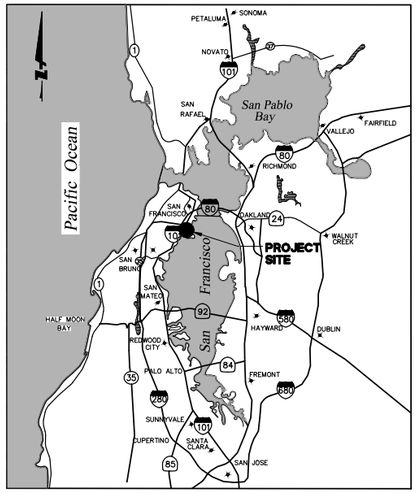
ATTACHMENT E

BAY TRAIL EXTENSION IMPROVEMENTS FOR

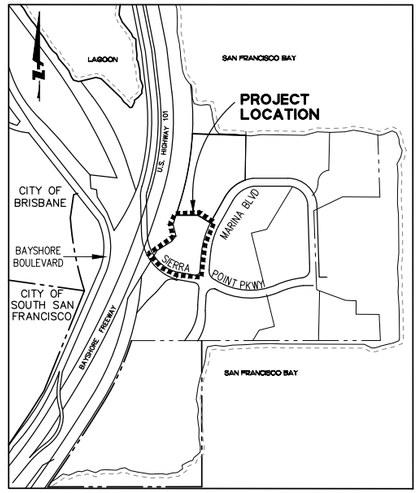
1000 MARINA BOULEVARD

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

DRAWING INDEX



VICINITY MAP
NO SCALE



LOCATION MAP
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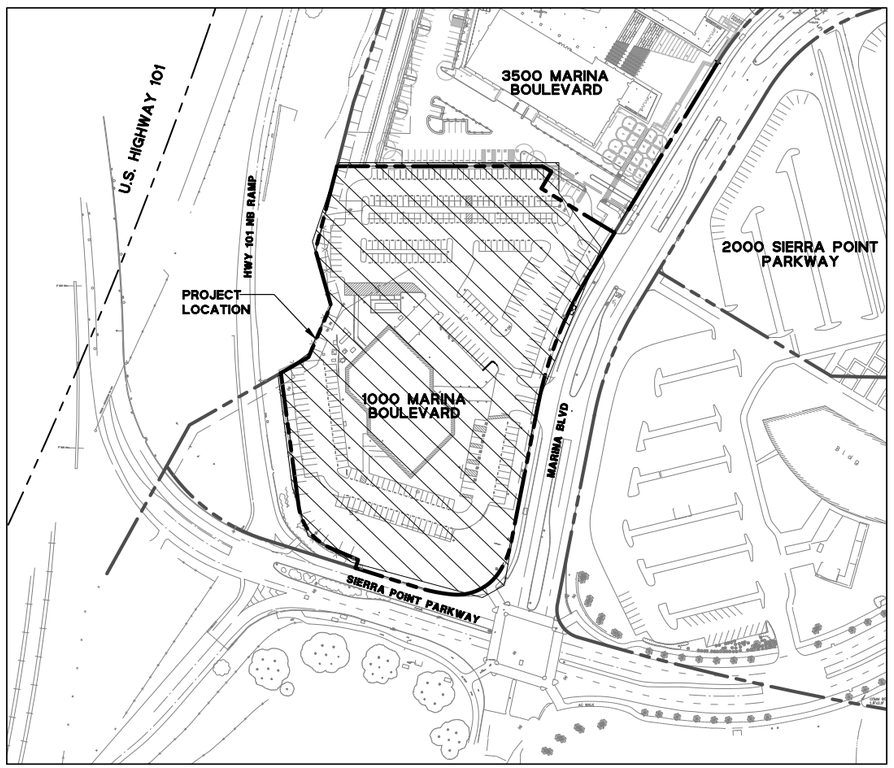


SITE MAP
SCALE: 1"=100'

PROJECT BENCHMARK

MAG NAIL SET IN AC CURB 75' NORTH OF DRIVEWAY TO 1000 MARINA BOULEVARD ALONG THE NORTHWEST EDGE OF MARINA BOULEVARD AND 15' NORTHEAST OF CATCH BASIN.
ELEVATION = 17.82' (NAVD – GPS–DERIVED)

OWNER/DEVELOPER

PHASE 3 REAL ESTATE PARTNERS
CONTACT: KYLE MARRS
PROJECT MANAGER
P.O. BOX 927729
SAN DIEGO, CA 92192

SITE INFORMATION:

PROJECT ADDRESS: 1000 MARINA BOULEVARD, BRISBANE, CA 94005
APN: 007165210
TOTAL SITE AREA: 192127.83 SF
TOTAL AREA DISTURBED: (40606.36 SF ≈ 0.93 ACRES)

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

Thomas R. Morse 01/17/2023

BKF ENGINEERS DATE
THOMAS R. MORSE
VICE PRESIDENT

REGISTERED PROFESSIONAL ENGINEER THOMAS R. MORSE No. 49457 EXP. 09/30/24 CIVIL STATE OF CALIFORNIA

PHASE 3 REAL ESTATE PARTNERS

CIVIL ENGINEER:
BKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
TITLE SHEET
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C0.0

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C0.0 TITLE SHEET.dwg
PLOT DATE: 01-13-23
PLOTTED BY: monu

ATTACHMENT E

GENERAL NOTES

I. REFERENCE DOCUMENTS

1. SIERRA POINT BUSINESS CENTER DEVELOPMENT STANDARDS DATED 2001.
2. CITY OF BRISBANE STANDARD DETAILS.
3. CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITION.
4. SUPPLEMENTAL RECOMMENDATIONS FOR BAY TRAIL EXTENSION, 1000 MARINA BOULEVARD, PREPARED BY LANGAN, DATED AUGUST 12, 2022.

II. GENERAL NOTES

1. THE TERM "STANDARDS", WHERE USED IN THESE DRAWINGS, SHALL SHALL REFER TO THE DEVELOPMENT STANDARDS REFERENCED ABOVE.
2. THIS PROJECT IS LOCATED WITHIN THE JURISDICTION OF THE CITY OF BRISBANE. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING PERMITS, ARRANGING INSPECTIONS AND COMPLYING WITH ALL APPLICABLE REGULATIONS OF THIS CITY AS REQUIRED BY THE CITY. WHERE USED IN THE DRAWINGS, THE TERM "CITY" AND "CITY ENGINEER" SHALL REFER TO THE CITY OF BRISBANE.
3. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING REQUIRED INSPECTIONS BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVES. NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO ARRANGE FOR CITY INSPECTION IN ADVANCE. THE CONTRACTOR WILL NOTIFY THE CITY ENGINEER AT (415) 508-2130 A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
4. ALL REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY THE ENGINEER, WHO WILL OBTAIN APPROVAL FROM THE CITY ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. REVISIONS SHALL BE ACCURATELY SHOWN ON REVISED PLANS, WHICH WILL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD AND CITY ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
5. CONTRACTOR WILL CONFIRM LOCATIONS OF EXISTING UTILITIES. CONTRACTOR WILL REPLACE OR REPAIR, AT THEIR OWN EXPENSE, ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED EXISTING UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, TO THEIR ORIGINAL CONDITION, UNLESS NOTED OTHERWISE ON THE PLANS.
6. CONTRACTOR SHALL COORDINATE HIS WORK, AND THAT OF HIS SUBCONTRACTORS, WITH ANY ONGOING GRADING OR SITE WORK OF OTHER CONTRACTORS AND WITH THE INSTALLATION OF FACILITIES BY PG&E, TELEPHONE AND CABLE TV.
7. ALL STREET MONUMENTS, LOT CORNER PIPES AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN CONFORMANCE WITH CITY REQUIREMENTS BEFORE FINAL ACCEPTANCE OF IMPROVEMENTS. MONUMENTS SHALL BE SET BY A SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA AND FILE A MINIMUM OF A CORNER RECORD WITH THE SAN MATEO COUNTY RECORDERS OFFICE. CORNER RECORD TO BE SUBMITTED TO CITY FOR REVIEW AND APPROVAL PRIOR TO RECORDATION AT THE COUNTY.
8. IF TEMPORARY LANE CLOSURES ARE REQUIRED FOR CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL FROM THE CITY ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR WILL ALSO PROVIDE FLAG MEN, CONES OR BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS, IN CONFORMANCE WITH CALTRANS STANDARDS.
9. EXISTING PEDESTRIAN WALKWAYS,BIKE PATHS AND HANDICAP ACCESS PATHWAYS WILL BE MAINTAINED DURING CONSTRUCTION TO THE SATISFACTION OF THE CITY ENGINEER.
10. TRENCHES WILL NOT BE LEFT OPEN OVERNIGHT ON SITE. CONTRACTOR WILL BACKFILL TRENCHES, OR PLACE STEEL PLATING AND/OR HOT-MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES AT THE END OF EVERY WORK DAY.
11. EXCAVATIONS WILL BE ADEQUATELY SHORED, BRACED AND SHEATHED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEATHING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE WILL COMPLETE NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE.
12. THE CONTRACTOR WILL PROVIDE DUST CONTROL FOR THE ENTIRE PROJECT SITE IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT'S BASIC AND ENHANCED DUST CONTROL MEASURES. IN THE EVENT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST, THE CITY RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND CHARGE THE COST TO THE OWNER WHO WILL BACK CHARGE THE CONTRACTOR.
13. DURING CONSTRUCTION, THE CITY STREETS WILL BE CLEANED AS OFTEN AS REQUIRED TO REMOVE ANY ACCUMULATION OF MUD AND DEBRIS RESULTING FROM THIS CONSTRUCTION. IF IMPORT OR EXPORT OF DIRT IS NECESSARY, THE CONTRACTOR WILL OBTAIN AN APPROVAL FOR THE HAULING ROUTE FROM THE CITY ENGINEERING DEPARTMENT. THE HAULING ROUTES WILL BE STRICTLY ADHERED TO BY THE CONTRACTOR AND ALL SUBCONTRACTORS.
14. ALL CONSTRUCTION STAKING WILL BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
15. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR WILL NOTIFY THE ENGINEER, BKF ENGINEERS AT (650) 482-6300 AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK IN QUESTION.
16. IF BKF ENGINEERS IS RETAINED TO PROVIDE CONSTRUCTION STAKING SERVICES, CONTRACTOR WILL BE PROVIDED WITH ONE SET OF SURVEY STAKES FOR LAYOUT PURPOSES. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PRESERVE AND PROTECT THESE STAKES UNTIL THEY ARE NO LONGER NEEDED. ALL RESTAKING SHALL BE AT THE CONTRACTOR'S EXPENSE REGARDLESS OF THE REASON FOR THE LOSS OF THE FIRST STAKES.
17. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING PAVEMENT, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALK, ETC., TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
18. PRIOR TO BIDDING, THE CONTRACTOR WILL VISIT THE SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND THE OVERALL REQUIREMENTS OF THE PROJECT.
19. CONTRACTOR AND SUBCONTRACTORS WILL OBTAIN AND PAY FOR REQUIRED PERMITS AND LICENSES TO PERFORM WORK WITHIN THE CITY OF BRISBANE PRIOR TO START OF WORK.
20. CONTRACTOR WILL PROVIDE A PERFORMANCE BOND FOR THE PERFORMANCE OF THE WORK PRIOR TO ISSUANCE OF A GRADING PERMIT IN AN AMOUNT TO BE SET BY THE CITY ENGINEER, BUT NO LESS THAN 100 PERCENT OF THE ESTIMATED COST OF THE WORK APPROVED BY THE CITY ENGINEER.
21. CONTRACTOR WILL POST 24-HOUR EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, POLICE DEPARTMENT AND FIRE DEPARTMENT ON SITE PRIOR TO START OF CONSTRUCTION.
22. NO GRADING WORK WILL BE PERFORMED DURING HOURS OTHER THAN THE NORMAL WORKING HOURS OF THE CITY PUBLIC WORKS DEPARTMENT'S INSPECTION AND MAINTENANCE PERSONNEL WITHOUT THE APPROVAL OF THE CITY ENGINEER AND WITHOUT FIRST OBTAINING A SPECIAL PERMIT FOR AFTER HOURS WORK FROM THE CITY ENGINEER. CONTRACTOR WILL BE RESPONSIBLE FOR PAYING ANY ADDITIONAL FEES REQUIRED BY THE CITY FOR PERFORMING WORK BEYOND THE NORMAL WORKING HOURS. CONTRACTOR WILL CONFORM TO ALL REQUIREMENTS OF THE CITY NOISE ORDINANCE WHEN WORKING IN THE CITY.
23. CONTRACTOR WILL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF ADJOINING PREMISES,TREES, LANDSCAPING,UTILITIES,SIDEWALKS AND STREETS FROM DAMAGE BY HIS OPERATIONS. CONTRACTOR WILL REPAIR, REPLACE OR CLEAN ANY PART OF THE ABOVE MENTIONED TO THE SATISFACTION OF THE OWNER, AT NO ADDITIONAL COST TO THE OWNER, OR THE ADJACENT PROPERTY OWNERS.
24. CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES WILL BE PROPERLY MAINTAINED AND MANAGED AT THE CONSTRUCTION SITE THROUGHOUT THE DURATION OF THE PROJECT.

III. EXISTING CONDITIONS

1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED ON AN AERIAL SURVEY PERFORMED BY AERO-GEODETIC DATED JANUARY 30, 2018 AND A FIELD SURVEY PERFORMED BY BKF ON AUGUST 30, 2019 AND AS-BUILT SITE CONDITIONS. GRADES ENCOUNTERED ON-SITE MAY VARY FROM THOSE SHOWN. CONTRACTOR WILL REVIEW THE PLANS AND SPECIFICATIONS AND CONDUCT INVESTIGATIONS AS REQUIRED TO VERIFY EXISTING CONDITIONS AT THE PROJECT SITE.
2. INFORMATION REGARDING EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WAS TAKEN FROM RECORD DATA KNOWN TO THE ENGINEER AND IS NOT MEANT TO BE A FULL CATALOG OF EXISTING CONDITIONS. CONTRACTOR WILL CONDUCT FIELD INVESTIGATIONS AS REQUIRED TO VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT PRIOR TO THE COMMENCEMENT OF WORK. CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS IN THE FIELD AND INFORMATION SHOWN ON THESE PLANS.
3. ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF ANY CONSTRUCTION AFFECTING SAID LINES.
4. CONTRACTOR WILL CONTACT USA (UNDERGROUND SERVICES ALERT) TOLL FREE AT 811, AND ALL AFFECTED UTILITY COMPANIES, A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO NOTIFY THEM OF CONSTRUCTION AND REQUEST UTILITIES BE MARKED. POTHOLING BY THE CONTRACTOR OR UTILITY COMPANY SHALL BE PERFORMED WHERE NEEDED TO VERIFY LOCATION OF UTILITIES.

IV. DEMOLITION

1. ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, WHICH ARE NOT SPECIFIED TO BE REMOVED OR ABANDONED, ARE TO REMAIN IN PLACE AND ARE NOT TO BE DISTURBED. CONTRACTOR WILL PROTECT SAID UTILITIES TO REMAIN THROUGHOUT THE COURSE OF CONSTRUCTION. CONTRACTOR WILL ADJUST SAID UTILITIES TO GRADE.

VI. RECORD DRAWINGS

1. ON A SET OF PRINTS OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS CONTRACTOR WILL KEEP AN ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION, AND A DESCRIPTION OF ALL WORK. CONTRACTOR SHALL ALSO NOTE THE LOCATION AND ELEVATION OF ANY EXISTING IMPROVEMENTS ENCOUNTERED WHICH VARY FROM THAT SHOWN. BASED ON SAID INFORMATION PROVIDED BY THE CONTRACTOR, BKF WILL PRODUCE FINAL RECORD DRAWINGS WHICH WILL BE A COMPLETE SET OF REPRODUCIBLE IMPROVEMENT PLANS WITH ALL ADDED NOTATIONS MADE IN INDELIBLE INK AND APPROPRIATELY HIGHLIGHTED. A RECORD DRAWING TITLED "AS-BUILT PLAN", SHALL BE SUBMITTED TO THE CITY PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY.

VII. STATEMENT OF RESPONSIBILITY

1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT,INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT WILL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE CITY OF BRISBANE HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE CITY OF BRISBANE, RESPECTIVELY.

VIII. UNAUTHORIZED CHANGES AND USES

1. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND REQUIRE WRITTEN APPROVAL OF THE BRISBANE CITY ENGINEER AND THE PREPARER OF THESE PLANS.

GRADING NOTES

1. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS SHALL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
2. ANY AREA TO RECEIVE FILL WILL BE SCARIFIED AT LEAST 8-INCHES, MOISTURE CONDITIONED TO AT LEAST 2% ABOVE OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90% RELATIVE COMPACTION.
3. CONTRACTOR WILL CLEAR DEBRIS FROM AREAS OF EARTHWORK AND GRADING PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS. DO NOT CLEAR AREAS OUTSIDE LIMIT OF WORK.
4. PLACE FILL MATERIAL IN LIFTS OF 8-INCH MAXIMUM UNCOMPACTED.
5. COMPACT FILL TO 90 PERCENT RELATIVE COMPACTION EXCEPT AS NOTED IN THE GEOTECHNICAL LETTER DATED AUGUST 12, 2022. COMPACT FILL TO SLIGHTLY ABOVE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH GEOTECHNICAL REPORT LETTER. DO NOT PLACE, SPREAD OR ROLL FILL MATERIAL DURING UNFAVORABLE WEATHER CONDITIONS. SOILS ENGINEER WILL BE ON SITE AND WILL PERFORM COMPACTION TESTS PERIODICALLY DURING CONSTRUCTION. CONTRACTOR WILL RECOMPACT AREAS OF FILL NOT MEETING COMPACTION REQUIREMENTS AS DIRECTED BY THE SOILS ENGINEER.
6. COMPACTION BY FLOODING, PONDING OR ETTING WILL NOT BE PERMITTED.
7. FOR BIDDING PURPOSES CONTRACTOR WILL MAKE THEIR OWN DETERMINATION OF EARTHWORK QUANTITIES.
8. ALL GRADING AND EARTHWORK TO BE PERFORMED IN COMPLIANCE WITH THE SITE MANAGEMENT PLAN (SMP) PREPARED BY LANGAN AND DATED 11 NOVEMBER 2020, AND THE CITY OF BRISBANE MUNICIPAL CODE SECTION 15.01.092 (A COPY AVAILABLE IN THE CITY HALL OFFICE).
9. PRIOR TO WORK, LANGAN WILL PERFORM BORINGS TO IDENTIFY DEPTH TO CLAY CAP IN THE WORK AREA. IF GRADING ACTIVITIES DO COME INTO CONTACT WITH OR PENETRATE THE CLAY CAP LAYER, OR ENCOUNTER REFUSE, LANGAN MUST BE NOTIFIED SO THAT THE SAN MATEO COUNTY LOCAL ENFORCEMENT AGENCY IS NOTIFIED AND APPROPRIATE CLAY CAP REPAIR DETAILS CAN BE DRAFTED.
10. IF OFF-SITE IMPORTED FILL, SUCH AS RECYCLED BASED ROCK, IS REQUIRED TO ATTAIN THE DESIGN GRADES, IT WILL BE TESTED PRIOR TO IMPORT FOR COMPLIANCE WITH THE ENVIRONMENTAL AND GEOTECHNICAL PARAMETERS AS DESCRIBED IN SMP SECTION 12.0. OFF-SITE IMPORT FILL WILL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND ENVIRONMENTAL ENGINEER PRIOR TO IMPORT TO THE SITE.

UTILITY NOTES

1. NO WATER VALVES OR OTHER FACILITIES OWNED BY THE CITY UTILITIES DEPARTMENT WILL BE OPERATED FOR ANY PURPOSE BY THE CONTRACTOR. ALL REQUIRED OPERATION WILL ONLY BE PERFORMED BY AUTHORIZED UTILITIES DEPARTMENT PERSONNEL. THE CONTRACTOR WILL NOTIFY THE UTILITIES DEPARTMENT NOT LESS THAN FORTY-EIGHT (48) HOURS IN ADVANCE OF THE TIME THAT SUCH OPERATION IS REQUIRED.
2. THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE PUBLIC WORKS DEPARTMENT IF EXISTING WATER, SEWER, GAS MAINS, OR SERVICES ARE DISTURBED OR DAMAGED.
3. CONTRACTOR WILL PROTECT ALL UTILITIES FROM DAMAGE DURING THE COURSE OF CONSTRUCTION.
4. ALL UTILITY BOXES AND LIDS IN PAVED AREAS WILL BE DESIGNED FOR H-20 LOADING.
5. EXISTING PG&E AND TELEPHONE MANHOLES/VAULTS WILL BE ADJUSTED TO GRADE BY THE UTILITY PROVIDER. THE CONTRACTOR WILL COORDINATE THEIR WORK WITH THE APPROPRIATE UTILITY PROVIDER. ALL OTHER UTILITY BOXES WILL BE ADJUSTED TO FINISHED GRADE BY THE CONTRACTOR.

SOIL MANAGEMENT

1. SITE DEVELOPMENT WILL REQUIRE EXCAVATION AND GRADING OF THE EXISTING OVERBURDEN SOIL. OVERBURDEN SOIL MAY BE REUSED ONSITE OR TRANSFERRED OFFSITE FOR DISPOSAL. SPECIFIC SOIL HANDLING REQUIREMENTS APPLY FOR THE PURPOSES OF SEGREGATING THE SOIL FROM REFUSE (IF ENCOUNTERED) AND CLAY CAP MATERIAL (IF ENCOUNTERED), AND IDENTIFYING AND MANAGING UNANTICIPATED CONDITIONS. THE CONTRACTOR WILL BE FAMILIAR WITH AND RESPONSIBLE FOR SOIL HANDLING REQUIREMENTS PROVIDED IN SMP SECTION 7.0, WHICH ARE REPEATED BELOW.

SOIL HANDLING

1. DURING EXCAVATION, OVERBURDEN SOIL, CLAY CAP LAYER MATERIAL AND REFUSE MUST BE SEGREGATED (IF ENCOUNTERED). OVERBURDEN SOIL WILL NEVER BE STOCKPILED WITH OR INCORPORATED WITH CLAY LAYER OR REFUSE MATERIALS (IF ENCOUNTERED). AN ENVIRONMENTAL TECHNICIAN WHO IS A CERTIFIED HAZARDOUS WASTE WORKER (PER 29 CODE OF FEDERAL REGULATIONS [CFR] 1910.120) WILL VISUALLY MONITOR CONSTRUCTION ACTIVITIES TO FACILITATE AND DOCUMENT COMPLIANCE WITH THE SPECIFIED SOIL MANAGEMENT PROCEDURES, OVERSEE OVERBURDEN SOIL SEGREGATION, AND IDENTIFY POTENTIAL UNANTICIPATED CONDITIONS. SOIL HANDLING WILL BE PERFORMED IN ACCORDANCE WITH A SITE-SPECIFIC HSP, TO BE APPROVED BY A CIH RETAINED BY THE GENERAL CONTRACTOR. CONTRUCTION DEWATERING MANAGEMENT, AND STORM WATER MANAGEMENT REQUIREMENTS OUTLINED IN THIS SMP ALSO APPLY. EXCAVATED OVERBURDEN SOIL WILL BE VISUALLY MONITORED FOR THE PRESENCE OF HAZARDOUS OR OTHER UNACCEPTABLE MATERIALS. SHOULD THE PRESENCE OF HAZARDOUS OR OTHER UNACCEPTABLE MATERIALS BE IDENTIFIED, THE MATERIALS WILL BE HANDLED IN ACCORDANCE WITH THE CONTINGENCY PROCEDURES IDENTIFIED IN SECTION 13.0.

SOIL STOCKPILING

1. MATERIAL FROM THE OVERBURDEN SOIL MAY BE STOCKPILED ACCORDING TO INDUSTRY STANDARDS, INCLUDING ESTABLISHED BEST MANAGEMENT PRACTICES (BMPS) FOR EROSION CONTROL. STOCKPILES OF OVERBURDEN SOIL MAY BE PLACED ADJACENT TO THE ACTIVE EXCAVATION SHOULD IT BE REUSED AS BACKFILL WITHIN FIVE BUSINESS DAYS. IF THE STOCKPILE IS TO EXIST ON-SITE LONGER THAN FIVE BUSINESS DAYS, IT WILL BE LOCATED IN A DESIGNATED STOCKPILED AREA AT THE END OF THE WORK DAY. WHEN STOCKPILED MATERIAL IS NOT ACTIVELY BEING HANDLED, TOP SHEETING WILL BE SECURED TO COVER SURFACE AREAS OF THE STOCKPILE TO PREVENT EROSION, DUST CREATION, OR RUN-OFF. OTHER STABILIZATION METHODS, SUCH AS APPLICATION OF TACKIFIER, ARE ALSO ACCEPTABLE.

SOIL ON-SITE REUSE

1. OVERBURDEN SOIL MAY BE GRADED AND REUSED ONSITE. UNLESS UNANTICIPATED CONDITIONS ARE IDENTIFIED, NO RESTRICTIONS ON OVERBURDEN SOIL REUSE APPLY. IT IS ASSUMED THAT EXISTING OVERBURDEN SOIL MEETS THE GEOTECHICAL REQUIREMENTS DESCRIBED IN SECTION 12.2.

SOIL OFF-SITE DISPOSAL

1. EXCAVATED OVERBURDEN SOIL THAT IS NOT REUSED AT THE SITE MUST BE FULLY PROFILED OFF-SITE REUSE OR DISPOSAL AND MANAGED ACCORDINGLY. SOIL PROPOSED FOR OFF-SITE REUSE OR DISPOSAL MUST BE SAMPLED AS REQUIRED BY THE SELECTED RECEIVING-FACILITY OR OFF-SITE LANDFILL. A LICENSED CONTRACTOR WILL BE HIRED TO HANDLE THE MATERIAL, INCLUDING CONTAINERIZATION AND TRANSPORT FOR OFF-SITE REUSE OR TO AN APPROPRIATELY PERMITTED DISPOSAL FACILITY, IF NECESSARY.

LEGEND

	PROPOSED	EXISTING
BOUNDARY LINE		
EASEMENT		
STORM DRAIN MAIN		EX 15" SD
SANITARY SEWER MAIN		EX 8" SS
WATER MAIN		EX 6" W
STORM DRAIN		SD
WATER LINE		W
JOINT TRENCH		JT
ELECTRICAL		E
FENCE		X
CATCH BASIN/DROP INLET		
MANHOLE		
WATER METER		
WATER VALVE		
FDC		
FIRE HYDRANT		
STREET LIGHT		

ABBREVIATIONS

SYMBOL	DESCRIPTION
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BCDC	SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION
BM	BENCHMARK
BFP	BACKFLOW PREVENTER
BOL	BOLLARD
BOW	BOTTOM OF WALL
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
BW	BACK OF WALK
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EAST
ELEC	ELECTRIC
EC	END OF CURVE
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
EX	EXISTING
EG	EXISTING GRADE
ES	EDGE OF SHOULDER
FDC	FIRE DEPT CONNECTION
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
JT	JOINT TRENCH
LF	LINEAR FEET
LVC	LENGTH OF VERTICAL CURVE
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NO.	NUMBER
NTS	NOT TO SCALE
PERF	PERFORATED PIPE
POC	POINT OF CONNECTION
PL	PROPERTY LINE
PR	PROPOSED
PT	POINT
PVI	POINT OF VERTICAL INTERSECTION
S	SOUTH
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SLP	SEE LANDSCAPE PLANS
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSP	SEE STRUCTURAL PLANS
ST	STREET
STA	STATION
STD	STANDARD
TOW	TOP OF WALL
TP	TOP OF PAVEMENT
TYP	TYPICAL
VERT	VERTICAL
W OR WL	WATER LINE
WM	WATER METER
WV	WATER VALVE

Know what's below. Call before you dig.

