OF PAVEMENT
ECR	END OF CURVE
PB	PULL BOX
FS	FINISHED SURFACE
FL	FLOW LINE
HP	HIGH POINT
LP	LOW POINT
RW	RETAINING WALL
RWM	RECLAIMED WATER METER
PP	POWER POLE
ST. LT.	STREET LIGHT
TC	TOP OF CURB
TG	TOP OF GRATE
PL	PROPERTY LINE
WM	WATER METER
TMH	TELEPHONE MANHOLE
EV	ELECTRIC VEHICLE

PROJECT UTILITY CONTACTS

CITY OF MANHATTAN BEACH (FRONT DESK - 24/7)	(310) 802-5140
CITY OF MANHATTAN BEACH (POLICE DEPARTMENT)	(310) 802-5100
CITY OF MANHATTAN BEACH (FIRE DEPARTMENT)	(310) 802-5203
COUNTY SANITATION DISTRICT (COMPTON)	(310) 638-1161
AT&T (DISTRIBUTION)	(510) 645-2929
AT&T (TRANSMISSION)	(866) 460-6324
WEST BASIN MUNICIPAL WATER DISTRICT - FRANK FUCHS	(310) 220-5475
WEST BASIN MUNICIPAL WATER DISTRICT - INFRAMARK, LLC (RECYCLED WATER PIPELINE MAINTENANCE)	(310) 217-2417
LA COUNTY PUBLIC WORKS (FLOOD MAINTENANCE)	(562) 305-7258
CROWN CASTLE (NEXTGLAVEN)	(800) 654-3110
SHELL OIL	(310) 816-2024
ZENITH ENERGY - STEVEN FRANKS	(562) 216-0675
SOUTHERN CALIFORNIA GAS COMPANY (DISTRIBUTION)	(800) 427-8894
SOUTHERN CALIFORNIA GAS COMPANY (TRANSMISSION)	(562) 806-4843
SOUTHERN CALIFORNIA EDISON - AUSTIN STEPHENS	(714) 737-7296
SPECTRUM (TIME WARNER CABLE)	(844) 780-6054
T-MOBILE - WALTER CALLEJAS	(818) 840-0808
FRONTIER COMMUNICATION (PREVIOUSLY VERIZON)	(866) 788-0166

PROFESSIONAL ENGINEER'S NOTE:

THE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY THE ENGINEER OF RECORD USING AVAILABLE RECORD PLANS AND MAPS AND BASED ON FIELD RECONNAISSANCE OF EXISTING CONDITIONS. KNOWN UTILITIES AND OWNERS OF OTHER STRUCTURES HAVE BEEN GIVEN WRITTEN NOTICE OF THE PROJECT. HOWEVER, THE ENGINEER OF RECORD AND CITY OF MANHATTAN BEACH ARE NOT RESPONSIBLE FOR THE TOTAL ACCURACY AND/OR CORRECTNESS OF THE SHOWN INFORMATION. THE CONTRACTOR, BY SIGNING THE CONSTRUCTION CONTRACT FOR THIS PROJECT, ACCEPTS AND ASSUMES FULL RESPONSIBILITY FOR THE WORK AND ITS IMPACT ON THE EXISTING FACILITIES WHETHER SHOWN OR NOT ON THESE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE TO MAKE HIS OWN INVESTIGATION AND INSPECTION INCLUDING POTHOLING AND SUCH OTHER METHODS HE DEEMS NECESSARY TO ALLOW HIM TO PROCEED ON THE CONSTRUCTION OF THIS PROJECT IN COMPLIANCE WITH THE LAWS, ORDINANCES, REGULATIONS AND CITY STANDARDS APPLICABLE TO THE PROJECT, INCLUDING STATE SAFETY ORDERS AND PROCEDURES OF USA.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY SURVEYS REQUIRED TO ESTABLISH HORIZONTAL AND VERTICAL CONTROLS PRIOR TO AND DURING CONSTRUCTION, AND TO REPLACE DISTURBED OR COVERED EXISTING SURVEY MONUMENTS AT HIS EXPENSE. MONUMENT RESTORATION/REPLACEMENT TO BE RECORDED.

THE PLANS HAVE BEEN APPROVED BY THE MANHATTAN BEACH DIRECTOR OF PUBLIC WORKS.

DIRECTOR OF PUBLIC WORKS
ERICK LEE — DATE

DECLARATION OF DESIGN ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH CHECK DOES NOT, THEREFORE RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. I ALSO HEREBY DECLARE THAT I HAVE COMPARED THESE PLANS WITH ALL APPLICABLE ADA TITLE II REQUIREMENTS FOR DISABILITY ACCESS FOR THIS PROJECT AND THESE PLANS ARE IN FULL COMPLIANCE WITH THOSE REQUIREMENTS.

M. Todd Broussard — SIGNATURE — 3/10/25 DATE

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED PROFESSIONAL ENGINEER — M. TODD BROUSSARD — No. C57144 — EXP. 12-31-2025 — CIVIL — STATE OF CALIFORNIA

M. Todd Broussard — 2/10/2025 DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY — DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
TITLE SHEET

RECOMMENDED BY: PROJECT MANAGER JEFF FIJALKA, PE — DATE
RECOMMENDED BY: CITY ENGINEER KATHERINE DOHERTY — DATE
DESIGNED BY: M. TODD BROUSSARD, PE, TAIT PROJECT ENGINEER — 3/10/2025 DATE
SCALE
DATE 3-10-25
DRAWING NO. D-952
SHEET 1 OF 22

GENERAL NOTES:

1. 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.
2 WORK NOT DONE IN THE PRESENCE OF THE CITY INSPECTOR IS SUBJECT TO REJECTION.
3. 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.
4. 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.
5. 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).
6. 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).
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND CLEANING OF THE PROPOSED WORK AREA.
8. 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...
9. 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.
10. 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.
11. 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.
12. 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 CONTAIN 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 TEMPORARY AREA ON–SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN–OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
13. 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.
14. 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.
15. 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).
16. 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.
17. 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.
18. 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.
19. 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.
20. USE OF TRENCH PLATING MAY BE APPROVED BY THE CITY ENGINEER UPON SUBMITTAL OF A PLATING PLAN AND APPROVAL OF PLAN BY THE CITY ENGINEER. ALL PLATES SHALL BE FIRMLY SUPPORTED ON ADJACENT PAVEMENT OR BEAMS. 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.
21. 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.
22. 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 INCOMPLETE.
23. 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.
24. 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 THEREFOR FROM THAT AGENCY. THERE MAY BE A FEE THEREFOR PAYABLE BY CONTRACTOR.
25. IN SOME CASES MATCH LINES MAY OVERLAP FROM PLAN SHEET TO PLAN SHEET. CONTRACTOR SHOULD REVIEW PLANS THOROUGHLY.
26. 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 LOOPS DAMAGED BY PROJECT WORK SHALL BE REPLACED IN THEIR ENTIRETY BACK TO CONTROL PANEL. CONTRACTOR SHALL TUNNEL 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.
27. 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 A 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.
28. 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".
29. 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.
30. CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.
31. 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.
32. 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 POTHOLING. IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.
39. ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306–5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
40. 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:

1. 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.
2. 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, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. DEMOLITION PLAN BY SEPARATE PERMIT.

NPDES NOTES:

1. 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.
2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
3. 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.
4. 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.
5. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERSAL BY WIND.
6. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
7. 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

1. ALL SLOPES IN DIRECTION OF TRAVEL SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUM ALLOWED GRADES BY THE AMERICAS 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.
2. 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.
3. 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.
4. 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:

1. ALL LANDSCAPE IRRIGATION BACKFLOW DEVICES MUST MEET CURRENT CITY REQUIREMENTS FOR PROPER INSTALLATION.
2. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CALL DIG ALERT TO IDENTIFY THE LOCATION OF ALL UTILITIES
3. 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.
4. 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.
5. 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.
6. IF ANY EXISTING SEWER LATERAL IS USED, IT MUST BE TELEVISED 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.
7. ANY UNUSED WATER OR SANITARY SEWER LATERALS MUST BE ABANDONED AT THE CITY MAIN.
8. 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.
9. 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.
10. THE BACK OF DRIVEWAY APPROACH MUST BE SIX INCHES HIGHER THAN THE FLOW LINE ON THE STREET. M.B.M.C. 9.76.030.
11. 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".
12. 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.
13. 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.
14. 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.
15. PLAN HOLDER MUST HAVE THE PLANS RECHECKED AND STAMPED FOR APPROVAL BY THE PUBLIC WORKS DEPARTMENT BEFORE THE BUILDING PERMIT IS ISSUED.

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED PROFESSIONAL ENGINEER
M. TODD BROUSSARD
No. C57144
EXP. 12–31–2025
CIVIL
STATE OF CALIFORNIA

2/10/2025
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560–8200

REVIEWED BY	DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
GENERAL NOTES

RECOMMENDED BY: PROJECT MANAGER JEFF FIJALKA, PE — DATE

RECOMMENDED BY: CITY ENGINEER KATHERINE DOHERTY — DATE

DESIGNED BY: M. TODD BROUSSARD, PE — 3/10/2025 DATE — TAIT PROJECT ENGINEER

SCALE

DATE 3–10–25

SHEET 2 OF 22

DRAWING NO. D–952

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

GENERAL:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, FIRE AND POLICE DEPARTMENT AT LEAST 72 HOURS PRIOR TO SHUTTING DOWN ANY WATER MAINS, FIRE HYDRANTS OR BLOCKING ACCESS TO ANY AREA. FIRE HYDRANT SHALL NOT BE OUT OF SERVICE FOR MORE THAN FOUR (4) HOURS AND NONE SHALL BE OUT OF SERVICE OVERNIGHT OR DURING WEEKENDS.
2. THE CONTRACTOR SHALL FIELD VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, ELECTRICAL, TELEPHONE, TELEVISION, STORM DRAIN, SEWER AND WATER AT ALL INTERSECTIONS PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS. DAMAGED UTILITIES SHALL BE REPLACED IN KIND UNDER THE SUPERVISION OF THE OWNER AT CONTRACTOR'S EXPENSE.
3. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING SEWER, GAS LATERALS AND/OR ELECTRICAL UNDERGROUNDING MAY NOT BE AT LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
4. PRIOR TO SHUT DOWN AND CUTTING OF ANY EXISTING WATER MAIN, ALL EXISTING VALVES SHALL BE EXERCISED BY CITY PERSONNEL. THE CONTRACTOR SHALL NOTIFY THE CITY'S DEPARTMENT OF PUBLIC WORKS, WATER DIVISION INSPECTION SUPERVISOR A MINIMUM OF FOUR DAYS PRIOR TO COORDINATE THE SHUT DOWN OF ANY WATER MAIN.
5. CONTRACTOR SHALL PROTECT IN PLACE THE EXISTING SURVEY MONUMENTS DURING WATER MAIN CONSTRUCTION. IF MONUMENTS ARE DESTROYED, THE CONTRACTOR SHALL SURVEY AND RESET RECORDED MONUMENTS.

DUCTILE IRON PIPE:

6. ALL D.I.P. WATER LINES AND FITTINGS SHALL BE CEMENT LINED DOUBLE THICKNESS, CLASS 50 PRESSURE CLASS WITH POLYETHYLENE ENCASEMENT AND COMPLY WITH ANSI A.21.51 (AWWA C 151).
7. STATIC WATER PRESSURE IN VICINITY IS SHOWN FOR LOW AND HIGH ELEVATIONS ON THE PLANS. (REFER TO TOP OR BOTTOM OF SHEETS)
8. PIPE MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S RECOMMENDATIONS.
9. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES EXCEPT AT POINTS OF CONNECTION TO EXISTING WATER MAINS.
10. THE CONTRACTOR MAY VARY THE GRADE IN THE ALIGNMENT OF THE WATERLINE IF FIELD CONDITIONS WARRANT WITH THE APPROVAL OF THE ENGINEER.
11. PIPE DEFLECTIONS SHALL NOT EXCEED 80% OF THE MANUFACTURER'S RECOMMENDED ALLOWABLE DEFLECTIONS FOR DUCTILE IRON PIPE AND FITTINGS INSTALLATION.
12. A MINIMUM OF 12-INCHES CLEARANCE BETWEEN THE EXISTING UTILITIES AND PROPOSED PIPELINES SHALL BE MAINTAINED AT CROSSINGS. UTILITIES SHALL BE SUPPORTED AS REQUIRED BY THE ENGINEER AND IN ACCORDANCE WITH APWA STD. DWG. 224-2 AND CITY OF MANHATTAN BEACH STD. DWG. ST-26.
13. THE OPEN ENDS OF ALL ABANDONED WATER LINES SHALL BE PLUGGED WITH CONCRETE. THE LOCATION OF THE CONCRETE PLUGS SHALL BE APPROVED BY THE CITY ENGINEER IN THE FIELD.
14. ALL EXCAVATIONS FOR THE INSTALLATION OF THE MAIN LINE PIPE AND SERVICES, INSTALLATION OF COMBINATION AIR VACUUM AND AIR RELEASE VALVES, INSTALLATION OF END OF LINE FLUSH-OUTS, AND ABANDONMENT OF EXISTING WATER MAINS SHALL BE BACKFILLED PER CITY OF MANHATTAN BEACH STD. DWG. MBSI-132A(ST-10).

FITTINGS:

15. ALL FITTINGS AND MECHANICAL JOINTS SHALL BE DUCTILE IRON UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. ALL RESTRAINED JOINTS AS SHOWN SHALL BE CONSTRUCTED WITH RESTRAINTS (MEGALUG OR FIELD-LOK GASKETS).
16. ALL DUCTILE IRON TEES AND CROSSES SHALL BE CLASS 350 FLANGE FITTINGS UNLESS OTHERWISE NOTED ON PLANS. ALL OTHER DUCTILE IRON FITTINGS SHALL BE CLASSED 350 WITH PUSH-ON JOINTS UNLESS OTHERWISE NOTED PLANS. PROVIDED FITTINGS WITH ENDS THAT ARE COMPATIBLE WITH MECHANICAL RESTRAINTS WHERE RESTRAINED JOINTS ARE REQUIRED.
17. ALL "TEE" INSTALLATIONS SHALL BE PER CITY STANDARDS, UNLESS SHOWN OTHERWISE ON PLANS.
18. CONTRACTOR SHALL FURNISH ALL FITTINGS NECESSARY FOR DEVIATION OF PIPE ALIGNMENT NOT SHOWN ON PLANS.

VALVES:

19. ALL VALVES SHALL BE GATE VALVES. VALVE ASSEMBLIES SHALL BE PER CITY STANDARDS.
20. GATE VALVES SHALL BE PLACED WITH OPERATING NUT EITHER NORTH OR WEST OF THE WATER MAIN.
21. ALL VALVES CONNECTING TO TEES, CROSSES AND REDUCERS SHALL HAVE FLANGED OR FLANGED X PUSH-ON ENDS.
22. NO VALVE SHALL BE LOCATED WITH A GUTTER OR OTHER CONCRETE DRAINAGE DEVICE, ALLEY GUTTERS, DRIVEWAY AND ALLEY APPROACHES OR SIDEWALKS, UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE CITY ENGINEER.
23. THE CONTRACTOR SHALL ADJUST ALL VALVE SLEEVES TO FINISH GRADE UPON COMPLETION OF REPAVING.
24. EXISTING PIPE, TEES, CROSSES AND OTHER FITTINGS WHICH INTERFERE WITH THE PROPOSED WATER SYSTEM IMPROVEMENTS SHALL BE REMOVED AND DISPOSED OF PROPERLY OR SALVAGED AS DIRECTED BY THE ENGINEER.
25. EXISTING VALVES SHALL BE SALVAGED UNDER DIRECTION OF THE ENGINEER. VALVE CANS SHALL BE REMOVED, BACKFILLED AND PAVED OVER.

AIR VALVES AND PUMP WELLS:

26. THE CONTRACTOR SHALL CONSTRUCT A COMBINATION AIR/VAC AIR RELEASE VALVE ASSEMBLY PER CITY STANDARDS AT ALL HIGH POINTS IN THE ALIGNMENT WHETHER OR NOT SHOWN ON THESE DRAWINGS.
27. CONTRACTOR SHALL CONSTRUCT A BLOW-OFF ASSEMBLY PER CITY STANDARDS AT ALL LOW POINTS IN THE ALIGNMENT WHETHER OR NOT SHOWN ON THESE DRAWINGS.

FIRE HYDRANTS:

28. ALL FIRE HYDRANTS, VALVES AND OTHER ASSOCIATED FACILITIES SHALL BE LOCATED IN THE FIELD AS DIRECTED BY THE ENGINEER. THE LOCATION SHOWN ON THESE PLANS ARE APPROXIMATE.
29. REMOVAL OF THE EXISTING FIRE HYDRANTS WILL INCLUDE CUTTING FIRE HYDRANT BURY TWO FEET (2'-0") BELOW EXISTING GRADE AND BACKFILLING WITH CONCRETE. SALVAGED FIRE HYDRANTS SHALL BE DELIVERED TO THE CITY WATER DIVISION.
30. FIRE HYDRANT INSTALLATIONS SHALL INCLUDE NEW 6--INCH LATERALS, VALVES WITH 6" X 6" X 6" OR 8" X 6" X 8" TEE. SEE CITY OF MANHATTAN BEACH STD DWG MBWS-701A(ST-16).

WATER SERVICES AND METERS:

31. ALL WATER SERVICES AND FIRE LINES SHALL BE REPLACED FROM THE NEW WATER LINE UP TO THE METER PER DETAILS MODIFIED ST-15 AND ST-22.
32. CONTRACTOR SHALL LOCATE AND FIELD VERIFY ALL WATER SERVICE CONNECTIONS AND FIRE LINE SERVICES SIZES AND LOCATIONS PRIOR TO COMMENCING WORK ON PROJECT.
33. WATER SERVICE SHALL NOT BE CONSTRUCTED LESS THAN 18 INCHES FROM ANOTHER WATER SERVICE AND WATER MAIN JOINT.
34. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, ADAPTERS, REDUCERS, AND/OR COUPLINGS NECESSARY TO CONNECT TO EXISTING PIPING AND METERS.

POTHOLING/UTILITIES:

35. THE CONTRACTOR SHALL POTHOLE ALL TIE IN CONNECTION LOCATIONS, PRIOR TO CONSTRUCTION TO FIELD VERIFY THE ACTUAL SIZE, DEPTH, AND ROUNDNESS OF THE EXISTING WATER SYSTEM. THE TIE IN WILL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
36. EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE UNLESS OTHERWISE SHOWN.
37. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS A MINIMUM DISTANCE OF 200 FEET IN ADVANCE OF WATER MAIN TRENCHING TO DETERMINE THE EXACT LOCATION AND VERIFY THE MATERIAL, SIZE, DEPTH AND ROUNDNESS OF ALL PARALLEL AND CROSSING UTILITIES WITHIN THE ALIGNMENTS OF THE NEW WATER MAIN. PIPE JOINTS SHALL BE DEFLECTED A MAXIMUM 80% OF MANUFACTURER'S RECOMMENDATION TO CLEAR INTERFERENCES WITH KNOWN OBSTRUCTIONS OR OTHER UTILITIES WHICH ARE SHOWN OR NOT SHOWN ON THE PLAN UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY INFORMATION GATHERED DEVIATING FROM PLANS SHALL BE CONVEYED TO THE ENGINEER IN WRITING.
38. FAILURE TO COMPLY WITH ANY OF THE ABOVE ITEMS SHALL BE SUFFICIENT CAUSE FOR THE AGENCY TO ARRANGE FOR THE NECESSARY WORK TO BE PERFORMED BY OTHERS. ANY COSTS INCURRED TO COMPLETE THE NECESSARY WORK WILL BE CHARGED TO THE CONTRACTOR.

CONNECTIONS:

39. CONTRACTOR SHALL RECONNECT ALL EXISTING SERVICES INCLUDING WATER SERVICE AND FIRE PROTECTION SERVICE CONNECTIONS FROM THE ABANDONED OR REPLACED WATER MAIN TO THE NEW WATER MAIN. THE CONTRACTOR SHALL ALSO PROVIDE ALL REQUIRED TEES, BLIND FLANGES, CAPS, FITTINGS, PIPE AND RESTRAINED JOINT CONNECTIONS REQUIRED TO RECONNECT ALL SERVICES CONNECTIONS TO THE NEW WATER MAIN PER CITY OF MANHATTAN BEACH STANDARDS. WATER AND FIRE SERVICE CONNECTIONS HAVE NOT BEEN SHOWN IN DETAIL FOR PLAN CLARITY.
40. AT CONNECTION POINTS, THE CONTRACTOR SHALL REMOVE INTERFERING EXISTING PIPING AND VALVES AND INSTALL FITTINGS, VALVES AND MAKE UP SPOOL PIECES AND JOIN PIPE ENDS WITH TRANSITION COUPLINGS.
41. CONNECTIONS TO EXISTING WATER MAIN SHALL BE ACCORDING TO TYPICAL CITY STANDARDS.
42. REFER TO CONNECTIONS SHOWN ON CITY STANDARDS.
43. THRUST BLOCK OR RESTRAINING DEVICES SHALL BE INSTALLED ON BOTH SIDES OF ALL FITTINGS, VALVES, PLUGS, AND DEAD ENDS, AND ALL DIRECTION CHANGES. THRUST BLOCKS SHALL BE PER CITY OF MANHATTAN BEACH STD. DWG. (ST-20). THE REQUIRED RESTRAINED LENGTH FITTINGS SHALL BE PER CITY STANDARDS, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
44. DUAL PURPOSE COUPLING TRANSITION FITTINGS SHALL BE USED FOR CIP/DIP TRANSITIONS FOR 12" OR LARGER.

RESTRAINTS/THRUST BLOCKS:

45. THRUST BLOCKS SHALL BE CONSTRUCTED PER CITY OF MANHATTAN BEACH STD. DWG. ST-20.
46. ALL NEW AND EXISTING WATER MAINS SHALL BE PROPERLY RESTRAINED BY THE CONTRACTOR DURING CONSTRUCTION AND HYDROSTATIC TESTING.
47. ALL FIRE SERVICE CONNECTIONS SHALL BE RESTRAINED.

TESTING/DISINFECTION:

48. THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT ALL WATER MAINS HAVE BEEN RELIEVED OF ENTRAPPED AIR BY HOLDING HYDROSTATIC PRESSURE IN PIPELINES BEING TESTED A MINIMUM OF 4 HOURS PER AWWA C600.
49. ALL WATER LINE INSTALLATIONS SHALL BE FREE OF DEBRIS AND ORGANIC MATERIALS. THE PIPE SHALL BE PRESSURE AND LEAKAGE TESTED, FLUSHED AND CHLORINATED. CHLORINATING SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA HEALTH DEPARTMENT, CONSISTING OF NOT LESS THAN 50 PPM INITIAL DOSAGE, WITH NOT LESS THAN 25 PPM RESIDUAL DOSAGE AFTER 24 HOURS. INSTALLATIONS SHALL BE FLUSHED AND A 48 HOUR BACTI TEST SHALL BE REQUIRED PRIOR TO PRESSURE TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE ALL BACTERIOLOGICAL TESTING BY A CERTIFIED LABORATORY. THE CONTRACTOR SHALL NOT HAVE CUSTODY OF THE WATER SAMPLES AT ANY TIME. ALL TESTING METHODS AND RESULTS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO CONNECTING THE NEW WATER MAIN TO THE CITY'S WATER SYSTEM.
50. ALL BACTI AND PRESSURE TESTS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PLACEMENT OF PERMANENT RESURFACING.

HIGH LINING (BY-PASS):

51. THE CONTRACTOR SHALL INSTALL BY-PASS LINES AS SHOWN AND PER SPECIFICATIONS. THE MINIMUM BY-PASS PIPING SIZE SHALL EQUAL THE SIZE OF THE MAIN TO BE REPLACED.
52. BY-PASS WATER PLANS SHALL BE PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER FOR ALL WATER MAINS TO BE REMOVED AND REPLACED PER PLAN. ALL BY-PASS PLANS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND COORDINATED AND APPROVED WITH THE CITY FIRE MARSHALL.

ABANDONMENT:

53. WHERE THE NEW WATER MAIN REPLACES AN EXISTING MAIN, THE EXISTING MAIN SHALL BE ABANDONED IN PLACE AND THE ENDS SHALL BE FILLED WITH 2 FEET MINIMUM OF SLURRY, CAPPED OR PLUGGED PROPERLY AND SECURED WITH CONCRETE PRIOR TO BACKFILLING.
54. REPLACED WATER SERVICES SHALL BE REMOVED.

SEPARATIONS:

55. ALL WATER MAIN SEPARATIONS SHALL COMPLY WITH DEPARTMENT OF HEALTH SERVICES GUIDANCE CRITERIA AND DIVISION OF DRINKING WATER (DDW) FOR THE SEPARATION OF WATER MAINS AD NON-POTABLE PIPELINES (LATEST ADDITION) AND CITY OF MANHATTAN BEACH STD. DWG. ST-26. THE MORE STRINGENT OF THE TWO SHALL GOVERN.
56. WHEREVER A WATER LINE CROSSES A SEWER LINE, VERTICAL SEPARATION SHALL NOT BE LESS THAN 4 INCHES. WHERE THE SEPARATION IS BETWEEN 4 INCHES AND ONE (1) FOOT, THE CONTRACTOR SHALL INSTALL THE WATER MAIN SO THAT A 16 FOOT SECTION OF PIPE IS CENTERED AT THE SEWER LINE, AND THERE SHALL NOT BE A PIPE JOINT WITHIN 8 FEET. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.
57. IN AREAS WHERE THE PIPELINE IS INSTALLED ABOVE AN EXISTING STORM DRAIN, THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 12 INCHES BETWEEN THE TOP OF STORM DRAIN AND THE BOTTOM OF THE PIPELINE. IF A 12 INCH CLEARANCE CANNOT BE MAINTAINED, PIPE SHALL BE CONCRETE ENCASED ACROSS THE STORM DRAIN, PLUS 3 FEET ON BOTH SIDES. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.
58. WHERE THE NEW WATER MAIN ENCROACHES WITH 4 FEET OF AN EXISTING SEWER OUTER DIAMETER SPECIAL CONSTRUCTION WILL BE REQUIRED BY CONSTRUCTING A CASING PIPE FOR THE NEW WATER MAIN. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.

TRENCHING AND BACKFILLING:

59. NO MECHANICAL EQUIPMENT IS PERMITTED TO OPERATE WITHIN THREE FEET OF A GAS LINE AND ANY CLOSER WORK MUST BE DONE BY HAND.

SEWER NOTES:

1. THE CONTRACTOR'S ATTENTION IS CALLED TO CONTRACT SPECIFICATION'S SPECIAL PROVISION, PART 3, SECTION 306-1.2.15 CONVEYANCE OF SEWAGE FLOWS.
2. THE LOCATIONS OF EXISTING UTILITIES AND HOUSE LATERALS SHOWN ARE BASED ON CCTV INSPECTIONS AND PREVIOUS RECORDS. IT MAY OR MAY NOT BE ACCURATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND EXPOSE ALL EXISTING LATERALS TO DETERMINE EXACT LOCATION AND DEPTHS TO WHICH THE CONNECTIONS ARE TO BE MADE.
3. AN EXISTING SEWER TO BE REPLACED SHALL BE CUT AND PLUGGED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 306-5 AND 306-6.
4. EXISTING DOWNSTREAM MANHOLES SHALL BE BULKHEADED WITH BRICK AND MORTAR OR PLUGS APPROVED BY THE ENGINEER AT NEW INLET DURING CONSTRUCTION OF NEW UPSTREAM LINES. BRICK AND MORTAR OR PLUG SHALL BE REMOVED IN THE PRESENCE OF THE ENGINEER DURING CLEARING OF THE FIRST UPSTREAM SECTION OF THE NEW SYSTEM.
5. THE NEW MAIN AND LATERALS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 306.1.4.4 OF THE STANDARD SPECIFICATIONS.
6. MANHOLE FRAMES AND COVERS SHALL HAVE NO LOCKING FEATURES AND CONFORM TO THE CITY OF MANHATTAN BEACH STANDARD DWG. MBSS-210A (ST-19). A FOUNDRY IDENTIFICATION MARK SHALL BE LOCATED ON THE BOTTOM OF THE COVER AND INSIDE THE FRAME.
7. WHENEVER THE INVERT ELEVATION OF THE EXISTING AND THE NEW SEWER ARE THE SAME, THE LATERALS SHALL BE ANGLED TOWARD THE DOWNSTREAM DIRECTION AT THE MAXIMUM SLOPE POSSIBLE.
8. THE CONTRACTOR SHALL ADJUST ALL NEW SEWER MANHOLE FRAME COVERS TO FINISHED PAVEMENT GRADE.
9. ALL LATERAL LOCATIONS SHALL BE CLEARLY MARKED WITH A 2 INCH HIGH "S" CHISELED IN THE CURB FACE BY THE CONTRACTOR, WITH EXCEPTION AT PRIVATE IMPROVEMENTS IN ENCROACHMENT AREAS.
10. STATIONS SHOWN THUS 0+00 AS SHOWN ON THE PLAN AND PROFILE ARE SEWER STATIONS FROM RECORDED DRAWINGS AND ARE INDEPENDENT OF STREET STATIONS AND ARE STATIONS ALONG CENTERLINE OF SEWER. THESE MAY VARY FROM CCTV DERIVED DISTANCES.
11. SEWER LINE DISTANCE SHOWN IN PLAN AND PROFILE IS THE HORIZONTAL DISTANCE MEASURED BETWEEN MANHOLES.
12. SEWER MAIN CONSTRUCTION SHALL BE MONITORED BY VIDEOTAPE EQUIPMENT & THE VIDEOTAPE SHALL BE PROVIDED TO CITY ENGINEER. STATIONING IS TO SHOW ON VIDEOTAPE.
13. MANHOLE CONES FOR REPLACEMENT MANHOLES SHALL BE SET STRAIGHT SIDE UPSTREAM. MANHOLE STEPS SHALL BE MADE OF STEEL REINFORCED POLYPROPYLENE.
14. ALL VCP AND FITTINGS SHALL BE CLASS DESIGNATED "EXTRA-STRENGTH" AND TESTED IN ACCORDANCE WITH ASTM C-700 AND PER CITY STANDARDS.
15. IF A POWERPOLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER LACDPW STANDARD PLAN 2023-2, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
16. ALL JOINTS BETWEEN VITRIFIED CLAY PIPE AND OR PVC SEWER PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "D" (WITH BUSHING IF NECESSARY) PER "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" SECTION 208-2.
17. WYE FITTINGS SHALL BE USED FOR LATERAL CONNECTIONS TO THE MAINLINE SEWERS EXCEPT AS NOTED.
18. NEW PIPE AND NEW MANHOLE BEDDING SHALL BE INSTALLED PER CITY OF MANHATTAN BEACH STANDARD DWG MBSI-132A (ST-10).
19. CONTRACTOR TO COAT OUTSIDE OF ALL NEW SANITARY SEWER MANHOLES WITH WATERPROOF MEMBRANES.
20. ALL NEW SANITARY SEWER MANHOLE FRAMES AND COVERS SHALL BE WATERTIGHT.
21. PRIOR TO ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH, AN INSPECTION OF SAID LINE BY VIDEO INCLUDING MANHOLES SHALL BE REQUIRED PER PROVISIONS OF SECTION 500-1.1.15 OF THE SSPWC. THE RESULTS OF THE VIDEO AND MANDREL INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY. THIS INCLUDES REPAIRED,LINED & REPLACED SEWERS.