PHASE 3 REAL ESTATE SERVICES

CIVIL ENGINEER: BKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT: TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER THOMAS R. MORGAN No. 49457 EXP. 09/30/24 CIVIL STATE OF CALIFORNIA

1000 MARINA BOULEVARD
NOTES, LEGEND, AND ABBREVIATIONS
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

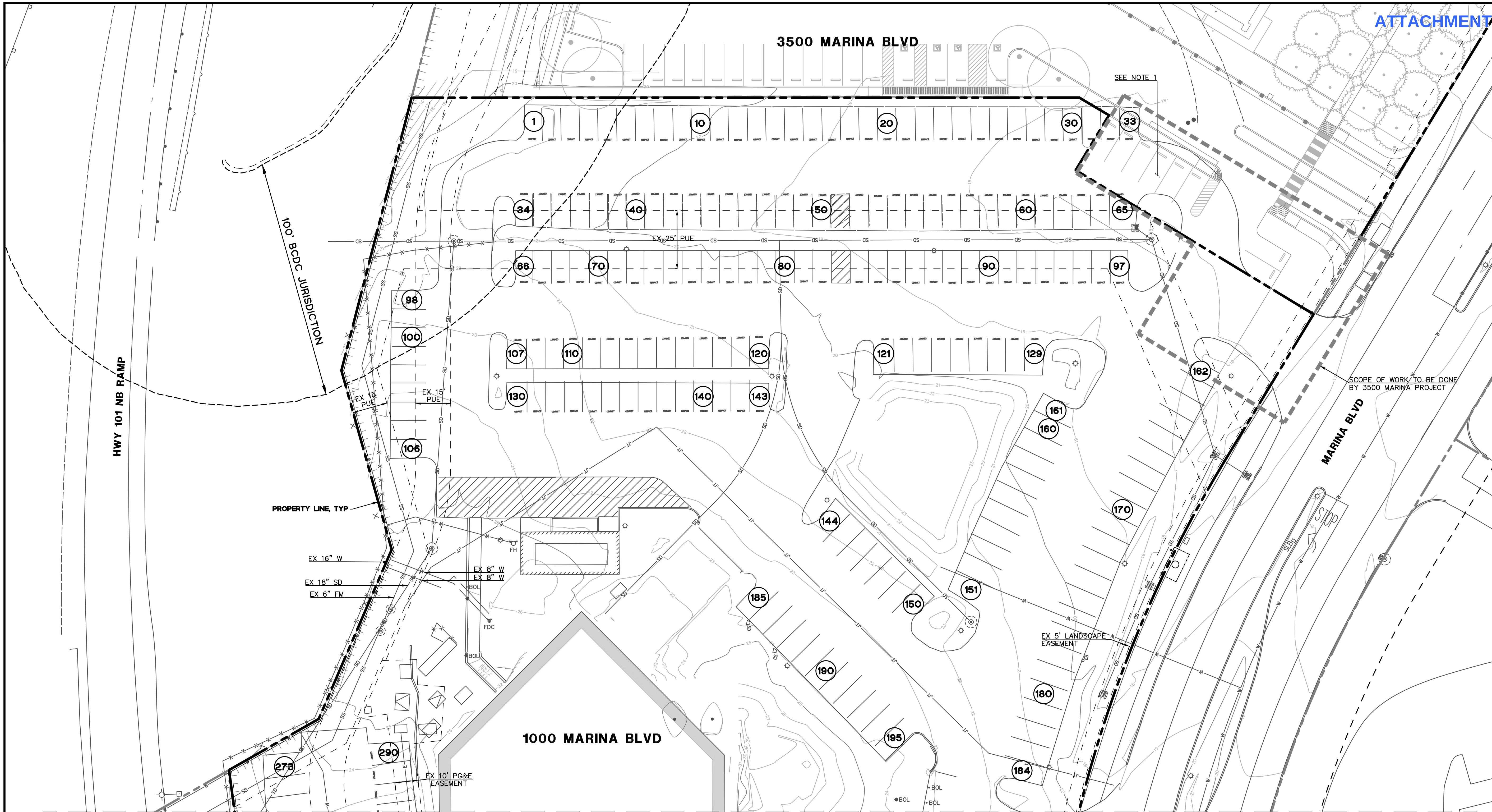
No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number: C0.1

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C0.1 NOTES AND ABBREVIATIONS.dwg
PLOT DATE: 01-13-23 PLOTTED BY: monu

ATTACHMENT E



SEE SHEET C1.1 FOR CONTINUATION

EXISTING PARKING COUNT

	AT-GRADE	GARAGE	
PARKING STALLS	283	19	
ADA STALLS	7	1	
TOTAL STALLS	290	20	310

△1

	AT-GRADE
COMPACT STALLS	202
STANDARD STALLS	88
TOTAL STALLS	290

△5

(#) PARKING STALL COUNT

NOTES:

1. EXISTING CONDITIONS OF PARKING STALLS AND SITE IMPROVEMENT WILL BE DONE AS PART OF 3500 MARINA BLVD PERMIT SET.
2. EXISTING UTILITIES SHOWN IS NOT A FULL CATALOG OF UNDERGROUND UTILITIES. UTILITIES SHOWN ON THIS PLAN ARE FROM VARIOUS SOURCES.CONTRACTOR IS TO NOTIFY ENGINEER WHEN ENCOUNTERING UTILITIES AND EXPECT ALL UTILITIES TO BE ACTIVE.
3. EXISTING EASEMENT INFORMATION IS FROM VARIOUS SOURCES. BKF ENGINEERS DID NOT CONFIRM THE EXISTING EASEMENTS.
4. SEE LANDSCAPE DRAWINGS FOR LOCATION OF EXISTING TREES.
5. COMPACT STALLS SHOWN ON THIS SHEET ARE 8' IN WIDTH AND 14' IN LENGTH. EXISTING STANDARD STALLS SHOWN ON THIS SHEET ARE 8.5' IN WIDTH AND 16' IN LENGTH. EXISTING STALL DIMENSIONS ARE BASED ON THE 1000 SIERRA POINT PARKWAY RECORD DRAWINGS DATED SEPTEMBER 14, 1981. △4

N

GRAPHIC SCALE

20 0 20 40

KEY MAP

NTS

PHASE3 REAL ESTATE PARTNERS

CIVIL ENGINEER:
BKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER THOMAS R. MORSE No. 49457 EXP. 09/30/24 CIVIL STATE OF CALIFORNIA

1000 MARINA BOULEVARD

EXISTING CONDITIONS PLAN

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
△5	PLAN CHECK RESPONSE 5	01/30/2023
△4	PLAN CHECK RESPONSE 4	01/17/2023
△3	PLAN CHECK RESPONSE 3	01/04/2023
△2	PLAN CHECK RESPONSE 2	12/02/2022
△1	PLAN CHECK RESPONSE	10/26/2022

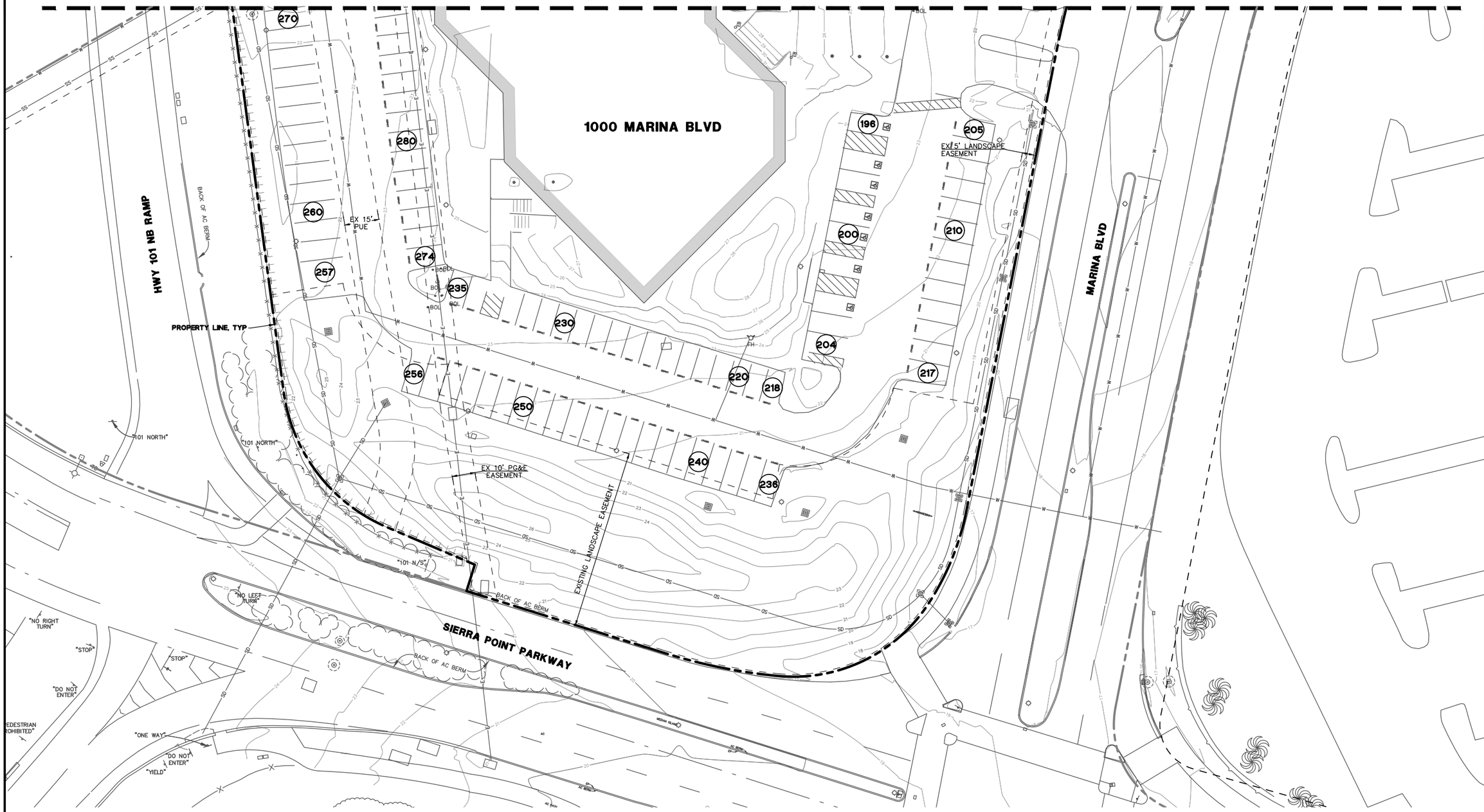
Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C1.0

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C1.0 EXISTING CONDITIONS.dwg
PLOT DATE: 01-30-23 PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C1.0 FOR CONTINUATION



EXISTING PARKING COUNT

	AT-GRADE	GARAGE	
PARKING STALLS	283	19	
ADA STALLS	7	1	
TOTAL STALLS	290	20	310 (1)

	AT-GRADE
COMPACT STALLS	202
STANDARD STALLS	88
TOTAL STALLS	290 (5)

(#) PARKING STALL COUNT

NOTE:
SEE SHEET C1.0 FOR NOTES.

GRAPHIC SCALE
20 0 20 40

KEY MAP
NTS

PHASE3 REAL ESTATE SERVICES

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CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MORSE
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
EXISTING CONDITIONS PLAN
CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
5	PLAN CHECK RESPONSE 5	01/30/2023
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE 2	12/02/2022
1	PLAN CHECK RESPONSE	10/26/2022

Date	08/24/2022
Scale	1"=20'
Design	AR
Drawn	AR
Approved	LKY
Job No	20170365-11

Drawing Number:
C1.1

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C1.0 EXISTING CONDITIONS.dwg
PLOT DATE: 01-30-23 PLOTTED BY: monu

ATTACHMENT E

3500 MARINA BLVD

1000 MARINA BLVD

HWY 101 NB RAMP

100' BCDC JURISDICTION

MARINA BLVD

SCOPE OF WORK TO BE DONE BY 3500 MARINA PROJECT

SEE SHEET C2.1 FOR CONTINUATION

	DEMOLITION TABLE
1	PROTECT WATER VALVE
2	PROTECT WATER METER
3	PROTECT STORM DRAIN MANHOLE
4	PROTECT LIFT STATION CONTROL BOX
5	PROTECT LIGHT POLE/ FIXTURE
6	REMOVE SDCB/SDDI, SEE NOTE 2
7	PROTECT ELECTRICAL VAULT
8	PROTECT FENCE
9	REMOVE FENCE

10	PROTECT SANITARY SEWER MANHOLE
11	REMOVE EXISTING CURB/AC BERM
12	SALVAGE/RELOCATE WHEEL STOP
13	RELOCATE LIGHT POLE/ FIXTURE
14	SALVAGE/RELOCATE EMERGENCY SIGN
15	PROTECT BFP
16	PROTECT SDCB/SDDI
17	PROTECT SIGN

NOTES:

1. PROTECT ALL UNDERGROUND UTILITIES UON.
2. EXISTING STORM DRAIN STRUCTURES ARE INLETS THAT ARE INTENTIONALLY COVERED AND ARE FILLED WITH DIRT. REMOVE STRUCTURES AND PIPES IF PIPES ARE AT LEAST 3.5 FEET IN DEPTH.
3. REFER TO LANDSCAPE PLANS FOR REMOVAL OF TREES. REMOVE ALL ROCKS AND SCARIFY TO A DEPTH OF AT LEAST 8–INCHES, MOISTURE–CONDITIONED TO AT LEAST TWO PERCENT ABOVE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION.
4. DEMOLITION WITHIN EXISTING UTILITIES SHOULD BE DONE WITH CARE. DEPTH OF EXISTING UTILITIES VARIES. NO HEAVY EQUIPMENT IS TO BE DRIVEN ON EXISTING UTILITIES THAT ARE TO REMAIN.
5. REMOVAL OF EXISTING WHEEL STOPS AND EMERGENCY SIGNS ARE TO BE DONE WITH CARE. WHEEL STOPS AND EMERGENCY SIGNS AND POST TO BE REUSED AND RELOCATED ON SITE. CONCRETE FOUNDATION OF THE SIGN POSTS TO BE REMOVED.

LEGEND:

- AC TO BE REMOVED
- PAVEMENT STRIPING TO BE REMOVED
- LANDSCAPE TO BE REMOVED, SEE NOTE 3.
- LIMIT OF DEMOLITION/SAWCUT
- PROPERTY LINE
- EXISTING EASEMENT LINE

GRAPHIC SCALE

20 0 20 40

KEY MAP
NTS

PHASE3 PLANNING + DESIGN

CIVIL ENGINEER:
CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

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1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MORSE
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD

DEMOLITION PLAN

SAN MATEO COUNTY CALIFORNIA

CITY OF BRISBANE

No.	Revisions	
5	PLAN CHECK RESPONSE 5	01/30/2023
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
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Date	08/24/2022
Scale	1"=20'
Design	AR
Drawn	AR
Approved	LKY
Job No	20170365-11

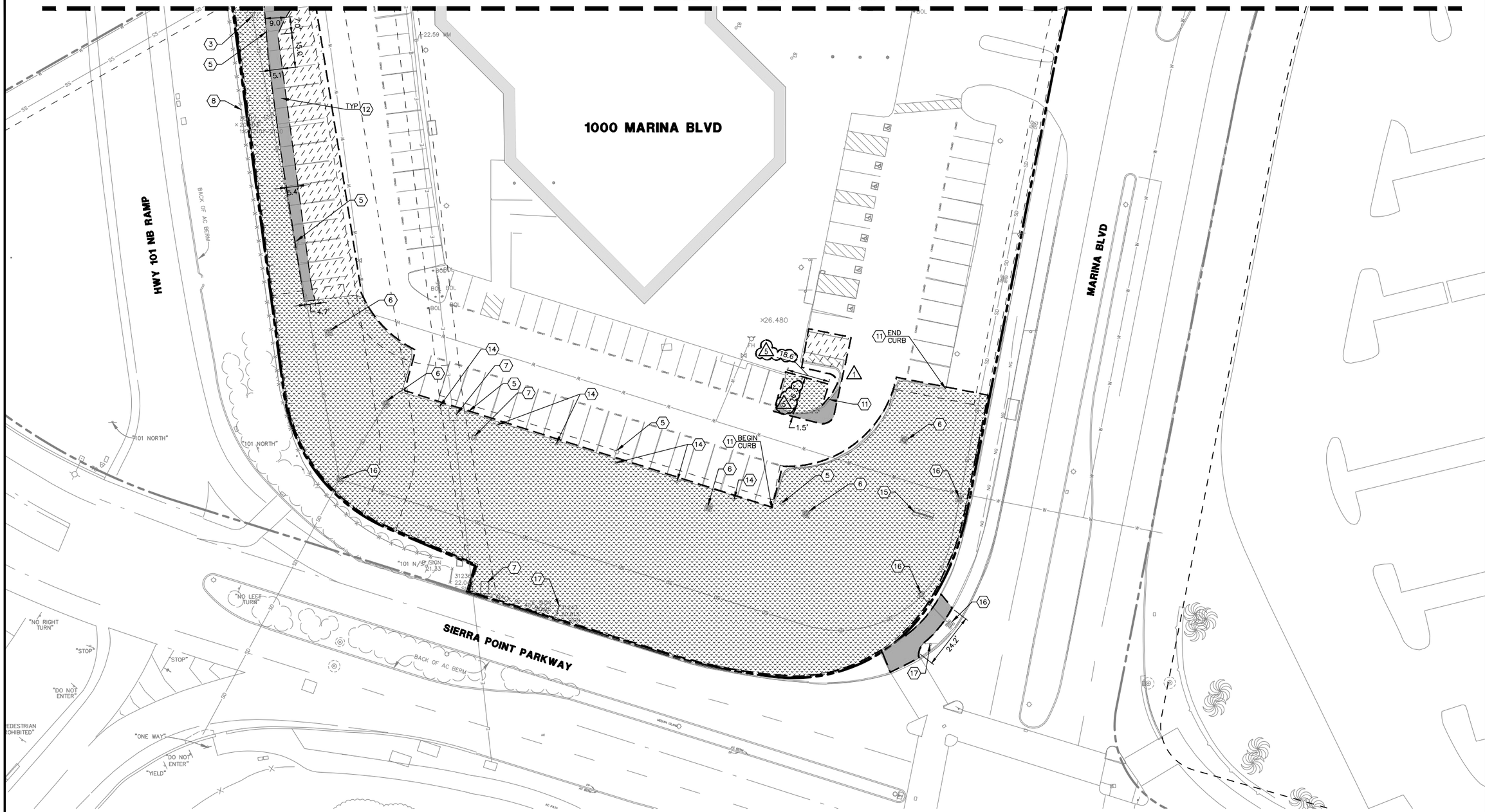
Drawing Number:

C2.0

DRAWING NAME: \\Bt1-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C2.0 DEMOLITION PLAN.dwg
PLOT DATE: 01-30-23
PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C2.0 FOR CONTINUATION



	DEMOLITION TABLE
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2	PROTECT WATER METER
3	PROTECT STORM DRAIN MANHOLE
4	PROTECT LIFT STATION CONTROL BOX
5	PROTECT LIGHT POLE/ FIXTURE
6	REMOVE SDCB/SDDI, SEE NOTE 2
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15	PROTECT BFP
16	PROTECT SDCB/SDDI
17	PROTECT SIGN

NOTE:
SEE SHEET C2.1 FOR NOTES.

LEGEND:

- AC TO BE REMOVED
- PAVEMENT STRIPPING TO BE REMOVED
- LANDSCAPE TO BE REMOVED, SEE NOTE 3.
- LIMIT OF DEMOLITION/SAWCUT
- PROPERTY LINE
- EASEMENT LINE

GRAPHIC SCALE
20 0 20 40

KEY MAP
NTS

PHASE3 REAL ESTATE SERVICES

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THOMAS R. MORSE
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
DEMOLITION PLAN
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
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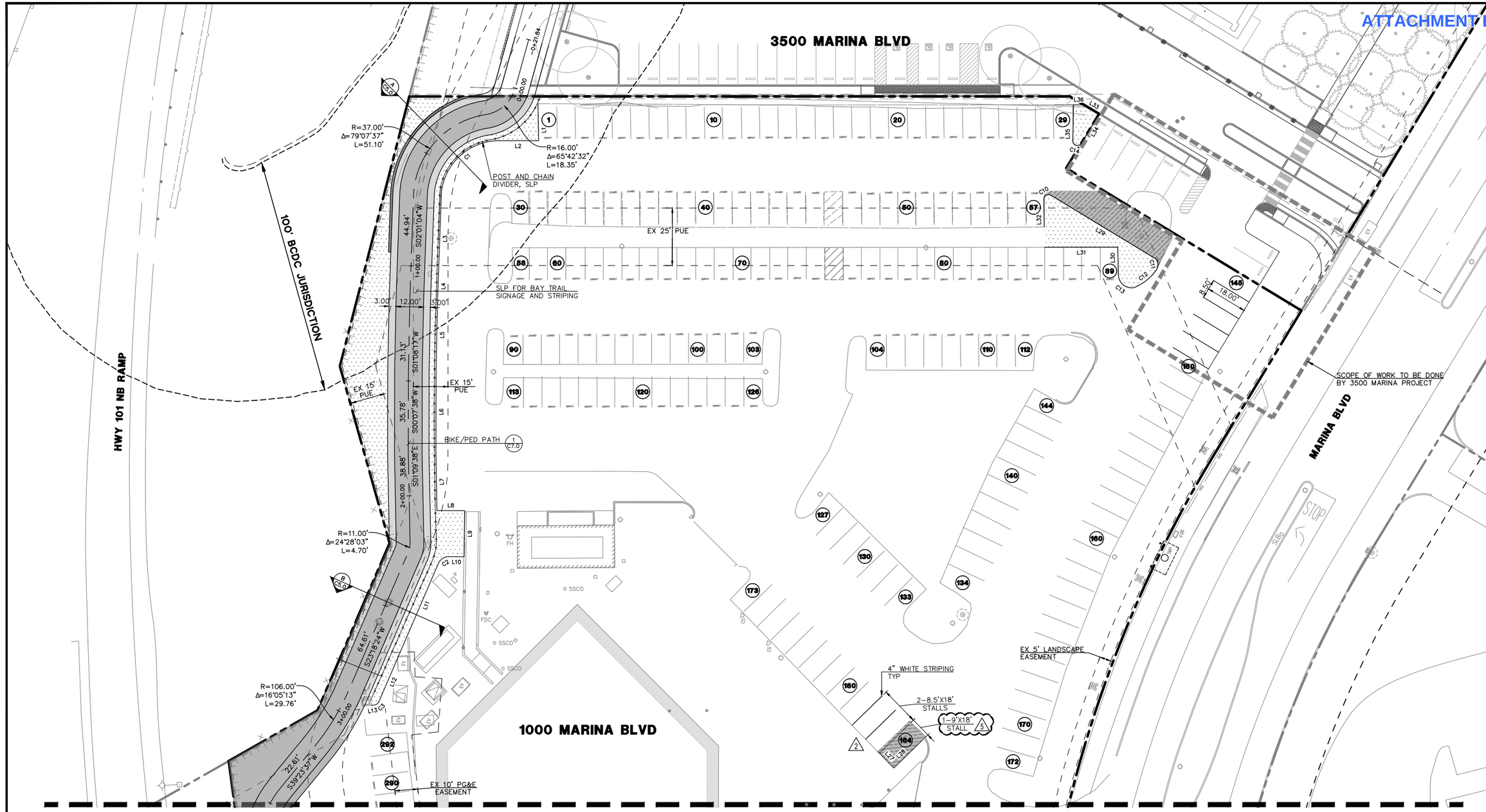
Drawn	AR
Approved	LKY
Job No	20170365-11

Drawing Number:
C2.1

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C2.0 DEMOLITION PLAN.dwg
PLOT DATE: 01-30-23
PLOTTED BY: monu

ATTACHMENT E



SEE SHEET C3.1 FOR CONTINUATION

LINE TABLE		
NO.	BEARING	LENGTH
L1	S01°01'17"E	16.10'
L2	N90°00'00"W	17.76'
L3	S02°03'31"W	40.34'
L4	S01°54'34"W	6.14'
L5	S01°15'08"W	31.12'
L6	S00°04'21"W	35.76'
L7	S01°00'05"E	25.12'
L8	S89°44'40"E	12.13'
L9	S00°50'22"W	20.00'
L10	N89°44'40"W	6.59'
L11	S23°17'52"W	44.63'
L12	S23°18'24"W	20.57'
L13	S81°59'52"W	1.34'
L14	S07°36'41"E	105.97'
L15	S72°20'49"E	166.71'
L16	S72°35'53"E	6.66'

LINE TABLE		
NO.	BEARING	LENGTH
L17	N17°24'14"E	14.00'
L18	S17°24'26"W	14.00'
L19	S72°35'46"E	0.97'
L20	S11°04'14"W	17.72'
L21	S11°17'54"W	2.43'
L22	S78°55'33"E	13.10'
L23	S11°04'14"W	12.56'
L24	N72°35'37"W	0.42'
L25	N17°40'39"E	16.02'
L26	N72°38'53"W	18.00'
L27	S44°17'38"E	9.99'
L28	N45°42'22"E	18.00'
L29	S58°45'04"E	53.24'
L30	N01°21'59"W	12.35'
L31	S89°56'57"W	31.81'
L32	N00°40'50"W	12.06'

LINE TABLE		
NO.	BEARING	LENGTH
L33	S58°13'14"E	7.66'
L34	S31°13'41"W	14.81'
L35	N00°44'18"E	15.70'
L36	S89°13'15"E	4.67'

CURVE TABLE			
NO.	RADIUS	DELTA	LENGTH
C1	25.28'	82°04'11"	36.22'
C2	5.00'	68°18'28"	5.96'
C3	2.44'	61°41'19"	2.63'
C4	60.02'	65°31'02"	68.63'
C5	3.50'	144°07'11"	8.80'
C6	50.00'	96°20'00"	84.07'
C7	5.00'	89°59'01"	7.85'
C8	5.01'	96°34'42"	8.44'
C9	1.00'	90°16'15"	1.58'
C10	2.00'	120°54'38"	4.22'
C11	4.27'	68°01'46"	5.08'
C12	22.27'	32°43'05"	12.72'
C13	5.76'	95°43'09"	9.63'
C14	2.00'	149°30'48"	5.22'

NOTES:

1. REFER TO LANDSCAPE DRAWINGS FOR DECOMPOSED GRANITE SECTION AND STEEL EDGE FOR BAY TRAIL.
2. REFER TO LANDSCAPE DRAWINGS FOR SIGNAGE AND STRIPING OF BAY TRAIL.
3. REFER TO LANDSCAPE DRAWINGS FOR PROPOSED TREE LOCATIONS AND PLANTING.
4. REFER TO GEOTECHNICAL SUPPLEMENTAL RECOMMENDATION LETTER FOR EARTHWORK PLACEMENT. REFER TO THE SITE MANAGEMENT PLAN (SMP) PREPARED BY LANGAN AND DATED 11 NOVEMBER 2020 FOR SOIL HANDLING REQUIREMENTS.

1000 MARINA BOULEVARD PROPOSED PARKING COUNT:

	AT-GRADE	GARAGE	
PARKING STALLS	285	19	
ADA STALLS	7	1	
TOTAL STALLS	292	20	312

NEW STALLS	16
REPLACED STALLS	20

	AT-GRADE
COMPACT STALLS	202
STANDARD STALLS	90
TOTAL STALLS	292

LEGEND:

- BAY TRAIL PAVEMENT SECTION
  SEE DETAIL 1/C7.0
  TOTAL AREA: 10,448 / AREA SHOWN ON THIS SHEET: 4,870 SF (3)
- DECOMPOSED GRANITE SHOULDER, SLP
- VEHICULAR PAVEMENT SECTION
  SEE DETAIL 2/C7.0
  TOTAL AREA: 4,097 SF / AREA SHOWN ON THIS SHEET: 776 SF (3)
- LANDSCAPE AREA, SLP
- PROPERTY LINE
- EXISTING EASEMENT LINE
- (88) PARKING COUNT

GRAPHIC SCALE
20 0 20 40

KEY MAP
NTS

PHASE3 PLANNING + DESIGN

CIVIL ENGINEER:
CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MORSE
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD

SITE PLAN

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

Revisions					
No.					
5	PLAN CHECK RESPONSE 5	01/30/2023			
4	PLAN CHECK RESPONSE 4	01/17/2023			
3	PLAN CHECK RESPONSE 3	01/04/2023			
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1	PLAN CHECK RESPONSE	10/26/2022			

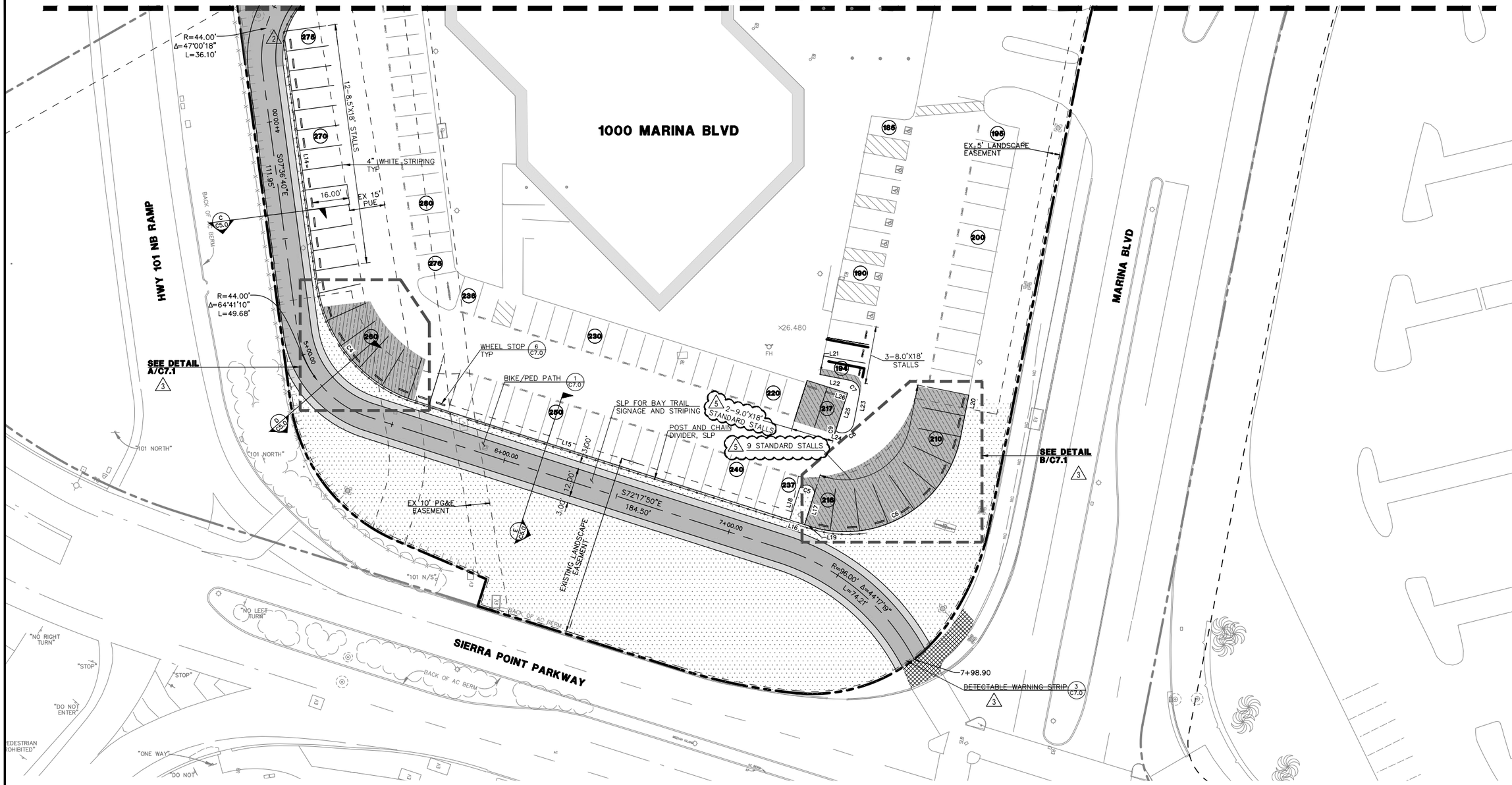
Date	08/24/2022
Scale	1"=20'
Design	AR
Drawn	AR
Approved	LKY
Job No	20170365-11

Drawing Number:
C3.0

DRAWING NAME: \\Bkt-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C3.0 SITE PLAN.dwg
PLOT DATE: 01-30-23
PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C3.0 FOR CONTINUATION



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L7	S01°00'05"E	25.12'
L8	S89°44'40"E	12.13'
L9	S00°50'22"W	20.00'
L10	N89°44'40"W	6.59'
L11	S23°17'52"W	44.63'
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L13	S81°59'52"W	1.34'
L14	S07°36'41"E	105.97'
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L18	S17°24'26"W	14.00'
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L20	S11°04'14"W	17.72'
L21	S11°17'54"W	2.43'
L22	S78°55'33"E	13.10'
L23	S11°04'14"W	12.56'
L24	N72°35'37"W	0.42'
L25	N17°40'39"E	16.02'
L26	N72°38'53"W	18.00'
L27	S44°17'38"E	9.99'
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C5	3.50'	144°07'11"	8.80'
C6	50.00'	96°20'00"	84.07'
C7	5.00'	89°59'01"	7.85'
C8	5.01'	96°34'42"	8.44'
C9	1.00'	90°16'15"	1.58'
C10	2.00'	120°54'38"	4.22'
C11	4.27'	68°01'46"	5.08'
C12	22.27'	32°43'05"	12.72'
C13	5.76'	95°43'09"	9.63'
C14	2.00'	149°30'48"	5.22'

NOTE:
SEE C3.0 FOR NOTES.

1000 MARINA BOULEVARD PROPOSED PARKING COUNT:

	AT-GRADE	GARAGE	
PARKING STALLS	285	19	
ADA STALLS	7	1	
TOTAL STALLS	292	20	312 (1)

NEW STALLS	16
REPLACED STALLS	20 (4)

	AT-GRADE
COMPACT STALLS	202
STANDARD STALLS	90
TOTAL STALLS	292 (5)

LEGEND:

- MARINA BLVD WALKWAY REPLACE IN KIND
- BAY TRAIL PAVEMENT SECTION SEE DETAIL 1/C7.0 TOTAL AREA: 10,448 SF / AREA SHOWN ON THIS SHEET: 5,578 SF (3)
- DECOMPOSED GRANITE SHOULDER, SLP
- VEHICULAR PAVEMENT SECTION SEE DETAIL 2/C7.0 TOTAL AREA: 4,097 / AREA SHOWN ON THIS SHEET: 3,321 SF (3)
- LANDSCAPE AREA, SLP
- PROPERTY LINE
- EXISTING EASEMENT LINE
- (##) PARKING COUNT

GRAPHIC SCALE
20 0 20 40

KEY MAP
NTS

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MOSES
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
SITE PLAN
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
5	PLAN CHECK RESPONSE 5	01/30/2023
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Design AR
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Drawing Number:
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DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C3.0 SITE PLAN.dwg
PLOT DATE: 01-30-23
PLOTTED BY: monu

ATTACHMENT E

3500 MARINA BLVD

1000 MARINA BLVD

HWY 101 NB RAMP

100' BCDC JURISDICTION

MARINA BLVD

CONFROM TO EX BAY TRAIL 21.0±

TOW 20.71

TOW 20.77

EP 21.09

TOW 21.04

EP 21.29

ES 21.34

CONFORM TO EX AC

EP 22.32

ES 22.27

EX 25' PUE

CONFORM TO EX

CONFORM TO EX

CONFORM TO EX

ES 22.59'

EP 22.54

EX 15' PUE

EX 15' PUE

ES 24.12

EP 24.06

ES 24.39

EP 24.33

SCOPE OF WORK TO BE DONE BY 3500 MARINA PROJECT

ES 25.48

EP 25.78

EP 25.55

ES 25.83

EX 5' LANDSCAPE EASEMENT

CONFORM TO EX EP 23.29

CONFORM TO EX EP 23.09

CONFORM TO EX EP 23.97

5 EP 23.73

EP 24.47

EP 24.67

EX 10' PG&E EASEMENT

SEE SHEET C4.1 FOR CONTINUATION

2 **EARTHWORK QUANTITIES:**

CUT MATERIAL	1,724 CY
FILL MATERIAL	222 CY
NET EXPORT	1,502 CY (5)

LEGEND:

- MARINA BLVD WALKWAY REPLACE IN KIND
- BAY TRAIL PAVEMENT SECTION SEE DETAIL 1/C7.0
- DECOMPOSED GRANITE SHOULDER, SLP
- VEHICULAR PAVEMENT SECTION SEE DETAIL 2/C7.0
- LANDSCAPE AREA, SLP
- PROPERTY LINE
- EXISTING EASEMENT LINE

GRAPHIC SCALE

20 0 20 40

KEY MAP
NTS

PHASE3 PLANNING + DESIGN

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STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MORSE
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD

GRADING PLAN

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
5	PLAN CHECK RESPONSE 5	01/30/2023
4	PLAN CHECK RESPONSE 4	01/17/2023
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Job No	20170365-11

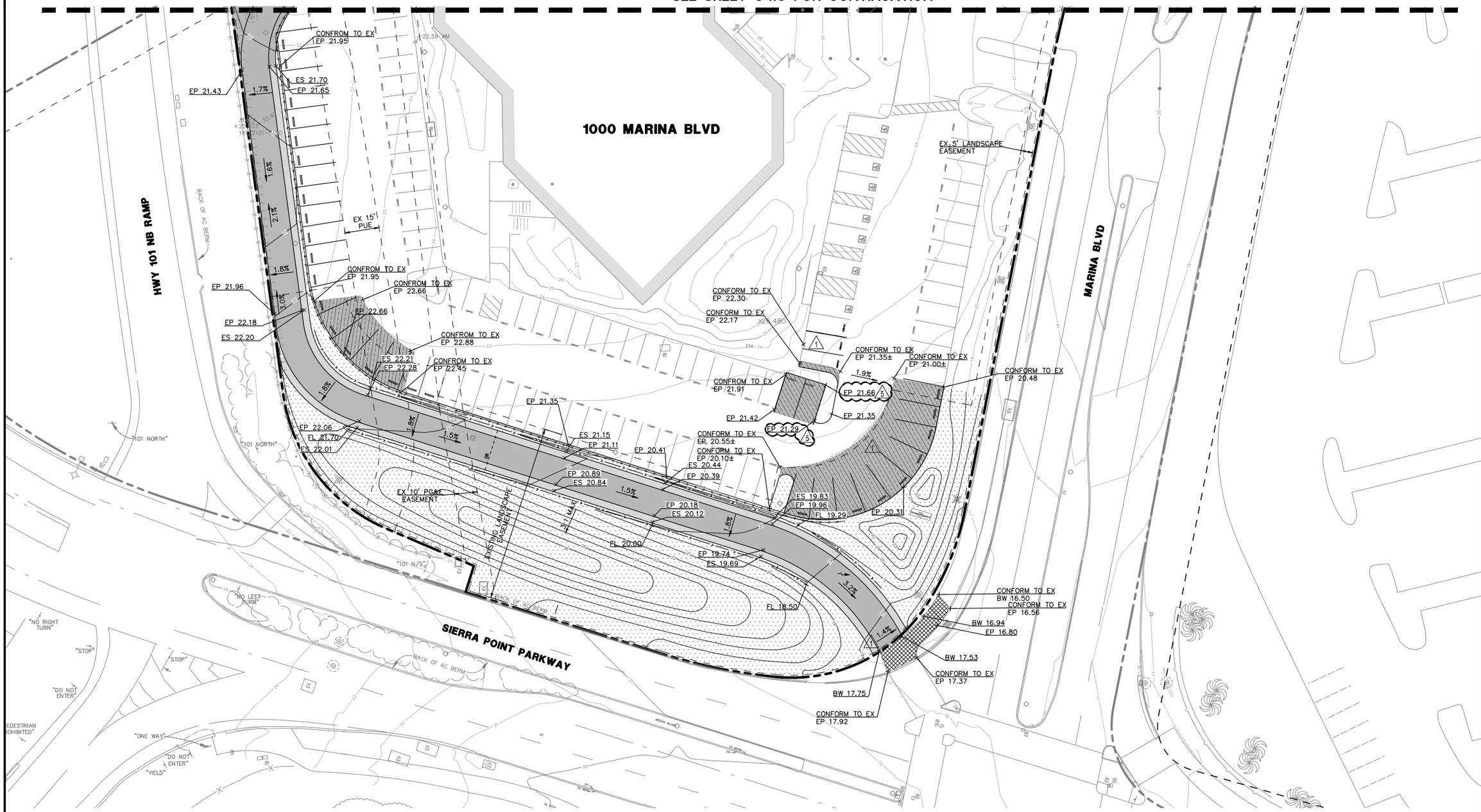
Drawing Number:

C4.0

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C4.0 GRADING PLAN.dwg
PLOT DATE: 01-30-23 PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C4.0 FOR CONTINUATION



EARTHWORK QUANTITIES: (2)

CUT MATERIAL	1,724 CY
FILL MATERIAL	222 CY
NET EXPORT	1,502 CY (5)

LEGEND:

- MARINA BLVD WALKWAY REPLACE IN KIND
- BAY TRAIL PAVEMENT SECTION SEE DETAIL 1/C7.0
- DECOMPOSED GRANITE SHOULDER, SLP
- VEHICULAR PAVEMENT SECTION SEE DETAIL 2/C7.0
- LANDSCAPE AREA, SLP
- PROPERTY LINE
- EXISTING EASEMENT LINE

GRAPHIC SCALE
20 0 20 40

KEY MAP
NTS

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C4.0 GRADING PLAN.dwg
PLOT DATE: 01-30-23
PLOTTED BY: monu

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
THOMAS R. MOSES
No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

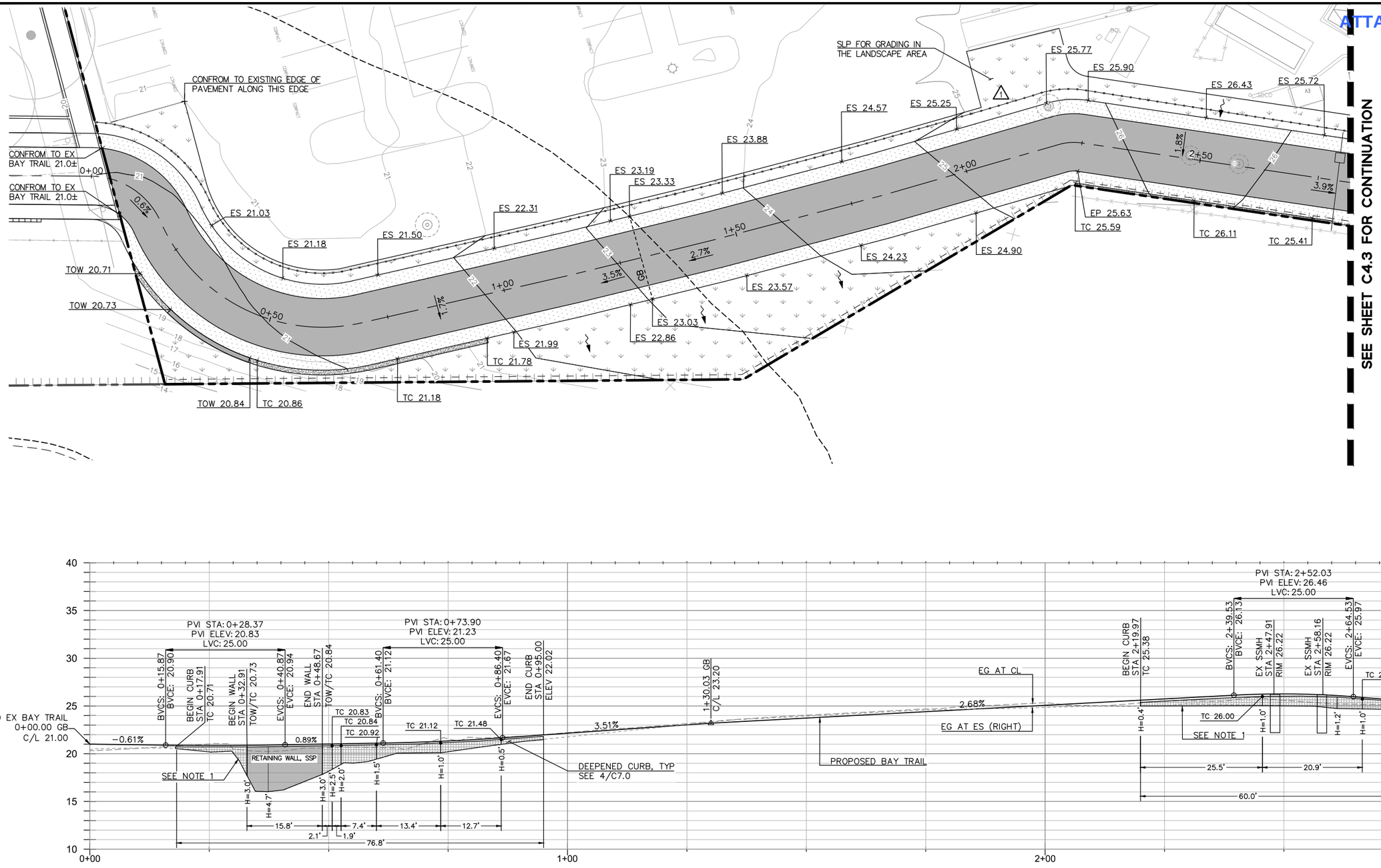
1000 MARINA BOULEVARD
GRADING PLAN
CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
5	PLAN CHECK RESPONSE 5	01/30/2023
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE 2	12/22/2022
1	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C4.1

ATTACHMENT E



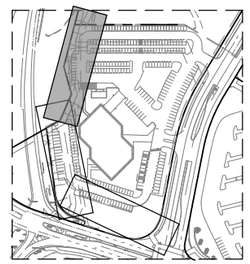
PROFILE

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

NOTES:

1. EXPOSED PORTION OF RETAINING WALL AND DEEPEND CURBS IS SHOWN ON THE PROFILES. WALL AND CURB ARE DEEPER. FOR WALL DETAILS SEE STRUCTURAL PLANS. FOR DEEPENED CURB DETAILS SEE DETAIL 4/C7.0.
2. TOP OF WALL IS FLUSHED WITH BAY TRAIL. SEE LANDSCAPE PLANS FOR LOCATION AND DETAIL OF THE GUARDRAIL.
3. ALL UTILITY BOXES TO BE ADJUSTED TO FINISHED GRADE BY THE CONTRACTOR.

GRAPHIC SCALE
10 0 10 20



KEY MAP
NTS

PHASE3 PLANNING & ENGINEERING

CIVIL ENGINEER:
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CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
BAY TRAIL PLAN AND PROFILE

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

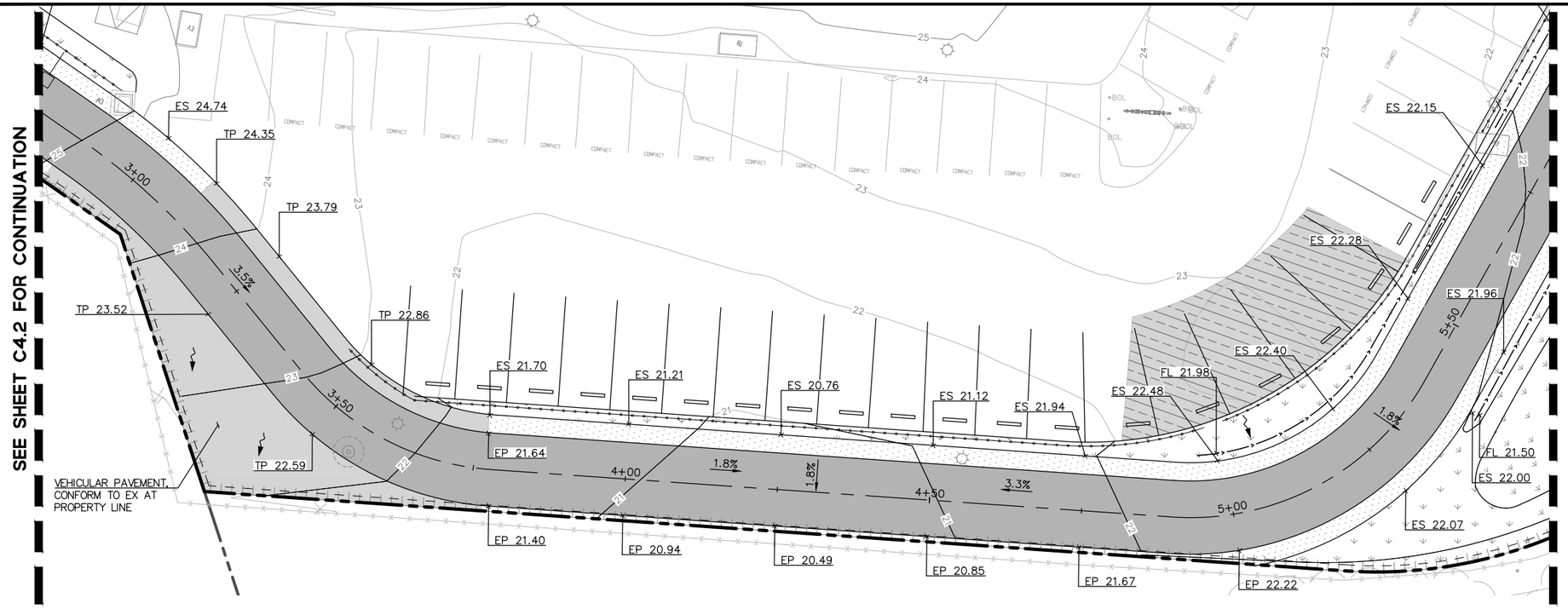
Drawing Number:
C4.2

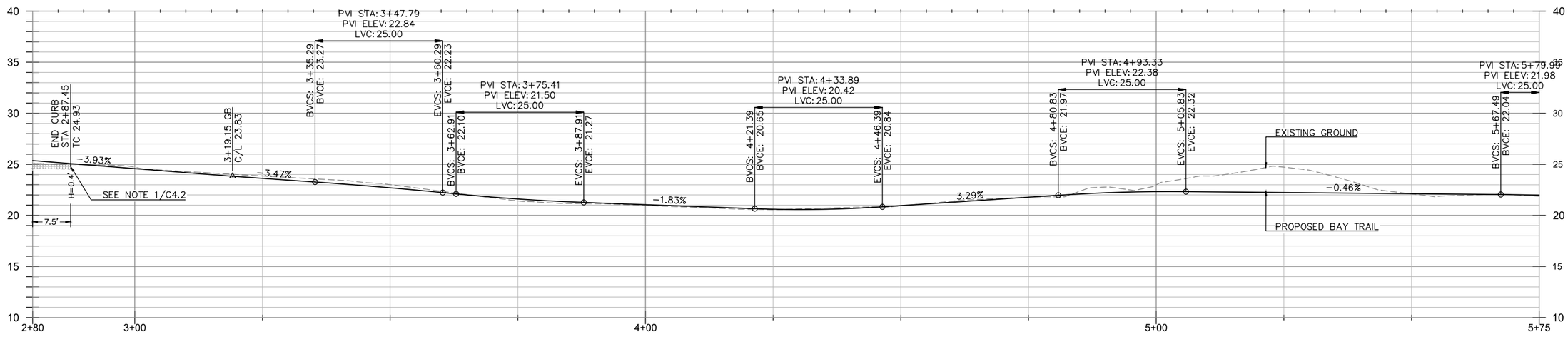
DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marino\ENG\1000 Marino\CD\PLOTS\C4.2 BAY TRAIL PLAN AND PROFILE.dwg
PLOT DATE: 01-13-23
PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C4.2 FOR CONTINUATION

SEE SHEET C4.4 FOR CONTINUATION





PROFILE

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

GRAPHIC SCALE
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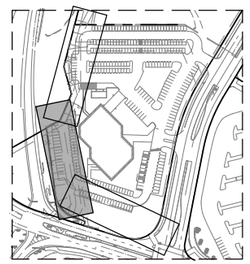

KEY MAP
NTS

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PLOT DATE: 01-13-23
PLOTTED BY: monu

PHASE3 PLANNING + DESIGN

CIVIL ENGINEER:
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255 Shoreline Drive,Suite 200
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STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
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No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
BAY TRAIL PLAN AND PROFILE

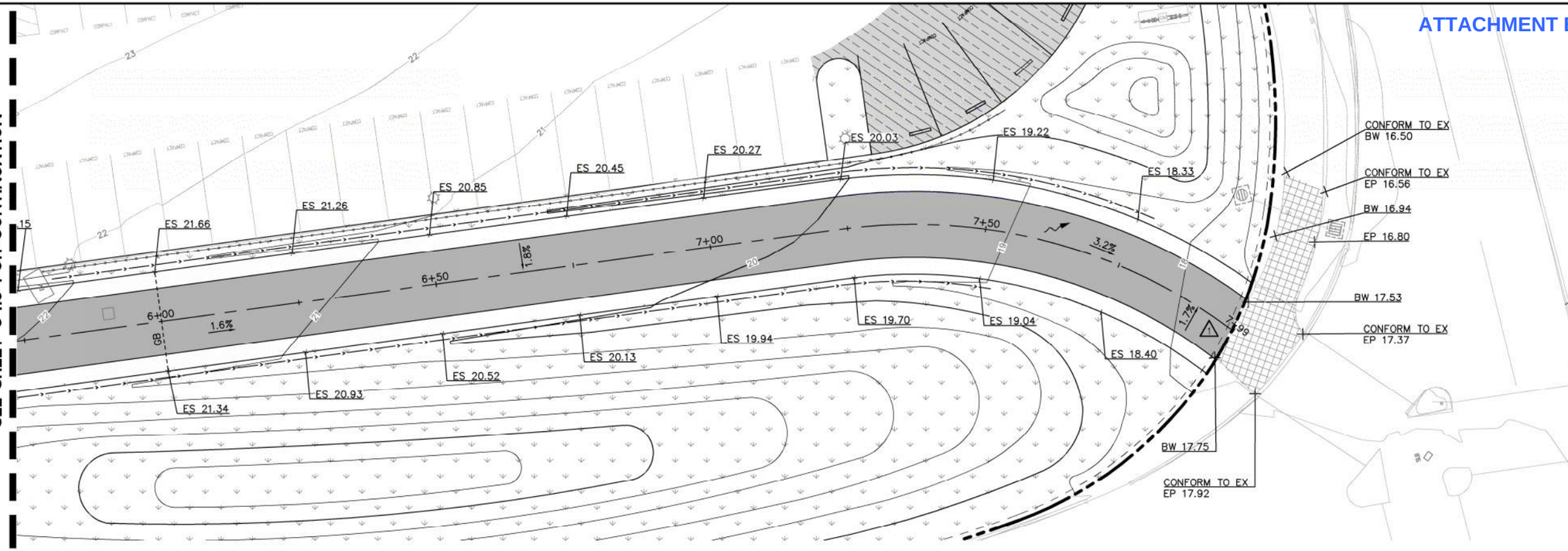
CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

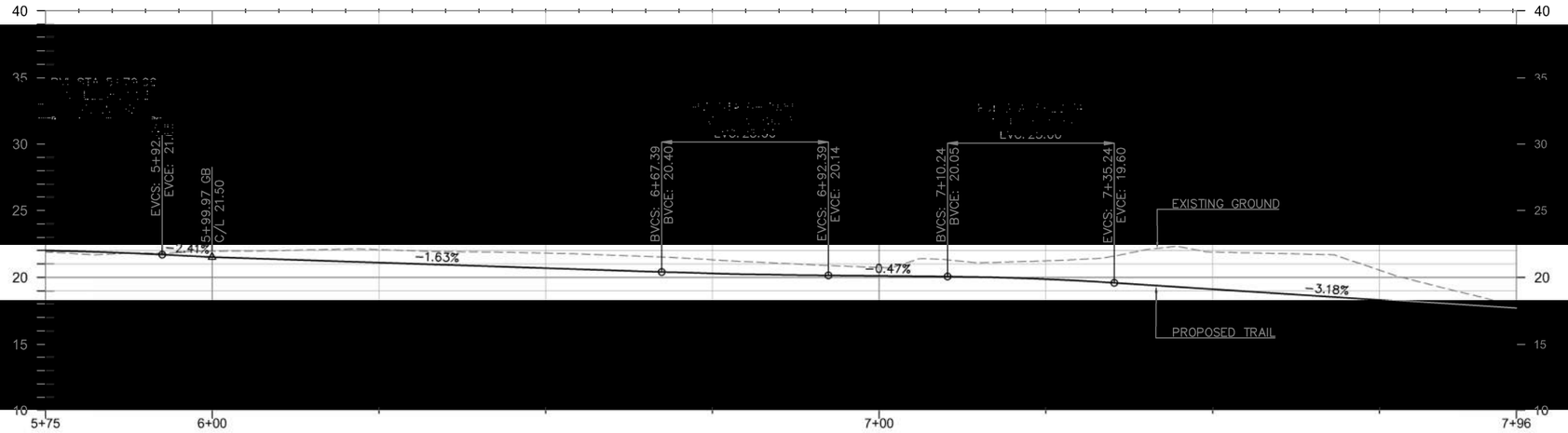
No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C4.3