    PRIOR TO THE ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH AN INSPECTION OF SAID LINE BY VIDEO SHALL BE REQUIRED AS PART OF COST FOR PROJECT TO THE CITY. ALL NEW REPAIRED & LINED SEWERS SHALL BE VIDEO INSPECTED. THE CCTV INSPECTION SHALL BE COMPLETED BY A CERTIFIED NATIONAL ASSOCIATION OF SEWER SERVICE COMPANY (NASSCO). PIPELINE ASSESSMENT AND CERTIFICATION PROGRAM (PACP) SHALL BE PERFORMED BY TRAINED OPERATORS(S) USING ESTABLISHED PACP CODING AND OBSERVATIONS. THE RESULTS OF THE VIDEO INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL. ANY NOTED DEFICIENCIES SHALL BE CORRECTED, THEN FOLLOWED BY A POST CORRECTION VIDEO TO BE SUBMITTED FOR REVIEW AND APPROVAL. THE CONTRACTOR OF THE PROJECT SHALL NOTIFY THE CITY OF MANHATTAN BEACH IN WRITING AT LEAST 48 HOURS (2 WORKING DAYS) IN ADVANCE OF THE SCHEDULED DATE AND TIME OF ANY VIDEO INSPECTIONS.
22. THE CONTRACTOR SHALL CHECK EACH LATERAL FOR THE PRESENCE OF A BACKWATER VALVE. WHICH SHALL BE REPLACED IF DAMAGED.
23. THE CONTRACTOR SHALL REVIEW CCTV TO LOCATE EXISTING SEWER LATERALS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
24. WHERE KNOWN, LOCATIONS OF SEWER LATERALS ARE SHOWN ON PLANS. HOWEVER, CONTRACTOR SHALL RECONNECT ALL FOUND LATERALS.
25. AS DIRECTED BY THE ENGINEER, CONTRACTOR SHALL SALVAGE ALL EXISTING MANHOLE COVERS AND FRAMES AND DELIVER THEM TO THE CITY YARD.
26. CONNECTION TO EXISTING CITY MANHOLES, WHERE STUBS DO NOT EXIST OF CORRECT SIZE, SHALL BE DONE BY CORE DRILLING.
27. MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION IN SEWER MAINS AND LATERALS BY USE OF BYPASS SYSTEM INCLUDING PUMIPING.
28. ANY EXISTING BACKWATER VALVE BWV SHALL BE REPLACED AS PART OF THIS PROJECT. INSTALL NEW BWV WHERE REQUIRED PER SECTION 710 OF THE PLUMBING CODE.

ROADWAY RECONSTRUCTION GENERAL NOTES:

1. CURB AND GUTTER AND RAMP TO BE REPLACED TO MATCH EXISTING AND IN ACCORDANCE WITH CITY STANDARD DRAWING AND "GREEN BOOK" STANDARDS.
2. 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.
3. 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.
4. ANY NEW CURB AND GUTTER CONSTRUCTED AT EXISTING ASPHALT WEARING COURSE SHALL BE JOINED WITH A MINIMUM SIX INCH NOTCH PER STANDARD DETAIL.
5. DRIVEWAY APPROACHES DISTURBED BY THE WORK SHALL BE REPLACED PER DETAILS HEREIN OR GREEN BOOK STANDARDS.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. TRAFFIC STRIPING AND PAVEMENT MARKING REPAIR SHALL BE THERMOPLASTIC AS SPECIFIED, PER CAL TRANS 84 AND PER CITY REQUIREMENTS.
12. 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.
13. 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).
14. ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.

GENERAL SIGNAGE AND STRIPING NOTES:

1. 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.
2. 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.
3. TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
4. REPLACE ALL SIGNAGE AND STRIPING DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.

TRAFFIC CONTROL REQUIREMENTS:

1. 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.
2. 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.
3. FLASHING ARROW BOARD(S) ARE MANDATORY FOR LANE CLOSURES ON MAJOR STREETS. THEY SHALL OPERATE UNTIL TRAFFIC CONTROL IS REMOVED.
4. 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.
5. ALL OPEN TRENCHES SHALL BE COVERED WITH NON-SKID STEEL PLATES OR TEMPORARY ASPHALT PAVEMENT BEFORE AND AFTER WORK HOURS.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. ANY REVISIONS TO THE TRAFFIC CONTROL PLANS OR REQUIREMENTS SHALL BE APPROVED BY THE ENGINEER.

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.**

REGISTERED PROFESSIONAL ENGINEER M. TODD BROUSSARD No. C57144 EXP. 12-31-2025 CIVIL STATE OF CALIFORNIA

2/10/2025
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY	DATE

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
GENERAL NOTES

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

DESIGNED BY
M. TODD BROUSSARD, PE 3/10/2025
TAIT PROJECT ENGINEER DATE

SCALE

DATE 3-10-25

SHEET 3 OF 22

DRAWING NO. D-952

GRADING GENERAL NOTES:

1. 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.

2. 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.

3. 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.

4. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO FEET HORIZONTAL TO ONE FOOT VERTICAL, 2:1.

5. 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.

6. ALL EXISTING FILLS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ADDITIONAL FILLS ARE ADDED.

7. ALL EXPOSED SLOPES SHALL BE PLANTED PER THE PROJECT LANDSCAPE PLANS AND IRRIGATED UNTIL GROUND COVER IS ESTABLISHED.

8. THE STOCKPILING OF EXCESS MATERIAL IS SUBJECT TO THE APPROVAL OF THE CITY.

9. ALL TRENCH BACKFILLS ARE TO BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

10. 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.

11. 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.

12. SANITARY FACILITIES SHALL BE MAINTAINED ON SITE THROUGHOUT THE DURATION OF CONSTRUCTION.

13. 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.

14. 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).

15. 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.

16. EXPORTED MATERIAL SHALL BE TAKEN TO A LEGAL DUMP SITE OR PERMITTED RECEIVING SITE APPROVED BY THE LOCAL AGENCY HAVING JURISDICTION.

17. PERMISSION IS REQUIRED FROM THE ADJACENT PROPERTY OWNER WHENEVER WORK IS PROPOSED OR NECESSARY ACROSS THE PROJECT'S PROPERTY LINES.

18. 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.

19. 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.

20. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND OBTAINING REQUIRED PERMITS FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA).

21. 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.

22. RULE 403, AIR QUALITY CONTROL MUST BE IMPLEMENTED DURING CONSTRUCTION:

22.1 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).

22.2 A PERSON SHALL TAKE EVERY RESPONSIBLE PRECAUTION TO MINIMIZE FUGITIVE DUST EMISSIONS FROM WRECKING, EXCAVATION, GRADING CLEARING OF LAND AND SOLID WASTE DISPOSAL OPERATIONS.

22.3 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.

22.4 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.

22.5 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.

23. 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.

24. CONTRACTOR SHALL USE LOW EMISSION MOBILE CONSTRUCTION EQUIPMENT DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES, WHERE FEASIBLE.

25. CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTIONS ENGINES TUNED CONSISTENT WITH MANUFACTURE'S SPECIFICATIONS DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.

25.1 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.

26. CONSTRUCTION PARKING SHALL BE ON-SITE, TRAFFIC CONTROL AND ACCESS SHALL BE IN ACCORDANCE WITH THE AGENCY HAVING JURISDICTION OVER THE PROJECT.

27. THE SPEED OF CONSTRUCTION VEHICLES ON-SITE SHALL BE LIMITED TO 15 MILES PER HOUR.

28. TRUCKS AND LARGE CONSTRUCTION VEHICLES SHALL OBTAIN APPROVED HAUL ROUTES FROM CITY PUBLIC WORKS.

29. 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.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING MEASURE:

30.1. CESSATION OF ACTIVITIES DURING A STAGE-2 SMOG EPISODE, CALL 800-242-4022 FOR THE DAILY SMOG FORECAST.

30.2. TRUCK ROUTES AND SCHEDULES FOR THE RECEIPT OF MATERIALS SHALL BE COORDINATED WITH THE APPROPRIATE AGENCIES.

30.3. 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.

31. THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING HIGH WIND DUST CONTROL MEASURE WHEN INSTANTANEOUS WIND SPEEDS EXCEED 25 MILES PER HOUR.

32.1 TERMINATION / MODIFICATION OF SCRAPERS, GRADERS OR DOZERS ON UNPAVED SURFACES UNTIL WINDS SUBSIDE.

32.2 APPLICATION OF WATER AS NEEDED TO ANY PREVIOUSLY GRADED SURFACE IF DUST EMANATION IS VISIBLE FROM SUCH A SURFACE.

32. 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.

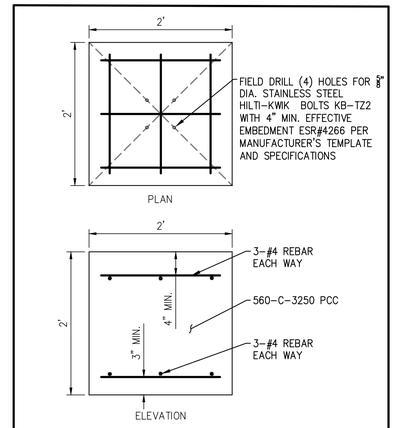
33. TRUCKS USED IN HAULING DIRT TO OR FROM THE SITE ON PUBLIC ROADS WILL BE COVERED OR WILL MAINTAIN A SIX INCH DIFFERENTIAL BETWEEN THE MAXIMUM HEIGHT OF ANY MATERIAL HAULED AND THE TOP OF THE TRAILER, HAUL TRUCK DRIVERS WILL LOAD PRIOR TO LEAVING THE SITE TO PREVENT SOIL LOSS DURING TRANSPORTATION.

34. 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.

35. 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.

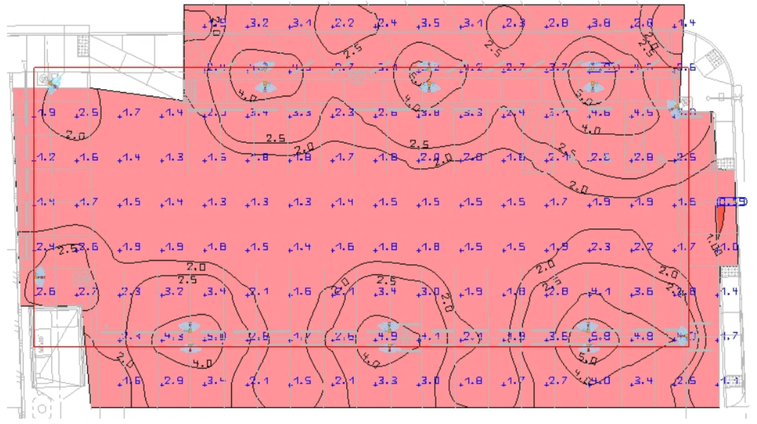
36. ALL LANDSCAPE IRRIGATION BACKFLOW DEVICES MUST MEET CURRENT CITY REQUIREMENTS FOR PROPER INSTALLATION.

37. 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.

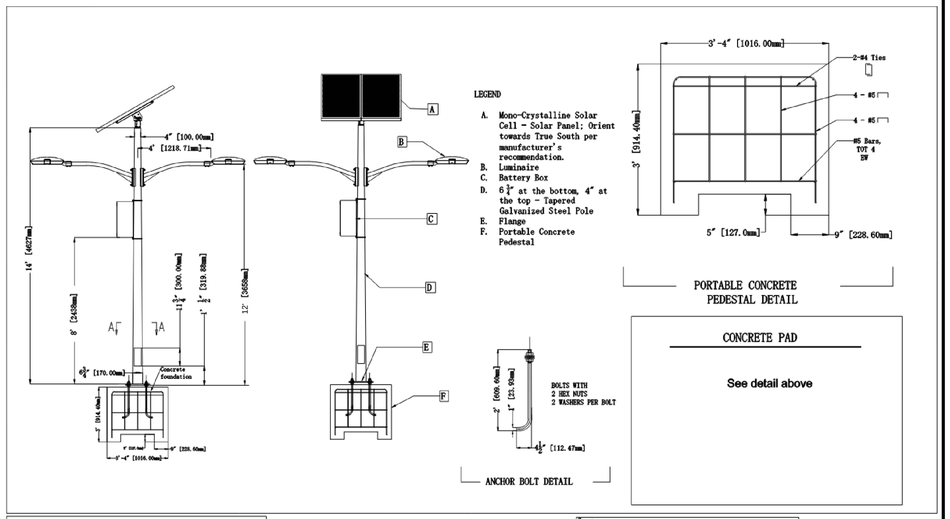


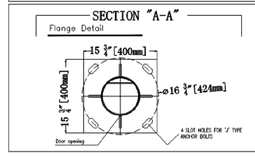
PAY STATION KIOSK FOUNDATION

N.T.S.



PARKING LOT LIGHTS PHOTOMETRICS





- Foundation dimensions shall be confirmed by a local engineering company, Greenshine New energy will not be held liable for any defect of the concrete foundation due to improper sizing.
- Drawings are based using hot-dipped galvanized steel, powder coating with a thickness of 4".
- *EPA of the system exclude the EPA of the pole, includes the solar panels, brackets, arm and LED fixture and battery box.
- **Wind resistance of the poles are indicative and further customization can be provided.

Tilt angle of the solar panels	15	30	45	60
EPA (ft²)*	3. 94	7. 58	10. 76	13. 13
Wind resistance** (mph)	90	90	90	90

System	Dual-Porta - 290D - 1P
By	Myron Xu
Date	2/07/2025
Website	www.streetlights-solar.com

Greenshine

SOLAR POWERED PARKING LOT LIGHTS

MATERIALS ARE CITY FURNISHED. CONTRACTOR ASSMEBLED

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SUPPLEMENTAL NOTES:

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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.

REGISTERED PROFESSIONAL ENGINEER M. TODD BROUSSARD No. C57144 EXP. 12-31-2025 CIVIL STATE OF CALIFORNIA

2/10/2025 DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

GENERAL NOTES & DETAILS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY DATE

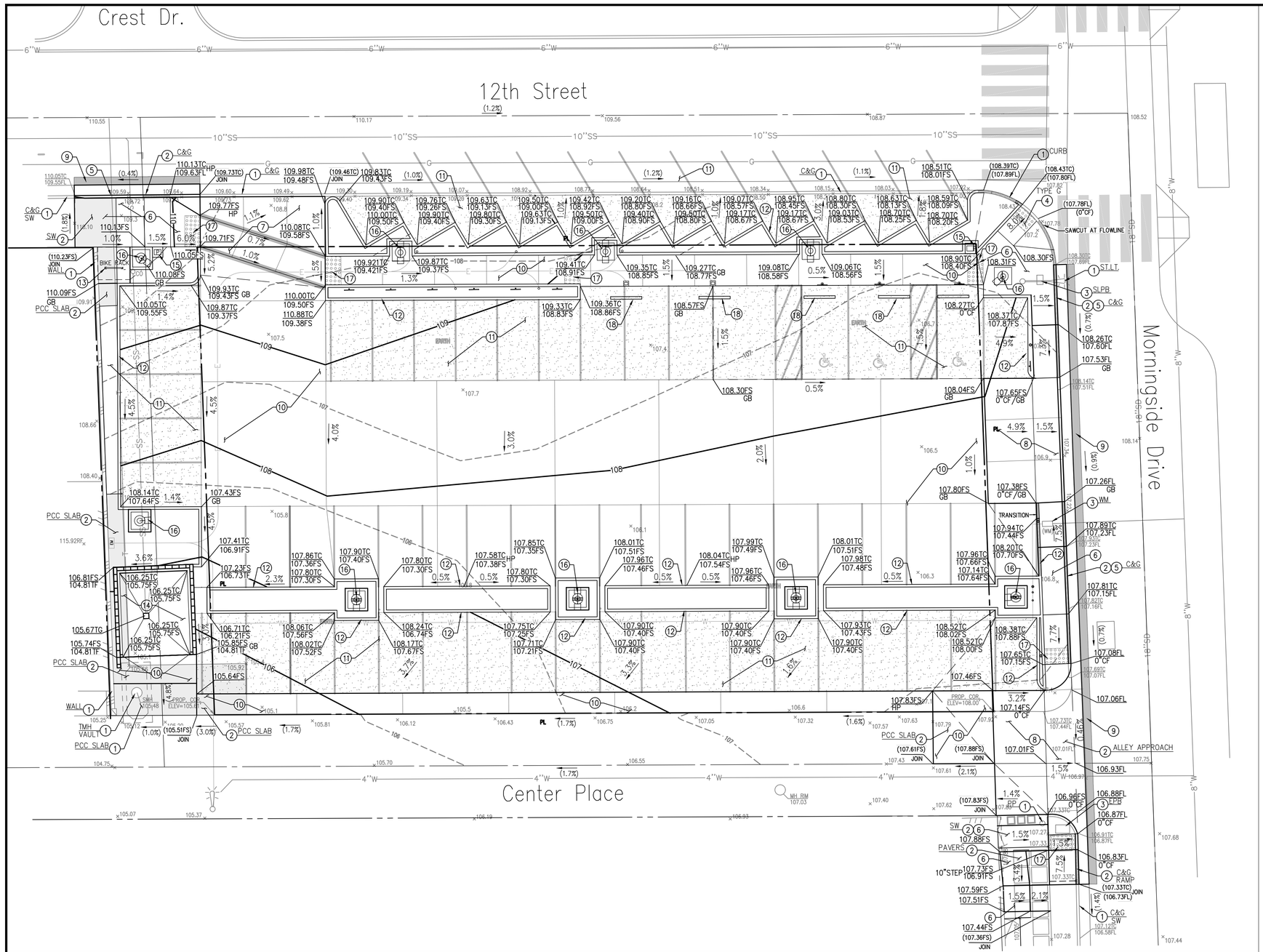
DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER 3/10/2025 DATE

SCALE

DATE 3-10-25

DRAWING NO. D-952

SHEET 4 OF 22



CONSTRUCTION NOTES

1. PROTECT EXISTING IMPROVEMENT IN PLACE
2. REMOVE EXISITNG IMPROVEMENT
3. RESET EXISTING IMPROVEMENT TO GRADE
4. CONSTRUCT CURB RAMP PER CALTRANS STD. A88A. TYPE PER PLAN. SLOPES PER PLAN.
5. INSTALL CURB AND GUTTER PER CITY OF MANHATTAN BEACH STD MBSI–120A–0 (ST–3) CURB HEIGHT PER PLAN.
6. CONSTRUCT 4" THICK PCC SIDEWALK PER CITY STD. MBSI–112A–0 (ST–2)
7. CONSTRUCT 8" PCC OVER 6" CAB, COMMERCIAL DRIVEWAY – TYPE I PER MBSI–116A–0 AND MODIFIED PER PLAN.
8. CONSTRUCT 8" PCC OVER 6" CAB, COMMERCIAL DRIVEWAY – TYPE IV PER MBSI–116D–0 AND MODIFIED PER PLAN.
9. REMOVE EXISTING AC/AB, 6" DEEP X 18" WIDE AND REPLACE WITH FULL DEPTH TYPE III C3–PG 64–10 SLOT PAVE.
10. CONSTRUCT 6" PCC.
11. CONSTRUCT 6" PERMEABLE CONCRETE OVER 95% COMPACTED NATIVE.
12. CONSTRUCT RAISED PCC CURB PER APWA STD. 120–2.
13. INSTALL DERO ROLLING RACK BICYCLE RACK OR APPROVED EQUAL (4 SPACES, MIN)
14. INSTALL 6' HIGH TRASH ENCLOSURE PER TRASH ENCLOSURE PLANS.
15. INSTALL CITY FURNISHED PAY STATION AND CONSTRUCT FOUNDATION PER DETAIL ON SHEET 4. PROVIDE FLAT (1.5% OR LESS) SURFACE.
16. INSTALL CITY FURNISHED SOLAR PARKING LOT LIGHTS. LIGHT FIXTURE TO BE 15' ABOVE GRADE AND SOLAR PANEL 17' ABOVE GRADE. CONTRACTOR TO PROVIDE CRANE SERVICE AND ASSEMBLY. PROVIDE 6" X 4'3" SQ. PCC FLAT SLAB (1.5% OR LESS).
17. INSTALL DETECTABLE WARNING SURFACE (3' DEEP)
18. INSTALL 6' WIDE PCC WHEEL STOP.

N

0 10' 20'

SCALE: 1" = 10'

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REGISTERED PROFESSIONAL ENGINEER M. TODD BROUSSARD No. C57144 EXP. 12-31-2025 CIVIL STATE OF CALIFORNIA

2/10/2025
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560–8200

REVIEWED BY | DATE

REFERENCES

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

REVISIONS

NO.	DESCRIPTION	BY	DATE

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
GRADING PLAN

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

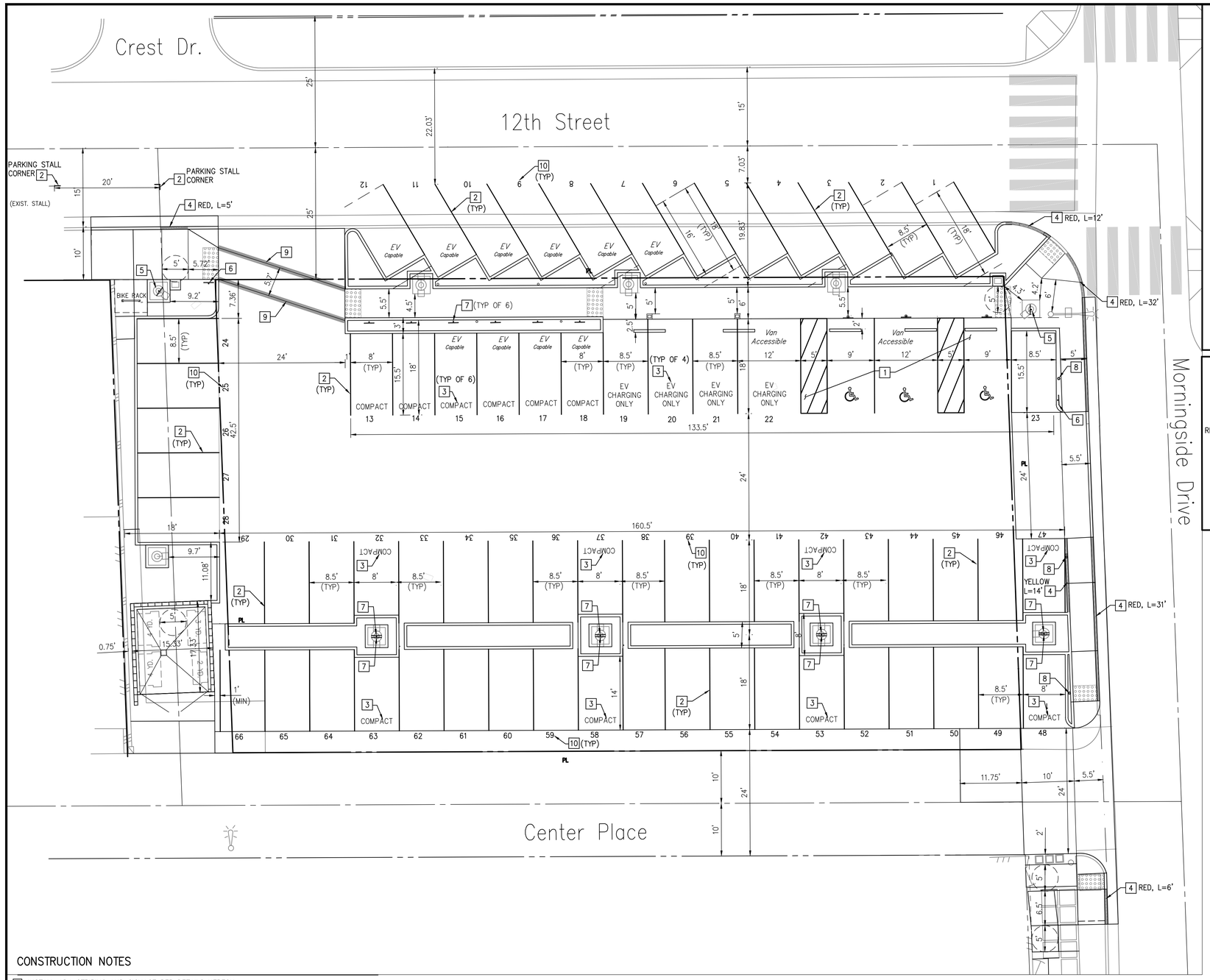
RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
3/10/2025
DATE

SCALE
DATE 3–10–25

DRAWING NO. D–952

SHEET 5 OF 22

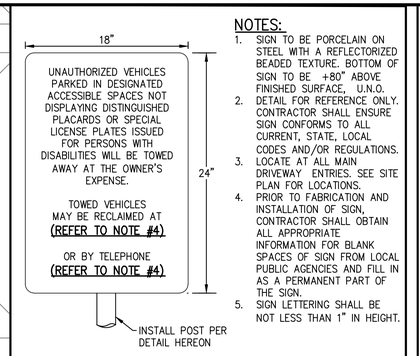


CONSTRUCTION NOTES

1. INSTALL ADA STRIPING AND SIGNAGE PER DETAILS HEREON
2. PAINT 4" WIDE, THERMOPLASTIC WHITE STRIPING
3. PAINT LETTERING SHOWN, 12" HIGH, THERMOPLASTIC WHITE LETTERING
4. PAINT CURB, COLOR PER PLAN. (2–COATS)
5. INSTALL "PAY HERE" SIGN ON PARKING LOT LIGHT POLE PER MBSI–413A
6. INSTALL "UNAUTHORIZED VEHICLE" SIGN ON SIGN POST PER DETAILS HEREON.
7. INSTALL "COMPACT CAR PARKING ONLY" SIGN ON PARKING LOT LIGHT POLE PER MBSI–413A.
8. INSTALL SURFACE MOUNT FLEXIBLE ROUND DELINEATOR POST.
9. PAINT 12" WIDE, THERMOPLASTIC WHITE STRIPING
10. PAINT NUMBERS SHOWN, 6" HIGH, BLACK ON WHITE BACKGROUND.

PARKING COUNT

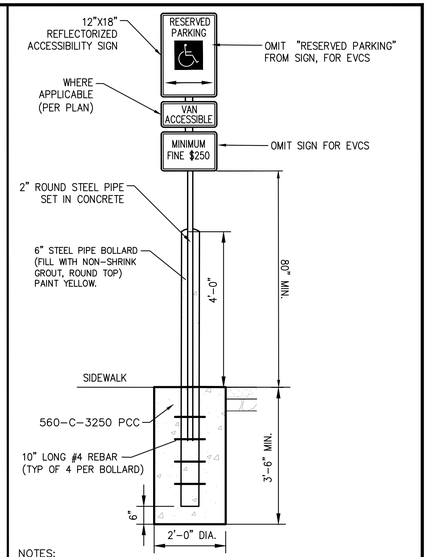
REGULAR STALLS		52
COMPACT STALLS		14
ADA STALLS		3
TOTAL STALLS		69
EV STALLS	0.20(69)	14
EVSE STALLS	0.25(14)	4
BICYCLE RACK		5



NOTES:
1. SIGN TO BE PORCELAIN ON STEEL WITH A REFLECTORIZED BEADED TEXTURE. BOTTOM OF SIGN TO BE +80" ABOVE FINISHED SURFACE, U.N.O.
2. DETAIL FOR REFERENCE ONLY. CONTRACTOR SHALL ENSURE SIGN CONFORMS TO ALL CURRENT, STATE, LOCAL CODES AND/OR REGULATIONS.
3. LOCATE AT ALL MAIN DRIVEWAY ENTRIES. SEE SITE PLAN FOR LOCATIONS.
4. PRIOR TO FABRICATION AND INSTALLATION OF SIGN, CONTRACTOR SHALL OBTAIN ALL APPROPRIATE INFORMATION FOR BLANK SPACES OF SIGN FROM LOCAL PUBLIC AGENCIES AND FILL IN AS A PERMANENT PART OF THE SIGN.
5. SIGN LETTERING SHALL BE NOT LESS THAN 1" IN HEIGHT.

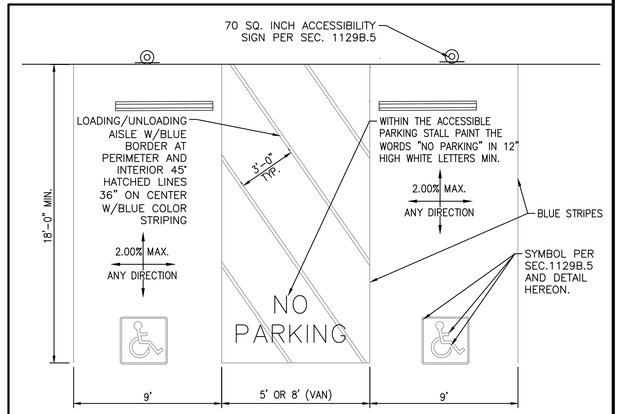
CALTRANS R100B (CA)
"UNAUTHORIZED VEHICLE" SIGN
N.T.S.

SPECIALTY SIGN
N.T.S.



NOTES:
1. SIGN SHALL BE CONSTRUCTED OF A MINIMUM 0.062" THICK ALUMINUM.
2. LETTERING, SYMBOL AND BORDER SHALL BE REFLECTIVE WHITE, ON BLUE BACKGROUND.
3. PLACE IN FRONT OF EACH ACCESSIBLE PARKING STALL WITHIN CLEAR VIEW, BUT NOT TO OBSTRUCT PASSAGE FROM PARKING STALL OR ANY WALKWAY.
4. WHERE SPACE IS DESIGNED FOR VAN ACCESSIBILITY, A SIGN "VAN ACCESSIBLE" SHALL BE INSTALLED.

CALTRANS R99 (CA)
ACCESSIBILITY SIGN
N.T.S.



ACCESSIBILITY PARKING STRIPING
N.T.S.