ATTACHMENT E





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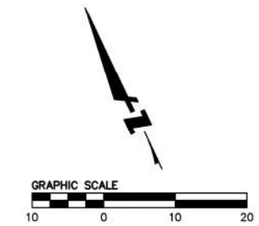

KEY MAP
NTS

PHASE3 REAL ESTATE PARTNERS

CIVIL ENGINEER:
BKF
255 Shoreline Drive,Suite 200
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EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

3000 MARINA BOULEVARD
BAY TRAIL PLAN AND PROFILE
CITY OF SAN MATEO COUNTY CALIFORNIA

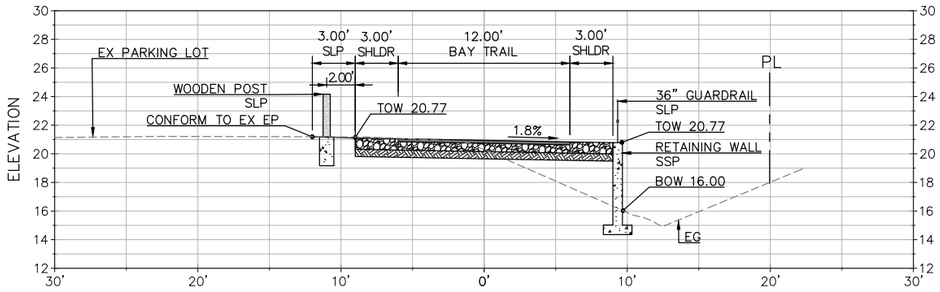
No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE	10/26/2022

Date 06/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

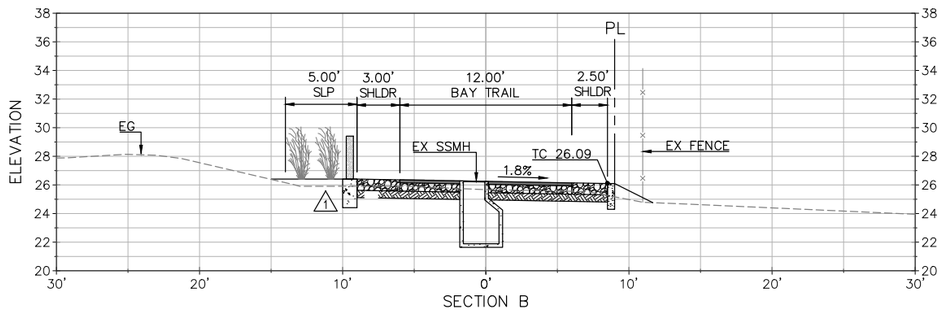
Drawing Number:
C4.4

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\PLOTS\C4.2 BAY TRAIL Pl... XOFILE.dwg
PLOT DATE: 01-13-23
PLOTTED BY: manu

ATTACHMENT E



SECTION A
SCALE: 1" = 5' VERTICAL
1" = 5' HORIZONTAL



SECTION B
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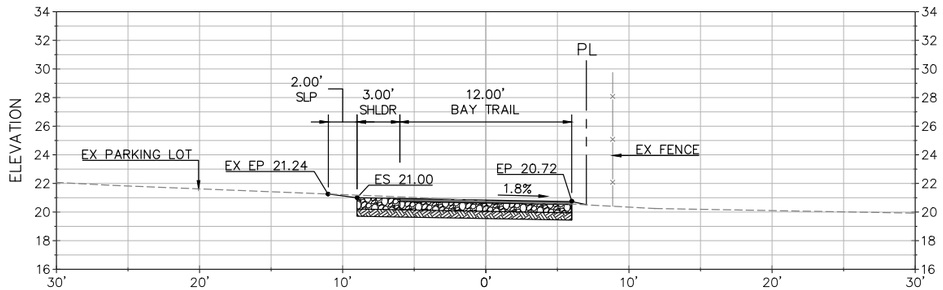

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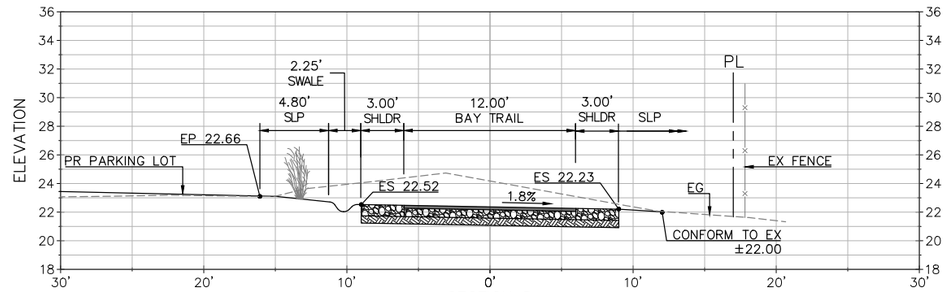

SECTION D
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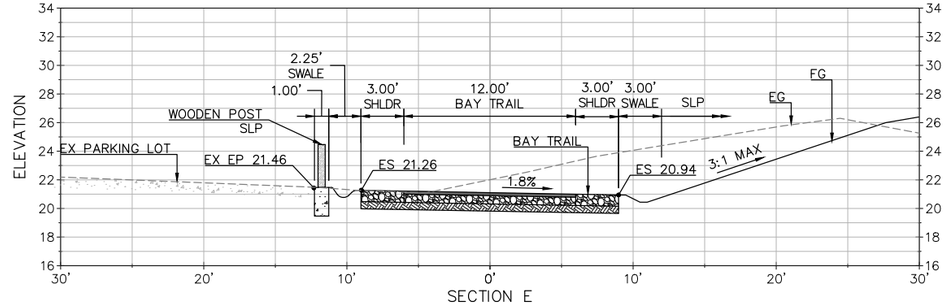

SECTION E
SCALE: 1" = 5' VERTICAL
1" = 5' HORIZONTAL

PHASE3
CIVIL ENGINEER:
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STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
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No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD

SECTIONS

CITY OF BRISBANE

SAN MATEO COUNTY

CALIFORNIA

No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 08/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:

C5.0

DRAWING NAME: \\Bkf-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C3.0 SITE PLAN.dwg
PLOT DATE: 01-13-23
PLOTTED BY: monu

ATTACHMENT E

3500 MARINA BLVD

HWY 101 NB RAMP

100' BCDC JURISDICTION

FIBER ROLL, TYP (2 / C6.2)

CONSTRUCTION FENCE

SCOPE OF WORK TO BE DONE BY 3500 MARINA PROJECT

1 / C6.2 INLET PROTECTION, TYP

MARINA BLVD

STOP

SIGN

FH

BOL

FDC

1000 MARINA BLVD

SEE SHEET C6.1 FOR CONTINUATION

LEGEND:

—X—X— CONSTRUCTION FENCE

FIBER ROLL

INLET PROTECTION

GRAPHIC SCALE

20 0 20 40

KEY MAP

NTS

PHASE3 PLANNING + DESIGN

CIVIL ENGINEER:
CKF
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No. 49457
EXP. 09/30/24
CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD

EROSION CONTROL PLAN

SAN MATEO COUNTY CALIFORNIA

CITY OF BRISBANE

No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 06/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

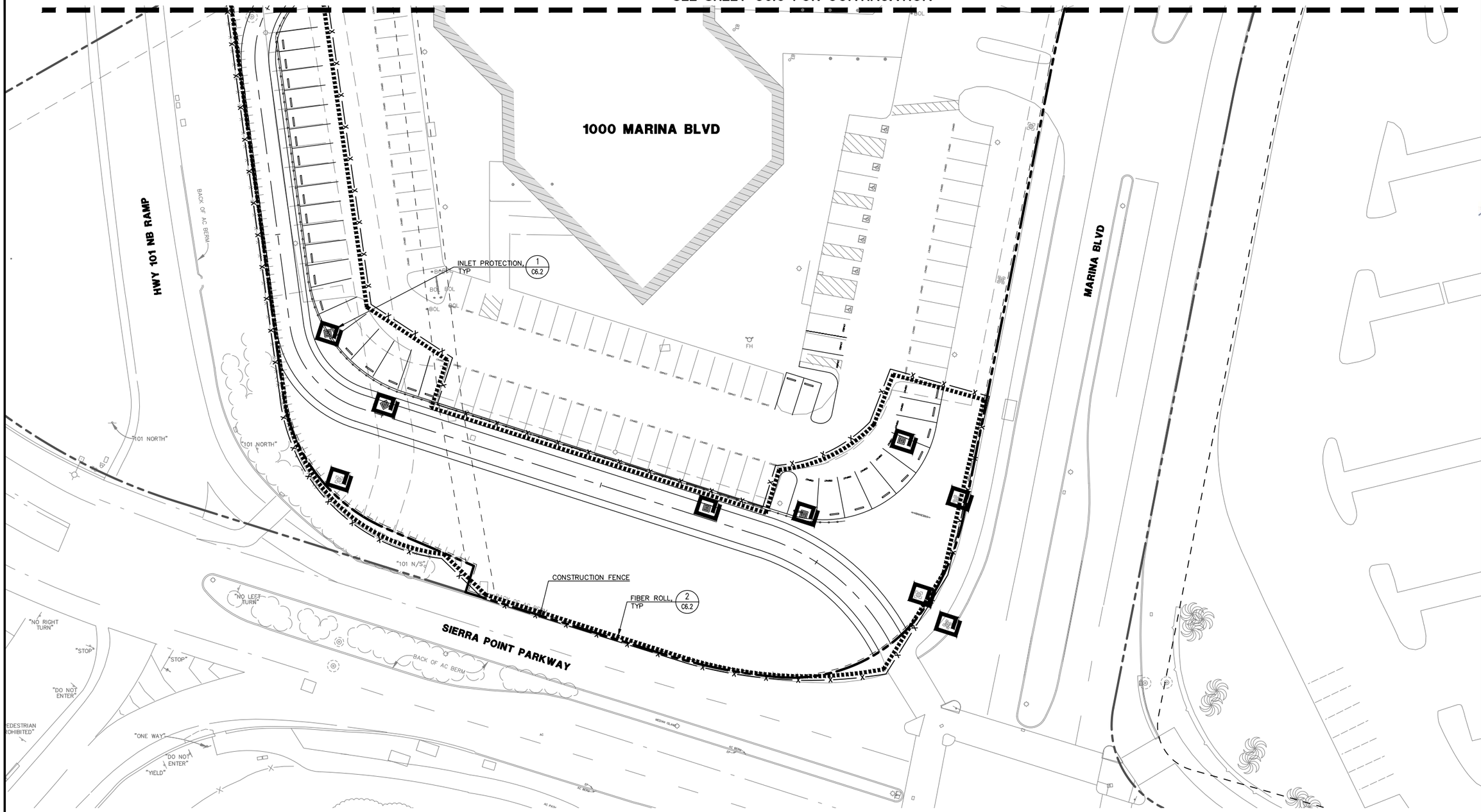
Drawing Number:

C6.0

DRAWING NAME: \\Bk1-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C6.0 EROSION CONTROL PLAN.dwg
PLOT DATE: 01-13-23
PLOTTED BY: monu

ATTACHMENT E

SEE SHEET C6.0 FOR CONTINUATION



LEGEND:

——x——x—— CONSTRUCTION FENCE

FIBER ROLL

INLET PROTECTION

GRAPHIC SCALE

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KEY MAP
NTS

DRAWING NAME: K:\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C6.0 EROSION CONTROL PLAN.dwg
PLOT DATE: 10-21-22
PLOTTED BY: kase

PHASE3 REAL ESTATE

CIVIL ENGINEER:
CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA

1000 MARINA BOULEVARD
EROSION CONTROL PLAN
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
1	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
1	PLAN CHECK RESPONSE	10/26/2022

Date 06/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C6.1

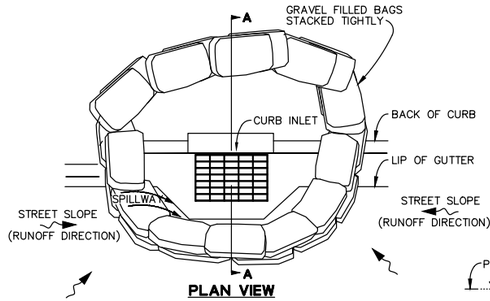
ATTACHMENT E

EROSION & SEDIMENT CONTROL NOTES

1. THE CONTRACTOR WILL IMPLEMENT APPLICABLE CONSTRUCTION EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) THROUGHOUT THE PHASES OF CONSTRUCTION OF THE PROJECT SITE. THE CONTRACTOR WILL BE AWARE THAT THE EROSION CONTROL MEASURES AND LAYOUT IDENTIFIED ON THIS PLAN SHEET ASSUMES THAT THE STREET HAS BEEN GRADED TO SUBGRADE AND PROPOSED STORM DRAINAGE STRUCTURES AND PIPE HAVE BEEN INSTALLED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE REVISIONS AND/OR UPDATES TO THE EROSION PLAN IN ACCORDANCE WITH THE DIFFERENT STAGES OF GRADING OPERATIONS DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15) AS REQUIRED BY THE CITY PUBLIC WORKS ENGINEER AND STATE REGULATORS.
2. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT–LADEN STORM RUNOFF FROM LEAVING THE SITE. CATCH BASIN INSERTS, GRAVEL BAGS, FIBER ROLLS, EARTHEN DIKES, EROSION CONTROL MATS/FABRICS AND FILTER PUMPS WILL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS WILL USE SEDIMENT BARRIERS.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGES TO PUBLIC AND/OR PRIVATELY OWNED AND MAINTAINED ROADS CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF MATERIAL SPILLED ON PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC AND/OR PRIVATE ROADS WILL BE CLEANED AT THE END OF THE WORK DAY.
4. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT–LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
5. ALL EROSION CONTROL FACILITIES MUST BE MONITORED. ALL SLOPES WILL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
6. ALL TRUCK TIRES WILL BE CLEANED PRIOR TO EXITING THE PROPERTY.
7. STOCKPILED MATERIAL
   - A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
   - B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY, UNLESS STOCKPILING IS NECESSARY.
   - C. SURROUND ALL STOCKPILES WITH PERIMETER SILT FENCES, FIBER ROLLS, APPROPRIATELY SIZED SECONDARY CONTAINMENT, OR OTHER RUNOFF CONTROLS.
   - D. STABILIZE INACTIVE STOCKPILES WITH SOIL STABILIZER AND/OR MULCH, OR COVER WITH A TARPAULIN.
   - E. COVER STOCKPILES OF CRUSHED AC OR PCC PAVEMENT WITH A TARPAULIN OR PROVIDE CASE–SPECIFIC DESIGNED SECONDARY CONTAINMENT AND CONTAINMENT AND SURROUND WITH APPROPRIATE RUNOFF CONTROLS.
   - F. USE INLET PROTECTION FOR STORM DRAIN STRUCTURES ADJACENT TO THE MATERIAL.
   - G. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION PLACEMENT.
10. DURING CONSTRUCTION, THE MAINTENANCE OF SUMMERTIME DRAINAGE THROUGH THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. AS SOON AS IS PRACTICAL AFTER THE NEW ONSITE STORM SYSTEM IS INSTALLED, THE CATCH BASINS WILL BE INSTALLED. EROSION CONTROL DEVICES WILL BE IN OR AROUND THOSE CATCH BASINS AS SHOWN ON THE APPROVED EROSION CONTROL PLAN. CONTRACTOR IS RESPONSIBLE FOR PREVENTING GRAVEL AND DIRT FROM ENTERING THE STORM DRAIN SYSTEM AND WILL REMOVE DEBRIS IN THE STORM DRAIN LINES.
12. EROSION CONTROL MEASURES WILL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION CONTROL PLAN WILL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE CITY PUBLIC WORKS ENGINEER.
13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT TEMPORARY BORROW AREAS AND/OR STOCKPILES WITH THE APPROPRIATE EROSION CONTROL MEASURES SATISFACTORY TO THE CITY PUBLIC WORKS ENGINEER.
14. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DURING GRADING OPERATION, BEFORE APRIL 15 AND PRIOR TO INSTALLATION OF STORM DRAINAGE SYSTEM. SUCH ADDITIONAL MEASURES WILL BE CONTINGENT UPON THE STAGE OF GRADING OPERATION. CONTRACTOR WILL IMPLEMENT ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER OR CITY PUBLIC WORKS ENGINEER.
15. THE SURFACE OF CUT SLOPES MORE THAN 4 FEET IN HEIGHT AND FILL SLOPES MORE THAN 3 FEET IN HEIGHT WILL BE PROTECTED AGAINST EROSION BY PLANTING WITH GRASS OR GROUNDCOVER PLANTS.
16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING LIMITS OF WORK AS SHOWN ON THE IMPROVEMENT PLANS. SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
17. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
18. ERODED SEDIMENTS AND OTHER POLLUTANTS WILL BE RETAINED ON–SITE AND ARE PROHIBITED FROM BEING TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
19. CONSTRUCTION PROJECTS SHALL BE CONDUCTED IN A MANNER WHICH PREVENTS THE RELEASE OF HAZARDOUS MATERIALS, HAZARDOUS WASTE, POLLUTED WATER AND SEDIMENTS TO THE STORM DRAIN SYSTEM. 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. 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.
20. REMOVE SILT AND DISPOSE OF SO AS NOT TO CAUSE SILTATION PROBLEMS.
21. PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE EROSION CONTROL BARRIER.
22. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, DEVICES SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE AT THE END OF EACH WORK DAY AND EROSION CONTROL FACILITIES MUST BE INSPECTED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
23. STANDBY CREWS WILL BE ALERTED BY THE PERMITEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAIN STORMS.

DUST CONTROL NOTES

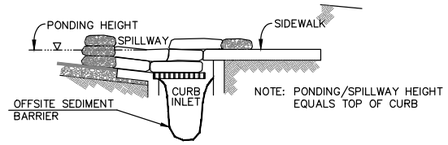
1. ALL ACTIVE CONSTRUCTION AREAS WILL BE WATERED AT LEAST TWICE DAILY.
2. ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS WILL BE COVERED OR WILL RETAIN AT LEAST TWO FEET OF FREEBOARD.
3. ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITE WILL BE EITHER PAVED, WATERED THREE TIMES DAILY, OR TREATED WITH NON–TOXIC SOIL STABILIZERS.
4. ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITE WILL BE SWEPT (WITH WATER SWEEPERS) DAILY.
5. IF VISIBLE SOIL MATERIAL IS CARRIED ONTO PUBLIC STREETS, THE STREET WILL BE SWEPT (WITH WATER SWEEPERS) DAILY.



PLAN VIEW

NOTES:

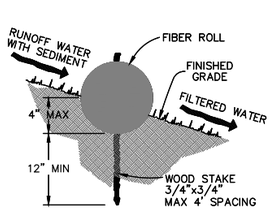
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. PERVIOUS BAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE BAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY WILL BE LOWER THAN TOP OF CURB.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT, AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



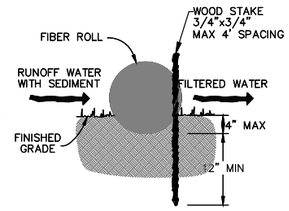
SECTION A–A

1 / – CURB INLET GRAVEL BAG PROTECTION

NTS



ENTRENCHMENT DETAIL IN SLOPE AREA



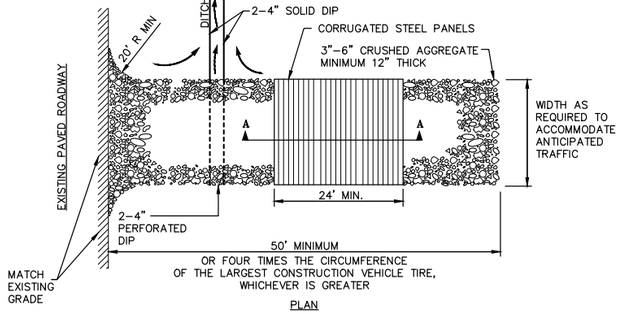
ENTRENCHMENT DETAIL IN FLAT AREA

NOTES:

1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
2. ADJACENT ROLLS WILL TIGHTLY ABUT.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

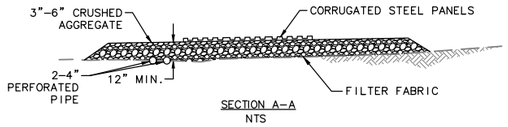
2 / – FIBER ROLL

NTS



PLAN

NTS



SECTION A–A

NTS

NOTES

1. ALL CONSTRUCTION ENTRANCES WILL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT–OF–WAYS WILL BE REMOVED IMMEDIATELY.
2. WHEELS WILL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAYS. WHEN WASHING IS REQUIRED, IT WILL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3" TO 6" STONE.
4. THE THICKNESS OF THE PAD WILL NOT BE LESS THAN 12".
5. THE WIDTH OF THE PAD WILL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
6. THE LENGTH OF THE PAD WILL NOT BE LESS THAN 50'.

3 / – STABILIZED CONSTRUCTION ENTRANCE/EXIT

NTS

PHASE3

CIVIL ENGINEER: CKF, 255 Shoreline Drive,Suite 200, Redwood City, CA 94065

LANDSCAPE ARCHITECT: TLS Landscape Architecture, 1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

REGISTERED PROFESSIONAL ENGINEER – THOMAS R. MORSE – No. 49457 – EXP. 09/30/24 – CIVIL – STATE OF CALIFORNIA

1000 MARINA BOULEVARD

EROSION CONTROL DETAILS

CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
4	PLAN CHECK RESPONSE 4	01/17/2023
3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE	10/26/2022

Date 06/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number: **C6.2**

DRAWING NAME: \\Bk1-rc\vol4\2017\170365_3000_Marina\ENG\1000 Marina\CD\PLOTS\C6.0 EROSION CONTROL PLAN.dwg
PLOT DATE: 01-13-23
PLOTTED BY: monu

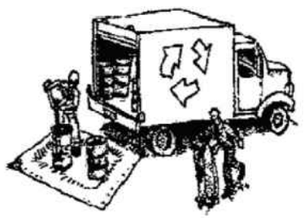
ATTACHMENT E

Construction Best Management Practices (BMPs)

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control

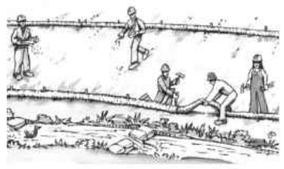
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

Paving/Asphalt Work

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

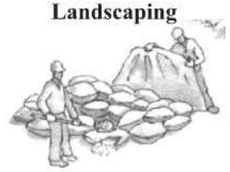
Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application

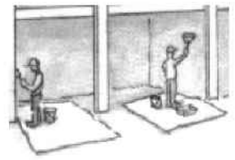
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering

- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to $10,000 per day!

PHASE3
CIVIL ENGINEER:
CKF
255 Shoreline Drive,Suite 200
Redwood City, CA 94065
LANDSCAPE ARCHITECT:
TLS
1015 Camelia St. Berkeley, CA 94710
STRUCTURAL ENGINEER:
REGISTERED PROFESSIONAL ENGINEER THOMAS R. MORSE No. 49457 EXP. 09/30/24 CIVIL STATE OF CALIFORNIA

1000 MARINA BOULEVARD
EROSION CONTROL DETAILS
CITY OF BRISBANE SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
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3	PLAN CHECK RESPONSE 3	01/04/2023
2	PLAN CHECK RESPONSE	10/26/2022

Date 06/24/2022
Scale 1"=20'
Design AR
Drawn AR
Approved LKY
Job No 20170365-11

Drawing Number:
C6.3

LANDSCAPE DRAWINGS, NOTES, LEGENDS, SYMBOLS AND ABBREVIATIONS

ATTACHMENT E

GENERAL NOTES

1. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS, AND APPLICABLE REQUIREMENTS OF THE CITY OF BRISBANE, COUNTY OF SAN MATEO AND OTHER REGULATORY AGENCIES.
3. UNLESS OTHERWISE SPECIFIED, SPECIFIC REFERENCES TO CODES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS, OR REQUIREMENTS OF REGULATORY AGENCIES, WHEN USED TO SPECIFY REQUIREMENTS FOR MATERIALS OF DESIGN ELEMENTS, SHALL MEAN THE LATEST EDITION OF EACH IN EFFECT ON THAT THE DATE OF SUBMISSION OF BIDS, OR THE DATE OF THE CHANGE ORDER OF FIELD ORDER, AS APPLICABLE.
4. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE TO CONSTRUCT THE WORK INDICATED ON THE LANDSCAPE DRAWINGS IN ACCORDANCE WITH CALIFORNIA ACCESSIBILITY STANDARDS, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
5. REPORT DISCREPANCIES IN DRAWINGS OR SPECIFICATIONS TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATIONS AND ADJUSTMENTS BEFORE COMMENCING WORK. ANY DEVIATIONS OR CHANGES IN THESE DRAWINGS WITHOUT WRITTEN ACCEPTANCE OF THE OWNER'S REPRESENTATIVE SHALL ABSOLVE THE OWNER'S REPRESENTATIVE AND THE DESIGN LANDSCAPE ARCHITECT OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION AND CHANGE.
6. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
7. THE EXACT LOCATION AND ELEVATION OF UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR. IF SHOWN, EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS, BASED UPON RECORD INFORMATION AVAILABLE TO THE LANDSCAPE ARCHITECT AT THE TIME OF PREPARATION OF THESE PLANS. LOCATION MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY AND COMPLETENESS OF THE INFORMATION SHOWN.
8. OBTAIN ACCEPTANCE OF HORIZONTAL ALIGNMENT OF ELEMENTS IN THE FIELD FROM OWNER'S REPRESENTATIVE PRIOR TO INSTALLMENT.
9. PROTECT FROM DAMAGE EXISTING UTILITIES ON THE SITE AND ON THE ADJACENT PROPERTY, INCLUDING BUT NOT LIMITED TO, WATER, SEWER, DRAINAGE, TELEPHONE AND SERVICES THAT ARE TO REMAIN IN PLACE.
10. PROTECT FROM DAMAGE EXISTING STREETS, SIDEWALKS AND ADJACENT PROPERTY THROUGHOUT THE WORK.
11. IF LIVE UTILITIES ARE ENCOUNTERED, NOT INDICATED PREVIOUSLY, PROTECT THE SAME FROM DAMAGE AND IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND AFFECTED UTILITY PROVIDER. DO NOT PROCEED UNTIL FURTHER INSTRUCTIONS ARE RECEIVED.
12. REFER TO GEOTECHNICAL AND POTHOLING FIELD REPORTS FOR PROPERTY EDGE CONDITIONS, CLAY CAP LAYER AND SOIL FILL.
13. OBTAIN COPY OF AND BECOME FAMILIAR WITH POTHOLING SURVEY REPORT DATED 5/6/22 COMPLY WITH REQUIREMENTS THEREIN. REPORT. THE SURFACE OF THE CLAY CAP LAYER SLOPES A MINIMUM OF 1% FOR POSITIVE DRAINAGE. DO NOT PENETRATE OR DAMAGE THE CLAY CAP. IF A DISCREPENCY OR CONFLICT IS FOUND BETWEEN PLANTING LAYOUT / PLANTING DETAILS AND CLAY CAP DETAILS NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY AND DO NOT PROCEED IN THAT AREA WITHOUT OWNER'S REPRESENTATIVE'S NOTIFICATION.
14. CONFLICTS BETWEEN GEOTECHNICAL REPORT AND LANDSCAPE DOCUMENTS SHALL BE BROUGHT TO OWNER'S REPRESENTATIVE'S ATTENTION.
15. VERIFY LOCATION OF SUBSURFACE UTILITIES, PIPES AND STRUCTURES. SHOULD UTILITIES OR OTHER WORK NOT SHOWN ON THE PLANS BE FOUND DURING EXCAVATIONS, PROMPTLY NOTIFY OWNER'S REPRESENTATIVE. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR DAMAGE ARISING FROM THEIR OPERATIONS SUBSEQUENT TO DISCOVERY OF UTILITIES NOT SHOWN ON PLANS.
16. REFER TO CIVIL DOCUMENTS FOR ADDITIONAL INFORMATION RELATED TO AND PART OF THE WORK SHOWN IN THESE DRAWINGS.
17. ALL WORK WITHIN THE CITY OF BRISBANE RIGHT OF WAY SHALL CONFORM TO CURRENT CITY AND COUNTY STANDARDS UNLESS OTHERWISE ACCEPTED IN WRITING BY THE CITY.
18. REFER CIVIL DRAWINGS FOR LAYOUT AND GRADING OF BAY TRAIL.