EZ
03/24/2025

0 10' 20'
SCALE: 1" = 10'

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REGISTERED PROFESSIONAL ENGINEER — M. TODD BROUSSARD — No. C57144 — EXP. 12-31-2025 — CIVIL — STATE OF CALIFORNIA
2/10/2025 DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560–8200

REVIEWED BY | DATE

REVISIONS

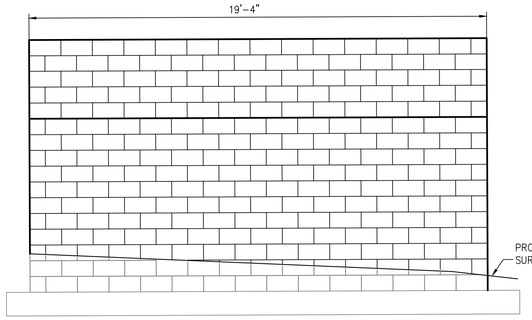
NO.	DESCRIPTION	BY	DATE

REFERENCES

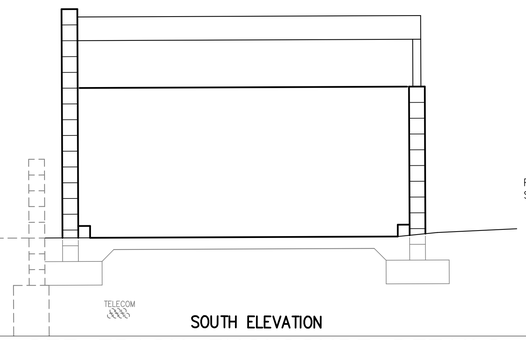
CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
STRIPING & SIGNAGE PLAN

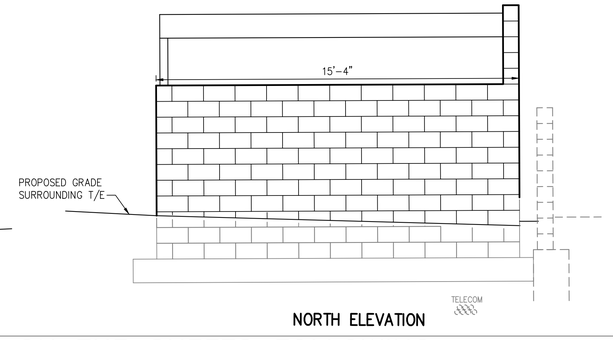
RECOMMENDED BY: PROJECT MANAGER, JEFF FIJALKA, PE — DATE
RECOMMENDED BY: CITY ENGINEER, KATHERINE DOHERTY — DATE
DESIGNED BY: M. TODD BROUSSARD, PE, TAIT PROJECT ENGINEER — 3/10/2025 DATE
SCALE | DATE 3–10–25
SHEET 6 OF 22
DRAWING NO. D–952



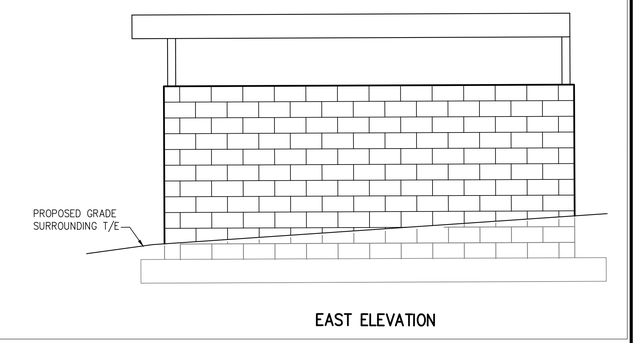
WEST ELEVATION



SOUTH ELEVATION

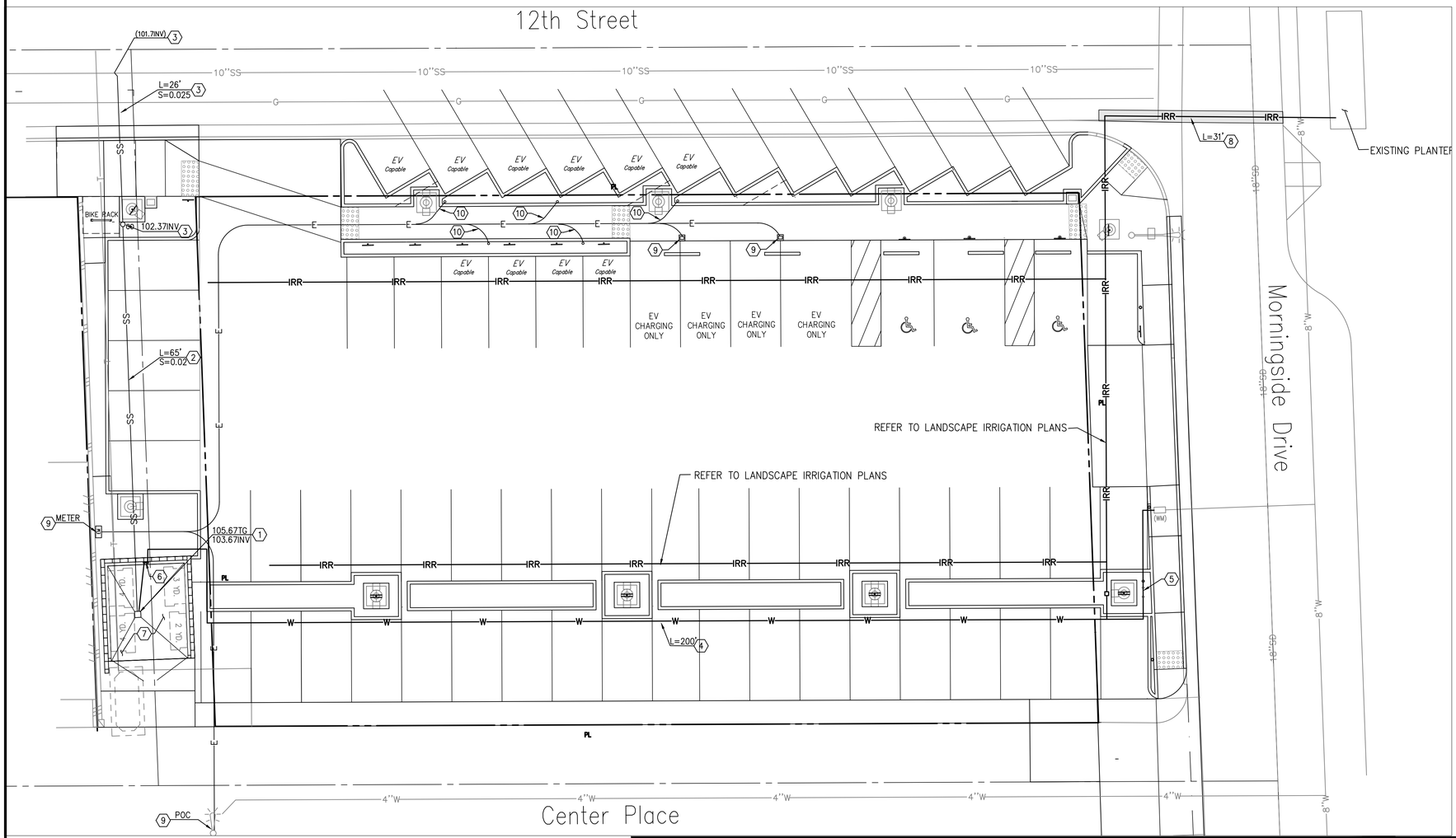


NORTH ELEVATION



EAST ELEVATION

SEE TRASH ENCLOSURE DETAILS ON THE SHEETS FOLLOWING



CONSTRUCTION NOTES

1. INSTALL 12X12X4 CAST IRON FLOOR DRAIN WITH SELF PRIMING TRAP.
2. INSTALL 6" SDR35 PVC SEWER. INCLUDE AC T-PATCH IN STREET PER MBSI-132A-0(ST-10)
3. INSTALL 6" CLEANOUT AND CONNECTION TO SEWER MAIN PER MBSS-200A-0.
4. INSTALL 2" SOFT COPPER, ASTM B88-62, TYPE K, WATER LINE
5. INSTALL 2" BALL VALVE AND 2" REDUCED PRESSURE BACKFLOW DEVICE, FEBCO MODEL #825Y, OR APPROVED EQUAL.
6. INSTALL HOSE BIB.
7. INSTALL FIRE SPRINKLER. SHALL BE DESIGNED BY CONTRACTOR, AS A DEFERRED SUBMITTAL.
8. TRENCH IN STREET FOR IRRIGATION LINE, INCLUDE AC T-PATCH PER MBSI-132A-0(ST-10). JACK AND BORE UNDER EXISTING CONCRETE.
9. INSTALL 80A LEVEL 2 EV CHARGER, ENPHASE CS-100 OR APPROVED EQUAL AND SUPPORTING METER, CONDUIT AND WIRING. TO BE DESIGNED BY CONTRACTOR AS A DEFERRED SUBMITTAL.
10. INSTALL EMPTY CONDUIT FOR FUTURE EV CHARGER.

0 10' 20'
SCALE: 1" = 10'

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REGISTERED PROFESSIONAL ENGINEER M. TODD BROUSSARD No. C57144 EXP. 12-31-2025 CIVIL STATE OF CALIFORNIA

2/10/2025
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

REVISIONS

NO.	DESCRIPTION	BY	DATE

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

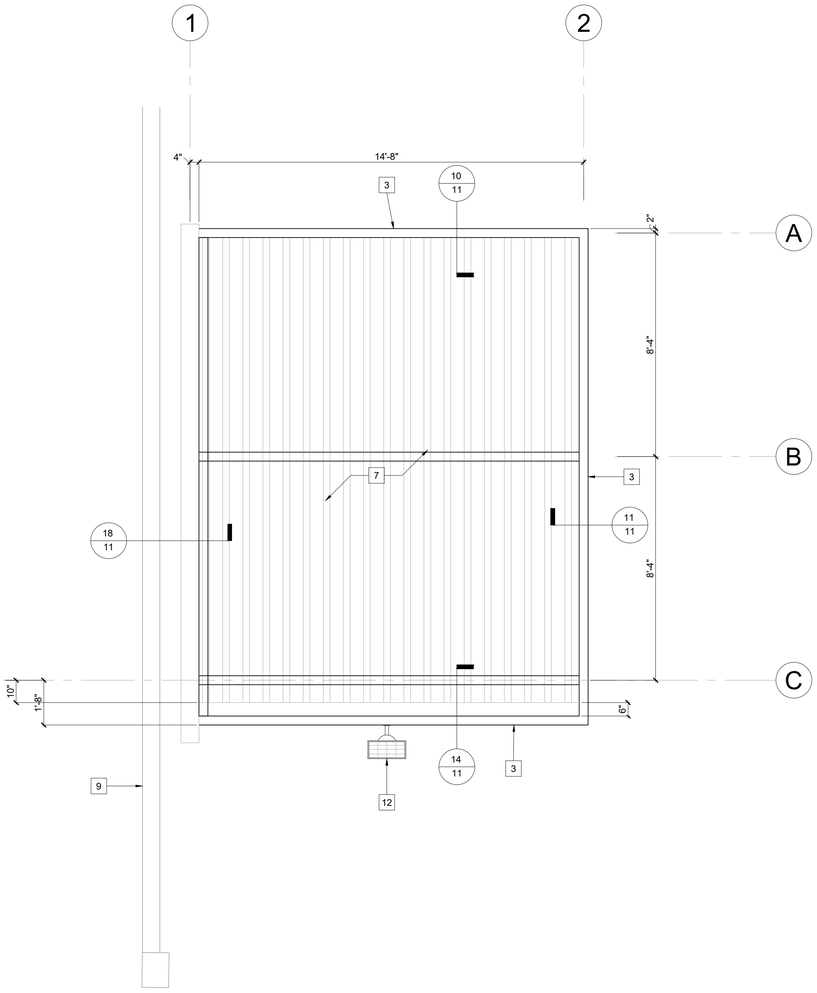
TRASH ENCLOSURE SITE & UTILITY PLAN

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY DATE

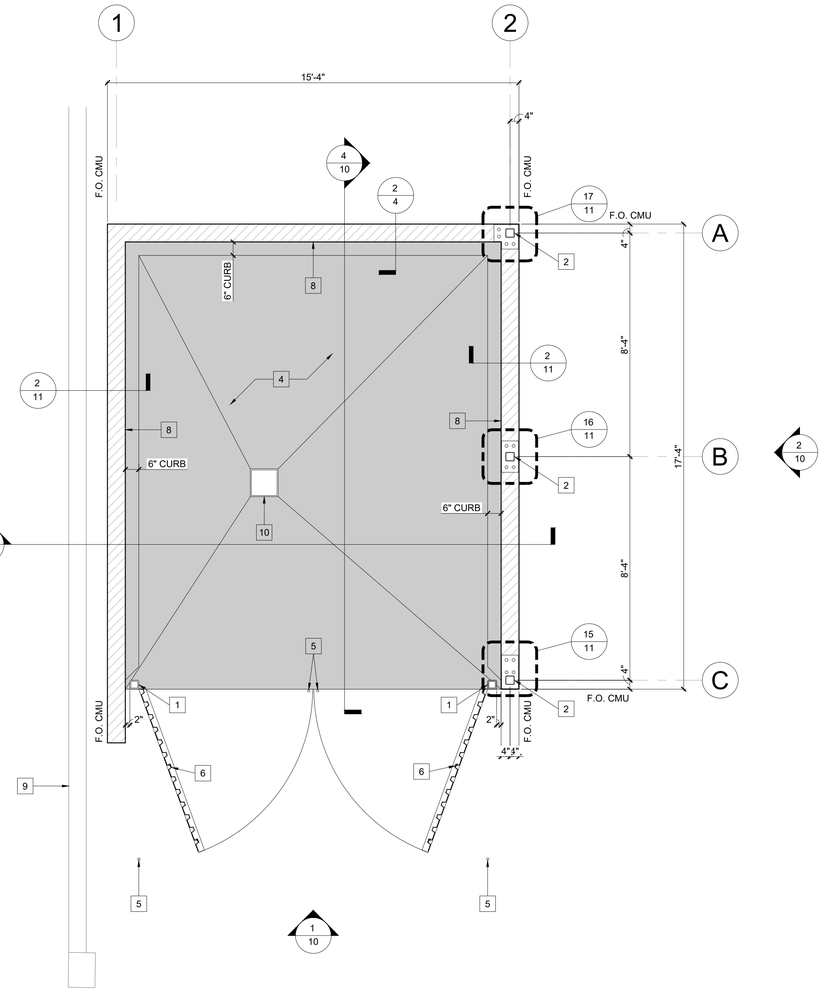
DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER 3/10/2025 DATE

SCALE
DATE 3-10-25
DRAWING NO. D-952
SHEET 7 OF 22



2 ROOF PLAN

SCALE: 3/8" = 1'-0"



1 FLOOR PLAN

SCALE: 3/8" = 1'-0"

KEYNOTES

1. HSS 4X4X1/2 POST. REFER TO DETIALS 5 AND 7/11, PRIME AND PAINT.
2. HSS 4X4X1/4 POST. REFER TO DETIALS 15, 16 AND 17/11, PRIME AND PAINT.
3. HSS 4X12X3/16 BEAM. REFER TO DETIALS 10, 11 AND 14/11, PRIME AND PAINT.
4. 5-INCH THK. CONCRETE SLAB, 3,000 PSI WITH NO. 4 REBAR AT 12-INCHES EACH WAY OVER COMPACTED GRADE. SURFACE OF THE CONCRETE SLAB IS TO BE SMOOTH AND SEALED TO BE IMPERVIOUS TO GREASE AND OILS.
5. CANE BOLT SLEEVE, SEE DETAIL 13/11.
6. 6'-6"W x 5'-8"H CORRUGATED METAL GATE WITH DIAGONAL BRACING, CONTINUOUS WELD AT ALL JOINTS; PRIME AND PAINT.
7. 1 1/2-INCH HSB-36 18 GA. VERCO DECK.
8. INTERIOR SURFACE OF ALL WALLS ARE TO BE SMOOTH AND SEALED TO BE IMPERVIOUS TO GREASE AND OILS.
9. EXISTING CMU WALL. PROTECT IN PLACE.
10. FLOOR DRAIN.
11. C 4X12X1/4. REFER TO DETAILS 10, 11 AND 14/11, PRIME AND PAINT.
12. SOLAR POWERED SECURITY LIGHT. HALO SBL 250 OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

SHEET NOTES

1. GRIDLINES ARE THE LOCATION OF CENTERLINES OF STRUCTURAL STEEL COLUMNS AND CENTER OF STRUCTURAL WALLS UNLESS OTHERWISE NOTED.

LEGEND

#/# DETAIL NUMBER / SHEET NUBER

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REGISTERED PROFESSIONAL ENGINEER — BRANDON J. DEEMS — No. 35335 — Exp. 12/31/25 — STRUCTURAL — STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

REVISIONS

NO.	DESCRIPTION	BY	DATE

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

TRASH ENCLOSURE PLANS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

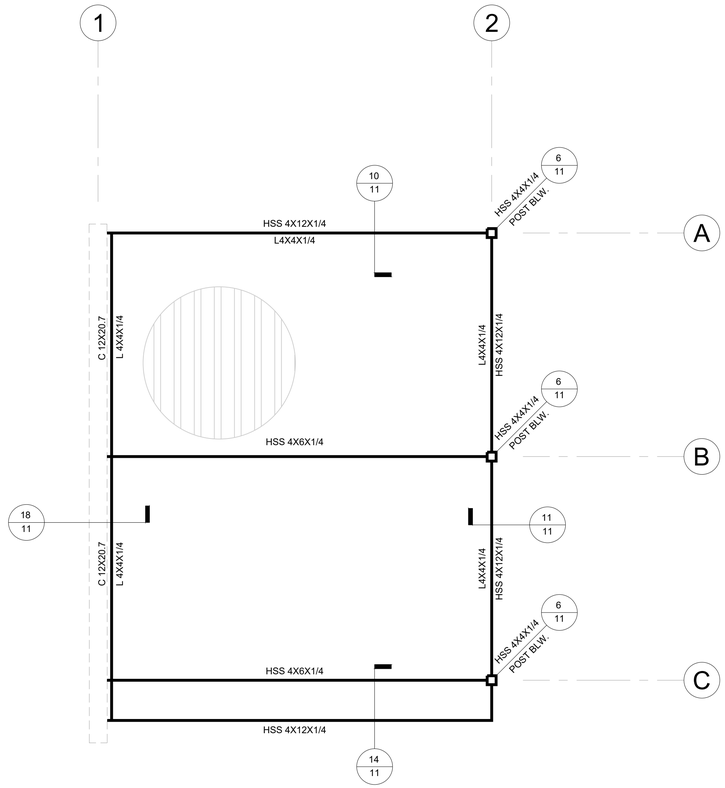
DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
12/16/2024
DATE

SCALE

DATE
11-10-22

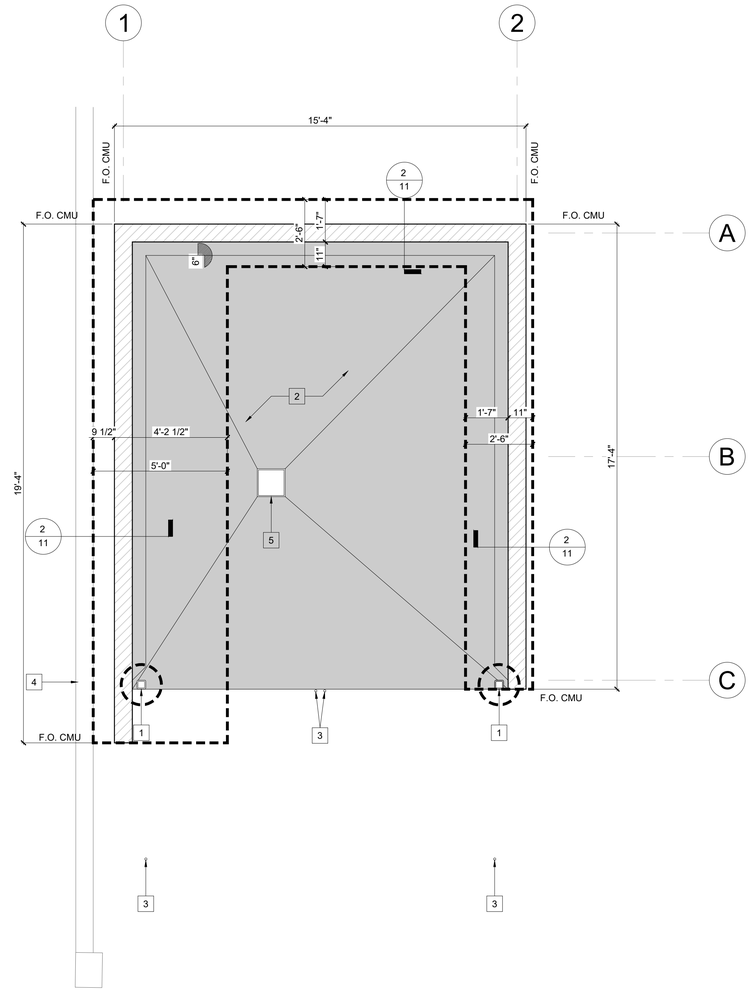
DRAWING NO.
D-952

SHEET 8 OF 22



2 ROOF FRAMING PLAN

SCALE: 3/8" = 1'-0"



1 FOUNDATION PLAN

SCALE: 3/8" = 1'-0"

SHEET NOTES

1. GRIDLINES ARE THE LOCATION OF CENTERLINES OF STRUCTURAL STEEL COLUMNS AND CENTER OF STRUCTURAL WALLS UNLESS OTHERWISE NOTED.

LEGEND

#/# DETAIL NUMBER
#/# SHEET NUBER

KEYNOTES

1. HSS 4"X4"X1/2" WITH 18-INCH DIA. PIER FOOTING WITH 4'-0" EMBEDMENT INTO GRADE. EMBED HSS COLUMN 2'-7" INTO FOOTING AND PROVIDE (5) NO. 5 VERTICAL BARS AND NO. 3 SPIRAL TIES AT 3-INCHES O.C. AROUND HSS.
2. 5-INCH THK. CONCRETE SLAB, 3,000 PSI WITH NO. 4 REBAR 12-INCHES O.C. EACH WAY OVER COMPACTED GRADE.
3. CANE BOLT SLEEVE, SEE DETAIL 13/11.
4. EXISTING CMU WALL. PROTECT IN PLACE.
5. FLOOR DRAIN.

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

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SUPPLEMENTAL NOTES:

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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.

REGISTERED PROFESSIONAL ENGINEER — BRANDON J. DEERS — No. 38585 — Exp. 12/31/25 — STRUCTURAL — STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY | DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

TRASH ENCLOSURE PLANS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

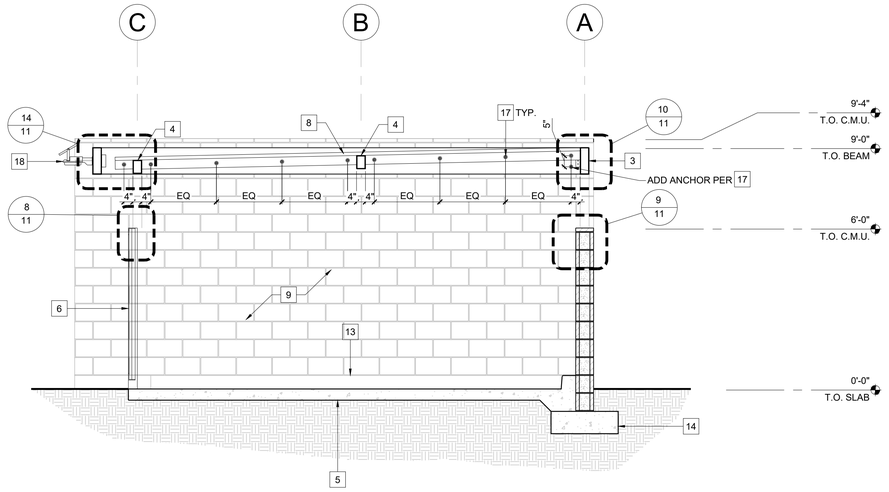
DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
12/16/2024
DATE

SCALE

DATE
11-10-22

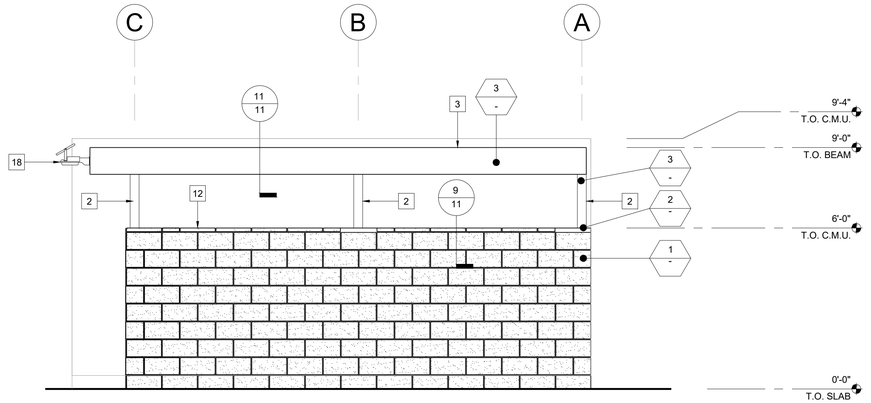
DRAWING NO.
D-952

SHEET 9 OF 22



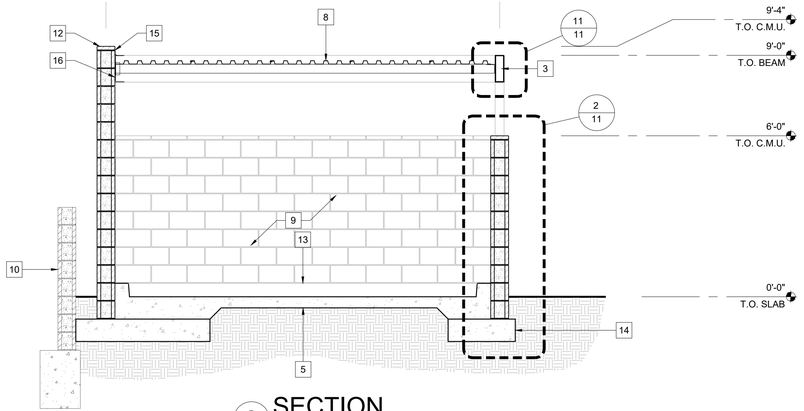
4 SECTION

SCALE: 3/8" = 1'-0"



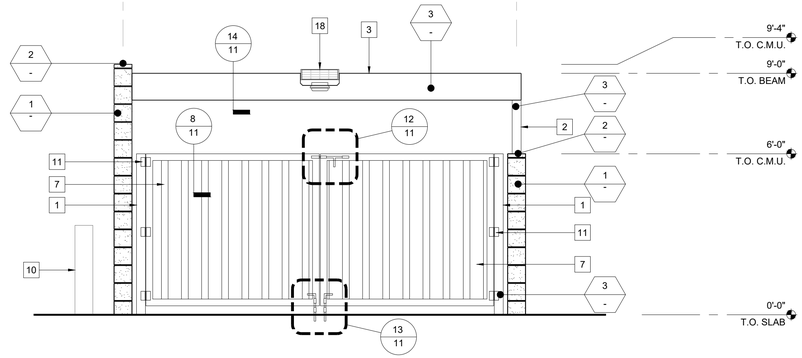
2 EAST ELEVATION

SCALE: 3/8" = 1'-0"



3 SECTION

SCALE: 3/8" = 1'-0"



1 SOUTH ELEVATION

SCALE: 3/8" = 1'-0"

KEYNOTES

1. HSS 4X4X1/2 POST. REFER TO DETAILS 5 AND 7/11, PRIME AND PAINT.
2. HSS 4X4X1/4 POST. REFER TO DETAILS 15, 16 AND 17/11, PRIME AND PAINT.
3. HSS 4X12X3/16 BEAM. REFER TO DETAILS 10, 11 AND 14/11, PRIME AND PAINT.
4. HSS 4X6X3/16 BEAM. PRIME AND PAINT.
5. 5-INCH THK. CONCRETE SLAB, 3,000 PSI WITH NO. 4 REBAR AT 12-INCHES EACH WAY OVER COMPACTED GRADE. SURFACE OF THE CONCRETE SLAB IS TO BE SMOOTH AND SEALED TO BE IMPERVIOUS TO GREASE AND OILS.
6. CANE BOLT SLEEVE, SEE DETAIL 13/11.
7. 6'-6"W x 5'-8"H CORRUGATED METAL GATE WITH DIAGONAL BRACING, CONTINUOUS WELD AT ALL JOINTS; PRIME AND PAINT.
8. 1 1/2-INCH HSB-36 18 GA. VERCO DECK.
9. INTERIOR SURFACE OF ALL WALLS ARE TO BE SMOOTH AND SEALED TO BE IMPERVIOUS TO GREASE AND OILS.
10. EXISTING CMU WALL. PROTECT IN PLACE.
11. HEAVY DUTY HINGE, WELDED (3) PER POST.
12. 1 5/8X16 CONCRETE MASONRY CAP.
13. 6-INCH CONCRETE CURB
14. CONCRETE FOOTING PER 1/9.
15. FLASHING WITH DRIP EDGE EMBEDDED INTO GROUT
16. C 12X20.7 REFER TO DETAILS 10, 11 AND 14/11, PRIME AND PAINT.
17. 5/8" Ø X 6" TITEN HD AT CENTER OF ANGLE AS SOWN.
18. SOLAR POWERED SECURITY LIGHT. HALO SBL 250 OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

SHEET NOTES

1. GRIDLINES ARE THE LOCATION OF CENTERLINES OF STRUCTURAL STEEL COLUMNS AND CENTER OF STRUCTURAL WALLS UNLESS OTHERWISE NOTED.
2. ALL WELDS TO BE GROUND SMOOTH.

LEGEND

#- DETAIL NUMBER
#- SHEET NUBER

FINISHES

1 - 8"x8"x16" CONCRETE MASONRY UNIT
COLOR: NATURAL GRAY

2 - 1-5/8"x8"x16" CONCRETE MASONRY CAP
COLOR: NATURAL GRAY

3 - SHERWIN WILLIAMS SW6258
"TRICORN BLACK"

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REGISTERED PROFESSIONAL ENGINEER
BRANDON J. DEEMS
No. 35535
Exp. 12/31/25
STRUCTURAL
STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY | DATE

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

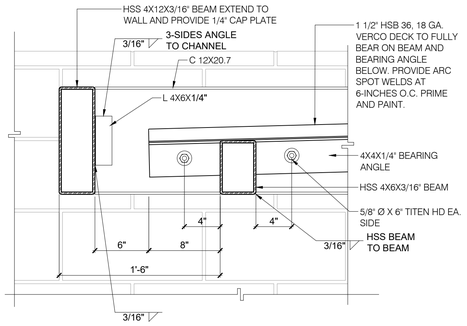
INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
TRASH ENCLOSURE ELEVATIONS AND SECTIONS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

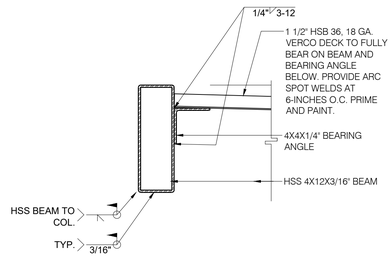
RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
12/16/2024
DATE

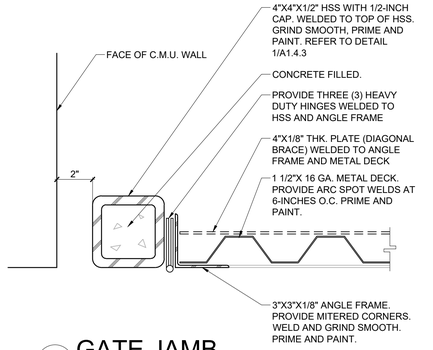
SCALE
DATE 11-10-22
SHEET 10 OF 22
DRAWING NO. D-952



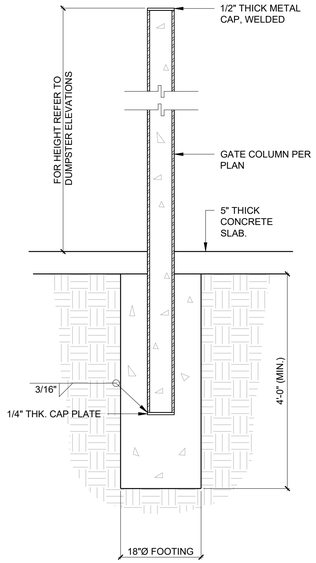
14 DETAIL AT FASCIA
SCALE: 1 1/2" = 1'-0"

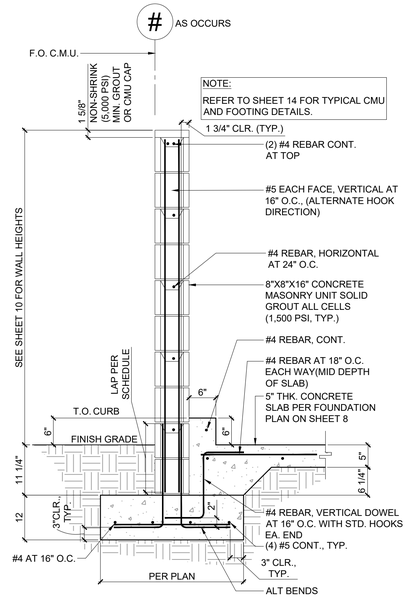


10 DETAIL AT FASCIA
SCALE: 1 1/2" = 1'-0"

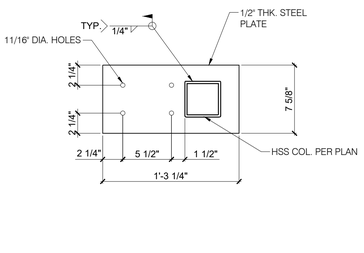


7 GATE JAMB
SCALE: 1 1/2" = 1'-0"

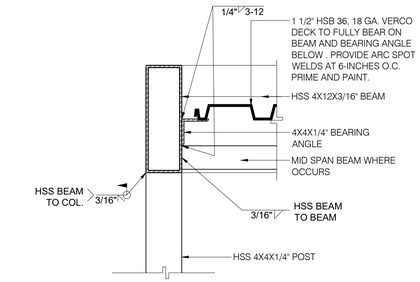




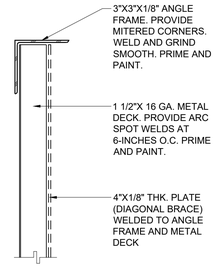
2 CMU WALL DETAIL
SCALE: 3/4" = 1'-0"



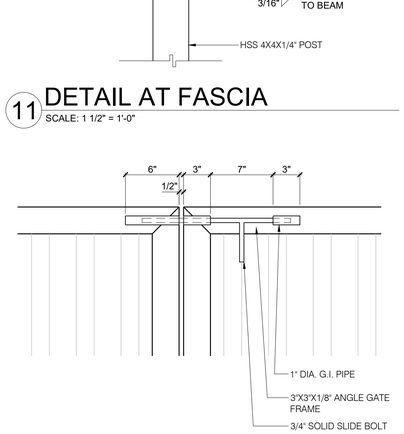
15 PLATE DETAIL
SCALE: 1 1/2" = 1'-0"



11 DETAIL AT FASCIA
SCALE: 1 1/2" = 1'-0"

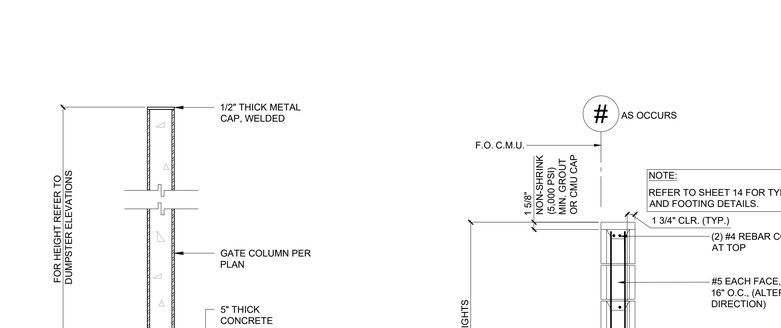


8 GATE DETAIL
SCALE: 3" = 1'-0"

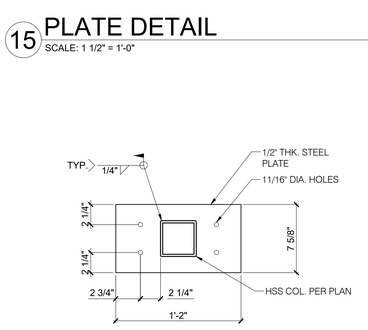


12 HORIZONTAL CANE BOLT
SCALE: 1 1/2" = 1'-0"

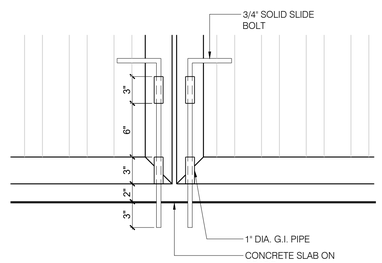
9 CMU WALL CAP
SCALE: 1 1/2" = 1'-0"



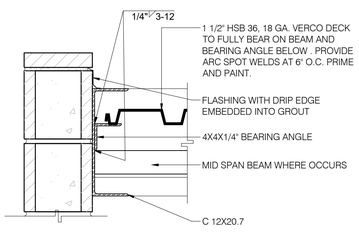
6 CMU WALL DETAIL
SCALE: 1 1/2" = 1'-0"



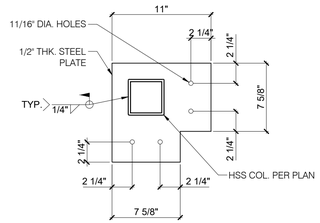
16 PLATE DETAIL
SCALE: 1 1/2" = 1'-0"



13 VERTICAL CANE BOLT
SCALE: 1 1/2" = 1'-0"



18 DETAIL AT FASCIA
SCALE: 1 1/2" = 1'-0"



17 PLATE DETAIL
SCALE: 1 1/2" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER — BRANDON J. DEERE — No. 36555 — STRUCTURAL — STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY — DATE

REVISIONS

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REFERENCES

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PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

TRASH ENCLOSURE DETAILS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
12/16/2024
DATE

SCALE
DATE 11-10-22
DRAWING NO. D-952
SHEET 11 OF 22

GENERAL STRUCTURAL NOTES

1. THE NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE GENERAL STRUCTURAL NOTES. TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE AND MAY NOT BE SPECIFICALLY REFERENCED ON THE DRAWINGS.
2. DIMENSIONS SHOWN ON DRAWINGS REFER TO FACE OF CONCRETE SURFACES, FACE OF STUDS, FACE OF CONCRETE BLOCK, TOP OF SHEATHING, TOP OF STRUCTURAL STEEL OR TOP OF SLAB, UNLESS OTHERWISE INDICATED.
3. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS, SPECIFICATIONS OR DRAWINGS OF OTHER DISCIPLINES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER PRIOR TO PROCEEDING WITH ANY EFFECTED WORK.
4. ANY WORK CONSTRUCTED IN CONFLICT WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
5. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF THE UTILITY SERVICES IN THE AREA TO BE EXCAVATED PRIOR TO COMMENCING EXCAVATION.
6. WHERE A CONSTRUCTION DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
7. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE (CBC). THE FOLLOWING CODES HAVE BEEN ADOPTED BY THE CBC AND HAVE BEEN IMPLEMENTED IN THE DESIGN OF THIS PROJECT:

   AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE): ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES INCLUDING ALL CURRENT SUPPLEMENTS

   AMERICAN CONCRETE INSTITUTE (ACI): ACI-318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
8. THE CONTRACTOR 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. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ENGINEER FREE AND HARMLESS FROM ALL CLAIMS. DEMANDS 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 ENGINEER.
9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT AND MATERIAL, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER DO NOT INCLUDE INSPECTION OF THE THESE ITEMS.
10. CARE SHALL BE TAKEN WHEN STORING CONSTRUCTION MATERIALS. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON THE FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE THE STRUCTURE HAS NOT ATTAINED THE REQUIRED DESIGN STRENGTH.

REINFORCED CONCRETE

1. CEMENT SHALL CONFORM TO ASTM C150, TYPE II/V.
2. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33.
3. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
4. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED BY THESE NOTES.
5. CONCRETE SHALL BE NORMAL WEIGHT (145 PCF). CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:

ELEMENT	STRENGTH	AGG	W/C RATIO (MAX)
FOOTINGS/ SLAB ON GRADE	3000 PSI	1"	.50

6. ADMIXTURES USED IN CONCRETE SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS, SHALL BE USED IN DOSAGES RECOMMENDED BY THE MANUFACTURER AND SHALL NOT CONTAIN MORE CHLORIDE THAN IS FOUND IN THE MUNICIPAL DRINKING WATER SUPPLY. LIQUID VOLUME IN ASTM C494, TYPE C ADMIXTURES SHALL BE ADDED TO WATER CONTENT AND WATER CEMENT RATIO CALCULATIONS.

WATER REDUCERS	ASTM C494, TYPE A
MID-RANGE WATER REDUCERS	ASTM C494, TYPE A/F
HIGH-RANGE WATER REDUCERS	ASTM C494, TYPE F
HYDRATION STABILIZERS (RETARDERS)	ASTM C494, TYPE B AND D
ACCELERATORS	ASTM C494, TYPE C
AIR ENTRAINING AGENTS	ASTM C260
CORROSION INHIBITORS	ASTM C494, TYPE C
SHRINKAGE REDUCING ADMIXTURES	ASTM C494, TYPE F
VISCOSITY MODIFYING ADMIXTURES	ASTMC494, TYPE S
SILICA FUME	ASTM C1240

7. FLYASH SHALL CONSIST OF POZZOLANIC ADMIXTURES CONFORMING TO ASTM C6819 F.
8. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR CONCRETE DESIGN STRENGTHS GREATER THAN 2500 PSI.
9. CONCRETE SHALL BE PROPORTIONED SUCH THAT THE 7 DAY STRENGTHS ARE A MINIMUM OF 70% OF THE SPECIFIED 28 DAY STRENGTH FOR ANY CONCRETE CONSTRUCTION REQUIRING SHORING, BRACING, OR TO RECEIVE CONSTRUCTION LOADS. SLABS ON GRADE SHALL HAVE A COMPRESSION STRENGTH OF 1800 PSI MINIMUM AT 3 DAYS IF SUBJECT TO CONSTRUCTION TRAFFIC.
10. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY CONCRETE WHICH FAILS TO ATTAIN SPECIFIED STRENGTH IN 28 DAYS IF DIRECTED BY THE STRUCTURAL ENGINEER.
11. ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER. ADMIXTURES SHALL COMPLY WITH ASTM C494 & C1017 AND BE OF A TYPE THAT INCREASES THE WORKABILITY OF THE CONCRETE, BUT SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT (CALCIUM CHLORIDE SHALL NOT BE USED).
12. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, HOLD-DOWN ANCHORS, AND INSERTS SHALL BE WELL SECURED IN POSITION WITH WIRE POSITIONERS PRIOR TO FOUNDATION INSPECTION AND BEFORE PLACING CONCRETE.
13. ANCHOR BOLTS EMBEDDED IN CONCRETE SHALL BE HEAVY HEX.
14. DEBRIS SHALL BE ENTIRELY REMOVED FROM FORMS PRIOR TO CONCRETE PLACEMENT.

BASIS OF DESIGN

PROJECT DESCRIPTION: NEW TRASH ENCLOSURE

1. VERTICAL LOADS:

   DEAD LOADS:

   ROOF 5 PSF

   LIVE LOADS: REDUCIBLE UNLESS OTHERWISE NOTED

   ROOF 20 PSF

2. LATERAL LOADS:

   WIND: PER ASCE 7-16 (CBC 2022)

   BASIC WIND SPEED-3 SECOND GUST (3s V_{ult}) 94MPH

   TOPOGRAPHIC FACTOR (K_{zt}) 1.0

   RISK CATEGORY II

   EXPOSURE CATEGORY C

   ENCLOSURE CLASSIFICATION ENCLOSED

   INTERNAL PRESSURE COEFFICIENT (GC_{pi}) +/- 0.18

   SEISMIC: PER ASCE 7-16 (CBC 2022)

   RISK CATEGORY II

   SEISMIC IMPORTANCE FACTOR (I_e) 1.0

   RHO (N-S) 1.0

   RHO (E-W) 1.0

   SITE LOCATION, LATITUDE 33.885613° N

   SITE LOCATION, LONGITUDE -118.40879° W

   MAPPED SPECTRAL RESPONSE ACCELERATIONS:

   SHORT PERIOD, Ss= 1.907g

   LONG PERIOD, S1= 0.679g

   SITE CLASS: D

   SPECTRAL RESPONSE COEFFICIENTS:

   SHORT PERIOD, Sds= 1.526g

   LONG PERIOD, Sd_1= 0.770G

   SEISMIC DESIGN CATEGORY D

   SEISMIC FORCE RESISTING SYSTEMS:

   STEEL ORDINARY CANTILEVER COLUMN SYSTEM

   R= 1.25

   C_d= 1.25

   Omega= 1.25

   C_s= 1.22 (STRENGTH)

   ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

FOUNDATION

1. THE SOILS REPORT RECOMMENDATIONS SHALL BE COMPLIED WITH BY THE CONTRACTOR.
2. **SOILS INFORMATION:**

   SEE SOILS REPORT BY: CODE MINIMUM

   SOIL DESIGN PARAMETERS:

   ALLOWABLE BEARING PRESSURE 1500 PSF (+1/3 INCREASE)

   LATERAL BEARING (PASSIVE) PRESSURE 250 PCF

   COEFFICIENT OF FRICTION 0.35

   MINIMUM CONTINUOUS FOOTING WIDTH 12 INCHES

   MINIMUM SPREAD FOOTING WIDTH 24 INCHES

   BOTTOM OF FOOTINGS SHALL BE AT LEAST 12 INCHES BELOW LOWEST ADJACENT PAD GRADE.
3. ALL FOUNDATION WORK SHALL BE FOUNDED ON FIRM UNDISTURBED NATURAL SOILS OR APPROVED COMPACTED SOILS.
4. CONTRACTOR SHALL INVESTIGATE THE SITE, DURING CLEARING AND EARTHWORK OPERATIONS, FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
5. THE FINISH EXCAVATION FOR FOUNDATIONS SHALL BE NEAT & TRUE TO LINE.
6. FOUNDATION EXCAVATIONS SHALL BE KEPT FREE OF LOOSE MATERIAL AND STANDING WATER AND SHALL BE CHECKED AND APPROVED BY THE SOILS ENGINEER BEFORE THE PLACEMENT OF ANY CONCRETE.
7. THE TESTING LAB SHALL SUBMIT COMPACTION REPORTS FOR ALL FILL TO THE ENGINEER BEFORE REQUESTING FOUNDATION INSPECTION. ALL LOOSE SOIL AND FILL DIRT, INCLUDING BACKFILL BEHIND RETAINING WALLS, SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY, OR GREATER AS REQUIRED BY THE SOILS REPORT.

REINFORCING STEEL

1. REBAR SHALL BE ASTM A615, GRADE 60 DEFORMED BARS.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE LAPPED 12" MINIMUM.
3. MINIMUM LAP SPLICES OF REINFORCING BARS SHALL BE AS SPECIFIED IN THE DRAWINGS.
4. VERTICAL BARS IN WALLS SHALL BE ACCURATELY POSITIONED AT THE CENTER OF THE WALL UNLESS OTHERWISE NOTED ON PLANS AND DETAILS.
5. REINFORCING DETAILING, BENDING, AND PLACING SHALL BE IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT".
6. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, HOLD DOWN ANCHORS AND INSERTS SHALL BE WELL SECURED IN POSITION WITH WIRE POSITIONERS PRIOR TO FOUNDATION INSPECTION AND BEFORE PLACING CONCRETE OR GROUT.
7. 180 DEGREE HOOKS MAY BE USED IN LIEU OF 90-DEGREE HOOKS IF DESIRED BY THE CONTRACTOR.
8. CLEAR DISTANCES, STEEL TO FORMS, UNLESS NOTED OTHERWISE:

SLABS NOT EXPOSED TO WEATHER, JOISTS, INTERIOR WALL SURFACES	3/4 "
EXTERIOR WALL SURFACES, SLABS EXPOSED TO WEATHER, #5 AND SMALLER	1-1/2"
EXTERIOR WALL SURFACES, SLABS EXPOSED TO WEATHER, #6 AND LARGER	2"
COLUMN TIES, BEAM TIES	1-1/2"
CLEAR DISTANCE BETWEEN BARS	2"
SLABS ON ROLLED GRADE	1-1/2"
FORMED SURFACES IN CONTACT WITH EARTH	2"
UNFORMED SURFACES IN CONTACT WITH EARTH	3"

CONCRETE-EXPANSION ANCHORS

1. CONCRETE EXPANSION ANCHORS SHALL BE:
   a. SIMPSON STRONG-BOLT 2 (SSB2) WEDGE ANCHORS BY SIMPSON STRONG TIE (ICC-ES ESR-3037).
2. REFERENCE ICC ESR REPORT FOR INSTALLATION INFORMATION SUCH AS, BUT NOT LIMITED TO; INSTALLATION TORQUE, DRILL BIT REQUIREMENTS AND PROCEDURES FOR CLEANING HOLES.
3. ANCHOR EMBEDMENTS SHALL BE AS SPECIFIED ON THE PLANS AND DETAILS. EMBEDMENT SPECIFIED IS THE NOMINAL EMBEDMENT OF THE ANCHOR (hnom). SEE DETAIL 6/11 FOR ADDITIONAL INFORMATION.
4. DO NOT INSTALL ANCHORS IN CONCRETE THAT IS LESS THAN 7 DAYS OLD.
5. ANCHORS SHALL BE USED ONLY WHERE SPECIFICALLY INDICATED ON PLANS AND DETAILS.
6. SPECIAL INSPECTION IS REQUIRED. SEE SPECIAL INSPECTION NOTES FOR ADDITIONAL INFORMATION.

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
ADD'L	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ARCH	ARCHITECT
ARCH'L	ARCHITECTURAL
ASD	ALLOWABLE STRESS DESIGN
(B)	BOTTOM
BF	BRACED FRAME
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BN	BOUNDARY NAILING
BO	BOTTOM OF
BOF	BOTTOM OF FOOTING
BR	BRACE
BRDG	BRIDGE(ING)
BRG	BEARING
BTWN	BETWEEN
C	CAMBER(ED)
CANT	CANTILEVERED
CF	CUBIC FEET(FOOT)
CG	CENTER OF GRAVITY
CIP	CAST IN PLACE
CJ	CEILING JOIST
CJT	CONSTRUCTION JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONC MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER(ED)
CTSK	COUNTERSINK
CY	CUBIC YARD
d	PENNY(NAILS)
DBL	DOUBLE
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DP (D)	DEEP(DEPTH)
DWG	DRAWING(S)
DWL	DOWEL(S)
(E)	EXISTING
EF	EACH FACE
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
EMBED	EMBEDMENT
EN	EDGE NAIL
ENG	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EQPT	EQUIPMENT
EXIST (E)	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
EW	EACH WAY
FAB	FABRICATION
FF	FINISH FLOOR
FG	FINISH GRADE
FIN	FINISH(ED)
FLG	FLANGE
FLR	FLOOR
FN	FIELD(FACE)NAIL
FND	FOUNDATION
FO	FACE OF
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOW	FACE OF WALL
FRM	FRAME
FRMG	FRAMING
FRT	FIRE-RETARDANT TREATED
FRTDF	FIRE-RETARDANT TREATED DF
FS	FAR SIDE
FT(')	FOOT(FEET)
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GLB	GLUED LAMINATED BEAM
GRD	GRADE
GSM	GALVANIZED SHEET METAL
GWB	GYPSUM WALLBOARD
(H)	HORIZONTAL
HD	HOLD DOWN
HDR	HEADER
HGR	HANGER
HORIZ	HORIZONTAL
HSB	HIGH STRENGTH BOLT
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF	INSIDE FACE
IN(")	INCH(S)
INT	INTERIOR
JST	JOIST
JT	JOINT
K	KIPS(1000)
LS	LAG SCREW
LAT	LATERAL
LB(#)	POUNDS
LDGR	LEDGER
LF	LINEAL FEET(FOOT)
LGTH	LENGTH
LLH	LONG LEG HORIZ
LLV	LONG LEG VERT
LONG	LONGITUDINAL
LRFD	LOAD & RESISTANCE FACTOR DESIGN
LT WT	LIGHT WEIGHT
LVL	LAMINATED VENEER LUMBER
MB	MACHINE BOLT
MF	MOMENT FRAME
MAS	MASONRY
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MISC	MISCELLANEOUS
MTL	METAL
(N)	NEW
NLG	NAILING
NLR	NAILER
NO(#)	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
NWT	NORMAL WEIGHT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OPPOSITE HAND
OPNG	OPENING
OPT	OPTIONAL
ORNT	ORIENTATE(ION)
OWJ	OPEN WEB JOISTS
OWSJ	OPEN WEB STEEL JOISTS
PA	PURLIN ANCHOR
PAR (//)	PARALLEL
PBS	PREMIER BUILDING SYSTEMS
PC	PRECAST CONCRETE
PCDT	PRECAST DOUBLE TEE
PERP	PERPENDICULAR
PEN	PENETRATION
PH	PAN HEAD
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLAM	PARALAM BEAM
PLY	PLYWOOD
PS	PRE-STRESSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P/T	POSTTENSIONED
PT	PRESSURE TREATED
PTDF	PRESSURE TREATED DF
QTY	QUANTITY
RAD (R)	RADIUS
REF	REFERENCE
REIN	REINFORCEMENT(ING)
REQ'D	REQUIRED
RO	ROUGH OPENING
ROS	ROUGH SAWN
RS	RE-SAWN
RTU	Roof Top Units
SCH	SCHEDULE
SEIS	SEISMIC
SHR	SHEAR
SHT	SHEET
SIM	SIMILAR
SKW	SKEW(ED)
SPEC	SPECIFICATION(S)
SQ	SQUARE
SS	SELECT STRUCTURAL
SSB2	SIMPSON STRONG BOLT 2
STD	STANDARD
STG	STRONG
STGR	STAGGER(ED)
STIFF	STIFFNER(S)
STIR	STIRRUP(S)
STL	STEEL
STRUC	STRUCTURAL
SUSP	SUSPENDED
SW	SHEAR WALL
SYMM	SYMMETRICAL
(T)	TOP
T & B	TOP AND BOTTOM
T & G	TONGUE AND GROOVE
TEMP	TEMPERATURE
TEMP	TEMPORARY
THK	THICK(NESS)
THRD	THREADED
TN	TOE NAIL
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOP	TOP OF PARAPET
TOS	TOP OF SHEATHING
TOW	TOP OF WALL
TS	TOP OF STEEL
TRANS	TRANSVERSE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT(V)	VERTICAL
VIF	VERIFY IN FIELD
(W)	WIDE(WIDTH)
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WFB	WIDE FLANGE BEAM
WHS	WELDED HEADED STUD
WP	WORK POINT
WPJ	WEAKENED PLANE JOINT
WS	WOOD SCREW(S)
WT	WEIGHT
WWF	WELDED WIRE FABRIC
X-STG	EXTRA STRONG
XX-STG	DOUBLE EXTRA STRONG
YD	YARD

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED PROFESSIONAL ENGINEER — BRENDON J. DEERE — No. 33536 — Exp. 12/31/25 — STRUCTURAL — STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
STRUCTURAL NOTES

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY DATE

DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER 12/16/2024 DATE

SCALE

DATE 11-10-22

DRAWING NO. D-952

SHEET 12 OF 22

REQUIRED SPECIAL INSPECTIONS OF STEEL CONSTRUCTION

VISUAL INSPECTIONS PRIOR TO WELDING	ACTION
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	P
WELDING PROCEDURES SPECFICATIONS (WPS) AVAILABLE	C
MANUFACTURER CERTIFICATIONS FOR WELDING COMSUMABLES AVAILABLE	C
MATERIAL IDENTIFICATION (TYPE/GRADE)	P
WELDER IDENTIFICATION SYSYTEM [1]	P
FIT -UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	P
FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y- & K- JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY) • JOINT PREPARATIONS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) @ BACKIG TYPE & FIT (IF AVAILABLE) • BACKING TYPE AND FIT (IF APPLICABLE)	P
CONFIGURATION AND FINISH OF ACCESS HOLES	P
FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	P
VISUAL INSPECTION TASKS DURING WELDING	**ACTION**
CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	P
NO WELDING OVER CRACKED TACK WELDS	P
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	P
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH) • INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED (SFRS)	P
WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	P
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	C
USE OF QUALIFIED WELDERS	P

VISUAL INSPECTION TASKS AFTER WELDING	TASK	DOCUMENT
WELDS CLEANED	P	N/A
SIZE, LENGTH AND LOCATION OF WELDS	C	N/A
WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELDBASE-METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	C	D
ARC STRIKES	C	D
K-AREA [2]	C	D
WELD ACCESS HOLES ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES [3]	C	D
BACKING REMOVED AND WELD TABS REMOVED (IF REQ'D)	C	D
REPAIR ACTIVITIES	C	D
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	C	D
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	P	D
REPLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS. IF REQ'D (SFRS)	C	D
BACKING REMOVED, WELD TABS REMOVED AND FINISHED AND FILLET WELDS ADDED (IF REQ'D)	C	D
SPECIAL INSPECTION TASKS PRIOR TO BOLTING	**TASK**	**DOCUMENT**
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTNER MATERIALS	P	N/A
FASTNERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	N/A
CORRECT FASTNERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	N/A
CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	N/A
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	O	N/A
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTNER ASSEMBLIES AND METHODS USED	O	D
PROPER STORGAE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTNER COMPONENTS	O	N/A
SPECIAL INSPECTION TASKS DURING TO BOLTING	**TASK**	**DOCUMENT**
FASTNER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS (IF REQ'D) ARE POSITIONED AS REQ'D	O	N/A
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENTIONING OPERATION	O	N/A
FASTNER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATAING	O	N/A
FASTNERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD FREE EDGES	O	N/A
SPECIAL INSPECTION TASKS AFTER TO BOLTING	**TASK**	**DOCUMENT**
DOCUMENT ACCEPATNCE OR REJECTION OF BOLTED CONNECTIONS	P	D

NOTES:
1. THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED SHALL BE THE LOW STRESS TYPE.
2. WHEN WELDING OF DOUBLER PLATES, CONTUNUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75mm) OF THE WELD. THE VISUAL INSPECTION SHALL BE PERFORMED NO SOONER THAN 48 HOURS FOLLOWING COMPLETION OF WELDING.
3. AFTER ROLLED HEAVY SHAPES (SEE AISC 360 SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (AISC 360 SECTION A3.1d) ARE WELDED, VISUALLY INSPECT THE WELD ACCESS HOLE FOR CRACKS.

SPECIAL INSPECTION REQUIREMENTS FOR CONCRETE MASONRY

MINIMUM VERIFICATION

VERIFICATION	REQUIRED			REFERENCE FOR CRITERIA
	LEVEL 1	LEVEL 2	LEVEL 3	TMS 602
1. PRIOR TO CONSTRUCTION:				
a. VERIFICATION OF COMPLIANCE OF SUBMITTALS	NR	R	R	ART. 1.5
b. VERIFICATION OF $f'm$ EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE	NR	R	R	ART. 1.4 B
2. DURING CONSTRUCTION:				
a. VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.	NR	R	R	ART. 1.5 & 1.6.3
b. VERIFICATION OF $f'm$ EVERY 5,000 SQ. FT.	NR	NR	R	ART. 1.4 B
c. VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.	NR	NR	R	ART. 1.4 B

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY			REFERENCE FOR CRITERIA	
	LEVEL 1	LEVEL 2	LEVEL 3	TMS 402	TM 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
a. PROPORTIONS OF SITE PREPARED MORTAR	NR	P	P	--	ART.2.1, 2.6 A, 2.6 C
b. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS	NR	P	P	--	ART. 3.4, 3.6 A
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
a. GROUT SPACE	NR	P	C	--	ART. 3.2 D, 3.2 F
b. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS	NR	P	C	SEC. 6.1, 6.3.1, 6.3.6, 6.3.7	ART. 3.2 E, 3.4
c. PROPORTIONS OF SITE-PREPARED GROUT	NR	P	P	--	ART. 2.6 B, 2.4 G,1.b
3. VERIFY DURING CONSTRUCTION:					
a. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	NR	P	P	--	ART. 1.5
b. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	NR	P	P	--	ART. 3.3 B
c. SIZE AND LOCATION OF STRUCTURAL MEMBERS	NR	P	P	--	ART. 3.3 F
d. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION	NR	P	C	SEC. 1.2.1(e), 6.2.1, 6.3.1	--
e. WELDING OF REINFORCEMENT	NR	C	C	SEC. 6.1.6.1.2	--
f. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40°F) OR HOT WEATHER (TEMP. ABOVE 90°F)	NR	P	P	--	ART. 1.8 C, 1.8 D
4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS	NR	P	C	--	ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4

1. R = REQUIRED, NR = NOT REQUIRED
2. SHADED COLUMN INDICATES LEVEL OF INSPECTION REQUIRED FOR THIS PROJECT.

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REGISTERED PROFESSIONAL ENGINEER — BRANDON J. DEERE — No. S6595 — Exp. 12/31/25 — STRUCTURAL — STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY — DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

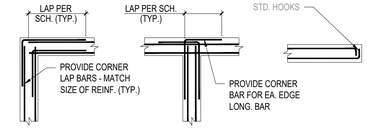
INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
STRUCTURAL NOTES & SPECIAL INSPECTIONS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE — DATE

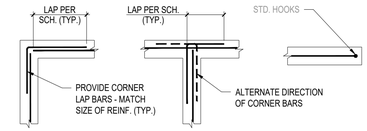
RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY — DATE

DESIGNED BY
M. TODD BROUSSARD, PE — 12/16/2024 DATE
TAIT PROJECT ENGINEER

SCALE
DATE 11-10-22
SHEET 13 OF 22
DRAWING NO. D-952

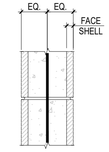


MULTIPLE CURTAIN

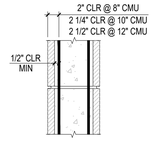


SINGLE CURTAIN

1 TYPICAL CONCRETE FOOTING INTERSECTIONS



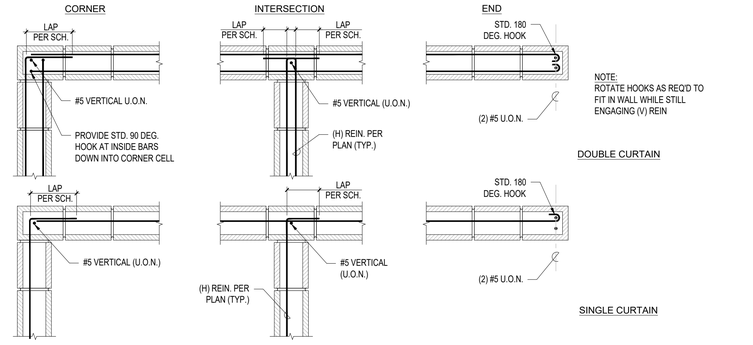
BARS @ CENTER



BARS @ FACE

BAR SIZE	8" CMU		10" CMU		12" CMU	
	CENTER	FACE	CENTER	FACE	CENTER	FACE
#4	1'-0"	1'-8"	1'-0"	1'-6"	1'-0"	1'-4"
#5	1'-6"	2'-7"	1'-2"	2'-4"	1'-0"	2'-1"
#6	2'-10"	4'-6"	2'-2"	4'-3"	1'-3"	3'-10"
#7	3'-11"	5'-3"	3'-0"	5'-3"	2'-5"	5'-3"
#8	5'-11"	6'-0"	4'-7"	6'-1"	3'-9"	6'-1"
#9	-	-	5'-10"	6'-10"	4'-9"	6'-10"