GENERAL - ALL SHEETS

- CENTERLINE
- ENLARGED PLAN AREA
- SECTION/ELEVATION DETAIL
- ALIGN
- 1:1 SLOPE
- PROPERTY LINE
- L.O.W LINE
- MATCHLINE
- BREAK LINE
- REVISION CLOUD
- DETAIL NUMBER (5 / L100) — SHEET NUMBER
- EXISTING TREE
- PROPOSED TREE

LAYOUT AND MATERIAL LEGEND

- POB — Point of Beginning
- Coordinate Point
- Align Flush
- MEX — Meet Existing Condition
- 53 — Proposed Contour
- 5350 — Existing Contour
- Matchline
- Property Line
- LOW — Limit of Work
- Proposed Tree
- Existing Tree
- Decomposed Granite Paving
- Pedestrian Asphalt, SCD
- Vehicular Asphalt, SCD
- Mulch

SHEET LIST

Sheet No.	Sheet Title	Scale
L0.00	LANDSCAPE SHEET INDEX, NOTES, LEGENDS, SYMBOLS, ABBREVIATIONS	N.A.
L0.10	LANDSCAPE ILLUSTRATIVE SITE PLAN	1"=32'
L0.20	SHEET KEY PLAN	1"=32'
L0.5.00	ARBORIST ASSESSMENT REPORT	N.A.
L0.5.01	ARBORIST ASSESSMENT REPORT	N.A.
L0.5.02	ARBORIST ASSESSMENT REPORT	N.A.
L0.6.00A	TREE PROTECTION AND REMOVAL NOTES/DETAILS	N.A.
L0.6.00B	TREE PROTECTION AND REMOVAL SCHEDULE	N.A.
L0.6.01	TREE PROTECTION AND REMOVAL PLAN - AREA 1	1"=16'
L0.6.02	TREE PROTECTION AND REMOVAL PLAN - AREA 2	1"=16'
L1.1.01	LANDSCAPE LAYOUT AND MATERIAL PLAN - AREA 1	1"=16'
L1.1.02	LANDSCAPE LAYOUT AND MATERIAL PLAN - AREA 2	1"=16'
L1.4.01	LANDSCAPE SOILS PLAN- AREA 1	1"=16'
L1.4.02	LANDSCAPE SOILS PLAN- AREA 2	1"=16'
L1.5.01	LANDSCAPE IRRIGATION PLAN - AREA 1	1"=16'
L1.5.02	LANDSCAPE IRRIGATION PLAN - AREA 2	1"=16'
L1.5.03	IRRIGATION NOTES AND LEGEND	N.A.
L1.5.04	IRRIGATION DETAILS	AS SHOWN
1 L1.5.05	HYDROZONE PLAN - AREA 1	1"-16'
L1.5.06	HYDROZONE PLAN - AREA 2	1"=16'
L1.6.00	PLANTING LEGEND AND NOTES	N.A.
L1.6.01	PLANTING PLAN - AREA 1	1"=16'
L1.6.02	PLANTING PLAN - AREA 2	1"=16'
L2.1.1	CONCEPTUAL SECTIONS	AS SHOWN
L8.1.1	DETAILS-PAVING	AS SHOWN
L8.1.2	DETAILS-PAVING	AS SHOWN
L8.4.1	DETAILS-HEADERS	AS SHOWN
L8.4.2	DETAILS-GUARDRAIL AND FENCE	AS SHOWN
L8.7.1	DETAILS-PLANTING	AS SHOWN
L8.7.2	DETAILS-PLANTING	AS SHOWN
L8.7.3	DETAILS-PLANTING	AS SHOWN
L8.8.1	DETAILS-SITE FURNISHING AND SIGNAGE	AS SHOWN
L8.8.2	DETAILS-DESIGN-BUILD GUARDRAIL SYSTEM	AS SHOWN

ABBREVIATIONS

@	AT
AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
ADRE	AREA DRAIN RIM ELEVATION
ARCH	ARCHITECT
B&B	BALL AND BURLAP
BC	BOTTOM OF CURB
BF	BOTTOM OF FENCE
BLDG	BUILDING
BS	BOTTOM OF STEP
BSW	BACK OF SIDEWALK
BW	BOTTOM OF WALL
CAL	CALIPER
CB	CATCH BASIN
CH	CONCRETE HEADER
CJ	CONTROL JOINT
CL	CENTER LINE
CLR	CLEARANCE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COJ	CONSTRUCTION JOINT
CONC	CONCRETE
CONT	CONTINUOUS
CP	CENTER POINT
DI	DROP INLET
DIA	DIAMETER
DN	DOWN
(E)	EXISTING
EA	EACH
EF	EACH FACE
EG	EXISTING GRADE
EJ	EXPANSION JOINT
EL	ELEVATION
ENGR	ENGINEER
EP	EDGE OF PAVEMENT
EQ	EQUAL
EW	EACH WAY
EX	EXISTING
FFE	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOC	FACE OF CURB
FOW	FACE OF WALL
FS	FINISH SURFACE
GB	GRADE BREAK
GJ	GROUT JOINT
H	HANDICAP PARKING STALL
HC	HANDICAP
HDR	HEADER
HH	HANDHOLE
HP	HIGH POINT
HV	HANDICAP VAN PARKING STALL
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INV	INVERT ELEVATION
LOW	LIMIT OF WORK
LP	LOW POINT
MAX	MAXIMUM
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MM	MILLIMETERS
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
OPP	OPPOSITE
PA	PLANTING AREA
PD	PLANTING DRAIN
PED	PEDESTRIAN
PERF	PERFORATED
POC	POINT OF CONNECTION
PT	POINT OF TANGENCY
R	RADIUS
RB	ROOT BARRIER
RGB	ROUNDED GRADE BREAK
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
SAD	SEE ARCHITECTURAL DRAWINGS
SCD	SEE CIVIL DRAWINGS
SD	STORM DRAIN
SED	SEE ELECTRICAL DRAWINGS
SG	SUBGRADE
SH	STEEL HEADER
SHP	SWALE FLOWLINE HIGH POINT
SIM	SIMILAR
SJ	SCORE JOINT
SPD	SEE PLUMBING DRAWING
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STL	STEEL
TA	TOP OF RETENTION ANGLE
TB	TOP OF BENCH
TC	TOP OF CURB
TG	TOP OF GUTTER
TF	TOP OF FOOTING
TH	TOP OF HEADER
TPTL	TREE PLANTING TRENCH LIMIT
TOB	TOP OF BERM
TOE	TOE OF BERM
TOF	TOP OF FENCE
TOFG	TOP OF FOOTING
TOP	TOP OF POST
TS	TOP OF STEP
TSH	TOP OF STEEL HEADER
TW	TOP OF WALL
TYP	TYPICAL
UFC	UNIFORM FIRE CODE
V	VOID STACK
VEH	VEHICULAR
VIF	VERIFY IN FIELD
WWF	WELDED WIRE FABRIC
WPM	WATER-PROOF MEMBRANE

TREE PROTECTION AND REMOVAL LEGEND

- PROTECT IN PLACE
- REMOVE
- TRANSPLANT
- XXXX — TREE TAG FROM (ARBORIST)

SOILS LEGEND

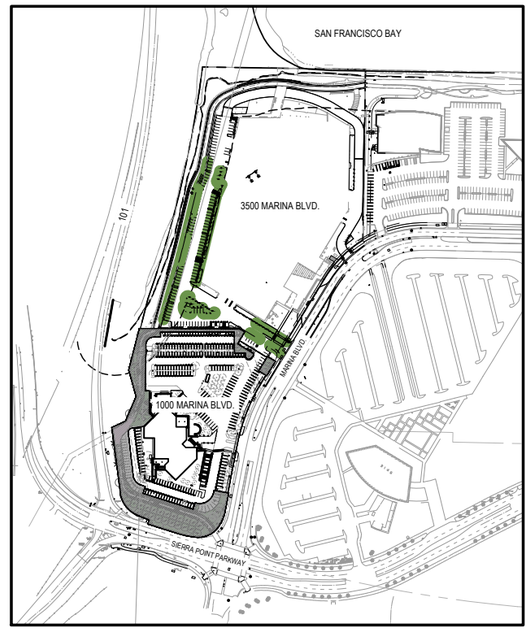
- Existing Bayside Soil - Spread oganic compost over existing soil at rate of 4 cu.yd per 1,000 sq.ft. Incorporate to 0'-6" depth for homogenous blend. (At Bay Side Areas)
- Amended Planting Soil Backfill - 1'-0" Depth (At Shrub and Perennial Areas)
- Amended Plant Pit Backfill - 3' Depth Typical, see details -Do not damage clay layer. VIF (At Tree Planting Pits)

NOTE:
Install 4 cu.yd organic compost per 1,000 sq.ft. of permeable planting area and incorporate to minimum 6 inch - 12 inch depth, unless otherwise indicated, to create a homogenous mix.

PLANTING LEGEND

REFER SHEET L1.6.00

CONTEXT



CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
LANDSCAPE SHEET INDEX, NOTES, LEGEND, AND ABBREVIATIONS
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/26/2022
1	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/28/2022
	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale NTS
Design
Drawn
Approved
Job No 201703365-11

Drawing Number:
L0.00

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.0_Landscape Sheet Index, Notes, Legends, Symbols, Abbreviations.dwg
PLOTTED BY: amberk
PLOT DATE: 01-05-23

ATTACHMENT E

3 PLANTING AREA AS PERCENT OF SITE TOTAL

SITE - PRE-PROJECT DEVELOPMENT PLANTING 70,772 SF		36.8%
SITE - PROPOSED DEVELOPMENT (PLANTING AREA ONLY) PLANTING 58,624 SF		30.5%
PLANTING EXISTING OUTSIDE LOW	34,344 SF	
PLANTING WITHIN LOW	22,460 SF	
MULCH AREA WITHIN LOW	1,820 SF	
SITE - PROPOSED DEVELOPMENT (PLANTING & BAY TRAIL AREA) PLANTING AREA + BAY TRAIL AREA 73,084 SF		38.0%
PLANTING EXISTING OUTSIDE LOW	34,344 SF	
PLANITNG WITHIN LOW	22,460 SF	
MULCH WITHIN LOW	1,820 SF	
BAY TRAIL (ASPHALT/DG)	14,460 SF	

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.01_Illustrative Plan.dwg
PLOT DATE: 01-13-23 PLOTTED BY: amberk

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
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1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

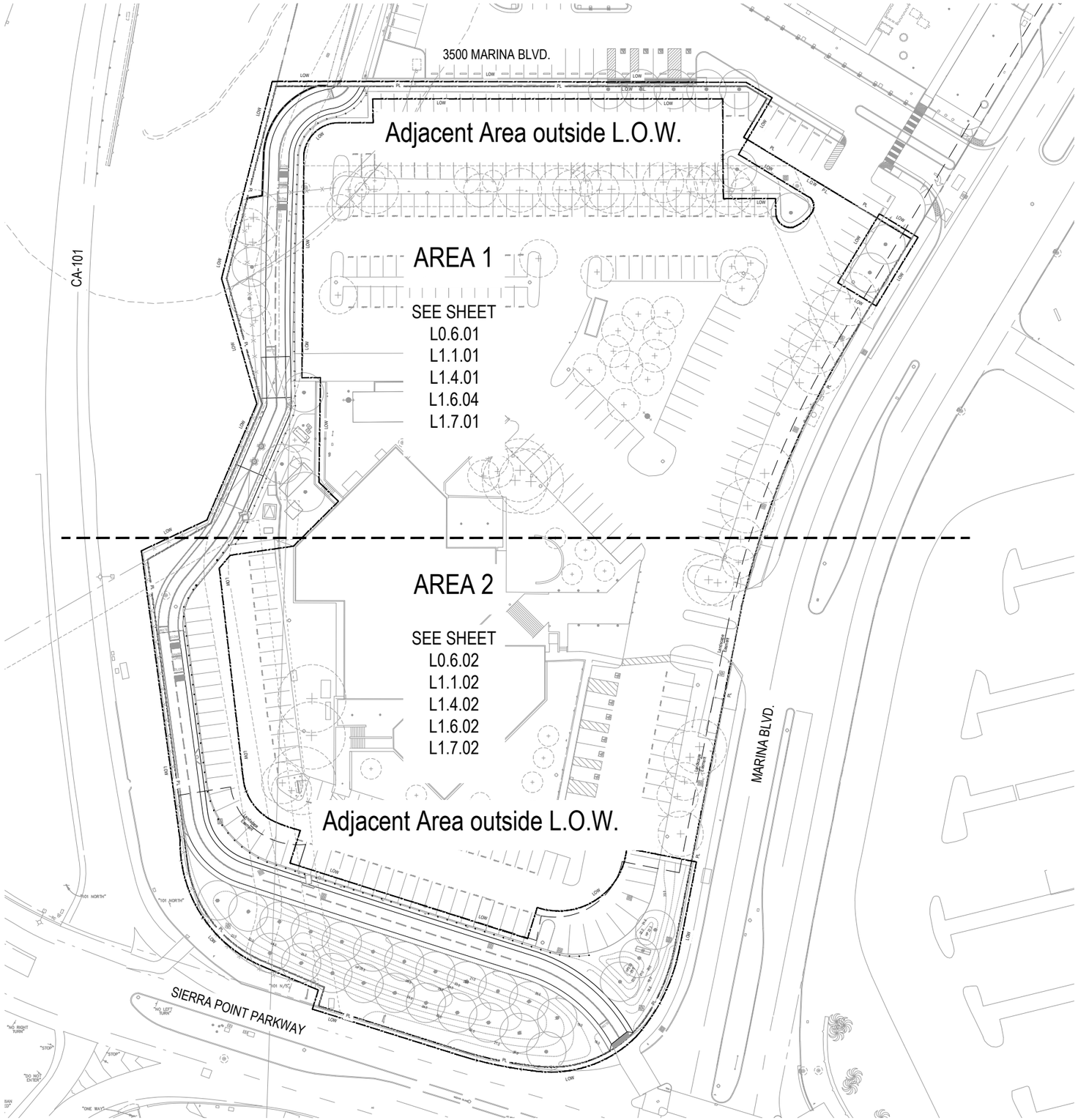
1000 MARINA BOULEVARD
LANDSCAPE ILLUSTRATIVE PLAN
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023
4	PLAN CHECK RESPONSE 4	01/17/2023

Date
Scale 1/32" = 1'-0"
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L0.10

ATTACHMENT E



PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
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LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley,
CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
SHEET KEY PLAN
SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/26/2022
	PLAN CHECK RESPONSE 3	01/04/2023

Date	
Scale	1/32" = 1'-0"
Design	
Drawn	
Approved	
Job No	20170365-11

Drawing Number:
L0.20

CITY OF BRISBANE

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.02_Sheet Key Plan.dwg
PLOT DATE: 01-05-23 PLOTTED BY: amberk

Tree Inventory Report

1000 Marina Boulevard
Brisbane, CA

Prepared for:
P3RE
P.O. Box 927729
San Diego, CA 92192

Prepared by:
HortScience | Bartlett Consulting
325 Ray Street
Pleasanton, CA 94566

January 11, 2021
Rev. June 13, 2022

Tree Inventory Report
1000 Marina Blvd.
Brisbane, CA

Table of Contents

List of Tables

Exhibits

Tree Inventory Report
1000 Marina Blvd.
Brisbane, CA

Introduction and Overview
P3RE is planning landscape improvements at 1000 Marina Boulevard in Brisbane, CA. The site consists of a commercial office building with associated parking lot and landscaping. HortScience | Bartlett Consulting, Divisions of The F.A. Bartlett Tree Expert Company, was asked to prepare a **Tree Inventory Report** for the trees within the project area as part of the application to the City of Brisbane.

This report provides the following information:
1. Assessment of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. Preliminary guidelines for tree preservation during the design, construction and maintenance phases of development.

Tree Assessment Methods
Trees were assessed on December 8, 2020 and June 6, 2022. Trees 1 inch and larger in diameter were included in the assessment. Tree tag numbers are #101 – 284; tag numbers are discontinuous. The assessment procedure consisted of the following steps:

1. Identifying the tree species;
2. Tagging each tree with a numerically coded metal tag and recording its location on a map; off-site trees were not tagged;
3. Measuring the trunk diameter at a point 54 inches above grade.
4. Evaluating the health and structural condition using a scale of 1 – 5 based on a visual inspection from the ground:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
   - ***0*** – Tree is dead.
5. Rating the suitability for preservation as 'high', 'moderate' or 'low'. Suitability for preservation considers the health, age and structural condition of the tree species, and its potential to remain an asset to the site.
   - ***High:*** Trees with good health and structural stability that have the potential for longevity at the site.

- ***Moderate***: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.
- ***Low***: Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual tree may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees
One hundred and twenty-four (124) trees representing eleven species were evaluated (Table 1). Overall, 26 (21%) trees were in good condition, 41 (33%) were fair, 51 (41%) were poor, and six (5%) were dead. Descriptions of each tree are provided in the *Tree Assessment*; locations are noted by tree tag number in the *Tree Assessment Plan* (see Exhibits).

Table 1. Tree condition and frequency of occurrence.
1000 Marina Blvd – Brisbane, CA

Common Name	Scientific Name	Condition				Total
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
Blackwood acacia	*Acacia melanoxylon*	-	1	-	-	**1**
Japanese maple	*Acer palmatum*	-	-	-	1	**1**
Strawberry tree	*Arbutus unedo*	-	-	2	2	**4**
Nichol's willowleafed peppermint	*Eucalyptus nicholii*	-	24	26	-	**50**
Crape myrtle	*Lagerstroemia indica*	-	-	3	2	**5**
Pink melaleuca	*Melaleuca nesophylla*	-	1	1	-	**2**
Cajeput paperbark tree	*Melaleuca quinquenervia*	-	2	2	-	**4**
New Zealand Christmas tree	*Metrosideros excelsa*	-	-	-	20	**20**
Monterey pine	*Pinus radiata*	5	3	6	1	**15**
Lombardy poplar	*Populus nigra* 'Italica'	1	16	1	-	**18**
Purpleleaf plum	*Prunus cerasifera*	-	4	-	-	**4**
Total		**6**	**51**	**41**	**26**	**124**

The property was bordered on the south and west sides by Sierra Point Parkway and Highway 101, and on the east side by Marina Boulevard. A commercial lot was under construction to the north, and other large commercial properties dominated the area. The site was relatively flat, with trees around and within the parking lot that surrounded the building.

The most prevalent species assessed was Nichol's willowleafed peppermint, with 50 trees (about 40% of the population, Photo 1). The peppermints were growing in rows at the north end of the parking lot, and in various areas near the building. The trees ranged in maturity from very young to over-mature, with diameters from 6 inches to 33 inches. Just over half (26 trees) were in fair condition, and the rest (24 trees) were poor. None of the peppermints were in good condition. Many of the mature trees had high crowns and poor structure, particularly trees at the north end of the site.

Twenty (20) New Zealand Christmas trees were present. All were newly planted young trees in good and very good condition (Photos 1 and 2). Diameters ranged from 1 to 2 inches. Trees were staked in lawn and mulched planting beds. Most trees had vigorous crowns.

Eighteen (18) Lombardy poplars were growing in groups of two or three on the southern part of the site in a lawn area, as well as along a fence on the western edge of the property (Photo 2). The poplars ranged in size from 9 to 31 inches in diameter. Trees had codominant or multiple branch attachments and upright form typical of the species. Many had scarred surface rooting and suckers at the base. Most poplars were in poor condition (16 trees) with significant dieback and stem decay. Poplar #130 was in fair condition; #136 was dead. None of the poplars were in good condition.

Fifteen Monterey pines were assessed. The pines were almost all mature trees, averaging about 20 inches in diameter. The largest tree was 32 inches and the smallest was 9 inches. The pines ranged from fair condition (6 trees) to poor (3 trees). Five of 15 trees were dead. The only pine in good condition was #189 in the north parking lot.

Photo 1.
Mature peppermint trees #208 - 210 were growing on the north side of the building (red arrows). Young New Zealand Christmas trees #269 and 268 (L to R, yellow arrows) are visible in the foreground.

Photo 2
Japanese maple #276 is at right. Lombardy poplar #123 is visible at far left (red arrow). New Zealand Christmas trees #277 – 282 (red ovals) are growing in the lawn area in center.

No other species were represented by more than five trees; two species were represented by a single tree. Included in this group were:

- Five crape myrtles were planted in a row on the east side of the building. Young trees #271 – 275 had diameters from 1 to 3 inches. Trees #271, 272 and 273 were in fair condition and #274 and 275 were good with more vigorous crowns.
- Strawberry trees #263 – 266 were young trees with 2 – 3 inch diameter trunks. Trees #263 and 266 were in good condition with vigorous foliage; #264 and 265 were fair.
- Four purpleleaf plums were in poor condition and growing in planting areas near the building. Plums #148 and 205 - 207 had multiple attachments at around 3 feet and poor form; most were leaning and showed signs of twig dieback.
- Cajeput paperbark trees #177 and #190 - 192 were growing in the north parking lot Three trees were codominant at the base with stems ranging from 7 to 26 inches in diameter. Tree #192 was single stemmed. Cajeputs #177 and 190 were in fair condition, while #191 and 192 were poor, with twig dieback and low vigor.
- Pink melaleucas #150 (in fair condition) and #153 (poor): both had shrub form with multiple attachments, growing in crowded beds along the northwest edge of the parking lot.
- Japanese maple #276 was growing at the southeast corner of the building (Photo 2). It had multiple stems arising from the base and was vigorous, in good condition.
- Blackwood acacia #145 had a 24-inch diameter and was growing near the western property line fence. The acacia was in poor condition and leaned west. It had a history of previous branch failure.

NOTES:
1. ARBORIST ASSESSMENT REPORT INCLUDES TREES WITHIN PROJECT LIMIT OF WORK AND TREES OUTSIDE LIMIT OF WORK ON ADJACENT 1000 MARINA AREA PROPERTY.

PHASE 3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100+ YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
ARBORIST ASSESSMENT REPORT
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

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	PLAN CHECK RESPONSE	10/26/2022

Date
Scale AS SHOWN
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L0.5.00

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.5.00_Arborist Assessment Report.dwg
PLOT DATE: 02-15-23 PLOTTED BY: kushal

City of Brisbane Tree Regulations

The City of Brisbane defines a *Protected Tree* by any of the following (8) categories:

1. California bay, coast live oak or California buckeye. These are the primary native tree species on San Bruno Mountain.
2. Any additional species of tree other than the three above that is determined by the City Council to uniquely contribute to the scenic beauty of the City or provide special benefits to the natural environment or wildlife.
3. Any tree designated as a protected tree by the City Council.
4. Any tree, regardless of size, originally required by the City to be planted or preserved as part of a development or other permit approval. This would include tree removal permits as well as landscape plans approved as part of site plan, design review or other development approval.
5. Any tree, regardless of size, required by the City to be planted as a replacement for an unlawfully removed tree.
6. Any tree, regardless of size, planted or maintained by the City.
7. Any tree growing in the street right of way that is greater than 30" in circumference (9.5" in diameter) at 24" above grade level. These are considered Street Trees whether or not they were planted by the City.
8. Three or more trees of any species that are greater than 30" in circumference (9.5" in diameter) at 24" above grade that are proposed for removal from the same property are considered collectively to be a Protected Tree.

Based on #4 and 8 above, 113 of the 124 trees assessed are *Protected*. *Protected* trees cannot be removed or have construction planned within the dripline without a permit. Protected status of individual trees is identified in the **Tree Assessment** (see Exhibits).

Suitability for Preservation

Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape. Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. For example, Monterey pines #102 and 105 are crowded by other trees and showing signs of pine pitch canker; both trees should be considered for removal.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. Lombardy poplars #123, 125, 128 and 129 were in poor condition with decayed, scarred surface roots and branch dieback. These trees are not recommended for preservation.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. New Zealand Christmas trees are relatively tolerant of construction impacts. Lombardy poplar is only moderately tolerant of impacts, and needs irrigation post-construction. Monterey pine is intolerant of impacts.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**
  Species that spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) maintains a list and invasive ratings of plant species in California. Brisbane is part of the Central West Floristic Province. Of the species at the site, blackwood acacia and purpleleaf plum have been rated as invasive on a limited basis.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (See **Table 2** and *Tree Assessment* in Exhibits).

Table 2. Suitability for preservation for on-site trees.
1000 Marina Blvd – Brisbane, CA

High	Trees with good health and structural stability that have the potential for longevity at the site. Twenty-five (25) trees on the property had high suitability for preservation, including all 20 New Zealand Christmas trees, crape myrtles #274 and 275, strawberry trees #263 and 266, and Japanese maple #276.
Moderate	Trees in fair health and/or possessing structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "good" category. Thirty-eight (38) trees had moderate suitability for preservation, including 24 Nichol's willowleafed peppermints.
Low	Trees in poor health or possessing significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Fifty-five (55) trees had low suitability for preservation, including 26 Nichol's willowleafed peppermints and 16 Lombardy poplars.

Note: Table does not include Lombardy poplar #136 and Monterey pines #103, 107, 138, 139 and 158. These trees were dead.

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Preliminary Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **TREE PROTECTION ZONE** can minimize these impacts.

Focus tree preservation on trees with high and moderate suitability for preservation. Trees with low suitability will never become assets to the new project. Dead trees should be removed.

The following recommendations will help reduce impacts to trees from development as well as maintain and improve their health and vitality through the clearing, grading and construction phases. The key elements of a tree preservation plan for the 1000 Marina Boulevard property would include:

- Establishing **TREE PROTECTION ZONES** for each tree to be preserved. **TREE PROTECTION ZONES** are identified by the Consulting Arborist based on species tolerances, tree condition, trunk diameters and the nature and proximity of the proposed disturbance.

- Providing supplemental irrigation prior to and during the demolition and construction phases of any planned construction.

Survival of the trees to be preserved or potentially preserved will depend on the care with which construction is performed around the trees and the nature of the impacts near these trees. Trees should be preserved in groups with minimal grading within the critical root zone, where possible. The following are recommendations for design and construction phases that will assist in successful tree preservation.

Design recommendations

1. Any changes to the plans affecting the trees should be reviewed by the Project Arborist with regard to tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.
2. Plan for tree preservation by designing adequate space around trees to be preserved. This area is called the **TREE PROTECTION ZONE:** No grading, excavation, construction or storage of materials should occur within that zone. Route underground services including utilities, sub-drains, water or sewer around the **TREE PROTECTION ZONE**. The tree protection zone is ten times the diameter or the entire dripline whichever is larger. Areas of the **Tree Protection Zone** should be fenced to minimize impacts and staging in the **TREE PROTECTION ZONE**.
3. Irrigation systems must be designed so that no trenching severs roots larger than 1 inch in diameter within the **TREE PROTECTION ZONE**.
4. Tree Preservation Guidelines prepared by the Project Arborist, which include specifications for tree protection during demolition and construction, should be included on all plans.

5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
6. Do not lime the subsoil within 50 feet of any tree. Lime is toxic to tree roots.
7. Ensure adequate but not excessive water is supplied to trees; in most cases, occasional irrigation will be required. Avoid directing runoff toward trees.

Pre-demolition and pre-construction treatments and recommendations

1. The demolition and construction superintendents shall meet with the Project Arborist before beginning work to review all work procedures, access routes, storage areas, and tree protection measures.
2. Portions of the **TREE PROTECTION ZONE** should be fenced. Trees adjacent to demolition may require limb and trunk protections. This may be accomplished using foam wrapped with wattle and orange snow fencing to protect the areas where the limb (or trunk) is exposed to incidental contact.
3. Prune trees to be preserved to clean the crown of dead branches 1 inch and larger in diameter, raise canopies as needed for construction activities. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300). The Project Arborist will provide pruning specifications prior to site demolition.
4. Structures and underground features to be removed within the **TREE PROTECTION ZONE** shall use equipment that will minimize damage to trees above and below ground, and operate from outside the **TREE PROTECTION ZONE**. The Project Arborist shall be on site during all operations within the **TREE PROTECTION ZONE** to monitor demolition activity.
5. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible, tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.
6. Apply and maintain 4 – 6 inches of wood chip mulch within the **TREE PROTECTION ZONE.**

Recommendations for tree protection during construction

1. Any approved grading, construction, demolition or other work within the **TREE PROTECTION ZONE** should be monitored by the Project Arborist.
2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
3. Tree protection devices are to remain until all site work has been completed within the work area. Fences or other protection devices may not be relocated or removed without permission of the Project Arborist.
4. Construction trailers, traffic and storage areas must remain outside **TREE PROTECTION ZONE** at all times.
5. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Project Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2 inches in diameter should be avoided.