2 CMU REBAR LAP SCHEDULE (f'm=2500psi)



3 TYPICAL MASONRY BLOCK INTERSECTIONS

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED PROFESSIONAL ENGINEER BRANDON J. DEEMS No. 33535 EXP. 12/31/25 STRUCTURAL STATE OF CALIFORNIA

12/16/2024
DATE SIGNED

TAIT & ASSOCIATES, INC.
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705
(714) 560-8200

REVIEWED BY | DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

TYPICAL STRUCTURAL DETAILS

RECOMMENDED BY
PROJECT MANAGER
JEFF FIJALKA, PE
DATE

RECOMMENDED BY
CITY ENGINEER
KATHERINE DOHERTY
DATE

DESIGNED BY
M. TODD BROUSSARD, PE
TAIT PROJECT ENGINEER
12/16/2024
DATE

SCALE
DATE 11-10-22

DRAWING NO. D-952

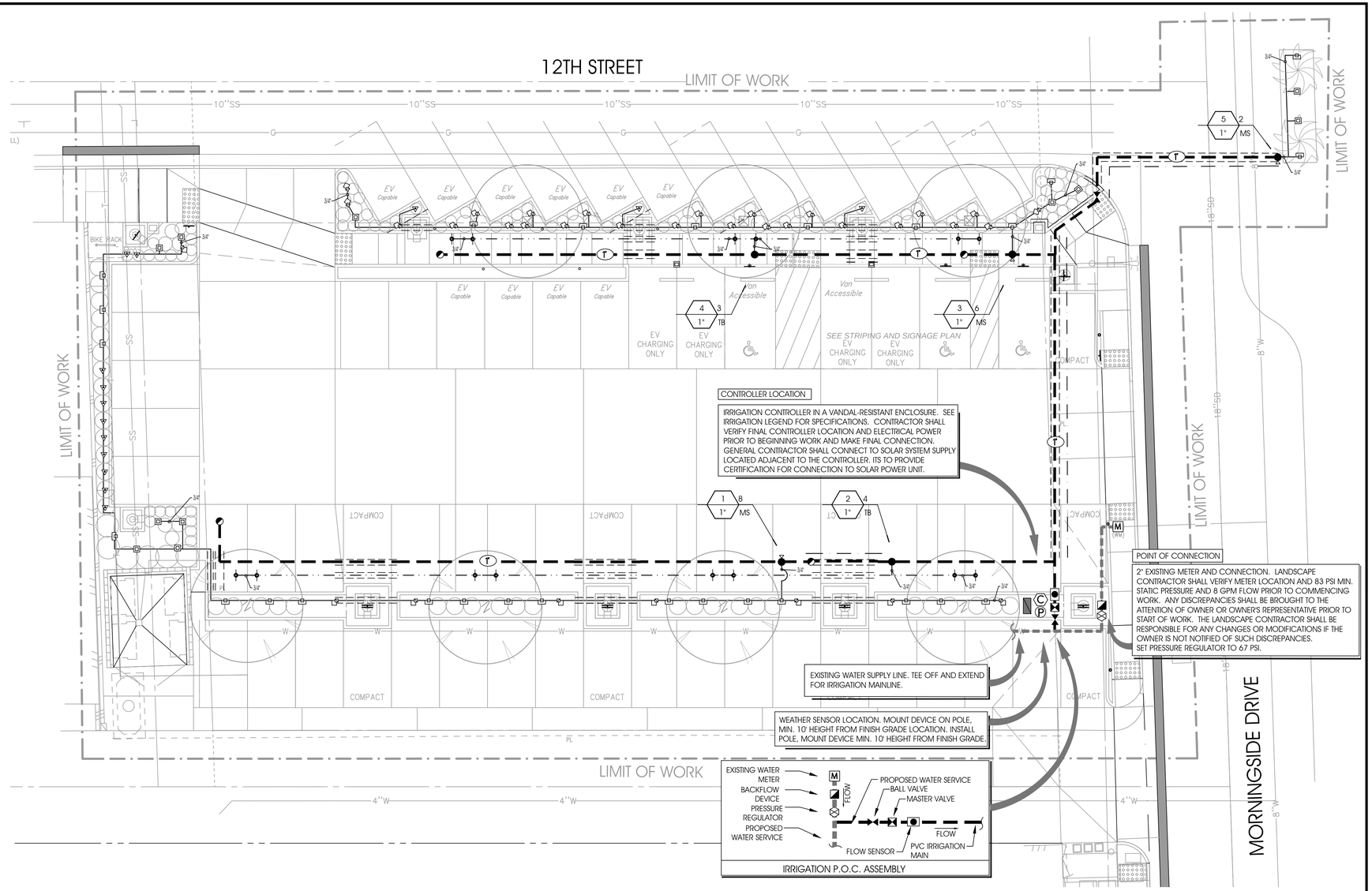
SHEET 14 OF 22

IRRIGATION LEGEND

INSTALL MICRO SPRAY HEADS AT A MIN. OF 12" AWAY FROM ALL HARDSCAPE AREAS

SYMBOL	DESCRIPTION	RADIUS	G.P.M.	PSI	PRECIP.
	RAINBIRD RWS-M-B-C-1402 18" DEEP ROOT WATERING SYSTEM	N/A	0.50	30	N/A
	RAINBIRD 1806-SAM-PRS-SQ-Q SQUARE MICROSPRAY ON 6" POP-UP	2.5'	0.12	30	1.90
	RAINBIRD 1806-SAM-PRS-SQ-H SQUARE MICROSPRAY ON 6" POP-UP	2.5'	0.20	30	1.57
	RAINBIRD 1806-SAM-PRS-SQ-F SQUARE MICROSPRAY ON 6" POP-UP	2.5'	0.40	30	1.55
	RAINBIRD PA-8S-PRS-PCT-05 DRIP EMITTER ON SCH 80 PVC RISER	N/A	0.08	30	2 ±

SYMBOL	DESCRIPTION / MODEL NO.
M	2" EXISTING POTABLE WATER METER, VERIFY IN FIELD
	FEBCO 825Y - 1" REDUCED PRESSURE BACKFLOW PREVENTION DEVICE W/ FEBCO 650A BRONZE WYE STRAINER PER CIVIL ENGINEER'S PLAN
	HUNTER FLOW-CLIK 1" FLOW SENSOR, SEE CONTROLLER SPECIFICATION BELOW FOR ADDITIONAL INFORMATION.
	RAINBIRD PEB-SERIES REMOTE CONTROL MASTER VALVE - 1"
	NIBCO BALL VALVE (LINE SIZE) T-585-80-LF (1/2"-3") OR T-580-70 (1-1/4"-1"-3")
	HUNTER HQ-33DLRC QUICK COUPLING VALVE OR APPROVE EQUAL, INSTALL 6" FROM HARDSCAPE.
	RAINBIRD PEB-SERIES REMOTE CONTROL VALVE - SIZE AS INDICATED ON PLAN
	RAINBIRD PESB-PRS-D* SERIES REMOTE CONTROL VALVE W/ GKCHK-200 QUICK CHECK BASKET FILTER (200-MESH) - SIZE AS INDICATED ON PLAN *CONTRACTOR TO SET PRS-DIAL TO 30 PSI ON ALL VALVES SERVING LOW VOLUME SPRAYS
	SOLAR SYSTEM-4, I.T.S 2,000 WATT SOLAR POWER SYSTEM CONNECTION FOR IRRIGATION CONTROLLER. AVAILABLE THROUGH I.T.S (714) 696-7526
3/4"	PVC CLASS 200 LATERAL LINE - 12" COVER IN PLANTING AREA. PVC SCHED. 40 - 24" COVER UNDER PAVING. SIZE AS NOTED ON PLAN.
3/4"	PVC CLASS 200 TREE BUBBLER LATERAL LINE - 12" COVER IN PLANTING AREA. PVC SCHED. 40 - 24" COVER UNDER PAVING. SIZE AS NOTED ON PLAN.
T	PVC IRRIGATION MAINLINE; SCH. 40 - 2" AND SMALLER, CLASS 315 2-1/2" AND LARGER. 36" COVER UNDER PAVING, 18" COVER IN PLANTING AREAS, SIZE AS NOTED ON PLAN.
	PROPOSED WATER SUPPLY LINE (ESTIMATED LOCATION), PER CIVIL ENGINEER'S PLANS
	SCH 40 PVC PIPE 2X DIA. OF PIPE BEING SLEEVED- 2" MIN.
	SCH 40 PVC WIRE SLEEVE - 2" MIN.
C	HUNTER PRO-C - 13 STATION CONTROLLER IN STRONG BOX PRE-ASSEMBLED PRODUCT AVAILABLE THROUGH; IMPERIAL TECHNICAL SERVICES, CONTACT DARYL GREEN FOR COORDINATION AND VERIFICATION OF FLOW SENSOR HARDWARE. PROVIDE CERTIFICATION FROM I.T.S. OF UL LISTED INSTALLATION IN CONFORMANCE TO SPEC. PHONE 949-584-7311 ASSEMBLY MODEL NO. ICA1-HU13-13 / SOLSP / SP / IFS-100HFC
P	WEATHER SENSOR LOCATION. MOUNT HUNTER SOLAR SYNC SENSOR ON POLE WITH NO OVERHEAD OBSTRUCTION & AWAY FROM HEAT REFLECTING SURFACE/ MASS. TEST AND VERIFY CONNECTION TO CONTROLLER. FINAL LOCATION TO BE VERIFIED WITH ITS TECHNICIAN.



FRICTION LOSS CALCULATION

PROJECT NAME:	INTERIM SURFACE PARKING LOT 3								
Project No. :	25011								
WATER PURVAYOR:	N/A								
WATER TYPE:	POTABLE								
DATA GIVEN BY:	BIANCE CARDENAS								
PHONE:	(310) 802-5357				DATE:	2/4/2025			
STATIC PRESSURE:	83	PSI							
P.O.C. ELEVATION:	1								
VALVE NO:	1								
FLOW RATE :	8	GPM							
ELEVATION @ VALVE	1								

WATER SERVICE LINE		size:	2"		feet	loss/100'	0.09	0.0	PSI
WATER METER		size:	2"					-	PSI
BACKFLOW and WYE STRAINER		size:	2"					13.5	PSI
FLOW METER		size:	1"					1.0	PSI
GRAVITY PRESSURE		Elevation difference:	0					0.0	PSI
MAINLINE PIPE	Sch.40	size:	1"	75	feet	loss/100'	1.74 PSI	1.3	PSI
MASTER VALVE		size:		1"				1.8	PSI
R.C.V.		size:		1"				1.8	PSI
LATERAL PIPE/FITTINGS (allowance)								5.0	PSI
PRESSURE @ HEAD								30.0	PSI
TOTAL PRESSURE LOSS:								**54.3**	PSI
RESIDUAL PRESSURE: (MIN. 10% OF STATUC PRESSURE)								**28.7**	PSI

CONTROL VALVE TAG LEGEND

5 • 15 ← INDICATES STATION NUMBER
INDICATES TOTAL FLOW IN GPM
T • MS ← INDICATES NOZZLE TYPE → MS MICRO SPRAY (RAINBIRD SQ); TB TREE BUBBLER
INDICATES VALVE SIZE

DESIGN CRITERIA

WATER TYPE:	POTABLE
STATIC WATER PRESSURE:	83 PSI
WATER PURVEYOR:	N/A
INFORMATION GIVEN BY:	BIANCA CARDENAS
DATE:	02/04/2025
PHONE NUMBER:	(310) 802-5357

IRRIGATION CONTRACTOR SHALL VERIFY THE STATIC WATER PRESSURE WITH SUPPLIER PRIOR TO INSTALLATION. IF DIFFERENT FROM ABOVE, NOTIFY CDPC OR OWNER. FAILURE TO GIVE SUCH NOTIFICATION MAY RESULT IN CONTRACTOR BEING RESPONSIBLE FOR CHANGES/WORK THAT MIGHT OCCUR.

SYSTEM INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR GRAPHIC DESIGN CLARITY PURPOSES ONLY. EQUIPMENT SHALL BE LOCATED IN SHRUB PLANTING AREAS. AVOID ANY CONFLICTS BETWEEN THE IRRIGATION EQUIPMENT LOCATIONS AND SPRINKLER SPRAY WITH TREE TRUNK, SHRUBS, ARCHITECTURAL FEATURES, LIGHT POLES, UTILITY STRUCTURE, ETC. ROUTE PIPES AROUND TREES; DO NOT INSTALL PIPES UNDER TREES.

'AS BUILT' NOTE:
DURING THE CONSTRUCTION, LANDSCAPE CONTRACTOR SHALL TAKE FIELD NOTES OF ACTUAL LOCATIONS WHERE IRRIGATION EQUIPMENT HAS BEEN INSTALLED ON A DAILY BASIS TO REFLECT WORK COMPLETED, PREPARE 'AS BUILT' DRAWING ON BOND PAPER COPY OF IRRIGATION PLAN PER SPECIFICATION V (FIVE), SUBSECTIONS A THROUGH G, AND REDLINE FIELD NOTES INDICATING 'AS BUILT' INFORMATION. SUBMIT TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO PREPARATION OF FINAL 'AS-BUILT' DRAWING AND CONTROLLER CHART FOR SUBMITTAL TO THE OWNER.

0' 5' 10' 20' 30'
SCALE: 1"=10'
NORTH

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN #4176 — Signature — July 31, 2025 Exp. Date — March 10, 2026 Date — STATE OF CALIFORNIA

conceptual design + planning company
1675 Scenic Drive, Suite 200
Costa Mesa, CA 92626
T: 949.399.0870
www.cdpcinc.com
COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY	DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
IRRIGATION PLAN

RECOMMENDED BY
JEFF FIJALKA, PE
PROJECT MANAGER — DATE

RECOMMENDED BY
KATHERINE DOHERTY
CITY ENGINEER — DATE

DRAWN BY: VYVY HA — DATE
CHECKED BY: VINCENT ROJAS, PROJECT MANAGER — DATE

SCALE	DATE	DRAWING NO.
PER PLAN	03-10-25	LS-1

SHEET 15 OF 22

IRRIGATION NOTES

1. EXISTING UTILITIES - INFORMATION ON THE DRAWINGS RELATING TO EXISTINGUTILITY LINES AND SERVICES IS FROM THE BEST SOURCES AVAILABLE. ALL SUCH INFORMATION IS FURNISHED ONLY FOR INFORMATION AND IS NOT GUARANTEED. THE CONTRACTOR SHALL EXCAVATE TEST PITS AS REQUIRED TO DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES. CALL UTILITY LOCATING SERVICE FOR PRECISE UTILITY LOCATIONS BEFORE BEGINNING ANY WORK. UNDERGROUND SERVICE ALERT (800) 227-2600.

2. UTILITY REQUIREMENTS - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AT LEAST 48 HOURS IN ADVANCE OF EXCAVATING AROUND ANY OF THEIR STRUCTURES. THE UTILITY COMPANIES LISTED BELOW SHALL BE CONTACTED:

   - GAS COMPANY
   - TELEPHONE COMPANY
   - ELECTRICAL
   - POWER COMPANY
   - CABLE TELEVISION COMPANY
   - WATER SUPPLY COMPANY

   THE CALIFORNIA PUBLIC UTILITIES COMMISSION MANDATES THAT, IN THE INTEREST OF PUBLIC SAFETY, MAIN LINE GAS VALVES BE MAINTAINED IN A MANNER TO BE READILY ACCESSIBLE AND IN GOOD OPERATING CONDITION. THE CONTRACTOR SHALL NOTIFY THE GAS COMPANY'S HEADQUARTERS PLANNING OFFICE AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

3. SYSTEM INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR GRAPHIC DESIGN CLARIFICATION PURPOSES ONLY. EQUIPMENT SHALL BE LOCATED IN SHRUB PLANTED AREAS RATHER THAN TURF AREAS WHENEVER POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING OR ARCHITECTURAL FEATURES.

4. IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE, WATER CONSERVATION AND PREVENTION OF OVERSPRAY ONTO WALKS AND ROADWAYS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITION AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.

5. IRRIGATION CONTRACTOR SHALL NOT INSTALL THE SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS THAT OBSTRUCTION, GRADE DIFFERENCES OR AREA DIMENSION DIFFERENCES EXIST. NOTIFY THE OWNER OF ANY DISCREPANCIES. IN THE EVENT THAT NOTIFICATION IS NOT MADE, THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR NECESSARY CHANGES AND WORK.

6. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, WALL LOCATIONS, ETC., THAT WILL EFFECT HIS WORK. ALSO, COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND OTHERS FOR LOCATING PIPE AND WIRE SLEEVES THROUGH WALLS, STRUCTURES, UNDER ROAD PAVING, ETC.

7. INSTALL ALL HEADS USING TRIPLE-SWING JOINTS PER DETAILS AND USE POP-UPHEADS WHEREVER PEDESTRIAN TRAFFIC COULD OCCUR. INSTALL ALL MAINLINE UNDER PAVING 36" DEEP IN SLEEVES TWICE THE SIZE OF THE PIPE BEING SLEEVED. INSTALL ALL EQUIPMENT PER LOCAL CODES.

8. THE IRRIGATION DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 64 PSI AND MAXIMUM DEMAND OF 8 GPM AT THE POINT OF CONNECTION.

9. A 120 VOLT ELECTRICAL POWER OUTLET AT EACH AUTOMATIC CONTROLLER LOCATION SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE NECESSARY POWER SOURCES AND TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL OUTLET TO THE AUTOMATIC CONTROLLER(S), INCLUDING PROPER GROUNDING AS REQUIRED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

10. PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING STATIONS AT ADJACENT WORK AREA AND DETERMINE VALVES CONTROLLING HEADS INDICATED FOR CONNECTION TO EXISTING SYSTEM. CONTRACTOR SHALL VERIFY VALVE SIZE AND EXISTING GPM FLOW PRIOR TO ADDING NEW HEADS. ALSO, SPACING AND COVERAGE SHALL BE VERIFIED AND NECESSARY PROVISION IN BID MADE FOR REQUIRED ADJUSTMENTS AND MODIFICATIONS TO ACHIEVE PROPER COVERAGE.

11. ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN SHRUB OR GROUND COVER AREAS SHALL BE INSTALLED SO THAT THE TOP OF THE SPRINKLER HEAD IS 1" ABOVE FINISH GRADE.

12. ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN LAWN AREAS SHALL BE INSTALLED SO THAT THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH ADJACENT SIDEWALK OR CURB.

13. IN OPEN SEEDED LAWN AREAS, SET TOP OF POP-UP TYPE SPRINKLER HEADS 3" ABOVE FINISH GRADE UNTIL LAWN IS ESTABLISHED. LOWERING OF ALL LAWN HEADS BY THE IRRIGATION CONTRACTOR SO THAT THE TOP OF THE SPRINKLER HEAD IS 1/2" ABOVE FINISH GRADE SHALL BE ACCOMPLISHED WITHIN TEN (10) DAYS AFTER NOTIFICATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

14. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE DESIGNATED ON THE PLANS.

15. EXISTING TREES - WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND TREE ROOTS. EXCAVATION IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR SHAL BE DONE BY HAND. ALL ROOTS TWO (2) INCHES AND LARGER IN DIAMETER, EXCEPT DIRECTLY IN THE PATH OF PIPE OR CONDUIT, SHALL BE TUNNELED UNDER AND SHALL BE HEAVILY WRAPPED WITH BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING. WHERE A TRENCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAT TWO (2) INCHES IN DIAMETER, THE WALL OF THE TRENCH ADJACENT TO THE TREE SHALL BE HAND TRIMMED, MAKING CLEAN CUTS THROUGH. ROOTS ONE (1) INCH AND LARGER IN DIAMETER SHALL BE PAINTED WITH TWO COATS OF TREE SEAL, OR EQUAL. TRENCHES ADJACENT TO TREE SHOULD BE CLOSED WITHIN TWENTY FOUR (24) HOURS; AND WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREE SHALL BE KEPT SHADED WITH BURLAP OR CANVAS.

MWELO Appendix B – Water Efficient Landscape Worksheet

Project Name: Manhattan Beach - Lot

Project Location: Orange, CA

Reference Evapotranspiration (Eto):	CIMIS Station	Redondo Beach	42.6	ETAF	Non-Residential	0.45

Hydrozone	Planting Description	Plants' Water Use	Plant Factor (PF)	Shade/Sun	Irrigation Method Nozzle Type	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq.ft.)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Area										
HZ-1	Tree	Low	0.2	Sun	Root Watering System	0.81	0.25	100	24.7	652
HZ-2	Tree	Medium	0.5	Sun	Root Watering System	0.81	0.62	75	46.3	1,223
HZ-3	Shrub/GC/Vine	Low	0.2	Sun	Micro Spray-RAINBIRD SQ 2.5'	0.75	0.27	1,153	307.5	8,121
								(A)	(B)	
							Totals	1,328	378	9,996
Special Landscape Areas										
SLA-1	No SLA						1	0	0	0
SLA-2	No SLA						1	0	0	0
								(C)	(D)	
							Totals	0	0	0
								ETWU Total		9,996
						Maximum Allowed Water				15,784

ETWU (Annual Gallons Required) = ETo x 0.62 x ETAF x Area

0.62 is a conversion

MAWA (Annual Gallons Allowed) = Eto x 0.62 x [(ETAF x LA) + ((1-ETAF) X SLA)]

ETAF Calculations — Average ETAF for

Regular Landscape Areas		All Landscape Areas	
Total ETAF x Area (B)	378.5	Total ETAF x Area (B+D)	378.5
Total Area (A)	1328	Total Area (A+C)	1,328
Average ETAF (B/A)	0.28	Sitewide ETAF (B+D) / (A+C)	0.28

Peak Month Watering Schedule

This schedule provides schedule for daily watering in highest Eto month (July) as baseline schedule.

Monthly adjustments shall be made by inputting monthly water budgeting factor in automatic controller program.

Soak Time between Cycles for Cycle and Soak: 15 min. **Micro Climate: 1=Sun, 0.7=Shade

Cycle Starting Time: 3:00 AM

*** Frequency of watering** 1 = Everyday; 2 = Every 2 days (3 times/ week); 3= Every 3 days (2 times/ week); 7= Once a week (Every 7 days)

Hydrozone	Controller station no.	Irrigation Method	Frequency of watering *	Number of Cycles	Run Time (minutes)	No. of valve stations per Hz	Runtime per HZ	Plant Description	Micro Climate** (Sun/Shade)
HZ-1	2	Root Watering System	1	1	2	1	2	Tree	Sun
HZ-2	4	Root Watering System	1	1	4	1	4	Tree	Sun
HZ-3	1, 3, 5	Micro Spray-RAINBIRD SQ 2.5'	1	1	2	3	6	Shrub/GC/Vine	Sun
					Total minutes***		12		
					Total Hours**		0.20		

***Total watering minutes/hours do not include the time for valves open and close.

This irrigation watering schedule has been prepared as a part of landscape documentation package prior to construction.

Since an accurate agricultural soils analysis will not be performed until after site grading is done but prior to landscape installation, adjustments in watering time and cycle may be needed depending on the final site conditions and soil type.

NOTES ON WATERING SCHEDULE

In Providing opinions of probable water use calculations, the client understands that Conceptual Design and Planning Co. has no control over the installation or management of the irrigation system, and that the opinions of probable water use calculations provided are made on the basis of current evapotranspiration data provided by CIMIS, irrigation industry manufacturer's standards, along with Conceptual Design and Planning Co.'s qualifications and experiences.

This irrigation schedule is intended to be used as a reference guide only. The following site specific conditions but not limited to, microclimates, soil conditions, actual irrigation system distribution effciency, slope variations or maturity of plant material, should be considered when utilizing this schedule. Soil testing is performed after completion of site grading, and soil texture/infiltration rate data was not yet available at the time of calculation. Conceptual Design and Planning Co. makes no warranty, expressed or implied, as to the accuracy of such schedules.

Peak Month Watering Schedule- Establishment Period (150% of normal schedule)

This schedule provides schedule for daily watering in highest Eto month (July) as baseline schedule.

Monthly adjustments shall be made by inputting monthly water budgeting factor in automatic controller program.

Soak Time between Cycles for Cycle and Soak: 15 min. Micro Climate*: 1=Sun, 0.7=Shade

Cycle Starting Time: 3:00 AM

*** Frequency of watering** 1 = Everyday; 2 = Every 2 days (3 times/ week); 3= Every 3 days (2 times/ week)

Hydrozone	Controller station no.	Irrigation Method	Frequency of watering	Number of Cycles	Run Time (minutes)	no. of valve stations per Hz	Runtime per HZ	Plant Description	Micro Climate* (Sun/Shade)
HZ-1	2	Root Watering System	1	1	3	1	3	Tree	Sun
HZ-2	4	Root Watering System	1	1	6	1	6	Tree	Sun
HZ-3	1, 3, 5	Micro Spray-RAINBIRD SQ 2.5'	1	1	3	3	9	Shrub/GC/Vine	Sun
					Total minutes**		18		
					Total Hours**		0.30		

***Total watering minutes/hours do not include the time for valves open and close.

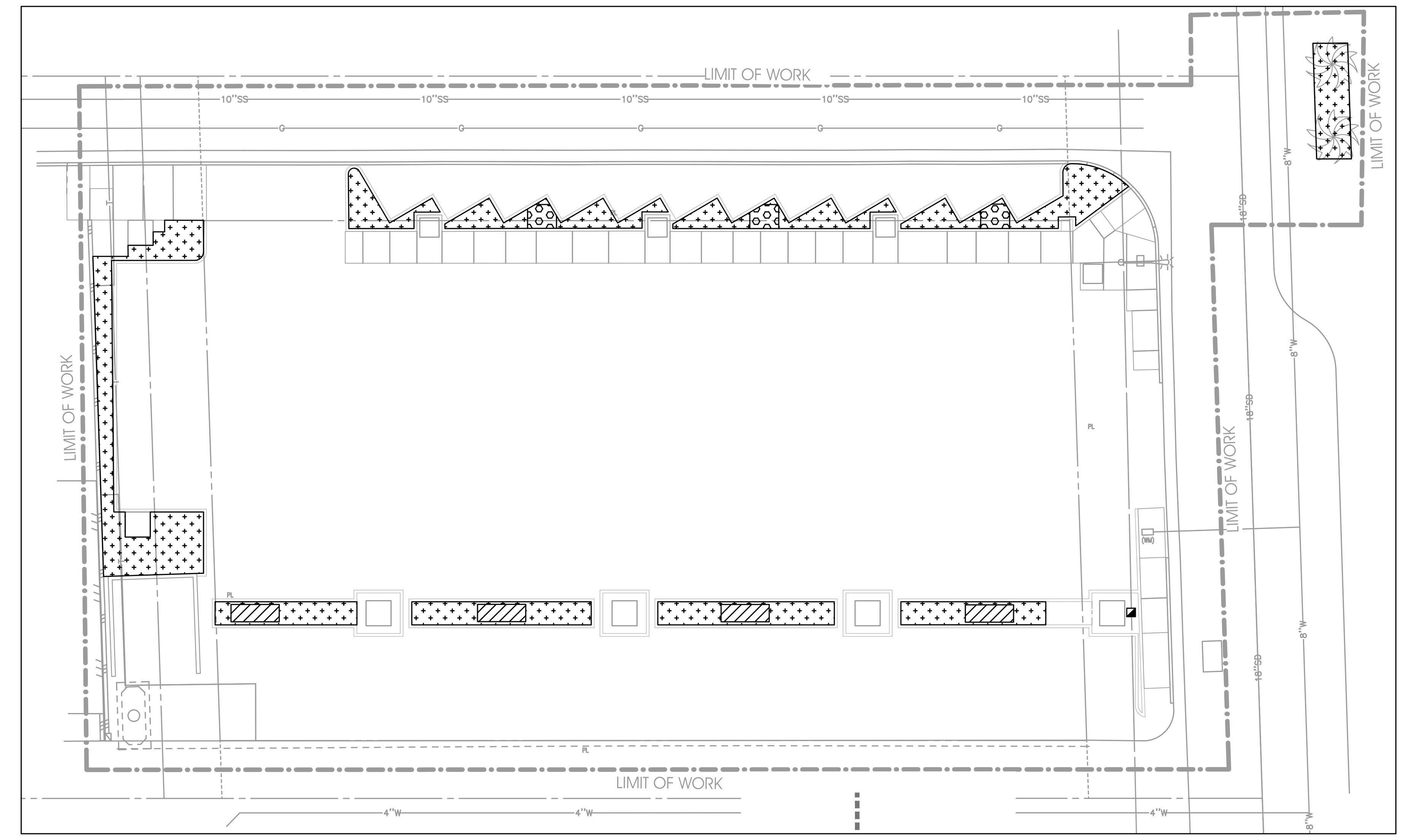
This irrigation watering schedule has been prepared as a part of landscape documentation package prior to construction.

Since an accurate agricultural soils analysis will not be performed until after site grading is done but prior to landscape installation, adjustments in watering time and cycle may be needed depending on the final site conditions and soil type.

LANDSCAPE WATER CONSERVATION STATEMENT

Water conservation is achieved in this landscape construction document as described below.

1. All plant materials selected for this site were appropriate for the geographical location and local climate, their adaptability to drought. Data from WULCOLS IV has been used for determining species' plant factor for the water use calculations.
2. Plants with similar water use requirements were grouped together.
3. 95% of landscape areas are planted with low water use plants, the balance with moderate use plants. No high water use plants are used.
4. Irrigation sections/hydrozones are separated by considering plant species factor, plant density and microclimate. If low water use plants are mixed with moderate water use plants in the same hydrozone, the moderate water use factor is used for water use calculations. See Hydrozone exhibit and table.
5. The irrigation system utilizes low-volume distribution system with a master valve, flow sensor, check valves, ET based automatic controllers with Cycle+Soak and water budgeting capability, weather station, rain shut-off.
6. All tree, shrub and groundcover areas will be dressed with 3" layer of mulch moisture retention and to discourage weeds.
7. Planting and irrigation plans comply with the standards set forth in local municipal code and water consevation ordinance.
8. The use of turf is eliminated.



HYDROZONE MAP

LEGEND

Hydrozone	Key	Water Use	Exposure	Irrigation Type
HZ-1	(hatched)	Low	Sun	Root Watering System
HZ-2	(circles)	Moderate	Sun	Bubblers
HZ-3	(crosses)	Low	Sun	Low Volume Spray (Rainbird SQ)

Imperial TECHNICAL SERVICES

Solar System 4: I.T.S. 2,000 Watt Hour Solar Power System

Model Number: SOLAR-SYSTEM4

DESCRIPTION:

This solar power system has been designed to help with situations where permanent electrical power has yet to be provided on the job site and a temporary power solution is needed.

This Imperial Solar Assembly is built with the highest quality standards using the best components to provide a cost effective solution to the long standing problem of getting temporary power to the job site.

The all-aluminum box provides a hasp for padlock lock-up and dual handles that can be used to chain/cable the box down for anti-theft protection.

FEATURES:

- 200 Watt Solar Panel and Mounting Bracket *
- 200 Watt Panel = 58" x 26"
- 160 Amp Hour LiFeP04 Type Battery
- Padlock Hasp on Box
- Weather Resistant 120VAC Lockable Outlet Box on Back for Easy Hookup
- Vented Box with Vent Pads for Airflow
- 3 Year Limited Warranty (excludes Battery)

* = *Excludes the 3" Galvanized Pole*

Imperial Technical Services 1480 N. Hancock St, Anaheim, CA 92807 (714) 696-7526 Fax (714) 696-7545
Imperial Technical Services 6630 Patterson Road, Livermore, CA 94550 (925) 667-2190 Fax (925) 667-2197

SOLAR SYSTEM 4—2022

0' 10' 20' 40' 60'
SCALE: 1"=20'

NORTH

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

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SUPPLEMENTAL NOTES:

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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.

REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN 4147 — Signature July 31, 2025 Exp. Date March 10, 2025 Date — STATE OF CALIFORNIA

conceptual design + planning company
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Costa Mesa, CA 92626
T: 949.399.0870
www.cdpcinc.com
COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY | DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

IRRIGATION CALCULATIONS & NOTES

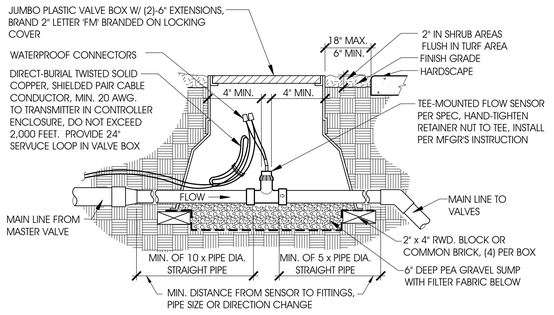
RECOMMENDED BY: JEFF FIJALKA, PE — PROJECT MANAGER — DATE

RECOMMENDED BY: KATHERINE DOHERTY — CITY ENGINEER — DATE

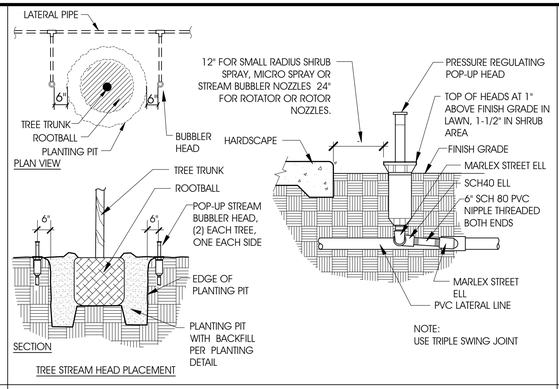
DRAWN BY: VYVY HA — DATE

CHECKED BY: VINCENT ROJAS — PROJECT MANAGER — DATE

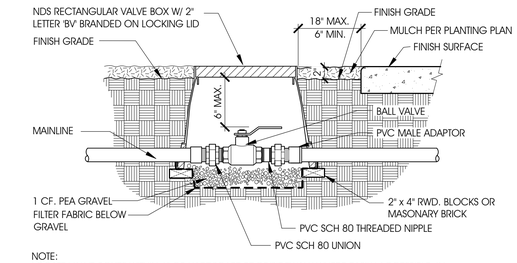
SCALE: PER PLAN | DATE: 03–10–25 | DRAWING NO. LS–2



FLOW SENSOR/METER

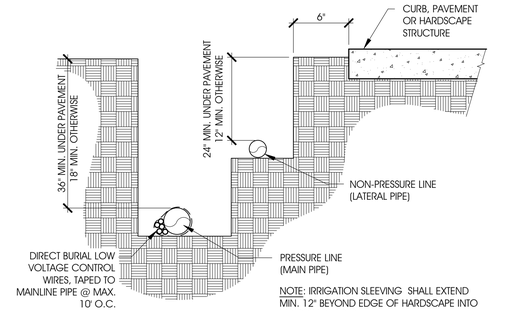


POP-UP SPRAY HEAD



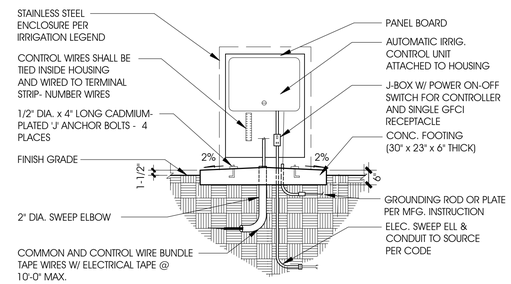
NOTE:
LOCATE VALVE BOXES WITHIN 6" OF HARDSCAPE EDGE/SIDEWALK WHERE EASILY ACCESSIBLE, IN SHRUB/GROUNDCOVER PLANTING AREA WHERE POSSIBLE.

BALL VALVE



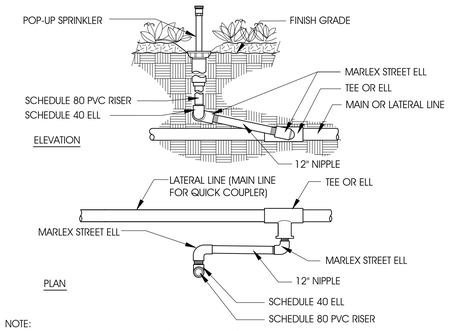
NOTE: IRRIGATION SLEEVING SHALL EXTEND MIN. 12" BEYOND EDGE OF HARDSCAPE INTO LANDSCAPE AREA

TRENCHING



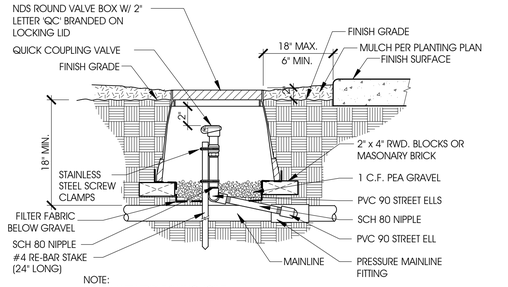
NOTE:
MOUNT WEATHER SENSOR ON TOP OF 10' POLE. VERIFY FINAL LOCATION IN FIELD. LOCATION TO BE OPEN TO WEATHER, WITHOUT OVERHEAD OBSTRUCTIONS.

PEDESTAL-MOUNT CONTROLLER



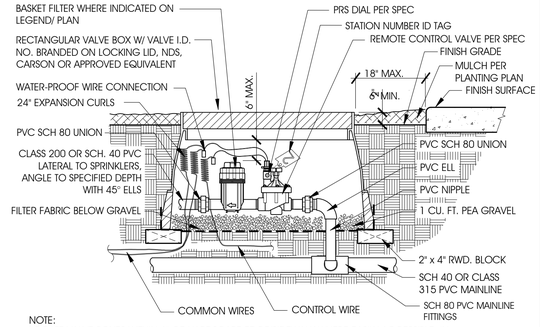
NOTE:
TRIPLE SWING JOINT WITH SPRAY HEADS AND QUICK COUPLER.
ALL PIPE AND FITTINGS SHALL BE SCH. 80 PVC UNLESS OTHERWISE SPECIFIED.

TRIPLE SWING JOINT



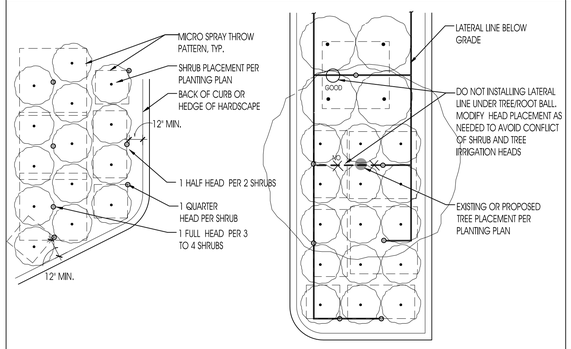
NOTE:
INSTALL WITH TRIPLE SWING JOINT.
INSTALL VALVE BOXES WITHIN 6" OF HARDSCAPE EDGE/SIDEWALK IN SHRUB / GROUND COVER PLANTING AREA WHERE EASILY ACCESSIBLE.

QUICK COUPLER VALVE



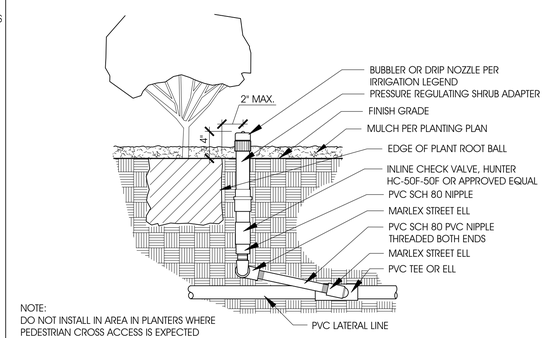
NOTE:
LOCATE VALVE BOXES WITHIN 6" OF HARDSCAPE EDGE/SIDEWALK WHERE EASILY ACCESSIBLE, IN SHRUB/GROUNDCOVER PLANTING AREA WHERE POSSIBLE.

REMOTE CONTROL VALVE



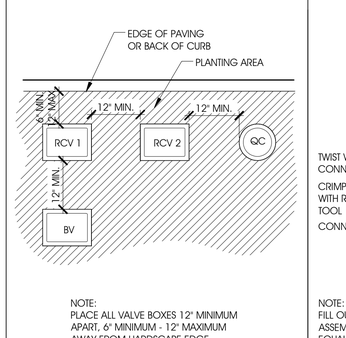
NOTE:
MICRO SPRAY IS INTENDED TO IRRIGATE ROOT ZONE RATHER THAN SPRAYING OVER TOPS OF PLANTS.
TYPICAL HEAD PLACEMENT (EXCEPTION MAY APPLY):
(1) QUARTER HEAD PER (1) PLANT
(1) HALF HEAD PER (2) PLANTS
(1) FULL HEAD PER 3 TO 4 PLANTS
COORDINATE PLANTING LAYOUT AND HEAD PLACEMENT TO ELIMINATE BACK-SPRAYING BLOCKED BY PLANTS ONTO HARDSCAPE SURFACES
INSTALL HEADS AT MINIMUM OF 12" AWAY FROM EDGE OR PAVING OR BACK OF CURB. ADJUSTMENTS WILL BE REQUIRED TO ELIMINATE OVER-SPRAY ONTO HARDSCAPE.

TYPICAL 2.5' SQUARE PATTERN MICRO SPRAY LAYOUT



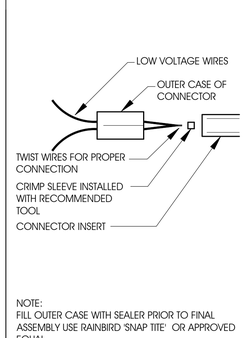
NOTE:
DO NOT INSTALL IN AREA IN PLANTERS WHERE PEDESTRIAN CROSS ACCESS IS EXPECTED
ALL PIPE AND FITTINGS SHALL BE SCH. 80 PVC UNLESS OTHERWISE SPECIFIED. USE PVC STREET ELLS W/ TEFLON TAPE FOR ALL PUBLIC PROJECT WORK.

DRIP EMITTER / BUBBLER ON RISER



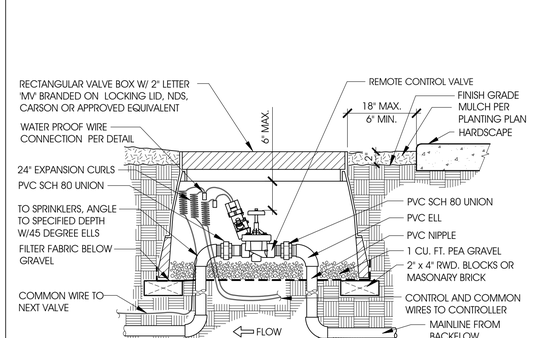
NOTE:
PLACE ALL VALVE BOXES 12" MINIMUM APART, 6" MINIMUM - 12" MAXIMUM AWAY FROM HARDSCAPE EDGE

VALVE BOX PLACEMENT



NOTE:
FILL OUTER CASE WITH SEALER PRIOR TO FINAL ASSEMBLY USE RAINBIRD 'SNAP TITE' OR APPROVED EQUAL

WIRE CONNECTION



NOTE:
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MASTER VALVE

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

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REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN — Signature — 31, 2025 — Exp. Date — March 10, 2025 — Date — STATE OF CALIFORNIA

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REVIEWED BY	DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

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IRRIGATION DETAILS

RECOMMENDED BY
JEFF FIJALKA, PE
PROJECT MANAGER — DATE

RECOMMENDED BY
KATHERINE DOHERTY
CITY ENGINEER — DATE

DRAWN BY
VYVY HA — DATE

CHECKED BY
VINCENT ROJAS
PROJECT MANAGER — DATE

SCALE	DATE	DRAWING NO.
PER PLAN	03-10-25	LS-3

SHEET 17 OF 22

PLANTING LEGEND

TREES

(SUNSET ZONE 24)

Symbol	Key	Botanical Name	Common Name	Size	WUCOLS Region
	A	Geijera parvifolia	Australian Willow	24" BOX	Low
	B	Metrosideros excelsa	New Zealand Christmas tree	24" BOX	Mod
		EXISTING PALM			

SOIL SAMPLE LOCATION, (2) LOCATIONS TOTAL
REFER TO PLANTING NOTES #11

SHRUBS

Sym.	Key	Botanical Name	Common Name	Size	WUCOLS (Region 3)
	AS	Agave 'Sharkskin'	Sharkskin Agave	5 gallon	Low
	CJ	Callistemon viminalis 'Little John'	Dwarf Bottlebrush	5 gallon	Low
	DO	Dodonaea viscosa 'Purpurea'	Purple Hopseed Bush	5 gallon	Low
	EC	Echeveria 'Curly Locks'	Curly Locks	1 gallon	Low
	FS	Festuca 'Mairei'	Atlas Fescue	1 gallon	Low

GROUND COVERS

Kalanchoe luciae	Paddle Plant	1 gal. @ 18" o.c.	Low

SIZING LEGEND

GRAPHIC SYMBOLS TAKE PRECEDENCE OVER WRITTEN QUANTITIES AND KEYS ON PLAN.

INDICATES QUANTITY
INDICATES SPECIES
24" BOX
1 GALLON
5 GALLON

STANDARD FORM TREES SHALL MEET MINIMUM D.B.H. (DIAMETER AT BREAST HEIGHT) SIZE AS FOLLOWS:
24" BOX : 1-1/2" TO 2"

HARDSCAPE LEGEND

1 DECORATIVE ROCK
MINER'S GOLD CRUSHED ROCK
SIZE: 3"-4"
INSTALL 3" LAYER OVER WEED FABRIC
COLOR: GOLDEN BROWN
AVAILABLE THROUGH: SOUTHWEST BOULDER
CONTACT: (760) 685-0202
CONTRACTOR TO SUBMIT A PHYSICAL SAMPLE AS WELL AS A WRITTEN SPECIFICATION FOR APPROVAL PRIOR TO CONSTRUCTION

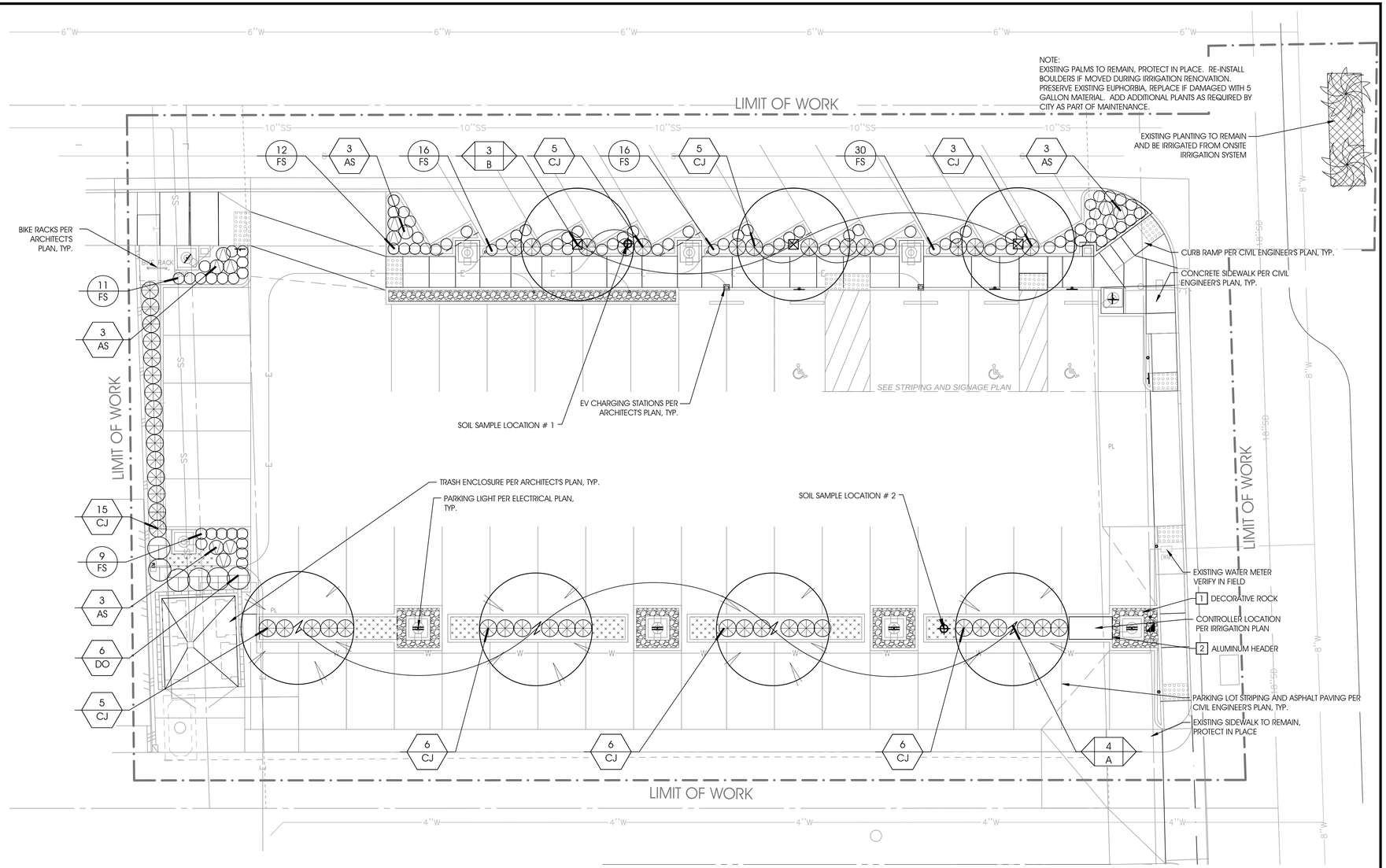
2 ALUMINUM HEADER
CLEANLINE XL ALUMINUM EDGING INSTALL PER MANUFACTURER'S DETAIL
SIZE: 3/16" X 6"
AVAILABLE THROUGH: PERMALOC
CONTACT: (616) 399-9600

SHEET #

LS-5

SOILS REPORT

SOIL TESTING SHALL OCCUR AFTER ROUGH GRADING AND SOIL IMPORT (IF REQUIRED) HAS BEEN COMPLETED, BUT PRIOR TO START OF ANY LANDSCAPE RELATED WORK. THE CONTRACTOR SHALL OBTAIN A STANDARD SOILS TEST FOR AGRICULTURAL SUITABILITY AND FERTILITY PREPARED BY AN APPROVED AGRICULTURAL TESTING LABORATORY. REPORT SHALL CONTAIN STANDARD SOIL TESTING DATA AND SHALL ALSO INCLUDE SOIL INFILTRATION RATE, SOIL TEXTURE AND PERCENTAGE OF ORGANIC MATERIAL CONTENT FOR EACH SAMPLE, AND RECOMMENDATIONS FOR SOIL PREPARATION AND BACKFILL MIX. THIS REPORT SHALL BE FURNISHED TO THE OWNER AND OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO IMPLEMENTATION. TWO SAMPLES SHALL BE TAKEN AT EACH LOCATION INDICATED ON THE PLANTING PLAN, ONE AT GROUND LEVEL TO 10" DEEP, THE OTHER AT 24" TO 36" DEEP. EACH SAMPLE SHALL CONTAIN APPROXIMATELY ONE QUART OF SOIL AND BE LABELED BY LOCATION AND DEPTH.



PLANT MATERIAL APPROVAL /LANDSCAPE SUPPLY SUBMITTAL

AFTER OBTAINING APPROVAL OF THE AGRICULTURAL SUITABILITY REPORT, AND A MINIMUM OF TWO WEEKS PRIOR TO PLANTING, THE CONTRACTOR SHALL SUBMIT TO THE OWNER / OWNER'S REPRESENTATIVE PLANT MATERIAL PHOTOS FOR APPROVAL. IF REQUESTED BY THE OWNER, THE LANDSCAPE ARCHITECT WILL TAG THE TREE MATERIAL.

ONE PHOTOGRAPH OF EACH SPECIES SPECIFIED ON PLAN SHALL BE PROVIDED FOR REVIEW AND APPROVAL. SUBMIT PRINTED PHOTO SUBMITTAL, OR DIGITAL PHOTOS BOUND TO ONE PDF FILE OF REASONABLE FILE SIZE, LESS THAN 5 MB, WILL BE ACCEPTED.

NO PARTIAL OR INCOMPLETE SUBMITTAL WILL BE ACCEPTED FOR REVIEW. ANY REJECTED SPECIES SHALL BE SUBJECT TO RESUBMITTAL.

EACH PHOTO SHALL CLEARLY SHOW FORM OF THE CROWN AND BRANCHING STRUCTURE OF A SINGLE PLANT WITHOUT OTHER TREES IN THE BACKGROUND.
EACH PHOTO SHALL BE LABELED WITH PLANT NAME, CONTAINER SIZE, SPECIFICATIONS (HEIGHT x CROWN, D.B.H. FOR TREES).

TREE PHOTO SHALL HAVE A MEASURING POLE OR A PERSON IN THE PHOTO FOR RELATIVE SCALE.

PLANTS DELIVERED TO THE PROJECT SITE WILL BE COMPARED TO THE APPROVED SUBMITTALS. IF THE PLANTS DELIVERED ARE FOUND TO BE SUBSTANDARD, THEY MAY BE REJECTED AT ANY TIME PRIOR TO FINAL ACCEPTANCE.

SUBMIT CUT SHEETS OF ALL LANDSCAPE SUPPLIES THAT WILL BE USED FOR LANDSCAPE INSTALLATION PRIOR TO INSTALLATION.

LANDSCAPE AREA TABULATION		
GROSS SITE AREA	19,000	S.F.
MIN. LANDSCAPE REQUIRED	5	%
TOTAL LANDSCAPE AREA	1,328	S.F. (6.99 %)
PLANTING AREA	1,328	S.F.
TURF AREA	0	S.F.

0' 5' 10' 20' 30'
SCALE:1"=10'
NORTH

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REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN #4787 — Signature — July 31, 2025 — Exp. Date — STATE OF CALIFORNIA

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REVIEWED BY	DATE

REFERENCES

REVISIONS			
NO.	DESCRIPTION	BY	DATE

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

TREE AND SHRUB PLANTING PLAN

RECOMMENDED BY
JEFF FIJALKA, PE
PROJECT MANAGER — DATE

RECOMMENDED BY
KATHERINE DOHERTY
CITY ENGINEER — DATE

DRAWN BY
VYVY HA — DATE

CHECKED BY
VINCENT ROJAS
PROJECT MANAGER — DATE

SCALE	DATE	DRAWING NO.
PER PLAN	03-10-25	LS-4

SHEET 18 OF 22

PLANTING NOTES

1. EXISTING UTILITIES: INFORMATION ON THE DRAWINGS RELATING TO ALIGNMENT OF EXISTING UTILITY LINES AND SERVICES WAS PROVIDED BY OTHERS AND IS FROM THE BEST SOURCE AVAILABLE. ALL SUCH INFORMATION IS FURNISHED ONLY FOR INFORMATION AND IS NOT GUARANTEED. THE CONTRACTOR SHALL EXCAVATE TEST PITS AS REQUIRED TO DETERMINE EXACT LOCATIONS OF ALL EXISTING UTILITIES. CALL UTILITY LOCATING SERVICE AND OBTAIN PRECISE UTILITY LOCATIONS MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. UNDERGROUND SERVICE ALERT (800)227-2600.

2. UTILITY REQUIREMENTS: THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AT LEAST 48 HOURS IN ADVANCE OF EXCAVATING AROUND ANY OF THEIR STRUCTURES. THE UTILITY COMPANIES LISTED BELOW SHALL BE CONTACTED:
   - CITY/COUNTY PUBLIC WORKS/ ENGINEERING DEPARTMENT
   - GAS COMPANY
   - TELEPHONE COMPANY
   - ELECTRICAL POWER COMPANY
   - CABLE TELEVISION COMPANY
   - WATER SUPPLY COMPANY

   THE CALIFORNIA PUBLIC UTILITIES COMMISSION MANDATES THAT, IN THE INTEREST OF PUBLIC SAFETY, MAIN LINE GAS VALVES BE MAINTAINED IN A MANNER TO BE READILY ACCESSIBLE AND IN GOOD OPERATING CONDITION. THE CONTRACTOR SHALL NOTIFY THE GAS COMPANY'S HEADQUARTERS PLANNING OFFICE AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.

4. DO NOT WILLFULLY PROCEED WITH PLANTING AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES AND/OR AREA DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ANY SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH LANDSCAPE INSTALLATION OPERATIONS.

6. CONTRACTOR SHALL NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO SCHEDULE A PRE-CONSTRUCTION MEETING AND COORDINATE PROJECT REVIEWS.

7. SEE SPECIFICATIONS FOR PLANTING REQUIREMENTS, MATERIALS AND EXECUTION. SEE DETAILS AND SPECIFICATIONS FOR STAKING METHOD, PLANT PIT DIMENSIONS AND BACKFILL REQUIREMENTS.

8. CONTRACTOR TO PROVIDE A MINIMUM OF 2% POSITIVE DRAINAGE IN ALL PLANTING AREAS. IN NO CASE SHALL WATER DRAIN TOWARDS BUILDINGS.

9. LANDSCAPE CONTRACTOR TO RECEIVE SITE GRADED TO +/-0.10 FOOT. CONTRACTOR SHALL OBTAIN LETTER OF GRADE CERTIFICATION FROM OWNER PRIOR TO PROJECT EXECUTION.

10. WEED AND EXISTING GRASS CONTROL: WEED AND GRASS TYPES SHOULD BE IDENTIFIED BY AN APPROVED LICENSED PEST CONTROL ADVISOR TO ENSURE COMPATIBILITY WITH CHEMICALS AND SEASON OF THE APPLICATION. DO NOT USE CHEMICAL/METHOD THAT WOULD ADVERSELY EFFECT NEW PLANTINGS. REMOVE EXISTING PERENNIAL WEEDS FROM SITE BY MOWING AND GRUBBING. FOLLOWING SOIL PREPARATION AND INSTALLATION OF ALL SPECIMEN TREES, PERFORM WEED ABATEMENT PROCEDURE AS FOLLOWS:
    a. APPLY 100 LBS. 46-0-0 COMMERCIAL FERTILIZER PER ACRE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
    b. WATER FOUR TIMES DAILY FOR 14 CONSECUTIVE DAYS TO PROMOTE EXISTING WEED/SEED GERMINATION.
    c. CEASE WATERING FOR THREE DAYS.
    d. SPRAY AREA WITH A NON-SELECTIVE/NON-RESIDUAL SYSTEMIC HERBICIDE TO ERADICATE GERMINATED WEEDS.
    e. LET WEEDS DIE FOR A PERIOD OF SEVEN DAYS MINIMUM WITHOUT IRRIGATION.
    f. REMOVE ALL WEEDS FROM SITE BY HOEING AND RAKING TO A MINIMUM DEPTH OF 1/2" BELOW SOIL SURFACE.
    g. IF WEEDS PERSIST, THE ABOVE ERADICATION PROCEDURE SHALL BE REPEATED.

11. SOIL TESTING: THE CONTRACTOR SHALL OBTAIN A SOILS TEST FOR AGRICULTURAL SUITABILITY AND FERTILITY PREPARED BY AN APPROVED AGRICULTURAL TESTING LABORATORY. SOIL TESTING SHALL OCCUR AFTER ALL SOIL HAS BEEN IMPORTED TO THE SITE AND ROUGH GRADE ESTABLISHED, BUT PRIOR TO SOIL PREPARATION. REPORT SHALL CONTAIN RECOMMENDATIONS FOR SOIL PREPARATION AND BACKFILL MIX. REPORT SHALL CONTAIN STANDARD SOIL TESTING DATA AND SHALL ALSO INCLUDE SOIL INFILTRATION RATE, SOIL TEXTURE, PH, TOTAL SOLUBLE SALTS, SODIUM AND % OF ORGANIC MATERIAL CONTENT FOR EACH SAMPLE, AND RECOMMENDATIONS FOR SOIL PREPARATION AND BACKFILL MIX.. THIS REPORT SHALL BE FURNISHED TO THE OWNER AND OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO IMPLEMENTATION. TWO (2) SAMPLES SHALL BE TAKEN AT EACH OF THE MINIMUM OF TWO (2) LOCATIONS. FROM ONE LOCATION, TAKE (1) SAMPLE AT 10" DEEP AND (1) SAMPLE FROM 24" TO 36" DEEP. EACH SAMPLE SHALL CONTAIN APPROXIMATELY ONE QUART OF SOIL AND BE LABELED PER LOCATION AND DEPTH, AND TESTED SEPARATELY. SEE PLANTING PLAN FOR SAMPLE LOCATIONS.

12. SOIL PREPARATION: FOR BID PURPOSES, ASSUME THE ROTOTILLING OF THE FOLLOWING AMENDMENTS INTO THE SOIL AT RATES INDICATED PER 1,000 SQUARE FEET:
    - 5 C.Y. NITROGEN STABILIZED REDWOOD SHAVINGS
    - 150 LBS. GYPSUM
    - 125 LBS. GRO POWER PLUS

13. BACKFILL: FOR BID PURPOSES, FOLLOW THE PLANTING SPECIFICATIONS SECTION VIII, H.

14. ABOVE SOIL PREPARATION AND BACKFILL SPECIFICATIONS ARE FOR BIDDING PURPOSE ONLY. CONTRACTOR TO AMEND SOIL AND PREPARE BACKFILL IN ACCORDANCE WITH APPROVED SOIL FERTILITY ANALYSIS RECOMMENDATIONS.

15. UNDER NO CIRCUMSTANCES, CONCRETE AND OTHER DEBRIS MAY BE CRUSHED AND REUSED AS FILL IN PLANTING AREA. SHOULD IMPORT SOIL BE NECESSARY, INDICATE SOURCE LOCATION. SOIL SHALL BE SANDY LOAM CONTAINING NO TOXIC CHEMICALS. SUBMIT AGRICULTURAL SUITABILITY AND FERTILITY TESTING FOR THIS IMPORT TO OWNER'S REPRESENTATIVE FOR APPROVED PRIOR TO SOIL IMPORTATION. TEST REPORT SHALL INCLUDE SOIL AMENDMENT RECOMMENDATIONS AND BE DONE BY AN APPROVED CALIFORNIA ASSOCIATION OF AGRICULTURAL LABORATORIES MEMBER.

16. AFTER AMENDING SOIL, BUT PRIOR TO PLANTING, CONTRACTOR SHALL PERFORM PERCOLATION TEST AT SELECTED LOCATION(S) SHOWN ON TREE PLANTING PLAN. NOTIFY LANDSCAPE ARCHITECT 48 HOURS PRIOR TO THE TEST. TEST AS FOLLOWS. CONTRACTOR SHALL RECORD THE RESULT AND SUBMIT TO LANDSCAPE ARCHITECT:
    - DIG 24" BOX-SIZE PIT AND SCARIFY THE SIDES; FILL WITH CLEAN WATER BY HOSE AT THE BOTTOM OF THE PIT AND LET IT DRAIN.
    - IMMEDIATELY AFTER IT DRAINS COMPLETELY, REFILL 12" DEEP WITH CLEAN WATER AND RECORD THE WATER LEVEL AS IT DRAINS.