6. If roots 1 inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Project Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
7. Spoils from trench, footing, utility or other excavation shall not be placed within the **TREE PROTECTION ZONE**, neither temporarily nor permanently.
8. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Project Arborist.
9. All trees shall be irrigated on a schedule to be determined by the Project Arborist (every 3 to 6 weeks is typical). Each irrigation shall wet the soil within the **TREE PROTECTION ZONE** to a depth of 18 - 24 inches.
10. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.
11. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
12. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel or certified tree climber.
13. Trees that accumulate a sufficient quantity of dust on their leaves, limbs and trunk as judged by the Project Arborist shall be spray-washed at the direction of the Project Arborist.

Maintenance of impacted trees
Trees should be monitored and inspected annually and after major storms to identify conditions requiring treatment to manage risk associated with tree failure.

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. Inspect trees annually and following major storms to identify conditions requiring treatment to manage risk associated with tree failure.

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client and/or tree owner.

If you have any questions about my observations or recommendations, please contact me.

HortScience | Bartlett Consulting

Pam Nagle
Consulting Arborist and Urban Forester
Certified Arborist #WE-9617A

NOTES:
1. ARBORIST ASSESSMENT REPORT INCLUDES TREES WITHIN PROJECT LIMIT OF WORK AND TREES OUTSIDE LIMIT OF WORK ON ADJACENT 1000 MARINA AREA PROPERTY.

PHASE3 REAL ESTATE SERVICES

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ARBORIST ASSESSMENT REPORT
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
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	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022

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Drawing Number:
L0.5.01

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.5.00_Arborist Assessment Report.dwg
PLOT DATE: 10-24-22 PLOTTED BY: amberk

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
101	Monterey pine	15	Yes	3	Moderate	In shrub planting bed; enlarged base; 1-sided to N; high crown; crowded.
102	Monterey pine	9	No	2	Low	In shrub planting bed; codominant at 7'; history of branch removals; crook on S stem; suppressed by #102/103.
103	Monterey pine	32	Yes	0	---	In shrub planting bed; codominant at 5' and multiple attachments at 7'; dead.
104	Monterey pine	28	Yes	3	Low	In shrub planting bed; heavy laterals to SE/SW; sap bleeding W side trunk; branch dieback to W/NW; pine pitch canker.
105	Monterey pine	22	Yes	2	Low	In shrub planting bed; crowded by #104/106; slight lean NW; 1-sided on E to 40'; pine pitch canker.
106	Monterey pine	24	Yes	3	Low	In shrub planting bed; multiple attachments at 8'; twisting form; slight lean NE; heavy laterals to E+W; pine pitch canker.
107	Monterey pine	25	Yes	0	---	In mulched bed; multiple attachments at 8'; 1-sided to E; weight of crown to S; dead.
108	Nichol's willowleafed peppermint	25	Yes	3	Moderate	In mulched bed; codominant at 12'; bark shedding on S side; high crown; some twig dieback.
109	Nichol's willowleafed peppermint	31	Yes	3	Moderate	In mulched bed; multiple attachments at 10+12'; sparse crown w/ some branch dieback on N side.
110	Nichol's willowleafed peppermint	21	Yes	3	Moderate	In mulched bed; multiple attachments at 20'; weight of crown SE; history of limb removals; crowded by #109.
111	Nichol's willowleafed peppermint	12	Yes	1	Low	In mulched bed; leans E; cracked areas of bark on trunk; sparse crown; suppressed with low live crown ratio.
112	Nichol's willowleafed peppermint	20	Yes	2	Low	In mulched bed; crowded by #113; leans SE.
113	Nichol's willowleafed peppermint	24	Yes	3	Moderate	In mulched bed; corrected lean N; multiple attachments at 15+20'; crowded by #112; some twig dieback.
114	Nichol's willowleafed peppermint	23	Yes	2	Low	In mulched bed; leans E/SE; suppressed by #115; girdling root N side; vigorous.
115	Nichol's willowleafed peppermint	27	Yes	3	Low	In mulched bed; multiple attachments at 10' w/ 3 upright stems; crowded by #116.
116	Nichol's willowleafed peppermint	23	Yes	3	Moderate	In mulched bed; slight lean NE; multiple attachments at 25'; sinuous form; crowded by #115/117.
117	Nichol's willowleafed peppermint	25	Yes	3	Moderate	In mulched bed; codominant at 30'; high crown; crowded by #116/118.
118	Nichol's willowleafed peppermint	33	Yes	3	Moderate	In mulched bed; slight lean E/NE; multiple attachments at 20+30'; crown twists N.
123	Lombardy poplar	28	Yes	2	Low	In lawn area; large scarred surface roots; slight lean N; profuse suckers at base to 15'.
125	Lombardy poplar	31	Yes	2	Low	In lawn area; slight lean E; multiple attachments at 10+12'; scarred surface roots; crowded by #122/123.
128	Lombardy poplar	25	Yes	2	Low	In lawn area; slight correcting lean E; multiple attachments at 12,20+25'; twig and branch dieback.
129	Lombardy poplar	27	Yes	2	Low	In lawn area; slight lean E; twig and branch dieback.
130	Lombardy poplar	12,5,3,2,2,2	Yes	3	Moderate	At edge of road; multiple attachments at 2'; vigorous upright young tree.
131	Lombardy poplar	18,16,15	Yes	2	Low	Growing through chain link fence; large surface roots; vigorous sprouting at base; some twig dieback.
132	Lombardy poplar	17,15,12	Yes	2	Low	Growing through chain link fence; large surface roots; vigorous sprouting at base; some twig dieback.
133	Lombardy poplar	26	Yes	2	Low	Decayed surface roots; history of limb failures to 5'; multiple attachments at 10'; upright w/ vigorous sprouting at base.
135	Lombardy poplar	24	Yes	2	Low	Codominant at 10'; slight lean NE; vigorous w/ suckers at base.
136	Lombardy poplar	9	No	0	---	Standing dead; codominant at 8' with included bark; engulfed in ivy.
137	Monterey pine	18	Yes	1	Low	Codominant at 35'; low live crown ratio; crowded by acacia grove W side; high crown w/ laterals to NW.
138	Monterey pine	17	Yes	0	---	Crowded by #137/139; high sparse crown w/ lost top; dead.
139	Monterey pine	13	Yes	0	---	Crowded by #138/140; high thin crown; dead.
140	Monterey pine	26	Yes	3	Moderate	Crowded by #141; slight lean S; some branch dieback.
141	Monterey pine	28	Yes	3	Moderate	Crowded by #140; balanced form with extended branches.
142	Lombardy poplar	17	Yes	2	Low	In ivy planting bed; slight corrected lean NE; some twig dieback.
143	Lombardy poplar	24	Yes	2	Low	6' from transformer pad; gravel around base; multiple attachments at 10'.
144	Lombardy poplar	21	Yes	2	Low	Bird nesting box installed N side at 15'; engulfed in ivy; multiple attachments at 25'; some twig and branch dieback.
145	Blackwood acacia	24	No	2	Low	6" from chain link fence; leans W; history of branch failure; vigorous.
146	Lombardy poplar	21	Yes	2	Low	In ivy planting bed; codominant at 40'; history of branch removals; some twig and branch dieback.
147	Lombardy poplar	21	Yes	2	Low	In mulch area; history of branch removals; lost top; some twig dieback; suckers at base.
148	Purpleleaf plum	5,5,3	No	2	Low	Multiple attachments at 3'; 2.5' from new concrete pad w/ utilities; leans NE; twig dieback.
149	Lombardy poplar	20	Yes	2	Low	Dead girdling root N side; slight lean N; some twig and branch dieback.
150	Pink melaleuca	8,8,4,3,3,2,2	No	3	Moderate	Multiple attachments at base; shrub form; weight of crown leaning N.
151	Lombardy poplar	21	Yes	2	Low	Large surface roots (to 8") in mulch area; slight lean E.
152	Lombardy poplar	21	Yes	2	Low	In mulch area; slight lean E.
153	Pink melaleuca	9,5,4,3	No	2	Low	Multiple attachments at 3'; crowded by shrub to N; 1-sided to S.
154	Nichol's willowleafed peppermint	26	Yes	3	Moderate	Codominant at 6'; large spreading crown; vigorous.
155	Nichol's willowleafed peppermint	17	Yes	2	Low	Crowded by #154/156; leans NE; branch dieback in lower crown.
156	Nichol's willowleafed peppermint	22	Yes	2	Low	Crowded by #155/157; leans N; sparse crown.
157	Nichol's willowleafed peppermint	24	Yes	3	Moderate	Broken girdling root N side trunk; codominant at 8'; slight lean N; some twig and branch dieback.
158	Monterey pine	12	Yes	0	---	Standing dead w/ decay present; codominant at 6'; slight lean SE; history of limb removal.
159	Nichol's willowleafed peppermint	18	Yes	3	Moderate	Base of tree at corner of parking lot w/ girdling roots; multiple attachments at 12+15'; slight corrected lean to NE.
160	Nichol's willowleafed peppermint	6	No	2	Low	Trunk twisted at base; leans NE; suppressed by #159/161; 1' from edge paving; codominant at 6"; vigorous.
161	Nichol's willowleafed peppermint	17	Yes	3	Low	At edge of paving; 8" girdling root; leans E.
162	Nichol's willowleafed peppermint	10	Yes	1	Low	No tag, behind construction fence. Codominant at 6'; twisting stems to N; somewhat vigorous.
163	Nichol's willowleafed peppermint	18	Yes	2	Low	In 6' parking lot planter; strong bow E; multiple attachments at 8' w/ 10" removed stem.
164	Nichol's willowleafed peppermint	14	Yes	1	Low	No tag, behind construction fence. Corrected bow to E; multiple attachments at 18'; history of limb removals; sparse crown w/ branch dieback.
165	Nichol's willowleafed peppermint	18	Yes	2	Low	At edge of paving; strong lean SE; multiple attachments at 12'; some branch dieback.
166	Nichol's willowleafed peppermint	12	Yes	2	Low	No tag, behind construction fence. Strong lean NE; codominant at 15'; some twig and branch dieback.
167	Nichol's willowleafed peppermint	18	Yes	2	Low	At edge of paving w/ deflected surface roots; slight correcting lean S; vigorous crown.
168	Nichol's willowleafed peppermint	14	Yes	2	Low	In parking lot planter; crowded by #169; large scarred surface roots; leans NE.
172	Nichol's willowleafed peppermint	16	Yes	3	Moderate	At edge of paving; deflected surface roots displacing concrete; slight corrected bow W; crowded by #173; codominant at 20'.
173	Nichol's willowleafed peppermint	16	Yes	3	Moderate	At edge of paving; codominant at 8'; crowded by #172/174; vigorous.
174	Nichol's willowleafed peppermint	14	Yes	3	Moderate	No tag, behind construction fence. Codominant at 18'; leans NE; crowded by #173/175; vigorous.
175	Nichol's willowleafed peppermint	16	Yes	3	Moderate	At edge of paving, lifting asphalt; corrected lean E; codominant at 15'; crowded by #174/176.

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
176	Nichol's willowleafed peppermint	17	Yes	2	Low	At edge of paving, lifting asphalt; lean N; codominant at 20'; crowded by #175.
177	Cajeput paperbark tree	26,12	Yes	3	Moderate	In parking lot planter; codominant at base; larger stem sweeps N and up; vigorous w/ some twig dieback.
178	Nichol's willowleafed peppermint	18	Yes	3	Moderate	No tag, behind construction fence. Bird nesting box on trunk NE side; multiple attachments at 15'; leans NW; crowded by #179.
179	Nichol's willowleafed peppermint	17	Yes	2	Low	At edge of paving w/ girdling root and deflected surface roots; codominant at 10; twisting form; crowded by #178/180.
180	Nichol's willowleafed peppermint	20	Yes	3	Moderate	At edge of paving, displacing asphalt; codominant at 12'; crowded by #179/181; sparse crown.
181	Nichol's willowleafed peppermint	12	Yes	2	Low	No tag, behind construction fence. High sparse crown with low live crown ratio; slight lean N.
182	Nichol's willowleafed peppermint	16	Yes	3	Moderate	No tag, behind construction fence. Slight lean NE; codominant at 12'; some twig and branch dieback.
183	Nichol's willowleafed peppermint	17	Yes	3	Moderate	At edge of paving, displacing asphalt and wheel stop; corrected lean SE; codominant at 10' w/ twisting form; crowded by #182/184.
184	Nichol's willowleafed peppermint	15	Yes	3	Moderate	6" from edge of paving; slight corrected lean E; multiple attachments at 10' (3 stems); crowded by #183/185.
185	Nichol's willowleafed peppermint	20	Yes	3	Moderate	At edge of paving; slight corrected lean SE; codominant at 15'; crowded by #184/187/188.
186	Nichol's willowleafed peppermint	14	Yes	2	Low	No tag, behind construction fence. Leans NE; high crown and low live crown ratio; crowded by #185/187.
187	Nichol's willowleafed peppermint	23	Yes	3	Moderate	At edge of paving, displacing asphalt and wheel stop; codominant at 12'; large vigorous crown.
188	Monterey pine	20	Yes	3	Moderate	Slight lean NE; fairly high crown; vigorous tree.
189	Monterey pine	13	Yes	4	Moderate	In parking lot planter; crowded at W side; slight lean NE; vigorous young tree.
190	Cajeput paperbark tree	20,15	Yes	3	Moderate	In parking lot planter; codominant at base; some twig dieback; vigorous tree.
191	Cajeput paperbark tree	13,10,7	Yes	1	Low	In planting bed; codominant at base; very sparse crown; lacks vigor.
192	Cajeput paperbark tree	16	Yes	2	Low	In planting bed; slight lean N; multiple attachments at 8'; upright form; twig dieback; low vigor.
198	Nichol's willowleafed peppermint	16	Yes	2	Low	Corrected bow S; leans S; crowded by #199/202; high sparse crown.
199	Nichol's willowleafed peppermint	22	Yes	2	Low	Slight lean SE; codominant at 10'; high sparse crown.
200	Nichol's willowleafed peppermint	16	Yes	2	Low	Codominant at 7'; crown weighted S; crowded by #199/201.
201	Nichol's willowleafed peppermint	14	Yes	2	Low	Leans SW; crowded by #200 and other nearby trees; high sparse crown.
202	Nichol's willowleafed peppermint	28	Yes	3	Moderate	Large girdling surface roots; slight lean S; crowded by building; bark peeling to 4' NW side trunk; high crown; multiple attachments at 35'; large tree.
203	Nichol's willowleafed peppermint	25	Yes	2	Low	Large girdling surface root; concrete utility pad 5' away, poured on 8" root to E; leans W; crowded by building; codominant at 20'; large tree.
204	Nichol's willowleafed peppermint	30	Yes	3	Moderate	Large surface roots; trunk bows SW; crowded by building; high crown; large tree.
205	Purpleleaf plum	7,6	No	2	Low	In bare planting bed; codominant at 3'; slight lean NE; vase form; many suckers.
206	Purpleleaf plum	6,5,4	No	2	Low	In bare planting bed; multiple attachments at 3.5'; slight lean SE; many suckers.
207	Purpleleaf plum	5,5,5,4,3	No	2	Low	In bare planting bed; multiple attachments at 3.5'; slight lean NE; twisted base.
208	Nichol's willowleafed peppermint	26	Yes	2	Low	Strong twisted lean NE; high crown; crowded.
209	Nichol's willowleafed peppermint	21	Yes	1	Low	New vehicle charging station 2' from NW side trunk; large surface roots girdling at W side; twisting lean NE; high crown; crowded.
210	Nichol's willowleafed peppermint	29	Yes	3	Moderate	Extensive large surface roots; high crown; slight lean NE; crowded by building.
255	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; good young tree.
256	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; good young tree.
257	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; good young tree.
258	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; multiple attachments at 6'; good young tree.
259	New Zealand Christmas tree	1	Yes	4	High	In lawn; staked; tag on branch; crook at base; diving roots.
260	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; vigorous.
261	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; vigorous.
262	New Zealand Christmas tree	1	Yes	4	High	In lawn; staked; tag on branch; multiple attachments at 4'.
263	Strawberry tree	2	Yes	4	High	In swale; staked; tag on branch; slight lean N.E.; vigorous young tree.
264	Strawberry tree	2	Yes	3	Moderate	In swale; staked; tag on branch; multiple attachments at 4.5 and 6'; lost top; vigorous.
265	Strawberry tree	2	Yes	3	Moderate	In shrubs; staked; tag on branch; slight lean N.; lacks vigor.
266	Strawberry tree	3	Yes	4	High	In shrubs; staked; tag on branch; multiple attachments at 5'; vigorous.
267	New Zealand Christmas tree	1	Yes	4	High	In shrub bed; staked; tag on stake; vigorous.
268	New Zealand Christmas tree	2	Yes	5	High	In shrub bed; staked; tag on stake; vigorous.
269	New Zealand Christmas tree	1	Yes	5	High	In shrub bed; staked; tag on stake; vigorous.
270	New Zealand Christmas tree	1	Yes	5	High	In shrub bed; staked; tag on stake; vigorous.
271	Crape myrtle	1	Yes	3	Moderate	6" from building wall; staked; tag on stake; multiple attachments at 4.5'; thin crown.
272	Crape myrtle	1	Yes	3	Moderate	6" from building wall; staked; tag on stake; slightly thin crown.
273	Crape myrtle	2	Yes	3	Moderate	6" from building wall; staked; tag on stake; slightly sinuous trunk; slightly thin crown.
274	Crape myrtle	2	Yes	4	High	6" from building wall; staked; tag on stake; leans E.; vigorous.
275	Crape myrtle	3	Yes	4	High	6" from building wall; staked; tag on stake; straps beginning to girdle trunk; multiple attachments at 6"; vigorous.
276	Japanese maple	3,3,2,2,2,2,2,2,2,1	No	4	High	In mulch bed; multiple attachments arise from base; raised crown; vigorous.
277	New Zealand Christmas tree	1	Yes	4	High	In lawn; staked; tag on branch; basal wound S. side trunk.
278	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; vigorous young tree.
279	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; vigorous young tree.
280	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; slightly enlarged base; vigorous young tree.
281	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; vigorous young tree.
282	New Zealand Christmas tree	1	Yes	5	High	In lawn; staked; tag on branch; basal wounds; vigorous young tree.
283	New Zealand Christmas tree	2	Yes	5	High	In sloped mulch bed; staked; tag on stake; narrow upright form; vigorous young tree.
284	New Zealand Christmas tree	1	Yes	5	High	In sloped mulch bed; staked; tag on stake; narrow upright form; vigorous young tree.

NOTES:
1. ARBORIST ASSESSMENT REPORT INCLUDES TREES WITHIN PROJECT LIMIT OF WORK AND TREES OUTSIDE LIMIT OF WORK ON ADJACENT 1000 MARINA AREA PROPERTY.

TREE ASSESSMENT-ARBORIST REPORT 01
N.T.S.

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.5.02_Arborist Assessment Report.dwg
PLOT DATE: 01-05-23 PLOTTED BY: amberk

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100+ YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
ARBORIST ASSESSMENT REPORT
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/26/2022
	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale AS SHOWN
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L0.5.02

TREE PROTECTION NOTES (ALSO REFER TO SPECIFICATIONS):

1. THE TREE PROTECTION FENCE ZONE SHALL BE DEFINED AS THE AREA FROM THE TRUNK OUT TO DRIPLINE OR A MINIMUM 15' BEYOND THE TRUNK. A TREE'S CRITICAL ROOT ZONE IS DEFINED AS THE AREA 10' BEYOND THE DRIPLINE. A CERTIFIED ARBORIST SHALL BE PRESENT FOR WORK WITHIN THE CRITICAL ROOT ZONE.
2. A CERTIFIED ARBORIST SHALL BE PRESENT TO EVALUATE ALL WORK PERFORMED WITHIN ANY TREE PROTECTION ZONE.
3. PROTECTIVE FENCING SHALL BE CHAIN LINK ON SECURE FOOTINGS, OR IMBEDDED AS REQUIRED BY CERTIFIED ARBORIST, THAT WILL NOT FALL OVER ONTO TREES.
4. PROTECTIVE FENCING SHALL BE PLACED AT THE OUTER EDGE OF THE TREE PROTECTION ZONE, MINIMUM 15' BEYOND THE TREE TRUNK OR AS SHOWN ON TREE PROTECTION DRAWING, WHICHEVER IS GREATER.
5. PROTECTIVE FENCING: FENCING MATERIAL SHALL ENCIRCLE ANY TREE WHOSE OUTER DRIPLINE IS WITHIN THE PROJECT SITE AND ANY CONSTRUCTION ACTIVITIES. LIMITS OF THE FENCING ON THE PLANS ARE DIAGRAMMATIC, AND THE ACTUAL LIMITS WILL BE DEFINED IN THE FIELD.
6. TREE PROTECTION FENCING MUST BE INSTALLED AND REMAIN IN AN UPRIGHT POSITION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES AND UNTIL THE FINAL COMPLETION WALK.
7. WHERE WORK FALLS WITHIN TREE PROTECTION ZONES, TREES MUST BE WRAPPED WITH 2"X4"S SET VERTICALLY AROUND THE TRUNK AND ORANGE CONSTRUCTION FENCE FOR THE DURATION OF THE PROJECT. USE THE NUMBER 2"X4"S NECESSARY TO KEEP FENCE OFF BARK OF TREE. THIS TECHNIQUE MUST BE USED WHERE STANDARD TREE PROTECTION MEASURES ARE NOT APPROPRIATE.
8. TURF, LANDSCAPE, AND HARDSCAPE REMOVALS WITHIN TREE PROTECTION FENCE SHALL BE BY HAND.
9. THE OWNER'S REPRESENTATIVE AND PROJECT ARBORIST SHALL BE CONSULTED IF SIGNIFICANT ROOTS GREATER THAN 4" DIAMETER ARE FOUND TO IMPEDE CONSTRUCTION.
10. CARE MUST BE TAKEN TO LIMIT COMPACTION OF SOIL OVER EXISTING TREE ROOTS.
11. LAYDOWN, STAGING AND PARKING AREAS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE AND SHALL BE SHOWN ON THE STAGING PLANS IF WITHIN THE PROJECT LIMIT AREA, OR ON THE CONSTRUCTION LOGISTICS PLAN IF OUTSIDE THE PROJECT LIMIT AREA.
12. CONSTRUCTION MATERIALS/EQUIPMENT/PERSONAL VEHICLES SHALL NOT BE STORED, PARKED OR TEMPORARILY PLACED IN THE TREE PROTECTION ZONE OF ANY TREES. NO MATERIALS SHALL BE STORED OR PLACED TEMPORARILY WITHIN PROTECTIVE FENCING, TO AVOID SOIL COMPACTION AND SOIL CONTAMINATION UNDER TREES. TREE PROTECTION ZONES OF TREES SHALL NOT BE DRIVEN OVER. PROVIDE ALTERNATIVE ROUTES FOR CONSTRUCTION TRAFFIC OF ANY KIND INCLUDING CARS, PEOPLE, TRACTORS, EQUIPMENT, CRANES, OR ANY OTHER TRAFFIC AND ALL STAGING OR STORAGE AREAS.
13. NO RINSING, CLEANING EQUIPMENT OR DUMPING CONSTRUCTION LIQUID MATERIALS SHALL BE ALLOWED IN THE TREE PROTECTION ZONES. CARE SHALL BE TAKEN IN CLEANING UP EQUIPMENT. THERE SHALL BE NO STORAGE OF DUMPSTERS OR ACCUMULATED DEBRIS FROM DEMOLITION ON OR AROUND THE TREE PROTECTION ZONES OF EXISTING TREES AND SHRUBS.
14. PROTECT OVERHANGING TREE CANOPIES FROM CONSTRUCTION DAMAGE. IF DRIVE AISLES ARE ANTICIPATED UNDER LOW CANOPIES CALL FOR AN EVALUATION BY A CERTIFIED ARBORIST TO DETERMINE APPROPRIATE MEASURES. ALL PRUNING SHALL BE DONE BY A CERTIFIED ARBORIST FOLLOWING NATIONAL ARBORIST ASSOCIATION SPECIFICATIONS.
15. THERE SHALL BE NO GRADE CHANGE WITHIN A MINIMUM OF FIFTEEN FEET OF THE TRUNK OF EXISTING TREES TO BE PROTECTED, AND PREFERABLY NONE WITHIN THE ENTIRE TREE PROTECTION ZONE.
16. HEAVY EQUIPMENT WILL NOT BE ALLOWED FOR EXCAVATION WITHIN TREE PROTECTION ZONES.
17. TREES TO BE PROTECTED SHALL BE MONITORED WEEKLY AND IRRIGATED AS NEEDED OR DIRECTED BY ARBORIST DURING THE COURSE OF CONSTRUCTION.
18. NO LIME OR OTHER SOIL TREATMENT SHALL BE APPLIED WITHOUT THE CONSENT OF A CERTIFIED ARBORIST.
19. ALL TRENCHING SHALL CONFORM TO THE FOLLOWING GUIDELINES.
    A. A CERTIFIED ARBORIST IS REQUIRED TO BE PRESENT TO SUPERVISE ANY TRENCHING, DIGGING OR EXCAVATION OF ANY KIND WITHIN A TREE PROTECTION ZONE.
    B. ROOTS LARGER THAN 2 INCHES IN DIAMETER SHALL NOT BE SEVERED WITHOUT CALLING THE CERTIFIED ARBORIST FOR CUTTING OR REVIEW.
    C. TUNNELING OR BORING UNDER ROOTS RATHER THAN PRUNING IS PREFERRED.
    D. DIGGING WITHIN A TREE PROTECTION ZONE SHALL BE AVOIDED. IF IT IS NECESSARY, HAND DIGGING SHALL BE USED FOR ANY TRENCHING WITHIN THE TREE PROTECTION ZONE UNLESS OTHERWISE APPROVED BY THE ARBORIST.
    E. ALL ROOTS THAT NEED TO BE CUT SHALL BE PRUNED CLEANLY, NOT TORN.

TREE REMOVAL NOTES:

1. PERFORM TREE REMOVAL WORK IN CONFORMANCE WITH APPLICABLE LOCAL CODES AND ORDINANCES.
2. TREE REMOVAL INCLUDES REMOVAL OF THE TREE TRUNK AND BRANCHES ABOVE GRADE, STUMP GRINDING THE REMAINING TRUNK AND REMOVING ROOTS TO A DEPTH OF 12" BELOW GRADE.
3. PROTECT EXISTING TREES TO REMAIN. DO NOT DAMAGE TRUNK, BRANCHES OR ROOTS OF TREES TO BE PROTECTED.
4. PROTECT EXISTING WORK TO REMAIN AND DO NOT CAUSE DAMAGE.
5. GRIND REMOVED TRUNKS, BRANCHES AND LEAF LITTER IN WOODCHIPPER TO CREATE FINE WOOD CHIPS. STORE WOOD CHIPS/ARBOR MULCH IN LOCATION ACCEPTABLE TO OWNER AND MINIMUM 25' FEET AWAY FROM BUILDINGS. WOOD CHIPS/ARBOR MULCH TO BE USED AS MULCH ON PLANTING AREAS AND TO BE STORED FOR INCORPORATION INTO COMPOST PRODUCED ON-SITE. USE CHIPS FOR STABILIZATION OF SOIL DISTURBANCES ASSOCIATED WITH REMOVAL..
6. LEGALLY DISPOSE OF TREE REMOVAL DEBRIS (NOT CHIPPED PER #5 ABOVE) OFF-SITE FOLLOWING CITY OF BRISBANE REQUIREMENTS.

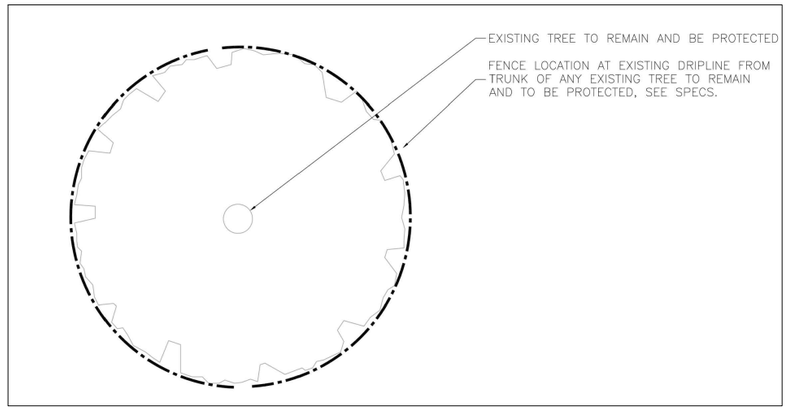
TREE INVENTORY WITHIN L.O.W. AND ADJACENT AREA OUTSIDE L.O.W.