    IF THE SECOND REFILLED WATER DRAINS 2 INCHES PER ONE HOUR OR FASTER, TREE MAY BE INSTALLED WITHOUT DRAIN SUMP. IF THE WATER DRAINS SLOWER, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND INSTALL THE DRAIN SUMP PER DETAILS.

17. CONTRACTOR'S INITIAL BID SHALL INCLUDE DRAIN SUMP WITH COST ITEMIZED. IF THE TEST PROVES THAT IT IS NOT NECESSARY, SUPPLY CREDIT TO THE OWNER.

18. ALL SHRUB/GROUNDCOVER AREAS SHALL BE TOP DRESSED WITH A 3" DEEP LAYER OF SHREDDED, COMPOSTED WOOD FIBER MULCH 'FOREST FLOOR' (1/2" TO1-1/2" PIECES) BY AGUINAGA FERTILIZER COMPANY (949)786-9558 OR APPROVED EQUAL.

19. CONCRETE MOWSTRIP, REDWOOD HEADERBOARD OR STEEL EDGING SHALL BE INSTALLED PER DETAIL WHEREVER GROUNDCOVER AREAS MEET TURF AREAS AS INDICATED ON THE DRAWINGS.

20. PLANT MATERIAL APPROVAL: AFTER OBTAINING APPROVAL FOR AGRICULTURAL SOILS REPORT AND AMENDMENTS, AND TWO WEEKS PRIOR TO PLANTING, CONTRACTOR SHALL SUBMIT TO LANDSCAPE ARCHITECT ONE PRINTED COLOR PHOTOGRAPH OF EACH SPECIES AND SIZE PLANT MATERIAL SPECIFIED ON PLAN FOR APPROVAL. PHOTOGRAPHS SHALL INCLUDE A PERSON OF AVERAGE HEIGHT FOR SCALE PURPOSES. ALL PLANT MATERIAL SHALL BE OF QUALITY AS DETERMINED BY THE OWNER'S REPRESENTATIVE. IF REQUESTED BY OWNER, LANDSCAPE ARCHITECT WILL TAG THE TREE MATERIAL. MATERIAL FOUND UNSUITABLE FOR THE DESIGN OR SPECIFICATION INTENT WILL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

21. ALL PLANT MATERIAL OF A GIVEN SPECIES SHALL HAVE MATCHING FORM UNLESS OTHERWISE SPECIFIED. ALL BOXED TREES SHALL BE OF QUALITY AS DETERMINED BY THE OWNER'S REPRESENTATIVE.

22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIAL FREE FROM PESTS OR PLANT DISEASES. PRE-SELECTED OR 'TAGGED' MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED TO BE PEST AND DISEASE FREE PRIOR TO SHIPMENT. IT IS THE CONTRACTOR'S OBLIGATION TO PROVIDE ANY REQUIRED CERTIFICATIONS AND WARRANTY FOR ALL PLANT MATERIAL PER THE SPECIFICATIONS.

23. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.

24. CONTRACTOR SHALL VERIFY PLANT MATERIAL QUANTITIES ON THE PLAN. GRAPHIC SYMBOLS TAKE PRECEDENCE OVER WRITTEN QUANTITIES.

25. CONTRACTOR TO PROVIDE A MINIMUM OF 2% POSITIVE DRAINAGE IN ALL PLANTING AREAS. IN NO CASE SHALL WATER DRAIN TOWARDS BUILDINGS.

26. AT EDGES OF PLANTING AREAS, THE CENTER LINE OF THE LAST ROW OF SHRUBS AND/OR GROUNDCOVER SHALL BE LOCATED NO FARTHER FROM THE EDGE THAN ONE-HALF THE SPECIFIED ON-CENTER SPACING UNLESS OTHERWISE INDICATED ON PLANS. GROUNDCOVER SHALL BE TRIANGULARLY SPACED.

27. IN AREAS WITH EXISTING TURF OR GROUNDCOVER, CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF BARE SPOTS AND ALL SCARS DUE TO IRRIGATION INSTALLATION OR RE-GRADING, AND SHALL MATCH EXISTING PLANTING TO ACHIEVE A UNIFORM OVERALL APPEARANCE.

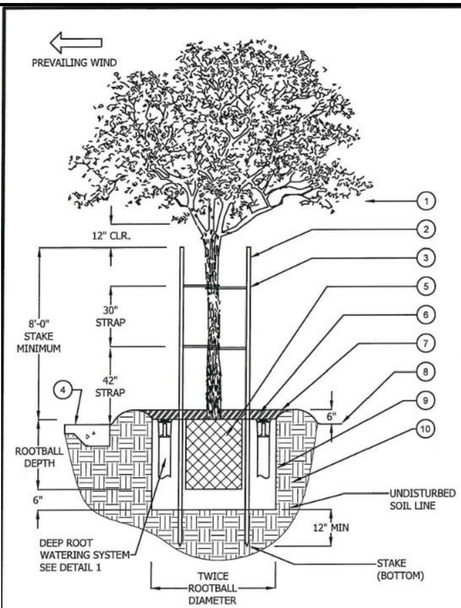
28. LOCATION OF EXISTING TREES ARE APPROXIMATE. IF DURING GRADING OPERATION, EXISTING GRADE CANNOT BE MAINTAINED WITHIN DRIPLINE OF TREES, CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION PRIOR TO GRADING.

29. CONTRACTOR SHALL OBTAIN COPY OF THE LATEST PARKING LOT STRIPING PLAN. TREES THAT ARE INTENDED TO BE PLACED IN LINE WITH PARKING STRIPES SHALL CORRESPOND WITH THIS PLAN. CONTACT OWNER'S REPRESENTATIVE IMMEDIATELY IF CONFLICTS OCCUR BETWEEN TREES AND LIGHT STANDARDS.

30. ANNUAL COLOR SHALL BE SELECTED BY OWNER'S REPRESENTATIVE AT TIME OF INSTALLATION.

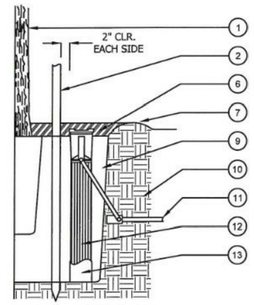
31. EXCAVATION AROUND EXISTING TREES TO BE PRESERVED: THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND TREE ROOTS. EXCAVATION SHALL BE DONE BY HAND WHERE ROOTS THAT ARE TWO (2) INCHES OR LARGER IN DIAMETER OCCUR. ALL ROOTS TWO (2) INCHES AND LARGER IN DIAMETER, EXCEPT DIRECTLY IN THE PATH OF PIPE OR CONDUIT, SHALL BE TUNNELED UNDER AND SHALL BE HEAVILY WRAPPED WITH WET BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING. WHERE A TRENCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAN TWO (2) INCHES IN DIAMETER, THE WALL OF THE TRENCH ADJACENT TO THE TREE SHALL BE HAND-TRIMMED, MAKING CLEAN-CUTS THROUGH, WITH EQUIPMENT THAT HAS BEEN CLEANED AND DISINFECTED PRIOR TO USE ONSITE ROOTS ONE (1) INCH AND LARGER IN DIAMETER SHALL BE PAINTED WITH TWO COATS OF TREE SEAL OR EQUAL. TRENCHES ADJACENT TO TREES SHALL BE CLOSED WITHIN TWENTY FOUR (24) HOURS; AND WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREE SHALL BE KEPT SHADED WITH BURLAP OR CANVAS AND KEPT DAMP.

32. PROTECTION OF EXISTING TREES: CONSTRUCT 4' HIGH CHAINLINK FENCE OR OTHER APPROVED PROTECTIVE FENCING AROUND THE TREE PER ARBORIST'S RECOMMENDATIONS. CONTACT OWNER'S REPRESENTATIVE FOR LOCATION OF THE FENCE IF NOT SHOWN ON THE PLAN. DO NOT ENTER, OR PLACE OBJECTS WITHIN FENCED AREA. PLACE 3" LAYER OF MULCH WITHIN THE FENCED AREA, BUT KEEP MULCH OFF TRUNK. POST AT LEAST THREE (3) LEGIBLE SIGNS ON THE FENCE STATING, DO NOT ENTER. NO DUMPING. DO NOT PLACE OBJECT INSIDE THE FENCE'. CONTRACTOR SHALL MAINTAIN FENCED AREA CLEAR OF OBJECTS AT ALL TIMES. WASH FOLIAGE ONCE A WEEK AFTER CONSTRUCTION ACTIVITY HAS STOPPED FOR THE DAY.



LEGEND

1. TREE(S) SHALL BE 24", 36" OR 48" BOX SIZE, STANDARD TREES, UNLESS SPECIFIED OTHERWISE
2. 2" DIA. X 12' LONG LODGE POLE PINE STAKES: (2) PER TREE W/ GREEN PRESERVATIVE STAIN. INSTALL 2" CLEAR OF ROOTBALL
3. (2) TWO JAIN MANUFACTURER (OR EQUIVALENT) VINYL FLEX TREE TIE STRAPS, MODEL: FSTT-50 WRAP TIGHTLY AROUND EACH LODGE POLE STAKE (IN OPPOSITE DIRECTIONS) AND SECURE
4. CONCRETE SIDEWALK
5. TREE ROOTBALL: 3" ABOVE GRADE, TAPER ROOTBALL TO GRADE
6. 4" LAYER TYPE-I BARK MULCH
7. 6" HIGH WATER RETENTION BASIN RING
8. SOIL FINISHED GRADE
9. BACKFILL WITH NATIVE SOIL
10. UNDISTURBED SITE SOIL
11. IRRIGATION WATER PIPE (3/4") DIAMETER MIN.
12. RAIN BIRD, TORO MFR. OR EQUIVALENT ROOT WATERING SYSTEM (RWS) WITH 18" TUBE BUBBLER HEAD, 0.50 GPM BUBBLER AND CHECK VALVE ON RISER ASSEMBLY. INSTALL 6" AWAY OF ROOT BALL. TWO (2) REQUIRED PER TREE.
13. ROOT WATERING SAND SOCK SHALL BE INSTALLED OVER THE RWS ASSEMBLY TO PREVENT SOIL INTRUSION.



DETAIL 1
ROOT WATERING SYSTEM

NOTES:

1. NO SHRUBS, SUCCULENTS, FRUIT TREES OR CACTUS SHALL BE CONSIDERED FOR PLANTING IN PUBLIC RIGHT OF WAY.
2. THE TREE(S) SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1 LATEST EDITION.
3. NO POLE STAKING ARE REQUIRED ON TREE(S) LARGER THAN 36" BOX SIZE.
4. INSTALL (2) TWO TREE STAKES WITH (2) TWO FLEX STRAPS PERPENDICULAR TO THE PREVAILING WIND.
5. PALMS WILL BE CONSIDERED ON A CASE BY CASE BASIS.

DATE REVISED
5/15/2019
2/05/2020

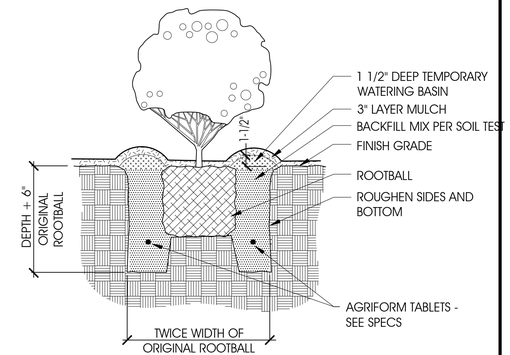
CITY OF MANHATTAN BEACH
DEPARTMENT OF PUBLIC WORKS

24", 36", AND 48" BOX TREE PLANTING AND STAKING DETAIL

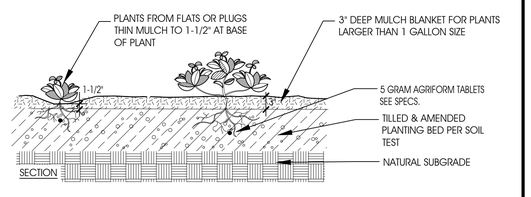
APPROVED BY: 2/5/20 (DATE)
PREM KUMAR, CITY ENGINEER

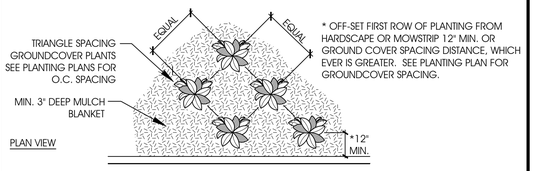
STANDARD PLAN NUMBER
MBLI-518A-1(ST-14)
SHEET 1 OF 1

CITY OF MANHATTAN STANDARD TREE STAKING AND ROOT WATERING SYSTEM



SHRUB PLANTING





GROUND COVER PLANTING

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN — Signature — My 31, 2025 Exp. Date — March 10, 2026 Date — STATE OF CALIFORNIA

conceptual design + planning company
1675 Scenic Drive, Suite 200
Costa Mesa, CA 92626
T: 949.399.0870
www.cdpcinc.com
COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY	DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

PLANTING DETAILS & NOTES

RECOMMENDED BY: JEFF FIJALKA, PE, PROJECT MANAGER — DATE
RECOMMENDED BY: KATHERINE DOHERTY, CITY ENGINEER — DATE
DRAWN BY: VYVY HA — DATE
CHECKED BY: VINCENT ROJAS, PROJECT MANAGER — DATE
SCALE: PER PLAN
DATE: 03-10-25
DRAWING NO.: LS-5
SHEET 19 OF 22

LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE:

LANDSCAPING SHALL BE MAINTAINED BY THE DEVELOPER, ITS TENANT(S) OR THEIR CONTRACT MAINTENANCE COMPANY. LANDSCAPE SHALL BE IN AN ORDERLY AND HEALTHY CONDITION AT ANY TIME. A SCHEDULE FOR ON-GOING MAINTENANCE SHALL BE AVAILABLE ON SITE. MAINTENANCE ITEMS INCLUDE BUT NOT LIMITED TO THE FOLLOWING;

IRRIGATION:

MAINTAIN AND OPERATE IRRIGATION SYSTEM ON THE PROPERTY WHICH DOES NOT EXCEED MAXIMUM ANNUAL WATER ALLOWANCE (MAWA) - 15,784 GALLONS PER YEAR.

MAINTAIN THE IRRIGATION SYSTEM TO MEET OR EXCEED AN IRRIGATION EFFICIENCY NECESSARY TO MEET MAWA.

INSPECT SYSTEM MONTHLY. REPLACE BROKEN OR MALFUNCTIONING IRRIGATION SYSTEM COMPONENTS WITH COMPONENTS EQUAL TO EXISTING COMPONENTS OR COMPONENTS WHICH MEET OR EXCEED AN IRRIGATION EFFICIENCY NECESSARY TO MEET CURRENT WATER CONSERVATION ORDINANCE.

INSPECT SPRAY THROW PATTERN MONTHLY. MAKE ADJUSTMENTS AND/OR REPAIR WHERE OVER SPRAY AND/OR WATER RUN-OFF OR OBSTRUCTION BY PLANT GROWTH ARE OBSERVED. PRUNING PLANTS OR PLACEMENT MODIFICATION MAY BE REQUIRED.

INSPECT ALL FILTER BASKETS AT VALVES SEMI-ANNUALLY AND CLEAN AS NEEDED. REMOVE EXCESS DEBRIS AND WATER IN ALL VALVE BOXES. INSPECT PROPER CONTROLLER WIRE CONNECTION.

REPLACEMENT OF IRRIGATION EQUIPMENT COMPONENT SHALL BE EQUAL TO ORIGINAL SPECIFICATION OR WITH COMPONENT WITH GREATER EFFICIENCY MET BY CURRENT WATER CONSERVATION ORDINANCE.

LANDSCAPE PLANTING

REMOVE LITTER AND WEEDS WEEKLY.

MULCH SEMI-ANNUALLY TO CITY REQUIRED DEPTH OF 3 INCHES.

REPLACE DEAD OR DAMAGED PLANTS IMMEDIATELY. THE REPLACEMENT PLANTING MATERIALS SHALL BE THE SAME MATERIAL AS PLANT BEING REPLACED SO THAT THE REPLACED VEGETATION DOES NOT RESULT IN MIXING HIGH OR MODERATE WATER USE PLANTS WITH LOW WATER USE PLANTS IN THE SAME HYDRO ZONE. IF THE SAME PLANT MATERIAL IS NO LONGER IN PRODUCTION, SIMILAR PLANTS OF THE SAME SIZE AND WATER USE (SAME HYDRO ZONE) AS THE PLANTS BEING REMOVED MAY BE USED UPON OWNER APPROVAL,

PROPERLY PRUNE TREES, SHRUBS AND GROUND COVER AS REQUIRED DEPENDING ON THE SPECIES AND PURPOSE. DO NOT TOP TREES. TREE PRUNING BY TREE MAINTENANCE COMPANY WITH ARBORIST ON STAFF IS HIGHLY RECOMMENDED.

FERTILIZE TREES, SHRUBS AND GROUND COVER AS RECOMMENDED PER SOILS MANAGEMENT RECOMMENDATION PER SOILS TEST.

IRRIGATION AUDIT REPORT

UPON COMPLETION OF IRRIGATION AND PLANTING INSTALLATION, A CERTIFICATE OF COMPLETION BY LICENSED LANDSCAPE ARCHITECT OR CONTRACTOR AND AN IRRIGATION AUDIT REPORT BY CERTIFIED IRRIGATION AUDITOR MAY BE REQUIRED BY CITY OF MANHATTAN BEACH CONTRACTOR SHALL PROVIDE LANDSCAPE IRRIGATION AUDIT REPORT CONDUCTED BY CERTIFIED IRRIGATION AUDITOR.
PROPERTY OWNER MAY BE REQUIRED TO SUBMIT AUDIT REPORT TO CITY OF MANHATTAN BEACH PERIODICALLY.

SOILS REPORT

SOIL TESTING SHALL OCCUR AFTER ROUGH GRADING AND SOIL IMPORT (IF REQUIRED) HAS BEEN COMPLETED, BUT PRIOR TO START OF ANY LANDSCAPE RELATED WORK. THE CONTRACTOR SHALL OBTAIN A STANDARD SOILS TEST FOR AGRICULTURAL SUITABILITY AND FERTILITY PREPARED BY AN APPROVED AGRICULTURAL TESTING LABORATORY. REPORT SHALL CONTAIN STANDARD SOIL TESTING DATA AND SHALL ALSO INCLUDE SOIL INFILTRATION RATE, SOIL TEXTURE, PH, TOTAL SOLUBLE SALTS, SODIUM AND % OF ORGANIC MATERIAL CONTENT FOR EACH SAMPLE, AND RECOMMENDATIONS FOR SOIL PREPARATION AND BACKFILL MIX. THIS REPORT SHALL BE FURNISHED TO THE OWNER AND OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO IMPLEMENTATION. TWO SAMPLES SHALL BE TAKEN AT EACH LOCATION INDICATED ON THE PLANTING PLAN; ONE AT GROUND LEVEL TO 10" DEEP, THE OTHER AT 24" TO 36" DEEP. EACH SAMPLE SHALL CONTAIN APPROXIMATELY ONE QUART OF SOIL AND BE LABELED BY LOCATION AND DEPTH TO BE SENT TO THE LAB.

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HOLLAND, MI 49424
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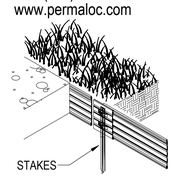
FAX: (616) 399-9770
www.permaloc.com

☑ SELECT DESIRED SIZE:

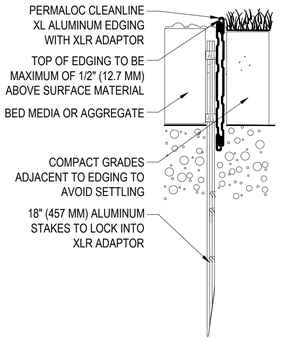
- ☐ 3/16" X 5" (3.2 MM X 127 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 6" (3.2 MM X 152.4 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 8" (3.2 MM X 203 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP
- ☐ 3/16" X 12" (3.2 MM X 305 MM), 0.116" (2.95 MM) THICK WITH 0.25" (6.35 MM) EXPOSED TOP LIP

☑ SELECT DESIRED FINISH:

- ☐ MF - MILL FINISH-NATURAL ALUMINUM
- ☐ BL - BLACK DURAFLEX-MEETS AAMA 2603
- ☐ GR - GREEN DURAFLEX-MEETS AAMA 2603
- ☐ BR - BRONZE DURAFLEX-MEETS AAMA 2603



ISOMETRIC VIEW



SIDE VIEW

NOTES:
1. 8'-0" (2.44 M) SECTIONS TO INCLUDE (3) 18" (457 MM) ALUMINUM STAKES AND (3) XLR ADAPTORS.
2. 16'-0" (4.88 M) SECTIONS TO INCLUDE (5) 18" (457 MM) ALUMINUM STAKES AND (3) XLR ADAPTORS.
3. CORNERS - CUT BASE EDGING UP HALFWAY AND FORM A CONTINUOUS CORNER.
4. PERMALOC CLEANLINE XL AS MANUFACTURED BY PERMALOC CORPORATION.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 25011-

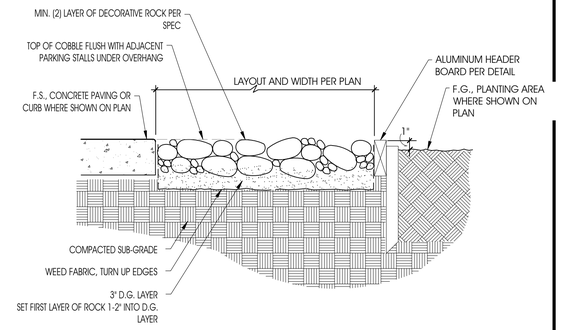
CLEAN LINE XL COMMERCIAL GRADE LANDSCAPE EDGING

PLANTING BED EDGING - STONE AND TURF

25011- REVISION DATE 10/03/2025

 CADdetails.com

ALUMINUM HEADER



DECORATIVE COBBLE ON D.G.

SCALE 1-1/2" = 1'-0" (8)

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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.

REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN — STATE OF CALIFORNIA
Signature
July 31, 2025
Exp. Date
March 10, 2026
Date

conceptual design + planning company
1675 Scenic Drive, Suite 200
Costa Mesa, CA 92626
T: 949.399.0870
www.cdpcinc.com
COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY	DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

PLANTING DETAILS & NOTES

RECOMMENDED BY: JEFF FIJALKA, PE, PROJECT MANAGER — DATE
RECOMMENDED BY: KATHERINE DOHERTY, CITY ENGINEER — DATE
DRAWN BY: VYVY HA — DATE
CHECKED BY: VINCENT ROJAS, PROJECT MANAGER — DATE
SCALE: PER PLAN
DATE: 03-10-25
DRAWING NO.: LS-6
SHEET 20 OF 22

GENERAL CONDITIONS

A. CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

B. VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his work, he shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his failure to observe these instructions.

C. MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his work.

D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.

E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his actions.

F. CHANGES IN THE WORK: The Owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.

G. CORRECTION OF WORK: The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.

H. LANDSCAPE COORDINATOR STATUS: The Landscape Coordinator acts as the authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.

I. CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.

J. SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.

K. PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

IRRIGATION SPECIFICATIONS

I. SCOPE OF WORK:

A. The Contractor shall provide all labor, tools, machinery, and processes necessary to install a complete irrigation system as shown on the drawings and/or specified herin. When completed the irrigation system shall be a 100% coverage system in total functioning manner.

II. GENERAL REQUIREMENTS:

A. VERIFICATION OF DIMENSIONS: All scaled dimensions are approximated. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions. Spacing of irrigation heads, locations of valves and backflow preventers, and proposed P.O.C. shall be as indicated on the drawings. Any deviation from the plans must have the approval of the Owner's Representative.

B. VERIFICATION OF FINISH GRADE: The Contractor shall inspect the site and check all finish grades within the work area to ensure the proper soil coverage (as specified) of the irrigation system pipes.

C. WATER SUPPLY: The Contractor shall verify and be familiar with the source of water supply to the irrigation system as indicated on the drawings.

D. PERMITS AND FEES: The Contractor shall apply and pay for all necessary permits required in the pursuit of his work as required by the governing codes.

E. CARE OF EXISTING BUILDINGS AND STEPS: The Contractor shall be held responsible for the care and preservation of all existing buildings and structures on the property and adjacent premises and contiguous property. Any part of these properties injured, damaged or disturbed because of his work shall be repaired, replaced or cleared by the Contractor at his expense.

F. REVIEW OF DRAWINGS: It is the Contractor's responsibility to review irrigation drawings and note any areas he believes additional heads or valves are required prior to submitting a bid. If no changes are submitted, the Contractor is responsible for full coverage of equipment as necessary at the Contractor's expense.

G. GOVERNING REGULATION: All local, municipal and state laws, rules and regulations governing or relating to any portion of this work and hereby incorporated into and made part of these specifications, and their provisions shall be carried out by the Irrigation Contractor.

H. DIAGRAMMATIC DESIGN: The design is diagrammatic. All pipe, valves, etc., shown within paved areas are for design clarifications only and shall be installed in planted areas where possible. Never install the backflow preventers in lawn area; always in shrub areas.

I. INSTALLATION: All irrigation materials shall be installed in accordance with the techniques and specifications set forth by each respective manufacturer. All pertinent descriptive literature issued by these manufacturers become a part of these specifications after having been approved by the authorized Owner's Representative. Such installation practices shall be followed only if the directions of the irrigation drawings and specifications do not thoroughly and completely order the methods or techniques to be followed. Install all equipment and materials as shown per details.

J. SITE PROBLEMS: The Irrigation Contractor shall not willfully install the irrigation system as indicated on the drawings when it is obvious in the field that there are unknown obstructions, grade differences, and/or discrepancies in the area dimensions until such conditions are brought to the attention of the Owner's Representative.

III. MATERIALS:

A. Irrigation materials and equipment shall be of type, size and location as noted and indicated on the drawings. Landscape Contractor shall be responsible for submittal to the Landscape Architect for approval prior to installation; (5) copies of printed or a bound PDF of cut-sheets (product information sheets) of each specified materials and equipment prior to installation. Materials and equipment shall be new and in perfect condition, no deviations from the specifications shall be allowed unless approved by the Landscape Architect. If material specified in this Construction Document is to be substituted, submit the product information at this time.

IV. INSTALLATION:

A. EXCAVATION

1. The Contractor shall verify locations of all existing subsurface utilities (mechanical and electrical) prior to excavation. Any utilities, A.C. paving, concrete work, plant material, etc., destroyed or damaged by any work under this contract shall be repaired or replaced at the Contractor's expense.

2. Trenches for pipe shall be cut to required grade line at a true gradient to provide uniform support for the length of the pipe.

3. Depth of trenches shall be sufficient to provide a minimum cover above the top of the pipe as noted on the drawings.

B. JOINING PIPE

1. The Contractor is responsible to be familiar with the methods of assembling, joining, and installing the various types of pipes to be used. He will adhere in strict accordance with the manufacturer's recommended procedures.

2. PVC pipe shall not be threaded and all transition from PVC to metal piping shall be by PVC male threaded adaptor fittings.

C. BACKFLOW PREVENTER: The backflow prevention device specified herein shall be verified with local plumbing and health codes. In the event of any conflict on the device or the installation methods, the Owner's Representative shall be notified PRIOR TO BID OPENING.

D. TESTS

1. All main lines and lateral lines which have glued joints under paving in the system shall be capped and pressure tested at 150 PSI.

2. Pressure shall be sustained in the lines for not less than four (4) hours. If leaks develop, the joints shall be replaced and the test repeated until the entire system is watertight.

3. Test shall be observed and approved by the Owner's Representative prior to backfill.

4. When the irrigation system has been completed (and before planting has begun), the Contractor, in the presence of the approved Owner's Representative, shall test the coverage of water afforded to the lawn and planting areas as complete and adequate. The Contractor shall furnish all materials and perform all work required to correct any inadequacies of coverage.

5. The Contractor shall inform the approved Owner's Representative of any deviations from the plan required by wind, plantings, soils, or site conditions that affect present irrigation coverage.

E. IRRIGATION HEAD INSTALLATION:

1. Shrub and ground cover spray heads adjacent to curbs or walks shall be installed 12" away from the curb or walk and the heads shall be pop-up models as indicated on the drawings.

2. Shrub spray heads adjacent to building, fences, or similar structures shall be installed 1" away from the structure and the nozzle shall be 6" minimum above finish grade. Shrub spray heads not near paving or structures shall be set 8" above finish grade.

3. All irrigation heads are to have triple swing joints as detailed.

4. Install all irrigation heads per details.

F. IRRIGATION HEAD ADJUSTMENTS:

1. The Irrigation Contractor shall flush and adjust all irrigation heads for optimum performance and to prevent overspray onto walks and buildings as much as possible. This shall include selecting the best degree of arc to fit existing site situations. This also includes using the appropriate radius reduction equipment.

G. CLOSING OF UNINSPECTED WORK:

1. The Contractor shall not allow or cause any of his work to be covered or enclosed until it has been inspected, tested and approved by the authorized Owner's Representative. Should any of his work be enclosed or covered before such inspection and test, he shall uncover the work at his own expense and after it has been inspected, tested, and approved, he shall make all repairs with like materials necessary to restore all his work and that of other Contractors to its original condition.

H. BACKFILLING:

1. Backfill shall not be placed until the installed irrigation system has been inspected and approved by the Owner's Representative.

2. Trenches shall be backfilled with a minimum of 4" of fine, granular materials to protect the pipe from the clods or rocks. The remaining excavated dirt can be used as backfill. The Contractor shall not place detrimental subsoil or rocks in the top 6" of backfill.

3. If settlement occurs and adjustments in pipe, valves, irrigation heads, or any other irrigation device becomes necessary to bring the system to proper working order, the Contractor shall, as a part of his work under this contract, make all the necessary adjustments without extra cost to the Owner.

I. AUTOMATIC CONTROLLER VALVES:

1. A 120 volt electrical power outlet to the controller shall be provided by others. (Provided the Landscape Contractor has not included the electrical connection in his scope of work). The Irrigation Contractor shall be responsible for making the hookup from the outlet to the controller.

2. All wire from the controller to electric control valves shall be solid copper U.F. #14-600 volt direct burial. Use white for common control wire, blue for lawn systems, black for shrub systems and red for moisture sensors wire. Install in common trench with main line pipe where possible. Tape control wire at 10' O.C. to main line pipe. Provide minimum 18" backfill cover, 36" under pavement.

3. Wire connections shall be made with "Scotch-Lok" wire connector sealing packs #3576 or Spears "Dri-splice" with sealant DS 300 or approved equal.

4. There shall be a control wire from each control valve running to the controller, and each control valve shall be connected to the common ground wire.

5. All electrical work shall comply with the applicable codes.

6. Install all valves per details, and manufacturer's recommendations.

J. MOISTURE SENSOR INSTALLATION (if applicable):

1. Installations and wiring are to be done by the Contractor in compliance with installation and operating instructions enclosed with the moisture sensor and included with these special instructions.

2. The Contractor shall furnish 2-AWG-UF #14 (or larger) wires from the controller to the moisture sensor control stations, locations shown on drawings. Provide additional 10' expansion lead to each station for finally locating of sensors. All sensors are to be wired in parallel (see wire color note above).