TOTAL TREES EXISTING : 124

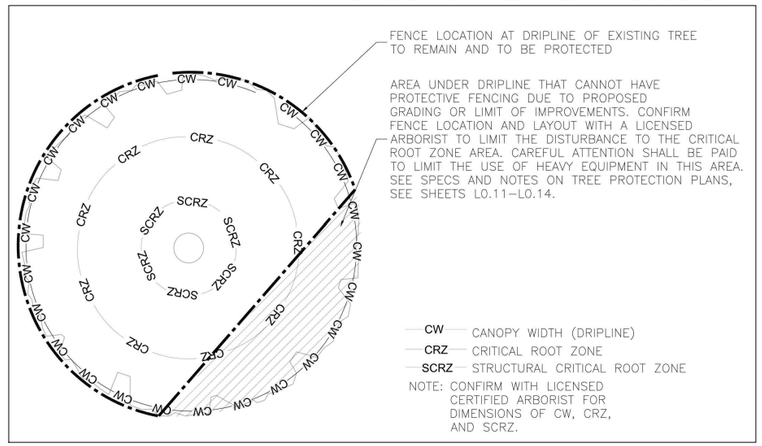
TREES PROTECTED IN PLACE : 93

TREES TO BE REMOVED : ~~31~~ 32

NEW TREES : 39



PROTECTIVE FENCING FOR TREE PROTECTION AT DRIPLINE-PLAN



PROTECTIVE FENCING FOR TREE PROTECTION AT PARTIAL DRIPLINE-PLAN

TREE PROTECTION FENCING-SECTION

TREE PROTECTION DETAIL 01

SCALE : NTS

PHASE 3 REAL ESTATE PARTNERS

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
TREE PROTECTION / REMOVAL NOTES AND DETAILS
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	Date
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	06/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/26/2022
	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale NTS
Design
Drawn
Approved
Job No 20170365–11

Drawing Number:
L0.6.00A

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.6.00_Tree Protection and Removal Notes.dwg
PLOT DATE: 02–15–23
PLOTTED BY: kushal

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Status
101	Monterey pine	15	Yes	Remove
102	Monterey pine	9	No	Remove
103	Monterey pine	32	Yes	Protect
104	Monterey pine	28	Yes	Protect
105	Monterey pine	22	Yes	Protect
106	Monterey pine	24	Yes	Protect
107	Monterey pine	25	Yes	Protect
108	Nichol's willowleafed peppermint	25	Yes	Protect
109	Nichol's willowleafed peppermint	31	Yes	Protect
110	Nichol's willowleafed peppermint	21	Yes	Protect
111	Nichol's willowleafed peppermint	12	Yes	Protect
112	Nichol's willowleafed peppermint	20	Yes	Protect
113	Nichol's willowleafed peppermint	24	Yes	Protect
114	Nichol's willowleafed peppermint	23	Yes	Protect
115	Nichol's willowleafed peppermint	27	Yes	Protect
116	Nichol's willowleafed peppermint	23	Yes	Protect
117	Nichol's willowleafed peppermint	25	Yes	Protect
118	Nichol's willowleafed peppermint	33	Yes	Protect
123	Lombardy poplar	28	Yes	Remove
125	Lombardy poplar	31	Yes	Remove
128	Lombardy poplar	25	Yes	Remove
129	Lombardy poplar	27	Yes	Remove
130	Lombardy poplar	12,5,3,2,2,2	Yes	Remove
131	Lombardy poplar	18,16,15	Yes	Remove
132	Lombardy poplar	17,15,12	Yes	Remove
133	Lombardy poplar	26	Yes	Remove
135	Lombardy poplar	24	Yes	Remove
136	Lombardy poplar	9	No	Remove
137	Monterey pine	18	Yes	Remove
138	Monterey pine	17	Yes	Remove
139	Monterey pine	13	Yes	Remove
140	Monterey pine	26	Yes	Remove
141	Monterey pine	28	Yes	Remove
142	Lombardy poplar	17	Yes	Remove
143	Lombardy poplar	24	Yes	Remove
144	Lombardy poplar	21	Yes	Remove
145	Blackwood acacia	24	No	Remove
146	Lombardy poplar	21	Yes	Remove
147	Lombardy poplar	21	Yes	Remove
148	Purpleleaf plum	5,5,3	No	Protect
149	Lombardy poplar	20	Yes	Remove
150	Pink melaleuca	8,8,4,3,3,2,2	No	Remove
151	Lombardy poplar	21	Yes	Remove
152	Lombardy poplar	21	Yes	Remove
153	Pink melaleuca	9,5,4,3	No	Protect
154	Nichol's willowleafed peppermint	26	Yes	Protect
155	Nichol's willowleafed peppermint	17	Yes	Protect

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Status
155	Nichol's willowleafed peppermint	17	Yes	Protect
156	Nichol's willowleafed peppermint	22	Yes	Remove
157	Nichol's willowleafed peppermint	24	Yes	Remove
158	Monterey pine	12	Yes	Protect
159	Nichol's willowleafed peppermint	18	Yes	Protect
160	Nichol's willowleafed peppermint	6	No	Protect
161	Nichol's willowleafed peppermint	17	Yes	Protect
162	Nichol's willowleafed peppermint	10	Yes	Protect
163	Nichol's willowleafed peppermint	18	Yes	Protect
164	Nichol's willowleafed peppermint	14	Yes	Protect
165	Nichol's willowleafed peppermint	18	Yes	Protect
166	Nichol's willowleafed peppermint	12	Yes	Protect
167	Nichol's willowleafed peppermint	18	Yes	Protect
168	Nichol's willowleafed peppermint	14	Yes	Protect
172	Nichol's willowleafed peppermint	16	Yes	Protect
173	Nichol's willowleafed peppermint	16	Yes	Protect
174	Nichol's willowleafed peppermint	14	Yes	Protect
175	Nichol's willowleafed peppermint	16	Yes	Protect
176	Nichol's willowleafed peppermint	17	Yes	Protect
177	Cajeput paperbark tree	26,12	Yes	Protect
178	Nichol's willowleafed peppermint	18	Yes	Protect
179	Nichol's willowleafed peppermint	17	Yes	Protect
180	Nichol's willowleafed peppermint	20	Yes	Protect
181	Nichol's willowleafed peppermint	12	Yes	Protect
182	Nichol's willowleafed peppermint	16	Yes	Protect
183	Nichol's willowleafed peppermint	17	Yes	Protect
184	Nichol's willowleafed peppermint	15	Yes	Protect
185	Nichol's willowleafed peppermint	20	Yes	Protect
186	Nichol's willowleafed peppermint	14	Yes	Protect
187	Nichol's willowleafed peppermint	23	Yes	Remove
188	Monterey pine	20	Yes	Remove
189	Monterey pine	13	Yes	Protect
190	Cajeput paperbark tree	20,15	Yes	Protect
191	Cajeput paperbark tree	13,10,7	Yes	Protect
192	Cajeput paperbark tree	16	Yes	Protect
198	Nichol's willowleafed peppermint	16	Yes	Protect

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Status
199	Nichol's willowleafed peppermint	22	Yes	Protect
200	Nichol's willowleafed peppermint	16	Yes	Protect
201	Nichol's willowleafed peppermint	14	Yes	Protect
202	Nichol's willowleafed peppermint	28	Yes	Protect
203	Nichol's willowleafed peppermint	25	Yes	Protect
204	Nichol's willowleafed peppermint	30	Yes	Protect
205	Purpleleaf plum	7,6	No	Protect
206	Purpleleaf plum	6,5,4	No	Protect
207	Purpleleaf plum	5,5,5,4,3	No	Protect
208	Nichol's willowleafed peppermint	26	Yes	Protect
209	Nichol's willowleafed peppermint	21	Yes	Protect
210	Nichol's willowleafed peppermint	29	Yes	Protect
255	New Zealand Christmas tree	1	Yes	Protect
256	New Zealand Christmas tree	1	Yes	Protect
257	New Zealand Christmas tree	1	Yes	Protect
258	New Zealand Christmas tree	1	Yes	Protect
259	New Zealand Christmas tree	1	Yes	Protect
260	New Zealand Christmas tree	1	Yes	Protect
261	New Zealand Christmas tree	1	Yes	Protect
262	New Zealand Christmas tree	1	Yes	Protect
263	Strawberry tree	2	Yes	Protect
264	Strawberry tree	2	Yes	Protect
265	Strawberry tree	2	Yes	Protect
266	Strawberry tree	3	Yes	Protect
267	New Zealand Christmas tree	1	Yes	Protect
268	New Zealand Christmas tree	2	Yes	Protect
269	New Zealand Christmas tree	1	Yes	Protect
270	New Zealand Christmas tree	1	Yes	Protect
271	Crape myrtle	1	Yes	Protect
272	Crape myrtle	1	Yes	Protect
273	Crape myrtle	2	Yes	Protect
274	Crape myrtle	2	Yes	Protect
275	Crape myrtle	3	Yes	Protect
276	Japanese maple	3,3,2,2,2,2,2,2,2,1	No	Protect
277	New Zealand Christmas tree	1	Yes	Protect
278	New Zealand Christmas tree	1	Yes	Protect
279	New Zealand Christmas tree	1	Yes	Protect
280	New Zealand Christmas tree	1	Yes	Protect
281	New Zealand Christmas tree	1	Yes	Protect
282	New Zealand Christmas tree	1	Yes	Protect
283	New Zealand Christmas tree	2	Yes	Protect
284	New Zealand Christmas tree	1	Yes	Protect

NOTES:
1. ARBORIST TREE ASSESSMENT REPORT INCLUDES TREES WITHIN PROJECT LIMIT OF WORK AND TREES OUTSIDE LIMIT OF WORK ON ADJACENT 1000 MARINA AREA PROPERTY.

PHASE 3 REAL ESTATE

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

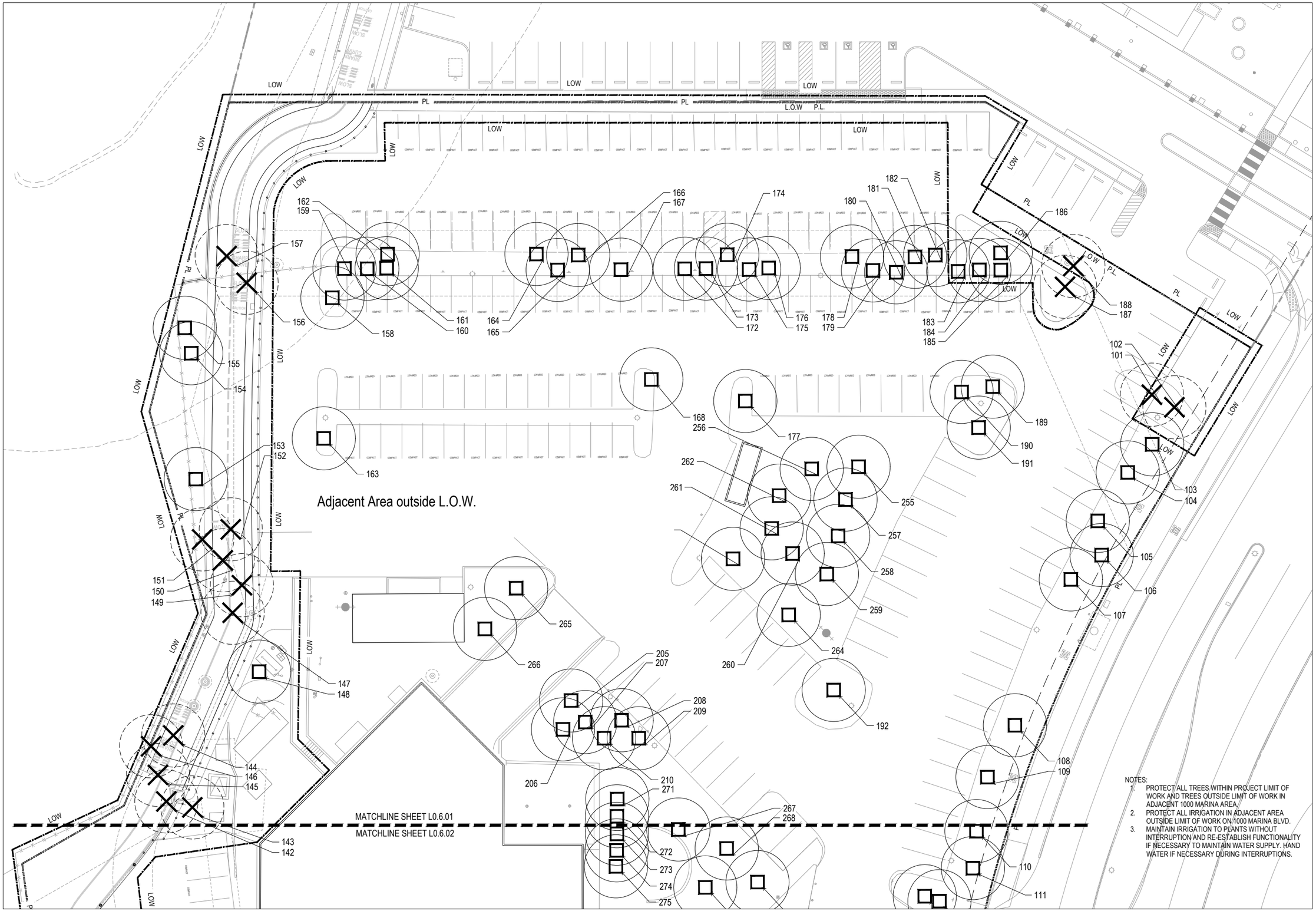
1000 MARINA BOULEVARD
TREE PROTECTION AND REMOVAL STATUS
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/29/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/28/2022
	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale NTS
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L0.6.00B

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.6.00_Tree Protection and Removal Notes.dwg
PLOT DATE: 02-15-23 PLOTTED BY: kushal



PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

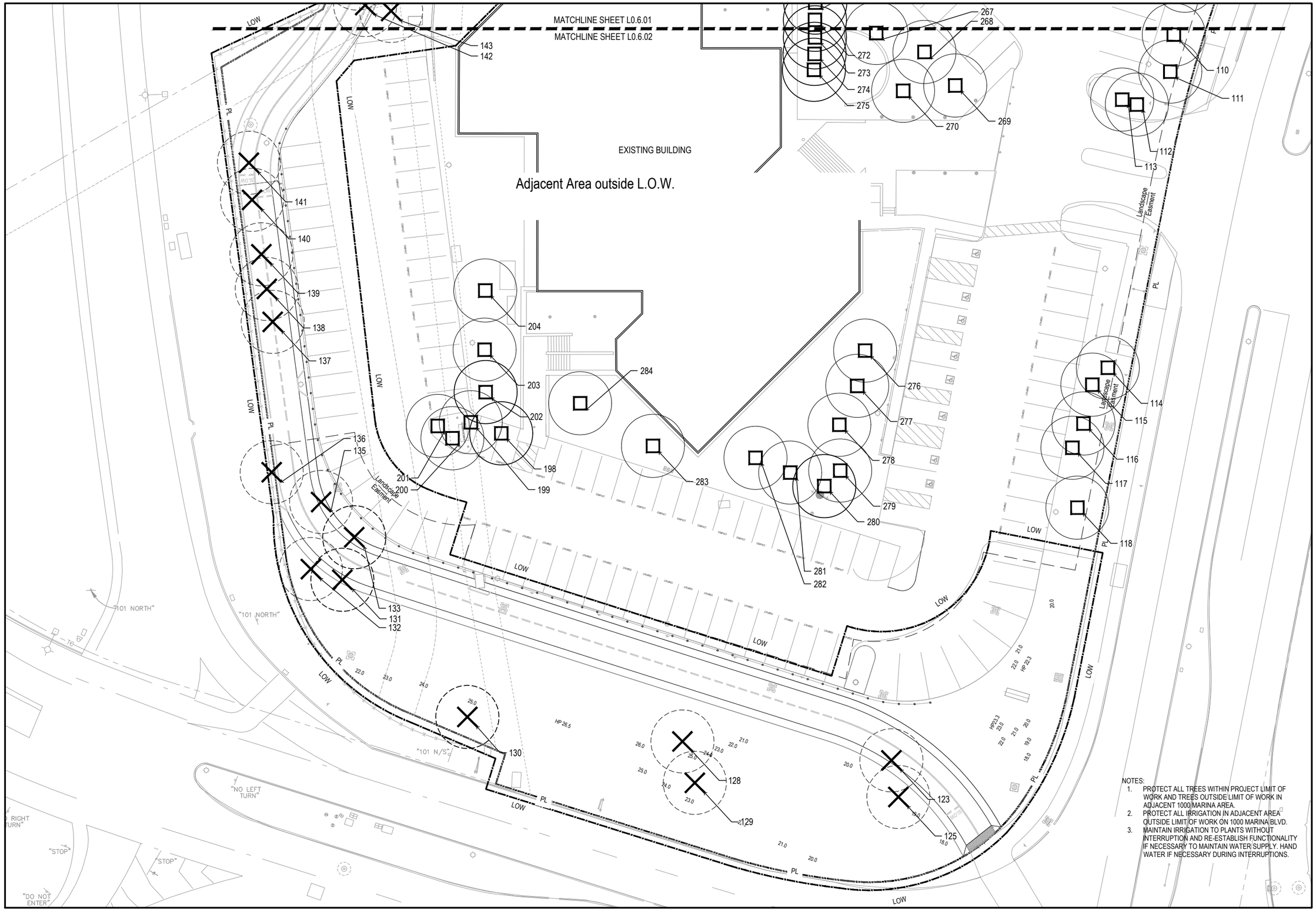
1000 MARINA BOULEVARD
TREE PROTECTION AND REMOVAL PLAN
AREA 1
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022

Date
Scale 1/16" = 1'-0"
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L0.6.01

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.6.01_Tree Protection Plan.dwg
PLOT DATE: 02-15-23
PLOTTED BY: kushal



NOTES:

1. PROTECT ALL TREES WITHIN PROJECT LIMIT OF WORK AND TREES OUTSIDE LIMIT OF WORK IN ADJACENT 1000 MARINA AREA.
2. PROTECT ALL IRRIGATION IN ADJACENT AREA OUTSIDE LIMIT OF WORK ON 1000 MARINA BLVD.
3. MAINTAIN IRRIGATION TO PLANTS WITHOUT INTERRUPTION AND RE-ESTABLISH FUNCTIONALITY IF NECESSARY TO MAINTAIN WATER SUPPLY. HAND WATER IF NECESSARY DURING INTERRUPTIONS.

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L0.6.01_Tree Protection Plan.dwg
PLOT DATE: 10-24-22 PLOTTED BY: amberk

PHASE 3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
TREE PROTECTION AND REMOVAL PLAN
AREA 2
SAN MATEO COUNTY CALIFORNIA
CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022

Date	
Scale	1/16" = 1'-0"
Design	
Drawn	
Approved	
Job No	20170365--11

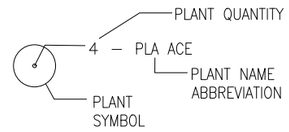
Drawing Number:
L0.6.02

ATTACHMENT E

TREES

ABBR.	SYM.	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	WUCOL	MAX. ROOTING DEPTH	Required Distance Between Bottom of Root ball and Clay Cap at Planting Root Ball at planting + Max Rooting Depth + 1 foot = maintain 1 foot between max rooting depth and top of clay cap (If clay Cap is present)
MET EXC	•	*Metrosideros excelsa*	Newzealand Christmas Tree	39	36" BOX,16'HT,10' SPREAD	L	3'	78 inches (6.5 feet)

PLANTING CALLOUT LEGEND



CA NATIVE PLANTS - 24,481 SQ.FT.

TYPE	SYM.	AREA (sqft)	ABBR.	BOTANICAL NAME	COMMON NAME	WUCOL	SIZE	REMARKS	MAX. ROOTING DEPTH	Required Distance Between Bottom of Root Ball and Clay Cap at Planting Root Ball at planting + Max Rooting Depth + 1 foot = maintain 1 foot between max rooting depth and top of clay cap (If clay Cap is present)
NA1		10,330	CAR DIV	*Carex divisa (C. tumulicola)*	Berkeley Sedge	L	1 GAL	18" O.C.	2'	43 inches (3.6 feet)
		630	CIS SKA	*Cistus skanbergii*	Rock Rose	L	5 GAL	24" O.C. DBL ROW	2'	47.75 inches (4 feet)
NA2		2,820	JUN PAT	*Juncus patens*	California Gray Rush	L	1 GAL	24" O.C.	2'	43 inches (3.6 feet)
NA3		6,668	LES FLA	*Lessingia flaginifolia 'Silver Carpet'*	Silver Carpet California Beach Aster	L	1 GAL	30" O.C.	2'	43 inches (3.6 feet)
NA4		1,510	MUH RIG	*Muhlenbergia rigens*	Deergrass	L	1 GAL	30" O.C.	2'	43 inches (3.6 feet)
NA5		1,000	ECH CAL	*Eschscholzia californica*	California Poppy	VL	1 GAL	24" O.C.	2'	43 inches (3.6 feet)
NA5		1,000	SIS BEL	*Sisyrinchium bellum*	Blue-eyed Grass	VL	1 GAL	18" O.C.	2'	43 inches (3.6 feet)

PLANTING NOTES

1. OBTAIN COPY OF AND BECOME FAMILIAR WITH GEOTECHNICAL INVESTIGATION 1000 MARINA BOULEVARD WHEN AVAILABLE. REVIEW CIVIL DRAWINGS TO BECOME FAMILIAR WITH SUBSURFACE CONDITIONS INCLUDING SITE FILL SOIL OVER A CLAY CAP MATERIAL OF LOW PERMEABILITY SOIL CONFORMING TO THE GEOTECHNICAL REPORT. THE SURFACE OF THE CLAY CAP LAYER SLOPES A MINIMUM OF 1% FOR POSITIVE DRAINAGE. DO NOT PENETRATE OR DAMAGE THE CLAY CAP. IF A DISCREPENCY OR CONFLICT IS FOUND BETWEEN PLANTING LAYOUT / PLANTING DETAILS AND CLAY CAP NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY AND DO NOT PROCEED IN THAT AREA WITHOUT OWNER'S REPRESENTATIVE'S NOTIFICATION.
2. VERIFY LOCATION OF SUBSURFACE UTILITIES, PIPES AND STRUCTURES. SHOULD UTILITIES OR OTHER WORK NOT SHOWN ON THE PLANS BE FOUND DURING EXCAVATIONS, PROMPTLY NOTIFY OWNER'S REPRESENTATIVE. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR DAMAGE ARISING FROM THEIR OPERATIONS SUBSEQUENT TO DISCOVERY OF UTILITIES NOT SHOWN ON PLANS.
3. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL IF IT IS DETERMINED THAT SUBGRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE.
4. GRADE THE SURFACE OF ALL PLANTING AREAS TO 1", REMOVE ALL ROCKS OVER 1-1/2", ALL EARTH CLODS AND THOROUGHLY INCORPORATE AMENDMENTS AND PLANTING SOIL FOR A HOMOGENOUS MIX PRIOR TO EXCAVATING PLANT PITS AND INSTALLING PLANTS.
5. PREPARE FINISH GRADES TO MEET SPOT ELEVATIONS AND CONTOURS SHOWN ON GRADING PLANS IN PLANTING AREAS TO INCLUDE THE APPLICATION OF TOPSOIL. MAKE SLOPES SMOOTH AND EVENLY WORKED. DO NOT LEAVE SOIL IN CLUMP FORM. HOLD FINISH GRADE BELOW EDGE OF WALK, EDGING OR CURB AS INDICATED ON PLANTING DETAILS.
6. IF CLAY CAP IS KNOWN TO BE PRESENT IN THE LOCATION OF THE PLANTING, INSTALL AND MAINTAIN MINIMUM SOIL DEPTH OF 12" UNDERNEATH BOTTOM OF MAXIMUM ROOTING DEPTH (VARIES BASED ON SPECIES) AND TOP OF CLAY CAP (IF KNOWN TO BE PRESENT), AT ALL LANDSCAPE PLANTING AREAS. NOTIFY LANDSCAPE ARCHITECT AND LANGAN PRIOR TO PROCEEDING IF ANY DISCREPENCIES ARE FOUND. (1)
7. INSTALL STEEL HEADER TO CONTAIN ALL PLANTING BEDS NOT CONTAINED BY A HARDSCAPE EDGE OF PAVING OR STRUCTURE.
8. SUPPLY PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE PLANTING PLAN. PLANT QUANTITIES AND AREA TAKE OFFS WHERE SHOWN ON THE PLANT SCHEDULE AND ON THE PLANTING PLAN ARE FOR CONVENIENCE AND GENERAL BID REFERENCE ONLY. VERIFY PLANT QUANTITIES. IF DISCREPENCIES EXIST BETWEEN THE QUANTITIES OR SQUARE FOOT AREAS SHOWN ON THE PLANT SCHEDULE AND THOSE SHOWN ON THE PLANS, THE PLANS TAKE PRECEDENCE TO IMPLEMENT DESIGN INTENT UNLESS OTHERWISE NOTED.
9. NO SUBSTITUTION OF SPECIES WITHOUT APPROVAL FROM THE LANDSCAPE ARCHITECT. CONTRACT GROW PLANTS AS REQUIRED. CONTRACT GROWN PLANTS MUST MEET INDUSTRY STANDARDS FOR SIZE UNLESS OTHERWISE NOTED.
10. FURNISH PLANT MATERIAL FREE OF PESTS AND PLANT DISEASES.
11. INSTALL PLANTS SO THEY BEAR SAME RELATIONSHIP OR SLIGHTLY HIGHER TO THE FINISHED GRADE THEY BORE IN THE NURSERY CONTAINER'S EXISTING GRADE UNLESS OTHERWISE INDICATED.
12. STAKE TREE LAYOUT AND PLACE UNDERSTORY PLANTS, STILL IN THEIR CONTAINERS, PER PLAN LAYOUT FOR LANDSCAPE ARCHITECT'S REVIEW AND ACCEPTANCE PRIOR TO INSTALLATION. STAKE OR PAINT ON THE GROUND THE LOCATIONS OF NEW AND EXISTING UTILITIES FOR REFERENCE DURING LANDSCAPE ARCHITECT'S FIELD REVIEW OF PLANTING LAYOUT. PLANT LAYOUT SHOWN ON THE PLANTING PLAN IS DIAGRAMMATIC.
13. DO NOT INSTALL PLANTS UNTIL ACCEPTANCE OF HORIZONTAL ALIGNMENT IN THE FIELD BY LANDSCAPE ARCHITECT.
14. SPACE GROUND COVER, ORNAMENTAL GRASS AND PERENNIAL PLANTS TRIANGULARLY IN PLANTING AREAS UNLESS OTHERWISE NOTED.
15. WHERE MULTIPLE SPECIES ARE CALLED OUT FOR AN AREA, MIX GROUND COVER PLANTS IN PLANTING BEDS TO AVOID GEOMETRICAL DISTRIBUTION UNLESS OTHERWISE SPECIFIED BY LANDSCAPE ARCHITECT.
16. DO NOT PLANT TREES WITHIN 10'-0" OF CENTERLINE OF UTILITY OR WITHIN WATER EASEMENTS. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPENCIES BEFORE PROCEEDING.
17. COORDINATE ON-SITE REVIEW MEETINGS FOR MOST EFFICIENT USE OF LANDSCAPE ARCHITECT'S TIME WHILE ON-SITE. NOTIFY LANDSCAPE ARCHITECT MINIMUM 72 HOURS PRIOR TO REQUESTED FIELD REVIEW MEETING AND PROVIDE AGENDA OF ITEMS THAT WILL BE READY FOR REVIEW DURING MEETING. IF AGENDA ITEMS ARE NOT COMPLETE AND READY FOR REVIEW (FOR EXAMPLE TREE LOCATIONS STAKED, SHRUB PLANTS SET OUT IN CONTAINERS AND UTILITIES STAKED/PAINTED) THE MEETING WILL BE CANCELLED. PARTIAL REVIEWS WILL NOT BE MADE.
18. INSTALL 3" LAYER OF BARK MULCH AT ALL TREES, PLANTS AND PLANT BEDS, WITH THE EXCEPTION OF TURF, SEEDED AREAS AND SLOPES GREATER THAN 2:1. KEEP MULCH AWAY FROM DIRECT CONTACT WITH PLANT TRUNK OR STEM.
19. ADJUST OR REMOVE ALL STAKES IN CONSULTATION WITH THE LANDSCAPE ARCHITECT UPON COMPLETION OF THE ONE (1) YEAR PLANT GUARANTEE PERIOD. ALL STAKES REMAINING SHALL THEN BECOME THE RESPONSIBILITY OF THE OWNER.
20. RIP EXISTING SOIL, INSTALL TOPSOIL AND SEED ALL AREAS IMPACTED AS A RESULT OF ANY AND ALL DISTURBANCES, CONSTRUCTION, OR STORAGE OF EQUIPMENT WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT. CONTRACTOR TO FIELD VERIFY AREAS OF SEED PRIOR TO SUBMITTING A BID.
21. PROVIDE IRRIGATION TO ALL PLANTED AREAS THROUGH AUTOMATED WEATHER-BASED IRRIGATION SYSTEM WITH WATERSENSE IRRIGATION CONTROLLERS USING LOCAL WEATHER DATA TO DETERMINE WHEN AND HOW MUCH TO WATER, RAINFALL SHUTOFF DEVICES TO TURN OFF SYSTEM DURING RAINY WEATHER AND IN-GROUND DRIP EMITTERS AS SHOWN.
22. PERFORM WORK IN ACCORDANCE WITH PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP). REFER TO CIVIL DRAWINGS.
23. 'WUCOL', SHOWN ON PLANT SCHEDULE, REFERS TO 'WATER USE CLASSIFICATION OF LANDSCAPE SPECIES', A PROJECT INITIATED AND FUNDED BY THE CALIFORNIA DEPARTMENT OF WATER RESOURCES TO PROVIDE AN ASSESSMENT OF IRRIGATION WATER NEEDS OF PLANT SPECIES LISTED IN THE DATABASE. EVALUATIONS ARE INDICATED BY VL (VERY LOW), L (LOW), M (MODERATE) AND H (HIGH) WATER NEEDS.