3. Ametek 6" extension boxes No. 10-170-003 covered by Ametek green cover No. WC-10-173-004, or approved equal, shall be installed as detailed.

4. All wiring connections at valve locations shall be water- proof.

5. One service unit will be purchased to properly prepare and service the moisture sensor. The service unit along with all printed operating instructions are to furnished to the Owner by the Contractor at final inspection.

6. Moisture Sensor operating and service instruction and operations manual is to be placed in the controller.

7. Special depth and placement information to augment Moisture Sensor Installation and Operation Instruction, is to be provided by the Specified Manufacturer.

8. Installation must be inspected and accepted by the Manufacturer's Representative.

V. DRAWINGS OF RECORD (AS-BUILTS):

A. GENERAL: The Contractor shall provide and keep up to date, in accordance with this section, a complete set of record "as-built" black line prints which shall be corrected daily and show every change from the original drawings and specifications and the exact "as-built" locations, sizes, depths and kinds of equipment. Prints for this purpose may be obtained from the Owner. This set of drawings shall be kept on the site and shall be used only as a record set. These drawings shall also serve as work progress sheets and the Contractor shall make neat and legible notations thereon daily, as the work proceeds, showing the work as actually installed. These drawings shall be available at the times for inspection and shall be kept in a location designated by the Owner's Representative.

B. REQUIRED NOTATIONS:

1. The Contractor shall indicate, in red, installed locations of the following items on plan and dimension from two (2) permanent reference points, such as building corners, back of curb, fire hydrant, etc. or road intersections.

   a. All valves: master, remote control, quick coupler, ball and gate valves)
   b. The routing of the irrigation mainlines
   c. Water meter and backflow device, connection to the existing water supply
   d. Controller and sensors (rain, moisture and flow sensors)
   e. Booster pump

2. The drawing shall show approved substitutions of sizes, materials, and manufacturer's name and catalog number.

C. DELIVERY OF DRAWINGS OF RECORD: On or before the date of final inspection, the Contractor shall deliver the corrected and complete field as-builts to the Owner's Representative. Delivery of these drawings will not relieve the Contractor of the responsibility of furnishing required information that may be omitted from the prints. Once the Owner's Representative has reviewed the field As-builts and contractor has made the required corrections, Contractor shall prepare final "As-built" drawings in a neat and professional manner. Submit to Owner's Representative / landscape Architect for approval prior to preparation of controller charts.

D. CONTROLLER CHARTS:

1. As-built drawings shall be received and approved by the Owner's Representative prior to preparing controller charts.

2. Provide one controller chart for each controller supplied.

3. The chart shall be drawn on a reduced drawing of the actual as-built system to fit to 11"x17" sheet format, using a different color to indicate the area of coverage for each station.

4 When the chart is completed and approved by the Owner's Representative, it shall be hermetically sealed and placed in the controller box.

VI. CLEAN UP:

A. SCOPE AND FREQUENCY: After installation operations have been completed, remove all trash, excess soil and rubbish from property. All scars, ruts, or other marks in the area caused by this work shall be repaired and the ground left in a neat and orderly condition throughout the site. The Contractor shall pick up all trash resulting from his work no less than each Friday before leaving the site, once a week and/or the last working day of each week. All trash shall be removed completely from the site.

VII. GUARANTEE:

A. SCOPE: The entire irrigation system shall be guaranteed by the Contractor as to materials and workmanship, including settling of backfill areas below grade for a period of one (1) year following the date of final acceptance of the work. If, within one (1) year from date of completion, settling occurs, and adjustments in pipes, valves, and irrigation heads, sod, irrigation devices, or paving is necessary to bring the system, sod or paving to the proper level of the permanent grades, the Contractor, as part of the work under this contract, shall make all adjustments without extra cost to the Owner, including the complete restoration of all damaged planting, paving or other improvements of any kind.

B. RESPONSIBILITY: Should any difficulties in connection with the operation of the irrigation system occur within the specified guarantee period--which is in the opinion of the Owner's Representative due to inferior material and/or workmanship --said difficulties shall be immediately corrected by the Contractor to the satisfaction of the Owner's Representative at no additional cost to the Owner, including any and all other damage caused by such defects.

C. INSTRUCTIONS: After the irrigation system has been completed and the connections made, the Contractor shall instruct the Owner, or his representative, in the operation and maintenance of the system.

PLANTING SPECIFICATIONS

I. SCOPE OF WORK:

A. Furnish all labor, materials and equipment necessary to provide and install plant materials as shown on the drawings or as specified herein.

B. Work included in this section (items included but not limited to):

1. Grade, including mounding, molding and shaping surface of all planting areas as indicated including the removal of existing vegetation unless otherwise specified.

2. Prepare and till soil in planting areas including furnishing of all amendments as specified. Note that amendments indicated on the drawings (unless otherwise specified) are for bid purposes only. Actual soil amendments will be based on the soils test results.

3. Furnish and plant all plant materials as indicated in the drawings and specifications.

4. Perform all pruning as required.

5. Stake and tie all plant materials as specified

6. Provide for the maintenance of the planting until acceptance of the job by the Owner's Representative

7. Dispose of all debris and surplus materials

8. Clean-up

9. Guarantee

10. Maintenance

II. VERIFICATION OF SITE CONDITIONS:

A. EXCAVATION: The Contractor shall verify exact locations of all existing sub-surface utilities (mechanical and electrical) prior to excavation. Any utilities, A.C. paving, concrete work, etc., destroyed or damaged by any work under this contract shall be repaired or replaced at the Contractor's expense.

B. SUB-SURFACE DRAINAGE OR SOIL CONDITIONS: Should sub-surface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of correction. If the Contractor fails to notify the Owner's Representative of such conditions, he shall be responsible for plant material under the guarantee clause of the specifications.

C. DIMENSIONS: All scaled dimensions are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

III.MATERIALS:

Landscape materials and equipment shall be of type, size and location as noted and indicated on the drawings. Landscape Contractor shall be responsible for submittal to the Landscape Architect for approval; (5) copies of printed or a bound PDF of all materials and equipment specified, and 1 quart bag of physical sample of mulch and soil amendment. Materials are to be new and in perfect condition, no deviations from the specifications shall be allowed unless approved by the Landscape Architect. If material specified in this Construction Document is to be substituted, submit the product information at this time.

A. SOIL AMENDMENTS:

1. Nitrogen stabilized wood shavings shall be 100% nitrogen stabilized (5% by dry weight) and free of shaving particles larger than 1/4" passing through a 100 mesh screen.

2. Soil sulfur shall be standard commercial grade.

3. Humus, "Gro-Power" 5-3-1 shall be manufactured by Southern California Organic Fertilizer Company, Glendale, CA (213) 245-6849 or (714) 750-3830.

4. Bone meal 2-22-0 shall be manufactured by Kellogg Supply, Wilmington, CA.

5 Azalea organic planter mix #103 shall be manufactured by Bandini Fertilizer.

6. Ph Acidall shall be manufactured by Kellogg Supply, Wilmington, CA.

7. Par - 5 shall be manufactured by Kaibab Forest Products.

8. Commercial fertilizer shall be Best Products or approved equal.

B. TOP SOIL

1. Topsoil consists of a fertile, friable natural loam of uniform quality, free from subsoil, stiff clay, hard clods, hard pan, sod, partially disintegrated debris, or other undesirable materials.

2. Topsoil shall not contain obnoxious weeds, such as morning glory, sorel, oxalis, spurge, annual poa, nut grass or bermuda grass.

C. PLANT MATERIALS:

1. Plant names in the Plant List conform to "Standardized Plant Names" by American Joint Committee of Horticultural Nomenclature, except in cases not covered therein. In these instances the established custom of the nursery trade shall be followed.

2. Plants shall be sound, healthy, vigorous, free from disease and weeds, insect pests or their eggs and shall have healthy, normal root systems, well filling their container, but not to the point of being root bound.

3. Plants shall not be pruned prior to delivery except as authorized by the Owner's Representative. In no case shall trees be topped.

4. All plant materials shall be subject to approval of size, health, quality, character, etc., by the Owner's Representative.

5. The height and spread of all plant materials shall be measured with branches in their normal position.

6 The caliper of all trees shall be measured 4' above the surface of the ground.

7. Where caliper or other dimensions of any plant materials are omitted from the plant list, it shall be understood that these plant materials shall be normal stock for the type listed.

8. Plant material shall be symmetrical, typical for variety and species, and shall conform to measurements specified in the Plant List/Legend.

9. Plant material larger than those specified may be supplied if complying in all other respects and at no additional cost to the Owner, upon approval of the Owner's Representative.

10. All plant materials must have been previously inspected at the nursery by the County Horticultural Department and shall be subject to acceptance as to quality by the Owner's Representative.

11. Substitutions will be permitted only as indicated, or if proof is submitted that any plant specified is not available, a proposal will be considered for the use of the nearest equivalent size or variety with an equitable adjustment of the contract price.

12. Quantities shown on the call outs on the Planting Plan are for the convenience of the Contractor only. Quantities drawn on the plan (whether by circles, dots or triangles) are the final authority and shall be furnished and installed as drawn. The Owner's Representative shall have the final authority as to location of all plant material.

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED LANDSCAPE ARCHITECT — JAMES E. BALDOVIN — 4787 — Signature — July 31, 2025 — Exp. Date — STATE OF CALIFORNIA — March 10, 2026 — Date

conceptual design + planning company
1675 Scenic Drive, Suite 200
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COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY DATE

REFERENCES

REVISIONS

NO.	DESCRIPTION	BY	DATE

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.
SPECIFICATIONS

RECOMMENDED BY: JEFF FIJALKA, PE, PROJECT MANAGER — DATE
RECOMMENDED BY: KATHERINE DOHERTY, CITY ENGINEER — DATE
DRAWN BY: VYVY HA — DATE
CHECKED BY: VINCENT ROJAS, PROJECT MANAGER — DATE
SCALE: PER PLAN
DATE: 03-10-25
SHEET 21 OF 22
DRAWING NO. LS-7

D. SEED MATERIALS:

1. Seed shall be clean, fresh, new crop seed and shall be the mixture as noted on the Planting Plan.

2. Seed shall be mixed by the dealer and furnished with the dealer's guarantee statement of composition and percentage of purity which shall be furnished to the Owner's Representative. Seed tags shall be delivered to the Owner's Representative at the time of installation.

E. STAKES: All stakes shall be per details.

IV. OBSTRUCTIONS BELOW GROUND:

A. CONTRACTOR'S RESPONSIBILITY: the Contractor is responsible for verifying the location of all utility lines and other underground obstructions so that proper precautions may be taken not to disturb or damage such improvements. In the event of a conflict between such lines and plant locations, the Contractor shall promptly notify the Owner's Representative, who shall arrange for the relocation of one or the other. Failing to follow this procedure, the Contractor shall at his own expense make any and all repairs for damages resulting from his work.

V. FINISH GRADING:

A. TILLING: Till all planting areas as specified herein.

B. UNIFORM GRADE: After tilling, all areas shall be brought to uniform grade by floating or hand raking.

C. GRADE RELATIONSHIPS: Finish grade of planting areas after application of soil amendments shall be 1" below top of concrete walks and curb grades and 6" below finish floor of building or as noted by spot elevations.

D. SLOPE FROM BUILDINGS: soil areas adjacent to buildings shall slope away from the building at 2% minimum for 10 feet and shall continue to slope at a minimum of 1% until water drains to street or storm system.

E. ROCKS OR CLODS: No rocks or clods over 3/4" in diameter shall be on top of prepared planting beds.

VI. WEED CONTROL:

A. KILLING WEEDS: Contractor shall germinate and destroy existing weed seeds before preparing areas for planting. Sufficient water shall be applied to cause weed seed to sprout. Young weeds shall then be destroyed and removed before they have opportunity to set seed.

B. ADDITIONAL REQUIREMENTS: For additional weed killing refer to Planting Notes on the Planting Plan.

VII. SOIL PREPARATION:

A. IMPORT SOIL REPORT: Should import soil be placed in planting areas, Contractor shall have import soils tested by an approved California Association of Agricultural Laboratories member and submit to the Owner and Owner's Representative for approval prior to placing the soil on site. The report shall also have soil amendment recommendations.

B. SITE SOIL REPORT: Prior to starting soil preparation the Contractor shall have site soils tested by an approved California Association of Agricultural Laboratories member and submit to the Owner and Owner's Representative prior beginning of landscape work. Follow the Surface Soil Preparation recommendations for all planting areas and Tree and Shrub Backfill Mix recommendations for tree and shrub planting.

C. COMPACTED AREAS: Soil areas that are compacted to more than 90% during site preparation shall be ripped to a minimum of 12" prior to beginning soil preparation.

D. METHOD OF MIXING: If the slope is under 2 to 1, the soil preparation materials should be broadcast uniformly over all landscape areas and worked to a depth of 6" by rototiller or other acceptable mechanical means to obtain a uniform blend in the soil. If the slope is greater than 2 to 1, the amendments shall be hydraulically applied for areas over 1000 square feet and raked in for small areas. For the soil amendment bid mix refer to the Planting Notes on the Planting Plan.

E. EXTRANEOUS MATERIALS: In addition to the work specified above, the Contractor shall remove all extraneous materials that are exposed on the surface and grade to facilitate run-off of surface water.

F. DELIVERY SLIPS: Supply delivery slips from the supplier for the soil amendments to the site and empty bags for fertilizer to the Superintendent of the job and the Owner's Representative at first field review. Bulk loads of soil amendments from the Contractor's yard will not be accepted.

VIII. SHRUB AND TREE PLANTING

A. CORRELATION: Trees and shrubs shall not be planted until all operations in conjunction with the installation of the irrigation system have been completed, final grades have been established, and the planting beds properly prepared by cultivation and fertilization as covered in these specifications.

B. PLANTING TIME: No planting shall take place during extremely hot, dry, windy or freezing weather.

C. LOCATIONS: Relative positions of all plants and trees are subject to approval of the Owner's Representative and they shall, if necessary, may be relocated at his direction as part of this contract. Trees shall normally be located a minimum of 5' from buildings, site amenities and walkways.

D. DISTRIBUTION: No more plants shall be distributed about the landscape area than can be planted and watered on the same day.

E. CONTAINER REMOVAL: Plant containers shall be removed when planting the plants. Container may be split on both sides, however, without use of axe or spade. All containers shall be removed from the site.

F. PLANTING PITS: Excavate all tree and shrub pits at least twice the rootball diameter. Pit depth shall be the same as the height of the rootball with a minimum of 6" additional depth at perimeter of plant pit. For planting in clay soil, see applicable details. Roughen sides and bottom of pit prior to placing the rootball; see details. Perform percolation test prior to tree planting per Planting Notes. Install drain sump pipe if soil fails percolation test per tree planting detail.

G. PLACING: Plants shall be placed and held during backfill in an upright position in the center of the pit. Plants shall be held at, or slightly above nursery level. The earth ball shall be kept intact. Any exposed roots shall be spread out. Injured roots shall be pruned.

H. BACKFILL: Contractor shall refer to Soils Report for final recommendations. (For bidding purposes only). Plant pit backfilling soil shall consist of 1 part nitrogen stabilized wood shavings to 2 parts topsoil. Materials shall be thoroughly mixed before placement. In addition to backfill, commercial fertilizer 20-10-5 Agriform 21-gram tablets shall be added to plant pits at the following rates:

1 tablet per 1 gallon container
2 tablets 5 gallon container
3 tablets per 15 gallon container
4 tablets per 24" box
5 tablets per 30" box
6 tablets per 36" box
7 tablets per 42" box
8 tablets per 48" box and those box sizes which are larger
No paks to be used for seasonal color areas.
See Section XI below.

I. WATERING: When the pit has been backfilled to three quarters of its depth water shall be poured about the roots. Air pockets shall be eliminated and backfill continued until the backfill is brought to grade level.

J. COMPACTING: Backfill shall not be compacted around the roots or ball of the plant during or after planting. The backfill on which the plant ball rests shall be lightly compacted.

K. SETTLEMENT: Plants which settle shall be raised to the required level or replaced at the option of the Contractor. Raised plants which fail to grow shall be replaced.

L. STAKING: Stakes shall be driven to sufficient depth to hold the tree rigid. Trees shall be supported by at least two ties (see details).

M. PRUNING: Pruning shall be done only as directed by the Owner's Representative, and shall comply with ANSI A300 Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance. In no instance shall topping, flush pruning cuts or other damaging actions be acceptable; any final cuts for removal of a lateral branch shall be made close to the trunk or parent limb, but without cutting into the branch bark ridge, collar, or leaving a stub.

N. PLANTING BEDS: Planting beds shall be edged and cultivated to the line separating areas as shown. Beds shall be brought to a smooth even surface conforming to established grades after full settlement has occurred.

IX. GROUND COVER AREAS:

A. REFERENCE: Refer to Paragraph V, VI, VII, for finish grading, weed control, and soil preparation.

B. SOIL PREPARATION: Amend the site soil in all planting areas per Surface Soil Preparation section of the Agricultural Soils Report as specified on the planting notes.

C. GRADING: Areas shall be raked and floated smooth to provide a true and uniform surface.

D. PLANT PITS AND FERTILIZER: Planting pits for ground cover shall be 4" x 4" or adequate to accept plant material from flats or 4" pots without crushing or deforming the rootball. Place a 20-10-5 Agriform 5 gram fertilizer tablet in each individual ground cover pit.

E. SPACING: Plant according to spacing and in areas indicated on the drawings. Soil shall be firmly tamped around each plant, and the excess soil removed from the crown.

F. WATERING: Each section of ground cover shall be immediately watered upon completion of planting, and thereafter as required.

G. SPACING FROM EDGE: The first row of ground cover should be placed at the half distance of the plant size shown on plan from the edge of planting area and triangle-spaced.

X. SEASONAL COLOR (IF APPLICABLE):

A. REFERENCE: Refer to Paragraph V, VI, VII, for finish grading, weed control, and soil preparation.

B. SOIL PREPARATION: Prepare the soil as per these specifications and the Planting Notes on the Planting Plan.

C. GRADING: Areas shall be raked and floated smooth to provide a true and uniform surface.

D. QUALITY OF PLANTS: Plants shall be healthy annual plant material in bloom in the size indicated on the drawings.

E. PLANT PITS AND FERTILIZER: Each plant pit for seasonal color shall be 6" x 6", or adequate to accept material in the required size, with one teaspoon of bone meal mixed into the backfill mix (shrub backfill mix should be used, but without the Agriform plant tablets).

F. SPACING: Plant at spacing and in areas indicated on the drawings. Soil shall be firmly tamped around each plant, and the excess soil removed from the crown.

G. WATERING: Each section of seasonal color shall be immediately watered upon completion of planting, and watered thereafter as required.

H. SPACING FROM EDGE: the first row of seasonal color should always be within 6" of the edge of the planting area.

XI. SOD LAWN MATERIALS AND PLANTING (IF APPLICABLE):

A. REFERENCE: Refer to Paragraph V, VI, VII, for finish grading, weed control, and soil preparation.

B. PREPARATION: Sod area prior to planting shall be rolled lightly and watered to a depth of 6" the day prior to planting. If any air pockets are found, the area shall be regraded as necessary. Lightly water the area to be planted just prior to planting.

C. QUALITY: Sod shall be #1 Grade, machine cut at uniform thickness of 5/8" excluding top growth and thatch, weed free and shall be no less than eight months nor more than sixteen months old.

D. TIMING: Installation shall take place within 24 hours after harvesting.

E. INSTALLATION: Sod shall be laid in a staggered pattern, with tight joints and in the same direction each time. On all slopes greater than 3:1, sod shall be installed from the bottom up and the newly installed sod should be protected by walking on boards as installer moves upward. On such slopes, pin the sod down with wooden pegs. No metal staples will be allowed. No sod of less than 18" in length will be allowed.

F. JOINTS: Adjoin the sections of sod firmly together. If air spaces occur between sections of sod they must be filled with sand or the sod relaid.

G. ROLLING: Roll sod with an adequately weighted roller to smooth out the sod bed.

H. PROTECTION OF EDGES: Regrade to protect the edges from drying if mowing edge is not used.

I. WATERING: After installation sod must be kept thoroughly watered to a depth of 6". No foot traffic shall be allowed for 2 to 3 weeks from the date of installation.

J. INSPECTION BY SUPPLIER: If there are any questions regarding the quality of sod installation a representative of the supplier shall be requested to inspect the installation and the Contractor shall call out the supplier's representative.

XII. SEED LAWN PLANTING (IF APPLICABLE):

A. REFERENCE: Refer to Paragraph V, VI, VII, for finish grading, weed control, and soil preparation.

B. PREPARATION: Cultivate to a depth of 2" below finish grade, remove stones, foreign growth of any kind and extraneous matter, and grade to remove ridges and depressions so that areas after settlement will conform to the finish grade. Roll and rake lightly until the surface is smooth, friable and of uniform fine texture.

C. SOWING: Sow lawn seed in the area designated on the drawings at the rate as designated on the Planting Plans. Sow the lawn in two directions.

D. TOP DRESSING: Rake lightly, spread 1/4" of Par-5 top dressing with a mechanical spreader, roll with a 200 lbs. roller and water with a fine spray.

XIII. HYDROSEEDING SPECIFICATIONS (IF APPLICABLE):

A. GENERAL: The hydromulch shall be applied in the form of a slurry consisting of wood cellulose fiber, seed, chemical additives, commercial fertilizer and water. When hydraulically sprayed on the soil surface, the hydromulching shall form a blotter like ground cover impregnated uniformly with seed and fertilizer and shall allow the absorption of moisture and rainfall to percolate to the underlying soil.

B. EQUIPMENT: Hydraulic equipment used for the application of the fertilizer, seed, and slury of prepared wood pulp shall be of the "super hydro-seeder" type as approved by the Owner's Representative.

C. APPLICATION: The operator shall spray the area with a uniform visible coat by using the green color of the wood pulp as a guide. The slurry shall be applied in a sweeping motion in a arched stream so as to fall like rain allowing the wood fibers to build on each other until a good coat is achieved and the material is spread at the required rate per acre.

D. TIME LIMIT: All slurry mixture which has not been applied within four hours after mixing will be rejected and removed from the project at the Contractor's expense.

E. PROTECTION: Special care should be exercised by the Contractor in preventing any of the slurry being sprayed inside any reservoir basin or onto drainage ditches and channels which may impede the free flow of rain or irrigation water. Any slurry spilled into restricted areas shall be cleaned up at the Contractor's expense to the satisfaction of the Owner or Owner's Representative.

F. MAINTENANCE AND IRRIGATION: Once the slurry mulch has been applied and allowed to set for one day, the slope shall then be irrigated. There is no set irrigation requirements in gallons per minute. Duration of time and number of gallons to be applied will vary from day to day and system to system depending on the rate of growth and climatic conditions encountered. As a rule of thumb, the soil surface must be kept moist at all times, particularly during the seeding germination period (approximately 30 days).

G. RESEEDING: All bare spots shall be reseeded (sodded, if hydroseed is turf mix), by the Contractor within 45 days providing the lack of cover growth or mulch is not due to inadequate irrigation or erosion caused by excessive watering by the Owner.

XV. REPLACEMENTS:

A. GENERAL: The Contractor shall immediately replace any and all materials which for any reason die or are damaged while under the Contractor's care. Replacements shall be made with plant of like kind and size in the same manner as specified for the original planting (see guarantee "XVII-D" for definition of death and replacement).

XVI. CLEAN-UP:

A. GENERAL: After all installation operations have been completed, all trash, excess soil, empty plant containers and rubbish shall be removed from the property. All scars, ruts or other marks in the area caused by this work shall be repaired and the ground left in a neat and orderly condition throughout the site. Contractor shall pick up all trash resulting from this work no less than each Friday before leaving the site, once a week and/or the last working day each week. All trash shall be removed completely from the site.

B. TOP SOIL: Excess topsoil shall be removed from the site.

C. NEATNESS: Leave the sidewalks and street in a neat and clean condition at the end of each working day.

D. REMOVAL OF TAGS: Remove all tags, labels, nursery stakes and ties from all plants unless otherwise directed, and only at the end of all installations.

XVII. PROTECTION:

A. GENERAL: At all times during construction, adequate protection shall be provided for all areas against damage of any kind, until final acceptance by the Owner's Representative.

B. RESPONSIBILITY: the Contractor shall be held responsible for the care and preservation of all existing buildings and structures on the property and adjacent premises. Any part of them injured, damaged of disturbed because of his work shall be repaired, replaced or cleaned by the Contractor at his expense.

XVIII. GUARANTEE:

A. SHRUBS: All shrubs shall be guaranteed as to growth and health for a period of ninety (90) days after completion of the specified maintenance period and/or final acceptance by the Owner or Owner's Representative.

B. TREES: Trees shall be guaranteed to live and grow in an acceptable upright position for one (1) year after the specified maintenance period and/or final acceptance by the Owner or Owner's Representative. The Owner must provide adequate maintenance to ensure the extended guarantee on trees.

C. DEFINITION OF DEATH: Plants which die or lose more than 30% of their original leaves shall be replaced.

D. REPLACEMENT: The Contractor, within seven (7) days of written notification by the Owner or Owner's Representative, shall remove and replace all guaranteed plant materials which for any reason fail to meet the requirements of this guarantee. Replacement shall be made with plant material as indicated or specified from the original planting and all such replacement materials shall be guaranteed as specified for the original guaranteed material.

XIX. MAINTENANCE:

A. SCOPE: After all work indicated on the drawings or herein specified has been completed, inspected, and approved by the Owner or Owner's Representative, the Contractor shall maintain all planted areas by means of continuous watering (including monitoring and adjusting irrigation schedule), weeding, rolling, mowing, pest control, reseeding, edging and/or any other operations necessary for their care and upkeep for a period of not less than ninety (90) days. At the end of the maintenance period, all plant materials shall be in a healthy, growing condition.

B. WEED CONTROL: All planted areas shall be kept free of debris and shall be weeded at not more that seven (7) day intervals. Areas that do not have a pre-emergent weed killer shall also be cultivated at not more that seven (7) day intervals.

C. FERTILIZING: All planted areas shall receive a fertilizer as required per soils report recommendations. For bid purposes only, application rate shall be 20 pounds per 1,000 square feet of Gro-Power 45 days following the beginning of maintenance. Water in thoroughly after application.

D. CONDITION OF SITE: During the maintenance period, keep the project neat and free from debris at all times. Obtain the Owner's approval for on-site storage of equipment or maintenance materials.

E. PEST MANAGEMENT: Maintain surveillance for pests to minimize damage to plants and irrigation equipment. Eliminate pests by certified pest control professionals who priortize non-chemical, biological, cultural or physical control methods to minimize health, environmental and financial risks.

XX. FINAL CONSTRUCTION AND FINAL MAINTENANCE INSPECTION:

A. FINAL CONSTRUCTION INSPECTION:

When all landscape improvements have been installed in accordance with the plans and specifications, the Contractor shall notify the Owner's Representative and request a "Final Construction" inspection. If the Owner's Representative determines the work to be substantially complete and in conformance with plans and specifications, the Contractor will be advised that the basic ninety (90) day maintenance period is started.

1. In order to be substantially complete, at least the following must have been finished.

a. All fine grading, including elimination of low points that hold standing water (exclude bio retention areas after rain) and water run-off onto non-permeable surfaces.

b. A complete and operable irrigation system.

c. Installation of all plant materials.

d. Seeding of all seeded areas.

2. Minor pick-up items may be completed during the basic maintenance period. These items will be determined as Minor solely by the Owner's Representative.

B. FINAL MAINTENANCE INSPECTION: At the end of the maintenance period and when the ground cover and turf have established and all pick-up items have been completed, the Contractor shall request a final maintenance inspection. The Contractor will be advised by the Owner's Representative at the final inspection that work is or is not satisfactory.

1. If the work is satisfactory, the basic maintenance period will end on the date of the final inspection as directed by the Owner's Representative.

2. If the work is unsatisfactory the basic maintenance period will continue at no additional expense to the Owner until the work has been completed, inspected, and approved by the Owner's Representative.

C. FAILURE TO PASS INSPECTION: If the work fails to pass final inspection, any subsequent inspections must be rescheduled as per above, and will be charged to the Contractor at the prevailing hourly rate of the Owner's Representative.

DECOMPOSED GRANITE

I. MATERIAL:

A. GRADATION: As determined by ASTM C 136 methodology.

Sieve Size	Percent Passing
1/2"	100
3/8"	90-100
No. 4	50-100
No. 30	25-55
No. 100	10-20
No. 200	5-18

B. SAND EQUIVALENT: As determined by ASTM D 2419 methodology shall have a minimum of 30. Sand equivalent shall be a maximum of 60 for vehicular use areas.

C. R-VALUE: As determined by ASTM D 2488 methodology shall be a minimum of 73 for vehicular use areas.

II. STABILIZER (IF APPLICABLE):

A. PEDESTRIAN PATHWAYS & VEHICULAR USE: Stabilizing organic binder Natracil produced by Gail Materials or equal. The binder shall be incorporated with the granite fines by the use of a pug mill that included a weight belt feeder that insures the proper ratio of binder to granite fines. Blending with the use of a bucket loader or similar is not acceptable. For pathways the binder shall be blended at the rate of 12 lbs. per ton of granite fines. For vehicular use the binder shall be blended at the rate of 14 lbs. per ton of granite fines.

B. EQUESTRIAN TRAILS & SLOPES 3:1 OR GREATER: Stabilizing organic binder Organic-lock produced by Gail Materials or equal. The binder shall be incorporated with the granite fines by the use of a pug mill that included a weight belt feeder that insures the proper ratio of binder to granite fines. Blending with the use of a bucket loader or similar is not acceptable. For pathways the binder shall be blended at the rate of 12 lbs. per ton of granite fines. For vehicular use the binder shall be blended at the rate of 14 lbs. per ton of granite fines.

III. INSTALLATION:

A. DEPTH: For pathways, decomposed granite shall be placed to a minimum depth of 3.5" mechanically compacted. For vehicular use, decomposed granite shall be placed to a minimum depth of 4" mechanically compacted. For planting area as landscape mulch, use decomposed granite without binder. Decomposed granite shall be placed to at depth of 2", moderately compacted.

B. STABILIZER WATERING: Evenly spread material in 2" lifts and grade smooth. Thoroughly water entire area so that the entire depth of the material is moist. After a period of 6 hours, compact the final lift with a mechanical compactor. Allow for a sufficient curing period of 4 days prior to use.

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 SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

REGISTERED LANDSCAPE ARCHITECT — JAMES F. BALDOVIN — STATE OF CALIFORNIA
Signature
July 31, 2025
Exp. Date
March 10, 2026
Date

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COSTA MESA ▫ CENTRAL COAST ▫ LAS VEGAS

REVIEWED BY | DATE

REVISIONS

NO.	DESCRIPTION	BY	DATE

REFERENCES

CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

INTERIM SURFACE PARKING LOT 3
1155 MORNINGSIDE DR.

SPECIFICATIONS

RECOMMENDED BY: JEFF FIJALKA, PE, PROJECT MANAGER — DATE
RECOMMENDED BY: KATHERINE DOHERTY, CITY ENGINEER — DATE
DRAWN BY: VYVY HA — DATE
CHECKED BY: VINCENT ROJAS, PROJECT MANAGER — DATE
SCALE: PER PLAN
DATE: 03-10-25
DRAWING NO.: LS-8
SHEET 22 OF 22