(3)

I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan.
TLS Landscape Architecture

PHASE 3 REAL ESTATE PARTNERS

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
CITY OF BRISBANE
SAN MATEO COUNTY
CALIFORNIA

PLANTING LEGEND AND NOTES

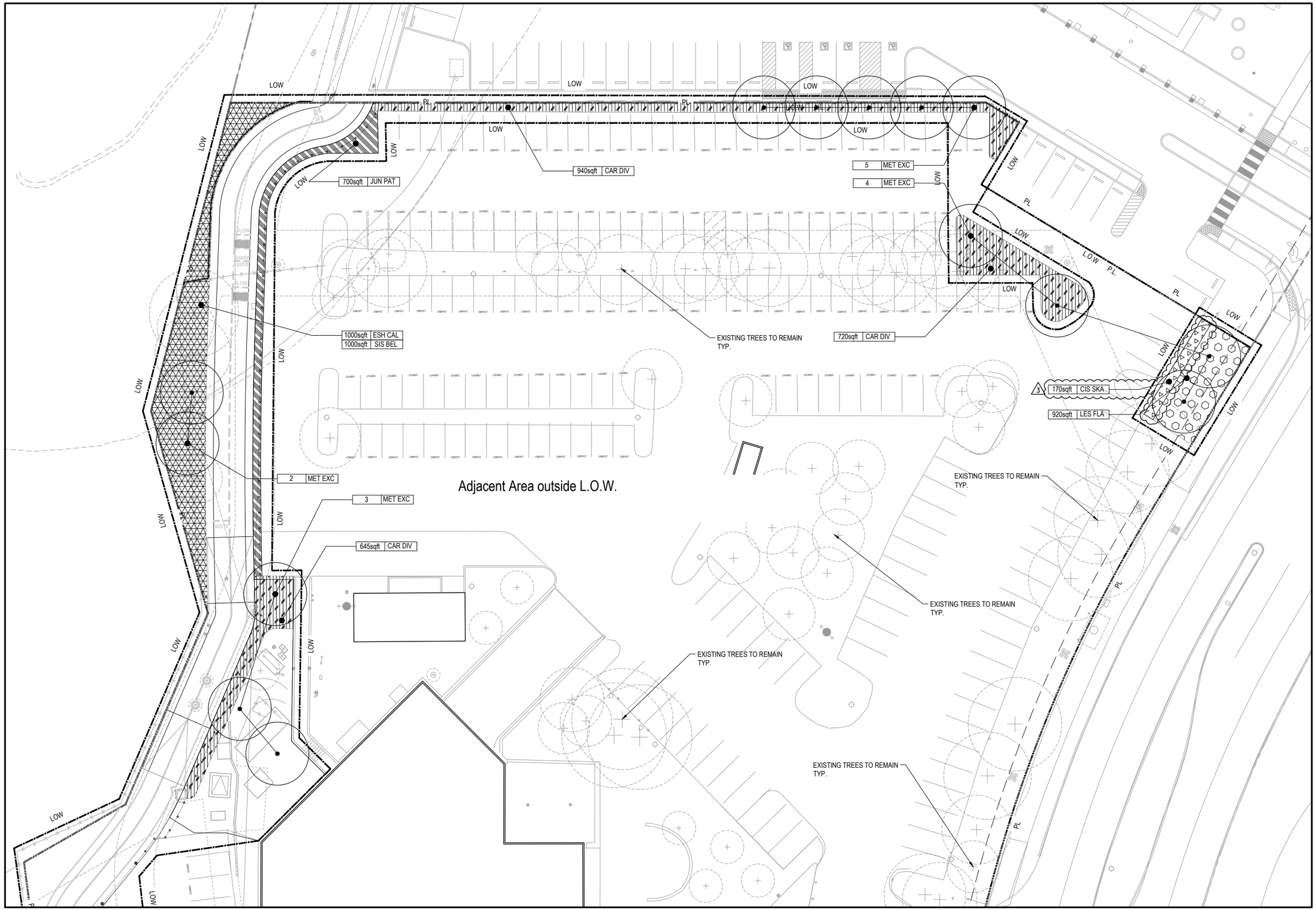
No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/29/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
1	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale
Design
Drawn
Approved
Job No 20170365--11

Drawing Number:
L1.6.00

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L1.6.00_Planting Schedule.dwg
PLOT DATE: 01-05-23
PLOTTED BY: kushal

ATTACHMENT E



DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L1.6.01-02_Planting Plan.dwg
PLOT DATE: 01-05-23 PLOTTED BY: amberk

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
CITY OF BRISBANE

LANDSCAPE PLANTING PLAN
AREA 1

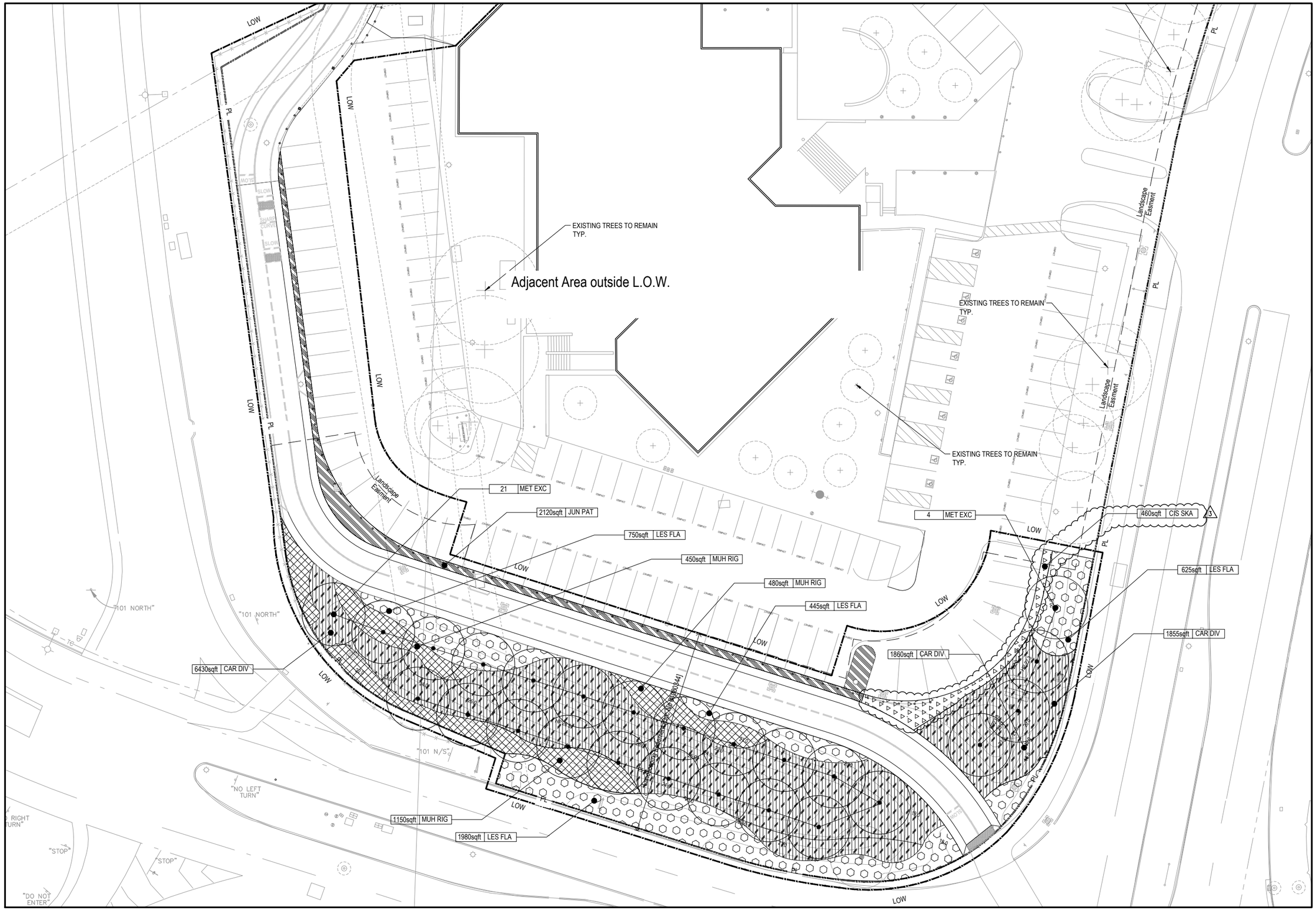
SAN MATEO COUNTY CALIFORNIA

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	06/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale 1/16" = 1'-0"
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L1.6.01

ATTACHMENT E



PHASE 3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley,
CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
CITY OF BRISBANE
SAN MATEO COUNTY
CALIFORNIA

LANDSCAPE PLANTING PLAN
AREA 2

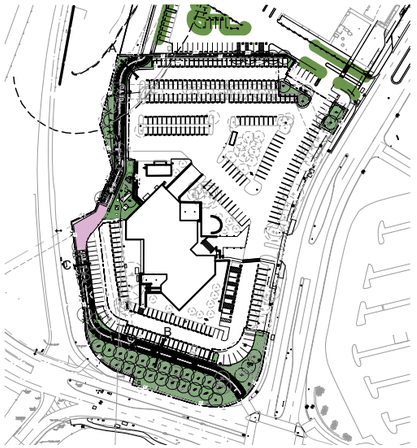
No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
3	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023

Date	
Scale	1/16" = 1'-0"
Design	
Drawn	
Approved	
Job No	20170365-11

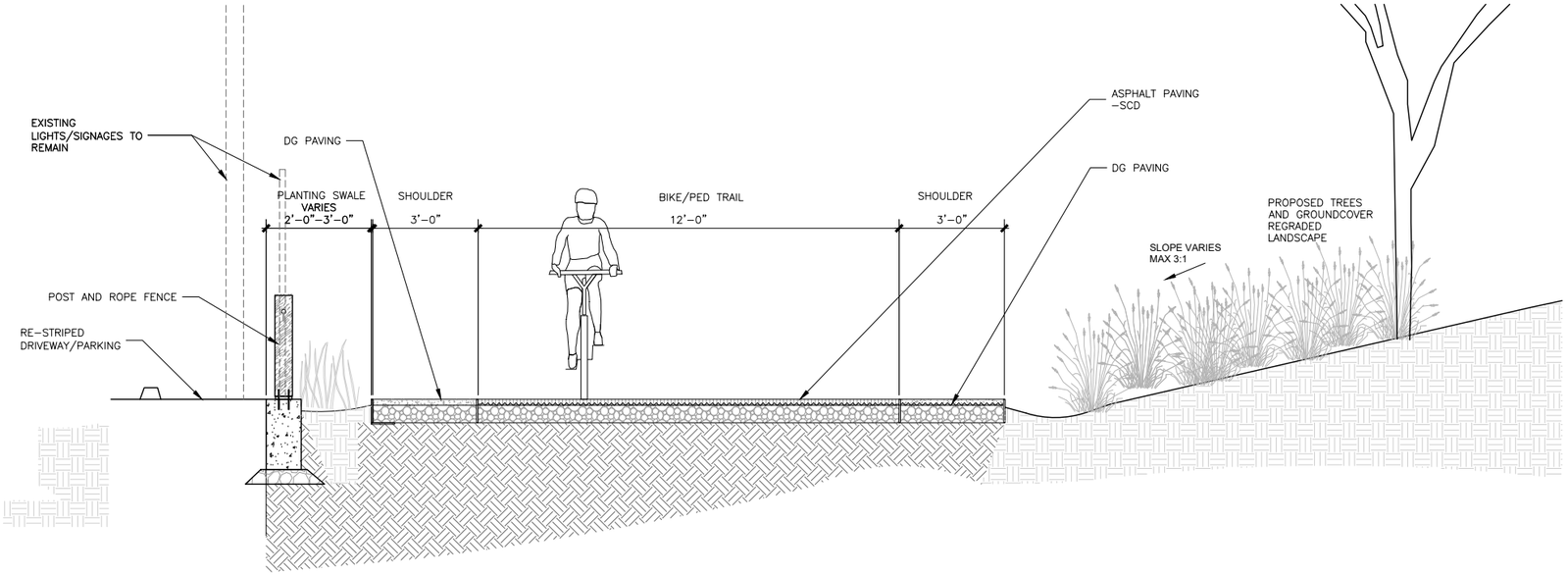
Drawing Number:
L1.6.02

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L1.6.01-02_Planting Plan.dwg
PLOT DATE: 01-05-23 PLOTTED BY: amberk

ATTACHMENT E



KEY PLAN

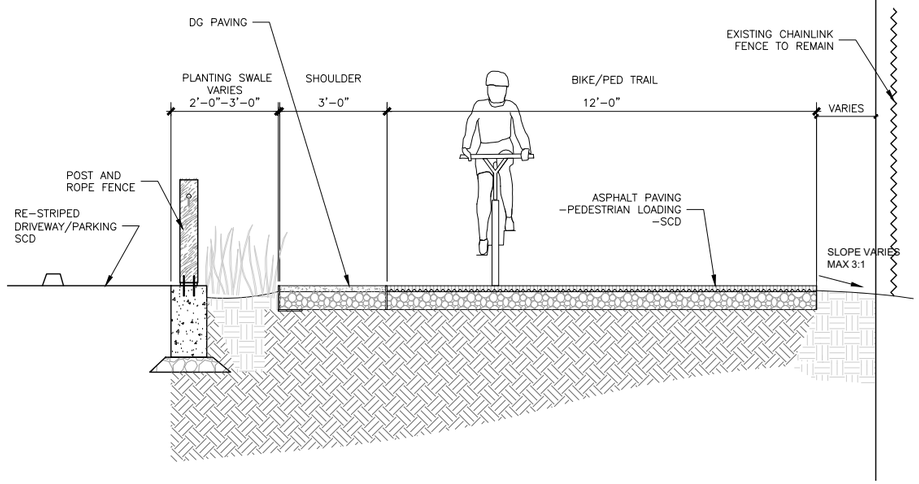


TYPICAL BAY TRAIL SECTION-B 02

SCALE : 1/2"=1'-0"

NOTE

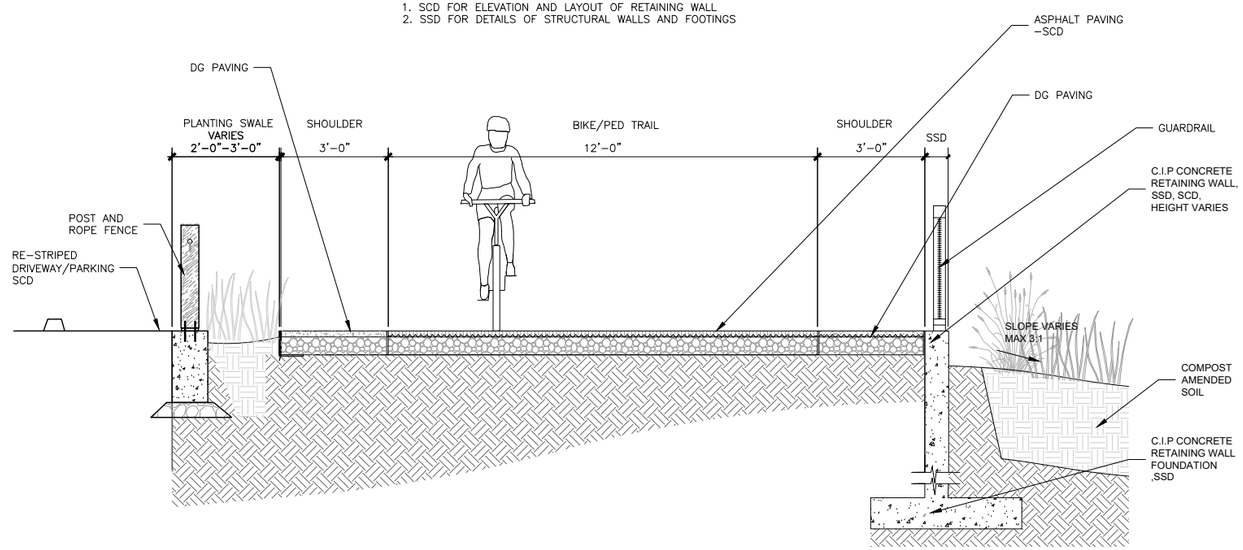
1. SCD FOR ELEVATION AND LAYOUT OF RETAINING WALL
2. SSD FOR DETAILS OF STRUCTURAL WALLS AND FOOTINGS



TYPICAL BAY TRAIL SECTION-C 03

SCALE : 1/2"=1'-0"

1. SCD FOR ELEVATION AND LAYOUT OF RETAINING WALL
2. SSD FOR DETAILS OF STRUCTURAL WALLS AND FOOTINGS



TYPICAL BAY TRAIL SECTION-A 01

SCALE : 1/2"=1'-0"

NOTES:
1. SCD FOR ELEVATION AND LAYOUT OF RETAINING WALL.
2. SSD FOR DETAILS OF STRUCTURAL WALLS AND FOOTINGS.

PHASE3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley, CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
CONCEPTUAL SECTIONS
SAN MATEO COUNTY
CALIFORNIA

CITY OF BRISBANE

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	06/28/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L2.1.1

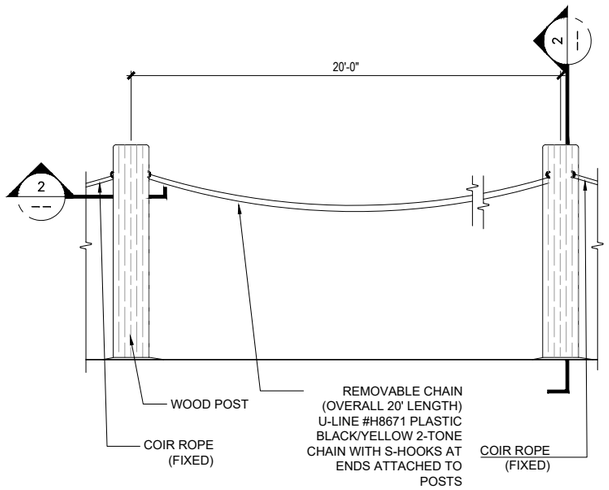
DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L2.1.1 Enlarged Sections.dwg
PLOT DATE: 01-05-23
PLOTTED BY: amberk

ATTACHMENT E

GUARDRAIL NOTES:

1. DESIGN-BUILD TO MEET CODES.
2. GUARDRAIL TO BE CAPABLE OF WITHSTANDING STRUCTURAL LOADS WITHOUT EXCEEDING ALLOWABLE DESIGN WORKING STRESS OF MATERIALS FOR GUARDRAILS, ANCHORS AND CONNECTIONS. THE GUARDRAIL SYSTEM IS TO BE DESIGNED AND CONSTRUCTED FOR A CONCENTRATED LOAD OF 200 LBS. APPLIED AT ANY SINGLE POINT AND IN ANY DIRECTION FOR A UNIFORM LATERAL FORCE OF 50 LBS./LIN. FT. IN ANY DIRECTION. THE CONCENTRATED AND UNIFORM LOADING CONDITIONS SHALL NOT BE APPLIED SIMULTANEOUSLY. THE TOP RAIL SHALL BE DESIGNED TO SUPPORT MINIMUM 300 LB. CONCENTRATED SINGLE POINT LOAD APPLIED AT ANY POINT VERTICALLY OR HORIZONTALLY.
3. DRAWINGS TO BE SIGNED BY CALIFORNIA LICENSED STRUCTURAL ENGINEER.
4. FINISHED HEIGHT 42".

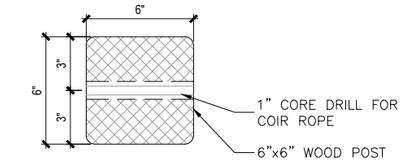
REFERENCE IMAGE :
SUPPLIED BY ERGEON
FENCES, CALIFORNIA



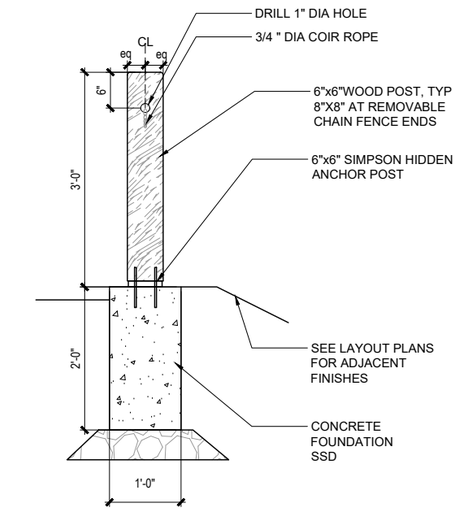
A.ELEVATION

POST AND REMOVABLE CHAIN BARRIER 03 ⚠

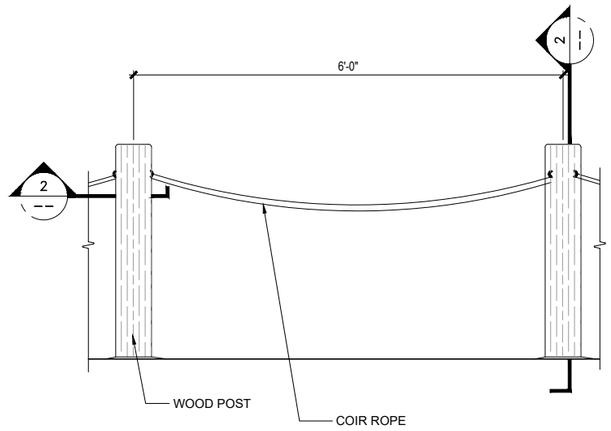
SCALE: 3" = 1'-0"



C.PLAN



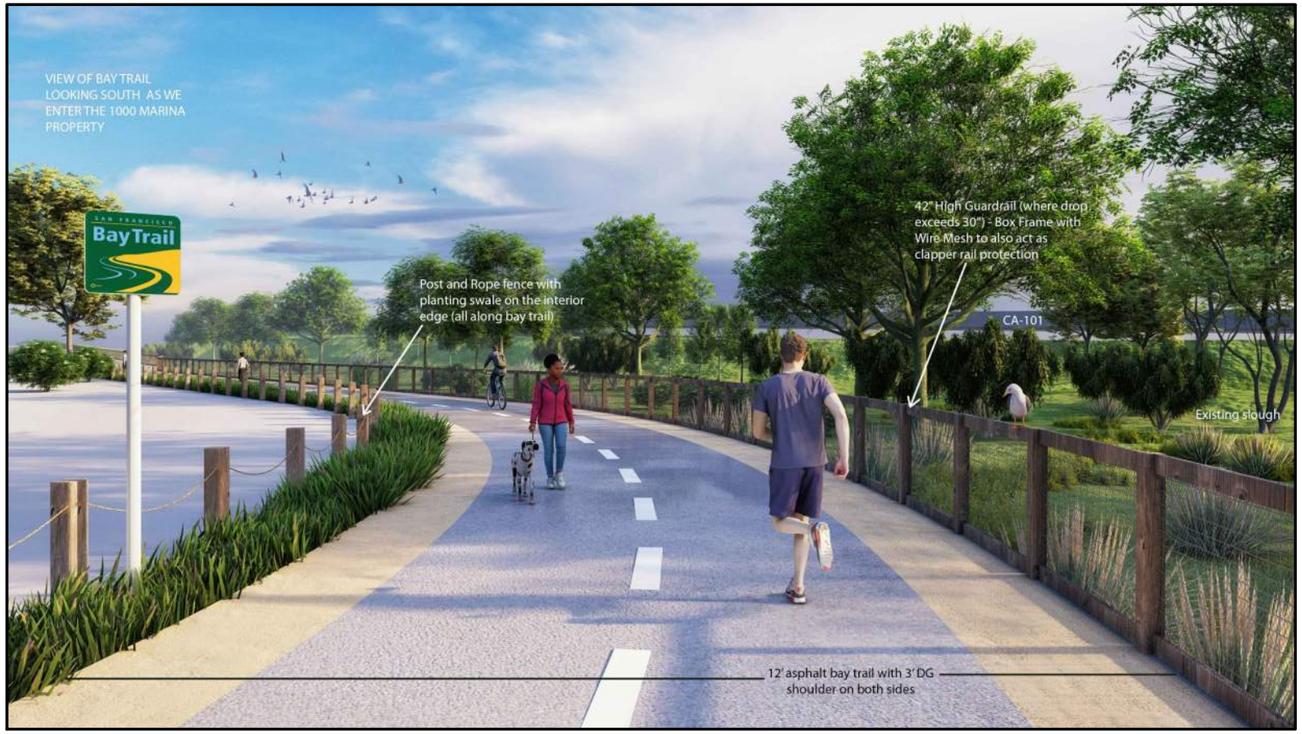
B.SECTION



A.ELEVATION

POST AND ROPE FENCE 01

SCALE: 3" = 1'-0"



RENDERING SHOWING PROPOSED GUARDRAIL AND FENCE ALONG BAY TRAIL 02

SCALE: 1 1/2" = 1'-0"

PHASE 3 REAL ESTATE SERVICES

CIVIL ENGINEER:
BKF 100 YEARS
255 Shoreline Drive,Suite 200
Redwood City, CA 94065

LANDSCAPE ARCHITECT:
TLS Landscape Architecture
1015 Camelia St. Berkeley,
CA 94710

STRUCTURAL ENGINEER:

1000 MARINA BOULEVARD
DETAILS-GUARDRAIL AND FENCE
CITY OF BRISBANE
SAN MATEO COUNTY
CALIFORNIA

No.	Revisions	
	100% DESIGN DEVELOPMENT	01/27/2021
	50% CONSTRUCTION DRAWINGS	05/27/2022
	90% CONSTRUCTION DRAWINGS	08/29/2022
	100% CONSTRUCTION DRAWINGS	10/26/2022
1	PLAN CHECK RESPONSE	10/26/2022
3	PLAN CHECK RESPONSE 3	01/04/2023

Date
Scale AS SHOWN
Design
Drawn
Approved
Job No 20170365-11

Drawing Number:
L8.4.2

DRAWING NAME: Y:\PHA 002 Marina-Bay Trail Extension\3.0 Dwgs\3.05 Sheet Sets\L8.4.2_Details-Headers and Fences.dwg
PLOT DATE: 01-05-23 PLOTTED BY: amberk